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TOOLS & TEMPLATES 1. ROAD MAINTENANCE AGREEMENT



Road Maintenance Agreement

The hauler wishes to haul goods and materials over certain public roads within the municipality;

The council of the municipality requires the hauler to enter into a Road Maintenance Agreement pursuant to Section 22 of *The Municipalities Act*.

The agreement is made pursuant to and subject to the provisions of *The Municipalities Act* and its regulations.

The Parties Agree as Follows:

- 1. The municipality shall:
 - 1.1. Permit the hauler to use the haul roads subject to the terms of this agreement;
 - 1.2. Administer this Agreement by providing up to date information that would be subject to review by the parties;
 - 1.3. Ensure that the information identified by the parties as confidential is held in strict confidence subject to *The Local Authority Freedom of Information and Protection of Privacy Act*;
 - 1.4. Ensure that municipal roads are in a reasonable state of repair;
- 2. The hauler shall:
 - 2.1. Only haul the following goods and materials ONLY:

crushed gravel or gravel aggregate



Detail of Material Being Hauled

2.2. On or over the following MUNICIPAL ROADS: (Municipal roads are roads constructed to graded and drained standards).

ONLY THE DESIGNATED HAUL ROADS

2.3. Travel at a speed not greater than 60 km/hr when loaded

- 2.4. If the municipality is responsible for the maintenance of the haul roads,
 - 2.4.1. The hauler shall before commencing an on-going haul, estimate the total quantify of good and materials to be hauled on the haul roads and pay to the municipality **as compensation for road maintenance** to the haul roads a sum equal to the estimated total quantity times a rate of:

Description	Summer Months		Winter Months	
Maintaining and	3.83¢ per m3/km	4.722¢ per	1.915¢ per m3/km	2.36¢ per yd3/mile
Restoring		yd3/mile		
Municipal Roads				
Shortening	3.27¢ per m3/km	4.031¢ per	1.635¢ per m3/km	2.015¢ per
Lifespan caused by		yd3/mile		yd3/mile
hauls				
TOTAL	7.10¢ per m3/km	8.753¢ per	3.55¢ per m3/km	4.875¢ per
		yd3/mile		yd3/mile

GST ADDITIONAL

- 2.4.2. Pay the compensation in 2.4.1 within 60 days of the completion of the haul, based on verified quantities. For on-going hauls the compensation in 2.4.1 is to be paid quarterly and will be based on verified quantities;
- 2.4.3. Make payment for compensation for repairs of bridges, culverts or other structures within 60 days;
- 2.5. Inspect the roadway every two days to determine if damage has been done and will give the municipality notice of necessary repairs within two days.
- 2.6. Conduct the bulk hauling operation so as to minimize interference with other traffic on the haul road;
- 2.7. Abide by following weight restrictions set out by Saskatchewan Highways and Transportation and the municipalities
- 2.8. Subject to *The Municipalities Act* and regulations, come to an agreement with the municipality to either compensate the municipality for maintenance of the road or maintain and repair the haul roads to a mutually acceptable standard, and to compensate the municipality for capital road loss that results from the haul in either case.
- 3. Any notices or communications required or permitted to be given pursuant to this Agreement shall be in writing and may be delivered to, or sent by prepaid registered or certified mail addressed to:

Municipality	Hauler
RM of	Name:
	Box:
	Town:
	Postal Code:
	Phone:



Truck Make & Model	
Truck License #	
Truck Color	
Trailer Make & Color	

Truck Make & Model	
Truck License #	
Truck Color	
Trailer Make & Color	

Truck Make & Model	
Truck License #	
Truck Color	
Trailer Make & Color	

Truck Make & Model	
Truck License #	
Truck Color	
Trailer Make & Color	

* If there are more, please add to the back of the sheet *

The agreement shall be in effect from _____, 20____ to _____, 20_____, 20_____ and may be extended by the agreement of the parties.

Agreed this ______ day of ______, 20_____.

Rural Municipality of	#
-----------------------	---

THE RURAL MUNUCIPALITY OF _____, # _____

{Seal}

Per: _____

CONTRACTOR

{Seal}

Per: ______



Haul Declaration Road Maintenance Agreement

CANADA PROVINCE OF SASKATCHEWAN TO WIT:)))		
I,, make	of the oath and do sol	emnly decl	ofare:	in the Province of

That during the year 20_____, I hauled the following commodities over municipal roads under a regional road maintenance agreement issued by the RM of ______ #____ and agree that the Mileage Allocation Sheet is filled correctly:

Summer Haul Period:	Winter Haul Period:
Agreement No.:	Agreement No.:
Commodity:	Commodity:
Quantity:	Quantity:

Mileage Allocation Sheet

	# Total Miles	# Total Yards	Fee	Total	GST	Remittance
RM #						
RM #						
RM #						
RM #						

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

Sworn before me at)	
In the Province of)	
This day of, 2)	
)	
A Commissioner of Oaths/Notary Public	,	Contractor/Owner
And for the Province of		
My commission/appointment expires	•	



TOOLS & TEMPLATES 2. ROAD MAINTENANCE AGREEMENT Government of Saskatchewan

RM AGGREGATE RESOURCE MANUAL





USING THE ROAD MAINTENANCE AGREEMENT TEMPLATE

The Ministry of Government Relations has created a draft Road Maintenance Agreement template for municipalities and industry to use cooperatively. The primary intent of a road maintenance agreement is to provide the signing parties with an efficient method by which haulers compensate the municipality for the additional road maintenance and loss of life resulting from their concentrated haul. Road maintenance agreements are to cover only the incremental cost that occurs above regular maintenance costs due to the increased pressures of heavy or frequent hauls.

The objective of this agreement template is to provide a flexible agreement that meets the needs of both parties and can be altered to suit a variety of situations. It clarifies the contractual responsibilities with sections detailing the responsibility of each party to maintain, and to invest in, the roads. On the one hand, the template allows the hauler, in agreement with the municipality, to use their own resources for road maintenance work. The hauler still must pay fees to compensate the municipality for capital road loss. On the other hand, the agreement template may be used if the municipality is responsible for the maintenance of the haul road; this would be under section 1.4 and 1.5, whereas sections 1.6 and 1.7 are used to outline the hauler's obligations if he maintains the roads for the municipality.

The template is subject to *The Municipalities Act* and its regulations and should be completed according to the most current regulations. Other documentation, such as maps, can be attached to the agreement to clarify both parties' expectations of the road maintenance agreement.

By including proposed dates of hauling and a timeframe for renegotiation, the agreement can be tailored to short term or long term hauls. Some sections of the template are better suited for on going or for short term hauls. If the parties agree that sections of the template agreement are not applicable to their individual situation, they can be removed.

At the 2010 Saskatchewan Association of Rural Municipalities (SARM) Annual Convention the membership passed a resolution requesting government investigate the possibility of RMs requiring a performance bond from haulers subsequent to entering into road maintenance agreements. Municipalities have the authority to request a performance bond from haulers, if it is negotiated and included in the road maintenance agreement. This requirement can be found in section 1.7.7 of the template. If this requirement is not applicable to the agreement, the clause can be removed.

This template agreement reflects the 2010 amendments giving the Saskatchewan Municipal Board the authority and responsibility of resolving disputes related to road maintenance agreements as per section 22.1 of *The Municipalities Act* and section 15 of *The Municipalities Regulations*.



ROAD MAINTENANCE AGREEMENT

Agreement No. _____

THIS AGREEMENT is made in duplicate;

BETWEEN:

The (*Name of Municipality*) ______(hereinafter called the "municipality")

- and -

(hereinafter called the "hauler")

Note: "hauler" means a person described in clause 22(1)(b) of *The Municipalities Act* who is required to enter into an agreement with a municipality pursuant to that section. Typically, a hauler may be a shipper, hauler or receiver.

WHEREAS:

The hauler wishes to ship, haul or receive certain goods, equipment or materials over certain public roads within the municipality, the movement of which in the council's opinion is likely to result in damage.

The council of the municipality requires the hauler to enter into a Road Maintenance Agreement pursuant to Section 22 of *The Municipalities Act*.

The agreement is made pursuant to and subject to the provisions of *The Municipalities Act* and its regulations.

THE PARTIES AGREE AS FOLLOWS:

1 The municipality shall:

- 1.1 permit the hauler to use the haul roads subject to the terms of this agreement;
- 1.2 administer this Agreement by providing up to date information that would be subject to review by the parties;



- 1.3 ensure that the information identified by the parties as confidential is held in strict confidence subject to *The Local Authority Freedom of Information and Protection of Privacy Act*;
- 1.4 ensure that municipal roads are in a reasonable state of repair;
- 1.5 continue to apply for any available Government grants for road upgrading.

1.2 The hauler shall:

1.2.1 only haul the following goods and materials:

within the specified timeframe of _____, 20____ to of _____, 20___:

(a) on or over the following MUNICIPAL ROADS: (Municipal roads are roads constructed to graded and drained standards). (*Attaching a map may assist in clarifying the road(s) described in the agreement.*)

and

(b) on or over the following UNDEVELOPED ROADS: (Undeveloped roads are roads that may not be in a reasonable state of repair and do not meet municipal road standards i.e. prairie trails, bladed trails). (*Attaching a map may assist in clarifying the road(s) described in the agreement.*)

(roads listed in (a) and (b) are herein referred to as the "haul roads;").

1.2.2 comply with the provisions of all applicable federal, provincial or municipal laws with respect to maintaining a clean environment;



- 1.2.3 notify the municipality immediately in the event of any spills and environmental contamination problems on the haul roads or any adjacent lands as a result of the use of the haul road, and the hauler shall be solely responsible for the cost of all work to be carried out to correct such problems caused by the operation;
- 1.2.4 upon expiry or termination of this agreement, leave the haul roads and any adjacent lands free of any environmental contamination resulting from the hauler's operation which may adversely affect the land or result in a breach of the duties described in clause 1.2.2. The responsibility of the hauler and municipality with respect to the environmental obligations contained herein shall continue to be enforceable by the municipality notwithstanding the termination of this agreement;
- 1.2.5 conduct the bulk hauling operation so as to minimize interference with other traffic on the haul road;
- 1.2.6 notify the municipality if any work is being done that will require temporary closure of the road or an interruption of motor vehicle traffic;
- 1.2.7 abide by the following weight restrictions:
- 1.2.8 subject to *The Municipalities Act* and regulations, come to an agreement with the municipality to either compensate the municipality for maintenance of the road or maintain and repair the haul roads to a mutually acceptable standard, and to compensate the municipality for capital road loss that results from the haul in either case.
- 1.3 For the purpose of this agreement ______ (name of municipality or hauler), is responsible for maintaining the haul roads to the standard agreed upon by both parties.

Note: The municipality and hauler shall agree upon which party will be responsible for maintenance of the haul roads. If the municipality is responsible, use sections 1.4 and 1.5. If hauler is responsible, use sections 1.6 and 1.7.

1.4 If the municipality is responsible for maintenance of the haul roads, the municipality shall:

- 1.4.1 expend, or retain in order to expend in the future, all compensation paid by the Parties, on roadway maintenance work on the roads, or portions thereof, that are indicated in 1.2.1 (a) or (b);
- 1.4.2 arrange the Engineering, Tendering and Contracting of roadway maintenance work unless the municipality conducts all of the work itself. All arrangements will be available for review by the parties on request.
- 1.5 If the municipality is responsible for the maintenance of the haul roads, the hauler shall:
 - 1.5.1 before commencing an on-going haul, estimate the total quantity of goods and materials to be hauled on the haul roads and pay to the municipality **as compensation for road maintenance** to the haul roads a sum equal to the estimated total quantity times a rate of ______ (*as set in regulations*), subject to a minimum fee of \$_____ per km;
 - 1.5.2 pay the compensation in 1.5.1 within 60 days of the completion of the haul, based on verified quantities. For on-going hauls the compensation in 1.5.1 is to be paid quarterly and will be based on verified quantities;
 - 1.5.3 make payment for compensation in 1.5.1 at one-half the rate if hauling takes place during the winter haul period, between ______ and _____, (in the absence of an agreed period regulations define the winter period as between November 15th and March 15th) subject to a minimum fee of \$_____ per km;
 - 1.5.4 before commencing an on-going haul, estimate the total quantity of goods and materials to be hauled on the haul roads and pay to the municipality **as compensation for the capital road loss** to the haul roads a sum equal to the estimated total quantity times a rate of ______(*as set in regulations*);
 - 1.5.5 pay the compensation in 1.5.4 within 60 days of the completion of the haul, based on verified quantities. For on-going hauls the compensation in 1.5.4 is to be paid annually and will be based on verified quantities;
 - 1.5.6 make payment for compensation in 1.5.3 at one-half the rate if hauling takes place during the winter haul period, between ______ and _____; (in the absence of an agreed period, regulations define the winter period as between November 15th and March 15th)
 - 1.5.7 make payment for compensation for repairs of bridges, culverts or other structures within 60 days;

1.5.8 pay as compensation for dust control on MUNICIPAL ROADS, a sum equivalent to:

(a) for hauls of 100,000 tonne kilometres and greater, actual costs incurred by the municipality to a maximum of \$0.01 (one cent) per tonne kilometre;

(b) for hauls of less than 100,000 tonne kilometres, actual costs incurred by the municipality to a maximum of \$1,000;

at the following locations:

- 1.5.9 inspect the roadway every _____ days to determine if damage has been done and will give the municipality notice of necessary repairs within _____ days.
- 1.6 If the hauler is responsible for maintenance of the haul roads, the municipality shall:
 - 1.6.1 not charge fees for road maintenance when the hauler is maintaining the haul roads to road maintenance standards pursuant to this agreement, but may still charge for capital road loss for the haul roads;
 - 1.6.2 inspect the roadway every _____ days to determine if damage has been done and will give the hauler notice of necessary repairs within _____ days.
- 1.7 If the hauler is responsible for maintenance of the haul roads, the hauler shall:
 - 1.7.1 ensure the haul roads are maintained in a reasonable state of repair, and permit speeds of a minimum of 65 km per hour, and for further clarity road maintenance standards may be set by agreement of the parties pursuant to this agreement;
 - 1.7.2 upon completion of the haul, repair, gravel and restore the road to the condition in which it existed before the haul or otherwise as may be agreed with the municipality in accordance with Schedule A (attached);
 - 1.7.3 repair bridges, culverts or other structures damaged as a result of the bulk haul within 30 days of written notification of damages or other time agreed to by the parties;
 - 1.7.4 provide for dust control:
 - (a) adjacent to occupied residences or businesses which are within 100 metres of the centerline of the haul road;



- (b) at locations where road dust may be dangerous to public safety; and
- (c) at other locations deemed by the municipality to require dust control.

Locations requiring dust control include but are not limited to:

- 1.7.5 not be charged maintenance fees by the municipality, provided the municipality does not have to provide labour or capital for road maintenance as a result of the haul period;
- 1.7.6 comply with the provisions of 1.5.4, 1.5.5 and 1.5.6 respecting capital road loss to the haul roads.

(Include 1.7.7 if council requires the hauler to purchase a performance bond prior to initiating hauling)

- 1.7.7 provide the municipality with a performance bond, issued by a surety company acceptable to the municipality, obtained with respect to the hauler's obligations pursuant to section 1.7.
- 2. Each party shall agree to the following special provisions (i.e. road conditions, weather, other):

- 3. Each party shall appoint a representative for the purpose of this section.
- 3.1 Each party may avail themselves of the dispute resolution process established in *The Municipalities Act* at any time.
- 3.2 The representatives shall inspect the haul roads together prior to commencement of the haul to establish the condition of the road.
- 3.3 Within 5 days of completion of the haul, the representatives shall again inspect the road for the purpose of determining that the conditions of this agreement respecting restoration of the road have been satisfied and a release shall be issued by the municipality.



- 3.4 In the case of a continuous haul, the representatives shall inspect the road for the purpose of determining that the conditions of this agreement respecting restoration of the road continue to be satisfied. The parties agree on an acceptable frequency for inspection of
- 3.5 If either party is of the opinion that the other party has not complied with any term or terms of this agreement, that party shall give notice in writing to the other party within 30 days of the final inspection completed pursuant to clause 3.3. In the absence of written notice pursuant to this clause, the agreement shall be deemed to be properly completed and no action may be maintained by either party respecting any breach of this agreement.
- 3.6 In the event the parties are unable to resolve any complaint with respect to which notice in writing has been given pursuant to clause 3.5, the matter or matters in dispute shall be submitted to the Saskatchewan Municipal Board in accordance with *The Municipalities Act*, section 22.1 to have the dispute dealt with through the road maintenance dispute resolution process.
- 3.7 In accordance to subsection 15(1) of *The Municipalities Regulations*, each party shall agree to the following dispute resolution process prior to submission of the dispute to the Saskatchewan Municipal Board pursuant to clause 22.1(2)(b) of the Act (i.e. mediation, council appointed committee, other):

4. Any notices or communications required or permitted to be given pursuant to this Agreement shall be in writing and may be delivered to, or sent by prepaid registered or certified mail addressed to:

In the case of a notice or communication to the municipality:

(Name and Address)

In the case of a notice or communication to the hauler:

(Name and Address)

Road Maintenance Agreement For Discussion Purposes Only



or to such other address as either party may notify the other in accordance with this section, and if so delivered shall be deemed to have been given when delivered, and if so mailed shall be deemed to have been given on the fifth business day after the date of mailing except in the case of a mail strike or other disruption of postal service, in which case it shall be deemed to have been given on the third business day after such strike or disruption ceases.

5. The agreement shall be in effect from ______ to _____ and may be extended by the agreement of the parties.

Agreed this ______ day of ______, 20 _____.

For (Name of Municipality)

Reeve/Mayor

Administrator

For (Name of Hauler)

President or Name

Secretary/Treasurer or Witness



SCHEDULE A

HAUL ROAD INSPECTION FORM

R.M. of	No.	Pre / Post Haul Inspection (circle one)
Contract No.		Date:
Contractor:		
R.M. Reps: (print)		
Contractor Reps: (print)		

Sketch of Haul Road:

Show Significant Points (km) referred to in Descriptions including major culverts and bridges. Show farmyards, villages, pastures, intersections, etc. where dust control may be required. Note other special conditions.

 Dust Control:
 Not Required:
 Type:

 Road Bans:
 No:
 Yes:
 %

 Axle:

 Current Local Conditions (i.e. Wet/Frozen):

Description of Road: (Note: $1 \text{ yard}^3 / \text{mile} = 0.475 \text{ m}^3 / \text{km}$) & $(1.0 \text{ m}^3 / \text{km} = 2.1 \text{ yard}^3 / \text{mile})$

From km	To km	Type Grid, Farm Access, Trail, etc.	Approx. Gravel Coverage yd ³ /mile or m ³ /km	Were CL Profile or X-Sec's Done?	Photo No.	Comments (if required, use additional sheets)

Road Maintenance Agreement
For Discussion Purposes Only



Revise to suit the situation



Description of Cross Section:

From km	To km	Gradeline Hi / Med / Low / Nil	Crown ~ % X-Slope	Ride Smooth, Rough, etc.	Conditions /Comments

Drainage Structures:

km	Approx.	Culvert	General	Photo	Associated Drainage, Other Comments
	Cover	Size & Type	Condition	110.	

Pre-Haul Preparations: Note any dust control, special gravel or grading, etc. that may be required

From km	To km	Treatment	Comments (Reason for Treatment)

Post-Haul Remedial Work: Note any Restoration of Road Required

From km	To km	Type of Work	Comments

Road Maintenance Agreement For Discussion Purposes Only



Follow-Up To Remedial Work (R.M. Approval & Clearance)

Pre-Haul Inspectio	n	Post-Haul Inspection	on
R.M. Rep. Signature	Date:	R.M. Rep. Signature	Date:
R.M. Rep. Signature	Date:	R.M. Rep. Signature	Date:
Contractor Rep. Signature	Date:	Contractor Rep. Signature	Date:
Additional Signature	Date:	Additional Signature	Date:



TOOLS & TEMPLATES 3. GRAVEL TENDER TEMPLATE



Logo/Image of RM

RURAL MUNICIPALITY OF [INSERT NAME] [Year] Gravel Supply

Tender #

Tender Release: [Date] Tender Closing: [Time], [Date]

Contact

Name Position Phone Number E-mail



1. Instruction to Bidders

1.1 Scope

The work shall consist of supply and stockpiling of gravel as per the specification and as per the location identified in this Tender. Gravel supply will be paid on a tonnage basis and shall include stripping of overburden at the pit, gravel screening and crushing, stockpiling, loading and hauling to the R.M. from the contractor's source pit.

1.2 Submission

Sealed Bids marked Tender # - [Date] Gravel Supply will be received until [time], [date] at the office of the Rural Municipality of [name of RM] at [location of office]. Tenders will be opened publicly immediately thereafter in the Council Chambers.

Bids shall be submitted on the separate Bid Form as provided complete with the bidder's legal status and business address shall be disclosed. The Bidder shall provide a price for each item of Work identified in Section II Bid Form; the work shall be measured and paid for on a unit price basis. The unit prices shall exclude the Goods and Services Tax, which shall be an extra where applicable in the total bid price. **The Owner reserves the right to reduce the said approximate quantities up to 20%.** The Bid Form shall be signed by a duly authorized official and in the case of a corporation shall be sealed with the corporate seal.

A bid bond or certified cheque in the amount of 10% of the total bid price shall accompany each bid. Include with the bid form a letter from a Surety agreeing to provide the required bonds. Late submissions or faxed bids will not be accepted, all bids will be opened publically immediately after the Tender closing time.

1.3 Inquiries

All inquiries prior to closing of bids are to be directed to: [Name of Contact] [Contact's Position] [Phone Number] [E-mail]

1.4 Examination

Potential Bidders shall familiarize themselves with the extent of the work expected, make themselves thoroughly acquainted with the requirements of the tender and obtain all information that may be necessary for the preparation of their bid and proper performance of the Contract.

1.5 Discrepancies & Omissions

Prospective bidders finding discrepancies in, or omissions from the tender documents, or having any doubt as to the meaning or intent of any part thereof, should at once notify the Manager of Public Works, who will send written instructions or explanations.



1.6 Addenda

Addenda, bulletins or corrections issued during the time of Tender Bid call will be done by fax and shall be included in the Tender submission and shall become part of the Contract.

1.7 Subcontracting

Bidders who propose to subcontract any portion of the Work shall list any Sub-Contractors they propose to engage, with the description of the sub-contracted work. Where a Sub-Contractor(s) is not identified, it will be interpreted that the Bidder proposes to execute that class of Work with the Bidder's own forces.

1.8 Qualifications

Each Bidder shall be prepared to submit the following information, on request of the R.M.:

- 1. Proof that he/she is incorporated or authorized to do business in Saskatchewan.
- 2. Proof of a valid Business License or Business Tax with the RM of [NAME].
- 3. Proof that he/she is financially capable of carrying out the terms of the Contract.
- 4. Proof that he/she has successfully carried out Work, similar in nature, scope and value, or is fully capable of performing the Work required to be done in accordance with the terms of this Contract.
- 5. Proof that his/her Sub-contractors (if applicable) have successfully carried out Work, similar in nature, scope or value, or is fully capable of performing the Work required to be done in accordance with the terms of this Contract.
- 6. Proof that Workers Compensation covers all persons who will be undertaking the Work or any portion thereof.
- 7. Proof of Insurance for no less than the amount of \$2,000,000.00.
- 8. Such other pertinent data as may be required by the Contract Administrator. Bidders shall provide, on request of the Contract Administrator, full access to any of the Bidder's facilities to evaluate the Bidder's ability to perform the Work. The Bidder shall complete the Qualification Form, giving a list of previously completed work, similar in nature, scope and value, insufficient detail to demonstrate his qualifications to undertake this Work.

1.9 Measurement & Payment

The units to be measured and paid for shall be as identified on the Bid Form. Those quantities listed on Section II Bid Form are to be considered approximate only and are based upon a cubic yard of gravel weighing XXXX lbs. (XXX kg). The R.M. will use the said quantities for the purpose of comparing bids. a) The method of measurement for supplying gravel will be the actual metric tonnes as weighed over a scale prior to hauling and spreading. The total cost for spreading will be calculated as the actual tonnage X (times) the numbers of miles of gravel spread in each division X (times) the unit price. b) Payment for supplying gravel shall include all labour, materials and equipment to stockpile the gravel as per the specifications along with all costs for quality control. The unit price for spreading shall include all labour, materials and equipment to haul gravel from the contractors stockpile in the pit and spread on the identified roadway at the rate as indicated and/or staked and shall include all costs to load, haul, spread each individual truckload of gravel and then return to the contractors stockpile in the pit. c) The



contractor is to supply a scale for measuring the tonnage of each truck which is to haul and spread gravel to the R.M. The scale shall be certified prior to hauling and spreading operations and all trucks shall have the tare weight taken prior to hauling and spreading. The Truck drivers shall provide one copy of the tickets to the R.M. Manager of Roads daily at the end of the day. The Manager will stake out the gravel spread on the roads prior to the hauling and spreading, the contractor must provide 48 hour notice prior to commencing hauling and spreading operations. d) At the end of the month the contractor shall provide an itemized invoice to the RM showing the road name (roads are listed as township or range roads), mile number (as shown on the maps) and tonnage hauled. Payment will only be made for the gravel after it has been hauled and spread on the RM roads. The RM will make monthly payments for gravel crushed and in the stockpile at the pit (maximum 75% of total quantity) provided that all tests meet the specifications.

1.10 Insurance

The Contractor shall, at no cost to the Municipality, adequately insure all vehicles used and required to perform the work. Evidence of coverage must be provided to the Municipality prior to commencing work. The Contractor is required to obtain Comprehensive General Public Liability coverage with limits not less than \$2,000,000.00 per occurrence or incident.

Prior to the Contractor beginning work for the Municipality, a Certificate of Insurance must be provided to the Municipality. Prior to the termination of such coverage, the insurer must notify the Municipality of the date of termination. Upon renewal of the policy, the insurer will provide an updated Certificate to the Municipality.

1.11 Damage Claims

The [Contact Position] or his designate will investigate all claims for damage. The decision of the Owner's representative as to whether damage was foreseeable or unforeseeable shall be final and binding upon the Contractor. Where damage is caused to private property, the contractor shall promptly supply the RM of [NAME] specific information as to dates, time, location, type of equipment and other related information as requested by the Municipality, to assist in determining responsibility.

1.12 Overtime & Holidays

The normal working days in this contract shall be Monday to Friday from 6AM to 6PM; however the Contractor may be asked or required to perform extended shifts and to possibly perform work on weekends. The Contractor shall not be entitled to overtime rates in either case. The Contractor will not receive any other rate other than the unit price as listed on the Bid Form. Any overtime premium paid to the employee(s) of the Contractor is the sole responsibility of the Contractor. Notwithstanding that the Contractor may be required by law to pay an overtime premium to his/her employees.

1.13 Safety Requirements

The Contractor shall maintain all equipment in good working order and shall perform all obligations expressed and implied in this Contract, in a good, safe and workmanlike manner. All work shall be carried out in accordance with the safety requirements set forth in the latest version of the Occupational Health and Safety Act. The Contractor shall provide proof of Worker's Compensation



coverage within seven (7) calendar days from the date of award of contract, and prior to commencement of said contract.

1.14 Utilities

If required; it is the Contractor's responsibility to understand any implications for overhead utility lines or cables may represent and any additional cost due to any damage imposed on these utilities shall be borne entirely by the Contractor.



2. Bid Form		
BIDDER:		
ADDRESS:		
City	Prov.	Postal Code:

Having examined the Bid Documents an Addenda No. _____ to No. _____ inclusive, all as issues by the RM of [INSERT NAME] (RM), and having visited the place of work, we hereby offer to enter into a Contract to perform the Work required by the Bid Documents for the unit prices (in Canadian Funds exclusive of GST) as stated below;

2.1 Gravel Supply

Includes all work in the pit to meet the gravel specification (mobilization, stripping, loading, screening, crushing, stockpiling, lease, royalties, etc.).

Total Gravel Supply	Unit Price	Extension
45,600 (metric tonnes)		

2.2 Hauling and Spreading

Includes hauling to the RM and spreading within each division only.

Division	Tonnage (MT)	Miles	Unit Price	Extension
1				
2				
3				
4				
5				
6				
Yard				
Total	[SUM]	[SUM]	Sub-total	
		•	TOTAL (excluding GST)	[Total Sum]

2.3 Sub-Contractors

We propose to use the following Sub-Contractors:

Subcontractor #1

Description of Work



Subcontractor			
Contact	Name:	Number	
	Name		-
Subcontractor #2			
Description of Work			
Subcontractor			
Contact	Name:	Number:	
Subcontractor #3			_
Description of Work			
Subcontractor			
Contact		Numbor	
			-

2.4 Equipment

We propose to use the following equipment on this Tender:

Equipment	Year/Make/Model



2.5 Qualifications

Here is a list of previous similar projects we worked on:

Example #1		
Year		
Description of Contract		
For Whom Work Was Performed Contact		
Value	Name:	Number:
Example #2 Year		
Description of Contract		
For Whom Work Was Performed Contact		
Value	Name:	Number:



2.6 Declarations

We hereby declare that:

- 1. We agree to commence the work as directed by the RM and will complete the hauling and spreading by [DUE DATE].
- 2. We agree that quantities shown on the Bid Form are estimates only; payment for work completed will be made for the actual quantities measured in the field by the RM.
- 3. No person, firm, or corporation other than the undersigned has any interest in this Bid for in the proposed Contract for which this Bid is made;
- 4. This Bid is open to acceptance for a period of 30 days from the date of the Bid and/or Tender closing date.

Signatures

Signed and Submitted on behalf of:

Name of Bidder	
Signature	(apply seal above)
Name of Person Signing	Name of Witness
Title of Person Signing	Signature of Witness
Date	Title of Witness

1. General

1.1. Scope

1.1.1. The work shall consist of the crushing, stockpiling and spreading of traffic gravel materials to the tonnage per mile as staked or as designated by the Engineer.

2. Products

- 2.1. Gradation
 - 2.1.1. When tested according to A.S.T.M. Designation C136-06, Method of Test for Sieve Analysis, the material shall meet one of the following gradation requirements as specified by the Engineer:

Sieve	Percent Passing by Weight
Size	
19.0 mm	100.0
12.5 mm	75 – 90
4.75 mm	45 – 70
425 um	10 – 35



75 mm	8 – 15
Fractured Face	65% (minimum)
Plasticity Index	4 – 12

2.1.2. The percentage passing the designated sieve sizes for any representative sample, when plotted on a semi-log grading chart, shall show a free flowing concave curve without sharp brakes, within the limits specified above. A tolerance of 3% will be permitted providing 100% of the oversize passes the next highest sieve.

2.2. Aggregate

- 2.2.1. The aggregate shall consist of hard, durable particles free from injurious quantities of soft or flaky particles, topsoil, loam or organic matter, or other deleterious material.
- 2.2.2. Granular material retained on the 4.75 mm sieve shall have a minimum average of thirty-five percent (35%) of the aggregate with at least one fractured face (A.S.T.M. D 5821).

2.3. Clay Binder

2.3.1. Shall consist of fine particles of sand, silt and clay containing no particles larger than will pass a 25 mm square opening screen, and shall be free from injurious amounts of organic matter or other deleterious material.

2.4. Testing

2.4.1. The contractor shall be responsible for ensuring the traffic gravel meets the required specifications during crushing operations, the R.M. will be allowed access to the stockpile to gather samples for compliance tests.
Minimum Tests required;
Sieve analysis - 1 for every 6,000 metric tonnes
P.I. -2

3. Execution

- 3.1. Construction
 - 3.1.1. Scales for weighing truckloads of gravel shall be of a platform type sensitive to a weight of 20 lbs. Proof of calibration of the scale shall be provided to the RM prior to hauling the gravel.
 - 3.1.2. Traffic Gravel is to be supplied, delivered and spread by the Contractor utilizing belly dump or clam shell trailers as per the tonnage identified on the gravel map or as staked out by the Engineer and/or Foreman.
 - 3.1.3. One triaxle load of gravel typically will weigh 29-31 tonnes and thus will be spread in a 1/4 mile (400m) stretch as follows; 250MT/mile 8 loads/mile (2 loads wide) 125MT/mile 4 loads/mile (1 down centre of road) If tandem axle trailers are used the Contractor shall inform the Engineer or Foreman so that each load will be staked in 1/5 mile (320m).

4. Measurement & Payment

- 4.1. Measurement Traffic gravel material will be measured in metric tonnes supplied and placed. Each truckload of traffic gravel incorporated into the work must be weighed over a scale and tickets must be given on site to the Engineer daily.
- 4.2. Payment Traffic gravel will be paid for at the unit price per tonne of material spread.



TOOLS & TEMPLATES 4. GRAVEL CRUSHING TENDER TEMPLATE



Logo/Image of RM

RURAL MUNICIPALITY OF [INSERT NAME] [Year] Gravel Crushing & Stockpiling Tender

Tender Release: [Date] Tender Closing: [Time], [Date]

Contact

Name Position Phone Number E-mail



1. Instruction to Bidders

1.1 Scope

The RM of [NAME] is requesting bids from interested parties wishing to custom crush various grades of gravel and stockpile the material in the [name of pit] located at [location of pit]. The main entrance to the pit is [location of main entrance].

The Scope of Work is to crush a minimum of ______ tonnes of _____ gravel in size, to ______. Standard]_____. This initial amount is required by ______. Note that a Penalty may apply if the target is not met. The RM **may** also require approximately ______. Note that a Penalty may apply if run. The successful Bidder shall be responsible for providing equipment and labour.

1.2 Submission

Sealed Bids marked Tender # - [Date] Gravel Crushing will be received until [time], [date] at the office of the Rural Municipality of [name of RM] at [location of office]. Tenders will be opened publicly immediately thereafter in the Council Chambers.

Bids shall be submitted on the separate Bid Form as provided complete with the bidder's legal status and business address shall be disclosed. The Bidder shall provide a price for each item of Work identified in Section II Bid Form; the work shall be measured and paid for on a unit price basis. The unit prices shall exclude the Goods and Services Tax, which shall be an extra where applicable in the total bid price. **The Owner reserves the right to reduce the said approximate quantities up to 20%.** The Bid Form shall be signed by a duly authorized official and in the case of a corporation shall be sealed with the corporate seal.

A bid bond or certified cheque in the amount of 10% of the total bid price shall accompany each bid. Include with the bid form a letter from a Surety agreeing to provide the required bonds. Late submissions or faxed bids will not be accepted, all bids will be opened publically immediately after the Tender closing time.

1.3 Inquiries

All inquiries prior to closing of bids are to be directed to: [Name of Contact] [Contact's Position] [Phone Number] [E-mail]

1.4 Tender Bids

Bids shall be at a flat rate per tonne of the specified amount of ______ gravel with an optional bid for various other types of crushed material requested, also at a flat rate per tonne. All applicable GST shall be written down separately.



1.5 Limitation of Damages

The Bidder waives any claim for loss of profits, overhead expense, liabilities, costs, expenses, loss or damage incurred, sustained or suffered by themselves prior or subsequent to or by reason of the acceptance or the non-acceptance by the RM of any tender bid or by reason of any delay in the acceptance of a quotation, or matters in respect of the competitive process, except as provided in the tender bid.

1.6 Errors & Omissions

It is understood, acknowledged and agreed that while this Request for Tender includes specific requirements and specifications, and while the RM has used considerable efforts to ensure an accurate representation of information in this request, the information is not guaranteed by the RM to be accurate, nor necessarily comprehensive or exhaustive. Nothing in the request is intended to relieve the Bidders from forming their own opinions and conclusions with respect to the matters addressed in the Request for Tender. There will be no consideration of any claim, after submission of Tender, that there is a misunderstanding with respect to the conditions imposed by the contract.

1.7 Indemnification

The successful Bidder will, at all times, indemnify and save harmless the RM, their officers, employees and agents from and against all claims, demands, losses, costs, damages, action, suit or other proceedings made, sustained, brought or prosecuted that are based upon, or caused in any way by anything done or omitted to be done by the Bidder or any of its officers, directors, employees, or agents in connection with the services performed, purportedly performed or required to be performed by the Bidder under this Request for Tender and subsequent agreement.

1.8 Award

The RM reserves the right to accept or reject any or all tender(s), to negotiate with the Successful Bidder(s), split the award or to waive irregularities and omissions, if in so doing the best interests of the RM will be served. No liability shall accrue to the RM for its decision in this regard. Any bid or any part of any bid will not necessarily be accepted. The lowest bid does not necessarily constitute an award. The RM is not obligated to award a contract to any Bidder pursuant to this Request for Tender.

1.9 Laws & Regulations

The Successful Bidder shall comply with the relevant federal, provincial and municipal statues, regulations and by-laws pertaining to the work and its performance. The Successful Bidder shall be responsible for ensuring similar compliance by its suppliers and sub-contractors (if applicable). The contract shall be governed by and interpreted in accordance with the laws of the Province of Saskatchewan.



1.10 Workplace Safety

Within 48 hours of Council approval and prior to signing the contract the Successful Bidder shall provide the RM with a copy of a Letter of Good Standing from WCB. It is the responsibility of the Successful Bidder to maintain good standing throughout the duration of the Project.

1.11 Sub-Contractors

The Contractor shall not assign or sub—let the Contract or any part thereof or any benefit of interest therein or there under, without the prior written consent of the RM. The Contractor shall be held as fully responsible to the RM for the acts and omission of its sub-contractors and of persons directly or indirectly employed by it as for the acts and omissions of persons directly employed by it.

1.12 Tender Deposit

A bid deposit shall be in the form of a bid bond, certified cheque, bank draft, money order, or irrevocable letter of credit, made payable to the RM of [NAME], in the amount of ______ based on 10% of the initial awarded contract.

1.13 Schedule of Items and Prices

Prices shall be submitted in Canadian funds with the Goods and Services Tax if applicable, shown separately. Product delivery shall be FOB destination.


2. Bid Form

l / We, ____

Propose and agree to perform the following work for the RM of [NAME] and to comply with the Contract Administrators (Manager of Public Works or designate), wishes throughout.

1. For the crushing of a minimum ______ tonnes of _____ gravel to be completed by ______.

At a flat rate of \$_____ per tonne plus GST.

2. Please provide a price on crushing an additional ______ tonne of ______ gravel if required.

At a flat rate of ______ per tonne plus GST.

3. The RM may require approximately ______ tonne of ______ crusher run.

At a flat rate of ______ per tonne plus GST.

- 4. Within 48 hours of Council approval and prior to signing the contract the Successful Bidder shall provide the RM with a copy of a Letter of Good Standing from WCB. It is the responsibility of the Successful Bidder to maintain good standing throughout the duration of the Project.
- 5. This contract will be completed by ____
- 6. All personnel, on site employees and contractors must have surface miner modules training.
- 7. The Contractor shall be responsible for the following:
 - a. All costs incurred for achieving 3 satisfactory gradient gravel tests meeting standards as defined by the municipality. The municipality will be responsible for all additional tests at their discretion.
 - b. The first 3 gravel tests shall be taken during the early stages of crushing, approximately in the first ______ tonne of gravel at intervals of ______ tonnes.
 - c. Gravel samples for testing shall be obtained by the Contractor in the presence of the Contract Administrator. If a failed gravel test is received, the contractor shall cease crushing immediately and make corrections. After corrections are made a new test will be taken, and I, in the opinion of the Contract Administrator or his designate, the crushed gravel appears to meet specifications, he may allow the contractor to continue crushing.
 - d. The contractor will be responsible for the cost of the failed and any subsequent gravel tests. Failure to meet this standard may render this contract void. **Payment will not be made on substandard material.**
- 8. It is highly recommended that the contractor use a conveyor scale to assist in proper calculation for quantity verification and that the Contract Administrator is on site when scale is set to zero at the start of crushing operation.
- 9. Crushing could be required on short notice in the busy season. If the contractor has not moved into the pit to commence crushing after a week's notice or an agreed time between the contractor and the contract administrator or his designate, a penalty of \$1,000 per day will apply.



- 10. Please include in your tender "Terms of Payment Required".
- 11. Final tabulation of tonnes crushed will be determined by RM scale weight.
- 12. The lowest or any tender will not necessarily be accepted.

I/we		have read and agree
to the above terms and conditions.		
Signature:	Date:	
Address:	Phone #:	
	_	
Return to:		
[Name of Contact] [Contact's Position] [Phone Number] [E-mail]		



TOOLS & TEMPLATES 5. GRAVEL HAULING TENDER TEMPLATE



Logo/Image of RM

RURAL MUNICIPALITY OF [INSERT NAME] [Year] Gravel Hauling

Tender #

Tender Release: [Date] Tender Closing: [Time], [Date]

Contact

Name Position Phone Number E-mail



1. Instruction to Bidders

1.1 Scope

The work to be done under this Contract shall consist of the hauling of aggregate materials from the pit located [location of pit] and the pit [location of pit]. The materials will be deposited on municipal roads. All material shall be hauled with a minimum of ______ trailers. The work is to be done between [DATE] and [DATE]. The hauling will be continuous until completed, with the exception of inclement weather.

1.2 Submission

Sealed Bids marked Tender # - [Date] Gravel Hauling & Loading will be received until [time], [date] at the office of the Rural Municipality of [name of RM] at [location of office]. Tenders will be opened publicly immediately thereafter in the Council Chambers.

Bids shall be submitted on the separate Bid Form as provided complete with the bidder's legal status and business address shall be disclosed. The Bidder shall provide a price for each item of Work identified in Section II Bid Form; the work shall be measured and paid for on a unit price basis. The unit prices shall exclude the Goods and Services Tax, which shall be an extra where applicable in the total bid price. **The Owner reserves the right to reduce the said approximate quantities up to 20%.** The Bid Form shall be signed by a duly authorized official and in the case of a corporation shall be sealed with the corporate seal.

A bid bond or certified cheque in the amount of 10% of the total bid price shall accompany each bid. Include with the bid form a letter from a Surety agreeing to provide the required bonds. Late submissions or faxed bids will not be accepted, all bids will be opened publically immediately after the Tender closing time.

1.3 Inquiries

All inquiries prior to closing of bids are to be directed to: [Name of Contact] [Contact's Position] [Phone Number] [E-mail]

1.4 Information to be Included with Tender

The bidder shall submit with its tender, on the prescribed forms attached hereto and forming part of the Tender Form, the following information:

- **a. Qualifications:** The Bidder shall give a list of previous or current work, similar in nature, scope and value to demonstrate ability and experience to perform this work.
- **b. Sub-Contractors:** Bidders who propose to subcontract any portion of the Work shall list any Sub-Contractors they propose to engage with the description of the sub-contracted work. Where a Sub-Contractor(s) is not identified, it will be interpreted that the Bidder proposes to execute that class of Work with the Bidder's own forces.



c. Equipment and Staffing Schedule: The Bidder shall specify the type and quantity of equipment in first class working condition that the Bidder proposes to employ for hauling and stockpiling. The Bidder shall specify any similar equipment in first class working condition that the Bidder is prepared to employ "in Reserve" if directed by the Manager of Public Works.

1.5 Discrepancies & Omissions

Prospective bidders finding discrepancies in, or omissions from the tender documents, or having any doubt as to the meaning or intent of any part thereof, should at once notify the Manager of Public Works, who will send written instructions or explanations.

1.6 Addenda

Addenda, bulletins or corrections issued during the time of Tender Bid call will be done by fax and shall be included in the Tender submission and shall become part of the Contract.

1.7 Tender Close, Withdrawal & Opening

The tendering period shall end at [TIME], [DATE] or at an extended time and date specified in a written notice.

A bigger shall be permitted to withdraw their tender unopened after it has been deposited if such request is received in writing by the Owner prior to the time specified for opening tenders.

Tenders shall be opened and recorded publicly at the time of close. Bidders are welcome to attend the next regular council meeting at which the contract will be recorded.

1.8 Tender Evaluation

No contract shall be awarded to any Bidder who, in the judgement of the Owner, is not a responsible Bidder or does not have all the necessary experience, capital, organization and equipment to perform the work in strict accordance with the terms and provisions of the contract. The Owner reserves the right to evaluate tenders on the basis of criteria of its own choice, in its sole discretion, whether previously disclosed to bidders or not, provided only that the reasons for selection of a tender shall not be frivolous, irrelevant or malicious. In evaluation of tenders the owner may, but is not obligated to, consider previous or on-going disputes from other contracts, with a bidder.

1.9 Acceptance of Tenders

The Owner reserves the right to reject any or all tenders, to waive irregularities and informalities at his discretion and to accept the tender which the Owner deems to be in its best interest. The lowest tender will not necessarily be accepted. The Bidder agrees that his tender is to continue open to acceptance and irrevocable for thirty (30) days of the date of the tender closing, accept this tender, whether any other tender has been accepted or not. The Owner reserves the right to negotiate at the time of acceptance, with the lowest bidder only, for a lower tender price, or for the removal from the tender of qualifying conditions, or both. No action of the Owner than a written "Notice of Acceptance" shall constitute an acceptance of a tender.



1.10 Basis of Tender

Prices tendered shall be gross prices including, but not limited to, all applicable duty, fuel, freight, cartage, Federal and Provincial Taxes, and all other items incidental to completing this contract except Goods and Services Tax (GST) which shall be extra where applicable, and charges governmental or otherwise paid and including profit and all compensation which shall be due to the Bidder for supplying labour and materials not only for the classification expressly specified but for those which have been omitted and all details necessarily connected with the Work and all risks and contingencies connected therewith.

If a discrepancy is found between the unit price and an amount, the unit price shall be considered as representing the intention of the bidder, and the Owner will recalculate the amount. The addition of the amounts will be corrected and a corrected tender amount and contract price will be established.

If a discrepancy is found between the sum of the corrected amounts and the tender price shown, the sum of the amounts, as corrected shall be deemed to represent the intent of the bidder.

1.11 Price & Payment

The Bidder shall provide a price for each item of Work identified in Section 2 Bidder Forms. The work shall be measured and paid for on a unit price basis. The units to be measured and paid for shall be as identified on Section 2 Bidder Form. The quantities listed on Section 2 Bidder Form are to be considered approximate only. The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor. The unit price shall exclude the Goods and Services Tax, which shall be an extra where applicable in the unit priced.

Any work required that does not have a unit price will be considered an extra. All extra work is to be agreed upon and understood in writing before the said extra work commences. The price for any extra work shall also be understood in writing prior to the commencement of said work.



2. Bid Form		
BIDDER:		
ADDRESS:		
City	Prov.	Postal Code:

Having examined the Bid Documents an Addenda No. _____ to No. _____ inclusive, all as issues by the RM of [INSERT NAME] (RM), and having visited the place of work, we hereby offer to enter into a Contract to perform the Work required by the Bid Documents for the unit prices (in Canadian Funds exclusive of GST) as stated below;

2.1 Prices for Hauling, Loading & Delivery of Aggregate

Area	Approximate No. of Units	Unit Price	Extension
[Area]	[yard miles] / [kg km]		
Sub-Total			
GST %			
TOTAL BID PRICE			

I / We, _____

the undersigned, (having examined the invitation and instructions to Bidders and the definitions, conditions and specifications for performance of the Works for Tender [DATE]) offer to perform the Works in conformity with the said documents and to enter into an agreement according to the terms and conditions set out within this tender package, in consideration of the sum arrived at as may be ascertained in accordance with said documents.

Seal or Witness

Bidders (Print)

Date

Bidders (Signature)

Address: ______

Phone/Fax Numbers: ______



2.2 Bidder Qualifications Statement of Experience in Similar Work

Example #1		
Year		
Description of Contract		
For Whom Work Was Performed Contact		
Value	Name:	Number:
Example #2		
Year		
Description of Contract		
For Whom Work Was Performed Contact		
Value	Name:	Number:
value		



2.3 Sub-Contractors

We propose to use the following Sub-Contractors:

Subcontractor #1			
Description of Work			
Subcontractor			
Contact	Name:	Number:	-
Subcontractor #2			
Description of Work			
Subcontractor			
Contact	Name:	Number:	-
Subcontractor #3			
Description of Work			
Subcontractor			
Contact	Name:	Number:	_



2.4 Equipment

Specify each truck type available for hauling and each type and size of loader available for loading:

Equipment for Hauling & Loading

2.5 Definitions, Conditions & Specifications

- 1) Wherever the term "Owner" or "R.M" is used throughout these specifications, it shall be defined as the "Rural Municipality of [NAME]".
- 2) The payment for load size shall be as measured by the Owner. The Owner reserves the right to request vehicles to proceed to a scale, and the Contractor will receive the applicable mile rate.
- 3) The contractor shall provide a minimum of 6 belly dumps on any day. The Owner shall notify the Contractor at the end of the business day what is required for the following day.
- 4) Payment is only made for actual hauling. If weather prohibits work from being started, or completed on any day, no extra payment is made to the contractor for any losses resulting in the loss of work for any day.
- 5) Each trailer will be measured to the trucks capacity by a representative of the Owner and Contractor. The haul capacity will be mutually agreed upon and will become the basis of the payment for each vehicle. If a capacity cannot be agreed upon, the Owner reserves the right to determine the haul capacity or terminate the contract. Haul distance shall be the shortest route from the pit to the worksite as agreed upon the Owner and Contractor.
- 6) The Contractor shall provide a loader and operator, included in the Bid. All costs associated with the loader operation, including, but not limited to, fuel, wages, repairs, towing, taxes, etc., are the sole responsibility of the contractor and costs to be included in the Bid item for Hauling.
- 7) The Contractor shall proceed to execute the said work with due diligence to the satisfaction of the Owner who shall have the power and right to inspect all work done or to be done by the Contractor and the Contractor shall not be entitled to any payment under this Agreement except upon confirmation, at the end of each month from the Owner setting forth that the Contractor has properly and in a workmanlike manner completed the required work.



- 8) Work hours will normally be conducted between the hours of 7:00 am to 7:00 pm, Mondays to Fridays.
- 9) The Contractor shall ensure equipment is operated in accordance with applicable laws and regulations under *The Highway Traffic Act* of Saskatchewan and shall be responsible for any damages including overhead utilities.
- 10) The Owner will maintain the pit access road and if needed and at the discretion of the owner, grade the access road a maximum of once per day.
- 11) The Owner is responsible for supply gravel cards in duplicate, and to ensure that these cards are initialed by an authorized Municipal employee every day. Gravel cards not initialed will not be eligible for payment.
- 12) The Contractor will submit gravel cards and invoices for payment at the end of each month. Payment will be made to the contractor within 30 days of the receipt of these invoices and gravel cards.
- 13) A penalty of \$500.00 per day may be imposed by the Municipality for each day that the contractor fails to comply with supplying of request equipment, under the terms described herein.
- 14) Any amount of money deducted due to any failure described within this tender shall be treated as liquidated damages and deducted from the amount payable to the Contractor in this Agreement.
- 15) Nothing in the terms described herein prohibit the Municipality from hauling gravel or other materials with its own equipment.
- 16) This contract can be terminated by Owner on 30 days written notice. The contract shall be subject to cancellation at any time without Notice due to failure on part of the Contractor to perform and observe any of the conditions, covenants or agreements herein.
- 17) This Contract may not be assigned by the Contractor without prior written consent of the Owner.
- 18) The Contractor agrees to indemnify and save harmless the Owner from all claims of every nature and kind which may be made or brought against the Owner by reason of the Contractor carrying out the terms of this contract.
- 19) The Contractor shall comply with all instructions and regulations imposed by the RM or the Province of Saskatchewan in connection with the manner in which the Contractor shall carry out this contract.
- 20) The Contractor shall, at no cost to the Municipality, adequately insure all vehicles and equipment used and required to perform the work. Evidence of coverage must be providing to the Municipality prior to commencing work.
- 21) The Contractor is required to obtain Comprehensive General Public Liability coverage with limits of not less than \$2,000,000.00 per occurrence or incident. The policy must name the Rural Municipality of [NAME] as an additional insured in respect of all matters associated with the contract and will protect the Municipality in respect of any and all claims arising directly or indirectly as a result of the contract. Coverage must include bodily injury, death and property damage, including the loss of use thereof and shall not have a deductible that exceeds \$500.00. Prior to the Contractor beginning work for the Municipality, a Certificate of Insurance must be provided to the municipality. Prior to the termination of such coverage, the insurer must notify the Municipality of the date of termination. Upon renewal of the policy, the insurer will provide an updated Certificate to the Municipality.
- 22) The Contractor shall be registered in good standing with Worker's Compensation Board.

End of Tender Documents.



TOOLS & TEMPLATES 6. GRAVEL CRUSHING AGREEMENT TEMPLATE



Gravel Crushing Agreement

This indenture is made in Duplicate this _____ day of _____, 20____,

BETWEEN

R.M. _____ No. _____

Hereinafter referred to as "the municipality"

AND

[Name of Crusher]

Hereinafter referred to as "the contractor"

Now therefore it is agreed between the parties as follows:

1. The contractor shall crush approximately 30,000 cubic yards of gravel as per tender specifications at the following rates:

Crushing	\$4.00 per cubic yard
Elimination Tailings under 30%	no charge
Elimination Tailings above 30%	0.21 Cents per cubic yard

2. The contractor shall crush approximately 10,000 cubic yards of 1 inch crushed rock at the following rates:

Crushing	\$4.00 per cubic yard
Elimination Tailings	0.21 Cents per cubic yard

3. The contractor shall crush approximately 10,000 cubic yards of 2 inch crushed rock at the following rates:

Crushing	\$4.00 per cubic yard
Elimination Tailings	0.21 Cents per cubic yard

- 4. At the following locations [Outline Pit Coordinates and Pit Name]
- 5. The Municipality retains the right to adjust amount to be crushed if elimination/tailings to produce the specified type of gravel exceeds 50%.
- 6. Stripping and Reclamation will be the responsibility of the municipality
- 7. Mobilization Fees:
Move and set-up\$10,000.00
- 8. All crushed gravel and reject piles will be scaled by [name of firm] and RM will pay associated costs to engineer.



- 9. Traffic gravel shall comply with the requirements of Specification Road Gravel including up to 30% elimination/tailings: (Note that random samples may be taken from the feed belt and/or stock pile and submitted for testing to confirm compliance to specification)
- 10. Should the gravel specifications as listed in 9 not be adhered to, the municipality may penalize the contractor if required.
- 11. Gravel crushing will be paid by the yard³ based on amounts scaled in stockpile.
- 12. The Municipality agrees to pay for crushing as follows:a. Upon completion of engineer or equivalent scaling to determine cubic yards in stockpile.
- 13. Contracting companies must have Worker's Compensation Board Clearance and be Saskatchewan Provincial Sales Tax Compliant.
- 14. Contractors shall be responsible for Occupational and Health Safety Regulations.
- 15. Crushing must be done on or before ______, 20_____ unless municipality agrees to extend contract.

In witness whereof the parties have hereunto set their hands and seals this _____ day of

_____, 20 ____.

Contractor

(SEAL)

Reeve

(SEAL)

Administrator



TOOLS & TEMPLATES 7. RM & PRIVATE LAND AGREEMENT TEMPLATE



RM & Landowner Agreement

This indenture is made in Duplicate this _____ day of _____, 20____,

BETWEEN

R.M. _____ No. ____ Hereinafter referred to as "the municipality"

AND

[Name of Private Land Owner] Hereinafter referred to as "the Landowner"

Now therefore it is agreed between the parties as follows:

- **1.** The Landowner shall allow the Municipality to crush and stockpile gravel on the property located on [location of the section of land].
- **2.** The Municipality is then deemed the owner of such gravel, and shall be allowed access to the pit until this contract has expired.
- **3.** The Municipality shall pay royalty fees to the Landowner of \$_____ ([amount written in full]) per cubic yard for the stockpile.
- **4.** The Municipality shall pay royalties to the Landowner calculated on a usage basis and will be paid by December 31st of each year that gravel is removed from the stockpile.
- **5.** The Municipality shall be responsible for the stripping of the pit and reclamation when gravel has been depleted and/or contract is ended.
- **6.** The Landowner shall give up all rights to sell gravel from the stockpile, all gravel to be removed shall be done so by direction of the municipality.
- **7.** The Landowner shall pay gravel extraction fees to the municipality in accordance with [municipal bylaw, if applicable].
- **8.** This agreement is valid until such time that gravel stockpiled in the year 20_____ is depleted and is binding upon the heirs, executors or successors of the said parties to this agreement.

Dated this _____ day of _____, 20____.

Reeve

Landowner Executor

Administrator



TOOLS & TEMPLATES 8. EXTRACTION FEE BYLAW & REPORTING FORM TEMPLATE

RM AGGREGATE RESOURCE MANUAL



Gravel Extraction Licensing Bylaw

The council of the Rural Municipality of ______ in the Province of Saskatchewan enacts as follows:

- 1. This bylaw shall be referred to as the Gravel Extraction Licensing Bylaw.
- 2. In this bylaw:
 - a. "Administrator" shall mean the Administrator of the Municipality;
 - b. "Contractor" includes any person, firm or corporation, including those persons, firms or corporations engaged by the crown; buy does not include the crown;
 - c. "Council" shall mean the Council of the Rural Municipality of ______;
 - d. "Gravel" includes rock, stone, sand, topsoil and other material in excess of 105 microns in diameter;
 - e. "Municipality" shall mean the Rural Municipality of _____
 - f. "Premise" includes any pit, site, or location within the Municipality, in which Gravel is naturally situated and from which Gravel is excavated.
- 3. No contractor shall operate or offer for hire any machine, tractor, truck or other appliance used in the excavation of Gravel from any premise within the Municipality without having first obtained a license to do so from the Municipality.
- 4. Any contractor requiring a license under the provisions of this bylaw shall each year, make written application to the Administrator of the Municipality stating the name and address of the applicant, the location of each premise from which the Gravel is to be excavated and an estimate of the amount of Gravel to be excavated within the current year; and paying in advance a fee of
 - a. \$0.160 per cubic metre or each cubic metre; or
 - b. \$0.122 per cubic yard for each cubic yard; or
 - c. \$0.086 per cubic tonne for each cubic tonne; or
 - d. \$0.080 per ton for each ton of gravel excavated from the premise.
- 5. Where the contractor estimates that the volume of Gravel to be extracted will exceed 10,000 cubic yards, the contractor shall pay a pre-extraction fee equal to the product of the estimated volume of Gravel to be extracted multiplied by the rate prescribed in Section 4 of this bylaw.
- Subject to the right of the Council to suspend or revoke the same as provided by *The Municipalities Act*, every licence shall remain in force or in effect until and including the 31st day of December of the year of issue.
- 7. On or before June 30 and December 31 respectively of the year in which the licence has been issued, the contractor shall make a return under oath, in the form shown in Schedules "A" and "B" respectively attached hereto, to the Administrator of the Municipality showing the quantity of Gravel, in the agreed units of measurement, excavated from each premise and pay the prescribed fee as set out in Section 4 of the bylaw.



- 8. The Municipality shall refund to the contractor any fees collected under this bylaw for estimated quantities of Gravel not excavated from the premise and for which the license fees has been paid.
- 9. Any person found guilty of an infraction of any of the provisions of this bylaw shall be liable on summary conviction to the penalty imposed by the general penalty bylaw of the Municipality.

Reeve

[SEAL]

Administrator

Adopted this _____ day of _____

Administrator



Schedule "A" June 30 Declaration

In the matter of Rural Municipality of		Gravel Extraction Licence Bylaw.		
I,				
of the		of		_ in the Province of
	do	solemnly declare that:		
1.	During the period	l from January 1, 2 _ (1) from the gra	0 to June 30, vel pit located on	20, I excavated the land described as
	(Attach list if gravel v	vas extracted from more	than one pit location)	
2.	I make this solemn of same force and effect	declaration, conscientiou t as if made under oath a	sly believing it to be truind by virtue of <i>The Can</i> d	ue and knowing it is in the add Evidence Act.
Declar	ed before me at the			
	of		Contractor Signature	
in the l	Province of Saskatchev			Title
in the i		van		Address
this	day of, 20_			City/Prov
				Postal
A Com the Pro	missioner for Oaths foi ovince of Saskatchewai	r n.		Phone #
My comn	nission expires			Fmail
20	<u></u> .			=

(1) State quantity and units of measurement(2) State location of pit



Schedule "B" December 31 Declaration

In the matter of Rural Municipality of		nicipality of	Gravel Extraction Licence Bylaw.		
I,					
of the		of	in the Province of		
		do solemnly declare that			
1.	During the per	iod from July 1, 20_ (1) from the g	to December 31, 20, I excavated as a contract of the second sec		
	(Attach list if grave	(2) and; el was extracted from mo	e than one pit location)		
2.	I make this solem same force and ef	in declaration, conscienti fect as if made under oat	ously believing it to be true and knowing it is in the and by virtue of <i>The Canada Evidence Act</i> .		
Declar	ed before me at the	2			
	of		Contractor Signature		
in the	Province of Saskatc	hewan	Title		
			Address		
this	day of, 2	0	City/Prov		
			Postal		
A Com the Pro	missioner for Oaths ovince of Saskatchev	for wan.	Phone #		
My comn	nission expires		Email		
20	<u> </u>		Linan		

(1) State quantity and units of measurement(2) State location of pit



TOOLS & TEMPLATES 9. FUEL TANK EMERGENCY PLAN TEMPLATE



Aggregate Pit Example Emergency Plan (for Fuel Tanks)

Date: March 31, 2018



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Notification Chart

Minor Spill under 100 Litres

Assess situation – protect yourself.

Call numbers listed below in order listed:

1 –	Fire	Department	(if	required)
-----	------	------------	-----	-----------

2 – Pit Manager

3 – Reeve

911 (XXX) XXX-XXXX (XXX) XXX-XXXX

Continue to safely monitor site until help arrives.

Major Spill over 100 Litres

Assess situation - protect yourself.

Call numbers listed below in order listed:

1 – Fire Department (if required)	911
2 – Pit Manager	(XXX) XXX-XXXX
3 – Reeve	(XXX) XXX-XXXX
4 – Environment Spill Line	1-800-667-7526
(Required for Spills over 100 Litres)	
5 – Environment Canada	1-866-845-6037
(Required to call if Spill is very large)	

Continue to safely monitor site until help arrives.

In Case of Fire

Assess situation – protect yourself.

Call numbers listed below in order listed:

1 – Fire Department	911
2 – Pit Manager	(XXX) XXX-XXXX
3 – Reeve (XXX) XXX-XX	
4 – Environment Spill Line	1-800-667-7526
(Required for Spills over 100 Litres)	

Continue to safely monitor site until help arrives.



General Site and Product Information

This information can be found in the Material Safety Data Sheets provided by your supplier.

Tank System Capacity & Product Information

The total tank system capacity is **25,000 litres**, which is split into two equal compartments of **12,500 litres**, of both unleaded gasoline and diesel fuel.

Gasoline, Unleaded

Product Name:	GASOLINE, UNLEADED
	Regular, Unleaded Gasoline (US Grade), Mid-Grade, Plus, Super, Wintergas,
Supervised	SummerGas, Supreme, SuperClean WinterGas, Regular Clean, Plus Clean, Premium,
Synonyms.	marked or dyed gasoline, TQRUL, transitional quality regular unleaded, BOB,
	Blendstock for Oxygenate Blending, Conventional Gasoline
Code:	W102E, SAP: 102 to 117
Product Use:	Unleaded gasoline is used in spark ignition engines including motor vehicles, inboard
	and outboard boat engines, small engines such as chain saws and lawn mowers, and
	recreational vehicles
	PETRO-CANADA
	P.O. Box 2844
Manufacturer/Supplier:	150 – 6 th Avenue South-West
	Calgary, Alberta
	T2P 3E3
	Petro-Canada: 403-296-3000
In case of emergency:	Canutec Transportation: 613-996-6666
	Poison Control Centre: 1-866-454-1212

Diesel Fuel

Product Name:	DIESEL FUEL
6	Seasonal Diesel, #1 Diesel, #2 Heating Oil, #1 Heating Oil, D50, D60, P40, P50, Arctic
	Diesel, Farm Diesel, Marine Diesel, Low Sulphur Diesel, LSD, Ultra Low Sulphur Diesel,
Synonyms:	ULSD, Mining Diesel, Naval Distillate, Dyed Diesel, Marked Diesel, Coloured Diesel,
	Furnace special, Biodiesel blend, B1, B2, B5, Diesel Low Cloud (LC).
Code:	W104, W293
	Diesel fuels are distillate fuels suitable for use in high and medium speed internal
Product Use:	combustion engines of the compression ignition type. Mining diesels, marine diesels,
	MDO and naval distillates may have a higher flash point requirement.
	PETRO-CANADA
	P.O. Box 2844
Manufacturer/Supplier:	150 – 6 th Avenue South-West
	Calgary, Alberta
	T2P 3E3
	Petro-Canada: 403-296-3000
In case of emergency:	Canutec Transportation: 613-996-6666
	Poison Control Centre: 1-866-454-1212





1) Aquifer & Lake

The presence of an aquifer and close proximity to a small body of water may increase the risk of harm to the environment and to human health.

2) RM Office

The RM's offices are in close proximity to the storage tank. This may increase the harm to human health.

Considerations

- Follow the Notification Chart efficiently and effectively
- Always ensure proper training occurs
- If one of the characteristics above is affected, make sure it is communicated through the "Notification of Affected Public" instructions.



Prevention, Preparedness and Response

Preventative Measures

Action	Guidelines
Staff Alertness & Intervention:	 Staff alertness towards customer activities can help prevent spills Employees should watch for unsafe customer activity or improper fueling procedures and intervene if necessary. Instruct customers in a polite but firm manner when necessary
Inspections:	 Employees shall conduct their required inspections. Several items to be checked during these inspections will help identify potential spill risks. By inspecting the fuel dispensing equipment, maintenance issues can be identified and corrected before a problem occurs. If a component such as a nozzle begins to drip or malfunction, have it serviced or replaced right away. If it is kept in service, it will only get worse.

Preparedness

- Spill Kit is Available on Site
- Emergency Plan in Place
- Location of Emergency Plan Known to Employees
- Training Completed on a Regular Basis
- Review of Emergency Plan Completed on a Regular Basis

Response

Action	Guidelines
Shutdown Source	If possible, shutdown the source of the spill immediately
	Follow the "Notification Chart"
	Outside assistance should always be requested when a spill:
Request Assistance	- Enters a drainage system
hequest Assistance	- Travels offsite
	 Cannot be controlled immediately at the site
	- Has the potential to do any of the above
Evacuate Area & Equip	- Evacuate people from the area, site, facility
Yourself	- Grab fire extinguisher, spill response kit, safety vest and traffic cones
	Eliminate ignition sources from the immediate area, which may include:
	 Vehicles (operating/running)
Eliminato Ignition	 Do-not restart vehicles
Sourcos	 Vehicles near the tank should be placed in neutral and pushed away from the
Sources	spill
	- Electrical appliances/utilities (i.e. ice freezer)
	- Customers who are smoking
	Contain and control spill using Spill Response Kit
Containment & Control	- Set up containment points to restrict spill to as small an area as possible.
	 Prevent spill from entering sewer.
	 Minimize spread of spill. Use pads and absorbent material.
	- Establish a 'No Go' area. Use cones.
	- Absorb spill and clean up.



First Aid-Measures

If any persons are exposed to the dangerous products in the storage tanks, refer to the measures below. Immediately contact management and additional medical attention if required. If unsure, err on the side of safety and contact medical attention.

Exposure	Measures
Inhalation:	If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. If breathing or the heart stops, trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR) respectively. Get medical attention immediately.
Eye Contact:	If in eyes: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact:	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Ingestion:	If swallowed: Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person. If breathing or the heart stops, trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR) respectively. Get medical attention immediately.
Protection of First-Aiders:	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mark or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Was contaminated clothing thoroughly with water before removing it, or wear gloves.
Notes to	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if
Physician:	large quantities have been ingested or inhaled.

Recovery

Action	Guidelines
Refer Media	If required, refer media to the Pit Manager or Reeve.
Replenish Materials Replenish the spill kit and spill container materials used during the response	
	After an emergency, do not recurs energians until you have obtained the energy of
Posumo Onorationa	After an emergency, do not resume operations until you have obtained the approval of the person in charge of the emergency response (such as the fire department), the
Resume Operations	the person in charge of the emergency response (such as the fire department), the
	store manager, or an authorized contractor.
Disposal of Waste	Waste must be handled, labelled and disposed of in accordance with standards set out in the WHMIS legislation. WHMIS regulations require that hazardous materials be properly labelled. If there is potentially hazardous and/or flammable waste stored on site, it is essential that staff are aware of the hazard. Waste should be disposed in accordance with regulations in which the gas station operates. Contact the local landfill and verify the hazardous waste disposal requirements.



Roles & Responsibilities

Position	Response Roles and Responsibilities		
	The Reeve shall be responsible for carrying out the notification of affected public and		
Reeve:	be ultimately responsible for ensuring the response was adequate and timely. The		
	Reeve shall also be the main contact in case of major emergencies.		
Pit Manager:	The Pit Manager shall be responsible for overseeing and helping where required		
	providing the immediate response and containment, control, reporting and clean-up.		
Employees:	The employees shall be responsible for the immediate response to the emergency,		
	including: shutting down the source, requesting assistance, evacuating the area and		
	eliminating ignition sources. The employee shall also seek medical attention for any		
	persons affected, if required.		
	Employees are also responsible for the containment, control, reporting and clean up.		

Notification of Affected Public

Measure	Details
	In the case of an Emergency, the community shall be informed through two social media streams: Facebook and Twitter.
Social Media:	The details of the emergency shall be explained on the "Rural Municipality" Facebook page as well as the @Rural Municipality twitter account.
E-mail:	The Reeve shall send an emergency e-mail to the membership outlining the details of the emergency.

Note: If any of the characteristics outlined in the "Site Characteristics" section are affected, ensure to note during the notifications.



Emergency Response Equipment List Equipment

Spill Kit:	-	Protective equipment (gloves) for responder to avoid skin contact
	-	Supplies to help contain, control and clean up
Absorbent Containers:	-	Hold absorbent material for quick access
Absorbent Materials:	-	Used to absorb and clean up spilled products
Cones:	-	Used to help protect the responder by alerting and diverting drivers
	-	Can be used with caution tape to establish a 'No Go' area
Fire extinguishers:	-	Extinguish potential fire associated with spill
Safety vest:	-	Protective equipment for responder to increase visibility and reduce likelihood of
		injury from oncoming vehicles

Equipment Locations

Spill Kit:	-	Insert Spill Kit Location
Absorbent Containers:	-	Insert Absorbent Containers Location
Absorbent Materials:	-	Insert Absorbent Materials Location
Cones:	-	Insert Cones Location
Fire Extinguishers:	-	Insert Fire Extinguishers Location
Safety Vest:	-	Insert Safety Vest Location

Spill Kit Details

	Insert Spill Kit Location	
	Spill kits shall be available on site at all hours that the station is open for business	
Location and	Spill kits should be labelled so that it can be quickly located.	
Accessibility:	Spill kits must be located in an accessible, unlocked area	
	Do not leave your spill kit on the forecourt (to reduce likelihood of theft)	
	Keep the spill kit and related materials in a location on site that is accessible to staff.	
Use by workers:	All workers must be aware of the location of the spill kit	
Absorbent Materials:	Used to absorb and clean up spilled products	
Conoci	Used to help protect the responder by alerting and diverting drivers	
cones.	Can be used with caution tape to establish a 'No Go' area	
Fire extinguishers:	Extinguish potential fire associated with spill	
Sofoty voct	Protective equipment for responder to increase visibility and reduce likelihood of	
Salely vest.	injury from oncoming vehicles	

Spill Absorbent

	- Two spill containers per location.
Location:	- One extra bag of absorbent material must be available at all times
	- Containers must be ¾ full of absorbent material at all times and free of garbage.
	- Ensure the appropriate number of containers are present
	- Notify management of
Deenensihilities	- Ensure spill absorbent containers are ¾ full of absorbent materials at all times and
Responsibilities:	free of garbage
	- Ensure extra bags of absorbent material are available at all times
	- Supply replacement materials



Environment Canada Tank Registry Data

The following information attached is the Environment Canada Registration documents for the tank on the next set of pages.



Find attached MSDS sheets for Gasoline and Diesel on the next set of pages.



TOOLS & TEMPLATES 10. HISTORY OF AGGREGATE DEPOSIT FORM

RM AGGREGATE RESOURCE MANUAL



Saskatchewan Ministry of Highways and Infrastructure

HISTORY OF AGGREGATE DEPOSIT

MR76-2001

Contract No.	_Contractor		C.S.(s)	
Pit File No	Contractor Commenced Work	20	Completed Work	20

1. Average Characteristics of Materials Produced

	Type of Aggregate								
	Tonnes Produced								
	% Reject								
	Stockpile No. (Mtce.)								
	1 ()								
	% Pass.								
	mm Sieve								
	31.5 mm Sieve								
	25.0 mm Sieve								
	22.4 mm Sieve								
	18 mm Sieve								
	16 mm Sieve								
	12.5 mm Sieve								
	9 mm Sieve								
	5 mm Sieve								
	2 mm Sieve								
	900 um Sieve								
	400 um Sieve								
	160 um Sieve								
	71 um Sieve								
	% Fracture 5 mm								
	Plasticity Index								
	Sand Equivalent								
	% Lightweight								
2.	Problem Deleterious M	Problem Deleterious Materials Present: Clay Balls Silt Seams Sand Seams							
	ShaleClay C	ShaleClay Coated							
3.	Was Filler, Binder, or H	Blender Sand used?		If yes, give location it	was obtained from.				
4.	Was bottom of Gravel/Sand reached? If so, what was material in bottom of Pit?								
	Was the contact even o	r uneven ?							
5.	Did material get coarse	Did material get coarser/finer/ or no change with depth?							
6.	Top Size Crushed	Type of cr	rusher used						
	Estimated % oversize (Estimated % oversize (rock over 160 mm)							
	Estimate of reject stockpilem ³ .								
	What was done with oversized rock or reject material?								
7.	Quantities	resulting from	overproduction -	Type of	material &	& quantity			
----	------------	----------------	------------------	---------	------------	------------			
----	------------	----------------	------------------	---------	------------	------------			

8. If gradation was difficult to meet, was this a fault of contract operations or poor pit log information?_____

able to be	m. Would you consider the water	, at what depth	Was water table reached? If). Wa
or would		(etc)?	high due to time of year or abnormal rais	hig
	Was any effort made to lower water table	ter table?	you consider this to be a fairly constant	yo
			f so, how, and what were results?	if s
_ Was all	ne from a previously opened pit?	Did any/all material come	Was any new area stripped?	0. Wa
_ Was all	ne from a previously opened pit?	Did any/all material come Was strip	Was any new area stripped?	0. Wa
_ Was all eviously	ne from a previously opened pit? pping placed over a possible future sand If yes, was the open pit p	Did any/all material come Was stripp g placed in an open pit?	Was any new area stripped? tripping disposed of inside Ministry are or gravelsource? Was strip	0. Wa stri

- 11. Was asphalt mix produced?
 Was a anti-strip used?
 Was lime or liquid anti-strip used?

 Brand name of the liquid anti-strip used?

- 13. Draw a diagram showing area worked, location of stockpiles or reject material and location of stripping if stockpiled.

See attached

Date of Report _____20____

Prepared by:_____

(Title)

This form is to be completed and sent to the Pit Manager immediately after completion of work within the pit.



TOOLS & TEMPLATES 11. ENGINEER CONSULTING TEMPLATE



Logo/Image of RM

RURAL MUNICIPALITY OF [INSERT NAME] [Year] Engineering Consulting Services

Request for Proposals (RFP)

Tender Release: [Date] Tender Closing: [Time], [Date]

Contact

Name Position Phone Number E-mail



Instruction to Proponents

1. Scope

The Rural Municipality of [NAME] is requesting proposals from interesting parties ("Proponents") wishing to perform various engineering consulting and/or project management duties as outlined in the following section of this request for proposals (RFP) document.

This section is where an RM must outline exactly what it would like from the Engineering Consultant. This template may be useful for the procurement of different advising and project management engineering services. Advising services could include aggregate testing and prospecting as well as design. Project management services could include the oversight of the tendering process for paving and/or construction, as well as general project management services.

2. Submission

Sealed proposals marked RFP # - [Date] Engineering Consulting Services will be received until [time], [date] at the office of the Rural Municipality of [name of RM] at [location of office]. Tenders will be opened publicly immediately thereafter in the Council Chambers.

The proponent shall provide an overall price for the Work identified in this RFP. The unit prices shall exclude the Goods and Services Tax, which shall be an extra where applicable in the total proposal price. The proposal shall be signed by a duly authorized official and in the case of a corporation shall be sealed with the corporate seal.

3. Inquiries

All inquiries prior to closing of the RFP are to be directed to: [Name of Contact] [Contact's Position] [Phone Number] [E-mail]

4. Proposal Required Information

The following information outlines the minimum information required in any given response to this RFP.

1. Background Information

• Include details on the Proponent, including legal name, telephone number, mailing address, contract name and contact e-mail address.

2. Cost & Timelines

- The Proponent must include in the proposal a breakdown of the cost estimates for each component of the Work.
- Submit a list of the hourly rates of each staff member of the Proponent who will be involved in completing this work, along with the charges for mileage, meals, and accommodations, etc., if applicable.
- Include a timeline that shows when the projects will be completed and all the relevant steps that will be required and by what date they will be completed.

3. Experience



- Include a resume of the Engineer who will conduct the work outlined in Section 1.1., including qualifications and number of years of experience.
- Three references (name, address, job title, phone number, email address), describing how the services provided to these references relate to the services you will provide to the RM.

4. Project Plan and Approach

- Submit a detailed list of services to be provided, including timelines and proposed approach and methodology.
- Submit an explanation of any potential engineering services that may arise but are not addressed in your total cost. Please not that any expenses not in the proposal must be approved by the Rural Municipality of [NAME] prior to being incurred.

5. Discrepancies & Omissions

Prospective proponents finding discrepancies in, or omissions from the tender documents, or having any doubt as to the meaning or intent of any part thereof, should at once notify the Manager of Public Works, who will send written instructions or explanations.

6. Indemnification

The successful Proponent will, at all times, indemnify and save harmless the RM, their officers, employees and agents from and against all claims, demands, losses, costs, damages, action, suit or other proceedings made, sustained, brought or prosecuted that are based upon, or caused in any way by anything done or omitted to be done by the Proponent or any of its officers, directors, employees, or agents in connection with the services performed, purportedly performed or required to be performed by the Proponent under this Request for Tender and subsequent agreement.

7. Award

The Rural Municipality of [NAME] will review all proposals for completeness. If a proposal is deemed by the municipal council to be incomplete, it will be discarded and not considered. The eligible proposals will be evaluated on the following factors:

Factor	Weight
Pricing	50%
Qualifications/Experience	35%
References	15%

Other potential factors could include innovation and value-added benefits, proposed timelines, project plan, proposal readability, etc. The weights included above are meant to be an example and should be customized by the individual RM.

The evaluation criteria will be applied at the discretion of council and all proponents acknowledge that they waive all rights of action or claim against the Rural Municipality of [NAME] for how it exercises its discretion in applying the evaluation criteria.

Proponents may be required to participate in an interview prior to being awarded the contract. The Rural Municipality of [NAME] reserves the right to reject any or all proposals.



8. Terms and Conditions

- The Rural Municipality of {Name] will not be responsible for any costs incurred by anyone in preparing and submitting proposals and/or attending interviews. The Rural Municipality of [name] accepts no liability of any kind to a Proponent prior to the signing of a contract.
- Submission of a proposal shall not obligate, nor shall it be construed as obligating the Rural Municipality of [name] to accept any such proposal or to proceed further with the project. The Rural Municipality of [name] may, in their sole discretion, elect not to proceed with the project.
- At all times, the Proponent has the responsibility to notify the Rural Municipality of [name] in writing, of any ambiguity, divergence, error, omission, oversight or contradiction contained within the proposal, as it is discovered.
- Proponents may amend or withdraw their proposal prior to the closing date and time specified in the Request for Proposal by written notice to the Manager of Public Works.
- After the closing date and time, proposals may not be withdrawn.
- Proposals submitted shall be final after the closing date and may not be altered by subsequent offerings, discussions, or commitments unless the Proponent is requested to do so by the Rural Municipality of [name].
- The Proponent must identify any information in its proposal that is considers to be confidential or proprietary.
- All proposals and accompanying documentation received under this competition will become the property of the Rural Municipality of [NAME] and not be returned. The proposals will be reviewed by the municipal council before any contract negotiations are offered.
- The Rural Municipality of [NAME] reserves the right to cancel and/or re-issue this Request for Proposal at any time for any reason without penalty.
- Prices quoted shall be held firm for a minimum of 365 days following the Request for Proposal closing date, and shall remain in effect through the duration of an agreement.
- Once selected, the Rural Municipality of [NAME] and the Proponent shall enter into a contractual agreement.
- The Proponent's proposal shall form part of the contractual agreement by attachment and will be incorporated by reference. Claims made in the proposal shall constitute contractual warranties.
- The successful Proponent agrees to obtain and maintain all professional certifications and licenses necessary to lawfully provide the services required under this Request for Proposal.



TOOLS & TEMPLATES 12. COST-BENEFIT ANALYSIS INSTRUCTIONS

RM AGGREGATE RESOURCE MANUAL



Aggregate Resource Manual – Cost Benefit Analysis Instructions

1. Concept & Introduction

A cost-benefit analysis (CBA) is a useful tool that can be used when looking at alternative investment options to achieve the same outcome. Specific to aggregate management in RMs, a CBA could be conducted to consider alternatives related to gravel sourcing, using innovative materials or using internal vs. outsourced resources. RMs have a responsibility to their ratepayers to provide services in the most efficient and cost-effective manner as possible. CBAs can be a powerful tool that can look at various different scenarios and how they affect the long-term economic outlook for an RM.

Cost-benefit analysis that considers two alternatives over multiple years that have different operating costs can be analyze by looking at the simple difference in annual cost, or by looking at the Net Present Value (NPV) over a period of time, often 25 years or longer for infrastructure analysis. Simple alternatives should be analyzed by comparing the annual cost difference, but NPV analysis may be required if operating costs will change for the two alternatives over time. A prime example would relate to comparing a capital investment that will have debt repayment over a period of time, say 10 years, against an alternative that may require little or no capital investment but carry a higher ongoing or operating cost. If a RM purchases land for gravel and rolls the upfront capital cost into annual debt repayments and compares that option against a quantity agreement in a lease, then the financial analysis will be considerably different once the debt has been paid off, so a longer term NPV analysis would be required to get a true picture of the cost-benefit. A discount rate of 5% has been applied to the NPV analysis and as a rule of thumb could generally be a rate set at which a RM would incur debt.

This particular CBA has been developed for SARM and is available from SARM members as part of the Aggregate Resource Manual.

2. General Instructions

The general objective of the cost-benefit analysis (CBA) is to have two comparable values which will allow RMs to compare different scenarios. In order to do that, the RMs must follow the following instructions.

2.1 GATHER DATA

The first step is to define the situation at hand and ensure that both scenarios lead to the same or comparable results. There should be at least two different options that can be looked at. The following are a list of data points that the RMs may need for both:

Net Present Value

Discount Rate: The discount rate is important to the analysis of the net present value. It follows the theory that 'a dollar today is worth more than a dollar tomorrow.' Cash flows in the future should not be analyzed the same as cash flows that could be had today. This is because a dollar today could be invested and theoretically present an additional return. Thus, the future cash flows that come from an investment or certain scenario must be 'discounted' to get to their value today. This rate is often looked at as the rate of which the investment could earn if it were placed elsewhere. Often, the minimum discount rate hovers near the prime rate. For that reason, it is suggested to be at 4%, although, if an RM had an extremely profitable alternative where it could hold or invest its money, it may choose to use a higher rate. RMs must ensure that the discount rate is the same on both scenarios.



Net Present Value: A net present value is the sum of the discounted cash flows. For each period away from the present (i.e. five years away for year five), the discount rate is compounded in order to account for the multiple years away it is. <u>There are no inputs that are required here.</u>

Investment

Investment: Is the cost of the investment that may be made. The debt is automatically calculated and inputted into the cost benefit analysis. In some instances, such as going to market for the procurement of gravel, there are no investments required and the amount can be left at 0.

Borrowing Rate: Is the expected rate at which the RM expects it can borrow from the bank for an investment.

Periods (Years): Is the amount of years that the RM expects it can amortize the loan.

Depreciation (Capital Replacement)

Useful Life (Years): The useful life is the amount of years you estimate to be able to use the asset for. **Salvage Value:** Salvage value is the estimated resale value of the asset after its useful life is complete. **Annual Depreciation:** The annual depreciation is automatically calculated using the Straight-Line Depreciation Method. Although a non-cash item, it should be considered as a proxy for the capital replacement value. For example, if a backhoe is purchased, the non-cash value of the depreciation should be considered since at the end of the use of the investment, another will need to be purchased.

Additional Costs (or Revenues)

Any other costs or revenues that may be associated with the scenario should be gathered. It is essential to include only incremental costs and revenues, not ones that would occur without the chosen scenario.

2) INPUT DATA

After gathering data, it should be inputted so that the RM can look back between the two scenarios in order to see which provides the best value. Each Scenario has its own Sheet in the Excel spreadsheet and can be accessed at the bottom of the screen ("Scenario Model #1", "Scenario Model #2", etc.).

The cells that need filling are denoted by the 'grey' Cells. The NPV of either scenario can be found in Cell C4. It is more likely than not that the NPV will be negative since the exploration of aggregate, construction of roads and maintenance of roads are not revenue generating exercises. There may be limited revenue-generating activities such as renting out a piece of purchased equipment, although it is not likely to have a large effect on the outcome.

I) Insert Data to Input Tables

The first step to inputting the data is filling out the Input Tables at the top of the Sheets. Input Table #1 is required to be filled out regardless with the discount and the inflation rate, since those rates will have a bearing on the NPV no matter what. Input Tables 2 and 3 are only required when an investment is being made. By filling out the Investment, Borrowing Rate, Periods, Useful Life and Salvage Value, the Capital Replacement and Debt on Investment Cells will be auto-populated. If there is no investment, you can either Delete Rows 20 and 21 or leave Input Tables 2 and 3 empty and there will be no effect on the NPV.

II) Insert Additional Revenues & Expenses

The second step is to input the additional Expenses or Revenues to the table (located in the Cells above Capital Replacement and Debt). There is an area to outline the Item name as well as further Description



if required/desired. Ensure that revenues are inputted as a positive value and expenses are inputted as negative values. The values only need to be inputted under Year 1 as the remaining of the years will be built out with the applicable inflation rate from Input Table 1.

III) Repeat for Other Sheets

Last, repeat the inputting of data into the second (or third, etc.) Sheets in order to get three comparable NPVs. These steps are for the simple inputting of data. There may be scenarios where it is important to enter into the cells that are not highlighted in grey. These scenarios can be seen in Section C below.

3) RISK ANALYSIS

Additionally, RMs should do scenario and/or sensitivity analysis to analyze different risks. For example, if an RM were comparing the purchase of a piece of equipment versus the lease of the same equipment, one variable that would affect the NPV would be the rate at which debt can be borrowed. The RM in that case may want to ask "what rate do we need to secure in order for this option to remain the best option?" Another example may be if an RM is considering the options of tendering for gravel or purchasing land and operating their own pit. One major variable in this scenario is that the inflation or price variance between years on the tender of gravel are extremely volatile. It would be a worthwhile exercise to use different scenarios for the inflation or change of costs. This is especially important when looking at multiple scenarios where the NPVs are very close. If the difference between the NPVs is quite large, it is likely that less scenario analyses are required since there is a higher likelihood that there is a preferable option.

Additionally, there should be qualitative analysis taken into account. Consider an example where an analysis was completed and found that it would be much better (based on the NPV amounts) to purchase land and open an RM run pit to supply aggregate to the RM versus purchasing via tender. If this were the case, the RM may want to consider their wherewithal and/or ability to operate an aggregate pit. If there is no experience doing so within the human resources in the RM, it may be worth considering going with the higher cost option, since they may provide the best value since you may have much higher confidence that they would be able to deliver the needed aggregate versus an RM run pit.

3. Editing the Model

There are several situations that may occur where the RM may need to edit the model so that it is conducive to unique needs. Some of the following are outlined below.

Less than 25 Year Time Horizon

There may be times where the time horizon of a comparison may be less than 25 years. This is simple to do. The first step is to enter Cell C5 (the NPV) and change the second input =NPV(C6,C22:AA22) to ensure that it only captures the years required. For example, if the timeframe would only be 10 years, then the formula would be =NPV(C6,C22:L22). Additionally, the RM may want to delete the content from beyond the year chosen in order to clean up the model.

Varying Inflation Rates

There may be scenarios where RMs will want to test varying inflation rates, rather than using a uniform inflation rate to analyze each revenue and cost over 25 years. In order to do this, the RM will need to enter each specific cell for the Revenues and Expenses to manually edit the percentage inflation. As of now, all inflation rates are connect to Cell \$C\$7. In the years, and for the items, that the RM wishes to test varying inflation rates, the Cell C7 input for that Cell would need to be changed. For example, an



updated inflation rate formula for Year 4 to 5 may look like =F12*(1+2%) rather than =F12*(1+C\$7), which would make the inflation for that item, that year, 2%.

Additional Scenarios

There are currently three tables available for analysis. If additional are required, simply right-click on the any of the blue titles of the sheets at the bottom of the screen (i.e. "Scenario Model #3). Click "Move or Copy", check the "Create a copy" box and click OK. Another Sheet will then appear at the bottom of the page.



APPENDIX **1. SPECIFICATIONS** Sub-Base Course

RM AGGREGATE RESOURCE MANUAL



3300 - SPECIFICATION FOR SUB-BASE COURSE

3300 - 1 DESCRIPTION

- 1.01 The work shall consist of spreading and compacting screened or crushed aggregate on a prepared surface.
- 1.02 The following definitions shall apply for this specification:
 - (a) Mean:

The arithmetic average of a set of 'n' test results constituting the sample.

(b) Moving average:

The arithmetic mean of 3 consecutive test results.

(c) Sub-base aggregate:

The aggregate before mixing, when binder is to be added or the aggregate before spreading and compacting, when no binder is to be added.

(d) Sub-base mix:

The sub-base aggregate after mixing with binder and water but before spreading and compacting.

(e) Sub-base course:

The sub-base aggregate or sub-base mix in place on the road during and after spreading and compacting.

3300 - 2 MATERIALS

Aggregate

2.01 Sub-base aggregate shall be composed of sound, hard, and durable particles of sand, gravel and rock free from injurious quantities of soft or flaky particles, shale, loam, clay balls and organic or other deleterious material.

3300 - 3 CONSTRUCTION

General

3.01 (a) Sub-base course shall comply with the requirements listed in Table 1:

FABLE 1	1
----------------	---

Sieve	ian Metric Sieve						
Designation	Series						
	ТҮРЕ						
	6	8	10				
50.0 mm	100.0	100.0	100.0				
2.0 mm	0 - 80.0	0 - 90.0					
400 um	0 - 45.0	0 - 60.0					
160 um	0 - 20.0	0-25.0					
71 um	0 - 6.0	0 - 15.0	0 - 20.0				
Plasticity Index (all types) 0 - 6.0							

- (b) A tolerance of 3% in the percent by weight passing the maximum size sieve shall be permitted providing 100% of the oversize passes the 63.0 mm sieve.
- 3.02 The following shall apply to Department owned or controlled aggregate sources shown on the plans or as described in the Special Provisions:
 - (a) Overburden shall be removed from material deposits in accordance with Specification 2260 For Removal Of Overburden.
 - (b) Stockpiles shall be constructed in accordance with Specification 3600 For Stockpiling Aggregates.
- 3.03 Binder, filler and blender sand shall be provided in accordance with Specification 3400 For Binder, Filler And Blender Sand.
- 3.04 Sub-base aggregate shall be pushed to a trap or into a stockpile prior to screening.

Processing

- 3.05 The production of sub-base course shall comply with the following:
 - (a) The Contractor shall cease operations if the moving average for any sieve does not comply with the specified requirements listed in Table 1.
 - (b) Operations shall not recommence until the specified requirements are met.
 - (c) Upon recommencement of operations, the specified requirements shall be met on each of the initial 2 tests.
 - (d) Failure to cease operations shall subject all subsequent materials to the requirements of General Provision 1400-7 (Unacceptable and Unauthorized Work).

Spreading and Compacting

- 3.06 The thickness of a compacted lift of sub-base course shall not exceed 120 mm. The lift thickness may be increased if the Contractor can demonstrate that with the use of vibratory compaction equipment and construction procedures, the compaction requirements can be achieved for lifts greater than 120 mm.
- 3.07 Sub-base courses shall be compacted until no further settlement is apparent and the particles are well keyed into place. The sub-base course shall be free from any rutting or deformations before the placement of the next course.
- 3.08 If excess moisture originating from external causes including but not limited to precipitation and/or Contractor's operation is present in the sub-base course and/or underlying material prior to the acceptance of the completed surfacing structure; the Contractor shall dry the sub-base course and/or the underlying material to the optimum moisture content and compact the sub-base and/or the underlying material to not less than the specified density or the optimum density in accordance with the requirements for Moisture-Density Proctor (STP 205-5).

Stabilizing

- 3.09 If the sub-base course proves to be unstable, the Engineer shall require the Contractor to stabilize the sub-base aggregate by one or a combination of the following methods:
 - (a) By the addition of binder or filler at the aggregate source or at the screening plant. The binder or filler shall be added and thoroughly distributed throughout the aggregate until a homogeneous mixture is obtained.
 - (b) By the addition of crushed aggregate on the road.
 - (c) By the addition of emulsified asphalt to the compaction water in the proportions designated by the Engineer. The Department shall supply the asphalt.
 - (d) Any other method proposed by the Contractor and approved by the Engineer.

Seasonal Shutdown

3.10 If work must be carried over from one construction season to the next, there shall be no exposed sub-base aggregate, mix or sub-base course remaining on the road unless covered by a lift of base course.

3300-4 SAMPLING AND TESTING

General

- 4.01 Unless otherwise specified, test procedures shall be in accordance with Saskatchewan Highways and Transportation's Standard Test Procedures Manual.
- 4.02 The test procedures in effect on the closing date of the tenders shall apply.

3300 - 5 MEASUREMENT

5.01 Sub-base course shall be measured in tonnes.

3300 - 6 PAYMENT

- 6.01 Payment for Sub-base Course shall be at the contract unit price per tonne. The contract unit price shall be full compensation for completing the work except for those activities for which specific provision for payment is made in this section.
- 6.02 If the contract includes a bid item for:
 - (a) Hauling Sub-base Course and Hauling Binder, Filler And Blender Sand; payment shall be made in accordance with Specification 2405 For Hauling On The Basis Of The Kilometre.
 - (b) Watering; payment shall be made in accordance with Specification 2500 For Watering.
 - (c) Binder, Filler And Blender Sand; payment shall be made in accordance with Specification 3400 For Binder, Filler And Blender Sand.
 - (d) Granular Base Course; payment for Granular Base Course used as stabilizing agent shall be at the contract unit price For Granular Base Course.
 - (e) Prime, Tack or Flush Coat; payment for emulsified asphalt used as stabilizing agent shall be the contract unit price for Prime, Tack and Flush Coat.



APPENDIX 2. SPECIFICATIONS Granular Base Course

RM AGGREGATE RESOURCE MANUAL



3505 - SPECIFICATION FOR GRANULAR BASE COURSE

3505 - 1 DESCRIPTION

- 1.01 The work shall consist of spreading and compacting crushed and pugmilled aggregate on a prepared surface.
- 1.02 The following definitions shall apply:
 - (a) Acceptance limit:

The maximum or minimum value for a test result above or below which the section of roadway shall be rejected.

(b) Acceptance testing:

The testing performed to determine compliance with the specification regarding certain requirements, limits and tolerances for the quality of materials and workmanship to be supplied.

(c) Base aggregate:

The aggregate before pugmilling.

(d) Base mix:

The mix after pugmilling, but before spreading.

(e) Base course:

The mix in place on the road during and after spreading and compacting.

(f) Mean:

The arithmetic average of a set of 'n' test results constituting the sample.

(g) Moving average:

The arithmetic mean of 3 consecutive test results.

(h) Surface defects:

Surface defects that are due to the Contractor's operation shall include but shall not be limited to the following:

- (i) Potholing.
- (ii) Surface failures.
- (iii) Ravelling.
- (iv) Rutting.
- (v) Bumps or dips.
- (vi) Irregular cross slopes.
- (vii) Segregation.

3505 - 2 MATERIALS

Aggregate

2.01 Base aggregate shall be composed of sound, hard and durable particles of sand, gravel and rock free from injurious quantities of elongated, soft or flaky particles, shale, loam, clay balls and organic or other deleterious material.

3505 - 3 CONSTRUCTION

General

3.01 (a) Base course shall comply with the requirements listed in Table 1.

TABLE 1

	PERCENT BY WEIG	HT PASSING CANADIAN ME	TRIC SIEVE SERIES			
SIEVE DESIGNATION	ТҮРЕ					
	31	33	35			
31.5 mm	100.0					
18.0 mm	75.0 - 90.0	100.0	100.0			
12.5 mm	65.0 - 83.0	75.0 - 100.0	81.0 - 100.0			
5.0 mm	40.0 - 69.0	50.0 - 75.0	50.0 - 85.0			
2.0 mm	26.0 - 47.0	32.0 - 52.0	32.0 - 65.0			
900 um	17.0 - 32.0	20.0 - 35.0	20.0 - 43.0			
400 um	12.0 - 22.0	15.0 - 25.0	15.0 - 30.0			
160 um	7.0 - 14.0	8.0 - 15.0	8.0 - 18.0			
71 um	6.0 - 11.0	6.0 - 11.0	7.0 - 12.0			
Plasticity Index	0 - 7.0	0 - 6.0	0 - 5.0			
Fractured Face %		50.0 Minimum				
Light Weight Pieces %	5.0 Maximum					

- (b) A tolerance of 3% in the percent by weight passing the maximum size sieve shall be permitted providing 100% of the oversize passes the 40.0 mm sieve for Type 31 base course and the 22.4 mm sieve for Types 33 and 35 base course.
- 3.02 The following shall apply to Department owned or controlled aggregate sources shown on the plans or as described in the Special Provisions:
 - (a) Overburden shall be removed from material deposits in accordance with Specification 2260 For Removal Of Overburden.
 - (b) Rock passing a 450 mm square opening screen and larger than the maximum specified size shall be crushed and incorporated simultaneously throughout the crushing operation.
 - (c) Stockpiles shall be constructed in accordance with Specification 3600 For Stockpiling Aggregates.
- 3.03 Binder, filler, and blender sand shall be provided in accordance with Specification 3400 For Binder, Filler And Blender Sand.
- 3.04 Binder, filler and blender sand shall be added using a separate conveyor system.
- 3.05 Binder, filler and blender sand feeds shall be accurately controlled and coordinated.

Reject Aggregate

- 3.06 If the Contractor is required to reject a fraction of the raw aggregate to meet the aggregate requirements in Table 1, the following shall apply:
 - (a) The raw aggregate shall be screened over a maximum 9.0 mm square opening screen or a 5.0 mm slotted screen prior to crushing.
 - (b) The Contractor shall be responsible for the rejected material up to a maximum of 10% of the raw aggregate by weight.
 - (c) The quantity of raw aggregate shall be calculated as follows:

Raw aggregate = (Granular base course less binder, filler and blender sand) x 1.11

Processing

- 3.07 Base mix production shall comply with the following requirements during the pugnilling stage:
 - (a) The Contractor shall cease operations if the moving average for any sieve does not comply with the specified requirements listed in Table 1.
 - (b) Operations shall not recommence until the specified requirements are met.
 - (c) Upon recommencement of operations, the specified requirements shall be met on each of the initial 2 tests.
 - (d) Failure to cease operations shall subject all subsequent materials to the requirements of General Provision 1400-7 (Unacceptable and Unauthorized Work).
- 3.08 Base aggregate shall be stockpiled after the crushing operation and prior to the pugmilling.
- 3.09 During pugmilling operations, the Contractor shall have sufficient base aggregate in stockpile for at least 24 h of pugmilling operation until crushing is completed.
- 3.10 Pugmilling shall be performed in a stationary mixing plant. The mixing unit shall be designed to ensure complete mixing of the materials.
- 3.11 The pugmill shall be equipped with spray bars for the addition of water.
- 3.12 The moisture content of the base mix shall not be greater than 5 % by weight when it leaves the pugmill.

Spreading And Compacting

- 3.13 Base mix shall be spread on dry and unfrozen surfaces.
- 3.14 Base mix shall not be compacted if the atmospheric temperature is less than 2 °C.
- 3.15 Base course spilled on new asphalt concrete shall be removed immediately.
- 3.16 The finished surface of the base course shall be true to grade and cross section and free of any surface defects.
- 3.17 If specified in the Special Provisions or shown on the plans, a prime coat shall be placed on the finished final lift of base course in accordance with Specification 4000 For Bituminous Prime, Tack, And Flush Coat. Prime coat shall be placed within 24 h, weather permitting, after receiving written authorization from the Engineer.
- 3.18 If a seal coat is specified for shoulder base course, the surface of the final lift of shoulder base course shall be constructed 10 mm below the surface of the final lift of the wearing course.

3.19 If excess moisture originating from external causes including but not limited to precipitation and/or Contractor's operation is present in the subgrade and/or sub-base course and/or base course prior to the acceptance of the completed surfacing structure; the Contractor shall dry the subgrade and/or sub-base course and/or base course to the optimum moisture content and compact the subgrade and/or sub-base course and/or base course to not less than the specified density or the optimum density in accordance with the requirements for Moisture-Density Proctor (STP 205-5).

Seasonal Shutdown

- 3.20 If work must be carried over from one construction season to the next and the number of working days/completion date have not expired, the following shall apply:
 - (a) For accepted final lift of base course on which a wearing course has not been placed, the following shall apply:
 - (i) At the time seasonal operations cease, a prime coat, seal coat, or asphalt concrete shall be placed on the full width of base course as directed by the Engineer.
 - (ii) The Department shall bear all the costs including materials for placing the prime coat, seal coat, and asphalt concrete on the full width of base course up to a maximum length of 1.5 km.
 - (iii) The Contractor shall bear all the costs including materials for placing the prime coat, seal coat, and asphalt concrete on the full width of base course on all other sections outside the 1.5 km limit. The Contractor may remove the base course in lieu of placing a prime coat, seal coat or asphalt concrete on it.
 - (iv) When work resumes, the Department shall bear the cost of removing the prime coat, seal coat, and asphalt concrete if required and remedying unacceptable base course including replacing the prime and prime materials on the 1.5 km limit.
 - (v) When work resumes, the Contractor shall bear the cost of removing the prime coat, seal coat, and asphalt concrete if required and remedying unacceptable base course including replacing the prime and prime materials on all other sections outside the 1.5 km limit.
 - (b) For unaccepted base course and accepted lower lifts of base course, the following shall apply:
 - (i) At the time seasonal operations cease, a prime coat, seal coat, or asphalt concrete shall be placed on the full width of base course as directed by the Engineer.
 - (ii) The Department shall bear all the costs including materials for placing the prime coat, seal coat, and asphalt concrete on the full width of base course up to a maximum length of 1.5 km.
 - (iii) The Contractor shall bear all the costs including materials for placing the prime coat, seal coat, and asphalt concrete on the full width of base course on all other sections outside the 1.5 km limit. The Contractor may remove the base course in lieu of placing a prime coat, seal coat or asphalt concrete on it.
 - (iv) When work resumes, the Department shall bear the cost of removing the prime coat, seal coat, and asphalt concrete if required and remedying unacceptable base course including replacing the prime and prime materials on the 1.5 km limit.
 - (v) When work resumes, the Contractor shall bear the cost of removing the prime coat, seal coat, and asphalt concrete if required and remedying unacceptable base course including replacing the prime and prime materials on all other sections outside the 1.5 km limit.

- 3.21 If work must be carried over from one construction season to the next and the number of working days/completion date have expired, the following shall apply:
 - (a) For accepted final lift of base course on which a wearing course has not been placed, the following shall apply:
 - (i) At the time seasonal operations cease, a prime coat, seal coat, or asphalt concrete shall be placed on the full width of base course as directed by the Engineer.
 - (ii) The Department shall bear all the costs including materials for placing the prime coat, seal coat, and asphalt concrete on the full width of base course up to a maximum length of 1.0 km.
 - (iii) The Contractor shall bear all the costs including materials for placing the prime coat, seal coat, and asphalt concrete on the full width of base course on all other sections outside the 1.0 km limit. The Contractor may remove the base course in lieu of placing a prime coat, seal coat or asphalt concrete on it.
 - (iv) When work resumes, the Contractor shall bear the costs of removing the prime coat, seal coat, and asphalt concrete if required and remedying unacceptable base course including replacing the prime and prime materials on all sections of base course.
- (b) For unaccepted base course and accepted lower lifts of base course, the following shall apply:
 - (i) At the time seasonal operations cease, a prime coat, seal coat, or asphalt concrete shall be placed on the full width of base course as directed by the Engineer.
 - (ii) The Contractor shall bear all the costs including materials for placing the prime coat, seal coat, and asphalt concrete on the full width of base course. The Contractor may remove the base course in lieu of placing a prime coat, seal coat or asphalt concrete on it.
 - (iii) When work resumes, the Contractor shall bear the costs of removing the prime coat, seal coat, and asphalt concrete if required and remedying unacceptable base course including replacing the prime and prime materials on all sections of base course.
- 3.22 The Contractor shall bear the cost of maintenance, except snow and ice removal, on sections of roadway where the road surface has been disturbed by the construction operations.

3505 - 4 SAMPLING AND TESTING

General

- 4.01 Unless otherwise specified, test procedures shall be in accordance with Saskatchewan Highways and Transportation's Standard Test Procedures Manual.
- 4.02 The test procedures in effect on the closing date of the tenders shall apply.

Acceptance Testing

4.03 Upon notification from the Contractor that a section of the roadway has been inspected and is ready for acceptance testing, the Engineer shall carry out the required tests for density and surface defects.

Acceptance Testing for Density

- 4.04 The maximum density value and the corresponding optimum moisture content shall be determined in accordance with the requirements for Moisture-Density Proctor (STP 205-5).
- 4.05 Densities shall not be taken at locations within 0.5 m of an unsupported edge and 0.1 m of a supported edge.
- 4.06 Acceptance testing for density of the base course on the road shall be determined in accordance with the requirements for Density-In-Place By Nuclear Gauge (STP 205-7).

4.07 Frequency and locations of testing on any section shall be at the discretion of the Engineer.

3505 - 5 ACCEPTANCE OR REJECTION

- 5.01 The section of base course shall be considered acceptable if it contains no surface defects and if:
 - (a) The average density meets or exceeds 100 % of maximum density.
 - (b) All individual test results are greater than 98 % of maximum density.
 - (c) The moisture content is less than or equal to the optimum moisture content.
- 5.02 If shoulder base course is placed in a separate operation and shoulder base course is the final wearing course; the section of shoulder base course shall be considered acceptable if it contains no surface defects and if:
 - (a) The average density meets or exceeds 95.0 % of maximum density.
 - (b) All individual test results are greater than 93.0 % of maximum density.
 - (c) The moisture content is less than or equal to the optimum moisture content.

Product Rejection

- 5.03 If the densities for any section of the roadway are outside the acceptance limits outlined in Sections 5.01 and 5.02, the section shall be rejected as unacceptable work and the following shall apply:
 - (a) The Contractor shall have the opportunity to remedy existing base course by rerolling or by any other method suggested by the Contractor and approved by the Engineer. The Contractor may request that the section of the roadway be retested during or after the completion of the remedial attempts.
 - (b) The section shall be tested a total of 3 times free of cost to the Contractor. The Contractor shall pay the cost of any additional testing. The rate for the Department testing shall be as designated in the Special Provisions.
 - (c) If the base course in the section remains outside the acceptance limits after the remedial attempts, the Contractor shall remove and replace all the base course in that section. The Engineer may approve a base course overlay of equal thickness in lieu of removing and replacing the base course.
- 5.04 Any section with surface defects shall be rejected as unacceptable work.

Repairs

5.05 Surface defects shall be repaired in a manner acceptable to the Engineer.

3505 - 6 MEASUREMENT

- 6.01 Granular base course shall be measured in tonnes.
- 6.02 Reject aggregate shall be measured by the cross section method. The volume of reject shall be multiplied by 1.7 to calculate tonnes.

3505 - 7 PAYMENT

- 7.01 Payment for Granular Base Course and Granular Shoulder Base Course shall be at the contract unit price per tonne. The unit price shall be full compensation for completing the work except for those activities for which specific provision for payment is made in this section.
- 7.02 The rate that the Department shall pay for rejecting aggregate in excess of 10% shall be as designated in the Special Provisions of the contract.

- 7.03 If the contract includes a bid item for:
 - (a) Hauling Granular Base Course, Hauling Granular Shoulder Base Course and/or Hauling Binder, Filler And Blender Sand; payment shall be made in accordance with Specification 2405 For Hauling On The Basis Of The Kilometre.
 - (b) Watering; payment shall be made in accordance with Specification 2500 For Watering.
 - (c) Binder, Filler And Blender Sand; payment shall be made in accordance with Specification 3400 For Binder, Filler And Blender Sand.
 - (d) Prime, Tack or Flush Coat; payment shall be made in accordance with Specification 4000 For Bituminous Prime, Tack And Flush Coat.
- 7.04 All remedial work shall be performed at the Contractor's expense including the cost of materials.



APPENDIX 3. SPECIFICATIONS Traffic Gravel

RM AGGREGATE RESOURCE MANUAL



4300 - SPECIFICATION FOR TRAFFIC GRAVEL

4300.1 DESCRIPTION

4300.1.1 The Work shall consist of crushing and stockpiling traffic gravel.

4300.2 MATERIALS

4300.2.1 The aggregate shall be composed of sound, hard and durable particles of sand, gravel and rock free from injurious quantities of elongated, soft or flaky particles, shale, loam, clay balls and organic or other deleterious material.

4300.3 CONSTRUCTION

- 4300.3.1 Traffic gravel shall be processed in accordance with Specification 3200 For Processing Aggregate.
- 4300.3.2 Traffic gravel shall comply with the requirements listed in Table 4300.3.T1:

Sieve		Percent by Weight Passing								
Designation	Canadian Metric Sieve Series									
		Туре								
	101	102	103	104	105	106	108	109		
75.0 mm	100									
50.0 mm	55-85	100								
40.0 mm		63-92								
31.5 mm			100	100						
22.4 mm			63-92	63-92	100	100	100			
18.0 mm					63-92	63-92	63-92	100		
5.0 mm	0-40	0-40	0-40	40-70	0-40	0-60	40-70	45-80		
2.0 mm	0-25	0-25	0-25	20-45	0-25	0-45	20-45	25-60		
400 µm				0-20			0-20	0-30		
Fractured Face %	50.0	Minimum								

Table 4300.3.T1 - Traffic Gravel Properties

4300.3.2.1 A tolerance of 3% in the percent by weight passing the maximum size sieve will be permitted providing 100% of the oversize passes the next highest sieve size. For Type 101 Traffic Gravel the next highest sieve size shall be 100.0 mm.

4300.4 MEASURMENT

4300.4.1 Traffic Gravel will be measured in tonnes to the nearest 0.1 of a tonne.

4300.5 **PAYMENT**

- 4300.5.1 Payment for Traffic Gravel will be at the contract unit price per tonne. The unit price will be full compensation for completing the Work except for those activities for which specific provision for payment is made in this section.
- 4300.5.2 If the Contract includes a bid item for:
 - 4300.5.2.1 Removal Of Overburden; payment will be made in accordance with Specification 2260 For Removal Of Overburden.
 - 4300.5.2.2 Hauling Aggregate; payment will be made in accordance with Specification 2405 For Haul On The Basis Of The Kilometre.



APPENDIX 4. AGGREGATE EXPLORATION TOOLS



Aggregate Exploration Tools Aggregate Detection Technology

Technology/	Depth of	Delineate	Pros	Cons	Notes
Instrument Tested	Penetration	Aggregate	- Mobility	- Cannot nenetrate more than 1 ft. of clay	A great portion of Saskatchewan is covered
Radar	7 111 4510.	res (inniced)	- Ability to detect subsurface	- Fragile connections	with clay: therefore the use of this
Nadai			structures	- Extremely interpretive results	instrument would be limited
			Structures	- Slow learning curve	instrument would be innited.
GEM300 Resistivity	Surficial to 27 ft.	Yes	- Mobility	- Low penetration	The first multi-frequency instrument tested.
Meter	-30 ft. (max)		- Multi-frequency	- Temperature constraints	all features were positive except the depth of
			- Ease of operation		penetration.
GEM2h Resistivity	Surficial – 300	Yes	- Mobility	- Temperature constraints	Great care must be taken to pick the right
Meter	ft.		- Ease of operation	- p	frequencies.
EM34 Resistivity	15 ft. – 90 ft.	Yes	- Depth of penetration	- Awkward to handle	Too bulky for extended use or for mass
Meter				- Heavy; lack of mobility	surveys.
Infrared Stereo	Surficial	N/A	- Cover large areas	- Cost	More experimentation is required to
Photography			- Readily available data	- Interpretive results	correlate aggregate deposits to this type of
					photography.
Satellite Radar	Surficial – 1 ft.;	N/A	- Photography can eliminate	- Cost	This technology is relatively new and more
Photography	some salinity		tree cover	- Some expertise required in the ordering	testing is required.
			- Can be useful in forested	of data	
			areas		
High Resolution	250 ft. – 2000 ft.	Yes	- Cover large areas	- Too deep of penetration	Penetrates too deep for aggregate potential.
Aeromagnetic Data				- Extreme cost	
				- Very interpretive results	
Airborne	15 ft. – 100 ft.	Yes	- Cover large areas	- Cost	Excellent technology to be used where
Electromagnetics			- Deep penetration	 Cannot delineate between gravel, sand, 	economically viable.
				silt or dry till	
SaskWater Well Logs	1 ft. – 600 ft.	Yes	- Cost	 Rely on driller's interpretation of what 	Care must be taken in that the term "gravel"
			- Readily available data	gravel is	is not the same with all water well drillers.
				 Only areas available are what SaskWater 	
				has done	
Geological Surface	1 ft. – 3000 ft.	No	- Used mainly in determining	 Interpretive areas between boreholes 	Useful when used in conjunction with
Maps	Salinity		how close the bedrock is to		airborne EM to differentiate between "good"
			the surface		results and the effect of bedrock.
Aggregate Potential	1 ft. – 600 ft.	Yes	- Quick reference to area's	 Interpretive areas between well logs 	Mass areas are connected by way of sporadic
Maps			landforms and "potential" for		well logs therefore can be quite interpretive.
			gravel		
			- Cost		
			 SRC Aggregate Resource 		



			Potential Maps are on file in hard copy and digital format		
Total Dissolved Solids	N/A – salinity	No	- Technology/Instrument	- Depth of penetration	Delineate aggregate.
Meter	testing		tested		
Global Positioning	N/A – survey	No	 Cover large areas quickly and 	 Knowledgeable surveyors required to 	Steadily continued use and research, very
Systems	instrument		efficiently	operate equipment	useful technology.
Limestone/Bedrock	Varies with	N/A	- Could possibly be crushed as	 Knowledge of how close 	Information is currently being compiled for
Studies	environment		a replacement for gravel	limestone/bedrock comes to the surface	this use.

Proposed Aggregate Detection Methods

Proposed Aggregate Location Methods	Anticipated Cost	Potential Use
Thermal/Infrared Study	Under \$100	Correlate on the ground first what a satellite can do, therefore reduce experimental cost.
Geometrics Pulley Array EM	Approximately \$2,500	Another type of EM system that was originally made mobile.
Continued Satellite Investigations	N/A	Devegetating forested areas in Northern Saskatchewan.
Seismic Records and Low-Level Seismic Investigations	N/A	Potentially useful for locating aggregate deposits.
Gas/Oil Borehole Logs	Nil	Potentially useful for locating aggregate deposits.
E-Phase Revisited	Nil	Potentially useful for locating aggregate deposits.
In-situ Glass Manufacturing/Aggregate Replacement	N/A	Man-made gravel from silt and sand – created in-situ.

Source: Aggregate Operators Best Management Practices Handbook for British Columbia: Volume 1 Introduction & Planning. British Columbia Ministry of Energy & Mines, April 2002.



APPENDIX 5. SAND & GRAVEL LEASE POLICY Government of Saskatchewan

RM AGGREGATE RESOURCE MANUAL



Policy

Sand and Gravel Policy

Effective: November 1, 1999 Revised: November 20, 2001 Revised: June 20, 2011 Reviewed: May 2013

A. <u>Overview of Policy Objectives</u>

The sand and gravel policy establishes the priority rights that Ministry of Highways and Infrastructure and rural municipalities are given to explore for and develop sand and gravel deposits underlying agricultural Crown lands. Commercial and private development of sand and gravel is accommodated when Ministry of Highways and Infrastructure and rural municipalities have declined their respective priority rights to utilize the deposits.

Proposals to develop deposits will take into account environmental or other unique conditions pertaining to the site. Reclamation plans to restore the site to an acceptable condition are a requirement.

The policy encourages the commercial development of sand and gravel on an as needed basis including requirements for the ongoing use of the quarriable area.

The policy stipulates the record keeping and reporting requirements of lessees.

B. Eligibility

Individuals, partnerships, corporations, municipalities or agencies who wish to conduct exploration activities for sand and gravel deposits on Crown land or who wish to develop sand and gravel deposits for private, commercial or public purposes are eligible to apply for exploration permits and sand and gravel leases.

Applicants must have all accounts with the Ministry in acceptable standing before a permit or lease is issued and must have complied with the terms and conditions of previous permits and leases in order to be eligible for an agreement.

C. <u>Procedures and Charges for Exploration Permits</u>

- 1. With each application, a proposal is required that includes the legal description of the lands involved; the scope of the operation and a reclamation plan for the land disturbed by the exploration.
- 2. If the land is subject to an agricultural lease, the applicant is required to obtain the consent and conditions of entry from the agricultural lessee of the land. Conditions of entry should include location of any roadways, fencing and gates. The applicant is responsible for negotiating compensation for any damages directly with the agricultural lessee.
- 3. Ministry of Highways and Infrastructure and the Rural Municipality in which sand and gravel deposits are found have the first right to those deposits for their purposes. Ministry of Highways and Infrastructure and the Rural Municipality are allowed to exercise their rights of first refusal on the area covered by the proposed exploration permit.
- 4. A Rural Municipality may apply for any number of exploration permits on its own subject only to the priority of Ministry of Highways and Infrastructure.

- 5. Charges for exploration permits are:
 - \$40.00 exploration permit fee, and
 - \$0.50 per acre non-refundable land use fee.
 - both fees are payable in advance.
- 6. Exploration permits expire 365 days after issuance.
- 7. The land subject to the application must be in one contiguous parcel. An exploration permit may be issued for a minimum of one legal subdivision or one river lot up to a maximum of 2,500 acres.
- 8. The fees for conducting exploration activities are as follows:
 - backhoe test holes \$ 5.00 per hole
 - dragline test holes \$10.00 per hole
 - auger holes \$ 5.00 per hole
- 9. Following completion of exploration operations, the permittee is required to provide a report that depicts the results of the exploration. The permittee must recondition the affected area as described in the reclamation plan to the satisfaction of the Ministry.

D. <u>Procedures and Charges for Sand and Gravel Leases</u>

- 1. An application for a sand and gravel lease will contain a full description of the proposal including the legal description of the lands involved; the scope of the operation and a reclamation plan for the land disturbed by the exploration.
- 2. If the land is subject to an agricultural lease, an applicant is required to obtain the consent and conditions of entry from the agricultural lessee of the land. Conditions of entry should include location of any roadways, fencing and gates. The applicant is responsible for negotiating compensation for any damages directly with the agricultural lessee.
- 3. Ministry of Highways and Infrastructure and the Rural Municipality, in which sand and gravel deposits are found, respectively, have a priority for the deposits for public use. If an applicant for a sand and gravel lease **does not hold** an exploration permit on the applicable lands, Ministry of Highways and Infrastructure and the Rural Municipality are allowed to exercise their priority on the area covered by the proposed lease. Should the Rural Municipality exercise their right under this policy, the land must be included in a lease in its name.
- 4. Where the Rural Municipality obtains a Sand and Gravel Lease through their right of first refusal, the lease will contain a clause outlining that the Lessee shall use any sand and gravel removed from the lands only for the construction or maintenance of public roads within the Lessee's municipality. The Lessee shall not, without written consent of the Minister, sell any of the sand and gravel, permit the removal of any sand and gravel from the lands by a third party, or otherwise use the sand and gravel for commercial purposes.
- 5. All sand and gravel lease applications are referred to Ministry of Environment for a review of environmental concerns particularly if the land is subject to the *Wildlife Habitat Protection Act*. Ministry of Economy may review applications to determine any possible impact on other quarrying or mining leases in the area (i.e. gold and uranium). The Rural Municipality may review the application for road issues associated with hauling of sand and gravel on municipal roads.

Clauses that address environmental and other concerns relating to the operation or reclamation of the lease may be added to the sand and gravel lease document. These clauses are binding on the sand and gravel lessee.

- 6. A sand and gravel lease conveys only the future rights to develop sand and gravel deposits contained in the leased area. The lease does not convey any rights to the surface of the leased area or associated access.
- 7. A sand and gravel lease may be issued without an exploration permit having been issued related to the sand and gravel deposits. However, an exploration permit will be issued concurrent with the issuance of the lease. There are no fees relating to the issuance of the exploration permit in this case.
- 8. The maximum size of a sand and gravel lease is 640 acres. No person, partnership, corporation, cooperative or municipality may have more than 1,280 acres under sand and gravel leases at any one time.
- 9. Fees relating to sand and gravel leases are:
 - \$200.00 lease agreement preparation fee, and
 - \$2.00 per acre as a non-refundable land holding fee.
 - both fees payable in advance

E. <u>Removing Sand and Gravel from a Lease</u>

- 1. In order to conduct quarrying operations after a sand and gravel lease is issued, the lessee must obtain a removal authorization. The request for a removal authorization will include the following:
 - (i) An acceptable engineer's plan, survey plan or plan which shows the area on which quarrying operations will take place including the access route to the site.
 - (ii) A copy of a letter of agreement with the agricultural lessee.
 - (iii) A detailed reclamation plan accompanied by a restoration deposit of cash, letter of credit or bond in the amount of \$2,500 for the first five acres and \$500 for each additional acre or part acre. Performance bonds need to continue six months beyond the termination of the lease to allow a discovery period by the Ministry. The bond is to be renewed thirty (30) calendar days before expiry of the existing bond.

Ministry of Highways and Infrastructure is not required to post a reclamation deposit. Cities, Towns, Villages, Hamlets, Rural Municipalities and Indian Bands may provide an irrevocable letter of undertaking to reclaim the site to a condition satisfactory to the Ministry, in lieu of a reclamation deposit.

- 2. Fees relating to the removal authorization are:
 - No fee for the removal authorization;
 - \$10.00 per acre as a non-refundable annual rental;
 - \$150 per acre one time payment for every acre covered by the removal authorization;
 - \$200 plus \$50 for each of the first ten acres and \$20 for each additional acre over ten acres as a one time payment to the account of the agricultural lessee.

F. <u>Reporting Requirements and General Conditions</u>

- 1. Within 30 days of the end of the calendar year, the holder of a sand and gravel lease is required to file a **Sand and Gravel Quarrying Production and Royalty Return Form** which details the amount of material removed from the lease and the amounts of applicable royalty. Royalties are due on all materials removed and used for commercial or private purposes. The royalty rate is \$.20 per cubic metre or \$.153 per cubic yard.
- 2. Records of all sand and gravel taken from the quarry must be available to the Ministry on request. The records are to include the quantity, weight and other particulars of the sand or gravel, including the

value and whether or not the sand or gravel was sold or used for a public, commercial or private purpose.

- 3. Sand and gravel leases will normally be issued for a term of five years. Ministry of Highways and Infrastructure and Rural Municipalities may receive leases with a term of up to 21 years.
- 4. Sand and gravel leases are assignable only with the consent of the Ministry. Any assignment granted by the Ministry will clearly detail the responsibilities of the assignee for the continuing operation of the lease and the reclamation requirements.
- 5. Sand and gravel leases are not saleable.
- 6. Sand and gravel lessees are required to make use of the quarry within one year of the issuance of a lease and in every year thereafter.

G. Procedures and Charges for Quarrying Road Construction Material

- 1. A road construction material permit will be issued on receipt of an application that includes the legal description of the lands, an acceptable site plan of the location and a reclamation plan.
- 2. Consent of the agricultural lessee must be obtained. The applicant is responsible for negotiating compensation for actual damages with the agricultural lessee. Conditions such as the location of the quarry, fencing or gate requirements should all be part of the consent
- 3. Road construction material permits will expire 365 days after issuance.
- 4. The fees, payable to the Ministry, for a permit to remove road construction material is as follows:
 - \$40.00 for the road construction material permit, and;
 - \$150.00 for each acre or portion of an acre on disturbed acres.
- 5. Following completion of the removal operations, the permittee is required to recondition the affected area to the satisfaction of the Ministry.

H. Additional Information

Additional information is available by contacting your local Regional Office, listed below:

Northeast (Tisdale)	Northwest (North Battleford)	South (Swift Current)
PO Box 1480	#A131-1192- 102 nd St.	PO Box 5000
1105-99th St.	North Battleford, S9A 1E9	350 Cheadle St.
Tisdale, SOE 1TO	(306) 446-7449	Swift Current, S9H 4G3
(306) 878-8813		(306) 778-8300