

STAFF REPORT: RECREATION DEPARTMENT



REPORT TO: Infrastructure & Recreation
Committee
MEETING DATE: May 15, 2012
REPORT NO.: DOR.12.17
SUBJECT: Northwinds Beach Washrooms
PREPARED BY: Terry Green, Manager of Parks and
Trails

A. Recommendations

THAT Council receive Staff Report DOR.12.17 entitled "Northwinds Beach Washrooms" for information purposes; and,

THAT Council approve hiring C.C Tatham and Associates to complete design and drawings for a septic holding tank and pump chamber at a quoted cost of \$5,500 excluding HST.

B. Background

The washrooms at Northwinds Beach were built in early 1991 and consist of a male and female washroom with 8 fixtures. They were constructed using a residential holding tank and pump to transfer the sewage waste to the municipal sewage system.

The washrooms were capable of handling the volume of people using the property up to the year 2000. By that time, the number of people using the washroom facility has steadily increased and it was found that the existing system was no longer adequate for the demand. The holding tank was not large enough and the pump needed to be replaced with a larger commercial grade pump.

In 2001 a larger tank was installed outside of the washrooms and a commercial grade, two horsepower grinder pump to transfer the sewage waste to the municipal service was installed. This system proved to work well with a few minor problems on occasion.

In 2010 problems started again with the pump becoming jammed with materials that were being flushed into the system. Staff tried installing a cage around the pump to stop the materials from reaching the pump. This stopped the toilet paper from reaching the pump and caused additional problems. Staff and private contractors had to remove the pump for repair on a regular basis.

We have had the pump-cutter knives replaced and the thermal protector replaced a number of times. During the two weeks that the pump was out of order in 2010 we brought in 4 portable toilets to the property.

In 2011 during the month of July the washrooms had to be closed due to the pump being jammed and burning out the thermal protector. We replaced the pump with our back up pump and the same thing happened again to that pump. We have been

removing the pump on a regular basis to remove the objects that were jamming the pump.

This work has been done by Town Staff and also by private contractors, which is placing a financial burden on our operating budget. We have tried putting additional garbage receptacles and signage in each washroom stall to help catch the non flushable material.

At this time, due to the cost of repairs and down time, Staff decided to close the washrooms and have 4 portable toilets placed there for the remainder of July and August of 2011. This was also a financial burden on our operating budget

The cost for portable toilets for July and August in 2011 was \$5,000 due to visitor usage. The number of people using the facility keeps increasing and this is putting a strain on the existing system.

Staff recommends a larger holding tank with a separate tank that would hold the non flushable material. Staff feels this would be the correct action to solve this ongoing problem.

C. The Blue Mountains' Strategic Plan

Addressing the Town's municipal infrastructure needs

D. Environmental Impacts

Possible fecal contamination within the washroom building from overflowing toilets
Possible fecal contamination of area surrounding the sump tank
Possible leaching of contaminants into Georgian Bay

E. Financial Impact

Engineering fees of \$5,500 excluding GST from Shoreline Acquisition and development reserve account # 4-611-1000-32004

F. In Consultation With

John Caswell Water & Waste Water Services
Darcy Chapman Financial Services
Sherri Adams Financial Services

G. Attached

1. Staff Report DOR.10.55 September 14, 2010
2. C.C. Tatham & Associates Ltd. Quote

Respectfully submitted,

Terry Green Manager of Parks & Trails

For more information, please contact:

Terry Green
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Business Telephone 519-599-1231

STAFF REPORT: RECREATION DEPARTMENT



REPORT TO: Infrastructure and Recreation Committee
MEETING DATE: September 14, 2010
REPORT NO.: DOR .10.55
SUBJECT: Northwinds Washrooms
PREPARED BY: Terry Green, Manager of Parks & Trails

A. Recommendations

THAT Council receive Staff Report DOR.10.55, "Northwinds Washrooms" for information purposes.

B. Background

During the week of August 12, 2010 sewage ejector pump problems were experienced at Northwinds Beach which were directly related to what people were flushing down the toilets. The problem occurred because the grinder pump will not grind up items such as baby wipes and other materials. These items get caught between the cutter knives and the pump housing which results in the pump jamming until it heats up to the point of blowing the breaker.

A related issue during such jamming is that the sewage waste then leaches out of the top of the sump and into the ground. After this has happened a few times the pump burns itself out. At the time this situation occurred our back up pump was being repaired and we had to rent portable toilets for a week until we got the pump back and reinstalled. Staff tried putting a cage around the pump to stop the baby wipes from being sucked into the pump but this caused another problem. It would not allow for the other materials to get to the pump and so this filled the sump hole and backed up the drains. Staff have since installed more signage in each washroom explaining what not to flush into the toilets and have also put a garbage container in each stall.

Staff will monitor this temporary solution and if this does not address the situation another solution will be considered for the 2011 season. One suggestion would be to install a large holding tank and have it pumped on a regular basis which would have a budget factor for 2011. As of today, September 1st, the sewage pump was jammed again and Staff had to remove the pump and the object jammed in the pump and reinstall the pump. This 2010 summer season has been very warm and the growing number of visitors to Northwinds Beach has increased. The existing washrooms were installed in 1991 and the sewage system at that time was capable of handling that volume of people using the facility but staff feels that we should be looking into a better system for next year.

C. The Blue Mountains' Strategic Plan

Addressing the Town's municipal infrastructure needs

D. Environmental Impacts

Possible fecal contamination within the washroom building from overflowing toilets.
Possible fecal contamination of the area surrounding the sump.
Possible leaching of contaminants into Georgian Bay.

E. Budget Impact

Reduce repair costs and staff costs for repairs.
Repair costs for this time were \$1,588.65 for washroom rentals, pump repairs.
Staff time of 37 hours.

F. Attachments

None at this time.

Respectfully submitted

Terry Green
Signature

For more information please contact
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Manager of Parks and Trails
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tgreen@thebluemountains.ca



C.C. Tatham & Associates Ltd.
Consulting Engineers

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February 15, 2012

via email
CCTA File 109115

Terry Green
Manager of Parks and Trails
Town of The Blue Mountains
32 Mill Street, P.O. Box 310
Thornbury, ON N0H 2P0

**Re: Town of The Blue Mountains
 Northwinds Beach – Sewage System Upgrades
 Work Plan and Fee Proposal**

Dear Terry:

C.C. Tatham & Associates Ltd. (CCTA) is pleased to provide the Town with a fee proposal to complete the design and drawings for a sewage holding tank and pump chamber for the Northwinds Beach public washrooms.

We understand the existing sewage grinder pump has experienced on-going operational issues in terms of turbine failure and motor seizures due to various impassable materials discharged from the toilets and excessive sand conveyed through the floor drains from the washrooms.

As part of our work plan, CCTA will assess the existing facility and design a sewage system to include a properly sized holding tank and pumping chamber in order to reduce the operational and maintenance effort required by the Town.

A summary of our estimated fees to complete the design and drawings for the upgrades is provided below.

Task 1	Collect available background information and complete a topographic survey of the building area	\$1,500
Task 2	Complete design calculations, including sizing of the holding tank and confirm sewage pump capacity	\$2,000
Task 3	Prepare design drawings and letter brief summarizing the design criteria and calculations	\$1,500
Task 4	Expenses	<u>\$500</u>
Total Estimated Fees (excl. HST)		\$5,500.00

For the purpose of this work plan, we have excluded fees related to any consultation with review agencies or acquiring any permits/approvals as it is uncertain as to what permits/approvals were acquired as part of the original sewage system installation. Should the Town require our services to obtain or amend any existing permits/approvals, we will provide a separate budget for the Town's review and approval.

I trust the above is satisfactory for your immediate needs. Should the Town authorize CCTA to complete the work described above, we will complete the work under our Engineering Services and Support Agreement with the Town. We assume we will be starting this work in the Spring. However, the schedule can be discussed once the Town authorizes the work.

We thank you for the opportunity and look forward to hearing from you in the near future.

Yours truly,
C.C. Tatham & Associates Ltd.



Kevin Sansom, B.A. Sc., P.Eng.
Project Manager
KRS:rh

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