



299-2012 ADDENDUM 6

REQUEST FOR PROPOSAL FOR A DESIGN, BUILD, OPERATE LANDFILL GAS PROJECT AT THE BRADY ROAD WASTE MANAGEMENT FACILITY

URGENT

**PLEASE FORWARD THIS DOCUMENT TO
WHOEVER IS IN POSSESSION OF THE
REQUEST FOR PROPOSAL**

ISSUED: June 1, 2012
BY: Irvin Slike
TELEPHONE NO. (204) 806-0957

**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE REQUEST FOR PROPOSAL AND
SHALL FORM A PART OF THE CONTRACT
DOCUMENTS**

Template Version: Ar20120228

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Request for Proposal, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 9 of Form A: Proposal may render your Proposal non-responsive.

PART B – BIDDING PROCEDURES

Add: B15.1.2(k)

B15.1.2(k) The City will supply high speed internet access at the same location as the three phase power. Please indicate your internet needs (both capacity and speed).

Delete: B17.1(e)

Revise: B23.4

B23.4 Further to B23.1(c), the Bid Price shall be the sum of the quantities multiplied by the unit prices for items shown on Form B: Prices in the following scenarios:

- (a) $A1 + B1 + C1$
- (b) $A1 + B1 + C2$
- (c) $A1 + B2 + C2$

B23.4.1 The City may employ Life Cycle Analysis using Net Present Value analysis of costs reported by the Bidder.

PART D – SUPPLEMENTAL CONDITIONS

Revise: D2.5 to read:

D2.5 The City desires that the collection system be constructed so that at no time (due to unanticipated failure, header maintenance, well failures, etc) will less than 80% of the entire existing well field be operational.

Add: D2.5.1

D2.5.1 System design and construction to meet the following CSA codes:

- (a) B149.6 -11 for digester gas and landfill gas installations;
- (b) CEC 22.1 current electrical code of construction;
- (c) B149.1 , B149.2 , B149.3 Natural Gas, Propane and
- (d) B149.3 field approval code for fuel related components on appliances and equipment.

Revise: D2.6 to read:

D2.6 There exists a perimeter ring of leachate collection headers and manholes outside much of the landfill burial footprint. The City would like the design to incorporate landfill gas condensate collection and discharge to be by gravity into the leachate collection system. Where a leachate collection line is nonexistent or in need of repair, the City will construct such a line. Where such lines are required in the future, the Contractor shall propose a design for acceptance by the City. The two areas depicted in SWD – 0 – 307, have high leachate levels. The City shall require that QED Autopump AP4+ or equivalent pumps be installed in any gas wells to assist in removing perched landfill leachate. The liquid can be discharged into the same perimeter ring. **An alternate method for condensate disposal would be to discharge it back into the landfill in a French drain sump at strategic points along the gas header.**

Revise: D2.8 to read:

D2.8 The major components of the Work are as follows:

- (d) Landfill Gas Collection design,
- (e) Landfill Gas collection header system A & B and flare construction,
- (f) Operating and maintaining the collection systems.

D2.8.1 Upon award of contract , Contractor shall have thirty days to deliver to the City a design of a collection and flaring system for both Areas A and B. The design shall incorporate well placement, proposed well depths, header delineation and feeder line locations, flare location, header and well head details. A design that incorporates redundancy as a safeguard is desired. The design shall incorporate methods to ensure that over 80% of envisioned well field withdrawal can be maintained if any line is blocked.

D2.8.2 System B collection will have to be designed to incorporate the City's fill plan. The City is willing to adjust fill plan according to the most advantageous method to collect landfill gas and reduce odour in System B. The Contractor shall propose this fill plan. The City's monthly volume fills an area approximately 135 m by 135 m by 3 m . The City shall require that a collection system be installed in all waste within six months of burial, to initially harvest and combust hydrogen sulphide to prevent odour.

Landfill Gas Collection Construction

D2.8.3 The gas collection system shall be sufficiently durable to last 40 years or more in the landfill environment. The well head design and construction shall be prevalent in most US EPA Title V landfills in the US and similar landfills in Canada, allowing for gas flow measuring, gas analysis, and gas withdrawal control. **The minimum acceptable diameter for a gas well is 150 mm (6 inches). The minimum diameter augured hole size for a gas well shall be 600 mm (24 inches). The City would like the gas media layer to be a recycled product such as tire chips, crushed glass, or other such products.**

Flaring

D2.8.4 The enclosed flare must **meet D2.5**. The flare must be sized to allow for collection of all landfill gas in System A and System B throughout the twenty year term. In order to meet the March 31 2013 deadline a used open flare may be used to facilitate the destruction of methane gas until such time as an enclosed flare is permanently installed. Also during construction temporary solar flares may be used on completed wells to mitigate odours. Contractor shall plan on having 15 readily available throughout the contract period to install on newly developed wells or to assist in venting leachate collection and riser lines, as directed by the City. The Contractor shall provide temporary fencing for the installed temporary flares.

Delete: D16.2

Page numbering on some forms may be changed as a result.

PART E – SPECIFICATIONS

Revise: E2.3

E2.3 The following information will be provided in accordance with B3.1:

- (a) Environmental Act License 2890 – Notice of Alteration;
- (b) Definition of General Site Leachate Conditions Final Report;
- (c) LFG Funding Agreement – signed by CAO;
- (d) Investigation of Landfill Gas Opportunities at the City of Winnipeg Brady Road Landfill Site;
- (e) Updated Capital and Engineering Services Option of Probable Cost Landfill Gas Collection System at the Brady Road Landfill Site;
- (f) Historic Refuse Disposal Data 2003 to Present;
- (g) Brady Road Individual Leachate Collection Systems.
- (h) Fire Considerations Re: Upcoming Landfill Gas Project;
- (i) Winnipeg Residential Waste Composition Study 2009;
- (j) City of Winnipeg – Brady Road Landfill – Landfill Tonnage – 2012-present;
- (k) Brady Projected Fill (CAD Drawing);
- (l) Present Topography (CAD Drawing);
- (m) **Site meeting attendees list.**

Questions & Answers

Q1 Please confirm that upon project award, we will be immediately informed to proceed with either B.1 OR B.2 on Form B: Prices. Please confirm that upon project award, we will be immediately informed to proceed with either C.1 or C.2 on Form B: Prices. Please confirm that Item B.2 is an ALTERNATIVE to Item B.1 and Item C.2 is an ALTERNATIVE to Item C.1.

A1 The City will award work based on the availability of funding. The City intends to award, as a minimum, items in A-Section One of Form B.

Q2 Please indicate who is responsible for obtaining a building permit if required.

A2 The Contractor is responsible for obtaining the building permit.

Q3 How much does the City of Winnipeg pay for delivered electricity at the site?

A3 The Contractor is responsible for the electrical costs. The rate that Manitoba Hydro will charge will be determined by the following link:
http://www.hydro.mb.ca/regulatory_affairs/energy_rates/electricity/current_rates.shtml#generalmedium