



A1. CONTRACTUAL ADVISOR

Mr. Brent Hygaard
Procurement Specialist
Real Property - Projects
Mission Procurement
realproperty-contracts@international.gc.ca

**Construction
Lowest Price Evaluation
Request for Proposals (RFP)**

for

Performance of the work as described in
Appendix "A" – Statement of Work of the
Draft Contract.

A2. TITLE

Roof Membrane Repair at the Canadian Immigration Building. Beijing, China

A3. SOLICITATION NUMBER

19-149975-BH

A4. PROJECT NUMBER

ARAF# 10359

A5. DATE

August 05, 2019

A6. RFP DOCUMENTS

1. Request for Proposals (RFP) title page
2. Submission Requirements and Evaluations (Section "I")
3. Price Proposal Form (Section "II")
4. General Instructions (Section "III")
5. Certifications Precedent To Contract Award (Section "IV")
6. Submission Checklist (Section "V")
7. Draft Contract (Section "VI")
8. Security Requirements Check List (Appendix "E")

In the event of discrepancies, inconsistencies, or ambiguities of the wording of these documents, the document that appears first on the above list will prevail.

A7. PROPOSAL DELIVERY

In order for the proposal to be valid, it must be received no later than **14:00 EDT (Eastern Daylight Time) on August 26, 2019** referred as the "Closing Date".

Only electronic copies will be accepted and received at the following email address:

realproperty-contracts@international.gc.ca

Attention: **Brent Hygaard**

Solicitation #: 19-149975-BH

Bidders should ensure that their name and solicitation number are in the email subject/title.

A8. PRICE PROPOSAL FORM

All the information required in section SR5 should appear on Section "II" - Price Proposal ONLY and submitted in a separate attachment entitled "Price Proposal". Failure to comply may result in the proposal being declared non-compliant and rejected from further consideration.

A9. SITE VISIT

Bidders must (mandatory) visit the site on **August 15, 2019** at 09:00 AM (CST), at their own expense, to become familiar with all of its on-site conditions.

No expenses related to the site visits will be reimbursed.

A10. ENQUIRIES

All enquiries or issues concerning this RFP must be submitted in writing to realproperty-contracts@international.gc.ca no later than **August 19**, in order to allow sufficient time to provide a response.

A11. LANGUAGE

Proposals must be submitted in English or French only.

A12. CONTRACT DOCUMENTS

The draft contract which the selected Bidder will be expected to execute is included with this RFP. Bidders are advised to review it in detail and identify any unduly onerous clauses to the Contractual Advisor in accordance with A10 - Enquiries. Her Majesty reserves the right not to make any amendment(s) to the Contract Documents.



SECTION "I" – SUBMISSION REQUIREMENTS AND EVALUATIONS

SR1. INTRODUCTION

SR1.1. This section outlines the information Bidders are required to submit. To qualify, Bidders must meet the mandatory requirements set out in the RFP. Proposals not meeting the Mandatory Requirements will not be given any further consideration. Submissions meeting the Mandatory Requirements will be evaluated according to the criteria set in SR5 – Price Proposal Form. Should Her Majesty elect to proceed with a contract, the Bidder with the lowest responsive bid will be awarded the Contract.

SR1.2. The evaluation will be based solely on the content of the responses and any correctly submitted amendment. No assumptions should be made that Her Majesty has any previous knowledge of the Bidders' qualifications other than that supplied pursuant to this RFP.

SR1.3. Insurance Requirement

The successful Bidder will be required to provide insurance coverage in accordance with article C9 in the Construction Contract within fourteen (14) days after receipt of a notice in writing that the bid was accepted by Her Majesty.

SR1.4. Contract Security

Contract Security is not required in accordance with the terms specified in article C10 of the Construction Contract.

SR1.5. Approval of Alternative Material

SR1.5.1. The bid must be based on using materials specified by trade or manufacturer's names where specified in the tender documentation.

SR1.5.2. Alternatives to materials and equipment specified by trade or manufacturer's names will be considered during the bid period if full descriptive data on proposed alternatives is submitted in writing to the Contractual Advisor as specified in A10. Enquiries.

SR1.5.3. The Contractual Advisor must approve any alternative material in writing. Approved alternatives will be incorporated in the specification by issuance of addenda to the tender documents.

SR2. SUBMISSION OF PROPOSALS

SR2.1. Proposals must be received by DFATD at the email address identified and by the date and time on page 1 of the solicitation. Canada will not be responsible for proposals delivered to a different email address.

SR2.2. Bidders should ensure that their name, closing date, and solicitation number is clearly referenced in the email message. It is the responsibility of the Bidder to confirm that their submission has been received on time, and to the correct email address.

SR2.3. More than one (1) e-mail can be sent if necessary (if the same file is sent twice, the latest file received will be used for evaluation purposes and the previous one(s) will not be opened).



SR2.4. Canada requests that Bidders provide their electronic proposals in Portable Document Format (.pdf) software application files or Microsoft office version 2003 or greater files.

SR2.5. Bidders should follow the specifications format instructions described below, during the preparation of their bid:

(a) Minimum type face of 10 points.

(b) All material be formatted to print on 8.5" x 11" or A4 paper.

(c) For clarity and comparative evaluation, the Bidder should respond using the same subject headings and numbering structure as in this RFP document.

Please note: bids may be modified or resubmitted only before the solicitation closing date, and must be done in writing. The latest bid received will supersede any previously received bids.

SR2.6. Canada will take no responsibility if a proposal is not received on time because the e-mail was refused by a server for the following reasons:

- The size of attachments exceeds 10 MB;
- The e-mail was rejected or put in quarantine because it contains executable code (including macros);
- The e-mail was rejected or put in quarantine because it contains files that are not accepted by our server, such as, but not limited to, .rar, encrypted .zip, encrypted .pdf, .exe., etc.

SR2.7. Links to an online storage service (such as Google Drive™, Dropbox™, etc.) or to another website, a File Transfer Protocol (FTP) service access, or any other mean of transferring files, will not be accepted. All documents submitted must be attached to the e-mail.

SR2.8. It is strongly recommended that Bidders confirm with the Contractual Advisor that their complete proposal was received. For this same reason, it is recommended that in cases where more than one (1) e-mail containing documents comprising the quote is submitted, the emails be numbered and the total number of emails sent in response to the solicitation also be identified.

SR2.9. Canada requires that each proposal, at closing date and time or upon request from the Contractual Advisor, be signed by the Bidder or by an authorized representative of the Bidder. If any required signature(s) are not submitted as requested, the Contractual Advisor may inform the Bidder of a time frame within which to provide the signature(s). Failure to comply with the request of the Contractual Advisor and to provide the signature(s) within the time frame provided may render the bid non-responsive. If a proposal is submitted by a joint venture, it must be in accordance with section 15.1.4 Joint Venture.

SR2.10. It is the Bidder's responsibility to:

- a. obtain clarification of the requirements contained in the RFP, if necessary, before submitting a proposal;
- b. prepare its proposal in accordance with the instructions contained in the RFP;
- c. submit by closing date and time a complete proposal;
- d. send its bid only to the email address specified on page 1 of the bid solicitation;



- e. ensure that the Bidder's name, and the RFP number are in the subject header of the email containing the proposal; and,
- f. provide a comprehensible and sufficiently detailed proposal, including all requested pricing details, that will permit a complete evaluation in accordance with the criteria set out in the RFP.

SR2.11. Proposals received on or before the stipulated RFP closing date and time will become the property of Canada and will not be returned, including those of unsuccessful Bidders. All proposals will be treated as confidential, subject to the provisions of the Access to Information Act (R.S. 1985, c. A-1) and the Privacy Act (R.S., 1985, c. P-21), and other applicable law.

SR2.12. Unless specified otherwise in the RFP, Canada will evaluate only the documentation provided with a Bidder's proposal. Canada will not evaluate information such as references to Web site addresses where additional information can be found, or technical manuals or brochures not submitted with the proposal.

SR2.13. A proposal cannot be assigned or transferred in whole or in part.

SR3. PHASED BID COMPLIANCE PROCESS (PBCP)

The Phased Bid Compliance Process applies to this requirement. Canada will use the Phased Bid Compliance Process described below.

SR3.1. Phased Bid Compliance Process

- (a) Canada is conducting the PBCP described below for this requirement.
- (b) Notwithstanding any review by Canada at Phase I or II of the PBCP, Bidders are and will remain solely responsible for the accuracy, consistency and completeness of their Bids and Canada does not undertake, by reason of this review, any obligations or responsibility for identifying any or all errors or omissions in Bids or in responses by a Bidder to any communication from Canada.

The bidder acknowledges that the reviews in Phase I or II of this PBCP are preliminary and do not preclude a finding in Phase III that the bid is non-responsive, even for mandatory requirements which were subject to review in Phase I or II and notwithstanding that the bid had been found responsive in such earlier phase. Canada may deem a bid to be non-responsive to a mandatory requirement at any phase.

The bidder also acknowledges that its response to a notice or a compliance assessment report (CAR) (each defined below) in Phase I or II may not be successful in rendering its bid responsive to the mandatory requirements that are the subject of the notice or CAR, and may render its bid non-responsive to other mandatory requirements.



- (c) Canada may, in its discretion, request and accept at any time from a Bidder and consider as part of the Bid, any information to correct errors or deficiencies in the Bid that are clerical or administrative, such as, without limitation, failure to sign the Bid or any part or to checkmark a box in a form, or other failure of format or form or failure to acknowledge; failure to provide a procurement business number or contact information such as names, addresses and telephone numbers; inadvertent errors in numbers or calculations that do not change the amount the Bidder has specified as the price or of any component thereof that is subject to evaluation. This shall not limit Canada's right to request or accept any information after the bid solicitation closing in circumstances where the bid solicitation expressly provides for this right. The Bidder will have the time period specified in writing by Canada to provide the necessary documentation. Failure to meet this deadline will result in the Bid being declared non-responsive.
- (d) The PBCP does not limit Canada's rights under Standard Acquisition Clauses and Conditions (SACC) 2003 (2018-05-22) Standard Instructions – Goods or Services – Competitive Requirements nor Canada's right to request or accept any information during the solicitation period or after bid solicitation closing in circumstances where the bid solicitation expressly provides for this right, or in the circumstances described in subsection (c).
- (e) Canada will send any Notice or CAR by any method Canada chooses, in its absolute discretion. The Bidder must submit its response by the method stipulated in the Notice or CAR. Responses are deemed to be received by Canada at the date and time they are delivered to Canada by the method and at the address specified in the Notice or CAR. An email response permitted by the Notice or CAR is deemed received by Canada on the date and time it is received in Canada's email inbox at Canada's email address specified in the Notice or CAR. A Notice or CAR sent by Canada to the Bidder at any address provided by the Bidder in or pursuant to the Bid is deemed received by the Bidder on the date it is sent by Canada. Canada is not responsible for late receipt by Canada of a response, however caused.

SR3.2. Phase I: Financial Bid

- (a) After the closing date and time of this bid solicitation, Canada will examine the Bid to determine whether it includes a Financial Bid and whether any Financial Bid includes all information required by the solicitation. Canada's review in Phase I will be limited to identifying whether any information that is required under the bid solicitation to be included in the Financial Bid is missing from the Financial Bid. This review will not assess whether the Financial Bid meets any standard or is responsive to all solicitation requirements.
- (b) Canada's review in Phase I will be performed by officials of the Department of Foreign Affairs, Trade and Development.
- (c) If Canada determines, in its absolute discretion that there is no Financial Bid or that the Financial Bid is missing all of the information required by the bid solicitation to be included in the Financial Bid, then the Bid will be considered non-responsive and will be given no further consideration.
- (d) For Bids other than those described in c), Canada will send a written notice to the Bidder ("Notice") identifying where the Financial Bid is missing information. A Bidder, whose Financial Bid has been found responsive to the requirements that are reviewed at Phase I, will not receive a Notice. Such Bidders shall not be entitled to submit any additional information in respect of their Financial Bid.



- (e) The Bidders who have been sent a Notice shall have the time period specified in the Notice (the “Remedy Period”) to remedy the matters identified in the Notice by providing to Canada, in writing, additional information or clarification in response to the Notice. Responses received after the end of the Remedy Period will not be considered by Canada, except in circumstances and on terms expressly provided for in the Notice.
- (f) In its response to the Notice, the Bidder will be entitled to remedy only that part of its Financial Bid which is identified in the Notice. For instance, where the Notice states that a required line item has been left blank, only the missing information may be added to the Financial Bid, except that, in those instances where the addition of such information will necessarily result in a change to other calculations previously submitted in its Financial Bid, (for example, the calculation to determine a total price), such necessary adjustments shall be identified by the Bidder and only these adjustments shall be made. All submitted information must comply with the requirements of this solicitation.
- (g) Any other changes to the Financial Bid submitted by the Bidder will be considered to be new information and will be disregarded. There will be no change permitted to any other Section of the Bidder’s Bid. Information submitted in accordance with the requirements of this solicitation in response to the Notice will replace, in full, only that part of the original Financial Bid as is permitted above, and will be used for the remainder of the bid evaluation process.
- (h) Canada will determine whether the Financial Bid is responsive to the requirements reviewed at Phase I, considering such additional information or clarification as may have been provided by the Bidder in accordance with this Section. If the Financial Bid is not found responsive for the requirements reviewed at Phase I to the satisfaction of Canada, then the Bid shall be considered non-responsive and will receive no further consideration.
- (i) Only Bids found responsive to the requirements reviewed in Phase I to the satisfaction of Canada, will receive a Phase II review.

SR3.3. Phase II: Technical Bid

- (a) Canada’s review at Phase II will be limited to a review of the Technical Bid to identify any instances where the Bidder has failed to meet any Eligible Mandatory Criterion. This review will not assess whether the Technical Bid meets any standard or is responsive to all solicitation requirements. Eligible Mandatory Criteria are all mandatory technical criteria that are identified in this solicitation as being subject to the PBCP. Mandatory technical criteria that are not identified in the solicitation as being subject to the PBCP, will not be evaluated until Phase III.
- (b) Canada will send a written notice to the Bidder (Compliance Assessment Report or “CAR”) identifying any Eligible Mandatory Criteria that the Bid has failed to meet. A Bidder whose Bid has been found responsive to the requirements that are reviewed at Phase II will receive a CAR that states that its Bid has been found responsive to the requirements reviewed at Phase II. Such Bidder shall not be entitled to submit any response to the CAR.
- (c) A Bidder shall have the period specified in the CAR (the “Remedy Period”) to remedy the failure to meet any Eligible Mandatory Criterion identified in the CAR by providing to Canada in writing additional or different information or clarification in response to the CAR. Responses received after the end of the Remedy Period will not be considered by Canada, except in circumstances and on terms expressly provided for in the CAR.



- (d) The Bidder's response must address only the Eligible Mandatory Criteria listed in the CAR as not having been achieved, and must include only such information as is necessary to achieve such compliance. Any additional information provided by the Bidder which is not necessary to achieve such compliance will not be considered by Canada, except that, in those instances where such a response to the Eligible Mandatory Criteria specified in the CAR will necessarily result in a consequential change to other parts of the Bid, the Bidder shall identify such additional changes, provided that its response must not include any change to the Financial Bid.
- (e) The Bidder's response to the CAR should identify in each case the Eligible Mandatory Criterion in the CAR to which it is responding, including identifying in the corresponding section of the original Bid, the wording of the proposed change to that section, and the wording and location in the Bid of any other consequential changes that necessarily result from such change. In respect of any such consequential change, the Bidder must include a rationale explaining why such consequential change is a necessary result of the change proposed to meet the Eligible Mandatory Criterion. It is not up to Canada to revise the Bidder's Bid, and failure of the Bidder to do so in accordance with this subparagraph is at the Bidder's own risk. All submitted information must comply with the requirements of this solicitation.
- (f) Any changes to the Bid submitted by the Bidder other than as permitted in this solicitation, will be considered to be new information and will be disregarded. Information submitted in accordance with the requirements of this solicitation in response to the CAR will replace, in full, only that part of the original Bid as is permitted in this Section.
- (g) Additional or different information submitted during Phase II permitted by this section will be considered as included in the Bid, but will be considered by Canada in the evaluation of the Bid at Phase II only for the purpose of determining whether the Bid meets the Eligible Mandatory Criteria. It will not be used at any Phase of the evaluation to increase or decrease any score that the original Bid would achieve without the benefit of such additional or different information. For instance, an Eligible Mandatory Criterion that requires a mandatory minimum number of points to achieve compliance will be assessed at Phase II to determine whether such mandatory minimum score would be achieved with such additional or different information submitted by the Bidder in response to the CAR. If so, the Bid will be considered responsive in respect of such Eligible Mandatory Criterion, and the additional or different information submitted by the Bidder shall bind the Bidder as part of its Bid, but the Bidder's original score, which was less than the mandatory minimum for such Eligible Mandatory Criterion, will not change, and it will be that original score that is used to calculate any score for the Bid
- (h) Canada will determine whether the Bid is responsive for the requirements reviewed at Phase II, considering such additional or different information or clarification as may have been provided by the Bidder in accordance with this Section. If the Bid is not found responsive for the requirements reviewed at Phase II to the satisfaction of Canada, then the Bid shall be considered non-responsive and will receive no further consideration.
- (i) Only Bids found responsive to the requirements reviewed in Phase II to the satisfaction of Canada, will receive a Phase III evaluation.

SR3.4. Phase III: Final Evaluation of the Bid



- (a) In Phase III, Canada will complete the evaluation of all Bids found responsive to the requirements reviewed at Phase II. Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) A Bid is non-responsive and will receive no further consideration if it does not meet all mandatory evaluation criteria of the solicitation.

SR4. BASIS OF SELECTION – MANDATORY TECHNICAL CRITERIA

SR4.1. A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

SR4.2. Mandatory Technical Proposal

In their technical offer, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work. This section should not exceed twenty (20) double-sided pages. Material exceeding the twenty (20) page maximum will not be considered. Copies of required certificates and licences, and title pages are not included in the twenty (20) page limit.

Proposals will be evaluated against the mandatory criteria listed below. Bidders must meet every mandatory criteria to be further evaluated on the basis of their price proposal. Bids which fail to meet one or more mandatory criteria will be declared non-responsive.

Proposals must identify the qualifications and experience of the Company and any proposed sub-contractors or affiliates as well as the proposed resource personnel to carry the tasks by systematically addressing each of the requirements as detailed below.

Each mandatory technical criterion should be addressed separately.



SR4.3. Mandatory Technical Criteria

SECTION 1 - CORPORATE EXPERIENCE

CORPORATE EXPERIENCE		
Item	Description	Compliance
MTC1	Bidder must have completed a minimum of three (3) roof repair projects in the past five (5) years prior to bid closing date. Each project must have a value in excess of 1,000,000 CNY.	<p>Bidder should complete three (3) project grids below to demonstrate project experience.</p> <p>It should show the following:</p> <ul style="list-style-type: none">• Explanation of the work demonstrating similarity to the work described in the SOW;• The value is in excess of 1,000,000 CNY; and• Demonstrate projects are no later than year 2014



PROJECT 1	
Project Title	
Client	<p>Company Name:</p> <p><u>Reference</u></p> <p>Name:</p> <p>Title:</p> <p>Telephone Number:</p> <p>Email Address:</p>
Check off box to certify the validity of the statement:	<p><input type="checkbox"/> Project cost is over 1,000,000 CNY</p> <p>and provide</p> <p>Project Cost (CNY): _____</p>
Project Start Date and Duration	<p><input type="checkbox"/> Project started after 2014</p> <p>Start date of project (year): _____</p> <p>End date of project (year): _____</p>
Description Of Project Scope	<p><input type="checkbox"/> Project is roof repair and the project scope is described</p> <p>Project Description: _____</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>



PROJECT 2	
Project Title	
Client	<p>Company Name:</p> <p><u>Reference</u></p> <p>Name:</p> <p>Title:</p> <p>Telephone Number:</p> <p>Email Address:</p>
Check off box to certify the validity of the statement:	<p><input type="checkbox"/> Project cost is over 1,000,000 CNY</p> <p>and provide</p> <p>Project Cost (CNY): _____</p>
Project Start Date and Duration	<p><input type="checkbox"/> Project started after 2014</p> <p>Start date of project (year): _____</p> <p>End date of project (year): _____</p>
Description of Project Scope	<p><input type="checkbox"/> Project is roof repair and the project scope is described</p> <p>Project Description: _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>



PROJECT 3	
Project Title	
Client	<p>Company Name:</p> <p><u>Reference</u></p> <p>Name:</p> <p>Title:</p> <p>Telephone Number:</p> <p>Email Address:</p>
Check off box to certify the validity of the statement:	<p><input type="checkbox"/> Project cost is over 1,000,000 CNY</p> <p>and provide</p> <p>Project Cost (CNY): _____</p>
Project Start Date and Duration	<p><input type="checkbox"/> Project started after 2014</p> <p>Start date of project (year): _____</p> <p>End date of project (year): _____</p>
Description of Project Scope	<p><input type="checkbox"/> Project is roof repair and the project scope is described</p> <p>Project Description: _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>



SECTION 2 - QUALIFICATIONS

QUALIFICATIONS		
Item	Description	Compliance
MTC2	Bidder must have current Professional Contracting Qualifications for Construction Renovation and Decoration, Grade 2 provided by the Beijing Municipal Commission of Housing and Urban-Rural Development. http://zjw.beijing.gov.cn/	<input type="checkbox"/> Provided current copies of all required permits or current application for certification/permit
MTC3	Bidder must have current Professional Contracting Qualifications for Waterproof, Anticorrosion and Insulation Projects, Grade 2 provided by the Beijing Municipal Commission of Housing and Urban-Rural Development. http://zjw.beijing.gov.cn/	<input type="checkbox"/> Provided current copies of all required permits or current application for certification/permit



SR5. PRICE PROPOSAL FORM

SR5.1. All the information required in section SR5 should appear on Section "II" - Price Proposal ONLY and submitted in a separate attachment entitled "Price Proposal". Failure to comply may result in the proposal being declared non-compliant and rejected from further consideration.

SR5.2. Firm Price

SR5.2.1. Bidders must quote an all-inclusive Firm Price on the form attached as Section "II" - Price Proposal Form. The Firm Price must include, but not necessarily be limited to, all costs resulting from the performance of the Work as described in this RFP, all costs resulting from the performance of any additional Work described in the Bidder's proposal (unless clearly described as an option), all travel, living costs and all overhead costs including disbursements;

SR5.2.2. Bidders must estimate on the Price Proposal Form the value of the taxes (including VAT) expected to be payable by Her Majesty as a result of entering into a contract with the Bidder;

SR5.2.3. All payments will be made according to the terms of payment set out in the attached draft Contract;

SR5.2.4. Exchange rate fluctuation protection is not offered; and

SR5.2.5. Price Proposal Forms not meeting above requirements will not be given any further consideration.

SR5.2.6. Bidders shall submit completed Bill of Quantities.

SR5.3. Taxes & Duties

SR5.3.1. Bidders are to provide full details concerning the applicability, amount and administration of the payment of all taxes (including VAT as described below) and duties (including import duties) payable in respect of the Work, as well as any possible exemption from all or part of same.

SR5.3.2. Her Majesty will pay the VAT specified in the Price Proposal Form provided:

a. that amount is applicable to the Work provided by the Bidder to Her Majesty under the Contract. Her Majesty will not be responsible for the payment of any VAT payable by the Bidder to any third party (including subcontractors);

b. Her Majesty is unable to procure an exemption from VAT in respect of the Work;

c. the Bidder agrees to render every reasonable assistance to Her Majesty in obtaining reimbursement of all VAT paid in respect of the Work from the appropriate Government Agency;

d. the VAT is shown separately on all of the Bidder's invoices and progress claims; and

e. the Bidder agrees to remit to the appropriate Government Agency any amounts of VAT legally required to be remitted by the Contractor pursuant to applicable tax laws.

SR5.4. Rating



The responsive bid with the lowest evaluated price will be recommended for award of a contract.

SR5.5. Price Breakdown

Her Majesty reserves the right to request a breakdown of the components of the Price Proposal should it believe that the price is unreasonable. Failure to provide an adequate breakdown, describing the rationale and expectation used to determine the cost of each component of the work, may lead to disqualification.



SECTION "II" – PRICE PROPOSAL FORM

PP1. CONTACT INFORMATION

Name of Firm: _____

Address: _____

Contact Person: _____

Phone number: (____) ____ - _____ Fax number: (____) ____ - _____

Email: _____@_____

PP2. Firm Price (exclusive of VAT)

Total price _____

Applicable Taxes _____

Total Firm Price _____

(state amount in words)

Signature

Date

Print Name and Capacity

All amounts are in the currency specified in the contract



PRICE PROPOSAL FORM BREAKDOWN

LIST THE TOTAL PRICE TO COMPLETE THE WORK AS DESCRIBED IN THE SOW, INCLUDING ALL LABOUR, MATERIALS, AND DELIVERY, EXCLUDING TAXES.

Provide all required permits equipment, tools, labour, and materials needed for this project.

Remove existing roofing.

Install a new partial roof system over prepared substrate.

Seal and caulk all joints and gaps including around any pipes and protrusions.

Repair / replace drains and drainage slopes on the roof, assure all water pooling.

TOTAL COST PRICE _____ (MUST MATCH THE TOTAL PRICE ABOVE)



SECTION "III" - GENERAL INSTRUCTIONS

GI1 Responsiveness

For a proposal to be considered valid, it must comply with all the requirements of this RFP identified as mandatory. Mandatory criteria are also expressed by using imperative verbs such "must" and "will".

GI2 Enquiries - Solicitation Stage

GI2.1. All enquiries or issues concerning this RFP must be submitted in writing to the Contractual Advisor as early as possible within the solicitation period. Enquiries and issues must be received within the timeframe described in article A10 to allow sufficient time to provide a response. Enquiries received after that time may not be answered prior to the Closing Date.

GI2.2. To ensure consistency and quality of information provided to Bidders, the Contractual Advisor will give notice, in the same manner as this RFP, of any additional information in response to significant enquiries received without revealing the sources of the enquiries.

GI2.3. All enquiries and other communications with government officials throughout the solicitation period must be directed ONLY to the Contractual Advisor named herein. Non-compliance with this condition during the solicitation period may (for that reason alone) result in the disqualification of your proposal.

GI3 Bidder's Suggested Improvements during Solicitation Period

Should any Bidder consider that the specifications or Statement of Work contained in this RFP can be improved technically or technologically, the Bidder is invited to make suggestions, in writing, to the Contractual Advisor named herein. The Bidder must clearly outline the suggested improvements as well as the reason for the suggestion. Suggestions which do not restrict the level of competition nor favour a particular Bidder will be given consideration provided they are received by the Contractual Advisor within the timeframe described in A10 to allow sufficient time to provide a response. Her Majesty reserves the right to accept or reject any or all suggestions.

GI4 Proposal Preparation Cost

The costs, including travel incurred by the Bidder in the preparation of its proposal and/or the negotiation (if applicable) of any resulting contract will be the sole responsibility of the Bidder and will not be reimbursed by Her Majesty.

GI5 Proposal Delivery

GI5.1. Proposals and/or amendments thereto, will only be accepted by the Minister if they are received at the email address indicated in A7, on or before the Closing Date and Time specified in A7.

GI5.2. Responsibility for proposal delivery: The Bidder has sole responsibility for the timely receipt of a proposal by Her Majesty and cannot transfer this responsibility to the Government of Canada. Her Majesty will not assume responsibility for proposals that are directed to an email address other than the one stipulated in A7 Canada.

GI5.3. Late Proposals: Proposals received after the Closing Date and Time specified in A7 time will not be opened or viewed.

GI6 Validity of Proposal

Any proposal must remain open for acceptance for a period of not less than ninety (90) calendar days after the Closing Date.



GI7 Rights of Canada

GI7.1. Her Majesty reserves the right:

- a. during the evaluation, to submit questions to or conduct interviews with Bidders, at Bidders cost, upon forty eight (48) hours written notice, to seek clarification or to verify any or all information provided by the Bidder with respect to this RFP;
- b. to reject all proposals received in response to this RFP if it/they fail to meet the objectives of the requirement within the boundaries imposed by Her Majesty's different stakeholders;
- c. to reject any bid based on an assessment of the inadequacy of the total bid price to permit the work to be carried out and, in the case of providing prices per unit (BOQ), whether each price reasonably reflects the cost of performing the work to which that price applies;
- d. to accept any proposal in whole or in part without prior negotiation;
- e. to cancel and/or re-issue this RFP at any time;
- f. to award one or more contracts, if applicable;
- g. to retain all proposals submitted in response to this RFP;
- h. not to accept any deviations from the stated terms and conditions;
- i. to incorporate all, or any portion of the Statement of Work, Request for Proposals and the successful proposal in any resulting contract; and
- j. not to contract at all.

GI8 Incapacity to Contract with Government

GI8.1. Canada may reject a proposal where the Bidder, including the Bidder's officers, agents and employees, has been convicted of an offence under the following provisions of the Criminal Code:

- a. Section 121, Frauds upon the Government;
- b. Section 124, Selling or Purchasing Office; or
- c. Section 418, Selling Defective Stores to Her Majesty.

(Subsection 750 (3) of the Criminal Code prohibits anyone who has been so convicted from holding public office, contracting with the government or benefiting from a government contract.)

GI8.2. Where Canada intends to reject a proposal pursuant to a provision of paragraph 8.1, the Contractual Advisor will so inform the Bidder and provide the Bidder ten (10) calendar days within which to make representations, prior to making a final decision on the proposal rejection.

GI9 Incurring of Cost

No costs incurred before receipt of a signed Contract or specified written authorization from the Departmental Representative can be charged to any resulting Contract. In addition, the Contractor is not to perform Work in excess of or outside the scope of any resulting Contract based on verbal or written requests or instructions from any government personnel other than the Departmental Representative. The Bidder's attention is drawn to the fact that the Departmental Representative is the only authority which can commit Her Majesty to the expenditure of the funds for this requirement.



GI10 Property of Her Majesty

All correspondence, documents and information provided to the Minister by any Bidder in connection with this RFP will become the property of Her Majesty and may be released pursuant to the Canadian Federal Access to Information Act and the Privacy Act.

GI11 Rights of Unsuccessful Bidders

Bidders are reminded that all materials submitted by them in either paper or electronic form, including architectural and engineering design drawings, specifications, photographs, etc. will become the property of the Canadian government. In consequence, they will not be returned to the unsuccessful Bidders of this tender competition. The keeping of such information by Canada is necessary to ensure that, in the event of a future internal audit of the tender process, or in the event of a challenge by one of the unsuccessful Bidders to this tender process, all the documents submitted by competing Bidders are available and not tampered with. Nevertheless, complete copyright in those materials will of course remain with the copyright owners of the materials submitted; Canada assures Bidders that it will at no time use those materials for any commercial purposes without the written consent of the authors.

GI12 Price Support

In the event that the Bidder's bid is the sole responsive proposal received, the Bidder must provide, on the Minister's request, one or more of the following price support if applicable:

- a. a current published price list indicating the percentage discount available to the Minister;
- b. copies of paid invoices for like services performed for other customers or for like items (same quantity and quality) sold to other customers;
- c. a price breakdown showing the cost of direct labour, direct materials, purchased items, engineering and plant overheads, general and administrative overhead, transportation, etc., profit;
- d. price or rate certification; and
- e. any other supporting documentation as requested by the Minister.

GI13 Bidders Not to Promote Their Interest in This Project

Bidders must not make any public comment, respond to questions in a public forum or carry out any activities to publicly promote or advertise their interest in this Project, except for their response to Her Majesty pursuant to this RFP.

GI14 Acceptance of bids

GI14.1. Bidders must meet and adhere to the architectural and design standards contained in the bid documentation.

GI14.2. Bidders must submit a list of sub-contractors on form PP3 list of sub-contractors they propose to use on the Works. The successful Bidder will not be allowed any subsequent substitution of the submitted list of sub-contractors, unless authorized, in advance in writing by Her Majesty.

GI15 Signatures

GI15.1. The following requirements are to be adhered to when signing the Price Proposal Form:

a. Corporation

The signatures of the authorized signatories must be affixed and their names and titles typed or printed.



b. Partnership

The signatures of the partners must be affixed and their names typed or printed. If not all of the partners sign or if the signatory is not a partner, then a certified true copy of the agreement signed by all partners authorizing such person or persons to execute the document on their behalf must accompany the bid.

c. Sole Proprietorship

The signature of the sole proprietor must be affixed and the name typed or printed. In the event that the signatory is not the sole proprietor then a certified true copy of the agreement signed by the sole proprietor authorizing such person or persons to execute the document must accompany the bid.

d. Joint Venture

A joint venture is an association of two or more parties who combine their money, property, knowledge, expertise or other resources in a single joint business enterprise, sometimes referred as a consortium, to bid together on a requirement. Bidders who bid as a joint venture must indicate clearly that it is a joint venture and provide the following information:

- a. the name of each member of the joint venture;
- b. the name of the representative of the joint venture, i.e. the member chosen by the other members to act on their behalf, if applicable;
- c. the name of the joint venture, if applicable.

If the information is not clearly provided in the bid, the Bidder must provide the information on request from the Contractual Advisor.

The bid and any resulting contract must be signed by all the members of the joint venture unless one member has been appointed to act on behalf of all members of the joint venture. The Contractual Advisor may, at any time, require each member of the joint venture to confirm that the representative has been appointed with full authority to act as its representative for the purposes of the bid solicitation and any resulting contract. If a contract is awarded to a joint venture, all members of the joint venture will be jointly and severally or solidarily liable for the performance of any resulting contract. Each of the participating signatories must sign the document in the manner applicable to their particular business arrangement which is more particularly described in G15.1.a to G15.1.c above.

G16 Return of documents

Unsuccessful Bidders must, if requested by the Contractual Advisor, return all bid documents (e.g. Working Drawings, Specifications, and Bills of Quantities) intact and in good condition within fourteen (14) calendar days of notification. Any copies of the Working Drawings, Specifications, and Bill of Quantities are to be returned along with the original bid documents.

G17 Mandatory Site Visit

G17.1. It is mandatory that the Bidder or a representative of the Bidder attend the site visit at the The Embassy of Canada to China – Beijing at:
Canadian Immigration Building
190 Dong Zhi Men Wai Street
Chao Yang District, Beijing, China, 100600

at the following date and time:



Thursday, August 15, 2019

Starting at **09:00 am** and lasting until **12:00 pm**.

Note that the gate will be closed at 09:30 am and no one will be admitted after that time.

GI17.2. Bidders are requested to confirm their attendance with the Contractual Advisor no later than **Wednesday, August 14, 2017** to confirm attendance and provide the name(s) of the person(s) who will attend. Bidders will be required to sign an attendance form. Bidders should confirm in their bids that they have attended the site visit.

GI17.3. Bidders who do not attend or send a representative will not be given an alternative appointment and their proposal will be rejected as non-compliant. Any clarifications or changes to the RFP resulting from the conference will be included as an amendment to this RFP.

GI17.4. Please note, any travel and other costs associated with attending the site visit will not be reimbursed by Canada.

GI18 Interpretation

In this RFP, "Her Majesty", "the Minister" or "Canada" means Her Majesty the Queen in right of Canada, as represented by the Minister of Foreign Affairs.



SECTION "IV" – CERTIFICATIONS PRECEDENT TO CONTRACT AWARD

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contractual Advisor will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contractual Advisor will render the bid non-responsive or constitute a default under the Contract.

The certifications and additional information listed below should be submitted with the bid but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contractual Advisor will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame specified will render the bid non-responsive.

CPCA1. ACCEPTANCE AND ENTRY INTO CONTRACT

The Bidder certifies that they will undertake, within fourteen (14) calendar days of receipt of notification of acceptance of their bid, to sign a contract contained in the RFP incorporating all the relative elements of this project, for the performance of the Work provided that the Bidder is notified, by Her Majesty, of the acceptance of their bid within ninety (90) days of the tender closing date.

CPCA2. CONSTRUCTION TIME

The Bidder certifies that they will complete the Work within the time stipulated in the specification from the date of notification of acceptance of their bid.

CPCA3. INSURANCE

1. The Bidder certifies that they have a clear understanding of Insurance Conditions identified in Appendix "D", Insurance Conditions of the Draft Contract inclusive of Comprehensive General Liability & Builder's Risk – Direct Damage.
2. The Contractor is responsible for deciding if any additional insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

CPCA4. MOBILIZATION PAYMENT

The Bidder certifies that they have a clear understanding that a Mobilization Payment (also commonly known as an Advance Payment) will not be provided. As such a Mobilization Payment Security is NOT required.

CPCA5. WARRANTY

1. The Bidder certifies that they have a clear understanding that they will be supplying a one (1) year warranty on the works done (excluding works done by the previous contractor), starting from the date that the Interim Certificate of Completion will be issued.
2. The Bidder certifies that they have a clear understanding that they will be supplying a two (2) year warranty on Modified Bituminous Membrane Roofing and Membrane Flashings, starting from the date that the Interim Certificate of Completion will be issued.



3. The Bidder certifies that they have a clear understanding that they will be supplying a two (2) year Material Warranty and Workmanship Warranty on Sheet Metal Flashings starting from the date that the Interim Certificate of Completion will be issued.

4. The Bidder certifies that they have a clear understanding that they will be obtaining, from the Membrane manufacturer, a ten (10) year Warranty / Material Guarantee that the roofing membrane shall be free of manufacturing defects and premature deterioration starting from the date that the Interim Certificate of Completion will be issued.

CPCA6. SECURE ENVIRONMENT

The Bidder certifies that they have a clear understanding that the work will be done in a secure environment with operations of the High Commission ongoing.

CPCA7. FINANCE CAPACITY

The Bidder certifies that they have the capacity to finance the costs of the required goods, labour, and subcontractors for sequential periods of up to sixty (60) days each.

CPCA8. BILL OF QUANTITIES

The Bidder shall provide a list of all known project related cost in the form of a Bill of Quantities.

CPCA9. NON-DISCRIMINATION IN HIRING AND EMPLOYMENT OF LABOUR

CPCA9.1. The Bidder certifies that in the hiring and employment of workers to perform any Work under the Contract, the Bidder will not refuse to employ and will not discriminate in any manner against any person because:

CPCA9.1.1 of that person's race, national origin, colour, religion, age, sex or marital status;

CPCA9.1.2 of the race, national origin, colour, religion, age, sex, or marital status of any person having any relationship or association with that person; or

CPCA9.1.3 a complaint has been made or information has been given by or in respect of that person relating to an alleged failure by the Contractor to comply with subparagraph (CPCA9.1.1) or (CPCA9.1.2);

CPCA9.2. If any question arises as to whether the Bidder has failed to comply with the provision described in paragraph (CPCA9.1.), the Minister or any person designated by the Minister will decide the question and his decision will be final for the purposes of the Contract; and

CPCA9.3. Failure to comply with the aforementioned clauses (CPCA9.1.1) and (CPCA9.1.2) regarding non-discrimination will constitute a material breach of the Contract.

CPCA10. LABOUR

The Bidder certifies to pay in employing labour, wages that are in conformity with all applicable legislation and norms in force in the place in which the Work is being performed.

CPCA11. CERTIFICATION OF UNDERSTANDING

The Bidder certifies that all parts of this RFP have been reviewed in detail and are completely understood in order to make its proposal. Under no circumstances will the Statement of Work, specifications, or task description be subject to revised interpretation or amended following Contract award except where the Departmental Representative so authorizes in writing.



CERTIFICATION STATEMENT

By signing and submitting this page, the Bidder certifies that the information submitted by the Bidder in response to the above requirements is accurate and complete.

SIGNED, ATTESTED TO AND DELIVERED on the _____ day of _____ on behalf of:

Print the legal name of the Bidder

Signature of authorized signatory

Signature of authorized signatory

Print name(s) & titles of authorized signatory

Print name(s) & titles of authorized signatory

Signature of Witness



SECTION "V" - SUBMISSION CHECKLIST

1. The Proposal is submitted as per the stipulations set out in SR2: SUBMISSION OF PROPOSALS and is received at

realproperty-contracts@international.gc.ca

no later than **14:00 EDT (Eastern Daylight Time)** on **August 26, 2019** with the bidders name and solicitation number (19-149975-BH) in the email subject/title.
2. The Technical proposal responds to all the mandatory criteria described in SR4.3. Mandatory Technical Criteria.
3. The Technical proposal and does not exceed twenty (20) double-sided pages. Copies of required certificates and licences, and title pages are not included in the twenty (20) page limit.
4. The Price proposal is submitted on the Section "II" - Price Proposal Form and is included as a separate attachment.
5. The Completed and signed Section "IV" – Certifications Precedent To Contract Award.



SECTION "VI" – DRAFT CONTRACT

C. ARTICLES OF AGREEMENT

C1. DEPARTMENTAL REPRESENTATIVE

Regional Maintenance Officer
Physical Resources Bureau
125 Sussex Drive, Ontario K1A 0G2
Ottawa, Canada
Telephone:
Mobile:
Fax:
E-mail: @international.gc.ca

DRAFT

Construction Contract

Between

Her Majesty the Queen in right of Canada
(referred to herein as
"Her Majesty") represented by the Minister of
Foreign Affairs (referred to herein as the "Minister")

and

(INSERT FULL LEGAL NAME OF CONTRACTOR)
(INSERT ADDRESS OF CONTRACTOR)
(referred to herein as the "Contractor")

for

Performance of the Work described in Appendix "A" –
Statement of Work

Form containing contract details: C2. TITLE (Roof Membrane Replacement at The Embassy of Canada to China - Beijing), C3. CONTRACT PERIOD, C4. CONTRACT NUMBER (0), C5. PROJECT NUMBER (ARAF# 10359), C6. DATE, C7. CONTRACT DOCUMENTS (list of 8 documents), C8. CONTRACT AMOUNT (Fixed Price), C9. INSURANCE (5,000,000.00 CNY), C10. CONTRACT SECURITY (Not Applicable), C11. MOBILIZATION ADVANCE (Not Applicable), C12. HOLDBACK (10%), C13. INVOICES (2 copies), C14. GOVERNING LAWS (Province of Ontario, Canada). Includes signature lines for Contractor and Minister, and a Corporate Seal area.



Appendix “A” – STATEMENT OF WORK

SW1 Major Objectives and outcomes of the project are:

1. The main objective of this project is to repair the roof where problems have been identified by the design consultant to enable the Mission to sustain operations until a complete roof replacement in 5 to 6 years.
2. Eliminate leaks and prevent further damage to equipment and property.

SW2 The contactor will:

1. Provide all required permits equipment, tools, labour and materials needed for this project,
2. Remove existing roofing,
3. Install a new partial roof system over prepared substrate,
4. Seal and caulk all joints and gaps including around any pipes and protrusions,
5. Repair / replace drains and drainage slopes on the roof, Assure all water pooling,
6. Work will be done as per specifications and drawings, meeting all applicable local building codes, regulations and prescribed standards indicated in the attached specifications.

SPECIFICATIONS

PART 1 - GENERAL	30
PART 4 – HEALTH AND SAFETY PLAN	37
PART 7 - ROUGH CARPENTRY GENERAL.....	41
PART 8 - ROUGH CARPENTRY PRODUCTS.....	43
PART 9 - ROUGH CARPENTRY EXECUTION.....	45
PART 10 - MODIFIED BITUMEN MEMBRANE GENERAL.....	46
PART 11 - MODIFIED BITUMEN MEMBRANE PRODUCTS	48
PART 12 - MODIFIED BITUMEN MEMBRANE EXECUTION.....	50
PART 13 - SHEET METAL FLASHING GENERAL	59
PART 14 - SHEET METAL FLASHING PRODUCTS	62
PART 15 - SHEET METAL FLASHING EXECUTION	64
PART 16 - PLUMBING GENERAL.....	66
PART 17 - PLUMBING PRODUCTS.....	66
PART 18 - PLUMBING EXECUTION.....	66



DRAWINGS

R1	ROOF PLAN
1	TYPICAL PARAPET DETAIL
2	TYPICAL ROOF DRAIN DETAIL
2	TYPICAL VENT STACK DETAIL
4	EXISTING CONCRETE PAVER DETAIL
5	STEEL SUPPORT BASE DETAIL
6	DOOR SILL DETAIL
7	PITCH POCKET DETAIL
8	PIPE ENCLOSURE DETAIL
9	EXISTING DUCTWORK CURB DETAIL

GENERAL

1.1 FEES, PERMITS AND CERTIFICATES

Pay all fees and obtain all permits. Provide authorities with plans and information for acceptance certificates. Provide certificates as evidence that work conforms to requirements of Authority having jurisdiction.

1.2 CONSTRUCTION PROGRESS SCHEDULE

Schedule and execute work with least possible interference or disturbance to the normal use of premises

On award of contract submit bar chart construction schedule for work, indicating anticipated progress stages within time of completion. When schedule has been reviewed by the Departmental Representative, take necessary measures to complete work within scheduled time. Do not change schedule without notifying Departmental Representative.

Carry out work during "regular hour" Monday to Friday from 07:00 to 18:00 hours

Carry out the any/all noise generating work during "off hours" Monday to Thursday from 18:00 to 07:00 hours, Friday starting at 13:30 to 07:00 hours.

Give the Departmental Representative 48 hours notice for work to be carried out during "off hours".

1.3 SUBMITTAL PROCEDURES

Submit promptly to Departmental Representative submittals listed for review, in orderly sequence to not cause delay in work.

Do not proceed with work affected by submittals until review is complete.

Product Data:

- .1 Submit one (1) copy electronically of product data: manufacturer's catalogue sheets, brochures, literature, performance charts and diagrams, used to illustrate standard manufactured products.
- .2 Cross reference product data information to applicable portions on Contract Documents.



Samples:

- .3 Submit samples: examples of materials, equipment, quality, finishes and workmanship.
- .4 Where colour, pattern or texture is criterion, submit full range of samples.
- .5 Reviewed and accepted samples will become standard of material and workmanship, against which installed work will be verified.

Submit photographs of surrounding properties, objects and structures liable to be damaged or be the subject of subsequent claims.

1.4 REGULATORY REQUIREMENTS

References and Codes:

- .1 Materials shall be new and work shall conform to the minimum applicable standards of the "References" indicated in the specification sections, the National Building Code of Canada 2015 (NBC) and all applicable Local codes. In the case of conflict or discrepancy the most stringent requirement shall apply.

Building Smoking Environment:

- .2 Smoking is not permitted in the Building. Obey smoking restrictions on building property.

Hazardous Material Discovery:

- .3 Stop work immediately when material resembling spray or trowel-applied asbestos, Polychlorinated Biphenyl (PCB), mould or other designated substance is encountered during demolition work.

Take preventative measure and promptly notify Departmental Representative.

Do not proceed until written instructions have been received from Departmental Representative.

1.5 FIRE SAFETY REQUIREMENTS

Comply with both the National Building Code of Canada 2015 (NBC) for fire safety in construction and the National Fire Code of Canada 2015 (NFC) for fire prevention, fire fighting and life safety in building in use.

- .1 The National Building Code (NBC): for fire safety and fire protection features that are required to be incorporated in a building during construction.
- .2 The National Fire Code (NFC):

The on-going maintenance and use of the fire safety and fire protection features incorporated in buildings.

The conduct of activities that might cause fire hazards in and around buildings.

Limitations on hazardous contents in and around buildings.

The establishment of fire safety plans.

Fire safety at construction and demolition sites.

Welding and cutting:

- .3 Before welding, soldering, grinding and/or cutting work, obtain a permit from Building fire Safety Advisor as directed by the Departmental Representative. Store flammable liquids in approved CSA containers inspected by the Fire Prevention Unit. No open flame shall be



used unless authorized by the Fir Prevention Unit. Minimum 48 hours notice is required to obtain permit.

- .4 "Fire watchers" as described in 2015 (NBC) shall be assigned when welding or cutting operations are carried out in areas where combustible materials within 10m may be ignited by conduction or radiation.

1.6 QUALITY CONTROL

Testing Laboratory Services:

- .1 Departmental Representative will appoint and pay for costs of inspection and testing services, unless indicated otherwise.
- .2 Provide safe working areas and assist with testing procedures, including provisions for materials or services and co-ordination, as required by testing agency and as authorized by Departmental Representative.
- .3 Where tests indicate non-compliance with specifications, contractor to pay for initial test and all subsequent testing of work to verify acceptability of corrected work

1.7 HAZARDOUS MATERIALS

Hazardous Materials: product, substance, or organism that may cause adverse impact to environment or adversely affect health of persons, animals, or plant life when released into the environment.

Comply with the requirements of the Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials; and regarding labelling and the provision of Material Safety Data Sheets (MSDS) acceptable to Human Resources Development Canada, Labour Program.

For work in occupied buildings give the Departmental Representative 48 hours notice for work involving designated substances (Ontario Bill 208), hazardous substances (Canada Labour Code Part II Section 10), and before painting, caulking, or using adhesives.

1.8 TEMPORARY UTILITIES

Existing services required for work may be used by the Contractor without charge. Ensure capacity is adequate prior to imposing additional loads. Connect and disconnect at own expense and responsibility.

Connect to existing power supply in accordance with Canadian Electrical Code.

Notify the Departmental Representative and utility companies of intended interruption of services, obtain requisite permission.

Give the Departmental Representative 48 hours notice related to each necessary interruption of any mechanical or electrical service throughout the course of the work. Keep duration of these interruptions to a minimum. Carry out all interruptions after normal working hours of the occupants, preferably on weekends.

1.9 CONSTRUCTION FACILITIES

Access Scaffold:

- .1 Scaffolding: in accordance with CSA Z797-09 (R2014) – Code of Practice for Access Scaffold.
- .2 Provide design drawings, signed and sealed by qualified Professional Engineer licensed by local Professional Authority, where prescribed.
- .3 Additions or modifications to scaffolding must be approved by Professional Engineer in writing.



Existing elevators: not to be used by construction personnel and/or transporting of materials.

Site Storage:

- .4 The Departmental Representative will assign storage space that shall be equipped and maintained by the Contractor.
- .5 Do not unreasonably encumber site with materials or equipment.
- .6 Move stored products or equipment that interfere with operations of Departmental Representative or other contractors.
- .7 Obtain and pay for use of additional storage or work areas needed for operations.
- .8 Do not load or permit to load any part of work with weight or force that will endanger work.

Where security is reduced by work provide temporary means to maintain security.

Sanitary facilities: will be assigned for Contractor's personnel. Others shall not be used. Keep facilities clean.

Signage:

- .9 Provide common-use signs related to traffic control, information, instruction, use of equipment, public safety devices, etcetera, in both official languages or by the use of commonly understood graphic symbols and to approval of the Departmental Representative.
- .10 No advertising will be permitted on this project.
- .11 The Departmental Representative will provide a sign describing the project for the information of building users. Locate sign as directed by Departmental Representative.
- .12 Maintain approved signs and notices in good condition for duration of project and dispose of off site, on completion of project or earlier, as directed by Departmental Representative.

1.10 TEMPORARY BARRIERS AND ENCLOSURES

Maintain existing services to building and provide for personnel and vehicle access.

Hoarding:

- .1 Design, erect and maintain temporary site enclosure as required by authority having jurisdiction.
- .2 Overhead protection required over all Pedestrian Entrances when any work is taking place on the roof and/or craning material to and from the roof.

Weather Enclosures: protect work temporarily until permanent enclosures completed.

Dust Control:

- .3 Provide dust tight screens or partitions to localize dust-generating activities, and for protection of workers, finished areas of work and public.
- .4 Maintain and relocate protection until such work is complete.
- .5 Protect all furnishings within work area with 0.102mm thick polyethylene film during construction. Remove film during non-construction hours and leave premises in clean, unencumbered and safe manner for normal daytime function.



Design, construct and maintain temporary "access to" and "egress from" work areas, including stairs, runways, ramps or ladders, independent of finished surfaces and in accordance with relevant municipal, provincial and other regulations.

Protection:

- .6 Protect work against damage until take-over.
- .7 Protect adjacent work against the spread of dust and dirt beyond the work areas.
- .8 Protect operatives and other users of site from all hazards

1.11 COMMON PRODUCT REQUIREMENTS

Quality of Work:

- .1 Carry out work using qualified licenced workers or apprentices in accordance with Local Regulations respecting manpower vocational training and qualification.
- .2 Permit employees registered in Local apprenticeship program to perform specific tasks only if under direct supervision of qualified licenced workers.
- .3 Determine permitted activities and tasks by apprentices, based on level of training attended and demonstration of ability to perform specific duties.

Storage, Handling and Protection:

- .4 Handle and store products in manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions.
- .5 Store packaged or bundled products in original and undamaged condition with manufacturer's seal and labels intact. Do not remove packaging or bundling until required in work.
- .6 Manufacturer's Instructions: unless otherwise indicated in specifications, install or erect products in accordance with manufacturer's instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers.

1.12 EXAMINATION AND PREPARATION

Examine site and conditions likely to affect work and be familiar and conversant with existing conditions.

Before commencing work, establish location and extent of services lines in area of work and notify Departmental Representative of findings

1.13 EXECUTION

Cut, Patch and Make Good:

- .1 Cut existing surfaces as required to accommodate new work.
- .2 Remove all items so shown or specified.
- .3 Patch and make good surfaces cut, damaged or disturbed, to Departmental Representative's approval. Match existing material, colour, finish and texture.

Firestop and smoke seal systems: in accordance with CAN-ULC-S115-05 – Standard Method of Fire Test of Firestop Systems. Install around pipe, ductwork, cables, and other objects penetrating fire separations to provide fire resistance not less than the fire resistance rating of surrounding floor, ceiling, and wall assembly.

Sleeves, Hangers and Inserts: co-ordinate setting and packing of sleeves and supply and installation of hangers and inserts. Obtain Departmental Representative's approval before cutting into structure.



Unless otherwise specified, materials for removal become the Contractor's property and shall be taken from site.

1.14 CLOSEOUT SUBMITTALS

Operations and Maintenance Manuals

- .1 Two (2) weeks prior to any scheduled training, submit to Departmental Representative six (6) copies of approved Operations Data and Maintenance Manual in both English and local language, compiled as follows:

Bind data in vinyl hard cover 3 "D" ring type loose leaf binders for 212 x 275mm size paper. Binders must not exceed 75mm thick or be more than 2/3 full.

Enclose title sheet labelled "Operation Data and Maintenance Manual," project name, date and list of contents. Project name must appear on binder face and spine.

Organize contents into applicable sections of work to parallel project specifications breakdown. Mark each section by labelled tabs protected with celluloid covers fastened to hard paper dividing sheets.

Include following information plus data specified.

- .2 Maintenance instructions for finished surface and materials.
- .3 Suppliers names, addresses and telephone numbers and components supplied by them must be included in this section. Components must be identified by a description and manufacturers part number.
- .4 Guarantees showing:
 - Name and address of projects.
 - Guarantee commencement date (date of Interim Certificate of Completion).
 - Duration of guarantee.
 - Clear indication of what is being guaranteed and what remedial action will be taken under guarantee.
 - Signature and seal of Guarantor.
- .5 Additional material used in project listed under various Sections showing name of manufacturer and source of supply.

Spare parts: List all recommended spares to be maintained on site to ensure optimum efficiency. List all special tools appropriate to unique application. All parts/tools detailed must be identified as to manufacturer, manufacturer part number and supplier (including address).

Include one complete set of final shop drawings (bound separately) indicating corrections and changes made during fabrication and installation.

Records

- .6 As work progresses, maintain accurate records to show deviations from contract drawings. Just prior to Departmental Representative's inspection for issuance of final certificate of completion, supply to the Departmental Representative one (1) set of white prints with all deviations neatly inked in. The Departmental Representative will provide two sets of clean white prints for this purpose.

Guarantees And Warranties



- .7 Before completion of work collects all manufacturer's guarantees and warranties and deposit with Departmental Representative.

1.15 CLEANING

Clean up work area as work progresses. At the end of each work period and more often if ordered by the Departmental Representative, remove debris from site, neatly stack material for use, and clean up generally.

Upon completion removes scaffolding, temporary protection and surplus materials. Make good defects noted at this stage.

Clean manufactured articles in accordance with manufacturer's directions.

Clean areas under contract to a condition at least equal to that previously existing and to approval of Departmental Representative.

1.16 SECURITY CHECK

All personnel employed on this project will be subject to security check. Obtain requisite clearance, as instructed, for each individual required to enter the premises.

Personnel will be checked daily at start of work shift and given a pass which must be worn at all times. Pass must be returned at end of work shift and personnel checked out.

1.17 COST BREAKDOWN

Before submitting first progress claim submit breakdown of Contract Amount in detail as directed by Departmental Representative and aggregating the Contract Amount. After approval by Departmental Representative cost breakdown will be used as the basis of progress payments.

1.18 PRECEDENCE

For Federal Government projects, Division 01 Sections take precedence over technical specification sections in other Divisions of this Project Manual.

END OF SECTION



HEALTH AND SAFETY PLAN

1.19 ACTION AND INFORMATIONAL SUBMITTALS

Submit site-specific Health and Safety Plan: Within seven (7) days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:

- .1 Results of site specific safety hazard assessment
- .2 Results of safety and health risk or hazard analysis for site tasks and operation found in work plan.

Submit two (2) copies of Contractor's authorized representative's work site health and safety inspection reports to Departmental Representative.

Submit copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors.

Submit copies of incident and accident reports.

Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within five (5) days after receipt of plan. Revise plan as appropriate and resubmit plan to Departmental Representative within five (5) days after receipt of comments from Departmental Representative.

Departmental Representative's review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.

Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to Departmental Representative.

1.20 FILING OF NOTICE

File Notice of Project with Local authorities prior to beginning of Work.

1.21 SAFETY ASSESSMENT

Perform site specific safety hazard assessment related to project.

1.22 MEETINGS

Schedule and administer Health and Safety meeting with Departmental Representative prior to commencement of Work.

1.23 GENERAL REQUIREMENTS

Develop a written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address project specifications.

Departmental Representative may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.

1.24 RESPONSIBILITY

Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.

Contractor will be responsible and assume the role Constructor as described in the Local Occupational Health and Safety Act and Regulations for Construction Projects.



1.25 UNFORESEEN HAZARDS

When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of local jurisdiction and advise Departmental Representative both verbally and in writing.

1.26 POSTING OF DOCUMENTS

Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of local authorities having jurisdiction, and in consultation with Departmental Representative.

1.27 CORRECTION OF NON-COMPLIANCE

Immediately address health and safety non-compliance issues identified by local authority having jurisdiction or by Departmental Representative.

Provide Departmental Representative with written report of action taken to correct non-compliance of health and safety issues identified.

Departmental Representative may stop Work if non-compliance of health and safety regulations is not corrected.

1.28 BLASTING

Blasting or other use of explosives is not permitted

1.29 POWDER ACTUATED DEVICES

Use powder actuated devices only after receipt of written permission from Departmental Representative

1.30 WORK STOPPAGE

Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations for Work.

1.31 FALL PROTECTION

Comply with local Occupational Health and Safety Act and Regulations for Construction Projects, Section 26, as described herein but not limited to:

- .1 Fall protection will be required when a worker is exposed to a fall of more than 3 metres.
- .2 Fall protection shall be in the form of:
 - Guardrail system
 - Travel restraint system
 - Fall restricting system
 - Fall arrest system
- .3 The components of any system listed above shall be designed by a professional engineer in accordance with good engineering practice, and shall meet the requirements of any of the National Standards of Canada that are applicable.

A wood guardrail system shall consist of a top rail, intermediate rail, and a toe board. The top rail shall be located at least 0.9m but no more than 1.1m above the surface on which the system is installed. The toe board shall extend at least 89mm above the surface on which the system is installed. The maximum distance between two adjacent posts of the guardrail system shall be 2.4m. Wood shall be SPF construction grade quality or better. Members shall be at least 38mm by 89mm. Members to resist prescribed point loads.



A travel restraint system shall consist of a full body harness (with adequate attachment points) or a safety belt. The full body harness or safety belt shall be attached by a lifeline or lanyard to a fixed support able to resist the prescribed static and dynamic forces.

A fall restrict system shall consist of assembly of components attached to a fixed support able to resist the prescribed static and dynamic forces. Worker's free fall distance must not exceed 0.6m.

A fall arrest system shall consist of a full body harness with adequate attachment points and a lanyard equipped with a shock absorber. The fall arrest system shall be attached by a lifeline or lanyard to a fixed support able to resist the prescribed static and dynamic forces. The fall arrest system shall be arranged so that a worker cannot hit the ground or an object or level below the work. The worker who falls shall not be subjected to a fall arrest force greater than 8 kilonewtons.

1.32 SITE FENCING

All equipment, machinery and materials stored on the ground must be cordoned off with a solid fence.

Ground areas below area of work on the roof must be fenced off to keep all pedestrian traffic a minimum of 4.5m from building. Fence shall be a minimum of 1.8m in height.

Any/all fencing to be constructed of modular steel fencing. Fencing to be constructed in such a manner that it is not easily knocked over. Minimum height of fence to be 1.8m above grade.

1.33 SAFETY AND SECURITY REQUIREMENTS

Enforce use of CSA approved hardhats and safety boots for all entering or working on construction site.

The Contractor shall remove from the site any persons not observing or complying with safety requirements.

The Contractor will report to the Departmental Representative, and jurisdictional authorities, any accident or incident involving the Contractor, the Departmental Representative, or the public; personnel and/or property, arising from the Contractor's execution of the work.

The Contractor will include all provisions of the Contract in so far as they are pertinent in any agreement with Sub-contractors, and hold all Sub-contractors equally responsible for safe work performance.

Delays in the progress of the Work arising out of infractions of legislation or Contract health and safety requirements are the responsibility of the Contractor.

Provide and maintain adequate lighting where workmen or public may be subject to hazards and in all working areas.

Comply with the requirements of the Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials, and regarding labelling and the provision of material safety data sheets.

In addition to the requirements of the Local Occupational Health and Safety Act, and Regulations for Construction Projects, provide temporary safeguards and protection against:

- .1 Accident or injury to any workmen or other persons on the site, adjacent work and property, roads and walks.
- .2 Damage to any part of the work and to any adjoining or adjacent structure, properties, pavements, walks, services, and other similar items by frost, weather, overloading, and any other cause resulting from the execution of the work.

Make good with material identical with existing and adjoining surfaces any damage resulting from the execution of the work to any part of the work or any buildings, pavements, landscaping, poles, hydrants, services, etc., on or surrounding the site.

Portable fire extinguishers, with a minimum rating of 4A:40B:C, shall be:



- .3 Located within 6m of persons using an open flame torch or other ignition source,
- .4 Readily available to all other persons in the area of hot surface applications and fire watch personnel and,
- .5 Located no further than 7.6m and no closer than 1.5m from a bitumen kettle.

Adhere to Departmental Representative's site specific Health and Safety policies, as applicable, which include the following:

- .6 Use of hard hats and safety boots
- .7 WHMIS: training, staff awareness of chemicals on site, emergency plan

The Contractor shall be responsible to insure that all individual accessing the roof is properly trained in Fall Arrest and Fall Protection as required by the Ministry of Labour of Ontario. Anyone not in possession of a certification card should not be allowed on the roof.

END OF SECTION



ROUGH CARPENTRY GENERAL

1.34 RELATED SECTIONS

Part 1 - General Conditions

Part 4 - Health & Safety Requirements

Part 10 - Modified Bitumen Membrane Roofing

Part 13 - Sheet Metal Flashing

1.35 REFERENCES

.1 Latest edition of all listed references to apply:

- .1 American Lumber Standards Committee (ALSC): Softwood Lumber Standards.
- .2 American Plywood Association (APA) Product Guide: Grades and Specifications.
- .3 Canadian Standards Association (CAN/CSA):
 - .1 CAN/CSA B111: Wire Nails, Spikes and Staples.
 - .2 CAN/CSA-G164M: Hot Dip Galvanizing of Irregularly Shaped Articles.
 - .3 CAN/CSA O121M: Douglas Fir Plywood.
 - .4 CAN/CSA-O141: Softwood Lumber.
 - .5 CAN/CSA O151M: Canadian Softwood Plywood.
 - .6 CAN/CSA-O325.0: Construction Sheathing.
- .4 National Forest Products Association (NFPA): Grading Rules.

National Lumber Grades Authority (NLGA): Stnd. Grading Rules, Canadian Lumber.

1.36 ANCHORS AND FASTENERS

Co-ordinate the location and installation of anchors and fasteners. Confirm types of fasteners to be utilized with Consultant.

Do not use metals in combination that will set up electrolytic action.

Use non-corrosive or galvanized steel fastenings as approved by Departmental Representative, or as otherwise specified.

Space anchors within load bearing or shear capacity.

1.37 QUALITY ASSURANCE

Lumber identification to be by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.

Plywood identification to be by grade mark in accordance with applicable CSA standards.

Plywood, OSB and wood based composite panel construction sheathing identification to be by grademark in accordance with applicable CSA standards.

At all times during Work, Contractor will have on site a qualified project supervisor. It will be Supervisor's responsibility to ensure that Work is carried out in an efficient manner, according to Plans and Specifications General Requirements

Develop a written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address project specifications.



Departmental Representative may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.

1.38 DELIVERY, STORAGE, AND HANDLING

- .1 Protect lumber and other products from dampness both during and after delivery at site.
- .2 Pile lumber in stacks in such manner as to provide air circulation around surfaces of each piece.
- .3 Stack plywood and other board products so as to prevent warping.
- .4 Locate stacks on well drained areas, supported at least 152mm (6") above grade and cover with well-ventilated sheds having firmly constructed over hanging roof with sufficient end wall to protect lumber from driving rain.

1.39 WASTE MANAGEMENT AND DISPOSAL

- .1 Set aside damaged wood and dimensional lumber off-cuts for acceptable alternative uses (e.g. bracing, blocking, cripples, bridging, finger-joining, or ties). Store this separated reusable wood waste convenient to cutting station and area of work.
- .2 Separate and recycle waste materials in accordance with applicable local, provincial and national regulations. Include for tipping fees associated with landfills and recycling depots
- .3 Unused preservatives and fire retardant materials are to be diverted from landfill through disposal at a special wastes depot.
- .4 Do not burn scrap at project site.
- .5 Fold up metal banding, flatten, and place in designated area for recycling.

1.40 PRECAUTIONS

All wood blocking must be sealed in with self-adhering vapour barrier membrane, as detailed, the same day



ROUGH CARPENTRY PRODUCTS

1.41 LUMBER MATERIALS

- .1 Materials to be best merchantable lumber, straight and sized and shaped to correct dimensions from nominal sizes noted on drawings. Lumber to be selected from well-seasoned stock, free from loose resinous knots, shakes, waxed edges, splits, dry rot or other defects which would impair strength or durability.
- .2 Lumber in accordance with following standards:
 - .1 CAN/CSA-O141.
 - .2 NLGA Standard Grading Rules for Canadian Lumber.
- .3 Unless specified otherwise all framing members to be No.1/No.2 SPF.
- .4 All materials directly exposed to exterior to be pressure treated unless noted otherwise on drawings or elsewhere in specification.
- .5 Furring, blocking, nailing strips, grounds, rough bucks, cants, curbs, fascia backing and sleepers to be pressure treated where exposed to exterior elements.
- .6 Moisture Content:
 - .1 At time of delivery and maintained at site.
 - .2 Boards and lumber 51mm (2") and less in thickness: 19% or less.
 - .3 Lumber over 51mm (2") thick: 25% or less.

1.42 PANEL MATERIALS

- .1 Canadian softwood plywood (CSP): to CSA O151, standard construction, exterior grade

1.43 ACCESSORIES

- .1 Bent metal plate: 18ga or 22ga, galvanized metal sheet, formed as required or as indicated on drawings to provide support for wood blocking or roof assembly components.
- .2 Anchorage to hollow masonry and gypsum walls: Galvanized toggle bolts.
- .3 Anchorage to solid masonry or concrete: Expansion shields and lag bolts:
 - .1 Rawl mushroom head lead anchors, min 6mm (0.25") diameter for sheathing,
 - .2 Hilti Kwik-Bolts for structural members.
- .4 Anchorage of wood members to sheet steel studs: Corrosion coated screws, min #14 thread, of length to penetrate minimum 19mm (0.75") through material into base.
- .5 Nails: Minimum 6d, hot dip galvanized spiral or ring shank nails, length to penetrate through material 38mm (1.5") into base.
- .6 Anchorage of wood blocking to masonry: Masonry screws, Tapcon anchors of sufficient length to penetrate 32mm (1.25") into masonry surfaces.
- .7 Batt Insulation: Stone wool mineral fiber batt insulation, Rockwool by Roxul Inc.
- .8 Explosive actuated fastening devices are prohibited for use on this project.

1.44 ACCESSORY FINISHES

- .1 Galvanizing: to CAN/CSA-G164:
 - .1 galvanized fasteners for all exterior work unless otherwise specified



- .2 galvanized fasteners for all high interior humid areas unless otherwise specified
- .2 Use stainless steel type 304 where noted on drawings



PART 2 - ROUGH CARPENTRY EXECUTION

2.1 PREPARATION

- .1 Comply with safety regulations and applicable bylaws governing work included in this section. Provide and maintain necessary barriers, guards and rails.
- .2 Scope of work includes parapet wall, roof joint, and wall modifications as indicated on drawings or as required to provide a secure, smooth surface to receive the new roof and flashing assembly:
 - .1 Install wood blocking secured into existing surfaces adequately to resist movement and wind uplift forces as per FM 1-49, minimum 200 pounds/foot.
 - .2 Install plywood sheathing as per detail drawings.
- .3 Complete wood blocking and sheathing to walls, curbs and drains as indicated on drawings.

2.2 INSTALLATION

- .1 Comply with requirements of Local Building Code at Place of Work, supplemented by following paragraphs:
 - .1 Ensure continuity and completeness of vapour retarder membrane as coinciding with new wood blocking installation.
 - .2 Install furring and blocking as required to space-out and support new walls, window projections and louver extensions, fascia, soffit, siding and other work as required.
 - .3 Align and plumb faces of furring and blocking to tolerance of 1:600.
 - .4 Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other work.
 - .5 Install wood cants, fascia backing, nailers, curbs and other wood supports as required and secure with adequate fasteners. Install sleepers as indicated.

2.3 ERECTION

- .1 Frame, anchor, fasten, tie and brace members to provide necessary strength and rigidity.
Countersink bolts where necessary to provide clearance for other work.

END OF SECTION



MODIFIED BITUMEN MEMBRANE GENERAL

2.4 SECTION INCLUDES

Installation of a new roof system over prepared substrate.

Provide the necessary labour and materials to complete the removal of the existing roofing system and sheet metal flashings down to the structural deck, as specified in preparation for installation of a new low slope, protected membrane roofing system, including but not limited to:

.1 On Designated Roof Area(s):

Existing concrete roof deck,
1 ply modified bitumen base sheet membrane, torch applied,
1 ply modified bitumen base sheet flashings, self-adhered,
1 ply granular modified bitumen cap sheet membrane, torch applied,
1 ply granular modified bitumen cap sheet flashings torch applied.

2.5 RELATED SECTIONS

Part 4 - Health And Safety Requirements

Part 7- Rough Carpentry

Part 13 - Sheet Metal Flashings

2.6 REFERENCES

.1 Latest edition of all listed references; most stringent requirements to govern in conflicts:

.1 American Society for Testing and Materials (ASTM) International:

.1 D41: Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing.
.2 D2822: Asphalt Roof Cement.
.3 D4601: Standard for Asphalt Coated Glass Fibre Base Sheet Used in Roofing.
.4 D6164: SBS Mod. Bit. Sheets Using Polyester Reinforcements.

.2 Canadian Standards Association (CAN/CSA):

.1 A123.2: Asphalt Coated Roofing Sheets.
.2 A123.16: Asphalt Coated Glass Base Sheets.
.3 A231.1: Precast Concrete Paving Slabs.
.4 0151M: Canadian Softwood Plywood.

.3 Canadian General Standards Board (CAN/CGSB):

.1 37.29M: Rubber-Asphalt Sealing Compound
.2 37-GP-9M: Primer, Asphalt, unfilled, for Asphalt Roofing and Waterproofing.
.3 37-GP-15M: Application of Asphalt Primer for Asphalt Roofing & Waterproofing.
.4 37-GP-56M: Membrane, Bituminous, Prefabricated and Reinforced for Roofing.

.4 Canadian Roofing Contractors Association (CRCA): Roofing and Waterproofing Manual

2.7 PRECAUTIONS

Roofing shall not be carried out when materials are damp and base sheet shall not be applied when ambient temperature is less than minus ten (-10) degrees Celsius. Postpone roofing work when inclement weather appears imminent.

Apply each part of roofing system only when surfaces are clean and dry.



Conduct operations so as to leave deck exposed for minimum period of time. Protect, as required, to prevent water infiltration or environmental damage to building interior. At no time shall the deck be left exposed overnight.

Where work must continue over finished roofing membrane, protect surface with minimum 13mm thick plywood sheets.

Strictly adhere to all safety guidelines for the torching of Modified Bituminous Membrane.

Any sharp projections, that in the opinion of the Consultant may penetrate the vapour barrier, shall be grounded smooth and flush.

All aspects of the re-roofing operation shall follow in close sequence. No part of the operation shall be so far ahead of the succeeding part that the latter cannot be finished that working day.

Contractor shall verify that the existing slope and/or added slope will permit the total drainage of water. If in the opinion of the contractor there is a possibility of water ponding, he shall advise the consultant so the situation can be addressed and corrected.

2.8 WARRANTY

Remedy all defects in the Modified Bituminous Membrane Roofing and Membrane Flashings installed hereunder which appear within a period of **two (2) years** from date of final completion.

Make all necessary repairs and replacements within **48 hours** of receipt of written notification.

Provide a written warranty confirming above, issued on the corporate letterhead, signed and sealed by an authorized signing officer.

Nothing contained in this article shall be construed as in any way restricting or limiting the liability in common law and statutory liability of the Contractor.

Obtain from the Membrane manufacturer a Material Guarantee stating that the roofing membrane shall be free of manufacturing defects and premature deterioration for the period of **TEN (10) years** from the date of final completion.



MODIFIED BITUMEN MEMBRANE PRODUCTS

2.9 BITUMEN & PRIMERS

All primers must meet Manufacture's requirements for specified warranties

Membrane Flashing Primer: composed of SBS synthetic rubbers, adhesive enhancing resins and volatile solvents designed for use with self-adhesive waterproofing membranes on most substrates.

- .1 Standard of Acceptance: Elastocol Stick by Soprema

Black Bituminous Primer for metal surfaces only: to be composed of asphalt modified bitumen with thermoplastic polymers and volatile solvents.

- .2 Standard of Acceptance: Elastocol 500 by Soprema

Roofing cement: asphalt to CGSB 37-GP-9Ma.

2.10 MODIFIED BITUMEN MEMBRANE – TORCH & TORCH APPLIED

Two (2) ply modified bitumen membrane system for specified System Warranty:

- .1 Base Sheet Field and Reinforcing Membrane:

- .1 Torch grade modified bitumen; minimum 3.0mm thick, with minimum 180 g/m² non-woven polyester scrim, impregnated and coated with SBS modified bitumen, and conforming to CGSB 37-GP-56M. Top and bottom surface to have thermofusible polyolefin film.

- .2 Standard of Acceptance: Sopralene Flam 180 by Soprema

- .2 Base Sheet Flashing:

- .1 Self-adhered grade modified bitumen; minimum 2.5mm with minimum glass fibre mat reinforcement, impregnated and coated with SBS modified bitumen, and conforming to CGSB 37-GP-56M. Top surface to be covered with thermofusible polyolefin film with self-adhesive bitumen bottom surface covered with silicone release film.

- .2 Standard of Acceptance: Sopralene Stick 250 by Soprema

Cap Sheet Field & Flashing Membranes:

- .3 Torch grade modified bitumen, minimum thickness 4.0mm, with minimum 250g/m² non-woven polyester scrim, impregnated and coated with SBS modified bitumen, and conforming to CGSB 37-GP-56M. Top surface to have No. 11 ceramic granules and torch grade bitumen bottom surface covered with thermofusible polyolefin film. Colour of granules to be chosen by Owner from Contractor supplied samples of standard colours.

- .4 Standard of Acceptance: Sopralene Flam 250 GR by Soprema

Protective Membrane (Under Pavers, Supports and Sleepers):

- .5 Torch grade modified bitumen, minimum thickness 5.0mm, with non-woven polyester scrim, impregnated and coated with SBS modified bitumen, and conforming to CGSB 37-GP-56M. Top surface to have No. 11 ceramic granules and torch grade bitumen bottom surface covered with thermofusible polyolefin film. Colour of granules to be chosen by Owner from Contractor supplied samples of standard colours.

- .6 Standard of Acceptance: Sopralene 180 5.0F by Soprema



2.11 ROOFING ACCESSORIES

Roofing accessories to be manufactured from spun aluminum or copper as required, and complete with removable caps where applicable. Unless otherwise designated by Consultant, pitch pockets are strictly prohibited. All units are to have foamed in place closed cell urethane foam insulation sprayed into unit at plant under controlled conditions. Flanges to be primed with rubberized asphalt compatible primer.

.1 Plumbing Stack Flashing: SJ-26 by Thaler Metal Industries Inc.

Membrane Tools: Use tools, hand rollers, weighted rollers, squeegees, etc. as recommended by membrane Manufacturer for installation of their product to ensure compatibility and avoid damaging of pressure sensitive membranes.

Sealing Compound: Rubberized Sealing Compound to CAN/CGSB-37.29, rubber asphalt type. Standard OF Acceptance: Sopramastic ALU by Soprema.

Sheet Metal Flashings and Trim: As per Section 07620 and fabricated from 24 gauge pre-painted steel. Hook strips to be 2 gauges heavier than flashings. Colour to match existing.

Sealants: As per Section 076200. Colour of sealants to match component applied against.

Pourable Sealer: Elastomeric pourable sealer as supplied by Soprema



PART 3 - MODIFIED BITUMEN MEMBRANE EXECUTION

3.1 WORKMANSHIP

Perform roofing work which is not specifically covered by these Specifications in accordance with applicable industry standards and good roofing practices of:

- .1 Canadian Roofing Contractors Association (CRCA),
- .2 Canadian Modified Bitumen Manufacturer's Association's recommendations,
- .3 Manufacturer's preprinted and published technical specifications,
- .4 ULC Design No. S-107 criteria,
- .5 Factory Mutual Global design criteria FM 1-28 and 1.49,
- .6 Compliance with local fire insurance requirements,
- .7 Compliance with local building codes.

Procedures for application of materials should be in accordance with Manufacturer's printed instructions and recommendations.

- .8 Advise Consultant of adjustments to specified roofing procedures recommended by Manufacturer or due to site conditions.
- .9 Written approval by Consultant is required to make any adjustments to specified procedures.

All work to be carried out in accordance with drawings, and specifications provided.

- .10 All supplied drawings and details constitute acceptable installations. Any deviance from these details must first approved by Consultant prior to installation.

While work is in progress, all steps must be taken to safeguard building from damage due to weather, fire, and structural overloading.

Examine underside of roof deck when installing mechanical fasteners, where possible, to avoid accidental damage to existing services.

Apply each part of roofing system when surfaces are free of moisture for successful application.

Do priming for asphalt roofing in accordance with CAN/CGSB 37-GP-15M and as recommended by membrane manufacturer.

- .11 Adhesives or sealants and liquid primers will not be applied until surfaces are dry.

3.2 EXAMINATION OF SITE CONDITIONS

Examine existing site conditions and substrates upon which work of this section is dependent. Report to Consultant in writing any defects or discrepancies. Commencement of work implies acceptance of existing conditions and assumption of full responsibility for finished condition of work.

Defective work resulting from application to unsatisfactory conditions will be considered responsibility of those performing work of this section.

3.3 PROTECTION

Adjacent Buildings and Tenants:

- .1 Take care to not damage any adjacent or closely located buildings and all related grounds in vicinity of Work during roofing operations.
- .2 Protect against infiltration of dust, debris, and other such contaminants and occurrences.
- .3 Locate garbage chutes to minimize exposure to adjacent building, its grounds, and its occupants.



- .4 Protect walls by means of tarpaulins where garbage chutes and hoisting equipment are located and operated.
- .5 Cover dumpsters and bins to prevent debris from blowing away.
- .6 Do not use spray installation methods on days with significant wind.
- .7 Damage to adjacent buildings, grounds, and vehicles to be rectified by Contractor at no additional cost.

Adjacent Roof Areas and Completed Work:

- .8 Take care not to damage any previously performed work or existing roofs.
- .9 If work area is accessed across existing roof areas, provide protection to existing roof system. Use continuous Protection Walkways consisting of 19mm (0.75") plywood sheathing over 38mm (1.5") extruded polystyrene insulation.
- .10 Protect newly installed roof work from traffic and damage using Protection Walkways where warranted by traffic requirements.
- .11 Comply with any precautions deemed necessary by Consultant.

Material Storage:

- .12 Deliver all materials to site in undamaged condition with original manufacturer's label intact and clearly visible for easy verification of specified materials.
- .13 Provide security fencing at all times for equipment and materials stored at ground level.
- .14 Protect rolls from flattening by storing on ends on skids.
- .15 Whenever possible, store roof materials off roof at designated, protected storage area.

Structural Integrity of Roof:

- .16 Use only equipment that will not adversely affect, damage, or alter roof deck.
- .17 Do not create point loads that may adversely affect performance of existing deck when storing materials on roof.

Inclement Weather:

- .18 Immediately halt work during inclement weather, including but not limited to rain fall, snow, drizzle, fog, and hail. Protect exposed building substrates, open building cavities, and moisture sensitive products.
- .19 At end of each work day or when stoppage occurs due to inclement weather, provide suitable protection from elements for completed work and materials out of storage.
- .20 Place in to heated storage any temperature sensitive materials such as membranes, adhesives, and sealants when temperature falls below 5 °C (40 °F).
- .21 Protect all vents, stacks, drains and related deck openings from inclement weather and contamination from debris.

Roof Safety, Access, and Egress:

- .22 Use warning signs and barriers. Maintain in good order until completion of work.
- .23 Access to roof to remain unobstructed.



- .24 Keep doorways and fire routes clean and clear of any obstacles.
- .25 Protect and safeguard all man-size or larger openings in roof deck with warning flags and suitable temporary barriers or railings.

Damage and Defective Work:

- .26 Avoid use on roof of any petroleum based and other chemical products that are corrosive and/or damaging to membrane. Provide protection to membrane from any accidental spills or drips. Any damage to roof system caused by non-compatible products to be cut out and replaced at no cost to Owner.
- .27 Investigate and examine any damage caused by execution of Work for this contract, and repair or replace with new materials to match original finish. Restoration and repair work to be reviewed and approved by Consultant.
- .28 Defective Work resulting from application of material on unsatisfactory surface or substrate to be rectified by Contractor at no additional cost.
- .29 Defective Work resulting from improper installation of materials to be rectified by Contractor at no additional cost.

3.4 SURFACE PREPARATION

Preparation:

- .1 Examine all roof decks and existing site conditions to ensure that they are in satisfactory condition for commencement of work in this section.
- .2 Divide work into logical sections and only tear-off as much existing roof as can be made watertight in same working day to prevent damage to building interior.
- .3 Prior to removal of any roof components, all existing openings (drains, vents, air intakes, etc.) to be covered or plugged to prevent any debris or contaminate from entering building below. All such coverings are to be removed at end of each working day and reinstalled prior to next day's start up.
- .4 Disconnect and reconnect Electrical Services and Mechanical Equipment as required.

Any rooftop equipment requiring disconnection to be responsibility of Contractor in consultation with Owner unless otherwise specified elsewhere in contract documents.

Existing Roof Removal:

- .5 On All Designated Roof Areas: Remove existing projection and perimeter metal flashings, roof membrane and membrane flashings and any other wood blocking, to expose existing substrates. Dispose removed items to an appropriate site for building material waste.
- .6 All unused and abandoned pitch pockets, vents, curbs, sleepers, projections, etc. are to be removed from designated areas and disposed of.

Obtain verification and authorization from Client before removing and disposing of any suspected unused or abandoned projections.

Install new roof decking as required to close off any deck openings prior before proceeding with new roof system installation.

Where existing insulation is exposed, examine insulation for any damage and deterioration required to be cut out and repaired with new compatible materials.

Substrate Review:



- .7 Exposed roof deck surfaces to be reviewed by Contractor with Consultant. Ensure to review entire roof area to satisfy any warranty requirements of Manufacturer of new roof membrane system.

Notify Consultant of review at least forty-eight (48) hours prior to site review.
- .8 Report any anomalies found that may impact soundness and structural integrity of roof system to Consultant and Owner immediately. Areas with damaged decking must be replaced or repaired before any further work may take place on that particular section.
- .9 Ensure roof decks are firm, straight, smooth, dry, free of snow, ice, frost, oils, or other contaminants. Decking must be properly cleaned of any dust and debris prior to proceeding with new installation. Test whether specified adhesion to deck will be obtained where required.
- .10 Prior to application of vapour retarder, examine deck and ensure any defect of level or construction is correct before proceeding with work.
- .11 Verify that roof drains have been installed at proper elevations relative to finished roof surface to allow for sufficient drainage of roof surface.
- .12 Review securement of existing projections and equipment (electrical conduit, gas lines, etc.). If inadequate securement is found, inform Consultant and halt work around that area until situation is rectified.
- .13 Review securement of existing plywood sheathing, wood blocking, and cant strips. Do not install new roofing unless such items are adequately secured to withstand stresses imposed by thermal movement of new roofing components.

3.5 CARPENTRY

- .1 On All Designated Roof Areas: Refer to detail drawings for carpentry requirements. Install wood blocking, plywood, and cant strips to accommodate required slopes, insulation, roofing membranes, and prefinished sheet metal and trim. Carpentry alterations to be performed to accepted trade practices.
- .2 Replace any seriously damaged or deteriorated wood at perimeters and projections with new construction grade spruce wood blocking or exterior grade plywood, good one side, to match existing. Determination of suitability to re-use or replace existing wood to be at discretion QA Observer.
- .3 Ensure existing wood blocking remaining at perimeters and curbs is securely fastened to existing substrate before installing new blocking and plywood.
- .4 Wood to wood, wood to metal, wood to masonry or concrete to be secured at 305mm (12") on center with alternating fasteners staggered.
- .5 Avoid protruding fastener heads. Where possible, all fasteners to be flush with or slightly sunk below surface of wood blocking being secured.
- .6 All wood blocking and plywood is to be considered part of roof, and to be made watertight by end of each work day to eliminate moisture infiltration into roof system.

3.6 MODIFIED BITUMEN MEMBRANE APPLICATION

On All Roof Replacement Areas: Install a two (2) ply, SBS modified bitumen membrane system overtop of prepared existing metal deck. Base sheet layer to be torch applied. Base sheet flashings to be self-adhering. Cap sheet layer and flashings to be torch applied.

- .1 All membrane materials are to be supplied by same manufacturer in order to meet material compatibility requirements necessary to achieve required System Warranty.



- .2 All membrane installations to conform to membrane manufacturer's printed literature, recommendations, guidelines, and instructions.
- .3 All membrane and flashing applications to be free of sags, blisters, wrinkles, and fish-mouths.

General Requirements for Application:

- .4 **Tools, Rollers, & Squeegees:** Use membrane manufacturer's recommended tools and accessories. Keep tools clean during performance of work and frequently replace application roller tips and squeegee heads with new when clogged.
- .5 **Surface Review:** Apply over wood, metal, gypsum board and concrete decks which are clean, smooth, and free of snow, ice, moisture, and debris. Concrete decks must have all holes filled with quick drying cement and rough patches removed.
- .6 **Application of Primer:** Priming is required for all substrates prior to installation. Avoid pooling primer and allow to completely dry before membrane installation. Drying time will vary according to absorptive qualities of material and ambient weather conditions.
- .7 **First Roll Starting Point:** Base sheet to begin at drain level with side lap aligned to centre of drain. Run rolls perpendicular to slope. Cap sheet to be installed over base sheet covering base sheet overlap. Center of cap sheet to align up with centre of drain.
- .8 **Relaxing of Roll Membrane:** ALL ROLL MEMBRANES ARE TO BE FULLY UNROLLED AND ALLOWED TO RELAX FOR A MIN. OF 15 MINUTES PRIOR TO INSTALLATION. Wait longer in cooler temperatures. Trace zig-zag pattern with torch as recommended by manufacturer over membranes that are covered with thermal-fusible film.
- .9 **Alignment of Rolls:** Completely unroll first roll and align with edge of roof. Reroll membrane from both ends to centre and apply as per specifications.
- .10 **Staggering of Sheets:** End laps between base and cap sheets to be offset a min. of 610mm (24"). Side laps between base and cap sheets to be offset a min. of 305mm (12"), centered alignment preferred. Laps in same membrane layer to be min. 76mm (3") wide for side laps and min. 305mm (12") wide for end laps. When salvage side laps of base and cap sheets are unequal, adjust cap roll width occasionally to maintain alignment.
- .11 **Procedure to Seal Voids:** Where voids are created by overlapping rolls of membrane, cut off corner of salvage edge where covered by next roll of material.
- .12 **Salvage Edge Protection:** Granules along edge of membrane to be primed prior to application of adhesive to provide good adhesion of laps.
- .13 **Membrane Flashings:** Base flashings to extend min. 102mm (4") onto field of roof from base of cant. Cap flashings to overlap base sheet flashings and extend min. 102mm (4") beyond base flashing. Use wider overlap widths where required by manufacturer for warranty requirements.
- .14 **Bleed-Out at Seams:** When torch applying membrane, provide consistent, continuous bleed-out along all seams, no less 3mm (1/8") and no greater than 6mm (1/4") in width.
- .15 **All Seams:** Check all seams in all sheets with a round nosed trowel while work is in progress. Repair found deficiencies immediately and before continuing roof installation.
- .16 **Base Sheet Seams:** Butter all seams and laps. Provide additional heat at point of 90° upturns in base sheet flashings. Recheck self adhering membrane seams left exposed within forty-eight (48) hours of installation to repair any revealed seam deficiencies with clean, heated trowel.



- .17 Cap Sheet Seams: At all end laps and membrane flashing overlaps, degranulate area (embed granules) of surface to be bonded by embedding ceramic granules into bitumen of membrane using clean, heated trowel to push in. Measure and use straight chalk lines to mark outline of areas requiring degranulation. Achieve a uniform black surface of bitumen across 100% of embedment areas to be overlapped.
- .18 Reinforcement: Required at all corners, vents, drains, HVAC units, and gravel stops.
- .19 Primer Application: Sanded membrane left exposed overnight or longer to be primed before continuing membrane installation to ensure good adhesion.
- .20 Torch Application: During windy periods, slow application rate down to ensure good bond with proper level of heat. Stop and periodically check for proper adhesion.

Correction Requirements for Defects and Deficiencies:

Delamination: Membrane may not be fully bonded to substrate due to:

- .1 Moisture present on substrate,
Dirt, dust, or other contaminate on substrate acting as a parting agent,
Inadequate application of primer or adhesive.
- .21 Misalignment: Alignment of row to starting line is lost due to swerving during application or to roll not being unrolled, aligned, and rerolled straight prior to application.

Misaligned roll to be cut at point where swerve begins and restarted.
Ensure membrane rolls are allowed to relax. Use heat in a zig-zag pattern to relax thermo-fusible films and membrane reinforcement.
Ensure pressure is applied evenly across roll during application to avoid drifting.
- .22 Wrinkles: Undulations located on surface of membrane after it has been applied:

Cross-Sheet Undulations: Waves in membrane due to installation in a stop and go fashion.
Continuous Ridging of Membrane: Formed by movement of substrate underneath membrane. Ensure substrate is secure before continuing.
- .23 Blisters: Pocket of air trapped under membrane where full adhesion was not achieved or trapped moisture released from substrate:

Remove and repair significant blisters.
Cut blister and adhere any loose membrane.
Apply patch membrane over repair area, extend a min. 152mm (6") on all sides.
- .24 Membrane Patches: Cap sheet membrane patches to be installed from seam to seam. Minimum size of membrane patch to be 915 x 915 mm (36" x36").

Base Sheet Field Membrane, Torch Installation:

- .25 PRIOR TO APPLICATION OF BASE SHEET, INSTALL SELF-ADHERING FIRE GUARD TAPE OVER ALL VERTICAL AND HORIZONTAL JOINTS IN SUBSTRATE.
- .26 Field measure and cut membrane to length of run required and roll up for installation.
- .27 Starting at low point on roof, perpendicular to slope, unroll cap sheet, align and re-roll from both ends.
- .28 Unroll and install cap sheet carefully in straight and parallel rows keeping majority of flame on membrane roll.
- .29 Base sheet to be torched across flat of roof, otop of substrate, and terminated at perimeters and vertical surfaces ensuring a good bond. Extend membrane up and over cant



- strip 50mm (2") onto vertical surface. Fasten top edge of membrane with round top nails spaced every 229mm (9") o/c
- .30 Lap sheets 76mm (3") for side laps and a minimum 152mm (6") for end laps. Offset joints in cap sheet 305mm (12") minimum from those of base sheet.
- .31 MEMBRANE GUSSET REINFORCEMENT TO BE INSTALLED ON TOP OF BASE SHEET MEMBRANE AT ALL INSIDE AND OUTSIDE CORNERS. CONSULTANT TO REVIEW GUSSET INSTALLATION BEFORE INSTALLATION OF CAP SHEET MEMBRANE.
- .32 All side and end laps of base sheet to be heat welded as required with hot air gun or torch to satisfaction of QA Observer.
- .2 Base Sheet Flashing, Self-adhered Installation:
- .1 Where required, prime concrete and wood surfaces at roof projections and around perimeter to receive new base sheet membrane flashings.
- .2 Install membrane flashing onto substrate in strips one membrane roll wide (40" or 1m) and extend over perimeters as shown on detail drawings
- .3 Field measure and cut flashing membrane to length required for flashing at each detail and roll up for installation.
- .4 Install base sheet flashing starting at outside face of perimeter, running across perimeter detail, and down onto flat of roof.
- .5 Once aligned in position, peel back a portion of release sheet and press membrane onto substrate for initial adherence. Hold membrane flashing tight and peel back release sheet by pulling diagonally.
- .6 Overlap each preceding flashing sheet by min. 76mm (3") on side laps and align bottom edge to a chalk reference line along base sheet membrane. Lap membrane flashing onto field membrane a minimum 102mm (4").
- .7 Use a membrane manufacturer recommended weighted roller to press membrane down onto substrate including laps. Finish by aligning edge of roller with lower end of side laps and rolling up membrane.
- .1 Do not cut membrane to remove trapped air bubbles. Squeeze out air bubbles by pushing roller to edge of laps.
- .8 Provide preliminary securement of membrane on outside edge or perimeters before installation of finish metal flashings and trim. Fasten top edge of membrane flashings on outside face of perimeter details with round top nails spaced every 229mm (9") o/c.
- .9 All side and end laps of base sheet flashing to be heat welded as required with hot air gun or torch to satisfaction of Observer.
- Cap Sheet Flashing, Torch Installation:
- .10 Cap sheet membrane flashing to be torched up and over perimeter details.
- .11 Install membrane flashing onto substrate in strips one membrane roll wide (40" or 1m) and extend up perimeters as shown on detail drawings
- .12 Field measure and cut flashing membrane to length required for flashing at each detail and roll up for installation.
- .13 Set cap sheet to offset base sheet flashing joints by 50% and extend a minimum of 152mm (6") onto roof. All end lap joints to be a minimum 76mm (3").



- .14 Align bottom edge to a chalk reference line along cap sheet membrane.
- .15 Install cap sheet flashing onto field membrane a minimum 204mm (8") from bottom of cant. Run flashing up vertical and across perimeter detail to outside edge.
- .16 Overlap each preceding cap sheet flashing sheet by min. 76mm (3") on side laps. Offset joints in cap sheet flashing 305mm (12") minimum from those of base sheet flashing.
- .17 Properly secure flashings to their support, without sags, blisters, fish-mouths or wrinkles with terminations as indicated on drawings and details.
- .18 All side and end laps of cap sheet flashing to be heat welded with hot air gun to satisfaction of Consultant.

Cap Sheet Field Membrane, Torch Installation:

- .19 Complete installation of base sheet flashing prior to installing membrane cap sheet and cap sheet flashings.
- .20 Field measure and cut membrane to length of run required and roll up for installation.
- .21 Starting at low point on roof, perpendicular to slope, unroll cap sheet, align and re-roll from both ends.
- .22 Unroll and install cap sheet carefully in straight and parallel rows keeping majority of flame on membrane roll.
- .23 Cap sheet to be torched across flat of roof, overtop of base sheet, and terminated at perimeters and vertical surfaces ensuring a good bond.
- .24 Lap sheets 76mm (3") for side laps and a minimum 152mm (6") for end laps. Offset joints in cap sheet 305mm (12") minimum from those of base sheet.
- .25 All side and end laps of cap sheet to be heat welded with hot air gun to satisfaction of Consultant.

3.7 ROOF DRAINS

Ensure the integrity of the vapour barrier is maintained, where applicable.

Install base sheet, 1 ply of reinforcing membrane (180 gram/m², torch applied) 1.0m x 1.0m centred over the drain and then complete the cap sheet application over the first two plies. Extend the cap sheet under the clamping ring.

Trim roofing membrane and set clamping ring.

3.8 METAL FLASHINGS

Metal flashings are specified in Section 07 62 00. Co-ordinate this work with that section.

3.9 COMPLETION OF DAY'S WORK

Install water cut-offs at the end of each day's work; remove completely prior to continuing further roofing applications.

Inspect all laps of the membrane application to ensure they are properly bonded. Repair any deficiencies prior to leaving the site for the day.

Base sheet applications should not be left exposed overnight unless all seams are torch welded prior to leaving the work site.



3.10 GENERAL

Minimum length of cap sheet on flat run of roof shall not be less than 1000mm.

Wrinkled or deformed ends of cap sheet rolls will not be tolerated and therefore must be discarded prior to application.

Following completion of new roofing, torch soften and apply a liberal application of approved bulk type mineral granules to cap sheet membrane edges where asphalt has extruded or flowed beyond clean lines and to all surface damage.

Splices in delivered rolls of membrane are to be removed. Cut back the roll 450mm on both sides of the splices and remove prior to installation.

END OF SECTION



SHEET METAL FLASHING GENERAL

3.11 SECTION INCLUDES

- .1 Supply and installation of new prefinished sheet metal flashings and counter flashings to complete roof system installation. Unless specifically indicated otherwise, all references to Sheet Metal Flashings in specifications and drawings to refer to new pre-painted steel.
- .2 Form, break, and install metal flashings to suit perimeter and projection details as specified and as shown on detail drawings.
- .3 Coordination of all work in this section with other sections and trades as required to ensure proper installation of specified components.

3.12 RELATED SECTIONS

Part 4 - Health & Safety Requirements

Part 10- Modified Bitumen Membrane Roofing

3.13 REFERENCES

- .1 Latest edition of all listed references; most stringent requirements to govern in conflicts:
 - .1 American National Standards Institute/Single Ply Roofing Industry (ANSI/SPRI):
 - .1 ES-1: Wind Design Standard for Edge Systems (Low Slope Roofing).
 - .2 American Society for Testing and Materials (ASTM):
 - .1 A606: Steel Sheet, High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled, with Improved Atmospheric Corrosion Resistance.
 - .2 A653/A653M: Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by Hot-Dip Process.
 - .3 A792/A792M: Steel Sheet, 55% Alum-Zinc Alloy-Coated by Hot-Dip Process.
 - .3 Canadian Standards Association (CAN/CSA):
 - .1 B111: Wire Nails, Spikes and Staples.
 - .4 Canadian General Standards Board (CAN/CGSB):
 - .1 51.32M: Sheathing, Membrane, Breather Type.
 - .2 93.1-M: Sheet, Aluminum Alloy, Prefinished.
 - .5 Sheet Metal and Air Conditioning Contractors National Association (SMACNA):
 - .1 Architectural Sheet Metal Manual
 - .6 Canadian Roofing Contractors Association (CRCA): Roofing and Waterproofing Manual.

3.14 SUBMITTALS

- .1 Warranty: Provide Owner with a Material and Workmanship Warranty for sheet metal flashing work on Contractor's letterhead, signed and authorized.
- .2 Compatibility: Provide written certification to Consultant stating that materials and components of roofing system and wall system, as assembled in system are compatible.
- .3 Mock-ups: Create mock-up sample of typical metal flashing detail and related accessories for review by Consultant.



- .1 Provide any additional mock-up samples as reasonably requested by Consultant.
- .2 Finished and approved mock-ups to remain as example of standard to be met, and may remain in place as part of installed and completed work.

3.15 STORAGE AND HANDLING

- .1 Do not store metals in direct contact with earth, road surface, roof deck, or other metals.
- .2 Place suitable supports or pallets under metal stock upon delivery. Protect metal from scratches, dents, punctures, and moisture.
- .3 Store caulking and sealants at +5°C minimum.
- .4 Handle and store products in a manner to prevent damage, oxidization, and deterioration.
- .5 Remove and replace damaged products at own expense and to satisfaction of Quality Assurance Observer/Consultant.
- .6 Apply materials in accordance with Manufacturer's recommendations.

3.16 SAFETY AND PROTECTION

- .1 References:
 - .1 CAN/CSA S269.2M: Access Scaffolding for Construction Purposes.
 - .2 FCC No. 301: Standard for Construction Operations.
 - .3 Comply with all safety requirements as per current printed edition of OHSA, and with O.I.R.C.A. standards.
- .2 Solvents, Adhesives and Membranes
 - .1 Store only enough solvents and adhesives on roof for same day's use.
 - .2 Manufacturer supplied adhesives should be stored in their overnight containers. Minimum temperature for solvent based adhesives and primers is -5°C.
- .3 Hoisting:
 - .1 Protect walls and roof perimeters where hoisting is required.
 - .2 Protect roofs from damage due to traffic and material handling until completion of project.

3.17 WARRANTY

- .1 Sheet Metal Flashings:
 - .1 Two (2) year Material Warranty and Workmanship Warranty.

3.18 PREPARATORY WORK

- .1 Examine drawings and specifications and any other necessary data which may affect installation to determine extent of Work involved in this Section. No additional claims against Owner to be allowed resulting from failure to ascertain full extent of Work required as described or implied.
- .2 Prior to application of flashings, review roof perimeters and projections.
- .3 Examine installed membrane flashings for any defect of level or construction before proceeding with work.



- .4 Advise Consultant of any deficiencies that may affect performance of roof system and any deviations from specified tolerances.
- .5 Defective or improper work must be corrected before proceeding with installation of sheet metal flashings.



SHEET METAL FLASHING PRODUCTS

3.19 PRE-FINISHED METAL FLASHINGS

Compatibility between materials is essential. Use only materials that are known to be compatible when incorporated in a completed assembly.

Prefinished Metal Flashing: 24 gauge (0.028" or 0.71mm) steel with G90 (Z275) zinc coating conforming to ASTM A653A/A653M. Surface with Dofasco Perspectra Series or Valspar WeatherX factory-baked finish. Standard colour to be selected by Departmental Representative. Submit samples of entire range of manufacturer's colour options.

- .1 Where metal flashing is in contact with dissimilar metal, use separation sheet or back-paint to suitable thickness (as approved by Departmental Representative) over entire area to prevent electrolytic action.

Starter Strip: Starter strips to be manufactured from the same type of material used for cap and counter flashings, and shall be 24 gauge (0.71mm).

Fastening Cleats: to be manufactured from the same type of material used for cap and counter flashings. For 24 gauge (0.71mm), space at 600mm o/c and for 26 gauge (0.55mm), space at 400mm o/c.

Fastening bars: to be 18 gauge metal and pre-drilled at 400mm o/c.

3.20 JOINTING

- .1 Linear mating of sections of cap flashings and parapet flashings to be with an "S" lock joint.
- .2 Corner mating to be completed with a standing seam "S" lock joint.

3.21 ACCESSORIES

- .1 Underlay: Smooth unsaturated quality rosin sized paper weighing not less than 0.3 Kg/m² (6 lbs per 100 ft²) unless otherwise shown to CSA A123.3M.
- .2 Joint Filler: Extruded polyethylene, closed cell, Shore A hardness 20, tensile strength 140 to 210 kilopascals (20 to 30 psi), 25% to 30% wider than joint to be caulked.
- .3 Touch-up paint: As recommended by pre-finished material manufacturer.
- .4 Bituminous Paint: Gilsonite asphalt 910-02 by Bakelite to CGSB 1-GP-108 Type II.
- .5 Sealants: one component polyurethane base caulking compound to CGSB 19.13-M. Sealing compound to be installed in accordance with manufacture's recommendations.

3.22 FASTENERS

- .1 Use galvanized, copper, aluminum or stainless steel nails or screws most compatible with materials being employed. Use fasteners as most generally suitable to not cause a galvanic reaction.
- .2 Fasteners to Wood: Nails, annular threaded of length to penetrate into bases minimum 1" (25 mm) or No. 8 screws to penetrate surface by min. 19 mm (0.75"), at 600 mm (24") o.c.
- .3 Exposed Fasteners: Nylon headed, No.14 Colormate fasteners by Leland Industries with 11mm (7/16") hex heads, self tapping or drilling point tips. Length to suit installation and with colour to match pre-painted metal.
- .4 Masonry Fasteners: Tapcon, Gripcon or Rawl spike sized to penetrate concrete 38mm (1.5") minimum unless otherwise shown.
- .5 Wedges: Rolled plumber sheet lead. Secure metal flashings on inside and should be secured with No.10 galvanized screws through neoprene washers at 760 mm (30") o.c.



- .6 Masonry Anchors: Rawl lead lags for screws as recommended by manufacturer.
- .7 Pop Rivets (Only where approved by Consultant): 3mm (0.125") shank diameter, all stainless steel, blind pop rivets meeting ASME/ANSI B18.1.1. Head diameter to be 6mm (0.25") and with a grip range of 4.7mm to 6.4mm (0.1875 to 0.25"). Body and mandrel to be constructed from high-shear, 300 series stainless steel.

3.23 FABRICATION

- .1 Fabricate all possible work in shop in 2.4m (8') lengths by brake forming, bench cutting, drilling and shaping. On high vertical sections install metal in 1.2m (4') section as specified and detailed. Profiled metal to be cold rolled.
- .2 On coping or flashing with a horizontal dimension of 406mm (16") or greater, fabricate metal flashings in maximum 1.2m (4') sections.
- .3 On coping or flashing with a horizontal dimension of 508mm (20") or greater, use 25mm (1") lock folded standing seam joints.
- .4 Where height of metal fascia exceeds 150mm, provide stiffening breaks every 150mm maximum. Breaks to be located at equal distance from the top and bottom of the fascia, and from each other.
- .5 Form bends with straight sharp lines, angles and corners into true planes, free from twists, buckles, dents and other visual distortions.
- .6 Double-back exposed metal edges at least 13mm (0.5"). Raw edges will not be permitted.
- .7 Supply all accessories required for installation of sheet metal work of this Section. Fabricate accessories of same materials to which they will be used.



PART 4 - SHEET METAL FLASHING EXECUTION

4.1 INSTALLATION

- .1 Install sheet metal flashings at copings, walls, joints, roof openings and other components required to protect membrane flashings as shown on drawings, or otherwise required.
- .2 Install continuous concealed starter strips at all exterior faces. Install cleats as required to protect membrane roofs and flashings from damage at lock joints and as required to permanently hold flashing in place. Secure starter strips at 152mm (6") on center, keeping fastener within 32mm (1.25") of drip edge.
- .3 Supply and install metal cleats at specified spacing. Use fastener of sufficient length to penetrate a minimum of 25mm into substrate.
- .4 Sheet metal work to be installed to cover entire area it protects and to be watertight under all service and weather conditions.
- .5 Install in a uniform manner, level, true to line, free of dents, warping and distortion.
- .6 Back-paint at rate of 0.12L/m² (¼ Gal/100 ft²) with bituminous paint, sheet metal that comes into contact with another kind of metal, masonry or concrete.
- .7 Install sheet metal with concealed fasteners at lock joints. Exposed fastening will be permitted only with approval of Consultant. Space all fasteners evenly in an approved manner. Use lead plugs and screws where fasteners are exposed, otherwise use concrete drive fasteners where metal flashings are installed over concrete or masonry.
- .8 Install underlay under sheet metal, installed directly over wood or masonry surfaces. Overlap joints 51mm (2") and turn up 76mm (3") at edges where horizontal surfaces intersect vertical planes.
- .9 Join sheet metal by "S" lock seams, to permit thermal movement. Space joints evenly where exposed. Form inside and outside corners by means of raised seams. Lock seams to ensure water tightness. Do not use pop rivets.
- .10 Slope all metal to interior to maintain minimum 8% slope. Do not form open joints or pockets that fail to drain water.
- .11 Caulk all open sheet metal joints. Solder corners and other locations as required for a permanent waterproof connection.
- .12 Where existing reglets can not be reused, New reglets are to be cut a minimum of 400mm above finished roof surface and are to be a minimum of 19mm wide and 25mm deep. Reglets to be cut prior to the application of the membrane flashings. Provide details of proposed cuts/locations for Departmental Representative approval prior to proceeding.
- .13 Clean reglets free of contaminates and dust.
- .14 Wedge flashings into reglet joints with lead wedges at 229mm (9") o.c. set minimum 6mm (¼") from masonry surface.
- .15 At reglets wider than 10mm (3/8") and deeper than 19mm (¾") provide polyethylene rod, 25% wider than joint width. Caulk all reglets to provide a continuous waterproof seal. Use colour to match materials. Conform to manufacturer's latest printed recommendations for use of products being employed.
- .16 Prepare mock-up installations of metal flashing details for approval by QA Observer prior to installation of sheet metal flashings.



4.2 CAULKING

Install caulking in accordance with manufacturer's latest recommendations and guidelines.

Provide foam backer rod for joints greater than 19mm wide and/or 25mm deep, prior to installing caulking compound.

Tool finish smooth and true, to satisfaction of Departmental Representative

4.3 FINISH

- .1 At project's conclusion, leave surface and adjacent work areas free of damage and clean of debris. Finished surfaces of formed metal flashings to be free of oil canning, dents and be perfectly colour matched.
- .2 Changes in colour between sheets and dented or oil canned surfaces that detract from visual appearance of finished product will be rejected. Remove and replace damaged, defaced or defective work.
- .3 Paint all exposed metal due to cutting.
- .4 After erection touch-up finish surfaces damaged during handling and erection in conformance with manufacturer's recommendations. Refinish shop applied finishes as approved by Consultant.
- .5 Remove deposits or protections and wash metals left unpainted and exposed to view as specified by metal manufacturer.

4.4 CLEAN-UP

- .1 Daily as work proceeds and on completion, remove all surplus materials and debris resulting from foregoing work.
- .2 Drag a magnetic bar across work area and grounds to ensure removal of all discarded fasteners and sharp metal debris.

Remove all stains, caulking or other adhesive from all affected surfaces.

END OF SECTION



PLUMBING GENERAL

4.5 RELATED SECTIONS

Part 4 - Health & Safety Requirements

Part 10 - Modified Bitumen Membrane Roofing

Part 13 - Sheet Metal Flashing

4.6 REFERENCE STANDARDS AND MINIMUM REQUIREMENTS

Conform to National Building Codes and requirements of Provincial and Municipal Authorities. Most stringent requirements shall govern where in conflict

PLUMBING PRODUCTS

4.7 PIPE AND FITTINGS

Cast iron to CAN/CSA-B70-02, Class 4000. Fittings shall be equal in quality and thickness to pipes and sized to match existing system.

4.8 MECHANICAL JOINTS

Adjustable butyl or rubber gasket with stainless steel clamp type joint.

4.9 PIPE HANGERS

Adjustable type wrought iron designed to allow pipe movement and insulation to pass unbroken through hanger.

4.10 INSULATION

25mm thick preformed type mineral fibre insulation with vapour barrier jacket and vapour sealed joints.

Areas of exposed installations provide canvas vapour jacket painted to match interior finish.

4.11 ROOF DRAIN

Copper retrofit drain inserts, complete with cast aluminum domes and U-Flow seal connectors

Standard of Acceptance: RD-4C-RR-FLAT by Thaler Metal Industries,

PLUMBING EXECUTION

4.12 DRAIN INSTALLATION

Fit roof drains to drainage pipe and fittings. Install mechanical joints. Make joints watertight and gastight.

Secure to existing substrate with mechanical deck clamps.

Adjust roof drain height to match new roof insulation thickness.

Set to permit proper drainage and not retard water flow after completion of roof membrane flashings plies.

4.13 TEMPORARY DRAINAGE

All roof areas not completed shall have temporary drainage.

All insert drains shall be connected and sealed to the existing piping with a U-flow as a minimum connection.

All temporary drains shall be removed prior to completing the new membrane application.



4.14 TESTING

Prior to starting construction verify that all drains are clear and free flowing. Any blockages are to be reported, in writing on Company letterhead, to Departmental Representative prior to the start of any work. Once work has begun, The Contractor assumes responsibility for free flowing drains and the cost associated with clearing.

Before restoring interior finish, ensure new system performs without leakage.

END OF SECTION



Appendix "B" – TERMS OF PAYMENT

TP1 Amount Payable – General

1.1 Subject to any other provisions of this Contract, Her Majesty will pay the Contractor, at the times and in the manner hereinafter set out, the amount by which:

1.1.1 the aggregate of the amounts described in TP2 exceeds; and

1.1.2 the aggregate of the amounts described in TP3;

and the Contractor must accept that amount as payment in full satisfaction for everything furnished and done by him in respect of the Work to which the payment relates.

1.2 Subject to any other provisions in this Contract, "Days" will mean continuous calendar days including weekends and statutory public holidays.

TP2 Amount Payable to the Contractor

2.1 The amounts referred to in TP1.1.1 are the aggregate of:

2.1.1 The contract amount referred to in C8 of the Articles of Agreement; and

2.1.2 The amounts, if any, that are payable to the Contractor pursuant to the General Conditions.

TP3 Amount Payable to Her Majesty

3.1 The amounts referred to in TP1.1.2 are the aggregate of the amounts, if any, that the Contractor is liable to pay Her Majesty pursuant to the Contract.

3.2 When making any payment to the Contractor, the failure of Her Majesty to deduct an amount referred to in TP3.1 from an amount referred to in TP2 will not constitute a waiver of the right to do so, or an admission of lack of entitlement to do so in any subsequent payment to the Contractor.

TP4 Time of Payment

4.1 In these Terms of Payment:

4.1.1 The "payment period" means a period of thirty (30) consecutive days or such other longer period as is agreed between the Contractor and the Departmental Representative;

4.1.2 An amount is "due and payable" when it is due and payable by Her Majesty to the Contractor according to TP4.4, TP4.7 or TP4.10;

4.1.3 An amount is overdue when it is unpaid on the first day following the day upon which it is due and payable;

4.1.4 The "date of payment" means the date of the negotiable instrument of an amount due and payable by the Receiver General for Canada and given for payment; and

4.1.5 The "Bank Rate" means the discount rate of interest set by the Bank of Canada in effect at the opening of business on the date of payment.

Progress Payments



- 4.2** The Contractor must, on the expiration of a payment period, deliver to the Departmental Representative in respect of that payment period a written progress claim in a form acceptable to the Departmental Representative that fully describes any part of the Work that has been completed (including its percentage of the total Work), and any material that was delivered to the work site but not incorporated into the Work, during that payment period.
- 4.3** The Departmental Representative will, not later than ten days after receipt by him of a progress claim referred to in TP4.2:
- 4.3.1** Inspect, or cause to have inspected, the part of the Work and the material described in the progress claim; and
- 4.3.2** Determine the value of the part of the Work and the material described in the progress claim that, in the opinion of the Departmental Representative:
- 4.3.2.1** is in accordance with the Contract, and
- 4.3.2.2** was not paid for in any other progress claim relating to the Contract.
- 4.4** Subject to TP1 and TP4.5 Her Majesty will, no later than thirty (30) days after the receipt by the Departmental Representative of a progress claim referred to in TP4.2, pay the Contractor an amount that is equal to the value that is determined under TP4.3.2 less a holdback as stated in C12.
- 4.5** It is a condition precedent to Her Majesty's obligation under TP4.4 that the Contractor has made and delivered to the Departmental Representative a statutory declaration in respect of a progress claim referred to in TP4.2.
- 4.6** A statutory declaration referred to in TP4.5 must contain a deposition by the Contractor that up to the date immediately preceding the Contractor's latest progress claim, all lawful obligations of the Contractor with regard to subcontractors and suppliers of material in respect of the Work under the Contract have been fully discharged.

Interim Certificate of Completion

- 4.7** Subject to TP1 and TP4.8, Her Majesty will, not later than thirty (30) days after the date of issue of an Interim Certificate of Completion referred to in GC44.2, pay to the Contractor an amount that is equal to the amount referred to in TP1, less the aggregate of:
- 4.7.1** An amount that is equal to the Departmental Representative's estimate of the cost to Her Majesty of rectifying defects and deficiencies described in the Interim Certificate of Completion; and
- 4.7.2** an amount that is equal to the total of all payments made by Her Majesty under TP4.4.
- 4.8** It is a condition precedent to Her Majesty's obligation under TP4.7 that the Contractor has made and delivered to the Departmental Representative a statutory declaration described in TP4.9 in respect of an Interim Certificate of Completion referred to in GC44.2.
- 4.9** A statutory declaration referred to in TP4.8 must contain a deposition by the Contractor that up to the date of the Interim Certificate of Completion the Contractor has:
- 4.9.1** Discharged all of the Contractor's lawful obligations to the subcontractors and suppliers of material in respect of the Work under the Contract; and
- 4.9.2** Discharged the Contractor's obligations referred to in GC14.6.

Final Certificate of Completion

- 4.10** Subject to TP1 and TP4.11, Her Majesty will, not later than sixty (60) days after the date of issue of a Final Certificate of Completion referred to in GC44.1, pay the Contractor the amount referred to in TP1 less the sum of all payments that were made pursuant to TP4.4 and TP4.7.



- 4.11** It is a condition precedent to Her Majesty's obligation under TP4.10 that the Contractor has made and delivered a statutory declaration described in TP4.12 to the Departmental Representative.
- 4.12** A statutory declaration referred to in TP4.11 will, in addition to the depositions described in TP4.9, contain a deposition by the Contractor that all of the Contractor's lawful obligations and any lawful claims against the Contractor that arose out of the performance of the Contract have been discharged and satisfied.

TP5 Progress Report and Payment Thereunder Not Binding on Her Majesty

Neither a progress claim referred to in TP4.3 nor any payment made by Her Majesty pursuant to these Terms of Payment will be construed as an admission by Her Majesty that the Work, material or any part thereof is complete, is satisfactory or is in accordance with the Contract.

TP6 Delay in Making Payment

- 6.1** Notwithstanding GC7 any delay by Her Majesty in making any payment when it is due pursuant to these Terms of Payment will not be a breach of the Contract by Her Majesty.
- 6.2** Her Majesty will be liable to pay to the Contractor simple interest at the average Bank Rate as defined in TP9.2.2 plus three percent (3%) per annum on any amount that is overdue, from the date such amount becomes overdue until the day prior to the date of payment, inclusive. No interest will be payable or paid in respect of payment unless the Contractor so requests after payment has become due
- 6.3** Interest will not be payable or paid unless the amount referred to in TP6.2 has been overdue for more than fifteen (15) days following:
- 6.3.1** The date the said amount became due and payable; or
- 6.3.2** The receipt by the Departmental Representative of the statutory declaration referred to in TP4.5, TP4.8 or TP4.11; whichever is the later, and
- 6.3.3** Interest will not be payable or paid on overdue advance payments if any.

TP7 Right of Set-off

- 7.1** Without limiting any right of set-off or deduction given or implied by law or elsewhere in the Contract, Her Majesty may set-off any amount payable to Her Majesty by the Contractor under this Contract or under any current contract against any amount payable to the Contractor under this Contract.
- 7.2** For the purposes of TP7.1, "current contract" means a contract between Her Majesty and the Contractor:
- 7.2.1** under which the Contractor has an undischarged obligation to perform or supply work, labour or material; or
- 7.2.2** In respect of which Her Majesty has, since the date on which the Articles of Agreement were made, exercised any right to take the Work that is the subject of the Contract out of the Contractor's hands.

TP8 Payment in Event of Termination

If the Contract is terminated pursuant to GC41, Her Majesty will pay the Contractor any amount that is lawfully due and payable to the Contractor as soon as is practicable under the circumstances.

TP9 Interest on Settled Claims

- 9.1** Her Majesty will pay to the Contractor simple interest on the amount of a settled claim at an average Bank of Canada Rate plus one and a quarter percent (1.25%) from the date the settled claim was outstanding until the day prior to the date of payment.
- 9.2** For the purposes of TP9.1:



- 9.2.1** A claim is deemed to have been settled when an agreement in writing is signed by the Departmental Representative and the Contractor setting out the amount of the claim to be paid by Her Majesty and the items of work for which the said amount is to be paid.
- 9.2.2** An "average Bank Rate" means the discount rate of interest set by the Bank of Canada in effect at the end of each calendar month averaged over the period the settled claim was outstanding.
- 9.2.3** A settled claim is deemed to be outstanding from the day immediately following the date the said claim would have been due and payable under the Contract had it not been disputed.
- 9.2.4** A claim means a disputed amount subject to negotiation between Her Majesty and the Contractor under the Contract.

TP10 Taxes

- 10.1** If applicable, the VAT or Canadian Goods and Services Tax (GST) is to be shown separately on all invoices and progress claims for Work performed, and will be paid by Her Majesty. The Contractor agrees to remit any GST due to Revenue Canada.
- 10.2** The Government of Canada GST registration number is 121491807.



Appendix "C" - GENERAL CONDITIONS

GC1 INTERPRETATION

1.1 In the Contract:

- 1.1.1 Where reference is made to a part of the Contract by means of numbers preceded by letters, the reference must be construed to be a reference to the particular part of the Contract that is identified by that combination of letters and numbers and to any other part of the Contract referred to therein;
- 1.1.2 "Contract" means the Contract Documents referred to in the Articles of Agreement;
- 1.1.3 "Contract security" means any security given by the Contractor to Her Majesty in accordance with the Contract;
- 1.1.4 "Days" means continuous calendar days, including weekends and statutory public holidays;
- 1.1.5 "Departmental Representative" means the officer, employee or person engaged by Her Majesty who is designated pursuant to the Articles of Agreement and includes a person specially authorized by him to perform, on his behalf, any of his functions under the Contract and is so designated in writing to the Contractor;
- 1.1.6 "Former Public Office Holder" means an employee of the executive or senior manager categories who was employed by the Canadian federal public service during the period of one (1) year immediately preceding the date of this Contract;
- 1.1.7 "Material" includes all commodities, articles and things required to be furnished by or for the Contractor under the Contract for incorporation into the Work;
- 1.1.8 "Minister" includes a person acting for, or if the office is vacant, in place of the Minister and his successors in the office, and his or their lawful deputy and any of his or their representatives appointed for the purposes of the Contract;
- 1.1.9 "Person" includes, unless the context otherwise requires, a partnership, proprietorship, firm, joint venture, consortium and a corporation;
- 1.1.10 "Plant" includes all animals, tools, implements, machinery, vehicles, buildings, structures, equipment and commodities, articles and things other than material, that are necessary for the due performance of the Contract;
- 1.1.11 "Subcontractor" means a person to whom the Contractor has, subject to GC4, subcontracted the whole or any part of the Work;
- 1.1.12 "Superintendent" means the employee of the Contractor who is designated by the Contractor to act pursuant to GC19;
- 1.1.13 "Technical documentation" means designs, reports, photographs, surveys, drawings, plans, specifications, computer software, computer printouts, calculations and other data, information and material, prepared, collected, computed, drawn, or produced for the Work; and
- 1.1.14 "Work" includes, subject only to any express stipulation in the Contract to the contrary, everything that is necessary to be done, furnished or delivered by the Contractor to perform the Contract.

- 1.2 The headings in the Contract documents, other than in the Plans and Specifications, form no part of the Contract but are inserted for convenience of reference only.
- 1.3 In interpreting the Contract, in the event of discrepancies or conflicts between anything in the Plans and Specifications and the General Conditions, the General Conditions govern.
- 1.4 Words importing the singular only also include the plural, and vice versa, where the context requires;
- 1.5 Headings or notes in the Contract will not be deemed to be part thereof, or be taken into consideration in its interpretation;
- 1.6 "Herein," "hereby," "hereof," "hereunder" and similar expressions refer to the Contract as a whole and not to any particular subdivision or part thereof.
- 1.7 In interpreting the Plans and Specifications, in the event of discrepancies or conflicts between:
 - 1.7.1 The Plans and Specifications, the Specifications govern;
 - 1.7.2 The Plans, the Plans drawn with the largest scale govern; and
 - 1.7.3 Figured dimensions and scaled dimensions, the figured dimensions govern.

GC2 SUCCESSORS AND ASSIGNS

The Contract will inure to the benefit of and be binding upon the parties hereto and their lawful heirs, executors, administrators, successors and assigns.

GC3 ASSIGNMENT OF CONTRACT

The Contract may not be assigned by the Contractor, either in whole or in part, without the written



consent of the Minister.

GC4 SUBCONTRACTING BY CONTRACTOR

- 4.1 Subject to this General Condition, the Contractor may subcontract any part of the Work.
- 4.2 The Contractor must notify the Departmental Representative in writing of his intention to subcontract.
- 4.3 A notification referred to in GC4.2 must identify the part of the Work, and the subcontractor with whom it is intended to subcontract.
- 4.4 The Departmental Representative may object to the intended subcontracting by notifying the Contractor in writing within six (6) days of receipt by the Departmental Representative of a notification referred to in GC4.2.
- 4.5 If the Departmental Representative objects to a subcontracting pursuant to GC4.4, the Contractor must not enter into the intended subcontract.
- 4.6 The Contractor must not, without the written consent of the Departmental Representative, change a subcontractor who has been engaged by him in accordance with this General Condition.
- 4.7 Every subcontract entered into by the Contractor must adopt all of the terms and conditions of this Contract that are of general application.
- 4.8 Neither a subcontracting nor the Departmental Representative's consent to a subcontracting by the Contractor will be construed to relieve the Contractor from any obligation under the Contract or to impose any liability upon Her Majesty.

GC5 AMENDMENTS

No amendment or change in any of the provisions of the Contract will have any force or effect until it is reduced to writing and signed by both parties.

GC6 NO IMPLIED OBLIGATIONS

- 6.1 No implied terms or obligations of any kind by or on behalf of Her Majesty will arise from anything in the Contract and the express covenants and agreements therein contained and made by Her Majesty are the only covenants and agreements upon which any rights against Her Majesty are to be founded.
- 6.2 The Contract supersedes all communications, negotiations and agreements, either written or oral, relating to the Work that were made prior to the date of the Contract.

GC7 TIME OF THE ESSENCE

Time is of the essence of the Contract.

GC8 INDEMNIFICATION BY CONTRACTOR

- 8.1 The Contractor must indemnify and save Her Majesty harmless from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings by whomever made, brought or prosecuted and in any manner based upon, arising out of, related to, occasioned by or attributable to the activities of the Contractor, his servants, agents, subcontractors and sub-subcontractors in performing the Work including an infringement or an alleged infringement of a patent of invention or any other kind of intellectual property.
- 8.2 For the purposes of GC8.1, "activities" includes any act improperly carried out, any omission to carry out an act and any delay in carrying out an act.

GC9 INDEMNIFICATION BY HER MAJESTY

- 9.1 Her Majesty will, subject to the Crown Liability Act, the Patent Act, and any other law that affects Her Majesty's rights, powers, privileges or obligations, indemnify and save the Contractor harmless from and against all claims, demands, losses, costs, damage, actions, suits or proceedings arising out of his activities under the Contract that are directly attributable to:
 - 9.2 Lack of or a defect in Her Majesty's title to the work site whether real or alleged; or
 - 9.3 An infringement or an alleged infringement by the Contractor of any patent of invention or any other kind of intellectual property occurring while the Contractor was performing any act for the purposes of the Contract employing a model, plan or design or any other thing related to the Work that was supplied by Her Majesty to the Contractor.

GC10 MEMBERS OF HOUSE OF COMMONS NOT TO BENEFIT

As required by the Parliament of Canada Act, it is an express condition of the Contract that no member of the Canadian House of Commons will be admitted to any share or part of the Contract or to any benefit arising therefrom.



GC11 NOTICES

- 11.1 Any notice, consent, order, decision, direction or other communication, other than a notice referred to in GC11.4, that may be given to the Contractor pursuant to the Contract may be given in any manner.
- 11.2 Any notice, consent, order, decision, direction or other communication required to be given in writing, to any party pursuant to the Contract will, subject to GC11.4, be deemed to have been effectively given:
 - 11.2.1 to the Contractor, if delivered personally to the Contractor or the Contractor's superintendent, or forwarded by mail, email or facsimile to the Contractor at the address set out in the Articles of Agreement; or
 - 11.2.2 to Her Majesty, if delivered personally to the Departmental Representative, or forwarded by mail, email or facsimile to the Departmental Representative at the address set out in C1.
- 11.3 Any such notice, consent, order, decision, direction or other communication given in accordance with GC11.2 will be deemed to have been received by either party:
 - 11.3.1 If delivered personally, on the day that it was delivered;
 - 11.3.2 If forwarded by mail, on the earlier of the day it was received and the sixth (6th) day after it was mailed; and
 - 11.3.3 If forwarded by email or facsimile, twenty-four (24) hours after it was transmitted.
- 11.4 A notice given under GC38.1.1, GC40 and GC41, if delivered personally, will be delivered to the Contractor if the Contractor is doing business as a sole proprietor or, if the Contractor is a partnership or corporation, to an officer thereof.

GC12 MATERIAL, PLANT AND REAL PROPERTY SUPPLIED BY HER MAJESTY

- 12.1 Subject to GC12.2, the Contractor is liable to Her Majesty for any loss of or damage to material, plant or real property that is supplied or placed in the care, custody and control of the Contractor by Her Majesty for use in connection with the Contract, whether or not that loss or damage is attributable to causes beyond the Contractor's control.
- 12.2 The Contractor is not liable to Her Majesty for any loss or damage to material, plant or real property referred to in GC12.1 if that loss or damage results from and is directly attributable to reasonable wear and tear.
- 12.3 The Contractor must not use any material, plant or real property referred to in GC12.1 except for the purpose of performing this Contract.
- 12.4 If the Contractor fails to make good any loss or damage for which he is liable under GC12.1 within a reasonable time after being required to do so by the Departmental Representative, the Departmental Representative may cause the loss or damage to be made good at the Contractor's expense, and the Contractor must thereupon be liable to Her Majesty for the cost thereof and must, on demand, pay to Her Majesty an amount equal to that cost.
- 12.5 The Contractor must keep such records of all material, plant and real property referred to in GC12.1 as the Departmental Representative from time to time requires and must satisfy the Departmental Representative, when requested, that such material, plant and real property are at the place and in the condition in which they ought to be.

GC13 MATERIAL, PLANT AND REAL PROPERTY BECOME PROPERTY OF HER MAJESTY

- 13.1 Subject to GC14.7 all material and plant and the interest of the Contractor in all real property, licences, powers and privileges purchased, used or consumed by the Contractor for the Contract will become the property of Her Majesty for the purposes of the Work and they will continue to be the property of Her Majesty:
 - 13.1.1 In the case of material, until the Departmental Representative indicates that he is satisfied that it will not be required for the Work; and
 - 13.1.2 In the case of plant, real property, licenses, powers and privileges, until the Departmental Representative indicates that he is satisfied that the interest vested in Her Majesty therein is no longer required for the purposes of the Work.
- 13.2 Material or plant that is the property of Her Majesty by virtue of GC13.1 must not be taken away from the work site or used or disposed of except for the purposes of the Work without the written consent of the Departmental Representative.
- 13.3 Her Majesty is not liable for loss of or damage from any cause to the material or plant referred to in GC13.1 and the Contractor is liable for such loss or damage notwithstanding that the material or plant is the property of Her Majesty.



GC14 PERMITS AND TAXES PAYABLE

- 14.1 The Contractor must, within fifteen (15) days after the date of the Contract, tender to a municipal authority an amount equal to all fees and charges that would be lawfully payable to that municipal authority in respect of building permits as if the Work were being performed for a person other than Her Majesty.
 - 14.1.1 The Contractor must be responsible for obtaining and pay for all necessary permits for all the Work to be undertaken under the Contract. He must give all notices and comply with all laws, rules and regulations bearing on the conduct of the Work as drawn and specified.
- 14.2 Within ten (10) days of making a tender pursuant to GC14.1, the Contractor must notify the Departmental Representative of his action and of the amount tendered and whether or not the municipal authority has accepted that amount.
- 14.3 If the municipal authority does not accept the amount tendered pursuant to GC14.1 the Contractor must pay that amount to Her Majesty within six (6) days after the time stipulated in GC14.2.
- 14.4 For the purposes of GC14.1 to GC14.3 "municipal authority" means any authority that would have jurisdiction respecting permission to perform the Work if the owner were not Her Majesty.
- 14.5 The Contractor must pay any and all applicable taxes arising from or relating to the performance of the Work under the Contract. The Contractor must also determine the extent of, and apply for, any and all exemptions that are, or may be, available due to the status of Her Majesty as a sovereign entity. Where the Contractor procures goods for incorporation into the Work, for such purposes, the Contractor will be an agent of Her Majesty. Any such exemptions that are available must be applied to the benefit of Her Majesty. The Contractor must obtain and provide sufficient documentation from the relevant authorities as to the availability of such exemptions.
- 14.6 In performing the Work under the Contract, the Contractor must abide by all of the laws in force in the local jurisdiction. Should the Contractor fail to pay any dues or taxes payable under those laws, the Minister, after giving the Contractor seven (7) days prior written notice of his intention so to do, will have the right to pay directly any such dues or taxes claimed, and deduct same from any payment due to the Contractor.
- 14.7 For the purpose of the payment of any and all applicable taxes or the furnishing of security for the payment of any and all applicable taxes arising from or related to the performance of the Work under the Contract, the Contractor will, notwithstanding the fact that all material, plant and interest of the Contractor in all real property, licences, powers and privileges, have become the property of Her Majesty after the time of purchase, be liable, as a user or consumer, for the payment or for the furnishing of security for the payment of any and all applicable taxes payable, at the time of the use or consumption of that material, plant or interest of the Contractor in accordance with the relevant legislation.

GC15 PERFORMANCE OF WORK UNDER DIRECTION OF DEPARTMENTAL REPRESENTATIVE

- 15.1 The Contractor must:
 - 15.1.1 Permit the Departmental Representative to have access to the Work and its site at all times during the performance of the Contract;
 - 15.1.2 Furnish the Departmental Representative with such information respecting the performance of the Contract as he may require; and
 - 15.1.3 Give the Departmental Representative every possible assistance to enable the Departmental Representative to carry out his duty to see that the Work is performed in accordance with the Contract and to carry out any other duties and exercise any powers specially imposed or conferred on the Departmental Representative under the Contract.

GC16 COOPERATION WITH OTHER CONTRACTORS

- 16.1 Where, in the opinion of the Departmental Representative, it is necessary that other contractors or workers with or without plant and material, be sent onto the Work or its site, the Contractor must, to the satisfaction of the Departmental Representative, allow them access and cooperate with them in the carrying out of their duties and obligation.
- 16.2 If:
 - 16.2.1 the sending onto the Work or its site of other contractors or workers pursuant to GC16.1 could not have been reasonably foreseen or anticipated by the Contractor when entering into the Contract;
 - 16.2.2 the Contractor incurs, in the opinion of the Departmental Representative, extra expense in complying with GC16.1; and



- 16.2.3 the Contractor has given the Departmental Representative written notice of his claim for the extra expense referred to in GC16.2.2 within thirty (30) days of the date that the other contractors or workers were sent onto the Work or its site;
- 16.3 Her Majesty will pay the Contractor the cost, calculated in accordance with GC48 to GC50, of the extra labour, plant and material that was necessarily incurred.

GC17 EXAMINATION OF WORK

- 17.1 If, at any time after the commencement of the Work but prior to the expiry of the warranty or guarantee period, the Departmental Representative has reason to believe that the Work or any part thereof has not been performed in accordance with the Contract, the Departmental Representative may have that Work examined by an expert of his choice.
- 17.2 If, as a result of an examination of the Work referred to in GC17.1, it is established that the Work was not performed in accordance with the Contract, then, in addition to and without limiting or otherwise affecting any of Her Majesty's rights and remedies under the Contract either at law or in equity, the Contractor must pay Her Majesty, on demand, all reasonable costs and expenses that were incurred by Her Majesty in having that examination performed.

GC18 CLEARING OF SITE

- 18.1 The Contractor must maintain the Work and its site in a tidy condition and free from the accumulation of waste material and debris, in accordance with any directions of the Departmental Representative.
- 18.2 Before the issue of an Interim Certificate of Completion referred to in GC44.2, the Contractor must remove all the plant and material not required for the performance of the remaining Work, and all waste material and other debris, and must cause the Work and its site to be clean and suitable for occupancy by Her Majesty's servants, unless otherwise stipulated in the Contract.
- 18.3 Before the issue of a Final Certificate of Completion referred to in GC44.1, the Contractor must remove from the Work and its site all of the surplus plant and material and any waste material and other debris.
- 18.4 The Contractor's obligations described in GC18.1 to GC18.3 do not extend to waste material and other debris caused by Her Majesty's servants or contractors and workers referred to in GC16.1

GC19 CONTRACTOR'S SUPERINTENDENT

- 19.1 The Contractor must, forthwith upon the award of the Contract, designate a superintendent.
- 19.2 The Contractor must forthwith notify the Departmental Representative of the name, address and telephone number of a superintendent designated pursuant to GC19.1.
- 19.3 A superintendent designated pursuant to GC19.1 must be in full charge of the operations of the Contractor in the performance of the Work and is authorized to accept any notice, consent, order, direction, decision or other communication on behalf of the Contractor that may be given to the superintendent under the Contract.
- 19.4 The Contractor must, until the Work has been completed, keep a competent superintendent at the work site during working hours.
- 19.5 The Contractor must, upon the request of the Departmental Representative, remove any superintendent who, in the opinion of the Departmental Representative, is incompetent or has been conducting himself improperly and must forthwith designate another superintendent who is acceptable to the Departmental Representative.
- 19.6 Subject to GC19.5, the Contractor must not substitute a superintendent without the written consent of the Departmental Representative.
- 19.7 A breach by the Contractor of GC19.6 entitles the Departmental Representative to refuse to issue any certificate referred to in GC44 until the superintendent has returned to the work site or another superintendent who is acceptable to the Departmental Representative has been substituted.

GC20 NATIONAL SECURITY

- 20.1 If the Minister is of the opinion that the Work is of a class or kind that involves the national security of Canada, he may order the Contractor:
 - 20.1.1 To provide him with any information concerning persons employed or to be employed by him for purposes of the Contract; and
 - 20.1.2 To remove any person from the Work and its site if, in the opinion of the Minister, that person may be a risk to the national security.



- 20.2 The Contractor must, in all contracts with persons who are to be employed in the performance of the Contract, make provision for his performance of any obligation that may be imposed upon him under GC19 to GC21.
- 20.3 The Contractor must comply with an order of the Minister under GC20.1.

GC21 UNSUITABLE WORKERS

The Contractor must, upon the request of the Departmental Representative, remove any person employed by him for purposes of the Contract who, in the opinion of the Departmental Representative, is incompetent or has conducted himself improperly, and the Contractor must not permit a person who has been removed to return to the work site.

GC22 INCREASED OR DECREASED COSTS

- 22.1 The amount set out in the Articles of Agreement will not be increased or decreased by reason of any increase or decrease in the cost of the Work that is brought about by an increase or decrease in the cost of labour, plant or material or any wage adjustment.
- 22.2 Notwithstanding GC22.1 and GC35, an amount set out in the Articles of Agreement will be adjusted in the manner provided in GC22.3, if any change occurs in a tax imposed under any sales tax legislation applicable under the governing law of this Contract relative to the purchase of tangible personal property to be incorporated into Real Property:
- 22.2.1 Occurs after the date of the submission by the Contractor of his tender for the Contract;
- 22.2.2 Applies to material; and
- 22.2.3 Affects the cost to the Contractor of that material.
- 22.3 If a change referred to in GC22.2 occurs, the appropriate amount set out in the Articles of Agreement will be increased or decreased by an amount equal to the amount that is established by an examination of the relevant records of the Contractor referred to in GC51 to be the increase or decrease in the cost incurred that is directly attributable to that change.
- 22.4 For the purpose of GC22.2, where a tax is changed after the date of submission of the tender but public notice of the change has been given by the appropriate local tax authorities before that date, the change will be deemed to have occurred before the date of submission of the tender.

GC23 LABOUR AND MATERIAL

- 23.1 The Contractor must at all time enforce strict discipline and good order amongst his employees, professional consultants and subcontractors and must not employ on the Work any unfit person nor anyone unskilled in the Work assigned to him.
- 23.2 The Contractor warrants that all materials and workmanship to be supplied by him will be of a quality consistent with the specifications of the Contract.

GC24 PROTECTION OF WORK AND DOCUMENTS

- 24.1 The Contractor must guard or otherwise protect the Work and its site, and protect the Contract, specifications, plans, drawings, information, material, plant and real property, whether or not they are supplied by Her Majesty to the Contractor, against loss or damage from any cause, and he must not use, issue, disclose or dispose of them without the written consent of the Minister, except as may be essential for the performance of the Work.
- 24.2 If any document or information given or disclosed to the Contractor is assigned a security rating by the person who gave or disclosed it, the Contractor must take all measures directed by the Departmental Representative to be taken to ensure the maintenance of the degree of security that is ascribed to that rating.
- 24.3 The Contractor must provide all facilities necessary for the purpose of maintaining security, and must assist any person authorized by the Minister to inspect or to take security measures in respect of the Work and its site.
- 24.4 The Departmental Representative may direct the Contractor to do such things and to perform such additional Work as the Departmental Representative considers reasonable and necessary to ensure compliance with or to remedy a breach of GC24.1 to GC24.3.

GC25 PUBLIC CEREMONIES AND SIGNS

- 25.1 The Contractor must not permit any public ceremony in connection with the Work without the prior written consent of the Departmental Representative.
- 25.2 The Contractor must not erect or permit the erection of any sign or advertising on the Work or its site without the prior written consent of the Departmental Representative.



GC26 PRECAUTIONS AGAINST DAMAGE, INFRINGEMENT OF RIGHTS, FIRE, AND OTHER HAZARDS

- 26.1 The Contractor must, at his own expense, do whatever is necessary to ensure that:
- 26.1.1 No person, property, right, easement or privilege is injured, damaged or infringed by reasons of the Contractor's activities in performing the Contract;
 - 26.1.2 Pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted or endangered by the performance or existence of the Work or plant;
 - 26.1.3 Fire hazards in or about the Work or its site are eliminated and, subject to any direction that may be given by the Departmental Representative, any fire is promptly extinguished;
 - 26.1.4 The health and safety of all persons employed in the performance of the Work are not endangered by the method or means of its performance;
 - 26.1.5 Adequate medical services are available to all persons employed on the Work or its site at all times during the performance of the Work;
 - 26.1.6 Adequate sanitation measures are taken in respect of the Work and its site; and
 - 26.1.7 All stakes, buoys and marks placed on the Work or its site by or under the authority of the Departmental Representative are protected and are not removed, defaced, altered or destroyed.
- 26.2 The Departmental Representative may direct the Contractor to do such things and to perform such additional Work as the Departmental Representative considers reasonable and necessary to ensure compliance with or to remedy a breach of GC26.1.
- 26.3 The Contractor must, at his own expense, comply with a direction of the Departmental Representative made under GC26.2.

GC27 INSURANCE

- 27.1 The Contractor must, at his own expense, obtain and maintain insurance contracts in respect of the Work and must provide evidence thereof to the Departmental Representative in accordance with the requirements of Appendix "D", Insurance Conditions of the Draft Contract
- 27.2 The insurance Contracts referred to in GC27.1 must:
- 27.2.1 be in a form, of the nature, in the amounts, for the periods and containing the terms and conditions specified in Appendix "D", Insurance Conditions of the Draft Contract, and
 - 27.2.2 provide for the payment of claims under such insurance Contracts in accordance with GC28.

GC28 INSURANCE PROCEEDS

- 28.1 In the case of a claim payable under a Builders Risk/Installation (All Risks) insurance Contract maintained by the Contractor pursuant to GC27, the proceeds of the claim must be paid directly to Her Majesty, and:
- 28.1.1 the monies so paid will be held by Her Majesty for the purposes of the Contract; or
 - 28.1.2 Her Majesty elects, will be retained by Her Majesty, in which event they vest in Her Majesty absolutely.
- 28.2 In the case of a claim payable under a General Liability Insurance Contract maintained by the Contractor pursuant to GC27, the proceeds of the claim must be paid by the insurer directly to the claimant.
- 28.3 If an election is made pursuant to GC28.1, the Minister may cause an audit to be made of the accounts of the Contractor and of Her Majesty in respect of the part of the Work that was lost, damaged or destroyed for the purpose of establishing the difference, if any, between:
- 28.3.1 the aggregate of the amount of the loss or damage suffered or sustained by Her Majesty, including any costs incurred in respect of the clearing and cleaning of the Work and its site and any other amount that is payable by the Contractor to Her Majesty under the Contract, minus any monies retained pursuant to GC28.1.2; and
 - 28.3.2 The aggregate of the amounts payable by Her Majesty to the Contractor pursuant to the Contract up to the date of the loss or damage.
- 28.4 A difference that is established pursuant to GC28.3 must be paid forthwith by the party who is determined by the audit to be the debtor to the party who is determined by the audit to be the creditor.
- 28.5 When payment of a deficiency has been made pursuant to GC28.4, all rights and obligations of Her Majesty and the Contractor under the Contract will, with respect only to the part of the Work that was the subject of the audit referred to in GC28.3, be deemed to have been expended and discharged.
- 28.6 If an election is not made pursuant to GC28.1.2 the Contractor must, subject to GC28.7, clear and clean the Work and its site and restore and replace the part of the Work that was lost, damaged or destroyed at his own expense as if that part of the Work had not yet been performed.



- 28.7 When the Contractor clears and cleans the Work and its site and restores and replaces the Work referred to in GC28.6, Her Majesty will pay him out of the monies referred to in GC28.1 so far as they will there unto extend.
- 28.8 Subject to GC28.7, payment by Her Majesty pursuant to GC28.7 will be made in accordance with the Contract but the amount of each payment will be one hundred percent (100%) of the amount claimed notwithstanding TP4.4.

GC29 CONTRACT SECURITY
NOT APPLICABLE

GC30 CHANGES IN THE WORK

- 30.1 Subject to GC5, the Departmental Representative may, at any time before he issues the Final Certificate of Completion:
- 30.1.1 Order Work or material in addition to that provided for in the Plans and Specifications; and
 - 30.1.2 Delete or change the dimensions, character, quantity, quality, description, location or position of the whole or any part of the Work or material provided for in the Plans and Specifications or in any order made pursuant to GC30.1.1, if that additional Work or material, deletion, or change is, in his opinion, consistent with the general intent of the original Contract.
- 30.2 The Contractor must perform the Work in accordance with such orders, deletions and changes that are made by the Departmental Representative pursuant to GC30.1 from time to time as if they had appeared in and been part of the Plans and Specifications.
- 30.3 The Departmental Representative will determine whether or not anything done or omitted by the Contractor pursuant to an order, deletion or change referred to in GC30. 1 increased or decreased the cost of the Work to the Contractor.
- 30.4 If the Departmental Representative determines pursuant to GC30.3 that the cost of the Work to the Contractor has been increased, Her Majesty will pay the Contractor the increased cost that the Contractor necessarily incurred for the additional Work calculated in accordance with GC49 or GC50.
- 30.5 If the Departmental Representative determines pursuant to GC30.3 that the cost of the Work to the Contractor has been decreased, Her Majesty will reduce the amount payable to the Contractor under the contract by an amount equal to the decrease in the cost caused by the deletion or change referred to in GC30.1.2 and calculated in accordance with GC49.
- 30.6 Articles GC30.3 to GC30.5 are applicable only to a contract or a portion of a contract for which a Firm Price Arrangement is stipulated in the Contract.
- 30.7 An order, deletion or change referred to in GC30. 1 will be in writing, signed by the Departmental Representative and given to the Contractor in accordance with GC11.

GC31 INTERPRETATION OF CONTRACT BY DEPARTMENTAL REPRESENTATIVE

- 31.1 If, at any time before the Departmental Representative has issued a Final Certificate of Completion referred to in GC44.1, any question arises between the parties about whether anything has been done as required by the Contract or about what the Contractor is required by the Contract to do, and, in particular but without limiting the generality of the foregoing, about:
- 31.1.1 the meaning of anything in the Plans and Specifications;
 - 31.1.2 the meaning to be given to the Plans and Specifications in case of any error therein, omission therefrom, or obscurity or discrepancy in their wording or intention;
 - 31.1.3 whether or not the quality or quantity of any material or workmanship supplied or proposed to be supplied by the Contractor meets the requirements of the Contract;
 - 31.1.4 the Work and carrying out the Contract are adequate to ensure that the Work will be performed in accordance with the Contract and that the Contract will be carried out in accordance with its terms;
 - 31.1.5 what quantity of any kind of Work has been completed by the Contractor; or
 - 31.1.6 the timing and scheduling of the various phases of the performance of the Work, the question will be decided by the Departmental Representative whose decision will be final and conclusive in respect of the Work.
- 31.2 The Contractor must perform the Work in accordance with any decisions of the Departmental Representative that are made under GC31.1 and in accordance with any consequential directions given by the Departmental Representative.

GC32 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK



- 32.1 Without restricting any warranty or guarantee implied or imposed by law or contained in the contract documents, the Contractor must, at his own expense:
 - 32.1.1 Rectify and make good any defect or fault that appears in the Work or comes to the attention of the Minister with respect to those parts of the Work accepted in connection with the Interim Certificate of Completion referred to GC44.2 within twelve (12) months from the date of the Interim Certificate of Completion; and
 - 32.1.2 Rectify and make good any defect or fault that appears in or comes to the attention of the Minister in connection with those parts of the Work described in the Interim Certificate of Completion referred to in GC44.2 within twelve (12) months from the date of the Final Certificate of Completion referred to in GC44.1.
- 32.2 The Departmental Representative may direct the Contractor to rectify and make good any defect or fault referred to in GC32.1 or covered by any other expressed or implied warranty or guarantee.
- 32.3 A direction referred to in GC32.2 will be in writing, may include a stipulation in respect of the time within which a defect or fault is required to be rectified and made good by the Contractor, and will be given to the Contractor in accordance with GC11.
- 32.4 The Contractor must rectify and make good any defect or fault described in a direction given pursuant to GC32.2 within the time stipulated therein.

GC33 NON-COMPLIANCE BY CONTRACTOR

- 33.1 If the Contractor fails to comply with any decision or direction given by the Departmental Representative pursuant to GC18, GC24, GC26, GC31 or GC32, the Departmental Representative may employ such methods as he deems advisable to do that which the Contractor failed to do.
- 33.2 The Contractor must, on demand, pay Her Majesty an amount that is equal to the aggregate of all costs, expenses and damage incurred or sustained by Her Majesty by reason of the Contractor's failure to comply with any decision or direction referred to in GC33.1, including the cost of any methods employed by the Departmental Representative pursuant to GC33.1.

GC34 PROTESTING DEPARTMENTAL REPRESENTATIVE'S DECISIONS

- 34.1 The Contractor may, within ten (10) days after the communication to him of any decision or direction referred to in GC30.3 or GC33.1, protest that decision or direction.
- 34.2 A protest referred to in GC34.1 must be in writing, contain full reasons for the protest, be signed by the Contractor and be given to Her Majesty by delivery to the Departmental Representative.
- 34.3 If the Contractor gives a protest pursuant to GC34.2, any compliance by the Contractor with the decision or direction that was protested will not be construed as an admission by the Contractor of the correctness of that decision or direction, or prevent the Contractor from taking whatever action he considers appropriate in the circumstances.
- 34.4 The giving of a protest by the Contractor pursuant to GC34.2 will not relieve him from complying with the decision or direction that is the subject of the protest.
- 34.5 Subject to GC34.6, the Contractor must take any action referred to in GC34.3 within three (3) months after the date that a Final Certificate of Completion is issued under GC44.1, and not afterwards.
- 34.6 The Contractor must take any action referred to in GC34.3 resulting from a direction under GC32 within three (3) months after the expiry of a warranty or guarantee period and not afterwards.
- 34.7 Subject to GC34.8, if Her Majesty determines that the Contractor's protest is justified, Her Majesty will pay the Contractor the cost of the additional labour, plant and material necessarily incurred by the Contractor in carrying out the protested decision or direction.
- 34.8 Costs referred to in GC34.7 will be calculated in accordance with GC48 to GC50.

GC35 CHANGES IN SOIL CONDITIONS AND NEGLIGENCE OR DELAY BY HER MAJESTY

- 35.1 Subject to GC35.2 no payment, other than a payment that is expressly stipulated in the contract, will be made by Her Majesty to the Contractor for any extra expense or any loss or damage incurred or sustained by the Contractor.
- 35.2 If the Contractor incurs or sustains any extra expense or any loss or damage that is directly attributable to:
 - 35.2.1 a substantial difference between the information relating to soil conditions at the work site that is contained in the Plans and Specifications or other documents supplied to the Contractor for his use in preparing his tender or a reasonable assumption of fact based thereon made by the Contractor, and the actual soil conditions encountered by the Contractor at the work site during the performance of the Contract; or



- 35.2.2 any neglect or delay that occurs after the date of the Contract on the part of Her Majesty in providing any information or in doing any act that the Contract either Her Majesty to do or that would ordinarily be done by an owner in accordance with the usage of the trade, he will, within ten (10) days of the date the actual soil conditions described in GC35.2.1 were encountered or the neglect or delay described in GC35.2.2 occurred, give the Departmental Representative written notice of his intention to claim for that extra expense or that loss or damage.
- 35.3 When the Contractor has given a notice referred to in GC35.2, he must give the Departmental Representative a written claim for extra expense or loss or damage within thirty (30) days of the date that a Final Certificate of Completion referred to in GC44.1 is issued and not afterwards.
- 35.4 A written claim referred to in GC35.3 must contain a sufficient description of the facts and circumstances of the occurrence that is the subject of the claim to enable the Departmental Representative to determine whether or not the claim is justified and the Contractor must supply such further and other information for that purpose as the Departmental Representative requires from time to time.
- 35.5 If the Departmental Representative determines that a claim referred to in GC35.3 is justified, Her Majesty will make an extra payment to the Contractor in an amount that is calculated in accordance with GC47 to GC50.
- 35.6 If, in the opinion of the Departmental Representative, an occurrence described in GC35.2.1 results in a savings of expenditure by the Contractor in performing the Contract, the amount set out in the Articles of Agreement will, subject to GC35.7, be reduced by an amount that is equal to the saving.
- 35.7 The amount of the saving referred to in GC35.6 will be determined in accordance with GC47 to GC49.
- 35.8 If the Contractor fails to give a notice referred to in GC35.2 and a claim referred to in GC35.3 within the times stipulated, an extra payment will not be made to him in respect of the occurrence.

GC36 EXTENSION OF TIME

- 36.1 Subject to GC36.2, the Departmental Representative may, on the application of the Contractor made before the day fixed by the Articles of Agreement for completion of the Work or before any other date previously fixed under this General Condition, extend the time for its completion by fixing a new date if, in the opinion of the Departmental Representative, causes beyond the control of the Contractor have delayed its completion.
- 36.2 An application referred to in GC36.1 will be accompanied by the written consent of the bonding company whose bond forms part of the contract security.

GC37 ASSESSMENTS AND DAMAGES FOR LATE COMPLETION

- 37.1 For the purposes of this General Condition:
- 37.1.1 the Work will be deemed to be completed on the date that an Interim Certificate of Completion referred to in GC44.2 is issued; and
- 37.1.2 "Period of delay" means the number of days commencing on the day fixed by the Contract for completion of the Work and ending on the day immediately preceding the day on which the Work is completed but does not include any day within a period of extension granted pursuant to GC36. 1, and any other day on which, in the opinion of the Departmental Representative, completion of the Work was delayed for reasons beyond the control of the Contractor.
- 37.2 If the Contractor does not complete the Work by the day fixed for its completion by the Articles of Agreement but completes it thereafter, the Contractor must pay Her Majesty an amount equal to the aggregate of:
- 37.2.1 All salaries, wages and travelling expenses incurred by Her Majesty in respect of persons overseeing the performance of the Work during the period of delay;
- 37.2.2 The cost incurred by Her Majesty as a result of the inability to use the completed Work for the period of delay; and
- 37.2.3 All other expenses and damages incurred or sustained by Her Majesty during the period of delay as a result of the Work not being completed by the day fixed for its completion.
- 37.3 The Minister may waive the right of Her Majesty to the whole or any part of the amount payable by the Contractor pursuant to GC37.2 if, in the opinion of the Minister, it is in the public interest to do so.
- 37.3.1 Her Majesty may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies due or become due to the Contractor. The payment or deduction of such damages will not relieve the Contractor from his obligation to complete the Works, or from any other of his obligations and liabilities under the Contract.

GC38 TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS



- 38.1 The Minister may, at his sole discretion, by giving a notice in writing to the Contractor in accordance with GC11, take all or any part of the Work out of the Contractor's hands, and may employ such means as he sees fit to have the Work completed if the Contractor:
- 38.1.1 Has not, within six (6) days of the Minister or the Departmental Representative giving notice to the Contractor in writing in accordance with GC11, remedied any delay in the commencement or any default in the diligent performance of the Work to the satisfaction of the Departmental Representative;
 - 38.1.2 Has defaulted in the completion of any part of the Work within the time fixed for its completion by the Contract;
 - 38.1.3 Has become insolvent;
 - 38.1.4 Has committed an act of bankruptcy;
 - 38.1.5 Has abandoned the Work;
 - 38.1.6 Has made an assignment of the contract without the consent required by GC3; or
 - 38.1.7 Has otherwise failed to observe or perform any of the provisions of the Contract.
- 38.2 If the whole or any part of the Work is taken out of the Contractor's hands pursuant to GC38.1:
- 38.2.1 the Contractor's right to any further payment that is due or accruing under the Contract is, subject only to GC38.4, extinguished; and
 - 38.2.2 The Contractor is liable to pay Her Majesty, upon demand, an amount that is equal to the amount of all loss and damage incurred or sustained by Her Majesty in respect of the Contractor's failure to complete the Work.
- 38.3 If the whole or any part of the Work that is taken out of the Contractor's hands pursuant to GC38.1 is completed by Her Majesty, the Departmental Representative will determine the amount, if any, of the holdback or a progress claim that had accrued and was due prior to the date on which the Work was taken out of the Contractor's hands and that is not required for the purposes of having the Work performed or of compensating Her Majesty for any other loss or damage incurred or sustained by reason of the Contractor's default.
- 38.4 Her Majesty will pay the Contractor the amount determined not to be required pursuant to GC38.3.

GC39 EFFECT OF TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS

- 39.1 The taking of the Work or any part thereof out of the Contractor's hands pursuant to GC38 does not operate so as to relieve or discharge him from any obligation under the Contract or imposed upon him by law except the obligation to complete the performance of that part of the Work that was taken out of his hands.
- 39.2 If the Work or any part thereof is taken out of the Contractor's hands pursuant to GC38, all plant and material and the interest of the Contractor in all real property, licences, powers and privileges acquired, used or provided by the Contractor under the Contract will continue to be the property of Her Majesty without compensation to the Contractor.
- 39.3 When the Departmental Representative certifies that any plant, material, or any interest of the Contractor referred to in GC39.2 is no longer required for the purposes of the Work, or that it is not in the interests of Her Majesty to retain that plant, material, or interest, it will revert to the Contractor.

GC40 SUSPENSION OF WORK BY MINISTER

- 40.1 The Minister may, when in his opinion it is in the public interest to do so, require the Contractor to suspend performance of the Work either for a specified or an unspecified period by giving a notice of suspension in writing to the Contractor in accordance with GC11.
- 40.2 When a notice referred to in GC40.1 is received by the Contractor in accordance with GC11, he must suspend all operations in respect of the Work except those that, in the opinion of the Departmental Representative, are necessary for the care and preservation of the Work, plant and material.
- 40.3 The Contractor must not, during a period of suspension, remove any part of the Work, plant or material from its site without the written consent of the Departmental Representative.
- 40.4 If a period of suspension is thirty (30) days or less, the Contractor must, upon the expiration of that period, resume the performance of the Work and he is entitled to be paid the extra cost, calculated in accordance with GC48 to GC50, of any labour, plant and material necessarily incurred by him as a result of the suspension.
- 40.5 If, upon the expiration of a period of suspension of more than thirty (30) days, the Minister and the Contractor agree that the performance of the Work will be continued by the Contractor, the Contractor must resume performance of the Work subject to any terms and conditions agreed upon by the Minister and the Contractor.



- 40.6 If, upon the expiration of a period of suspension of more than thirty (30) days, the Minister and the Contractor do not agree that performance of the Work will be continued by the Contractor or upon the terms and conditions under which the Contractor will continue the Work, the notice of suspension will be deemed to be a notice of termination pursuant to GC41.

GC41 TERMINATION OF CONTRACT

- 41.1 The Minister may terminate the Contract at any time by giving a notice of termination in writing to the Contractor in accordance with GC11.
- 41.2 When a notice referred to in GC41.1 is received by the Contractor in accordance with GC11, he must, subject to any conditions stipulated in the notice, forthwith cease all operations in performance of the Contract.
- 41.3 If the Contract is terminated pursuant to GC41.1, Her Majesty will pay the Contractor, subject to GC41.4 an amount equal to:
- 41.3.1 the cost to the Contractor of all labour, plant and material supplied by him under the Contract up to the date of termination in respect of a contract or part thereof for which a Unit Price Arrangement is stipulated in the Contract; or the lesser of:
 - 41.3.2 An amount, calculated in accordance with the Terms of Payment, that would have been payable to the Contractor had he completed the Work; and
 - 41.3.3 An amount that is determined to be due to the Contractor pursuant to GC49 in respect of a contract or part thereof for which a Firm Price Arrangement is stipulated in the Contract less the aggregate of all amounts that were paid to the Contractor by Her Majesty and all amounts that are due to Her Majesty from the Contractor pursuant to the Contract.
- 41.4 If Her Majesty and the Contractor are unable to agree about an amount referred to in GC41.3 that amount will be determined by the method referred to in GC50.

GC42 CLAIMS AGAINST AND OBLIGATIONS OF THE CONTRACTOR OR SUBCONTRACTOR

- 42.1 Her Majesty may, in order to discharge lawful obligations of and satisfy claims against the Contractor or a Subcontractor arising out of the performance of the Contract, pay any amount that is due and payable to the Contractor pursuant to the Contract directly to the obligees of and the claimants against the Contractor or the Subcontractor but such amount if any, as is paid by Her Majesty will not exceed that amount which the Contractor would have been obliged to pay to such claimant pursuant to legislation applicable under the governing law of the Contract. Any such claimant need not comply with the provisions of such legislation setting out the steps by way of notice, registration or otherwise as might have been necessary to preserve or perfect any claim for lien or privilege which claimant might have had, however Her Majesty will, prior to paying any such claims, provide the Contractor with ten (10) days prior written notice to the effect that She will be so doing.
- 42.2 Her Majesty will not make any payment as described in GC42.1 unless and until that claimant will have delivered to Her Majesty:
- 42.2.1 A binding and enforceable Judgment or Order of a court of competent jurisdiction setting forth such amount as would have been payable by the Contractor to the claimant pursuant to the provisions of the legislation applicable under the governing law of this Contract ;
 - 42.2.2 A final and enforceable award of an arbitrator setting forth such amount as would have been payable by the Contractor to the claimant pursuant to the provisions of the legislation applicable under the governing law of this Contract; or
 - 42.2.3 The consent of the Contractor authorizing a payment.
- 42.3 For the purposes of determining the entitlement of a claimant pursuant to GC42.2.1 and GC42.2.2, the notice required by GC42.8 will be deemed to replace the registration or provision of notice after the performance of Work as required by any applicable legislation and no claim will be deemed to have expired, become void or unenforceable by reason of the claimant not commencing any action within the time prescribed by any applicable legislation.
- 42.4 The Contractor must, by the execution of this Contract, be deemed to have consented to submit to binding arbitration at the request of any claimant those questions that need be answered to establish the entitlement of the claimant to payment pursuant to the provisions of GC42.1 and such arbitration must have as parties to it any Subcontractor to whom the claimant supplied material, performed Work or rented equipment should such Subcontractor wish to be adjoined and Her Majesty will not be a party to such arbitration and, subject to any agreement between the Contractor and the claimant to the contrary, the arbitration will be conducted in accordance with the applicable legislation governing arbitration.



- 42.5 A payment made pursuant to GC42.1 is, to the extent of the payment, a discharge of Her Majesty's liability to the Contractor under the Contract and may be deducted from any amount payable to the Contractor under the Contract.
- 42.6 The Contractor must comply with all laws in force in the jurisdiction where the Work is being performed relating to payment period, mandatory holdbacks, and creation and enforcement of mechanics' liens, builder's liens, privileges or similar legislation.
- 42.7 The Contractor must discharge all his lawful obligations and must satisfy all lawful claims against him arising out of the performance of the Work at least as often as the Contract requires Her Majesty to pay the Contractor.
- 42.8 The Contractor must, whenever requested to do so by the Departmental Representative, make a statutory declaration deposing to the existence and condition of any obligations and claims referred to in GC42.6.
- 42.9 GC42.1 will only apply to claims and obligations:
- 42.9.1 The notification of which has been received by the Departmental Representative in writing before payment is made to the Contractor pursuant to TP4.10 and within one hundred and twenty (120) days of the date on which the claimant;
- 42.9.1.1 Should have been paid in full under the claimant's contract with the Contractor or Subcontractor where the claim is for money that was lawfully required to be held back from the claimant; or
- 42.9.1.2 Performed the last of the services, Work or labour, or furnished the last of the material pursuant to the claimant's contract with the Contractor or Subcontractor where the claim is not for money referred to in GC42.9.1.1; and
- 42.9.2 The proceedings to determine the right to payment of which, pursuant to GC42.2, will have commenced within one year from the date that the notice referred to in GC42.9.1 was received by the Departmental Representative, and the notification required by GC42.9.1 will set forth the amount claimed to be owing and the person who by contract is primarily liable.
- 42.10 Her Majesty may, upon receipt of a notice of claim under GC42.9.1, withhold from any amount that is due and payable to the Contractor pursuant to the Contract the full amount of the claim or any portion thereof.
- 42.11 The Departmental Representative will notify the Contractor in writing of receipt of any claim referred to in GC42.9.1 and of the intention of Her Majesty to withhold funds pursuant to GC42.10 and the Contractor may, at any time thereafter and until payment is made to the claimant, be entitled to post, with Her Majesty, security in a form acceptable to Her Majesty in an amount equal to the value of the claim, the notice of which is received by the Departmental Representative and upon receipt of such security Her Majesty will release to the Contractor any funds which would be otherwise payable to the Contractor, that were withheld pursuant to the provisions of GC42.10 in respect of the claim of any claimant for whom the security stands.

GC43 SECURITY DEPOSIT - FORFEITURE OR RETURN

- 43.1 If:
- 43.1.1 The Work is taken out of the Contractor's hands pursuant to GC38;
- 43.1.2 The Contract is terminated pursuant to GC41; or
- 43.1.3 The Contractor is in breach of or in default under the Contract;
- 43.2 Her Majesty may convert the security deposit, if any, to Her own use.
- 43.3 If Her Majesty converts the contract security pursuant to GC43.1, the amount realized will be deemed to be an amount due from Her Majesty to the Contractor under the Contract.
- 43.4 Any balance of an amount referred to in GC43.3 that remains after payment of all losses, damage and claims of Her Majesty and others will be paid by Her Majesty to the Contractor if, in the opinion of the Departmental Representative, it is not required for the purposes of the Contract.

GC44 DEPARTMENTAL REPRESENTATIVE'S CERTIFICATES

- 44.1 On the date that:
- 44.1.1 the Work has been completed; and
- 44.1.2 The Contractor has complied with the Contract and all orders and directions made pursuant thereto, both to the satisfaction of the Departmental Representative, the Departmental Representative will issue a Final Certificate of Completion to the Contractor.
- 44.2 If the Departmental Representative is satisfied that the Work is substantially complete he will, at any time before he issues a certificate referred to in GC44.1, issue an Interim Certificate of Completion to



the Contractor, and for the purposes of GC44.2 the Work will be considered to be substantially complete:

- 44.2.1 When the Work under the Contract or a substantial part thereof is, in the opinion of the Departmental Representative, ready for use by Her Majesty or is being used for the purposes intended; and
- 44.2.2 when the Work remaining to be done under the Contract is, in the opinion of the Departmental Representative, capable of completion or correction at a cost of not more than:
 - 44.2.2.1 Three percent (3%) of the first \$500,000;
 - 44.2.2.2 Two percent (2%) of the next \$500,000, and
 - 44.2.2.3 One percent (1%) of the balance of the value of the Contract at the time this cost is calculated.
- 44.3 For the sole purpose of GC44.2.2, where the Work or a substantial part thereof is ready for use or is being used for the purposes intended and the remainder of the Work or a part thereof cannot be completed by the time specified in C3, or as amended pursuant to GC36, for reasons beyond the control of the Contractor or where the Departmental Representative and the Contractor agree in writing not to complete a part of the Work within the specified time, the cost of that part of the Work which was either beyond the control of the Contractor to complete or the Departmental Representative and the Contractor have agreed in writing not to complete by the time specified will be deducted from the value of the Contract referred to GC44.2.2 and the said cost will not form part of the cost of the Work remaining to be done in determining substantial completion.
- 44.4 An Interim Certificate of Completion referred to in GC44.2 will describe the parts of the Work not completed to the satisfaction of the Departmental Representative and all things that must be done by the Contractor:
 - 44.4.1 before a Final Certificate of Completion referred to in GC44.1 will be issued; and
 - 44.4.2 Before the twelve (12) month period referred to in GC32.1.2. will commence for the said parts and all the said things.
- 44.5 The Departmental Representative may, in addition to the parts of the Work described in an Interim Certificate of Completion referred to in GC44.2, require the Contractor to rectify any other parts of the Work not completed to his satisfaction and to do any other things that are necessary for the satisfactory completion of the Work.
- 44.6 If the Contract or a part thereof is subject to a Unit Price Arrangement, the Departmental Representative will measure and record the quantities of labour, plant and material, performed, used and supplied by the Contractor in performing the Work and will, at the request of the Contractor, inform him of those measurements.
- 44.7 The Contractor must assist and cooperate with the Departmental Representative in the performance of his duties referred to in GC44.6 and will be entitled to inspect any record made by the Departmental Representative pursuant to GC44.6.
- 44.8 After the Departmental Representative has issued a Final Certificate of Completion referred to in GC44.1, he will, if GC44.6 applies, issue a Final Certificate of Measurement.
- 44.9 A Final Certificate of Measurement referred to in GC44.8 will:
 - 44.9.1 contain the aggregate of all measurements of quantities referred to in GC44.6; and
 - 44.9.2 Be binding upon and conclusive between Her Majesty and the Contractor as to the quantities referred to therein.

GC45 RETURN OF SECURITY DEPOSIT

- 45.1 After an Interim Certificate of Completion referred to in GC44.2 has been issued, Her Majesty will, if the Contractor is not in breach of or in default under the Contract, return to the Contractor all or any part of the security deposit that, in the opinion of the Departmental Representative, is not required for the purposes of the Contract.
- 45.2 After a Final Certificate of Completion referred to in GC44.1 has been issued, Her Majesty will return to the Contractor the remainder of any security deposit unless the Contract stipulates otherwise.
- 45.3 If the security deposit was paid into the Consolidated Revenue Fund of Canada, Her Majesty will pay interest thereon to the Contractor at a rate established from time to time pursuant to section 21(2) of Canada's Financial Administration Act.

GC46 CLARIFICATION OF TERMS IN GC47 TO GC50

- 46.1 For the purposes of GC47 to GC50:
 - 46.1.1 "Unit Price Table" means the table set out in the Contract; and
 - 46.1.2 "Plant" does not include tools customarily provided by a tradesman in practising his trade.



GC47 ADDITIONS OR AMENDMENTS TO UNIT PRICE TABLE

- 47.1 Where a Unit Price Arrangement applies to the Contract or a part thereof the Departmental Representative and the Contractor may, by an agreement in writing:
- 47.1.1 Add classes of labour, plant or material, and units of measurement, prices per unit and estimated quantities to the Unit Price Table if any labour, plant or material that is to be included in the Final Certificate of Measurement referred to in GC44.8 is not included in any class of labour, plant or material set out in the Unit Price Table; or
 - 47.1.2 subject to GC47.2 and GC47.3, amend a price per unit set out in the Unit Price Table for any class of labour, plant or material included therein if the Final Certificate of Measurement referred to in GC44.8 shows or is expected to show that the total quantity of that class of labour, plant or material actually, used or supplied by the Contractor in performing the Work is:
 - 47.1.2.1 Less than eighty-five percent (85%) of that estimated total quantity; or
 - 47.1.2.2 In excess of one hundred and fifteen percent (115%) of that estimated total quantity.
- 47.2 In no event will the total cost of an item set out in the Unit Price Table that has been amended pursuant to GC47.1.2.1. exceed the amount that would have been payable to the Contractor had the estimated total quantity actually been performed, used or supplied.
- 47.3 An amendment that is made necessary by GC47.1.2.2 will apply only to the quantities that are in excess of one hundred and fifteen percent (115%).
- 47.4 If the Departmental Representative and the Contractor do not agree as contemplated in GC47.1, the Departmental Representative will determine the class and the unit of measurement of the labour, plant or material and, subject to GC47.2 and GC47.3, the price per unit therefor will be determined in accordance with GC50.

GC48 DETERMINATION OF COST - UNIT PRICE TABLE

Whenever, for the purposes of the Contract it is necessary to determine the cost of labour, plant or material, it will be determined by multiplying the quantity of that labour, plant or material expressed in the Unit Price Table by the price of that unit set out by agreement in a unit price table which will be included in the Contract prior to signing.

GC49 DETERMINATION OF COST - NEGOTIATION

- 49.1 If the method described in GC48 cannot be used because the labour, plant or material is of a kind or class that is not set out in the Unit Price Table, the cost of that labour, plant or material for the purposes of the Contract will be the amount agreed upon from time to time by the Contractor and the Departmental Representative.
- 49.2 For the purposes of GC49.1, the Contractor must submit to the Departmental Representative any necessary cost information requested by the Departmental Representative in respect of the labour, plant and material referred to in GC49.1.

GC50 DETERMINATION OF COST - FAILING NEGOTIATION

- 50.1 If the methods described in GC47, GC48 or GC49 fail for any reason to achieve a determination of the cost of labour, plant and material for the purposes referred to therein, that cost will be equal to the aggregate of:
- 50.1.1 all reasonable and proper amounts actually expended or legally payable by the Contractor in respect of the labour, plant and material that falls within one of the classes of expenditure described in GC50.2 that are directly attributable to the performance of the Contract;
 - 50.1.2 an allowance for profit and all other expenditures or costs, including overhead, general administration costs, financing and interest charges, and every other cost, charge and expenses, but not including those referred to in GC50.1.1 or GC50.1.3 or of a class referred to in GC50.2, in an amount that is equal to ten percent (10%) of the sum of the expenses referred to in GC50.1.1, and interest on the costs determined under GC50.1.1 and GC50.1.3, which interest will be calculated in accordance with TP9.
 - 50.1.3 provided that the total cost of an item set out in the Unit Price Table that is subject to the provisions of GC47.1.2 does not exceed the amount that would have been payable to the Contractor had the estimated total quantity of the said item actually been performed, used or supplied.
- 50.2 For purposes of GC50.1.1. the classes of expenditure that may be taken into account in determining the cost of labour, plant and material are:
- 50.2.1 Payments to subcontractors;



- 50.2.2 Wages, salaries and travelling expenses of employees of the Contractor while they are actually and properly engaged on the Work, other than wages, salaries, bonuses, living and travelling expenses of personnel of the Contractor generally employed at the head office or at a general office of the Contractor unless they are engaged at the work site with the approval of the Departmental Representative;
- 50.2.3 Assessments payable under any statutory authority relating to workmen's compensation, employment insurance, pension plan or holidays with pay;
- 50.2.4 Rent that is paid for plant or an amount equivalent to the said rent if the plant is owned by the Contractor that is necessary for and used in the performance of the Work, if the rent or the equivalent amount is reasonable and use of that plant has been approved by the Departmental Representative;
- 50.2.5 Payments for maintaining and operating plant necessary for and used in the performance of the Work, and payments for effecting such repairs thereto as, in the opinion of the Departmental Representative, are necessary to the proper performance of the Contract other than payments for any repairs to the plant arising out of defects existing before its allocation to the Work;
- 50.2.6 Payments for material that is necessary for and incorporated in the Work, or that is necessary for and consumed in the performance of the Contract;
- 50.2.7 Payments for preparation, delivery, handling, erection, installation, inspection, protection and removal of the plant and material necessary for and used in the performance of the Contract; and
- 50.3 Any other payments made by the Contractor with the written approval of the Departmental Representative that are necessary for the performance of the Contract.

GC51 RECORDS TO BE KEPT BY CONTRACTOR

- 51.1 The Contractor must:
 - 51.1.1 Maintain full records of his estimated and actual cost of the Work together with all tender calls, quotations, contracts, correspondence, invoices, receipts and vouchers relating thereto;
 - 51.1.2 Make all records and material referred to in GC51.1.1 available to audit and inspection by the Minister and the Deputy Receiver General for Canada or by persons acting on behalf of either or both of them, when requested;
 - 51.1.3 Allow any of the persons referred to in GC51.1.2 to make copies of and to take extracts from any of the records and material referred to in GC51.1.1; and
 - 51.1.4 Furnish any person referred to in GC51.1.2 with any information he may require from time to time in connection with such records and material.
- 51.2 The records maintained by the Contractor pursuant to GC51.1.1 must be kept intact by the Contractor until the expiration of two (2) years after the date that a Final Certificate of Completion referred to in GC44.1 was issued or until the expiration of such other period of time as the Minister may direct.
- 51.3 The Contractor must cause all subcontractors and all other persons directly or indirectly controlled by or affiliated with the Contractor and all persons directly or indirectly having control of the Contractor to comply with GC51.1 and GC51.2 as if they were the Contractor.

GC52 CONFLICT OF INTEREST

It is a term of this Contract that no former public office holder who is not in compliance with the Government of Canada's Conflict of Interest and Post-Employment Code for Public Office Holders will derive a direct benefit from this Contract.

GC53 CONTRACTOR STATUS

- 53.1 The Contractor will be engaged under the contract as an independent Contractor.
- 53.2 The Contractor or any employee of the said Contractor is not engaged by the Contract as an employee, servant or agent of Her Majesty.
- 53.3 For the purposes of GC53.1 and GC53.2 the Contractor must be solely responsible for any and all payments and deductions required to be made by law including those required for pension plans, employment insurance, workers' compensation or income tax.

GC54 GOVERNING LAWS

The Contract will be governed by the laws in force in the jurisdiction defined in section C14 of the Articles of Agreement.

GC55 SOVEREIGN IMMUNITY



Notwithstanding any provision in this Contract, Her Majesty the Queen in Right of Canada, does not waive any immunity to which she is or may be entitled to by virtue of domestic or international law.

GC56 HUMAN REMAINS, ARCHAEOLOGICAL REMAINS AND ITEMS OF HISTORICAL OR SCIENTIFIC INTEREST

- 56.1 For the purposes of this clause:
 - 56.1.1 Human remains means the whole or any part of a deceased human being, irrespective of the time that has elapsed since death;
 - 56.1.2 Archaeological remains are items, artefacts or things made, modified or used by human beings in antiquity and may include, but not are limited to, stone, wood, or iron structures; monuments, bump deposits, bone artifacts, weapons, tools, coins, or pottery; and
 - 56.1.3 Items of historical or scientific interest are naturally occurring or manufactured objects or things of any age that are not archaeological remains but may be of interest to society because of their historical or scientific significance, value, rarity, natural beauty, or other quality.
- 56.2 If, during the course of the Work, the Contractor encounters any object, item or thing which is described in clause GC56.1, or which resembles any object, item or thing described in clause GC56.1, the Contractor must:
 - 56.2.1 take all reasonable steps, including immediately stopping the Work in the affected area, to protect and preserve the object, item or thing;
 - 56.2.2 immediately notify the Departmental Representative of the circumstances in writing; and
 - 56.2.3 Take all reasonable steps to minimize additional costs which may accrue as a result of any work stoppage.
- 56.3 Upon receipt of a notification in accordance with GC56.2.2, the Departmental Representative will, in a timely manner, determine whether the object, item, or things is one described in, or contemplated by, clause GC56.1, and will notify the Contractor in writing of any action to be performed, or Work to be carried out, by the Contractor as a result of the Departmental Representative's determination.
- 56.4 The Departmental Representative may, at any time, enlist the services of experts, particularly an archaeologist or historian as appropriate, to assist in the investigation, examination, taking of measurements or other such recordings, placing of permanent protection around or removing of the object, item or thing encountered by the Contractor, and monitoring in case of further discoveries, and the Contractor must, to the satisfaction of the Departmental Representative, allow them access and cooperate with them in the carrying out of their duties and obligations.
- 56.5 Human remains, archaeological remains and items of historical or scientific interest encountered at the site of the Work will remain the property of her Majesty.
- 56.6 Accept as may be otherwise provided for in the contract, the provisions of GC30 will apply.

GC57 CONTAMINATED SITE CONDITIONS

- 57.1 For the purposes of this clause, a contaminated site condition exists when toxic, radioactive or other hazardous substances or materials, or other pollutants, are found to be present at the site of the Work to the extent that they constitute a hazard, or potential hazard, to the environment, property, or the health or safety of any person.
- 57.2 If the Contractor encounters a contaminated site condition, or has reasonable grounds to believe that a contaminated site condition exists at the site of the Work, the Contractor must:
 - 57.2.1 take all reasonable steps, including stopping the Work, to ensure that no person suffers injury, sickness or death, and that neither property nor the environment is injured or destroyed as a result of the contaminated site condition;
 - 57.2.2 immediately notify the Departmental Representative of the circumstances in writing; and
 - 57.2.3 Take all reasonable steps to minimize additional costs which may accrue as a result of any work stoppage.
- 57.3 Upon receipt of a notification in accordance with GC57.2.2, the Departmental Representative will, in a timely manner, determine whether a contaminated site condition as described in, or contemplated by, clause GC57.1, exists, and will notify the Contractor in writing of any action to be taken, or Work to be performed, by the Contractor as a result of the Departmental Representative's determination.
- 57.4 If the Contractor's services are required by the Departmental Representative, the Contractor must follow the direction of the Departmental Representative with regard to any excavation, treatment and disposal of the contaminated substances or materials.
- 57.5 The Departmental Representative may at any time, and at the Departmental Representative's sole discretion, enlist the services of experts and specialty contractors to assist in determining the existence of, and the extent and treatment of the contaminated site condition, and the Contractor must,



to the satisfaction of the Departmental Representative, allow them access and cooperate with them in the carrying out of their duties and obligations.

57.6 Accept as may be otherwise provided for in the Contract, the provisions of GC30 will apply.

GC58 CERTIFICATION - CONTINGENCY FEES

58.1 The Contractor certifies that it has not directly or indirectly paid or agreed to pay and covenants that it will not directly or indirectly pay or agree to pay a contingency fee for the solicitation, negotiation or obtaining of this Contract to any person other than an employee acting in the normal course of the employee's duties.

58.2 All accounts and records pertaining to payments of fees or other compensation for the solicitation, obtaining or negotiation of the Contract will be subject to the accounts and audit provisions of the Contract.

58.3 If the Contractor certifies falsely under GC58.1 or is in default of the obligations contained therein, Her Majesty may either take the Work out of the Contractor's hands in accordance with the provisions of the Contract to recover from the Contractor by way of reduction to the Contract amount or otherwise the full amount of the contingency fee.

58.4 For the purposes of GC58:

58.4.1 "Contingency fee" means any payment or other compensation that is contingent upon or is calculated upon the basis of a degree of success in soliciting or obtaining a Government contract or negotiation the whole or any part of its terms;

58.4.2 "Employee" means a person with whom the Contractor has an employer/employee relationship; and

58.4.3 "Person" includes an individual or a group of individuals, a corporation, a partnership, an organization and an association and, without restricting the generality of the foregoing, includes any individual who is required to file a return with the registrar pursuant to section 5 of the Lobbyist Registration Act R.S. 1985 c.44 (4th Supplement) as the same may be amended from time to time.

GC59 DISPUTE SETTLEMENT

59.1 Mutual Discussions

The Contractor and Her Majesty, which for the purpose of this GC 59.1 will jointly be referred to as the "Parties" and severally as the "Party," agree that if any dispute arises out of or in connection with this Contract, including without limitation any question regarding its existence, validity, termination of rights or obligation of any party, the Parties will attempt, for a period of thirty (30) days after receipt by one Party of a notice from the other Party of indicating:

59.1.1 the existence of the dispute

59.1.2 its basic substance; and

59.1.3 The other Party's decision to refer the dispute to arbitration in accordance with GC59 of the Contract, the Parties will attempt to settle the dispute by mutual discussions between them.

59.2 Referral to Arbitration

Any such dispute that cannot be settled amicably by mutual discussion within the thirty (30) day period referred to above, will be settled by arbitration under the arbitration of the Province of Ontario (the "Rules"). The venue of the arbitration will be conducted in the province of Ontario, Canada. Any notice of arbitration, response or other communication given to or by a party to the arbitration will be given and deemed received as provided in the Rules. The costs of the arbitration will be determined and paid by the parties to the arbitration as provided in the Rules.

59.3 Appointments of Arbitrators

Each of the Parties has the right to appoint one (1) arbitrator. The two (2) arbitrators will in turn appoint the third arbitrator. Should either Party fail to appoint its respective arbitrator within thirty (30) days from the date requested by the other Party, or should the two (2) arbitrators so appointed fail to appoint the third arbitrator within thirty (30) days from the date of appointment of the second arbitrator then such arbitrator(s) will be appointed by the chairman of the Attribution of the Association of Chartered Engineers in the Province of Ontario, Canada.

59.4 No Legal Proceedings

Each Party agrees that it will not institute any legal proceedings arising out of or in connection with this Contract, except only as provided in this GC34 and each party agrees that it will apply to the court having jurisdiction to homologate for legal enforcement the decision rendered by the arbitral tribunal. In the event any legal proceedings are instituted in any court to enforce any arbitration award, the person or persons against whom enforcement of that arbitration award is sought will pay all costs, including



without limitation the costs of legal counsel and translation fees, of the person or persons seeking to enforce the arbitration award.

59.5 Award Binding

The arbitration must be held within six (6) months of the date of appointment of the arbitrator and the arbitrator is authorized to assess costs against a party who has caused delay or who has failed to comply with any rules of the arbitration. The decision of the arbitrator will be final, binding and incontestable and may be used as a basis for judgement thereon in the Province of Ontario, Canada, or elsewhere.

59.6 Waivers

The Parties expressly agree to waive Article 48.1 of Law No. 30 Year 1999 on Arbitration and Alternative Dispute Resolution, so that the mandate of the arbitrators duly constituted in accordance with the terms of this Contract will remain in effect until a final arbitration award has been issued by the arbitrators.

59.7 Enforcement of Awards

For the purpose of enforcing any arbitration award, the Parties choose the general, permanent and not-exclusive domicile of the Office of the Registrar of the Province of Ontario, Canada, without prejudice to the Parties' rights to enforce any arbitration award in any court having jurisdiction over the other Party or its assets.

GC60 FORCE MAJEURE

60.1 Relief from Performance

Neither Her Majesty nor the Contractor will be liable to the other for any delay in or failure to render, any act or thing to be performed pursuant to this Contract, to the extent that such delay or failure is caused by an event of force majeure. The effected party must use its best endeavours to eliminate the effects of the force majeure as soon as possible and resume performance hereunder.

60.2 No termination

This Contract must not be terminated by temporary force majeure and the rights and obligations of the Contractor and Her Majesty must be restored in full after any period of force majeure has ended.

60.3 Payment of Moneys

60.3.1 If as a consequence of money that is required to be paid by one Party pursuant to the terms and conditions of this Contract cannot be so paid in the manner directed by this Contract due to an event of force majeure, then the Party required to pay must notify the Party entitled to receive the money of the former's inability to pay and the reasons for it.

60.3.2 The Party entitled to receive the money will designate to the Party required to pay an alternative place for payment and the latter will remit the funds to that place for the Party entitled to receive the funds.

60.4 Force Majeure Events

Force majeure events will include, without limitation, any act of God, civil commotion or delays caused by governmental restriction affecting all or any portion of the Work which prevents or materially restricts either party from performing its obligations hereunder for which such party is responsible

GC61 HEALTH AND SAFETY

61.1 The Contractor must ensure, in fulfilling its contractual obligations under this Contract, that its employees and agents are appropriately equipped with all safety clothing and equipment required to perform the Work.

61.2 The Contractor must further ensure that its employees and agents adhere to and follow all applicable health and safety regulations, standards and procedures in force in the jurisdiction and have been trained and will use all mandatory safety equipment imposed by local law when completing the Work under this Contract.



APPENDIX "D" - INSURANCE CONDITIONS

IC1 PROOF OF INSURANCE

- 1.1 The Contractor must, at its own expense, obtain and maintain insurance as provided hereunder with companies subject to approval in writing by Her Majesty.
- 1.2 Immediately following notification of Contract award and preceding the start of any on-site Work, the Contractor must have its insurance broker, agency or underwriter inform the Departmental Representative in writing that all insurance required hereunder is in force.
- 1.3 Within fourteen (14) days after acceptance of the Contractor's tender, the Contractor must, unless otherwise directed in writing by the Departmental Representative, deposit with the Departmental Representative an Insurer's Certificate of Insurance in the form displayed in this document and, if requested by the Departmental Representative, the originals or certified true copies of all contracts of insurance maintained by the Contractor pursuant to the Insurance Coverage Requirements shown hereunder.

IC2 RISK MANAGEMENT

- 2.1 The provisions of the Insurance Coverage Requirements contained hereunder are not intended to cover all of the Contractor's obligations under GC8 of the General Conditions Appendix "C" of the Contract. Any additional risk management measures or additional insurance coverages the Contractor may deem necessary to fulfill its obligations under GC8 will be at its own discretion and expense.

IC3 PAYMENT OF DEDUCTIBLE

- 3.1 The payment of monies up to the deductible amount made in satisfaction of a claim will be borne by the Contractor.

IC4 TYPES OF INSURANCE REQUIRED

- 4.1 The Contractor will obtain the following types of commercial insurance coverage:
 - 4.1.1 Comprehensive General Liability Insurance ("CGL"); and
 - 4.1.2 Builder's Risk - Direct Damage Insurance ("BR").

IC5 ADDITIONAL NAMED INSURED

- 5.1 Each insurance policy must insure the Contractor, and must include as Additional Named Insured, the Owner, being Her Majesty the Queen in right of Canada, represented by the Minister of Foreign Affairs and the Employees or servants of both Her Majesty and the Contractor.

IC6 PERIOD OF INSURANCE COVERAGE

- 6.1 Unless otherwise directed in writing by the Departmental Representative, the policies required hereunder must attach from the date of contract award and must be maintained until the day of issue of the Final Certificate of Completion.

IC7 NOTIFICATION

- 7.1 Each insurance policy must contain a provision that thirty (30) days prior written notice will be given by the Insurer to the Departmental Representative in the event of any material change in, cancellation of, or expiration of coverage. Any notice affecting a material change in, cancellation of, or expiration of coverage received by the Contractor must be transmitted forthwith to the Departmental Representative.



PART I - COMPREHENSIVE GENERAL LIABILITY (CGL)

CGL1 LIMITS

- 1.1 The policy must be written on a form similar to that known and referred to in the insurance industry as IBC 2100 - Commercial General Liability policy (Occurrence form) and must provide for limit of liability of not less than the amount stated in C9, inclusive of Bodily Injury and Property Damage for any one occurrence or series of occurrences arising out of one cause. Legal or defence costs incurred in respect of a claim or claims must not operate to decrease the limit of liability.

CGL2 COVERAGES

- 2.1 The policy must include but not necessarily be limited to the following coverages:
- 2.1.1 All premises, property and operations necessary or incidental to the performance of this Contract;
 - 2.1.2 Personal injury;
 - 2.1.3 Bodily injury and Property Damage on an "occurrence" basis;
 - 2.1.4 "Broad Form" Property Damage including the loss of use of property;
 - 2.1.5 Removal or weakening of support of any property, building or land whether such support be natural or otherwise;
 - 2.1.6 Elevator Liability (including Escalators, Hoists and Similar Devices);
 - 2.1.7 Contingent Employer's Liability;
 - 2.1.8 Owner's and Contractor's Protective Liability;
 - 2.1.9 Contractual and Assumed Liabilities under this Contract;
 - 2.1.10 Completed Operations and Products Liability;
The insurance must continue for a period of at least two (2) years beyond the date of the Departmental Representative's Final Certificate of Completion for the Completed Operations Hazard.
 - 2.1.11 Cross Liability;
The clause must be written as follows:
Cross Liability
The insurance as is afforded by this policy must apply in respect to any claim or action brought against any one Insured by any other Insured. The coverage will apply in the same manner and to the same extent as though a separate policy had been issued to each Insured. The inclusion herein of more than one Insured must not operate to increase the limit of the Insurer's liability.
 - 2.1.12 Severability of Interests Clause;
The clause must be written as follows:
Severability of Interests
This policy, subject to the limits of liability stated herein, must apply separately to each Insured in the same manner and to the same extent as it a separate policy had been issued to each. This inclusion herein of more than one insured must not increase the limit of the Insurer's liability.
- 2.2 Period of Insurance Coverage:
The period of required insurance coverage for all insurance elements listed in CGL2: Coverages must be from the date of execution of this contract until the date of issuance by the Departmental Representative of the Final Certificate of Completion.

CGL3 ADDITIONAL EXPOSURES

- 3.1 The policy must be endorsed to include the following exposures or hazards if the Work is subject thereto:
- 3.1.1 Blasting;
 - 3.1.2 Pile driving and caisson work;
 - 3.1.3 Underpinning;
 - 3.1.4 Risks associated with the activities of the contractor on an active airport;
 - 3.1.5 Radioactive contamination resulting from the use of commercial isotopes; and
 - 3.1.6 Damage to the portion of an existing building beyond that directly associated with an addition, renovation or installation contract. (The care, custody and control exclusion will not apply.)



CGL4 INSURANCE PROCEEDS

4.1 Insurance Proceeds from this policy are payable directly to a Claimant/Third Party.

CGL5 DEDUCTIBLE

5.1 The policy must be issued with a deductible amount of not more than \$500.00 per occurrence applying to Property Damage claims only.



PART II - BUILDER'S RISK - DIRECT DAMAGE (BR)

BR1 SCOPE OF POLICY

- 1.1 The policy must be written on an "All Risks" basis granting coverage similar to that provided by the form known and referred to in the Insurance Industry as "Builders' Risk Comprehensive Form."

BR2 PROPERTY INSURED

- 2.1 The property insured must include:
- 2.1.1 The Work and all property, equipment and materials intended to become part of the finished Work at the site of the project while awaiting, during and after installation, erection or construction including testing;
 - 2.1.2 Expenses incurred in the removal from the construction site of debris of the property insured, including demolition of damaged property, de-icing and de-watering, occasioned by loss, destruction or damage to such property and in respect of which insurance is provided by this policy; and
 - 2.1.3 Equipment and materials required for the execution or temporary protection of the Work.

BR3 INSURANCE PROCEEDS

- 3.1 Insurance Proceeds from this policy are payable in accordance with GC28 of the General Conditions of the Contract.
- 3.2 The policy must provide that the proceeds thereof are payable to Her Majesty or as the Minister may direct.
- 3.3 The Contractor must do such things and execute such documents as are necessary to effect payment of the proceeds.

BR4 AMOUNT OF INSURANCE

- 4.1 The amount of insurance must not be less than the sum of the contract value plus the declared value (if any) set forth in the contract documents of all material and equipment supplied by Her Majesty at the site of the project to be incorporated into and to form part of the finished Work.

BR5 DEDUCTIBLE

- 5.1 The policy must be issued with a deductible amount of not more than \$1,000.00 CAD.

BR6 EXCLUSION QUALIFICATIONS

- 6.1 The policy may be subject to the standard exclusions but the following qualifications must apply:
- 6.1.1 Faulty materials, workmanship or design may be excluded only to the extent of the cost of making good thereof and will not apply to loss or damage resulting therefrom;
 - 6.1.2 Loss or damage caused by contamination by radioactive material may be excluded except for loss or damage resulting from commercial isotopes used for industrial measurement, inspection, quality control, radiographic or photographic use; and
 - 6.1.3 Use and occupancy of the project or any part or section thereof must be permitted where such is for the purposes for which the project is intended upon completion.



BROKER'S CERTIFICATE OF INSURANCE

(TO BE DELIVERED TO THE DEPARTMENTAL REPRESENTATIVE BEFORE THE START OF ANY ON-SITE WORK)

COVERING:

DESCRIPTION OF WORK: _____

LOCATION OF WORK: _____

ISSUED BY:

BROKER/AGENT: _____

ADDRESS: _____

ISSUED TO: FOREIGN AFFAIRS, TRADE AND DEVELOPMENT CANADA

ADDRESS: 125 SUSSEX DRIVE, OTTAWA, ONTARIO CANADA K1A 0G2

NAMED INSURED:

CONTRACTOR: _____

ADDRESS: _____

This document certifies that the following policies of Insurance are at present in force covering all operations of the Insured, effective from _____ 20__ in connection with Foreign Affairs, Trade and Development Canada, for the _____ made between the Named Insured and Foreign Affairs, Trade and Development Canada.

TYPE	POLICY NUMBER	EXPIRY DATE OF LIABILITY			LIMITS	DEDUCTIBLE
		DAY	MONTH	YEAR		
Comprehensive General Liability						
Builder's Risk "All Risks"						

Each of these policies provides coverages as specified in Appendix "D", Insurance Conditions of the Draft Contract which form part of this Contract.

The Insurer agrees to notify Her Majesty and the Named Insured in writing thirty (30) days prior to any material change in, cancellation of, or expiration of any policy or coverage.

Name - Broker/Agent's Authorized Representative Signature-Broker/Agent's Authorized Representative Date Telephone Number

ISSUANCE OF THIS CERTIFICATE WILL NOT LIMIT OR RESTRICT THE RIGHT OF HER MAJESTY TO REQUEST AT ANY TIME DUPLICATE CERTIFIED COPIES OF SAID INSURANCE POLICIES.



INSURER'S CERTIFICATE OF INSURANCE

(TO BE DELIVERED TO THE DEPARTMENTAL REPRESENTATIVE BEFORE THE START OF ANY ON-SITE WORK)

COVERING:
DESCRIPTION OF WORK:
LOCATION OF WORK:
ISSUED BY:
BROKER/AGENT:
ADDRESS:

ISSUED TO: FOREIGN AFFAIRS, TRADE AND DEVELOPMENT CANADA
ADDRESS: 125 SUSSEX DRIVE, OTTAWA, ONTARIO CANADA K1A 0G2

NAMED INSURED:
CONTRACTOR:
ADDRESS:

This document certifies that the following policies of Insurance are at present in force covering all operations of the Insured, effective from 20 in connection Foreign Affairs, Trade and Development Canada, for the made between the Named Insured and Foreign Affairs, Trade and Development Canada.

Table with 7 columns: TYPE, POLICY NUMBER, EXPIRY DATE OF LIABILITY (DAY, MONTH, YEAR), LIMITS, DEDUCTIBLE. Rows include Comprehensive General Liability and Builder's Risk 'All Risks'.

Each of these policies provides coverages as specified in Appendix 'D', Insurance Conditions of the Draft Contract which form part of this Contract.

The Insurer agrees to notify Her Majesty and the Named Insured in writing thirty (30) days prior to any material change in, cancellation of, or expiration of any policy or coverage.

Name - Insurer's Authorized Representative, Signature- Insurer's Authorized Representative, Date, Telephone Number

ISSUANCE OF THIS CERTIFICATE WILL NOT LIMIT OR RESTRICT THE RIGHT OF HER MAJESTY TO REQUEST AT ANY TIME DUPLICATE CERTIFIED COPIES OF SAID INSURANCE POLICIES.



APPENDIX "E" – SECURITY REQUIREMENTS CHECKLIST (SRCL)



Government of Canada / Gouvernement du Canada

Contract Number / Numéro du contrat
Security Classification / Classification de sécurité PROTECTED A

SECURITY REQUIREMENTS CHECK LIST (SRCL) / LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)

PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE		
1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine GAC	2. Branch or Directorate / Direction générale ou Direction BEJING	
3. a) Subcontract Number / Numéro du contrat de sous-traitance N/A	3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant N/A	
4. Brief Description of Work / Brève description du travail The contractor will repair the roof membrane of IRCC roof		
5. a) Will the supplier require access to Controlled Goods? / Le fournisseur aura-t-il accès à des marchandises contrôlées?	<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui	
5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control Regulations? / Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques?	<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui	
6. Indicate the type of access required / Indiquer le type d'accès requis		
6. a) Will the supplier and its employees require access to PROTECTED and/or CLASSIFIED information or assets? / Le fournisseur ainsi que les employés auront-ils accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS? (Specify the level of access using the chart in Question 7. c) / (Préciser le niveau d'accès en utilisant le tableau qui se trouve à la question 7. c)	<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui	
6. b) Will the supplier and its employees (e.g. cleaners, maintenance personnel) require access to restricted access areas? No access to PROTECTED and/or CLASSIFIED information or assets is permitted. / Le fournisseur et ses employés (p. ex. nettoyeurs, personnel d'entretien) auront-ils accès à des zones d'accès restreintes? L'accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS n'est pas autorisé.	<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui	
6. c) Is this a commercial courier or delivery requirement with no overnight storage? / S'agit-il d'un contrat de messagerie ou de livraison commerciale sans entreposage de nuit?	<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui	
7. a) Indicate the type of information that the supplier will be required to access / Indiquer le type d'information auquel le fournisseur devra avoir accès		
Canada <input type="checkbox"/>	NATO / OTAN <input type="checkbox"/>	Foreign / Étranger <input type="checkbox"/>
7. b) Release restrictions / Restrictions relatives à la diffusion		
No release restrictions / Aucune restriction relative à la diffusion <input type="checkbox"/>	All NATO countries / Tous les pays de l'OTAN <input type="checkbox"/>	No release restrictions / Aucune restriction relative à la diffusion <input type="checkbox"/>
Not releasable / À ne pas diffuser <input type="checkbox"/>		
Restricted to: / Limité à: <input type="checkbox"/>	Restricted to: / Limité à: <input type="checkbox"/>	Restricted to: / Limité à: <input type="checkbox"/>
Specify country(ies): / Préciser le(s) pays:	Specify country(ies): / Préciser le(s) pays:	Specify country(ies): / Préciser le(s) pays:
7. c) Level of information / Niveau d'information		
PROTECTED A / PROTÉGÉ A <input type="checkbox"/>	NATO UNCLASSIFIED / NATO NON CLASSIFIÉ <input type="checkbox"/>	PROTECTED A / PROTÉGÉ A <input type="checkbox"/>
PROTECTED B / PROTÉGÉ B <input type="checkbox"/>	NATO RESTRICTED / NATO DIFFUSION RESTREINTE <input type="checkbox"/>	PROTECTED B / PROTÉGÉ B <input type="checkbox"/>
PROTECTED C / PROTÉGÉ C <input type="checkbox"/>	NATO CONFIDENTIAL / NATO CONFIDENTIEL <input type="checkbox"/>	PROTECTED C / PROTÉGÉ C <input type="checkbox"/>
CONFIDENTIAL / CONFIDENTIEL <input type="checkbox"/>	NATO SECRET / NATO SECRET <input type="checkbox"/>	CONFIDENTIAL / CONFIDENTIEL <input type="checkbox"/>
SECRET / SECRET <input type="checkbox"/>	COSMIC TOP SECRET / COSMIC TRÈS SECRET <input type="checkbox"/>	SECRET / SECRET <input type="checkbox"/>
TOP SECRET / TRÈS SECRET <input type="checkbox"/>		TOP SECRET / TRÈS SECRET <input type="checkbox"/>
TOP SECRET (SIGINT) / TRÈS SECRET (SIGINT) <input type="checkbox"/>		TOP SECRET (SIGINT) / TRÈS SECRET (SIGINT) <input type="checkbox"/>

TBS/SCT 350-103(2004/12)

Security Classification / Classification de sécurité PROTECTED A





Government of Canada / Gouvernement du Canada

Contract Number / Numéro du contrat
Security Classification / Classification de sécurité PROTECTED A

PART A (continued) / PARTIE A (suite)

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets?
Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS? No / Non Yes / Oui
If Yes, indicate the level of sensitivity:
Dans l'affirmative, indiquer le niveau de sensibilité :

9. Will the supplier require access to extremely sensitive INFOSEC information or assets?
Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate? No / Non Yes / Oui
Short Title(s) of material / Titre(s) abrégé(s) du matériel :
Document Number / Numéro du document :

PART B - PERSONNEL (SUPPLIER) / PARTIE B - PERSONNEL (FOURNISSEUR)

10. a) Personnel security screening level required / Niveau de contrôle de la sécurité du personnel requis

<input type="checkbox"/> RELIABILITY STATUS COTE DE FIABILITÉ	<input type="checkbox"/> CONFIDENTIAL CONFIDENTIEL	<input type="checkbox"/> SECRET SECRET	<input type="checkbox"/> TOP SECRET TRÈS SECRET
<input type="checkbox"/> TOP SECRET - SIGINT TRÈS SECRET - SIGINT	<input type="checkbox"/> NATO CONFIDENTIAL NATO CONFIDENTIEL	<input type="checkbox"/> NATO SECRET NATO SECRET	<input type="checkbox"/> COSMIC TOP SECRET COSMIC TRÈS SECRET
<input checked="" type="checkbox"/> SITE ACCESS ACCÈS AUX EMPLACEMENTS			

Special comments:
Commentaires spéciaux : _____

NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided.
REMARQUE : Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.

10. b) May unscreened personnel be used for portions of the work?
Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail? No / Non Yes / Oui
If Yes, will unscreened personnel be escorted?
Dans l'affirmative, le personnel en question sera-t-il escorté? No / Non Yes / Oui

PART C - SAFEGUARDS (SUPPLIER) / PARTIE C - MESURES DE PROTECTION (FOURNISSEUR)

INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS

11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises?
Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS? No / Non Yes / Oui

11. b) Will the supplier be required to safeguard COMSEC information or assets?
Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC? No / Non Yes / Oui

PRODUCTION

11. c) Will the production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment occur at the supplier's site or premises?
Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ? No / Non Yes / Oui

INFORMATION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)

11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data?
Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS? No / Non Yes / Oui

11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency?
Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale? No / Non Yes / Oui



Government of Canada / Gouvernement du Canada

Contract Number / Numéro du contrat
Security Classification / Classification de sécurité PROTECTED A

PART C - (continued) / PARTIE C - (suite)

For users completing the form manually use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises. Les utilisateurs qui remplissent le formulaire manuellement doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form online (via the Internet), the summary chart is automatically populated by your responses to previous questions. Dans le cas des utilisateurs qui remplissent le formulaire en ligne (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

SUMMARY CHART / TABLEAU RÉCAPITULATIF

Category / Catégorie	PROTECTED / PROTÉGÉ			CLASSIFIED / CLASSIFIÉ			NATO				COMSEC					
	A	B	C	CONFIDENTIAL / CONFIDENTIEL	SECRET	TOP SECRET / TRÈS SECRET	NATO RESTRICTED / NATO DIFFUSION RESTREINTE	NATO CONFIDENTIAL / NATO CONFIDENTIEL	NATO SECRET	COSMIC TOP SECRET / COSMIC TRÈS SECRET	PROTECTED / PROTÉGÉ			CONFIDENTIAL / CONFIDENTIEL	SECRET	TOP SECRET / TRÈS SECRET
											A	B	C			
Information / Assets / Renseignements / Biens / Production																
IT Media / Support TI / IT Link / Lien électronique																

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED? La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE? No / Non Yes / Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification". Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire.

12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED? La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE? No / Non Yes / Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments). Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquer qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).



Government of Canada / Gouvernement du Canada

Contract Number / Numéro du contrat
Security Classification / Classification de sécurité PROTECTED A

PART D - AUTHORIZATION / PARTIE D - AUTORISATION			
13. Organization Project Authority / Chargé de projet de l'organisme			
Name (print) - Nom (en lettres moulées) Jean-Philippe Houde		Title - Titre Physical Resources Manager	Signature
Telephone No. - N° de téléphone 86-10-5139 4064	Facsimile No. - N° de télécopieur 86-10-5139 4435	E-mail address - Adresse courriel jean-philippe.houde@international.gc.ca	Date July 27, 2018
14. Organization Security Authority / Responsable de la sécurité de l'organisme			
Name (print) - Nom (en lettres moulées) Blair Price		Title - Titre Mission Security Manager	Signature
Telephone No. - N° de téléphone 86-10-5139 4330	Facsimile No. - N° de télécopieur 86-10-5139 4435	E-mail address - Adresse courriel keane.grimsrud@international.gc.ca	Date July 27, 2018
15. Are there additional instructions (e.g. Security Guide, Security Classification Guide) attached? Des instructions supplémentaires (p. ex. Guide de sécurité, Guide de classification de la sécurité) sont-elles jointes?			<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui
16. Procurement Officer / Agent d'approvisionnement			
Name (print) - Nom (en lettres moulées) Brent Hygaard		Title - Titre Procurement Specialist	Signature
Telephone No. - N° de téléphone 343-203-1331	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel brent.hygaard@international.gc.ca	Date June 19, 2019
17. Contracting Security Authority / Autorité contractante en matière de sécurité			
Name (print) - Nom (en lettres moulées)		Title - Titre	Signature
Telephone No. - N° de téléphone	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel	Date

TBS/SCT 350-103(2004/12)

Security Classification / Classification de sécurité PROTECTED A

Canada