SPECIFICATION

FOR

Summerside Public Health, Linden Avenue

Dental Clinic Renovation

Summerside, Prince County, PEI

Project 4575-17014

Prepared by:

PEI Department of Transportation, Infrastructure and Energy

October, 2017

TABLE OF CONTENTS

			No. of Pages
Section AA	-	Site Visit	1
Section A	-	Invitation to Bidders	1
Section B	-	Instructions to Bidders	10
Section C	-	General Conditions	17
Section D	-	Form of Agreement	2
Section E	-	Contract Tender	2
Section G	-	Safety Requirements (Pre-Construction Safety Check List)	13
Section 1A	-	General Instructions	8
Section 1C	-	Cutting and Patching	1
Section 2A	-	Demolition	2
Section 2C	-	Asbestos Abatement	2
Section 6E	-	Architectural Woodwork	3
Section 8C	-	Steel Frames	3
Section 8D	-	Wood Doors	1
Section 9B	-	Acoustic Ceiling Tile Systems	2
Section 9O	-	Painting	1
Section 9S	-	Sheet Vinyl Flooring	2
Government of Prince Edward Island Wiring Standards			6
Appendix A	-	PLM Asbestos Bulk Sample Report	9

DRAWINGS

A1 of 3	-	Demolition & New Floor Plans
A2 of 3	-	Millwork Details
A3 of 3	-	Reflected Ceiling Plans & Flooring and Paint Schedules

1. GENERAL

   a) All bidders submitting tenders for this work shall first examine the site and all conditions thereon and/or therein. All tenders shall take into consideration all such conditions as may affect the work under this contract, no claims for extras resulting from conditions existing at the time of tender will be accepted by the Owner.

2. SITE VISIT

   a) **There will be a recommended site visit held, Tuesday, November 7th at 10:00 am. Contractors are asked to meet outside the main entrance of the building.**

END

Sealed tenders will be received at the Public Works and Planning Division of the Department of Transportation, Infrastructure and Energy, 3rd Floor Jones Building, 11 Kent Street, Charlottetown, PE until **2 PM, Local Time, on November 16, 2017.** Tenders are to be clearly marked to indicate the project being tendered on.

Summerside Public Health – Dental Clinic Renovation
Summerside, Prince County, PE

Scope of Work:

.1 To supply all labour, plant and materials, equipment and supervision necessary to complete demolition and construction of the renovation identified in the drawings and specification herein.
.2 Work includes, but not limited to, the removal and disposal of hazardous materials and construction debris as per, but not limited to, the authority having jurisdiction.
.3 The demolition and reconstruction of walls, floors, ceilings, plumbing and electrical as identified in drawings and specification herein.
.4 No services to be unhooked before receiving approval from Transportation, Infrastructure and Energy Representative.
.5 Shop drawings to be submitted for approval prior to ordering of material.
.6 Contracts, Insurance, Construction schedule and Safety Policy are to be provided before work can begin.
.7 Three copies of "As-Built" drawings, warranty papers and Maintenance manuals to be provided upon completion of the project.

Note: Preparation and submission of bids – Area A/Area A+B. Refer to Section B – Instructions to Bidders, paragraph 20. b).

Drawings and Specifications may be obtained from the Department of Transportation, Infrastructure and Energy, 3rd Floor Jones Building, 11 Kent Street, Charlottetown, PE.

Drawings and Specifications are available for viewing at the Construction Association offices in Charlottetown, Moncton, Saint John, Fredericton and Halifax.

Refer to Instructions to Bidders for Bid Security and Contract Security requirements.

Tenders will be opened at the above advertised time and place and Bidders are invited to be present at the opening. Lowest or any Tender will not necessarily be accepted.

Any additional information can be obtained by contacting **Jonathan Gauthier, at 902-368-6680 or fax 902-569-0590 or email jwgauthier@gov.pe.ca.**

END

1. GENERAL

   a) The Tender Documents including General Conditions of Contract, the Instructions to Tenderers, Specifications, Tender Form and Drawings are all complementary and shall be read together.

   b) Each Tenderer shall examine the Tender Documents as soon as possible after receipt thereof and should he or she discover any errors or omissions therein, he or she shall notify the Department as soon as possible and at least seven (7) days prior to the date set for receiving tenders so that further instructions and/or drawings may be issued to all Tenderers before the date set for receiving tenders.

2. ADDENDA

   a) Tenders may, during the tendering period, be advised by addenda of required additions to, deletions from, or alterations to the requirements of the tender documents. All such changes shall become an integral part of the Tender Documents and shall be allowed for in arriving at the fixed sum tender figure.

3. BID AND CONTRACT SECURITY

   BID SECURITY

   a) Each Tender submitted shall be accompanied by the following security:

      .1 General Contract Tender less than or equal to Three Million ($3,000,000.00) Dollars, including mechanical and electrical subcontract values:

         A Bid Bond equal to at least ten percent (10%) of the Tender amount and a Letter of Surety from a bonding company guaranteeing to supply a Performance Bond in the amount of fifty percent (50%) of the total contract amount.

         OR

         A Security Deposit equal to at least ten percent (10%) of the Tender amount.

      .2 General Contract Tender more than Three Million ($3,000,000.00) Dollars, including mechanical and electrical subcontract values:

         A Bid Bond equal to at least ten percent (10%) of the Tender amount and a Letter of Surety from a bonding company guaranteeing to supply a Performance Bond in the amount of fifty

percent (50%) of the total contract amount and a Labour and Material Payment Bond in the amount of fifty percent (50%) of the total contract amount.

.3 Mechanical, Electrical and Sprinkler Trade Contract Tenders submitted through the Bid Depository:

A bid bond equal to at least ten percent (10%) of the tender amount and a letter of surety from a bonding company guaranteeing to supply a performance bond in the amount of fifty percent (50%) of the sub-contract amount.

OR

A Security Deposit equal to at least ten percent (10%) of the tender amount, the security deposit must be in the form of a Certified Cheque or Bank Draft drawn on a Bank to which the Bank Act applies or a Credit Union.

b) .1 All Bonds and Letter of Surety, provided by General Contractors, made payable to the Owner.

.2 Bonds and Letters of Surety supplied by the General Contractor to the Owner shall be from a recognized surety company, satisfactory to, and approved by the Owner.

c) .1 Security Deposits, provided by General Contractors, must be in the form of a Certified Cheque or Bank Draft drawn on a Bank to which the Bank Act applies or a Credit Union, payable to "**Minister of Finance, Province of Prince Edward Island**".

.2 Bond of the Government of Canada, unconditionally guaranteed, as to the principal and interest by the Government of Canada if such Bonds are:

(a) Payable to the bearer, or

(b) Accompanied by a duly executed instrument of transfer to the Owner, in the form prescribed by the Domestic Bonds of Canada Regulations, or

(c) Negotiated as to principle or as to principle and interest in the name of the Owner, pursuant to the Domestic Bonds of Canada Regulations.

d) Security deposits submitted through the Bid Depository shall be accompanied by the Bid Security. The subcontractors shall advise General Contractors what form of bid security is being used and what form of contract security will be used.

CONTRACT SECURITY

a) Upon award of a contract the Contractor is to provide the following contract security:

.1 General Contract Tender less than or equal to Three Million ($3,000,000.00) Dollars, including mechanical and electrical subcontract values:

A Performance Bond in the amount of fifty percent (50%) of the contract amount.

OR

A Security Deposit in an amount equal to at least ten percent (10%) of the contract amount.

.2 General Contract Tender more than Three Million ($3,000,000.00) Dollars, including mechanical and electrical subcontract values:

A Performance Bond and a Labour and Materials Payment Bond, each in the amount of fifty percent (50%) of the contract amount.

.3 Mechanical, Electrical and Sprinkler Sub-Contract Tender submitted through the Bid Depository:

A performance bond in the amount of fifty percent (50%) of the sub-contract amount.

OR

A Security Deposit equal to at least ten percent (10%) of the tender amount, the security deposit must be in the form of a Certified Cheque or Bank Draft drawn on a Bank to which the Bank Act applies or a Credit Union.

b) .1 All bonds, provided by General Contractors, are to be made payable to the Owner.

.2 Bonds shall be from a recognized surety company, satisfactory, and approved by the Owner.

.3 If a Performance Bond is utilized, it shall be maintained in force for a period of not less than twelve (12) months after the issuance of the total Performance Certificate.

c) .1 Security Deposits, provided by General Contractors, must be in the form of a Certified Cheque or Bank Draft drawn on a Bank to which the Bank Act applies or a Credit Union, payable to "**Minister of Finance, Province of Prince Edward Island**".

OR

.2 Bonds of the Government of Canada, unconditionally guaranteed, as to the principle and interest by the Government of Canada if such Bonds are:

(a) Payable to the bearer, or

(b) Accompanied by a duly executed instrument of transfer to the Owner, in the form prescribed by the Domestic Bonds of Canada Regulations, or

(c) Negotiated as to principle or as to principle and interest in the name of the Owner pursuant to the Domestic Bonds of Canada Regulations.

(d) Contract security shall be provided at the expense of the Contractor, bonds shall be provided by an established surety company satisfactory to, and approved by the Owner. Certified Cheques or Bank Drafts shall be drawn on an account with a recognized financial institution.

(e) Contract security deposits provided by Trade Contractors that submitted sub-trade prices, to General Contractors through the Bid Depository, shall be in the form indicated when the sub-trade price is submitted to the General Contractors.

4. CONSTRUCTION SCHEDULE

a) Demolition and new construction cannot begin until materials from all trades are on PEI and ready for installation. Minimizing down-time for the dental clinic is of utmost importance. Owner and client will work with the Contractor to expedite the work to minimize closure of the clinic.

b) The completion date for this project shall be **mid-March, 2018**.

c) Contractor to provide signed contracts, construction schedule, safety policy and proof of insurance prior to starting work.

5. MATERIALS AND EQUALS

a) Materials, plant and equipment are described and named specifically in the Specifications ONLY to describe types and qualities of materials, plant and equipment required.

b) Suppliers or manufacturers wishing to have their material, plant or equipment approved as an equal shall submit complete technical information to the Consultant seven (7) days prior to the

receipt of tenders. The Consultant shall review the material submitted and notify all prospective bidders of any materials, plant or equipment that have been accepted as equal.

c) All bidders submitting a tender shall include in their tender amount only materials, plant or equipment as specified or that have been approved as an equal.

6. ALTERNATE PRODUCTS

a) Approval may be given by the Consultant after the award of the Contract, on application in writing from the Contractor, for the substitution of a similar material, item or plant or equipment bearing another brand name or of other manufacture, subject to the following:

.1 Any top quality material or item of plant and equipment proposed as a substitute by the Contractor and considered by the Owner to be of equal quality, value and price to that specified and suitable for the purpose intended, may be accepted as a substitute.

.2 Materials and items of plant and equipment which the Contractor proposes as substitutes and which are considered by the Engineer to be suitable for the purpose intended, but which are in his or her opinion of lesser value, quality and price than those specified will only be accepted as substitutes if reasonable credits are allowed for their use.

.3 Requests for alternates must be made by the Contractor well in advance of the time the item is to be ordered. The request shall be accompanied by sufficient information in the form of manufacturers literature, samples, and other data to permit proper investigation of the substitutes proposed.

b) Bidders are requested to include information on alternates as an appendix to this tender. The information should indicate the proposed credit or extra, to the tender amount, and include sufficient data to allow the Consultant to evaluate the item proposed as an alternate.

7. SUPERVISION AND COORDINATION

a) The Contractor shall be responsible for supervising and coordinating all aspects of the work.

b) The Contractor shall include in his or her quotation all cost relative to supervising sub-contractors, including those submitting tenders directly to the Owner, which form a portion of the complete project and shall be assigned to the successful General Contractor.

8. RESPONSIBILITY

a) The Contractor shall be responsible to be fully familiar with the complete documents and shall include in his or her tender those items which are named, implied, or traditionally a part of the general contract work.

9. DEFINITIONS

In this specification the following terms shall have the definitions noted below:

OWNER:	**Government of Prince Edward Island as represented by the Minister of Transportation, Infrastructure and Energy**
CONSULTANT:	PEI Dept. of Transportation, Infrastructure and Energy

10. SITE INSPECTOR

a) There will be an Inspector representing the Department of Transportation, Infrastructure and Energy, Province of PEI. No work is to be covered without having received approval from the Inspector. The Inspector will have the authority to cause any part of the work to cease, should, in his or her opinion, there be a cause to do so.

This work shall be examined by the Department and approval granted to resume when a satisfactory solution has been found.

b) The inspector does not have authority to authorize changes to work. He or she shall confer with the Consultant or Engineer who, if necessary will authorize any change.

c) The fact that the inspector does not reject any work shall not remove the responsibility for completing all work as specified; from the Contractor.

11. OWNERS RIGHT TO TERMINATE CONTRACT

a) The Owner reserves the right to remove the Contractor from the site if the work is not completed as specified in Paragraph 4. If the Contractor is removed, the Owner shall have the work completed and deduct the cost of this work from the amount owing the Contractor and his or her bid deposit.

12. SUB-CONTRACTORS

a) The bidder shall include with his or her tender, in the space designated for that purpose, the names of each Sub-Contractor included in his or her tender, reserving however, the right to substitute other Sub-Contractors for any trade in the event that the listed Sub-Contractor declares bankruptcy after the date of close of the tenders. Any such substitution shall be subject to the approval of the Owner and contingent on evidence of bankruptcy satisfactory to the Owner.

b) "OWN FORCES" is acceptable only where the bidder can demonstrate that he or she has the resources to carry out the work so designated. Bidders are required, if so requested, to provide information relevant to experience and personnel which will demonstrate to the satisfaction of the Owner that a Sub-Contractor is qualified to perform the work of a particular sub-contract.

c) All Sub-Contractors are advised to become familiar with all Specifications and Drawings. The General Contractor shall ensure that all sub-trades understand their entire responsibilities in order to complete the project. Sub-trade work may appear in various sections of Specifications and on various drawings.

13. GUARANTEES

a) The Contractor shall be required to guarantee the work of this Contract for a period of twelve (12) months after the Owner's acceptance of the work, against improper or defective materials and workmanship, and shall repair and make good at his or her own expense any damage to the building and contents through any of the above causes during this period. Any contract omissions and/or deficiencies reported to the Contractor within twelve (12) months after acceptance of the work shall be made good by the Contractor at his or her own expense.

b) Notwithstanding the above, the bidder's attention is directed to the fact that certain individual items on this project may be required to be guaranteed by the manufacturer for periods in excess of twelve (12) months. These specific requirements are to be found in various sections of the Specifications for this project.

14. REJECTION OF TENDERS

a) The Owner reserves the right to reject any and all tenders.

15. CONSULTANT'S INTERPRETATION

a) The Consultant's interpretation of plans and specifications shall be final. Should the Contractor have any doubt as to interpretation, he or she shall refer to the Consultant for clarification

before submitting his or her tender. No allowances or extras will be made for misinterpretation of plans and specifications by the Contractor.

16. PERMITS, REGULATIONS AND TAXES

a) All permits and fees required for the proper completion and inspection of the work herein specified will be paid for by the Contractor. Except the building permit which will be paid for by the Owner. All applicable taxes shall be included in the tender price, excluding the Harmonized Sales Tax. The Contractor, as per current Provincial Regulations, shall include on all invoices the Harmonized Sales Tax as an additional line item. This would be in addition to the tender amount which does not include HST.

b) The work shall be completed to the satisfaction of the Consultant and local inspecting authorities.

c) In the absence of any provisions contained herein, the applicable Provincial Codes or the National Building Code shall govern in that order.

d) The latest edition of the Canadian Electrical Code shall govern all Electrical work, whether prewired and/or assembled remote from the site or not.

e) All equipment supplied or installed shall be CSA approved for the intended use.

f) All materials, components and equipment as well as construction methods shall comply with the latest edition of the National Building Code and all other applicable codes or regulations.

g) The latest edition of the PEI Occupational Health and Safety Act and Regulations shall govern safe construction practices.

17. EXISTING CONDITIONS

a) Bidders will be held to have examined the Tender Documents, to have visited the site and to have informed themselves as to existing conditions and limitations.

b) If in the performance of the contract, subsurface or latent conditions at the site are found to be materially different from those indicated by the drawings and specifications, or unknown conditions not usually inherent in work of the character shown and specified, the attention of the Consultant shall be called immediately in writing to such conditions before they are disturbed. Upon such notice, or upon his or her own observation of such conditions, the Consultant shall promptly make such changes in the drawings and specifications as he or she

finds necessary to conform to the different conditions and any increase or decrease in the cost shall be adjusted as provided under "Changes in the Work".

18. RECEIPT AND OPENING OF TENDERS

a) Tenders will be opened at the time and place stated in the tender call. The officer whose duty it is to open them will decide when the specified time has arrived. No responsibility will attach to any officer for the premature opening of a bid not properly addressed and identified.

19. AWARD OF CONTRACT

a) If the tender is accepted the Contract will be awarded as promptly after the opening of bids as is possible. The selection of the tender that is accepted shall be at the sole discretion of the Owner.

b) Each bidder shall be prepared, if so requested by the Owner, to present evidence of his or her experience, qualifications and financial ability to carry out the terms of the contract.

20. TENDER SUBMISSION

a) Tenders must be submitted on the form included with this specification. This form must be completely filled out in ink, or be typewritten with the signature in longhand. The completed forms shall be without interlineation, alteration or erasures.

b) Preparation and submission of bids – Area A/Area A+B
   .1 The work will be bid in two (2) ways, Area A and Area A + Area B.
   .2 The Owner will select the project mix that best suits their budget, either Area A or Area A + Area B.
   .3 Regardless of their project, the selection will be based on either:
      A) The low bidder of Area A
      OR
      B) The low bidder of Area A + Area B

c) The tender, together with the Tender Security described in this section must be addressed and delivered in a sealed envelope marked "Tender" and bearing the name of the Contractor submitting the tender, together with identification indicating the name of the project.

d) Tenders will be received at the place and time indicated in the tender call. Late tenders will not be accepted and will be returned unopened to the tenderer.

e) Amendments to the submitted offer will be permitted if received in writing prior to Tender closing and if endorsed by the same party or parties who signed and sealed the offer. Amendments submitted by fax will be accepted, if received prior to tender closing. (Fax (902) 368-5395).

f) The receipt of addenda for the project shall be acknowledged by filling in the addendum number and date of issue for each addendum on the appropriate line in the tender form. These lines shall be initialed by the person signing the tender after they have been filled in.

g) Any appendices to the tender form requesting information on suppliers, sub-contractors or alternate prices shall be filled in for the tender to be considered complete.

21. TAXES

a) All tenders submitted shall EXCLUDE the Harmonized Sales Tax.

22. CONFIDENTIALITY AND FREEDOM OF INFORMATION (Effective November 1, 2002)

a) By submitting your bid, you agree to disclosure of the information supplied, subject to the provisions of the Freedom of Information and Protection of Privacy (FOIPP) Act.

b) Anything submitted in your bid that you consider to be "confidential information" because of its proprietary nature should be marked as "CONFIDENTIAL", and will be subject to appropriate consideration under the Freedom of Information and Protection of Privacy Act.

c) During the delivery and installation of goods and/or services, you may have access to confidential or personal information. Should this occur, you must ensure that such information is not released to any third party or unauthorized individual.

d) Any information provided on this contract may be subject to release under the Freedom of Information and Protection of Privacy Act. You will be consulted prior to the release of any information.

END

INDEX

1. Definitions
2. Documents
3. Detail Drawings & Instructions
4. Copies Furnished
5. Shop Drawings
6. Drawings & Specs on the Work
7. Ownership of Drawings & Model
8. Samples
9. Material Tests & Mix Designs
10. Consultant and Contractor
11. Consultant's Decisions
12. Superintendence
13. Materials, Appliances, Employees
14. Inspection of Work
15. Rejected Work
16. Deductions of Uncorrected Work
17. Correction after Completion
18. Emergencies
19. Protection of Work & Property
20. Contractors' Insurance
21. Performance bond
22. Cash Allowance
23. Sub-surface Conditions
24. Changes in the Work
25. Valuation of Changes
26. Application for Payments
27. Certificates & Payments
28. Taxes
29. Permits, Notices. Laws & Rules
30. Patent Fees
31. Use of Premises
32. Cleaning Up
33. Cutting, Patching & Digging
34. Delays
35. Owner's Right to do Work
36. Owner's Right to Terminate Contract
37. Contractor's Right to Suspend Work or Terminate contract
38. Damages & Mutual Responsibility
39. Separate Contracts with Other Contractors
40. Assignment
41. Subcontracts
42. Relations of Contractor and Sub-Contractor
43. Arbitration
44. Owner Signing Authority
45. Conflict of Interest

1. DEFINITIONS

a) The Contract Documents shall include instructions to Tenderers, General Conditions, Supplementary General Conditions, Specifications, Drawings, Tender Form and the signed agreement.

b) The Owner, the Contractor and the Consultant are those names as such in the Agreement and Specifications.

c) The term 'Subcontractor' includes only a person, firm or corporation having a contract for the execution of a part or parts of the work included in the Contract, and a person, firm or corporation furnishing material called for in the Contract and worked to a special design according to the Drawings or Specifications, but does not include one who merely furnishes material not so worked.

d) The term 'work' includes all labour, materials and services required, as shown or described in the contract, documents, supplied and installed or erected complete at the place of building.

e) The term 'Other Contractor' means any person, firm or corporation employed by or having a contract directly or indirectly with the Owner otherwise than through the Contractor.

f) The place of building is the designated site or location of the completed work.

g) The law of the place of building shall govern the work.

h) For the purpose of contract signing authority, the Director is the Director of the Public Works and Planning Division of the PEI Department of Transportation, Infrastructure and Energy.

2. DOCUMENTS

a) The Contract Documents shall be signed in duplicate by the Owner and Contractor. The Contract Documents are complementary and what is called for by any one shall be as binding as if call for by all. The intention of the documents is to include all labour and materials reasonably necessary for the proper execution of the work. It is not intended however, that materials or work not covered by or properly inferable from any heading, section or trade in the specifications shall be supplied unless shown on the drawings. Descriptions of materials or work in words which so applied have well known technical or trade meanings shall be held to refer to such recognized standards. Should the specification conflict with the drawings, the specifications shall govern. In the case of discrepancies between drawings, those of larger scale, or if the scales are the same, those of later date shall govern.

All drawings and specifications shall be interpreted in conformity with the agreement and these General Conditions which shall govern.

3. DETAIL DRAWINGS & INSTRUCTIONS

a) The Consultant shall furnish as necessary for the execution of the work, additional instructions, by means of drawings or otherwise. All such additional instructions shall be consistent with the Contract Documents. The work shall be executed in conformity therewith and the Contractor shall do no work without such additional instructions. In giving such additional instructions, the Consultant shall have authority to make minor changes in the work, not inconsistent with the Contract.

If either the Contractor or the Consultant so request, they shall jointly prepare a schedule, subject to change from time to time in accordance with the progress of the work fixing the dates at which the various detail drawings will be required and the Consultant shall furnish them in accordance with this schedule, and on like request, a schedule shall be prepared, fixing the dates for the submission of shop drawings, for the beginning of manufacture and installation of materials and for the completion of the various parts of the work.

4. COPIES FURNISHED

a) The Consultant shall furnish to the Contractor, without charge, as many copies of all Drawings and Specifications as are reasonably necessary for the proper execution of the work.

5. SHOP DRAWINGS

a) The Contractor shall furnish to the Consultant, at proper times, all shop and setting drawings or diagrams which the Consultant may deem necessary in order to clarify the details of the work. The Contractor shall make any changes in such drawings or diagrams which the Consultant may require consistent with the Contract, and shall submit sufficient copies of the revised prints to the Consultant for approval – all but one of which shall be returned to the Contractor if approved by the Consultant. When submitting such shop and setting drawings, the Contractor shall notify the Consultant in writing of changes made therein from the Consultant's Drawings or Specification. The Consultant's approval of such drawings or of the revised drawings shall not relieve the Contractor from responsibility for errors made by the Contractor therein or for changes made from the Consultant's Drawings or Specifications not covered by the Contractor's written notification to the Consultant.

6. DRAWINGS AND SPECIFICATIONS ON THE WORK

a) The Contractor shall keep one cope of all Drawings, Specifications and approved shop drawing on the work, in good order, available to the Consultant and to his or her representatives.

7. OWNERSHIP OF DRAWINGS AND MODELS

   a) All drawings, specifications and copies thereof and all models furnished by the Consultant are his or her property. They are not to be used on other work and, with the exception of the signed contract set of the Drawings and Specifications, are to be returned to him or her on request on the completion of the work. Any models furnished by the Contractor or the Owner are the property of the Owner.

8. SAMPLES

   a) The Contractor shall furnish for the Consultant's approval such samples as he or she may reasonably require. The work shall be in accordance with approved samples.

9. MATERIAL TESTS AND MIX DESIGNS

   a) The Contractor shall furnish for the Consultant's approval such material tests and mix designs as he or she may reasonable require. The cost of providing the foregoing beyond the extent called for in the specification shall be charged to the Owner. The work shall be in accordance with approved material tests and mix designs.

10. CONSULTANT AND CONTRACTOR

    a) The Consultant is, in the first instance, the interpreter of the Contract and the judge of its performance; he or she shall use his or her powers under the Contract to enforce its faithful performance by both parties hereto. The Contractor shall, however, have complete control, subject to Article 12, of his or her organization. In case of the termination of the employment of the Consultant, the Owner shall appoint any Consultant whose status under the Contract shall be that of the former Consultant.

11. THE CONSULTANT'S DECISION

    a) The Consultant shall decide on questions arising under the Contract Documents, whether as to the performance of the work or the interpretation of the Specifications and drawings, but should the Contractor hold such decisions to be at variance with the Contract Documents or to involve changes in the work already built, fixed, ordered or in hand in excess of the contract, or to be given in error, he or she shall notify the Consultant before proceeding to carry them out. In the event of the Consultant and the Contractor failing to agree as to such excess or error and the Consultant deciding to carry out such disputed work, the Contractor shall act according to such decision. Any question of excess of cost due to the aforesaid cause may be decided in the manner hereinafter provided in Article 43.

12. SUPERINTENDENCE

a) The Contractor shall keep on the work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Consultant. The superintendent shall not be changed except with the consent of the Consultant, unless the superintendent proves to be unsatisfactory to the Contractor or ceases to be in his or her employ. The superintendent shall represent the Contractor in his or her absence and directions on minor matters given to him or her shall be held to be given to the Contractor. Important directions shall be given in writing to the Contractor. The Contractor shall give efficient supervision to the work using his or her best skill and attention.

13. MATERIALS, APPLIANCES, EMPLOYEES

a) Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labour, water, tools, equipment, light and power necessary for the execution of the work. Unless otherwise specified all materials shall be new. Both workmanship and materials shall be of the quality specified. The Contractor shall not employ on the work any unfit person or anyone not skilled in the work assigned to him or her.

14. INSPECTION OF WORK

a) The Owner, or the Consultant on his or her behalf, and their representatives shall at all times have access to the work wherever it is in preparation or progress and the Contractor shall provide proper facilities for such access and for inspection. If the specifications, the Consultant's instructions, the laws, or the ordinances of any public authority require any work to be specially tested or approved, the Contractor shall give the Consultant timely notice of its readiness for inspection, and if the inspection is by an authority other than the Consultant, of the date and time fixed for such inspection. Inspections by the Consultant shall be promptly made. If any such work should be covered up without approval or consent of the Consultant, it must, if required by the Consultant, be uncovered for examination and made good at the Contractor's expense. Re-examination of questioned work may be ordered by the Consultant. If such work be found in accordance with the Contract, the Owner shall pay the cost of re-examination and replacement. If such work be found not in accordance with the contract, through the fault of the Contractor, the Contractor shall pay such cost.

15. REJECTED WORK

a) The Contractor shall promptly remove from the premises any defective work, whether the result of poor workmanship, use of defective materials, damage through carelessness or other act of the Contractor, which has been condemned by the Consultant as failing to conform to the Contract Documents, whether incorporated in the work or not. The Contractor shall promptly replace and re-execute his or her own work in accordance with the contract and

without expense to the Owner and shall bear the expense of making good all work of other Contractors destroyed or damaged by such removal or replacement. If the Contractor does not remove such condemned material or work within the time fixed by written notice, the Owner may remove them and may store such materials at the expense of the Contractor. If the Contractor does not pay the expense of such removal within Five (5) days thereafter, the Owner may, upon Ten (10) das written notice, sell such materials at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs and expenses that should have been borne by the Contractor.

16. DEDUCTIONS FOR UNCORRECTED WORK

a) If, in the opinion of the Consultant, it is not expedient to correct defective work or work not done in accordance with the Contract Documents, the Owner may deduct from the contract price the difference in value between the work as done and that called for by the contract, the amount of which shall be determined in the final instance by the Consultant.

17. CORRECTION AFTER COMPLETION

a) Subject to any special provisions in the Contract Documents, the Contractor shall remedy any defects due to faulty materials or workmanship appearing within a period of one year from the date of substantial completion of the work and shall pay for any damage to other work resulting therefrom which appears within such period and neither the final certificate nor payment thereunder shall relieve the Contractor from responsibility hereunder. The Owner shall give notice of observed defects promptly. Questions arising under this Article may be decided as provided in Article 43.

18. EMERGENCIES

a) The Consultant has authority in an emergency to stop the progress of the work whenever, in his or her opinion, such stoppage may be necessary to ensure the safety of life, or of the structure, or neighbouring property. This includes authority to make such changes and to order, access and award the cost of such work extra to the Contract or otherwise as may in his or her opinion be necessary.

19. PROTECTION OF WORK AND PROPERTY

a) The Contractor shall maintain continuously adequate protection of all his or her work from damage and shall take reasonable precautions to protect the Owner's property from all injury arising in connection with this Contract. He or she shall make good any damage or injury to his or her work and shall make good any damage or injury to the property of the Owner resulting from the lack of reasonable protective precautions. He or she shall not be responsible, however, for any damage or injury to his or her work and to the property of the Owner which

may be directly due to errors in the Contract Documents or caused by the Owner, his or her agents, or employees, or from any work or risk which the Owner has agreed to insure, provided the Contractor has taken reasonable protective precautions. He or she shall adequately protect adjacent property as required by law and the Contract Documents.

20. CONTRACTORS' INSURANCE

a) INDEMNITY/HOLD HARMLESS

.1 The Contractor shall be liable for all injuries to persons and for damage to property caused by his or her operations, and those of his or her sub-contractors, and his or her and their employees, engaged on all operations in connection with the contract both on and off the site, and he or she shall indemnify and save harmless the Owner from all suits, claims, expenses, costs, demands, losses, and damages to which the Owner may be put by reason of injury, including death, to persons, and damage to property of the Owner and others, resulting from; negligence, carelessness and any other cause whatsoever in the performance of the work.

.2 The Contractor shall, until the date of issue of the final Certificate of Approval of the work by the Consultant, Indemnify and Save Harmless the Owner, and protect his or her own interests against:

(a) Theft, burglary or robbery of, and loss or damage to, all materials and equipment brought to the site for use in the work, whether or not such materials and equipment are incorporated in the work at the time that any such theft, burglary, robbery, loss or damage occurs.

(b) Theft or burglary of, and loss or damage to, any of his or her own plant and equipment being used on the Project and/or stored on the site.

b) BUILDERS RISK, ALL RISK PROPERTY INSURANCE

.1 The Contractor shall, without limiting its obligations or liabilities herein and at its own expense, provide and maintain the following insurances with Insurers and in forms and amounts acceptable to Government:

(a) The Contractor shall have Commercial General Liability coverage in an amount not less than Two Million ($2,000,000.00) dollars inclusive per occurrence against bodily injury and property damage. The Government of Prince Edward Island is to be added as an additional insured under this policy. Such insurance shall include, but not be limited to:

i) Blanket Written Contractual Liability;

ii) Personal Injury Liability;
iii) Non-owned Automobile Liability;
iv) Cross Liability;
v) Operation of Attached Machinery

Commercial General Liability insurance shall be endorsed to provide the Owner with thirty (30) day advance written notice of cancellation or material change and fifteen (15) days notice in the event of non-payment.

(b) Automotive liability coverage (Standard Automobile Policy) on all vehicles, the subject of this Agreement, owned, leased, operated or licensed in the name of the Contractor, in an amount not less than Two Million ($2,000,000.00) dollars

(c) If the work involves new construction or reconstruction of a property being repaired or maintained, the Contractor shall provide and maintain All Risk Course of Construction (Builder's Risk) to the full value of the work in the amount of the Contract Price. The policy will permit partial or complete use or occupancy by the Owner during the term of this insurance.

All the foregoing insurance shall be primary and not require the sharing of any loss by any insurer of the Government nor by any other form of recovery available such as the Provincial Self Insurance and Risk management Fund.

.2 Proof of Insurance

A Certificate(s) of Insurance and any renewals thereof, shall be furnished to the Government prior to commencement of work by the Contractor and must be updated as required during the Term.

The policies required by this Agreement shall be in a form and with insurers satisfactory to the Government. Default of deliver or receipt by the government shall not be construed as acknowledgement or concurrence that there has been compliance with the terms of this Agreement.

.3 Indemnification

The Contractor shall indemnify and hold harmless the Government of Prince Edward Island, its agents, representatives and employees from and against all claims, demands, losses, costs, damages, actions, suits or proceedings of every nature and kind whatsoever arising out of or resulting from the performance of work (herein called the "claims"), provided that any such claim is caused in whole or in part of any act, error or omission, including but not

limited to those of negligence of the Contractor, or anyone directly or indirectly employed by the Contractor anyone for whom the Contractor may be liable.

21. PERFORMANCE BOND

a) The Owner shall have the right to require the Contractor to furnish a bond covering the faithful performance of the Contract – including the corrections after completion provided for in Article 17 – and the payment of all obligations arising under the contract, in such form as the Consultant may prescribe and with such sureties as he or she may approve. If such bond is required by written instructions given previous to the receipt of bids, the premium shall be paid by the Contractor, if subsequent thereto, it shall be paid by the Owner.

22. CASH ALLOWANCES

a) The Contractor shall include in the contract sum all cash allowances mentioned in the Specifications, which allowances shall be expended in whole or in part as the Consultant shall direct and the amount of the contract sum being adjusted in conformity therewith. The Contract sum includes such sums for expenses and profit on account of such cash allowances as the Contractor required excepting those allowances included for contingency purposes.

23. SUBSURFACE CONDITIONS

a) In the event that during the execution of the work, subsurface conditions at the site are found to differ materially from those indicated in the Contract Documents and soil reports, or otherwise represented by the Owner or Consultant to the Contractor, then the Contractor shall promptly notify the Consultant in writing of such conditions, the Consultant shall promptly investigate such conditions and if he or she finds that they differ materially and will result in an increase or decrease in the cost of,. Or time required for performance of this Contact, an equitable adjustment shall be made between the parties and the contract modified in writing accordingly. If the parties fail to agree upon the adjustment to be made, the dispute may be determined as provided for in Article 43.

24. CHANGES IN THE WORK

a) The Owner or the Consultant, without invalidating the contract, may make changes by altering, adding to, or deducting from the work, the contracts sum being adjusted accordingly. All such work shall be executed under the conditions of the Contract except that any claim for extension or reduction of time caused thereby shall be adjusted at the time of ordering such change. Except as provided in Article 18, no change shall be made unless in pursuance of a written order from the Consultant and no claim for an addition to or deduction from the contract sum shall be valid unless so ordered and at the same time valued, or agreed to be valued, as provided in Article 25.

25. VALUATION OF CHANGES

a) Change Orders calling for normal changes or additions to the work will be priced in detail giving actual material trade prices (not list prices) and actual labour costs (including Employment Insurance, Worker's Compensation, holiday pay) and actual equipment rental. To these prices the Contractor will add:

.1 For work less than $2,500 involving the General Contractor only, the General Contractor adds 20% to his or her costs.

.2 For work over $2,500 involving the General Contractor only, the General Contractor adds 15% to his or her costs.

.3 For work less than $2,500 involving a Sub-Contractor only, the Sub-Contractor adds 20% to his or her costs, submits this price to the General Contractor who adds 10%.

.4 For work over $2,500 involving a Sub-Contractor only, the Sub-Contractor adds 15% to his or her cost, submits this price to the General Contractor who adds 5%.

.5

(a) For work less than $2,500 involving the General Contractor and Sub-Contractor, the Sub-Contractor adds 20% to his or her costs, submits his or her price to the General Contractor who adds 10%; to this amount the General Contractor adds the cost of his or her own work plus 20% of the cost of his or her own work only.

(b) The General Contractor does not add a further 10% to the cost of his or her own work.

.6

(a) For work over $2,500 involving the General Contractor and a Sub-Contractor, the Sub-Contractor adds 15% to his or her cost, submits this price to the General Contractor who adds 5%; to this amount the General Contractor adds the cost of his or her own work plus 15% of the cost of his or her own work only.

(b) The General Contractor does not add a further 5% to the cost of his or her own work.

.7 Deletions to Contract: A mark-up shall **not** be charged nor credited on a credit portion of a Change Order.

.8 Supervision related to Change Orders shall be considered as included in the allowable mark-up and shall **not** be included in the labour charges for a Change Order.

26. APPLICATION FOR PAYMENTS

a) The Contractor shall – before the first application for payment – submit to the Consultant a schedule of values of the various parts of the work aggregating to the total sum of the contract, divided so as to facilitate payments, made out in such form, and supported by such evidence as to its correctness as the Consultant may direct. This schedule, when approved by the Consultant, shall be used as a basis for applications of payment, unless it can be found to be in error.

b) The Contractor, as per current Provincial regulation, shall include on all invoices the Goods and Services Tax as an additional line item. This amount would be in addition to the tender amount which does not include HST. See article 28 of this Section.

27. CERTIFICATES AND PAYMENTS

a) Partial payments will be made monthly and within thirty (30) days after approval by the Owner and on the basis of a duly certified and approved estimate of work performed during the preceding period. In preparing estimates, the material delivered on the site and preparatory work done shall be taken into consideration.

b) In making such partial payments, there shall be retained a hold back in the amount of fifteen percent (15%) of the estimated amount on each partial payment estimate, less any holdback release which may have been made to specific sub-contractors under any progressive release of holdback provisions in Provincial Legislation.

c) All materials and work covered by partial payments made shall thereupon become the sole property of the Owner, but this shall not be construed as relieving the Contractor from the sole responsibility for the safety and preservation of all materials and work upon which payments have been made and restoration of any damaged work or as a waiver of the right of the Owner to require the fulfillment of all the terms of the contract. Nor shall Consultant's Certification of Partial Payment for any work be construed as his or her final or irrevocable acceptance of that work.

d) Document of Completion: Upon completion and acceptance of all work whatsoever required and the release of all claims against the Owner as specified, the Consultant shall file a written document with the Owner and with the Contractor as to the entire amount of work performed and compensation earned by the Contractor – including the extra work and compensation therefore.

e) Final Payment: Within sixty (60) days after the filing of such document of completion and minimum one (1_ day after the lien period, and upon receipt from the General Contractor of declarations signed by each of his sub-contractors that the sub-contractor has been paid up to,

and including the past previous partial payment, the Owner will pay the Contractor the amount stated therein less all deductions authorized by the terms of this contract and previous payments and advances whatsoever to or for the account of the Contractor. All previous estimates and payments, including those relating to extra work, shall be subject to correction at the time of this payment which is, throughout this contact, called Final Payment. Final Payment shall be subject to inspection and acceptance by the Owner or duly authorized representatives of the Owner and by representatives of all agencies having direct interest in the project.

Submittals to include:

- Certificate or letter of clearance from the Provincial Worker's Compensation Board
- Certificate or letter of clearance from the Provincial Treasury

f) With the second and all subsequent applications for payment, the Contractor shall include a statutory declaration form CCDC 9B, or other similar acceptable form to the Owner, declaring that all labour and materials entering into the work, including Sub-Contractors, covered by the previous application, have been paid. With application for release of lien holdback, the Contractor shall include a statutory declaration form CCDC 9A, or other similar form acceptable to the Owner.

g) With application for release of lien holdback, the Contractor shall include certificates issued by the Worker's Compensation Board, indicating that Worker's Compensation premiums in relation to the project have been paid in full.

28. <u>TAXES</u>

a) Unless otherwise provided herein, the Contractor shall pay all government sales or excise taxes in force at the date of the Agreement, provided that any increase or decrease in such taxes shall increase or decrease the contract sum accordingly.

29. <u>PERMITS, NOTICES, LAWS AND RULES</u>

a) The Contractor shall apply and pay for all necessary permits or licenses required for the execution of the work (but this shall not include the obtaining of the Building Permit or permanent easement or right of servitude). The Contractor shall give all necessary notices and pay all fees required by law and comply with all laws, ordinances, rules and regulations relating to the work and to the preservation of the public's health. The Contractor shall be responsible for the safety of all workmen and equipment on the project in accordance with all applicable safety legislation passed by federal, provincial and local authorities governing construction safety.

If the Contract Documents are at variance therewith, any resulting additional expense incurred by the Contractor shall constitute an addition to the contract price.

30. PATENT FEES

a) The Contractor shall pay all royalties and license fees and shall save the Owner harmless from loss on account of suits or claims for infringement of patents in the doing of the work.

31. USE OF PREMISES

a) The Contractor shall confine his or her apparatus, the storage of materials and the operations of his or her workmen to limits indicated by laws, ordinances, permits or by direction of the Consultant and shall not unreasonable encumber the premises with his or her materials. The Contractor shall not load – or permit to be loaded – any part of the work with a weight that will endanger its safety. The Contractor shall enforce the Consultant's instructions regarding signs, advertisements, fires and smoking.

32. CLEANING UP

a) The Contractor shall at all times keep the premises free from accumulations of waste material or rubbish caused by his or her employees or work and, at the completion of the work, he or she shall remove all his or her rubbish and all tolls, equipment and surplus materials from and about the work and shall leave the work "broom clean" or its equivalent, unless more exactly specified. In case of dispute, the Owner may remove the rubbish and charge the cost as the Consultant shall determine to be just.

33. CUTTING, PATCHING AND DIGGING

a) The Contractor shall do all cutting, fitting or patching of his or her work that may be required to make its several parts come together properly and fit it to receive or be received by work of Other Contractors shown upon, or reasonable implied by, the Contract Documents.

Any cost caused by ill-times work shall be borne by the party responsible therefore.

The Contractor shall not endanger any existing work by cutting, digging or otherwise and shall not cut or alter the work of any other contractor save with the consent of the Consultant.

34. DELAYS

a) If the Contractor is delayed in the completion of the work by any act or neglect of the Owner, Consultant or any Other Contractor or any employee of any one of them or by changes ordered in the work, then the time of completion shall be extended for such reasonable time as the

Consultant may decide. If the Contractor is delayed in completion of the work by labour disputes, strikes, lock-outs (including lock-outs decreed or recommended by a recognized contractors' association for its members of which the Contractor is a member), fire, unusual delay by common carriers or unavoidable casualties or without limit to any of the foregoing by any cause of any kind whatsoever beyond the Contractor's control, then the time of completion shall be extended for a period of time equal to the time lost due to such delays. I addition and without limit to the foregoing, the time of completion shall be extended because of any cause whatsoever within the Contractor's control which the Consultant shall decide as justifying a delay for such reasonable time as the Consultant may decide.

No such extension shall be made for delay unless written notice of claim is given to the Consultant within seven (7) days of its commencement provided, however, that in the case of a continuing cause of delay only one claim shall be necessary.

If no schedule is made under Article 3, no claim for delay shall be allowed on account of failure to furnish drawings until two (2) weeks after demand for such drawings and not then unless such claim be reasonable.

The Consultant shall not, except by written notice to the Contractor, or as provided in Article 18, stop or delay any part of the work pending decisions or proposed changes either by him or herself or by the Owner.

35. OWNER'S RIGHT TO DO WORK

a) If the Contractor should neglect to execute the work properly or fail to perform any provision of this Contract, the Owner, after five (5) days written notice to the Contractor, may without prejudice to any other right or remedy he or she may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor; provided however, that the Consultant shall approve both such actions and the amount charged to the Contractor.

36. OWNER'S RIGHT TO TERMINATE CONTRACT

a) If the Contractor should be adjusted as bankrupt, or if he or she should make a general assignment for the benefit of his or her creditors, or if a receiver should be appointed on account of his or her insolvency or if he or she should – except in case of recited in Article 35 – refuse or fail to supply enough properly skilled workmen or proper materials after having received seven (7) days notice in writing from the Consultant to supply additional workmen or materials, or if he or she should fail to make prompt payment to Sub-Contractors or for material or labour, or persistently disregard laws, ordinances or the instruction of the Consultant, or otherwise be guilty of a substantial violation of the provisions of the Contract, then the Owner, upon the certificate of the Consultant that sufficient cause exists to justify

such action , may, without prejudice to any right or remedy he or she may have, by giving the Contractor written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools and appliances thereon and finish the work by whatever method he or she may deem expedient, but without undue delay or expense. In such case, the Contractor shall not be entitled to receive the expense of finishing the work, including compensation to the Consultant for his or her additional services; such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner. The expense incurred by the Owner as herein provided, shall be certified by the Consultant.

37. CONTRACTOR'S RIGHT TO SUSPEND WORK OR TERMINATE CONTRACT

a) If the work should be stopped under an order of any court or other public authority through no act or fault of the Contractor or of anyone employed by him or her, or if the Consultant fails to issue a certificate in accordance with Article 27, or if the Owner should fail to pay to the Contractor within seven (7) days of its maturing and presentation, any sum certified by the Consultant or awarded by arbitrators, then the Contractor may, upon five (5) days written notice to the Owner and the Consultant, stop work and/or terminate this Contract without prejudice to any other right or remedy he or she may have and recover from the Owner payment for all work executed and any loss sustained upon the plant or material with reasonable profit and damages.

38. DAMAGES AND MUTUAL RESPONSIBILITY

a) If either party to this Contract should suffer damage in any manner because of any wrongful act or neglect of the other party or of anyone employed by him or her then he or she shall be reimbursed by the other party for such damage. Claims under this paragraph shall be made in writing to the party liable within a reasonable time after the first observance of such damage and not later than the time of final certificate, except as expressly stipulated otherwise in the case of faulty work or materials, and may be adjusted by agreement or in the manner set out in Article 43 and the party reimbursing the other party as aforesaid shall thereupon be subrogated to the rights of the other party in respect of such wrongful act or neglect if it be that of a third party. Should the Contractor cause damage to any other contractor on the work the Contractor agrees – upon due notice – to settle with such other contractor by agreement or arbitration, if he or she will so settle. If such other contractor sues the Owner on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor who shall defend such proceedings at the Owner's expense and if any final order or judgment against the Owner arises therefrom the Contractor shall pay or satisfy it and pay all costs incurred by the Owner provided that if the Contractor becomes liable to pay or satisfy any final order or judgment against the Owner, then the Contractor shall have the right upon undertaking to indemnify the Owner against any and all liability for sots to appeal, in the name of the Owner, such final order or judgment to any and all courts or competent jurisdiction.

39. SEPARATE CONTRACTS WITH OTHER CONTRACTORS

a) The Owner reserves the right to let separate contracts in connection with the undertaking of which the work is a part and the Contractor shall connect properly and coordinate this work with that of other contractors. If any part of the Contractor's work depends – for its proper execution or results – upon the work of any other contractor, the Contractor shall inspect the work prior to proceeding with his or her work as required by the Contract. Should the Contractor fail so to inspect and report, he or she shall have no claim against the Owner by reason of the defective or unfinished work of any other contractor except as to latent defects not reasonable noticeable at the time of the commencement of the Contractor's work. In letting separate contracts, the Owner shall be responsible for the coordination of fire and other insurance coverages and shall take all precautions reasonable possible to avoid possible occurrence of a labour dispute or disputes on the work.

40. ASSIGNMENT

a) Neither party to the Contract shall assign the Contract without the written consent of the other.

41. SUB-CONTRACTS

a) The Contractor agrees that the list of names of sub-contractors supplied prior to the signing of the Contract is the list of Sub-Contractors proposed to be used to carry out those parts of the work noted thereon and he or she shall not employ any to whom the Consultant may reasonable object.

   If the change of any name on such list is required by the Consultant and the work has to be awarded to a higher bidder, the contract price shall be increased by the difference between the two bids.

   The Consultant shall, on request, furnish to any Sub-Contractor wherever practicable, evidence of the amounts certified to on his or her account.

   The Contractor shall be held as fully responsible to the Owner for the acts and omissions of his or her sub-contractors and of persons directly or indirectly employed by them, as for the acts and omissions of persons directly employed by him or her. In view of this responsibility, the Contractor shall not be obliged to employ as a sub-contractor or supplier any person or firm to whim he or she may reasonable object.

42. RELATIONS OF CONTRACTOR AND SUB-CONTRACTOR

a) The Contractor agrees to bind every sub-contractor by the terms of the Contract Documents, as far as applicable to his or her work.

43. ARBITRATION

a) In the case of any dispute arising between the Owner (or the Consultant acting on his or her behalf) and the Contractor as to their respective rights and obligations under the Contract, either party hereto shall be entitled to give to the other notice of such dispute and to request arbitration thereof; and the parties may, with respect to the particular matters then in dispute, agree to submit the same to arbitration in accordance with the applicable law of the place of building.
Arbitration proceedings shall not take place until after the completion or alleged completion of the work except (a) on a question of certificate for payment, or (b) in a case where either party can show that the matter in dispute is of such nature as to require immediate consideration while evidence is available.

44. OWNER SIGNING AUTHORITY

a) Mr. Alan Maynard, P. Eng. is designated as the Director for the purposes of this agreement, the Director shall represent Government in all matters pertaining to the construction Project being provided pursuant to this agreement, and will administer said agreement, and shall complete necessary approvals of all plans and specifications provided for under this agreement on behalf of Government, provided however, that the Director shall not be authorized to amend the terms of the agreement.

Government may replace the Director by providing written notice, in accordance with the notice requirements of this agreement.

45. CONFLICT OF INTEREST

a) The Contractor warrants that as at the date of this Agreement, no conflict of interest, or any circumstance that might interfere with independent and objective exercise of judgment, exists or is likely to arise in relation to execution of this Agreement or its subject matter. The Contractor shall immediately notify Government, in writing, if any such actual or potential conflict of interest should arise at any time during the Term. In the event Government discovers or is notified by the Contractor of an actual or potential conflict of interest, Government, in its sole discretion, may either:

i) allow the Contractor to resolve the actual or potential conflict to the satisfaction of Government; or
ii) terminate the Agreement in accordance with the Termination section of this Agreement.

END

PROJECT: **Summerside Public Health – Dental Clinic Renovation**

1. GENERAL

a) The undersigned tenderer (hereinafter called the "Contractor") hereby offers to the Minister of Transportation, Infrastructure and Energy (hereinafter called the "Owner") to furnish all necessary tools, plant, services, materials and labour to execute and complete in a careful and workmanlike manner the work set out under the **Project #4575-17014** herein, which is more particularly described in the Plans and Specifications titled **Summerside Public Health – Dental Clinic Renovation** and **dated October, 2017** for the lump sum as set out in Clause 3.

The Contractor agrees:

.1 To complete the work by the date indicated on the Instructions to Bidders.

.2 That this Form of Agreement supersedes and cancels all communication, negotiations and agreements relating to the work other than contained in the completed tender.

.3 To use all suppliers and sub-contractors indicated on his or her tender unless prior approval is received from the Engineer to make a change.

2. ADDENDA

a) The following addenda are included in this contract:

_____

_____

_____

_____

3. CONTRACT PRICE

a) The Contract Price (*the lump sum referred to in Clause 1*:) which excludes value added taxes is:

_____

_____

b) Value added (HST)(of _____%) payable by the Owner to the Contractor are:

_____

_____

c) Total amount payable by the Owner to the Contractor for the construction of the work is:

_____

_____

4. CORRESPONDENCE

a) The Owner, Engineer, Consultant, and Contractor may be contacted in writing at the addresses below:

Owner, Engineer, & Consultant

PEI Department of Transportation, Infrastructure and Energy
PO Box 2000
Charlottetown, PE C1A 7N8

Contractor
_____
_____
_____

5. CONTRACTOR'S ACCEPTANCE

a) Accepted and executed on behalf of the Contractor this _____ day of _____, 20___, in the presence of _____.

_____ _____
Witness Signature & Corporate Seal

6. OWNER'S ACCEPTANCE

a) Accepted and executed on behalf of the Owner this _____ day of _____, 20___, in the presence of _____.

_____ _____
Witness Signature & Seal

END

TENDER
SUBMITTED BY: _____
ADDRESS: _____
_____
PHONE: _____ FAX: _____
DATE: _____

FOR: **Summerside Public Health – Dental Clinic Renovation**
205 Linden Avenue
Summerside, PE C1N 2K4

TO: Minister of Transportation, Infrastructure and Energy
11 Kent Street, PO Box 2000
Charlottetown, PE C1A 7N8

HAVING examined the drawings and specifications for this project as well as any addenda issued, we hereby offer to furnish all materials, plant and labour necessary for the full and proper completion of:

"Summerside Public Health – Dental Clinic Renovation"

INCLUDING all prime cost allowances, or other taxes in force at this date and **excluding HST**; but not including any additional or deductible allowance or taxes which may be applicable subsequent to this date, and which shall be payable by or to the Owner, in accordance with the above mentioned documents, for the sum of:

Area A:
_____ Dollars ($_____)
in lawful money of Canada.

Area A + Area B:
_____ Dollars ($_____)
in lawful money of Canada.

In submitting this tender we recognize the necessity to complete the information requested on any appendices, as well as the right of the Owner to accept any tender at the price submitted on the condition that revised tenders will not be called for if minor changes are made.

In the event of this tender being accepted within thirty (30) days of the time stated for the closing of tenders, and our failing or declining to enter into a contract, then our bid deposit shall be forfeited to

the Owner in lieu of any damages which he or she may suffer by reason of our failure or refusal to enter into such contract.
In the event of our tender not being accepted within thirty (30) days of the time stated for the closing of tenders, the bid deposit will be returned to us forthwith unless a satisfactory arrangement is made with us covering its retention for a further stated period.

This tender includes the following addenda:

Addendum #	Date	Initial

If we are notified of the acceptance of this tender within the above specified time we will:

Enter into a formal contract agreement with the Owners.
Furnish a general analysis of the contract sum, the total aggregating the amount of our tender.
Provide a Construction Schedule and complete the entire work on or before the dates stated.

Our tender includes the following sub-contractors and suppliers, (own forces may be used, see Item 12, Section B).

Carpentry _____
Flooring (Supplier) _____
Flooring (Installer) _____
Painting _____
Mechanical _____
Electrical _____
Asbestos Removal _____

_____
Submitted by (Name of Bidder)

_____
Authorized Signature

END

1. REFERENCES

   a) CSA - S269.1 – [1975] Falsework for Construction Purposes.

   b) CAN/CSA - S269.2 – [M87] Access Scaffolding for Construction Purposes.

2. CONSTRUCTION SAFETY MEASURES

   a) Observe construction safety measures of:

      .1 Latest edition of the National Building Code of Canada

      .2 National Fire Code of Canada

      .3 Provincial Government, including but not limited to the:

         (a) Provincial Building Code Act

         (b) Latest edition of the Occupational Health & Safety Act Statutes of Prince Edward Island (including any amendments to and regulations).

         (c) Workers' Compensation Act

         (d) Fire Prevention Act

         (e) Dangerous Goods Transportation Act

         (f) Industrial Best Practices for Equipment Isolation and Lockout Policy

   b) In case of conflict or discrepancy the more stringent requirement shall apply.

   c) Maintain clear emergency exit paths.

   d) Ensure that employees working on this specific project have met training requirements as legislated by the Prince Edward Island Occupational Health and Safety Act and its regulations.

   e) Where reference is made to jurisdictional authorities, it shall mean all authorities who have within their constituted powers the right to enforce the laws of the place of the building and workplace.

3. OVERLOADING

   a) Ensure no part of Work is subjected to loading that will endanger its safety or will cause permanent deformation.

4. FALSEWORK

   a) Design and construct falsework in accordance with CSA s269.2.

5. HOISTS AND CRANES

   a) Operate such equipment only by qualified hoist or crane operators, and maintain current inspection certificate.

6. SCAFFOLDING AND FALL ARREST

   a) Design and Construct Scaffolding in accordance with CSA S269.

   b) Each user of scaffolding shall examine scaffolding for sufficiency before using it. He or she shall make it secure, or shall notify the Contractor in Writing that he or she will not commence work until it is made secure.

   c) Comply with the requirements of the Fall Protection and Scaffolding Regulations, Province of Prince Edward Island 1988.

7. EQUIPMENT AND TOOLS

   a) Each user of equipment or tools shall be appropriately trained and be responsible to examine for sufficiency before use. Make equipment and tools safe if necessary, or notify the Contractor in writing that user will not commence work with such tools until it is made safe.

8. WHMIS

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

   b) Have a copy of WHMIS data sheets available at the workplace on delivery of materials.

9. HAZARDOUS MATERIALS

a) Should material resembling hazardous materials [other than those identified with the Contract Documents], including but not limited to spray or trowel applied asbestos, be encountered in course of work; stop work immediately. Do not proceed until written instructions have been received from Consultant.

b) Any material which contains asbestos that is disturbed or removed during construction work (see Asbestos content Report), shall be removed in accordance with the regulations set out by the Occupational Health and Safety Act. All costs for proper cutting, removal and disposal of all asbestos on this contract shall be included in Tender. Refer also to Section 01900.

c) Where work entails use, storage, or disposal of toxic or hazardous materials, chemicals and/or explosives, or otherwise creates a hazard to life, safety, health, or the environment; work shall be in accordance with the Jurisdictional Authority.

10. SITE CLEANING

a) Except where special permission is obtained, maintain clear access on public sidewalks and roads

b) Maintain walks and roads clear of construction materials and debris, including excavated material. Clean walks and roads as frequently as required to ensure that they are cleared of materials, debris and excavated material.

c) Remove snow and ice from public sidewalks.

11. FIRE SAFETY REQUIREMENTS

a) Enforce fire protection methods, good housekeeping and adherence to local and underwriter's fire regulations including, but not limited to, Fore Protection Act and the Provincial Building Code Act. Provide UL approved fire extinguishers, and other fire fighting services and equipment, except where more explicit requirements are specified as the responsibility of individual Sections.

b) Hot Work will not be permitted on or within the building structure, tanks, or confined spaces, except as outline herein. Prior to conducting hot work, a hot work permit shall be prepared and submitted. An example format for a hot work permit shall be included in the Safety document submission. The permit shall describe compliance with the following procedures. After tank or confined space interiors or building areas have been decontaminated, hot work may be conducted only when the tank or confined space is inverted. Hot work shall not be performed

unless monitoring indicates atmospheres within and immediately surrounding are less than eight percent (8%) oxygen inside less than ten percent (10%) of the LFL outside; continuous monitoring shall continue until the hot work is completed. The hot work prohibition includes welding, cutting, grinding, sawing, or other similar operations which could be expected to potentially generate combustion-producing temperatures or sparks, or which could produce potentially hazardous fumes or vapours. An individual at each hot work site shall be designated as a fire watch. This person's sole responsibility shall be to monitor the hot work and have immediate access to at least two (2) twenty (20) pound fire extinguishers located at each hot work site. All extinguishers shall be currently inspection tagged, approved safety pin and tamper resistant seal. A new permit shall be obtained at the start of each work shift during which hot work will be conducted.

c) Smoking permitted in designated areas only. Exercise care in the use of smoking materials.

d) Advise the Fire Chief in the area of Work of any work that would impede fire apparatus response, including but not limited to violation of minimum overhead clearance prescribed by the fire chief, erecting of barricades and digging of trenches.

e) Fire Separations:

.1 Ensure that fire separations are installed to maintain total integrity and that they are not breached by Work following their installation.

.2 Replace fire separations which have suffered a lessening of their required rating during construction.

f) Ensure nothing subverts the integrity of fire protection provided for the building structure.

g) Coordinate work of all sections so that they do not encroach on space required for fire protection and its installation. Ensure that fire protection damaged during construction is totally replaced.

12. <u>REPORTING FIRES</u>

a) Know the location of the nearest fire alarm box and telephone, including the emergency phone number.

b) Report immediately all fire incident to the fire department as follows:

.1 Activate nearest fire alarm box, or

.2 Telephone 911

.3 Where fire alarm box is exterior to building, the person activating the fire alarm box shall remain at the box to direct Fire Department to scene of the fire.

.4 When reporting a fire by telephone, give location of fire, name or number of building and be prepared to verify the location.

13. ENVIRONMENTAL PROTECTION

a) Ensure that pollution and environmental control of construction activities are exercised during the Work to requirements of the federal and provincial environmental acts; including, but not limited to, the Prince Edward Island Environmental Protection Act.

14. SAFETY DOCUMENT SUBMISSION

a) Ensure Safety Document Submission applies to Work of this specific project and site.

b) Submit two copies of Safety Document at the Pre-Construction Meeting. Do not commence Work nor deliver material on-site prior to submission.

c) Included in Safety Document submission specific information detailing the methods and procedures to be implemented ensuring adherence to the acts, regulations, codes and policies specified in this section and to:

.1 Ensure the health and safety of persons at or near the Work; including, but not limited to, the Public.

.2 Ensure the measures and procedures of the regulatory agencies specified are carried out.

.3 Ensure every employee, self-employed person and employer performing Work under this contract complies with the regulatory agencies specified.

.4 Where changes to the methods and procedures in the execution of work change submitted safety methods and procedures, modify submitted Safety Documentation and submit modifications, in writing to the Consultant and Minister prior to implementation.

15. SAFETY DOCUMENT ORGANIZATION

a) Organize information in the form of an instructional manual as follows:

.1 Place in binders of commercial quality, 8-1/2” x 11” x 3” maximum ring size.

.2 Cover: Identify binder with typed or printed title “Project Safety Document” and list the title of the project.

.3 Provide tabbed fly leaf for each separate heading, with typed heading on tab.

.4 Where drawings are within the safety document, provide with reinforced punched binder tab. Bind in with text; fold in larger drawings to size text pages.

.5 Arrange content under Safety Document headings specified herein.

16. SAFETY DOCUMENT HEADINGS

a) Employee Safety Training

.1 Place, under this heading, a statement indicating employees working on this specific project have met specified training requirements.

b) Company Safety Policy

.1 Place, under this heading, information pertaining to the company’s policy and commitment to Occupational Health and Safety, including the responsibilities of management, supervisors and works.

c) Company Safety Rules in General Terms

.1 Place, under this heading, information of a general, global nature, applying to every work environment where the company has staff pertaining to rules directing compliance to policy. For example, state company safety rules with respect to use of hard hats, safety glasses, safety footwear, CSA approval on such items, use of alcohol or non-prescription drugs.

d) Hazard Assessment

.1 Place, under this heading, information identifying possible hazards specific to this project and identify safe methods and procedures for the execution of work to ensure safety in the work place.

.2 Arrange contents of this heading by technical section number on the project manual.

e) Emergency Action Plan

.1 Place, under this heading, information detailing action to be taken in the event of various emergencies.

.2 Arrange content under the following sub-headings:

(a) First Aid

i. Include information concerning establishment of a First Aid Station, related supplies, staff awareness of location and staff training in First Aid Care of Casualties.

(b) Contact Emergency Support Groups

i. Include relative information including phone location for emergency use, the emergency telephone numbers (and their location) for the various organizations which must be contacted in case of an emergency, and staff training in procedures.

(c) Cessation of Work

i. Include relative information how work cessation during emergencies is handled and communicated to persons present on site.

(d) Joint Occupational Health and Safety Committee Representative

i. Place under this heading information detailing membership and terms of reference.

17. SAFETY OFFICER

a) Provide a Safety Officer at the work site to perform safety management, surveillance, inspections, and safety enforcement for the Contractor. The Safety Specialist shall be the safety "competent person". The Safety Officer shall be at the work site at all times whenever work or testing is being performed, shall conduct daily safety inspections.

.1 Qualifications

(a) Qualifications of Safety Officer

i. Ability to manage the on-site contractor safety program through appropriate management controls.

ii. Ability to identify hazards and have the capability to expend resources necessary to abate the hazards.

iii. Must have worked on similar types of projects that are equal to or exceed the scope of the project assigned with the same responsibilities.

iv. Shall, as a minimum, have attended a recognized training qualification program including at least 40 hours of classroom instruction.

(b) Qualifications of Qualified Person, Confined Space Entry:

i. The qualified person shall be capable (by educations and specialized training) of anticipating, recognizing, and evaluating employee exposure to hazardous substances or other unsafe conditions in a confined space. This person shall be capable of specifying necessary control and protective action to ensure worker safety.

(c) Qualification of Crane Operators must be submitted to the Consultant for approval and must be authorized to operate the crane.

.2 Meetings

(a) Preconstruction Conference

i. The safety officer shall attend the preconstruction conference (see outline attached).

(b) Meeting On Work Procedures

i. Meet with Contracting Officer to discuss work procedures and safety precautions required by the APP. Ensure the participation of the Contractor's superintendent, the quality control, and representatives of each subcontractor or trade performing work at the site.

(c) Weekly Safety Meetings

i. Hold weekly at the project site. Attach minutes showing contract title, signatures of attendees and a list of topics discussed.

(d) Work Phase Meetings

i. The appropriate activity hazard analysis shall be reviewed and attendance documented by the Contractor at the preparatory, initial, and follow-up phases of quality control inspection.

(e) New Employee Indoctrination

i. New employees will be informed of specific site hazards before they begin work. Documentation of this orientation shall be kept on file at the project site.

END

PRE-CONSTRUCTION CONTRACTOR SAFETY CHECKLIST

Use this text as a guideline for completing the attached checklist. This checklist is a general, *pre-construction* review of the contractor safety program, as well as an information session to identify what the PEI Department of Transportation, Infrastructure and Energy (TIE) requires of our Contractors. Where the item requires a submission, ensure that it is received. If the item does not apply, enter N/A for not applicable.

The following information will assist you in establishing what will be reviewed in each section.

1. **Safety Policy:** Each employer is required by law (in Prince Edward Island) to have a safety policy and program and to implement that policy. TIE will ask for and receive a copy of that program.

2. **Safety Representative:** Each Contractor is required to advise TIE who their safety representative is. That representative has duties as described in the Occupational Health and Safety Act.

3. **Emergency Procedure:** Each Contractor must have a site specific layout and emergency plan complete with emergency phone numbers.

4. **Employee Orientation:** Each and every person working for a Contractor, including sub-contractors will be given an orientation to familiarize them with the site safety program. Unless otherwise specified, each sub-contractor is responsible for the orientation of their workers.

5. **Safe Work Plan:** Most contractors are involved in tasks that subject workers to hazards. In order to ensure that these workers are secured from hazard, the Contractor will supply TIE with a written safe work plan which affords protection against the hazards. This plan must be signed by a company representative and communicated to the workers involved in the task.

6. **Personal Protective Equipment Review:** Advise that all workers require CSA Class “b” hard-hat, CSA “Green Patch” (eight inch) footwear, eye, ear, and respiratory protection as required (boots and hat at all times).

7. **Fall Protection:** Fall restraint or fall arrest protection required where a fall of 2.4 meters (8 feet) or more is possible. **NO EXCEPTIONS**

8. **Housekeeping:** Advise of daily, or as needed, clean-up requirements.

9. **Tool Box Talks:** Each Contractor is required to conduct weekly safety meetings with their forces and advise TIE they have been done.

10. **Material Handling/Storage:** Advise Contractor about storage areas and handling of material so as not to endanger their worker or another worker. Stacked material to be banded, chained, blocked, or otherwise secured.

11. **Landing Platforms:** Advise Contractor about movement of material on or off platforms, all material to be secured. Platform gates or chains to be kept closed at all times workers are on platform. If not possible, worker to be tied off with fall restraint system independent of platform.

12. **WHMIS Training:** Receive verification that all Contractor workers are trained and that the Contractor submits their MSDS.

13. **GFCI:** Advise Contractor that all tools are required to have ground fault circuit interrupters (where electricity is supplied by Contractor).

14. **Accident Investigations:** Any injury to any of their workers must be investigated and reported to TIE.

15. **Verbal, Written, Gone:** Explain Zero Tolerance Program.

16. **Joint/Worker Safety Committee:** Sites of over twenty (20) workers must establish a safety committee; over fifty (50), an additional worker committee. Workers required to attend committee meetings will do so and not be prevented by employers.

17. **Fire Protection:** All trades involved in performing hot work of any kind are required to provide fire protection at the work location.

18. **Guardrails:** Advise Contractors that where temporary removal of guardrails is necessary, the area around them must be cordoned off with a barrier. Guardrails must be replaced as soon as possible.

19. **First Aider:** Each Contractor is required to have a first aid kit and trained first aider. Employer must name their first aider.

20. **Visitors:** Advise Contractor that any visitors to site must be suitable protected from hazard. They must wear hard hat, safety vest, and proper safety footwear while on site.
21. **Task Lighting:** Review responsibilities of task specific lighting (who provides it).

22. **Swamper/Riggers Competency:** Where cranes are used, the Contractor must use a swamper/rigger. They shall provide TIE with a written statement identifying, by name(s), their rigger and that the named person is a competent worker as described in the construction reulations.

23. **Scaffolds:** Review scaffold building requirement:
    - Use all braces required by design
    - Access ladder for platform over 1.5 meters
    - Full width platform if height over 3 meters (10 feet)(PEI Regulations require double planks)
    - Full guardrails and toeboards
    - Tied in three times base dimension or use of outriggers
    - Engineered over 50 feet in height (standard frame type)

24. **Elevating Work Platforms:**
    - All boom and scissors lifts required to be CSA approved and have approval on machine
    - Operators manual required on machine at all times
    - Maintenance record on machine at all times
    - Operator must receive training in operation of equipment
    - Fall protection must be used at all times on a boom lift
    - Fall protection required to be used on scissor lift when unit is being moved

25. **Protruding Rebar:** Installer's of reinforcing steel must protect the protruding hazard or make arrangements to have it protected. Removal of protective coverings for task purposed only is allowed, however, protective covering must be replaced as soon as possible.

26. **WCB Clearance Certificates:** Advise Contractor that TIE will not release any funds for payment until Workers Compensation Board Clearance Certificate has been received by TIE.

PRE-CONSTRUCTION CONTRACTOR SAFETY CHECKLIST

PROJECT: _____ DATE: _____

CONTRACTOR: _____

WORK BEING PERFORMED: _____

_____ _____

_____ _____
(Print name and title) (Print name and title)

_____ _____
E-D Project Manager/Superintendent Contractor Representative
(Sign) (Sign)

☑ Means Yes
☒ Means No

☐ 1. Safety Policy Submitted
☐ 2. Safety Representative
☐ 3. Emergency Procedure Review
☐ 4. Employee Orientation
☐ 5. Written Safe Work Plan Submitted
☐ 6. Personal Protective Equipment Review
Hard hats and Footwear
Safety Glasses
☐ 7. Fall Protection
☐ 8. Housekeeping
☐ 9. Tool Box Safety Talks (Weekly)
☐ 10. Material Handling/Storage
☐ 11. Landing Platforms
☐ 12. WHMIS Training Verification – MSDS received
☐ 13. GFCI Requirements
☐ 14. Accident/Incident Investigations Notification
☐ 15. Verbal, Written, Gone
☐ 16. Joint Worker Safety Committee
☐ 17. Fire Protection
☐ 18. Guardrails
☐ 19. First Aider on Staff – Name Supplied
☐ 20. Visitors and Safety Equipment
☐ 21. Task Lighting
☐ 22. Swampers/Riggers Competency (in writing)
☐ 23. Scaffolds
☐ 24. Elevating Work Platforms
☐ 25. Protruding Rebar Protection
☐ 26. WCB Clearance Certificate

1. GENERAL

a) The General Contractor is to provide each item and properly execute all work as specified herein, indicated by drawings, specifications, addenda, or change orders issued with respect to this Project.

b) The General Contractor shall co-ordinate, administer and supervise all work and material acquisition unless noted otherwise in either the Specifications or Drawings. Faulty work by any Section which could have been avoided by proper co-ordination and/or supervision by the General Contractor will not be accepted.

c) Unless specified otherwise, the provisions of this Section shall apply to all Sections of the specifications.

d) Study all Contract documents to determine additional work required by your section on which the work of other sections depends.

e) Establish rates of wages and conditions of work in accordance with the Industrial standards Act of the Province of Prince Edward Island. Wherever possible give preference to local labour.

f) Workmanship shall be of highest quality in accordance with best standard practice for this type of work, except where specified more precisely.

2. SPECIFICATION FORMAT

a) These specifications are not intended as a detailed description of installation methods but serve to indicate particular requirements in the completed work.

b) Conform to the latest edition of the National Building Code, together with all its related supplements, hereinafter referred to as the “Code” or “code”. Where Drawings and Specifications exceed code requirements provide such additional requirements.

c) Where a material is designated on Drawings or in the Specifications for a certain application, unless otherwise specified, that material shall conform to standards designated in the latest edition of the National Building Code and any other Code, Act or Bylaw of Provincial or Local Application provided that in the case of conflict or discrepancy the more stringent requirement shall apply. Similarly, unless otherwise specified, installation methods and standards of workmanship shall also conform to standards invoked by the aforementioned code. Where no particular material is specified for a certain use, the bidder shall select from the choice offered in the code in each case.

d) References to codes, standards, including manufacturers direction for installation shall be the latest edition thereof.

e) Provide a copy of all certificates of acceptance issued by Provincial or Local authorities.

f) Parts of the specification are written in short form, therefore it is understood that where a component of the work is stated in a heading followed by a material or operation, the words "Shall be", "Shall consist of" or similar words or phrases are implied which denote complete supply and installation of such materials of operations for the component of work designated by the heading.

g) Where the aforementioned Code or this specification does ot provide all information necessary for complete installation of any item, then the manufacturer's instructions for first quality workmanship shall be strictly complied with.

h) Where words in the Contract Documents occur in the singular number, they shall be taken as plural where applicable in accordance with the quantities required to satisfy the requirements of the Contract.

3. STANDARDS AND DEFINITIONS

a) Where a reference is made to specification standards produced by various organizations, conform to latest edition of standards, as amended and revised to date of Contract.

b) Have a copy of each specified standard which relates to your work available on the Site to be produced immediately on the Consultant's request.

4. CO-OPERATION

a) Co-operate with and co-ordinate with other trades as required for the satisfactory and expeditious completion of the work. Take field dimensions relative to this work. Fabricate and erect work to suit field dimensions and field conditions. Provide all forms, templates, anchors, sleeves, inserts and accessories required to be fixed to or inserted in the work and set in place or instruct the related trades as to their location. Pay the cost of extra work caused by and make up time lost as the result of failure to provide the necessary co-operation, information or items to be fixed to or built in, in adequate time.

b) This Section shall provide other Sections with and be responsible for levels and dimensions which other sections require for establishing proper locations for their work.

5. MATERIAL STORAGE AND HANDLING

   a) Store packaged materials in original, undamaged condition with manufacturers' labels and seals intact. Handle and store materials in accordance with manufacturers' and suppliers' recommendations and in a manner to prevent damage to materials during storage and handling.

6. SITE VISIT

   a) All bidders submitting tenders for this work shall first examine the site and all conditions therein. All tenders shall take into consideration all such conditions as may affect the work under this contract, no claims for extras resulting from conditions existing at the time of tender will be accepted by the Owner.

7. EXAMINIATION

   a) All trades shall examine the existing conditions upon which their work depends. Report to the General Contractor with a copy to the Consultant in writing defects in such work. The application of their work or any part of it shall be deemed acceptance of the work upon which their work or that part of it which has been applied depends.

   b) Drawings are, in part, diagrammatic and are intended to convey scope of work and indicate general and approximate location, arrangement and sized of building components.

8. CONSTRUCTION SAFETY

   a) Observe construction safety measures of the latest edition of the National Building Code Part 8, Provincial Government Workers/Workers Compensation Board and municipal authority provided in any case of conflict or discrepancy more stringent requirements shall apply.

   b) Comply with requirements of FCC no. 301.

   c) Ensure no part of Work is subjected to loading that will endanger its safety or will cause permanent deformation.

   d) Design and construct falsework in accordance with CSA S269.2.

   e) Operate such equipment only by qualified hoist or crane operators, and maintain current inspection certificate.

   f) Design and construct Scaffolding in accordance with CSA S269.2.

g) Comply with the requirements of the Fall Protection & Scaffolding Regulations, Province of Prince Edward Island 1988.

h) Each user of equipment or tools shall be appropriately trained and be responsible to examine for sufficiency before use. Make equipment and tools safe if necessary, or notify the Contractor in writing that user will not commence work with such tools until it is made safe.

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

.1 Have a copy of WHMIS data sheets available at the workplace on delivery of materials.

9. PROTECTION

a) Take reasonable and required measures, including those required by authorities having jurisdiction to protect the public and those employed on work from body harm and to protect adjacent public and private property from damage. Make full restitution for such harm and damage resulting from failure to take adequate protective measures. Make good damage to work from whatever cause.

b) Take all necessary precautions to guard site, premises, materials and the public at time other than when supervised work is in progress.

c) Provide and maintain in working order, suitable Underwriters' labeled fire extinguishers and locate in prominent position to approval of authorities having jurisdiction.

d) Provide all signs, ramps, barricades, and hoarding and protective measures necessary to the safe execution of the work and protection of the public.

e) Protect, relocate and maintain existing, active services wherever they are encountered. Wherever inactive services are encountered, cap them off and remove the unwanted portion, with the approval of the authorities having jurisdiction or the public utility concerned, in the manner approved by them.

f) All trades shall protect previously installed work while carrying out their own work.

g) Damaged work shall be made good by appropriate trades but at the expense of those causing damage.

h) Attach and fasten fixtures and fittings in place in safe, sturdy, secure manner so that they cannot work loose or fall or shift out of position during the occupancy of building as a result of vibration or other causes in normal use.

i) Protect existing buildings, landscaping, curbs, roads and lanes and utilities. If, during work, any buildings, landscaping, curbs, roads and lanes are damaged, repair or replace them at no extra expense to the Owner.

10. FASTENINGS

a) Supply all fastenings, anchors and accessories and adhesives required for fabrication and erection of the work.

b) Exposed metal fastenings and accessories shall be of same texture, colour and finish as base metal on which they occur.

c) Anchoring and fastening devices or adhesive shall be of appropriate type and shall be used in sufficient quantity in such a manner as to provide positive permanent anchorage of the unit to be anchored in position. Install anchors at spacing to provide for required load carrying capacity.

d) Keep exposed fastenings to a minimum, evenly spaced and neatly laid out.

e) Supply adequate instructions and templates and, if necessary, supervise installation where fastenings or accessories are required to be built into work of other trades.

f) Fastenings shall be of permanent type. Wood plugs are not permitted.

g) Fastenings which cause spalling or cracking of material to which anchorage is being made are not permitted.

h) Do not use powder actuated fastening devises, which are stressed in withdrawal on any part of this work without written approval from the Consultant. Take particular stringent safety precautions when using powder actuated fastenings. Only low velocity plunger-type are permitted.

11. CUTTING, FITTING, AND PATCHING

a) All cutting and patching shall be the responsibility of the General Contractor.

b) Where new work connects with existing and where existing work is altered, ct and patch and make good to match existing work.

c) Make cuts with clean, true, smooth edges. Make patches inconspicuous in final assembly.

12. EXISTING SERVICES

a) Where work involves breaking into or connecting to existing services, submit work schedule sufficiently in advance to allow coordination of possible interruption with the Owner. Confirm each interruption 24 hours immediately prior to scheduled date of implementation.

13. ENVIRONMENTAL PROTECTION

a) Ensure that pollution and environmental control of construction activities are exercised during the work to requirements of the federal and provincial environmental acts; including, but not limited to, the Prince Edward Island Environmental Protection Act.

14. HAZARDOUS MATERIAL

a) Should material resembling hazardous materials (other than those identified within the Contract Documents), including, but not limited to spray or trowel applied asbestos, be encountered in course of work; stop work immediately. Do not proceed until written instructions have been received from Consultant.

b) Any material which contains asbestos that is disturbed or removed during construction work (see Asbestos Content Report (where applicable)), shall be removed in accordance with the regulations set out by the Occupational Health & Safety Act. All costs for proper cutting, removal and disposal of all asbestos on this contract shall be included in Tender. Refer also to Section 2C (as applicable).

c) Where work entails use, storage, or disposal of toxic or hazardous materials, chemicals and or explosives, or otherwise creates a hazard to life, safety, health, or the environment; work shall be in accordance with the Jurisdictional Authority.

15. CLEANING

a) All rubbish and construction debris must be removed from the entire site on a regular basis, so that the site is maintained in a clean, safe condition. Materials removed are to be disposed of in a manner acceptable to the Provincial Department of Environment and Energy.

b) Vacuum clean all areas prior to painting and close all areas after completion of painting to restrict access to authorized persons.

c) Dust and clean all surfaces including glass (interior and exterior), doors and hardware.

16. FIRES

a) Do not light fires of any sort to burn rubbish resulting from the work.

17. ACCESS TO SITE

a) Access to site shall be directed by the Consultant.

18. SITE LIMITS

a) The limits of the site are shown on the drawings and all activity relating to the contract shall be confined within these limits.

19. MAINTENANCE MANUALS

Prior to the issuance of the final certificate the following items shall be assembled and incorporated into a three ring binder complete with table of contents:

a) All warranties and guarantees submitted by manufacturers.

b) The printed or typewritten copies of recommended maintenance procedures for all items requiring regular maintenance.
c) A copy of all approved Shop drawings.

20. PERMITS

a) Obtain a pay for all required permits, licenses, and inspections; required by applicable laws and regulations. Except the building permit which will be paid for by the Owner.

21. TOBACCO PRODUCT USAGE BAN

The use of Tobacco products is not permitted within the building or property.

a) Property – Includes all lands and buildings under the control of the government of PEI.

b) Tobacco Products – Includes cigarettes, cigars, pipes, chewing tobacco, snuff, and any other products containing or reasonably resembling tobacco or tobacco products except approved cessation products used in approved cessation programs.

c) Tobacco Usage Ban – Includes smoking, chewing, dipping or any other form of use of tobacco products.

END

1. CUTTING AND PATCHING

a) Cut, patch and make good to leave work in a finished condition where new work connects with existing.

b) Sections responsible for various categories of cutting and patching are as follows:

.1 All cutting and patching shall be the responsibility of the General Contractor.

c) Carry out cutting and patching in the following manner:

.1 Regardless of which Subcontractor or Section of the specifications is responsible for any portion of cutting and patching work, in each case, tradesmen qualified in the work being cut and patched, shall be employed to carry out or supervise this work to ensure that it is correctly done.

.2 Where new work connects with existing and where existing work is altered, cut and patch and make good to match existing work.

.3 Do not cut, drill or sleeve load-bearing members without first obtaining the Consultant's written authority for each condition.

.4 Drill work carefully, leaving a clean hole not larger than required. This applies to both new and existing work.

.5 Cut holes after they are located by trades requiring them.

.6 Bulkheads to be constructed with steel studs, furring and seam filled gyproc.

.7 Make cuts with clean, true, smooth edges. Make parches inconspicuous in final assembly.

.8 Co-ordinate work of your Section with work of other Sections, taking into account existing installations to assure best arrangement of components in available space. For critical locations consult with Consultant before commencing work.

.9 At penetrations of fire rated ceilings, walls, and floor/roof assemblies, completely seal voids with fire rated material, fill thickness of constructed element.

END

1. GENERAL

   a) The demolition and removal of items indicated on the drawings, which must be demolished to allow for the construction and renovations indicated on the plans and specification herein, shall be demolished under the supervision of the section sub-contractor. These materials include, but are not limited to: **flooring and walls containing hazardous materials, carpet, existing millwork, etc. as required to complete the work as per the specifications and drawings.**

2. PROTECTION

   a) Prevent movement, settlement or damage of structures and parts of existing building to remain, provide bracing, shoring and underpinning as required. Make good damage caused by demolition.

   b) Take precautions to support affected structures and, if safety of building services appears to be endangered, cease operations and notify Consultant.

   c) If during the demolition work a situation should develop or a condition be exposed which has the potential to endanger the safety of the occupants or users of the buildings or structure in which demolition work is being carried out, or occupants or users of adjoining buildings or structures, the Contractor will cease operations, take whatever emergency actions, in the Contractor's opinion, is required to ensure the immediate safety of the occupants or users of these buildings or structures, and notify the Architect before continuing with the work.

3. DESCRIPTION OF WORK

   a) Perform all demolition removal and restitution as indicated, implied and required to properly complete the work of this contract.

   b) Refer closely to drawings and specifications to determine extent of demolition requirement.

   c) Demolition drawings serve only as a guide to demolition requirements. Location of new components and finishes where components exist implies removal of such components prior to new construction.

   d) Demolition of existing components, required to facilitate construction of new work is required.

4. EXECUTION

a) Dispose of demolished materials in accordance with authorities having jurisdiction.
b) Do not disrupt active or energized utilities and services.
c) At the end of each day's work, leave the site in a safe condition, with no danger of any component toppling or falling.

d) Remove existing equipment, services, and obstacles where required for refinishing or making good of existing surfaces, and replace as work progresses.

e) Do not sell or burn materials on site.

f) Remove contaminated or dangerous materials, as defined by authorities having jurisdiction relating to environmental protection, from site and dispose of in safe manner to minimize danger at site or during disposal.

g) All demolished materials become the property of the Contractor, unless indicated otherwise, and are to be removed from the site and disposed of in a manner and in a location acceptable to Provincial Authority governing such disposal.

END

1. GENERAL

This section shall remove and dispose of all asbestos containing materials that must be demolished as part of the construction work. The removal and disposal of materials includes, but not limited to, flooring, floor masking and plaster walls in areas as indicated on the drawings.

2. DEFINITIONS

.1 HEPA vacuum: High efficiency particulate air filtered vacuum equipment with a filter system capable of collecting and retaining fibres greater than 0.3 microns in length at 99.9% efficiency.

.2 Amended water: Water with a non-ionic surfactant wetting agent added to reduce water tension to allow thorough wetting of fibres.

3. REGULATORY AGENCIES

.1 Comply with Provincial requirements pertaining to asbestos, company policies and with these specifications.

4. SUBMITTALS

.1 Contractor must provide proof of licensing certificate for asbestos abatement with the Prince Edward Islands Workers Compensation Board / Occupational Health & Safety Division prior to contract agreement.
.2 Obtain from Workers Compensation Board / Occupational Health & Safety Division, an Asbestos Notification Work Permit and supply a signed copy to Owner or their Consultant.
.3 Obtain from the PEI Department of Environment and submit to Owner or their Consultant all necessary permits for transportation and disposal of asbestos waste. Ensure that dump operator is fully aware of hazardous nature of material being dumped, and proper methods of disposal.
.4 Submit proof satisfactory to Owner or their Consultant that all employees have had instruction on the hazards of asbestos, respirator use, dress,use of showers, entry and exit from work areas, and all aspects of work procedures and protective measures. Ensure supervisory personnel have attended asbestos training course, approved by the project Consultant. Submit proof of attendance in form of certificate. Minimum of one Supervisor for every ten abatement workers.
.5 Submit layout of waste loading / containment areas leaving the building.

.6 Submit proof of Contractor's General & Environmental Liability Insurance.

.7 Submit proof satisfactory to the Owner or Consultant that all employees have respirator fitting and testing. Workers must be fit-tested (section 7.3 of the CSA Z94.4-11 Standard) with the respirator that is personally issued.

.8 Submit Worker's Compensation Board status and transcription of insurance.

.9 The asbestos abatement/demolition Contractor shall submit a copy of approvals from Workers Compensation and the Department of Communities, Land and Environment covering the work and disposal procedures to the PEI Department of Transportation, Infrastructure and Energy Attention Mr. Jonathan Gauthier, Fax 368-5395 or email jwgauthier@gov.pe.ca.

5. EXISTING CONDITIONS

a) Reports and information pertaining to known material containing asbestos to be handled, removed, or otherwise disturbed during this project can be found in Appendix A.

6. EXECUTION

a) Perform all work in accordance with the P.E.I. Occupational Health and Safety Act.

7. MONITORING

a) An independent testing agency will be engaged, and paid by the Contractor, to monitor the space outside the work area to insure adequacy of enclosure procedures. The Contractor must also provide a clean air certificate upon completion of removals before any other work carries on.

END

1. GENERAL

1. This section shall supply all labour, material and equipment to install Architectural Woodwork & particle board cabinetwork as outlined on the drawings.

2. Do architectural woodwork to Millwork Standards of the Architectural Woodwork Manufacturers Association of Canada (AWMAC) latest edition, except where specified otherwise.

3. Shop Drawings
   a. Indicate details of construction, profiles, jointing, fastening and other related details.
   b. Indicate all materials, thicknesses, finishes and hardware.
   c. Indicate locations of all service outlets in casework, typical and special installation conditions, and all connections, attachments, anchorage and location of exposed fastenings.

4. Samples:
   a. Submit samples as requested by Consultant.

5. Delivery, Storage, and Handling:
   a. Protect millwork against dampness and damage during and after delivery.
   b. Store millwork in ventilated areas, protected from extreme changes of temperature or humidity.

2. PRODUCTS

2.1 Materials
1. Melamine faced composition board, (MFCB) with high density particle board core to CSA 0188.0-M78, to overall thicknesses specified, except where specifically indicated otherwise.
2. Laminated plastic: to CAN3-A172
3. Nails and staples: to CSA B111.
4. Wood screws: to CSA B35.4-1972 electroplated.
5. Provide zinc-plated "CUP" washers at all locations where exposed screws are indicated or required.
6. Splines: wood plastic metal.

2.2 Manufactured Units
1. Casework:
   a. Fabricate caseworks to AWMAC custom quality grade and as detailed on drawings.

2.3 Laminated Plastic Tops

1. Countertops and backsplashes: one piece, selected by Owner. Standard of Acceptance:
    i. Arborite
    ii. Nevamar
    iii. Formica
    Or approved equal.
2. Core: 19mm MDF particleboard.
3. Adhesive: As recommended by manufacturer.
4. Draw bolts: Blum or approved equal.

2.4 Hardware

1. Hinges: heavy duty concealed hinges for flush-mounted or frame-mounted doors, 110 degree swing.
    a. Standard of acceptance
        i. Blum
        ii. Hettich
        Or approved equal.

2. Door and drawer pulls:
    a. 6 mm diam. steel rod, 107 x 24 mm c/c screws.
    b. Standard of acceptance
        i. Richelieu-Martin, or approved equal.

3. Adjustable shelving standards: to CGSB 69-GP-8M
    a. Heavy Duty, Item #233SS, Type 304 Stainless Steel
    b. Standard of acceptance
        i. Knape-Vogt, or approved equal.

4. Drawer standards: Item #B5220 M, length to suit drawer.

2.5 Fabrication

1. Set nails and countersink screws, apply plain wood filler to indentations, sand smooth and leave ready to receive finish.

2. Shop install cabinet hardware for doors, shelves and drawers. Recess shelf standards unless noted otherwise.

3. Shelving to cabinetwork to be adjustable unless otherwise noted.

4. All joints are to be cut accurately and filler is not to be used to compensate for poor joints.

5. Provide cutouts for plumbing fixtures, inserts, appliances, outlet boxes and other fixtures.

6. Shop assemble work for delivery to site in size easily handled and to ensure passage through building openings.

3. EXECUTION

3.1 Workmanship

1. Do architectural woodwork to Quality Standards of the Architectural Woodwork Manufacturers Association of Canada (AWMAC), except where specified otherwise.

2. Install prefinished millwork at locations shown on drawings. Position accurately, level, plumb straight.

3. Fasten and anchor millwork securely. Provide heavy duty fixture attachments for wall mounted cabinets.

4. Design and select fasteners to suit size and nature of components being joined. Use proprietary devices as recommended by manufacturer.

5. Use draw bolts in Counter top joints.

6. Scribe and cut as required to fit abutting walls and to fit properly into recesses and to accommodate piping, columns, fixtures, cutlets or other projecting, intersecting or penetrating objects.

7. At junction of plastic laminate counter back splash and adjacent wall finish, apply small bead of sealant.

8. Replace items of finish carpentry with damage to surfaces, including hammer and other bruises.

9. Install all cabinet hardware in accordance with manufacturer's recommendations and adjust to provide proper clearances and to function freely and properly.

3.2 Cleaning

1. Clean millwork and cabinet work inside cupboards and outside surfaces.

3.3 Protection

1. Protect millwork and cabinet work from damage until final inspection.

END

1. GENERAL

    1. This section will supply and install all steel hollow metal frame to suit doors indicated on the plans and in this specification.

    2. Shop Drawings
        a. Submit shop drawings for approval.
        b. Indicate dimensions, each frame type, material, core thickness, reinforcements, location of anchors, exposed fasteners and finishes.

2. MATERIALS

    2.1 Sheet steel: Commercial grade steel to ASTM A366-72, Class 1 finished to ASTM A526 W25 (wiped) zinc finish.

    1. Frames: 1.6 mm base thickness steel.

    2. Floor anchors, channel spreaders and wall anchors: minimum 1.6 mm base thickness steel.

    3. Guard boxes: minimum 0.8 mm base thickness steel.

    4. Glazing stops: minimum 1 mm base thickness steel, screw fixed, tamper proof.

    2.2 Reinforcing channel: to CSA G40.21, type 300W.

    2.3 Door bumpers: black neoprene double stud.

    2.4 Primer: to CSGB 1

3. FABRICATION

    3.1 Fabricate frames as detailed and indicated on drawings to Canadian Steel Door and Frame Manufacturers' Association, "Canadian Manufacturing Specifications for Steel Doors and Frames", most recent edition; except where specified otherwise.

    3.2 Cut mitres and joints accurately and weld continuously on inside of frame profile.

    3.3 Grind welded corners and joints to flat plans, fill with metallic paste filler and sand to uniform smooth finish.

    3.4 Touch up frames with primer where galvanized finish damaged during fabrication.

3.5 Frames to be the wrap around type and be supplied with anchors to suit the adjacent wall construction. Provide butt type frames with suitable anchors if indicated or required.

3.6 Provide adjustable jamb anchors for fixing at floor.

3.7 Reinforce heads of frames wider than 1200 mm. Reinforce frame where door coordinators are to be attached.

3.8 All frames will be blanked, drilled reinforced and tapped to receive mortise hardware as per templates. The frames will also be reinforced to receive surface hardware as indicated on the hardware list. For proper adjustment, drilling and tapping for surface applied hardware will be made on site by the door erectors.

1. Hinge reinforcement to be 10 gauge steel.

2. All other reinforcements to be 14 gauge steel.

3.9 Install 3 bumpers on strike jamb for each single door and 2 bumpers at head for pairs of doors.

3.10 For exterior systems, construct thermally broken frames using steel core, separating exterior portion of frame from the interior portion with polyvinyl chloride thermal breaks. All voids to be filled with batt insulation.

3.11 Install 1.6 mm base thickness steel frames to interior openings 1200 mm or less in unsupported width.

3.12 Install 2.0 mm base thickness steel frames to interior openings over 1200 mm in unsupported width.

3.13 Where shown on plans or door schedule, fire rated pressed steel frames shall be supplied in strict accordance with Underwriters Laboratories labels Class A - 3 hours, Class B - 1 1/2 hours, and Class C - 3/4 hours. Each door must bear the ULC approved label and also must have the name of the manufacturer stamped on each leaf.

4. INSTALLATION

4.1 Set frames plumb, square, level and at correct elevation.

4.2 Secure anchorages and connections to adjacent construction.

4.3 Brace frames rigidly in position while building-in. Install temporary horizontal wood spreader at third points of door opening to maintain frame width. Provide vertical supports at centre of head for openings over 1200 mm wide. Remove temporary spreaders after frames are built-in.

4.4 Make allowances for deflection of structure to ensure structural loads are not transmitted to frames.

END

1. GENERAL

   a) This section shall supply and install all the wood doors, required on this project and indicated on the plans and in this specification.

2. MATERIALS

   a) Gypsum BoardAll door material and construction shall conform to CSA D132.2 - M1977 and to ULC requirements where fire rated doors are required.

   b) Doors shall have a framed solid core of extruded particle board with a minimum density of 449 kg/m^3.

   c) Faces shall be paint grade 3 ply birch veneer.

   d) Side edges shall be 1 3/4" thick birch, glued to the core.

   e) Prepare doors for glass and louvers. Provide glazing stops to match face veneer.

3. INSTALLATION

   a) Bevel vertical edges of single acting doors 3 mm in 50 mm on lock side and 1.5 mm in 50 mm on hinge side.

   b) Install doors and hardware in accordance with manufacturer’s instructions

   c) Adjust hardware for correct function.

   d) Install glazing and louvers.

   e) Re-adjust doors and hardware in order to provide a proper free operation.

END

1. GENERAL

This section shall provide all labour and material to install new acoustic ceiling tile and grid system.

2. MATERIALS

.1 Acoustic Ceiling Tile

.1 Acoustic units for suspended ceiling systems:
- .1 Type: Fissured, Square lay in.
- .2 Content: Mineral fibre, .66 lb/SF.
- .3 Surface Finish: Factory applied latex paint.
- .4 Colour: White
- .5 Size: 24 x 48 x 5/8 inches for non-fire rated exposed tee grid.
- .6 Armstrong Fine Fissured #755B mineral fibre ceiling tile or approved equal.

.2 Provide sample tile prior to ordering material or commencing work on site.

.3 Provide one box of surplus ceiling tiles, to match new tile.

.2 Suspension System (Required Where Noted On Plan)

.1 Heavy duty system to ASTM C635-78.

.2 Basic materials for suspension system: commercial quality cold rolled steel electro-galvanized finish.

.3 Exposed tee bar grid components: shop painted satin sheen white. Components die cut. Main tee with double web, rectangular bulb and 25 mm rolled cap on exposed face. Cross tee with double web and rectangular bulb; web extended to form positive interlock with main tee webs; lower flange extended and offset to provide flush intersection with fire-rated controlled wall moulding to be channel for angle shape expansion in similar finish.

.4 Hanger wire: galvanized soft annealed steel wire, 3.6 mm diameter for access tile ceiling to ULC tested design requirements for fire rated assemblies.

.5 Hanger inserts: purpose made.

.6 Accessories: splices, clips, wire ties, retainers and wall moulding flush, to complement suspension system components.

3. WORKMANSHIP

.1 Install hangers.
.2 Lay out centre line of ceiling both ways, to provide balanced borders at room perimeter with border units of less than 50% of standard unit width.
.3 Ensure suspension system is co-ordinated with location of related components and other trades.
.4 Install wall mould to provide correct ceiling height. Finished ceiling system to be level within 1:1000.
.5 Complete suspension system to support superimposed loads, such as lighting fixtures, diffusers grilles and speakers.
.6 Interlock cross member to main runner to provide rigid assembly
.7 Install suspension system to manufacturer's instructions.
.8 Frame at openings for air diffusers, speakers, etc., and at changes in ceiling heights.
.9 Provide fire rated light boxes to ULC standards above all recessed light fixtures in rated areas.
.10 Provide hold-down clips in all rated ceilings with visible access tile at service locations.

END

1. GENERAL

This section shall provide all labour and materials to paint all walls, window trims, existing doors, and frames as indicated on the drawings and specification herein.

Contractor to patch and repair walls, prior to painting. All patched areas to be spot primed.

All walls to receive one coat of primer and two coats of finish paint (eggshell)

All doors, frames and trim to receive one coat of primer and two coats of finish paint (semi-gloss)

Remove electrical cover plates, light fixtures, and other surface mounted items prior to undertaking any painting operations. Store for re-installation after painting is completed.

2. MATERIALS

a) Qualified Products: Paint finishes shall be selected from any of the following brand paint materials for interior paint application or approved equal:

.1 Olympic
.2 Behr
.3 Benjamin Moore
.4 Para
.5 Pittsburgh
.6 Pratt & Lambert

b) All painted areas to be latex based paint

c) Lab and Sterilization room to receive kitchen and bath paint

d) Colours:

.1 The Owner will provide a colour schedule after contract award.

.2 Interior colour schedule will be based upon the selection of no more than two base colours and one trim colour.

END

1. GENERAL

This section shall provide all labour and materials to install new sheet vinyl flooring. Contractor responsible to prepare existing subfloor as per manufacturer's specifications. Refer to drawing and notes for locations requiring new sheet vinyl flooring. Contractor to provide maintenance data for the new flooring.

2. MATERIALS

a) Homogeneous sheet vinyl flooring to ASTM F1913/linoleum sheet flooring to ASTM F2034, Type 1, class B tp ASTM E84, <450 to ASTM E662, Class 1 to ASTM E648 Slip Resistance: R9 to EN649/.6 to ASTM D2047, abrasion resistance Group P or better.

b) Seams to be heat welded.

c) Life-long wax and polish free maintenance protocols.

d) Roll width: 2m.

e) Colour: Medintech by Armstrong #84320 Pumice Stone

f) Standard of Acceptance:

    a. Marmoleum Real by Forbo; thickness 2.5mm
    b. Polyflor Mystique PUR by Polyflor Ltd; thickness 2mm
    c. Elegance 290 by Gerflor, thickness 2mm
    d. Medintech by Armstrong, thickness 2mm

g) Continuous Flash Cove Base (Sterilization room)
    a. Colour and material – continuation of flooring material
    b. Height – 150mm
    c. Seams to be heat welded
    d. Use manufacturer's recommended installation methods.

h) Rubber Base – All other areas receiving new flooring to receive 100mm high rubber base. Colour to be selected by Owner. Standard of acceptance:
    a. Centura
    b. Johnsonite
    c. Armstrong
    d. Or approved equal

i) Accessories: use manufacturer's recommended accessories. Colour and pattern match type.
   a. Vinyl welding rod
   b. Cove former – 38mm radius
   c. Transition strips – sized to suit flooring materials and colour to match rubber base.

END

Government of Prince Edward Island
Structured Cabling Standards
January 26, 2010

Emerging technologies dictate that it is no longer allowable to simply integrate various manufacturers' components into a building's structured cabling. In order to guarantee network performance, a single manufacturer's "system" of matched components is required. Our standard is Belden IBDN System 4800, GigaFlex Category 6.

It is also paramount that all new or renovated construction utilizes the latest available technology, eliminating the need and costly process of network infrastructure replacement, in the future.

The following standards apply to all network cabling installations:

1. All installers shall be familiar with and follow these industry standard documents:

   ANSI/TIA/EIA-569-A (CSA T530)
   ANSI/TIA/EIA-607 (CSA T527)
   ANSI/TIA/EIA-568-B.1, B.2, B.2-1 & B.3
   ANSI/TIA/EIA-606A
   ANSI/TIA/EIA-862
   TSB-155, IEEE 802.3an

2. The entire system shall meet or exceed the current day **Category 6** standard specifications, which includes four-pair, 23 gauge, copper cabling performance of 300 MHz. <u>Only matched components from one manufacture`s system shall be used to provide an end -to-end solution</u>. Provide complete system consisting of outlet boxes, cover plates, patch panels, patch cords, and cable, etc. The contractor shall verify that all system parts received meet specification, prior to installation.

3. 4-port angled face plates shall be for MDVO style jacks, with 3 ports used in each instance (2 data, 1 telephone). The upper ports are to be used for data terminations and the lower for voice, unless otherwise stated. The MDVO jacks in angled face plates are to be installed as designed by the manufacturer, which in this case has the printing inverted. This allows the release tab on the data cable to be facing upwards, making it easier to remove from the jack.

4. Each horizontal cable, data outlet, and patch panel port shall bear the same identifying number. The numbering scheme for the building data outlets shall be assigned in a logical, sequential manner. Numbering on the plates shall be <u>*viewable from both in front and above*</u>. A contractor must assign these jack numbers on the floor plans, prior to pulling in any cable.

5. Patch panels shall be Belden Category 6 Flex, for GigaFlex MDVO style jacks, for mounting in 19 inch floor mounted rack. Panels to be a matched components of the cabling system being installed; 24-port one rack unit high; 48-port two rack units high. Allow for 25% spares.

6. Patch cords shall be Category 6 Belden GigaFlex. Two patch cords required for each data line. Cable jacket and boots to match system color code:

   "Green" jacket and boots for Belden/CDT GigaFlex System
   "Blue or Grey" jacket and boots for Standard Cat5 UTP cable

   a) Standard patch cord lengths are not to exceed 10 feet. Cords of up to 25' *may* be used temporarily if it can be shown that the total electrical length of the connection to the switch remains under 100 feet, until such time as additional runs can be installed.

7. Contractor to supply patch cords at both the main data rack and in the individual rooms. Number of patch cords required shall be determined by the number of data outlets shown on the Drawings. Patch cord length required in these amounts:

   - 4 feet, 30% of total count.
   - 7 feet, 50% of total count
   - 10 feet, 20% of total count.

8. The installer shall be responsible for providing to IT Shared Services:
   - a map of the data outlet numbering and cable pathways on a copy of the building floor plan(s)
   - test results for each channel with a Level IV meter, using the standard specifications for Category 6.

9. All cable terminations shall be installed and tested to the T-568A wiring standard.

10. The contractor shall guarantee that all aspects of their installation shall be free from defects, and shall warranty workmanship and materials for a period of one (1) year from the date of inspection and acceptance by the representative of Provincial Treasury, IT Shared Services. The contractor shall assume all costs associated with repair or replacement; any form of cable trauma will be considered a defect and shall require replacement.

11. Category 6 data cabling shall meet or exceed specifications for Category 6, be 4 pair, 23 AWG, with FT4 rated insulation. Accepted systems are color-coded to uniquely identify the individual system horizontal cabling. For cabling:

Green	Belden/CDT (Nordx) System (4812LX)
Blue	Standard Cat5 UTP cable
White	All telephone copper cable

    Cabling for telephone shall be of Category 6 type (Belden 2412)

12. If an installed base of a manufacturer's Category 5E or 6 system is already

installed, consult with the IT Shared Services representative for the specification of product to be installed. If there are any deficiencies, anomalies, link length issues, design flaws, fit up problems regarding to the structured cabling system, the Contractor shall contact the IT Shared Services representative for clarification and/or resolution, before proceeding.

13. All Cat6 T-568A MDVO's shall bear the following colors for ease of identification, in the event of their usage:

Green	Belden/CDT (Nordx) Cat6 GigaFlex Data jacks
Blue	Regular Cat5 data jacks
White	Voice cable termination jacks GigaFlex
Black	Fax cable termination jacks GigaFlex

14. Patch panels shall only be mounted in IT Shared Services approved equipment racking device(s). This shall be in accordance with the attached Rack or Cabinet Package Documents. No substitutions.

15. Attachment of panels and devices to specified racks and cabinets shall use only 10-32 Robertson rack mounting screws; accepted - Middle Atlantic part # HS.

16. The Installer shall leave a minimum of 12" of excess UTP cable on the data outlet termination to facilitate future re-termination. The excess cable is to be stored in a sweeping "S" pattern; coils are <u>not</u> permitted.

17. The Installer shall leave a minimum of 3 meters of excess UTP cable on the patch panel end to facilitate future repositioning of panels on the rack unit. The excess cable is to be stored in a sweeping "S" pattern; coils are <u>not</u> permitted.

18. Where applicable, the rear outside of vertical cable management troughs shall be used to control cables attaching to the racking unit. This shall be in accordance with a document supplied to the installer, detailing the type and configuration of such device.

19. Where physical security is of concern, all network cables shall be enclosed in continuous conduit from the workstation outlet to the secure telecommunications room. The conduit shall be of sufficient size to meet the maximum forty (40) percent fill ratio and turn radius specifications.

20. Horizontal cabling shall be installed to the manufacturer's specifications, including but not limited to, the minimum bend radius. The contractor shall be responsible for proper bundling (with velcro wraps) and handing of all cables (with cable trays, Caddy Fasteners and/or "J" hooks) between the telecommunication closets and the workstation MDVOs, in common pathways (above corridors); the "home run" method is not permitted. Cable bundles should be supported at 2 foot intervals.

21. Each workstation outlet plate shall be configured with a minimum of 2 data drops

plus telephone service if required. Data drops shall only be used to deliver data services and shall not be used for any other service to the workstation.

22. **Installer shall be trained by the manufacturer of the cabling system being installed, following methods demonstrated in that training, and shall pocess a valid Certificate of Completion from the manufacturer, for the courses taken. Training must have been taken within the previous three (3) years, to be considered "valid". Certificates must be made available to the IT Shared Services representative for review, upon request.**

23. Before deviating from these methods, contact the Department of Provincial Treasury IT Shared Services representative.

24.

Belden IBDN System 4800 components include:

4812 005 1000	GigaFlex 4812, 4-pair, 23 AWG, CMR, Cat 6, Green, 1000 ft.
AX101070	CAT6+ Modular Jacks, for Data
AX101065	CAT6+ Modular Jacks, for Voice
AX101066	CAT6+ Modular Jacks, for Fax
AX350056	Belden GigaFlex PS6+ patch cables 4 feet, green
AX350057	Belden GigaFlex PS6+ patch cables 7 feet, green
AX350058	Belden GigaFlex PS6+ patch cables 10 feet, green
AX101456	Flex Patch Panel, 1U , 24-port, black
AX101458	Flex Patch Panel, 2U, 48-port, black
A0645269	MDVO Angled Entry Faceplate
AX101437	Interface Plate, Flush, 4-port, White

25.

Relay Rack Package Components

PART: Description	Product Code/Ordering #	Manufacturer	Quantity per pkg
Relay Rack Package - no substitutions			
Relay rack with 2 vertical cable management, black	DRR-44 + 2 DRCC-44CAN	Middle Atlantic	1
Power strip for rack	PB-12-IS/6FTCRD	Electron Metal	1
Organizer Ring Panel Horizontal Cable Management	AO403977	Belden IBDN	6
Horizontal Cable Manager, 1U, Black	HCM-1D	Middle Atlantic	4
Rack Drawer, 3U	UD3	Middle Atlantic	1
Universal Rackshelf, 1U, frontmount	U1	Middle Atlantic	1
Vented Center mount shelf, 2U	U2MS	Middle Atlantic	2
Formed blank panel 1U, black	EB1	Middle Atlantic	4
Formed blank panel 2U, black	EB2	Middle Atlantic	6
Heavy Duty Sliding Shelf	SS	Middle Atlantic	1
10-32 Pan Head Rack mounting screws and washers	HS	Middle Atlantic	100
IEC Power Cord, 12 inch, 4 per pkg	IEC-12X4	Middle Atlantic	1
IEC Power Cord, 18 inch, 4 per pkg	IEC-18X4	Middle Atlantic	1
IEC Power Cord, 24 inch, 4 per pkg	IEC-24X4	Middle Atlantic	1
Velcro Roll, 75 feet	99-050-QT-1	Polygon	1
Cable Ties, 7 inch, bag of 100	TY-525-MX	Thomas & Betts	1

26. Acceptable Conduit Runs
    - Achieve the best direct route (e.g., usually parallel to building lines) with no bend greater than 90 degrees or an aggregate of bends in excess of 180 degrees between pull points or pull boxes.
    - No continuous sections longer than 30.5 m (100 ft).
    - Be bonded to ground on one or both ends in accordance with national or local requirements.
    - Withstand the environment to which they will be exposed.
    - For runs that total more than 30.5 m (100 ft) in length, pull points or pull boxes should be inserted so that no segment between points/boxes exceeds the 30.5 m (100 ft) limit.
    - Total conduit runs should be kept to 45.8 m (150 ft) or less (including the sections through pull boxes).

27. Conduit Capacity

		Cable Outside Diameter mm (in)							
Inside Diameter (mm)	Trade Size	3.3 (0.13)	4.6 (0.18)	5.6 (0.22)	6.1 (0.24)	7.4 (0.29)	7.9 (0.31)	9.4 (0.37)	13.5 (0.53)
16	1/2	1	1	0	0	0	0	0	0
21	3/4	6	5	4	3	2	2	1	0
27	1	8	8	7	6	3	3	2	1
35	1-1/4	16	14	12	10	6	4	3	1
41	1-1/2	20	18	16	15	7	6	4	2
50	2	30	26	22	20	14	12	7	4
63	2-1/2	45	40	36	30	17	14	12	6
78	3	70	60	50	40	20	20	17	7
91	3-1/2	—	—	—	—	—	—	22	12
100	4	—	—	—	—	—	—	30	14

- cable capacity of horizontal pathway conduits that have no more than two 90 degree bends (180 degrees total) and are no longer than 30.5 m (100 ft).

The table shows the conduit fill ratio guidelines for horizontal cables; however, the number of cables that can be installed is actually limited by the allowed maximum pulling tensions of the cables. Maximum conduit fill ratio is 40%.

28. Maximum Category 6 cable lengths apply to all horizontal distribution cables; from the Horizontal Cross-connect (patch panel) to the telecommunications outlet

(workstation end), maximum cable length is 90 meters, (295 feet) including slack

Subsystem	Backbone lengths up to:	Data rates up to:
Campus backbones (OM1 fiber)	2 km (1.2 mi)	155 Mb/s
Campus backbones (OM2 fiber)	550 m (1804 ft)	1 Gb/s
Building backbones (OM2 fiber)	300 m (984 ft)	1 Gb/s
Building backbones (OM3 fiber)	300 m (984 ft)	10 Gb/s
Campus/building backbones (OS1 fiber)	2000 m (6560 ft)	10 Gb/s

requirements. BAS horizontal link lengths are also limited to 90 meters, independent of the media type.

29. Maximum fiber optic cable lengths are as follows:

    As a general guideline in premises applications for backbone cabling, OM1, 62.5/125 µm; OM2, 50/125 µm; or OM3, laser optimized 50/125 µm optical multimode fiber is recommended for applications supported for these lengths and data rates. Single mode fiber may also be required for premises applications.

30. Fiber optic backbone requirements shall be supplied on a separate design document.

Appendix - A

PLM Asbestos Bulk Sample Report

Client Information:	PEI Dept. of Transportation & Infrastructure Energy P.O. Box 2000, Charlottetown, PE C1A 7N8
Attention:	Jonathan Gauthier
Project Location:	205 Linden Avenue, Summerside, PE
Project Number:	PE7183
Date:	October 4, 2017

ALL-TECH
ENVIRONMENTAL SERVICES LIMITED

BACKGROUND: On September 13, 2017, ALL-TECH Environmental Services Limited was retained to collect various bulk material samples within the Dental Health Centre located at 205 Linden Avenue in Summerside, Prince Edward Island. A total of six (6) bulk materials were collected and analyzed for the determination of asbestos content.

Samples were analyzed by International Asbestos Testing Laboratory (IATL) for Polarized Light Microscopy (PLM) analysis. A summary of results is listed below in Table A.

TABLE A

Sample ID	Material Description / Location	Asbestos Content (%)	Asbestos Content (%) Additional Layers	Photo
SA-01	a) Brown 9" x 9" vinyl floor tile with b) Black / yellow mastic / Room 209	a) 1.8% Chrysotile	b) 3.3% Chrysotile	

Sample ID	Material Description / Location	Asbestos Content (%)	Asbestos Content (%) Additional Layers	Photo
SA-02	a) Off white 9" x 9" vinyl floor tile with b) Black mastic / Room 210	a) Non Detected	b) 5.4% Chrysotile	
SA-03	Drywall joint compound / Room 204	a) Non Detected	b) Non Detected	

Sample ID	Material Description / Location	Asbestos Content (%)	Asbestos Content (%) Additional Layers	Photo
SA-04	12" x 12" Plain ceiling tile / Room 204	Non Detected	N/A	
SA-05	12" x 12" pin hole ceiling tile / Room 210	Non Detected	N/A	

Sample ID	Material Description / Location	Asbestos Content (%)	Asbestos Content (%) Additional Layers	Photo
SA-06	24" x 24" ceiling tile / Reception Area	Non Detected	N/A	

Asbestos containing material is defined under the Prince Edward Island's Occupational Health and Safety Act R.S.P.E.I. 1988, Cap. O-1.01 General Regulations as installed materials containing more than 1% asbestos by dry weight.

If you have any questions regarding this report, please do not hesitate to contact our office (902) 569-0172.

Larry Koughan, CET, CRSP
Branch Manager

Inc. lab certificate of analysis

iATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St.,Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 9/25/2017
Report No.: 546581 - PLM
Project: DTIE Dental Health
Project No.: PE7183

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6343880
Client No.: SA-01
Description: Brown Floor Tile; 12x12
Facility:
Location: Room 209, VS X-Ray Room

Percent Asbestos:
PC 1.8 *Chrysotile*

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
98.2

Lab No.: 6343880(L2)
Client No.: SA-01
Description: Black/Yellow Mastic
Facility:
Location: Room 209, VS X-Ray Room

Percent Asbestos:
PC 3.3 *Chrysotile*

Percent Non-Asbestos Fibrous Material:
Trace Cellulose

Percent Non-Fibrous Material:
96.7

Lab No.: 6343881
Client No.: SA-02
Description: Off-White Floor Tile; 9x9
Facility:
Location: Room 210 , VS 203-202

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6343881(L2)
Client No.: SA-02
Description: Black Mastic
Facility:
Location: Room 210 , VS 203-202

Percent Asbestos:
PC 5.4 *Chrysotile*

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
94.6

Lab No.: 6343882
Client No.: SA-03
Description: White Joint Compound
Facility:
Location: Room 204

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6343882(L2)
Client No.: SA-03
Description: Tan Joint Compound
Facility:
Location: Room 204

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6343883
Client No.: SA-04
Description: White/Tan Ceiling Tile; 1x1
Facility:
Location: Room 204, VS 204-207-203 X-ray

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
99 Cellulose

Percent Non-Fibrous Material:
1

Analytical Method -**US EPA 600, R93-116**. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/15/2017
Date Analyzed: 09/25/2017
Signature: Mark Stewart
Analyst: Mark Stewart

Approved By: Frank Ehrenfeld
Frank E. Ehrenfeld, III
Laboratory Director

iATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St.,Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 9/25/2017
Report No.: 546581 - PLM
Project: DTIE Dental Health
Project No.: PE7183

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6343884
Client No.: SA-05

Description: White/Tan Ceiling Tile; 1x1
Facility:

Location: Room 210, VS 202

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
99 Cellulose

Percent Non-Fibrous Material:
1

Lab No.: 6343885
Client No.: SA-06

Description: White/Grey Ceiling Tile; 2x2
Facility:

Location: Receptionist Area

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
70 Cellulose
20 Fibrous Glass

Percent Non-Fibrous Material:
10

Analytical Method -**US EPA 600, R93-116**. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/15/2017
Date Analyzed: 09/25/2017
Signature: Mark Stewart
Analyst: Mark Stewart

Approved By: Frank Ehrenfeld
Frank E. Ehrenfeld, III
Laboratory Director

iATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St.,Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 9/25/2017
Report No.: 546581 - PLM
Project: DTIE Dental Health
Project No.: PE7183

Appendix to Analytical Report

Customer Contact:
Analysis: US EPA 600, R93-116

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com
iATL Office Manager: cdavis@iatl.com
iATL Account Representative: Cassie Doherty
Sample Login Notes: See Batch Sheet Attached
Sample Matrix: Bulk Building Materials
Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL..com and ir our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

Certifications:

- NIST-NVLAP No. 101165-0
- NY-DOH No. 11021
- AIHA-LAP, LLC No. 100188

Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analytical Methodology Alternatives: Your initial request for analysis may not have accounted for recent advances in regulatory requirements or advances in technology that are routinely used in similar situations for other qualified projects. You may have the option to explore additional analysis for further information. Below are a few options, listed as the matrix followed by the appropriate methodology. Also included are links to more information on our website.

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB)

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process)
Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)>

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

iATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St..Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 9/25/2017
Report No.: 546581 - PLM
Project: DTIE Dental Health
Project No.: PE7183

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique – by TEM): ASTM D 5755, D5756, or D6480

Various other asbestos matrices (air, water, etc.) and analytical methods are available.

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a list with highlighted disclaimers that may be pertinent to this project. For a full explanation of these and other disclaimers, please inquire at **customerservice@iatl.com**.

1) Note: No mastic provided for analysis.
2) Note: Insufficient mastic provided for analysis.
3) Note: Insufficient material provided for analysis.
4) Note: Insufficient sample provided for QC reanalysis.
5) Note: Different material than indicated on Sample Log / Description.
6) Note: Sample not submitted.
7) Note: Attached to asbestos containing material.
8) Note: Received wet.
9) Note: Possible surface contamination.
10) Note: Not building material. 1% threshold may not apply.
11) Note: Recommend TEM-NOB analysis as per EPA recommendations.
12) Note: Asbestos detected but not quantifiable.
13) Note: Multiple identical samples submitted, only one analyzed.
14) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.080%.
15) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.125%.

Recommendations for Vermiculite Analysis:

Several analytical protocols exist for the analysis of asbestos in vermiculite. These analytical approaches vary depending upon the nature of the vermiculite mineral being tested (e.g. un-processed gange, homogeneous exfoliated books of mica, or mixed mineral composites).Please contact your client representative for pricing and turnaround time options available.

iATL recommends initial testing using the EPA 600/R-93/116 method. This method is specifically designed for the analysis of asbestos in bulk building materials. It provides an acceptable starting point for primary screening of vermiculite for possible asbestos.

Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional.

The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

1)**Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% LOQ for most samples.

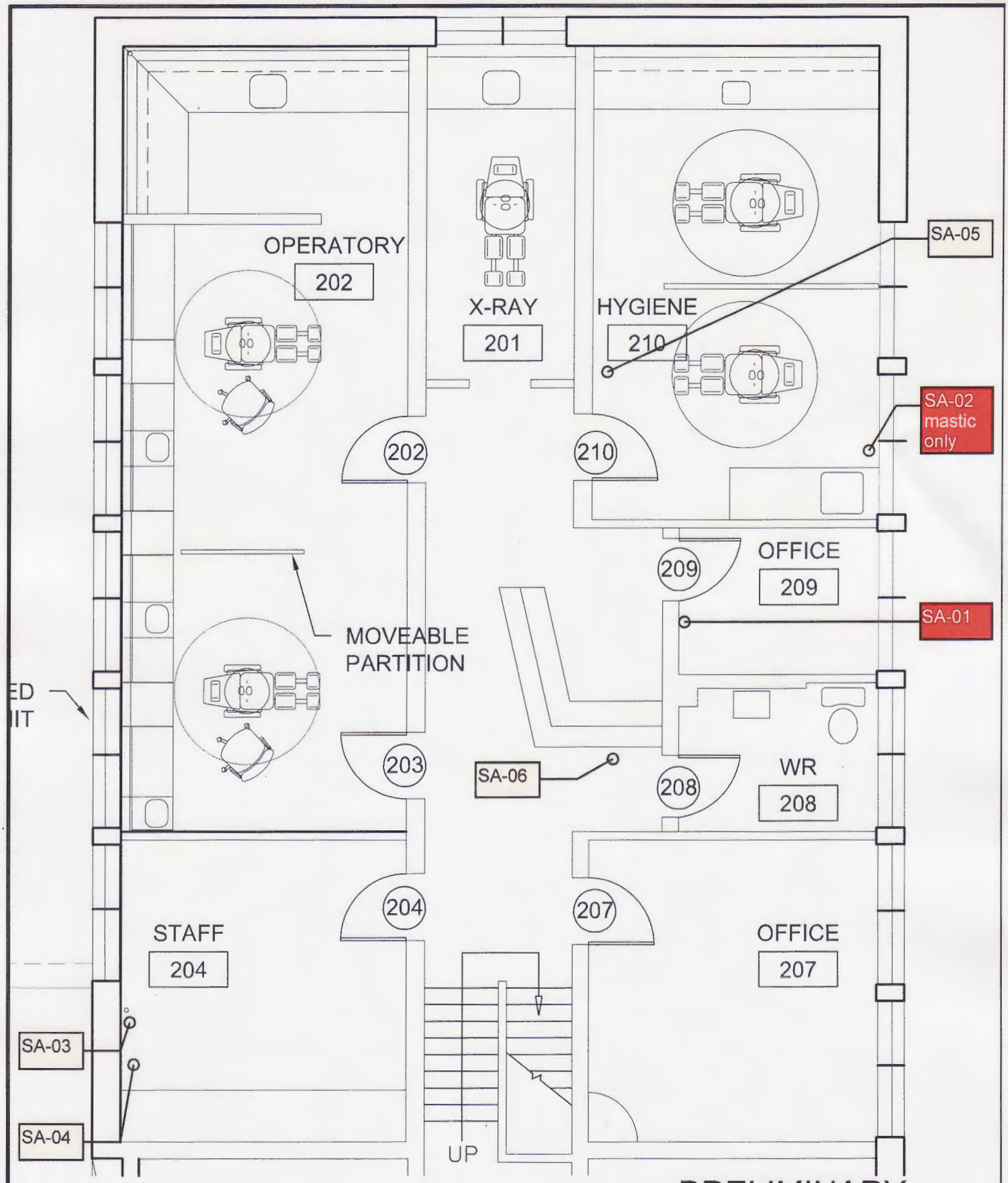
2)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Floats" only.

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Suspension" only.

LOQ, Limit of Quantitation estimates for mass and volume analyses.
*With advance notice and confirmation by the laboratory.
**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).



PRELIMINARY

NOT FOR CONSTRUCTION

G:\BLDG ASSET\BLDGS\2690 SUMMERSIDE MEDICAL CENTRE\17014\DWG\2690-17014.DWG

Project Title:	Drawing Title:
Summerside Dental Clinic	Proposed Floor Plan

Prince Edward Island CANADA	Date:	Dsgn By:	Drn By:	Scale:	Proj No.:	Dwg No.:
	Aug, 2017	###	###	1:100	2690 - 17014	A1