



Tender T.3901

ROOF REHABILITATION - South Arm Community Centre

Tenderers are invited to respond to this call for Tenders on the terms contained herein.

Name of Bidder: _____

Address: _____

City: _____

Province: _____ Postal Code: _____

Telephone No: _____ Fax No.: _____

E-mail: _____

Contact Person: _____

Title: _____

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NOTICE TO ROOFING CONTRACTORS CALL FOR TENDERS

The City of Richmond invites tenders for the following roof rehabilitation project:

**For the: SOUTH ARM COMMUNITY CENTRE
8880 WILLIAMS ROAD, RICHMOND, BC**

The Scope of Work includes, but is not limited to, the following:

1. Roof Areas # 1, 10 & # 11
2. Remove and dispose of roof and related flashings to the gyproc level.
3. Install carpentry, vapour barrier, insulation and sloping crickets, permaboard and mopped, 2 ply modified bitumen membrane torched and related flashings.
4. The Work is expected to start immediately upon access to the structure, Owner's approval and weather permitting.

Pre-Tender Site Meeting:

1. **Date:** **Wednesday, March 31st, 2010 @ 10:30 O'CLOCK A.M.**
2. **Location:** 8880 Williams Road, Richmond, BC
3. The City of Richmond strongly encourages all potential Bidders to attend this tour (sign-in attendance). No other tours will be organized or arranged for this project.

Bidding Documents:

Bidding documents will be posted on BC Bid and City of Richmond Website.

For information contact:

— Purchasing: Daianna Panni, Buyer I, Purchasing Section, City of Richmond,
Phone: 604-276-4270, E-mail: purchasing@richmond.ca.

Questions will be accepted until Wednesday, April 7, 2010 5:00 pm.

Submission of Tender:

1. Sealed tenders, plainly marked on the envelope, 'T.3901 – ROOF REHABILITATION – SOUTH ARM COMMUNITY CENTRE', will be received at the Information Center, Main Floor, Richmond City Hall, addressed to the Purchasing Section, 6911 No. 3 Road, Richmond, BC V6Y 2C1 until **12:00 NOON LOCAL TIME, TUESDAY, April 20th, 2010.**
2. Time verification to be by the clock in the Information Centre, Main Floor, Richmond City Hall.
3. Tenders received after the above mentioned time and date will be returned unopened.
4. The lowest Tender, or any tender, will not necessarily be accepted.
5. There will **NOT** be a public opening following the closing.
6. For further instructions / requirements refer to 'Instructions to Bidders', Contract Document.

PLEASE CONFIRM RECEIPT OF THIS NOTICE VIA E-Mail to the attention of Daianna Panni, 'purchasing@richmond.ca'.

We will bid this project: Yes ___ No ___

Name of Company (PRINT)

Company Representative

E-mail address re distribution of Contract

Instructions to Tenderers

1. Introduction

1.1. These instructions apply to the preparation of tenders for the Contract, which is generally for the following Work:

- Roof Areas # 1, 10 & # 11
- Remove and dispose of roof and related flashings to the gyproc level
- Install carpentry, vapour barrier, insulation and sloping crickets, permaboard and mopped, 2 ply, modified bitumen membrane torched and related flashings.
- The Work is expected to start immediately upon access to the structure, Owner's approval and weather permitting.

All enquiries regarding this should be directed to the persons named below (the "City Representatives"):

Technical/Contractual

Daianna Panni

Buyer I - Contracting Specialist

Purchasing Section

Tel: 604-276-4270

E-mail: purchasing@richmond.ca

Deadline for questions is:

Wednesday, April 7, 2010 5:00 PM

1.2. Bidders must be accompanied by a Bid bond. In addition, bids shall be accompanied by an Undertaking of Surety, an Undertaking of Liability Insurance, and a Bid Bond on a form approved by the Insurance Bureau of Canada, all issued by a Surety Company(s) licensed to conduct business in the Province of British Columbia. The Bid bond shall be in an amount not less than 10% of the TOTAL TENDERED AMOUNT. Bidders may submit a Bid Deposit, in the form of a certified cheque, in an amount not less than 10% of the TOTAL QUOTED AMOUNT drawn up in the name of the Owner, in lieu of a Bid Bond. The Undertaking of Surety shall comprise a Performance bond and a Labour and Materials Payment bond, each to be equal in value to 50% of the TOTAL QUOTED AMOUNT and conditioned upon the fulfilment of the contract by the Contractor.

2. Submission of Tenders

2.1. Tenders must be delivered by or before:

Tender Closing Time: 12:00 Noon local time

Tender Closing Date: Tuesday, April 20, 2010. There will **NOT** be a public opening following the closing and a list of bids will be available by contacting Purchasing after 4:00 p.m. local time.

Tender Submission Address: Manager – Purchasing
Front of House, Richmond City Hall
6911 No. 3 Road, Richmond, BC, V6Y 2C1

2.2. Tenders one (1) original and two (2) copies should be submitted in a sealed envelope clearly marked with the name of the Tenderer and Contract T.3901, Roof Rehabilitation – South Arm Community Centre.

2.3. Tenders should be submitted on the Tender Form (including all Appendices) as provided, fully and properly completed as required by the Tender Form, and all other Contract Documents, and should include all unit prices, lump sum amounts, and other required information.

2.4. Tenders received after the Closing Time on the Closing Date will be returned unopened to the Tenderer.

3. Contract Documents

3.1. The Contract Documents listed below are the documents to review to prepare a Tender. The Contract Documents consist of:

- (a) Instructions to Tenderers;
- (b) Tender Form, including the following appendices:
 - (i) Appendix A – Undertaking Of Liability Insurance;
 - (ii) Appendix B – List of Previous Contracts;
 - (iii) Appendix C – List of Subcontractors;
 - (iv) Appendix D – List of Equipment;
- (c) General Conditions;

- (d) Specifications;
- (e) Drawings;
- (f) Addenda, if any; and
- (g) Purchase Order.

3.2. The Contract Documents may be obtained from BC Bid or the City of Richmond Website.

4. Interpretation of Contract Documents

4.1. The Contract Documents are listed in section 3.1 in order of priority, from highest to lowest. In the event of a conflict or inconsistency between any of the Contract Documents, the document with the higher priority will govern.

4.2. If a Tenderer is in doubt as to the correct meaning of any provision of the Contract Documents, the Tenderer may request clarification from the City Representative at the phone and fax numbers listed above. If a Tenderer discovers any contradictions or inconsistencies within the Contract Documents or its provisions, the Tenderer should immediately notify the City Representative. The City may, if it considers necessary, issue a written addendum to deal with necessary clarifications. No oral explanations or representations from the City Representative or any other person will affect or amend any provision of the Contract Documents, including these Instructions to Tenderers.

5. Prices

5.1. Tenderers should include in the Tender Price a sufficient amount to cover the entire cost of the Work including all necessary labour, plant, equipment, tools and materials required to complete the Work in accordance with the Contract Documents. The Tender Price should also include a sufficient amount for all applicable duties, taxes, charges, overhead, and all profit.

6. Qualifications and Modifications

6.1. Tenders which contain qualifying conditions, or which otherwise do not conform with the requirements of the Contract Documents, may be rejected by the City.

7. Amendments

7.1. Tenderers may amend or revoke a tender by giving written notice, delivered by hand, mail or fax, to the City Representative at any time up until the Closing Time on the Closing Date. An amendment or revocation that is received after the Closing Time on the Closing Date will not be considered and will not affect a Tender as submitted.

7.2. Any amendment should only indicate the changes to a Tender. Amendments that, expressly or by inference, disclose the Tenderer's Tender Price or any other material confidentiality requirements of a Tender, will permit the City to reject the entire Tender.

7.3. The Tenderer assumes all risk that a fax communication will be received by the City Representative within the times required by these Contract Documents.

8. Duration of Bids

8.1. A Tenderer may revoke a Tender at any time up until the Closing Time on the Closing Date. After the Closing Time on the Closing Date, a Tender will remain valid and irrevocable for sixty (60) days after the Closing Date, even if the City accepts another Tender.

9. Award

9.1. The City reserves the full right to, in its sole discretion, and according to its own judgement of its best interest:

- (a) reject any and all bids for any reason whatsoever;
- (b) waive any technical or formal defect in a Tender and accept that Tender;
- (c) award the contract to other than the low Tenderer; and
- (d) consider other factors besides price, as called for in the Tender Form, to identify and select the Tenderer the City decides is most advantageous.

The City will not be responsible for any costs, expenses, loss, damage or liabilities whatsoever incurred by a Tenderer as a result of, or arising out of, bidding for the Contract, or due to the acceptance or non-acceptance of any Tender.

2. 2.2 for the Price: (continued)

OFFER 1 SOUTH ARM COMMUNITY CENTRE

NOTICE TO CONTRACTORS:

Not necessarily all Contractors Bidding will be members of the Roofing Contractors Association of BC (RCABC), therefore we request RCABC member Contractors to submit a separate price to include to provide a five (5) year RCABC Guarantee, excluding Re-inspections and excluding Roof Inspection costs.

STATE SEPARATE PRICE FOR RCABC

5 YEAR GUARANTEE.....\$ _____

State separate price for G.S.T.....\$ _____

Total.....\$ _____

TOTAL written in lawful money of Canada DOLLARS

2.3 for the Price of:

OFFER 1 OPTION "B"

RE-ROOF AREAS # 1, 10 & # 11.....\$ _____

State separate price for G.S.T.....\$ _____

Total.....\$ _____

TOTAL written in lawful money of Canada DOLLARS

2.3 OFFER 1

STATE SEPARATE PRICE FOR RCABC

5 YEAR GUARANTEE.....\$ _____

State separate price for G.S.T.....\$ _____

Total.....\$ _____

TOTAL written in lawful money of Canada DOLLARS

2. 2.4 to provide the following Unit Pricing:

- .1 **PROVIDE SEPARATE PRICE TO PROVIDE SCREWS & PLATES TO RCABA CRITERIA**.....\$ _____
- State separate price for G.S.T.....\$ _____
- Total.....\$ _____

TOTAL written in lawful money of Canada DOLLARS

2.5 to provide the following Unit Pricing (continued):

- .3 Unit rate mark-up for unforeseen elements, in addition to the work, to be covered under cost-plus basis.

PROVIDE HOURLY RATES, INCLUDING ALL COSTS, OVERHEAD AND PROFIT FOR EXTRAS IF NECESSARY:

- .1 Foreman.....\$ _____ plus G.S.T.
- .2 Journeyman.....\$ _____ plus G.S.T.
- .3 Apprentice.....\$ _____ plus G.S.T.
- .4 Skilled Labourer.....\$ _____ plus G.S.T.

- .4 **PROVIDE MATERIAL MARK-UP FOR EXTRAS, IF NECESSARY, AS FOLLOWS:**

Cost plus _____% overhead, plus _____% profit.

2.6 to achieve Substantial Performance of the Work within _____ (insert completion time in weeks following award of the Contract).

3. I/We confirm that the Tender Price includes all applicable duties, taxes, and handling charges incidental to the Work.

4. I/We confirm that the following appendices are attached to and form part of this Tender:

Appendix A: Undertaking Of Liability Insurance;

Appendix B: List of Previous Contracts;

Appendix C: List of Subcontractors;

Appendix D: List of Equipment;

5. I/We confirm that this Tender will be open for acceptance for a period of 60 calendar days from the day the day following the Closing Date. If within this period the City delivers a written notice by which the City accepts my/our Tender Submission (“Notice of Award”) and a purchase order for the goods and/or services specified in my/our Tender (“Purchase Order”), then such offer and acceptance will create a Contract as described in the Contract Documents and I/we will, within 14 days of receipt of the Notice of Award and Purchase Order, deliver to the City certified copies of all insurance policies and certificates required and specified in the Contract Documents.

6. I/We agree that, if we receive a Notice of Award and Purchase Order, and fail to deliver the insurance policies and certificates as required by paragraph 5 of this Form of Tender, then such failure shall be deemed to be a failure to enter into the Contract, and the City may award the Contract to another party.

Dated this ____ day of _____ 20____

Bidder:

Full legal name of Corporation, Partnership or Individual

Authorized Signatory

Appendix A: Undertaking of Liability Insurance

(To be submitted with Tender)

City of Richmond
6911 No. 3 Road
Richmond, BC V6Y 2C1

Dear Sirs:

We, the undersigned (insert insurance company's name) _____ do hereby undertake and agree to insure the Contractor in the amount of \$5,000,000.00 as outlined in the attached "General Conditions of the Contract" and agree to:

- a. Name the City of Richmond, its officers, officials, agents, and employees as additional insured in connection with the work being proposed by the Contractor.
- b. State that such policy applies to each insured in the same manner and to the same extent as if separate policy had been issued to each insured named in the policy.
- c. State that the policy cannot be cancelled, lapsed, or materially changed without at least 30 days written notice of cancellation delivered to the City Clerk of the City of Richmond at 6911 No. 3 Road, Richmond, BC V6Y 2C1.
- d. State that coverage provided by such insurance shall protect the Contractor and the City of Richmond during the performance of the works and services specified in the attached Form of Tender and specifically that the insurance required by such Tender shall be consistent with the requirements therein.

if the Contract is awarded to (insert bidder's name) _____

EXCEPTIONS:

Dated at _____, British Columbia, this ____ day of _____, 2009.

BY: _____ TITLE: _____

This form must be signed by the Insurance Company or an authorized Broker on behalf of the Insurance Company.

A SEPARATE FORM MUST BE SIGNED FOR EACH POLICY IF MORE THAN ONE POLICY.

Appendix B: List of Previous Contracts

The Tenderer has recently undertaken and completed the contracts described below and authorizes the City of Richmond to inquire as to the nature of the Tenderers performance on these contracts.

YEAR	PROJECT TITLE	OWNER PHONE # CONTACT	SCOPE	BUDGET		SCHEDULE		ROLE OF KEY STAFF MEMBERS	OTHER RELEVANT INFO
				Original	Actual	Proposed	Actual		

(If additional space is required, attach additional)

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2.0 MODIFIED BITUMEN ROOFING SAFETY CONDITIONS AND SAFETY MEASURES

1.1 SAFETY CONDITIONS

- 1) Contractors are required to maintain a **TWO (2) HOUR MINIMUM FIRE WATCH** at the end of each working day, after open flame roofing application methods have been utilized. All roof areas worked shall be checked for hot spots and signs of smouldering.
- 2) Caution should be taken when working around roof openings, penetrations or flashing. Extreme caution should be exercised when working around exhaust vents that may have grease or lint accumulations. Such accumulations should be cleaned before roofing work is started.
- 3) Torches should be used according to manufacturers' instructions. Torch stands should be used to direct flame upward when momentarily not in use. Torches should not be used near gas lines, electrical wires or flammable liquids. All equipment should be inspected regularly and kept in good working order.
- 4) Contractor should have adequate fire extinguishing equipment. A minimum of five 20-lb. multi-purpose dry chemical extinguishers is suggested. There should be at least one fire extinguisher within 20 ft. horizontal travel distance of any torch-applied roofing equipment. For larger roof areas, additional protection such as charged hose lines or additional extinguishers may be required. (Contractor should be made aware of the location of fire hoses if they are available. Outside faucets from "domestic" water supply may also be useful.)
- 5) Contractor should either have a phone or be aware of the location of the nearest public phone. Contractor should be aware of local emergency phone numbers. For larger roofing jobs it may be worthwhile to notify the local Fire Department in advance of the scope and time frame of the proposed work. Any fires, even if extinguished, should be reported to the Fire Department.
- 6) **No propane or combustible liquids** are to be left on site and/or any roof areas after roofing crews vacated the work site at the end of the day.
- 7) **All equipment** used for roofing applications must be either removed from the work site at the end of working shifts or the equipment must be secured and rendered immovable and inaccessible, "as is reasonable" to vandals.
- 8) The site is to be secured using all barricades, and/or other materials as are necessary to enclose and isolate the site.
- 9) **In all modified bituminous membrane roofing applications, a "PEEL and STICK" membrane must be used as the first ply stripping on all combustible wall surface areas where fire damage may occur.**
- 10) All other normal site safety concerns, that are either stated elsewhere within this specification, and/or are required and/or implied by others, are to form part of the safety requirements.

**2.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

**SAFETY CONDITIONS AND SAFETY
MEASURES (CONTINUED)**

1.2 SAFETY MEASURES

Construction Safety

1. .1 Observe and enforce construction safety measures required by Part 8 of NBC 1990, Provincial Government, Workers' Compensation Board of B.C. and municipal statutes and authorities.
- .2 In event of conflict between any provisions of above authorities the most stringent provision will apply.
- .3 Ensure no part of work is subjected to a load which will endanger its safety or will cause permanent deformation.

Fire Safety

2. .1 Comply with all Provincial and local Fire Safety Regulations. The section 5.0.1 Safety Precautions – Torching published in the Roofing Contractors Association of B.C. "Roofing Practices Manual" form part of this Specification.

WHMIS Requirements

3. .1 The Contractor shall comply fully with all WHMIS (Workplace Hazardous Materials Information System) requirements. In addition, provide to the Owner, prior to commencement of the work, one complete set of current MSDS (Material Safety Data Sheets) for all materials to be used on this job site.

3.0 MODIFIED BITUMEN ROOFING

SAFETY PRECAUTIONS

1. Modified bitumen roofing membranes represent the latest in the evolution of bituminous roofing systems. However, some systems require that applicators use a propane-fueled open flame torch to adhere the membrane. When working with an open flame on the construction site, applicators must use extreme caution to prevent accidents. Carelessness could lead to loss of property or life.

Torching

This section contains precautions for applying modified bitumen roofing. The applicator will find proper procedures for working with equipment of the jobsite, and dealing with personnel.

NOTE: If a fire occurs for any reason, call the Fire Department immediately, even if you put out the flames. Some material may smoulder for hours before bursting into flames, and could be smouldering in places where the layman may not think to look. Let the fire fighters do their job. Safety is no accident.

2. .1 Applicators use an open flame to soften the bitumen of the underside of the membrane to make it adhere to the roofing substrate. At a temperature of 1100°C (2000°F), the flame produced by liquid propane gas does an excellent melting job. But used incorrectly or carelessly, the flame could damage the roof or the buildings and seriously injure the applicator.

EQUIPMENT

Applicators should receive training in proper application, maintenance and safety procedures when handling torching equipment.

Operators should handle their equipment carefully. Protect the soft brass valve of the gas cylinder. It is easy to crack or break it. A broken valve could turn the cylinder into a torpedo. Check all cylinders before refilling.

**3.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

**SAFETY PRECAUTIONS
(CONTINUED)**

2. 1. (Continued)
Never overfill a cylinder. It could explode.
All applicators of modified bitumen should participate in the safety and training program.
2. .2 a) Use well-built durable products that feature safety devices and are listed by Underwriters Laboratories of Canada (ULC).
- b) Follow the Manufacturer's safety and operating instructions provided with the torch system.
- c) Check all equipment for wear. Repair and/or replace as necessary.
- d) Use soap solution to test for gas leaks before lighting, then check for the proper operation of the torch.
- e) Check all fittings and other equipment on the applications equipment for leakage.
- f) Be sure that torch equipment is in good working order and that the cylinder valves are clean.
- g) Stop work and shut off flame if propane odour is detected.
- h) Stop work and make repairs if a leak occurs.
- i) Keep non-applicators at least 3 m (10') from the flame.
- j) Protect your equipment: store it in a tool box.

General

**3.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

**SAFETY PRECAUTIONS
(CONTINUED)**

- 2. .2 k) Do not use matches or cigarette lighter to test for gas leaks.
- l) Containers which hold or may have held flammable material must be kept clear of the torch or other heat sources.
- m) Do not use equipment that has been damaged or that is in need of repair.
- 2. .3 a) Protect cylinder valves; where possible use cylinders that have valve protection welded to the cylinder.
- b) Propane tanks are pressurized – do not puncture or subject to extreme heat.
- c) Secure propane tanks in an upright position and place them at least 3 m (10') from the open flame.
- d) Increase the size of the bottle or cylinder to keep frosting from occurring.
- e) Close the propane cylinder valve first and let the remaining gas burn out of the hose before closing the torch valve when shutting off the torch.
- f) Plug the valve with a plastic plug when cylinder is not in use.
- g) Do not turn a vapour cylinder on its side to increase pressure – liquid could escape.

General
(Continued)

Tanks

**3.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

**SAFETY PRECAUTIONS
(CONTINUED)**

2. .3 h) Do not heat a cylinder to increase pressure.
- i) Do not fill gas cylinder or bottle in need of repair.
- j) Do not tighten the brass fittings too tightly with a wrench.

Tanks
(Continued)

2. .4 a) Use an adjustable ULC listed regulator with the torch.
- b) Make sure flow of gas through the regulator is in the proper direction. Directional flow is stamped on regulator.
- c) Keep vent in pressure regulator clear at all times.
- d) Use a pressure gauge on every regulator.
- e) Do not use an adjustable regulator with a higher pressure range than the one that came with the torch.
- f) Do not operate any pressure gauge beyond the top of its scale or near excessive heat (above 65 Celsius) or where there is excessive vibration.
- g) Do not use equipment without an operating pressure gauge.

Regulators

2. .5 a) Check hoses for wear and tear.
- b) Use only hoses listed for liquid propane gas.

Hoses

**3.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

**SAFETY PRECAUTIONS
(CONTINUED)**

2. .5 c) Use less than 15 m (50') of hose at one time.
2. .6 a) Use an adjustable pilot light with a complete shut-off.
- b) Use a torch stand to direct flame upward when not in use.
- c) Use only torch machines equipped with the same safety features as described for torches. They should also have individually adjustable torches. Use only torch trolleys and multiple head machines with approved safety valves.
- d) Ignite burner with a flint or electronic lighter. Matches or disposable lighters are unsafe substitutes.
- e) Treat the torch as if it is always burning. On bright days it is very hard to see the flame, and when working around mechanical equipment, it is impossible to hear the torch operating.
- f) Be very careful when working with torches in areas where you cannot see. Pull material away, heat it, and then apply it to the flashing.
- g) Do not leave lighted torch unattended.
- h) Do not lay an operating torch over the edge of a roof.

Hoses (Continued)

Torches

**3.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

**SAFETY PRECAUTIONS
(CONTINUED)**

2. .6 i) Do not use a trowel as a torch stand.
- j) Do not lay an operating torch to rest on a gas cylinder. If there is a gas leak in the cylinder area, there could be a fire.
- k) Do not play with a torch. A flame can be hard to see on a bright day and can ignite skin or clothing instantly.
2. .7 a) Have at least one Class ABC fire extinguisher within 6 m (20') of each worker using the torch.
- b) Train each worker in the proper use of the fire extinguishers.
- c) Direct the stream from a dry chemical-type fire extinguisher at the base of the fire from a distance of at least 3 m (10'). Sweep the fire away from you, starting at its nearest point and moving the chemical stream toward the farthest point.
- d) Do not try to put out a cylinder fire if it cannot be done without tipping the cylinder. Let it burn and call the Fire Department.
- e) Do not place fire extinguisher too close to liquid propane gas equipment. If fire results, you may not be able to get at fire extinguisher to put out the fire.

Torches (Continued)

Extinguishers

**3.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

**SAFETY PRECAUTIONS
(CONTINUED)**

- 2. .7 (Continued)
**WHEN IN DOUBT – CHECK IT OUT.
IF STILL IN DOUBT – DON’T USE IT.**

Extinguishers
(Continued)

- 2. .8 Each building is different from every other building, and each roof design presents a new set of challenges to the Roofing Contractor. The applicator of modified bitumen systems must adapt his standard safety procedures to meet the special requirements of the current job. However, roofers should follow the basic rules presented in these pages.

BUILDINGS

The job supervisor should take extra care when working on the modified bitumen roofing job. The supervisor should walk the job one hour after all torches have been extinguished. The delay will help guard against a smouldering fire going undetected at the end of the work day. Check for potential “hot spots” – especially cants, wall flashings, and around penetrations such as vent pipes, intake vents and skylights.

Applicators must take special care when torching at flashings, corners, or voids in the roof deck. Never torch directly at these locations. Always torch the membrane and then adhere it to the corner or joint.

- 2. .9
 - a) Install metal flashing on penetrations or flashings with a tight fitting felt collar before torching.
 - b) Shut down air conditioning units, exhaust fans and air intake fans in the work area at the roof control.
 - c) Do not work in an enclosed area where gas can accumulate.

General

**3.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

**SAFETY PRECAUTIONS
(CONTINUED)**

2. .10 a) Use perlite, fiberglass, or concrete cant strips if cant strips are required.
- b) Use glass or organic base sheet on all wood decks and over flammable insulation, cant strips or other flammable surfaces.
- c) Look for any void, hole or gap in substrate and fill with non-combustible or perlite cant strip.
- d) Use a base ply over all flammable insulation surfaces and edges and over all joints between rigid insulation boards. The base ply provides a protective covering for underlying combustibles.
- e) Install a base ply or a layer of roof insulation, acceptable to the membrane manufacturer, to separate polyurethane or polyisocyanurate roof insulation from the modified sheet and the torch.
- .10 f) Install a base ply over all flammable surfaces and rigid board insulations. Be sure base ply fits tightly around all roof deck openings and turns up the wall, so the flame cannot flash down and start a fire underneath the deck.
- g) Do not torch to wood fiber insulation, cant strip, wood or any flammable material.

Substrates

**3.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

**SAFETY PRECAUTIONS
(CONTINUED)**

2. .11 a) Follow the Manufacturer's recommendations on torching to insulation and recover board surface.
- b) Use a small torch when flashing near details.
- c) Shield air conditioning units and other protrusions with perlite panels or similar material when using the torch around them.
- d) Heat the membrane away from air conditioning units, fans, soil pipes and all other protrusions. Care must be taken to avoid flame being pulled into the building interior.
- e) Feather seams around details with hot trowel, not open flame.
- f) Heat membrane and then attach to flashings, corners, or voids in the roof deck. Never torch directly.
- g) Use caution when torching near pipes in the event there is suction present.
- h) Do not torch anything you cannot see such as under air conditioning units or behind counter flashing.
- i) Do not torch near gas lines or near electric wires (such as around roof top equipment, etc.).
- j) Do not torch around flammable vents or plastic projections.

Torching Methods

**3.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

**SAFETY PRECAUTIONS
(CONTINUED)**

2. .11 k) Do not point the torch under roof top equipment.
- l) Do not point the torch down open roof penetrations.
- m) Do not point the torch into corners or roof edges where dried wood or fiber may ignite (such as wood blocking or cant strip).
- n) Do not point the torch at low flashings where there is an overhang and flame could get up under the counter flashing, such as around skylights or prefabricated curbs with fiberboard sidewall insulation.
- o) Do not apply modified bitumen products directly over exposed conduits or pipes lying on the roof deck.
- p) Avoid prolonged contact with heat sensitive metals such as lead, as overheating of these metals could ignite underlying flammable services.
- q) Do not lay an operating torch directly onto the membranes – there is danger both of fire and of damaging the membrane.
- r) Do not lay an operating torch on an open penetration on the roof. If the penetration is part of an air intake system, the flames could be sucked into the building.

Torching Methods
(Continued)

**3.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

**SAFETY PRECAUTIONS
(CONTINUED)**

2. .12 Many construction-industry tradesmen use open flames or flame tools in their jobs. Heating and air conditioning Contractors, welders and plumbers all use open flame at the job site. These professionals are responsible for the safe use of their tools, just as the Roofing Contractor is responsible for the safe application of the modified bitumen roofing systems.

PERSONNEL

Contractors must not only train their own men in using open flame application, but must also make sure the General Contractor and his superintendents are familiar with the necessary safety precautions for using torch application of roofing membrane.

Some of the safety precautions will be considered unpleasant, such as wearing long-sleeve shirts and long pants in the summer, but the results, - a safe, injury-free job site – are worth the effort.

2. .13 a) Wear proper clothing: non-synthetic fabrics, long-sleeve shirt, long pants, boots, gloves and proper eye protection.
- b) Keep non-applicators at least 3 m (10') from open flame.
- c) Train, instruct, and warn employees on the use or torching equipment.

General

**3.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

**SAFETY PRECAUTIONS
(CONTINUED)**

2. .13 d) Use extra caution around edges of insulation board. Cover exposed edges with inflammable base ply to prevent flame from coming in contact with any flammable material. Contact for any length of time with lead or other materials affected by heat should be avoided.

General
(Continued)

e) Do not take anything for granted. Be on guard against lapses in on-

2. .14 For years Fire Departments have been learning the proper safety precautions necessary to prevent fires. Their expertise and assistance should be utilized whenever possible to supplement a company's safety training program. By making the local fire department a part of your team, you are giving notice that in all cases Safety Comes First.

FIRE DEPARTMENT

2. .15 a) Strict compliance with local fire codes must be maintained.

Fire Department Recommendations

b) Give written notice to the local Fire Department where required, and obtain any necessary permits.

c) The required number of fire extinguishers shall be on the roof at all times. They shall be Class ABC extinguishers of the size specified by the local fire code; one per each torch operator.

d) Install portable smoke detectors in attics as required by the local Fire Department.

**3.0 MODIFIED BITUMEN ROOFING
(CONTINUED)**

- 2. .15 e) Foremen on the job shall have fire safety training and shall remain at job site at least one hour after the application has ended for the day.

- f) No flammable liquids shall be stored or used on the roof excluding liquid propane gas in approved containers. All liquid propane gas not in use shall be stored on the ground.

**SAFETY PRECAUTIONS
(CONTINUED)**

Fire Department Recommendations
(Continued)

REPORT ALL FIRES TO THE FIRE DEPARTMENT, EVEN THOSE THAT ARE EXTINGUISHED QUICKLY. THERE MAY STILL BE FIRE AND/OR SMOULDERING IN AREAS WHERE A LAYMAN MAY NOT THINK TO LOOK.

4.0 MODIFIED BITUMEN ROOFING:

SCOPE OF WORK

- | | |
|---|-------------------------------|
| 1. Rehabilitation of the roof system(s) located at SOUTH ARM COMMUNITY CENTRE, 8880 WILLIAMS ROAD, RICHMOND, BC. | Location of Work |
| 2. .1 The Contractor shall furnish all labour, materials and equipment necessary to remove and dispose of existing roofing membranes, flashings, etc. to the existing insulation and/or walls as required. Rework and prepare all decks, perimeters, and walls as required to facilitate the written Specifications, Roof Plans and Details enclosed.

.2 Further, the Roofing Contractor will cooperate and coordinate with the Contractor providing all new mechanical units. | Labour, Materials & Equipment |
| 3. Submit a unit price to provide screws and plates to RCABC criteria. | |
| 4. The Contractor to furnish all labour, materials and equipment deemed necessary to install new gypsum, wood, roof system, sheet metal flashings and components, etc., as required by the written Specifications. Roof Plans and Details attached. | |
| 5. The Contractor to supply all protection deemed necessary to grounds, structure and persons involved. | Protection |
| 6. All materials, roofing or otherwise, to be installed by qualified "BC licensed trades people". Roofing crew to have a minimum of sixty (60%) percent journeymen with past experience applying the products specified. | Qualification of Crew |
| 7. Manufacturer's certification of crew members confirming past experience will be required prior to start-up of Work as related to the Modified Bitumen Membranes and / or Sheet Metal Flashing. | Certification of Crew |

**4.0 MODIFIED BITUMEN ROOFING:
(CONTINUED)**

**SCOPE OF WORK
(CONTINUED)**

8. .1 Upon completion, submit to Owners a two (2) year Maintenance Bond as provided by the surety and a five (5) year written Roofing Contractor Labour and Material Guarantee for leaks and replacement of roofing materials, insulations, and other system and/or wall and/or deck and/or structure damage occurring from leaks, or if selected by the Owner, a five (5) year RCABC Guarantee in accordance with Offers 1 and 2, Clause 2. 2.2 and 2.3 'Quotation Form', this document provided as a separate price.

GUARANTEES / WARRANTIES
Contractor

.2 Upon completion, the Membrane and/or Sheet Metal Manufacturer, care of the "Roofing Contractor", to provide Owners with a written ten (10) year Guarantee for membrane manufacturer defects including granule loss.

Membrane

9. Only those products listed in the following roof system components, and/or materials listing, are acceptable for use in this Specification. Inclusion of a non-specified product(s) may result in the rejection of the affected work. Correction of the rejected work shall be undertaken at no cost to the Owners and the satisfaction of the Consultant and/or his Representative.

Acceptable Products

10. **For all torch-on applied roofs, Contractors are required to maintain a minimum two (2) hour fire watch at the end of each working day, after open roofing application methods have been utilized. All roof areas worked shall be checked for hot spots and signs of smouldering.**

CONTRACTORS TAKE NOTICE

5.0 MODIFIED BITUMEN ROOFING:

**PROCEDURES & INSTRUCTIONS
FOR ROOF SYSTEM RELATED
WORK**

- | | | |
|----|---|---|
| 1. | Shop drawings supplied by the Contractor for all sheet metal details are to be approved in writing by the Roofing Consultant prior to shop forming. | Approval of Sheet Metal Details |
| 2. | .1 All inspections are to be on a spot check basis. | Quality Control Inspections, Etc. |
| | .2 All occurrences on site are to be documented in the daily reports and include photos. This shall include extras and changes to work. | |
| | .3 All progress invoicing submitted directly to Roof Tech 2000 Consultants Ltd. office, c/o the Owners for approval. In accordance with CCDC, the Statutory Declaration Form (CCDC 9A) must accompany the second and subsequent applications for progress payments or the release of holdback funds. All invoicing is for installed roofing materials only, materials stored on site are not to be included in the invoice. | Progress Invoices

Statutory Declarations |
| | .4 All extras and changes to work are to be confirmed by the Roofing Consultant and the Owners' Representative. | |
| | .5 The on-site Consultant is to be Roof Tech 2000 Consultants Ltd. Cost of quality control service to be paid by the Client direct and not be included in this Contract. | Quality Control Payment |
| 3. | All work must be continuous from start to completion as to be negotiated and agreed upon between Owners, Contractors and Roofing Consultant prior to start up of Work, with crews of adequate size and experience on each site as will be required to facilitate completion of the Contracts as agreed upon. | Sequence of Work / Crew Quantity |

**5.0 MODIFIED BITUMEN ROOFING:
(CONTINUED)**

**PROCEDURES & INSTRUCTIONS
FOR ROOF SYSTEM RELATED
WORK (CONTINUED)**

- | | | |
|-----|---|---|
| 4. | All plumbing, electrical, phone, gas, etc. Disconnections and reconnections, both labour and materials are to be included in this Quotation. All materials and work are to be provided by the Contractor. | Related Work Connections, Plumbing, Gas, etc. |
| 5. | All damage to plumbing, electrical, phone, gas, etc., due to penetrations of screws, nails, etc., are to be repaired to original standards as required to the satisfaction of the Owner's Representative. Cost of repairs is to be included in this Quotation. | Plumbing, Electrical, etc. Damage |
| 6. | All damage to the interior or exterior structure or grounds, walls, sidewalks, etc., is to be cleaned, repaired or upgraded to the satisfaction of the Owner's Representative. Cost of cleaning and restoration work to be included in this Quotation. | Structure, Ground, Etc., Damage |
| 7. | Access to the interior of the structure is to be supplied as required to perform work as related to this Contract ONLY. Phones and interior washrooms are NOT to be used without prior permission of the Owners' Representative. | Access to Structure |
| 8. | Contractor is to provide all on site sanitary requirements. | Sanitary Facilities |
| 9. | The Owner shall make provisions for domestic power. | Electrical Power |
| 10. | .1 Upon completion, submit to Owners a two (2) year Maintenance Bond as provided by the surety and a five (5) year written Roofing Contractor Labour and Material Guarantee for leaks and replacement of roofing materials, insulations, and other system and/or wall and/or deck and/or structure damage occurring from leaks, or if selected by the Owner, a five (5) year RCABC Guarantee in accordance with | GUARANTEES / WARRANTIES
Contractor |

**5.0 MODIFIED BITUMEN ROOFING:
(CONTINUED)**

**PROCEDURES & INSTRUCTIONS FOR
ROOF SYSTEM RELATED WORK
(CONTINUED)**

10. .1 Offers 1 and 2, Clause 2. 2.2 and 2.3, 'Quotation Form', this document provided as a separate price.
10. .2 Upon completion, the membrane and/or sheet metal Manufacturer, care of the "Roofing Contractor", to provide Owners with a written ten (10) year Guarantee for membrane manufacturer defects including granule loss.
11. All materials shall be new unless specific written approval has been given by Specifying Authority for any component.
12. The Contractor shall obtain permits, pay all fees therefore, and comply with all Provincial and Municipal and other legal regulations and by-laws as applicable to the Work. If no local regulations, comply with the National Building Code of Canada, latest revision.
13. The location of existing features has been determined from available records, but is not guaranteed. The location of all such features shall be investigated and verified in the field by the Contractor.
14. Protect existing road, paving, buildings, finished surfaces, equipment, trees, lawns, utilities, heating, lighting, power and telephone services during the Work. Make good, repair or replace any damage to Owner's approval.
15. Provide, maintain and remove on completion, hoardings, barriers and warning signs for the protection of workmen and the public as required and approved by the Specifying Authority. All the necessary precautions shall be taken to protect the public at all times. No hoisting or lowering of roofing materials will be permitted in areas accessible to the public or employees.

**GUARANTEES / WARRANTIES
Membrane Manufacturer**

New Materials

Permits, Regulations

Existing Features

Protection

Work Area Safety

**5.0 MODIFIED BITUMEN ROOFING:
(CONTINUED)**

**PROCEDURES & INSTRUCTIONS FOR
ROOF SYSTEM RELATED WORK
(CONTINUED)**

16. Provide protection at all times against weather so as to maintain work, material, equipment and property free from injury or damage and as necessary ensure work is carried out expeditiously in accordance with agreed time schedule and completion date.
17. Parking for workmen employed on the Work shall be restricted to the area assigned for the purpose by the Owner or Authority having jurisdiction.
18. Submit to the Specifying Authority and Owner's Representative prior to the award of the contract, an application schedule, satisfactory to all parties. Schedule to indicate commencement of the Contract, progress and planned date of completion. All work must be coordinated in such a manner as to be continuous to completion with optimum crew size for the required Work.
19. All roof areas to be made water-tight as soon as possible before proceeding. No roof system components to be removed which are greater in area than can be made water-tight under climatic conditions existing at the time.
20. Access to buildings roofs are to be confirmed by: Owner's Representatives.
21. To minimize odour from plant, keep the length of operations to the minimum. Locate odour producing equipment away from mechanical vents, intake ducts and/or prevailing winds which will redirect fumes.
22. Contractor shall ensure that the work is carried out in such a way as to inconvenience as little as possible the proper functioning of the premises.

Climatic Conditions

Parking

Progress Schedule

Procedure

Access to Work

Odours

Sequence of Work

**5.0 MODIFIED BITUMEN ROOFING:
(CONTINUED)**

**PROCEDURES & INSTRUCTIONS FOR
ROOF SYSTEM RELATED WORK
(CONTINUED)**

23. It is intended that the Contractor attends the site during normal daytime working period and no restriction will be made on the general continuity of his work. If a major restriction on operation is required due to unforeseen circumstances, it shall be recorded and signed for by the Owner Representative and subject to additional costs.

Daily Working Period

24. This Contractor shall provide protection to the property and the surrounding properties under this section, from damage resulting from his work, particularly during the removal of any of the existing roofs. All damages caused by this Contractor shall be made good by him at no cost to the Owner. The Contractor shall maintain adequate fire suppression equipment on roof area and for all torch applied roofs shall also **maintain a minimum two (2) hour fire watch standby** after work operations have ceased for the day, and/or when fire is at a risk.

Protection of Property

25. This Contractor shall maintain the site in as clean a condition as possible, to the satisfaction of the Consultant during his work daily, and shall remove from this and the surrounding properties, any debris from his work on the completion of the job. Failure to do this will result in this cleaning and removal being instituted by the Owner and the cost then deducted from the amount owing this Contractor.

Clean-up
Demolition, Debris and Disposal

26. .1 All demolished material to be carefully contained and removed by chutes or other approved means from roof surfaces in order of procedure. Demolished materials are to be deposited in secure and tarped containers.
- .2 Disposal containers are to be located in only those areas that do not interfere with the daily operations of the building.

**5.0 MODIFIED BITUMEN ROOFING:
(CONTINUED)**

**PROCEDURES & INSTRUCTIONS FOR
ROOF SYSTEM RELATED WORK
(CONTINUED)**

26. .3 All disposal containers must be cordoned off utilizing ultra-visible combination of flags, ropes and / or barricades, to comply with Workers' Compensation Board requirements regarding public safety.
- .4 No stock piling of roofing debris on existing roofs or ground will be permitted.
- .5 To prevent fire and / or vandalism, disposal containers are to be removed from the site immediately upon filling and to be tarped and secured if partially filled and left overnight. All related liability will be included in the Contractor's responsibilities.
- .6 Any disposal container left on site, without the presence of the roofing crew, must be located a minimum of ten (10) meters away from the building wall or roof overhang, unless otherwise approved by the Owners Representative.
- .7 Common areas surrounding the work site must be kept clean at all times. **Daily clean-up and disposal of all debris is MANDATORY.** Related costs are to be included in this Quotation.

Clean-up
Demolition, Debris and Disposal

Storage

Note: Fire related vandalism and unauthorized access to the roof areas is of paramount concern and all stipulations will be rigidly enforced.

27. Storage of the specified roof replacement products are restricted to only those roof areas governed by this Contract.

**5.0 MODIFIED BITUMEN ROOFING:
(CONTINUED)**

**PROCEDURES & INSTRUCTIONS FOR
ROOF SYSTEM RELATED WORK
(CONTINUED)**

28. Quotations will be accepted only from those Roofing Contractors who are licensed to carry on business in the Province of British Columbia and who have a qualified B.C. Roofing Tradesman Ticket and are approved by the membrane Manufacturer **prior** to start up of work.

Qualifications of Quotation

29. Contractor **NOT** to start contracts as agreed by Owner, Roofing Consultant and the Roofing Contractor **prior** to submission of signed Agreement.

Commencement of Work

30. .1 For all Insurance requirements see 'General Conditions of the Contract', Clauses 14.1 and 14.2, 'Indemnification and Insurance', forming part of City of Richmond Contract, this document.

INSURANCES

.2 Insurance must be issued by an Insurance Carrier, licensed in B.C. Proof of Insurance is required prior to start-up of Work. See 'Appendix A - Undertaking of Liability Insurance', forming part of City of Richmond Contract, this document.

.3 Provide written proof of Workers Compensation coverage as required, prior to work start-up. Refer to 'General Conditions of the Contract', Clause 15. 'Workers' Compensation Board Coverage / Prime Contractor', forming part of City of Richmond Contract, this document.

Workers' Compensation Coverage

6.0 MODIFIED BITUMEN ROOFING:

**PROCEDURES & INSTRUCTIONS
FOR ROOF SYSTEM COMPONENTS**

1. .1 Provide two plies; Type 4 (12 lb) fibreglass, mopped, throughout the mainfield roof area, as required for water-proofing. Note: tape gypsum as required.
- .2 Provide two plies 12 lb, Type 4, fiberglass felt, mopped throughout the mainfield roof area, as required for waterproofing.
- .3 Tape all joints and perimeters, etc. as required to prevent asphalt drippage.
- .4 Glazing will be required for all installed membranes, due to rain and/or areas that are not going to be completed within the same day. Prior to glazing insure that the areas are water-tight., therefore stripping and/or other necessary procedures will be as required. All moppings and glaze coats to be 100% coverage of asphalt, hot enough to saturate the membrane substrate. Coverage as required so that the membranes are not exposed.

TEMPORARY ROOF SYSTEMS /
VAPOUR BARRIERS
Steel & Gypsum Wood Decks

2. The following are the categories of drains to be used within this Re-roof Program:

DRAINS

- .1 All existing cast iron drains are to be reused complete with new lead sheets. Upgrade all securements clamping rings and screens as required.
- .2 All roof areas drained by means of interior drains are to have an equal number of shop formed 24 oz copper flange type overflow drains protruding at a downward angle two inches beyond the perimeter fascia. Caulk sheet metal as required. See the typical detail.

Cast Iron

Overflow Drains

**6.0 MODIFIED BITUMEN ROOFING:
(CONTINUED)**

**PROCEDURES & INSTRUCTIONS
FOR ROOF SYSTEM COMPONENTS
(CONTINUED)**

2. .3 Overflow scupper type to be shop formed 24 oz. (689 gram) copper, braised and/or silver soldered only.

DRAINS (Continued)
Scupper Drains

3. All existing plumbing vent stacks are to be extended a minimum of 12" above the finished roofing systems. All plumbing vent stacks are to have new shop formed and/or pre-manufactured 32 oz copper, or 14 gauge aluminum sleeves complete with settle caps. All sizes to be compatible with existing. Copper is to be brazed or silver soldered only, aluminum is to be welded. Vent flashing sleeves are to be 12" high and have a 6" wide retainer flange with pre-punched holes for securement at 4" o.c. See the Typical Detail.

Plumbing Vent Stacks

4. Curbs and all components to be extended as necessary to comply with required new curb heights, municipal standards, drawn details and roof plans.

Heat / Air Vents

5. .1 All interior walls are to be cladded with 1/2" treated and primed plywood (see details) secured with galvanized screws and/or pins as required, and sealed with stripping plies and flashings that extend 2" above the exterior perimeter walls with a minimum of 12" above the finished roof systems. All structural block mortar joints, stucco, wood or steel wall cladding is to be cut as required to facilitate this installation.

Interior Walls

- .2 **Self-adhesive membrane stripping must be used on all interior combustibile wall surfaces.** Preheating only, of this stripping membrane is allowed. **No open flame application** is to be used on any combustibile interior wall surface directly above roofed area.

Note: A minimum of a two (2) hour fire watch is required after all torch application procedures.

**6.0 MODIFIED BITUMEN ROOFING:
(CONTINUED)**

**PROCEDURES & INSTRUCTIONS
FOR ROOF SYSTEM COMPONENTS
(CONTINUED)**

6. All exterior perimeters are to be built up and sloped towards the roof system, as required, to a minimum of 4" above the highest point of the finished roof system. All perimeters of each roof area are to maintain one level throughout. All adjacent roof areas that are on the same level are to have perimeters of equal height unless otherwise noted.

Exterior Perimeters

7. Sheet metal fascia other than noted on roof plans are to be 24 ga. galvanized iron baked enamel finish. All fascia metal widths greater than 8" are to have reverse cross breaks incorporated. Panels are to equal the existing metal coverage plus a minimum 1 1/2". All exterior fascia drip edges are to be secured to structure with continuous clips, secured using screws and/or drill & pin and have a minimum one ply base sheet underlayment running from four (4") inches beyond the interior wall to down the outside fascia to under the continuous clip.

Exterior Fascia

8. Remove and dispose.

Existing Membranes

9. Prior to the installation of any new roofing system the roof deck is to be evaluated to verify that its condition is capable of supporting the new system. All areas with deterioration will require upgrading by 'others' and/or satisfactorily negotiated with the existing Contractor all costs of upgrading, if required, not to be included in this Quotation.

Existing Decks' Condition &
Upgrading

**6.0 MODIFIED BITUMEN ROOFING:
(CONTINUED)**

**PROCEDURES & INSTRUCTIONS
FOR ROOF SYSTEM COMPONENTS
(CONTINUED)**

- 10. .1 All extras are to be recorded by the roofing foreman and approved, in writing, by the site roof inspector, daily. Extras

- . .2 System: Upon completion of each roof area, to second ply membrane and first ply stripping stage plus components, i.e. drain leads, vent flashings, etc., the roof area is to be subjected to a 'free flow' flood test. Drains are not to be blocked allowing water to run from all surfaces to drains, and areas are to be evaluated for ponding. All areas that retain standing water are to be upgraded with layers of membrane and/or rigid fiberglass board to eliminate standing water. All additional labour and materials are to be extra to this Quotation. Ponding

- .3 **Ponding is to be defined as an area that contains standing water for a time which will result in stains, plant or algae growth developing on the roof surface.** Definition of Ponding

- 11. All roof areas over existing insulation: Polyisocyanurate insulation to be mopped to the substrate with hot asphalt in two layers of 1" (inch). Polyisocyanurate Insulation
 - .1 Joints are to be staggered at butt and side joints of underlying insulation layers.
 - .2 Mop and flop second layer of Polyisocyanurate insulation with 100% coverage of warm asphalt over E.P.S. and tape the seams to prevent burn out of the E.P.S. insulation.

**6.0 MODIFIED BITUMEN
ROOFING:**

(CONTINUED)

**PROCEDURES & INSTRUCTIONS
FOR ROOF SYSTEM COMPONENTS
(CONTINUED)**

- | | |
|---|--------------------|
| 12. Install Permaboard, or equal, over Polyisocyanurate insulation. Adhere using 100% coverage of hot asphalt. | Permaboard |
| .1 Side and butt joints are to be staggered with the insulation below. | |
| .2 Nail Permaboard to all wood surfaces to receive torch applied membrane at 12" o.c. Fasten with large head Simplex nails. | |
| .3 Tape all joints at horizontal / vertical transitions using 6" 'Peel and Stick' tape. | |
| .4 The Contractor is to submit Unit Prices to provide for levelling in ponded locations, 100 square feet (1 square) of permaboard in this Quotation. All extras are to be recorded by the roofing foreman and site inspector daily. | |
| | |
| 13. All existing and new protrusions through the roof deck are to be built up with wood and are to be extended to a minimum of 10" above the finished roof system. Extend all metal liners, etc., as required to equal existing. | Curbs and Sleepers |
| | |
| 14. Construction grade, treated and free of deterioration. Coat all surfaces to receive asphalt with primer, sizes to conform to site requirements, roof plans, written specification and details. | Wood, General |

**6.0 MODIFIED BITUMEN ROOFING:
(CONTINUED)**

**PROCEDURES & INSTRUCTIONS
FOR ROOF SYSTEM COMPONENTS
(CONTINUED)**

15. Over completed stripping plies, supply and install 24 gauge galvanized iron baked enamel sheet metal flashings as per written Specifications, Roof Plans, Details and as required to complete as intended; colour to be pre-approved in writing by owner's representative. All tendered colours to be only as supplied by manufacturer's standard range of stock colours. The installation criteria are as follows:

Sheet Metal Flashings

- .1 All metal shall have proper allowances for expansion and contraction.
- .2 No lap joints will be permitted.
- .3 All metal to be joined by double 'S' lock clips, single 'S' locks, standing seams or continuous clips (see Typical Details).
- .4 All cap flashing top surfaces and corners are to be secured using standing seams. Inside and outside fascia corners are to be secured with double 'S' locks.
- .5 All joints are to be caulked both prior to and after connections.
- .6 All exposed edges of flashings shall be hemmed to form drip edges.
- .7 All metal is to be firmly attached to structure with compatible wood screws.
- .8 "Dutchman" clips and/or other exposed fastenings are not to be used.
- .9 The top of all sheet metal cap flashings are not to have any flat horizontal surfaces.
- .10 All fascia sheet metal is to be extended 1 1/2" beyond existing coverage other than areas specified for 'other' coverages.

7.0 MODIFIED BITUMEN ROOFING:

MATERIALS

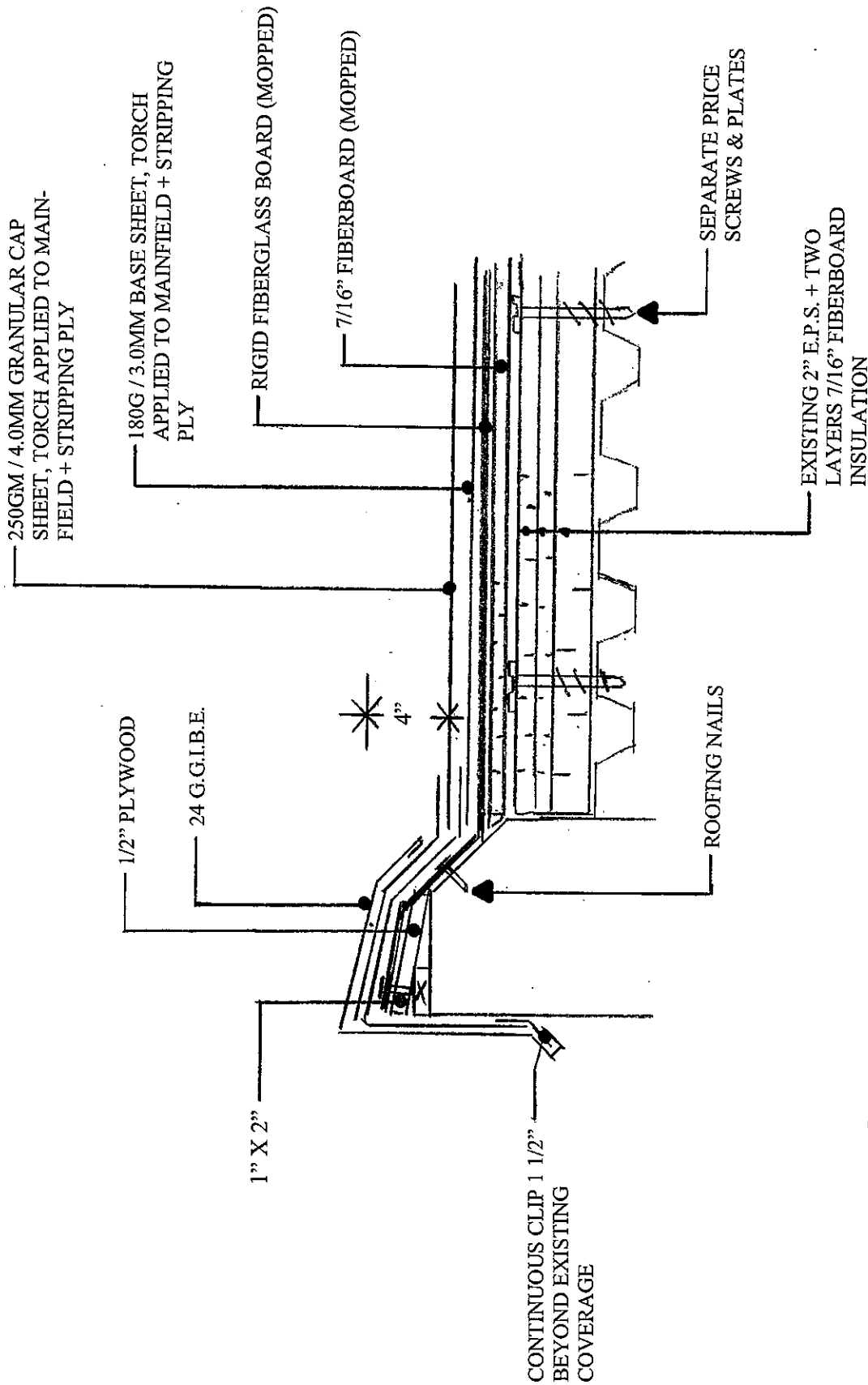
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|--|---|
| 1. Construction grade, free of deterioration, and pressure treated. Coat all surfaces to receive modified bituminous membranes with primer, sizes to conform to site requirements, Roof Plans, written Specifications, Details and as required to suit site conditions. | Wood |
| 2. S.B.S. / modified bituminous primer compatible with membranes. | Primer |
| 3. To be galvanized and of the appropriate size and type. | Fasteners |
| 4. Overflow scupper type to be shop formed 24 oz. (689 gram) copper, braised and/or silver soldered only. | Scupper/Drains |
| 5. Shop formed or manufactured “stacks and caps” to be 32 oz. copper or 14 gauge aluminum welded, braised or silver solder only. DO NOT use tin solder. Set flange in a trowel coat of mastic. | Plumbing Vent Stacks |
| 6. Alternate stripping for combustible wall surfaces. 3.0 mm 180 g/m2 non-woven polyester fleece plus glass grid, top surface is covered with a thermofusible plastic film and the bottom side contains a self-adhesive surface CGSB 37GP56M, Type-2, Class-C, Grade-2. This self-adhesive membrane must be used on all interior combustible wall surfaces as the first ply stripping. NO OPEN FLAME torch welding is allowed on the first ply stripping to those areas. | (Torch applied) Base Sheet for “Combustible” Walls |
| 7. To be 4.0 mm 250 g/m2 non-woven polyester fleece, top surface is covered with coloured ceramic granules and the bottom surface has a thermofusible plastic film for torch welding application CGSB 37GP56M, Type-1, Class-A, Grade-2. Colours are to be pre-approved, in writing, by Owner’s Representative. | (Torch applied) Granulated Cap Sheet Mainfield Membrane and Stripping Ply |

Note: A Minimum two (2) hour fire watch is required for all torch applications.

**7.0 MODIFIED BITUMEN ROOFING:
(CONTINUED)**

**MATERIALS
(CONTINUED)**

- | | | |
|-----|--|------------------------------------|
| 8. | To be 24 gauge galvanized sheet steel, minimum 0.71 mm (0.028") of commercial quality to ASTM-A446, finished with A526-80-Z275 zinc coating or equal. Equal coating to equal ASTMD-966 and G-23. Colour to be selected by the Owner from Manufacturer's standard colour range. | Pre-finished Sheet Metal Flashings |
| 9. | Mastic, compatible to S.B.S. modified bitumen membranes. | Mastic |
| 10. | Asphalt to C.G.S.B. standard A123.7= 1973, Type 3, bearing manufacturer's identification label stating asphalt type and maximum temperature. Tankers to have supplier verification on site. | Bitumen (Blown Asphalt) |
| 11. | To be galvanized and of the appropriate size and type. | Screws and Nails |
| 12. | Silver solder and/or brace. | Solder |
| 13. | To be Schnee-Morehead SM7100 (or equal) colour to match materials in use. | Caulking |
| 14. | Mastic compatible to S.B.S. Modified Bitumen membranes. | Roofing Mastic |
| 15. | To be rigid underlay board, Hal Industries Permaboard or equal. | Rigid Fiberglass Board |



DETAIL # 1

OPTION "A"

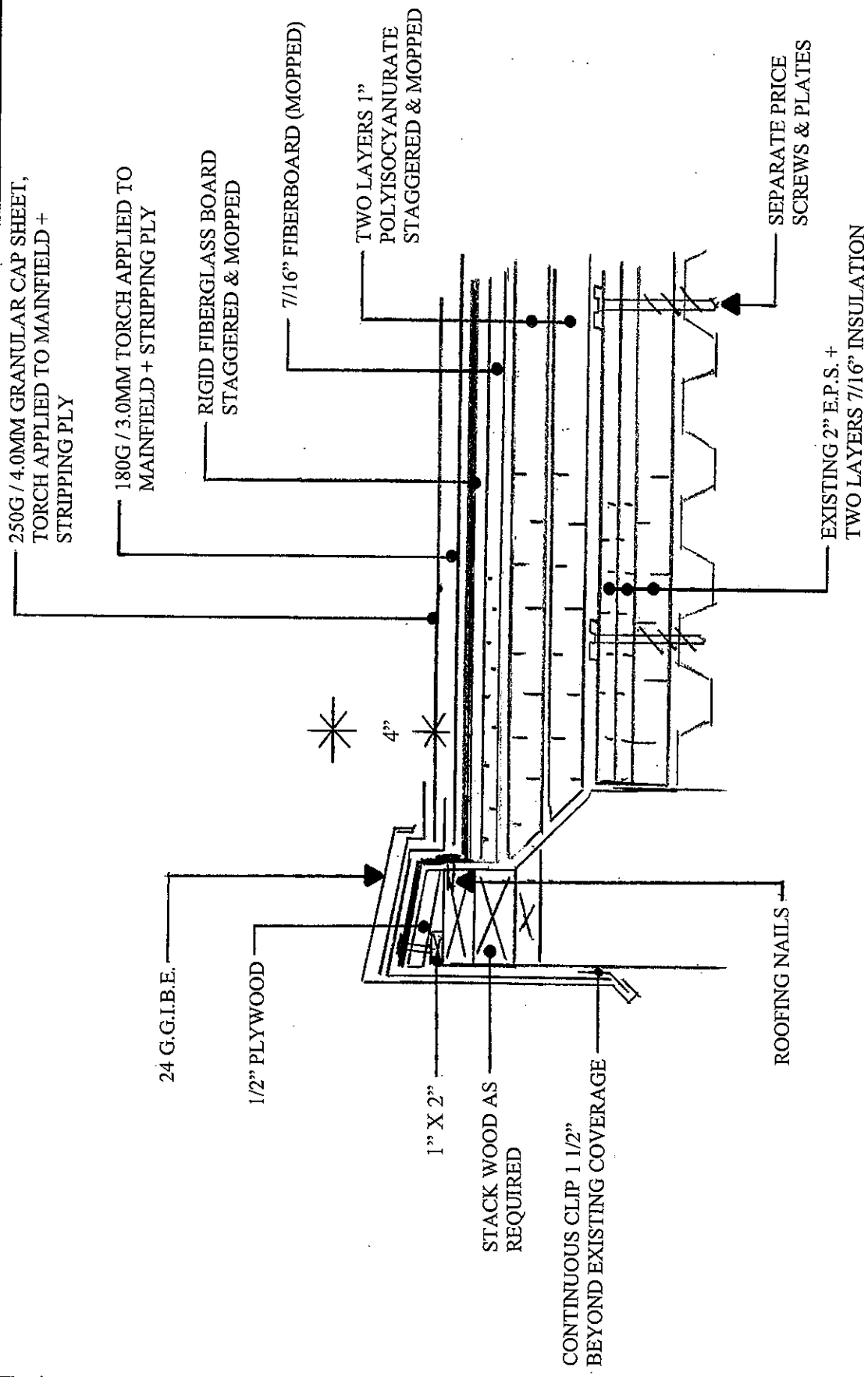
(604) 888-ROOF
CONSULTANTS LTD.
ROOFTECH
INDEPENDANT CONSULTANTS & INSPECTORS

Job#: 10-287

Date: MARCH / 10

Drawn by: JPJ

CITY OF RICHMOND
SOUTH ARM COMMUNITY CENTRE
8880 WILLIAMS ROAD, RICHMOND, BC
YEAR 2010 REROOF(S): RA # 1, 10 & # 11

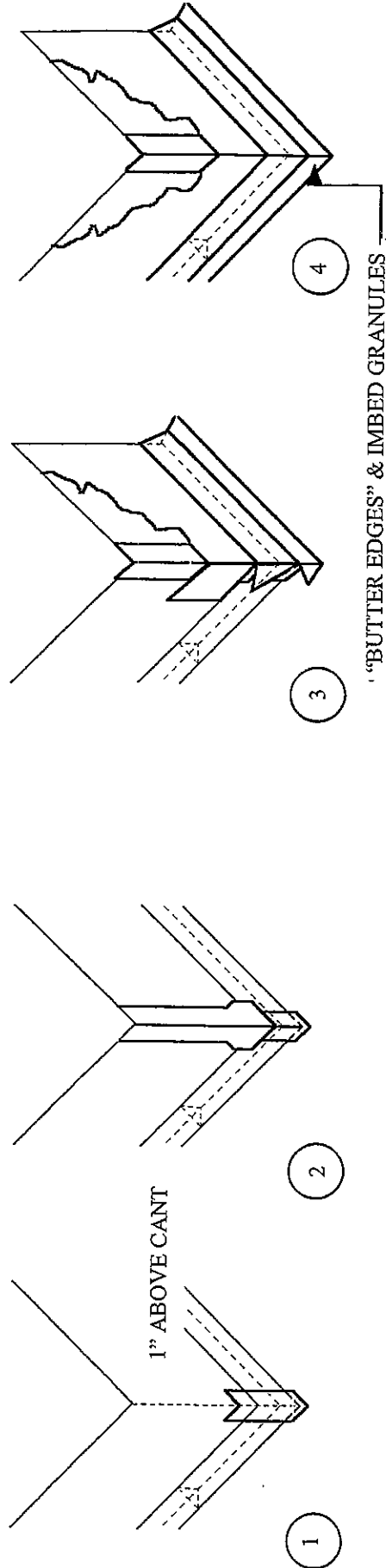


DETAIL # 1

OPTION "B"

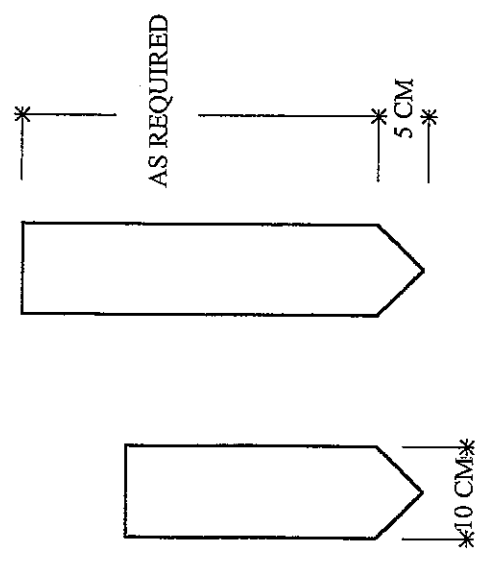
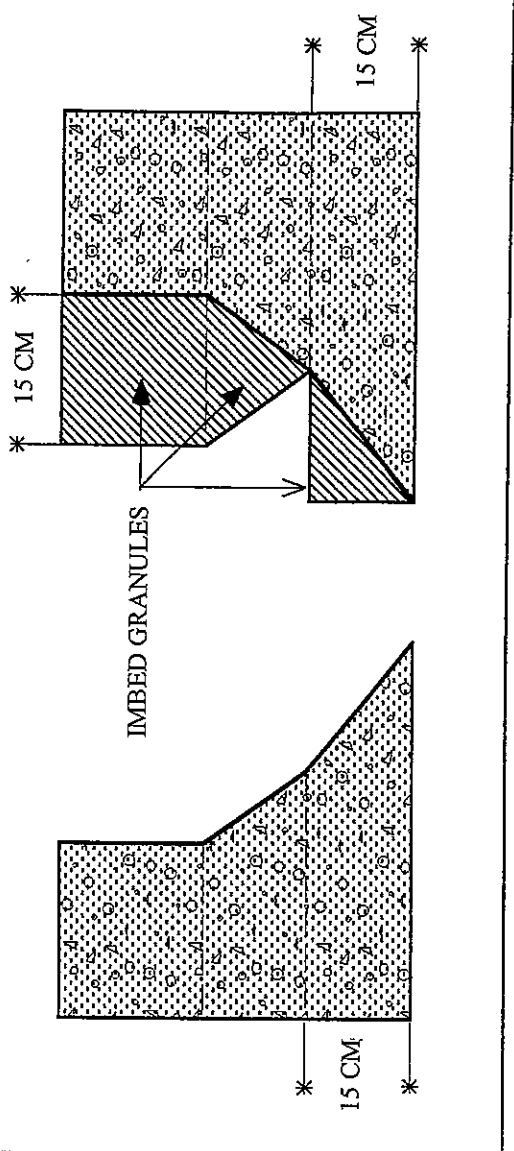
(604) 888-ROOF CONSULTANTS LTD.	Job#: 10-287
ROOFTECH INDEPENDANT CONSULTANTS & INSPECTORS	Date: MARCH / 10
	Drawn by: JPJ
CITY OF RICHMOND SOUTH ARM COMMUNITY CENTRE 8880 WILLIAMS ROAD, RICHMOND, BC YEAR 2010 REROOF(S): RA # 1, 10 & # 11	

OUTSIDE CORNER REINFORCEMENT & STRIPPING CRITERIA FOR 180G 3.0MM S.B.S.



"BUTTER EDGES" & IMBED GRANULES

OUTSIDE CORNER STRIPPING CRITERIA FOR 250G 4.0MM GRANULAR S.B.S.



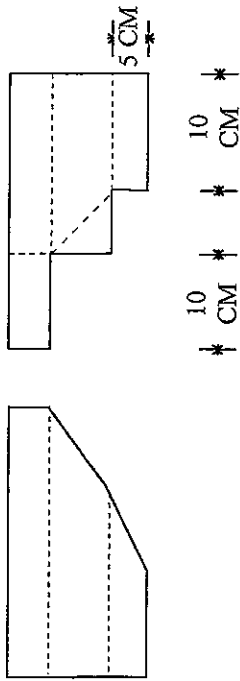
TYPICAL OUTSIDE CORNER REINFORCEMENT & STRIPPING CRITERIA

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 Date: MARCH / 10
 Drawn by: JPJ

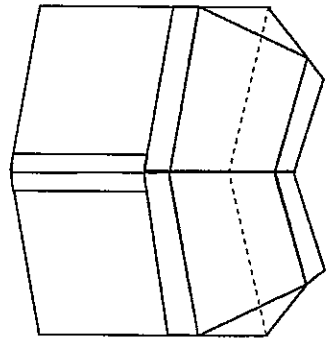
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 YEAR 2010 REROOF(S): RA # 1, 10 & # 11

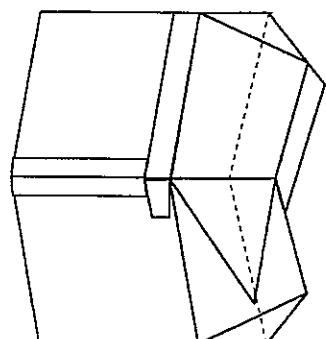
INSIDE CORNER STRIPPING CRITERIA FOR 180G 3.0MM S.B.S. BASE SHEET



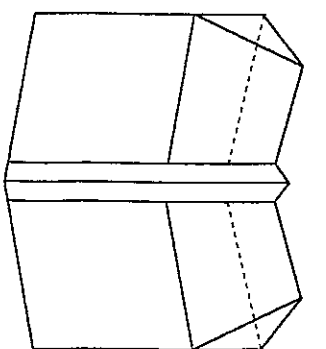
10 CM * * 10 CM *



1



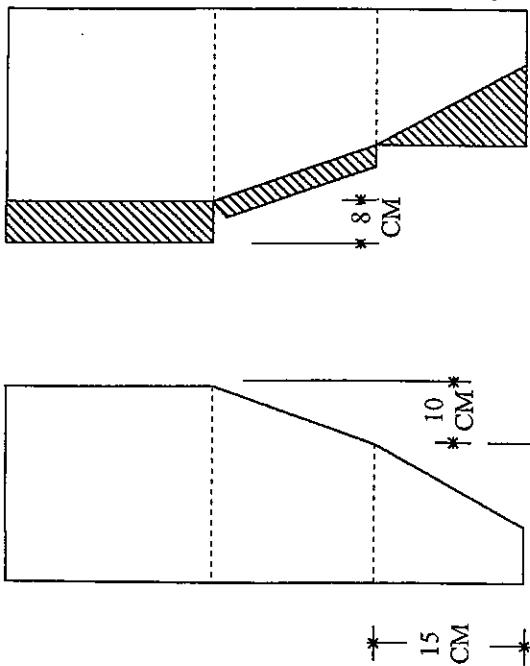
2



3

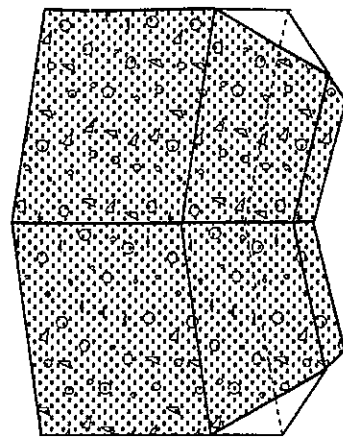
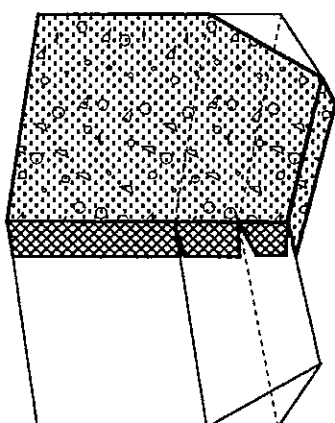
CORNER PATTERN FOR 180G 3.5MM "S.B.S. BASE SHEET" TORCH APPLIED WITH A 100% BOND

INSIDE CORNER STRIPPING CRITERIA FOR GRANULAR CAP SHEET



10 CM * * 10 CM *

CORNER PATTERN FOR 250G 4.0MM "GRANULAR S.B.S. CAP SHEET" TORCH APPLIED WITH A 100% BOND



TYPICAL MEMBRANE INSIDE CORNER STRIPPING

2000
ROOFTECH
 INDEPENDANT CONSULTANTS & INSPECTORS

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NOT TO SCALE: Existing measurements & profiles NOT for Tender purposes. Contractor to confirm all site data.

SHOP FORMED HOOD
 32 OZ. COPPER OR 14 GA.
 ALUMINUM OR WRAP
 USING 1.2MM E.P.D.M. &
 GALVANIZED CLAMPS

STACK & FLANGE TO BE
 SHOP FORMED 32 OZ. COPPER
 OR 14 GA. ALUMINUM ONLY

250G S.B.S. GRANULATED MEMBRANE
 CAP SHEET 4.0MM TORCH WELDED

180G S.B.S.
 MEMBRANE 3.0MM
 TORCH WELDED

TROWEL COAT
 S.B.S. MASTIC

IMBED THE EXISTING GRANULES
 12" BEYOND THE FLANGE OF THE
 NEW STACK

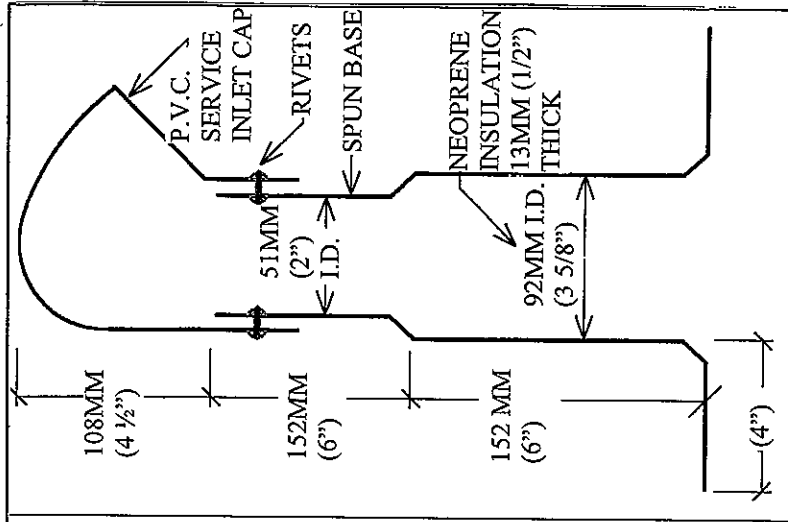
NOTE:
 EXISTING ELECTRICAL & / OR PIPE
 TO BE EXTENDED AS NECESSARY TO
 SUIT SITE CONDITIONS & CODES.
 INCLUDE ALL RELATED COSTS IN
 TENDER.

MINIMUM STRIPPING
 12"

MINIMUM FLANGE
 6"

MASTIC

CUT & DISPOSE OF
 EXISTING LEAD P/V
 STACK FLASHING



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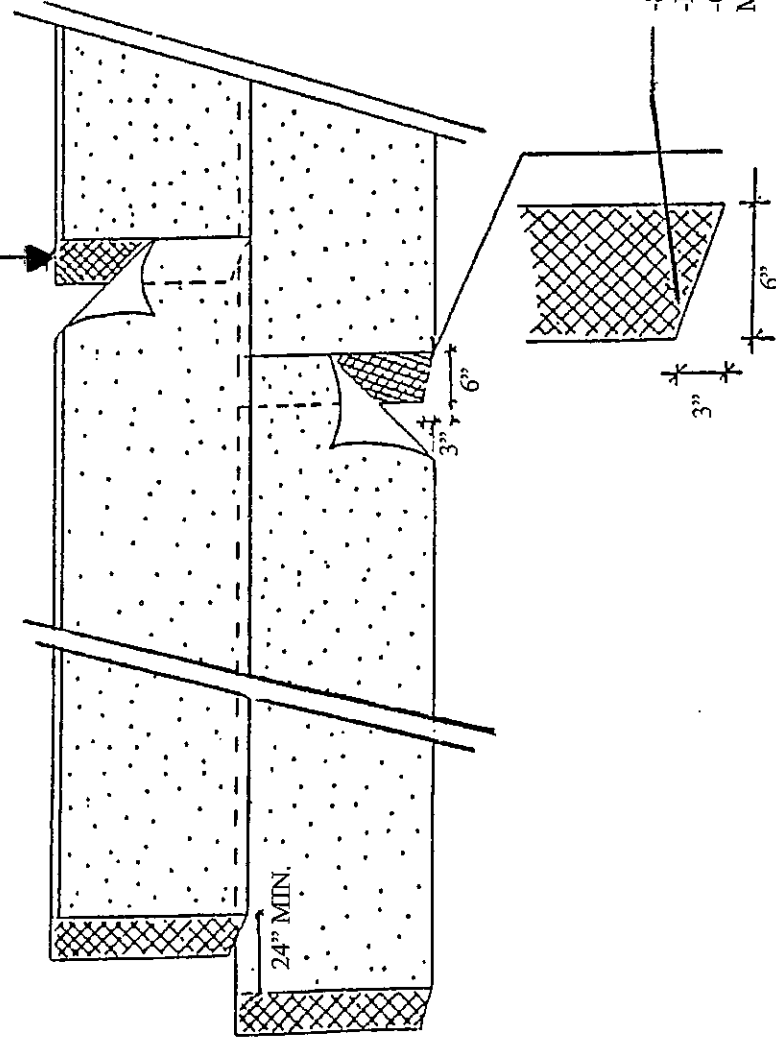
TYPICAL DETAIL ELECTRICAL & / OR GAS FLASHING REPLACEMENT

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NOT TO SCALE: Existing measurements & profiles NOT for tender purposes. Contractor to confirm all site data.

HEAT TOP SURFACE & EMBED GRANULARS INTO MEMBRANE PRIOR TO ADHESION OF OVERLAP PLY

STAGGER END LAPS 24"
250 (GRANULAR) MEMBRANE,
TORCH WELDED



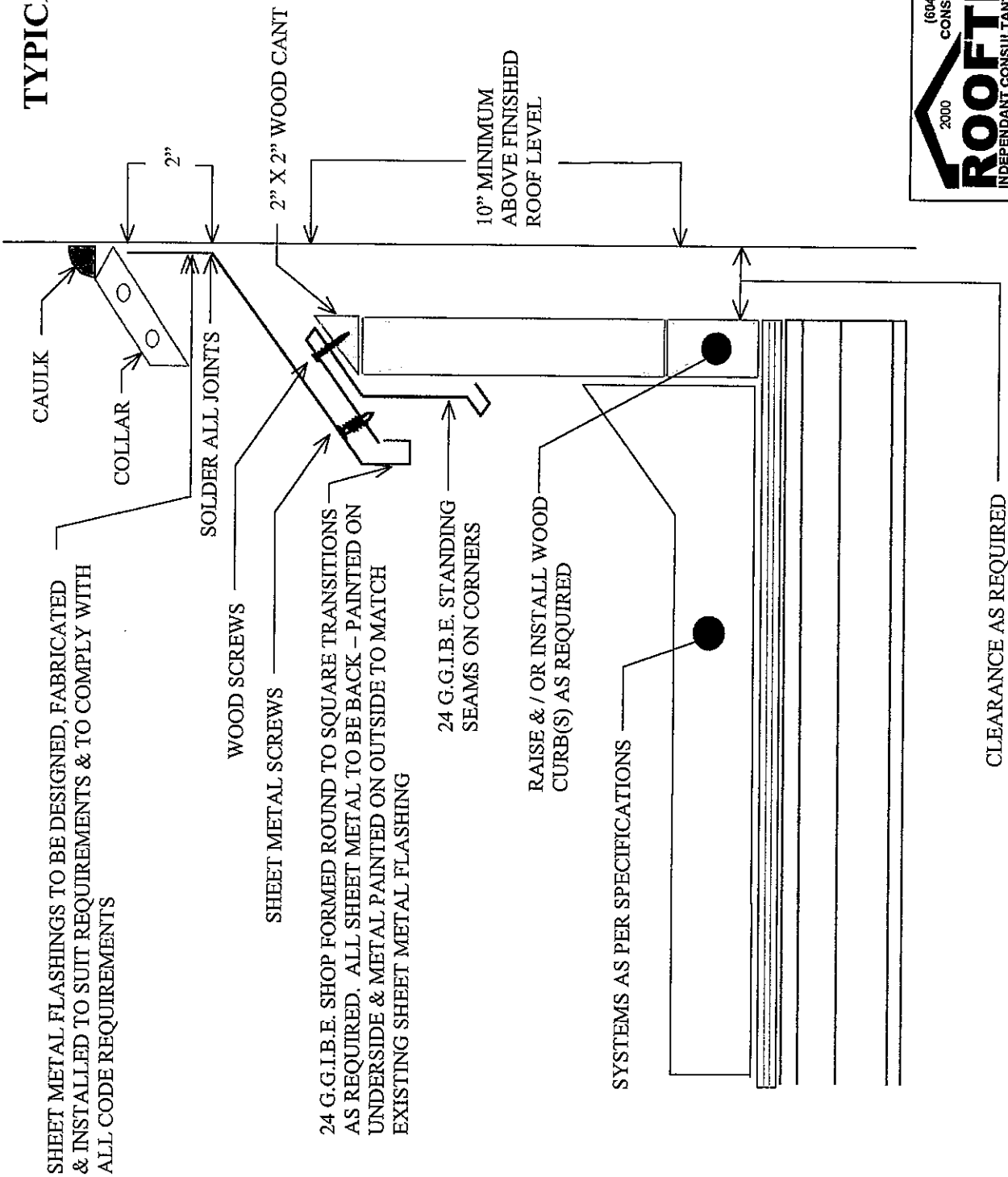
HANDLING CRITERIA
ALL ROLLS ARE TO BE UNROLLED & ALLOWED TO RELAX PRIOR TO INSTALLATION ON TO THE ROOF. TIME REQUIRED FOR RELAXATION IS DEPENDANT UPON WEATHER & MANUFACTURER. CRITERIA IS SMOOTH WRINKLE FREE BOND
NOTE: HANDLING CRITERIA TO APPLY TO ALL 180G MEMBRANE

-SIDE LAPS 3"
-END LAPS 6"
-CUT IN AN ANGLE AT CORNERS OF THE MEMBRANE THAT WILL BE COVERED

GRANULATED CAP SHEET LAYOUT CRITERIA

	Job#: 10-287
	Date: MARCH / 10
Drawn by: JPJ	
CITY OF RICHMOND SOUTH ARM COMMUNITY CENTRE 8880 WILLIAMS ROAD, RICHMOND, BC YEAR 2010 REROOF(S): RA # 1, 10 & # 11	

TYPICAL CURB DETAIL



SHEET METAL FLASHINGS TO BE DESIGNED, FABRICATED & INSTALLED TO SUIT REQUIREMENTS & TO COMPLY WITH ALL CODE REQUIREMENTS

CAULK

COLLAR

2"

SOLDER ALL JOINTS

WOOD SCREWS

2" X 2" WOOD CANT

10" MINIMUM ABOVE FINISHED ROOF LEVEL

24 G.G.I.B.E. SHOP FORMED ROUND TO SQUARE TRANSITIONS AS REQUIRED. ALL SHEET METAL TO BE BACK - PAINTED ON UNDERSIDE & METAL PAINTED ON OUTSIDE TO MATCH EXISTING SHEET METAL FLASHING

24 G.G.I.B.E. STANDING SEAMS ON CORNERS

RAISE & / OR INSTALL WOOD CURB(S) AS REQUIRED

SYSTEMS AS PER SPECIFICATIONS

CLEARANCE AS REQUIRED

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 SOUTH ARM COMMUNITY CENTRE
 8880 WILLIAMS ROAD, RICHMOND, BC
 YEAR 2010 REROOF(S): RA # 1, 10 & # 11

NOTE: EXTEND ALL PIPE TO EQUAL EXISTING & INSULATE AS REQUIRED. INCLUDE ALL COSTS IN TENDER

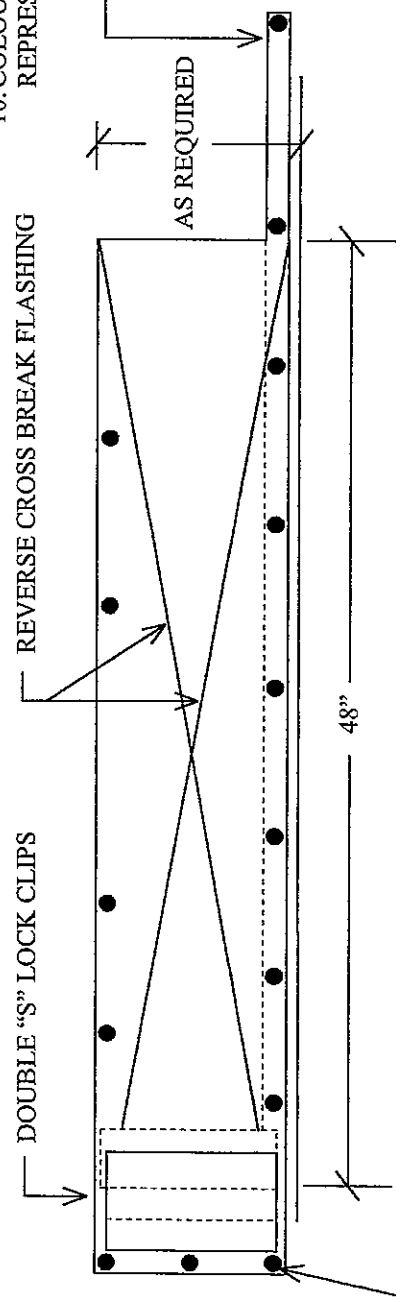
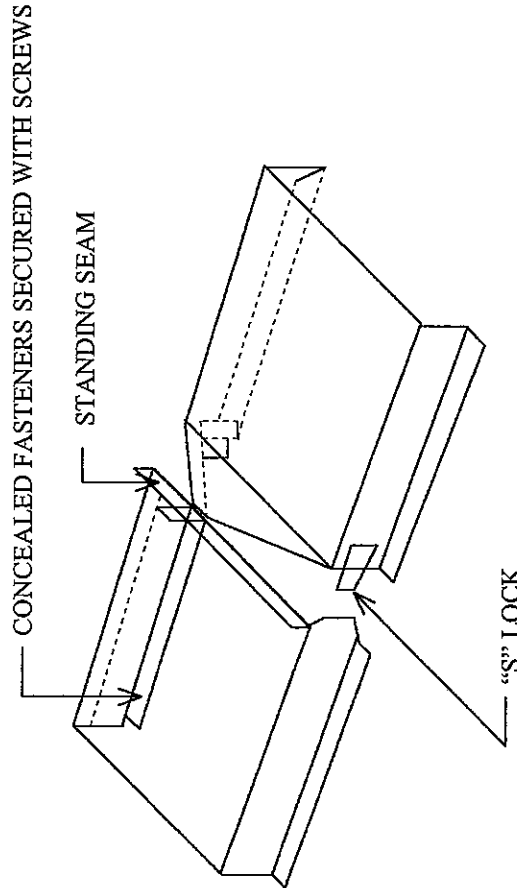
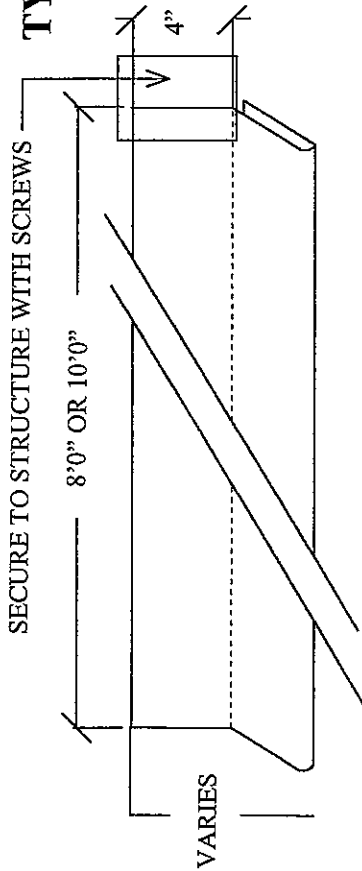
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NOT TO SCALE: Existing measurements & profiles NOT for Tender purposes. Contractor to confirm all site data.

TYPICAL SHEET METAL INSTALLATION CRITERIA

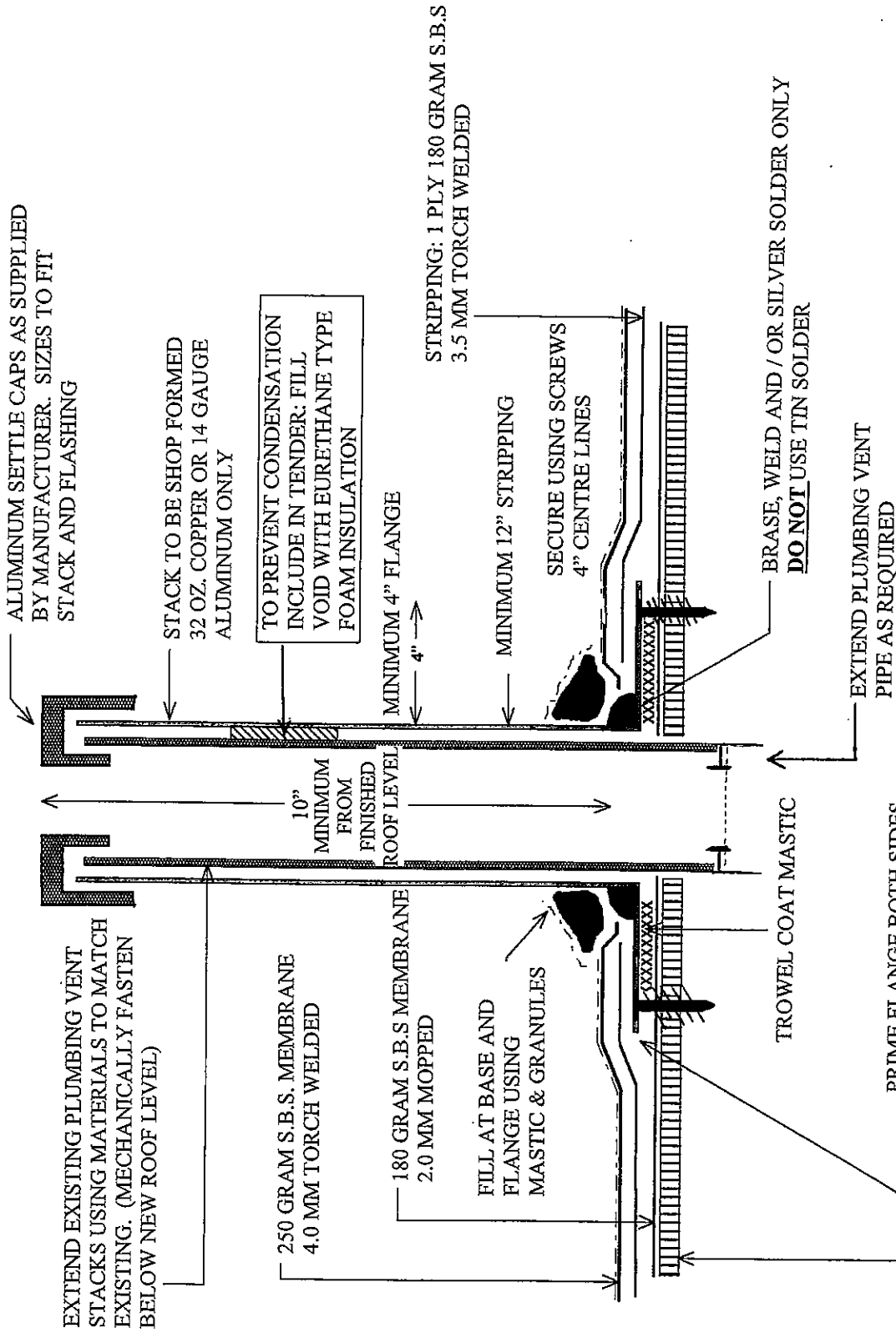
1. ALL METAL SHALL HAVE PROPER ALLOWANCE FOR EXPANSION & CONTRACTION.
2. NO LAP JOINTS WILL BE PERMITTED.
3. ALL METAL TO BE JOINED BY LOCK CLIPS OR STANDING SEAM: SEE DETAILS.
4. ALL CAP FLASHINGS TO BE FASTENED WITH 24 GAUGE CLIPS AT 24" CENTRE LINES.
5. ALL JOINTS ARE TO BE CAULKED BOTH PRIOR TO AND AFTER CONNECTING.
6. ALL EXPOSED EDGE FLASHINGS SHALL BE HEMMED TO FORM A DRIP EDGE.
7. ALL METAL TO BE FIRMLY ATTACHED TO THE STRUCTURE WITH COMPATIBLE WOOD SCREWS.
8. NO SHEET METAL IS TO HAVE A FLAT SURFACE.
9. ALL SHEET METAL DETAILS ARE TO BE CONFIRMED BY THE ROOFING CONSULTANT VIA SHOP DRAWINGS PRIOR TO MANUFACTURE.
10. COLOUR TO BE PRE-APPROVED BY OWNER'S REPRESENTATIVE "IN WRITING."



<p>2000 ROOFTECH INDEPENDANT CONSULTANTS & INSPECTORS</p>	Job#: 10-287
	Date: MARCH / 10
	Drawn by: JPJ
<p>CITY OF RICHMOND SOUTH ARM COMMUNITY CENTRE 8880 WILLIAMS ROAD, RICHMOND, BC YEAR 2010 REROOF(S): RA # 1, 10 & # 11</p>	

FASTENED WITH SCREWS AS REQUIRED
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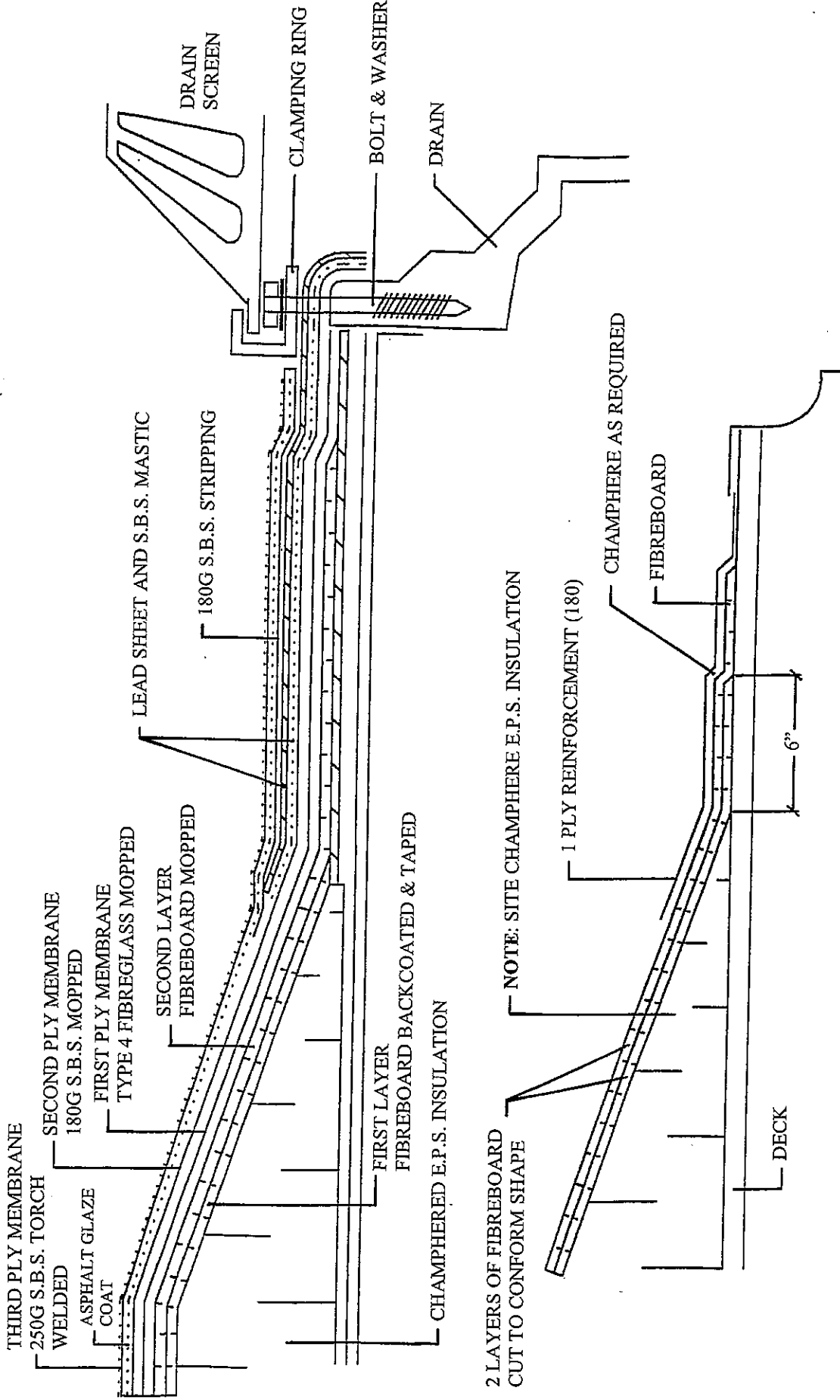
Job#: 10-287
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TYPICAL PLUMBING VENT FLASHING

TYPICAL SPECIFIED ROOF ASSEMBLY

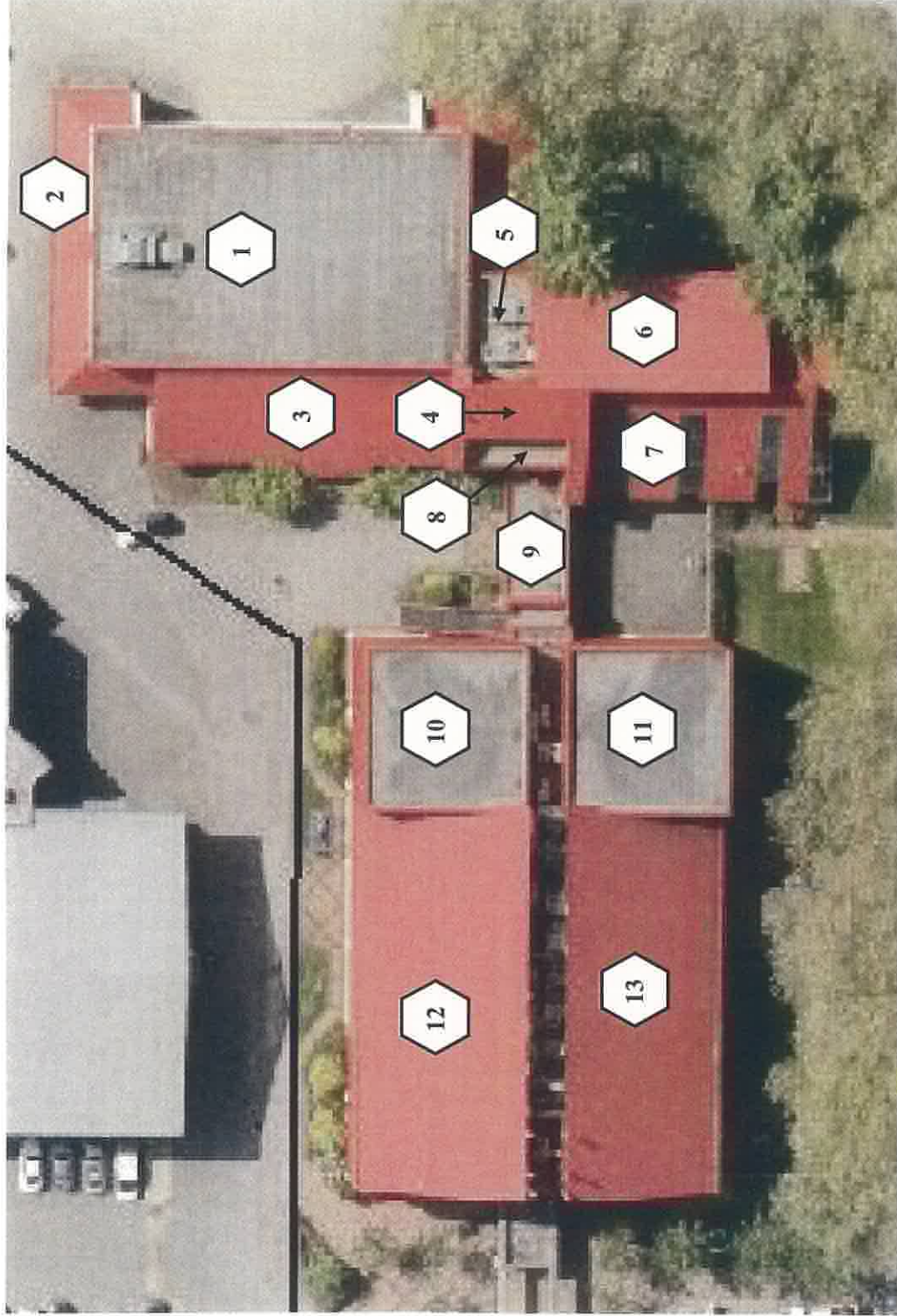


TYPICAL DRAIN SUMP CRITERIA

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 Date: MARCH / 10
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Job#: 10-287
Date: FEB. / 10
Drawn by:

Project: CITY OF RICHMOND
SOUTH ARM COMMUNITY CENTRE
8880 WILLIAMS ROAD, RICHMOND, BC
YEAR 2010 REROOF(S): RA 1, 10 & # 11

1.



2.



3.



4.



5.



6.



7.



8.



9.



10.



11.



12.



13.



Environmental Terms and Conditions of Contract

1. Environmental Policy Requirements

1.1 The City of Richmond's Environmental Purchasing Policy

The City of Richmond's Environmental Purchasing Policy states:

In order to increase the development and awareness of environmentally sound products and services, City of Richmond Staff will review their contracts and tender specifications for goods and services, to ensure that wherever possible and economically feasible, specifications are amended to provide for consideration of environmental characteristics. Consideration may be given to those environmental products that are certified by an independent accredited organization.

The City of Richmond as a whole will endeavour to increase its use of products and services that are more responsible to the environment in the way they are made, used, transported, stored and packaged and disposed of. It is recognized that analysis is required to ensure that the products are made available at competitive prices, and that the environmental benefits provided by a product or service should not significantly affect the intended use of that product or service.

- 1.1.1 The City of Richmond reserves the right to request information from bidders that will demonstrate compliance to this environmental purchasing policy.
- 1.1.2 Bidders are asked to supply information on environmentally preferable products and services that meet all specifications and performance requirements.
- 1.1.3 Placing the City of Richmond in breach of its environmental policy or environmental laws will result in the termination or suspension of an agreement, at the sole discretion of the City.

1.2 Environmental Attributes of Company

- 1.2.1 It is desirable that suppliers to the City of Richmond have an environmental policy statement approved at the executive level and implemented across the company.
- 1.2.2 Suppliers who have pursued environmental certification such as ISO 14001 should include this information with their bid. The ISO 14000 Series is a set of international standards for voluntary environmental management for both private and public organizations. It is designed to promote environmental compliance, ensure a commitment to pollutions

prevention, and foster continual improvement of environmental performance through efficient environmental management.

- 1.2.3 The City of Richmond strictly subscribes to an environmental policy that requires all suppliers to be in compliance with all environmental laws and regulations regarding the manufacture, processing, handling, provision, disposal and waste management of goods and services.

1.3 **Environmental Purchasing Resources**

- 1.3.1 The City of Richmond Environmental Purchasing Guide is available from the City of Richmond Web site at:

<http://www.richmond.ca/services/Sustainable/environment/policies/purchasing.htm>

General Conditions of the Contract

1. INTERPRETATION

1.1 Definitions

In the Contract Documents, the following definitions apply:

“**City**” means the City of Richmond;

“**Contract**” means this contract as set out and described in the Contract Documents;

“**Contract Documents**” has the meaning set out in the Instructions to Tenderers;

“**Contractor**” means the Tenderer that is awarded the Contract; and

“**Work**” means and includes anything and everything required to be done for the completion of this Contract.

2. WORK

2.1 Conformity with Contract Documents

The Contractor will perform the Work in strict conformity with the Contract Documents.

2.2 Standard of Care

The Contractor will perform the Work with that degree of care, skill and diligence normally provided by a qualified and experienced practitioner performing similar work, and on the understanding that the City is relying on the Contractor’s experience and expertise.

2.3 Satisfaction of City

The Contractor will perform the Work to the reasonable satisfaction and approval of the City. The City will be the sole judge of the Work in respect of both quality and quantity, and the City’s decisions with regard to the Work, or as to the meaning and intention of this Contract, or any part or parts thereof, will be binding and final upon the Contractor.

2.4 Permits

The Contractor will obtain and pay for all applicable permits, licences, and certificates required to complete the Work unless otherwise provided herein.

General Conditions of the Contract (Cont'd)

2.5 Changes in the Work

The City may make changes to the Work, and the Contract price and time for performance will be adjusted by mutual agreement between the City and the Contractor. Except in the case of an emergency, changes may not be made by the Contractor without written approval by the City.

3. PERSONNEL

3.1 Qualified Personnel

The Contractor will provide only professional personnel who have the qualifications, experience and capabilities to perform the Work.

3.2 Subcontractors

The Contractor will perform the Work using its own personnel and those subcontractors as may be listed on the Tender Form and approved by the City, and will bind all approved subcontractors to the terms of the Contract Documents, as applicable to the subcontractors work. The Contractor will be as fully responsible to the City for acts and omissions of subcontractors and of persons directly or indirectly employed by them as for acts and omissions of persons directly employed by the Contractor.

3.3 Replacement of Personnel or Sub-Contractors

If the City reasonably objects to the performance, experience, qualifications or suitability of any of the Contractor 's personnel or subcontractors then the Contractor will, on written request from the City, replace such personnel or subcontractors.

3.4 City's Own Forces and Other Contractors

The City may have its own work forces and other contractors on the site while the Work is under way. The City will coordinate the work of all contractors on the site and require their coordination with each other. The Contractor will report to the City any apparent deficiencies in other contractors' work which would affect the Work, immediately after the deficiencies come to the Contractor's attention.

4. INDEPENDENT CONTRACTOR

It is understood that this Contract is strictly between the Contractor and the City and the Contractor is an independent contractor for the City and no employment relationship, partnership, agency, or joint venture exists between the City, the employees of the Contractor and/or its agents and/or their employees, and/or its Contractors and/or their

General Conditions of the Contract (Cont'd)

employees. Any disputes between the Contractor and any of its employees and/or its agents and/or their employees and/or their Contractors and/or their employees will be resolved by the Contractor with no involvement by the City.

5. PREMISES

5.1 Use of Premises

The Contractor will confine the use of the premises for the Work as directed by the City and will comply with regulations which govern the building or institution where the Work is located.

5.2 Cleaning of Premises

At the conclusion of the Work, the Contractor will clean up and remove all debris and rubbish to the satisfaction of the City.

5.3 Light, Power, and Heat

The City's supply of electrical energy and water will be available to the Contractor without charge. The Contractor, upon completion of the Work, will remove temporary connections and extension of services, leaving the existing structures and services undamaged.

6. INQUIRIES

Contractor's inquiries to the City during construction should be directed to the following:

Daianna Panni
Buyer I - Contracting Specialist
Purchasing Section
Tel: 604-276-4270
E-mail: purchasing@richmond.ca

7. PAYMENT

7.1 Progress Payments

The Contractor will submit a monthly invoice (the "**Invoice**") to the City requesting payment of the portion of the Work completed in the previous month.

the City will pay the portion of an Invoice which the City determines is payable within 30 days of the receipt of the Invoice, except the City will hold back from payments 10% of the amount the City determines is payable to the Consultant.

General Conditions of the Contract (Cont'd)

7.2 Payment of Holdback

The City will pay the Contractor the 10% holdback 55 days after completion of the Work upon receipt of:

- the Contractor's written claim for final payment;
- a Statutory Declaration stating that the Contractor has discharged every obligation and paid or satisfied every just claim incurred by him in connection with the Contract, including claims by subcontractors, and
- written clearance from WorkSafeBC.

8. TAXES AND FEES

8.1 Taxes

Unless otherwise provided herein, the Contractor will pay all government sales or excise taxes in force at the date of the Contract, provided that any increase or decrease in such taxes will increase or decrease the amount due under the Contract accordingly. The Contractor will ensure that invoices show the appropriate amounts for Goods and Services Taxes and Provincial Sales Taxes separately.

8.2 Patent Fees

The Contractor will pay all royalties and licence fees and will save the City harmless from any and all losses on account of suits or claims of infringement of patents in any way connected to the Contractor's performance of the Work.

9. DEFECTIVE WORK

9.1 Correction of Defects

If, in the opinion of the City, the Work is improperly, defectively, or insufficiently performed, or being performed, the City may, in writing, order the Contractor to re-execute or correct the Work in accordance with such order; and if the Contractor fails to comply with such order within ten working days, the City may, at any time thereafter, execute or cause to be executed the order so given, and the Contractor will, on demand, pay to the City, all costs, damages, and expenses incurred in respect thereof or occasioned by reason of the non-compliance by the Contractor with any such orders; and if the Contractor fails to pay such costs, damages, and expenses, the City may retain and deduct such costs, damages, and expenses from any amount then or thereafter payable to the Contractor under this Contract.

General Conditions of the Contract (Cont'd)

9.2 Deficiency Holdback

The City may retain holdbacks to cover deficiencies in the Work, in an amount equal to twice the amount the City estimates as the total cost to complete the deficiencies.

10. WARRANTY

Unless otherwise specified, the Contractor warrants that only the best workmanship and materials will be employed and if, within a period of one (1) year from the date of acceptance of the Work by the City, such Work or any portion thereof are found by the City to be defective or faulty due to imperfect or bad workmanship or material, the Contractor agrees to correct such defective Work forthwith without expense to the City.

11. LIENS

11.1 Indemnification

The Contractor will fully indemnify the City from and against any and all liability or expenses by way of legal costs or otherwise in respect of any claim which may be made for a lien or charge at law or in equity or to any claim or liability under the Builders Lien Act, or to any attachment for debt, garnishee process, or otherwise, that arises in connection with the Work.

11.2 Lien Holdback

The City may, in addition to other holdbacks as provided by the Contract Documents, hold back an amount equal to any lien which has been filed with respect to the Work, plus 10% as security for costs. The City may, at its option, after five days written notice to the Contractor, pay such amount into court to discharge the lien. If the lien is discharged without payment of the holdback into court, then the City shall pay such holdback to the Contractor, without interest.

12. PROTECTION OF THE WORK

The Contractor will protect of the Work and materials from damage and will protect the City's property and any adjoining property from injury due to the Work.

13. BONDS

Within fourteen (14) calendar days of the award of the Contract or the demand by the Owner or Construction Manager (whichever occurs first), the Contractor shall provide and pay for a Performance Bond and a Labour and Materials Payment Bond each in the amount of fifty percent (50%) of the Contract Price, covering the faithful performance of the Contract including the requirements of Item 10 – Warranty, and including without

General Conditions of the Contract (Cont'd)

limitations, corrections after completion provided for in Item 10, and payment of all obligations arising under the Contract.

For greater certainty, the Performance Bond shall cover the Owner and the Construction Manager in the event of the Contractor's Failure to faithfully perform the Contract, whether from bankruptcy or otherwise, for all expenses incurred to properly complete the work, including reasonable legal fees and additional architectural or engineering fees, watchman services, heating, lighting and all similar expenses.

The aforesaid Performance Bond and Labour and Materials Bond shall name the City of Richmond as the obligee, and shall be issued by the surety only after the Contractor has provided to the surety complete disclosure of all Terms and Conditions of the Contract, any amendments thereto, and all assignment agreements, if any, applicable to the Contract, and shall be duly executed by all parties thereto. The Contractor shall provide to the Owner, or cause to be provided to the Owner, such written confirmation as the Owner deems appropriate that the surety has received full disclosure of all material information and documents which may affect or impact upon the surety's obligations under the Performance Bond and the Labour and Materials Payment Bond.

14. INDEMNIFICATION AND INSURANCE

14.1 Indemnification

The Contractor will indemnify, hold, and save harmless the City from and against all claims, losses, damages, costs, actions, and other proceedings, made, sustained, brought or prosecuted in manner, based upon, occasioned by, attributable to any injury, including death, property damage, infringement, or damage arising from any act or omission of the Contractor, the Contractor's employees, officers, volunteers, servants, or agents or persons from whom the Contractor has assumed responsibility in the performance or purported performance of this Contract.

14.2 Insurance

The Contractor will, at its own expense, through the terms of the Contract secure, maintain, and pay for the following coverage:

Comprehensive General Liability Insurance with a limit of not less than \$5,000,000 inclusive per occurrence for bodily injury and property damage and \$5,000,000 for personal injury. The policy or policies will cover all premises and operations necessary or incidental to the performance of this Contract and include but not necessarily be limited to the following coverage:

- *Contractual liability assumed under this Contract.*

General Conditions of the Contract (Cont'd)

- *Contingent employer's liability with respect to operations of sub-contractors.*
- *Owner's protective liability.*
- *Cross liability.*
- *Automobile liability (non-owned, hired).*
- *Completed operations liability 24 months after completed operations.*
- *Voluntary medical payments.*

"Course of Construction" Property Damage Insurance covering all risks of physical loss or damage on an occurrence basis, including loss of use of property, and including losses or damage from flood or earthquake. The coverage provided will amount to no less than 80% of the total value of the Work done and material delivered to the site, or under the control of the Contractor, payable to the City and Contractor as their interests may appear, and protecting each in such terms as will preclude subrogation claims by the insurer against anyone insured thereunder.

The City, its officers, officials, and employees will be added as additional named insured on all such policies. All such insurance provided by these policies will be primary regardless of any insurance or self insurance that may be enforced at the time of any loss or claim that insures the City, its officers, officials, and employees.

The policy or policies will be underwritten by an insurance company or companies licensed to do business in the Province of British Columbia and who meet with the reasonable approval of the City. Prior to the commencement of the Work, the Contractor will furnish the City through the Office of the Purchasing and Insurance Department a certified original copy of all such policies as evidence that such insurance is in force. The Contractor agrees that such insurance policies cannot be cancelled, lapsed, or materially changed without at least 30 days' written notice to the City.

Maintenance of such insurance and the performance of the Contractor of the Contractor's obligations under this clause will not relieve the Contractor of liability under the indemnification provisions here and above set forth. The foregoing insurance provisions will not limit the insurance required by Municipal, Provincial, or Federal law.

General Conditions of the Contract (Cont'd)

It will be the full responsibility of the Contractor to determine whether any additional insurance coverage is necessary and advisable for its own protection and/or to fulfil its obligations under this Contract. Any such additional insurance will be provided and maintained by the Contractor its own expense.

15. WORKSAFEBC COVERAGE/PRIME CONTRACTOR

The Contractor agrees that it will at its own expense procure and carry or cause to be procured and carried and paid for, full WorkSafeBC coverage for itself and all workers, employees, servants and others engaged in or upon any work or service which is the subject of this Contract. The Contractor agrees that the City has the unfettered right to set off the amount of the unpaid premiums and assessments for such WorkSafeBC coverage against any monies owing by the City to the Contractor. The City will have the right to withhold payment under this Contract until the WorkSafeBC premiums, assessments or penalties in respect of work done or service performed in fulfilling this Contract had been paid in full.

The Contractor agrees that it is the Prime Contractor for the purposes of the WorkSafeBC Occupational Health and Safety Regulations for the Province of British Columbia. The Contractor will have a safety program acceptable to the WorkSafeBC and will ensure that all WorkSafeBC safety rules and regulations are observed during performance of this Contract, not only by the Contractor but by all subcontractors, workers, material men and others engaged in the performance of this Contract. Prior to commencement of construction, the Contractor will complete and file a "Construction Notice of Project" with the WorkSafeBC and will provide a copy of the same to the City confirming that the Contractor will be the Prime Contractor responsible for coordination of safety and health under Part 3 of the Workers Compensation Act and Part 20 of the WCB Occupational Health and Safety Regulations.

The Contractor will provide the City with the Contractor's WorkSafeBC registration number and a letter from WorkSafeBC confirming that the Contractor is registered in good standing with WorkSafeBC and that all assessments have been paid to the date thereof prior to the City having any obligation to pay monies under this Contract. The Contractor will also provide a signed copy of the Prime Contractor Designation Document.

The Contractor will indemnify the City and hold harmless the City from all manner of claims, demands, costs, losses, penalties and proceedings arising out of or in any way related to unpaid WorkSafeBC assessments owing from any person or corporation engaged in the performance of this Contract or arising out of or in any way related to the failure to observe safety rules, regulations and practices of WorkSafeBC, including penalties levied by WorkSafeBC.

General Conditions of the Contract (Cont'd)

16. DEFAULT

The City may, by notice to the Contractor, may terminate this Contract:

- If the Contractor fails to perform the Work within the time specified or breaches any material provision of the Contract,
- If the Contractor is adjudged bankrupt, or makes a general assignment for the benefit of creditors because of its insolvency, or if a receiver is appointed because of its insolvency;

If the City terminates this Contract as provided by this section, then the City may:

- enter into contracts, as it in its sole discretion sees fit, with other persons to complete the Work;
- withhold payment of any amount owing to the Contractor under this Contract for the performance of the Work;
- set-off the total cost of completing the Work incurred by the City against any amounts owing to the Contractor under this Contract, and at the completion of the Services pay to the Contractor any balance remaining; and
- if the total cost to complete the Services exceeds the amount owing to the Contractor, charge the Contractor the balance, which amount the Contractor will forthwith pay.

17. USE OF WORK PRODUCT

The Contractor hereby sells, assigns and transfers to the City the right, title and interest required for the City to use and receive the benefit of all the reports, drawings, plans, designs, models, specifications, computer software, concepts, products, designs or processes or other such work product produced by or resulting from the Work rendered by the Contractor. This section does not give the City the right to sell any such work product to any third party and the City may sell the work product only with the prior approval of the Contractor. The Contractor may retain copies of the work product.

18. JURISDICTION

Nothing in this Contract limits or abrogates, or will be deemed to limit or abrogate, the jurisdiction of the Council of the City in the exercise of its powers, rights or obligations under any public or private statute, regulation or by-law or other enactment.

General Conditions of the Contract (Cont'd)

19. DISPUTE RESOLUTION

All matters in dispute under this Contract may, with the concurrence of both the City and the Contractor, be submitted to arbitration by a single arbitrator.

20. GENERAL

20.1 Governing Law

This Contract will be governed by the laws of British Columbia.

20.2 Compliance with Laws

The Contractor will perform the Work in compliance with all applicable codes, laws, regulations, and ordinances.

20.3 Amendment

This Contract may be amended only by agreement in writing, signed by both parties.

20.4 Time

Time will be of the essence in this Contract.

20.5 Assignment

Neither party will assign the Contract without the written consent of the other.

20.6 Notices

Any notice required to be given in this Contract will be deemed to be duly given to the City if sent by registered mail addressed to the City's Purchasing Section at Richmond "City Hall, 6911 No. 3 Road, Richmond, BC V6Y 2C1" and to the Contractor if sent by registered mail addressed to the Contractor at the address set forth in the Tender Form.



Note: Receipt of this completed form will assist us in calling for future bids. Please complete and submit this form prior to the closing date and time as shown on the Request for Tender/Proposal/Tender form.
Please remember to include Tender/Proposal/Tender No. at right.

Tender/Proposal/Tender No.
T.3901

A Tender/Proposal/Tender is not being submitted for the following reason(s):

- | | |
|--|--|
| <input type="checkbox"/> We do not manufacture/supply the required goods/services | <input type="checkbox"/> Cannot obtain raw materials/goods in time to meet delivery requirements |
| <input type="checkbox"/> We do not manufacture/supply to stated specifications | <input type="checkbox"/> Cannot meet delivery requirements |
| <input type="checkbox"/> Specifications are not sufficiently defined | <input type="checkbox"/> Cannot quote/tender a firm price at this time |
| <input type="checkbox"/> Insufficient information to prepare quote/proposal/tender | <input type="checkbox"/> Insufficient time to prepare quote/tender. |
| <input type="checkbox"/> Quantity too small | <input type="checkbox"/> We are unable to competitively quote/tender at this time. |
| <input type="checkbox"/> Quantity too large | <input type="checkbox"/> We do not have facilities to handle this requirement |
| <input type="checkbox"/> Quantity beyond our production capacity | <input type="checkbox"/> Licensing restrictions (please explain) |
| <input type="checkbox"/> Cannot meet packaging requirements | <input type="checkbox"/> Agreements with distributors/dealers do not permit us to sell directly. |
| <input type="checkbox"/> Cannot handle due to present plant loading | <input type="checkbox"/> Other reasons or additional comments (please explain below) |

I / We wish to quote / tender on similar goods / services in future <input type="checkbox"/> Yes <input type="checkbox"/> No	Authorized Company Official – Signature and Title	Date
This space for City of Richmond Comments	Firm Name	
	Address	
	City	
	Province	Postal Code
	Telephone Number	