

TENDER DOCUMENTS

SECTION 5 STANDARD ADMINISTRATIVE CONDITIONS

TABLE OF CONTENTS

	PAGE
SECTION 5 STANDARD ADMINISTRATIVE CONDITIONS.....	1
5.1 INTERPRETATION OF THE CONTRACT	1
5.2 DEFINITIONS	1
5.3 ACRONYMS, SYMBOLS AND ABBREVIATIONS	2
5.4 STANDARDS.....	3
5.5 CONTRACT DOCUMENTS.....	4
5.6 ORDER OF PRECEDENCE	5
5.7 CONTRACT ADMINISTRATION	6
5.8 LAWS AND REGULATIONS.....	7
5.9 PERMITS.....	7
5.10 NOT APPLICABLE	8
5.11 CLOSING OF STREETS OR ROADS	8
5.12 CONTRACTOR'S LIABILITY	8
5.13 FIRE PROTECTION.....	8
5.14 WORK PLANNING	9
5.15 QUALITY MANAGEMENT, INSPECTIONS AND TESTING	13
5.16 TEMPORARY WORKS, WORKSITE SERVICES AND OTHERS	16
5.17 PRESERVATION OF BURIED STRUCTURES	23
5.18 PRESERVATION OF OTHER STRUCTURES.....	24
5.19 PRESERVATION OF THE EQUIPMENT NECESSARY FOR THE OPERATION OF THE OWNER'S STRUCTURES.....	26
5.20 PRESERVATION OF NEW OR EXISTING STRUCTURES AND EQUIPMENT	26
5.21 MATERIALS, LABOUR AND TOOLING PROVIDED BY THE CONTRACTOR	27
5.22 MATERIALS, LABOUR AND TOOLING PROVIDED BY THE OWNER.....	27
5.23 NOT APPLICABLE	28
5.24 OCCUPANCY AND MAINTENANCE OF WORK AREAS.....	28
5.25 SIMULTANEOUS WORKS BY THE OWNER OR OTHER CONTRACTORS.....	28
5.26 NAVIGATION ON THE RIVER, SEAWAY, LA PRAIRIE BASIN AND LACHINE CANAL	29
5.27 NOT APPLICABLE	31
5.28 DOCUMENTS AND SAMPLES SUBMITTAL.....	31
5.29 WORKSITE DOCUMENTS	33

5.30	DOCUMENTS AND ITEMS TO BE SUBMITTED UPON COMPLETION OF THE WORK	33
5.31	NOT APPLICABLE	34
5.32	SUBSTITUTION	34
5.33	WORK SCHEDULE	36
5.34	INTERIM AND FINAL ACCEPTANCE OF THE WORK AND HOLDBACK.....	37
5.35	DAMAGES	39
5.36	NOT APPLICABLE	43

SECTION 5 STANDARD ADMINISTRATIVE CONDITIONS

5.1 INTERPRETATION OF THE CONTRACT

- 5.1.1 The use of the infinitive in these specifications indicates an obligation of the Contractor.
- 5.1.2 The work shall be in accordance with the Contract documents and the Engineer's instructions.

5.2 DEFINITIONS

- 5.2.1 In the Contract,
 - 5.2.1.1 "addendum" means the instrument amending the Tender Documents prior to the deadline set for the receipt of tenders;
 - 5.2.1.2 "change order" means the instrument amending the object, the clauses or the conditions of the Contract after signature thereof;
 - 5.2.1.3 "worksite" means the location where the work is being carried out, as well as the immediate area used for the temporary structures or for the storage of materials and tooling;
 - 5.2.1.4 "plans and specifications" means the *Special Administrative Conditions*, the *Special Technical Conditions*, including the Contract plans, the *Standard Administrative Conditions* and the *Standard Technical Conditions*, as well as any amendments made to these sections in accordance with the *General Conditions*;
 - 5.2.1.5 "Contract documents" means the documents constituting the Contract pursuant to Article 5.5 *Contract Documents*;
 - 5.2.1.6 "Contractor" means the individual or corporate entity designated as the successful tenderer in the Notice of Contract Award;
 - 5.2.1.7 "tests" means the tests carried out on the materials and structures to verify their compliance with the standards and with the requirements of the plans and specifications;
 - 5.2.1.8 "day" means a calendar day, that is, a period of twenty-four (24) hours, considered from midnight to midnight, that corresponds to the divisions of a calendar month;
 - 5.2.1.9 "working day" means a day other than a Saturday, Sunday or a construction holiday in the area where the structure is located;

- 5.2.1.10 “theoretical lines” means the lines shown on the plans or described in the specifications delineating the structures;
- 5.2.1.11 “Owner” means The Jacques Cartier and Champlain Bridges Incorporated, acting as an agent of His Majesty in Right of Canada and exercising the powers thereof;
- 5.2.1.12 “subcontractor” means a subcontractor as defined in paragraph 8.1.1.13 of Section 8 *General Conditions*;
- 5.2.1.13 “Price Table” means the price table contained in the Contractor’s Tender Form, subject to any changes specified in the Notice of Contract Award.

5.3 ACRONYMS, SYMBOLS AND ABBREVIATIONS

5.3.1 Where referred to in the Contract, the following acronyms and symbols refer to the following:

- | | | |
|----------|--------|---|
| 5.3.1.1 | AASHTO | American Association of State Highway and Transportation Officials |
| 5.3.1.2 | ACI | American Concrete Institute |
| 5.3.1.3 | AISC | American Institute of Steel Construction |
| 5.3.1.4 | ANSI | American National Standards Institute |
| 5.3.1.5 | ASME | American Society of Mechanical Engineers |
| 5.3.1.6 | ASTM | ASTM International (formerly known as American Society for Testing and Materials) |
| 5.3.1.7 | AWS | American Welding Society |
| 5.3.1.8 | BNQ | Bureau de normalisation du Québec |
| 5.3.1.9 | CCDG | Cahier des charges et devis généraux du ministère des Transports du Québec |
| 5.3.1.10 | CEC | Canadian Electrical Code |
| 5.3.1.11 | CGSB | Canadian General Standard Board |
| 5.3.1.12 | CISC | Canadian Institute of Steel Construction |
| 5.3.1.13 | CSA | Canadian Standards Association |
| 5.3.1.14 | CWB | Canadian Welding Bureau |

5.3.1.15	FED-STD	Federal Standards
5.3.1.16	GCMG	Galvanized corrugated metal guardrail
5.3.1.17	HPS	High pressure sodium (lamp)
5.3.1.18	IES	Illuminating Engineering Society
5.3.1.19	ISO	International Organization for Standardization
5.3.1.20	LC	Laboratoire des chaussées du ministère des Transports du Québec
5.3.1.21	LCPC	Laboratoire Central des Ponts et Chaussées (France)
5.3.1.22	LPS	Low pressure sodium (lamp)
5.3.1.23	NBC	National Building Code
5.3.1.24	NCHRP	National Cooperative Highway Research Program
5.3.1.25	NEMA	National Electrical Manufacturers Association
5.3.1.26	NLGA	National Lumber Grades Authority
5.3.1.27	OPSS	Ontario Provincial Standard Specification
5.3.1.28	QEC	Quebec Electrical Code
5.3.1.29	SSPC	The Society for Protective Coatings
5.3.1.30	ULC	Underwriters Laboratories of Canada

5.4 STANDARDS

5.4.1 Not applicable

5.4.2 Not applicable

5.4.3 In the event of ambiguity or contradiction between a standard referred to in both the Contract and on the plans and in the specifications, the document that is more favourable to the Owner shall prevail. The Owner will decide which is more favourable thereto.

5.4.4 Canadian standards take precedence over Quebec standards and Quebec standards take precedence over U.S. or foreign standards.

5.5 CONTRACT DOCUMENTS

- 5.5.1 Subject to paragraphs 5.5.3 and 5.5.4, the documents constituting the Contract between the Owner and the Contractor (also referred to as the “Contract”) are:
- 5.5.1.1 the Tender Documents, as referred to in Article 2.1 *Tender Documents*;
 - 5.5.1.2 the tender submitted by the Contractor in response to the Call for Tenders for the Contract;
 - 5.5.1.3 the Notice of Contract Award issued in writing by the Owner;
 - 5.5.1.4 any amendment to the Contract made in accordance with the General Conditions.
- 5.5.2 In the Contract:
- 5.5.2.1 “Fixed Price Agreement” means that part of the Contract which provides for a lump sum payment to be made for the performance of the work to which it relates; and
 - 5.5.2.2 “Unit Price Agreement” means that part of the Contract where it is stipulated that the product of multiplying a price by a number of measurement units in a category will be made as payment for the performance of the work covered by such agreement.
- 5.5.3 Any provision of the Contract that expressly applies only to a Unit Price Agreement does not apply to any part of the work covered by the Fixed Price Agreement.
- 5.5.4 Any provision of the Contract that expressly applies only to a Fixed Price Agreement does not apply to any part of the work covered by the Unit Price Agreement.
- 5.5.5 Nothing in the Contract documents may create a contractual relationship between:
- 5.5.5.1 the Owner and a subcontractor or a supplier, or any of the representatives or employees thereof, or any other person carrying out any part of the work on their behalf;
 - 5.5.5.2 the Engineer and a subcontractor or a supplier, or any of the representatives or employees thereof, or any other person carrying out any part of the work on their behalf.
- 5.5.6 The Contract documents complement each other. What is prescribed by one of these documents is binding on the parties in the same way as if it were prescribed by all of them.
- 5.5.7 Terms or abbreviations which have a well-known technical or commercial meaning are used in the Contract documents in the sense thus assigned thereto.
- 5.5.8 Any word used in the masculine or singular in the Contract documents may have the meaning of the feminine or plural when the context so requires.

- 5.5.9 Neither the organization of the specifications into sections, subsections, articles and paragraphs nor the arrangement of the plans shall in any way be construed as requiring the Contractor to divide the work among the subcontractors and suppliers and to determine the scope of the work assigned to each trade.
- 5.5.10 Some of the general requirements set out in the *Standard Administrative Conditions* and *Standard Technical Conditions* may be supplemented by requirements specific to the work set out on the plans and in the specifications.
- 5.5.11 The work shall be in accordance with the plans and specifications and the Engineer's instructions.
- 5.5.12 For the purposes of the Contract, including incidental purposes, the Owner's address shall be deemed to be the following:
- 1225, St-Charles Street West, Suite 500
Longueuil, Quebec J4K 0B9
- 5.5.13 Not applicable
- 5.5.14 The Contract shall be administered and interpreted in accordance with the laws in force in the Province of Quebec.
- 5.5.15 The parties agree that the Contract was entered into in Longueuil, Quebec and is subject to the laws applicable in the Province of Quebec, and that any action relating thereto shall be brought in the judicial district of Montreal.

5.6 ORDER OF PRECEDENCE

- 5.6.1 In the event of a conflict or discrepancy between the documents listed below, the wording of the document listed first shall take precedence over the wording of any subsequent document listed:
- 5.6.1.1 any amendment to the Contract made in accordance with the *General Conditions*;
- 5.6.1.2 the Notice of Contract Award, including any document incorporated into a Contract document prior to the issuance of the Notice of Contract Award (Section 1);
- 5.6.1.3 the document entitled "*Special Administrative Conditions*" (Section 3);
- 5.6.1.4 the document entitled "*Standard Administrative Conditions*" (Section 5);
- 5.6.1.5 the document entitled "*Standard Pay Items*" (Section 7B);
- 5.6.1.6 the document entitled "*General Conditions*" (Section 8);
- 5.6.1.7 the document entitled "*Special Technical Conditions*" (Section 4);

- 5.6.1.8 the document entitled “*Standard Technical Conditions*” (Section 6);
 - 5.6.1.9 the document entitled “*Instructions to Tenderers*” (Section 2);
 - 5.6.1.10 the document entitled “*Tender and Terms of Payment Form*” (Section 7A) duly signed;
 - 5.6.1.11 the document entitled “*Contract Security and Insurance Conditions*” (Section 10);
 - 5.6.1.12 not applicable;
 - 5.6.1.13 not applicable;
 - 5.6.1.14 not applicable.
- 5.6.2 Notwithstanding the *General Conditions*, in the event of any conflict or discrepancy between the requirements of these specifications and the specifications shown on the plans listed in paragraph 4.02.1 *Contract Plans*, the most stringent of the requirements or specifications to the advantage of the Owner shall prevail.

5.7 CONTRACT ADMINISTRATION

- 5.7.1 The Owner’s Chief Executive Officer or a person designated thereby shall be responsible for the administration of the Contract.
- 5.7.1.1 The language used in the administration of the Contract shall be the language in which the Contractor’s tender was submitted.
- 5.7.2 The provisions of Article 8.19 *Contractor’s Superintendent* of the *General Conditions* do not apply to this Contract and are replaced by the following provisions.
- 5.7.3 For the purposes of this Contract, the Contractor shall appoint a Project Manager and a Superintendent.
- 5.7.4 The Contractor’s Project Manager shall have a degree in engineering or a technique in the field related to the Contract and at least ten (10) years of experience, including five (5) years of relevant experience in work of comparable scope and complexity to that of this Contract, or any combination of training and experience deemed at least equivalent by the Engineer.
- 5.7.5 The tasks to be performed by the Contractor’s Project Manager are, without however being limited to, the following:
- 5.7.5.1 he shall have full responsibility for the operations of the Contractor in the performance of the work and shall be authorized to receive, on behalf of the Contractor, any notice, consent, order, directive, decision or other communication that may be given thereto under the Contract;

- 5.7.5.2 he shall ensure that all documents of a technical nature, such as procedures, plans, technical data sheets, design notes, schedules and updates, as well as the prevention program, lifting plans, control measures, certifications, mixes, samples, methods, environmental protection plan and emergency measures plan are prepared and transmitted in strict compliance with the requirements of the plans and specifications, to the satisfaction of the Engineer.
- 5.7.6 The Contractor's Superintendent shall have at least ten (10) years of experience, including five (5) years of relevant experience in work of comparable scope and complexity to that of this Contract.
- 5.7.7 Not applicable
- 5.7.8 The Contractor shall not designate the same person to act as Project Manager and Superintendent.
- 5.7.9 During working hours and until the issuance of the Interim Certificate of Completion, the Contractor shall maintain a Project Manager and a Superintendent on the work site.
- 5.7.10 The Contractor may not replace the Project Manager or Superintendent without the written consent of the Engineer. In addition, at the request of the Engineer, the Contractor shall remove any Project Manager or Superintendent who, in the opinion of the Engineer, does not meet the requirements, and promptly replace him with another person who is acceptable to the Engineer.
- 5.7.11 Any failure by the Contractor to comply with the requirements of paragraph 5.7.9 and/or paragraph 5.7.10 will result in the application of Article 5.35.9 *Damages for Failure to Comply with the Requirements Related to Contract Administration*.

5.8 LAWS AND REGULATIONS

- 5.8.1 The Contractor shall comply with all laws, ordinances, regulations and orders in council of the federal, provincial and municipal governments and agencies thereof applicable to the work and shall be responsible for any contravention of such laws, ordinances, regulations and orders in council.
- 5.8.2 The word "law" includes any laws, codes and regulations pertaining to work on a construction site, including the *Canada Labour Code - Part II - Health and Safety* and the *Quebec Act respecting Occupational Health and Safety*, as well as the related policies, laws and guides, all as amended from time to time.

5.9 PERMITS

- 5.9.1 The Contractor shall obtain, at its own expense, all permits, certificates, licences and authorizations required by law for the performance of the work. In all cases, the Contractor shall, at its own expense, comply with the requirements associated with such permits, certificates, licences and authorizations.

5.9.2 The Contractor shall provide the Owner, upon request, with certified copies of the aforementioned documents and with the receipts showing payment of the required fees.

5.10 NOT APPLICABLE

5.11 CLOSING OF STREETS OR ROADS

5.11.1 If, as a result of the work, the Contractor must close to traffic or obstruct certain streets or roads which are under the authority of jurisdictions other than that of the Owner, the Contractor shall obtain, at its own expense, the prior authorizations and enter into all agreements required to that effect with the appropriate authorities.

5.11.2 Copies of such authorizations shall be forwarded to the Engineer at least fourteen (14) days prior to the commencement of any work requiring the closure of traffic or the obstruction of streets or roads.

5.12 CONTRACTOR'S LIABILITY

5.12.1 The Contractor shall assume full responsibility for all damage resulting from the performance of this work, including damage caused as a result of the negligence, recklessness, or lack of skill of its representatives, employees, agents, subcontractors, subcontractors thereof, suppliers, or any other person for whom the Contractor is responsible.

5.12.2 The Contractor shall indemnify and save harmless the Owner and His Majesty in Right of Canada from and against all claims, demands, losses, costs, damage, actions, suits or proceedings by any person based upon, arising out of, connected with, occasioned by or attributable to the activities of the Contractor, its employees, agents and subcontractors, as well as of the subcontractors thereof, in the performance of the work under the contract, including any infringement or alleged infringement of any patent of invention or any other form of intellectual property.

5.13 FIRE PROTECTION

5.13.1 Without restricting the scope of the requirements of the *General Conditions*, the Contractor shall at all times have on hand sufficient and appropriate fire extinguishing equipment to effectively fight any fire caused by its work.

5.13.2 The Contractor shall at all times have on duty personnel trained in the use of such equipment, or competent to handle it.

5.13.3 The Contractor shall, at no additional cost to the Owner, take all necessary measures to prevent any fire hazard, and shall strictly comply with all laws, arrangements and regulations relating to fire protection, and with all instructions and directives given by the Owner or representative thereof during the course of the work.

5.14 WORK PLANNING

5.14.1 RESPONSIBILITY FOR THE PERFORMANCE OF THE WORK

- 5.14.1.1 The Contractor shall have full responsibility for the performance of the work, which the Contractor shall direct and supervise so as to ensure compliance thereof with the Contract documents.
- 5.14.1.2 Unless otherwise specified, the Contractor shall be solely responsible for the means, methods, sequences and procedures of construction, as well as for the coordination of the various parts of the work.

5.14.2 ELEMENTS TO BE CONSIDERED IN PLANNING

- 5.14.2.1 Since the work under this Contract has a significant impact on the Owner's major maintenance program, an important aspect of this Contract is to carry out the work as expeditiously as possible according to the prescribed work schedule.
- 5.14.2.2 The Contractor shall commence the preparatory work on the day following the date of the written Notice of Contract Award from the Owner, subject to paragraph 5.14.2.3 and any other restrictions in the *Special Administrative Conditions*. Such preparatory work shall include, without however being limited to, the design and preparation of the *Contractor's plans* for scaffolding, walkways and enclosures, as well as the submission to the Engineer of the workshop drawings, technical data sheets and other information relating to the materials and equipment intended for the performance of this Contract.
- 5.14.2.3 The Contractor shall not commence any work at the worksite until it has received written authorization from the Owner. Such authorization will be given only after the Contractor has provided the Owner with the "Notice of Compliance with Insurance Conditions" and the bonds and/or security deposit required in the Tender Documents, and has jointly conducted the pre-work inspection.
- 5.14.2.4 Not applicable
- 5.14.2.5 The Contractor shall take into consideration the work to be carried out on the structures as part of the other projects planned by the Owner and consider the resulting impacts and restrictions as set forth in Article 5.25 *Simultaneous Works by the Owner or Other Contractors*.
- 5.14.2.6 The Contractor shall prepare its work schedule taking into account the days that will be lost due to adverse weather conditions and performances of fireworks and other special events that will result in lane or bridge closures. The Owner will not grant the Contractor any postponement of the prescribed completion date(s) if weather conditions are not favorable for the performance of the work.
- 5.14.2.7 The Contractor shall inquire about applicable safety regulations that may adversely affect the Contractor's planning and scheduling of the work. The Owner will not grant

the Contractor any postponement of the prescribed completion date(s) as a result of the imposition, by the *Commission des normes, de l'équité, de la santé et de la sécurité du travail* (CNESST), of any safety restrictions, regulations or directives.

- 5.14.2.8 The Contractor shall, at all times, have the obligation and responsibility to plan all of its activities by providing for the use of manpower, materials, tooling and work methods that will ensure that the work is carried out in accordance with the terms and conditions of the Contract and at a rate of progress that will ensure completion thereof within the contractual deadlines.
- 5.14.2.9 The Contractor shall allow sufficient time in its work program to evacuate its employees and clear the bridges of its equipment for the traffic control prescribed in these specifications.
- 5.14.2.10 If the Contractor wishes to install its scaffolding, enclosures, platforms and other access devices by waterway, the Contractor shall particularly check the difficulties involved in accessing the work areas. The Contractor shall ensure that the water in the river and La Prairie Basin is deep enough for barge transportation on the waterway. The Contractor shall expect fluctuating water levels. In addition, the Contractor shall access the work sites without interfering with traffic on the bridge, marine traffic and vehicle, bicycle or pedestrian traffic on the St. Lawrence Seaway dike. The Contractor shall contact the Canadian Coast Guard (Fisheries and Oceans Canada) and the St. Lawrence Seaway Management Corporation (SLSMC) during the tender period for any information regarding the authorizations required for the use of the waterways.

5.14.3 COMPETENCY OF PERSONNEL

- 5.14.3.1 Without limiting the scope of paragraphs 5.7.4 and 5.7.6 of these specifications, the Contractor shall employ as Project Manager, superintendents, foremen or workers competent persons with relevant experience in the work and sufficient training to readily understand the plans and specifications. Said employees shall direct, organize and carry out the work in such a manner as to achieve results that conform to the requirements of the Contract. These conditions also apply to the Contractor's engineers and technicians, and to subcontractors.
- 5.14.3.2 The persons mentioned above shall also be competent in occupational health and safety, environmental protection, temporary signage and traffic control.

5.14.4 CONDITION AND CAPACITY OF EQUIPMENT AND TOOLING

- 5.14.4.1 The Contractor shall use appropriate equipment and tooling of such capacity and in sufficient quantity to perform the work within the time specified in the Contract. Such equipment and tooling shall be in good working order and safe for workers and the public, in accordance with applicable laws.

5.14.5 CONTINUITY OF WORK

5.14.5.1 The Contractor shall carry out the work continuously and in a logical sequence of phases. The Contractor shall provide the resources necessary to complete each phase of the work in an expeditious manner in order to minimize traffic hindrances and complete it within the stipulated time frame.

5.14.6 REVIEW OF THE WORK PLANNING AND DETAILED WORK SCHEDULE

5.14.6.1 If the progress of the work is delayed in relation to the detailed work schedule considered acceptable by the Engineer and, as a result of such delay, there is a risk, in the opinion of the Engineer, that the work cannot be completed within the contractual deadline(s), the Contractor shall take such steps as may be necessary to make up such delay by increasing its personnel, tooling and/or facilities, or by modifying its work methods, as applicable, at no additional cost to the Owner.

5.14.6.2 In all cases of delay, the Contractor shall notify the Engineer of its intentions with respect to such delay, and the Engineer may, if he deems it necessary, require the Contractor to revise all or part of its initial detailed work schedule. The Engineer will set a time limit for the submission of such revision.

5.14.7 ACCELERATED WORK

5.14.7.1 The Contractor shall, when required, provide the additional materials, labour and tooling needed to meet the dates and deadlines specified in the Contract, including, without limitation, working shifts on a twenty-four (24) hour per day, seven (7) day per week basis and overtime work.

5.14.7.2 All costs associated with such accelerated work shall be at the Contractor's expense.

5.14.8 FOLLOW-UP MEETINGS

5.14.8.1 Once every two (2) weeks, or at intervals determined by the Engineer, worksite meetings will take place to review the progress of the work and any other matters arising out of or which may affect the Contract. The agenda and minutes of each meeting will be prepared and distributed by the Engineer.

5.14.8.2 The Project Manager and the Contractor's Superintendent or senior worksite representative shall attend each meeting, together with such members of the Contractor's personnel and such responsible representatives from subcontractors and suppliers whose presence may be necessary to properly review all aspects of the work covered under the agenda.

5.14.8.3 The Contractor shall update the work schedule and forward it to the Engineer every fourteen (14) working days. The schedule update shall be transmitted at least two (2) working days prior to each worksite meeting. The updates shall be transmitted via e-mail. They shall reflect the status of all ongoing activities as well as the actual construction sequence.

5.14.8.3.1 The updated work schedules shall be prepared in the manner accepted by the Engineer and shall provide the following information:

5.14.8.3.1.1 the activities that have progressed or been completed during the previous period;

5.14.8.3.1.2 the approximate number of days required to complete the work in progress;

5.14.8.3.1.3 the work to be undertaken or continued in the following weeks.

5.14.8.3.2 The updated work schedules shall indicate how any activities that fall behind the planned schedule will be accelerated to meet the Contract deadlines and the prescribed requirements.

5.14.8.3.2.1 The revisions for the work not yet undertaken shall also be indicated in the work schedules.

5.14.8.4 After each worksite meeting, the Engineer will forward the meeting minutes to the Contractor. Within seven (7) days of receipt of the minutes, the Contractor shall notify the Engineer of any inaccuracies or errors noted in the minutes, failing which the Contractor will be presumed to agree with the contents of the minutes.

5.14.8.5 The parties agree to cooperate to ensure the proper conduct of the meetings.

5.14.9 WEEKLY AND DAILY PLANNING OF THE WORK

5.14.9.1 In addition to the work schedule, the Contractor shall, every Friday by 12:00 (noon), provide the Engineer with a program, detailed by sector and by shift, indicating the activities planned for the following week.

5.14.9.2 If changes in the schedule occur during the week, the Contractor shall forward to the Engineer in writing the detailed revised program, which shall include a listing of all worksite activities, by sector and by shift, that the Contractor plans to carry out during the next day or weekend, within the following time frame:

Work Days	Deadline for Delivery to the Engineer
Tuesday through Friday	The day before by 4:00 p.m.
Saturday through Monday	Friday by 12:00 (noon)

5.14.9.3 Such work planning is necessary to organize the daily activities of the various participants, including the Engineer and the laboratories. However, the Engineer reserves the right to establish a work authorization procedure by type of work, such as

concrete pours or work requiring immediate joint measurement, quality control or verification of elevation.

5.14.10 Any failure by the Contractor to comply with the requirements of paragraph 5.14.8.3 and/or paragraph 5.14.9 will result in the application of Article 5.35.8 *Damages for Failure to Comply with the Requirements Related to the Updating of the Work Schedule and Weekly and Daily Planning of the Work.*

5.15 QUALITY MANAGEMENT, INSPECTIONS AND TESTING

5.15.1 GENERAL

- 5.15.1.1 Quality control is the sole responsibility of the Contractor, and the latter shall employ one or more laboratories (hereinafter “Contractor’s Laboratory” or “Contractor’s Laboratories”), at its own costs. No later than twenty-one (21) days from the date of award of the Contract by the Owner, the Contractor shall provide to the Engineer, in writing, the name of the Laboratory or Laboratories employed thereby for this Contract. The Owner reserves the right to require the Contractor to employ one or more specialized laboratory(ies) as appropriate to the nature of the work covered by this Contract.
- 5.15.1.2 Notwithstanding the foregoing paragraph, the Owner will, at its own expense, commission a testing laboratory independent of the Contractor’s laboratory (hereinafter referred to as the Owner’s Laboratory) to carry out additional monitoring with respect to the quality assurance of the materials.
- 5.15.1.3 The Contractor shall provide all cooperation required for any routine sampling and testing requested by the Owner’s Laboratory. The Contractor shall have no claim for compensation or additional delay for any interruption of its work resulting from the foregoing.
- 5.15.1.4 The Engineer will visit the site of the work at appropriate intervals for the purpose of keeping himself well informed of both the progress and the quality of the work, and to determine whether the work is generally progressing in accordance with the Contract.
- 5.15.1.5 The Engineer shall have free access to the work at all times. If portions of the work are carried out at locations other than that of the structure, the Engineer shall have access thereto while the work is in progress.
- 5.15.1.6 The Contractor shall provide the Engineer with suitable facilities to enable him to carry out his supervision in a safe and efficient manner.
- 5.15.1.7 If the laws and regulations, the Contract or the Engineer’s instructions require the work to be tested, inspected or approved, the Contractor shall notify the Engineer, with reasonable notice, of the time at which the work may be tested, inspected or approved.

- 5.15.1.8 If the Contractor covers the work or allows any part of the work to be covered before the prescribed tests, inspections or approvals have been conducted, completed or given, the Contractor shall, upon request of the Engineer, uncover the part in question in such a manner as to permit such prescribed tests, inspections or approvals to be conducted, completed or given and re-cover the work, all at the Contractor's expense.
- 5.15.1.9 Control sheets shall be completed by the Contractor for the major phases of the project and shall be reviewed jointly by the Engineer and the Contractor at the start of construction.
- 5.15.1.10 At least fourteen (14) days prior to the start of the work, the Contractor shall submit to the Engineer, for review and comment, the quality control program that the Contractor intends to implement for the performance of the work. The program shall indicate all checkpoints that will be made during the performance of the work.

5.15.2 SHOP INSPECTIONS AND TESTING

- 5.15.2.1 Unless otherwise specified, all materials to be incorporated into the structure as well as the fabrication and assembly of all parts shall be subject to examination by inspectors of the Owner's Laboratory before acceptance.
- 5.15.2.2 Upon request of the Engineer, the Contractor shall, in an appropriate manner, prepare and provide, at its own expense, samples of all materials and manufactured or cast parts for further examination.
- 5.15.2.3 If he so wishes, the Engineer will inspect all the equipment and materials to be supplied during fabrication and prior to delivery thereof and will attend the shop tests after final assembly.
- 5.15.2.4 The Contractor shall provide and maintain, at no additional cost to the Owner, all instruments, tools and facilities necessary to inspect the quality of the work performed and to check the weight and dimensions of the materials used, both at the workshop where they are fabricated and at the worksite where they are assembled. The Contractor shall also provide all the labour and apparatus that may be required to handle the materials during the inspection.
- 5.15.2.5 The Contractor shall make the necessary arrangements to ensure that the Owner's inspectors have access at all times to all parts of the worksite and to any workshops where parts are being fabricated, either by the Contractor or by a subcontractor. The Contractor shall also make the necessary arrangements to ensure similar access to the workshops supplying purchased materials and components for incorporation into the work.
- 5.15.2.6 The Contractor shall not place any materials or undertake any work until the Engineer has been notified thereof and arrangements have been made for any inspection deemed necessary by the Engineer.

- 5.15.2.7 The Contractor shall notify the Engineer at least seventy-two (72) hours in advance of the time when shop tests are to take place so that the Engineer can make arrangements to attend the tests if required.
- 5.15.2.8 The Contractor shall also notify the Engineer at least seventy-two (72) hours in advance of when the materials will be complete and ready for final inspection so that the Engineer can inspect them.
- 5.15.2.9 After fabrication, the Contractor shall test the materials and equipment at its workshop to ensure that all components function satisfactorily and that the complete assemblies meet the minimum standards and essential requirements covering the equipment and materials comprised in this Contract.
- 5.15.2.10 Not applicable
- 5.15.2.11 The Contractor shall replace or repair, at no further cost to the Owner, any rejected material or work.
- 5.15.2.12 Any waiver by the Engineer of his right to inspect the materials and equipment or to attend the shop tests as provided herein shall in no way relieve the Contractor of its obligations and responsibility for the work, and the rights of the Owner as provided in this Contract shall not be affected thereby in any way.

5.15.3 INSPECTION BY THE CONTRACTOR

- 5.15.3.1 The Contractor shall ensure, by proper inspection, that all parts and components are fabricated and assembled in accordance with the indications on the workshop drawings and the requirements of the plans and specifications.
- 5.15.3.2 The Contractor shall submit to the Engineer a report of any deficiencies found.
- 5.15.3.3 When fabricating finished components, the Contractor shall inspect them before using or installing them or submitting them for acceptance.
- 5.15.3.4 The Contractor shall keep and maintain adequate inspection records which shall be available for review by the Engineer at any time and copies of all or part of such records may be made.
- 5.15.3.5 In the event that the Engineer disagrees with any test result from the Contractor's Laboratory, the Owner's Laboratory will conduct the necessary additional tests and issue an opinion on the corrective measures required under the circumstances. The Contractor shall proceed, at its own cost, with the implementation of said corrective measures.

5.15.4 MODIFICATION OR REPLACEMENT OF DEFECTIVE PARTS

- 5.15.4.1 Subject to paragraph 5.15.4.2, if any part furnished by the Contractor fails to pass the tests, the Contractor shall make the necessary modifications or replacements requested by the Engineer, at no additional cost to the Owner.
- 5.15.4.2 Unless otherwise directed by the Engineer, no repair of defective parts will be accepted, and any defective part shall be replaced with a new part.

5.16 TEMPORARY WORKS, WORKSITE SERVICES AND OTHERS

5.16.1 GENERAL

- 5.16.1.1 The Contract Price includes all direct or indirect charges related to the temporary works, as well as to the worksite services and tooling that are necessary for the Contractor to perform the work or required under the Contract.
- 5.16.1.2 Such temporary works, and worksite services and tooling shall be maintained in good working order throughout the term of the Contract.
- 5.16.1.3 The Contractor shall not remove from the worksite all or any part of these temporary works, services or tooling until acceptance of the work by the Engineer.

5.16.2 COMPLIANCE WITH LAWS AND REGULATIONS

- 5.16.2.1 Without limiting the scope of Article 5.8 *Laws and Regulations*, the Contractor shall comply with the *Safety Code for the Construction Industry* (CQLR, c. S-2.1, r. 4) as well as with the laws and regulations governing the environment, hygiene and the occupational health and safety of workers on the worksite and in the facilities, workshops and outbuildings permanently or temporarily installed for the execution of the work.
- 5.16.2.2 The Contractor shall participate in environmental and quality of life inspections and shall promptly correct, at its own expense, any deficiencies found by any other official authority empowered to act in the public interest.

5.16.3 LAND, ACCESS ROADS AND RIGHTS OF WAY

- 5.16.3.1 The Owner will make available to the Contractor, for the duration of the work, such land, access roads, rights of way and other rights available to the Owner that the latter deems necessary for the performance of the work.
- 5.16.3.2 The Contractor shall obtain the Owner's authorization before installing any equipment on the Owner's property located in the vicinity of the work of this Contract.
- 5.16.3.3 The Contractor shall obtain, at its own expense, such land, access roads, rights of way and other additional rights as it deems necessary for the performance of the work.

- 5.16.3.4 The Contractor shall maintain and keep in a safe and good state of repair the land, access roads, passageways and other sites used thereby for the performance of the work. In this regard, the Contractor shall, notably, recover without delay any materials, tooling or waste materials that may have been accidentally dropped during transportation.
- 5.16.3.5 Unless otherwise directed by the Engineer, the Contractor shall restore to their original condition, or to a condition acceptable to the Engineer, the land, access roads, passageways and other sites once the Contractor has finished using them.
- 5.16.3.6 In order to be able to demonstrate that the land, access roads, passageways and other sites are being restored to their original condition, the Contractor shall, if required by the Engineer, carry out all necessary soil characterization tests. Said tests shall be carried out before and after use of the land, access roads, passageways and other sites, and at the Contractor's expense.
- 5.16.3.7 In order to monitor the condition of the land, access roads and passageways before and after use, the Contractor shall conduct photographic or video surveys as prescribed in Articles 6.13.9.5.3.1 *Pre-work Inspection* and 6.13.9.5.3.2 *Post-work Inspection* of subsection 6.13 *Environmental Protection*.

5.16.4 WORK AREAS

- 5.16.4.1 The Contractor's work areas shall comprise only those areas allocated to the Contractor by the Owner, notably the sites where the work is carried out, as well as the service areas and the storage areas. The locations of these areas are shown on the plans and in the specifications, or by directive of the Engineer.
- 5.16.4.2 Unless authorized in advance and in writing by the Owner, the Contractor shall not use, for any purpose other than transportation, the bridges, roads, access roads and passageways, whether within or outside the Contractor's work areas.

5.16.5 SERVICE AND STORAGE AREAS

- 5.16.5.1 The Contractor shall have the right to use the Owner's land as required, and as directed by the Engineer, for parking, storage, services and offices. The specific location will be designated by the Engineer.
- 5.16.5.2 Employees and visitors of the Contractor are prohibited from parking private cars on the Owner's property other than in the area designated for such purpose by the Engineer.

5.16.6 ENGINEER'S OFFICE

- 5.16.6.1 Prior to the commencement of, and for the entire duration of the work, the Contractor shall provide the Engineer with an office and with the services specified on the plans and in the specifications.

- 5.16.6.2 Unless otherwise specified in the other sections of the specifications, such office and services shall be part of the Contractor's mobilization and worksite organization costs and shall remain the property of the Contractor.
- 5.16.6.3 Said office and services shall be for the exclusive use of the Engineer or representatives thereof.
- 5.16.6.4 The office shall be installed on the site in a location accepted by the Engineer.
- 5.16.6.5 The office shall have a minimum floor area of fifteen (15) square metres (m²) and shall be air-conditioned, heated, lighted and furnished with one (1) desk with drawers, one (1) office chair, two (2) additional chairs, one (1) legal size filing cabinet, two (2) tables and one (1) clothing locker. The office shall be equipped with grilles and bars on the doors and windows.
- 5.16.6.6 The office shall have a potable water supply and a washroom or a sanitary trailer, or an equivalent previously agreed to by the Owner, with a minimum of two (2) toilet units with sinks, namely one (1) for women and one (1) for men. The toilet facilities shall be insulated against cold and equipped with a working heating system.
- 5.16.6.6.1 If running water is not available, the Contractor shall provide potable water through a cold water dispenser and ensure the supply of potable water.
- 5.16.6.6.2 The sanitary trailer, where applicable, shall be insulated against cold and shall be equipped with a working heating system, a sink and hot water.
- 5.16.6.7 The Contractor shall provide high speed internet access and be responsible for all charges for use. Access may be provided via a router, Turbo sticks, or any other equivalent device accepted by the Engineer.
- 5.16.6.8 The Contractor shall provide a multi-functional printer which shall, notably, have the letter, legal, and 11" x 17" formats. The Contractor shall also provide the printing paper and ink cartridges. The printer shall be connected to the router, either wired or wireless. The Contractor shall provide the necessary computer support within twenty-four (24) hours of the Engineer's report of a printer malfunction.
- 5.16.6.9 The Contractor shall guarantee the computer security of the peripherals used to exchange data with the Owner. Said peripherals shall have, as a minimum, a functional antivirus, activated automatic updates and the impossibility of installing software without having administrator rights.
- 5.16.6.10 The Contractor shall perform daily maintenance and cleaning of the office, restrooms and equipment provided.
- 5.16.6.11 Any failure by the Contractor to comply with any of the requirements of Article 5.16.6 *Engineer's Office* will result in the application of Article 5.35.13 *Damages for Failure to Comply with the Requirements related to the Engineer's Office*.

5.16.7 WORKSITE SERVICES

- 5.16.7.1 The Contractor shall, from the commencement of the work, provide all electrical, lighting, water, sewer, heating, cooling, communication, sanitary, protection, security and other services that are either necessary for the performance of the work or required under the Contract.
- 5.16.7.2 The Contractor shall be responsible for all costs related to such temporary services, whether for their supply, installation, maintenance, use, dismantling, removal or otherwise, until completion of the work.

5.16.8 ELECTRICITY AND TEMPORARY LIGHTING

- 5.16.8.1 Unless otherwise specified on the plans and in the specifications, the Owner will not provide any electrical service at the Contractor's service and storage area or at the worksite.
- 5.16.8.2 The Contractor shall provide, install and maintain, at all times, the electrical distribution system and power necessary for both the performance of the work and the worksite facilities.
 - 5.16.8.2.1 The Owner provides the lighting required for the normal operation of roads, bridges and other structures under its jurisdiction. Unless otherwise specified on the plans and in the specifications, no other lighting is available at the Contractor's service and storage area, or at the worksite.
- 5.16.8.3 The Contractor shall provide, install, and maintain adequate lighting to ensure that the work can be carried out efficiently and safely at all times.
- 5.16.8.4 The Contractor shall obtain the Engineer's authorization before carrying out any work on the Owner's electrical installations. To prevent accidental activation of a circuit, the Contractor shall, after isolating the circuit, lock out all power sources. The lockout of power sources shall be performed in accordance with subsection 6.12 *Occupational Health and Safety* of these specifications.
- 5.16.8.5 All of the Contractor's lighting equipment shall be explosion proof, and conform to Class 1, Zone 0, Group II classification.

5.16.9 WATER AND SEWER

- 5.16.9.1 Unless otherwise specified on the plans and in the specifications, no water and sewer services are available at the Contractor's service and storage area or at the worksite.
- 5.16.9.2 The Contractor shall provide, install and maintain at all times the water and sewer systems necessary for both the performance of the work and the worksite facilities.

5.16.10 COMMUNICATIONS

- 5.16.10.1 Unless otherwise specified on the plans and in the specifications, the Owner will not provide any telephone or communication services at the Contractor's service and storage area or at the worksite.
- 5.16.10.2 The Contractor shall provide, install and maintain at all times the communication network necessary for both the performance of the work and the worksite facilities.
- 5.16.10.3 The Contractor shall have a cell phone available at all times for its Project Manager and Superintendent, as well as one for any employee in charge during the work so that the Engineer is able to communicate with the Contractor at all times throughout the duration of the work.
- 5.16.10.4 Outside of working hours, the Contractor shall provide the Engineer and the Sûreté du Québec with telephone numbers where a responsible person can be reached in case of emergency.
- 5.16.10.5 Prior to commencing work, the Contractor shall complete and submit to the Engineer a list of those in charge of the Contractor's worksite as well as the telephone numbers where they can be reached at all times.
- 5.16.10.6 The Contractor shall not post any document or information pertaining to this Contract or any other contract of the Owner on an FTP site or any other file sharing site previously approved by Owner, unless the Contractor creates a subdirectory specific to the Owner with a username and password that is accessible only to authorized representatives of the Contractor and the Owner.

5.16.11 PROTECTION AND SECURITY

- 5.16.11.1 Unless otherwise specified on the plans and in the specifications, the Owner will not provide any protective or security services at the Contractor's service and storage area or at the worksite.
- 5.16.11.2 The Owner shall not be responsible for any loss or damage of any kind and from any cause whatsoever which may occur to the Contractor's materials and tooling, and to the personal property of its employees.

5.16.12 WORKSITE ACCESS

- 5.16.12.1 The Owner does not control access to and from the work site.
- 5.16.12.2 The Contractor agrees to establish and cause to be complied with by all persons under its jurisdiction any rules or directives for the control of the access to and exit from the worksite that may be necessary to ensure the safety of such persons and the public.

5.16.13 DELIVERIES TO THE WORKSITE

- 5.16.13.1 The Contractor shall ensure that one of its representatives accompanies any vehicle making a delivery to the worksite.

5.16.13.2 In addition, the Contractor shall ensure that the dimensions of its materials, tooling and other supplies are such that such property can be transported or moved freely on all access roads, roads, bridges and work areas.

5.16.13.3 The transportation of materials and tooling is subject to road safety standards and regulations, notably those set out in the *Vehicle Load and Size Limits Regulation* (CQLR, c. C-24.2, r.31) as well as the *Regulation respecting Special Permits* (CQLR, c. C-24.2, r.35).

5.16.13.4 No storage of materials or tooling will be tolerated on access roads, traffic lanes, bike paths and sidewalks, except with prior written permission of the Engineer.

5.16.14 TRANSPORTATION OF PERSONNEL

5.16.14.1 The use of private vehicles is prohibited on access roads and in work areas, unless authorized in writing by the Engineer. Private vehicles shall be parked at the Contractor's service and storage area, to the extent that space permits and according to the Engineer's instructions, or elsewhere.

5.16.14.2 The Contractor shall be responsible for the transportation of its employees from the service area to the worksite. To this end, the Contractor shall submit to the Engineer, prior to the commencement of the work at the worksite, the method and means of transportation of both its employees and those of its subcontractors.

5.16.15 MAINTENANCE OF WORK AREAS

5.16.15.1 Unless otherwise specified on the plans and in the specifications, the Contractor shall, throughout the duration of the work, maintain its work areas and the roads, access roads and passageways forming part thereof in such a manner as to permit safe and unobstructed vehicular, bicycle and pedestrian traffic. Such maintenance shall also meet the occupational health and safety requirements, including the removal of snow from work platforms and the removal of debris and waste materials.

5.16.16 ROAD MAINTENANCE

5.16.16.1 Unless otherwise specified on the plans and in the specifications, the Owner shall be responsible for the maintenance of, and snow removal from, the main roads and the roads adjacent to the work areas. All maintenance and snow removal within the Contractor's work areas shall be the responsibility of the Contractor for the duration of the work.

5.16.17 OBSTRUCTION OF TRAFFIC LANES

5.16.17.1 Unless otherwise specified on the plans and in the specifications, the Contractor shall organize its work in such a way as to allow, at all times, the free circulation of vehicles, cyclists and pedestrians.

5.16.17.2 However, if the nature of the work absolutely requires an obstruction, the Contractor shall submit a request to the Owner to that effect, in which shall be specified, notably, the reason, logistics and period of time for which the Contractor intends to partially or completely obstruct traffic. Any such logistics and period of obstruction shall meet the requirements of subsection 6.14 *Traffic Control and Temporary Signage*.

5.16.18 DEMOBILIZATION

5.16.18.1 Upon completion of the work, the Contractor shall demobilize the worksite, and of its personnel, tooling and materials, and restore the site and its work areas to their original condition or to a condition acceptable to the Owner by cleaning them and, if necessary, by performing such other operations as the Owner deems necessary.

5.16.19 ALIGNMENT AND LEVELS

5.16.19.1 The Contractor shall establish at the worksite, in the presence of the Engineer, those landmarks (survey monuments, geodetic markers, and other) shown on the plans that are necessary for the performance of the work.

5.16.19.2 It is the Contractor's responsibility to coordinate the establishment of such marks in a timely manner so as to avoid any delay in the execution of the work.

5.16.19.3 The Contractor shall preserve these marks throughout the duration of the work. If they are distorted or destroyed by any cause, the Contractor shall restore them at its own expense, unless such cause is the fault of the Owner.

5.16.19.4 The Contractor shall take all necessary precautions to protect the permanent survey marks, markers and monuments encountered on the worksite. In all cases where, as a result of the performance of the work, such survey marks, markers and monuments are or are likely to be distorted, the Contractor shall expressly notify the Engineer thereof. If they are rendered unusable, the Contractor shall replace them at its own expense.

5.16.19.5 The Contractor shall, at its own expense, establish the topographic lines and levels for the purposes of the Contract, from the landmarks established at the worksite in the presence of the Engineer. The Contractor shall provide the Engineer with all means necessary and practicable to enable him to verify the alignment and profile of the work established by the Contractor. The Contractor shall also retain all marks until the work is fully completed to the satisfaction of the Engineer.

5.16.19.6 The Engineer reserves the right to verify the alignment and levels of the work at any time.

5.16.19.7 If the Contractor, in the course of performing the work, finds any discrepancy in the established landmarks, the Contractor shall immediately notify the Engineer thereof.

5.16.19.8 All work shall be performed in such a manner that, upon completion, the alignments and levels shown on the original drawings, or on plans subsequently modified by order of the Engineer, are fully complied with.

5.16.20 CONTRACTOR'S PRELIMINARY EXAMINATION

5.16.20.1 Examination of Contract documents

5.16.20.1.1 The Contractor shall examine the Contract documents and promptly report to the Engineer any errors, discrepancies, or omissions that the Contractor may discover therein. If any are discovered, the Contractor shall not perform the work until the corrective or missing information is received from the Engineer.

5.16.20.2 Field measurement

5.16.20.2.1 The Contractor shall verify all relevant dimensions by site inspection and field measurement with the Engineer prior to any fabrication and prior to commencing the work.

5.16.20.3 Examination of the work site

5.16.20.3.1 Before commencing the work, the Contractor shall examine the existing structures upon which its work depends, and shall report in writing to the Engineer any apparent defects in such structures that may affect its work.

5.17 PRESERVATION OF BURIED STRUCTURES

5.17.1 BURIED STRUCTURES BELONGING TO THE OWNER

5.17.1.1 Prior to commencing the work, the Contractor shall ascertain from the Owner the existence and actual location of any conduit, cable, pipe, duct or other buried structure (water, sewer, electricity, communication and other) owned by the Owner that may be affected by the work, whether or not shown on the plans.

5.17.1.2 It is the Contractor's responsibility to request this information and location at least seven (7) working days prior to the commencement of the work in order to avoid any delay in the execution of the work.

5.17.1.3 The Contractor shall take, at its own expense, all measures necessary to preserve such structures against damage, loss and service interruptions.

5.17.1.4 The Contractor shall be responsible for any damage to such structures and any repair or replacement shall be at the Contractor's expense and shall be carried out to the satisfaction of the Owner.

5.17.1.5 The Contractor shall, in all cases, promptly notify the Owner of any damage caused thereby or of any danger created by or in connection with its work.

5.17.2 BURIED STRUCTURES BELONGING TO THIRD PARTIES

5.17.2.1 Prior to commencing the work, the Contractor shall ascertain from the appropriate authorities (Hydro-Québec, Bell Canada, Vidéotron, Énergir, municipality or others) the existence and actual location of any conduit, cable, pipe, duct or other buried structure (electricity, communication, gas, water, sewer and other) that may be affected by the Contractor's work, whether or not shown on the plans.

5.17.2.2 It is the Contractor's responsibility to request this information and location in a timely manner so as to avoid any delay in the execution of the work.

5.17.2.3 The Contractor shall take, at its own expense, all measures necessary to protect such structures against damage, loss and service interruptions.

5.17.2.4 Any damage, loss or service interruption caused by or resulting from the Contractor's activities or lack of protection will be immediately repaired or replaced by the owner of such facilities at the Contractor's expense.

5.17.2.5 The Contractor shall, in all cases, promptly notify the Owner of any damage, loss or service interruptions caused thereby or of any danger created by or in connection with its work.

5.17.3 OBJECTS OR REMAINS OF AN ARCHAEOLOGICAL NATURE

5.17.3.1 The Contractor shall, at its own expense, protect from damage any objects or remains of an artistic, historical or archaeological nature which may be found at the worksite or in the vicinity thereof.

5.17.3.2 In addition, the Contractor shall notify the Owner of any discovery, refrain from any work that may damage or destroy it, and comply with the laws and regulations in force in such matter.

5.18 PRESERVATION OF OTHER STRUCTURES

5.18.1 GENERAL

5.18.1.1 The Contractor shall at all times adequately protect from damage, loss, falling material, and service interruptions all existing structures, properties, and facilities, such as roadways, curbs, sidewalks, fences, structures, gas lines, water pipes, power lines, telephone lines, overhead power lines, drains, and other facilities and equipment, in or near the work area. The Contractor shall also protect all types of traffic (pedestrian, bicycle, road and marine) from falling materials, debris and equipment, and from any of its activities.

5.18.1.2 In all cases, the Contractor shall obtain authorization from the appropriate authorities concerned (municipality, Énergir, Hydro-Québec, Bell Canada, Vidéotron, or other) before any work is carried out in the vicinity of any structure or service.

5.18.1.3 All damage to existing structures or losses resulting from the Contractor's activities or lack of proper protection by the Contractor will be repaired immediately, or the structures replaced, as the case may be, by the appropriate authority concerned, at the Contractor's expense.

5.18.2 UTILITIES UNDER AGREEMENT WITH THE OWNER

5.18.2.1 Under permits issued by the Owner or agreements therewith, various utilities or other communication and transportation systems may be attached to the Owner's bridges, viaducts, tunnels and other structures. Specifically, these utilities and systems consist of conduit, duct banks, cables, pipes, walkways and other access devices.

5.18.2.2 The Contractor shall check and validate with the appropriate authorities (Hydro Québec, Bell Canada, Vidéotron, Énergir, municipality or others) the presence of facilities that may be affected by the work.

5.18.2.3 In general, the Contractor shall coordinate with the appropriate authorities concerned all work relating to the protection (and, if necessary, temporary support) of their respective services as well as the location of manholes and walkways giving access thereto.

5.18.2.4 The Contractor shall contact such appropriate authorities to ascertain the exact nature of their respective facilities, the location thereof and the measures to be taken with respect thereto in connection with the performance of the Contract.

5.18.2.5 Not applicable

5.18.2.6 The Contractor shall forward a copy of these measures and procedures to the Engineer.

5.18.2.7 The Contractor shall obtain authorization from each owner of a facility before any work is carried out over or near such facility. The Contractor shall also obtain authorization from the Engineer. It is understood, however, that such authorization shall not relieve the Contractor of any of its obligations and responsibilities under the Contract.

5.18.2.8 The Contractor shall at all times take the necessary steps to adequately protect the facilities in or near the work area from damage, loss or service interruption.

5.18.2.9 Any damage, loss or service interruption caused or resulting from the Contractor's activities or lack of protection will be immediately repaired or replaced by the owner of such facilities at the Contractor's expense.

5.18.2.10 The Contractor shall, in all cases, promptly notify the Owner of any damage, loss or service interruptions caused thereby or of any danger created by or in connection with its work.

5.18.2.11 The requirements of subsection 6.15 *Temporary Structures* apply to the temporary protective systems and structures designed to meet the requirements of this article.

5.19 PRESERVATION OF THE EQUIPMENT NECESSARY FOR THE OPERATION OF THE OWNER'S STRUCTURES

5.19.1 For their safe and efficient operation, the bridges, roads and other structures may be equipped with, without limitation, the following systems:

5.19.1.1 lighting system;

5.19.1.2 surveillance camera system;

5.19.1.3 lane control signal system;

5.19.1.4 variable message sign (VMS) system;

5.19.1.5 detection system.

5.19.2 These structures are also equipped with road signs and a storm water drainage system.

5.19.3 The aforementioned equipment is usually mounted on gantries, lamp posts or shafts, or attached directly to the structure, deck, sidewalks or accessories of the structure. The conduits are usually exposed, but some conduits or sections of conduits are underground. Some access devices and platforms are also located thereon.

5.19.4 The Contractor shall ascertain the exact location and details of the equipment required for the operation of the Owner's structures.

5.19.5 Unless otherwise specified, such equipment shall remain functional at all times. The continued operation of such equipment is an essential element of the proper performance of the Contract.

5.19.6 The nature and scope of the work related to this equipment depend directly on the exact nature of the work carried out by the Contractor and the means and methods of construction used thereby. It is therefore the sole responsibility of the Contractor to define and implement all measures relating to the preservation of such equipment.

5.20 PRESERVATION OF NEW OR EXISTING STRUCTURES AND EQUIPMENT

5.20.1 The Contractor shall, throughout the duration of the work, take all precautions to protect existing coatings (paint, galvanizing), equipment, electrical and mechanical panels and

apparatus, bearings, moving parts, and all other new or existing materials, components or equipment, from damage and any danger of contamination by surrounding agents and shall keep them in a perfect state of cleanliness and free of all dirt, abrasives, dust, soiling, concrete and other contaminants.

- 5.20.2 The Contractor shall be responsible for any damage to the aforementioned materials, equipment or components caused by its work and shall promptly clean such materials, equipment or components or make the necessary repairs at no additional cost to the Owner and to the full satisfaction of the Engineer.
- 5.20.3 No temporary or permanent parts shall be welded to the structures unless such work is specifically provided for in the Contract. If so, the Contractor shall notify the Engineer prior to carrying out the welding work.

5.21 MATERIALS, LABOUR AND TOOLING PROVIDED BY THE CONTRACTOR

- 5.21.1 The Contractor shall provide all the materials, labour and tooling required for the performance of the work, except those which the Contract specifies that the Owner will provide.
- 5.21.2 The materials provided shall be new and meet the requirements of the Contract and the Engineer's instructions. They shall be perfectly fabricated and placed in accordance with the Contract.
- 5.21.3 The Contractor shall remain responsible for the selection of the manufacturers of the products used and for the performance of such products when installed.
- 5.21.4 The Engineer may reject any material that has not met the technical requirements on previous projects of the same type.
- 5.21.5 Where the quality of a material is not specified, the material shall be of a quality compatible with the materials used in the industry for the type of application involved and shall be deemed acceptable by the Engineer.
- 5.21.6 Where the quality of work is not specified, the work shall be in accordance with good practice.
- 5.21.7 The equipment and tooling shall not leave oil deposits on the concrete slabs. They shall also be equipped with special silencers to reduce noise to an acceptable level. Compressors shall be equipped with filters to remove all traces of oil from the compressed air.

5.22 MATERIALS, LABOUR AND TOOLING PROVIDED BY THE OWNER

- 5.22.1 The Owner will not provide the Contractor with any materials, labour, or tooling for the performance of the work, unless the Contract specifically provides that they will be provided by the Owner.

5.23 NOT APPLICABLE

5.24 OCCUPANCY AND MAINTENANCE OF WORK AREAS

- 5.24.1 The Contractor shall restrict the deployment of its labour and tooling within the limits indicated by the laws, ordinances, permits and Contract documents.
- 5.24.2 The Contractor shall make every effort to keep the work areas on the Owner's bridges, roads and other structures free of unnecessary encumbrances.
- 5.24.3 The Contractor shall not impose or permit to be imposed on any part of a structure any weight or stress likely to impair the safety thereof.
- 5.24.4 Once the Contractor has undertaken work in a work area, the Contractor shall be responsible for the maintenance of such area over its entire length and width, including any sidewalks and bike paths, if any, until the work is completed. The maintenance includes any work necessary to keep the roadways in a clean condition to ensure the smooth and safe movement of vehicles, pedestrians and cyclists.
- 5.24.5 Not applicable
- 5.24.6 Not applicable

5.25 SIMULTANEOUS WORKS BY THE OWNER OR OTHER CONTRACTORS

- 5.25.1 The Owner reserves the right to carry out or cause to be carried out at any time work of any kind in the vicinity of the work that is the subject of this Contract. In such a case, the Contractor shall carry out its own work in such a manner as not to interfere with the work of the Owner or other contractors, and shall cooperate therewith in a manner that will ensure the harmonious completion of the entire contract.
- 5.25.2 To this end, the Contractor shall be responsible for obtaining information from the Engineer on the Owner's and other contractors' work programs and for checking regularly with the Engineer on the progress of the work to prevent any coordination problems. If the parties cannot reach agreement on the coordination of certain work, the Engineer will decide and his decision shall be final.
- 5.25.3 The Contractor shall take into account, in the price of its tender, the restrictions and occasional inconveniences that may result from the construction work of the other contractors or consultants, and from the work carried out by the Owner's personnel. Any claim by the Contractor for changes in its sequence or methods of work due to such restrictions and occasional inconveniences shall be deemed inadmissible.

5.26 NAVIGATION ON THE RIVER, SEAWAY, LA PRAIRIE BASIN AND LACHINE CANAL

- 5.26.1 Before undertaking any work in, over or near waterways, the Contractor shall notify the authorities concerned so that they may issue *Notices to Shipping*. In this regard, the Contractor shall contact the SLSMC, the Montreal Port Authority (MPA) and the Canadian Coast Guard (Fisheries and Oceans Canada).
- 5.26.2 For the duration of the Contract, navigation will be maintained in the St. Lawrence Seaway channel and in the St. Lawrence River. The Contractor shall obtain authorizations from the authorities concerned prior to carrying out any work that may affect the navigation or safety of these waterways.
- 5.26.3 Work under this Contract shall not interfere with, delay, or interrupt navigation in any way. This requirement is an essential aspect of the Contract.
- 5.26.4 In the event that the Contractor wishes to carry out certain work in the Seaway channel from a floating facility, the Contractor shall comply with the SLSMC's *Seaway Handbook*, available at: <https://greatlakes-seaway.com/en/commercial-shipping/seaway-handbook/>, including the *Seaway Practices and Procedures*, as well as any amendments that may be published from time to time. The Contractor shall also comply with any other measures deemed necessary by the SLSMC.
- 5.26.5 The Contractor shall obtain prior authorization from the SLSMC Marine Traffic Controller for any movement of its floating facility in the shipping channel. In addition, the Contractor shall immediately notify the SLSMC Marine Traffic Controller when the Contractor begins or completes such a move.
- 5.26.6 The Contractor shall maintain radio communications with the *Seaway Traffic Control Centre* as previously agreed therewith. The Contractor shall comply at all times with the directives of Marine Traffic Controller regarding navigation.
- 5.26.7 The Owner shall not be liable for any damage to the Contractor's personnel, materials or equipment resulting from the Contractor's work in the channel.
- 5.26.8 Recreational boating will also be maintained in the La Prairie Basin during the term of the Contract. The Contractor shall not interfere with boating traffic and shall adjust its access and protection devices accordingly.
- 5.26.9 When any event occurs that may affect the MPA's operations, the Contractor shall notify the MPA's Control Centre by telephone at 514-283-7022. This center is in operation twenty-four (24) hours a day, seven (7) days a week.
- 5.26.10 The Contractor shall comply with all applicable federal, provincial and other laws and regulations governing navigation on the St. Lawrence River, the St. Lawrence Seaway and the Lachine Canal including, without limitation, the *Canadian Navigable Waters Act* (RSC 1985, c. N-22), the *Canada Shipping Act, 2001* (SC 2001, c. 26) and all regulations adopted thereunder.

- 5.26.11 The authorities responsible for enforcing these laws include Transport Canada, the Canadian Coast Guard, the SLSMC, Parks Canada and the MPA.
- 5.26.12 The measures to be taken by the Contractor to comply with navigational protection requirements are directly related to the means and methods of construction used thereby. It is therefore the sole responsibility of the Contractor to inquire of the responsible authorities as to the exact nature and scope of the measures that are necessary in view of the Contractor's means and work methods, and to comply therewith. In this regard, the Contractor shall, notably:
- 5.26.12.1 describe to the responsible authorities the nature of its work and the means and methods of construction that the Contractor intends to use;
 - 5.26.12.2 agree with the responsible authorities on any measures required to ensure the protection of navigation;
 - 5.26.12.3 comply at all times with the measures agreed upon with the responsible authorities;
 - 5.26.12.4 obtain all required authorizations.
- 5.26.13 The protection of navigation extends not only to anything that may interfere with, delay or interrupt navigation, but also to anything that may jeopardize the safety of navigation. This protection applies to both recreational and commercial navigation.
- 5.26.14 Without in any way limiting the obligations imposed thereupon in the preceding paragraphs, the Contractor shall:
- 5.26.14.1 install all devices necessary to ensure that no debris or materials fall into the water;
 - 5.26.14.2 install said devices in such a manner as not to interfere with navigation;
 - 5.26.14.3 define a safety perimeter at water level and ensure, by means of buoys, beacons or other aids to navigation, that it is respected or, if the safety of navigation so requires, by means of signallers equipped with boats;
 - 5.26.14.4 if working at night, install lights at the ends of work barges or other floating equipment used for the work;
 - 5.26.14.5 coordinate with the responsible authorities for any work over the water and obtain the required authorizations;
 - 5.26.14.6 remove any debris or other material from the bed or surface of the water, when caused by the Contractor's work;
 - 5.26.14.7 if the Contractor intends to use marine equipment, obtain all necessary authorizations from the responsible authorities and use such equipment as directed thereby.

5.27 NOT APPLICABLE

5.28 DOCUMENTS AND SAMPLES SUBMITTAL

5.28.1 GENERAL RULES

- 5.28.1.1 The Contractor shall prepare and submit to the Engineer, for review, such Contractor's plans as are required by the Contract documents or as the Engineer may reasonably request.
- 5.28.1.2 The term "*Contractor's plans*" refers to plans of scaffolding, enclosures, walkways and other access devices, plans of lane closures, procedures for controlling loads on platforms, signage and signalling plans, lifting drawings, diagrams, illustrations, tables, performance charts, workshop drawings, technical data sheets, brochures, samples and other documents required to perform the work, prepared on the basis of the plans, specifications and site conditions.
- 5.28.1.3 The Contractor shall verify all Contractor's plans before transmitting them to the Engineer. Upon completion of this verification, the Contractor shall be deemed to have determined and verified all field measurements, worksite construction conditions (or undertakes to do so), material requirements, catalog numbers and other similar data, and to have coordinated each of the Contractor's plans with the requirements of the work and Contract documents. This verification shall be indicated by a stamp, a date and the signature of a person in charge on each of the Contractor's plans. In forwarding the Contractor's plans to the Engineer, the Contractor shall inform the Engineer in writing of any deviations from the Contract documents.
- 5.28.1.4 The Contractor's plans shall be submitted to the Engineer in a logical sequence, and sufficiently in advance so as not to delay the work. The Contractor and the Engineer shall, if requested by either, jointly prepare a schedule setting forth the dates for the submission and return of the Contractor's plans. Unless otherwise agreed upon by the Engineer, the Contractor shall allow fourteen (14) days for his review.
- 5.28.1.5 If a Contractor's plan requires approval by any other appropriate or public authority, the Contractor shall be responsible for submitting it to such authority.
- 5.28.1.6 The Contractor's plans shall be in the form specified or requested by the Engineer and shall be submitted to the Engineer by electronic means. The Engineer will review the plans and return them within the time specified or agreed upon. Such review is limited to checking the Contractor's plans for both the conformance with the design intent and the general arrangement of the elements shown. This review does not relieve the Contractor of its responsibility for errors or omissions in the Contractor's plans, nor of its obligations to comply with the Contract documents, unless the Engineer has specifically indicated on the Contractor's plans that he accepts such deviation.
- 5.28.1.7 The Contractor shall make such changes in the Contractor's plans as the Engineer may require if he finds them to be inconsistent with the Contract documents and, unless otherwise directed by the Engineer, the Contractor shall resubmit them. When

submitting the revised Contractor's plans, the Contractor shall notify the Engineer in writing if any changes have been made other than those requested by the Engineer. Unless otherwise agreed upon by the Engineer, the Contractor shall allow fourteen (14) days for his review.

5.28.1.8 The changes required by the Engineer are not supposed to cause a variation in the Contract Price. If the Contractor believes otherwise, the Contractor shall notify the Engineer thereof in writing prior to undertaking the work.

5.28.1.9 Any work for which either the Contract documents or the Engineer require the Engineer's review of the Contractor's plans shall not be undertaken until the Engineer authorizes it. Any work carried out prior to such authorization shall be at the risk of the Contractor, who shall make any corrections required by the Engineer at its own expense.

5.28.1.10 The Contractor shall keep a copy of each Contractor's plan bearing the Engineer's review stamp at the worksite.

5.28.1.11 The "Subject" section of any electronic document transmitted between the various parties to this Contract shall be presented as follows:

5.28.1.11.1 Contract Number – Document Type – Date of Update (for example: 61000-schedule-080115)

5.28.2 RULES SPECIFIC TO PLANS

5.28.2.1 The Contractor shall prepare all manufacturing, assembly, installation and working plans as well as the lists of materials required for the execution of the work, based on the plans and specifications and the site survey.

5.28.2.2 The plans shall show the materials to be used, as well as their dimensions, location, tolerances, etc. They shall show the methods of construction, fastening or anchoring to be used, installation diagrams, connection details, relevant explanatory notes and any other information necessary for the execution of the work. Where required, the Contractor shall also submit the design notes and stress diagrams.

5.28.2.3 The plans shall bear the Contract number in the title block and a graphic reference scale. The first plan in a series shall provide a complete listing of the titles and numbers of the plans in the series.

5.28.2.4 Unless otherwise specified, the plans shall be produced by hand or in accordance with the Owner's *Plan Preparation Guide* which will be provided to the Contractor by the Engineer. The plans that are not prepared to the satisfaction of the Engineer will be returned to the Contractor for correction.

5.28.2.5 After review by the Engineer, the Contractor shall provide the Engineer with a reproducible copy of the plans reviewed including, when required, the design notes and stress diagrams.

5.28.3 RULES SPECIFIC TO MATERIAL SAMPLES

5.28.3.1 The Contractor shall submit to the Engineer the material samples required in the specifications.

5.28.3.2 The samples shall be submitted in triplicate, each with a label indicating the material, as well as its origin, destination and reference to the specifications.

5.28.3.3 When the colour, pattern, or texture is the subject of selection by the Engineer, the Contractor shall submit the full range of samples required.

5.28.3.4 The material samples examined and accepted will become the standard against which the quality of the materials and the workmanship of the work will be judged.

5.28.4 RULES SPECIFIC TO SAMPLES OF THE STRUCTURE (MOCK-UPS)

5.28.4.1 The Contractor shall build the mock-ups required by the specifications.

5.28.4.2 The mock-ups shall be built at the various locations specified in the specifications or agreed upon between the Contractor and the Engineer.

5.28.4.3 In each section of the specifications where samples of the structure are referred to, it is specified whether or not said samples may be part of the finished work and, where applicable, when they shall be removed.

5.28.4.4 The structure samples examined and accepted will become the standard against which the quality of the materials and the workmanship of the work will be judged.

5.29 WORKSITE DOCUMENTS

5.29.1 The Contractor shall keep on site an updated copy of the Contract documents, meeting handouts, reports and minutes. These pieces and documents shall be in good condition, and the Owner and Engineer must be able to consult them at any time.

5.30 DOCUMENTS AND ITEMS TO BE SUBMITTED UPON COMPLETION OF THE WORK

5.30.1 ASSEMBLY, OPERATING, HANDLING, MAINTENANCE AND OTHER MANUALS

5.30.1.1 When the Contractor makes available to the Owner all or part of the work covered by the Contract for issuance of the Interim Certificate of Completion, the Contractor shall also deliver to the Owner all assembly, operating, handling and maintenance manuals

that are specifically required of the Contractor under the Contract or that the Owner deems necessary for the operation and maintenance of said work.

- 5.30.1.2 All documents shall be delivered to the Owner as first version in electronic format. After review and acceptance of this first version by the Owner, the Contractor shall produce the final version and deliver it to the Owner electronically and in one (1) hard copy.
- 5.30.1.3 The manuals shall consist of loose 8 ½" x 11" sheets bound in three (3) ring binders with hard vinyl covers. These manuals shall be specific to all equipment sold by suppliers to the Contractor and installed by the Contractor.
- 5.30.1.4 Each manual provided to the Owner shall either be in English, in French or bilingual (English and French). Upon delivery of the equipment at the worksite, the Contractor shall ensure that it obtains from the manufacturer the assembly, operating, handling and maintenance manuals.
- 5.30.1.5 The manuals shall be divided into sections and each section shall be clearly identified by a tab. A complete manual shall be prepared by the Contractor for each piece of equipment, or for each set of identical pieces.
- 5.30.1.6 The contents of each manual shall be adjusted to suit the work, structures or equipment specified in the *Special Technical Conditions*. However, the conditions of this article shall be complied with by the Contractor as to the sections, principle and format of the manuals.

5.31 NOT APPLICABLE

5.32 SUBSTITUTION

- 5.32.1 Unless otherwise provided in the Contract, the Contractor may use a substitute material for that specified in the Contract by trademark or manufacturer's or supplier's name, provided that such substitution request is made after award of the Contract and previously authorized in writing by the Engineer.
- 5.32.2 However, the Engineer will only consider a substitution request if:
 - 5.32.2.1 the material specified in the Contract is not available, or;
 - 5.32.2.2 the date of delivery of the material specified in the Contract, and ordered within a reasonable timeframe, unduly delays the work, or;
 - 5.32.2.3 the use of the products proposed as substitutes results in a decrease in the Contract price, and if the percentage of Canadian content is equal to or greater than that of the materials specified in the Contract.

5.32.3 The documents and information required by the Engineer in one (1) copy for substitution requests are the following:

5.32.3.1 reasons for requesting the substitution;

5.32.3.2 detailed technical description;

5.32.3.3 name of the manufacturer;

5.32.3.4 trade name;

5.32.3.5 relationship to plans and specifications;

5.32.3.6 compliance with relevant standards;

5.32.3.7 technical advantages;

5.32.3.8 price difference, including the price of the specified material and the name of the supplier as well as the price of the proposed material and the name of the supplier;

5.32.3.9 impact on the work schedule;

5.32.3.10 applicable test results;

5.32.3.11 other impact on the overall work.

5.32.4 The Engineer will accept or reject such substitution within a period of time which depends upon the information to be obtained and the tests and verifications necessary to assess the equivalence of that material, having regard to its nature, complexity or novelty. Acceptance of such equivalence will be communicated in writing.

5.32.5 It is the Contractor's responsibility to submit such a request to the Engineer for acceptance in a timely manner so as to avoid any delay in the execution of the work.

5.32.6 If the substitution request proposed by the Contractor is accepted by the Engineer and such substitute material costs less than what is specified on the plans and in the specifications, the Contractor shall issue the applicable credits to the Owner. The proposed credit shall be specified at the time the substitution request is submitted.

5.32.7 When a substitution request proposed by the Contractor is accepted by the Engineer, the Contractor shall bear all costs and full responsibility for such substitution on the remaining work of the Contract.

5.32.8 If any such substitution request proposed by the Contractor is refused by the Engineer, the costs incurred by the delays and other inconveniences caused by the refusal shall be borne entirely by the Contractor.

5.33 WORK SCHEDULE

5.33.1 DETAILED WORK SCHEDULE

5.33.1.1 The Contractor shall, within seven (7) days of the date of award of the Contract, submit to the Engineer, for review, a detailed work schedule which demonstrates that the work will be completed within the contractual deadlines.

5.33.1.2 The review by the Engineer of this schedule or any revisions thereto shall not result in any obligation or liability of the Owner to the Contractor and shall in no way diminish the Contractor's obligations and responsibilities.

5.33.2 CONTENT AND FORM OF THE DETAILED WORK SCHEDULE

5.33.2.1 The purpose of the schedule is to promote good planning well in advance of the work at the worksite and to demonstrate to the Owner that the work is planned in a logical sequence within the contractual deadlines.

5.33.2.2 The schedule shall be sufficiently detailed to clearly identify the anticipated progress of each of the activities required to complete the work within the contractual deadlines, indicating their start and completion dates as well as their interdependence. In addition, the Contractor shall identify the activities that are part of the critical path of the Contract.

5.33.2.3 The schedule shall be developed in the form of a time scale diagram showing the Contractor's planning and sequence of work. It shall be presented in PDF and Microsoft® MS Project® format. This diagram shall be accompanied by explanatory documents giving a detailed description of the labour, materials, tooling, means and methods that the Contractor intends to use to carry out the work and achieve the planned production rate.

5.33.2.4 The levels of detail of the activities in the diagram along with the written explanations shall make it possible for the Engineer to assess the practicability of the schedule presented. In addition to the worksite installation and construction activities, the schedule shall also identify the design, procurement, fabrication and transportation activities.

5.33.2.5 The schedule shall be prepared and updated using Microsoft® MS Project® project management software, version 2013 or later. The schedule and all updates shall be provided to the Owner in the form of a computerized copy transmitted via email.

5.33.2.6 In order for the schedule to be deemed complete by the Engineer, the Contractor shall forward any revisions and/or additional information requested by the Engineer, if the latter determines that such additions are necessary for the schedule to comply with the requirements of this article.

5.33.3 COMPLIANCE WITH THE DETAILED WORK SCHEDULE

5.33.3.1 The Contractor shall comply with the detailed work schedule reviewed by the Engineer.

5.34 INTERIM AND FINAL ACCEPTANCE OF THE WORK AND HOLDBACK

5.34.1 INTERIM ACCEPTANCE OF THE WORK

5.34.1.1 When the Contractor is of the opinion that the conditions referred to in paragraph 8.44.1 have been or will be met by a specified date for the purpose of issuing the Interim Certificate of Completion, the Contractor shall notify the Engineer thereof in writing.

5.34.1.2 Within five (5) working days of the later of (i) receipt of such notice and (ii) the date on which the Contractor anticipates that the conditions referred to in paragraph 8.44.1 will be met, and if the Engineer determines that the conditions of paragraph 8.44.1 have been met, the Engineer will confirm to the Contractor, in writing, that he is prepared to inspect the work in the presence of the Contractor, and to schedule a date for doing so.

5.34.1.2.1 If the Engineer deems that the conditions of paragraph 8.44.1 have not been met, the Engineer will notify the Contractor in writing of his refusal to initiate the process for the interim acceptance of the work.

5.34.1.3 The inspection of the work for the purpose of issuing the Interim Certificate of Completion will take place, at the earliest, three (3) days after the date of receipt, by the Contractor, of the confirmation referred to in paragraph 5.34.1.2. If the Contractor does not make itself available within a reasonable period of time, the Engineer reserves the right to inspect the work in the Contractor's absence, without further notice or delay.

5.34.2 FINAL ACCEPTANCE OF THE WORK

5.34.2.1 When the Contractor is of the opinion that the conditions referred to in paragraph 8.44.8 have been or will be met by a specified date for the purpose of issuing the Final Certificate of Completion, the Contractor shall notify the Engineer thereof in writing.

5.34.2.2 Within five (5) working days of the later of (i) receipt of such notice and (ii) the date on which the Contractor anticipates that the conditions referred to in paragraph 8.44.8 will be met, and if the Engineer determines that the conditions of paragraph 8.44.8 have been met, the Engineer will confirm to the Contractor, in writing, that he is prepared to inspect the work in the presence of the Contractor, and to schedule a date for doing so.

5.34.2.2.1 If the Engineer deems that the conditions of paragraph 8.44.8 have not been met, the Engineer will notify the Contractor in writing of his refusal to initiate the process for the final acceptance of the work.

5.34.2.3 The inspection of the corrected or completed work for the purpose of issuing the Final Certificate of Completion will take place, at the earliest, three (3) days after the date of receipt, by the Contractor, of the confirmation referred to in paragraph 5.34.2.2. If the Contractor does not make itself available within a reasonable period of time, the Engineer reserves the right to inspect the work in the Contractor's absence, without further notice or delay.

5.34.3 HOLDBACK

5.34.3.1 Notwithstanding anything to the contrary prescribed in paragraphs 7.4.7 through 7.4.12 or prescribed elsewhere in the Contract, the following terms and conditions shall apply:

5.34.3.1.1 The issuance of the Interim Certificate of Completion by the Owner will not trigger the full application of paragraphs 7.4.7, 7.4.8 and 7.4.9. The enforcement of these paragraphs will not result in the release of the 5% or 10% holdback, as the case may be, on the progress payments made on the price of the work covered by the Interim Certificate of Completion. Instead, the Owner will pay to the Contractor any amount payable pursuant to paragraphs 7.4.7, 7.4.8 and 7.4.9, from which the Owner will however withhold an amount representing 2.5% of the price of the work accepted pursuant to the Interim Certificate of Completion (including applicable taxes), as a holdback to secure the Contractor's performance of the obligations imposed thereupon pursuant to Article 8.32 *Rectification of Defects in the Work* and Article 8.33 *Non-Compliance by the Contractor*.

5.34.3.1.2 The issuance of the Final Certificate of Completion by the Owner will not trigger the full application of paragraphs 7.4.10, 7.4.11 and 7.4.12. Instead, the Owner will pay to the Contractor any amount payable pursuant to paragraphs 7.4.10, 7.4.11 and 7.4.12 (with the necessary modifications), from which the Owner will however withhold the holdback provided for in paragraph 5.34.1.1 and an amount representing 2.5% of the price of the work that the Contractor was required to correct or complete under the Interim Certificate of Completion (including applicable taxes), as a holdback to secure the Contractor's performance of the obligations imposed thereupon pursuant to Article 8.32 *Rectification of Defects in the Work* and Article 8.33 *Non-Compliance by the Contractor*.

5.34.3.1.3 Not later than twelve (12) months less a day after the date of interim acceptance shown on the Interim Certificate of Completion, the Owner will inspect the work and send a report to the Contractor describing any defects or deficiencies to be rectified or corrected within the time allowed.

5.34.3.1.4 Any refusal by the Contractor to rectify or correct the work as directed by the Engineer may result in the application of a permanent holdback equal to the value, as estimated by the Engineer, of the work that the Contractor fails to rectify or correct, plus 20%.

5.34.3.1.5 Any failure by the Contractor to rectify or correct the work within the time specified by the Engineer may result, at the Owner's discretion, in either:

- 5.34.3.1.5.1 the application of a permanent holdback equal to the value, as estimated by the Engineer, of the work that the Contractor fails to rectify or correct, plus 20%; or
- 5.34.3.1.5.2 the application of damages in accordance with to paragraph 5.35.3.3.
- 5.34.3.1.6 Within sixty (60) days following, as the case may be, i) the date on which the Contractor has corrected all defects and deficiencies described in the report referred to in paragraph 5.34.3.1.3 to the satisfaction of the Engineer, or ii) the date on which the Owner has applied the permanent holdback pursuant to paragraph 5.34.3.1.4, or iii) the date on which the Owner has applied the permanent holdback or damages pursuant to paragraph 5.34.3.1.5, the Owner will remit to the Contractor the aggregate of the amounts withheld pursuant to paragraphs 5.34.3.1.1 and 5.34.3.1.2 above, less any amount that the Contractor may owe to the Owner for any reason, notably any amount owing to the Owner by the Contractor pursuant to 8.32 *Rectification of Defects in the Work* and Article 8.33 *Non-Compliance by the Contractor*, including, without limitation, any permanent holdback or damages imposed on the Contractor pursuant to paragraphs 5.34.3.1.4 and 5.34.3.1.5.
- 5.34.3.1.7 No interest shall be payable to the Contractor on the amounts withheld pursuant to paragraphs 5.34.3.1.1 and 5.34.3.1.2 above. Accordingly, the Contractor shall provide, in its tender, for any costs arising from the application of these paragraphs.

5.35 DAMAGES

5.35.1 PURPOSE AND DEFINITION

- 5.35.1.1 Articles 5.35.1 to 5.35.12 specify the damages payable as a result of the Contractor's failure to comply with the provisions of this Contract dealing with the time limits for the execution of the work and, where applicable, for the following: closure of traffic lanes, temporary signage, load lifting, work planning, Contract administration, certain environmental protection requirements, temporary structures, and certain requirements relating to lifting operations.
- 5.35.1.2 For the purposes of this article, a work day (or working day) is defined as any day except those specified below:
- 5.35.1.2.1 Sunday;
- 5.35.1.2.2 the work day determined by the Engineer when, due to adverse weather conditions or a condition directly resulting therefrom, the Contractor is unable to continue a critical activity. For the purposes of this article, it shall be a work day on which the Contractor is unable to continue the work with at least 60% of the labour and equipment normally engaged in the performance of said critical activity during a period of at least five (5) hours;
- 5.35.1.2.3 the work day on which the Contractor is unable to continue a critical activity, designated by the Engineer, due to the following:

- 5.35.1.2.3.1 a breach of Contract or impediment either by the Owner, by any other contractor of the Owner, or by any employee thereof;
- 5.35.1.2.3.2 failure, by the Owner, to deliver materials;
- 5.35.1.2.3.3 any other reason, beyond the control of the Contractor and proven to be such, to the satisfaction of the Engineer.

5.35.1.3 A work week shall consist of a minimum of six (6) days per week.

5.35.1.4 A critical activity is any activity that, if delayed, will result in a delay in the completion of the work of this Contract.

5.35.2 COMPLETION DATES

5.35.2.1 The Contractor shall carry out the work under this Contract without undue delay until completion thereof.

5.35.2.2 If the completion dates specified in this Contract do not allow the Contractor to complete the work by working the normal number of hours per day or per week, the Contractor shall add, for the duration of the Contract, such shifts and workers as the Contractor deems necessary to complete the work within the time specified, at no additional cost to the Owner.

5.35.2.3 The prices tendered for the various pay items shall include any additional costs resulting from the above provisions.

5.35.2.4 For the purpose of calculating the damages under Article 5.35.3 *Damages for Failure to Meet the Completion Dates*, the counting of the work days shall commence either on the day following the expiration of the completion dates specified in this Contract, calculated from the date of the Notice of Contract Award, or on the day following the date specified in the *Special Administrative Conditions*.

5.35.2.5 The work time from the day following the expiration of the completion dates specified in this Contract or the date specified in the *Special Administrative Conditions* referred to above shall be counted until the date of acceptance of the work by the Owner, by which date all work, excluding demobilization, shall be completed in all respects.

5.35.3 DAMAGES FOR FAILURE TO MEET THE COMPLETION DATES

5.35.3.1 It is agreed between the contracting parties that in the event that the work is not finished or completed by the end of the prescribed time, the Owner will have suffered prejudice.

5.35.3.2 Notwithstanding the *General Conditions* of the Contract, because it is, and will be, extremely difficult to assess and determine the exact extent of the prejudice suffered by the Owner as a result of such delay, the parties hereby agree that the Contractor

shall pay to the Owner, as liquidated damages, the amount specified in the *Special Administrative Conditions* for each working day of delay after the completion dates specified herein.

5.35.3.3 Notwithstanding the *General Conditions* of the Contract, in addition to the requirements of paragraphs 5.35.3.1 and 5.35.3.2, it is agreed between the contracting parties that for any rectification of defects in the work during the warranty period as set forth in 8.32 *Rectification of Defects in the Work*, the Contractor shall pay the amount specified in the *Special Administrative Conditions* for each work day exceeding the time specified by the Engineer for the correction of any defect to compensate the Owner, who incurs costs when such correction is made.

5.35.3.4 It is understood that the amounts referred to in paragraphs 5.35.3.2 and 5.35.3.3 represent an assessment of the actual damages caused to the Owner after the prescribed deadlines.

5.35.4 WORK DAYS BEYOND SCHEDULE

5.35.4.1 The number of work days beyond the completion dates specified in this Contract will be recorded in the worksite meeting minutes.

5.35.4.2 The Contractor shall have seven (7) days to challenge, in writing, the accuracy of the information recorded in the worksite meeting minutes, failing which it is agreed that the Contractor agrees with the information recorded.

5.35.5 DAMAGES ARISING FROM THE CLOSURE OF TRAFFIC LANES

5.35.5.1 In addition to the damages described above, it is agreed between the contracting parties that in the event that the traffic lanes are not opened to traffic as required by the specifications or if they are closed without authorization, the Owner will have suffered prejudice.

5.35.5.2 Notwithstanding the *General Conditions* of the Contract, because it is, and will be, extremely difficult to determine the exact extent of the loss attributable to such failure by the Contractor, the parties hereby agree that the Contractor shall pay to the Owner, as liquidated damages, the amount of three thousand five hundred dollars (\$3,500.00) for each lane and for each ten (10) minutes of obstruction or delay in reopening one or more traffic lanes at the times prescribed in subsection 6.14 *Traffic Control and Temporary Signage* of these specifications. As an example, damages will be calculated as follows:

5.35.5.2.1 One (1) lane blocked for 1 to 10 minutes: \$3,500;

5.35.5.2.2 One (1) lane blocked for 11 to 20 minutes: \$7,000;

5.35.5.2.3 Two (2) lanes blocked for 1 to 10 minutes: \$7,000.

5.35.5.3 If the Contractor obstructs traffic, for any length of time, without a properly approved *Lane Closure Request*, or obstructs traffic outside of the hours authorized in such request, the parties hereby agree that the Contractor shall pay to the Owner, as liquidated damages, in addition to the damages specified in paragraph 5.35.5.2, the amount of three thousand five hundred dollars (\$3,500.00) for each such violation.

5.35.6 DAMAGES FOR FAILURE TO COMPLY WITH THE TEMPORARY SIGNAGE REQUIREMENTS

5.35.6.1 In addition to the damages described above, it is agreed between the contracting parties that in the event that the Contractor fails to comply with the requirements of the specifications pertaining to temporary road signage, more specifically the traffic control and signage measures referred to in Section 4 *Control of Vehicular, Pedestrian and Cycling Traffic* and subsection 6.14 *Traffic Control and Temporary Signage* of these specifications, the Owner will have suffered prejudice.

5.35.6.2 Notwithstanding the *General Conditions* of the Contract, and in addition to the damages described above, because it is extremely difficult to determine the exact extent of the loss attributable to such failure by the Contractor, the parties hereby agree that the Contractor shall pay to the Owner, as liquidated damages, the amount of five hundred and fifty dollars (\$550) for each deviation of such requirements and for each additional day during which the deviation persists.

5.35.7 DAMAGES FOR FAILURE TO COMPLY WITH THE LOAD LIFTING REQUIREMENTS

5.35.7.1 As provided in paragraph 6.61.7.1.14, for any failure by the Contractor to comply with the requirements of paragraphs 6.61.7.1.7 through 6.61.7.1.13, the Contractor shall pay to the Owner, as liquidated damages, the amount of one thousand dollars (\$1,000.00) for each deviation.

5.35.8 DAMAGES FOR FAILURE TO COMPLY WITH THE REQUIREMENTS RELATED TO THE UPDATING OF THE WORK SCHEDULE AND WEEKLY AND DAILY PLANNING OF WORK

5.35.8.1 As provided in paragraph 5.14.10, for any failure by the Contractor to comply with the requirements of paragraph 5.14.8.3 or paragraph 5.14.9, the Contractor shall pay to the Owner, as liquidated damages, the amount of two hundred dollars (\$200.00) for each day late. The damages shall also be payable if the Engineer finds the documents provided by the Contractor to be incomplete, unrepresentative of the existing situation, or unrealistic as to the forecast, for each deviation and for each additional day during which the deviation persists.

5.35.9 DAMAGES FOR FAILURE TO COMPLY WITH THE REQUIREMENTS RELATED TO CONTRACT ADMINISTRATION

5.35.9.1 As provided in paragraph 5.7.11, for any failure by the Contractor to comply with the requirements of paragraph 5.7.9 or of paragraph 5.7.10, the Contractor shall pay to the Owner, as liquidated damages, the amount of seven hundred and fifty dollars (\$750) for each deviation and for each additional day during which the deviation persists, and for each of the positions of Project Manager and Superintendent.

5.35.10 DAMAGES FOR FAILURE TO COMPLY WITH CERTAIN ENVIRONMENTAL PROTECTION REQUIREMENTS

5.35.10.1 As provided in paragraph 6.13.1.9, for any failure by the Contractor to comply with the requirements of subsection 6.13 *Environmental Protection*, the Contractor shall pay to the Owner, as liquidated damages, the amount of five hundred dollars (\$500) for each deviation and for each additional day during which the deviation persists.

5.35.11 DAMAGES FOR FAILURE TO COMPLY WITH THE REQUIREMENTS RELATED TO TEMPORARY STRUCTURES

5.35.11.1 As provided in paragraph 6.15.4.1.27, for any failure by the Contractor to comply with the requirements of paragraph 6.15.3.1.24, the Contractor shall pay to the Owner, as liquidated damages, the amount of five hundred dollars (\$500) for each deviation and for each additional day during which the deviation persists.

5.35.12 DAMAGES FOR FAILURE TO COMPLY WITH THE REQUIREMENTS RELATED TO JACKING OPERATIONS

5.35.12.1 As provided in paragraph 6.61.7.1.14, for any failure by the Contractor to comply with the requirements of any of paragraphs 6.61.7.1.7 through 6.61.7.1.13, the Contractor shall pay to the Owner, as liquidated damages, the amount of five thousand dollars (\$5,000.00) for each deviation.

5.35.13 DAMAGES FOR FAILURE TO COMPLY WITH THE REQUIREMENTS RELATED TO THE ENGINEER'S OFFICE

5.35.13.1 As provided in paragraph 5.16.6.10, for any failure by the Contractor to comply with the requirements in any of the paragraphs of Article 5.16.6 *Engineer's Office*, the Contractor shall pay to the Owner, as liquidated damages, the amount of two hundred dollars (\$200) for each deviation and for each additional day during which the deviation persists.

5.36 NOT APPLICABLE

END OF SECTION