

Essex-Windsor Solid Waste Authority



Request for Proposals

For Fibre Optical Sorting System (FOSS) at Windsor Material Recovery Facility (MRF) for the Essex-Windsor Solid Waste Authority

Issue Date: August 10, 2018

Closing Date and Time: Tuesday, September 04, 2018, 12:00 PM

Mandatory On-site Meeting: Thursday August 23, 2018, 10:30 AM

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1. Document Takers Responsibility

The contractor shall note that it is their obligation to notify the Essex-Windsor Solid Waste Authority (the Authority) if they have printed the documents off of the Authority Website or acquired it from any other source so they can be added to the Plan Takers List in case of notices, changes, addenda or other reason. Please contact the Authority office to be added to the list.

Cathy Copot-Nepszy- Manager of Waste Diversion,

Phone: 519-776-6441 x 1394, Email: ccnepszy@ewswa.org

2. Facility & Operations Description and General Scope of Work

The Essex-Windsor Solid Waste Authority manages the Windsor Material Recovery Facility (MRF) which is currently operated under contract by Windsor Disposal Services Ltd. Through a dual-stream recycling process, fibre materials are collected via the curbside Blue Box Program and then delivered to the Fibre Building at the Windsor MRF; whereas, collected containers are delivered to the Container Building.

At the Fibre building, fibre materials are dropped on the tip floor which has the capacity to hold only two days' worth of collected fibre materials with a MRF rated capacity of 8 tonnes per hour (refer to Appendix A – Fibre Line Drawing). Then they are loaded manually by a skid steer operator onto an infeed conveyor that brings the material up through an incline conveyor (C2) to a manual pre-sort area. Here on the second level platform, two (2) operators opposing one another remove residuals and office paper, and open bags/boxes to present the material for further processing at upcoming stations. Next, material drops onto an OCC (old corrugated cardboard) screen that separates OCC from the fibre materials and delivers them a final OCC QC line conveyor where one (1) QC OCC Operator performs final sorting to clean OCC product for the end-market. Newspaper and other materials that drop through the OCC screen are then delivered up from a C7 conveyor (300FPM) to a C8 Conveyor (500FPM) that is in a vacant (currently no optical sort device) "optical sort" room. From here, materials are brought into the manual sort room conveyor where six (6) operators (three (3) on each side of the conveyor) sort: OCC, boxboard (OBB), container recyclables, and residual that they place into gravity chutes that delivers material to floor level storage bunkers (e.g., OCC, OBB, residual) and bins (recyclables). This conveyor supports manual operators to prepare final newspaper as it is delivered to the baler conveyor or floor level storage bunker. In this closed sort room there is also a reversible standalone conveyor that operators dump their blue bins once they are full of picked recyclable materials which are then brought to a silo. Once full, this silo is delivered by forklift to the Container Building tip floor to deliver container recyclables. Live-bottom storage bunkers below the platform store material until they have accumulated enough material to be run through to the baler. Due to higher volumes, typically, ONP#8 runs continuously through the processing system directly through to the baler operation, where one (1) operator bales is stationed to bale presented materials and performs quality control and transportation on final product.

As a result of current market conditions, quality concerns on end-marketable commodities, and a study published in October 2016 by Reclay StewardEdge Inc. (refer to Appendix B), the Authority is intending to invest in a Fibre Optical Sorting System (FOSS) at the Windsor MRF that sorts fibre materials (e.g., OCC, OBB, newspaper, office paper, residuals) with the goal of cleaning newspaper and recovering more OCC, OBB, and container recyclables for the end-market. One of the main study recommendations was the install of a FOSS in the vacant "optical sort" room that would improve processing efficiencies and generate recycling program revenues. Since this study, customer concerns with fine materials such as glass, small lids, debris, etc. has been raised also. Therefore, there is interest to invest in a small fines screening process that will only improve revenues and quality of final material. Preferably, this would be installed prior to the FOSS which would improve the integrity and longevity of the processing equipment (including the new FOSS). These equipment recommendations along with submitted proposals that would bring the existing recycling process to a state of optimal performance are required to generally fit within the existing infrastructure of the Windsor MRF's Fibre Building. Currently, in total the Fibre Building has nine (9) sorters and two (2) supportive operators (i.e., baler, material handler).

Moreover, the Authority is requesting that responses to this RFP also include material composition audits that are sourced by the bidder to a neutral third party to evaluate the composition of incoming and outgoing materials that would assist with the development and evaluation of this new processing equipment.

Objectives

The objectives of this RFP are as follows:

- a) To gather updated information on material composition of the Windsor MRF's Fibre Building for the design and evaluation of a new FOSS.
- b) To increase the recovery of OCC and OBB from the ONP stream; and
- c) To reduce the level of contamination (e.g., EWSWA Blue Box items, OCC, OBB) in the ONP stream.
- d) Recover products such as OCC/OBB and EWSWA Blue Box items with high levels of purity (e.g., low contamination levels) through the dual ejection optical sorter equipment.

Therefore, bidders are requested to bid on the following items:

- A. Design, supply, delivery, install, and commissioning of Fibre Optical Sorting System (FOSS) (optical sorter, compressor, conveyors, fines screen, etc.).
- B. Material Composition Audits (Pre- and Post- FOSS install) to assist with design and evaluation of recycling process equipment (e.g., FOSS).

Price Proposals for the equipment shall be F.O.B. to the installation site in Windsor, Ontario. Qualified parties with requisite experience in design, supply, install, commissioning, and support for this type of equipment are invited to submit a Proposal outlining their price, experience, qualifications, and proposed project timeline, by no later than the closing date/time identified by this RFP.

The Authority reserves the right to reject any and all price quotes and to waive formalities as the interest of the Authority may require without stating reasons therefore, the lowest or any price quote may not necessarily be accepted.

The Authority also reserves the right to award contracts to separate suppliers if it deems appropriate.

3. Bidder's Check Sheet

(To be enclosed in the Bid Envelope)

Please ensure that the following things have been completed:

- Has your bid been signed by the proper officer(s) of the firm?
- Have you enclosed the required bid deposit?
- Have you signed the declaration of understanding?

Notes:

- i. Your bid will be informal and shall be disqualified if ANY of the foregoing points have not been complied with.
- ii. If further clarification is required, please contact the Authority as noted below.

Authority Contact for All Contract Related Matters

Ms. Cathy Copot-Nepszy, M.ASc., Manager of Waste Disposal, Essex-Windsor Solid Waste Authority

360 Fairview Avenue West, Suite 211, Essex, Ontario. N8M 3G4

Phone: 226-345-0230, email: ccnepszy@ewswa.org

4. Closing Date and Time

Sealed bids clearly marked as to contents, will be received for Fibre Optical Sorting System (FOSS) at the Windsor Material Recovery Facility (MRF) for the Essex-Windsor Solid Waste Authority, where the envelope must stipulate the respondent's company name.

Bids must be addressed to:

Ilija Maodus, General Manager - Essex-Windsor Solid Waste Authority

360 Fairview Ave. W., Suite 211, Essex, Ontario N8M 3G4

Bids will be received at his office until the closing date and time:

Closing Date: September 4, 2018

Closing Time: At 12:00PM (Noon) Local Time

Tenders received after the official closing time and date specified above will not be considered. On the closing date, commencing at approximately 12:05 PM local time, all submissions will be opened, read and recorded publicly by the Essex-Windsor Solid Waste Authority at the above mentioned address. No electronic submission packages will be accepted.

5. Withdrawal or Qualifying of Bids

A Bidder who has already submitted a Bid may submit a further Bid at any time up to the official closing time. The last Bid received shall supersede and invalidate all Bids previously submitted by that Bidder for this contract.

A Bidder may withdraw or qualify their Bid at any time up to the official closing time by submitting a letter bearing their signature and seal as in their Bid to the Authority. No telephone calls, faxes or emails will be considered. Bids which are qualified may be rejected by the Authority without assigning any reasons.

6. Informal or Unbalanced Bids

All entries in the Form of Bid shall be made in ink or by typewriter. Entries made in pencil shall, unless otherwise decided by the Authority, be invalid or informal.

Bids which are incomplete, conditional, illegible or obscure or that contain additions not called for, reservations, erasures, alterations (unless properly and clearly made and initialled by the Bidder's signing officer) or irregularities of any kind may be rejected as informal.

Bids that contain prices which appear to be so unbalanced as likely to affect adversely the interest of the Authority may be rejected. Wherever in a Bid the amount quoted for an item

does not agree with the extension of the estimated quantity and the Bidder's unit price, the unit price shall govern and the amount and the Total Bid Price shall be corrected accordingly.

The Authority reserves the right to waive formalities at its discretion.

Bidders who have submitted Bids that have been rejected by the Authority because of informalities will normally be notified of the reasons for the rejection within ten (10) days after the closing date for Bids.

7. Quantities

The quantities as set out in the Form of Bid are approximate only and are given as a basis for estimate and comparing. No additional payment will be made for any work which is required or inferable but not specifically mentioned herein. The total prices quoted shall be deemed to include all materials, equipment and labour to complete the work as specified and to the complete satisfaction of the Authority.

8. Bids

Each Bid must include a completed Quantity and Price Schedule, including Statement A (Bidder's Experience), and a Bid deposit as required herein. The complete written contract documents and specifications should be submitted as the Bid. The Bidder shall give the total Bid price both in words and in figures and shall fill in all blank spaces for unit prices, item prices, lump sums, and other information in the Form of Bid. The Bid must be enclosed in a sealed opaque envelope clearly marked with the name and address of the company.

9. Qualification of Bidders

All Bidders shall be required to demonstrate to the satisfaction of the Authority that they have adequate financial resources, experienced personnel, and expertise to perform the services required by the specifications, and shall furnish such information and/or proof of these qualifications. No contract will be awarded to any Bidder who, as determined by the Authority, is not qualified to perform the necessary service due to any unsatisfactory record, or inadequate experience, or who lacks the necessary capital, organization, and equipment to conduct and complete the installation and provide technical support and service in strict accordance with the specifications. The Authority is requesting as a minimum, 10 years of experience in the supply and service of recycling processing equipment.

10. Bid Prices

The lump sum price or prices quoted in the Quantity and Price Schedule shall include the furnishing of all materials, supplies and equipment and provision of all labour, tools and equipment, utility and transportation services necessary to perform and complete all the work

required under the Contract, including all miscellaneous work, whether specifically included in the Contract Documents or not.

11. Sole Interest

No person, firm, or corporation other than the Bidder shall have any interest in the Bid or in the proposed contract for which the Bid is made and to which it relates.

12. Omissions, Discrepancies and Interpretations

Should a Bidder find omissions from or discrepancies in any of the Bid documents or should there be doubt as to the meaning or any part of such documents, they should notify the Authority, preferably in writing.

If the Authority considers that a correction, explanation or interpretation is necessary or desirable, they will issue an addendum to all who have taken out Bid documents. No oral explanation or interpretation shall modify any of the requirements or provisions of the Bid documents.

Neither party to the contract shall take advantage of any apparent error or omission in the Contract Documents, but the Authority shall be permitted to make such corrections and interpretations as may be necessary for fulfillment of the intent of the Contract Documents. Any work or material not included herein but which may be fairly implied as included in this Contract, of which the Authority shall judge, shall be done or furnished by the Contractor as if such work or materials had been included.

In the event of any inconsistency or conflict in the provision of the Bid documents, such provisions shall take precedence and govern in the following order:

- i. General Specifications
- ii. Quantity and Price Schedule
- iii. Information for Bidders
- iv. Bidder's Check List

13. Bid Deposit

Bids shall be accompanied by a deposit in the form of an irrevocable letter of credit, certified cheque or bid bond in the amount of ten percent (10%) of the bid price submission for Item A, made payable to the Essex-Windsor Solid Waste Authority. The deposits of all bidders, except for the two lowest acceptable Bids, will be returned within 10 days after the tenders are opened. The tender deposits of all bidders will be released upon execution by the successful Bidder of the contract agreement.

Bidders are requested to note that no interest will be paid for the Bid deposit cheque retained by the Authority. The Bidders are deemed to have made due allowance for this in their contract bid price.

The Contractor shall hold their Bid open for a period of not less than ninety (90) days and the Authority shall have the option of accepting or rejecting any or all Bids within the ninety (90) day period from the Bid closing date. After the ninety (90) day period, the Contractor may, without penalty, withdraw their Bid and their Bid deposit will be returned. The Bidder may, however, elect to hold the Bid open for a further period of time, if necessary, and the Authority reserves the right to accept or reject such Bid so extended.

14. Experience

In order to aid the Authority in determining the ability of each Bidder, the Bidder shall complete Statement "A", which is bound herein, stating the Bidder's experience in similar work which has been successfully completed.

15. Sub-Contractors

The use of sub-contractors will be permitted for infrastructure repairs or modifications & cleaning only. All processing equipment shall be provided by the successful bidder for this Contract.

16. Contract Execution

The successful Bidder will be required to execute a Form of Agreement and to furnish the required bid deposit and to furnish the required certificates of insurance and good standing with the Workplace Safety and Insurance Board all within seven (7) days from the day upon which the Authority gives the Bidder notice that the Form of Agreement is to be executed. If a Bidder fails to meet any and all of the requirements of this section, the entire deposit may be forfeited to the account of the Authority.

17. Workplace Safety and Insurance Board

The Contractor shall furnish evidence of compliance with all requirements of the Workplace Safety and Insurance Board. Such evidence to include a certificate of good standing issued prior to the execution of the Contract, and a further certificate issued prior to the payment of the final balance due to the Contractor.

18. Insurance

General Liability Insurance

The Contractor will provide a Liability Policy written on a Commercial General Liability Form for limits of not less than \$5,000,000 inclusive per occurrence for bodily injury, death, and damage to property.

The property damage deductible shall not exceed ten thousand dollars (\$10,000) and shall be the responsibility of the Contractor.

The Commercial General Liability shall name as Insured:

- The Essex-Windsor Solid Waste Authority
- The County of Essex
- The City of Windsor

The Commercial General Liability Policy shall include but not be limited to the following extensions:

- All premises, property and operations necessary or incidental to the performance of the contract
- Bodily Injury and Property Damage on an occurrence basis
- Personal Injury
- Broad Form Property Damage
- Contingent Employers Liability
- Owners and Contractors Protective
- Cross Liability
- Products and Completed Operations
- Non-Owned Automobile with a limit of not less than \$2,000,000.
- Blanket Written Contractual
- 30 Days Notice of Cancellation

Equipment Insurance

The Contractor will provide and maintain damage insurance with respect to all equipment used by the Contractor in the operations described in the contract. Where the Contractor is to provide and maintain insurance coverages, any costs thereof including coverage deductibles shall be the sole responsibility of the Contractor. The Contractor shall provide the Authority with a certificate of insurance from an acceptable licensed Insurer prior to commencement of the contract.

Environmental Insurance

- The Contractor will provide and Environmental Impairment Liability Form. This coverage is for Third Party Bodily Injury. Property damage and clean up expenses arising from gradual or sudden pollution events, with limits of not less than two million dollar (\$2,000,000).
- The Environmental Impairment Policy has to be extended to cover on site clean-up expenses.

The deductible for the coverages shall not exceed \$25,000

Under the Environmental Impairment Policy:

- The insured vs. insured exclusion will not apply to the Client/Additional
- This insurance is primary and is not contributable with respect to any other insurance that may be available to the Authority.

The Environmental Impairment Policy shall include as additional named insured:

- The Corporation of the County of Essex
- The Corporation of the City of Windsor
- Essex-Windsor Solid Waste Authority

Automobile Liability Insurance

Automobile liability insurance in respect of licensed vehicles shall have limits of not less than \$5 million (\$5,000,000) inclusive per occurrence for bodily injury, death and damage to property, covering all licensed vehicles owned or leased by the Contractor. Where the policy has been issued pursuant to a government –operated automobile insurance system, the Contractor shall provide the Authority with confirmation of automobile insurance coverage for all automobiles registered in the name of the Contractor.

Contractors Equipment Insurance

“All Risks” Contractors equipment insurance covering machinery and equipment used by the Contractor for the performance of the work, shall be in a form acceptable to the Authority and shall not allow subrogation claims by the insurer against the Authority.

19. Taxes

All prices bid in the Bid shall include all taxes where applicable

20. Power of the Authority

The General Manager of the Authority and the Waste Diversion Manager of the Authority, or their designates, are required to see that provisions of the Specifications are faithfully adhered to, especially as regards to the quality of the equipment and labour supplied by the Contractor and shall have the power to suspend any worker for incompetence, drunkenness, negligence or disregard of others.

21. Examination of the Site and Equipment

Bidders are required to satisfy themselves by personal examination of the existing MRF processing equipment, facility, condition, etc. which may be encountered on the Site. The submission of the Bid shall be deemed proof that the Contractor has satisfied themselves as to all the provisions of the Contract, of all the conditions which may be encountered, of what materials they will be required to supply, or any other matter which may enter into the carrying out of the contract to a satisfactory conclusion. No claims will be entertained by the Authority from the Contractor that they were uninformed as to any of the provisions or conditions intended to be covered by the Contract.

22. Mandatory On-Site meeting

All bidders are required to attend a mandatory on-site meeting to review existing equipment, location and conditions. The site meeting shall be held on Thursday, August 23th, 2018 at the

- Windsor Material Recovery Facility (3560 North Service Rd. East, Windsor, Ontario)
10:30 am – 12:00 pm

Bidders **must** attend a site meeting prior to acceptance of their bid package.

23. Holdback

Progress Payments shall be subject to a 10% holdback and in accordance with the requirements of the Construction Lien Act 1990 and any amendments made thereto.

24. Warranty

The successful Bidder shall complete the **Maintenance & Warranty Statement** contained herein and provide a full statement of the warranty provided for the equipment being provided and the work being bid. The warranty should clearly describe the terms under which the manufacturer accepts responsibility for the cost to repair defects caused by faulty design, quality of work or material in the opinion of the Essex-Windsor Solid Waste Authority, and for the applicable period of time after delivery, installation and commissioning. The successful Bidder shall, at their own expense, make good and repair deficiencies and every part thereof,

all to the satisfaction of the Authority. Should the successful Bidder for any cause fail to do so, then the Owner may do so and employ such other person or persons as the Authority may deem proper to make such repairs or do such work, and the whole costs, charges, and expenses so incurred may be deducted from any amount due to the Bidder or may be collected otherwise by the Owner from the Bidder. The decision of the Authority shall be final as to the necessity of repairs of any work required to be done under the provisions of this clause or any other clause or clauses, in the amounts expended therefore. The warranty effective date will be the date that successful performance testing has been achieved.

25. Performance of Contract

The Contractor shall supply all of the materials, machinery and equipment and perform all of the work in a good and workmanlike manner and in accordance and in compliance with the Information for Bidders, Form of Bid, General Specifications, Scope of Work, the Schedules and the formal Contract to be executed and delivered (herein collectively referred to as the "Contract").

26. Compliance with Laws, Regulations and Policies

The Contractor shall comply with all labour, police, health, sanitary and other laws and regulations imposed by public bodies having jurisdiction during the Term of this Contract.

All federal, provincial and local laws and regulations, as well as policies established by the Authority, now or subsequently enacted, shall become a part of the Contract and be complied with in the performance of all parts of the work. The Contractor shall enforce provisions of policies established by the Authority, where such policies provide for such enforcement. This may include, but not be limited to a requirement to discipline persons who fail to comply with such policies, including ejection of the offending persons from the Site.

The Contractor shall be, or shall become, familiar with all such laws, regulations and policies which in any manner affect the performance of the Contract, those engaged or employed in the work, or affect facilities or equipment used in the work, or which in any way may affect the conduct of the work and no plea of misunderstanding will be considered on account of ignorance thereof. Without limiting the generality of the aforesaid, it shall be the Contractor's responsibility to comply with:

- Workplace Safety and Insurance Act
- Confined Space Entry
- Occupational Health and Safety Act
- Safety or other Policies established by the Authority
- Construction Lien Act and regulations.

The Contractor shall indemnify and hold harmless the Authority, the County of Essex, and the City of Windsor and its employees against and from all suits or actions arising from any Health and Safety violations as well as the cost to defend such charges as a result of any violation.

27. Patents

The Contractor shall fully indemnify and save harmless the Authority, County of Essex and the City of Windsor against and from all suits or actions arising from the claim of any person or persons who are or claim to be patentees of any process used in connection with work performed under this contract or any of the materials, plant, machinery, tools or appliances used therein or thereon, or in any way therewith by the Contractor.

28. Labour and Equipment

The Contractor shall furnish only skilled labour and all equipment that is or becomes necessary to carry out the operations in accordance with the provisions of the Contract.

The Contractor's agents, workers, employees or any persons under the Contractor's control, including all subcontractors, shall abide by the applicable provisions of the Occupational Health and Safety Act.

The Contractor shall provide experienced and qualified personnel to supervise the operations at all times.

The Contractor shall provide all equipment and material necessary to complete the job to the satisfaction of the Authority.

The Contractor shall provide on-site supervision at all times that meets the requirements of section 14 of the O Reg. 213/91 (Construction Project) under the Occupational Health and Safety Act.

29. Co-operation

Other contractors may be present at the MRF during this work. The Contractor shall extend full co-operation to them, and allow free access to them for the purposes of performing their work at all times. The Authority reserves the right to alter the method of operations pursuant to this Contract so as to avoid interference with other work.

30. Indemnity

A. The Contractor shall indemnify and save harmless the Authority, the County of Essex and the City of Windsor from all losses, damages, expenses, actions, causes of actions, suits, claims, demands and costs whatsoever which may arise either directly or indirectly by

reason of any failure, neglect or refusal by the Contractor to comply with these specifications, or arising out of the performance or non-performance of the terms of this Contract by the Contractor and its employees or agents or Contractors, EXCEPT to the extent that such liability for damage was caused by any failure, neglect or refusal by the Authority to comply with this Contract, or arising out of the performance or non-performance of the terms of this Contract by the Authority and its employees, agents or Contractors.

- B. Without restricting the generality of the foregoing, it is understood and agreed that the Authority shall not be liable for damages to any third party for bodily injury or property damage caused by any accident by the Contractor or otherwise or while engaged in work for or on behalf of the Authority causing either damage or injury through the negligence of the employees of the Contractor and whether or not the same shall be by reason of an accident by or with any truck, trailer, motor vehicle or any other vehicle or equipment whatsoever, and the Contractor hereby covenants and agrees with the Authority to indemnify and save harmless the Authority of and from all claims or damages howsoever arising, caused by any of the acts of negligence or otherwise of the employees of the Contractor referred to in this paragraph, EXCEPT to the extent that such liability for damage was caused by the negligent act or omission of the Authority, its employees, Contractors or agents.

31. Clean Up

While working at the Windsor MRF, the Contractor shall maintain a clean working environment that is acceptable by the Authority. At the end of the Contract, the Contractor shall remove from the property all equipment, surplus materials, and waste which is the property of the Contractor or which is otherwise the responsibility of the Contractor and leave the premises in the same condition they were in at the commencement of the Contract.

32. Existing Equipment

Any existing equipment at the MRF that is required to be removed and disposed of by the contractor requires approval of the Authority. All other component not deemed usable by the Authority shall be removed and disposed of by the Contractor. The Contractor shall coordinate a review of existing equipment with the Authority.

33. Delay in Service / Work Stoppage

In the event of breakdown of the Contractor's equipment or work stoppage, or for any reason a delay in service results, the Contractor will be responsible for any overtime or extra cost incurred by the Authority. Should the Authority deem it necessary to seek other means to perform the work because of inefficiency or hold-up on the part of the contractor, all additional expense incurred shall be recovered from the Contractor by deduction from the payments.

34. Contract Amount

The total Contract price shall not be exceeded under any circumstances without the PRIOR written approval of the Authority.

35. Payment

In addition to the requirements of the Construction Lien Act, staged payments will apply to this contract. For the purposes of this RFP, Contractors should assume the following payments:

10% payment on order of equipment, and the Authority's approval of a master project timeline and drawings, etc. that are required for this RFP.

30% payment upon delivery of the equipment to the site.

30% payment upon completion of installation of equipment.

30% payment upon successful Acceptance Testing.

The Contractor acknowledges that the final progress payment will not be made until the Authority has received and approved complete Operations and Maintenance Manuals, drawings, final Approval Report, etc. as required by this RFP. The Contractor shall submit an invoice to the Authority for each progress payment.

36. Safety and First Aid

Without limiting the generality of the article in this document pertaining to- Compliance with Laws, Regulations and Policies, the Contractor shall provide and maintain the necessary first aid items and equipment as called for under the First Aid Regulations of the Workplace Safety and Insurance Act and the Occupational Health and Safety Act.

Prior to the start of the project, a mandatory health and safety meeting will be conducted by the Authority staff with the Contractor's staff and supervisor to highlight the specific dangers associated with the landfill operations.

37. Authority Facilities

The Contractor shall be responsible for any damage to the Authority's facilities or property which results from its operations. The Contractor shall repair any such damage without delay, at its own expense and to the complete satisfaction of the Authority. If the Contractor fails to repair Authority property without delay, then the Authority will arrange for the necessary repairs and deduct it from the contract payments.

38. Commencement and Completion

The work shall commence upon a mutually agreed date between the Authority and the Contractor. The Contractor shall provide with the bid submission, a master project timeline that clearly indicates the amount of time necessary to complete the proposed retrofit that will ultimately enable the system to function as intended. The timeline should break out, but is not limited to: Pre-FOSS Install Composition Audit, Design, Fabrication, Equipment Delivery, Installation phases, Pre-Start-up, Initial Operations, Post-FOSS Install Composition Audit, Acceptance Testing, Final approval by the Authority.

This timeline shall consider that the MRF is an active recycling facility, and that shutting down the facility to install equipment must be scheduled and kept to a minimum. The Contractor's timeline will disclose how they plan to do the necessary work with minimal operational disruption. Once awarded this RFP, the Contractor will meet with staff deemed necessary by the Authority to finalize installation timelines so that minimal disruption to operations occurs. The Successful Contractor will maintain the master timeline throughout the project life cycle and share it with the Authority as agreed upon at contract award.

39. Liquidated Damages

It is agreed by the parties to the Contract that in case all the work called for under the Contract is not finished or completed within the time limit as set forth in these "General Specifications", damage will be sustained by the Essex-Windsor Solid Waste Authority and that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which the Essex-Windsor Solid Waste Authority will sustain in the event of and by any reason of such delay and the parties hereto agree that the Contractor will pay to the Essex-Windsor Solid Waste Authority the sum of One Thousand Dollars (\$1000.00) for liquidated damages for each and every calendar day delay in finishing the work in excess of the number of working days prescribed and it is agreed that this amount is an estimate of the actual damage to the Essex-Windsor Solid Waste Authority which will accrue during the period in excess of the prescribed number of working days.

The Essex-Windsor Solid Waste Authority may deduct any amount due under the paragraph from any money that may be due or payable to the Contractor on any account whatsoever. The liquidated damages payable under this paragraph are in addition to and without prejudice to any other remedy, action or other alternative that may be available to the Essex-Windsor Solid Waste Authority.

The Contractor shall not be assessed with Liquidated Damages for any delay caused by act of God, acts, regulations or decrees of any government, natural phenomena, war, strikes, lockouts, freight embargoes, fire, plant breakdown, process upset or any other cause, whether similar or dissimilar, beyond its reasonable control.

If the time available for the completion of the work is increased or decreased by reason of alterations or changes, the number of days shall be increased or decreased as determined by the Authority.

If the time available for the completion of the work is increased or decreased because of an overrun or underrun of a major item in the Contract, the Essex-Windsor Solid Waste Authority may increase or decrease the number of working days by adding or subtracting therefrom, as the case may be, a number of days calculated from the difference between the actual quantity and the estimated Bid quantity divided by the average daily production of the most productive 50% of the working time shown on the Contractor's Schedule, provided that this basis for calculation may not be used where, in the opinion of the Authority, all or any of the relevant major items are carried out concurrently.

40. Hours of Operation

Access to the work site will normally be granted during the following hours:

Windsor Material Recovery Facility (MRF) 8:00 am – 5:00 pm Mon.– Sat.

If however, the Contractor has approval through the Authority to work beyond these hours to complete work in a timely manner, special access to the work site shall be granted through the Authority.

The MRF will normally be closed on the following statutory holidays: New Year's Day, Family Day, Good Friday, Victoria Day, Canada Day, Civic Holiday, Labour Day, Thanksgiving Day, Christmas Day and Boxing Day.

41. Site Access

The Contractor shall have access to the site through the main gate. The gate will normally be open only during the hours the site is open for disposal of wastes. The gate will normally be closed and locked at all other times. The Contractor will be permitted access to the site only beyond working hours through the approval of the Authority. Otherwise, the site gate will normally be closed and locked at all other times.

The Contractor shall provide details of how material will be brought onto the site, off-loaded, temporarily stored and will provide an installation plan and timeline. The site shall remain fully operational during this work and the contractor shall include details of construction activities in order to maintain site access.

42. Performance of the Work

The Contractor shall ensure that the work is performed to the satisfaction of the Essex-Windsor Solid Waste Authority at all times. All materials and workmanship shall be of

excellent quality, and any substandard materials or workmanship shall be replaced or repaired to the satisfaction of the Essex-Windsor Solid Waste Authority.

43. Inspection

Authorized representatives of the Essex-Windsor Solid Waste Authority shall at all times have access to the work for the purpose of inspection.

44. Acceptance of Work and Release of Holdback

Prior to substantial completion and the release of holdback, the work must be completed to the satisfaction of the Essex-Windsor Solid Waste Authority.

45. Removal of Employees

The Authority, in its sole discretion, retains the right, under this contract, to require the Contractor to remove from its facilities any employee who is incompetent, intoxicated, and belligerent or has flagrant disregard for others or for any other just cause.

The Authority, in its sole discretion, may stop the work entirely if there are not a sufficient number of experienced employees on site to carry it out properly, or for any other good and sufficient cause.

46. Force Majeure

If any of the facilities of the Authority are not available to the Contractor or the Authority is delayed in the performance of any of its obligations by any act of God, acts, regulations or decrees of any government, natural phenomena, war, strikes, lockouts, freight embargoes, fire, plant breakdown, process upset or any other cause, whether similar or dissimilar, beyond its reasonable control, then:

- a) the Authority shall not have any liability to the Contractor;
- b) the Contractor shall not have any right to make any claim or bring any action against the Authority for any damage it may suffer as a consequence; and
- c) The time for performance of such obligations by the Authority shall be extended for a reasonable period of time but in no case shall the extension of time be less than the time lost as the result of the event causing the delay, unless such shorter extension be agreed to by the parties.

47. General Specifications

The following consist of the general specifications for the design, supply, install, and commissioning of Fibre Optical Sorting System (FOSS) at Windsor Material Recovery Facility (MRF) that is located at 3560 North Service Rd, Windsor ON.

Scope of Work/Installation/Commissioning Requirements:

1. The Contractor shall submit a design and one combined price for a Fibre Optical Sorter System (FOSS):
 - a) To add a primary dual ejection optical sorter that removes OCC and OBB, EWSWA's Blue box recyclables (e.g., PET, aluminum and tin cans, glass bottles/jars, trays and clamshells, HDPE bottles and tubs) from the mixed fibre stream.
 - b) Due to facility/process constraints the initial concept is that this would occur after the OCC screen and before the manual sort room and preferably housed in the vacant "optical sort" room after C8 conveyor.
 - c) The FOSS shall have an average throughput capacity of eight tonnes per hour.
 - d) FOSS Design consideration must be given to material surges and creating good material distribution to ensure optimal performance of the FOSS.
 - e) FOSS Design should accommodate wet paper or snow that may cause greater material clumping than seen when fibre materials are dry. To address the issues that extreme wet and cold conditions bring, along with levels of dust and contamination (e.g., glass, lids, etc.) in the fibre material stream, the design should strongly consider the install of a fine screen or alternative solution upstream of the optical sorter.
 - f) The Contractor must consider the impact of the FOSS on labour in manual sort room and the reallocation (e.g., QC) of labour along the system or **potential for labour savings**.
 - g) The positively and negatively ejected materials and their paths as a result of the FOSS may need to be altered or redesigned so as to minimize the impact to the existing equipment/processing system, as well as other required changes that would support the RFP and make the recycling process at the Fibre Building whole at the completion of this project.
 - h) Pricing should also include quarterly maintenance reviews and associated work of the new optical sorter for a period of two years after full commissioning is achieved.

Optical Performance Requirements: The optical sorting equipment must meet a minimum of 85% capture and 85% purity of capture.

FOSS Performance Requirements: The Fibre Optical Sorting System (FOSS) must meet a minimum of 95% capture and 95% purity of capture.

2. The Contractor shall submit one combined price for Pre- and Post- FOSS Install Composition Audits that will assist with the design and evaluation of the FOSS and recycling process at the MRF. It is recommended that the Contractor use a neutral third party expert in this field to perform this critical aspect of the contract. The Successful

Contractor shall share the proposed audit process and program during the initial planning phase with the Authority and will proceed only once approval from the Authority is received.

3. Information regarding the following must be provided by the Successful Contractor:

I. Building/Installation Requirements

- a) A layout of the proposed new equipment, and its recommended location and configuration, should be submitted in a PDF format. This layout should include any structural modifications that are required to the existing facility/equipment.
- b) The exact location of the FOSS, fine screens equipment, etc. shall be finalized by the Contractor through collaboration with the Authority. While modifications to the existing facility/equipment may be made, the Contractor shall ensure that changes made will allow access to the MRF's essential operations.
- c) The Contractor shall obtain all permits and licenses required to complete the scope of work (e.g., Notice of Project with the MOL, ESA permits)
- d) The Authority will obtain a building permit for the work and amend the MRF's MOECC Environmental Compliance Approval if required.
- e) Relocation of any exit stairs, landings and emergency exit lighting in accordance with the building code and the Authority is the responsibility of the Contractor.
- f) The Contractor is responsible for the supply and installation to the existing sprinkler system that is required by their proposal to be in accordance with the building code and the Authority's approval.
- g) The Contractor is responsible for the supply, changes and installation of any utility services (e.g., gas, water).
- h) The Contractor is responsible for any structural changes required to the building to support the new equipment (e.g., column reinforcing, concrete floor work) in accordance with the building code and the Authority. Any structural alterations (including load bearing changes) will require an engineer's report.
- i) Elevated walkways, platforms, etc. shall be designed and installed in accordance with the Ontario building code(s), Occupational Health & Safety Act regulations, etc.
- j) The Contractor is responsible for bringing electricity to the new control panel and communication lines/cables as required to new or altered equipment.
- k) The Contractor is responsible to complete all electrical field wiring and interconnections to the existing motor control centre; where, all electrical connections must be carried out by qualified electricians. The Contractor shall provide all wiring, conduit and other equipment, electrical/wiring permits and final ESA inspection, and all costs associated with complying with Inspection findings.
- l) The Contractor is to provide all structural, process, electrical and any other applicable equipment drawings in duplicate to the Authority upon completion of the commissioning phase prior to final approval. Timing will be established during the initial review of the master project timeline by the Authority and Contractor.
- m) The Contractor is to coordinate a staging area on-site with the Authority prior to the delivery of installation equipment, tools, etc.

II. Compressed Air

- a) Must provide one (1) air compressor, which is capable of running the proposed FOSS. It must include clean, dry air and oil-free compressed air: Class 2 according to ISO Standard 8573-1:2010.
- b) Must be a screw-type compressor that must meet or exceed the specifications as set out by the manufacturer of the Optical Sorter and be equipped with all recommended options, (e.g., dryers and airline lubricators, filter rack) for the MRF environment in which it will operate. The Contractor shall specify the make, model, horsepower, cfm, etc. of the compressor in the proposal.

III. Conveyors and Other Equipment

- a) Sufficient work space, stairways (not ladders) and work platforms are available and safe for personal to access (e.g., conveyor belt changes, inspections, maintenance).
- b) Must meet relevant CSA, OSHA, and other applicable safety standards (e.g., proper guarding for protection from pinch points, rotating shafts, catch points).
- c) Conveyor panels shall be equipped with transition panels to avoid material spillage at transition points. Similarly, proper skirting shall be installed on conveyor sides to avoid material spillage.
- d) Emergency stop buttons shall be included for new equipment and must be wired to shut down the entire fibre processing system or areas deemed necessary as a result of this project. Accessible emergency pull cords shall be installed to immediately shut down the entire Fibre processing system or areas deemed necessary.
- e) Safe and easily removable belly pans to be provided to the underside of all conveyor belts for cleaning purposes.
- f) Ensure supplied equipment is to good standard where, bearings can be greased, conveyors belts are 3 ply MOR (moisture, oil resistant), etc.

IV. PLC Program, Controls and Integration

- a) The new PLC program and electrical control must be integrated into the existing Fibre Processing Line and PLC program.
- b) The new equipment programming must display similar information as the existing PLC program (e.g., fault/warnings status, disconnect status, motor amperage, on/off status).
- c) A detailed description of how this integration will be completed, as well as, the interface details including start & stop sequencing shall be provided with the submission.
- d) All motors shall be high efficiency and 575V.

V. Commissioning Requirements

The Contractor shall carry out the following commissioning plan (i.e., Start-up, Initial Operation, Acceptance Testing) and adhere to the following requirements. The Contractor is responsible:

- a) For undertaking all requirements to demonstrate to the Authority that all of the requirements of the specifications and the Contract have been fulfilled.
- b) To give timely notice (as identified in the master project timeline) to the Authority requesting inspection of work, or supervision of any testing, specified or required under the Contract.

- c) Should any performance test fail (in part or in full), the Contractor shall modify the equipment, operation, or recycling processing equipment at the MRF such that the cause of the failure is eliminated through the approval of the Authority. This equipment modification must then be tested through subsequent performance testing, all at the sole cost and expense of the Contractor.
- d) To ensure that any inspection or testing required under the Contract is done in the presence of the Authority or its representative and that the Contractor at their expense may have to repeat such inspection or testing.

The Authority reserves the right to duplicate and/or expand the Contractor's validation testing by hiring an independent inspection/testing agency to undertake any testing of the work the Authority deems necessary at the cost of the Authority.

a) Equipment Start-up

- i. Once installation is complete and prior to Start-up of equipment, all equipment shall be thoroughly cleaned of all debris, loose concrete, timber, tools, etc.
- ii. As per the OSHA, a Pre-Start-up Health and Safety Review is to be arranged by the Contractor and must be completed by a qualified third party. A signed copy shall be provided to the Authority within 14 days of the date the review was conducted. Any deficiencies will be corrected by the Contractor at its sole expense.
- iii. If timing is different from the master timeline, the Contractor shall notify the Authority in writing, at least 48 hours advance notice of start-up if agreed upon by the Authority. Where applicable, the manufacturer shall complete a Certificate of Installation verifying the equipment was satisfactorily installed and is ready for any further testing.
- iv. During the Start-up, the Contractor shall provide qualified personnel and all necessary equipment, materials, supplies, lubricants, etc.
- v. The Contractor shall be entirely responsible for the equipment and its operation during this start-up period. Should any equipment and/or facility be damaged during Start-up, the Contractor shall repair or replace such equipment to the satisfaction of the Authority.
- vi. Start-up shall include check out and demonstrate to the Authority all control functions (e.g., check-out of rotating equipment speeds, motor current and voltage, excessive vibration). All electrical and mechanical equipment shall be operated for a minimum of six (6) consecutive hours. The Contractor and manufacturer shall verify that the equipment fully meets its intended purpose by the end of this phase.
- vii. During Start-up, the Contractor shall make necessary changes to equipment/facility as approved by the Authority. By the end of this phase, the Contractor shall demonstrate to the Authority that the equipment is capable of proper and uninterrupted operation, and is ready for the "Pre-production" phase as specified hereafter.

b) Initial Operation

- i. The Contractor shall notify the Authority at least 24 hours in advance of starting the "Initial Operation" phase.
- ii. Should the equipment be shut down for any reason during this phase, the Initial Operation shall be extended for a period equivalent to the shutdown at no cost to the

- Authority, where costs incurred to the Authority (e.g., production loss) shall be forwarded to the Contractor.
- iii. Initial Operation shall take place in a similar manner to Equipment Start-Up but with the introduction of curbside collected mixed fibre materials onto the line. The intent of this phase is to ensure that all equipment is capable of operating as intended while processing fibre materials. In this stage, the Contractor is not required to meet product recovery and quality specifications.
 - iv. Mixed fibre materials will be loaded at the Infeed Conveyor by the Authority and the process shall be operated for one complete day, all equipment operating at least six (6) continuous, uninterrupted hours for that day and the Contractor and manufacturer shall verify that it is ready for "Approval Testing" as specified below.
 - v. During Initial Operation, the Contractor shall make necessary changes to the equipment/facility as approved by the Authority. By the end of this phase, the Contractor shall demonstrate to the Authority that the equipment is capable of proper and uninterrupted operation, and is ready for "Acceptance Testing" as specified hereafter.
 - vi. The Authority shall continue to process mixed fibre materials until acceptance testing is completed. Contractor shall make all adjustments during break times or off-shift hours.
- c) Acceptance Testing
- i. The Contractor shall submit to the Authority a MRF Acceptance Test Plan prior to the planned start of Acceptance Testing. The plan should identify the test procedures and schedule on a day-to-day basis. It shall also include details on the program for monitoring process rates, product and residual quality during this phase.
 - ii. Once all the equipment and components have been successfully started up as required the Contractor shall notify the Authority in writing, at least two (2) working days in advance, of the date that the Contractor is ready to proceed with Acceptance Testing. The Authority will advise the Contractor in writing whether or not the Acceptance Testing phase can begin on the date proposed. The Authority will have the right to delay the start of Acceptance Testing by up to five (5) working days without any additional costs being charged to the Authority. All audits are to be conducted jointly by the Contractor and the Authority.
 - iii. Prior to notifying the Authority that the equipment supplied is ready for Acceptance Testing, the Contractor shall turn over to the Authority copies of all permits, materials/equipment test reports, Certificates of Installation, governing authorities' inspection reports/certificates, and all else required to demonstrate to the Authority that the equipment has been properly installed, conforms to the rules and regulations of the governing authorities and is ready to process materials.
 - iv. The Contractor shall be solely responsible for ensuring that all equipment conform to all applicable regulations and has been inspected by all authorities having jurisdiction prior to Acceptance Testing.
 - v. During the Acceptance Testing, the Contractor shall demonstrate to the Authority that the equipment supplied and installed is capable of "processing" the specified materials at the specified feed rates and with the specified capture/purity rates without overloads, plug-ups, trip outs, excessive spillage, dust release, etc. The Contractor will make all

- modifications to equipment necessary to correct any problems that become evident, during the Acceptance Testing period.
- vi. Sorting staff, mobile equipment operators and the baler operator shall be provided by the Authority. The Authority shall supply all expendable items, materials and fluids to operate the equipment. All costs associated with the storage, loading, transportation, unloading, and disposal of the products and the residue shall be borne by the Authority.
 - vii. The Authority shall supply the Contractor with mixed fibre materials for testing purposes.
 - viii. Throughout the Acceptance Testing Period, the Authority shall have unrestricted access to inspect and witness the operation.

The FOSS must be fulfill the above specifications and pass the following conditions:

1. The new FOSS must be capable of processing eight (8) tonnes per hour of curbside collected mixed fibres over a continuous period of 6 hour (one shift) for two consecutive days under any and all seasonal conditions.
2. If the throughput rate of eight (8) tonnes per hour is not achieved as indicated above, the complete test must begin over again from day one. The Approval Testing shall validate that all equipment and systems operate satisfactorily and meet specifications.
3. The new FOSS must be capable of ejecting the following material: OCC and OBB, EWSWA's Blue box recyclables (e.g., PET, aluminum and tin cans, glass bottles/jars, trays and clamshells, HDPE bottles and tubs) from the mixed fibre stream.
4. The proposed FOSS must eject/remove a minimum of 85% by weight and the ejected fraction must have a minimum purity of 85%. These targets must be met prior to any manual quality control sorting operation.
5. The specified ejection and purity rates will be calculated and demonstrated over a minimum of six (6) audits over a two day period (minimum of two (2) audits on any one day). The ejection and purity results of the six (6) individual audits will be averaged to yield one overall test result for ejection and one overall test result for purity. Any cross contamination will be considered within the acceptance and performance testing with the weights of wrongly ejected materials counted against performance effectiveness. If the results of the Approval Testing show that the optical sorting equipment does not meet the purity requirements, the test will be deemed unsuccessful and must be repeated.
6. Within five (5) working days of receipt of material quantity and quality results of the 6-hour Acceptance Test and receipt of acceptance reports of End Markets, the Authority shall advise the Contractor on where or not the results were acceptable for the following: achieving the guaranteed processing rate requirements and recovery efficiency, and acceptability of the recovered materials shipped to market by the End Markets.
7. Within seven (7) calendar days after completion of the Acceptance Test program, the Contractor shall furnish to the Authority five (5) copies of an Acceptance Test Report

describing: all daily weight data on waste, product and residue quantities, all residue and available product quality data, market acceptance verification, all of the Contractor's calculations that demonstrate that the Contractor has met or exceeded the Acceptance Test requirements, and that all the deficiencies noted during the test period, the proposed modifications and the proposed schedule and methodology for demonstrating these modifications are successful.

8. The Successful Contractor will be given three (3) opportunities over a maximum period of three (3) weeks to successfully complete the Approval Testing. Each opportunity represents six (6) audits over a two-day period. Should the Successful Contractor fail three (3) times during the three test week periods, the Successful Contractor will be given up to 60 days after the last performance test to remedy the situation at its expense, which may include equipment modifications or additions. The retest will include one (1) opportunity, which represents six (6) audits over a two-day period.
9. Successful completion is attained when acceptance testing is completed where the Authority accepts these results and then Successful Contractor is notified by The Authority in writing.

VI. Operations and Maintenance Manual

- a) The Successful Contractor will be required to submit not less than two copies of the draft Operating and Maintenance Manual to the EWSWA within 90 days of the anticipated commencement of MRF commissioning. Following incorporation of comments from EWSWA, and no later than 30 days prior to the scheduled commissioning date, no less than two approved copies are to be provided to the EWSWA. The Operating and Maintenance Manual(s) shall conform with Best Industry Practice with content that enables EWSWA or their contractor to operate and maintain the plant in an efficient, effective and safe manner. The manual shall be a robustly bound working document capable of being updated and clearly set out for ease of reference. The text and drawing shall refer specifically to the processing system supplied.
- b) The Manual(s) will include information which is essential for a fundamental understanding of the new FOSS including but not limited to risk assessments and similar information to enable safe operation and maintenance and start up, normal operating and shut down procedures.
- c) A full planned preventative maintenance (PPM) program will be required within the manual(s) so that PPM can be scheduled and performed in a manner and frequency that meets the requirements of original equipment manufacturers and recognized industry standards. It will include materials and labour required for a program to maximize equipment life and ensure continuity of operations.
- d) The PPM should include a comprehensive list of consumable items including recommended suppliers.
- e) In addition to information specified, the maintenance manual shall include:
 - i) final shop drawings and product data of equipment;
 - ii) record drawings of mechanical and electrical installation;

- iii) equipment Manufacturer's Inspection and Test Reports;
 - iv) mechanical Equipment Inspection Reports; and
 - v) product data shall include (where applicable),
 - (1) complete parts lists with numbers; a list of recommended spare parts;
 - (2) complete wiring and connection diagrams; and
 - (3) copies of all inspection certificates issued by governing authorities.
- f) For all mechanical/electrical equipment the contractor should provide details of maintenance requirements including details of scheduled maintenance, planned downtime requirements, etc. A list of recommended spare parts and details of service and emergency response arrangements for all equipment should be provided.

48. Documents/Records

The Contractor shall submit 2 sets of the Operating and Maintenance Manual to the Authority that contains operating and maintenance instructions for all equipment and controls installed under this Contract. The manual shall include:

- i) list of recommended spare and replacement parts
- ii) operating instructions
- iii) routine maintenance instructions (including recommended maintenance schedule with the grades of lubricants required and instructions as to how the equipment may be taken apart, if necessary, for periodic inspection and replacement)
- iv) trouble-shooting procedures
- v) as-built contract drawings and working drawings
- vi) engineer stamped drawings upon completion of the project by a licensed member of the Professional Engineers Ontario (PEO) for all engineering work as required for the proposed project per the agreement of the Authority.

The Contractor shall provide forecasted project timelines for their FOSS proposal with the bid submission.

49. Training

In addition to initial start-up training, the Contractor shall provide the Authority staff with sufficient on-site training (minimum of 5 continuous days of staff time) to ensure sufficient working knowledge for operation and maintenance of the new recycling process system is to the satisfaction of the Authority. As a minimum, the following shall be covered: general system operations, health and safety, system maintenance (e.g., daily, weekly, monthly maintenance, lubrication intervals, type of lubrication, belt and bearing replacement, gear box maintenance), start-up procedures, operation of electrical controls, trouble shooting (e.g., fault codes, reduced optical recovery), spare parts ordering instruction, etc.

50. Contingency

No work shall be carried out under this item without prior written approval of the Authority.

51. Form of Bid

Company Information- Please Print Clearly

Company Name: _____

Complete Mailing Address: _____

Company Website: _____

Contact Name: _____

Title: _____

Office Phone Number: _____ Mobile: _____

Email: _____

Address (If Different from above): _____

52. Declaration of Understanding

To: Essex-Windsor Solid Waste Authority
360 Fairview Avenue West, Suite 211
Essex, Ontario. N8M 3G4

I (WE) _____

having carefully examined the locality and sites of the proposed works, and all Contract Documents relating thereto, including Addendum/Addenda No. _____ to _____ ** inclusive in strict accordance with the Contract Documents and agree to furnish all equipment, materials, labour, supervision and all things necessary (Item A & B) for the total sum of

Dollars (\$ _____).

** The Bidder will insert here the numbers of the addenda received during the Tendering process.

The Aforesaid Sum Is Made Up As Per The Quantity And Price Schedule On Subsequent Pages.

The Bidder further declares that this RFP is made without any connection, comparison of figures, or arrangements with, or knowledge of, any other corporation, firm or persons making a RFP for the same work and in all respects is fair and without collusion or fraud.

The Bidder further declares that no member of the the Authority and no officer or employee of the Authority is or will become interested directly or indirectly as a contracting party, partner, shareholder, surety or otherwise in the performance of the Contract, or in the supplies, work or business to which it relates, or in any portion of the profits thereof, or in any of the monies to be derived therefrom.

Name of Signing Officer (Please Print): _____

Title of Signing Officer: _____

Signature of Signing Officer: _____

53. Quantity, Price, and Project Schedule

Item A. Fibre Optical Sorting System (FOSS)

New Fibre Optical Sorting System (FOSS) at the Windsor Material Recovery Facility including all removals, demolition, equipment installation, etc. as specified by this RFP and outlined in this submission. NOTE: Please include general arrangement drawings, project timelines, etc. along with this submission.

Type of Equipment	Cost Of Equipment	Associated Costs	Total Cost	Comments
Optical Sorter				
Air Compressor System				
Fines Accelerator Screen (or alternate solution)				
Supportive facilities (e.g., conveyors (e.g., quality control and transfer), access platforms, support structure)				
Manual sort room (e.g., chutes, work station alteration)				
Other (specify)				
		Sub-Total	\$ _____	
		H.S.T.	_____	
		TOTAL BID PRICE	\$ _____	

Item B. Material Composition Audit

Material Composition Audits (Pre- and Post- FOSS install) to assist with design and evaluation of FOSS and recycling process equipment, etc. as specified by this RFP and outlined in this submission. Material Composition Audit program must be included in the project timeline for FOSS. A Material Composition program proposal for both audits, etc. must be included along with your submission.

B.	Material Composition Audits	Lump Sum	\$ _____
		Sub-Total	\$ _____
		H.S.T.	\$ _____
		TOTAL BID PRICE	\$ _____

Note: The Authority reserves the right to reject any and all price quotes and to waive formalities as the interest of the Authority may require without stating reasons therefore, the lowest or any price quote may not necessarily be accepted. The Authority reserves the right to award a contract for one or both components to separate suppliers if it deems appropriate.

Estimated FOSS Project Schedule- Key Milestones

1. Equipment order Date: _____
2. "Installation" Start Date: _____
3. "Equipment Start-up" Start Date: _____
4. "Initial Operation" Start Date: _____
5. "Approval Testing" Start Date: _____
6. "Approval Testing" Completion Date: _____

NOTE: Refer to project timeline requirements as listed in Section 37. Commencement to Completion section of this document. Anticipated Award of Contract is forecasted to be granted by September 14, 2018.

Maintenance & Warranty Statement

Response time for service calls _____ hours.

Location of local service center/office _____

Location of major components/parts supplier _____

Warranty period:

- a) Optical Sorter _____
- b) Compressor _____
- c) Fines Screen _____
- d) Conveyor, belts, etc. _____
- e) Cables, connections,
wiring and junction boxes _____
- f) Structural work _____
- g) Other _____

List any additional Maintenance and Warranty information as deemed necessary that is not included in the aforementioned section above:

54. Statement “A” – Bidders Experience in Similar Work

Year	Description of Work	For Whom Work was Performed (including contact information)	Value

55. Statement “A” – Signatures and Authorizations

Name of Company: _____

Name of Signing Officer: _____

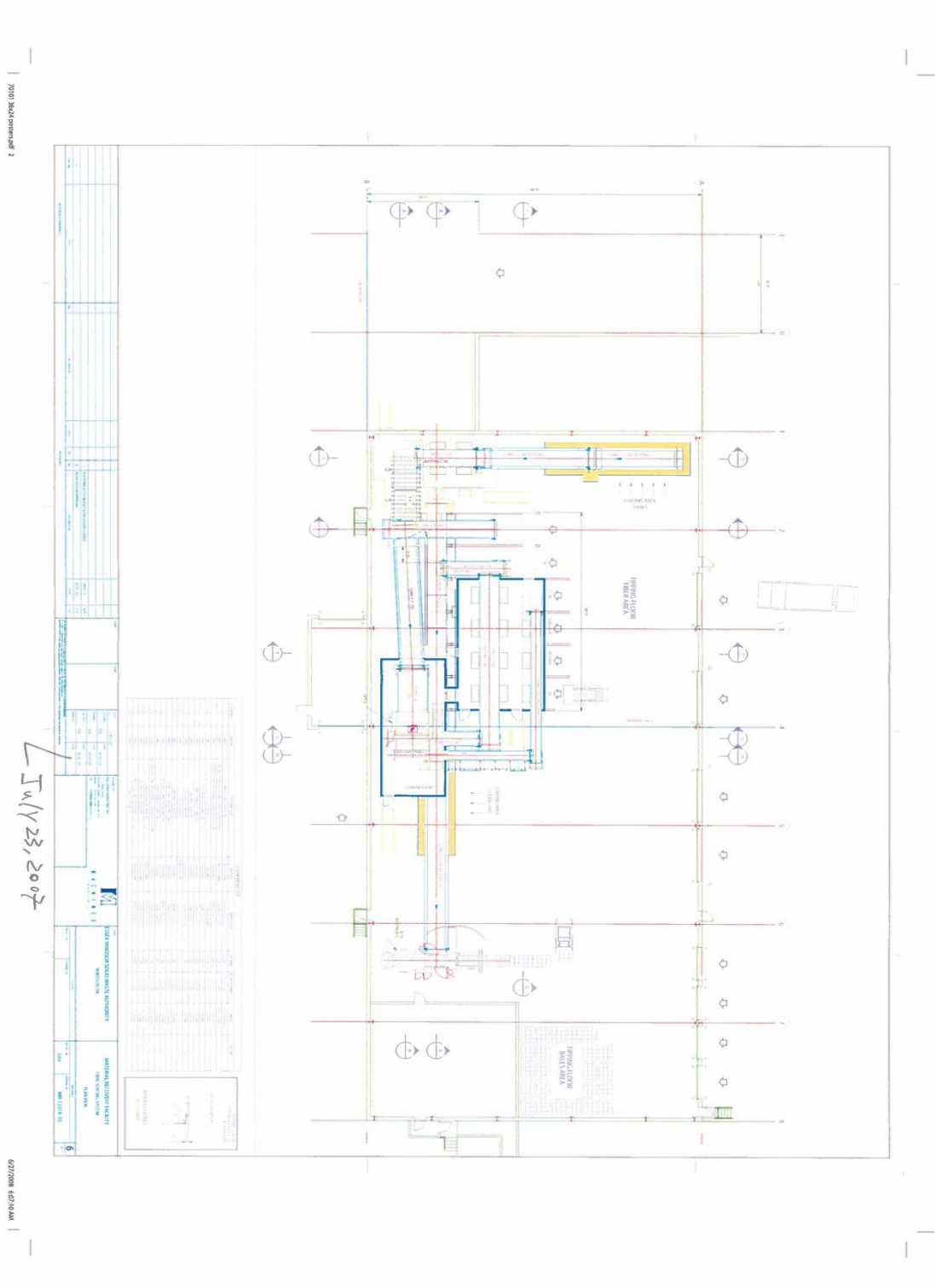
Title of Signing Officer: _____

Signature of Signing Officer: _____

Date: _____

**Informal or Incomplete Tenders Cannot Be Considered
 ** Lowest or Any Tender Not Necessarily Accepted ****

56. Appendix A: Fibre Line Drawing



57. Appendix B: MRF Efficiency Assessment and Improvement Recommendations

Document attached separately.