# **SPECIFICATIONS FOR:**

TOWN OF ST. PAUL ADMINISTRATIVE BUILDING AREA B 5101 – 50 Street St. Paul, Alberta T0A 3A1



# ALLEN DESJARLAIS INDEPENDENT INSPECTIONS LTD.

11036 – 150 Street Edmonton, Alberta T5P 1S1

**Telephone:** 780-952-9754

Fax: 780-486-4410

		Invitation to Bid Project No
Mandatory Site Visit:	A.M.,	
Closing Date:	P.M., _	

#### 1. LIST OF SPECIFIED SECTIONS

Division	Section Number	Section Name
Front	00000	Cover
End	00001	Table of Contents
Specification	00201	Instructions to Bidders
	00255	Mandatory Attendance Pre-Bid Meeting & Form
	00300	Bid Form And Appendices
	00500	Form of Agreement
	00611	Performance and Payment Security
	00760	General Conditions
	01000	General Requirements
	01212	Allowances
	01375	Alteration Project Procedures
	01500	Facilities & Control
	01741	Clean-Up
	01900	Additional Requirements & Notes to Drawings
Division	02224	Selective Demolition
Two to	06100	Rough Carpentry
Sixteen	07270	Firestopping & Smoke Seals
	07510	S.B.S. Roof Membranes & Insulation
	07620	Metal Flashings
	15010	General Mechanical Requirements
		•

#### 2. LIST OF DRAWINGS

The following drawings are not bound within the Specification but are issued with the Specifications and form part of the Bid Document.

#### DRAWING INDEX:

RP1 - Roof Plan of Re-roof Area(s)

# **DETAIL DRAWINGS:**

Parapet Detail

Roof Drain Detail

Roof Parapet Detail

Control Joint Detail

Extended Vent Curb Detail

Roof/Wall Base Flashing Detail

A.R.C.A. Figures - Torch Safety Detailing - (Figures 1(a), 2, 3, 4, 5, 6) - apply for this project.

#### 1. SUMMARY

.1 The intent of this Bid call is to solicit and receive formal offers to perform the following Work:

Project – Year 2017 Area B Town of St. Paul Administration Building 5101 – 50 Street St. Paul, Alberta TOA 3A1

# 2. INSTRUCTION FOR BIDDERS

Bidders should carefully read the following document prior to submitting a Tender. All terms, conditions and provisions of this Call for Tenders are deemed to be accepted by the Bidder and incorporated by reference in its Tender and any resulting contract, except such terms and conditions as are expressly excluded in the Tender subject to the agreement of the Owner to such exclusion.

#### 2.1 QUESTIONS

All questions regarding this Call for Tenders should be directed by electronic mail to:

Allen Desjarlais, whose e-mail address is allenaii@telus.net or by written correspondence to:

Allen Desjarlais Independent Inspections Ltd. 11036 – 150 Street Edmonton. AB T5P 1S1

Phone: 780-952-9754 Fax: 780-486-4410

Telephone inquires may be accepted however, verbal responses to any inquiry are not binding on the Owner.

- Information obtained from any source other than listed in an addendum is not official and may be inaccurate and is not binding on the Owner.
- Direct contact by a Bidder with any other person other than Owner's representative specified in #2.4 without prior authorization may result in disqualification of the Bidder.
- Bidder inquiries should be made no later than two (2) days prior to the Closing Date. Inquiries made after this date may not be given a response.

# 2.2 MANDATORY PRE-TENDER MEETING AND SITE VISIT

A mandatory pre-Tender meeting and site inspections will be conducted as detailed in Section 00255. Failure to attend the pre-Tender meeting will result in disqualification of the potential Bidder. As a result, Bidders must register on site signing the form provided as page 2 of Section 00255.

# 2.3 CALL FOR TENDERS IS NOT AN ORDER TO PURCHASE

- This Call for Tenders should not be construed as a contract to order or purchase. The Owner shall not be obligated in any manner to any Bidder until a written contract substantially in the form set out in Section 00500 augmented by other relevant Sections including but not limited to Section 00611, Section 00760, Section 01000, Section 01375 and Section 01500 has been duly executed if any Tender is accepted which will not necessarily be the case. The issuance of this Call for Tenders does not constitute a commitment by the Owner to award a contract.
- The Owner shall not be liable for any costs incurred by a Bidder in the preparation of or presentation of a Tender.

#### 2.4 SUBMISSION OF TENDERS

#### MANDATORY REQUIREMENTS

- In this section of Mandatory Requirements the reference to Tender includes any written amendment to the Tender. No amendments other than in writing and in compliance with the Mandatory Requirements for Tenders will be considered. Any amendment must clearly identify the Tender it relates to and must show whether it is a first, or subsequent amendment, and the number thereof, if multiple amendments are made.
- Tenders must be submitted originally signed and sealed, as required in this Call for Tenders. The Tender must be in a sealed envelope addressed in the manner set out at the end of this paragraph and be delivered to the receptionist at the said address prior to the date and time established herein as the Closing Date and Closing Time for receipt of Offer. The address is:

Town of St. Paul Administration Building 5101 – 50 Street St. Paul, Alberta TOA 3A1

- The clock at the desk of the receptionist shall be used to determine the time of receipt of a Tender. Once the clock shows one minute after the Closing Time allowed for receipt of Tenders no further Tenders will be accepted. The said clock will be the only timing device used to record the time of receipt of a Tender and no Bidder will challenge the accuracy of the time indicated thereby, or the interpretation of that time, by the person receiving the Tender whose determination shall be final and binding on all Bidders.
- Tenders will be considered to be received in time if delivered as required above not later than \_\_\_\_\_\_p.m.
   o'clock in the afternoon Alberta time (the Closing Time) on the \_\_\_\_\_\_ day of \_\_\_\_\_\_\_, 2017 (the Closing Date).
- Tenders received after the Closing Time on the Closing Date will be date and time stamped but will not be considered as valid Tenders. They will be placed in a folder marked "Rejected."
- Tenders must be submitted using the enclosed Stipulated Price Bid Form in Section 00300, signed in full and returned to the address noted above in a sealed envelope clearly marked "Call for Tenders – T #Town of St. Paul Administration Building".
- No Bidder shall impede or otherwise interfere with any other Bidder in a manner calculated to, or that
  does interfere with the delivery of the other Bidder's Tender.

- TIME IS OF THE ESSENCE and the mere presence of a Bidder in the reception area prior to the Closing Time for receipt of Tenders will not be considered sufficient to permit the Bidder to submit a Tender after the time noted above. Bidders must therefore allow sufficient time to permit actual delivery of the Tender to the receptionist prior to the Closing Time on the Closing Date.
- Tenders merely left on the receptionist's desk, left with another, or delivered otherwise than to the receptionist, will not be considered to be properly delivered. The receptionist will initial each envelope received within time as it is received and will note the time of receipt thereon.
- Tenders once received shall remain open for acceptance for at least one hundred and twenty (120)
  days from the Closing Date, not counting the Closing Date and may not be withdrawn except with the
  consent of the Owner.
- NO TENDERS SUBMITTED BY FACSIMILE, E-MAIL OR MEANS OTHER THAN AS REQUIRED ABOVE WILL BE CONSIDERED.
- The instructions to Bidders set out in the foregoing eleven (11) paragraphs and any other provisions noted in this document as being mandatory or using the words "shall" or "must" are MANDATORY and strict compliance is required, otherwise the Tender or any amendment thereto may be rejected.

#### 3. COMPLETION OF 'BID FORM"

- .1 Fill in all blanks by typing or printing legibly and signing in spaces provided for signatures.
- Any items omitted or illegible, any alterations to the text, or any conditions added on or submitted with the Bid Form Section 00300 may cause the Bid to be rejected.

#### 4. AMENDMENT OF TENDER

After a Tender has been submitted, any amendment(s) may be submitted in accordance with the Mandatory provisions set out for Tenders and such amendments shall be in writing, duly signed, and dated with the wording "Adjustment to Tender- T #Town of St. Paul Administrative Building" and the name of the Bidder. An amendment must be received in a sealed envelope at the location outlined above, no later than the Closing Date and Closing Time. Any amendment not in compliance with the Mandatory provisions for Tenders, including but not limited to being delivered after the Closing Date and Closing Time will not be considered.

#### 5. ACCEPTANCE/REJECTION OF TENDER

- The Owner is not under any obligation to award a contract and reserves the right to terminate the Call
  for Tender process at any time with all or any of the responding Bidders.
- The Laws and Courts of the Province of Alberta, in the Judicial District of Edmonton shall govern
  this call for Tenders and any contract made as a result of the acceptance of any Tender.
- The decision to select or reject any Tender shall be in the sole and absolute discretion of the Owner, and the exercise of that discretion shall not be subject to any challenge in any forum.
- The submission of a Tender shall give rise to the contract that arises at common law when a Bidder

submits a tender in response to a call for tenders <u>provided however</u> that the Bidder specifically waives the benefit of any law that would create any duty of fairness on the part of the Owner toward the Bidder or the Bidders as a class and the only obligation of the Owner to the Bidders as a class shall be to act in good faith that shall be the only obligation of the Owner.

- The Owner reserves the right to negotiate the terms of any Tender with any Bidder even if those negotiations substantially alter the original scope of this Call for Tenders without the need to negotiate with any other Bidder respecting similar terms and the Bidder specifically agrees that such negotiation shall not be a breach of the duty of the Owner to act in good faith.
- The Owner reserves the right to cancel this Call for Tenders in its entirety after the advertised Closing Date if all qualified Tenders exceed the allocated budget for the procurement.
- A single response (i.e. a Tender from only one Bidder) may also be deemed to be a failure of
  competition, and at the sole option of the Owner, the Call for Tenders may be cancelled.
- A Tender may be rejected if references are found to be unsatisfactory.
- A Tender may be rejected if previous experience of the Owner with a Bidder was found to be unsatisfactory.
- The Owner reserves the right to reject the lowest cost Tender or any and all Tenders.
- Tenders that are not compliant with any requirement of this Call for Tenders may be rejected.
- The Owner's discretion may be exercised by Director of Facility Services or designate, which shall not be subject to challenge in any forum on any ground.
- The Bidder agrees that all documentation and information contained in any Tender becomes the property of the Owner and may be copied for internal use and may be subject to disclosure under the terms of the <u>Freedom of Information and Protection of Privacy Act.</u>
- Any application by a Bidder to withdraw its entire Tender or any part or parts thereof shall be delivered to the Owner at its address shown above to the attention of person listed in section 2.4, prior to the stipulated Closing Date and Closing Time and shall be labelled as a "Request to Withdraw a Tender T# Town of St. Paul Administrative Building" and the name of the Bidder.

#### 6. **BID OPENING**

- .1 Bids will be opened in public immediately after Bid closing time, at the address specified in 2.4.
- .2 The name of each Bidder and the Bid price stated on the Bid Form will be read aloud. The reading aloud of a Bid price shall not be considered a representation or warranty that the price is correct or that the Bid is valid.

#### 7. SEPARATE PRICES

.1 If separate prices are requested, Bid prices will be evaluated solely on the Base Bid price entered in the Stipulated Price Bid Form.

### 8. IRREGULARITIES

- A Bid that is informal, incomplete, qualified, non-compliant with the requirements of the Bid Documents, or otherwise irregular in any way, may be declared invalid and rejected.
- .2 The Owner may accept or waive a minor and inconsequential irregularity, or where practicable to do so, the Owner may, as a condition of Bid acceptance, request a Bidder to correct a minor and inconsequential irregularity with no change in Bid price.
- .3 The determination of what is, or is not, a minor and inconsequential irregularity, the determination of whether to accept, waive, or require correction of an irregularity, and the final determination of the validity of a Bid, shall be at the Owner's sole discretion.
- .4 Discrepancies between words and figures will be resolved in favour of words.

#### 9. GST EXCLUDED

.1 Bidders shall not include in their Bid prices any amount for the Federal Goods and Services Tax.

#### 10. EXAMINATION OF BID DOCUMENTS & SITE

- .1 Bidders shall, before submitting a Bid,
  - .1 examine and read the Bid Documents thoroughly.
  - .2 visit the site to become familiar with conditions affecting the work,
  - .3 consider effect of regulatory requirements applicable to the work,
  - .4 study and correlate Bidder's observations with the Bid Documents, and
  - immediately notify the person identified for receiving inquiries of all perceived omissions and discovered conflicts, errors, or discrepancies in the Bid Documents.
- .2 Refer to Section 00255 Mandatory Attendance Pre Bid Meeting.

#### 11. PRODUCT SUBSTITUTIONS

- .1 Where products are specified by a proprietary specification, and substitutions are permitted, Bidders may base their Bids on a named product or manufacturer or on unnamed substitutions, subject to the requirements specified in the General Conditions.
- .2 During the Bidding period, it is the sole responsibility of each Bidder to determine whether a substitution meets the requirements specified in the General Conditions.
- .3 Requests for approval of substitutions from Bidders will not be considered during bidding period. Substitutions will normally be evaluated and approved or rejected after contract award.

# 12. INTERPRETATION & MODIFICATION OF BIDS & DOCUMENTS

.1 Submitted Bids cannot be modified.

- .2 Submit questions about the meaning and intent of the Bid Documents to the person identified for receiving inquiries. Interpretations and modifications considered necessary will be issued in writing in the form of an 'Addendum'.
- .3 Replies to questions, interpretations and modifications made in a manner other than by written 'Addendum' shall not be binding and shall be without legal effect.

#### 13. INFORMATION DISCLOSURE

- All information provided by the Owner to Bidders and all information provided by Bidders to the Owner a part of or subsequent to their Bid submission, is subject to the disclosure and protections provisions of the Freedom of Information and Protection of Privacy Act (Alberta). This Act allows any person a right of access to records in the Owner's custody or control, subject to limited and specific exceptions as set out in the Act.
- .2 Where applicable, Bidders may identify those portions of any submission from the Bidder to the Owner which the Bidder considers confidential and what harm could reasonably be expected from disclosure

  The Owner does not warrant that such identification will preclude disclosure if disclosure is determined to be required under the Act.

#### 14. ADDENDA

. 1 Bidders shall include in their Bids, provisions of all 'Addenda' issued during the Bid period and shall ascertain prior to Bid submission that all Addenda issued have been received.

#### 15. INQUIRIES

.1 Direct all inquiries during Bid period to:

Allen Desjarlais Independent Inspections Ltd. 11036 – 150 Street Edmonton, AB TSP 1S1

Phone: 780-952-9754 Fax: 780-486-4410

#### 16. SAFETY PREQUALIFICATION

- .1 Prime contract Bidders shall possess, a valid standard Certificate of Recognition (COR) or a valid Temporary Letter of Certification (TLC) for a standard COR as issued by the Alberta Construction Safety Association (ACSA) or another certifying partner authorized by Alberta Employment, Immigration and Industry to issue CORs or TLCs. Possession of other than a standard COR, such as a Small Employer Certificate of Recognition (SECOR) is acceptable.
- .2 Bidders shall submit with their Bid, a photocopy of their COR, TLC or SECOR.
- .3 A Bid from a Bidder who fails to submit the required COR, TLC or SECOR will be declared invalid and will be rejected.

Section 00201 Instructions to Bidders 9/26/2017 Page 7 of 7

.4 Prospective Bidders who do not possess a standard COR, TLC for a standard COR, or SECOR and wish to obtain information about obtaining either one, are advised to contact:

The Alberta Construction Safety Association #101, 13025 St Albert Trail Edmonton, Alberta T5L 5G2

Telephone: (780) 453-3311 or 1-800-661-2272

Fax: (780) 455-1120

Internet: www.acsa-safety.org

Or another certifying partner authorized by Alberta Employment, Immigration and Industry to issue a standard COR, SECOR or TLC.

#### 17. CONTRACT TIME

.1	Attain substantial completion of the work
----	---

**End of Section** 

1.	MANDATORY	ATTENDANCE PRE-BID MEETING

.1	A Pre-Bid meeting will be held at . 2017.	, ata.m. on,

- .2 Purpose is to provide Bidders an opportunity to familiarize themselves with the Work and with existing conditions. Owner's representative(s) will be present.
- .3 Site access is restricted. This will be Bidders' only opportunity to inspect the site.
- .4 Attendance at the time and place specified is **mandatory** for all prime contract Bidders and is a condition of contract award.
- .5 Each prime contract Bidder shall submit, with its Bid, a copy of the attached Form 00255A Confirmation of Mandatory Attendance Pre-Bid Meeting. This form, when signed by the Owner's representative at the Pre-Bid meeting, will attest to the attendance of the Bidder's representative. If this form is not submitted with the Bid or is submitted improperly signed, and the Owner cannot otherwise verify a Bidder's attendance at the Pre Bid meeting, that Bidder's bid will be declared invalid and the Bid will be rejected.
- .6 Major subcontract Bidders are strongly advised to attend <u>but their attendance is not mandatory</u>. Others are invited to attend.
- No information provided by the Owner's representative at the Mandatory Pre-Bid Meeting shall be binding, unless such information is included in an Addendum.

# Section 00255 Mandatory Attendance Pre-Bid Meeting 10/1/2017 Page 2 of 2

# MANDATORY ATTENDANCE PRE-BID MEETING FORM

1.	FROM (Bidder):	(Noma)	
		(Name)	
		(Address)	
	то:	Town of St. Paul 5101 – 50 Street St. Paul, Alberta TOA	A 3A1
	PROJECT NAME:	Year 2017 Re-roof Town of St. Paul Adr St. Paul, Alberta	ministration Building, Area B
declar	ed invalid and the bid	s representative and the will be rejected. The	ing is mandatory and that failure to submit this form, no Owner's representative, will cause the bid to be undersigned hereby confirm that a representative of ang for the above name project, held on:
Date:			
	ATURE OF BIDDER' ESENTATIVE:	S	NAME OF PERSON SIGNING BESIDE: (Please print)
SIGNATURE OF OWNER'S REPRESENTATIVE:			NAME OF PERSON SIGNING BESIDE: (Please print)
<del></del>			

Section 00300 Bid Form 10/1/2017 Page 1 of 4

# **BIDFORM**

TO:	Town of St. I 5101 – 50 St. St. Paul, Albe	eet
	Project:	Year 2017 Re-roof Town of St. Paul Administration Building, Area B St. Paul, Alberta
We,	(Company Na	me)
of	(Business Ad	lress)
having	g examined the	Bid Documents and Addenda Noto Noinclusive, all
	ultant or Owner	
and ha	ving visited the	project site; hereby offer to enter into a Contract to perform the work
		ocuments for the stipulated price of
DOLL contin	ARS (\$ gency allowanc	) in Canadian funds, which price includes any specified cash and sexcept the Federal Goods and Services Tax.
Appen	dices to Bid Fo	m:
The in provid	formation on su ed in the attach	ocontractors, alternative and separate prices as called for in the Bid Documents is d appendices and forms an integral part of this Bid.
Declar	ations:	
We he	reby declare the	
a)	Bid Documen	rform the work in compliance with the required completion schedule stated in the s, or if no schedule is stated, to attain Substantial Performance of the Work within seiving notice of Contract award;
b)	no person, fire proposed Con	or corporation other than the undersigned has any interest in this Bid or in the ract of which this Bid is made;

Section 00300 Bid Form 10/1/2017 Page 2 of 4

#### **BIDFORM**

- c) this Bid is irrevocable and open to acceptance for a period of one hundred twenty (120) days from the date of Bid;
- d) we also agree that if we withdraw our Bid before the time limited in (c) hereof, the amount of the bid bond or the certified cheque shall be forfeited to Town of St. Paul as liquidated damages;
- e) in the event of this Bid being accepted within the time limited in (c) hereof, and our failing or declining to enter into a contract in the form hereinafter mentioned for the amount of the Bid, the said bid bond or certified cheque shall be forfeited to Town of St. Paul as liquidated damages, to which the Board may be entitled, by reason of our refusal to enter into such a contract;
- f) in the event of our Bid not being accepted within the time limited in the Bid Form the bid bond or certified cheque, un-cashed, will be returned to us forthwith unless satisfactory arrangement is made with us covering its retention for a further period.
- g) Town of St. Paul will not pay interest on securities furnished;
- h) in submitting this Bid, we recognize the right of the Owner to accept any Bid at the price submitted or to reject all Bids, it being understood, and this Bid is submitted on the express condition, that revised Bids shall not be called for in the event that minor revisions are required and agreed to for any Bid submitted;
- i) if notified in writing by the Owner of the acceptance of this Bid within one hundred twenty (120) days of the Bid closing date, we will:
  - .1 Execute the Form of Agreement.
  - .2 Furnish the security, if requested, for the proper completion of the work in the form of Bonds as required by the Contract Documents.
  - .3 Furnish a general breakdown and analysis of the contract sum, the total aggregating the amount of the Bid, and which shall be used as the basis for preparing monthly progress claims.

Signatures

Company		
	(Name)	<del></del>
	(Street Address or Postal Box Number)	
	(City, Province and Postal Code)	***

Section 00300 Bid Form 9/26/2017 Page 3 of 4

# **BIDFORM**

Signature:	~~~			(Apply Seal Above)
Name and Title:	(P	lease Print or Type)		
Witness:				
Dated at	this	day	, 20	

Section 00300 Bid Form 9/26/2017 Page 4 of 4

#### **BIDFORM**

	APPE	VDIX	"A"	TO	BIL
--	------	------	-----	----	-----

Project Title:

Location:

Bid Submitted by:

#### **LIST OF BID DOCUMENTS**

The following is a list or description of the Bid Documents referred to in the Bid for the above named Project.

Section 00201 Instructions to Bidders

Section 00760 General Conditions

Section 01000 General Requirements (Scope of Work)

Section 01500 Facilities and Control

	AGREEMENT BETWEEN TOWN OF ST	. PAUL AND CONTRACTOR
This	his Agreement made in triplicate this day o	of in the year 2017 by and
	etween:	
	TOWN OF ST. P	AUL
	5101 – 50 Stre	eet
	St. Paul, Alberta To	0A 3A1
	hereinafter called the	"Owner"
and	nd	
herei	ereinafter called the "Contractor"	
witne	itness: that the parties agree as follows:	
THE	HE WORK	
The (	he Contractor shall:	
(a)	) perform the Work required by the Contract Doc	cuments for
	which have been signed by the parties, and which	ch were prepared by
	acting as and hereinafter called the Owner's Rep	presentative for the purpose of this
	Agreement and the General Conditions.	
(b)	) do and fulfill everything indicated by this Agree	ement and shall

(c)	commence wo	rk by tl	ne day of 20 and attain Substantial
	Performance of	of the W	ork, as certified by the Owner, by the day of
	20		·
CONT	RACT DOCU	IMENT	rs
The fol	lowing docum	ents, to	gether with this Form of Agreement, constitute the contract:
Specifi	cations	-	as issued for Bid – Section 00001
Drawin	ıgs	-	as per drawing list in Specifications
Section	n 00611	***	Performance and Payment Security
Section	n 00760	-	General Conditions
Section	n 01000	-	General Requirements
Section	n 01375	-	Alternative Project Procedures
Section	a 01500	-	Facilities and Control
Any Aa	ldendum		

Section 00500 Agreement 9/26/2017 Page 3 of 5

CONTRACT PRICE	
The base contract price is	
	_DOLLARS
plus G.S.T. of	_DOLLARS
in Canadian funds, which price shall be subject to adjustments as may be required	d in accordance
with the provisions of the Contract Documents.	

#### **PAYMENT**

- (a) Subject to applicable legislation and the provisions of the Contract Documents, and in accordance with legislation and statutory regulations respecting holdback percentages and, where such legislation or regulations do not exist or apply, subject to a holdback of ten percent (10 %), the Owner shall:
  - (1) make monthly payments in Canadian funds to the Contractor on account of the contract price. The amounts of such payments shall be as certified by the Owner and
  - (2) upon Substantial Completion of the Work, as certified by the Owner, pay to the Contractor the unpaid balance of holdback monies then due, as stated in the Alberta Lien Act and
  - (3) upon Total Performance of the Work as certified by the Owner pay to the Contractor the unpaid balance of the contract price then due.
- (b) The Contractor shall clearly state on all invoices his required terms of payment. If these terms are not clearly stated, the terms will automatically be assumed to be thirty (30) days and no payment will be processed prior to that time.

#### RIGHTS AND REMEDIES

- (a) The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligation, rights and remedies otherwise imposed or available by law.
- (b) No action or failure to act by the Owner, or Contractor shall constitute a waiver of any right or duty afforded any of them under the contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

#### **DISPUTES**

Differences between the parties to the contract as to interpretation application or administration of this contract which can not be resolved by mutual agreement shall be settled by the arbitration process outlined in Section 00700 Item 1.23 (Disputes).

#### ADDRESSES FOR NOTICES

Communications in writing between the parties shall be considered to have been received by the addressee on the date of delivery if delivered by hand to the individual or to a member of the firm or to an officer of the corporation for whom they are intended or if sent by post or by telegram, to have been delivered within five (5) working days of the date of mailing, dispatch or delivery, to the telegraph company when addressed as follows:

The Owner's Representative at:

5101 - 50 Street

St. Paul, Alberta T0A 3A1

The Contractor at:

#### LAW OF THE CONTRACT

The law of the Place of the Work shall govern the interpretation of the contract.

#### LANGUAGE OF THE CONTRACT

These Contract Documents are prepared in the English language and is agreed that in the apparent discrepancy between the English and any other language, the English language shall prevail.

#### **ENTIRE AGREEMENT**

This document contains the entire agreement of the parties hereto, and no modification thereof shall be binding upon the parties unless such modification is in writing signed by the respective parties hereto.

Section 00500 Agreement 10/1/2017 Page 5 of 5

#### **SUCCESSION**

This Agreement shall enure to the benefit of and be binding upon the parties hereto, their respective heirs, legal representatives, successors and assigns.

In witness whereof the parties hereto have executed this Agreement under their respective corporate seals and by the hands of their proper officers thereunto duly authorized.

SIGNED, SEALED AND DELIVERED in the presence of:

OWNER: TOWN OF ST. PAUL 5101 – 50 Street

St. Paul, Alberta T0A 3A1

Signature	signature
	signature
	CONTRACTOR
	name
witness	signature
name and title	name and title

**END OF SECTION** 

#### 1. GENERAL

- .1 Bonds shall be issued by a duly incorporated surety company authorized to transact business of suretyship in the Province of Alberta.
- .2 Consign bonds to the Owner.

#### 2. CONTRACT PERFORMANCE SECURITY

- .1 Contractor to provide 10% bid bond.
- .2 Contractor shall provide a Performance Bond for 50% of the Contract Price as security for performance of the contract.
- .3 Performance Bond shall be in accordance with the Canadian Construction Documents Committee (CCDC) Standard Form of Performance Bond, CCDC Document No. 221.

#### 3. SECURITY FOR PAYMENT OF CLAIMS

- .1 Contractor shall provide a Labour and Material Payment Bond for 50% of the Contract Price as security for payment to claimants for labour and material used or reasonably required for use in the performance of the Contract.
- .2 Labour and Material Payment Bond shall be in accordance with the Canadian Construction Documents Committee (CCDC) Standard Form of Labour and Material Payment Bond, CCDC Document No. 222.

#### 4. SUBMISSION OF SECURITY

.1 Submit security to the Owner within 15 days after bid is accepted.

**END OF SECTION** 

#### 1. OWNER'S REPRESENTATIVE

.1 The Owner shall appoint a representative who shall, unless the Contractor is expressly advised otherwise by a duly authorized officer of the Owner, have full authority to act on behalf of and bind the Owner under the Contract.

# 2. CONTRACT DOCUMENTS

- .1 The Contract Documents consist of Letter of Acceptance of Contractor's Bid; executed Bid Form Section 300, Form of Agreement Section 500; these General Conditions, other documents, or parts thereof, contained in Division 0 of the Specifications which have application during performance of the Contract; Divisions 1-16 of the Specifications; Drawings; Schedules; and such other documents as may be identified as Contract Documents, and including amendments thereto made in accordance with provisions of the Contract.
- .2 The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all.
- .3 The Owner, in the first instance, shall decide on questions arising under the Contract Documents, interpret requirements therein, and judge performance in accordance therewith.

#### 3. ASSIGNMENT

.1 Contractor shall not assign the Contract, in whole or in part, nor shall the Contractor sublet the Contract as a whole, without previous written consent of the Owner, which consent shall be at The Owner's sole discretion.

#### 4. TERMINATION

.1 The Owner may, by giving a written notice of termination to Contractor, terminate the Contract at any time.

#### 5. SUBCONTRACTS

- .1 The Owner will recognize Contractor only. Nothing contained in the Contract Documents shall create any contractual relationship between any Subcontractor and the Owner.
- .2 Contractor agrees to bind every Subcontractor by the terms of the Contract Documents, as far as Applicable to work of the subcontract.

# 6. PROTECTION OF WORK AND PROPERTY

- .1 Contractor shall take all reasonable precautions necessary to protect the Work and the Owner's property from damage during performance of the Contract and shall make good any damage to the Work or to the Owner's property caused by the Contractor or any of the Contractor's Subcontractors at no additional cost to the Owner.
- .2 The Contractor is advised that the work is to be performed on an existing building that may contain potentially unsafe conditions. The Contractor shall be responsible for making safe such conditions prior to proceeding with the work. Do not perform any work that may be unsafe, may cause unsafe conditions or may cause damage to the building.

#### 7. CLEANING

- .1 Contractor shall at all times keep site free from unsightly or hazardous accumulations of waste Material and shall leave the site in a neat and tidy condition at completion of work.
- .2 Do not allow waste material, rubbish, and windblown debris to reach and contaminate adjacent properties.
- .3 Sprinkle dusty debris with water as required.
- .4 Lower waste material in a controlled manner; do not drop or throw materials from heights.
- .5 Perform final cleaning operations specified herein prior to request for inspection for Interim Acceptance of the Work.

# 8. HOLD HARMLESS AGREEMENT

.1 Contractor shall hold harmless the Owner from any and all third party claims, demands, or actions for which Contractor is legally responsible, including those arising out of negligence, willful harm, or crimes by Contractor or Contractor's employees or agents. This hold harmless shall survive the Contract.

#### 9. INSURANCE

- .1 Without limiting its liabilities under the Contract, Contractor shall provide, maintain and pay for Following minimum insurance coverages, in forms acceptable to the Owner:
  - .1 Comprehensive or Commercial General Liability Insurance with limits of not less than \$5,000,000 inclusive per occurrence (annual general aggregate, if any, not less than \$10,000,000) against bodily injury, personal injury, and property damage. Following endorsements shall be included: premises, property, and operations; Contractor's protective; blanket contractual; non-owned auto; the Owner, its elected officials, employees, servants, and agents as additional insureds; broad form property damage; cross liability and severability of interest on all policies; 30 days advance notice to the Owner of cancellation or material change.
  - Automobile Liability Insurance on all vehicles owned, operated or licensed in Contractor's name, with limits of not less than \$5,000,000.

- Where such risks exist, Property Insurance in the form of an All Risks Builder's Risk Policy or an All Risks Installation Floater insuring not less than the full insurable value of the Work plus an appropriate value for risk of loss to The Owner's property, if any, in Contractor's care, custody and control.
- .2 Contractor shall submit prior to commencement of work in a form acceptable to the The Owner, proof that insurance coverages are in effect and meet specified conditions.

# 10. REGULATORY REQUIREMENTS

- .1 Contractor shall comply with all laws, ordinances, rules, regulations, orders, codes and other Legally enforceable requirements applicable to the performance of the Contract.
- .2 The Owner has applied for, paid for, and obtained the Development Permit.
- .3 Contractor shall apply and pay for all other necessary permits or licences (including the Building Permit) required for execution of Work, except obtaining permanent easements or rights of servitude.
- .4 Contractor shall comply with the Occupational Health and Safety Act and regulations issued pursuant thereto.

#### 11. DEFECTIVE WORK

- Defective work is work that has been rejected by the Owner as failing to conform to the Contract Documents. Contractor shall promptly correct defective work as required to conform to the Contract Documents, with no change in Contract Price.
- .2 If, in the Owner's opinion, it is not expedient to correct defective work, the Owner may deduct from the Contract Price the difference in value between the work as performed and that required by the Contract Documents, the amount of which will be determined in the first instance by the Owner.

#### 12. CONTRACT TIME

.1 Time and all time limits stated in the Contract Documents are of the essence of the Contract. Contractor shall perform work expeditiously and with adequate forces to complete Work of the Contract within time specified in the Contract. If specified in number of days, weeks, or months, time for completion shall commence running on date of issuance of Letter of Bid Acceptance.

# 13. MATERIALS AND EQUIPMENT

.1 Unless otherwise specified, Contractor shall provide, maintain, and pay for all materials, tools, machinery, equipment, temporary facilities, controls, and conveniences, necessary for execution of the Work. Unless otherwise specified, all materials shall be new, of merchantable quality and suitable for the intended purpose.

#### 14. PRODUCT OPTIONS AND SUBSTITUTIONS

- .1 For products specified by non-proprietary specification, select any product which meets requirements of Contract Documents, by any manufacturer.
- .2 For products specified by proprietary specification and accompanied by words indicating that Substitutions will not be accepted, use product or manufacturer named. Substitutions are not permitted.
- Except where substitutions are not permitted, when a product is specified by proprietary specification, other unnamed products will be accepted, subject to such substitutions being the same generic type as, being capable of performing the same functions as, and meeting or exceeding the standards of quality and performance of the named product. Substitutions shall not require revisions to Contract Documents.
- .4 In making a substitution Contractor represents that:
  - .1 Contractor has investigated substitute product and/or manufacturer and has determined that it meets the criteria specified in 14.3,
  - .2 Contractor will make any changes to the Work necessitated by the substitution as required for the Work to be complete in all respects, and
  - .3 Contractor waives claims for additional costs and time caused by substitution which may subsequently become apparent.

# 15. WARRANTY

Neither the final payment, nor any provision in the Contract Documents shall relieve Contractor from responsibility for faulty materials or workmanship which appear within a period of one year from the date of Construction Completion, or such other periods as may be specified for parts of the Work and Contractor shall remedy any defects due thereto and pay for any damage to other work resulting therefrom which appear within such periods.

#### 16. CHANGES IN THE WORK

.1 The Owner may order changes in the Work by means of a written Change Order. Contractor shall not proceed with any change in the work without a written Change Order.

#### 17. VALUATION OF CHANGES ON STIPULATED PRICE WORK

- .1 On extra work authorized by the Owner, allowance for overhead and profit shall be as follows:
  - .1 For work performed by Contractor's own forces, Contractor shall be entitled to 5% for overhead on actual cost of material and labour and an additional 5% for profit on above total.
  - .2 For work performed by Subcontractors:
    - .1 each Subcontractor shall be entitled to 5% for overhead on actual cost of material and labour and an additional 5% for profit on above total, and
  - .3 Contractor shall be entitled to 5% of Subcontractors' total.
  - .4 For work performed by Sub-subcontractors:
    - each Sub-subcontractor shall be entitled to 5% for overhead on actual cost of material and labour and an additional 5% for profit on above total,
    - .2 Subcontractor shall be entitled to 5% of Sub-subcontractors' total, and
    - .3 Contractor shall be entitled to 5% of above total.
- .3 If a change results in a decrease in cost, amount of credit to be given to the Owner shall be amount of actual decrease, without overhead and profit.
- .4 If a change involves both extras and credits and results in an increase in cost, overhead and profit shall be allowed on the increase only.

#### 18. PAYMENT

- .1 Contractor shall submit a single application for payment upon completion and acceptance of the Work. Alternatively, if Contract Time exceeds one month, and subject to the Owner's approval, applications for payment may be made monthly. Applications for payment shall include a subtrade cost breakdown to correspond with that submitted with a Section 00440.
- .2 Amount claimed shall be for value of work performed and products delivered to site, at that date.
- In order to conform with the Owner's accounting policy, the amount payable shall be amount claimed, adjusted by the Owner if necessary, plus applicable Goods and Services Tax (GST), less 10% holdback in accordance with the Builders' Lien Act of Alberta.
- .4 If applications for payment are made monthly, Contractor shall submit with second and any Subsequent applications, Statutory Declaration, CCDC Document 9A 2001.
- .5 The Owner shall, not later than ten (10) working days after receipt of an application for payment from the Contractor, conduct an inspection and assessment of the work in order to verify the validity of the application, and shall notify the contractor in writing of approval or disapproval of the application. The Owner shall then require ten (10) working days to process payment which will subsequently be mailed to the Contractor.
- .6 Contract Price shall exclude Goods and Services Tax (GST).
- Each application for payment shall indicate a separate amount for Goods and Services Tax, which shall be considered as separate from the Contract Price.
- .8 The amount of Goods and Services Tax properly chargeable to the Owner by Contractor will be paid by the Owner to Contractor together with each payment made by the Owner.
- .9 The value of deficient work shall be estimated by the Owner and a value equivalent to <u>two and one half (2.5x) times</u> that amount shall be deducted from any progress payment. This deficiency holdback shall be paid to the Contractor after proper execution of the deficient work.
- In instances where the Owner receives a Notice of Lien registered against the property, the amount of such Lien will be deducted from the Certificate of Payment. This amount will be released for payment through the Certificate issued subsequent to the one on which payment

was retained, provided satisfactory evidence of discharge of such Lien accompanies the application for payment submitted to the Owner for the release of only the actual amount so retained.

- The Owner shall, not later than ten (10) working days after the submission by the Contractor of a Certificate of Substantial Performance of the Work, conduct an inspection and assessment of the Work in order to verify the validity of the Certificate. The Owner will, not later than seven (7) working days after this inspection notify the Contractor in writing of approval or reasons for disapproval of the Certificate.
- The Owner shall require ten (10) working days from the day following the expiration of the lien Holdback period to process payment of the lien holdback monies, which will subsequently be mailed to the Contractor.
- .13 Final payment shall be payable provided that:
  - .1 Work has been completed, deficiencies have been corrected, and Work has been accepted by the Owner,
  - .2 Builder' Lien Act (Alberta) statutory period of 45 days from date of issuance of Certificate of Substantial Performance or date of completion of contract has expired,
  - .3 no lien claims have been registered which are then outstanding, and
  - .4 Statutory Declaration, CCDC Document 9A-2001 and Letter of Clearance from Workers' Compensation Board have been submitted.
  - .5 Construction Completion Certificate has been issued by the Owner.

#### 19. CLAIMS

- .1 If Contractor intends to claim any additional payment, Contractor shall give notice of this intention to the Owner as soon as possible and not later than 7 days after the event giving rise to he claim or Contractor first becomes aware of such event.
- The parties shall make reasonable efforts to resolve a claim as soon as possible after receipt thereof. When the Owner issues a final written position on the claim, or fails to do so within a reasonable period of time, and the claim is not resolved to the satisfaction of both parties, the claim shall be considered a dispute and shall be settled in accordance with Article 20.

#### 20. DISPUTES

- .1 Contractor shall notify the Owner in writing immediately should Contractor hold that a decision by the Owner is in error or at variance with the Contract Documents.
- .2 If the dispute is not resolved promptly, the Owner will give such instructions as are necessary to continue the Work and to prevent delays pending settlement of the dispute. Contractor shall act immediately according to such instructions, it being understood that by so doing neither party will jeopardize any claim they may have.

9/26/2017

- If it is subsequently determined and agreed that such instructions were in error or at variance with .3 The Contract Documents, the Owner will pay Contractor for additional costs incurred by Contractor in carrying out work required by such instructions, such additional costs being the amount beyond what the Contract Documents, correctly understood and interpreted, would have required Contractor to incur.
- In the case of any dispute arising between the Owner and Contractor as to their respective rights .4 and obligations under the Contract, either party hereto shall be entitled to give to the other notice of such dispute and to request arbitration thereof, and the parties may, with respect to the particular matters then in dispute, agree to submit the same to arbitration in accordance with the Arbitration Act.
- Notwithstanding any disputes, including arbitration proceedings, Contractor shall carry .5 out the Work and maintain its progress.

#### 21. SUPERVISION

- The contractor shall employ a competent supervisor and necessary assistants who shall be in .1 Continuous attendance at the place of work while work is being performed.
- The supervisor shall meet with the approval of the Owner at the Owner's sole discretion and shall .2 not be changed without valid reason.
- .3 The supervisor and necessary assistants shall be in the exclusive employ of the Contractor and shall not be associated in any way with any sub contractor, supplier or others providing services on this project.

#### 22. INFORMATION DISCLOSURE

- All information provided by the Owner to the Contractor pursuant to the Contract and all .1 information provided by the Contractor to the Owner pursuant to the Contract, is subject to the disclosure and protection provisions of the Freedom of Information and Protection of Privacy Act This Act allows any person a right of access to records in the Owner's custody or control, subject to limited and specific exceptions as set out in the Act.
- Where applicable, the Contractor may identify those portions of any submission from the .2 Contractor to the Owner which the Contactor considers confidential and what harm could reasonably be expected from disclosure. The Owner does not warrant that such identification will preclude disclosure if disclosure is determined to be required under the Act.
- .3 Prior to disclosing to the Owner any individual's personal information, the Contractor shall obtain the consent of the affected individual. Such consents shall be in writing and shall specify to whom the personal information may be disclosed and how information may be used.

Section 00760 General Conditions 9/26/2017 Page 8 of 8

#### 23. COMPLETION AND ACCEPTANCE

- After the Contractor has completed all the Work and corrected all known deficiencies; the Contractor shall give the Owner notice that the Work has been finally completed. Within ten (10) working days of receipt of that notice, the Owner will either issue a Construction Completion Certificate or give notice to the Contractor of the deficiencies to be remedied before A Construction Completion Certificate can be issued. Notwithstanding the foregoing, the Owner's issuance of a Construction Completion Certificate shall not relieve the Contractor of any obligations under the Contract.
- The Owner will not issue a Construction Completion Certificate until the Contractor has fulfilled all obligations as set out in the Contract Documents including, but not limited to, the Contractor's obligations with respect to any required commissioning, provision of as-built drawings, issuance of all applicable certificates or permits, and the provision of Operating and Maintenance Manuals.

**END OF SECTION** 

#### 1. WORK OF THIS CONTRACT

.1 Work of this Contract comprises the following:

Replace roof in Area B designated as Year 2017 Partial Re-roof of St. Paul Administration Building

.2 Municipal Address:

5101 – 50 Street St. Paul, Alberta T0A 3A1

.3 Physical Limits: Work of the Contract is not necessarily restricted to work within property lines of site, but includes all Work required by Contract Documents, both within and outside property lines.

#### 2. CONTRACT TIME

.1 Complete the Work within the time specified in Section 00500 - Form of Agreement.

# 3. RESTRICTIONS ON CONTRACTOR'S USE OF PREMISES

- .1 Contractor's use of premises will be restricted due to user occupancy and use of the Facility.
- .2 Contractor shall confine his equipment, storage of materials and operations of his personnel to limits indicated by laws, ordinances, permits or prior arrangement with the Owner. Contractor shall not unreasonably encumber the premises with his apparatus and shall leave said premises in their original condition upon completion of the work.
- .3 Cooperate and coordinate Work with the Owner and Facility users to minimize conflict and facilitate usage.
- .4 Work involving the use of irritant materials such as paints, solvents, glues or work which will create dust, shall be performed after the Facility's normal hours of operation, which are as follows:
  - 8:00 a.m. 4:00 p.m. Monday to Friday for all construction procedures.
- In the event that it would not be practical to perform this work after the facility's normal working hours of operation, the contractor must notify the Owner a minimum of forty eight (48) hours in advance.
- Where installation of one part of the Work is dependent on installation of other components, either before or after its own installation, schedule and coordinate construction activities in the sequence required to obtain the best results.
- .7 Comply with manufacturer's installation instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in Contract Documents.
- .8 Provide attachment and connection devices and methods necessary for securing Work. Secure Work true to line and level. Allow for expansion and building movement.
- .9 Do the cutting and remedial work required to make the several parts of the Work come together properly.

### 5. PROJECT MEETINGS

- Prior to start of any work, a pre-construction meeting shall be held by the Owner and the Contractor to examine and discuss the Work of the Contract. The meeting shall include Health & Safety Orientation. The Owner will document and distribute Minutes.
- .2 Construction progress meetings will be scheduled by the Owner at the site, at times to be determined for the duration of the contract. The Owner will document and distribute Minutes.
- .3 Supervision of the project will be by the Owner.

All technical questions are to be directed to the Owner's representative:

Allen Desjarlais Independent Inspections Ltd. 11036 – 150 Street Edmonton, AB T5P IS1

Phone: 780-952-9754 Fax: 780-486-4410

# 6. WORK SITE SAFETY - THIS CONTRACTOR IS "PRIME CONTRACTOR"

- .1 The Contractor shall, for the purposes of the Occupational Health and Safety Act (Alberta), and for the duration of the Work of this Contract:
  - .1 be the "prime contractor" for the "work site", and
  - do everything that is reasonably practicable to establish and maintain a Health & Safety Management system that will ensure compliance with the Act, regulations and code, as required to ensure the health and safety of all persons at the "work site".
- .2 The Contractor shall direct all subcontractors, sub-subcontractors, other contractors, employers, workers and any other persons at the "work site" on safety related matters, to the extent required to fulfill its "prime contractor" responsibilities pursuant to the Act, regardless of:
  - .1 whether or not any contractual relationship exists between the Contractor and any of these entities, and
  - .2 whether or not such entities have been specifically identified in this Contract.
- .3 The Owner does not anticipate that there will be any contractors, other than those performing the Work of this Contract, engaged in work at the "work site" during the performance of the Work of this Contract.

# 7. GENERAL HEALTH AND SAFETY EXPECTATIONS FOR CONTRACTORS

- .1 The following expectations shall be communicated by the project owner to the prime contractor prior to project start up. The prime contactor or project owner acting in this capacity shall ensure these expectations are communicated to all contracted employers and workers at the worksite for the duration of the project and monitor to ensure they are being complied with.
- .2 All contractors<sup>1</sup> on Town of St. Paul Administration Building site are responsible for the health and safety of their own employees, and for ensuring that their work does not endanger any other persons that may be in close proximity (e.g. staff) to their work activities.
- .3 The *Prime Contractor* (when required by legislation) is responsible for coordinating and implementing a *Project Health and Safety Plan* that ensures all employers/contractors comply with health and safety requirements established by local, provincial, and federal Acts, regulations and codes, contract documents and TOWN OF ST. PAUL.
- .4 Contractors and their representatives shall participate in a general site health and safety orientation with TOWN OF ST. PAUL representatives and/or the prime contractor **prior to** the commencement of project work.
- .5 A Contractor Orientation Checklist shall be completed prior to the commencement of each project by the project owner and/or prime contractor in order to identify site specific hazards, conditions and requirements. The checklist shall be signed off by the project owner and the prime contractor prior to the commencement of project work activities. This can be accomplished at the pre-construction meeting. Copies of the checklist should be attached to the meeting minutes.
- .6 The prime contractor is responsible for reviewing the Contractor Orientation Checklist with their employees and the employees of subcontractors involved in all phases of the project prior to the commencement of work activities.
- .7 All contractors shall wear identification at all times while on TOWN OF ST. PAUL property.
- 8 The prime contractor shall conduct regularly scheduled work-site health and safety inspections at each project site and keep written records of these inspections. The scope or duration of work may regulate the frequency of these inspections.
- 9 Contractors shall take immediate corrective action when unsafe conditions are identified at the worksite. All injury incidents, near misses and unsafe conditions shall be immediately reported to the prime contractor representative. The prime contractor shall immediately notify the project owner's representative. An OHS Specialist may be consulted for additional assistance.
- .10 Copies of site health and safety inspection reports, hazard assessments and incident investigations associated with the project shall be forwarded at the request of the project owner.
- .11 Failure of a contractor to correct unsafe conditions, comply with health and safety requirements or the requirements outlined in this document may result in work stoppage and removal of the contractor from TOWN OF ST. PAUL property. The project owner and/or TOWN OF ST. PAUL representatives have the right to stop work, refuse entry to TOWN OF ST. PAUL premises or terminate the contract.

<sup>&</sup>lt;sup>1</sup> Contractor means the prime contractor's company, contractor's company and the companies of subcontractors, consultants, vendors and suppliers.

#### 8. SUBMITTALS

- .1 W.C.B. Submittals: Submit certificate of an account with Workers Compensation Board prior to commencement of Work. Submit letter of clearance with application for payment of holdback, if applicable, and with application for final payment.
- .2 Work Schedule: Prior to start of work, submit a schedule indicating scheduled start and completion dates for each construction activity.
- .3 Shop Drawings and Product Data: Submit five copies of shop drawings and product data required by the Contract Documents and for such other items as the Owner may reasonably request. Do not proceed with work until related submission has been reviewed.
- .4 Samples: Submit duplicate samples required by the Contract Documents and for such other items as the Owner may reasonably request.

### 9. QUALITY CONTROL

- .1 The Owner may employ services of independent testing agencies to establish if work complies with Contract Documents. The Owner will appoint and pay for services of such testing agency.
- .2 Where tests or inspections, by the Owner appointed testing agency, indicate work is not in accordance with the Contract Documents, additional tests or inspections, as the Owner may require to verify acceptability of corrected work, shall be paid for by Contractor.

#### 10. TEMPORARY FACILITIES AND CONTROLS

- .1 Existing Facility services (water, power, heat) may be used by contractor at no cost.
- .2 Sanitary Facilities: provide and maintain during the work, temporary toilets for the use of all contractors personnel employed on the work. Comply with the Provincial Board of Health Regulation under the Public Health Act. Provide separate facilities for both male and female as required.
- .3 Contractor shall provide telephone / fax. Existing Facility system shall not be used by Contractor.
- .4 Comply with the Owner's regulations, including loading / unloading, parking, location of garbage disposal.
- .5 Be aware of and comply with the Owner's standing orders in case of fire.
- .6 Provide hoarding as may be required and as directed by Owner.
- .7 The Contractor is to provide 8' high chain-link fencing secured by lock to complete staging areas to prevent access by students. All ground equipment necessary for the re-roofing operation must be within these confines.

#### 11. OVERLOADING AND CLEANING OF STREETS

.1 Contractor shall ensure that no part of the work is subjected to a load which may endanger safety or structural integrity.

### 12. SMOKE FREE POLICY

.1 Entire Facility is designated as "non smoking". Smoking is prohibited on the premises.

#### 13. INSPECTION OF WORK

.1 The Owner shall have access to the work at all times for inspection purposes.

#### 14. CONTRACT CLOSE-OUT

- .1 Record Drawings: Submit project record drawings indicating deviations from Contract Documents resulting from changed site conditions and changes ordered by the Owner.
- .2 Operation and Maintenance Data: Submit three copies of operation and maintenance data required by the Contract Documents and for such other items as the Owner may reasonably request.
- .3 Maintenance Materials: Leave maintenance materials required by the Contract Documents where directed by the Owner. Clearly label all items.
- .4 The submission of record drawings and the operation and maintenance manuals are a requirement for completion and acceptance of the work.

# 15. OCCUPATIONAL HEALTH & SAFETY ACT, REGULATION & CODE

.1 Prime Contractor must comply with Town of St. Paul COR PROGRAM.

END OF SECTION

#### 1 INTENT

- .1 Include specified allowances in Contract Price and, unless otherwise specified, also include all associated costs required to perform and complete work of allowances. Ensure that allowances and associated costs are included only once in Contract Price.
- .2 The term "Prime Cost Sums" shall be synonymous with Allowances.

# 2 CASH ALLOWANCES: UNFORESEEN WORK

- .1 Amount of each allowance includes all costs. Do not include in contract price any additional costs in excess of allowance amount.
- .2 Work performed under each allowance shall be authorized by Change Order and valued in accordance with requirements of "Valuation of Changes" article in General Conditions of Contract.

# 3 SCHEDULING WORK COVERED BY ALLOWANCES

- .1 Comply with following:
  - .1 Perform work within Contract time.
  - .2 Include work in construction schedule.
  - Owner will provide Contractor with required documentation or information within time specified, or where such time is not specified, in sufficient time to permit construction schedule to be maintained.

# 4 PERFORMANCE OF WORK COVERED BY ALLOWANCES

- .1 The Owner will determine by whom and for what amounts work covered by allowances will be performed.
- .2 If not specified, the Owner will determine manner in which prices for work covered by allowances will be obtained.
- .3 When required or specified, Contractor shall assist the Owner by identifying potential suppliers and Subcontractors and by obtaining prices for work covered by allowances.
- .4 Expenditures from allowances shall be authorized in writing by Owner.

#### 5 CONTRACTOR'S RESPONSIBILITIES

.1 Contractor's responsibilities for work covered by allowances shall be the same as for other work of this Contract.

.2 On notification in writing of selection of supplier or Subcontractor by Owner, execute purchase agreement with designated supplier or enter into subcontract or amend existing subcontract with designated Subcontractor.

# 6 DETERMINATION OF ACTUAL COSTS

- .1 Actual cost of items included in an allowance amount shall be determined by:
  - .1 actual amount duly payable by Contractor to Subcontractors or suppliers, and
  - .2 Contractor's actual cost of material and labour for work performed by his own forces.
- .2 Trade discounts and refunds shall be credited to Owner.
- .3 Notwithstanding the foregoing, cash discounts, if any, on accounts paid by Contractor before net due date may be retained by Contractor.

#### 7 ADJUSTMENT OF CONTRACT PRICE

- .1 Should actual cost of items included in an allowance amount, when ultimately determined in accordance with foregoing article, be more or less than specified amount of allowance, Contract Price will be adjusted accordingly by Change Order in accordance with requirements of General Conditions of Contract.
- .2 Contractor shall not be entitled to any extra payment on account of work of specified allowances except as specified in paragraph .1 above.

END OF SECTION

## 1. INTENT

.1 These procedures apply to requirements for patching and making good around new and existing work.

## 2. SITE VISIT

- .1 Refer to Section 00255 Mandatory Attendance Pre-Bid Meeting.
- .2 Review existing site conditions during Bid period. Investigate ceiling plenums, duct shafts, wall structures and other building systems affected by the Work.
- .3 Confirm dimensions of applicable existing equipment with field measurements.
- .4 Use visit to note required materials which may be difficult to provide, and notify the Owner during Bid period.

## 3. SUBMITTALS

- .1 Comply with requirements of Section 01000.
- .2 Submit drawings of structural alterations and temporary support systems for the Owner's review before proceeding with structural alterations.
- .3 Provide drawings fully detailing alterations to structure, signed and sealed by a professional structural engineer registered to practice in the Province of Alberta.
- .4 Submit, for the Owner's approval, details of methods other than specified coring, drilling, or cutting.

## 4. STRUCTURAL ALTERATIONS

- .1 Do not cut, cut into or alter any building structure, or bearing walls and partitions until proposed methods and procedures for doing so, including temporary support system, are reviewed by the Owner.
- .2 Conform strictly to approved details. Cut or remove only to extent shown on engineer's drawing reviewed by the Owner.

## 5. SPECIAL PROTECTION REQUIREMENTS

- .1 Protect unaffected finishes, equipment and adjacent work from damage caused by cutting, moving, removal and patching operations. Protect surfaces which will remain as part of finished work.
- .2 Notify the Owner immediately of damage to fireproofing coatings.
- .3 Protect existing fireproofing coating to structural members. If damaged due to work of this Contract, restore damaged areas to original condition using materials to match existing colour, texture and required fire protection rating, at no additional cost to the Owner.
- .4 Protect personnel, building occupants and public from airborne dust and contaminants when cleaning spray fireproofing or contaminant-generating materials from structure.
- .5 Protect area below welding work from sparks and molten metal, using wet double canvas blankets.

## 6. CUTTING, REMOVAL AND FITTING

- .1 Make cuts with clean, true, smooth edges. Provide patches inconspicuous in final assembly.
- .2 Use electric percussion tools to cut clay tile, plaster and concrete blocks.
- .3 Carefully remove material being cut. Do not cut services discovered.
- .4 Where required, carefully remove modular, manufactured type finishes, including lay-in ceiling tile in component ceiling systems.
- .5 Fit alteration work airtight to pipes, sleeves, ducts, conduits and other required penetrations through building elements.

## 7. MATERIALS

- .1 Obtain new products to patch, match or extend existing products and meet or exceed quality of existing products.
- Quality of existing products, available for assessment during pre-bid site visit, shall serve as basis for requirements for appearance and performance of materials used in the Work.
- .3 Where existing material cannot be matched with new, salvaged material may be used subject to approval by the Owner.
- Where matching materials are not available, the Owner will consider similar product which meets same performance requirements as existing.
- .5 Obtain acceptance of the Owner before installing any materials not matching existing.

## 8. PATCHING, EXTENDING AND MAKING GOOD TO EXISTING WORK

- .1 Patch, extend and make good existing work using skilled workers able to match existing quality. Quality of work shall meet technical requirements for similar components throughout Specifications.
- Where a portion of existing finished surface is damaged, lifted, stained, or otherwise imperfect, patch or replace with matching materials. Match existing finishes unless specified otherwise.
- .3 If patched or imperfect surface was painted or coated, repaint or recoat entire surface area.
- .4 Replace damaged lay-in type ceiling tile and other components with new.
- .5 Patch surfaces and materials exposed by partition removal, with finishes to match adjacent.
- .6 Restore existing work damaged during construction to a condition matching existing finishes.

## 9. TRANSITIONS

- .1 Make transitions as smooth as possible where new work abuts or finishes flush with existing work.
- .2 Match existing adjacent work in texture and appearance, providing transition invisible to the eye from distance of 2 meters.
- .3 When smooth transition is not practicable, e.g., from a smooth finish to masonry, tile or plaster, terminate existing surface along a straight line at a natural point of division and provide trim to the Owner's approval.
- Where two or more spaces become one space and planes are nominally continuous, re-work floors and walls and ceilings to provide planes meeting without breaks, steps or bulkheads.
- .5 Where change of plane exceed 75 mm, obtain instructions from the Owner for method of executing transition.

## 10. EXISTING SERVICES

- .1 Establish location and extent of services in area of work and notify the Owner of findings before starting Work.
- .2 Inform the Owner immediately of unknown services that are encountered. Confirm findings in writing.

## 11. ALTERATIONS TO MECHANICAL AND ELECTRICAL SERVICES

- .1 Refer to mechanical and electrical drawings and specifications for extent of mechanical and electrical alterations.
- .2 Perform alterations with minimum disturbance to existing work.
- .3 Access service runs in ceiling spaces through light fixture openings and ceiling access panels where possible. Subject to the Owner's approval, provide bulkheads to conceal services where ceiling spaces are not accessible.
- .4 Except in mechanical and electrical rooms, conceal the following:
  - .1 ducts
  - .2 pipes
  - .3 raceways
  - .4 conduit runs
  - .5 junction boxes

using chases and cut-outs in walls and floors, under-floor ducts and ceiling spaces.

.5 Patch and make good existing work, where damaged due to alterations to and installation of services.

## 12. CORING, DRILLING AND SAW-CUTTING CONCRETE

- .1 Complete an x-ray inspection of affected concrete area before coring. Employ the services of an experienced x-ray inspector. Confirm with the Owner before coring or drilling, location of reinforcing steel and raceways that may be present.
- .2 Perform coring and drilling after normal working hours, unless specified otherwise. Confirm coring and drilling times with the Owner.
- .3 Wet or dry core drilling and saw-cutting are acceptable. Reduce amount of cooling water used to minimum required and collect water used in suitable containers, or use a suitable vacuum system that will collect water.
- .4 Do not core structural beams or cut conduits or reinforcing steel without written permission from the Owner.

## 1 WORK OF THIS CONTRACT

- .1 Work of this contract comprises the following:
  - .1 Partial Re-roofing of Area B of Town of St. Paul Administration Building in St. Paul, Alberta as indicated by specifications and drawings.
- .2 The entire work shown in the drawings and specifications shall be in a single contract.
- .3 Work shall be performed under a single Stipulated Price Contract.
- .4 Making good of damage to existing roads, curbs, gutters and sidewalks occurring outside property lines.
- .5 Making good damage to existing walks, asphalt and lawns within property lines.

## 2 SERVICE OUTAGES & DISRUPTIONS

- .1 Notify Operations Contact 48 hours prior to any required shut-down of existing services.
- .2 Because St. Paul Administration Building will be fully operational throughout the duration of this work, it is necessary that the Contractor shall coordinate the shutting-off of existing services outside of normal working hours, on a continuous start to finish basis so as to provide no disruption to normal centre operations.
- .3 Provide and maintain temporary connections during disruption to existing services, to permit continued usage of the building. Remove temporary connections upon restoration of services.
- .4 Keep shut-down time to the practicable minimum.

## 3 CONTRACTOR'S USE OF PREMISES

.1 The Contractor, in the normal course of operation, shall avoid entry into the building.

## 4 USER'S OCCUPANCY OF PREMISES

.1 The tenants will use the building during normal school hours for the duration of construction.

## 5 STAGING AREA SECURITY

.1 The Contractor is to provide chain-link fencing secured by lock to complete staging areas to prevent access by students. All ground equipment necessary for the re-roofing operation must be within these confines.

## 6 SITE SECURITY

.1 All equipment must be secured to safeguard the intentional or unintentional use.
END OF DOCUMENT

## .1 Cleaning Materials

- .1 Use only cleaning materials recommended by manufacturer of material to be cleaned.
- .2 Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

## .2 Cleaning during construction

- .1 At regular intervals during progress of work, clean-up building premises and site and dispose of waste material, rubbish, and debris.
- .2 Do not allow waste material, rubbish, and debris to accumulate and become an unsightly or hazardous condition. Maintain site in a clean and orderly condition.
- .3 Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- .4 Do not allow waste material, rubbish, and windblown debris to reach and contaminate adjacent properties.
- .5 Sprinkle dusty debris with water as required.
- .6 Lower waste material in a controlled manner; do not drop or throw materials from heights.

## .3 Final cleaning

- .1 Perform final cleaning operations specified herein prior to request for inspection for Interim Acceptance of the Work.
- .2 Use experienced workers or professional cleaners for final cleaning.
- .3 Remove grease, paint spots, dirt, dust, stains, labels, fingerprints and other foreign matter from interior and exterior surfaces; vacuum and dust behind grilles, louvres and screens; wash floor surfaces not otherwise finished; clean doors and frames; clean metal work; clean equipment; clean hardware; clean and polish glass on both sides; clean and polish mirrors.
- .4 Repair, patch and touch-up marred surfaces to match adjacent finishes.
- .5 Replace cracked and broken glass.
- .6 Ensure that cleaning agents and methods do not remove finishes and permanent protective coatings on surfaces being cleaned.
- .7 Leave all surfaces in perfectly clean and unsoiled condition.

## Town of St. Paul Administration Building Area B St. Paul, Alberta

Section 01900 Notes to Drawings 9/26/2017 Page 1 of 1

- 1. Remove existing metal flashing from perimeters and discard from roof surface.
- 2. Remove existing roof membrane to existing metal deck.
- 3. Install new ½" gypsum board and 1 ply 15# felt vapour barrier.
- 4. Install new wood blocking at curbs and perimeters to a height of 8" above finished roof surface.
- 5. Raise gas lines and install prefabbed gas line supports.
- 6. Install new sloped type 1 EPS insulation in asphalt. (2"-6")
- 7. Install new 1" fibreboard in mop and flop method.
- 8. Install insulation wrap and fire tape at curbs and perimeters.
- Install a new two ply modified bitumen roof membrane, base sheet installed in asphalt,
   250 cap sheet torched.
- 10. Install new 30" lead flashings at drain locations.
- 11. Install new prefinished 26 gauge metal flashing.
- 12. Install temporary steel fencing at tar kettle location.
- 13. Leave site clean and free of roofing debris.

### SELECTIVE DEMOLITION

- .1 During demolition and renovations, erect and maintain construction barriers around work area to protect existing building, systems and equipment from construction dust. Seal off ducts, grilles and doorways to prevent the spread of dust and fumes throughout the school and the mechanical system. Provide drop sheets to existing equipment and furniture that remains in the work areas. On completion, remove dustproof partitions and make good all surfaces.
- .2 Carry out demolition in accordance with CSA S350-M1980, Code of Practice for Safety in Demolition of Structures. All salvageable materials, equipment or parts resulting from demolition, remain the property of the Owner, and may not be removed from the area without direct approval or instructions from the Owner's representative. Carefully remove and turn over to the Owner the following salvageable items for his pickup:
  - .1 Existing splashpad and downspout.

The remaining unwanted materials are to be removed from the premises and disposed of by the contractor.

- .3 Disconnect and cap all mechanical services in accordance with requirements of local authority having jurisdiction. Natural gas supply lines shall be removed by the gas company or by a qualified tradesman in accordance with the gas company instructions. Completely remove all inactive ductwork and piping to boundaries of project area.
- .4 Disconnect all electrical in the areas to be demolished. Post warning signs on all electrical lines and equipment which must remain energized to serve other areas during period of demolition and renovation. This work shall be done to the requirements of local authority having jurisdiction. Completely remove all inactive wiring and conduit to boundaries of project area.
- .5 The Town of St. Paul Administration Building representative shall be notified at least one week before the demolition work begins so that our forces may schedule the removal, modification and reinstallation the following equipment: (Note: All conduits and junction boxes are the responsibility of this contractor, if applicable).
  - .1 DDC management system,
  - .2 DDC temperature sensors,
  - .3 Cable television and clock systems,
  - .4 Intrusion detection system.
  - .5 Public address system (PA),
  - .6 Telephone system,
  - .7 Computer network cabling and devices.
- .6 Any work conducted on the roof requires this contractor to protect the existing roof membrane with lay down sheets of at least ½" thick plywood. This protection shall include but not limited to foot traffic paths, work zone, placement of tools and small equipment areas. Any roofing damage shall be made good by this contractor at not extra charge to the Owner.

- .7 Temporary suspended work that is without continuous supervision or security. Enclose the area to prevent entry of unauthorized persons. Ensure safe passage of building occupants around area of demolition using temporary partitions, security and signs.
- .8 Maintain fire alarm, fire protection systems, security, water, power and all essential services.
- .9 In each case notify the affected utility company in advance and obtain approval where required, before commencing with the work on main services.
- .10 Patch and repair requirements:
  - .1 Patch, extend and make good existing work using skilled workers able to match existing quality. Quality of work shall meet technical requirements for similar components throughout Specifications.
  - .2 Where a portion of existing finished surface is damaged, lifted, stained, or otherwise imperfect, patch or replace with matching materials. Match existing finishes unless specified otherwise.
  - .3 If patched or imperfect surface was painted or coated, repaint or recoat entire surface area.
  - .4 Replace damaged components with new.
  - .5 Patch surfaces and materials exposed by partition removal, with finishes to match adjacent.
  - .6 Restore existing work damaged during construction to a condition matching existing finishes.
- .11 Cease operations and notify the Owner immediately for special protective and disposal instructions when any asbestos materials are uncovered during the work of this section.

## 1 GENERAL

## 1.1 PRODUCT STORAGE

- .1 Protect materials from weather while at site.
- .2 All materials stored on roof will be on pallets or wood supports to ensure materials cannot be moisture damaged. All stockpiles of materials must be effectively covered with tarps to maintain dry conditions.

## 2.1 PRODUCTS

- .1 Cants: Fibre or Wood
- .2 Wood Blocking: Apply wood preservative, copper napthimate or pentachlorophenol base water repellent.

## 3.1 GENERAL CARPENTRY REQUIREMENTS

- .1 Curb Heights: construct curbs measured from finished roof membrane to minimum heights as shown on CRCA applicable FL Specification details. Where curb heights are not shown or specified, minimum height from roof membrane shall be 200mm (8").
- .2 Construct new wood curbs if required around various roof items such as fan bases, pedestal bases, T.V. bases, roof expansion joints, etc. Verify requirements on site for roof top mechanical equipment, fans, etc.
- Construct new 2" x 4", 2" x 6", and up to 2" x 8" roof perimeters to a height at least 8 inches above new roof membrane. The width of new parapet construction to match existing.
- .4 Where stacked lumber is detailed for parapets up to 8" width, it is the Roofing Contractor's option to substitute wood framed parapets with stude 16" O.C. and ½" plywood skins. Fiberglas batt insulation between stude must be included.

## 4.1 EXISTING WOOD BLOCKING

.1 Contractor to allow for replacing whatever existing wood blocking is rotten.

## 5.1 <u>SPLASH PADS</u>

.1 Contractor to include new concrete splash pads as detailed.

## 6.1 GAS LINE SUPPORTS

.1 All gas line to be supported with pressure treated wood blocking with appropriate brackets resting on concrete pavers over Roofmate Insulation.

- .1 Firestopping shall provide a (1) one hour fire resistance ratings when tested to CAN4-S115-M85, for a rating period applicable to the separation. These fire separations are continuous and extend from floor slab to underside of roof structure/deck. Generally, these walls are on either side of all corridors and hallways, around storage and service rooms and around mechanical and electrical rooms.
- .2 Firestopping of electrical and communications cables shall be easily re-enterable and re-sealable with negligible risk of damage to cables, and shall not require de-rating of electrical cables. If an installation requires new penetrations through walls which are fire separations, they shall be sealed with firestopping under this section. Comply with Johns Manville Firetemp Installation and Inspection Guide.
- .3 Firestopping system shall by as listed under ULC Guide 40 U19 "Firestop Systems" or as listed in WH Listing under "Through-Penetration Firestopping Systems". Provided that all other specified requirements can be met, use any of the following products, either singly or in combination of a tested system:
  - .1 Elastomeric sealant.
  - .2 Elastomeric coating.
  - .3 Intumescent putty/blocking.
  - .4 Poured-in-place silicone foam.
  - .5 Preformed silicone foam.
  - .6 Multi-cable transit system.
- .4 Provide primer as recommended by firestopping manufacturer for applicable substrate.
- .5 Firetemp CI intumescent (heat-expanding) caulk or Firetemp SI spray and Firetemp SI spray endothermic (heat-absorbing) firestopping materials by Johns Manville. or One-component, non-combustible, red in colour for easy identification inorganic, moderately intumescent firestop sealant by FS-ONE by Hilti Canada Ltd. "Fire Tests of Through-Penetration Firestops" by ULC in accordance with CAN4-S115-M85 for system ratings of up to four hours "Fill, Void or Cavity Materials" for use in Through-Penetration Firestop Systems.
- .6 The following are approved manufacturers and supplies of firestopping systems and shall be used for product, installation and system selections: Johns Manville Firetemp, 3M Fire Barrier, AD Firebarrier, Hilti Firestop and Firestop System.

## 1 GENERAL

- 1. The A.R.C.A. 'Manual of Good Roofing Practice' represents a consensus of the A.R.C.A. membership and constitutes a guide to good roofing practice in Alberta. In the context of these specifications for roofing, flashings and other construction upon which roofing and flashing must depend for proper performance (eg. Roof decks, parapets, walls, roof mounted equipment etc.). The recommendations contained in the A.R.C.A. manual shall be read as part of these specifications with the following amendments: Wherever the word 'should' is used, it shall be read as 'shall'.
- .2 The installer shall be a competent, qualified tradesman using adequate material and equipment to execute the work of this section. He shall hold at least a three year Apprenticeship Certificate or a Journeyman Certificate as "Roofer" and shall be a member of the A.R.C.A.
- .3 Provide the Owner with a guarantee/warranty by an A.R.C.A. five (5) year Certificate of Assurance.
- Protected SBS Membrane Roofing shall be SOPREMA Waterproofing Inc. or approved equal.
   Base sheet SBS modified asphalt membrane 3mm
   Flashing and cap sheet SBS 4 mm.
   The top side shall be self protected with coloured granules (grey)
- Bitumen:
   Plastic cement. Cutback asphalt, fibre filled with SBS modified bituminous membrane.
- Insulation:
   Extended plastic insulation R-value 5/1", minimum R-15.
- .7 Examine surfaces to be roofed and report in writing to the Contractor any defects which may impact the roofing work.
- .8 Ensure continuous solid blocking or nails are properly installed at all edges, curbs, vertical surfaces and all openings properly curbed and blocked.
- Ensure roof drains are adjusted to correct levels for roofing system.
- 10. Commencement of Work shall imply acceptability of existing conditions.
- 11. Ensure that adequate fire extinguishers are located near any melter being used, when this melter is located on or in the building. Location of the melter is subject to approval by the Architect.
- 12. All surfaces shall be clean, solid and free of laitance, frost, dust, dirt, oil, grease, curing compounds and other foreign matter detrimental to adhesion of the membrane.
- 13. Voids, cracks, holes and other damaged surfaces shall be repaired before application of the membrane.
- 14. Examine surfaces to receive membrane and ensure that they are free of conditions that will adversely affect the performance of the membrane. Work shall not proceed until defects have been corrected.
- All seams in the base sheet, including the field of the roof, are to be torched and trowelled ("buttered"). The base shall be fully adhered over its entire area. Blisters and wrinkles are not acceptable. All wrinkles, blisters, and improperly

- sealed laps shall be corrected or repaired as required.
- .16 All seams shall be in a straight line and fully sealed.
- .17 Co-ordinate installation of related metal flashings.
- All flashings shall be installed concurrently with the roof membrane as the job progresses.
- .19 Maximum lengths of membrane flashing shall equal the roll width.
- .20 Complete the installation of the membrane cap sheet as per manufacturer's recommendation.
- .21 The top of all parapet walls must be covered with a one ply of membrane flashing cope sheet which shall be bonded to and extend down the outside vertical a minimum of 75mm (3")
- .22 Protect surfaces subject to soiling or damage adequately. Adjacent roof areas used for traffic or storage of material shall be protected. All damages whatsoever to such surfaces shall be repaired or replaced at no extra cost to the Contractor.
- .23 Clean daily as the work proceeds and upon completion, clean up and remove from the premises all rubbish and surplus materials, and leave the work and site in a clean and tidy condition.
- .24 Remove bituminous markings from finished surfaces.

### 1.1 SCOPE

.1 Install IKO or Soprema Torch-Applied membrane system to designated area.

## 1.2 REFERENCE STANDARDS

- .1 IKO and Soprema Standards are applicable to all work.
- .2 It will be responsibility of roofing contractor to ensure that IKO or Soprema representative visits job site during installation.

## 1.3 GUARANTEE

- .1 The Contractor will provide the Owner with a IKO or Soprema 10 year warranty for material that covers costs required to restore water-proof roof system. This document issued by the membrane supplier will guarantee against material defect.
- .2 In addition the Contractor shall obtain from the membrane manufacturer a written warranty stating that the waterproofing membrane shall provide a waterproof surface for 10 years after installation. If infiltration happens due to faulty material or workmanship the manufacturer shall make the necessary repairs to the roofing system.
- .3 Supply maintenance bond as specified.
- .4 Contractor shall obtain, on behalf of the Owner, the ARCA Five Year Warranty Certificate, for the performance of Contractor's obligations under the extended warranty. Owner will not accept other roofing certificates.

## 1.4 EXTENDED WARRANTY

- .1 Provide an extended warranty stating:
  - .1 that the roofing system has been constructed in accordance with the Contract Documents, and
  - .2 that the Contractor shall, at no additional expense to the Owner, repair any actual leaks or deficiencies in the roofing system, occurring within five (5) years after the date of Substantial Performance of the Work, and which have resulted from faulty or improper workmanship.
- .2 For the purpose of this extended warranty, the roofing system includes the roofing assembly and related sheet metal work.
- .3 The Owner appointed inspector will inspect the roofing system in the last three months of extended warranty period and will promptly inform Contractor of deficiencies.
- .4 Stop leaks which have resulted from a deficiency, within a time reasonably determined by the Owner appointed inspector.
- .5 Correct deficiencies within 15 working days of notification by the Owner appointed inspector, or as otherwise determined by the Owner appointed inspector.

## 1.5 SECURITY FOR EXTENDED WARRANTY

- .1 If roofing system has been constructed by a member of the A.R.C.A., Contractor shall obtain, on behalf of the Owner, the A.R.C.A. Five Year Warranty Certificate, for the performance of Contractor's obligations under the extended warranty. The Owner will not accept other roofing certificates. Maintenance bond shall be 5 Years duration (1Year & 2Year & Two Annual Renewals).
- .2 If roofing system has been constructed by a non-member of the A.R.C.A., Contractor shall obtain a maintenance bond for the performance of Contractor's obligations under the extended warranty. Maintenance bond shall be:
  - in the amount of 100% of the cost of materials and labour associated with the roofing and roofing related work performed under this Contract.
  - .2 in a form acceptable to the Owner, and consigned to the Owner.
- .3 Submit Warranty Certificate or Maintenance Bond prior to Substantial Performance of the Work.

## 1.6 EXAMINATION OF SURFACES

- .1 Examine all surfaces to receive roofing and insulation.
- .2 Coordinate work with demolition to obtain an approved re-roofing surface.
- .3 Notify the Owner of surfaces unacceptable to receive the work of this Section.
- .4 The commencement of roofing or flashing will imply unconditional acceptance of the surfaces to receive this work.
- .5 All roof openings, except roof drains and plumbing vents, shall be curbed. Curbs shall be mounted on, and attached directly to the structural deck. Curb height shall be 200 mm (8") for all curbs, measured from the top of the membrane.

Page 4 of 8

.6 Control joints shall be located and installed as detailed and curbed to A.R.C.A. standards.

## 1.7 PRODUCTS HANDLING AND PROTECTION

- .1 Deliver all materials to the job site; handle and store in original packages and containers with manufacturer's seal and labels intact. The manufacturer's name, brand mass, specification number and lot number shall be shown on the labels.
- .2 Store materials in weatherproof shelters, having floors which will protect the material from moisture. Store roll materials on end. Avoid prolonged exposure of light or heat sensitive materials to sunlight.
- .3 Do not store materials on the roof in concentrations which exceed design live loads.
- .4 Protect installed work and materials.
- .5 Place plywood runways over the work to enable the movement of materials and the traffic.
- .6 Adequate fire extinguishers shall be located near all kettles and torch being used, when located on or in the building. Location of kettle is subject to approval of the Owner.
- .7 Protect surrounding surfaces against damage from roofing work. Where hoisting is necessary, hang tarpaulins to protect the walls during delivery of hot asphalt.
- In the event of materials damaged by the elements, proper handling or other causes, such materials will be rejected and shall be replaced at no extra cost to the Owner. Remove rejected materials promptly from the site.

## 1.8 SPECIAL REQUIREMENTS

- .1 Hours of work shall be governed on a day-to-day basis by the administration. Failure to adhere to the schedule may cause a shutdown of work.
- .2 The Contractor shall provide protection sheets, warning signs or barricades in locations inside and outside the building site, as required by the Owner.
- .3 It will be the Contractor's responsibility to verify possible problem locations on the inside of the building regarding unsafe conditions that may disrupt the day-to-day operation of the Building.
- .4 Damaged light fixtures, ceiling tiles, gypsum ceilings, conduit, pipes or other such items created by this work, shall be repaired to the satisfaction of the Owner and at no cost to the Owner.

## 2 PRODUCTS

## 2.1 MATERIALS

.1 Asphalt Primer: IKO or Soprema

Description: Primer shall be applied on all surfaces other than insulation to be covered with membrane.

Nature: Black bituminous varnish.

Composition: Asphalt modified bitumen with thermo-plastic polymers and volatile solvents.

- .2 Asphalt: Type III in compliance with C.S.A. A123.4M 1979.
- .3 Vapour Barrier: 1 Ply 15# Felt in Asphalt.
- .4 Sloped E.P.S. Insulation: Applicable to all areas 2" minimum at drain locations to a maximum of 6" thickness at a 1% slope.
- .5 Insulation: Sloped or flat polystyrene and fibreboard. Sloped and Flat Insulation: Sloped and Flat Expanded Polystyrene Insulation to be C.G.S.B. 51-G-P-20M Type 1. All E.P.S. insulation is to be covered with 1" coated asphalt impregnated fibreboard, installed "mop & flop" method with joints staggered. The insulation supplier shall be responsible for shop drawing for sloped insulation areas.

The insulation manufacturer shall substantiate the recommendations for the use of their product under the asphalt base waterproofing membrane bonded with hot asphalt.

## .6 Membranes:

.1 Membrane – Base Sheet: Modiflex or Elastophene PS
Description: Roofing membrane shall have a 95 g/meter squared glass
mat reinforcement and thermofusible elastomeric asphalt. Membrane
shall be thermofusible polypropylene one side and sanded one side.
Components:

Reinforcement: glass mat 95 g/m".

Elastomeric Asphalt: mix of selected bitumen and SBS thermoplastic polymer.

Physical Properties:

Tensile Strength, N/5 cm.: Longitudinal - 840.

Transversal - 660.

Ultimate Elongation: Longitudinal - 4%.

Transversal - 4%.

Low Temperature Flexibility: no cracking at -30 degrees Celsius.

Static Puncture Strength: 98 N.

.2 Membrane – Cap Sheet & Cap Sheet Stripping: Torchflex or Sopralene Flam 250 GR.

Description: Roofing membrane shall have a non-woven polyester reinforcement and thermofusible elastomeric asphalt. The top side shall be self-protected with coloured granules. The underside shall be protected by a thermofusible film. This membrane is to be applied by torching only.

Components:

Reinforcement: 250 g/m" of non-woven polyester.

Thermofusible elastomeric asphalt: mix of selected bitumen and SBS thermoplastic polymer.

Physical Properties:

Tensile Strength, N/5 cm. : MD - 1450. XD - 1090.

Ultimate Elongation: Longitudinal – 60%.

Transversal - 69%.

Static Puncture Strength: 370 N

Low Temperature Flexibility: no cracking at -30 degrees Celsius.

- Flashings Base Sheet: IKO or Soprema Peel & Stick .3 Description: Roofing membrane shall have a non-woven polyester reinforcement and thermofusible elastomeric asphalt. Both sides shall be protected by a thermofusible plastic film.
- .7 Roofing Nails: for wood substrates. In compliance with CSA B-111-1974 standard, table 12, nails shall be made of galvanized steel, long enough to penetrate the wood deck by at least 20mm on flashings and parapet walls.

#### .8 Bitumen:

- .1 Gum Box Sealing Compound: Rubberized asphalt to CGSB 37-GP-29M.
- .2 Asphalt Primer: Conforming to CGSB 37-GP-9M; primer must be compatible for use with sheet membrane as supplied by manufacturer.
- .3 Flashing Cement: Flashing cement used shall be compatible with the membrane system and approved for use by the manufacturer.
- Asphalt: Type III, in compliance with C.S.A. A123-7. .4

#### 3 EXECUTION

#### WORKMANSHIP 3.1

- .1 Apply roofing over clean, dry surfaces to IKO or Soprema recommendations and requirements.
- .2 Locate kettles so smoke will not discolour building or smoke will not be picked up by building air handling systems and distributed through building and setting off fire alarms.
- .3 Protect surrounding surfaces against damage from roofing work.
- .4 Before application of roofing system check for surfaces to be dry.
- Ensure items projecting through roof are solidly set and cant strips and nailing .5 strips are in place.
- Maintain roof waterproof at all times to protect the interior of the building areas. .6

#### 3.2 APPLICATION

.1 **Insulation Panel Installation**  .1 Insulation shall be fastened in accordance with the manufacturer's requirements and with general installation recommendations.

Insulation Protection: Insulation shall not be left without protection at the end of a day's work. Seal all surfaces and insulation panels. Remove when resuming work.

## .2 Applying 2 Ply Membrane

- .1 Base sheet membrane shall be unrolled dry on insulation panels for alignment. Each strip shall have 75mm side laps and 150mm end laps.
- .2 Base sheet shall be re-rolled from both ends and unrolled in a hot asphalt bed.
- .3 Asphalt shall be applied at a minimum temperature of approximately 230 degrees C and heated in a kettle at approximately 250 degrees C. Asphalt shall be applied at a rate of 1 to 1.5 kg/m. sq. (20-30 lb./sq.ft.) at a distance not to exceed 1 meter from the roll to provide sufficient thermal mass to melt and amalgamate with the asphalt of the membrane. For low temperature application, it may be necessary to heat asphalt at higher temperatures so that application temperature is adequate. However, the heating temperature of the asphalt shall not exceed 260 degrees C, the recommended absolute limit. Care must be taken that the asphalt in the kettle is continuously used to prevent distillation. Generally speaking do not apply mopped membranes at temperatures below -10 degrees C. The wind chill will affect proper adhesion of the bitumen.
- .4 Hot asphalt <u>will not bond</u> to plastic film, therefore it is essential that the plastic film to torched off the surface of the end of the roll (150mm) before mopping down the overlap.
- .5 Application shall provide a smooth surface, free of air pockets, wrinkles, fishmouths, or tears.

## .3 <u>Base Sheet Stripping (Flashing)</u> Installation

.1 Base sheet stripping shall be laid in strips on meter wide to the vertical surfaces, extending on to the flat surface of the roof a minimum of 100mm (4"). Side laps shall be 75mm and shall be staggered a minimum of 100mm with the laps of the base sheet.

## .4 Cap Sheet Installation

.1 Fully torch IKO or Soprema Cap Sheet to the base sheet. Overlap seams a minimum of 75mm and end lap 150mm. Offset cap sheet from base sheet so that seams are a minimum of 300mm apart. Extend to top of cant strip.

- .5 <u>Vapour Barrier Installation</u>
  - .1 1 Ply 15# Felt in Asphalt.

## .6 Roof Insulation

- Install sloped polystyrene insulation embedded in hot bitumen, sheets in moderate contact with snug joints as per suppliers shop drawing. Roofing Contractor must ensure all roof insulation achieves a maximum bonding condition. Polystyrene insulation must be placed in contact with moppings of asphalt at the most desirable temperature to avoid insulation curling. Insulation sheets must be "PRESSED DOWN" to ensure contact with asphalt and adhesion.
- .2 Install second layer of 1 inch coated fibreboard asphalt impregnated on top of base layer of polystyrene insulation.

  Fibreboard insulation, installed "mop and flop" method, must be fully coated and "PRESSED DOWN" to contact polystyrene surfaces and achieve maximum adhesion. The roofing contractor is responsible for determining asphalt temperatures to achieve adhesion without insulation "burn outs".

The roofer must remove and replace any poorly adhered insulation. Voids between insulation sheets are not acceptable.

## 1. GENERAL

## 1.1 REFERENCE STANDARDS

.1 Installations to C.R.C.A. requirements shall be considered as the specifications.

## 1.2 EXAMINATION OF SURFACES

Visit job site and examine all metal flashing requirements. All parapet fascia flashings, parapet cap flashings, parapet interior face flashings, curbs, equipment base flashings, control joints, gum boxes, reglets, etc., are to be applied to C.R.C.A. recommendations and details where possible.

## 2 PRODUCTS

## 2.1 MATERIALS

- .1 Galvanized Steel Sheet: commercial quality to ASTM A526-71 (1975) with G90 designation, zinc coating to ASTM A525-78, thickness 24 gauge (0.7010mm).
- .2 Solder: 50% pig lead and 50% block tin, to ASTM B32-76.
- .3 Flux: commercial quality as recommended by sheet metal manufacturer.
- .4 Flashing Nails: #12 hot dipped zinc coated, annual ringed.
- .5 Sheet Metal Screws: Cadmium plated, self-tapping, pan head. For concrete work drill pilot holes and install pin bolts with expansion shields.
- .6 26 gauge prefinished metal cap flashing, colour of Owner's choice.

## 3 EXECUTION

## 3.1 INSTALLATION

- .1 Use concealed fastenings except where approved before installation.
- .2 S-Locks required on end joints.
- .3 Standing seams required on corner cap flashings.
- .4 Caulk flashing with sealant only where provided for, do not use caulking as an alternative to good roofing practice.
- .5 Install new marathon roof drain receptacles or roof drain leads as may be necessary to comply with recognized practice.
- .6 Install 26 gauge cap flashing, colour of Owner's choice, to new perimeter construction and to completely cover existing fascias.
- Install new spun aluminum plumbing vents or lead flashings on wood curbs as may be necessary to comply with recognized practice.
- Re-roof Drains: In event these are required install new copper re-roof drains, Thaler or approved equal.

## 1 EXHAUST FANS

.1 Existing exhaust fans to be removed to allow roof curbs to be extended to accommodate 150mm of new curb. Exhaust duct drop to be extended to accommodate new curb height. Seal ductwork for air tight seal. If existing duct is insulated, exhaust duct extension to be insulated.

## 2 PLUMBING VENTS

.1 Existing plumbing vents to be removed at roof penetration. Install new vent extension of pipe material to match existing. Install lead flashing at each vent for a complete installation over wood curb.

## 3 CHIMNEYS

.1 Existing counter flashing and storm collar on existing chimneys to be removed. New storm collar and counter flashing to be installed to accommodate new insulation and roof curbs.

## 4 AIR SYSTEMS

.1 Existing air systems to be removed to allow roof curbs to be extended to accommodate 150mm of new curb. Supply air and return air duct work to be extended. Seal duct work for airtight seal.

## 5 GAS PIPING

.1 Existing gas piping to be extended at each riser location onto roof and shortened at each vertical riser at each air system. Piping change to accommodate new insulation and pipe sleepers. Clamp gas pipe to sleepers.

## 6 SHEET METAL GOOSENECKS

.1 Remove existing sheet metal goosenecks. Extend duct through roof to top of new roof curb. Install new gooseneck installed as per SMANA standards on top of new curb to provide new weatherproof installation.

## 7 ELECTRICAL

.1 Roofer shall be responsible for electrical personnel disconnecting and reconnecting electrical for mechanical equipment.

## 8 ELECTRICAL WORK

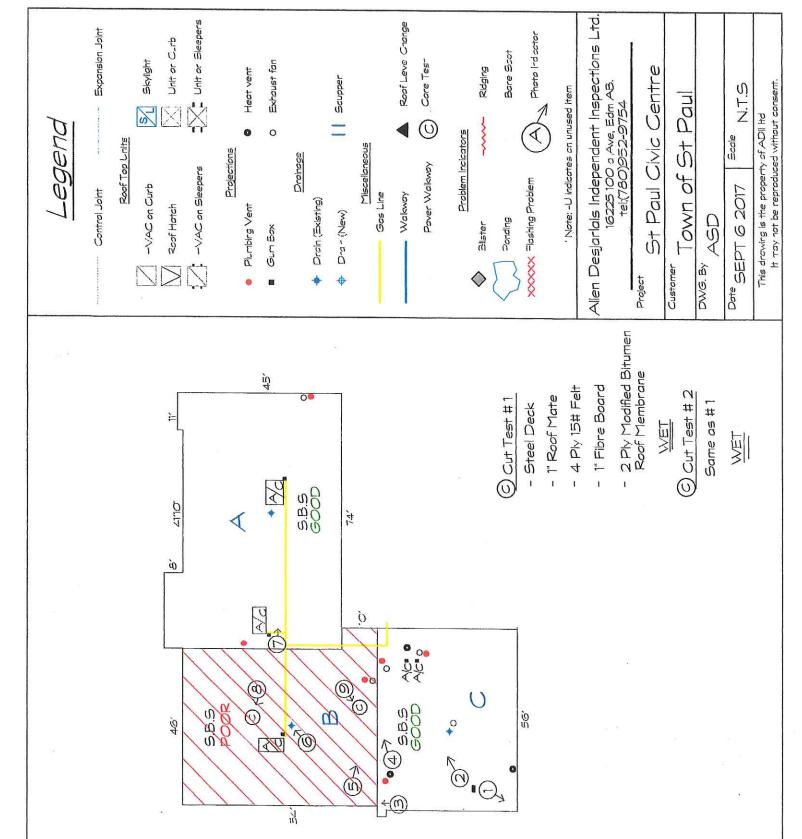
.1 Mechanical Trade to employ an electrical sub-trade for disconnection, relocation and reconnection. Provide electrical service to equipment in

new location. Remove existing conduits on existing equipment to facilitate the temporary raising of the roof top unit. Provide new conduits and provide new waterproof junction boxes on roof.

.2 All electrical work to be carried out to the latest Electrical Code and approved by the Electrical Inspection Branch.

## 9 ROOF DRAINS

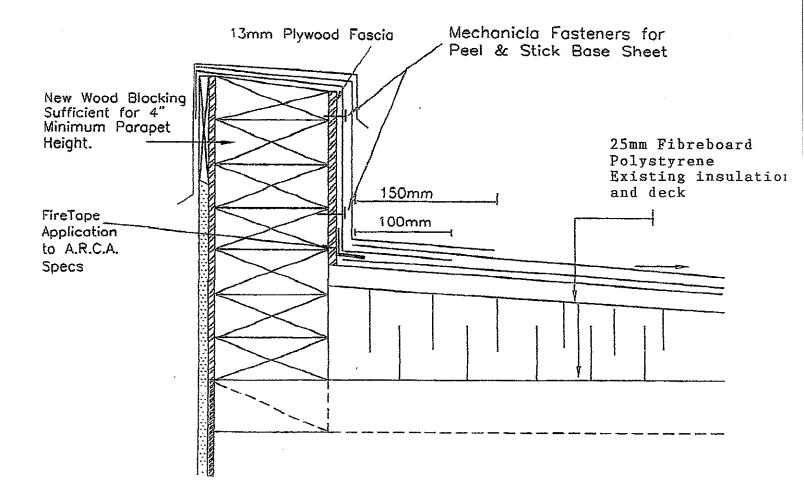
- .1 Roofer to include for additional roof drain installations if required with associated drainage piping. New Ancon cast iron drain assemblies with cat iron piping to be installed as illustrated on roof plan with piping installed within the building structure as illustrated to connect up with existing drainage system.
- .2 For existing drains new clamping rings to be provided if existing rings unavailable. Clamping rings to be bolted to drain receptacle. The appropriate new domed gravel restrainers to be installed.
- .3 Roofer to assess condition of existing drains at time of tendering and include for above as necessary.
- .4 Roofer to provide galvanized scuppers and/or overflow scuppers in locations designated by Owner.



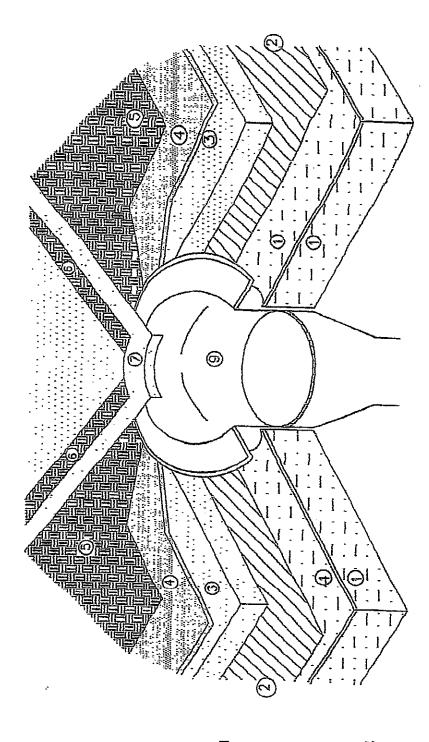




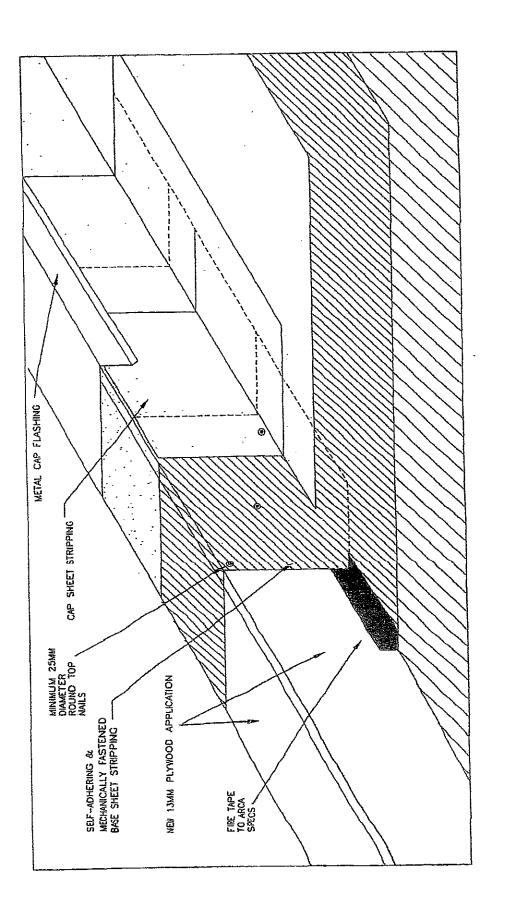
## PARAPET DETAIL



- 1 Existing Deck,Existing VapourBarrier andExisting Insulation
- 2 1% Sloped E.PS. Insulation 2" – 6" minimum at drains
- 3 1" Fibreboard Asphalt impregnated and coated
- 4 Modiflex Base Sheet P.S.
- 5 IKO Peel & Stick Base Sheet Stripping
- 6 Torchflex 250 Flam Cap Sheet
- 7 Lead Flashing at drain locations



ROOF DRAIN DETAIL

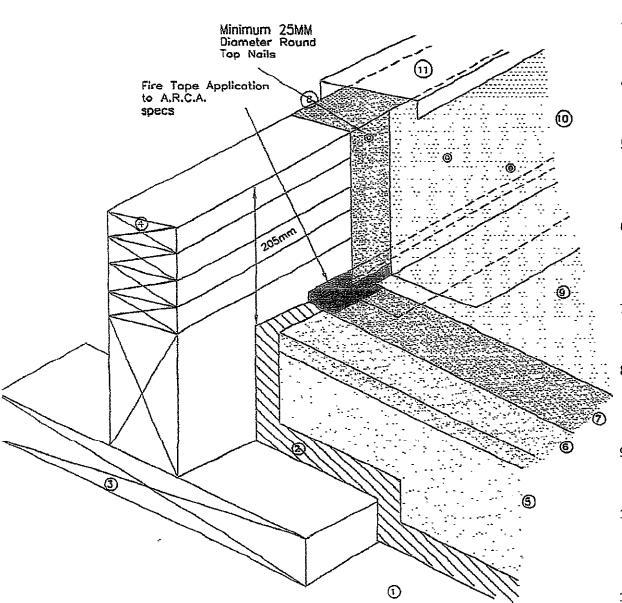


ROOF PARAPET DETAIL

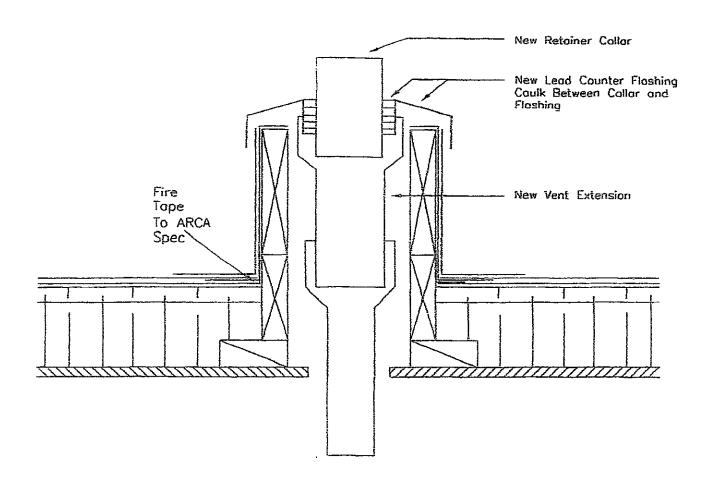
## Legend

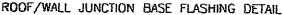
- 1 Existing Deck & Insulation
- 2 Vapour Barrier N/A
- 3 Existing Wood Blocking
- 4 New Wood Blocking
- 5 1% Sloped E.P.S.Insulation 2" 6"minimum at drains
- 6 1" fibreboard asphalt impregnated and coated
- 7 Modiflex Base Sheet P.S.
- 8 IKO Peel & Stick Base Sheet Stripping
- 9 Torchflex 250 Flam Cap Sheet
- 10 -Torchflex 250 Flam Cap Sheet Stripping
- 11 26 G.G.I. Prefinished Flashing

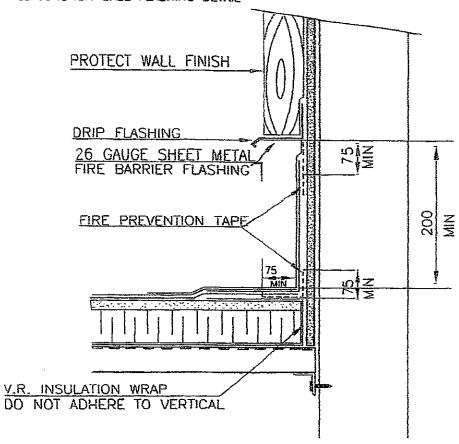
# CONTROL JOINT DETAIL



## Extended Vent Curb Detail

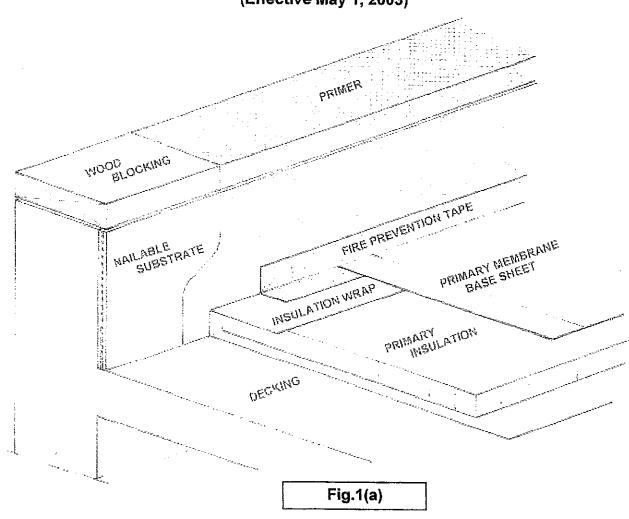






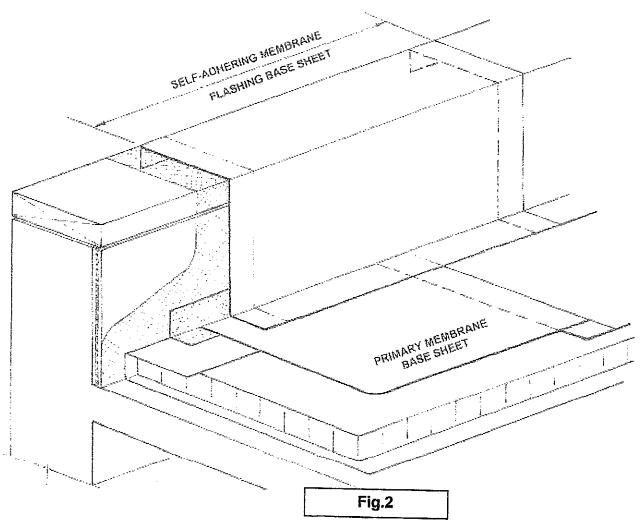
- 1. THE VAPOUR RETARDER SHALL WRAP THE EXPOSED INSULATION EDGES AT PARAPETS, CURBS, ROOF WALL JUNCTIONS AND ROOF OPENINGS. THE VAPOUR RETARDER WRAP SHALL EXTEND A SUFFICIENT HORIZONTAL DISTANCE TO PERMIT THE PRIMARY BASE SHEET TO BE FULLY ADHERED TO IT. THE VAPOUR RETARDER EXTENSION SHALL BE FULLY ADHERED TO THE TOP SURFACE OF THE INSULATION.
- 2. PRIOR TO APPLICATION OF PRIMARY MEMBRANE BASE SHEET, PROTECT THE ANGLE TRANSITION WITH THE VERTICAL SUBSTRATE BY APPLYING A MINIMUM 150MM (6") WIDE STRIP OF A SELF-ADHERING FIRE PRÉVENTION TAPE CENTERED OVER THE ANGLE TRANSITION.
- 3. ADHERE THE PRIMARY MEMBRANE BASE SHEET BY OVERLAPPING THE FIRE PREVENTION TAPE AT THE BASE OF THE VERTICAL TRANSITION.
- 4. COVER ALL SUBSTRATE GAPS, CRACKS, JOINTS OR OPENINGS AT CORNERS AND PENETRATIONS WITH SELF—ADHERING FIRE PREVENTION TAPE PRIOR TO TORCH ADHERING FLASHING BASE SHEET MEMBRANE, INCLUDING SHEET METAL FLASHING JOINTS.
- 5. INSTALL MINIMUM 26 GA. FIRE BARRIER SHEET METAL FLASHING AT BASE OF WALL FINISH AND MECHANICALLY FASTEN TO SUBSTRATE IN THE 75MM (3°) WIDE WALL FLANGE. PRIME THE SHEET METAL SURFACE AS REQUIRED AND/OR USE FIRE PREVENTION TAPE.
- 6. ADHERE FLASHING BASE SHEET TO THE VERTICAL SUBSTRATE; MEMBRANE BASE SHEET AND SHEET METAL FIRE BARRIER FLASHING. MEMBRANE FLASHING BASE SHEET SHALL TERMINATE A MINIMUM DISTANCE OF 75MM (3") ONTO THE 26 GA. FIRE BARRIER FLASHING WALL FLANGE.
- 7. INSTALL CAP SHEET MEMBRANES.
- 8. IN RETRO FIT APPLICATIONS, EXISTING COMBUSTIBLE SUBSTRATES MUST BE COVERED BY NEW PLYWOOD OR A SELF-ADHERING S.B.S. BASE FLASHING MEMBRANE AUGMENTED WITH MECHANICAL FASTENERS.

# APPLICATION PROCEDURE FOR SELF-ADHERING MEMBRANE FLASHING FOR NAILABLE SUBSTRATES (Effective May 1, 2003)



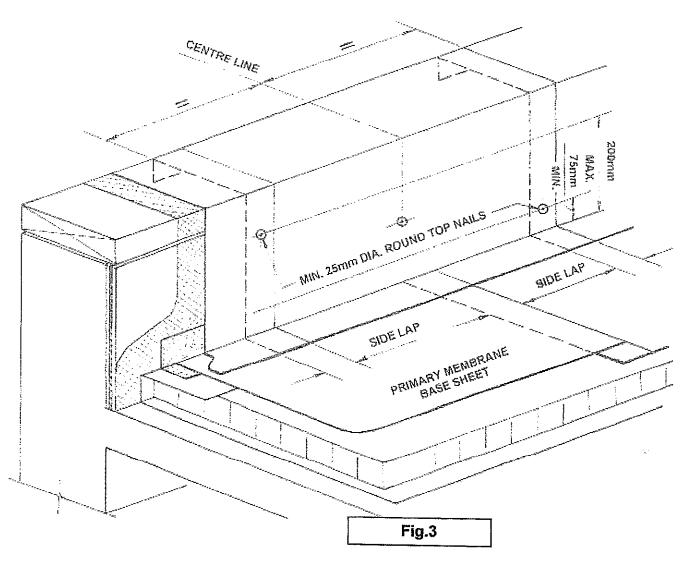
- 1) Prime the wood blocking and nailable substrate with a compatible primer in advance of the application of the self-adhering membrane flashing.
- 2) Center the self-adhering fire protection tape over the vertical junction and adhere it to the nailable vertical substrate and to the horizontal extension of the insulation wrap.
- 3) Adhere the primary membrane base sheet over the horizontal extension of the fire prevention tape using an application of hot asphalt. Terminate the primary membrane base sheet at the base of the vertical junction. Do not turn base sheet up the vertical.

## APPLICATION PROCEDURE FOR SELF-ADHERING MEMBRANE FLASHING FOR NAILABLE SUBSTRATES (Effective May 1, 2003)



- 4) Prepare the surface of membrane base sheet termination by burning off the plastic film covering. Self-adhering membranes do not adhere to plastic film.
- Adhere roll width sections of self-adhering modified bitumen membrane flashing base sheet to the primed vertical substrate and the prepared surface of the primary membrane base sheet termination.
- Turn the membrane flashing sheet extension down over the wood blocking, adhere and mechanically fasten it to the exterior wood blocking face.

# APPLICATION PROCEDURE FOR SELF-ADHERING MEMBRANE FLASHING FOR NAILABLE SUBSTRATES (Effective May 1, 2003)



Mechanically fasten the self-adhering membrane flashing base sheet to the nailable vertical substrate using a minimum of one (1) horizontal row of one (1") diameter round top nails placed over the side laps and at the midwidth of the sheet. (See Mechanical Fastener Spacing Schedule)

# MECHANICAL FASTENER SPACING SCHEDULE

## **PARAPETS**

## A) Parapets Maxium 300mm (12") in Height

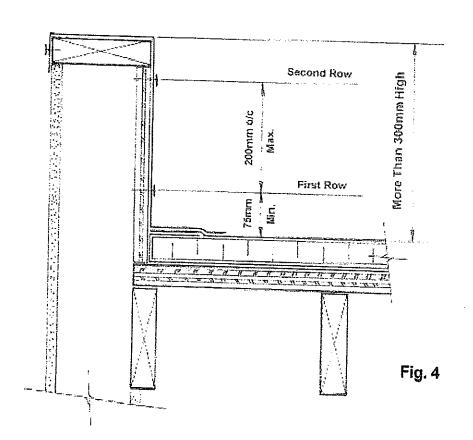
Fasteners shall be placed in a single horizontal row located no lower than 75mm (3") but no higher than 200mm (8") above the surface of the primary membrane base sheet (See Fig 3)

# B) Parapets Greater than 300mm (12") in Height

Additional rows of fasteners spaced vertically at maximum 200mm (8") on centre are required above the first row of fasteners, when parapets exceed 300mm (12") in height.

## Examples:

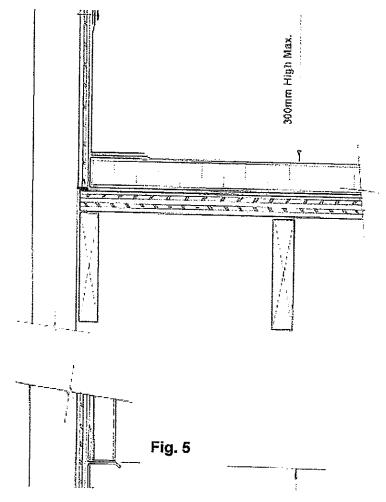
- i. Parapets 350mm (14") high require a minimum of two (2) rows of fasteners. (See Fig. 4)
- ii. Parapets 600mm (24") high require a minimum of three (3) rows of fasteners.



## **WALL JUNCTIONS**

## C) Wall Flashing Heights 300mm (12") or Less

A minimum of one (1) row of fasteners, placed beneath the wall finish is required along the upper termination of the membrane flashing. (See Fig. 5)



# D) Wall Flashing Heights Greater Than 300mm (12")

Additional horizontal rows of fasteners spaced at maximum 200mm (8") on centre are required for wall heights greater than 300mm (12") high.

# WOOD CANT EDGED PERIMETERS

The self adhering membrane flashing base sheet shall be mechanically fastened to the exterior wood cant face as well as by a single row of fasteners placed in the sloping cant face. (See Fig. 6)

