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DIVISION 01

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SITE CONDITIONS

1. GENERAL

1.1 Site Conditions and Limits

- .1 Examination of Site
 - .1 Prior to commencing actual construction Work, inspect field conditions, obtain and confirm actual Site dimensions, examine surface conditions as required to ensure correct execution of the Work.
 - .2 Maintain or arrange for the removal, relocation, and replacement as appropriate of any existing utilities, which may be affected by the Work.
 - .3 Arrange for the removal, relocation, and replacement as appropriate, of process piping, equipment, electrical conduit, and concrete pads and supports.

1.2 Documents and Instructions

- .1 Documents Provided
 - .1 Upon award of the Contract, the Contractor will be provided with five (5) complete sets of the Bid Documents (including Drawings) and five (5) copies of any revised Drawings or Addenda to the Bid Documents, which may have been issued during the Bid Period. Should the Contractor require additional sets of Drawings or documents, these will be supplied to him at cost.
- .2 Discrepancies and Omissions
 - .1 Notify the Contract Administrator immediately upon discovery of discrepancies or omissions in the Contract Documents or of any doubt as to the meaning or intent of any part thereof.
 - .2 To proceed with the Work when an error is suspected or when there is doubt as to the interpretation of the project requirements constitutes full acceptance of any cost associated with any remedial Work, which may be required.
- .3 Documents On-Site
 - .1 Maintain one (1) copy of all current Contract Documents and all Shop Drawings on-site, in good order and available to the Contract Administrator or his representatives.
 - .2 This requirement does not include the executed Contract Documents.
- .4 Changes to the Work
 - .1 Refer to the Contract General Conditions regarding changes to the Work.

SITE CONDITIONS

- .2 Contemplated Change Notice: issued after award of Contract, does NOT constitute an order to perform the change but is a notice of a proposed change only. Submit to the Contract Administrator within seven (7) days after receipt of Contemplated Change Notice a statement of cost adjustments and effect upon construction schedule required by the proposed change. Itemize statement in accordance with all items separately listed.
- .3 Field Order: during Construction, the Contract Administrator may issue a Field Order to authorize a change or additional Work of an emergency nature. A firm total cost (extra or credit) or a method for determining this cost must be included (unit price, cost plus, or time basis).
- .4 Authorization for Contract Change: after receipt of the statement of cost adjustment and the City's approval, the Contract Administrator will issue an Authorization for Contract Change in the amount of the approved cost adjustment, which will authorize the Contractor to proceed with the change to the Work, or alternatively will notify the Contractor that the proposed change is cancelled.
- .5 Field Instructions: the Contract Administrator may issue during construction, a Field Instruction to supplement or clarify the Contract Documents. Neither the Contract Price nor the Contract Time is affected by a Field Instruction.

1.3 Subsurface Conditions

- .1 The Contractor shall take appropriate precautions to protect existing structures and any underground utilities that could be affected by the Work.

1.4 Site Preparation

- .1 Description
 - .1 This Specification shall cover Site preparation, including mobilization, field office facilities, equipment and fuel compounds, Site drainage, access roads, storage areas, and turnarounds, Site contamination and clean-up, demobilization and Site restoration, and other Contractor related tasks required, as a portion of the Works for this Contract.
 - .2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour materials, all things necessary for and incidental to the satisfactory performance and completion of all Work, as hereinafter specified.

1.5 Construction Methods

- .1 Use of Public Roads and Rights-of-Way
 - .1 Maintenance

SITE CONDITIONS

- .1 It shall be the responsibility of the Contractor to keep public roads and rights-of-way used by their construction activities and traffic clean and maintained during the Construction Period.
 - .2 Earth, gravel, sand, or other construction materials spilled from hauling equipment onto public roads and rights-of-way shall be picked up promptly and continuously at the Contractor's expense.
 - .3 Any damage to public roads and rights-of-way caused by the Contractor's construction activities shall be repaired at the Contractor's expense as directed by the Contract Administrator or the authority having jurisdiction.
 - .4 Public roads and rights-of-way on the Site are used daily for delivery of septage and other materials. The Contractor shall ensure the roadways are kept unobstructed and not used for stockpiling or storage of materials, equipment, garbage, or Contractor's vehicles and parking.
- .2 Construction Traffic Crossing and Entering Public Roads
- .1 The Contractor shall limit their construction traffic crossing or entering public roads to as few locations as possible. Crossing and entrance locations shall be provided to the Contract Administrator for review and approval prior to construction starting.
 - .2 Where construction traffic crosses or enters onto public roads and rights-of-way the Contractor shall obtain the necessary approvals and provide signage and temporary traffic controls detailed in the Workzone Traffic Control Manual from the Manitoba Transportation and Government Services.
- .2 Site Drainage
- .1 Provision of adequate Site drainage during the Work shall be the Contractor's responsibility. No extra payments or time extensions will be granted as a result of difficulties associated with Site access resulting from poor Site drainage during any part of the Work.
 - .2 Any areas requiring clearing and grubbing to maintain adequate Site drainage shall be reviewed with the Contract Administrator prior to commencement of the Work.
 - .3 Maintain surface drainage in groundwater recharge areas.

SITE CONDITIONS

.3 Demobilization and Site Restoration

- .1 Further to GC:6.29, the Contractor shall demobilize, clean up, and remove all repair Work related surplus materials, tools, equipment, waste and debris, access roads, storage areas, turnarounds, approaches to public roads, ditch crossings, and temporary culverts and dispose off-site and backfill excavations by the day set for Substantial Performance.
- .2 The Contractor shall at his own expense, restore all surface areas damaged or disturbed by his activities at or adjacent to the Site to a condition equal to or better than was existing.

.4 Restricted Access Areas

- .1 Refer to the Site plan for any areas identified as restricted access. No admittance shall be permitted to these areas by the Contractor or Contractor's personnel without the Contract Administrator's permission.

1.6 Environmental Protection

- .1 The Contractor shall plan and implement the Work of this Contract strictly in accordance with the requirements of the environmental protection measures as herein specified.
- .2 The Contractor is advised that at least the following Acts, Regulations, and By-laws apply to the Work.
 - .1 Federal
 - .1 Canadian Environmental Protection Act c.16
 - .2 Transportation of Dangerous Goods Act and Regulations c.34
 - .2 Provincial
 - .1 The Dangerous Goods Handling and Transportation Act D12
 - .2 The Endangered Species Act E111
 - .3 The Environment Act c.E125
 - .4 The Fire Prevention Act F80
 - .5 The Manitoba Nuisance Act N120
 - .6 The Public Health Act c.P210
 - .7 The Workplace Safety and Health Act W120
 - .8 Other current associated regulations that may be applicable

SITE CONDITIONS

- .3 The Contractor is advised that the following environmental protection measures apply to the Work.
 - .1 Materials Handling and Storage
 - .1 The Contractor shall abide by the requirements of Manitoba Conservation for handling and storage of fuels.
 - .2 All fuel handling and storage facilities shall comply with the Dangerous Goods and Transportation Act, Storage and Handling of Petroleum Products Regulation and any local land use permits.
 - .2 Fuel Handling and Storage
 - .1 Fuels, lubricants, and other potentially hazardous materials as defined in The Dangerous Goods and Transportation Act shall be stored and handled within the approved storage areas.
 - .2 The Contractor shall ensure that all fuel storage containers are inspected daily for leaks and spillage. Damaged or leaking fuel storage containers shall be promptly removed from the Site.
 - .3 When servicing requires the drainage or pumping of fuels, lubricating oils or other fluids from equipment, a groundsheet of suitable material (such as HDPE) and size shall be spread on the ground to catch the fluid in the event of a leak or spill. This groundsheet may be supplemented with absorbent fabric material.
 - .4 Refuelling of mobile equipment and vehicles shall take place at least 100 m from a water reservoir shoreline.
 - .5 The areas around storage areas and fuel lines shall be distinctly marked and kept clear of snow and debris to allow for routine inspection and leak detection.
 - .6 A sufficient supply of materials, such as absorbent material and plastic oil booms, to clean up minor spills shall be stored nearby on-site. The Contractor shall ensure that additional material can be made available on short notice.
 - .3 Waste Handling and Disposal
 - .1 The construction area shall be kept clean and orderly at all times during and at completion of construction.
 - .2 At no time during construction shall personal or construction waste be permitted to accumulate for more than one day at any location on the construction Site, other than at a dedicated storage area as may be acceptable to the Contract Administrator.
 - .3 Indiscriminate dumping, littering, or abandonment shall not take place.

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- .4 No on-site burning of waste is permitted.
- .5 The Contractor shall provide waste collection bins within the laydown area acceptable to the Contract Administrator.
- .4 Dangerous Goods/Hazardous Waste Handling and Disposal
 - .1 Dangerous goods and hazardous waste are identified by, and shall be handled according to, the Dangerous Goods Handling and Transportation Act and Regulations.
 - .2 The Contractor shall be familiar with the Dangerous Goods Handling and Transportation Act and Regulations.
- .5 Emergency Spill Response
 - .1 The Contractor shall ensure that due care and caution is taken to prevent spills.
 - .2 The Contractor shall report all major spills of petroleum products or other hazardous substances with the potential for impacting the environment and threat to human health and safety to the Contract Administrator and Manitoba Conservation, immediately after occurrence of the environmental accident, by calling the 24-hour emergency telephone number (204) 944-4888.
 - .3 The Contractor shall designate a qualified supervisor as the on-site emergency response coordinator for the project. The emergency response coordinator shall have the authority to redirect manpower in order to respond in the event of a spill.
 - .4 The following actions shall be taken by the person in charge of the spilled materials or the person(s) arriving at the scene of a hazardous material accident or the on-site emergency response coordinator.
 - .5 Notify emergency response coordinator of the accident:
 - .1 Identify exact location and time of accident.
 - .2 Indicate injuries, if any.
 - .3 Request assistance as required by magnitude of accident (Manitoba Conservation 24-hour Spill Response Line (204) 944-4888, Police, Fire Department, Ambulance, company back-up).
 - .6 Assess situation and gather information on the status of the situation, noting:
 - .1 Personnel on-site
 - .2 Cause and effect of spill
 - .3 Estimated extent of damage

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- .4 Amount and type of material involved
- .5 Proximity to waterways and the reservoirs
- .7 If safe to do so, try to stop the dispersion or flow of spill material:
 - .1 Approach from upwind
 - .2 Stop or reduce leak if safe to do so
 - .3 Dike spill material with dry, inert absorbent material or dry clay soil or sand
 - .4 Prevent spill material from entering waterways and utilities by diking
 - .5 Prevent spill material from entering manholes and other openings by covering with rubber spill mats or diking
- .8 Resume any effective action to contain, clean up, or stop the flow of the spilled product.
- .9 The emergency response coordinator shall ensure that all environmental accidents involving contaminants shall be documented and reported to Manitoba Conservation according to the Dangerous Goods Handling and Transportation Act Environmental Accident Report Regulation 439/87.

2. PRODUCTS

- .1 Not used

3. EXECUTION

- .1 Not used

END OF SECTION

PROJECT MEETINGS

1. GENERAL

1.1 Preconstruction Meeting

- .1 Within 2 days after award of Contract, the Contract Administrator will request a meeting of parties in the Contract to discuss administrative procedures and responsibilities.
- .2 Representatives of the City, Contract Administrator, Contractor, and major sub-contractors shall attend.
- .3 Representatives of the Contractor and sub-contractors attending the preconstruction meeting shall be qualified and authorized to act on behalf of the party each represents.
- .4 The Contract Administrator will arrange meeting space and facilities, and notify all parties.
- .5 The Contract Administrator will chair and record discussions and decisions, and circulate the meeting notes to all parties concerned.
- .6 Agenda to include the following:
 - .1 Appointment and notification of official representatives of participants in the Work
 - .2 Schedule of the Work, progress scheduling
 - .3 Schedule of Shop Drawing and Sample submissions
 - .4 Schedule for the procurement and delivery of specified equipment
 - .5 Plant orientation program
 - .6 Requirements for temporary facilities, signs, offices, storage sheds, utilities, hoarding, access, and use
 - .7 Site security
 - .8 Health and safety
 - .9 Modification procedures, Contemplated Change Notices and Authorization for Contract Changes procedures, approvals required, mark-up percentages permitted, time extensions, overtime, administrative requirements as originated by the City or in the case of a savings, by the Contractor.
 - .10 Product and tool storage
 - .11 Weather protection
 - .12 As-Constructed Drawings
 - .13 Commissioning, acceptance, and handover
 - .14 Warranties
 - .15 Monthly progress claims, administrative procedures, photographs, holdbacks

PROJECT MEETINGS

- .16 Insurances and transcript of policies
- .17 Communication procedures
- .18 Access to the Site and Work areas; security
- .19 Survey
- .20 Progress meeting schedule
- .21 Photographs
- .22 Emergency telephone numbers
- .23 Other business

1.2 Progress Meetings

- .1 The Contract Administrator shall schedule and chair progress meetings once a week during construction and through the commissioning period.
- .2 Provide input to the Contract Administrator for the meeting agenda.
- .3 Representatives of the City, Contract Administrator, Contractor, and major sub-contractors must be in attendance. Arrange for other parties, such as trades and suppliers, to attend for specific agenda items if applicable.
- .4 Representatives of the Contractor, sub-contractors, and suppliers attending meetings must be qualified and authorized to act on behalf of the party each represents.
- .5 Agenda for construction progress meetings to include the following:
 - .1 Review and approval of minutes of previous meeting
 - .2 Field observations, problems, conflicts
 - .3 Review submittal schedules; expedite as required
 - .4 Review of off-site fabrication and delivery schedules
 - .5 Forecast progress and schedule for upcoming Work period
 - .6 Problems impeding construction schedule
 - .7 Corrective measures and procedures to regain projected schedule
 - .8 Revisions to construction schedule
 - .9 Site coordination review
 - .10 Maintenance of quality standards
 - .11 Review of Site cleanliness
 - .12 Review of Site safety and security

PROJECT MEETINGS

- .13 Review of temporary facilities
 - .14 Review requests for information
 - .15 Review Contemplated Change Notices, Field Orders, Authorization for Contract Change, and Field Instructions
 - .16 Review proposed changes for effect on construction schedule and on completion date
 - .17 Review of progress payments
 - .18 Outstanding action items
 - .19 Date and place of next meeting
 - .20 Other business
- .6 The Contract Administrator will record notes of the project meetings, including significant proceedings, decisions, parties responsible for all actions, dates for completion of duties, etc.
- .7 The Contract Administrator reserves the right to cancel any progress meeting or call additional meetings whenever deemed necessary.

1.3 Special Meetings

- .1 Special meetings may be requested by the Contract Administrator or Contractor to discuss specific issues. Generally, three days notice is required for special meetings. The agenda will be set to suit the meeting. Minutes will be recorded by the Contract Administrator.

2. PRODUCTS

- .1 Not used

3. EXECUTION

- .1 Not used

END OF SECTION

SUBMITTALS

1. GENERAL

1.1 Shop Drawings and Product Data

- .1 "Shop Drawings" mean custom drawings, product data, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by the Contractor to illustrate details of a portion of the Work.
- .2 Arrange for the preparation of clearly identified shop drawings as specified or as the Contract Administrator may reasonably request. Shop drawings are to clearly indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of the Work. Where articles or equipment attach or connect to other articles or equipment, clearly indicate that all such attachments and connections have been properly coordinated, regardless of the trade under which the adjacent articles or equipment will be supplied and installed. Shop drawings are to indicate their relationship to design drawings and specifications. Notify the Contract Administrator in writing of any deviations in shop drawings from the requirements of the Contract Documents.
- .3 Shop drawings shall be submitted with a marked-up copy of the associated specification. For each specification clause, indicate compliance or deviation from specification. Provide full explanation for each deviation. Shop drawings submitted without the marked-up associated specification sections will be returned to the Contractor as "NOT REVIEWED".
- .4 Examine all shop drawings prior to submission to the Contract Administrator to verify that all requirements have been determined and verified and that each shop drawing has been checked and coordinated with the requirements of the Work and the Contract Documents. Examination of each shop drawing shall be indicated by stamp, date and signature of a responsible person of the Subcontractor for supplied items and of the General Contractor for fabricated items. Shop drawings not stamped, signed and dated will be returned without being reviewed and stamped "REVISE AND RESUBMIT".
- .5 Submit shop drawings promptly and in an orderly sequence so as to cause no delay in the Work. Failure to submit shop drawings in time is not to be considered reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed. Jointly prepare a schedule fixing the dates for submission and return of shop drawings.
- .6 The Contract Administrator will review and return shop drawings in accordance with the schedule agreed upon or otherwise with reasonable promptness so as to cause no delay in the Work.
- .7 Shop drawing review by the Contract Administrator is solely to ascertain conformance with the general design concept. Responsibility for approval of detail design inherent in shop drawings rests with the Contractor and review by the Contract Administrator shall not imply such approval.
- .8 Review by the Contract Administrator shall not relieve the Contractor of any responsibility for errors or omissions in shop drawings or for proper completion of the Work in accordance with the Contract Documents.

SUBMITTALS

- .9 Responsibility for verification and correlation of field dimensions, fabrication processes, techniques of construction, installation and coordination of all parts of the Work rests with the Contractor.
- .10 Shop drawings will be returned to the Contractor with one of the following notations.
 - .1 When stamped "REVIEWED – NO COMMENT", distribute additional copies as required for execution of the Work.
 - .2 When stamped "REVIEWED - AS NOTED", Contractor shall so modify all copies for use and distributed same as specified for "REVIEWED – NO COMMENT".
 - .3 When stamped "REVISE AND RESUBMIT", make the necessary revisions, as indicated, consistent with the Contract Documents and submit again for review.
 - .4 When stamped "REVIEW BY CONSULTANT NOT REQUIRED", no further revisions are required.
- .11 After submittals are stamped "REVIEWED – NO COMMENT" or "REVIEWED - AS NOTED", no further revisions are permitted unless re-submitted to the Contract Administrator for further review.
- .12 Any adjustments made on shop drawings by the Contract Administrator are not intended to change the Contract Price. If it is deemed that such adjustments affect the Contract Price, clearly state as such in writing prior to proceeding with fabrication and installation of work.
- .13 Make changes in shop drawings which the Contract Administrator may require consistent with Contract Documents. When re-submitting, notify the Contract Administrator in writing of any revisions other than those requested by the Contract Administrator.
- .14 Shop drawings indicating design requirements not included in the Contract Documents require the seal of a qualified Professional Engineer, registered in the province of the place of the Project. Consulting calculations shall be submitted for review, if requested, and sealed by a qualified Professional Engineer.
- .15 Only two (2) reviews of shop drawings will be made by the Contract Administrator at no cost. Each additional review will be charged to the Contractor at the Contract Administrator's scheduled rates. The Contract Administrator's charges for the additional work will be deducted from the Contractor's Progress Certificates.

2. RECORD DRAWINGS

- .1 After award of Contract, the Contract Administrator will provide a complete set of electronic drawing files in AutoCAD format for the purpose of maintaining Project record drawings. Accurately record all deviations from Contract Documents caused by site conditions and changes ordered by the Contract Administrator. Update daily.
- .2 Record locations of concealed elements of mechanical and electrical services.
- .3 Identify drawings as "Project Record Copy". Maintain in good condition and make available for inspection on site by Contract Administrator at all times.

SUBMITTALS

- .4 On completion of the Work, two (2) weeks prior to final inspection, submit record drawings to Contract Administrator for review.

3. PHOTOGRAPHS AND PUBLICITY

- .1 No photographs of the site or of any portion of the Work will be permitted without prior approval of the Contract Administrator.
- .2 No press or publicity releases will be permitted without prior approval of the Contract Administrator.

4. PROCEDURES

- .1 The Contractor shall, if required by the Contract Administrator, submit for the review of the Contract Administrator method statements which describe in detail, supplement with drawings where necessary, the methods to be adopted for executing any portion of Work.
- .2 These statements shall also include details of constructional plant and labour to be employed. Acceptance by the Contract Administrator shall not relieve the Contractor of any of his responsibilities, nor shall reasonable refusal to approve entitle the Contractor to extra payment or an extension of time.

END OF SECTION

TEMPORARY FACILITIES

1. GENERAL

1.1 Laydown and Storage

- .1 All construction materials shall be stored at designated laydown and storage areas. Stored combustible materials shall be separated by clear space to prevent fire spread and allow access for manual fire fighting equipment, including fire hoses, extinguishers, hydrants, etc.
- .2 Designated areas shall be used for storage of flammable and combustible liquids and gases, which shall be properly equipped for grounding and bonding when refueling vehicles and equipment. Spills shall be contained as required by Provincial Regulations.
- .3 Pressurized dry chemical fire extinguishers of suitable capacity or equally effective extinguishers as per NFPA 10 shall be provided where:
 - .1 Flammable liquids are stored or handled.
 - .2 Temporary oil or gas fire equipment is used.
 - .3 Welding or flame cutting is performed.

1.2 Temporary Construction Materials

- .1 Tarpaulins and plastic coverings shall be of fire-retardant materials, which are UL or FM listed or approved, or which have passed the Large Scale Test specified in NFPA-701.

1.3 Contractor's Trailers

- .1 The Contractor shall:
 - .1 Prevent hazardous accumulations of dust, fumes, mist, vapours, or gases in areas occupied during construction.
 - .2 Provide local exhaust ventilation to prevent harmful accumulation of hazardous substances into atmosphere of occupied areas.
 - .3 Dispose of exhaust materials in manner that will not result in harmful exposure to persons.
 - .4 Ventilate storage spaces containing hazardous or volatile materials.
 - .5 Ventilate temporary sanitary facilities.
 - .6 Continue operation of ventilation and exhaust system for time after cessation of Work process to assure removal of harmful elements.
- .2 Suitable fire control equipment shall be provided by the Contractor for protection of its facilities, the portion of the City's building under construction and materials and equipment

TEMPORARY FACILITIES

at all Work areas. All fire protection equipment and fuel storage shall meet the approval of the Contract Administrator. Storage of fuel will not be permitted in the vicinity of the Work.

- .3 Unless approved by the Contract Administrator, burning of any materials is **NOT** allowed at the Site of the Work.
- .4 The Contractor shall be responsible for any damage resulting from fires caused by the Contractor or its employees and shall be solely responsible for all costs, which may be incurred in extinguishing such fires.

1.4 Toilets and Washrooms

- .1 Washroom facilities are not available at the NEWPCC for the Contractor's use.
- .2 The Contractor shall supply and maintain all necessary toilets and washrooms for its employees engaged in the Work. These toilets and washrooms shall comply with the requirements of The Public Health Act, R.S.M. 1987, c. P210, including sewage holding facilities and water storage. Sewage connections are not available.

1.5 Disposal of Waste Materials

- .1 Spoiled and waste materials shall not be dumped in any locations other than those approved by the local authorities. Any cost for permits and fees for disposing of waste materials shall be borne by the Contractor.
- .2 Disposal of all excavated and waste materials shall be in accordance with the requirements of the appropriate provincial regulatory agencies.
- .3 When working anywhere within the Works, the Contractor shall at the end of each working day remove the rubbish and leave the Site in a clean and tidy state, to the satisfaction of the Contract Administrator. If this is not done, the City will clean the Site and charge the Contractor.

1.6 Parking

- .1 Parking shall be arranged and maintained to not disrupt access for the plant's operation and maintenance.

1.7 Contractor's Site Storage for Equipment and Materials

- .1 The Contractor shall provide and maintain in a clean and orderly condition an adequately sized storage facility on-site, which will provide weather protected storage for all the tools, equipment, and materials necessary for the undertaking and completion of the Work.
- .2 The storage facility shall be located where directed by the Contract Administrator.
- .3 The compound shall have a hard base suitable for the storage of heavy equipment. Adequate temporary drainage shall be provided around the facility.

TEMPORARY FACILITIES

- .4 The storage of equipment and materials shall be limited to the storage facility only.
- .5 The responsibility for the security of the Site storage and the condition of all the equipment and materials therein shall rest solely with the Contractor.
- .6 The Contractor will be responsible for removal of this facility prior to issuance of Total Performance.

1.8 Water Supply

- .1 The Contractor is responsible to provide water required for the construction Works and for the water required for watertightness testing identified in Section 03300.
- .2 The Contractor shall, at its own cost, supply, install, maintain, and move extensions to water services as required during the Construction Period, subject to the City's approval.

1.9 Power and Light

- .1 The Contractor shall provide temporary power and light for own use. Install in accordance with regulations of governing authorities.
- .2 Provide and pay for all temporary power required during Construction for temporary lighting and the operations.
- .3 Wiring for temporary lighting is to be entirely separate from temporary power installation except for a common supply connection at either an electrical service or distribution centre.

1.10 Use of Permanent Water Supply, Heat, Power Light, and Telephone

- .1 The Contractor shall not make use of permanent water supply, heat, power, lighting, or telephone inside the NEWPCC without permission from the Contract Administrator.

1.11 Fueled Welding Machines and Air Compressors

- .1 Fueled welding machines and air compressors required for performance of the Work are to be the responsibility of the respective users. Locate outside of buildings.

1.12 Guard Rails and Barricades

- .1 Provide guard railings and barricades, around all openings, open shafts, open stairwells. Construct as recommended by local governing authorities.

1.13 Site Security

- .1 The City does not normally provide security forces to the plant Site. The gate is normally open during the day and closed at night.

TEMPORARY FACILITIES

1.14 Scaffolding

- .1 Provide and maintain adequate scaffolding as required. Scaffolding shall be rigid, secure, and constructed to ensure adequate safety for workers. Erect without damage to buildings or finishes.

1.15 Ladders, Stairs

- .1 Provide and maintain adequate temporary ladders and stairs required for construction.
- .2 Secure to structure.
- .3 Ladders and stairs are to comply with all requirements of safety authority.
- .4 Provide temporary wood treads on steel pan stairs for use prior to placement of permanent treads.

1.16 Explosive Actuated Fastening Tools

- .1 Provide for the use of explosive-actuated fastening tools when required. When using, conform to the requirements of CSA Z166 - "Explosive Actuated Fastening Tools" and local governing authorities.

1.17 Access to Site

- .1 Provide and maintain access roads, sidewalk crossings, ramps, and construction runways as required for access to, from, and through the Site. Conform to requirements of local governing authorities when required and when necessary make arrangements with adjacent property owners. Locate these traffic facilities where they are least disruptive to normal street traffic and local Site traffic.

1.18 Temporary Vehicular and Pedestrian Access

- .1 Maintain existing vehicular and pedestrian accesses properly at all times during construction.
- .2 The Contractor shall confine his equipment, storage of materials, and operations of his workmen to minimize Site damage. The Contractor shall be responsible to restore all areas damaged or affected by construction to equal or better conditions, which existed prior to construction, unless designated otherwise.

1.19 Protection for Off-Site and Public Property

- .1 Protect adjacent private and public property from damage during the performance of the Work.
- .2 Be responsible for all damages incurred due to improper protection.

TEMPORARY FACILITIES

1.20 Fire Protection

- .1 Provide and maintain adequate temporary fire protection equipment during performance of the Work as required by insurance companies having jurisdiction.
- .2 Provide minimum one (1) fire extinguisher in each equipment and tool shed, temporary office, material storage shed workshop.
- .3 Where subjected to low temperatures, extinguishers shall be anti-freeze type. In proximity to gas, oil, grease, or paint storage locations extinguishers shall be No. 10 carbon dioxide type. Extinguishers for all other locations shall be soda-acid type. All extinguishers shall be minimum 10 L capacity and ULC labelled.
- .4 Handle gasoline and like combustible materials with good, safe practice.
- .5 Remove combustible debris from Site daily.

1.21 Protection of Building Finishes and Equipment

- .1 Provide adequate protection for finished and partially finished building finishes and existing equipment and services during the performance of the Work. Provide necessary screens, covers, hoardings, etc., as required. Be responsible for all damages incurred due to improper or lack of protection.
- .2 The Contractor shall use methods of construction on concrete Work that will not generate dust.
- .3 The Contractor shall protect existing mechanical and electrical equipment from damage.
- .4 Maintain and protect existing services in operation during the course of the Work. Repair services damaged at no cost to the City.
- .5 If service interruptions are necessary, such interruptions shall be made only at times approved by the City.
- .6 Advise the Contract Administrator of any necessary service relocations not identified by the Contract Documents.

1.22 Access to Site and Building

- .1 It will be the Contractor's responsibility to check that accesses are in suitable condition before any plant, equipment, or materials are delivered to Site.
- .2 Access on the Site may be restricted by existing buried and surface utilities and structures. The Contractor is to confirm location of all potential obstructions and to review routing of construction vehicles with the Contract Administrator.
- .3 The Contractor shall maintain access at all times for City personnel or the Contract Administrator.

TEMPORARY FACILITIES

1.23 Access to Work

- .1 Normal working hours for City staff working inside the NEWPCC shall be between 7:30 a.m. and 4:00 p.m., Monday to Friday, except holidays.
- .2 The Contract Administrator shall be informed at least 24 hours in advance where the Contractor intends to carry out Work outside normal working hours and no such Work shall be done without the Contract Administrator's approval except when the Work is unavoidable or absolutely necessary for:
 - .1 Preventing injury to any person or saving the life of any person; or
 - .2 Preventing damage to property where the circumstances placing the property in danger could not reasonably have been foreseen and where the immediate carrying out of such Work is necessary in order to prevent damage to that property; in which case the Contractor shall immediately advise the Contract Administrator in writing that such Work outside the normal working hours is necessary and of the reasons for this. He shall also state the nature and extent of Work to be carried out.
- .3 The Contractor shall coordinate activities with City personnel and any other contractors that may be working concurrently on the Site.

1.24 Temporary Use of Conveying Systems

- .1 Contractor may use existing cranes, hoists, monorails, and other access and lifting devices as required for the work; provide City minimum 24 hours notice requesting such use.

1.25 Site Security Lighting

- .1 Provide and pay for temporary Site lighting as required for non-daylight times. Install lamps in suitable locations to obtain unobstructed light over all Work areas.
- .2 Perform daily inspection of Site lighting and replace burned out and missing lamps. Relocate promptly any lights that become obstructed by new Work.

1.26 Warnings and Traffic Signs

- .1 When Work is performed within public areas, provide and erect adequate warning signs as necessary to give proper warning. Place signs sufficiently in advance to enable public to respond to directions.
- .2 Warning and traffic signs shall be illuminating type, visible to public and traffic during day and night.
- .3 Provide and maintain signs and other devices required to indicate construction activities or other temporary or unusual conditions resulting from the Work.

TEMPORARY FACILITIES

2. PRODUCTS

.1 Not used

3. EXECUTION

.1 Not used

END OF SECTION

CONTRACT CLOSEOUT

1. GENERAL

1.1 Final Cleaning

- .1 When the Work is Substantially Performed, remove surplus products, tools, construction machinery, and equipment not required for the performance of the remaining Work.
- .2 Remove waste and debris and leave the Work clean and suitable for occupancy by the City.
- .3 When the Work has reached Total Performance, remove surplus products, tools, construction machinery, equipment, waste, and debris.
- .4 Leave the Work areas broom clean before the final inspection.

1.2 Site Restoration

- .1 The Contractor shall remove the temporary Site office and storage facilities prior to Total Performance being issued.
- .2 The Contractor will be responsible for grounds restoration to original state, as determined necessary by the Contract Administrator.
- .3 The Contractor shall repair all damage caused by his forces on roadways or accesses.

2. PRODUCTS

- .1 Not used

3. EXECUTION

- .1 Not used

END OF SECTION