DIVISION 1

SPECIFICATIONS GENERAL

INDEX

SECTION 101

FOREWORD

This manual is a living document and will continually be revised and updated with best practices to improve upon construction specifications for road and bridge work. It is therefore the sole responsibility of Manual users to check periodically to make sure they have the latest and legal edition of this manual.

It is the Bidder/User's responsibility to ensure they have an up-to-date copy of the Department's Specifications when bidding on Department tenders or when completing the required work.

Users of the Department's Specifications Book are advised any references to Standards, Design Codes and Technical Guidelines and the like shall be to the most current version as appropriate, unless otherwise noted in the contract documents or has been specifically noted in the Specification. Any acts, statues or regulations referred to in the Contract Documents which have been repealed are to be superseded by any new legislation which decrees that it has replaced said act, statue or regulation.

Furthermore, references to Department names throughout the Specifications Book are current to the time of issuing the Specifications Book. Users are advised Department names may change from time to time and it is the user's responsibility to ensure they contact the appropriate Department as required.

SECTION 110

ENGINEER'S FIELD OFFICE

On projects having a total estimated tender value of $250,000 or greater, the Contractor shall supply a field office together with furniture for the use of engineering staff. The Field Office shall not be of a lesser standard than that shown on Form 1201 and furniture shall be of a standard to prevent musculoskeletal injury (ergonomic) as per the OH&S Act. Prior written approval must be obtained from the Department should the Contractor wish to supply an office other than that shown and described on this plan.

The Contractor must provide the office with utilities including but not limited to: washroom facility, electricity, high-speed internet access and telephone service (long distance charges are to be itemized and reimbursed through Project Contingency allowances at cost based upon submitted supplier invoices). The field office is to have a plain paper fax and separate photocopier capable of scanning to Adobe PDF format. The photocopier must be capable of copying letter (8.5” x 11”) and legal (8.5” x 14”) sized paper as well as bound field books.

On projects having a total estimated tender value of less than $250,000, the Contractor must still supply a field office and furniture, but the field office and furniture may be to a lower standard than that shown on Form 1201. Furniture and facilities may be reduced accordingly as agreed to by the Owner’s Representative; however, the floor area shall not be less than 15 square metres.

On contracts that involve the construction of a concrete bridge or concrete pavement, the Contractor shall equip the office with a concrete test cylinder-curing tank of capacity not less than 0.2 cubic metres.

The field office must be located on the site of the project and shall be completely ready for use, including all above noted utilities, from the first day the Contractor commences work and it shall remain available for use until Total Performance of the contract as certified by the Owner’s Representative. All doors for accessing the Field Office shall be secured by means of an exterior latch suitable for a Department supplied padlock. Any other means of accessing the Field Office shall be securable and accessible from the inside only.

The Contractor shall clean the office and maintain all electric lights, heating, ventilation, hot and cold water, telephone, internet and the washroom facilities in good working condition at all times. Cleaning of the office shall be done on a biweekly basis unless the Owner’s Representative agrees to an alternate schedule.

All costs of providing the office, furniture, equipment and providing and maintaining the required heat, light, hot and cold water, telephone, internet and sanitary provisions (including paper products, soap and sanitizer) together with twice a week clean out shall be borne by the Contractor. (Note: all products for cleaning and sanitizing must meet Health Canada authorized products for disinfection.)

No payment will be made for this item. The provision and maintenance of the Field Office including all the noted requirements shall be considered part of carrying out the other contract items.

SECTION 111

FIELD LABORATORY

On projects having a total estimated tender value of $250,000.00 or greater and on which soils testing will be required, the Contractor shall supply a field laboratory together with furniture for use by engineering staff.

The field laboratory shall be heated, have 110 volts 60 cycle electrical outlets, electric light, work benches, clean running water, washroom facilities, electric laboratory oven, propane table top stove, and be suitable for the type of testing called for in the specifications. The field laboratory shall be of a standard not less than that shown on the plan on Form 1203 and furniture shall be of a standard to prevent musculoskeletal injury (ergonomic) as per the OH&S Act. Should the Contractor wish to supply a field laboratory other than that shown on Form 1203, then prior written approval of the Owner's Representative must be obtained.

The field laboratory is to have a photocopier capable of copying letter (8.5" x 11") and legal (8.5" x 14") sized paper as well as bound field books. The office area in the laboratory shall also be fitted with an air conditioning unit.

If at any point during the project, the field laboratory experiences an electrical malfunction that results in damages or short circuits any piece of Department supplied equipment, the Contractor will be required to replace the damaged equipment with new equipment of the same make/model or better. Failure on behalf of the Contractor to replace such equipment will result in the replacement costs for the damaged equipment being deducted from the final progress claim. Any work on the project that would require use of the damaged equipment shall be suspended until such time as replacement equipment is provided by the Contractor. The Department will not entertain any claims for delay as a result of the above requirements.

Whenever asphalt testing is conducted, the Contractor shall provide a fume hood located inside the field laboratory for Department testing purposes, having adequate forced air

circulation. This requirement is necessary to ensure the safety of personnel conducting the extraction of asphalt cement from the hot-mix asphalt using N-Propyl Bromide. Contractors shall also provide the required N-Propyl Bromide solvent to conduct the testing.

The fume hood must be located appropriately within the laboratory to allow proper functional access and not interfere with other laboratory functions or testing.

Fume hoods, complete with work surfaces, cabinets, sinks, exhaust blowers and chemical extraction pumps, must be approved by the Materials Engineering Division prior to purchase. Proposed fume hoods shall meet or exceed ASHRAE-110, NFPA-45, and UL 1805 standards as well SEFA recommended practices.

Materials and description criteria below shall be met:

1. **Fume Hood**

    - Minimum dimensions of 72 inches wide x 32 inches deep x 48 inches high to permit placement of vacuum extractor, vacuum pump and hot plate.
    - Constructed of chemical resistant, flame retardant, non-metallic composite resin, both interior and exterior.
    - Interior fume chamber is moulded one piece seamless with all corners coved.
    - Equipped with vertical slide safety tempered glass slash with chemical resistant sash frame – sash track – and sash lift.
    - Sash stops which field personnel can manually adjust.
    - Vapour-proof light fixture mounted in hood with switch pre-wired to junction box.
    - 115v, 20amp, single-phase 2-duplex receptacle installed on front column of fume hood for a vacuum pump and hot plate.
    - Switch installed for chemical extraction pump.

    (Hemco Uniflow LE Fume Hood Part No. 35611 or Equivalent)

    (Hemco Safety Sash Lock Part No. 51651 or Equivalent)

    (Hemco 2 Duplex Receptacle Part No. 50029-2 or Equivalent)

    (Hemco Single Receptacle Part No. 50030-2 or Equivalent)

2. **Work Surface (Countertop)**

    - Stainless steel work surface with dimensions to match internal fume hood

chamber.

- Surface dished minimum 3/8” to contain spillage.
- Hole must be cut in surface to allow installation of oval cup sink.
- Polyolefin 3 inch by 9 inch oval cup sink for drainage

(Hemco Stainless Steel Work Surface Part No. 20616 or Equivalent)

(Hemco Oval Cup Sink Part No. 40121 or Equivalent)

3. **Acid Storage Base Cabinets**

- Storage base cabinets having dimensions to match fume hood chamber (minimum dimensions for one cabinet 72 inches wide or two cabinets 36 inches wide each.)
- Constructed of top grade furniture steel with a chemical resistant finish.
- Interior shall have a moulded one piece seamless liner constructed of chemical resistant composite resin.
- Adequate space for two 5-gallon containers. One container will hold clean solvent to pump into extractor whereas the second container will hold the asphalt cement / N-Propyl bromide extract solution from the vacuum extractor. (Rather than setting up the two containers, the Contractor may run lines for clean solvent and extract to barrels outside the trailer that are properly secured)
- Adjustable Shelf and vented hinged doors.

(Two Hemco Acid Storage Base Cabinets Part No. 15030 (36 inches wide) or equivalent)

4. **Fume Hood Exhaust Blower**

- Belt driven exhaust blower installed next to hood or externally on the trailer roof. Capacity of 500-1000 CFM
- ¼ HP, 115 V motor
- Pilot light switch for air blower.
- Ventilation duct hardware and vents shall be supplied and installed as per fume hood manufacturer’s instructions

(Hemco Epoxy Coated Steel Blower Belt Drive Part No. 51705X or Equivalent)

(Hemco Blower Switch with Pilot Light Part No. 50027-1 or Equivalent)

5. **Chemical Extraction Pump**

- 115v liquid-flow pump to be installed in base cabinet to extract N-Propyl Bromide from container
- Pump outfitted with chemical resistant Viton diaphragm
- Piping made of PVC plastic

The fume hood must also be inspected prior to use in accordance with all applicable regulations.

Contractors are to provide the required N-Propyl Bromide solvent to conduct the testing. For rough estimate purposes, each extraction test requires approximately 5 litres solvent.

Contractors must also dispose of used solvent by means of an approved chemical waste disposal company. Verification of proper disposal of the solvent shall be provided to the Owner's Representative upon completion of the work.

The field laboratory shall be located on the site of the project and shall be ready for use from the first day the Contractor commences work for which testing is required, and it shall remain available for use for the duration of the contract. All doors for accessing the Field Laboratory shall be secured by means of an exterior latch suitable for a Department supplied padlock. Any other means of accessing the Field Laboratory shall be securable and accessible from the inside only.

The Contractor shall supply a separate vented steel storage locker for the Department's coring machine and mixed gas. The storage unit shall be located near the field laboratory and have a means of properly securing its contents.

The Contractor shall periodically clean the laboratory and maintain all electric lights, heating, running water, and sanitary provisions in good working condition during the time the laboratory is required.

On projects having a total estimated tender value of less than $250,000, the Contractor shall provide and maintain a field laboratory as described, or provide transportation of all Test Samples from the job site to the Department's Materials Engineering Division at LeMarchant Road in St. John's.

The Owner's Representative, or their representatives shall select test samples, and the number and the frequency of taking test samples shall be at the sole discretion of the Owner's Representative.

All costs of providing and maintaining the field laboratory as described, or of transporting test samples shall be borne by the Contractor. No payment will be made for this item. The provision and maintenance of the field laboratory shall be considered as part of carrying out those contract items for which tests are required.

SECTION 112

BOARD AND LODGING FOR DEPARTMENTAL PERSONNEL

The Contractor shall supply board and lodging to the Department's Engineering staff, or their representatives, employed on the work, providing that the Contractor is maintaining accommodations for their staff. Board and lodging shall include furnished sleeping quarters, comparable to those supplied to the Contractor's own staff.

Rates for determining payment for board and lodging shall be in accordance with the latest Human Resources Secretariat Travel Policy for Newfoundland Meal and Private Accommodations in effect at the time of tender closing (including HST). Current rates may be found under the travel policy at the following link:

https://www.exec.gov.nl.ca/exec/hrs/working_with_us/policies.html

The Contractor shall not charge the Department for meals not availed of by the Department's Engineering staff as long as three (3) hours notice before mealtime is given. When the Department's employees do not avail of meals and accommodations supplied by the Contractor on weekends and holidays, payment will be made for lodging only.

Should the Contractor provide accommodations for their staff, and insufficient space is made available for Department personnel, alternate arrangements will be made for Department personnel and costs associated for the alternate arrangements, in excess of the $25.00 for lodging specified above, are to be borne by the Contractor.

SECTION 113

SANITARY PROVISIONS

The Contractor shall provide and maintain sanitary provisions for the use of their employees. The sanitary provisions shall be in accordance with the various Provincial and Municipal Government Regulations. In particular, the Contractor shall ensure sanitary provisions meet with the requirements of Section 61 and 62 of the OH&S Regulations.

SECTION 120

PURCHASE OF LUMBER

Whenever the Contractor is required to purchase lumber for use on a project, they must use lumber that has been manufactured in the Province of Newfoundland and Labrador when such lumber is available in suitable quality.

SECTION 121

MOVEMENT OF CONTRACTOR'S PLANT

Whenever it becomes necessary to transport Contractor's plant, machinery or materials, the Contractor shall have no claim against the Department for any cost or delay that may be incurred or occasioned by reason of the condition of any road, bridge or any natural obstruction.

SECTION 122

LINES AND GRADES

For Roadwork Operations:

All lines and grades shall be furnished by the Owner’s Representative on the offset stakes. Slope stakes will be placed as required by the Owner’s Representative.

Whenever necessary, the Contractor's operations shall be suspended to permit the placing of stakes and the setting of grades. Every effort will be made to make such suspensions as brief as practicable, but the Contractor shall not be allowed any compensation for such suspensions.

The Contractor shall give the Owner’s Representative ample notice of the time and places where the lines and grades will be needed. The Contractor shall give the Owner’s Representative a minimum of 3 working days notice in advance of starting an operation requiring staking. Claims will not be considered due to alleged inaccuracies unless the Contractor notifies the Owner’s Representative, in writing, in sufficient time to allow for the verification of the potential issue.

All stakes, marks, etc., shall be carefully preserved by the Contractor and in the case of their destruction or removal by the Contractor or their employees/subcontractors, such stakes or marks, etc., shall be replaced by the Owner’s Representative at the Contractor's expense

The Contractor shall be responsible for transferring the lines and grades from the offset stakes.

For Bridge operations:

The Contractor shall refer to Section 926 for layout requirements associated with structures.

SECTION 123

STORAGE FACILITIES

The Contractor shall supply proper storage facilities at their own expense and shall be responsible for the care of all materials until placed in the works.

SECTION 124

NOTICES BY CONTRACTOR

The Contractor shall give all necessary notices to Municipalities, waterworks, gas, electric light or power, cable television, telephone companies, owners or occupants of property, or other interested parties at least two weeks in advance of the work, except where the serving of such notice is the express duty of the Department. One copy of all such notices shall be forwarded to the Owner's Representative.

Where work activities such as bridge rehabilitation and asphalt paving are anticipated to cause significant delays to the motoring public, the Contractor shall be responsible for providing ample notifications to the public through radio and newspaper media. Notifications shall commence a minimum of one week before the plan disruption and continue for the duration of the work. Where directed by the Owner's Representative, the Contractor shall supply Variable Message Board signs to advise motorists of the anticipated delay caused by the Work. The provision of these requirements shall be deemed incidental to the Work.

SECTION 125

WAGES OF FLAGPERSON

Where flagpersons are required for the control and direction of traffic, either in accordance with Section 715, or as requested by the Owner's Representative, then the Contractor shall be compensated at the contract price for flagperson hours unless deemed incidental to the work.

Measurement for payment will be the number of hours, rounded to the nearest half hour that each flagperson works as required by the Owner's Representative. No payment will be made for meal periods unless the flagperson actually works through the meal periods.

Payment at the contract price for flagperson hours shall be compensation in full for all costs to provide the flagperson; including wages, board and lodging, E. I., premiums, etc., and profit.

Contractors are advised that only employees who have received proper training can be claimed for under this section. Flagpersons shall be equipped with either 2-way or 3-way radios for communications only. Flagpersons are not be permitted to use any cellular devices during hours of operation unless deemed an emergency. Flagpersons observed using cellular devices for any other purposes will be requested to leave site and shall be replaced immediately.

The Department will not accept any claims resulting from work delays for the dismissal of any flagperson who fails to abide by this requirement. Contractors are strongly advised to enforce this item promoting site safety.

SECTION 126

HARMONIZED SALES TAX

Contractors are advised that government is not exempt from the Harmonized Sales Tax (HST). HST is not to be included with the individual unit prices in the unit price table. The Department of Transportation and Infrastructure will pay the HST to the Contractor with each regular progress billing.

SECTION 127

SUBCONTRACTORS

Where applicable, and subject to the approval of the Owner's Representative, the Contractor may apply to have portions of the Work carried out by an approved subcontractor(s). The Contractor shall provide the Owner's Representative, in writing, with the name(s) of the proposed subcontractor(s) as well as a description of the item(s) being subcontracted. The Owner's Representative will provide written approval of the subcontractor to the Contractor as required. The approval of any subcontractor shall be exclusive to the Contract under which the application is made.

In submitting a request for use of a subcontractor, the Contractor shall affirm:

1. The subcontractor is completely familiar with the Contract Documents and will be furnished with a copy of the documents prior to commencing work.

2. The Contractor shall also affirm the subcontractor is fully aware of the Contractor's Site Specific Safety Plan and will abide by its requirements, the OH&S Act and Regulations as well as the Department's OH&S Manual.

SECTION 128

CERTIFICATE OF RECOGNITION

The Contractor shall, at the time of bid submission, submit a Letter of Good Standing stating Certificate of Recognition (COR) certified from the Newfoundland and Labrador Construction Safety Association, or equivalent. The Letter of Good Standing stating COR certified must be valid at the Submission Deadline (Closing Date). The Contractor must remain in good standing with the COR program for the full duration of the contract.

Additionally, the Contractor shall provide such evidence of compliance, via letter of good standing, stating Certificate of Recognition from the NLCSA by any or all of their Subcontractors. Failure to provide the necessary documentation may result in the issuance of a Stop Work Order until such time as the necessary information is provided. The Contractor will not be entitled to claim for Delay as a result of any Stop Work Order being issued.

SECTION 130

PROTECTION AGAINST NEGLIGENCE AND DAMAGE

The Contractor shall at all times, carry out the Work in a manner that will create the least interference with traffic consistent with the faithful performance of the Work. They shall not close any portion of the highway, except by written order of the Owner's Representative. When such closure is so authorized, the Contractor shall furnish, erect, and maintain at their own expense, such barriers, lights, and notices, and employ such security and flagpersons as are required by Section 715 or as the Owner's Representative may direct. They shall use all proper precautions by good and efficient barriers, notices, lights, and security, for the prevention of accident, and shall indemnify and save harmless the Minister from all suits and action for damages and costs to which they may be put by reason of injury to persons or property resulting from negligence, carelessness or any other cause whatsoever in the performance of the Work, in guarding the same, or from any improper material used in construction, or by or on account of any act or omission of said Contractor or their agent or/and subcontractor, or employee. The Contractor shall assume all damage liability to persons or properties caused by reason of their operations on this contract. The Contractor shall, at their own expense, save from injury all trees adjoining the highway unless the Owner's Representative shall otherwise direct.

Before commencing work, the Contractor shall establish the extent and exact location of all known existing underground services including pipelines, municipal water and sewer lines, cables, structures and other obstructions in the area of work and notify the Owner's Representative in writing of the findings. The Contractor shall proceed with caution in the performance of the Work to protect all known underground services and be responsible for all associated repairs when such underground services are broken or otherwise damaged as a result of the Contractor's operations, either directly or indirectly.

Where underground services must be removed or relocated as directed by the Owner's Representative, then the removal or relocation shall be carried out and paid in accordance with the appropriate specification and contract item on the Unit Price Table for that work. Should there not be a contract item for the removal or relocation of the particular type of structure encountered, then the removal or relocation will be paid for in accordance with the provisions of Section 150.

The Contractor is reminded of the requirements of Section 124.

SECTION 131

ROAD OR BRIDGE DIVERSIONS

Where the Work involves a diversion or diversions from the existing highway alignment, the Contractor shall be responsible for the maintenance of the existing road and bridges as well as the diversion(s) until the completion and acceptance of the Work. The Contractor shall be aware of the requirements of Division 7 of the Specifications Book as well as the Traffic Control Manual. Diversions must be approved by the Owner's Representative prior to their installation. The specified minimum width of the top of a one lane diversion shall be a minimum of 5.5 meters.

However, should the Contractor establish that their equipment does not use the existing road and bridges, then maintenance of the existing road and bridges will be the responsibility of the Department.

SECTION 132

DISCONTINUATION OF WORK

Where the Work is discontinued, and will not be resumed until after an extended period, or until the next working season, the Contractor shall, when so directed by the Owner's Representative, open and place the roadway together with any bridges in a satisfactory condition suitable for safe public travel and snow plowing.

Concrete bridge decks over which it is proposed to run traffic shall be cured in accordance with Section 904. The bridge structure and railing shall be in a condition adequate to sustain all traffic without damage.

Once opened, the roadway shall not be closed to traffic, or traffic thereon be obstructed without written authority of the Owner's Representative.

The Contractor may request that the Department take over maintenance responsibilities for the roadway during periods when work is discontinued. In which case, the Contractor must first place the roadway together with any bridges in a condition that is acceptable to the Owner's Representative before the Department will relieve the Contractor of their responsibility for maintenance. However, the Department will not undertake to maintain; temporary signs, temporary traffic lights, temporary culverts, and temporary bridges provided by the Contractor, responsibility for the maintenance of these shall rest with the Contractor throughout the period of discontinuation of the Work.

During a discontinuation of work period when the Department has taken over maintenance responsibility, should any bridge damage occur, for example damage to an

expansion joint or to a bridge railing, the Contractor shall indemnify and hold harmless the Department for the damage, and any consequences of the damage. The Contractor shall make good any such damage at their own expense in a timely fashion. Failure by the Contractor to undertake the necessary repairs in an acceptable timeframe may result in the Department having the repairs completed by others and recovering the costs from the Contractor's future progress payments.

SECTION 133

REMOVAL OF SNOW AND ICE

During the construction period, the Contractor shall remove snow and ice from any portion of the Work in any of its stages, whenever deemed necessary by the Owner's Representative. No additional payment will be made for this work.

SECTION 134

FINISHING OF PROJECT

After all other work encompassed in the contract is completed, and before acceptance and final payment will be made, the entire project shall be neatly finished and trimmed to the lines, grades, and cross sections shown on the plans, or as directed by the Owner's Representative, to produce smooth surfaces and slopes and a uniform cross section. All construction operations related debris, fallen trees, boulders, bog, and surplus materials, shall be disposed of as provided by these specifications.

All drainage ditches, waterways, and culverts shall be opened up and cleared out to restore to their full effectiveness.

Should the surface of any structure or road be contaminated as a result of the Contractor's operations, then the Contractor shall clean off all such mud, or deleterious substances, and restore the surface to the satisfaction of the Owner's Representative.

All grubbed areas adjoining excavations or embankments shall be graded to conform to the general ground lines.

Finishing of project will be considered as subsidiary work pertaining to the contract and no extra payment will be made.

SECTION 135

DELAYS CAUSED BY UTILITIES AND PROPERTY OWNERS

Before work begins, the Department will make every effort to acquire all of the right of way and to arrange for the moving of those utility poles, wires, cables, and underground facilities that are in the way. However, should the Contractor be delayed, due to the right of way not being acquired, or due to utility poles, wires, cables, and underground facilities not being moved, the Department will not assume responsibility for such delays and the Contractor shall indemnify and save harmless the Minister from all suits and action for damages and costs resulting from the delay.

SECTION 136

CONTRACTOR'S LIABILITY FOR ENGINEERING SUPERVISION COSTS

Should the Contractor fail to meet the date to substantially perform the Work as indicated in the Agreement between the Owner and Contractor, and is unable to provide justification acceptable to the Owner for the delay, the Contractor shall be held liable for payment to the Owner for the additional costs for engineering supervision in accordance with GC 46 as well as the Supplementary General Condition for “Liquidated Damages”. Costs shall be charged against the Contractor for each calendar day that the Work remains uncompleted after the Liquidated Damages Application Date, not as a penalty but as Liquidated Damages.

The per diem Liquidated Damage Daily Rate will apply, which has been determined as the total of the Department’s costs associated with maintaining a presence and carrying out typical contract administration duties on the project which includes, but has not been limited to the following: salaries including overtime, for the staff complement on the project, travel costs for the normal staff complement on the project, vehicle rental charges, fuel for vehicles, and other equipment rental charges, such as internal survey equipment, which may be utilized on the project.

Depending on the scope of Work, there may be other direct or indirect costs to the Department, which are recoverable as supplemental liquidated damages including but not limited to consulting, third parties etc. These other costs shall be quantified and considered as additional to the Liquidated Damage Daily Rate noted above. These costs could be substantial.

No bonus will be assessed for completing the project ahead of the given completion date.

Contractors, by submission of their tender, shall be deemed to have accepted these terms and agree the per diem Liquidated Damage Daily Rate specified in the contract is a

genuine reasonable pre-estimate of costs, or loss to the Department, for contract administration.

SECTION 137

CLEARANCES DURING CONSTRUCTION

Where vertical clearance for vehicular traffic is restricted, the Contractor shall make provision to ensure that adequate clearance remains. The vertical clearance during construction shall not be less than 4.5 metres.

At the beginning of each project or each construction season, whichever is most frequent, the leading edge of such vertical obstruction shall be clearly marked in fluorescent orange or red paint. At least two signs shall be posted, one at and one before the opening, indicating the exact vertical clearance less 0.1 metres. The signs shall be of a reflective type and the lettering shall be standard size or larger. At least one of these signs shall be placed far enough in advance to permit large and heavy trucks to decelerate. This procedure shall be repeated on each side of the opening facing oncoming traffic.

Where falsework restricts the lateral clearance afforded to vehicles, the Contractor shall make adequate provision for protection of the Work and traveling public, including but not limited to the installation of guide rail.

Where one lane of traffic on a bridge, overpass or underpass is closed to traffic, the Contractor shall make adequate provision for the same.

This shall include proper signs and concrete median type barriers separating the Work and traffic areas. The various concrete median barriers shall have a minimum height of 813 millimetres, minimum base width of 610 millimetres, a nominal mass of 17.0 kN and be connected by chain to each other with a nominal separation of 500 millimetres between barriers. Each anchor and chain shall be capable of lifting a mass equal to 1.3 times the mass of the median barrier.

SECTION 138

UPGRADING OF ROADS OPEN TO TRAFFIC

The Contractor shall be responsible for ensuring that the driving surface of the road is always at an acceptable standard for traffic, as determined by the Owner's Representative.

For projects, other than the Trans Canada Highway, where placing of Selected Granular Base Course is an item, the application of this material shall be carried out in such a way

that no more than a total of 1 kilometre of reconstructed subgrade is left without selected granular base course at any time.

On Trans Canada Highway projects where pavement is to be removed and replaced without provision for diverting traffic over other paved areas, the Work shall be carried out in conformance with the following provisions.

For projects of length less than 6 kilometres, initially no more than one continuous stretch of pavement, of length no greater than 1 kilometre, may be removed. After completion of subgrade and after completion of the placing of Granular “B” and when at least 75% of the Granular “A” operations have been carried out over this initial pavement removed section, then more old pavement may be removed in a continuous stretch, for an addition length of up to 1 kilometre.

After at least 1 kilometre of road has been paved, and at least 75% of the Granular “A” operations have been completed on the remaining unpaved part, then an additional 1 kilometre of pavement may be removed. The operations shall continue in this fashion until the paving is completed. At no time during operations shall an unpaved work area exceed 2 kilometres in length.

Furthermore, the Contractor shall carry out their operations in such a way that no one place on a public traveled roadway on the Trans Canada Highway will be unpaved for more than 28 calendar days.

Prior to commencing paving operations, the Contractor shall discuss with the Owner’s Representative the proposed locations of longitudinal joints. The Contractor shall carry out their paving operations so that the longitudinal joints are at locations approved by the Owner’s Representative.

Surface course asphalt shall not be laid on short sections. For projects of length greater than 3 kilometres, the Surface Course shall not be laid in lengths less than 3 kilometres. Minimum width of application for the Surface Course shall be the full base course width.

For projects of length 6 kilometres or more, the work shall proceed as previously stipulated for the shorter projects, except that the Contractor has the option of working with two unpaved work areas, instead of just the one as previously stipulated. The work areas shall initially be at opposite ends of the project, and both operations shall proceed toward each other. Work areas shall not be at random places throughout the project.

SECTION 139

COORINATION WITH OTHER CONTRACTORS

The Contractor is advised that other Contractors or Departmental forces may be working or may commence work within the limits of the Contract. The Contractor shall cooperate with the other forces present on site to coordinate and schedule the work such that there are no delays for either party. The Contractor is advised that the Department will not accept claims resulting from delays or interference caused by the operations of the other forces present and working within the project limits. Where possible, notification shall be provided in the Contract at the time of Tender, if applicable.

SECTION 142

CANADIAN NAVIGABLE WATERS ACT

All regulations of the Canadian Navigable Waters Act shall be strictly adhered to.

The Canadian Navigable Waters Act is a Federal Statute designed to protect the public right of navigation in navigable waters, as defined in the Statute, by prohibiting the building or placement of any "work" in, upon, over, under, through, or across navigable water without approval of the Minister of Fisheries & Oceans. The Canadian Coast Guard, a special operating agency with the Department of Fisheries & Oceans, administers the Act.

Written comments concerning CNWA should be directed to:

Regional Manager, Atlantic Region
Navigation Protection Program
Transport Canada
10 Barter's Hill
John Cabot Building, 6th Floor
P.O. Box 1300
St. John's NL
A1C 6H8
Phone: 506-851-3113
Email: NPPATL-PPNATL@tc.gc.ca

SECTION 150

FORCE ACCOUNT PAYMENT

Where work is required for which no contract unit prices exist, then this work will be paid in accordance with Clause GC 19.1(c) of the General Conditions of the Contract.

With reference to Actual Cost as mentioned in Clause GC 19.1(c), Payroll Burden together with Board and Lodging shall be considered as components of Actual Cost.

For Contractor's personnel working on Force Account Work, who are lodged in the Contractor's own accommodations, Board and Lodging expenses allowed shall be at the same rates as those detailed in Section 112.

However, for Contractor's personnel working on Force Account work, who are lodged in a hotel, Board and Lodging expenses allowed shall be the actual billed cost of hotel accommodations, plus compensation for meals at the same rates as those detailed in Section 112.

When the Contractor does work with their own forces, including their own equipment, the rental rate for equipment, which includes overhead and profit, shall be as specified in Division 10, Equipment Rental Rate Schedule. Additional allowance for overhead and profit in accordance with General Conditions of the Contract. Clause 19.1(c) shall be calculated upon materials, labour and payroll burden only.

When the Contractor does work with rented equipment and the equipment is approved by the Owner’s Representative, the Contractor shall be entitled to reimbursement equal to the rental cost of the equipment, supported by detailed invoices, plus a markup of ten (10%) percent on the rental cost to cover overhead and profit.

When the Contractor does work with their own forces including their own equipment, but a rental rate for the equipment is not included in Division 10, the rental rate for the equipment in question shall be calculated by the Department.

If force account work is being carried out under a formal contract, which has been tendered by the Department, and changes in the work are made through the General Conditions of the contract, Clause 18 and/or 19, as the case may be, then payroll burden shall be calculated to be 35% of the cost of labour.

Where a flagperson is required during the carrying out of Force Account Work, the flagperson shall be compensated for in accordance with the provisions given in Section 125 dealing with flagperson hours, without any additional mark-up for overhead or profit.

SECTION 151

FENCES

The Contractor shall, when as directed by the Owner's Representative, remove and replace fences in new positions and shall not, without the express consent of the Owner's Representative, leave any land from which a fence has been removed open to the public overnight. The Contractor shall supply materials, tools and labour necessary for the removal and re-erection of fences and shall perform the work to the satisfaction of the Owner's Representative.

Payment will be made in accordance with the appropriate Contract Unit Price. However, on those jobs where fencing is not a contract item, payment will be made in accordance with the provisions of General Condition 19.1.

SECTION 153

WEIGHT RESTRICTIONS

The Contractor shall be responsible for the compliance with Provincial and Departmental weight restrictions, by both their own vehicles and any hired trucks hauling materials for use on this contract or on any Departmental or private work the Contractor may undertake. Should the Contractor wish to haul materials for use in this contract over a Department maintained road before first weighing the materials, the Contractor shall give the appropriate Regional Engineer adequate forewarning as to the proposed travel route and the times at which loads will be transported so that portable scales may be set up to check for compliance with the highway weight regulations.

Off Highway Trucks are not permitted to operate on Provincial roads without the approval of the Owner's Representative and Service NL. In addition, all bridges will be restricted to standard highway loadings and Off Highway trucks are not permitted to cross any bridges without the written approval by the Chief Bridge Engineer or their delegate.

The Owner's Representative is empowered to take immediate action to ensure compliance with all acts and regulations.

SECTION 154

TEMPORARY RAILWAY CROSSING

Where a railway line crosses the job, and should the Contractor want to use a temporary crossing to obtain access to the job site on both sides of the tracks, then it shall be the responsibility of the Contractor to obtain a permit from the railway company and to co-ordinate all the necessary details of the construction of the temporary crossing with the

railway company. The Contractor shall provide the Department with a copy of the written authorization by the Railway prior to commencing any work.

The Contractor shall be responsible for all costs associated with the application for permission, the installation and the maintenance of the temporary railway crossing during the time until the contract is completed.

The Department shall not be held responsible for any delays caused to the Contractor by problems in co-ordinating the work with the railway company.

No payment will be made to the Contractor for this item.

SECTION 155

EXTENSIONS TO ROAD CONTRACT

Contractors are advised that they may be required to undertake work in addition to the sections of road covered in this contract. Should the Owner's Representative request the Contractor to undertake additional work and the Contractor agrees, the work will be performed as per Contract Unit Prices subject to adjustments, plus or minus, for the difference in haulage cost of the additional work and that of the contract.

In contracts where overhaul is a bid price, haulage cost will be based on the appropriate bid unit price. Otherwise, payment adjustment for each item is given by the subtraction of the cost calculated at the rates set below to haul the quantity of the item placed on the extension minus the product of the "Specific Haul Cost" for the item, times the quantity of the item placed at the extension.

"Specific Haul Cost" for each item shall be defined as the cost calculated at the rates set below to haul the actual quantities of the item placed on the contract divided by the actual quantity, in tonnes, of the item placed on the contract.

In contracts where overhaul is not a bid price, haulage rates will be set at $0.33 per tonne-kilometre for excavated rock and asphalt and $0.25 per tonne-kilometre for all other excavated materials and granulars.

SECTION 156

CONTINGENCY AMOUNT

This amount is estimated to cover expenditures for foreseeable work to be carried out by the Contractor, the cost of which is not included in the tendered unit prices for the contract. This work will include but is not restricted to payment for such items as fencing, repairs to private property, etc. This amount will also cover payment for expenditures incurred

by the Contractor that could not be foreseen when the contract was prepared such as but not limited to, increase in taxes during the life of the contract, etc. This is not a lump sum payment to Contractors. No payment will be made except where the expenses are approved by the Owner's Representative and properly invoiced.

SECTION 157

MOBILIZATION AND DEMOBILIZATION

Mobilization shall be defined as the loading, transportation, unloading, and complete set-up of all plant, materials, and equipment necessary to complete the work associated with the contract. Demobilization shall be defined as the decommissioning, loading, transportation, unloading and mothballing of all plant, excess materials and equipment, as well as site clean-up, and submission of any required final project documentation after the work associated with the contract is complete.

Where excess materials are demobilized and the Department purchases these materials, demobilization shall include the loading, transportation and unloading of the same from the job site to the nearest district or regional depot. Demobilization does not apply to the loading, transportation to a storage site, and removing of existing materials, which are to be salvaged.

The Contractor is advised that payment at the lump sum price for Mobilization and Demobilization shall be compensation in full for all labour, supplies, materials and equipment use required to mobilize and demobilize plus the provision of storage and security required during the mobilization and demobilization phases of the work.

For Bridge Rehabilitation Projects, refer to Section 919 for information regarding additional requirements specific to that type of work.

The price bid for this item in contracts on the island portion of the province shall not exceed the limits given in the following table for the Island Portion of Province:

Island Portion of Province

Total Estimated Tender (including Mobilization & Demobilization but not including HST)	Mobilization & Demobilization Tender Item Maximum Bid Permitted
Less than $500,000	10% of Total Estimated Tender

Total Estimated Tender (including Mobilization & Demobilization but not including HST)	Mobilization & Demobilization Tender Item Maximum Bid Permitted
Between $500,000 & $1,000,000	$50,000 + 7.5% of the amount that the Total Estimated Tender exceeds $500,000
Greater than $1,000,000	$87,500 + 5.0% of the amount that the Total Estimated Tender exceeds $1,000,000

The price bid for this item in contracts in the Labrador portion of the province shall not exceed the limits given in the following table for Labrador:

Labrador

Total Estimated Tender (including Mobilization & Demobilization but not including HST)	Mobilization & Demobilization Tender Item Maximum Bid Permitted
Less than $1,000,000	15% of Total Estimated Tender
Between $1,000,000 & $2,000,000	$150,000 + 12.5% of the amount that the Total Estimated Tender exceeds $1,000,000
Greater than $2,000,000	$275,000 + 10.0% of the amount that the Total Estimated Tender exceeds $2,000,000

Should the amount bid exceed the limits specified, the tender will be considered unbalanced and shall be rejected.

BASIS OF PAYMENT

For Bridge Rehabilitation Projects, refer to Section 919 for details regarding payment for Mobilization and Demobilization.

For projects with a bid price of $300,000.00 or less, at the time of tender, fifty percent of the total of this item shall be paid on the first progress estimate provided that the Contractor has fully mobilized, and 50% will be paid on the final progress estimate. In

instances where the Contractor has not fully mobilized, payment shall be as determined by the Owner's Representative with all considerations due to the specifics of the work.

For projects with a bid price over $300,000.00, at the time of tender, payment* for this item will be made in partial payments as follows:

- No Mobilization & Demobilization will be paid until 5% of the tender price (excluding Mobilization & Demobilization) is achieved.
- When 5% of the tender price is earned by the progress to date in contract items (excluding Mobilization & Demobilization), 20% of the amount bid for this item will be paid.
- Continued progress payment based on a prorated amount for the percentage of work completed – up to a max of 80% of the bid amount.
- 20% once the contract has reached final completion

There shall be no change in the lump sum price of this item due to a change in contract scope or an extension to the contract completion date. At no time shall the total of the amounts paid to the Contractor under this item be greater than the tender's lump sum bid price.

The payments for the lump sum price shall be full compensation for the work under this item regardless of the number of times the Contractor mobilizes/demobilizes to the project location(s).

*Payments for interim blasting, crushing, stocking aggregate and materials on site are not considered as value of work completed on a bid item when payment for this item is calculated.

SECTION 158

DISPOSAL AREAS

Where the Contractor wishes to dispose of excess materials from the Work onto private lands, the Contractor must:

1. Satisfy themselves that the land is actually owned by the private individual.
2. Be responsible to obtain permission from any property owner for use of their land as a disposal area for excess materials from the Work.
3. Dispose of all materials in such a way to conform to all Federal, Provincial and Municipal Regulations including buffer zones around waterbodies, environmentally sensitive areas, etc...
4. Have the property owner sign and date a release form supplied by the Owner's Representative for the approval to use the land as a disposal site.

5. Sign and date the release form and provide a copy of the signed release to the Owner's Representative including a description of the locations used for disposal.
6. Be responsible for all costs associated with the disposal and rehabilitation of the disposal area.

Release forms hold the Department free from any and all claims related to the placement of excess materials from the Work onto private property. Release forms will be provided by the Owner's Representative and no disposal activities shall take place until the Owner's Representative has been provided with a copy of the signed release form.

SECTION 160

CONTRACTOR PERFORMANCE EVALUATION SYSTEM

INDEX

160.01 GENERAL

The Contractor Performance Evaluation System is a process designed to maintain an acceptable level of performance from Contractors carrying out work for the Department of Transportation and Infrastructure (hereafter the “Department”). It will also provide a means to identify contractors with acceptable performance records and to provide a means to identify and deal with contractors with deficient or unsatisfactory performance records.

A record of the performance of Contractors will be maintained to identify the following:

a) Those Contractors who by virtue of satisfactory performance (as defined herein) will continue to be eligible to submit tenders for work with the Department.
b) Those Contractors who by virtue of deficient performance (as defined herein) who may have their bidding privileges suspended based on an evaluation of their contract work on a particular project and other projects completed for the Department.
c) Those Contractors who by virtue of unsatisfactory performance (as defined herein) may be subject to having their bidding privileges suspended by the Department for a period of time determined by the Department based on a review and an evaluation of their contract work on a particular project.

The Contractor Performance Evaluation System is not to interfere with, or substitute, the normal written communication that the Department would initiate when confronted with unsatisfactory performance during the execution of the work of the contract before the issuance of a Final Completion Certificate under the contract or during the execution of warranty work related to GC 31 of the contract. The Contractor is to be notified immediately through normal project communication if the work is not proceeding or being completed in a satisfactory manner.

160.02 PERFORMANCE RATING METHODOLOGY

The TI Site Representative or TI Project Manager will conduct the Contractor Performance Evaluation. The Evaluation will be conducted in two parts in accordance with the methodology provided in this document by using the Forms 160A and 160B. Form 160A being the "Contractor Performance Evaluation Report Part I: Contract Work Other Than Warranty Work" and as Form 160B being the "Contractor Performance Evaluation Report Part II: Warranty Work Under The Contract."

An unsatisfactory performance (as defined herein) on a single project may result in the suspension of bidding privileges for a period to be determined by the Department.

A deficient performance (as defined herein) on a particular project subject to a review of Contractor performance on other projects for the Department may result in the suspension of bidding privileges for a period of time to be determined by the Department.

Performance Rating Methodology for Contractor's Work Other Than Warranty Work (Form 160A) will be completed within thirty (30) days of the earlier of:

1. The issuance of a Final Completion Certificate for the project; or
2. The abandonment of the work by the Contractor; or
3. The termination of the work of the Contractor under the contract by the Department.

Performance Rating Methodology for Contractor's Warranty Work under the Contract (Form 160B) will be completed within thirty (30) days of the earlier of:

1. The completion of warranty work under GC 31; or
2. Where the Contractor refuses to do warranty work under GC 31; or
3. Where the Contractor abandons the warranty work before completion; or
4. The Contractor is terminated by the Department pursuant to the contract.

The Contractor's performance will be evaluated on a point rating system relative to the six (6) category listed on the latest version of Form 160A and/or Form 160B at the time of tender of the contract.

a) Project Execution and Timeliness (15 points)
b) Leadership and Accountability (20 points)
c) Project Administration and Management (15 points)
d) Quality of Work Completed (20 points)
e) Safety (25 points)
f) Environmental Considerations & Compliance (5 points)

160.03 INTERPRETATION OF RATINGS

The interpretation of points rating under Form 160A will be as follows:

a) 66 - 100 shall be defined as "Satisfactory Performance"
b) 50 - 65 shall be defined as "Deficient Performance"
c) 0 - 49 shall be defined as "Unsatisfactory Performance"

The interpretation of points rating under Form 160B will be as follows:

a) 70 shall be defined as "Satisfactory Performance"
b) < 70 shall be defined as "Unsatisfactory Performance"

160.04 COMPLETION OF THE EVALUATION

Completion of a Contractor Contract Performance Evaluation Report i.e., Form 160A and Form 160B being the Contractor Performance Evaluation Report Part I: Contract Work Other Than Warranty Work and the Contractor Performance Evaluation Report Part II: Warranty Work under the Contract is required for all publicly tendered roadwork contracts.

Part one (Form 160A) of the Evaluation Report will be completed by the TI Site Representative and/or TI Project Manager and will be reviewed and signed by the Regional Engineer and the Director of Highway Design and Construction. The Final Report will be distributed to the Contractor and to the Tendering & Contracts office.

Part two (Form 160B) of the Performance Evaluation Report will be completed by the TI Project Manager and/or the Regional Engineer if the Department makes a claim against the Contractor in respect of warranty work under GC 31.

The Project Manager will complete form 160B within thirty (30) days of the expiration of the GC 31 warranty period related to the work even if the Department does not make a

claim against the Contractor under GC 31. The Regional Engineer and the Director of Highway Design and Construction will sign this report and distribute it to the Contractor and Tendering & Contracts office.

160.05 SUSPENSION OF BIDDING PRIVILEGES

Tendering and Contracts will record the Contract Performance Evaluation rating on each contract and maintain a record of the Contractor's assessment on previous contracts.

Contractors receiving a "Deficient" rating on the Form 160A of the Contractor Performance Evaluation Report will be notified in writing by Tendering and Contracts that their performance needs to be improved. A Contractor in this category will be put on notice that a review of that Contractor's bidding privileges is to occur and that that Contractor's bidding privileges on work for the Department may be suspended based upon a review of the Contractor's performance on the current contract and on previous contracts for the Department.

Contractors receiving an "Unsatisfactory" rating on the Form 160A or form 160B of the Contractor Performance Evaluation Report will be notified of possible suspension of bidding privileges. The review will be based upon the Contractor's overall performance on previous contracts and, if necessary, a more detailed report from the Regional Engineer on the current contract including any warranty work related to that contract. The results of the review will be communicated to the Contractor in writing by Tendering and Contracts.

The decision to suspend the bidding privileges of a Contractor and for what period in any particular instance shall rest with the Deputy Minister of the Department. The decision will be based on the facts and circumstances, including all Contractor Performance Evaluation Reports related to the same and will be communicated to the Contractor concerned by a letter from the Deputy Minister copied to Tendering and Contracts.

If the Department approves a suspension of bidding privileges, then all future bids from the Contractor will be rejected prior to tender opening.

Alternatively, any tenders from a Contractor under suspension, discovered after tender opening, will be marked "disqualified". [PT Act Regulations 3.(4)]

Suspensions apply to all Department tendered projects. Attempts by suspended companies to submit tenders under a new company name or structure (successor corporations) are to be rejected. It is incumbent on the "new" company to establish the merits of having the opportunity to tender.

160.06 REINSTATEMENT OF BIDDING PRIVILEGES

The duration of suspensions may vary depending upon individual circumstances but will generally be for at least one (1) year and/or until the circumstances related to the suspension are addressed to the satisfaction of the Deputy Minister of the Department.

A Contractor's suspension may be lifted by the Deputy Minister of the Department upon written request from the Contractor. The Contractor shall demonstrate its ability to perform satisfactory work on future projects to the satisfaction of the Deputy Minister of the Department. This may be achieved by the successful completion of comparable projects for other jurisdictions completed after the time of suspension or the identification and correction of problems that led to the suspension. Where the suspension relates to the Contractor's failure to perform corrective work related to a GC 31 Warranty; the Deputy Minister may lift that suspension when the warranty work has been completed to the satisfaction of the Regional Engineer. The Contractor will need to satisfy the Department regarding the steps that that Contractor will take in future to avoid the reoccurrence of such defects.

In the event of reinstatement, the Contractor must achieve a "Satisfactory" rating on the first subsequent contract in order to retain eligibility to continue bidding Transportation and Infrastructure projects.

160.07 CONTRACTOR REQUESTED REVIEW OF EVALUATION

A Contractor may request a review be conducted by the Department of a Performance Evaluation in respect to a particular project by submitting a written request, with supporting documentation, to Tendering and Contracts.

A committee established by the Assistant Deputy Minister of the Department will conduct the review. The review is to be completed within sixty (60) days of the request and the results will be communicated in writing to the Contractor.

160.08 CONFIDENTIALITY OF INFORMATION

The Department intends the information compiled through the Contractor Performance Evaluation System to be solely for internal use. Evaluation information related to a particular contractor(s) will not be released to outside parties, such as reference checks from other tendering agencies, without the consent of the affected contractor(s).

SECTION 162

FAILURE TO COMPLY WITH REGULATORY STANDARDS

Contractor's failure to comply with the regulations of any authority having jurisdiction over the works, or part thereof, or any aspect of the performance of the work and the manner of carrying out the work, will entitle and result in the Owner appointing such engineer, engineers, compliance officer or officers as may be necessary to more fully cause compliance by the Contractor with the requirements of the relevant regulatory authority.

The Owner may thereafter, and for so long as the Owner may keep such engineer, engineers, compliance officer or officers, on the site of the works, deduct from the progress payments otherwise due to the Contractor the costs including but not limited to payroll, payroll burdens, accommodations, meals, and transportation costs associated with the work of such engineer, engineers, compliance officer or officers as the case may be. The Contractor shall have no right to dispute the Owner's right to appoint such engineer, engineers, compliance officer or officers, the reasonableness of the deduction of such costs or the amount thereof and the Engineer's certificate of the amount of such costs shall be final and binding upon the Contractor and the Owner.

SECTION 170

EXAMINATION OF GEOTECHNICAL INFORMATION

The Contractor shall have access to and may examine any information related to any geotechnical investigations relevant to the Work. The Contractor may review any records related to borings, test pit excavations and any other subsurface investigations and soil analyses performed either by the Department or its consultants with the understanding that this data and analyses was used by the Owner as part of the design of the permanent Works only and for no other purpose.

Any subsurface information available is based on the investigations undertaken at the locations identified only. The Department makes no guarantees, warranties (either expressed or implied), or representations with respect to the information provided. The Contractor is cautioned that the data provided in no way is typical of the locations and may have changed since the time the data was acquired.

The Department makes no guarantees that the presence or absence of water at the project location or any subsurface explorations when made, will be representative of the actual conditions encountered at time of construction.

The Contractor shall be solely responsible for obtaining any additional information they feel is necessary prior to commencing any part of the Work.

SECTION 180

UNWATERING INCIDENTAL TO WORK

The term "Unwatering" shall mean the removal or keeping out of water from the site that would impede the construction of the permanent structure (culvert, retaining walls, etc.), in order that work may be carried out in accordance with the specifications. Unwatering shall be undertaken by any means including, but not limited to, pumping, temporary watertight structures, cofferdams and settling ponds as appropriate.

Where unwatering is not a pay item but is required in order to carry out the Work, then the Contractor shall provide such necessary unwatering. The Contractor shall provide such temporary watertight structures and pumps as are required for unwatering, and then after completion of the work, remove the unwatering facilities and clean-up and trim the site to sightly proportions, all at their own expense.

The term “settling pond” refers to any open air, water containment structure used to manage the suspended solids or to control the discharge rate of pumped or flowing water. Other terms such as, but not limited to, dewatering basin, unwatering basin, retention ponds, etc. must meet the requirements of “settling ponds”.

The term “cofferdam” refers to any enclosure built within a body of water from which water is pumped out to expose the bed of a body of water to allow construction activities to be performed in the dry. Cofferdams are typically constructed of earth; however, portable cofferdams may also be employed depending on the environmental conditions at the site.

Earthen cofferdams when used shall be constructed with suitable materials to render the cofferdam non-erodible and non-polluting. Earthen cofferdams shall be faced with plastic sheeting followed by sandbags, or equivalent if approved by the Owner’s Representative. The purpose of the plastic is to produce a dam that produces the least amount of infiltration.

Should silt fences be required in connection with the unwatering operation, then the silt fences shall be incidental to the cost of unwatering.

Unwatering Operations

The Contractor shall carry out all work necessary to ensure the area remains dewatered to allow the work to be completed in the dry and to prevent disturbance to the foundation. The Contractor shall develop and implement all measures necessary in order to achieve the necessary unwatering to suit the situation.

Loose fill shall not be used to construct any unwatering structures; all fill shall be contained in sandbags or another method to allow for minimal disruption when removed from the water.

Effluent from an unwatering operation shall not be disposed of directly into a watercourse or waterbody. Effluent shall be discharged to a vegetated area that will cause the water to flow through a minimum of 50 metres of established vegetation between the discharge and watercourse. As vegetation becomes inundated with sediment, the Contractor shall relocate the discharge point into a new vegetated area as required to prevent sediment from reaching a watercourse.

If appropriate vegetated areas are not available, the Contractor shall employ other suitable means of sedimentation removal, such as sediment traps, to ensure effluent has been suitable cleaned of sediment before discharging to a watercourse.

Unless otherwise specified, all temporary unwatering and support structures shall remain the property of the Contractor and shall be removed from the job site when no longer required.

All earth or rock fill used in unwatering shall be removed from the watercourse upon completion of dewatering. Contractors shall incorporate necessary measures to limit sedimentation of the watercourse during this removal.

Any damage to the permanent structure due to any failure of the unwatering measures implemented as part of the Work shall be remedied at the expense of the Contractor to the satisfaction of the Department, up to and including, the removal and replacement of the permanent structure.

Turbidity Limits and Measurements

The upstream and downstream turbidity may be monitored and measured by the Owner's Representative during all in-water or near water activities, including but not limited to, the construction, operation, and removal of unwatering systems. During construction, turbidity shall not increase more than 10 NTUs between the upstream and downstream measurements without prior approval by the Owner's Representative.

Measurement of turbidity will be by the turbidity tube method or another Department accepted alternative. Measurements shall be taken a minimum of 50 metres upstream and 25 metres downstream from the project site. Upstream sampling shall capture a representative sample of water not impacted by construction activities while the downstream sampling shall capture the highest turbidity due to construction run-off.

Turbidity measurement systems shall be provided by the Contractor and available on-site at all times. Failure to have turbidity-measuring instruments on-site while unwatering systems are being constructed, installed, or operational, regardless of whether a turbidity

event has occurred or not, will result in the application of liquidated damages equivalent to the rate stipulated in the contract documents for each day the instruments are not available on site.

Furthermore, failure of the Contractor to address any sedimentation event that exceeds the limits outlined above may result in the assessment of liquidated damages at the rate specified in the contract documents.

Work on the entire project may be halted by the Department should the Contractor fail to adequately address any sedimentation event during the unwatering operation.

The Contractor shall be fully liable for all costs and/or consequences resulting from the implementation or failure of the unwatering plan including any charges levied by any regulatory agency.

In the event that a watercourse becomes significantly laden with siltation due to natural or local conditions, such as flooding, excessive rainfall, or other unforeseen environmental factors, the Department reserves the right to issue a Stop Work Order to the Contractor. This action may be taken to ensure that the affected conditions are adequately addressed. The issuance of such a Stop Work Order shall remain in effect until such time that the conditions improve to a level that permits safe and effective continuation of the work.

It is explicitly understood that the issuance of a Stop Work Order under these circumstances shall not be considered a valid ground for any delay claim or compensation by the Contractor. The Contractor acknowledges that the Department is not liable for any time extensions, cost reimbursements, or other claims associated with delays resulting from the effects of siltation, flooding, or other related conditions that lead to the issuance of a Stop Work Order.

The Contractor is expected to comply with all directives issued by the Department or other agencies to mitigate or address the situation, and to resume work promptly once conditions are deemed suitable for continuation.

SECTION 190

OCCUPATIONAL HEALTH AND SAFETY

INDEX

190.01 GENERAL

.1 The following requirements apply to all contracts awarded by the Department of Transportation and Infrastructure for maintenance, operations, upgrades, support services, or construction related to the transportation network assets including but not limited to roads, bridges, airports, marine assets, and similar.

.2 All work is to be performed in accordance with the requirements of the Newfoundland and Labrador Occupational Health and Safety Act and Regulations as amended, the Department of Transportation and Infrastructure's Contractor Safety Management Program and any specified Contract requirements.

.3 The Contractor shall comply with and enforce compliance by employees, subcontractors, suppliers and visitors with all safety requirements of the Contract Documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with the Project Site Specific Safety Plan.

.4 The Contractor is responsible for all work coordination at the project site, safety oversight, and must maintain full ownership and control of safety within the project area at all times. The Contractor will be delegated and shall assume the duties of the Principle Contractor for the work area(s). As such, the Contractor shall ensure co-ordination of work schedules and tasks, and communication thereof for the purpose of ensuring health and safety on the worksite(s).

.5 The Department shall perform project due diligence, site visits, safety monitoring activities, make suggestions or recommendations for improvement, and/or request changes in how work is performed. Notwithstanding, the Contractor has full responsibility, authority, and accountability for safely performing all work on the project site(s) and/or under the project. The Department solely relies on the Contractor to know how to safely perform all Work including making appropriate decisions on Department recommendations or requests.

.6 Subsequent to awarding of the tender and at least 10 (ten) working days prior to commencement of work, and prior to the pre-start Health and Safety meeting, the Contractor must submit to the Owner's Representative a detailed Site Specific Safety Plan (SSSP). **See Section 190.2.**

.7 Review of the Project Site Specific Safety Plan and other submitted documents by the Owner's Representative shall only be viewed as acknowledgment that the Contractor has submitted the required documentation under this specification. The Owner's Representative makes no representation and provides no warranty for the accuracy, completeness and legislative compliance of the Project Site Specific Safety Plan and other submitted documents by this acceptance. Responsibility for errors and omissions in the Project Site Specific Safety Plan and other submitted documents is not relieved by acceptance by the Owner's Representative.

.8 For projects exceeding thirty (30) days or more, the Contractor shall, prior to the commencement of work, notify in writing the Department of Digital Government and Service NL, Occupational Health and Safety Division. **See Section 190.3.9.**

190.02 PROJECT SITE SPECIFIC SAFETY PLAN (SSSP)

190.02.01 PROJECT SITE SPECIFIC SAFETY PLAN REQUIREMENTS

The Contractor shall:

.1 Prepare and complete all work in accordance with a detailed Project Site Specific Safety Plan (SSSP) specific to each project and specific project location conditions. The plan shall identify, evaluate and control job specific hazards through a detailed hazard assessment of the tendered project outlining phases of the project and hazards/controls associated with specific work, equipment, locations and tasks associated with the work conducted during each phase of the project. The plan shall also ensure adequate policies, procedures and safe work practices are in place to manage hazards identified in the hazard assessment that cannot be addressed through engineering controls. Furthermore, it is the responsibility of the Contractor to submit only one SSSP that incorporates all relevant portions of their subcontractors' safety documentation.

.2 Provide a copy of the Project SSSP to the Owner's Representative.

190.02.02 PROJECT SITE SPECIFIC SAFETY PLAN CONTENTS

The Contractor is responsible to determine the appropriate safety actions, plans, and information for the Project SSSP.

Notwithstanding, the written SSSP shall incorporate the following minimum information:

.1 An organizational structure, in the form of an organizational chart with contact information of the key positions, which shall establish the specific chain of command and specify the overall responsibilities of Contractors' employees at the work site. The chart shall also include relevant information for all subcontractors.

.2 Identification of the designated qualified work coordinator(s) (i.e. Supervisor, Contractor Safety Representative) as per Section 21 of the OHS Regulations.

.3 A comprehensive work plan which shall:

- .1 Outline the phases of the Project and the required tasks, equipment, positions, resources and objectives for each phase, including all subcontracted work.
- .2 Conduct a detailed hazard assessment of each project phase, including all subcontracted work, taking into consideration the objectives, tasks, equipment, positions, resources, training, etc.
- .3 Identify the controls required for all identified hazards and project phases that may include engineering controls, policies, procedures, equipment, safe work practices, training and communication with staff, etc.
- .4 Establish personnel requirements for implementing the plan and controls, and establish site-specific training and notification requirements and schedules.

.4 General safety rules for the Project.

.5 A Project training matrix (tabular or spreadsheet format) identifying all necessary training by occupation for the scope of the contract as per the Contractor's health and safety training plan. **Refer to Section 190.3.6.**

.6 A personal protective equipment (PPE) Program. **Refer to Section 190.4.5.**

.7 A traffic control plan. **Refer to Section 190.4.6.**

.8 A fall protection plan, if necessary. **Refer to Section 190.4.7.**

.9 A dust suppression management program, if necessary.

.10 A hearing conservation program in accordance with Part VI, Section 68 of the OHS Regulations.

.11 An assessment of all possible risks of violence for the project and corresponding control measures. Considerations should include location and circumstances of the site, previous history of incidents and or possible triggers.

.12 A visitor safety and orientation policy that will include education on hazards, required PPE to be worn by visitors and accompaniment by staff while on site. This program shall also take into consideration the safety of the general public that may come in contact with the work site and appropriate measures for notification and safety.

.13 As part of the SSSP the Contractor shall provide a vehicle inspection matrix (tabular or spreadsheet format) showing required inspection type and date of most recent inspection for all powered mobile equipment (including light vehicles) that will be used in fulfilling the terms of the contract, including rented and the subcontractor's equipment. Upon request, the Contractor shall provide to the Owner's Representative, individual inspection forms that at a minimum state that the equipment is in a safe operating condition and is signed by a qualified journeyperson mechanic.

.14 The SSSP shall include an acceptable parking plan for all powered mobile equipment (including light vehicles) to be used on the Project. The plan shall address both daytime parking requirements to reduce congestion in the work area, nighttime parking considerations, and overall impacts on the pubic (i.e., visibility/sightlines, impeding traffic flow, etc.). At a minimum, the plan shall be based on a hazard assessment that considers factors such as equipment type, potential for roll over, load capacity of the parking area, pedestrian and vehicular traffic, and potential for equipment tampering, equipment energy, and equipment contact with power lines.

.15 The SSSP shall include a site specific emergency response plan for the job site and ensure that supervisors and workers are trained in the emergency response plan. The emergency response plan shall address, as a minimum:

- .1 Emergency recognition and evaluation (identification of each potential type of emergency and evaluation of requirements for response).
- .2 Pre-emergency planning (included the assessment of controls to reduce the likelihood of such an emergency if possible).
- .3 Personnel roles, lines of authority and communication (include a communication list of all emergency services in the immediate and surrounding areas).
- .4 Required communication equipment including landlines, mobile phones, radios, satellite phones, and/or other equipment needed to ensure appropriate emergency communications in the area of the Project.
- .5 Safe distances and places of refuge.
- .6 Site security and control.
- .7 Evacuation routes and procedures.
- .8 Decontamination procedures which are not covered by the Project SSSP.
- .9 Emergency medical treatment and first aid.

.10 Emergency alarm, notification and response procedures including procedures for reporting incidents to local, provincial and federal government departments.
.11 PPE and emergency equipment.
.12 Procedures for handling emergency incidents.
.13 Procedures and protocol for working alone and/or remote working.
.14 Site specific emergency response training requirements and emergency response drills shall be identified along with written rescue plan for high risk emergencies (i.e. fall rescue, confined space entry, etc.).
.15 The emergency response procedures shall be tested regularly and the results documented. The frequency at which all aspects of the emergency response plan will be rehearsed must be stated.
.16 Provide adequate first aid facilities for the job site and ensure that a minimum number of workers are trained in first aid in accordance with the OHS First Aid Regulations.
.17 Provide requirements and permits for isolated campsite locations such as coordinates, fire suppression systems, alarms, camp monitoring, nuisance wildlife, drinking water provisions, etc.
.18 Depending on the specifics of the contract, the SSSP may require other programs and documents to meet health and safety provisions as required in the OHS Act and Regulations. See **Sections 190.4 and 190.5** for examples of potential additional requirements.

190.03 SAFETY MONITORING

190.03.01 CONTRACTOR ROLES AND RESPONSIBILITIES

The Contractor shall:

.1 Ensure that their organization is staffed appropriately to ensure completion of project tasks and all necessary safety related duties and responsibilities.
.2 Ensure co-ordination of work schedules and tasks, and communication thereof for the purpose of ensuring health and safety on the worksite(s).
.3 Develop a Project SSSP, as indicated above, that thoroughly assesses the health and safety hazards of each project phase, including all subcontracted work.
.4 Implement all requirements of the Project SSSP. The Contractor shall take all necessary measures to immediately implement any engineering controls, administrative controls, personal protective equipment required or termination of work procedures to ensure compliance with the SSSP and the OHS Act and Regulations. All measures should be immediately communicated to staff.
.5 The Contractor shall comply with and enforce compliance by employees, subcontractors, suppliers and visitors with all safety requirements of the Contract

Documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with the Project SSSP.

.6 Periodically review and modify the SSSP as required including but not limited to when a new hazard is identified during completion of work or when an error or omission is identified in any part of the SSSP.

.7 Support/permit periodic inspections of the Contractor's work by the Owner's Representative and/ or the Department of Transportation and Infrastructure Occupational Health and Safety team to maintain compliance with the SSSP. Inspections may include visual inspections of the site and documentation, as well as testing and sampling as required.

.8 Be responsible for any and all costs associated with delays as a result of the Contractor's failure to comply with the requirements outlined in **Section 190** or the OHS Act and Regulations.

.9 Ensure that all workers receive necessary training as per the training matrix contained in the SSSP prior to the start of work. Maintain training records in a tabular format or spreadsheet for all employees on the project site and complete periodic reviews to ensure that necessary re-certifications are completed prior to expiration dates.

.10 Ensure all equipment, vehicles, tools, or other devices necessary throughout the Project are suitable for the task and are inspected and maintained in accordance with the manufacturers' specifications and/or CSA standards adopted by the OHS Regulations.

.11 Be responsible to ensure that site inspections have been completed at no less than 1 week intervals. These site inspections shall include risk assessments where the nature of the ongoing work or tasks associated with the work increase in risk or significantly change due to phases in the project or project progression.

.12 Ensure that toolbox meetings are held with staff no less than once per week and shall include review of safety related information that is pertinent to the safety of employees.

.13 Ensure that all toolbox meetings, site inspections, risk assessments, OHS Committee meetings and any OHS Directives or reports are documented and submitted with the Contractor's Monthly OHS Performance Report. **(Refer to forms appended to the end of Section 190).**

.14 Review for completeness the hazard assessment results immediately prior to commencing work, when a new hazard is identified during completion of work or when an error or omission is identified.

.15 Be solely responsible for investigating, evaluating and managing any report of actual or potential hazards.

.16 Retain copies of all completed hazard assessments at the project site and provide a copy to the Owner's Representative. Copies of any hazard

assessments not included in the original SSSP must be submitted immediately to the Owner's Representative and noted on the Contractor's Monthly OHS Performance Report.

.17 Promote the employees' right to work in a respectful, harassment-free, and psychologically healthy and safe work environment. Assist the Owner's Representative to investigate incidents of workplace violence or harassment carried out against a TI employee by Contractor or Subcontractor employees.

190.03.02 SUPERVISION

190.03.02.01 The Contractor shall:

.1 Develop an organizational structure that establishes a specific chain of command and overall responsibilities of all employees at the work site.

.2 Assign a sufficient number of supervisory personnel to the work site and ensure that all work is performed under the direct supervision of competent persons.

.3 Ensure that any person assigned to supervisory duties on site shall not conduct significant work in relation to the contract that inhibits them from the ability to properly supervise the work site.

.4 Ensure the site supervisor(s) have complete understanding, working knowledge and familiarity with the Project SSSP, applicable codes and standards as well as the OHS Act and Regulations.

.5 Ensure the site supervisor(s) fully implements, enforces, and monitors the SSSP.

.6 Prior to the start of work, ensure that the site supervisor(s) have the training, knowledge, and understanding in:

- .1 Project tasks and construction activities.
- .2 Hazard recognition evaluation and control.
- .3 Development and implementation of safe work practices and procedures.
- .4 Accident incident investigations and reporting.
- .5 Workplace violence and harassment prevention.
- .6 Equipment maintenance and inspections required for preventive safety.
- .7 Care and maintenance of PPE to be used on site.
- .8 Standard First Aid training certified by WorkplaceNL.
- .9 WHMIS 2015.
- .10 Other certifications may be required depending on the work tasks associated with a specific contract to ensure that adequate controls are in place to mitigate the risks to workers, and to abide by all applicable legislation, codes and standards. This may include, but is not limited to:
  - i. Traffic Control Person (level I and II) training certified by WorkplaceNL.
  - ii. Power Line Hazards training certified by WorkplaceNL.

iii. Fall Protection training certified by WorkplaceNL.
iv. Confined Space Entry training certified by WorkplaceNL.
v. Rescue and emergency response.
vi. Trenching and excavation.
vii. Scaffolding.
viii. Rigging and slinging.
ix. Transportation of Dangerous Goods.
x. Other training as specified by the Department.

.7 Assign a dedicated on-site safety representative to assist the Site Supervisor during the completion of high-risk activities. This person shall have training, knowledge, and understanding regarding the activity(s) being completed. High-risk activities may include, but are not limited to:

.1 Heavy lift operations which includes items greater than 1000 kg or which may need an engineered lift plan due to other identified risk factors.

.2 Lift operations that occur closer than 10 m of energized power lines or close proximity to moving traffic, public and residential areas, or other sensitive locations.

.3 When greater than 3 employers are working in close proximity at the same time. Close proximity execution means any time the operations of each employer are close enough to directly influence or add risk to another employer.

.4 Working within or near highly populated residential areas when there is an appreciable ongoing risk to the public that needs continual safety oversight.

.5 When a complex traffic control plan is needed in high volume areas.

.6 Work involving confined space entry.

.7 Working with or near toxic and hazardous substances.

.8 Any other high-risk activity identified through hazard/risk assessment by the Contractor or by the Department.

In such instances, the Contractor may request and the Department may agree that such dedicated safety representation is not needed if the Contractor demonstrates there are adequate safety controls in place to mitigate the risk.

190.03.02.02 The Site Supervisor(s) shall:

.1 Be responsible for project safety by ensuring the work complies with all requirements of the SSSP and with the appropriate section(s) of OHS Act and Regulations, latest edition.

.2 Prior to mobilization on site, hold a pre-start Health and Safety meeting with the Contractors, Subcontractors, and Owner’s Representatives to review of the SSSP including all its contents.

.3 Be responsible for the delivery and documentation of the site safety orientations and ensure that personnel who have not been oriented are not permitted to enter the site. This applies to all workers (Contractor, Subcontractor, and Department), and visitors. **Refer to Section 190.3.6.7**.

.4 Advise of the health and safety hazards for the work site, provide written or verbal instructions of any precautions to be taken to protect everyone at the work site and ensure that the applicable personal protective equipment is used and worn on site at all times.

.5 Review hazard assessment for completeness immediately prior to commencing work, when a new hazard is identified during completion of work, or when an error or omission is identified.

.6 Address all safety concerns brought to their attention in a timely manner depending on the severity of the hazard.

.7 Be responsible for the maintenance of a daily log of inspections, meetings, infractions and mitigating measures. The log is to be filed daily and copies provided to the Owner's Representative as requested.

.8 Be responsible to log, investigate, track and follow-up on mitigations for all near misses, incidents and/or accidents.

.9 Promote employees' right to work in a respectful, harassment-free, and psychologically healthy and safe work environment. Assist the Owner's Representative to investigate incidents of workplace violence or harassment carried out against a TI employee by Contractor or Subcontractor employees.

.10 Ensure the correct traffic control signage plan is utilized on site and staff have been notified of the requirements. Ensure that road signage is inspected for accuracy and condition by a competent and trained person upon set-up, each morning prior to work, and at any point in which the signage requires change during the workday or life of the contract. A Traffic Control Signage log must be submitted with the Contractor's Monthly OHS Performance Report. **Refer to Section 190.4.6.**

.11 If required for the project, coordinate with and support the efforts of the on-site safety representative.

190.03.03 PROJECT DEDICATED FULL TIME CONTRACTOR SAFETY REPRESENTATIVE (CSR)

The Department of Transportation and Infrastructure recognizes that, based on complexity, certain construction projects will need a higher level of diligence and focus on safety management and oversight. Providing such diligence by the Contractor may be accomplished by a dedicated safety resource to support the Contractor's Site Supervisor. For some projects the Department may elect to cover the additional costs of dedicated site support in the form of a full time Contractor Safety Representative (CSR) (formally

known as Contractor Safety Officer). A dedicated CSR means dedicated full time to the project and cannot be shared over multiple projects. As such, it will be identified in the Supplemental General Conditions and a cost line item will be included in the pricing table. Should it become evident after contract award that the CSR is only required on site part time, or where the duties can be performed by other members of the Contractor's site team, the bid price payments will be reduced/pro-rated accordingly.

For projects where the Department has not included for specific payment of a CSR, the Contractor will be expected to ensure the Contractor's organization is staffed appropriately to ensure completion of project tasks and all necessary safety related duties and responsibilities.

The CSR role is intended to provide expertise and dedicated site safety support to the Contractor's Site Supervisor(s). Under no situation does the requirement to have a CSR alleviate the safety responsibility of the Contractor or Site Supervisor(s). When specified for inclusion by the Department, the CSR is intended to be a focused role with formal training and knowledge in safety management. In this case, the Contractor shall ensure that a CSR is appointed, and has sufficient authority and resources to support the implementation and monitoring of the SSSP.

.1 The CSR shall have:
  .1 Formal training in OHS Management (degree, diploma, or certificate) combined with at least two (2) years of relevant experience, or
  .2 A designation such as National Construction Safety Officer (NCSO), Construction Safety Officer (CSO), Canadian Registered Safety Technician (CRST), Canadian Registered Safety Professional (CRSP), or Certified Health and Safety Consultant (CHSC), or other similar designation.

.2 Prior to the start of work, the CSR may also require additional certifications depending on the work tasks associated with a specific contract. This may include, but is not limited to:
  .1 Traffic Control Person (level I and II) training certified by WorkplaceNL.
  .2 Power Line Hazards training certified by WorkplaceNL.
  .3 Standard First Aid training certified by WorkplaceNL.
  .4 Fall Protection training certified by WorkplaceNL.
  .5 Confined Space Entry training certified by WorkplaceNL.
  .6 Rescue and emergency response.
  .7 Trenching and excavation.
  .8 Scaffolding.
  .9 Rigging and slinging.

.10 Transportation of Dangerous Goods.
.11 WHMIS 2015.
.12 Other training as specified by the Department.

190.03.04 HEALTH AND SAFETY COMMITTEE

The Contractor shall:

.1 Establish a site Occupational Health and Safety Committee where ten or more workers are employed on the job site for greater than 30 days.
.2 Committee members shall receive training from a WorkplaceNL recognized training provider.
.3 Provide a copy of all committee minutes with the Contractor's Monthly OHS Performance Report.

190.03.05 REPORTING AND INVESTIGATION

The Contractor shall adhere to a documented incident, hazard, safety reporting, and investigation process. The system shall:

.1 Ensure all hazards, near misses, incidents, accidents, injuries, equipment damage are recorded and properly investigated.
.2 Rank actual and potential severity of observations and report all high potential near misses, accidents, and incidents immediately to the Owner's Representative and to the OHS Division of Digital Government and Service NL.
.3 Advise the Owner's Representative and the OHS Division of Digital Government and Service NL verbally and in writing immediately of any incident that results in serious injury to a person or results in the death of a person; or had the reasonable potential to cause serious injury.
.4 Provide a copy of all notifications made to the OHS Division of Digital Government and Service NL to Transportation and Infrastructure.
.5 Where life safety risks or other high potential risks exists, the Contractor must stop work until such time as the risk can be mitigated to a safe level.
.6 Make appropriate steps to ensure that the hazards are mitigated to a safe level, workers are notified of the hazards and how to protect themselves. Additionally, workers must be provided with any new safe work practices or information regarding mitigation of the risk.

190.03.06 INSTRUCTION AND TRAINING

.1 Workers shall not participate in, or supervise, any activity on the work site until they have been trained to a level required by the job function and responsibility.
.2 Contractors shall develop an OHS training program that reflects OHS Legislative requirements and specific safety hazards based on Project work.

.3 Contractors must supply, as a component of the SSSP, a training matrix identifying all necessary training by occupation for the scope of the contract.

.4 Training requirements will depend on the work tasks associated with a specific contract, however, as a minimum, shall include the following:

.1 Federal and/or Provincial Health and Safety Legislative requirements including roles and responsibilities of supervisors, workers and other person(s) responsible for implementing, monitoring and enforcing health and safety requirements.

.2 Instruction and training on the hazards associated with any work that workers will be performing and how to protect themselves and others. This will include a review of all safe work practices, the reporting and documentation of hazards, and the reporting of accidents and injuries.

.3 Limitations, use, maintenance and care of engineering controls and equipment.

.4 Workers must receive training from a WorkplaceNL recognized training provider as outlined in the OHS legislation (i.e. fall protection, confined space entry, power line hazards, traffic control persons training).

.5 Training in the use, care and maintenance of PPE to be used on site.

.6 Limitations, use, maintenance and disinfection/decontamination of personal protective equipment associated with completing work.

.7 Training in the Contractor's emergency response plan for the Project. Workers engaged in fall arrest or confined space rescue operations will require specific training for the tasks involved.

.8 Limitations and use of emergency notifications and response equipment including emergency response protocol(s).

.9 All workers at site must receive training in Workplace Violence and Harassment Prevention.

.10 Training in WHMIS 2015.

.11 Safety and health hazards associated with working in extreme weather conditions (i.e. heat/cold hazards).

.12 Appropriate number of persons trained in emergency and Standard First Aid according to the OHS First Aid Regulations.

.13 Safety and health hazards associated with working on a contaminated site, if applicable, including recognition of symptoms and signs which might indicate over exposure to hazards.

.14 Refer to **Sections 190.3.2 and 190.3.3** for training requirements for Site Supervisors and CSRs.

.5 Detailed training records must be provided to the Owner's Representative upon request. Site training records must be in tabular or spreadsheet format, stating employee name, occupation, required training, date that training was obtained

and expiry date. This must be signed and dated by a member of the Contractor's management team.

.6 Only qualified operators shall operator powered mobile equipment. Contractors must maintain records of worker's driver's license classification, expiry date, endorsements and the type of equipment (excavator, paver, loader etc...) they are qualified to operate for the complete scope of work on the Project. Such records must be provided to the Owner's Representative upon request. Records must be in tabular format or spreadsheet that has been signed and dated by a member of the Contractor's management team. Please note, that Driver's License Numbers should not be provided as this is confidential information. Provision of the License Number may breach PIPEDA - the Personal Information Protection and Electronic Documents Act. (Federal Act) or ATIPPA - Access to Information and Protection of Privacy Act - Part IV. (Provincial Act of NL & Lab).

.7 Authorized visitors shall not access the work site until they have received orientation which would include :

.1 Notification of the names of persons responsible for implementing, monitoring and enforcing the Project SSSP.

.2 Briefed on safety and health hazards present on the site.

.3 Instruction in the proper use and limitations of personal protective equipment.

.4 Briefed on the emergency response protocols including notification and evacuation processes.

.5 Advisement of practices and procedures to minimize risks from hazards and applicable to activities performed by visitors.

.6 Being accompanied while on site and provided the appropriate PPE.

190.03.07 CONSTRUCTION SAFETY MEASURES

The Contractor shall:

.1 Observe construction safety measures of the Federal or Provincial Government, OHS Act and Regulations, WorkplaceNL, and Municipal Authority. In cases of conflict or discrepancy, the more stringent requirement shall apply.

.2 Administer the project in a manner that will ensure, at all times, full compliance with Federal and Provincial Acts, regulations and applicable safety codes and the Project Site Specific Safety Plan.

.3 Provide the Owner's Representative with copies of all orders, directions and any other documentation, issued by the Occupational Health and Safety Division with the Department of Digital Government and Service NL and Employment and Social Development Canada (ESDC).

.4 Forward copies of all orders, directions or any other documentation immediately after receipt.

190.03.08 POSTING OF DOCUMENTS

.1 The Contractor shall ensure applicable items, articles, notices, minutes and orders are posted in a prominent location on site in accordance with OHS Act and Regulations or as required by WorkplaceNL.

190.03.09 NOTIFICATION

.1 For projects exceeding thirty (30) days or more, the Contractor shall, prior to the commencement of work, notify in writing the Department of Digital Government and Service NL, Occupational Health and Safety Division the following information and provide a copy to the Owner's Representative:
  .1 Completion of Notice of Project Form.
  .2 Company name and mailing address of the Contractor doing the work.
  .3 The number of workers to be employed.
  .4 A copy of the Project Site Specific Safety Plan if requested.

190.03.10 CORRECTION OF NONCOMPLIANCE

.1 The Contractor must immediately address health and safety non-compliance issues identified by the authority having jurisdiction or by the Owner's Representative.
.2 The Contractor must provide the Owner's Representative with written report of action taken to correct non-compliance of health and safety issues identified.
.3 The Owner's Representative may stop work if noncompliance of health and safety regulations are not corrected.

190.03.11 LIQUIDATED DAMAGES FOR NON-COMPLIANCE

.1 Poor safety performance leads to extreme risks, delays, and overall extra resource by the Department of Transportation and Infrastructure to provide incremental administration and additional due diligence on the Contractor Work. As such, if the Work fails to meet any specific safety requirement in this **Section 190** the Department will apply Liquidated Damages to the work.
.2 The Department shall document and provide the Contractor with notification, either verbal or written, when an infraction has been noted so as to allow the Contractor to develop corrective actions to prevent future infractions.
  .1 The Contractor will be given a minimum of one written warning for failure to comply with this specification.
  .2 The next three infractions will result in Liquidated Damages of $500/day for non-compliance being applied to the work. For each successive infraction the Liquidated Damages increases to $1,000/day.

.3 The possibility of project shutdown or termination exists at any time where the Contractor fails to observe the provisions of **Section 190** and the Owner's Representative and the Department believe such action is warranted from a safety and/or contractual perspective. Such shutdown or termination may occur irrespective of whether Liquidated Damages were applied or not.

.4 Typical infractions may include but are not limited to:

.1 CSR not present on site as required.

.2 Safety reports not provided within specified timelines.

.3 Working without appropriate safety work practices, procedures, etc.

.4 Incidents and hazards not investigated, nor communicated to the Owner's Representative in a timely fashion.

.5 Failure to action OHS orders and/or other identified safety gaps in a timely manner.

.6 Not adhering to training requirements.

.7 Utilizing or operating unsafe or uninspected mobile equipment (including light vehicles).

.8 Not adhering to approved signage plans and requirements.

.9 Violation of any portion of **Section 190** or the Contractor's Site Specific Safety Plan without appropriate investigations and mitigations. This includes not adhering to their SWP's, safety procedures, OHS Act and Regulations, and policies.

190.04 SAFETY REGULATIONS

The Department solely relies on the Contractor to know and adhere to appropriate safety regulations. The following sections are provided for convenience and are not intended to be an all-inclusive list of safety regulations. In addition to the items stated in **section 190.4**, it is the Contractor's responsibility to ensure compliance with applicable Federal, Provincial, Territorial and Local statutes, regulations, and ordinances. Should there be any conflicts in latest regulations, Contractor safe work practices, or other recognized safety needs the latest and most stringent safety requirements shall apply.

190.04.01 WHMIS 2015

The Contractor shall:

.1 Ensure that all controlled products are in accordance with the Workplace Hazardous Materials Information System (WHMIS 2015) Regulations and Chemical Substances of the OHS Act and Regulations regarding use, handling, labeling, storage, and disposal of hazardous materials.

.2 Deliver copies of relevant Safety Data Sheets (SDS) to job site and the Owner's Representative. The SDS must be acceptable to Health Canada for all controlled products that will be used in the performance of this Work.

.3 Train workers required to use or work in close proximity to controlled products as per OHS Act and Regulations. This must be documented as part of the on-site orientation and a copy provided to the Owner's Representative.
.4 Label controlled products at jobsite as per OHS Act and Regulations.
.5 Provide appropriate emergency facilities as specified in the SDS where workers may be exposed to contact with chemicals, e.g. eyewash facilities, emergency shower.
.1 Workers shall be trained in use of such emergency equipment.
.6 Provide appropriate personal protective equipment as specified in the SDS where workers are required to use controlled products.
.1 Properly fit workers for personal protective equipment.
.2 Train workers in care, use and maintenance of personal protective equipment.
.7 Ensure that SDS remain on site at all times and are accessible to everyone on site.

190.04.02 OVERLOADING

The Contractor shall:
.1 Ensure no part of the Work or associated equipment is subjected to loading that will endanger its safety or cause permanent deformation.
.2 Ensure equipment operations follow manufacturer's operating manual.

190.04.03 FALSEWORK

The Contractor shall:
.1 Design and construct falsework in accordance with CSA S269.1.

190.04.04 SCAFFOLDING

The Contractor shall:
.1 Design, erect and maintain scaffolding in accordance with CSA S269.2: Access Scaffolding for Construction Purposes and Part XI: sections 147-249 of the OHS Regulations.
.2 Ensure that fall protection devices are used by all workers working at elevations of 1.22 metres or greater in accordance with CSA Z259 and CSA S269.2.
.3 All workers performing work at height and who will be required to utilize a fall arrest system must be trained in a fall protection program certified by WorkplaceNL.
.4 Scaffolding shall be inspected each day prior to use by a competent inspector. Records and copies of these inspections shall be kept on site and provided upon

request to the Department of Transportation and Infrastructure officials, Owner's Representative, etc.

.5 Scaffolding inspection reports may be required to be provided with the Contractor's Monthly OHS Performance Reports, at the discretion of the Owner's Representative.

190.04.05 PERSONAL PROTECTIVE EQUIPMENT

The Contractor shall:

.1 Develop a Personal Protective Equipment (PPE) Program which shall detail:
  .1 Selection criteria based on site hazards as determined by the hazard assessment.
  .2 Use, maintenance, inspection and storage requirements and procedures.
  .3 Decontamination and disposal procedures.
  .4 Inspection procedures prior to, during and after use, and other appropriate medical considerations.
  .5 Limitations during temperature extremes, heat stress and other appropriate medical consideration.

.2 Ensure that in addition to those requirements set forth in the OHS Act and Regulations, all persons, including those employed by the Contractor or their Subcontractors, working on projects for The Department of Transportation and Infrastructure shall wear the following mandatory Personal Protective Equipment at **ALL** times while working on the project.
  .1 CSA approved safety boots meeting the CSA Z195 Standard.
  .2 CSA approved hard hat meeting the CSA Z94.1 Standard.
  .3 CSA approved safety glasses meeting CSA Z94.3 Standard.
  .4 High visibility apparel as defined in the OHS Regulations.
  .5 Where noise exceeds standards set out in the OHS Regulations hearing protection shall be worn, and hearing conservation program implemented.
  .6 Other personal protective equipment, as may be required by the work tasks, hazard assessments or the Contractor, depending on duties being performed.

190.04.06 TRAFFIC CONTROL

The Contractor shall:

.1 Provide traffic control measures when working on, or adjacent to, roadways. This will include but is not limited to appropriate signage, traffic control persons and control vehicles.

.2 Ensure that traffic control measures conform with the Department of Transportation and Infrastructure's Traffic Control Manual, latest edition and errata.

.3 Ensure daily completion of the Department of Transportation and Infrastructure, Contractor Daily Traffic Control Signage Log. This log is to be completed daily at a minimum and at any point where the signage required changes to ensure accuracy. The log will be submitted monthly with the Contractor OHS Monthly Performance Report and may be inspected randomly by staff of Transportation and Infrastructure for completion and accuracy.

.4 Ensure that signage utilized on site shall meet the requirements of the Traffic Control Manual.

.5 Submit traffic control plans for all portions of the contract work to the Owner's Representative as part of the SSSP including all accompanying hazards assessments. These traffic control plans must note the location, plan number if referencing a plan contained in the Traffic Control Manual, spacing of signs, location and number of traffic control persons and be prepared in a professional manner. If the construction situation is not specifically addressed in the Traffic Control Manual then the Contractor must provide the Owner's Representative with a site specific traffic control plan addressing all of the items listed above in a professional format.

.6 Complete hazard assessments for traffic control plans to identify hazards unique to the work (i.e., volume of heavy equipment, size of lanes and barriers to protect workers from traffic, additional decreases in posted speeds, etc.).

.7 The Contractor shall ensure that traffic control persons have completed Traffic Control Person Level I training as certified by WorkplaceNL.

.8 The Contractor shall ensure that a competent individual is responsible for monitoring, maintaining and adjusting traffic control plans throughout the life of the project. This individual shall:

.1 Have completed Traffic Control Person Level II training as certified by WorkplaceNL.

.2 Be provided with authority and resources to ensure continuous monitoring of the worksite and revision of the traffic control plan when necessary.

.3 Be responsible to complete the Daily Traffic Control Signage Log to accompany the Contractor's Monthly OHS Performance Report requirements.

.9 Contractors should plan their work activities daily to ensure work will not occur in twilight or dark hours. However, if this does occur due to unforeseen circumstances, the Contractor shall have provisions in place for illumination of the work area and ensure the traffic control persons are properly equipped as required.

.10 Ensure compliance with Part XVI of the OHS Regulations 5/12.

190.04.07 WORKING AT HEIGHT

The Contractor shall:

.1 Ensure that Fall Protection devices in accordance with the regulations are utilized at a height of 1.22 metres.

.2 Develop a site specific fall protection plan, including a rescue plan, and provide it to the Owner's Representative as a part of the SSSP when fall protection systems (as per Part X of the OHS Regulations), are required during the course of the Project.

.3 Ensure that fall restraint or fall arrest devices used by workers are in accordance with CSA Z259.

.4 Ensure that all workers performing work at height and who will be required to utilize a fall arrest system are trained in a fall protection program certified by WorkplaceNL.

.5 Maintain a list of all persons trained in WorkplaceNL certified fall protection training on site. To be combined with other training records as required in a tabular or spreadsheet format listed throughout **Section 190**.

.6 Ensure regular inspections of all fall protection and fall arrest equipment are completed and that records are maintained and kept on site. Daily inspections of fall restraint and horizontal fall protection/arrest systems shall be conducted.

.7 Ensure that manufacturer's specifications for engineered fall protection/arrest/restraint systems are kept on site at all times.

.8 Ensure that anchor points for fall arrest systems are identified and certified annually by a Professional Engineer per CSA standards.

.9 Develop Working from Height Safe Work Practices specific to the Work, location and risks, and ensure the workers receive specific instruction regarding the work tasks and associated rescue plans.

.10 Ensure that rescue equipment for fall rescues is kept in close proximity to workers working at height.

.11 Where necessary the Contractor shall ensure that adequate protection from falling debris is addressed in site specific safety plans, this may include debris nets, barriers, etc.

190.04.08 WORKING OVER OR NEAR WATER

The Contractor shall:

.1 Where the risk of entering water is identified and other means of fall protection or rescue are not adequate to prevent the worker from entering the water, develop water rescue plans and ensure that workers on site are trained.

.2 Keep and maintain a list of all persons trained in water rescue on site. This list shall be combined with other training records as required in a tabular or spreadsheet format listed throughout **Section 190**.

.3 Require that workers wear personal flotation devices where workers are at risk of entering the water.
.4 Ensure that life-saving equipment is available near entry site for water rescue. This may include lifeboats, throw lines, life preservers, etc.

190.04.09 ACCESS, EGRESS AND WALKWAYS

The Contractor shall:

.1 Ensure that all accesses, egresses and walkways are continuously monitored for hazards which may include slips, trips, slippery conditions and other hazards.
.2 Develop provisions for snow clearing of walkways, accesses and egresses.
.3 Ensure that all access, egress hatches, holes or other potential hazards of this nature are clearly identified to workers and adequately covered.

190.04.10 RIGGING AND SLINGING

The Contractor shall:

.1 Ensure that workers required to perform work related to rigging and slinging are trained and deemed competent in such operations and practices.
.2 Maintain and inspect all rigging and slinging equipment in accordance with manufacturers' specifications, CSA Standards and OHS Regulations.
.3 Ensure that the working load limit of rigging and slinging equipment on site is marked and visible on the product.
.4 At a minimum, ensure that rigging and slinging operations meet the requirements of the OHS Act and Regulations.
.5 Ensure that rigging and slinging equipment identified in daily inspections or otherwise identified as damaged, worn or unacceptable to manufacturers' specifications, appropriate standards or OHS Regulations is immediately taken out of service and destroyed.

190.04.11 WORKPLACE VIOLENCE AND HARASSMENT

.1 The Contractor shall develop a Workplace Violence and Harassment Prevention Plan for the project that complies with the latest edition of the OHS Regulations.

190.05 SAFETY OPERATIONS

The Department solely relies on the Contractor to know how to safely perform the Work and the Contractor is fully responsible for the safety of its operations. The following are minimum expectations and may not be all inclusive. The Contractor shall ensure that all work meets the latest safety requirements and that all work is performed safely irrespective of the stated following requirements. Should there be any conflicts in latest standards, Contractor safe work procedures/practices, or other recognized safety needs

the latest and most stringent safety requirements as deemed appropriate by the Contractor shall apply.

190.05.01 EXCAVATION OPERATIONS

The Contractor shall:

.1 Protect excavations more than 1.22 metres deep against cave-ins or wall collapse by side wall sloping to the appropriate angle of repose, an engineered shoring/sheathing system or an approved trench box.

.2 Provide a ladder where excavation is greater than 1.22 metres deep, extending from the bottom of the excavation to at least 0.91 metres above the top of the excavation.

.3 Ensure that all excavations less than 1.22 metres deep are effectively protected when hazardous ground movement may be expected.

.4 Ensure that trench boxes are designed and certified by a registered Professional Engineer. Ensure the manufacturer's Depth Certificate Statement is permanently affixed to the trench box. Use trench boxes in strict accordance with manufacturer's instructions and depth certification data.

.5 For excavations deeper than five (5) metres, provide a certificate from a registered Professional Engineer stating that the protection methods proposed have been properly designed in accordance with accepted engineering practice. The Engineer's certificate shall verify that trench boxes, if used, are properly designed and constructed to suit the depth and soil conditions.

.6 Ensure that the superintendent and every crew chief, foreperson and lead hand engaged in trenching operations or working in trenches have the appropriate training and have in their possession a copy of the OHS Regulations: PART XVIII EXCAVATION, UNDERGROUND WORK AND ROCK CRUSHING.

190.05.02 BLASTING OPERATIONS

Where blasting is required, the Contractor, at a minimum, must:

.1 Ensure a valid Blaster's Certificate and Certificates of Qualification acceptable to the OHS Regulations 5/12 under Section 419 identifying the Level of Qualification for the project requirements (Journey Persons Blaster Certificate will still be accepted). An acceptable letter of extension of blasters certificate from the Apprenticeship and Trades Certification Division of the Department of Advanced Education, Skills and Labour is required where their certificate expires (5 years max.). Certificate numbers and names are required for all blasters proposed for the project.

.2 Hold a Temporary Magazine License, when required, issued by Natural Resources Canada.

.3 Hold an Explosives Vehicle Certificate, when required, issued by Transport Canada for transport of explosives regulated under the Transportation of Dangerous Goods Act.

.4 Ensure that the Blaster's resume clearly states and demonstrates:

.1 Minimum five (5) years of experience in handling, storage and detonation of explosives.

.2 Training at a blaster's school which is acceptable to the Provincial Government.

.5 Ensure blasting operations are carried out under the direct visual supervision of a certified Blaster either registered with the Apprenticeship and Trades Certification Division of the Department of Advanced Education, Skills and Labour or has been issued a certificate from completion of a program approved by the Department of Digital Government and Service NL. Ensure that the certificate level is appropriate for the blasting activities which will occur. Comply with the requirements of:

.1 Explosives Act.

.2 Explosives Regulations.

.3 Newfoundland Regulation 5/12, Occupational Health and Safety Regulations.

.4 Role of certified blaster set out in section 419 of the Occupational Health and Safety Regulations 5/12.

.6 Store explosives in accordance with the "Explosives Act (Canada)" and transport, handle and use in the manner prescribed by the manufacturer of the substance and subject to specific regulations. An inventory of explosives shall be kept at all times.

.7 Ensure that workers required to transport explosives have a valid Transportation of Dangerous Goods Training Certification in accordance with the Transportation of Dangerous Goods Act and the Explosives Act. Vehicle used to transport explosives on site shall be placarded and explosives shall be transported in containers lined with non-sparking materials (reference section 428 of the Occupational Health and Safety Regulations 5/12). Detonators shall not be placed in a magazine or daybox with other types of explosives or in a compartment of a vehicle with another type of explosive.

.8 Ensure that the use of explosives on site complies with the Occupational Health and Safety Regulations 5/12 General Blasting requirements are set out in Part XIX of the Regulations. Loaded holes shall be clearly identified with barricades put in place to prevent access to the holes. Drilling shall not be done closer to a loaded bore hole than a distance half the total depth of the hole being drilled and in no case shall drilling be conducted at a distance closer than 6 metres from a loaded borehole. Drill cuttings shall not be used as stemming material.

.9 Advise the public by suitable public notices, advertisements, house to house contacts etc. for blasting operations in close proximity to areas occupied by the public. Advise of the warning device to be sounded and the procedure to be used before detonation of individual blasts. Roads and approaches to the danger area are guarded or barricaded to prevent anyone from entering. Loaded holes which have not been fired by the end of the day shall not be left unattended.

.10 Prior to detonation of a blast, give sufficient warning in every direction and ensure that all persons have reached a place of safety before the blast is fired.

.11 File an Emergency Response Assistance Plan with the Explosives Branch, Natural Resources Canada.

.12 Ensure that the Blaster:

.1 Is solely responsible for implementation of the Explosives Management Program.

.2 Has a valid blaster's safety certificate from the Apprenticeship and Trades Certification Division of the Provincial Department of Advanced Education, Skills and Labour and have a valid temporary Magazine License, when required, issued by Natural Resources Canada, for storage and explosives.

.3 Possess a thorough working knowledge of the Federal Explosives Act and Provincial Regulations.

.4 Possess a specialized training in handling storage and detonation of explosives.

.5 Keeps a field journal concerning all blast activities.

190.05.03 HEAVY EQUIPMENT OPERATIONS

The Contractor shall:

.1 Ensure mobile equipment used on job site is fitted with a Roll Over Protective Structure (ROPS) and Falling Object Protective Structures (FOPS) as specified in OHS Act and Regulations (specific to sections 261-265).

.2 Ensure that operators of mobile equipment have adequate instruction and are competent in the operation of mobile equipment.

.3 Ensure that operators of heavy equipment are Power Line Hazards certified from WorkplaceNL.

.4 Obtain written clearance from the power utility where equipment is used in close proximity to (within 5.5 metres) overhead or underground power lines.

.5 Equip cranes with:

.1 A mechanism which will effectively prevent the hook assembly from running into the top boom pulley.

.2 A legible load chart.

.3 A maintenance logbook.

.6 Ensure that there is no overnight parking of heavy equipment on road shoulders, where exposure to the public may be present.

190.05.04 BRUSH CLEARING OPERATIONS

The Contractor shall:

.1 Ensure workers using chain saws or brush saws are competent and wear the following safety equipment:
  .1 CSA approved safety hat fitted with face screen or shield.
  .2 Approved eye protection.
  .3 Hearing protection, e.g. earmuffs.
  .4 CSA approved chain saw pants.
  .5 CSA approved chain saw boots.
  .6 Cut resistant gloves.
.2 Chain saws must be equipped with a chain brake.
.3 A safe work practice (SWP) must be developed, implemented and all workers trained in the SWP prior to undertaking such tasks and utilizing tree and brush clearing equipment.

190.05.05 DIVING OPERATIONS

When diving operations are required, the Contractor shall ensure that the diving contractor, completes, at a minimum, the following:

.1 Development of site specific diving safety plan.
.2 Maintains records of the diver(s) and dive supervisor (s), including:
  .1 Copy of valid Diving Certificate and Supervisor Certificate from the Diving Certification Board of Canada (or equivalent) for the required work on the project. (i.e. Restricted SCUBA Diver, Unrestricted SCUBA Diver, SCUBA Supervisor, Restricted Surface-Supplier Diver, Unrestricted Surface-Supplied Diver, etc.(See www.divercertifcation.com).
  .2 Resume which clearly demonstrates years of experience for the specific type (SCUBA, Surface Supplied Air, etc.) of diving to be performed at the site and projects completed to achieve minimum number of logged bottom time hours.
  .3 First Aid and CPR Training Certification.
.3 Maintains the dive tender(s) resume which must clearly state relevant training (including first aid and CPR and experience for the specific task (i.e. dive tender logbook).
.4 Ensures current (less than one year) medical examination certificate(s) for all divers, from a licensed medical doctor in the Province of Newfoundland and Labrador who is knowledgeable and competent in diving and hyperbaric medicine for all dives.

.5 Maintains Certificates of Analysis for quality/purity of breathing air to be used by diver(s).

.6 Ensures documentation showing that diving life support equipment is in good working order and properly maintained.

.7 Ensures copies of documentation to show:

.1 An up-to-date dive site listing of the contact Hyperbaric facility and phone numbers for each location.

.2 Written arrangements with standby physician(s) specializing in diving/hyperbaric medicine for contingent emergency response and post dive follow-up for 48 hours after dive is completed.

.3 Effective means of communication between the diving supervisor and physician are available.

.4 The name, location and telephone number of the hospital and emergency department nearest the dive site.

.8 Develops emergency rescue procedures that include:

.1 Managing deteriorating environmental conditions.

.2 Managing unexpected weather or sea state condition.

.3 Evacuation of diver(s) under pressures greater that atmospheric pressure

.4 In water emergency transfers.

.5 Managing failing of equipment below the surface that impairs the ability of a diver to complete a dive.

.6 Managing failure of any major component of diving plant or equipment.

.7 Emergency signaling between divers involved in the diving program and between the diver(s) and the attendants using umbilical, tethers or other suitable methods.

.8 Mobilizing standby divers.

.9 Mobilizing crafts, standby boats and any other devices to be used for rescue.

.10 Contacting evacuation, rescue, treatment facilities and medical services that will be used in the diving program.

.11 Operation of emergency power and lighting facilities

.9 Ensures diving operations conform to CSA Z275.2 “Occupational Safety Code for Diving Operations” and CSA Z275.4 “Competency Standard for Diving Hyperbaric Chamber, and remotely Operated Vehicle Operations” or later edition.

.10 Ensures sampling:

.1 Prior to commencing diving activities, sample water and analyze sample(s) for:

i. Fecal Coliforms (Escherichia coli).

ii. Total Coliforms.

iii. Any health hazard identified during the site specific hazard assessment.
iv. Any parameter as directed by the Department of Digital Government and Service NL.

.2 Water will be designated a contaminant if the chemical concentration of a contaminant exceeds:
i. 200 fecal Coliforms (Escherichia coli) per 1000 milliliter of water.
ii. 100 times the guidelines concentration established in the most recent Guidelines of Canadian Drinking Water Quality.
iii. Any other criteria established by the Department of Digital Government and Service NL.

.11 Ensures that sample analysis is to be completed by a laboratory that is accredited by the Canadian Associates of Environmental and Analytical Laboratories (CAEAL) or other national equivalent.

.12 Ensures that dive personnel must meet the minimum competency requirements of CSA 275.4-02.

.1 The Dive supervisor(s) shall as a minimum:
i. Possess a Valid Diving Certificate, or equivalent, for a minimum of three (3) years for the type of diving to be performed.
ii. Have completed one hundred and fifty (150) hours of logged diving time for the type of diving to be performed.
iii. Have completed fifty (50) hours of dive supervision for the type of diving to be performed.

.2 Diver(s) shall as a minimum:
i. Possess a valid Diving Certificate or equivalent, for the type of diving to be performed.
ii. Have completed fifty (50) hours of logged dive time for the type of diving to be performed.

.13 Ensures that a diving operation shall be interrupted or discontinued or not commenced when:

.1 Continuation of the diving operation would or is likely to compromise the safety of any person involved in the diving operation.

.2 The water currents at the underwater work site are likely to compromise the safety of any person involved in the diving operation.

.3 Combustible material is stored too close for safety to any diving plant and equipment used in the diving operation.

.14 Ensures that a diving operation shall:

.1 Not be conducted in the vicinity for any other activity that might pose a danger to any person involved in the diving operation.

.2 Not use any craft that has insufficient power or stability for the safe continuity of the diving operation.

.3 Provide measures for making work area boundary and stopping unauthorized entry into the work area.

.4 Provide adequate illumination of the dive site and the underwater work site of the diving operation.

.15 Provides, at the work site while completing diving operations, a diving operations logbook that is permanently bound and has numbered pages.

.1 Produce on request, any logbooks, records or other documentation associated with the diving operation, for inspection by the Owner's Representative.

.2 As a minimum, for each diving operation enter into the diving operation logbook:

i. date and time the diving operation commenced and terminated including any time the diving operation was interrupted.
ii. name of supervisor; names of all other persons involved.
iii. the procedures followed.
iv. the decompression table and the schedule in that the decompression table was used.
v. the maximum depth, bottom time, dive time and total dive time for each dive.
vi. the type of diving plant and equipment and the type of breathing mixture used.
vii. the type of discomfort, injury or illness including decompression sickness, suffered by any person involved
viii. any environmental conditions that affected or might have affected the diving operation.
ix. any other factors relevant to the safety to health of any person involved.

.16 Ensures that diving in free swim mode is not permitted at the work site.

.17 Provides separate first aid supplies for dive operation. All dive team personnel shall be trained in first aid and cardiopulmonary resuscitation (CPR).

.18 Provides medical oxygen for emergency response at work site. The dive supervisor shall be trained in administering medical oxygen.

190.05.06 CONFINED SPACE OPERATIONS

When confined space entry is required, the Contractor, at a minimum, must:

.1 Develop a site specific confined space entry plan that is specific to the nature of work performed and provide it to the Owner's Representative as a part of the

SSSP. This shall include a CSE permit system, rescue plan, testing, equipment, communication considerations and safe work procedures.

.2 Ensure confined space operations are carried out in accordance with the OHS Act and Regulations PART XXVII CONFINED SPACE ENTRY.

.3 The Contractor shall ensure that all appropriate policies, assessments, training, testing and rescue plans are in place, communicated to workers and utilized prior to confined space entry.

.4 All staff required to enter a confined space shall be trained in confined space entry through a program certified by WorkplaceNL.

.5 Provide approved air monitoring equipment when workers are working in confined spaces as appropriate. Ensure any testing equipment to be used is calibrated, in good working order and used by trained persons.

.6 Maintain 'entry permit' records for each entry into a confined space to ensure compliance with Provincial Legislation. Records shall be made available to Owner's Representative upon request.

190.05.07 CRANE OPERATIONS

The Contractor shall:

.1 Ensure that training records and certifications for operators of cranes are kept on site and maintained. This training shall meet the requirements of the OHS Act and Regulations, CSA standards and identify the operators as competent.

.2 Ensure that manufacturers' specifications for all lifting equipment is kept on site.

.3 Inspect and maintain lifting equipment in accordance with the appropriate CSA standards and manufacturers' specifications by a competent and qualified individual.

.4 Ensure that maintenance records for lifting equipment is maintained and available upon request.

.5 Develop safe work practices for working around cranes and ensure that the information is reviewed with operators and staff.

.6 Ensure that safe work practices for crane operations are developed and reviewed with all operators. Additional attention shall be provided for safe work practices related to operations for tandem crane lifts.

.7 Complete a hazard assessment and develop a corresponding plan, when tandem crane lifts are required for the construction, maintenance and or repair of a structure, road or bridge.

.8 Ensure that operators and signalers shall have radios or other suitable means of communications.

.9 Ensure that where an apprentice crane operator will be operating a crane he/she is under the direct supervision of a journey person operator as required by the

Apprenticeship and Trades Certification Division of the Department of Advanced Education, Skills and Labour.

.10 Ensure that the load capacity of the crane is clearly marked in a visible location.

190.05.08 PIT AND QUARRY OPERATIONS

.1 The Contractor shall ensure that pits and quarry operations comply with OHS Regulations. The Contractor may be required to provide the following documents certified by the appropriate professionals in accordance with the regulations:

.1 Mine design plan, certified by a Professional Engineer (where three or more benches are to be mined) (OHS section 519).

.2 A plan for electrical energy at the mine, certified by a Professional Engineer (OHS section 679).

.3 Ground Control Logbook (OHS section 525).

.4 Ensure appropriate signage is utilized to prohibit unauthorized entry.

.5 Monitor conditions and utilize a dust suppression management program, particularly for drilling and crushing operations, if necessary.

190.06 OWNER'S STATEMENT

.1 The Owner shall not be responsible for injury or damage occasioned by a failure of the Contractor to adhere to these provisions.

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Dept. of Transportation & Infrastructure
P.O. Box 8700, St. John's, NL, A1B 4J6

The report below is to be completed on a monthly basis by all Contractors
Please attach information pertaining to items highlighted with an asterisk (*)

Contractor Information		
Contractor/Company Name		
Report Prepared By		
Report for Period	Beginning:	Ending:
Project and Location		

Contact	**Name**	**Contact Number**
Contract Manager		
Contractor CSO		
Site Manager		

Monthly OHS Performance Indicators

Lagging Indicators		**Leading Indicators**		
Indicate the total within reporting period above	Monthly Total	*Indicate the total within reporting period above*	Monthly Total	Records available
Lost Time Injuries		Tool Box Talks (safety specific)*		
Working Days Lost		OHS Committee/Rep Meetings*		
Return to Work Plans		Bi-Weekly Project Meeting		
First Aid Incidents		Site Safety Orientations		
Medical Aid Incidents		*Weekly* Site Inspections*		
Total Hours Worked (site)		Hazard Reports Submitted		
Accident /Incident reports		Hazard Assessments Conducted*		
Accident Incident Investigations Conducted*		Traffic Control Signage Log Completed*		
		NLCSA Certificate of Recognition (COR)*		

OHS Division Activities

OHS Division Inspections		OHS Division Directives Issued*		

Sub-Contractor Information

Name sub-contractors working on site	Description of work conducted by sub-contractors	Days on site	COR Certified (Y/N)

Training Information

Training conducted with staff	Brief description of training conducted with safety or work practice focus	Total staff trained	Records available (Y/N)

Equipment Maintenance

Annual equipment inspections conducted (Y/N)	All equipment passed inspection (Y/N)	Records Available (Y/N)	Non-Routine maintenance required? Identify equipment	List maintenance conducted

Report completed on:		**Signature:**	

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
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Definitions

First Aid incident – An Occupational Injury/Illness that requires first aid treatment only and does not result in loss of time from work or Restricted Work.

Medical aid incident – A classification of Occupational Injury/Illness for Medical Treatment beyond First Aid Injury where there has been no Lost Days. i.e: Visit to a health care provider or hospital specific to the injury

Lost-Time Injury – An injury/illness resulting in Lost Days beyond the date of injury as a direct result of an Occupational Injury/Illness incident on the project.

Working Days Lost – The number of calendar days that the employee is unable to work beyond the day of injury specific to the project in which the injury occurred. Calculate total days for all employees working on the project.

Total Hours Worked –Total number of hours of employment (i.e., the actual worked hours) of all employees for each contractor and sub-contractor companies for the reporting period specific to the project.

Accident – An undesired event resulting in death, ill health, injury, damage or other loss.

Incident -- An unplanned, undesired event that had the potential to cause injury or other damage.

Accident/Incident Report – all accidents and incidents must be reported, whether through an internal reporting structure or through the WHSCC employers form 7. All accidents of a serious nature must also be reported to the OHS Division with in 24 hours (serious accidents re outlined in section 54(3) of the OHS Act)

Accident/Incident Investigation – is an investigation by the employer into the root cause of an accident or incident to identify hazards and prevent workplace accidents/incidents from recurring.

Department of Transportation and Infrastructure

Contractor Daily Traffic Control and Signage Log

Date/Time	Location/Project	Indicate the number or name of the signage layout utilized from the TCM	Current condition/placement of signage	Current/expected weather conditions	Signage and equipment adequate for the work and conditions (Y/N)	Identify deficiencies completed prior to the commencement of work and any signage repairs, replacements or upgrading required	Report completed by	Signage adjusted, indicate date and time of adjustment/inspection