

ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD

Lighting the Way ~ Rejoicing in Our Journey

REQUEST FOR TENDER: 642-CP2020 Partial Roof Modification Good Shepherd Catholic School 4 Edith Street, Thamesville, ON NOP 2K0

> Submission Deadline and Location: Tuesday, February 11, 2020 2:00:00 PM Local Time Catholic Education Centre Reception Desk 420 Creek Street, Wallaceburg, ON N8A 4C4

> > ISSUED: January 14, 2020



Part 1: INTRODUCTION

1.1. INTRODUCTION

The St. Clair Catholic District School Board (hereafter referred to as the "SCCDSB" or the "Board") invites interested parties to submit sealed submissions in response to this Request for Tender ("RFT") document. The SCCDSB currently operates 25 elementary schools, 2 secondary schools, and an administrative office within the regions of Sarnia-Lambton and Chatham-Kent.

1.2. PURPOSE

The purpose of this RFT document is to provide interested parties with sufficient information to enable them to prepare and submit bids for consideration by the SCCDSB for the Scope of Work provided, subject to the terms and conditions described herein.

1.3. INTERPRETATION AND DEFINITIONS

The following words are used throughout the bid document and proponents should note these conditions when completing their RFT submission.

"ADDENDUM" means a written instruction and/or clarification issued to the RFT Document. The term addenda is to mean the same as Addendum.

"AGREEMENT" or "CONTRACT" means the final document including, but not limited to, the terms and conditions of this document.

"APPLICABLE LAW" and "APPLICABLE LAWS" means any common law requirement and all applicable and enforceable statutes, regulations, directives, policies, administrative interpretations, orders, by laws, rules, guidelines, approvals and other legal requirements of any government and/or regulatory authority in effect from time to time.

"BID IRREGULARITY" means a deviation between the requirements (terms, conditions, specifications, special instructions) of a bid response for the purposes of this bid; bid irregularities are further classified as major irregularities or minor irregularities. The classification of what is a major irregularity or a minor irregularity shall be the sole discretion of the SCCDSB.

"BID SUBMISSION" or "SUBMISSION" means all of the documentation and information submitted by a Proponent in response to this request.

"CONFLICT OF INTEREST" means any situation or circumstance where, in relation to performance of obligations under the RFT, the Proponent's other commitments, relationships, or financial interests could result in a real, perceived, or potential unfair advantage to the Proponent.

"CONTRACTOR" means an entity that submits a bid in response to this tender document, as the context may suggest, refers to a potential Contractor.

"INFORMAL" shall mean bid submissions will be eliminated from further evaluation if the submission does not include the required information.

"MUST" shall mean proponents "must" include the required information in the bid submission. Failure to include the required information will deem the submission informal.

"PROPONENT" means an entity that submits a bid in response to this tender document, as the context may suggest, refers to a potential Proponent.

"SHOULD" shall mean proponents "should" include the required information in the bid submission.



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"SUBCONTRACTOR" means the subcontractor and/or business who contracts to provide some service or material necessary for the performance of another's contract.

[End of Part 1]



PART 2: RFT PROCESS, INSTRUCTIONS, TERMS & CONDITIONS

2.1. <u>RFT SCHEDULE</u>

For the purposes of this RFT, the Board has established the following timing deadlines for the completion of the RFT process.

Event	Date & Time
Issue Date:	January 14, 2020
Mandatory Site Visit:	January 21, 2020 @ 11:30 AM
Last day to submit questions:	January 30, 2020 @ 12:00 PM
Responses to Questions Received :	February 4, 2020
Closing Date and Time:	February 11, 2020 @ 2:00:00 PM

2.2. <u>RFT CONTACT</u>

Tony Prizio, Supervisor – Procurement St. Clair Catholic District School Board 420 Creek Street, Wallaceburg, ON P: (519) 627-6762 x10256 E: tony.prizio@st-clair.net

2.3. ACCEPTANCE OF TERMS

The submission of a bid by a Proponent represents that the Proponent has read and completely understands, and accepts all provisions contained within this RFT. Any bid that has alternative terms and conditions to those contained herewith may be considered a counteroffer to the Board's request and may be rejected.

2.4. AGREEMENT TO ABIDE BY ESTABLISHED PROCESS

The following rules must be observed to protect the integrity of the competitive procurement process:

- All communications, including requests for information, must be between only the Representative of the Board and each Bidder who have been authorized and designated for that particular purpose.
- Apart from the communications between and among the designated representatives, there must be no communication between any other Board staff and any other representatives of the Bidder, and no giving of information with respect to the competitive procurement process and the final contract.
- Any attempt on the part of the Bidder, or any of its Employees, Agents, Vendors, or Representatives to contact any person(s) other than the designated SCCDSB representative(s) with respect to the competitive procurement process or any violation of the above requirements will be grounds for disqualification. The Board may, at its discretion, in addition to any other rights or remedies available at law, reject any potential or actual submission submitted by that Bidder.



Bidders accepts and agrees to observe the conditions listed herein, inform their staff thereof, and ensure their compliance by submitting an executed Bid Submission in response to this RFT.

2.5. <u>SCOPE OF WORK</u>

The St. Clair Catholic District School Board (Board) is seeking a Contractor to provide all of the necessary materials, equipment and labour to complete Partial Roof Modification project at Good Shepherd Catholic School in Thamesville, ON. Refer to Appendix C: Scope of Work & Specifications for detailed description of work to be carried out be the successful Proponent.

2.6. EXAMINATION OF SITE & SITE VISIT

Location: Good Shepherd Catholic School, 4 Edith Street, Thamesville, ON

Contact: Paul Lernout (519) 360-6262

Instructions: The site examination will be held at the date and time specified in Section 2.1 RFT Schedule. Attendees are required to report to the main office. A sign-in sheet will be available at the site examination. It is the attendee's responsibility to ensure they are signed-in at the meeting.

This is a MANDATORY SITE VISIT. Only contractors who attend the site visit will be permitted to submit a bid response. Attendance will be taken and will form part if the Bid Documents. Representatives of the Owner and Consultant will be in attendance.

In submitting a bid, it will be assumed that the bidders have carefully examined the drawings and have included in the bid price the complete cost of the work contemplated by the drawings and specifications and other bid documents.

2.7. TIMING OF PROJECT

The schedule for the completion of the project is:

- Commencement no earlier than June 29, 2020.
- Completion / Substantial Performance no later than August 21, 2020.

Work is to be completed during regular business hours. Working outside of school hours, including daytime access during weekends, holidays, March break, etc. shall be at the sole discretion of the SCCDSB's Project Manager.

2.8. COORDINATION WITH OCCUPANTS

Owner Occupancy: Owner will occupy site during entire construction period except for weekends and Christmas break. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.

- Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
- Notify Owner not less than 48 hours in advance of activities that will affect Owner's operations.
- Restrict high noise operations (i.e. breaking and cutting concrete) to unoccupied periods. Include any overtime wages due to the condition stipulated.



 Power shutdowns will be scheduled during unoccupied periods. Include any overtime wages due to the condition stipulated.

2.9. BID SUBMISSION

Bids shall be submitted with the project clearly identified on the sealed envelope:

RFT Bid Package #: 642-CP2020 – Good Shepherd Catholic School – Partial Roof Modification

The sealed Bid Submission must be returned to:

Catholic Education Centre Reception Desk

420 Creek Street, Wallaceburg, ON N8A 4C4

Attention: Tony Prizio, Supervisor - Procurement

<u>Bids MUST be received no later than the date and time specified in this tender document.</u> Any bid submissions received after the deadline will be returned unopened to the bidder. It is the Bidder's responsibility to ensure their Bid Submission is received by a Board representative on or before the tender close. The Board will not take any responsibility for late submissions due to postal delay through Canada Post, third-party courier services, or for any other reason.

If a Bidder chooses to deliver their Bid Submission via post or courier, the envelope or package must reference the project number and project description on the outside.

Bids shall be filled out in ink or typed, signed in longhand by a duly authorized company official (having authority to bind) [and sealed with a company corporate seal]. One original of the fully completed Bid Form must be submitted. Failure to provide all of the requested information on the Bid Form may result in disqualification of the bid. Please refer to Appendix A: Bidder's Response Guide.

Bids by telephone, email, or fax will <u>not</u> be accepted.

After bid closing all submissions will be reviewed by the Board's evaluation team. Contractors submitting a bid are invited to stay for a public opening of Bids at 2:05 PM at the Catholic Education Centre.

Supplier's Bid Submission, all Bid Documents and Purchase Order will form the agreement.

2.10. CONTRACT PRICING

Proponents must complete the Bid Form. Prices must include all travel, reimbursements, delivery (FOB Destination).

All charges must include the cost of the product or service. Prices quoted must be for products or services exactly as specified, unless otherwise noted or requested on the Bid Form.

2.11. QUESTIONS AND REQUESTS FOR CLARIFICATION

Proponents finding discrepancies, ambiguities or omissions in the RFT documents or having doubt as to the meaning or intent thereof, shall immediately notify the Procurement Department. The board is not responsible for any misunderstanding of the RFT on the part of a Proponent. Questions must be received by the date and time specified in the RFT Document. Responses will be provided in writing to Proponents through the same platform that the original RFT documents were issued.



All questions to be addressed in writing to:

<u>Tony Prizio</u>, Supervisor - Procurement St. Clair Catholic District School Board E-mail: <u>tony.prizio@st-clair.net</u> CC: <u>victoria.iaccino@st-clair.net</u>

For the purpose of this RFT, Proponents shall not contact anyone in the Board other than the designated contact listed in these bid documents. Any unauthorized communications may result in disqualification.

2.12. ADDENDA

Proponents may also, during the RFT Process, be advised by Addendum of any additions, deletions or alterations to RFT documents. All such Addenda shall become part of the RFT Documents.

If an addendum is issued, the document(s) will be made available to Proponents through the same platform that the original RFT documents were issued. Proponents are responsible for verifying before submitting its response that it has received all addenda that may have been issued.

Where a Bid Submission has been received by the Board prior to the publication of an Addendum or notice, the Board shall allow that Proponent to submit a revised Bid Submission prior to the closing date for the RFT or send written acknowledgement (which may be by email) to the RFT contact that the original Bid Submission still stands.

2.13. WITHDRAWAL OF SUBMISSION

A Proponent may alter, amend, or withdraw a submitted proposal if such request is received in writing by the contact person for this RFT prior to the closing date and time specified in this document. The last submission shall supersede and invalidate all previous submission by that Proponent as it applies to this bid. Such requests received after the closing date and time will not be permitted.

2.14. BID ACCEPTANCE

It shall be understood by all proponents, that the RFT submission shall be valid and subject to acceptance by the Board, and that no adjustments shall be made to the proposal for a period of up to and including sixty (60) days from the RFT Closing Date.

The Board reserves the right to determine the successful proponent at its sole discretion. The lowest cost may not be accepted. The Board reserves the right to decline any or all submissions, in whole or in part, at any time prior to making an award.

The successful proponent shall be required to enter into a formal contract with the Board, which will include the terms and conditions of the RFT documents, the Proponent's bid, and all other applicable documents.

2.15. <u>CANCELLATION</u>

The Board may cancel this RFT at its discretion at any time prior to an award. The Board may do so for budgetary reasons, for any other reason, or without providing reasons and issue a new request for tender, request for qualifications, or do nothing.

2.16. CLARIFICATION

The Board reserves the right to seek clarification from any Proponents without being obligated to all Proponents if it finds certain aspects of a bid unclear.

2.17. BOARD'S RIGHT TO WAIVE MINOR IRREGULARITY



The Board reserves the right to accept or waive a minor irregularity, or where practical to do so, the Board may as a condition of bid acceptance request a Proponent to correct a minor irregularity with no change in bid price. Items of non-compliancy on any bid submissions which do not strictly comply with the provisions, procedures and requirements of this bid, or are incomplete, ambiguous, or which contain errors, alterations, misleading information, omissions, or irregularities of any kind, may be rejected and disqualified at the discretion of the Board. All proponents agree to provide all such additional information as, and when requested, at their own expense, provided no proponent in supplying any such information shall be allowed, in any way to change the pricing or other cost quotations originally given in its bid submission or in any way materially alter or add to the solution originally proposed.

2.18. ERRORS AND OMISSIONS

The Board will not be held liable for any errors or omissions in any part of the RFT. While the Board has used considerable effort to ensure an accurate representation in the RFT, the information contained in the RFT is supplied solely as a guideline for the Proponents. The information is not guaranteed or warranted to be accurate by the Board, nor is it necessarily comprehensive or exhaustive.

2.19. DOCUMENT AVAILABILITY

RFT documents are available on the Board's Website www.st-clair.net under Bid Opportunities or on Biddingo www.biddingo.com. Documents will also be provided to local construction associations: Sarnia Construction Association, Windsor Construction Association, Lambton Area Builders Exchange and the London & District Construction Association.

The Board assumes no responsibility for the proponent's failure to examine all of the RFT Documents.

2.20. PROPONENT EXPENSES

Any and all costs and expenses incurred by Proponents in the development, preparation, submission or presentation of their bids, or otherwise related to its participation in this RFT process will be borne by the Proponents. The selection of any bid, or the rejection of any or all bids, or the termination/cancellation of this RFT process, or initiation of a new RFT process shall not render the Board liable to pay or reimburse any such costs or damages incurred by any Proponent, or any partner or contractor of such Proponents.

2.21. VOLUNATRY ALTERNATE & SEPARATE PRICES

The bid amounts are to be based on the bid documents. Where there is any conflict within the bid documents, the bid amount shall include the higher cost alternative. Alternative proposals are encouraged and should be identified in the bid. Submit complete information including any impact on schedule to allow a full evaluation of the proposal including, as applicable, any particulars in which the alternate proposal is at variance with or unable to meet the specifications. Note also any impact on other trades if the alternative is accepted. Alternative proposals may be made without limitation, including for items specified as single sourced.

2.22. BID INELIGIBILITY

Bids may, at the discretion of the Owner, be declared informal for any of the following reasons:

- the bid is incomplete, unsigned, improperly signed or sealed, conditional, illegible, obscure, contains arithmetical errors, erasures, alterations, or irregularities of any kind, or
- the bid does not include the required bonding/ consent of surety
- the Bid Forms and enclosures are improperly prepared, or



- the prices seem to be so unbalanced as to adversely affect the interests of the Owner, or
- the bid is based upon an unreasonable period of time for completion or delivery, or
- the bidder does not provide the required Proof of Insurance within the time specified in these Bid Documents

2.23. <u>AWARD</u>

The Board has the right to reject any or all bids. The lowest Bid will not necessarily be accepted. The invitation to bid does not constitute an offer by the Contractor to enter into a contract. In the event of a tie, a coin flip conducted by the Supervisor – Procurement (or designate) with a minimum of one other Board staff will determine the successful proponent.

Acceptance of the Bid and/or award is subject to the approval of the St. Clair Catholic District School Board.

The SCCDSB reserves the right to withdraw the award of the contract to a successful bidder(s) within 30 days of the award if, in the opinion of the SCCDSB, the successful bidder(s) is unable or unwilling to enter into a form of contract satisfactory to the SCCDSB. The SCCDSB shall be entitled to do so without any liability being incurred by the SCCDSB to the bidder.

2.24. ENTITLEMENT TO A DEBRIEFING

In accordance with the Broader Public Sector Procurement Directive unsuccessful Bidders are entitled to a debriefing, during which they will be provided with feedback regarding their Tender. In order to be debriefed, unsuccessful Bidders must contact the Owner representative identified in the Bid Documents in writing to request a debriefing within sixty (60) days from the date of the notification of award.

2.25. BID DISPUTE PROCEDURE

In the event that a Bidder wishes to review the decision of the Board in respect of any material aspect of the Request For Tender process, the Bidder shall submit a protest in writing to the Board to the attention of the Supervisor – Procurement within ten (10) days of the closing date of the Tender.

Any protest in writing shall include the following:

- a) a specific identification of the provision and/or procurement procedure that is alleged to have been breached;
- b) a specific description of each act alleged to have breached the procurement process;
- c) a precise statement of the relevant facts;
- d) an identification of the issues to be resolved;
- e) the Bidder's arguments and supporting documentation;
- f) the Bidder's requested remedy.

2.26. INVOICING & PAYMENT

The Board shall pay by electronic funds transfer (EFT), P-Card, or cheque within twenty eight (28) days after the receipt of a proper invoice. Invoices will be reviewed and certified by the Board's Consultant, if applicable, before the invoice is processed for payment. Invoices must include all back-up material for time and material charges, disbursements, and other fees. Please make reference to the Purchase Order number on the invoice.



Invoices should be sent digitally to the architect and be based upon the consultant's approved format for invoicing with copies sent to <u>victoria.iaccino@st-clair.net</u>. Digital invoices will be processed as an original. Please do not send duplicate copies by mail.

Note: Invoices should reflect a 10% holdback (final construction cost) which will be retained by Board through substantial completion of the project in accordance with relevant legislation.

2.27. <u>TAXES</u>

Include in Bid all Taxes and all other Customs Duties and Excise Taxes which are in force at Bid date as detailed in General Conditions. Harmonized Sales Tax (H.S.T.) is <u>not</u> to be included in the bid. The H.S.T. amount and the Bidder's <u>H.S.T. Registration Number</u> are to be indicated on the Bid Form in the spaces provided.

2.28. CHANGE NOTICES, CHANGE ORDERS

The following fee percentage and overhead charges shall be applied to additional work ordered by the Board:

- For work carried out by the Contractor's own forces 10% Overhead & Profit
- For work involving a subcontractor, the subcontractor may charge a maximum 10% fee. The General Contractor may charge a maximum of 5% in addition to subcontractor's fee.

2.29. PROJECT SPECIFIC REQUIREMENTS

Any and all damages to facilities while under the control of the contractor shall be repaired at the contractor's cost. Please be advised that the Owner has a No Smoking Requirement on the Owners' property. Contractors shall provide their own washroom facilities for their employees; board washrooms will be off limits to the contractor's employees. Contractors are requested to ensure that employees and suppliers are advised of these Requirements. Contractor shall remove rubbish and debris from the site on a daily basis or as directed by the Board. On completion of the work, all debris shall be removed; the floor shall be thoroughly cleaned and swept; the site shall be left in a tidy condition (construction clean). Do not use the Board's equipment or facilities for cleaning or for any reason.

2.30. SUBCONTRACTORS

The successful Proponent(s) may not, at any time, subcontract any portions of its contract with the Board nor shall it assign the contract without the written permission of the Board. The successful Proponent(s) must not, at any time, change subcontractors approved by the Board without the written permission of the Board.

2.31. GENERAL TERMS AND CONDITIONS

The issuance of this bid document shall not constitute and obligation on the part of the Board to any proponent who submits a bid.

The laws of the Province of Ontario shall govern any dispute occasioned as a result of the performance or non-performance and/or workmanship of a contract issued pursuant to the bid and any dispute arising out of the issuance of and response to this bid document.

All SCCDSB policies, procedures and regulations must be adhered to by the successful bidder(s).

Some of the Board sites are equipped with video surveillance cameras.



The successful proponent(s) is obliged to cooperate with all recycling and environmental procedures and initiatives established by government, the Board and each school.

The successful bidder(s)' employees and contracted staff shall not be considered SCCDSB employees and shall not represent themselves as an agent of the SCCDSB nor be eligible for any of the benefits provided to SCCDSB employees.

The SCCDSB reserves the right to demand the removal of any successful bidder's employees or contracted staff engaged in this contract if, in the SCCDSB's opinion, their conduct has been of an unacceptable nature.

The successful bidder(s) will be responsible for ensuring that regular supervision is maintained over all working personnel. It is the bidder's responsibility to ensure that all their activities are properly coordinated with the SCCDSB's operations and modify assignments as required.

This bid document is being issued pursuant to the SCCDSB's Purchasing Policies and Procedures.

The acceptance of the bid by the successful proponent(s) and the award of the contract contemplated by this bid document may be subject to approval of the Board of Trustees.

2.32. BONDING

On bids exceeding \$100,000.00 (inclusive of all taxes) the following tender security / bonding is required and must accompany the bid:

- Agreement to Bond: 50% Performance and 50% Labour and Material
- Bid Bond: 10% of the bid price, payable to the St. Clair Catholic District School Board

If the bid amount is greater than \$100,000 and less than \$500,000 (inclusive of all taxes) the Surety or Bid Bond may be provided in the form of an irrevocable letter of credit, a certified cheque, or money order payable to the Board in the value of 10% of the bid amount.

Only bond and agreements to bond issued by a licenced Canadian surety company authorized to do business in the Province of Ontario will be accepted. Upon request, the successful Bidder will be required to present the bonds to the Purchasing Department. Failure to provide the proper surety to the Board upon award will result in rejection of that Bid. The cost of bonding shall be included in the Bid price and identified on the Tender Form, if applicable.

2.33. INSURANCE

The successful Proponent(s) must maintain, at the Proponent's expense for the entire term of the Contract or as otherwise required, all insurance as set out below. Proof of coverage must be received within <u>5</u> business days of the bid closing; however, it is recommended that proponents include proof of insurance as part of their bid submission:

- Comprehensive General Liability and Property Damage with a limit of not less than \$2,000,000.00 (two million dollars).
- Motor Vehicle Public Liability and Property Insurance on all owned and rented equipment with a limit of not less than **\$2,000,000.00 (two million dollars).**

The Proponent agrees to indemnify, hold harmless, and defend the Board, its Consultants, agents or employees from and against any and all liability for loss, damage and expense, which the Board may suffer or for which the Board may be held liable by reason of injury (including death) or damage to any property arising out of negligence on the party of the proponent or any of its representatives, employees, or



subcontractors in the execution of the work preformed or by way of ownership or operation of an automobile.

The successful Proponent shall provide the Board with a complete certified copy of all policies. Copies of renewed policies must be provided to the Board on or before the policy renewal date for projects that extend past the original policy term or for multi-year contracts. The successful Proponent must name the St. Clair Catholic District School Board as additional insured on their insurance policies.

2.34. WORKPLACE SAFETY INSURANCE BOARD (WSIB)

Successful Proponent(s) must ensure that all workers are covered by the Workplace Safety and Insurance Board coverage for the duration of this contract. Proof of coverage must be received <u>within 5 business days</u> of the bid closing; however, it is recommended that proponents include their coverage as part of their bid submission.

Proponents must furnish a Certificate of Clearance from the Workplace Safety and Insurance Board as evidence that all returns have been made and all necessary assessments have been paid as required, or levied, by the Workplace Safety and Insurance Board.

Alternatively, if the Proponent is an Independent Operator and is not classified under Class G: Construction, the proponent must provide a letter from the Work Place Safety & Insurance Board confirming independent operator status and identification number under the WSIB Act.

2.35. <u>PERMITS</u>

The Board will apply and pay for a building permit if applicable. The contractor is to obtain all other permits as required to complete the project, including but not limited to ESA, hot work permit etc.

2.36. MEETINGS

A Post Bid Meeting may be convened and chaired by the Board who will invite the Successful Proponent and his major Subcontractors to review the Contract Documents and Bid submitted. This meeting will be prior to the Board issuing a Letter of Intent or Contract. This meeting does not constitute or infer any contract award to the proposed contractor or any other contractor, nor that will the project proceed.

During the course of Work, scheduled progress meetings may be required at the call of the Project Leader.

2.37. WARRANTY

The vendor/contractor warrants that all goods/services, materials and equipment supplied under contract are free of all defects in manufacture and workmanship for a period of not less than 1 year from date of delivery, installation or performance (whichever is the later) whether or not any portion or trade has been sublet.

The vendor/contractor shall promptly remedy any defect or deficiency in any goods/services, materials and equipment supplied under contract to the satisfaction of the Board within seven (7) calendar days following notice to do so from the Board at no additional cost to the Board, unless otherwise specified.

In the event that the vendor/contractor doesn't not promptly honour the above warranties to the satisfaction of the Board, the Board may, at the sole cost of the vendor/contractor do whatever it deems necessary and advisable to remedy, rectify or replace the defective, deficient or non-compliant goods, services, materials or equipment. The Board shall inform the vendor/contractor in advance of the approximate cost of such work to be done by the Board.



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All goods/services and/or equipment furnished or supplied pursuant to the contract shall be installed or attached in such a manner as to preserve all manufacturer's and vendor/contractor's warranties, which shall, together with all parts and components, become the property of the Board after the successful and satisfactory installation or attachment.

2.38. GUARANTEE

The vendor/contractor guarantees that all goods/services, materials and equipment supplied under contract are new manufacture. The products must not contain re-manufactured parts and/or accessories and must not have been used under contract with any other customer(s) unless specified by the Board. The submissions will be of the latest design and technology at the time of submission by the vendor.

The vendor/contractor represents and warrants that the goods and/or services supplied pursuant to this bid will be manufactured and/or supplied under such conditions that do not contravene the Ontario Human Right Code or the minimum standards of Ontario workplace legislation and regulations or are otherwise unethical. In the event in the opinion of the Board, the bidder is in breach of the foregoing representation and warranty, the Board may cancel the award or any such subsequent contract entered into between the Board and bidder pursuant thereto.

2.39. <u>SCHEDULE</u>

The Contractor will be required to perform the work in accordance with the Schedule dates provided in 2.7. <u>Timing of Project</u>. Ordering of major and long delivery items shall begin immediately upon successful bidder's receipt of contract award. The Contractor will provide a construction schedule within five (5) days of being awarded the project.

Time is of the essence. Bidders are to include adequate manpower, overtime and shift work necessary to meet or improve the schedule, and to make up any time lost to weather or normal delays. Include travel, room and board costs for out of town workers, shop overtime and other premiums to expedite material and equipment, shipping premiums and any incentive costs required to meet the schedule.

2.40. CONTRACTED SERVICES PROGRAM

Contractors performing work on Board property must complete the Contracted Services Program. The Contracted Services Program is a joint program with Lambton Kent District School Board. This program has three basic components that **must** be met before the bid is awarded. Contractors who cannot meet the minimum requirements of this program will not be awarded this tender. Program information can be found on the Board's web site at <u>www.st-clair.net</u> or through the Board contact identified previously in this document. If the contractor has already been pre-qualified by LKDSB they must provide proof of completion. Identification badges can be used on SCCDSB or LKDSB property. <u>All Insurance and WSIB certificates must be up to date under the Contracted Services Program</u>.

2.41. HEALTH and SAFETY

The Occupational Health and Safety Act describes the responsibilities of an employer. The Board requires Contractors to maintain procedures, training, and enforcement so that the responsibilities are carried out in the workplace. The Contractor shall abide by and strictly adhere to the regulations and conditions set out and laid down by the most current versions of the Occupational Health and Safety Act. All staff employed or hired by the Contractor and working on the Board's premise MUST be trained in WHMIS in accordance with Occupational Health and Safety Act and Regulations. They MUST adhere to all of the Board's Health and Safety Procedures and Guidelines and to Municipal By-Laws.



Contractor will submit proof of its health and safety program, procedures and training as detailed above upon request by the Board.

The Contractor shall appoint a Competent Person as the Supervisor of this project. The Competent Person shall be as defined in Section 1 of the Occupational Health and Safety Act.

The successful Contractor shall conform to the Ontario "Occupational Health and Safety Act" and all regulations made under said act and assume full responsibility for contraventions of same.

All workplace injuries or accidents on Board property MUST be reported by the Contractor to the Board's representative within 24 hours.

Any workplace injury that is defined under the Occupational Health and Safety Act as a "Critical Injury" must be reported to the Board's representative IMMEDIATELY.

2.42. ELECTRICAL AND SAFETY APPROVALS

All electrical/electronic components supplied by the vendor/contractor must be CSA, ULC and/or Ontario Hydro/Ontario Electrical Safety Authority approved. Appropriate labels must be affixed to the equipment prior to delivery. The vendor/ contractor is responsible for ensuring goods or services supplied to the Board must comply with the Occupational Health and Safety Act and Regulations of Industrial Establishments.

2.43. DESIGNATED SUBSTANCES

The contractor shall conduct work in recognition of the most current regulations related to Designated Substances. The contractor is required to review the site specific designated substances report to ascertain potential for exposure to designated materials and notify the board of instances where the scope of work under this contract will require remediation. If the report does not schedule designated materials in the attached report and should the contractor uncover material which is believed to be asbestos, work is to cease immediately and the Board staff are to be contacted immediately.

2.44. SAFE SCHOOL PROCEDURES

Contractor's staff is required to report to the main office of the site where work will be carried out during regular school hours and notify the school office staff of the purpose of the visit. The Contractor is required to adhere to all school specific procedures if applicable.

It is the responsibility of the Contractor's staff to sign in and sign out of the Log Book, which is located in the main office area, while performing their duties.

The following information must be recorded in a legible manner:

Date Company Name Employee Name Employee Signature Reason for Visit Time Entering Building Time Leaving Building

2.45. HOISTING, SCAFFOLDS, ELEVATED WORK PLATFORMS



The Contractor is responsible for all hoisting and other equipment necessary to facilitate their work if required.

2.46. <u>TEMPORARY POWER</u>

A source of electric power will be designated by the Board. The Board will allow a tie-in connection with fuse or breaker protection for the Contractor's estimated load requirements. The Contractor must provide the power connections and all extensions from the point to the job site. All electrical connections and extensions must meet ESA requirements and must be approved by the Board. The Contractor's estimated load requirements must not be exceeded without the Owner's permission.

2.47. NOISE AND TRAFFIC CONTROL

Bidders shall comply with all applicable **<u>noise by-laws</u>** (or local requirements governing same) and traffic routing that may be in effect during the life of the Project.

This <u>may</u> limit some activities to restricted time periods. Where the schedule requires for after hour work, the Contractor shall include all costs associated with obtaining the necessary permits to work such time periods.

The Contractor shall be responsible for all costs associated with providing a traffic officer as necessary to facilitate construction.

2.48. <u>SITE ACCESS AND EGRESS</u>

Contractors will be required to sign out a master key and will be assigned an access code for the alarm system. Successful Contractor will be responsible for building security during working hours and locking up the facility at night, which includes setting the alarm.

Any false alarms generated by the Contractor's workforce will result in a back charge for the costs incurred to the Board.

The Contractor shall make good any damage to roads, curbs, sidewalks, fencing, or grass damaged by vehicles or equipment during the course of construction.

2.49. PARKING

Contractors must park within the designated areas and allow for provisions to and from the designated parking area onto the job site.

2.50. CONTRACTOR'S PERSONNEL

The Contractor shall, at its own expense, provide all the personnel required to take a proactive role in managing the project as it relates to their work and its coordination with other trades. This will include but is not limited to the following:

- Competent supervision of the work of the Contract and coordination with the work of other Subcontractors. This includes being responsible for and properly supervising any subcontractors of this subcontractor.
- All layout work required to complete the work of the trade contract.
- Competent supervision of the work of the trade contract to ensure work is done in accordance with the OHSA and any other applicable regulations.



- Expediting the procurement of material and equipment to ensure delivery by their required dates.
- Submission of Requests for Information where required in a timely manner and wherever possible providing the Board with information to assist in the answering of these requests.
- Submission in a timely manner of all required shop drawings and samples and assistance to the Board required to obtain approvals to suit the schedule. All shop drawings are to be reviewed by the Contractor prior to submitting for approval.
- Attendance at all construction coordination meetings when requested by the Board.
- Provision of all necessary information requested by the Board for cost control and billing purposes.
- Inspection of the work of the Trade Contract for defects and deficiencies and cooperation with the Board and other inspection authorities to allow their inspections to take place.
- Submission of pricing for all changes to the work within five (5) working days after receipt of change documentation including the breakdown and backup necessary to allow checking and approval.

2.51. ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT

The Purchaser is committed to the highest possible standards for accessibility. Proponent(s) must be capable to recommend and deliver, as appropriate for each Deliverable, accessible and inclusive Services consistent with the Ontario Human Rights Code (OHRC), the Ontarians with Disabilities Act, 2001 (ODA) and Accessibility for Ontarians with Disabilities Act, 2005 (AODA) and its regulations in order to achieve accessibility for Ontarians with disabilities.

In accordance with Ontario Regulation 429-07 made under the Accessibility for Ontarians with Disabilities Act, 2005 (Accessibility Standards for Customer Service), the Purchaser has established policies, practices and procedures governing the provision of its services to persons with disabilities.

Proponents are required to comply with the Purchaser's accessibility standards, policies, practices, and procedures, which may be in effect during the Term of the Agreement and which apply to the Deliverables to be provided by the Proponent.

2.52. CANADA'S ANTI-SPAM LEGISLATION

Please note that vendors are required to comply with all applicable laws, including CASL, in providing goods or services to the Board. This also extends to communications sent on the Boards behalf. The successful proponent(s) will be required to indemnify the Board for any failure by the successful proponent(s) to comply with CASL, to the extent that the successful proponent(s) action, or inaction, could expose the Board to liability.

2.53. CONFIDENTIAL INFORMATION

All correspondence, documentation, and information of any kind provided to any Proponent in connection with or arising out of this Request for Tender or the acceptance of any Bid:

- Remains the property of the Purchaser and shall be removed from the Purchaser's premises only with the prior written consent of the Purchaser.
- Must be treated as confidential and shall not be disclosed except with the prior written consent of the Purchaser.
- Must not be used for any purpose other than for replying to this RFT and for the fulfilment of any related subsequent agreement.
- Must be returned to the Purchaser upon request.



Except as provided otherwise in this request, or as may be required by Applicable Laws, the Purchaser shall treat the Proponents' Proposals and any information gathered in any related process as confidential, provided that such obligation shall not include any information that is or becomes generally available to the public other than as a result of disclosure by the Purchaser.

During any part of this Request for Tender process, the Purchaser or any of its representatives or agents shall be under no obligation to execute a confidentiality agreement.

All correspondence, documentation, and information provided in response to or because of this RFT may be reproduced for the purposes of evaluating the Proponent's Bid Submission.

If a portion of a Proponent's Bid Submission is to be held confidential, such provisions must be clearly identified in the Bid.

The Purchaser reserves the right to require any Proponent to enter into a non-disclosure and/or confidentiality agreement satisfactory to the Purchaser.

2.54. <u>CONFLICT OF INTEREST</u>

Proponents must declare all conflicts of interest or any situation that may reasonably perceived as a conflict of interest in relation to the Project that exists now or may exist in the future. The Board, at its sole discretion, waive any and all actual, potential, or perceived conflicts of interest, on such terms and conditions and the Board, at its sole discretion, considers to be appropriately managed, mitigated, and minimized. In this regard the Board may require the Proponent to implement measures or take steps to manage or mitigate the impact of any actual, potential, or perceived conflict of interest.

2.55. MUNICIPAL FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY ACT

The *Municipal Freedom of Information and Protection of Privacy Act* (Ontario) applies to information provided by Proponents. A Proponent should identify any information in its Quotation or any accompanying documentation supplied in confidence for which confidentiality is to be maintained by the Purchaser. The confidentiality of such information will be maintained by the Purchaser, except as otherwise required by law or by order of a court, tribunal, or the Ontario Privacy Commissioner.

By submitting a Bid, including any Personal Information requested in this RFT, Proponents agree to the use of such information for the evaluation process, for any audit of this procurement process, and for contract management purposes.

2.56. PERSONAL INFORMATION PROTECTION AND ELECTRONIC DOCUMENTS ACT

The Proponent represents and warrants that if the Proponent becomes subject to any private sector privacy legislation in responding hereto, or in carrying out its obligations under any subsequent agreement, the bidder will be solely responsible with such legislation. Without limitation, the Proponent represents and warrants that if the Proponent is subject to the *Personal Information Protection and Electronic Documents Act* (PIPEDA) the Proponent shall ensure compliance of all PIPEDA Protected Information that the Bidder:

- Collects directly from the individuals or indirectly from the Board or others;
- Uses or discloses in the course of responding hereto or in performing its obligations under and subsequent agreement; or
- Transfers or discloses to the Board

2.57. TRADE AGREEMENTS



Proponents should note that procurements within the scope of either Chapter 5 of the Canadian Free Trade Agreement, Chapter 19 of the Comprehensive Economic and Trade Agreement, within the scope of the Trade and Cooperation Agreement between Quebec and Ontario or any other applicable agreement not listed herein are subject to such agreements, although the rights and obligations of the parties shall be governed by the specific terms of this RFT.

2.58. WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM

The Proponent should provide Workplace Hazardous Materials Information System (WHMIS) material safety data sheets (MSDS) for all Services. Additionally, the Proponent should provide the Purchaser's personnel WHMIS training, as it relates to the Services, in accordance with the Ontario Occupational Health and Safety Act.

2.59. VENDOR PERFORMANCE

Where the Contractor fails to comply with any of its obligations under the Contract, the Board may issue a notice setting out the manner and time-frame for rectification. Within seven (7) Business Days of receipt of that notice or in a timeframe as otherwise agreed to, the Contractor shall either: (a) comply with that rectification notice; or (b) provide a rectification plan satisfactory to the Board. If the Contractor fails to either comply with that rectification notice or provide a satisfactory rectification plan, the Board may immediately terminate the Contract. Where the Contractor has been given a prior rectification notice, the same subsequent type of non-compliance by the Contractor may allow the Board to immediately terminate the Contract and result in the suspension of bidding privileges to the Board for up to two years at the sole unfettered discretion of the Board.

2.60. TERMINATION OF CONTRACT

Either party may terminate the Agreement on written notice to the other where such other party neglects or fails to perform or observe any material term or obligation of the Agreement and such failure has not been cured within 30 Days of written notice being provided.

If the Proponent fails to execute the work properly or otherwise fails to comply with the requirements of the contract to a substantial degree, the Board may correct such default and deduct the cost thereof from any payment then or thereafter due to the contractor.

The Board shall be entitled to terminate the Agreement immediately, without liability, cost, or penalty on written notice to the Proponent:

- if any proceeding in bankruptcy, receivership, liquidation, or insolvency is commenced against the Proponent or its property;
- if the Proponent makes an assignment for the benefit of its creditors, becomes insolvent, commits an act of bankruptcy, ceases to carry on its business or affairs as a going concern, files a notice of intention or a proposal, or seeks any arrangement or compromise with its creditors under any statute or otherwise;
- following the occurrence of any material change in the Board's requirements which results from a regulatory or funding changes, or recommendations issued by a Governmental Authority;
- in the event of a breach of the representation regarding conflict of interest;
- in the event of a misrepresentation or material breach;
- if the proponent uses, destroys, exploits, or discloses any Board Confidential Information to any Personal Information contrary to this Agreement; and
- in accordance with any provision of the Agreement that provides for early termination;



The Board reserves the right to terminate the Agreement, without cause, upon sixty (60) days' prior written notice to the Proponent.

The Board shall be liable to the Vendor only for the payment of Deliverable(s) supplied and accepted up to the date of termination.

The Board, at its sole and unfettered discretion, may extend the timelines for termination if it is deemed to be in the Board's best interest to do so.

Any termination of the Agreement shall not in any respect limit any of either party's rights or remedies either in law or in equity or relieve either party of any obligation incurred prior to the effective date of such termination.

[End of Part 2]



APPENDIX A: Bidder's Response Guide

Each bid submission should be structured using only the criteria identified in this bid document.

- 1. A completed copy of APPENDIX C: Bid Form **<u>must</u>** be included in your bid submission.
- Proof of WSIB Coverage and proof of insurance <u>must</u> be supplied within 5 days of the submission deadline.
- 3. If applicable, bonding/tender security must be provided in your bid submission.
- 4. Supplemental material will not qualify as substitutes for direct responses to the bid's requirements, except for specifically requested material.
- 5. The successful contractor must be prequalified under the contracted services program before an award is made.



Tender 642-CP2020 Partial Roof Modification Good Shepherd Catholic School Issued: January 14, 2020

APPENDIX B: Bid Form

Submitted By: _____

To:

St. Clair Catholic District School Board

642-CP2020 Partial Roof Modification

Good Shepherd Catholic School, Thamesville

B1. Base Bid Price

The Drawings, Specifications and other Contract Documents for this Project have been examined, as well as the premises and job site conditions affecting the work. The undersigned hereby offers to complete the work in accordance with the Contract Documents for the following bid price, in Canadian Funds, EXCLUDING HST:

_____ Dollars (\$ ______)

or such other sums as may be finally ascertained in accordance with the allowances, deductions, or changes as set out in the Bid Documents. HST will be added to the bid price.

In submitting this Bid, the undersigned recognizes and accepts the right of the Owner to accept any Bid, which is deemed the most advantageous to the Owner, (or any part thereof), at the price submitted, or to reject any or all Bids. Acceptance of the Bid and/or award of the contract is subject to the approval of the Board.

In the event that a discrepancy arises between the written bid price and the associated numerical price, the written bid price will be deemed to be correct.

B2. Harmonized Sales Tax (HST)

The bidder shall not include the applicable HST in the bid price. The successful contractor will indicate on each application for payment as a separate amount the appropriate HST the Owner is obliged to pay.

HST Registration # _____

B3. Cash Allowances

- 1. Include a Stipulated Sum of twenty thousand dollars (\$20,000.00) to cover over the following items from which the Consultant shall direct payment for services, labour, and material.
 - a. Itemized Price Part A: Roof Areas "F" and "G" Cash Allowance of \$10,000.00



b. Itemized Price Part B: Roof Areas "H" and "I" Cash Allowance of \$10,000.00

Time and Materials rates to be applied against Cash Allowance work. Final reconciliation will adjust the cash allowance as credit to the SCCDSB for unexpended amounts and extra to the contractor for over expenditure. The contractor shall mark-up sub-trade time and materials billing for this portion of work at 10% only.

B4. Itemized Prices

The following prices make up the Base Bid amount. The following prices, if accepted by the owner, shall include all labour, material, tools, equipment, overhead and profit for the execution and completion of the scope of work herein and in accordance with these Bid Documents, EXCLUDING HST. No other cost consideration shall be added to the contract for the scope of this work if accepted by the owner. The owner retains the right to cancel any or all of the sites for any reason.

ONLY ENTER A BID FOR THE OPTION YOU ARE PROVIDING. NOTE "N/A" FOR THE OTHER TWO OPTIONS

Part A: Roof Areas "F" and "G"

The Roofing Contractor is to peel back and separate the existing Two-Ply Modified Bitumen Granulated Surface Membrane from the current insulation below. Then the Contractor is to supply and install all Rigid Insulation, Protection board, etc., prior to installing a Two Ply Modified Bitumen Roof System as shown on the Enclosed Drawings and in accordance with the Project Specifications for this facility. (The Contractor will include a Cash Allowance of \$10,000.00, as noted in B4: Cash Allowances, with this price (if the allowance is not used, it will be taken off of the Total Tender Price).

Option A1 (HENRY)	Option A2 (SOPREMA)	Option A3 (IKO)

Part B: Roof Areas "H" and "I"

The Roofing Contractor is to peel back and separate the existing Two-Ply Modified Bitumen Granulated Surface Membrane from the current insulation below. Then the Contractor is to supply and install Protection Board, etc., prior to installing a Two Ply Modified Bitumen Roof System as shown on the Enclosed Drawings and in accordance with the Project Specifications for this facility. (The Contractor will include a Cash Allowance of \$10,000.00, as noted in B4: Cash Allowances, with this price (if the allowance is not used, it will be taken off of the Total Tender Price).

Option B1 (HENRY)	Option B2 (SOPREMA)	Option B3 (IKO)

Total Itemized Prices



Part A: Roof Areas "F" and "G" plus Part B: Roof Areas "H" and "I". Total to be used to provide bid in Section B1. Base Bid Price.

Option A1 + B1 (HENRY)	Option A2 + B2 (SOPREMA)	Option A3 + B3 (IKO)

B5. Bonding

Upon Award contractor will furnish a Performance Bond and Labour and Materials Bonds as outlined in these Bid Documents. The cost identified below is included in the Base Bid Price and EXCLUDES HST.

Bonding Company	Cost
-----------------	------

B6. <u>Unit Prices</u>

Price (Hourly Rate) for roofing contractor to carry out and additional work which may be required by the Board beyond the Scope of Work, EXCLUDING HST.

|--|

B7. List of Subcontractors

Trade	Mechanical	Contractor	Postma Heating & Cooling
Trade		Contractor	
Trade		Contractor	

B8. <u>Project Superintendent / Supervisor</u>

The Owner requires the General Contractor provide a full time site supervisor for the duration of the project. A minimum of 5 years supervisory experience is required. List proposed personnel and their experience in the table below. Supervisory experience with firms other than the Bidder is acceptable to include on the list. The General Contractor shall indicate the person chosen in writing to the Owner within 5 days of contract award.

Name	Firm/Position	Qualifications/ Experience



B9. <u>References</u>

References are required by proponents regardless if they are currently doing business with the St. Clair Catholic District School Board. References should be from other boards, counties, municipalities, academic institutions or companies of a similar size to the SCCDSB, if possible, for contracts for similar projects completed within the past 5 years. By completing this Bid Form the proponent authorizes the SCCDSB to obtain business reference information from the following sources:

Organization Name	
Organization Address	
Contact Name/ Title	
Email	
Phone	
Type of Product/ Service	
Value of Contract	

Organization Name	
Organization Address	
Contact Name/ Title	
Email	
Phone	
Type of Product/ Service	
Value of Contract	

B10. Conflict of Interest

I /We confirm that: (please check one)

_____ There is not nor was there any actual or perceived Conflict of Interest or any other type of unfair advantage in our submitting this Proposal or performing or observing the contractual obligations of the Contractor in the Agreement.

OR

_____ Complete with this bid submission is a declaration on company letterhead of situations which may be a Conflict of Interest or an instance of unfair advantage or appears as potentially a Conflict of Interest or unfair advantage in our company submitting this Proposal or the contractual obligations of the Contractor under the Agreement.

Please note that the Board has the right to waive an actual or perceived conflict of interest as described in section 2.54 CONFLICT OF INTEREST.



B11. Agreement of Terms

I/We hereby acknowledge and agree that I/we have read, accepted, and completed all Contract Terms and Conditions and Appendices.

I/We understand it is the SCCDSB's intention that this RFT and the successful proponent(s)'s returned RFT submission will form the basis of the proposed contract. All of the terms and conditions of this RFT must be accepted by the proponent(s) and incorporated into the proponent(s) RFT submission. It is the SCCDSB's intention to use a Purchase Order when establishing a contract with the successful proponent(s).

The undersigned acknowledges receipt of Addenda Numbers ______ through ______ inclusive, and that the price, or adjustment thereof, for all work required therein is included in this submission.

This page must be signed below and returned with your submission for your bid to be accepted.

I/We the undersigned are duly authorized to execute this Bid Submission on behalf of:

Company:	
Address:	
Name:	
Title:	
Signature:	Date:
Phone:	Fax:
Email:	

Please refer to Appendix A: Bidder's Response Guide to ensure you include all necessary documentation with your bid submission



Tender 642-CP2020 Partial Roof Modification Good Shepherd Catholic School Issued: January 14, 2020

APPENDIX C: Scope of Work and Specifications

Specifications and Drawings prepared by:

Remlap Building Services Inc.

1407 Gore Road, RR1 Harrow, ON NOR 1G0

SPECIFICATION ON PARTIAL ROOF MODIFICATION

FOR

ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD

AT

GOOD SHEPHERD CATHOLIC SCHOOL 4 EDITH STREET THAMESVILLE ONTARIO NOP 2K0

PROJECT No. 642-CP2020

JANUARY 2020

3.0 GENERAL

Partial Roof Modification for Good Shepherd Catholic School - Thamesville PROJECT No. 642-CP2020

3.1 Warranties

3.1.1 Roofing Application Guarantee

Warrant the work of this section including insulation, membrane and sheet metal work against defects and any actual leakage in accordance with the General Conditions but for a period of two (2) years and agree to make good promptly any defects which occur or become apparent within the warranty period, such defects to include but not be restricted to leaking, blistering, lifting, curling, wrinkling, alligatoring, fish mouths, loosening and splitting of seams, buckling of counter flashing, improper securement of flashings, improper use or application of materials.

3.1.2 Membrane System Warranty:

Provide a Written Membrane System Warranty to **St. Clair Catholic District School Board** – **Partial Roof Modification** stating that the Roofing Membrane Manufacturer will pay the entire cost to have the Authorized Roofing Applicator search any leaks which occur due to Membrane or Application (workmanship) failure within the warranty period of fifteen years.

Partial Roof Modification for Good Shepherd Catholic School - Thamesville PROJECT No. 642-CP2020

OPTION NO. 1 – HENRY COMPANY

4.1 Modified Bitumen Membrane

- 4.1.1 Modified Bitumen Sheets shall conform to CGSB 37-GP-56M "Membrane, Modified, Bituminous, Prefabricated and Reinforced for Roofing"; Type 2, Class C, Grade 2 for Base Sheets and Type 1, Class A, Grade 2 for Cap Sheets.
- 4.1.2 The Contractor may bid on any Manufacturer's Systems specified for torching application of the base sheet and torching of the cap sheet for this roof area. The colour of the granular surface is to be selected by the Owner. Supply additional granules to be applied to bitumen outflows between membrane sheets.
- 4.1.3 Modified Bitumen Membrane Two-Ply System shall be as specified or approved equal and accepted by the Consultant and Owner.
 - a) Henry Company
 - i) Base Sheet (NP180P/S) and (NP180 S/P 3.5 Cap Sheet)
 - ii) Self-Adhesive Membrane (NP 180 Tack Sheet)
 - iii) Cap Sheet (NP250gT4)

4.2 Electrical/Cooling Line Penetration

4.2.1 Pipe Flash as manufactured by OMG Roofing Products are to be used at all penetrations as detailed.

4.3 Primer

4.3.1 As required by each Roof Membrane Manufacturer.

4.4 Rigid Insulation

4.4.1 Insulation shall be roof insulation which is rigid closed cell, Polyiso Foam Insulation, integrally laminated to glass fiber mat facers, thermal resistance of insulation shall be R-11.4 (L.T.T.R.) (2.0 inch) for the main roof on Area 'F' and 'G' and then the Tapered Insulation around recessed roof drains, Resistance R-Value in accordance with ASTM C1289-11A. All insulation boards shall be 4 feet by 4 feet in size. **ROOF AREA 'H' and 'I' does not receive any additional rigid insulation**.

4.5 Insulation Overlay Boards

4.5.1 Bituminous Boards consisting of multi-ply, semi-rigid Asphaltic Roofing Substrate Board composed of a mineral fortified Asphaltic core formed between two Asphaltic saturated fiberglass liners. Length 1200mm x Width 1500mm x thickness 4.5 mm such as Recover Board by Bakor or approved equal by the Consultant.

4.6 Bitumen Adhesive

4.6.1 Royal Millennium One-Step Foamable Adhesive to be used for application of thermal barrier (if required) along with rigid insulation and overlay boards.

Partial Roof Modification for Good Shepherd Catholic School - Thamesville PROJECT No. 642-CP2020

OPTION NO. 1 – HENRY COMPANY

4.7 Vent Pipe Stack Flange

4.7.1 The vent pipe stack flange shall be Thaler Roofing Specialties Products Inc. Model No. SJ-37 insulated flange. The Roofing Contractor shall verify the inside diameter of the vent pipe stack for each location.

4.8 Exhaust Vent Flashings

4.8.1 Thaler EVF Exhaust Vent Flashings consist of a double wall metal flashing sleeve with integral deck flange, matching removable hood (screw fastened), pre-molded urethane insulation lines and EPDM Base Seal.

4.9 Roof Drain

4.9.1 Roof Drain shall be Thaler Roof Specialties Products Inc. Model No. RD-4A-RR Vandal-Proof aluminum roof drain with aluminum ferrule to complete a FURCO Connection. Outlet size shall be verified on site by the Roofing Contractor.

4.10 Tapered Insulation (Recessed Roof Drains) (ONLY 'F' AND 'G')

4.10.1 The tapered insulation shall be faced Isocyanurate Boards conforming to CAN/CGSB-51.26-M86, 4.11.1 The tapered insulation shall be faced Isocyanurate Boards conforming to CAN/CGSB-51.26-M86, meeting the requirements of ULC S126 Polyisocyanurate foam panels chemically bonded during the foaming process to facers on the top and bottom glass fiber mat surfaces. Tapered panels shall not be less than 13m at any point of the roof to the slope indicated on the Roof Plan and Details.

4.11 Elastomeric Modified Bitumen Adhesive

4.11.1 Bakor MBA Gold is a fib rated rubberized adhesive with a bonding strength designed for adhering SBS modified bitumen and asphalt coated membranes directly to properly prepared substrates.

4.12 Metal Flashings

4.12.1 Metal flashings shall be 24ga. Colorite 8000 Series pre-finished steel (both sides) as manufactured by Westeel Roscoe, Steelcolour 8000 Series or Owner approved equal, formed to comply with field conditions. The colour is to be selected by the Owner from the Manufacturer's standard colours. A one meter "test bend" for each general metal flashing condition shall be completed and presented to the Owner's Representative for approval prior to general fabrication.

4.13 Sealants

4.13.1 Caulking Sealants for metal flashing shall be one-part silicone to conform to CGSB 19 GP 96. Sealants shall be manufactured by Canadian General Electric, Dow Corning or approved equal. The colour of the sealant shall be identical to the colour of the metal flashing; the Owner is to approve the colour before ordering the sealant. This sealant shall be applied to all metal flashing joints including the reglet.

Partial Roof Modification for Good Shepherd Catholic School - Thamesville PROJECT No. 642-CP2020

OPTION NO. 1 – HENRY COMPANY

4.14 Roofing Gravel

4.14.1 The gravel shall be ¹/₄" to 5/8" size; water washed pea gravel, well graded, opaque, non-porous material free of fines, moisture, ice, and snow or long splinters and conforms to ASTM D1863-086.

4.15 Framing Lumber

4.15.1 Framing Lumber on top of roof area shall be pressure treated for rot resistance conforming to CSA 0322-1976 and CSA 080-M1983; sizes shown on the Drawings. Grade SPF No. 2 or better.

4.16 Plywood

4.16.1 Exterior Grade "fir" to CSA 0121 or CSA 0151, ½" and ¾" thick, as detailed on Enclosed Drawings.

4.17 Rough Hardware and Nails

4.17.1 The Roofing Contractor shall supply all rough hardware where required. Nails, spikes, screws, bolts, etc. shall be of sufficient size and type to rigidly secure all members into place. All nails shall be hot dip galvanized.

4.18 Painting

- 4.18.1 All existing gas lines, exhaust fan hoods and roof top units shall be cleaned and scraped prior to being repainted.
- 4.18.2 Clean and prime with Alkyd Metal Primer before applying two coats of enamel paint. The colour shall be selected by the Owner.

4.19 Plastic Roof Cement

4.19.1 Pro-Grade Plastomers 810-21 Plastic Cement is composed of asphalt synthetic rubber, fiber and fillers exceeding the requirements of CAN/CGSB-37.5. This product is manufactured by Bakor or approved equal.

4.20 Precast Pads

4.20.1 Precast concrete pads shall be 24 inches by 24 inches by 2-inch-thick for additional walkway, etc. as shown on Roof Plan. Pads shall be placed on a 20 inch by 20 inches by 1-inch-thick sections of rigid Type 4 extruded polystrenne insulation. (46 new pavers in total)

4.21 Roof Pipe Supports

4.21.1 Roof Pipe Supports as manufactured by C-Port (Model No. CXP) are to be supplied and installed by the Roofing Contractor. **Total of 18 are Required**.

<u>Note:</u>

During this roof modification, any disconnect of roof top Mechanical Units, Gas Lines, etc., are to be completed using the following Mechanical Contractor:

Postma Heating and Cooling Contact Person: Jeff Nead Phone: 519-354-9491

Partial Roof Modification for Good Shepherd Catholic School - Thamesville PROJECT No. 642-CP2020

OPTION NO. 1 – HENRY COMPANY

5.1 TEAR-OFF

- 5.1.1 Prior to the start of installation, the roofing Contractor shall examine all roof areas included in this Specification. The Roofing Contractor shall notify the Consultant of any unacceptable conditions.
- 5.1.2 These conditions include, but are not limited to, uneven deck surfaces, improperly installed curbs and nailers, surfaces with fins or sharp projections, and surfaces contaminated with incompatible materials. Work shall not begin until these conditions have been corrected. Protect membrane in high traffic areas, work by other trades, application of gravel, etc.
- 5.1.3 Completely remove the existing **Two-Ply Modified Bitumen Granulated Surface Membrane** from the current insulation below on all four (4) roof areas. Only tear-off those roofing components that can be re-roofed in the same day. Tear-off work shall not be left exposed at the end of the work day.

5.2 INSTALLATION – Two Ply Modified Bitumen Membrane Roof System

- 5.2.1 Install all carpentry items such as curb extensions, wood blocking at roof perimeters, etc. as detailed on the Drawings. All wood members which are to be anchored to masonry construction shall be permanently fastened into place. Do not use fasteners which will cause spalling, cracking or deformation of fastened materials.
- 5.2.2 Apply roofing materials over clean and dry surfaces in accordance with the Manufacturer's Recommendations. The re-roofing operations shall be performed on a continuous basis as weather conditions allow.
- 5.2.3 Install all new wood blocking and plywood as detailed on the applicable details

5.2.4 Installation of Rigid Insulation Boards (ROOF AREA 'F' AND 'G' ONLY)

- .1 Install boards with low-rise foam adhesive to the existing rigid insulation. On all insulation surfaces intended for board coverage apply beads of 20mm (3/4") wide on 200mm (8") centers.
- .2 Firmly set the rigid insulation boards in staggered fashion. All boards must be butted tightly together.
- .3 Apply only as many boards as can be covered in the same day.

5.2.5 Installation of Insulation Overlay Boards (FOR ALL ROOF AREAS)

- .1 Install boards with low-rise foam adhesive to the rigid insulation as indicated. On all insulation surfaces intended for board coverage, apply beads of 20mm (3/4") wide on 200mm (8") centers.
- .2 Firmly set the insulation overlay boards, long joints continuously and short joints staggered. All boards must be evenly and tightly butted together.
- .3 All joints between boards and insulation will be staggered.
- .4 Apply only as many boards as can be covered in the same day.

Partial Roof Modification for Good Shepherd Catholic School - Thamesville PROJECT No. 642-CP2020

OPTION NO. 1 – HENRY COMPANY

5.2.6 Base Sheet Installation (FOR ALL ROOF AREAS)

- .1 Install the base sheet roof membrane starting from the low point (roof drain) to the high point. The base sheet is to be adhered with adhesive to the overlay boards to the parapet wall.
- .2 Unroll base sheet flashing at drain level with first side lap lined-up with drain center.
- .3 Overlap side laps by 75mm along lines provided to this end and overlap end laps by 150mm. Stagger end joints by at least 300mm.
- .4 Re-Roll base sheet and unroll again onto bed of cold adhesive with a notched squeegee having notches 6mm (1/4") wide 3mm (1/8") deep and spaced 25mm (1") on centers. The side and end lap must be <u>HEAT WELDED (FUSED) TOGETHER WITH A LEISTER HAND HELD GUN OR APPROVED TO EQUAL TO ENSURE GOOD FUSION</u>. Also avoid the cold adhesive from within two inches of the side and end laps.
- .5 Avoid forming wrinkles, air pockets or fish-mouthing. The modified bitumen membrane should be cut in maximum lengths of 55mm (18 ft) and allowed to relax on the jobsite.
- .6 This membrane is to be carried up to the inside face of parapet wall prior to installing new plywood on inside face of parapet wall.

5.2.7 Installation of Additional Plywood and/or Wood Blocking (FOR ALL ROOF AREAS)

.1 Install all new wood blocking and plywood as detailed on the applicable Details.

<u>Note</u>: The new plywood detail on the inside face of parapet wall is not to be installed until the first ply of base sheet roof membrane is applied 3 inches up the vertical surface of parapet wall.

5.2.8 Base Sheet Flashing Installation (FOR ALL ROOF AREAS)

- .1 Apply base sheet flashing only once primer coat is dry.
- .2 Install base sheet flashing in one (1) metre widths to cover roofing substrate over 100mm. Overlap side laps by 75mm. Stagger side laps by a least 100mm from base sheet overlaps on the roof to avoid excessive layering.
- .3 Apply base sheet flashing directly onto substrate by removing silicone paper cover sheet. Proceed from top to bottom. Once in place, apply pressure manually in a uniformed fashion to obtain homogenous adherence over the entire surface. Preferably seal seams with aluminum applicator and rubber roller. The flashing membrane is to be adhered to the bottom of the wood blocking on the outside face of parapet wall. Nail outside edge at 300mm O.C. Burn off plastic film of base sheet membrane before adhering base sheet flashing over it.
- .4 Avoid forming wrinkles, air pockets or fish-mouths.

<u>Note</u>: ALL BASE SHEET FLASHING MEMBRANE IS TO BE EXTENDED TO THE BOTTOM OF WOOD FASCIA.

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OPTION NO. 1 – HENRY COMPANY

5.2.9 Cap Sheet Installation (FOR ALL ROOF AREAS)

- .1 Prior to installing the cap sheet membrane, all insulated flanges are to be installed around each roof penetration and secured to the metal roof deck with four (4) fasteners per flange before applying base sheet target section on top.
- .2 Once the base sheet has been applied, the stripping has been completed and no indications of defects are present, then the cap sheet shall be laid.
- .3 Begin application of the cap sheet at the lowest edge. Cap sheet shall be unrolled and care be taken to ensure proper alignment of the first roll.
- .4 Cap sheet shall be torched into place in accordance with the Recommendations of the Membrane Manufacturer, to the base sheet membrane.
- .5 The seams between the base sheet and cap sheet shall be staggered a minimum of 300 mm (12 inches).
- .6 Care should be taken to ensure heating is consistent across the width in order to avoid skips or voids. Bitumen should flow out from the lap 6mm (1/4") to ensure a tight seal.
- .7 All lap seams on the cap sheet are to be checked after membrane installation.

5.2.10 Cap Sheet Flashing Installation (FOR ALL ROOF AREAS)

- .1 Cap sheet membrane installation shall be laid in strips 1m wide along the parapet. Side laps shall be a minimum of 100mm (4 inches) overlap.
- .2 Extend cap sheet a minimum of 150mm (6 inches) onto roof surface from the intersection of roof and vertical surfaces and extend to the top of the parapet wall to the outside of wall.
- .3 The flashing membrane shall be anchored to the wood nailers by nailing through discs or using nails with 25mm (1 inch) minimum diameter head semi-solidly attached. Nail a minimum of 200mm (8 inches) on center.
- .4 Matching granules shall be used to cover excess between flow at seams.

5.2.11 Flood Coat and Gravel Cover (FOR ALL ROOF AREAS)

- .1 Apply a flood coat of cold roofing adhesive (MBA Gold) at the rate of 6.5 gallons/100ft² as recommended by Manufacturer (Bakor).
- .2 Then embed new approved pea stone gravel at 20 kg/m² (450 lbs/100ft²) while adhesive is still wet.

5.2.12 Concrete Pavers

.1 Install concrete pavers as indicated on the Roof Plan on top of one-inch extruded polystrenne rigid insulation (Type 4).

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OPTION NO. 1 – HENRY COMPANY

5.3 INSTALLATION – Metal Flashings (FOR ALL ROOF AREAS)

- 5.3.1 Cap and counter flashings shall be jointed with a double S-type locked joint. Flashings shall be installed with continuous clips secured to wood capping blocking at 12 inches O.C.
- 5.3.2 Flashing shall be fabricated to shapes on site with all necessary breaks for adequate expansion.
- 5.3.3 The inside face of the metal cap flashing between the S-locked joints is to be secured with three (3) fasteners matching the colour of the metal cap with a neoprene washer between the fastener head and inside face of the metal cap flashing.
- 5.3.4 All joints shall be sealed with approved sealant.
- 5.3.5 Counter flashings shall be installed at all reglets and curbs with at least three (3) inches below the top of roof curb or reglet.

5.4 CLEAN-UP

5.4.1 Upon completion of the installation, the work shall be left clean and free of defects which might affect the durability or appearance of the building. Clean all roof surfaces, including adjacent roofs and grounds of all foreign matter resulting from this Roofing Project.

<u>OPTION NO. 2 – SOPREMA</u>

6.1 Modified Bitumen Membrane

- 6.1.1 Modified Bitumen Sheets shall conform to CGSB 37-GP-56M "Membrane, Modified, Bituminous, Prefabricated and Reinforced for Roofing"; Type 2, Class C, Grade 2 for Base Sheets and Type 1, Class A, Grade 2 for Cap Sheets.
- 6.1.2 The Contractor may bid on any Manufacturer's Systems specified for torching application of the base sheet and torching of the cap sheet for this roof area. The colour of the granular surface is to be selected by the Owner. Supply additional granules to be applied to bitumen outflows between membrane sheets.
- 6.1.3 Modified Bitumen Membrane Two-Ply System shall be as specified or approved equal and accepted by the Consultant and Owner.

a) Soprema

- i) Base Sheet (SOPRALENE 180 S/P 3.5 for Cap Sheet)
- ii) Self-Adhesive Membrane (NP 180 Tack Sheet)
- iii) Cap Sheet (NP250gT4) for flashing membrane.

6.2 Electrical/Cooling Penetration

6.2.1 Pipe Flash as manufactured by OMG Roofing Products are to be used at all penetrations as detailed.

6.3 Soprasmart Board 180

6.3.1 Soprasmart board 180 is a high-performance high-density support panel composed of SBS modified bitumen membrane with a non-woven polyester reinforcement, factory-laminated on asphaltic board (SOPRABOARD). The surface is covered with a thermo-fusible plastic film.

6.4 Primer

6.4.1 The primer shall consist of Elastocol Stick designed for use with self-adhered SBS modified bitumen base sheet flashing membrane. The risk of primer flare-up is eliminated when modified bitumen cap sheets are thermo-fused to the self-adhered base sheet flashing membranes.

6.5 Duotack

6.5.1 Duotack is a LOW-RISE two-part urethane adhesive to be used for the application of rigid insulation.

6.6 Vent Pipe Stack Flange

6.6.1 The vent pipe stack flange shall be Thaler Roofing Specialties Products Inc. Model No. SJ-37 insulated flange. The Roofing Contractor shall verify the inside diameter of the vent pipe stack for each location.

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<u>OPTION NO. 2 – SOPREMA</u>

6.7 Exhaust Vent Flashings

6.7.1 Thaler EVF Exhaust Vent Flashings consist of a double wall metal flashing sleeve with integral deck flange matching removable hood (screw fastened) pre-molded urethane) insulation lines and EPDM base seal.

6.8 Roof Drain

6.8.1 Roof Drain shall be Thaler Roof Specialties Products Inc. Model No. RD-4A-RR Vandal-Proof aluminum roof drain with aluminum ferrule to complete a FURCO Connection. Outlet size shall be verified on site by the Roofing Contractor.

6.9 Rigid Insulation

6.9.1 Insulation shall be roof insulation which is rigid closed cell, Polyiso Foam Insulation, integrally laminated to glass fiber mat facers, thermal resistance of insulation shall be R-11.4 (L.T.T.R.) (2.0 inch) for the main roof area on Area 'F' and 'G' and then the Tapered Insulation around recessed roof drains, Resistance R-Value in accordance with ASTM C1289-11A. All insulation boards shall be 4 feet by 4 feet in size. **ROOF AREA 'H' and 'I' does not receive any additional rigid** insulation.

6.10 Tapered Insulation (Recessed Roof Drains) (ONLY AREA 'F' AND 'G')

6.10.1 The tapered insulation shall be faced Isocyanurate Boards conforming to CAN/CGSB-51.26-M86, meeting the requirements of ULC S126 Polyisocyanurate foam panels chemically bonded during the foaming process to facers on the top and bottom glass fiber mat surfaces. Tapered panels shall not be less than 13m at any point of the roof to the slope indicated on the Roof Plan and Details.

6.11 Elastomeric Modified Bitumen Adhesive (ALL ROOF AREAS)

6.11.1 COLPLY EF is a low volatile organic compound (VOC), low odour, 100% solids and solvent-free polyether-based adhesive.

6.12 Metal Flashings

6.12.1 Metal flashings shall be 24ga. **Colorite 8000 Series** pre-finished steel (both sides) as manufactured by Westeel Roscoe, **Steelcolour 8000 Series** or Owner approved equal, formed to comply with field conditions. The colour is to be selected by the Owner from the Manufacturer's standard colours. A one meter "test bend" for each general metal flashing condition shall be completed and presented to the Owner's Representative for approval prior to general fabrication.

6.13 Sealants

6.13.1 Caulking Sealants for metal flashing shall be one-part silicone to conform to CGSB 19 GP 96. Sealants shall be manufactured by Canadian General Electric, Dow Corning or approved equal. The colour of the sealant shall be identical to the colour of the metal flashing; the Owner is to approve the colour before ordering the sealant. This sealant shall be applied to all metal flashing joints including the reglet.

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<u>OPTION NO. 2 – SOPREMA</u>

6.14 Roofing Gravel

6.14.1 The gravel shall be ¹/₄" to 5/8" size; water washed pea gravel, well graded, opaque, non-porous material free of fines, moisture, ice, and snow or long splinters and conforms to ASTM D1863-086.

6.15 Framing Lumber

6.15.1 Framing Lumber on top of roof area shall be pressure treated for rot resistance conforming to CSA 0322-1976 and CSA 080-M1983; sizes shown on the Drawings. Grade SPF No. 2 or better.

6.16 Plywood

6.16.1 Exterior Grade "fir" to CSA 0121 or CSA 0151, ½" and ¾" thick, as detailed on Enclosed Drawings.

6.17 Rough Hardware and Nails

6.17.1 The Roofing Contractor shall supply all rough hardware where required. Nails, spikes, screws, bolts, etc. shall be of sufficient size and type to rigidly secure all members into place. All nails shall be hot dip galvanized.

6.18 Painting

- 6.18.1 All existing gas lines, exhaust fan hoods and roof top units shall be cleaned and scraped prior to being repainted.
- 6.18.2 Clean and prime with Alkyd Metal Primer before applying two coats of enamel paint. The colour shall be selected by the Owner.

6.19 Plastic Roof Cement

6.19.1 Pro-Grade Plastomers 810-21 Plastic Cement is composed of asphalt synthetic rubber, fiber and fillers exceeding the requirements of CAN/CGSB-37.5. This product is manufactured by Bakor or approved equal.

6.20 Precast Pads

6.20.1 Precast concrete pads shall be 24 inches by 24 inches by 2-inch-thick for additional walkway, etc. as shown on Roof Plan. Pads shall be placed on a 20 inch by 20 inches by 1-inch-thick sections of rigid Type 4 extruded polystrenne insulation. **(46 new pavers in total)**

6.21 Roof Pipe Supports

6.21.1 Roof Pipe Supports as manufactured by C-Port (Model No. CXP) are to be supplied and installed by the Roofing Contractor. **Total of 18 are Required.**

Note:

During this roof modification, any disconnect of Roof Top Mechanical Units, Gas Lines, etc., are to be completed using the following Mechanical Contractor:

Postma Heating and Cooling Contact Person: Jeff Nead Phone: 519-354-9491

Partial Roof Modification for Good Shepherd Catholic School - Thamesville PROJECT No. 642-CP2020

<u>OPTION NO. 2 – SOPREMA</u>

7.1 Tear-Off

- 7.1.1 Prior to the start of installation, the roofing Contractor shall examine all roof areas included in this Specification. The Roofing Contractor shall notify the Consultant of any unacceptable conditions.
- 7.1.2 These conditions include, but are not limited to, uneven deck surfaces, improperly installed curbs and nailers, surfaces with fins or sharp projections, and surfaces contaminated with incompatible materials. Work shall not begin until these conditions have been corrected. Protect membrane in high traffic areas, work by other trades, application of gravel, etc.
- 7.1.3 Completely remove the existing **Two-Ply Modified Bitumen Granulated Surface Membrane** from the current insulation below on all four (4) roof areas. Only tear-off those roofing components that can be re-roofed in the same day. Tear-off work shall not be left exposed at the end of the work day.

7.2 INSTALLATION – Two Ply Modified Bitumen Membrane Roof System

- 7.2.1 Install all carpentry items such as curb extensions, wood blocking at roof perimeters, etc. as detailed on the Drawings. All wood members which are to be anchored to masonry construction shall be permanently fastened into place. Do not use fasteners which will cause spalling, cracking or deformation of fastened materials.
- 7.2.2 Apply roofing materials over clean and dry surfaces in accordance with the Manufacturer's Recommendations. The re-roofing operations shall be performed on a continuous basis as weather conditions allow.
- 7.2.3 Install all new wood blocking and plywood as detailed on the applicable details.

7.2.4 Installation of Rigid Insulation Boards (ROOF AREA 'F' AND 'G' ONLY)

- .1 Install boards with Duotack Adhesive to the existing rigid insulation. On all insulation surfaces intended for board coverage apply beads of 20mm (3/4") wide on 200mm (8") centers.
- .2 Firmly set the rigid insulation boards in staggered fashion. All boards must be butted tightly together.
- .3 Apply only as many boards as can be covered in the same day.

7.2.5 Installation of Soprasmart Board (FOR ALL ROOF AREAS)

- .1 Install Smart Boards with Duotack Adhesive to the rigid insulation as indicated. On all insulation surfaces intended for board coverage, apply continuous strips of 13 to 19 mm (½ to ¾ inch) on 150 mm (6") centers for eight (8) feet around roof perimeter and 200 mm (8") centers for the field of the roof.
- .2 Firmly set the Smart Boards, into the strips of Duotack Adhesive. All boards must be evenly and tightly butted together in soldier fashion.
- .3 Apply only as many boards as can be covered in the same day.
- .4 Install Sopralap cover strips across the end laps on the panels by heat-welded with a propane torch.

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<u>OPTION NO. 2 – SOPREMA</u>

7.2.6 Installation of Additional Plywood and/or Wood Blocking (FOR ALL ROOF AREAS) Install all new wood blocking and plywood as detailed on the applicable Details.

<u>Note</u>: The new plywood detailed on the inside face of parapet wall is not to be installed until the first ply of base sheet roof membrane is applied 3 inches up the vertical surface of parapet wall.

7.2.7 Application of Primer (FOR ALL ROOF AREAS)

.1 Apply primer to the wood blocking and plywood surfaces which will be in contact with the selfadhesive membranes at a rate of 0.2 to 0.3 l/m². All surfaces to be primed must be free of rust, dust or any residue that may hinder adherence. Cover primed surfaces with roofing membrane as directed by the Manufacturer.

7.2.8 Base Sheet Flashing Installation (FOR ALL ROOF AREAS)

- .1 Apply base sheet flashing only once primer coat is dry.
- .2 Install base sheet flashing in one (1) metre widths to cover roofing substrate over 100mm. Overlap side laps by 75mm. Stagger side laps by a least 100mm from base sheet overlaps on the roof to avoid excessive layering.
- .3 Apply base sheet flashing directly onto substrate by removing silicone paper cover sheet. Proceed from top to bottom. Once in place, apply pressure manually in a uniformed fashion to obtain homogenous adherence over the entire surface. Preferably seal seams with aluminum applicator and rubber roller. The flashing membrane is to be adhered 4 inches over top of the Blueskin membrane on the outside face of parapet wall. Nail outside edge at 300mm O.C. Burn off plastic film of base sheet membrane before adhering base sheet flashing over it.
- .4 Avoid forming wrinkles, air pockets or fish-mouths.

<u>Note:</u> ALL BASE SHEET FLASHING MEMBRANES ARE TO BE EXTENDED TO THE BOTTOM OF WOOD FASCIA.

7.2.9 Cap Sheet Installation (FOR ALL ROOF AREAS)

- .1 Prior to installing the cap sheet membrane, all insulated flanges are to be installed around each roof penetration and secured to the metal roof deck with four (4) fasteners per flange before applying base sheet target section on top.
- .2 Once the base sheet has been applied, the stripping has been completed and no indications of defects are present, then the cap sheet shall be laid.
- .3 Begin application of the cap sheet at the lowest edge. Cap sheet shall be unrolled and care be taken to ensure proper alignment of the first roll.
- .4 Cap sheet shall be torched into place in accordance with the Recommendations of the Membrane Manufacturer, to the base sheet membrane.
- .5 The seams between the base sheet and cap sheet shall be staggered a minimum of 300 mm (12 inches).

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<u> OPTION NO. 2 – SOPREMA</u>

- .6 Care should be taken to ensure heating is consistent across the width in order to avoid skips or voids. Bitumen should flow out from the lap 6mm (1/4") to ensure a tight seal.
- .7 All lap seams on the cap sheet are to be checked after membrane installation.

7.2.10 Cap Sheet Flashing Installation (FOR ALL ROOF AREAS)

- .1 Cap sheet membrane installation shall be laid in strips 1m wide along the parapet. Side laps shall be a minimum of 100mm (4 inches) overlap.
- .2 Extend cap sheet a minimum of 150mm (6 inches) onto roof surface from the intersection of roof and vertical surfaces and extend to the top of the parapet wall to the outside of wall.
- .3 The flashing membrane shall be anchored to the wood nailers by nailing through discs or using nails with 25mm (1 inch) minimum diameter head semi-solidly attached. Nail a minimum of 200mm (8 inches) on center.
- .4 Matching granules shall be used to cover excess between flow at seams.

7.2.11 Flood Coat and Gravel Cover (FOR ALL ROOF AREAS)

- .1 Apply a flood coat of cold roofing adhesive (COLPLY EF) at the rate of 5 gallons/100ft² as recommended by Manufacturer (Soprema).
- .2 Then embed new approved pea stone gravel at 20 kg/m² (450 lbs/100ft²) while adhesive is still wet.

7.2.12 Concrete Pavers

.1 Install concrete pavers as indicated on the Roof Plan on top of one-inch extruded polystrenne rigid insulation (Type 4).

7.3 INSTALLATION – Metal Flashings (FOR ALL ROOF AREAS)

- 7.3.1 Cap and counter flashings shall be jointed with a double S-type locked joint. Flashings shall be installed with continuous clips secured to wood capping blocking at 12 inches O.C.
- 7.3.2 Flashing shall be fabricated to shapes on site with all necessary breaks for adequate expansion.
- 7.3.3 The inside face of the metal cap flashing between the S-locked joints is to be secured with three (3) fasteners matching the colour of the metal cap with a neoprene washer between the fastener head and inside face of the metal cap flashing.
- 7.3.4 All joints shall be sealed with approved sealant.
- 7.3.5 Counter flashings shall be installed at all reglets and curbs with at least three (3) inches below the top of roof curb or reglet.

Remlap Building Services Inc. 1407 Gore Road, RR1 – Harrow Ontario NOR 1G0

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<u>OPTION NO. 2 – SOPREMA</u>

7.4 CLEAN-UP

7.4.1 Upon completion of the installation, the work shall be left clean and free of defects which might affect the durability or appearance of the building. Clean all roof surfaces, including adjacent roofs and grounds of all foreign matter resulting from this Roofing Project.

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<u>OPTION NO. 3 – IKO</u>

8.1 Modified Bitumen Membrane

- 8.1.1 Modified Bitumen Sheets shall conform to CGSB 37-GP-56M "Membrane, Modified, Bituminous, Prefabricated and Reinforced for Roofing"; Type 2, Class C, Grade 2 for Base Sheets and Type 1, Class A, Grade 2 for Cap Sheets.
- 8.1.2 The Contractor may bid on any Manufacturer's Systems specified for torching application of the base sheet and torching of the cap sheet for this roof area. The colour of the granular surface is to be selected by the Owner. Supply additional granules to be applied to bitumen outflows between membrane sheets.
- 8.1.3 Modified Bitumen Membrane Two-Ply System shall be as specified or approved equal and accepted by the Consultant and Owner.

a) Soprema

- i) Base Sheet (TORCHFLEX TP-180-SF-BASE 3.5 mm for Cap Sheet)
- ii) Self-Adhesive Membrane (ARMOURBOND 180)
- iii) Cap Sheet (TORCHFLEX TP-250 CAP) for flashing membrane.

8.2 Electrical/Cooling Line Penetration

8.2.1 Pipe Flash as manufactured by OMG Roofing Products are to be used at all penetrations as detailed.

8.3 Support Panel

8.3.1 IKO Protectobase 180 is a high-performance high-density support panel composed of SBS modified bitumen membrane with a non-woven polyester reinforcement, factory-laminated on asphaltic board (IKOTHERM). The surface is covered with a thermo-fusible plastic film.

8.4 Primer

8.4.1 The primer shall consist of IKO S.A.M. Adhesive designed for use with self-adhered SBS modified bitumen base sheet flashing membrane. The risk of primer flare-up is eliminated when modified bitumen cap sheets are thermo-fused to the self-adhered base sheet flashing membranes.

8.5 Insulation Adhesive

8.5.1 Millennium Adhesive is a two-part urethane adhesive to be used for the application of rigid insulation.

8.6 Vent Pipe Stack Flange

6.6.1 The vent pipe stack flange shall be Thaler Roofing Specialties Products Inc. Model No. SJ-37 insulated flange. The Roofing Contractor shall verify the inside diameter of the vent pipe stack for each location.

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OPTION NO. 3 – IKO

8.7 Hot Exhaust Stack Flashings

8.7.1 Thaler EVF Exhaust Vent Flashings consist of a double wall metal flashing sleeve with integral deck flange matching removable hood (screw fastened) pre-molded urethane) insulation lines and EPDM base seal.

8.8 Roof Drain

8.8.1 Roof Drain shall be Thaler Roof Specialties Products Inc. Model No. RD-4A-RR Vandal-Proof aluminum roof drain with aluminum ferrule to complete a FURCO Connection. Outlet size shall be verified on site by the Roofing Contractor.

8.9 Rigid Insulation

8.9.1 IKOTHERM shall be roof insulation which is rigid closed cell, Polyiso Foam Insulation, integrally laminated to glass fiber mat facers, thermal resistance of insulation shall be R-11.4 (L.T.T.R.) (2.0 inch) for the main roof area on Areas 'F' and 'G' and then the Tapered Insulation around recessed roof drains, Resistance R-Value in accordance with ASTM C1289-11A. All insulation boards shall be 4 feet by 4 feet in size. ONLY ROOF AREA 'H' and 'I' does not receive any additional rigid insulation.

8.10 Tapered Insulation (Recessed Roof Drains) (ONLY AREA 'F' AND 'G')

8.10.1 The tapered insulation shall be faced Isocyanurate Boards conforming to CAN/CGSB-51.26-M86, meeting the requirements of ULC S126 Polyisocyanurate foam panels chemically bonded during the foaming process to facers on the top and bottom glass fiber mat surfaces. Tapered panels shall not be less than 13m at any point of the roof to the slope indicated on the Roof Plan and Details.

8.11 Elastomeric Modified Bitumen Adhesive (ALL ROOF AREAS)

8.11.1 IKO COLD GOLD FIELD ADHESIVE is a solvent-free, single component, cold-applied interplay adhesive suitable to be used as a cold applied flood coat with approved stone aggregate on top.

8.12 Metal Flashings

8.12.1 Metal flashings shall be 24ga. **Colorite 8000 Series** pre-finished steel (both sides) as manufactured by Westeel Roscoe, **Steelcolour 8000 Series** or Owner approved equal, formed to comply with field conditions. The colour is to be selected by the Owner from the Manufacturer's standard colours. A one meter "test bend" for each general metal flashing condition shall be completed and presented to the Owner's Representative for approval prior to general fabrication.

8.13 Sealants

8.13.1 Caulking Sealants for metal flashing shall be one-part silicone to conform to CGSB 19 GP 96. Sealants shall be manufactured by Canadian General Electric, Dow Corning or approved equal. The colour of the sealant shall be identical to the colour of the metal flashing; the Owner is to approve the colour before ordering the sealant. This sealant shall be applied to all metal flashing joints including the reglet.

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<u> OPTION NO. 3 – IKO</u>

8.14 Roofing Gravel

8.14.1 The gravel shall be ¹/₄" to 5/8" size; water washed pea gravel, well graded, opaque, non-porous material free of fines, moisture, ice, and snow or long splinters and conforms to ASTM D1863-086.

8.15 Framing Lumber

8.15.1 Framing Lumber on top of roof area shall be pressure treated for rot resistance conforming to CSA 0322-1976 and CSA 080-M1983; sizes shown on the Drawings. Grade SPF No. 2 or better.

8.16 Plywood

8.16.1 Exterior Grade "fir" to CSA 0121 or CSA 0151, ½" and ¾" thick, as detailed on Enclosed Drawings.

8.17 Rough Hardware and Nails

8.17.1 The Roofing Contractor shall supply all rough hardware where required. Nails, spikes, screws, bolts, etc. shall be of sufficient size and type to rigidly secure all members into place. All nails shall be hot dip galvanized.

8.18 Painting

- 8.18.1 All existing gas lines, exhaust fan hoods and roof top units shall be cleaned and scraped prior to being repainted.
- 8.18.2 Clean and prime with Alkyd Metal Primer before applying two coats of enamel paint. The colour shall be selected by the Owner.

8.19 Plastic Roof Cement

8.19.1 Aquabarrier Mastic is a modified asphalt sealant that is formulated with synthetic rubber for longevity and glass fibers for extra strength.

8.20 Precast Pads

8.20.1 Precast concrete pads shall be 24 inches by 24 inches by 2-inch-thick for additional walkway, etc. as shown on Roof Plan. Pads shall be placed on a 20 inch by 20 inches by 1-inch-thick sections of rigid Type 4 extruded polystrenne insulation. **(46 new pavers in total)**

8.21 Roof Pipe Supports

8.21.1 Roof Pipe Supports as manufactured by C-Port (Model No. CXP) are to be supplied and installed by the Roofing Contractor. **Total of 18 are required.**

Note:

During this roof modification, any disconnect of Roof Top Mechanical Units, Gas Lines, etc., are to be completed using the following Mechanical Contractor:

Postma Heating and Cooling Contact Person: Jeff Nead Phone: 519-354-9491

Partial Roof Modification for Good Shepherd Catholic School - Thamesville PROJECT No. 642-CP2020

OPTION NO. 3 – IKO

9.1 Tear-Off

- 9.1.1 Prior to the start of installation, the roofing Contractor shall examine all roof areas included in this Specification. The Roofing Contractor shall notify the Consultant of any unacceptable conditions.
- 9.1.2 These conditions include, but are not limited to, uneven deck surfaces, improperly installed curbs and nailers, surfaces with fins or sharp projections, and surfaces contaminated with incompatible materials. Work shall not begin until these conditions have been corrected. Protect membrane in high traffic areas, work by other trades, application of gravel, etc.
- 9.1.3 Completely remove the existing **Two-Ply Modified Bitumen Granulated Surface Membrane** from the current insulation below on all Four (4) Roof Areas. Only tear-off those roofing components that can be re-roofed in the same day. Tear-off work shall not be left exposed at the end of the work day.

9.2 INSTALLATION – Two Ply Modified Bitumen Membrane Roof System

- 9.2.1 Install all carpentry items such as curb extensions, wood blocking at roof perimeters, etc. as detailed on the Drawings. All wood members which are to be anchored to masonry construction shall be permanently fastened into place. Do not use fasteners which will cause spalling, cracking or deformation of fastened materials.
- 9.2.2 Apply roofing materials over clean and dry surfaces in accordance with the Manufacturer's Recommendations. The re-roofing operations shall be performed on a continuous basis as weather conditions allow.
- 9.2.3 Install all new wood blocking and plywood as detailed on the applicable details.

9.2.4 Installation of Rigid Insulation Boards (ROOF AREA 'F' AND 'G' ONLY

- .1 Install boards with MILLENNIUM Adhesive to the existing rigid insulation. On all insulation surfaces intended for board coverage apply beads of 20mm (3/4") wide on 200mm (8") centers.
- .2 Firmly set the rigid insulation boards in staggered fashion. All boards must be butted tightly together.
- .3 Apply only as many boards as can be covered in the same day.

9.2.5 Installation of Support Panel (FOR ALL ROOF AREAS)

- .1 Install IKO PROTECTOBOARD 180 with MILLENNIUM Adhesive to the rigid insulation as indicated. On all insulation surfaces intended for board coverage, apply continuous strips of 13 to 19 mm (½ to ¾ inch) on 150 mm (6") centers for eight (8) feet around roof perimeter and 200 mm (8") centers for the field of the roof.
- .2 Firmly set the Smart Boards, into the strips of MILLENNIUM Adhesive. All boards must be evenly and tightly butted together in soldier fashion.
- .3 Apply only as many boards as can be covered in the same day.
- .4 Install TORCHTAPE cover strips across the end laps on the panels by heat-welded with a propane torch.

<u> OPTION NO. 3 – IKO</u>

- 9.2.6 Installation of Additional Plywood and/or Wood Blocking (FOR ALL ROOF AREAS) Install all new wood blocking and plywood as detailed on the applicable Details.
 - <u>Note</u>: The new plywood detailed on the inside face of parapet wall is not to be installed until the first ply of base sheet roof membrane is applied 3 inches up the vertical surface of parapet wall.

9.2.7 Application of Primer (FOR ALL ROOF AREAS)

.1 Apply IKO S.A.M. primer to the wood blocking and plywood surfaces which will be in contact with the self-adhesive membranes at a rate of 0.2 to 0.3 l/m². All surfaces to be primed must be free of rust, dust or any residue that may hinder adherence. Cover primed surfaces with roofing membrane as directed by the Manufacturer.

9.2.8 Base Sheet Flashing Installation (FOR ALL ROOF AREAS)

- .1 Apply base sheet flashing only once primer coat is dry.
- .2 Install base sheet flashing in one (1) metre widths to cover roofing substrate over 100mm. Overlap side laps by 75mm. Stagger side laps by a least 100mm from base sheet overlaps on the roof to avoid excessive layering.
- .3 Apply base sheet flashing directly onto substrate by removing silicone paper cover sheet. Proceed from top to bottom. Once in place, apply pressure manually in a uniformed fashion to obtain homogenous adherence over the entire surface. Preferably seal seams with aluminum applicator and rubber roller. The flashing membrane is to be adhered 4 inches over top of the Blueskin membrane on the outside face of parapet wall. Nail outside edge at 300mm O.C. Burn off plastic film of base sheet membrane before adhering base sheet flashing over it.
- .4 Avoid forming wrinkles, air pockets or fish-mouths.

<u>Note:</u> ALL BASE SHEET FLASHING MEMBRANES ARE TO BE EXTENDED TO THE BOTTOM OF WOOD FASCIA.

9.2.9 Cap Sheet Installation (FOR ALL ROOF AREAS)

- .1 Prior to installing the cap sheet membrane, all insulated flanges are to be installed around each roof penetration and secured to the metal roof deck with four (4) fasteners per flange before applying base sheet target section on top.
- .2 Once the base sheet has been applied, the stripping has been completed and no indications of defects are present, then the cap sheet shall be laid.
- .3 Begin application of the cap sheet at the lowest edge. Cap sheet shall be unrolled and care be taken to ensure proper alignment of the first roll.
- .4 Cap sheet shall be torched into place in accordance with the Recommendations of the Membrane Manufacturer, to the base sheet membrane.
- .5 The seams between the base sheet and cap sheet shall be staggered a minimum of 300 mm (12 inches).
- .6 Care should be taken to ensure heating is consistent across the width in order to avoid skips or voids. Bitumen should flow out from the lap 6mm (1/4") to ensure a tight seal.
- .7 All lap seams on the cap sheet are to be checked after membrane installation.

Partial Roof Modification for Good Shepherd Catholic School - Thamesville PROJECT No. 642-CP2020

<u>OPTION NO. 3 – IKO</u>

9.2.10 Cap Sheet Flashing Installation (FOR ALL ROOF AREAS)

- .1 Cap sheet membrane installation shall be laid in strips 1m wide along the parapet. Side laps shall be a minimum of 100mm (4 inches) overlap.
- .2 Extend cap sheet a minimum of 150mm (6 inches) onto roof surface from the intersection of roof and vertical surfaces and extend to the top of the parapet wall to the outside of wall.
- .3 The flashing membrane shall be anchored to the wood nailers by nailing through discs or using nails with 25mm (1 inch) minimum diameter head semi-solidly attached. Nail a minimum of 200mm (8 inches) on center.
- .4 Matching granules shall be used to cover excess between flow at seams.

9.2.12 Flood Coat and Gravel Cover (FOR ALL ROOF AREAS)

- .1 Apply a flood coat of cold roofing adhesive (COLD GOLD) at the rate of 5 gallons/100ft² as recommended by Manufacturer (IKO).
- .2 Then embed new approved pea stone gravel at 20 kg/m² (450 lbs/100ft²) while adhesive is still wet.

9.2.13 Concrete Pavers

.1 Install concrete pavers as indicated on the Roof Plan on top of one-inch extruded polystrenne rigid insulation (Type 4).

9.3 INSTALLATION – Metal Flashings (FOR ALL ROOF AREAS)

- 9.3.1 Cap and counter flashings shall be jointed with a double S-type locked joint. Flashings shall be installed with continuous clips secured to wood capping blocking at 12 inches O.C.
- 9.3.2 Flashing shall be fabricated to shapes on site with all necessary breaks for adequate expansion.
- 9.3.3 The inside face of the metal cap flashing between the S-locked joints is to be secured with three (3) fasteners matching the colour of the metal cap with a neoprene washer between the fastener head and inside face of the metal cap flashing.
- 9.3.4 All joints shall be sealed with approved sealant.
- 9.3.5 Counter flashings shall be installed at all reglets and curbs with at least three (3) inches below the top of roof curb or reglet.

9.4 CLEAN-UP

7.4.1 Upon completion of the installation, the work shall be left clean and free of defects which might affect the durability or appearance of the building. Clean all roof surfaces, including adjacent roofs and grounds of all foreign matter resulting from this Roofing Project.

PARTIAL ROOF MODIFICATION

FOR

GOOD SHEPHERD CATHOLIC SCHOOL 4 EDITH STREET THAMESVILLE ONTARIO NOP 2K0

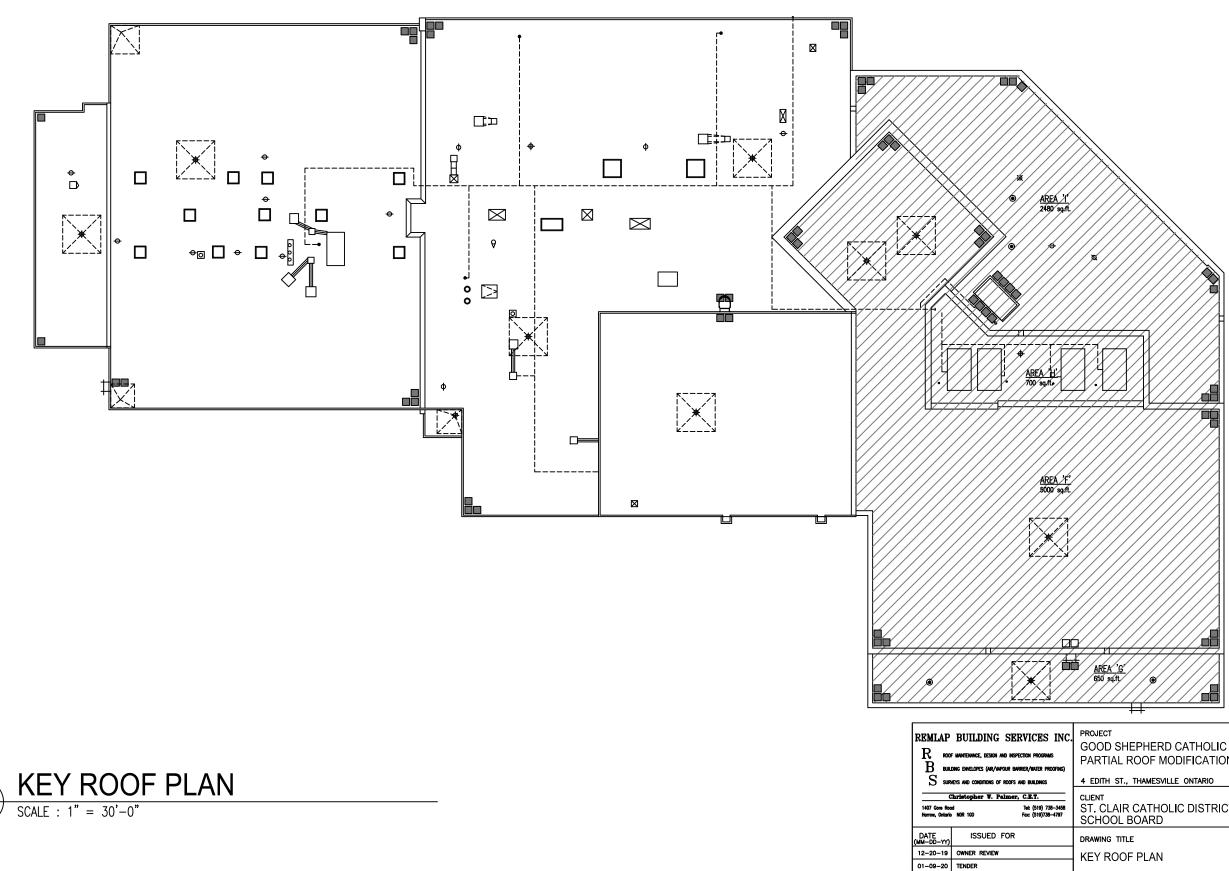
PROJECT No. 642-CP2020

ENCLOSED DRAWINGS

RGS-1 Key Roof Plan

- R-1a Existing and Design Roof System List
- RGS-2 Enlarged Roof Plan Roof 'l', 'H' AND PART OF 'F'
- RGS-3 Enlarged Roof Plan PART OF ROOF 'F' AND 'G'
- DGS-1 Roof Detail Parapet Detail (Area 'l')
- DGS-2 Roof Detail Parapet Detail (Area 'l')
- DGS-3 Roof Detail Parapet Detail (Area 'l')
- DGS-4 Roof Detail Curtain Wall Detail (Area 'l')
- DGS-5 Roof Detail Parapet Detail (North Wall Area 'l')
- DGS-6 Roof Detail Roof Top Unit Detail (Area 'l')
- DGS-7 Roof Detail Parapet Detail Between Area 'F' and 'H'
- DGS-8 Roof Detail Parapet Detail (Area 'F')
- DGS-9 Roof Detail Parapet Detail (Area 'F')
- DGS-10 Roof Detail Parapet Detail Between Area 'E' and 'F'
- DGS-11 Roof Detail Parapet Detail (Area 'F')
- DGS-12 Roof Detail Parapet Detail (Area 'G')
- DGS-13 Roof Detail Parapet Detail (Area 'H')
- DGS-14
- and 14a Roof Detail Wall Ladder Detail (Area 'G')
- DGS-15 Roof Detail Electrical Penetration (Area 'l')
- DGS-16 Roof Detail Roof Drain (Area 'l')
- DGS-17 Roof Detail Vent Pipe Stack (Area 'l')
- DGS-18 Roof Detail Exhaust Vent Flashing (Area 'l')
- DGS-19 Roof Detail Roof Drain (Area 'H')
- DGS-20 Roof Detail Electrical Penetration (Area 'H')
- DGS-21 Roof Detail Roof Top Unit (Area 'H')
- DGS-22 Roof Detail Roof Drain (Area 'F' and 'G')
- DGS-23 Roof Detail Exhaust Vent Flashing (Area 'G')





PROJECT	DATE :	DECEMBER 2019
GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATION	SCALE :	AS SHOWN
4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
	СНК. ВҮ :	CWP
ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	SHEET SIZE :	11"x17"
DRAWING TITLE	PROJECT FILE NO.	RBS19-60
KEY ROOF PLAN	drawing no. R	GS-1

ROOF REPLACEMENT GOOD SHEPHERD CATHOLIC SCHOOL 4 EDITH STREET, THAMESVILLE ONTARIO NOP 2KO

EXISTING ROOF SYSTEM

<u>AREA 'F'</u>

Two-Ply Modified Bitumen Granulated Surface Membrane On ½ inch Fiberboard Insulation On 3-inch Rigid Insulation (ISO) On One-Ply of Kraft Paper for Vapour Retarder On ½ inch Gypsum Board On Metal Deck

AREA 'G'

Two-Ply Modified Bitumen Granulated Surface Membrane On ½ inch Fiberboard Insulation On 3-inch Rigid Insulation (ISO) On One-Ply of Kraft Paper for Vapour Retarder On ½ inch Gypsum Board On Metal Deck

AREA 'H'

Two-Ply Modified Bitumen Granulated Surface Membrane On ½ inch Fiberboard Insulation On 1 ½-inch Rigid Insulation (ISO) On 3-inch Rigid Insulation (ISO) On One-Ply of Kraft Paper for Vapour Retarder On ½-inch Gypsum Board On Metal Deck

AREA 'I'

Two-Ply Modified Bitumen Granulated Surface Membrane On ½ inch Fiberboard Insulation On 3-inch Rigid Insulation (ISO) On One-Ply of Kraft Paper for Vapour Retarder On ½ inch Gypsum Board On Metal Deck

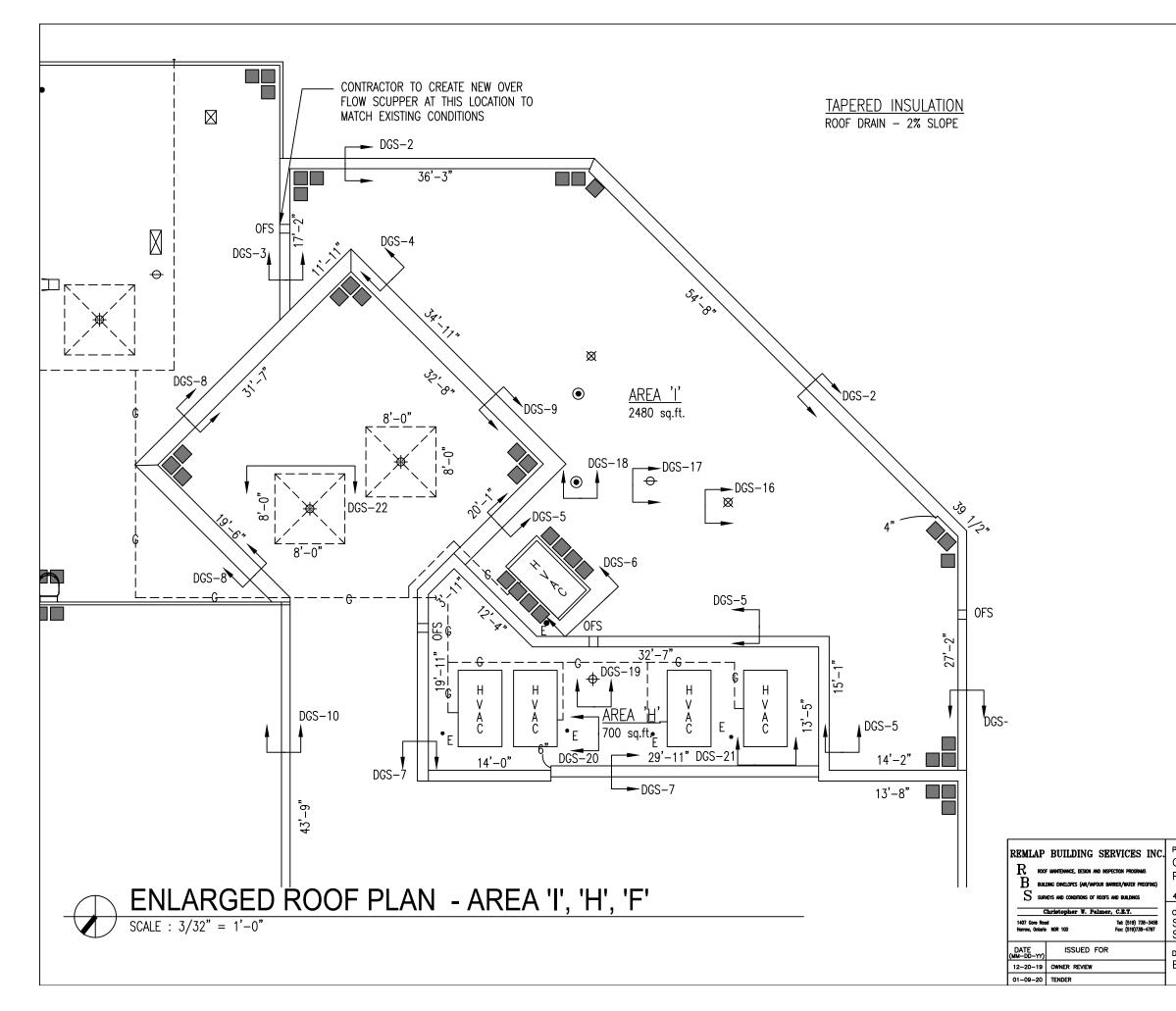
Pea Stone Roofing Gravel On Flood Coat of Adhesive On 2-Ply Modified Bitumen Membrane On 3/16" Asphalt Protection Board On Existing ½-inch Fibreboard Insulation On 1 ½-inch Rigid Insulation (ISO) On Existing 3-inch Rigid Insulation (ISO) On Existing Vapour Retarder On Existing ½-inch Gypsum Board On Existing Metal Deck

Pea Stone Roofing Gravel On Flood Coat of Adhesive On 2-Ply Modified Bitumen Membrane On 3/16" Asphalt Protection Board On Existing ½-inch Fibreboard Insulation On 3-inch Rigid Insulation (ISO) On Existing Vapour Retarder On Existing ½-inch Gypsum Board On Existing Metal Deck

DESIGN ROOF SYSTEM

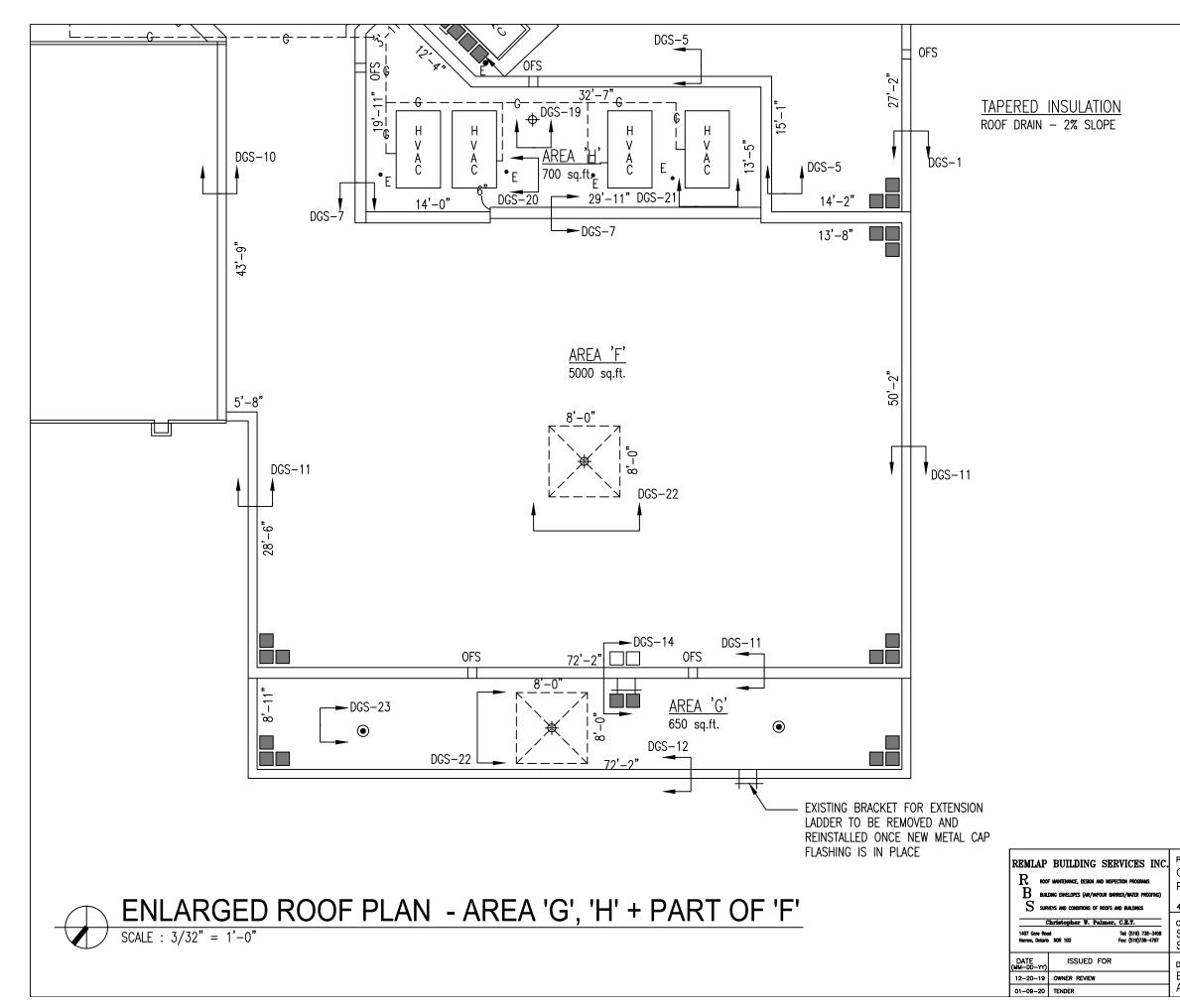
Pea Stone Roofing Gravel On Flood Coat of Adhesive On 2-Ply Modified Bitumen Membrane On 3/16" Asphalt Protection Board On Tapered Insulation as Noted On 2" Rigid Insulation (ISO) On Existing ½-inch Fibreboard Insulation On Existing 3-inch Rigid Insulation (ISO) On Existing Vapour Retarder On Existing ½-inch Gypsum Board On Existing Metal Deck

Pea Stone Roofing Gravel On Flood Coat of Adhesive On 2-Ply Modified Bitumen Membrane On 3/16" Asphalt Protection Board On Tapered Insulation as Noted On 2" Rigid Insulation (ISO) On Existing ½-inch Fibreboard Insulation On Existing 3-inch Rigid Insulation (ISO) On Existing Vapour Retarder On Existing ½-inch Gypsum Board On Existing Metal Deck



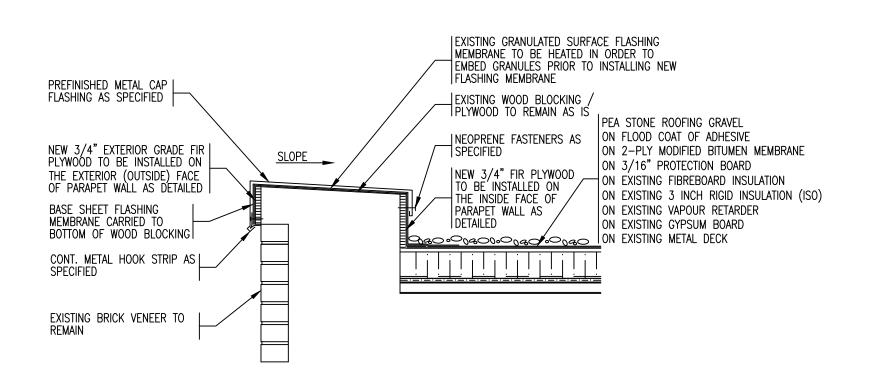
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	ROOF DRAIN
Φ	VENT PIPE STACK
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E C•	ELECTRICAL PENETRATION
	NEW CONCRETE PAVER WITH INSULATION CUSHION
	EXISTING CONCRETE PAVER TO BE SAVED AND REUSED
HVAC	ROOF TOP UNIT (TO BE LIFTED DURING ROOF MODIFICATIONS TO ALLOW NEW FLASHING MEMBRANE TO BE APPLIED ON TOP OF EXISTING CURB)

	DATE :	DECEMBER 2019
GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATION	SCALE :	AS SHOWN
4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
CLIENT ST. CLAIR CATHOLIC DISTRICT	СНК. ВҮ :	CWP
ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	SHEET SIZE :	11 " x17"
DRAWING TITLE	PROJECT FILE NO.	RBS19-60
ENLARGED ROOF PLAN - ROOF 'I', 'H', 'F'	drawing no. R	GS-2



<u>LEGEND</u>	
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	ROOF DRAIN
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	NEW CONCRETE PAVER WITH INSULATION CUSHION
	EXISTING CONCRETE PAVER TO BE SAVED AND REUSED
HVAC	ROOF TOP UNIT (TO BE LIFTED DURING ROOF MODIFICATIONS TO ALLOW NEW FLASHING MEMBRANE TO BE APPLIED ON TOP OF EXISTING CURB)

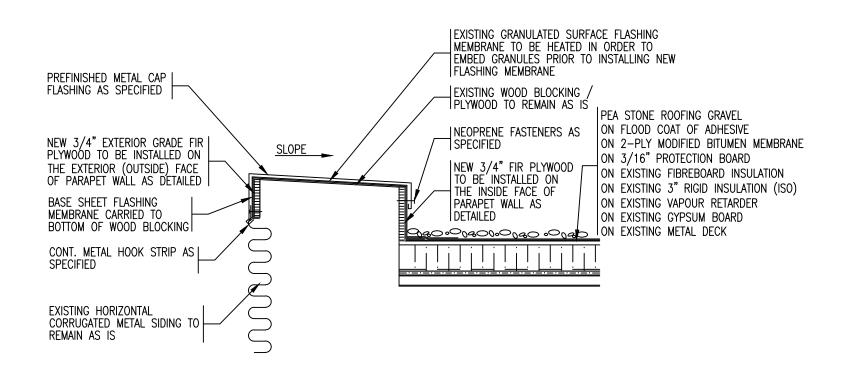
	DATE :	DECEMBER 2019
GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATION	SCALE :	AS SHOWN
4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
	СНК. ВҮ :	CWP
ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	SHEET SIZE :	11 " x17 "
DRAWING TITLE	PROJECT FILE NO.	RBS19-60
ENLARGED ROOF PLAN - ROOF 'H', 'G' AND PART OF 'F'	drawing no. R	GS-3



PARAPET DETAIL - AREA 'I'

NOTE:
1. EXISTING 2-PLY GRANULATED SURFACE MODIFIED BITUMEN
ROOF MEMBRANE IS REQUIRED TO BE PEELED FROM
EXISTING RIGID INSULATION WITH THE REMAINDER OF THE
EXISTING ROOF SYSTEM TO REMAIN
2. EXISTING METAL CAP AND COUNTER FLASHINGS ARE
REQUIRED TO BE REMOVED COMPLETELY PRIOR TO
COMMENSEMENT OF ROOF MODIFICATIONS AND THEN SUPPLY,
FABRICATE AND INSTALLED NEW AS DESIGN AND SPECIFIED

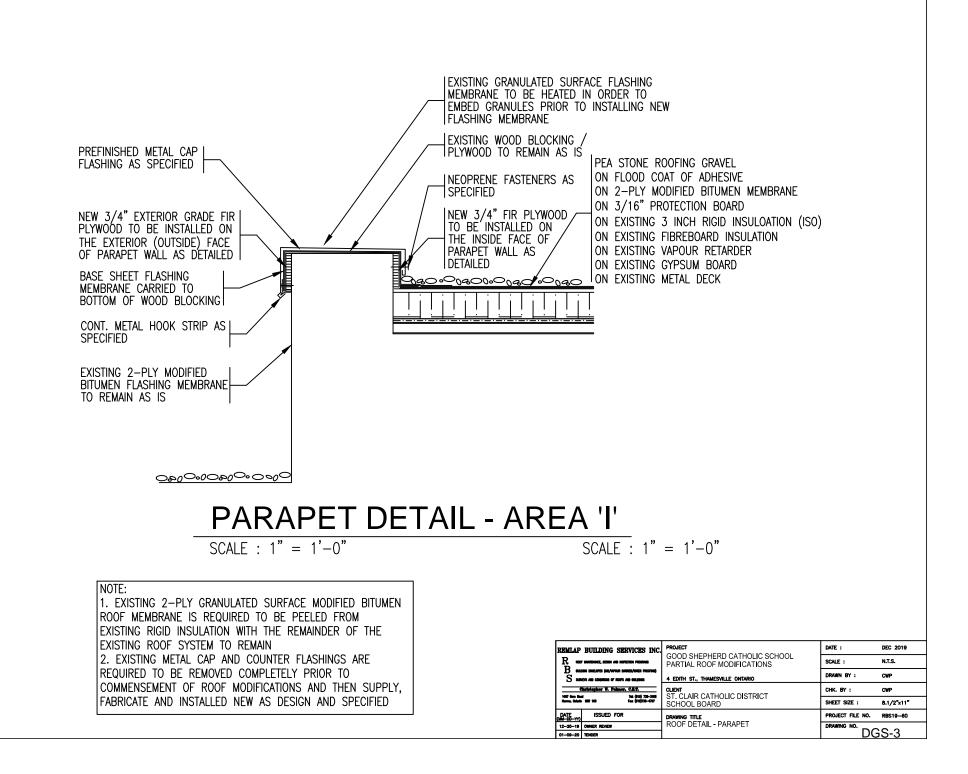
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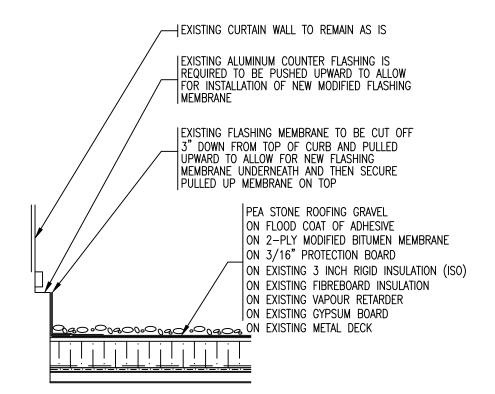


PARAPET DETAIL - AREA 'I'

NOTE:
1. EXISTING 2-PLY GRANULATED SURFACE MODIFIED BITUMEN
ROOF MEMBRANE IS REQUIRED TO BE PEELED FROM
EXISTING RIGID INSULATION WITH THE REMAINDER OF THE
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			SHEET SIZE :	8.1/2"x11"
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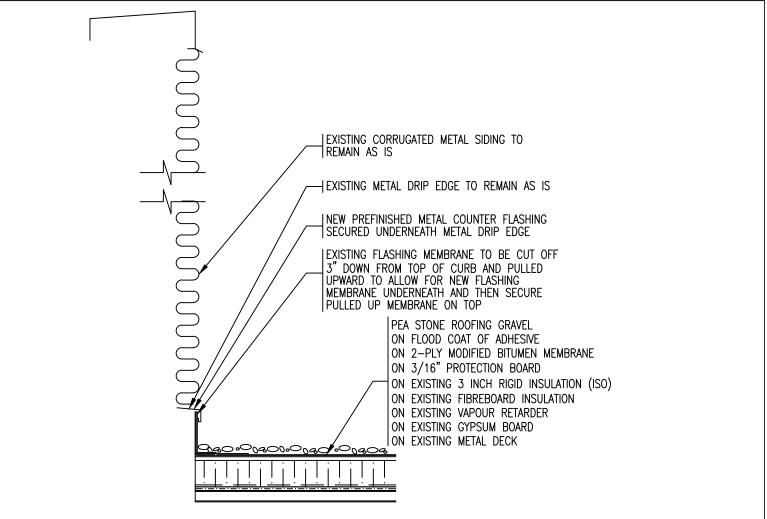


CURTAIN WALL DETAIL - AREA 'I'

SCALE : 1'' = 1' - 0''

NOTE: 1. EXISTING 2-PLY GRANULATED SURFACE MODIFIED BITUMEN ROOF MEMBRANE IS REQUIRED TO BE PEELED FROM EXISTING RIGID INSULATION WITH THE REMAINDER OF THE EXISTING ROOF SYSTEM TO REMAIN 2. EXISTING METAL CAP AND COUNTER FLASHINGS ARE REQUIRED TO BE REMOVED COMPLETELY PRIOR TO COMMENSEMENT OF ROOF MODIFICATIONS AND THEN SUPPLY, FABRICATE AND INSTALLED NEW AS DESIGN AND SPECIFIED

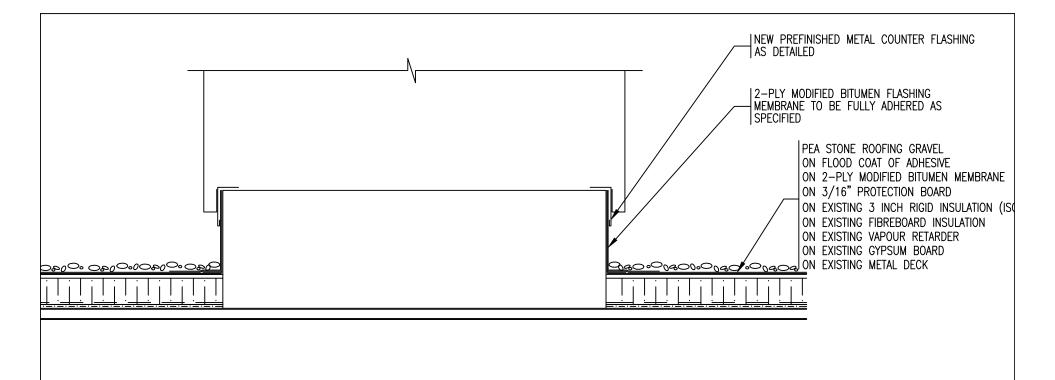
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Christopher W. Falmer, C.I.T.	CLENT ST. CLAIR CATHOLIC DISTRICT	СНК. ВҮ:	CWP
1407 One Real Tek (110) 738-340 Harres, Colado XXX 100 Fac: (510)738-4707	SCHOOL BOARD	SHEET SIZE :	8.1/2"x11"
DATE ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	RBS19-60
12-20-19 OWNER REVIEW	ROOF DETAIL - CURTAIN WALL	DRAWING NO.	
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PARAPET DETAIL - NORTH WALL - AREA 'I'

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XISTING RIGID INSULATION WITH THE REMAINDER OF THE
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2. EXISTING METAL CAP AND COUNTER FLASHINGS ARE
REQUIRED TO BE REMOVED COMPLETELY PRIOR TO
COMMENSEMENT OF ROOF MODIFICATIONS AND THEN SUPPLY,
ABRICATE AND INSTALLED NEW AS DESIGN AND SPECIFIED

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Christopher W. Fulmer, C.E.T. 1407 dava Real Marros, Galado MR 100 Fac. (\$119)738-3400 Harros, Galado MR 100 Fac. (\$119)738-4797		CLENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	СНК. ВҮ:	CWP
			Sheet size :	8.1/2"x11"
DATE	ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	RBS19-60
12-20-19	OWNER REVIEW	ROOF DETAIL - NORTH PARAPET	DRAWING NO.	
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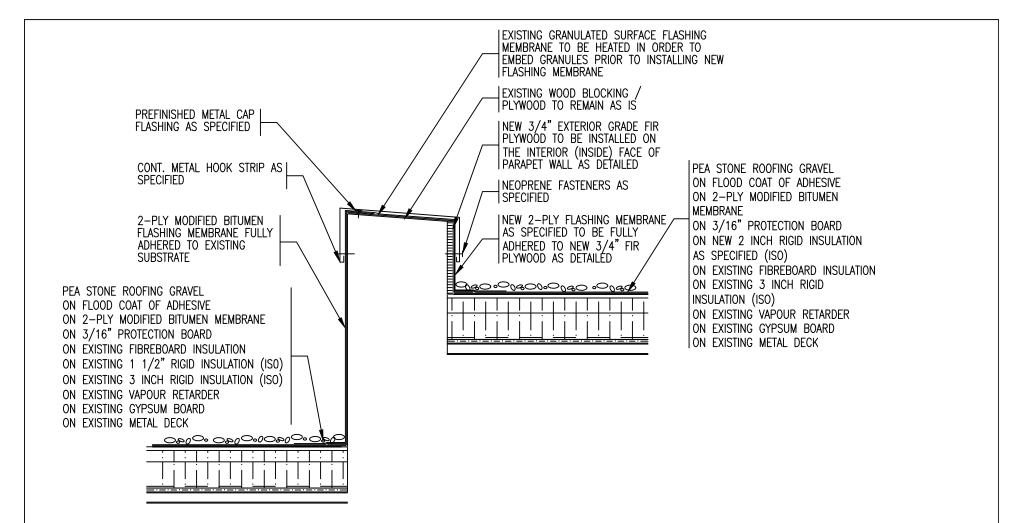
DETAIL - ROOF TOP UNIT - AREA 'I'

SCALE : 1" = 1'-0"

NOTE:

1. EXISTING 2-PLY GRANULATED SURFACE MODIFIED BITUMEN ROOF MEMBRANE IS REQUIRED TO BE PEELED FROM EXISTING RIGID INSULATION WITH THE REMAINDER OF THE EXISTING ROOF SYSTEM TO REMAIN 2. EXISTING METAL CAP AND COUNTER FLASHINGS ARE REQUIRED TO BE REMOVED COMPLETELY PRIOR TO COMMENSEMENT OF ROOF MODIFICATIONS AND THEN SUPPLY, FABRICATE AND INSTALLED NEW AS DESIGN AND SPECIFIED 3. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE THE MECHANICAL CONTRACTORS RAISE THE DIRT POCKETS SINCE THEY ARE AGAINST THE CURRENT ROOF SYSTEM 4. CONTRACTOR IS RESPONSIBLE FOR DISCONNECTION OF GAS LINES AND ELECTRICAL CABLES PRIOR OF LIFTING UNITS UP FROM ROOF CURBS 5. EXISTING METAL COUNTER FLASHING ALONG WITH MEMBRANE FLASHING ARE REQUIRED TO BE REMOVED FROM ROOF CURB ONCE THE ROOF TOP UNIT IS LIFTED

REMLAP BUILDING SERVICES INC. R not unstance, status an arritatio manual B assume macro (payment anomy) S assume and the second and the second and S assume and the second and the second and the first heat and the second and the second and the test of the heat and the second and the se		PROJECT GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATIONS	DATE :	DEC 2019
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		4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
		CLENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	СНК. ВҮ:	CWP
			Sheet size :	8.1/2"x11"
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		ROOF DETAIL - ROOF TOP UNIT	DRAWING NO.	
01-09-20	TENDER		DG	S-6

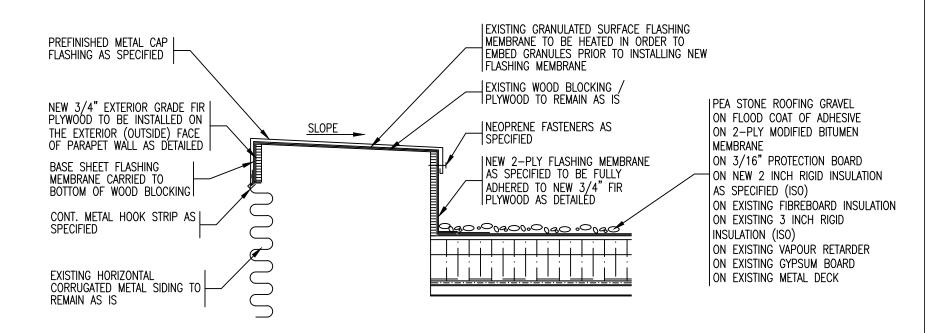


PARAPET DETAIL - BETWEEN AREA 'F' & 'H'

SCALE : 1'' = 1' - 0''

NOTE: 1. EXISTING 2-PLY GRANULATED SURFACE MODIFIED BITUMEN ROOF MEMBRANE IS REQUIRED TO BE PEELED FROM EXISTING RIGID INSULATION WITH THE REMAINDER OF THE EXISTING ROOF SYSTEM TO REMAIN 2. EXISTING METAL CAP AND COUNTER FLASHINGS ARE REQUIRED TO BE REMOVED COMPLETELY PRIOR TO COMMENSEMENT OF ROOF MODIFICATIONS AND THEN SUPPLY, FABRICATE AND INSTALLED NEW AS DESIGN AND SPECIFIED

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Christopher W. Palmer, C.E.T.	CLIENT ST. CLAIR CATHOLIC DISTRICT	СНК. ВҮ:	CWP
Harris, Calado HDR 100 Faz (\$10)738-4787	SCHOOL BOARD	Sheet size :	8.1/2"x11"
DATE ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	D. RBS19-60
12-20-19 OWNER REVIEW	ROOF DETAIL - PARAPET	DRAWING NO.	07
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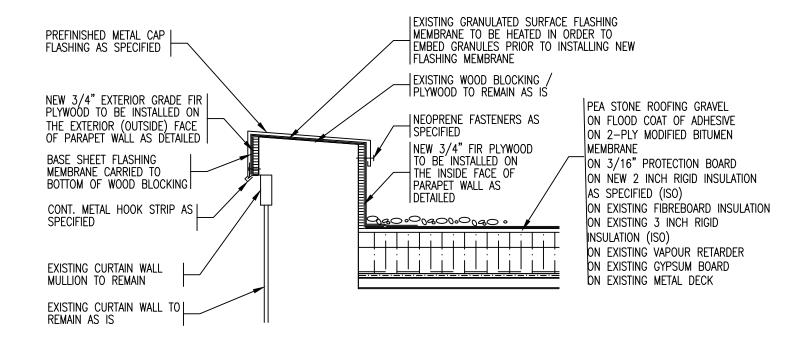


PARAPET DETAIL - AREA 'F'

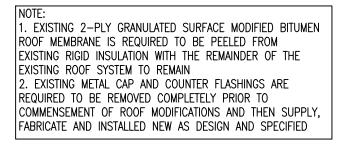
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2. EXISTING METAL CAP AND COUNTER FLASHINGS ARE
REQUIRED TO BE REMOVED COMPLETELY PRIOR TO
COMMENSEMENT OF ROOF MODIFICATIONS AND THEN SUPPLY,
FABRICATE AND INSTALLED NEW AS DESIGN AND SPECIFIED

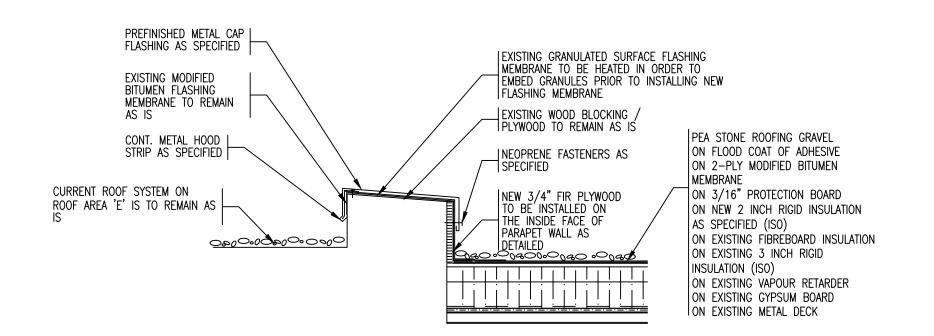
REMIAP BUILDING SERVICES INC. R nor watcher, esser an infector fromme		PROJECT GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATIONS	DATE :	DEC 2019
			SCALE :	N.T.S.
1 7	DING EINELOPES (MI/MPOUR BANNER/MINER PROOFING) VEYS AND CONDITIONS OF ROOFS AND BAILDONS	4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
Christopher K. Fulmer, C.E.Y. 1007 fore Real Te (110) 728-300 Herre, Grief III 100 Fez (110)728-4797		CLENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	СНК. ВҮ:	CWP
			Sheet size :	8.1/2"x11"
DATE ISSUED FOR (UM-DD-YY) 12-20-19 OWNER REVIEW		DRAWING TITLE	PROJECT FILE NO. RBS19-60	RBS19-60
		ROOF DETAIL - PARAPET	DRAWING NO.	0.0
01-09-20	TENDER		L DG	iS-8



PARAPET DETAIL - AREA 'F'



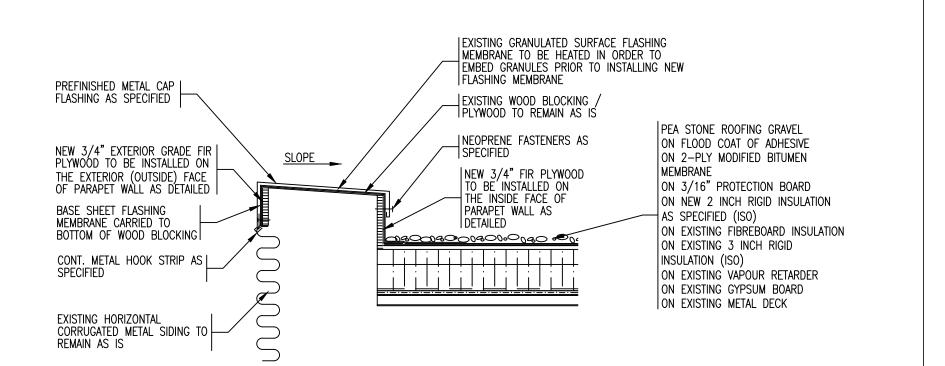
REMLAP BUILDING SERVICES INC.	PROJECT GOOD SHEPHERD CATHOLIC SCHOOL ROOF MODIFICATIONS	DATE :	DEC 2019
R ROT WHITCHNES, SESSIE AND REPECTEDA PRODUMES		SCALE :	N.T.S.
В андлик биедорся (ил/ингон вилиен/инер лисопия) S запистя лие соценских от поотя лие выдания	4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
Christopher W. Palmer, C.E.T.	CLENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	СНК. ВҮ:	CWP
Hannes, Calado HOR 100 Fac (\$16)738-4767		SHEET SIZE :	8.1/2"x11"
DATE ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	RBS19-60
12-20-19 OWNER REVIEW	ROOF DETAIL - CURRENT	DRAWING NO.	0.0
01-09-20 TENDER		DG	iS-9



PARAPET DETAIL - BETWEEN AREA 'E' & 'F'

NOTE:
1. EXISTING 2-PLY GRANULATED SURFACE MODIFIED BITUMEN
ROOF MEMBRANE IS REQUIRED TO BE PEELED FROM
EXISTING RIGID INSULATION WITH THE REMAINDER OF THE
EXISTING ROOF SYSTEM TO REMAIN
2. EXISTING METAL CAP AND COUNTER FLASHINGS ARE
REQUIRED TO BE REMOVED COMPLETELY PRIOR TO
COMMENSEMENT OF ROOF MODIFICATIONS AND THEN SUPPLY,
FABRICATE AND INSTALLED NEW AS DESIGN AND SPECIFIED

REMLAP BUILDING SERVICES INC.	PROJECT	DATE :	DEC 2019
R NOT MATERIAL, SEARN NO REPETCH PRODUCT	GOOD SHEPHERD CATHOLIC SCHOOL ROOF MODIFICATIONS	SCALE :	N.T.S.
В видона диндата (на/нички внимен/нике инсогна) S зилиста на совалска от полта на видона	4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
Christopher W. Falmer, C.E.T. 1607 Gev Red Tet (210) 735-360	CLENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	СНК. ВҮ:	CWP
Harree, Calado HDR 100 Fac: (\$16)738-4767		Sheet size :	8.1/2"x11"
DATE ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	RBS19-60
12-20-19 OWNER REVIEW	ROOF DETAIL - PARAPET	DRAWING NO.	0.40
01-09-20 TENDER		DG	S-10



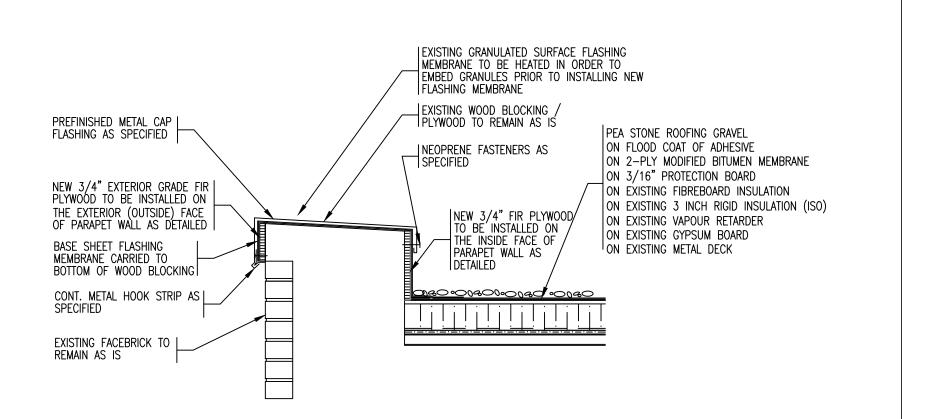
PARAPET DETAIL - AREA 'F'

SCALE : 1'' = 1' - 0''

NOTE:

1. EXISTING 2-PLY GRANULATED SURFACE MODIFIED BITUMEN ROOF MEMBRANE IS REQUIRED TO BE PEELED FROM EXISTING RIGID INSULATION WITH THE REMAINDER OF THE EXISTING ROOF SYSTEM TO REMAIN 2. EXISTING METAL CAP AND COUNTER FLASHINGS ARE REQUIRED TO BE REMOVED COMPLETELY PRIOR TO COMMENSEMENT OF ROOF MODIFICATIONS AND THEN SUPPLY, FABRICATE AND INSTALLED NEW AS DESIGN AND SPECIFIED

REMLAP BUILDING SERVICES INC.	PROJECT GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATIONS	DATE :	DEC 2019
R пот импаниса, азван но наталан глания		SCALE :	N.T.S.
В видов внедате (ин/иголя анивертива тасатов) S запаса на сованска от поста на видова	4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
Christopher W. Falmer, C.B.T.	CLIENT ST. CLAIR CATHOLIC DISTRICT	СНК. ВҮ:	CWP
1407 Gev Real Tel: (210) 738-3408 Harrow, Calado HDII: 100 Fac: (210)738-4707	SCHOOL BOARD	Sheet size :	8.1/2"x11"
DATE ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	RBS19-60
12-20-19 OWNER REVIEW	ROOF DETAIL - PARAPET	DRAWING NO.	0.44
01-09-20 TENDER		DG	S-11



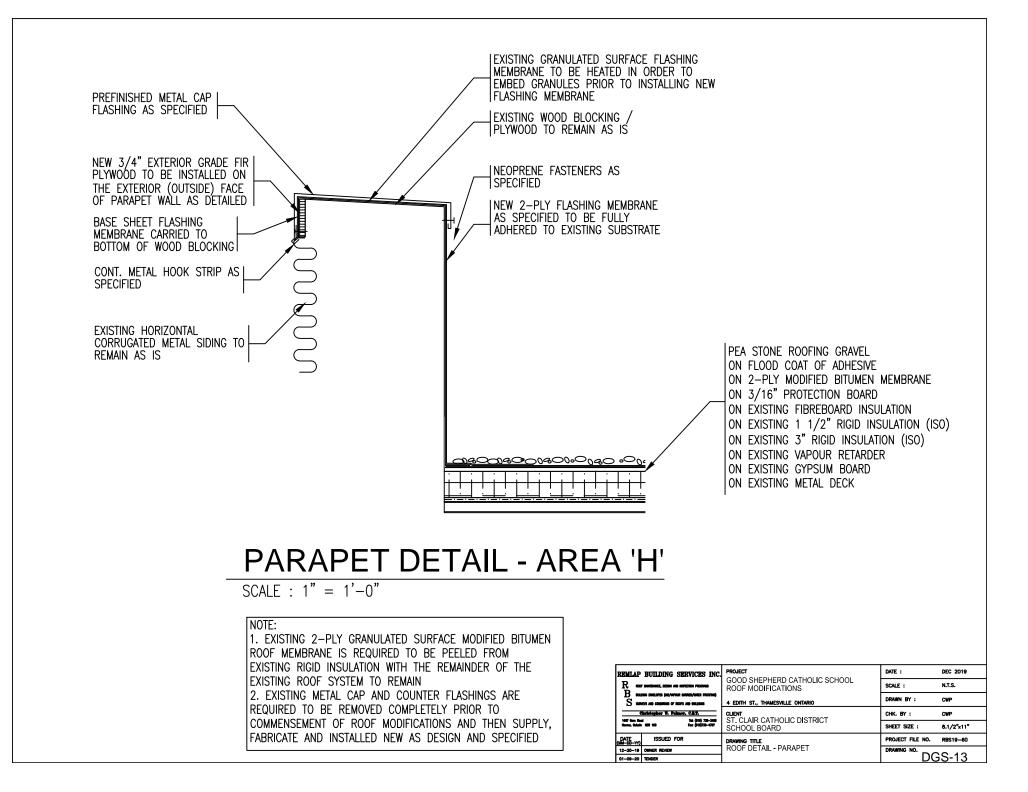
PARAPET DETAIL - AREA 'G'

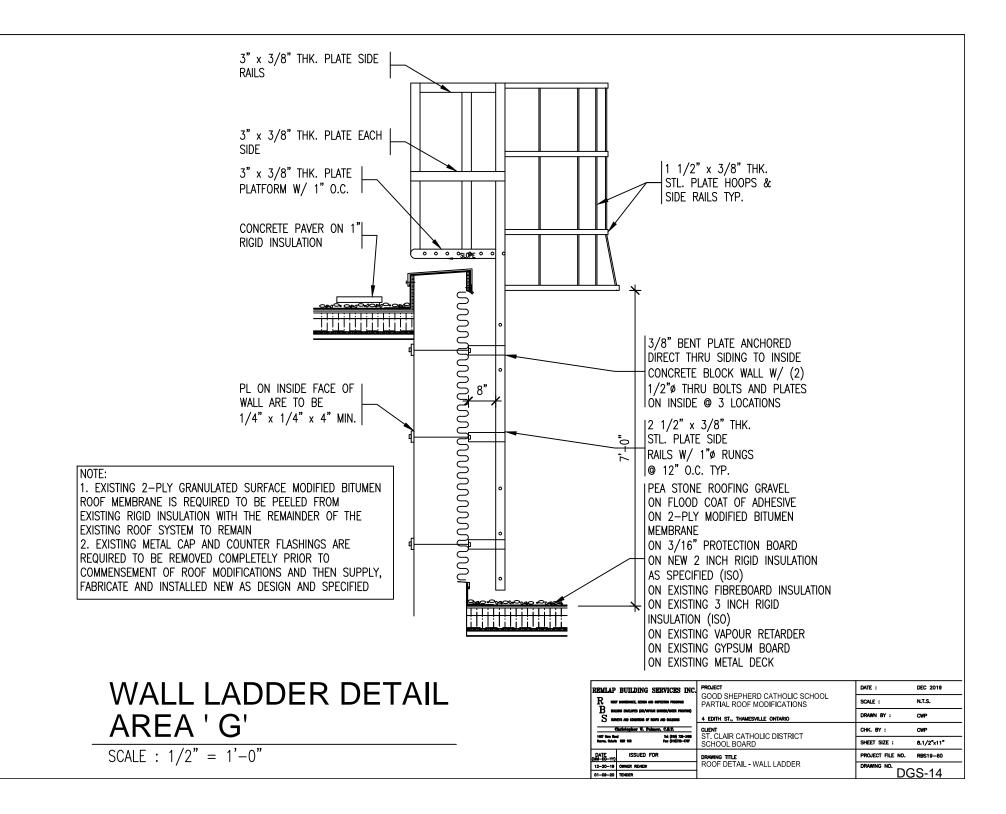
SCALE : 1'' = 1' - 0''

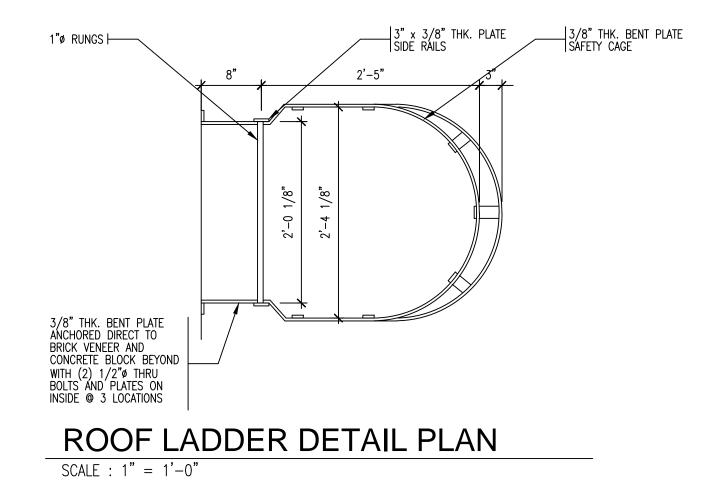
NOTE:

1. EXISTING 2-PLY GRANULATED SURFACE MODIFIED BITUMEN ROOF MEMBRANE IS REQUIRED TO BE PEELED FROM EXISTING RIGID INSULATION WITH THE REMAINDER OF THE EXISTING ROOF SYSTEM TO REMAIN 2. EXISTING METAL CAP AND COUNTER FLASHINGS ARE REQUIRED TO BE REMOVED COMPLETELY PRIOR TO COMMENSEMENT OF ROOF MODIFICATIONS AND THEN SUPPLY, FABRICATE AND INSTALLED NEW AS DESIGN AND SPECIFIED

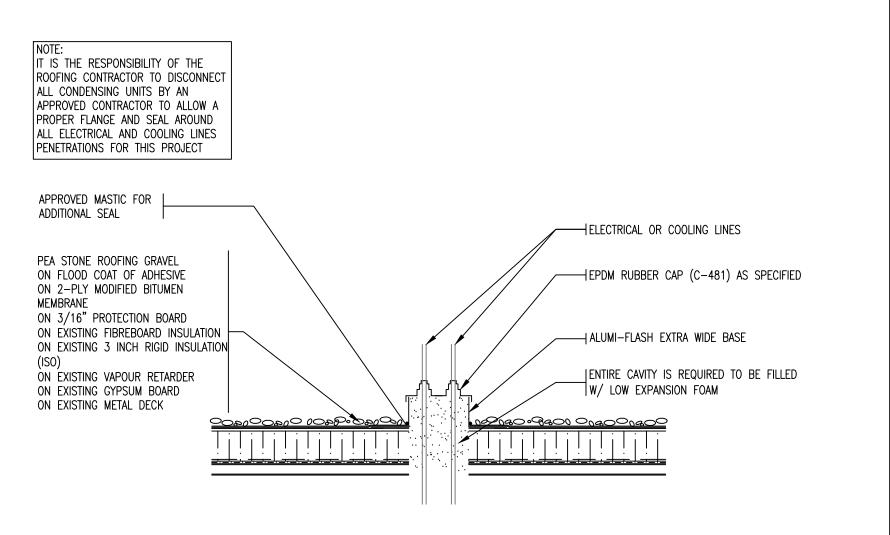
REMILAP BUILDING SERVICES INC. R and unitance, cann an automa manufactor B acuss sectors a services manufactor S action and acutors of action are maximum Conference on the Patience CEP. We dry have been been been been been been been been been		PROJECT GOOD SHEPHERD CATHOLIC SCHOOL ROOF MODIFICATIONS	DATE :	DEC 2019
			SCALE :	N.T.S.
		4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
		CLENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	СНК. ВҮ:	CWP
			Sheet size :	8.1/2"x11"
DATE ISSUED FOR (DAT-DD-YY) 12-20-19 OWNER REVIEW		DRAWING TITLE	PROJECT FILE NO.	RBS19-60
		ROOF DETAIL - CURRENT	DRAWING NO.	0.40
01-09-20 TENDER			DG	S-12







-				
REMLAP	BUILDING SERVICES INC.	PROJECT	DATE :	DEC 2019
R NOT MONTONICS, SCIEN AND INSPECTION PRODUMES		GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATIONS	SCALE :	N.T.S.
1 7	200 EMELOPES (MI/MPCUR EMINER/MILER PROSFINI) NEYS MID CONDITIONS OF ROOTS AND BUILDINGS	4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
Circletopher W. Palmer, C.I.T.		CLIENT ST. CLAIR CATHOLIC DISTRICT	СНК. ВҮ:	CWP
1407 Gase Rec Harres, Oxfarb	ad Tek (\$10) 730-3488 19 MBR 100 Fac (\$10)730-4707	SCHOOL BOARD	Sheet size :	8.1/2"x11"
DATE (um-DD-YY) ISSUED FOR 12-20-19 OWNER REVIEW 01-00-20 TENDER		DRAWING TITLE	PROJECT FILE NO.	NO. RBS19-60
		ROOF DETAIL - LADDER DETAIL	DRAWING NO.	
			DG	S-14a

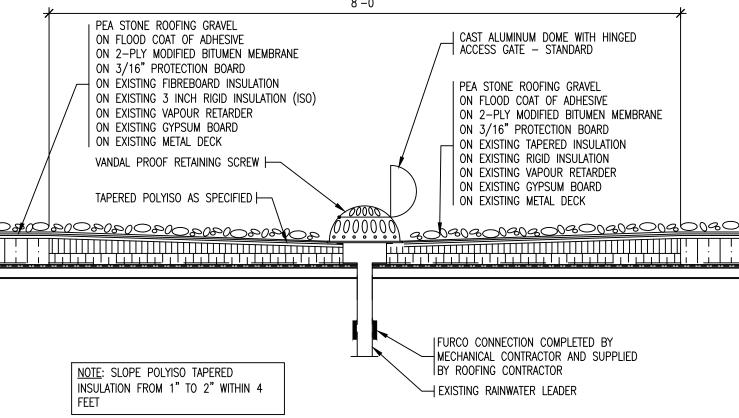


ROOF AREA 'I' - ELECTRICAL / COOLING LINE PENETRATIONS SCALE : $1^{"} = 1^{-0}$

REMLAP	BUILDING SERVICES INC.	PROJECT GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATIONS	DATE :	DEC 2019
	F WHITEHHEZ, DESIGN AND INSPECTION FROMMUS		SCALE :	N.T.S.
1 7	jais enelaris (na/nfour enner/inter fication) Nos and colonicus of itors and gallance	4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
1407 Same Bar	Christopher W. Palmer, C.S.T.	CLENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	СНК. ВҮ:	CWP
Harrow, Coladi			Sheet size :	8.1/2"x11"
DATE	ISSUED FOR	DRAWING TITLE ROOF DETAIL - PENETRATION	PROJECT FILE NO.	RBS19-60
12-20-19	OWNER REVIEW		DRAWING NO.	0.45
01-09-20	TENDER		DG	S-15

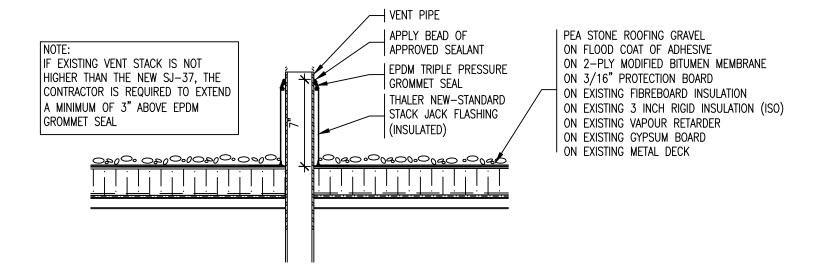
REBILIAP BOILDING SERVICES INC. R Rar watersteer, cases was services Rar watersteer, cases was provide watersteer B Rarms on cases or cases or core on services Rarms or cases or core on services S Refer to a case or core on services Rarms or cases or core on services Cases of the cases or core on services Rarms or cases or core on services		PROJECT GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATIONS	DATE :	DEC 2019
			SCALE :	N.T.S.
		4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
		CLENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	СНК. ВҮ :	CWP
			SHEET SIZE :	8.1/2"x11"
	ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	RBS19-60
12-20-19 OWNER REVIEW		ROOF DETAIL - ROOF DRAIN	DRAWING NO.	
01-09-20	TENDER		I DO	SS-16

SCALE : 1'' = 1' - 0''



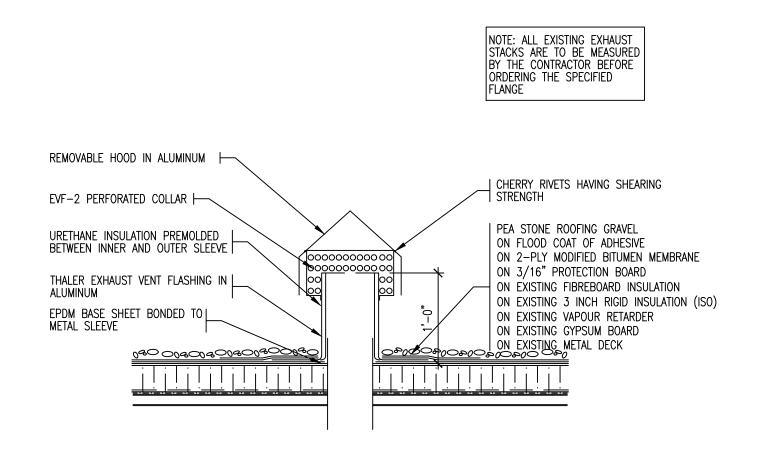
ROOF DETAIL - ROOF DRAIN AREA 'I'

8'-0"



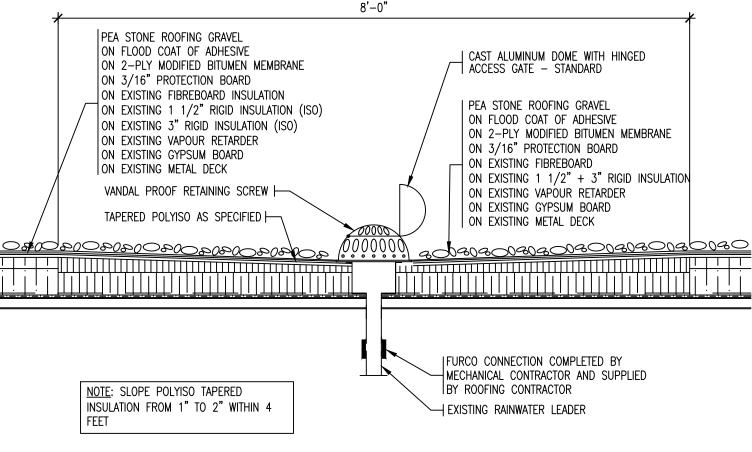
ROOF DETAIL - VENT PIPE STACK - AREA 'I' SCALE : 1" = 1'-0"

REMLAP	BUILDING SERVICES INC.	PROJECT	DATE :	DEC 2019
	F WAITENACE, JESON AND INSPECTICA PROXIMIE	GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATIONS	SCALE :	N.T.S.
1 7	2010 EMELOPES (MI/MPOUR BANNER/MILER PROGRAM) MENS AND CONSIDENCE OF NOOPS AND BANLONDS	4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
Christopher W. Falmer, C.E.T. 147 See Real Tek (215) 728-3408		CLIENT ST. CLAIR CATHOLIC DISTRICT	СНК. ВҮ:	CWP
Harrow, Collado	ad Tet (\$119) 738-3458 a NOR 100 Fas: (\$19)738-4797	SCHOOL BOARD	Sheet size :	8.1/2"x11"
DATE	ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	RBS19-60
12-20-19 OWNER REVIEW		ROOF DETAIL - VENT PIPE STACK	DRAWING NO.	0.47
01-09-20	TENDER		DGS-17	



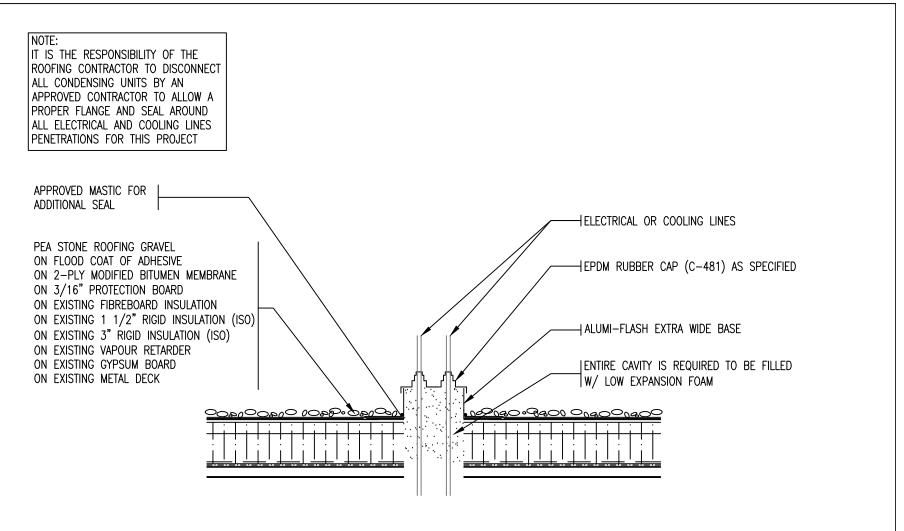
EXHAUST VENT FLASHING DETAIL - AREA 'I'

REMLAP	BUILDING SERVICES INC.	PROJECT	DATE :	DEC 2019
R .	OF LINKTONICS, DESCH AND INSPECTICA PROBABLY	GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATIONS	SCALE :	N.T.S.
B BULKING DIRELINES (#/.4704.00 BULKING PROCEEDING S SURGES ARE COMMENTS OF FACTS ARE SUBJECT BULKING BULKING Charterbayer X, Pulkinger, D.B.Y. Bulkinger, D.B.Y. Bulkinger, D.B.Y. BULKING VHO free head RE 100 Re (H1)718-0400 BULKING BULKING		4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
		CLENT ST. CLAIR CATHOLIC DISTRICT	СНК. ВҮ:	CWP
		SCHOOL BOARD	Sheet size :	8.1/2"x11"
		DRAWING TITLE	PROJECT FILE NO.	RBS19-60
		ROOF DETAIL - EXHAUST VENT	DRAWING NO.	0.40
			DGS-18	



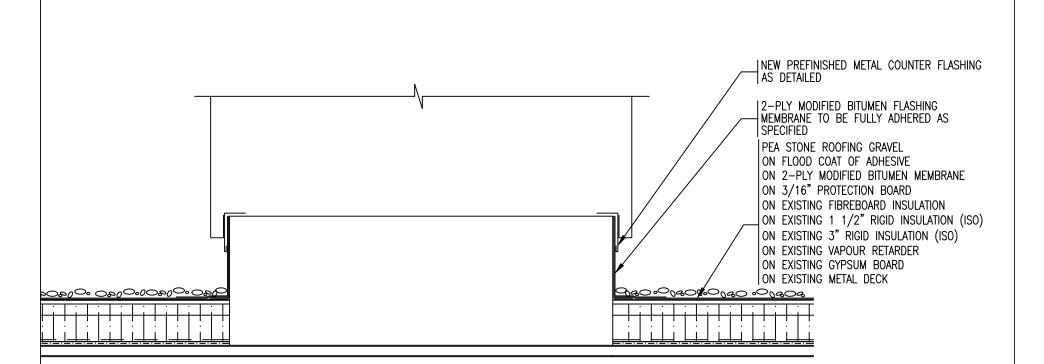
ROOF DETAIL - ROOF DRAIN AREA 'H'

REMLAP BUILDING SERVICES	INC. PROJECT	DATE :	DEC 2019
R NOT WHITEHER, SEAR AND HEREETICS PROBABILITY	GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATIONS	SCALE :	N.T.S.
B SUBJE DIRECTES (IN/APPLIE AND DIRECTORES FILE S SUBJES AND COMPACIES OF INCOS AND ONLINES	4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
Christopher W. Palmer, C.S.T.	CLIENT ST. CLAIR CATHOLIC DISTRICT	СНК. ВҮ :	CWP
1407 Gere Raud Tek (\$16) 73 Harrou, Colado MER 160 Fax (\$16)738-	SCHOOL BOARD	SHEET SIZE :	8.1/2"x11"
DATE ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	RBS19-60
12-20-19 OWNER REVIEW	ROOF DETAIL - ROOF DRAIN	DRAWING NO.	0.40
01-09-20 TENDER		De De	SS-19



ROOF AREA 'H' - ELECTRICAL / COOLING LINE PENETRATIONS

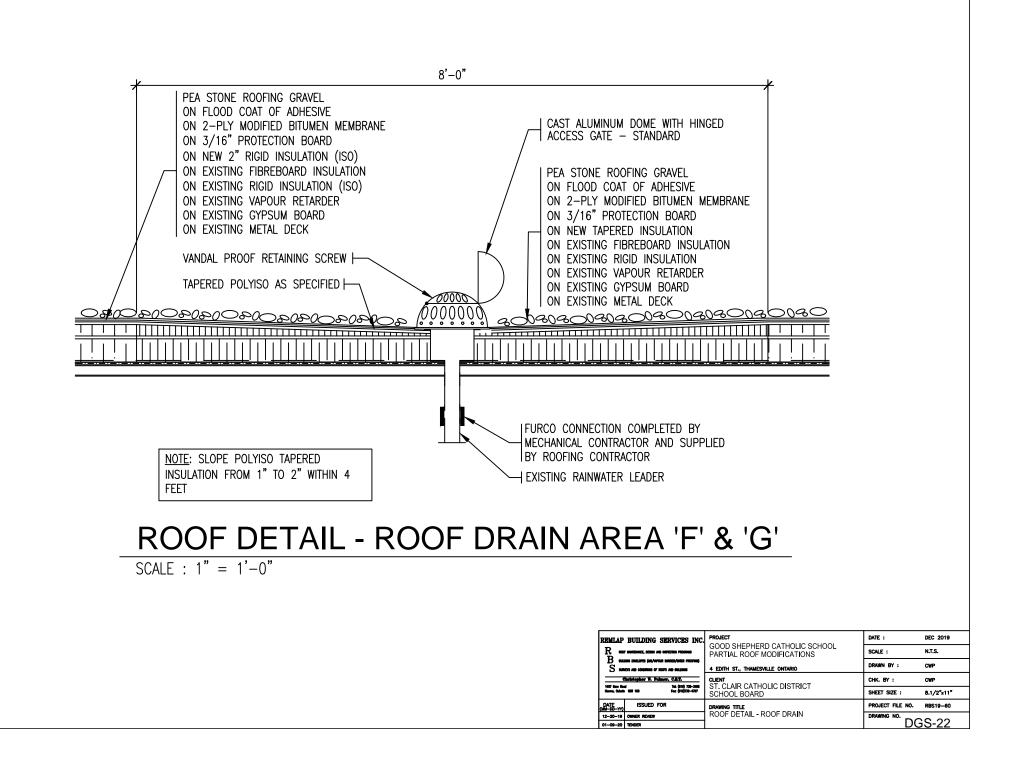
		GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATIONS 90 MILION 4 EDITH ST., THAMESMILE ONTARIO DRAWN BY : CWP		
REMLAP	P BUILDING SERVICES INC.		DATE :	DEC 2019
1 m	OF WAITSHICE, DESIGN AND INSPECTION PROGRAMS		SCALE :	N.T.S.
1 7	LENG EMELOPES (UR/WYOLR EMMER/EMER PROFINI) INCIS AND COMPILIES OF REATS AND GALLENGS	4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
1407 (mm 8	Christopher W. Falmer, C.B.T.		СНК. ВҮ:	CWP
Harrise, Calar	In High 100 Fee: (\$16)738-4767		Sheet size :	8.1/2"x11"
DATE	ISSUED FOR		PROJECT FILE NO.	RBS19-60
12-20-19	OWNER REVIEW	ROOF DETAIL - PENETRATION	DRAWING NO.	0.00
01-09-20	TENDER		I DG	iS-20

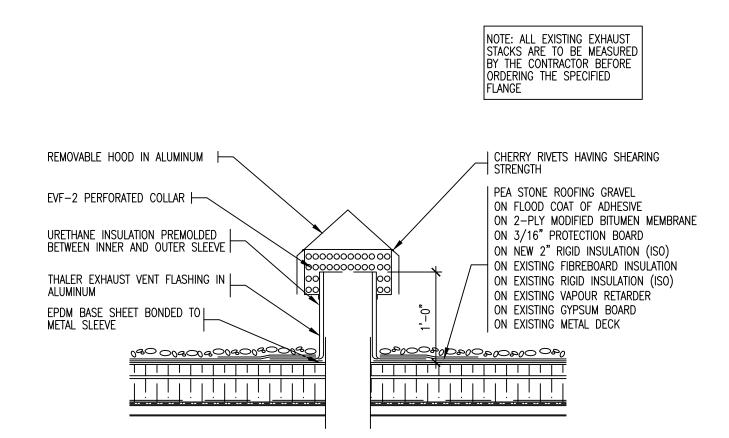


DETAIL - ROOF TOP UNIT - AREA 'H'

NOTE:
1. EXISTING 2-PLY GRANULATED SURFACE MODIFIED BITUMEN ROOF MEMBRANE IS REQUIRED TO
BE PEELED FROM EXISTING RIGID INSULATION WITH THE REMAINDER OF THE EXISTING ROOF
SYSTEM TO REMAIN
2. EXISTING METAL CAP AND COUNTER FLASHINGS ARE REQUIRED TO BE REMOVED COMPLETELY
PRIOR TO COMMENSEMENT OF ROOF MODIFICATIONS AND THEN SUPPLY, FABRICATE AND INSTALLED
NEW AS DESIGN AND SPECIFIED
3. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE THE MECHANICAL CONTRACTORS RAISE THE DIRT
POCKETS SINCE THEY ARE AGAINST THE CURRENT ROOF SYSTEM
4. CONTRACTOR IS RESPONSIBLE FOR DISCONNECTION OF GAS LINES AND ELECTRICAL CABLES
PRIOR OF LIFTING UNITS UP FROM ROOF CURBS
5. EXISTING METAL COUNTER FLASHING ALONG WITH MEMBRANE FLASHING ARE REQUIRED TO BE
REMOVED FROM ROOF CURB ONCE THE ROOF TOP UNIT IS LIFTED

REMLAP BUILDING SERVICES INC.	PROJECT GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATIONS	DATE :	DEC 2019
R NOT WATCHING, DESCH AND HERECTCH PRODUCT		SCALE :	N.T.S.
В БИДИК ВИЕДРЕЗ (ИЛ/ИРСИК ВИЛЕН/АНЕК РИСОРИИ) S БИЛСТЗ АНД ССИДИСТСЯ ОГ ПОСРЗ АНД ВИДИКА	4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
Christopher W. Falmer, C.S.T. 1997 for had is fitth 725-340	CLENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	СНК. ВҮ:	CWP
1407 Gave Raad Tek (\$16) 738-3408 Harrow, Calado HER 160 Faz: (\$16)738-4787		Sheet size :	8.1/2"x11"
DATE ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	RBS19-60
12-20-19 OWNER REVIEW	ROOF DETAIL - ROOF TOP UNIT	DRAWING NO.	0.04
01-09-20 TENDER		DGS-21	





EXHAUST VENT FLASHING DETAIL - AREA 'G' SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC. R and monomer, and an application framework		PROJECT GOOD SHEPHERD CATHOLIC SCHOOL PARTIAL ROOF MODIFICATIONS	DATE :	DEC 2019
			SCALE :	N.T.S.
-	ens enelares (ve/viroux exiter/exter filofini) Vers vad colentius of itors vad exilentis	4 EDITH ST., THAMESVILLE ONTARIO	DRAWN BY :	CWP
Christopher W. Palmer, C.E.T. 1407 dass Real Harres, Galado MR 100 Fac (\$16)738-300 Harres, Galado MR 100 Fac (\$16)738-4797		CLENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	СНК. ВҮ:	CWP
			Sheet size :	8.1/2"x11"
문 영제 3	ISSUED FOR	DRAWING TITLE ROOF DETAIL - EXHAUST VENT	PROJECT FILE NO.	RBS19-60
12-20-19 OWNER REVIEW	OWNER REVIEW		DRAWING NO.	0.00
01-09-20	TENDER		DGS-23	