



INSTRUCTIONS TO BIDDERS

Date: April 27, 2017

BID PACKAGES #: 612-CP1725

1. **BID SUBMISSION**

The St. Clair Catholic District School Board (Board) is seeking roofing contractors to provide partial roof replacement.

Bids from invited bidders shall be submitted on the Bid Form provided and submitted in an envelope clearly marked:

Bid Packages #: 612-CP1725 Christ The King Catholic School – Roof Replacement Tender

The envelope shall be sealed and delivered to: **St. Clair Catholic District School Board
420 Creek St.
Wallaceburg, ON
N8A 4CA**

Attention: Mr. Tony Prizio, Procurement Specialist

Bids will be accepted not later than **May 16, 2017 @ 11:00:00 a.m. (No extensions to Bid Closing date are anticipated. Bidders are encouraged to act immediately to prepare their submissions!)**

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 Tender Form must be submitted. **Failure to provide all of the requested information on the Tender Form may result in disqualification of the bid.**

Bids by telephone, fax or email will **not** be accepted.

After bid closing, sealed envelopes will be opened by the Board's Procurement Specialist (Tony Prizio) and a representative from Corporate Services' department.

2. **SCOPE OF WORK**

The Instructions to Bidders identifies the work to be performed in the Contract and takes priority if there is a conflict within the Bid Documents. **Refer to attached specifications for detailed description of work to be carried out by the successful proponent.**

3. **BID DOCUMENTS**

The following Bid Documents form the basis of this Bid Package and shall be examined by bidders:

- 3.1 Instructions to Bidders dated April 27, 2017
- 3.2 Tender Form, Specifications and Drawings – Christ The King Catholic School May, 2017
- 3.3 **Prime Contract – Will be a standard CCDC-2 2008 Stipulated Price Contract.** The Board assumes no responsibility for the bidder's failure to examine **all** of the Bid Documents. **(also refer to Appendix A – SCCDSB - Supplementary Conditions to CCDC-2 2008)**



INSTRUCTIONS TO BIDDERS

Date: April 27, 2017

BID PACKAGES #: 612-CP1725

4. **BID ACCEPTANCE**

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

The Board reserves the right to determine the successful bidder by any combination of base bid, separate prices, requested alternate prices and voluntary alternate prices submitted with the bid. The Board is not obligated to select the bid with the lowest price and may cancel a bid prior to award without liability to any bidder.

The successful bidder shall be required to enter into a formal contract with the Board, which will include the terms and conditions of the Instructions to Bidders, Bid Form, and all other applicable documents.

5. **AWARD**

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.

6. **PAYMENT**

The Board shall pay within forty-five (45) days after receipt of the invoices which are received and approved by the Board.

7. **TAXES**

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 **not** to be included in the bid. The H.S.T. amount and the Bidder's **H.S.T. Registration Number** are to be indicated on the Bid Form in the spaces provided.

8. **ADDENDA**

Bidders finding discrepancies, ambiguities or omissions in the bid documents or having doubt as to the meaning or intent thereof, shall immediately notify the Procurement Specialist who may issue instructions and/or clarifications by Addendum to all Bidders. Bidders may also, during the Bidding Period, be advised by Addendum of any additions, deletions or alterations to bid documents. All such Addenda shall become part of the Bid Documents.

All questions to be addressed in writing to: **Mr. Tony Prizio**, Procurement Specialist
St. Clair Catholic District School Board
Fax 519.627.8230 or
E-mail: tony.prizio@st-clair.net
Copy: marcie.myers@st-clair.net
No later than 48 hours prior to bid closing date.



INSTRUCTIONS TO BIDDERS

Date: April 27, 2017

BID PACKAGES #: 612-CP1725

9. **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.

10. **BONDING: REQUIREMENT**

On bids exceeding \$ 50,000.00, submit with the Bid an Agreement to Bond for a 50% Performance Bond, and a 50% Labour & Material Payment Bond. Upon request, the successful Bidder will be required to provide the 50% Performance Bond and 50% Labour and Material Payment Bond from a bonding company acceptable to the Board. The cost of the bond is not to be included in the bid sum, the amount of which is to be identified on the Bid Form.

Each bid shall be accompanied by bid security in the form of either:

Certified cheque payable to the "St. Clair Catholic District School Board" in the amount of 10% of the bid price;

OR

Bid bond in the amount of 10% of the bid price naming the Owner as obligee and issued by a surety licensed to conduct surety and insurance business in Canada. The bid bond shall remain valid for a period of sixty (60) days from the Submission Deadline.

11. **VOLUNTARY ALTERNATE AND 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 must 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.

12. **EXAMINATION OF SITE & SITE VISIT**

In submitting a bid, it will be assumed that the bidders have carefully examined the site and surrounding properties of the work and have informed themselves as to the existing conditions, access, storage areas and limitations, and have included in the bid price the complete cost of the work contemplated by the drawings and specifications and other bid documents.

A mandatory site visit has been scheduled for May 4, 2017 at 10:00 a.m. Interested parties should meet at the admin. office of Christ The King Catholic School, located at 227 Thomas Avenue Wallaceburg, ON.

13. **TIMING OF PROJECT**

Work on **BOTH** sites must take place during the summer months. Work may begin on **July 1, 2017** and will have to be complete no later than **September 1, 2017**.

14. **PROJECT SPECIFIC REQUIREMENTS**



INSTRUCTIONS TO BIDDERS

Date: April 27, 2017

BID PACKAGES #: 612-CP1725

Contractor shall provide their own washroom facilities for their employees, board washrooms will be off-limits to the contractor's employees.

Please be advised that the Owner has a No Smoking Requirement on the Owners' property. Contractors are requested to ensure that employees and suppliers are advised of the Requirement. 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.

15. INSURANCE

Contractor must maintain, at the Contractor's expense for the entire term of the Contract or as otherwise required, all insurance as set out below:

- The successful Contractor shall provide the Board with proof of insurance for Comprehensive General Liability and Property Damage with a limit of not less than \$2,000,000.00 (two million dollars) inclusive prior to commencing work.
- The successful Contractor shall provide the Board with proof of insurance for 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)** inclusive prior to commencing work.
- The Contractor agrees to indemnify, hold harmless, and defend the Board 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 or employees by way of ownership or operation of an automobile.
- The successful Contractor shall provide the Board with a complete certified copy of all policies.
- The successful Contractor must name the St. Clair Catholic District School Board as additional insured on their insurance policies.

16. WORKPLACE SAFETY INSURANCE BOARD (WSIB)

Contractor must furnish a copy of Workplace Safety and Insurance Board Clearance Certificate of good standing, "Section 748" of the Workplace Safety and Insurance Act with its bid documents.

17. PERMITS

The Board will apply and pay for the building permit. The Contractor shall apply for and include costs for any other permits and approvals required for the completion of their work.

18. MEETINGS

A Post Bid Meeting may be convened and chaired by the Board who will invite Contractor 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.

19. GUARANTEE



INSTRUCTIONS TO BIDDERS

Date: April 27, 2017

BID PACKAGES #: 612-CP1725

The guarantee shall be as outlined in the specifications starting from after completion of the entire job and acceptance thereof by the Board unless a different period of time is specified with the Board's approval. The Contractor's guarantee shall cover all work under the Contract whether or not any portion or trade has been sublet.

The Contractor agrees to correct promptly, at the Contractor's own expense, defects or deficiencies in the Work which appear prior to and during the period of guarantee, or such longer periods as may be specified for certain products or work.

If the Contractor fails to make any replacements or repairs required hereunder, after notice from the Board and reasonable opportunity to do so, the Board may have such work done at Contractor's expense, including all necessary labour costs in connection therewith. Board shall inform Contractor in advance of the approximate cost of such work to be done by the Board.

20. SCHEDULE

The Contractor will be required to perform the work in accordance with the Schedule dates provided in 13. Timing of Project. 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.

21. CONTRACTED SERVICES PROGRAM

Contractors performing work on Board property must complete the Contracted Services Program. 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 www.st-clair.net or through the Board contact identified previously in this document.

22. 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.



INSTRUCTIONS TO BIDDERS

Date: April 27, 2017

BID PACKAGES #: 612-CP1725

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.

23. SAFE SCHOOL PROCEDURES

Contractor's staff is required to report to the main office of each school 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

24. PARKING

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

25. TIE BIDS

In the event of a tie. A coin flip conducted by the Procurement Specialist with a minimum of one other Board staff will determine the successful proponent.

END OF INSTRUCTIONS TO BIDDERS

ST. CLAIR CATHOLIC DISTRICT SCHOOL
BOARD
ROOF REPLACEMENT

FOR

CHRIST THE KING CATHOLIC SCHOOL
227 THOMAS AVENUE
WALLACEBURG, ONTARIO
N8A 2B9

TENDER FORM

**CHRIST THE KING CATHOLIC SCHOOL
PROJECT No. 612-CP1725**

MAY 2017

TENDER FORM

Roof Replacement
for
Christ The King Catholic School-Wallaceburg / Project **No** 612-CP1725

Name of Bidder _____

(Hereinafter Called the Tenderer Contractor)

Address _____

Being A _____ (A) which _____ (B)

Note: In space (A) above states type of company
Eg. "Incorporated", "limited", etc.
In space (B) above state "is" or "is not".

Registered under the laws of the Province of _____

DOES HEREBY AGREE TO:

1. Furnish all labour, materials, equipment, and service necessary for the completion of the **Roof Replacement at St. Clair Catholic District School Board** in accordance with Information of Tenderers, Form of Tender, General Conditions of Contract and Drawings by Remlap Building Services, 1407 Gore Road, RR1 Harrow, Ontario – N0R 1G0 for **TOTAL TENDER PRICE "A" (H.S.T. INCLUDED)**,

_____ \$ _____
Option No1 *(HST Included)*

_____ \$ _____
Alternate Method *(HST Included)*

or such other sums as may be finally ascertained in accordance with the allowance for Roof Replacement and deductions as set out in the Tender Documents.

2. And also agrees that upon Tender acceptance to furnish a Performance and Maintenance Bond, Labour and Material Payment Bond and Liability Insurance as required by the Contract Documents, the cost of which is included in the Total Tender Price. The Tenderer hereby proposes:

Name of Bonding Company

Cost of Bonding

Stipulated prices shall include all labour, equipment and materials required to complete the work in every respect, including provincial sales tax.

TENDER FORM

Roof Replacement
for

Christ The King Catholic School-Wallaceburg / **Project No 612-CP1725**

Section "A"

Roof Replacement for Christ The King Catholic School

The Bidder offers to provide all labour, materials and equipment services for the execution and completion of the work of the trade or trades herein and in accordance with the instructions for Bidders including Provincial Sales Tax for the stipulated sum of:

Item

No.

Description

Total
Option No.1 **Alternate Method**
(Original Design) **See Enclosed Description**

**A. CHRIST THE KING CATHOLIC SCHOOL
(Includes Roof Areas B, C, D and E
as indicated on Key Plan RK-1)**

The Roofing Contractor is to remove the existing Roof System completely to the metal deck. Then the Contractor is to supply and install Vapour Retarder, 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 \$15,000.00 with this price (if the allowance is not used, it will be taken off of the Total Tender Price).

\$ _____ \$ _____

Total Tender Price "A" (excluding HST)

\$ _____ \$ _____

Add 13% HST

\$ _____ \$ _____

Total Tender Price "A" (including HST)

\$ _____ \$ _____

MEMBRANE MANUFACTURER

The Contractor is required to submit the name of the Membrane Manufacturer who they are planning to use for this Roof Replacement Project:

SEPARATE PRICE 'A' – 2.7" POLYISO RIGID INSULATION BOARDS

The Contractor is to provide a cost to remove any wet or deteriorated 2.7" Polyiso rigid insulation boards and then supply and install (mechanically attach) new 2.8" Polyiso insulation in the place of the areas which were removed on Roof Area 'B'.

\$ _____ ft²
(Excluding HST)

TENDER FORM

Roof Replacement
for
Christ The King Catholic School-Wallaceburg / Project **No 612-CP1725**

SEPARATE PRICE 'B' – 2.0" POLYISO RIGID INSULATION BOARDS

The Contractor is to provide a cost to remove any wet or deteriorated 2.0" Polyiso rigid insulation boards and then supply and install (mechanically attach) new 2.0" Polyiso insulation in the place of the areas which were removed on Roof Areas 'C', 'D' and 'E'.

\$ _____ ft²
(Excluding HST)

- 3.** And also agrees to submit the total tender price in compliance with the provisions of Section 1.21 of the Information to Tenderers regarding Harmonized Sales Tax (HST).
- 4.** And agrees to leave this tender open for acceptance a minimum period of sixty (60) days from the tender closing date and not to modify, withdraw, or cancel their bid during this period.

The Tenderer also agrees that until the form of Agreement is completed and executed, this Tender, together with the acceptance thereof by the Owner and the Tenderer, shall remain open regardless of whether or not any other Tender has been previously accepted.

- 5.** And also agrees to start the entire work within four (4) working days after the award of contract.

6. Documents and Acknowledgements

The Tenderer acknowledges that they have carefully examined the site of the proposed work, the existing premises and conditions; and thoroughly reviewed the Information to Tenderers, Tender Form, General Conditions, Supplementary General Conditions, Specifications, Drawings and the Addenda of the proposed Contract.

Addendum No. _____ Date: _____

Addendum No. _____ Date: _____

7. Completion of Work

We undertake to complete the work in _____ weeks after Receipt of Purchase Order or Written Authorization issued by **St. Clair Catholic School Board**

OR

To start work on **JULY 4TH, 2017** and to complete the work by **SEPTEMBER 1ST, 2017**

TENDER FORM

Roof Replacement
for
Christ The King Catholic School-Wallaceburg / Project **No 612-CP1725**

8. Subcontractors

The Tenderer proposes to use the following Subcontractors, the portion of the work to be performed by each being as indicated with no more than one Subcontractor being proposed for any such portions. (If Subcontractors are not proposed, write N/A in the blank space.)

SUBCONTRACTOR	WORK OR TRADE

Signature of Authorized Officer _____

Phone No. _____ *Email* _____

Name of Signature _____

Witness _____

Dated at _____

This _____ *day of* _____ **2017**

NOTES:

- 1. If this Tender is submitted by or on behalf of any Corporation by some duly authorized officer, or agent thereof, who shall subscribe their name and office, the Seal of the Corporation shall be affixed.**
- 2. The Owner reserves the right to accept or reject any part OR all of bid and may not necessarily award the tender to the lowest bidder.**

ROOF RETROFIT METHOD
for
Christ The King Catholic School
Project **No 612-CP1725**

ALTERNATE

To start work on **September 11th, 2017** and to complete this work by **October 27th, 2017**

SCOPE OF WORK

AREA 'B', 'C', 'D' AND 'E'

- Existing single ply EPDM membrane is required to be peeled from the surface of the existing Polyiso rigid insulation.
- Once the membrane is removed, any wet or deteriorated insulation boards are required to be removed and replaced with new insulation boards to match existing thickness (mechanically attached).
- Then the entire surface of the Polyiso rigid insulation is required to be blown or swept clean prior to attempting to adhere new rigid insulation on top the existing Polyiso insulation boards.
- Then supply and install new insulation boards on top, R-11.4 (L.T.T.R.) (2.0) inch) for the main roof areas and only the tapered insulation around the roof drains. All insulation boards are to be adhered with foam adhesive to the surface of the existing Polyiso insulation in the same fashion as indicated in Item 7.2.6 within the tender package.
- Once the new 2 inch (4x4 boards) are adhered into place, then the application is to continue in the same fashion as Item 7.2.7 through Item 7.4.1 within the tender package.

Note:

All tapered insulation is to be installed as indicated on the original design roof system along with all details within the design system.

ROOF RETROFIT METHOD

FOR

CHRIST THE KING CATHOLIC SCHOOL

227 THOMAS AVENUE

WALLACEBURG, ONTARIO

N8A 2B9

PROJECT No. 612-CP1725

EXISTING ROOF SYSTEM

Fully Adhered EPDM Membrane
On 2.7" Rigid Insulation (ISO)
On Kraft Paper for Vapour Retarder
On Metal Deck (E-W Direction)

AREA 'B'

Pea Stone Roofing Gravel
On Flood Coat of Adhesive
On Two-Ply Modified Bitumen Membrane
On 3/16" Asphalt Protection Board
On Tapered Insulation as Noted
On New 2" Rigid Insulation (ISO)
On Existing 2.7" Rigid Insulation (ISO)
On Existing Vapour Retarder
On Existing Metal Deck

RETROFIT ROOF SYSTEM

Fully Adhered EPDM Membrane
On 2" Rigid Insulation (ISO)
On 6 Mil Polyethelene Vapour Retarder
On Metal Deck (N-S Direction)

AREA 'C'

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

Fully Adhered EPDM Membrane
On 2" Rigid Insulation (ISO)
On 6 Mil Polyethelene Vapour Retarder
On Metal Deck (N-S Direction)

AREA 'D'

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

AREA 'E'

Fully Adhered EPDM Membrane
On 2" Rigid Insulation (ISO)
On 6 Mil Polyethelene Vapour Retarder
On Metal Deck (E-W Direction)

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

**SPECIFICATION
ON
ROOF REPLACEMENT**

FOR

ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD

AT

**CHRIST THE KING CATHOLIC SCHOOL
227 THOMAS AVENUE
WALLACEBURG, ONTARIO
N8A 2B9**

**CHRIST THE KING CATHOLIC SCHOOL
PROJECT No. 612-CP1725**

May 2017

*Remlap Building Services Inc.
1407 Gore Road, RR1 - Harrow Ontario N0R 1H0*

3.0 GENERAL

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

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 – Roof Replacement** 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.

4.0 PRODUCTS

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

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 Thermal Barrier (If Required)

- 4.2.1 Exterior grade gypsum sheathing board with water resistant paper surfaces 12.7mm thick. Reference Standard CSA-A82.27 – M1979

4.3 Vapour Retarder

- 4.3.1 Vapor-Bloc SA is a Self-Adhered Vapour Barrier Membrane consisting of an SBS rubberized asphalt compound which is integrally laminated to a blue cross-laminated polyethelene film.

4.4 Primer

- 4.4.1 As required by each roof membrane manufacturer. NO PRIMER REQUIRED WHEN USING VAPOR-BLOC SA ON METAL DECK. IF THE GYPSUM BOARD IS APPLIED, THEN BLUESKIN PRIMER WILL BE REQUIRED.

4.5 Rigid Insulation

- 4.5.1 Insulation shall be roof insulation which is rigid closed cell, Polyiso Foam Insulation, integrally laminated to fiber-reinforced paper facers, thermal resistance of insulation shall be R-23.6 (L.T.T.R.) (4.0 inch) for the main roof area and R-11.4 (L.T.T.R.) (4 inch) 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.

4.6 Insulation Overlay Boards

- 4.6.1 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.

4.0 PRODUCTS

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 1 – HENRY COMPANY

4.7 Bitumen Adhesive

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

4.8 Cavity Wall Rigid Insulation

- 4.8.1 Insulation shall be Foamular C-300 Extruded Polystyrene Rigid Insulation as manufactured by Owens Corning to be used on the exterior walls behind the new metal siding as indicated on the Enclosed Drawings. The rigid insulation complies with CAN/ULC S701, Type 4 and has a CCMS listing. **ALL BOARDS TO BE SQUAR EDGE, NOT SHIP-LAPPED.**

4.9 Vent Pipe Stack Flange

- 4.9.1 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.

4.10 Hot Exhaust Stack Flashings

- 4.10.1 The hot pipe flashings shall be Thaler Roofing Specialties Products Inc. Model № MEF-3A aluminum flashings with split collar to suit new roof system. The Contractor shall fill Roxul Insulation between pipe and flange.

4.11 Roof Drain

- 4.11.1 Roof Drain shall be Thaler Roof Specialties Products Inc. Model No. RD-4-RR with FURCO FOR DIRECT CONNECT. Outlet size shall be verified on site by the Roofing Contractor.

4.12 Conduit Flashings

- 4.12.1 The multiple flexible conduit flashings shall be Thaler Roofing Specialties Products Inc. Model № MEF-AE4 insulated flange. The Roofing Contractor shall verify the diameter of all openings.

4.13 Tapered Insulation (Recessed Roof Drains and Crickets)

- 4.13.1 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 organic 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.

4.14 Elastomeric Modified Bitumen Adhesive

- 4.14.1 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.

4.0 PRODUCTS

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 1 – HENRY COMPANY

4.15 Metal Flashings

- 4.15.1 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.

4.16 Sealants

- 4.16.1 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.

4.17 Roofing Gravel

- 4.17.1 The gravel shall be ¼" 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 D1863086.

4.18 Framing Lumber

- 4.18.1 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.

4.19 Plywood

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

4.20 Rough Hardware and Nails

- 4.20.1 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.

4.21 Painting

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

4.22 Plastic Roof Cement

- 4.22.1 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.

4.0 PRODUCTS

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 1 – HENRY COMPANY

4.23 Precast Pads

- 4.23.1 Precast concrete pads shall be 24 inch by 24 inch by 2 inch thick for additional walkway, etc. as shown on Roof Plan. Pads shall be placed on a 20 inch by 20 inch by 2 inch thick sections of rigid Type 4 extruded polystyrene insulation.

48 NEW PAVERS IN TOTAL FOR CHRIST THE KING CATHOLIC SCHOOL

4.24 Roof Pipe Supports

- 4.24.1 Roof Pipe Supports as manufactured by C-Port (Model № CXP) are to be supplied and installed by the Roofing Contractor to replace the existing supports for gas lines at Christ The King Catholic Schools.

TOTAL OF 35 REQUIRED @ CHRIST THE KING CATHOLIC SCHOOL

4.25 Exterior Cladding

- 4.25.1 The exterior cladding shall be fabricated from galvanize coated structural quality steel sheet, CESB1 201-M84 Grade 33, base thickness .030 in (22 ga) Coating Designation A2150 for painted finish.
- 4.25.2 The prefinished wall cladding shall be Vic West Inc-AD300R or approved equal.
- 4.25.3 The paint finish for wall cladding shall be Steelcolour Series 8000 having a dry film thickness of 1.0 mil. The unexposed side shall have a prime coat. Colour will be selected from Manufacturer's Standard Colours by the Owner.
- 4.25.4 The sub girts shall be as manufactured from galvanized steel conforming to ASTM Z27S, profiled to be Z-300 (18 ga) installed no more than every two (2) feet on center.
- 4.25.5 All flashings and trims are required to be fabricated as detailed with 24 ga material which is the same as metal cap and counter flashings.

5.0 EXECUTION

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

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 Loose Laid Ballasted Roof System completely to the existing metal deck. 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 The areas to be re-roofed must have all the roofing components removed completely to the metal roof dish before applying the new roof system. 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 Thermal Barrier (If Required)**
 - .1 Apply low-rise foam adhesive as recommended by the Membrane Manufacturer on top the metal roof deck to ensure good adhesion of the exterior grade gypsum board to the top flute of metal deck.
- 5.2.5 **Installation of Vapour Retarder**
 - .1 Apply Blueskin Primer by roller or spray to all surfaces as required and allow drying. **(IF THERMAL BARRIER IS APPLIED)**
 - .2 Unroll and align air/vapour barrier centered at low point of roof or drain. Apply air/vapour removing release paper providing 2 inch side and end laps. Seal around projections as per manufacturer's recommendations.
 - .3 Apply self-adhesive membrane without any wrinkles or fish mouths.
 - .4 The vapour retarder is to be carried up the vertical surfaces a minimum of 8 inches above roof deck.

5.0 EXECUTION

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 1 – HENRY COMPANY

5.2.6 Installation of Rigid Insulation Boards

- .1 Install boards with low-rise foam adhesive to the vapour retarder. 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.

5.2.7 Installation of Insulation Overlay Boards

- .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 vertical joints between boards and insulation will be staggered.
- .4 Apply only as many boards as can be covered in the same day.

5.2.8 Base Sheet Installation

- .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 HEAT WELDED (FUSED) TOGETHER WITH A LEISTER HAND HELD GUN OR APPROVED TO EQUAL TO ENSURE GOOD FUSION. 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.

5.2.9 Installation of Additional Plywood and/or Wood Blocking

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

Note: 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.

5.0 EXECUTION

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 1 – HENRY COMPANY

5.2.10 Base Sheet Flashing Installation

- .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.

5.2.11 Cap Sheet Installation

- .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.

5.2.12 Cap Sheet Flashing Installation

- .1 Cap sheet membrane installation shall be laid in strips 1m wide along the parapet. End 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.

5.0 EXECUTION

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 1 – HENRY COMPANY

- .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.

5.2.13 Flood Coat and Gravel Cover

- .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.

5.2.14 Concrete Pavers

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

5.2.15 Erection – Wall Panels

1. Provide all fastenings to completely install metal wall system and maintain a weather-tight installation. All sealant shall be in accordance with Item 12.8
2. Protect metal surfaces in contact with masonry mortar or other cementitious surface with isolation coating.
3. The exterior sheets shall be fastened to the sub-frame by means of self-tapping S.M. steel cadmium plated for steel. Fasten sub-girts to masonry with purpose designed fasteners, non-corrosive type. Colour to match siding and any exposed fasteners.
4. Provide flashing and closures at head, bottom edge and jamb corners, parapet cap, etc. as required of the same material, gauge and finish as wall and installed to provide a water-tight job.
5. A ribbon of joint sealing compound shall be laid on the face of the supports at the top and bottom of the wall panels to provide an adequate seal.
6. All materials, articles and accessories incorporated in the work shall be of a type and quality specified herein and subject to the approval of the Consultant. Methods of preparation, construction and installation of such materials, articles and accessories shall be in accordance with the S.S.B.I. Standard Code of Practice, Manufacturer's Printed Specifications and as directed by the Consultant.

NOTE: THE EXTERIOR WALL CAVITY INSULATION (EXTRUDED POLYSTYRENNE – 3 INCH) IS REQUIRED BETWEEN EVERY 3 INCH Z-BAR @ TWO FEET ON CENTER.

5.0 EXECUTION

**Roof Replacement
for
Christ The King Catholic School-Sarnia / Project № 612-CP1725**

OPTION NO. 1 – HENRY COMPANY

5.3 INSTALLATION – Metal Flashings

- 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.

6.0 PRODUCTS

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 2 – SOPREMA

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 Thermal Barrier (If Required)

- 6.2.1 Exterior grade gypsum sheathing board with water resistant paper surfaces 12.7mm thick. Reference Standard CSA-A82-27-M1979.

6.3 Vapour Retarder

- 6.3.1 Soprapap®R is a self-adhesive membrane composed of SBS modified bitumen and a tri-laminated woven polyethylene facer. The under face is covered with a silicone release film.

6.4 Insulation Soprasmart Board 180

- 6.4.1 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.

6.5 Primer

- 6.5.1 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.

6.6 Duotack

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

6.0 PRODUCTS

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 2 – SOPREMA

6.7 Cavity Wall Rigid Insulation

- 6.7.1 Insulation shall be Foamular C-300 Extruded Polystyrene Rigid Insulation as manufactured by Owens Corning to be used on the exterior walls behind the new metal siding as indicated on the Enclosed Drawings. The rigid insulation complies with CAN/ULC S701, Type 4 and has a CCMS listing.

6.8 Vent Pipe Stack Flange

- 6.8.1 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.

6.9 Hot Exhaust Stack Flashings

- 6.9.1 The hot pipe flashings shall be Thaler Roofing Specialties Products Inc. Model № MEF-3A aluminum flashings with split collar to suit the new Two-Ply Modified Bitumen Roof System. The Roofing Contractor shall verify the inside diameter of the hot pipe stack for each location and fill between the flange and pipe with Roxul Insulation.

6.10 Roof Drain

- 6.10.1 Roof Drain shall be Thaler Roof Specialties Products Inc. Model No. RD-4-RR with FURCO FOR DIRECT CONNECT. Outlet size shall be verified on site by the Roofing Contractor.

6.11 Rigid Insulation

- 6.11.1 Insulation shall be roof insulation which is rigid closed cell, Polyiso Foam Insulation, integrally laminated to fiber-reinforced paper facers, thermal resistance of insulation shall be R-23.6 (L.T.T.R.) (4.0 inch) for the main roof area and R-11.4 (L.T.T.R.) (2.0 inch) 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.

6.12 Tapered Insulation (Recessed Roof Drains)

- 6.12.1 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 organic 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.

6.13 Elastomeric Modified Bitumen Adhesive

- 6.13 .1 COLPLY EF is a low volatile organic compound (VOC), low odour, 100% solids and solvent-free polyether based adhesive.

6.0 PRODUCTS

**Roof Replacement
for
Christ The King Catholic School-Sarnia / Project № 612-CP1725**

OPTION NO. 2 – SOPREMA

6.14 Metal Flashings

- 6.14.1 Metal flashings shall be 24ga. Colorite 5000 Series pre-finished steel (both sides) as manufactured by Westeel Roscoe, Steelcolour 5000 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.

6.15 Sealants

- 6.15.1 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.

6.16 Roofing Gravel

- 6.16.1 The gravel shall be ¼" 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 D1863086.

6.17 Framing Lumber

- 6.17.1 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.

6.18 Plywood

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

6.19 Rough Hardware and Nails

- 6.19.1 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.

6.20 Painting

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

6.0 PRODUCTS

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 2 – SOPREMA

6.21 Plastic Roof Cement

- 6.21.1 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.

6.22 Precast Pads

- 6.22.1 Precast concrete pads shall be 24 inch by 24 inch by 2 inch thick for additional walkway, etc. as shown on Roof Plan. Pads shall be placed on a 20 inch by 20 inch by 2 inch thick sections of rigid Type 4 extruded polystyrene insulation.

48 NEW PAVERS IN TOTAL FOR CHRIST THE KING CATHOLIC SCHOOL

6.23 Roof Pipe Supports

- 6.23.1 Roof Pipe Supports as manufactured by C-Port (Model № CXP) are to be supplied and installed by the Roofing Contractor to replace the existing supports for gas lines at Christ The King Catholic Schools.

TOTAL OF 35 REQUIRED @ CHRIST THE KING CATHOLIC SCHOOL

6.24 Exterior Cladding

- 6.24.1 The exterior cladding shall be fabricated from galvanize coated structural quality steel sheet, CESB1 201-M84 Grade 33, base thickness .030 in (22 ga) Coating Designation A2150 for painted finish.
- 6.24.2 The prefinished wall cladding shall be Vic West Inc-AD300R or approved equal.
- 6.24.3 The paint finish for wall cladding shall be Steelcolour Series 8000 having a dry film thickness of 1.0 mil. The unexposed side shall have a prime coat. Colour will be selected from Manufacturer's Standard Colours by the Owner.
- 6.24.4 The sub girts shall be as manufactured from galvanized steel conforming to ASTM Z27S, profiled to be Z-300 (18 ga) installed no more than every two (2) feet on center.
- 6.24.5 All flashings and trims are required to be fabricated as detailed with 24 ga material which is the same as metal cap and counter flashings.

7.0 EXECUTION

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 2 – SOPREMA

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 Loose Laid Ballasted Roof System completely to the existing metal deck. 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 The areas to be re-roofed must have all the roofing components removed completely to the metal roof deck before applying the new roof system. 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 Thermal Barrier
 - .1 Install boards with Duotack Adhesive to the metal deck or wood deck.
 - .2 On all gypsum surfaces intended for board coverage, apply beads of 20mm (3/4") wide on 200mm (8") centers.
- 7.2.5 Installation of Vapour Retarder
 - .1 When applying Soprapap'R over top metal deck, the existing surface is not required to be primed.
 - .2 The deck surface must be clean and sound, free of loose materials or contaminants such as water and grease which may compromise the performance of this product.
 - .3 Unroll and align air/vapour barrier centered at low point of roof or drain. Apply air/vapour removing release film providing 3 inch side laps and 6 inch end last (minimum). Seal around projections as per manufacturer's recommendations.
 - .4 Apply self-adhesive membrane without any wrinkles or fish mouths.
 - .5 The vapour retarder is to be carried up the vertical surfaces a minimum of 8 inches above roof deck.

7.0 EXECUTION

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 2 – SOPREMA

7.2.6 Installation of Rigid Insulation Boards

- .1 Install boards with Duotack Adhesive to the vapour retarder. On all insulation surfaces intended for board coverage apply beads of 20mm (3/4") wide on 200mm (8") centers.

7.2.7 Installation of Soprasmart Board

- .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.

7.2.8 Installation of Additional Plywood and/or Wood Blocking

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

Note: 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.

7.2.9 Application of Primer

- .1 Apply 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.

7.2.10 Base Sheet Flashing Installation

- .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.

7.0 EXECUTION

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 2 – SOPREMA

7.2.11 **Cap Sheet Installation**

- .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.

7.2.12 **Cap Sheet Flashing Installation**

- .1 Cap sheet membrane installation shall be laid in strips 1m wide along the parapet. End 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.

7.2.13 **Flood Coat and Gravel Cover**

- .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.

7.2.14 **Concrete Pavers**

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

7.0 EXECUTION

Roof Replacement for Christ The King Catholic School-Sarnia / Project № 612-CP1725

OPTION NO. 2 – SOPREMA

7.2.15 Erection – Wall Panels

1. Provide all fastenings to completely install metal wall system and maintain a weather-tight installation. All sealant shall be in accordance with Item 12.8
2. Protect metal surfaces in contact with masonry mortar or other cementitious surface with isolation coating.
3. The exterior sheets shall be fastened to the sub-frame by means of self-tapping S.M. steel cadmium plated for steel. Fasten sub-girts to masonry with purpose designed fasteners, non-corrosive type. Colour to match siding and any exposed fasteners.
4. Provide flashing and closures at head, bottom edge and jamb corners, parapet cap, etc. as required of the same material, gauge and finish as wall and installed to provide a water-tight job.
5. A ribbon of joint sealing compound shall be laid on the face of the supports at the top and bottom of the wall panels to provide an adequate seal.
6. All materials, articles and accessories incorporated in the work shall be of a type and quality specified herein and subject to the approval of the Consultant. Methods of preparation, construction and installation of such materials, articles and accessories shall be in accordance with the S.S.S.B.I. Standard Code of Practice, Manufacturer's Printed Specifications and as directed by the Consultant.

NOTE: THE EXTERIOR WALL CAVITY INSULATION (EXTRUDED POLYSTYRENE – 3 INCH) IS REQUIRED BETWEEN EVERY 3 INCH Z-BAR @ TWO FEET ON CENTER.

7.3 INSTALLATION – Metal Flashings

- 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.

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.

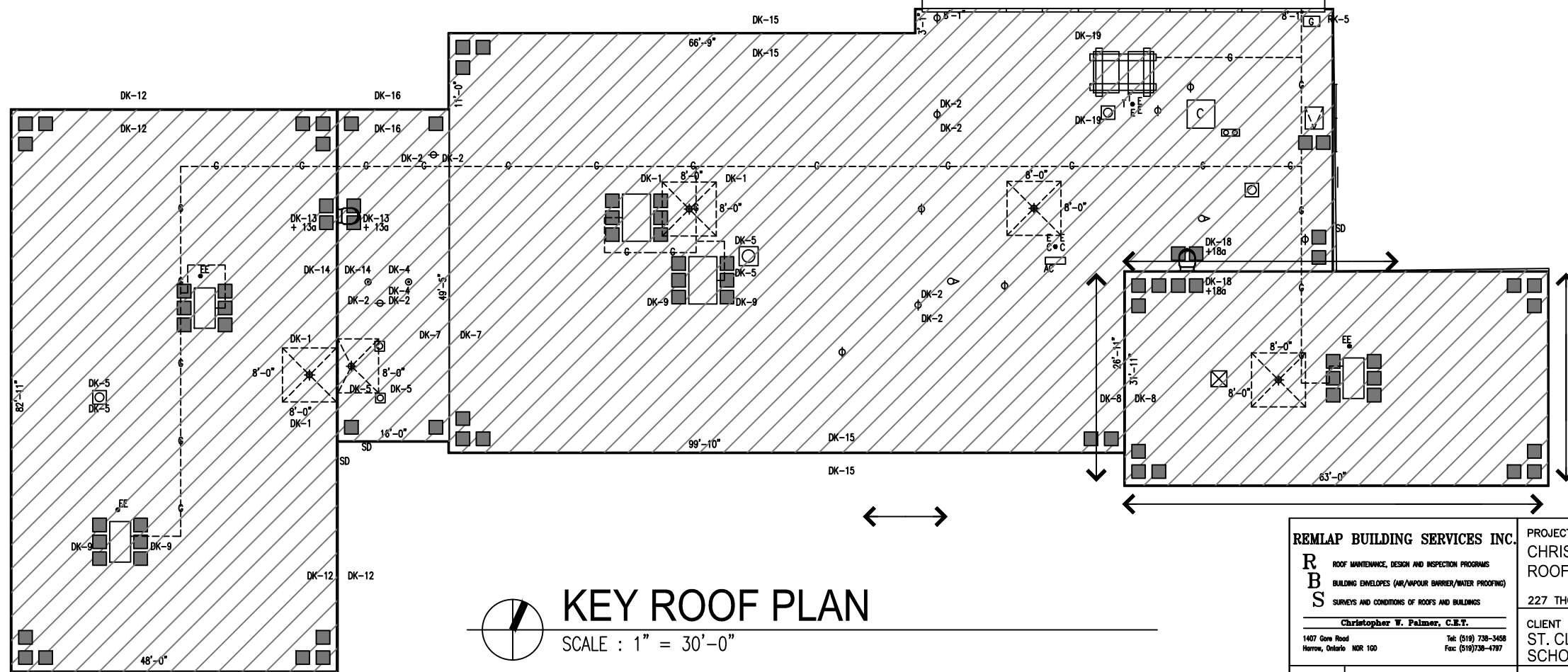
ROOF REPLACEMENT
FOR
CHRIST THE KING CATHOLIC SCHOOL
227 THOMAS AVENUE
WALLACEBURG ONTARIO
N8A 2B9
PROJECT No. 612-CP1725


ENCLOSED DRAWINGS

- RK-1 Key Roof Plan**
- RK-1a Existing and Design Roof System List**
- RK-2 Enlarged Roof Plan – Roof ‘C’ and ‘D’**
- RK-3 Enlarged Roof Plan – Roof ‘B’ and ‘E’**
- RK-4 Elevations (Around Roof ‘B’)**
- RK-5 Elevations (North Wall of Area ‘E’)**

- DK-1 Roof Detail - Roof Drain**
- DK-2 Roof Detail – Vent Pipe Stack**
- DK-3 Roof Detail – Hot Exhaust Stack**
- DK-4 Roof Detail - Exhaust Vent Flashing**
- DK-5 Roof Detail – Exhaust Fan**
- DK-6 Roof Detail – Gooseneck Exhaust Fan**
- DK-7 Roof Detail – Control Joint**
- DK-8 Roof Perimeter Detail – Area ‘B’**
- DK-9 HVAC Detail - Area ‘C’**
- DK-10 Roof Hatch Detail**
- DK-11 Chimney Detail**
- DK-12 Roof Perimeter Detail - Area ‘C’**
- DK-13 Wall Ladder Detail – Area ‘C’**
- DK-13a Wall Ladder Detail Plan – Area ‘C’**
- DK-14 Wall Detail @ Bottom of Area ‘C’**
- DK-15 Perimeter Wall Detail – Area ‘E’**
- DK-16 Perimeter Wall Detail – Area ‘D’**
- DK-17 HVAC Detail – Area ‘B’**
- DK-18 Wall Ladder Detail – Area ‘B’**
- DK-18a Roof Ladder Detail Plan – Area ‘B’**
- DK-19 Platform Detail for HVAC Units – Area ‘E’ (Looking East)**
- DK-20 Platform Detail for HVAC Units – Area ‘E’ (Looking North)**

 AREA TO BE REMOVED AND REPLACED



 **KEY ROOF PLAN**
SCALE : 1" = 30'-0"

REMLAP BUILDING SERVICES INC. RBS ROOF MAINTENANCE, DESIGN AND INSPECTION PROGRAMS BUILDING ENVELOPES (AIR/WATER BARRIER/WATER PROOFING) SURVEYS AND CONDITIONS OF ROOFS AND BUILDINGS Christopher W. Palmer, C.E.T. 1407 Gore Road Harrow, Ontario N0R 1G0 Tel: (519) 738-3458 Fax: (519) 738-4787	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : AS SHOWN DRAWN BY : CWP CHK. BY : CWP SHEET SIZE : 11"x17"
	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	PROJECT FILE NO. RBS16-65 DRAWING NO. Rk-1
DATE (MM-DD-YY) 11-16-16 12-5-16	ISSUED FOR OWNER REVIEW TENDER	DRAWING TITLE KEY ROOF PLAN

**ROOF REPLACEMENT
CHRIST THE KING CATHOLIC SCHOOL
227 THOMAS AVENUE, WALLACEBURG ONTARIO N8A 2B9**

EXISTING ROOF SYSTEM

Fully Adhered EPDM Membrane
On 2.7" Rigid Insulation (ISO)
On Kraft Paper for Vapour Retarder
On Metal Deck (E-W Direction)

AREA 'B'

Pea Stone Roofing Gravel
On Flood Coat of Adhesive
On Two-Ply Modified Bitumen Membrane
On 3/16" Asphalt Protection Board
On Tapered Insulation as Noted
On 4" Rigid Insulation (ISO)
On Vapour Retarder
On Existing Metal Deck

DESIGN ROOF SYSTEM

Fully Adhered EPDM Membrane
On 2" Rigid Insulation (ISO)
On 6 Mil Polyethelene Vapour Retarder
On Metal Deck (N-S Direction)

AREA 'C'

Pea Stone Roofing Gravel
On Flood Coat of Adhesive
On Two-Ply Modified Bitumen Membrane
On 3/16" Asphalt Protection Board
On Tapered Insulation as Noted
On 4" Rigid Insulation (ISO)
On Vapour Retarder
On Existing Metal Deck

Fully Adhered EPDM Membrane
On 2" Rigid Insulation (ISO)
On 6 Mil Polyethelene Vapour Retarder
On Metal Deck (N-S Direction)

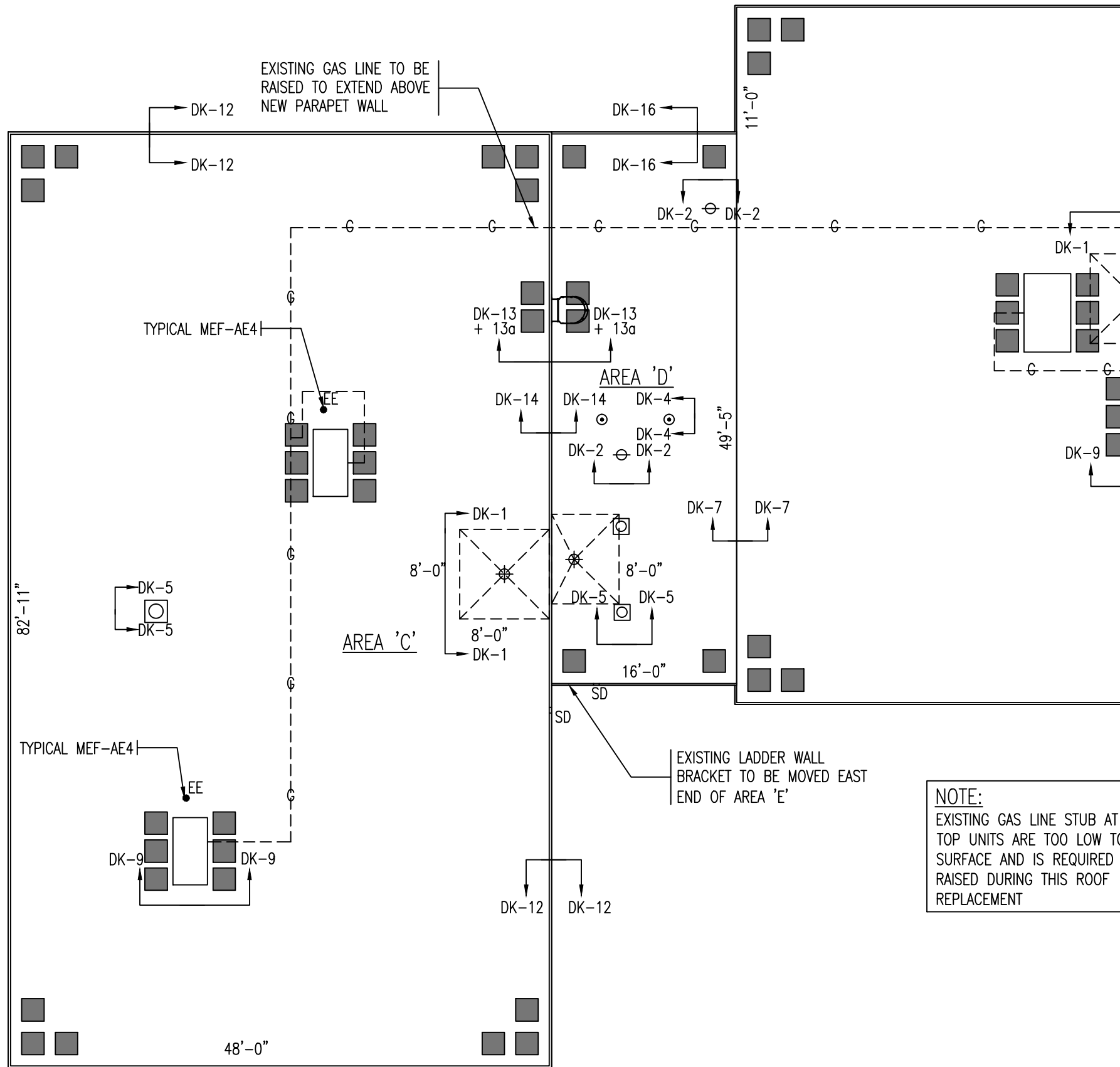
AREA 'D'

Pea Stone Roofing Gravel
On Flood Coat of Adhesive
On Two-Ply Modified Bitumen Membrane
On 3/16" Asphalt Protection Board
On Tapered Insulation as Noted
On 4" Rigid Insulation (ISO)
On Vapour Retarder
On Existing Metal Deck

Fully Adhered EPDM Membrane
On 2" Rigid Insulation (ISO)
On 6 Mil Polyethelene Vapour Retarder
On Metal Deck (E-W Direction)

AREA 'E'

Pea Stone Roofing Gravel
On Flood Coat of Adhesive
On Two-Ply Modified Bitumen Membrane
On 3/16" Asphalt Protection Board
On Tapered Insulation as Noted
On 4" Rigid Insulation (ISO)
On Vapour Retarder
On Existing Metal Deck



LEGEND

- ⊕ ROOF DRAIN
- ⊙ VENT PIPE STACK
- ⊠ EXHAUST FAN
- ≡ WALL LADDER
- ┌─┐ BRACKET FOR EXTENSION LADDER
- ⊗ ABANDONED CURB TO BE ELIMINATED AND DECK CLOSED IN
- ⊙ HOT EXHAUST STACK
- ⊖ EXHAUST STACK W/ DIRECTION
- ⊠ GOOSE NECK EXHAUST FAN
- G- CONTROL JOINT
- CONCRETE PAVER W/ INSULATION CUSHION

TAPERED INSULATION
 ROOF DRAIN - 2% SLOPE
 CRICKET - 1% SLOPE

NOTE:
 EXISTING GAS LINE STUB AT ROOF TOP UNITS ARE TOO LOW TO ROOF SURFACE AND IS REQUIRED TO BE RAISED DURING THIS ROOF REPLACEMENT

ENLARGED ROOF PLAN - ROOF PENETRATION AND DIMENSIONS
 SCALE : 3/32" = 1'-0"

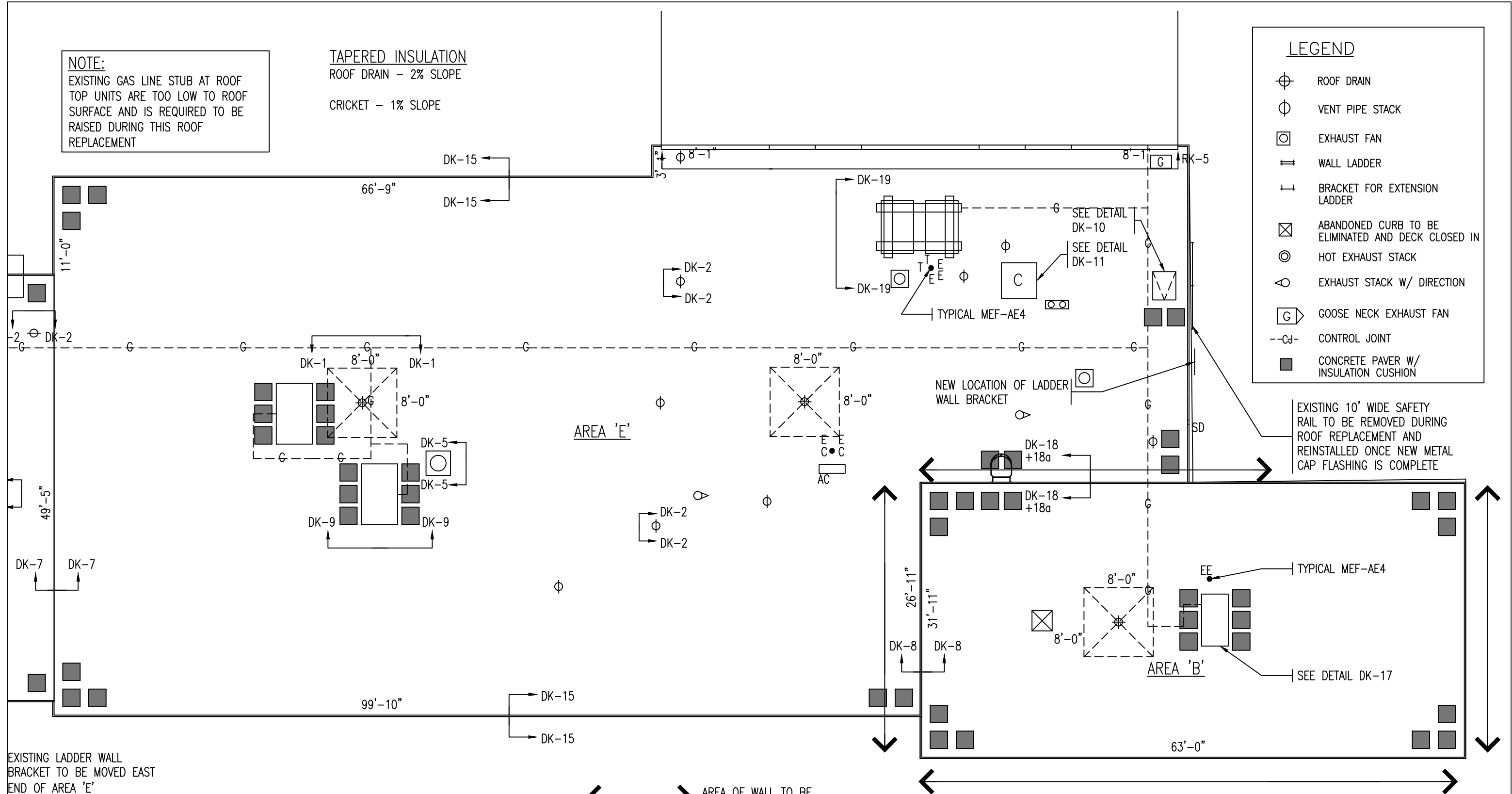
REMLAP BUILDING SERVICES INC. ROOF MAINTENANCE, DESIGN AND INSPECTION PROGRAMS BUILDING ENVELOPES (AIR/WAPOUR BARRIER/WATER PROOFING) SURVEYS AND CONDITIONS OF ROOFS AND BUILDINGS Christopher W. Palmer, C.E.T. 1407 Gore Road, Huron, Ontario N0R 1G0 Tel: (519) 738-3458 Fax: (519) 738-4787	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : AS SHOWN DRAWN BY : CWP
	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 11"x17" PROJECT FILE NO. RBS16-65 DRAWING NO. Rk-2
DATE (MM-DD-YY) 11-16-16 12-5-16	ISSUED FOR OWNER REVIEW TENDER	DRAWING TITLE ENLARGED ROOF PLAN - ROOF 'C' & 'D'

NOTE:
 EXISTING GAS LINE STUB AT ROOF TOP UNITS ARE TOO LOW TO ROOF SURFACE AND IS REQUIRED TO BE RAISED DURING THIS ROOF REPLACEMENT

TAPERED INSULATION
 ROOF DRAIN - 2% SLOPE
 CRICKET - 1% SLOPE

LEGEND

- ⊕ ROOF DRAIN
- ⊙ VENT PIPE STACK
- ⊠ EXHAUST FAN
- ≡ WALL LADDER
- ⊥ BRACKET FOR EXTENSION LADDER
- ⊗ ABANDONED CURB TO BE ELIMINATED AND DECK CLOSED IN
- ⊙ HOT EXHAUST STACK
- ⊖ EXHAUST STACK W/ DIRECTION
- G GOOSE NECK EXHAUST FAN
- CJ- CONTROL JOINT
- CONCRETE PAVER W/ INSULATION CUSHION

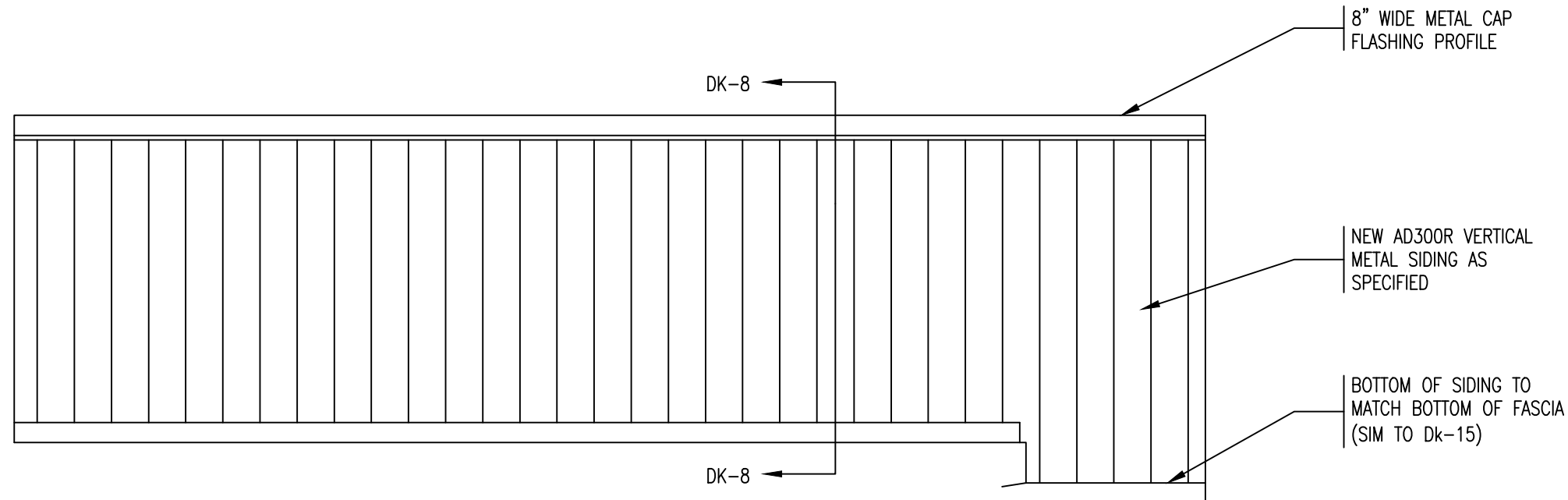


EXISTING LADDER WALL BRACKET TO BE MOVED EAST END OF AREA 'E'

AREA OF WALL TO BE COVERED W/ NEW METAL SIDING

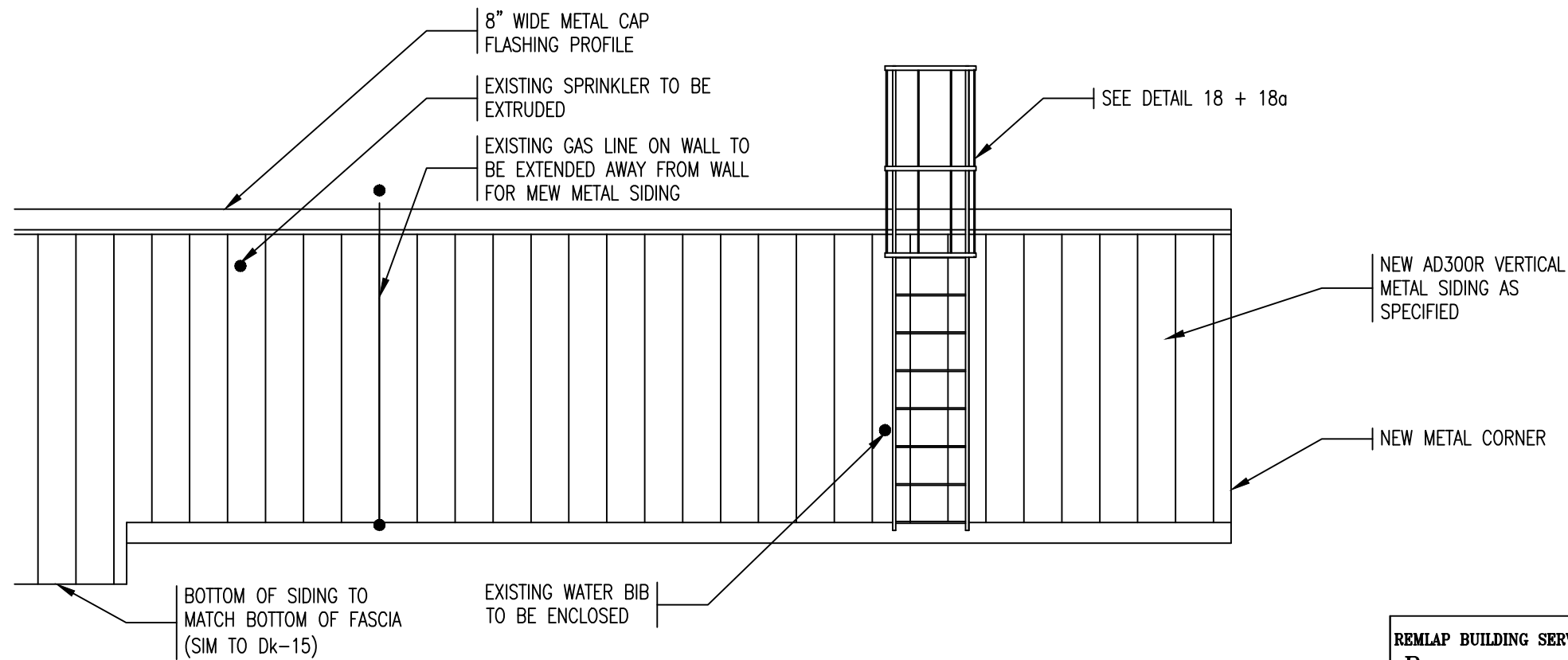
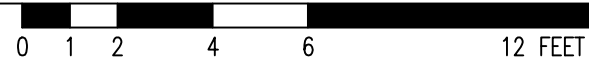
ENLARGED ROOF PLAN - ROOF PENETRATION AND DIMENSIONS
 SCALE : 3/32" = 1'-0"

REMLAP BUILDING SERVICES INC. ROOF MAINTENANCE, DESIGN AND INSPECTION PROGRAMS BUILDING ENVELOPES (AIR/WAPOUR BARRIER/WATER PROOFING) SURVEYS AND CONDITIONS OF ROOFS AND BUILDINGS Christopher W. Palmer, C.E.T. 1407 Gore Road, Huron, Ontario N0R 1G0 Tel: (519) 738-3458 Fax: (519) 738-4797	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : AS SHOWN DRAWN BY : CWP
	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 11"x17"
	DRAWING TITLE ENLARGED ROOF PLAN - ROOF 'B' & 'E'	PROJECT FILE NO. RBS16-65 DRAWING NO. Rk-3



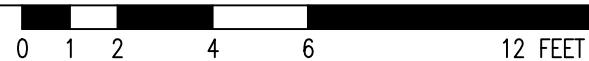
WEST WALL OF AREA 'B'

SCALE : 1/4" = 1'-0"

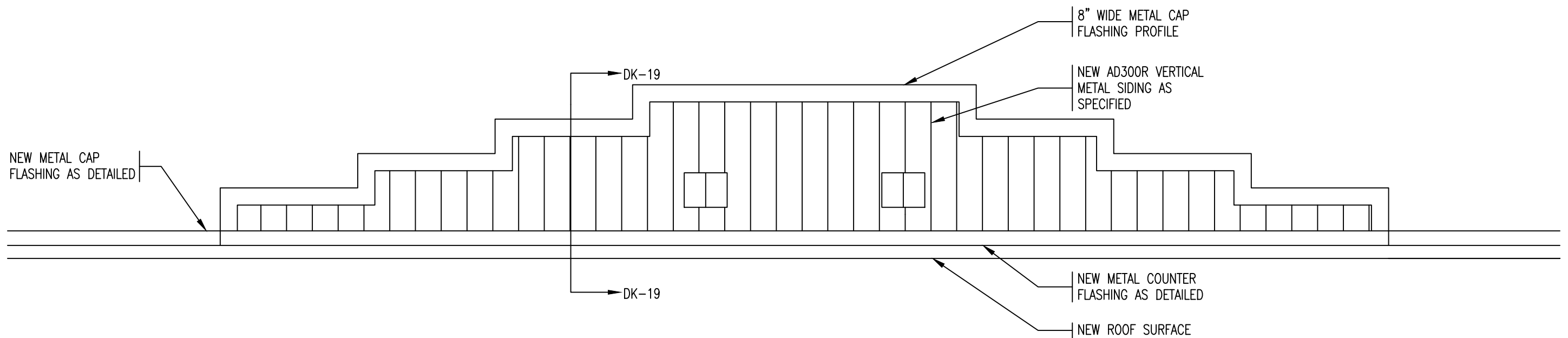


NORTH WALL OF AREA 'B'

SCALE : 1/4" = 1'-0"

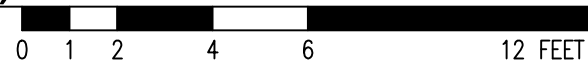


REMLAP BUILDING SERVICES INC. ROOF MAINTENANCE, DESIGN AND INSPECTION PROGRAMS BUILDING ENVELOPES (AIR/WAPOUR BARRIER/WATER PROOFING) SURVEYS AND CONDITIONS OF ROOFS AND BUILDINGS Christopher W. Palmer, C.E.T. 1407 Gore Road, Huron, Ontario N0R 1G0 Tel: (519) 738-3458 Fax: (519) 738-4787	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : AS SHOWN DRAWN BY : CWP
	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 11"x17" PROJECT FILE NO. RBS16-65 DRAWING NO. Rk-4
DATE (MM-DD-YY) 11-16-16 12-5-16	ISSUED FOR OWNER REVIEW TENDER	DRAWING TITLE ELEVATIONS

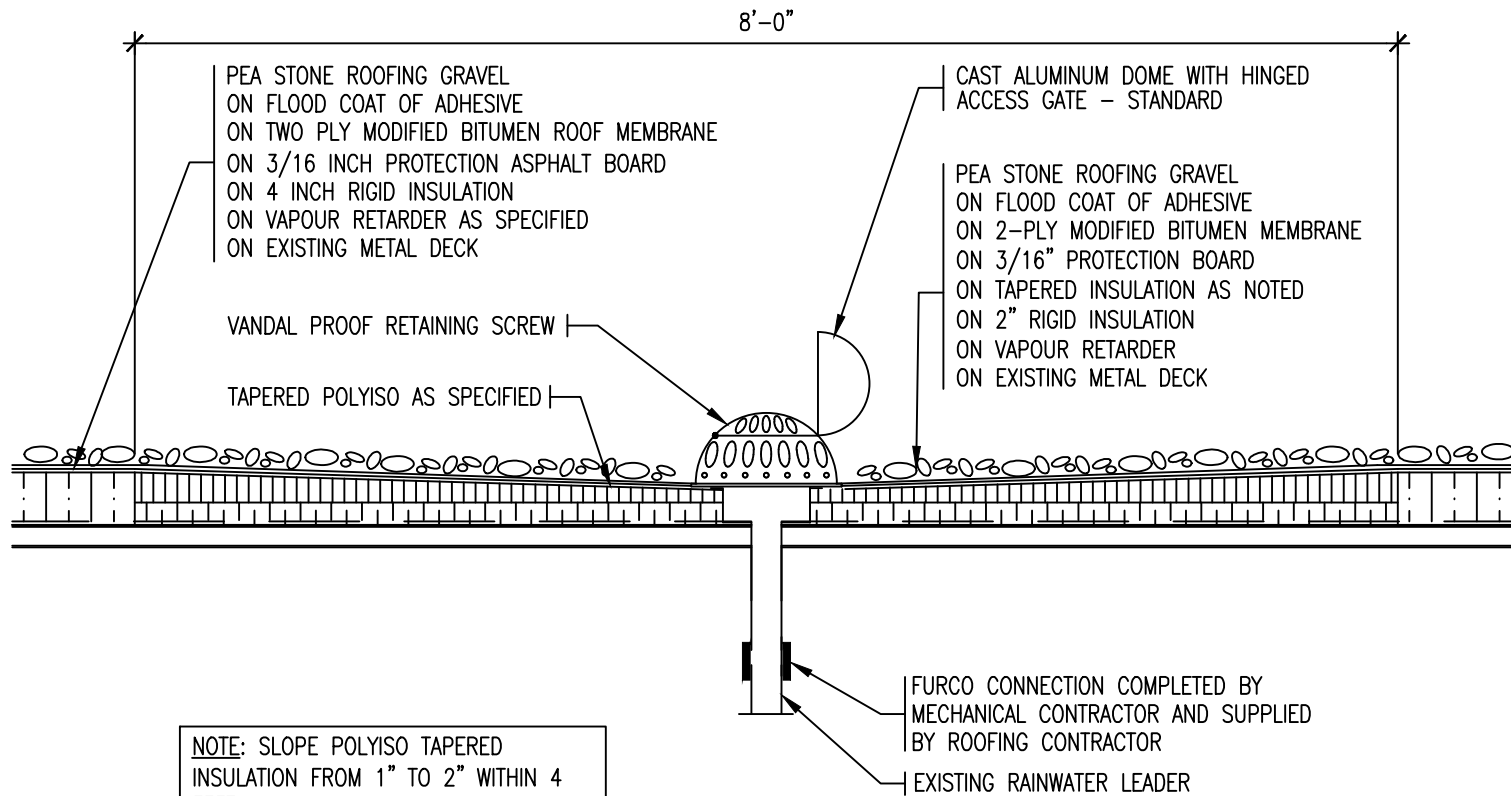


**NORTH WALL OF AREA 'E'
(NEXT TO AREA 'A')**

SCALE : 1/4" = 1'-0"



REMLAP BUILDING SERVICES INC. ROOF MAINTENANCE, DESIGN AND INSPECTION PROGRAMS BUILDING ENVELOPES (AIR/WAPOUR BARRIER/WATER PROOFING) SURVEYS AND CONDITIONS OF ROOFS AND BUILDINGS Christopher W. Palmer, C.E.T. 1407 Gore Road, Huron, Ontario N0R 1G0 Tel: (519) 738-3458 Fax: (519) 738-4797		PROJECT	DATE :	NOVEMBER 2016
		CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	SCALE :	AS SHOWN
		CLIENT	DRAWN BY :	CWP
		ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY :	CWP
DATE (MM-DD-YY)	ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	RBS16-65
11-16-16	OWNER REVIEW	ELEVATION	DRAWING NO.	Rk-5
12-5-16	TENDER			



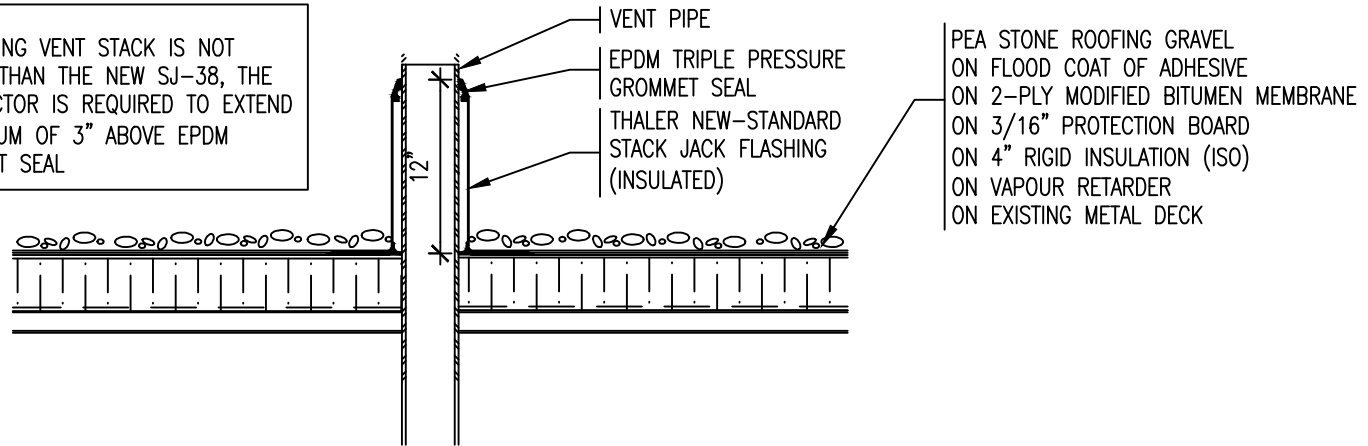
NOTE: SLOPE POLYISO TAPERED INSULATION FROM 1" TO 2" WITHIN 4 FEET

ROOF DETAIL - ROOF DRAIN

SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC. R B S <small>ROOF ASSESSMENT, DESIGN AND INSPECTION SERVICES INSULATION INSTALLATION (POLYURETHANE SPRAYED POLYURETHANE) SURVEYS AND CONSULTING OF ROOFS AND BUILDINGS</small> <small>Christophorus W. Palmer, C.B.S.</small> <small>1607 Glen Road Toronto, Ontario M6H 1G9 Tel: (416) 738-3885 Fax: (416) 738-4757</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP
	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 8.1/2"x11"
DATE <small>(DATE-12-17)</small> 11-18-16 OWNER REVIEW 12-5-16 TENDER	DRAWING TITLE ROOF DETAIL	PROJECT FILE NO. RBS16-65 DRAWING NO. Dk-1

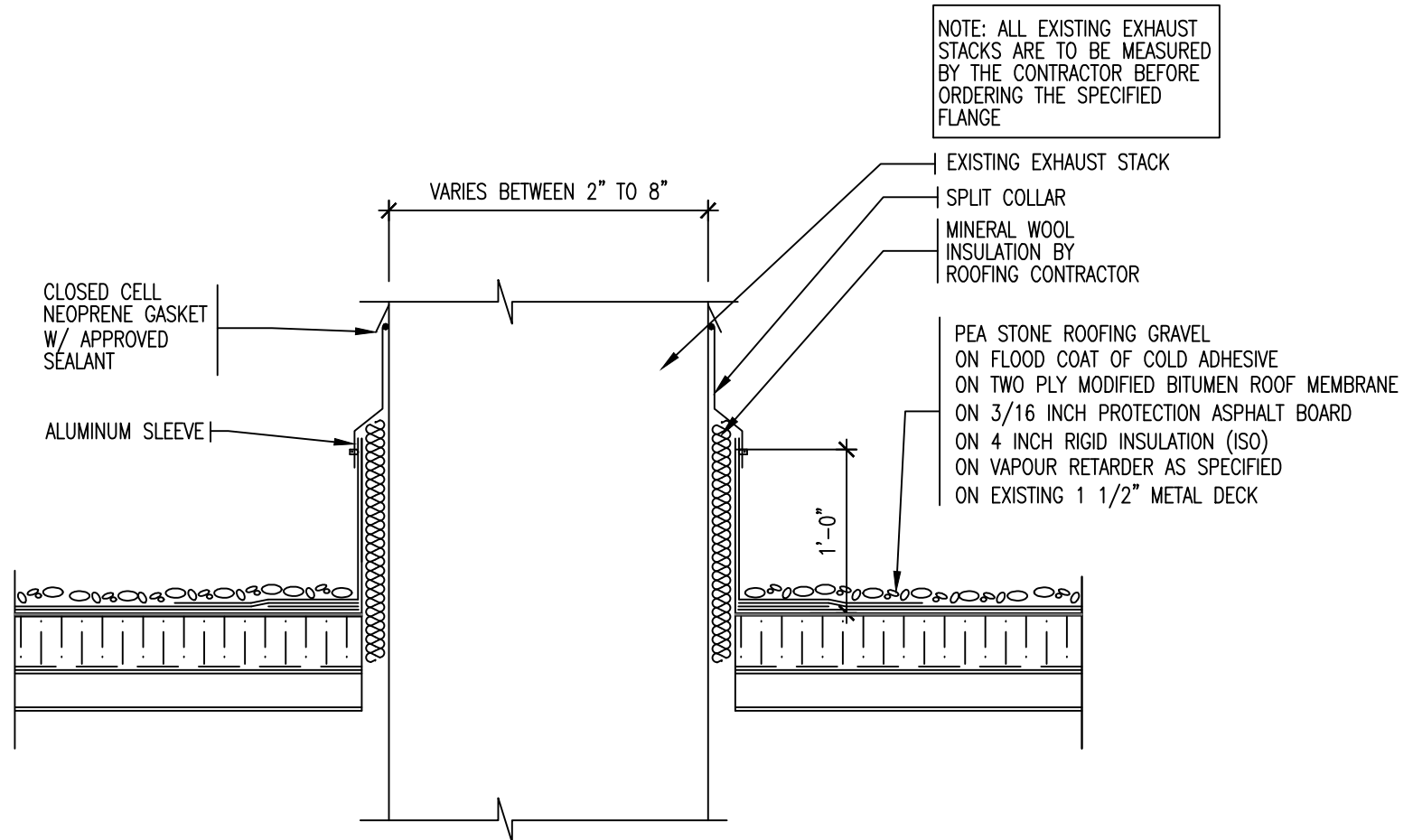
NOTE:
 IF EXISTING VENT STACK IS NOT HIGHER THAN THE NEW SJ-38, THE CONTRACTOR IS REQUIRED TO EXTEND A MINIMUM OF 3" ABOVE EPDM GROMMET SEAL



ROOF DETAIL - VENT PIPE STACK

SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC. R B S <small>ROOF REPAIRS, ROOFING AND ROOFING PRODUCTS INSULATION SPECIALISTS (POLYURETHANE FOAM/FOAM PRODUCTS) SUBJECTS AND CONSULTANTS OF ROOFS AND BUILDINGS</small> <small>1607 Glen Road Huron, Ontario N2R 1K2</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP
	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 8.1/2"x11"
	DRAWING TITLE ROOF DETAIL	PROJECT FILE NO. RBS16-65 DRAWING NO. Dk-2
DATE 11-16-16 12-5-16	ISSUED FOR OWNER REVIEW TENDER	



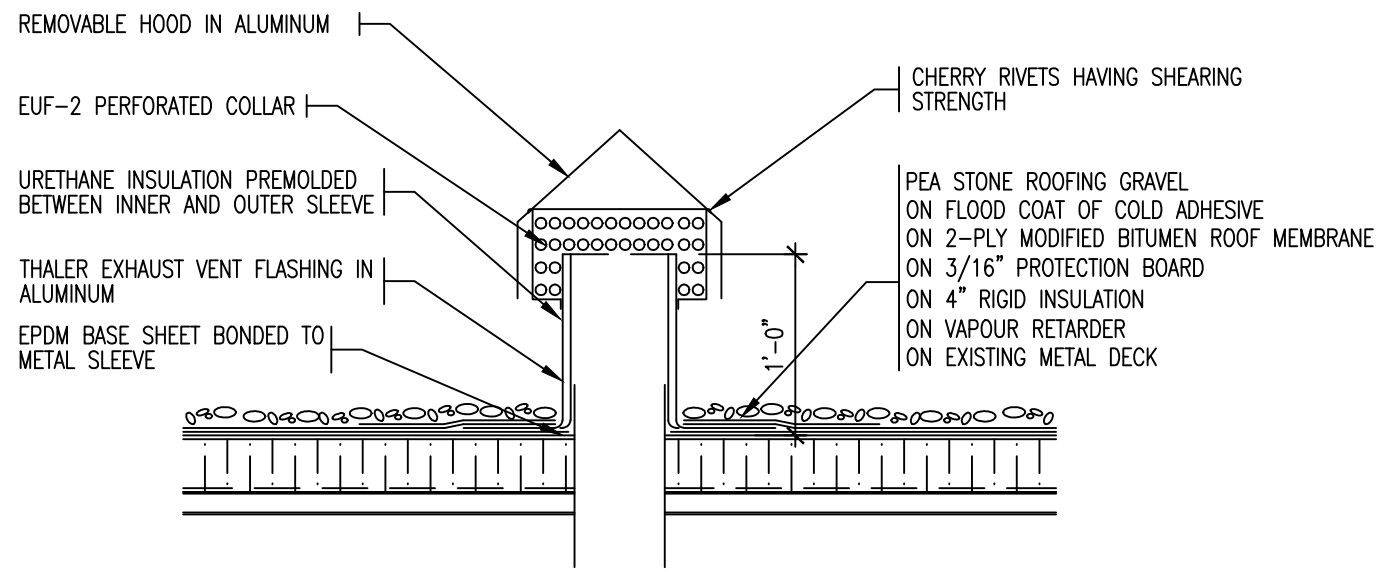
NOTE: ALL EXISTING EXHAUST STACKS ARE TO BE MEASURED BY THE CONTRACTOR BEFORE ORDERING THE SPECIFIED FLANGE

TYPICAL HOT EXHAUST STACK DETAIL

SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC. R B S <small>1607 Glen Road Toronto, Ontario M8Z 1X2</small>	<small>ROOF MEMBRANES, FLASHING AND DRAINAGE PRODUCTS</small> <small>INSULATION PRODUCTS (POLYURETHAN FOAMS/OTHER PRODUCTS)</small> <small>CLADDING AND COMPONENTS OF ROOFS AND WALLS</small> <small>Christopher W. Palmer, C.B.S.</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP
	<small>1607 Glen Road Toronto, Ontario M8Z 1X2</small>	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 8.1/2"x11"
	DATE (DATE-18-17) 11-16-18 12-5-18	ISSUED FOR OWNER REVIEW TENDER	DRAWING TITLE ROOF DETAIL

NOTE: ALL EXISTING EXHAUST STACKS ARE TO BE MEASURED BY THE CONTRACTOR BEFORE ORDERING THE SPECIFIED FLANGE



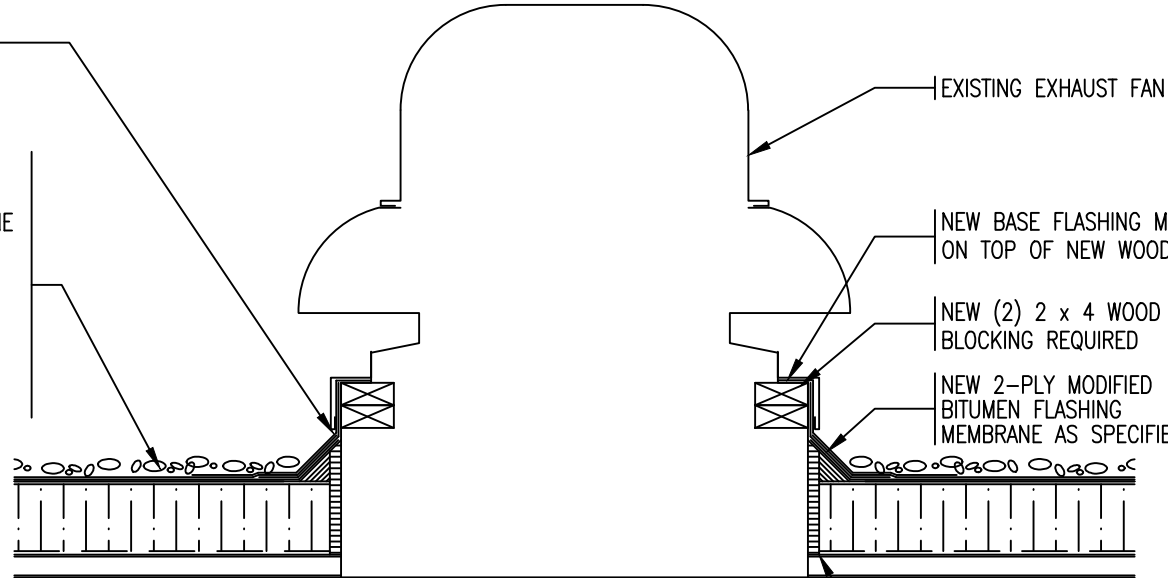
EXHAUST VENT FLASHING DETAIL

SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC. <small>ROOF REPAIRS, ROOFING AND ROOFING PRODUCTS INSULATION SPECIALISTS (POLYURETHANE FOAM/FOAM POLYURETHANE) SURFACES AND COATINGS OF ROOFS AND BUILDINGS</small> Christchurch, N.Z. Palmerston, C.N.Z. <small>1007 Glen Road Palmerston, N.Z. 4100 Tel: (06) 738-3385 Fax: (06) 738-0757</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP
	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 8.1/2"x11"
DATE <small>(DATE-12-17)</small> 11-18-18 OWNER REVIEW 12-5-18 TENDER	DRAWING TITLE ROOF DETAIL	PROJECT FILE NO. RBS16-65 DRAWING NO. Dk-4

NEW PREFINISHED METAL
COUNTER FLASHING AS
DETAILED

PEA STONE ROOFING GRAVEL
ON FLOOD COAT OF COLD ADHESIVE
ON TWO PLY MODIFIED BITUMEN ROOF MEMBRANE
ON 3/16 INCH PROTECTION ASPHALT BOARD
ON TAPERED INSULATION AS NOTED
ON 4 INCH RIGID INSULATION (ISO)
ON VAPOUR RETARDER AS SPECIFIED
ON EXISTING METAL DECK



EXISTING EXHAUST FAN

NEW BASE FLASHING MEMBRANE CARRIED
ON TOP OF NEW WOOD BLOCKING

NEW (2) 2 x 4 WOOD
BLOCKING REQUIRED

NEW 2-PLY MODIFIED
BITUMEN FLASHING
MEMBRANE AS SPECIFIED

NEW 3/4" EXT. GRADE
FIR PLYWOOD W/
CHAMFER AS DETAILED

DETAIL - EXHAUST FAN

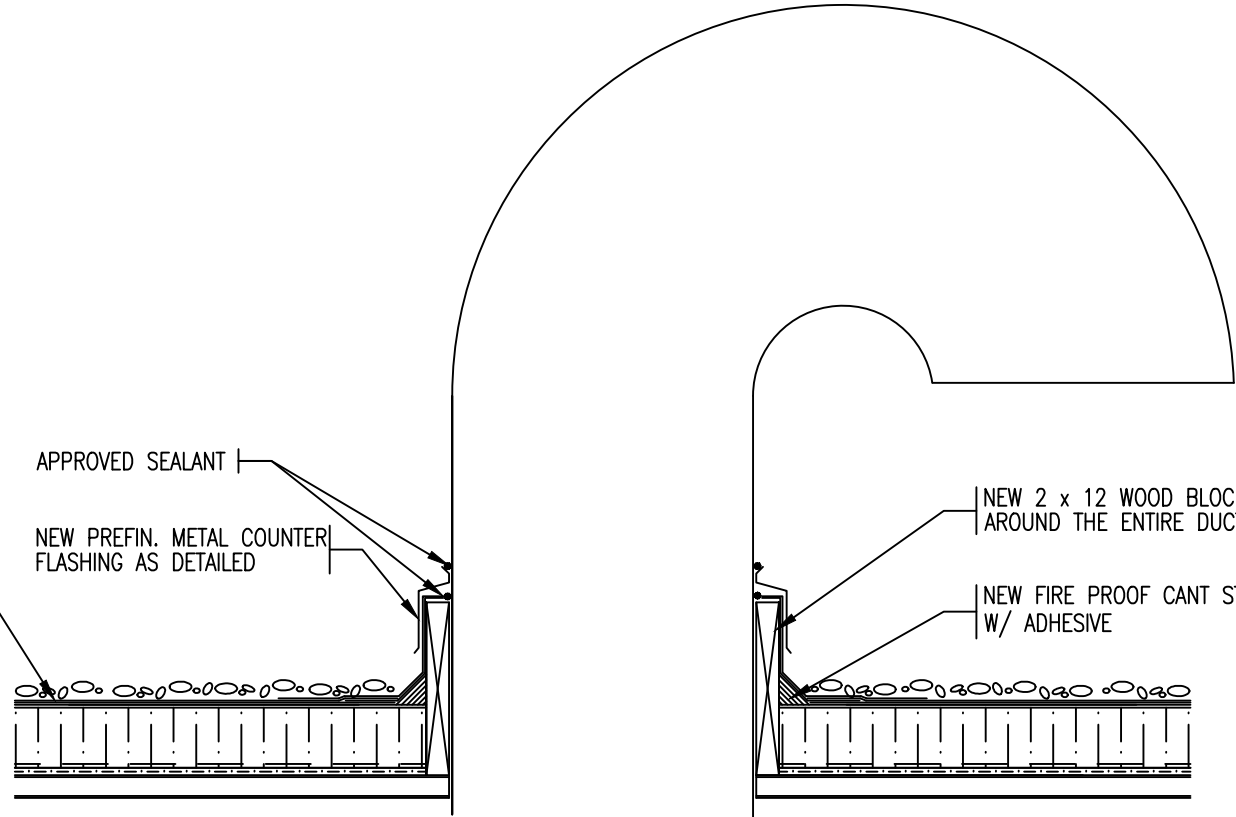
SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC. R B S <small>ROOF REPAIRS, ROOFING AND ROOFING PRODUCTS INSULATION SPECIALISTS (POLYURETHANE SPRAYED POLYURETHANE) SURFACES AND COATINGS OF ROOFS AND BUILDINGS</small> <small>Christopher W. Palmer, C.B.S.</small> <small>1607 Glen Road Toronto, Ontario M8S 1K2 Tel: (416) 738-3885 Fax: (416)738-0757</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT	DATE : NOVEMBER 2016
	227 THOMAS AVE., WALLACEBURG ONTARIO	SCALE : N.T.S.
	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	DRAWN BY : CWP
DATE <small>(MM-DD-YY)</small> 11-18-16	ISSUED FOR OWNER REVIEW	CHK. BY : CWP
12-5-16	TENDER	SHEET SIZE : 8.1/2"x11"
	DRAWING TITLE ROOF DETAIL	PROJECT FILE NO. RBS16-65
		DRAWING NO. Dk-5

PEA STONE ROOFING GRAVEL
 ON FLOOD COAT OF ADHESIVE
 ON 2-PLY MODIFIED BITUMEN MEMBRANE
 ON 3/16" PROTECTION BOARD
 ON 4" RIGID INSULATION
 ON VAPOUR RETARDER AS SPECIFIED
 ON EXISTING WOOD DECK

APPROVED SEALANT
 NEW PREFIN. METAL COUNTER
 FLASHING AS DETAILED

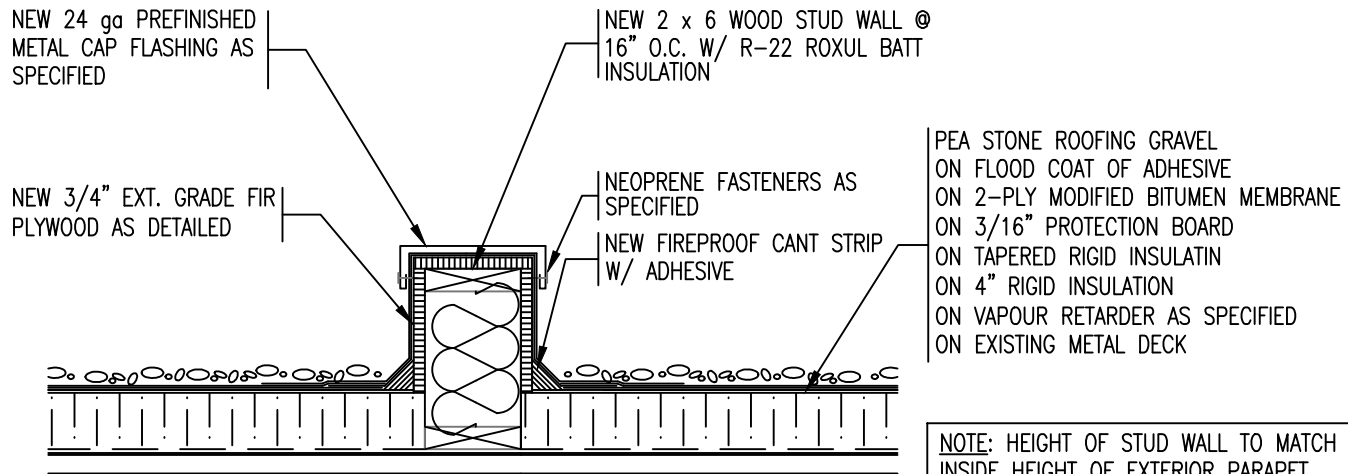
NEW 2 x 12 WOOD BLOCKING
 AROUND THE ENTIRE DUCT
 NEW FIRE PROOF CANT STRIP
 W/ ADHESIVE



DETAIL - GOOSENECK EXHAUST FAN

SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC.		PROJECT	DATE :	NOVEMBER 2016
R B S		CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT	SCALE :	N.T.S.
1607 Glen Road Huron, Ontario N2R 1K0		227 THOMAS AVE., WALLACEBURG ONTARIO	DRAWN BY :	CWP
Tel: (519) 738-3383 Fax: (519) 738-4077		CLIENT	CHK. BY :	CWP
Christopher W. Palmer, C.B.S.		ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	SHEET SIZE :	8.1/2"x11"
DATE	ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	RBS16-65
11-18-16	OWNER REVIEW	ROOF DETAIL	DRAWING NO.	Dk-6
12-6-16	TENDER			

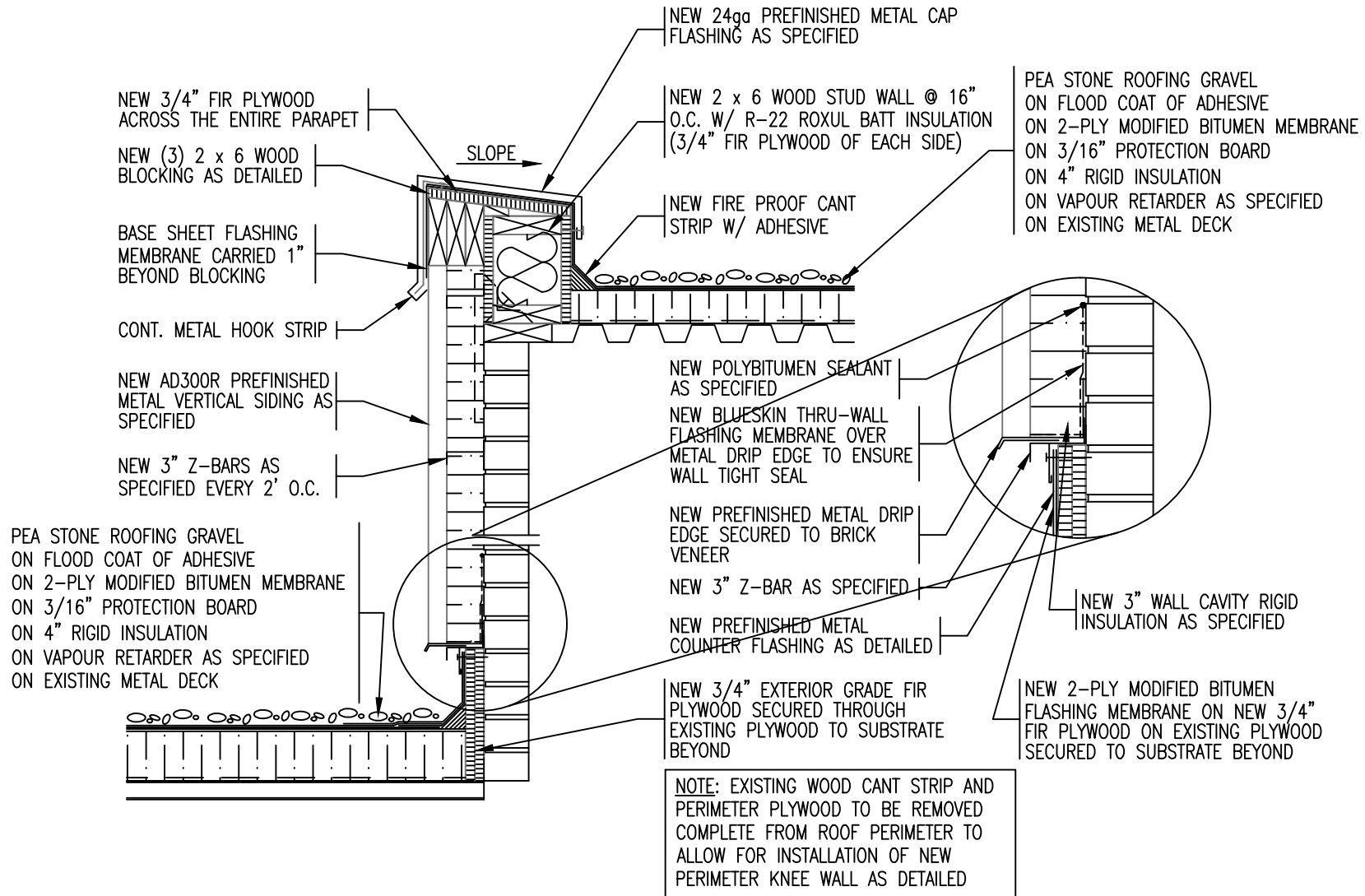


NOTE: HEIGHT OF STUD WALL TO MATCH
INSIDE HEIGHT OF EXTERIOR PARAPET
WALL

ROOF DETAIL - CONTROL JOINT

SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC. R B S <small>1001 Glen Road Toronto, Ontario M8Z 1K2</small>	<small>ROOF ASSEMBLIES, EGRESS AND INTERIOR FINISHES</small> <small>WOODEN SHAKES (PLY/ROOF DECKS/UNDER FLOORING)</small> <small>SUBJECTS AND CONDITIONS OF ROOFS AND BUILDINGS</small> <small>Christopher W. Palmer, C.B.S.</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP
	<small>1001 Glen Road Toronto, Ontario M8Z 1K2</small>	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 8.1/2"x11"
	DATE <small>11-18-16</small>	ISSUED FOR OWNER REVIEW	DRAWING TITLE ROOF DETAIL



ROOF PERIMETER DETAIL - ROOF AREA 'B'

SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC. R B S <small>1607 Glen Road Peterborough, Ontario K9J 1G9</small>	<small>NEW ARCHITECTURAL, ENGINE AND INTERIOR FINISHES INSULATION SPECIALTIES (POLYURETHAN SPRAY/FIRE PROTECTION) SURFACES AND COATINGS OF ROOFS AND WALLS</small> <small>Christopher W. Palmer, C.B.S.</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP	
	<small>1607 Glen Road Peterborough, Ontario K9J 1G9</small>	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 8.1/2"x11"	
	DATE (ISS-REV) 11-16-16	ISSUED FOR OWNER REVIEW	DRAWING TITLE ROOF DETAIL	PROJECT FILE NO. RBS16-65 DRAWING NO. Dk-8
	12-6-16	TENDER		

NEW 1/8" ASPHALT CORE PROTECTION BOARD MECHANICALLY ATTACHED THROUGH 1 1/2" RIGID INSULATION TO EXISTING METAL CURB

PEA STONE ROOFING GRAVEL ON FLOOD COAT OF ADHESIVE ON 2-PLY MODIFIED BITUMEN MEMBRANE ON 3/16" PROTECTION BOARD ON 4" RIGID INSULATION ON VAPOUR RETARDER AS SPECIFIED ON EXISTING METAL DECK

EXISTING HVAC UNIT

NOTE: NEW BASE FLASHING MEMBRANE TO BE CARRIED ON TOP OF EXISTING ROOF CURB

NEW PREFINISHED METAL COUNTER FLASHING AS DETAILED
 2-PLY MODIFIED BITUMEN FLASHING MEMBRANE AS SPECIFIED
 NEW FIRE PROOF CANT STRIP W/ ADHESIVE

HVAC DETAIL - AREA 'C'

SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC. R B S <small>ROOF REPAIRS, ROOFING AND INSULATION PRODUCTS INSULATION SPECIALISTS (POLYURETHANE SPRAY/FORCE APPLIED) SURFACES AND COATINGS OF ROOFS AND BUILDINGS Christchurch, N. Palmerston, C.B.S. 1407 New Road Palmerston, New Zealand 4100 Tel: (06) 738-3383 Fax: (06) 738-0707</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT	DATE : NOVEMBER 2016 SCALE : N.T.S.
	227 THOMAS AVE., WALLACEBURG ONTARIO	DRAWN BY : CWP
	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 8.1/2"x11"
DATE <small>(ISS-15-17)</small> 11-18-18	ISSUED FOR OWNER REVIEW	PROJECT FILE NO. RBS16-65 DRAWING NO. Dk-9
12-5-18	TENDER	

PEA STONE ROOFING GRAVEL
ON FLOOD COAT OF ADHESIVE
ON 2-PLY MODIFIED BITUMEN MEMBRANE
ON 3/16" PROTECTION BOARD
ON 4" RIGID INSULATION
ON VAPOUR RETARDER AS SPECIFIED
ON EXISTING METAL DECK

EXISTING ROOF HATCH

NEW PREFINISHED
METAL COUNTER
FLASHING AS DETAILED

2-PLY MODIFIED BITUMEN
FLASHING MEMBRANE ON 3/4"
FIR PLYWOOD ANCHORED TO
ROOF HATCH

NEW FIRE PROOF CANT
STRIP W/ ADHESIVE

NEW WOOD BLOCKING
AROUND ENTIRE
OPENING AS DETAILED

NOTE: EXISTING ROOF HATCH TO BE
REMOVED FROM THE METAL ROOF
DECK TO ALLOW FOR INSTALLATION OF
NEW WOOD BLOCKING TO HEIGHT OF
NEW RIGID INSULATION AND THEN
INSTALL ROOF HATCH OF TOP

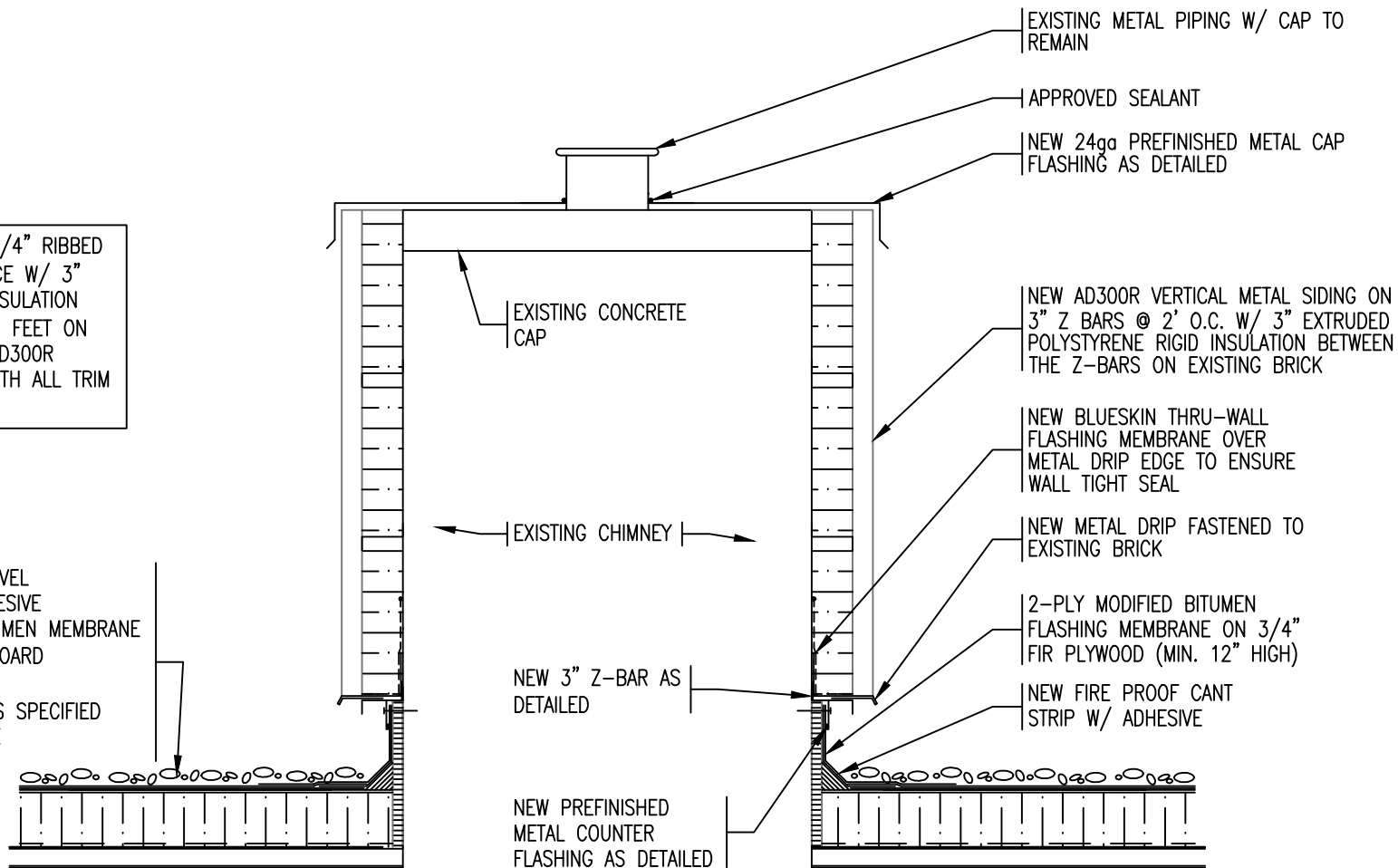
DETAIL - ROOF HATCH

SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC.		PROJECT	DATE :	NOVEMBER 2016
R B S		CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT	SCALE :	N.T.S.
1607 Glen Road Huron, Ontario N2R 1G0		227 THOMAS AVE., WALLACEBURG ONTARIO	DRAWN BY :	CWP
Tel: (519) 738-3365 Fax: (519)738-4707		CLIENT	CHK. BY :	CWP
Architect: W. Palmer, C.M.A.S.		ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	SHEET SIZE :	8.1/2"x11"
DATE	ISSUED FOR	DRAWING TITLE	PROJECT FILE NO.	RBS16-65
11-16-16	OWNER REVIEW	ROOF DETAIL	DRAWING NO.	Dk-10
12-6-16	TENDER			

NOTE: REMOVE EXISTING 3/4" RIBBED METAL SIDING AND REPLACE W/ 3" EXTRUDED WALL CAVITY INSULATION WITH 3" Z-BARS EVERY 2 FEET ON CENTRE AND THEN NEW AD300R VERTICAL METAL SIDING WITH ALL TRIM ACCESSORIES

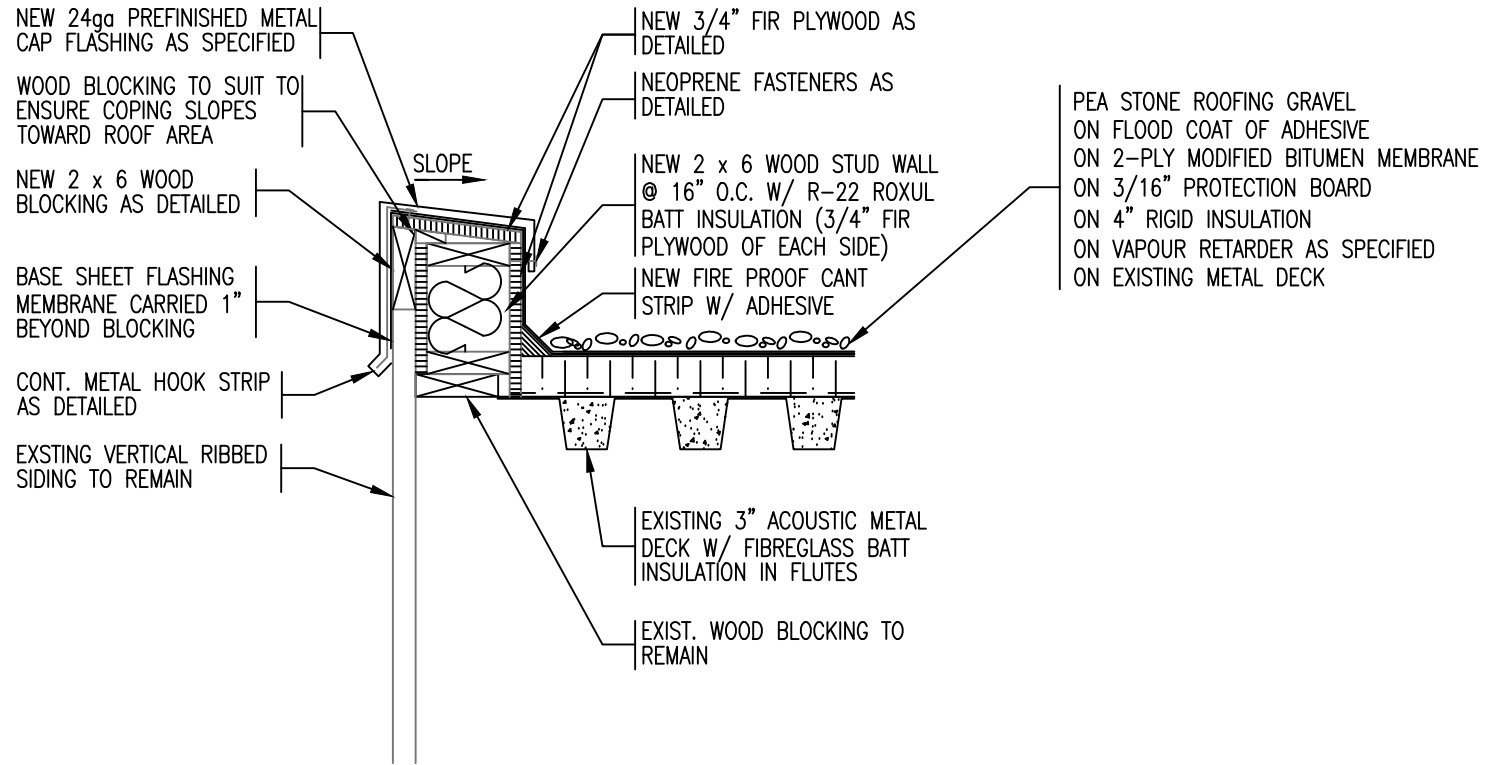
PEA STONE ROOFING GRAVEL ON FLOOD COAT OF ADHESIVE ON 2-PLY MODIFIED BITUMEN MEMBRANE ON 3/16" PROTECTION BOARD ON 4" RIGID INSULATION ON VAPOUR RETARDER AS SPECIFIED ON EXISTING METAL DECK



CHIMNEY DETAIL

SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC. <small>ROOF REPAIRS, ROOFING AND INSULATION PRODUCTS INSULATION SPECIALISTS (POLYURETHANE FOAMS/URETHANES) SURVEYS AND CONSULTING OF ROOFS AND BUILDINGS</small> Christopher W. Palmer, C.E.S. <small>1607 Glen Road Toronto, Ontario M8S 1K2 Tel: (416) 728-3282 Fax: (416)728-0727</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT	DATE : NOVEMBER 2016
	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	SCALE : N.T.S.
DATE (ISS-17) 11-16-16 OWNER REVIEW 12-6-16 TENDER	ISSUED FOR OWNER REVIEW TENDER	DRAWN BY : CWP CHK. BY : CWP SHEET SIZE : 8.1/2"x11"
	DRAWING TITLE ROOF DETAIL	PROJECT FILE NO. RBS16-65 DRAWING NO. Dk-11

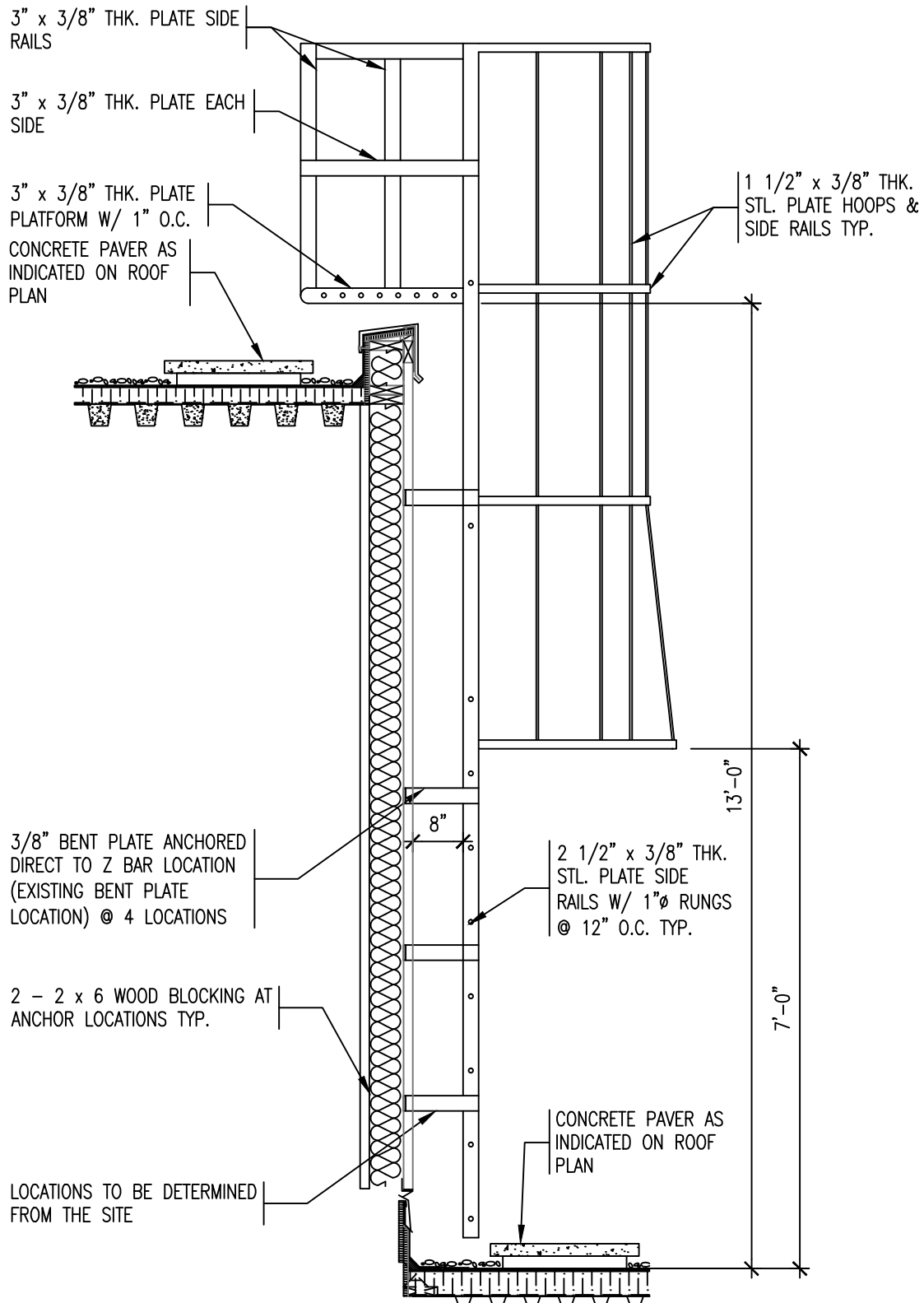


NOTE: EXISTING SCREWS ON TOP OF METAL SIDING WALL ARE REQUIRED TO BE REMOVED TO ALLOW FOR THE REMOVAL OF THE WOOD CANT STRIP

ROOF PERIMETER DETAIL - ROOF AREA 'C'

SCALE : 1" = 1'-0"

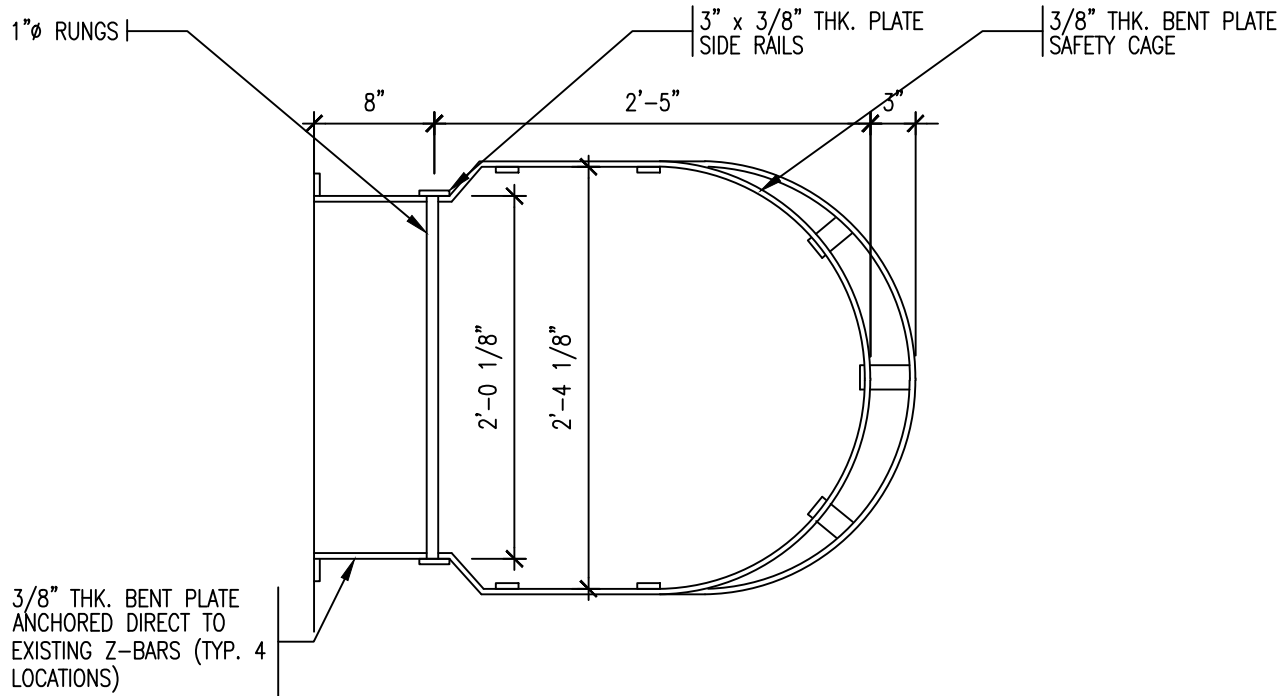
REMLAP BUILDING SERVICES INC. R B S <small>1607 Glen Road Toronto, Ontario M8Z 1X2</small>	<small>ROOF REPLACEMENT, DEMO AND REVISIONS PROVIDED</small> <small>ISSUES CHANGES (BY/WORK ORDER/DATE PROVIDED)</small> <small>SUBJECT AND CONTENTS OF ROOFS AND WALLS</small> Christopher W. Palmer, C.B.S. <small>16 (416) 738-3883 Fax (416) 738-0757</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP
	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 8.1/2"x11"	
	DATE <small>(DATE-TO-TO)</small> 11-18-16 OWNER REVIEW 12-5-16 TENDER	DRAWING TITLE ROOF DETAIL PROJECT FILE NO. RBS16-65 DRAWING NO. Dk-12	



WALL LADDER DETAIL FOR AREA 'C'

SCALE : 1/2" = 1'-0"

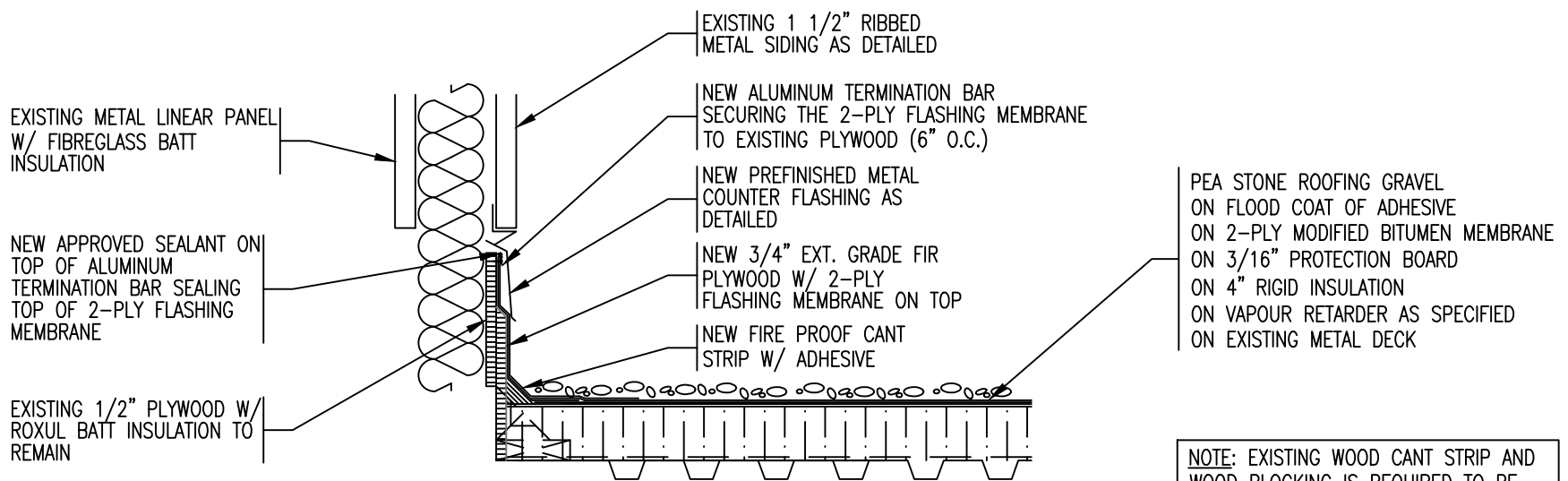
REMLAP BUILDING SERVICES INC. <small>ROOF MAINTENANCE, INSPECTION AND REPAIRS PROGRAM</small> <small>BUILDING ENVELOPE (DR/UPPER ENERGY/WATER PROGRAM)</small> <small>STRONG AND CONDITION OF ROOFS AND BALCONIES</small> Christopher W. Feltous, C.E.T. <small>1407 Glen Road Keweenaw, Ontario N0B 1S0 Tel: (519) 739-3300 Fax: (519) 739-0197</small>		PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP CHK. BY : CWP SHEET SIZE : 8.1/2"x11"
DATE (MM-DD-YY) 11-16-16 12-6-16	ISSUED FOR OWNER REVIEW TENDER	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD DRAWING TITLE ROOF DETAIL	PROJECT FILE NO. RBS16-65 DRAWING NO. Dk-13



ROOF LADDER DETAIL PLAN - AREA 'C'

SCALE : 1" = 1'-0"

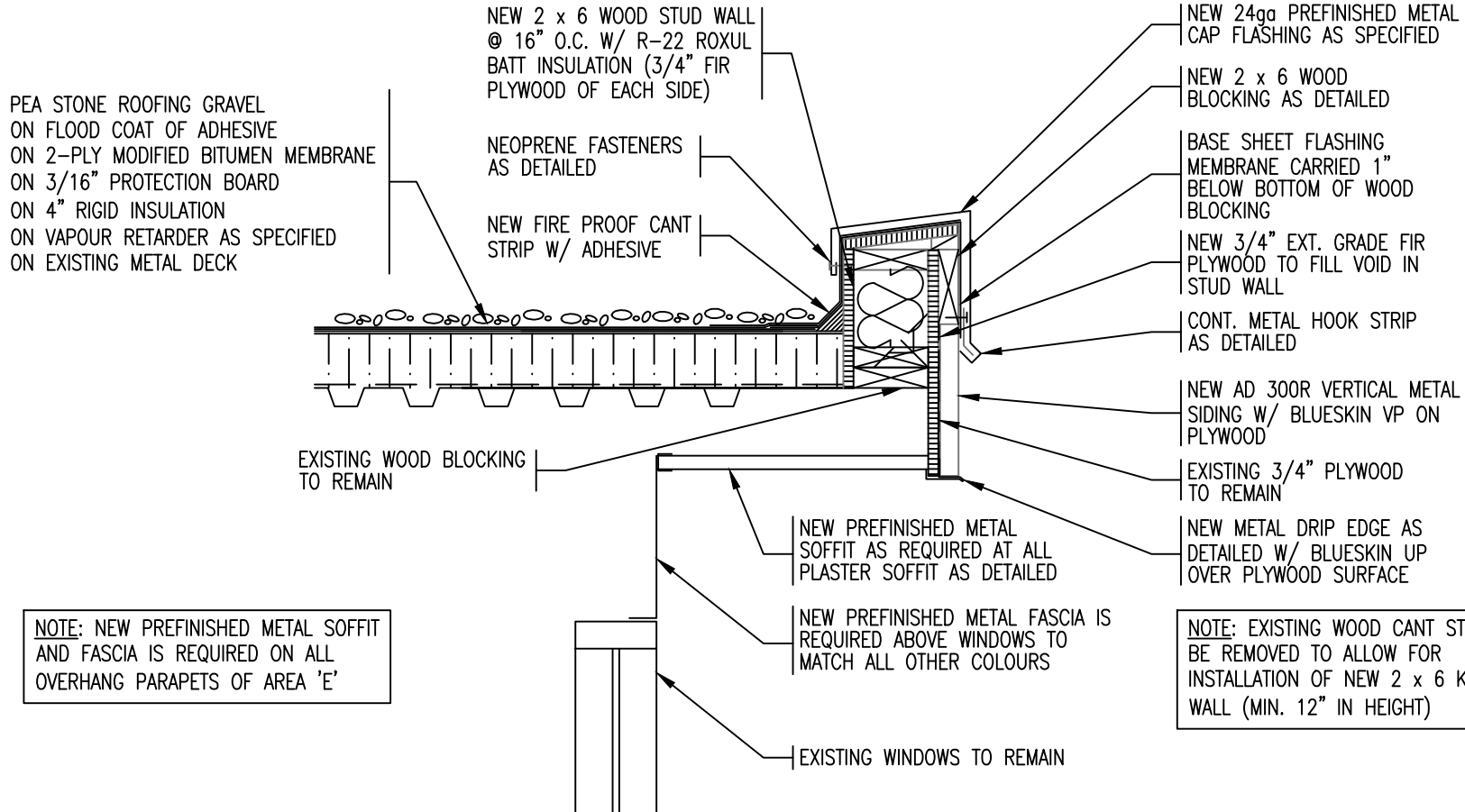
REMLAP BUILDING SERVICES INC. R B S <small>ROOF REPAIRS, ROOFING AND ROOFING PRODUCTS INSULATION (POLYURETHANE FOAM/ROCK WOOL FIBRE) SUBJECTS AND COMPONENTS OF ROOFS AND BUILDINGS</small> <small>Christopher W. Palmer, C.B.S.</small> <small>1607 Glen Road Huron, Ontario N2R 1G0 Tel: (519) 738-3885 Fax: (519) 738-4757</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT	DATE : NOVEMBER 2016
	227 THOMAS AVE., WALLACEBURG ONTARIO	SCALE : N.T.S.
	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	DRAWN BY : CWP
DATE (ISS-TO-YY) 11-16-16	ISSUED FOR OWNER REVIEW	CHK. BY : CWP
12-6-16	TENDER	SHEET SIZE : 8.1/2"x11"
	DRAWING TITLE ROOF DETAIL	PROJECT FILE NO. RBS16-65
		DRAWING NO. Dk-13a



WALL DETAIL @ BOTTOM OF AREA 'C'

SCALE : 1" = 1'-0"

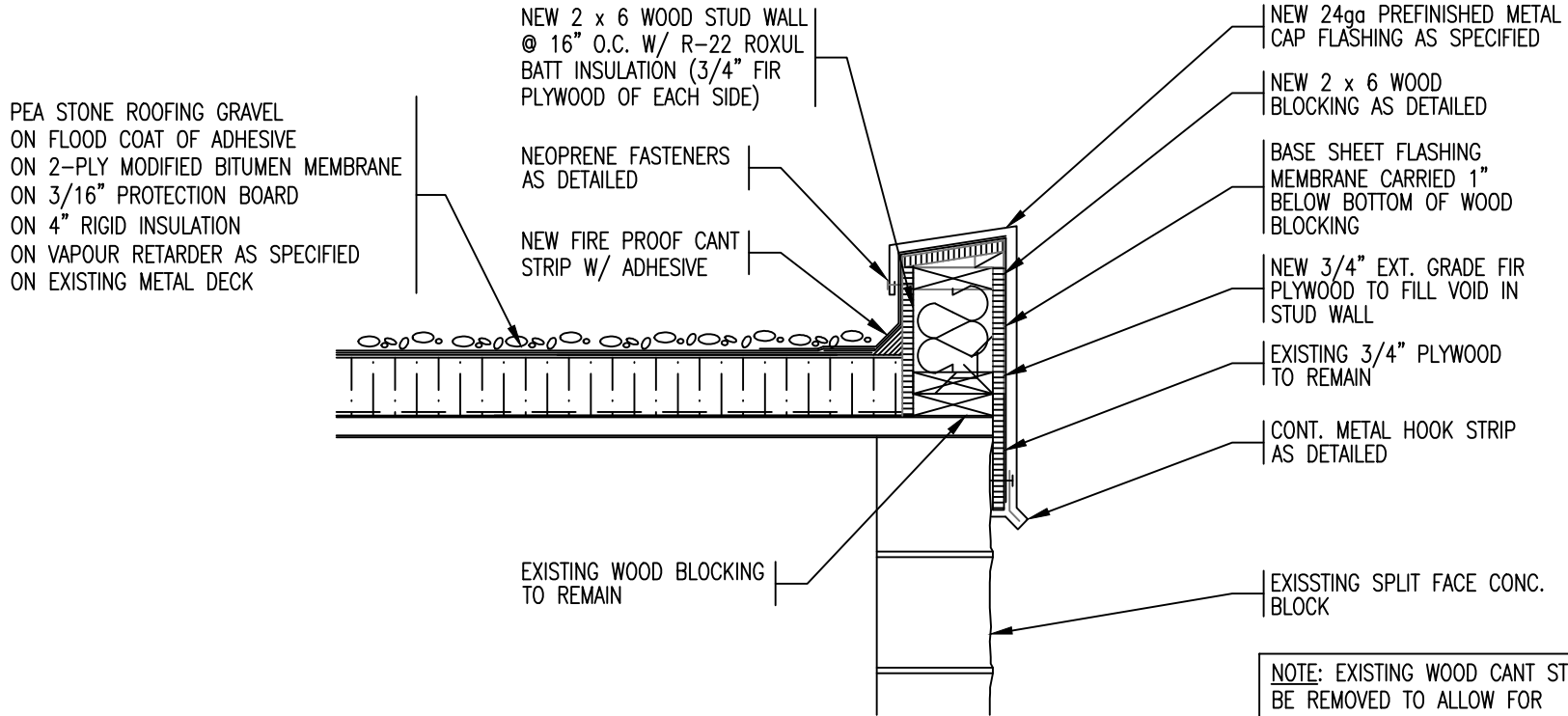
REMLAP BUILDING SERVICES INC. <small>ROOF ASSESSMENT, DESIGN AND INSTALLATION SERVICES</small> <small>INSULATION SPECIALISTS (POLYURETHANE SPRAY/FORCE APPLIED)</small> <small>SUBJECTS AND CONSULTANTS OF ROOFS AND BUILDINGS</small> <small>Christchurch, N. Palmerston, C.B.S.</small> <small>1007 New Road</small> <small>1st Floor 728-3282</small> <small>Phone, Mobile: 800 330</small> <small>Fax: (913) 728-0707</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT	DATE : NOVEMBER 2016 SCALE : N.T.S.	
	227 THOMAS AVE., WALLACEBURG ONTARIO	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	DRAWN BY : CWP CHK. BY : CWP
	DATE (DATE-DE-YR) 11-18-16 OWNER REVIEW 12-5-16 TENDER	DRAWING TITLE ROOF DETAIL	SHEET SIZE : 8.1/2"x11" PROJECT FILE NO. RBS16-65 DRAWING NO. DK-14



PERIMETER WALL DETAIL - AREA 'E'

SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC. R B S <small>1987 Glen Road Huron, Ontario N2R 1K1</small>	<small>NEW ARCHITECTURAL, DESIGN AND INTERIOR FINISHES EXISTING CHANGELAP (NEW/WORK CHANGES/WORK PROVISIONS) SUBJECT AND CONDITIONS OF BIDS AND BIDDINGS</small> <small>Client: Christopher W. Palmer, C.M.A.S.</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT	DATE : NOVEMBER 2016 SCALE : N.T.S.
	<small>227 THOMAS AVE., WALLACEBURG ONTARIO</small> CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	DRAWN BY : CWP CHK. BY : CWP SHEET SIZE : 8.1/2"x11"	
DATE <small>11-16-16</small>	ISSUED FOR OWNER REVIEW	DRAWING TITLE ROOF DETAIL	PROJECT FILE NO. RBS16-65 DRAWING NO. Dk-15
DATE <small>12-6-16</small>	TENDER		

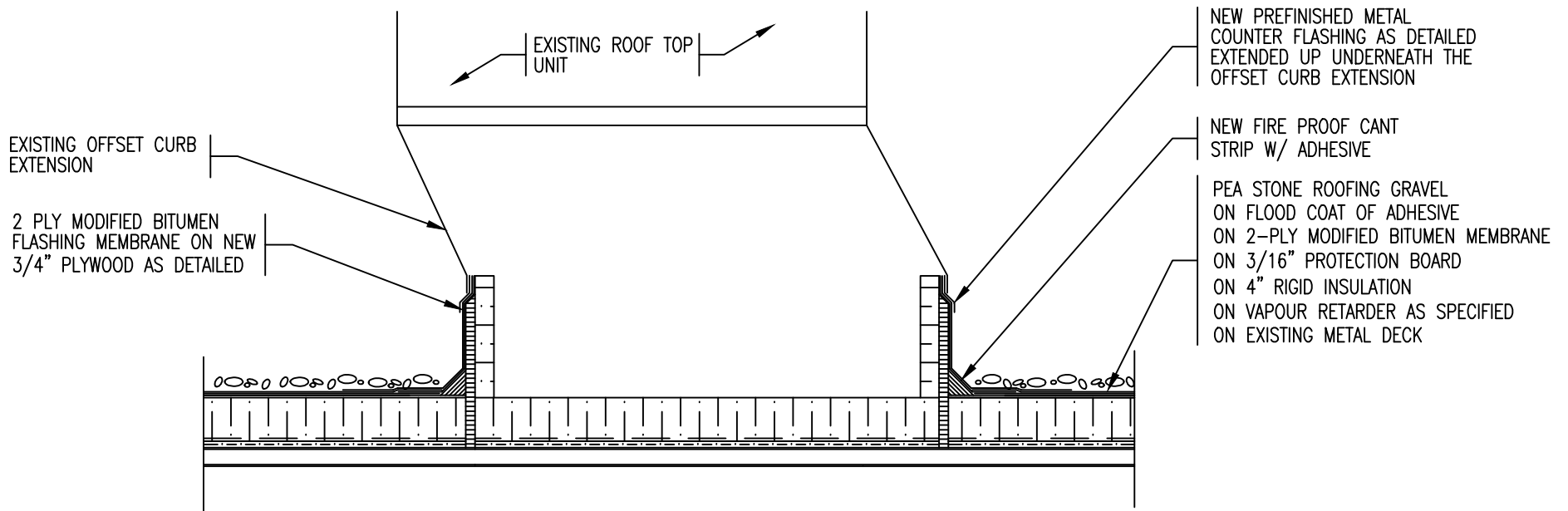


NOTE: EXISTING WOOD CANT STRIP TO BE REMOVED TO ALLOW FOR INSTALLATION OF NEW 2 x 6 KNEE WALL (MIN. 12" IN HEIGHT) TYPICAL

PERIMETER WALL DETAIL - AREA 'D'

SCALE : 1" = 1'-0"

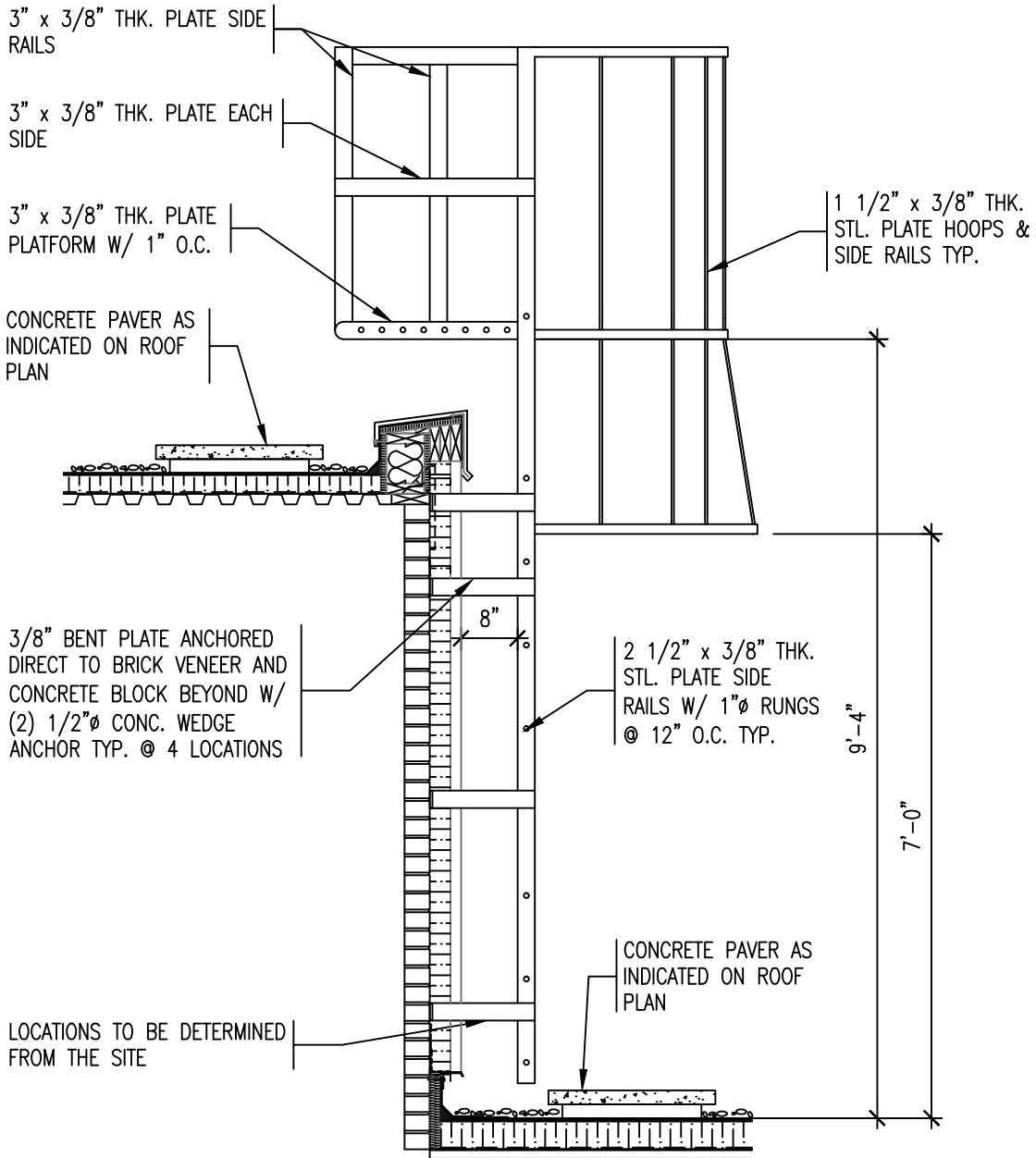
REMLAP BUILDING SERVICES INC. R B S <small>1605 Glen Road Huron, Ontario N2R 1K0</small>	<small>ROOF ASSESSMENT, DESIGN AND SUPERVISION PROVIDED</small> <small>INSULATION INSTALLATION (POLYURETHANE SPRAYED POLYURETHANE)</small> <small>SUBJECTS AND CONDITIONS OF BIDDING AND BIDDINGS</small> <small>Christophorus W. Palmer, C.B.S.</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP	
	<small>1605 Glen Road Huron, Ontario N2R 1K0</small>	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 8.1/2"x11"	
	DATE <small>(DATE-15-17)</small> 11-16-16	ISSUED FOR OWNER REVIEW	DRAWING TITLE ROOF DETAIL	PROJECT FILE NO. RBS16-65 DRAWING NO. Dk-16
	12-5-16	TENDER		



HVAC DETAIL - AREA 'B'

SCALE : 1" = 1'-0"

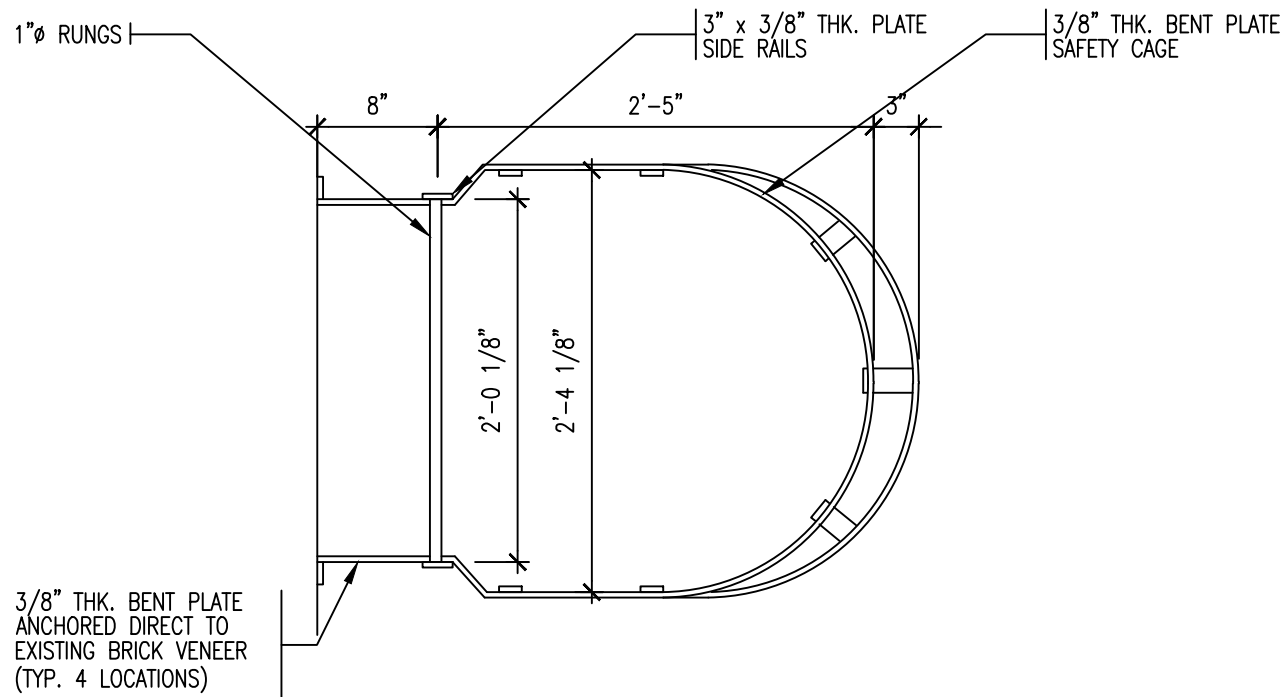
REMLAP BUILDING SERVICES INC. R B S <small>1607 Glen Road Huron, Ontario N2R 1K0 Tel: (519) 738-3885 Fax: (519)738-0757</small>	<small>ROOF ASSESSMENT, DESIGN AND SUPERVISION PROVIDED</small> <small>INSULATION INSTALLATION (POLYURETHANE SPRAYED POLYURETHANE FORTH)</small> <small>SUBJECTS AND CONDITIONS OF BIDS AND AGREEMENT</small> Christopher W. Palmer, C.B.S. <small>1607 Glen Road Huron, Ontario N2R 1K0 Tel: (519) 738-3885 Fax: (519)738-0757</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP CHK. BY : CWP SHEET SIZE : 8.1/2"x11"	
	DATE <small>(MM-DD-YY)</small> 11-18-16	ISSUED FOR OWNER REVIEW	DRAWING TITLE ROOF DETAIL	PROJECT FILE NO. RBS16-85 DRAWING NO. Dk-17
	12-5-16	TENDER		



WALL LADDER DETAIL FOR AREA 'B'

SCALE : 1/2" = 1'-0"

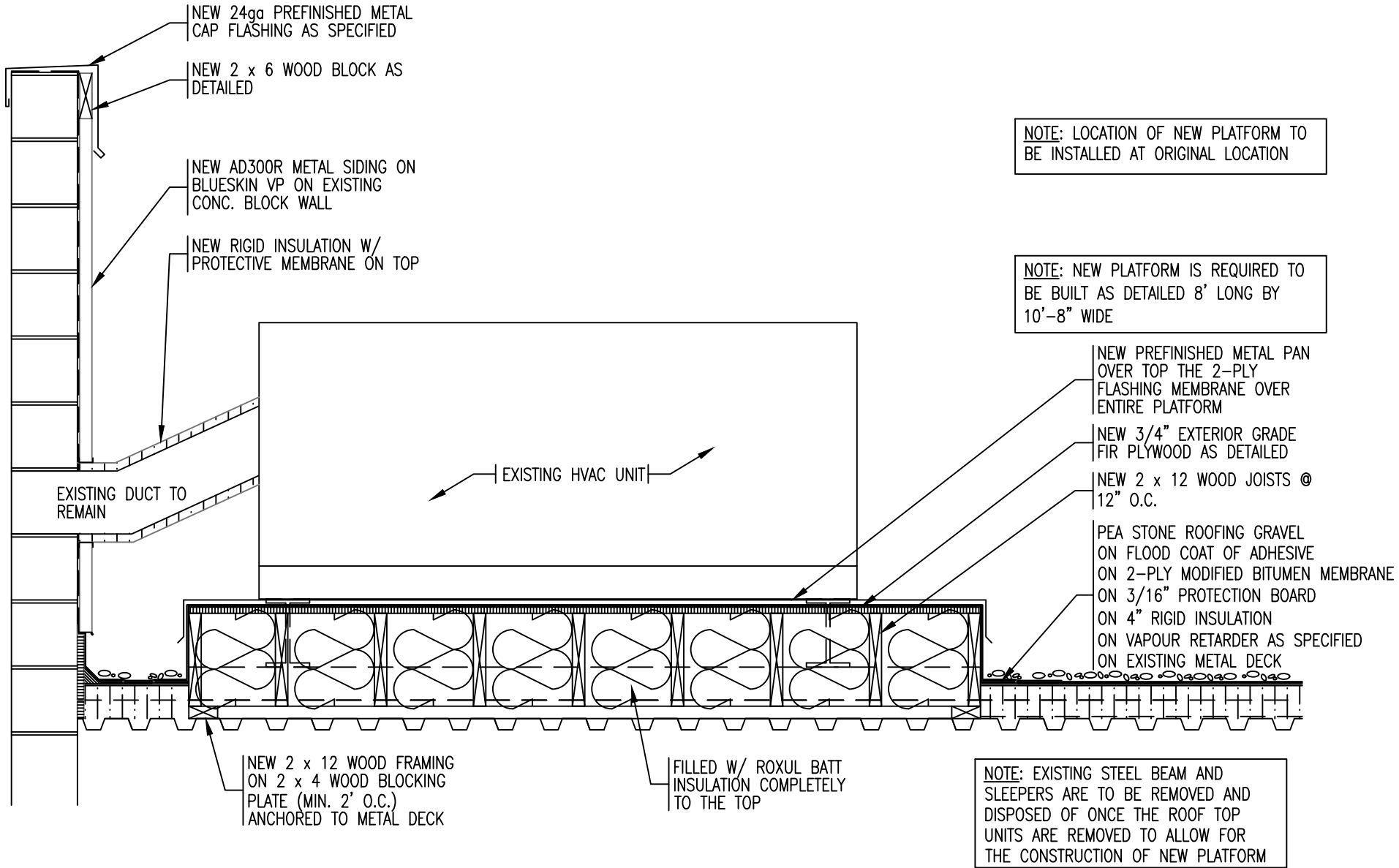
REMLAP BUILDING SERVICES INC. <small>ROOF MAINTENANCE, INSPECTION AND REPAIRS PROGRAM</small> <small>BUILDING ENVELOPE (DR/UPPER ENERGY/WATER PROGRAM)</small> <small>STRONG AND CONSISTENT OF ROOFS AND BUILDINGS</small> Christopher W. Feltus, C.E.T. <small>1407 Glen Road Huron, Ontario N0R 1S0 Tel: (519) 739-3300 Fax: (519) 739-0707</small>		PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP CHK. BY : CWP SHEET SIZE : 8.1/2"x11" DRAWING NO. : RBS16-65
DATE <small>(MM-DD-YY)</small> 11-16-16 12-6-16	ISSUED FOR OWNER REVIEW TENDER	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD DRAWING TITLE ROOF DETAIL	DRAWING NO. Dk-18



ROOF LADDER DETAIL PLAN - AREA 'B'

SCALE : 1" = 1'-0"

REMLAP BUILDING SERVICES INC. R ROOF REPAIRS, ROOFING AND ROOFING PRODUCTS B BRICKWORK (W/WORK DONE/UNDER PROGRESS) S SUDS AND CONDENS OF ROOFS AND BUILDINGS <small>1007 Glen Road Toronto, Ontario M8Z 1G2</small>		PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP
<small>1007 Glen Road Toronto, Ontario M8Z 1G2</small>		CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	CHK. BY : CWP SHEET SIZE : 8.1/2"x11"
DATE (ISS-REV) 11-18-16 12-5-16	ISSUED FOR OWNER REVIEW TENDER	DRAWING TITLE ROOF DETAIL	PROJECT FILE NO. RBS16-65 DRAWING NO. Dk-18a



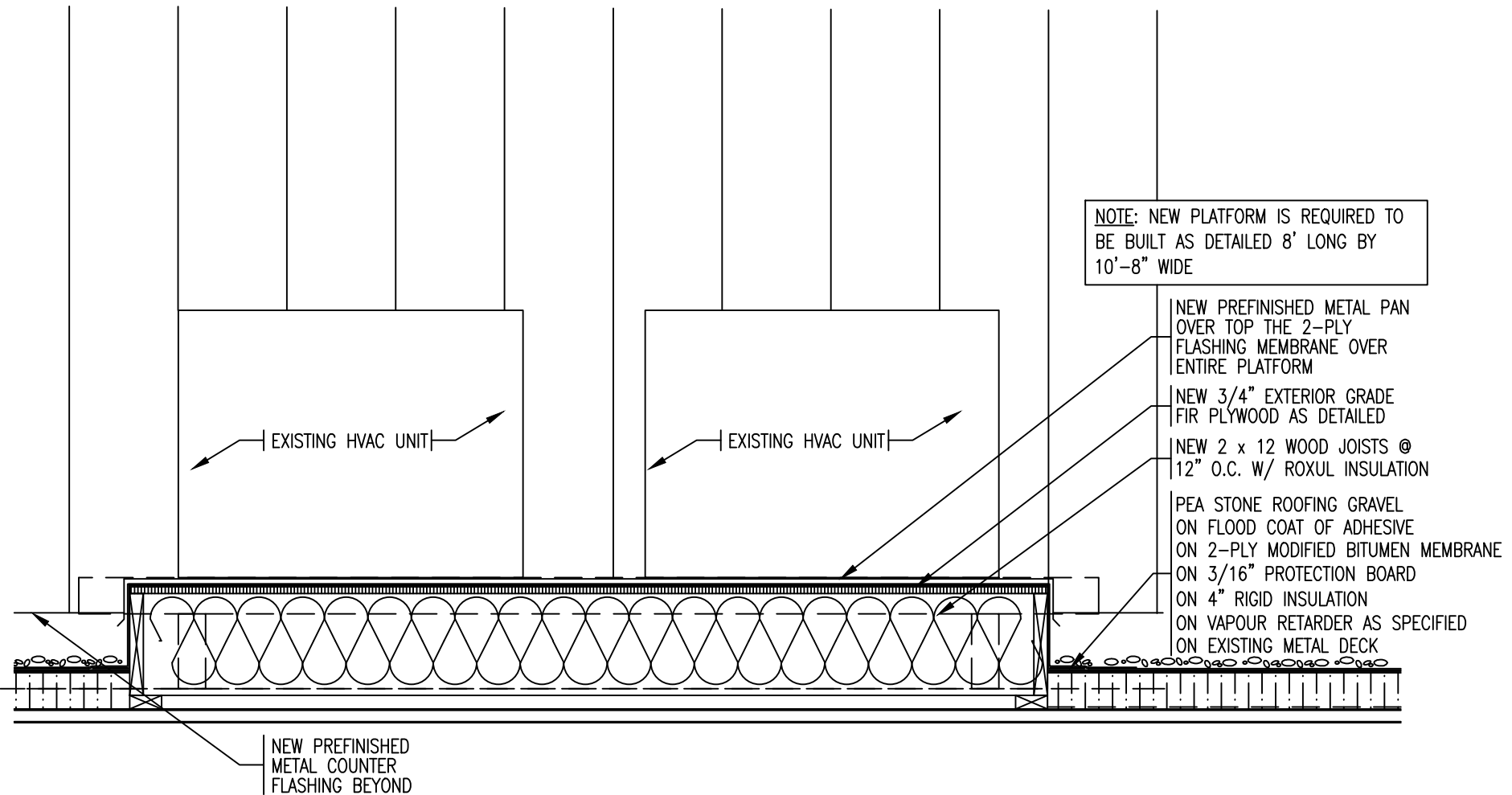
PLATFORM DETAIL FOR HVAC UNITS - AREA 'E' (LOOKING EAST)

SCALE : 3/4" = 1'-0"

REMLAP BUILDING SERVICES INC. R B S <small>1607 New Road Toronto, Ontario M8Z 1X2</small>	<small>NEW ARCHITECTURAL, DESIGN AND SERVICES PROVIDED UNLESS OTHERWISE INDICATED OTHERWISE SPECIFIED</small> CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	DATE : NOVEMBER 2016 SCALE : N.T.S. DRAWN BY : CWP CHK. BY : CWP SHEET SIZE : 8.1/2"x11" PROJECT FILE NO. RBS16-65 DRAWING NO. Dk-19
	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT 227 THOMAS AVE., WALLACEBURG ONTARIO	
	DATE (DATE-YY) 11-16-16 12-5-16	ISSUED FOR OWNER REVIEW TENDER

NOTE: LOCATION OF NEW PLATFORM TO BE INSTALLED AT ORIGINAL LOCATION

NOTE: NEW PLATFORM IS REQUIRED TO BE BUILT AS DETAILED 8' LONG BY 10'-8" WIDE



- NEW PREFINISHED METAL PAN OVER TOP THE 2-PLY FLASHING MEMBRANE OVER ENTIRE PLATFORM
- NEW 3/4" EXTERIOR GRADE FIR PLYWOOD AS DETAILED
- NEW 2 x 12 WOOD JOISTS @ 12" O.C. W/ ROXUL INSULATION
- PEA STONE ROOFING GRAVEL ON FLOOD COAT OF ADHESIVE ON 2-PLY MODIFIED BITUMEN MEMBRANE ON 3/16" PROTECTION BOARD ON 4" RIGID INSULATION ON VAPOUR RETARDER AS SPECIFIED ON EXISTING METAL DECK

NEW PREFINISHED METAL COUNTER FLASHING BEYOND

PLATFORM DETAIL FOR HVAC UNITS - AREA 'E' (LOOKING NORTH)

SCALE : 3/4" = 1'-0"

REMLAP BUILDING SERVICES INC. <small>ROOF REPAIRS, ROOFING AND ROOFING PRODUCTS INSULATION SPECIALISTS (POLYURETHANE FOAM/ROCK WOOL FIBRE) SUBJECTS AND CONSULTANTS OF ROOFS AND BUILDINGS Christopher W. Palmer, C.B.S. 1607 Glen Road Toronto, Ontario M8S 1K0 Tel: (416) 738-3883 Fax: (416) 738-4757</small>	PROJECT CHRIST THE KING CATHOLIC SCHOOL ROOF REPLACEMENT	DATE : NOVEMBER 2016	
	227 THOMAS AVE., WALLACEBURG ONTARIO	CLIENT ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD	SCALE : N.T.S.
	DRAWING TITLE ROOF DETAIL	DRAWN BY : CWP	CHK. BY : CWP
DATE 11-18-16	ISSUED FOR OWNER REVIEW	SHEET SIZE : 8.1/2"x11"	
12-5-16	TENDER	PROJECT FILE NO. RBS16-85	
		DRAWING NO. Dk-20	