

**MINUTES
CITY OF IQALUIT
ENGINEERING AND PUBLIC WORKS
COMMITTEE OF THE WHOLE MEETING #01
MARCH 23, 2023 at 6:00 p.m.
CITY COUNCIL CHAMBERS**

PRESENT FROM COUNCIL

Councillor Romeyn Stevenson, Chair
Mayor Solomon Awa
Deputy Mayor Kyle Sheppard
Councillor Swany Amarapala
Councillor Ookalik Curley
Councillor Simon Nattaq
Councillor Paul Quassa
Councillor Kimberly Smith
Councillor Samuel Tilley

PRESENT FROM ADMINISTRATION

Rod Mugford, Acting Chief Administrative Officer
Tammy Ernst-Doiron, City Clerk
Katrina Sarmiento, Executive Assistant
Livete Ataguyuk, Community Communications Liaison
Sumon Ghosh, Director of Engineering and Capital Planning
Firas Younes, Manager of Engineering
Shane Turner, Superintendent of Water and Sewer

CONSULTANTS

Ian McBean, Principal, Colliers Project Leaders
Richard Sithole, Senior Project Manager, Colliers Project Leaders
Ramesh Krishnan, Assistant Project Manager, Colliers Project Leaders

ADOPTION OF AGENDA

Motion EPW 23-01

Moved by: Councillor Smith
Seconded by: Councillor Quassa

Adoption of agenda as presented.

Unanimously Carried

1. MINUTES

None

2. **DECLARATION OF INTEREST**

None

3. **DELEGATIONS**

None

4. **DEFERRED BUSINESS AND TABLED ITEMS**

None

5. **NEW BUSINESS**

a) Long-Term Water Supply Project - Project Status Update and Request for Decision - Design-Bid Model instead of Design-Build Model for Delivery of Raw Water Intake and Storage Reservoir

Sumon Ghosh, Director of Engineering and Capital Planning, provided the following update on the Long-Term Water Supply Project. Mr. Ghosh noted that the legal team provided some comments in relation to the Environmental Impact Assessment, which has been submitted to Infrastructure Canada for review. Mr. Ghosh anticipates that the funding agreement will be signed by April.

The following are the highlights of the presentation:

- Colliers Project Leaders – first meeting on January 9
- Nunavut Water Board – meetings regarding the permitting process
- License expires June 2026
 - Prior to the license expiry, an application must be submitted including Unnamed Lake as the new water source
 - Application will take one year to process
 - Various documents are required to include with the application
 - Flow measurements are required and there is limited documentation
 - Unable to obtain approval to construct a weir as Unnamed Lake water source is not included in the current license
 - Trying to obtain flow measurements through temporary sensors
 - Raw water quality analysis – some are available from 2019 but additional analysis is needed
- Proceed with design process and once progress reaches 30 percent, an application will be submitted to the Nunavut Water Board including Unnamed Lake in 2024
- Request for Proposal for Environmental Engineering Consulting Site will be issued within the next two months
- August 2022 presented a Design-Build approach
 - Discussed to modify to a Progressive Design-Build approach

Ian McBean, Principal, Colliers Project Leaders, explained the advantages and disadvantages of both the Design-Build and Progressive Design-Build approaches:

- Design-Build
 - Schedule acceleration
 - One entity is responsible for overall design and construction
 - Entity has the design risk
 - Start construction before design is complete
 - Responsible for scheduling and cost risk
 - Strict performance criteria
 - Based on 30 percent design
 - Difficult for the owner to make any changes
 - Preliminary design is required to transfer to the design builder
- Progressive Design-Build
 - Allows the design to be progressed up to 60 to 70 percent
 - Risks – constructability issues and value engineering are completed prior to construction
 - Proponent is selected based on qualifications and not cost
 - Cost is developed over time based on actual quotes
 - Design package must be 70 to 80 percent complete before submitting to the Nunavut Water Board
 - Nunavut Water Board will take one year to process the application
 - Early construction is not possible

Mr. McBean explained that the City normally uses Design-Build, which provides control of the scope and quality until the tender package is issued. The risk with Design-Build on any project is that the City retains the design risk, which can require change orders.

Mr. McBean recommended that if the Design-Build approach was used for the project, an independent constructability review should be carried out prior to the tender package being issued. He noted that the storage facility is complex as it is an earth berm dam type structure that should have a peer review carried out prior to construction.

Mr. McBean noted that the Design-Build approach provides local contractors the ability to bid on the competitive process and allows the City the ability to retain the lowest qualified bidder.

Mr. McBean provided the following information:

- Stakeholder meetings and a Risk Mitigation Workshop was carried out this week
- Finalization of delivery strategy
- Request for Proposal for a Design Consultant has been prepared
 - Will be issued within the next few weeks
 - Includes Environmental Impact Consultant
- Continue with community awareness and stakeholder engagement
- Planning an open house to be held the end of April
- Submit a project proposal to Nunavut Planning Commission

- Once the Design Consultant has been awarded, it will take six months to have a proposal ready
- When the Nunavut Planning Commission receives the proposal:
 - Start four-month Nunavut Impact Review Board process
- Complete final design in June 2024
 - Start one year Nunavut Water Board process

Mr. Ghosh advised that a Determination Letter was received from Infrastructure Canada that identified three stakeholders that had to be consulted:

- Nunavut Tunngavik Inc. (NTI) – will meet the end of April
- Hunters and Trappers Organization (HTO) – will meet the end of April
- Qikiqtani Inuit Association (QIA) – meeting held today

Mr. Ghosh noted that Infrastructure Canada requires that a certain number of local trade workers must be employed for the project. He noted that having this requirement outlined in the tender package is not required, as the project is following the Infrastructure Canada Regulations that includes the requirement for Community Employment Benefit.

Councillor Quassa noted that Nunavummi Nangminiaqtunik Ikajuuti (NNI) is a Government of Nunavut requirement and clarified that NNI is not required in the tender documents.

Councillor Stevenson reiterated Mr. Ghosh's explanation that when projects are funded by the Government of Nunavut, the NNI requirements must be followed. The Long-Term Water Supply Project is funded by the federal government and is required to include the Community Employment Benefit.

Mayor Awa asked for clarification regarding the design and asked if a meeting was held previously regarding the design.

Deputy Mayor Sheppard noted that Council approved the plan for the long-term water supply, including a second reservoir. He noted that staff are requesting approval to design the project.

Mayor Awa asked if Council would be required to make a decision on a design option. Mr. Ghosh explained that a Design-Bid-Build would avoid any unnecessary concerns regarding licensing requirements.

Councillor Amarapala asked if there were any guarantees on the construction of the water system to avoid any additional work.

Mr. Ghosh explained that a Design-Bid-Build has two components: an engineering consultant designing the project and a contractor to build the project based on the design. He further explained the criteria used to evaluate the consultants based on technical and financial. He noted that he has drafted a Consultant Performance Evaluation, which is

currently being reviewed by Administration. Mr. Ghosh pointed out that given the magnitude of the project, additional stringent technical criteria is being drafted to use when evaluating proposals.

Councillor Amarapala asked if there was a guarantee that the design would function the way it should for a period of time before any additional work would be required due to low quality of material or other financial savings used during the construction period.

Mr. Ghosh indicated that he was hopeful that the additional technical criteria that was being drafted to use during proposal evaluations would help to eliminate future concerns. He also noted that choosing the right contractor was limited to the Purchasing By-law Guidelines. The proposed draft Consultant Performance Evaluation would be used in conjunction with the Purchasing By-law Guidelines.

Motion EPW 23-02

Moved by: Deputy Mayor Sheppard

Seconded by: Mayor Awa

Committee recommends that Council direct staff to change from the Design-Build approach to the Design-Bid-Build approach for the Long-Term Water Supply Project.

Unanimously Carried

Councillor Tilley noted that the Government of Nunavut has mandated that NNI be used to allow Nunavummiut to bid on government contracts. He also noted that NNI requires 20 percent Inuit employment.

Councillor Stevenson pointed out that the City's Procurement Policy is followed and NNI is required when a project is funded by the Government of Nunavut.

Councillor Quassa understood that the federal government also approved and supports NNI requirement.

Councillor Stevenson pointed out that by following the City's Procurement Policy, there is no need for a motion not to use NNI requirements as the project is not funded by the Government of Nunavut. He noted that if staff determine through additional research that specific direction is required regarding NNI requirements, it can be presented at the Council meeting with the other committee recommendations.

b) New Iqaluit Operations Centre – Project Status Update

Sumon Ghosh, Director of Engineering and Capital Planning, advised that three tenders were received for the Federal Road water main extension and they were currently being evaluated.

c) Apex River Supplemental Pumping 2023 – Project Status Update

Sumon Ghosh, Director of Engineering and Capital Planning, provided a project status update on the 2023 Apex River supplemental pumping. The following are the highlights:

- Stantec met with stakeholders in late February and a mechanical and electrical report will be submitted tomorrow
- Pending Government of Nunavut approval, an electrical contractor will be hired to make the modifications to the pumps and generator
- Government of Nunavut will provide the reverse osmosis plant generator to use for supplemental pumping
 - Generator needs to be recertified and not aware of who is responsible to have the recertification carried out
- Change Order approved for Stantec to conduct preliminary site visit and the electrical/mechanical requirements
- Another Change Order will be required for design and implementation of the site changes

Deputy Mayor Sheppard asked if the updated generator to be used at Apex River can be moved and used at Unnamed Lake, if required.

Mr. Ghosh pointed out that if pumping is required from Unnamed Lake, there is other additional equipment needed such as pipes and pumps. He noted that the backup generator for Apex River pumping will not be sufficient in size to operate the pumps.

Deputy Mayor Sheppard understood that the reverse osmosis system was acquired from the Government of Nunavut and asked if the generator came with the system.

Mr. Ghosh noted that there has been discussion regarding the generator and the Government of Nunavut have advised that they own the generator. A User Agreement has been received from the Government of Nunavut for the generator.

Rod Mugford, Acting Chief Administrative Officer, understood in 2019, the reverse osmosis system included the generator. In discussion with Government of Nunavut staff, it was noted that this was not correct. He advised that staff have not been able to locate documents regarding the reverse osmosis system generator. Mr. Mugford pointed out that in signing the User Agreement for the generator, he will request that the Government of Nunavut be responsible to pay for the recertification cost as they own the generator.

Deputy Mayor Sheppard expressed concern that the City paid \$1 million to repair the reverse osmosis system and it did not include the generator.

Mayor Awa noted that the City will have to be prepared to put the water pump at Qikiqtaalik Lake. He noted that there was not the usual snowfall this year and the water supply will not last in the small rivers.

Councillor Stevenson asked if there were regular updates on the amount of water in Lake Geraldine.

Mr. Ghosh advised that regular updates are received bi-weekly and the last report was 109 metres. He advised that a considerable amount of water was lost from the leak in AV 305. In comparison to last year, the water level is decreasing faster.

Mr. Ghosh explained that it is important to have the work completed on the pumps and generator in order to start pumping as soon as possible.

Councillor Stevenson noted that residents must still conserve water.

Mr. Mugford advised that he recently requested the Communications and Customer Service Manager to release waterwise tips in a Public Service Announcement and on the website. He advised that more frequent updates would be carried out to conserve water.

Mr. Mugford noted that the bi-weekly data is currently at 109 metres and when the level reaches 104 metres, there will be a problem. Based on models, if there is no water flow during spring freshet and additional water pumping does not start until early to mid-June, August and September will be two critical months.

Deputy Mayor Sheppard noted that when Lake Geraldine is full, it is at 111 metres. He suggested that new councillors review some of the information regarding water levels in Lake Geraldine to become familiar with the water situation.

Mayor Awa asked if water would have to be pumped from the Sylvia Grinnell River if there was not sufficient water during the spring freshet and the Apex River was still frozen.

Mr. Ghosh explained that staff have requested authorization from Department of Fisheries and Oceans to withdraw water from Apex River in excess of the amount approved in the Water License.

Mr. Ghosh advised that there were no plans to pump water from the Sylvia Grinnell River.

d) Request for Proposal – Environmental Consulting on Long-Term Water Supply Project – Verbal Update

Sumon Ghosh, Director of Engineering and Capital Planning, advised that a Request for Proposal would be issued for Environmental Consulting on the Long-Term Water Supply Project.

Mr. Ghosh noted that in discussions with the Government of Nunavut, the Archeological Investigation and Study could be carried out sometime during the application process, therefore it does not have to be included in this Request for Proposal.

6. IN CAMERA SESSION

(3) As per Section 22 (2) (a) CTV Act and By-law 526 Section 67

Motion EPW 23-03

Moved by: Mayor Awa

Seconded by: Councillor Quassa

Committee goes In Camera at 7:12 p.m.

Unanimously Carried

Motion EPW 23-04

Moved by: Deputy Mayor Sheppard

Seconded by: Councillor Amarapala

Committee returns to Regular Session at 7:54 p.m.

Unanimously Carried

Motion EPW 23-05

Moved by: Deputy Mayor Sheppard

Seconded by: Councillor Smith

Committee recommends that Council award the contract to Nunavut Excavating for remediation of AV 305.

Unanimously Carried

7. ADJOURNMENT

Motion EPW 23-06

Moved by: Councillor Smith

Seconded by: Mayor Awa

Committee adjourns at 7:56 p.m.

Unanimously Carried



A handwritten signature in blue ink, appearing to read "Romeyn Stevenson", written above a horizontal line.

Romeyn Stevenson
Chair

A handwritten signature in blue ink, appearing to read "Tammy Ernst-Doiron", written above a horizontal line.

Tammy Ernst-Doiron
City Clerk

Approved by City Council on the 11th day of April 2023

