



CONTRACT DOCUMENTS

Asbestos Abatement Services
RESCO Canada Inc.
78 Route 148, Grenville, Quebec
Contract No. 31365 (1)

Prepared for: RHI Refractories Holding Company

JULY 2003

REF. NO. 31365 (1)

This report is printed on recycled paper.

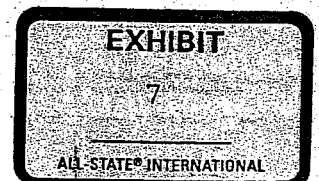


TABLE OF CONTENTS

FORM OF AGREEMENT

ARTICLE 1	THE UNDERTAKING	2
ARTICLE 2	CONTRACT DOCUMENTS	2
ARTICLE 3	CONTRACT PRICE	3
ARTICLE 4	CONTRACT TIMES	4
ARTICLE 5	EXAMINATION AND INSPECTION	4
ARTICLE 6	ALTERATIONS AND OMISSIONS	5
ARTICLE 7	PROGRESS PAYMENTS	5
ARTICLE 8	WITHHOLDING PAYMENTS	7
ARTICLE 9	WORK TO BE FREE FROM ALL ENCUMBRANCES	7
ARTICLE 10	SUBSTANTIAL PERFORMANCE	8
ARTICLE 11	FINAL INSPECTION AND PAYMENT	10
ARTICLE 12	TAXES	12
ARTICLE 13	FORCE MAJEURE AND NO DAMAGES FOR DELAY	12
ARTICLE 14	RIGHT TO SUSPEND WORK	15
ARTICLE 15	TERMINATION	15
ARTICLE 16	WARRANTY AND GUARANTEE	18
ARTICLE 17	SUCCESSORS AND ASSIGNS	18
ARTICLE 18	PATENTS AND OTHER INTELLECTUAL PROPERTY RIGHTS	19
ARTICLE 19	INDEMNIFICATION	19
ARTICLE 20	MISCELLANEOUS	20

EXHIBITS

EXHIBIT A	STATUTORY DECLARATION (TO ACCOMPANY SECOND AND SUBSEQUENT PROGRESS CLAIMS)	
EXHIBIT B	FINAL RELEASE OF ALL CLAIMS	
EXHIBIT C	STATUTORY DECLARATION (FOR RELEASE OF HOLDBACK, MAINTENANCE SECURITY HOLDBACK, OR BOTH UPON SUBSTANTIAL PERFORMANCE AND COMPLETION)	
EXHIBIT D	CONTRACTOR'S AFFIDAVIT OF ALL TAXES PAID	
EXHIBIT E	APPLICATION FOR PAYMENT	
EXHIBIT F	PERFORMANCE BOND	
EXHIBIT G	PAYMENT BOND	

GENERAL CONDITIONS

Gc.01	DEFINITIONS AND TERMINOLOGY	1
Gc.02	CONTRACT DOCUMENTS	8
Gc.03	SUBCONTRACTORS AND SUPPLIERS	9
Gc.04	THE ENGINEER	10
Gc.05	DISPUTES AND CLAIMS	11
Gc.06	NOTICE OR OTHER COMMUNICATION	12
Gc.07	TO BE FURNISHED BY CONTRACTOR	13
Gc.08	PROSECUTION OF THE WORKS	14
Gc.09	ENGINEERING AND INSPECTION CHARGES	15
Gc.10	EMERGENCIES	16
Gc.11	USE OF SITE	16

TABLE OF CONTENTS

Gc.12	SUBSURFACE AND PHYSICAL CONDITIONS	17
Gc.13	DIFFERING SUBSURFACE OR PHYSICAL CONDITIONS.....	18
Gc.14	UNDERGROUND FACILITIES.....	19
Gc.15	SAFETY AND PROTECTION	20
Gc.16	LAWS AND REGULATIONS.....	21
Gc.17	PERMITS.....	21
Gc.18	TESTS AND INSPECTIONS	21
Gc.19	SUBSTITUTES AND OR-EQUALS	24
Gc.20	RECORD DOCUMENTS.....	26
Gc.21	SHOP DRAWINGS AND SAMPLES.....	26
Gc.22	WORK BY OWNER OR OTHER CONTRACTORS.....	28
Gc.23	RECORD RETENTION, REVIEW, AND INSPECTION	29
Gc.24	CONFIDENTIALITY.....	29
Gc.25	UNIT PRICE WORK	30
Gc.26	ALTERATIONS, ADDITIONS, AND OMISSIONS	31
Gc.27	EXTRA WORK.....	32
Gc.28	FORCE ACCOUNT WORK	33

SPECIAL CONDITIONS

Sc.01	INSURANCE.....	1
Sc.02	FAILURE TO COMPLETE WORK ON TIME	8
Sc.03	PAYMENT PROCEDURES.....	8
Sc.04	ADDRESSES FOR GIVING NOTICE.....	9
Sc.05	RECORD RETENTION PERIOD.....	10
Sc.06	PERFORMANCE AND PAYMENT BONDS.....	11
Sc.07	SUBSURFACE AND PHYSICAL CONDITIONS	11

PROJECT SPECIFICATIONS

PS.1.0	GENERAL.....	1
PS.1.1	SCOPE OF WORK.....	1
PS.1.2	DEFINITIONS.....	1
PS.1.3	REGULATORY AGENCIES.....	1
PS.1.4	INSTRUCTION AND TRAINING	2
PS.1.5	SUBMITTALS	2
PS.1.6	EXISTING CONDITIONS	2
PS.1.7	WORKER PROTECTION	3
PS.1.8	VISITOR PROTECTION.....	4
PS.2.0	PRODUCTS.....	4
PS.2.1	MATERIALS	4
PS.3.0	EXECUTION	5
PS.3.1	GENERAL PROCEDURES.....	5
PS.3.2	procedures for glove bag removal	7
PS.3.3	PROCEDURES FOR EMERGENCY WORK.....	8
PS.3.4	AIR MONITORING	8
PS.4.0	MEASUREMENT AND PAYMENT.....	9

TABLE OF CONTENTS

PS.4.1 PAYMENT.....9

ATTACHMENTS

ATTACHEMENT 1 TABLE 1 SCOPE OF WORK

ATTACHEMENT 2 ASBESTOS ASSESSMENT REPORT PREPARED BY CONESTOGA-ROVERS &
ASSOCIATES, NOVEMBER 21, 2002

FORM OF AGREEMENT

THIS AGREEMENT, entered into this 28 day of July 2003

For:
ASBESTOS ABATEMENT SERVICES
RESCO CANADA INC.
78 ROUTE 148, GRENVILLE, QUEBEC

by and between

RHI Refractories Holding Company care of Robin Schmidt Whitley

hereinafter referred to as "OWNER",

and

Asbex Limitée

hereinafter called "CONTRACTOR",

NOW THEREFORE, OWNER and CONTRACTOR, for the consideration hereinafter named, agree as follows:

ARTICLE 1 THE UNDERTAKING

1.1 Work To Be Done

A. CONTRACTOR shall:

1. furnish all supervision, labor, services, materials, equipment, transportation, Plant and Equipment, temporary facilities, and incidentals of every kind necessary, and perform and complete in the most substantial, timely, and workmanlike manner, the Works specified or indicated in the Contract Documents entitled "Asbestos Abatement Services, 78 Route 148, Grenville, Quebec "; and
2. do and fulfill everything required by and in complete accordance with the Contract (the Contract Documents) as defined herein.

ARTICLE 2 CONTRACT DOCUMENTS

2.1 Documents Forming the Contract

- A. The Contract and the Contract Documents shall be one and the same. The Contract Documents establish the rights and obligations of the parties and shall be deemed to include: the executed Agreement; the executed Performance and Payment Bonds; the General Conditions; the Special Conditions; the Project Specifications; the Drawings; the Schedule of Information, the Schedule of Prices, the Schedule of Additional Unit Prices approved by ENGINEER, and the Schedule of Equipment Rental Rates approved by ENGINEER; any Addenda; all provisions required by Laws and Regulations to be inserted in the Contract whether actually inserted or not; all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications issued on or after the date of Notice of Award; and all appendices, attachments, and exhibits to any of the foregoing.

2.2 Reporting and Resolving Discrepancies

- A. CONTRACTOR shall be fully responsible for thoroughly reviewing the Contract Documents.
- B. Should conflict appear between the various Contract Documents, priority shall be given in order of appearance in the following list:
1. Agreement;
 2. Special Conditions;
 3. General Conditions;
 4. Project Specifications;
 5. Drawings:
 1. General,
 2. Details; and
 6. Schedules.

- C. If, during the performance of the Works, CONTRACTOR discovers any conflict, discrepancy, ambiguity, error, or omission within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Works, or of any standard, specification, manual, or code, or of any instruction of any Supplier, CONTRACTOR shall notify ENGINEER thereof in writing within 24 hours after discovery, for resolution by ENGINEER. CONTRACTOR shall not proceed with the Works affected thereby (except in an emergency) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 6.1 or ENGINEER determines that no such conflict exists. Any work affected by such conflict, discrepancy, ambiguity, error, or omission which is performed prior to ENGINEER's decision shall be at CONTRACTOR's risk and expense and at no additional cost to OWNER.
- D. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, discrepancy, ambiguity, error, or omission between the provisions of the Contract Documents and: (i) the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or (ii) the provisions of any Laws or Regulations applicable to the performance of the Works (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

ARTICLE 3 CONTRACT PRICE

3.1 Contract Price

- A. In consideration of the payments to be made by OWNER to CONTRACTOR as hereinafter mentioned, CONTRACTOR shall perform and complete the Works in accordance with the provisions of the Contract Documents.
- B. In consideration of the performance and completion of the Works in accordance with the provisions of the Contract Documents, OWNER shall pay the Contract Price to CONTRACTOR at the time and in the manner prescribed in the Contract Documents.
- C. The Contract Price shall consist of:
1. the lump sum price not to exceed Three Hundred Thousand American dollars; and
 2. plus or minus any adjustments made in accordance with the Contract.

ARTICLE 4 CONTRACT TIMES

4.1 Notice to Proceed

- A. CONTRACTOR shall begin the Works on the day indicated in the Notice to Proceed and shall prosecute the Works so that the Works is substantially performed, and completed and ready for final payment within the number of days, or alternatively, on or before the dates set forth in Section 01100 of the Project Specifications. The issuance of the Notice to Proceed by ENGINEER on behalf of OWNER will fix the date on which the Contract Times will commence to run.

ARTICLE 5 EXAMINATION AND INSPECTION

5.1 Documents and Site Conditions

- A. CONTRACTOR represents and warrants to OWNER that before making its bid it carefully examined the bid documents, including Addenda, and it carefully examined, inspected, and investigated the Site, as well as its surrounding territory, and is fully informed regarding all of the risks, contingencies, and other circumstances and conditions affecting or influencing the work to be done and labor and materials to be furnished for the completion of the Contract, including, without limiting the generality of the foregoing, Laws and Regulations, the nature and location of the Works, the general and local conditions, particularly those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads, uncertainties of weather, physical conditions at the Site, the location and condition of facilities and structures (including utilities and the like), whether above or below the ground or underwater, the conformation and conditions of the ground, the character of equipment and facilities needed prior to and during the prosecution of the Works, and all other matters which can in any way affect the progress, performance, or furnishing of the Works, or the cost thereof under the Contract.
- B. Except as provided in Gc.12 and Gc.13 of the General Conditions, CONTRACTOR assumes the risk of all surface, subsurface, or any other conditions at the Site, whether known or unknown, which may affect its performance under the Contract, and shall not attempt to seek a change in the Contract Price or the Contract Times (or Milestones) or to excuse any inadequacy, failure, or lack of performance of its obligations under the Contract on grounds of such conditions regardless of any inaccuracy or incompleteness of information which CONTRACTOR has acquired from OWNER or any other source. CONTRACTOR acknowledges that such information from OWNER or any other source is not intended as a representation or warranty with respect to conditions to be encountered at the Site and is only provided for informational purposes.

ARTICLE 6 ALTERATIONS AND OMISSIONS

6.1 Amending and Supplementing Contract Documents

- A. OWNER reserves the right, at any time during the progress of the Works, to alter the Drawings or the Project Specifications, add to the Works, or omit any portion of the Works as OWNER may deem reasonably necessary; and to make allowances for additions and deductions in the Contract Price in accordance with the Contract.
- B. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Works or to modify the terms and conditions thereof in one or more of the following ways: (i) Written Amendment; (ii) Change Order; or (iii) a Work Change Directive.
- C. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Works may be authorized, by one or more of the following ways: (i) a Field Order; (ii) ENGINEER's approval of a Shop Drawing or Sample; or (iii) ENGINEER's written interpretation or clarification.

ARTICLE 7 PROGRESS PAYMENTS

7.1 Applications for Payments

- A. ~~CONTRACTOR shall, within 10 days after the date of the Notice to Proceed (unless otherwise specified in Section 01200 of the Project Specifications) and before submission of the first Application for Payment, submit to ENGINEER for review a breakdown of the Contract Price ("Schedule of Values"). The Schedule of Values shall include quantities and prices of items which when added together equal the Contract Price and subdivide the Works into component parts in sufficient detail to serve as the basis for progress payments during performance of the Works. Such prices shall include an appropriate amount of overhead and profit applicable to each item of the Works. The Schedule of Values shall be made out in such form and supported by such evidence as ENGINEER may direct. The Schedule of Values when approved by ENGINEER shall be incorporated into an Application for Payment in the form prescribed by the Contract Documents (Exhibit E). Schedule of Values will be acceptable to ENGINEER as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Works. Without changing the Contract Price, OWNER reserves the right to require CONTRACTOR (i) to increase or decrease amounts within the Schedule of Values; (ii) to conform the Schedule of Values to OWNER's local accounting practice; and (iii) to furnish additional segregations of the Schedule of Values for the purpose of allocating Contract Price to individual buildings, structures, equipment installations, and/or other areas of the Project. No progress payment shall be made to CONTRACTOR until an acceptable Schedule of Values and form of Application for Payment is submitted to ENGINEER.~~

- B. Within 10 days following the first day of each month, CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Works completed during the preceding month and accompanied by Statutory Declarations as set forth in Article 9 and such other supporting documentation as is required by the Contract Documents.
- C. As the work progresses in accordance with the Contract and in a manner that is satisfactory to OWNER, OWNER will make progress payments on account of the Contract Price to CONTRACTOR in the manner set forth in the Special Conditions, against Applications for Payment recommended by ENGINEER of CONTRACTOR's performance of portions of the Works to the satisfaction of ENGINEER. OWNER shall have no responsibility to pay or reimburse CONTRACTOR with respect to any matters stated in the Contract to be at the cost or expense of CONTRACTOR or to be at no extra or additional cost or expense to OWNER. OWNER shall have no obligation to pay CONTRACTOR for work which is not satisfactory to OWNER or is not done in accordance with the Contract.
- D. OWNER will retain a percentage of all progress payments due to CONTRACTOR under the Contract.

7.2 Review of Applications

- A. ENGINEER will, within 10 days after receipt of each Application for Payment, either recommend payment to OWNER, or return the Application for Payment for necessary corrections.
- B. ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, the Works has not progressed to the point indicated or is not completed in accordance with the Contract Documents. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss.

7.3 Progress Payment Becomes Due

- A. Thirty days after ENGINEER's recommendation, the amount recommended for progress payment will (subject to the provisions of Article 8) become due, and when due will be paid by OWNER to CONTRACTOR.
- B. Progress payments, however, shall not constitute acceptance of CONTRACTOR's work by OWNER, nor be construed as a waiver of any right or claim by OWNER.

7.4 CONTRACTOR's Warranty of Title

- A. CONTRACTOR warrants and guarantees that title to all Works, materials, and equipment covered by any Application for Payment, whether

incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

7.5 Payment to Subcontractors and Suppliers

- A. CONTRACTOR shall pay each Subcontractor and Supplier the full amount paid by OWNER for its proportionate share of work, not later than 5 days after receipt of payment from OWNER.
- B. CONTRACTOR agrees that all funds requested in its Applications for Payment for the benefit of Subcontractors, Suppliers, and laborers as evidenced by CONTRACTOR's sworn statement shall be paid from the funds received from OWNER for each Application for Payment. OWNER reserves the right to furnish to any Subcontractor or Supplier evidence of the amounts certified on their respective account for payment to CONTRACTOR.

ARTICLE 8 WITHHOLDING PAYMENTS

8.1 OWNER's Right to Withhold or Reduce Payment

- A. Notwithstanding anything to the contrary herein contained, OWNER shall have the right, without any duty, to withhold or reduce any payments due or to become due CONTRACTOR, by reason of (i) any indebtedness owed by CONTRACTOR to OWNER; (ii) any *defective* work not remedied or any *defective* materials not removed and replaced; (iii) any third-party claims filed or reasonable evidence indicating probable filing of any such claims; (iv) any Liens in favor of any workers, Subcontractors, Suppliers, or laborers; (v) a claimed failure of CONTRACTOR to make any payments to its Subcontractors, Suppliers, or laborers; (vi) any failure of CONTRACTOR to comply with the Contract Documents; and/or (vii) any set-off to which OWNER may be legally entitled.

ARTICLE 9 WORK TO BE FREE FROM ALL ENCUMBRANCES

9.1 Releases; Statutory Declarations; Sworn Statements

- A. Before making progress payments or final payment or releasing any holdback, OWNER will require CONTRACTOR to furnish evidence that all work performed and materials supplied and all structures built for which payment is being made are free and clear from all lawful Liens under any Laws or Regulations, including, without limiting the generality of the foregoing, legal provisions relating to Liens in favor of workers, builders, architects, Subcontractors, or Suppliers, and such other evidence as may be necessary to satisfy OWNER that CONTRACTOR has fulfilled CONTRACTOR's obligations under the Contract.
- B. CONTRACTOR's Applications for Payment shall be accompanied by CONTRACTOR's Statutory Declaration (Exhibit A) indicating that all accounts for labor, subcontracts, products, construction machinery and equipment, and other indebtedness which may have been incurred by

CONTRACTOR in the performance of the Works and for which OWNER might in any way be held responsible have been paid in full except holdback monies properly retained. In addition each Application for Payment shall be accompanied by satisfactory evidence of compliance with workers' compensation legislation including premiums due thereunder.

- C. CONTRACTOR's final Application for Payment shall be accompanied by CONTRACTOR's Statutory Declaration (Exhibit C) and satisfactory evidence of compliance with workers' compensation legislation including premiums due thereunder. CONTRACTOR's Final Release of All Claims (Exhibit B), and Final Release of All Claims (Exhibit B) from all Subcontractors and Suppliers who have not previously submitted a Final Release of All Claims.
- D. For release of holdback CONTRACTOR shall furnish:
 - 1. Statutory Declaration (Exhibit C); and
 - 2. Final Release of All Claims (Exhibit B) applicable to the services completed or materials furnished up to the date of CONTRACTOR's application for release of holdback, signed by each Subcontractor and Supplier who has a right to file a Lien against the premises.
- E. Releases of all claims arising out of or which may arise out of or filed in connection with the Works, and Statutory Declarations shall be complete and legally effective. Sample copies of the required Statutory Declarations and release of claim forms are provided by OWNER. Such suggested forms are intended to cover only OWNER's minimum requirements under the Contract. CONTRACTOR shall be responsible for supplementing these forms and supplying to OWNER any other information, forms, and documents which may be required by applicable laws of the Province where the work is being performed.
- F. CONTRACTOR shall immediately notify OWNER in the event CONTRACTOR obtains information that a Lien has been or may be asserted against the Site or in relation to the Works. CONTRACTOR shall immediately pay, satisfy, and discharge any and all obligations and liabilities (including settlement costs, court costs, and reasonable attorneys' fees) arising from or related to any such Liens. CONTRACTOR shall be liable to pay to OWNER all moneys that the latter may pay in vacating or discharging a Lien, including without limitation all amounts paid by way of security for costs or otherwise, and all legal fees on a solicitor-client basis.

ARTICLE 10 SUBSTANTIAL PERFORMANCE

10.1 Inspection for Substantial Performance

- A. When CONTRACTOR considers the entire Works ready for its intended use CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Works is substantially performed (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Performance. Promptly thereafter, OWNER,

CONTRACTOR, and ENGINEER shall make an inspection of the Works to determine the status of completion. If ENGINEER does not consider the Works substantially performed, ENGINEER will notify CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers the Works substantially performed, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Performance which shall fix the date of Substantial Performance. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have 7 days after receipt of the tentative certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Works is not substantially performed, ENGINEER will within 14 days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefor. If, after consideration of OWNER's objections, ENGINEER considers the Works substantially performed, ENGINEER will within said 14 days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Performance (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Performance, ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, and protection of the Works, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER in writing prior to ENGINEER's issuing the definitive certificate of Substantial Performance, ENGINEER's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

- B. OWNER shall have the right to exclude CONTRACTOR from the Site after the date of Substantial Performance, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

10.2 Partial Utilization

- A. Use by OWNER at OWNER's option of any substantially performed part of the Works which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER, and CONTRACTOR agree constitutes a separately functioning and usable part of the Works that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Works, may be accomplished prior to Substantial Performance of all the Works subject to the following conditions:
 - 1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Works which OWNER believes to be ready for its intended use and substantially performed. If CONTRACTOR agrees that such part of the Works is substantially performed, CONTRACTOR shall certify to OWNER and ENGINEER

that such part of the Works is substantially performed and request ENGINEER to issue a certificate of Substantial Performance for that part of the Works. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Works ready for its intended use and substantially performed and request ENGINEER to issue a certificate of Substantial Performance for that part of the Works. Within a reasonable time after either such request, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of that part of the Works to determine its status of completion. If ENGINEER does not consider that part of the Works to be substantially performed, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers that part of the Works to be substantially performed, the provisions of Paragraph 10.1 will apply with respect to certification of Substantial Performance of that part of the Works and the division of responsibility in respect thereof and access thereto; and

2. no occupancy or separate operation of part of the Works may occur prior to compliance with the requirements of Paragraph 1.7 D of the Special Conditions regarding property insurance.

ARTICLE 11 FINAL INSPECTION AND PAYMENT

11.1 Final Inspection

- A. Upon written notice from CONTRACTOR that the entire Works or an agreed portion thereof is complete, ENGINEER will make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Works is incomplete or *defective*. CONTRACTOR shall immediately take such measures as are necessary to complete such Works or remedy such deficiencies.

11.2 Final Application for Payment

- A. After CONTRACTOR has, in the opinion of ENGINEER, satisfactorily completed all corrections identified during the final inspection and has delivered all documentation in accordance with the Contract Documents, CONTRACTOR may make application for final payment following the procedure for progress payments.
- B. The final Application for Payment shall be accompanied (except as previously delivered) by:
 1. all documentation called for in the Contract Documents, including, but not limited to, evidence of compliance with workers' compensation legislation required by Paragraph 1.4 C.3 of the Special Conditions and evidence of continuation of insurance required by Paragraph 1.3 B.5 of the Special Conditions;

2. a written statement from CONTRACTOR that CONTRACTOR has no further claims or demands for additional monies or extra work in connection with the Contract;
 3. CONTRACTOR's affidavit that all federal, provincial, and local taxes applicable to the Works, including, but not limited to, sales, consumer, use, excise, and disposal taxes have been paid (Exhibit D);
 4. releases and statutory declarations as set forth in Article 9;
 5. Asset titles and inventories; and
 6. any and all other documents reasonably required by ENGINEER OR OWNER.
- C. In lieu of the releases specified in Paragraph 11.2 B and as approved by OWNER, CONTRACTOR may furnish receipts, and an affidavit of CONTRACTOR that the receipts include all labor, services, equipment, and material for which a Lien could be filed, and all payrolls, material and equipment bills, and other indebtedness connected with the Works for which OWNER (or the owner(s) of the premises where the Site is located if other than OWNER) or property at the Site might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier refuses to furnish a release or receipt in full, CONTRACTOR shall furnish a bond or other collateral satisfactory to OWNER to indemnify OWNER and ENGINEER, and their respective representatives and agents against any Liens.

11.3 Review of Application and Acceptance

- A. If, on the basis of ENGINEER's observation of the Works during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, ENGINEER is satisfied that the Works has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within 10 days after receipt of the final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application for Payment to OWNER for payment. At the same time ENGINEER will also give written notice to OWNER and CONTRACTOR that the Works is acceptable subject to the provisions of Paragraph 11.5. Otherwise, ENGINEER will return the Application for Payment to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application for Payment.

11.4 Final Payment Becomes Due

- A. Thirty days after presentation to OWNER of the Application for Payment and accompanying documentation, the amount recommended for final payment by ENGINEER will become due and, when due, will be paid by OWNER to CONTRACTOR.

- B. OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER.

11.5 Waiver of Claims

- A. CONTRACTOR's acceptance of final payment shall constitute a waiver of all claims by CONTRACTOR against OWNER.

ARTICLE 12 TAXES

12.1 Proof of Payment; Affidavit of Taxes Paid

- A. The Contract Price shall include all taxes required by Laws and Regulations, including, but not limited to, sales, consumer, use, excise, disposal, or any other applicable taxes. If requested by OWNER, CONTRACTOR shall furnish proof of payment of such taxes.
- B. Prior to final payment, CONTRACTOR shall submit an affidavit (Exhibit D) that all such taxes have been paid. Said affidavit is a condition precedent to OWNER's obligation to pay.

12.2 Goods and Services Tax

- A. The total Contract Price shall include the Goods and Services Tax (GST) and Quebec Sales Tax (QST). However, the individual prices, if any, set forth in the Schedule of Prices SHALL NOT include the GST and QST. The appropriate GST and QST amounts will be paid to CONTRACTOR in addition to the amounts recommended for payment by ENGINEER for work performed under the Contract and will therefore not affect individual prices. GST and QST amounts shall be included as separate items on the summary page of Applications for Payment and on the summary page of Schedule of Prices.

ARTICLE 13 FORCE MAJEURE AND NO DAMAGES FOR DELAY

13.1 Force Majeure Event

- A. Any delays in or any failure of performance of either party hereto shall not constitute a default under the Contract, or give rise to any claim for damages, to the extent (i) such delays or failure of performance are not reasonably foreseeable, are caused by circumstances beyond the control of the party thereby affected, and constitute "force majeure" under Paragraph 13.1 B hereof (collectively "force majeure event"); and (ii) the affected party satisfies the notice and claim filing requirements, as applicable, of the Contract.
- B. For the purposes of the Contract, the term "force majeure" means an occurrence or non-occurrence arising from causes beyond the control of a party and which could not be avoided or overcome by due diligence. Force majeure does not include unanticipated or increased costs, changed financial

circumstances, contract disputes, failure to obtain workers, materials, or supplies, unless directly caused by the outbreak of a war or a strike.

- C. Time necessary for reviews by ENGINEER of Shop Drawings and Samples, and field changes to meet actual conditions, and delays incurred by seasonal and weather limitations shall be anticipated, and are not a force majeure event, and are not eligible for additional compensation or extensions of time. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR, and also are not a force majeure event, and are not eligible for additional compensation or extensions of time.
- D. CONTRACTOR expressly understands that one of the material terms of the Contract, for which it has received substantial consideration, is to shift to CONTRACTOR, except as stated otherwise herein, any and all risks CONTRACTOR may suffer as a result of delays, including, but not limited to, a force majeure event, during the term of the Contract. Except as stated otherwise herein, in no event shall any delay, except a force majeure event, result in a change to the Contract Times (or Milestones), and no delay shall result in a change to the Contract Price or any claim by CONTRACTOR for additional compensation, and OWNER shall not be held responsible for any loss or damage suffered by CONTRACTOR by reason of any such delay.
- E. CONTRACTOR shall include in the Contract Price the cost of doing the work under the Contract caused by the non-compensatory delays described above.
- F. CONTRACTOR shall use all means available, including overtime at CONTRACTOR's expense and at no additional cost to OWNER, to complete the Works in accordance with the Contract Times (or Milestones), time being of the essence.

13.2 Notice and Claim Filing Requirements

- A. In the event a condition arises which wholly or in part prevents or will prevent either party hereto from performing hereunder, the affected party shall inform the other in writing within 24 hours of the time at which the affected party first has reason to believe the condition has occurred or may occur and stating the general nature of the claim. Provided the notice described in this Paragraph 13.2 A is given and the other notice and claim filing requirements, as applicable, of the Contract are met, the obligation affected by a force majeure event shall be extended by Change Order or Written Amendment for a time equal to the delay caused solely by the intervention of such force majeure event.
- B. For a force majeure claim CONTRACTOR shall notify ENGINEER and OWNER orally within 48 hours from the start of any delay in the Works to explain the cause and the expected duration of the delay. Within 5 working days after first becoming aware of a possible delay, CONTRACTOR shall file with ENGINEER and OWNER written notice of any claim for an extension to the Contract Times (or Milestones) due to a force majeure event. Such notice shall contain an explanation of the cause(s) of any actual or potential delay.

the anticipated duration of any delay, the measures taken and to be taken to prevent or minimize the delay, and the timetable for implementation of such measures. CONTRACTOR shall file with ENGINEER and OWNER any claim for an extension to the Contract Times (or Milestones) due to a force majeure event, along with all required supporting data, in writing within 10 days from the time when such alleged force majeure event shall have ceased. If CONTRACTOR fails to meet any of the notification or claim filing requirements set forth herein, CONTRACTOR shall be deemed to have waived any right to an extension to the Contract Times (or Milestones). CONTRACTOR has the burden to prove the events that caused the delay, that such events constitute a force majeure event, that CONTRACTOR satisfied the notification and claim filing requirements of the Contract, and that CONTRACTOR is entitled to an extension to the Contract Times (or Milestones) due to a force majeure event. A claim by CONTRACTOR for an extension to the Contract Times (or Milestones) must set forth in detail the source and the nature of each alleged force majeure event, the date upon which each such force majeure event began and ended, and the obligation under the Contract which is delayed due to each such force majeure event. CONTRACTOR shall, in any event, be entitled to an extension of the Contract Times (or Milestones) for a force majeure event only for the number of days of delay which OWNER determines to be due solely to such force majeure event, and only for the obligation under the Contract affected by such force majeure event as determined by OWNER. CONTRACTOR shall not be entitled to receive a separate extension of time for each one of several force majeure events operating concurrently, but, if at all, only for the actual period of delay in completion of the Works as determined by OWNER irrespective of the number of force majeure events contributing to produce such delay. If one of several causes of delay operating concurrently arises from any act or omission of CONTRACTOR or any Representative, and would of itself (irrespective of the concurrent causes) have delayed the Works, no extension of time will be allowed for the period of delay arising from such act or omission, regardless of the existence of a concurrent force majeure event. An extension of one Milestone for any part of the Works based upon a particular force majeure event shall not entitle CONTRACTOR to an extension of a subsequent Milestone or the final dates of completion in the Contract Times without CONTRACTOR meeting its burden of proof for each incremental step or requirement for which a time extension is sought.

13.3 Delay by OWNER

- A. If CONTRACTOR's performance under the Contract is materially delayed due solely to the negligence, reckless or willful misconduct, or breach of the Contract on the part of OWNER or those for whom OWNER is responsible, then, provided that CONTRACTOR fully meets all notice and claim filing requirements set forth in Gc.05 of the General Conditions, CONTRACTOR as its sole remedy shall be entitled to: (i) an extension to the Contract Times (or Milestones) by Change Order or Written Amendment equal to the duration of such material delay, and (ii) an increase in the Contract Price by Change Order or Written Amendment so as to properly compensate CONTRACTOR for any increased cost reasonably and actually incurred as a direct result of such material delay.

ARTICLE 14 RIGHT TO SUSPEND WORK

14.1 OWNER May Suspend

- A. Notwithstanding any provision in the Contract Documents to the contrary, at any time and without any cause whatsoever, OWNER may suspend the execution of the Works by CONTRACTOR or any portion thereof for the period of time that OWNER determines appropriate for the convenience of OWNER by notice in writing to CONTRACTOR and ENGINEER.
- B. CONTRACTOR, as its sole remedy and full compensation for such suspension, shall be entitled to an extension to the Contract Times (or Milestones) or an adjustment in the Contract Price, or both, to the extent directly attributable to any such suspension provided that no adjustment shall be made for any claim under Paragraph 14.1 B unless CONTRACTOR files notice of such claim in writing with ENGINEER and OWNER within 10 days after the suspension of the Works or any portion thereof and fully meets the other notice and claim filing requirements set forth in Gc.05 of the General Conditions.

ARTICLE 15 TERMINATION

15.1 OWNER May Terminate for Cause

- A. The occurrence of any one or more of the following events will justify termination for cause:
 - 1. CONTRACTOR's failure to perform the Works in accordance with the Contract Documents (including, but not limited to, refusal or failure to timely supply sufficient skilled workers, suitable materials or equipment, or Plant and Equipment, or failure to adhere to the progress schedule established under Paragraph 8.1 C of the General Conditions as adjusted from time to time pursuant to Paragraph 8.1 D of the General Conditions, or failure to make prompt payments to Subcontractors or Suppliers;
 - 2. CONTRACTOR's disregard of Laws or Regulations of any public body having jurisdiction;
 - 3. CONTRACTOR's disregard of the authority or instructions of ENGINEER;
 - 4. CONTRACTOR's violation in any material way of any provisions of the Contract Documents.
- B. In addition to OWNER's rights as set forth in Article 14 and without prejudice to any other right or remedy to which OWNER might be entitled, OWNER may immediately terminate the services of CONTRACTOR upon written notice to CONTRACTOR (and the surety, if any) if one or more of the events identified in Paragraph 15.1 A occur which goes unremedied by CONTRACTOR for 7 days after CONTRACTOR has received written notice

thereof from OWNER, or in the event it comes to the attention of OWNER that CONTRACTOR has made a material misrepresentation to OWNER as an inducement for OWNER to enter into or continue the Contract.

- C. Unless OWNER agrees otherwise, the Contract shall be automatically terminated upon CONTRACTOR becoming insolvent or subject to receivership, bankruptcy, or other insolvency proceedings, whether or not under Court supervision.

- D. Should OWNER terminate CONTRACTOR's services, as provided in Paragraph 15.1 B, OWNER may exclude CONTRACTOR from the Site, and take possession of the whole of the Works and of all temporary works, and of all Plant and Equipment at the Site, and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Works all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and OWNER may finish the Works by whatever method OWNER may deem expedient, including but not limited to, by contract negotiated or publicly let, by the use of its own forces, by calling upon CONTRACTOR's surety to complete the Works, or by a combination of any such methods. In any such case, CONTRACTOR shall not be entitled to receive any further payment until the Works is finished. OWNER shall only be responsible to CONTRACTOR for work performed prior to the effective date of termination under this Paragraph 15.1, in accordance with the Contract Documents, subject to any set-off to which OWNER may be legally entitled. If the unpaid balance of the Contract Price exceeds all claims, costs, expenses, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by OWNER arising out of or relating to completing the Works, such excess shall, subject to Article 8, be paid to CONTRACTOR. If such claims, costs, expenses, losses, and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER within 30 days of OWNER's written demand for payment. Such claims, costs, expenses, losses, and damages incurred by OWNER due to CONTRACTOR's default will be incorporated in a Change Order or Written Amendment, provided that when exercising any rights or remedies under this Paragraph 15.1 D OWNER shall not be required to obtain the lowest price for the Works performed.

- E. If, in the case of CONTRACTOR's failure or refusal to supply additional workers, Plant and Equipment, or supervisory personnel, it is in the interest of OWNER to do so, OWNER may without prejudice to any other right or remedy, continue CONTRACTOR's services on some of the Works and take possession of other parts of the Works and some or all of the temporary works, premises, Plant and Equipment, and materials and equipment at the Site for such other parts of the Works and finish such other parts of the Works by whatever method OWNER may deem expedient. If CONTRACTOR's services are not terminated, CONTRACTOR shall not be entitled to receive any further payment on account of the parts of the Works of which OWNER has taken possession until the whole of the Works is finished.

- F. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies due CONTRACTOR by OWNER will not release CONTRACTOR from liability.
- G. In no event shall CONTRACTOR be paid by OWNER for loss of anticipated profits or revenue or other economic loss arising out of or resulting from termination for cause.

15.2 OWNER May Terminate for Convenience

- A. Notwithstanding any other provision in the Contract Documents to the contrary and without prejudice to any other right or remedy of OWNER, OWNER may, at any time, terminate the Contract, or any work to be performed hereunder, in whole or in part, for convenience and without any cause whatsoever upon 10 days advance written notice to CONTRACTOR ("Notice"). The Notice shall specify the extent of termination and the effective date. In such event, the Contract shall terminate on the date and in the manner set forth in such Notice and, unless the Notice provides otherwise, CONTRACTOR shall be obligated to perform the following duties on the effective date of termination:
 - 1. cease operations as specified in the Notice;
 - 2. terminate all subcontracts (if any) and orders (if any) to the extent they relate to termination;
 - 3. continue any work not terminated; and
 - 4. take any other actions as directed by ENGINEER.
- B. In the event of termination under this Paragraph 15.2, CONTRACTOR shall, subject to Article 8, be entitled to receive, as its sole remedy, payment (without duplication of any items) for: (i) completed and acceptable Works executed in accordance with the Contract Documents prior to the effective date of such termination; (ii) expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Works, plus fair and reasonable sums for overhead and profit on such expenses; (iii) reasonable expenses incurred in settlement of terminated contracts with Subcontractors, Suppliers, or others; (iv) reasonable expenses directly attributable to termination; and (v) any retainage then held by OWNER, less any amounts owed by CONTRACTOR to OWNER.
- C. In the event that OWNER terminates the Contract in a manner which is subsequently determined to be wrongful or unjustified, such termination shall be deemed a termination for convenience of OWNER under this Paragraph 15.2.

ARTICLE 16 WARRANTY AND GUARANTEE

16.1 CONTRACTOR's General Warranty and Guarantee

- A. CONTRACTOR expressly warrants and guarantees to OWNER and ENGINEER that all materials and equipment furnished shall be new unless otherwise specified, and that all Works under the Contract shall be in conformance with the Contract Documents and will not be *defective*. CONTRACTOR shall promptly make good, without cost to OWNER, any and all Works that is *defective*.
- B. CONTRACTOR's obligation to perform and complete the Works in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of the Works that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Works in accordance with the Contract Documents:
 - 1. observations by ENGINEER;
 - 2. recommendation by ENGINEER or payment by OWNER of any progress or final payment;
 - 3. the issuance of a certificate of Substantial Performance by ENGINEER or any payment related thereto by OWNER;
 - 4. use or occupancy of the Works or any part thereof by OWNER;
 - 5. any acceptance by OWNER or any failure to do so;
 - 6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by ENGINEER;
 - 7. any inspection, test, or approval by others; or
 - 8. any correction of *defective* Works by OWNER.

ARTICLE 17 SUCCESSORS AND ASSIGNS

17.1 No Assignment

- A. CONTRACTOR shall not assign or otherwise transfer or alienate any of its benefits or obligations under the Contract without the advance written approval of OWNER, and any purported assignment, transfer, or alienation by CONTRACTOR of such benefits or obligations without such approval shall be null and void.
- B. The Contract shall inure to the benefit of and be binding upon, the parties and their respective successors and assigns.

ARTICLE 18 PATENTS AND OTHER INTELLECTUAL PROPERTY RIGHTS

18.1 Patent Fees and Royalties; Indemnification

- A. CONTRACTOR shall secure all rights and pay all license fees and royalties and assume all costs incident to the use in the performance of the Works or the incorporation in the Works of any invention, design, process, product, or device which is the subject of patent rights, copyrights, or other intellectual property rights held by others.
- B. CONTRACTOR shall defend, indemnify, and hold harmless OWNER, ENGINEER, and the present and future officers, shareholders, directors, officials, employees, representatives, agents, partners, affiliates, parents, and subsidiaries of each and any of them from and against any and all liabilities, damages, penalties, fines, forfeitures, demands, claims, causes of actions, suits, judgments, losses, costs, and expenses of every kind (including, but not limited to, all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs), whether foreseeable or unforeseeable, which any or all of them may hereafter suffer, incur, be responsible for, or pay out, as a result of any violation or an alleged violation of any patent rights, trade secrets, copyrights, or other intellectual property rights resulting, in whole or in part, from any act or omission by CONTRACTOR or any Representative.
- C. The provisions of this Article 18 shall survive final payment, completion, and acceptance of the Works, or termination or completion of the Contract.

ARTICLE 19 INDEMNIFICATION

19.1 CONTRACTOR's Indemnification

- A. CONTRACTOR shall assume entire responsibility and liability, to the fullest extent permitted by Laws and Regulations, for all damages or injury to all persons (including, but not limited to, sickness, disease, or death), whether employees or otherwise, and to all property including, without limiting the generality of the foregoing, loss of use, or contamination of or adverse effects on the environment or any natural resources, arising out of, resulting from, or in any manner connected with, the execution of the Works provided for in the Contract or occurring or resulting from the use by CONTRACTOR, or any Subcontractor, Supplier, or Representative, of materials, equipment, instrumentalities, or other property, whether the same be owned by OWNER, CONTRACTOR, or third parties, and CONTRACTOR, to the fullest extent permitted by Laws and Regulations, agrees to indemnify and save harmless OWNER, ENGINEER, and the present and future officers, shareholders, directors, officials, employees, representatives, agents, partners, affiliates, parents, and subsidiaries of each and any of them from and against all such claims including, without limiting the generality of the foregoing, claims for which OWNER or ENGINEER may be or may be claimed to be liable and legal fees and disbursements paid or incurred to enforce the provisions of this Paragraph 19.1, and CONTRACTOR further

agrees to obtain, maintain, and pay for such insurance coverage and endorsements as will insure the provisions of this Paragraph 19.1.

- B. The indemnification obligations under this Article 19 shall not be limited in any way by the amount or type of damages, compensation, or benefits payable under worker's compensation acts, disability benefit acts, other employment benefit acts, or the amount of insurance carried or recovered.
- C. The provisions of this Article 19 shall survive final payment, completion, and acceptance of the Works, or termination or completion of the Contract.

ARTICLE 20 MISCELLANEOUS

20.1 Governing Law and Venue

- A. The formation, validity, performance, and breach of the Contract and any matter relating thereto, and all claims, disputes, or actions whatsoever of any nature between the parties, shall be construed, enforced, and determined in accordance with the laws of the Province of Quebec.

20.2 Complete Agreement

- A. The Contract contains the entire agreement of the parties, and cancels and supersedes all prior negotiations and agreements of the parties, with respect to its subject matter. There has been no promise or representation made by either party to induce the other party to enter into the Contract which is not set forth in the Contract. The fact that a deletion from or addition to the Contract has been made during its negotiation shall not be used for any purpose, including without limitation for the purpose of interpreting the Contract. No principle providing for the construction or interpretation of an agreement adverse to its drafter shall apply to the Contract. The Contract shall not be set aside, modified, amended, or augmented, in whole or in part, except in writing signed by a duly authorized representative of each party.

20.3 Severability

- A. Every paragraph, part, term, or provision of the Contract is severable from the others. If any paragraph, part, term, or provision of the Contract is construed or held to be void, invalid, or unenforceable by order, decree, or judgment of a court of competent jurisdiction, the remaining paragraphs, parts, terms, and provisions of the Contract shall not be affected thereby but shall remain in full force and effect.

20.4 Survival of Obligations

- A. All representations, releases, waivers, indemnifications, warranties, guarantees, and similar agreements made in, required by, or given in accordance with the Contract Documents, as well as all obligations of the Contract Documents which are expressly or implicitly continuing obligations, shall survive final payment, completion, and acceptance of the Works, or termination or completion of the Contract.

20.5 Cumulative and Non-Exclusive Rights and Remedies

- A. The individual rights and remedies of OWNER under the Contract Documents shall be cumulative and in addition to, not in lieu of, any other rights and remedies of OWNER provided at law or in equity.

20.6 Waiver

- A. A waiver of any provision of the Contract Documents shall be for that one time only and shall not apply to any subsequent breach, unless otherwise agreed to in writing by both parties hereto. OWNER's acceptance of a late or otherwise non-conforming performance by CONTRACTOR shall not be deemed a waiver of OWNER's right to hold CONTRACTOR liable for any damage resulting therefrom nor OWNER's right to terminate the Contract for cause related to the same. The failure of either party to insist in one or more instances upon the terms of the Contract, or to exercise any right hereunder, shall not be construed as a waiver of the future performance of any such term or the future exercise of such right, and the obligation of each party with respect to such future performances shall continue in full force and effect.

20.7 Specific Performance

- A. Failure of CONTRACTOR to comply strictly with the provisions of the Contract, as amended by all Written Amendments and Change Orders, shall entitle OWNER to all rights and remedies for breach of contract, and OWNER shall be entitled, at its sole discretion and option, to obtain specific performance by CONTRACTOR solely upon a showing of any breach of the Contract, as amended by all Written Amendments and Change Orders, and without (i) posting by OWNER of any bond or security therefore, or (ii) any other showing.

20.8 Independent Contractor

- A. CONTRACTOR shall be an independent contractor, maintaining control over its own employees and operations, and neither CONTRACTOR nor anyone employed by CONTRACTOR shall be deemed to be a servant, employee, or agent of OWNER. CONTRACTOR shall be fully responsible for and shall withhold or pay, or both, as may be required by Laws and Regulations, all federal, provincial, and local taxes and contributions with respect to, measured by, or based upon compensation paid to or earned by CONTRACTOR's employees.

20.9 Language of the Contract

- A. This Letter Agreement is drawn in English at the request of the parties hereto. La présente convention est rédigée en anglais à la demande des parties.

CONTRACTOR and OWNER hereby agree to the full performance of the covenants herein contained and

IN WITNESS WHEREOF:

have signed this Agreement as of the day and year first written. This Agreement bears the formal date
aforementioned and shall be for all purposes retroactive to such date even though signed and
acknowledged on the dates mentioned below,

SIGNED IN THE PRESENCE OF:

RHI Refractories Holding Company care of Schmidt Whitley
OWNER.

Asbex Limitee
CONTRACTOR

BY _____
(Authorized Signature)

BY _____
(Authorized Signature)

(Print Name)

(Print Name)

(Print Title)

(Print Title)

This _____ day of _____, 200_

This _____ day of _____, 200_

at _____
(Location)

at _____
(Location)

WITNESS _____

WITNESS _____

Note: If CONTRACTOR is a corporation or partnership, attach evidence of authority to sign.

END OF FORM OF AGREEMENT

STATUTORY DECLARATION

TO BE MADE BY THE CONTRACTOR OR SUBCONTRACTOR
TO ACCOMPANY THE SECOND AND SUBSEQUENT PROGRESS CLAIMS

IN THE MATTER OF THE CONTRACT/SUBCONTRACT

between _____

_____ Owner/Contractor

and _____

_____ Contractor/Subcontractor

for _____

(insert Contract/Subcontract title)

in _____, Quebec

I, _____ of the _____ of _____

in the Province of _____ DO SOLEMNLY DECLARE:

THAT I am _____ (see Note 1) of _____
the Contractor/Subcontractor named in the Contract/Subcontract abovementioned, and as such have
personal knowledge of the facts hereunder declared, and that all accounts for labor, subcontracts,
products, construction machinery, and equipment and other indebtedness which may have been incurred
by the Contractor/ Subcontractor in the performance of the said Contract/Subcontract (see Note 2) and
for which the Owner might in any way be held responsible have been paid in full under the said
Contract/Subcontract up to _____, 200__ as set forth in Application for Payment No. ____
except for (i) holdback monies properly retained, (ii) payments deferred by agreement, (iii) accounts
withheld by reason of legitimate dispute as set forth in Attachment 1 to this Statutory Declaration.

AND I MAKE THIS SOLEMN DECLARATION conscientiously believing it to be true and knowing it is
of the same force and effect as if made under oath.

DECLARED before me at the _____

_____ of _____

in the _____

of _____ this _____ Signed _____

day of _____ 200__

A Commissioner for Oaths, Notary Public, Justice of the Peace

Note 1: The Declaration must be made by the President, a Vice President, the Secretary, the Treasurer, or a Director of an incorporated company except that another individual may make the Declaration provided that two copies of the by-law issued under the Corporation seal authorizing such individual to execute documents accompanies the first Declaration on each Contract/Subcontract. For a partnership the Declaration must be made by one of the partners and for a sole proprietorship the sole proprietor himself must make the Declaration. The position of the declarant and the name of the Contractor/Subcontractor must be clearly noted.

Note 2: Other indebtedness shall mean only such debts incurred by the Contractor/Subcontractor to persons in privity of contract with him, debts arising out of statutory requirements, and in the case of the Contractor's/Subcontractor's workers any debt arising out of collective bargaining agreements, legislation applying to worker's compensation, unemployment insurance, and minimum wage standards where applicable.

**ATTACHMENT 1
STATUTORY DECLARATION**

The following is a complete list of disputed accounts:

This table is not intended for listing unpaid accounts that are not in dispute. If there are no disputed accounts, enter "NONE".

<i>Name of Creditor</i>	<i>Service Rendered</i>	<i>Total Claim \$</i>	<i>Amount in Dispute \$</i>	<i>Amount Paid \$</i>

FINAL RELEASE OF ALL CLAIMS

OWNER's Contract

Date of Release

Contract No. _____

OWNER's Name

Premises Location - Name/Address

Party Releasing All Claims - Name

- Address

Role (Check One):

CONTRACTOR

Supplier

Subcontractor

Laborer

Other _____

Payment Received From - Name

Description of Services

Full and Final Accumulated Payment Amount

\$

Upon actual receipt of the stated full and final accumulated payment amount as consideration and satisfaction for furnishing material, labor or services in connection with the named premises location, the undersigned, being duly authorized by the party to release all claims, by signing this Final Release of All Claims, does waive, surrender and release any and all claims (asserted or unasserted) including any claim for additional costs and expenses directly or indirectly attributable to our contract.

The undersigned covenants that any and all documents requested by the OWNER to effectuate this Final Release of All Claims shall be executed.

AUTHORIZED PERSON

Signature

Name (Print or Type)

Capacity (Print or Type)

Date

STATUTORY DECLARATION

TO BE MADE BY THE CONTRACTOR WHEN APPLYING FOR RELEASE OF HOLDBACK, MAINTENANCE SECURITY
HOLDBACK, OR BOTH UPON SUBSTANTIAL PERFORMANCE AND COMPLETION

IN THE MATTER OF THE CONTRACT

between _____

Owner

and _____

Contractor

for _____

(insert Contract title)

in _____, Quebec

I, _____ of the _____ of _____

in the Province of _____ DO SOLEMNLY DECLARE:

THAT I am _____ (see Note 1) of _____
the Contractor named in the Contract abovementioned, and as such have personal knowledge of the facts
hereunder declared, and that all accounts for labor, subcontracts, products, construction machinery, and
equipment and other indebtedness which may have been incurred by the Contractor in the performance
of the said Contract (see Note 2) and for which the Owner might in any way be held responsible have
been paid in full.

AND I MAKE THIS SOLEMN DECLARATION conscientiously believing it to be true and knowing it is
of the same force and effect as if made under oath.

DECLARED before me at the _____

_____ of _____

in the _____

of _____ this _____

Signed _____

day of _____ 200__

A Commissioner for Oaths, Notary Public, Justice of the Peace

Note 1: The Declaration must be made by the President, a Vice President, the Secretary, the Treasurer, or a Director of an incorporated company
except that another individual may make the Declaration provided that two copies of the by-law issued under the Corporation seal authorizing such
individual to execute documents accompanies the first Declaration on each Contract. For a partnership the Declaration must be made by one of the
partners and for a sole proprietorship the sole proprietor himself must make the Declaration. The position of the declarant and the name of the
Contractor must be clearly noted.

Note 2: Other indebtedness shall mean only such debts incurred by the Contractor to persons in privity of contract with him, debts arising out of
statutory requirements, and in the case of the Contractor's workers any debt arising out of collective bargaining agreements, legislation applying to
worker's compensation, unemployment insurance, and minimum wage standards where applicable.

PERFORMANCE BOND

BOND NO. _____

BOND AMOUNT \$ _____

KNOW ALL MEN BY THESE PRESENTS THAT _____ as Principal,
hereinafter called the Principal, and _____
a corporation created and existing under the laws of _____
and duly authorized to transact the business of Suretyship in _____
as Surety, hereinafter called the Surety, are held and firmly bound unto RHI Refractories Holding
Company, Twin Tower, Wienerbergstrasse 11, 1100 Vienna, Austria care of Robin Schmidt Whitley as
Obligee, hereinafter called the Obligee, in the amount of _____
_____ Dollars (\$ _____)
lawful money of Canada, for the payment of which sum, well and truly to be made, the Principal and the
Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and
severally, firmly by these presents.

WHEREAS, the Principal has entered into a written contract with Obligee, dated the _____ day of
_____, 200__, for Asbestos Abatement Services, RESCO
Canada Inc., 78 Route 148, Grenville, Quebec, in accordance with the Contract Documents submitted
therefore which are by reference made part hereof and are hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal shall
promptly and faithfully perform the Contract then this obligation shall be null and void; otherwise it shall
remain in full force and effect.

Whenever the Principal shall be, and declared by the Obligee to be, in default under the Contract, the
Obligee having performed the Obligee's obligations thereunder, the Surety may promptly remedy the
default, or shall promptly:

- (1) complete the Contract in accordance with its terms and conditions; or
- (2) obtain a bid or bids for submission to the Obligee for completing the Contract in accordance
with its terms and conditions, and upon determination by the Obligee and the Surety of the
lowest responsible bidder, arrange for a contract between such bidder and the Obligee and
make available as work progresses (even though there should be a default, or a succession of
defaults, under the contract or contracts of completion, arranged under this paragraph)
sufficient funds to pay the cost of completion less the balance of the Contract price; but not
exceeding, including other costs and damages for which the Surety may be liable hereunder,
the amount set forth in the first paragraph hereof. The term "balance of the Contract price",
as used in this paragraph, shall mean the total amount payable by the Obligee to the Principal
under the Contract, less the amount properly paid by the Obligee to the Principal.

Any suit under this bond must be instituted before the expiration of 1 year following the date on which
final payment under the Contract falls due.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

No right of action shall accrue on this Bond, to or for the use of, any person or corporation other than the Obligee named herein, or the heirs, executors, administrators, successors, or assigns of the Obligee.

SIGNED AND SEALED THIS _____ day of _____, 200__

(Principal) (Seal)

(Witness)

By: _____

(Print Name and Title)

(Surety) (Seal)

(Witness)

By: _____

(Print Name and Title)

(Acknowledgment by Principal, if a corporation)

PROVINCE OF _____)
COUNTY OF _____)

ss.:

On this _____ day of _____, 200__, before me personally came _____ to me known, who being by me duly sworn, did depose and say that he/she resides in _____ that he/she is the _____ of _____, the corporation described in and which executed the foregoing instrument; that he/she knows the corporate seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he/she signed his/her name thereto by like order.

(Seal)

Notary Public

County

(Acknowledgment by Principal, if not a corporation)

PROVINCE OF _____)
COUNTY OF _____)

ss.:

On this _____ day of _____, 200__, before me personally came _____ to me known and known to me to be the person described in and who executed the foregoing instrument and who acknowledged that he/she executed the same.

(Seal)

Notary Public

County

(Acknowledgment by Surety)

PROVINCE OF _____)
COUNTY OF _____)

ss.:

On this _____ day of _____, 200__, before me personally came _____ to me known, who being by me duly sworn, did depose and say that he/she resides in _____ that he/she is the _____ of _____, the corporation described in and which executed the foregoing instrument; that he/she knows the corporate seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he/she signed his/her name thereto by like order.

(Seal)

Notary Public County

(The Surety Company must append a statement of its financial condition and a copy of the resolution authorizing the execution of bonds by officers of the Surety Company.) _____

PAYMENT BOND
(TRUSTEE FORM)

BOND NO. _____

BOND AMOUNT \$ _____

Note: This Bond is issued simultaneously with another Bond in favour of the Obligee conditioned for the full and faithful performance of the Contract.

KNOW ALL MEN BY THESE PRESENTS THAT _____

_____ as Principal,

hereinafter called the Principal, and _____

a corporation created and existing under the laws of _____

and duly authorized to transact the business of Suretyship in _____

as Surety, hereinafter called the Surety are, subject to the conditions hereinafter contained, held and firmly bound unto RHI Refractories Holding Company, Twin Tower, Wienerbergstrasse 11, 1100 Vienna, Austria care of Robin Schmidt Whitley as Trustee, hereinafter called the Obligee, for the use and benefit of the Claimants, their and each of their heirs, executors, administrators, successors and assigns, in the amount of _____

_____ Dollars (\$ _____)

of lawful money of Canada for the payment of which sum well and truly to be made the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a written contract with the Obligee, dated the _____ day of _____, 200____, for Asbestos Abatement Services, RESCO Canada Inc., 78 Route 148, Grenville, Quebec, which Contract Documents are by reference made a part hereof, and are hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Principal shall make payment to all Claimants for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A Claimant for the purpose of this Bond is defined as one having a direct contract with the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment directly applicable to the Contract provided that a person, firm or corporation who rents equipment to the Principal to be used in the performance of the Contract under a contract which provides that all or any part of the rent is to be applied towards the purchase price thereof, shall only be a Claimant to the extent of the prevailing industrial rental value of such equipment for the period during which the equipment was used in the performance of the Contract. The prevailing industrial rental value of equipment shall be determined, insofar as it is practical to do so, in accordance with and in the manner provided for in the latest revised edition to the publication of the Canadian Construction Association titled "Rental Rates on Contractors Equipment" published prior to the period during which the equipment was used in the performance of the Contract.
2. The Principal and the Surety, hereby jointly and severally agree with the Obligee, as Trustee, that every Claimant who has not been paid as provided for under the terms of his contract with the Principal; before the expiration of a period of 90 days after the date on which the last of such Claimant's work or labor was done or performed or materials were furnished by such Claimant, may as a beneficiary of the trust herein provided for, sue on this Bond, prosecute the suit to final judgment for such sum or sums as may be justly due to such Claimant under the terms of his

contract with the Principal and have execution thereon. Provided that the Obligee is not obliged to do or take any act, action or proceeding against the Surety on behalf of the Claimants, or any of them, to enforce the provisions of this Bond. If any act, action or proceeding is taken either in the name of the Obligee or by joining the Obligee as a party to such proceeding, then such act, action or proceeding, shall be taken on the understanding and basis that the Claimants; or any of them, who take such act, action or proceeding shall indemnify and save harmless the Obligee against all costs, charges and expenses or liabilities incurred thereon and any loss or damage resulting to the Obligee by reason thereof. Provided still further that, subject to the foregoing terms and conditions, the Claimants, or any of them, may use the name of the Obligee to sue on and enforce the provisions of this Bond.

3. No suit or action shall be commenced hereunder by any Claimant:
 - (a) unless such Claimant shall have given written notice within the time limits hereinafter set forth to each of the Principal, the Surety and the Obligee, stating the substantial accuracy the amount claimed. Such notice shall be served by mailing, the same by registered mail to the Principal, the Surety and the Obligee, at any place where an office is regularly maintained for the transaction of business by such persons or served in any manner in which legal process may be served in the Province or other part of Canada in which the subject matter of the Contract is located. Such notice shall be given
 - (1) in respect of any claim for the amount or any portion thereof, required to be held back from the Claimant by the Principal, under either the terms of the Claimant's contract with the Principal, or under the Mechanic's Liens Legislation applicable to the Claimant's contract with the Principal, whichever is the greater, within 120 days after such Claimant should have been paid in full under the Claimant's contract with the Principal;
 - (2) in respect of any claim other than for the holdback, or portion thereof, referred to above, within 120 days after the date upon which such Claimant did, or performed, the last of the work or labor or furnished the last of the materials for which such claim is made under the Claimant's contract with the Principal;
 - (b) after the expiration of 1 year following the date on which the Principal ceased work on the Contract, including work performed under the guarantees provided in the Contract;
 - (c) other than in a Court of competent jurisdiction in the Province or District of Canada in which the subject matter of the Contract, or any part thereof, is situated and not elsewhere, and the parties hereto agree to submit to the jurisdiction of such Court.
4. The Surety agrees not to take advantage of Article 1959 of the Civil Code of the Province of Quebec in the event that, by an act or an omission of a Claimant, the Surety can no longer be subrogated in the rights, hypothecs, and privileges of said Claimant.
5. Any material change in the contract between the Principal and the Obligee shall not prejudice the rights or interest of any Claimant under this Bond, who is not instrumental in bringing about or has not caused such change.
6. The amount of this Bond shall be reduced by, and to the extent of any payment or payments made in good faith, and in accordance with the provisions hereof, inclusive of the payment by the Surety of Mechanics' Liens which may be filed of record against the subject matter of the Contract, whether or not claim for the amount of such Lien be presented under and against this Bond.
7. The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

SIGNED AND SEALED THIS _____ day of _____, 200

(Principal)

(Seal)

(Witness)

By: _____

(Print Name and Title)

(Surety)

(Seal)

(Witness)

By: _____

(Print Name and Title)

(Acknowledgment by Principal, if a corporation)

PROVINCE OF _____)
COUNTY OF _____) ss.:

On this _____ day of _____, 200__, before me personally came _____ to me known, who being by me duly sworn, did depose and say that he/she resides in _____ that he/she is the _____ of _____, the corporation described in and which executed the foregoing instrument; that he/she knows the corporate seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he/she signed his/her name thereto by like order.

(Seal)

Notary Public County

(Acknowledgment by Principal, if not a corporation)

PROVINCE OF _____)
COUNTY OF _____) ss.:

On this _____ day of _____, 200__, before me personally came _____ to me known and known to me to be the person described in and who executed the foregoing instrument and who acknowledged that he/she executed the same.

(Seal)

Notary Public County

(Acknowledgment by Surety)

PROVINCE OF _____)
COUNTY OF _____)

ss.:

On this _____ day of _____, 200__, before me personally came _____ to me known, who being by me duly sworn, did depose and say that he/she resides in _____ that he/she is the _____ of _____, the corporation described in and which executed the foregoing instrument; that he/she knows the corporate seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he/she signed his/her name thereto by like order.

(Seal)

Notary Public

County

(The Surety Company must append a statement of its financial condition and a copy of the resolution authorizing the execution of bonds by officers of the Surety Company.)

GENERAL CONDITIONS

Gc.01 DEFINITIONS AND TERMINOLOGY

1.1 Defined Terms

- A. Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below shall have the meanings indicated which are applicable to both the singular and plural thereof.

Addenda

"Addenda" means written or graphic instruments issued prior to the specified date for bid closing which clarify, correct, or change the bid requirements or the bid documents.

Agreement

"Agreement" means the written instrument which is evidence of the agreement between OWNER and CONTRACTOR covering the Works.

Application for Payment

"Application for Payment" means the form acceptable to ENGINEER which is to be used by CONTRACTOR during the course of the Works in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

Change Order

"Change Order" means a document recommended by ENGINEER, which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion, or revision in the Works, or an adjustment in the Contract Price or the Contract Times (or Milestones), issued on or after the date of Notice of Award, and shall form part of the Contract.

Contract

"Contract" means the entire and integrated written agreement between OWNER and CONTRACTOR concerning the Works. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

Contract Price

"Contract Price" means the monies payable by OWNER to CONTRACTOR for the performance and completion of the Works in accordance with the provisions of the Contract Documents, and in the context of the Contract means either the total lump sum price of CONTRACTOR for the performance of the Works or the total of the unit prices of CONTRACTOR for the performance of the Works extended, based upon the estimated quantities set forth in the Schedule of Prices,

or combination of unit prices and lump sums named in the Schedule of Prices, plus or minus any adjustments made in accordance with the Contract.

Contract Times

"Contract Times" means the number of days or the dates stated in the Project Specifications to achieve Substantial Performance; and complete the Works so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment, as such number of days or dates may be modified pursuant to the Contract Documents.

CONTRACTOR

"CONTRACTOR" means the party to whom the Contract for the Works has been awarded and with whom OWNER has entered into the Agreement, and in the context of the Contract means the person or company named as CONTRACTOR in the Agreement.

Drawings

"Drawings" mean that part of the Contract Documents prepared or approved by ENGINEER which graphically show the scope, extent, and character of the Works to be furnished and performed by CONTRACTOR, and include all modifying Drawings issued by Addenda and/or during the progress of the Works. Shop Drawings and other CONTRACTOR submittals are not Drawings as so defined.

ENGINEER

"ENGINEER" means Conestoga-Rovers & Associates Limited and its duly authorized agents. Whenever in the Contract Documents the shortened names "Conestoga-Rovers & Associates" or "CRA" are used, such names each refer to ENGINEER.

Field Order

"Field Order" means a written order issued by ENGINEER which requires minor changes in the Works but which does not involve a change in the Contract Price or the Contract Times (or Milestones), and shall form part of the Contract.

Force Account Work; work performed on a Force Account Basis

"Force Account Work"; "work performed on a Force Account Basis" means work performed at the request of ENGINEER and authorized by OWNER to be paid for in accordance with Gc.28. The term "Force Account Basis" means on the basis of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of Force Account Work plus CONTRACTOR's fee for overhead and profit determined as provided in Gc.28.

Laws and Regulations; Laws or Regulations

"Laws and Regulations"; "Laws or Regulations" mean any and all applicable statutes, laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

Liens

"Liens" means charges, security interests, or encumbrances upon Project funds, real property, or personal property.

Milestone

"Milestone" means a principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Performance of all the Works.

Notice of Award

"Notice of Award" means the written notice by ENGINEER on behalf of OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.

Notice to Proceed

"Notice to Proceed" means a written notice given by ENGINEER on behalf of OWNER to CONTRACTOR fixing the date on which the Contract Times (or Milestones) will commence to run and on which CONTRACTOR shall start to perform the Works under the Contract Documents.

Other Contractor

"Other Contractor" means any person, firm, or corporation employed by or having a contract directly or indirectly with OWNER otherwise than through CONTRACTOR.

OWNER

"OWNER" means the party with whom CONTRACTOR has entered into the Agreement and for whom the Works are to be provided, and in the context of the Contract means the entity named as OWNER in the Agreement.

Partial Utilization

"Partial Utilization" means use by OWNER of a substantially performed part of the Works for the purpose for which it is intended (or a related purpose) prior to Substantial Performance of all the Works.

Plant and Equipment

"Plant and Equipment" means everything (including tools, appliances, and construction equipment and machinery, including plant and equipment of Subcontractors), except labor, which is either brought onto the Site or used by or on behalf of CONTRACTOR in order to carry out the Works, but not to be incorporated in the Works.

Project

"Project" means the total construction of which the Works to be performed under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents.

Project Specifications

"Project Specifications" or "Specifications" are one and the same and mean that part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Works and certain administrative details applicable thereto.

Representative

"Representative" wherever and in whatever manner used shall mean CONTRACTOR's officers, directors, shareholders, employees, agents, Subcontractors and tier of Subcontractors, Suppliers, any other person or entity, directly or indirectly employed by any of them to perform or furnish any of the Works, and anyone for whose acts or omissions any of them may be liable.

Samples

"Samples" means physical examples of materials, equipment, or workmanship that are representative of some portion of the Works and which establish the standards by which such portion of the Works will be judged.

Sections

"Sections" means the Sections of the Project Specifications. The first two numbers of a five digit Section number denote the Division number (e.g., 01100 represents a Section of Division 1).

Shop Drawings

"Shop Drawings" means all drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of the Works. Approved Shop Drawings are not Contract Documents.

Site

"Site" means the lands, waters, structures, or other areas indicated in the Contract Documents as being furnished by OWNER to CONTRACTOR upon which the

Works is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for the use of CONTRACTOR.

Subcontractor

"Subcontractor" means a person, corporation, or entity having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part or parts of the Works included in the Contract.

Substantial Performance

"Substantial Performance" is as defined in the lien legislation applicable to the Project Site location. If such legislation is not in force or does not contain such definition, Substantial Performance shall have been reached when the Works (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Works (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Works (or a specified part thereof) is ready for use or is being used for the purpose for which it is intended and is so certified by ENGINEER. The term "substantially performed" as applied to all or part of the Works refers to Substantial Performance thereof.

Supplier

"Supplier" means a manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with CONTRACTOR or with any Subcontractor to furnish materials or equipment to be incorporated in the Works by CONTRACTOR or any Subcontractor.

Underground Facilities

"Underground Facilities" shall mean any and all underground or submerged pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities which were installed underground or underwater to furnish any services or materials, including, but not limited to, those that convey electricity, gas, steam, liquid petroleum product, telephone or other communications, cable television, water, wastewater, stormwater, other liquids or chemicals, or traffic or other control systems.

Work Change Directive

"Work Change Directive" means a written statement to CONTRACTOR issued on or after the date of the Notice of Award and signed by OWNER and recommended by ENGINEER, ordering an addition, deletion, or revision in the Works, or responding to differing or unforeseen subsurface or physical conditions under which the Works is to be performed or to emergencies, and shall form part of the Contract. A Work Change Directive will not change the Contract Price or the Contract Times (or Milestones), but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following

negotiations by the parties as to its effect, if any, on the Contract Price or the Contract Times (or Milestones) as provided in the Contract.

Works

"Works" means the performing or furnishing of labor, the furnishing and incorporating of materials and equipment, the furnishing of services, and all other things required to be done, all as required by the Contract Documents, and includes all extra and additional work and material and services that may be ordered pursuant to the Contract.

Written Amendment

"Written Amendment" means a written statement modifying the Contract Documents, signed by OWNER and CONTRACTOR on or after the date of Notice of Award and normally dealing with the nonengineering or nontechnical rather than strictly construction-related aspects of the Contract Documents, and shall form part of the Contract.

1.2 Terminology

- A. Whenever in the Contract Documents the terms "as allowed", "as approved", or terms of like effect or import are used, or the adjectives "reasonable", "sufficient", "necessary", "suitable", "acceptable", "proper", "satisfactory", or adjectives of like effect or import are used to describe an action or determination of ENGINEER as to the Works, it is intended that such action or determination will be solely to evaluate, in general, the completed Works for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise).
- B. The following words when used as described shall have the meanings assigned to them:

day

"day" means a calendar day of 24 hours measured from midnight to the next midnight. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day or days will be omitted from the computation.

defective

"defective" is an adjective which when modifying the word "Works" refers to Works that is unsatisfactory, faulty, or deficient, in that it does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment (unless responsibility for the protection thereof has been specifically and

expressly assumed by OWNER at Substantial Performance in accordance with Article 10 of the Agreement). The terms "faults" and "defects" (and words of like import) in the Works each refer to Works that is *defective*.

directed

"directed", "designated", "permitted", "required", "accepted", and words of like import, wherever and in whatever manner used, with or without reference to ENGINEER, mean as directed, designated, permitted, required, and accepted by ENGINEER.

furnish

"furnish", when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

herein

"herein", "hereinafter", "hereunder", and words of similar import refer to the Contract Documents.

include

"include", "includes", or "including" mean to include without limitation.

install

"install", when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

may

"may", wherever and in whatever manner used, is permissive.

person

"person" includes firms, companies, and corporations.

progress payment

"progress payment" refers to the method of monthly payments to CONTRACTOR in accordance with the terms of the Contract.

provide or perform

"provide" or "perform", when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use. When "furnish", "install", "perform", or "provide" is not used in connection with services, materials, or

equipment in a context clearly requiring an obligation of CONTRACTOR, "provide" is implied.

shall or will

"shall" or "will", whenever used to stipulate anything, means the imperative: the item must be done or performed by the party so charged and the party has entered into a covenant with the other party to do or perform the same.

shown

"shown", "indicated", "detailed", and words of like import, wherever and in whatever manner used, with or without reference to the Drawings, means shown, indicated, or detailed on the Drawings.

specified

"specified", "described", or "noted", wherever and in whatever manner used, means as specified, described, or noted in the Contract Documents.

submitted

"submitted", wherever and in whatever manner used, means submitted to ENGINEER or OWNER for acceptance by ENGINEER or OWNER.

- C. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

Gc.02 CONTRACT DOCUMENTS

2.1 Intent

- A. The Contract Documents are complementary and what is called for by any one shall be as binding as if called for by all. It is the intent of the Contract Documents to describe a functionally complete Project to be constructed by CONTRACTOR in accordance with the Contract Documents, and to include all the labor, supervision, materials, equipment, Plant and Equipment, supplies, documentation, services, transportation, facilities, and all other things necessary for the proper execution of the Works, excepting only those items specifically stated in the Contract Documents as being furnished by OWNER.
- B. The headings or titles shall not be deemed to be part of the Contract Documents to be taken into consideration in the interpretation or construction of the Contract.
- C. Drawings and Project Specifications shall be read and interpreted together. Sections of Division 1 of the Project Specifications govern the execution of the work of all Sections of the Project Specifications.

- D. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result shall be provided by CONTRACTOR whether or not specifically called for on the Drawings and in the Project Specifications, or other Contract Documents, at CONTRACTOR's expense and at no additional cost to OWNER.
- E. Any division of the Project Specifications into Sections or subsections shall be only for clarity of reading and reference, and shall not be taken to be a division into trades, subtrades, or sections of work of any kind.

2.2 Reference Standards

- A. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the date of bid closing.
- B. No provision of any such standard, specification, manual, code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents.

Gc.03 SUBCONTRACTORS AND SUPPLIERS

3.1 CONTRACTOR's Responsibility

- A. CONTRACTOR shall not delegate or sublet the whole of the Works. CONTRACTOR shall not delegate or sublet any part of the Works without the prior written consent of ENGINEER or OWNER.
- B. CONTRACTOR shall preserve and protect the rights of the parties under the Contract with respect to work to be performed under subcontract. CONTRACTOR shall enter into contracts or written agreements with Subcontractors and Suppliers to require them to perform their work as provided in the Contract Documents, and shall incorporate the terms and conditions of the Contract Documents into all contracts or written agreements with Subcontractors and Suppliers.
- C. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of Subcontractors, Suppliers, and of persons directly or indirectly employed by them, including Subcontractors nominated by OWNER or ENGINEER, if any, just as CONTRACTOR is fully responsible for acts and omissions of persons directly employed by CONTRACTOR. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other person any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier, or other person, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any monies due any such Subcontractor, Supplier, or other person or entity except as may otherwise be required by Laws or Regulations.

- D. CONTRACTOR shall not employ any Subcontractor against whom OWNER or ENGINEER may object to as lacking capability to properly perform.
- E. Without the prior written approval of OWNER or ENGINEER, CONTRACTOR shall not add to, delete from, or change the Subcontractors named in the Contract.
- F. OWNER, through ENGINEER, may provide to a Subcontractor or Supplier information as to the percentage of the Subcontractor's or Supplier's work which has been recommended for payment.

Gc.04 THE ENGINEER

4.1 Authority of ENGINEER

- A. ENGINEER will be OWNER's representative during the construction period. CONTRACTOR shall execute and complete the Works in accordance with the Contract and to the satisfaction of ENGINEER, and shall promptly comply with ENGINEER's instructions on any matter relating thereto.
- B. Neither ENGINEER's authority or responsibility under this Gc.04 or under any other provision of the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by ENGINEER shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- C. ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the furnishing or performance of the Works. ENGINEER will not be responsible for CONTRACTOR's failure to perform or furnish the Works in accordance with the Contract Documents. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or any Representative.
- D. CONTRACTOR shall not be relieved from any obligations under the Contract Documents or otherwise (i) by any inspections, reviews, tests, certifications, supervision, directions, controls, authority, or approvals of ENGINEER or OWNER whether or not provided, required, or performed pursuant hereto, or (ii) by the lack of or inadequacy of any of same.
- E. ENGINEER shall make decisions, as described below, on matters arising under the Contract. Subject to the terms and conditions hereof, ENGINEER shall render a written decision with respect to the following:

1. inquiries regarding claimed conflicts or discrepancies within or between the Contract Documents; or
 2. claimed ambiguities, errors, or omissions in the Contract Documents; or
 3. inquiries regarding the quality, dimensions, and sufficiency of Plant and Equipment, materials or equipment, or work; or
 4. inquiries regarding the due and proper execution of the Works; or
 5. claims or inquiries regarding the measurement, quantity, or valuation of the Works, including extra work and/or deductions; or
 6. claims for additional time and/or compensation; or
 7. any other inquiries or questions for which CONTRACTOR makes a specific written request for a written decision.
- F. ENGINEER will have authority to disapprove or reject Works which ENGINEER believes to be *defective*, or that ENGINEER believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. ENGINEER will also have authority to require special inspection or testing of the Works as provided in Paragraph 18.3, whether or not the Works is fabricated, installed, or completed.

Gc:05 DISPUTES AND CLAIMS

5.1 Notice

- A. All claims by CONTRACTOR for an increase in the Contract Price or extension to the Contract Times (or Milestones) arising out of or in any way related to the Contract, or any claim by CONTRACTOR for damages due in any way to, arising out of, or in any way related to the performance of the Works, or any dispute CONTRACTOR might have with regard to any matters enumerated in Paragraph 4.1 D shall be submitted in writing to ENGINEER for decision. All such claims or disputes (i) shall include the amount or extent of the claim or dispute with all supporting data; (ii) shall be submitted in writing to ENGINEER within 15 days of the event or events which first give rise to the claim or dispute unless ENGINEER allows, in writing, an additional period of time for CONTRACTOR to ascertain and submit more accurate data in support of the claim or dispute; and (iii) shall be accompanied by CONTRACTOR's written statement that the adjustment claimed is the entire adjustment to which CONTRACTOR has reason to believe it is entitled as a result of said event or events.
- B. CONTRACTOR's failure to meet any of the claim filing requirements herein shall render any claim by CONTRACTOR for an increase in the Contract Price or extension to the Contract Times (or Milestones) invalid without further consideration or review and no increase in the Contract Price or extension to the

Contract Times (or Milestones) shall be made on account of the claim. CONTRACTOR shall bear the burden of proving all of the foregoing.

- C. The claim filing requirements set forth in this Gc.05 shall apply in addition to, not in lieu of, other claim filing requirements set forth in the Contract Documents.

5.2 ENGINEER's Decision

- A. ENGINEER shall render its decision no later than 30 days following CONTRACTOR's timely written submission to ENGINEER. ENGINEER's decision shall be final and binding upon CONTRACTOR unless, within 20 days after the date such decision was rendered by ENGINEER, CONTRACTOR delivers to OWNER and ENGINEER written notice disputing such decision. The 15-day notice specified in Paragraph 5.1 A shall be a condition precedent to CONTRACTOR's right to pursue any further action, including, but not limited to, any action in any court of law, with respect to the claim or dispute. CONTRACTOR's notice disputing the decision shall clearly identify the issues in dispute, CONTRACTOR's position, and clearly state the specific facts supporting CONTRACTOR's position. Copies of all supporting documents on which CONTRACTOR relies to support its position shall also be attached to the notice. Failure to submit the required information and documentation shall be deemed a waiver of CONTRACTOR's right to use such information or documentation in any later proceeding.

5.3 Continuing the Works

- A. CONTRACTOR shall not delay or disrupt the progress of the Works awaiting a decision upon any claim or dispute, or as a result of any unresolved dispute. To the extent that an inquiry is made of ENGINEER for which a decision is necessary and such decision would impact progress of the Works, CONTRACTOR shall, unless directed otherwise in writing by OWNER or ENGINEER, continue with all aspects of the Works not so affected by any forthcoming decision by ENGINEER and shall immediately upon receipt of ENGINEER's decision proceed with all work affected by the decision, regardless of whether or not CONTRACTOR later disputes such decision.

Gc.06 NOTICE OR OTHER COMMUNICATION

6.1 Giving Notice

- A. Whenever any provision of the Contract Documents requires the giving of written notice or requires any other communication to be made in writing, such notice or communication will be deemed to have been validly given or made (1) if delivered in person to the individual or to a member of the firm or to any officer of the corporation for whom it is intended, or (2) if delivered at or sent by (i) prepaid overnight courier service, or (ii) postage prepaid registered or certified mail, to the last business address known to the giver of the notice, or (3) if transmitted by facsimile, the time at which a machine generated confirmation states the notice or communication was received at the facsimile telephone number of the intended recipient last known by the sender.

6.2 Address for Notice

- A. All such writings between the parties under the Contract shall be addressed as specified in the Special Conditions.
- B. Either party may change its designation of addressee or address upon written notice to the other party.

6.3 OWNER's Communication to CONTRACTOR

- A. Except as otherwise provided in the Contract Documents, OWNER will issue all communications to CONTRACTOR through ENGINEER.

Gc.07

TO BE FURNISHED BY CONTRACTOR

7.1 Services, Materials, and Equipment

- A. Unless otherwise specified in the Contract Documents, CONTRACTOR shall provide, assume full responsibility, and include in the Contract Price for the execution of the whole of the Works complete in every respect in accordance with the Contract, including, but not limited to: all services, labor, supervision, transportation, materials, equipment, Plant and Equipment, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, startup, and completion of the Works; final cleanup of the Site on completion of the Works to the satisfaction of ENGINEER; and all contingent expenses and risks of every kind necessary to complete the Works in accordance with the Contract (provided that the Contract Price will not include for those items which are specifically stated in the Project Specifications to be paid as Force Account Work).
- B. All materials, equipment, and accessories incorporated into the Works shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Project Specifications shall expressly run to the benefit of OWNER. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.2 Supervision and Superintendence

- A. CONTRACTOR shall supervise, inspect, and direct the Works competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Works in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, for coordinating the various parts of the Works, and to see that the completed Works complies accurately with the Contract Documents.

- B. CONTRACTOR shall employ and keep on the Works at the Site at all times during its progress a competent resident supervisor herein referred to as "superintendent" and necessary assistants. The superintendent shall not be replaced without prior written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent shall be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.
- C. CONTRACTOR shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

7.3 Labor

- A. CONTRACTOR shall provide competent, suitably qualified personnel to survey, lay out, and construct the Works as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the Site.

Gc.08

PROSECUTION OF THE WORKS

8.1 Progress Schedule

- A. Time is of the essence with respect to the performance of the Contract by CONTRACTOR.
- B. CONTRACTOR shall proceed with the Works when the Notice to Proceed is issued and shall complete the Works in accordance with the Contract Times (or Milestones) and in such a manner that:
 1. any stages of the Works, including any Milestones specified in the Contract Documents which are specified to be completed on or before a specific time (number of days or dates), shall be completed on or before such time; and
 2. the whole of the Works which is specified to be completed on or before a specific time (number of days or dates) shall be completed on or before such time.
- C. Within 7 days after the date of the Notice to Proceed (unless otherwise specified in Section 01300 of the Project Specifications), CONTRACTOR shall submit to ENGINEER for its review, a progress schedule indicating the times (number of days or dates) for starting and completing the various stages of the Works, including any Milestones specified in Section 01100 of the Project Specifications. The progress schedule will be acceptable to ENGINEER if it provides an orderly progression of the Works to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on ENGINEER responsibility for the progress schedule, for sequencing, scheduling, or progress of the Works nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility therefor.

- D. CONTRACTOR shall adhere to the progress schedule established in accordance with Paragraph 8.1 C, as it may be adjusted from time to time, as follows:
1. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in Paragraph 8.1 C) proposed adjustments in the progress schedule that will not result in changing the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the Project Specifications applicable thereto; and
 2. proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Gc.05. Such adjustment may only be made by a Change Order or Written Amendment in accordance with Gc.05.
- E. If ENGINEER should be of the opinion and so state in writing to CONTRACTOR that the quality or number of workers is not sufficient, or that Plant and Equipment (including, without limitation, its condition, capacity, or number of units) is not sufficient, or that the delivery of materials and equipment is not sufficient, or that the methods being employed are not such as will ensure that the Works or any part thereof will be completed within the specified time, CONTRACTOR shall forthwith improve the quality and increase the number of workers employed, shall make revisions to Plant and Equipment including, but not limited to, providing and utilizing additional Plant and Equipment, shall employ work methods satisfactory to ENGINEER, and shall take whatever measures as ENGINEER may specify to expedite the progress of the Works and to bring the Works up to schedule, including adding overtime work and additional shifts, all at CONTRACTOR's expense and at no additional cost to OWNER. CONTRACTOR shall submit to ENGINEER in writing a plan for bringing the Works up to schedule. CONTRACTOR shall continue such efforts to expedite the progress of the Works until such time as, in opinion of ENGINEER, the degree of completion of the Works complies with the progress schedule.
- F. Such right of ENGINEER to require acceleration by CONTRACTOR or such other measures to expedite the progress of the Works shall not constitute grounds for any claim by CONTRACTOR for adjustment to the Contract Price for by way of illustration and not limitation: decreased efficiency, stacking of trades, overtime or premium labor costs and per diems, additional Plant and Equipment rentals, increased supervision, insurance, and other related payroll costs.

Gc.09

ENGINEERING AND INSPECTION CHARGES

9.1 Failure to Complete Work on Time

- A. When the Works is not completed in accordance with the Contract Times (or Milestones), engineering and inspection expenses incurred by OWNER upon the Works from such scheduled completion date to the actual date of completion may be charged to CONTRACTOR.

Gc.10

EMERGENCIES

10.1 CONTRACTOR's Obligation to Act

- A. In emergencies affecting the health, protection, or safety of any persons or the safety or protection of any property, natural resources, or the environment, CONTRACTOR is obligated to act to prevent threatened damage, injury, or loss. CONTRACTOR shall notify OWNER and ENGINEER immediately, and shall give ENGINEER and OWNER written notice (i) of such emergency within 24 hours of discovery of same, and (ii) of any significant changes in the Works or deviations from the Contract Documents caused thereby within 5 days after completion of work relating to the emergency.

10.2 Notice or Claim

- A. If CONTRACTOR believes that additional work done by it in an emergency which arose from causes beyond its control entitles it to an increase in the Contract Price or an extension of the Contract Times (or Milestones), CONTRACTOR shall make claim as provided for in Gc.05. Failure by CONTRACTOR to provide notice or make a claim as required hereunder shall result in a waiver by CONTRACTOR of any claim relating to the emergency.

Gc.11

USE OF SITE

11.1 Limitation on Use of the Site and Other Areas

- A. CONTRACTOR shall confine Plant and Equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and the Works with Plant and Equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas, resulting from the performance of the Works.
- B. CONTRACTOR shall not load or permit to be loaded any part of the Works with a weight or force that will endanger the safety of the Works.
- C. CONTRACTOR shall promptly comply with ENGINEER's directions regarding signs, advertisements, fires, and smoking. CONTRACTOR shall use the Site only for the performance and completion of the Works.

11.2 Cleaning

- A. During the progress of the Works, CONTRACTOR shall keep the Site and other areas in a tidy condition and free from accumulations of waste materials, rubbish, and other debris resulting from the Works. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

- B. Prior to Substantial Performance of the Works, CONTRACTOR shall clean the Site and make it ready for utilization by OWNER. CONTRACTOR shall remove materials, tools, Plant and Equipment not required for the performance of the remaining work. Prior to application for final payment, CONTRACTOR shall remove all waste materials, rubbish, and debris from and about the Site and other areas as well as all temporary facilities, Plant and Equipment, and surplus materials. CONTRACTOR shall leave the Site in good and satisfactory condition, finished in all respects, and clean and ready for occupancy or use by OWNER at completion of the Works. CONTRACTOR shall restore to original condition all property not designated for alteration by the Contract Documents.

Gc.12

SUBSURFACE AND PHYSICAL CONDITIONS

12.1 Reliance on Technical Data

- A. Reports and drawings listed in Sc.08 of the Special Conditions identify:
1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that ENGINEER has used in preparing the Contract Documents; and
 2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities as described in Paragraphs 14.1 and 14.2) that ENGINEER has used in preparing the Contract Documents.
- B. CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Special Conditions. Except for such reliance on such "technical data", CONTRACTOR may not rely upon or make any claim against OWNER, ENGINEER, or any of ENGINEER's consultants with respect to:
1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, and safety precautions and programs incident thereto; or
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

DIFFERING SUBSURFACE OR PHYSICAL CONDITIONS

13.1 Notice

- A. If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:
1. is of such a nature as to establish that any "technical data" on which CONTRACTOR is entitled to rely as provided in Paragraphs 12.1 A or 12.1 B is materially inaccurate; or
 2. is of such a nature as to require a change in the ENGINEER's design; or
 3. differs substantially and materially from that shown or indicated on the Drawings; or
 4. is of an unusual nature and differs substantially and materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then CONTRACTOR shall, promptly after becoming aware thereof (and not later than 48 hours) and before further disturbing the subsurface or physical conditions or performing any Works in connection therewith (except in an emergency as required by Paragraph 10.1 A), notify OWNER and ENGINEER in writing about such condition. CONTRACTOR shall not further disturb such condition or perform any Works in connection therewith (except as aforesaid) until receipt of written order to do so.

13.2 ENGINEER's Review

- A. After receipt of written notice as required by Paragraph 13.1 A, ENGINEER will promptly review the pertinent condition, determine the necessity of OWNER's obtaining additional exploration or tests with respect thereto, and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

13.3 Possible Price and Times Adjustments:

- A. Except as provided otherwise in Paragraph 13.3 B, the Contract Price or the Contract Times (or Milestones), or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in CONTRACTOR's cost of, or time required for, performance of the Works; subject, however, to the following:
1. such condition must meet one or more of the categories described in Paragraph 13.1 A; and
 2. with respect to Works that is paid for on a unit price basis, any adjustment in the Contract Price will be subject to the provisions of Gc.25.
- B. CONTRACTOR shall not be entitled to any adjustment in the Contract Price or the Contract Times (or Milestones) if:

1. CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of the Contract Price and the Contract Times (or Milestones) by the submission of a bid or becoming bound under a negotiated contract; or
 2. the existence of such condition could have been discovered or revealed as a result of examination, inspection, and investigation of the Site and contiguous areas required by the bid requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or
 3. CONTRACTOR failed to give the written notice within the time and as required by Paragraph 13.1 A.
- C. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or the Contract Times (or Milestones), or both, as provided in Paragraph 13.3 A, a claim may be made therefor as provided in Gc.05.

Gc.14 UNDERGROUND FACILITIES

14.1 Shown or Indicated

- A. The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities, including OWNER, or by others. Unless it is otherwise expressly provided in the Special Conditions, OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data, and the cost of all of the following shall be included in the Contract Price, and CONTRACTOR shall have full responsibility for:
1. reviewing, checking, and independently verifying all such information and data;
 2. locating all Underground Facilities that are shown or indicated in the Contract Documents or that otherwise may interfere with or be affected by the Works;
 3. coordination of the Works with the owners of such Underground Facilities, including OWNER, during performance of the Works; and
 4. the safety and protection of all such Underground Facilities as provided in Gc.15 and repairing any damage thereto resulting or arising, directly or indirectly, from the Works.

14.2 Not Shown or Indicated

- A. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated or not shown or indicated with reasonable

accuracy in the Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any work in connection therewith except in an emergency as required by Paragraph 10.1 A, identify the owner of such Underground Facility, and give written notice to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility as provided in Gc.15.

- B. If ENGINEER concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences (as provided in Gc.26), but only to the extent that such consequences are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated.

Gc.15 SAFETY AND PROTECTION

15.1 Safety and Protection

- A. CONTRACTOR shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs and for the health, safety, and welfare of any Representative. CONTRACTOR, during the course of the Works, shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
1. all persons on or around the Site or who may be affected by the Works;
 2. all the Works and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 3. other property at the Site or adjacent thereto, natural resources, and the environment, including, but not limited to, trees, shrubs, lawns, walks, pavements, roadways, aboveground facilities, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of the Works.
- B. CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety and protection of persons or property from damage, injury, or loss; and shall provide and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Works may affect them, and shall cooperate with them and ENGINEER in the protection, removal, relocation, and replacement of their property. All damage, injury, or loss to any property, natural resource, or the environment referred to in Paragraph 15.1 A.2 or 15.1 A.3, caused, directly or indirectly, in whole or in part, by CONTRACTOR or any Representative, shall be remedied promptly by

CONTRACTOR at its expense and at no additional cost to OWNER. CONTRACTOR's duties and responsibilities for safety and protection of the Works shall continue until such time as all the Works is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with Paragraph 12.3 A of the Agreement that the Works is acceptable (except as otherwise expressly provided in connection with Substantial Performance).

Gc.16 LAWS AND REGULATIONS

16.1 CONTRACTOR's Responsibilities

- A. CONTRACTOR shall at all times comply with all Laws and Regulations applicable to the performance of the Works, including, but not limited to, any statute, law, ordinance, rule, or regulation regarding the employment of labor and/or relating to the preservation of public health and safety and the environment.
- B. Unless otherwise specified, CONTRACTOR shall pay all fees, procure all licenses, permits, and certificates, deposit all drawings, file all reports and logs, and give all notices required by Laws and Regulations.

Gc.17 PERMITS

17.1 CONTRACTOR's Responsibilities

- A. CONTRACTOR shall at all times comply with permit requirements applicable to the Works.
- B. Unless otherwise specified, CONTRACTOR shall obtain and pay for all necessary permits from the applicable governmental authority. CONTRACTOR shall deliver a copy of all such permit applications and permits to ENGINEER prior to commencing work on the Site.

Gc.18 TESTS AND INSPECTIONS

18.1 Access

- A. OWNER and ENGINEER shall have access to the Works at all times for their observation, inspecting, and testing. CONTRACTOR shall provide sufficient, safe, and proper conditions for such access.
- B. OWNER and ENGINEER may at all reasonable times visit, enter, and make inspections at any building, factory, workshop, work, or site where materials are being prepared, made, or treated, or where work is being done in connection with the Contract.

18.2 Tests and Inspections

- A. CONTRACTOR shall give ENGINEER timely notice of readiness of the Works for all required inspections, tests, or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. OWNER shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
 - 1. for inspections, tests, or approvals covered by Paragraphs 18.2 C and 18.2 D below;
 - 2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 18.3 B shall be paid as provided in said Paragraph 18.3 B; and
 - 3. as otherwise specifically provided in the Contract Documents.
- C. If Laws or Regulations of any public body having jurisdiction require any Works (or part thereof) specifically to be inspected, tested or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish ENGINEER the required certificates of inspection or approval.
- D. CONTRACTOR shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for OWNER's and ENGINEER's acceptance of materials or equipment to be incorporated in the Works, or acceptance of materials, mix designs, or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Works. Such inspections, tests, or approvals shall be performed by organizations acceptable to OWNER and ENGINEER.
- E. If any Works (or the work of others) that is to be inspected, tested, or approved is covered by CONTRACTOR without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered by CONTRACTOR, at CONTRACTOR's expense and at no additional cost to OWNER, for observation by ENGINEER.
- F. If any Works that is to be inspected or tested by OWNER or ENGINEER is determined to be *defective* after such inspection or test, all fees and charges of ENGINEER or OWNER in re-performing such tests or inspections will be charged against CONTRACTOR, and deducted from any monies due or to become due CONTRACTOR.

18.3 Uncovering Works

- A. If any Works is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense and at no additional cost to OWNER.

- B. Notwithstanding the requirements of Paragraphs 18.2 E and 18.3 A, if the Contract requires, or if ENGINEER notifies CONTRACTOR in writing that specific work must be inspected before the work is covered or further work is done, and CONTRACTOR fails to call for an inspection before covering the work or doing further work, ENGINEER shall have the discretion and power to order the work uncovered at CONTRACTOR's expense and at no additional cost to OWNER, and inspected, even if the work is later determined to be acceptable. In the event of any failure by CONTRACTOR to timely or adequately meet any of its obligations to uncover such work as described in this Paragraph 18.3 B and after notice thereof to CONTRACTOR, or without any notice in the event of emergency, OWNER may perform such tasks and deduct the costs thereof from any monies due or to become due CONTRACTOR.
- C. If ENGINEER considers it necessary or advisable that covered Works be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as ENGINEER may require, that portion of the Works in question, furnishing all necessary labor, material, and equipment. If it is found that such Works is *defective*, CONTRACTOR shall pay all claims, costs, losses, and damages (including, but not limited to, all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including, but not limited to, all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Price, as determined by ENGINEER. If, however, such Works is not found to be *defective*, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction.

18.4 Correction or Removal of *Defective* Works

- A. CONTRACTOR shall correct all *defective* Works, whether or not fabricated, installed, or completed, or, if the Works has been rejected by ENGINEER, remove it from the Site and replace it with Works that is not *defective*. CONTRACTOR shall pay all claims, costs, losses, and damages arising out of or relating to such correction or removal (including, but not limited to, all costs of repair or replacement to other Works or work of others resulting therefrom). If CONTRACTOR fails within a reasonable time after written notice from ENGINEER to correct such *defective* Works or to remove and replace such rejected Works as required by ENGINEER, OWNER may correct the *defective* Works or remove and replace the rejected Works and deduct the costs thereof from any monies due or to become due CONTRACTOR.

18.5 Correction Period

- A. If within 1 year after the date of Substantial Performance or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee or warranty required by the Contract Documents or by any specific provision of the Contract Documents, any Works is found to be *defective*, or if the repair of any damages to the land or areas made available for

CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in Paragraph 11.1 is found to be *defective*, CONTRACTOR shall promptly, without cost or inconvenience to OWNER and in accordance with OWNER's or ENGINEER's written instructions: (i) repair such *defective* land or areas, or (ii) correct such *defective* Works or, if the *defective* Works has been rejected by OWNER, remove it from the Site and replace it with Works that is not *defective*, and (iii) satisfactorily correct or repair or remove and replace any damage to other Works, to the work of others, or to other land or areas resulting therefrom. If CONTRACTOR does not adequately respond or promptly comply with the terms of such instructions and after notice thereof to CONTRACTOR, or without any notice in an emergency, OWNER may have the *defective* Works corrected or repaired or may have the rejected Works removed and replaced, and all claims, costs, losses, and damages arising out of or relating to such correction or repair or such removal or replacement (including, but not limited to, all costs of repair, removal, or replacement of other Works and work of others) shall be paid by CONTRACTOR.

- B. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Performance of all the Works, the correction period for that item may start to run from an earlier date if so provided in the Project Specifications or by Written Amendment.
- C. Where *defective* Works (and damage to other Works resulting therefrom) has been corrected or removed and replaced under this Paragraph 18.5, the correction period hereunder with respect to such Works will be extended for an additional period of 1 year after such correction or removal and replacement has been satisfactorily completed.
- D. CONTRACTOR's obligations under this Paragraph 18.5 are in addition to any other obligation or warranty. The provisions of this Paragraph 18.5 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.
- E. OWNER's rights and remedies under this Paragraph 18.5 are in addition to all other rights and remedies of OWNER under the Contract, statute, regulation, or common law.

Gc.19

SUBSTITUTES AND OR-EQUALS

19.1 Materials and Equipment

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using a patent or proprietary name or by using the name of a particular Supplier, such specification or description shall be considered as used for the purpose of establishing the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or or-equal item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to ENGINEER for review under the circumstances described in Paragraphs 19.1 B and 19.1 C.

- B. If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Works will be required, it may be considered by ENGINEER as an or-equal item.
- C. If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an or-equal item under Paragraph 19.1 B, it will be considered a proposed substitute item. CONTRACTOR shall submit sufficient information to allow ENGINEER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. The procedure for review by ENGINEER will be as set forth in Paragraph 19.1 D, as supplemented by the Project Specifications and as ENGINEER may decide is appropriate under the circumstances.
- D. CONTRACTOR shall make written application to ENGINEER for review of a proposed substitute item. CONTRACTOR shall (i) certify that the proposed substitute item will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified, (ii) state the extent, if any, that the use of the proposed substitute item in the Works will require a change in any of the Contract Documents and whether or not incorporation or use of the proposed substitute item in connection with the Works is subject to payment of any license fee or royalty. When the substitute item necessitates changes to or coordination with any other portion of the Works, the data submitted shall include drawings and details showing all such changes, and CONTRACTOR shall perform such changes as part of any acceptance of CONTRACTOR's substitution request by ENGINEER; (iii) identify all variations of the proposed substitute item from that specified; (iv) provide an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item; and (v) and any additional data required by ENGINEER.

19.2 Substitute Construction Methods or Procedures

- A. If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by ENGINEER. CONTRACTOR shall submit sufficient information to allow ENGINEER, in ENGINEER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in Paragraph 19.1 C.

19.3 ENGINEER's Evaluation

- A. ENGINEER shall be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 19.1 and 19.2. ENGINEER will be the sole judge of acceptability. No or-equal or substitute shall be ordered, installed, or utilized until ENGINEER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an or-equal. ENGINEER will advise CONTRACTOR in writing of any negative determination. ENGINEER's decision will be final.

19.4 CONTRACTOR's Expense

- A. CONTRACTOR shall provide all data in support of any proposed substitute or or-equal at CONTRACTOR's expense and at no additional cost to OWNER.

19.5 Special Guarantee

- A. OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense and at no additional cost to OWNER a special performance guarantee or other surety with respect to any substitute.

Gc.20 RECORD DOCUMENTS

20.1 Site Records

- A. CONTRACTOR shall keep a complete, current, and permanent record at the Site of all data required to be maintained by the Contract Documents, including, but not limited to, the dates of commencement and completion of all aspects of the Works, daily records of the number of workers, the number and type of equipment engaged on the Works and on each division of the Works, and test results, and make such data available to ENGINEER upon request.
- B. CONTRACTOR shall maintain one record copy of all current Contract Documents, Submittals, reports, and records of meetings at the Site in good order and annotated to show changes made during performance of the Works. Such record documents together with all approved Samples and a counterpart of all approved Shop Drawings shall be available to ENGINEER and OWNER for reference. Upon Substantial Performance of the Works, such record documents, Samples, and Shop Drawings shall be delivered to ENGINEER for OWNER.

Gc.21 SHOP DRAWINGS AND SAMPLES

21.1 Submittal Procedures

- A. CONTRACTOR shall submit Shop Drawings and Samples to ENGINEER for review and approval in accordance with Section 01300 of the Project Specifications or as ENGINEER may reasonably request. The data shown on the Shop Drawings shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show ENGINEER the services, materials, and equipment CONTRACTOR proposes to provide and to enable ENGINEER to review the information. Each Sample shall be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as ENGINEER may require to enable ENGINEER to review the submittal.
- B. Where a Shop Drawing or Sample is required by the Contract Documents, any related Works performed prior to ENGINEER's review and approval of the pertinent submittal shall be at CONTRACTOR's expense and responsibility and at no additional cost to OWNER.

- C. Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:
1. all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 2. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Works;
 3. all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and
 4. CONTRACTOR shall also have checked and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Works and the Contract Documents.
- D. Each submittal shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.
- E. At the time of each submittal, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to ENGINEER for review and approval of each such variation.

21.2 ENGINEER's Review

- A. ENGINEER will review and approve Shop Drawings and Samples in accordance with the schedule agreed upon, or otherwise with reasonable promptness so as to cause no delay. ENGINEER's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Works, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- B. ENGINEER's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- C. ENGINEER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called

ENGINEER's attention to each such variation at the time of each submittal as required by Paragraph 21.1 E and ENGINEER has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of Paragraph 21.1 C.

21.3 Resubmittal Procedures

- A. CONTRACTOR shall make corrections required by ENGINEER and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

Gc.22 WORK BY OWNER OR OTHER CONTRACTORS

22.1 Related Work at the Site

- A. OWNER reserves the right to perform other work related to the Project at the Site with its own forces, or to award separate contracts therefor. If such other work is not noted in the Contract Documents, then:
 - 1. written notice thereof will be given to CONTRACTOR prior to starting any such other work; and
 - 2. if OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or the Contract Times (or Milestones) that should be allowed as a result of such other work, a claim may be made therefor as provided in Gc.05.
- B. CONTRACTOR shall afford each Other Contractor who is a party to such a direct contract and each utility owner (and OWNER, if OWNER is performing the other work with OWNER's own forces) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the Works with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting, and patching of the Works that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and shall only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this Paragraph 22.1 B are for the benefit of such utility owners and Other Contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and Other Contractors.
- C. If the proper execution or results of any part of CONTRACTOR's Works depends upon work performed by others under this Gc.22, CONTRACTOR shall inspect such other work and promptly report to ENGINEER in writing any delays,

defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Works. CONTRACTOR's failure to so report will constitute an acceptance of such other work as fit and proper for integration with CONTRACTOR's Works except for latent defects and deficiencies in such other work.

22.2 Coordination

- A. If OWNER intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in the Special Conditions:
 - 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
 - 2. the specific matters to be covered by such authority and responsibility will be itemized; and
 - 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Special Conditions, OWNER shall have sole authority and responsibility for such coordination.

Gc.23

RECORD RETENTION, REVIEW, AND INSPECTION

23.1 Record Retention

- A. CONTRACTOR shall maintain accurate, detailed, and current financial records, reports, field data, test data, calculations, estimates, field notes, books, and other documents, data, and information (the "Records") in connection with the Works performed and all transactions related thereto. CONTRACTOR shall retain such Records for the record retention period specified in the Special Conditions.
- B. OWNER's certified public accountant and/or other individuals designated by OWNER may, upon reasonable notice, review, inspect, copy, and audit the Records, at the place or places where such Records are kept, during the term of the Contract and during the Record retention period as defined herein. CONTRACTOR shall provide in all of its agreements with third parties that OWNER shall have the right to audit all source documentation of such third parties' compensation.

Gc.24

CONFIDENTIALITY

24.1 Confidentiality

- A. CONTRACTOR shall keep strictly confidential and shall not disclose to any other person or entity (i) any information concerning the Site or CONTRACTOR's or any Representative's activities in connection with the Site which CONTRACTOR acquires by any means; or (ii) any information which CONTRACTOR receives from OWNER, ENGINEER, or their respective representatives or agents in the

course of CONTRACTOR's performance under the Contract. CONTRACTOR shall not use or disclose any such information other than for purposes of such performance, except (i) as to information which has come into the public domain other than through CONTRACTOR or any Representatives; (ii) as authorized in writing in advance by OWNER or its duly authorized designee; or (iii) as required by any Laws or Regulations. In the event that CONTRACTOR or any Representative is called upon under a purported requirement of any Laws or Regulations to disclose or use information protected by this Paragraph 24.1 A, CONTRACTOR shall give OWNER sufficient advance written notice thereof to allow OWNER to contest the matter.

- B. CONTRACTOR shall bind each Representative under terms identical to these obligations of confidence as they apply in connection with each Representative's portions of the Works.

24.2 Survival

- A. The provisions of this Gc.24 shall survive final payment, completion, and acceptance of the Works, or termination or completion of the Contract.

Gc.25

UNIT PRICE WORK

25.1 Revisions to Quantities

- A. Where the Contract Documents provide that all or part of the Works is to be unit price work, initially the Contract Price will be deemed to include for all unit price work an amount equal to the sum of the unit price for each separately identified item of unit price work times the estimated quantity of each item as indicated in the Schedule of Prices. The estimated quantities of items of unit price work are approximate and are not guaranteed, and are solely for the purpose of comparison of bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of unit price work performed by CONTRACTOR will be made by ENGINEER subject to the provisions of Paragraph 25.2 A.
- B. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item in the Schedule of Prices.
- C. Revisions to the Drawings or Specifications or further Drawings or Specifications may, from time to time, be issued by ENGINEER during the progress of the Works, as deemed necessary by ENGINEER. On unit price work, any quantities stated on the Drawings or in the Schedule of Prices are intended as estimates only and may be increased or decreased as found necessary by ENGINEER.
- D. On unit price work, if: (i) the quantity of any item of unit price work performed by CONTRACTOR that is not shown to have a tiered pricing structure varies by more than plus or minus 15 percent from the estimated quantity of such item detailed in the Schedule of Prices, and provided such item is a "Major Item" as defined in Paragraph 25.1 E; (ii) there is no corresponding adjustment with respect to any other item of the Works; and (iii) CONTRACTOR believes that

CONTRACTOR is entitled to an increase in the Contract Price as a result of having incurred additional expense or OWNER believes that OWNER is entitled to a decrease in the Contract Price, then, such item of work shall be re-estimated so that CONTRACTOR and OWNER can mutually agree on a revised unit price applicable to the item of work. If mutual agreement cannot be reached between OWNER and CONTRACTOR on work to be performed, CONTRACTOR shall upon the written request of ENGINEER perform the work on a Force Account Basis as described in Gc.28.

- E. A "Major Item" is defined as any individually bid item that has an actual value, equal to or greater than 5 percent of the Contract Price as bid. The actual value is calculated on the basis of its actual or estimated bid quantity, whichever is larger.

25.2 Determinations for Payment Purposes

- A. ENGINEER will determine the actual quantities and classifications of unit price work performed by CONTRACTOR. ENGINEER will review with CONTRACTOR ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). ENGINEER's written decision thereon will be final and binding (except as modified by ENGINEER to reflect changed factual conditions or more accurate data) upon OWNER and CONTRACTOR, subject to the provisions of Gc.05.

Gc.26

ALTERATIONS, ADDITIONS, AND OMISSIONS

26.1 Authorized Changes in the Works

- A. Without invalidating the Contract and without notice to any surety, ENGINEER on behalf of OWNER may, at any time or from time to time, make alterations to the Drawings and Project Specifications, issue additional instructions and require additional work or direct the omission of work, and CONTRACTOR shall conform thereto in accordance with the provisions of the Contract subject to the following:
1. on unit price work where the alterations, additional work, or omission of work change the quantity of the work, but do not materially change the character of the work as a whole, the work shall be paid for on the basis of the actual quantities measured in the completed Works at the rates set forth in the Schedule of Prices (subject to the provisions of Gc.25);
 2. on lump sum work where the alterations, additional work, or omission of work do not materially change the character or volume of the work as a whole, the work shall be paid for at the lump sum stipulated in the Agreement or, if the Works is to be paid for in several lump sums, at the lump sums set forth in the Schedule of Prices; and
 3. where alterations, additional work, or omission of work materially change the character of unit price work as a whole or materially change the character or quantity of lump sum work as a whole, such alterations, additional work, or omission of work shall be re-estimated so that

CONTRACTOR and OWNER can mutually agree on revised unit prices and lump sums applicable to the Works. If mutual agreement cannot be reached between OWNER and CONTRACTOR on work to be performed, CONTRACTOR shall upon the written request of ENGINEER perform the work on a Force Account Basis as described in Gc.28.

- B. Alterations, additional work, or omission of work will be authorized by a Field Order, Written Amendment, Change Order, or a Work Change Directive. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Works involved in accordance with the applicable provisions of the Contract Documents, including such Field Order, Written Amendment, Change Order, or Work Change Directive (except as otherwise specifically provided).
- C. If any alteration, addition, or omission diminishes the quantity of work to be done, such alteration, omission, or addition shall not give rise to a claim for damages including, but not limited to, claims for payment for loss of anticipated profits or revenue on the work that may be so dispensed with.

26.2 Unauthorized Changes in the Works

- A. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 6.1 of the Agreement, except in the case of an emergency as provided in Gc.10 or in the case of uncovering Works as provided in Paragraph 18.3 C.

26.3 Notice to Surety

- A. If notice of any change affecting the general scope of the Works or the provisions of the Contract Documents (including, but not limited to, the Contract Price or the Contract Times (or Milestones) is required by the provisions of any Contract bond to be given to a surety, the giving of any such notice shall be CONTRACTOR's responsibility. The amount of each applicable bond shall be adjusted to reflect the effect of any such change.

Gc.27 EXTRA WORK

27.1 Authorized Extra Work

- A. CONTRACTOR shall do extra work if required by ENGINEER for lump sums or unit prices or time and material rates as may be mutually agreed upon between CONTRACTOR and OWNER, which work will be described by a Change Order or Written Amendment.
- B. Should ENGINEER decide that it is impracticable to do such work on a unit price or lump sum price basis, or time and material basis, or if OWNER and CONTRACTOR are unable to agree upon prices for extra work, CONTRACTOR shall, if instructed by ENGINEER, perform extra work on a Force Account Basis as described in Gc.28. No payment for extra work will be made unless such work is ordered in writing by ENGINEER prior to such work being performed.

- C. OWNER reserves the right to have extra work performed by OWNER's own forces or by Other Contractors and CONTRACTOR shall afford such facilities as ENGINEER may require for the performance of such work.
- D. All of the reporting requirements that are applicable to Force Account Work as specified in Gc.28 including daily work summaries, proper accounts and records of costs, and of the details that comprise the total cost of the extra work shall apply to work performed on a time and material basis.

27.2 Notice Requirements for Unauthorized Extra Work

- A. CONTRACTOR shall not perform any work for which CONTRACTOR intends to make a claim under the Contract for an increase in the Contract Price or extension to the Contract Times (or Milestones), unless directed in writing by ENGINEER to perform such work. CONTRACTOR shall give ENGINEER prior written notice, indicating specifically the work which CONTRACTOR claims constitutes extra work and the amount of payment for such work which CONTRACTOR will claim as a consequence in performing the extra work. ENGINEER shall, within the period of time set forth in Gc.05, render a decision on the matter. CONTRACTOR shall comply with ENGINEER's decision, and to the extent CONTRACTOR disagrees with all or part of the decision, CONTRACTOR shall comply with the requirements of Gc.05.
- B. If any extra, additional, or different work is executed by CONTRACTOR without prior written authorization of ENGINEER, OWNER shall not be obligated to pay CONTRACTOR any amount therefor, and CONTRACTOR shall bear all costs and expenses thereof.

Gc.28 FORCE ACCOUNT WORK

28.1 Costs Included

- A. When the value of any Works is determined on a Force Account Basis, the costs to be reimbursed to CONTRACTOR will be only those additional or incremental costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Force Account Work. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the items described in Paragraph 28.1 B, and shall not include any of the costs itemized in Paragraph 28.2.
- B. OWNER will pay to CONTRACTOR in respect of work performed on a Force Account Basis the following items:
 - 1. Materials and Equipment:
 - 1. Cost of all necessary materials and equipment purchased by CONTRACTOR at the request of ENGINEER and incorporated into the Force Account Work including cost of transportation, loading and unloading, and storage thereof, and Supplier's field services

required in connection therewith. Materials used, if acquired by direct purchase, shall be covered by receipted bills or acceptable invoices. All prices on used material incorporated in either temporary or permanent work shall be billed at a fair value, less than the original cost when new. A reasonable salvage credit shall be given for all salvageable material recovered. Salvage value of substantial material recovered shall be determined jointly by CONTRACTOR and ENGINEER. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds, and returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

2. Labor:

1. Payroll costs for necessary employees in the performance of the Force Account Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Such employees shall include, without limitation, foremen and other personnel employed full time at the Site. Payroll costs for employees (except CONTRACTOR's superintendent as specified otherwise in Paragraph 28.2 A.6) not employed full time on the Force Account Work shall be apportioned on the basis of their time spent on the Force Account Work. Each class of labor shall be billed separately, at actual payroll rates. Average rates based on different classes of labor will not be accepted.
2. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include unemployment, excise, and payroll taxes, Canada Pension Plan contributions, workers compensation, health and retirement benefits, sick leave, vacation and holiday pay, and other such reasonable labor-related fringe benefits that are required to be made pursuant to existing written agreements with employees and/or labor organizations. The expenses of performing Force Account Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by OWNER.

3. CONTRACTOR-Owned Construction Equipment:

1. Rentals for CONTRACTOR-owned construction equipment, other than small tools when used on Force Account Work and when certified as necessary by ENGINEER in accordance with the Schedule of Equipment Rental Rates approved by ENGINEER and incorporated herein including additional items of construction equipment added thereto from time to time with the approval of ENGINEER.
2. Unless otherwise specified, the rates in the Schedule of Equipment Rental Rates shall include the cost of operators, servicing, fuels,

lubricants, maintenance, repairs, insurance, and all other services, fees, taxes, profit, and overheads including, in the case of rates including operators, room and board for operators required to operate the equipment at the Site and maintain it in working order.

3. Rental rates for welding equipment shall include for the provision of all fuel, oxygen, acetylene, and lubricants, but shall not include for the supply of welding rod.
4. No payment shall be made for the use of any item of equipment on Force Account Work which is not listed in the Schedule of Equipment Rental Rates approved by ENGINEER or has no rental rate entered against it, except that if CONTRACTOR brings to the Site additional CONTRACTOR-owned equipment for the performance of the Works and submits a quotation for a rental rate which is approved by ENGINEER, such equipment and the approved rental rate shall be deemed to be entered in the Schedule of Equipment Rental Rates approved by ENGINEER. For CONTRACTOR-owned equipment specifically brought to the Site for Force Account Work, reasonable costs for mobilization of the equipment to and demobilization from the Site will be paid to CONTRACTOR.
5. The rental rates listed in the Schedule of Equipment Rental Rates for each item of equipment when approved by ENGINEER will be paid to CONTRACTOR for the number of operating hours the said item of equipment is engaged on Force Account Work at the request of ENGINEER whether such time is worked on day shift or night shift, or both.
6. One-half of the hourly rental rate shall be paid to CONTRACTOR in respect of time during which:
 1. the equipment is engaged in traveling from and returning to the place on the Site where the equipment was located when required for Force Account Work;
 2. the equipment is being modified for a different use and restored for its previous use on completion of the Force Account Work (e.g., changing boom for crane or shovel); or
 3. the equipment and operator are ordered by ENGINEER in writing to be held ready for work.
7. No payment will be made in respect of:
 1. the time during which the equipment is being maintained, repaired, or replaced;
 2. the time during which the equipment cannot be used because of breakdown, fault of the equipment or CONTRACTOR, or because of inclement weather conditions; or

3. the time during which the equipment is not in use except as provided above for travel, modification, or standby.
 8. Unless otherwise specified, the rates entered in the Schedule of Equipment Rental Rates shall be on an hourly basis.
 9. Should ENGINEER and CONTRACTOR be unable to agree upon rates for CONTRACTOR-owned equipment to be used on Force Account Work, other than small tools, CONTRACTOR shall, except as otherwise specified herein, be reimbursed for CONTRACTOR's ownership costs and for CONTRACTOR's operating costs for self-owned equipment calculated as follows:
4. CONTRACTOR-Rented Construction Equipment:
1. In the event that CONTRACTOR does not own a specific type of equipment and must obtain it by rental, CONTRACTOR shall be paid the actual rental rate for the equipment for the time that the equipment is used to accomplish the Force Account Work or is required by ENGINEER to be present, not to exceed the adjusted rental rate in the Blue Book. For CONTRACTOR-rented equipment specifically brought to the Site for Force Account Work, reasonable costs for mobilization of the equipment to and demobilization from the Site will be paid to CONTRACTOR. CONTRACTOR shall also be reimbursed for the operating cost of the equipment unless reflected in the rental rate approved by ENGINEER. Such operating cost shall be determined in the same manner as specified for CONTRACTOR-owned equipment. In the event that area practice dictates the rental of fully manned or fueled and maintained equipment, payment will be made on the basis of an invoice for the rental of the fully manned, fueled and/or maintained equipment including all costs incidental to its use, including costs of mobilization to and demobilization from the Site, provided the rate is substantiated by area practice.
5. Subcontractors:
1. Payments made by CONTRACTOR to Subcontractors for Force Account Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from subcontractors acceptable to OWNER and CONTRACTOR and shall deliver such bids to OWNER, who will then determine, with the advice of ENGINEER, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on a Force Account Basis, the Subcontractor's costs and fee shall be determined in the same manner as CONTRACTOR's costs and fee as provided in this Gc.28. If CONTRACTOR hires construction equipment from third parties for use on Force Account Work with the approval of ENGINEER such third parties will be deemed to be approved Subcontractors.

6. Special Consultants:

1. Costs of special consultants (including, but not limited to, engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Force Account Work.

7. Supplemental Costs:

1. Supplemental costs including the following:

1. Proportion of necessary transportation, travel, and subsistence expenses of CONTRACTOR's employees at the Site incurred in discharge of duties connected with Force Account Work, and transportation, travel, and subsistence expenses of CONTRACTOR's employees brought to the Site specifically for Force Account Work at the request of ENGINEER.
2. Cost of utilities, fuel, and sanitary facilities at the Site.
3. Sales, consumer, use, and other similar taxes related to the Force Account Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.
4. Cost of premiums for additional bonds and insurance in connection with the Force Account Work.
5. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expressage, and similar petty cash items in connection with the Force Account Work.

28.2 Costs Excluded

A. OWNER will not pay to CONTRACTOR in respect of work performed on a Force Account Basis any of the following items:

1. payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by CONTRACTOR, whether at the Site or in CONTRACTOR's principal or branch office for general administration of the Force Account Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 28.1 B.2 or specifically covered by Paragraph 28.1 B.6, all of which are to be considered administrative costs covered by the CONTRACTOR's fee set forth in Paragraph 28.3;
2. expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site;
3. cost of furnishings and equipment for Site offices;

4. any costs and expenses applicable to the Works paid for on a unit price or lump sum price basis;
 5. the use of small tools which have been provided for the Works being performed on a lump sum or unit price basis;
 6. salary and expenses of CONTRACTOR's superintendent (except that, if in any month, the direct wages paid to labor engaged on Force Account Work exceeds the direct wages paid to labor engaged on unit price or lump sum work CONTRACTOR shall be paid that proportion of the salary and expenses of CONTRACTOR's superintendent determined by dividing the direct wages paid to labor engaged on Force Account Work by the total direct wages paid to labor engaged on Force Account Work and unit price and lump sum work);
 7. any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Force Account Work and charges against CONTRACTOR for delinquent payments;
 8. costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including, but not limited to, the correction of *defective* Force Account Work, disposal of materials or equipment wrongly supplied, and making good any damage to property;
 9. all salary and expenses of clerical or stenographic employees;
 10. all charges for minor equipment, such as small tools, including shovels, picks, axes, saws, bars, sledges, lanterns, jacks, cables, pails, wrenches, air tools, pumps, etc., and other miscellaneous supplies and services;
 11. all drafting room accessories such as paper, computer and software, blueprinting, etc.; and
 12. other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 28.1 and 28.2.
- B. No payment will be due to CONTRACTOR in respect of work performed on a Force Account Basis:
1. without the prior written authority of ENGINEER; or
 2. if not carried out and completed to the satisfaction of ENGINEER; or
 3. if CONTRACTOR has not obtained the approval of ENGINEER before incurring any obligation or making any expenditure on account of such work.

28.3 CONTRACTOR's Fee

A. When the value of any Works is determined on a Force Account Basis, CONTRACTOR's fee for overhead and profit shall be calculated as follows:

1. a mutually acceptable fixed fee; or
2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the approved costs described in Paragraph 28.1 B:
 1. for costs incurred under Paragraph 28.1 B.1, CONTRACTOR's fee shall be 15 percent;
 2. for costs incurred under Paragraph 28.1 B.2, CONTRACTOR's fee shall be 15 percent, excluding any overtime additive payments. No fee for profit and overhead shall be paid on the premium portion of overtime;
 3. for costs incurred under Paragraph 28.1 B.5, CONTRACTOR's fee shall be 5 percent;
 4. where one or more tiers of subcontracts are on Force Account Basis and no fixed fee is agreed upon, the intent of Paragraphs 28.3 A.2.1 and 28.3 A.2.2 is that the Subcontractor who actually performs the Force Account Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 28.1 B.1 and 28.1 B.2 and that any higher tier Subcontractor and CONTRACTOR will each be paid a fee of 5 percent of the amount paid to the next lower tier Subcontractor;
 5. no fee shall be payable on the basis of costs itemized under Paragraphs 28.1 B.3, 28.1 B.6, 28.1 B.7, and 28.2;
 6. no fee shall be payable on the premium portion of overtime;
 7. the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in CONTRACTOR's fee by an amount equal to 5 percent of such net decrease; and
 8. when both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with Paragraphs 28.3 A.2.1 through 28.3 A.2.7, inclusive.

28.4 Documentation

A. Payment for work performed on a Force Account Basis will be made on the basis of the following reports:

1. CONTRACTOR shall deliver to ENGINEER for checking a daily summary of work done on a Force Account Basis. This summary on 8 1/2-inch by 11-inch paper shall be delivered to ENGINEER not later than closing time on the day following that for which the work is reported; and
 2. the summary shall contain at a minimum:
 1. a list of materials used indicating the amount and nature of each material. The cost (if known) shall also be included. This shall be later documented by proper receipts;
 2. a list of equipment used indicating the number of hours used and the kind, type, and size of equipment;
 3. a list of personnel by name, including the hours and rate at which they were used;
 4. a statement of the work accomplished for that day;
 5. this summary shall be dated and signed by CONTRACTOR's authorized representative and ENGINEER;
 6. the Contract number and other identification as well as the name of CONTRACTOR shall appear on the statement;
 7. ENGINEER will make any notations, remarks, or comments on this form that may assist in final payments; and
 8. such other information as ENGINEER may request.
- B. One copy of the summary when approved shall be retained by ENGINEER and CONTRACTOR's Application for Payment shall be substantiated with an exact copy of the approved summary.
- C. CONTRACTOR shall maintain proper accounts and records of the cost and of the details that comprise the total cost to CONTRACTOR of Force Account Work in such form and detail as shall be satisfactory to OWNER. CONTRACTOR shall at any time within the time period referred to in Gc.28, make such accounts and records together with all invoices, receipts, and vouchers available, upon request therefor, to OWNER for review and audit, if deemed necessary by ENGINEER or OWNER. In case all or part of such accounts and records are not made so available, CONTRACTOR understands that any items not supported by reason of such unavailability of the accounts and records shall be disallowed, or if payment therefor has already been made, CONTRACTOR shall, upon demand in writing by ENGINEER or OWNER, refund to OWNER the amount so disallowed.
- D. CONTRACTOR shall prosecute Force Account Work or work performed on a Force Account Basis with all reasonable diligence, and employ thereon competent workers. CONTRACTOR shall give ENGINEER or OWNER access to all accounts, bills, payrolls, and vouchers relating to Force Account Work not covered by unit prices unless a statement in writing of the actual cost of the same,

fully itemized as to labor, materials, and equipment is presented to ENGINEER before the last day of the month following that during which each specific order was complied with by CONTRACTOR.

- E. Daily timesheets shall be prepared in triplicate by CONTRACTOR listing the names, hours worked, and rates of pay for each worker, and hours and rate for equipment engaged on the Works and these shall be submitted daily to ENGINEER for checking. One copy of these timesheets when approved shall be retained by ENGINEER. CONTRACTOR's Application for Payment for labor and equipment shall be substantiated with copies of these approved timesheets.
- F. Any failure on the part of CONTRACTOR to obtain the consent and approval of ENGINEER to the purchasing of any materials or supplies, or before shipping any equipment to the Site, or to furnish when requested by ENGINEER to do so, such timesheets, invoices, receipts, and other substantiating information as specified herein, shall render CONTRACTOR liable for the full amount of all costs in connection therewith and CONTRACTOR shall have no recourse whatsoever against OWNER or ENGINEER for reimbursement of all or any part thereof.

END OF GENERAL CONDITIONS

SPECIAL CONDITIONS

Sc.01

INSURANCE

1.1 Licensed Insurers

- A. All insurance policies required by the Contract Documents to be purchased and maintained by CONTRACTOR shall be obtained from insurance companies that are duly licensed or authorized in the locations where the Works is being performed, to provide insurance for the limits and coverages so required.

1.2 Evidence of Insurance

- A. Not later than 7 days after the date of Notice of Award and before any work at the Site is started, CONTRACTOR shall deliver original certificates of insurance ("Certificates") in form satisfactory to OWNER and ENGINEER, evidencing insurance in force in accordance with this Sc.01. CONTRACTOR shall promptly deliver Certificates upon the placement, renewal, amendment, or extension of all or any part of the required insurance. Certificates shall be delivered to the certificate holders identified in Paragraphs 1.3 D., 1.6 D., and 1.7 C. Certificates shall, as a minimum, be marked to show: (i) Contract number, (ii) name of the Site, (iii) name of each additional insured and named insured; and (iv) any special coverage set forth in this Sc.01 such as waiver of subrogation, separation of insureds, and contractual liability, as applicable. In addition to delivering original Certificates to OWNER and ENGINEER as certificate holders, CONTRACTOR shall also deliver to OWNER and ENGINEER, a copy of each Certificate required to be delivered to any other certificate holder identified in this Sc.01.

1.3 General Coverage Requirements

- A. CONTRACTOR shall, without limiting its obligations or liabilities, purchase and maintain liability and other insurance as is appropriate for the Works being performed and as will provide comprehensive protection from claims arising out of or resulting from the performance of the Works or CONTRACTOR's other obligations under the Contract and for which CONTRACTOR may be legally liable, whether the act or omission out of which the claim arises is by CONTRACTOR or any Representative.
- B. The policies of insurance required by this Paragraph 1.3 to be purchased and maintained by CONTRACTOR shall, as a minimum:
 - 1. except for Workers' Compensation and Automobile Liability, contain or be endorsed to contain a provision to include as additional insureds OWNER, ENGINEER, and each other person or entity identified as an additional insured in Paragraph 1.3 E, all of whom shall be listed as additional insureds (Designated Person or Organization Form), and include coverage for the respective subsidiaries, officers, directors, partners, officials, employees, agents, and any other consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered.

thereby of all such additional insureds (and the Certificates furnished by CONTRACTOR pursuant to Paragraph 1.2 A shall so provide);

2. contain or be endorsed to contain a provision that the coverage afforded will not be canceled or restricted until at least 30 days prior written notice by certified mail, return receipt requested, has been given to OWNER, ENGINEER, CONTRACTOR, and each other additional insured identified in the Contract Documents to whom Certificates have been issued (and the Certificates furnished by CONTRACTOR pursuant to Paragraph 1.2 A shall so provide);
 3. remain continuously in effect and without interruption (i) from the date of Notice of Award through at least the date of final payment, and (ii) at all times thereafter with respect to CONTRACTOR's obligations under the Contract Documents;
 4. include at least the specific coverages provided in Paragraph 1.4; and
 5. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain continuously in effect, unless specified otherwise, for at least 2 years after the date of final payment (and CONTRACTOR shall furnish OWNER, ENGINEER, and each other additional insured identified in the Contract Documents to whom Certificates have been issued, evidence satisfactory to OWNER of continuation of such insurance at the date of final payment and each year thereafter).
- C. CONTRACTOR's obligation under the Contract to maintain uninterrupted coverage may be satisfied by successive annual policies. If any of the policies are written on a claims-made basis, such policies shall have a retroactive date to the date of Notice of Award.
- D. The Certificates required by Paragraph 1.2 A shall strictly designate the following certificate holders:
1. RHI Refractories Holding Company
Twin Tower
Wienerbergstrasse 11
1100 Vienna, Austria
Attention: Robin Schmidt Whitley
 2. Conestoga-Rovers & Associates Limited
179 Colonnade Road, Suite 400
Ottawa, Ontario K2E 7J4
Attention: Francois LaForge
- E. The following are other persons or entities to be included on the policies required by Paragraph 1.4 (excluding Workers' Compensation and Automobile Liability) as additional insureds (Designated Person or Organization Form):
1. [_____].

1.4 Specific Coverage Requirements

A. Commercial General Liability Insurance

1. Coverage shall be written on form IBC 2100, or its equivalent replacement, without limitation, restriction, or special exclusion, except as shall be acceptable to OWNER and shall:
 1. be written with limits which, at a minimum, meet the limits set forth in Paragraph 1.8 A.1;
 2. provide that completed operations coverage shall be continuously maintained for a period of at least 2 years after the date of final payment; and
 3. provide contingent employers' liability coverage.
2. If the Works involves the use of an owned, non-owned, or hired watercraft or aircraft, satisfactory evidence of owned, non-owned, or hired watercraft or aircraft liability, in a form, and at limits, acceptable to OWNER, shall be provided.

B. Automobile Liability Insurance

1. Automobile liability insurance in respect of all licensed vehicles owned or leased by CONTRACTOR shall:
 1. provide liability coverage for bodily injury, death, and damage to property; and
 2. be written with limits which, at a minimum, meet the limits set forth in Paragraph 1.8 A.2.
2. Where the policy has been issued pursuant to a government-operated automobile insurance system, CONTRACTOR shall provide OWNER and ENGINEER with confirmation of automobile insurance coverage for all automobiles registered in the name of CONTRACTOR.
3. If pollutants such as any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste are to be transported, coverage shall be written with limits which, at a minimum, meet the limits set forth in Paragraph 1.8 A.2.

C. Workers' Compensation Insurance

1. Statutory benefits as required by the province in which the Works will be performed.
2. Coverage shall be written with limits which, at a minimum, meet the limits set forth in Paragraph 1.8 A.3.

3. Prior to commencing mobilization to the Site, Substantial Performance of the Works, and submission of the final Application for Payment, CONTRACTOR shall provide evidence of compliance with workers' compensation legislation at the Site, including payments due thereunder.
4. At any time during the term of the Contract, when requested by OWNER, CONTRACTOR shall provide such evidence of compliance by CONTRACTOR and Subcontractors.

D.

D. Asbestos Liability

1. Coverage shall be written on Commercial General Liability form CG 00 01 (1/96 edition), or its equivalent, and shall not contain an asbestos exclusion. Coverage shall:
 1. be written with limits which, at a minimum, meet the limits set forth in Paragraph 1.8 C.6;
 2. provide that completed operations coverage shall be maintained for a period of at least 2 years after the date of final payment;
 3. be written on an occurrence form and not contain a sunset provision, commutation clause, or any other provision which would prohibit the reporting of a claim and the subsequent defense and indemnity that would normally be provided by the policy;
 4. be endorsed by the insurer to cover asbestos for all phases of the abatement process;
 5. provide asbestos liability arising out of or resulting from the ownership, existence, maintenance, or use of premises by or on behalf of CONTRACTOR, and operations necessary or incidental to the performance of the Contract;
 6. if the policy or any endorsement contains a provision which limits or eliminates bodily injury or property damage coverage based on final air fiber clearance levels, the policy shall be modified so that it is consistent with the clearance level and the appropriate analytical testing protocol contained in the Contract Documents; and
 7. not exclude asbestos bodily injury to employees of OWNER, ENGINEER, CONTRACTOR, or any Representative, or any of them, so long as their designated job duties do not require them to be in the regulated asbestos abatement area.

E. Umbrella Liability

1. Liability insurance specified herein may be effected in primary policies of insurance or combinations of primary and umbrella policies. Umbrella policies as a minimum shall be true follow-form coverage and shall provide all coverage incorporated in the primary underlying policies.

There shall be no additional exclusions or limitations. The umbrella policies shall contain a clause stating that it takes effect (drops down) in the event the primary aggregate is impaired or exhausted.

1.5 Pollution Legal Liability

- A. If the scope of the Works in the Contract requires the treatment, storage, or disposal of any hazardous or non-hazardous materials off the Site, CONTRACTOR shall obtain from the treatment, storage, or disposal facility (TSDF) operator, as applicable, a Certificate for Pollution Legal Liability as will provide protection from claims for losses that arise from the insured TSDF that is accepting any such materials with coverage for:
1. bodily injury, sickness, disease, mental anguish, or shock sustained by any person, or death of any person;
 2. property damage including physical injury to or destruction of tangible property including the resulting loss of use thereof, cleanup costs, and the loss of use of tangible property that has not been physically injured or destroyed; and
 3. defense including costs, charges, and expenses incurred in the investigation, adjustment, or defense of claims.
- B. Coverage shall apply to sudden and accidental and non-sudden and accidental pollution conditions including, but not limited to, the discharge, dispersal, release, or escape of smoke; vapors; soot; fumes; acids; alkalis; toxic chemicals, liquids, or gases; waste materials; or other irritants, contaminants, or pollutants into or upon land, sediments, soils, groundwater, the atmosphere, or any watercourse or body of water.
- C. Coverage shall be written with limits which, at a minimum, meet the limits set forth in Paragraph 1.8 A.5.

1.6 OWNER's Insurance

- A. In addition to the insurance required to be provided by CONTRACTOR in accordance with Paragraph 1.3, CONTRACTOR shall purchase and maintain an Owners Protective Liability insurance policy on a form acceptable to OWNER covering OWNER's and ENGINEER's general liability for claims which may arise or result from operations under the Contract. The policy shall be a separate policy, shall be written on an occurrence basis, with no deductible, and with limits set forth in Paragraph 1.8 A.6. The policy shall remain continuously in effect and without interruption from the date of Notice of Award to final payment.
- B. The policy shall include OWNER and ENGINEER as named insureds[, and each of the persons or entities listed in Paragraph 1.3 E].
- C. The policy shall contain or be endorsed to contain a provision that the coverage afforded will not be canceled or restricted until at least 60 days prior written notice by certified mail, return receipt requested, has been given to the

designated certificate holders (and the Certificate furnished by CONTRACTOR pursuant to Paragraph 1.2 A shall so provide).

- D. OWNER and ENGINEER shall be designated as certificate holders on the certificate of insurance reflecting this coverage. Format and delivery requirements for Certificates shall comply with Paragraph 1.2 A.

1.7 CONTRACTOR's Property Insurance

- A. CONTRACTOR shall purchase and maintain property insurance written on a Builders' Risk or Installation Floater and which shall:

1. be written on an "All-Risks" form including the perils of earthquake and flood, acceptable to OWNER;
2. be written at limits equal to the insurable value of the Works as determined by OWNER;
3. include as named insureds OWNER, ENGINEER, CONTRACTOR, and Subcontractors as their interests might appear;
4. contain a loss payable provision to OWNER;
5. remain continuously in effect and without interruption from the date of Notice of Award to at least 10 days after the date of final payment; and
6. be written with a deductible not exceeding [\$5,000].

- B. The policy shall contain or be endorsed to contain a provision that the coverage afforded will not be canceled or restricted until at least 60 days prior written notice by certified mail, return receipt requested, has been given to the designated certificate holders (and the Certificate furnished by CONTRACTOR pursuant to Paragraph 1.2 A shall so provide).

- C. OWNER, ENGINEER, CONTRACTOR, and Subcontractors shall be designated as certificate holders on the Certificate reflecting this coverage. Format and delivery requirements for Certificates shall comply with Paragraph 1.2 A.

- D. Partial Utilization - Acknowledgment of Property Insurer

1. If OWNER finds it necessary to occupy or use a portion or portions of the Works prior to Substantial Performance of all the Works, such use or occupancy may be accomplished in accordance with Paragraph 10.2 of the Agreement; provided that no such use or occupancy shall commence before the insurers providing the property insurance have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The giving of such notice to property insurers shall be CONTRACTOR's responsibility. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any partial use or occupancy.

E. Contractors' Equipment Insurance

1. "All risks" Contractors' equipment insurance covering construction machinery and equipment used by CONTRACTOR for the performance of the Works, including boiler insurance on temporary boilers and pressure vessels, shall be in a form acceptable to OWNER and shall not allow subrogation claims by the insurer against OWNER and ENGINEER. The policies shall be endorsed to provide OWNER and ENGINEER with not less than 15 days notice in writing in advance of cancellation, change, or amendment restricting coverage.

1.8 Minimum Limits of Liability

- A. The limits of liability for the insurance required by Sc.01 shall provide not less than the following amounts:

1. Commercial General Liability:

1. General Aggregate	\$	2,000,000
2. Products - Completed Operations Aggregate	\$	2,000,000
3. Personal Injury	\$	2,000,000
4. Each Occurrence	\$	2,000,000

2. Automobile Liability:

1. Combined Single Limit - Per Accident	\$	1,000,000
2. If "pollutants" as defined in Paragraph 1.4 B are to be transported	\$	2,000,000

3. Workers' Compensation:

Statutory

4. Asbestos Liability:

1. General Aggregate	\$	2,000,000
2. Per Claim/Each Occurrence	\$	1,000,000

5. Pollution Legal Liability (TSDF):

1. General Aggregate	\$	2,000,000
2. Per Claim	\$	1,000,000

6. Owners Protective Liability:

1. General Aggregate	\$	5,000,000
2. Each Occurrence	\$	5,000,000

7. Builders' Risk/Installation Floater:

Insurable value of the Works as determined by OWNER.

1.9 Deductibles and Self-Insured Retentions

- A. CONTRACTOR shall be solely responsible for any deductible or self-insured amounts which may exist in any insurance policies required under the Contract Documents. CONTRACTOR shall be fully responsible for all uninsured losses including those of its subtrades. Any deductible or self-insured retention amounts on the policies shall not reduce the amount of collectible limits of liability. Payment of monies up to the deductible amount made in satisfaction of a claim shall be borne solely by CONTRACTOR at no additional cost to OWNER, ENGINEER, or any additional insured or named insured identified in this Sc.01.
- B. CONTRACTOR shall indicate on the Certificates the deductible or self-insured retention amounts for each policy. OWNER reserves the right to require a bond or letter of credit to ensure payment of all losses, investigations, claims, administration, and defense expenses falling within the deductible or self-insured retention amount.

Sc.02 FAILURE TO COMPLETE WORK ON TIME

2.1 Actual Damages

- A. OWNER and CONTRACTOR recognize that time is of the essence of the Contract and that OWNER may suffer financial loss if the Works is not completed in accordance with the Contract Times (or Milestones). CONTRACTOR shall be solely responsible for any and all actual damages incurred by OWNER resulting or arising, directly or indirectly, from any failure to perform the Works in accordance with the Contract Times (or Milestones).
- B. OWNER may deduct the amounts described in this Sc.02 from any monies due or to become due CONTRACTOR or otherwise available therefor or, at OWNER's option, CONTRACTOR shall promptly pay such amounts to OWNER (or such remaining amounts after such deduction). No such deduction or payment or any other deduction or retention by OWNER or payment or reimbursement by CONTRACTOR pursuant to the Contract shall relieve CONTRACTOR from any obligation under the Contract or otherwise.

2.2 Work Completed After Completion Date

- A. Permitting CONTRACTOR to continue and finish the Works after the time fixed for its completion or after the date to which the time for completion may have been extended and/or acceptance of payment of damages hereunder, will in no way excuse CONTRACTOR's breach of the Contract nor operate as a waiver on the part of OWNER of any of its rights under the Contract or otherwise.

Sc.03 PAYMENT PROCEDURES

3.1 Progress Payments; Holdback

- A. CONTRACTOR shall submit and ENGINEER will process Applications for Payment in accordance with Article 7 of the Agreement.

- B. OWNER shall make monthly progress payments on account of the Contract Price on the basis of CONTRACTOR's Applications for Payment as recommended by ENGINEER, on a monthly basis during performance of the Works as provided in Paragraph 3.1 C.
- C. Prior to Substantial Performance, progress payments will be made in an amount equal to 90 percent of the Works completed (with the balance being holdback), less the aggregate of payments previously made and less such amounts as ENGINEER shall determine in accordance with Paragraph 7.2 B of the Agreement, or OWNER may withhold, in accordance with Paragraph 8.1 A of the Agreement.

3.2 Payment of Holdback Upon Substantial Performance

- A. After the issuance of the certificate of Substantial Performance of all the Works in accordance with Article 10 of the Agreement, CONTRACTOR shall submit an Application for Payment of the holdback amount accompanied by satisfactory evidence of compliance with workers' compensation legislation, including premiums due thereunder and such supporting documentation as is required by Article 9 of the Agreement.
- B. After receipt of an acceptable Application for Payment from CONTRACTOR and accompanying documentation as provided in Paragraph 3.2 A, ENGINEER will indicate in writing a recommendation of payment of holdback and present the Application for Payment to OWNER.
- C. On the 46th day after publication of the Certificate of Substantial Performance in accordance with the lien legislation applicable to the Site, and after OWNER is satisfied that no Liens were registered, the amount recommended will (subject to the provisions of Paragraph 3.2 D) become due, and when due will be paid by OWNER to CONTRACTOR.
- D. OWNER may retain out of the holdback amount any sums required by law to satisfy any Liens against the Works or, if permitted by the lien legislation applicable to the Site, other third party monetary claims against CONTRACTOR which are enforceable against OWNER.
- E. If CONTRACTOR fails to publish a copy of the Certificate of Substantial Performance of all the Works as required by Paragraph 3.2 C within 7 days after receiving a copy of said certificate signed by ENGINEER, OWNER may publish a copy of the certificate at CONTRACTOR's expense and at no additional cost to OWNER.

Sc.04 ADDRESSES FOR GIVING NOTICE

4.1 General

- A. Pursuant to Gc.06 of the General Conditions, all notices and other communications required to be made in writing shall be addressed for delivery as specified in the following paragraphs.

4.2 CONTRACTOR to OWNER

- A. All notices and other communications required to be made in writing from CONTRACTOR to OWNER shall be addressed for delivery separately to:

Eddy Edwards

Pietragallo, Bosick & Gordon
One Oxford Centre, 38th Floor
Pittsburgh, Pennsylvania
USA

Telephone: 412-263-2000

Fax: 412-261-5295

4.3 OWNER to CONTRACTOR

- A. All notices and other communications required to be made in writing from OWNER to CONTRACTOR shall be addressed for delivery to:

Andrée Clairoux
Asbex Limitée
6254 Notre-Dame West
Montreal, Quebec

Telephone: 514-846-2099

Fax: 514-846-2108

4.4 CONTRACTOR to ENGINEER

- A. All notices and other communications required to be made in writing from CONTRACTOR to ENGINEER shall, except as directed otherwise by ENGINEER in writing, be addressed for delivery to:

Francois LaForge
Conestoga-Rovers & Associates
179 Colonnade Rd., Suite 400
Ottawa, Ontario, K2E 7J4

Telephone: (613) 727-0510

Fax: (613) 727-0704

Sc.05 RECORD RETENTION PERIOD

5.1 Duration

- A. Pursuant to Gc.23 of the General Conditions, CONTRACTOR shall, unless otherwise specified or required by any Laws or Regulations, retain such Records for 3 years.

5.2 Destroying Records

- A. After the expiration of the record retention period, CONTRACTOR shall give OWNER 60 days written notice prior to destroying or disposing of records retained hereunder, and shall give OWNER an opportunity to take custody of said records at OWNER's expense.

Sc.06

PERFORMANCE AND PAYMENT BONDS

6.1 Submission of Bonds

- A. Not later than 7 days after the date of Notice of Award, CONTRACTOR shall deliver to OWNER an executed Performance Bond in an amount equal to at least 100 percent of the Contract Price as security for the faithful performance of all CONTRACTOR's obligations under the Contract, and also shall furnish to OWNER a separate executed Payment Bond in an amount equal to at least 100 percent of the Contract Price as security for the payment of all persons performing labor and furnishing materials in connection with the Contract.

6.2 Acceptable Sureties

- A. Bonds shall be in the form prescribed by the Contract Documents (Exhibits F and G), except as provided otherwise by Laws and Regulations, and shall be executed by such sureties as are acceptable to OWNER. Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act. Bonds required by the Contract Documents to be purchased and maintained by CONTRACTOR shall be obtained from such surety company or companies as are approved by OWNER, and as are duly licensed or authorized to transact business in the jurisdiction in which the Site is located, and to issue bonds for the limits and coverages so required. Bonds shall be approved by OWNER prior to execution of the formal Contract and shall remain in full force and effect for no less than 1 year after the date when final payment under the Contract becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents.
- B. If the surety on any bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any province where any part of the Project is located or it ceases to meet the requirements of Paragraph 6.2 A, CONTRACTOR shall within 20 days thereafter substitute another Performance and Payment bond and surety, both of which shall comply with requirements of this Sc.06.

Sc.07

PHYSICAL CONDITIONS

7.1 Technical Data Relied Upon by ENGINEER

- A. Pursuant to Paragraph 12.1 A of the General Conditions, ENGINEER has relied upon the following reports and drawings in the preparation of the Project Specifications:

1. The following reports of explorations and tests of the building materials at the Site:
 1. Report dated, March 2001 prepared by AGX entitled: Asbestos Containing Material Survey Report.
- B. Copies of this report that is not included with bidding documents may be examined by contacting the ENGINEER during regular business hours. These reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which CONTRACTOR may rely as identified and established above are incorporated therein by reference. CONTRACTOR is not entitled to rely upon other information and data utilized by ENGINEER in the preparation of Drawings and Project Specifications.

END OF SPECIAL CONDITIONS

PROJECT SPECIFICATIONS

The Works includes but is not limited to the following:

PS.1.0 GENERAL

PS.1.1 SCOPE OF WORK

1. Asbestos abatement services to be provided for this project are described on Table 1 – Scope of Work and section 4.0 of the November 21, 2002 Asbestos Assessment Report.

PS.1.2 DEFINITIONS

1. Engineer in this specification section refers to Conestoga-Rovers & Associates Ltd.
2. 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 any dimension at 99.97% efficiency.
3. Amended water: Water with a non-ionic surfactant wetting agent added to reduce water tension to allow wetting of fibres.
4. Authorized visitor: the Engineer or his representative, and persons representing regulatory agencies.
5. Negative Air Ventilation Unit: A ventilation unit capable of maintaining a negative air pressure differential of 0.02 inches of water within an enclosure relative to the area outside the enclosure. The negative air unit will be supplied with HEPA filters, a device to measure the negative air pressure within the enclosed area and a ground fault interrupt device if used in a wet environment.

PS.1.3 REGULATORY AGENCIES

1. Comply with Federal, Provincial, and local requirements pertaining to asbestos, provided that in any case of conflict among these requirements or with these specifications the more stringent requirement shall apply.
2. Comply with Sections 2.4.1 and 3.23 of the Quebec Safety Code for the Construction Industry (S-2.1, r.6), Division III of the Regulation Respecting the Quality of the Work Environment (S-2.1, r.15) and Regulations from the Commission de la Santé et de la Sécurité du Travail du Québec (CSST).
3. Prior to commencing any asbestos abatement work, the CONTRACTOR shall notify, orally and in writing, an inspector at the office of the Commission de la Santé et de la Sécurité du Travail du Québec (CSST) nearest the workplace of the operation at least 10 days prior to asbestos abatement work.

PS.1.4 INSTRUCTION AND TRAINING

- .1 Before commencing work, ensure that every worker has had instruction and training, provided by a competent person, in the hazards of asbestos exposure, in personal hygiene and work practices, and in the use, cleaning, and disposal, of respirators and protective clothing.
- .2 Instruction and training related to respirators shall include instruction and training related to:
 - .1 The limitations of the equipment.
 - .2 The inspection and maintenance of the equipment.
 - .3 The fitting of the equipment.
 - .4 The disinfecting of the equipment.
- .3 Instruction and training related to the asbestos abatement work to be conducted shall include instruction and training related to:
 - .1 Work procedures and practices to be followed for low, moderate and high risk operations.
 - .2 The construction, maintenance and inspection of high risk enclosures and decontamination facilities.
 - .3 The use, maintenance and decontamination of equipment to be used.
 - .4 The Contractor's Health and Safety Plan.

PS.1.5 SUBMITTALS

- .1 Submit proof satisfactory to the Engineer that suitable arrangements have been made to dispose of asbestos-containing waste in accordance with requirements of authority having jurisdiction.
- .2 Supply satisfactory proof to the Engineer of the following:
 - .1 Proof of worker training with respect to worker protection and asbestos abatement procedures.
 - .2 Proof that worker training was conducted by a competent individual.
 - .3 Certificate of Insurance held by the Contractor (must have asbestos insurance).
 - .4 Proof that the Contractor has Worker's Compensation coverage.
 - .5 Health and Safety Plan prepared by the Contractor.
 - .6 Proof that the CSST was notified prior to commencing any asbestos abatement work.
- .3 Notify Engineer, in writing, minimum of 48 hours in advance of Moderate and High risk asbestos abatement work.

PS.1.6 EXISTING CONDITIONS

- .1 Reports and information pertaining to material containing asbestos to be handled, removed, or otherwise disturbed during this project are bound into this specification following this Section and include:

- .1 The November 21, 2002 Asbestos Assessment Report prepared by CRA
- .2 Notify the Engineer of friable material discovered during this work and not apparent from the drawings, specifications, or report, pertaining to the work. Do not disturb such material pending instructions from the Engineer.

PS.1.7 WORKER PROTECTION

- .1 **Respirators:** For all moderate and high risk operations, provide workers with personally issued, and marked as to efficiency and purpose, reusable or replaceable filter type air purifying respirators suitable for protection against asbestos and acceptable to the Provincial Authority having jurisdiction. Workers shall wear and use the equipment while in the work area.
- .2 **Protective Clothing:** Provide workers with protective clothing that does not readily retain or permit penetration of asbestos fibres, and consists of full-body covering including head covering with snug fitting cuffs at wrists, ankles, and neck. Every worker who enters the work area shall wear protective clothing.
- .3 Eating, drinking, chewing, and smoking, are not permitted in the work area.
- .4 For all low and moderate risk operations, facilities for the washing of hands and face shall be made available to a worker and shall be used by every worker when leaving the work area.
- .5 For all moderate risk operations, before leaving work area, a worker shall decontaminate his shoes and protective clothing by using HEPA vacuum or damp wiping. When protective clothing is to be disposed of, it shall be decontaminated as above and placed in labelled disposal bags. Workers shall vacuum all exposed skin, suit, respirator and hair (after removing hood) and proceed to nearest washroom to wash hands and face.
- .6 For all high risk operations, provide a decontamination facility consisting of a series of interconnecting rooms including:
 - .1 A room suitable for changing into protective clothing and for storing contaminated protective clothing.
 - .2 A shower room, provided with hot and cold water of a constant temperature that is not less than 40° Celsius, with individual controls inside the room to regulate water flow, be capable of providing adequate supplies of hot water to maintain a temperature of at least 40° Celsius, and include clean towels.
 - .3 A room suitable for changing into street clothes and for storing clean clothing and equipment.
 - .4 Curtains of polyethylene sheeting or other suitable material fitted to each side of the entrance or exit to each room

These rooms shall be arranged in sequence and constructed so that any person entering or leaving the work area must pass through each room in the decontamination facility.

- 7 For all high risk operations, when leaving the work area, a worker shall enter the decontamination facility and shall, in the following order:
 - .1 Decontaminate any protective equipment that will be reused using a vacuum equipped with a HEPA filter or by damp wiping prior to removing it and shall then remove it.
 - .2 Dispose of any protective clothing that will not be reused into a dust tight container suitable for containing asbestos waste and appropriately labelled as containing asbestos waste.
 - .3 Shower.
 - .4 Remove and clean the respirator.

PS.1.8 VISITOR PROTECTION

- .1 Provide protective clothing and approved respirators to authorized visitors to the work areas.
- .2 Instruct authorized visitors in the use of protective clothing, respirators, and procedures.
- .3 Provide clearly visible signs warning visitors of the asbestos dust hazard in the work area.

PS.2.0 PRODUCTS

PS.2.1 MATERIALS

- .1 Drop and Enclosure Sheets:
 - .1 Polyethylene: 6-mil thick.
 - .2 FR polyethylene: 6-mil thick woven fibre reinforced fabric bonded both sides with polyethylene.
- .2 Wetting Agent (Amended Water): 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with water in a concentration to provide thorough wetting of asbestos-containing material.
- .3 Waste Containers: Waste shall be contained in two separate dust-tight containers. The inner container shall be a 6-mil thick sealable polyethylene bag. The outer container shall be a sealable metal or fibre type where there are sharp objects included in the waste material; otherwise the outer container may be sealable metal or fibre type or a second 6-mil thick sealable polyethylene bag. Waste containers shall have a preprinted cautionary asbestos warning, in both official languages, clearly visible when ready for removal to disposal site.
- .4 Tape: Tape suitable for sealing polyethylene to surfaces under both wet conditions using amended water, and dry conditions.

- .5 Slow drying sealer, non-staining, clear, water dispersible type that remains tacky on surface for at least 8 hours and designed for the purpose of trapping residual asbestos fibres. Sealers shall have flame spread and smoke developed rating less than 50 and be compatible with new fireproofing.
- .6 Canvas and Lagging: 8 oz canvas textile coated with 120-18 fire resistant lagging compound.
- .7 Glove Bag: Minimum 10 mil polyvinyl glove bag equipped with a double pull, double throw zipper and a sealable lower pouch

PS.3.0 EXECUTION

PS.3.1 GENERAL PROCEDURES

- .1 Comply with the general procedures for low, moderate and high risk and glove bag operations as set out below. In the case of contradictory or conflicting requirements the most rigorous and stringent requirements shall apply.
- .2 Prevent the spread of dust from the work area using measures appropriate to the work to be done. Use FR polyethylene drop sheets over flooring such as carpeting that absorbs dust and over all flooring in work areas where dust or contamination cannot otherwise be safely contained. When performing moderate or high risk operations and the walls themselves do not enclose the work area, erect an enclosure of polyethylene sheeting around the work area.
- .3 For all moderate and high risk operations, the mechanical ventilation system servicing the work area shall be disabled and all voids and openings, including ventilation ducts to or from the work area, shall be sealed with polyethylene sheeting and tape or other appropriate means.
- .4 Before beginning work, at each access to work areas, install barrier tape (low risk operations) or warning signs (moderate, and high risk operations) as required to isolate the work area. Warning signs shall read as follows:

"Caution - Asbestos Hazard Area
No Unauthorized Entry
Wear Assigned Protective Equipment
Breathing Asbestos Dust May Cause Serious Bodily Harm".
(and French equivalent)

- .5 For all high risk operations, a negative air ventilation unit shall be operated inside the enclosures. The negative air ventilation unit should be vented to the exterior of the building wherever possible. Where negative air ventilation units cannot be vented to the building exterior, the Contractor must ensure that the units and filters are D.O.P. tested prior to use in the work area. Satisfactory proof of D.O.P. testing must be provided to the Engineer prior to equipment installation and operation in the work area. The number or capacity of the negative air ventilation unit(s) used shall allow one complete air change within the enclosure every 20 minutes.

- .6 Before beginning work remove all visible dust and loose friable material from surfaces in the work area where dust and loose friable material is likely to be disturbed during the course of the work. Use a HEPA vacuum, or damp cloths where damp cleaning does not create a hazard and is otherwise appropriate.
- .7 Other than loose material which shall be removed by HEPA vacuum, friable material containing asbestos to be removed or disturbed shall be thoroughly wetted before and during work unless wetting creates a hazard or causes damage. Use garden reservoir type low velocity fine mist sprayer. Perform work in a manner to reduce dust creation to lowest levels practicable.
- .8 Do not use compressed air to clean up or remove dust from any surface.
- .9 Where practicable dust and waste containing asbestos shall be kept wet.
- .10 Dust and waste containing asbestos shall not be permitted to fall freely from one work level to another.
- .11 All repair operations are to be conducted as a moderate risk operation as specified in Table 1. Subsequent to the cleaning of loose material and wetting as described above the contractor will cut a length of canvas of sufficient length to ensure significant overlap with the existing damaged canvas. The canvas jacket will be placed over the damaged area and the fire resistant lagging compound will be applied.
- .12 For all high risk operations, the Contractor shall supply a competent person to inspect the work area for defects in the enclosure, barriers and decontamination facility:
 - .1 At the beginning of each shift.
 - .2 At the end of a shift where there is no shift beginning immediately following the shift that is ending.
 - .3 At least once each day on days when there are no shifts.

Records of the inspections shall be maintained by the Contractor and copies provided to the Engineer on a weekly basis.

- .13 Defects observed during an inspection shall be immediately repaired and no work, other than such repair work, shall be carried out in the work area until the repair work is completed.
- .14 Following completion of moderate and high risk operations, a water-based sealant shall be applied to surfaces from which asbestos has been removed to encapsulate any microscopic fibres that remain adhering to the surface. The sealant shall not be used to encapsulate visible fibres adhering to any surface as a result of incomplete removal. Contractor shall obtain authorization from Engineer prior to any application of sealant.
- .15 All work conducted as a low, moderate, high risk and glove bag operations will be subject to visual inspection and acceptance by the Engineer. Any contamination of surrounding areas indicated by visual inspection will require the complete cleanup of affected areas.

.16 Cleanup:

- .1 Frequently, and at regular intervals during the work, and immediately after completion of the work clean up dust and waste containing asbestos using a HEPA vacuum or by damp mopping.
- .2 Place dust and waste containing asbestos in sealed dust-tight waste bags. Drop sheets and disposable protective clothing shall be treated as asbestos waste and shall be wetted and folded to contain dust and then placed in waste bags.
- .3 Immediately before their removal from the work area, and disposal, clean each filled waste bag using damp cloths or HEPA vacuum and place in second clean waste bag.
- .4 Remove asbestos waste bags from the work area frequently and at regular intervals.
- .5 Seal and remove double-bagged waste from site. Dispose of in accordance with requirements of Provincial and Federal Authority having jurisdiction. Supervise dumping and ensure that dump operator is fully aware of hazardous nature of material to be dumped and that guidelines and regulations for asbestos disposal are followed.
- .6 Perform final thorough cleanup of work areas and adjacent areas affected by the work using HEPA vacuum.
- .7 At completion of work, all equipment, tools and materials used in the work area should be decontaminated by wet cleaning or HEPA vacuum.

PS.3.2 PROCEDURES FOR GLOVE BAG REMOVAL

- .1 Use the glove bag removal method for removal of asbestos-containing insulation material specified in Table 1.
- .2 Install the glove bag around the material to be removed. Be sure that tools, cleaning and sealing materials are in the bag prior to installation. Check seals on bags prior to starting removal and recheck as work progresses. Spray material with amended water, allow water to soak in, then respray. Cut insulation cover with a knife and remove insulation material from pipes.
- .3 After insulation is removed, wipe down pipe to remove remaining fibres and thoroughly wash the inside of the bag, pipe or equipment surfaces, and tools. Without removing the wand from the bag, change the spray bottle to an encapsulate material, then respray the inside of the bag, pipe or equipment, and ends of exposed insulation material. Excavate the bag with HEPA vacuum, remove tools from bag, remove bag from pipe, folding inward the sides of the bag, then twist and tape the open end, the wand opening and the vacuum opening.
- .4 Defects observed during an inspection shall be immediately repaired and no work, other than such repair work, shall be carried out in the work area until the repair work is completed.
- .5 Following completion of moderate risk operations, a water-based sealant shall be applied to surfaces from which asbestos has been removed to encapsulate any microscopic fibres that

remain adhering to the surface. The sealant shall not be used to encapsulate visible fibres adhering to any surface as a result of incomplete removal.

- .6 All work conducted as a moderate risk operation will be subject to visual inspection and acceptance by ENGINEER. Any contamination of surrounding areas indicated by visual inspection will require the complete cleanup of affected areas.

PS.3.3 PROCEDURES FOR EMERGENCY WORK

The following procedures are to be followed in the event of a breach or failure of a moderate or high risk enclosure.

- .1 Construct enclosure around area if time permits. If enclosure is not possible, clear local area of all occupants.
- .2 If possible, disable ventilation serving area.
- .3 Worker performing repair shall wear protective respirator. If readily available, use disposable suit. If normal work clothes are worn they may have to be disposed of if visibly contaminated.
- .4 Use of drop sheet under work to minimize clean-up if possible.
- .5 Perform emergency repair with minimum disturbance of asbestos.
- .6 Obtain asbestos equipment and perform clean-up of visible material before allowing unprotected personnel to enter area. Use HEPA filtered vacuum or wet cleaning.
- .7 Decontaminate using moderate risk procedures and return at appropriate time to complete repair following full moderate risk procedures.

PS.3.4 AIR MONITORING

- .1 From commencement of work until completion of cleaning operations air samples will periodically be collected by the ENGINEER outside of work area enclosures in accordance with CSST, Quality of the Work Environment and the Safety Code for the Construction Industry regulations.

During the course of the work, fibre content of the air inside and outside of the work areas will be measured by means of an air sampling train consisting of an air sampling pump equipped with a cellulose ester filter. The filters will be analyzed by phase contrast microscopy (PCM) for fibre content. If PCM measurements exceed 0.1 fibres per cubic centimetre outside of the work areas, work will be stopped until procedures are corrected.

- .2 If air monitoring shows that areas outside work area enclosures are contaminated, the CONTRACTOR shall enclose, maintain and clean these areas in the same manner as that applicable to work areas.
- .3 Following abatement, aggressive air sampling will be conducted by the ENGINEER inside high risk enclosures prior to dismantling the enclosure to determine if the cleanup has been

adequately performed. Aggressive air sampling will be conducted a minimum of 8 hours following the application of a sealant to all surfaces within the enclosure to allow the airborne asbestos fibres to settle. CONTRACTOR shall allow a minimum of 48 hours following application of water-based adhesive, during which time ENGINEER will conduct aggressive air sampling and transport samples to a laboratory for subsequent analysis and reporting of results to ENGINEER. If the measurements exceed 0.01 fibres per cubic centimetre, the CONTRACTOR shall reclean the area inside the enclosure and the area subjected to aggressive air sampling. Extra work required by CONTRACTOR and ENGINEER to meet said criteria of 0.01 fibres per cubic centimetre will be at CONTRACTOR's sole expense.

PS.4.0 MEASUREMENT AND PAYMENT

PS.4.1 PAYMENT

Payment for the asbestos abatement services described in the Project Specifications will be made at the lump sum price stipulated on the Schedule of Prices, which price and payment shall be full compensation for all labour, plant, materials and equipment required to perform the asbestos abatement services as described in the Project Specifications.

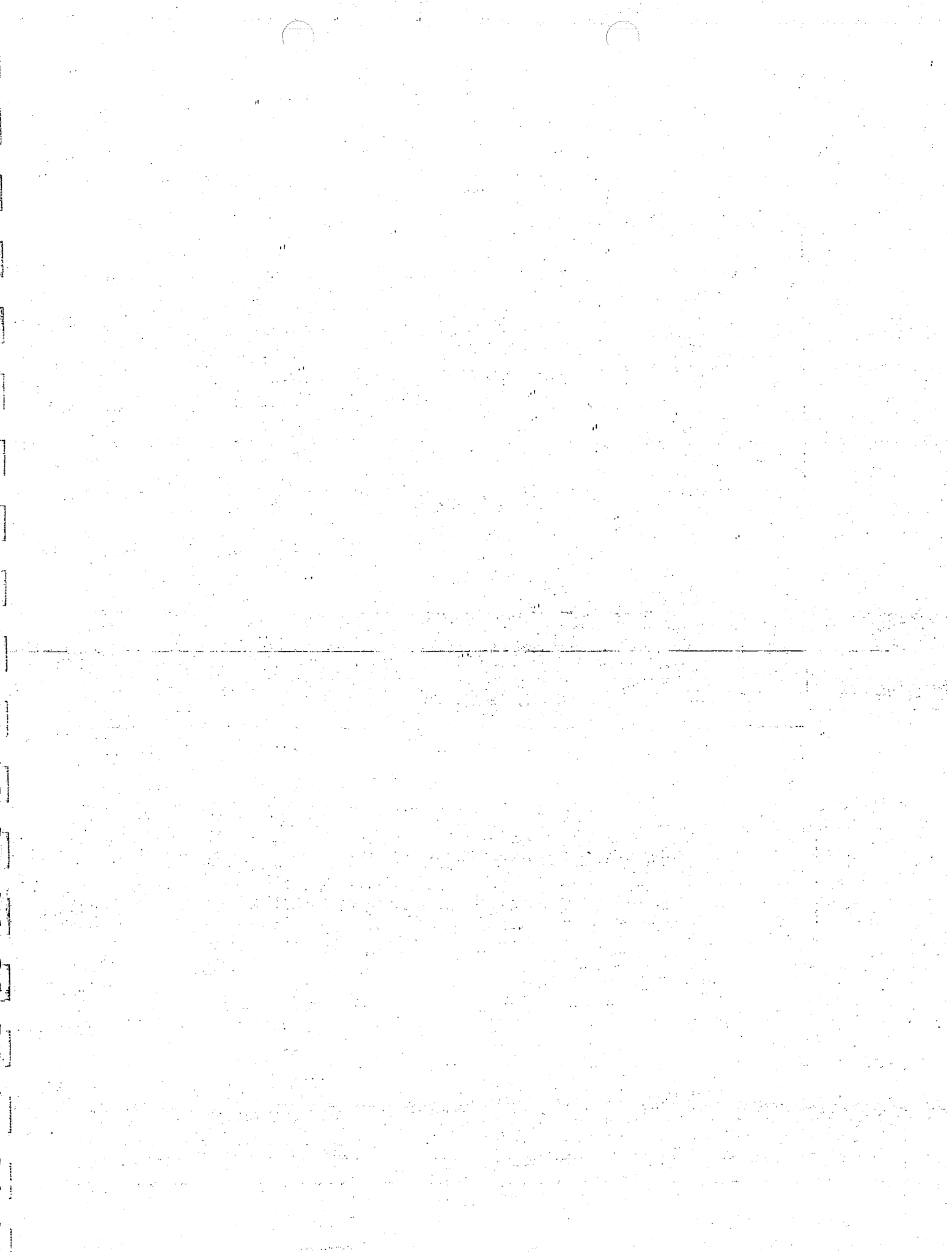
The Services shall be completed according to the following schedule:

Commencement of Services:	August 18, 2003
Final Completion of Services:	September 26, 2003

TABLE 1

SCOPE OF WORK
 ASBESTOS ABATEMENT
 RESCO CANADA INC.
 78 ROUTE 148, GRENVILLE QUEBEC

<i>Work Tasks</i>	<i>Approximate Quantity</i>	<i>Operation Type</i>
Repair all damaged pipe insulation as listed in section 4.0 of the Asbestos Assessment Report	1050 ft	Moderate Risk
Remove the pipe insulation in the north east corner of the raw material storage area of the plant	80 ft	Glove Bag
Repair all damaged pipe elbow insulation as listed in section 4.0 of the Asbestos Assessment Report	70 fittings	Moderate Risk
Repair all damaged kiln, duct and mechanical insulation in the kiln and dryer section of the plant as listed in section 4.0 of the Asbestos	6,000 ft ²	Moderate Risk
Remove all potential asbestos containing dust and debris in the kiln and dryer section of the plant including on top of kilns and dryers and below the floors in these areas	18,500 ft ²	Low Risk
Remove all potential asbestos containing dust and debris on the floor below the sprayed-on fireproofing in the highrise and rotary kiln section of the plant	10,500 ft ²	Low Risk
Repair by encapsulation any areas of the fireproofing which present an imminent risk of emitting asbestos fibres.	200 ft ²	Moderate Risk
Make any additional repairs to confirmed asbestos containing insulation which may not be listed in section 4.0 of the Asbestos Assessment Report.		Moderate Risk



February 12, 2003

Reference No. 31365

Mr. Eddie Edwards
Pietragallo, Bosick & Gordon
One Oxford Centre, 38th Floor
Pittsburgh, PA 15219

Dear Mr. Edwards:

Re: Revised Asbestos Abatement Work Program and Cost Estimate
Damaged Friable Material
Resco Canada Inc.
78 Route 148, Grenville, Quebec

1.0 INTRODUCTION

As requested, Conestoga-Rovers & Associates (CRA) is pleased to provide the following work program and engineering services cost estimate to provide consulting services relative to the completion of asbestos abatement activities at the Resco Canada Facility located at 78 Route 148, Grenville, Quebec (Site). Based on our discussions, CRA's proposed work program would consist of the following tasks:

- Task 1 - Preparation of Tender Specifications/Contract Documents and Health and Safety Plan for the Removal and Repair of Friable Asbestos;
- Task 2 - Asbestos Abatement Contractor Supervision During the Removal and Repair of All Friable ACM; and
- Task 3 - Reporting.

CRA's proposed methodologies and procedures to complete the above tasks are discussed in the following sections.

2.0 WORK PROGRAM

2.1 TASK 1 - PREPARATION OF TENDER SPECIFICATIONS/CONTRACT DOCUMENTS AND HEALTH AND SAFETY PLAN FOR ASBESTOS ABATEMENT

CRA will prepare tender specifications for the removal and/or repair of all damaged friable pipe straight insulation, pipe elbow insulation, kiln insulation, boiler insulation, mechanical insulation and sprayed-on wall insulation identified at the Site, as listed in Appendix A. The purpose of the tender specifications prepared will be to provide technical guidance and recommended procedures and work practices to be followed by asbestos abatement contractors

for moderate risk, high risk and glove bag operations for asbestos abatement at the Site. The tender specifications prepared by CRA will include the following:

- summary of work to be performed by the asbestos abatement contractor;
- definitions;
- regulatory agency notification requirements;
- submittal requirements by the asbestos abatement contractor to CRA and RHI-AG;
- instruction and training requirements of the asbestos abatement contractor personnel;
- personal protective equipment (PPE) and worker protection requirements;
- visitor protection requirements;
- materials and equipment to be used by the asbestos abatement contractor;
- abatement procedures to be followed by the asbestos abatement contractor for high risk, moderate risk and glove bag Operations in the Province of Quebec;
- air monitoring protocol;
- waste disposal requirements;
- work area inspection requirements; and
- emergency work contingency requirements.

The tender specifications to be prepared by CRA will comply with the requirements of Section 3.23.1 of the Safety Code for the Construction Industry as regulated by The Commission de la Santé et de la Sécurité du Travail du Québec (CSST).

In addition, a Site-specific health and safety plan (HASP) will be developed to ensure that all on-Site activities conducted by CRA are performed in accordance with the Act Respecting Occupational Health and Safety (CSST). Site-specific HASPs are prepared to fulfil the obligations under Canadian Occupational Safety and Health Law and to maintain consistent health and safety procedures across the company for projects involving fieldwork. A typical CRA Site-specific HASP includes the following:

- a description of the work location;
- a description of the hazard that may be encountered;
- personal protective equipment (PPE) to be used;
- personal air monitoring (if necessary);
- environmental monitoring requirements (if required);
- decontamination requirements (if required);
- personnel information, contractor/subcontractor information;

- work activities covered under the HASP; and
- emergency contingency plan (if required).

2.2 TASK 2 - ASBESTOS ABATEMENT CONTRACTOR SUPERVISION

CRA will provide on Site asbestos abatement contractor supervision and oversight for the removal and/or repair of all damaged friable asbestos containing pipe straight insulation, pipe elbow insulation, kiln insulation, boiler insulation, mechanical insulation and sprayed-on wall insulation identified. During asbestos removal activities, CRA will attend the Site and will visually inspect the work areas for defects in any enclosures, barriers or decontamination facilities that have been erected for the completion of the work. Any defects observed during an inspection will be reported to the asbestos abatement contractor's Site supervisor for immediate correction, no asbestos abatement activities will be allowed to proceed until all observed defects have been corrected.

CRA's inspection will also ensure that appropriate hygiene and work practices are being followed by the asbestos abatement contractor during the project and that the work area is thoroughly cleaned of asbestos dust and waste prior to dismantling any barriers, enclosure or decontamination facilities.

2.2.1 TASK 2.1 - AIR MONITORING

From commencement of work until completion of cleaning operations, air samples will periodically be collected by CRA inside and outside of work area enclosures in accordance with section 13 of the Regulation Respecting the Quality of the Work Environment (CSST).

During the course of the work, fibre content of the air outside work areas will be measured by means of an air sampling train consisting of an air-sampling pump equipped with a cellulose ester filter. The filters will be analyzed by phase contrast microscopy (PCM) for fibre content. If PCM measurements exceed 0.1 fibres per cubic centimeter work will be stopped until procedures are corrected.

Following abatement, aggressive air sampling will be conducted by CRA inside the Type 3 enclosure prior to dismantling to determine if the cleanup has been adequately performed. If the measurements exceed 0.01 fibres per cubic centimeter, the asbestos abatement contractor shall re-clean the area inside the enclosure and the area subjected to aggressive air sampling.

2.3 TASK 3 - REPORTING

Upon completion of the asbestos abatement activities and receipt of analytical data, an Asbestos Abatement Report summarizing all field activities and analytical data generated will be prepared. The report will be submitted within two weeks following completion of the asbestos abatement activities.

3.0 COST ESTIMATE

The estimated cost to complete the above mentioned engineering services is \$34,925.00 U.S. excluding taxes. A breakdown of this cost is presented on Table 1. Fees for professional services will be based on time actually spent on the project and are based on current Professional Engineering rates. CRA does not charge a premium for overtime, weekend or holiday work necessary to meet client deadlines. The change in the cost for the preparation of the RFB from previous budget estimates reflects the requirement for an additional Site visit to verify the scope of work to be included in the bid documents.

As requested, CRA has also provided an estimate of asbestos contractor services to perform the abatement. The estimated costs have been prepared based on the recommendations provided in the Asbestos Assessment Report prepared by CRA in November 2002 and the Recommended Asbestos Abatement Strategy prepared by CRA in January 2003. The asbestos abatement costs were estimated through an assessment of the level of effort required to undertake asbestos repair (enclosure) and, where appropriate, asbestos removal activities, associated with the damaged ACM listed in Appendix A. The estimated cost for the abatement contractor is \$362,200.00 U.S. excluding taxes. This estimate is based on prior experience and is subject to reception of a firm quote from a professional asbestos abatement contractor. CRA will notify RHI-AG and/or their representatives of any cost discrepancy between our estimate and the quote received from the professional asbestos contractor.

Any changes to the scope of work and engineering services cost estimate described herein will be made in consultation with RHI-AG and/or their representatives and will not be carried out without prior approval.

February 12, 2003

5

Reference No. 31365

4.0 SUMMARY

The cost estimate and work program presented above are based on the recommendations provided in the Asbestos Assessment Report (CRA November 2002). This proposal was prepared to assist RHI-AG with preliminary budgetary planning in respect to the abatement of friable asbestos as identified in Appendix A. Please do not hesitate to contact our office should you have any questions or comments concerning this submission.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Trent Windsor, C.E.T.

TLW/ff/5

Encl.

TABLE 1

BUDGET ESTIMATE
 ASBESTOS ABATEMENT SERVICES
 RESCO FACILITY
 78 ROUTE 148, GRENVILLE, QUEBEC

A) <u>ENGINEERING SERVICES</u>		<i>Estimated Cost</i> ⁽¹⁾
<i>Abatement Issue</i>		
1)	Preparation of Draft Request for Bid (RFB) and submission to client for review and comment	\$1,600.00
2)	Finalization of RFB and issuance to three to five prospective asbestos abatement contractors	\$200.00
3)	Pre-bid meeting with prospective bidders	\$500.00
4)	Contractor selection and contract award	\$200.00
5)	Asbestos Abatement Services	
	a) On-Site inspections	\$22,500.00
	b) Air Monitoring equipment including pumps, air sampling cassettes, and analyses.	\$3,250.00
	c) Disbursements (accommodations, meals, transportation)	\$4,825.00
6)	Preparation of letter report summarizing the asbestos abatement activities.	\$1,850.00
ENGINEERING SERVICES TOTAL		\$34,925.00 ⁽²⁾
<hr/>		
B) <u>ABATEMENT SERVICES</u>		
1)	1050 linear feet of pipe insulation	\$6,500.00
2)	70 damaged pipe fittings	\$700.00
3)	damaged duct, kiln and mechanical insulation and associated dust and debris removal	\$195,000.00
4)	spayed-on fireproofing and associated dust and debris	\$160,000.00
CONTRACTING SERVICES TOTAL		\$362,200.00 ⁽²⁾

⁽¹⁾ Abatement service costs are based on previous experience and are subject to reception of a firm quote from a professional asbestos abatement contractor.

⁽²⁾ All prices are estimated and are expressed in US dollars based on the exchange rate of February 6, 2003 of \$1.65 Cdn. This rate is subject to change.

APPENDIX A

**ASBESTOS CONTAINING MATERIALS
LOCATIONS AND APPROXIMATE QUANTITIES**

High-rise

approximately 30 ft of pipe insulation, shuttle conveyor floor (2nd floor) from K 31 to H 31; and approximately 24,000 square feet of sprayed-on wall insulation.

West Half of Main Plant (Kiln Section)

Pipe Insulation

approximately 80 ft of pipe insulation in the north east corner of the raw material storage building;

approximately 135 ft of pipe insulation from Ax 6W to E 6W;

approximately 5 ft of pipe insulation at G 6W;

approximately 5 ft of pipe insulation at F 3W;

approximately 55 ft of pipe insulation from C 2W to C4W;

approximately 60 ft of pipe insulation from C 4W to D4W;

approximately 5 ft of pipe insulation at B 4;

approximately 10 ft of pipe insulation at C 4;

approximately 75 ft of pipe insulation from B 7 to B 10;

approximately 5 ft of pipe insulation at B 12

approximately 50 ft of pipe insulation from B 14 to B 16; and

approximately 5 ft of pipe insulation at D 13.

Pipe Fitting Insulation

two elbows at B 11.

Kiln #1

waste heat duct insulation at E 16;

waste heat duct insulation at F 16;

6 elbows at E 13;

8 elbows at E 12, oil pump station;

waste heat duct insulation at E 10;

waste heat duct insulation at E 6;

waste heat duct insulation at E 5;

waste heat pipe y fitting insulation from E 6 to F 6;

pipe insulation and elbows at gas feed lines along kiln; and debris along horizontal surfaces.

Kiln #2

fan housing and mechanical insulation in mezzanine atop kiln at G6 to G 7;
pipe insulation at G 6 to G 7;
kiln insulation at various sections along both sides of kiln;
damaged waste heat duct insulation above the kiln;
pipe insulation and elbows at gas feed lines along kiln; and
debris along horizontal surfaces.

Kiln #3

recovery heat duct insulation, extensive damage between J 5W to J 4W;
mechanical duct insulation at J 1W to J2W;
pipe and elbow insulation from J 3 to J 9;
pipe and elbow insulation from H 3 to H 9;
elbow insulation at H 10;
elbow insulation at H 11, oil pump station;
pipe fitting at J 12;
significant damage to the kiln insulation along the length of the kiln especially at the west end
of the kiln and at hatches and other portions of the kiln frequently disturbed by plant and
maintenance personnel.

East Half of Main Plant (Dryer, Silo and Workshop Section)

Pipe Insulation

approximately 5 ft at B 16;
approximately 5 ft at Ax 16;
approximately 5 ft at Ax 18 to Ax 19;
approximately 25 ft at Ax 24 to Ax 25;
approximately 5 ft at Ax 31.5, Welders Shop;
approximately 5 ft at Ax 32, Welders Shop;
approximately 75 ft between Ax 33 and Ax 34, Lift Truck Repair Shop;
approximately 5 ft at Ax 34.5, Electric Shop;
approximately 10 ft at Ax 40, Plant Stores;
approximately 5 ft at M 38, Canteen;
approximately 10 ft at P 37, Boiler Room;
approximately 15 ft at O 36, Boiler Room;
approximately 10 ft at N 36, Boiler Room;
approximately 15 ft at M 36, Boiler Room;
approximately 50 ft at M 35, Compressor Room;
approximately 45 ft at R 32A;
approximately 120 ft from L 30 to T 30;
approximately 15 ft at V 25;
approximately 30 ft from Bx 24 to Cx 24; and
approximately 5 ft at Dx 24.

Pipe Fitting Insulation

1 elbow at G 38, Plant Stores;
2 elbows at O 38, Canteen;
5 elbows at O 35, Compressor Room;
1 elbow at M 34, Lab;
1 elbow at O 34, Lab;
1 elbow at Fx 34A;
1 elbow at Fx 32A;
2 elbows at T 28; and
1 pipe end at W 25.

Boiler Insulation

moderate damage to protective covering on boiler #4 at O 37

Duct Insulation

from Dx 21 to Dx 22; and
along and above Dryer 1, 2 and 3.

Fan Housing and Mechanical Insulation

moderate damage at all locations on top of Dryer 1, 2 and 3.

Sprayed on Wall Insulation

approximately 22,000 square feet located in the Rotary Kiln Area of the plant.

Debris

potential asbestos containing dust and debris along all horizontal surfaces in the vicinity of the dryers.

Research and Development Building

First Floor

approximately 5 ft of pipe insulation in room CR 1;
2 elbows in room CR 2;
5 elbows in room CR 3;
7 elbows at the west end of the two-story building;
approximately 5 ft of pipe insulation at the west end of the two-story building;
2 elbows at the south east end of the two-story building;
2 elbows at the north east end of the two-story building;
approximately 15 ft of pipe insulation on the rain leader at the east end of the two-story building; and
1 elbow at the main foyer of the two-story building.

Second Floor

approximately 10 ft of pipe insulation on the rain leader in the closet next to the washroom in the two-story building.

Corridor between 2 Story Building and Pilot Plant

approximately 15 ft of pipe insulation at the south end of the corridor;
7 elbows at the south end of the corridor;
approximately 15 ft of pipe straight insulation on the rain leader at the south end of the corridor;
1 pipe fitting on the rain leader at the north end of the corridor.

Boiler Room

5 elbows

Pilot Plant

1 elbow at east end of the shop; and
1 fitting on a rain leader at the west end of the shop.