one has a different capital cost, a facilities replacement cost, as well as an operation and maintenance cost.

The Proponents will be permitted to use imaginative and ingenious approaches to treatment but certain limitations/requirements may be imposed in the context of approvals yet to be received.

At this time, the preferred site for the proposed plant, shown in Plan A, is a tract of land located near Riley Road between the Cherry Brook community and Lake Major. The site is outside the City's limits and is currently under negotiation for purchase. Its development will be controlled by the eventual health and environmental approvals and the results of a future geotechnical study of the site that will be made available by the City at the time that a Request for Proposal ("RFP") is issued.

III. The Preferred Arrangement Under a Public-Private Partnership Approach

The Proponent will be required to design, construct, finance, own and operate over a period of 20 years the new water treatment plant and all works constructed within the designated site limits plus the replacement of the Lake Major intake and pumping station and the construction of approximately 3,300 feet of 42-inch diameter raw water line to transmit raw water from the new pumping station to the new water treatment plant.

The new water treatment plant must provide satisfactorily treated water to DWU's system on a continuous basis at such rates, quantities and pressures as DWU may require, not to exceed a rate of 20 MIGD in any 72-hour period including the booster pumping rate.

The new pumping station will be sized to deliver 20 MIGD through four electrically driven pumping units with any three capable of delivering the station rating. The power requirements at the new pumping station, when pumping 20 MIGD through the existing 24-inch diameter raw water line as well as the new 42 inch diameter raw water line, are estimated at approximately 1,500 horsepower. Pumping quantities and pressures should be sufficient to fill the highest reservoir (Akerley reservoir at elevation 119.3 m).

The new water intake will extend into Lake Major to draw 16 feet of water over the pipe obvert from the normal lake level and will have a maximum capacity of 32 MIGD.

The Proponent will be responsible for:

(a) Site excavation and development.

(b) Provision of all structures needed to improve water quality to the standards indicated in Appendix B including:

pre-filtration treatment facilities including chemical storage and feeding systems;

- water filtration system;
- filter backwash system;
- site storage capacity for finished water of not less than 5 MIGD;
- disinfection and fluoridation facilities including chemical storage;
- sludge treatment and disposal system; and
- booster pumping facilities within the new plant with a firm capacity of 20 MIGD spread over four pumping units and based on the largest unit being out of service.

(c) Construct new intake, new raw water pumping station and 42-inch diameter raw water line.

(d) Connection to DWU's transmission system at the site limits.

(e) All mechanical and electrical works needed to make the plant and pumping station functional.

(f) Provision of sewage disposal and site drainage.

(g) Site grading and landscaping.

(h) All architectural superstructures to provide for operation, laboratory and personnel accommodation.

(i) All electric power requirements to operate the facilities.

(j) All other associated works within the site limits which are particularly described within the pre-design report attached hereto as Appendix C.

In general, the City's requirements are that the project be designed and constructed on a low-maintenance budget with a life for structural elements of at least 60 years, mechanical components of 25 years and electrical/instrumentation items of at least 15 years with no major maintenance required in the first 15 years.

The Proponent will be responsible for obtaining all provincial and municipal approvals regulating the building and operation of such a facility under the laws of the Government of Canada, Province of Nova Scotia and the bylaws of the City of Dartmouth and Halifax County Municipality.

The City will be responsible for leasing or transferring the property (Plan A) at nominal cost to the Proponent and for designing, constructing and financing:

- all connections to the DWU transmission system at plant site limits;

- all works needed to maintain operation of the DWU during the construction period;
- the relocation of any existing utilities affected by plant construction; and
- the provision of a power supply to the plant site limits.

Further, the City will be responsible for all health and environmental approvals but will require the support of the Proponent in gaining such approvals. The City will also be responsible for obtaining necessary approvals from the Nova Scotia Utility and Review Board but will require the Proponent to provide all documentation in support of the approval. All other approvals will be the responsibility of the Proponent but the City will assist in obtaining these approvals as the Proponent may require. All approvals will be subject to the conditions contained therein and the Proponent will be responsible for ensuring compliance with all approvals.

With respect to the regulatory approvals related to the Nova Scotia Department of Health, Environment and the Utility and Review Board, the City anticipates that it will achieve final approvals within three months of receiving a process pre-design submission from the successful Proponent. Should that period be exceeded, the successful Proponent will have cause to negotiate additional payment for unanticipated delays based on reasonable proof of the costs incurred. The current state of the approval process with the province is as set out in Appendix D.

IV. Cost Estimate of the City Approach

If the City does not receive attractive responses to this RFQ, it will proceed with a traditional tender call for either separate or combined engineering and construction contracts.

The City has determined that the best estimate for carrying out the works proposed herein, as a regular capital works project under a traditional tender call with municipal financing, ownership and operation, is as follows: