

Halifax Harbour Solutions
REQUEST FOR PROPOSALS #00-065

Addenda #1-15



Halifax Harbour Solutions
REQUEST FOR PROPOSALS #00-065

Addendum #1



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number One

June 19, 2000

This Addendum Number One is a supplement to, forms an integral part of, and is to be read as one document with, the Request for Proposals #00-065 dated May 30, 2000.

3.4.1 Shared Responsibility

Paragraph (a) is deleted and replaced with the following:

"(a) HRM shall be responsible for all Hazardous Substances existing on the Closing Date at the following areas:

- (i) such of sites for the Sewage Treatment Plants provided by HRM over which HRM has control (or for which HRM is presently negotiating); and
- (ii) such of the routes identified in HRM's preliminary layouts for each of the Sewage Collection Systems (see Appendices C, D, E, and F) over which HRM has control (or for which HRM is presently negotiating),

(collectively "HRM Sites");"

Appendix Z: Definitions

The definition of "HRM Sites" is deleted and replaced with the following:

"HRM Sites' means:

- (a) such of sites for the Sewage Treatment Plants provided by HRM over which HRM has control (or for which HRM is presently negotiating); and
- (b) such of the routes identified in HRM's preliminary layouts for each of the Sewage Collection Systems (see Appendices C, D, E, and F) over which HRM has control (or for which HRM is presently negotiating)."

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Halifax Harbour Solutions

REQUEST FOR PROPOSALS #00-065

Addendum #2



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Two

July 28, 2000

This Addendum Number Two is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000.

1.4.4 Business Arrangements/Phased Implementation

The first paragraph of Subsection 1.4.4 is deleted and replaced with the following:

"The Project may be implemented in two Phases. The Proponent must submit its Proposal for the entire Project; namely for the Phase 1 and Phase 2 components as follows:"

Paragraph two of Subsection 1.4.4 is amended to read as follows:

"HRM reserves the right to modify the components of Phase 1 and Phase 2 at any time, including in the event the Successful Proponent submits a Proposal containing an additional solution comprised of fewer than four (4) Facilities with corresponding Sewage Collection Systems."

The first and second sentences of sub-paragraph (b) of paragraph five of Subsection 1.4.4 are deleted.

Paragraphs seven and eight of Subsection 1.4.4 are deleted and replaced with the following:

"In addition, the Proponent may submit:

- (a) an alternate long-term financing proposal to HRM's long-term financing for the Facilities;
- (b) a solution comprised of fewer than four (4) Facilities with corresponding Sewage Collection Systems;
- (c) a solution for a sewage collection and transmission system which is alternate to the required submission of a tunnel solution for the Sewage Collection Systems of Halifax North and Dartmouth; and

- (d) a supplement to its Proposal for additional use(s) of the Halifax North Sewage Treatment Plant site which would enhance or better utilize the site potential."

1.6 Evaluation and Selection

The second sentence of paragraph one of Section 1.6 is amended to read as follows:

"The Proposal Review Committee will review and evaluate the Proposals, including any:

- (a) alternate long-term financing proposals to HRM's long-term financing for the Facilities;
- (b) solutions comprised of fewer than four (4) Facilities with corresponding Sewage Collection Systems;
- (c) solutions for sewage collection and transmission systems which are alternate to the required submission of a tunnel solution for the Sewage Collection Systems of Halifax North and Dartmouth; and
- (d) supplements to the Proposals for additional use(s) of the Halifax North Sewage Treatment Plant site which would enhance or better utilize the site potential.

The Proposal Review Committee will then report to and advise the Proposal Selection Committee and recommend to the Proposal Selection Committee a Proponent and a solution proposed by such Proponent."

The following new paragraph is inserted after paragraph one and before paragraph two of Section 1.6:

"In the event one (1) Facility is proposed for mainland Halifax as part of a solution comprised of fewer than four (4) Facilities, HRM's preference is that such Facility be located at the site for the Halifax South Facility."

3.2.3.4 Halifax South Sewage Collection System

The following new sentence is inserted at the end of paragraph one of Subsection 3.2.3.4:

"In the event such outfall requires a pumping station, the Company shall provide the pumping station."

3.3.3 Outfalls and Diffusers

The following new sentence is inserted at the end of the last paragraph of Subsection 3.3.3:

"In the event HRM proceeds with Phase 1 only of the Project, HRM reserves the right to exclude the diffuser at Halifax South, following discussions with the Selected Proponent or the Company, as the case may be, and the Governmental Authorities on the advisability of excluding such diffuser for the Phase 1 period during which untreated sewage is the effluent at Halifax South."

3.4.1 (Civil/Site Development) Shared Responsibility

Subparagraph (a) of Subsection 3.4.1 is amended to read as follows:

"HRM shall be responsible for Hazardous Substances, excluding sulphide-bearing materials (acidic slates):

- (i) existing on the Closing Date at the following areas:
 - (A) such of the sites for the Sewage Treatment Plants provided by HRM over which HRM has control (or for which HRM is presently negotiating); and
 - (B) such of the routes identified in HRM's preliminary layouts for each of the Sewage Collection Systems (see Appendices C, D, E, and F) over which HRM has control (or for which HRM is presently negotiating),[^]

(collectively the "HRM Sites"); and
- (ii) not identified on the HRM Site Conditions Reports.

For clarification, HRM shall not be responsible for any sulphide-bearing materials (acidic slates) whether or not identified on the HRM Site Conditions Reports."

Subparagraph (b) of Subsection 3.4.1 is amended by replacing the phrase "any such Hazardous Substances" with the phrase "any Hazardous Substances for which HRM is responsible".

Subparagraph (c) of Subsection 3.4.1 is amended by adding the words "for which HRM is responsible" after the phrase "any Hazardous Substances".

4.2.2 Sewage Collection Systems

The following new sentence is inserted after the first sentence and before the second sentence of Subsection 4.2.2:

"In the event HRM proceeds with only Phase 1 of the Project, HRM will operate the outfall (and diffuser, if applicable) at Halifax South as part of the Halifax South Sewage Collection System."

4.5.1 Influent

The first paragraph of Subsection 4.5.1 is amended by deleting the words "(as shown on Figures F.1 and F.2 of Appendix B2)" and replacing them with the following sentence:

"Refer to Subsection 3.2.1."

The following new paragraph is inserted after paragraph three and before paragraph four of Subsection 4.5.1:

"All influent collected through the Sewage Collection Systems and routed to the Facilities shall be subject to the full sewage treatment process. No blending of treated, partially-treated or untreated flows will be permitted."

4.6 Sludge and Residue Management and Disposal

The third sentence of paragraph two of Section 4.6 is amended to read as follows:

"The Sludge shall then be further treated through a Sludge Handling and Management System(s), meaning the Sludge shall be transported to an off-site location, approved and licensed by NSDOE for the processing and/or disposal of such material, where the Sludge shall be processed, stabilized, stored and disposed of for beneficial use or other environmentally acceptable means in accordance with the pathogen reduction and vector-attraction reduction requirements of 40 CFR Part 503 U.S. EPA Regulations and other regulations approved by NSDOE."

5.1.3 Payment Structure

Subparagraph (b)(i) of Subsection 5.1.3 is deleted and replaced with the following:

"(i) guaranteed maximum price for the cost of designing, constructing and commissioning which shall be paid on the later of:

- A. March 31, 2002 in the case of the Halifax North Facility; March 31, 2004 in the case of the Dartmouth Facility; March 31, 2006 in the case of the Halifax South Facility; and March 31, 2008 in the case of the Herring Cove Facility; and
- B. the later of the Date of Substantial Completion of the applicable Facility and the Date of Substantial Completion of its related Sewage Collection System; or"

The following new paragraph is inserted after subparagraph (d) of Subsection 5.1.3.:

"In the event that the Date of Substantial Completion of both a Facility and its related Sewage Collection System is achieved before the payment date set out in paragraph(b)(i)A. above for such Facility and HRM agrees to make early payment to the Company, all interim finance savings shall accrue to HRM."

5.4.2.3.3

The formula in the fourth paragraph of Subsection 5.4.2.3.3 is amended by replacing the phrase "Measured Quantity (m³)" with the phrase "Measured Quantity (1,000m³)".

The formula in the fifth paragraph of Subsection 5.4.2.3.3 is deleted and replaced with the following:

$$\begin{array}{ccccccc} \text{Chemical} & & & & & & \text{Measured} \\ \text{Variable} & & \text{Unit Price} & & \text{Usage Rate} & & \text{Quantity} \\ \text{Component of} & = & (\$/\text{kg or tonne}) & \times & (\text{kg or tonne}) & \times & (\text{kg or tonnes}) \\ \text{OMM Fee} & & & & & & \end{array}$$

The following new paragraph is inserted after the last paragraph of Subsection 5.4.2.3.3:

"All Sludge shall be weighed using one or more weigh scales which shall be checked and calibrated by an authority acceptable to HRM from time to time. The moisture content of weighed Sludge shall be measured by acceptable means, and the weight of Sludge for payment purposes shall be the net weight of Dry Sludge Solids at zero percent (0%) moisture content."

7.12.1 (Proposal Evaluation Process) General

The first paragraph of Subsection 7.12.1 is deleted and replaced with the following:

"The Proponent shall submit its Proposal for the entire Project; namely for the Phase 1 and Phase 2 components."

The third sentence of paragraph two of Subsection 7.12.1 is amended to read as follows:

"The Proposal Review Committee will review and evaluate the Proposals, including any:

- (a) alternate long-term financing proposals to HRM's long-term financing for the Facilities;
- (b) alternate solutions comprised of fewer than four (4) Facilities with corresponding Sewage Collection Systems;
- (c) solutions for sewage collection and transmission systems which are alternate to the required submission of a tunnel solution for the Sewage Collection Systems of Halifax North and Dartmouth; and
- (d) supplements to the Proposals for additional use(s) of the Halifax North Sewage Treatment Plant site which would enhance or better utilize the site potential.

The Proposal Review Committee will then report to, make a recommendation to and advise the Proposal Selection Committee."

The following new paragraph is inserted after paragraph two and before paragraph three of Subsection 7.12.1:

"In the event one (1) Facility is proposed for mainland Halifax as part of a solution comprised of fewer than four (4) Facilities, HRM's preference is that such Facility be located at the site for the Halifax South."

The third paragraph of Subsection 7.12.1 is deleted and replaced with the following:

"The Proposal Selection Committee is not bound by any recommendation of the Proposal Selection Committee. In turn, Council is not bound by any recommendation of the Proposal Selection Committee. HRM, its Council Members, employees and agents accept no liability for any costs, expenses, damages or otherwise of any Proponent in the event all Proponents are rejected or in the event a recommended Proponent is not accepted by either the Proposal Selection Committee or Council, as the case may be."

The fifth paragraph of Subsection 7.12.1 is amended to read as follows:

"Proposals will be evaluated in three (3) stages by the Proposal Review Committee:

- (c) Completeness Review;
- (d) Compliance Review; and
- (e) Technical, Economic and Financial Merit Review."

7.12.4.2 Financial Merit (85 points)

The first sentence of Subsection 7.12.4.2 is amended to read as follows:

"HRM will evaluate the financial merit of each Proponent's financial submission or submissions (including, if applicable, the impact of any alternate long-term financing proposal) utilizing a net present value methodology over the planned useful life of the Sewage Collection Systems, the Facilities and the Sludge Handling and Management Systems (i.e. sixty (60) years after the

commencement of the first of the Operating and Maintenance Agreements)."

7.13 Reference Bid

Subparagraph (b) of Subsection 7.13.2 is deleted and replaced with the following:

"(b) the capital cost estimates will be prepared for the four (4) Facility solution described in Subsection 1.4.4 and for alternate solutions including:

- (a) a solution comprised of fewer than four (4) Facilities with corresponding Sewage Collection Systems; and
- (b) a solution for a sewage collection and transmission system which is alternate to the required submission of a tunnel solution for the Sewage Collection Systems of Halifax North and Dartmouth."

Subsection 7.13.4.3 is amended by deleting the second sentence thereof.

3.3 of Part 8 Sewage Collection Systems Design

The following new paragraph is inserted after the last paragraph of Section 3.3 of Part 8:

"In the event HRM proceeds only with Phase 1 of the Project and a pumping station is required for the outfall at Halifax South, the Proponent shall describe in its Proposal how any such pumping station will be incorporated or modified for use after Phase 2 is implemented and the Halifax South Facility is constructed."

5.0 of Part 8

The last paragraph of Section 5.0 of Part 8 is deleted and replaced with the following:

"While the Financial Proposal will be broken down by location, it is understood that the Proposals will be evaluated on the basis of a solution for the entire Project."

5.1.3 of Part 8: Guaranteed Maximum Price for each Sewage Collection System

The following new subparagraphs are inserted after subparagraph(k) of Subsection 5.1.3 of Part 8:

"(l) all work related to the design, construction and commissioning of the Halifax South outfall and diffuser, in the event HRM proceeds only with Phase 1 of the Project; and

(m) all work required to remove, dispose of and/or treat all Hazardous Substances except those Hazardous Substances for which HRM is responsible in accordance with Subsection 3.4.1."

5.1.4 of Part 8 Guaranteed Maximum Price for Each Facility

The following new subparagraph is inserted after subparagraph (k) and before subparagraph(l) of Subsection 5.1.4 of Part 8:

"(k.1) all work required to remove, dispose of and/or treat Hazardous Substances except those Hazardous Substances for which HRM is responsible in accordance with Subsection 3.4.1."

5.8 of Part 8 Economic and Industrial Benefits

The paragraph of Section 5.8 of Part 8 is amended to read as follows:

"The Proponent shall submit its Economic and Industrial Benefits Plan as part of its Proposal, which shall address the requirements as set forth in Subsection 5.7.2 of Part 5."

Appendix B1: Project Requirements

Appendix B1, Part B: 3.4.4 Pumping Stations

Subsection 3.4.4 is deleted and replaced with the following:

"3.4.4.1 General Requirements

Pumping stations shall be sized, except where proposed as an alternate system to tunnels, to meet the hydraulic design criteria at ADWF for the year 2021 as well as for the peak pumping rates resulting from interception of four (4) times ADWF estimated for the year 2021 and the year 2041 as shown in Appendix C (Table 1), Appendix D (Table 2), Appendix E (Table 3), and Appendix F (Table 4).

Pumping stations, where proposed as an alternate system to tunnels, shall be sized to meet the hydraulic design criteria at peak pumping rates from interception of five (5) times ADWF estimated for the year 2021 and the year 2041 as shown in Appendix C (Table 1) and Appendix D (Table 2).

Pumping stations with peak design capacity greater than 75 l/s shall be wet well/dry well types, designed in accordance with the Water Environment Federation Manual of Practice FD-4, Design of Wastewater and Stormwater Pumping Stations.

Instrumentation for pumping stations and related installations shall comply with HRM Municipal Service Systems, Part A: Design Guidelines (Public Works and Transportation Services, HRM) and shall also include flow meters on the discharge header of all pumping stations with a peak design capacity of 75 l/s or greater. Flow meters shall display locally the flow rate and totalized flow and provide auxiliary contacts so that data can be transmitted to a remote location.

The Company shall be responsible for all elements of the pumping station structures, including site and utility services."

Pumping stations shall, at a minimum, comply with the following requirements:

- (a) all above-ground components of pumping stations shall be designed to blend into the local area and be harmonious with the surrounds;
- (b) pumping stations shall be secured against vandalism, and shall include appropriate drainage/lifting equipment for

items such as pumps, motors and other maintenance and repair operations;

- (c) pumping wet well/dry well stations shall be equipped with a small workbench area, and a toilet/washbasin facility;
- (d) SCADA Systems for pumping stations shall be linked to the MacIntosh Street Control Centre for the Halifax North, Halifax South and Herring Cove pumping stations, and to the Bissett Road Control Centre for the Dartmouth pumping stations. All SCADA Systems shall be fully coordinated and integrated with HRM's existing systems at the time of commissioning each Sewage Collection System; and
- (e) pumping stations shall be equipped with odour and noise control systems to absolutely minimize odour and noise effects in the area of the pumping station.

3.4.4.2 Chain Rock Pumping Station Requirements

The Chain Rock pumping station will be located in Point Pleasant Park, and special measures are required with respect to all design and construction activities within the Park. The Company shall comply, at a minimum, with the following requirements for the pumping station:

- (a) the above-ground components of the building shall be constructed with a cut granite stone exterior, and the above-ground section of the building shall be minimized in area;
- (b) the building shall be attractively designed and blended to the surroundings;
- (c) the exterior of the building shall be designed to provide a
- (d) historic/replica style similar to the original Chain Rock Battery building, or the Prince of Wales (Martello) Tower;
- (e) there shall be allowance for tree plantings around the completed building and other vegetation such as shrubs; and
- (f) the building shall include a public toilet facility.

The pumping station shall be located at the north edge of the opened area at the junction of Cable Road, Arm Road and Tower

Hill Road, and such location must be fully satisfactory to the Point Pleasant Park Advisory Committee and Parks Canada. The Company shall be required to liaise with HRM, the Point Pleasant Park Advisory Committee and Parks Canada with respect to all aspects of design and construction within Point Pleasant Park, including scheduling of construction. During construction, all impacts on Point Pleasant Park shall be minimized, and extreme care shall be exercised by construction vehicle operators and in all construction activities.

Construction access for the pumping station, forcemain, water supply and power supply shall be in accordance with HRM requirements. This may involve the use of the right-of-way between Point Pleasant Park and Chain Rock Drive, for which special provisions may apply.

Within Point Pleasant Park, the forcemain from and water supply to the pump house shall be in a relatively shallow trench, using Styrofoam insulation to minimize the depth of excavation and disturbance to tree roots. The power supply to the pumping station shall be underground.

Following construction, Point Pleasant Park and other areas affected by construction operations shall be fully reinstated to conditions which are acceptable to the Point Pleasant Park Advisory Committee, Parks Canada and HRM.

Long-term operating access shall be from existing Point Pleasant Park paths. The pumping station itself shall have a carefully designed and constructed vehicular access, connecting to Point Pleasant Park paths, shall be suitably surfaced and shall be acceptable to the Point Pleasant Park Advisory Committee, Parks Canada and HRM."

Appendix B1, Part B: 3.4.7 Combined Sewer Overflows

Subsection 3.4.7 is amended by adding the following paragraph between paragraphs two and three:

"The Grit removal process shall be provided at all overflows. The Grit removal process shall be fully automated including bar screens and de-watering screw\press. There shall also be an automated means of transporting the screened material to receiving carts which shall have a capacity of one week's storage."

Appendix B1, Part C

The fourth sentence of Subsection 3.1 is amended by replacing the phrase "Appendix FF" with the phrase "Appendix EE".

Paragraph (a) of Subsection 3.4.3 is amended by replacing the phrase "Appendix FF" with the phrase "Appendix EE".

Appendix B1, Part D

Subparagraph (a), (b) and (c) of Section 1.2 are amended in the same manner as subparagraph (a), (b) and (c) of Subsection 3.4.1. of the RFP was amended in this addendum #2.

Appendix B1, Part E

Paragraph six of Section 1.0 is amended in the same manner as Section 4.6 of the RFP was amended in this addendum #2.

Appendix B2

Figures F.1 and F.2 in Appendix B2 show the boundaries of the existing sewersheds. They do not show the boundaries for the ultimate flows. Refer to Appendices C, D, E and F.

Appendix F

Delete Figure F.1.

Appendix Y: OMM Cost Schedule and Renewal Cost Schedule

The first sentence contained in the footnote on page one of Appendix Y is amended to read as follows:

"For financial evaluation purposes, the Proponent shall use the following annual flow volumes and Dry Sludge Solid weights for the periods shown:"

The following new table is inserted after the first table contained in the footnote on page one of Appendix Y:

<u>Dry Sludge Solids in tonnes/year</u>				
<u>Period</u>	<u>Halifax North</u>	<u>Dartmouth</u>	<u>Herring Cove</u>	<u>Halifax South</u>
2001-2016	3,480	2,760	960	1,920
2017-2026	3,840	3,120	1,320	2,040
2027-2036	3,960	3,480	1,800	2,160

On the first page of the table headed "OMM Cost Schedule for [Facility Name]" under the heading "Unit Price per 1,000 m³ of Wastewater", the phrase "Power/Energy (CxF)" is deleted and replaced with the phrase "Power/Energy (ExH)".

The second paragraph contained in the footnote on page one of Appendix Y is amended to read as follows:

"These annual volumes and weights are solely for the purposes of comparing Financial Proposals. Actual volumes and weights will vary from those shown. Unit prices shall be applicable to greater or lesser volumes without restriction."

Appendix Z: Definitions

The following new subparagraphs are inserted after subparagraph(d) in the definition of "Project":

"(e) the design and construction of an access road adjacent to the Dartmouth Facility; and

(f) the design and construction of a realignment of Water Street for the Halifax North Facility."

The definition of "Reference Bond" is amended to read as follows:

"Reference Bond" means the long-term Government of Canada bond, 8.0% due June 1, 2023."

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REQUEST FOR PROPOSALS #00-065

Addendum #3



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Three

August 23, 2000

This Addendum Number Three is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, and Addendum Number Two dated July 31, 2000.

Part 5 - Business Arrangements

Subsection 5.3.1 - "General" is amended such that paragraph (b) reads as follows:

"(b) variable payments proposed by the Proponent based on its basis point spread above the Government of Canada bellweather bond chosen by the Proponent at the Proposal Due Date, which shall be fixed subsequent to the Proposal Due Date on or before the Date of Substantial Completion of the last Facility or the Date of Substantial Completion of the related Sewage Collection System, whichever is later,"

Section 5.6 - Changes in Law

Subsection 5.6.3 of the RFP is hereby amended by adding the following after the third sentence thereof:

"Capital costs will be born by HRM although the Company will be given an option to provide an alternate long-term financing proposal."

RFP Part 8, Section 3.0 - Construction Proposal

Subsection 3.5 (Outfalls and Diffusers) is amended by adding the following paragraphs:

"With respect to the outfall for Halifax South, the Proponent shall provide a design and pricing for two options:

- (a) assuming that the depth of the water at the seawall and from the seawall to the shipping channel is altered to provide a minimum draft of 18.1 metres below the lowest low tide; and

- (b) assuming that the change referred to in (a) may be made at a future time."

The Company shall be responsible to secure any water lot leases or licenses that may be required from the Halifax Port Authority in the name of HRM on terms and conditions acceptable to HRM.

Appendix B1, Part B: 3.4.3 Forcemains

Subsection 3.4.3 is amended by adding the following paragraphs after the second paragraph:

"Air relief valves installed on any forcemains shall be located where maintenance can be conducted without restriction."

"Forcemains over 200 m long shall have ball-type gate valves installed at 200 m maximum spacing for maintenance purposes."

Appendix B1, Part B: 3.4.4 Pumping Stations

Subsection 3.4.4.1 General Requirements is amended by adding the following:

- (a) to subsection 3.4.4.1(c)

"pumping wet well/dry well stations shall be equipped with a small workbench area, and a toilet, washbasin facility, including a shower and eyewash station;"

- (b) after subsection 3.4.4.1(e)

- (f) pumping stations shall be equipped with odour and noise control systems to absolutely minimize odour and noise effects in the area of the pumping station;

- (g) fixed stainless steel trash racks shall be installed upstream of the pumps for the purpose of screening large materials from the pumps. Fixed trash racks shall be equipped with washing systems to facilitate cleaning;

- (h) heavy duty grinders shall be provided for all wet well/dry well pumping stations and a maintenance by-pass channel shall be provided around the grinder with suitable control gates;

- (i) ventilation of wet wells and screen/grit hopper areas shall be exhausted vertically. Provide odour control with charcoal or other acceptable filters;
- (j) all buildings constructed to house pumping stations including stand-by power generators and wet/dry wells shall be constructed as low maintenance. Where wet wells and pumps are constructed internally, there shall be provisions to provide mechanical lift for pumps and a monorail to move the pumps to the exterior. The lifting device shall be electric. Hatch doors shall have mechanical means to assist when opening for maintenance operations;
- (k) all interior exposed concrete to be painted;
- (l) the exterior of buildings shall all have vandal-proof night lighting, plus 2 m high galvanized chain link fence, with three strands above 2 m, gates for truck access and heavy duty padlocks;
- (m) all driveway access shall be paved and surrounding areas landscaped, except the Chain Rock pumping station which shall be treated as specified in 3.4.4.2 Chain Rock Pumping Station Requirements;
- (n) exterior wet wells shall be located to allow maintenance vehicles unrestricted access for cleaning and pump maintenance;
- (o) all pumping stations shall be adequately sized to give good space for all operations and maintenance activities and shall not be too compact;
- (p) mechanical means shall be provided for raising and lowering any wet well gates. An effective system for draining and cleaning wet wells shall be provided; and
- (q) floats and/or transducers shall have good and convenient access, and the bottom section floats, or similar gauging equipment, shall not be fixed to the side walls, but float rings shall be used as required to retain the lower sections."

Appendix B1, Part B: 3.4.7 Combined Sewer Overflows

Subsection 3.4.7 is amended by deleting the following paragraph inserted by means of Addendum Number Two:

"The Grit removal process shall be provided at all overflows. The Grit removal process shall be fully automated including bar screens and de-watering screw/press. There shall also be an automated means of transporting the screened material to receiving carts which shall have a capacity of one week's storage."

and by adding the following paragraph between paragraphs 2 and 3:

"The intent is to remove solids greater than 12 mm and floatables from wastewater to be overflowed. In general, these materials shall be routed to the Sewage Treatment Plant where they shall be collected and disposed of, as specified."

Appendix B1, Part B: 4.5 Herring Cove Sewage Collection System:

The following new subsection is inserted at the end of subsection 4.5.2:

"4.5.3 Roaches Pond Retention Tank

The capacity of the Roaches Pond retention tank shall be extended to double the existing tank capacity, using reinforced concrete. This extension shall include all necessary work including connections, controls, monitoring systems, as required for a complete and functional system including grading and all other necessary measures. Drawings of the existing retention tank are available for viewing at the Data Room."

Appendix B1, Part C: 2.5 Design Criteria:

Subsection 2.5 is amended by adding the following new paragraph:

"A minimum of two design options for the Halifax North Sewage Treatment Plant building shall be provided in the Proposal:

- (a) a design with a usable roof at grade level on Barrington Street, capable of supporting a structure of no more than two storeys;

- (b) a design without a usable roof which takes into consideration the heritage character of the area.

General height restriction for the Halifax North Sewage Treatment Plant building is a maximum of eight metres above grade on the Barrington Street side, in order to protect the views from Brunswick Street."

Appendix B1, Part F: 12.4 SCADA System:

The following new paragraph is inserted after the last paragraph of Section 12.4:

"The SCADA System is to include a passive node at a location to be indicated by HRM. Its function is to enable HRM personnel to supervise the Sewage Treatment Plants operations, see and print all relevant screens, trends and reports. No process control or SCADA programming functions are to be implemented at this node.

The work station shall have the same hardware and the same operating system as the other system nodes and shall have the current version of the Microsoft Office 2000 line installed on it. The Company shall include all communications hardware and commissioning of the node as part of the overall SCADA System and shall be responsible to maintain and update the SCADA/communications software for the term of the contract."

Appendix B1, Part G: 1.11 Work Carried out in Winter

Section 1.1 is amended to read as follows:

"When work is carried out in freezing weather the work shall be protected from frost and dampness during and after placement. When the minimum temperature is at or below 4°C , concrete delivered to the site shall be heated and sufficient temporary protection in the form of enclosures or tarpaulins shall adequately enclose and protect the work under construction. Sufficient temporary heat shall be provided to maintain the temperature above 10°C in the work area and in the fresh concrete during a curing period of at least four (4) consecutive days after placing.

Backfilling shall not be done with frozen material or where the material already in place is frozen."

Halifax Harbour Solutions

REQUEST FOR PROPOSALS #00-065

Addendum #4



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Four

September 1, 2000

This Addendum Number Four is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, Addendum Number Two dated July 31, 2000, and Addendum Number Three dated August 23, 2000.

7.1 Schedule for Selection Process

Section 7.1 is hereby amended such that the section reads as follows:

"The schedule for the Proposal submission and selection process is as follows:

- RFP Release Date Day 1
- Proponent Meeting (optional)
- Deadline to Request Clarifications Day 42
- Deadline for Submission of Proposal Day 122
- Announcement of Selected Proponent Day 234
- Execution of Project Agreements Day 290

This schedule is tentative and HRM may change any of the dates set out above. HRM will provide written notice to the Proponent of any such changes. The Proponent must submit its Proposal no later than 12:00 noon, Halifax time, on **September 29, 2000** ("Proposal Due Date")."

Appendix Z: Definitions: The definition of "Proposal Due Date" is amended to read as follows:

"Proposal Due Date" means 12:00 noon, Halifax Time, September 29, 2000.

Maurice E. Lloyd, P.Eng., FCIP
Project Manager
Halifax Harbour Solutions Project

Halifax Harbour Solutions

REQUEST FOR PROPOSALS #00-065

Addendum #5



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Five

September 9, 2000

This Addendum Number Five is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, Addendum Number Two dated July 31, 2000, Addendum Number Three dated August 23, 2000 and Addendum Number Four dated September 1, 2000.

3.3 Performance, Physical and Design Requirements - Facilities

3.3.2.2 Capacity, Location and Layout of Sewage Treatment Plants

The table in subparagraph 3.3.2.2 is amended to read as follows:

SEWAGE TREATMENT PLANT CAPACITIES FLOWS IN m³/s

Plant Location	Initial Construction (Based on projections to 2021)			Ultimate Flows	
				Ultimate Capacity (2041)	Ultimate Peak Flows (2041)
	Avg. Daily Flow	Peak Flow	Min. flow	Avg. Daily Flow	Peak Flow
Halifax North	1.01	2.68	0.20	1.07	2.86
Dartmouth	<u>0.97</u>	<u>2.58</u>	<u>0.19</u>	<u>1.15</u>	<u>3.06</u>
Herring Cove	0.33	0.88	0.06	0.61	1.64
Halifax South	0.54	1.29	0.09	0.63	1.51

Notes:

1. Peak flow is equal to 4 x average dry weather flow.
2. Average Daily Flow is 1.5 x average dry weather flow.
3. The ultimate capacity represents the average dry weather flow that is expected when development of the applicable sewersheds is complete.
4. HRM does not guarantee that the minimum flow for each Sewage Treatment Plant is the least flow which may be experienced.

4.5 Technical Requirements

4.5.1 Influent

Subsection 4.5.1 of the RFP is hereby amended by adding the following after the last sentence of the first paragraph thereof:

"It is the requirement that total lifecycle costs be minimized, and Proponents are required to demonstrate that their Proposals achieve this requirement. Where a pumping station in a Sewage Collection System can most economically be used to deliver sewage and lift the sewage that discharges at the head works of the Sewage Treatment Plant, the Proponent shall provide a complete rationale for its proposal and it shall fully detail the capital costs and operating and maintenance cost savings, relative to providing a separate lift station at the Sewage Treatment Plant. The Proponent shall also provide the calculated division of operating and maintenance costs, annually over the 30 year period, to comply with the principle concerning the allocation of costs between HRM and the Company. The Proponent shall not propose to locate pumping stations outside a Sewage Treatment Plant Site boundary, simply to avoid or transfer operating costs."

The table in subsection 4.5.1 is amended in the same manner as the table in subsection 3.3.2.2.

Appendix Y

OMM Cost Schedule and Renewal Cost Schedule

The tables in the footnote "*" on the first page are amended to read as follows:

*For financial evaluation purposes, the Proponent shall use the following annual flow volumes for the periods shown:

Flow Volumes in 1000 m³/year

<u>Period</u>	<u>Halifax North</u>	<u>Dartmouth</u>	<u>Herring Cove</u>	<u>Halifax Sough</u>
2001-2016	29,000	<u>25,000</u>	8,000	16,000
2017-2026	32,000	<u>33,000</u>	11,000	17,000
2027-2036	33,000	<u>36,000</u>	15,000	18,000

The annual volumes and weights are solely for the purposes of comparing Financial Proposals. Actual volumes and weights will vary from those shown. Unit prices shall be applicable to greater or lesser volumes without restriction.

Dry Sludge Solids in tonnes/year

Period	Halifax	Dartmouth	Herring Cove	Halifax South
2001-2016	3,480	<u>3,000</u>	960	1,920
2017-2026	3,840	<u>3,960</u>	1,320	2,040
2027-2036	3,960	<u>4,320</u>	1,800	2,160

The last footnote on page 3 is hereby deleted and replaced with the following:

"**For Financial Proposal purposes, Proponents should use a unit price for power/energy of 6.5¢ per kilowatt hour".

Appendix B1: Project Requirements

Appendix B1, Part C

4.3 Sewage Treatment Plant Capacity

4.3.1 Capacity of Sewage Treatment Plants

The table in subsection 4.3.1 is amended in the same manner as the table in subsections 3.3.2.2 and 4.5.1 of the RFP.

Appendix D

Dartmouth Sewage Collection System: Flow Estimates and Preliminary Layout of the Required Sewage Collection System

Table 2 is amended to read as follows:

TABLE 2

SEWER FLOWS - DARTMOUTH STP										
		1991		2011		2021		2041		Max'm
OUTFALL/SEWERSHED	Area No.	ADWF m ³ /s	4XADWF m ³ /s	ADWF m ³ /s	4xADWF m ³ /s	ADWF m ³ /s	4XADWF m ³ /s	ADWF m ³ /s	4xADWF m ³ /s	m ³ /s
Shannon Park	2	0.009	0.035	0.009	0.035	0.009	0.035	0.009	0.035	0.04
Ferguson Road	3	0.017	0.070	0.020	0.079	0.020	0.079	0.020	0.079	1.63
Waterfront Zone H	H	0.001	0.004	0.001	0.004	0.001	0.004	0.001	0.004	0.07
Burnside	1	0.032	0.127	0.054	0.216	0.055	0.219	0.057	0.227	0.71
Tufts Cove Total		0.059	0.235	0.083	0.334	0.084	0.338	0.086	0.345	2.45
Wallace Street	4	0.003	0.014	0.003	0.014	0.003	0.014	0.003	0.014	0.80
Grove Street	6	0.002	0.009	0.002	0.009	0.002	0.009	0.002	0.009	0.40
Jamieson Street	5	0.033	0.131	0.046	0.182	0.047	0.1867	0.049	0.194	4.00
Brookside Avenue	7	0.002	0.010	0.003	0.011	0.003	0.011	0.003	0.011	0.35
Waterfront Zone G	G	0.005	0.019	0.005	0.019	0.005	0.019	0.005	0.019	0.07
Jamieson Total		0.046	0.183	0.059	0.235	0.060	0.239	0.062	0.247	5.62
Lyle Street	8A	0.010	0.040	0.011	0.045	0.0111	0.045	0.011	0.045	1.92
Best Street	8B	0.001	0.005	0.001	0.005	0.001	0.005	0.001	0.005	0.11
Waterfront Zone F	F	0.001	0.003	0.003	0.010	0.003	0.010	0.003	0.010	0.05
Lyle/Best Total		0.012	0.048	0.015	0.059	0.015	0.059	0.015	0.059	2.08
Park Avenue	9A	0.007	0.026	0.007	0.027	0.007	0.027	0.007	0.027	1.98
North Street	9B	0.004	0.018	0.005	0.018	0.005	0.018	0.005	0.018	1.33
Waterfront Zone E	E	0.000	0.001	0.003	0.013	0.004	0.017	0.006	0.026	0.03
North/Park Total		0.011	0.045	0.015	0.059	0.016	0.063	0.018	0.071	3.35
King Street PS	10/D	0.010	0.041	0.015	0.060	0.017	0.068	0.021	0.083	1.10
Canal PS	12	0.161	0.645	0.214	0.856	0.263	1.050	0.359	1.437	2.44
Maitland PS	11	0.002	0.007	0.002	0.007	0.002	0.007	0.002	0.007	0.55
Old Ferry Road PS	13	0.022	0.088	0.023	0.093	0.023	0.093	0.023	0.093	3.05
Dartmouth Cove Total	10/13	0.195	0.782	0.254	1.016	0.304	1.217	0.405	1.620	7.14
Dartmouth North Total		0.323	1.292	0.426	1.703	0.479	1.916	0.586	2.342	
Tupper Street	14	0.002	0.009	0.002	0.009	0.002	0.009	0.002	0.009	0.64
Waterfront Zone C	C	0.000	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.00
Tupper Total		0.003	0.011	0.003	0.011	0.003	0.011	0.003	0.011	0.64
Cruisack Street	15	0.009	0.036	0.009	0.036	0.009	0.036	0.009	0.036	1.92
Waterfront Zone B	B	0.001	0.005	0.001	0.005	0.001	0.006	0.002	0.007	0.01

Cruisack Total		0.010	0.041	0.010	0.041	0.011	0.042	0.011	0.044	1.92
Melva Street	16	0.005	0.021	0.022	0.086	0.025	0.098	0.031	0.122	0.70
Woodside Ind. Park	18	0.006	0.022	0.022	0.090	0.026	0.102	0.032	0.127	0.10
Waterfront Zone A	A	0.002	0.007	0.002	0.007	0.002	0.008	0.003	0.010	0.01
Portland Estates	17	0.003	0.012	0.004	0.015	<u>0.102</u>	<u>0.408</u>	<u>0.102</u>	<u>0.408</u>	<u>0.12</u>
Melva Total		0.015	0.062	0.050	0.198	<u>0.154</u>	<u>0.616</u>	<u>0.166</u>	<u>0.664</u>	<u>0.93</u>
Dartmouth South Total		0.028	0.114	0.063	0.251	<u>0.168</u>	<u>0.669</u>	<u>0.180</u>	<u>0.719</u>	
Dartmouth STP		0.352	1.406	0.488	1.954	<u>0.646</u>	<u>2.584</u>	<u>0.766</u>	<u>3.064</u>	

APPENDIX G

Lifecycle Costs

Table 2 is amended to read as follows:

TABLE 2

COLLECTION SYSTEM FLOWS - DARTMOUTH STP				
OPERATING PERIOD	2001-2021		2021-2041	2041-2051
	Area	Avg. Daily Flow	Avg. Daily Flow	Avg. Daily Flow
OUTFALL/SEWERSHED	No.	m ³ /s	m ³ /s	m ³ /s
Shannon Park	2			
Ferguson Road	3			
Waterfront Zone H	H			
Burnside	1			
Tufts Cove Total		0.117	0.126	0.129
Wallace Street	4	0.005	0.005	0.005
Grove Street	6	0.003	0.003	0.003
Jamieson Street	5			
Brookside Avenue	7			
Waterfront Zone G	G	0.007	0.007	0.007
Jamieson Total		0.084	0.091	0.093
Lyle Street	8A			
Best Street	8B			
Waterfront Zone F	F			
Lyle Best Total		0.021	0.022	0.022
Park Avenue	9A			
North Street	9B			
Waterfront Zone E	E			
North/Park Total		0.021	0.025	0.027
King Street PS	10/D			
Canal PS	12			
Maitland PS	11			
Old Ferry Road PS	13			
Dartmouth Cove Total	10/13	0.397	0.532	0.607
Dartmouth North Total		0.640	0.798	0.878
Tupper Street	14			
Waterfront Zone C	C			
Tupper Total		0.034	0.004	0.004
Cuisack Street	15			
Waterfront Zone B	B			
Cuisack Total		0.015	0.015	0.015
Melva Street	16			
Woodside Ind. Park	18			
Waterfront Zone A	A			
Portland Estates	17			
Melva Total		0.14	0.240	0.249
Dartmouth South Total		0.160	0.260	0.269
Dartmouth STP		0.80	1.06	1.15

Maurice E. Lloyd, P.Eng., FCIP
Project Manager
Halifax Harbour Solutions Project

Halifax Harbour Solutions

REQUEST FOR PROPOSALS #00-065

Addendum #6



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Six

September 18 2000

This Addendum Number Six is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, Addendum Number Two dated July 31, 2000, Addendum Number Three dated August 23, 2000, Addendum Number Four dated September 1, 2000, and Addendum Number Five dated September 8, 2000.

Appendix A: Facility Sites and Roads

Appendix A is amended by incorporating by reference the following data which was delivered to the Proponents as follows:

Halifax North

Site and Road:

Legal and Topographical Survey and
Legal Description
By HRM

Delivery Date: 25 July, 2000

Dartmouth

Site:

Legal and Topographical Survey and
Legal Description
Topographical Survey of access road
By Servant, Dunbrack, McKenzie and MacDonald Ltd.

Delivery Date: 29 August, 2000

Halifax South

Site:

Legal and Topographical Survey and
Legal Description
Plan of Survey Block V-1 and Block V-2
Via Rail Canada Inc. Lands
by Servant, Dunbrack, McKenzie & MacDonald Ltd.

Delivery Date: 25 August, 2000

Date: July 17, 2000-09-05 File No. 1-1-84 (20672)
Plan No. 14-931-A
Plan of Survey Block V-1 and Block V-2

Herring Cove Site

For Proposal purposes, Proponents should use the site boundary and topographical survey data together with letter of Jacques Whitford Environment Limited describing the general geotechnical conditions in the area as delivered with a memorandum of 21 August, 2000 from the Project Manager.

HRM Site Condition Reports

The HRM Site Condition Reports are the following reports and data which were delivered to the Proponents as follows:

Halifax North Site

Geotechnical Investigation
Proposed Sewage Treatment Plant Site
Barrington, Cornwallis and
Upper Water Streets, Halifax, N.S.
by ADI Limited
7020 Mumford Road
HALIFAX NS B3L 4H9
Date: 99/10/15
File No. 29-4241-00P.2

[Delivery Date: 25 October, 1999]

Phase I Environmental Site Assessment
Proposed Sewage Treatment Plant Site
Land Bounded by Barrington, Cornwallis and
Upper Water Streets, Halifax, N.S.
by ADI Limited
Date: 99/10/15
File No. 29-4241-008.1 includes Archaeology Assessment Report
Combined Environmental Geotechnical Investigation
Assessment by ADI Limited

Delivery Date: 25 October, 1999]

Delivery Date: 28 August, 2000

HRM
Geotechnical Investigation
for Harbour Solutions Project
Project #14417
by Jacques Whitford and Associates Limited
- Halifax North Outfall & Diffuser
- Dartmouth (Coast Guard) Outfall & Diffuser
Date: 13 October, 1999

Delivery Date: 25 October, 1999

Dartmouth Site

HRM
Geotechnical Investigations
for Halifax Harbour Solutions Project
Coast Guard Site
Dartmouth, Nova Scotia
Project #NSD14417
Date: 22 August, 2000
by Jacques Whitford Associates Limited

Delivery Date: 25 August, 2000

Public Works and Government Services Canada
Screening Level Ecological Risk Assessment
Dartmouth Coast Guard Base
Dartmouth, Nova Scotia
JWEL Project #14520-18
Date: 7 June, 2000
by Jacques Whitford Environment Limited

Delivery Date: 26 July, 2000

Public Works and Government Services Canada
Phase II/III Environmental Site Assessment
Coast Guard Facility
Dartmouth, Nova Scotia
Project #14520-18
by Jacques Whitford Environment Limited
Date: 7 June, 2000

Delivery Date: 26 July, 2000

Public Works and Government Services Canada
Hazardous Materials Survey
Coast Guard Facility
Dartmouth, Nova Scotia
Project #14520-18
by Jacques Whitford Environment Limited
Date: 7 June, 2000

Delivery Date: 26 July, 2000

HRM
Geotechnical Investigation
for Harbour Solutions Project
Project #14417
by Jacques Whitford and Associates Limited
- Halifax North Outfall & Diffuser
- Dartmouth (Coast Guard) Outfall & Diffuser
Date: 13 October, 1999

Delivery Date: 25 October, 1999

Halifax South Site

HRM
Final Report
Geotechnical Investigation
Via Rail Maintenance Facility (Halifax)
by Jacques Whitford and Associates Limited
Date: 17 July, 2000

Delivery Date: 26 July, 2000

Halifax Regional Municipality
Phase I Environmental Site Assessment
Former Via Rail Maintenance Facility
Marginal Road
Halifax, Nova Scotia
Project #NSD15190
Date: 13 June, 2000
by Jacques Whitford Environment Limited

Delivery Date: 26 July, 2000

HRM
Preliminary Hazardous Material Survey
Former Via Rail Maintenance Facility
Marginal Road
Halifax, Nova Scotia
Project #NSD15190
Date: 4 July, 2000
by Jacques Whitford Environment Limited

Delivery Date: 26 July, 2000

HRM
Phase II Environmental Site Assessment
Former Via Rail Maintenance Facility
Marginal road
Halifax, Nova Scotia
Project #NSD15190
Date: 6 July, 2000
by Jacques Whitford Environment Limited

Delivery Date: 26 July, 2000

HRM
Tier II Risk Assessment
Former Via Rail Maintenance Facility
Marginal Road
Halifax, Nova Scotia
Project #NSD15190
Date: 2 August, 2000

Delivery Date: 8 August, 2000

HRM
Geotechnical Investigation
for Harbour Solutions Project
by Maritime Testing [1985] Limited [Draft Report]
Halifax South Outfall & Diffuser
Herring Cove Outfall & Diffuser

Delivery Date: 1 September, 2000

Sewage Collection System

HRM
Halifax Harbour Solutions Project
Geotechnical Investigations
for Land Based Tunnels
Halifax, Dartmouth, Nova Scotia
Project #NSD14417
by Jacques Whitford and Associates Limited
Date: 28 July, 2000

Delivery Date: 1 August, 2000

Halifax Harbour Solutions Project

Geotechnical Investigations for Land Based
Tunnel Supplementary Report
By Jacques Whitford & Associates Ltd.

Delivery Date: 1 September, 2000

Part 8, Section 7.5

The Proponent may specify a formula to be used to calculate the amount of the Termination Fee to be paid by HRM on early termination of the Operating and Maintenance Agreements.

Project Agreements

Attached hereto are the forms of the Project Agreements; namely the Development Agreement, an Operating and Maintenance Agreement and a License. HRM will not unilaterally make any changes in substance to the form of the Project Agreements after the Proposal Due Date. The Proponent and their lenders must be prepared to execute, without amendment, the form of the Project Agreements attached.

Materials Delivered by HRM

Attached as Schedule A is a list of certain materials delivered by HRM in accordance with subsection 2.2.2.3 of the RFP.

Survival of RFP

All of the provisions of the RFP remain in full force and effect until the Project Agreements are executed with the Company. The unsuccessful Proponent remains bound by all of the terms of the RFP, including Section 9.21, until the Project Agreements are executed.

Proponent Guarantors

The names of the Proponent Guarantors acceptable to HRM as follows:

- (a) in the case of Halifax Regional Environmental Partnership:
 - (i) Lyonnaise American Holding, Inc.;
 - (ii) United Water Resources Inc.;
 - (iii) United Water Services LP ("United Water") Ontario; and
 - (iv) Suez Lyonnaise des Eaux S.A.

(b) in the case of Halifax WaterWorks Group:

- (i) CH2M HILL Ltd.;
- (ii) CH2M HILL Companies, Limited;
- (iii) Thames Water PLC.;
- (iv) Thames Water Utilities Limited; and
- (v) Thames Water International Services Limited.

MAURICE E. LLOYD, P.Eng., FCIP,
Project Manager
Halifax Harbour Solutions Project

SCHEDULE A

(a) Wastewater Characterization Study

Halifax Harbour Solutions Project
Wastewater Characterization Study - 1999
August, 1999
File No. 013557
by SNC-Lavalin Inc.
Suite 200
Park Lane Terraces
5657 Spring Garden Road
HALIFAX NS B3J 3R4

Delivery Date: 25 October, 1999

(b) Oceanographic Baseline Studies

Marine Benthic Habitat and
Sediment Characterization
at each Diffuser Site
HRM Project #14368
Date: 1 October, 1999
by Jacques Whitford Environment Limited
(4 Sites)

Delivery Date: 25 October, 1999

Halifax Harbour Solutions
Commercial Fisheries, Halifax Harbour
HRM
by Jacques Whitford Environment Limited
Project #14368-0004
Date: 1 October, 1999

Delivery Date: 25 October, 1999

(c) Oceanographic Modelling and Assimilative Capacity Study

Project #99-096 Delivery Date: 20 January, 2000
Prepared for Halifax Harbour Solutions Project
Prepared by MacNeil and Hurlbut
Date: January, 2000
Coastal Ocean Associates Inc.
7 Canal Street, 2nd Floor
DARTMOUTH NS B24 2W1
Phone: (902) 462-7677
Fax: (902) 463-5696

Supplemental Modelling Oceanographic Delivery Date: 1 August, 2000
Modelling and Assimilative Capacity Study
Project #99-096
Date: 28 July, 2000

(d) Avifauna Study Delivery Date: 25 October, 1999
at the Proposed Herring Cove Sewage
Treatment Plant Site
HRM
by Jacques Whitford Environment Limited
Date: 1 October, 1999

Halifax Harbour Solutions
REQUEST FOR PROPOSALS #00-065

Addendum #7



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Seven

September 21, 2000

This Addendum Number Seven is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, Addendum Number Two dated July 31, 2000, Addendum Number Three dated August 23, 2000, Addendum Number Four dated September 1, 2000, and Addendum Number Five dated September 8, 2000, and Addendum Number Six dated September 15, 2000.

Section 5.3.4.1. and 5.3.4.2

For the purposes of evaluation, HRM, based on using an amortization structure for a thirty (30) year financing, will use a basis point spread of 100 basis points above the yield as of the Proposal Due Date on the Reference Bond.

7.2 Schedule for Selection Process

Section 7.1 is hereby amended such that the section reads as follows:

"The schedule for the Proposal submission and selection process is as follows:

- RFP Release Date Day 1
- Proponent Meeting (optional)
- Deadline to Request Clarifications Day 42
- Deadline for Submission of Proposal Day 136
- Announcement of Selected Proponent Day 248
- Execution of Project Agreements Day 304

This schedule is tentative and HRM may change any of the dates set out above. HRM will provide written notice to the Proponent of any such changes. The Proponent must submit its Proposal no later than 12:00 noon, Halifax time, on **October 13, 2000** ("Proposal Due Date")."

Appendix Z: Definitions: The definition of "Proposal Due Date" is amended to read as follows:

"Proposal Due Date" means 12:00 noon, Halifax Time, **October 13, 2000.**

MAURICE E. LLOYD, P.Eng., FCIP,
Project Manager
Halifax Harbour Solutions Project

Halifax Harbour Solutions

REQUEST FOR PROPOSALS #00-065

Addendum #8



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Eight

January 26, 2001

This Addendum Number Eight is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, Addendum Number Two dated July 31, 2000, Addendum Number Three dated August 23, 2000, Addendum Number Four dated September 1, 2000, and Addendum Number Five dated September 8, 2000, Addendum Number Six dated September 15, 2000 and Addendum Number Seven dated September 21, 2000.

Addendum to Proposal

To be responsive to the Request for Proposals #00-065 as amended by Addenda Numbers One to Seven and this Addendum Number Eight (collectively, "RFP"):

- (a) The Proponent must submit an addendum to its Proposal ("Addendum") to cause the Proposal to meet the mandatory submission requirements of Part 8 of the RFP. A separate memorandum will be delivered outlining the items which cause the Proponent's Proposal to continue to be incomplete. The Proponent may make such further changes to its Proposal in the Addendum as it wishes. HRM has not conducted a review of the Proponent's Proposal for compliance. See Section 7.12.3.

Proposals that remain incomplete after clarifications to the Addendum, if any have been requested, shall not be evaluated. Proposals that are non-compliant after clarifications to the Addendum, if any have been requested, will be disqualified. See Sections 7.10 and 7.12; and

- (b) The Proponent must deliver with the Addendum a release and indemnity, in the form attached as Schedule "A", executed by the Proponent, each of the Proponent Guarantors and those parties identified by HRM in a memorandum; and
- (c) The Proponent may submit an alternate solution which includes a Facility located on lands within the boundaries described in Schedule "B" ("DND/HRM Lands"). If the Proponent's Proposal currently includes an alternate solution utilizing the DND/HRM Lands, the Proponent may indicate in the Addendum the changes, if any, it wishes to make to such alternate solution; and
- (d) The Proponent may submit, in addition to the mandatory requirement of a solution including a sewer tunnel extending from Sackville Street to the Sewage Treatment Plant site, an alternate solution for sewage collection and transmission with capacity equal to five (5) times ADWF for the year 2041 as shown on

Appendix C (Table 1). If the Proponent elects to submit such an alternate solution, the Addendum shall include in the Sewage Collection System Cost Schedule details with regard to the costs of the alternate sewage collection and transmission system in addition to the costs of the tunnel; and

- (e) The Addendum must include a statement regarding the execution of the Project Agreements as referred to in "Project Agreements" below.

Schedule for Selection Process

Section 7.1 is hereby amended such that the section reads as follows:

"The schedule for the Proposal submission and selection process is as follows:

- RFP Release Date Day 1
- Proponent Meeting (optional)
- Deadline to Request Clarifications Day 42
- Deadline for Submission of Proposal Day 136
- Release Date of Addendum Number Eight Day 241
- Deadline for submission of Addendum to Proposal Day 265
- Announcement of Selected Proponent Day 377
- Execution of Project Agreements Day 426

This schedule is tentative and HRM may change any of the dates set out above. HRM will provide written notice to the Proponent of any such changes. The Proponent must submit its Proposal no later than 12:00 noon Halifax time, on October 13, 2000 ("Proposal Due Date"). The Proponent must submit its Addendum no later than 12:00 noon, Halifax time, on **February 19, 2001** ("Addendum Due Date")."

Part 8 – Mandatory Submission Requirements

Section 1.2 of Part 8 is amended such that the first sentence of the last paragraph thereof now reads as follows:

"The Proposal shall be irrevocable by the Proponent and shall remain in effect and open for acceptance by HRM for a period of two hundred (200) calendar days from the Acceptance Due Date or until the Project Agreements are executed and delivered by HRM and the Selected Proponent, whichever is earlier.

Section 7.12.3 – Compliance Review

The first sentence of s. 7.12.3 is amended to read as follows:

"Concurrent with the issuance of Addendum #8, HRM will commence its detailed assessment of the Proposal in the following areas..."

1.6 Evaluation and Selection

The following paragraph which was inserted by way of Addendum Number Two after paragraph one and before paragraph two, is hereby deleted:

"In the event one (1) Facility is proposed from mainland Halifax as part of a solution comprised of fewer than four (4) Facilities, HRM's preference is that such Facility be located at the site for the Halifax South Facility."

Technical Requirements

(a) Forcemains, Pumping Stations and Auxiliary Power

Notwithstanding any other provision of the RFP or the Project Agreements, the HRM Municipal Services System shall apply to pumped systems (which includes pumping stations) with a design capacity greater than 75 l/sec. (i.e., there shall be dual forcemains each capable of handling the design flow required in the Project Requirements and there is a requirement for stand-by generators).

(b) Odour

Notwithstanding any other provision of the RFP or the Project Agreements, the following provisions shall apply with respect to air emission/odour:

(i) Sewage Treatment Plants - Air Emission/Odour

The Company shall employ measures to ensure that all plant areas are fully and effectively enclosed, all areas are under negative pressure, and all air within plants is treated prior to discharging. There shall be no detectable odours off site i.e. beyond property boundary. The concentration of Total Reduced Sulphur (TRS) compounds in air discharged from the Facility shall not exceed 5.5 ug/m³, or 4 ppb, as measured at points of discharge from each of the Sewage Treatment Plant's exhaust stack(s).

Measurement in the stacks shall be on a continuous basis and the specified odour limit shall not be exceeded in any 5 minute rolling average.

An odour monitoring and recording system including sensors, measuring and recording devices shall be installed at all sewage treatment plants. All sensors and measuring equipment shall be suitable for the intended operation with appropriate sensitivity and accuracy for the low concentrations that will be measured and monitored include data in SCADA system with capability for real time monitoring of results by HRM.

(ii) Sewage Collection Systems - Air Emission/Odour

The Company shall employ measures to ensure that all pumping stations and combined sewer overflow ("CSO") chambers are fully and actively enclosed. Air handling and treatment systems shall be permanently installed as part of the pumping station and CSO construction. Portable or mobile type units are not acceptable. There shall be no detectable odours off site, i.e. beyond the physical limits of the pumping stations and of the CSO chambers. The concentration of Total Reduced Sulphur (TRS) compounds in air discharged from the collection facilities i.e. pumping stations and CSO's, shall not exceed 5.5 ug/m³, or 4 ppb, as measured at points of air discharge from each facility.

The specified limits shall not be exceeded in any 5 minute rolling average.

(c) **HVAC Systems**

For clarification, all HVAC systems shall be permanent installations.

(d) **Sludge**

Notwithstanding any other provision of the RFP or the Project Agreements, the following applies to the requirement to provide a Sludge Handling and Management System:

- (i) All Sewage Treatment Plant processes including loading the thickened and dewatered Sludge for transportation shall be enclosed under negative pressure; and
- (ii) Each Sewage Treatment Plant shall include process equipment for the collection, conveying, storage, mixing, pumping, thickening, dewatering of Sludge and the loading of the thickened and dewatered Sludge for transportation.

(e) **General**

If there is any conflict or ambiguity in the RFP (including the Appendices thereto) with respect to any component of the Project, the more stringent requirement shall apply.

Project Agreements

There will not be a binding agreement for the Project until HRM and the Selected Proponent have entered into the Project Agreements. HRM has considered all changes requested by both Proponents. A separate memorandum ("Memorandum") will be delivered to each of the Proponents outlining the requested changes which HRM is prepared to make. After the selection of the Selected Proponent, HRM will consider additional changes requested by the Successful Proponent and its lenders; however, HRM makes no commitment that it will agree to any further changes. The Proponent must state in the Addendum that it is prepared to execute, without amendment, the form of Project Agreements which accompanied Addendum #6 with the modifications thereto as set forth in the Memorandum. For clarification, the Proponent's financial proposal must be consistent with the Project Agreements. Refer to s.7.14.

MAURICE E. LLOYD, P.Eng., FCIP,
Project Manager
Halifax Harbour Solutions Project

SCHEDULE "A"

HALIFAX HARBOUR SOLUTIONS PROJECT

RELEASE and INDEMNITY

WHEREAS on May 30, 2000, the Halifax Regional Municipality ("HRM") issued a request for proposals as subsequently amended by Addenda 1 through 7("RFP");

AND WHEREAS on October 13, 2000 [Proponent Name] responded to the RFP ("Proponent's Proposal");

AND WHEREAS the Proponent Guarantors are [insert names of Proponent Guarantors];

AND WHEREAS on November 27, 2000, HRM requested clarifications of certain aspects of the Proponent's Proposal as contemplated by Section 7.10 of the RFP;

AND WHEREAS by correspondence dated *, [Proponent Name] responded to the request for clarifications ("Clarifications");

AND WHEREAS HRM has reviewed the Proponent's Proposal and Clarifications for completeness as contemplated by Section 7.12.2 of the RFP and has determined that the Proponent's Proposal is incomplete;

AND WHEREAS Section 7.12.2 of the RFP provides that proposals that are incomplete after clarifications shall not be evaluated;

AND WHEREAS HRM has determined that it is in the best interests of the HRM to continue with the RFP process notwithstanding that no Proponent submitted a proposal which was complete;

AND WHEREAS HRM has issued Addendum #8 to the RFP;

AND WHEREAS as a condition of continuing with the RFP process HRM is requiring that each Proponent, the Proponent Guarantors and those parties identified by HRM in a memorandum delivered to each Proponent execute this release and indemnity;

NOW THEREFORE know all men by these presents that in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt whereof is hereby acknowledged, the undersigned do hereby remise, release and forever discharge the HRM, and its city councillors, agents, employees, consultants, contractors, advisors and their respective successors and assigns (collectively the "Released Parties") of and from any and all manner of liabilities, obligations, claims, demands, actions, suits, causes of action, costs, expenses and damages of every nature and kind whatsoever at law or in equity which the undersigned ever had or now have or can, shall or may have by reason of any matter, cause or thing done or omitted to

be done whatsoever by the Released Parties in any way relating to or arising directly or indirectly out of:

1. the methods, procedures and processes undertaken by the Released Parties to evaluate Proposals including the Proponent's Proposal; and
2. the determination by HRM that no Proposal (including the Proponent's Proposal) was complete; and
3. any failure by HRM to fulfill any obligation or covenant of HRM contained in the RFP or otherwise directly or indirectly relating to the RFP or the evaluation of Proposals to the RFP; and
4. the continuation of the RFP process including the issuance by HRM of Addendum #8 to the RFP,

collectively referred to as a "Claim."

FURTHER, each of the undersigned hereby agree to use their best efforts to ensure that no person or entity in any way directly or indirectly associated or affiliated with the undersigned in relation to the RFP or the Proponent's Proposal ("Related Party") pursues a Claim against any one or more of the Released Parties and each of the undersigned agree to indemnify, defend and save and keep harmless each of the Released Parties from and against any and all liabilities, obligations, losses, damages, costs, expenses and disbursements of whatever kind and nature incurred by any one of the Released Parties in respect of Claim by a Related Party.

IN WITNESS WHEREOF each of the undersigned has caused this Release to be executed under the hand of their proper officers or representatives duly authorized in that behalf as of the day and year first above written.

[The release and indemnity is to be executed by the Proponent, each of the Proponent Guarantors and those parties identified by HRM in a memorandum delivered to the Proponent.]

SCHEDULE "B"

DESCRIPTION OF DND/HRM LANDS

That parcel of land in the Halifax Regional Municipality owned by the Halifax Regional Municipality and Her Majesty the Queen in the right of Canada, as represented by the Department of National Defence identified as a "potential treatment siting area" on Figure 3.4 entitled Halifax Harbour Solutions - Alternative B in a report prepared for the Halifax Regional Municipality by the Halifax Harbour Solutions Project Team by Jacques Whitford Environment Limited dated March 23, 1998, which parcel of land may be more particularly described as follows:

Beginning at the point on the northeastern side of Barrington Street where the northwestern boundary of Artz Street would intersect the northeastern boundary of Barrington Street assuming the northwestern boundary of Artz Street is extended to intersect with the northeastern boundary of Barrington Street.

Thence southeast along the northeastern boundary of Barrington Street to the northwestern boundary of Cornwallis Street.

Thence northeast along the northwestern boundary of Cornwallis Street to the southwestern boundary of the roadway (Provo Wallis Boulevard) on the land commonly known as the DND parking lot.

Thence northwest along the southwestern boundary of the roadway (Provo Wallis Boulevard) on the land commonly known as the DND parking lot.

Thence southwest along the northwestern boundary of Artz Street assuming the northwestern boundary of Artz Street is extended to intersect with the southwestern boundary of the roadway on the land commonly known as the DND parking lot to the point of beginning.

Halifax Harbour Solutions
REQUEST FOR PROPOSALS #00-065

Addendum #9



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Nine

February 5, 2001

This Addendum Number Nine is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, Addendum Number Two dated July 31, 2000, Addendum Number Three dated August 23, 2000, Addendum Number Four dated September 1, 2000, and Addendum Number Five dated September 8, 2000, Addendum Number Six dated September 15, 2000, Addendum Number Seven dated September 21, 2000 and Addendum Number Eight dated January 26, 2001.

Technical Requirements

Forcemains, Pumping Stations and Auxiliary Power

Notwithstanding any other provision of the RFP or the Project Agreements, the HRM Municipal Services System shall apply to pumped systems (which includes pumping stations) with a design capacity greater than 75 l/sec. (i.e., there shall be dual forcemains each capable of handling the design flow required in the Project Requirements and there is a requirement for stand-by generators). Provided however HRM will accept for pumping systems with a design capacity greater than 75 l/sec one of the following options:

2. Two forcemains where one forcemain is intended to handle the operating flows meeting the 2041 design requirements, and the second is to be a spare, fully capable of handling the operating flows in the event of failure or problem with the basic operating forcemain. Each forcemain shall have a suitable connection and back-flow preventer in the pumping station to permit flushing of the forcemain with water. When the second (spare) forcemain is put into operation, it would be achieved manually. When in use, the second (spare) forcemain operation shall be fully automatic in the pumping station.

OR

3. Two forcemains with a total forcemain capacity meeting the 2041 design requirements. Each forcemain shall have a capacity of not less than 40% of the design flow for the pumping station/forcemain system. In addition, the design and selection of wet wells, pumps and the arrangements of forcemains, valves and controls shall meet the following minimum operational requirements and other requirements stipulated in the RFP:
 - (a) The operations of the pumping systems shall be fully automatic for the entire operating conditions, including but not limited to the opening and closing of valves as required; and

- (b) The pumping systems shall have sufficient valves to isolate each of the forcemains.

All appropriate life-cycle cost analyses for pumping stations and forcemains shall be provided as required in the RFP.

MAURICE E. LLOYD, P.Eng., FCIP,
Project Manager
Halifax Harbour Solutions Project

Halifax Harbour Solutions
REQUEST FOR PROPOSALS #00-065

Addendum #10



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Ten

August 20, 2001

This Addendum Number Ten is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, Addendum Number Two dated July 31, 2000, Addendum Number Three dated August 23, 2000, Addendum Number Four dated September 1, 2000, and Addendum Number Five dated September 8, 2000, Addendum Number Six dated September 15, 2000, Addendum Number Seven dated September 21, 2000, Addendum Number Eight dated January 26, 2001 and Addendum Number Nine dated February 5, 2001.

WHEREAS HRM is proceeding with the review and evaluation of the Submissions tendered by each of the Halifax Regional Environmental Partnership ("HREP") and the Halifax WaterWorks Group ("HWG") in a Revised Process more particularly outlined in the Revised Offer Letters submitted by each of HREP and HWG dated June 15, 2001;

AND WHEREAS it was acknowledged in the Revised Offer Letters that the Schedule for the Selection Process as set forth in Section 7.1 of the RFP may be amended by HRM from time to time.

Section 7.1 Schedule for Selection Process

Section 7.1 of the RFP is hereby further amended as follows:

- Announcement of Selected Proponent: Day 479 (September 28, 2001)
- Execution of Project Agreements: Day 503 (October 22, 2001)

This schedule is tentative and HRM may change any of the dates set out above.

The Proponent, the Members of the Proponent, the Proponent Guarantors and the Sureties are required to execute and return to HRM on or before August 31, 2001, a copy of the declaration attached as Schedule "A".

Capitalized terms that are used in this Addendum Number 10 without being defined have the meanings given to them in the Revised Offer Letter.

Dated at Halifax as of the 20th day of August, 2001.

Maurice E. Lloyd, P.Eng. FCIP
Project Manager
Halifax Harbour Solutions Project

Schedule "A"

DECLARATION FORMING PART OF ADDENDUM NUMBER 10

WHEREAS HRM is proceeding with the review and evaluation of the Submission tendered by the undersigned Proponent in accordance with the terms and conditions of the Revised Offer Letter dated June 15, 2001;

AND WHEREAS HRM has issued Addendum Number Ten to the RFP amending the Schedule for the Selection Process;

The undersigned Proponent, Members of the Proponent and Proponent Guarantors warrant that the Submission constitutes an irrevocable offer to HRM by the Proponent for review and evaluation under the Revised Process, which shall remain in effect and open for acceptance by HRM until October 31, 2001, being two hundred and fifty-five (255) calendar days from the Addendum Due Date or until the Project Agreements are executed and delivered by HRM and the Selected Proponent, whichever is earlier.

The undersigned Surety confirms that Bid Bond No. * has been amended to extend the condition of the Obligation to October 31, 2001 provided any suit under the bond must be instituted on or before January 31, 2002.

Except as amended above, all the terms and conditions of the Revised Offer Letter dated June 15, 2001 remain in full force and effect.

This Declaration may be executed by the Proponent, Members of the Proponent and Proponent Guarantors hereto in separate counterparts, each of which when so executed and delivered, which may include delivery by facsimile or other similar device and reproduction of signatures by facsimile or such similar device, will be treated as binding as if originals, all of which shall be an original. Each party undertakes to provide HRM and each other party with a copy of this Declaration bearing original signatures.

Capitalized terms that are used in this Declaration without being defined have the meanings given to them in the Revised Offer Letter.

Dated at *, * this * day of August, 2001.

Yours truly,

[This Declaration is to be signed by authorized officers of the Proponent, all of the Members of the Proponent, all of the Proponent Guarantors and the Surety or Sureties issuing the Bid Bond.]

Halifax Harbour Solutions
REQUEST FOR PROPOSALS #00-065

Addendum #11



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Eleven

October 5, 2001

This Addendum Number Eleven is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, Addendum Number Two dated July 31, 2000, Addendum Number Three dated August 23, 2000, Addendum Number Four dated September 1, 2000, and Addendum Number Five dated September 8, 2000, Addendum Number Six dated September 15, 2000, Addendum Number Seven dated September 21, 2000, Addendum Number Eight dated January 26, 2001, Addendum Number Nine dated February 5, 2001 and Addendum Number Ten dated August 20, 2001.

WHEREAS HRM is proceeding with the review and evaluation of the Submissions tendered by each of the Halifax Regional Environmental Partnership ("HREP") and the Halifax WaterWorks Group ("HWG") in a Revised Process more particularly outlined in the Revised Offer Letters submitted by each of HREP and HWG dated June 15, 2001;

AND WHEREAS it was acknowledged in the Revised Offer Letters that the Schedule for the Selection Process as set forth in Section 7.1 of the RFP may be amended by HRM from time to time.

Section 7.1 Schedule for Selection Process

Section 7.1 of the RFP is hereby further amended as follows:

- Announcement of Selected Proponent: Day 511 (October 30, 2001)
- Execution of Project Agreements: Day 535 (November 23, 2001)

This schedule is tentative and HRM may change any of the dates set out above.

The Proponent, the Members of the Proponent, the Proponent Guarantors and the Sureties are required to execute and return to HRM on or before October 11, 2001, a copy of the declaration attached as Schedule "A".

Capitalized terms that are used in this Addendum Number 11 without being defined have the meanings given to them in the Revised Offer Letter.

Dated at Halifax as of the 5th day of October , 2001.

Maurice E. Lloyd, P.Eng. FCIP
Project Manager

Schedule "A"

DECLARATION FORMING PART OF ADDENDUM NUMBER 10

WHEREAS HRM is proceeding with the review and evaluation of the Submission tendered by the undersigned Proponent in accordance with the terms and conditions of the Revised Offer Letter dated June 15, 2001;

AND WHEREAS HRM has issued Addendum Number Eleven to the RFP amending the Schedule for the Selection Process;

The undersigned Proponent, Members of the Proponent and Proponent Guarantors warrant that the Submission constitutes an irrevocable offer to HRM by the Proponent for review and evaluation under the Revised Process, which shall remain in effect and open for acceptance by HRM until December 14, 2001, being two hundred and ninety-nine (299) calendar days from the Addendum Due Date or until the Project Agreements are executed and delivered by HRM and the Selected Proponent, whichever is earlier.

The undersigned Surety confirms that Bid Bond No. * has been amended to extend the condition of the Obligation to December 14, 2001 provided any suit under the bond must be instituted on or before March 14, 2002.

Except as amended above, all the terms and conditions of the Revised Offer Letter dated June 15, 2001 remain in full force and effect.

This Declaration may be executed by the Proponent, Members of the Proponent and Proponent Guarantors hereto in separate counterparts, each of which when so executed and delivered, which may include delivery by facsimile or other similar device and reproduction of signatures by facsimile or such similar device, will be treated as binding as if originals, all of which shall be an original. Each party undertakes to provide HRM and each other party with a copy of this Declaration bearing original signatures.

Capitalized terms that are used in this Declaration without being defined have the meanings given to them in the Revised Offer Letter.

Dated at *, * this * day of October, 2001.

Yours truly,

[This Declaration is to be signed by authorized officers of the Proponent, all of the Members of the Proponent, all of the Proponent Guarantors and the Surety or Sureties issuing the Bid Bond.]

Halifax Harbour Solutions

REQUEST FOR PROPOSALS #00-065

Addendum #12



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Twelve

November 22, 2001

This Addendum Number Twelve is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, Addendum Number Two dated July 31, 2000, Addendum Number Three dated August 23, 2000, Addendum Number Four dated September 1, 2000, and Addendum Number Five dated September 8, 2000, Addendum Number Six dated September 15, 2000, Addendum Number Seven dated September 21, 2000, Addendum Number Eight dated January 26, 2001, Addendum Number Nine dated February 5, 2001, Addendum Number Ten dated August 20, 2001 and Addendum Number Eleven dated October 5, 2001.

WHEREAS HRM is proceeding with the review and evaluation of the Submissions tendered by each of the Halifax Regional Environmental Partnership ("HREP") and the Halifax WaterWorks Group ("HWG") in a Revised Process more particularly outlined in the Revised Offer Letters submitted by each of HREP and HWG dated June 15, 2001;

AND WHEREAS it was acknowledged in the Revised Offer Letters that the Schedule for the Selection Process as set forth in Section 7.1 of the RFP may be amended by HRM from time to time.

Section 7.1 Schedule for Selection Process

Section 7.1 of the RFP is hereby further amended as follows:

- Announcement of Selected Proponent: Day 556 (December 14, 2001)
- Execution of Project Agreements: Day 632 (February 28, 2002)

This schedule is tentative and HRM may change any of the dates set out above.

The Proponent, the Members of the Proponent, the Proponent Guarantors and the Sureties are required to execute and return to HRM on or before November 30, 2001, a copy of the declaration attached as Schedule "A".

Capitalized terms that are used in this Addendum Number 12 without being defined have the meanings given to them in the Revised Offer Letter.

Dated at Halifax as of the 22 day of November , 2001.

Maurice E. Lloyd, P.Eng. FCIP
Project Manager

Schedule "A"

DECLARATION FORMING PART OF ADDENDUM NUMBER 12

WHEREAS HRM is proceeding with the review and evaluation of the Submission tendered by the undersigned Proponent in accordance with the terms and conditions of the Revised Offer Letter dated June 15, 2001;

AND WHEREAS HRM has issued Addendum Number Twelve to the RFP amending the Schedule for the Selection Process;

The undersigned Proponent, Members of the Proponent and Proponent Guarantors warrant that the Submission constitutes an irrevocable offer to HRM by the Proponent for review and evaluation under the Revised Process, which shall remain in effect and open for acceptance by HRM until April 2, 2002, being four hundred eight (408) calendar days from the Addendum Due Date or until the Project Agreements are executed and delivered by HRM and the Selected Proponent, whichever is earlier.

The undersigned Surety confirms that Bid Bond No. * has been amended to extend the condition of the Obligation to April 2, 2002 provided any suit under the bond must be instituted on or before July 2, 2002.

Except as amended above, all the terms and conditions of the Revised Offer Letter dated June 15, 2001 remain in full force and effect.

This Declaration may be executed by the Proponent, Members of the Proponent and Proponent Guarantors hereto in separate counterparts, each of which when so executed and delivered, which may include delivery by facsimile or other similar device and reproduction of signatures by facsimile or such similar device, will be treated as binding as if originals, all of which shall be an original. Each party undertakes to provide HRM and each other party with a copy of this Declaration bearing original signatures.

Capitalized terms that are used in this Declaration without being defined have the meanings given to them in the Revised Offer Letter.

Dated at *, * this * day of November, 2001.

Yours truly,

[This Declaration is to be signed by authorized officers of the Proponent, all of the Members of the Proponent, all of the Proponent Guarantors and the Surety or Sureties issuing the Bid Bond.]

Halifax Harbour Solutions

REQUEST FOR PROPOSALS #00-065

Addendum #13



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Thirteen

March 7, 2002

This Addendum Number Thirteen is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, Addendum Number Two dated July 31, 2000, Addendum Number Three dated August 23, 2000, Addendum Number Four dated September 1, 2000, and Addendum Number Five dated September 8, 2000, Addendum Number Six dated September 15, 2000, Addendum Number Seven dated September 21, 2000, Addendum Number Eight dated January 26, 2001, Addendum Number Nine dated February 5, 2001, Addendum Number Ten dated August 20, 2001, and Addendum Number Eleven dated October 5, 2001 and Addendum Number Twelve dated November 22, 2001 (collectively, "RFP").

WHEREAS the Halifax Regional Environmental Partnership ("HREP") was chosen as the Selected Proponent in a Revised Process more particularly outlined in the Revised Offer Letter submitted by HREP dated June 15, 2001;

AND WHEREAS HRM and HREP are presently negotiating in an effort to agree upon the terms and conditions of the Project Agreements to govern the parties' relationship in connection with the Project;

AND WHEREAS it was acknowledged in the Revised Offer Letter that the Schedule for the Selection Process as set forth in Section 7.1 of the RFP may be amended by HRM from time to time.

Section 7.1 Schedule for Selection Process

Section 7.1 of the RFP is hereby further amended as follows:

- Execution of Project Agreements: April 5, 2002
- Effective Date of Project Agreements: May 31, 2002

This schedule is tentative and HRM may change any of the dates set out above.

The Proponent, the Members of the Proponent, the Proponent Guarantors and the Sureties are required to execute and return to HRM on or before March 22, 2002, a copy of the declaration attached as Schedule "A".

Capitalized terms that are used in this Addendum Number 13 without being defined have the meanings given to them in the Revised Offer Letter.

Dated at Halifax as of the 7 day of March , 2002.

Kulvinder Dhillon
Acting Project Manager

Schedule "A"

DECLARATION FORMING PART OF ADDENDUM NUMBER 13

WHEREAS Halifax Regional Environmental Partnership ("HREP") tendered its Submission relating to the Halifax Harbour Solutions Project to HRM for review and evaluation in accordance with the terms and conditions of HREP's Revised Offer Letter dated June 15, 2001;

AND WHEREAS HRM and HREP are negotiating in an effort to agree upon the terms and conditions of the Project Agreements to govern the parties' relationship in connection with the Project;

AND WHEREAS it is presently anticipated that the Effective Date of the Project Agreements, when finalized and executed, will be subject to certain conditions precedent including the receipt of all necessary approvals in accordance with the *Environment Act* and the *Canadian Environmental Assessment Act* and the delivery by HREP of certain contracts, bonds and proof of required insurance;

AND WHEREAS HRM has issued Addendum Number Thirteen to the RFP amending the Schedule for the Selection Process;

The undersigned Selected Proponent, Members of the Selected Proponent and Proponent Guarantors warrant that the Submission constitutes an irrevocable offer to HRM by the Selected Proponent for review and evaluation under the Revised Process, which shall remain in effect and open for acceptance by HRM until June 28, 2002, being four hundred ninety-five (495) calendar days from the Addendum Due Date or until the Effective Date of the Project Agreements, whichever is earlier.

The undersigned Surety confirms that Bid Bond No. 058597932-IG has been amended as follows:

- (a) to amend the condition of the Obligation to replace the phrase "fails or refuses to execute and deliver the Project Agreements within the prescribed time" with the phrase "fails or refuses to execute the Project Agreements within the prescribed time or fails or refuses to execute and deliver the guarantees, bonds, proof of required insurance and other documents in order to achieve the Effective Date of the Project Agreements, within the prescribed time"; and
- (b) to extend the condition of the Obligation to June 28, 2002,

provided any suit under the Bid Bond must be instituted on or before September 28, 2002.

Except as amended above, all the terms and conditions of the Revised Offer Letter dated June 15, 2001 remain in full force and effect.

This Declaration may be executed by the Proponent, Members of the Proponent and Proponent Guarantors hereto in separate counterparts, each of which when so executed and delivered, which may include delivery by facsimile or other similar device and reproduction of signatures by facsimile or such similar device, will be treated as binding as if originals, all of which shall be an original. Each party undertakes to provide HRM and each other party with a copy of this Declaration bearing original signatures.

Capitalized terms that are used in this Declaration without being defined have the meanings given to them in the Revised Offer Letter.

Dated this * day of March, 2002.

Yours truly,

SELECTED PROPONENT

United Water Canada Inc.

Per: _____

PROPONENT GUARANTORS

United Water Canada Inc.

Per: _____

United Water Services Canada LP

Per: _____

Ondeo North America Inc.

Per: _____

Suez

Per: _____

SURETY

SIGNED, SEALED AND DATED by the Continental Casualty Company on March *, 2002.

Continental Casualty Company

Per: _____

Halifax Harbour Solutions

REQUEST FOR PROPOSALS #00-065

Addendum #14



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Fourteen

June 12, 2002

This Addendum Number Fourteen is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, Addendum Number Two dated July 31, 2000, Addendum Number Three dated August 23, 2000, Addendum Number Four dated September 1, 2000, and Addendum Number Five dated September 8, 2000, Addendum Number Six dated September 15, 2000, Addendum Number Seven dated September 21, 2000, Addendum Number Eight dated January 26, 2001, Addendum Number Nine dated February 5, 2001, Addendum Number Ten dated August 20, 2001, Addendum Number Eleven dated October 5, 2001, Addendum Number Twelve dated November 22, 2001 and Addendum Number Thirteen dated March 7, 2002 (collectively, "RFP").

WHEREAS the Halifax Regional Environmental Partnership ("HREP") was chosen as the Selected Proponent in a Revised Process more particularly outlined in the Revised Offer Letter submitted by HREP dated June 15, 2001;

AND WHEREAS HRM and HREP are presently negotiating in an effort to agree upon the terms and conditions of the Project Agreements to govern the parties' relationship in connection with the Project;

AND WHEREAS it was acknowledged in the Revised Offer Letter that the Schedule for the Selection Process as set forth in Section 7.1 of the RFP may be amended by HRM from time to time.

Section 7.1 Schedule for Selection Process

Section 7.1 of the RFP is hereby further amended as follows:

- _ Execution of Project Agreements: July 16, 2002
- _ Effective Date of Project Agreements: August 15, 2002

This schedule is tentative and HRM may change any of the dates set out above.

The Proponent, the Members of the Proponent, the Proponent Guarantors and the Sureties are required to execute and return to HRM on or before June 28, 2002, a copy of the declaration attached as Schedule "A".

Capitalized terms that are used in this Addendum Number 14 without being defined have the meanings given to them in the Revised Offer Letter.

Dated at Halifax as of the 12th day of June, 2002.

Michael Labrecque
Project Manager

Schedule "A"

DECLARATION FORMING PART OF ADDENDUM NUMBER 14

WHEREAS Halifax Regional Environmental Partnership ("HREP") tendered its Submission relating to the Halifax Harbour Solutions Project to HRM for review and evaluation in accordance with the terms and conditions of HREP's Revised Offer Letter dated June 15, 2001;

AND WHEREAS HRM and HREP are negotiating in an effort to agree upon the terms and conditions of the Project Agreements to govern the parties' relationship in connection with the Project;

AND WHEREAS it is presently anticipated that the Effective Date of the Project Agreements, when finalized and executed, will be subject to certain conditions precedent including the receipt of all necessary approvals in accordance with the *Environment Act* and the *Canadian Environmental Assessment Act* and the delivery by HREP of certain contracts, bonds and proof of required insurance;

AND WHEREAS HRM has issued Addendum Number Fourteen to the RFP amending the Schedule for the Selection Process;

The undersigned Selected Proponent, Members of the Selected Proponent and Proponent Guarantors warrant that the Submission constitutes an irrevocable offer to HRM by the Selected Proponent for review and evaluation under the Revised Process, which shall remain in effect and open for acceptance by HRM until September 30, 2002 or until the Effective Date of the Project Agreements, whichever is earlier.

The undersigned Surety confirms that Bid Bond No. 058597932-IG has been amended as follows:

- (a) to amend the condition of the Obligation to replace the phrase "fails or refuses to execute and deliver the Project Agreements within the prescribed time" with the phrase "fails or refuses to execute the Project Agreements within the prescribed time or fails or refuses to execute and deliver the guarantees, bonds, proof of required insurance and other documents in order to achieve the Effective Date of the Project Agreements, within the prescribed time"; and
- (b) to extend the condition of the Obligation to September 30, 2002,

provided any suit under the Bid Bond must be instituted on or before December 31, 2002.

Except as amended above, all the terms and conditions of the Revised Offer Letter dated June 15, 2001 remain in full force and effect.

This Declaration may be executed by the Proponent, Members of the Proponent and Proponent Guarantors hereto in separate counterparts, each of which when so executed and delivered, which may include delivery by facsimile or other similar device and reproduction of signatures by facsimile or such similar device, will be treated as binding as if originals, all of which shall be an original. Each party undertakes to provide HRM and each other party with a copy of this Declaration bearing original signatures.

Capitalized terms that are used in this Declaration without being defined have the meanings given to them in the Revised Offer Letter.

Dated this * day of June, 2002.

Yours truly,

SELECTED PROPONENT

United Water Canada Inc.

Per: _____

PROPONENT GUARANTORS

United Water Canada Inc.

Per: _____

United Water Services Canada LP

Per: _____

Ondeo North America Inc.

Per: _____

Suez

Per: _____

SURETY

SIGNED, SEALED AND DATED by the Continental Casualty Company on June *, 2002.

Continental Casualty Company

Per: _____

Halifax Harbour Solutions

REQUEST FOR PROPOSALS #00-065

Addendum #15



HALIFAX HARBOUR SOLUTIONS
Request for Proposals #00-065

Addendum Number Fifteen

September 6, 2002

This Addendum Number Fifteen is a supplement to, forms an integral part of, and is to be read as one document with the Request for Proposals #00-065 dated May 30, 2000, as amended by Addendum Number One dated June 19, 2000, Addendum Number Two dated July 31, 2000, Addendum Number Three dated August 23, 2000, Addendum Number Four dated September 1, 2000, and Addendum Number Five dated September 8, 2000, Addendum Number Six dated September 15, 2000, Addendum Number Seven dated September 21, 2000, Addendum Number Eight dated January 26, 2001, Addendum Number Nine dated February 5, 2001, Addendum Number Ten dated August 20, 2001, Addendum Number Eleven dated October 5, 2001, Addendum Number Twelve dated November 22, 2001, Addendum Number Thirteen dated March 7, 2002 and Addendum Number Fourteen dated June 12, 2002 (collectively, "RFP").

WHEREAS the Halifax Regional Environmental Partnership ("HREP") was chosen as the Selected Proponent in a Revised Process more particularly outlined in the Revised Offer Letter submitted by HREP dated June 15, 2001;

AND WHEREAS HRM and HREP are presently negotiating in an effort to agree upon the terms and conditions of the Project Agreements to govern the parties' relationship in connection with the Project;

AND WHEREAS it was acknowledged in the Revised Offer Letter that the Schedule for the Selection Process as set forth in Section 7.1 of the RFP may be amended by HRM from time to time.

Section 7.1 Schedule for Selection Process

Section 7.1 of the RFP is hereby further amended as follows:

__ Execution of Project Agreements: October 4, 2002

__ Effective Date of Project Agreements: October 31, 2002

This schedule is tentative and HRM may change any of the dates set out above.

The Proponent, the Members of the Proponent, the Proponent Guarantors and the Sureties are required to execute and return to HRM on or before September 19, 2002, a copy of the declaration attached as Schedule "A".

Capitalized terms that are used in this Addendum Number 15 without being defined have the meanings given to them in the Revised Offer Letter.

Dated at Halifax as of the 6th day of September, 2002.

Michael Labrecque
Project Manager

Schedule "A"

DECLARATION FORMING PART OF ADDENDUM NUMBER 15

WHEREAS Halifax Regional Environmental Partnership ("HREP") tendered its Submission relating to the Halifax Harbour Solutions Project to HRM for review and evaluation in accordance with the terms and conditions of HREP's Revised Offer Letter dated June 15, 2001;

AND WHEREAS HRM and HREP are negotiating in an effort to agree upon the terms and conditions of the Project Agreements to govern the parties' relationship in connection with the Project;

AND WHEREAS it is presently anticipated that the Effective Date of the Project Agreements, when finalized and executed, will be subject to certain conditions precedent including the receipt of all necessary approvals in accordance with the *Environment Act* and the *Canadian Environmental Assessment Act* and the delivery by HREP of certain contracts, bonds and proof of required insurance;

AND WHEREAS HRM has issued Addendum Number Fifteen to the RFP amending the Schedule for the Selection Process;

The undersigned Selected Proponent, Members of the Selected Proponent and Proponent Guarantors warrant that the Submission constitutes an irrevocable offer to HRM by the Selected Proponent for review and evaluation under the Revised Process, which shall remain in effect and open for acceptance by HRM until October 18, 2002.

The undersigned Surety confirms that Bid Bond No. 058597932-IG has been amended as follows:

- (a) to amend the condition of the Obligation to replace the phrase "fails or refuses to execute the Project Agreements within the prescribed time or fails or refuses to execute and deliver the guarantees, bonds, proof of required insurance, the Construction Contract(s) and the Tunnelling Contract on or about the Effective Date of the Project Agreements" with the original condition "fails or refuses to execute the Project Agreements within the prescribed time"; and
- (b) to extend the condition of the Obligation to October 18, 2002,

provided any suit under the Bid Bond must be instituted on or before January 18, 2003.

Except as amended above, all the terms and conditions of the Revised Offer Letter dated June 15, 2001 remain in full force and effect.

This Declaration may be executed by the Proponent, Members of the Proponent and Proponent Guarantors hereto in separate counterparts, each of which when so executed and delivered, which may include delivery by facsimile or other similar device and reproduction of signatures by facsimile or such similar device, will be treated as binding as if originals, all of which shall be an original. Each party undertakes to provide HRM and each other party with a copy of this Declaration bearing original signatures.

Capitalized terms that are used in this Declaration without being defined have the meanings given to them in the Revised Offer Letter.

Dated this * day of September, 2002.

Yours truly,

SELECTED PROPONENT

United Water Canada Inc.

Per: _____

PROPONENT GUARANTORS

United Water Resources Inc.

By: _____

United Water Services Canada LP (by USW Canada GP Inc., its General Partner)

By: _____

Ondeo North America Inc.

By: _____

Suez

Per: _____

SURETY

SIGNED, SEALED AND DATED by the Continental Casualty Company on September *, 2002.

Continental Casualty Company

Per: _____