REQUEST FOR QUOTATIONS

Title: Supply & Delivery of 5 (or More) Salt & Sander Units

Reference No.: 1220-040-2015-037

FOR THE SUPPLY OF GOODS

(General Services)

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REQUEST FOR QUOTATIONS

1. INTRODUCTION

The City of Surrey (the "City") invites contractors to provide a quotation on the form attached as Schedule B to Attachment 1 (the "Quotation") for the supply of the goods described in Schedule A to Attachment 1 (the "Goods"). The description of the Goods sets out the minimum requirements of the City. A person that submits a Quotation (the "Contractor") should prepare a Quotation that meets the minimum requirements, and may as it may choose, in addition, to also include goods, or terms that exceed the minimum requirements.

2. ADDRESS FOR DELIVERY

A Quotation should be labelled with the Contractor's name, RFQ title and number. A Quotation should be submitted in the form attached to this RFQ as Schedule B – Quotation and Schedule B-1 – Contractor Configuration Compliance.

The Contractor may submit a Quotation either by email or in a hard copy, as follows:

(a) Email

If the Contractor chooses to submit by email, the Contractor should submit the Quotation electronically in a single pdf file to the City by email at: purchasing@surrey.ca.

PDF emailed Quotations are preferred and the City will confirm receipt of emails. Note that the maximum file size the City can receive is 10Mb. If sending large email attachments, Contractors should phone to confirm receipt. A Contractor bears all risk that the City's equipment functions properly so that the City receives the Quotation.

(b) Hard Copy

If the Contractor chooses NOT to submit by email, the Contractor should submit one original unbound Quotation and one (1) copy (two (2) in total) which should be delivered to the City at the office of:

Name: Richard D. Oppelt
Purchasing Manager
at the following location:

Address: Surrey City Hall
Finance & Technology Department – Purchasing Section
Reception Counter, 5th Floor West
13450 – 104th Avenue, Surrey, B.C., Canada, V3T 1V8

3. DATE

The City would prefer to receive Quotations on or before **April 7, 2015**. The City's office hours are 8:30 a.m. to 4:00 p.m., Monday to Friday, except statutory holidays.

4. INQUIRIES

All inquiries related to this Request for Quotations ("RFQ") should be directed in writing to:

Name:	Richard D. Oppelt, Purchasing Manager
Email:	purchasing@surrey.ca
Reference:	1220-040-2015-037

5. ADDENDA

If the City determines that an amendment is required to this RFQ, the City Representative will issue a written addendum by posting it on the BC Bid Website at www.bcbid.gov.bc.ca (the "BC Bid Website") and the City Website at www.surrey.ca (the "City Website") that will form part of this RFQ. It is the responsibility of Contractors to check the BC Bid Website and the City Website for addenda. The only way this RFQ may be added to, or amended in any way, is by a formal written addendum. No other communication, whether written or oral, from any person will affect or modify the terms of this RFQ or may be relied upon by any Contractor. By delivery of a Quotation, the Contractor is deemed to have received, accepted and understood the entire RFQ, including any and all addenda.

6. NO CONTRACT

This RFQ is simply an invitation for quotations (including prices and terms) for the convenience of all parties. It is not a tender and no obligations of any kind will arise from this RFQ or the submission of Quotations. The City may negotiate changes to any terms of a Quotation, including terms in Attachment 1 and Schedules A and B and including prices, and may negotiate with one or more Contractors or may at any time invite or permit the submission of quotations (including prices and terms) from other parties who have not submitted Quotations.

7. ACCEPTANCE

A Quotation will be an offer to the City which the City may accept at any time by signing the copy of the Quotation and delivering it to the Contractor. A Quotation is not accepted by the City unless and until both the authorized signatory and the purchasing representative have signed on behalf of the City. Delivery of the signed agreement by the City may be by fax or pdf e-mail. In that event, the contract will be comprised of the documents included in the definition of Agreement in Attachment No. 1 – Quotation Agreement – Goods.

8. CONTRACTOR'S EXPENSES

Contractors are solely responsible for their own expenses in preparing and submitting Quotations, and for any meetings, negotiations or discussions with the City or its representatives and consultants, relating to or arising from the RFQ. The City will not be liable to any Contractor for any claims, whether for costs, expenses, losses or damages, or loss of anticipated profits, incurred by the Contractor in preparing and submitting a Quotation, or participating in negotiations for a contract, or other activity related to or arising out of this RFQ.

9. CONTRACTOR'S QUALIFICATIONS

By submitting a Quotation, a Contractor represents that it has the expertise, qualifications, resources, and relevant experience to supply the Goods.

10. CONFLICT OF INTEREST

A Contractor must disclose in its Quotation any actual or potential conflicts of interest and existing business relationships it may have with the City, its elected or appointed officials or employees. The City may rely on such disclosure.

11. SOLICITATION OF COUNCIL MEMBERS AND CITY STAFF

Contractors and their agents will not contact any member of the City Council and City staff with respect to this RFQ, other than the contact person named in Section 4, at any time prior to the award of a contract or the cancellation of this RFQ.

12. CONFIDENTIALITY

All Quotations become the property of the City and will not be returned to the Contractor. All Quotations will be held in confidence by the City unless otherwise required by law. Contractors should be aware the City is a "public body" defined by and subject to the Freedom of Information and Protection of Privacy Act of British Columbia.

13. SIGNATURE

The legal name of the person or firm submitting the Quotation should be inserted in the Quotation. The Quotation should be signed by a person authorized to sign on behalf of the Contractor and include the following:

(a) If the Contractor is a corporation then the full name of the corporation should be included, together with the names of authorized signatories. The Quotation should be executed by all of the authorized signatories or by one or more of them provided that a copy of the corporate resolution authorizing those persons to execute the Quotation on behalf of the corporation is submitted;

(b) If the Contractor is a partnership or joint venture then the name of the partnership or joint venture and the name of each partner or joint venturer should be included, and each partner or joint venturer should sign personally (or, if one or more person(s) have signing authority for the partnership or joint venture, the partnership or joint venture should provide evidence to the satisfaction of the City that the person(s) signing have signing authority for the partnership or joint venture). If a partner or joint venturer is a corporation then such corporation should sign as indicated in subsection (a) above; or

(c) If the Contractor is an individual, including a sole proprietorship, the name of the individual should be included.

Attachment No. 1 – DRAFT QUOTATION AGREEMENT – GOODS

Master Price Agreement

Reference RFQ Title: Supply & Delivery of 5 (or More) Salt & Sander Units

RFQ No.: 1220-040-2015-037

BETWEEN:

CITY OF SURREY
13450 - 104 Avenue
Surrey BC V3T 1V8

(the "City")

AND:

(the "Contractor")

WHEREAS the City wishes to engage the Contractor to provide the Goods and the Contractor agrees to provide the Goods.

THEREFORE in consideration of the payment of one ($1.00) dollar and other good and valuable consideration paid by each of the parties to the other (the receipt and sufficiency of which is hereby acknowledged) the City and the Contractor agree as follows:

DEFINITIONS AND INTERPRETATION

1. In these General Terms and Conditions:
   (a) "Agreement" means this agreement and all schedules attached hereto;
   (b) “City” means the City of Surrey;
   (c) “Contractor” means a contractor whose Quotation has been accepted by the City and who is supplying the Goods under this Agreement;
   (d) "Goods" means the equipment or materials that are the subject of this Agreement;
   (e) “Purchase Price” means the price quoted by the Contractor an accepted by the City, unless otherwise agreed by the parties in writing, and includes all taxes, duties, freight charges and other charges except PST and GST; and
   (f) “RFQ” means the Request for Quotations.

2. This Agreement may be modified only by express and specific written agreement. In the event of a conflict between the provisions of any documents listed below, then the documents shall govern and take precedence in the following order:
   (a) this Agreement;
   (b) the RFQ;
   (c) the Quotation; and
   (d) other terms, if any, that are agreed to by the parties in writing.

3. The following attached Schedules are a part of this Agreement:

Schedule A – Specification of Goods;
Schedule A-1 – Preferred Specifications;
Schedule B – Quotation; and
Schedule B – Attachment No. 1 – Preferred Specifications.

GOODS

4. The Contractor will supply the Goods in accordance with this Agreement. The Goods supplied will meet the specifications set out in Schedule A of this Agreement.

5. The Contractor will deliver the Goods free and clear of all liens and encumbrances in the manner and to the destination stipulated. In the event of the Contractor's failure to meet this condition, the Contractor will, on written notice from the City, forthwith return all monies paid by the City on account of the Goods and in addition the City may by written notice terminate this Agreement without liability, and in such event, in addition to the above, the Contractor will be liable for any and all expenses or losses incurred by the City resulting from such failure.

PURCHASE PRICE

6. The City will pay the Purchase Price to the Contractor in accordance with this Agreement. The Purchase Price shall also include without limitation all costs of boxing, packing, crating, and loading and unloading the Goods at the prescribed destination.

7. Time is of the essence.

PAYMENT

8. Invoices must include the Contractor’s name, address and telephone number, the City’s purchase order number, the Contractor’s invoice number, the Contractor’s GST registration number or an indication that it is not applicable if the Contractor is a small trader, the quantity, tax (if any) and the complete Purchase Price calculations, including extensions and discounts.

9. The City will pay the invoice, in the amount as the City determines is correct less any deductions for setoffs or holdbacks permitted by this Agreement including, without limitation, those described in Sections 11, 12 and 13, within 30 days of the receipt of the invoice, unless the parties have agreed in writing to other payment terms. The payment by the City of any invoice will not bind the City with respect to any subsequent payment or final payment and will not mean that the City has accepted that the Goods are in accordance with the requirements of this Agreement, or that the Contractor is in any manner released from its obligation to comply with this Agreement.

10. Unless otherwise provided, all dollar amounts referred to in this Agreement are in lawful money of Canada.

SUBMITTING YOUR ELECTRONIC INVOICE

Please send electronic invoices to the City of Surrey by email to surreyinvoices@surrey.ca.

In order to process your payment, the following submission guidelines **must** be met:

- Invoice(s) must be sent as attachments.
- Attachment(s) must be in PDF format.
- PDF attachment(s) must be named: <Company name>_<Invoice Number>.
- Email(s) must not exceed 2MB.

Please Note: failure to meet the guidelines above may result in payment processing delays or in your payment not being processed.

SUBMITTING YOUR INVOICE BY HARD COPY

Please send your hard copy invoices by mail to:

Name: _____
Address: _____
_____

DEFICIENCIES

11. The City shall have a reasonable time to inspect and to accept the Goods. The City may reject any Goods not in accordance with this Agreement, whether due to damage resulting from improper packing, loading, unloading or otherwise. The City shall notify the Contractor of rejection of the Goods whereupon the Goods will be held subject to the disposition by the Contractor. Any costs or expenses incurred by the City as a result of the rejection of the Goods are, immediately upon written demand by the City, payable by the Contractor, and may be set off against any payments owing by the City to the Contractor.

12. The City may hold back from payments otherwise due to the Contractor up to 150% of a reasonable estimate, as determined by the City, on account of deficient or defective materials. This holdback may be held, without interest, until replacement Goods are received or such deficiency or defect is remedied.

DEFAULT AND TERMINATION

13. In the event the Contractor does not ship the Goods by the shipping date specified in this Agreement, or does not deliver the Goods by the delivery date specified in this Agreement, or otherwise fails to comply with the requirements of this Agreement, then:

(a) the City reserves the right to terminate this Agreement, in whole or in part, and in the event of such termination no payment will be owing by the City on account of this Agreement and the Contractor will be liable for any and all expenses or loss resulting from such failure or delay and will return all monies paid by the City; or

(b) if the City does not terminate this Agreement for late shipping or delivery, the City may deduct and setoff from any payments owing to the Contractor all additional costs the City reasonably incurs on account of the late shipping or delivery.

14. The City may by written notice at any time cancel this Agreement with respect to Goods which, as of the date of cancellation, have not been shipped.

15. If the Contractor becomes insolvent or makes an assignment for the benefit of creditors or a receiver or trustee is appointed for the property of the Contractor, then the City may, at its election, and without prejudice to its rights at law or in equity, terminate this Agreement.

16. The City will not accept nor be responsible for any restocking charges for any Goods shipped to the City and then, for whatever reason, returned to the Contractor pursuant to this Agreement. The Contractor is to bear all costs including shipping and handling of returned Goods.

WARRANTIES AND INDEMNITIES

17. The Contractor warrants that the Goods shall be free from defects in design, materials, workmanship and title, shall conform in all respects to the terms of this Agreement, shall be fit and suitable and perform satisfactorily for the purposes and under the conditions made known to the Contractor by the City or which were reasonably inferable. The Goods shall be at least equal to the higher of national standards or codes (such as, by way of illustration, CSA or ASTM), or standards and codes customarily applicable at the place where the City will use the Goods. The Goods shall be of the best quality, if no quality is specified. This general warranty is independent of and without prejudice to any specific warranty or service guarantee offered by the Contractor or third party manufacturer or supplier of the Goods in connection with the purpose for which the Goods were purchased. The Contractor shall assign to the City any warranty or service guarantee offered by a third party manufacturer or supplier of the Goods. Notwithstanding this assignment, if at any time up to one year from the date of delivery or installation (if applicable) the City determines the Goods or any part do not conform to these warranties, the City shall notify the Contractor within a reasonable time after such discovery, and the Contractor shall then promptly correct such nonconformity at the Contractor's expense. Goods used to correct a nonconformity shall be similarly warranted for one year from the date of installation. The Contractor's liability shall extend to all liabilities, losses, damages, claims and expenses incurred by the City caused by any breach of any of the above warranties.

18. The Contractor warrants and guarantees that Goods delivered under this Agreement do not infringe any valid patent, copyright or trademark, foreign or domestic, owned or controlled by any other corporation, firm or person, and agrees to indemnify and save harmless the City and all of its elected and appointed officials, officers, employees, servants, representatives and agents (collectively the "Indemnitees"), from and against any and all claims, demands, causes of action, suits, losses, damages and costs, liabilities, expenses and judgments (including all actual legal costs) by reason of any claim, action or litigation arising out of any alleged or actual infringement of any patent, copyright or trademark, foreign or domestic, relating to the Goods supplied under this Agreement.

19. The Contractor represents and warrants that all Goods delivered under this Agreement shall comply with all applicable codes, statutes, by-laws, rules and regulations, or any federal, provincial, municipal or other competent authority for the time being in force, including any environmental laws and that the Goods are not dangerous to the environment or to person or health.

20. The Contractor will indemnify and save harmless the Indemnitees from and against all claims, demands, causes of action, suits, losses, damages and costs, liabilities expenses and judgments (including all actual legal costs) for damage to or destruction or loss of property, including loss of use, and injury to or death of any person or persons which any of the Indemnitees incur, suffer or are put to arising out of or in connection with any failure, breach or non-performance by the Contractor of any obligation of this Agreement, or any wrongful or negligent act or omission of the Contactor or any employee or agent of the Contractor.

CUSTOMS

21. Documentation for shipments of Goods from outside Canada shall be provided by a Contractor by airmail and shall include all documents as required by law or customary practice. All packages shall be marked as follows:

> “Upon arrival, please contact customs broker:
> Livingston International Inc.
> Telephone: 604-685-3555
> Fax: 604-605-8231
> Email: cst19@livingstonintl.com”

INSPECTIONS

22. If this Agreement pertains to the fabrication, assembly or other processing of the Goods, representatives of the City shall be permitted free access at all reasonable times for the purpose of inspection, testing or obtaining information as to the progress of the fabrication, assembly or processing.

SAFETY

23. If this Agreement includes any inspection, installation or other work on the City's premises by the Contractor, or representative or sub-contractor of the Contractor, all such activity shall be performed and undertaken in strict compliance with all applicable health and safety laws and regulations, including, without limitation, the Workers Compensation Act, the Occupational Health & Safety Regulation and the Hazardous Products Act, and also in strict compliance with any published and issued by the City for use at the City's premises. The Contractor shall provide the City with the Contractor's Workers Compensation Board registration number and a letter from the Workers Compensation Board confirming the Contractor is registered in good standing with the Workers Compensation Board and that all assessments have been paid to the date thereof prior to the City having any obligation to pay monies under this Agreement.

WHMIS/MSDS

24. The Contractor covenants and agrees to comply with all the Workers Compensation Board Occupational Health and Safety Regulations for hazardous materials and substances, and in particular with the "Workplace Hazardous Materials Information Systems (WHMIS)" Regulations. All "Material Safety Data Sheets (MSDS)" will be shipped along with the Goods and any future MSDS updates will be forwarded.

SHOP DRAWINGS

25. The City may require that shop drawings be submitted by the Contractor for review prior to the delivery of the Goods. The City may require that a qualified registered professional engineer stamp and approve a shop drawing prior to submission. Any review of shop drawings by the City will not relieve the Contractor from its obligation to deliver Goods in full compliance with all requirements of this Agreement.

WAIVER

26. Any failure of the City at any time or from time to time to enforce or require the strict keeping or performance of any of the terms and conditions contained in this Agreement shall not constitute a waiver of the terms and conditions and shall not affect or impair the terms or conditions in any way or the City's right at any time to avail itself of any remedies as the City may have for any breach or breaches of the terms and conditions.

APPLICABLE LAW

27. This Agreement shall be governed by and construed in accordance with the laws of the Province of British Columbia. The City and the Contractor accept the jurisdiction of the courts of British Columbia and agree that any action under this Agreement shall be brought in such courts.

NOTICES

28. Any notice, report or other document that either party may be required or may wish to give to the other must be in writing, unless otherwise expressly provided for, and will be deemed to be validly given to and received by the addressee:
    (a) by hand, on delivery;
    (b) by facsimile, on transmission; or
    (c) by mail, five calendar days after posting.

    The addresses for delivery will be as follows:

    (a) The City:
    Attention:

    (b) The Contractor:
    Attention:

MERGER AND SURVIVAL

29. The representations, agreements, covenants and obligations set out in this Agreement shall survive the delivery of the Goods and payment of the Purchase Price.

ENTIRE AGREEMENT

30. This Agreement, including any other documents expressly included by reference in this Agreement, contains the entire agreement of the parties regarding the provision of the Goods, and no understandings or agreements, oral or otherwise, exist between the parties except as expressly set out in this Agreement. This Agreement supersedes and cancels all previous agreements between the parties relating to the Goods.

31. In the event that the Contractor issues an invoice, packing slip, sales receipt, or any like document to the City, the City accepts the document on the express condition that any terms and conditions in it which constitute terms and conditions which are in addition to or which establish conflicting terms and conditions to those set out in this Agreement are expressly rejected by the City.

SIGNATURE

32. This Agreement may be executed in one or more counterparts all of which when taken together will constitute one and the same Agreement, and one or more of the counterparts may be delivered by fax transmission or as a pdf file.

PRICES AND FREE ON BOARD ("F.O.B.") POINT

33. Prices to be shown on the Quotation as net with all applicable sales taxes, environmental taxes and levies shown separately. All other taxes, duties, insurance and freight are to be included in the net unit price.

34. Vehicles (or equipment) are to be delivered F.O.B., freight prepaid, to City of Surrey, Central Works Yard, Fleet Services Division, 6645 – 148th Street, Surrey, BC V3S 3C7.

TERM

35. The term of this Agreement shall be effective upon the date of final execution by the City and for a period of one-year (the "Term").

36. The City may at any time prior to thirty (30) days before the end of the Term, by written notice to the Contractor, extend the Term for a period of time not to exceed two (2) additional one (1) year periods, or portions thereof. If the City elects to extend the Term, the provisions of this Agreement will remain in force, including the Purchase Price and discounts, except where amended in writing by the parties.

- END OF PAGE -

ENUREMENT

37. This Agreement shall enure to the benefit of and be binding upon the respective successors and permitted assigns of the City and the Contractor.

This Quotation Agreement is executed by the Contractor this _____ day of _____, 201_.

CONTRACTOR

I/We have the authority to bind the Contractor.

_____
(Legal Name of Contractor)

_____ _____
(Signature of Authorized Signatory) (Signature of Authorized Signatory)

_____ _____
(Print Name and Position of Authorized Signatory) (Print Name and Position of Authorized Signatory)

This Quotation Agreement is executed by the City of Surrey this _____ day of _____, 201_.

CITY OF SURREY
by its authorized signatory:

_____
(Signature of Authorized Signatory)

_____
(Print Name and Position of Authorized Signatory)

SCHEDULE A – SPECIFICATION OF GOODS

PROJECT TITLE: Supply & Delivery of 5 (or More) Salt & Sander Units

PROJECT No.: 1220-040-2015-037

1. SPECIFICATIONS

Schedule A-1 – Technical Specifications contains the City's preferred specifications and relevant information that Contractors should use to prepare their Quotation. Contractors should respond to each specification as described in Schedule B-1. The primary objective of this RFQ is to describe a salt and sander unit that meets the City's preferred specifications, as described in Schedule A-1 – Technical Specifications. Additional objectives are:

(a) to establish a master price agreement(s) with Contractors who are able to provide specific salt and sander units so that the City may order units appropriate to its needs; and
(b) to obtain competitive prices.

Contractors should provide their cost from the manufacturer, less holdbacks, and submit their dealer mark-up/fee to be charged on all orders for each vehicle model. Contractor's costs may be subject to verification by the City.

The City makes no claims regarding any quantities that will be purchased of any salt and sander unit type or optional items. Quantities will be determined at the preference of the City on an as and when needed basis, including the opportunity to place additional orders with various equipment options, with the Contractor.

The awarded Contractor(s), or its approved sub-contractors, shall accept purchase orders from and deliver products and services (if any) to the City. Subcontractor participation is to be governed by the Contractor.

This RFQ is not for a one-stop, meet-any-and-all specifications/requirements.

2. GENERAL DESCRIPTION

It is the intent of this specification to provide for the purchase of five (5) or more new and unused salt and sander units with prewetting capabilities of the current model year.

The units shall be skid mounted to enable them to be loaded onto a tandem axle dump truck.

3. QUALITY

The salt/sander units shall be manufactured by a company with a registered quality standard no less than ISO 9001.

4. EQUIVALENT PRODUCT

Quotations will be accepted for consideration on any make or model that is equal or superior to the salt/sanders specified. Decisions of equivalency will be at the sole interpretation of the Fleet

and Garage Manager of the City's Engineering Department. A blanket statement that equipment proposed will meet all requirements will not be sufficient to establish equivalence. Original manufacturer's brochures of the proposed unit should be submitted with the Quotation.

All modifications made to the standard production unit described in the manufacturer's brochures must be certified by the manufacturer and submitted with the Quotation, or the Quotation will be deemed "non-responsive" and rejected without further review. Contractor must be prepared to demonstrate a unit similar to the one proposed, if requested.

5. DELIVERY

The salt/sanders shall be delivered F.O.B. Destination, Freight Prepaid to the City of Surrey in first class operating condition. If the Contractor must store, park, or hold the units until such a time that the City, at its sole discretion, requires them, the Contractor will store the units at no additional cost to the City. The units shall be delivered and commissioned and in perfect working condition no later than October 16, 2015.

Contractor shall state delivery time after receipt of order.

6. DOCUMENTATION

Contractors are to submit the following conformation along with Schedule B – Quotation.
(a) Complete manufacturer's technical specifications literature; and
(b) Standard warranty documentation.

7. QUANTITIES

The City makes no claims regarding any quantities or optional items that will be purchased. Quantities will be determined at the preference of the City on an as and when needed basis, including the opportunity to place additional orders with various equipment options, with the Contractor.

8. OPTIONAL ITEMS

The City of Surrey may choose, at its sole discretion, to add any or all of the optional items to this purchase. Contractor shall provide on a cover letter with a list of options and prices.

9. TITLE, RISK OF LOSS, FREIGHT

Title of goods received under a purchase order agreement shall remain with the Contractor until they are delivered to the City's Works Yard, 6645 – 148th St., Surrey, BC at which time title passes to the City of Surrey. The Contractor will bear all risks of loss, theft, injury, or destruction or damage of goods and materials ordered herein which occur prior to delivery and acceptance. Such loss, injury, or destruction or damage shall not release the Contractor from any obligations under.

SCHEDULE A-1 – PREFERRED SPECIFICATIONS

PREFERRED SPECIFICATIONS

The specifications herein states the minimum preferred requirements.

1. HOPPER CAPACITY
1.1 Spreaders to be new, and current model • The spreader shall apply: o Dry material o Variably prewet dry material o Pre-wetting capability of 5-30% by weight. o Limited manual Anti-icing capability. Product brochure to be submitted bid
1.2 State unladen tare weight of spreader.
1.3 State dimensions of spreader. The unit shall fit into a 16'6" dumpbox
1.4 Dry material hopper capacity to be a minimum of 8m3 (water level or struck). To be confirmed at the time of order, once load distribution calculations are provided by the proponent.
1.5 Liquid capacity to be a minimum of 3,050 litres, to ensure a 30% mix with the salt product.
2. HOPPER CONSTRUCTION
2.1 Hopper to be of steel construction. All fasteners to be stainless steel. All material surfaces to be steel shot blasted and shall have a zinc-dust combined primer coat and one finish coat of poly urethane lead free polyurethane paint, colour to be confirmed at time of order. Both coats to be baked and cured for durability.
2.2 Hopper must have a 10 year rust through warranty furnished with a manufactures support document.
2.3 Hopper shall be continuously seam welded. Must be of uni-body design, not sectional build type.
2.4 Hopper screen to be one piece "A" frame design with a minimum of 3 cross braces. Frame must be structurally bolted to upper hopper lip to provide stiffening characteristics. (use of chains and or hooks is not acceptable)
2.5 Hopper inside cross bracing: must have vertically positioned and horizontal welded hopper braces including screen frame, to provide integral strength, please provide details
2.6 Hopper screen decking must be constructed and welded using 10 mm rod on 100 x 100 mm (4 x 4") centers allowing for not more or less than 3 ½" openings.
2.7 Screen and frame must be hot dip galvanized. Screen wire must be 10 mm or more
2.8 The screen deck must incorporate 2 (two) hinged lockable man doors to assist in hopper entry when the spreader is stopped.
2.9 Hopper screen grates shall be sloped at approx. 8 degree angle
2.10 Hopper bottom cross braces must be welded and placed such that they must support the conveyor frame during removal. Conveyor belt replacement must be achievable within an acceptable time frame without the need for special support or crane equipment. Please stipulate time to replace conveyor belt.

2.11 Slide in bump stop must be robust design. The bump stop tube must be of suitable size and wall thickness and be structurally welded into the lower frame of the spreader. Tubing must have welded cap at both ends. This area must with stand repeated impact from the slide in procedure. Provide detail of size of material used.
2.12 Rear mounted access ladders with dual hand holds and safety grip steps to provide access to rear compartment.
2.13 Rear ladder access steps to be minimum of 12” x 3”, each, of open non-slip surface. Weight rating of the ladder to be 550 lbs.
2.14 Hopper inspection ladder must be rear center mounted with double hand hold rails.
2.15 Step arrangement must be accessible to operator when the spinner is in the operating position. Step angle must be arranged to ensure safe access for staff. Please provide details.
2.16 Double hand hold brackets must be available from ground level. (Single hand hold not acceptable).
2.17 Hopper inspection pedestal must be located half way up the ladder and feature a nonslip surface.
3. CONVEYOR
3.1 Conveyor belt must be seamless rubber 2 ply smooth top design. Top working surface to incorporate an additional 2 mm thickness to increase wear characteristics.
3.2 Conveyor drive roller to be vulcanized rubber with self-cleaning diamond pattern treads. Drive roller must have convex shape and be self-aligning. Tensioning roller must also be convex shape
3.3 Conveyor must have a shiftable neutral gear to allow for maintenance and adjustments while the hopper is full. Neutral feature must be designed to engage and disengage continuously under full load. Clutch housing to be made of stainless material must be a proven component in use with spreaders for not less than 5 years.
3.4 Conveyor must be able to rotate with a laden hopper, without discharging material.
3.5 Conveyor belt must be mounted on a completely removable conveyor frame including side curtain rubbers. Conveyor must be easily removable with its drive gear box and floor attached for servicing with a laden hopper
3.6 Conveyor scrapers must be located such that scrapped tailings fall free to the ground and do not become trapped between truck body floor and spreader conveyor.
3.7 All scrappers shall be constructed from stainless steel, with a polyurethane edge which contacts the conveyor. Scrapers must be replaceable. Brushes are not acceptable.
3.8 Provide details including a diagram of scraper layout and number of scrapers. All scraper mounting materials shall stainless material including springs and chains.
3.9 Conveyer tension roller must have stainless adjustment rods and support axle that can be mechanically positioned and mechanically locked.
3.10 Tension roller must have replaceable and greaseable pillow block bearing design. Both front and rear rollers must be easily removable for bench service without conveyor frame removal.
3.11 Conveyor roller cross shafts must be stainless steel. All shaft bearings must be greaseable.
3.12 Front roller must be one piece 60” wide design, so as to eliminate high pressure points of individual wheels.
3.13 Hopper must empty equally and fully from front to rear to ensure a constant centre of gravity as the hopper is emptied.

4. HYDRAULICS
4.1 Controls shall be compatible with the Parker Hydraulics IQUAN system
4.2 Main valve must be pedestal mounted allowing for airflow around all of its outer dimensions. A flush mounted valve body is not acceptable.
4.3 Main valve block shall be one piece construction.
4.4 Main valve block must be designed for a threaded valve spool installment. Quick spool interchangeability for simple trouble shooting must be possible.
4.5 Hydraulic test port must be mounted inside rear enclosure. (External mount not acceptable).
4.6 Hydraulic pressure test gage must be included for constant pressure display
4.7 Spreader, control system and liquid system to be supplied from a single, ISO certified manufacturer. All functions to be run test before leaving the factory and a certified copy of the run test to be provided. Test protocol sheet to be provided.
4.8 Valve control connector must be square DIN type with stainless clamping screw.
4.9 Spreader valve must include a high pressure 10 micron inline filter. Must include a built in filter element pressure rated by-pass valve.
4.10 Main wire harness to consist of 6 wires only. All wires to be wrapped in one industrial duty cold temperature rated wire loom.
4.11 All hydraulic controls, including drive motors and valving and all electronic controls are to be housed in a sealed compartment at rear of the spreader.
5. ELECTRICAL
5.1 Wire loom to be internal dry powder lubricated design, allowing for long life and high flexibility cold temperature rating -30 c . All wires shall have individual labeling every one inch under loom sheath. Wire to be fine braid 10 gauge on 4 power conductors and 18 gauge on communication circuit. (Lower grade looms not acceptable).
5.2 Main harness connection plugs to be numbered on both male and female sides. Pins and sockets must be sterling silver coated. Plug housing must have high quality compression rubber seal. Housing clamp must be stainless spring with roller lock handle locking over stainless stud.(Lesser quality plugs not acceptable)
5.3 Main wire plug strain relief must be stainless nut with compression rubber seal. (plastic strain relief not acceptable)
5.4 Main wiring plug connector must be treated with high quality carrion finish.
5.5 All wiring harnesses and connections to be of highest quality. Harness routing must feed through a large double lipped grommet, were wiring harness enters the mechanical cabinet. Boot and tie wrap not acceptable.
5.6 Rear mounted spreader control box must be stand off mounted in rear sealed enclosure. Secondary box to be sealed with nema 15 or better standard. Box seal to feature protected recessed track mounted compression seal. Cover is screwed down firmly on male female track lock. All wires to enter box using double lipped grommet seals with internal strain relief tie point.
5.7 Spreader control box must be stand-off mounted to limit vibration and to allow air flow around unit. Surface mounted control box not acceptable.
5.8 External power circuits i.e. beacon lights, work lights, must be routed through a drain box enclosure terminal junction. Direct wire entry not permitted! (drain boxes must be included)

5.9 Control box must have no exposed connectors or pins. Also, all wiring harness plug points shall have no “single wire” entry points into plugs.
5.10 All electrical plugs to be weather proof and sealed. No open exposed connector pins. No wire shall be rubbing on metal surfaces.
5.11 Pulse generators shall be in weather proof rubber sealed cabinet to protect from elements and ensure long life of equipment.
5.12 Rear compartment must be constructed of metal and integrated and welded to the rear of the spreader hopper body. Poly covers not acceptable.
5.13 Replaceable wire harness. All wires and looms must be available by part #. All harness must terminate using cannon plug style connectors. Wire harness diagram must be applied as a permanent adhesive label on the inside of each control box cover.
5.14 Beacon lights must be LED. Must be individual mounted lights.
5.15 Beacon lights shall be mounted on a galvanized standoff pedestal bracket. Left and right side beacons must be on separate power and controlled by virtual protected circuits. (external spreader attached lights to be controlled by controller).
5.16 Spreader sensors and encoders. All sensors to be attached to components in rear enclosure only. Only the spinner sensor will be external mounted. Conveyor and liquid pump sensors must be housed in an enclosed environment.
5.17 All electrical functions to be through a multiplex wiring harness. Control system must be capable of full manual override to allow spreading in the event of an electrical failure.
5.18 Internal electronic components of control system must be replaceable, board style. Replaceable by city staff, describe.
5.19 All wires and hoses entering the rear enclosure must be sealed. Hydraulic and liquid hose must use bulk head fittings. Electrical lines must enter through purpose built rubber bellows mounted on a welded strain relief port.
5.20 Rear enclosure must have a designed floor drain with a rubber port trap.
5.21 Unit to be supplied with system controller which is compatible with Parker IQAN system.
6. REAR CONTROL CABINET
6.1 A large center rear opening metal door will feature dual lock handles. This door shall have gas shock lift prop.
6.2 Rear door must have fully recessed door seal mounted inside door surface. This protected door seal must prevent any ingress of moisture even during pressure washing. (door seal must not be mounted to door)
6.3 Rear enclosure must be sloped to prevent spilled material build up on rear enclosure.
7. SPREADER AND DELIVERY METERING
7.1 Spinner safety shield must be manufactured of 8 gauge galvanized metal. A metal stand-off bracket must be integrated into the lower spinner shield such that a safe distance is created for the operator. (plastic shield not acceptable)
7.2 Spinner disc – 12 wings (fins), with curved blades with movement from 12 degrees to 30 degrees for thorough prewet mixing distribution. Rear discharge spreader must be equipped with a mixing chamber at the spinner.

7.3 Optimal prewetting is achieved by means of the centrifugal force that the specially designed mixing disc ensures that the salt grains and the liquid are mixed in a rotational motion inside the mixing chamber
7.4 Material metering achieved by a stainless steel feed delivery roller with various sized replaceable cams along the full inside length of the hopper. (gate or auger type opening not acceptable)
7.5 Stainless steel agitator shaft mounted above the delivery roller to have replaceable spring fingers. This allows frozen and lumpy material to break up before it is metered out. The agitator shaft will rotate in synchronized speed with delivery roller to ensure equalization and homogenization of material to the roller.
7.6 Chute opening at the base above the spinner must have a minimum opening area of 10 X 6".
7.7 Drop chute to be poly. Chute and spinner assembly shall be capable of spring assisted swinging to an upright position for storage and/or calibration. Spinner height to be vertically adjustable from 12" to 20" above the road surface.
7.8 Spreader shall be able to spread from 2- 12 m wide for all material types and "crown/strip" spread with the spreader disc. Describe if you must add additional component to switch from broadcast to strip spread.
7.9 Hydraulic off- loading of material from the spreader to be possible with the spinner and drop chute in the upright position. Safety device to prevent the spinner from being activated when in the upright position to be supplied. Describe safety system to stop the spinner rotating when raised. A driver activated over ride switch must be located at the rear of machine near the spinner.
7.10 Clamping sill for a left and right side mounted rubber base shall have stainless fasteners.
7.11 Metering rubber (lower) base on the left side shall provide extended life feature allowing a flip of the base when worn. This feature allows for the life to be doubled.
7.12 An adjustable spring tensioned rubber base to be provided for calibration adjustment. Adjustment to be made from the rear of the hopper, with the ability to remove the adjuster to make it tamper proof.
8. LANDING LEGS
8.1 Folding front legs must be each rated at 5000kg. Each leg must be clearly labeled with a factory certification of carrying capacity. Front legs to be height adjustable. Each leg must have a handle to assist adjustment for each leg.
8.2 Front legs must be hinged on a 2 "pin, with pin bushing bolted to the leg (must be removable). The pin must be mounted in two (each side) replaceable brass greaseable bushings. (steel to steel not acceptable)
8.3 Front legs must feature a replaceable ramped poly wear strip. (welded/glued wear strip not acceptable)
8.4 Rear legs must have a 3500 KG rating each. Rear legs must be clearly factory labeled to display load carrying capacity. Rear legs must have a spring assist lift to neutralize the weight when being adjusted.
8.5 Leg capacity combined load must be rated at 17,000 kg. Test standard to 25,000 kg documentation to be available. Must be capable supporting fully laden unit.
8.6 Slide in guides (left and right side mounted) shall be full hopper length and shall adjust to inside dump body width. Guides shall be galvanized 2 x 4" heavy wall tubing with ramped ends.

8.7 Storage legs and front roller to remain on spreader while in use. Leg system to allow for mounting and demounting of a fully laden spreader.
9. PREWETTING
9.1 Liquid pump must be multi-chamber diaphragm design with a minimum of 130 litres/minute (34 gallons/ minute) @ 20 bar (300 psi). Pump housing must be oil amerced such that the pump may run dry without damage. (Gear or turbine pumps not acceptable)
9.2 Liquid pump must be easily rebuildable.
9.3 Prewetting to be programmable and variable from 5% to 30% in 1% increments of the dry rate.
9.4 An in-line (2" inlet/outlet) 40 mesh filter shall be provided to supply filtered liquid to the prewetting pump. Filter shall be self-cleaning, have a built in check valve and be easily accessible and serviceable with liquid tanks full without loss of liquid.
9.5 Liquid filling must be 2" full port and must accept filling rates of up to 200 GPM and must stay fully equalized during filling procedure, with stop fill feature.
9.6 Tanks to be filled from a single poly 2" cam lock male port nipple with shutoff valve and be located at the rear. Filling port nipple to be oriented at a 45 degree angle towards ground.
9.7 Single bottom ported and vented tank lines will fill and drain all tanks equally. Filling and draining of tanks must not affect the center of gravity.
9.8 Liquid crossover equalization hose (2"dia) shall not cross from side to side between or under the conveyor belt at any point. (must be at front or rear of hopper)
9.9 A sight gauge easily seen from the filling position for liquid level shall be provided.
9.10 Tanks shall be sumped and baffled and be secured to body by means of recessed steel brackets and bolts. Straps are not acceptable. Also the bushing seat reinforces the bracket tube. Bracket tubing must be capped.
9.11 A single liquid tube to be mounted at the spinner (minimum diameter of 1"). Nozzle must not be stationary and adjust with symmetry function.
9.12 Symmetry adjustments must function by moving the deflector at the chute base. Spinner head must remain stationary.
9.13 Safety shield must not allow access to the top of the spinner at any time. There must also be an integrated safety rail mounted to the back and side of the shield. This prevents the operator from getting too close to the moving spinner.
10. CONTROLLER
10.1 All controller functions for dry & liquid materials to be road speed related from 0-70 km/hr (0-45 mph).
Controller to allow on the go operator adjustment of: • Spreading width • Spreading symmetry • Spreading quantity • Maximum ('blast') • Control beacon lights • Control work light
10.2 Controller screen to display application rates, settings, spread width and material selected.
10.3 Control system to have self-diagnostic capabilities and the controller screen to display errors in graphical symbology.
10.4 Controller to be programmable and incorporate password protection to 4 levels of allowed programmability.

10.5 Liquid and dry material empty sensors to be provided and the controller screen to indicate when dry material hopper and liquid tanks are empty. (dry material sensor required)
10.6 Controller to include PCMCIA slot to allow for uploading of any future software enhancements to the control system.
10.7 One rear mounted work light and two rotating beacons to be supplied- all individually switched and controlled from the controller.
10.8 Controller to have function buttons to assist operators in making regular spreader adjustments.
10.9 Electric tank level indicator to tell the operator when in the cab the tanks are empty.
10.10 Electric dry material level indicator to tell the operator, when in the cab, that there is 10% capacity or less of dry material available.
10.11 Data production system- data output to an RS232 port with up to 35 data streams for collection by others. A new event occurs each time that: • Start/stop- dry material • Start/ stop- liquid • Prewetting on/off • Width setting is changed • Symmetry setting is changed • Quantity setting is changed • Function buttons • Alarms & status • Distance traveled • Time logging off
11. WARRANTY
11.1 Warranty to be 100% parts and labour against defects in materials and workmanship with the following minimum coverage: • 1 year full FOB • 2 years on all electrical components FOB nearest Dealer • 5 years on stainless steel agitator shaft and delivery roller • 10 years against hopper rust perforation FOB nearest Dealer • 15 year parts availability guarantee
11.2 Two parts and Operator manuals to be provided.
11.3 Operator training to be included. Please provide details on training, and number of hours of training provided per unit
11.4 Ongoing factory technical training and support.
11.5 State where technical support is located.
11.6 Is there Canadian based factory trained technical support. Please state location of technicians. (Technical staff must be based in Canada)
11.7 Canadian parts warehouse with trained parts personnel. Location and inventory value.
11.8 Units to be supplied with suitable components to comply with this specification in all respects. This specification lists only the major details and it is the Vendor's responsibility to deliver complete and operable units.
11.9 Units must not be prototypes and must have been in use with other municipalities for a minimum of two years. A minimum of 3 references to be provided on request.

11.10 Vendor must maintain a parts inventory and be able to provide prompt 24/ 7 services during the winter operating season. Prior to the tender award the City reserves the right to visit potential vendor's facilities.
12. COMMISIONING OF UNITS
12.1 All costs associated with the installation of the units onto selected trucks shall be included in the bid price

QUOTATION

SCHEDULE B

RFQ Title: Supply & Delivery of 5 (or More) Salt & Sander Units

RFQ No: 1220-040-2015-037

CONTRACTOR

Legal Name: _____

Address: _____

Phone: _____

Fax: _____

Email: _____

CITY OF SURREY

TO:
City Representative: Richard D. Oppelt
Purchasing Manager

Address: Courier/Hand Deliver:
Surrey City Hall
Finance & Technology Department – Purchasing Section
Reception Counter 5th Floor West
13450 – 104th Avenue, Surrey, BC, V3T 1V8

Telephone: 604-590-7274
Email: purchasing@surrey.ca

1. The Contractor offers to supply to the City of Surrey the Goods for the prices plus applicable taxes as follows:

All costs to meet the preferred minimum specifications shall be included in the following delivered prices.

UNIT PRICE: $_____ **X 5** $_____

SUB-TOTAL: **$**_____

GST 5% on $_____ $_____

PST 7% on $_____ $_____

TOTAL QUOTED PRICE: **$**_____

The completed unit shall be delivered within _____ days after receipt of purchase order.

State Warranty (no less than one (1) year) _____

Warranty repairs shall be performed at _____
Please complete if applicable: British Columbia Certified ☐

Payment Terms:
A cash discount of _____ % will be allowed if the invoice is paid within _____ days, or the ____ day of the month following, or net 30 days, on a best effort basis.

2. If this offer is accepted by the City, such offer and acceptance will create a contract as described in:
   (a) the RFQ;
   (b) the specifications set out above and in Schedule A of the RFQ;
   (c) the General Terms and Conditions; and
   (d) this Quotation; and
   (e) other terms, if any, that are agreed to by the parties in writing.

3. Capitalized terms used and not defined in this Quotation will have the meanings given to them in the RFQ. Except as specifically modified by this Quotation, all terms, conditions, representations, warranties and covenants as set out in the RFQ will remain in full force and effect.

4. The Contractor will meet or exceed each item in the specifications as written: YES ☐ NO ☐. If No, any minor deviations from the stated specifications are backed up by the enclosed manufacturer or dealer's detailed description of each variation with reference made to each item to which the variation will apply.

5. The location of the nearest factory authorized warranty repair facility / parts dealership:

   _____

   _____

   _____

   _____

6. The number of days after the date the Purchase Order is received that the Contractor will guarantee delivery: _____

7. The Contractor to indicate on each line provided in **Attachment #1** if they comply with the Quotation items as specified or are taking exception to the Quotation items specified.

   If additional space is required to fully explain Quotation exception(s), attach additional page(s) to the Quotation and indicate the section number and subsection that has the exception and provide explanation.

   If more than one (1) make or model is to be offered, copy the specification sheets to submit separate Quotation sheets for each item to be evaluated.

   Note: Failure to provide all of the information in **Attachment #1** does not relieve the Contractor of the responsibility of supplying all of the necessary items and/or complying with all of the conditions of this Quotation. Complete all pages of **Attachment #1**.

- END OF PAGE -

8. I/We the undersigned duly authorized representatives of the Contractor, having received and carefully reviewed the RFQ including without limitation the Specifications and the General Terms and Conditions, submit this Quotation in response to the RFQ.

This Quotation is offered by the Contractor this _____ day of _____, 201_.

CONTRACTOR

I/We have the authority to bind the Contractor

_____
(Legal Name of Contractor)

_____ _____
(Signature of Authorized Signatory) (Signature of Authorized Signatory)

_____ _____
(Print Name and Position of Authorized Signatory) (Print Name and Position of Authorized Signatory)

This Quotation is accepted by the City this _____ day of _____, 201_.

CITY OF SURREY

_____ _____
(Signature of Authorized Signatory) (Signature of Purchasing Representative

_____ _____
(Print Name and Position of Authorized Signatory) (Print Name of Purchasing Representative)

_____
(Signature of Authorized Signatory)

_____
(Print Name and Position of Authorized Signatory)

SCHEDULE B-1 – CONTRACTOR CONFIGURATION COMPLIANCE

SPECIFICATIONS FOR: 5 (or more) Salt & Sander Units

Contractor should confirm manufacturer's specification in the "Yes OR No" column. If "No", state the manufacturers' specification. Attach additional pages if necessary.

Note: Contractors should provide complete manufacturers' details of model propsed in the right-hand column titled, "Manufacturers' Specifications".	**Make:** _____ **Model:** _____ **Year:** _____	
Preferred Minimum Specifications	**Yes OR No (Circle)**	**Manufacturers' Specifications**
1. HOPPER CAPACITY		
1.2 Spreaders to be new, and current model • The spreader shall apply: o Dry material o Variably prewet dry material o Pre-wetting capability of 5-30% by weight. o Limited manual Anti-icing capability. Product brochure to be submitted with bid.	**Y or N**	
1.2 State unladen tare weight of spreader.	**Y or N**	
1.3 State dimensions of spreader. The unit shall fit into a 16'6" dumpbox	**Y or N**	
1.4 Dry material hopper capacity to be a minimum of 8m3 (water level or struck). To be confirmed at the time of order, once load distribution calculations are provided by the proponent.	**Y or N**	
1.5 Liquid capacity to be a minimum of 3,050 litres, to ensure a 30% mix with the salt product.	**Y or N**	
2. HOPPER CONSTRUCTION		
2.1 Hopper to be of steel construction. All fasteners to be stainless steel. All material surfaces to be steel shot blasted and shall have a zinc-dust combined primer coat and one finish coat of poly urethane lead free polyurethane paint, colour to be confirmed at time of order. Both coats to be baked and cured for durability.	**Y or N**	
2.2 Hopper must have a 10 year rust through warranty furnished with a manufactures support document.	**Y or N**	
2.3 Hopper shall be continuously seam welded. Must be of uni-body design, not sectional build type.	**Y or N**	
2.4 Hopper screen to be one piece "A" frame design with a minimum of 3 cross braces. Frame must be structurally bolted to upper hopper lip to provide stiffening characteristics. (use of chains and or hooks is not acceptable)	**Y or N**	

2.5 Hopper inside cross bracing: must have vertically positioned and horizontal welded hopper braces including screen frame, to provide integral strength, please provide details	**Y or N**	
2.6 Hopper screen decking must be constructed and welded using 10 mm rod on 100 x 100 mm (4 x 4") centers allowing for not more or less than 3 ½" openings.	**Y or N**	
2.7 Screen and frame must be hot dip galvanized. Screen wire must be 10 mm or more	**Y or N**	
2.8 The screen deck must incorporate 2 (two) hinged lockable man doors to assist in hopper entry when the spreader is stopped.	**Y or N**	
2.9 Hopper screen grates shall be sloped at approx. 8 degree angle	**Y or N**	
2.10 Hopper bottom cross braces must be welded and placed such that they must support the conveyor frame during removal. Conveyor belt replacement must be achievable within an acceptable time frame without the need for special support or crane equipment. Please stipulate time to replace conveyor belt.	**Y or N**	
2.11 Slide in bump stop must be robust design. The bump stop tube must be of suitable size and wall thickness and be structurally welded into the lower frame of the spreader. Tubing must have welded cap at both ends. This area must with stand repeated impact from the slide in procedure. Provide detail of size of material used.	**Y or N**	
2.12 Rear mounted access ladders with dual hand holds and safety grip steps to provide access to rear compartment.	**Y or N**	
2.13 Rear ladder access steps to be minimum of 12" x 3", each, of open non-slip surface. Weight rating of the ladder to be 550 lbs.	**Y or N**	
2.14 Hopper inspection ladder must be rear center mounted with double hand hold rails.	**Y or N**	
2.15 Step arrangement must be accessible to operator when the spinner is in the operating position. Step angle must be arranged to ensure safe access for staff. Please provide details.	**Y or N**	
2.16 Double hand hold brackets must be available from ground level. (Single hand hold not acceptable).	**Y or N**	
2.17 Hopper inspection pedestal must be located half way up the ladder and feature a nonslip surface.	**Y or N**	
3. CONVEYOR		
3.1 Conveyor belt must be seamless rubber 2 ply smooth top design. Top working surface to incorporate an additional 2 mm thickness to increase wear characteristics.	**Y or N**	
3.2 Conveyor drive roller to be vulcanized rubber with self-cleaning diamond pattern treads. Drive roller must have convex shape and be self-aligning. Tensioning roller must also be convex shape	**Y or N**	

3.3 Conveyor must have a shiftable neutral gear to allow for maintenance and adjustments while the hopper is full. Neutral feature must be designed to engage and disengage continuously under full load. Clutch housing to be made of stainless material must be a proven component in use with spreaders for not less than 5 years.	**Y or N**	
3.4 Conveyor must be able to rotate with a laden hopper, without discharging material.	**Y or N**	
3.5 Conveyor belt must be mounted on a completely removable conveyor frame including side curtain rubbers. Conveyor must be easily removable with its drive gear box and floor attached for servicing with a laden hopper	**Y or N**	
3.6 Conveyor scrapers must be located such that scrapped tailings fall free to the ground and do not become trapped between truck body floor and spreader conveyor.	**Y or N**	
3.7 All scrappers shall be constructed from stainless steel, with a polyurethane edge which contacts the conveyor. Scrapers must be replaceable. Brushes are not acceptable.	**Y or N**	
3.8 Provide details including a diagram of scraper layout and number of scrapers. All scraper mounting materials shall stainless material including springs and chains.	**Y or N**	
3.9 Conveyer tension roller must have stainless adjustment rods and support axle that can be mechanically positioned and mechanically locked.	**Y or N**	
3.10 Tension roller must have replaceable and greasable pillow block bearing design. Both front and rear rollers must be easily removable for bench service without conveyor frame removal.	**Y or N**	
3.11 Conveyor roller cross shafts must be stainless steel. All shaft bearings must be greaseable.	**Y or N**	
3.12 Front roller must be one piece 60” wide design, so as to eliminate high pressure points of individual wheels.	**Y or N**	
3.13 Hopper must empty equally and fully from front to rear to ensure a constant centre of gravity as the hopper is emptied.	**Y or N**	
4. HYDRAULICS		
4.1 Controls shall be compatible with the Parker Hydraulics IQUAN system	**Y or N**	
4.2 Main valve must be pedestal mounted allowing for airflow around all of its outer dimensions. A flush mounted valve body is not acceptable.	**Y or N**	
4.3 Main valve block shall be one piece construction.	**Y or N**	
4.4 Main valve block must be designed for a threaded valve spool installment. Quick spool interchangeability for simple trouble shooting must be possible.	**Y or N**	
4.5 Hydraulic test port must be mounted inside rear enclosure. (External mount not acceptable).	**Y or N**	

4.6 Hydraulic pressure test gage must be included for constant pressure display	**Y or N**	
4.7 Spreader, control system and liquid system to be supplied from a single, ISO certified manufacturer. All functions to be run test before leaving the factory and a certified copy of the run test to be provided. Test protocol sheet to be provided.	**Y or N**	
4.8 Valve control connector must be square DIN type with stainless clamping screw.	**Y or N**	
4.9 Spreader valve must include a high pressure 10 micron inline filter. Must include a built in filter element pressure rated by-pass valve.	**Y or N**	
4.10 Main wire harness to consist of 6 wires only. All wires to be wrapped in one industrial duty cold temperature rated wire loom.	**Y or N**	
4.11 All hydraulic controls, including drive motors and valving and all electronic controls are to be housed in a sealed compartment at rear of the spreader.	**Y or N**	
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5.2 Main harness connection plugs to be numbered on both male and female sides. Pins and sockets must be sterling silver coated. Plug housing must have high quality compression rubber seal. Housing clamp must be stainless spring with roller lock handle locking over stainless stud.(Lesser quality plugs not acceptable)	**Y or N**	
5.3 Main wire plug strain relief must be stainless nut with compression rubber seal. (plastic strain relief not acceptable)	**Y or N**	
5.4 Main wiring plug connector must be treated with high quality carrion finish.	**Y or N**	
5.5 All wiring harnesses and connections to be of highest quality. Harness routing must feed through a large double lipped grommet, were wiring harness enters the mechanical cabinet. Boot and tie wrap not acceptable.	**Y or N**	
5.6 Rear mounted spreader control box must be stand off mounted in rear sealed enclosure. Secondary box to be sealed with nema 15 or better standard. Box seal to feature protected recessed track mounted compression seal. Cover is screwed down firmly on male female track lock. All wires to enter box using double lipped grommet seals with internal strain relief tie point.	**Y or N**	
5.7 Spreader control box must be stand-off mounted to limit vibration and to allow air flow around unit. Surface mounted control box not acceptable.	**Y or N**	

5.8 External power circuits i.e. beacon lights, work lights, must be routed through a drain box enclosure terminal junction. Direct wire entry not permitted! (drain boxes must be included)	**Y or N**	
5.9 Control box must have no exposed connectors or pins. Also, all wiring harness plug points shall have no “single wire” entry points into plugs.	**Y or N**	
5.10 All electrical plugs to be weather proof and sealed. No open exposed connector pins. No wire shall be rubbing on metal surfaces.	**Y or N**	
5.11 Pulse generators shall be in weather proof rubber sealed cabinet to protect from elements and ensure long life of equipment.	**Y or N**	
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5.15 Beacon lights shall be mounted on a galvanized standoff pedestal bracket. Left and right side beacons must be on separate power and controlled by virtual protected circuits. (external spreader attached lights to be controlled by controller).	**Y or N**	
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5.18 Internal electronic components of control system must be replaceable, board style. Replaceable by city staff, describe.	**Y or N**	
5.19 All wires and hoses entering the rear enclosure must be sealed. Hydraulic and liquid hose must use bulk head fittings. Electrical lines must enter through purpose built rubber bellows mounted on a welded strain relief port.	**Y or N**	
5.20 Rear enclosure must have a designed floor drain with a rubber port trap.	**Y or N**	
5.21 Unit to be supplied with system controller which is compatible with Parker IQAN system.	**Y or N**	
6. REAR CONTROL CABINET		
6.1 A large center rear opening metal door will feature dual lock handles. This door shall have gas shock lift prop.	**Y or N**	

6.2 Rear door must have fully recessed door seal mounted inside door surface. This protected door seal must prevent any ingress of moisture even during pressure washing. (door seal must not be mounted to door)	**Y or N**	
6.3 Rear enclosure must be sloped to prevent spilled material build up on rear enclosure.	**Y or N**	
7. SPREADER AND DELIVERY METERING		
7.1 Spinner safety shield must be manufactured of 8 gauge galvanized metal. A metal stand-off bracket must be integrated into the lower spinner shield such that a safe distance is created for the operator. (plastic shield not acceptable)	**Y or N**	
7.2 Spinner disc – 12 wings (fins), with curved blades with movement from 12 degrees to 30 degrees for thorough prewet mixing distribution. Rear discharge spreader must be equipped with a mixing chamber at the spinner.	**Y or N**	
7.3 Optimal prewetting is achieved by means of the centrifugal force that the specially designed mixing disc ensures that the salt grains and the liquid are mixed in a rotational motion inside the mixing chamber	**Y or N**	
7.4 Material metering achieved by a stainless steel feed delivery roller with various sized replaceable cams along the full inside length of the hopper. (gate or auger type opening not acceptable)	**Y or N**	
7.5 Stainless steel agitator shaft mounted above the delivery roller to have replaceable spring fingers. This allows frozen and lumpy material to break up before it is metered out. The agitator shaft will rotate in synchronized speed with delivery roller to ensure equalization and homogenization of material to the roller.	**Y or N**	
7.6 Chute opening at the base above the spinner must have a minimum opening area of 10 X 6".	**Y or N**	
7.7 Drop chute to be poly. Chute and spinner assembly shall be capable of spring assisted swinging to an upright position for storage and/or calibration. Spinner height to be vertically adjustable from 12" to 20" above the road surface.	**Y or N**	
7.8 Spreader shall be able to spread from 2- 12 m wide for all material types and "crown/strip" spread with the spreader disc. Describe if you must add additional component to switch from broadcast to strip spread.	**Y or N**	
7.9 Hydraulic off- loading of material from the spreader to be possible with the spinner and drop chute in the upright position. Safety device to prevent the spinner from being activated when in the upright position to be supplied. Describe safety system to stop the spinner rotating when raised. A driver activated over ride switch must be located at the rear of machine near the spinner.	**Y or N**	
7.10 Clamping sill for a left and right side mounted rubber base shall have stainless fasteners.	**Y or N**	

7.11 Metering rubber (lower) base on the left side shall provide extended life feature allowing a flip of the base when worn. This feature allows for the life to be doubled.	**Y or N**	
7.12 An adjustable spring tensioned rubber base to be provided for calibration adjustment. Adjustment to be made from the rear of the hopper, with the ability to remove the adjuster to make it tamper proof.	**Y or N**	
8. LANDING LEGS		
8.1 Folding front legs must be each rated at 5000kg. Each leg must be clearly labeled with a factory certification of carrying capacity. Front legs to be height adjustable. Each leg must have a handle to assist adjustment for each leg.	**Y or N**	
8.2 Front legs must be hinged on a 2 “pin, with pin bushing bolted to the leg (must be removable). The pin must be mounted in two (each side) replaceable brass greaseable bushings. (steel to steel not acceptable)	**Y or N**	
8.3 Front legs must feature a replaceable ramped poly wear strip. (welded/glued wear strip not acceptable)	**Y or N**	
8.4 Rear legs must have a 3500 KG rating each. Rear legs must be clearly factory labeled to display load carrying capacity. Rear legs must have a spring assist lift to neutralize the weight when being adjusted.	**Y or N**	
8.5 Leg capacity combined load must be rated at 17,000 kg. Test standard to 25,000 kg documentation to be available. Must be capable supporting fully laden unit.	**Y or N**	
8.6 Slide in guides (left and right side mounted) shall be full hopper length and shall adjust to inside dump body width. Guides shall be galvanized 2 x 4” heavy wall tubing with ramped ends.	**Y or N**	
8.7 Storage legs and front roller to remain on spreader while in use. Leg system to allow for mounting and demounting of a fully laden spreader.	**Y or N**	
9. PREWETTING		
9.1 Liquid pump must be multi-chamber diaphragm design with a minimum of 130 litres/minute (34 gallons/ minute) @ 20 bar (300 psi). Pump housing must be oil amerced such that the pump may run dry without damage. (Gear or turbine pumps not acceptable)	**Y or N**	
9.2 Liquid pump must be easily rebuildable.	**Y or N**	
9.3 Prewetting to be programmable and variable from 5% to 30% in 1% increments of the dry rate.	**Y or N**	

9.4 An in-line (2" inlet/outlet) 40 mesh filter shall be provided to supply filtered liquid to the prewetting pump. Filter shall be self-cleaning, have a built in check valve and be easily accessible and serviceable with liquid tanks full without loss of liquid.	**Y or N**	
9.5 Liquid filling must be 2" full port and must accept filling rates of up to 200 GPM and must stay fully equalized during filling procedure, with stop fill feature.	**Y or N**	
9.6 Tanks to be filled from a single poly 2" cam lock male port nipple with shutoff valve and be located at the rear. Filling port nipple to be oriented at a 45 degree angle towards ground.	**Y or N**	
9.7 Single bottom ported and vented tank lines will fill and drain all tanks equally. Filling and draining of tanks must not affect the center of gravity.	**Y or N**	
9.8 Liquid crossover equalization hose (2"dia) shall not cross from side to side between or under the conveyor belt at any point. (must be at front or rear of hopper)	**Y or N**	
9.9 A sight gauge easily seen from the filling position for liquid level shall be provided.	**Y or N**	
9.10 Tanks shall be sumped and baffled and be secured to body by means of recessed steel brackets and bolts. Straps are not acceptable. Also the bushing seat reinforces the bracket tube. Bracket tubing must be capped.	**Y or N**	
9.11 A single liquid tube to be mounted at the spinner (minimum diameter of 1"). Nozzle must not be stationary and adjust with symmetry function.	**Y or N**	
9.12 Symmetry adjustments must function buy moving the deflector at the chute base. Spinner head must remain stationary.	**Y or N**	
9.13 Safety shield must not allow access to the top of the spinner at any time. There must also be an integrated safety rail mounted to the back and side of the shield. This prevents the operator from getting too close to the moving spinner.	**Y or N**	
10. CONTROLLER		
10.1 All controller functions for dry and liquid materials to be road speed related from 0-70 km/hr (0-45 mph).	**Y or N**	
Controller to allow on the go operator adjustment of: • Spreading width • Spreading symmetry • Spreading quantity • Maximum ('blast') • Control beacon lights • Control work light	**Y or N**	

10.2 Controller screen to display application rates, settings, spread width and material selected.	**Y or N**	
10.3 Control system to have self-diagnostic capabilities and the controller screen to display errors in graphical symbology.	**Y or N**	
10.4 Controller to be programmable and incorporate password protection to 4 levels of allowed programmability.	**Y or N**	
10.5 Liquid and dry material empty sensors to be provided and the controller screen to indicate when dry material hopper and liquid tanks are empty. (Dry material sensor required.)	**Y or N**	
10.6 Controller to include PCMCIA slot to allow for uploading of any future software enhancements to the control system.	**Y or N**	
10.7 One rear mounted work light and two rotating beacons to be supplied- all individually switched and controlled from the controller.	**Y or N**	
10.8 Controller to have function buttons to assist operators in making regular spreader adjustments.	**Y or N**	
10.9 Electric tank level indicator to tell the operator when in the cab the tanks are empty.	**Y or N**	
10.10 Electric dry material level indicator to tell the operator, when in the cab, that there is 10% capacity or less of dry material available.	**Y or N**	
10.11 Data production system- data output to an RS232 port with up to 35 data streams for collection by others. A new event occurs each time that: • Start/stop- dry material • Start/ stop- liquid • Prewetting on/off • Width setting is changed • Symmetry setting is changed • Quantity setting is changed • Function buttons • Alarms & status • Distance traveled • Time logging off	**Y or N**	
11. WARRANTY		
11.1 Warranty to be 100% parts and labour against defects in materials and workmanship with the following minimum coverage: • 1 year full FOB • 2 years on all electrical components FOB nearest Dealer • 5 years on stainless steel agitator shaft and delivery roller • 10 years against hopper rust perforation FOB nearest Dealer • 15 year parts availability guarantee	**Y or N**	
11.2 Two parts and Operator manuals to be provided.	**Y or N**	
11.3 Operator training to be included. Please provide details on training, and number of hours of training provided per unit	**Y or N**	
11.4 Ongoing factory technical training and support.	**Y or N**	

11.5 State where technical support is located.	**Y or N**	
11.6 Is there Canadian based factory trained technical support. Please state location of technicians. (Technical staff must be based in Canada)	**Y or N**	
11.7 Canadian parts warehouse with trained parts personnel. Location and inventory value.	**Y or N**	
11.8 Units to be supplied with suitable components to comply with this specification in all respects. This specification lists only the major details and it is the Vendor's responsibility to deliver complete and operable units.	**Y or N**	
11.9 Units must not be prototypes and must have been in use with other municipalities for a minimum of two years. A minimum of 3 references to be provided on request.	**Y or N**	
11.10 Vendor must maintain a parts inventory and be able to provide prompt 24/ 7 services during the winter operating season. Prior to the tender award the City reserves the right to visit potential vendor's facilities.	**Y or N**	
12. COMMISIONING OF UNITS		
12.1 All costs associated with the installation of the units onto selected trucks shall be included in the bid price.	**Y or N**	
13. MISCELLANEOUS		
13.1 All units to meet all requirements of British Columbia Department of Transportation Authorities and related laws and statutes.	**Y or N**	
13.2 All units to meet all requirements of Workers' Compensation Board of British Columbia in regards to warning and safety decals.	**Y or N**	