

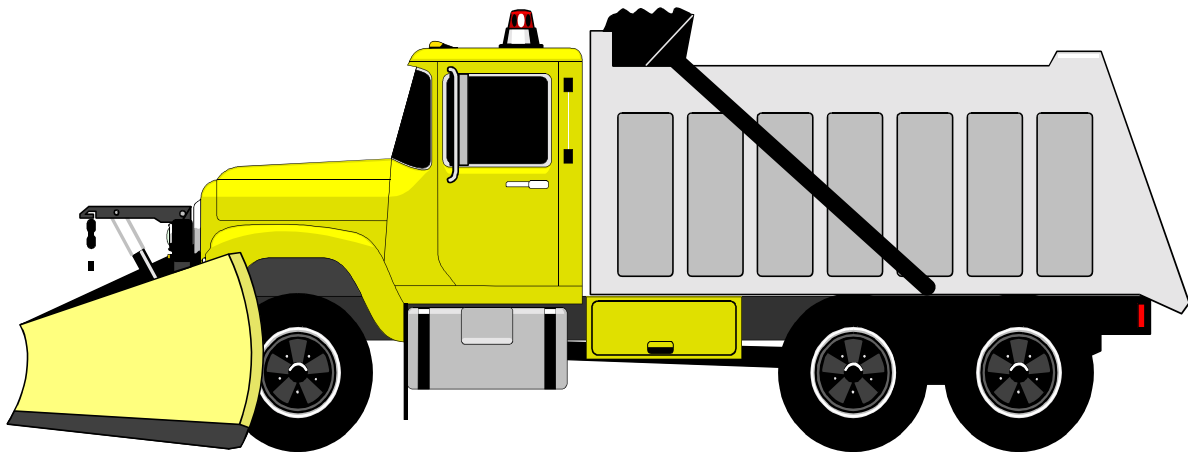


HIGHWAY MAINTENANCE

Request for Proposal

Contract Maintenance Area 4 Peace Region

Hines Creek, Peace River & Manning Areas



HIGHWAY MAINTENANCE

Request for Proposal

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1.0 INTRODUCTION

In 1996, Alberta Transportation (then Alberta Transportation and Utilities) signed Highway Maintenance Contracts with several contractors, for the outsourcing of all highway maintenance activities in the province of Alberta. Originally, these contracts were for a 5-year term. However, to allow a staggered approach in subsequent rounds of re-tendering, the termination dates for several of the original contracts were extended, for varying periods to a maximum of 3 years.

Since May of 2000, Alberta Transportation has been in the process of re-tendering the highway maintenance contracts in various areas of the province. This is being accomplished through a series of Request for Proposals (RFPs) of which this RFP is a component. Each RFP contains a single Contract Maintenance Area (CMA). The area boundaries of individual CMAs have been retained from the original contracts.

Major changes for the round of RFPs which commenced in 2000 include the addition of secondary highways into the Provincial Highway System and the use of a reduced number of government maintenance facilities.

Maintenance of the secondary highway network now falls under the jurisdiction of Alberta Transportation. Previously, this maintenance work had been administered by each municipality for its' respective area. With the inclusion of secondary highways in the new highway maintenance contracts, quantities of work have increased substantially.

The government is currently in the process of selling some of the maintenance facilities (sand/salt and snowplow truck storage sites). Previously these facilities have been leased to the contractors. For the new contracts, contractors are totally responsible for providing suitable sites/facilities to accommodate all maintenance materials and equipment. However, a select number of government sites/facilities may be available for lease by the Contractor for a limited time or the full term of the contract.

This RFP outlines highway maintenance requirements in a specific CMA, any government maintenance facilities available for use by a contractor and applicable rental rates, general requirements concerning the submission of a Proposal, and the scoring system used to evaluate Proposals.

1.1 DEFINITIONS AND INTERPRETATIONS

In addition to the definitions contained in Specification 51.2 General (for Maintenance Work), the following definitions shall apply to this Request for Proposal:

Contract Maintenance Area

“Contract Maintenance Area” or “CMA” means a network of provincial highways within a defined geographical area on which maintenance activities are performed.

Shop

“Shop” means a location where individual sand and salt stockpiles or combined sand and salt stockpiles and/or snowplow trucks being used for highway maintenance activities are situated.

Existing Contractor

“Existing Contractor” means the individual, partnership, or corporation currently holding the Department highway maintenance contract for any CMA(s) at the time of this Request for Proposal.

Previous Contractor

“Previous Contractor” means an individual, partnership or corporation which previously held a Departmental Highway Maintenance contract for any CMA(s) but does not hold such a contract at the time of this Request for Proposal.

Request for Proposal

“Request for Proposal” or “RFP” means the document issued by the Department requesting proposals from Prospective Contractors to perform the Work in accordance with the terms and conditions of the RFP, Special Provisions, Plans, Specifications and Specification Amendments.

Total Fixed Costs

“Total Fixed Costs” means the summation of the following items from the Unit Price Schedule where applicable; Snow Removal and Ice Control (Truck) “Availability Rate” (unit price x truck availability days), Highway Maintenance Work (unit price x 12 months), Indirect Operating Costs (unit price x 12 months), and Indoor Heated Storage (unit price x number of trucks x truck availability days).

Provisional Quantities

“Provisional Quantities” means the estimated quantities of work the Department expects will be performed during the first full fiscal year of the contract.

Total Provisional Costs

“Total Provisional Costs” means the summation of all bid items from the Unit Price Schedule which have a provisional quantity provided, multiplied by the corresponding bid item unit price (excluding any fixed cost items).

Department Designate

“Department Designate” means the person assigned by the Department to administer the process for evaluation of Proposals.

1.2 USAGE OF FACILITIES OWNED OR PREVIOUSLY OWNED BY THE GOVERNMENT OF ALBERTA

Not all government owned facilities have the same lease status and availability throughout the term of the Contract. Details of the status and availability of government owned facilities and applicable rental rates are identified in the Special Provisions.

Some government owned facilities are being retained by the Department and are available for lease by the Contractor for the duration of the Contract. Others, previously owned by the government, have been sold and are not available to the Contractor for lease unless the Prospective Contractor can make arrangements with the new owner.

Any lease of a government owned facility by a Contractor will be based on the Standard Lease Agreement for highway maintenance facilities. The standard lease agreement is included with this RFP.

Notwithstanding anything to the contrary in this RFP document, any lease of a government-owned facility by a contractor and/or the use of a facility previously owned by the government will include the requirement for the Contractor to include in its Environmental Management Plan and construct at the Contractor's sole cost, the improvements to the facility to satisfy the requirements of the “Environmental Management Plan Guidelines Highway Maintenance Yards” document included in this RFP. Such improvements shall be completed prior to the commencement of any operations at the site.

1.3 ELIGIBILITY OF PROSPECTIVE CONTRACTORS

Proposals will only be accepted from organizations registered with the Corporate Registry, Alberta Registries and Alberta Municipal Affairs. Directors may not be registered with more than one organization submitting a Proposal.

Proposals submitted by new companies that are incorporated as a limited partnership or as a totally new company will be accepted provided they meet the conditions of the RFP. Any Contract awarded will be in the new company's registered name.

Proposals from registered consortia or partnerships must be in the name of a single Contractor with other members of the consortium/partnership listed as subcontractors.

Proposals based on conditions other than those stated or allowed for by the RFP will not be considered.

The Department reserves the right to reject any or all Proposals.

1.4 PRE-SUBMISSION MEETING

During the period allowed for submission of Proposals, the Department will hold an “on-site” meeting for Prospective Contractors to inspect the proposed Work area and available Shop facilities. At that time, Department representatives present will address any questions the Prospective Contractors have concerning the Work. The time and location of the meeting are detailed in the Special Provisions.

1.5 SELECTION OF THE PREFERRED PROPOSAL

Contracts will not be awarded on price alone. The Department will select a preferred Proposal using the method described in this RFP, which includes a pricing component and an evaluation of technical information to be provided by the Prospective Contractor including but not limited to:

- A commitment from a financial institution and a bonding company.
- Proof of enrollment or accreditation/recognition, either achieved or in progress, in an appropriate safety certification program.
- Proof of insurance.
- Information on senior management team.
- Identification of how the Contractor will provide manpower and equipment to perform critical activities.
- Identification of how the Contractor will provide adequate shop facilities.
- Identification of how the Contractor will meet acceptable levels of response for snow/ice control.
- Identification of how environmental issues will be addressed.
- Identification of how public safety issues will be addressed.

1.6 INTRODUCTION OF DOCUMENTS

1.6.1 General

The documents listed in this section contain either mandatory requirements or supplemental information, concerning this RFP. Documents containing supplemental information are provided to assist the Prospective Contractor in determining the scope of the Work. Documents containing mandatory requirements are contractually binding.

In addition to a thorough examination of the documents, the Prospective Contractor is encouraged to inform himself about the exact nature of the Work expected to form part of the Contract. The Prospective Contractor may contact Department Operations Managers and Contract Inspectors, inspect roads and inspect records of previous Work performed.

The Prospective Contractor may also purchase Department manuals entitled “Highway Maintenance Guidelines and Levels of Service June, 2000” and “Contract Administration Manual, Highway and Bridge Maintenance, February 1999”. These manuals are available

from Alberta Transportation, Program Management Branch, 3rd Floor, Twin Atria Building, Phone (780) 427-2091, Fax (780) 422-0232.

1.6.2 Documents Containing Mandatory Requirements or Supplemental Information Specific To The RFP and Contract

With the exception of "previous work quantity information", the following documents are included in this Request for Proposal.

1.6.2.1 Documents Containing Mandatory Requirements

1.6.2.1.1 Instructions to Prospective Contractors

This document contains instructions on what the Prospective Contractor must include in a Proposal and how it is to be arranged. It also includes all the necessary forms and delivery instructions for submitting a Proposal.

1.6.2.1.2 Specification Amendments and Special Provisions

These documents contain additions, deletions or modifications to the Specifications to address unique work requirements which are specific to a CMA. The Specification Amendments and Special Provisions will form part of the Contract.

1.6.2.1.3 Unit Price Schedule

This document contains a list of all the Activities necessary to complete the Work, together with all the Bid Items associated with each Activity. The scope of Work for each Bid Item is described in the corresponding Specification, the reference number of which is shown beside the Bid Item.

The Unit Price Schedule also contains Provisional Quantities. Provisional Quantities are the anticipated quantities of Work expected to be performed during the first full fiscal year of the Contract.

The Unit Price Schedule will form part of the contract.

1.6.2.1.4 Plans

The CMA Map is a plan that shows:

- boundaries of the Contract Maintenance Area,
- the location of Department facilities which are available for the Contractor's use, including leased shops and Department owned stockpile sites or gravel sources,

- the current paved and gravel provincial highway network that comprise the CMA, including approach roads, Vehicle Inspection Stations and other facilities that are part of the Contract, and
- general geographic information, such as towns and rivers.

The Plow Beat Map is included in the Special Provisions and is a plan that shows:

- hard surfaced highways that are maintained with a plow truck in the winter, including the highway control section and kilometre stations for each highway section,
- truck allocation used to calculate the "Base" Level of Service,
- maintenance facilities and stockpiles used to calculate the "Base" Level of Service (Some of these facilities are not available for the Contractor's use) (Gravel pits have also been shown),
- other facilities such as Vehicle Inspection Stations, and
- limited geographic information outside the CMA boundary.

1.6.2.1.5 Winter Service Delivery Details

This document contains the necessary spread-sheets which the Prospective Contractor will use to determine if the number and location of his proposed sand salt storage sites and snow and ice control equipment fleet will provide the required level of service.

1.6.2.2 Documents Containing Supplemental Information

1.6.2.2.1 Previous Work Quantity Information

This information includes summaries of "Bid Item" work quantities completed in a CMA in recent years. Prospective Contractors are encouraged to familiarize themselves with the historical work records in each CMA. This information is available from the applicable department Operations Manager.

In general, the work quantity records will not include the secondary highway network expansion. The Contractor shall assure himself whether the quantity records contain secondary highways and over what periods those highways were included in the existing highway maintenance contract.

Generally, large-scale expansion of the highway network to include secondary highways did not begin until April 2000.

1.6.2.2.2 Local Features

Due to the geographical and climatic variations that impact highway maintenance throughout the province, there is a need for local features to be considered when undertaking a geographical highway maintenance contract. This document has

been compiled to assist the Prospective Contractor to gain an understanding of the “local” aspect of the Work.

The highway network has expanded since the awarding of the existing highway maintenance contracts. Local features on newly added highways were developed through input from local municipal jurisdictions staff and from Department staff.

1.6.3 Documents Containing Mandatory Requirements Common to All Contracts and RFPs

The following documents are not included in the package with the Request for Proposals but are available for purchase from Alberta Transportation, Program Management Branch, 3rd Floor, Twin Atria Building, phone (780) 427-2091, fax (780) 422-0232.

These documents will form part of the Contract.

1.6.3.1 General Specifications

These documents detail the general terms and conditions of the contractual relationship between the Department and the Contractor and general requirements for the accommodation of traffic, which will be in effect for the duration of the contract. These specifications are contained in the Department manual entitled Highway Maintenance Specifications, version 3, May 2001.

1.6.3.2 Technical Specifications

These documents detail the technical requirements and payment terms for all Bid Items in the Contract and are contained in the Department manual entitled Highway Maintenance Specifications, version 3, May 2001.

Technical specifications for highway maintenance activities differ from those for highway construction activities due to the following:

- Specific locations where Work will be required are generally not known.
- The severity of problems can not be foreseen (for example, does the patch need to be excavated or surface patched?).
- The extent of Work required is unknown (for example, is the Work spread out over a large area or is it concentrated in one area?).
- Work practices and technologies may change during the term of the Contract.

1.6.3.3 Standard Drawings

These documents provide specific detail for various components or items of Work and are contained in the Department manuals entitled Traffic Accommodation in Work Zones, Edition 2, 2001, CB6 Standard Highway Construction Drawings, Alberta Highway Pavement Marking Guide, September 1999, Typical Barrier Drawings and Typical Signage Drawings.

1.6.3.4 *Alberta Transportation Products List*

This document is referenced in the technical specifications and contains products that comply with the requirements of the applicable technical specifications and are suitable for use on Department projects. This document can be accessed on the Department website only, at www.trans.gov.ab.ca (click on construction projects; roadways; technology development).

2.0 PROGRAMMING THE WORK

2.1 MAINTENANCE BUDGET AND ANNUAL WORK QUANTITIES

The Department has a process for the distribution of funding for maintenance activities at a provincial level. Once the provincial distribution is completed, the Department Operations Manager will prepare the Annual Work Quantity (AWQ). The AWQ will be used in determining the magnitude of the various maintenance Activities. Each Activity will have one or more Bid Items, which will be used to define and pay for the Work. The actual quantity of Work will be known only when the Work is ordered. The AWQ will be based on the inventory of physical assets, the condition of the assets, provincial strategies and will vary from year to year.

Various information management systems will assist Department staff in preparing the AWQ.

2.2 SCHEDULING THE WORK

The Department will issue Work Orders to the Contractor, which will have varying response and completion times. Response and completion times are based on the type of work and the urgency in each case. Emergency situations will require very short response times and good communication between all parties. Activities such as mowing, pavement crack sealing, and highway line painting may be carried out over an extended period of time. In each case, the Contractor is responsible to schedule his Work force to meet the specified response and completion times.

Prospective Contractors are advised that the Department and Existing Highway Maintenance Contractors are jointly developing processes to ensure work planning and the issuance of Work Orders is done in a manner which will allow the work to be carried out in a timely and effective manner. Prospective Contractors awarded contracts will be expected to participate in the development of these processes.

3.0 CONTRACT

3.1 DURATION OF CONTRACT

The duration of the Contract will be approximately 5 years. The termination dates for the CMAs in the existing highway maintenance contracts may vary for each CMA. The termination date for the Contract is specified in the Special Provisions.

3.2 SUBCONTRACTS AND ASSIGNMENTS

The terms and conditions concerning subcontracting and assignment of Work under the Contract are detailed in Specification 51.2, General (for Maintenance Work).

The Prospective Contractor shall list any proposed assignments in Envelope No: 2 of the Proposal. The Prospective Contractor shall also list any proposed subcontracts associated with snow removal and ice control work where the value of such work exceeds \$25,000 annually and any subcontracts for other types of work where the value of such work exceeds \$100,000 annually.

Any assignments or subcontracts identified by the Prospective Contractor in his Proposal shall be subject to the approval of the Department.

The Prospective Contractor is advised that companies involved in other Department highway maintenance contracts, in the capacity of “the Contractor”, will be acceptable as subcontractors under any contract resulting from this RFP, provided that the value of the subcontracted work does not exceed 10% of the total contract value, on an annual basis.

3.3 CONTRACTS FOR INDIVIDUAL OR MULTIPLE CONTRACT MAINTENANCE AREAS

3.3.1 Allowable Number of CMAs

A Highway Maintenance Contractor may not hold a contract or contracts for more than 7 CMAs.

The total number of CMAs available for bidding at this time is 4. A Prospective Contractor who is an Existing Contractor shall refer to Sections 3.3.3.1 and 3.3.3.2 for details on how the CMAs in his existing contracts will impact the total number of CMAs he may hold.

3.3.2 Proposals for Multiple or Individual CMAs

A Prospective Contractor may submit no more than one Proposal for each individual CMA and no more than one Proposal for each specific combination of CMAs.

For a Proposal covering a combination of CMAs, the amount of security required shall be the aggregate amount. (Prescribed security per CMA multiplied by the number of CMAs)

in the Proposal). The unit prices bid for “like” bid items shall be the same in all the individual CMAs, except for the following CMA specific items.

- Bid items 1410 to 1419 - Supply and Stockpile Sand to --
- Bid items 1470 to 1479 - Supply of Sodium Chloride to --
- Bid item 2701 – Maintain/Prepare Gravel Surface Roads (Grader)
- Bid item 3001 - Highway Maintenance Work per CMA --
- Bid item 4401 - Indirect Operating Costs per CMA

A Prospective Contractor interested in bidding on individual CMAs may submit Proposals for any and all CMAs.

3.3.3 Proposals From A Prospective Contractor With An Existing Department Highway Maintenance Contract

Resources such as snowplow trucks, sand/salt, loaders, foreman and operators, allocated to an existing Department highway maintenance contract can not be committed in a Proposal.

3.3.3.1 Existing Highway Maintenance Contracts That Terminate In 2004

A Prospective Contractor with an existing Department highway maintenance contract that terminates in 2004 will not have the CMAs in the existing contract counted in the allowable total of 7 CMAs.

3.3.3.2 Existing Highway Maintenance Contracts That Terminate In 2005 Or Subsequent Years

A Prospective Contractor with an existing Department highway maintenance contract that terminates in 2005 or subsequently will have each CMA in the existing contract included in the allowable total of 7 CMAs.

4.0 PROPOSAL EVALUATION

4.1 OVERVIEW OF PROPOSAL EVALUATION OBJECTIVES

The objectives of the evaluation of the Proposals are to:

- Ensure that the safety of the travelling public and maintenance workers is maintained,
- Reduce the cost of delivering the Department's maintenance program,
- Ensure that the government's investment in the road infrastructure and operational facilities throughout the province is protected,
- Minimize the financial risk to both the Department and the Contractor and ensure that the risk is equitably distributed, and
- Maximize the appropriate use of technology to reduce costs.

4.2 OVERVIEW OF PROPOSAL EVALUATION PROCESS

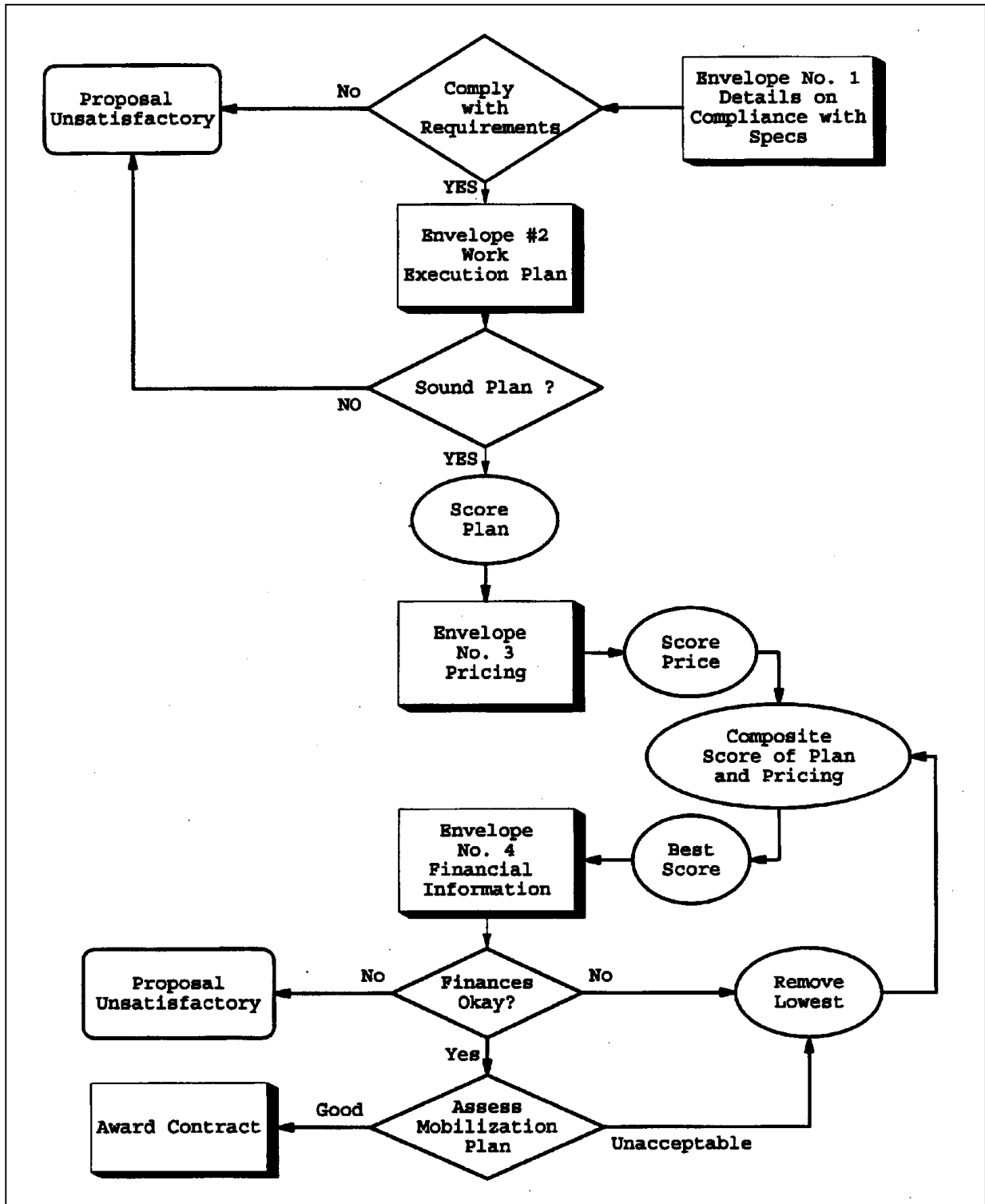
The Department will assess the Proposals for:

- Compliance with the Specifications
- Key Personnel
- Work Planning
- Snow/Ice Control Plan
- Safety Plan
- Material Storage
- Past performance of Existing and Previous Contractors or experience of new contractors
- Pricing

All Proposals will be ranked in each of the above categories. Once the preferred Proposal or Proposals have been identified, the Department may meet with the preferred Prospective Contractor(s) to finalize any details concerning the Proposal(s). The preferred Proposal(s) will then be assessed for financial capability.

If the preferred Proposal(s) is deemed satisfactory following the financial assessment, the preferred Prospective Contractor(s) will then be required to submit a detailed Mobilization Plan. If the Mobilization Plan is acceptable, the Contract(s) will be awarded.

The Evaluation and Contract Award Process is outlined in the following flowchart.



4.3 PROPOSAL EVALUATION AND CONTRACT AWARD – 4 ENVELOPE PROCESS

The Prospective Contractor's Proposal shall consist of 4 basic components. The information provided for each component shall be submitted in one of the 4 envelopes as detailed in this RFP. The Department will assess and score the contents of each envelope separately. The criteria used to assess the contents of each envelope and the relative weightings given to each criterion are detailed in this RFP.

If the information provided by the Prospective Contractor does not demonstrate that the Prospective Contractor is able to meet the mandatory requirements of the RFP, Special Provisions, Plans, Specifications and Specification Amendments, then the Proposal may be rejected.

The following provides an overview of the requirements for each envelope and a general outline of the proposal evaluation and contract award process.

4.3.1 Phase 1 - Compliance with Specifications (Envelope 1)

This first phase of the evaluation process will be to assess the contents of Envelope No: 1 to ensure that the Proposal meets all the mandatory requirements of the Specifications and the RFP. If the results of the assessment indicate that the Prospective Contractor does not comply with all requirements, the Proposal may be deemed unacceptable and rejected. If a Proposal is rejected at this stage, all other envelopes for such proposal will be returned unopened to the Prospective Contractor.

4.3.2 Phase 2 – Work Execution Plan and Previous Performance/Experience (Envelope 2)

The second phase of the evaluation process will be to assess the contents of Envelope No: 2. Envelope No: 2 shall contain the service levels the Department may expect from the Contractor. This will allow the Department to assess the Prospective Contractor's ability to carry out the Work without unnecessary risk to the travelling public or the Department for the duration of the Contract.

This phase of the evaluation will account for 22.5% of the overall score of the Proposal.

4.3.3 Phase 3 - Price Analysis (Envelope 3)

The third phase of the evaluation process will be to assess the contents of Envelope No: 3 to determine which Proposal(s) would provide best value to the Department at any stage during the term of the Contract. This phase of the evaluation will account for 77.5% of the overall score of a Proposal.

In particular, the following items will be assessed:

- The anticipated overall total cost to the Department of accepting the Proposal.

- The impact on cost of upward and downward shifts in the quantities of groups of major highway maintenance activities.

The Bid Items will be analyzed under a series of probable scenarios for the 5-year term of the Contract. The scenarios will include possible work quantity variations and economic parameter fluctuations. The price analysis will identify the Proposal that performs well under the most scenarios compared to ones that perform well under a lesser number of scenarios. The object is to determine the Proposal that provides the best value to the Department.

4.3.4 Phase 4 - Identifying the Preferred Proposal (Scoring Envelopes 2 and 3)

The contents of Envelopes No: 2 and No: 3 will be scored. The score for the contents of Envelope No: 2 will be worth 22.5% of the combined total of the 2 envelopes. The score for the contents of Envelope No: 3 will account for the remaining 77.5% of the combined total. The Proposal having the best composite score of Envelopes No. 2 and No. 3 will become the preferred Proposal. Only the preferred Proposal will be subjected to the following phases.

4.3.5 Phase 5 – Meeting to Clarify any Details Concerning the Proposal

At this stage in the process, the Department may meet with the preferred Prospective Contractor to finalize any details concerning the preferred Proposal.

4.3.6 Phase 6 – Financial Analysis (Envelope 4)

The Department will satisfy itself that the Prospective Contractor submitting the preferred Proposal has the financial capability and support to perform the Work, as well as the financial stability to continue operations throughout the 5-year term of the Contract. In Envelope No: 4, the Prospective Contractor is required to submit financial and related information to allow the Department to make that determination.

It is recognized that prospective Contractors may have concerns about divulging their financial data to the Department. Therefore, arrangements have been made for an independent financial evaluation company to serve as the examiners of the ownership and financial data submitted in Envelope No: 4.

Only Envelope No: 4 of the preferred Proposal will be provided to the financial evaluator. The envelopes of all other Prospective Contractors will be retained unopened by the Department Designate. Using data derived in Phase 3, together with the contents of Envelope No: 4, the financial evaluator will assess the submission, and will provide the Department with a determination of either satisfactory or unsatisfactory. If the contents of Envelope No: 4 are deemed to be unsatisfactory, the Proposal will be rejected and the Proposal having the second best composite score will become the new preferred Proposal.

After assessing the contents of Envelope No: 4, the financial evaluator will reseal the contents in the envelope and return it to the Department designate. The Department designate will forward the package to the Prospective Contractor.

The following data is required as part of Envelope No: 4:

4.3.6.1 Ownership

The Prospective Contractor shall provide a clear statement of the ownership of the existing business submitting the Proposal. The Department requires an indication of the corporate structure of the Prospective Contractor, the names of the principals, their ownership interest and the name under which the Prospective Contractor is registered with Corporate Registry, Alberta Registries and Alberta Municipal Affairs. If more than one Prospective Contractor is involved, the Department also requires a statement of the ownership structure of the proposed venture.

4.3.6.2 Eligibility

Since a Contractor is restricted as to the number of CMAs he can hold, the Department requires a statement indicating the number of CMAs already awarded to the Prospective Contractor(s) or principals of the Prospective Contractor.

4.3.6.3 Financial Statements

If the Prospective Contractor is an existing business, the Department requires the audited financial statements for the previous 3 years. These statements shall include as a minimum:

- Statement of Earnings
- Balance Sheet
- Statement of Cash Flows

The notes to these statements shall also be provided.

For organizations that do not have audited statements, the Department requires at least a Statement of Earnings, Balance Sheet and Statement of Cash Flows for the 3-year period, together with the name, address, and phone number of the accountant who prepared the statements. The independent financial evaluator may contact the accountant for clarification of submissions.

When more than one Prospective Contractor is involved in a joint submission, the Department requires the statements of each Prospective Contractor according to the guidelines provided above.

When an individual submits a Proposal, the Department requires the following for each of the principals involved in the venture:

- A statement of net worth notarized in Alberta.

- A personal credit rating report.

4.3.6.4 *Pro Forma Statements*

The Department requires financial pro forma statements for the proposed venture and expects to see the following:

- A Statement of Earnings showing revenues from Alberta Transportation, the cost of operation, and the profit expected before taxes for each of the 5 years of the Contract.
- A Balance Sheet for the each of the 5 years.
- Statement of Cash Flows for the 5 years, with the first year broken into months. Sources of new debt or equity required by the venture shall be identified.

4.3.6.5 *Financing*

The Prospective Contractor shall provide a statement from each investor indicating the investor's undertaking to provide the equity involved. Also to be provided, is a letter from each lending institution indicating that it has examined the pro forma statements of the proposed venture and are prepared to provide financing as per the statements.

4.3.7 Phase 7 – Mobilization Plan

If the contents of Envelope No: 4 are satisfactory, the Prospective Contractor submitting the preferred Proposal will be required to provide a detailed Mobilization Plan demonstrating how his organization will be able to commence Work by the specified date.

The preferred Prospective Contractor will be permitted 30 days to submit the Mobilization Plan. The Mobilization Plan shall include the following:

- Assembling the management and supervisory team,
- Letters of Intent from the Prospective Contractor for engaging the Foreman, Snowplow Truck Operators and all remaining personnel to commence work,
- Resumes for all Foremen and Snowplow Truck Operators
- Letters of Intent from the Prospective Contractor for purchasing any equipment in accordance with the undertaking of the Proposal,
- Letters of Intent from the Prospective Contractor for procurement of facilities and scheduling of site construction,
- Securing bonds and insurance,
- Producing the necessary documentation to ensure compliance with the General Specification requirements for winter default procedures,
- Detailed Schedule of the mobilization process
- In the event that the original facilities are not available, details of alternatives (alternative facilities must be comparable and acceptable to the Department),
- Identification of any facilities that are being obtained from the Government of Alberta (any and all Departments and agencies or boards) or facilities that were previously

- owned by the government and a completed Environmental Management Plan for each such site.
- Execution of lease agreements by the Prospective Contractor for each Department facility to be leased if a Contract is awarded. The lease agreements will be prepared by the Department based on the applicable rental rates as stated in this RFP and on the terms and conditions as set out in the standard lease agreement. The lease agreements will not be executed by the Department until the Environmental Management Plans are approved, and
 - Identification of any person who has any interest in the title, lien, caveat or encumbrance on property being proposed as a site for storage of equipment or materials.

4.3.8 Phase 8 - Contract Award

If the Department is satisfied with the preferred Prospective Contractor's Mobilization Plan, the Contract will be awarded, and the envelopes of the unsuccessful Prospective Contractors will be returned.

After awarding of the Contract, failure of the Contractor to commence work on the specified date may result in the forfeiture of the Performance Security.

4.4 IMPLEMENTATION OF MOBILIZATION PLAN

4.4.1 Progress Updates for Mobilization Plan

Following Contract award, the Contractor shall provide the Department with written monthly reports concerning the progress being made on the various components of the Mobilization Plan, particularly the procurement of facilities and winter snow and ice control equipment. Such reports shall be supplied to the Department's Operations Manager at the end of each month. The Contractor may also be required to meet with the Operations Manager to discuss details of the progress of the Mobilization Plan. Any such meetings will be at the discretion of the Department.

4.4.2 Failure to Deliver Equipment, Operators or Sand/Salt Materials in Accordance with the Mobilization Plan

In the event the Contractor is unable to provide the required number of snowplow trucks, loaders, equipment operators or sand/salt material at the applicable locations by the required dates indicated in the Mobilization Plan, the Contractor must undertake alternative temporary measures, to ensure that there is no loss in service to the travelling public. Such measures must be suitable to the Department and shall be completed at no additional costs to the Department.

The alternative measures must be detailed in a written Contingency Plan and provided to the Department for evaluation prior to implementation. The Department will be the sole judge of whether or not the Contractor's proposed Contingency Plan provides an adequate level of service or if the duration proposed by the Contractor for the Contingency Plan is suitable.

In these situations the following conditions shall also apply:

- If the Department is of the opinion that the Contractor's Contingency Plan would not result in a loss of service and there is no additional costs to the Department, the Contractor will not be assessed penalties for failing to comply with the Mobilization Plan.
- If the Department is of the opinion that the Contractor's Contingency Plan would result in a reduced level of service but that the reduced level of service, for the time period proposed, is manageable, the Contractor would not be assessed penalties for failing to comply with the Mobilization Plan. However, if the Contractor does not meet either the deadlines or the other commitments detailed in the Contingency Plan, penalties will be assessed as if the Contingency Plan was deemed "unacceptable".
- If the Department is of the opinion that the Contractor's Contingency Plan does not provide an adequate level of service and/or the proposed duration for the alternative measures is too long, the Contingency Plan will be deemed unacceptable. In these cases, the Contractor will be assessed penalties based on the quantities of materials and equipment/operators that are not "in place" by the required dates. The penalties shall be \$500 per day per stockpile of sand or salt, \$500 per day per snowplow truck with operator(s) and/or \$500 per day per loader with operator. The penalties shall commence on the day the materials and/or equipment/operators were scheduled to be in place and shall continue daily until such time as the materials and/or equipment/operators are in place or until a suitable Contingency Plan is received by the Department and suitable alternate measures are in place.

4.4.3 Permanently Relocating a Shop

Permanent relocation of a Shop subsequent to the award of the Contract shall be subject to the approval of the Department. In these cases the Department's main concern will be that the Contractor provide the same level of service as was indicated in the Contractor's Proposal, at no additional cost to the Department.

Generally, if the required level of service can be maintained without increasing the number of snowplow trucks, the request to relocate the Shop would be approved. However, if additional snowplow trucks are required to maintain the required level of service, the "Availability Rate" and "Heated Storage" payments will not be made for those trucks. Also, the Department will not entertain requests for increases to the Indirect Operating Costs.

4.5 EVALUATION CRITERIA AND WEIGHTINGS

4.5.1 Envelope No: 1 - Compliance with Specifications

The following table shows the items in Envelope No: 1 which will be reviewed by the Department. Non-compliance with any of these requirements may result in the rejection of the Proposal.

ENVELOPE NO: 1 REQUIREMENTS	COMPLIANCE	NON-COMPLIANCE
All Envelopes submitted on time		
Prospective Contractor's Certification of Information		
Prospective Contractor's Proposal Agreement		
Consent of Surety		
Consent of bank for ILOC (where applicable)		
Letter of Intent from Insurance Company		
Legally registered company		
Safety accreditation/enrollment		
Minimum 70% experienced snowplow truck operators (see note 1)		
Fixed Costs not exceeding 45% of estimated total annual contract amount		
Addenda enclosed		
Minimum 75% experienced Foreman (see note 2)		

Notes:

1. Equipment Operators

It is considered important that snow/ice control activities be performed by trained and skilled equipment operators. It is expected that experienced personnel will be able to exercise the appropriate judgement to operate safely and appropriately in emergency situations.

One equipment operator shall be assigned to each snowplow truck in the Proposal. If the Department requires more than one operator for a truck, such details will be specified in the Special Provisions.

The Prospective Contractor is asked to provide a written commitment that a minimum of 70% of snowplow truck operators that he intends to employ for the term of the Contract have at least 3 year experience in winter highway maintenance.

Resumes and letters of intent signed by the snowplow truck operators shall be required as part of the mobilization plan.

2. Foreman

Foremen supervise activities and therefore must have a demonstrated ability to supervise the operation of all maintenance activities and ensure proper procedures are used.

The key operations supervised by Foremen are:

- snow and ice control
- repair of asphalt surfaces
- crack sealing

- temporary work zone signing
- responding to emergency situations
- permanent signing and sign maintenance

At least 75% of the Foremen must have a minimum of 2 years highway maintenance experience. Each Foreman must have some level of supervisory highway maintenance experience and a good working knowledge of highway “work zone” management. The Prospective Contractor is asked to provide a written commitment that he will provide the minimum number of Foreman, with the necessary experience and at the required locations as detailed in the Special Provisions.

Resumes and Letters of Intent signed by the Foreman shall be required as part of the Mobilization Plan.

4.5.2 Envelope No: 2 - Work Execution Plan and Previous Performance/Experience

The maximum score for Envelope No: 2 is as shown on the following table:

Item	Maximum Allowable
Score of Work Execution Plan	175 Points
Score of Past Performance/Experience	50 Points
Total	225 Points

Actual scoring will be determined using the following table entitled "Work Execution Plan Components". The range of points available for each item are shown under the columns entitled "Minimum" or "Desirable". Actual points awarded for each item will be multiplied by the applicable weighting factor to arrive at the score for the item.

WORK EXECUTION PLAN COMPONENTS	Weighting Factor	SCORING		
		Minimum (* denotes critical)	Desirable	Maximum Available
KEY PERSONNEL				
Number, Placement and Delegation				
Contract Manager	1	0 - 1	N.A.	1
Superintendent	1	0 - 1	N.A.	1
Experience and Skill				
Contract Manager	1	N.A.	0 - 5	5
Superintendent	2	N.A.	0 - 5	10
KEY PERSONNEL SUBTOTAL				17
WORK PLANNING				
Work Planning Details	1	0 - 5	N.A.	5
WORK PLANNING SUBTOTAL				5
SNOW/ICE CONTROL PLAN				
Sand/Salt Storage				
Sand/salt storage plan	1	0 - 5	N.A.	5
Salt shed size	2	N.A.	0 - 5	10
Loaders in indoor heated storage	2	N.A.	0 - 5	10
Proximity of sand/salt storage sites to the highway network	3	N.A.	0 - 5	15
Snowplow Truck Storage Sites				
Snowplow truck storage site plan	1	0 - 1	N.A.	1
Trucks in indoor heated storage	3	N.A.	0 - 5	15
Proximity of truck storage sites to sand/salt storage sites	3	N.A.	0 - 5	15
Winter Equipment				
Winter equipment plan	1	0 - 1	N.A.	1
Increased hopper capacity	1	N.A.	0 - 5	5
Motor Graders for Winging Shoulders				
Motor grader winging plan	1	0 - 1	N.A.	1
Motor Graders for Gravel Surfaces				
Motor grader gravel surface plan	1	0 - 5	N.A.	5
Grader storage sites strategically located to the highest classification section	2	N.A.	0 - 5	10
Repair of Equipment				
Repair of equipment plan	1	0 - 1	N.A.	1
Spare snowplow trucks	3	N.A.	0 - 5	15
Winter Preparation and Staffing				
Winter preparation and staff plan	2	0 - 5	N.A.	10

WORK EXECUTION PLAN COMPONENTS	Weighting Factor	SCORING			
		Minimum (* denotes critical)	Desirable	Maximum Available	
Winter Snowplowing Delivery					
Satisfactory?	1	0 – 1*	N.A.	1	
Winter Sand or Salt Delivery					
Satisfactory?	1	0 – 1*	N.A.	1	
% Utilization					
Satisfactory?	1	0 – 1*	N.A.	1	
SNOW/ICE CONTROL PLAN SUBTOTAL				122	
SAFETY PLAN					
Emergency preparedness	2	0 – 1	N.A.	2	
Training	2	0 – 1	N.A.	2	
Safety meetings	2	0 – 1	N.A.	2	
Traffic Accommodation in Work Zones manual	2	0 – 1	N.A.	2	
Safe work practices and job procedures	2	0 – 1	N.A.	2	
Subcontractors and safe work practice and procedures	2	0 – 1	N.A.	2	
Fatigue management	2	0 – 1	N.A.	2	
SAFETY SUBTOTAL				14	
MATERIAL STORAGE					
Mixed sand/salt storage structure	3	N.A.	0 – 5	15	
Storage and/or disposal of fuel and other materials	2	0 – 1	N.A.	2	
MATERIAL STORAGE SUBTOTAL				17	
SUBTOTAL				175	
CONTRACTOR PREVIOUS PERFORMANCE/EXPERIENCE		10	N.A.	0 - 5	50
TOTAL POINTS				225	

4.5.3 Envelope No: 3 - Price Analysis

An explanation of the various “Pricing Components” and “Total CMA Cost” is detailed in the section of this RFP titled “Details for Analysis of Pricing.”

Pricing Components	Weighting Factor	Scoring for Pricing Components Worst to Best					Maximum Available
		1	2	3	4	5	
Scenario # 1	2						10
Scenario # 2	2						10
Scenario # 3	2						10
Unbalanced Bid Check	4						20
Total CMA Cost							725
Total Points							775

4.5.4 Envelope No: 4 – Financial Analysis

The following items will be assessed by the financial evaluator and will be rated as either acceptable or unacceptable.

FACTORS	ACCEPTABLE	UNACCEPTABLE
Ownership		
Eligibility		
Financial History		
Pro Formas		
Financial and Banking		

4.6 DETAILS FOR EVALUATION OF WORK EXECUTION PLAN (ENVELOPE 2)

The individual components of the contents of Envelope No: 2 will be assessed using the key points outlined in this section as the baseline evaluation.

The Proposal shall address each issue specified and when requested, provide information in sufficient detail to ensure the Department can determine (with confidence) the Prospective Contractor’s ability to meet the requirements of the key points. Covering additional issues in the Proposal may result in potentially better points than only covering the issues identified.

The Department will assess and compare each Prospective Contractor’s ability to safely and competently perform the Work. A Proposal that makes certain commitments and covers all the issues in a comprehensive manner will score well compared to a Proposal that makes less commitments or provides less detail.

The Work Execution Plan will form part of the Contract.

4.6.1 Minimum and Desirable Requirements

Each component of the Work Execution Plan makes reference to minimum and/or desirable requirements. Minimum requirements are those that the Department feels must be satisfactorily addressed in the Work Execution Plan. Desirable requirements are those that the Department deems to have merit, but are not absolutely necessary.

Minimum requirements will be classified as either non-critical or critical. If a non-critical requirement is not satisfactorily addressed in the Work Execution Plan, points will be deducted in the appropriate category. Regardless, the preferred Prospective Contractor will be required to ensure that any non-critical minimum requirements are addressed in his Work Execution Plan prior to final acceptance by the Department, and there will be no resulting adjustment of prices. This is premised on the assumption that the Prospective Contractor was aware of the minimum requirements and not specifically addressing it in the Work Execution Plan was simply an oversight.

If a minimum requirement is categorized as critical and is not satisfactorily addressed in the Work Execution Plan, the Department will elect one of the following:

- Deduct points from the appropriate category in Envelope No. 2.
- Terminate the evaluation of the Proposal.

Desirable requirements have a range of points available for evaluation purposes. Should the Work Execution Plan satisfactorily address and commit the Prospective Contractor to meeting the applicable requirement, points will be awarded. The number of points awarded will be based on the degree the requirement has been met.

4.6.2 Key Personnel

The Prospective Contractor shall provide an “organization chart” and a brief description of the management and supervision plan, for the Proposal.

Normally, maintenance organizations have a basic organization as shown below:

Principals	Administer Contractor Activity
Contract Manager	Administers Contract Activity
Superintendent	Administers Activity in Contract
Foremen	Supervises Activity in a Local Area
Equipment Operators	Performs Activities Locally

This is the basic maintenance organization that the Department will use for comparison of Proposals.

It is understood that each Prospective Contractor may wish to organize in a different fashion or manner. The Department has no desire to change or create a different organizational structure for the Contractor but simply uses this base structure for comparative purposes. Each Contractor may choose to have whatever management structure they wish.

The Prospective Contractor shall provide an organization chart, indicating the names, titles and locations for all personnel at the Superintendent level and higher. In addition, the Prospective Contractor shall identify where all management and supervisory personnel will reside. Also to be included are the locations of the proposed major offices where the Prospective Contractor’s administrative functions will occur.

All personnel identified should have both a resume and a brief description provided of their work history, including any previous experience they may have in any kind of highway maintenance.

The descriptions for the proposed Contract Managers must also indicate the average annual dollar value of work the person has typically supervised or managed in recent work history. This is to identify the proposed Manager’s current responsibility level.

Proposals will be evaluated for the following:

4.6.2.1 *Experience and Skill Levels of Personnel*

4.6.2.1.1 Contract Manager

The skills and experience of the Contract Manager are considered an essential component of the plan. Contract Managers are expected to have:

- Demonstrated good speaking and writing skills, to enable positive liaison with the Department's Staff and ensure accurate record keeping, including accident reports and Work Completion Reports,
- Demonstrated experience in planning, organizing, directing and reviewing the Work of the crews
- Good public relations skills,
- Experience in contract management, and
- Experience in large highway contracts (maintenance or construction).

4.6.2.1.2 Superintendent

The Superintendent must be able to substitute for the Contract Manager in her/his absence. Normally, all the basic skills of the Contract Manager are required for the Superintendent.

Superintendents are not normally "line supervisors" and do not regularly supervise work activities directly in the field.

Superintendents must have the ability to respond rapidly to emergency after-hours calls and to notify the Department of any required Work.

Superintendents must have directly related supervisory highway maintenance experience. Some contract administration experience is also preferred.

4.6.2.2 *Number of Positions in Each Classification*

4.6.2.2.1 Contract Manager

At least one Contract Manager must be identified in each Proposal, regardless of the number of CMAs within the Proposal.

If there is more than one CMA in the Proposal, the same Contract Manager can be named for all the CMAs, to a maximum of 7, providing the CMAs are adjoining. If the CMAs are not adjoining, then an additional Contract Manager would be preferred.

If a Contract Manager is or will be also supervising CMAs within an existing Department highway maintenance contract, then those CMAs will also be included in the maximum of 7 CMAs for that Contract Manager.

4.6.2.2.2 Superintendent

A Superintendent may supervise up to 7 CMAs. If there is more than one CMA in the Proposal, the same person can be named for all the CMAs, to a maximum of 7, providing the CMAs are adjoining and form a continuous area. If the CMAs are not adjoining and not continuous, then additional Superintendents are required.

4.6.2.3 *Location and Distribution of Personnel*

4.6.2.3.1 Contract Manager

The Contract Manager is expected to have an office within the Contract area boundaries. The Contract Manager shall be responsible for supervision of administrative responsibilities of the Contractor and should be available to liaise on a day to day basis with the Department Operations Manager.

4.6.2.3.2 Superintendent

If the Contract Manager does not have an office in close proximity to office of the Department Operations Manager, it is very desirable that the Superintendent resides and works in close proximity. Day to day operations should not be delayed due to the absence of the Contract Manager.

Superintendents must reside within the Contract area boundaries and be available in the “off-hours” in case of emergency situations.

4.6.2.4 *Key Personnel - Scoring*

The Proposal will be evaluated and scored based on the following:

4.6.2.4.1 Contract Manager - Number, Placement and Delegation

Each Proposal will be reviewed to determine which Proposal has the most practical Management Plan. There may be only 1 Contract Manager for 7 CMAs provided the manager's daily working office is within one of the CMAs. The Contract Manager is expected to be placed in a strategic location to facilitate the Work and “decision making” with Department staff.

4.6.2.4.2 Contract Manager - Experience and Skill

The work history and experiences of the Contract Manager(s) will be reviewed and rated according to the following table:

Responsibility Level	Value of Annual Construction/Maintenance Activities Managed
Low	Under \$5.0 M
Medium	\$5 - \$10 M
High	Over \$10. M

Using the “responsibility level” and years of experience, points will be awarded as follows:

Previous Hwy. Maintenance Management Experience	Current or Recent Responsibility Level		
	Low	Medium	High
None	0 point	1 point	2 points
2 years or less	1 point	2 points	3 points
More than 2 years	2 points	3 points	5 points

If more than one Contract Manager is identified within the Proposal, the Contract Manager with the lowest score will be the one used in the scoring.

4.6.2.4.3 Superintendent - Number, Placement and Delegation

At least 1 Superintendent strategically located within the Contract area boundaries will be considered as a minimum requirement.

4.6.2.4.4 Superintendent - Experience and Skill

All Superintendents should have similar skill sets as Contract Managers.

Points will be awarded based on the average amount of experience of all the Superintendents proposed, in accordance with the following table.

Years of Highway Maintenance Supervisory Experience	Points Awarded
Less than 1 year	0
1 - 3 years	1
3 - 5 years	2
5 – 8 years	3
8 – 10 years	4
more than 10 years	5

4.6.3 Work Planning

4.6.3.1 Work Planning – Details

The Prospective Contractor shall provide a brief description of how the work will be planned in accordance with contract specifications. The Prospective Contractor's work planning shall include, but is not limited to the following items:

- Joint participation in the development of the yearly CMA activity based budget
- Development of a detailed work plan for all programmed work
- Allowances in resource allocation to ensure ability to perform routine and reactionary work is not compromised
- Work identification and reporting as part of the Prospective Contractor's routine highway inspections

4.6.3.2 Work Planning – Scoring

The Proposal will be evaluated and scored on the following items:

A. Minimum Requirements

The following factors will be considered when accessing whether or not the Prospective Contractor's work planning is satisfactory:

- Does proposed detailed work planning consider Department needs (i.e. budget, completion dates, priorities, etc.)?
- Does the Prospective Contractor's proposed detailed work planning include allowances for routine and reactionary work?
- Is work identification and reporting part of the Prospective Contractor's work planning?
- Does the Prospective Contractor commit to working jointly with the Department in the development of an efficient work planning process that takes into account both the needs of the Prospective Contractor and the needs of the Department?

4.6.4 Snow/Ice Control Plan

The key element in Envelope No: 2 is the Prospective Contractor's Snow/Ice Control Plan.

4.6.4.1 Sand/Salt And Snowplow Truck Storage

The Prospective Contract is asked to provide details of facilities as identified in the following two sections.

4.6.4.1.1 Salt Storage Site Plan

The Prospective Contractor must provide a detailed plan for each salt storage facility identified in the Proposal, including but not limited to the following information detailed herein.

The use of a site that is presently being used and is outside the boundaries of the CMA(s) included in this RFP will only be permitted if the Prospective Contractor clearly demonstrates that the salt storage capacity is not being duplicated.

- Ownership and location of site by land parcel. If the site is being shared with other users of salt and/or the Contractor is providing salt to/for others, the Contractor must provide a detailed description of the proposed method used to track quantities. This method must be able to be audited and satisfactory to the Engineer.
- Present or future capacity of the site.
- Type of storage structure.
- The location and length of highway network serviced by a site. If the site is being used for more than 1 CMA, the lengths and locations of all highways serviced (in all CMAs) by the site must be identified
- Highway locations serviced by a site should represent, in general, the halfway point between sites. If this is not the case, the Prospective Contractor shall provide an explanation why they do not.
- Calculation of the bid quantity of salt for that site. The quantity of salt should be calculated based on the length of highway serviced by the site in each CMA, multiplied by the Salt Distribution Factor for that CMA, aggregated together.
- For Proposals consisting of multiple CMAs and having salt sites servicing highways in more than 1 CMA, the price bid for supply of salt from that site must be the same in the Unit Price Schedule for each CMA for that particular site.
- If the Prospective Contractor has any cause for alteration of the quantity, his explanation and evaluation of the causes for the amendments to salt distribution quantity.
- For Proposals consisting of multiple CMAs and having salt site servicing highways in more than 1 CMA, the salt quantity distribution must be based on the kilometre distance of highways in each CMA, utilizing the factors identified in the Special Provisions.
- Clearly indicate the deadhaul roads, including length and location, being used to access the highway system. Identify any major deadhaul routes through urban or residential areas. The location of the roadway network access needs to be identified within 0.1 km. accuracy, referenced to the Department's control section reference system.
- Identify the type of loader equipment and loader storage the site will have. Specifically will the loader be stored inside or outside and if the loader will have indoor heating, above freezing temperatures.

- If site is not currently being leased from the Department as a maintenance facility, provide a description of the land use.

4.6.4.1.2 Sand Storage Site Plan

The Prospective Contractor must provide a detailed plan for each sand storage facility within the Proposal, including but not limited to the following information detailed herein.

The use of a site that is presently being used and is outside the boundaries of the CMA(s) included in this RFP will only be permitted if the Contractor demonstrates that the sand storage capacity is not being duplicated.

- Ownership and location of site by land parcel. If the site is being shared with other users of sand and/or the Contractor is providing sand to/for others, the Contractor must provide a detailed description of the proposed method used to track quantities. This method must be able to be audited and satisfactory to the Engineer.
- Present or future capacity of the site.
- Is the storage indoor or outdoor?
- If indoor, what type of structure? (A tarp supported by the pile will not be considered an indoor structure).
- If outdoor, will the site have a paved or asphalt storage pad?
- Does the site have a paved or asphalt loading pad?
- The location and length of highway network serviced by a site. If the site is being used for more than 1 CMA, the lengths and locations of all highways serviced (in all CMAs), serviced by the site.
- If highway locations identified do not match the economic haul points between other winter sand storage sites, an explanation of why they do not.
- Calculation of the bid quantity of sand for that site. The quantity of sand should be calculated based on the length of highway serviced by the site, in each CMA multiplied by the Sand Distribution Factor for that CMA, aggregated together.
- For Proposals consisting of multiple CMAs and having sand sites servicing highways in more than 1 CMA, the price bid for the supply of sand must be the same in the Unit Price Schedule for each CMA for that particular site.
- If the Prospective Contractor has any cause for alteration of the quantity, his explanation and evaluation of the causes for the amendments to sand distribution quantity.
- For Proposals consisting of multiple CMAs and having sand sites servicing highways in more than 1 CMA, sand quantity distribution must be based on the kilometre distance of highway in each CMA, utilizing the factors identified in the Special Provisions.
- Clearly indicate the deadhaul roads, including length and location to be used to access the highway system. Identify any major deadhaul routes through urban or residential areas. The location of the roadway network access needs

to be identified, within 0.1 km accuracy, referenced to the Department’s control section reference system.

- Identify the type of loader equipment and loader storage the site will have. Specifically will the loader be stored inside or outside and if the loader will have indoor heating, above freezing temperatures.
- If the site is not currently being leased from the Department as maintenance facility, provide a description of the land use.

4.6.4.1.3 Salt/Sand Storage Plan - Scoring

The Proposal will be evaluated and scored on the following items:

A. Minimum Requirements

The following factors will be considered when assessing whether or not the Prospective Contractor’s plan for sand and salt storage is satisfactory.

- All sites identified?
- All sites have salt storage sheds?
- All sites have storage doors and a facility for either blowing or conveyor storage of salt?
- Does the total quantity of salt and sand storage capacity in the Proposal match the specified requirements?
- Are highway sections close to economic haul points? If not, does the Proposal have an acceptable and rational explanation?
- Are deadhauls acceptable? How many go through residential or urban areas?
- Do actual deadhaul road lengths match the Prospective Contractor’s Proposal?
- Does the loader have sufficient bucket capacity?
- Does the Proposal protect inventories from other parties adequately? Is there an accurate accounting procedure?
- Do truck beats for salt and/or sand application match the sections identified with each storage facility?
- Are there any errors in highway length allocation?
- Is the deadhaul length to the truck storage locations correct?
- Is there an asphalt pad and is it of sufficient size?

B. Desirable Requirements

Size of Salt Sheds

Prospective Contractors that propose to use larger salt stockpile storage than the minimum size shown in the Special Provisions are eligible for additional points in accordance with the following calculation and table:

$$[\text{Storage (expressed as a \%)} = (\text{Total Proposal Salt Storage Capacity}) \div (\text{Total Base Storage Capacity})]$$

% Storage	Points Awarded
Under 90	Below Minimum - Critical
90 - 98	Below Minimum - Non-Critical
99 - 100	0
101 - 110	1
111 - 120	2
121 - 130	3
131 - 140	4
Over 140	5

The capacity “counted” for any particular shed will be limited to the annual provisional salt quantity for that salt shed, as calculated by the Prospective Contractor in his Snow and Ice Control Plan.

If the Prospective Contractor submits a Proposal containing multiple CMAs, the base storage capacity may be aggregated. All storage sites must be within the Contract area boundaries.

Loaders in Indoor Heated Storage

Prospective Contractors that propose heated indoor storage for loaders will be eligible for additional points in accordance with the following:

The term “% heated storage” will be the % of loaders with heated storage, used to load salt or sand, compared to the total number of loaders, used to load salt and sand in the Contract area boundaries. The loader must be stored in or very near the salt or sand loading facility. Only one loader per site will be counted.

% of Salt/Sand Loaders with Indoor Heated Storage	Points Awarded
0 - 40	0
41 - 59	1
60 - 79	2
80 - 89	3
90 - 99	4
100	5

Proximity of Sand/Salt Storage Sites to the Highway Network

The Department will look favorably on sites located in close proximity to the highway network. The Department will distribute the sites proposed by the Prospective Contractor into categories, and then count all the sites in each category as a percentage of the total number of sites. Scoring will be based on the following two tables:

Category	Distance from Nearest Hwy. (Km)
A	<1
B	1 - 2
C	2.1 - 4
D	4.1 - 8
E	8.1 - 12
F	Over 12

Category	% in Category as a Decimal	Multiplication Factor	Points Awarded
A		5	
B		4	
C		3	
D		2	
E		1	
F		0	
Total Points Awarded			

4.6.4.1.4 Snowplow Truck Storage Sites

The Prospective Contractor must provide a detailed plan for every snowplow truck storage facility listed within the Proposal, including but not limited to the following:

- The location of each facility by land parcel.
- The number of trucks at each site.
- The number of trucks in indoor heated storage at each site.
- Assignment of each of the trucks to their highway beat, for each truck storage site. If the Proposal is for multiple CMAs, the individual assignment for each CMA must be clearly shown.
- Assignment of each truck to a winter sand or salt storage facility or facilities for their individual highway beat.
- Identification of deadhaul roads and lengths between each truck storage facility and the applicable salt/sand storage site or sites. Are any deadhaul roads in urban areas or in residential areas? The location of the roadway network access needs to be identified within 0.1 km accuracy, referenced to the Department’s control section reference system.

4.6.4.1.5 Snowplow Truck Storage Sites Plan - Scoring

The Proposal will be evaluated and scored on the following items:

A. Minimum Requirements

- Address all items listed in the previous subsection, satisfactorily.

The suitability of the Snowplow Truck Storage Site Plan will be ranked on the minimum requirements and in direct comparison with the plans of other Prospective Contractors.

B. Desirable Requirements

- Increasing the number of trucks to be stored in indoor heated locations.
- Locating truck storage sites in close proximity to the sand/salt storage sites.

The Department will look favorably on the Proposal that offers the most indoor heated storage and truck site locations in close proximity to both highways and sand/salt storage locations.

Snowplow Trucks in Indoor Heated Storage

A Prospective Contractor that proposes to store a greater percentage of snowplow trucks in indoor heated locations (greater than the minimum number specified in the Special Provisions) is eligible for additional points in accordance with the following.

The Department will calculate the "% additional trucks in indoor heated storage" using the following formula:

$$\left\{ \frac{(\text{No. of Trucks Proposed, Indoor Heated}) - (\text{Min. No. of Heated Trucks in Special Provisions})}{(\text{No. of Trucks Proposed, Indoor Heated})} \right\}$$

Scoring will be based on the following table:

% of Additional Trucks Indoor Heated Storage	Points Awarded
0 - 5	0
6 - 10	1
11 - 15	2
16 - 20	3
21 - 25	4
Over 25	5

Proximity of Snowplow Truck Storage Sites to Sand/Salt Storage Sites

The Department will look favorably on truck storage sites that are located in close proximity to sand/salt storage sites. The Department will categorize the Prospective Contractor’s proposed sites in accordance with the following table. Distances will be measured from the truck storage site to the nearest sand/salt storage site.

Category	Distance from nearest Sand/Salt Site (Km)
A	Same site (<0.5)
B	0.5 - 1
C	1.1 - 2
D	2.1 - 4
E	4.1 - 8
F	Over 8

The Department will calculate the distribution of the number of sites in each category, as a decimal. Points will be awarded based on the following table:

Category	% in Category (as a Decimal)	Multiplication Factor	Points Awarded
A		5	
B		4	
C		3	
D		2	
E		1	
F		0	
Total Points			

4.6.4.2 Truck Demand Factor

Truck Demand Factor will be based on the application ice control materials (sand and salt).

The Prospective Contractor should strive for the strategic placement of sand/salt storage facilities. Details on the calculations to assist the Contractor in performing this task are provided in the document entitled “Winter Service Delivery - Details”.

The proposed Truck Demand Factor for highway sanding/salting must include the salting/sanding of all highways within the proposed Contract area boundaries for all CMAs included with the Proposal. The Truck Demand Factor for Proposals with multiple CMAs is the aggregate sum of all Truck Demand Factors for all CMAs.

The proposed Truck Demand Factor can be calculated electronically utilizing standard computer software provided in this RFP. The unit of measure for Truck Demand Factor will be in cubic metre kilometre (Cu.M-km).

Care must be taken that data entered is accurate and the Prospective Contractor shall satisfy himself that the Truck Demand Factor calculated is accurate, as defined in “Winter Service Delivery - Details”.

4.6.4.2.1 Determination of the Bid Number of Snowplow Trucks

The Prospective Contractor shall perform a specific calculation to determine the number of snowplow trucks required in his Proposal. Terms of the calculation are shown below:

(a) Factors Necessary for Calculation

Base Number of Snowplow Trucks: The Special Provisions identify a “base number” of snowplow trucks established by the Department for each CMA. The base number of snowplow trucks will be the number specified for a CMA or the cumulative total for combinations of CMAs, depending on the number of CMAs contained in the Prospective Contractor’s Proposal.

Base Truck Demand Factor: The Special Provisions identify a “base factor” for each CMA. The base factor will be that number specified for a CMA or the cumulative total for combinations of CMAs, depending on the number of CMAs contained in the Prospective Contractor's proposal.

Proposed Truck Demand Factor: The Contractor shall calculate the “Proposed Truck Demand Factor” in accordance with the document entitled “Winter Service Delivery Details” included in this RFP.

(b) Formula for Calculating the Proposed Number of Snowplow Trucks

The Prospective Contractor must calculate the Proposed Number of Snowplow Trucks using the following formula:

$$\left\{ \frac{\text{Proposed Truck Demand Factor}}{\text{Base Truck Demand Factor}} \right\} \times (\text{Base Number of Snowplow Trucks})$$

This is the minimum number of snowplow trucks, in all categories, that the Prospective Contractor must include in his Unit Price Schedule.

The formula may not provide a whole number of trucks, but rather a fraction remainder of a truck. The Prospective Contractor may round up or down, provided other requirements specified in the CMA are met.

For Proposals consisting of more than once CMA, a single snowplow truck can work in one or more than one CMA. However, the snowplow truck cannot be “counted” more than once in the Proposal, regardless of where it works. Each snowplow truck shall be assigned only once, in the CMA where it is stored.

4.6.4.2.2 Other Considerations Affecting the Number of Snowplow Trucks in a Proposal

The Special Provisions specify a minimum number of snowplow trucks required for each CMA.

The Prospective Contractor calculates the proposed number of trucks using the formula specified in the previous subsection. However, depending on the distribution of the truck storage locations and the requirements in the Special Provisions, the number of trucks calculated may not meet all the requirements for snow/ice control.

If this occurs, the Prospective Contractor shall adjust the number of trucks accordingly and include within his bid, the number of trucks necessary to meet all requirements.

The total number of snowplow trucks proposed shall include the number of single axle snowplow trucks identified in the Special Provisions. If the Prospective Contractor proposes more single axle trucks than the number identified in the Special Provisions, he must increase the total number of trucks proposed to account for the reduced carrying capacity of the single axle trucks. Equivalencies for the additional single axle trucks are calculated as follows:

$$[(\text{Size of Hopper}) \div (8.5)] = \text{Equivalent number of trucks for a single axle}$$

The Prospective Contractor shall show clearly the additional number of trucks required due to the use of additional single axle trucks.

If a Prospective Contractor proposes snowplow trucks with a hopper size greater than 8.5 cubic metres, the increased capacity will have no impact on the number of trucks he must provide.

4.6.4.3 *Winter Equipment Plan*

The Prospective Contractor shall identify, in the Winter Equipment Plan, the distribution of equipment as shown below:

Equipment	Site 1	Site 2	Site 3
Number of Snowplow Trucks			
Number of Wings			
Number of Tandem Axle			
Number of Single Axle			
Number of One-Way Plows			

Equipment	Site 1	Site 2	Site 3
Number of Two-Way Plows			
Sand Hopper Sizes			
Number of Oversize Units			
Number of Loaders			
Number of Pre-wetting Devices			

This will identify to the Department the exact numbers and types of equipment being proposed.

Also to be identified are any additional attachments that the Prospective Contractor proposes to provide. Typical examples are:

- Other types of plows mounted
- Any other equipment that the Prospective Contractor feels may be of interest to the Department

4.6.4.3.1 Single Axle Snowplow Trucks

The Special Provisions may require the provision of a minimum number of single axle snowplow trucks. The Prospective Contractor must recognize and accommodate the number and location of single axle trucks identified in the Special Provisions.

4.6.4.3.2 Tandem Axle Snowplow Trucks

The Prospective Contractor must propose hopper size of not less than 8.5 cubic metres for each tandem axle snowplow truck with the exception of the following:

If a tandem axle snowplow truck was in service of the Department prior to 1996 winter season, that truck will be accepted “as is” (grandfathered) provided that it has not been modified. Normally, modification is defined as a reduction in carrying capacity since 1996. The unit number of the truck and the hopper number, as assigned to the Department prior to 1996, should be identified. A unit may only be grandfathered in the CMA that it was originally stationed.

4.6.4.3.3 Winter Equipment Plan - Scoring

The Proposal will be evaluated and scored on the following items:

A. Minimum Requirements

- Identify all units.
- Provide the number of wings identified in the Special Provisions.
- Comply with the requirements in the Special Provisions for single axle trucks.
- Are there any tandem axle trucks with less than 8.5 cubic metre hoppers? If so, are they all eligible to be grandfathered? Has the required historical information been included?

- Comply with the requirements in the Special Provisions for the number of two-way plows.
- Provide the number of pre-wetting devices specified in the Special Provisions.

B. Desirable Requirements

- The provision of extra larger hoppers or different truck configurations that may improve service.

Trucks with Increased Hopper Capacity

The Department will look favourably on a Proposal that proposes trucks with hopper capacity greater than 8.5 cubic metres. To qualify, increased capacity hoppers must be manufactured units, not "shop built" extensions to smaller units. Minimum information required on each "oversize" snowplow truck is:

- GVWR (Gross Vehicle Weight Rating)
- Axle Configuration and allowable axle weights
- Capacity of hopper in cubic metres (provide manufacturers brochures showing hopper configuration and stated capacity)

The volume capacity of each truck with a hopper size greater than 8.5 cubic metres will be aggregated for all oversize trucks identified in the Proposal.

The Department will calculate an "additional hopper cumulative factor" by adding the total cubic metre volume of additional hopper capacity (above 8.5 cubic metres for each applicable truck) divided by the total cubic meter volume of the regular 8.5 cubic metre hopper capacity for all CMAs in the Proposal.

Points will be awarded as shown below:

% of Additional Cumulative Hopper Capacity	Points Awarded
0	0
1 – 6	1
7 – 12	2
13 – 18	3
19 – 24	4
25 – 30	5

4.6.4.4 Motor Graders For Winging Shoulders

4.6.4.4.1 Motor Graders For Winging Shoulders Plan

Prospective Contractors shall identify their plan for provision of motor graders for winging shoulders. Specific information required is:

- Number and types of motor graders
- Storage Locations of motor graders

4.6.4.4.2 Motor Graders For Winging Shoulders - Scoring

The Proposal will be evaluated for the following:

- Is the number of graders identified adequate?
- Are they in good strategic locations?
- Is the equipment suitable for the work required?

4.6.4.5 *Motor Graders For Gravel Surface Roadways*

4.6.4.5.1 Motor Graders for Gravel Surface Roadways Plan

The Special Provisions will include a table (and the RFP, a map) of each CMA showing the location of all gravel roads to be maintained. The table will provide information on gravel surface sections as follows:

- weighted average annual daily traffic (WAADT)
- kilometres (from and to)
- number of 10,000 square metres

The Prospective Contractor shall provide a plan for provision of motor grader services on all identified gravel roadways. Specific information required is:

- Identification of motor grader circuits, each of which is to have one assigned motor grader. A circuit is a combination of gravel roadway sections that are normally done consecutively. This means grouping of the sections to minimize the travel between sections. The circuits need to meet the following criteria:

Maximum Utilization:

WAADT	Maximum #10,000 m ² per Grader
<100	120
100 to 500	80
>500	60

The Prospective Contractor’s plan shall show the number of 10,000 m² per WAADT classification assigned to each motor grader in a table similar to the following:

WAADT	#10,000 m ² in Circuit	Equivalent Motor Graders (#10,000 m ² / Max. #10,000 m ²)
<100		
100 to 500		
>500		
Total		Not to exceed 1.0

The “equivalent motor grader” is a calculation showing the motor grader utilization for a particular classification of road in the circuit. It is equal to the number of 10,000 m² in the classification divided by the maximum allowed for that classification. The Prospective Contractor's table will demonstrate that the motor grader circuit meets the maximum utilization criteria.

Maximum Time to Complete:

WAADT	Maximum Time to Complete (hrs)
<100	24
100 to 500	18
>500	12

The Prospective Contractor’s plan shall show for each section in a circuit that the section can be completed within the maximum time allowed for its classification. This will be determined by a calculation using a motor grader deadheading speed of 40 kilometres per hour and a working speed of 10 kilometres per hour. The starting point will be the motor grader storage location. All gravel sections will require two passes, meaning that the motor grader may have to backtrack over the completed section (at 40 kilometres per hour), depending on the location of the subsequent section to be bladed. The Prospective Contractor’s plan shall show this calculation for each section in the circuit, with the “time to complete” accumulating from the previous section.

- Motor grader storage locations by land parcel and the associated deadhaul to the nearest point on the assigned circuit and the travel distance to the nearest point on the highest WAADT classification section in its circuit.
- The length of deadhaul between individual sections of each circuit.
- Proximity of the operator to the grader storage location.

The Proposal will be assessed for the strategic placement of motor graders to determine if the Prospective Contractor’s plan is acceptable and economic for the Department.

4.6.4.5.2 Motor Graders for Gravel Surface Roadways - Scoring

The Proposal will be evaluated and scored for the following:

A. Minimum Requirements

- Demonstrating that the number of motor graders complies with the maximum utilization per grader.
- Demonstrating that each proposed circuit be completed within the maximum “time to complete”.
- Identifying suitable back-up plans for motor grader breakdowns and operator unavailability.
- Identifying specific arrangements for supplemental resources in emergency situations, such as reciprocal agreements, or other types of equipment (i.e. farm tractors, loaders, etc.).
- Identify subcontractor arrangements and how Department work will be prioritized.

B. Desirable Requirements

- Strategically locating motor grader storage locations to the highest WAADT classification section in its circuit.

To evaluate the locations for grader storage, the Department will first categorize the Prospective Contractor's proposed motor grader storage sites as shown in the following table:

Category	Deadhaul (kms) from Storage to Highest Classification Section in Circuit
A	<1.0
B	1.0 to 10
C	10.1 to 20
D	20.1 to 30
E	30.1 to 40
F	>40

If there are two or more sections in the circuit with the same classification as highest, the deadhaul will be measured to the nearest such section.

The distribution of the number of sites in each category will then be calculated as a decimal. Points will be awarded based on the following table:

Category	% in Category (as a decimal)	Multiplication Factor	Points Awarded
A		5	
B		4	
C		3	
D		2	
E		1	
F		0	
Total Points Awarded			

4.6.4.6 *Repair of Winter Equipment*

4.6.4.6.1 Repair of Winter Equipment Plan

The Prospective Contractor shall provide a plan for repair of winter snow/ice control equipment. Specifically, to identify repair locations, facilities, mechanics and the number/distribution of mobile service trucks.

Also, the Prospective Contractor shall identify the pre-winter season preparations for winter snow/ice control equipment.

4.6.4.6.2 Repair of Winter Equipment Plan - Scoring

The Proposal will be evaluated and scored on the following:

A. Minimum Requirements

- Is there at least one service center within the proposed Contract area boundaries? If not, within the boundaries of a nearby existing highway maintenance contract?
- Provide at least one service repair truck for every two CMAs.
- Provide a trained mechanic available for every CMA.
- If mechanical work is subcontracted, what is the nature of the subcontracting agreement concerning prioritizing of work?

B. Desirable Requirements

- If spare snowplow trucks are being provided, indicate the number, and a description of the type, age and storage location of each unit.

Number of Spare Snowplow Trucks

Prospective Contractors that propose to provide spare snowplow trucks, for emergency breakdowns and unforeseen circumstances, will be eligible for additional points.

The Department will calculate “% proposed spare snowplow trucks”, according to the following formula:

$$\% \text{ Proposed Spare Snowplow Trucks} = \left\{ \frac{\text{Total Number of Spare Trucks in Proposal}}{\text{Total Number of Trucks in Proposal}} \right\} \times 100\%$$

Scoring will be based on the following table:

% of Proposed Spare Trucks	Points Awarded
0	0
1 – 2	1
3 - 4	2
5 - 6	3
7 - 8	4
Over 8	5

4.6.4.7 Winter Preparation and Staffing

4.6.4.7.1 Winter Preparation and Retaining Key Personnel Plan

The Prospective Contractor shall provide a plan of his annual preparations for each winter snow/ice control season covering the following items.

- Preparations for equipment servicing repair
- Pre-season tour with equipment operators
- Coordination of Emergency Contacts
- Review procedures
- Pre-season Safety Meeting
- A plan to retain key employees, particularly the equipment operators, for each winter season.
- Training operators on the optimization of salt and sand usage.

4.6.4.7.2 Winter Snow/Ice Control Staff Plan

The Prospective Contractor shall provide a plan covering the following items:

- Ability to contact the Contractor’s staff during "off-hours", for winter storm response
- Pre-winter training of staff
- Training of new staff
- Certification of equipment operators
- Notifying the Department of trained operators, including notification of newly trained operators.

4.6.4.7.3 Salt/Sand Optimization Plan

The Prospective Contractor shall provide a plan indicating how he will ensure that sand and salt use is optimized and how staff involved in snow and ice removal operations will be trained in the plan’s execution. The plan shall include, but is not limited to, the following items:

- Calibration of spread control devices
- Tracking of sand and salt usage

- Optimal sand and salt usage
- Use of pre-wetting technology

4.6.4.7.4 Winter Preparation and Staff Plan - Scoring

The Department will consider the following when evaluating and scoring the plan:

A. Minimum Requirements

- How much training will each new operator receive?
- Will there be pre-season meetings?
- Will there be pre-season inspections and road tours?
- Will a list of the “trained operators” be maintained?
- Will the Department receive timely updates to the “trained operator” list?
- Does the Prospective Contractor have a plan for retaining equipment operators?
- Does the Prospective Contractor commit to training for optimization of sand and salt use?
- Is the Prospective Contractor’s sand/salt optimization plan satisfactory?

4.6.4.8 *Prospective Contractor’s Winter Snowplowing And Sand/Salt Delivery Calculations*

The Prospective Contractor must calculate the winter snowplow truck response time to snowplow each section of highway identified in the Base Highway Table. Details of this calculation and an explanation of the method are contained in the document “Winter Service Delivery - Details” included with this RFP.

4.6.4.8.1 Completion of Contractor Highway Tables

The Prospective Contractor must show (within the Contractor Highway Table) that the entire highway network within the proposed contract area, is covered.

Copies of Base Highway Tables are provided in the Special Provisions and a computer disc is provided to assist the Prospective Contractors in completing the Contractor Highway Table.

4.6.4.8.2 Completion of Contractor Truck Tables

Contractor Truck Tables will summarize the “snowplow truck beats” across the highway network. The Prospective Contractor shall complete these tables carefully to ensure that “running time” and “beat length” are calculated properly and match the requirements identified the Special Provisions.

Copies of Base Truck Tables are provided in the Special Provisions and a computer disc is provided to assist the Prospective Contractors in completing the Contractor Truck Tables.

4.6.4.8.3 Completion of Contractor Time Tables

The Prospective Contractor shall calculate the "times" carefully and assure himself that all requirements are met, as identified in the Special Provisions. If the Contractor's "times" do not meet or better the times specified, the Contractor's score may be reduced or the Proposal deemed as "unacceptable", depending on the nature and extent of the discrepancy.

Computer software is included in the RFP to assist the Prospective Contractor with this task.

4.6.4.9 *Prospective Contractor's Calculation of "% Utilization"*

The Prospective Contractor must calculate the winter snowplow truck beat length, as calculated in "% Utilization" for each snowplow truck identified in the Proposal. Details of this calculation and an explanation of the method are contained in the document "Winter Service Delivery – Details" included with this RFP.

Computer software is included in this RFP to assist the Prospective Contractor with this task.

4.6.4.10 *Prospective Contractor's Calculation of "Network LOS Cumulative Time"*

The Prospective Contractor must calculate the cumulative winter snowplow truck plowing response time, for each roadway class. Details of this calculation and an explanation of the method are contained in the Special Provisions.

In the case where a Proposal consists of multiple CMAs, the times may be grouped together provided the cumulative time requirements are met in all roadway classes, as identified in the Special Provisions.

Computer software is included in this RFP to assist the Prospective Contractor with this task.

4.6.4.11 *Winter Snowplowing, Sand/Salt Delivery and % Utilization - Scoring*

A. Minimum Requirements

The Proposal will be evaluated for the following:

- Accuracy
- Completeness
- Appropriateness
- Compliance with Special Provisions

Minor discrepancies will not result in any reduced scoring. Major discrepancies may result in the rejection of the Prospective Contractor's Proposal, if the Department is of the opinion that the Proposal no longer meets the spirit or intent of the RFP.

4.6.5 Safety Plan

The Proposal will be evaluated and scored with regards to safety from the standpoint of the Prospective Contractor's policies, emergency response, safe work practices, training, and work site traffic accommodation, in carrying out the Work.

A. Minimum Requirements

4.6.5.1 Safety Program

- The Prospective Contractor shall submit a written emergency preparedness plan for public safety which deals with environmental disasters, road closures, smoke hazards and dangerous goods spills and which identifies the appropriate contacts.
- The Prospective Contractor shall submit a written plan in place to ensure proper training for key maintenance activities such as sanding, snowplowing, and crack sealing.
- The Prospective Contractor shall submit a written policy for conducting safety meetings, which encompasses toolbox meetings, regularly scheduled safety meetings, and pre-seasonal meetings, and which requires the minutes and an attendee list be recorded.
- The Prospective Contractor shall describe safe work practices and job procedures for key activities where his staff may be at risk from the travelling public, or the travelling public at risk from the work being conducted. Key activities would be snow and ice control, crack sealing, pothole patching, and pavement repair.
- The Prospective Contractor shall submit a written fatigue management plan covering activities which would typically involve extended hours of work by employees, operators or subcontractors.

4.6.5.2 Traffic Accommodation

- The Prospective Contractor shall describe how he will orientate and update his staff to the Department's most current version of Traffic Accommodations in Work Zones manual.
- The Prospective Contractor shall describe how he will ensure any subcontractors will follow the safe work practices and job procedures outlined by the Prospective Contractor.

4.6.6 Environmental Management

In the Snow/Ice Control Plan, the Prospective Contractor provides details for facility sites. In the long term interest of maintenance contracting, it is imperative that all sites, both publicly and privately owned, are kept clean and responsibly managed from an environmental standpoint.

A. Minimum Requirements

4.6.6.1 *Environmental Management Plan - Government-Owned Facilities and Facilities Previously Owned by the Government*

For each government-owned facility leased from the Department, the Prospective Contractor shall provide an Environmental Management Plan in accordance with the provisions of the Standard Lease Agreement and the “Environmental Management Plan Guidelines Highway Maintenance Yards” documents included in this RFP.

The Prospective Contractor shall also provide an Environmental Management Plan in accordance with the provisions of the “Environmental Management Plan Guidelines Highway Maintenance Yards” for each facility that was previously owned by the government. Environmental Management Plans shall be completed and supplied to the Department’s Designate as part of the Mobilization Plan.

The Environmental Management Plans must be submitted to the Department Designate for approval.

4.6.6.2 *Materials Storage*

The following materials shall be stored and/or disposed of in an environmentally responsible manner:

- Pesticides/herbicides
- Paints and solvents
- Liquid asphalts
- Cold-mix asphalts
- Engine and hydraulic oils
- Anti-freeze
- Fuel Storage
- Batteries
- Creosote posts

The Prospective Contractor shall provide a complete listing of materials that will be kept at each site and a plan detailing how the sites will be managed responsibly. A generic plan for material storage is acceptable.

4.6.6.3 Environmental Maintenance Operations Plan

The Prospective Contractor is advised that the Department intends to work with environmental regulatory agencies and Highway Maintenance Contractors to develop a framework document to be used by all Highway Maintenance Contractors to prepare Environmental Maintenance Operations (EMO) plans. It is envisioned that EMO plans will consist of plans and/or written procedures which will detail the processes the Highway Maintenance Contractor intends to follow for each highway maintenance activity, to ensure the activities do not adversely impact the environment.

Once the Environmental Maintenance Operations Framework document is completed, all Highway Maintenance Contractors will be required to prepare an EMO plan for their respective contracts.

B. Desirable Requirements

4.6.6.4 Covered Mixed Sand/Salt Storage Structure – Contractor Facilities

The Department will look favorably on the provision of storage structures for mixed sand/salt stockpiles. When such structures are provided, they shall comply with the following:

- Mixed sand/salt storage structures shall be constructed on an impermeable floor of asphalt, concrete, or other suitable material that is graded away from the center of the structure for drainage purposes. The pad shall extend around the exterior of the structure and be graded away from the building, such that runoff is prevented from entering the structure. The roof and exterior of the structure shall be constructed of waterproof material, such that precipitation and moisture are prevented from entering the structure.
- A mixed sand/salt storage structure shall have a minimum capacity of 50% of the annual provisional quantity for each particular site. The annual provisional quantities for each site are calculated by the Prospective Contractor in this snow and ice control plan.

A Contractor may construct mixed sand/salt storage at each site to a maximum size of his choosing. However, for proposal evaluation purposes, only a capacity of up to 50% of the annual provisional quantity for each size will be counted.

Mixed sand/salt storage capacity will be calculated as a percentage of the total provisional quantity for the CMA as follows:

$$\frac{\text{\% of Total Provisional Quantity Covered}}{\text{\% of Total Provisional Quantity Covered}} = \frac{\text{Sum of Covered Mixed Sand/Salt Storage Capacity at Each Site (Tonnes)}}{\text{Total Provisional Quantity of Mixed Sand Salt Storage for the CMA (Tonnes)}}$$

Points will be awarded based on the following table:

% of Total Provisional Quantity Covered	Points Awarded
0	0
1 – 9	1
10 – 19	2
20 – 29	3
30 – 39	4
40 - 50	5

For the purpose of tender evaluation only, the Department will credit the value of the saving accrued due to covered sand storage, for facilities purposed by the Contractor, in Envelope No. 2. Shown below is a table for adjustment of Envelope No. 3 pricing of Indirect Operating Cost (IOC), for Proposal evaluation purposes only.

Calculation Tables for IOC Adjustment				
Covered sand capacity in tonnes (cannot exceed 50% of Annual Provision Quantity for any site)	X	\$2.35 per tonne	=	Annual savings in mixing per tonne (A)
3% of the above noted quantity for savings in salt remixing	X	\$50 per tonne	=	Annual savings in salt supply due to remixing (B)
Total Annual Savings \$ = (A) + (B)				
IOC Adjustment per month (Total Savings \$)	÷	12 months	=	Monthly credit adjustment for IOC

This adjustment is for Proposal evaluation purposes only, no adjustment of IOC will actually be made, after award of the tender. During the term of the tender, no supplemental payments will be made for the value of any saving accrued due to covered winter sand storage.

4.6.7 Previous Performance of the Prospective Contractor

Prospective Contractors that hold or have held a Department highway maintenance contract will be recognized for the performance of their respective contracts.

Existing Contractors and Previous Contractors will be scored by the applicable Department’s Operations Manager, using the Performance Measures System. Points will be awarded based on the following table.

Existing Contractor's Performance Score (%)	Points Awarded
95 - 100	5
90 - 94	4
81 - 89	3
71 - 80	2
61 - 70	1
Under 60	0

Prospective Contractors that have more than one existing highway maintenance contract will have their score averaged equally between contracts.

Prospective Contractors with full highway maintenance contracting experience in other provinces will also be given consideration. Such contractors with a minimum of three years in full highway maintenance contracting will be awarded 2 points and those with a minimum of 3 years of highway construction experience will be awarded 1 point. A maximum of 2 points will be awarded for "Previous Experience". To qualify, appropriate supporting documentation from the applicable jurisdiction must be provided.

- Type of work included in the contract
- Contract value
- Number of years the contractor has contracted with the jurisdiction
- Are the equipment and/or facilities supplied by the jurisdiction or the contractor?
- Is direct supervision of the work provided by the contractor or the jurisdiction?

Prospective Contractors who do not meet these “experience” criteria will not be awarded points.

Prospective Contractors who do not have a highway maintenance contract with the Department at the time of this RFP are asked to provide details of their highway maintenance/construction contracting experience, in their respective Proposals.

4.7 DETAILS FOR ANALYSIS OF PRICING

The individual components of Envelope 3 will be assessed using the key points outlined in this section as the basis for evaluation. The evaluation will be based on the bid prices provided by the Prospective Contractor in the Unit Price Schedule. The Department will assess the Prospective Contractor’s total price for the work (in a specific Contract Maintenance Area) and also test the prices for specific components of the work under a variety of scenarios. The results obtained then will be compared to all other Proposals (for that Contract Maintenance Area).

In addressing the content of Envelope 3, the Prospective Contractor shall note that it is a competitive process and that the Department is attempting to determine the best overall value for money for the duration of the Contract. The process will also enable the Department to confirm which of the Proposals provides the Department with the best value in the event of cyclical variations in the actual work quantities and will also conduct an for unbalanced bid check.

4.7.1 Total CMA Cost

For each Contract Maintenance Area in a Proposal, the Total CMA Cost will be determined using Provisional Quantities and bid prices. This value will include fixed costs and provisional costs.

The Proposal providing the lowest Total CMA Cost will score 725 points. The remaining CMAs in each Proposal will be scored using the following formula:

$$\text{Total CMA Cost Points} = 725 - \left\{ \frac{\text{Total CMA Cost} - \text{Lowest Total CMA Cost}}{\text{Lowest Total CMA Cost}} \right\} \times 3500$$

This process will reward those Proposals, which provide the lowest Total CMA Cost by giving them a score of 725 points.

4.7.2 Scenario #1

This scenario will test the Prospective Contractors bid prices for winter operations and will be based on a single winter season in which severe conditions have been encountered which will result in a **30% increase** in winter work quantities above that indicated in the Unit Price Schedule (for each Contract Maintenance Area). The total value for the scenario will be determined using calculated work quantities and the Proposal bid prices.

The Proposal providing the lowest scenario value will score 5 points and the one providing the highest scenario value will score 1 point.

The remaining Proposals will be scored by dividing the range between the lowest scenario value and the highest scenario value into three equal parts. Each of these parts will then be assigned a value between 4 and 2 points with the part in the lowest scenario value being assigned a score of 4. The remaining parts will receive diminishing scores, as the scenario value becomes higher.

The remaining Proposals will then be compared to this distribution and scores assigned based on the range they fall within. This process will reward those Proposals, which provide the lowest scenario value by giving them a score of 5 points. As an example, the second best Proposal, which may not provide as low a price, may only score 3 points.

4.7.3 Scenario #2

This scenario will test the Prospective Contractors bid prices for summer operations and will be based on a single summer season in which the anticipated work load has been decreased which results in a **20% decrease** in summer work quantities below that indicated in the Unit Price Schedule (for each Contract Maintenance Area). The total value for the scenario will be determined using calculated work quantities and the Proposal bid prices, where applicable, for the following categories of work:

- Crack Sealing
- Pot Hole Patching
- Line Painting
- Regravelling
- Mowing

The Proposal providing the lowest scenario value will score 5 points and the one providing the highest scenario value will score 1 point.

The remaining Proposals will be scored by dividing the range between the lowest scenario value and the highest scenario value into three equal parts. Each of these parts will then be assigned a value between 4 and 2 points with the part in the lowest scenario value being assigned a score of 4. The remaining parts will receive diminishing scores, as the scenario value becomes higher.

The remaining Proposals will then be compared to this distribution and scores assigned based on the range they fall within. This process will reward those Proposals, which provide the lowest scenario value by giving them a score of 5 points. As an example, the second best Proposal, which may not provide as low a price, may only score 3 points.

4.7.4 Scenario #3

This scenario will test the Prospective Contractors bid prices for winter and summer operations which will result in a 20% decrease in winter work quantities and a 30% increase in summer quantities as compared to the Unit Price Schedule (for each Contract Maintenance Area). The total value for the scenario will be determined using calculated work quantities and the Proposal bid prices for the winter and the summer. The summer categories of work are as detailed in Scenario #2 above.

The Proposal providing the lowest scenario value will score 5 points and the one providing the highest scenario value will score 1 point.

The remaining Proposals will be scored by dividing the range between the lowest scenario value and the highest scenario value into three equal parts. Each of these parts will then be assigned a value between 4 and 2 points with the part in the lowest scenario value being assigned a score of 4. The remaining parts will receive diminishing scores, as the scenario value becomes higher.

The remaining Proposals will then be compared to this distribution and scores assigned based on the range they fall within. This process will reward those Proposals, which provide the lowest scenario value by giving them a score of 5 points. As an example, the second best Proposal, which may not provide as low a price, may only score 3 points.

4.7.5 Unbalanced Bid Check

For the unbalanced bid check component valued at 5 points, a comparison will be made of the Prospective Contractor's Proposal unit prices against the existing provincial average unit prices, where applicable. The intent is to look at the degree of change in these unit prices, assess added risk to the Department and check for unbalanced pricing.

Proposals, which present the least risk to the Department with balanced prices, will score the best when compared to the other proposals.



WINTER SERVICE DELIVERY

DETAILS

March 1, 2002

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Introduction

In order to ensure delivery of appropriate “Levels of Service” (LOS) to the Provincial Highway network, without the risk of loss of service to the travelling public, it is important that Alberta Transportation be able to compare contract proposals to a pre-determined base case.

In their proposals, prospective contractors will select locations for their sand/salt sites and the storage locations of their snowplow trucks. In planning and selecting their sites, it is very important that their allocation of resources (stockpiles and trucks) be well placed and strategic to the operation to ensure that they are able to deliver service that meets or better the established base case level. In order to achieve this goal, the required level of “WINTER SERVICE DELIVERY” is identified by the base case data provided in the Request for Proposal (RFP) for each Contract Management Area (CMA). A base case number of Snowplow units is allocated and identified in the RFP for each CMA, along with “WINTER SERVICE DELIVERY” allowable delivery times for plowing and sanding/salting. In order to define the requirements on the new highway network, snowplow trucks are assigned based on activity requirements for each section of Highway based on its highway class, which is determined by Average Annual Daily Traffic volume (AADT).

In order to present and order the data in an easily understood fashion, a breakdown was developed as shown below:

Basic Objectives & Strategy

The following is list of objectives the Department wishes to achieve in “Snow/Ice Delivery”:

- Retain overall “Level of Service”
- Encourage development of economic maintenance facilities
- Encourage prospective contractors to find efficient methods for snow and ice control work
- Tender selection must be “Objective”
- Efficiency must be “built-in” the tender
- Risk is shared, but the Province carries the majority of the risk for winter weather
- Bidding must not be excessively complicated
- Electronic aids to permit “Iterations” are supplied
- The Province does not want to better service, just the same service (but no less), at the lowest possible cost.
- Give prospective contractors room to “Move” within the specifications, to operate in the most efficient manner possible.

Strategic Placement of Economic Facilities

The Department has devolved ownership of maintenance facilities to encourage development of other sites, within the following guidelines:

- New sites must be affordable and not add unduly to indirect operating cost.
- Site locations must encourage an efficient maintenance operation
- Sites must be strategically placed to provide service to the public
- Prospective bidders will be able to balance site placement with trucks in the RFP
- Within a highway class, all highways are treated in the same manner.
- Overall in classes or groups of classes, the maximum allowable time to finish work remains the same.
- Where appropriate, some existing facilities and sites are acceptable and will be available for lease by the successful contractor.

Basic Elements of “Level of Service” (LOS)

Different proposals will be received from Prospective Contractors. Each proposal must be compared to determine the best snow/ice control plan. The elements of comparison are listed below:

- Proposals are compared under the same conditions.
- Actual conditions may be different.
- A standard truck configuration is used for all evaluations.
- Beats for plowing are the same as sand application.
- All trucks drive the same speed.
- All trucks apply sand at the same rate.
- Specific methods for calculation are the same.
- Plowing and sanding application “Time to complete” or delivery time is used for comparison
- The ‘Base case’ is documented in the request for proposal package.

Highway Class

To protect the “Base case” or existing level of service, all roadways are split into sections:

- Each sections requires similar maintenance over it’s entire length
- Each section has a “highway class”

Class of Highway	Traffic Volume(AADT)
A	>15,000
B	7,000 –15,000
C	5,000 –7,000
D	2,000 –5,000
E	1,000 – 2,000
F	500 –1,000
G	100 – 500
H	<100

- Maximum allowable delivery time for plowing & sanding/salting will be determined for each section, by highway class.

Definitions of “different but similar” overall

Competitive proposals will be compared in the following areas:

- The delivery time for sanding and salting
- Delivery time is documented in the “Base case” standards
- Delivery time for any individual section can vary from the “base case” as long as it remains less than the maximum allowable for that section.
- Delivery time will vary with the physical position of sites, relative to highways, other sites and the suitability of haul roads.
- More than one truck can work on a single section of highway.
- The completion time for the slowest truck in a section will be the delivery time for that section.
- The individual times for each section will be added up in a “cumulative total”.
- Specifications will be provided indicating maximum “cumulative total time” for classes or groups of classes.
- The total of all “cumulative total times” for all classes of highways must be less than total for the “base case”.

Truck Demand Factor

All RFP documents will have a “Base Truck Demand Factor” identified within the Special Provisions section. This factor, as calculated, is equivalent to the haul required to bring one cubic meter of sand over the entire CMA highway network from existing facilities.

The Prospective Contractor, who may have different locations for facilities, is asked to calculate a proposed demand factor in his proposal. This factor is used to evaluate the number of trucks proposed for the contract.

Base number of Trucks

Each RFP for a CMA will identify within the Special Provisions Section a base number of snowplow trucks required within that CMA. A proposal may be for one or several CMAs, and have any number of trucks that satisfy the calculations described below.

Minimum Number of Required Trucks

The Prospective Contractor will be asked to calculate the minimum required number of snowplow trucks required in the proposal. The calculation will be as shown below:

Minimum number of trucks required for the proposal =

$$\{[\text{Proposed Truck Demand Factor}]/[\text{Base Truck Demand Factor}]\} * \text{Base Number of Trucks}$$

An Excel spreadsheet is provided in the tender document to assist the Prospective Contractor in calculation of “Proposed Truck Demand Factor”, using the Main Highway Table worksheet. The minimum number of trucks calculated by the formula above may be rounded up or down at the prospective contractor’s choice, so long as all other requirements are satisfied.

A view of how the electronic spreadsheet looks follows:

		Base Case					Contractor's Propos				
Line #	Highway	Description	2 Lane Equiv. Length	AADT	Distance to nearest stockpile	Demand Factor	Distance to nearest stockpile	Demand Factor	Trucks	Maximum allowable plowing time	Maxir allow sand/ tim
1	16:02	Jasper Park Bdry to To Hwy 40 (N) (km 0.000-19.425)*HOTSPOT*	25.62	3,400	5.2	461.4		328.2	0.6	1.75	2
2	16:02	Town of Hinton, Hwy 40 (N) to Hinton East Valley access (km 19.425-30.945)	27.96	10,200	0.2	396.5		390.9	0.8	2	4
3	16:02	Hinton East Valley access to Cardale Road (km 30.945-43.025)	24.36	4,580	6.8	462.4		296.7	0.6	3	4
4	16:02 & 16:04	Cardale Road to Obed Transfer Site Access (km 43.125-52.020)*HOTSPOT*	18.85	4,580	19.0	535.4		177.7	0.4	1.75	2.1
5	16:04	Obed Transfer Site Access to Galloway Road (km 52.020-28.500)	60.39	4,540	27.1	3460.0		1823.5	1.5	3	4
6	40:28	N. of Luscar to Pullout south of Nine Mile Hill (km 9.225-31.125)	21.90	420	19.7	671.5		239.8	0.2	5	10
7	40:28	Pullout South of Nine Mile Hill to Jct. Hwy. 16:02 (km 31.125-47.647)*HOTSPOT*	16.65	910	3.2	191.9		138.6	0.4	1.25	1.1
8	40:30	Jct. Hwy. 16 to Jarvis Lake Access (km 0.000-15.525)*HOTSPOT*	15.87	1,670	5.2	208.0		125.9	0.3	2	2.1
9	40:30	Jarvis Lake Access to Pinto Creek (km 15.525-57.363)	42.50	1,670	0.1	907.4		903.1	0.9	3	6
10	16:04 & 16:06	Galloway to McPhee's shop (km 28.500-6.525)	55.01	5,100	0.4	1535.1		1513.1	1.5	2	4
11	16:06	Town of Edson, McPhee's shop to Jct 748:02 (km 6.525 - 13.506)	15.36	10,200	0.4	124.1		118.0	0.5	2	4
12	16:06 & 16:08	Jct 748:02 to Pge Rd 105(CMA Bdry) (km 13.506-35.223)	132.75	5,300	0.7	8904.2		8811.3	3.6	2	4
13	47:06	Coalspur to Jct Hwy 16 (km 0.000-58.410)	59.14	760	0.8	1796.1		1748.8	0.7	4	8
14	748:02	Jct. Hwy. 16 to N. of Edson (Includes 25th Cross St) (km 58.410-74.004)	22.59	900	7.4	422.3		255.2	0.5	3	6

The Prospective Contractor is asked to identify all the sources of sand/salt in relation to the highway sections nearby.

The calculation of the minimum number of truck in a proposal of multiple CMAs shall be done in one calculation. The cumulative totals of the “Proposed Truck Demand Factor”, “Base Truck Demand Factor” and “Base number of Trucks” will be used.

Comparing Levels of Service

Highway sections (paved highways only) for a CMA have been classified by AADT, and are listed in the Base case Data provided in the RFP document. Along with the base case data defining the Sections, a distance to the existing stockpile location for sand/salt is given for each section. The “Base Truck Demand Factor” is calculated from this information and is also listed on the base data spreadsheet provided with each RFP.

Section Definition

A section is defined as follows: *A single length of one highway that has a similar traffic volume (AADT), within the same CMA.*

Alternative proposals with different storage locations for sand/salt/trucks will be compared against each other and the established base utilizing exactly the same sections.

Sections are pre-identified for each CMA and will remain the same for the complete analysis.

Allocation of plow trucks (**truck component or % utilization**) will vary from Class to Class. Class A sections have a much larger volume of traffic, and require more (**truck component**) than, say, a Class E with much less traffic.

Note: Assignment of the # of kms per truck for each Class of Highway for each CMA, will be identified in the RFP.

Base case Levels of Winter Service Delivery

In the RFP evaluation process, Alberta Transportation has not specified the locations for sand/salt stockpiles and truck storage. The RFP process permits “room” for the Prospective Contractor to propose the best combination of sites for maintenance facilities.

In order to allow for comparison all proposals will be compared to the established “Base case”.

Department Staff have established the “Base case” for the provincial highway network within a CMA, from which “Levels of Service” requirements were developed. The “Winter Service Delivery” requirements establish benchmarks for each CMA using the following rationale:

- Current shop information known.
- The existing plow truck fleet has known beats and locations.
- Alberta Transportation staff established assignments for each truck in the CMA. This data now forms the base from which the specified requirements for winter snowplowing (**Base Plow Time**) and sanding/salting (**Base Sand Time**) are derived.

Note: Copies of the “Base Case” worksheets for each CMA are included in the RFP.

A view of the “Main Highway Worksheet” was included in the previous section.

Parts of the spreadsheet developed to assist the prospective contractor calculate his minimum number of trucks and plow truck allocation are protected so that they cannot be altered. It is the prospective contractor’s responsibility to ensure that the formulas used to calculate completion times and % utilization in the spreadsheet are not changed from the files given with the RFP.

Comparison of Contractor’s Proposed Delivery of Service

Winter snow/ice control sections will be compared and evaluated in the following manner:

- Minimum number of plow trucks required for the proposal (**Truck demand factor**)
- Time to Plow a section (**Plow Time**)
- Time to Sand/Salt a section (**Sand Time**)
- Maximum lengths of beat assignments for truck in covering all Sections (**% Utilization**)
- Total Time to complete delivery of service to all sections based on roadway Class or group of Classes for each CMA (**Cumulative Network LOS Delivery time**)

NOTE: Calculations for the above Delivery Times utilize common assumptions and mathematical calculations. Delivery time is not necessarily an actual time but a time that measures strategic placement of facilities within the network for comparison purposes. Details of the assumptions and calculations can be found in this document, under “ORGANIZATION OF DATA” – Truck Worksheets.

DEFINITIONS

Basic definitions of the “Levels of Service” requirements based on “Winter Service Delivery” are shown below:

Plow Time

The time it takes a snowplow truck to complete the initial pass of all travel lanes (includes one pass over travel lanes in interchanges, climbing lanes and passing lanes), in the section, measured from the time the trucks start. All trucks drive at an average speed of 46 km/hr at all times (including stops, deadheading, and loading).

Sand Time

The time it takes for snowplow trucks to make one pass of sanding/salting all travel lanes in the section. The maximum time is measured from the time the trucks start until the assigned length of section is treated. All trucks are assumed to travel at an average speed of 46 km/hr when sanding/salting, and 70 km/hr when deadheading, and distribute sand/salt at 330 kg per lane kilometer. The prospective contractor will specify each truck's hopper capacity, which will determine the distance of highway treated per hopper load.

% Utilization (Truck Allocation)

Plow trucks are assigned to work on sections of highway, until the truck is fully committed. The total number of kilometers that a truck can handle varies according to the class of highway sections that the truck works on. Busy roads (i.e. Class A, B and C sections) require more care and attention and have a shorter response time, so any one truck can only look after a few kilometers. Low volume roads (i.e. Class G or H sections) have a longer response time and will not be treated as often, so one truck can look after more kilometers. When a plow truck is assigned to work on a section, the number of kilometers that are assigned in that section will be used to calculate what percentage of the truck's full allocation has been assigned. A truck is over allocated when it has a % utilization greater than 100%. Trucks are usually assigned to a % utilization of between 95% and 105%.

An "Assignment Worksheet" will be specified in the special provisions for each CMA and will include assignment #'s (kms/truck/class) to be used for the allocation of trucks from the minimum number of trucks allowed up to the "Base Case" number specified for that CMA.

In the event the contractor wishes to propose more trucks than the "Base Case" number, he will be allowed to allocate the #'s (kms/truck/class) as he feels most appropriate within the range of a minimum beat assignment of 25 kms per truck and the assigned number of kms for the "Base case" truck allocation per Class for the CMA. Otherwise, the prospective contractor must use the number of kilometers per truck for each class of highway, given in the Special Provisions.

Cumulative Level of Service Delivery Time (by Class)

The time to plow (**Plow Time**) and also to sand/salt (**Sand Time**) for each section is calculated in the “Truck” worksheets and totaled up in the “Time” worksheets. Each Class or group of Classes is assigned a total specified time for completion based on “Base Case” data analysis and all proposals will be required to meet or better the specified total times.

The time to complete any individual section for cumulative LOS will be the running time of the slowest truck to finish that section.

Note: Copies of the “Base Case” worksheets for each CMA are included in the RFP.

Organization of Data

To assist prospective contractors in preparing their bids, a compact disk is included with each RFP. On the disc is a complete set of Excel 97 spreadsheets that should be used to calculate the proposed resources (sand/salt stockpile locations, and number of trucks) for “WINTER SERVICE DELIVERY”. Also included in the spreadsheet file is the “Base Case” data analysis from which the specified requirements were determined.

The entire highway network for each CMA has been broken down into sections based on “Class of Highway” for analysis purposes. A “Base number of Trucks” is specified in each RFP and is the number of trucks assigned to the CMA for the base case analysis.

The Base Case data will be presented and used in preparing the Contract “Winter Service Delivery” proposal in the following way through the use of linked spreadsheet Worksheets:

Highway worksheets

Main Hwy worksheet:

In this worksheet, highways within the CMA are broken into sections. The description of the sections includes the Class of Highway, the 2-lane equivalent length, the existing distance from the Sand/Salt location, as well as the calculation for the “Truck Demand Factor (Base)”.

Allowable (**Plow Time**) and allowable (**Sand Time**) will be included in this worksheet. Links are in place to also display this data in the other worksheets, where appropriate.

Truck Demand Factor

The Contractor's truck demand factor will be calculated in the "Main Hwy Table". The base demand factor is also shown in the "Main Hwy Table", and the "Special Provisions".

"Base Hwy" worksheet:

With this worksheet, all highway sections within the CMA are listed and include the Class of Highway, 2-lane equivalent length and a summary of all the individual snow plow truck assignments shown for the established Base Case. This worksheet clearly shows that the total number of base trucks have been appropriately assigned and the entire network is being serviced with no spots missed.

Note: This spreadsheet summarizes the Base case analysis and is generated automatically through links to the "Truck Worksheets".

Truck worksheets

The purpose of this group of worksheets (Base Plow Truck, Proposed Plow Truck, Base Sand Truck and Proposed Sand Truck) is to facilitate the assignment of each truck into rational and appropriate beats. Assignment of plow trucks to individual sections of highway is accomplished using the "**Truck**" worksheet. Links between worksheets will automatically enter the appropriate data in the "**Sand**" worksheet.

Snow and ice control "Winter Service Delivery" will be compared and evaluated based on the following:

- Time to Plow a section (**Plow Time**)
- Time to Sand/Salt a section (**Sand Time**)

This approach allows for the calculation of the time required for the first pass plowing and sanding/salting each section of highway. All proposals will be evaluated using the same basic spreadsheet file.

Details on the functioning of the spreadsheets for the assignment of Truck Beats, inputting of Data required for the Plowing and Sanding/Salting Delivery Times Analysis follows:

Maps

It is most useful to prepare truck beats using a map. Maps can make what appears to be an extremely complicated situation much easier to manage.

A map of how the Department assigned the “base case” level is provided in the tender documents.

Blank maps for the Contractor to fill out are available.

The RFP requires a map of the proposed truck beats. The only restriction on this map is that it clearly shows the truck allocations in order. Maps can be drawn by computer or coloured by hand. If done by hand, the use of “highlighter pens” is recommended.

Plowing Analysis

Plow Truck worksheets

Allocation of Trucks:

The spreadsheet will automatically calculate the truck component required for each section and accumulate the total for each assignment for each truck.

Once the trucks have been allocated their Assignments for their beat and the required data inputted into the Truck Plowing Worksheet, the spreadsheet will calculate the time to deliver the plowing activity in the following manner:

Data Requirements for Snowplowing Analysis

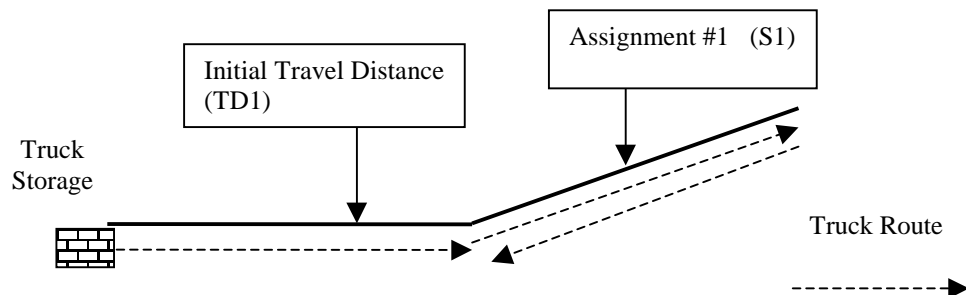
Prospective Contractors are asked to familiarize themselves with the mathematical evaluation and ensure themselves of its accuracy. Factors included in the evaluation are:

- Travel distance (TD1) from truck storage to start of the 1st assignment (S1),
- Length assigned to the truck in each section, and
- Subsequent travel distance(TD2, TD3, TD4, etc.) between assignments.

Travel distance is the distance from where the truck is now, and where the truck will start plowing on the next assignment.

A sketch of the situation is provided below:

Assignment to the first section



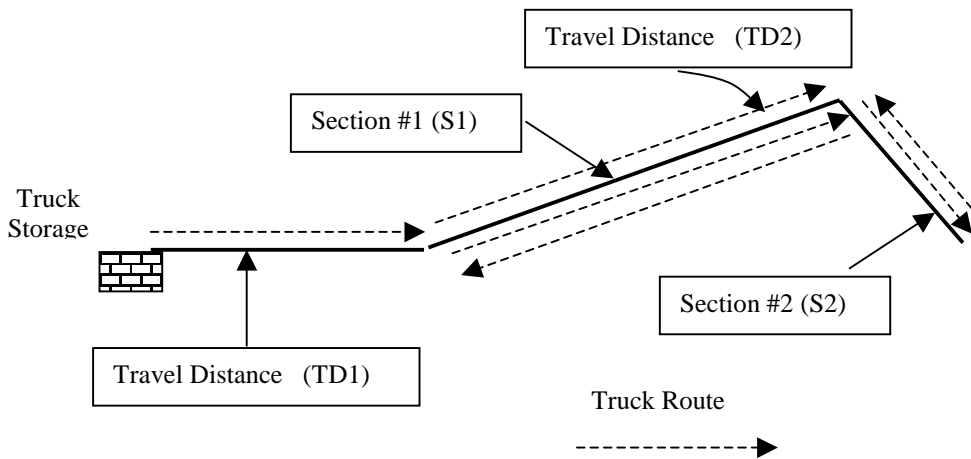
Time calculation:

The time (t_1) to complete is based on the “Travel Distance” (TD1) with an “out and back” pass on Assignment #1 (S1) and assuming the plow truck is going at a constant speed (TS = 46 km/h).

Time Formula: $t_1 = (TD1 + \{2 * S1\}) / TS$

Note that the start point and end point of an assignment are always at the same place.

Assignment to the second section



Time calculation:

Travel time is the sum of travel times for individual assignments, including the time required to move from one assignment to the next. Travel time for the first assignment is calculated as example 1, above. Travel time for the second assignment (t_2) is calculated as:

Time Formula: $t_2 = (TD2 + \{2 * S2\}) / TS$

Total travel time for assignments one and two is calculated as:

$$t_{1+2} = t_1 + t_2 = [(TD1 + \{2*S1\}) + (T2 + \{2*S2\})] / TS$$

If the starting point of the next assignment is the same as the starting point of the assignment just completed, then the travel times between assignments is zero.

Base Plow Truck worksheet

This worksheet shows the individual snowplow truck assignments for the existing, or base case, situation. These assignments include all the paved roads in the CMA. The maximum time to complete delivery (**Plow Time**) for each section and each truck and each assignment has been calculated. Linking between worksheets will summarize these times automatically in the “Plowing Time Worksheet”.

Note: A base map showing the beat assignments, locations where trucks are stationed and the location of materials (Sand/Salt) storage sites is included in the RFP.

A view of the “Base Plow Truck Worksheet” in electronic format follows:

Assignment 1														Assignment 2	
Truck #	Truck Desc	First TR	Total components	Sect #	Hwy	Description	Class	TD	Length	Time	% Distribution	Beat #	Hwy		
1	Hesco 1	3542	180	2	902	Art Hwy 40/40th to Hesco East Valley Rd	B	0.2	20.8	1.22	0.82	3	902		
2	Hesco 2	3555	0.05	4	902 & 904	Catholic Road to Old Transfer Site Access	D	19.3	18.9	1.22	0.45	3	902		
3	Hesco 2	4102	0.08	1	902	Japan Park Bldg to Art Hwy 42 North	D	5.2	25.8	1.22	8.81	8	4828		
4	Hesco 4	5835	0.32	8	904	Old Transfer Site Access to 2 km East of Haguen Road	D	27.9	28.1	1.87	0.88	8	4828		
5	Hesco 5	5752	1.8	7	4028	Palmer South of Mile Mile 4800-Art Hwy 6	E	0.2	8.7	0.78	0.33	8	4828		
6	Edson 1	3756	1.85	8	905	McPhar's Shop to Art Hwy 42 (25th Street)	B	0.4	8.4	0.68	0.48	12	1094 & 908		
7	Edson 2	5490	0.14	14	31802	Wepferhouse Corner to North of Edson	E	8.5	21.1	1.11	0.42	8	31804		
8	Edson 3	3745	1.80	12	905 & 908	Van Creek to Stad's App	C	10.5	36.8	1.87	0.37	8	31802		
9	Edson 4	3097	1.82	10	904 & 908	McPhar's Shop to Bluewilde	C	0.4	10.1	0.58	0.35	8	904 & 908		
10	Edson 5	5454	0.32	5	904	West of Medicine Lodge to East of Intersect Road	D	28.5	27.7	1.82	0.48	11	4708		
11	Edson 1	5228	0.81	10	904 & 908	Art Hwy 4780 to Club Ranch to RR	C	12.0	20.8	2.08	0.94	11	4708		

Proposed Plow Truck worksheet

Every proposal’s methodology section must include a map of truck assignments showing location where the trucks will be stationed, so that actual lengths of “Truck Assignments” and travel distances can be confirmed. In the “Proposed Plow Truck” worksheet, the time to complete delivery of service (**Plow Time**) to each section and each “Assignment” in the assigned beat in hours are calculated. These times will be further summarized automatically in the “Proposed Plow Time” worksheet.

Below is a view of the Proposed Plow Truck worksheet:

	A	B	C	D	Assignment 1						Assignment 2			
	Truck #	Truck Des.	Km/Tk	Total component	Sect. #	Hwy	Description	Class	TD	Length	Accu in Time	% Utilization	Sect. #	Hwy
3	1													
4	2													
5	3													
6	4													
7	5													
8	6													
9	7													
10	8													
11	9													
12	10													
13														
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30														

The Prospective Contractor is required to fill in all unshaded areas on the worksheet. This includes identification of the truck (i.e. truck name), assignments in order using the section number, travel and assigned distances within the section. The worksheet will calculate % allocation and cumulative time to complete for each assignment.

Cross-Over Segment (#99)

Based on the location of truck storage and stockpile sites, a proposal may have trucks that are assigned to sections in more than one CMA. In this case, the prospective contractor must show all assignments for that truck in both spreadsheets.

Because the maximum number of kilometers per truck can vary between CMAs, the % utilization may be different depending on which CMA spreadsheet file it is calculated in. To correct for this, use 'section 99' for the sections that are in the

‘other ‘ CMA when entering assignment data. Automatic spreadsheet calculations for assignments using a ‘section 99’ do not include the % utilization for that assignment, but do include a calculation of cumulative travel time. The end result will be that the truck % utilization in each CMA must be added together manually to get the total % utilization.

Any proposal that has trucks working in more than one CMA are required to use the same truck number (truck name) for all CMAs spreadsheets in the proposal.

Sanding/Salting Analysis

Sand worksheets

The proposal evaluation process automatically copies the assignments given for plowing into the sand truck worksheets. % utilization is not calculated for sanding/salting, since it will be the same as for plowing. The time required to complete sanding/salting will be longer than for plowing, since the truck will have to travel to and from the stockpile site used in that assignment to refill the hopper. The spreadsheet will calculate the length of highway that each truck can sand/salt based on the hopper capacity entered by the prospective contractor. Prospective contractors should refer to specification 52.1.3.4 for minimum hopper sizes, and the special provisions for any exceptions to the minimum sizes.

The specifications allow trucks to be parked at sites that do not have sand/salt stockpiles, just as long as all sections can be treated in the maximum allowable time and the total cumulative times for each class of highway are acceptable. If trucks are not stored at a stockpile site, then the time to travel from the garage to the stockpile site (the mobilization distance) is added to the total time to complete the work.

Travel distance between assignments is measured the same as for plowing, and is filled in automatically.

Once the data for truck assignments has been entered in the “Truck Sand” worksheet, the spreadsheet will calculate the time to complete the delivery (**Sand Time**) of the sanding/salting work in the following manner:

Data requirements for sanding/salting analysis:

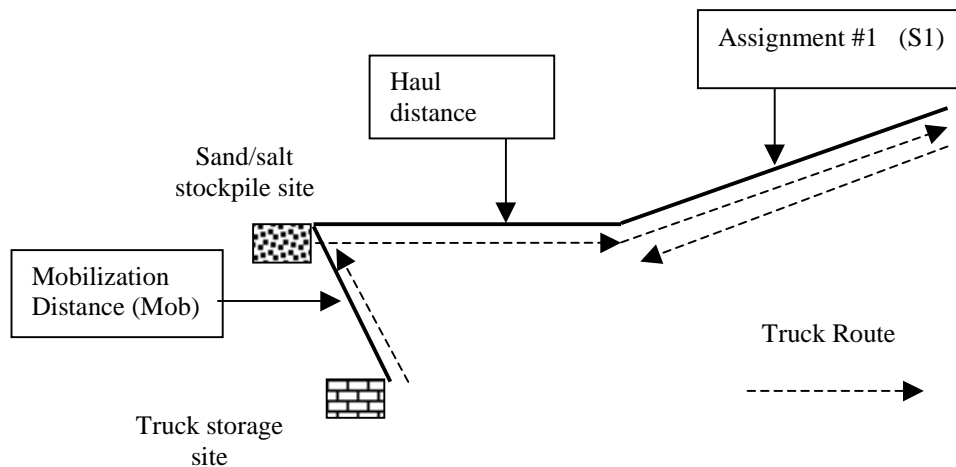
- Distance from truck storage to the sand/salt stockpile site (Mob),
- Distance from sand/salt source to the nearest point in each section (Haul), and

Basic Assumptions:

- Hopper capacity for sanding/salting is entered by the prospective contractor, in m^3 ,
- Sand/Salt usage $0.33 m^3/lanekm$ of roadway,
- The spreadsheet calculates the length of highway that can be treated for the quantity of sand or salt carried,
- To account for the various lengths of the sections and the corresponding number of loads required to complete the section, the spreadsheet calculates the time required to sand/salt the length of section assigned, plus haul time according to the distance from the stockpile site,
- Each assignment will take sand/salt from a single stockpile site, and
- Truck speed is an average 46 km/h when sanding/salting, and a deadhead average speed of 70 km/h. The deadheading speed is used at all times when the truck is not sanding/salting.

Sand/Salt scenarios:

First assignment

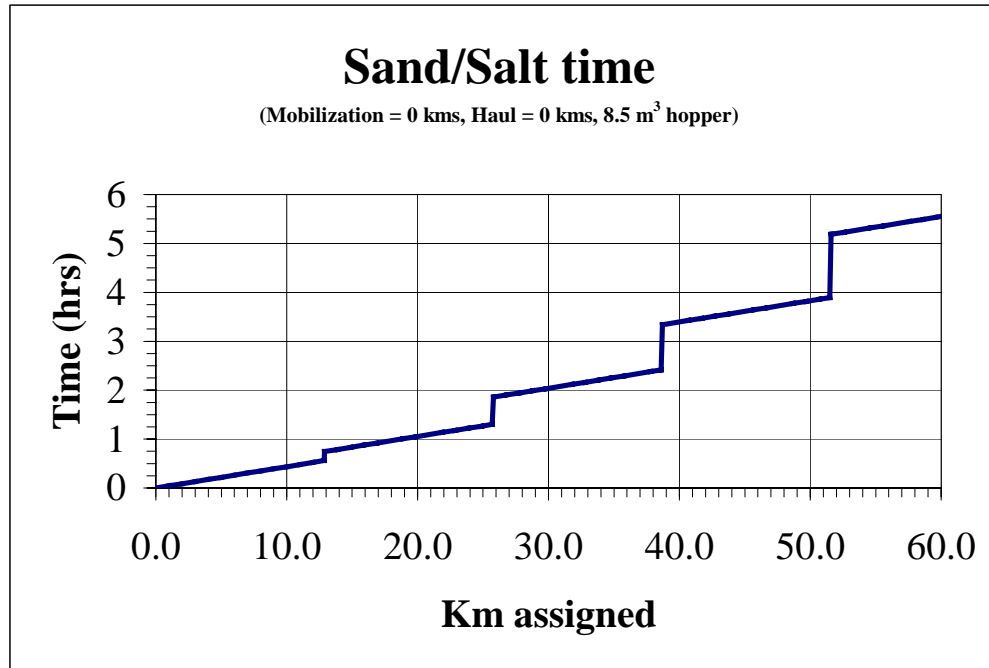


Time calculation for the first assignment:

For the first assignment, the time (t_1) to complete is based on the “Mobilization Distance” (Mob) from the truck storage site to the sand/salt stockpile, the “Haul Distance” (Haul), Maximum length of highway that can be treated using the full

hopper capacity (MH), and the assigned length in the section (S1). The longer the assigned length, the more trips are needed back to the stockpile to refill the hopper. Deadheading time is calculated in two parts: the time spent deadheading within the section, and the time spent deadheading from the start of the section to the stockpile site.

The graph below shows an example of the time required to treat different assigned section lengths:



This graph shows how, as the time spend deadheading within the section increases, the overall time increases exponentially.

Time Formula for first assignment (names and symbols are Excel functions):

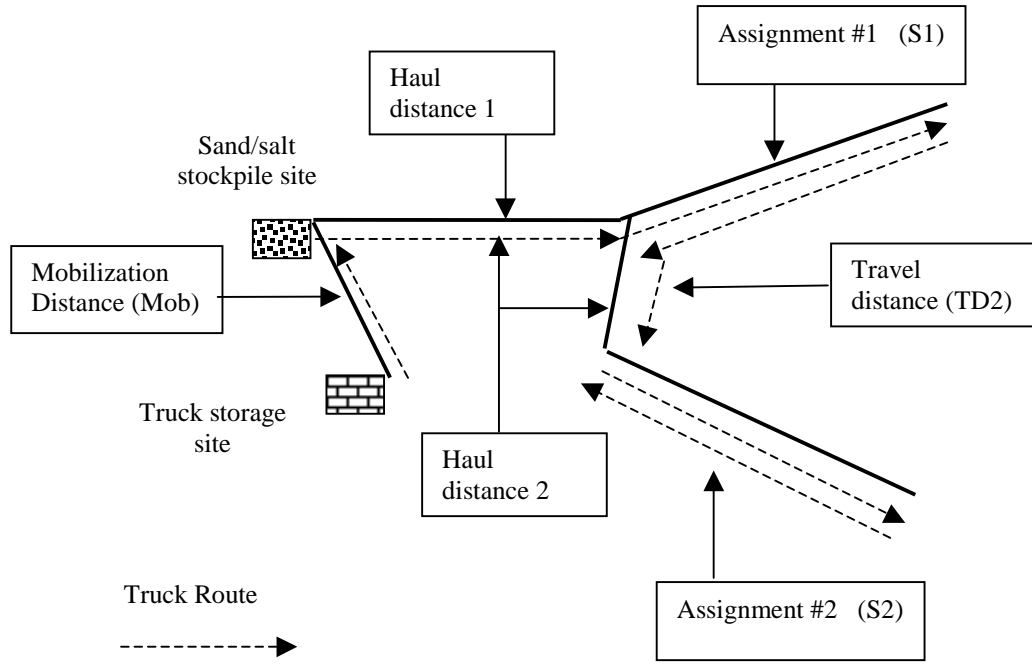
Maximum length of highway that can be treated using the full hopper capacity (MH) is:
 $MH = [\text{Hopper size} / 0.33 \text{ m}^3 \text{ per lane km}] / 2$

Number of loads to treat the first assignment (NL) is:
 $NL = \text{rounddown}(S1/MH)$

Distance traveled (d₁) is:
 $d_1 = \{ \text{Mob} + \text{Haul} + (NL^2 * MH) + (2 * NL * \text{Haul}) \} + \{ 2 * \text{Assigned length} \}$

Time to treat the first section (t₁) in hours is:
 $t_1 = \{ \text{Mob} + \text{Haul} + (NL^2 * MH) + (2 * NL * \text{Haul}) \} / \text{deadhead speed} + \{ 2 * \text{Assigned length} \} / \text{sanding speed}$

Second and subsequent assignments



After the first assignment, there may be sand/salt left in the hopper that will be used at the start of the next assignment. The spreadsheet will calculate the quantity of sand/salt remaining in the hopper at the end of each assignment, and that quantity will be used to determine the number of loads needed in the next assignment. Mobilization distance only applies to the first assignment, but there may be travel distance (shown as TD2 in the drawing above) between assignments. This travel distance is automatically entered from the Proposed Plow Truck worksheet.

The number of lane kilometers that can be treated with the sand/salt left in the hopper at the end of the previous assignment (LeftoverKm) is:

$$\text{LeftoverKm} = \{(\text{NL}_{\text{previous}}) * \text{MD} + \text{quantity in hopper at start of previous assignment}\} - \{2 * \text{previous assignment length}\}$$

The next assignment may be short enough that the material left in the hopper is sufficient to do the complete next assignment without reloading the hopper.

The number of loads required for the next assignment (NL_{next}) is:

If

(next assignment length) \leq LeftoverKm, then $NL_{next} = 0$

Elseif

(next assignment length) \leq LeftoverKm + MH, then $NL_{next} = 1$

Elseif

$NL_{next} = 1 + \text{rounddown}([\{\text{next assignment length}\} - \text{LeftoverKm}] / \text{MH})$

Using NL_{next} , the time required to treat a section is calculated as:

Distance traveled in section_i (d_i) is:

$d_i = \{TD_i + \text{Haul} + (NL_{next}^2 * MH) + (2 * NL_{next} * \text{Haul})\} + 2 * \text{Assigned length}$

Time to treat the first section (t_i) in hours is:

$t_i = \frac{\{TD_i + \text{Haul} + (NL_{next}^2 * MH) + (2 * NL_{next} * \text{Haul})\}}{\text{deadhaul speed}} + \frac{(2 * \text{Assigned length})}{\text{sanding speed}}$

These formulae are used in the spreadsheet provided to prospective contractors. The only data that the prospective contractor must enter is the mobilization and haul distances.

Base Sand Truck worksheet

This worksheet shows the individual snowplow/sanding truck assignments for the existing or base case situation. These assignments include all paved roads in the CMA. Time to complete delivery (**Sand Time**) for each section and each truck assignment will be calculated, in hours worked. Links in the spreadsheet will summarize these times automatically in the “Sand Time” worksheet.

Note: A base map showing the beat assignments, locations where trucks are stationed and the location of materials (Sand/Salt) storage sites is included in the RFP.

A view of the electronic “Base Sand Worksheet” follows:

Truck #	Truck Description	Hopper Size (m3)	2LEkin treated by one hopper load	Sect. #	Hwy	Description	Mob	Haul	Length
1	Hinton 1	8.5	12.88	2	16:02	Jct Hwy 40 North to Hinton East Valley Exit	0.0	0.2	27.86
2	Hinton 2	8.5	12.88	4	16:02 & 16:04	Caridale Road to Obed Transfer Site Access	0.0	19.0	18.85
3	Hinton 3	8.5	12.88	1	16:02	Jasper Park Entry to Jct Hwy 40 North	0.0	5.2	25.82
4	Hinton 4	8.5	12.88	5	16:04	Obed Transfer Site Access to 2 km East of Hargwen Road	0.0	27.9	29.05
5	Hinton 5	8.5	12.88	7	40:28	Pulout South of Nine Mile Hill to Jct Hwy 16	0.0	3.2	18.65
6	Edson 1	8.5	12.88	11	16:06	McPhee's Shop to Jct 748.02 (25th Street)	0.0	0.4	15.36
7	Edson 2	8.5	12.88	14	748:02	Weyerhaeuser Corner to North of Edson	0.0	8.9	21.09
8	Edson 3	8.5	12.88	12	16:06 & 16:08	Wolf Creek to Stad's App	0.0	18.5	35.95
9	Edson 4	8.5	12.88	10	16:04 & 16:06	McPhee's Shop to Branch Inn	0.0	0.4	13.05
10	Edson 5	8.5	12.88	5	16:04	West of Medicine Lodge to East of Hargwen Road	0.0	28.8	27.74
11	Robb 1	8.5	12.88	10	16:04 & 16:06	Jct. Hwy 47.06 to Dandurand Pt	58.1	6.9	20
12	Carrot Creek 1	8.5	12.88	12	16:06 & 16:08	Club Nojack to RR 105	0.0	15.1	27.2
13	Carrot Creek 2	8.5	12.88	12	16:06 & 16:08	RR 140 to Club Nojack	0.0	0.7	37
14	Carrot Creek 3	8.5	12.88	12	16:06 & 16:08	Stad's Approach to RR 140	0.0	4.8	10.4
17		8.5	12.88						
18		8.5	12.88						
19		8.5	12.88						
20		8.5	12.88						
21		8.5	12.88						
22		8.5	12.88						
23		8.5	12.88						
24		8.5	12.88						
25		8.5	12.88						
26		8.5	12.88						
27		8.5	12.88						

Proposed Sand Truck worksheet

This worksheet will be completed and included in the Contractor’s “Envelope No: 2” methodology component of his tender submission. The methodology section must also show the truck assignments on a map that also shows locations where trucks are stored and stockpile sites. These maps will be used to check the lengths of “Truck Beat Assignments” “Haul Distances” and “Travel Distances”. In the “Proposed Sand Truck” worksheet, the time to complete sanding/salting (**Sand Time**) for each section will be calculated, in hours. These times will be further summarized automatically in the “Proposed Sand Time” worksheet.

Following is a view of the “Proposed Sand Truck” worksheet, in electronic format:

1	A	B	C	D	Assignment 1							Assignment 2				
2	Truck #	Truck Description	Hopper Size (m3)	2LEKm treated by one hopper load	Sect. #	Hwy	Description	Mob	Haul	Length	NL	Accum Time	2LEKm remaining in hopper	Sect. #	Hwy	Desc
3	1		8.5	12.88												
4	2		8.5	12.88												
5	3		8.5	12.88												
6	4		8.5	12.88												
7	5		8.5	12.88												
8	6		8.5	12.88												
9	7		8.5	12.88												
10	8		8.5	12.88												
11	9		8.5	12.88												
12	10		8.5	12.88												
13			8.5	12.88												
14			8.5	12.88												
15			8.5	12.88												
16			8.5	12.88												
17			8.5	12.88												
18			8.5	12.88												
19			8.5	12.88												
20			8.5	12.88												
21			8.5	12.88												
22			8.5	12.88												
23			8.5	12.88												
24			8.5	12.88												
25			8.5	12.88												
26			8.5	12.88												
27			8.5	12.88												

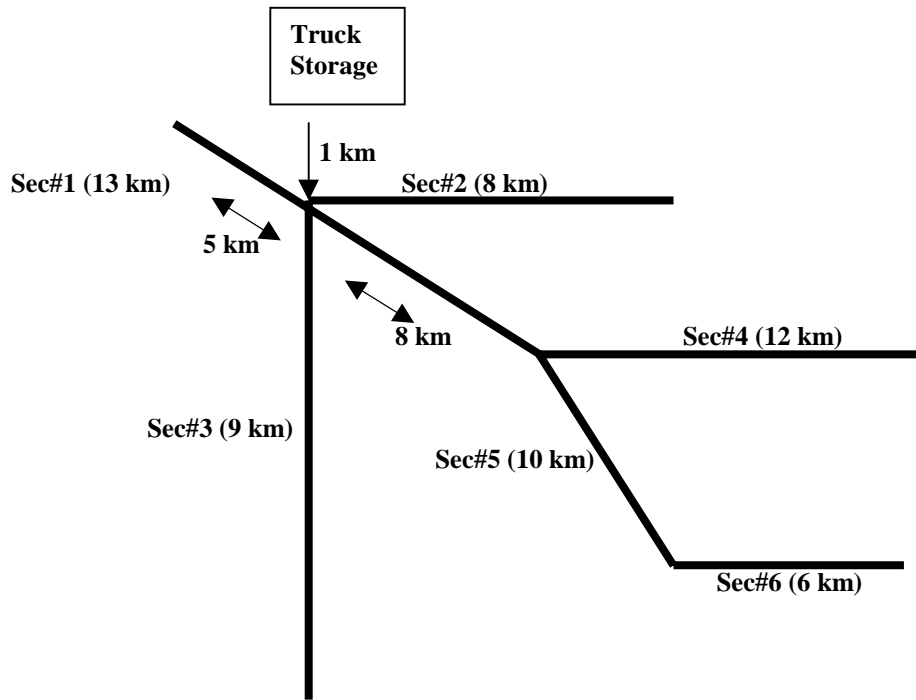
The Prospective Contractor is asked to fill the columns that are not shaded, with the mobilization and haul distances for the first assignment, and travel and haul distances for subsequent assignments.

A contractor cannot use more than one stockpile site per assignment. Any plow trucks that cross CMA boundaries must have the appropriate haul/travel and assigned lengths in both CMA spreadsheets.

Example of Truck Worksheet Data Requirements

Example of Plow Truck worksheet data requirements

Following is a typical situation that can arise, for a truck beat, for a snow plow analysis. The correct answers are provided later on:



Step A): Order the Sections As they are Completed

In completing the entering of the required data the first step is to enter in the section number for the assignment.

Assignment Number	Section Number
1	4
2	5
3	6
4	1
5	2
6	3

Step B): Calculate the Length of Each Assignment

An equivalent 2 lane km length is then selected as the assignment and entered. The computer will calculate and automatically display the accumulated truck component for each assignment.

Step C): Describe Each Assignment

A brief description can be entered for each assignment. The plow truck always ends up at the same location that it started; in other words, all assignments are “round trip”.

Step D): Show Travel Distances

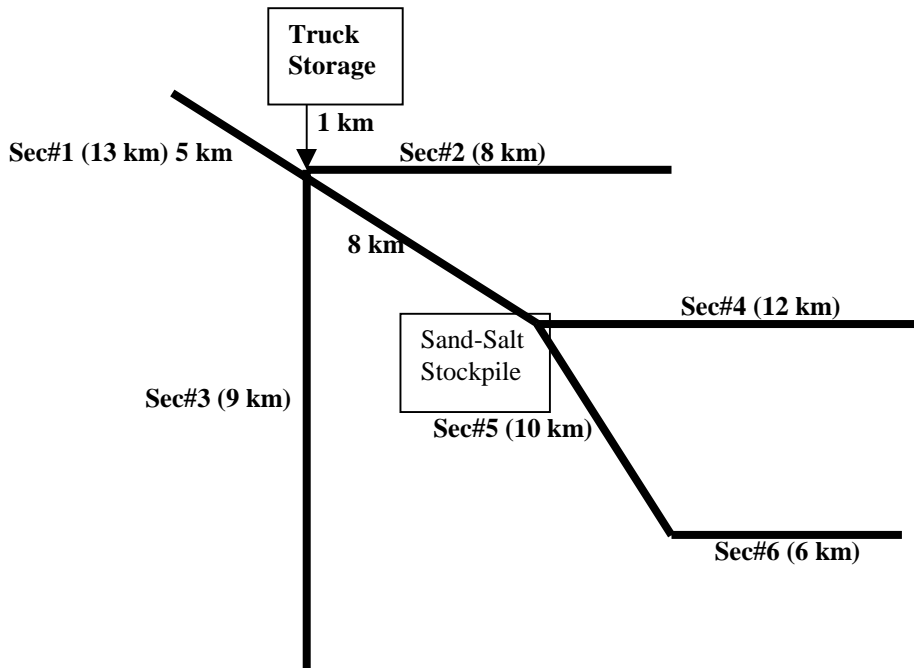
The travel distances (TD’s) are then entered for each assignment as per “WINTER SERVICE DELIVERY – DETAILS”.

The following example can be used to practice determining travel distances (TD's):

Assignment #1	Assignment #2	Assignment #3	Assignment #4	Assignment #5	Assignment #6
TD1 - ____	TD2 - ____	TD 3 - ____	TD4 - ____	TD5 - ____	TD6 - ____
Length - ____	Length - ____	Length - ____	Length - ____	Length - ____	Length - ____

SAND/SALT TRUCK WORKSHEET DATA REQUIREMENTS

Shown below is a typical example of sand/worksheet calculation for the same truck beat.



Steps are the same, as for snowplowing analysis.

MOBILIZATION, HAUL & TRAVEL DISTANCES:

The mobilization distance (Mob), haul distances and travel distances (TD's) for the "PROPOSED" assignments need to be inputted into the spreadsheet for each assignment as per "WINTER SERVICE DELIVERY – DETAILS".

The accumulated times to complete the activity of SANDING/SALTING will be calculated automatically and displayed for each truck assignment.

The accumulated times are automatically displayed in the “PROPOSED SAND TIME” worksheet.

The following example illustrates the method for determining mobilization distance (Mob), haul distances and travel distances (TD’s) :

Assignment #1	Assignment #2	Assignment #3	Assignment #4	Assignment #5	Assignment #6
MD - ____					
Haul - ____	Haul - ____	Haul - ____	Haul - ____	Haul - ____	Haul - ____

NOTE: The mobilization distance applies only to Assignment #1 and no travel distance is required in Assignment #1.

The haul distance for each assignment is the distance from the closest point in the assigned section of highway to the stockpile source used for that assignment. Only one stockpile source can be used per assignment.

Answers For Typical Examples for Plowing and Sand/Salting

For Plowing

Assignment #1	Assignment #2	Assignment #3	Assignment #4	Assignment #5	Assignment #6
MD – 9 km.	TD2 – 0 km	TD 3 – 10 km.	TD4 – 10 km.	TD5 – 8 km.	TD6 – 0
Length – 12 kms.	Length – 10 kms.	Length – 6 kms.	Length – 13 kms.	Length – 8 kms.	Length – 9 kms.

For Sanding & Salt Application

Assignment #1	Assignment #2	Assignment #3	Assignment #4	Assignment #5	Assignment #6
MD – 9 kms.	TD2 – 0 kms.	TD 3 – 10 kms.	TD4 – 10 kms.	TD5 – 8 kms.	TD6 – 0 kms.
Haul – 0 kms.	Haul – 0 kms.	Haul – 10 kms.	Haul – 0 kms.	Haul – 8 kms.	Haul – 8 kms.

Time worksheets

The purpose of this group of worksheets (Base Plow Truck, Proposed Plow Truck, Base Sand Truck, and Proposed Sand Truck) is to summarize and display the service delivery times calculated. This allows for easy comparison to the specified requirements. These worksheets are generated automatically by links built into the group of spreadsheets provide with each RFP, and no data is entered on them. The following worksheets are provided:

Base Plow Time worksheet

The Base Plow Time worksheet is the summarization of the data calculated in the Base Plow Truck worksheet. In effect, it presents the data in a workable manner by matching times to complete the activity to the various Classes of Highway. Data from the “Base Plow Time” worksheet for each CMA is used as the reference point for determining and assigning the total allowable Delivery Times by Class or Group of Classes.

In the Base Plow Time and Base Sand worksheets that are included in each RFP, the actual times of “Service Delivery” for the CMA is identified by roadway Class. This is the summary of actual performance capabilities of the maintenance resource allocation presently as assigned for the “Base Case” for the CMA.

A view of the Base Plow Time worksheet, in electronic format follows:

Base Plow Cumulative time by class															
Class	A	B	C	D	E	F	G	H							
Total Time	138	337	670	1240	139	695									

Base Plow time by section				Break #											
Sect. #	Highway	Class	Time to complete	Minimum allowable time	1	2	3	4	5	6	7	8	9	10	11
1	1602	D	123	150				123							
2	1602	B	122	200	122										
3	1602	D	136	300	170	136									
4	1602 & 1604	D	125	150			125								
5	1604	D	225	300					187				225	189	
6	4628	G	385	600					385						
7	4628	E	679	125						679					
8	4628	E	152	200							152				
9	4628	E	295	300						295					
10	1604 & 1608	C	200	200									188		200
11	1604	D	660	200							660				
12	1608 & 1608	C	197	200							178		197		
13	6708	F	338	600											338
14	74032	E	227	300									18	227	
15	74034	E	287	300									287		
16	3208	E	210	300											
17	79182	G	300	600											
18		H													
19		H													
20		H													

Proposed Plow Time worksheet

The “Proposed Plow Time” worksheet is the summarization of the data calculated in the “Proposed Plow Truck” worksheet. Data generated in this Worksheet will be used in the evaluation process for comparing proposals to each other and the established “Base Case”.

A view of the Proposed Plowing Time worksheet, in electronic format follows:

Proposed Plow Cumulative time by class															
Class	A	B	C	D	E	F	G	H							
Total Time															
Proposed Plow time by section															
Sect. #	Highway	Class	Time to complete	Maximum allowable time	Truck #	1	2	3	4	5	6	7	8	9	10
1	16:02	D		1.50											
2	16:02	B		2.00											
3	16:02	D		3.00											
4	16:04	D		1.50											
5	16:04	D		3.00											
6	40:28	G		5.00											
7	40:28	E		1.25											
8	40:30	E		2.00											
9	40:30	E		3.00											
10	16:06	C		2.00											
11	16:06	B		2.00											
12	16:08	C		2.00											
13	47:06	F		4.00											
14	748:02	E		3.00											
15	748:04	E		3.00											
16	32:08	E		3.00											
17	751:02	G		5.00											
18		H													

Included in the time worksheet is the completion time of each class of highway, shown on the top of the worksheet. These times are used for completion of the “Cumulative Network Plowing Time Specification”.

All areas in the “Proposed Plow Time” worksheet are shaded, because all information in the worksheet comes from the “Proposed Plow Truck” worksheet.

Base Sand Time Worksheet

The “Base Sand Time” worksheet is the summarization of the data calculated in the “Base Sand Truck” worksheet. In effect it presents the data in a workable manner by matching times to complete the activity to the various Classes of Highway. Data from the “Base Sand Time” worksheet for each CMA is used as the reference point for determining and assigning the total allowable Delivery Times by Class or Group of Classes.

In the Base Worksheet that is included in each RFP, the actual times of delivery of the service for the CMA is identified by roadway Class. This is the summary of actual performance capabilities of the maintenance resource allocation presently as assigned for the “Base Case” for the CMA.

A copy of the “Base Sand Time” worksheet, in electronic format follows:

Base Sand Cumulative time by class																
Class	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Total Time	2.83	6.49	10.92	23.06	6.72	10.39										
Base Sand time by section					Truck #											
Seet #	Highway	Class	Time to complete	Maximum allowable time	1	2	3	4	5	6	7	8	9	10	11	
13	5 16-04	D	4.08	4.08				3.99						2.57	4.90	
14	6 40-28	G	6.65	10.00				6.65								
15	7 40-28	E	1.05	1.58					1.05							
16	8 40-38	E	2.37	2.58					2.17							
17	9 40-38	E	5.69	6.00				3.60	5.69							
18	10 16-04 & 16-08	C	2.87	4.00										2.87	2.18	
19	11 16-08	B	0.87	4.00						0.87						
20	12 16-08 & 16-08	C	3.62	4.00						2.44			3.62			
21	13 47-06	F	6.72	8.00										6.72	5.70	
22	14 748-02	E	3.98	6.00									1.48	3.95		
23	15 748-04	E	5.59	6.00									5.59			
24	16 32-08	E	4.61	6.00												
25	17 751-02	D	6.65	10.00												
26	18	H														
27	19	H														
28	20	H														
29	21	H														
30	22	H														
31	23	H														
32	24	H														

Proposed Sand Time worksheet

The “Proposed Sand Time” worksheet is the summarization of the data calculated in the “Proposed Sand Truck” worksheet. Data generated in this Worksheet will

be used in the evaluation process for comparing proposals to each other and the established “Base case”.

Shown following is a view “Proposed Sand Time” worksheet in electronic format:

The screenshot shows an Excel spreadsheet with the following data:

Proposed Sand Cumulative time by class																
Class	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Total Time																
Proposed Sand time by section																
Sect #	Highway	Class	Time to complete	Maximum allowable time	Truck #											
1	16:02	D		2.00	1	2	3	4	5	6	7	8	9	10	11	
2	16:02	B		4.00												
3	16:02	D		4.00												
4	16:02 & 16:04	D		2.50												
5	16:04	D		4.00												
6	40:28	G		10.00												
7	40:28	E		1.50												
8	40:30	E		2.50												
9	40:30	E		6.00												
10	16:04 & 16:06	C		4.00												
11	16:06	B		4.00												
12	16:06 & 16:08	C		4.00												
13	47:06	F		8.00												
14	748:02	E		6.00												
15	748:04	E		6.00												
16	32:08	E		6.00												
17	751:02	G		10.00												
18		H														
19		H														
20		H														

Included in this worksheet are the completion time of each class of highway, shown on the top of the worksheet. These times are used for completion of the “Cumulative Network Sand Application Time Specification”.

All areas in the “Proposed Sand Time” worksheet are shaded, because all information in the worksheet comes from the “Proposed Sand Truck” worksheet.

Hotspots

- These are areas where the Operations Manager will want to designate special (reduced) times for delivery of services.

- A hotspot is defined as a section where the actual or base time is specified instead of the “default” time for that class of highway.
- Hotspots are very restrictive to Prospective Contractors and does not permit “room to move”. Therefore they are used judiciously.
- Typically hotspots will be major hills (usually in river valleys) and urban areas.

Trouble Spots

Trouble spots are identified in the local features of RFP, for each individual CMA. They identify problems in the area that normally require special or additional attention, during winter storms.

They differ from hot spots, as they do not require faster response times within the Special Provisions, for that CMA.

The Prospective Contractor should identify in his proposal’s section on the snow and ice control plan how he intends to deal with both hotspots and troublespots.

Contract Specifications for Snow/Ice Control Plan

The Special Provision will identify some requirements to protect the minimum level of service for snow/ice control, in the following areas:

Plowing Delivery Requirements

Prospective contractors have the opportunity to select locations for sand/salt stockpiles and the truck storage. In planning and selecting their sites, it is very important that their allocation of resources (sand/salt stockpiles and trucks) be placed strategically to ensure that the proposed service is equal to or slightly better than the established base case levels. Proposals will be evaluated on the winter service delivery cumulative times calculated in the spreadsheets described previously.

Requirements for “WINTER SERVICE DELIVERY” are specified in the RFP and all proposals will be evaluated based on meeting or exceeding the Base case “WINTER SERVICE DELIVERY “ criteria.

For this reason, times of delivery of service in the worksheets are compared to the existing base case delivery of service to ensure overall service to Alberta’s motorists is maintained.

Level of Service for all Class A, B & C Highways are considered critical and will therefore have more critical assigned **%Utilization (Truck Allocation)** parameters.

The Prospective Contractor may have the situation that the minimum truck factor calculation does not accommodate, in sufficient numbers, enough trucks to meet the technical requirements in the RFP for Winter Service Delivery – Plowing. In those cases, additional trucks must be added to the proposal to ensure all requirements are met.

The Department has established overall “Business Rules” that governs the determination of Winter Service Delivery requirements. This will ensure that overall practices within the province are consistent.

Sanding/Salting Delivery Requirements

The “Sand Time” worksheet will be similar to “Plow Time” worksheet in format but summarize times to deliver sand or salt.

The “Special Provisions” contain a worksheet that specifies the maximum allowable completion times for both plowing and sand application, for all individual highway sections, within that CMA.

The Prospective Contractor may have the situation that the minimum truck factor calculation does not accommodate, in sufficient numbers, enough trucks to meet the technical requirements in the RFP for Winter Service Delivery – Sanding / Salting Application. In those cases, additional trucks or additional supply sites or a redistribution of supply sites must be added to the proposal to ensure all requirements are met.

% Utilization Requirements

The ‘Base Case’ plow truck allocation has been modeled on existing truck storage and sand/salt stockpile locations. Prospective contractors will be able to modify the existing locations for both truck storage and sand/salt stockpiles. When the proposed distribution of trucks and stockpiles increases the efficiency of the prospective contractor’s fleet, fewer trucks will be required to provide the same level of service. To account for this increase in efficiency, the maximum number of 2LEKm of highway that each truck can be assigned to is increased slightly as the total number of trucks decreases.

Maximum allocation limits will be specified in the RFP for Classes and Groups of Classes. To permit a rational distribution of beat length over a variety of truck fleets, the following worksheet will be included in all “Special Provisions”.

An example of this worksheet is shown below:

Truck Allocation Assignment Worksheet – CMA 28			
Max. 2LEKm assigned per truck			
Class	Base 19 or more Trucks	Proposed 17 Trucks Minimum	Proposed 18 Trucks
A	25	25	25
B	28	35	30
C	N/A	N/A	N/A
D	38	45	42
E	45	60	47
F	85	105	90
G	190	110	100
H	N/A	N/A	N/A

NOTE: A minimum beat length of 25 kilometers must be assigned for an individual snow plow truck .

Each Special Provision section shall show an “Assignment Worksheet” for the full range of trucks from the minimum number to the “Base case” number assigned for the CMA.

Depending on where the prospective contractor locates his sand/salt stockpiles, the proposed truck demand factor may indicate that the proposed fleet has more trucks than the “Base case” number. In that case, the proposed contractor will be allowed to choose a 2LEKm assigned per truck between 25 2LEKms and the “Base case” truck allocation, per Class, for that CMA.

Following is a view of the “Assignment Worksheet”, in electronic format:

Number of Trucks	14	13	12 (Minimum)	2LEKm per truck used in Proposed Plow truck table
Assign				A
2LEKm per truck	34	34	34	B
based on # of	37	37	37	C
trucks in proposal	42	45	49	D
	50	54	58	E
	88	95	103	F
	94	101	110	G
				H

The Prospective Contractor is required to fill in the unshaded area with the number of maximum 2LEKm assigned per truck, according to the minimum number of trucks calculated from the Proposed Truck Demand Factor.

% utilization

The Department permits a small degree of over - utilization, particularly in the lower classes of roadway. This allows proposals to over-allocate additional highway sections that would otherwise require an additional truck. The basic guidelines for % utilization are:

- Prospective contractors should attempt to have an average % utilization of 1.0 (100%) per truck for their proposal.
- Trucks should be assigned until % utilization is greater than 0.8. Only in rare cases will a truck that has a % utilization less than 0.8 be unable to travel to another area for further allocations within the maximum allowable time.
- Trucks are considered appropriately allocated with a % utilization of 0.9 and higher.
- Allowable over-utilization depends on the highest class of highway that the truck works on, in any of its assignments. This has changed from previous

proposal evaluations, where the over-utilization depended on the class of highway that the truck was working on when it became over-utilized.

- If the prospective contractor wants to propose an over-utilization of trucks within an area, he shall clearly identify this within his Winter Snow/Ice Control plan in Envelope No. 2, and explain his justification for the over-utilization.

Shown below are typical worksheets that may appear in “Special Provisions”

Maximum % utilization by Roadway Class		
Class	Permissible percentage of fleet with % utilization > 1.0, by CMA	Maximum % Utilization allowed
A	1 truck or 10%, whichever is less	1.05
B	1 truck or 10%, whichever is less	1.10
C	2 trucks or 20%, whichever is less	1.10
D, E, F, G or H	3 trucks or 30%, whichever is less	1.15

Cumulative Network LOS Time Requirements

The “Special Provision” section of the RFP will have requirements for the total time to complete either plowing or sand/salt application for individual classes, or groups of classes or time overall for the entire network. The time to complete any individual section for cumulative LOS will be the running time of the slowest truck to finish that section.

The Prospective Contractor must meet all the cumulative time requirements, by groups of classes of highway. The Base Case Cumulative Network time is found in the “Base Time” worksheets, and for the Contractor’s proposal in the “Proposed Time” worksheets, for plowing or sand application activities.

The Prospective Contractor may have the situation that the minimum number of trucks, as calculated by the truck demand factor equation on page 7, does not provide sufficient numbers of trucks to meet the requirements for Cumulative Network LOS Time Requirements. In those cases, additional trucks must be provided.

Depending on the number of CMAs in a proposal, different groups of Classes of Highway are used to evaluate the proposal. The cumulative network LOS time for each class is added to make the group time, and the proposal must have a group time less than or equal to the Base Case, for that group of classes of highway. Shown below is a typical example of a Network Cumulative LOS Time worksheet that may appear in a “Special Provision”:

Permissible Cumulative Network Class Time, in Multiple CMAs'	
No: of CMAs in Proposal	Permissible Cumulative Times
1	Combine Classes A, B & C Combine Classes D & E Combine Classes F, G & H
2	Combine Classes A, B & C Combine Classes D & E Class F Combine Classes G & H
3 or more	Combine Classes A, B & C Class D Class E Class F Combine Classes G & H

The Prospective Contractor, in his Snow/Ice control plan shall add the class times within the individual groupings identified in the “Special Provisions” for all the CMAs, within the proposal. This applies to both, sand application completion time and the snowplowing completion time.

The Department has established overall “Business Rules” that governs the determination of Winter Service Delivery requirements. This will ensure that overall practices within the province are consistent, in all CMAs.

- Cumulative network LOS times for the proposal must be equal to or less than the base case, for both plowing and sanding/salting
- In unusual cases, the best allocation of plow trucks may result in a proposed delivery time being greater than the maximum allowable on some sections of highway. For individual sections, the proposed delivery time may be exceeded to a maximum of 10% above the allowable maximum time for that section, in no more than two sections in each CMA.
- In unusual cases, the best allocation of sand/salt stockpiles may result in proposed delivery times being greater than the maximum allocable. For individual sections, the proposed delivery time may be exceeded to a maximum of 10% above the allowable maximum time for that section in no more than 10% of the sections in each CMA.
- In all cases, the cumulative network LOS times must not exceed the Base Case.

Prospective Contractor's Procedure for Snow/Ice Control Plan

The prospective contractor should follow this sequence to determine the number and placement of plow trucks that meet department requirements:

1. Select stockpile locations and truck storage sites for the proposal.
2. Enter distances from the nearest stockpile location to each section in the "Main Hwy Worksheet" worksheet, in column 'j' (Contractor: Sand/salt distance to stockpile).
3. Calculate the minimum number of trucks required using the truck demand factor calculation (see page 7).
4. Enter the maximum 2LEKm assigned per truck for the minimum number of trucks calculated, in the "Assignment" worksheet.
5. Enter truck information on the "Proposed Plow Truck" worksheet, and assign trucks to plow all sections.
6. Check the "Proposed Plow Time" worksheet to ensure that (a) all sections have been completely assigned, (b) all sections are completed within the maximum time allowed, and (c) all trucks are within maximum allowable % allocation.
7. Enter hopper size, mobilization and haul distances in the "Proposed Sand Truck" worksheet.
8. Check the "Proposed Sand Time" worksheet to ensure that all sections are completed within the maximum time allowed.
9. Make changes as required to the stockpile locations and truck storage sites and plow assignments until all sections are completed within the maximum allowable time for plowing and sand/salt, and all trucks are within maximum allowable % allocation.
10. Check that the "Proposed Plow Time" and "Proposed Sand Time" worksheets cumulative plow and sand/salt times by class of highway, grouped as described above, are less than or equal to the grouped cumulative times by class of highway in the "Base Plow Time" and "Base Sand Time" worksheets.
11. Make changes as required until the proposed cumulative times by groups of classes of highway are less than or equal to the base case.
12. Draw plow beat maps for inclusion in the proposal.

Assessment of Snow/Ice Control Plan

The following points should be considered by the Prospective Contractor when preparing his snow/ice control plan.

- The snow/ice control plan will be a major component of “Envelope No: 2”.
- The assessment panel for “Envelope No: 2” will be given the job to review the Contractor’s proposal for snow/ice control.
- The assessment panel may decide to adjust the delivery times, % Utilization and network cumulative times for all proposals. Proposed contractors are not allowed to propose changes to delivery times, % utilization and network cumulative times.
- In all cases, the “Spirit and Intent” of the specification must be met in the proposal.
- Minor difference and discrepancies will occur. Depending on the severity, the panel may elect to identify those as either:
 1. Accept worksheet
 2. Below Minimum, Non-Critical (negotiated changes possible)
 3. Recommend Bid Rejection (No longer meets Spirit & Intent)

Spirit & Intent of Snow/Ice Specifications

Wholesale reduction or trading of service between areas or classes or groups of classes will not be considered as meeting the spirit and intent of snow/ice specifications.

Not meeting the “spirit or intent” of winter snow/ice control specifications can put a Prospective Contractor’s entire proposal in serious peril.

INSTRUCTIONS TO PROSPECTIVE CONTRACTORS

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1.0 INSTRUCTIONS FOR SUBMITTING PROPOSALS**1.1 DATE AND TIME OF PROPOSAL SUBMISSION**

Prospective Contractors must submit their response to the Request for Proposal (RFP) for this Contract to Alberta Transportation, Program Management Branch, by 2:01 P.M. on April 3, 2003, using the addressing label enclosed with this package.

1.2 ALLOWABLE NUMBER OF PROPOSALS AND CMAS

The Prospective Contractor may submit no more than one Proposal for each individual Contract Maintenance Area (CMA) and no more than one Proposal for each specific combination of CMAs. Each combination of CMAs will be considered as a separate Proposal and must be submitted under a separate cover.

A Prospective Contractor will not be awarded more than 7 CMAs.

A Prospective Contractor with an existing Department highway maintenance contract shall refer to Section 3.3 of this Request for Proposal for details on how his existing CMAs will be counted.

1.3 GENERAL REQUIREMENTS FOR PROPOSAL SUBMISSION**1.3.1 Packaging and Number of Copies**

The Prospective Contractor, when submitting each Proposal, must:

- Provide each Proposal in a single package addressed using the label as shown in Section 1.3.2.
- Provide the information required in 4 separate sealed envelopes or sealed parcels, which must include the forms identified by Alberta Transportation as a requirement for the Proposal (required contents specified in and Section 1.4 of this Instructions to Prospective Contractors).
- Ensure that Envelopes 1, 3 and 4 contain one bound set of the Prospective Contractor's response, and that Envelope 2 contains four bound and one unbound set of the Prospective Contractor's response.

1.3.2 Mailing Address For Submission of Proposal

Prospective Contractor's Name: _____

Address: _____

Proposal for Maintenance Work

Alberta Transportation
Program Management Branch
Attention: Director
Tender Administration
Tender Deposit Counter
3rd Floor, Twin Atria Building
4999 - 98 Avenue
Edmonton, Alberta
T6B 2X3

CMA _____

Proposal to be submitted by:

2:01 PM

(Time)

April 3, 2003

(Date)

1.3.3 Label for Envelopes

Pre-typed labels are included with this package. This must be affixed to each of the four envelopes to indicate the envelope number (1, 2, 3 or 4), the Prospective Contractor's company name and the Contract maintenance areas included in the Proposal

SAMPLE: Label to be provided

Envelope Number: _____
Prospective Contractor Name: _____
CMA No(s) included in the Proposal:
CMA No. _____
CMA No. _____
CMA No. _____
CMA No. _____

1.4 SPECIFIC REQUIREMENTS CONCERNING CONTENT OF THE PROPOSAL - 4 ENVELOPES

The Prospective Contractor will be required to submit each of his Proposal package(s) divided into four distinct envelopes. To ensure the validity of his submission, the Prospective Contractor must ensure that the correct information and number of copies is placed in the appropriate envelope.

1.4.1 Required Contents of Envelope 1

The Prospective Contractor must provide the following information in Envelope 1 as outlined in Section 4.5 of the RFP document.

- The form titled "Prospective Contractor's Certification of Information Provided", which must be completed fully and initialed/signed by an authorized signing officer of the Prospective Contractor's company.
- The completed form, "Prospective Contractor's Proposal Agreement", which must be signed and sealed by an authorized signing officer of the Prospective Contractor's company.

- A consent of surety from the Prospective Contractor's surety agreeing to furnish the required labour and material payment bond in the amount equal to the number of CMAs times \$500,000.
- Where applicable, a signed letter of intent from a financial institution agreeing to provide an irrevocable letter of credit in an amount equal to the number of CMAs times \$250,000 payable to the Provincial Treasurer, or consent of Surety to furnish a forfeiture bond in an amount equal to the number of CMAs times \$250,000.
- A signed letter of intent from an insurance company agreeing to provide the required insurance coverage.
- Any addenda issued during the pre-submission period.
- A signed letter stating that, in the completed Unit Price Schedule, the ratio of the total fixed costs to the total fixed costs plus provisional costs does not exceed 45% for each CMA. (Definitions of fixed costs and provisional costs are found in Section 1.1 of the RFP document.)
- A signed letter stating that a minimum of 70% of the snowplow equipment operators to be employed will have at least 3 winter seasons of highway maintenance experience.
- A signed letter stating that a minimum of 75% of the foremen to be employed will have at least 2 years of supervisory highway maintenance experience.
- Written confirmation of enrollment or copy of certificate indicating accreditation in an appropriate Safety Certification Program (details of requirements are specified in Section 51.2.8.1 of Specification 51.2 General, For Maintenance Work).
- Written confirmation or copy of certificate indicating that the Prospective Contractor is a legally registered company.

1.4.2 Required Contents of Envelope 2

For each Proposal, the Prospective Contractor must provide information on his company's Work Execution Plan as detailed in Section 4.6 of the RFP document. To meet the requirements of Envelope 2, the Prospective Contractor must organize and present his response using headings and the bullets listed below without any change to the order or sequence. If the Prospective Contractor wants to provide information on additional items, these may be presented following the headings listed:

The Prospective Contractor shall limit the contents of Envelope 2 to no more than 100 pages excluding the paper copies of the Winter Service Delivery Tables.

The Prospective Contractor may also provide additional information in the form of appendices attached to the Work Execution Plan; however, the department may limit the evaluation to the first 150 pages of the plan.

A. Key Personnel

- Experience and skills of Contract Manager and Superintendent
- Number of positions in each of the above noted categories
- Location of office and residence of Contract Manager and Superintendent

B. Snow Ice Control Plan

- Winter Service Delivery Tables (refer to "Winter Service Delivery Details") in the RFP
 - Complete the Proposed Truck Demand Table
 - Complete the Proposed Plow Truck Table
 - Complete the Proposed Sand Truck Table
 - Complete the Proposed Plow Time Table
 - Complete the Proposed Sand Time Table
 - Complete the Proposed Highway Table

The Prospective Contractor shall use the "Winter Service Delivery" disc(s) to complete all of the calculations for winter service delivery. The Contractor shall submit a paper copy of all the completed tables along with the discs.

- Salt Storage
 - Identify salt storage shed details and quantity for each site
 - Identify length of roads serviced from each site
 - Identify accounting procedure for outside sales
- Sand Storage
 - Identify sand storage facilities and quantity for each site
 - Identify length of roads serviced from each site
 - Identify accounting procedure for outside sales
 - Identify number of loaders with indoor heated storage and the total number of loaders
 - Provide proximity details of storage sites to truck storage sites
 - Provide map of deadhaul roads.
- Snowplow Truck Storage Sites
 - Provide map of routes required to access materials and highways
 - Identify lengths of deadhaul
 - Provide proximity details to the highway network
 - Identify deadhaul in urban areas
- Winter Equipment
 - Identify all units
 - Provide a map of all truck haul beats
 - Identify tandem trucks replacing single axle trucks (over and above the minimum specified) from the existing fleet

- Identify “oversize” hoppers and/or trucks
- Motor Graders for Winging Shoulders
 - Identify equipment
 - Identify response times
- Motor Graders for Gravel Surfaces
 - Identify equipment
 - Provide map of individual grader circuits
 - Identify grader sites
 - Show details of response time for each circuit
 - Identify emergency assistance plans and supplemental resources
 - Show distance from grader site to highest classification roadway in each circuit
- Repair of Equipment
 - Identify spare trucks, specific units and location
- Winter Staffing
 - Identify equipment operator training
 - Identify preseason equipment operator procedures
 - Identify preseason safety meetings
 - Commitment to certified equipment operator list
 - Identify equipment operator training for sand/salt conservation
- Winter Plowing Delivery
 - Define all snowplow truck beats
- % Utilization
 - Provide an explanation of any trucks that exceed % utilization limit
 - Provide summary table for % utilization for cross-over between CMAs
- Cumulative Network LOS
 - Provide a summary table for cumulative network class time, with groupings as identified in the Special Provisions, for that proposal
 - Provide an explanation for any major discrepancies
- Delivery Times for Snowplowing and Sand/Salt Application
 - Provide an explanation for any major discrepancies

C. Safety Plan

- Refer to Section 4.6.5 of RFP for details.

D. Material Storage Plan

- Refer to Section 4.6.6 of RFP for details.

E. Subcontracts and Assignments

- List subcontracts and assignments (refer to Section 3.2 of the RFP).

F. Contractor Previous Performance/Experience

The Department will use the existing information to assess the performance of the maintenance Contractors that are currently working with the Department.

Prospective Contractors who have not had a highway maintenance contract with Alberta Transportation shall provide details of their previous contracting experience in highway construction or maintenance in order for the Department to assess their previous experience.

1.4.3 Required Contents of Envelope 3

The Prospective Contractor must complete and enclose the Unit Price Schedule for each CMA attached to this Request for Proposal in Envelope 3. The Prospective Contractor must complete every unshaded portion of the Unit Price Schedule as follows:

The Prospective Contractor must also submit the completed computer discs containing the Unit Price Schedule.

- In the Unit Price column, a unit price for each bid item.
- In the Extension column, the total of the quantity multiplied by the unit price. (In the case of a discrepancy in the Extension column, the Unit Price will take precedence.)
- Some bid items also require the Contractor to provide quantities as well as the unit prices. The Contractor must provide quantities for those items.
- In the case of multiple CMAs in one Proposal, the unit prices bid shall be the same in all the CMAs for all bid items except the following CMA specific items:

Bid Items 1410 to 1419 Supply and Stockpile Sand to ____

Bid Items 1470 to 1479 Supply of Sodium Chloride to ____

Bid Items 2701 to ____ Maintain/Prepare Gravel Surface Roads (Grader)

Bid Items 3001 to ____ Highway Maintenance Work per CMA ____

Bid Items 4401 to ____ Indirect Operating Costs per CMA ____

Note

Failure to complete all requirements for each component of the Unit Price Schedule may result in the Proposal being rejected. The Prospective Contractor shall note that Envelope 3 will only contain the Unit Price Schedule. The Prospective Contractor must not present any documentation, which will elaborate upon or qualify his response to the Unit Price Schedule. Any such elaboration or qualification may result in the Proposal being rejected.

1.4.4 Required Contents of Envelope 4

The Prospective Contractor must provide the following financial information in Envelope 4, as defined in Section 4.3.6 of the Request for Proposals:

- Ownership and structure of the business submitting the proposal.
- Eligibility, which will include a statement indicating the number of contracts already, awarded to the firm(s) or principals of the firm.
- If the company is an existing business, a financial statement for each of the previous 3 years which includes:
 - Statement of Earnings
 - Balance Sheet
 - Statement of Cash Flows
- Pro Forma Statements which will allow the Prospective Contractor’s anticipated financial projection for the 5 years of the Contract and includes for each of the years of the Contract:
 - Statement of Earnings
 - Balance Sheet
 - Statement of Cash Flows
- Where appropriate a statement of net worth and personal credit rating.
- A statement of any undertaking from any investors and lending institutions.

1.5 PRE-SUBMISSION MEETING

Details of the pre-submission meeting are identified in the Special Provisions.

The following list shows the Department contact person for the respective CMAs:

1, 2 & 4	Bill Gish, Operations Manager, Peace River Phone: (780) 624-6220 Fax: (780) 624-2440
3	Geoff Dunn, Operations Manager, Grande Prairie Phone: (780) 538-6113 Fax: (780) 538-5384

The Prospective Contractor may contact the respective Operations Manager to obtain information on the following items:

- historical data for work quantities,
- roadway inventory data,
- report on pavement structure condition,
- maintenance facilities owned by the Government of Alberta and available for lease,
- any other pertinent information related to highways in the respective CMAs.

1.6 PROJECT INQUIRIES

All inquiries regarding the Specifications and Request for Proposal submission should be directed to Mr. Moh Lali, Director, Maintenance, Specifications and Traffic Engineering, Technical Standards Branch, 2nd Floor, Twin Atria Building, 4999 - 98 Avenue, Edmonton, Alberta, Telephone (780) 415-1083.

1.7 INQUIRIES ON DEPARTMENTAL FACILITIES

All inquiries regarding leasing of government owned facilities shall be directed to Mr. John Devlin, Manager, Lease Documentation, Telephone (780) 422-0608 or Fax (780) 422-2113.

A sample lease agreement is included in the Request for Proposal document.

1.8 ADDENDA

Addenda, when required, will be issued and will form part of the Request for Proposal, General Specifications or Technical Specifications as appropriate. The Prospective Contractor must acknowledge receipt of each addendum in the space provided on the "Receipt of Addenda" form. The individual items included in the addendum will be added, deleted or changed in accordance with the instructions contained in the addendum letter. The Prospective Contractor must acknowledge the addenda by attaching them and inserting them in the Envelope 1.

1.9 PROPOSAL CHANGES

The Prospective Contractor will not be permitted to introduce or request a change to his Proposal after the date and time set by the Department for the submission of Proposals.

1.10 CONTRACT FORMS

The following sample forms are enclosed herewith and are divided into the following two groups:

Group 1, forms to be included in Envelope 1 of the Proposal:

- Prospective Contractor's Certification of Information Provided
- Prospective Contractor's Proposal Agreement

Group 2, forms provided for the Prospective Contractor's information. The Department will provide copies of these forms to the preferred Prospective Contractor to be submitted as part of the Mobilization Plan.

- Forfeiture Bond
- Statutory Declaration
- Irrevocable Letter of Credit when used for Performance Security
- Labour and Materials Payment Bond

Prospective Contractor's Certification of Information Provided
(To be Included in Envelope 1)

To ensure that the Prospective Contractor's Proposal will meet the mandatory technical requirements of the General and Technical Specifications and the Request for Proposal, the Prospective Contractor will have an authorized signing officer of his company initial in the space provided that the following required information has been provided for in the Proposal and is contained in the appropriate envelopes. By placing his initial, the authorized signing officer certifies that:

- | | (Initials) |
|---|------------|
| <ul style="list-style-type: none"> • CMAs included in the proposal are: _____

 _____ | _____ |
| <ul style="list-style-type: none"> • All 4 envelopes have been submitted | _____ |
| <ul style="list-style-type: none"> • The company has not included any conditions in the Proposal that alter the General or Technical Specifications | _____ |
| <ul style="list-style-type: none"> • The Prospective Contractor agrees to provide consent of interested parties to allow Alberta Transportation's use of snow clearing equipment and facilities in the event of Contractor default or Contract termination | _____ |

Envelope 1 - (Technical requirements), contains:

- | | |
|---|-------|
| <ul style="list-style-type: none"> • A completed "Prospective Contractor's Certification of Information Provided" form | _____ |
| <ul style="list-style-type: none"> • A completed Prospective "Contractor's Proposal Agreement" form | _____ |
| <ul style="list-style-type: none"> • Consent of Surety for the labour and material bond | _____ |
| <ul style="list-style-type: none"> • Consent of a financial institution for the irrevocable letter of credit or a certified cheque, bank draft or money order are enclosed, (if applicable), or consent of surety for the forfeit bond | _____ |
| <ul style="list-style-type: none"> • Signed letter of intent from an insurance company | _____ |
| <ul style="list-style-type: none"> • Confirmation that the Prospective Contractor has completed or has initiated the process for safety accreditation | _____ |
| <ul style="list-style-type: none"> • Confirmation that the company is legally registered with the Corporate Registry | _____ |
| <ul style="list-style-type: none"> • Confirmation that a minimum of 70% of snowplow equipment operators to be employed will have at least 3 winter seasons of highway maintenance experience | _____ |
| <ul style="list-style-type: none"> • Confirmation that a minimum of 75% of foremen to be employed will have at least 2 years of supervisory highway maintenance experience | _____ |

Envelope 2 - (Work Execution Plan), contains:

A. Key Personnel

- Details of experience and skills of Contract Manager and Superintendent _____
- Number of positions in each of the above noted categories _____
- Location of office and residence of Contract Manager and Superintendent _____

B. Snow Ice Control Plan

- Winter Service Delivery Tables
 - Completed "Truck Demand Table" _____
 - Completed "Plow Truck Table" _____
 - Completed "Sand Truck Table" _____
 - Completed "Proposed Plow Time Table" _____
 - Completed "Proposed Sand Time Table" _____
 - Completed "Proposed Highway Table" _____
- Salt Storage
 - Details of Salt storage shed and quantity for each site _____
 - The length of roads serviced from each site _____
 - Details of accounting procedure for outside sales _____
- Sand Storage
 - Details of sand storage facilities and quantity for each site _____
 - The length of roads serviced from each site _____
 - Details of accounting procedure for outside sales _____
 - Number of loaders with indoor heated storage and total number of loaders _____
 - Details of proximity of sand storage sites to truck storage sites _____
 - A map of deadhaul roads _____
- Snowplow Truck Storage Sites
 - A map of the routes required to access materials and highways _____
 - The lengths of deadhaul roads _____
 - Details of proximity of truck storage sites to the highway network _____
 - Details of deadhaul routes in urban areas _____
- Winter Equipment
 - A list of all units _____
 - A map of all truck haul beats _____
 - The number (if any) of tandem trucks replacing "surplus" single axle trucks (over and above the minimum specified) from the existing fleet _____
 - The number of "oversize" hoppers and/or trucks _____
- Motor Graders for Winging Shoulders
 - Identify equipment _____
 - Identify response times _____
- Motor Graders for Gravel Surfaces
 - A list and description of the equipment _____
 - A map of individual grader circuits _____
 - The location of grader sites _____
 - Details of response time for each circuit _____
 - Details of emergency assistance plans and supplemental resources _____
 - Distance from the grader site to highest classification roadway in each circuit _____

- Repair of Equipment
 - The number of spare trucks, specific units and locations _____
- Winter Staffing
 - Details for equipment operator training _____
 - Details for pre-season equipment operator procedures _____
 - Details for pre-season safety meetings _____
 - Commitment to certified equipment operator list _____
 - Identify equipment operator training for sand/salt conservation _____
- Winter Plowing Delivery
 - Define all snowplow truck beats _____
- % Utilization
 - An explanation of any trucks that exceed the “% utilization” limit _____
 - A summary table for “% utilization” for cross-over between CMAs _____
- Cumulative Network LOS
 - A summary table for cumulative network class time, with groupings as identified in the Special Provisions, for that proposal _____
 - An explanation for any major discrepancies _____
- Delivery Times for Snowplowing and Sand/Salt Application
 - An explanation for any major discrepancies _____

C. Safety Plan

- Address issues listed in Section 4.6.5 of the RFP _____

D. Material Storage Plan

- Address applicable items listed in Section 4.6.6 of the RFP _____

E. Subcontracts and Assignments

- List of proposed subcontracts and assignments (see section 3.2 of the RFP) _____

F. Contractor Previous Performance/Experience _____

Required only for Contractors that do not have an existing Department highway maintenance contract.

Envelope 3 - (Pricing), contains:

- Completed Unit Price Schedule(s) indicating bid item unit prices. Also, indicate quantities for those bid items where the Prospective Contractor is required to provide them. _____

Envelope 4 - (Financial Information), contains required financial information on:

- Ownership _____
- Eligibility _____

- Financial Statements
 - Statement of Earnings _____
 - Balance Sheet _____
 - Statement of Cash Flow _____

- Pro Forma Statements
 - Statement of Earnings _____
 - Balance Sheet _____
 - Statement of Cash Flow _____

- A statement of net worth and personal credit rating _____

- A statement of any undertaking from any investors and lending institutions _____

By signature of the authorized company official, the Prospective Contractor acknowledges that failure to indicate that any one of the above requirements has been included in the Proposal may result in rejection, and no further review of the Proposal will take place.

(Name of Prospective Contractor)

(Authorized Signature)

(Date)

**Prospective Contractor's Proposal Agreement
(To be Included in Envelope 1)**

CMA's included in this proposal are: _____, _____, _____, _____, _____

Should this Proposal be accepted, the undersigned agrees to enter into a written agreement with the Minister of Transportation of the Province of Alberta for the faithful performance of the Work as outlined in this Proposal. The undersigned further agrees to execute and perform the Work in accordance with the Special Provisions, Specification Amendments, Plans, General Specifications, and the Technical Specifications.

The undersigned further agrees that the Proposal will remain open for consideration by the Department for 90 days.

An authorized signing officer must sign in the space provided below and then the document must be either sealed with the company seal, or the Affidavit of Execution of the Witness must be completed. Failure to comply will result in the Proposal being rejected.

<p>AFFIDAVIT OF EXECUTION</p> <p>CANADA PROVINCE OF ALBERTA TO WIT:</p> <p>I, _____ of the City of _____ in the Province of _____ make oath and say:</p> <p>(1) That I was personally present and did see _____ named in the annexed instrument, and who is known to me to be the person named therein, duly sign and execute the same for the purposes named therein; that the same was executed at the _____ of _____ said Province, and that I am the subscribing witness thereto;</p> <p>(2) That I personally know the said _____ and he is in my belief of the full age of eighteen years.</p> <p>SWORN before me at the City of _____ in the Province of Alberta, this ____ day of _____ 20____.</p>	<p>(Seal)</p>
	<p>Prospective Contractor's Name (Company Name)</p>
	<p>Authorized Signature</p>
	<p>Signature Printed</p>
	<p>Address</p>
	<p>Address Postal Code</p>
<p>_____ Witness Sign Here</p> <p>_____ A Commissioner for Oaths in and for the Province of Alberta</p>	<p>Prospective Contractor's Telephone Number</p>
	<p>Witness (Signature)</p>
	<p>Witness (Printed)</p>
	<p>Date</p>

FORFEITURE BOND

Bond No. _____ Amount _____ Contract No. _____

KNOW ALL MEN BY THESE PRESENTS THAT

_____ (the Contractor)
of the _____ of _____, in the Province of Alberta, as Principal (Hereinafter called "the Principal"),
- and -

_____ (the bonding Company)
of _____ of _____ (hereinafter called "the Surety"), are held and firmly bound onto:

HER MAJESTY THE QUEEN, herein represented by the Minister of Transportation of the Province of Alberta, obligee (hereinafter called the Minister") in the sum of _____ Dollars \$(_____), to be paid to the Minister of his successors in office, or to whom the said Minister or his successors may direct, and the said Principal and Surety bind themselves for the payment of which sum, well and truly be made, the Principal and the Surety bind themselves and each of them and their respective successors, heirs, executors, administrators and assigns, jointly and severally, to pay the said sum under the terms of these presents;

WHEREAS the Principal has entered into a written Contract with the Minister dated the _____ day of _____, A.D. 20____, being Contract No. _____, and which Contract is by reference made a part hereof (and is hereinafter referred to as "the Contract");

AND WHEREAS it is a term of the Contract that contract security be provided naming the Minister, as obligee herein;

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Principal shall promptly and faithfully perform the Contract then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Whenever the Principal is declared by the Minister to be in default under the Contract, the Minister having performed the Minister's obligations thereunder, the Surety shall pay unto the Minister the sum of _____ dollars (\$ _____) upon receipt of the Minister's written demand sent by registered mail or facsimile transmission to the Surety at _____

Such payment shall be made within 30 calendar days of the receipt of the said demand by the Surety.

The Surety shall not be liable for a greater sum than the amount specified in this Forfeiture Bond.

This Forfeiture Bond shall remain in full force and effect from the inception date of the Contract for a period of two years. One year after the inception date and annually thereafter the bond will be renewed or extended for subsequent periods of two years.

IN WITNESS WHEREOF, the Principal and the surety have Signed and Sealed this Bond this _____ day of _____, 20____.

SIGNED AND SEALED
In the Presence of:

WITNESS TO THE PRINCIPAL

Principal (Seal)

WITNESS OF SURETY

Surety (Seal)

STATUTORY DECLARATION

CANADA
PROVINCE OF ALBERTA

IN THE MATTER OF a Contract bearing
No. _____ between Her Majesty the Queen in right of the
Province of Alberta as represented by the Minister of
Transportation and _____
(hereinafter referred to as the "Contractor").

TO WIT:

I, _____ of the _____
of _____ in the Province of Alberta, do so solemnly declare that as of
_____ 20_____ :

- 1. I am an officer of the Contractor holding the office of _____ and as such have personal knowledge of this Contract and of the facts and matters stated herein.
- 2. The Contractor has discharged every obligation under this Contract, excluding the payment of the sums listed under "Exceptions".
- 3. No payments due exceed 30 days for all labour, equipment, materials and services used in the performance of this Contract and any related subcontract, including full payment to all subcontractors and the Workers' Compensation Board, excluding payment of the sums listed under "Exceptions".
- 4. There are no outstanding amounts or holdbacks retained from any subcontractor or creditor, with the exception of the names and amounts shown below. If there are no exceptions, this will be so indicated below.

Exceptions:

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Sample

Signature of Declarant

DECLARED before me _____
at _____
this ____ day of _____ 20_____

A Commissioner of Oaths in
and for the Province of Alberta

**SAMPLE FORM OF IRREVOCABLE LETTER OF CREDIT
WHEN USED FOR PERFORMANCE SECURITY**

Her Majesty the Queen in right of the Province of Alberta as represented by the Minister of Transportation (hereinafter called "the Minister").

The Minister has agreed to enter into Contract No. _____ with _____
_____ (hereinafter called "the Company") dated _____
_____ and the Company desires to satisfy Performance requirements specified in the Contract and:

The Minister desires to secure such security requirements as are specified in the Contract:

_____ (hereinafter called "the Bank") hereby
establishes in your favour an Irrevocable Letter of Credit No. _____ for an amount or
amounts not exceeding in the aggregate _____ (Amount).

Claims hereunder must be made in writing to this office accompanied by your signed and endorsed sight draft on
_____ (Name of Bank) _____ (Branch) and must contain
the reference "Letter of Credit No. _____ dated _____. We hereby undertake that
such drafts will be duly honoured on presentation, without enquiring whether you have a right between yourselves
and the Company to make such presentation and without recognizing any claim of the Company provided that the
terms and conditions of this Credit are complied with.

It is understood the Bank is obligated under this Credit for the payment of monies only.

It is a condition of this Irrevocable Letter of Credit that it shall be deemed to be automatically extended, without
amendment, for one year from the present or any future expiration date hereof, unless ninety (90) days prior to
any such date we shall notify you, in writing by registered mail, that we elect not to consider this Letter of Credit
renewed for any such additional period.

The expiry date for presentation of any claims at our counters is _____ and the
Bank's liability will be extinguished for any claims thereafter.

Except as otherwise stated therein, this Credit is subject to the Uniform Customs and Practice for Documentary
Credits (1993 Revision), International Chamber of Commerce, Publication 500.

Yours truly,

IF PRESENTED FOR PAYMENT, THE CHEQUE
OR DRAFT WILL BE PAYABLE TO THE
PROVINCIAL TREASURER

SIGNATURE (Manager)

SIGNATURE (Witness)



LABOUR AND MATERIAL PAYMENT BOND

Bond No. _____ Amount _____ Contract No. _____

Project: _____

KNOW ALL PERSONS BY THESE PRESENTS THAT

(Principal)

of the _____ of _____ in the Province of Alberta, as Principal (hereinafter called "the Principal"),

- and -

(Surety)

of the _____ of _____ in the Province of Alberta, as Principal (hereinafter called the "Surety"), a surety authorized to transact business in the Province of Alberta, are held and firmly bound unto:

HER MAJESTY THE QUEEN, In the Right of the Province of Alberta, herein represented by the Minister of Transportation, as Trustee, (hereinafter called "the Minister") for the use and benefit of claimants as hereinbelow defined, in the sum of

_____ dollars (\$ _____), to be paid to the Minister or his successors in office, or to whom the said Minister or his successors may direct, and the said Principal and Surety bind themselves and each of them and their respective successors, heirs, executors, administrators and assigns jointly and severally, to pay the said sum under the terms of these presents:

WHEREAS the Principal has entered into a written Contract (hereinafter called "the Contract") with the Minister, dated the _____ day of _____, A.D. 20____, being Contract No. _____, and which Contract is by reference made a part hereof (date to be filled in by the Department);

AND WHEREAS it is a term of the Contract that a Labour and Material Payment Bond be provided in favour of the Minister, as contained herein;

NOW THEREFORE the conditions of this obligation are such that if the Principal shall make payment to all claimants for all labour and material used or reasonably required for use in the performance of the Contract and should such payment be properly made, then this obligation shall be null and void; otherwise, this obligation and these conditions will remain in full force and effect, subject to the following conditions:

- 1. For the purpose of this bond: (a) "claimant" means a person, including a body corporate, or a partnership, and the heirs, executors, administrators or other legal representatives of a person to whom the context can apply according to law, who has provided labour and material and who has not been paid for the same by the Principal or a subcontractor, in accordance with the Principal's or subcontractor's obligation to do so, provided that a person who rents equipment to the Principal or a subcontractor to be used in performance of the Contract under a contract which provides that all or a part of the rent is to be applied towards the purchase price thereof, shall only be a claimant to the extent of the prevailing Alberta Department of Transportation and Utilities rental rates for the period during which the equipment was used in the performance of the Contract. (b) "labour and material" means labour, equipment, materials and services used or reasonably required for use in the

performance of the Contract.

(c) "services" means water, gas, electrical power, light, heat, oil, gasoline, steam, telephone, architectural, engineering and technical services, construction camp rental and catering, and other similar services, consumed or incurred, by the Principal or a subcontractor, at the Place of the Work and in the performance of the Work of the Contract.

(d) "subcontractor" means

- (i) a person not contracting directly with the Minister, but contracting with a contractor who holds a contract with the Minister, for the provision of labour and material, and
- (ii) a person contracting with the person first mentioned in subclause (i) for the provision of labour and material.

2. The Surety acknowledges and agrees that Surety means a person who guarantees to the Crown the payment of creditors.

3. The Principal and the Surety hereby jointly and severally agree with the Minister, as Trustee, that every claimant who has not been paid as provided for under the terms of his contract with the Principal or subcontractor before the expiration of a period of 90 days after the date on which the last of such claimant's work or labour was done or performed or materials were furnished by such claimant, may, as beneficiary of the trust herein provided for, sue on this Bond, prosecute the suit to final judgement for such sum or sums as may be justly due to such claimant under the terms of his contract with Principal or subcontractor, and have execution thereon; provided that the Minister is not obliged to do or take any act, action or proceeding against the Surety on behalf of any claimant to enforce the provisions of this Bond. If any act, action or proceeding is taken either in the name of the Minister or by joining the Minister as a party to such proceeding, then such act, action or proceeding shall be taken on the understanding and basis that the claimant who takes such act, action or proceeding shall indemnify and save harmless the Minister against all costs, charges and expenses or liabilities incurred thereon and any loss or damage resulting to the Minister by reason thereof; provided still further that, subject to the foregoing terms and conditions, a claimant may use the name of the Minister to sue on and enforce the provisions of this Bond.

4. No suit or action shall be commenced pursuant to clause 3 hereof by any claimant unless such claimant shall give notice

within the time limits hereinafter set forth, to each of the Principal, Surety and Minister, stating the amount that is claimed. Such notice shall be served by mailing the same to the Principal, Surety and Minister at the addresses shown in this bond, or served in any manner in which legal process may be served in the Province of Alberta. Such notice shall be given:

- (a) in respect of any claim for the amount or any portion thereof required to be held back from the claimant by the Principal or subcontractor under the terms of the claimant's contract with the Principal or subcontractor, within 120 days after such claimant should have been paid in full under the claimant's contract with the Principal or subcontractor,
- (b) in respect of any claim other than for the holdback or portion thereof, referred to above, within 120 days after the date upon which such claimant did or performed the last of the work, or furnished the last materials for which such claim was made under the claimant's contract.

5. Any suit by a claimant under this Bond shall be instituted before the expiration of 1 year from the date on which the

Principal ceased work on the Contract, including work under the guarantees and warranties provided in the Contract, and shall be instituted in a court of competent jurisdiction in the Province of Alberta.

6. Upon receipt, at the address shown in this bond, by the Surety, of a notice of claim from a claimant, the Surety shall:

- (a) immediately commence its investigation of the claim, and
- (b) within 15 days, send, in writing, to the claimant and the Minister, an acknowledgement of the notice of claim and a statement of the procedures to be followed by the claimant in order to attempt to settle the claim.

7. Pursuant to clause 6. hereof and following compliance with the procedures referred to in clause 6. and;

- (a) providing the claim is not being disputed, the Surety or the Principal, or both, shall make payment to the claimant within 30 days after the date of agreement on the quantum of the claim; or
- (b) in the event the claim is being disputed, the Surety or the Principal, or both, shall, within 30 days, notify, in writing, the claimant and the Minister of the dispute, setting out the grounds of dispute.

8. Any material change in the Contract between the Principal and the Minister shall not prejudice the rights or interests of any claimant under this Bond, who is not instrumental in bringing about or has not caused such change.

9. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith, and in accordance with the provisions hereof, by the Surety.

10. Where the aggregate of claims appears to the Minister to exceed the sum of the bond amount and money due and payable to the Principal, the Minister and the Surety may agree to suspend payment until all claimants have substantiated their claims.

11. The Surety shall not be liable for a greater sum than the maximum amount specified in this Bond.

ADDRESS FOR NOTICES shall be:

MINISTER
at Alberta Transportation, Business Management Branch, 3rd Floor, Twin Atria Building, 4999 - 98 Avenue, Edmonton, Alberta T6B 2X3.

PRINCIPAL at _____

SURETY at _____

IN WITNESS WHEREOF the Principal and the Surety have signed and sealed this Bond, this ____ day of _____, 20____.

SIGNED, SEALED and DELIVERED by
the Principal in the Presence of

WITNESS TO PRINCIPAL

Principal (Seal)

SIGNED, SEALED and DELIVERED by
the Surety in the Presence of

WITNESS TO SURETY

Seal (Seal)

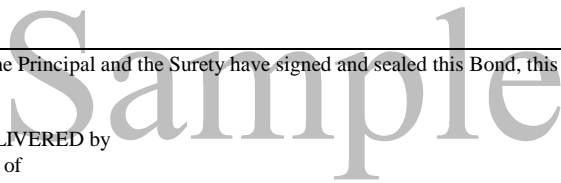


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A. AWARDING HIGHWAY MAINTENANCE CONTRACTS

At this time, the Department is requesting the submission of Proposals for the performance of highway maintenance in Contract Maintenance Areas 1, 2, 3 & 4.

This Special Provision is intended to supplement and provide clarification of the clauses in the Request for Proposals pertaining to the process that will be used by the Department to identify the Preferred Proposal(s). The term "Preferred Proposal" is referenced in Section 4.0 of this Request for Proposal.

Step 1 – Identifying the Proposal or Combination of Proposals covering all 4 CMAs and having the Highest Score

Pursuant to section 4.0 of this Request for Proposals, the department will identify the Proposal covering all 4 CMAs or the combination of Proposals covering all 4 CMAs, as the case may be, which has the highest score. For the purposes of this Special Provision only, such Proposal(s) is deemed as the "HIGHEST SCORE PROPOSAL(S)".

If in the opinion of the Department, the "HIGHEST SCORE PROPOSAL(S)" provides good value to the Department, it will be considered to be the Preferred Proposal(s) and the evaluation process will continue pursuant to Section 4.3.6 of this Request for Proposals.

Step 2 – Assessing Proposals where the HIGHEST SCORE PROPOSAL does not provide Good Value to the Department

STEP 2 will only be used if the "HIGHEST SCORE PROPOSAL(S)"(as determined in STEP 1) is judged by the Department as not providing good value.

If in the opinion of the Department, the "HIGHEST SCORE PROPOSAL(S)" does not provide good value to the Department it will not be considered to be the Preferred Proposal(s). In such case the Department will then consider all individual Proposals that do not contain all 4 CMAs. This includes any Proposals that are part of a combination of Proposals covering all 4 CMAs.

The Department will then proceed with the evaluation process as follows:

- (a) select the Proposal or combination of Proposals which covers the greatest number of CMAs, and also provides good value to the Department. In the case of Proposals or combination of Proposals that cover the same number of CMAs, the Proposal or combination of Proposals with the highest cumulative score will be selected.

The scores of each individual CMA in the selected Proposal(s) will be compared to the scores of the corresponding CMAs of the "HIGHEST SCORE PROPOSAL(S)" and the following shall apply:

- (i) If the selected Proposal covers only 1 CMA, the score of that CMA must be at least 10% greater than the score of the corresponding CMA from the “HIGHEST SCORE PROPOSAL(S)”, before it will be considered to be a Preferred Proposal.
- (ii) If the selected Proposal covers 2 CMAs, the cumulative score of the 2 CMAs must be at least 5% greater than the cumulative score of the corresponding CMAs of the “HIGHEST SCORE PROPOSAL(S)”, before it will be considered to be a Preferred Proposal.
- (iii) If the selected Proposal covers 3 CMAs, the cumulative score of the 3 CMAs must be at least 3.5% greater than the cumulative score of the corresponding CMAs of the “HIGHEST SCORE PROPOSAL(S)”, before it will be considered to be a Preferred Proposal.
- (iv) These requirements for “increased scores” in items (i), (ii) and (iii) above do not apply in cases where the selected Proposal was originally a component of the “HIGHEST SCORE PROPOSAL(S)”. In such cases, the selected Proposal will be judged on a best value basis.
- (v) In the event the Department awards contracts to bidders with Preferred Proposals selected through this STEP 2, this will result in 1 or more than 1 CMA not being covered by a contract. In such case, the Department may enter into negotiations with the bidder having the “HIGHEST SCORE PROPOSAL” (as determined in STEP 1) for the performance of the Work in the affected CMA(s). In the event such negotiations are not resolved to the satisfaction of both parties, the Department reserves the right to explore other avenues for awarding the highway maintenance in the affected CMAs, including re-tendering.

Step 3 – No Preferred Proposals Identified

If Step 2 does not result in any Preferred Proposals, the Department reserves the right to award no contracts whatsoever, through this RFP process.

B. STANDARD SPECIFICATIONS

The Specifications for this Contract are published in the Department manual entitled “Highway Maintenance Specifications”, Version 3, May 2001.

The typical plans and drawings for this Contract are published in the following documents:

- All drawings for traffic accommodation and work zone temporary signing are found in the Department manual entitled “Traffic Accommodation in Work Zones”, 2nd Edition, May 2001.
- Standard drawings showing requirements for pavement markings are found in the latest version of the Department manual entitled “Alberta Highway Pavement Marking Guide”.
- Typical drawings for permanent highway signage are included in the Department manual entitled “Typical Signage Drawings”.

- Typical drawings for barriers are included in the Department manual entitled “Typical Barrier Drawings”.
- Most of the drawings referenced in the Highway Maintenance Specifications manual are found in the Department manual entitled “CB6 Standard Highway Construction Drawings”.

Any drawings not found in these manuals, or any updated drawings, are included in the individual specifications or included in the contract.

C. SCOPE OF WORK

The work within this CMA will commence at **12:01 A.M. on May 16, 2004** and terminate at **12:00 P.M. (midnight) on May 15, 2009**.

The Work consists of performing all required routine and specific maintenance of the designated highway infrastructure within the boundaries as shown on the Contract Plan.

Provincial highways included in the designated highway infrastructure are as follows:

PAVED HIGHWAYS

Hwy. No.:	Description	Kilometer		Length (2 Lane Equivalent)
		From:	To:	
2:60	Reno Road to Peace River Bridge	4.84	38.68	38.43
2:62	East End of Peace River Bridge to Jct. Hwy 35	0.00	19.45	27.97
2:64	Jct. Hwy 35 to Sixth Meridian	0.00	35.96	38.22
2:66	Sixth Meridian to Hwy 64	0.00	38.40	39.78
2:68	Hwy 64 to CMA Bdy.	0.00	7.76	8.41
2A:36	Jct. Hwy 2:62 to Jct. Hwy 2:64(Grimshaw)	0.00	11.66	11.76
35:04	Jct. Hwy 2 to Jct. Hwy 689	0.00	35.27	39.00
35:06	Jct. Hwy 689 to Notikewin River Bridge(Town of Manning)	0.00	43.74	43.74
35:08	Notikewin River Bridge(Town of Manning) to 25 th Baseline	0.00	53.24	55.00
35:10	25 th Baseline to Jct. Hwy 695	0.00	42.72	46.23
64:02	BC Border to Running Lake Rd.	0.00	65.92	67.60
64:04	Running Lake Rd. to Hwy 685	0.00	32.23	32.70
64:06	Hwy 685 to Hwy 2:68	0.00	27.86	28.10

SPECIAL PROVISIONS

CMA #4

Hwy. No.:	Description	Kilometer		Length (2 Lane Equivalent)
		From:	To:	
64A:06	Hwy 64 to Hwy 2:66	0.00	6.64	6.64
682:02	E of Hwy 729 (start of Pavm't) to Hwy 64	9.55	23.39	13.84
683:02	Jct. Hwy 744 to Jct. Hwy 2 (Nampa)	0.00	9.77	9.87
684:02	Jct. Hwy 2:64 to Jct. Hwy 2:62	0.00	31.30	34.00
685:02	E of Hwy 729 to Hwy 732	0.60	28.79	28.29
685:04	Hwy 732 to Hwy 735	0.00	19.64	19.64
685:06	Hwy 735 to Hwy 2 (Grimshaw)	0.00	31.74	32.12
688:02	Jct. Hwy 2 to Jct. Hwy 986	0.00	23.57	26.07
689:02	Sixth Meridian to Jct. Hwy 35 (Dixonville)	0.71	23.15	22.44
690:02	Jct. Hwy 35 to Deadwood	0.00	11.72	11.72
691:02	Jct. Hwy 35 to Jct. Hwy 741	0.00	16.05	16.05
692:02	Jct. Hwy 35 to East of Hawk Hills	0.00	13.02	14.05
726:02	Hwy 64 N to Worsley	0.00	16.16	16.16
732:02	Hwy 2 to Hwy 685	0.00	17.18	17.20
737:02	Jct. Hwy 685 to Jct. Hwy 35	10.09	34.69	24.60
740:02	Shatesbury Ferry to Jct. Hwy 684	49.28	55.01	5.73
741:02	Jct. Hwy 691 to North of Jct. Hwy 741	0.00	1.14	1.14
743:02	Jct. Hwy 2 to North of Jct. Hwy 986	0.00	14.97	17.20
744:04	CMA Boundary through Town of Peace River to Jct. Hwy 2	30.59	61.43	32.35
986:01	Jct. Hwy 35 to Jct. Hwy 688	0.00	37.01	44.85
986:02	Jct. Hwy 688 to CMA Boundary	0.00	13.47	13.76
AR 200	Jct. Hwy 2 to Brownvale			1.100
AR 201	Jct. Hwy 2 to Whitelaw			1.600
AR 214	Jct. Hwy 2 to Bluesky			0.100
AR 238	Jct. Hwy 2 to Berwyn			0.600
TOTAL 2 LANE EQUIVALENT				888.06

GRAVEL HIGHWAYS

Hwy No:	Description	Kilometer		Length (2 Lane Equivalent)
		From	To	
682:02	Hwy 729 to Start of Pvm't	0.00	9.55	9.55

SPECIAL PROVISIONS

CMA #4

Hwy No:	Description	Kilometer		Length (2 Lane Equivalent)
		From	To	
685:02	East Hwy 729 to 600m east of Hwy 729	0.00	0.60	0.60
689:02	Sixth Meridian to Jct. Hwy 689 and Range Rd. 260.	0.00	0.71	0.71
690:02	End of pavement at Deadwood to Jct. Hwy 743	11.72	14.70	2.98
692:02	End of pavement to East of Hawk Hills	13.02	27.02	14.00
717:02	BC border N to Hwy 64	0.00	23.76	23.76
729:02	Hwy 682 to Hwy 685	0.00	22.98	22.98
730:02	Hwy 64 N to Eureka River	0.00	12.45	12.45
735:02	Hwy 2 to Hwy 685	0.40	13.52	13.52
737:02	End of pavement at Brownvale to Jct. Hwy 685	0.81	10.90	10.09
741:02	End of pavement to West of Notikewin Provincial Park	1.14	33.57	32.43
743:02	End of pavement to Jct. Highway 690	14.97	69.48	54.51
	TOTAL			198.18

INTERCHANGES

Location	Paved km
INT. 11 - Jct. Hwy 2 & Hwy 744	0.89
INT.12 - Jct. Hwy 2 & Hwy 684	3.02
INT.1924 - Jct. Hwy 2 & 98 Street-Peace River	0.32
TOTAL	4.23

ROADS OTHER THAN PROVINCIAL HIGHWAY

Location	Gravel Road Length (km)
Duncan's First Nation	9.25
TOTAL	9.25

WEIGH SCALES, ACCESS ROADS AND ROADSIDE TURNOUTS

Area	Hwy.	km	Gravel Length (km)	Paved Length (km)	Parking Lot Paved Area (m²)
AR 200 – Brownvale Access	2:64	26.93	-	0.49	-
AR 201 – Whitelaw Access	2:66	4.70	-	1.60	-
AR 214 – Bluesky Access	2:66	16.90	-	0.10	-
AR 238 – Berwyn Access	2:64	17.01	-	0.60	-
Grimshaw Vehicle Inspection Site	35:04	6.46	-	0.41	22,000
Grimshaw Roadside Turnout	35:04	1.99	-	0.17	5,100
Hawkhills Roadside Turnout	35:08	32.08	-	0.15	1,500
Kemp River Railway Crossing Roadside Turnout	35:10	18.14	-	0.14	1,500
B.C Border Turnout	64:02	1.3	-	-	5,000
TOTALS			0	3.66	34,250

PARK ROADS AND PARKING LOTS

The following facilities, owned by Community Development, contain roads and parking areas for which Transportation is responsible for maintenance. The Contractor shall maintain all vehicular roads that are wide enough for two lane traffic, roads within campgrounds that are wide enough for motor graders, and the main parking areas within provincial parks and recreational areas. Specifically, the Contractor shall look after the surface maintenance from shoulder to shoulder plus drainage culvert. Snow removal shall be undertaken where required for parks operations as determined by the Engineer.

Area	Hwy.	Km	Roadway Gravel Length (2 LEkm)	Roadway Paved Length (2 LEkm)	Parking Lot Gravel Area (m ²)	Parking Lot Paved Area (m ²)
Queen Elizabeth Provincial Park	2:64	1.610	0.3	10.0	200	5000
	2:64	12.00				
	685:06	26.84				
Notikewin Provincial Park	692:02	23.78	4.9	-	200	-
Twin Lakes Recreation Area	35:10	8.85	0.8	-	200	-
Figure Eight Lake Recreation Area	737:02	19.75	1.5	-	200	-
TOTALS			7.5	10.0	800	5000

WATER MANAGEMENT INFRASTRUCTURE

The following areas are infrastructure, owned by Alberta Environment and maintained by Alberta Transportation, which are located within the CMA boundaries and are a component of the maintenance work for the area.

AREA	DESCRIPTION	LOCATION
Grimshaw	Flood Control Ditch	Twp. 83-23-W5
Figure 8 Lake	Drop Outlet	Sec. 20-84-25-W5
George Lake	Weir / Inlet Channel	Twp. 83-23-W6
Stoney Lake	Dam / Drop outlet	Sec. 31-86-03-W6
Sulphur Lake	Weir	Sec. 07-89-02-W6

D. CONTRACTOR PERFORMANCE RATING SYSTEM

The Department has worked with the industry to develop a system for rating performance of Maintenance Contractors. This system is used in the Evaluation Criteria section of the document.

It is intended by the Department that further enhancements and modifications in the system will continue. All Contractors awarded a maintenance Contract shall have the opportunity to participate in the development of the system but the Department will have the final decision on the system.

The basic intent of the system is to rate the performance of an individual Contractor relative to those factors identified as being important. The primary factors to be considered will be:

- Work is done in a timely fashion.
- Work is done to the standards required by the specifications.

- The public and workers are not endangered during the performance of the Work.
- The count of demerit points applied to the Contract.
- Any other factors that are identified as important by both the Contractors and the Department during development of the system.
- Built-in Contractor quality control and quality assurance features into the system, to monitor specification compliance accurately.
- Automate the system as much as possible and reduce all subjectivity of the system.

There shall be no direct financial penalties applied to the Contractor due to Performance Rating, other than default of the Contract, in extreme circumstances.

E. PROVISION OF MATERIALS

The Contractor shall maintain, within the CMA, a minimum quantity of maintenance materials. Payment will be made at the time when these materials are incorporated into the Work using the applicable bid items for supply and installation of these materials. There is no separate payment for the storage of these materials or any other associated costs for maintaining these materials in inventory. The following are the minimum quantities required:

SIGNS

Sign Number	Sign Description	Sign Dimensions (cm)	Sign Quantity
RA-1	Stop	60 X 60	12
		90 X 90	6
		120 X 120	1
		150x150	1
WA-22	Bump	75 X 75	6
WA-7	Advisory Speed "65 km/h"	60 X 60	6

GUARDRAILS

Materials	Quantity
W-Beam Guardrail – 3.81 metre sections	16
W-Beam Guardrail– Turn Down End Sections	4
Treated Timber Guardrail Posts 150 cm X 200 cm @ 1.52 metres long	20
Treated Timber Guardrail Posts Posts 150cm X 200cm @ 2.13 metres long	6

F. MAINTAINING HWY 690, HWY 741 AND HWY 743 GRAVEL SURFACES**GENERAL**

The Contractor shall crush, stockpile, and place surfacing gravel for maintenance of Highway 690, Highway 741 and Highway 743 gravel surfaces in accordance with the specifications and provisions contained herein. The department estimates that over the term of the Contract, Highway 690 will require 3,000 cubic metres of surfacing gravel, Highway 741 will require 15,000 cubic metres of surfacing gravel and Highway 743 will require 32,000 cubic metres of surfacing gravel. These estimates are based on the department's five year average.

The Contractor is encouraged to supply the aggregate from his own sources but has the option of using the department owned pits listed below.

COMMON PROVISIONS

The following provisions will apply for both Department and Contractor sources.

- The supply and production of aggregate shall be in accordance with Specifications 55.4 and 55.3, as modified herein.
- Quantities for each time crushing will be at the discretion of the Contractor. However, as a minimum, the Contractor shall have completed the yearly provisional quantity specified in the unit price schedule by June of each year, or two months following issuance of the work order.
- The Contractor shall determine stockpile quantities as follows. Stockpile sites shall be surveyed prior to commencing crushing operations to obtain original ground measurements. Upon completion of crushing and stockpiling operations the Contractor shall survey the stockpile(s) and calculate volumes based on the End Area method. No allowance will be made for settlement. These volumes will be used by the department to ensure that minimum quantity requirements have been met, and for interim payments.
- Conversion of gravel surfacing aggregate quantities from volume to weight will be done using the factor of 1.632 tonnes per cubic metre.
- The Contractor shall provide a crushing plan within one month following award of the Contract.
- Pit operations shall be in compliance with Federal and Provincial Environmental guidelines and Regulations. An Environmental Construction Operations Plan (ECO Plan) will be required for each pit.

DEPARTMENT SOURCES

The following department sources are available to the Contractor for supply of surfacing gravel:

Nearest Hwy. Location	Legal Location	Name	Approx. 5 years Volume(m3)
Hwy 690	SE 20, SW 21-90-21-W5	North Star	3,000
Hwy 741	SE 20, SW 21-90-21-W5	North Star	15,000
Hwy 743	SE 20, SW 21-90-21-W5	North Star	12,000
Hwy 743	SW 26-084-22-W5	Richards	20,000

The material supplied and crushed in the Crown pit will be the Department's property and the Contractor shall not remove, relocate outside of the pit, sell or use for any other purpose than specified for under this Contract.

In addition to the requirements of Specification 55.3, "Aggregate Production and Stockpiling" the following shall apply:

- The Department may test at any time and reject material that does not meet specifications.
- The Contractor shall notify the Regional Aggregates Coordinator prior to commencement, and at completion of the pit operations.
- Topsoil, subsoil and overburden shall be removed in separate layers and stockpiled separately at locations determined by the Engineer.
- The Contractor shall burn any debris resulting from clearing operations.
- Pit operations, including decommissioning, shall be in accordance with department's pit operation plan, and the guidance provided by the Aggregates Coordinator. Pit plans and relevant information may be obtained from the department's Aggregates Coordinator in the Peace Region office.
- Stockpiling of crushed, reject and overburden material shall only be at the locations determined by the Engineer.
- Construction materials and all garbage shall be disposed of in the nearest approved disposal site. Absolutely no burying of garbage will be allowed in the pit.
- The Contractor shall contain and dispose of all sewage, outhouse waste, all fluids, oils, fuels, parts and other materials related to the repair and maintenance of any and all equipment brought to the pit for the purpose of carrying out the work. Absolutely no draining, spilling or burying of these materials will be allowed in the pit.
- Accidental discharges and/or spills of oil, diesel fuel or other environmentally harmful substances shall be immediately reported to the department and appropriate environmental authorities. Cleanup of spills will be at the Contractor's expense.
- All material up to 400mm in diameter shall be crushed.
- At the completion of crushing and stockpiling, all active pit faces shall be sloped to 2:1 and all non active slopes to 4:1.
- As part of the Quality Control the Contractor shall provide one (1) sieve analysis per 1000m3 of material crushed.

CONTRACTOR SOURCE

If the Contractor elects to supply the aggregate from his own source then he shall prepare a haul diagram for each source and submit it to the Engineer for approval. If the department approves the Contractor's source then payment for haul will be made as though the haul was done from the nearest department source (North Star Pit or the Richards Pit).

INTERIM PAYMENT

Interim payments for producing and stockpiling surfacing gravel will be made under the following conditions:

- The Contractor submits a written request for interim payment to the Engineer.
- The producing and stockpiling has been completed in accordance with the specifications and the provisions contained herein.
- Interim payment will not imply acceptance of the crushed aggregate by the Engineer. Interim payment will not be made for reject or surplus material.
- Interim payments will only be made on quantities crushed for use on Hwy. 690, Hwy 741 and Hwy. 743 as part of the following bid items: “Gravel Surfacing on Hwys. 690, 741 & 743 - Supply and Place (North Star Pit or Contractor’s Source)” and “Gravel Surfacing on Hwy. 743 - Supply and Place (Richards Pit or Contractor’s Source)”.

Measurement for interim payments will be as specified above in the section titled “Common Provisions”.

Interim payment is considered a portion of the unit price bid for material placed on the roadway. The interim payment will be deducted when payment is made under the applicable bid item.

Interim payment will be made at the unit price of \$2.00 per tonne. No inflationary/deflationary price adjustment will be made to this price throughout the term of the Contract.

PAYMENT

Payment for maintaining gravel surfaces on Hwy. 690, Hwy 741 and Hwy. 743 will be made at the applicable unit price bid per tonne for “Gravel Surfacing on Hwys. 690, 741 & 743 - Supply and Place (North Star Pit or Contractor’s Source)” and “Gravel Surfacing on Hwy. 743 - Supply and Place (Richards Pit or Contractor’s Source)”. This payment will be full compensation for producing, stockpiling and placing the gravel surfacing material; and for all labour equipment, tools and incidentals necessary to complete the work.

If the Contractor elects to use his own aggregate source for this work then payment for supply of aggregate will be made in accordance with specification 55.4, “Supply of Aggregate”.

Payment for haul will be made in accordance with Specification 55.2, with the exception that if the Contractor elects to use his own aggregate source then haul will be measured and paid for as though it was done from the nearest department source.

Payment for maintaining gravel surfaces on roads other than Hwy. 690, Hwy. 741 and Hwy. 743 will be made in accordance with the applicable specifications and standard bid items for this work.

At termination of the Contract any surplus crushed surfacing gravel in department sources, which meets specifications, will be purchased by the Department at the unit price of \$4.00 per tonne. No inflationary/deflationary price adjustment will be made to this price throughout the term of the Contract. Any interim payment, which has been made on the surplus material, will be deducted from the purchase price.

G. HIGHWAY MAINTENANCE WORK

INCIDENTAL MATERIALS

Further to Specification 53.39, the Contractor shall provide the following signs:

- Sixteen (16) 75 x 75 cm **“Smoke Ahead”** (WD-175) signs. Six (6) for Peace River Area, Six (6) for Manning Area and Four (4) for Hines Creek Area.
- Fourteen (14) 60 x 60 cm portable **“Stop”** (RA-1) signs. Eight (8) for Peace River Area, Two (2) for Manning Area and Four (4) for Hines Creek Area.
- Eight (8) 90 x 90 cm portable **“Traffic Lights Out of Order”** signs for Peace River Area.
- Eight (8) 90 x 90 cm **“Police Emergency Ahead”** (WD-200) signs. Four (4) for Peace River Area, Two (2) for Manning Area and Two (2) for Hines Creek Area.

There will be no separate payment for the supply, storage, setup and removal of these signs. This work shall be considered to be incidental to Highway Maintenance Work.

SCHEDULED ROAD INSPECTIONS – SUMMER (DAY)

Scheduled Road Inspections for the summer months (April 15 to October 15) shall be performed during normal working hours on the circuits and at the frequencies as follows:

SCHEDULED ROAD INSPECTIONS – SUMMER		
CIRCUIT	DESCRIPTION	APPROXIMATE LENGTH OF CIRCUIT In km
A	2:60 (km 4.84 to km 38.68), 2:62, 2:64, 2:66, 2:68 (km 0.00 to km 7.76), 2A:36, 35:04, 35:06, 35:08, 35:10 (km 0.00 to km 42.72), 64:02, 64:04, 64:06, 64A:06, 688:02, 732:02 (km 0.0 to km 10.00), 743:02 (km 0.00 to km 14.97), 986:01, 986:02 (km 0.00 to km 13.47)	554

SCHEDULED ROAD INSPECTIONS – SUMMER		
CIRCUIT	DESCRIPTION	APPROXIMATE LENGTH OF CIRCUIT In km
B	682:02, 683:02, 684:02, 685:02, 685:04, 685:06, 689:02, 690:02, 691:02, 692:02, 717:02, 726:02, 729:02, 730:02, 732:02 (km 10.00 to km 17.18), 735:02, 737:02, 740:02 (km 49.28 to km 55.01), 741:02, 743:02 (km 14.97 to km 69.48), 744:04 (km 30.59 to km 61.43), Duncan’s First Nation Public Roads	490

Circuit A shall be patrolled three times per week on Monday, Wednesday and Friday, during normal working hours.

Circuit B shall be patrolled twice per week, no more than 3 days between inspections, during normal working hours.

The contractor shall, during normal working hours, inspect all litterbins, toilets, access roads, major roadside turnouts and park roads at the frequencies identified for the adjacent highways in Circuits A and B.

Regardless of the patrol frequency of the circuits as defined, the Contractor shall provide all emergency services required to maintain the safety of the travelling public.

SCHEDULED ROAD INSPECTIONS – WINTER

Scheduled Road Inspections for the winter months (October 16 to April 14) shall be performed on the circuits and at the frequencies as follows:

SCHEDULED ROAD INSPECTIONS – WINTER		
CIRCUIT	DESCRIPTION	APPROXIMATE LENGTH OF CIRCUIT In km
1	2:60 (km 4.84 to km 38.68), 2:62, 2:64, 2:66, 2:68 (km 0.00 to km 7.76), 2A:36, 35:04, 35:06, 35:08, 35:10 (km 0.00 to km 42.72), 64:02, 64:04, 64:06, 64A:06, 682:02 (km 9.55 to km 23.39), 683:02, 684:02, 685:02, 685:04, 685:06, 688:02, 689:02, 690:02 (km 0.00 to km 11.72), 691:02, 692:02 (km 0.00 to km 13.02), 726:02, 732:02, 737:02 (km 10.09 to km 34.69), 740:02 (km 49.28 to km 55.01), 741:02 (km 0.00 to km 1.14), 743:02 (km 0.00 to km 14.97), 744:04 (km 30.59 to km 61.43), 986:01, 986:02 (km 0.00 to km 13.47)	838
2	2:60 (km 31.44 to km 38.68), 2:62, 2:64 (km 0.00 to km 5.00), 744:04 (km 57.00 to km 61.43) 986:01 (km 19.90 to km 37.01)	53
3	2:60 (km 4.84 to km 31.44), 2:64 (km 5.00 to km 35.96), 2:66, 2:68 (km 0.00 to km 7.76), 2A:36, 35:04, 35:06, 35:08, 35:10 (km 0.00 to km 42.72), 64:02, 64:04, 64:06, 64A:06, 682:02 (km 9.55 to km 23.39), 683:02, 684:02, 685:02, 685:04, 685:06, 688:02, 689:02, 690:02, 691:02, 692:02, 726:02, 732:02, 737:02 (km 10.09 to km 34.69), 740:02 (km 49.28 to km 55.01), 743:02 (km 0.00 to km 14.97), 744:04 (km 30.59 to km 57.00), 986:01 (km 0.00 to km 19.90), 986:02 (km 0.00 to km 13.47)	803
4	682:02 (km 0.00 to km 9.55), 690:02 (km 11.72 to km 14.70), 692:02 (km 13.02 to km 27.02), 717:02, 729:02, 730:02, 735:02, 737:02 (km 0.81 to km 10.09), 741:02, 743:02 (km 14.97 to km 69.48), Duncan’s First Nation Public Roads	206

Inspections shall be performed on Circuit 1 on a night shift, every night, 7 days a week, with the exception of Christmas Eve. Patrols shall start after midnight and be completed by 6:00 A.M.

Daily Road Reports shall be completed on a standard form supplied by the Department and shall be submitted by 7:00 A.M. daily to Alberta Motor Association, to Transportation District office and to the Maintenance Contract Inspector.

Circuit 2 shall be patrolled 5 days a week during normal working hours.

Circuit 3 shall be patrolled three times per week on Monday, Wednesday and Friday, during normal working hours.

Circuit 4 shall be patrolled twice per week, no more than 3 days between inspections, during normal working hours.

The Contractor shall, during normal working hours, inspect all litterbins, toilets, park roads, weigh scales, access roads and major roadside turnouts at the frequencies identified for the adjacent highways in Circuits 2, 3 and 4.

The Contractor shall inspect the Shaftesbury Ice Bridge when it is in service at the frequencies identified in Circuits 1 and 3.

Regardless of the patrol frequency of the circuits as defined, the Contractor shall provide all emergency services required to maintain the safety of the travelling public.

During inclement weather, the Foreman or his designate will be required to continually monitor the roads during normal working hours as part of the highway maintenance work item.

All foremen's vehicles involved in snow/ice removal operations shall be equipped with a dynamic infrared road and air temperature sensor. The sensor display shall be mounted inside the cab and be positioned in an area visible to the operator.

ROUTINE HIGHWAY MAINTENANCE ACTIVITIES

- The Contractor shall record daily and report weekly on all work that is performed under the Highway Maintenance Work activity. As part of these reports the person carrying out the inspection should be observant and record any and all work that may be required in the near future.
- The Contractor shall ensure that all items under 53.39.4.3. are addressed and corrective action taken immediately upon notification or if person carrying out inspections comes upon it.
- During night patrols the contractor shall record daily and report weekly on all work that is required to correct any area lighting problems, or any signals which require replacement or repair as part of there inspection. These reports will be submitted to the MCI so quantities can be collected and work orders written.

DELINEATOR AND WILDLIFE REFLECTOR POSTS

Straightening or re-installing delineator posts shall include cleaning out the existing hole. All this work may require the use of hand tools.

All delineators to be straightened at least twice a year and reflectors to be replaced as required:

- commencing after the snow has gone and completing before June 15th
- commencing after September 1st and completing before October 15th

Other delineator deficiencies may require attention during other time periods, as directed by the Engineer.

SIGN STRAIGHTENING

A sign requires straightening once it is more than 1.5 degrees off vertical.

All signs shall be straightened at least twice each year as follows:

- commencing after the frost is out each spring and completing before June 15th
- commencing after September 1st and completing before October 15th

Other sign straightening may be required during other time periods, as directed by the Engineer.

WASHING SIGNS, DELINEATORS AND REFLECTIVE STRIPS ON GUARDRAIL

The Contractor shall commence washing signs, delineators and reflective strips on guardrail within 24 hours of the end of a winter storm, whenever these items are dirty. Washing shall continue until all signs, delineators, wildlife reflectors and reflective strips are clean. Summer washing of these items on gravel roads is also required as necessary.

REFUSE PICKUP

All refuse found on the road surface is to be removed immediately.

The Contractor shall complete a thorough clean up of the following highways commencing after the snow has gone and completing before June 30th of each year:

- all highways within any Town or Village; the clean up shall include all highways within 3 kilometres of the corporate limits
- all highways within any Hamlet; the clean up shall include all highways within 1 kilometre of the Hamlet

In addition to the above, on all roadways and areas as listed in section B, all visible litter as seen from the patrol vehicle shall be picked up during regular road patrols throughout the year.

FROST PROBES

There are two conventional frost probe in CMA 4 that shall be maintained and read at intervals. It is located on the following highway:

Highway 35:04 – Grimshaw Vehicle Inspection Site – Km 6.6 - Located on centerline.

Highway 35:08 – North of Manning – Km 23.1 – Located in southbound acceleration lane.

The frost probe shall be read twice a week from November 1, until the frost is in the road to a depth of 120 cm, then every two weeks until the frost starts coming out of the road. In the spring, the probe shall then be read twice weekly until the frost is completely out of the ground.

The Contractor as required shall carry out routine maintenance of frost probe. At minimum it shall be serviced once per year. The work shall be incidental to Highway Maintenance work and include the following:

- a) Replace or clean cap and grease threads, also clean thread collar.
- b) If collar is loose, old concrete shall be removed and replaced with new quick drying concrete.
- c) Remove frost probe tube and suction out any water in the casing.
- d) Empty tube of old dye and replace tube with new one if the tube has become cloudy.
- e) Fill tube with new dyes each year.
- f) Replace rusted clamps.
- g) Mark 30 cm gradations on the tube.
- h) Identify frost probe location on the road.

Other work not specified will be paid as extra work. Refer to the detail drawing of typical “Frost Penetration Probe Installation” found in these Special Provisions.

LOCATIONS OF PUBLIC FACILITIES

Various public facilities are located within the boundaries of the CMA. Litterbins each contain 2 bag holders/barrels. In accordance with Specification 53.39 and these Special Provisions, the Contractor shall maintain and service the following:

LITTER BINS	
Hwy 2:68 (North Side Dunvegan Hill)	2 bin at roadside turnouts
Hwy 35:04 (North of Jct. Hwy 2)	1 bin at roadside turnouts
Hwy 35:08 (South of Jct. Hwy 692)	1 bin at roadside turnouts
Hwy 35:10 (South of Kemp River Railroad Crossing)	1 bin at roadside turnouts
Hwy 64:02 (East of BC Border)	1 bin at roadside turnouts
Hwy 685:04 (East of Hwy 732)	1 bins at roadside turnouts

MAINTENANCE OF FLASHING BEACONS AND SIGNALS

The Contractor shall, as part of routine duties, perform minor maintenance work on flashing beacons and signals, in accordance with Specification 53.39 on the following facilities:

Location	Type (Flashing Beacon / Signal)
Hwy 2:60 – Nampa Crosswalk	1 overhead flashing beacon
Hwy 2:60 – South of Pat’s Creek Interchange (Peace River)	1 flashing beacon on “Keep Right Assembly”
Hwy 2:60 – Peace River Bridge (east end)	1 flashing beacon on “Keep Right Assembly”
Hwy 2:62 – Peace River Bridge (west end)	1 flashing beacon on “Keep Right Assembly”
Jct. Hwy 2:62 & 78 th St. – Peace River	Traffic signals, pedestrian signals and overhead advance warning lights
Jct. Hwy 2:62 & Hwy 743 – Peace River	Traffic signals, pedestrian signals and overhead advance warning lights
Hwy 2:62 – West of Hwy 743	1 flashing beacon on “Keep Right Assembly”
Jct. Hwy 2:62 & Hwy 35:04	1 flashing beacon on “Stop” sign
Hwy 2:64 – Grimshaw Crosswalks (3 locations)	12 overhead flashing pedestrian lights
Jct. Hwy 2:64 & Hwy 684	2 flashing beacons on “Keep Right Assembly”
Hwy 35:04 – Grimshaw VIS	4 flashing beacons – 2 each on “Vehicles over 4,500 kg Report to Vehicle Inspection Station when Lights Flashing”
Jct. Hwy 35:04 & Hwy 986	2 flashing beacons on “Keep Right Assembly”
Jct. Hwy 743:02 & Hwy 986	2 flashing beacons on “Stop” sign
Hwy 744:04 – 100 th St. & 96 th Ave. – Peace River	Traffic and pedestrian signals
Hwy 744:04 – 100 th St. & 100 th Ave. – Peace River	Traffic and pedestrian signals
Hwy 744:04 – 100 th St. & 101 th Ave. – Peace River	Traffic and pedestrian signals
Hwy 744:04 – 100 th St. & 102 th Ave. – Peace River	1 overhead flashing beacon
35:06 – Manning Crosswalk	4 overhead flashing pedestrian lights and 1 advance warning flashing light

From time to time there may be additions or deletions to the above list of flashing beacons and signals. The Contractor shall perform minor maintenance work on any additional flashing beacons and signals added to the system. No adjustment to payment will be made for future additions or deletions of flashing beacons and/or signals.

REPORTING OF WILDLIFE ROADKILL

In accordance with Specification 53.39, the Contractor shall provide the following:

- The Contractor shall keep a record of roadkill locations and numbers. The information shall be supplied to the Maintenance Contract Inspector and local Conservation Officer. Wildlife shall be disposed of in an environmentally friendly manner (i.e.: landfill sites, etc.) unless otherwise directed.

PERFORMING MINOR FENCE REPAIRS

There are some locations within CMA 4 where page wire fence and barbed wire fence exist. In accordance with specification 53.39, the Contractor shall perform minor repairs to those fence lines and wire gates.

H. MINIMUM NUMBER OF FOREMEN

The minimum number of foremen required to supervise work within the scope of this CMA shall be three (3). The Department considers this to be the minimum number to adequately supervise winter snow and ice control activities. The number of Foremen may be reduced in the summer season, providing it can be shown in the proposal that Department staff will still have sufficient access to Foremen and/or Superintendents on a wide spread basis.

Foremen shall be dedicated to full time supervisory duties and must be available locally and on a wide spread basis to meet with Department personnel on issues pertaining to the Work. Foremen shall also be available during “off-hours”.

Foremen shall not be “Lead Hands” or “Working Foremen” that would not be widely available for inspection and supervisions during winter storms. Foremen shall not be assigned full time duty as an equipment operator during the winter season.

A Foreman’s winter residence shall be within half an hour of his assigned shop or main work center.

I. SNOW REMOVAL AND ICE CONTROL

The Prospective Contractor, in the Snow/Ice Control plan of his Proposal, shall identify details of the type and location of snow/ice control equipment within the proposed Contract area boundaries. The Department has specific requirements, to ensure the public safety is properly maintained.

HOT SPOTS

The following areas shall require high priority for snow/ice control.

HOT SPOT	LOCATION	DETAILS
Peace River West Hill	Hwy 2:60	Steep grades, fog conditions, high volume of traffic, interchanges, divided highway, major bridges, river valley, commuter traffic, climbing lane, heavy truck traffic
Peace River West Hill	Hwy 2:62	Steep grades, fog conditions, high volume of traffic, interchange, major intersections, divided highway, major bridges, river valley, commuter traffic, climbing lane,

HOT SPOT	LOCATION	DETAILS
		heavy truck traffic
Town of Fairview limits (Km 25 to 28)	Hwy 2:66	Commuter traffic, major intersection, heavy truck traffic
Meikle River Valley	Hwy 35:08	Steep grades, fog conditions, major bridge, river valley, climbing lanes, heavy truck traffic
100 Mile Hill	Hwy 35:10	Steep grades, climbing lane, heavy truck traffic, frequent snow fall
Clear River Hill (West of Hines Creek)	Hwy 64:02	River valley, steep grades, heavy truck traffic, fog conditions, extra drive lanes, bus traffic, frequent snow fall
Hwy 2 North to Cooperate Limits	Hwy 732:02	Commuter traffic, major intersection, high traffic volumes, heavy truck traffic
Judah Hill	Hwy 744:04	Steep grades, commuter traffic, fog conditions
DMI East and West Hill	Hwy 986:01	Steep grades, fog conditions, divided highway, major bridges, river valley, commuter traffic, climbing lanes, heavy truck traffic

TRUCK EQUIPMENT REQUIREMENTS

The following is a list of equipment fleet requirements in reference to Specification 52.1.

MINIMUM REQUIREMENT EQUIPMENT TYPE	NUMBER OF UNITS	LOCATION
Tandem Axle Sander/Plow Truck with right wing, two-way plow, six-way underbody plow and 8.5 m ³ hopper	1	Hines Creek Area
	2	Peace River Area
	1	Manning Area
Tandem Axle Sander/Plow Truck with right wing, two-way plow, and 8.5 m ³ hopper	5	Peace River Area
Tandem Axle Sander/Plow Truck with right wing, and 8.5 m ³ hopper	3	Hines Creek Area
	2	Peace River Area
	2	Manning Area

For measurement and payment purposes, Tandem Axle Truck with six-way Underbody Plow and 8.5m³ Rear Discharge Sander shall be considered the same as “Tandem Axle Sander/ Plow Truck – 8.5 m3 and smaller”.

- All 4 lane highways shall have trucks equipped with 2 way plows
- Minimum of 18 plow trucks shall be housed in indoor heated storage

The Contractor may choose to use a Tridem or Tandem-Tandem Axle Plow Truck to improve efficiency and level of service. In such case according to specification 52.1.3.3, the truck shall have the minimum of 325 HP engine.

NUMBER OF SNOWPLOW TRUCKS

The Prospective Contractor shall calculate the number of snowplow trucks required in his Snow/Ice Control Plan. The number shall be calculated using the following formula:

{{(Proposed Truck Demand Factor) ÷ (Base Truck Demand Factor)} x (Base No: of Trucks)}

For this particular CMA, base information is as shown:

Base Truck Demand Factor	Base No. of Trucks
22,024.5	20

If the Prospective Contractor submits a Proposal consisting of multiple CMAs, then the cumulative value of Base Truck Demand Factor and Base No. Of Trucks must be used, to calculate the number of trucks required within the Proposal. Regardless of the total, all the specific individual equipment requirements of each CMA must be met.

Within the Snow/Ice Control Plan, the Prospective Contractor shall clearly demonstrate that the number of snowplow trucks and the requirements for specific equipment are met, in number, type and location.

The minimum number of snowplow trucks for this CMA is 18.

TRUCK AVAILABILITY

In accordance with Specification 52.1, Snow Removal and Ice Control (Truck), the Contractor shall supply trucks and related equipment for the following periods:

In CMA 4, three (3) tandem snowplow trucks with wing shall be available from October 1 to April 30: Two (2) tandems in Peace River area and one (1) tandem in Manning area. For all other trucks in this Contract, the availability period shall be from October 15 to April 15.

The Engineer may adjust the availability periods.

In the event of heavy snowstorms or other unseasonable weather it occurs outside the time period specified for availability, the Contractor shall make sufficient equipment and personnel available at the earliest possible time, regardless of the time period specified for Availability. In these cases, the availability rate will be paid for the additional days worked.

PLOW TRUCK HOUR PAYMENT ADJUSTMENT

For this CMA, the provisional quantity, which will be used to establish the “footprint” for payment adjustments (Specification 52.1) for snowplow truck hours, is **7500** hours. These hours

are based on the best historical data available. Further information on the historical data may be obtained by contacting the Operations Manager.

J. MOTOR GRADER REQUIREMENTS FOR PAVED HIGHWAYS

The graders with wings shall be required for snow removal on the sideslopes of all highways.

Minimum requirements for grader units and approximate locations (area) are as follows:

Minimum Requirement Equipment Type	Number of Units	General Location
Motor Graders with right wing	1	Hines Creek Area
Motor Graders with right wing	1	Peace River Area
Motor Graders with right wing	1	Manning Area

Motor Graders shall be equipped with wings for winter operations during the period from October 15 to April 15.

The specific locations of the motor graders are at the discretion of the Contractor, who shall respond within 24 hours of the issuance of the Work Order and all work orders shall be completed within 10 days of the issuance unless otherwise specified and approved by the Engineer.

K. PROVISIONS FOR SALT STORAGE (BASE SALT STORAGE QUANTITY)

The Prospective Contractor must identify in his Proposal, the location and distribution of salt storage facilities within the Contract area boundaries.

The Gradation of Salt required for this CMA is fine (Type D).

The minimum value or base salt storage capacity for this CMA is 2,500 tonnes.

All sites identified by the Prospective Contractor in his Proposal, shall have a minimum quantity capacity of either 200 tonnes or 20 % of the projected usage from that site, as calculated in the Prospective Contractor's Snow/Ice Control plan, whichever is greater. In cases where shops have been purchased or leased from the Department, the existing salt storage capacity will be considered adequate.

The Winter Salt Distribution Factor for this CMA is 11.26 tonnes per km (10,000 / 888.06).

The Prospective Contractor's annual provisional quantity for each site shall be calculated according to the following calculation:

$$\text{(Winter Salt Distribution Factor)} \times \text{(Length of roadway serviced by that site)}$$

The length of the roadway serviced by that site must be identified within the Prospective Contractor’s Snow/Ice Control Plan.

For multiple CMA proposals, the overall or cumulative quantity of salt storage capacity must equal or exceed the cumulative value of base salt storage quantity for all CMAs within the Proposal.

PAYMENT ADJUSTMENT FOR SALT USAGE

For this CMA, the provisional quantity, which shall be used to establish the “footprint” for payment adjustments (Specification 52.8) for salt usage is 10,000 tonnes.

L. WINTER SANDING MATERIALS

The Prospective Contractor must identify in his Proposal, the location and distribution of sand storage facilities within the proposed Contract area boundaries. Unless otherwise specified elsewhere in this RFP document, sand and salt must be stored in the same yard at each location.

The Winter Sand Distribution Factor for this CMA is 34.23 tonnes per two lane equivalent km (30,400 / 888.06).

The Prospective Contractor’s annual provisional quantity for each sand storage site shall be calculated according to the following calculation:

(Winter Sand Distribution Factor) x (Length of roadway serviced by that site)

The length of the roadway serviced by a site must be identified with the Prospective Contractor’s Snow/Ice Control Plan.

For the duration of the Contract, the Contractor shall supply sodium chloride treated sand as per Specification 52.5 at the locations identified in the Proposal. When the Department determines that renewal of existing sand/sodium stockpiles is required, the Contractor shall add sodium chloride as per specification 52.5 unless otherwise directed by the Engineer.

All winter sanding material produced for this CMA shall meet the following specification:

Sieve Size	% Passing
5000	100
1250	60-90
315	5-40
160	0-15
80	0-10

M. SNOW/ICE CONTROL DELIVERY SECTIONS AND CLASS

For the purposes of comparing Proposals between Prospective Contractors, the Department has divided the entire highway network into “Sections”. Each Section is assigned a “Class”, which identifies its relative significance, as outlined in “Winter Service Delivery – Details” within the network.

Snow/Ice Control Sections have been fixed prior to the RFP and can not be altered by the Prospective Contractor within his Snow/Ice Control Plan.

Details of Snow/Ice Control Sections are identified in the following table, and in the “Main Highway Table”, in the computer disc, included in this RFP document.

Sect. #	Highway	Class	Description	2 Lane Equiv. Length
1	2:60	D	South of Nampa (Reno Road) to Jct. Hwy 688	27.380
2	2:60	D	Jct. Hwy 688 to Peace River Bridge HOTSPOT	11.050
3	2:62	B	Peace River Bridge to Jct. Hwy 743 HOTSPOT	7.710
4	2:62	D	Jct. Hwy 743 to Top of West Peace River Hill HOTSPOT	4.250
5	2:62	D	Top of West Peace River Hill to Jct. Hwy 35	16.010
6	2:64	D	Jct. Hwy 35 to Jct. Hwy 2A	5.600
7	2:64	D	Jct. Hwy 2A to East of Whitelaw (Sixth Meridian)	32.620
8	2:66	E	East of Whitelaw (Sixth Meridian) to Fairview ECL	25.580
9	2:66	D	Fairview ECL to Fairview SCL HOTSPOT	3.600
10	2:66	D	Fairview South Corporate Limit to Jct. Hwy 64	10.600
11	2:68	D	Jct. Hwy 64 to CMA Boundary North of Dunvegan at Top of Peace River Valley	8.410
12	2A:36	E	Jct. Hwy 2:62 to Jct. Hwy 2:64 (Grimshaw)	11.760

SPECIAL PROVISIONS

CMA #4

Sect. #	Highway	Class	Description	2 Lane Equiv. Length
13	35:04	D	Jct. Hwy 2 to Jct. Hwy 689 (Dixonville)	39.000
14	35:06	D	Jct. Hwy 689 to Jct. Hwy 691	43.260
15	35:06,:08	D	Jct. Hwy 691 to Town of Manning North Corporate Limit	2.760
16	35:08	E	Town of Manning North Corporate Limit to Jct. Chinchaga Road	22.490
17	35:08	E	Jct. Chinchaga Road to South Hawk Hills Road (Meikle River Valley) HOTSPOT	5.830
18	35:08,:10	E	South Hawk Hills Road to North of Twin Lakes (Top of 100 Mile Hill)	40.530
19	35:10	E	100 Mile Hill to Kemp R/R Crossing HOTSPOT	5.990
20	35:10	E	Kemp R/R Crossing to Jct. 695 (Carcajou)	24.110
21	64:02	G	B.C. Boundary to Top of Clear River West Hill	19.200
22	64:02	G	Top of Clear River West Hill to Top of Clear River East Hill HOTSPOT	8.200
23	64:02	G	Top of Clear River East Hill to Jct. Hwy 726	31.800
24	64:02	F	Jct. of Hwy 726 to Running Lake Road	8.400
25	64:04	F	Running Lake Road to Jct. Hwy 685 (Hines Creek)	32.700
26	64:06	E	Jct. Hwy 685 to Jct. Hwy 64A (West of Farview)	21.400
27	64:06	F	Jct. Hwy 64A to Jct. Hwy 2:68	6.700
28	64A:06	E	Jct. Hwy 64 to Jct. Hwy 2:66 (Fairview)	6.640
29	682:02	G	East of Jct. Hwy 729 to Jct. Hwy 64	13.840

SPECIAL PROVISIONS

CMA #4

Sect. #	Highway	Class	Description	2 Lane Equiv. Length
30	683:02	G	Jct. Hwy 744 to Jct. Hwy 2 (Nampa)	9.870
31	684:02	G	Jct. Hwy 2:64 to Jct. Hwy 740	11.070
32	684:02	F	Jct. Hwy 740 to Town of Peace River Corporate Limit	17.930
33	684:02	D	Town of Peace River Corporate Limit to Jct. of Hwy 2:62	5.000
34	685:02	G	East of Jct. 729 to Hines Creek West Corporate Limit	11.600
35	685:02	E	Hines Creek West Corporate Limit to Jct. Hwy 64	1.800
36	685:02	E	Jct. Hwy 64 to Jct. Hwy 732 (North of Fairview)	14.890
37	685:04	F	Jct. Hwy 732 to Jct. Hwy 735	19.640
38	685:06	F	Jct. Hwy 735 to Jct. Hwy 737	11.300
39	685:06	F	Jct. Hwy 737 to Jct. Hwy 2	20.820
40	688:02	F	Jct. Hwy 2 to Jct. Hwy 986	26.070
41	689:02	G	6th Meridian to Jct. Hwy 35 (Dixonville)	22.440
42	690:02	G	Jct. Hwy 35 to Deadwood	11.720
43	691:02 741:02	F	Jct. Hwy 35 to North of Jct. Hwy 741	17.190
44	692:02	G	Jct. Hwy 35 to East of Hawk Hills	14.050
45	726:02	G	Jct. Hwy 64 to Worsley	16.160
46	732:02	C	Jct. Hwy 2 to Farview North Corporate Limit HOTSPOT	2.400
47	732:02	E	Fairview North Corporate Limit to Jct. Hwy 685	14.800

SPECIAL PROVISIONS**CMA #4**

Sect. #	Highway	Class	Description	2 Lane Equiv. Length
48	737:02	G	Jct. Hwy 685 to Jct. Hwy 35	24.600
49	740:02	G	Shaftesbury Ferry to Jct. Hwy 684	5.730
50	743:02	D	Jct. Hwy 2 to North of Peace River Corporate Limit (end of climbing lane)	4.880
51	743:02	E	North of Peace River Corporate Limit to North of Jct. Hwy 986	12.320
52	744:04	F	CMA Boundary to Top of Judah Hill	27.350
53	744:04	F	Top of Judah Hill to Town of Peace River Limit HOTSPOT	2.000
54	744:04	B	Through Town of Peace River to Jct. Hwy 2	3.000
55	986:01	F	Jct. Hwy 35 to Jct. Hwy 743	21.450
56	986:01	F	Jct. Hwy 743 to Top of DMI West Hill	7.790
57	986:01	F	Top of DMI West Hill to Jct. Hwy 688 HOTSPOT	15.610
58	986:02	F	Jct. Hwy 688 to East of Shell Plant Acs	13.760
59	AR 238	G	Jct. Hwy 2 to Berwyn	0.600
60	AR 200	G	Jct. Hwy 2 to Brownvale	1.100
61	AR 201	G	Jct. Hwy 2 to Whitelaw	1.600
62	AR 214	G	Jct. Hwy 2 to Bluesky	0.100

N. BASE SNOW/ICE CONTROL HIGHWAY TABLE

To assist the Prospective Contractor with the calculations and preparation of his Snow/Ice Control Plan, data in the form of tables are provided in this RFP document, in both written and electronic format.

Base tables indicate the level of service that the Department expects the Prospective Contractor to meet or exceed overall, not necessarily meet or exceed in every category or every Section of Highway.

O. BASE SNOW/ICE CONTROL TRUCK TABLE

To assist the Prospective Contractor with the calculations and preparation of his Snow/Ice Control Plan, data in the form of tables are provided, in this RFP document, in both written and electronic format.

Base Plow Truck Tables indicate the level of service that the Department expects the Prospective Contractor to meet or exceed overall, not necessarily meet or exceed in every category or every Section of Highway.

A Base Plow Truck Table identifies specific truck beats across the highway network.

P. WINTER SNOWPLOWING - DELIVERY TIME REQUIREMENTS

In the Prospective Contractor's Snow/Ice Control Plan, details of the storage location for snowplow trucks must be provided.

Based on those locations, the Prospective Contractor must calculate the time to complete snowplowing of all the highway Sections, within the proposed Contract area boundaries, and include the results in his Winter Snow/Ice Control Plan. The requirements must be met in each case.

Details of how the calculation is performed are available in the "Winter Service Delivery – Details". A computer disc is available to the Prospective Contractor to assist in this task.

Shown below are the requirements for completion of snowplowing for each Section.

Section No:	Class	Time to Complete Snowplowing (hrs)
1	D	3.00
2	D	0.75 (HOTSPOT)
3	B	0.50 (HOTSPOT)
4	D	0.75 (HOTSPOT)
5	D	3.00
6	D	3.00
7	D	3.00
8	E	3.00
9	D	1.00 (HOTSPOT)
10	D	3.00
11	D	3.00
12	E	3.00
13	D	3.00
14	D	3.00

SPECIAL PROVISIONS**CMA #4**

Section No:	Class	Time to Complete Snowplowing (hrs)
15	D	3.00
16	E	3.00
17	E	1.00 (HOTSPOT)
18	E	3.00
19	E	1.00 (HOTSPOT)
20	E	3.00
21	G	5.00
22	G	2.00 (HOTSPOT)
23	G	5.00
24	F	4.00
25	F	4.00
26	E	3.00
27	F	4.00
28	E	3.00
29	G	5.00
30	G	5.00
31	G	5.00
32	F	4.00
33	D	3.00
34	G	5.00
35	E	3.00
36	E	3.00
37	F	4.00
38	F	4.00
39	F	4.00
40	F	4.00
41	G	6.00
42	G	5.00
43	F	4.00
44	G	5.00
45	G	5.00
46	C	1.00 (HOTSPOT)
47	E	3.00
48	G	5.00
49	G	5.00
50	D	3.00
51	E	3.00
52	F	4.00
53	F	1.00 (HOTSPOT)
54	B	2.00
55	F	4.00
56	F	4.00
57	F	1.50 (HOTSPOT)
58	F	4.00

SPECIAL PROVISIONS**CMA #4**

Section No:	Class	Time to Complete Snowplowing (hrs)
59	G	5.00
60	G	5.00
61	G	5.00
62	G	5.00

All hours are to be reported to the second decimal place of accuracy.

Q. WINTER SAND/SALT APPLICATION - DELIVERY TIME REQUIREMENTS

In the Prospective Contractor's Snow/Ice Control Plan, details of the storage locations for snowplow trucks and winter materials must be provided.

Based on those locations, the Prospective Contractor must calculate the time to complete the application of sand and salt on all the highway Sections, within the proposed Contract area boundaries, and include the results in his Winter Snow/Ice Control Plan. The requirements must be met in each case.

Details of how the calculation is performed are available in the supplemental document "Winter Service Delivery – Details". A computer disc is available to the Prospective Contractor to assist in this task.

Shown below are the requirements for completion of sand/salt application for each Section.

Section No:	Class	Time to Complete Sand/Salt Application (hrs)
1	D	4.00
2	D	0.75 (HOTSPOT)
3	B	0.75 (HOTSPOT)
4	D	0.75 (HOTSPOT)
5	D	4.00
6	D	4.00
7	D	4.00
8	E	6.00
9	D	1.00 (HOTSPOT)
10	D	4.00
11	D	4.00
12	E	6.00
13	D	4.00
14	D	4.00
15	D	4.00
16	E	6.00
17	E	1.00 (HOTSPOT)
18	E	6.00
19	E	1.00 (HOTSPOT)
20	E	6.00
21	G	10.00

SPECIAL PROVISIONS**CMA #4**

Section No:	Class	Time to Complete Sand/Salt Application (hrs)
22	G	2.00 (HOTSPOT)
23	G	10.00
24	F	8.00
25	F	8.00
26	E	6.00
27	F	8.00
28	E	6.00
29	G	10.00
30	G	10.00
31	G	10.00
32	F	8.00
33	D	4.00
34	G	10.00
35	E	6.00
36	E	6.00
37	F	8.00
38	F	8.00
39	F	8.00
40	F	8.00
41	G	10.00
42	G	10.00
43	F	8.00
44	G	10.00
45	G	10.00
46	C	1.00 (HOTSPOT)
47	E	6.00
48	G	10.00
49	G	10.00
50	D	4.00
51	E	6.00
52	F	8.00
53	F	1.50 (HOTSPOT)
54	B	4.00
55	F	8.00
56	F	8.00
57	F	2.00 (HOTSPOT)
58	F	8.00
59	G	10.00
60	G	10.00
61	G	10.00
62	G	10.00

All hours are to be reported to the second decimal place of accuracy.

R. SNOWPLOW TRUCK - % UTILIZATION REQUIREMENTS

All Prospective Contractors are required, in their Snow/Ice Control Plan, to identify the length of every snowplow truck beat. The snowplow beats must be identical for sanding, salting and snowplowing.

“% Utilization” for each snowplow truck is defined as a percentage of actual beat length divided by it’s maximum length of beat, as defined within the RFP.

Prospective Contractors, in their Snow/Ice Control Plan (Proposed Plow Truck Table), must show the lengths of beat of each snowplow truck and calculate its “% Utilization”.

Shown below is a table of maximum lengths of individual snowplow truck beat assignments. Also, specified in the table is the maximum “% Utilization”.

Truck Allocation Assignment Table – CMA 4			
Max. Kilometre assignment per truck			
Class	Base 20 Trucks	Minimum 18 Trucks	Proposed 19 Trucks
A			
B	32	36	34
C	32	36	34
D	34	38	36
E	45	50	47
F	75	83	79
G	92	102	97
H			

The Prospective Contractor, within his Snow/Ice Control Plan, may exceed 100 % Utilization, only as shown on the following table:

Maximum % Utilization by Roadway Class		
Class	Permissible percentage of fleet with % utilization > 1.0, by CMA	Max. % Utilization Allowed
A	1 truck or 10 %, whichever is less	105%
B	1 truck or 10 %, whichever is less	110%
C	2 trucks or 20 %, whichever is less	110%
D	3 trucks or 30 %, whichever is less	115%
E	3 trucks or 30 %, whichever is less	115%
F	3 trucks or 30 %, whichever is less	115%
G	3 trucks or 30 %, whichever is less	115%
H	3 trucks or 30 %, whichever is less	115%

If the Prospective Contractor proposes to “over-utilize” trucks, he shall identify within his Winter Snow/Ice Control Plan in Envelope No. 2 his plan and explanation justifying the over-utilization Section or groups of Sections.

S. CUMULATIVE NETWORK TIME REQUIREMENTS

The Prospective Contractor, in his Snow/Ice Control Plan, is asked to calculate the total cumulative time to complete both snow plowing and sand/salting of all sections in each roadway class or groups of classes, within the proposal.

All hours are to be reported to the second decimal place of accuracy.

Shown below is a table indicating the maximum cumulative time to complete snowplowing and sand/salting application activities:

Class	MAXIMUM CUMULATIVE Time to Complete Snowplowing	MAXIMUM CUMULATIVE Time to Complete Sand/Salt Application
A	-	-
B	1.38	1.87
C	0.76	0.54
D	15.72	21.89
E	19.57	30.73
F	33.70	60.68
G	46.44	79.43
H	-	-

Depending on the number of CMAs that the Prospective Contractor proposes for the Contract, cumulative times by roadway class must be combined as shown in the following table:

Permissible Cumulative Network Class Time, in Multiple CMAs'	
No: of CMAs in Proposal	Permissible Time
1	Combine Classes A, B & C Combine Classes D & E Combine Classes F & G & H
2	Combine Classes A, B & C Combine Classes D & E Class F has individual times Combine Classes G & H
3 or more	Combine Classes A, B & C Classes D & E & F have individual times Combine Classes G & H

The Prospective Contractor must group the Classes according to this table and must not exceed the permissible cumulative network class time for the groupings.

T. MOTOR GRADER CIRCUITS (GRAVEL HIGHWAYS)

Shown below is a list of roadways that require motor grader assignments.

Hwy No:	Description	Kilometer		Length (2 Lane Equivalent)	Width (m)	WAAD T	AREA (10000 m ²)
		From	To				
682:02	Hwy 729 to Start of Pvm't	0.00	9.55	9.55	13	320	12.42
685:02	East of Highway 729 to 600 m east of 729	0.00	0.60	0.60	12	170	0.72
689:02	Sixth Meridian to Jct. Hwy 689 and Range Rd. 260.	0.00	0.71	0.71	8	10	0.57
690:02	End of pavement at Deadwood to Jct. Hwy 743	11.72	14.70	2.98	12	200	3.58
692:02	End of pavement to East of Hawk Hills	13.02	27.02	14.00	12	180	16.80
717:02	BC border N to Hwy 64	0.00	23.76	23.76	11	130	26.14
729:02	Hwy 682 to Hwy 685	0.00	22.98	22.98	11	120	25.28
730:02	Hwy 64 N to Eureka River	0.00	12.45	12.45	11	200	13.70
735:02	Hwy 2 to Hwy 685	0.40	13.52	13.52	12	80	16.22
737:02	End of pavement at Brownvale to Jct. Hwy 685	0.81	10.90	10.09	10	80	10.09
741:02	End of pavement to West of Notikewin Provincial Park	1.14	33.57	32.43	10	120	32.43
743:02	End of pavement to Jct. Highway 690	14.97	69.48	54.51	12	130	65.41
	TOTAL			198.18			224.08

U. CO-ORDINATION WITH THE PREVIOUS HIGHWAY MAINTENANCE CONTRACT

The Department owns or has access to the sites identified for the storage of sand/salt. There may be inventory of materials existing at the commencement of this Contract. Details are shown below:

Location	Description of Site
Hines Creek	Sand, salt, mixed sand/salt, guardrail, signs and posts
Worsley	Mixed sand/salt
Grimshaw	Sand, salt, mixed sand/salt, guardrail, signs and posts
Manning	Sand, salt, mixed sand/salt, guardrail, signs and posts
Peace River	Sand, salt, mixed sand/salt

If necessary, the Department will negotiate with the Contractor, details of any required relocation of materials in consultation with the existing highway maintenance Contractor. If there are surplus stockpiles of mixed sand/salt and or salt from the 2003/2004-winter season, the Contractor shall arrange for the transfer of this material to his site by May 15, 2004. This will be paid for as Extra Work.

V. ANNUAL HIGHWAY CLEAN-UP

On the first or second Saturday in May, the Department hosts the "Annual Highway Clean-up". The Contractor will be responsible for litter pick up, erecting clean-up signs and disbursement of bags, vests and signs to local clubs. The Department will supply all materials. All Work will be paid for as Extra Work in accordance with Specification 51.2, General.

W. MOWING

If a second or subsequent shoulder cut is required in any year, only guardrail and guideposts immediately adjacent to the highway will require hand trimming.

The contractor may be required to utilize smaller mowing equipment for work in areas where there are median/ditch width restrictions or permeable ditch barriers, ditch blocks and other barriers/obstacles located within the right-of-way. The use of smaller equipment shall be incidental to the work and no separate payment will be made

X. HAND BRUSHING

GENERAL

The Work consists of cutting, stacking and/or disposing of standing or fallen brush and trees using hand held tools or equipment. This Work also includes the disposal of the limbs and other debris.

The Contractor shall supply all equipment necessary to complete the Work. Typical equipment required includes chainsaws, axes, brush hooks and brush cutters. The size and type of the equipment to be supplied will be subject to the approval of the Engineer.

The Contractor shall supply a minimum 2 person crew. The number of crews required will be specified on the Work Order.

PROCEDURES

The Contractor shall prevent debris from being deposited on the roadway surface or adjacent lands.

Work shall be performed during daylight hours only, unless otherwise approved by the Engineer.

Cleared material equal to and greater than 100 mm in diameter shall be cut into 500mm lengths and stacked along the edge of the Right-of-Way. The Contractor shall dispose of material less than 100mm in diameter.

Trees and brush shall be hand brushed to a height not exceeding 150 mm as measured from the ground line. Stumps larger than 25 mm in diameter shall be cut at ground level.

Tops of stumps shall not be left cone shaped or pointed.

The Contractor shall ensure that the drainage structures are not damaged or obstructed by hand brushing operations.

The Contractor shall complete the Work within 90 calendar days of the issuance of the Work Order.

MEASUREMENT AND PAYMENT

Measurement will be in hours (to the nearest ¼ hour) for the time each 2 person crew spends travelling to and from the worksite, and is engaged in the Work. The maximum allowable travel time from the worksite to the nearest shop will be one hour.

Payment will be made at the unit price bid per hour for “Hand Brushing (2 person crew)” and will be full compensation for all labour, equipment, tools and incidentals necessary to complete the Work.

There is no warranty period for this Work.

Y. SUPPLY OF NON-STANDARD SIGNS

Further to specification 54.12, for the supply of non-standard signs, the contractor shall provide a shop drawing of the sign layout for review with the Department before sign manufacture. This work shall be incidental to the supply of non-standard signs.

Z. PRE-WETTING SYSTEMS

In accordance with Specification 52.9, a minimum of **5** trucks shall be equipped with pre-wetting systems. Four (**4**) trucks shall be stationed in the Peace River area and one (**1**) truck in the Hines

Creek area. The minimum storage capacity shall be 5,000 litres per truck equipped with a pre-wetting system.

AA. EMERGENCY SIGN PACKAGE

Whenever necessary, the Contractor shall erect the emergency sign packages within 4 hours of the issuance of the Work Order on all highways.

Due to the number of responses to accidents and requirements for traffic accommodation, it has been found practical to have the emergency sign packages ready for immediate use.

The types of packages required at the specified locations are as follows:

Hines Creek Area – 1 - 2 lane package

Peace River Area – 1 - 2 lane package

BB. MAINTAINING “WELCOME TO ALBERTA” SIGNS

CMA 4 contains one “Welcome to Alberta” signs located at the British Columbia Border on Highway 64.

The Work consists of maintaining these signs and the immediate areas surrounding the signs. The Contractor shall supply all materials necessary to complete the Work. The color and type of paint and stain required is as follows:

For repainting of the Alberta Wild Rose Logo:

Wild Rose Pink	Glidden B2-3 Alkyd Gloss Enamel, Pastel Base
White	Exterior White Alkyd Gloss Enamel

For restraining areas of discoloration or fading, the Contractor shall supply Danish or Swedish Teak Oil Preservative.

The products listed are subject to revision on a yearly basis based on availability, color changes or other manufacturing requirements. The Contractor shall have no claim against the Department because of a change to the approved products.

The Contractor shall supply all equipment necessary to complete the Work. The Contractor shall apply an approved rot inhibitor annually to the entire surface of the sign.

The Contractor shall perform all necessary repairs to the signs resulting from normal wear and weathering except the reflective sheeting on the raised lettering.

The Contractor shall paint any areas on the surface of the sign where the existing paint is peeling or flaking. Stain shall be applied to all areas on the sign where the existing stain has become discolored. All loose material and dirt shall be removed prior to the application of paint or stain.

The Contractor shall trim all vegetation within one metre of the sign to a maximum height of 150 mm. All litter or debris within 10 metres of the sign shall be removed from the site. Vegetation blocking the sign face from the view of oncoming traffic shall be removed.

The Contractor shall complete the litter removal and vegetation control every 30 days commencing May 1 and until October 31 each year, for the duration of the Contract.

The annual rot inhibitor treatment of the signs shall be completed between May 1 and July 15 each year, for the duration of the Contract.

All Work shall be completed within 30 calendar days of the issuance of the Work Order.

Measurement will be made of the number of signs maintained annually. Payment will be made at the unit price bid per sign per year for "Maintaining Welcome to Alberta Signs". This payment will be full compensation for supplying paint, stains and rot inhibitors, preparation of surfaces, applying rot inhibitors and paint, performing minor repairs, removing litter, trimming vegetation, traffic accommodation and all labor, materials, equipment, tools and incidentals necessary to complete the Work.

CC. PEACE RIVER BRIDGE STRUCTURE CLEANING

Articles 54.30.1, 2, 3, 4, 5, and 8 of Specification 54.30 apply to the cleaning of Peace River Bridge.

EXAMINATION OF WORK

The Contractor, in submitting a unit price, acknowledges that he has thoroughly examined the bridge structure and is completely familiar with every detail of the scope of work. The Contractor acknowledges that he has examined the site and surrounding areas, and is familiar with any restrictions or possible restrictions which could affect or limit his operation due to environmental restrictions, constraints, public traffic and property of others.

A full set of structural drawings can be viewed in the Peace River office (3rd Floor Provincial Building) including the configuration and loading for the maintenance carts.

CLEANING THE BRIDGE STRUCTURE

The Contractor shall clean the following surfaces in addition to those noted in section 54.30.5.3:

- all surfaces of the parapets,
- railings, verticals, truss members and street lights to a minimum height of five (5) metres above the deck surface, all of the box beams, all stringers flanking the open grates, the exterior fascias of the outside floor stringers, and the areas on the floor beams under the grates and containing road maintenance debris,

- concrete legs of pier 1 and 2, and
- piers, pier caps and pier bearings.

FISHERIES AND OCEANS

The Contractor shall be responsible for obtaining authorization from Department of Fisheries and Oceans prior to commencement of the Work. The Contractor shall conduct his operations in compliance with any environmental restrictions and minimize impacts on the river and the riverbanks surrounding the site.

TIME TO COMPLETE

All Work shall be completed within 30 calendar days of issuance of the Work Order.

TRAFFIC ACCOMMODATION

The Contractor shall submit a Traffic Accommodation Strategy two weeks prior to commencement of any Work. The Department must approve the Traffic Accommodation Strategy before any work commences. The Work must be performed during off peak hours, namely from 7:00 p.m. to 7:00 a.m. Interference to Highway 2 traffic shall be kept to a minimum. Traffic control on the bridge shall be directed by flagpersons and must have one lane open at all times. To protect vehicles passing under the approach spans during washing operations, extra spotters or flagpersons shall be used. The Contractor shall remove all obstructions from the bridge deck promptly at the end of each working day and restore two-way traffic.

MAINTENANCE CART

The existing maintenance cart is available for use by the Contractor “as is.” The Contractor will examine the cart and provide a written inspection report of the existing condition. After the work is completed, the Contractor will reinspect and restore the cart to its original condition. Any repairs to the cart to operate or maintain are the responsibility of the Contractor and no additional payment will be made. No modifications to the cart’s design are permitted.

SITE CLEAN-UP

Sand and debris material shall not be dumped within the right-of-way.

ANNOUNCEMENTS

The Contractor shall advise the public, of their operations, through the local radio station (CKYL) (KIX) and (AMA).

PAYMENT

Payment will be made at the unit price bid per lump sum for “Bridge Structure Cleaning (Peace River)”. This payment will be full compensation for the supply of water including any required permits and approvals, traffic accommodation, cleaning and washing all surfaces identified in Sections 54.30.5.2 and 54.30.5.3, disposal of dirt and debris, and all labour, materials, equipment, tools and incidentals necessary to complete the Work.

DD. OPERATION OF SHAFTESBURY FERRY**GENERAL**

The Work consists of the operation and maintenance of the Department’s Shaftesbury Ferry, approach ramps, docks, and ferry landing sites, from spring break-up to winter freeze-up. Included in the work is the general maintenance and repair of the docks and launch sites. The Contractor will launch the ferry in the spring and dry-dock it in the fall. The Shaftesbury Ferry consists of a barge powered by a tug and is used to transport traffic across the Peace River. The crossing is on the Peace River located in NW 8-82-23-W5M on Highway 740, South of Grimshaw.

OPERATING AND SAFETY PLAN

The Contractor shall provide the Operations Manager with an Operating and Safety Plan at the commencement of the Contract. The Operating and Safety plan shall detail the following:

- Operator and deck hand training
- Public safety
- Hazard assessment
- Safe work procedures
- Accident reporting and investigation
- Daily inspections
- Routine maintenance schedule
- Safety meetings
- Fire and water rescue procedure.
- Shift schedules
- Methods for installing and removing ferry

INCIDENTAL MATERIALS

The Contractor shall supply all incidentals or consumable materials required for the day to day operation of the ferry and maintenance of the launch sites including but not limited to the following:

- Canada and Alberta flags
- All fuel, oil and lubricants which meet or exceed the equipment Manufacturer’s specifications

- All air, oil, fuel filters and batteries which meet or exceed the equipment Manufacturer's specifications
- All required cables (wire rope) for tug, barge, docks, anchor, deadmen anchors, and winches
- Supply and maintain four (4) 20 LB and five (5) 5 LB dry chemical fire extinguishers
- Fuel containers for outboard motors
- Air conditioning fluid
- Wood preservative approved for use by the Operations Manager
- Bumper boards on docks
- Boarding material for windows
- Two large plastic receptacles filled with sand, each equipped with a scoop
- Traffic vests and protective clothing for operators and deck hands
- First aid supplies
- Orange flags
- Light bulbs
- Cleaning supplies
- Litter bags
- Toilet supplies
- All sign tabs "Closed and Hours of Operation"

The supply of these materials will be considered incidental to the work and no separate or additional payment will be made.

ADDITIONAL WORK AND MATERIALS

The Contractor shall supply additional work or materials necessary for repairs or maintenance of the ferry, docks and launch sites as directed by the Operations Manager.

TOILET FACILITIES AND LITTER RECEPTICLES

The Contractor shall supply portable toilet facilities and litter receptacles on the North (Grimshaw) side of the river crossing.

The supply and maintenance of toilet facilities and litter receptacles will be considered incidental to the work and no separate or additional payment will be made.

LAUNCHING OF FERRY

The Contractor shall commence work to remove river ice on approaches, roadways and the ferry launch ramp within one calendar day of being directed to do so by the Operations Manager.

The Contractor shall commence work to launch the ferry within two calendar days of being directed to do so by the Operations Manager. The work required shall include the following:

- Site preparation including the placement of crushed gravel
- Supply and installation of portable toilet facilities and litter receptacles

- Installation of a new or rebuilt water pump/impeller (Water pump/Impeller to be supplied by the Department)
- Installation of a new or rebuilt driveshaft (Driveshaft to be supplied by the Department)
- Supply and installation of new steering cable for tug
- Supply and replace any damaged or worn cables (wire rope) for tug, barge, docks, anchors and winches
- Wash timber deck, docks, and pontoons
- Supply and application of wood preservative to deck and docks
- Pressure steam wash and clean the engine room in tug and vacuum up and dispose of the waste fluids
- Service the air condition unit in tug and replenish air conditioning fluid as required
- Installation of docks
- Launching the Ferry (tug and barge)
- Transporting winches, lifeboats, outboard motors, life buoys, life jackets, fire extinguishers, water pump, hoses, small tools and equipment from the storage site to the ferry launch area and installing them in their required locations
- Transporting the tool shed trailer to and setting it up at the ferry launch area
- All other incidentals necessary to return the ferry to operational status.

The Contractor shall supply all equipment to launch the Ferry.

FERRY OPERATION

Hours of Operation

The basic hours of operation for the ferry shall be from 7:00 a.m. to 11:30 p.m., 7 days per week. Additional services may be required, for emergencies and/or special events, which is beyond the basic hours of operation. The Contractor shall provide additional ferry services as directed by the Operations Manager.

The Operations Manager maintains the authority to shutdown ferry operations at any time.

Operational Requirements

The Contractor shall employ trained, competent operators and deck hands. Employees shall remain at the ferry site at all times during their shift. Operators and deck hands shall be trained in First Aid, Lifeboat and Water Rescue, WHMIS, Transportation of Dangerous Goods, and Emergency Fire Fighting Procedures, and/or any other Federal/Provincial Regulations, such as Marine Emergency Duties and Department of Transportation's safety regulations, which exist and apply.

To comply with the Canada Shipping Act the Contractor must ensure that the ship crew have the following certificates; Master, Limited Short-Run Ferry Certificate (Ref. Section 29.(2) of the CSA), First Mate, Limited Certificate for a Short Run Ferry (Ref. Section 29.(2)) and the Restricted Engineer (Ref. Section 31.(2)). Alberta's self propelled ferries must have a minimum crew complement of two people. Between the two crew members that form the ship's

complement, they must hold the three certificates. The Contractor shall be responsible for all direct and associated costs for staff training.

The Contractor shall develop and implement a “Code of Practice for Entry into Confined Spaces” that complies with the requirements of Section 191 General Safety Regulations (Alberta Regulation 348/84) and as directed by Alberta Labour, Occupational Health and Safety Division.

The Contractor shall direct the safe loading and unloading of all vehicular and passenger traffic using the ferry. All employees must wear a fluorescent orange vest with reflective strips front and back, a blaze or fluorescent hat, and Grade 1 CSA approved footwear while operating the ferry.

The Ferry shall be operated within its prescribed limits with respect to load limitations, weight restrictions, number of vehicles and dangerous goods carriers. Dangerous goods carriers are not allowed to board with other vehicles.

The Contractor shall notify the Coast Guard, The Department and appropriate Environmental Regulatory Authorities of all oil, gasoline or dangerous good spills no matter what the size of the spill is.

The Contractor shall ensure that fire and water rescue equipment is properly maintained and serviceable at all times. Fire extinguishers shall be maintained in accordance with the Safety Codes Act and pursuant regulations.

The Contractor shall ensure that all cables (wire rope) are properly maintained and replaced when necessary due to damage or wear. The Contractor shall supply and install all cables.

The Contractor shall supply appropriate mobile communications on the ferry in order to communicate with land at all times while the ferry is operating.

The Contractor shall not charge the public any boarding fees for providing the ferry service.

The Contractor shall provide a “Passenger Safety” briefing to passengers prior to the vessel leaving any place where passengers embark. The Safety Briefing shall as a minimum specify the location of lifejackets, location of survival craft and instructions on how to don lifejackets.

The Contractor shall keep the public informed of the ferry’s operating status through the media, Alberta Motor Association and signage. The existing ferry operation signs located on Highway 740 and 684 shall convey the correct message at all times.

The Contractor shall provide the Operations Manager with a monthly record detailing daily vehicle and passenger count, servicing and repairs undertaken.

The Contractor shall provide the Operations Manager an oil sample analysis every 2 months of operation.

The Contractor shall install road closed signs and barricades on the approach roadway when the ferry is shutdown.

All sign tabs “Closed and Hours of Operation” on roadways and highways which pertain to the Shaftesbury Ferry are to be changed and maintained by the Contractor.

The Contractor is responsible for all utility costs, power and telephone, associated with the ferry operation.

The Contractor shall notify the Operations Manager immediately when ferry service is interrupted for any reason whatsoever.

The Contractor shall inform the Operations Manager when ice build up on the river occurs that may result in shutdown of ferry service. The Operations Manager will be the final authority to determine if conditions warrant shutdown of the ferry for the season.

Daily Inspections

As part of routine ferry operations, the Contractor shall perform the following tasks on a daily basis prior to start-up:

- Inspect and test run the lifeboats, outboard motors and all rescue equipment
- Inspect fire extinguishers; and maintain, replace and replenish as necessary.
- Inspect First-Aid equipment and supplies; and replenish as necessary
- Visually inspect the tug and pontoon hulls for leakage or damage
- Check sounding tubes in pontoon hulls for water and pump out any water that may have leaked in
- Ensure the onboard water pump(s) is/are operational
- Inspect all cables for damage or wear and replace them as necessary
- Drain all water from tug engine fuel/water separator
- Check all engine and drive line fluid levels and replenish as required

The Contractor shall develop a checklist, approved by the Engineer, of daily inspections and provide it upon request.

Daily inspections will be considered incidental to ferry operation and no separate or additional payment will be made.

Equipment Operation, Routine Maintenance and Minor Repair

The Contractor shall operate and service all mechanical components of the ferry and other equipment in accordance with the Manufacturer’s recommendations and the following:

- The tug engine shall be warmed-up sufficiently prior to commencing work and cooled down prior to shut down each day.
- Change the tug engine oil and filter every 250 hours of operation
- Replace the air filter after every 500 hours of operation and the fuel filters after every 250 hours of operation or sooner as required
- Perform minor repairs to equipment as required

Routine maintenance and minor repair of the ferry and other related equipment, including the supply of required materials, will be considered incidental to ferry operation and no separate or additional payment will be made.

Major Equipment Maintenance, Repair and Overhaul

The Department will arrange and pay for the major repair or maintenance of equipment; and replacement or overhaul of major components of the ferry as required, including the following:

- Tug engines, transmissions and drive trains
- Outboard motors
- Barge and pontoons
- Winches
- Electrical Systems

Routine Maintenance and Repair of Docks and Launch Sites

The Contractor shall maintain and carry out minor repairs to the docks and launch areas as required including, but not limited to, the following:

- Adjust docks as river levels rise and recede whether the steel ramps are in place or not
- Maintain the roadway and approaches to the docks
- Replace timber (or equivalent) bumper boards on docks as required
- Replace any damaged or worn cables, including deadmen anchors
- Keep the ferry deck clean and free of mud, snow, and other debris
- Keep launch sites and docks clean and free of garbage and other debris
- Maintain toilet facilities and litter bins

The Contractor shall supply all equipment to adjust the docks. No track type equipment is permitted to travel on the timber deck surface of the ferry.

Routine maintenance and minor repair of the docks and launch sites, including the supply of required materials, will be considered incidental to the work and no separate or additional payment will be made.

DRY DOCKING OF FERRY

The Contractor shall commence work to remove the ferry from service immediately upon direction of the Operations Manager. This work required shall include the following:

- Removal of the barge using steel sloop and launch ramp
- Removal of tug using steel sloop
- Securing the tug and barge to deadmen anchors with min. 5/8" steel cables; tug anchored to one deadmen, barge anchored to four separate deadmen (Contractor to supply cables)
- Removal of the docks

- Removal of winches, lifeboats, all outboard motors and associated equipment and transporting them to the Contractor's Yard for storage
- Removal of life buoys, life jackets, fire extinguishers, water pump, hoses, small tools and equipment from the ferry and transporting to the tool shed trailer
- Transporting the tool shed trailer from ferry launch area and transporting to the Contractor's Yard for storage
- Removal of the portable toilet facilities and litter receptacles
- Board up all the windows on tug and barge
- Setting up signs and barricades as required
- All other incidental work required to remove and store the ferry and prepare the site for the winter season

The Contractor shall supply all equipment to dry dock the Ferry.

ANNUAL INSPECTION OF PONTOONS

The pontoons of the barge are inspected for damage annually by the Department and by Transport Canada. When directed to do so by the Operations Manager, the Contractor shall supply qualified personnel for Confined Space Entry, labourers, and generators used for inspections. The supply of generators, labour, materials, tools and equipment will be considered incidental to the work and no separate or additional payment will be made.

INSURANCE

The insurance coverage as specified in Section 51.2.12 "Insurance" shall include the Shaftesbury Ferry Operation.

The Contractor shall obtain Marine liability insurance in accordance with the Navigable Waters Act for the ferry operation. The Contractor shall provide and maintain appropriate Marine Protection and Indemnity Insurance in an amount of not less than two million dollars (\$5,000,000.00) per occurrence to cover claims arising in connection with the ferry operation.

The cost of Marine Protection and Indemnity Insurance will be considered, as incidental to the work and no separate or additional payment will be made.

The Department is responsible for Hull and Machinery insurance coverage for the Ferry.

ACCIDENTAL DAMAGE TO OR LOSS OF EQUIPMENT

The Contractor shall not repair damages caused by accidental means, without the prior approval of the Operations Manager.

The Contractor shall immediately notify the Operations Manager of any damage to, or loss of equipment from, the Ferry or associated property, which is due to accidental cause of any type. The Operations Manager will initiate and co-ordinate the handling of any such claim and will advise the Contractor of actions, if any, to be taken by him.

MEASUREMENT AND PAYMENT

Measurement for payment for ferry operation during the basic hours of operation will be by the actual number of full days the ferry is in service. Partial days will be pro-rated.

Payment for ferry operation during the basic hours of operation will be made at the unit price bid for “Operating Shaftesbury Ferry” and will be compensation in full for all insurance, labour, materials, equipment, tools, and incidentals necessary to perform the Work.

Measurement for payment for ferry operation outside of the basic hours of operation will be by the actual number of hours the ferry is in service.

Payment for ferry operation outside of the basic hours of operation will be made at the unit price bid for “Additional Shaftesbury Ferry Service” and will be compensation in full for all insurance, labour, materials, equipment, tools, and incidentals necessary to perform the Work.

Payment for all work required to prepare the site and return the ferry to operational status will be made at the unit price bid for “Launching Shaftesbury Ferry” and will be compensation in full for all labour, materials, equipment, tools and incidentals necessary to complete the Work.

Payment for this work will be made at the unit price bid for “Dry Docking Shaftesbury Ferry” and will be compensation in full for all labour, materials, equipment, tools and incidentals necessary to complete the Work.

Payment for additional work and materials requested by the Operations Manager will be made in accordance with Section 51.2.28, “Extra Work” of Specification 51.2, General.

Payment for removal of ice on approaches, roadways and launch ramps will be made in accordance with Section 51.2.28, “Extra Work” of Specification 51.2, General.

Payment for the supply of new signs and barricades will be made in accordance with Specification 54.12, Supply of Permanent Highway Signs, and all signs will be considered the property of the Department.

EE. SHAFTESBURY ICE BRIDGE**SCOPE OF WORK**

The Work consists of the construction and maintenance of the Shaftesbury Ice Bridge. The crossing is on the Peace River located in N.W. 8-82-23-W5M on Highway 740, South of Grimshaw.

MATERIALS AND EQUIPMENT

The Contractor shall supply all materials and equipment necessary to complete the Work.

PERMITS AND APPROVALS

The Department will obtain any authorizations necessary for construction and maintenance of the Ice Bridge prior to commencement of the Work.

The Contractor shall conduct his operations in accordance with the conditions of the authorization for construction and maintenance of the Ice Bridge.

CONTRACTOR'S OPERATING AND SAFETY PLAN

The Contractor shall provide an Operating and Safety Plan satisfactory to the Operations Manager before commencement of work. The Operating and Safety plan shall be based on the requirements of:

- The Government of the Northwest Territories, Department of Transportation Manual entitled "A Field Guide to Ice Construction Safety"
- The Alberta Occupational Health and Safety booklet entitled "Travelling, standing and working on ice requires extreme CAUTION",

ICE BRIDGE CONSTRUCTION

The following are general requirements for information purposes only. They will be superseded by the requirements of the approved Operating and Safety Plan where applicable.

Ice thickness, weather and the peculiarities of the river are the main contributing factors that determine when construction of an Ice Bridge should commence.

Ice bearing capacities shall be adhered to when choosing and deploying equipment and employees for the Work. This will require testing the ice thickness to determine its capacity.

If the natural ice is not thick enough to safely support the construction of the Ice Bridge, the ice crossing shall be flooded or activities suspended until sufficient ice thickness has developed.

All personnel shall wear appropriate flotation suits while working on the ice crossing.

When it is unsafe to permit travel, barricades and signs shall be posted and maintained at the entrance to the Ice Bridge stating that it is closed.

When there is sufficient bearing capacity:

- Snow can either be removed or compacted to accelerate ice thickness development
- Extremely rough ice may need to be broken down using hand tools before heavier equipment can be used to complete the leveling process. Small pumps may be required to flood areas that require strengthening. Equipment can be used to level the ice only when there is sufficient ice thickness.

Usually an Ice Bridge can be initially opened when there is sufficient ice to safely permit travel of vehicles having a gross vehicle weight up to 2,500 kilograms. The minimum width of travel surface required at this initial opening is 10 m. The completed surface width shall be 15 metres. The Ice Bridge shall be constructed to a standard capable of allowing a vehicle with a gross weight up to a maximum of 5,000 kilograms, when possible, to travel safely at a speed of 10 km/hr. The depth of each flood should not exceed 5 centimetres.

When the surface is smooth enough and the ice has sufficient strength to permit the safe passage of vehicles the Contractor will interpret ice test results and recommend the opening of the Ice Bridge at the calculated load limit. The Operations Manager will be responsible for approving the opening date together with a load limit.

Once approval is obtained the Contractor shall post the load limit and open the Ice Bridge.

SIGNING AND TRAFFIC ACCOMMODATION

Prior to opening the Ice Bridge, the Contractor shall supply and install all necessary regulatory, advisory and information signs at the bridge entrances. All sign materials shall be supplied in accordance with the Alberta Transportation Recognized Products list.

The Contractor shall erect signs at the entrance to the Ice Bridge advising motorists:

- Of the Maximum allowable vehicle weight
- To travel at a maximum speed of 10 km/hr
- Use of the Ice Bridge is at own risk.
- Only one maximum tonnage vehicle is permitted on the ice bridge at a time

The Contractor shall supply and install suitable markers with delineator reflectors and fluorescent orange flags at 50 metre intervals to delineate the edge of the Ice Bridge.

ICE BRIDGE MAINTENANCE

A visual inspection of the Ice Bridge shall be performed daily or as directed by the Operations Manager. The Contractor shall observe and document all circumstances and conditions affecting the travelling public and the Ice Bridge.

Ice measuring/testing and recording of data shall be performed in accordance with the approved procedures for ice bearing assessment. Recommended changes in the ice bearing capacity of the Ice Bridge shall be reported to the Operations Manager and load limits increased or decreased upon approval. All applicable signs shall be changed accordingly.

The Contractor shall:

- Maintain the Ice Bridge to the desired width of 15 metres and maintain markers identifying ice bridge boundary.

- Flood to increase thickness to maintain the specified ice bearing capacity. The depth of each flood should not exceed 5 centimetres and should be restricted to half of the road surface width at a time to minimize traffic interruptions.
- Remove snow as necessary and keep the snow berms sloped away to reduce the possibility of trapping snow unnecessarily.

Payment for snow removal will be made at the applicable unit prices in the current Maintenance Contract.

In the event that heavy equipment is required to repair the Ice Bridge due to conditions caused by the river such as pressure ridges, the department will make payment for such work in accordance with Section 51.2.28, Extra Work of Specification 51.2, General (For Maintenance Work).

ICE BRIDGE CLOSURE

In the latter part of the season, it may be necessary to close the Ice Bridge whenever the surface water becomes too deep and/or the load bearing capacity of the ice is not sufficient to support vehicles.

Except in the case of recognized imminent danger, Ice Bridge closure dates shall be approved in advance by the Operations Manager.

At the end of the season, just prior to when the surface becomes unfit for the safe usage by any vehicles, the Contractor will retrieve all signs and other traffic control devices on the ice. The signs shall be cleaned and stockpiled for use in subsequent years and shall be returned to the Department upon termination of the Contract. When the Operations Manager directs final closure of the Ice Bridge, the Contractor shall install road closed signs and barricades at the entrance to the Ice Bridge. The Contractor shall monitor the closure of the Ice Bridge while performing regular road inspections.

RECORD OF ICE BEARING ASSESSMENT

The Contractor shall keep records of ice thickness during the construction and maintenance of the Ice Bridge. All pertinent information such as date, time, names, temperature, weather conditions, distances, test hole locations, ice condition, presence of cracks, details of load limits, and signature shall be recorded in a bound logbook. The records shall be filed as part of the permanent record and will be made available to the Operations Manager.

PAYMENT

Payment for construction of the Ice Bridge up to 5,000 kilogram load capacity and a travel surface of 15 metres wide will be made in accordance with Section 51.2.28, Extra Work of Specification 51.2, General (For Maintenance Work). There will be no separate or additional payment for the supply of flotation suits.

Payment for the supply of new signs will be made in accordance with Specification 54.12, Supply of Permanent Highway Signs, and all signs will be considered the property of the Department.

Payment for the installation and removal of signs and sign posts/supports will be made at the applicable unit price in accordance with Specification 54.12, Supply of Permanent Highway Signs and Specification 54.13, Maintenance of Highway Signs.

Payment for inspection of the Ice Bridge will be made in accordance with Specification 53.39, Highway Maintenance Work.

Payment for ice measuring and testing will be made at the unit price bid per occurrence for “Ice Measuring and Testing - Shaftesbury” after construction of the Ice Bridge is completed to the specified load capacity. An occurrence will be paid when the ice measuring and testing is completed over the entire length of the Ice Bridge. This payment will be full compensation for all labour, equipment, tools, recording of pertinent data, determining load limits, traffic accommodation and signing, inspections, and incidentals necessary to complete the Work.

Payment for flooding for routine maintenance of the Ice Bridge will be made in accordance with Section 51.2.28, Extra Work of Specification 51.2, General (For Maintenance Work).

There will be no separate or additional payment for the supply, installation and maintenance of traffic delineators, markers, reflectors or flags required for traffic control and guidance. These items will be considered incidental to the Work.

FF. MATERIAL CONVERSION FACTOR

Where the application of conversion factors is necessary, the following standards values shall be used:

The conversion factor for pit-run, crushed granular material and ACP (uncompacted)	1.632 tonnes per cubic meter
The conversion factor for sand	1.365 tonnes per cubic meter
The conversion factor for ACP (compacted)	2.330 tonnes per cubic meter

GG. LOCATIONS AND TELEPHONE NUMBERS OF CONTACT PERSONNEL

The Department will issue the Contractor with a listing of all applicable contact personnel, complete with addresses and telephone numbers. This list may include but not be limited to local representatives of:

- Alberta Transportation, Inspection Services
- Alberta Infrastructure, Regional Staff
- Alberta Infrastructure, Property Management Staff
- Alberta Environment
- Counties and Municipal Districts
- Towns and Villages
- Royal Canadian Mounted Police

- National Park Service (If Applicable)
- Indian Reserves
- Metis Settlements
- Railways

HH. ELECTRONIC SUBMISSION OF DOCUMENTS

The unit price schedule and the winter service delivery spreadsheets of the Prospective Contractor's Proposal shall be submitted as both a hard copy and electronically (diskette/CD). The electronic submissions are required to facilitate the evaluation of Proposals only. In the event of a discrepancy between electronic and hard copy submissions, the hard copy shall govern.

II. PROVISION FOR MIXED SAND/SALT STORAGE

Mixed sand/salt stockpiles shall be stored on an impermeable floor of asphalt, concrete or other suitable material that is graded away from the center of the structure for drainage purposes.

Storage shall accommodate the loading, mixing and stockpiling of at least 125% of the annual provisional quantity of sand indicated in the Unit Price Schedule for that particular site.

JJ. USE OF MAINTENANCE FACILITIES PREVIOUSLY OWNED BY THE GOVERNMENT OF ALBERTA

The Contractor shall complete an Environmental Management Plan for each site previously owned, at any time, by the Government of Alberta. The Environmental Management Plan shall comply with the requirements of the "Environmental Management Plan Guidelines Highway Maintenance Yards" document included in the RFP.

The provisions of the Environmental Management Guidelines Highway Maintenance Yards document may require significant improvements or other work at the site to achieve environmental compliance. Also, the Environmental Management Plan Guidelines Highway Maintenance Yards document includes separate requirements for "Priority 1", "Priority 2" and "Priority 3" category sites. The location of any sites previously owned by the government in this CMA and the applicable category for such site(s) may be obtained from the Department Operations Manger. The Contractor shall complete any such work prior to commencement of the Contract. The cost of any such work shall be at the Contractors expense and will not be paid for separately.

The Environmental Management Plan must be acceptable to and approved by the Department and shall be completed as part of the Mobilization Plan required under the RFP.

The Contractor shall operate the site in accordance with all applicable environmental legislation, the Environmental Management Plan Guidelines for Highway Maintenance Yards and the approved Environmental Management Plan during the term of the Contract.

KK. MISCELLANEOUS WORK (SUPPLY OF TRUCK AND/OR LABOUR)**GENERAL**

The Work consists of supplying labour and trucks for miscellaneous work under the following activities:

Activity	Description
3000	Inspections
3300	Chemical Vegetation Control
4200	Beaver Control

The Contractor shall supply all hand tools necessary to perform the Work.

LABOUR

Labour may include, but is not limited to, the following work:

Inspections:

- assisting MCI in collection of SCR data, inventory and other necessary data
- installation and repair of barricades and installation and repair of barricade flashers on the transitions from 4 to 2 lane highways and other places where temporary installations exist
- installation of batteries, bulbs, flasher heads on highway appurtenances.
- removal of enviro berms and maintenance of erosion control structures throughout the highway network.

Chemical Vegetation Control:

- hand picking weeds in inaccessible areas, slide areas, backslopes near creeks and water runs that cannot be sprayed.
- delivering bagged noxious and restricted weeds to MD Field offices for disposal.

Beaver Control:

- removing and disposing of debris accumulated in culverts, as a result of beaver activity, when blasting is not required.

TRUCK

The Contractor shall supply the necessary vehicle (1 ton truck or smaller) required to transport personnel and hand tools to and from the job sites.

MEASUREMENT AND PAYMENT

Measurement will be in hours (to the nearest ¼ hour) the vehicle and/or labourer spends travelling to and from the worksite, and is engaged in the Work. The maximum allowable travel time from the worksite to the nearest shop will be one hour.

Payment will be made at the unit price bid per hour for “Supply of Truck (Miscellaneous Work)” and/or “Supply of Labour (Miscellaneous Work)” under the applicable activity for which the work has been ordered.

There is no warranty period for this Work.

LL. QUALITY CONTROL/QUALITY ASSURANCE PROGRAMS

The Contractor shall adhere to the following tables in conducting for quality control and quality assurance. When Department staff audits for specification conformance, traffic accommodation is to be included as part of the audit.

A summary list of tables for quality assurance activities is shown below:

Table No:	Activity
QA-1	Snow Removal and Ice Control
QA-2	Snow Removal and Ice Control Graders
QA -3	Snowfence / Supply & Install
QA -4	Mix & Stockpile Salt-treated Sand
QA -5	Supply and Stockpile Sand
QA-6	Supply Sodium Chloride
QA-7	Pit Run Gravel
QA-8	Cracksealing
QA-9	Crack, Rout & Seal
QA-10	Selective Surface Seals
QA-11	Pothole Patching
QA -12	Asphalt Pavement Surface – Patching & Deep Patching
QA -13	Asphalt Surface Treatment
QA -14	Roadway & Raised Median Cleaning
QA -15	Painted Roadway Lines
QA -16	Pavement Messages
QA -17	Grading Gravel Surfaces
QA -18	Regravelling
QA-19	Supply & Apply Dust Abatement
QA-20	Emergency Sign Package Supply, Flagperson, Signs and Vehicle Supply/ Arrowboards
QA-21	Highway Maintenance Work
QA-22	Milled Rumble Strips
QA-23	Mowing
QA-24	Vegetation Control
QA-25	Supply of Signs / Supply & Install Posts
QA-26	Work on Major Signs and Sign Structures
QA-27	Delineators & Wildlife Reflectors
QA-28	Supply & Install W-beam Guardrail & Posts
QA-29	Bridge Structure Cleaning
QA-30	Ferry Operations

Table No: QA-1, Snow Removal & Ice Control Activity No: 1100 Specification No: 52.1 Bid Items Nos: 1101, 1102, 1103		
Q/A Process	Frequency Minimum	Responsibility
1. Annual check of spreader device and pre-wetting units and calibrations	One each per truck/year	Foreman
2. Spot calibrate 5% of units	Per year	Superintendent or designate
3. Payment in hours – time records submitted to TRANS are physically spot-audited for time record accuracy and completeness	Audit 90% of the fleet/yr. Covering min. 2 storm events	Management or designate
4. Site Q/A inspection of work to evaluate conformance to spec and accuracy of measurement	random inspections per CMA per yr. (covering 20% of fleet)	Management or designate
Table No: QA-2, Snow & Ice Control – Graders Activity No: 1200 Specification No: 53.27 Bid Items No: 1201		
Q/A Process	Frequency Minimum	Responsibility
1. Payments in hours – time records submitted to TRANS are physically audited for time record accuracy and completeness.	Audit 90% of the fleet/yr. Covering min. 2 storm events	Superintendent or designate
2. Site Q/A inspection of work to evaluate conformance to specification and accuracy of measurement	One/grader/season to a max. of 8 inspections	Superintendent or designate
Table No: QA-3, Snowfence/ Supply & Install Activity No: 1300 Specification No: 52.3 Bid Items No: 1301		
Q/A Process	Frequency Minimum	Responsibility
1. Suppliers to provide documentation confirming material dimensions and porosity of snowfence.	One each per supplier/yr. of fence purchased	Superintendent or designate
2. Inspect location and erection in accordance with specification	One per CMA/year	Superintendent or designate

Table No: QA-4, Mix & Stockpile Salt Treated Sand Activity No: 1400 Specification No: 52.5 Bid Items No: 1401		
Q/A Process	Frequency Minimum	Responsibility
1. Volumetric measure – total volume of material	One pile/CMA	Superintendent or designate
2. Application rate of salt is as specified	One pile/CMA	Superintendent or designate
Table No: QA-5, Supply & Stockpile Sand Activity No: 1400 Specification No: 52.7 Bid Items Nos: 1410 to 14		
Q/A Process	Frequency Minimum	Responsibility
1. Sieve analysis to be supplied by supplier 1 each per 800 tonnes of material supplied. If consistent material, O.M. may specify min. 1/source/yr. Results to be consistent with spec agreed to with TRANS for specific sources	Random check sieves if supplier results not by an independent lab whose results are certified by a P. Eng. at one per source.	Foreman
Table No: QA-6, Supply Sodium Chloride Activity No: 1400 Specification No: 52.8 Bid Items Nos: 1470 to 14		
Q/A Process	Frequency Minimum	Responsibility
1. Each load to clearly show the net weight of Product being delivered	Independently re-weigh four loads per year	Superintendent or designate
2. Check delivery of material according to specification	Spot check bill of lading and material delivered 2 loads/CMA/yr.	Superintendent or designate
Table No: QA-7, Pit Run Gravel Activity No: 1500 Specification No: 53.2 Bid Items Nos: 1503 & 1504		
Q/A Process	Frequency Minimum	Responsibility
Visual inspection of source material and acceptance of each source between TRANS and Contractor	Visual each source	Foreman and MCI
Table No: QA-8, Cracksealing Activity No: 1600 Specification No: 53.4 Bid Items No: 1601		
Q/A Process	Frequency Minimum	Responsibility
1. Use material from recognized product list with suppliers providing Q/C results for each batch of material supplied	Each batch	Foreman
2. Audit supplier Q/C tests by independent test	One each per supplier	Superintendent
3. Audit crew compliance to specification and quantities.	500 lane meters per CMA per season	Superintendent or designate

Table No: QA-9, Crack, Rout & Seal Activity No: 1600 Specification No: 53.5 Bid Items No: 1602		
Q/A Process	Frequency Minimum	Responsibility
1. Use material from recognized product list with suppliers providing Q/C results for each batch of material supplied	Each batch	Foremen
2. Audit crew compliance to specifications and quantities. Use templates as per Drawing CBS-10.5M	500 lane meters per CMA per season	Superintende nt or Designate
Table No: QA-10, Selective Surface Seals Activity No: 1700 Specification No: 53.7 Bid Items Nos: 1702 & 1703		
Q/A Process	Frequency Minimum	Responsibility
1. Obtain supplier results for each batch of material supplied	Do an independent test to verify supplied Q/C results if quantity or product utilized exceeds 20,000 litres per year.	Superintendent
2. Do aggregate sieve analysis – one per source	Do an independent Q/A test per year if sieve not done by an independent testing agency with results certified by a P. Eng.	Foreman
3. Site Q/A inspection of work to evaluate conformance to spec and accuracy of measurement.	Two each per CMA per year	Manager or designate
Table No: QA-11, Pothole Patching Activity No: 1800 Specification No: 1801 to 1804 Bid Items Nos: 53.10		
Q/A Process	Frequency Minimum	Responsibility
Obtain technical information and any available Q/C results from each supplier.	Per supplier per batch	Foremen
Site Q/A inspection of work to evaluate conformance to specification and accuracy of the measurement	One section of hwy. With 20 or more potholes per CMA per year	Management or designate

Table No: QA-12, Asphalt Pavement – Surface, Patching & Deep Patching		
Activity Nos: 1900 & 2100 Specification No: 53.13 & 53.14		
Bid Items Nos: 1901 to 1911 & 2102		
Q/A Process	Frequency Minimum	Responsibility
1. Asphalt Concrete Pavement Mix provides mix design for the approved mix for each mix and each supplier. If mix design differs from that specified, mix designs to be approved by MCI/OMs’.	One per each supplier per source	Superintendent
2. Obtain Q/C results if performed by supplier, audit supplier testing	Minimum one independent test to verify asphalt, oil content and gradation as per mix design per year	Management or designate
3. Spot-check scales or weight of loads.	One per year per supplier	Superintendent or Foreman
4. Site Q/A inspection of work to evaluate conformance to specification and accuracy of measurement	One per CMA per year	Management or designate
Table No: QA-13, Asphalt Surface Treatment		
Activity No: 2000 Specification No: 53.9		
Q/A Process	Frequency Minimum	Responsibility
1. Do aggregate sieve analysis	Once per year per source	Foremen
2. Obtain Q/C results if performed by supplier for oil	Verify from bill of lading – 1 load/yr.	Foreman
3. Site Q/A inspection of work to evaluate conformance to specification and accuracy of measurement	One per year	Superintendent or Management Designate
Table No: QA-14, Roadway & Raised Median Cleaning		
Activity No: 2200 Specification No: 53.17		
Bid Items Nos: 2201 to 2203		
Q/A Process	Frequency Minimum	Responsibility
Audit for compliance to specification	Four areas per CMA per year, covering all activities done in each CMA	Management or designate

Table No: QA-15, Painted Roadway Lines		
Activity No: 2300 Specification No: 53.20		
Bid Items Nos: 2301 to 2307		
Q/A Process	Frequency Minimum	Responsibility
1. Use recognized products list for paint and bead.	Each material	Superintendent
2. Obtain supplier Q/C results for paint and beads	One per supplier per batch	Superintendent
3. Produce or obtain daily application records from subcontractor	Verify to meet spec daily	Foreman
4. Audit daily application and payment quantity	One day's production per CMA per year	Superintendent
5. Visual conformance to specification on highway	Four 5 km sections and minimum 2 intersections per CMA per year	Management
Table No: QA-16, Pavement Messages		
Activity No: 2400 Specification No: 53.21, 53.22 & 53.24		
Bid Items Nos: 2403 & 2404		
Q/A Process	Frequency Minimum	Responsibility
1. Obtain supplier Q/C results	One per supplier	Superintendent
2. Visual audit application for conformance to specifications	One per CMA per year	Management or designate
Table No: QA-17, Grading Gravel Surfaces		
Activity No: 2500 Specification No: 53.27		
Bid Items No: 2501		
Q/A Process	Frequency Minimum	Responsibility
Payment in hours – time records submitted to TRANS are physically spot audited for time and record accuracy and completeness	Once/grader/season to a maximum of 8 inspections	Management or designate
Table No: QA-18, Regravelling		
Activity No: 2600 Specification No: 53.29		
Bid Items No: 2601 to 2607		
Q/A Process	Frequency Minimum	Responsibility
1. Do aggregate analysis. If consistent material, O.M. may specify min. 1/source/yr. Results to be consistent with spec agreed to with TRANS for specified material.	One test per 800 tonnes per source	Foremen
2. Spot check scales/weights of loads	One per source	Superintendent or designate
3. Site audit for conformance to specifications	One per CMA per year	Management or designate

Table No: QA-19, Supply & Apply Dust Abatement Activity No: 2700 Specification No: 53.31 Bid Items Nos: 2702 to 2704		
Q/A Process	Frequency Minimum	Responsibility
1. Obtain Q/C results certifying analysis of product (copy with each load)	One each per source per batch	Superintendent
2. Audit product Q/C analysis – send sample for independent test	One per four loads	Superintendent
3. Audit daily bulk application and payment quantity	One day per CMA per year	Superintendent
4. Visual audit application results on highway for conformance to specification	One section per CMA per year	Superintendent
Table No: QA-20 Emergency Sign Package, Supply, Flagperson, Signs, Vehicle Supply/Arrowboards Activity No: 2900 Specification Nos: 53.36, 53.37 & 53.38 Bid Items Nos: 2901 to 2906		
Q/A Process	Frequency Minimum	Responsibility
1. Do audit of all signs and verify equipment package complete and ready to mobilize	Twice per year per package	Foreman
2. Check records and confirm training requirements have been met for flag people	Once per year	Superintendent
3. Spot audit compliance to specifications	One/yr./CMA	Management or designate
Table No: QA-21, Highway Maintenance Work Activity No: 3000 Specification No: 53.39 & Special Provisions Bid Items Nos: 3001 & 3002		
Q/A Process	Frequency Minimum	Responsibility
1. Keep record of highway maintenance work on approved form	Check use of form	Foreman
2. Audit inspections for compliance	Four per CMA per year	Management or designate
3. Audit winter inspection circuits for completion of inspection and accuracy of road condition assessment	Four circuits per CMA per year	Management or designate
Table No: QA-22, Milled Rumble Strips Activity No: 3100 Specification No: 53.41 Bid Items Nos: 3101, 3102 & 3103		
Q/A Process	Frequency Minimum	Responsibility
Site audit for conformance to specification	4 locations of stop conditions and 2 – 5 km sections per CMA per year	Superintendent or Management designate

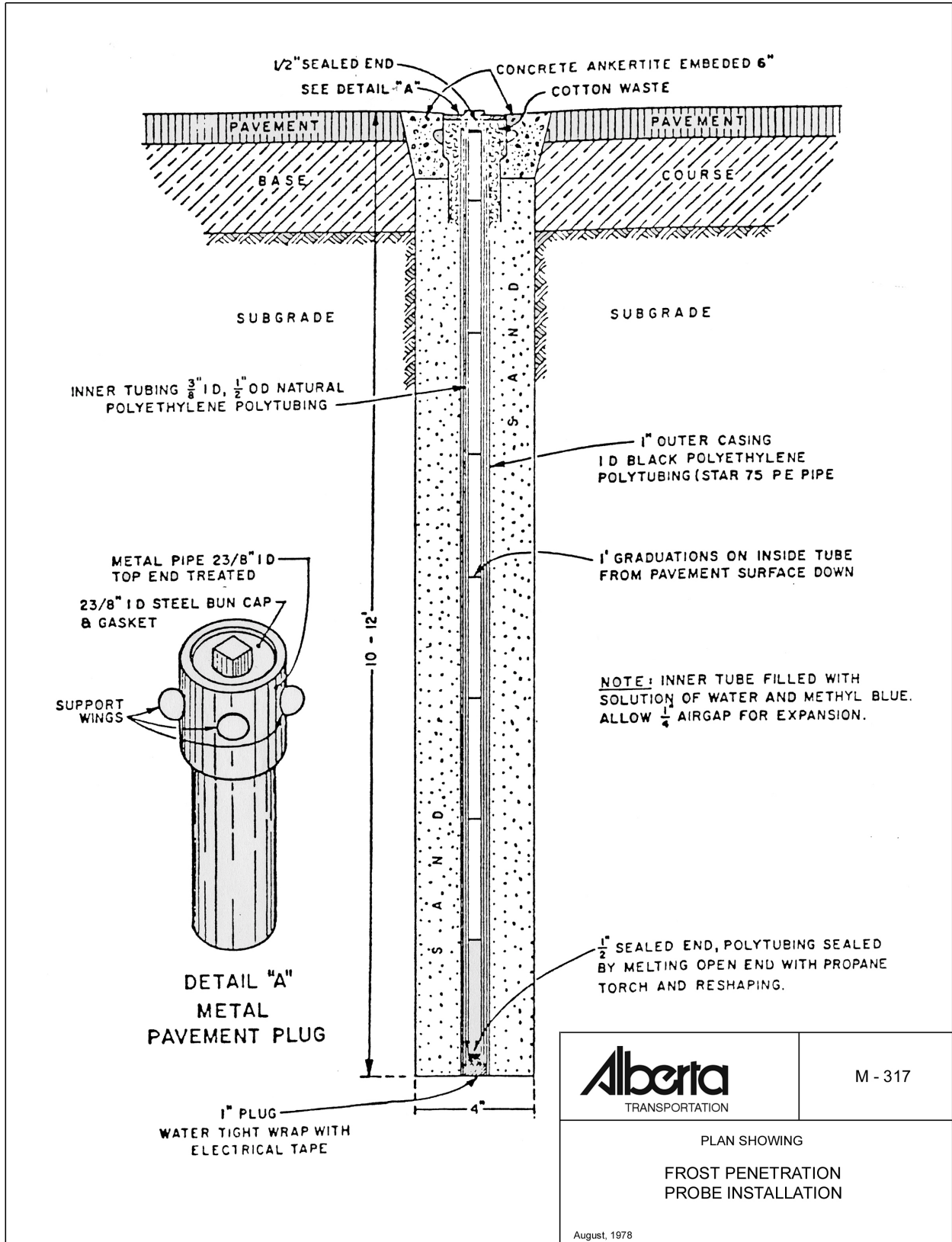
SPECIAL PROVISIONS

CMA #4

Table No: QA-23, Mowing Activity No: 3200 Specification No: 54.1 Bid Items No: 3201		
Q/A Process	Frequency Minimum	Responsibility
1. Audit check to verify cuts 150 mm in accordance with specification.	One days production per CMA per year	Management or designate
2. Audit mowing width for partial right-of-way mowing	One days production per CMA per year	Management or Designate
3. Audit that hand trimming has been done as required	One days production per CMA per year	Management or designate
Table No: QA-24, Vegetation Control Activity No: 3300 Specification No: 54.4 Bid Items Nos: 3301 to 3304		
Q/A Process	Frequency Minimum	Responsibility
1. Verify applicator has proper license	Once per sub-contractor per year	Superintendent
2. Obtain copies of permits and advertisement	Once per sub-contractor per year	Superintendent
3. Obtain production reports from sub-contractor confirming application rate	For all areas	Foreman
4. Audit application of chemicals in accordance with specification	Once per season, one area per CMA	Superintendent
5. Audit production reports	One day per year per CMA	Management or designate
Table No: QA-25, Supply of Signs & Supply / Install Posts Activity No: 3600 Specification No: 54.12 Bid Items Nos: 3601 to 3608, 3609, 3610 & 3611		
Q/A Process	Frequency Minimum	Responsibility
1. Supplier to provide certification that materials supplied meet specification and are from recognized products list	Once per year per supplier	Superintendent
2. Spot audit installation to verify conformance to specifications	Four installations/ CMA/year	Management or designate
3. Supplier to provide certification that the posts meet MLGA standards and are from recognized products list	Once per year per supplier	Superintendent

Table No: QA-26, Work on Major Signs & Sign Structures Activity No: 3600 Specification No: 54:13 Bid Items Nos: 3607, 3608, 3620, 3621, 3622 & 3623		
Q/A Process	Frequency Minimum	Responsibility
1. Supplier to provide certification that materials supplied meet specifications and are from recognized products list.	Once per year per supplier	Superintendent
2. Spot audit installation to verify conformance to specifications	Four per year per CMA	Management or designate
Table No: QA-27, Delineators & Wildlife Reflectors Activity No: 3800 Specification Nos: 54.19 & 54.20 Bid Items Nos: 3801, 3804, 3805 & 3806		
Q/A Process	Frequency Minimum	Responsibility
1. Supplier to provide certification that posts supplied meet specification and are from recognized products list.	Once per year per supplier	Superintendent
2. Spot audit installation to verify conformance to specifications	Four per year per CMA	Management or designate
Table No: QA-28, Supply & Install W-Beam Guardrail & Posts Activity No: 3900 Specification No: 54.23 Bid Items No: 3902		
Q/A Process	Frequency Minimum	Responsibility
1. Suppliers to provide certification that materials supplied meets specifications, and are from recognized products list.	Once per year per supplier	Superintendent
2. Spot audit installations to verify conformance to specifications and the posts have a date certificate attached.	Four installations per year per CMA	Management or designate
Table No: QA-29, Bridge Structure Cleaning Activity No: 4100 Specification No: 54.30 Bid Items No: 4101		
Q/A Process	Frequency Minimum	Responsibility
Spot Audit to verify compliance to specification	One bridge per CMA per year.	Management or Designate.
Table No: QA-30, Ferry Operations Activity No: 4500 Specification No: Special Provisions Bid Items Nos: 4501, 4502 & 4503		
Q/A Process	Frequency Minimum	Responsibility
Monitor response of operator to traffic using ferry and that operator is following appropriate operational procedures	Twice per year	Management or designate

MM. DRAWINGS



cma_04 PLOW TRUCK FINAL2
Assignment

Class	Number of Trucks	Base Case: 20 trucks	Minimum: 18 trucks	19 trucks		2LEKm per truck used in Proposed Plow truck table
A	Assign				A	
B	2LEKm per truck	32	36	34	B	1
C	based on # of trucks in proposal	32	36	34	C	1
D		34	38	36	D	1
E		45	50	47	E	1
F		75	83	79	F	1
G		92	102	97	G	1
H					H	

cma_04 PLOW TRUCK FINAL2
Main Hwy Table

Sect. #	Highway	Class	Description	2 Lane Equiv. Length	AADT	Base Case		Contractor's Proposal		Maximum allowable plowing time	Maximum allowable sand/ salt time
						Distance to nearest stockpile	Demand Factor	Distance to nearest stockpile	Demand Factor		
1	2:60	D	South of Nampa (Reno Road) to Jct Hwy 688	27.380	2390	12.4	714.3		374.8	3.0	4.0
2	2:60	D	Jct Hwy 688 to Peace River Bridge HOTSPOT	11.050	3000	5.1	117.4		61.1	0.75	0.75
3	2:62	B	Peace River Bridge to Jct Hwy 743 HOTSPOT	7.710	13100	3.1	53.6		29.7	0.75	0.75
4	2:62	D	Jct Hwy 743 to Top of West Peace River Hill HOTSPOT	4.250	4530	5.1	30.7		9.0	0.75	0.75
5	2:62	D	Top of West Peace River Hill to Jct Hwy 35	16.010	4530	6.1	225.8		128.2	3.0	4.0
6	2:64	D	Jct Hwy 35 to Jct Hwy 2A	5.600	3630	1.5	24.1		15.7	3.0	4.0
7	2:64	D	Jct Hwy 2A to East of Whitelaw (Sixth Meridian)	32.620	1890	1.5	581.0		532.0	3.0	4.0
8	2:66	E	East of Whitelaw (Sixth Meridian) to Fairview ECL	25.580	1660	31.6	1,135.5		327.2	3.0	6.0
9	2:66	D	Fairview ECL to Fairview SCL HOTSPOT	3.600	3040	30.3	115.6		6.5	1.00	1.00
10	2:66	D	Fairview South Corporate Limit to Jct Hwy 64	10.600	2070	30.3	377.4		56.2	3.0	4.0
11	2:68	D	Jct Hwy 64 to CMA Boundary North of Dunvegan at Top of Peace River Valley	8.410	2450	30.3	290.2		35.4	3.0	4.0
12	2A:36	E	Jct Hwy 2:62 to Jct Hwy 2:64 (Grimshaw)	11.760	1380	0.2	71.5		69.1	3.0	6.0
13	35:04	D	Jct Hwy 2 to Jct Hwy 689 (Dixonville)	39.000	1850	6.2	1,002.3		760.5	3.0	4.0
14	35:06	D	Jct Hwy 689 to Jct Hwy 691	43.260	1840	3.0	1,065.5		935.7	3.0	4.0
15	35:06;.08	D	Jct Hwy 691 to Town of Manning North Corporate Limit	2.760	3550	0.5	5.2		3.8	3.0	4.0
16	35:08	E	Town of Manning North Corporate Limit to Jct Chinchaga Road	22.490	1650	0.5	264.1		252.9	3.0	6.0
17	35:08	E	Jct Chinchaga Road to South Hawk Hills Road (Meikle River Valley) HOTSPOT	5.830	1650	22.1	145.8		17.0	1.00	1.00
18	35:08;.10	E	South Hawk Hills Road to North of Twin Lakes (Top of 100 Mile Hill)	40.530	1050	26.2	1,883.2		821.3	3.0	6.0
19	35:10	E	100 Mile Hill to Kemp R/R Crossing HOTSPOT	5.990	1050	27.1	180.3		17.9	1.00	1.00
20	35:10	E	Kemp R/R Crossing to Jct 695 (Carcajou)	24.110	1050	3.0	363.0		290.6	3.0	6.0
21	64:02	G	B.C. Boundary to Top of Clear River West Hill	19.200	270	39.6	944.6		184.3	5.0	10.0
22	64:02	G	Top of Clear River West Hill to Top of Clear River East Hill HOTSPOT	8.200	370	32.6	300.9		33.6	2.00	2.00

**cma_04 PLOW TRUCK FINAL2
Main Hwy Table**

Sect. #	Highway	Class	Description	2 Lane Equiv. Length	AADT	Base Case		Contractor's Proposal		Maximum allowable plowing time	Maximum allowable sand/ salt time
						Distance to nearest stockpile	Demand Factor	Distance to nearest stockpile	Demand Factor		
23	64:02	G	Top of Clear River East Hill to Jct Hwy 726	31.800	370	1.0	537.4		505.6	5.0	10.0
24	64:02	F	Jct of Hwy 726 to Running Lake Road	8.400	560	0.1	36.1		35.3	4.0	8.0
25	64:04	F	Running Lake Road to Jct Hwy 685 (Hines Creek)	32.700	830	2.5	616.4		534.6	4.0	8.0
26	64:06	E	Jct Hwy 685 to Jct Hwy 64A (West of Fairview)	21.400	900	2.5	282.5		229.0	3.0	6.0
27	64:06	F	Jct Hwy 64A to Jct Hwy 2:68	6.700	540	23.7	181.2		22.4	4.0	8.0
28	64A:06	E	Jct Hwy 64 to Jct Hwy 2:66 (Fairview)	6.640	1140	23.7	179.4		22.0	3.0	6.0
29	682:02	G	East of Jct Hwy 729 to Jct Hwy 64	13.840	320	23.7	423.8		95.8	5.0	10.0
30	683:02	G	Jct Hwy 744 to Jct Hwy 2 (Nampa)	9.870	300	32.5	369.5		48.7	5.0	10.0
31	684:02	G	Jct Hwy 2:64 to Jct Hwy 740	11.070	220	4.9	115.5		61.3	5.0	10.0
32	684:02	F	Jct Hwy 740 to Town of Peace River Corporate Limit	17.930	730	16.0	447.6		160.7	4.0	8.0
33	684:02	D	Town of Peace River Corporate Limit to Jct of Hwy 2:62	5.000	2440	2.0	22.5		12.5	3.0	4.0
34	685:02	G	East of Jct 729 to Hines Creek West Corporate Limit	11.600	170	0.3	70.8		67.3	5.0	10.0
35	685:02	E	Hines Creek West Corporate Limit to Jct Hwy 64	1.800	1310	0.8	3.1		1.6	3.0	6.0
36	685:02	E	Jct Hwy 64 to Jct Hwy 732 (North of Fairview)	14.890	870	2.5	148.1		110.9	3.0	6.0
37	685:04	F	Jct Hwy 732 to Jct Hwy 735	19.640	490	17.4	534.6		192.9	4.0	8.0
38	685:06	F	Jct Hwy 735 to Jct Hwy 737	11.300	520	36.8	479.7		63.8	4.0	8.0
39	685:06	F	Jct Hwy 737 to Jct Hwy 2	20.820	540	2.0	258.4		216.7	4.0	8.0
40	688:02	F	Jct Hwy 2 to Jct Hwy 986	26.070	810	12.4	663.1		339.8	4.0	8.0
41	689:02	G	6th Meridian to Jct Hwy 35 (Dixonville)	22.440	210	45.8	1,279.5		251.8	6.0	11.0
42	690:02	G	Jct Hwy 35 to Deadwood	11.720	200	22.9	337.1		68.7	5.0	10.0
43	691:02 741:02	F	Jct Hwy 35 to North of Jct Hwy 741	17.190	500	3.0	199.3		147.7	4.0	8.0
44	692:02	G	Jct Hwy 35 to East of Hawk Hills	14.050	190	36.0	604.5		98.7	5.0	10.0
45	726:02	G	Jct Hwy 64 to Worsley	16.160	330	1.0	146.7		130.6	5.0	10.0

**cma_04 PLOW TRUCK FINAL2
Main Hwy Table**

Sect. #	Highway	Class	Description	2 Lane Equiv. Length	AADT	Base Case		Contractor's Proposal		Maximum allowable plowing time	Maximum allowable sand/ salt time
						Distance to nearest stockpile	Demand Factor	Distance to nearest stockpile	Demand Factor		
46	732:02	C	Jct Hwy 2 to Farview North Corporate Limit HOTSPOT	2.400	5920	30.3	75.6		2.9	1.00	1.00
47	732:02	E	Fairview North Corporate Limit to Jct Hwy 685	14.800	1270	17.4	367.0		109.5	3.0	6.0
48	737:02	G	Jct Hwy 685 to Jct Hwy 35	24.600	370	15.5	683.9		302.6	5.0	10.0
49	740:02	G	Shaftesbury Ferry to Jct Hwy 684	5.730	250	16.0	108.1		16.4	5.0	10.0
50	743:02	D	Jct Hwy 2 to North of Peace River Corporate Limit (end of climbing lane)	4.880	2250	5.1	36.8		11.9	3.0	4.0
51	743:02	E	North of Peace River Corporate Limit to North of Jct Hwy 986	12.320	1730	8.4	179.4		75.9	3.0	6.0
52	744:04	F	CMA Boundary to Top of Judah Hill	27.350	600	9.4	631.1		374.0	4.0	8.0
53	744:04	F	Top of Judah Hill to Town of Peace River Limit HOTSPOT	2.000	600	7.4	16.8		2.0	1.00	1.50
54	744:04	B	Through Town of Peace River to Jct Hwy 2	3.000	7280	6.1	22.8		4.5	2.0	4.0
55	986:01	F	Jct Hwy 35 to Jct Hwy 743	21.450	780	19.7	652.6		230.1	4.0	8.0
56	986:01	F	Jct Hwy 743 to Top of DMI West Hill	7.790	680	19.7	183.8		30.3	4.0	8.0
57	986:01	F	Top of DMI West Hill to Jct Hwy 688 HOTSPOT	15.610	680	25.7	523.0		121.8	1.50	2.00
58	986:02	F	Jct Hwy 688 to East of Shell Plant Acs	13.760	630	36.0	590.0		94.7	4.0	8.0
59	AR 238	G	Jct. Hwy 2 to Berwyn	0.600	400	13.9	8.5		0.2	5.0	10.0
60	AR 200	G	Jct. Hwy 2 to Brownvale	1.100	290	23.8	26.8		0.6	5.0	10.0
61	AR 201	G	Jct. Hwy 2 to Whitelaw	1.600	270	52.6	85.4		1.3	5.0	10.0
62	AR 214	G	Jct. Hwy 2 to Bluesky	0.100	300	39.6	4.0		0.0	5.0	10.0
			Total CMA	888.060			22,024.5		9,276.4		

cma_04 PLOW TRUCK FINAL2
Base Plow Truck

Truck #	Truck Des.	Km/Tk	Total component	Assignment 1										Assignment 2									
				Sect. #	Hwy	Description	Class	TD	Length	Time	% Utilization	Sect. #	Hwy	Description	Class	TD 2	Length	Accum Time	% Utilization				
1	Hines Creek 1	47.40	0.52	22	64:02	Top of Clear River West Hill to Top of Clear River East Hill HOTSPOT	G	74.6	8.200	1.98	0.09	21	64:02	B.C. Boundary to Top of Clear River West Hill	G	7.0	19.200	2.97	0.30				
2	Hines Creek 2	48.14	0.82	46	732:02	Jet Hwy 2 to Fairview North Corporate Limit HOTSPOT	C	30.3	2.400	0.76	0.08	47	732:02	Fairview North Corporate Limit to Jet Hwy 685	E	2.4	14.800	1.46	0.40				
3	Hines Creek 3	29.28	0.68	9	2:66	Fairview ECL to Fairview SCL HOTSPOT	D	30.3	3.600	0.82	0.11	8	2:66	East of Whiteclaw (Sixth Meridian) to Fairview ECL	E	1.6	25.580	1.96	0.87				
4	Hines Creek 4	48.58	0.86	26	64:06	Jet Hwy 685 to Jet Hwy 64A (West of Fairview) HOTSPOT	E	2.5	21.400	0.98	0.48	29	682:02	East of Jet Hwy 729 to Jet Hwy 64	G	21.7	13.840	2.06	0.63				
5	Hines Creek 5	69.06	0.85	25	64:04	Running Lake Road to Jet Hwy 685 (Hines Creek)	F	2.5	32.700	1.48	0.44	24	64:02	East of Hwy 726 to Running Lake Road	F	32.2	8.400	2.54	0.55				
6	Hines Creek 6	28.29	0.50	35	685:02	Hines Creek West Corporate Limit to Jet Hwy 64	E	0.8	1.800	0.10	0.04	36	685:02	Jet Hwy 64 to Jet Hwy 732 (North of Fairview)	E	1.8	14.890	0.78	0.37				
7	Hines Creek 7	20.61	0.58	10	2:66	Fairview South Corporate Limit to Jet Hwy 64	D	30.3	10.600	1.12	0.31	11	2:68	Jet Hwy 64 to CMA Boundary North of Dunvegan at Top of Peace River Valley	D	11.2	8.410	1.73	0.56				
8	Peace River 1	48.36	0.98	2	2:60	Jet Hwy 688 to Peace River Bridge HOTSPOT	D	5.1	11.050	0.59	0.33	53	744:04	Top of Judah Hill to Town of Peace River Limit HOTSPOT	F	9.0	2.000	0.87	0.35				
9	Peace River 2	29.84	0.74	3	2:62	Peace River Bridge to Jet Hwy 743 HOTSPOT	B	2.0	7.710	0.38	0.24	4	2:62	Jet Hwy 743 to Top of West Peace River Hill	D	0.0	4.250	0.56	0.37				
10	Peace River 3	47.44	0.71	57	986:01	Top of DMI West Hill to Jet Hwy 688 HOTSPOT	F	19.6	15.610	1.10	0.21	56	986:01	Jet Hwy 743 to Top of DMI West Hill	F	0.0	7.790	1.44	0.31				
11	Peace River	75.72	0.97	40	688:02	Jet Hwy 2 to Jet Hwy 986	F	12.4	26.070	1.40	0.35	58	986:02	Jet Hwy 688 to East of Shell Plant Ass	F	23.6	13.760	2.51	0.53				
12	Grimshaw 1	44.05	1.00	1	2:60	South of Nampa (Keno Road) to Jet Hwy 688	D	29.4	27.980	1.83	0.81	30	683:02	Jet Hwy 744 to Jet Hwy 2 (Nampa)	G	20.1	9.870	2.70	0.91				
13	Grimshaw 2	26.61	0.78	6	2:64	Jet Hwy 35 to Jet Hwy 2A	D	1.5	5.600	0.28	0.16	13	35:04	Jet Hwy 2 to 5 km north	D	0.0	5.000	0.49	0.31				
14	Grimshaw 3	34.00	1.00	13	35:04	5 km north of Jet Hwy 2 to Jet Hwy 689	D	11.2	34.000	1.72	1.00												
15	Grimshaw 4	34.32	0.98	7	2:64	Jet Hwy 2A to East of Whiteclaw (Sixth Meridian)	D	1.5	32.620	1.45	0.96	59	AR 238	Jet Hwy 2 to Berwyn	G	12.4	0.600	1.75	0.97				
16	Grimshaw 5	80.15	0.97	31	684:02	Jet Hwy 2:64 to Jet Hwy 740	G	4.9	11.070	0.59	0.12	32	684:02	Jet Hwy 740 to Town of Peace River Corporate	F	11.1	17.930	1.61	0.36				
17	Manning- Keg River 1	50.10	1.11	19	35:10	100 Mile Hill to Kemp R/R Crossing HOTSPOT	E	27.1	5.990	0.85	0.13	20	35:10	Kemp R/R Crossing to Jet 695 (Carcajou)	E	0.0	24.110	1.90	0.67				
18	Manning 2	48.85	1.09	17	35:08	Jet Chinchaga Road to South Hawk Hills Road (Meikle River Valley) HOTSPOT	E	22.1	5.830	0.73	0.13	16	35:08	Town of Manning North Corporate Limit to Jet Chinchaga Road	E	0.0	22.490	1.71	0.63				
19	Manning 3	37.05	0.83	14	35:06	Jet Hwy 689 to Jet Hwy 690	D	22.9	23.000	1.50	0.68	44	692:02	Jet Hwy 35 to East of Hawk Hills	G	55.0	14.050	3.30	0.83				
20	Manning 4	40.21	0.91	14	35:06	Jet Hwy 690 to Jet Hwy 691	D	3.0	20.260	0.95	0.60	15	35:06:08	Jet Hwy 691 to Town of Manning North Corporate Limit	D	0.0	2.760	1.07	0.68				
		888.06	16.87																				

cma_04 PLOW TRUCK FINAL2
Base Plow Truck

Truck #	Truck Des.	Km/Tk	Total component	Assignment 3										Assignment 4									
				Sect. #	Hwy	Description	Class	TD 3	Length	Accum Time	% Utilization	Sect. #	Hwy	Description	Class	TD 4	Length	Accum Time	% Utilization				
1	Hines Creek 1	47.40	0.52	23	64:02	Top of Clear River East Hill to E of Jct Hwy 726	G	7.0	20.000	3.99	0.52												
2	Hines Creek 2	48.14	0.82	37	685:04	Jct Hwy 732 to Jct Hwy 735	F	14.8	19.640	2.63	0.87	38	685:06	Jct Hwy 735 to Jct Hwy 737	F	19.6	11.300	3.55	0.82				
3	Hines Creek 3	29.28	0.68	62	AR 214	Jct. Hwy 2 to Bluesky	G	13.0	0.100	2.25	0.68												
4	Hines Creek 4	48.58	0.86	28	64A:06	Jct Hwy 64 to Jct Hwy 2:66 (Fairview)	E	0.0	6.640	2.35	0.77	27	64:06	Jct Hwy 64A to Jct Hwy 2:68 (top of Clear River East Hill) E of Hwy 726 to Hwy 728	F	0.0	6.700	2.64	0.86				
5	Hines Creek 5	69.06	0.85	45	726:02	Jct Hwy 64 to Worsley	G	8.4	16.160	3.43	0.72	23	64:02		G	0.0	11.800	3.94	0.85				
6	Hines Creek 6	28.29	0.50	34	685:02	East of Jct 729 to Hines Creek West Corporate	G	1.8	11.600	1.33	0.50												
7	Hines Creek 7	20.61	0.58	61	AR 201	Jct. Hwy 2 to Whiteclaw	G	33.7	1.600	2.53	0.58												
8	Peace River 1	48.36	0.98	54	744:04	Through Town of Peace River to Jct Hwy 2	B	0.0	3.000	1.00	0.45	12	2A:36	Jct Hwy 2:62 to Jct Hwy 2:64 (Grimshaw)	E	12.0	11.760	1.78	0.71				
9	Peace River 2	29.84	0.74	50	743:02	Jct Hwy 2 to North of Peace River Corporate Limit (end of climbing lane)	D	0.0	4.880	0.78	0.51	33	684:02	Town of Peace River Corporate Limit to Jct of Hwy 2:62	D	4.5	5.000	1.09	0.66				
10	Peace River 3	47.44	0.71	51	743:02	North of Peace River Corporate Limit to North of Jct Hwy 986	E	6.0	12.320	2.11	0.59	42	690:02	Hwy 35 to W of Hwy 743	G	55.0	11.720	3.81	0.71				
11	Peace River	75.72	0.97	55	986:01	Jct Hwy 35 to Jct Hwy 743	F	17.1	21.450	3.82	0.82	41	689:02	8 km E of End of Pavement to Hwy 35	G	46.0	14.440	5.45	0.97				
12	Grimshaw 1	44.05	1.00	52	744:04	CMA Boundary to S of 683:02 (Top of Judah)	F	9.8	6.800	3.20	1.00												
13	Grimshaw 2	26.61	0.78	5	2:62	Top of West Peace River Hill to Jct Hwy 35	D	0.0	16.010	1.19	0.78												
14	Grimshaw 3	34.00	1.00																				
15	Grimshaw 4	34.32	0.98	60	AR 200	Jct. Hwy 2 to Brownvale	G	9.9	1.100	2.01	0.98												
16	Grimshaw 5	80.15	0.97	49	740:02	Shattsbury Ferry to Jct Hwy 684	G	0.0	5.730	1.86	0.42	39	685:06	Jct Hwy 737 to Jct Hwy 2	F	14.3	20.820	3.07	0.70				
17	Manning- Keg River 1	50.10	1.11	18	35:08:10	South Hawk Hills Road to North of Twin Lakes (Top of 100 Mile Hill)	E	4.5	20.000	2.87	1.11												
18	Manning 2	48.85	1.09	18	35:08:10	South Hawk Hills Road to North of Twin Lakes (Top of 100 Mile Hill)	E	4.1	20.530	2.69	1.09												
19	Manning 3	37.05	0.83																				
20	Manning 4	40.21	0.91	43	691:02	Jct Hwy 35 to North of Jct Hwy 741	F	0.0	17.190	1.81	0.91												
		888.06	16.87																				

cma_04 PLOW TRUCK FINAL2
Base Plow Truck

Assignment 5											
Truck #	Truck Des.	Km/Tk	Total component	Sect. #	Hwy	Description	Class	TD 5	Length	Accum Time	% Utilization
1	Hines Creek 1	47.40	0.52								
2	Hines Creek 2	48.14	0.82								
3	Hines Creek 3	29.28	0.68								
4	Hines Creek 4	48.58	0.86								
5	Hines Creek 5	69.06	0.85								
6	Hines Creek 6	28.29	0.50								
7	Hines Creek 7	20.61	0.58								
8	Peace River 1	48.36	0.98	52	744:04	(CMA Bdy) S of Hwy 683 to Top of Judah Hill	F	20.0	20.550	3.10	0.98
9	Peace River 2	29.84	0.74	41	689:02	West end of 669 to 8 km East	G	69.5	8.000	2.95	0.74
10	Peace River 3	47.44	0.71								
11	Peace River	75.72	0.97								
12	Grimshaw 1	44.05	1.00								
13	Grimshaw 2	26.61	0.78								
14	Grimshaw 3	34.00	1.00								
15	Grimshaw 4	34.32	0.98								
16	Grimshaw 5	80.15	0.97	48	737:02	Jct Hwy 685 to Jct Hwy 35	G	14.2	24.600	4.45	0.97
17	Manning- Keg River 1	50.10	1.11								
18	Manning 2	48.85	1.09								
19	Manning 3	37.05	0.83								
20	Manning 4	40.21	0.91								
		888.06	16.87								

**cma_04 PLOW TRUCK FINAL2
Base Sand Truck**

Truck #	Truck Description	Hopper Size (m3)	2LEKm treated by one hopper load	Assignment 1					Assignment 2												
				Sect. #	Hwy	Description	Mob	Haul	Length	NL	Accum Time	2LEKm remaining in hopper	Sect. #	Hwy	Description	Travel	Haul	Length	NL	Accum Time	2LEKm remaining in hopper
1	Hines Creek 1	8.5	12.88	22	64:02	Top of Clear River West Hill to Top of Clear River East Hill HOTSPOT	0.0	74.6	8.2	1.42	4.68	21	64:02	B.C. Boundary to Top of Clear River West Hill	7.0	39.6	19.2	2	5.92	11.24	
2	Hines Creek 2	8.5	12.88	46	732:02	Jct Hwy 2 to Fairview North Corporate Limit HOTSPOT	0.0	30.3	2.4	0.54	10.48	47	732:02	Fairview North Corporate Limit to Jct Hwy 685	2.4	17.4	14.8	1	2.14	8.56	
3	Hines Creek 3	6.5	9.85	9	2:66	Fairview ECL to Fairview SCL	0.0	30.3	3.6	0.59	6.25	8	2:66	East of Whiteleaf (Sixth Meridian) to Fairview ECL	1.6	31.6	25.58	2	4.54	0.37	
4	Hines Creek 4	8.5	12.88	26	64:06	Jct Hwy 685 to Jct Hwy 64A (West of Fairview)	0.0	2.5	21.4	1	1.22	4.36	29	682:02	East of Jct Hwy 729 to Jct Hwy 64	21.7	23.7	13.84	1	3.33	3.40
5	Hines Creek 5	8.5	12.88	25	64:04	Running Lake Road to Jct Hwy 685 (Hines Creek)	0.0	2.5	32.7	2	2.34	5.94	24	64:02	Jct of Hwy 726 to Running Lake Road	32.2	0.0	8.4	1	3.35	10.42
6	Hines Creek 6	6.1	9.24	35	685:02	Hines Creek West Corporate Limit to Jct Hwy 64	0.0	0.8	1.8	0.09	7.44	36	685:02	Jct Hwy 64 to Jct Hwy 732 (North of Fairview)	1.8	2.5	14.89	1	1.00	1.79	
7	Hines Creek 7	8.5	12.88	10	2:66	Fairview South Corporate Limit to Jct Hwy 64	0.0	30.3	10.6	0.89	2.28	11	2:66	Jct Hwy 64 to CMA Boundary North of Dunvegan at Top of Peace River Valley	11.2	30.3	8.41	1	2.90	6.75	
8	Peace River 1	8.5	12.88	2	2:60	Jct Hwy 688 to Peace River Bridge HOTSPOT	0.0	5.1	11.05	0.55	1.83	53	744:04	Top of Judah Hill to Town of Peace River Limit HOTSPOT	9.0	7.4	2	1	1.27	12.71	
9	Peace River 2	8.5	12.88	3	2:62	Peace River Bridge to Jct Hwy 743 HOTSPOT	0.0	3.1	7.71	0.38	5.17	4	2:62	Jct Hwy 743 to Top of West Peace River Hill HOTSPOT	0.0	5.1	4.25		0.64	0.92	
10	Peace River 3	13	19.70	57	986:01	Top of DMI West Hill to Jct Hwy 688 HOTSPOT	0.0	25.7	15.61	1.05	4.09	56	986:01	Jct Hwy 743 to Top of DMI West Hill	0.0	19.7	7.79	1	2.51	15.99	
11	Peace River 4	8.5	12.88	40	688:02	Jct Hwy 2 to Jct Hwy 986	0.0	12.4	26.07	2	2.76	12.57	58	986:02	Jct Hwy 688 to East of Shell Plant Acs	23.6	36.0	13.76	1	5.42	11.69
12	Grimshaw 1	8.5	12.88	1	2:60	South of Nampa (Reno Road) to Jct Hwy 688	0.0	12.4	27.38	2	2.81	11.26	30	683:02	Jct Hwy 744 to Jct Hwy 2 (Nampa)	20.1	32.5	9.87		3.99	1.39
13	Grimshaw 2	8.5	12.88	6	2:64	Jct Hwy 35 to Jct Hwy 2A	0.0	1.5	5.6	0.26	7.28	13	35:04	Jct Hwy 2 to 5 km north	0.0	6.1	5		0.57	2.28	
14	Grimshaw 3	8.5	12.88	13	35:04	5 km north of Jct Hwy 2 to Jct Hwy 689 (Dixonville)	0.0	6.2	34	2	2.66	4.64			0.0						
15	Grimshaw 4	8.5	12.88	7	2:64	Jct Hwy 2A to East of Whiteleaf (Sixth Meridian)	0.0	1.5	32.62	2	2.26	6.02	59	AR 238	Jct. Hwy 2 to Berwyn	12.4	13.9	0.6		2.66	5.42
16	Grimshaw 5	8.5	12.88	31	684:02	Jct Hwy 2:64 to Jct Hwy 740	0.0	4.9	11.07	0.55	1.81	32	684:02	Jct Hwy 740 to Town of Peace River Corporate Limit	11.1	16.0	17.93	2	3.37	9.64	
17	Manning-Keg River	8.5	12.88	19	35:10	100 Mile Hill to Kemp R/R Crossing HOTSPOT	0.0	27.1	5.99	0.65	6.89	20	35:10	Kemp R/R Crossing to Jct 695 (Carcajou)	0.0	3.0	24.11	2	2.65	8.54	
18	Manning 2	8.5	12.88	17	35:08	Jct Chinchaga Road to South Hawk Hills Road (Meikle River Valley) HOTSPOT	0.0	22.1	5.83	0.57	7.05	16	35:08	Town of Manning North Corporate Limit to Jct Chinchaga Road	0.0	0.5	22.49	2	2.32	10.32	
19	Manning 3	8.5	12.88	14	35:06	Jct Hwy 689 to Jct Hwy 690	0.0	22.9	23	2.17	2.76	44	692:02	Jct Hwy 35 to East of Hawk Hills	55.0	45.8	14.05	1	5.71	1.59	
20	Manning 4	8.5	12.88	14	35:06	Jct Hwy 690 to Jct Hwy 691	0.0	3.0	20.26	1	1.19	5.50	15	35:06:08	Jct Hwy 691 to Town of Manning North Corporate Limit	0.0	0.5	2.76		1.32	2.74

cma_04_PLOW TRUCK FINAL2
Base Sand Truck

Truck #	Truck Description	Hopper Size (m3)	2LEKm treated by one hopper load	Assignment 3				Assignment 4				Travel	Haul Length	NL	Accum Time	2LEKm remaining in hopper				
				Sect. #	Hwy	Description	Travel	Haul Length	NL	Accum Time	2LEKm remaining in hopper						Sect. #	Hwy	Description	Travel
1	Hines Creek 1	8.5	12.88	23	64:02	Top of Clear River East Hill to E of Jct Hwy 726	7.0	1.0	20	1	7.12	4.12								
2	Hines Creek 2	8.5	12.88	37	685:04	Jct Hwy 732 to Jct Hwy 735	14.8	17.4	19.64	1	4.14	1.80	685:06	Jct Hwy 735 to Jct Hwy 737	19.6	36.8	11.3	1	6.67	3.38
3	Hines Creek 3	6.5	9.85	62	AR 214	Jct. Hwy 2 to Bluesky	13.0	39.6	0.1		5.30	0.27			0.0					
4	Hines Creek 4	8.5	12.88	28	64A:06	Jct Hwy 64 to Jct Hwy 2:66 (Fairview)	0.0	23.7	6.64	1	4.82	9.64	64:06	Jct Hwy 64A to Jct Hwy 2:68	0.0	23.7	6.7		5.45	2.94
5	Hines Creek 5	8.5	12.88	45	726:02	Jct Hwy 64 to Worsley	8.4	1.0	16.16	1	4.40	7.13	64:02	(top of Clear River East Hill) Eof Hwy 726 to Hwy 726	0.0	1.0	11.8	1	5.14	8.21
6	Hines Creek 6	6.1	9.24	34	685:02	East of Jct 729 to Hines Creek West Corporate Limit	1.8	0.3	11.6	2	2.08	8.68			0.0					
7	Hines Creek 7	8.5	12.88	61	AR 201	Jct. Hwy 2 to Whitehaw	33.7	52.6	1.6		4.20	5.15			0.0					
8	Peace River 1	8.5	12.88	54	744:04	Through Town of Peace River to Jct Hwy 2	0.0	6.1	3		1.49	9.71	2A:36	Jct Hwy 2:62 to Jct Hwy 2:64 (Grimshaw)	12.0	0.0	11.76	1	2.35	10.83
9	Peace River 2	8.5	12.88	50	743:02	Jct Hwy 2 to North of Peace River Corporate Limit (end of climbing lane)	0.0	5.1	4.88	1	1.25	8.92	684:02	Town of Peace River Corporate Limit to Jct of Hwy 2:62	4.5	2.0	5		1.56	3.92
10	Peace River 3	13	19.70	51	743:02	North of Peace River Corporate Limit to North of Jct Hwy 986	6.0	8.4	12.32		3.25	3.67	42	Hwy 35 to W of Hwy 743	55.0	20.0	11.72	1	5.69	11.65
11	Peace River 4	8.5	12.88	55	986:01	Jct Hwy 35 to Jct Hwy 743	17.1	19.7	21.45	1	7.62	3.11	41	8 km E of End of Pavement to Hwy 35	46.0	46.0	14.44	1	11.06	1.55
12	Grimshaw 1	8.5	12.88	52	744:04	CMA Boundary to S of 683:02 (Top of Judah Hill)	9.8	30.0	6.8	1	5.90	7.47			0.0					
13	Grimshaw 2	8.5	12.88	5	2:62	Top of West Peace River Hill to Jct Hwy 35	0.0	0.2	16.01	2	2.02	12.03			0.0					
14	Grimshaw 3	8.5	12.88				0.0								0.0					
15	Grimshaw 4	8.5	12.88	60	AR 200	Jct. Hwy 2 to Brownvale	9.9	23.8	1.1		3.19	4.32			0.0					
16	Grimshaw 5	8.5	12.88	49	740:02	Shaftesbury Ferry to Jct Hwy 684	0.0	16.0	5.73		3.85	3.91	39	Jct Hwy 737 to Jct Hwy 2	14.3	2.0	20.82	2	5.83	8.84
17	Manning-Keg River	8.5	12.88	18	35:08:10	South Hawk Hillis Road to North of Twin Lakes (Top of 100 Mile Hill)	4.5	31.6	20	1	5.12	1.42			0.0					
18	Manning 2	8.5	12.88	18	35:08:10	South Hawk Hillis Road to North of Twin Lakes (Top of 100 Mile Hill)	4.1	26.2	20.53	1	4.58	2.67			0.0					
19	Manning 3	8.5	12.88												0.0					
20	Manning 4	8.5	12.88	43	91:02 741:0	Jct Hwy 35 to North of Jct Hwy 741	0.0	3.0	17.19	2	3.02	11.31			0.0					

cma_04 PLOW TRUCK FINAL2
Base Sand Truck

Assignment 5												
Truck #	Truck Description	Hopper Size (m3)	2LEKm treated by one hopper load	Sect. #	Hwy	Description	Travel	Haul Length NL	Accum Time	2LEKm remaining in hopper		
1	Hines Creek 1	8.5	12.88				0.0					
2	Hines Creek 2	8.5	12.88				0.0					
3	Hines Creek 3	6.5	9.85				0.0					
4	Hines Creek 4	8.5	12.88				0.0					
5	Hines Creek 5	8.5	12.88				0.0					
6	Hines Creek 6	6.1	9.24				0.0					
7	Hines Creek 7	8.5	12.88				0.0					
8	Peace River 1	8.5	12.88	52	744:04	(CMA Bdy) S of Hwy 683 to Top of Judah Hill	20.0	9.1	20.55	1	4.11	3.16
9	Peace River 2	8.5	12.88	41	689:02	West end of 689 to 8 km East	69.5	40.0	8	1	4.80	8.80
10	Peace River 3	13	19.70				0.0					
11	Peace River 4	8.5	12.88				0.0					
12	Grimshaw 1	8.5	12.88				0.0					
13	Grimshaw 2	8.5	12.88				0.0					
14	Grimshaw 3	8.5	12.88				0.0					
15	Grimshaw 4	8.5	12.88				0.0					
16	Grimshaw 5	8.5	12.88	48	737:02	Jct Hwy 685 to Jct Hwy 35	14.2	15.5	24.6	2	8.95	10.00
17	Manning-Keg River	8.5	12.88				0.0					
18	Manning 2	8.5	12.88				0.0					
19	Manning 3	8.5	12.88				0.0					
20	Manning 4	8.5	12.88				0.0					

Base Plow Cumulative time by class																										
Class	A	B	C	D	E	F	G	H																		
Total Time	1.38	0.76	15.72	19.57	33.70	46.44																				
Base Plow time by section																										
Sect. #	Highway	Class	Time to complete	Maximum allowable time	Truck #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1	280	D	1.63	3.00													1.93									
2	260	D	0.59	0.75										0.59												
3	262	B	0.38	0.75										0.38												
4	262	D	0.56	0.75										0.56												
5	262	D	1.19	3.00														1.19								
6	264	D	0.28	3.00														0.28								
7	264	D	1.45	3.00																1.45						
8	268	E	1.96	3.00																						
9	266	D	0.82	1.00																						
10	266	D	1.12	3.00																						
11	268	D	1.73	3.00										1.73												
12	2A36	E	1.78	3.00																						
13	3504	D	1.72	3.00																						
14	3506	D	1.50	3.00																						
15	3506.08	D	1.07	3.00																						
16	3508	E	1.71	3.00																						
17	3508	E	0.73	1.00																						
18	3508.10	E	2.87	3.00																						
19	3510	E	0.85	1.00																						
20	3510	E	1.90	3.00																						
21	6402	G	2.97	5.00																						
22	6402	G	1.98	2.00																						
23	6402	G	3.99	5.00																						
24	6402	F	2.54	4.00																						
25	6404	F	1.48	4.00																						
26	6406	E	0.98	3.00																						
27	6406	F	2.64	4.00																						
28	64A06	E	2.95	3.00																						
29	68202	G	2.06	5.00																						
30	68302	G	2.70	5.00																						
31	68402	G	0.59	5.00																						
32	68402	F	1.61	4.00																						
33	68402	D	1.09	3.00																						
34	68502	G	1.33	5.00																						
35	68502	E	0.10	3.00																						
36	68502	E	0.78	3.00																						
37	68504	F	2.63	4.00																						
38	68506	F	3.55	4.00																						
39	68506	F	3.07	4.00																						
40	68902	F	1.40	4.00																						
41	68902	G	5.45	6.00																						
42	69002	G	3.81	5.00																						
43	74102	F	1.81	4.00																						
44	69202	G	3.30	5.00																						
45	72502	G	3.43	5.00																						
46	73202	C	0.76	1.00																						
47	73202	E	1.46	3.00																						
48	73702	G	4.45	5.00																						
49	74002	G	1.86	5.00																						
50	74302	D	0.78	3.00																						
51	74302	E	2.11	3.00																						
52	74404	F	3.20	4.00																						
53	74404	F	0.87	1.00																						
54	74404	B	1.00	2.00																						
55	98601	F	3.82	4.00																						
56	98601	F	1.44	4.00																						
57	98601	F	1.10	1.50																						
58	98602	F	2.51	4.00																						
59	AR238	G	1.75	5.00																						
60	AR200	G	2.01	5.00																						
61	AR201	G	2.53	5.00																						
62	AR214	G	2.25	5.00																						

Base Sand Cumulative time by class																									
Class	A	B	C	D	E	F	G	H																	
Total Time	1.87	0.54	21.89	30.73	60.68	79.43																			
Base Sand time by section																									
Sect. #	Highway	Class	Time to complete	Maximum allowable time	Truck #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	260	D	2.81	4.00																					
2	260	D	0.55	0.75									0.55												
3	262	B	0.38	0.75										0.38											
4	262	D	0.64	0.75										0.64											
5	262	D	2.02	4.00														2.02							
6	264	D	0.26	4.00														0.26							
7	264	D	2.26	4.00															2.26						
8	266	E	4.54	6.00				4.54																	
9	266	D	0.59	1.00				0.59																	
10	266	D	0.89	4.00								0.89													
11	268	D	2.90	4.00								2.90													
12	2A.36	E	2.35	6.00									2.35												
13	35.04	D	2.66	4.00														0.57	2.66						
14	35.06	D	2.17	4.00																					
15	35.06.08	D	1.32	4.00																					
16	35.08	E	2.32	6.00																					
17	35.08	E	0.57	1.00																					
18	35.08.10	E	5.12	6.00																					
19	35.10	E	0.85	1.00																					
20	35.10	E	2.65	6.00																					
21	64.02	G	5.92	10.00																					
22	64.02	G	1.42	2.00																					
23	64.02	G	7.12	10.00																					
24	64.02	F	3.35	8.00																					
25	64.04	F	2.34	8.00																					
26	64.06	E	1.22	6.00					1.22																
27	64.06	F	5.45	8.00					5.45																
28	64A.06	E	4.82	6.00					4.82																
29	682.02	G	3.33	10.00					3.33																
30	683.02	G	3.99	10.00					3.99																
31	684.02	G	0.55	10.00																					
32	684.02	F	3.37	8.00																					
33	684.02	D	1.56	4.00										1.56											
34	685.02	G	2.08	10.00																					
35	685.02	E	0.09	6.00																					
36	685.02	E	1.00	6.00																					
37	685.04	F	4.14	8.00																					
38	685.06	F	6.67	8.00																					
39	685.06	F	5.83	8.00																					
40	688.02	F	2.76	8.00																					
41	689.02	G	11.06	11.00																					
42	690.02	G	5.69	10.00																					
43	691.02	G	3.02	8.00																					
44	692.02	G	5.71	10.00																					
45	726.02	G	4.40	10.00																					
46	732.02	C	0.54	1.00																					
47	732.02	E	2.14	6.00																					
48	737.02	G	8.95	10.00																					
49	740.02	G	3.85	10.00																					
50	743.02	D	1.25	4.00																					
51	743.02	E	3.25	6.00																					
52	744.04	F	5.90	8.00																					
53	744.04	F	1.27	1.50																					
54	744.04	B	1.49	4.00																					
55	986.01	F	7.62	8.00																					
56	986.01	F	2.51	8.00																					
57	986.01	F	1.05	2.00																					
58	986.02	F	5.42	8.00																					
59	AR 288	G	2.66	10.00																					
60	AR 200	G	3.19	10.00																					
61	AR 201	G	4.20	10.00																					
62	AR 214	G	5.30	10.00																					

Sect. #	Highway	Class	Description	Total km	1		2		3		4		5		6		7		8		9		10		11	
					Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp
1	260	D	South of Nampota (Reno Road) to Jct Hwy 688	27.380	OK																					
2	260	D	Jct Hwy 688 to Peace River Bridge HOTSPOT	11.050	OK																					
3	262	B	Peace River Bridge to Jct Hwy 743	7.710	OK																					
4	262	D	Jct Hwy 743 to Top of West Peace River Hill	4.250	OK																					
5	262	D	Top of West Peace River Hill to Jct Hwy 35	16.010	OK																					
6	264	D	Jct Hwy 35 to Jct Hwy 2A	5.600	OK																					
7	264	D	Jct Hwy 2A to East of Whitleaw (Sixth Meridian)	32.620	OK																					
8	266	E	East of Whitleaw (Sixth Meridian) to Fairview ECL	25.580	OK																					
9	266	D	Fairview ECL to Fairview SCL HOTSPOT	3.600	OK																					
10	266	D	Fairview South Corporate Limit to Jct Hwy 64	10.600	OK																					
11	268	D	Jct Hwy 64 to CMA Boundary North of Dunvegan at Top of Peace River Valley	8.410	OK																					
12	2A:36	E	Jct Hwy 2:62 to Jct Hwy 2:64 (Grimshaw)	11.760	OK																					
13	35:04	D	Jct Hwy 2 to Jct Hwy 689 (Dixonville)	39.000	OK																					
14	35:06	D	Jct Hwy 689 to Jct Hwy 691	43.260	OK																					
15	35:06:08	D	Jct Hwy 691 to Town of Manning North Corporate Limit	2.760	OK																					
16	35:08	E	Town of Manning North Corporate Limit to Jct Chinchaga Road	22.490	OK																					
17	35:08	E	Jct Chinchaga Road to South Hawk Hills Road (Melkie River Valley) HOTSPOT	5.830	OK																					
18	35:08:10	E	South Hawk Hills Road to North of Twin Lakes (Top of 100 Mile Hill)	40.530	OK																					
19	35:10	E	100 Mile Hill to Kemp R/R Crossing HOTSPOT	5.990	OK																					
20	35:10	E	Kemp R/R Crossing to Jct 685 (Carcajou)	24.110	OK																					
21	64:02	G	B.C. Boundary to Top of Clear River West Hill	19.200	OK	0.21																				
22	64:02	G	Top of Clear River West Hill to Top of Clear River East Hill HOTSPOT	8.200	OK	0.09																				
23	64:02	G	Top of Clear River East Hill to Jct Hwy 726	31.800	OK	0.22																				
24	64:02	F	Jct of Hwy 726 to Running Lake Road	8.400	OK																					
25	64:04	F	Running Lake Road to Jct Hwy 685 (Hines Creek)	32.700	OK																					
26	64:06	E	Jct Hwy 685 to Jct Hwy 64A (West of Fairview)	21.400	OK																					
27	64:06	E	Jct Hwy 64A to Jct Hwy 2:68	6.700	OK																					
28	64A:06	F	Jct Hwy 64 to Jct Hwy 2:66 (Fairview)	6.640	OK																					
29	682:02	G	East of Jct Hwy 729 to Jct Hwy 64	13.840	OK																					
30	683:02	G	Jct Hwy 744 to Jct Hwy 2 (Nampa)	9.870	OK																					
31	684:02	G	Jct Hwy 2:64 to Jct Hwy 740	11.070	OK																					
32	684:02	F	Jct Hwy 740 to Town of Peace River Corporate Limit	17.930	OK																					
33	684:02	D	Town of Peace River Corporate Limit to Jct of Hwy 2:62	5.000	OK																					
34	685:02	G	East of Jct 729 to Hines Creek West Corporate Limit	11.600	OK																					
35	685:02	E	Hines Creek West Corporate Limit to Jct Hwy 64	1.800	OK																					
36	685:02	E	Jct Hwy 64 to Jct Hwy 732 (North of Fairview)	14.890	OK																					
37	685:04	F	Jct Hwy 732 to Jct Hwy 735	19.640	OK																					
38	685:06	F	Jct Hwy 735 to Jct Hwy 737	11.300	OK																					
39	685:06	F	Jct Hwy 737 to Jct Hwy 2	20.820	OK																					
40	686:02	F	Jct Hwy 2 to Jct Hwy 986	26.070	OK																					
41	689:02	G	6th Meridian to Jct Hwy 35 (Dixonville)	22.440	OK																					
42	690:02	G	Jct Hwy 35 to Deadwood	11.720	OK																					
43	691:02 741:02	F	Jct Hwy 35 to North of Jct Hwy 741	17.190	OK																					
44	692:02	G	Jct Hwy 35 to East of Hawk Hills	14.050	OK																					
45	726:02	G	Jct Hwy 64 to Worsley	16.160	OK																					
46	732:02	C	Jct Hwy 2 to Fairview North Corporate Limit HOTSPOT	2.400	OK	0.08																				

11.05	0.33
7.71	0.24
4.25	0.13

10.50	0.31
8.41	0.25
11.76	0.26

11.80	0.13
8.40	0.11
32.70	0.44

21.40	0.48
6.70	0.09
6.64	0.15
13.84	0.15

5.00	0.15
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11.60	0.13
1.80	0.04
14.89	0.33

19.64	0.26
11.30	0.15

16.16	0.13
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2.40	0.08
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8.00	0.09
11.72	0.13
26.07	0.13
14.44	0.13

Sect. #	Highway	Class	Description	Total km	12		13		14		15		16		17		18		19		20	
					Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km	Truck Comp	Km
1	1260	D	South of Nampa (Reno Road) to Jct Hwy 688	27.380	OK	27.38	0.81															
2	2160	D	Jct Hwy 688 to Peace River Bridge	11.050	OK																	
3	3262	B	Peace River Bridge to Jct Hwy 743	7.710	OK																	
4	4262	D	Jct Hwy 743 to Top of West Peace River Hill	4.250	OK																	
5	5262	D	Top of West Peace River Hill to Jct Hwy 35	16.010	OK																	
6	6264	D	Jct Hwy 35 to Jct Hwy 2A	5.600	OK																	
7	7264	D	Jct Hwy 2A to East of Whiteleaf (Sixth Meridian)	32.620	OK																	
8	8266	E	East of Whiteleaf (Sixth Meridian) to Fairview ECL	25.560	OK																	
9	9266	D	Fairview ECL to Fairview SCL	3.600	OK																	
10	10266	D	Fairview South Corporate Limit to Jct Hwy 64	10.600	OK																	
11	11268	D	Jct Hwy 64 to CMA Boundary North of Dunvegan at Top of Peace River Valley	8.410	OK																	
12	12A-36	E	Jct Hwy 262 to Jct Hwy 264 (Grinshaw)	11.760	OK																	
13	13504	D	Jct Hwy 2 to Jct Hwy 689 (Dixonville)	39.000	OK																	
14	143506	D	Jct Hwy 689 to Jct Hwy 691	43.660	OK																	
15	153506.08	D	Jct Hwy 691 to Town of Manning North Corporate Limit	2.760	OK																	
16	163508	E	Town of Manning North Corporate Limit to Jct Chinchaga Road	22.490	OK																	
17	173508	E	Jct Chinchaga Road to South Hawk Hills Road (Melkie River Valley) HOTSPOT	5.830	OK																	
18	183508.10	E	South Hawk Hills Road to North of Twin Lakes (Top of 100 Mile Hill)	40.530	OK																	
19	193510	E	100 Mile Hill to Kemp R/R Crossing	5.990	OK																	
20	203510	E	Kemp R/R Crossing to Jct 695 (Cargill)	24.110	OK																	
21	216402	G	B.C. Boundary to Top of Clear River West Hill	19.200	OK																	
22	226402	G	Top of Clear River West Hill to Top of Clear River East Hill	8.200	OK																	
23	236402	G	Top of Clear River East Hill to Jct Hwy 726	31.800	OK																	
24	246402	F	Jct of Hwy 726 to Running Lake Road	8.400	OK																	
25	256404	F	Running Lake Road to Jct Hwy 685 (Hines Creek)	32.700	OK																	
26	266406	E	Jct Hwy 685 to Jct Hwy 64A (West of Fairview)	21.400	OK																	
27	276406	E	Jct Hwy 64A to Jct Hwy 268	6.700	OK																	
28	2864A36	E	Jct Hwy 64 to Jct Hwy 266 (Fairview)	6.640	OK																	
29	2968202	G	East of Jct Hwy 729 to Jct Hwy 64	13.840	OK																	
30	3068302	G	Jct Hwy 744 to Jct Hwy 2 (Nampa)	9.870	OK																	
31	3168402	G	Jct Hwy 264 to Jct Hwy 740	11.070	OK																	
32	3268402	F	Jct Hwy 740 to Town of Peace River Corporate Limit	17.930	OK																	
33	3368402	D	Town of Peace River Corporate Limit to Jct of Hwy 262	5.000	OK																	
34	3468502	G	East of Jct 729 to Hines Creek West Corporate Limit	11.600	OK																	
35	3568502	E	Hines Creek West Corporate Limit to Jct Hwy 64	1.800	OK																	
36	3668502	E	Jct Hwy 64 to Jct Hwy 732 (North of Fairview)	14.890	OK																	
37	3768504	F	Jct Hwy 732 to Jct Hwy 735	19.640	OK																	
38	3868506	F	Jct Hwy 735 to Jct Hwy 737	11.300	OK																	
39	3968506	F	Jct Hwy 737 to Jct Hwy 2	20.820	OK																	
40	4068802	F	Jct Hwy 2 to Jct Hwy 986	26.070	OK																	
41	4168902	G	8th Meridian to Jct Hwy 35 (Dixonville)	22.440	OK																	
42	4269002	G	Jct Hwy 35 to Daadwood	11.720	OK																	
43	4369102 74102	F	Jct Hwy 35 to North of Jct Hwy 741	17.190	OK																	
44	4469202	G	Jct Hwy 35 to East of Hawk Hills	14.050	OK																	
45	4572602	G	Jct Hwy 64 to Wonsley	18.160	OK																	
46	4673202	C	Jct Hwy 2 to Fairview North Corporate Limit	2.400	OK																	

16.01	0.47
5.60	0.16

32.62	0.96
-------	------

5.00	0.15	34.00	1.00
------	------	-------	------

23.00	0.69	20.26	0.60
		2.76	0.08

22.49	0.50
5.83	0.13
20.53	0.46
20.00	0.44
5.99	0.13
24.11	0.54

11.07	0.12
17.99	0.24

9.87	0.11
------	------

20.82	0.28
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14.05	0.15	17.19	0.23
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cmra_04 FLOW TRUCK FINAL2
Base Hwy

47	732:02	E	Fairview North Corporate Limit to Jct Hwy 685	14.800	OK
48	737:02	G	Jct Hwy 685 to Jct Hwy 35	24.600	OK
49	740:02	G	Statesbury Ferry to Jct Hwy 684	5.730	OK
50	743:02	D	Jct Hwy 2 to North of Peace River Corporate Limit (end of climbing lane)	4.880	OK
51	743:02	E	North of Peace River Corporate Limit to North of Jct Hwy 986	12.320	OK
52	744:04	F	CMA Boundary to Top of Judah Hill	27.350	OK
53	744:04	F	Top of Judah Hill to Town of Peace River Limit HOTSPOT	2.000	OK
54	744:04	B	Through Town of Peace River to Jct Hwy 2	3.000	OK
55	986:01	F	Jct Hwy 35 to Jct Hwy 743	21.450	OK 0.23
56	986:01	F	Jct Hwy 743 to Top of DMH West Hill	7.730	OK
57	986:01	F	Top of DMH West Hill to Jct Hwy 688 HOTSPOT	15.610	OK
58	986:02	F	Jct Hwy 688 to East of Shell Plant Acs	13.760	OK 0.18
59	AR 208	G	Jct. Hwy 2 to Benwyn	0.600	OK
60	AR 200	G	Jct. Hwy 2 to Brownvale	1.100	OK
61	AR 201	G	Jct. Hwy 2 to Whiteleaf	1.600	OK
62	AR 214	G	Jct. Hwy 2 to Bluesky	0.100	OK
			Total Km per Truck	888.060	

16.872 0.97 1.00 0.78 34.00 26.61 44.05 1.00 34.00 34.32 80.15 50.10 48.85 37.05 0.83 40.21 0.91

24.60	0.27
5.73	0.06

6.80	0.09
------	------

0.60	0.01
1.10	0.01

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1 SPECIFICATION AMENDMENTS

1.1 **Specification 51.2, General (For Maintenance Work)**

1.1.1 Section 51.2.13, Due Care, Claim Settlement and Hold Harmless

1.1.1.1 Insert the following new paragraph after the 5th paragraph:

It is the Department's intent that all claimants fully understand the claims resolution process. To assist the claimant in this regard, the Department has available an information pamphlet outlining the process. When contacted by a claimant, the department will provide a copy of the pamphlet to the claimant and then refer the claim to the Contractor. In situations where the Contractor is contacted by a claimant directly, the Contractor shall immediately advise the claimant that a pamphlet outlining the claims resolution process is available from the local Alberta Transportation Office. The Contractor shall then deal with the claim as described above.

1.1.2 Section 51.2.28, Extra Work

1.1.2.1 Replace Sub-section 51.2.28.3(a) with:

(a) *at the rates shown in the Equipment Rental Rates Guide for Equipment to which no allowance will be added; or*

1.1.2.2 Replace Sub-section 51.2.28.3 (b) with:

(b) *for third-party equipment rental accounts, at the rates invoiced by the third party, provided these rates were approved by the Engineer prior to the commencement of the Extra Work, to which will be added 15%; or*

1.1.3 Section 51.2.39, Mobile Radio Communications System

1.1.3.1 Replace the first two sentences of the first paragraph with the following:

The Department will provide the network portion of a mobile radio communications system through a specified service provider, free of cost to the Contractor, for mobile radios that are required for the highway maintenance operators. This will cover one radio for each snow plow truck (including each spare truck), grader, foreman, and superintendent vehicles and an additional six radios per Contract Maintenance Area.

1.1.4 Section 51.2.64, Price Adjustment Due to Inflation

1.1.4.1 In the first line of sub-section 51.2.64.3, Application of Net Index, replace 'Effective April 1, 2002' with '*Effective April 1, 2005*'.

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1.2 Specification 51.3, Traffic Accommodation and Temporary Signing (For Maintenance Work)

1.2.1 Section 51.3.5, Traffic Accommodation Strategy

1.2.1.1 Insert the following paragraph after the second paragraph:

The Contractor shall submit his proposed Traffic Accommodation Strategy to the Engineer prior to commencement of the Work. The Engineer will review the Traffic Accommodation Strategy and communicate any concerns to the Contractor. Any issues or concerns regarding the Contractor's proposed Traffic Accommodation Strategy shall be addressed to the mutual satisfaction of the Contractor and the Engineer prior to the commencement of the Work.

1.3 Specification 52.1, Snow removal and Ice Control

1.3.1 Section 52.1.3.6, Snowplow Wing

1.3.1.1 Insert the following after the fourth paragraph:

Notwithstanding the minimum lengths of blades and wings, the operating configuration shall have a minimum effective total plowing width of 4.3 m when the wing is in the non-extended position and a minimum effective total plowing width of 5.0 m when the wing is fully extended.

The requirements for Aminimum effective total plowing width^o shall only apply to equipment purchased after September 1, 2002.

1.3.2 Section 52.1.7, Availability Rate

1.3.2.1 Replace the second and third paragraphs with the following:

The available rate will not be paid for "spare" trucks which are not in use. The Availability Rate will not be paid for any trucks that have completed 13 full years of service as determined by the designated model year assigned by the manufacturer and year end of each winter season (June 1). For example, all 2000 model year trucks will be deemed to have completed 13 full years of service on June 1, 2013 and no further availability rate payments will be made.

If, during the term of the Contract, additional snowplow trucks are required as a result of a change in scope in a Contract Maintenance Area, the Availability Rate will be paid for the applicable period each additional truck is required, provided that the truck has not completed 13 full years of service as defined above.

1.3.3 Section 52.1.8, Payment Adjustments

1.3.3.1 The contents of Section 52.1.8 are deleted in their entirety and replaced with the following:

52.1.8.1 General

Payment adjustments for snowplow truck usage will be applied yearly at the end of the Department fiscal year. Payment adjustments are based on the total yearly snowplow truck hours accumulated during the Department fiscal year, for all trucks within the Contract area boundaries. The total yearly snowplow truck hours are compared against the "Combined Truck Usage Footprint" to determine

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the payment adjustments.

52.8.1.2 Footprint

The "Combined Truck Usage Footprint" is a range of the estimated total snowplow truck hours required within the Contract area boundaries each fiscal year. The "Combined Truck Usage Footprint" is determined as follows:

- (i) the Special Provisions will indicate a Provisional Quantity for snowplow truck hours for each Contract Maintenance Area (CMA),*
- (ii) the Provisional Quantities for each CMA in the Contract will be combined to provide the Total Provisional Quantity,*
- (iii) the "Combined Truck Usage Footprint" will be the Total Provisional Quantity +/- 5 %,*
- (iv) if the highway network within a CMA increases or decreases during the term of the Contract, the Provisional Quantity for snowplow truck hours referred to in item (i) of this section, will be increased or decreased by an amount as calculated with the following formula:*

$$\frac{\text{Provisional Quantity for Snowplow Truck Hours}}{\text{CMA Total km (2 lane equiv.)}} \times \text{Increase or Decrease in 2 lane equiv. km}$$

- (v) The Department's fiscal year runs from April 1 to March 31 of the following year. If the first fiscal year of the Contract is less than a full fiscal year, the Provisional Quantity for snowplow truck hours referred to in item (i) of this section will be reduced by an amount based on the Department's five year historical data for the snowplow truck hours occurring during the period from April 1 to the commencement date of the Contract. This adjusted quantity will be used to calculate the Footprint for the first fiscal year of the Contract only.*

If the final fiscal year of the Contract is less than a full fiscal year, the Footprint and the payment adjustments for snowplow truck hours will not apply to the final fiscal year. Payment for snowplow truck usage in the final fiscal year of the Contract will be based on the actual number of hours used.

- (vi) if additional snowplow trucks are added to the Contractor's fleet for reasons other than highway network expansion, then such additions will have no impact on the calculation of the Footprint.*

52.1.8.3 Actual Yearly Hours Within The Footprint

If the actual total yearly snowplow truck hours fall within the Footprint then no payment adjustment will be applied.

52.1.8.4 Actual Yearly Hours Exceed Footprint

If the actual total yearly snowplow truck hours exceed the Footprint then a lump sum reduction in payment will be applied in accordance with the following formula:

$$\text{Lump Sum Adjustment} = \text{WUP} \times \text{Actual Hours} \times 0.15 \times (1.05 - \text{Actual Hours} / \text{Footprint})$$

Where WUP is the Weighted Average Unit Price as calculated based on the total actual hours worked in the year by each category of truck.

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52.1.8.5 *Actual Yearly Hours Are Less Than Footprint*

If the actual total yearly snowplow truck hours are less than the Footprint then a lump sum payment will be made in accordance with the following formula:

$$\text{Lump Sum Adjustment} = \text{WUP} \times \text{Actual Hours} \times 0.29 \times (0.95 - \text{Actual Hours} / \text{Footprint})$$

1.4 *Specification 52.2, Snow or Debris Removal with Loader or Truck*

1.4.1 Section 52.2.1, General

1.4.1.1 Insert the following after the first paragraph:

Generally this specification is intended to be used for snow removal, rockslides or mudslides only.

1.5 *Specification 52.5, Sodium Chloride Treated Sand*

1.5.1 Section 52.5.8, Measurement and Payment

1.5.1.1 Replace the third paragraph with the following two new paragraphs:

Payment, by the Department, for the supply of sodium chloride treated sand material does not constitute the Department's ownership of such material, but rather reflects the Department's appreciation for the business cycles of the Contractor and the need of the Department to have the Contractor in a prepared state in advance of inclement winter weather. The Contractor acknowledges and agrees that the Contractor is considered the owner of the material until such time as the material is placed on the road.

As owner of the material, the Contractor acknowledges and accepts that the Contractor solely bears the responsibility for the safe storage of the said material so as to minimize the potential for any environmental contamination.

1.6 *Specification 52.6, Calcium Chloride Treated Sand*

1.6.1 Section 52.6.8, Measurement and Payment

1.6.1.1 Replace the third paragraph with the following two new paragraphs:

Payment, by the Department, for the supply of calcium chloride treated sand material does not constitute the Department's ownership of such material, but rather reflects the Department's appreciation for the business cycles of the Contractor and the need of the Department to have the Contractor in a prepared state in advance of inclement winter weather. The Contractor acknowledges and agrees that the Contractor is considered the owner of the material until such time as the material is placed on the road.

As owner of the material, the Contractor acknowledges and accepts that the Contractor solely bears the responsibility for the safe storage of the said material so as to minimize the potential for any environmental contamination.

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1.7 **Specification 52.7, Supply and Stockpile Sand**

1.7.1 Section 52.7.6, Measurement and Payment

- 1.7.1.1 Replace the second paragraph of sub-section 52.7.6.1, 'General' with the following two new paragraphs:

Payment, by the Department, for the supply of sand material does not constitute the Department's ownership of such material, but rather reflects the Department's appreciation for the business cycles of the Contractor and the need of the Department to have the Contractor in a prepared state in advance of inclement winter weather. The Contractor acknowledges and agrees that the Contractor is considered the owner of the material until such time as the material is placed on the road.

As owner of the material, the Contractor acknowledges and accepts that the Contractor solely bears the responsibility for the safe storage of the said material so as to minimize the potential for any environmental contamination.

1.8 **Specification 52.8, Supply of Sodium Chloride (Salt)**

1.8.1 Section 52.8.3, Salt Storage Sites

- 1.8.1.1 Delete the last sentence of the fifth(last) paragraph

1.8.2 Section 52.8.5, Payment Adjustments:

- 1.8.2.1 Insert the following items for determination of the 'Combined Salt Usage Footprint' in sub-section 52.8.5.2, Salt Usage:

- (iv) *if the highway network within a CMA increases or decreases during the term of the Contract, the Provisional Quantity for salt referred to in item (i) of this section, will be increased or decreased by an amount as calculated with the following formula:*

$$\frac{\text{Provisional Quantity for Salt (tonnes)}}{\text{CMA Total km (2 lane equiv.)}} \times \text{Increase or Decrease in 2 lane equiv. Km}$$

- (v) *The Department's fiscal year runs from April 1 to March 31 of the following year. If the first fiscal year of the Contract is less than a full fiscal year, the Provisional Quantity for salt referred to in item (i) of this section will be reduced by an amount based on the Department's five year historical data for salt usage occurring during the period from April 1 to the commencement date of the Contract. This adjusted quantity will be used to calculate the Footprint for the first fiscal year of the Contract only.*

If the final fiscal year of the Contract is less than a full fiscal year, the Footprint and the payment adjustments for salt usage will not apply to the final fiscal year. Payment for Salt usage in the final fiscal year of the Contract will be based on the actual number of tonnes used.

1.8.3 Section 52.8.7, Measurement and Payment

- 1.8.3.1 Replace the fourth paragraph of sub-section 52.8.7.1, 'Supply of Salt' with the following two new paragraphs:

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Payment, by the Department, for the supply of salt material does not constitute the Department's ownership of such material, but rather reflects the Department's appreciation for the business cycles of the Contractor and the need of the Department to have the Contractor in a prepared state in advance of inclement winter weather. The Contractor acknowledges and agrees that the Contractor is considered the owner of the material until such time as the material is placed on the road.

As owner of the material, the Contractor acknowledges and accepts that the Contractor solely bears the responsibility for the safe storage of the said material so as to minimize the potential for any environmental contamination.

1.9 Add the following Specification to Section 52, Winter (Pre-Wetting)

52.9 PRE-WETTING SYSTEMS

52.9.1 GENERAL

This specification covers the general requirements for the supply of truck mounted Pre-Wetting Systems to be used for spraying liquid chemical agents directly on sand, salt or sand and salt materials during spreading.

The Contractor shall supply all necessary equipment and materials required to provide a functional Pre-wetting System capable of meeting the performance requirements specified herein.

Pre-wettings systems that were approved for work with Alberta Transportation during the 2001/02 season will also be deemed acceptable. Pre-wetting systems which are replaced during the term of the Contract, shall be replaced with systems meeting the requirements specified herein.

52.9.2 MATERIALS

52.9.2.1 General

The Contractor shall obtain approval from the Engineer prior to ordering pre-wetting liquid chemical agents. The Contractor shall be responsible for confirming that the chemicals received are the same as the chemicals on the bill of lading and shall reject chemicals that are obviously non-compliant.

The Department recognizes the following chemicals as effective pre-wetting agents:

- \$ Sodium Chloride (typically 20% - 23% Concentration)*
- \$ Calcium Chloride (typically 30% - 36% Concentration)*
- \$ Magnesium Chloride (typically 26% - 32% Concentration)*

Other Chloride and Non-Chloride chemicals may be used for pre-wetting as approved by the Engineer.

Upon request, the Contractor shall provide the Engineer with the following information for each load of chemicals delivered:

- \$ Product Data Sheet (listing of chemical and physical properties)*
- \$ Certificate of Analysis*
- \$ Name of supplier and manufacturer*
- \$ Bill of lading number*
- \$ Origin of product*
- \$ Final destination of product*

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\$ Quantity in shipment

52.9.2.2 Quality Assurance Testing

The Contractor shall be responsible for quality assurance testing of pre-wetting chemical agents as directed by the Engineer.

52.9.2.3 Storage

The Contractor shall be responsible for the storage of liquid pre-wetting chemical agents. All storage tanks shall have a re-circulation system capable of preventing the settling of solids.

The Contractor shall provide a minimum storage capacity of 5 000 litres for each truck equipped with a pre-wetting system.

52.9.3 EQUIPMENT

52.9.3.1 General

The pre-wetting system shall have a minimum of 3 output flow rate settings to accommodate light, medium and heavy pre-wetting of materials. The pre-wetting system shall be capable of sustaining a heavy flow rate of 25 litres of liquid chemical agent per tonne of treated sand during a normal sanding application rate of 600 kg/2 lane km at 60 km/hr (15 litres/minute flow rate equivalency).

The pre-wetting system shall be integrated with the spread control device and automatically increase, decrease, start and stop flow to match spreader activity. The pre-wetting system shall be designed such that maximum surface coverage of the materials is obtained.

Pre-wetting systems shall be kept in good working condition at all times. The Contractor shall ensure that all components of the pre-wetting system are compatible with the liquid chemical agent(s) used.

All snow plow trucks equipped with pre-wetting systems shall be properly designed and engineered to safely operate under the combined load capacity of the sanding unit and pre-wetting tanks.

The number of trucks to be equipped with pre-wetting systems is specified in the Special Provisions.

52.9.3.2 Tanks

The truck mounted tank capacity for liquid pre-wetting chemicals shall be sufficient to pre-wet two full loads of treated sand at a constant heavy flow rate of 25 litres/tonne during an application rate of 600 kg/2 lane km at 60 km/hr.

For example, a tandem axle truck with an 8.5 m³ hopper would require a minimum tank(s) capacity of 588 litres (8.5m³ x 1.365 = 11.6t, 11.6t x 2 loads = 23.2t, 23.2t x 25 l/t = 588 litres).

52.9.3.3 Temperature Sensor

The pre-wetting system shall include a dynamic infra-red road and air temperature sensor. The sensor shall have separate displays for ambient air and road temperature values. The sensor display shall be mounted inside the cab and be positioned in an area visible to the operator.

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52.9.3.4 Flow Meter

All pre-wetting systems shall have a properly operating flow meter.

52.9.3.5 Calibration

Calibration of pre-wetting systems will be required under the following conditions:

- \$ prior to commencement of winter maintenance activities each year,*
- \$ when there is a change of pre-wetting chemical agents,*
- \$ whenever equipment is repaired or replaced, and*
- \$ when requested by the Engineer.*

Pre-wetting systems shall calibrated to an accuracy of \pm 10%.

52.9.4 PRE-WETTING LOG

The Contractor shall maintain a log of daily pre-wetting activities for each truck equipped with a pre-wetting system, and shall compile a monthly summary for each shop location.

Information recorded shall include time, air and road temperature, precipitation type, surface condition, type of chemical used, application rates, quantity used and results achieved.

The Engineer will provide data forms for the recording of this information.

52.9.5 MEASUREMENT AND PAYMENT

Measurement for pre-wetting systems will be in hours for the time a truck equipped with a pre-wetting system is performing snow removal and ice control work.

Payment for pre-wetting will be made at the unit price bid per hour for "Pre-Wetting Systems". This hourly rate will be paid regardless of whether or not "pre-wetting" is required when the truck is performing snow removal and ice control work.

Payment for the supply and quality assurance testing of liquid pre-wetting chemicals will be made as "Extra Work" in accordance with Specification 51.2, General for Maintenance Work. Payment for the supply of pre-wetting chemicals will not be considered to constitute ownership of the chemicals by the Department until such time that it is used for the purpose intended.

Payment for costs associated with Contractor produced Sodium Chloride Liquids (salt brine), excluding the supply of salt, will be made as "Extra Work" in accordance with Specification 51.2, General for Maintenance Work. Payment for the supply of salt used in salt brines will be made in accordance with Specification 52.8, Supply of Sodium Chloride (Salt).

The costs associated with providing storage of liquid pre-wetting chemicals will be considered included in the unit price bid for "Indirect Operating Costs".

52.9.6 WARRANTY

There is no warranty period for this Work.

SPECIFICATION AMENDMENTS

1.10 Specification 53.20, Painted Roadway Lines

1.10.1 Section 53.20.8, Measurement and Payment

1.10.1.1 Replace the contents of Section 53.20.8.1, Painting Roadway Lines with the following:

53.20.8.1 General

Measurement will be made in kilometres of the length of line painted. Separate measurements will be made for each colour of paint used. The space between Adashed lines@will not be measured for payment.

No payment will be made for any roadway lines painted during a given day in which the Acceptance Criteria has not been achieved for that day.

53.20.8.1.1 Painting Roadway Lines - Multiple Lines Ordered

Payment will be made at the applicable unit price bid per line-kilometre for APainted Roadway Lines - White@, APainted Roadway Lines - White (Waterborne)@, APainted Roadway Lines - Yellow@ or APainted Roadway Lines - Yellow (Waterborne)@regardless of the specified width. These payments will be full compensation for inspecting the areas to be painted, applying the paint and glass beads and all labour, equipment, tools and incidentals necessary to complete the Work.

53.20.8.1.2 Painting Roadway Lines - Single Lines Ordered

This bid item shall only apply when line painting is performed on segments of highway where the Department has required that only a single line be painted. The bid item shall not apply to Asingle lines@painted on intersections, interchanges, acceleration or deceleration lanes, or on sections of highway where more than 2 lines are being painted as part of the painting operation at that time.

Payment will be made at the applicable unit price bid per line-kilometre for APainted Roadway Lines - White -Single Line Ordered@, APainted Roadway Lines - White (Waterborne) - Single Line Ordered APainted Roadway Lines - Yellow - Single Line Ordered@ or APainted Roadway Lines - Yellow (Waterborne) - Single Line Ordered@regardless of the specified width. These payments will be full compensation for inspecting the areas to be painted, applying the paint and glass beads and all labour, equipment, tools and incidentals necessary to complete the Work.

53.20.8.1.3 Premium Payments

In urgent situations where the Contractor is required to complete the Work within 7 calendar days of the issuance of the Work Order, an additional payment will be made at the applicable unit price bid per occurrence for "Line Painting - Premium". This item will apply regardless of the type of paint used and payment will be full compensation for complying with the accelerated scheduling required to complete the Work.

1.10.1.2 Insert the following as the final paragraph in subsection 53.20.8.2, Painting Roadway Lines at Intersections and Interchanges:

These items will apply regardless of the type of paint used.

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- 1.10.1.3 Replace the second sentence of the first paragraph of subsection 53.20.8.3, Supply of Paint and Glass Beads with the following:

Separate measurements will be made for each colour and type of paint.

- 1.10.1.4 Replace the first sentence of the second paragraph of subsection 53.20.8.3, Supply of Paint and Glass Beads with the following:

Payment will be made at the applicable unit price bid per litre for ASupply of Paint - Yellow®, ASupply of Waterborne Paint - Yellow®, ASupply of Paint - White® or ASupply of Waterborne Paint - White®.

1.11 Specification 53.27, Maintenance and Preparation of Gravel Surface Roads and Snow Removal and Ice Control on Gravel and Paved Roads

1.11.1 Section 53.27.7, Measurement and Payment

- 1.11.1.1 Replace sub-section 53.27.7.1, General with the following:

Measurement will be in hours (to the nearest 3 hour) for the time the grader is engaged in the Work in accordance with the following:

- \$ two 15 minute coffee breaks per day will be allowed (no deduction)*
- \$ travel time between worksites will be paid for up to a maximum of one hour per day*

Payment will not be made for travel time from the storage location of the grader to and from the worksite, nor for time required to change blades, refuel or install chains.

1.12 Specification 53.36, Emergency Sign Package

1.12.1 Section 53.36.1, General

- 1.12.1.1 Delete the existing paragraph and replace with:

The Work consists of storing emergency signs supplied by the Department and maintaining the signs in an acceptable condition for the term of the Contract. The Work also consists of using these signs to accommodate traffic in emergency or unique situations where a long-term closure of the highway or a driving lane is necessary.

For emergency or unique situations where a short term closure is necessary, the emergency sign package would not normally be used. Such situations would be handled through the use of flagpersons and work zone signs in accordance with Specification 53.37, Supply of Flagpersons for Emergency Traffic Control.

1.12.2 Section 53.36.4, Procedures

- 1.12.2.1 Delete the existing paragraph and replace with:

The Contractor shall store all signs in the emergency sign packages at the Contractor-s designated locations. The Contractor shall maintain the signs in an acceptable condition throughout the term of the Contract. The Contractor shall ensure all signs are available for immediate use in a long term lane closure at any time during the term of the contract. The Contractor shall not use the signs in the emergency sign package for any other purpose without approval of the Engineer.

SPECIFICATION AMENDMENTS

1.12.3 Section 53.36.6, Measurement and Payment

1.12.3.1 Delete the first and second paragraphs and replace them with:

Measurement will be in hours (to the nearest 1/4 hour) for the time spent picking up the sign package, hauling it to the worksite, erecting it, taking it down and hauling it back to the storage location.

Payment will be made at the unit price bid per hour for "Erect and Remove Emergency Sign Package." This payment will be full compensation for loading, erecting, removing and unloading the signs as required, and all labour, material, equipment, tools and incidentals necessary to complete the Work.

Subsequent to installation of signs at a site, any required maintenance including cleaning, repair, re-erecting or relocating(same site) of the signs will be considered a component of Specification 53.39, Highway Maintenance Work and no separate or additional payment will be made. Periodic inspection of the site will be considered an Additional Road Inspection in accordance with Specification 53.39.

1.13 **Specification 53.37, Supply of Flagpersons for Emergency Traffic Control**

1.13.1 Section 53.37.1, General

1.13.1.1 Replace the first paragraph with the following:

The Work consists of providing signs, traffic cones, certified flagpersons and vehicles to control traffic in emergency or unique situations as directed by the Engineer. In situations where flagpersons are required continuously, for extended periods of time, the use of the AEmergency Sign Package (specification 53.36) may also be required.

1.13.2 Section 53.37.2, Materials

1.13.2.1 Replace the entire contents of this Sub-section with the following:

The Contractor shall supply and maintain sufficient types and quantities of signs to accommodate traffic during short term lane closures. The types of signs required are shown on drawings TCS-B-2.1B and TCS-B-2.1A of the 2nd edition (May 2001) of the Traffic Accommodation in Work Zones Manual.

For long term lane closures, the use of the AEmergency Sign Package®, as detailed in Specification 53.36, may be required.

1.13.3 Section 53.37.6, Measurement and Payment

1.13.3.1 Add the following to the sixth (6) bullet:

Travel time will be paid at the unit price bid per hour for "Supply of Flagperson" for both the working crew and the relief crew.

SPECIFICATION AMENDMENTS

1.14 Specification 53.39, Highway Maintenance Work

1.14.1 Section 53.39.3, Equipment

1.14.1.1 Add the following:

The Engineer may authorize the use of heavy equipment/larger truck to remove and dispose of large roadkill or debris if in his opinion, the animal or debris is too large for a one ton truck.

1.14.2 Section 53.39.4.2, Road Inspections

1.14.2.1 Add the following paragraph to subsection 53.39.4.2.1, Scheduled Road Inspections:

The Contractor shall identify and document all deficiencies observed during road inspections and shall submit this information to the Engineer on a weekly basis. The Department will supply the Contractor with a standard form for road inspection reporting.

1.14.2.2 Replace the contents of Sub-section 53.39.4.2.2, Additional Road Inspections with:

The Engineer may direct the Contractor to perform road inspections in addition to the Scheduled Road Inspections specified in the Special Provisions. Typically this would involve an increase in the frequencies of the scheduled road inspections specified in the Special Provisions, or patrolling a completely new circuit.

Any "reactionary" inspections performed by the Contractor either during or outside normal working hours will not be considered as Additional Road Inspections.

1.14.2.3 Add the following as a new sub-section

53.39.4.2.5 *Reactionary Inspections*

In addition to the Scheduled Road Inspections specified in the Special Provisions, any Additional Inspections required by the Engineer and, undertaking Routine Highway Maintenance Activities, it may be necessary for the Contractor to perform separate Reactionary Inspections. A Reactionary Inspection is an unplanned inspection required either during or outside normal working hours, to inspect a potentially unsafe road condition or incident within the CMA boundaries. The Contractor would normally become aware of the unsafe condition or incident through notification by the RCMP, the travelling public, the Department or his own forces.

1.14.3 Section 53.39.7, Measurement and Payment

1.14.3.1 Change the title of sub-section 53.39.7.1 to:

53.39.7.1 ***Scheduled Road Inspections, Reactionary Road Inspections, Emergency Duties and Routine Highway Maintenance Activities***

1.14.3.2 Replace the last sentence of the first paragraph of sub-section 53.39.7.1 with the following:

This payment will be full compensation for performing all required Scheduled Road Inspections

SPECIFICATION AMENDMENTS

including Routine Observations and Daily Road Reports; Reactionary Road Inspections, Emergency Duties, Routine Highway Maintenance Activities including the supply of "incidental materials" and all reporting for a CMA during each monthly period, with the following exceptions:

- 1.14.3.3 Add the following to the third bullet of sub-section 53.39.7.1, Scheduled Road Inspections, Reactionary Road Inspections, Emergency Duties and Routine Highway Maintenance Activities:

In situations where roadkill is disposed of at a landfill site, separate payment will also be made at the unit price bid per kilometre for "Haul of Road Kill". Distance will be measured from the 'home shop' for the applicable maintenance beat to the nearest suitable disposal site as determined by the Engineer, regardless of whether or not the roadkill is hauled directly to the disposal site or to the shop. Payment will be made on a "per trip" basis regardless of the number of animals hauled to the disposal site on any given trip. Payments for the landfill disposal fee and the haul to the disposal site will be considered full compensation for all costs involved in the disposal of roadkill.

- 1.14.3.4 Replace the fourth bullet of sub-section 53.39.7.1 with the following:

\$ When the Engineer authorizes the use of heavy equipment/vehicle for the removal and disposal of large roadkill, the additional equipment costs will be paid as Extra Work.

- 1.14.3.5 Add the following bullet to sub-section 53.39.7.1:

\$ When the Contractor utilizes a private waste disposal company and rented bins for the disposal of garbage, the costs for bin rental and one bin pickup per month will be considered included in the Highway Maintenance work item. Additional pickups will be paid for at the actual cost invoiced by the disposal company with no markup.

- 1.14.3.6 Insert the following paragraph after the last bullet in sub-section 53.39.7.1:

No adjustment to the unit price bid per month for Highway Maintenance Work[®] will be considered due to any expansion or reduction of the highway network that may occur during the term of the Contract.

- 1.14.3.7 Replace the first sentence of sub-section 53.39.7.2, Additional Road Inspections, with the following:

Payment will be made at the unit price bid per kilometre for Additional Road Inspections[®].

- 1.14.3.8 Replace the first paragraph of Sub-section 53.39.7.3, After Hours Call-Out with:

Under certain conditions, payment for performing Reactionary Inspections as detailed in section 53.39.4.2.5 and/or responding to critical items as detailed in Section 53.39.4.3, Emergency Duties, will be made at the unit price per occurrence for "After Hours Call-Out" as established by the Department and shown in the Unit Price Schedule. Such payment will only be made if:

- 1.14.3.9 Add the following to the third bullet of Sub-section 53.39.7.3, After Hours Call-Out:

If the required bid item work is not performed at the time of the call-out, the "After Hours Call-Out" will be paid.

SPECIFICATION AMENDMENTS

1.15 Specification 54.12, Supply of Permanent Highway Signs

1.15.1 Add the following to Section 54.12.2, Materials

Reflective Sheeting for Select Permanent Highway Signs

The Department has separate standards for the reflective sheeting on the following permanent highway signs:

*RA-1 "Stop",
RA-2 "Yield",
RB-22 "Wrong Way" and
RB-23 "Do Not Enter".*

When any of these signs are required, the Contractor shall supply reflective sheeting in accordance with the minimum coefficient of retro-reflectivity (R_A (cd/lux/m²)) as shown in the following table.

Observation Angle	Entrance Angle	White	Red
0.21	-41	370	98
0.21	+301	225	65
0.51	-41	275	70
0.51	+301	125	32

Currently, 3M=s Diamond Grade (VIP), Series 3990, reflective sheeting material is the only acceptable material for use on these signs. If in the future, products from other manufacturers are recognized by the Department to meet these requirements, they will be listed in the Alberta Transportation Products List.

1.15.2 Section 54.12.6, Measurement and Payment

1.15.2.1 Add the following sentence to the first paragraph of subsection 54.12.6.1, General:

The actual area calculations for the various types and sizes of signs are as shown on the Department's website.

1.15.2.2 Add the following bid items to the list appearing after the first paragraph of subsection 54.12.6.2, Supply of Standard Signs:

- \$ Standard Signs, 0.27m² and under with 3M Diamond Grade (VIP) reflective sheeting - Supply*
- \$ Standard Signs, 0.28m² to 0.45m² with 3M Diamond Grade (VIP) reflective sheeting - Supply*
- \$ Standard Signs, 0.46m² to 0.56m² with 3M Diamond Grade (VIP) reflective sheeting - Supply*
- \$ Standard Signs, 0.57m² to 1.44m² with 3M Diamond Grade (VIP) reflective sheeting - Supply*
- \$ Standard Signs, 1.45m² and over with 3M Diamond Grade (VIP) reflective sheeting - Supply*

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1.16 Specification 54.13, Maintenance of Highway Signs

1.16.1 Section 54.13.4, Time to Complete

1.16.1.1 Add the following paragraph:

The aforementioned times are intended for "Reactionary" Work. The Department and the Contractor may revise the ~~time to complete~~ to allow for improved scheduling of planned activities.

1.17 Specification 54.30, Bridge Structure Cleaning

1.17.1 Section 54.30.5, Procedures

1.17.1.1 Replace the title of sub-section 54.30.5.4, 'Removal of Accumulated Material' with the following new title:

54.30.5.4 Removal of Accumulated Material and Washing the Structure

1.17.1.2 Replace the contents of sub-section 54.30.5.4, 'Removal of Accumulated Material' with the following:

Prior to cleaning the structure, the Contractor shall plug all deck drains. The drains shall remain plugged for the entire bridge cleaning operation. The Contractor shall then sweep and remove all accumulated dirt and debris from the bridge deck, median, curb and sidewalks prior to washing. The dirt and debris shall be disposed of in a manner which will not contaminate wetlands, waterbodies or other sensitive areas.

Prior to removing water from a naturally occurring water source, the Contractor shall obtain a temporary license for withdrawing water from Alberta Environment.

When washing the structure, the Contractor shall ensure that the water does not run directly into a water course. Water may be channelled into the adjacent vegetated areas to remove any silt, salt or other deleterious material. On large bridges that have deck drains that do not allow the water to flow into the ditches, the Contractor will use vacuum trucks or pumps or other approved methods to safely dispose of the water.

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Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
Activity 1100 Snow Removal and Ice Control					
1101	52.1 SP	Single Axle Sander/Plow Truck	Nil no. of trucks	per hour	(see NOTE below)
1102	52.1 SP	Tandem Axle Sander/ Plow Truck - 8.5 m ³ and Smaller	no. of trucks	per hour	(see NOTE below)
1103	52.1 SP	Tandem Axle Sander/ Plow Truck - Larger than 8.5 m ³	no. of trucks	per hour	(see NOTE below)
1112	52.1 SP	Tridem or Tandem Tandem Axle Sander/ Plow Truck - Larger than 13 m ³	no. of trucks	per hour	(see NOTE below)
NOTE: Extension values for Bid Items 1101, 1102, 1103 & 1112 must be calculated as follows: $Qty \text{ (no. of trucks bid)} \times Unit \text{ Price} \times (375) = Extension$ <small>Avg. Annual Hrs</small>					
1104	52.1 SP	Snowplow Wings (Minimum of 16 wings)	6 000.0 hours	per hr	
1105	52.1	Snow Removal and Ice Control (Truck) Availability Rate (multiply total number of trucks by 180 days)	total days	\$105.000 per day	
1106	52.1 SP	Snow Removal and Ice Control (Truck) Indoor Heated Storage Premium (Minimum of 18 trucks for 180 days)	3 240.0 total days	\$35.000 per day	\$113,400.00
1107	52.2	Snow Removal (Loader)	100.0 hours	per hour	
1108	52.2	Snow Removal (truck)	140.0 hours	per hour	
1109	52.2	Snow Removal - Premium	Nil occurrences	per occurrence	
1110	SP	Snow Removal (Snow Blower)	Nil hours	per hour	
1111	SP	Pre-Wetting Systems (Minimum of 5 systems)	1 875.0 hours	per hr	

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Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
Activity 1200		Snow Removal and Ice Control (Grader)			
1201	53.27	Snow Removal and Ice Control on Gravel Surfaces (Grader)	1 260.0 hours	_____ per hour	_____
1202	53.27	Snow Removal and Ice Control on Paved Surfaces (Grader)	300.0 hours	_____ per hour	_____
Activity 1300		Snow Fencing			
1301	52.3	Snow Fence - Supply and Install	Nil metres	_____ per metre	_____
1302	52.3	Snow Fence - Remove	Nil metres	_____ per metre	_____
Activity 1400		Ice Control Materials			
1401	52.5	Sodium Chloride Treated Sand - Mix and Stockpile	33 440.0 tonnes	_____ per tonne	_____
1402	52.6	Calcium Chloride Treated Sand - Mix and Stockpile	Nil tonnes	_____ per tonne	_____
1403	52.7	Sand - Pick Up and Stockpile	Nil tonnes	_____ per tonne	_____
1404	52.7	Sand - Pick Up, Process, and Stockpile	Nil tonnes	_____ per tonne	_____
1405	55.2	Haul (for Pickup and Stockpile or Pickup, Process and Stockpile)	Nil tonne.kms	_____ per tonne.km	_____
<i>NOTE: Must enter location, quantity and unit price for Supply and Stockpile of Sand</i>					
1410	52.7	Sand - Supply and Stockpile To: _____	_____ tonnes	_____ per tonne	_____
1411	52.7	Sand - Supply and Stockpile To: _____	_____ tonnes	_____ per tonne	_____
1412	52.7	Sand - Supply and Stockpile To: _____	_____ tonnes	_____ per tonne	_____

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Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
1413	52.7	Sand - Supply and Stockpile To: _____	_____ tonnes	_____ per tonne	_____
1414	52.7	Sand - Supply and Stockpile To: _____	_____ tonnes	_____ per tonne	_____
1415	52.7	Sand - Supply and Stockpile To: _____	_____ tonnes	_____ per tonne	_____
1416	52.7	Sand - Supply and Stockpile To: _____	_____ tonnes	_____ per tonne	_____
1417	52.7	Sand - Supply and Stockpile To: _____	_____ tonnes	_____ per tonne	_____
1418	52.7	Sand - Supply and Stockpile To: _____	_____ tonnes	_____ per tonne	_____
1419	52.7	Sand - Supply and Stockpile To: _____	_____ tonnes	_____ per tonne	_____
For Analysis Only		Total Quantity of Supply and Stockpile Sand Must Equal 30 400 tonnes as Per S.P.	_____ total tonnes		
1469	55.4	Supply of Aggregate	30 400.0 tonnes	\$1.150 per tonne	\$34,960.00
<i>NOTE: Must enter location, quantity and unit price for Supply of Salt</i>					
1470	52.8	Sodium Chloride (salt) - Supply To: _____	_____ tonnes	_____ per tonne	_____
1471	52.8	Sodium Chloride (salt) - Supply To: _____	_____ tonnes	_____ per tonne	_____
1472	52.8	Sodium Chloride (salt) - Supply To: _____	_____ tonnes	_____ per tonne	_____
1473	52.8	Sodium Chloride (salt) - Supply To: _____	_____ tonnes	_____ per tonne	_____
1474	52.8	Sodium Chloride (salt) - Supply To: _____	_____ tonnes	_____ per tonne	_____

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Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
1475	52.8	Sodium Chloride (salt) - Supply To: _____	_____ tonnes	_____ per tonne	_____
1476	52.8	Sodium Chloride (salt) - Supply To: _____	_____ tonnes	_____ per tonne	_____
1477	52.8	Sodium Chloride (salt) - Supply To: _____	_____ tonnes	_____ per tonne	_____
1478	52.8	Sodium Chloride (salt) - Supply To: _____	_____ tonnes	_____ per tonne	_____
1479	52.8	Sodium Chloride (salt) - Supply To: _____	_____ tonnes	_____ per tonne	_____
For Analysis Only		Total Qty of Supply Sodium Chloride (salt) Must Equal 10 000 tonnes as Per S.P.	_____ total tonnes		
Activity 1500		Subgrade Excavation (non paved surfaces)			
1501	53.1	Excavation	120.0 cubic metres	_____ per cubic metre	_____
1502	53.1	Backfill with Salvaged Material	80.0 cubic metres	_____ per cubic metre	_____
1503	53.2	Pit Run Gravel - Supply and Place	40.0 cubic metres	_____ per cubic metre	_____
1504	53.2	Pit Run Gravel - Pick Up and Place	40.0 cubic metres	_____ per cubic metre	_____
1505	53.3	Granular Base Course - Supply and Place	40.0 cubic metres	_____ per cubic metre	_____
1506	53.3	Granular Base Course - Pick Up and Place	40.0 cubic metres	_____ per cubic metre	_____
1507	55.4	Supply of Aggregate	80.0 cubic metres	\$1.880 per cubic metre	\$150.40
1508	55.2	Haul	6 000.0 m ³ .kms	_____ per m ³ .km	_____

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Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
Activity 1600		Crack Sealing			
1601	53.4	Crack Sealing	450 000.0 metres	_____ per metre	_____
1602	53.5	Crack Routing and Sealing	40 000.0 metres	_____ per metre	_____
1603	53.4 53.5	Crack Sealing - Blotting	45 000.0 metres	_____ per metre	_____
Activity 1700		Apply Surface Seals			
1701	53.6	Asphalt Pavement Surface Seal - Liquid Asphalt	Nil square metres	_____ per square metre	_____
1702	53.7	Asphalt Pavement Crack Repair - Spray Patch	20 000.0 metres	_____ per metre	_____
1703	53.7	Asphalt Pavement Surface Repair - Spray Patch	1 000.0 square metres	_____ per square metre	_____
Activity 1800		Pot Hole Patching			
1801	53.10	Pot Hole Patching ASBC/ACP (up to 50 Pot holes)	50.0 each	_____ per each	_____
1802	53.10	Pot Hole Patching ASBC/ACP (over 50 Pot holes)	100.0 each	_____ per each	_____
1803	53.10	Pot Hole Patching Proprietary Mix (up to 50 Pot holes)	50.0 each	_____ per each	_____
1804	53.10	Pot Hole Patching Proprietary Mix (over 50 Pot holes)	500.0 each	_____ per each	_____
Activity 1900		Surface Patching			
1901	53.13	Asphalt Concrete Pavement Patching (Paver) - Pick Up and Place	200.0 tonnes	_____ per tonne	_____
1902	53.13	Asphalt Concrete Pavement Patching (Machine) - Pick Up and Place	400.0 tonnes	_____ per tonne	_____

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Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
1903	53.13	Asphalt Concrete Pavement Patching (Hand) - Pick Up and Place	Nil tonnes	per tonne	
1904	53.13	Emergency Patch - Pick Up and Place	Nil tonnes	per tonne	
1905	53.13	Asphalt Concrete Pavement Patching (Paver) - Supply and Place (Type 5 or Similar)	200.0 tonnes	per tonne	
1906	53.13	Asphalt Concrete Pavement Patching (Paver) - Supply and Place (Type 8 or Similar)	100.0 tonnes	per tonne	
1907	53.13	Asphalt Concrete Pavement Patching (Machine) - Supply and Place (Type 5 or Similar)	1 000.0 tonnes	per tonne	
1908	53.13	Asphalt Concrete Pavement Patching (Machine) - Supply and Place (Type 8 or Similar)	Nil tonnes	per tonne	
1909	53.13	Asphalt Concrete Pavement Patching (Hand) - Supply and Place (Type 5 or Similar)	10.0 tonnes	per tonne	
1910	53.13	Asphalt Concrete Pavement Patching (Hand) - Supply and Place (Type 8 or Similar)	10.0 tonnes	per tonne	
1911	53.13	Asphalt Stabilized Base Course Patching (Machine) - Supply and Place	Nil tonnes	per tonne	
1912	53.13	Asphalt Stabilized Base Course Patching (Hand) - Supply and Place	Nil tonnes	per tonne	
1913	53.13	Proprietary Mix Patching (Machine) - Supply and Place	Nil tonnes	per tonne	
1914	53.13	Proprietary Mix Patching (Hand) - Supply and Place	10.0 tonnes	per tonne	
1915	53.13	Emergency Patch - Supply and Place	20.0 tonnes	per tonne	
1916	53.13 55.2	Haul	100 000.0 tonne.kms	per tonne.km	

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Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
1917	55.4	Supply of Aggregate (for ACP and ASBC only)	1 340.0 tonnes	\$1.150 per tonne	\$1,541.00
1918	53.13	Surface Patching Price Adjustment - Single Patch (25t plus)	400.0 tonnes	per tonne	Credit to Dept.
1919	53.13	Surface Patching Price Adjustment - 100 tonnes	700.0 tonnes	per tonne	Credit to Dept.
1920	53.13	Surface Patching - Premium	1.0 occurrence	per occurrence	
1921	53.13	Surface Patching - Interim Premium	1.0 occurrence	per occurrence	
Activity 2000 Asphalt Surface Treatment					
2001	53.9	Asphalt Surface Treatment - Patching	Nil square metres	per square metre	
2002	53.9	Asphalt Surface Treatment - Minor Repair	Nil square metres	per square metre	
2003	53.9	Asphalt Surface Treatment - Major Repair	Nil square metres	per square metre	
2004	53.9	Asphalt Surface Treatment - New Construction	Nil square metres	per square metre	
2005	53.27	Preparing Gravel Surface	Nil hours	per hour	
2006	53.29	Spot Gravelling - Supply and Place	Nil cubic metres	per cubic metre	
2007	53.29	Spot Gravelling - Pickup and Place	Nil cubic metres	per cubic metre	
2008	53.30	Gravel Surfacing - Supply and Place	Nil tonnes	per tonne	
2009	53.30	Gravel Surfacing - Pickup and Place	Nil tonnes	per tonne	

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Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
2010	55.2	Haul	Nil tonne.kms	per tonne.km	
2011	55.2	Haul	Nil m ³ .kms	per m ³ .km	
2012	55.4	Supply of Aggregate	Nil tonnes	\$1.150 per tonne	
2013	55.4	Supply of Aggregate	Nil cubic metres	\$1.850 per cubic metre	
2014	53.9	Supply of Asphalt for Surface Treatment	Nil tonnes	per tonne	
2015	53.9	Asphalt Surface Treatment - Premium	Nil occurrence	per occurrence	
2016	53.9	Asphalt Surface Treatment - Interim Premium	Nil occurrence	per occurrence	
Activity 2100		Deep Patch			
2101	53.14	Asphalt Pavement Deep Patching - Pickup and Place	100.0 square metres	per square metre	
2102	53.14	Asphalt Pavement Deep Patching - Supply and Place	100.0 square metres	per square metre	
2103	55.4	Supply of Aggregate	100.0 tonnes	\$1.150 per tonne	\$115.00
2104	55.2	Haul	10 000.0 tonne.kms	per tonne.km	
2105	53.14	Deep Patching - Premium	1.0 occurrences	per occurrence	
2106	53.14	Deep Patching - Interim Premium	1.0 occurrences	per occurrence	

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Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
Activity 2200		Roadway and Raised Median Cleaning			
2201	53.17	Roadway Cleaning Broom	500 000.0 square metres	_____ per square metre	_____
2202	53.17	Roadway Cleaning - Pickup Broom	175 000.0 square metres	_____ per square metre	_____
2203	53.17	Raised Medians Cleaning	15 000.0 square metres	_____ per square metre	_____
2204	53.17	Roadway Cleaning - Premium	2.0 occurrences	_____ per occurrence	_____
Activity 2300		Line Painting			
2301	53.20	Supply of Paint - White	20 800.0 litre	_____ per litre	_____
2302	53.20	Supply of Paint - Yellow	12 700.0 litre	_____ per litre	_____
2303	53.20	Painted Roadway Lines - White	540.0 line kms	_____ per line km	_____
2304	53.20	Painted Roadway Lines - Yellow	330.0 line kms	_____ per line km	_____
2305	53.20	Line Painting - Premium	1.0 occurrences	_____ per occurrence	_____
2306	53.20	Line Painting - Intersections	130.0 sides	_____ per side	_____
2307	53.20	Line Painting - Interchanges	3.0 interchanges	_____ per interchange	_____
2308	53.20	Painted Roadway Lines - White - Single Line Ordered	20.0 line kms	_____ per line km	_____
2309	53.20	Painted Roadway Lines - Yellow - Single Line Ordered	10.0 line kms	_____ per line km	_____

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
2310	53.20	Supply of Waterborne Paint - White	18 500.0 litre	per litre	
2311	53.20	Supply of Waterborne Paint - Yellow	11 300.0 litre	per litre	
2312	53.20	Painted Roadway Lines - White (Waterborne)	540.0 line kms	per line km	
2313	53.20	Painted Roadway Lines - Yellow (Waterborne)	330.0 line kms	per line km	
2314	53.20	Painted Roadway Lines - White (Waterborne) - Single Line Ordered	20.0 line kms	per line km	
2315	53.20	Painted Roadway Lines - Yellow (Waterborne) - Single Line Ordered	10.0 line kms	per line km	
Activity 2400 Pavement Markings					
2401	53.21	Painting Pavement Markings	700.0 square metres	per square metre	
2402	53.21	Painting Pavement Markings - Premium	1.0 occurrences	per occurrence	
2403	53.22	Permanent Pavement Marking, Tape - Supply and Install	Nil square metres	per square metre	
2404	53.24	Permanent Pavement Marking, Thermoplastic - Supply and Install	250.0 square metres	per square metre	
2405	53.24	Raised Pavement Markers - Supply and Install	Nil each	per each	
2406	53.24	Raised Pavement Marker Reflectors - Supply and Replace	Nil each	per each	
Activity 2500 Grading Gravel Surfaces					
2501	53.27	Maintain/Prepare Gravel Surface Roads (Grader)	2 500.0 hours	per hour	

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
Activity 2600		Regravelling			
2601	53.29	Spot Gravelling - Supply and Place	500.0 cubic metres	per cubic metre	
2602	53.29	Spot Gravelling - Pickup and Place	500.0 cubic metres	per cubic metre	
2603	53.29	Spot Gravelling - Premium	1.0 occurrences	per occurrence	
2604	55.4	Supply of Aggregate	500.0 cubic metres	\$1.880 per cubic metre	\$940.00
2605	55.2	Haul	50 000.0 m ³ .kms	per m ³ .km	
2606	53.30	Gravel Surfacing - Supply and Place	13 000.0 tonnes	per tonne	
2607	53.30	Gravel Surfacing - Pickup and Place	7 000.0 tonnes	per tonne	
2608	55.4	Supply of Aggregate	13 000.0 tonnes	\$1.150 per tonne	\$14,950.00
2609	55.2	Haul	1 500 000.0 tonne.kms	per tonne.km	
2610	53.30 SP	Gravel Surfacing on Hwys. 690, 741 & 743 - Supply and Place (North Star Pit or Contractor's Source)	9 792.0 tonnes	per tonne	
2611	53.30 SP	Gravel Surfacing on Hwy. 743 - Supply and Place (Richards Pit or Contractor's Source)	6 528.0 tonnes	per tonne	
Activity 2700		Dust Abatement			
2701	53.27	Maintain/Prepare Gravel Surface Roads (Grader)	5.0 hours	per hour	
2702	53.31	Dust Abatement, Calcium Chloride - Supply and Apply	25.0 flake.tonnes	per tonne	

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
2703	53.31	Dust Abatement, EDS Material - Supply and Apply	Nil tonnes	per tonne	
2704	53.31	Dust Abatement, Ligno Sulphate - Supply and Apply	Nil tonnes	per tonne	
Activity 2800 Maintenance of Livestock Guards					
2801	53.33	Livestock Guard - Clean and Inspect	Nil metres	per metre	
2802	53.33	Livestock Guard - Inspect	Nil metres	per metre	
2803	53.34	Livestock Guard - Supply Range Type	Nil metres	per metre	
2804	53.34	Livestock Guard - Supply Standard Highway Type	Nil metres	per metre	
2805	53.34	Livestock Guard - Supply Off Highway Type	Nil metres	per metre	
2806	53.35	Livestock Guard - Repair Metal Sections	Nil hours	per hour	
2807	53.35	Livestock Guard - Repair Wooden Sections	Nil hours	per hour	
2808	53.35	Livestock Guard - Install Complete	Nil hours	per hour	
2809	53.35	Livestock Guard - Premium	Nil occurrences	per occurrence	
Activity 2900 Provide Traffic Control					
2901	53.36	Erect and Remove Emergency Sign Package	40.0 hours	per hour	
2902	53.37	Supply Flagperson, Signs and Vehicle	200.0 hours	per hour	

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
2903	53.37	Supply Flagperson	160.0 hours	per hour	
2904	53.38	Supply of Truck Mounted Arrowboard - Mobile	10.0 hours	per hour	
2905	53.38	Supply of Truck Mounted Arrowboard - Stationary	Nil hours	per hour	
2906	53.38	Supply of Pull Behind Arrowboard - Stationary	Nil hours	per hour	
2907	53.37 53.38	Traffic Control - Premium	10.0 occurrences	per occurrence	
Activity 3000		Inspections			
3001	53.39	Highway Maintenance Work	12.0 months	per month	
3002	53.39	Additional Road Inspections	8 000.0 kilometres	per kilometre	
3003	53.39	After Hours Callout	40.0 occurrences	per occurrence	
3004	53.39	Haul of Roadkill	10 000.0 kilometres	per kilometre	
3005	53.39 SP	Hand Brushing (2 person crew)	200.0 hours	per hour	
3006	SP	Supply of Labour (Miscellaneous Work)	50.0 hours	per hour	
3007	SP	Supply of Truck (Miscellaneous Work)	50.0 hours	per hour	
Activity 3100		Milled Rumble Strips			
3101	53.41	Milled Rumble Strips	40.0 kilometres/side	kilometre/side	

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
3102	53.41	Milled Rumble Strips for No-Passing Zones	2.0 kilometres	per kilometre	
3103	53.41	Milled Rumble Strips for Stop Conditions	2.0 sets	per set	
Activity 3200		Mowing			
3201	54.1	Mowing	2 300.0 hectares	per hectare	
Activity 3300		Chemical Vegetation Control			
3301	54.4	Vegetation Control - Mobile Spray (On Road)	300.0 hectares	per hectare	
3302	54.4	Vegetation Control - Mobile Spray (Off Road)	50.0 hectares	per hectare	
3303	54.4	Vegetation Control - Mobile Spot Spray (On Road)	30.0 hectares	per hectare	
3304	54.4	Vegetation Control - Mobile Spot Spray (Off Road)	40.0 hectares	per hectare	
3305	54.4	Mobile Spray - Premium	1.0 occurrences	per occurrence	
3306	54.4	Vegetation Control - Hand Spray	2 000.0 square metres	per square metre	
3307	54.4	Hand Spray - Premium	1.0 occurrences	per occurrence	
3308	SP	Supply of Labour (Miscellaneous Work)	50.0 hours	per hour	
3309	SP	Supply of Truck (Miscellaneous Work)	50.0 hours	per hour	

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
Activity 3400		Culvert Maintenance			
3401	54.5	Steaming Culverts	100.0 hours	_____ per hour	_____
3402	54.6	Cleaning Culvert Barrel - Up To 800mm Diameter	60.0 metres	_____ per metre	_____
3403	54.6	Cleaning Culvert Barrel - over 800mm but less than 1500mm Diameter	60.0 metres	_____ per metre	_____
3404	54.6	Cleaning Culvert Barrel - 1500mm Diameter and over	60.0 metres	_____ per metre	_____
3405	54.6	Cleaning Culvert Ends	80.0 each	_____ per each	_____
3406	54.6	Culvert Cleaning - Premium	1.0 occurrences	_____ per occurrence	_____
Activity 3500		Culvert Installation/Rehab/Replacement			
3501	54.8 54.9	Culverts - Excavation and Backfill	400.0 cubic metres	_____ per cubic metre	_____
3502	54.8	Culverts - Remove and Dispose	30.0 metres	_____ per metre	_____
3503	54.8 54.9	Centre-Line Culvert - Traffic Control	30.0 metres	_____ per metre	_____
3504	54.8	Culvert Removal Premium	Nil occurrences	_____ per occurrence	_____
3506	54.9	Culverts Install - Corrugated Metal Pipe - 500 mm - Nominal Diameter	Nil metres	_____ per metre	_____
3507	54.9	Culverts Install - Corrugated Metal Pipe - 600 mm - Nominal Diameter	20.0 metres	_____ per metre	_____
3508	54.9	Culverts Install - Corrugated Metal Pipe - 800 mm - Nominal Diameter	30.0 metres	_____ per metre	_____

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
3509	54.9	Culverts Install - Corrugated Metal Pipe - 900 mm - Nominal Diameter	30.0 metres	per metre	
3510	54.9	Culverts Install - Corrugated Metal Pipe - 1200 mm - Nominal Diameter	30.0 metres	per metre	
3511	54.9	Culverts Install - Corrugated Metal Pipe - 1500 mm - Nominal Diameter	Nil metres	per metre	
3512	54.9	Culverts Install - Corrugated Polyethylene Pipe 525 mm - Nominal Diameter	Nil metres	per metre	
3513	54.9	Culverts Install - Corrugated Polyethylene Pipe 600 mm - Nominal Diameter	Nil metres	per metre	
3514	54.9	Culverts Install - Corrugated Polyethylene Pipe 750 mm - Nominal Diameter	Nil metres	per metre	
3515	54.9	Culverts Install - Corrugated Polyethylene Pipe 900 mm - Nominal Diameter	Nil metres	per metre	
3516	53.2	Pit-Run Gravel - Supply and Place	60.0 cubic metres	per cubic metre	
3517	53.2	Pit-Run Gravel - Pick Up and Place	60.0 cubic metres	per cubic metre	
3518	53.3	Granular Base Course - Supply and Place	160.0 cubic metres	per cubic metre	
3519	53.3	Granular Base Course - Pick Up and Place	160.0 cubic metres	per cubic metre	
3520	53.13	Asphalt Concrete Pavement (Mix Type 5 or Type 8) Patching (Grader) - Produce and Place	30.0 tonnes	per tonne	
3521	53.13	Asphalt Concrete Pavement (Mix Type 5 or Type 8) Patching (Grader) - Pick up and Place	Nil tonnes	per tonne	
3522	55.4	Supply of Aggregate	30.0 tonnes	\$1.150 per tonne	\$34.50

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Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
3523	55.4	Supply of Aggregate	220.0 cubic metres	\$1.880 per cubic metre	\$413.60
3524	55.2	Haul	1 700.0 tonne.kms	per tonne.km	
3525	55.2	Haul	12 000.0 m ³ .kms	per m ³ .km	
3526	54.9	Culvert Installation - Premium	Nil occurrences	per occurrence	
3528	54.10	Culvert End Repair - Using Hand Tools	6.0 each	per each	
3529	54.10	Culvert End Repair - Using Equipment	4.0 each	per each	
Activity 3600 Maintaining Signs					
3601	54.12	Standard Signs 0.27 square metres and under - Supply	15.0 square metres	per square metre	
3602	54.12	Standard Signs 0.28 to 0.45 square metres - Supply	40.0 square metres	per square metre	
3603	54.12	Standard Signs 0.46 to 0.56 square metres - Supply	30.0 square metres	per square metre	
3604	54.12	Standard Signs 0.57 to 1.44 square metres - Supply	20.0 square metres	per square metre	
3605	54.12	Standard Signs 1.45 square metres and Over - Supply	10.0 square metres	per square metre	
3606	54.12	Extra Prints	20.0 each	per each	
3607	54.12	Non Standard Signs - 3/4" Plywood - Supply	25.0 square metres	per square metre	
3608	54.12	Non Standard Signs - Extruded Aluminum - Supply	25.0 square metres	per square metre	

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
3609	54.13	Sign Posts - Wooden, 100mm x 100mm (or equivalent) - Supply and Install	10.0 each	per each	
3610	54.13	Sign Posts - Wooden, 100mm x 150mm (or equivalent) - Supply and Install	300.0 each	per each	
3611	54.13	Sign Posts - Wooden, 150mm x 200mm (or equivalent) - Supply and Install	Nil each	per each	
3612	54.13	Wooden Sign Posts (or equivalent) - Remove and Reinstall	20.0 each	per each	
3613	54.13	Wooden Sign Posts (or equivalent) - Remove and Dispose	20.0 each	per each	
3614	54.13	Install Sign - Less than 1 square metre	500.0 each	per each	
3615	54.13	Install Sign - 1 to 3 square metres	50.0 each	per each	
3616	54.13	Install Sign - Over 3 square metres	10.0 each	per each	
3617	54.13	Remove Sign - Less than 1 square metre	20.0 each	per each	
3618	54.13	Remove Sign - 1 to 3 square metres	10.0 each	per each	
3619	54.13	Remove Sign - Over 3 square metres	2.0 each	per each	
3620	54.13	Breakaway Steel Posts - W150 x 14 - Supply and Install	4.0 each	per each	
3621	54.13	Breakaway Steel Posts - W200 x 15 - Supply and Install	4.0 each	per each	
3622	54.13	Breakaway Steel Posts - W150 x 22 - Supply and Install	2.0 each	per each	

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
3623	54.13	Breakaway Steel Posts - W200 x 27 - Supply and Install	2.0 each	per each	
3624	54.13	Breakaway Steel Posts - Remove and Reinstall	2.0 each	per each	
3625	54.13	Breakaway Steel Posts - Remove and Dispose	2.0 each	per each	
3626	54.13	Concrete Base - Supply and Install	12.0 each	per each	
3627	54.13	Concrete Base - Remove and Reinstall	2.0 each	per each	
3628	54.13	Concrete Base - Remove and Dispose	2.0 each	per each	
3629	54.13	Cluster Frames - Supply and Install	10.0 square metres	per square metre	
3630	54.13	Wind Frame - Supply and Install	20.0 square metres	per square metre	
3631	54.13	Reinforcing Girts - Supply and Install	20.0 metres	per metre	
3632	54.12 54.13	Banding of Signs	50.0 each	per each	
3633	54.13	Sign on Overhead Sign Structure or Bridge Structure - Install	1.0 square metres	per square metre	
3634	54.13	Sign on Overhead Sign Structure or Bridge Structure - Remove	1.0 square metres	per square metre	
3635	54.12	Standard Signs 0.27 square metres and under with 3M Diamond Grade (VIP) reflective sheeting - Supply	2.0 square metres	per square metre	
3636	54.12	Standard Signs 0.28 to 0.45 square metres with 3M Diamond Grade (VIP) reflective sheeting - Supply	20.0 square metres	per square metre	

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
3637	54.12	Standard Signs 0.46 to 0.56 square metres with 3M Diamond Grade (VIP) reflective sheeting - Supply	5.0 square metres	per square metre	
3638	54.12	Standard Signs 0.57 to 1.44 square metres with 3M Diamond Grade (VIP) reflective sheeting - Supply	10.0 square metres	per square metre	
3639	54.12	Standard Signs 1.45 square metres and Over with 3M Diamond Grade (VIP) reflective sheeting - Supply	4.0 square metres	per square metre	
3640	SP	Maintaining Welcome to Alberta Sign	1.0 each	per each	
Activity 3800		Maintaining Guideposts			
3801	54.19	Flexible Guidepost - Supply and Install	800.0 each	per each	
3802	54.19	Flexible Guidepost - Remove and Reinstall	50.0 each	per each	
3803	54.19	Flexible Guidepost - Remove and Dispose	20.0 each	per each	
3804	54.20	Wildlife Reflector Post - Supply and Install Wooden Post 2.13 m	Nil each	per each	
3805	54.20	Wildlife Reflector Post - Supply and Install Steel Post 2.13 m	10.0 each	per each	
3806	54.20	Wildlife Reflector - Supply and Install	10.0 each	per each	
Activity 3900		Maintaining Guardrail			
3901	54.22	Guardrail/ Barrier - Remove and Dispose	20.0 metres	per metre	
3902	54.23	W-Beam Guardrail - Supply and Install	500.0 metres	per metre	
3903	54.23	Guardrail Posts 1.52 m Wooden - Supply and Install	200.0 posts	per post	

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
3904	54.23	Guardrail Posts 2.13 m Wooden - Supply and Install	20.0 posts	per post	
3905	54.23	Guardrail Posts 1.9 m Metal - Supply and Install	Nil posts	per post	
3906	54.23	Guardrail Posts Plastic - Supply and Install	30.0 posts	per post	
3907	54.23	W-Beam Guardrail - Realigning	60.0 metres	per metre	
3908	54.23	W-Beam Guardrail - Resetting	60.0 metres	per metre	
3909	54.24	Box Beam Guardrail - Supply and Install	Nil metres	per metre	
3910	54.24	Box Beam Guardrail - Remove and Reinstall	Nil metres	per metre	
3911	54.24	Box Beam Guardrail Posts - Supply and Install	Nil posts	per post	
3912	54.23 54.24	Guardrail - Premium	3.0 occurrences	per occurrence	
Activity 4000		Line Fence			
4001	54.29	Line Fence - Repair or Remove	Nil hours/2 man crew	hour/2 man crew	
Activity 4100		Bridge Maintenance/ Rehabilitation/ Repair			
4101	54.30	Bridge Structure - Cleaning	25 600.0 square metres	per square metre	
4102	54.30 SP	Bridge Structure - Cleaning (Peace River)	1.0 lump sum	per lump sum	

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
Activity 4200		Beaver Control			
4201	54.34	Beaver Control	150.0 hours	_____ per hour	_____
4202	SP	Supply of Labour (Miscellaneous Work)	50.0 hours	_____ per hour	_____
4203	SP	Supply of Truck (Miscellaneous Work)	50.0 hours	_____ per hour	_____
Activity 4300		Highway Cleanup			
4301	52.2	Debris Removal - Loader	20.0 hours	_____ per hour	_____
4302	52.2	Debris Removal - Truck	50.0 hours	_____ per hour	_____
4303	52.2	Debris Removal - Premium	2.0 occurrences	_____ per occurrence	_____
Activity 4400		Miscellaneous			
4401	51.2.17	Contractor Indirect Operating Costs	12.0 month	_____ per month	_____
Activity 4500		Ferry Operations			
4501	SP	Launching Shaftesbury Ferry	1.0 occurrences	_____ per occurrence	_____
4502	SP	Operating Shaftesbury Ferry	230.0 days	_____ per day	_____
4503	SP	Additional Shaftesbury Ferry Service	10.0 hours	_____ per hour	_____
4504	SP	Dry Docking Shaftesbury Ferry	1.0 occurrences	_____ per occurrence	_____
4505	SP	Ice Measuring and Testing - Shaftesbury	10.0 occurrences	_____ per occurrence	_____

CMA 4

Unit Price Schedule

Bid Item	Spec.	Description	Qty	Unit Price	Extension
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Total Provisional Costs:		
Total Fixed Costs:		
Total Contract:		

LOCAL FEATURES

CMA 4

GUIDELINES FOR HINES CREEK, PEACE RIVER and MANNING AREAS

PROVIDED FOR INFORMATION ONLY

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A. TROUBLE SPOTS

The following areas will normally require special attention during winter storms:

- **Highway 732:02 in the Town of Fairview:** This section has high traffic volumes in the Town of Fairview and it is advantages to plow the majority of the snow to the east, away from the sidewalk on the west side of Hwy 732.
- **Hwy 2:66 in the Town of Fairview:** This section has high traffic volumes in the Town of Fairview.
- **Hwy 685:02 in the Village of Hines Creek:** This section has high traffic volumes in the Village of Hines Creek and the large number of driveways are a concern during winter conditions.
- **Hwy 64:06 and Hwy 64A:06 Hines Creek to Fairview:** This is a commuter route between these two communities.
- **Hwy 685:02 and Hwy 732:02 Fairview to Hines Creek:** This is a commuter route between these two communities. There is high traffic volumes on these two Highways generated by commuters to and from the Canfor Lumber Mill located along this route.
- **Hwy 2:66 Whitelaw to Fairview:** This highway has commuter traffic generated by communities and rural acreages along its route. The highway also is a link in destination travel between the Peace River Area and Grande Prairie.
- **Hwy 64:02 Clear River Valley:** The Clear River Valley is an area of concern during winter conditions. This is a school bus route and has a steep grade on both sides of the river. The Clear River Valley has been identified as a hot spot.
- **Hwy 682:02 Highland Park Coulee:** This is a commuter and school bus route into Fairview and has steep grades and is a concern during winter conditions.
- **Hwy 744:04 Town of Peace River:** This highway travels through the Town of Peace River. Snow removal will require loading and hauling offsite.
- **Hwy 2:64, 2A:36, 685:06 Town of Grimshaw:** This highway travels through the Town of Peace River. Snow removal will require loading and hauling offsite.
- **Hwy 2:60 and 2:62 Peace River Bridge Decks:** The bridge decks in the Peace River Valley require special attention during the winter season. Higher frequency of inspections is required to constantly monitor bridge deck conditions.

B. TYPICAL MAINTENANCE ISSUES

Sign Washing

Mild winter temperatures and spring break up are critical periods requiring a higher frequency of sign and delineator washing. Generally, wherever signs are relatively close to the roadway combined with higher traffic volumes, the signs and delineators get dirty very quickly and more frequent washings during these periods are required.

The Contractor should have a plan in place to address the need for routine highway maintenance activities during times where higher frequencies of work are required.

Guardrail

All guardrails in CMA 4 can be a problem during the winter months due to strong winds causing heavy drifts. Several guardrail areas, especially within river valleys or hills, can be quite prone to damage. Attention and care in snowplowing and truck movements are required to prevent damage.

On highway 682 west of Fairview, snowplow trucks with wings are not used due to the narrow width of pavement and presence of guardrail on both sides of the highway in some locations.

Severe Erosion

Due to the steepness of ditch gradients, there is significant potential for erosion problems in some areas. There is a need to plan and schedule routine inspections of critical drainage areas so as to monitor conditions to ensure that the drainage is not causing damage to the roadside infrastructure and/or adjacent infrastructure.

Slide Areas

The Department has a Regional Geotechnical Consultant monitoring various slide areas throughout CMA 4. The contractor shall assist in noting any routine observations of significant slide movement that might affect the safety of the travelling public.

Beaver Control

There are several areas in CMA 4 that will require attention on a regular basis for beaver control causing flooding.

Culverts

There is some unique culvert installations. Such as the "elephant trunk" in the Clear River and Peace River Valley. Landslide activity has separated and damaged a few sections of the culvert in the past. Some intermittent inspections may be required in order to ensure that the pipe is in good working order.

There are several culvert locations in CMA 4 that are prone to chronic freezing each year and require steaming on a regular basis.

C. CULVERT AND GUARDRAIL REHABILITATION PROGRAMS

The Department has had ongoing special programs to rehabilitate culverts and guardrail. The extent of these programs is subject to funding availability from year to year.

LEASE AGREEMENT

THIS LEASE made this day of A.D. 20 ,

BETWEEN:

HER MAJESTY THE QUEEN, in
right of Alberta, as represented
the Minister of Infrastructure,
(the "Landlord")

- and -

a corporation under the laws of Alberta,
(the "Tenant")

The Landlord is the registered owner of or has administration of land
located at _____ legally described as:

as outlined in red on Schedule "A" attached hereto (the "Land"), upon which are
located a maintenance garage and ancillary buildings (collectively the "Buildings");

By separate contract with the Landlord (the "Maintenance Contract"), the Tenant has agreed to provide highway maintenance services in a geographic area of the Province in which the Land is located;

The purpose of this Agreement is to provide for the lease of the Land and Buildings (collectively the "Demised Premises") to the Tenant;

In this Lease, the "Province" means Her Majesty the Queen, in right of Alberta, as represented by the Minister of Infrastructure and the "Purchaser" means any other party that becomes the owner of the Demised Premises;

For clarity, any reference to the Landlord in this Lease means:

- (a) the Province, in respect of any period of time during which the Province is the owner of the Demised Premises; and
- (b) any Purchaser in respect of any period of time during which such Purchaser is the owner of the Demised Premises.

The parties agree as follows:

1. **TERM**

- 1.1 (a) The Landlord hereby leases the Demised Premises to the Tenant for a term of _____ years and _____ months commencing _____, 200__ and expiring _____, 200____.
- (b) The Demised Premises are leased to the Tenant for the primary purpose of operating a highway maintenance facility. The Demised Premises may also be used for any other purpose as may be approved by the Landlord in writing, such approval not to be unreasonably withheld.

- (c) The Tenant acknowledges that the Demised Premises are satisfactory for the purpose of operating a highway maintenance facility and the Tenant agrees to occupy the Demised Premises in an "as is" condition at the commencement date of this Lease.

1.2 If, during the term of this Lease, the Maintenance Contract is terminated or expires and is not renewed, then either party may terminate this Lease upon not less than 30 days' notice in writing to the other party.

2. **RENT**

- 2.1 (a) The Tenant shall pay to the Landlord during the term the annual rent of \$_____ payable monthly in even portions of \$_____.
- (b) The monthly rental amount is payable on or before the first day of each calendar month.

ALTERNATE Section 2.1(b) for Partial Months

- (b) For the period _____, _____ to _____, _____ the portion of annual rent payable is \$_____ and for the period _____, _____ to _____, _____ the portion of annual rent payable is \$_____. For each such period, the rent is payable on the first day of the period. For the balance of the term of this Lease, the monthly rental amount is payable on the first day of each calendar month.

- (c) Cheques shall be payable to the Minister of Finance and delivered to:

ALBERTA INFRASTRUCTURE
FINANCE
2ND FLOOR, 6950 - 113 STREET
EDMONTON, ALBERTA
T6H 5V7
TELEPHONE NO.: (403) 427-3386

or at such other place as the Landlord may from time to time notify the Tenant in writing.

- (d) Each of the Tenant's rental cheques shall be accompanied by a statement detailing all leases covered by the cheque (Landlord's file number reference, the amount being paid for each lease and the time period covered by the payment).

2.2 This is a net lease and all costs and obligations relating to the Demised Premises, whether or not referred to, now existing or contemplated by the parties, are the responsibility of the Tenant unless specifically provided to the contrary herein.

- 2.3 (a) In the event that an agreement is reached by the Province to sell the Demised Premises, the Province or any Purchaser of the Demised Premises may notify the Tenant to pay to the Province, or the Purchaser as the case may be, a security deposit in the amount equal to 3 months rental under this Lease plus the Federal Goods and Services Tax.
- (b) The Tenant will pay the security deposit within 30 days of receipt of such notice.
- (c) This provision to require the Tenant to provide a security deposit may only be utilized on one occasion.

- (d) The Landlord may use the security deposit to:
 - (i) Reimburse the Landlord, on expiry or termination of this Lease, for the cost of:
 - (A) repairing any damage to the Demised Premises caused or permitted to be caused by the Tenant or its invitees that is not repaired by the Tenant at all or to the Landlord's satisfaction; and
 - (B) restoring the Demised Premises to a reasonable state of cleanliness;
 - (ii) Pay the Landlord any amount due the Landlord by the Tenant which remains unpaid in accordance with the provisions of this Lease; and
 - (iii) Compensate the Landlord for any costs or damages suffered by the Landlord as a result of the Tenant failing to carry out any provision of this Lease.
- (e) The use of the security deposit in accordance with this Lease constitutes satisfaction of the Tenant's obligations to repair, restore or make payment to the Landlord, only to the amount of the security deposit so used. The Tenant shall remain liable for any costs of repair and restoration, and any other amounts due to the Landlord, in excess of the amount of the security deposit so used, and the Landlord shall be entitled to all of its remedies at law to obtain satisfaction of the same.
- (f)
 - (i) The Landlord is not required to pay to the Tenant any interest on the security deposit.
 - (ii) The Landlord is entitled to retain any interest and profit resulting from the investment of the security deposit.

- (g)
 - (i) The Landlord shall within a reasonable period of the termination of this Lease return to the Tenant the security deposit or such balance remaining, if any, after use by the Landlord in accordance with this Lease.
 - (ii) If all or a portion of the security deposit is used by the Landlord, the Landlord shall also provide the Tenant with a statement of account showing the amount of the security deposit used and for what purposes.
 - (iii) The security deposit, or balance thereof, and statement of account may be forwarded by the Landlord to the Tenant by registered mail to the Tenant's address for notices under this Lease.
- (h) If during the term of this Lease, the security deposit or a portion thereof is used by the Landlord, the Tenant will reinstate the security deposit to its full amount within 30 days of notice from the Landlord of the amount outstanding.

2.4 If and so long as the Province remains the Landlord under this Lease, the Landlord may, by way of set-off against amounts payable to the Tenant under the Maintenance Contract:

- (a) Reimburse the Landlord, on expiry or termination of this Lease, for the cost of:
 - (i) repairing any damage to the Demised Premises caused or permitted to be caused by the Tenant or its invitees that is not repaired by the Tenant at all or to the Landlord's satisfaction; and
 - (ii) restoring the Demised Premises to a reasonable state of cleanliness;

- (b) Pay the Landlord any amount due the Landlord by the Tenant which remains unpaid in accordance with the provisions of this Lease; and
- (c) Compensate the Landlord for any costs or damages suffered by the Landlord as a result of the Tenant failing to carry out any provision of this Lease.

3. **TAXES, UTILITIES AND OTHER CHARGES**

3.1 The Tenant is not responsible for the payment of any amounts in respect of the Demised Premises for grants in place of taxes, property taxes, local improvement charges or other charges under the Municipal Government Act, R.S.A. 2000, c.M-26, as amended and revised from time to time.

3.2 The Tenant shall pay when due business taxes, license fees, telephone charges and all costs and charges relating to the installation, extension, repair and maintenance of and consumption of utilities in and about the Demised Premises, which utilities generally comprise electricity, natural gas for heating, water and sewer, and other tenant's charges of a similar nature that may be properly assessed or charged against the Tenant with respect to the Demised Premises.

3.3 The Tenant shall pay to the Landlord any amount payable from time to time by the Tenant to the Landlord in accordance with the Federal Goods and Services Tax (GST) and accruing in respect of rental or other payments pursuant to this Lease. The amount of any payment set forth in this Lease does not include GST unless specifically stated to the contrary herein.

4. **ASSIGNMENT OR SUBLETTING**

4.1 (a) The Tenant shall have no right to assign the within Lease, or sublet the Demised Premises, or any part thereof, during the term of this Lease without the prior written approval of the Landlord which approval is not to be unreasonably withheld. The parties agree that it is reasonable for the Landlord to withhold approval of any assignment or subletting that is deemed by the Landlord in its sole discretion to present a risk of environmental contamination at the Demised Premises.

(b) The Tenant agrees that it will not request approval of an assignment or sublease under this Section 4 unless the Tenant has obtained the prior written approval of the Municipality, in which the Demised Premises are located, to the proposed use of the Demised Premises by the assignee or Subtenant. The Tenant will provide a true copy of such approval with its request to the Landlord.

4.2 In granting any approval under this Section 4, the Landlord may impose any conditions on the Tenant or the Subtenant as the Landlord deems appropriate in its sole discretion.

4.3 The Tenant agrees that any approved sublease of the Demised Premises granted by the Tenant pursuant to this Section 4 will bind the Subtenant to all of the obligations applicable to the Tenant under Section 9 "Contaminants and Environmental Conditions" of this Lease.

4.4 For clarity and without limiting the generality of Clause 4.1, the provisions of this Section 4 will apply to any existing Sublease of the Demised Premises which the Tenant wishes to continue, renew or extend into the term of this Lease, notwithstanding any previous approval which may have been provided by the Landlord.

4.5 No assignment or subletting shall in any way release or relieve the Tenant of its obligations under this Lease.

4.6 The Landlord's approval of an assignment or subletting under this Lease shall not be deemed to be an approval of any subsequent assignment or subletting.

4.7 The Tenant will, upon request of the Landlord, provide the Landlord with true copies of any assignment or subletting documentation whether such request is before or after approval by the Landlord.

5. **NUISANCE**

5.1 The Tenant will not do or fail to do anything which results in a nuisance or which causes the rate of insurance upon the Buildings, or any part thereof, to be increased. If the rate of insurance on the Buildings is increased and the Tenant is responsible, the Tenant shall pay to the Landlord the amount of the increase.

5.2 If notice of cancellation is given on any insurance policy on the Buildings or if any such policy is refused by an insurer by reason of the Tenant's use of the Demised Premises, the Tenant shall forthwith remedy such use upon request in writing by the Landlord. If the Tenant fails to do so forthwith the Landlord at its option may terminate this Lease by giving the Tenant notice in writing providing a reasonable period, under the circumstances, for the Tenant to vacate the Demised Premises.

6. **INDEMNITY**

6.1 (a) The Tenant shall indemnify and hold harmless the Landlord, its employees and agents, from any and all claims, demands, actions and costs whatsoever that may arise, directly or indirectly, out of any act or omission of the Tenant, its employees or agents, in the performance by the Tenant of this Lease and all other business operations.

(b) Such indemnification will survive this Agreement.

6.2 (a) The Landlord shall indemnify and hold harmless the Tenant, its employees and agents, from any and all claims, demands, actions and costs whatsoever that may arise, directly or indirectly, out of any act or omission of the Landlord, its employees or agents, in the performance by the Landlord of this Lease and all other business operations.

(b) Such indemnification shall survive this Agreement.

7. **LIMITATION OF LANDLORD'S LIABILITY**

7.1 The Tenant shall not be entitled to damages from the Landlord on account of:

(a) failure of utility services or any other services;

- (b) damage occasioned by water, snow or ice or by any break in any pipe, tank or fixture;
- (c) damage caused by any electric or other wiring;
- (d) damage caused by occupants of neighbouring property; or
- (e) changes to the Buildings or their services that are made with reasonable expedition.

8. **TENANT'S INSURANCE**

8.1 During the term of this Lease, the Tenant shall be responsible for insuring all its owned property on or in the Demised Premises, including all of its improvements, furniture, fittings, fixtures and stock-in-trade in amounts adequate to cover the repair or replacement of such property.

8.2 The Tenant shall, at its own expense and without limiting its liabilities herein, insure its operations under a contract of Comprehensive General Liability, with an insurer licensed in Alberta, in an amount not less than \$1,000,000.00 per occurrence against bodily injury, personal injury, and property damage including loss of use thereof. Such insurance shall include blanket contractual liability and shall extend to include All Risks Tenants Legal Liability coverage in an amount adequate to cover the Tenant's legal liability for the Demised Premises.

8.3 The Tenant will provide to the Landlord a detailed certificate of insurance as evidence of each insurance policy prior to occupancy of the Demised Premises by the Tenant.

8.4 All required insurance shall be endorsed to provide the Landlord with 30 days advance notice of cancellation or material change.

8.5 The Tenant will not place property insurance on the Buildings.

8.6 The Tenant hereby waives any right of recourse it may have or obtain against the Landlord, its employees or agents, with regard to loss or damage to the Tenant's property located on or in the Demised Premises, and shall make its insurer aware of this waiver.

9. CONTAMINANTS AND ENVIRONMENTAL CONDITIONS

9.1 In this Lease:

- (a) "Contaminant" means any physical, chemical, biological or radiological substance that has or may have an adverse affect on the environment; and
- (b) "Release" has the same meaning as the word "release" in the Environmental Protection and Enhancement Act, R.S.A. 2000, c.E-12 (the "Environmental Protection Act"), as amended and revised from time to time.

- 9.2
- (a) Without limiting Clause 11.3, the Tenant will comply with all applicable laws relating to any Contaminant and the protection of the environment at the Demised Premises and neighbouring properties.
 - (b) The Tenant will conduct its operations in a manner which will:
 - (i) protect the Demised Premises and neighbouring properties from contamination;
 - (ii) avoid situations hazardous to the health of individuals at the Demised Premises and neighbouring properties; and
 - (iii) without limiting Clause 11.3, comply with the Environmental Protection Act, the Alberta Fire Code and any other legislation pertaining to the environment.
 - (c) The Tenant will not permit the Release of any Contaminant at the Demised Premises or elsewhere.

- (d) The Tenant is responsible for the full cleanup of the Demised Premises and any neighbouring properties affected, to the satisfaction of the Landlord in its sole discretion, of any Contaminant Release at the Demised Premises during the term of this Lease and such obligation will survive this Lease.
 - (e) For clarity, and notwithstanding any other terms and conditions of this Lease, the Tenant is not responsible for the cleanup of any Contaminant Release at the Demised Premises prior to the initial occupancy of the Demised Premises by the Tenant, whether under this Lease or a prior Lease, or as a result of any act of the Landlord, its agents, employees or contractors.
- 9.3
- (a)
 - (i) The Tenant will submit to the Landlord for approval a written plan (the "Environmental Management Plan") prepared in accordance with the document entitled "Environmental Management Plan Guidelines Highway Maintenance Yards" dated January 24, 2003 as revised from time to time (the "EMP Guidelines").
 - (ii) The Tenant acknowledges receipt of a copy of the EMP Guidelines.
 - (iii) The Landlord in its sole discretion will in writing to the Tenant either approve the Environmental Management Plan or any resubmitted Environmental Management Plan in accordance with Subclause 9.3(a)(iv) or provide reasons why the Environmental Management Plan is not acceptable to the Landlord.
 - (iv) Within 10 days of notice that the Environmental Management Plan is not approved by the Landlord, the Tenant will revise and resubmit the Environmental Management Plan to the Landlord for approval.

- (b) (i) The Landlord's consent under the Subclause 9.3(a) is not for any technical or regulatory purpose and is only to protect its interest as Landlord and without limited the generality of the foregoing is not to be construed as providing any permit, license or any other approval pursuant to the Environmental Protection Act or any other applicable legislation.
 - (ii) Approval of the Environmental Management Plan by the Landlord will not relieve the Tenant of any of the Tenant's obligations under this Lease and the Tenant is responsible for rectifying any deficiency in or failure of the approved Environmental Management Plan and for making any revision to the approved Environment Management Plan requested from time to time by the Landlord acting reasonably.
 - (iii) Any revision to the Environmental Management Plan, required by virtue of Subclause 9.3(b)(ii) will be submitted to the Landlord for approval in accordance with Subclause 9.3(a).
- (c) (i) The Tenant may not conduct any operations at the Demised Premises until its Environmental Management Plan has been approved by the Landlord. For clarity, in the event of a deficiency or failure of the approved Environmental Management Plan or a requested amendment to the approved Environmental Management Plan in accordance with Subclause 9.3(b)(ii), the Tenant may continue its operations except as it relates to such deficiency, failure or amendment
- (ii) Notwithstanding Subclause 9.2(c), the Tenant shall conduct its operations including but not limited to salt/sand operations at the Demised Premises strictly and fully in accordance with the Environmental Management Plan as approved by the Landlord, the EMP Guidelines and this Lease.

- (ii) Where there is a conflict between the Environmental Management Plan, the EMP Guidelines and this Lease then the conflict will be reconciled in favor of the most stringent of the conflicting provisions as determined by the Landlord, acting reasonably.

9.4 (a) Notwithstanding Clause 9.7, the Landlord may during the term hereof enter and use the Demised Premises for the purposes of:

- (i) removing any underground fuel tank (provided the Landlord backfills and levels any Land disturbed);
- (ii) undertaking land farming operations of fuel contaminated soils;

and

- (iii) undertaking environmental assessments, investigations and site remediation.

(b) The Landlord will use its best efforts to ensure its activities under Subclause 9.4(a) do not unreasonably interfere with the operations of the Tenant.

9.5 (a) The Tenant shall indemnify and hold harmless the Landlord, its employees and agents, from any and all claims, demands, actions and costs whatsoever that may arise, directly or indirectly, out of the Release of any Contaminant at the Demised Premises, or any actions which are otherwise in non-compliance with the Environmental Protection Act, or predecessor legislation, during the term of the Lease except as may result from the Landlord's operations under Clause 9.4.

(b) Such indemnification will survive this Lease.

- 9.6 (a) The Landlord shall indemnify and hold harmless the Tenant, its employees and agents, from any and all claims, demands, actions and costs whatsoever that may arise, directly or indirectly, out of the Release of any Contaminant at the Demised Premises, or any actions which are otherwise in non-compliance with the Environmental Protection Act, or predecessor legislation, prior to the initial occupancy of the Demised Premises by the Tenant, whether under this Lease or a prior Lease, or as a result of any act of the Landlord, its agents or employees.
- (b) Such indemnification shall survive this Lease.

9.7 The Tenant will permit the Landlord, its employees and agents, to enter the Demised Premises at all reasonable times for the purpose of determining compliance by the Tenant with the obligations under this Section 9. If the Tenant is in any way failing to comply with any obligation under this Section 9, the Landlord and its agents may, but are not obliged to, enter the Demised Premises and rectify such failure and the Landlord shall be entitled to recover the cost from the Tenant as rent upon invoice.

9.8 The Province may issue demerit points to the Tenant under the Maintenance Contract in the event of any default or series of defaults by the Tenant under the provisions of this Section 9 that the Province, in its sole discretion, considers material.

10. **REFUSE**

10.1 The Tenant will not allow refuse, garbage or other loose or objectionable matter to accumulate in or about the Demised Premises and will at all times keep and at the termination of the said term yield up the Demised Premises in a clean condition.

11. REPAIRS AND MAINTENANCE

- 11.1 (a) (i) In this Clause, "Structural Elements" means the Building's foundation, floors, columns, exterior walls, roof, roofing, chimneys and vents, exterior cladding, exterior windows and doors and flashings but excluding those items listed in paragraph 4 and paragraph 24 through paragraph 28, inclusive, of Schedule "B".
- (ii) The Landlord shall at all times keep the Structural Elements of the Buildings in good order and condition and shall make all needed repairs and replacements thereto as required from time to time during the term of this Lease.
- (b) Subject to Subclause 11.1(a), the Tenant shall, in accordance with all applicable codes, at all times keep the Demised Premises, including the mechanical, electrical and other utility systems servicing the Demised Premises and any appurtenances thereto and any and all improvements now or hereafter executed or installed in or about the Demised Premises, in good order and condition and shall make all needed repairs and replacements thereto as required from time to time during the term of this Lease. For clarity, but without limiting the generality of the foregoing, the Tenant is responsible for the items listed in Schedule "B" attached hereto, if applicable, for the Demised Premises.
- (c) The Tenant is responsible for any damage to the Demised Premises occasioned by the negligence or actions of the Tenant, its employees or agents.

11.2 The Tenant will permit the Landlord, its employees and agents, to enter the Demised Premises at all reasonable times for the purpose of viewing the condition thereof. If repair or maintenance is required and is the responsibility of the Tenant, the Tenant shall within 10 days of receipt of written notice given by or on behalf of the Landlord, commence and proceed diligently with the completion of the repair or maintenance referred to in the notice. If the Tenant has not complied with the notice within 10 days from the date of receipt thereof, the Landlord and its agents may enter the Demised Premises and execute such repair or maintenance and the Landlord shall be entitled to recover the cost from the Tenant as rent upon invoice.

- 11.3 (a) The Tenant shall comply with the requirements of all applicable laws with respect to its use of the Demised Premises.
- (b) Without limiting the generality of the foregoing, the space leased under this Lease may be subject to the provisions of the Protection from Second-Hand Smoke in Public Buildings Act, R.S.A. 2000, c.P-30, as amended and revised from time to time.

11.4 The Province may issue demerit points to the Tenant under the Maintenance Contract in the event of any default or series of defaults by the Tenant under the provisions of this Section 11 that the Province, in its sole discretion, considers material.

12. **LIENS**

- 12.1 (a) During the term of this Lease, the Tenant shall not suffer or permit any builders' liens or other liens for work, labour, services or material relating to work contracted for by or on behalf of the Tenant or any agent or employee of the Tenant to remain filed against the Land.

- (b) The Tenant shall, to the satisfaction of the Landlord, indemnify and hold the Landlord harmless against the cost of removing any such liens and against all liability for any damages, interest, penalties and expenses (including reasonable legal costs) resulting from or incurred in connection with such liens that are not forthwith removed by the Tenant.

13. **TENANT'S NOTICE**

13.1 The Tenant shall promptly advise the Landlord of any accidental loss or damage to the Demised Premises, its fixtures or equipment, and shall not make any repair to or replace any such damaged or lost property of the Landlord without the Landlord's prior written consent. The Tenant must, however, take steps required to prevent further loss or damage from occurring.

13.2 The Tenant shall immediately advise the Landlord of any injury or accident which may result in injury occurring on, in or about the Buildings or the Demised Premises.

14. **REGULATIONS**

14.1 The Tenant, its agents and employees, shall observe any reasonable rules and regulations that the Landlord may make relating to the Demised Premises.

15. SIGNS

15.1 The Tenant may, at its sole cost, place signs on the Demised Premises with the prior consent of the Landlord, acting reasonably. At the expiration or termination of this Lease, as the case may be, the Tenant shall remove any signs and any resulting damage to the Demised Premises shall be repaired by the Tenant to the satisfaction of the Landlord.

16. QUIET ENJOYMENT

16.1 The Landlord has good right and full power to lease the Demised Premises as set out in this Lease. If and so long as the Tenant performs its obligations hereunder, the Tenant shall quietly enjoy the Demised Premises without hindrance by the Landlord, its employees and agents, subject to the provisions of this Lease.

17. SERVICES

17.1 The Tenant shall provide caretaking services in the Buildings during the term of this Lease to maintain a reasonable standard of cleanliness.

17.2 The Tenant will make provision for the disposal of the accumulation of its waste materials.

17.3 The Tenant will keep in a clean condition the sidewalks and parking areas which form part of the Land and any adjoining municipal sidewalks, if applicable, and will maintain same free of the accumulation of debris, dust, ice and snow.

17.4 The Tenant shall maintain any landscaped areas on the Land including the cutting of grass and pruning of trees and shrubs.

17.5 The Tenant shall maintain the surfaces of the sidewalks, parking areas and other hard-surfaced areas that may be located on the Land, including the refurbishment or replacement of the surfaces when required in order to retain same in at least the condition existing at the commencement date of this Lease.

18. REMOVAL OF TENANT'S EQUIPMENT AND TRADE FIXTURES

18.1 The Tenant reserves all its right, title and interest in and to its trade fixtures and equipment and upon termination of this Lease, the Tenant shall if all rent and monies have been paid, remove from the Demised Premises such trade fixtures and equipment so installed by the Tenant, all of which are hereby deemed and agreed to be personal property. Any removal shall be completed prior to the termination of this Lease and the Tenant shall make good all damage caused by such removal.

19. DESTRUCTION OR DAMAGE

19.1 If during the term hereby granted:

- (a) the Buildings are totally destroyed by fire, or other cause; or
- (b) the Buildings are damaged so as to render them unusable or partly unusable for the Tenant's permitted uses, but not to the extent that they are totally destroyed as that expression is defined in this Section;

the Landlord may, within 1 month after the date of damage or destruction, terminate this Lease by giving written notice thereof to the Tenant. In this Section "totally destroyed" means damage or destruction to the extent that in the Landlord's opinion the Buildings cannot be made ready for the Tenant's reoccupancy within 6 months of the event. Provided however, that the Tenant shall in no way be released from its liability for damage to the Buildings where such damage is caused by the negligence of the Tenant, its employees or agents.

20. **REMODELLING**

20.1 The Tenant shall not carry out any alterations to the Demised Premises without the prior written approval of the Landlord, which approval shall not be unreasonably withheld. However, the Landlord may in its sole discretion withhold consent in cases where the structure of any of the Buildings, or any of the Buildings' mechanical or electrical systems are affected.

20.2 All alterations, additions or improvements made by the Tenant, excepting moveable furniture and other tenants' fixtures, shall be and remain the property of the Landlord on the expiration of the term.

- 20.3 (a) Notwithstanding Clause 20.2, the Landlord may on notice in writing to the Tenant within 3 months of the expiry of this Lease require the Tenant to remove and make good any alteration, addition or improvement made by the Tenant.
- (b) Such work will be completed by the Tenant within a reasonable period of time.
- (c) The Tenant may enter the Demised Premises for the purpose of completing such work.

21. **FORCE MAJEURE**

21.1 If the Landlord is unable to perform any of its obligations under this Lease due to any event or circumstance beyond its control, the time for performance of that obligation shall be extended for the period of time that the event or circumstance operates to prevent such performance.

22. **TERMINATION FOR DEFAULT**

22.1 The Tenant shall be deemed to have committed an act of default hereunder if:

- (a) any of the Tenant's goods and chattels located on or in the Demised Premises liable to distress are seized or taken in execution or attachment by any creditor of the Tenant;
- (b) the Tenant makes an assignment for the benefit of its creditors, or becomes bankrupt or insolvent or takes the benefit of any enactment for bankrupt or insolvent debtors or becomes involved in voluntary or involuntary winding-up proceedings or if a receiver shall be appointed for the business, property, affairs or revenues of the Tenant;
- (c) the Tenant fails to perform any obligation or comply with any provision of this Lease and persists in such failure 3 days after receiving written notice from the Landlord to rectify such failure;
- (d) part or all of the rent or other amounts hereby reserved to be paid by the Tenant are not so paid, and such default continues for 5 days after the due date thereof; or
- (e) the Tenant abandons or purports to surrender the Demised Premises or repudiates this Lease or makes a bulk sale of its goods.

22.2 Upon the Tenant committing an act of default, the Landlord may terminate this Lease upon giving the Tenant written notice of termination, whereupon the Landlord shall be entitled to enter upon and retake the Demised Premises.

22.3 In addition to the rights of the Landlord under Clause 22.2, the Province may, upon the Tenant committing an act of default, issue demerit points to the Tenant under the Maintenance Contract.

23. **ARBITRATION**

23.1 In the event of a dispute arising between the Landlord and the Tenant regarding the interpretation, application, operation or any alleged violation of this Agreement, such dispute shall be determined by arbitration in accordance with this Section.

23.2 The party alleging a dispute shall notify the other party in writing of the details of the nature and extent of the dispute.

23.3 Within 7 days from receipt of notice, the opposite party shall in writing notify the party preparing the initial notice of any matter referred to in the initial notice for which it accepts responsibility and proposes to take remedial action.

23.4 The terms of reference for arbitration shall be those areas of dispute referred to in the initial notice with respect to which the opposite party has not admitted responsibility or proposed to take remedial action to the satisfaction of the first party.

23.5 Each party shall, within 7 days of the establishment of the terms of reference pursuant to Clause 23.4, appoint an arbitrator and the two arbitrators shall within 7 days of their appointment appoint a third member of the arbitration committee who will act as chairman. However, if the two arbitrators fail to appoint a chairman, then both parties or either of them may apply to a Justice of the Court of Queen's Bench of Alberta to have the chairman appointed.

23.6 If either party fails to appoint an arbitrator within the 7 day period outlined in Clause 23.5, the arbitrator appointed by the one party shall be deemed to be the arbitration committee and a decision of such arbitrator shall be binding upon the parties.

23.7 Within 30 days of the establishment of the arbitration committee, or such further period as may be agreed upon by the parties, the arbitration committee shall resolve the matters in dispute referred to in the terms of reference.

23.8 The decision of the majority of the arbitration committee shall be the decision of the committee.

23.9 The decision of the arbitration committee shall be binding upon the parties.

23.10 The cost of the arbitration committee shall be borne equally by the parties.

24. OVERHOLDING

24.1 Should the Tenant remain in possession of the Demised Premises after the termination of the term without special agreement, a tenancy from year to year shall not be created by implication of the law and the Tenant shall be deemed to be a monthly tenant only at a monthly rental to be established by the Landlord and otherwise in accordance with the terms of this Lease.

25. PRORATING OF PAYMENTS

25.1 Where an amount is payable by the Tenant or by the Landlord in respect of a period of time where only part of the period of time falls within the term of the Lease, the amount will be prorated.

26. ADDRESS FOR NOTICES

26.1 Whenever in this Lease, it shall be required or permitted that notice or demand be given or served by either party to this Lease to or on the other party, such notice or demand shall be in writing and may be given personally or by prepaid registered letter addressed to the other for which intended at the address hereunder, or to such other address as may be substituted therefor from time to time by proper notice and if mailed, shall be deemed to be given 48 hours after it is mailed as hereinbefore specified:

TO THE LANDLORD AT:
DIRECTOR, LEASING
ALBERTA INFRASTRUCTURE
MAIN FLOOR, 6950 - 113 STREET
EDMONTON, ALBERTA
T6H 5V7

TO THE TENANT AT:

ATTENTION: _____

27. SALE OR LEASE OF THE DEMISED PREMISES

27.1 The Landlord, or its agents and their invitees, may at all reasonable times and on reasonable notice to the Tenant, enter the Demised Premises for the purpose of showing the Demised Premises to prospective purchasers and prospective tenants or conducting any other activity reasonably required in connection with the sale of the Demised Premises by the Landlord or the lease of the Demised Premises by the Landlord upon expiry or termination of this Lease.

27.2 The Province, or its agents and their invitees, may at all reasonable times and on reasonable notice to the Tenant, enter the Demised Premises for the purpose of showing the Demised Premises to prospective highway maintenance contractors or conducting any other activity reasonably required in connection with a highway maintenance contract tender call.

27.3 The Landlord, or its agents, may place "For Sale" and "For Lease" signs in reasonable locations on the Demised Premises.

27.4 In the event of a sale of the Demised Premises, the Tenant will attorn to and become the Tenant of the Purchaser in accordance with the terms and conditions of this Lease.

28. NON-WAIVER

28.1 The waiver by the Landlord or the Tenant of the strict performance of any condition, covenant or agreement herein contained shall not constitute a waiver of or abrogate such or any other condition, covenant or agreement nor shall it be deemed a waiver of any subsequent breach of the same or of any other condition, covenant or agreement.

29. TIME OF ESSENCE

29.1 Time is of the essence of this Lease.

30. INTERPRETATION

30.1 The headings used throughout this Lease are inserted for reference purposes only and are not to be considered or taken into account in construing the terms and provisions of any paragraph or section and are not to be deemed in any way to qualify, modify, or explain the effects of any such provisions or terms.

30.2 The words "herein", "hereof", "hereby", "hereunder" and words of similar import refer to this Lease as a whole and not to any clause, section or paragraph hereof.

31. SUCCESSORS OR ASSIGNS

31.1 This Lease shall enure to the benefit of and be binding upon the Landlord and the Landlord's successors and assigns and upon the Tenant and the Tenant's successors.

31.2 The Tenant does hereby accept this Lease of the Demised Premises as above set forth.

IN WITNESS WHEREOF the Landlord has executed this Agreement this day and year first above written.

AND THE TENANT has hereunto affixed its corporate seal duly attested by the hands of its officers duly authorized in that behalf, as of the day of A.D. 20 .

LANDLORD:

Signed by the Minister of Infrastructure of the Province of Alberta, or his duly authorized representative and sealed with his Seal of Office.

DIRECTOR, LEASING
DEPARTMENT OF INFRASTRUCTURE

TENANT:

PER (Seal)

PER

SCHEDULE "B"

TENANT RESPONSIBILITIES

The Tenant is responsible for the following:

1. Window washing.
2. Wash ceilings and walls to remove soot caused by diesel exhaust.
3. Garbage removal from the Demised Premises.
4. Overhead door and salt shed door maintenance, including all moving parts, rollers, tracks, hinges and lifting and lowering mechanisms.
5. Preventative maintenance and repair of the mechanical, humidification, electrical, high voltage, security, computerized building control, elevators and architectural systems.
6. Maintenance of fire systems including testing and inspection of fire extinguishers, fire hoses, sprinkler systems, fire alarms, fire pumps, and emergency lights. This includes maintenance and repair of water backflow preventors.
7. Maintaining a water treatment program for all water, steam and condensate used in the mechanical systems. Where applicable maintain glycol levels in affected systems.
8. Replacement of light bulbs, tubes and ballast.
9. Repair and maintenance of light standards (including bulb replacement).
10. Maintaining and securing site fencing.
11. Performing horticultural services (including weed control) to all of the Lands within the fenced areas, including sewage mounds, the grounds and any areas outside of the fenced-in compound requiring maintenance. This includes municipal property which may extend from the property boundary to adjacent curbs, lanes and streets. Light equipment is required to perform horticultural services on sewage mounds.
12. Spring and fall maintenance of lawn irrigation systems.
13. Repair and maintenance of the shop air compressor, fuel pumps, floor hoists and overhead hoists.

14. Pest control.
15. Cleaning and maintenance of shop sumps, as required, including cleaning of trench drains and replacement of floor grates.
16. Repair and maintenance of sewage disposal systems including septic tank, pumps and cleaning as required. Secure by lock, all manholes and lids on septic tanks and cisterns.
17. Servicing of domestic water wells including repair and maintenance of pumps, pressure systems and water conditioning systems.
18. Proper disposal of used oil.
19. Repair and maintenance of high pressure washers.
20. Maintenance of the gravelled and paved areas inside the compound.
21. Caretaking program to ensure hard surfaced and resilient flooring in office and lunchroom areas is maintained in a manner acceptable to the Landlord, acting reasonably.
22. Repairs, maintenance and replacement of salt pond liners. Pump out the ponds and dispose of contents in a manner acceptable to the Landlord.
23. Repair and maintenance of all interior and exterior signage.
24. Repair or replace locks on man doors, repair and replace weatherstripping on both man doors and overhead doors. Provide for keys to be cut as required and rekeying as required.
25. Replacing caulking, weather seals and broken glass on exterior windows.
26. Repainting of all interior painted surfaces, as reasonably required.
27. Repair, maintenance and replacement of all floor coverings, as reasonably required.
28. Repair and maintenance of all stairs.

LEASE AGREEMENT

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**HIGHWAY MAINTENANCE YARDS
STANDARD LEASE DOCUMENT 2003**

LEASE AGREEMENT
(Rents Receivable)

Lease of land and buildings to:

"Highway Maintenance Yard"
_____, Alberta

File: R _____-2

D R A F T

**Environmental Management Plan Guidelines
Highway Maintenance Yards**

Date: January 24, 2003

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Environmental Management Plan Guidelines Highway Maintenance Yards

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1. Definitions:

“Owner” means the fee simple owner of the Highway Maintenance Yard (HMY).

“Owned or Previously Owned” means Highway Maintenance Yards that were or are currently owned by Alberta Infrastructure or Alberta Transportation.

“Government” means the Alberta Government of the province of Alberta, Canada.

“Contaminant” means any physical, chemical, biological or radiological product, substance or material that has an adverse affect on the environment

“Containment” means to control, hold back or confine a product, substance or material within a predetermined area.

“Designated Area” means the area used for all Salt and Salt/Sand storage, mixing and handling.

"Release" means to spill, discharge, leach, leak, seep, dispose of, spray, inject, inoculate, abandon, deposit, pour, emit, empty, throw, dump, place or exhaust;

"Storage" means the holding of a substance or thing for a temporary period at the end of which it is processed, used, transported, treated or disposed of;

“Highway Maintenance Contractor (HMC)” means the highway maintenance contractor for Alberta Transportation who is the occupant or potential occupant of a Highway Maintenance Yard.

“Highway Maintenance Yard” (HMY) means the lands and improvements used for highway maintenance operations, in whole or in part for Alberta Transportation.

“Risk Management” means a plan and actions to reduce, control or prevent exposure to contamination. A Risk Management plan must have a fully delineated contamination area, source control, monitoring wells and be approved by all the stakeholders including Alberta Environment.

2. Introduction:

A Joint Environmental Committee with representatives from Alberta Environment, Transportation and Infrastructure recommends a unified approach to the prevention and management of salt contamination at Highway Maintenance Yards (HMYs). One of the recommendations is for the Highway Maintenance Contractors (HMCs) to develop Environmental Management Plans (EMPs) that protect the environment.

This EMP Guideline is developed as a go forward document for inclusion in Alberta Transportation’s Highway Maintenance Request for Proposals.

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It is intended that the HMC undertake the Owners responsibility on HMYs they occupy and that EMPs they develop and administer comply with this guideline and address all potential contaminants and environmental issues.

Alberta Infrastructure has an interest in source control of contaminants and preventing contamination on HMYs the department owns or previously owned. This interest is necessitated by ongoing efforts to develop Risk Management plans or Remediate adjacent lands that may have been contaminated due to Alberta Government operations at these HMYs.

The Joint Environmental Committee has designated all Government owned or previously owned HMYs as “High, Medium, or Low Priority Sites”. EMPs for these sites must comply with the following requirements.

- “High Priority Sites (Priority One)” are those that are known to have some level of contamination; those that are within 300 meters of a watercourse; or those in a community that depends on groundwater for its drinking supply. These sites require the construction of an “all weather” shelter of appropriate size to fully shelter the on site salt requirements, salt unloading activities, annual volume of salt/sand storage, mixing and loading operations. The interior shall be considered the Designated Area.
- “Medium Priority Sites (Priority Two)” are those with limited or no information about contamination, and are not in close proximity to water supplies. These sites require construction of an “all weather” shelter of appropriate size to fully shelter the annual volume of salt/sand storage, an asphalt containment area (Designated Area) for salt impacted material and a lined pond for runoff water.
- “Low Priority Sites (Priority Three)” are those that are not considered to be a concern for contamination. Maintain the salt/sand pile covered with tarps and protected from wind, rain and snow. These sites require construction of an asphalt containment area (Designated Area) for salt impacted material and a lined pond for runoff water.

3. Purpose:

The purpose of the Environmental Management Plan Guideline is to ensure a consistent approach for Owners to implement, coordinate and maintain EMPs on HMYs.

This guideline is provided to document the minimum environmental requirements of an EMP. It is intended to provide a broad overview of environmental issues that face the industry, outline minimum EMP requirements, performance issues, basic monitoring and reporting requirements and to minimize misunderstandings in preparing EMPs.

This guideline is for use, as a basis for reviewing EMPs at HMYs to assess the minimum requirements for source control. These same guidelines apply to all sites where HMCs store mixed salt/sand products for use on a highway maintenance contract with Alberta Transportation.

4. Objectives:

The primary objectives of the Environmental Management Plan Guideline are to ensure:

- ◆ The Owner will comply with the *Environmental Protection and Enhancement Act*, *Alberta Fire Code*, *Canadian Environmental Protection Act (CEPA)*, *Waste Control Regulation* and any other legislation pertaining to the protection of the environment at the HMY and adjacent properties.
- ◆ The Owner will conduct its operation in a manner that will protect the HMY and adjacent properties and avoid situations hazardous to the health of individuals and the environment.
- ◆ The Owner will inspect the HMY, and conduct investigations necessary to ensure compliance with the EMP, any lease agreements and all environmental laws.
- ◆ The Owner will implement best practices to prevent the release of contaminants at the HMY. It is understood that some tracking or release of contaminants such as salt is inherent in the handling operations.
- ◆ The Owner will promptly notify the regulatory authorities if there is a release of contaminants in accordance with the *Alberta Environment - Release Reporting Guidelines*.
- ◆ The Owner will be responsible for the full cleanup of any contaminant releases.
- ◆ The Owner will have an acceptable EMP complying with this guideline prior to commencing operations at the HMY.
- ◆ The Owner will provide an EMP that is specific to the leased HMY that consists of an itemized list of each contaminant clearly describing the intended process for storage, handling and use of each such contaminant. The EMP will include a site plan showing specific storage areas and additional plans as necessary to illustrate how materials will be stored, protected and secured.
- ◆ The Owner will monitor and maintain records of activities required to comply with the EMP.
- ◆ The Owner's performance as required by the EMP is monitored.

5. Responsibilities

5.1 Alberta Transportation

- ◆ Alberta Transportation is responsible to ensure the Highway Maintenance Contractors (HMCs) are aware of the requirements for an acceptable EMP prior to approval of a lease agreement at an Alberta Infrastructure owned HMY.
- ◆ Alberta Transportation is responsible to advise Alberta Infrastructure, Property Management and Leasing Branch of the successful Highway Maintenance Contractor (HMC) for each contract involving the Ministers HMY. Property Management is to receive notice 30 days prior to the deadline for an EMP.

5.2 Highway Maintenance Contractor (HMC)

- ◆ The HMC is responsible to provide an EMP that complies with this guideline, ensures source control, meets all the environmental legislation, complies with the highway maintenance contract and the requirements of the lease agreement for Government owned HMYs.
- ◆ The HMC is responsible for all costs associated with maintenance and improvements required to comply with their EMP.

5.3 Contact List

Alberta Transportation

Moh Lali - Director – Transportation

Alberta Environment

Emergency release reporting – 1-800-222-6514

Alberta Infrastructure

Rob Tomalty - Area Manager, Lethbridge	(403-381-5391)
Steve Rawcliffe – Area Manager, Calgary	(403-297-3247)
Don Franks – Area Manager, Red Deer	(403-340-7652)
George Tribe – Area Manager, Edmonton South	(780-422-0356)
Arvid Hopp – Area Manager, North West	(780-460-4990)
Louis Levasseur – Area Manager, North East	(780-645-6286)

6. Document Preparation and Administration:

- ◆ The HMC will prepare EMPs in a format of their choosing and will address all the issues referenced in the Environmental Management Plan Guideline.
- ◆ The HMC will keep copies of the EMP on-site that will be readily available for review by all the HMC staff and contractors as well as Alberta Infrastructures representative.
- ◆ The HMC will keep documentation that verifies that persons working at HMYs are suitably instructed to the extent they are involved in the use, handling and storage of

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products covered in the EMP and that they can and will comply with the requirements of the EMP.

- ◆ The HMC will review the effectiveness of the EMP on a regular basis and at least annually. If required, the HMC, Alberta Transportation or Alberta Infrastructure will recommend amendments to the EMP.

7. Quality Assurance Monitoring and Reporting:

- ◆ The HMC will keep records and logs to demonstrate that proper controls are in place, working successfully and monitored.
- ◆ The HMC will immediately report to Alberta Environment any releases that have caused or have the potential to cause an adverse effect. Reporting requirements are described in the *Release Reporting Guideline* (Alberta Environment, 2001). Examples of reportable releases include, but are not limited to overflowing catchments area, retention ponds or significant spills outside the containment area and any release of contaminants that leave the HMY.
- ◆ On Government owned HMYs;
 - ◆ the HMC will arrange site inspections and provide written reports on the “Semi Annual Maintenance Inspection Check List” (Appendix A) that will be signed off by the Transportation Operations Manager and the Infrastructure Facilities Manager. Infrastructure will be responsible for all structural repairs as required in the applicable lease.
 - ◆ the HMC will report to Alberta Infrastructure any environmental related issues and complaints by the public or adjacent landowners.
 - ◆ the representatives for Transportation and Infrastructure will advise the HMC of any complaints by the public or adjacent landowners.

8. Product Storage and Handling

This section provides a summary of the products and operational issues to be considered by the HMC in the preparation of an EMP. The HMC is fully responsible for assessment of the site to ensure all the environmental issues are identified and addressed in the EMP.

8.1 Product Identification and Labeling

8.1.1 Product Identification, Storage and Handling

The following table identifies many of the products that are commonly stored and handled at the HMY and provides a brief description of their potential for release into the environment. When released into the environment, these products may be contaminants and therefore the HMC must address their potential release in their EMP. This is not an all-inclusive list. The HMC must provide an all-inclusive list of products in use or storage.

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product	Storage and Handling Issues	
Salt	<ul style="list-style-type: none"> Spillage on the ground and/or becoming airborne during delivery and salt shed filling process. Spillage on the ground and/or becoming airborne during movement of salt from the salt shed to the mixing area. Precipitation falling on the sand/salt pile carries salt out of the designated area. Truck parked in heated garage. Condition of retention ponds. Saline water disposal from ponds. 	<ul style="list-style-type: none"> Sand/salt mixture falling from loaded trucks as they drive on the site. Equipment used for handling, relocation and mixing of salt or sand/salt mixture is used for other purposes, thereby depositing salt at the location where the equipment is used. Snow piles created on the site during snow removal operation. Washing of trucks on the site.
Engine Fuel	<ul style="list-style-type: none"> Leaking underground fuel storage tanks. Leaking aboveground fuel storage tanks. Spillage while refueling at the designated refueling area. Spillage while refueling at random locations on the site. Leaking fuel tanks and slip tanks on vehicles and equipment. Spillage during removal from vehicle or equipment fuel tank. 	<ul style="list-style-type: none"> Leakage during storage prior to disposal. Spillage and dripping on the site during cleaning/rust proofing of truck boxes or other equipment. Spillage or improper disposal of fuel used as a cleaning solvent. Leakage from 45-gallon drums stored for future use.
Engine Oil and Filters	<ul style="list-style-type: none"> Leakage from dispensing equipment Spillage during oil change procedure. Spillage and dripping on the site during cleaning/rust proofing of truck boxes or other equipment. 	<ul style="list-style-type: none"> Leaking vehicles and equipment. Leakage from empty oil containers prior to disposal. Leakage/spilling during storage prior to disposal.
Lubricating Grease	<ul style="list-style-type: none"> Leakage from dispensing equipment. Spillage during lubrication procedure. 	<ul style="list-style-type: none"> Leakage from empty grease containers and dispensers prior to disposal. Leakage from storage tanks or containers.
Automotive Antifreeze	<ul style="list-style-type: none"> Leakage from dispensing equipment. Spillage during filling, mixing procedures. Leaking vehicles and equipment. 	<ul style="list-style-type: none"> Spillage during removal from engine or flushing procedures. Leakage from storage tanks or containers.
Solvents	<ul style="list-style-type: none"> Leakage from dispensing equipment. Improper ventilation of airborne vapors. Spillage during cleaning of vehicle and equipment parts. 	<ul style="list-style-type: none"> Spillage during thinning of paints and cleaning of painting tools or equipment. Leakage from storage tanks or containers.
Liquid/Solid Asphalt, Liquid Paint	<ul style="list-style-type: none"> Leakage from dispensing equipment. Spillage during filling, mixing procedures. Leakage from application equipment. 	<ul style="list-style-type: none"> Leakage from storage tanks or containers.
Soil Sterilants, Herbicide, Insecticide	<ul style="list-style-type: none"> Leakage from dispensing equipment. Spillage during filling, mixing procedures. Inadequate labeling of mixed product. Regulation compliant storage area 	<ul style="list-style-type: none"> Improper cleaning of application equipment and containers. Leakage from any containers during storage. WHMIS compliant
Automotive Batteries	<ul style="list-style-type: none"> Improper charging procedure, location and storage and disposal. 	
Pre-treated Timber, Oily Rags, Absorbents, Tires, Aerosol Cans	<ul style="list-style-type: none"> Inadequate storage locations and procedures. Excessive quantities. Lengthy storage time. 	

8.2 Storage Containers and Tanks (environmentally sensitive products)

8.2.1 General

- ◆ The HMC will dispose of, in an appropriate manner, residue/waste from equipment cleaning, drippings, etc. Such disposal methods and locations will be identified in the EMP.
- ◆ The HMC will clearly label all product containers and tanks identifying the product being contained in accordance with WHMIS regulations.

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8.2.2 Containers

- ◆ The HMC will ensure that no sources of ignition, such as smoking or open flames, are present where flammable products are stored in containers.
- ◆ The HMC will maintain containers in good condition. The containers will be accurately and sufficiently labeled with no excess residue on the outside of containers. Containers in questionable condition should be placed in an overpack container and removed from site.
- ◆ The HMC will ensure leaking containers have contents transferred to secure container or be placed in an overpack container.
- ◆ The HMC will ensure that stacking of containers in storage will be done in a manner that will not cause the containers to be damaged or ruptured by excessive weight, falling or tipping.
- ◆ The HMC will store and label all containers in a containment area.

8.2.3 Storage Tanks

- ◆ The HMC will construct, operate, and inspect tank systems used for storage, blending, or processing of liquids to ensure that they are environmentally sound.
- ◆ The HMC will ensure that all tanks, stationary or portable, located or kept on site, have secondary containment. Secondary containment may necessitate the construction of an earthen berm around a tank or provisions of a designated location with secondary containment for a portable tank.
- ◆ The HMC will ensure all hoses used for transfer purposes are free of cracks or defects. When not in use, hoses are to be placed in a manner to prevent leakage or a method provided to capture any leakage.
- ◆ The HMC will place a drip pan or bucket under the hose connections to contain any drippings during transfer of liquids into or out of tanks.

8.3 Solid Asphalt Mix Storage

- ◆ The HMC will not prepare asphalt mix on Government owned HMYs unless approved in writing by Alberta Infrastructure.

9. Spill Prevention and Response Requirements

- ◆ The HMC will operate the facility to minimize the possibility of a fire, explosion or unplanned release of substances. A site specific Contingency or Emergency Response Plan must be in place that has been prepared by the HMC to minimize health and environmental hazards arising from fires, explosions, or any other unplanned release of substances. .
- ◆ The HMC must be aware of the applicable legislation such as the *Release Reporting Guideline* (Alberta Environment 2001) with respect to spills, spill response, and reporting requirements.
- ◆ The HMC will equip the facility with appropriate spill response equipment and documented procedures

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- ◆ On Government owned HMYs, the HMC will ensure that Alberta Infrastructure is contacted in a timely manner in the event of any fire, explosion, or release of substance.

10. Contamination Risk Areas

HMYs have areas that are affected by high concentrations of potential contaminants. These areas require ongoing monitoring and care to ensure adequate source control. The HMC will keep records and logs to demonstrate that proper controls are in place, working successfully and monitored.

10.1 Designated Area

- ◆ The HMC will ensure that the designated area has an impervious surface such as asphalt. The boundaries of the designated area will be graded and curbed so that the salt and salt/sand mix is confined to the area.
- ◆ The HMC will ensure the exposed surface is examined each spring for drainage and condition and all necessary maintenance is performed.
- ◆ The HMC will ensure proper drainage flow and crack sealing to direct surface runoff to a saline water pond.
- ◆ The HMC will ensure that the designated area is large enough to accommodate the storage of salt impacted snow so as to have any melt water runoff directed to the saline water pond.
- ◆ The HMC will ensure that any detritus or salt impacted material accumulating on the designated area is added to the salt/sand pile or disposed of in accordance with the appropriate legislation. Such material shall not be stored off the designated area.
- ◆ The HMC will prepare detailed plans and operating procedures for all requirements of the EMP to ensure salt will be confined to the designated area. The plans will detail the containment area as well as a pond for saline runoff water.
- ◆ The HMC will immediately clean up all salt spilled outside the designated area. Spills will be reported as per the *Release Reporting Guideline* (Alberta Environment 2001) and recorded in the Owner's onsite logbook.

10.2 Sanitary Sewage Systems

- ◆ The HMC will not use the sanitary sewage systems as catchment areas for saline rain or snow melt water.
- ◆ The HMC must obtain written approval from the municipality before connecting new drainage systems used for washing salt impacted vehicles and equipment to municipal systems
- ◆ The HMC may direct sanitary sewage containing saline water from washing salt impacted vehicles and equipment to a holding tank, provided that the holding tank is pumped out and the effluent is disposed of in accordance with the applicable regulations.
- ◆ The HMC will not use municipal ditches or property for any saline water runoff.

10.3 Fuel and Oil Storage or Use Areas

- ◆ The HMC will maintain fuel storage tanks to current *Alberta Fire Code* standards. The HMC will arrange for the tanks to be registered with the Petroleum Tank Management Association of Alberta.
- ◆ The HMC will not use above ground farm type, fuel storage tanks.
- ◆ The HMC will provide and maintain a surface, such as concrete, in the vehicle refueling area to contain spills.
- ◆ The HMC will provide and maintain containment areas where oil or petroleum products are stored or used. These areas will be of sufficient size to contain 100% of the stored products. This includes fuel used to clean or rust proof truck boxes or other equipment. Note: Not required for unopened containers 4 liters or smaller.
- ◆ The HMC will clean up all spills and recycle or dispose of spilled materials in accordance with the *Environmental Protection and Enhancement Act* and the *Waste Control Regulation*.
- ◆ The HMC will keep records as required by the *Environmental Protection and Enhancement Act* and the *Waste Control Regulation* for all contaminants disposed of and these records will be made available upon request.
- ◆ The HMC will not use fuel or oils over absorbent material with the intent of deliberately releasing a contaminant and disposing of the contaminated absorbing material.

10.4 Treated Lumber Storage Areas

- ◆ The HMC will store treated timber products in an area specifically marked for the purpose.
- ◆ The HMC will ensure that treated timber products are covered.
- ◆ The HMC will keep the stored quantities at a reasonable amount.
- ◆ The HMC will remove unusable or broken material from the site at least annually. Disposal will be in accordance with the *Environmental Protection and Enhancement Act* and the *Waste Control Regulations*.

11. Salt Storage and Handling Requirements

Extreme care must be exercised in the storage, handling and delivering of salt. Every effort must be taken to ensure salt is not released to the environment. Extensive contamination occurs when salt is released over a localized area due to the cumulative effect.

11.1 Salt Shed Operations

- ◆ The HMC will store salt in a salt shelter or covered structure.
- ◆ The HMC will inspect the salt shelter annually and take remedial action to maintain the structure.
- ◆ The HMC will keep the salt shed doors closed when there is no salt removal operation in progress.

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11.2 Salt Off-loading Requirements

- ◆ The HMC will ensure that a trained personal perform or supervise all aspects of the off-loading of the salt into the salt shed or shelter. Note: Demerit points may be recommended for contamination on government owned sites due to the HMCs failure to take appropriate actions to control the off-loading operations.
- ◆ The HMC may load salt into the shed by conveyor or blow salt into the shed by providing a piping system with filtered air vents designed for the purpose. The piping system will be thoroughly cleaned before and after each use and will have operating procedures posted on the shed. The type of filters and frequency of cleaning and changing will be part of the operating procedures. The shed doors and other openings will be closed and sealed during blowing operations to ensure air escaping the shed does so only through the filter sections.
- ◆ The HMC will sweep salt spilled during the off-loading operations into the shed on completion.
- ◆ The HMC will adjust operations or stop off-loading immediately if airborne salt is observed leaving the designated area or the shelter in the case of Government owned “Priority One” sites.

12. Salt/Sand Management Practices

Containment of salt and salt impacted materials is a mandatory lease agreement requirement on Government owned HMYs. Every effort should be taken to ensure salt is fully contained.

12.1 Salt/Sand Mixing Requirements

- ◆ The HMC will undertake all pickled salt/sand mixing, storage and handling in the Designated Area.
- ◆ The HMC will contain all salt/sand within the Designated Area at all times.
- ◆ The HMC will keep salt dust created during the granular salt mixing operation out side of an enclosed structure to a minimum by ensuring the material free fall is one metre or less. Similar precautions must be taken in enclosed structures if salt dust is escaping from the structure or leaving the Designated Area. Note: where liquid salt or similar products are used the freefall may be greater than one metre as long as the mixed product and salt spray is contained in the Designated Area or structure as may be the case.
- ◆ The HMC will not carry out the pre-winter mixing operation when wind conditions cause any salt dust or spray to become airborne and migrate off the designated area.
- ◆ The HMC will ensure that persons involved in the mixing operation are properly instructed and familiar with the requirements to limit salt and salt dust or spray to the designated area.

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12.2 Salt/Sand Stockpile Carry-over Requirements

- ◆ The HMC will work with Transportation to restrict the quantity of salt/sand stockpiled on site at manageable and environmentally considerate quantities.
- ◆ The HMC will undertake all reasonable activities to prevent any salt water leaching or flowing into natural drainage courses, roadway ditches or onto adjacent lands.

12.3 Salt/Sand Covering Requirements

- For Government owned or previously owned HMYs the EMP must comply with the following requirements:
 - “High Priority Sites (Priority One)” As a minimum, these sites require the construction of an “all weather” shelter of appropriate size to fully shelter the on site salt requirements, salt unloading activities, annual volume of salt/sand storage, mixing and loading operations. The interior shall be the Designated Area.
 - “Medium Priority Sites (Priority Two)” As a minimum, these sites require construction of an “all weather” shelter of appropriate size to fully shelter the annual volume of salt/sand storage, an asphalt containment area (Designated Area) for salt impacted material and a lined pond for runoff water.
 - “Low Priority Sites (Priority Three)” As a minimum, these sites require the salt/sand pile to be covered with tarps and protected from wind, rain and snow, construction of an asphalt containment area (Designated Area) for salt impacted material and a lined pond for runoff water.
 - ◆ Note: tarps used for covering salt/sand piles must be firmly secured to solid anchors suitable for the purpose.
 - ◆ Note: salt/sand piles must be covered at all times during summer months mid May to October.
 - ◆ Note: Shelters used for covering salt/sand piles may be temporary metal, wood or fabric structures. The shelters should be installed on wood or concrete pony walls of sufficient height and construction to accommodate the volume of material stored and loading equipment activity. The shelters must be adequately sealed to prevent entry of water and escape of dust.

12.4 Plow Truck Maintenance and Cleaning Requirements

- ◆ The HMC will only clean salt and road grit on the designated area.
- ◆ The HMC will not wash salt from plow trucks or equipment on HMY unless an adequate catchment and disposal system for the saline water is provided, or the HMC receives written approval from the municipality to use the municipal system.
- ◆ The HMC will clean maintenance shop sumps at least monthly during the salt/sand application season to minimize the amount of salt impacted grit in the system.

13. Saline Water Containment and Disposal (salt impacted runoff water)

For Government owned or previously owned HMYs, the priority two and priority three sites require the construction and maintenance of a saline water pond. The pond must be designed to capture all the runoff from the containment or Designated area.

13.1 Saline Water Pond Design and Construction

The HMC will consider the following when planning the design of a Saline Water Pond:

- ◆ The amount of space available in the yard.
- ◆ The topography: The pond will be located in an area down gradient from the designated area.
- ◆ The number of times a year that it is desirable to remove the brine from the pond.
- ◆ Annual precipitation: Infrastructure recommends that the design be based on annual precipitation as opposed to unusual storm events (e.g. 1 in 50 year, 1 in 100 year etc.). The reason for this is the required storage volume will be very high for infrequent storm events compared to average annual precipitation. Precipitation information is available at www.agric.gov.ab.ca.
- ◆ The size of the designated area: The designated area consists of the salt shed, the mixing area, the pickled material storage pile, handling area, snow storage and the saline water pond.
- ◆ The required freeboard in the pond: Sufficient freeboard provided in the pond will provide a backup when an unusual storm event does occur. The freeboard area will fill and back up onto the designated area, to the curb heights that will provide considerable additional storage.
- ◆ The pond liner: Heavy polyethylene liner material that is UV protected and resistant to chemicals is required and installed as per manufacturer's specification. Particular attention must be paid to the bedding material for the liner.
- ◆ The designated area will be paved and the perimeter curbed: The pavement base should be evaluated as existing salt may have contaminated the base to the point that it may not be capable of supporting the intended loads. The minimum recommended asphalt thickness is 100mm. Curbs should be a rolled design and a minimum of 150mm in height.
- ◆ The preceding design information is intended to assist with basic design and is not intended to be all the information that needs consideration. Site Specific information is required (e.g. topographical survey) to complete the design. Alberta Infrastructure, Site and Environmental Services is available to liaison with the HMC on pond design and approve proposals prior to construction on government owned HMYs.
- ◆ The Saline Water Pond liner will be inspected annually. The process and findings will be documented in the onsite log book. .

13.2 Saline Water Disposal

- ◆ The HMC will ensure that all runoff from the designated area is collected in the saline water pond and the HMC must remove water when the levels reach the designed high water line to ensure adequate free board is available. The designated high water line will be clearly indicated on the pond structure.
- ◆ The HMC will remove the saline water from site to an acceptable disposal location. Note: Acceptable disposal locations are salt-water injection wells or other locations approved Alberta Environment.
- ◆ The HMC will not under any circumstances discharge salt impacted water from the ponds at the site. Note: Even though the designed area may have been washed down and appears clean there will be residual salt. Even small amounts of salt discharged at the site repeatedly will have a cumulative effect, which is not acceptable. Pond water purified by Reverse Osmosis or other methods may be discharged at the site if it is tested and found to be free of salt.
- ◆ The HMC will keep a log on site of all disposals. The information in the log will include dates, approximate volumes pumped, and manifests/receipts from disposal sites.

14. Site Drawings and Sketches

- ◆ The HMC will keep site drawings showing locations of all building improvements and storage areas.
- ◆ The HMC will keep site drawings showing topographical elevations and site drainage flow directions.
- ◆ The HMC will keep engineered construction drawings for the saline water pond and associated apparatus.
- ◆ The HMC will keep sketches that detail contaminant storage areas, tanks and containers.

D R A F T

**Appendix A:
Semi Annual Maintenance Inspection Checklist**

DRAFT

HIGHWAY MAINTENANCE YARD

SEMI ANNUAL MAINTENANCE INSPECTION CHECK LIST SPRING
 FALL

DATE: _____ CONTRACTOR/OWNER: _____

LOCATION _____ BID/SITE I.D. _____

(Please indicate: ✓ - Satisfactory; X - Unsatisfactory; N/A - Not Applicable.)

DESCRIPTION	RESULT	COMMENTS
A Structural		Building: Main Shop
Roof/eaves/siding		
OH doors & openers		
Doors & windows		
Floors/concrete		
Building envelope		
Other		
A Structural		Building: Salt Shed
Roof/eaves/siding		
OH doors & openers		
Doors & windows		
Floors/concrete		
Building envelope		
Other		

DRAFT

DESCRIPTION	RESULT	COMMENTS
A Structural		Building:
Roof/eaves/siding		
OH doors & openers		
Doors & windows		
Floors/concrete		
Building envelope		
Other		
A Structural		Building:
Roof/eaves/siding		
OH doors & openers		
Doors & windows		
Floors/concrete		
Building envelope		
Other		

DRAFT

DESCRIPTION	RESULT	COMMENTS
B Mechanical		
HVAC systems		
Plumbing/Hot water		
Sink/Toilets		
Exhaust systems		
Air Compressor		
Pressure washer		
Fuel pumps		
Floor hoists		
O.H. hoists		
Electrical systems		
Light standards		
Elevators		
Water Treatment		
P.M. Program		
Floor Grates		
Other		

DRAFT

DESCRIPTION	RESULT	COMMENTS
C Yard Maintenance		
Site fences		
Weed control		
Material storage		
Equipment storage		
Pavement areas		
Gravel areas		
Other		

D Fire Systems		
Portable extinguishers		
Fire alarms		
Emergency lights		
Other		
E Environmental		
Salt contaminants		
Salt storage and fill pipe/air filter system		
Creosote contaminants		
Site Drainage		

DRAFT

DESCRIPTION	RESULT	COMMENTS
Sewage system operation		
Water well operation		
Sand/Salt Pile Drainage		
Waste Oil Disposal		
Fuel Dispensing System		
Chemical/Paints/Oil Storage		
Asphaltic Materials		
Other		
F Housekeeping		
Painting		
Garbage removal		
Oil clean up		
Sump Clean out		
Pest control		
Bulb replacement		
Caretaking		
Water System		

DRAFT

DESCRIPTION	RESULT	COMMENTS
Emergency Phone List		
Other		

Next Inspection Scheduled For: _____

INFRA. FACILITIES MANAGER: _____

DATE: _____

T RANS. OPERATIONS MANAGER: _____

DATE: _____

OWNER REPRESENTATIVE: _____

DATE: _____

OUR FILE: CMA-4

March 17, 2003

Dear Sir:

Attached is addendum 1 to the Request for Proposals for Highway Maintenance Work in the Hines Creek, Peace River & Manning areas identified as Contract Maintenance Area No. 4.

Please make the necessary revisions to the proposal documents as shown on the attached addendum.

Also attached is a "Receipt of Addenda" form. Please acknowledge receipt of this addendum on the form provided and include this entire package in Envelope 1 of your submission.

If you have any questions on addendum 1 then please call me at the above number.

Yours truly,



Donald Durand
Specifications Technologist

cc: Moh Lali, Acting Executive Director, Program Management Branch
Gordon Zack, Acting Executive Director, Divisional Coordination & Special Projects
John Enleder, Regional Director, Peace Region
Bill Gish, Operations Manager, Peace River
Jim Harvey, Director, Tender Administration, Program Management Branch
Ian Baird, Contract Specification Specialist, Technical Standards Branch

attachment:

ADDENDUM #1
FOR CONTRACT MAINTENANCE AREA 4
REQUEST FOR PROPOSAL
HINES CREEK, PEACE RIVER & MANNING AREAS

The above noted Request for Proposal is revised in accordance with the following:

1 REVISIONS TO THE REQUEST FOR PROPOSAL SECTION

1.1 SECTION 4.6.4, 'SNOW/ICE CONTROL PLAN', IS REVISED IN ACCORDANCE WITH THE FOLLOWING:

1.1.1 The third, fourth and fifth bullets (regarding indoor/outdoor storage) following the second paragraph of sub-section 4.6.4.1.2, 'Sand Storage Site Plan' are deleted and replaced with the following bullet:

- *"All sodium chloride treated sand must be stored in an indoor structure. Identify the type of indoor structure proposed for the site (A tarp supported by the pile will not be considered as an indoor structure)."*

1.2 SECTION 4.6.6, 'ENVIRONMENTAL MANAGEMENT', IS REVISED IN ACCORDANCE WITH THE FOLLOWING:

1.2.1 The title of sub-section 4.6.6.1 is revised from "Environmental Management Plan - Government-Owned Facilities and Facilities Previously Owned by the Government" to "*Environmental Management Plan - All Maintenance Facility Sites*".

1.2.2 The second and third paragraphs of sub-section 4.6.6.1 are deleted and replaced with the following:

"The Prospective Contractor shall also provide an Environmental Management Plan in accordance with the provisions of the "Environmental Management Plan Guidelines for Highway Maintenance Yards" for each facility that was previously owned, at any time, by the Government of Alberta and for each new facility proposed by the Contractor. Environmental Management Plans shall be completed and supplied to the Department's Designate as part of the Mobilization Plan.

The Environmental Management Plans must be submitted to the Department Designate for review and acceptance."

1.2.3 The sub-title "**B. Desirable Requirements**" which directly precedes sub-section 4.6.6.4 is deleted.

1.2.4 Sub-section 4.6.6.4, 'Covered Mixed Sand/Salt Storage Structure - Contractor Facilities', is deleted in its entirety and replaced with the following:

"4.6.6.4 Storage of Sodium Chloride Treated Sand

The Contractor must provide indoor storage structures at all maintenance facility sites capable of sheltering the annual volume of treated sand specified.

Indoor storage structures shall be constructed on an impermeable floor of asphalt, concrete, or other suitable material that is graded away from the center of the structure for drainage purposes. The pad shall extend around the exterior of the structure and be graded away from the building, such that runoff is prevented from entering the structure. The roof and exterior of the structure shall be constructed of waterproof material, such that precipitation and moisture are prevented from entering the structure. A tarp supported by the pile will not be considered as an indoor structure.

Prospective Contractors shall identify in their proposals that all maintenance facility sites will include indoor structures capable of sheltering the annual volume of treated sand as specified above. Fifteen points will be awarded if the Contractor has demonstrated that all treated sand will be acceptably sheltered.”

2 REVISIONS TO SPECIAL PROVISIONS

2.1 SPECIAL PROVISION A., ‘AWARDING HIGHWAY MAINTENANCE CONTRACTS’ IS REVISED IN ACCORDANCE WITH THE FOLLOWING:

2.1.1 The following paragraph is added to the end of Step 2:

“The percentages referred to in Items (i), (ii) and (iii) above are intended to account for additional administration costs that would be incurred by the Department if contracts were awarded for more than one Contractor and did not cover all four contract maintenance areas. Individual proposals consisting of single(s) and/ or multiple CMAs that are selected as the preferred proposals and are from the same contractor will be evaluated in accordance with Items (ii) or (iii) based upon the total number of selected preferred CMAs.”

2.2 SPECIAL PROVISION DD., “OPERATION OF SHAFTESBURY FERRY” IS REVISED IN ACCORDANCE WITH THE FOLLOWING:

2.2.1 The following sentence is added to the 7th bullet of the section titled, ‘Launching of Ferry’:

“Washing shall be done on dry land with the wash water being directed into a settling basin for sediment control.”

2.2.2 The following sentence is added to the 8th bullet of the section titled, ‘Launching of Ferry’:

“Wood preservatives shall be applied on dry land in a manner that ensures no spillage, leakage or dripping of preservatives on to land or water occurs.”

2.2.3 The following bullet is added to the section titled, ‘Launching of Ferry’:

“• Any equipment or portion of equipment that will be working in water shall use environmentally friendly fluids. Equipment entering water must be thoroughly cleaned of all mud and fluids prior to entering the water.”

2.2.4 The following bullet is added to the section titled, ‘Daily Inspections’:

“• Remove silt build-up under the approach ramps and inside the hull of the approach ramp, as required, or as directed by the Department Representative. The department will be working with Fisheries and Oceans Canada, Environment Canada and Alberta Environment to

develop Best Management Practices, and appropriate permits and approvals for silt removal.”

- 2.2.5 The following sentence is added to the 5th bullet of the section titled, ‘Daily Inspections’:

“If the water in the hull is contaminated with hydrocarbons it shall not be pumped into the river.”

- 2.2.6 The 6th paragraph of the section titled, ‘Operational Requirements’ is replaced with the following:

“The Contractor shall notify the Coast Guard, the Department, Environment Canada, Alberta Environment and Fisheries and Oceans of all oil, gasoline or dangerous good spills no matter what the size of the spill is.”

- 2.3 SPECIAL PROVISION EE., “SHAFTESBURY ICE BRIDGE” IS REVISED IN ACCORDANCE WITH THE FOLLOWING:

- 2.3.1 The following paragraph is added to the end of the section titled, ‘Ice Bridge Maintenance’:

“The Contractor shall not deposit gravel, sand or dirt into the river or on to the ice bridge.”

- 2.4 SPECIAL PROVISION II., ‘PROVISION FOR MIXED SAND/SALT STORAGE’ IS DELETED IN IT’S ENTIRETY AND REPLACED WITH THE FOLLOWING:

“II. STORAGE OF SODIUM CHLORIDE TREATED SAND

All sodium chloride treated sand shall be stored in indoor structures. Indoor structures shall designed to accommodate storage of the annual volume of sodium chloride treated sand specified.

Indoor structures shall be constructed on an impermeable floor of asphalt, concrete, or other suitable material that is graded away from the center of the structure for drainage purposes. The pad shall extend around the exterior of the structure and be graded away from the building, such that runoff is prevented from entering the structure. The roof and exterior of the structure shall be constructed of waterproof material, such that precipitation and moisture are prevented from entering the structure. A tarp supported by the pile will not be considered as an indoor structure.

Maintenance Facilities designated as High Priority Sites in accordance with Section 2, ‘Introduction’ of the “Environmental Management Plan Guidelines for Highway Maintenance Yards” require indoor structures capable of accommodating covered loading and mixing operations in addition to storage of the materials.”

- 2.5 SPECIAL PROVISION JJ., ‘USE OF MAINTENANCE FACILITIES PREVIOUSLY OWNED BY THE GOVERNMENT OF ALBERTA’ IS DELETED IN IT’S ENTIRETY AND REPLACED WITH THE FOLLOWING:

“JJ. ENVIRONMENTAL MANAGEMENT OF MAINTENANCE FACILITIES

Priority Designations

All maintenance facility sites identified in the Prospective Contractor's proposal that are owned, or were at any time previously owned, by the Government of Alberta which were designated as Low Priority Sites (Priority Three) by the Joint Environmental Committee are now designated as Medium Priority Sites (Priority Two). Designations for maintenance facility sites listed as High Priority or Medium Priority have not changed.

All new maintenance facility sites identified in the Prospective Contractor's proposal, which have never been owned at any time by the Government of Alberta, shall include documentation demonstrating the priority designation warranted as described in Section 2, 'Introduction' of the "Environmental Management Plan Guidelines for Highway Maintenance Yards" document included in the RFP.

No maintenance facility site will be designated as Low Priority.

Maintenance Facilities Owned by the Government of Alberta

Environmental Management of Maintenance Facilities Owned by the Government of Alberta shall be subject to the Lease Agreement and the "Groundwater Quality Monitoring Program" and "Inspections" sections of this special provision.

This Special Provision (JJ) does not in any way limit the rights of Alberta Infrastructure under the Alberta Infrastructure standard lease agreement or under any lease agreement entered into between Alberta Infrastructure and the Contractor.

Maintenance Facilities Previously Owned by the Government of Alberta and New Sites Proposed by the Contractor

The Contractor shall complete an Environmental Management Plan for each site previously owned, at any time, by the Government of Alberta or any new site proposed by the Contractor. The Environmental Management Plan shall comply with the requirements of the "Environmental Management Plan Guidelines for Highway Maintenance Yards" document included in the RFP.

The provisions of the Environmental Management Guidelines Highway Maintenance Yards document may require significant improvements or other work to existing sites to achieve environmental compliance. Also, the Environmental Management Plan Guidelines for Highway Maintenance Yards document includes separate requirements for sites designated as either "High Priority", "Medium Priority" or "Low Priority". The location of any sites previously owned by the government in this CMA may be obtained from the Department Operations Manager. The Contractor shall complete any such work prior to commencement of the Contract. The cost of any such work shall be at the Contractor's expense and no separate or additional payment will be made.

The Environmental Management Plan must be acceptable to the Department and shall be completed as part of the Mobilization Plan required under the RFP.

The Contractor shall operate the site in accordance with all applicable environmental legislation, the Environmental Management Plan Guidelines for Highway Maintenance Yards and the approved Environmental Management Plan during the term of the Contract.

Groundwater Quality Monitoring Program

The Prospective Contractor shall include provisions for a groundwater quality monitoring program in his Environmental Management Plan for all maintenance facility sites identified in his proposal.

Each site shall include a minimum of three monitoring wells. One well shall be located hydraulically up-gradient of the site and two wells hydraulically down-gradient of the site. At Medium Priority Sites one of the down-gradient wells shall be located immediately down-gradient from the run-off collection pond. The wells shall be designed to allow collection of groundwater samples from the uppermost water bearing formation to a maximum depth of 50 metres. If no groundwater is encountered in the first 50 metres of drilling then groundwater monitoring wells will not be required for that site.

The Contractor shall arrange for an initial sampling of chloride and sodium concentrations as soon as groundwater levels have stabilized after installation of the wells. Subsequent sampling and analysis shall be done on a semi annual basis in conjunction with the maintenance facility inspections specified below. All groundwater sampling and analysis shall be done by an independent and qualified engineering consulting firm registered with A.P.E.G.G.A. All results of groundwater analysis shall be provided to the Department in triplicate.

All costs associated with installation, maintenance and sampling of groundwater monitoring wells shall be at the Contractor's expense and no separate or additional payment will be made.

Alberta Transportation may request supplementary water samples and analysis from groundwater monitoring wells of any particular site in addition to the frequency specified above. Any such additional samples requested by the Department will be paid for as Extra Work in accordance with Specification 51.2, General for Maintenance Work.

Inspections

The Contractor shall arrange for semi annual inspections at each maintenance facility site included in the Contract to determine compliance with Environmental Management Plans. One inspection shall be scheduled during the summer season (July - August) and the other during the winter season (January - February). All inspections shall be conducted by an independent and qualified engineering consulting firm registered with A.P.E.G.G.A.

The Contractor shall provide the Department with three copies of the Consultant's written report detailing results of the inspection within a maximum of two weeks following completion of the inspection. All costs associated with maintenance facility inspections shall be at the Contractor's expense and no separate or additional payment will be made.

Each occurrence of non-compliance with an Environmental Management Plan will be a demeritable offence. If any one requirement of an Environmental Management Plan is identified in the Consultant's inspection report as being in non-compliance the Department will assess the Contractor one demerit point for that site. The Contractor shall promptly correct the deficiency(s) to bring the site into compliance with the Environmental Management Plan and shall arrange for a follow-up inspection.

These inspections do not preclude Alberta Environment or Environment Canada from assessing fines for a site that is not in compliance with the applicable legislation as identified in Section 4, 'Objectives', of the Environmental Management Plan Guidelines for Highway Maintenance Yards document included in the RFP.

Alberta Transportation, Alberta Environment and Alberta Infrastructure reserve the right to conduct any additional investigations deemed necessary to ensure compliance with Environmental Management Plans and Lease Agreements. Any requirements of an Environmental Management Plan found to be in non-compliance from such investigations will also be considered a demeritable offence.

3 REVISIONS TO THE LEASE AGREEMENT

3.1 SECTION 8, "TENANT'S INSURANCE" IS REVISED IN ACCORDANCE WITH THE FOLLOWING:

3.1.1 The first sentence of clause 8.2 is replaced with the following:

"The Tenant shall, at its own expense and without limiting its liabilities herein, insure its operations under a contract of General Liability Insurance, with an insurer licensed in Alberta, in an amount not less than \$2,000,000.00 per occurrence insuring against bodily injury, personal injury, and property damage including loss of use thereof."

4 REVISIONS TO THE ENVIRONMENTAL MANAGEMENT PLAN GUIDELINES FOR HIGHWAY MAINTENANCE YARDS

4.1 THE DATE SHOWN ON THE TITLE PAGE (PAGE 1) IS CHANGED FROM JANUARY 24, 2003 TO "MARCH 7, 2003".

4.2 ALL REFERENCES TO THE TERM "Release Reporting Guideline" SHALL MEAN "Release Reporting Regulation".

4.3 THE FIRST BULLET FOLLOWING THE FIFTH PARAGRAPH OF SECTION 2, 'INTRODUCTION', IS REPLACED WITH THE FOLLOWING:

- ◆ "High Priority Sites (Priority One)" are those sites that are within 300 meters of a watercourse or permanent open water body; in or near communities where the water supply is obtained from shallow aquifers (identified in Appendix A); where the average surficial soil texture (texture of 1.5 metre surface) has a median grain size greater than 75 microns. These sites require the construction of an "all weather" shelter of appropriate size to fully shelter the on site salt requirements, salt unloading activities, annual volume of salt/sand storage, mixing and loading operations. The interior shall be considered the Designated Area."

4.4 THE FOLLOWING LEGISLATION REFERENCE IS INSERTED INTO THE 1ST BULLET OF SECTION 4, 'OBJECTIVES':

"Release Reporting Regulation"

4.5 SECTION 7, 'QUALITY ASSURANCE MONITORING AND REPORTING' IS REVISED IN ACCORDANCE WITH THE FOLLOWING:

4.5.1 The third bulled is replaced with the following:

- ◆ "On Government Owned or Previously Owned HMYs,"

4.5.2 The first sub-bullet directly following the third bullet which starts with "the HMC will arrange site inspections...", is Deleted.

4.6 THE 1ST BULLET OF SECTION 12.2, 'SALT/SAND STOCKPILE CARRY-OVER REQUIREMENTS' IS REPLACED WITH THE FOLLOWING:

- ◆ "The HMC shall work in co-operation with Alberta Transportation to minimize the quantity of salt/sand carry-over."

4.7 APPENDIX "A", SEMI ANNUAL MAINTENANCE INSPECTION CHECKLIST, IS DELETED IN ITS ENTIRETY AND REPLACED WITH THE FOLLOWING:

"APPENDIX A

The following communities are known by Alberta Environment to have sensitive ground water supplies and to obtain water from shallow aquifers referred to in priority 1 sites.

<i>Village of Andrew</i>	<i>Town of Eckville</i>	<i>Village of Lougheed</i>
<i>Village of Bon Accord</i>	<i>Village of Entwistle</i>	<i>Town of Okotoks</i>
<i>Town of Canmore</i>	<i>Village of Forestberg</i>	<i>Town of Oyen</i>
<i>Village of Chauvin</i>	<i>Village of Ft. Assiniboine</i>	<i>Village of Rosalind</i>
<i>Village of Cremona</i>	<i>Town of Hardisty</i>	<i>Village of Sedgewick</i>
<i>Municipality of Crowsnest Pass</i>	<i>Town of High River</i>	<i>Town of Smoky Lake</i>
<i>Village of Delburne</i>	<i>Town of Killam</i>	<i>Town of Sundre</i>
	<i>Village of Longview</i>	<i>Town of Turner Valley</i>

This list was developed through the former MUST Program (Management of Underground Storage Tanks) for incorporation into the 1992 Alberta Fire Code to identify specific communities where secondary containment would be requirement for installation of underground petroleum storage tanks."

4.8 THE "DRAFT" WATERMARK LOCATED ON THE TOP OF EACH PAGE IS DELETED. THE ENVIRONMENTAL MANAGEMENT PLAN GUIDELINES FOR HIGHWAY MAINTENANCE YARDS HAS NOW BEEN FINALIZED AND IS NO LONGER CONSIDERED A DRAFT DOCUMENT.

**RECEIPT OF ADDENDA
CMA 4**

In accordance with Section 1.8, Addenda, of the Instructions to Prospective Contractors section, all addenda received by the Prospective Contractors must be acknowledged.

The undersigned as an authorized representative of the Contractor, by signature acknowledges receipt of the Addendum on the date indicated.

Complete and enclose this form in Envelope 1.

ADDENDUM #	ISSUED	RECEIVED	CONTRACTOR'S SIGNATURE
1	March 17, 2003		

A separate form will be issued with each addendum. All forms must be returned in Envelope 1.



TRANSPORTATION

TECHNICAL STANDARDS BRANCH
MAINTENANCE, SPECIFICATIONS & TRAFFIC ENGINEERING

2ND FLOOR, TWIN ATRIA BUILDING
4999 - 98 AVENUE
EDMONTON, AB T6B 2X3



**Think
&Drive**
SAFETY STARTS WITH YOU!

TELEPHONE NO: 780/415-1071
FAX NO: 780/422-2027

OUR FILE: CMA-4, ADDENDUM 2

March 28, 2003

Dear Sir:

Attached is addendum 2 to the Request for Proposals for Highway Maintenance Work in the Hines Creek, Peace River & Manning areas identified as Contract Maintenance Area No. 4.

Please make the necessary revisions to the proposal documents as shown on the attached addendum.

Also attached is a "Receipt of Addenda" form. Please acknowledge receipt of this addendum on the form provided and include this entire package in Envelope 1 of your submission.

If you have any questions on addendum 1 then please call me at the above number.

Yours truly,

Donald Durand
Specifications Technologist

cc: Moh Lali, Acting Executive Director, Program Management Branch
Gordon Zack, Acting Executive Director, Divisional Coordination & Special Projects
John Enleder, Regional Director, Peace Region
Bill Gish, Operations Manager, Peace River
Jim Harvey, Director, Tender Administration, Program Management Branch
Ian Baird, Contract Specification Specialist, Technical Standards Branch

attachment:

ADDENDUM #2
FOR CONTRACT MAINTENANCE AREA 4
REQUEST FOR PROPOSAL
HINES CREEK, PEACE RIVER & MANNING AREAS

Prospective Contractors are advised that the deadline for submission of the above noted Request for Proposal has been extended from 2:01 P.M. on April 3, 2003 to **2:01 P.M. on April 23, 2003**. Please hand change the date on the return labels provided with RFP package.

Additionally, the above noted Request for Proposal is revised in accordance with the following:

1 REVISIONS TO THE 'REQUEST FOR PROPOSAL' SECTION

1.1 SUB-SECTION 4.6.6.4, 'STORAGE OF SODIUM CHLORIDE TREATED SAND', INCLUDED IN ITEM 1.2.4 OF ADDENDUM 1, IS REVISED IN ACCORDANCE WITH THE FOLLOWING:

1.1.1 The first paragraph is replaced with the following:

"The Contractor shall provide Indoor storage structures at all maintenance facility sites for sheltering of sodium chloride treated sand. These structures must be capable of sheltering the total quantity of sand as specified in the Special Provisions."

1.1.2 The third (last) paragraph is replaced with the following:

"Prospective Contractors shall identify in their proposals that all maintenance facility sites will include indoor storage structures capable of sheltering the total quantity of sand as specified in the Special Provisions. Fifteen points will be awarded if the Contractor has demonstrated that sodium chloride treated sand will be acceptably sheltered."

2 REVISION TO THE 'INSTRUCTIONS TO PROSPECTIVE CONTRACTORS' SECTION

2.1 SECTION 1.1, 'DATE AND TIME OF PROPOSAL SUBMISSIONS', IS REVISED IN ACCORDANCE WITH THE FOLLOWING:

2.1.1 The specified submission date of "April 3, 2003" is revised to "*April 23, 2003*".

3 REVISION TO THE SPECIAL PROVISIONS

3.1 SPECIAL PROVISION II., 'STORAGE OF SODIUM CHLORIDE TREATED SAND', INCLUDED IN ITEM 2.4 OF ADDENDUM 1, IS REVISED IN ACCORDANCE WITH THE FOLLOWING:

3.1.1 The second sentence of the first paragraph is replaced with the following:

"Indoor structures shall be designed to accommodate a minimum of 125% of the annual provisional quantity of sand indicated in the Unit Price Schedule for each location."

4 REVISIONS TO THE 'SPECIFICATION AMENDMENTS' SECTION

4.1 IN THE FIRST PARAGRAPH OF SECTION 1.11.1.1 THE TEXT "(to the nearest 3 hour)" SHOULD READ "*(to the nearest 1/4 hour)*".

4.2 IN THE 'OBSERVATION ANGLE' AND 'ENTRANCE ANGLE' COLUMNS OF THE TABLE IN SECTION 1.15.1, "1" SHOULD READ AS "*° (degrees)*"; I.E. "0.2°", "0.5°", "4°" & "30°".

**RECEIPT OF ADDENDA
CMA 4**

In accordance with Section 1.8, Addenda, of the Instructions to Prospective Contractors section, all addenda received by the Prospective Contractors must be acknowledged.

The undersigned as an authorized representative of the Contractor, by signature acknowledges receipt of the Addendum on the date indicated.

Complete and enclose this form in Envelope 1.

ADDENDUM #	ISSUED	RECEIVED	CONTRACTOR'S SIGNATURE
2	March 28, 2003		

A separate form will be issued with each addendum. All forms must be returned in Envelope 1.



TRANSPORTATION

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TELEPHONE NO: 780/415-1071
FAX NO: 780/422-2027

OUR FILE: CMA-4, ADDENDUM 3

April 3, 2003

Dear Sir:

Attached is addendum 3 to the Request for Proposals for Highway Maintenance Work in the Hines Creek, Peace River & Manning areas identified as Contract Maintenance Area No. 4.

Please make the necessary revisions to the proposal documents as shown on the attached addendum. A revised Unit Price Schedule has been issued as part of this addendum. **Please ensure that this revised Unit Price Schedule is included in Envelope 3 of your submission.**

Also attached is a "Receipt of Addenda" form. Please acknowledge receipt of this addendum on the form provided and include this entire package in Envelope 1 of your submission.

If you have any questions on this addendum then please call me at the above number.

Yours truly,

Donald Durand
Specifications Technologist

cc: Moh Lali, Acting Executive Director, Program Management Branch
Gordon Zack, Acting Executive Director, Divisional Coordination & Special Projects
John Enleder, Regional Director, Peace Region
Bill Gish, Operations Manager, Peace River
Jim Harvey, Director, Tender Administration, Program Management Branch
Ian Baird, Contract Specification Specialist, Technical Standards Branch

attachment:

ADDENDUM #3
FOR CONTRACT MAINTENANCE AREA 4
REQUEST FOR PROPOSAL
HINES CREEK, PEACE RIVER & MANNING AREAS

The above noted Request for Proposal is revised in accordance with the following:

1 REVISIONS TO THE SPECIAL PROVISIONS

1.1 SPECIAL PROVISION I., 'SNOW REMOVAL AND ICE CONTROL', IS REVISED IN ACCORDANCE WITH THE FOLLOWING:

1.1.1 All references to "six-way Underbody Plow" are changed to "*four-way Underbody Plow*".

1.1.2 The last paragraph in the subsection titled 'TRUCK EQUIPMENT REQUIREMENTS' is replaced with the following:

"If the Contractor elects to use snow plow trucks with large capacity sanding units (13m³ or larger) to improve efficiency and level of service, he shall enter the number of such trucks and the unit price bid per hour in Bid Item No. 1112 "Large Capacity Sander/ Plow Truck - 13m³ and Larger".

In accordance with Specification 52.1.3.3, "Truck", large capacity Sander/ Plow Trucks shall be properly designed to safely operate under the expected load capacity and shall have a minimum 325 horsepower engine."

2 REVISED UNIT PRICE SCHEDULE

2.1 A NEW UNIT PRICE SCHEDULE HAS BEEN ISSUED FOR CMA 4 WHICH CONTAINS THE FOLLOWING REVISIONS:

2.1.1 The description for Bid Item 1103 has been changed from "Tandem Axle Sander/ Plow Truck - Larger than 8.5 m³" to "*Tandem Axle Sander/ Plow Truck - Larger than 8.5 m³ and less than 13 m³*".

2.1.2 The description for Bid Item 1112 has been changed from "Tridem or Tandem Tandem Axle Sander/ Plow Truck - Larger than 13 m³" to "*Large Capacity Sander/ Plow Truck - 13 m³ and Larger*".

**RECEIPT OF ADDENDA
CMA 4**

In accordance with Section 1.8, Addenda, of the Instructions to Prospective Contractors section, all addenda received by the Prospective Contractors must be acknowledged.

The undersigned as an authorized representative of the Contractor, by signature acknowledges receipt of the Addendum on the date indicated.

Complete and enclose this form in Envelope 1.

ADDENDUM #	ISSUED	RECEIVED	CONTRACTOR'S SIGNATURE
3	April 3, 2003		

A separate form will be issued with each addendum. All forms must be returned in Envelope 1.