

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

COORDINATION 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.