



Public Works and Government Services Canada

Requisition No. EZ899-140441/A

SPECIFICATIONS

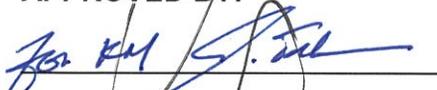
For

Km 355 – Km 358 Hourly Equipment Rental, Alaska
Highway, BC

Project No. R.017174.016

May 2013

APPROVED BY:


Alaska Hwy Program Manager, EASS

May 29 2013
Date


Construction Safety Coordinator

2013.05.29
Date

TENDER:


Project Manager

May 29 2013
Date

Specification Divisions	Sections	Number of Pages	
Division 1	01 11 00	Summary of Work	3
	01 25 10	Submission of Quotation for Contemplated Change Orders.	3
	01 31 00	Project Management and Coordination	5
	01 32 18	Construction Progress Schedules	3
	01 33 00	Submittal Procedures	7
	01 35 33	Health and Safety	7
	01 35 43	Environmental Protection	3
	01 52 00	Construction Facilities	2
	01 59 10	Construction Camp	1
01 77 00	Closeout Procedures	2	
Division 2	02 61 33	Hazardous Materials	4
List of Drawings	R.017174.016-01	Hourly Equipment Specification	1
	R.017174.016-02	Typical Steel Sub Drain Installation	1



PART 1 – GENERAL

- 1.1 Section Includes .1 Summary of work.
- 1.2 Precedence .1 The Division 1 Sections of these technical specifications take precedence over the other sections of the specifications.
- 1.3 Work Covered by Contract Documents .1 The project involves slope stabilization at Km 355 – 358 of the Alaska Highway. Work will be done on an hourly basis as per unit price table.
- .1 No separate payment for overtime hours for labourers/operators.
 - .2 Supervisor is incidental to work and no separate payment will be made. Supervisor must be on site at all times.
 - .3 No separate payment for hand tools, generators, pumps, power saws, plate tamper, jumping jacks, trench shield, etc.
 - .4 No separate payment for health and safety occurred items.
- .2 The work under this contract generally comprises of the following but is not limited to:
- .1 Km 355 to Km 358:
 - .1 Excavation of slope (3:1) and disposal of surplus material in area designated by Departmental Representative.
 - .2 Installation of interceptor ditch, Departmental Representative will mark location in field.
 - .3 Haul and place Rip Rap material in existing roadway ditch and inlet and outlet of culvert for access road south side of bridge. Rip Rap will come from Km 319 Quarry, 5 Kms off Alaska Highway.
 - .4 Equipment to have approved seven-day timing devices mounted to record actual operating time. Equipment number & date shall be recorded on cards.
 - .2 Installation of Perf Pipe in left hand side of existing roadway ditch south side of Bougie Bridge:
 - .1 Excavation of trench, 1m width minimum, 2m deep, trim slopes, and disposal of surplus excavated ditch and side slope materials in area designated by Departmental Representative;
 - .2 Aggregate source is at Km 366.
 - .3 Perforated CSP Drainpipe and Geotextile supplied by PWGSC at Fort Nelson Airport Compound.
 - .4 Supply labour for perforated CSP Drain Pipe installation.
 - .5 Placement of impermeable fill (excavated Unit 3 Clay) and or Unit 4 (Till material);
 - .6 Protection of existing utilities. Contractor's

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- responsibility to contact utilities for locates.
- .7 Supply labour for Perf Pipe culvert installation.
- .8 Pile shrubs and trees for burning at location as directed by Departmental Representative.
- .9 Haul excavated material with truck and pup and/or Rock Truck to area as directed by Departmental Representative.
- .10 Road shoulder repairs and placement of gravel shouldering if required;
- .11 Environmental protection;
- .12 Supply and maintain traffic control for the work.
- .13 Equipment to have approved seven-day timing devices mounted to record actual operating time. Equipment number and dates shall be recorded on cards.
- .3 Equipment and labour hourly rates shall be all inclusive of service truck.
- .4 Travel and accommodation will be lump sum in unit price table. No separate payment will be made.
- 1.4 Codes
- .1 Perform all construction work in accordance with CAN/CSA S6-06, CAN/CSA A23.1-09 and any other code of provincial or local application, provided that in any case of conflict or discrepancy, the more stringent requirements shall apply.
- .2 Meet or exceed requirements of:
- Contract documents; and
 - Specified standards, applicable legislation, codes, and referenced documents.
- 1.5 Contractor's Use of Site
- .1 Restrict work to within lands owned by the Departmental Representative within the construction site.
- .2 Any additional areas required by the contractor outside the lands owned by the Departmental Representative and designated for use on this project, shall be the contractors responsibility to organize. Any costs associated with the use of these additional lands shall be the Contractor's responsibility.
- .3 Assume full responsibility for protection and safekeeping of products under this contract.
- 1.6 Equipment
- .1 Minimum equipment size listed in drawing – R.017174.016-01.
- .2 Mob and De-mob of equipment will be incidental to equipment hours and no separate payment will be made.

PART 2 – EXECUTION

- 2.1 Work Completion
- .1 Preparation of required submittals to commence immediately upon receipt of notice to proceed.
 - .2 Commence onsite work no earlier than October 15, 2013.
 - .3 Achieve Substantial Performance by December 31, 2013.
 - .4 Achieve Completion by January 31, 2014.
- 2.2 Special Precautions
- .1 The Contractor's attention is drawn to the possibility of utilities, etc., within the limits of work. The Contractor shall confirm the locations of all such utilities. The Contractor shall notify the Departmental Representative should utilities be located in areas other than those shown on the drawings.
 - .2 Existing structures, geotechnical instrumentation (piezometers), utilities, roads (including chip seal surface), culverts, and all others structures, services, piping or equipment within the limits of work shall be properly protected from any injury or damage, direct or indirect. Any damage that is caused as a result of the operations of the Contractor shall be repaired and made good at his expense to the satisfaction of the departmental representative.

END OF SECTION

PART 1 - GENERAL

- 1.1 Submission of Quotation for Contemplated Change Notices .1 If the Departmental Representative determines that the cost of the work will be affected due to a contemplated change, the Contractor shall submit a quotation to the Departmental Representative in accordance with the instructions specified herein.
- 1.2 General .1 Quotations for Contemplated Change Notices must include a detailed breakdown of all labour, material, plant and equipment costs incurred by the Contractor. Quotations from subcontractors involved in the change must also be supported by similarly detailed breakdowns of the subcontractors' costs.
- .2 It is the responsibility of the Contractor to ensure that all subcontractors' quotations included in the Contractor's quotation to the Departmental Representative are fair and reasonable in view of the terms expressed herein.
- .3 The labour hours required for the contemplated change shall be based on the estimated number of hours to perform the work.
- .4 Time spent by a working foreman may be included in the number of labour hours at a rate agreed to in writing by the Contractor and the Departmental Representative.
- .5 Time attributable to material handling, productivity factors and approved rest periods is to be included in the number of hours required by the contemplated change and will not be paid as a separate item under hourly rates.
- .6 Markups referred to in Sections 1.5 and 1.6 below are not to be included in the hourly labour rates.
- .7 When a change deletes work which has not yet been performed, the Departmental Representative is entitled to an adjustment in the Contract Amount equal to the cost the Contractor would have incurred had the work not been deleted.
- .8 Markups referred to in Sections 1.5 and 1.6 below shall not be applied to any credit amounts for deleted work.
- .9 In those cases where the change involved additions and deletions to the work, the percentage markups referred to in Sections 1.5 and 1.6 below shall apply only when the cost of the additions minus the cost of the deletions would result in an increase in the Contract Amount. The percentage allowance shall only be applied to that portion of the costs of the additions that is in excess of the cost of the deletions.

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- 1.2 General (Cont'd)
- .10 If the contemplated change in the work necessitates a change in the contract completion date, or has an impact on the work, the Contractor shall identify and include the resulting cost in the breakdown of its quotation to the Departmental Representative.
 - .11 The work shall conform to the contract documents unless otherwise stated in the Contemplated Change Notice, Change Order or Site Instruction (1) signed by the Departmental Representative.
 - .12 Upon acceptance of the Contractor's quotation by the Departmental Representative, the Departmental Representative shall prepare and issue the formal Change Order.
- 1.3 Hourly Labour Rates
- .1 The hourly labour rates listed in the Contractor's quotation shall be determined in accordance with the collective agreements that are applicable at the site of the work and shall include:
 - .1 The base rate of pay.
 - .2 Vacation pay.
 - .3 Benefits which includes:
 - .1 Welfare contributions;
 - .2 Pension contributions;
 - .3 Union dues;
 - .4 Training and industry funds contributions; and
 - .5 Other applicable benefits, if any, that can be substantiated by the Contractor.
 - .4 Statutory and legislated requirements, assessed and payable under statutory authority, which included:
 - .1 Employment Insurance contributions;
 - .2 Canada Pension Plan or Quebec Pension Plan contributions;
 - .3 Workers' Compensation Board;
 - .4 Public Liability and Property Damage insurance premiums;
 - .5 Health tax premiums.
 - .2 In the case of nonunion labour, all rates claimed shall be in accordance with the terms of the Labour Conditions forming part of this contract and the Contractor must provide satisfactory proof of the rates actually paid. Nonunion rates shall not exceed rates payable under any applicable collective trade agreement unless approved in writing by Departmental Representative.

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- .4 Material, Plant and Equipment Costs .1 The costs of all purchases and rentals must be based on the actual amount paid to the suppliers by the Contractor or subcontractor and said costs are to include all applicable discounts.
- .5 Allowance to the Contractor or Subcontractor on Work by Own Forces .1 A markup equal to 20 percent of the cost of all labour, material, plant and equipment furnished or supplied by the Contractor or subcontractor that is required by the contemplated change, shall be added to the Contractor's or subcontractor's quotation as full compensation for miscellaneous additional costs related to:
- .1 The purchase or rental of material, plant and equipment;
 - .2 The purchase of small tools and supplies;
 - .3 Safety and protection measures; and
 - .4 Permits, bonds, insurance, engineering, as-built drawings, commissioning and site office.
- .6 Allowance to Contractor on Work Performed by its Subcontractors .1 A markup equal to 15 percent of the total of all quotations received from subcontractors, shall be added to the Contractor's quotation as full compensation for:
- .1 All supervision, coordination, administration, overhead, margin and the risk of undertaking the work within the stipulated amount; plus
 - .2 Miscellaneous costs related to:
 - .1 Safety and protection measures; and
 - .2 Permits, bonds, insurance, engineering, as-built drawings, commissioning and site office.

PART 2 - PRODUCTS

- 2.1 Not Used .1 Not used.

PART 3 - EXECUTION

- 3.1 Not Used .1 Not used.

END OF SECTION

PART 1 - GENERAL

- 1.1 Section Includes .1 Coordination of work with other contractors and work by Departmental Representative under administration of contract.
- .2 Startup and progress meeting schedules, submittals and close-out procedures.
- 1.2 Related Sections .1 Section 01 11 00 – Summary of Work.
- .2 Section 01 33 00 – Submittal Procedures
- 1.3 Coordination .1 Coordinate progress schedules, submittals, use of site, temporary utilities, construction facilities, and construction work, with progress of work of other contractors and work by Owner, under instructions of Departmental Representative.
- 1.4 Construction Organization and Start-up .1 Within 15 days after award of contract, request a meeting of parties in contract to discuss and resolve administrative procedures and responsibilities.
- .2 Senior representatives of the Owner, PWGSC, Consultant, Contractor, major Subcontractors, field inspectors and supervisors will be in attendance.
- .3 Establish time and location of meeting and notify parties concerned minimum five days before meeting.
- .4 Incorporate mutually agreed variations to contract documents into agreement, prior to signing.
- .5 Agenda to include following:
- .1 Appointment of official representative of participants in Work.
- .2 Schedule of work, progress scheduling in accordance with Section 01 32 18 – Construction Progress Schedule.
- .3 Schedule of submission of shop drawing, samples, colour chips in accordance with Section 01 33 00 – Submittal Procedures.
- .4 Requirements for temporary facilities, site sign, offices, storage sheds, utilities, fences in accordance with Section 01 52 00 – Construction Facilities.
- .5 Delivery schedule of specified equipment in accordance with Section 01 32 18 – Construction Progress Schedules.
- .6 Site security in accordance with Section 01 52 00 – Construction Facilities.

1.4 Construction Organization
and Start-up (Cont'd)

- .7 Proposed changes, change orders, procedures, approvals required, mark-up percentages permitted, time extensions, overtime, and administrative requirements (GC).
- .8 Departmental Representative furnished materials.
- .9 Take-over procedures, acceptance, and warranties in accordance with Section 01 77 00 – Closeout Procedures.
- .10 Monthly progress claims, administrative procedures, photographs, and holdbacks (GC)
- .11 Insurances and transcript of policies (GC)
- .6 Comply with Department Representative's allocation of mobilization areas of site; for field offices and sheds, access, traffic, and parking facilities.
- .7 During construction, coordinate use of site and facilities through Departmental Representative's procedures for intra-project communications: Submittals, reports and records, schedules, coordination of drawings, recommendations, and resolution of ambiguities and conflicts.
- .8 Comply with instructions of Departmental Representative for use of temporary utilities and construction facilities.
- .9 Coordinate field engineering and layout work with Departmental Representative.

1.5 Project Meetings

- .1 Schedule and administer weekly project meetings throughout progress of work as determined by Departmental Representative.
- .2 Prepare agenda for meetings.
- .3 Distribute written notice of each meeting four days in advance of meeting date to Departmental Representative.
- .4 Provide physical space and make arrangements for meetings.
- .5 Preside at meetings.
- .6 Record minutes. Include significant proceedings and decisions. Identify action by parties.
- .7 Reproduce and distribute copies of minutes within three days after each meeting and transmit to meeting participants, affected parties not in attendance and Departmental Representative.

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- 1.6 On-Site Documents .1 Maintain at job site, one copy each of the following:
- .1 Contract drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Reviewed shop drawings.
 - .5 Change orders.
 - .6 Other modifications to contract.
 - .7 Field test reports.
 - .8 Copy of approved work schedule.
 - .9 Section 01 35 33 – Health and Safety
 - .10 Manufacturers’ installation and application instructions.
 - .11 Labour conditions and wage schedules.
- 1.7 Schedules .1 Submit preliminary construction progress schedule in accordance with Sections 01 32 18 – Construction Progress Schedule.
- .2 After review, revise and resubmit schedule to comply with revised project schedule.
 - .3 During progress of work, revise and resubmit as directed by Departmental Representative.
- 1.8 Construction Progress Meetings .1 During course of work and weeks prior to project completion, schedule progress meeting monthly.
- .2 Contractor, major subcontractors involved in work and Departmental Representative are to be in attendance.
 - .3 Notify parties minimum three days prior to meetings.
 - .4 Record minutes of meetings and circulate to attending parties and affected parties not in attendance within three days after meeting.
 - .5 Agenda to include following:
 - .1 Review, approval of minutes of previous meeting.
 - .2 Review of work progress since previous meeting.
 - .3 Field observations, problems, conflicts.
 - .4 Problems which impede construction schedule.
 - .5 Review of off-site fabrication delivery schedules.
 - .6 Corrective measures and procedures to regain projected schedule.
 - .7 Revision to construction schedule.
 - .8 Progress schedule during succeeding work period.
 - .9 Review submittal schedules; expedite as required

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- 1.8 Construction Progress Meetings (Cont'd)
- .10 Maintenance of quality standards.
 - .11 Review proposed changes for affect on construction schedule and on completion date.
 - .12 Health and Safety
 - .13 Other business.
- 1.9 Submittals
- .1 Make submittal to Department Representative for review.
 - .2 Submit preliminary shop drawings, product data and samples in accordance with Section 01 33 00 – Submittal Procedures, for review for compliance with contract documents; for field dimensions and clearances, for relation to available space, and for relation to work of other contracts. After review, revise and resubmit for transmittal to Departmental Representative.
 - .3 Submit requests for payment for review, and for transmittal to Departmental Representative.
 - .4 Submit requests for interpretation of contract documents, and obtain instructions through Departmental Representative.
 - .5 Process substitutions through Departmental Representative.
 - .6 Process change orders through Departmental Representative.
 - .7 Deliver closeout submittals for review and preliminary inspections, for transmittal to Departmental Representative.
 - .8 Section 01 35 33 – Health and Safety
- 1.10 Coordination Drawings
- .1 Provide information required by Departmental Representative for preparation of coordination drawings.
 - .2 Review and approve revised drawings for submittal to Departmental Representative.
- 1.11 Closeout Procedures
- .1 Notify Departmental Representative when work is considered ready for Substantial Performance.
 - .2 Accompany Departmental Representative on preliminary inspection to determine items listed for completion or correction.
 - .3 Comply with Departmental Representative's instructions for correction of items of work listed in executed certificate of Substantial Performance and for access to Owner-occupied areas.
 - .4 Notify Departmental Representative of instructions for completion of items of work determined in Departmental Representative's Final inspection.

PART 2 – PRODUCTS

2.1 Not Used .1 Not Used.

PART 3 - EXECUTION

3.1 Not Used .1 Not Used.

END OF SECTION

PART 1 - GENERAL

- 1.1 Precedence .1 For Federal Government projects, Division 1 Sections take precedence over technical specification sections in other Divisions of this Project Manual.
- 1.2 Measurement Procedures .1 Cost of providing construction Progress Schedules will be considered incidental to the work and no additional payment will be made.
- 1.3 Definitions
- .1 Activity: An element of work performed during course of Project. An activity normally has an expected duration, expected cost and expected resource requirements. Activities can be subdivided into tasks.
- .2 Bar Chart (GANTT): A graphic display of schedule-related information. In typical bar chart, activities or other Project elements are listed down left side of chart, dates are shown across top and activity durations are shown as date-placed horizontal bars. Generally Bar Chart should be derived from commercially available computerized project management system.
- .3 Baseline: Original approved plan (for Project, work package, or activity), plus or minus approved scope changes.
- .4 Construction Work Week: Monday to Sunday, inclusive, will provide five day work week and define schedule calendar working days as part of Bar Chart (GANTT) submission.
- .5 Duration: Number of work periods (not including holidays or other nonworking periods) required to complete an activity or other Project element. Usually expressed as workdays or workweeks.
- .6 Master Plan: A summary-level schedule that identifies major activities and key milestones.
- .7 Milestone: A significant event in Project, usually completion of major deliverable.
- .8 Project Schedule: The planned dates for performing activities and the planned dates for meeting milestones. A dynamic, detailed record of tasks or activities that must be accomplished to satisfy Project objectives. Monitoring and control process involves using Project Schedule in executing and controlling activities and is used as basis for decision making throughout project life cycle.
- .9 Project Planning, Monitoring and Control System: Overall system operated by Engineer to enable monitoring of project work in relation to established milestones.

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- 1.4 Requirements
- .1 Ensure Master Plan and Detail Schedules are practical and remain within specified contract duration.
 - .2 Plan to complete work in accordance with prescribed milestones and time frame.
 - .3 Limit activity durations to maximum of approximately 20 working days to allow for progress reporting.
 - .4 Ensure that it is understood that Award of Contract or time of beginning, rate of progress, Interim Certificate and Final Certificate as defined times of completion are of essence of this contract.
- 1.5 Submittals
- .1 Submit to Departmental Representative within 10 working days of Award of contract Bar Chart (GANNT) as Master Plan for planning, monitoring and reporting of project progress.
 - .2 Submit Project Schedule to Departmental Representative within 10 working days of receipt of acceptance of Master Plan.
- 1.6 Master Plan
- .1 Structure schedule to allow orderly planning, organizing and execution of work as Bar Chart (GANNT)
 - .2 Departmental Representative will review and return revised schedules within 5 working days.
 - .3 Revise impractical schedule and resubmit within 5 working days.
 - .4 Accepted revised schedule will become Master Plan and be used as baseline for updates.
- 1.7 Project Schedule
- .1 Develop detailed Project Schedule derived from Master Plan.
 - .2 Ensure detailed Project Schedule includes as minimum milestone and activity types as follows:
 - .1 Mobilization.
 - .2 Produce Aggregates.
 - .3 Haul Aggregates.
 - .4 Clean up.
 - .5 Completion date.

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- 1.8 Project Schedule Reporting .1 Update Project Schedule on monthly basis, reflecting activity changes and completions as well as activities in progress.
- .2 Include as part of Project Schedule, narrative report identifying work status to date, comparing current progress to baseline, presenting current forecasts, defining problem areas, anticipated delays and impact with possible mitigation.
- 1.9 Project Meetings .1 Discuss Project Schedule at regular site meetings. Identify activities that are behind schedule and provide measures to regain slippage. Activities considered behind schedule are those with projected start or completion dates later than current approved dates shown on baseline schedule.
- .2 Weather related delays with their remedial measures will be discussed and negotiated.

PART 2 - PRODUCTS

- 2.1 Not Used .1 Not Used

PART 3 - EXECUTION

- 3.1 Not Used .1 Not Used

END OF SECTION

PART 1 - GENERAL

- 1.1 Section Includes
- .1 Shop drawings and product data.
 - .2 Certificates and transcripts.
 - .3 Required Contractor Submittals.
 - .1 Pre-mobilization Submittals.
 - .1 Schedule.
 - .2 Contractor Chain of Command.
 - .3 Work Plan.
 - .4 Quality Control Plan.
 - .5 Traffic Management Plan.
 - .6 Construction Access Plan.
 - .7 Environmental Protection Plan (EPP).
 - .8 Campsite Plan.
 - .9 Health and Safety Plan
 - .2 Construction Phase Submittals.
 - .1 Monthly Progress Reports.
 - .2 Quality Control Inspection Reports.
 - .3 Progress Photographs.
 - .3 Project Completion Submittals.
 - .1 Record Drawings.
 - .2 Quality Control Records.
- 1.2 Precedence
- .1 For Federal Government projects, Division 1 Sections take precedence over technical specification sections on other Divisions of the Project Manual.
- 1.3 Related Sections
- .1 Section 01 30 18 – Construction Progress Schedules.
 - .2 Section 01 35 33 – Health and Safety Requirements.
 - .3 Section 01 35 43 – Environmental Procedures.
- 1.4 Administrative
- .1 Submit to Departmental Representative, submittals listed for review. Submit with reasonable promptness and in orderly sequence so as to not cause delay in work. Failure to submit in ample time is not considered sufficient reason for an extension of contract time and no claim for extension by reason of such default will be allowed.
 - .2 Work affected by submittal shall not proceed until review is complete.
 - .3 Present shop drawings, product date, samples and mock-ups in SI metric units.

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- 1.4 Administrative (Cont'd)
- .4 Where items or information is not produced in SI Metric units, converted values are acceptable.
 - .5 Review submittals prior to submission to Departmental Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and coordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and shall be considered rejected.
 - .6 Notify Departmental Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
 - .7 Verify field measurements and affected adjacent work are coordinated.
 - .8 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative's review of submittals.
 - .9 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative review.
 - .10 Keep one reviewed copy of each submission on site.
- 1.5 Shop Drawings and Product Data
- .1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by contractor to illustrate details of a portion of work.
 - .2 Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been coordinated, regardless of Section under which adjacent items will be supplies and installed. Indicate cross references to design drawings and specifications.
 - .3 Allow 10 days for Departmental Representative's review of each submission.
 - .4 Adjustments made on shop drawings by Departmental Representative are not intended to change Contract Price. If adjustments affect value of work, state such in writing to Departmental Representative prior to proceeding with work.

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- 1.5 Shop Drawing and Product Data (Cont'd)
- .5 Make changes in shop drawings as Departmental Representative may require, consistent with Contract Documents. When resubmitting, notify Departmental Representative in writing of any revisions other than those requested.
 - .6 Accompany submissions with transmittal letter containing:
 - .1 Date.
 - .2 Project title and number.
 - .3 Contractor's name and address
 - .4 Identification and quantity of each shop drawing, product data and sample.
 - .5 Other pertinent data.
 - .7 Submissions shall include:
 - .1 Date and revision dates.
 - .2 Project title and number.
 - .3 Name and address of:
 - .1 Subcontractor.
 - .2 Supplier
 - .3 Manufacturer.
 - .4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
 - .5 Details of appropriate portions of work as applicable:
 - .1 Fabrication.
 - .2 Performance characteristics.
 - .3 Standards.
 - .8 After Departmental Representative's review, distribute copies.
 - .9 Submit six prints and one electronic copy of shop drawings for each requirement requested in specification Sections and as consultant may reasonably request.
 - .10 Submit six hard copies and one electronic copy of product data sheets or brochures for requirements requested in specification Sections and as requested by Departmental Representative where shop drawing will not be prepared due to standardized manufacture of product.
 - .11 Delete information not applicable to project.
 - .12 Supplement standard information to provide details applicable to project.

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- 1.5 Shop Drawings and Product Data (Cont'd) .13 If upon review by Departmental Representative, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and fabrication and installation of work may proceed. If shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through same procedure indicated above, must be performed before fabrication and installation of work may proceed.
- .14 The review of shop drawings by Public Works & Government Services Canada (PWGSC) is for the sole purpose of ascertaining conformance with general concept. This review shall not mean that PWGSC approves detail design inherent in shop drawings, responsibility for which shall remain with Contractor submitting same, and such review shall not relieve Contractor of responsibility for errors or omissions in shop drawings or of responsibility for meeting all requirements of construction and Contract Documents. Without restricting generality of foregoing, Contractor is responsible for dimensions to be confirmed and correlated at job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for coordination of work of all sub-trades.
- 1.6 Certificates and Transcripts .1 Immediately after award of Contract, submit Workers' Compensation Board status.
- .2 Submit transcription of insurance immediately after award of Contract.
- 1.7 Required Contractor Submittals .1 General
- .1 This Clause identifies the plans, programs, and documentation required prior to mobilization on site and during the construction phase.
- .2 Pre-Mobilization Submittals
- .1 Submittal Schedule and Acceptance
- .1 Submit the following plans and programs to the Engineer for review a minimum of 10 days prior to mobilization to the project site. The Contractor shall not begin any site work until the Departmental Representative has authorized acceptance of the submittals in writing. The Contractor shall not construe the Departmental Representative's authorization of the submittals to imply approval of any particular method or sequence for conducting the work, or for addressing health and safety concerns. Authorization of the programs shall not relieve the Contractor from the responsibility to conduct the

1.7 Required Contractor Submittals (Cont'd)

work in strict accordance with the requirements of Federal or Provincial regulations, this specification, or to adequately protect the health and safety of all workers involved in the project and any members of the public who may be affected by the project. The Contractor shall remain solely responsible for the adequacy and completeness of the programs and work practices, and adherence to them:

- .1 Project Schedule, detailing the schedule of the workdays and manpower required to complete each phase of the project (e.g., mobilization, construction sequencing, excavation, steel erection, backfilling, roadway reconstruction and demobilization).
- .2 Contractor Chain of Command, listing key Contractor personnel, including names and positions, addresses, telephone, cellular telephone and/or pager numbers. The list shall include the names and telephone/cellular telephone/pager numbers for contact persons who are available on a 24-hour basis in the event of emergencies.
- .3 Work Plan, describing the Contractor's intended methods of construction including, but not limited to, the environmental mitigation strategies and projected number of personnel on site.
- .4 Construction Access Plan, which shall include, but not be limited to, engineering drawings and procedures for accessing all areas of the work.
- .5 Environmental Protection Plans (EPP), which shall meet the requirements of Section 01 35 43 – Environmental Procedures.
- .6 Camp Site Plan, showing the layout of fences, parking areas and buildings, and describing the facilities for food and waste storage in accordance with Section 01 35 43 – Environmental Procedures. The maximum area of the campsite shall be 50 m by 50 m.
- .7 Occupational Health and Safety Program – The Contractor shall have a Certificate of Recognition (COR) or Registered Safety Plan (RSP) including a site specific Health and Safety Plan acceptable to the Departmental Representative. The contractor shall implement and maintain the Health and Safety Plan during the work.

- .1 Monthly Progress Reports in accordance with Section 01 32 18 – Construction Progress Schedules – Bar Chart (GANTT).
- .2 Quality Control Inspection Reports – The Contractor shall maintain a daily inspection report that itemizes the results of all Quality Control inspections conducted by the Contractor. The reports shall be made available for review by the Engineer upon request. A summary of all Quality Control inspections conducted to date shall be submitted by the Contractor with each request for payment.
- .3 Shop Drawings – The Contractor shall submit all shop drawings required to fabricate and conduct the work a minimum 30 days prior to fabrication.
- .4 Progress Photographs:
 - .1 Formats:
 - .1 Prints 200 x 300 mm, colour, glossy, complete with binding edge or in three-hole plastic sleeves.
 - .2 Electronic: jpg files, minimum three mega pixels.
 - .2 Submission requirements: three sets prints and one set of electronic files.
 - .3 Identification: typewritten name and number of project, description of photography and date of exposure on 25 x 50 mm white patch in upper right hand corner.
 - .4 Viewpoints: viewpoints determined by Construction Manager or Engineer.
- .5 Submission Frequency: prior to commencement of work and monthly thereafter with progress statement, or as directed by construction Manager or Departmental Representative.
- .6 Submit all negatives of all photographs before final acceptance. Submit CD with all electronic pictures as part of closeout package.
- .7 Insert negatives in envelopes and identify with name and number of project.
- .8 Indicate exposure dates and viewpoints of each frame of 35 mm film strips.
- .9 Weekly traffic control reports detailing any traffic accidents, near misses, disruption to traffic or observed abnormal traffic patterns.

1.7

Required Contractor Submittals (Cont'd)

- .4 Project Completion Submittals
 - .1 Record Drawings – The Contractor shall submit copies of all Contractor's Drawings revised as necessary to record all as-built changes to the work

PART 1 - GENERAL

- 1.1 Related Sections .1 All Sections.
- 1.2 References .1 Government of Canada
.1 Canada Labour Code, Part II
.2 Canada Occupational Health and Safety Regulation.
.2 Province of British Columbia
.1 Worker's Compensation Act Part 3, Occupational Health and Safety.
.2 Occupational Health and Safety Regulation.
- 1.3 Workers' Compensation Coverage .1 Comply fully with the Workers' Compensation Act, regulations and orders pursuant thereto, and any amendments up to the completion of the work.
.2 Maintain Workers' Compensation Board coverage during term of the contract, until and including the date that the Final Certificate of Completion is issued.
- 1.4 Compliance With Regulations .1 PWGSC may terminate the contract without liability to PWGSC where the Contractor, in the opinion of PWGSC, refuses to comply with a requirement of the Workers' Compensation Act or the Occupational Health and Safety Regulations.
.2 It is the Contractor's responsibility to ensure that all workers are qualified, competent and certified to perform the work as required by the Workers' Compensation Act or the Occupational Health and Safety Regulations.
- 1.5 Submittals .1 Submit the following:
.1 Copies of reports or directions issued by Federal, Provincial, Territorial Health and Safety inspectors.
.2 Copies of incident and accident reports.
.3 Complete set of Material Safety Data Sheets (MSDS), and all other documentation required by Workplace Hazardous Materials Information System (WHMIS) requirements.
.4 Emergency Procedures.
.5 Health and Safety Plan

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- 1.5 Submittals (Cont'd)
- .2 The Departmental Representative will review the Contractor's site-specific project Health and Safety Plan and emergency procedures and provide comments to the Contractor within two days after receipt of the plan. Revise the plan as appropriate and resubmit to Departmental Representative.
 - .3 Medical surveillance: where prescribed by legislation, regulation, or safety program, submit certification of medical surveillance for site personnel prior to commencement of work and submit additional certifications for any new site personnel to Departmental Representative.
 - .4 Submission of the Health and Safety Plan and any revised version, to the Departmental Representative, is for information and reference purposes only. It shall not:
 - .1 Be construed to imply approval of the Departmental Representative.
 - .2 Be interpreted as a warranty of being complete, accurate and legislatively compliant.
 - .3 Relieve the Contractor of his legal obligations for the provision of health and safety on the project.
- 1.6 Responsibility
- .1 The Contractor shall be responsible for:
 - .1 Assume responsibility as the Prime Contractor or work under this contract.
 - .2 The safety of persons and property on site.
 - .3 The protection of persons off site and the environment to the extent that they may be affected by the conduct of the work.
 - .4 Comply with and enforce compliance by employees with safety requirements of Contract documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan
- 1.7 General
- .1 Provide safety barricades and lights around work site as required to provide a safe working environment for workers and protection for pedestrian and vehicular traffic.
 - .2 Ensure that non-authorized persons are not allowed to circulate in designated construction areas of the work site.
 - .1 Provide appropriate means by use of barricades, fences,

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- warning signs, traffic control personnel and temporary lighting as required.
- .2 Secure site at nighttime as deemed necessary to protect site against entry.
- 1.8 Regulatory Requirements
- .1 Comply with specified codes, acts, bylaws, standards and regulations to ensure safe operations at site.
- .2 In the event of conflict between any provision of the above authorities, the most stringent provision will apply. Should a dispute arise in determining the most stringent requirement, the Departmental Representative will advise on the course of action to be followed.
- 1.9 Filing of Notice
- .1 The Contractor is to complete and submit an Advance Notice of Project as required by British Columbia Worker's Compensation Branch.
- .2 Provide copies of all notices to the Departmental representative
- 1.10 Health and Safety Plan
- .1 Conduct a site-specific hazard assessment based on review of Contract Documents, required work and project site. Identify any known and potential health risks and safety hazards.
- .2 Prepare and comply with a site-specific project Health and Safety Plan based on hazard assessment, including, but not limited to, the following:
- .1 Primary requirements:
- .1 Contractor's Safety Policy.
- .2 Identification of applicable compliance obligations.
- .3 Definition of responsibilities for project/organization chart for project.
- .4 General safety rules for project.
- .5 Job-specific safe work procedures.
- .6 Inspection policy and procedures.
- .7 Incident reporting and investigation policy and procedures.
- .8 Occupational Health and Safety Committee/Representative procedures.
- .9 Occupational Health and Safety meetings.
- .10 Occupational Health and Safety communications and record keeping procedures.
- .2 Summary of health risks and safety hazards resulting from analysis of hazard assessment, with respect to site tasks and operations which must be performed as part of the work.

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- 1.10 Health and Safety Plan
(Cont'd)
- .3 List hazardous materials to be brought on site as required by the work.
 - .4 Indicate engineering and administrative control measures to be implemented at the site for managing identified risks and hazards.
 - .5 Identify personal protective equipment (PPE) to be used by workers.
 - .6 Identify personnel and alternates responsible for site safety and health.
 - .7 Identify personnel training requirements and training plan, including site orientation for new workers.
- .3 Develop the plan in collaboration with all subcontractors. Ensure that work/activities of subcontractors are included in the hazard assessment and are reflected in the plan.
- .4 Revise and update Health and Safety Plan as required and resubmit to Departmental Representative.
- .5 The review of Health and Safety Plan by Public Works & Government Services Canada (PWGSC) shall not relieve the Contractor of responsibility for errors or omissions in final Health and Safety Plan or of responsibility for meeting all requirements of construction and Contract Documents.
- 1.11 Emergency Procedures
- .1 List standard operating procedures and measures to be taken in emergency situations. Include an evacuation plan and emergency contact (i.e. Names/telephone numbers) of:
 - .1 Designated personnel from own company.
 - .2 Regulatory agencies applicable to work and as per legislated regulation.
 - .3 Local emergency resources.
 - .4 Departmental Representative (site staff).
 - .2 Include the following provisions in the emergency procedures:
 - .1 Notify workers and first aid attendant of the nature and location of the emergency.
 - .2 Evacuate all workers safely.
 - .3 Check and confirm the safe evacuation of all workers.
 - .4 Notify the fire department or other emergency responders.
 - .5 Notify adjacent workplaces or residences which may be affected if the risk extends beyond the workplace.
 - .6 Notify Departmental Representative.
 - .3 Provide written rescue/evacuation procedures as required for but not limited to:

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- 1.11 Emergency Procedures
(Cont'd)
- .1 Work at high angles.
 - .2 Work in confined spaces or where there is a risk of entrapment.
 - .3 Work with hazardous substances.
 - .4 Underground work.
 - .5 Work on, over, under and adjacent to water.
 - .6 Workplaces where there are persons who requires physical assistance to be moved.
- .4 Revise and update Emergency Procedures as required and re-submit to the Departmental Representative.
- 1.12 Health and Safety Coordinator
- .1 Employ and assign to work, competent and authorized representative as Health and Safety Coordinator. Health and Safety Coordinator must:
 - .1 Have minimum 2 years' site-related working experience specific to activities associated with Construction.
 - .2 Have working knowledge of occupational safety and health regulations.
 - .3 Be responsible for completing Contractor's Health and Safety Training Sessions and ensuring that personnel not successfully completing required training are not permitted to enter site to perform work.
 - .4 Be responsible for implementing, enforcing daily and monitoring site-specific Contractor's Health and Safety Plan.
 - .5 Be on site during execution of work and report directly to and be under direction of site supervisor.
- 1.13 Hazardous Products
- .1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials and regarding labeling and provision of Material Safety Data Sheets (MSDS) acceptable to the Departmental Representative and in accordance with the Canada Labour Code.
 - .2 Where use of hazardous or toxic waste cannot be avoided:
 - .1 Advise Departmental Representative beforehand of the products intended for use. Submit applicable MSDS and WHMIS documents.
 - .3 Comply with section 02 61 33
- 1.14 Unforeseen Hazards
- .1 Should any unforeseen or peculiar safety-related factor, hazard, or condition become evident during performance of work,

immediately stop work and advise Departmental Representative verbally and in writing.

- 1.15 Posted Documents
- .1 Post legible versions of the following documents on site:
 - .1 Health and Safety Plan.
 - .2 Sequence of Work.
 - .3 Emergency Procedures.
 - .4 Site drawing showing project layout, locations of first-aid station, evacuation route and marshaling station and the emergency transportation provisions.
 - .5 Notice of Project.
 - .6 Floor Plans.
 - .7 Notice as to where copy of the Workers' Compensation Act and Regulations are available on the work site for review by employees and workers.
 - .8 Workplace Hazardous Information System (WHMIS) documents.
 - .9 Material Safety Data Sheets (MSDS).
 - .10 List of names of joint Health and Safety Committee members of Health and Safety Representative as applicable.
 - .2 Post all Material Safety Data Sheets (MSDS) on site, in a common area, visible to all workers and in locations accessible to tenants when work of the contract includes construction activities adjacent to occupied areas.
 - .3 Postings and Insert Postings should be approved by Departmental Representative.
- 1.16 Meetings
- .1 Attend health and safety pre-construction meeting and all subsequent meetings called by the Departmental Representative.
- 1.17 Correction of Noncompliance
- .1 Immediately address health and safety noncompliance issues identified by authority having jurisdiction or by Departmental Representative.
 - .2 Provide Departmental Representative with written report of action taken to correct noncompliance of health and safety issues identified.
 - .3 Departmental Representative may stop work if noncompliance of health and safety regulations is not corrected. The Contractor will be responsible for any costs arising from such a "stop work order".

PART 2 - PRODUCTS

2.1 Not Used .1 Not used.

PART 3 - EXECUTION

3.1 Not Used .2 Not used.

END OF SECTION

Part 1 - General

- 1.1 Scope of Environmental Protection .1 This section specifies the environmental requirements that the Contractor will adhere to as a minimum. The scope of environmental protection includes the following tasks.
- 1.2 Regulatory Framework .1 The Contractor shall observe all applicable Federal, Provincial and Municipal legislation, regulations, guidelines and codes of practice including but not limited to the following:
- .1 Canadian Environmental Protection Act
 - .2 Transport of Dangerous Goods Act
 - .3 National Fire Code, 1995
 - .4 Underwriters' Laboratories of Canada
 - .5 National Building Code, 1995 (with all current amendments)
 - .6 Work Site Hazardous Material Information System Regulations (WHMIS)
- .2 Soil Criteria/Guidelines:
- .1 CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health, 2001.
 - .2 CCME Canada Wide Standards for Petroleum Hydrocarbons in Soil, 2001.
 - .3 BC CSR Generic and Matrix Numerical Soil Standards.
 - .4 BC CSR Leachate Quality Standards.
 - .5 Yukon CSR Generic and Matrix Numerical Soil Standards
- .3 Surface Water and Groundwater Criteria/Guidelines
- .1 CCME Canadian Water Quality Guidelines for the Protection of Aquatic Life, 2001.
 - .2 BC CSR Generic Numerical Water Standards.
 - .3 Yukon CSR Generic Numerical Water Standards.
- .4 Sediment Criteria:
- .1 CCME Canadian Sediment Quality Guidelines for the Protection of Aquatic Life, 2001 (freshwater and marine).
 - .2 BC Generic Sediment Quality Criteria.
- .5 The Contractor shall observe the regulations and standards of other local governing agencies.

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- 1.2 Regulatory Framework (Cont'd) .6 In case of conflict or discrepancy, the more stringent requirement shall apply. The Contractor shall meet or exceed requirements of contract documents, specified standards, codes and referenced documents. The Contractor will ensure that all on-site personnel are familiar with the mitigation measures included in the Contractor Health and Safety Plan should a spill on site occur.
- 1.3 WHMIS .1 The Contractor shall comply with requirements of the Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage and disposal of hazardous materials and labeling and provision of material safety data sheets (MSDS) acceptable to Labour Canada and Health and Welfare Canada.
- .2 WHMIS is a Canada wide system designed to give employers and workers information about hazardous materials used in the workplace.
- .3 The Contractor shall deliver copies of WHMIS data sheets to PWGSC for each hazardous material prior to bringing hazardous material on site.
- 1.4 Hazardous Material .1 Storage and Handling of Hazardous Materials.
- .2 Transportation of Hazardous Materials.
- .3 Disposal of Hazardous Materials.
- 1.5 Handling and Transportation of Dangerous Goods .1 The Contractor will observe and enforce all Acts, Regulations and Guidelines required by the regulatory agencies of the Federal, Territorial and potentially provincial governments including but not limited to Environment Canada, Department of Environment and Transport Canada Transportation of Dangerous goods Act and Regulations. In the case of conflict, the more stringent requirements will apply. The Contractor will maintain complete records, including Bills of Lading, Manifests and descriptions of any actions undertaken under the handling and transportation of dangerous goods.
- 1.6 Compliance of Aboveground/Underground Storage Tanks .1 Technical Guidelines for Aboveground Storage Tank Systems Containing Petroleum Products (Aboveground Technical Guidelines)
- .2 The Aboveground Technical Guidelines incorporate the CCME Environmental Code of Practice for Aboveground Storage Tank Systems Containing Petroleum Products. Subject to the modifications set out in the Aboveground Technical Guidelines, the Code of Practice is adopted as the guidelines to be used by Federal Departments.

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- 1.6 Compliance of Aboveground/Underground Storage Tanks (Cont'd) .3 The modifications are:
- .1 Non-application of some Sections of the Codes Practice is defined.
 - .2 The wording "shall" shall be replaced by "should".
 - .3 "Authority having jurisdiction" is defined for each clause it appears in.
 - .4 Allowance is made for equivalents and alternative to materials, systems and procedures not already specified.
 - .5 Review and certification of the design by a Professional Engineer is recommended.
 - .6 Product transfer requirements are specified.
 - .7 A table for upgrading existing tank systems is set out.
- 1.7 Emergency Spill Response .1 The Contractor shall prepare an Emergency Spill Response Plan that must be submitted to PWGSC for review of adequacy. The Contractor shall be responsible for the implementation and supervision of this plan and its application to the Contractor's personnel and its subcontractors. The plan shall require that a designated Health and Safety representative (Site Health and Safety Officer (SHSO) is present on-site while personnel are working in association with hazardous materials, fueling and other environmentally sensitive operations. This Health and Safety representative must have received training equivalent to OSHA 40-hour Hazardous Waste Operation and Emergency Response Training Course.
- 1.8 Clean up .1 The Contractor must include in its tender price all costs relating to removal of all surplus materials, debris and equipment on completion and cleaning up the site to PWGSC's satisfaction.
- 1.9 Relevant Standards .1 The Contractor shall be responsible for ensuring that all of its materials and workmanship are in compliance with relevant standards, codes, regulations and generally in accordance with good practice. Proof of good standing with the local Workers' Compensation Board (WCB) is required.

END OF SECTION

PART 1 - GENERAL

- 1.1 Installation and Removal .1 Provide construction facilities in order to execute work expeditiously.
.2 Remove from site all such work after use.
- 1.2 Scaffolding .1 Provide and maintain scaffolding, ramps, ladders, swing staging, platforms and temporary stairs as necessary to carry out work.
- 1.3 Measurement Procedures .1 No separate payment under Construction Facilities.
- 1.4 Hoisting .1 Provide, operate and maintain hoists and cranes required for moving of workers, materials and equipment. Make financial arrangements with subcontractors for use thereof.
.2 Hoists and cranes shall be operated by qualified operator.
- 1.5 Site Storage/Loading .1 Confine work and operations of employees by Contract Documents. Do not unreasonably encumber premises with products.
.2 Do not load or permit to load any part of work with a weight or force that will endanger the work.
- 1.6 Equipment, Tool and Materials Storage .1 Provide and maintain, in a clean and orderly condition, lockable weatherproof sheds for storage of tools, equipment and materials.
.2 Locate materials not required to be stored in weatherproof sheds on site in a manner to cause least interference with work activities.
- 1.7 Sanitary Facilities .1 Provide sanitary facilities for work force in accordance with governing regulations and ordinances.
.2 Post notices and take such precautions as required by local health authorities. Keep area and premises in sanitary condition.
.3 Locate project identification sign as directed by Departmental Representative.
- 1.8 Construction Signage .1 Direct requests for approval to erect a Consultant/Contractor signboard to Departmental Representative. For consideration, general appearance of Consultant/Contractor signboard must conform to project identification site sign. Wording shall be in both official languages.
.2 Signs and notices for safety and instruction shall be in both official languages. Graphic symbols shall conform to CAN3-Z321.
.3 Maintain approved signs and notices in good condition for duration of project, and dispose of off site on completion of

project or earlier if directed by Departmental Representative.

PART 1 - PRODUCTS

2.1 Not Used .1 Not used.

PART 3 - EXECUTION

3.1 Not Used .1 Not used.

END OF SECTION

PART 1 - GENERAL

- 1.1 Description .1 This section specifies requirements of regulatory agencies related to establishment and removal of construction camps.
- 1.2 Requirements of Regulatory Agencies .1 Camp and service area locations are subject to approval of Departmental Representative and are to be established and operated in accordance with local regulations governing operations of field camps.
- .2 Prior to installation of camp and services, submit plan of layout to Departmental Representative for approval.
- .3 Apply to authority having jurisdiction for authorization for use of water and disposal of domestic sewage wastes. Obtain authorization prior to establishing camp.
- .4 Comply with Environment Regulations.
- 1.3 Measurement for Payment .1 No separate payment for construction camp.
- .2 Unit price to include all costs for all camps in this contract.

PART 2 - PRODUCTS

- 2.1 Not Used .1 Not used.

PART 3 - EXECUTION

- 3.1 Mobilization .1 Mobilize equipment, camp, personnel and material. Establish temporary buildings, shops, offices and facilities. Obtain necessary license and approvals.
- .2 Upon vacating camp and services area sites, clean up and leave in condition satisfactory to Departmental Representative.
- 3.2 Maintenance .1 Maintain camps in neat and tidy condition.
- .2 No separate payment for camp clean-up.

END OF SECTION

PART 1 – GENERAL

- 1.1 Related Sections
- .1 Section 01 33 00 – Submittal Procedures
 - .2 Section 01 35 43 – Environmental Procedures
- 1.2 References
- .1 Export and Import of Hazardous Waste Regulations (EIHWR Regulations), SOR/92637.
 - .2 National Fire Code of Canada 1995
 - .3 Transportation of Dangerous Goods Act (TDG Act) 1992, (T19.01).
 - .4 Transportation of Dangerous Goods Regulations (TDGR), (SOR/8577, SOR/85585, SOR/85609, SOR/86526).
- 1.3 Definitions
- .1 Dangerous Goods: Product, substance, or organism that specifically listed or meets the hazard criteria established in Transportation of Dangerous Goods Regulations.
 - .2 Hazardous Material: Product, substance, or organism that is used for its original purpose; and that is either dangerous goods or a material that may cause adverse impact to the environment or adversely affect health of persons, animals, or plant life when released into the environment.
 - .3 Hazardous Waste: Any hazardous material that is no longer used for its original purpose and that is intended for recycling, treatment or disposal.
 - .4 Workplace Hazardous Materials Information System (WHMIS): A Canada wide system designed to give employers and workers information about hazardous materials used in the workplace. Under WHMIS, information on hazardous materials is to be provided on container labels, material safety data sheets (MSDS), and worker education programs. WHMIS is put into effect by a combination of federal and provincial laws.
- 1.4 Submittals
- .1 Submit product data in accordance with Section 01 33 00 – Submittal Procedures.
 - .2 Submit to Departmental Representative current Material Safety Data Sheet (MSDS) for each hazardous material required prior to bringing hazardous material on site.
 - .3 Submit hazardous materials management plan to Departmental Representative that identifies all hazardous materials, their use, their location, personal protective equipment requirements, and disposal arrangements.

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- 1.5 Storage and Handling
- .1 Coordinate storage of hazardous materials with Departmental Representative and abide by internal requirements for labeling and storage of materials and wastes.
 - .2 Store and handle hazardous materials and wastes in accordance with applicable federal and provincial laws, regulations, codes, and guidelines.
 - .3 Store and handle flammable and combustible materials in accordance with current National Fire Code of Canada requirements.
 - .4 Observe smoking regulations at all times. Smoking is prohibited in any area where hazardous materials are stored, used, or handled.
 - .5 Abide by the following storage requirements for quantities of hazardous materials and wastes in excess of 5 kg for solids, and 5 litres for liquids:
 - .1 Store hazardous materials and wastes in closed and sealed containers that are in good condition.
 - .2 Label containers of hazardous materials and wastes in accordance with WHMIS.
 - .3 Store hazardous materials and wastes in containers compatible with that material or waste.
 - .4 Segregate incompatible materials and wastes.
 - .5 Ensure that different hazardous materials or hazardous wastes are not mixed.
 - .6 Store hazardous materials and wastes in a secure storage area with controlled access.
 - .7 Maintain a clear egress from storage area.
 - .8 Store hazardous materials and wastes in a manner and location that shall prevent them from spilling into the environment.
 - .9 Have appropriate emergency spill response equipment available near the storage area, including personal protective equipment.
 - .10 Maintain an inventory of hazardous materials and wastes, including product name, quantity, and date when storage began.
 - .6 Ensure personnel have been trained in accordance with Workplace Hazardous Materials Information System (WHMIS) requirements.
 - .7 Report spills or accidents immediately to Departmental Representative and the ESO. Submit a written spill report to

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- 1.6 Transportation
- .1 Departmental Representative within 24 hours of incident.
Transport hazardous materials and wastes in accordance with federal Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.
 - .2 If exporting hazardous waste to another country, ensure compliance with federal Export and Import of Hazardous Waste Regulations.
 - .3 If hazardous waste is generated on site:
 - .1 Coordinate transportation and disposal with Departmental Representative.
 - .2 Ensure compliance with applicable provincial laws and regulations for generators of hazardous waste.
 - .3 Use only a licensed carrier authorized by provincial authorities to accept subject material.
 - .4 Prior to shipping material, obtain written notice from intended hazardous waste treatment or disposal facility that it will accept material and that it is licensed to accept this material.
 - .5 Label containers with legible, visible safety marks as prescribed by federal and provincial regulations.
 - .6 Ensure that only trained personnel handle, offer for transport, or transport dangerous goods.
 - .7 Provide a photocopy of all shipping documents and waste manifests to Departmental Representative.
 - .8 Track receipt of completed manifest from consignee after shipping dangerous goods. Provide a photocopy of completed manifest to Departmental Representative.
 - .9 Report any discharge, emission, or escape of hazardous materials immediately to the Departmental Representative and appropriate provincial authority. Take reasonable measures to control release.

PART 2 - PRODUCTS

- 2.1 Materials
- .1 Only bring on site the quantity of hazardous materials required to perform work.
 - .2 Maintain MSDSs in proximity to where the materials are being used. Communicate this location to personnel who may have contact with hazardous materials.

PART 3 - EXECUTION

- 3.1 Disposal
- .1 Dispose of hazardous waste materials in accordance with applicable federal and provincial acts, regulations, and guidelines.
 - .2 Recycle hazardous wastes for which there is an approved, cost effective recycling process available.
 - .3 Send hazardous wastes only to authorized hazardous waste disposal treatment facilities.
 - .4 Burning, diluting, or mixing hazardous wastes for purpose of disposal is prohibited.
 - .5 Disposal of hazardous materials in waterways, storm or sanitary sewers, or in municipal solid waste landfills is prohibited.
 - .6 Dispose of hazardous wastes in a timely fashion in accordance with applicable provincial regulations.

END OF SECTION

Equipment

Class

Dozer

130-189.9 FWHP

Dozer

190 - 259.9 FWHP

Excavator

68000 - 87 999 lbs

Attachments included with Hourly Excavator Rate :

Digging / Clean Up Buckets with Thumb
Hydraulic Plate Tamper

Trucks (x2)

Combination Tandem & Pup Trailer (15 cu yd)

Loader

Bucket (3 cu yd)

Rock Trucks

66000 - 87999 lbs
(30 - 40 tonnes)

project title

titre du projet

drawing title

titre du dessin

ALASKA HIGHWAY
British Columbia

Hourly Equipment Rental
KM 355-358



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

REAL PROPERTY SERVICES
Pacific Region

designed by

conçu par

drawn by

dessiné par

scale

échelle

date

date

G. Smith

B. Woodworth

N.T.S.

May 22, 2013

approved by

approuvé par

project no.

projet no.

R.017174.016

PWSSC Project
Manager

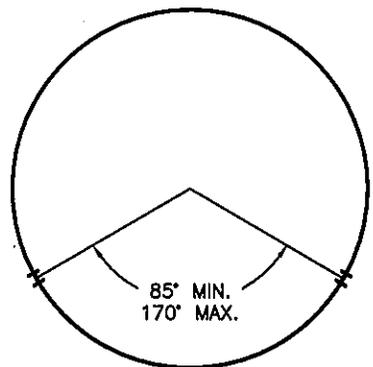
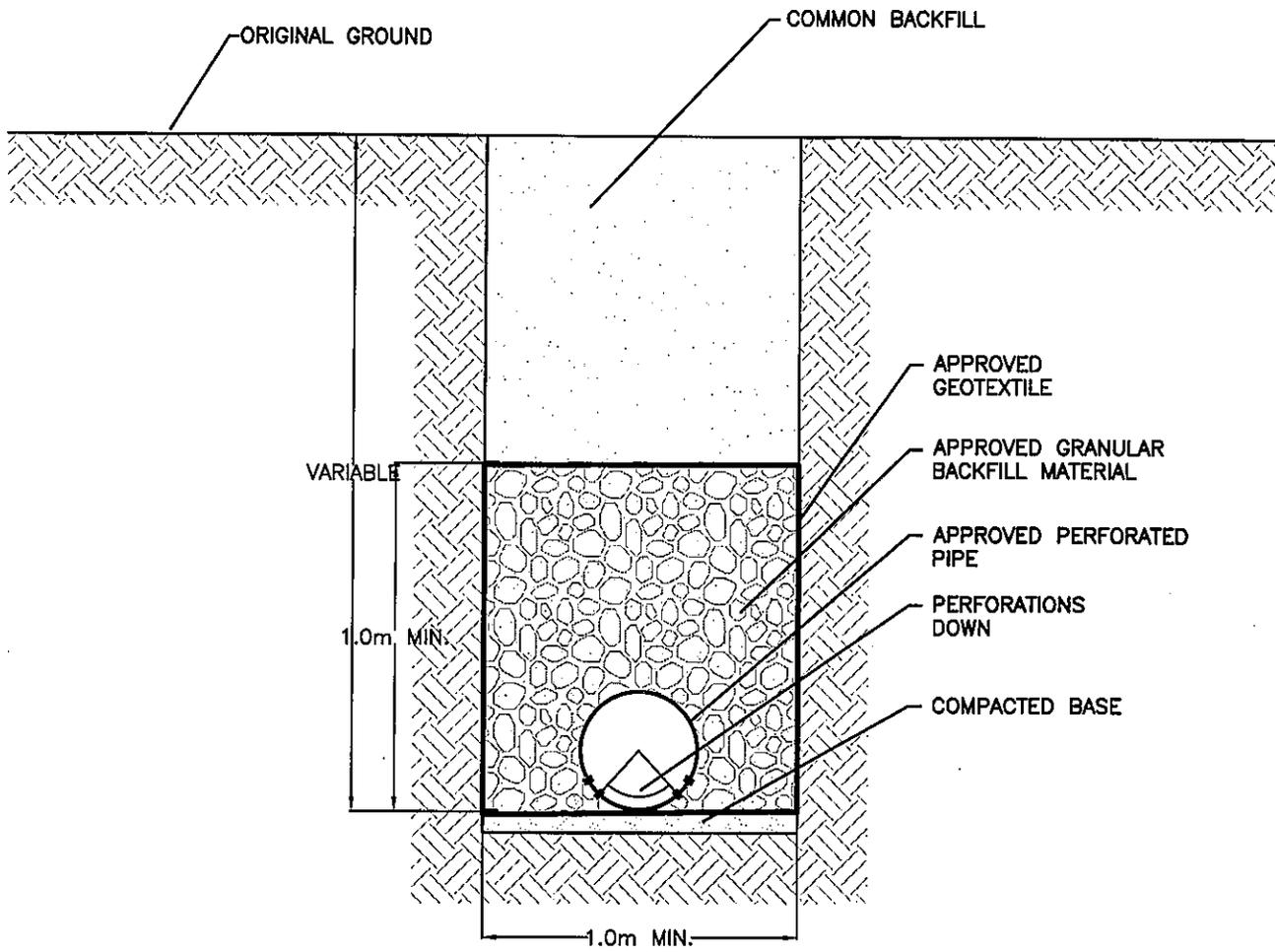
G. Smith

Administrateur de Projets
IPSSC

sheet

R.017174.016-01

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**INVERT PERFORATION
DETAIL**

project title		titre du projet		drawing title		titre du dessin	
ALASKA HIGHWAY British Columbia				Typical Steel Sub Drain Installation km 355-358			
 Public Works and Government Services Canada REAL PROPERTY SERVICES Pacific Region	Travaux publics et Services gouvernementaux Canada		designed by conçu par A.H.G	drawn by dessiné par B. Woodworth	scale échelle N.T.S.	date May 22, 2013	
			approved by	approuvé par	project no. R.017174.016	project no.	
			PWSSC Project Manager	G. Smith	Administrateur de Projets TPSSC	sheet R.017174.016-02	feuille