



REQUEST FOR QUOTATIONS

Title: Newton Cultural Centre Roof Replacement
Reference No.: 1220-040-2016-041

MINOR WORKS SERVICES

(Construction Services)

REQUEST FOR QUOTATIONS

TABLE OF CONTENTS

1.	INTRODUCTION.....	3
2.	ADDRESS FOR DELIVERY	3
3.	DATE	3
4.	INQUIRIES.....	4
5.	ADDENDA.....	4
6.	NO CONTRACT	4
7.	ACCEPTANCE.....	4
8.	CONTRACTOR'S EXPENSES.....	4
9.	CONTRACTOR'S QUALIFICATIONS	5
10.	CONFLICT OF INTEREST.....	5
11.	SOLICITATION OF COUNCIL MEMBERS, CITY STAFF AND CITY CONSULTANTS.....	5
12.	CONFIDENTIALITY	5
13.	SIGNATURE	5
14.	INFORMATION MEETING	6
15.	PROPRIETARY NAMES.....	6
	Schedule A – Scope of Work and Drawings.....	7
	Schedule B – Sample Agreement	9
	Schedule B – Appendix 1 Special Provisions	28
	Schedule B – Appendix 2 Supplementary Specifications (Project).....	37
	Schedule B – Appendix 2-A Contract Drawings	62
	Schedule B – Appendix 3 Schedule of Prices.....	74
	Schedule B – Appendix 4 Construction Schedule.....	74
	Schedule B – Appendix 5 Key Personnel, Subcontractors and Material Suppliers.....	74
	Schedule B – Appendix 6 Prime Contractor Designation	74
	Schedule B – Appendix 7 Contractor Health & Safety Expectations (Responsibility of Contractor(s)).....	74
	Schedule B – Appendix 8 Statutory Declaration	74
	Schedule B – Appendix 9 Form 3 Builders Lien Act, (Section 7 (10)) Certification of Completion	74
	Schedule B – Appendix 10 Form 2 Builders Lien Act, (Section 7 (4)) Notice of Certification of Completion.....	74
	Schedule B – Appendix 11 Post Compliance Form Certification of Completion	74
	Schedule C – Form of Quotation.....	75
	Attachments:	
	1. City of Surrey, Project Completion Deliverables Worksheet	82
	2. Prime Contractor Designation – Letter of Understanding.....	83
	3. Contractor Health & Safety Expectations (Responsibility of Contractor(s))	84

REQUEST FOR QUOTATIONS

1. INTRODUCTION

The City of Surrey (the "City") invites contractors to provide a quotation on the form attached as Schedule C (the "Quotation") for the supply of the goods (if any) and services described in Schedule A (the "Work"). The description of the Work sets out the minimum requirements of the City. A person that submits a Quotation (the "Contractor") should prepare a Quotation that meets the minimum requirements, and may as it may choose, in addition, to also include goods, services or terms that exceed the minimum requirements.

2. ADDRESS FOR DELIVERY

A Quotation should be labelled with the Contractor's name, RFQ title and number. A Quotation should be submitted in the form attached to this RFQ as Schedule C – Form of Quotation.

The Contractor may submit a Quotation either by email or in a hard copy, as follows:

(a) Email

If the Contractor chooses to submit by email, the Contractor should submit the Quotation electronically in a single pdf file to the City by email at: purchasing@surrey.ca.

PDF emailed Quotations are preferred and the City will confirm receipt of emails. Note that the maximum file size the City can receive is 10Mb. If sending large email attachments, Contractors should phone to confirm receipt. A Contractor bears all risk that the City's equipment functions properly so that the City receives the Quotation.

(b) Hard Copy

If the Contractor chooses NOT to submit by email, the Contractor should submit one original unbound Quotation and two (2) copies (three (3) in total) which should be delivered to the City at the office of:

Name: Richard D. Oppelt
Purchasing Manager
at the following location:

Address: Surrey City Hall
Finance & Technology Department – Purchasing Section
Reception Counter 5th Floor West
13450 – 104th Avenue, Surrey, B.C., Canada, V3T 1V8

3. DATE

The City would prefer to receive Quotations on or before **May 27, 2016**. The City's office hours are 8:30 a.m. to 4:00 p.m., Monday to Friday, except statutory holidays.

4. INQUIRIES

All inquiries related to this Request for Quotations ("RFQ") should be directed in writing to:

Name: Richard D. Oppelt, Purchasing Manager
Email: purchasing@surrey.ca
Reference: 1220-040-2016-041

5. ADDENDA

If the City determines that an amendment is required to this RFQ, the City's Representative will issue a written addendum by posting it on the BC Bid Website at www.bcbid.gov.bc.ca (the "BC Bid Website") and the City Website at www.surrey.ca (the "City Website") that will form a part of this RFQ. It is the responsibility of Contractor to check the BC Bid Website and the City Website for addenda. The only way this RFQ may be added to, or amended in any way, is by a formal written addendum. No other communication, whether written or oral, from any person will affect or modify the terms of this RFP or may be relied upon by any Contractor. By delivery of a Quotation, the Contractor is deemed to have received, accepted and understood the entire RFQ, including any and all addenda.

6. NO CONTRACT

This RFQ is simply an invitation for quotations (including prices and terms) for the convenience of all parties. It is not a tender and no obligations of any kind will arise from this RFQ or the submission of Quotations. The City may negotiate changes to any terms of a Quotation, including terms in Schedule A, Schedule B and Schedule C and including prices, and may negotiate with one or more Contractors or may at any time invite or permit the submission of quotations (including prices and terms) from other parties who have not submitted Quotations.

7. ACCEPTANCE

A Quotation will be an offer to the City which the City may accept at any time by signing the copy of the Quotation and delivering it to the Contractor. A Quotation is not accepted by the City unless and until both the authorized signatory and the purchasing representative have signed the Contract on behalf of the City. Delivery of the signed Quotation by the City may be by pdf email. In that event, the resulting Contract will be comprised of the documents included in the definition of Contract in Schedule B – Draft Contract – Minor Works.

8. CONTRACTOR'S EXPENSES

Contractors are solely responsible for their own expenses in preparing and submitting Quotations, and for any meetings, negotiations or discussions with the City or its representatives and consultants, relating to or arising from the RFQ. The City will not be liable to any Contractor for any claims, whether for costs, expenses, losses or damages, or loss of anticipated profits, incurred by the Contractor in preparing and submitting a Quotation, or participating in negotiations for a contract, or other activity related to or arising out of this RFQ.

9. CONTRACTOR'S QUALIFICATIONS

By submitting a Quotation, a Contractor represents that it has the expertise, qualifications, resources, and relevant experience with the requirements of the Work. Tradesmen engaged in the performance of the Work shall be qualified in accordance with the requirements of the *Tradesman Qualification Act* and all pertinent licensing requirements required by the Ministry of Municipal Affairs.

10. CONFLICT OF INTEREST

A Contractor must disclose in its Quotation any actual or potential conflicts of interest and existing business relationships it may have with the City, its elected or appointed officials or employees. The City may rely on such disclosure.

11. SOLICITATION OF COUNCIL MEMBERS, CITY STAFF AND CITY CONSULTANTS

Contractors and their agents will not contact any member of the City Council, City staff or City consultants with respect to this RFQ, other than the contact person named in Section 4, at any time prior to the award of a contract or the cancellation of this RFQ.

12. CONFIDENTIALITY

All Quotations become the property of the City and will not be returned to the Contractor. All Quotations will be held in confidence by the City unless otherwise required by law. Contractors should be aware the City is a "public body" defined by and subject to the Freedom of Information and Protection of Privacy Act of British Columbia.

13. SIGNATURE

The legal name of the person or firm submitting the Quotation should be inserted in the Quotation. The Quotation should be signed by a person authorized to sign on behalf of the Contractor and include the following:

- (a) If the Contractor is a corporation then the full name of the corporation should be included, together with the names of authorized signatories. The Quotation should be executed by all of the authorized signatories or by one or more of them provided that a copy of the corporate resolution authorizing those persons to execute the Quotation on behalf of the corporation is submitted;
- (b) If the Contractor is a partnership or joint venture then the name of the partnership or joint venture and the name of each partner or joint venturer should be included, and each partner or joint venturer should sign personally (or, if one or more person(s) have signing authority for the partnership or joint venture, the partnership or joint venture should provide evidence to the satisfaction of the City that the person(s) signing have signing authority for the partnership or joint venture). If a partner or joint venturer is a corporation then such corporation should sign as indicated in subsection (a) above; or
- (c) If the Contractor is an individual, including a sole proprietorship, the name of the individual should be included.

14. INFORMATION MEETING

An information meeting will be hosted by the City Representative to discuss the City's requirements under this RFQ (the "Information Meeting"). While attendance is at the discretion of Contractors, Contractors who do not attend will be deemed to have attended the Information Meeting and to have received all of the information given at the Information Meeting.

At the time of issuance of this RFQ a meeting has been scheduled as follows:

Date: May 18, 2016

Time: 10:00 a.m.

Location: Newton Cultural Centre
13520 – 72 Avenue, Surrey, BC, V3W 2P1 (Lobby/Entrance)

Contractors are to examine the site prior to submitting a Quotation to fully acquaint themselves with all existing conditions reasonably inferable from examination of the site and its surroundings and the RFQ and to make allowance for such conditions in the Quotation. By submitting a Quotation, a Contractor represents that it has examined the site fully as to all conditions, contingencies, risks and circumstances, local or otherwise, which might influence or affect the performance or the cost of the work, including but not limited to: location of the work, location of buildings on the site, adjacent properties, Contractor occupancy during the work, access and all other conditions that a competent Contractor experienced in work similar to the work would consider and take into account, and is further deemed to have included in the contract price all costs occasioned thereby.

15. PROPRIETARY NAMES

Proprietary Names - Use of manufacturers' names or proprietary names in the Contract Documents is solely for the purpose of describing the article, indicating an acceptable standard of quality, or identifying required compatibility with other equipment.

Products - Contractors who wish to substitute equivalent or superior products instead of specified products should submit a request in writing to the City preferably seven working days prior to the date for submissions. Approval of substitute products will be made only by addendum.

SCHEDULE A – SCOPE OF WORK AND DRAWINGS

PROJECT TITLE: **Newton Cultural Centre Roof Replacement**

PROJECT No.: **1220-040-2016-041.**

1. DESCRIPTION OF SCOPE OF WORK

To provide all labour, supervision, materials, plant, equipment, layout, survey, permits, and inspections, and related services for Newton Cultural Centre Roof Replacement. Furnish certificates confirming work conforms to requirements of Authorities having jurisdiction.

Job site location is Newton Cultural Centre, 13520 – 72 Avenue, Surrey, B.C., V3W 2P1

The general components of the work include roof replacement and related works but not limited to the following:

- replacement of roof and related works;
- removal and disposal of existing roofing materials, flashings, etc. to the existing deck and or walls as required to facilitate the written Specifications, Roof Plans and Details enclosed;
- provision of all labour, materials and equipment deemed necessary to install new wood, roof system, sheet metal flashings and components, etc., as required by the written Specifications; and
- supply and install new roofing system as required.

The detailed scope of work is as described on the Contract Drawings (listed below), Special Provisions (Schedule B – Appendix 1), and Supplementary Specifications (Project) (Schedule B- Appendix 2).

The lack of and/or omission of detailed specifications does not minimize the acceptable levels of service and only the best commercial practices are acceptable.

Contractor to comply with all BC Plumbing Code, BC Fire Marshal, BC Workers' Compensation Board, National Building Code of Canada, BC Boiler Inspector, BC Electrical Inspector, National Fire Protection Association, and any other authorities having local jurisdiction. Failure to abide by these rules and regulations will result in being immediately escorted from the work site.

2. CONTRACT DRAWINGS (e.g. Architectural; Mechanical; Electrical and Structural)

The following drawings are included as part of this RFQ.

DRAWING NUMBER SPECIFICATION	DRAWING INDEX/TITLE	DATE OF ISSUE
Consultant: IRC Building Sciences Group		
R1	Roof Plan	Apr.18, 2016
S1	New Sleeper Plan & Detail	Apr.18, 2016
VCMM712	Wood Curb Detail	-
VCMM720	Wood Curb Detail	-
VGMM023	Roof Edge Detail	-
VGMM024	Roof Edge Detail	-
VGMM025	Roof Edge Detail	-
VGMM026	Roof Edge Detail	-
VRMM544	Window Sill Detail	-
VRMM545	Chimney Reglet Detail	-
VSMM554	Plumbing Stack Detail	-

**SCHEDULE B
SAMPLE – CONSTRUCTION CONTRACT**

Title: Newton Cultural Centre Roof Replacement

AGREEMENT No.: 1220-040-2016-041

THIS AGREEMENT dated the _____ day of _____, 201__.

BETWEEN:

CITY OF SURREY
13450 – 104 Avenue
Surrey, B.C., Canada, V3T 4V8

(the "**City**")

OF THE FIRST PART

AND:

(Full legal name and address of Contractor)

(the "**Contractor**")

OF THE SECOND PART

WHEREAS the Contractor wishes to undertake the following project for the benefit of the City:

Newton Cultural Centre Roof Replacement

NOW THEREFORE THIS CONTRACT WITNESSETH that in consideration of the premises and payment of One (\$1.00) Dollar and other good and valuable consideration paid by each of the parties to each other (the receipt and sufficiency of which each party hereby acknowledges), the parties hereby covenant and agree with each other as follows:

1. DEFINITIONS

1.1 For the purposes of this Contract, the following terms shall have the meanings set forth below:

- (a) "Certification of Completion" means a certificate issued indicating that Substantial Performance of the Work has been achieved;

- (b) "Certificate of Total Performance" means a certificate issued indicating that the Work has been achieved;
- (c) "Change" means:
 - (i) an addition to the Work that is both of a type and character similar to the Work as defined in the Contract Documents; or
 - (ii) a deletion of the Work indicated in the Contract Documents; or
 - (iii) an alteration of the Work indicated in the Contract Documents, within the general scope of the Work as described in the Contract Documents;
- (d) "Change Order" means a written approval setting out a description of the Work covered by the Change, the price or method of valuation for the Work, the change in the Contract Price and adjustment, if any, to the Contract Time;
- (e) "City" means the City of Surrey;
- (f) "Consultant" is the person or entity engaged by the City and identified as such in the Contract;
- (g) "Contract Administrator" is the person or entity engaged by the City and identified as such in the Contract;
- (h) "Construction Schedule" means a construction schedule indicating the planned start and completion dates of the major activities of the Work as set out in Appendix 4;
- (i) "Contract" means this Contract as set out and described in the Contract Documents;
- (j) "Contract Documents" means this Contract including all schedules and appendices, construction standards, specifications and drawings;
- (k) "Contract Price" means the price of the Work as set out Section 4.1 of this Contract;
- (l) "Contract Time" means the period of time for the completion of the Work as provided by the Contract Documents;
- (m) "Contractor" means the person, firm or corporation identified as such in this Contract and includes the Contractor's authorized representative as designated to the City in writing;
- (n) "Contractor's Representative" means the person appointed by the Contractor to represent the Contractor for the purposes of this Contract and so notified to the City in writing;
- (o) "Drawings" means the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details and diagrams;
- (p) "Extra Work" means additional Work that the City may wish performed that is Extra Work and not a Change. Extra Work may be declined by the Contractor or may, upon agreement between the parties, be undertaken as Extra Work;

- (q) "Payment Certifier" is the person or entity identified as such in the Contract responsible for the issuance of certificates of payment;
- (r) "Place of Work" means the designated site or location where the Work products are to be finally or permanently constructed or installed;
- (s) "Project Manager" is the person or entity engaged by the City and identified as such in the Contract;
- (t) "Substantial Performance" means the Work, or a substantial part of it, is ready for use or is being used for the purpose intended;
- (u) "Total Performance" means the date of the City's acceptance of the Work in writing as fully performed according to the Contract Documents; and
- (v) "Work" means and includes anything and everything required to be done for the fulfillment and completion of this Contract.

2. THE WORK

- 2.1 The Contractor will perform all Work and provide all labour, equipment and material and do all things strictly as required by the Contract Documents, including without limitation the scope of work and drawings specified in Appendix 2 and Appendix 2-A.
- 2.2 The Contractor will commence the Work on or before <<insert date here>>. The Contractor will proceed with the Work diligently, will perform the Work generally in accordance with the Construction Schedule as set out in Appendix 4 as required by the Contract Documents and will achieve Substantial Performance of the Work on or before <<insert date here>>. subject to the provisions of the Contract Documents for adjustments to the Contract Time.
- 2.3 Time shall be of the essence of the Contract.

3. CONTRACT DOCUMENTS

- 3.1 All of the Contract Documents shall constitute the entire Contract between the City and the Contractor.
- 3.2 The Contract supersedes all prior negotiations, representations or agreements, whether written or oral, and the Contract may be amended only in strict accordance with the provisions of the Contract Documents.
- 3.3 If there is any inconsistency or conflict between the provisions of the Contract Documents, then the Contract Documents shall govern and take precedence in the following order with this Contract taking precedence over all other Contract Documents:
 - (a) Contract;
 - (b) Addenda (if any);
 - (c) Departmental Construction Standards (if any);
 - (d) Specifications;
 - (e) Drawings; and
 - (f) all other Contract Documents.

4. CONTRACT PRICE

- 4.1 The Contract Price for the Work shall be the sum of <<insert figures here>> dollars, plus goods and services tax in the amount of <<insert figures here>> dollars, for a total Contract Price of <<insert figures here>> dollars in Canadian funds (the "Contract Price") plus any adjustments approved by the City, including any payments owing on account of Change Orders and agreed to Extra Work, approved in accordance with the provisions of the Contract Documents.
- 4.2 The Contract Price shall be the entire compensation due to the Contractor for the Work and this compensation shall cover and include all profit and all costs of supervision, labour, material, equipment, overhead, financing, and all other costs and expenses whatsoever incurred in performing the Work. The Contract Price is a firm fixed price.

5. HOLDBACKS

- 5.1 The City shall hold back 10%, or other percentage as required by the *Builders Lien Act*, S.BC 1997, c. 45, as amended (the "*Builders Lien Act*"), of any amounts due to the Contractor as a builders lien holdback.
- 5.2 In addition to other holdbacks as provided by the Contract Documents, when considering Substantial Performance, the City may hold back from payments otherwise due to the Contractor 200% of a reasonable estimate, as determined by the City's Representative, on account of deficient or Defective Work already paid for. This holdback may be held, without interest, until such deficiency or defect is remedied. The items of defect or deficiency and the amounts of related holdback shall be listed separately on the invoice.
- 5.3 If after Substantial Performance is achieved the Contractor is unable to complete any of the Work because of climatic or other conditions beyond the Contractor's reasonable control, then the City may hold back from payments otherwise due to the Contractor the amount as estimated by the City's Representative in consultation with the Contractor by which the cost to have others complete the Work exceeds the estimated Contract Price for such Work.
- 5.4 The City may, in addition to other holdbacks as provided by the Contract Documents, hold back an amount equal to any lien which has been filed with respect to the Work, plus 15% as security for costs. The City may, at its option, after five (5) days written notice to the Contractor, pay such amount into court to discharge the lien. If the lien is discharged without payment of the holdback into court, then the City shall pay such holdback to the Contractor, without interest.
- 5.5 **Holdback period of 55 days will follow the date of substantial performance.** The City will perform a court registry search on the 46th day, on a best effort basis.

6. INVOICING AND PAYMENT

- 6.1 Subject to applicable legislation, including without limitation the holdbacks referred to in above, and the provisions of the Contract Documents, the City shall make payments to the Contractor thirty (30) days after receipt of any invoice from the Contractor.

- 6.2 The Contractor shall submit invoice(s) for payment to the City, based on the completion of each phase of the Work. Any and all Extra Work as approved by the City, must be clearly identified and quantified on a separate invoice(s).
- 6.3 The invoice(s) submitted for the completion of each project phase shall be clearly itemized to the details of the phase completed or the amount of Work performed, the billing rates, show an invoice number, contractor's name, address, telephone number, reference the City's purchase order number or name and location of employee, and in an itemized manner the amount due for each phase completed, tax (if any) and a grand total. The grand total will be subject to holdbacks.
- 6.4 The payment by the City of any monthly or other payment shall not bind the City with respect to any subsequent payment or the final progress payment, but shall be taken as approximate only, and shall not mean, or be construed to mean, that the City has accepted Work that is not in accordance with the requirements of the Contract Documents, or that the Contractor is in any manner released from its obligation to comply with the Contract Documents.
- 6.5 For earlier payment, the Contractor can offer a cash discount. All payment cheques are mailed.

Invoices will be submitted by the Contractor by mail to:

Name: <<state who is authorized to approve invoices for payment>>
Address: <<state location where invoices are to be delivered>>

7. PERFORMANCE OF THE WORK

- 7.1 The Contractor will perform and provide all labour, services and other acts, and provide all equipment, machinery, water, heat, power, and facilities required for performance of the Work.
- 7.2 The Contractor will not proceed with any work that is not part of the Work, except in accordance with the Contract.
- 7.3 The Contractor will apply for and pay for all necessary permits and licenses and pay all fees required for the performance of the Work.

8. CHANGES

- 8.1 The City may, without invalidating the Contract, change the Work by adding to or deducting from the Work in which event the Construction Schedule will be adjusted.
- 8.2 The Contractor will not proceed with any Change without a written Change Order signed by the City.
- 8.3 The Contractor's overhead and profit will not be allowed on Change Orders paid for from allowances specified in the contract.
- 8.4 The value of a change in the Work shall be determined by one or more of the following methods as selected by the Consultant in consultation with the City.
(a) by estimate and acceptance in a lump sum;

- (b) by unit prices set out in the Contract or subsequently agreed upon;
- (c) by actual cost and an allowance for overhead and profit as follows:
 - (1) Contractor's overhead and profit on expenditures from allowances, including Extra Work paid for from the contingency allowance, shall be included in the Contract Price.
 - (2) For changes in the Work not covered by a contingency allowance, the Contractor's overhead and profit shall be a maximum of ten percent (10%) of the actual cost of Work performed directly by the Contractor for a Change or part thereof.
 - (3) The Contractor will be entitled to charge a mark-up for overhead and profit equal to a maximum of five percent (5%) of the actual cost of work performed directly by a subcontractor a change or part thereof, provided, however, that where the subcontractor is a wholly owned subsidiary of the Contractor no mark-up for overhead and profit whatsoever shall be charged by the Contractor or paid by the City.
 - (4) The subcontractor's allowance for overhead and profit for a change shall be limited to a maximum of five percent (5%) of the actual cost of the Work performed by the subcontractor.
 - (5) Where the change involves the substitution of one type of product for another the actual cost of the Change, whether credit or extra, shall be the net difference in the actual cost.
 - (6) For avoidance of doubt, the Contractor's hourly labour rates stated in **Appendix [], a future Appendix** will be applicable to changes in Work without any mark-up.

9. SITE CONDITIONS

9.1 The Contractor acknowledges and agrees that:

- (a) it has had the opportunity to undertake additional examinations or subsurface investigations, or both, of the Place of Work, including any buildings or structures involved with the Work, in order to satisfy itself as to site conditions, including subsurface conditions and the impact they could have on the Work and the Contract; and
- (b) it is not entitled to any adjustment in the Contract, or to any other remuneration or damages whatsoever, in any way connected with the site conditions at the Place of Work, including subsurface conditions.

10. DOCUMENTS

10.1 The Contractor will keep one copy of the Contract, including the schedules and all drawings, specifications and shop drawings, at the Place of Work in good order and available for review by the City's Representative, and deliver a complete set to the City upon Substantial Performance of the Work.

10.2 The Contractor agrees that the City is hereby granted an unconditional and irrevocable perpetual license to reproduce and use, in whole or in part, and for any purpose or other project or work the City desires, all matters contained in or set out in the Contract including all drawings and specifications and all models furnished by the Contractor, and the Contractor agrees that the license granted by this section comprises the copyright, industrial design, trademark and all other intellectual property therein.

11. TIME

- 11.1 The Contractor will proceed diligently and complete the Work in a good and workmanlike manner and strictly in accordance with the Construction Schedule.
- 11.2 If the Contractor is delayed in the performance of the Work by any act or neglect of the City, the Construction Schedule will be extended for such time as may be agreed by the City and the Contractor, acting reasonably.
- 11.3 The Contractor will, as required by the City, provide or up-date the Construction Schedule, showing the anticipated start and completion dates and durations of the major elements of the Work. Failure or refusal to provide a Construction Schedule or up-date will be a default.
- 11.4 Time is of the essence of the Contract.

12. TAXES AND DUTIES

- 12.1 The Contractor will pay all taxes, custom duties and other charges relating to the Work, and the supply and installation of all materials and equipment included in the Work.
- 12.2 Where an exemption of taxes, custom duties or other charges is applicable to the Contract by way of the Contractor filing claims for, or cooperating fully with the City and the proper authorities in seeking to obtain such refunds, the Contractor will make such applications and provide such cooperation. Refunds that are properly due to the City and have been recovered by the Contractor will be promptly refunded to the City.

13. BUILDER'S LIENS

- 13.1 The Contractor will immediately take steps to keep the Place of Work free of any builder's liens and certificates of pending litigation and the Contractor will defend and indemnify the City from any builder's lien or certificate of pending litigation filed as a result of the Work. The Contractor will pay all costs and expenses including actual legal costs incurred by the City as a result of any builder's lien or certificate of pending litigation related to the Work.

14. CITY DIRECTIONS

- 14.1 The Contractor will in all respects complete the Work in accordance with the City's requirements and standards and to the satisfaction of the City.
- 14.2 The City's Representative may at any time and from time to time inspect the Work.
- 14.3 The Contractor will comply with all directions from the City relating to the coordination of the Work with the activities of the City or with other contractors hired by the City, should there be any.
- 14.4 The Contractor will have total control of the Work and will be solely responsible for ensuring the Work is in accordance with the requirements of the Contract.

15. INSPECTIONS

- 15.1 The Contractor will retain one or more independent contractors with the relevant professional education, skill and experience, to carry out and report upon all testing and other inspection activities necessary to confirm the Work is in accordance with the requirements of the Contract. The Contractor will promptly provide copies of such reports to the City's Representative.
- 15.2 If Work is designated for tests, inspections or approvals by authorized agencies, the Contractor will give the City's Representative reasonable notice of when the Work will be ready for review and inspection.

16. USE OF PLACE OF WORK

- 16.1 The Contractor will confine its tools, machinery, equipment and materials to limits as may be established by the City's Representative, acting reasonably.
- 16.2 The Contractor will maintain the Place of Work in a tidy condition and free from the accumulation of waste products and debris, other than that caused by the City, other contractors or their employees.
- 16.3 Prior to application for the Certificate of Total Performance, the Contractor will remove all surplus products, tools, machinery and equipment, and any waste and debris, and leave the Place of Work clean and suitable for occupancy by the City.
- 16.4 The Contractor will not have exclusive use of the Place of Work, and will undertake the Work in cooperation with the City, and other users of the Place of Work as the City may permit or direct.
- 16.5 The Contractor will protect the property adjacent to the Place of Work from damage and will hold the City harmless from any claims which may arise as a result of the Contractor's operations under the Contract, or from failure to provide such protection, or both.
- 16.6 The Contractor will protect the Work, the Place of Work, the City's property from damage and will be responsible for any damage which may arise as a result of operations under the Contract, except damage which occurs as a result of actions of the City.
- 16.7 Should any damage occur to the Work, the Place of Work, or the City's property, or all of the aforementioned, for which the Contractor is responsible, the Contractor will:
- (a) make good such damage to the Work, and
 - (b) if the City so directs, make good such damage to the City's property,
- and the Construction Schedule will be extended for such time as may be agreed by the City and the Contractor, acting reasonably.
- 16.8 The City may take possession of and use any completed portion of the Work regardless of the time for completion of the Work. Such possession or use will not be construed as final acceptance of the Work or portion.

17. SUPERVISION

- 17.1 The Contractor will provide competent supervision as is necessary to perform the Work.

18. CODES AND REGULATIONS

- 18.1 The Contractor will perform the Work in full compliance with all applicable federal, provincial and municipal enactments, codes and regulations.

19. CONTRACTOR'S WARRANTY

- 19.1 The Contractor represents, warrants and guarantees to the City that:
- (a) the Work will, in all respects, be constructed in a good and workmanlike manner;
 - (b) the Work will be constructed in accordance with all applicable laws in effect at the date of the Contract and in accordance with the best current and prevailing industry practices;
 - (c) the Work will be supplied, procured, fabricated, installed, constructed and completed in accordance with all requirements of the Contract;
 - (d) all Work will be free from defects or deficiencies arising from faulty construction, faulty material, faulty equipment, faulty installation or faulty workmanship;
 - (e) the Work as constructed will be fit for the purpose intended;
 - (f) title to all Work and all parts thereof shall be free and clear of all liens, charges, encumbrances and adverse claims whatsoever; and
 - (g) no part of the Work shall constitute an infringement of any patent, trade mark, copyright or other proprietary interest.
- 19.2 The Contractor agrees to correct any deficiency in the Work arising from faulty construction, faulty material, faulty equipment, faulty installation or faulty workmanship, which appear:
- (a) in the case of any roof, in the period of five (5) years after Substantial Performance of the Work;
 - (b) for other Work, excluding Work covered by a warranty greater than twelve (12) months, in the period of twelve (12) months after the date of Substantial Performance of the Work; and
 - (c) for other Work in the period of any warranties.
- 19.3 The Contractor shall undertake all repairs or replacements at times that will minimize interference with the City's operations.
- 19.4 Nothing contained herein limits the rights of the City in relation to recovery for latent deficiencies in the Work or otherwise limits the rights of the City at law or in equity.
- 19.5 The Contractor shall not be relieved of its warranty obligations by reason of inspection, testing or acceptance of the Work or any portion thereof, or the issuance of a Certification of Completion, or a Certificate of Total Performance, or payment to the Contractor of any money under the Contract.
- ## **20. WAIVERS**
- 20.1 The Contractor's application for the Certification of Completion shall constitute a waiver and release by the Contractor of any and all claims arising out of or relating to the Contract to the date of Substantial Performance. This waiver shall include without limitation those that

might arise from the negligence or breach of contract by the City, the City's Representative and their respective employees, agents, officers and contractors, but does not include claims made by the Contractor in writing prior to such application in accordance with the provisions of the Contract Documents and delivered to the City's Representative prior to date of Substantial Performance and still unsettled.

- 20.2 The Contractor's application for the Certificate of Total Performance shall constitute a waiver and release by the Contractor of any and all claims arising out of or relating to the Contract that have arisen between the date of Substantial Performance and the date of the Certificate of Total Performance. This waiver shall include those that might arise from the negligence or breach of contract by the City, the City's Representative, and their respective employees, agents, officers and contractors, but does not include claims by the Contractor in writing prior to such application in accordance with the provisions of the Contract Documents and delivered to the City's Representative and still unsettled.

21. SUBSTANTIAL PERFORMANCE

- 21.1 The City or its Consultant will, after receipt of a written application from the Contractor for a Certification of Completion, make an inspection and assessment of the Work and issue a Certification of Completion or if the City decides that Substantial Performance has not been achieved, consult with the Contractor and advise the Contractor of the Work required to achieve Substantial Performance.

- 21.2 Prior to making application for Substantial Performance of the Work, the Contractor shall submit to the Consultant or Owner the following:

- (a) letters of assurance for professional design and review from those professionals engaged by the Contractor under the provisions of the Contract, including applicable sealed shop drawings;
- (b) all required manufacturer's inspections, certifications, guarantees, warranties as specified in the Contract Documents;
- (c) all maintenance manuals, operating instructions, maintenance and operating tools, replacement parts or materials as specified in the Contract Documents;
- (d) certificates issued by all permit issuing authorities indicating approval of all installations, work and improvements requiring permits;
- (e) certificates issued by all testing, commissioning, cleaning, inspection authorities and associations as applicable or specified in the Contract Documents; and
- (f) all required record Drawings and as built and as-installed documents in the form specified in the Contract Documents, including the as-built Drawings.

If it is impracticable, with reasonable diligence and attention, for the Contractor to have obtained one or more of the items listed above prior to making application for Substantial Performance of the Work, then delivery of such items may be deferred until the date that is 30 days following Substantial Performance of the Work.

- 21.3 Together with its request or application for the Certificate of Completion of the Work, the Contractor shall provide to the Consultant and the Owner the following:
- (a) a sworn declaration in a form acceptable to the City Representative that all amounts relating to the Work, due and owing as of the end of the month covered by the invoice to third parties including all subcontractors and suppliers, have been paid;

- (b) a current clearance letter from Workers' Compensation Board confirming that the Contractor is in good standing with and that all required remittances and assessments have been made to the Workers' Compensation Board;
 - (c) a statement compiling and reconciling all Change Orders and Change Directives; and
 - (d) any other documents to be submitted by the Contractor as specified in the Contract Documents or reasonably required by the Consultant or the Owner.
- 21.4 The City shall pay any builder's lien holdback as required by the *Builders Lien Act*, or on such other date as required by law, but the City may hold back the amounts for any deficiencies or filed builder's liens.
- 21.5 The contract administrator - IRC Building Sciences Group shall be the payment certifier responsible for payment certification for the Contractor under the *Builders Lien Act*. The Contractor shall be the person responsible for payment certification for all subcontractors, including the subcontractors, as required under the *Builders Lien Act*.

22. TOTAL PERFORMANCE

- 22.1 Before applying for a Certificate of Total Performance, the Contractor will provide to the City the following:
- (a) complete sets of digital drawings and specifications, in reproducible form, showing the as-built Work;
 - (b) complete sets of maintenance manuals for any and all equipment comprised in the Work; and
 - (c) the results of quality control testing by the Contractor.
- 22.2 The Contractor may apply for a Certificate of Total Performance and the procedure and requirements for the issuance of the Certificate of Total Performance shall include the provision by the Contractor of the sworn declaration and Workers' Compensation Board compliance documentation.

23. WORKERS' COMPENSATION BOARD AND OCCUPATIONAL HEALTH AND SAFETY

- 23.1 The Contractor agrees that it shall, at its own expense, procure and carry, or cause to be procured, carried and paid for, full Workers' Compensation Board coverage for itself and all workers, employees, servants and others engaged in or upon any work or service which is the subject of this Contract. The Contractor agrees that the City has the unfettered right to set off the amount of the unpaid premiums and assessments for the Workers' Compensation Board coverage against any monies owing by the City to the Contractor. The City shall have the right to withhold payment under this Contract until the Workers' Compensation Board premiums, assessments or penalties in respect of the Work done or service performed in fulfilling this Contract have been paid in full.
- 23.2 The Contractor shall provide the City with the Contractor's Workers' Compensation Board registration number and a letter from the Workers' Compensation Board confirming that the Contractor is registered in good standing with the Workers' Compensation Board and that all assessments have been paid to the date thereof prior to the City having any obligations to pay monies under this Contract.

- 23.3 Without limiting the generality of any other indemnities granted by the Contractor in this Contract, the Contractor shall indemnify and hold harmless the City, its elected and appointed officials, employees and agents, from all manner of claims, demands, costs, losses, penalties and proceedings (including all actual legal costs) arising out of or in any way related to unpaid Workers' Compensation Board assessments owing from any person or corporation engaged in the performance of this Contract or arising out of or in any way related to the failure to observe safety rules, regulations and practices of the Workers' Compensation Board, including penalties levied by the Workers' Compensation Board.
- 23.4 The Contractor agrees that it is the prime contractor for the Work as defined in the *Workers Compensation Act*, R.S.B.C. 1996, c. 492 as amended and will ensure compliance with the *Workers Compensation Act* and Regulations in respect of the workplace. Without limiting its responsibilities under the legislation, the Contractor will coordinate the activities of employers, workers and other persons at the workplace relating to occupational health and safety. The Contractor shall have a safety program acceptable to the Workers' Compensation Board, shall provide first aid services, and shall ensure that all Workers' Compensation Board safety rules and regulations are observed during the performance of this Contract, not only by the Contractor, but by all sub-contractors, workers, material personnel and others engaged by the Contractor in the performance of this Contract. The Prime Contractor shall appoint a qualified coordinator for the purpose of ensuring the coordination of health and safety activities for the workplace. Prior to commencement of Construction, the Contractor shall complete and file a "Construction Notice of Project" with the Workers' Compensation Board and shall provide a copy of the same to the City confirming that the Contractor shall be the prime contractor responsible for coordination of safety and health under Part 3 of the *Workers' Compensation Act* and Part 20 of the WCB Occupational Health and Safety Regulations. That person will be the person so identified in this Contract, and the Contractor will advise the City immediately in writing if the name or contact number of the qualified coordinator changes.
- 23.5 The Contractor will ensure compliance with and conform to all health and safety laws, by-laws or regulations of the Province of British Columbia, including without limitation any regulations requiring installation or adoption of safety devices or appliances.
- 23.6 The Contractor shall fulfill all its duties, obligations, and responsibilities in such a manner that it ensures the safety of the public and in accordance with the safety regulations of the Workers' Compensation Board and shall install signs and barriers as required to ensure the safety of the public and of its employees in the use of the City facilities.
- 23.7 The Contractor understands and undertakes to comply with all the Workers' Compensation Board Occupational Health and Safety Regulations for hazardous materials and substances, and in particular with the "Workplace Hazardous Materials Information System (WHMIS)" Regulations. All "Material Safety Data Sheets (MSDS)" shall be shipped along with the goods, materials, products and any future MSDS updates shall be forwarded.

24. INSURANCE

- 24.1 The Contractor will obtain and carry, in forms and with insurers satisfactory to the City:
- (a) commercial general liability insurance in a wrap up form with a limit of five million (\$5,000,000) dollars inclusive per occurrence for bodily injury, death and damage to property;

- (b) the insurance shall include the Contractor, the City, the project manager, all contractors, subcontractors, suppliers and tradesmen contributing to the Work;
- (c) the insurance shall preclude subrogation claims by the insurer against anyone insured hereunder;
- (d) the insurance shall include coverage for:
 - broad form products and completed operations,
 - City's and contractor's protective liability,
 - contractor's contingent liability,
 - blanket written contractual,
 - contingent employer's liability,
 - personal injury liability,
 - non-owned automobile,
 - cross liability,
 - employees as additional insured's, and
 - broad form property damage;

and where such further risk exists:

- shoring, blasting, excavating, underpinning, demolition, removal, pile-driving and caisson work, work below ground surface, tunnelling and grading, as applicable, and
- operation of attached machinery.
- (e) product and completed operations liability insurance, to remain in full force and effect for a period of not less than twelve (12) months following completion of the Work;
- (f) course of construction insurance against "all risks" of physical loss or damage, and shall extend to cover all materials, property, structures and equipment while in transit or storage and during construction, erection, installation and testing, but such insurance shall not include coverage for the Contractor's equipment of any description. Such insurance shall be maintained until Substantial Performance of the Work;
- (g) Automobile Liability insurance on all vehicles owned, operated or licensed in the name of the Contractor in an amount not less than less three million (\$3,000,000 dollars);
 - (i) the insurance shall include as an insured, each contractor and subcontractor, project manager, architect and engineer who is engaged in the Work; and
 - (ii) the insurance will contain a waiver of the insurer's rights of subrogation against all insured except where a loss is deemed to have been caused by or resulting from any error in design or any other professional error or omission.

24.2 The Contractor will provide proof of the required insurance coverage prior to commencing the Work. Such proof will be in the form of a City of Surrey certificate of insurance.

24.3 The Contractor acknowledges that any requirement or advice by the City as to the amount of coverage under any policy of insurance will not constitute a representation by the City that the amount required is adequate and the Contractor acknowledges and agrees that it is solely responsible for obtaining and maintaining policies of insurance in adequate amounts.

- 24.4 If requested to do so, the Contractor will provide the City with a copy of insurance policies relating to the Work.

25. INDEMNIFICATION

- 25.1 The Contractor shall indemnify and hold harmless the City, its elected officials, its officers, agents and employees (collectively the "Indemnitees") from and against claims, demands, losses, costs, damages, actions, suits or proceedings by third parties that arise out of, or are attributable to, any act or omission or alleged act or omission of the Contractor, the Contractor's agents, employees or subcontractors or suppliers in performance of the Contract.
- 25.2 The City shall indemnify and hold harmless the Contractor, its agents and employees from and against claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of or which are attributable to a lack of or defect in title or an alleged lack of or defect in title to the Place of Work.

26. REJECTED WORK

- 26.1 Work that is defective ("Defective Work"), whether the result of poor design, poor workmanship, use of defective materials or damage through carelessness or other acts, and whether incorporated in the Work or not, which has been rejected by the City as failing to conform to the Contract will be removed promptly by the Contractor and replaced and re-executed promptly and properly at the Contractor's expense.

27. DEFAULT

- 27.1 If the Contractor:
- (a) is adjudged bankrupt, makes a general assignment for the benefit of creditors, or a receiver is appointed on account of its insolvency;
 - (b) fails to supply competent supervision, properly skilled workers or proper materials;
 - (c) fails to make prompt payment to its contractors, suppliers or workers;
 - (d) fails to observe, or breaches the provisions of the Contract;
 - (e) fails to remove and replace Defective Work;
 - (f) abandons the Work; or
 - (g) fails to adhere to the Construction Schedule;

the Contractor is in default of the Contract and the City may give the Contractor written notice to remedy such default. If the Contractor does not commence correction of such default within five (5) business days of receiving such notice and diligently pursue correction of such default, the City may suspend the Work or terminate the Contract, without prejudice to any other right or remedy the City may have.

- 27.2 The parties agree that if the City terminates the Contract under the conditions set out above, the City shall pay the Contractor:
- (a) for all Work performed, plus reimbursement for expenditures made on account of the remaining Work, but shall not pay for profit and overhead on account of the remaining Work or any additional costs incurred because of the termination.

- 27.3 If the City terminates the Contract, the City may:
- (a) take possession of the Work and materials, and utilize the Contractor's machinery and equipment at the Place of Work to the extent third party rights are not impaired, and bring the Work to completion by whatever method the City may deem expedient; and
 - (b) upon completion of the Work, charge the Contractor the full cost of completing the Work, as certified by the City's Representative, including remedying any deficiencies in the Work.

28. CORRECTION BY CITY

- 28.1 In addition to the right of termination, if the Contractor fails to comply with a provision of the Contract, including failure to remove and replace Defective Work, the City may, without prejudice to any other remedy it may have, correct such default and charge the Contractor the full cost of correcting the default.

29. DISPUTE RESOLUTION

- 29.1 The parties will make reasonable efforts to resolve any dispute, claim, or controversy arising out of this agreement or related to this agreement ("Dispute") using the dispute resolution procedures set out in this section.

Negotiation

The parties will make reasonable efforts to resolve any Dispute by amicable negotiations and will provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate negotiations.

Mediation

If all or any portion of a Dispute cannot be resolved by good faith negotiations within 30 days, either party may by notice to the other party refer the matter to mediation. Within 7 days of delivery of the notice, the parties will mutually appoint a mediator. If the parties fail to agree on the appointment of the mediator, then either party may apply to the British Columbia International Commercial Arbitration Centre for appointment of a mediator. The parties will continue to negotiate in good faith to resolve the Dispute with the assistance of the mediator. The place of mediation will be Surrey, British Columbia. Each party will equally bear the costs of the mediator and other out-of-pocket costs, and each party will bear its own costs of participating in the mediation.

Litigation

If within 90 days of the request for mediation the Dispute is not settled, or if the mediator advises that there is no reasonable possibility of the parties reaching a negotiated resolution, then either party may without further notice commence litigation.

30. ASSIGNMENT AND SUBCONTRACTS

- 30.1 The Contractor agrees to preserve and protect the rights of the parties under the Contract with respect to Work to be performed under subcontract and to:

- (a) enter into contracts or written agreements with subcontractors to require them to perform their work in accordance with and subject to the terms and conditions of the Contract Documents; and
 - (b) be as fully responsible to the City for acts and omissions of subcontractors and of persons directly or indirectly employed by them as for acts and omissions of persons directly employed by them. The Contractor agrees that he will incorporate the terms and conditions of the Contract Documents into all subcontract agreements entered into with subcontractors.
- 30.2 The Contractor agrees to employ those subcontractors proposed by in writing and accepted by the City at the signing of the Contract. The Contractor shall not, without the written consent of the City, change a subcontractor who has been engaged in accordance with the Contract.
- 30.3 The City may, for reasonable cause, object to the use of a proposed subcontractor and require the Contractor to employ one of the other subcontract tenderers.
- 30.4 In the event that the City requires a Change from a proposed subcontractor, the Contract Price shall be adjusted by the difference in cost and mark-up occasioned by such required Change.
- 30.5 The Contractor shall not be required to employ as a subcontractor a person or firm to whom he may reasonably object.
- 30.6 The Contractor may, upon reasonable request and at its discretion, provide to a subcontractor information as to the percentage or quantity of the subcontractor's work which has been certified for payment.
- 30.7 Nothing contained in the Contract Documents shall create a contractual relationship between a subcontractor and the City.

31. NOTICES

- 31.1 Any notice, report or other document that either party may be required or may wish to give to the other must be in writing, unless otherwise provided for, and will be deemed to be validly given to and received by the addressee, if delivered personally, on the date of such personal delivery, if delivered by facsimile, on transmission, or it by mail, five calendar days after posting. The addresses for delivery will be as follows:

(a) The City:	City of Surrey – Planning & Development 13450 – 104 Avenue Surrey, B.C., Canada, V3T 1V8
Attention:	Lorne Anuik Project Manager Facilities Maintenance and Operations / Planning & Development
Fax:	604-599-8794
e-mail:	LAAnuik@surrey.ca

(b) The Contractor: [Insert full legal name and address]

Attention: [Insert Contractor contact name]
[Insert title]

Fax: <<Insert>>

e-mail: <<Insert>>

(c) The Contract Administrator / Payment Certifier:

IRC Building Sciences Group
250 – 21900 Westminster Highway
Richmond, B.C., V6V 0A8

Attention: Douglas Wells
Project Manager

Fax: 604-279 9644

e-mail: dwells@ircgroup.com

32. FORCE MAJEURE

32.1 Each party will be excused from performance under this Contract for any period and to the extent that it is prevented from or delayed in performing any obligations pursuant to this Contract, in whole or in part, by any Force Majeure Event. The affected party may invoke this section by promptly notifying the other party in writing of the nature and estimated duration of the suspension of the party's performance. In such event, the affected party will be excused from further performance of obligations so affected for so long as such Force Majeure Event prevails and such party continues to use its best efforts to recommence performance whenever and to whatever extent possible without delay (except that a party is not required by this Section to compromise its position with respect to or settle any labour dispute in order to satisfy its obligations hereunder). For the avoidance of doubt, nothing in this Section will affect the City's right to terminate this Contract for convenience as provided in Section 27.

32.2 For the purposes of this Contract, "Force Majeure Event" will mean the occurrence of an event or circumstance beyond the reasonable control of a party, provided that (i) the non-performing party is without fault in causing or preventing such occurrence and (ii) such occurrence cannot be circumvented through the use of commercially reasonable alternative sources, workaround plans or other means. Force Majeure Events will include acts of federal, provincial, local or foreign governmental authorities or courts, war or insurrection, civil commotion, catastrophic events, including without limitation earthquakes, catastrophic weather conditions, pandemics, fires, floods, storms or other elements of nature or acts of God, and labour disturbances that affect the party claiming force majeure.

33. NON ROAD DIESEL ENGINE EMISSION REGULATION

If you **own**, **operate**, or **hire** diesel powered equipment, Metro Vancouver's Non-Road Diesel Engine Emissions Regulation Bylaw No 1161, 2012 (the Bylaw) may impact your

business. The Bylaw came into force on January 1, 2012 and requires owners or operators to register and label Tier 0 and Tier 1 non-road diesel engines that are 25 horsepower (19kW) or greater in order to operate within Metro Vancouver. Tier 0 engines must have **90 days** of registration purchased by **December 31, 2014** or the engine(s) will be **prohibited from ever operating** in Metro Vancouver. To be fully registered an owner/operator must:

- provide required information (machine/engine/company details),
- pay fees, and
- label machines with Metro Vancouver issued registration number.

The City may, at its discretion, give preference to equipment that meets higher emission standards.

Contact Metro Vancouver staff at 604-451-6655, visit www.metrovancouver.org/nonroaddiesel or email nonroaddiesel@metrovancouver.org for more information about the Bylaw, the rebate program, and for assistance with the registration process.

34. GENERAL

- 34.1 The Contract contains the entire agreement between the City and the Contractor and may not be amended except in writing and signed by both parties.
- 34.2 All schedules and appendices attached to the Contract will be read and construed as forming part of the Contract.
- 34.3 The Contract will be interpreted in accordance with the laws of the Province of British Columbia.
- 34.4 The headings are included in the Contract for convenience only and will not be referred to in interpreting the Contract.
- 34.5 No consent or waiver by either party to or of any breach or default by the other under the Contract will be effective unless in writing, nor will such consent or waiver be relied on as consent to or waiver of any other breach or default of the same or any other obligation.
- 34.6 Each party will, at its own expense, execute and deliver all such further agreements and documents and do such acts and things as may be reasonably required to give effect to the Contract.

IN WITNESS WHEREOF the parties hereto have executed the Contract on the day and year first above written.

CITY OF SURREY

by its authorized signatory(ies):

Insert Name of Person Signing

Insert Name of Person Signing

Insert Title of Person Signing

Insert Title of Person Signing

<<INSERT FULL LEGAL NAME OF CONTRACTOR>>

by its authorized signatory(ies):

Insert Name of Person Signing

Insert Name of Person Signing

Insert Title of Person Signing

Insert Title of Person Signing

SCHEDULE B – APPENDIX 1 SPECIAL PROVISIONS

S.P.1 Definitions

In these Special Provisions, unless the context otherwise requires,

“Section” means section of the Specifications or the Conditions of Contract.

“Item” means item of Fees and Payments – Schedule C – Form of Quotation.

S.P.2 Scope of Work

The Contractor will perform and provide the following services or Work:

(a) Supply of all labour, supervision, materials, plant, equipment, layout, survey, permits, inspections, and other related services to complete the Newton Cultural Centre Roof Replacement as noted in the drawings, complete with specifications. Furnish certificates confirming work conforms to requirements of Authorities having jurisdiction.

The Work will be undertaken at the Place of Work, as follows:

13520 72 Avenue, Surrey, B.C., V3W 2P1

The detailed scope of work is as described on the Contract Drawings (Appendix 2A), Special Provisions (Appendix 1), and Supplementary Specifications (Project) (Appendix 2).

The lack of and/or omission of detailed specifications does not minimize the acceptable levels of service and only the best commercial practices are acceptable.

S.P.3 Contract Time

The Work will be performed and completed according to the Construction Schedule as agreed to by the City, and as amended from time to time. Sufficient workers, materials, equipment, appliances, and services are to be kept on site at all times to maintain the scheduled completion of the Work. It further understood and agreed upon and made part of the Contract that the Work must be begun, performed, and completed in accordance with this schedule by the Contractor and if the Contractor fails to begin, perform without interruption, and complete the Work as required by this Contract, the Contractor may be declared in default of this Contract. If the Work is not substantially complete within the time required in Appendix 4 of this Contract, the Contractor shall pay to the City the following:

- (a) Any expenses or damages which are incurred by the City as a result of the Contractor's failure to complete the work under this Contract within the time specified; and/or
- (b) The sum of \$250.00 for each and every day after the date of Substantial Completion until the date of actual Substantial Completion. If the Work is not finally completed within the time required in the preceding Section 2 of the Contract, the Contractor will pay to the City, the sum of \$100.00 for each and every day after the date of Final Completion until the date of actual Final Completion.

S.P.4 Contract Administrator / Payment Certifier

The Contract Administrator / Payment Certifier is IRC Building Sciences Group, 280 – 21900 Westminster Highway, Richmond, B.C., V6V 0A8, Telephone: 604-295 8070 x 7236 Fax: 604-279 9644 E-mail: dwells@ircgroup.com, represented by: Douglas Wells, Project Manager.

S.P.5 Consultant

The Consultant is IRC Building Sciences Group, 280 – 21900 Westminster Highway, Richmond, B.C., V6V 0A8, Telephone: 604-295 8070 x 7236 Fax: 604-279 9644 E-mail: dwells@ircgroup.com, represented by: Douglas Wells, Project Manager.

S.P.6 Project Manager

The Project Manager is Lorne Anuik, Project Manager, Facilities Maintenance and Operations, Planning & Development, City of Surrey, Telephone: 604-590 7205 Fax: 604-599-8794 E-mail: LAAnuik@surrey.ca.

S.P.7 Coordination

Coordinate your work with all required trade contractors, City forces, suppliers to maximize overall productivity and to facilitate the completion of the project overall. All trades will include for a foreman or senior representative to attend site coordination meetings discussing schedule, safety, crew counts, materials delivery and work conflicts. These meetings are to be schedule at the convenience of the City.

While it is not an all-inclusive list of potential coordination requirements, the following is a list of known activities that the Contractor should be aware when planning for coordination.

Other contractors

The Contractor will be required to coordinate their schedule and work program with the following construction activities, which will be tendered to other contractors by the City and will be construction concurrent with the Contract.

“NONE”

S.P.8 Availability of Place of Work

The Place of Work, is available for the immediate commencement of the Work. The anticipated start date is <<insert date mm/dd/year>>. The Contractor will schedule the Work accordingly.

S.P.9 Quality Assurance

Work covered shall be performed by a single firm experienced in renovation/construction services of a similar nature and scope. Subject to approval of the City, the Contractor may subcontract any work to be performed under this Contract. However, the election to subcontract work shall not relieve the Contractor from responsibility or liability which it has assumed under this Contract and the Contractor shall remain liable to the same extent that

its liability would attach, as if the Work had been performed by the Contractor's own employees.

All materials and hardware to be supplied by the Contractor, which are not specifically described herein, shall be of suitable construction, composition and quality to achieve their intended function.

S.P.10 Job Conditions

The Contractor shall be familiar with the project location and how the existing conditions will affect their work. This is so that no misunderstanding may arise afterwards as to the character or as to the extent of the work to be done; likewise, in order to advise and acquaint themselves with all precautions to be taken in order to avoid injury to person or property of another. No additional compensation will be granted because of any unusual difficulties or City's special requests that may be encountered in the execution of any portion of the work.

S.P.11 Environmental Protection

The Contractor warrants that it will not produce or discharge in any manner or form, directly or indirectly, chemicals or toxic substances into the environment and that all equipment used will not pose a hazard to, or harm or adversely affect anyone coming into contact with it and covenants and agrees to provide the City with an environmental plan (where applicable), acceptable to the City, which plan shall outline the procedures to be followed by the Contractor to prevent the production or discharge of chemicals or toxic substances into the environment and the actions to be taken should the discharge occur.

The Contractor will be responsible to take all necessary measures to comply with the requirements of the Federal and Provincial environmental protection agencies, City by-laws, the *Waste Management Act*, R.S.B.C. 1996, c. 482, as amended and any other applicable acts and regulations in respect to air, earth and water pollutants.

The Contractor will report to the City immediately if any hazardous or toxic materials are found or discovered. Such materials are to be left untouched and the area is to be marked and cordoned off to prevent any access to the workers and the public.

S.P.12 Safety

The Contractor shall be solely responsible for construction safety at the Place of Work as and to the extent required by applicable construction safety legislation, regulations and codes, including *Workers Compensation Act* and applicable regulations, and by good construction practice.

Safety – Fall Protection - The Contractor and any trade contractor shall include for all fall protection equipment and requirements necessary to complete scope of Work in a safe manner and in compliance with the site safety plan, which includes: Fall protection must be worn when working at a height over 6 ft. or as the hazards present necessity.

Safety – On-Site Hazards and Utilities Present – Before commencing any Work at the Place of Work, the Contractor is to make themselves aware of any and all on-site hazards including but not limited to underground and overhead utilities near to the Work area and to

take every precaution necessary to eliminate any risk that may exist. If an on-site hazard exists that is causing or may cause injury to any person(s), the Contractor is to take immediate action to mitigate risk and damage, and then notify the City and the City's consultant (if any).

S.P.13 Traffic Control

At all times during the Work or activities included in this specification, the Contractor shall take full responsibility to ensure that traffic control is carried out in accordance with City Bylaws and the Ministry of Transportation and Highways regulations for work performed on provincial highways and including their right-of ways, as applicable.

The Contractor at his expense, is to provide:

- all necessary signs, materials, barricades, and other warning devices;
- qualified and trained Traffic Control Personnel for traffic flagging services; and,
- in some cases, equipment such as flashing arrow boards, cones, etc.

These are specified in accordance with the Province of British Columbia, Ministry of Transportation & Highways' General Specifications for Highway Jurisdiction, Section 194 (Appendix A), and the Traffic control Manual for Work on Roadways, 1995 and the Traffic Control Manual for Work on Roadways, Field and Office Edition, (1999 Update). Please visit

http://www.th.gov.bc.ca/trafficcontrol/tc_guidelines1.htm for the latest updates.

Additional services to ensure safety may be required at the discretion of the City. The Contractor is to provide such additional services as directed at no extra cost.

S.P.14 Construction Access and Traffic Maintenance

The designated access to and from the construction site must be approved by the City. All construction traffic must use the designated access including heavy equipment, trucks and workers' personal vehicles.

Construction access to the Place of Work areas within existing building for workers and delivery of materials shall be designated by the City. No other existing exits or entrances shall be used by workers for access or for delivery of materials.

The Contractor shall conduct construction operations with minimum interference to adjacent roadways, sidewalks and access facilities in general and shall keep such areas free from materials, debris and equipment at all times. The Contractor shall not close or obstruct existing roadways, sidewalks, parking areas or delivery points and shall not place or store materials or park cars on same.

The Contractor shall cooperate in all ways with the City in all matters concerning necessary interference with normal operation of the Place of Work. Minimizing disruption of normal facility/site operation and vehicular movements at the Place of Work is an essential requirement of the Contract.

The Contractor shall:

- (a) Include project phasing strategies in the Construction Schedule to minimize traffic disruption on the Place of Work
- (b) Provide one (1) week minimum notice to the City, previous to any disruption or alteration of access to the Place of Work. The Contractor shall provide all signs, pylons and flag persons necessary to direct vehicular traffic around work in progress.
- (c) The Contractor shall maintain access to existing fire hydrants and Siamese connections and shall keep entrances and exits to existing and adjacent buildings clear at all times.

S.P.15 Proposed Substitutions

Acceptance of material specifications that are an equal or higher level of quality compared to the material specified will not be unreasonably withheld.

Quotations for equipment substitutions to be made as separate line items and as additive or deductive alternates to the base equipment bid.

Evaluation of the substitutions to be made solely by the City whose decision shall be final.

S.P.16 Manuals

Installation and Operator's manuals must accompany equipment delivered. Electrical, Mechanical, and Plumbing booklets shall be provided to the City, as per the Specifications.

All manual(s) must be furnished prior to payment and delivered to the City. Failure to deliver all manual(s) that are ordered may result in non-payment until all manual(s) are received.

S.P.17 Hours of Work

Refer to the City of Surrey applicable bylaws for acceptable work hours.

No work is to be performed outside of these acceptable work hours without written approval from the City, and with approval by obtaining a noise variance if required.

All work shall conform to local bylaws, including building and parking bylaws and municipal guidelines and regulations. This includes Building Bylaws and Noise Restrictions, which will apply to all work being completed. Where work or the work schedule does not permit compliance with the Bylaws, the Contractor shall request permission from the City for special exemptions from the bylaws. No extra compensation, in any form (e.g. overtime, etc.) will be given without prior written approval from the City.

S.P.18 Damage

The Contractor will be responsible for any and all damages to property or persons and for any losses or costs to repair or remedy the Works as a result of any negligent act or omission, or misconduct in the performance of the Works and its subcontractor's Work and shall indemnify and hold harmless the City, its officers, agents and employees from all suits, claims, actions or damages of any nature whatsoever resulting therefrom unless such loss, damage, injury or loss results from or arises out of the error, omission and/or negligent acts

of the City, or its officers, for subsequent correction of any such error, omission and/or negligent acts or of its liability for loss or damage resulting therefrom. Except as to professional liability, these indemnities shall not be limited by the listing of any insurance coverage.

S.P.19 Worksite Conduct

All labourers and workers, while working in and around the 13520 – 72 Avenue, Surrey, B.C., V3W 2P1, Surrey, British Columbia, and the City facilities, shall act in a professional manner. The Contractor is to enforce proper discipline and decorum among all labourers and workers on the worksite and is to control, among other things: 1) noise, including music; 2) the use of offensive language; 3) smoking or drinking of alcoholic beverages on the worksite; 4) physical violence; 5) riding in the passenger elevators; 6) thievery; and 7) the transportation of articles or materials deemed hazardous. If the City determines, in its sole discretion, that any labourer need to be removed due to his or her failure to comply with the terms of this provision, the Contractor will remove such labourers from the worksite immediately.

Alcohol and drugs are not tolerated on this site at any time including anyone deemed to be under the influence shall be escorted off site.

S.P.20 Cleanliness and Disposal of Unwanted Materials

Continuous daily clean up of the work areas shall be performed by the Contractor and trade contractor throughout the performance of the Work and will be undertaken in accordance with the Contractor's waste management plan. Clean up of waste products and debris generated by the Contractor and any trade contractor outside of the building and on the site shall be the responsibility of the Contractor. Should the City be required to clean up the work of the Contractor or trade contractor the cost of such clean up will be recovered from the Contractor.

The Contractor is solely responsible for any and all damages done or regulations violated in the disposal of waste materials and for any other actions, which the Contractor performs.

The Contractor warrants that it will produce or discharge in any manner or form, directly or indirectly, chemicals or toxic substances into the environment and that all equipment used will not pose a hazard to, or harm or adversely affect anyone coming into contact with it and covenants and agrees to provide the City with an environmental plan (where applicable), acceptance to the City, which plan shall outline the procedures to be followed by the Contractor to prevent the production or discharge of chemicals or toxic substances into the environment and the actions to be taken should the discharge occur.

The Contractor shall be responsible to take all necessary measures to comply with the requirements of the Federal and Provincial environmental protection agencies, City by-laws, the *Waste Management Act*, R.S.B.C. 1996, c. 482, as amended and any other applicable acts and regulations in respect to air, earth and water pollutants.

S.P.21 Accidents; Equipment Safety

Any and all accidents, regardless of how minor, involving another person, private property, or vehicle, shall be reported immediately to the Surrey R.C.M.P. and a report requested. The City shall also be contacted immediately and be provided a copy of any reports.

The Contractor shall assume all responsibility for damages to property or injuries to persons, including accidental death, attorneys fee and costs of defense which may be caused by Contractor's performance of this Contract, whether such performance be by itself, its subcontractor, or anyone directly or indirectly employed by Contractor or its subcontractors and whether such damage shall accrue or be discovered before or after termination of this Contract.

The Contractor's equipment operators shall maintain good safety and driving records, and use extreme caution during the performance of the Work.

S.P.22 Permits and Fees

The Contractor is to secure and pay for any additional permits, and governmental fees, licenses and inspection necessary for proper execution and completion of the Work which is customarily secured after execution of an agreement and which is legally required. The Contractor is to comply with and give notices required by Laws applicable to performance of the Work.

S.P.23 Final Completion and Payment

When the Work is finally complete and the Contractor is ready for a final inspection, the Contractor is to notify the City, in writing. Thereupon, the City will perform a final inspection of the Work. If the City confirms that the project is complete including all deficiencies, is in full accordance with this Contract and the Contractor has performed all of its obligations, is hereby entitled to submit for final payment, subject to the *Builders Lien Act*.

S.P.24 Workmanship

- (a) General: Workmanship shall be of best quality, executed by workers experienced and skilled in respective duties for which they are employed. Do not employ any unfit person or anyone unskilled in their respective duties. The City reserves the right to dismiss for site, workers deemed incompetent, careless, insubordinate or otherwise objectionable. Decisions as to quality of fitness of workmanship in cases of dispute rest solely with the City, whose decision shall be final.
- (b) Coordination: Ensure cooperation of workers in laying out work. Maintain efficient and continuous supervision.
- (c) Protection of Work in progress: The Contractor is to adequately protect Work completed or in progress. Work damaged or defaced due to failure in providing such protection is to be removed and replaced, or repaired, as directed by the City at no cost to the City.

Should any dispute arise regarding the quality of the workmanship, materials or products used in the performance of the Work, the final decision regarding the acceptable quality of the workmanship, and fitness of the materials and products rests strictly with the City.

Additionally, all Works required hereunder will be performed as promptly as possible, and in any event within the time stated by the City, and such Work will be subject to approval and acceptance of the City, but such approval and acceptance will not relieve the Contractor from the obligation to correct any incomplete, inaccurate or defective work, all of which shall be promptly remedied by the Contractor on demand, without cost to the City.

The Contract Administrator will visit the Place of Work at intervals appropriate to the progress of the Work to become familiar with the progress of the Work, the quality of the Work being provided and to determine if the Work is proceeding in general conformity with the Contract Documents.

S.P.25 VEHICLES/EQUIPMENT

The Contractor should have a sufficient number of service vehicles together with sufficient operating personnel to perform the Services. If, in the opinion of the City, whose opinion shall be final and binding, the numbers of service vehicles that the Contractor has in service are inadequate to meet the Service response times stated herein, the Contractor may be given thirty (30) calendar days notice, after which time the Contractor must provide additional vehicles to perform the Services, as directed by the City.

Contractors Vehicles/Equipment used in the performance of the Services are to be properly equipped to complete the Newton Cultural Centre Roof Replacement. Off-road (e.g. ATV's) type of equipment may be utilized within the parks provided that they conform to WCB standards. The units should be sealed to prevent loss of waste materials while collecting & transporting garbage.

All vehicles/equipment will be kept clean, in good mechanical condition, painted to present a neat appearance, show evidence of annual safety inspections and display proper registration and license.

All Contractor's vehicles/equipment should be equipped with approved back-up alarms, multiple lite revolving/strobe lights, or other necessary warning systems, which should be maintained and in proper operating condition at all times. In the event of a breakdown, the Contractor should arrange for reserve equipment, with always the intent to maintain the schedule frequency.

Vehicles/Equipment used in the performance of the Services is to be identified on both sides with the company name and telephone number. This should be fully legible and displayed in a professional manner. The Contractor may also be required to display magnetic signs as supplied by the City, identifying the Contractor as a 'City Contractor'. This will not replace the company identification.

S.P.26 Tradesmen

All materials, roofing or otherwise, to be installed by qualified "BC licensed trades people". Roofing crew to have a minimum of sixty (60%) percent journeymen with past experience applying the products specified.

Trade certification of crew members confirming past experience may be required prior to start-up of Work as related to the laminated fiberglass shingle, modified bitumen and sheet metal flashing installation.

S.P.27 Qualifications of Contractor

Contractor represents that it has the expertise, qualifications, resources and relevant experience to supply the goods and services. Tradesman, engaged in the performance of the Work shall be qualified in accordance with the requirements of the Tradesman Qualifications Act and all pertinent licensing requirements required by the Ministry of Municipal Affairs. Specifically for the purposes of this Contract all materials, roofing or otherwise, to be installed by qualified BC licensed trades people. Roofing crew is to have a minimum of sixty (60%) percent journeymen on-site during the performance of the Work. At no time during the new roof application is there to be less than the required number of journeymen on site. Failure to maintain the required number of journeymen on site may, at the discretion of the Consultant or the City, result in a stop work order until such time as the journeymen requirements are met. Any financial loss to the Contractor as a result of a stop work order will be the responsibility of the Contractor.

S.P.28 On-Site Hazards and Utilities Present

The Contractor is to make themselves aware of any and all on-site hazards including but not limited to underground and overhead utilities in or near to the Work area and to take every precaution necessary to eliminate any risk that may exist. If an on-site hazard exists that is causing or may cause injury to any person(s), the Contractor is to take immediate action to mitigate risk and damage, and then notify the City and the City's Consultant.

*****END OF PAGE*****

**SCHEDULE B - APPENDIX 2
SUPPLEMENTARY SPECIFICATIONS – (PROJECT)**

PROJECT: Newton Cultural Centre Roof Replacement

PREPARED BY

CONSULTANT: IRC Building Sciences Group
#280, 21900 Westminster Highway
Richmond, BC V6V 0A8

DATED: April 19, 2016

PROJECT SUMMARY

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 01
Section 01 11 00
Page 1 of 2

1.0 GENERAL

1.1 DOCUMENTS

- .1 This section of the specification forms part of the Contract Documents and is to be read, interpreted and coordinated with all other parts.

1.2 PROJECT SUMMARY

- .1 This project includes the replacement of roofs 1, 2 & 3 on The Newton Cultural Centre.
- .2 The work includes, but is not limited to:
 - .1 Removal and disposal of the existing:
 - .1 1 ½" river rock ballast and EPDM membrane; and
 - .2 BUR roofing and fibreboard; and
 - .2 Supply and install new
 - .1 Peel & stick vapour retarder; and
 - .2 Supply and installation of new wood sleepers and associated privacy screen supports for relocation of a ground level mechanical unit to the roof; and
 - .3 2 layers of Sopra-Iso PLUS 1.8" x 4' x 8' coated glass filament faced polyisocyanurate insulation; and
 - .4 Dens Deck Prime® overlay board secured with screws and plates; and
 - .5 2 ply Soprema Soprafix 630 / 660 SBS membrane system including all penetration accessories; and
 - .6 Supply and installation of new metal flashings to all penetrations, curbs, parapets, roof edges, etc.
 - .7 Note: Tower Roof 1 will not be insulated.

1.3 RELATED SECTIONS

- .1 Section 07 52 00 – Modified Bituminous Sheet Roofing

1.4 REFERENCES

- .1 Roofing Contractors Association of British Columbia (RCABC), Roofing Practices Manual (RPM), latest edition.
- .2 CGSB 37-GP-56M, Membrane, Modified Bituminous, Prefabricated and Reinforced for Roofing.
- .3 Soprema Canada Inc. Technical Manual, latest edition.

PROJECT SUMMARY

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 01
Section 01 11 00
Page 2 of 2

.4 CAN/CSA A123.21

END OF SECTION

1.0 GENERAL

1.1 DOCUMENTS

- .1 This section of the specifications forms part of the contract documents and is to be read, interpreted and coordinated with all other parts.

1.2 SUMMARY

- .1 This section of Work includes furnishing of all labor, materials, services and equipment necessary to replace roof areas 1, 2 & 3 at the Newton Cultural Centre as shown on the Roof Plan and on the attached drawings and details, all as specified herein. General scope of work includes, but not limited to, the following:
 - .1 Removal and disposal of the existing:
 - .1 1 ½" river rock ballast and EPDM membrane; and
 - .2 BUR roofing and fiberboard; and
 - .2 Removal of all obsolete equipment; and
 - .3 Removal and disposal of associated metal flashings; and
 - .4 Supply and installation of:
 - .1 Peel & stick vapour retarder; and
 - .2 2 layers of acrylic faced polyisocyanurate insulation; and
 - .3 Dens Deck Prime[®] overlay board secured with screws and plates; and
 - .4 2 ply Soprema Soprafix Base 630 / 660 SBS membrane system; and
 - .5 Supply and installation of new metal flashings to all penetrations, curbs, parapets, roof edges, etc.
 - .6 Installation of new sleepers and associated privacy screen supports for relocation of a ground level mechanical unit to the roof; and,
 - .7 Tower Roof 1 is not to be insulated.
 - .2 Existing Conditions as determined by observation:
 - .1 1 ½" river rock ballast on EPDM membrane on BUR on fiberboard on wood deck on roofs 2 & 3.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 2 of 22

.2 Building Occupancy / Usage

- .1 The building is a free-standing two storey with tower, wood-framed cultural centre and former fire hall.

.3 New Roofing Installation Outline

- .1 **Soprema Inc. Soprafix** 2 ply SBS membrane assembly with a mechanically attached base membrane on Dens Deck Prime[®] overlay board on 2 layers of polyisocyanurate insulation on vapour barrier on existing wood deck.

- .2 Refer to Project Summary.

.4 CONTINGENCY ALLOWANCE:

- .1 The Owner has a reserve contingency allowance in place to cover unforeseen circumstances as noted below.
- .2 Application and payment will be made according to unit prices supplied by the contractor in the *RFQ Documents*. All extra cost items to be supported by invoices and / or approved change orders. The cash allowance is intended for, but not limited to the following items:
- .1 Rotted, rusted or deteriorated substrates, if discovered.
- .2 Supply and installation of back slopes and crickets other than those shown on the drawings to enhance drainage as determined by the Consultant.

1.3 REFERENCES

- .1 Roofing Contractors Association of British Columbia (RCABC), Roofing Practices Manual (RPM), latest edition.
- .2 CGSB 37-GP-56M, Membrane, Modified Bituminous, Prefabricated and Reinforced for Roofing.
- .3 Soprema Inc. Technical Manual, latest edition.
- .4 CAN/CSA A123.21

1.4 DESIGN STANDARD

- .1 Although the **Soprema Inc. Soprafix** system has been selected as the design standard for the project and the specifications are based on these products. Other Manufacturers of equivalent products and systems are invited to submit proposals through the roofing Contractor at the time of RFQ. Consideration may be given to alternative 2 ply SBS modified bitumen systems only, and shall employ mechanical attachment as the system securement. All accessory materials must be supplied and / or approved in writing by the primary Membrane Manufacturer. Proposals must include product technical data sheets,

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 3 of 22

proposed fastener layout patterns or site specific descriptions and printed Manufacturers installation instructions and must comply fully with the experience and job reference requirements of Section 1.6 Quality Assurance of these specifications.

1.5 QUALITY ASSURANCE

- .1 For the work, obtain primary materials from a single Manufacturer, which has produced that type of product and system successfully for not less than 5 years. Submit job references on request of the Consultant. All materials shall be only as recommended or accepted by the primary Membrane Manufacturer.
- .2 Contractor shall be experienced in the application of the materials and shall supply job references and client references upon request, to show Modified Bitumen installation experience of similar size and scope of this project for at least 5 years. Client references to be supplied on request.
- .3 Contractor's Field Supervision: Contractor must maintain full time supervisor/ foreman on the job during times roofing work is in progress. Supervisor must have roofing trade qualification and have minimum 5 years experience in roofing work similar in nature and scope of specified roofing. Roofing crew makeup shall be trade qualified journeyman roofers and registered apprentices in the ratio of no more than 1 to 3 (at least one journeyman to three apprentices). Qualifications may be reviewed prior to award of contract and will be reviewed on site by the Consultant / Inspector.
- .4 Prior to commencement of the work, the Consultant, the Roofing Contractor, the Roofing Contractor's Foreman, the Owner's Representative and the Membrane Manufacturer shall meet on site (the **Pre-Start Meeting**) to review the materials, details, work methodologies & schedule and the Owner's requirements. The Manufacturer's Representative shall assist to ensure that the installers and the Consultant / Inspector are instructed in the most up-to-date and correct membrane installation procedures.
- .5 A copy of the complete specifications, drawings, submittals and addenda shall be on site at all times.
 - .1 The project foreman must be familiar with all aspects of the specifications and all personnel must read and understand the contents of the specification prior to the start of work.
- .6 Manufacturer's Representative shall visit site at regular intervals during the installation of the roofing and provide copies of written reports to the Consultant.

1.6 SUBMITTALS

- .1 Preferred format for all submittals is as **.pdf** or **.doc** electronic files whenever possible.
- .2 PreStart Meeting Mandatory Submittals
 - .1 Submit original **Performance Bond** and **Labour & Material Bond**.
 - .2 Submit required **insurance documentation** noting additional insured.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 4 of 22

- .3 Submit current **WSBC Clearance Letter** and future updates as required.
 - .4 Submit a List of Sub Contractors to be used on this project.
 - .5 Submit for approval a **detailed work schedule** showing milestones and times required for each phase of the work.
 - .6 **Installer Certification:** Obtain and provide written certification from the Membrane Manufacturer certifying that the installer is approved by Manufacturer for installation of the specified system and supply of the required guarantee documents.
 - .7 Submit the **list of all supervisory personnel and crew make-up** who will be working on this project together with their trade qualifications.
 - .8 Manufacturer's Guarantee: Submit copy of the completed **Manufacturer's Guarantee Application** as submitted to the Manufacturer.
 - .9 **Product data:** Submit Manufacturer's technical product data, published installation instructions, and maintenance recommendations for each type of roofing product to be used.
 - .10 Prepare and submit a written Strategic Material Application in Flame Sensitive Locations (**SMAFSL**) Plan, as outlined in 1.9, to the Owner's Representative and Consultant, detailing the methods of application and materials to be used in identified flame sensitive areas. SMAFSL to include installation practices around building air intake locations.
 - .11 Submit two sets (1 electronic & 1 printed) of standard **metal flashing colour samples** for selection by the Owner.
- .3 Other Submittals
- .1 Preferred format for all submittals is as .pdf or .doc electronic files whenever possible.
 - .2 Submit shop drawings detailing construction details, assembly, profiles, materials, and installation for conditions requested by the Consultant.
 - .3 Provide **sheet metal flashing shop drawings** showing profiles, fixings and locations to Consultant for review prior to fabrication.
 - .4 Submit written regular **work schedules**, via e-mail or fax, as required by the Consultant or Owner's Representative, prior to the start of work in each area. Verbal communication or phone messages will not be acceptable.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 5 of 22

1.7 DELIVERY, STORAGE AND HANDLING

- .1 Deliver and store materials in original sealed containers with all Manufacturers' labels intact.
- .2 Store and keep dry all materials, accessories, plywood and lumber elevated from contact with ground / roof and from moisture and protected from weather with purpose-made tarp(s). Polyethylene or other non-breathable plastic coverings are not acceptable. Ensure materials and tarps are secure from severe winds. Do not rely on Manufacturer's packaging for weather protection.
- .3 Store all insulation materials so as to keep dry and avoid condensation under storage wrappers and weather protection.
- .4 Store membrane rolls upright in strict accordance with the Membrane Manufacturer's published instructions. Do not stack pallets more than one high.
- .5 Store membrane rolls, etc in heated enclosures prior to use where climatic conditions warrant and as recommended by the Manufacturer; bring only enough rolls for immediate use to the work area.
- .6 Avoid prolonged exposure of light and heat sensitive materials to sunlight.
- .7 Store combustible materials away from heat and open flame.
- .8 Do not stockpile materials or equipment, or operate equipment so as to overload the building structure in any way. Any damage from overloading the deck or its supporting members shall be repaired or replaced at the Contractor's own expense.

1.8 SITE CONDITIONS

- .1 Site Access: From exterior by Contractor supplied, installed and maintained ladders and / or scaffolding.
 - .1 Notify Owner's Representative, Consultant / Inspector & Manufacturer of intent to start work at least 3 days prior to commencing any work.
 - .2 Provide regular notification of any changes in work schedule.
- .3 Occupants in the building may be sensitive to noise, vibration, dust or logistical activity that prevents patrons' access to their operation. The Contractor is to cooperate and communicate with the Owner's Representatives and Occupants regarding the location of equipment, materials or personnel, so as to minimize the impact the use and the operation of the facility as much as possible.
 - .1 Written communication and notification of work locations and procedures with the Owner's Representative and Consultant are MANDATORY on a daily or weekly basis, as noted in section 1.7.7.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 6 of 22

- .4 Environmental Requirements:
 - .1 Requirements of RCABC, Inspection Agency and Manufacturer shall be followed for weather conditions during application of the roofing system.
 - .2 Do not carry out roofing operations during wet weather. Do not apply roofing to any wet surface or when rain is imminent.
- .5 Existing Conditions (Substrate): Proceed with the new work of this section only when substrate repairs and preparation have been carefully completed.
- .6 Interior Protection: The interior of the building and its contents shall be at all times protected from damage consequential to the execution of this contract and any repairs or claims for damage shall be the sole responsibility of the Contractor.
- .7 Coordinate metal flashing and trim work with the installation of roofing, drains, nailers, curbs etc.
- .8 Protect adjacent work and surfaces from splash, spray or spillage. Keep grounds around project clean on a daily basis.
- .9 Note that considerable care and caution will be required to locate under deck electrical conduit, which is present in random locations.
- .10 The use of radios, iPods and music devices other than those meant for communication purposes are not permitted and will not be tolerated.
- .11 Do not store tools, materials, etc on top of roof-top mechanical equipment. Keep roof-top equipment clean of all roofing debris.
- .12 Supply and maintain a portable toilet on site for use of the workers in a designated location. The toilets shall be maintained in a clean, sanitary, secure and safe manner at all times.
- .13 Smoking is not permitted on site.

1.9 FIRE PREVENTATIVE MEASURES

- .1 The Contractor is to use this section of the specifications as a guide for the development of a risk assessment evaluation and a Strategic Material Application in Fire Sensitive Location Plan (**SMAFSL**). The Contractor is not to rely solely on these specifications for fire hazard assessment and appropriate work procedures.
- .2 The Contractor shall make himself familiar with the construction of the building prior to and during the scope of work, as well as with the actual use and occupancy of the building in determining appropriate Fire Safety Plans. Consultation with the Owner's Representative, their designate and Tenants shall form an integral part of the Fire Safety Plan. The SMAFSL shall include installation practices around building air intake locations.
- .3 Proposals for the use of alternate materials and/or installation practices, prior to work, or as encountered, are to be submitted to the Consultant prior to implementation.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 7 of 22

- .4 Proposals to modify the materials or installation practices are designed to specifically address installation / fire concerns and not to be considered an opportunity to change the specified membrane system or generate extra costs.
- .5 A SMAFSL Plan based on the Contractor's installation knowledge, familiarity with the building and the building use, and documented consultation with the Owner's Representative shall form part of a plan to be supplied by the successful bidder **at the PreStart Meeting**. A copy of this plan is to be submitted to the Owner's Representative and Consultant and be available upon request for review by any other regulatory agency.
- .6 Comply with Owner's instructions for obtaining Hot Works Permits where required.
- .7 Comply with or exceed RCABC Safety Precautions - Torching for Modified Bituminous Systems as described in the RCABC Roofing Practices Manual, Tab 5.0.1. Deficiencies in Fire Extinguisher Requirements will not be tolerated.
- .8 Where torches are used for drying or application, a minimum of one 10 lb. ABC fire extinguisher with current charge tags intact is required for each torch on the roof. The extinguisher at all times shall be within 20' (6m) of the worker using the torch. Workers shall be able to demonstrate verbal competence in the use of the extinguisher upon request of the Consultant.
- .9 In addition to fire extinguisher requirements set out in paragraph 1.10.8, there shall be a fully charged water hose extended to the roof level for use while hot work is underway. In the event that water service is not readily available at least one "2A Rated Hand Operated Pressurized Water Extinguisher" shall be at roof level.
- .10 All work involving propane torch application of roofing materials shall conform to the British Columbia Fire Code, Section 5.2 "Hot Works", 2006 or latest version. **Take particular note of the mandatory Fire Watch Requirements of this section. Fire watch personnel shall have at their disposal a hand held infra-red non-contact thermometer (a "Roofmaster Hot Spot HST-2 or equivalent) to aid in identifying hot spots and must be used as part of the fire watches duties.**
 - .1 **Fire watch:** 1 hour minimum from time of torch extinguishment or as directed by the Owner.
 - .2 Make fire watch records available for review on request to the Owner's Representative, Consultant / Inspector or any other regulatory agency.
- .11 Leaving materials and equipment stored at a reroofing site can result in a potentially dangerous situation. Therefore the following additional procedures are to be followed:
 - .1 Do not store any roofing materials or equipment within 100 feet of the building when the roofing crew is not on site.
 - .2 No materials are to be left on the ground overnight. Where materials must be stored on the ground overnight a security guard must be posted to patrol the site.
 - .3 Propane tanks are to be secured or removed at the end of each workday. Torches are to be removed from propane bottles and secured at the end of each workday.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 8 of 22

- .4 All ladders accessing the site must be removed and secured each night. All ladder type hoists must be secured or removed to prevent others from accessing the roof site.
- .5 Advise suppliers to supply materials to site only when roofing crew is on site.
- .6 Garbage bins are to be removed on a regular basis. Consult and cooperate with the Owner's Representative so that bins do not interfere with building operations or deliveries.

1.10 OCCUPATIONAL HEALTH & SAFETY

- .1 The Roof Contractor shall be designated as "Prime Contractor" and will be responsible to ensure that section 118 of the WSBC Act and regulation 20.3 are complied with.
- .2 The Roofing Contractor / "Prime Contractor" is responsible, among other things, for:
 - .1 Establishing a system of site orientations; and
 - .2 Establishing a system of supervision for all workers on site; and
 - .3 Ensuring all employers' workers comply with regulations, and the act including insuring documented fall protection planning, access / egress, first aid & emergency procedure issues are addressed.
- .3 The Prime Contractor is responsible for ensuring that every employee and worker at the roofing construction site for which he / she is primarily responsible, complies with all WSBC regulations.
- .4 Workers at the roofing construction site include: delivery personnel, visitors, consultants, inspectors & owner's agents and employees.

1.11 CREW SIZE & CONTINUITY OF WORK

- .1 During roofing removal and installation of new roofing the Contractor shall maintain a minimum **crew of 5 workers** with qualifications as specified in section 1.5.3. Exceptions for crew size will only be made during sheet metal installation. Safety monitors, if utilized, do not constitute 'workers with qualifications'. Sheet metal installation shall follow completion of other work by no more than 5 working days.
- .2 With due allowance for inclement weather, the Contractor shall diligently pursue completion of the project in the best possible time.
- .3 Cap sheet installation shall immediately follow base sheet installation within **5 days**. "Phased" construction will not be acceptable under any circumstances.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 9 of 22

1.12 GUARANTEES

- .1 Provide a written **10 year RCABC RoofStar Guarantee** from the date of Approved Final Inspection. Cost of inspection is not to be included in this section but will be paid by the Owner. The cost of this warranty is to be shown as a separate item on the *RFQ Documents*.
- .2 Provide a written **10 Year Membrane Manufacturer No Dollar Limit System (Platinum) Warranty** from the date of Approved Final Inspection stating that the waterproofing membrane is free from manufacturing defects and that the Membrane Manufacturer will repair at its own expense any actual leaks in the roofing membrane, membrane flashings or subsequent damage to the roofing system components caused either by faulty materials or faulty workmanship.
- .3 Provide copies of all final project guarantees and warranties to IRC Building Sciences Group. **This is as a condition of Final Acceptance of the project.**
- .4 The Manufacturer's Representative shall visit the site at regular intervals in order to assure that the membrane is being installed according to the Manufacturer's instructions and standards for guarantee purposes. Such conformance is to be detailed in writing and transmitted to the Consultant prior to Final Inspection. The Roofing Contractor is responsible to ensure that this documentation is provided.
- .5 Inspection on this project is pre-assigned to:

IRC Building Sciences Group,
250 – 21900 Westminster Hwy, Richmond, BC, V6V 0A8,
Telephone: 604.295.8070 Fax: 604.279.9644
Email: mklein@ircgroup.com
- .6 Costs of Post Final Inspection(s), if required, may be charged back to the Contractor at a rate of \$650.00 per inspection.

2.0 PRODUCTS

2.1 STANDARDS

- .1 Conform to the latest "Guarantee Standards" published in the RCABC Roofing Practices Manual and to the appropriate CSA, CGSB, FM and ASTM standards for the roofing system specified. Materials used must be listed on the most current RCABC Accepted Materials List F-061.

2.2 WOOD SHEATHING, CURBS AND CANTS

- .1 Where shown in the details or as required, plywood for sheathing: 5/8" or as detailed: vacuum-pressure impregnated with disodium octaborate tetrahydrate (DOT) preservative to obtain an average net retention of 2.7 kg/m³B₂O₃ (0.17 pcf) by assay. ACQ and / or AC preservative treatments are specifically NOT acceptable except in writing from the Consultant.

IRC BUILDING SCIENCES GROUP

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19 April 2016

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 10 of 22

- .2 Dimension lumber for perimeter or penetration curb extensions etc.: Hem / Fir, factory vacuum-pressure impregnated with disodium octaborate tetrahydrate (DOT) preservative to obtain an average net retention of 2.7 kg/m³B₂O₃ (0.17 pcf) by assay. ACQ and / or AC preservative treatments are specifically NOT acceptable except in writing from the Consultant.
- .3 Cants as required or for use in cold process applications: 4" x 4", factory vacuum-pressure impregnated with disodium octaborate tetrahydrate (DOT) preservative to obtain an average net retention of 2.7 kg/m³B₂O₃ (0.17 pcf) by assay. ACQ and / or AC preservative treatments are specifically NOT acceptable except in writing from the Consultant.
- .4 Wood for parapet tops: borate treated solid wood cut to shape or treated plywood with appropriate support blocking as detailed. ACQ and / or AC preservative treatments are specifically NOT acceptable except in writing from the Consultant.
- .5 Nails: spiral or ring type, hot dip galvanized of a suitable length for the purpose. Screws for attachment of plywood or lumber to steel substrates, studwork or decking: Buildex equivalent coated roofing screws as applicable and of a suitable length for the purpose.
 - .1 Use only drill type fasteners for attaching sheathing or blocking to concrete or masonry. Do not use powder actuated fastening devices without the written consent of the Consultant.
 - .2 Use only Hot Dipped Galvanized fasteners.

2.3 RIGID INSULATION AND OVERLAY BOARD

- .1 Foam Plastic Roof Insulation: Polyisocyanurate foam core with fiberglass facers, only as approved in writing by the Membrane Manufacturer. Insulation shall have a minimum R-value at 1" thickness of 5.6 measured in accordance with ASTM C 518, PIMA Bulletin 101 and RIC/TIMA bulletin 281-1. Insulation is to be applied in two layers with joints staggered.
 - .1 1.8" x 4'-0" x 8'-0" with a minimum compressive strength of 20 psi are pre-approved for installation over prepared vapour retarder: **SOPRA-ISO PLUS** as manufactured by Soprema Inc.
 - .2 All foamed plastic insulations must be CFC free and in compliance with the Province of British Columbia Ozone Depleting Substance Regulations.
 - .3 All polyisocyanurate insulation must be dry when delivered to the job site.
- .2 Foamed in Place Insulation: for voids between sheets in main insulation to be foamed in placed urethane foam, **INSTA-FOAM** or **GREAT STUFF** or other approved equivalent.
- .3 Overlay board for installation over the prepared sloped and flat insulation, and prior to the installation of the base sheet: **1/4" x 4' x 8' DENS DECK PRIME®** as manufactured by Georgia Pacific Gypsum LLP.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 11 of 22

- .4 Insulation Fasteners: **SOPRAFIX** fasteners and metal insulation plates as required by the Membrane Manufacturer.

2.4 MEMBRANE AND ACCESSORIES

.1 Primers

- .1 Bituminous solvent-based primer for torch applied membranes: **ELASTOCOL 500** as manufactured by Soprema Inc.
- .2 Polymer non-bituminous solvent-based primer for self-adhesive membranes: **ELASTOCOL STICK** as manufactured by Soprema Inc.

- .2 Vapour Retarder: Self-adhering SBS membrane bonded to a cross-laminated polyethylene film, **SOPRAVAP'R** by Soprema Inc. Primer as recommended by the Manufacturer.

- .3 Base Membrane: Composite reinforced SBS modified bitumen membrane, 2.5 mm thick, mass 2.6 kg/M2, conforming to CAN/CGSB 37-GP-56M (9th Draft), thermofusible film top and sanded bottom surface and duo selvedge (70% self-adhesive and 30% thermofusible), **SOPRAFIX BASE 630** as manufactured by Soprema Inc.

- .4 Base Membrane Flashing (Stripping): SBS modified bitumen membrane, 3.0 mm thick, conforming to CGSB 37-GP-56M, with thermofusible film top and film bottom, **SOPRALENE FLAM 180**, as manufactured Soprema Inc.

- .5 Base Membrane "SELF ADHERING" Flashing (Stripping) for use in flame sensitive areas: SBS modified bitumen membrane, 3.0 mm thick, mass 2.8 kg/M2, conforming to CGSB 37-GP-56M, with thermofusible film on top and self adhesive bottom surface, with release paper, **SOPRALENE FLAM STICK**, as manufactured by Soprema Inc.

- .6 Cover Strip to ensure watertightness at base membrane end laps: 330 mm SBS modified bitumen and composite elastomeric bitumen reinforcement with a plastic thermofusible film on both surfaces, **SOPRALAP**, as manufactured Soprema Inc.

.7 Cap Membrane:

- .1 SBS modified bitumen membrane 4.0mm thick (nominal), mass 4.34 kg/m2, thermofusible bottom surface, granulated top surface, conforming to CGSB 37-GP-56M, **SOPRAFIX TRAFFIC CAP 660** manufactured by Soprema Inc. Color to be light grey.

- .8 Exposed Membrane Cap Flashings: SBS modified bitumen sheet 4.0mm thick, mass 4.8 kg/M2, granulated surface, conforming to CGSB 37-GP-56M, **SOPRAFIX TRAFFIC CAP 660** manufactured by Soprema Inc. Color to be light grey.

- .9 Fire Protection for additional protection in flame sensitive locations, as determined by the Contractor: 165 mm (6½") wide tape consisting of a glass fleece reinforcement and SBS modified bitumen: **SOPRAGUARD TAPE** as manufactured Soprema Inc.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 12 of 22

- .10 Membrane Underlay Board for use over asphalt contaminated surfaces: **plywood** or **DENS DECK PRIME®**.
- .12 Membrane fasteners: **SOPRAFIX** screws and plates as required by the Membrane Manufacturer. Fasteners shall be of a length suitable to penetrate the deck min. 1".
- .13 Roof Mastic for air seals under wood perimeter blocking, for installation beneath hardware flanges and for use when installing mastic and granules at the base of flanged penetrations: **SOPRAMASTIC** as required by the Membrane Manufacturer's "system" criteria.
- .14 Roof Walkway Pads: minimum 250 gm SBS modified bitumen granulated cap membrane of contrasting colour, **SOPRAWALK** as manufactured by Soprema Inc.
- .15 Walkway Pad Attachment: Walkway material to be torched or adhered as recommended by the Membrane Manufacturer. Adhesive to be as recommended by the Membrane Manufacturer.
- .16 Separation layer for use beneath loosely installed equipment such as (but not limited to) satellite dishes, gas line support blocks etc.: **SOPRAMAT** as manufactured by Soprema Inc.
- .17 Liquid Membrane Detailing:
 - .1 For non-immersed service: Liquid-applied one-component polyurethane / bitumen coating c/w woven polyester reinforcement: **ALSAN FLASHING SYSTEM** as manufactured by Soprema Inc.
 - .2 For immersed service: Liquid-applied two-component PMMA coating c/w woven polyester reinforcement: **ALSAN RS FLASHING SYSTEM** as manufactured by Soprema Inc.
 - .3 The use of the specialty flashing system shall be specifically approved in advance by the membrane manufacturer for each application.
- .18 Replacement Wood Deck: T&G decking to match existing deck.

2.5 ROOF PENETRATION HARDWARE

- .1 Roof penetration hardware for plumbing vents, gas lines and electrical cables etc.: welded or spun **Aluminum** penetration hardware as manufactured by Menzies Metal Products or Lexsucu Canada Ltd. Lead jacks are not acceptable.
 - .1 Plumbing penetration hardware shall have Aluminum caps of appropriate size and fit.
 - .2 Where possible electrical cables shall be routed through 2 - 90° ABS elbows secured to the top of the aluminum hardware or as detailed.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 13 of 22

- .3 In the event that there is insufficient electrical conduit / cable when routed through the roof penetration hardware, install an electrical junction box and extend the conduit / cable as necessary.
- .2 "B-Vent" or similar round ductwork penetrations: spun **Aluminum** penetration hardware as manufactured by Menzies Metal Products complete with 2 caulked storm collars on each "B-Vent" flashing. Top of aluminum penetration hardware to be a minimum of 8" above finished roof surface.

2.6 ALUMINUM GUTTERS & RAIN WATER LEADERS

- .1 **NOTE:** It is intended that the existing aluminum gutters are to remain in place. If replaced they shall be as noted below.
- .2 "Continuous" roll formed aluminum gutter: formed from .032" series 3000 aluminum alloy, 5" wide x 4" deep, contour to be Roman Ogee, continuous lengths to 60', colour as chosen by the Owners.
- .3 Gutter supports: extruded aluminum profile hanger clip 3/4" wide spaced at 16" oc secured with #10 x 1 1/4" flat head 18-8 stainless steel fasteners.
- .4 Outlets: hopper type, 3" x 4" with needle trap at bottom of RWL. The needle trap shall be supplied and installed under this section.
- .5 Corners: colored vinyl, 90° corner miter. pop riveted to gutter. 45° joints: Field fabricated from gutter material on site. All end caps shall be preformed, fitted to gutter and button locked.
- .6 Downpipe profile: 2" x 3" section, c/w bead lines to allow expansion and contraction, fabricated from .016" - 3000 aluminum alloy.
- .7 Concrete Splash Blocks: Purpose-made concrete splash-blocks installed on separation layer.

2.7 METAL FLASHINGS

- .1 Base, cap and counter flashing metal: **minimum 24ga.** galvalume coated sheet steel, pre-finished with Silicone Modified Polyester (SMP), or pre-approved alternative. Color to be chosen by the Owner's Representative from the standard range of locally available colors.
 - .1 Gum Edge Type flashings or other flashings requiring extra rigidity shall also be formed from 24 ga. minimum metal. Fastening bars shall be either proprietary or shall be formed from 22ga. sheet steel. Maximum length of bars shall be 5'0".
- .2 Parapet Wall Saddles: custom fabricated c/w fully folded & caulked seams and flanges, using chosen prefinished materials, at all junctures with other vertical surfaces.
- .3 Provide **shop drawings** of all metal flashings showing location, dimensions, fastenings, etc for review prior to fabrication.

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 14 of 22

2.8 SEALANTS

- .1 Sealants for other than membrane work: one part, moisture cure, polyurethane, Sternson **RC 1** or Tremco **DYMONIC** or Schnee-Morehead **SM7100 PERMATHANE**. Silicone based sealants shall not be used on this project.

3.0 EXECUTION

3.1 DEMOLITION

- .1 Cooperate with Owner's Representative so that Tenants are properly notified and Tenant's operations are not unduly disturbed.
- .2 Arrange with Owner's Representative for removal and disposal of obsolete equipment (if any), abandoned equipment curbs and protection of roof until replacement roofing is complete. Fill in any resultant equipment openings in steel deck with decking of similar profile and gauge.
- .3 Roof Top Equipment and Machinery: Arrange with Owner and Tenants to schedule shut downs for equipment that must be moved or raised in order to install new curbs, modify existing curbs, install sleepers and the new roofing system.
- .4 Provide the Owner and Tenants with 5 working days notice for disconnection or shutdown of rooftop equipment or moving of loosely ballasted satellite hardware. The **Roofing Contractor will arrange** for electrical power, communication and gas line disconnection and reconnection by City of Surrey tradesmen. Unless otherwise instructed, the **Roofing Contractor will arrange and pay** for moving and lifting equipment and for changes, modification, and removal and reinstallation of electrical, communication, control and gas connections.
 - .1 Contact Tom Wiebe of the City of Surrey to arrange necessary services, at 778.846.6081.
- .5 Note that considerable care and caution will be required to locate under deck electrical conduit, which is present in random locations. **Extreme caution** must be taken to prevent the insulation and membrane fasteners penetrating these conduits.
- .6 Use only purpose made chutes or other pre-approved method for removal of old roofing from roofs areas to ground. Take precautions to control dust around chutes and disposal bins. Tarp bins as necessary.
 - .1 **THROWING OF ROOFING DEBRIS FROM ROOF TO GROUND WITHOUT PROTECTIVE CHUTES WILL NOT BE TOLERATED. Keep area around garbage bin broom-clean at all times.**
- .7 On all roof areas used for logistics, loading and access are to be protected. Any damage to building or roof areas as a result of their use or to building components will be corrected and paid for by the Roofing Contractor.
- .8 Remove all existing metal flashings progressively as roofing is removed.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 15 of 22

- .9 Weatherproofing: Only prepare or remove as much roofing etc. as can be **replaced** on the same day.
 - .1 **Under no circumstances shall any portion of the roof be left open to the weather overnight. Ensure all portions are sealed watertight before leaving the roof.**
 - .2 **The roofing assembly to the completed base membrane and base stripping and acceptable night seal, must be installed and completed each day.**
 - .3 **THERE ARE NO EXCEPTIONS TO THIS REQUIREMENT.**
- .10 Inspect the prepared deck and if defects or depressions are found to exist that will seriously affect drainage; make proposals to the Consultant for correcting such defects.
- .11 Curbs and perimeter blocking to be rebuilt or raised as necessary to maintain RCABC Standards Compliance and design requirements. Install curbs for equipment as required.
 - .1 Unless otherwise noted, all curbs and built-in sleepers must be at least 8" above final finished roof surface.
 - .2 Equipment currently on loose sleepers to be installed on fully roofed-in sleepers, c/w metal cap flashings. New roofed-in sleepers to be of equal length & location as existing sleepers and at least 8" above finished roof surface.
- .12 The Roofing Contractor shall ascertain locations where minor water ponds prior to cap sheet installation, where possible, and propose to the Consultant steps to eliminate such ponding.
- .13 When installing wood plates on parapet walls or blocking to receive flashings ensure positive slope to the inside of the building.
- .14 As part of the fire safety plans and fire preventative measures, appropriate to the membrane "system" and prior to the installation of vapour retarder and base stripping, install fire prevention tape at all junctions or gaps in plywood sheathing or any location where the contractor feels the entry of flame could have negative affects. Apply tape in 165 mm. widths to membrane substrate with approximately half on either side of the joint or transition that is being protected.

3.2 DECK PREPARATION

- .1 Ensure under deck protection has been installed where necessary.
- .2 Remove existing roofing systems to expose the underlying wood deck.
- .3 Sweep / vacuum the existing wood deck of all rocks, dust and debris. Take care that roofing debris does not fall into interior spaces. Inspect any exposed deck for damage & rot. Record and report rotted or otherwise deteriorated areas to Consultant / Inspector.
- .4 Repair or replace deteriorated areas of wood deck as instructed.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 16 of 22

- .5 Where required, wood deck replacement to be paid out of Contingency Allowance.
- .6 Substrate to be clean and dry before commencement of new roofing work.
- .7 1 new mechanical curb and 2 x associated service penetrations are to be added during the course of work.
 - .1 The City of Surrey shall plan and locate these new roof top accessories.
 - .2 The City of Surrey shall provide a curb to be mounted and leveled by the roofing contractor.
 - .3 The roofing contractor shall provide aluminum penetration hardware for these new service penetrations as described in Section 2.5.

3.3 VAPOUR RETARDER

- .1 Install specified vapour retarder on wood deck beneath specified insulation complete with primer as per the Manufacturer's specifications.
- .2 Vapour retarder stripping to extend 3" minimum above the insulation at all curbs & perimeters and as detailed.
- .3 Carefully fit vapour retarder **tightly** to all curbs, parapets and penetrations. **Repair all rips, cuts and holes** in vapour retarder immediately prior to installing insulation.

3.4 OVERLAY INSTALLATION ROOF 1 ONLY

- .1 Install DENS DECK PRIME[®] overlay over installed vapour retarder, and staggered a minimum of 12". Overlay is to be mechanically attached with screws & plates as required by the Membrane Manufacturer's "system" criteria and RCABC Minimum Standards.
- .2 Do not install insulation.

3.5 NEW SLEEPERS AND PRIVACY SCREEN SUPPORTS

- .1 Roofing Contractor is to review and include for supply and installation of new wooden sleepers and privacy screen supports, as described in Detail S-1.
 - .1 Dimensional lumber is to be as described in Section 2.2.1, unless otherwise directed in S-1.

3.6 RIGID INSULATION AND OVERLAY INSTALLATION ROOFS 2 & 3

- .1 Remove waterproof wrappings only prior to installation. Do not incorporate any wet, damp, or damaged materials into the roof.
- .2 Install only components such as can be covered with roof membrane on the same day.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 17 of 22

- .3 Insulation to be installed in tight contact with adjoining boards, curbs, etc with joints staggered, minimum 12" to provide a smooth surface to accept insulation. **Fill all voids greater than 1/4"** between insulation boards, etc. with specified sprayed foam insulation. Off set and stagger between layers of insulation.
- .4 Install DENS DECK PRIME® overlay over prepared insulation, and staggered a minimum of 12". Overlay is to be mechanically attached with screws & plates as required by the Membrane Manufacturer's "system" criteria and RCABC Minimum Standards.
- .5 Upon conclusion of each working period, exposed surfaces and edges of the insulation shall be sealed and rendered watertight by temporary seal. This seal shall be removed and disposed of on resumption of work. Ensure the transition is smooth and does not impede drainage.
- .1 **Maintain insulation staggers and overlay offsets and staggers at night seal locations.**

3.7 BASE MEMBRANE INSTALLATION

- 1 **The roofing assembly to the completed base membrane and base stripping must be installed and completed each day. NO EXCEPTIONS.**
- .2 Unroll membrane before use and allow membranes to relax for minimum 15 minutes or longer in colder weather conditions as recommended by the Membrane Manufacturer.
- .3 Install fire guard tape & membrane at all required locations.
- .4 Install base sheet in strict accordance with the Membrane Manufacturer's instructions. The Membrane Manufacturer's printed instructions form an integral part of the installation portion of the specifications.
- .5 Layout and align base sheets. Let the membrane relax at least 15 minutes before installing
- .6 Stretch sheet to full length. Fasten the base sheet membrane at one end, pull firmly on the membrane to stretch it flat, then install fasteners inside the 4" wide side lap with screws & 2" Ø barbed fastening plates, proceeding toward the free end at 12" c/c in the corners and 18" c/c in all other areas as required by the Manufacturer to meet wind lift loads, or as prescribed by the manufacturer.
- 7 Provide a smooth application, free of voids, wrinkles, fish-mouths or tears. If minor repair patches are required, ensure patches extend minimum 6" beyond defect, are neat, square to membrane direction and fully bonded to the base sheet.
- .8 Install 300 mm / 13" wide Sopralap protection band centered on end laps.
- .9 Side laps shall be 4" and end laps 1". After removing quick release papers from both membranes and mating membranes together, **seal all side and end laps with a propane torch and hot trowel, de-granulating tool or purpose made "lapper". Do not use roofer's torching cane.**

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 18 of 22

- .10 **The roofing assembly to the completed base sheet and base stripping must be installed and completed each day. NO EXCEPTIONS.**

3.8 BASE MEMBRANE FLASHING

- .1 Upon completion of the first ply of membrane and before application of the second ply, provide membrane flashing at all plane changes, curbs penetrations etc.
- .2 Install wood plates or blocking on parapet walls with positive slope to the inside of the building where required prior to installing base membrane flashings.
- .3 Prime all appropriate substrates and allow to dry.
- .4 Cut membrane in 1 meter (roll width) pieces by the length to suit the detail. Extend onto the horizontal surface a minimum of 4". Side laps shall be 3" and staggered a minimum of 4" with laps of the base sheet. Base sheet stripping shall be applied from 4" onto the flat surface of the roof 'up and over' parapets and extend down the outside face of the exterior edge minimum 4", or as detailed.
 - .1 All surfaces that are contaminated by asphalt shall be overlaid with plywood or DENS DECK PRIME[®]. Plywood or DENS DECK PRIME[®] can be designed to receive either torch applied, or self – adhering base sheet stripping plies.
 - .2 In areas that have been determined to be flame sensitive install "SELF ADHERING" or "ADHERED WITH MASTIC" base sheet flashing strip as applicable with appropriate primer or adhesive as per Manufacturer's instructions.
 - .3 In these locations ensure through careful planning that the poly facer on the field base sheet is defeated away from the actual point of installation. Do not defeat the poly facer in flame sensitive locations. Wood cant strips are to remain or be installed in locations where the adhesive method of stripping application has been chosen.
 - .4 **All self adhering base sheets are to be installed using procedures, tools & techniques (hand rolling) per Manufacturer's printed installation instructions.**
- .5 Install membrane gusset at all locations required by Membrane Manufacturer.
- .6 When allowed by the support, the base sheet stripping plies shall be nailed at the top outside edge and in-seam in the vertical seams @ 12" o.c. or the outside supports as applicable or shown on drawings.
- .7 Over flange of penetration hardware, etc. apply a 30" square piece of base sheet stripping centered over the protrusion, turned 45° to membrane direction and fully torch in place.
- .8 At drip edge and gravel stop flashings install base membrane flashings from 6" on field of roof and 3" onto metal flashings as detailed c/w primer as per Manufacturer's instructions.

3.9 CAP MEMBRANE INSTALLATION

- .1 Cap sheet installation shall follow base sheet installation by **5 days maximum**. "Phased" construction will not be acceptable under any circumstances.
- .2 Start at the low point and in the same direction as the base sheet.
- .3 Unroll sheets and allow to relax. Align the sheets and stagger from the base sheet below by a minimum of 12" from side and end laps. Clip and bevel corners to avoid "T-joint" problems.
- .4 Reroll the membrane from both ends prior to torching.
- .5 Ensuring that membrane is aligned properly, fully torch weld the cap sheet to the base sheet. During this application, both surfaces shall be simultaneously melted, forming a bead of molten asphalt that is pushed in front of the roll being applied. Immediately after torching cap sheet while it is still hot, use a clean trowel or hard rubber roller to seal end laps and T-joints; **do not use roofer's torching cane**.
- .6 Cap sheet shall have side laps of 3" and end laps of 6". Surface granules on end laps must be embedded prior to installation of the following sheet.
- .7 Cap membrane end laps in adjacent runs to be offset 3' from each other.
- .8 After installation of the cap sheet check all laps with a trowel. Avoid excessive asphalt seepage or bleed out in the laps.
- .9 Provide a smooth application free from wrinkles fish-mouths and tears. If minor repair patches are required, ensure patches are full roll width, neat, square with rounded corners and fully bonded to the cap sheet.
- .10 At drip edge flashings, install cap membrane to beyond outside edge of flashing and trim with a hot knife as detailed.
- .11 At gravel stop flashings install cap membrane to bottom of upstand. Seal membrane to flashing with Sopramastic as detailed.

3.10 CAP MEMBRANE FLASHING INSTALLATION

- .1 Cut membrane in 1 meter (roll width) pieces by the length to suit the detail. Extend onto the horizontal surface a minimum of 6". Side laps shall be 3" and staggered a minimum of 4" with laps of the base sheet.
- .2 Using a chalk line, lay out a straight line on the cap membrane surface, parallel to the roof edge 6" inside the roof from the base of the cant or plane change.
- .3 Using a torch and a round nosed trowel or a purpose made de-granulating tool, fully embed the cap sheet granules into the heated bitumen, from the chalk line to the edge of the sheet.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 20 of 22

- .4 Cap membrane flashing shall be torch welded directly on to the base sheet proceeding from bottom to top. Ensure a neat and uniform bond.
- .5 Cap membrane flashing shall be applied to extend up the interior vertical face to the top outside edge of the curb and onto the flat portion of the roof a minimum of 6" or as detailed.

3.11 ROOF DRAINS, VENTS, AND ALUMINUM ROOF PENETRATION HARDWARE

- .1 Prime top surface of all metal flanges, including sheet leads and allow to dry for 24 hours prior to installation.
- .2 Replace all lead plumbing stacks and electrical jacks with new **Aluminum** roof penetration hardware. Only one utility, ie. electrical or gas, etc, are to be housed in each penetration hardware installation, unless an appropriate sized weather-head or gooseneck can be installed to accommodate multiple utilities.
 - .1 Plumbing stacks shall have Aluminum caps of appropriate size and fit.
 - .2 Plumbing pipes inside hardware to be minimum 8" above finished roof. Extend plumbing piping to top of aluminum stack or cut back to top of piping.
 - .3 Electrical Cables
 - .1 Where possible electrical and communication / control cables shall be routed through 2 - 90° ABS elbows secured to the top of the aluminum hardware or as detailed.
 - .2 Fill opening of all weather-heads with spray-in foam insulation after all cables and piping are installed.
 - .4 In the event that there is insufficient electrical conduit / cable when routed through the roof penetration hardware, install an electrical junction box and extend the conduit / cable as necessary.
- .3 Set flange or metal flashing in full bed of mastic and secure in place.
- .4 Over flange etc. apply a 30" square piece of base membrane stripping centered over the protrusion, turned 45° to membrane direction and fully torch in place.
- .5 The Roofing Contractor is responsible for building and raising of curbs as required.
- .6 Curbs to be rebuilt or raised as necessary to accommodate insulation thickness and maintain RCABC Guarantee Standards compliance. Install curbs for equipment as required. Prime all curbs and upstands and allow to dry, prior to membrane installation.
- .7 Install new aluminum "B-Vent" flashings complete with 2 caulked storm collars on each "B-Vent" flashing. Extend internal piping & ductwork as required.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 21 of 22

- .8 A custom fabricated through wall vent hood is to be installed in the vertical portion of the drying tower wall, to provide waterproofing and shedding for service lines for the het pump being relocated as shown in Detail S-1.

3.12 LIQUID MEMBRANE FLASHINGS

- .1 Liquid membrane flashings in accordance with the Manufacturer's instructions and requirements.
- .2 Provide a mock-up Alsan / Alsan RS installation for review by Consultant and Manufacturer before proceeding with remainder of Alsan / Alsan RS work. Mock-up may be incorporated into final work.
- .3 Manufacturer's Technical Representative to be in attendance and provide installation instruction during the first installation of liquid membrane flashings.

3.13 METAL FLASHINGS

- .1 All metal flashings shall be installed to RCABC Guarantee Standards and standard RCABC flashing details. Use standing seams where practical and S-Lock seams where standing seams are impractical, sloped to the interior of the roof.
- .2 Form flashings to RCABC details, square, true, and accurate to size, free from distortion and other defects detrimental to appearance or performance.
- .3 Provide for thermal movement of flashings and materials with which it comes in contact.
- .4 Apply two coats of bituminous paint on each contacting surface between dissimilar metals.
- .5 All exposed edges of flashings shall be hemmed a minimum of 3/4" for rigidity.
- .6 Metal flashings are to be securely anchored to continuous blocking or nailers using continuous clips fastened at 12" c/c and 3" maximum from hook of the clip with fasteners suitable for the purpose. Install cladding fasteners with neoprene washers, suitable for the purpose, on the interior face at 3 per 10' length. Refer to RCABC Minimum Standard A6.10 latest revision. All anchoring shall meet or exceed RCABC Guarantee requirements.
- .7 Use concealed fastening unless otherwise approved by the Consultant.
- .8 Flash copings, roof edges, openings, parapet saddles and all items projecting through roofing as detailed. Ensure that no flashings pond water and that all drain to the interior of the roof area.
- .9 Apply sealant to inside of S-lock joints, before assembly and the exposed corners of standing seams.
- .10 Install 2 caulked storm collars on all B-vents and similar round penetrations through the roof.

MODIFIED BITUMINOUS SHEET ROOFING

Project: **NEWTON CULTURAL CENTRE ROOF REPLACEMENT**
13520 - 72 Avenue, Surrey, BC, V3W 2P1

Division 07
Section 07 52 00
Page 22 of 22

- .11 Sheet metal installers shall pick up and remove all metal clippings, discards and extra fasteners as the work progresses.

3.14 CAULKING AND SEALANTS

- .1 All surfaces to receive sealant must be prepared according to the Sealant Manufacturer's printed instructions.
- .2 Apply sealant between flashings and dissimilar construction. Apply sealant neatly and hand tool all joints.
- .3 Install ETHAFOAM backer rod in all gum lip flashings and then sealant. Hand tool joints ensuring that the sealant is sloped to shed water.

3.15 WALKWAY PADS

- .1 Walkway pads shall be membrane width installed at all roof - top equipment service doors, ladder landings and major access for service locations. Install pads according to Manufacturer's recommendations.
- .2 Butt walkway pad to leading edge of cap membrane flashing all around roof top equipment. Minimum size to be 3' x 3' at access hatches & ladders.

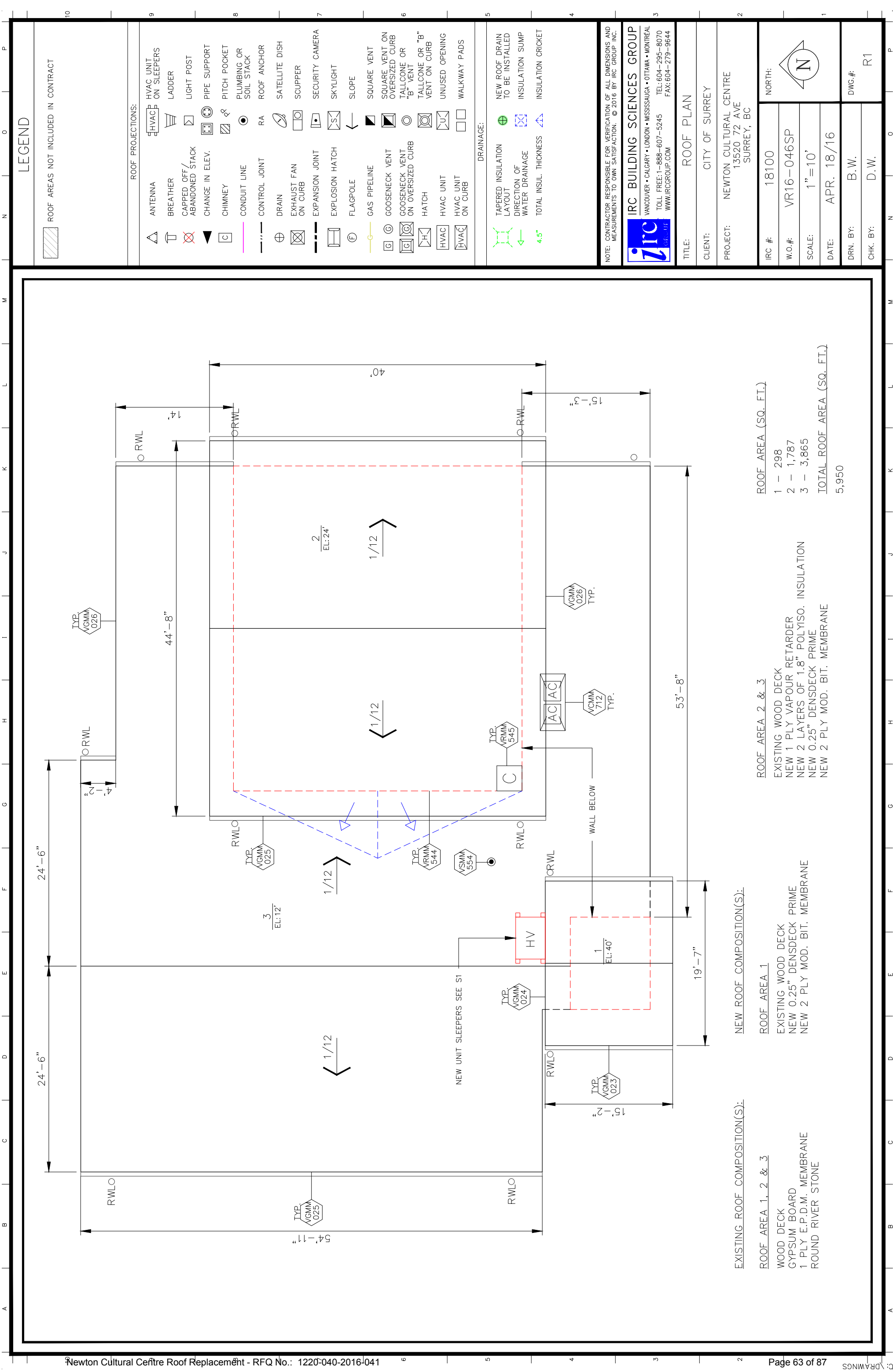
3.16 PROTECTION AND FINAL CLEAN UP

- .1 Protect finished roof areas from damage and ensure that only authorized traffic and persons are allowed on roof until after final inspection.
- .2 During roofing protect buildings and grounds from debris and equipment. Site is to be kept in a neat, tidy, safe and workmanlike condition at all times.
- .3 Upon scheduling download of rooftop loaded materials and equipment, coordinate download with owner's mechanical trade to allow uploading of ground based mechanical unit.
- .3 Upon completion, site is to be left in a clean condition to the complete satisfaction of the Owner's Representative. Clean all spills, splatters etc. caused during the replacement-roofing project. Remove and dispose of all debris, wrappers etc.
- .4 At Final Inspection verify that all drains are functioning properly.
- .5 Provide a copy of all final project guarantees & warranties to IRC Building Sciences Group **as a condition of Final Acceptance** of this project.

END OF SECTION

**SCHEDULE B - APPENDIX 2-A
CONTRACT DRAWINGS**

DRAWING NUMBER SPECIFICATION	DRAWING INDEX/TITLE	DATE OF ISSUE
Consultant: IRC Building Sciences Group		
R1	Roof Plan	Apr.18, 2016
S1	New Sleeper Plan & Detail	Apr.18, 2016
VCMM712	Wood Curb Detail	-
VCMM720	Wood Curb Detail	-
VGMM023	Roof Edge Detail	-
VGMM024	Roof Edge Detail	-
VGMM025	Roof Edge Detail	-
VGMM026	Roof Edge Detail	-
VRMM544	Window Sill Detail	-
VRMM545	Chimney Reglet Detail	-
VSMM554	Plumbing Stack Detail	-



LEGEND

ROOF AREAS NOT INCLUDED IN CONTRACT

ROOF PROJECTIONS:

- ANTENNA
- BREATHER
- CAPPED OFF/ABANDONED STACK
- CHANGE IN ELEV.
- CHIMNEY
- CONDUIT LINE
- CONTROL JOINT
- DRAIN
- EXHAUST FAN ON CURB
- EXPANSION JOINT
- EXPLOSION HATCH
- FLAGPOLE
- GAS PIPELINE
- GOOSENECK VENT
- GOOSENECK VENT ON OVERSIZED CURB
- HATCH
- HVAC
- HVAC UNIT ON CURB
- HVAC UNIT ON SLEEPERS
- LADDER
- LIGHT POST
- PIPE SUPPORT
- PITCH POCKET
- PLUMBING OR SOIL STACK
- RA
- ROOF ANCHOR
- SATELLITE DISH
- SCUPPER
- SECURITY CAMERA
- SKYLIGHT
- SLOPE
- SQUARE VENT
- SQUARE VENT ON OVERSIZED CURB
- TALLCONE OR "B" VENT
- TALLCONE OR "B" VENT ON CURB
- UNUSED OPENING
- WALKWAY PADS

DRAINAGE:

- TAPERED INSULATION LAYOUT
- DIRECTION OF WATER DRAINAGE
- TOTAL INSUL. THICKNESS
- NEW ROOF DRAIN TO BE INSTALLED
- INSULATION SUMP
- INSULATION CRICKET

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TOLL FREE: 1-888-607-5245 TEL: 604-295-8070
WWW.IRCGROUP.COM FAX: 604-279-9644

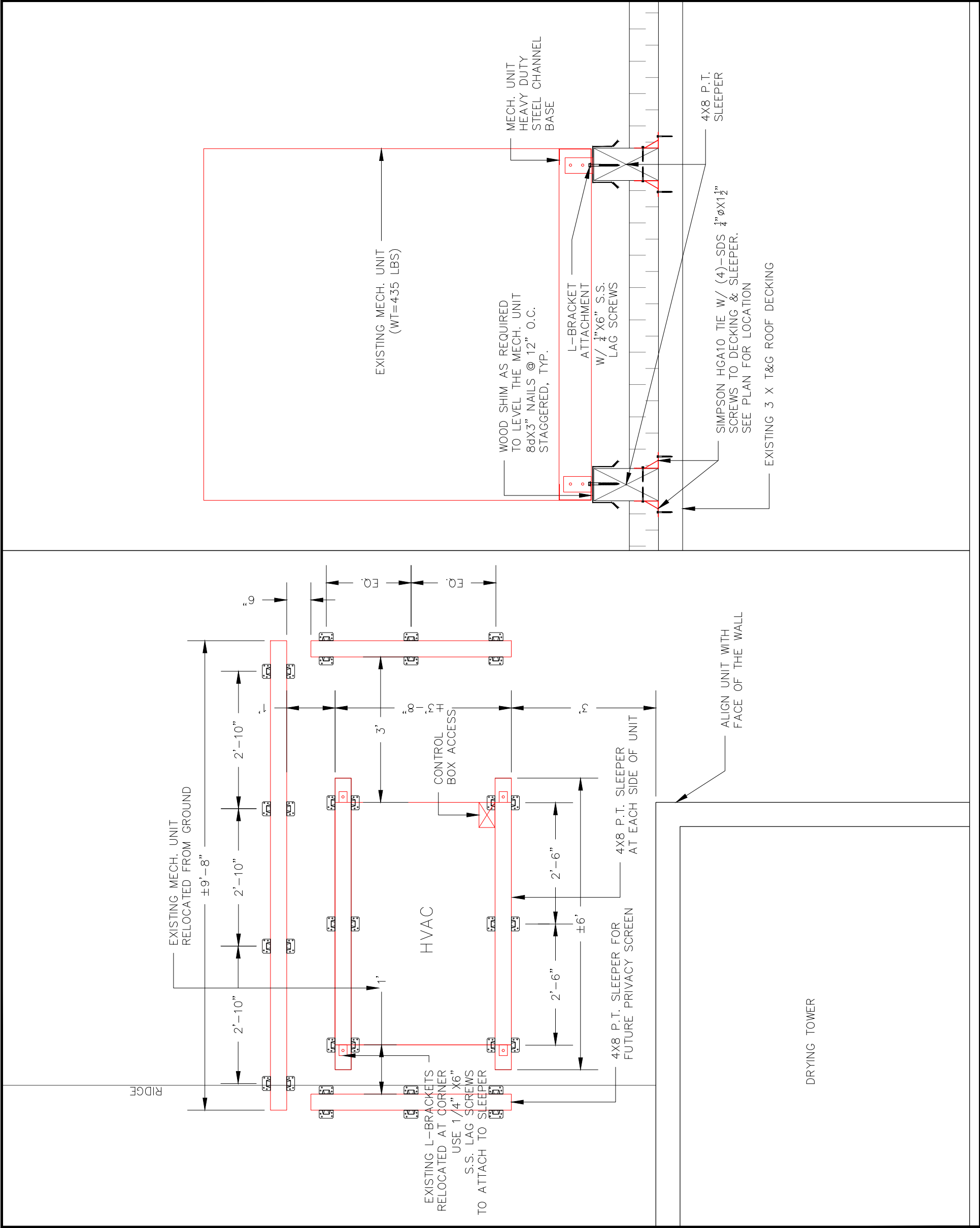
TITLE: ROOF PLAN

CLIENT: CITY OF SURREY

PROJECT: NEWTON CULTURAL CENTRE
13520 72 AVE
SURREY, BC

IRC #:	18100	NORTH:
W.O.#:	VR16-046SP	
SCALE:	1"=10'	
DATE:	APR. 18/16	

DRN. BY:	B.W.	DWG.#: R1
CHK. BY:	D.W.	



LEGEND

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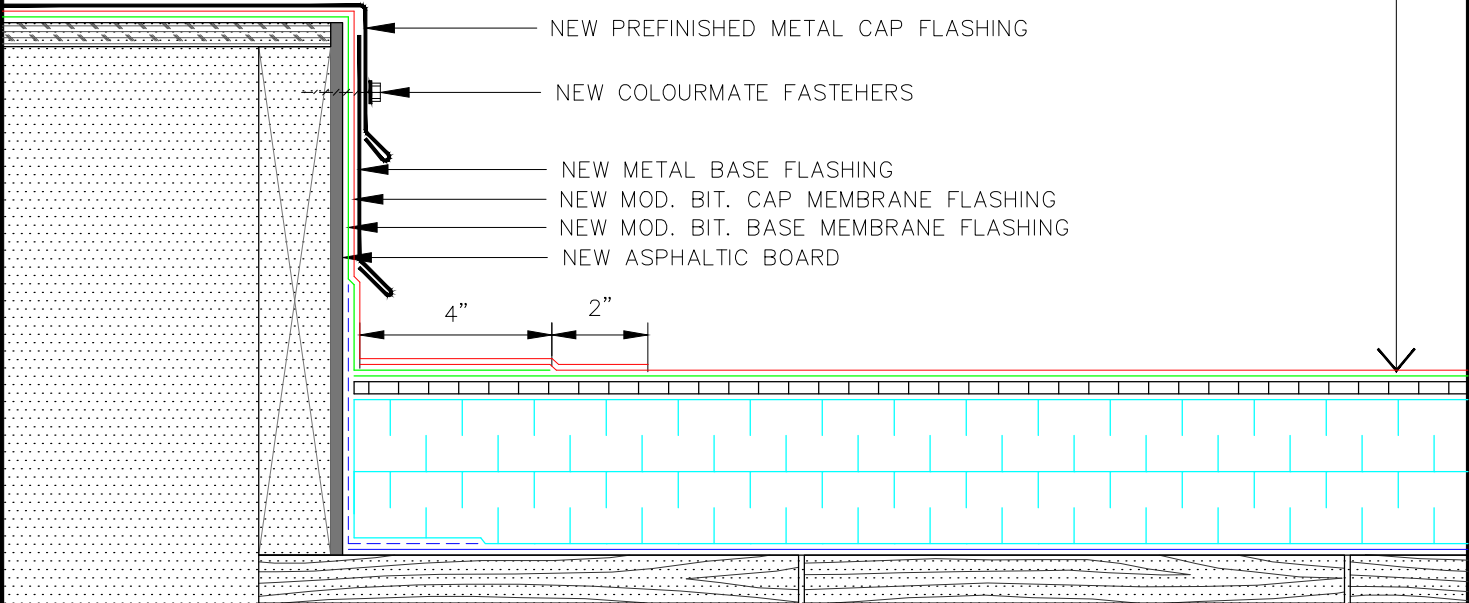
TITLE: NEW SLEEPER PLAN & DETAIL

CLIENT: CITY OF SURREY

PROJECT: NEWTON CULTURAL CENTRE
13520 72 AVE
SURREY, BC

IRC #:	18100	NORTH:	
W.O.#:	VR16-046SP		
SCALE:	NTS		
DATE:	APR. 18/16		
DRN. BY:	B.W.	DWG.#:	S1
CHK. BY:	D.W.		

NEW MOD. BIT. CAP SHEET
 NEW MOD. BIT. BASE SHEET
 NEW 0.25" DENSDECK PRIME
 NEW 2 LAYERS OF POLYISO. INSULATION
 NEW 1 PLY VAPOUR RETARDER
 EXISTING WOOD DECK



NEW PREFINISHED METAL CAP FLASHING
 NEW COLOURMATE FASTEHERS
 NEW METAL BASE FLASHING
 NEW MOD. BIT. CAP MEMBRANE FLASHING
 NEW MOD. BIT. BASE MEMBRANE FLASHING
 NEW ASPHALTIC BOARD

4" 2"



TITLE: WOOD CURB DETAIL

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 Newton Cultural Centre Roof Replacement, RFO No. 1220-040-2016-041
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REVISED:
 REV'N.#:
 DRN. BY: B.W.
 CHK. BY: T.A.A.

SCALE: 3" = 1'-0"
 DATE:
 DWG.#: VCMM712
 Page 65 of 87

NEW MOD. BIT. CAP SHEET
NEW MOD. BIT. BASE SHEET
NEW 0.25" DENSDECK PRIME
NEW 2 LAYERS OF POLYISO. INSULATION
NEW 1 PLY VAPOUR RETARDER
EXISTING WOOD DECK

NEW WOOD FRAME BOX CURB
W/ 3/4" PLYWOOD TOP

NEW PREFINISHED METAL CAP FLASHING

NEW COLOURMATE FASTEHERS

NEW METAL BASE FLASHING

NEW MOD. BIT. CAP MEMBRANE FLASHING

NEW MOD. BIT. BASE MEMBRANE FLASHING

4" 2"

NEW MINERAL BATT INSULATION



TITLE:

WOOD CURB DETAIL

REVISED:

SCALE: 3" = 1'-0"

REV'N.#:

DATE:

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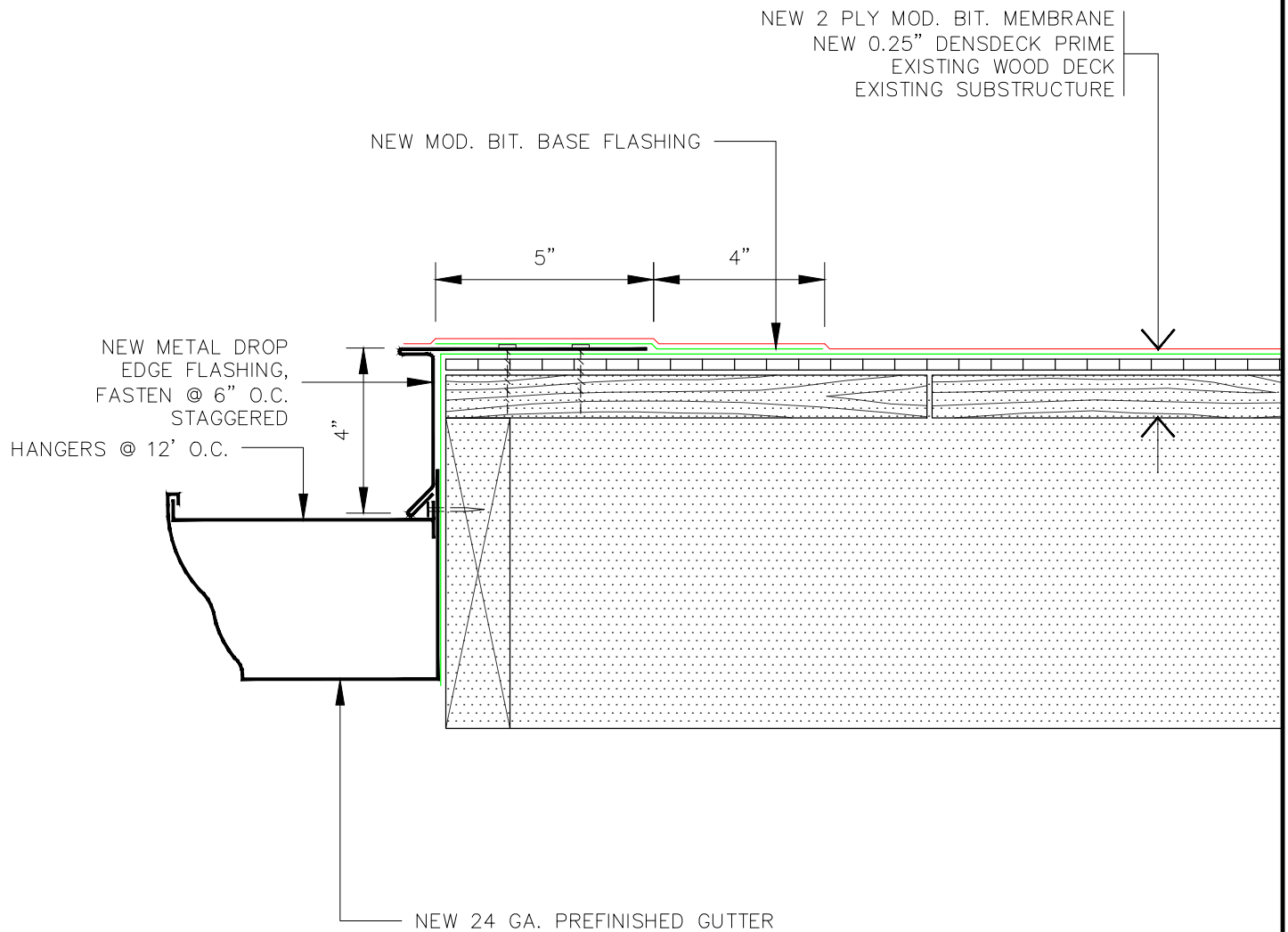
DRN. BY: B.W.

DWG.#:

CHK. BY: T.A.A.

Page 68 of 87

VCMM720



TITLE:

ROOF EDGE DETAIL

REVISED:

SCALE: 3" = 1'-0"

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DATE:

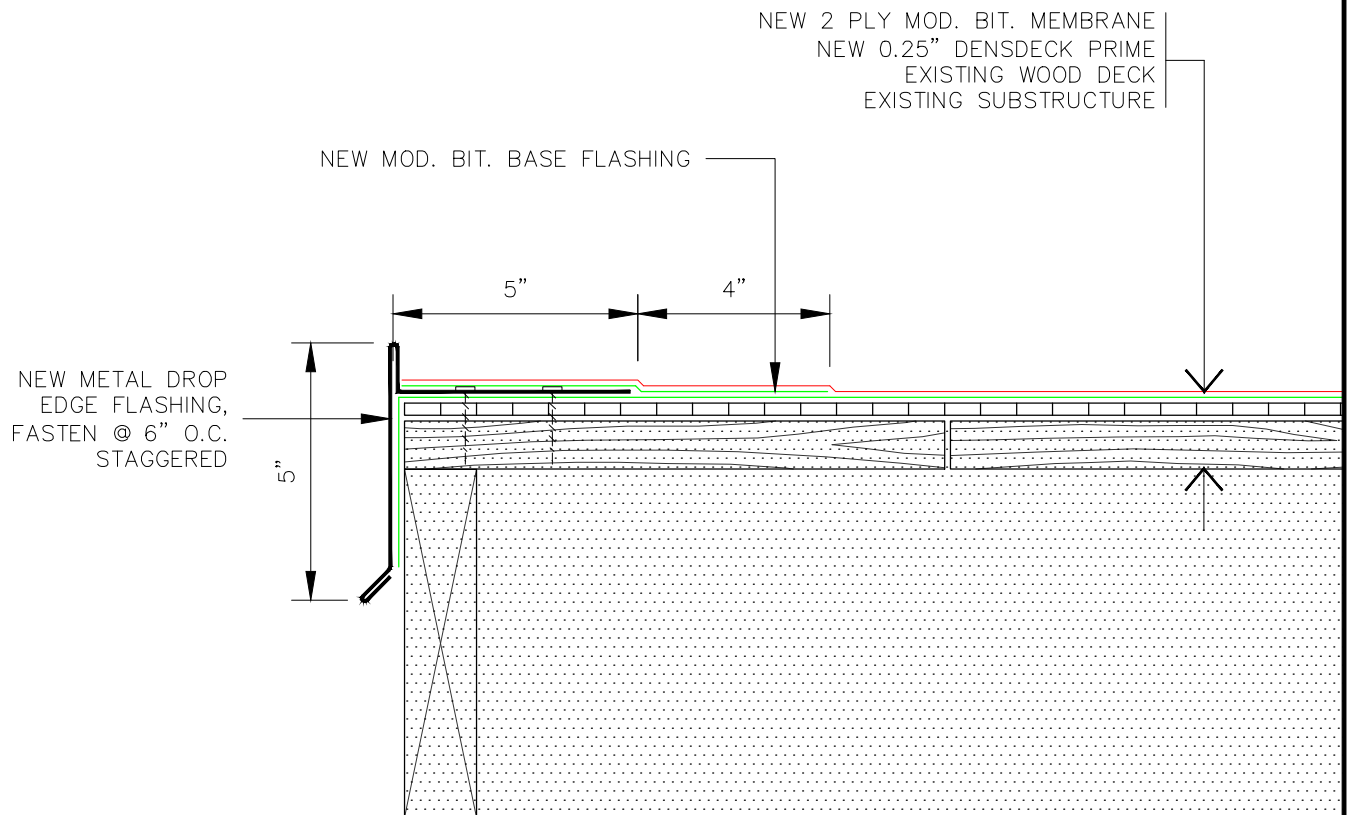
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DWG.#:

CHK. BY: T.A.A.

VCMM023
 Page 67 of 87



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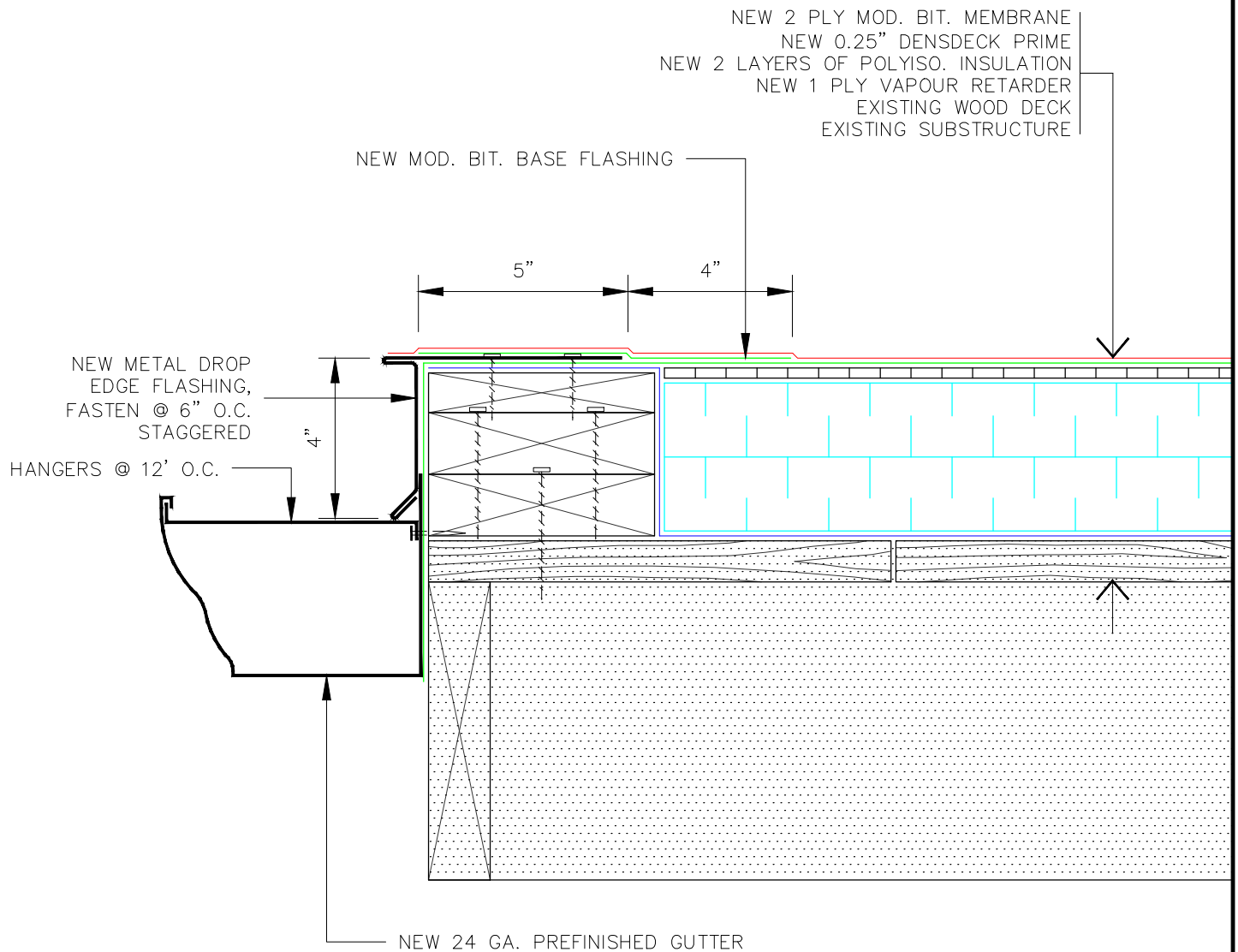
CHK. BY: T.A.A.

SCALE: 3" = 1'-0"

DATE:

DWG.#: VGMM024

Page 68 of 87



TITLE:

ROOF EDGE DETAIL

REVISED:

SCALE: 3" = 1'-0"

REV'N. #:

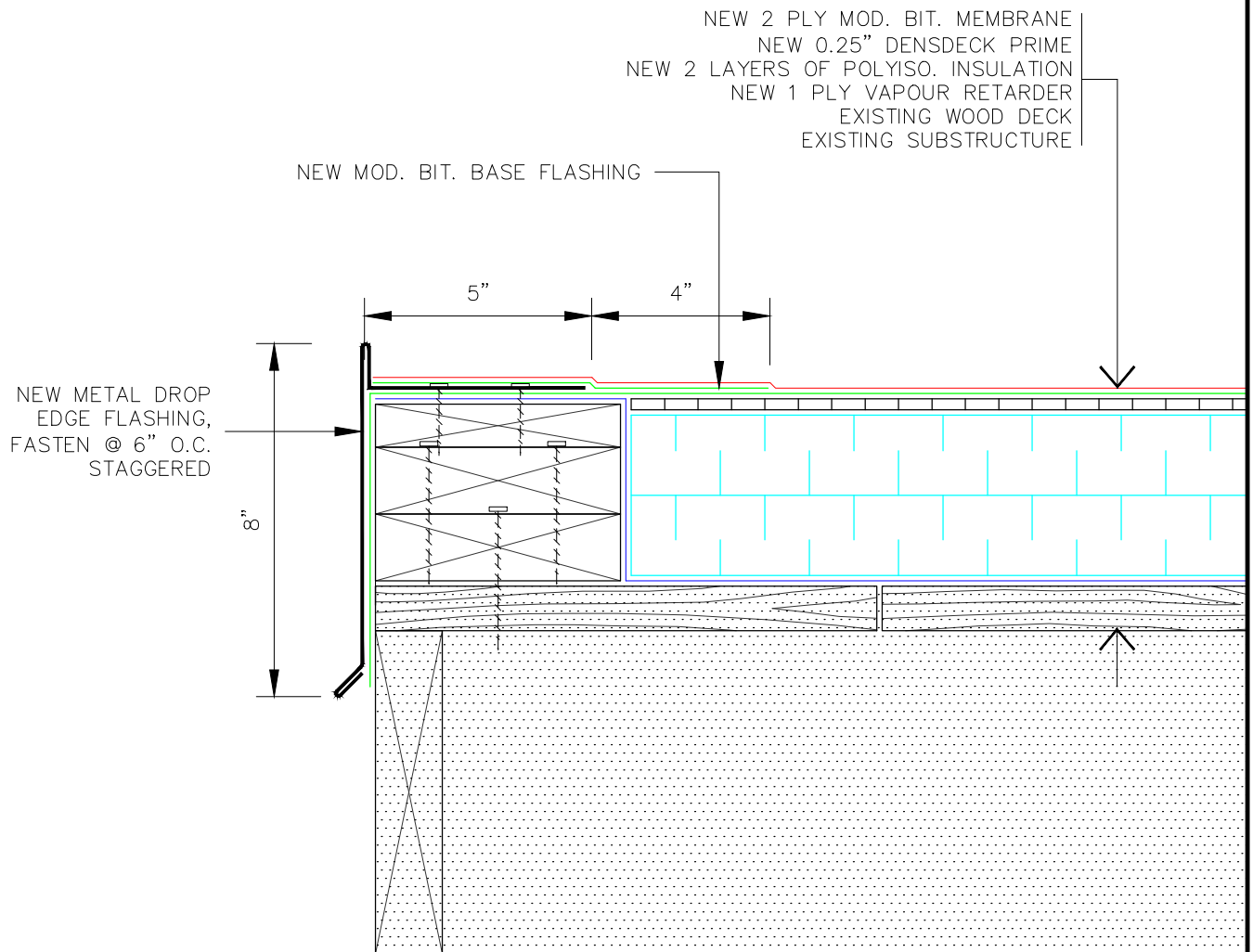
DATE:

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DWG. #: VCGMM025
 Page 69 of 87

CHK. BY: T.A.A.



TITLE: ROOF EDGE DETAIL

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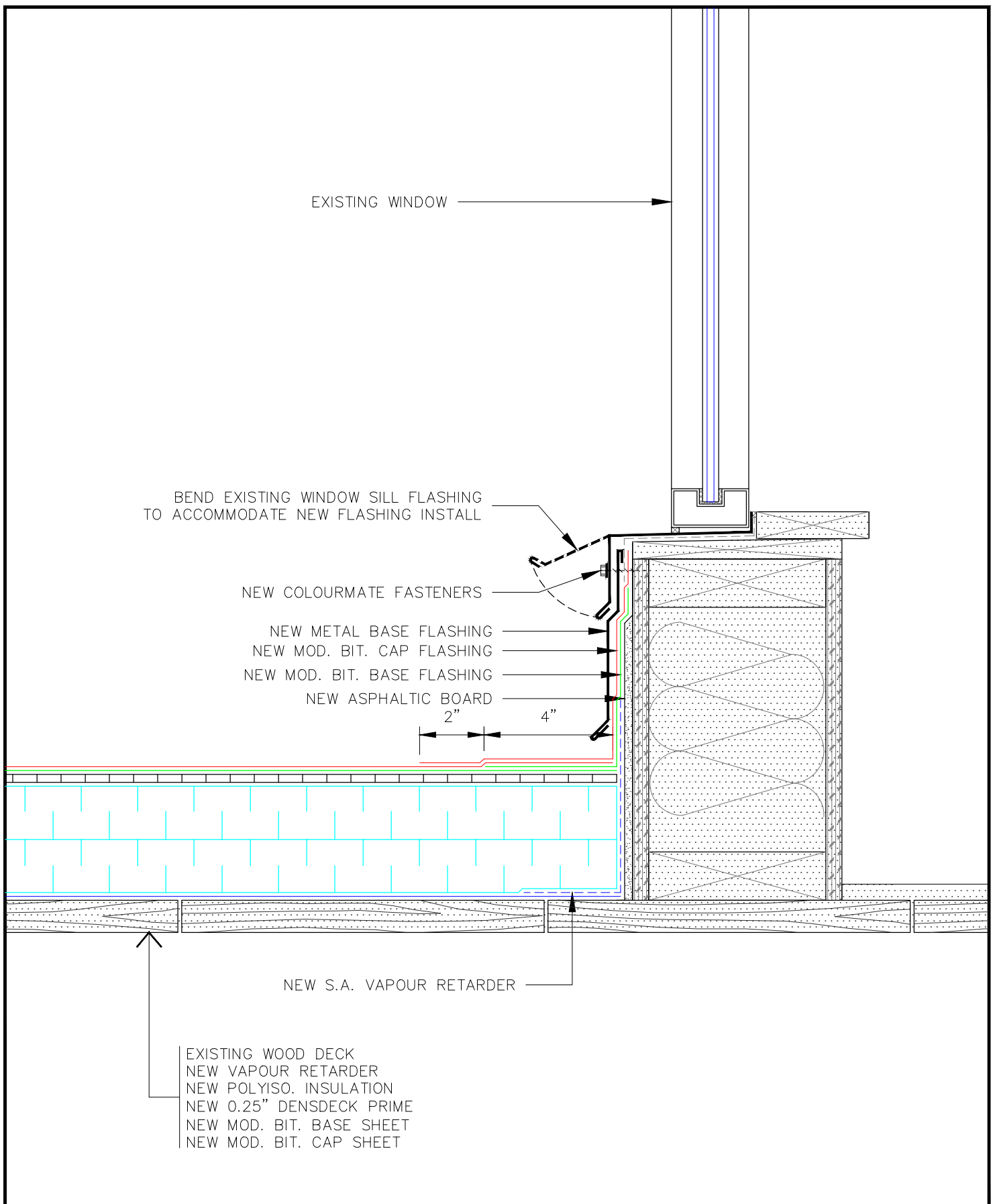
CHK. BY: T.A.A.

SCALE: 3" = 1'-0"

DATE:

DWG.#: VCMM026

Page 70 of 87



TITLE: WINDOW SILL DETAIL

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REV'N.#:

DRN. BY: B.W.

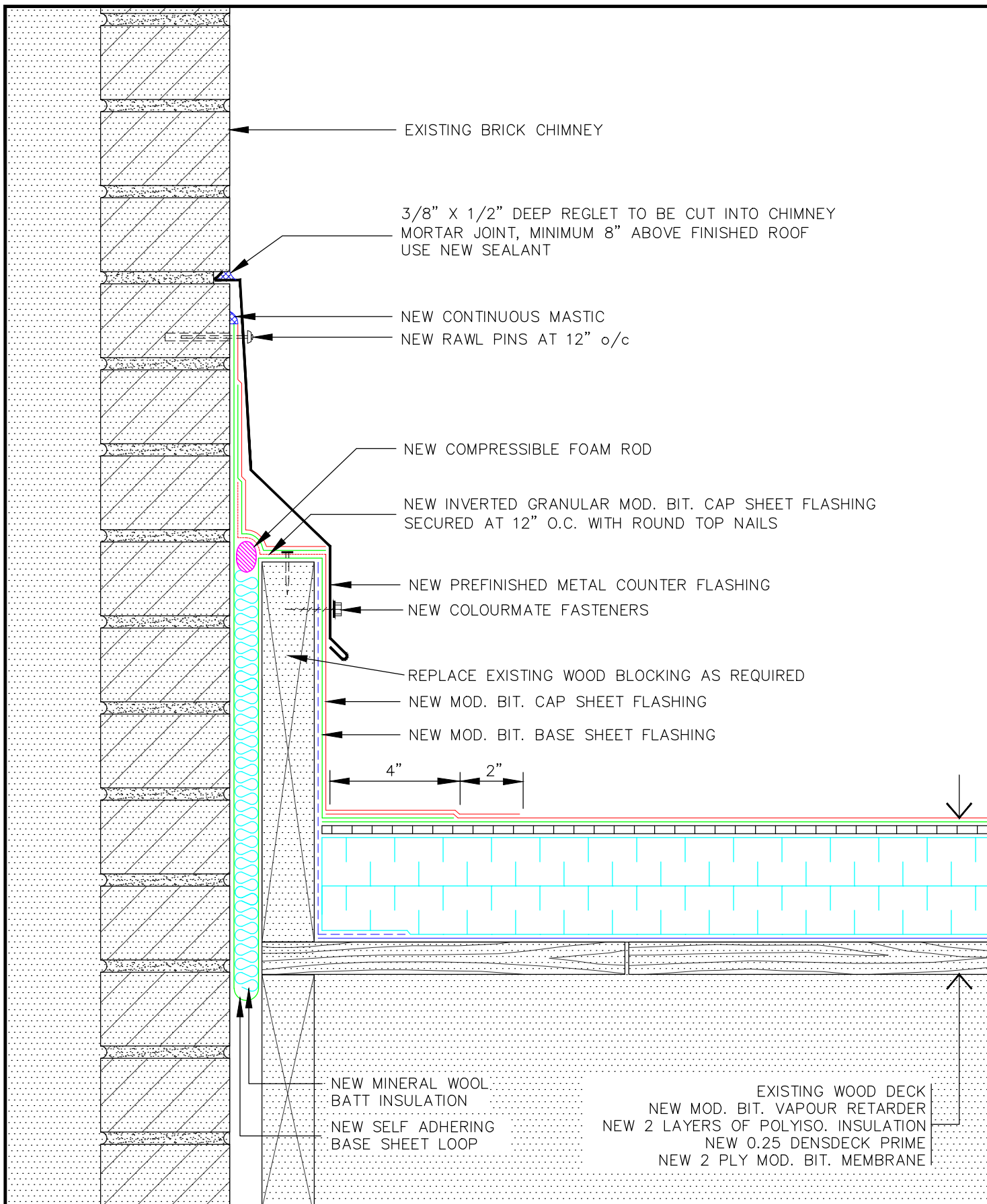
CHK. BY: T.A.A.

SCALE: 3" = 1'-0"

DATE:

DWG.#: VRMM544

Page 71 of 87



TITLE:

CHIMNEY REGLET DETAIL

REVISED:

SCALE: 3" = 1'-0"

REV'N.#:

DATE:

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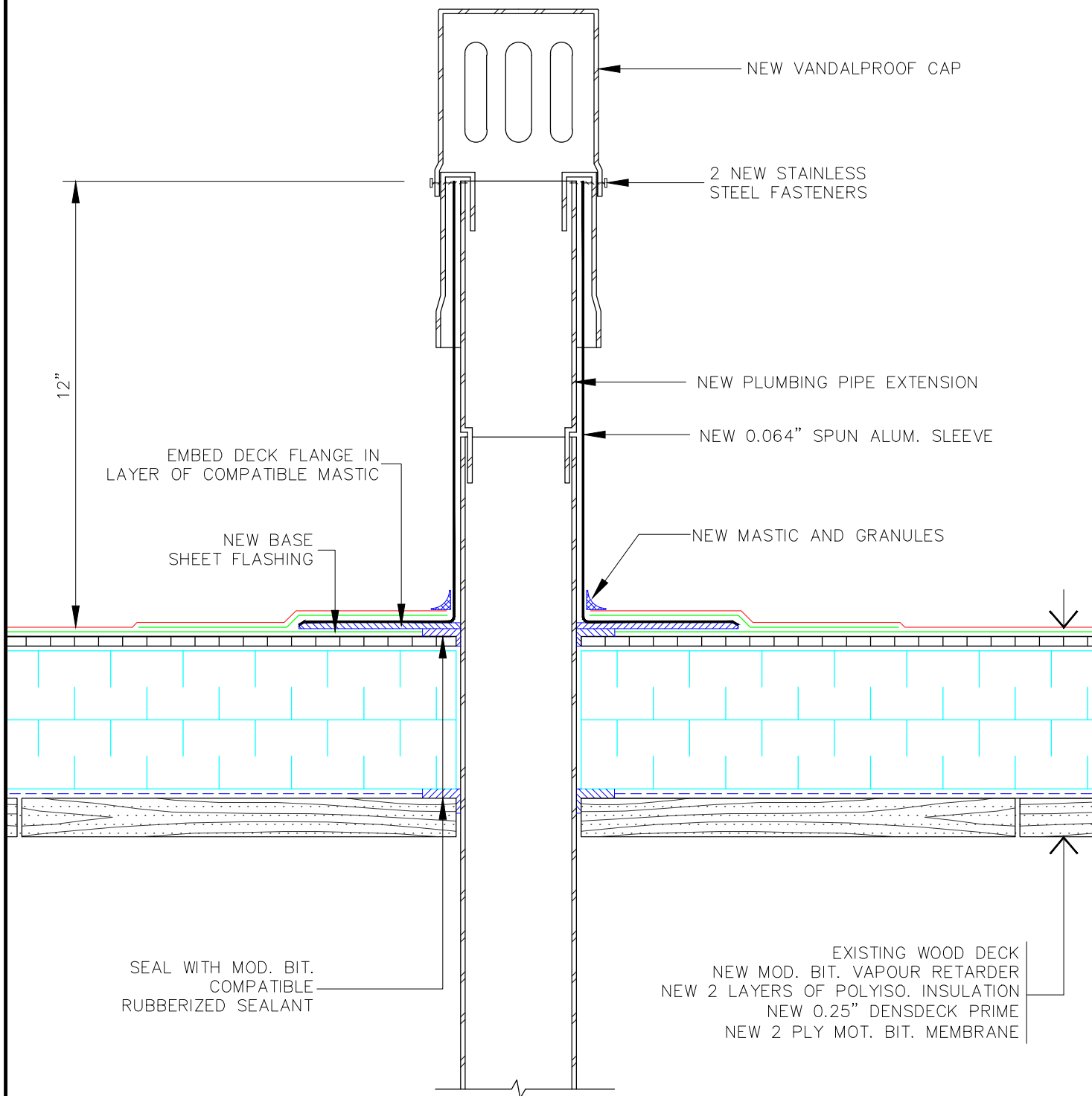
DRN. BY: B.W.

DWG.#:

CHK. BY: T.A.A.

VRMM545

Page 72 of 87



TITLE: PLUMBING STACK DETAIL

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REVISED:

REV'N.#:

DRN. BY: B.W.

CHK. BY: T.A.A.

SCALE: 3" = 1'-0"

DATE:

DWG.#: VSMM554
Page 73 of 87

**SCHEDULE B
APPENDICES 3 THROUGH 11**

Information from Schedule C of the RFQ will be inserted at the time of the award of the Contract:

Schedule B – Appendix 3	Schedule of Prices
Schedule B – Appendix 4	Construction Schedule
Schedule B – Appendix 5	Key Personnel, Sub-Contractors, and Material Suppliers

Forms to be included at the time of the award of the contract:

Schedule B – Appendix 6	Prime Contractor Designation
Schedule B – Appendix 7	Contractor Health & Safety Expectations (Responsibility of Contractor(s))
Schedule B – Appendix 8	Statutory Declaration
Schedule B – Appendix 9	Form 3 <i>Builders Lien Act</i> (Section 7(10)) Certification of Completion
Schedule B – Appendix 10	Form 2 <i>Builders Lien Act</i> (Section 7 (4)) Notice of Certification of Completion
Schedule B – Appendix 11	Post Compliance Form Certification of Completion



SCHEDULE C - QUOTATION

RFQ Title: Newton Cultural Centre Roof Replacement

RFQ No: 1220-040-2016-041

CONTRACTOR

Legal Name: _____

Address: _____

Phone: _____

Fax: _____

Email: _____

TO:

City Representative: Richard D. Oppelt, Purchasing Manager

Address: Surrey City Hall
Finance & Technology Department – Purchasing Section
Reception Counter 5th Floor West
13450 – 104 Avenue, Surrey, B.C., Canada, V3T 1V8

Email for PDF Files: purchasing@surrey.ca

1. If this Quotation is accepted by the City, a contract will be created as described in:
 - (a) the Agreement;
 - (b) the RFQ; and
 - (c) other terms, if any, that are agreed to by the parties in writing.
2. Capitalized terms used and not defined in this Quotation will have the meanings given to them in the Agreement and RFQ. Except as specifically modified by this Quotation, all terms, conditions, representations, warranties and covenants as set out in the Agreement and RFQ will remain in full force and effect.
3. I/We have reviewed the Sample Agreement (Schedule B). If requested by the City, I/we would be prepared to enter into the Sample Agreement, amended by the following departures (list, if any):

Section**Requested Departure(s) / Alternative(s)**

4. The City requires that the successful Contractor have the following in place **before providing the Work**:

- (a) Workers' Compensation Board coverage in good standing and further, if an "Owner Operator" is involved, personal operator protection (P.O.P.) will be provided,
Workers' Compensation Registration Number _____;
- (b) Prime Contractor qualified coordinator is Name: _____
and Contact Number: _____;
- (c) Insurance coverage for the amounts required in the proposed Agreement as a minimum, naming the City as additional insured and generally in compliance with the City's sample insurance certificate form available on the City's Website at www.surrey.ca. search [Standard Certificate of Insurance](#);
- (d) City of Surrey or Intermunicipal Business License: Number _____;
- (e) If the Contractor's goods and services are subject to GST, the Contractor's GST Number is _____; and
- (f) If the Contractor is a company, the company name indicated above is registered with the Registrar of Companies in the Province of British Columbia, Canada, Incorporation Number _____.

As of the date of this Quotation, we advise that we have the ability to meet all of the above requirements **except as follows** (list, if any):

Section**Requested Departure(s) / Alternative(s)**

5. The Contractor acknowledges that the departures it has requested in Sections 3 and 4 of this Quotation will not form part of the Contract unless and until the City agrees to them in writing by initialing or otherwise specifically consenting in writing to be bound by any of them.

Changes and Additions to Specifications and Scope:

6. In addition to the warranties provided in the Agreement, this Quotation includes the

7. I/We have reviewed the RFQ, Schedule A – Scope of Work and Drawings. If requested by the City, I/we would be prepared to meet those requirements, amended by the following departures and additions (list, if any):

Requested Departure(s) / Alternative(s) / Addition(s)

Fees and Payments

8. The Contractor offers to supply to the City of Surrey the Goods and Services for the prices plus applicable taxes as follows:

F.O.B. Destination		Payment Terms: A cash discount of ____% will be allowed if invoices are paid within ____ days, or the ____ day of the month following, or net 30 days, on a best effort basis.	Ship Via:
Item #	Item Name	Amount	
	<p>To provide all labour, materials, plant and equipment and all other services necessary for the performance of the Work as stated in the specifications and drawings.</p> <p>Job site location is 13520 – 72 Avenue, Surrey, B.C., V3W 2P1</p> <p>The detailed scope of Work is as described on the Contract Drawings (Schedule B – Appendix 2A), Special Provisions (Schedule B – Appendix 1), and Supplementary Specifications (Project) (Schedule B- Appendix 2).</p> <p>Lump Sum Amount for Tower Roof 1 with a 10-year RCABC RoofStar Guarantee:</p> <p>Lump Sum Amount for Roof 2 with a 10-year RCABC RoofStar Guarantee:</p> <p>Lump Sum Amount for Roof 3 with a 10-year RCABC RoofStar Guarantee:</p> <p>Note: Overheads, General Conditions and Profit are to be included in the above amounts.</p>	<p>\$ _____</p> <p>\$ _____</p> <p>\$ _____</p>	
CURRENCY: Canadian		Subtotal (lump sum roofs 1, 2 & 3):	\$ _____
		GST (5%):	\$ _____
		TOTAL QUOTATION PRICE:	\$ _____

List of Alternate Prices:

9. The following is a list of Alternate Price(s) to the Work and forms part of this RFQ, upon the acceptance of any or all of the Alternate Price(s). The Alternate Prices are an addition or a deduction to the Total Quotation Price and do not include GST. DO NOT state a revised Total Quotation Price.

Description of Alternate Prices	Addition	Deduction
AP-1. Credit to reduce RCABC RoofStar Guarantee in sub-total (lump sum roofs 1, 2 & 3) from 10-year to a 5-year (before taxes):	\$ []	\$ []
AP 2. Credit to reduce to 1 layer 1.8" 4' x 8' acrylic faced insulation (before taxes):	\$ []	\$ []

List of Separate Prices:

10. The following is a list of Separate Price(s) to the Work and forms part of this RFQ, upon the acceptance of any or all of the Separate Price(s). The Separate Prices are an addition or a deduction to the Total Quotation Price and do not include GST. DO NOT state a revised Total Quotation Price.

Description of Separate Price Items	Addition	Deduction
SP-1.	\$[]	\$[]
SP-2.	\$[]	\$[]

Force Account Labour and Equipment Rates:

11. Contractors should complete the following tables setting out the all-inclusive hourly labour rates including overhead and profit for approved extras/credits for all applicable categories of labour (use the spaces provided and/or attach additional pages, if necessary):

Table 1 – Hourly Labour Rate Schedule:

Labour Category	Straight Time/hr (Plus GST)	Overtime Rate/hr (Plus GST)
.1 Journeyman Carpenter	\$	\$
.2 Journeyman Roofer	\$	\$
.3 Apprentice Roofer	\$	\$
.4 Journeyman Sheet Metal	\$	\$
.5 Apprentice Sheet Metal	\$	\$
.6 Labourer	\$	\$

Table 2 – Hourly Equipment Rate Schedule:

No.	Equipment Description	Hourly Equipment Rate
		\$
		\$

Metro Vancouver's Non-Road Diesel Engine Emissions Regulation By-law No. 1161, 2012 (the Bylaw)

12. Contractor should confirm they are in compliance with By-law (if applicable)

☐ Applicable as follows ☐ Not applicable to this project

No.	Equipment Description	Engine Tier Designation	Engine Registration Number as Issued by Metro Vancouver
1		<input type="checkbox"/> Tier 0 or <input type="checkbox"/> Tier 1	
2		<input type="checkbox"/> Tier 0 or <input type="checkbox"/> Tier 1	
3		<input type="checkbox"/> Tier 0 or <input type="checkbox"/> Tier 1	
4		<input type="checkbox"/> Tier 0 or <input type="checkbox"/> Tier 1	
5		<input type="checkbox"/> Tier 0 or <input type="checkbox"/> Tier 1	

Construction Schedule:

13. Contractors should provide an estimated schedule, with major item descriptions and time indicating a commitment to perform the Contract within the time specified (use the spaces provided and/or attach additional pages, if necessary).

- (a) Commence the Work on or before: _____; and
(b) Substantial Performance: _____.

Contractor may provide a Microsoft Project (or similar) schedule outlining the Critical Path and should include all major phases of the Work and indicate start and substantial completion dates for each.

ACTIVITY	SCHEDULE									
	1	2	3	4	5	6	7	8	9	10

Proposed Disposal Site: _____

Key Personnel & Subcontractors:

14. Contractor to provide information on the background and experience of all key personnel proposed for the performance of the Work (use the spaces provided and/or attach additional pages, if necessary):

Key Personnel

Name: _____
Experience: _____
Dates: _____
Project Name: _____
Responsibility: _____

15. Contractor to provide the following information on the background and experience of all proposed subcontractors and material suppliers for the divisions or sections of the work/or supply listed below: (use the spaces provided and/or attach additional pages, if necessary): [Note: It is not necessary for Contractor to list all subcontractors and material suppliers that the Contractor proposes to use – only those for the divisions or sections of work / supply listed below]

<i>Description Of Work/supply</i>	<i>Subcontractor & Material Supplier Names</i>	<i>Years Of Working With Contractor</i>	<i>Telephone Number and Email</i>

The City reserves the right of approval for each of the subcontractors and material suppliers. The Contractor will be given the opportunity to substitute an acceptable subcontractor and material supplier, if necessary.

Experience and References:

16. Contractor's relevant **experience and qualifications** for the performance of the Work similar to those required by the Agreement (use the spaces provided and/or attach additional pages, if necessary):

17. Contractor's **references** for work performed by your firm of a similar nature and value (name and telephone number) (use the spaces provided and/or attach additional pages, if necessary). The City's preference is to have a minimum of three references. Previous clients of the Contractor may be contacted at the City's discretion.

18. I/We the undersigned duly authorized representatives of the Contractor, having received and carefully reviewed the RFQ and the Agreement, submit this Quotation in response to the RFQ.

This Quotation is executed by the Contractor this _____ day of _____, 20__.

CONTRACTOR

I/We have the authority to bind the Contractor.

(Legal Name of Contractor)

(Signature of Authorized Signatory)

(Signature of Authorized Signatory)

(Print Name and Position of Authorized Signatory)

(Print Name and Position of Authorized Signatory)

ATTACHMENT 1 - CITY OF SURREY, PROJECT COMPLETION DELIVERABLES WORKSHEET

Project Name: _____

Project Address: _____

Date: _____

End of Project Walk-through: _____

End of Project Walk-through: _____

City Representative: _____

Contractor/Contractor Rep: _____

Department: _____

Company Name: _____

Contact phone number: _____

Contact phone number: _____

Fax number: _____

Fax number: _____

A. BUILDING PERMITS – CLOSED OUT

- ☐ Architectural
- ☐ Electrical
- ☐ Mechanical / Plumbing
- ☐ Structural
- ☐ Other

B. O&M MANUALS RECEIVED

**Shop Drawings to be included in O&M Manuals*

Architectural

- ☐ 1 Electronic (PDF) file
- ☐ 2 Hardcopies

Electrical

- ☐ 1 Electronic (PDF) file
- ☐ 2 Hardcopies

Mechanical

- ☐ 1 Electronic (PDF) file
- ☐ 2 Hardcopies

Other(s)

- ☐ 1 Electronic (PDF) file
- ☐ 2 Hardcopies

C. PROJECT CLOSE-OUT

- ☐ Project Summary Report
- ☐ Substantial Completions
- ☐ Deficiencies List
- ☐ Transfer of Utilities (Hydro/Teresan)
Notify City of Surrey (604-591-4804)
- ☐ Asset Inventory Forms including HVAC
- ☐ TCA Cost Summary Finance, & Warranty
Information sheets & Project summary
with graphics
- ☐ Final Occupancy Certification
- ☐ All documentation/correspondence
pertaining to the project (File Share Device)

D. FALL PROTECTION / RESTRAINT SYSTEM

- ☐ Complete
- ☐ Wall plaques displayed as required
- ☐ 1 (PDF) containing the Fall Protection Safety
System

E. AS-BUILT DRAWING SUBMITTALS

Architectural

- ☐ 1 Set of AutoCAD As-Built DWG files
- ☐ 1 Set of PDF As-Built drawings
- ☐ 1 Set of paper construction drawings

Civil

- ☐ 1 Set of AutoCAD As-Built DWG files
- ☐ 1 Set of PDF As-Built drawings
- ☐ 1 Set of paper construction drawings

Electrical

- ☐ 1 Set of AutoCAD As-Built DWG files
- ☐ 1 Set of PDF As-Built drawings
- ☐ 1 Set of paper construction drawings

Fire Protection

- ☐ 1 Set of AutoCAD As-Built DWG files
- ☐ 1 Set of PDF As-Built drawings
- ☐ 1 Set of paper construction drawings

Landscaping

- ☐ 1 Set of AutoCAD As-Built DWG files
- ☐ 1 Set of PDF As-Built drawings
- ☐ 1 Set of paper construction drawings

Mechanical / Plumbing

- ☐ 1 Set of AutoCAD As-Built DWG files
- ☐ 1 Set of PDF As-Built drawings
- ☐ 1 Set of paper construction drawings

Structural

- ☐ 1 Set of AutoCAD As-Built DWG files
- ☐ 1 Set of PDF As-Built drawings
- ☐ 1 Set of paper construction drawings

Other:

- ☐ 1 Set of AutoCAD As-Built DWG files
- ☐ 1 Set of PDF As-Built drawings
- ☐ 1 Set of paper construction drawings

F. FIRE SAFETY PLAN

- ☐ Complete
- ☐ Wall plaques displayed throughout facility
- ☐ 1 Electronic (PDF) file of the fire safety plan
- ☐ 2 paper copies of the fire safety plan

Signed: _____

City Representative

Contractor Representative

Internal Representative

Fire Chief/ Representative

ATTACHMENT 2

PRIME CONTRACTOR DESIGNATION LETTER OF UNDERSTANDING

As per the requirements of the *Workers' Compensation Act* Part 3, Division 3, Section 118 (1-3), which states:

Coordination of multiple-employer workplaces

118 (1) In this section:

"multiple-employer workplace" means a workplace where workers of 2 or more employers are working at the same time:

"prime contractor" means, in relation to a multiple-employer workplace,

- (a) the directing contractor, employer or other person who enters into a written agreement with the owner of that workplace to be the prime contractor for the purposes of this Part, or
- (b) if there is no agreement referred to in paragraph (a), the owner of the workplace.

(2) The prime contractor of a multiple-employer workplace must

- (a) ensure that the activities of employers, workers and other persons at the workplace relating to occupational health and safety are coordinated, and
- (b) do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with this Part and the regulation in respect to the workplace.

(3) Each employer of workers at a multiple-employer workplace must give to the prime contractor the name of the person the employer has designated to supervise the employer's workers at that workplace.

By signing this Agreement, the Contractor accepts all responsibilities of a prime contractor as outlined in the *Workers' Compensation Act*, and *WorksafeBC OH&S Regulation*.

As a Contractor signing this Prime Contractor Designation form with the City of Surrey (the "owner"), you are agreeing that your company, management staff, supervisory staff and workers will comply with the *Workers' Compensation Board (WCB) Occupational Health and Safety Regulation* and the *Workers' Compensation (WC) Act*.

Any WorksafeBC OH&S violation by the prime contractor may be considered a breach of contract resulting in possible termination or suspension of the agreement and/or any other actions deemed appropriate at the discretion of the City.

Any penalties, sanctions or additional costs levied against the City, as a result of the actions of the prime contractor are the responsibility of the prime contractor.

The Contractor acknowledges having read and understood the information above.

By signing this Prime Contractor Designation form, the Contractor agrees as a representative of the firm noted below, to accept all responsibilities of the prime contractor for this project.

The Contractor understands and accepts the responsibilities of the prime contractor designation in accordance with the *Workers' Compensation Act* while contracted by the City of Surrey for project and will abide by all *Workers' Compensation Board Regulation* requirements.

Project File No.: 1220-040-2016-041

Project Title and Site Location: 13520 – 72 Avenue, Surrey, B.C., V3W 2P1

Prime Contractor Name: _____

Prime Contractor Address: _____

Telephone/Fax Numbers: Phone: _____ Fax: _____

Name of Person in Charge of Project: _____

Name of Person Responsible for Coordinating Health & Safety Activities: _____

Phone: _____

Prime Contractor Signature: _____ Date: _____

Please return a signed copy of this memo to the City of Surrey, Finance & Technology Department, Purchasing Section, 13450 – 104 Avenue, Surrey, British Columbia, V3T 1V8

If you have any questions, please contact the City of Surrey, Manager Occupational Health & Safety at 604-591-4658.

ATTACHMENT 3

CONTRACTOR HEALTH & SAFETY EXPECTATIONS

RESPONSIBILITY OF CONTRACTOR(S)

The City of Surrey strives to maintain a safe work environment for employees and contractors and insists upon the enforcement of safe practices and procedures in all premises and in all work activities. It is essential that all contractors and their employees and sub-contractor(s) perform in the same manner. It is every employers and contractors responsibility to ensure that staff and public are protected from workplace hazards.

As a contractor to the City of Surrey, you are expected to conform to the requirements of the Workers' Compensation Act, the WCB Occupational Health and Safety Regulation and to all federal, provincial and local laws and regulations. The City of Surrey Building Owner, Project Manager, and the Manager, Occupational Health & Safety or designate have the authority to order an unsafe act to cease or to have an unsafe piece of equipment removed from the premises or, in extreme situations, to shut down a job entirely. Any City of Surrey Employee that observes a safety infraction by a contractor performing work for the City of Surrey should bring it to the attention of a manager immediately or Occupational Health & Safety (604-591-4131).

The following information is provided as typical City of Surrey requirements, but does not relieve the contractor from complying with all applicable local, provincial and federal laws, regulations and bylaws.

PERSONNEL

1. You are expected to inform your employees of any potential hazard in the workplace and advise of appropriate action to be taken should a hazard be found or a fire or accident occur.
2. Contractors will restrict persons invited on the premises to employees only. No families or friends are permitted.
3. The contractor will advise the City of any on-site accidents involving the contractor's employees, or injuries to others caused by the contractor's business.

SAFETY MANAGEMENT SYSTEM

1. Contractors will ensure their employees utilize proper safety equipment and clothing as required for job site activities.
2. Contractors must follow and have on site proper written safe work procedures for hazardous work, e.g. Fall protection, confined space entry, hotwork, lockout, excavations and shoring, traffic management, etc.
3. Contractor must Identify workplace risk and implement suitable controls.
4. Contractor must provide safety training and education to staff and have training records available for review.
5. Contractor must have a health & safety program for its workers and sub-contractors
6. Contractor will provide appropriate First-Aid coverage for their workers and subcontractors.
7. Contractor must forward a weekly work task list prior to work commencement.
8. The qualified safety coordinator must participate in the City of Surrey OHS Orientation or attend the Prime Contractor's Orientation.

WORK AREAS –City Facilities

No work by contractors shall occur in any area without prior consent of the City of Surrey Manager, Civic Facilities or his designated representative. Work during normal business hours of the City shall not create undue noise, smells or otherwise unduly disturb the work of City of Surrey staff or the public. If an activity requires that a disturbance is likely, the contractor shall whenever possible only do that work outside normal business hours.

All activities that create a hazard (i.e. work from a ladder, removal of a floor tile, emission of VOC's, etc.) to persons outside the contractor's supervision shall have warning devices, delineation or barriers, sealed spaces, etc. as would normally be required to protect any person from that hazard.

SAFETY ATTITUDE

Your safety record and attitude are important criteria used to judge your qualification for future bidding on solicitations with the City of Surrey.

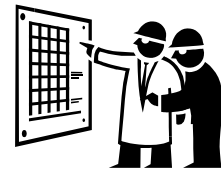
You can help ensure employee safety and your eligibility for future business with the City if you exhibit and practice a "Safe Work - Safe City" attitude.

The City of Surrey is concerned about the health, safety and wellbeing of all employees and contractors. It is essential we maintain a healthy, safe and productive work environment.

All Employees & Contractors:

It is everyone responsibility to:

- ❖ know and comply with WCB regulations and
- ❖ follow established safe work procedures
- ❖ immediately report any work related injury to his/her supervisor; and to the city representative
- ❖ not remain on the work site while his/her ability to work is in any way impaired
- ❖ report unsafe acts and conditions to their supervisor
- ❖ correct unsafe conditions immediately whenever it is possible to do so
- ❖ take reasonable care to protect your health & safety and the health and safety of other persons who may be affected by your act's or omissions at work



An employee must refuse to work if continuing to do so would endanger the health and safety of the employee, fellow employees or others. The worker must immediately report the circumstances of the unsafe condition to his or her supervisor or manager. If the unsafe condition is not remedied or the issue is not resolved the Manager, Occupational Health & Safety must be contacted.

A common sense approach usually resolves the issue.

GENERAL RULES

1. For all secured worksites, contracted workers are required to sign in and sign out each day
2. (Access cards may be issued – a worker may need to provide an Identification document (i.e. Driver's License) in exchange).
3. Personal protective equipment, as determined by the City, through consultation with the Contractors Health and Safety Representatives must be worn when and where required. (Hard Hats, Safety Footwear, Safety Vests and Safety Glasses must be worn on active construction sites. Hearing Protection must be worn when noise levels are above 85dBA.)
4. Horseplay, gambling and the use of alcohol or narcotics will not be tolerated.
5. No Smoking within 7.5M of a City owned buildings door exits, windows and vents.
6. Report **ALL** injuries to your supervisor immediately and notify the City's site representative.
7. Report any unsafe conditions, including someone under the influence or hazards, which may allow an injury to occur to you, a fellow worker, or others on the worksite.
8. Report any property damage, regardless of how minor.
9. Restricted and controlled products will be labeled, used and stored in accordance with the associated regulations, e.g. WHMIS. Follow all procedural instructions when using or handling hazardous materials/controlled products and ensure that all containers of hazardous/controlled product materials are properly labelled and stored in designated areas.
10. Obey all posted signs and notices. Do not venture into areas that you are not authorized to enter.
11. Always use the correct posture when lifting and get assistance if the weight is excessive.
12. Do not work within the limits of approach to high voltage equipment.
13. If working at heights greater than 10 feet a Fall Protection system must be in place. The appropriate Fall Protection equipment must be worn at all times.
14. **Housekeeping** (Orderliness and good housekeeping are basic requirements and must be maintained at all times):
 - a) Aisles are to be kept clear at all times.
 - b) Individual work areas are to be kept clean and tidy.
 - c) All materials, tools, products and equipment are to be kept in their designated areas.
 - d) Liquid spills are to be cleaned up immediately to prevent slips and falls.
 - e) Accumulation of oily rags, combustible refuse or similar fire hazards will not be tolerated.
15. **Fire Prevention:**
 - a) Become familiar with Surroundings and emergency exit.
 - b) Ensure aisles and exits are not blocked at any time.
 - c) Anytime a fire extinguisher is used, report it immediately to your supervisor, so that it can be recharged.

16. Equipment Operation (Any equipment, which could create a hazard, must be maintained in good condition):

- a) Equipment must not be repaired, adjusted or operated unless by a "competent person" who understand the safe operating procedures.
- b) Always be aware of the use and location of the "EMERGENCY STOP" button, if equipment is so equipped, before using the equipment.
- c) Loose clothing, jewelry and long hair must be secured to prevent becoming entangled with equipment.
- d) The Operator must check all safety devices on equipment before operation.
- e) All equipment must be turned off and the appropriate "lock-out" procedure followed, prior to repairs, cleaning, adjustment or lubrication.
- f) Radio/Walkman/I-pod Head phones are not allowed to be worn during regular work operations.
- g) All ladders must be of an approved type and length. Unacceptable ladders must be removed immediately from the premises.
- h) All vehicles and equipment on City property must be kept in safe mechanical condition at all times, and be operated only by persons with a valid driver's license and/or proper training and qualifications.
- i) Contractors will not operate any equipment, valves, switches, etc., which are part of the City's operation, unless specific permission is received from the Department Representative.

17. Ground Disturbance –Every time you dig in the ground, with a shovel or mechanized equipment, you run the risk of loss of life or damage to property if you hit any of the many buried cables, conduits, gas or oil pipelines and/or other underground facilities that serve our city, **BC One Call Must be called and a ticket obtained prior to commencing any ground disturbance activities.**

Issued By:	Occupational Health & Safety Section - Contractor Coordination Program
Date:	Revised: January 14, 2014 Original: August 15, 2014
Distributed:	Via Email & Posted on Intranet: January 16, 2015: <u>August 15, 2014</u>

This document does not replace the Workers' Compensation Act or WorkSafeBC OH&S regulation. Each individual Contractor must have specific health and safety safe work rules and procedures that apply to their work tasks. Each Contractor must comply with the Workers' Compensation Act and WorkSafeBC Occupational Health & Safety Regulation and to all federal, provincial and local laws and regulations. If a contractor is unable to comply they must bring this to the attention of their qualified safety representative and to the Prime Contractor safety representative immediately.

Authorized Signature: _____

Name: _____

(Please Print)

Date: _____