

MINUTES

PUBLIC UTILITIES COMMISSION

**PUC BOARDROOM
325 GRAND AVE E**

**MAY 18, 2006
4:00 PM**

PRESENT: Chairman Bryon Fluker, Commissioners Janet McGuigan, Jim Brown, Frank Vercooteren, A/CAO Gerry Wolting, Senior Level Advisor Jack Sonneveld, General Manager Scott Prail, Facility Systems Manager Rob Bernardi, and Manager – South Tom Kissner.

ABSENT: Mayor Diane Gagner, Commissioners Tom McGregor and Joe Faas

1. CALL TO ORDER

Chairman Bryon Fluker called the meeting to order at 4:05 PM.

2. DECLARATION OF PECUNIARY INTEREST

NONE

3. APPROVAL OF MINUTES

a) April 24, 2006

Moved by Commissioner Vercooteren and seconded by Commissioner Brown.

“That the minutes of April 24, 2006 Regular Meeting and Closed Session Meeting be approved.”

Motion carried

4. REPORTS

a) Financial Report

MUNICIPALITY OF CHATHAM-KENT
Public Utilities Commission

“INFORMATION REPORT”

TO: PUC Chairperson and Commissioners
FROM: Scott Prail, CET, B.Comm.
General Manager, Chatham-Kent PUC
DATE: May 18, 2006
SUBJECT: Water/Wastewater Revenues and Expenditures

For information of the Commission.

BACKGROUND

The Summary of Revenues and Expenditures for water and wastewater are prepared monthly for the Commission's review and information.

COMMENTS

The year-to-date revenues and expenditures (April, 2006) are on historical usage patterns and no significant variances are projected in 2006.

The debt payments have been calculated on a monthly basis to provide a better overview of the monthly revenues and expenditures.

CONSULTATIONS

Chatham-Kent Utility Services prepared the summaries of budget information.

FINANCIAL IMPLACATIONS

No budget impacts are anticipated at this time.

Prepared by:

Reviewed by:

Jack Sonneveld
Senior Level Advisor, Chatham-Kent PUC

Scott Praill, C.E.T., B.Comm
General Manager, Chatham-Kent PUC

Reviewed by:

Gerry Wolting, B. Math, CA.
Acting Chief Administrative Officer

Moved by Commissioner McGuigan and seconded by Commissioner Vercouteren.

“That the Financial Report be received.”

Motion carried

b) In-Camera Report

Moved by Commissioner Brown and seconded by Commissioner Vercouteren.

“To move item (b) to (h).”

Motion carried

c) Hastings Line Waterline Extension

MUNICIPALITY OF CHATHAM-KENT

Public Utilities Commission

TO: PUC Chairperson and Commissioners

FROM: Scott Praill, CET, B.Comm.
General Manager, Chatham-Kent PUC

DATE: May 18, 2006

SUBJECT: Hastings Line Waterline Extension – Contract T06-127
(community of Highgate)

RECOMMENDATIONS

It is recommended that:

1. The Chatham-Kent Public Utilities Commission approve the award of the Hastings Line Waterline Extension, Contract T06-117 to Delway Contractors Limited at the quoted price of \$13,910.00, including GST.
2. The Chairperson and General Manager be authorized to complete the necessary agreements.

BACKGROUND

A Hastings Line water service request was submitted to the Chatham-Kent Public Utilities Commission in September 2003.

The Hastings Line Waterline project includes the construction of a 50 mm waterline to be connected to the existing 50mm main located at 475 King Street, continue north and then extending easterly at the intersection of Hastings Line and King Street for approximately 200 meters.

A total of two (2) residential land parcels exist along this portion of the petitioned area (including three (3) newly severed lots).

Todgham & Case Associates Inc. prepared an estimated cost for the proposed waterline. The estimated cost for the project, including engineering but does not include GST is \$17, 500.00.

COMMENTS

A total of three (3) quotations were received and they are summarized in the following table:

Ridgetown Wellfield Upgrades Transmission Line Replacement Project Contract No. T06-132	
<u>Contractor:</u>	<u>Quotation amount:</u> (including 7% GST)
Delway Contractors Limited Chatham, Ontario	\$13,910.00
G.W. Clarke Drainage Contractors Ltd. Blenheim, Ontario	\$14,932.00
Henry Heyink Construction Ltd. Chatham, Ontario	\$18,990.00

It is recommended that the Chatham-Kent PUC award Contract No. T06-127 to Delway Contractors Limited at the tendered price of \$13,910.00, including GST and that the Chairperson and General Manager be authorized to complete the necessary agreements.

COMMUNITY STRATEGIC PLAN

The recommendations in this report support the following objectives and strategic directions:

B. Economy-We are a prosperous community

B3: Maintain and enhance new and existing infrastructure to support economic and smart growth opportunities

Desired Outcomes / Proposed Activities

- Advocate for essential provincial and federal investment and equitable tax policies to support financing and effective operation of sustainable transportation systems, water, sewer and waste management services.
- Support new infrastructure investments and modernize existing infrastructure.
- Maintain and improve the quantity and quality of ground and surface waters

The recommendations will not adversely impact the remainder of the Community Strategic Plan.

CONSULTATION

Todgham & Case Associates Inc. reviewed the quotations and a copy of their letter recommending the award of the tender is attached.

FINANCIAL IMPLICATIONS

The cost that will be allocated to the PUC is estimated to be \$6,000.00. All other costs associated with the project will be recovered through assessment.

Prepared by:

Reviewed by:

Jack Sonneveld
Senior Level Advisor
Chatham-Kent PUC

Scott Praill, C.E.T., B.Comm.
General Manager,
Chatham-Kent PUC

Reviewed by:

Gerry Wolting, B. Math, CA.
Acting Chief Administrative Officer

Moved by Commissioner Brown and seconded by Commissioner McGuigan.

“That the Chatham-Kent Public Utilities Commission approve the award of the Hastings Line Waterline Extension, Contract T06-117 to Delway Contractors Limited at the quoted price of \$13,910.00, including GST.

The Chairperson and General Manager be authorized to complete the necessary agreements.”

Motion carried

d) Tilbury Elevated Tank

MUNICIPALITY OF CHATHAM-KENT
Public Utilities Commission

TO PUC Chairperson and Commissioners
FROM Scott Praill, CET, B.Comm.
General Manager, Chatham-Kent PUC
DATE May 18, 2006
SUBJECT Tilbury Elevated Water Tower – Contract T06-142 Award

RECOMMENDATIONS

It is recommended that:

1. The Chatham-Kent Public Utilities Commission approve the award of the Tilbury Elevated Water Storage Tank, Contract T06-142 to Landmark Structures Company Limited at the tendered price of \$4,130,200.00, including GST.
2. The Chairperson and General Manager be authorized to complete the necessary agreements.

BACKGROUND

The Chatham-Kent Public Utilities Commission (PUC) approved the Class Environmental Assessment Project File for the Tilbury Water Storage Tank on March 23, 2006.

The problems associated with the existing water storage unit are summarized as follows:

- The existing tank is approximately 51 years old;
- The existing elevated tank requires extensive rehabilitation;

- There is insufficient water storage in the Tilbury distribution system to service future demands;
- The Tilbury system provides low water pressure to the Lighthouse Cove area.

The preferred alternative was to construct a new 6,180 m³ (1,358,117 gallon) elevated storage tank on the existing site. The estimated capital cost for the new Tilbury elevated water storage tank was \$2.74 million, including 4% contingency allowance and excluding taxes. The cost of the engineering services from Totten Sims Hubbicki Associates (TSH) is \$143,150.00.

COMMENTS

The major contract items include:

- a gravel access road,
- a raft and piled foundation
- 6,181 m³ capacity elevated water storage tank,
- 10.5 L/hr. capacity/standby sodium hypochlorite feed system,
- chlorine residual analyzer,
- piping and valves,
- mechanical and HVAC system,
- electrical and instrumentation.

Due to the specialized nature of the construction of elevated water storage, a total of two (2) quotations were received. They are summarized in the following table:

Tilbury Elevated Water Tank Replacement Project Contract No. T06-142	
<u>Contractor:</u>	<u>Quotation amount:</u> (including 7% GST)
Landmark Structures Company Limited Burlington, Ontario	\$4,130,200.00
Norwec Company King City, Ontario	\$4,843,569.00

Administration and Mike Gundry, TSH, completed a detailed review of the tenders and compared the estimated costs to the tender. The details are summarized in the following chart:

Comparison Estimated costs vs Tendered costs		
	Estimate:	Tender:
Elevated storage tank	\$2,378,040.00	\$2,931,000.00
Misc.	\$ 178,000.00	\$ 629,000.00
Sub-Total	\$2,556,040.00	\$3,560,000.00
Contingency	\$ 105,258.00	\$ 300,000.00
GST	\$ 186,291.00	\$ 270,200.00
Demolition	\$ 75,000.00	\$ 90,000.00
Engineering	\$ 193,500.00	\$ 193,500.00
TOTAL	\$3,116,089.00	\$4,443,500.00

Golder Associates were retained to complete the geotechnical review for the tower construction. They have recommended that the tower be constructed with a raft foundation over piling. The estimated extra cost associated with this work is \$600,000.00.

The low quotation from Landmark Structures Company Limited includes a \$300,000.00 contingency allowance and 7% GST (\$270,200.00).

The cost of the project, including engineering and demolition of the old tower, but net of GST and "half" (1/2) of the contingency allowance is \$3,993,500.00

It is recommended that the Chatham-Kent PUC award Contract No. T06-142 to Landmark Structures Company Limited at the quoted price of \$4,130,200.00 and that the Chairperson and General Manager be authorized to complete the necessary agreements.

COMMUNITY STRATEGIC PLAN

The recommendation in this report supports the following objective and strategic direction:

B. Economy – We are a prosperous community

B3: Maintain and enhance new and existing infrastructure to support economic and smart growth opportunitiesDesired Outcomes / Proposed Activities

- **Support new infrastructure investments and modernize existing infrastructure**

The recommendation will not adversely impact on the remainder of the Community Strategic Plan.

CONSULTATIONS

Mike Gundry, Project Manager, Totten Sims Hubbicki Ltd., reviewed the tenders and a copy of the report recommending the award to Landmark Towers Limited is attached.

Legal Services has also been consulted with regards to awarding the tender.

FINANCIAL IMPLICATIONS

The estimated cost of \$3.5 million was included in the 2006 Capital Budget for this project. The Long Term Financial Plan recommended paying for this project from the General Water Reserves. The projected General Water Reserve balance will decrease from \$4.09M to \$3.59 M. in 2007

Prepared by:

Jack Sonneveld
Senior Level Advisor,
Chatham-Kent PUC

Reviewed by:

Scott Praill, CET, B.Comm.
General Manager,
Chatham-Kent PUC

Reviewed by:

Gerry Wolting, B. Math, CA.
Acting Chief Administrative Officer

Moved by Commissioner Brown and seconded by Commissioner Vercooterren.

“That the Chatham-Kent Public Utilities Commission approve the award of the Tilbury Elevated Water Storage Tank, Contract T06-142 to Landmark Structures Company Limited at the tendered price of \$4,130,200.00, including GST.

The Chairperson and General Manager be authorized to complete the necessary agreements.”

Motion carried

e) Indian Creek Road

**MUNICIPALITY OF CHATHAM-KENT
PUBLIC UTILITIES COMMISSION**

TO: PUC Chairperson and Commissioners

FROM: Jack Sonneveld
Senior Level Advisor, Chatham-Kent PUC

DATE: May 18, 2006

Subject: Contract T06-133, Indian Creek Road East Watermain Looping, (Community of Chatham)

RECOMMENDATIONS

It is recommended that:

1. The tender in the amount of \$76,673.62, including GST, for the Indian Creek Road East Watermain Project in the Community of Chatham be awarded to Ben Bruinsma and Sons Limited.
2. Administration prepare a report to Chatham-Kent Council and by-law for the deferred waterline connection costs.
3. The Chairperson and General Manager be authorized to complete the necessary agreements.

BACKGROUND

The watermain extension/looping project was identified in the 2006 Watermain Lifecycle Projects approved by the Chatham-Kent Public Utilities Commission (PUC).

Staff have been monitoring and flushing the existing dead end watermain because of low chlorine residuals. The installation of the proposed watermain loop will enhance the quality of water, water pressure, and water distribution grid.

The project consists of the installation of 303 m of 200 mm PVC DR18 pipe and connecting to the existing watermain on Indian Creek Road East and the watermain on Charing Cross Road.

A total of six (6) properties could be serviced from the waterline extension in the future. The estimated cost per connection was \$11,532.00.

The estimated project cost, including design, tendering and contract administration was \$96,630.00.

COMMENTS

Todgham and Case Associates carried out the project engineering. The Purchasing Officer received and opened tenders for the work on Tuesday, May 16, 2006.

Six (6) competitive bids were received on the project. The bids are summarized in the following table:

Indian Creek Road East Watermain Extension Contract T06-133	
Tenderer	Tender Amount (including GST)
Ben Bruinsma & Sons Limited Chatham, Ontario.	\$76,673.62
Henry Heyink Construction Limited Chatham, Ontario.	\$83,674.00
Dig R Wright Excavating inc. Chatham, Ontario	\$85,547.07
Delway Contractors Limited Chatham, Ontario	\$90,000.00
Murray Mills Excavating & Trucking (Sarnia) Ltd. Sarnia, Ontario	\$104,511.39
Marchand Excavating Contractors Limited Comber, Ontario.	\$140,045.68

Todgham and Case Associates have reviewed the tenders and advised that the tenders are complete in all respects. The low tender received is within the engineer's estimate and within the total overall approved budget amount for lifecycle water main replacements.

It is recommended Contract T06-133 be awarded to Ben Bruinsma and Sons Limited who submitted the lowest tender bid. It is also recommended that administration prepare a report to Chatham-Kent Council and the necessary by-law for the deferred connection costs.

COMMUNITY STRATEGIC PLAN

The recommendation in this report supports the following objective and strategic direction:

B. Economy – We are a prosperous community

B3: Maintain and enhance new and existing infrastructure to support economic and smart growth opportunities

Desired Outcomes / Proposed Activities

- **Support new infrastructure investments and modernize existing infrastructure**

The recommendation will not adversely impact on the remainder of the Community Strategic Plan.

CONSULTATIONS

Infrastructure and Engineering Services were consulted and support the recommendations.

FINANCIAL IMPLICATIONS

The Indian Creek Road East Waterline Project is part of the overall \$1.629 million of watermain lifecycle projects planned for 2006.

Prepared by:

Reviewed by:

Jack Sonneveld
Senior Level Advisor
Chatham-Kent PUC

Scott Praill, C.E.T., B.Comm.
General Manager,
Chatham-Kent PUC

Reviewed by:

Gerry Wolting, B. Math, CA.
Acting Chief Administrative Officer

Moved by Commissioner McGuigan and seconded by Commissioner Brown.

“That the tender in the amount of \$76,673.62, including GST, for the Indian Creek Road East Watermain Project in the Community of Chatham be awarded to Ben Bruinsma and Sons Limited.

Administration prepare a report to Chatham-Kent Council and by-law for the deferred waterline connection costs.

The Chairperson and General Manager be authorized to complete the necessary agreements.”

Motion carried

f) River Line Waterline Extension

MUNICIPALITY OF CHATHAM-KENT

Public Utilities Commission

TO: PUC Chairperson and Commissioners

FROM: Jeannie Medeiros
Technical Assistant/Projects Co-ordinator, Chatham-Kent PUC

DATE: May 18, 2006
SUBJECT: River Line Waterline Extension
(Community of Harwich)

RECOMMENDATIONS

It is recommended that:

1. The proposed River Line waterline extension is approved to proceed.
2. Administration prepares a report to Chatham-Kent Council for the approval of the project and authorization for the necessary By-law under Part XII of the Municipal Act, 2001.
3. The property owners in this area are informed by letter of the vote results and the PUC action.

BACKGROUND

A previous petition was submitted to the Chatham-Kent Public Utilities Commission in June 2005 from residents along River Line requesting consideration for municipal water.

Originally, the proposal was estimated based on the construction of a 200 mm waterline to be connected to the existing main at 9759 River Line and terminate 335m east of the Mull Road. The system would include a 200 mm waterline under the Thames River to loop into the existing water system on Longwoods Road.

A total of forty-nine (49) residential land parcels and seven (7) vacant agricultural parcels exist along this portion of the previous petitioned area.

The cost per connection for the proposed River Line waterline including the 2005 Part 12 Charge was estimated to be \$10,715.00, which included \$180,000.00 associated with looping the waterline into the existing water system on Longwoods Road and would have been charged to the PUC.

The initial vote in December 2005 did not have the support to continue. Ninety-eight percent (98%) of the property owners returned the ballots with only thirty-one percent (31%) in favour of proceeding with the project.

A new petition with a revised route along River Line was submitted to the Chatham-Kent Public Utilities Commission in February 2006.

COMMENTS

The service area would see the construction of a 200 mm waterline on River Line for a distance of 3 315 metres and terminating at #11014 Mull Road. The system will include a 200 mm waterline under the Thames River to loop into the existing water system on Longwoods Road.

A total of twenty-five (25) residential land parcels and two (2) vacant agricultural parcels exist along this portion of the petitioned area.

Thames Valley Engineering Inc. prepared an estimated cost for the proposed waterline. The estimated cost for the project, including engineering and GST is \$458,440.00 of which \$180,186.00 is associated with looping the proposed waterline into the existing water system on Longwoods Road and would be charged to the PUC.

The estimated cost per connection for the proposed River Line waterline extension, including the 2006 Part 12 Charge is \$11,999.00.

An information and vote package describing the proposed extension project and costs associated was distributed to the benefiting owners on April 10, 2006. A ballot was included with the return date of May 3, 2006. One hundred percent (100%) of the property owners returned the ballots. The ballot results were seventy-one percent (71%) in favour of proceeding with the project.

It was indicated to the property owners that the PUC would require that a majority were in favour of the project and, that as a guideline, 66% of the returned votes should support the project before administration would recommend that the project proceed to construction. The wording on the ballot page indicated that the project would be evaluated based on the number of returned ballots.

Based on the approved Waterline Assessment Policy requiring 66% support, it is our recommendation that the PUC proceed with providing water servicing to the residences along River Line and that the property owners are notified by letter, of the vote results and the PUC action.

It is also recommended that administration prepare a report to Chatham-Kent Council for the approval of the project and authorization for the necessary By-law under Part XII of the Municipal Act, 2001.

COMMUNITY STRATEGIC PLAN

The recommendations in this report support the following objectives and strategic directions:

B. Economy-We are a prosperous community

B3: Maintain and enhance new and existing infrastructure to support economic and smart growth opportunities

Desired Outcomes / Proposed Activities

- Advocate for essential provincial and federal investment and equitable tax policies to support financing and effective operation of sustainable transportation systems, water, sewer and waste management services.
- Support new infrastructure investments and modernize existing infrastructure.
- Maintain and improve the quantity and quality of ground and surface waters

The recommendations will not adversely impact the remainder of the Community Strategic Plan.

CONSULTATION

Thames Valley Engineering Inc. prepared the preliminary engineering information.

FINANCIAL IMPLICATIONS

The estimated cost of \$180,186.00 for a 200 mm waterline under the Thames River to loop into the existing water system on Longwoods Road will be allocated to the PUC. All other costs associated with the project will be recovered through assessment.

Prepared by:

Jeannie Medeiros
Technical Assistant/Projects Co-ordinator

Reviewed by:

Scott Praill, CET, B. Comm
General Manager
Chatham-Kent PUC

Reviewed by:

Gerry Wolting, B. Math, CA.
Acting Chief Administrative Officer

Moved by Commissioner Vercouteren and seconded by Commissioner Brown.

“That the proposed River Line waterline extension is approved to proceed.

Administration prepares a report to Chatham-Kent Council for the approval of the project and authorization for the necessary By-law under Part XII of the Municipal Act, 2001.

The property owners in this area are informed by letter of the vote results and the PUC action.”

Motion carried

g) Pioneer Line Waterline Extension

MUNICIPALITY OF CHATHAM-KENT

Public Utilities Commission

TO: PUC Chairperson and Commissioners

FROM: Jeannie Medeiros
Technical Assistant/Projects Co-ordinator, Chatham-Kent PUC

DATE: May 18, 2006

SUBJECT: Pioneer Line Waterline Extension
(Community of Chatham)

RECOMMENDATIONS

It is recommended that:

1. A Public Meeting be held and an information package be distributed to determine the local area property owners support for the proposed waterline project on Pioneer Line from the CSX Railway to St. Clair Road.
2. Administration will prepare a report to the Chatham-Kent Public Utilities Commission on the vote results and the Chatham-Kent Public Utilities Commission action.

BACKGROUND

A petition was submitted to the Chatham-Kent Public Utilities Commission in November 2005 from residents along Pioneer Line requesting consideration for municipal water.

Originally, the proposal was estimated based on the construction of a 200 mm waterline extending from St. Clair Road and terminating immediately west of Prince Albert Side Road for a distance of 3 300 meters.

A total of twenty-six (26) residential land parcels and eleven (11) vacant agricultural parcels exist along the portion of the previous petitioned area.

Todgham and Case Associates Inc. prepared an estimated cost for the project. The total project cost, including engineering but excluding GST is \$408,500.00 of which \$120,600.00 is associated with oversizing and would be charged to the PUC.

The cost per connection for the proposed Pioneer Line waterline including the 2005 Part 12 Charge was estimated to be \$9,954.

It was indicated to the property owners that the PUC would require that a majority were in favour of the project and, that as a guideline, 66% of the returned votes should support the project before administration would recommend that the project proceed to construction.

The initial vote in February 2006 did not have the support to continue. Eighty-nine percent (89%) of the property owners returned the ballots with only fifty-eight percent (58%) in favour of proceeding with the project.

Based on the vote results, the Public Utilities Commission approved the recommendation not to proceed at the March 23, 2006 Commission meeting.

COMMENTS

A new petition with a revised route along Pioneer Line was submitted to the Chatham-Kent Public Utilities Commission in April 2006.

The proposed distribution system network for this area would see the construction of a 200 mm diameter waterline from the existing 300 mm diameter waterline at the CSX Railway west to #8886 Pioneer Line.

The waterline is oversized from a 150 mm diameter waterline to a 200 mm diameter waterline for area trunk distribution to address future development needs. The oversizing cost was not included in the assessment calculations for frontage owners and would be allocated to the PUC.

After the petition request was received, several property owners beyond the petitioned area contacted the PUC wanting information on how they could receive water. Administration advised them of the petition already obtained and that the new petition would need to begin west of #8886 Pioneer Line. A second petition was never received because the property owners indicated that they could not meet the PUC petition policy.

Administration feels it would be beneficial to extend the waterline from CSX Railway to St. Clair Road. There are many reasons to loop the waterline including health, fire and economical benefits that will occur.

By extending the waterline to St. Clair Road, it will provide a continuous water loop system for uninterrupted water service. It is desirable to feed water to any location in the system from at least two directions. That way, during an emergency or routine shut down of one line, service can be provided from the other direction, which could not be provided currently.

The health benefit of extending the waterline is water quality. The extension will allow the water in the main to flow from both directions and stop it from becoming "stagnant". Stagnation can cause low chlorine residual, bacteria, odors, colors, etc. Looping the line will allow it to transfer water from one part of the system to another and keep it fresher. This would also minimize water waste, or the need to flush the mains to maintain water quality.

For the reasons above, administration is recommending the watermain be installed the entire distance between the CSX Railway and St. Clair Road. If area from CSX Railway to #8886 Pioneer Line returns their ballots with 66% in favour, then the area from #8868 Pioneer Line to St. Clair Road would then be able to opt in to the project, and the PUC would carry the deferred assessments until residence wished to connect, but the property owners from CSX Railway to #8886 Pioneer Line would be assessed the connection cost and not have the option of deferring the connection cost.

The firm of Todgham & Case Associates Inc. prepared an estimate of the associated costs for the proposed waterline along Pioneer Line from CSX Railway to St. Clair Road. The estimated cost for the project, including engineering but does not include GST is \$349,680.00 of which \$46,800.00 is associated with the extension and \$151,800.00 is associated with oversizing and would be allocated to the PUC.

A total of twenty-nine (29) residential land parcels and ten (10) vacant agricultural parcels exist along the proposed waterline area from the CSX Railway to St. Clair Road.

The estimated cost per connection for the proposed Pioneer Line waterline extension from the CSX Railway to St. Clair Road, including the 2006 Part 12 Charge is \$12,180.00.

If the initial vote from the property owners located at the CSX Railway to #8886 Pioneer Line does not have a majority in favour, the waterline extension will not proceed.

We recommend that:

- The property owners in this area are informed by letter of a public meeting.
- Administration prepares a report to the Chatham-Kent Public Utilities Commission on the vote results and future action.

COMMUNITY STRATEGIC PLAN

The recommendations in this report support the following objectives and strategic directions:

A: Health – We are a healthy community

A2: Exceed standards for health protection and promotion

B. Economy-We are a prosperous community

B3: Maintain and enhance new and existing infrastructure to support economic and smart growth opportunities

Expected Results:

- Increase number of preventative health initiatives
- Advocate for essential provincial and federal investment and equitable tax policies to support financing and effective operation of sustainable transportation systems, water, sewer and waste management services.
- Support new infrastructure investments and modernize existing infrastructure.
- Maintain and improve the quantity and quality of ground and surface waters

The recommendations will not adversely impact the remainder of the Community Strategic Plan.

CONSULTATION

The General Manager of Water & Wastewater Services, Manager of Facilities and Systems and the Senior Level Advisor reviewed the report.

Todgham & Case Associates Inc. prepared the preliminary engineering information.

FINANCIAL IMPLICATIONS

The estimated oversizing cost of \$151,800.00 will be allocated to the PUC. The PUC may be required to carry property assessment costs until the area residents connect to the water line. All other costs associated with the project will be recovered through assessment and future connections.

Prepared by:

Jeannie Medeiros
Technical Assistant/Projects Co-ordinator

Reviewed by:

Reviewed by:

 Scott Prail, CET, B. Comm
 General Manager
 Chatham-Kent PUC

 Gerry Wolting, B. Math, CA.
 Acting Chief Administrative Officer

Moved by Commissioner Brown and seconded by Commissioner McGuigan.

“That a Public Meeting be held and an information package be distributed to determine the local area property owners support for the proposed waterline project on Pioneer Line from the CSX Railway to St. Clair Road.

Administration will prepare a report to the Chatham-Kent Public Utilities Commission on the vote results and the Chatham-Kent Public Utilities Commission action.”

Motion carried

h) Ridgetown Water Supply Property Purchase & In-camera Report

**MUNICIPALITY OF CHATHAM-KENT
Public Utilities Commission**

TO PUC Chairperson and Commissioners

FROM Jack Sonneveld,
Senior Level Advisor, Chatham-Kent PUC

DATE May 18, 2006

SUBJECT Ridgetown Water Supply Property Purchase

RECOMMENDATIONS

It is recommended that:

1. The Chatham-Kent Public Utilities Commission confirm the purchase of the Chatham-Kent Energy properties in the community of Ridgetown known as #1 Tecumseh Street and #41 Erie Street.

BACKGROUND

The preliminary design of the reservoir expansion and treatment upgrades required at the Erie Street location in the community of Ridgetown indicated that additional property would be required.

The purchase of the Ridgetown Hydro/PUC properties was previously approved by the Chatham-Kent Public Utilities Commission subject to the completion of an Environmental Site Assessment on the sites.

Dillon Consulting has completed a detailed Phase 1 Environmental Site Assessment (ESA) on the sites. They have completed a very similar project for Cambridge Hydro where a small piece of hydro property was acquired as a municipal well site. Based on the type of site, Dillon Consulting recommended completing soil sampling and testing in addition to the regular "Phase I" ESA.

COMMENTS

Dillon Consulting completed the detailed Phase I Environmental Assessment and the following is a summary of the environmental issues identified during the Phase 1 ESA and Dillon's comments:

1. The use of engine oil and storage of waste oil in drums represents a potential source of contamination as a result of spills and leaks during filling and maintenance activities.
 - Dillon recommends the installation of secondary containment to prevent future spill to the ground surface as a Best Practice measure.
2. a) The existing transformer represents a potential source of petroleum hydrocarbon and PCB contamination to soil and/or groundwater in the vicinity of the filling and sampling ports.

- The oil in the existing transformer contains less than 50 parts per billion of PCBs
- b) The historic storage of new and used transformers at the site, represent a potential source of petroleum hydrocarbon and PCB contamination to soil and/or PCB Contamination from possible equipment leaks.
- c) The historic use of arsenic based herbicides for weed control has been a common practice at many hydro facilities. Although, the use of arsenic based herbicides is not known to occur at this site, the use of these herbicides may have predated the current practice.
- Two soil samples were taken at the sites. The results of the laboratory analysis are summarized in the attached letter from Dillon dated April 25, 2006. Both samples did not exceed the applicable MOE Table 2 Standards for the parameters analyzed.
- Detectable concentrations of PCBs and total petroleum hydrocarbons (TPH) were measured at the SS1 indicate the shallow soils surrounding the existing transformer have been impacted with low PCB transformer fluid.. Continued maintenance and monitoring of the existing transformer is recommended to ensure additional inputs of TPH and PCBs do not occur in the area.
- Minor impacts from the historical storage of new and used transformers may have occurred at the SS2 location as a detectable concentration of (TPH) was observed.
- The analysis of metals from both samples also indicated that arsenic is not present on site at concentrations that exceed MOE Table 2 Standards.

Summary:

Mr. Cliff Hanson, BA, MSc, MBA, Project Manager for Dillon Consulting has assured the PUC that there is nothing to be concerned about.

CONSULTATIONS

Dillon staff conducted onsite interviews with Mr. Bev Taylor, C-K Hydro Lineman and Mr John Wilson, Manager Water & Wastewater Services for the PUC (South).

FINANCIAL IMPLICATIONS

There are no financial impacts resulting from this report.

Prepared by:

Jack Sonneveld
Senior Level Advisor
Chatham-Kent PUC

Reviewed by:

Scott Praill, C.E.T., B.Comm.
General Manager,
Chatham-Kent PUC

Reviewed by:

Gerry Wolting, B. Math, CA.
Acting Chief Administrative Officer

PUC IN-CAMERA REPORT

The PUC met in-camera on January 19, 2006 and would report the following for the approval of the PUC.

The PUC considered a report with respect to Ridgetown Water Supply Property Purchase. It was moved and carried:

“Commissioner McGregor recommended that the purchase be conditional based on the satisfactory appraisal and environmental assessment on the property.

That the Chatham-Kent Public Utilities Commission authorize administration to proceed with the purchase of the Chatham-Kent Energy property in the community of Ridgetown known as #1 Tecumseh Street and #41 Erie Street at the estimated cost of \$100,000.00.

The purchase be conditional on a satisfactory Environmental Assessment being completed on the property.

The General Manager be authorized to sign the necessary documents.”

Moved by Commissioner McGuigan and seconded by Commissioner Brown.

“That the Chatham-Kent Public Utilities Commission confirm the purchase of the Chatham-Kent Energy properties in the community of Ridgetown known as #1 Tecumseh Street and #41 Erie Street.

To receive the In-camera report.”

Motion carried

i) Ridgetown Water Transmission Line Replacement

**MUNICIPALITY OF CHATHAM-KENT
Public Utilities Commission**

TO PUC Chairperson and Commissioners
FROM Scott Praill, CET, B.Comm.
 General Manager, Chatham-Kent PUC
DATE May 18, 2006
SUBJECT Ridgetown Water Transmission Line Replacemen
 (Community of Ridgetown)

RECOMMENDATIONS:

It is recommended that:

1. The Chatham-Kent Public Utilities Commission approve the award of the Ridgetown Transmission Line Replacement Project, Contract T06-132 to Delway Contractors Limited at the quoted price of \$317,522.50, including GST.
2. The Chairperson and General Manager be authorized to complete the necessary agreements.

BACKGROUND

The Chatham-Kent PUC approved replacing and upgrading the existing 150 mm collector water main as part of the Ridgetown Wellfield Upgrades. The transmission main connects the Harris and Hitch wells to the water treatment facilities located near the Layne well. The total length of the transmission main and connector lines is approximately 1500 meters.

The Ridgetown Wellfield Upgrades cost that was included in the 2005 presentation was \$759,000, plus engineering fees at 15%. The PUC also approved the purchase of the C-K Hydro Property in Ridgetown. Dillon Consulting has completed a detailed review of the design and costing for the upgrades.

The summary of impacts on the costs are summarized as follows:

- a) The final design of the raw water transmission main determined that a combination of 200 mm and 250 mm watermain should be installed.
- b) Items not anticipated in the Preliminary Design:
 - i. The storage requirements have been increased by 3% (+\$15,000)
 - ii. Additional yard piping and valves are required (+\$20,000)
 - iii. Additional aerator recommended at the Scane site. (+\$43,000)
 - iv. Additional telemetry upgrades not included in the original estimate including chlorine analyzer and post chlorination. (+\$140,000)
- c) Increase in Engineering costs of \$56,475.00 (Total of \$170,325)

The updated total project costs are outlined in the following chart and they will be funded from the 2006 Capital Budget.

Ridgetown Wellfield Upgrades Updated Projected Costs	
<u>Description:</u>	<u>Updated cost estimate:</u>
Transmission collector main	\$244,500.00
Water Storage/pumps	\$796,000.00
Well remediation & backup wells	\$ 95,000.00
Sub-total	\$1,135,500.00
Engineering (15%)	\$170,325.00
Property purchase (C-K Hydro)	\$100,000.00
TOTAL	\$1,405,825.00

COMMENTS

A total of five (5) quotations were received for the water transmission line upgrading and they are summarized in the following table:

Ridgetown Wellfield Upgrades Transmission Line Replacement Project Contract No. T06-132	
<u>Contractor:</u>	<u>Quotation amount:</u> (including 7% GST)
Henry Heyink Construction Ltd. Chatham, Ontario	\$319,500.00
Delway Contractors Limited Chatham, Ontario	\$317,522.50*
G.W. Clarke Drainage Contractors Ltd. Blenheim, Ontario	\$334,236.46
D'Amore Construction Ltd. Windsor, Ontario	\$409,205.45
Murray Mills Excavating Sarnia, Ontario	\$458,774.31

*Corrected tender amount, confirmed by contractor.

Dillon Consulting Limited prepared the detailed tender documents. The 150 mm watermain is being replaced with 850 m of 200 mm PVC and 675 m of 250 mm PVC. The 2004-2005 estimated replacement cost was \$200,000.

The low quotation from Delway Contractors Limited includes a \$25,000.00 contingency allowance and 7% GST.

The quoted price includes the installation of a casing (\$27,000.00) under the abandoned CSX railway. We anticipate approval from CSX to remove the casing from the contract prior to actual construction.

It is recommended that the Chatham-Kent PUC award Contract No. T06-132 to Delway Contractors Limited at the corrected tender price of \$317,522.50 including GST and that the Chairperson and General Manager be authorized to complete the necessary agreements.

COMMUNITY STRATEGIC PLAN

The recommendations in this report support the following objectives and strategic directions:

- A: Providing a safe, caring and healthy environment
- A2: Provide adequate infrastructure to support, enhance and sustain existing and future growth.

Expected Results:

Increase user satisfaction. The installation of this waterline will improve access to safe, good quality municipal water.

OTHERS CONSULTED

Joe Calabrese, Project Manager, Dillon Consulting Ltd., reviewed the quotations and a copy of the tender review is attached.

FINANCIAL IMPLICATIONS

Due to the increases in costs for PVC pipe and other construction costs, the Capital Budget amount was adjusted to \$1,250,000 in the Long Term Capital Budget Review.

Prepared by:

Jack Sonneveld
Senior Level Advisor,
Chatham-Kent PUC

Reviewed by:

Scott Praill, CET, B.Comm.
General Manager,
Chatham-Kent PUC

Reviewed by:

Gerry Wolting, B. Math, CA.
Acting Chief Administrative Officer

Moved by Commissioner Brown and seconded by Commissioner Vercouteren.

“That the Chatham-Kent Public Utilities Commission approve the award of the Ridgetown Transmission Line Replacement Project, Contract T06-132 to Delway Contractors Limited at the quoted price of \$317,522.50, including GST.

The Chairperson and General Manager be authorized to complete the necessary agreements.”

Motion carried

j) Treatment of Processed Wastewater from Wallaceburg Water Treatment Plant
MUNICIPALITY OF CHATHAM-KENT
Public Utilities Commission

TO: PUC Chairperson and Commissioners
 FROM: Tom Kissner
 Area Manager (North)
 Chatham-Kent Public Utilities Commission
 DATE: May 9, 2006
 SUBJECT: Treatment of Process Wastewater from the Wallaceburg Water Treatment Plant

RECOMMENDATIONS

It is recommended that:

1. Administration advise CH2MHill Ltd. to proceed with the design of a process waste handling system for the Wallaceburg Water Treatment Plant consisting of an equalization tank and a forcemain to Libby Street pumping station,
2. Administration prepare a report for the Ministry of the Environment, outlining the plan for the handling of the process waste streams from the Wallaceburg Water Treatment Plant, including a timeline for implementation of the plan.

BACKGROUND

The Wallaceburg Water Treatment Plant was originally constructed in 1944 and included 2 settling tanks with 8 upstream mixing chambers, 2 dual media filters, a high lift pumping station and a 1.14 ML reservoir. The plant was expanded in 1948 to include 2 additional settling tanks with 8 upstream mixing chambers and 2 additional dual-media filters. A second reservoir having a capacity of 4.54 ML was constructed in 1972. A new washwater pumping station was added in 1978 and 2 pretreatment tanks were added in 1980. In 1998, the implementation of a Supervisory Control and Data Acquisition (SCADA) system began with completion of the project in 2000. In 2005, high lift pump replacement and piping modifications were completed. In the original design and construction of the facility, process waste generated at the plant was discharged to the Sydenham River through a 525 mm diameter storm sewer. The process waste from this facility continues to be discharged to the Sydenham River, as there have been no upgrades to the original system. The existing process waste streams include those from filter backwashing, pretreatment and settling tanks settled solids and other miscellaneous sources such as storm runoff.

In October 2003, the Ministry of the Environment conducted a routine inspection of the Wallaceburg Water Treatment facility, and as a result of this inspection, a Provincial Officer Order was issued to the Public Utilities Commission for the Municipality of Chatham-Kent in February 2004. The Provincial Officer Order required that either:

- 1) An aquatic study be undertaken to assess the likelihood of impairment of the Sydenham River resulting from the discharge of process waste from the Wallaceburg Water Treatment Plant and, if such impairment is found to be likely, a plan for implementation of any works necessary to ameliorate the impact of the process waste discharges, including a timeline for implementation; or
- 2) A plan be submitted for handling or pretreatment of the process waste streams, including a timeline for implementation.

Sampling and analysis of the process waste stream indicated that the process waste water did not meet the objectives of the Provincial Water Quality Objectives for discharges to surface waters, therefore, it was decided forego an aquatic study to determine possible impairment of the Sydenham River and proceed with the development of a plan for the handling or pretreatment of the process waste.

COMMENTS

CH2MHill has completed a detailed Waste Study Report for the Wallaceburg Water Treatment Plant that included the following areas of review:

1. Process Design Criteria
 - a) Plant Design Flow
 - b) Process Waste Streams
 - c) Solids Generation

 d) Summary

2. Treatment Options

- a) Flow Equalization Tank
- b) Transfer to Sewage Treatment Plant
- c) Gravity Clarifier
- d) Gravity Thickener
- e) Thickened Sludge Treatment
- f) Ultimate Disposal of Treated Water and Sludge

3. Costs and Schedule

- a) Estimated Cost
- b) Approvals
- c) Implementation Schedule

Prior to investigating treatment options, conceptual levels of the daily process waste volumes and solids generation rates under average and maximum conditions were established for the proposed design flows. More detailed evaluations of process waste volumes and solids generation will have to be conducted during the pre-design stage of the process waste handling facilities in order to determine more precise estimates of waste volumes and solids generation. The treatment of process waste involves several components, including: containment of the process waste; separation of solids from water; concentration of solids for disposal; ultimate disposal of solids (sludge); ultimate disposal of treated water (supernatant). A description of each treatment option is listed below followed by a table summarizing costs.

(a) Flow Equalization Tank

The purpose of a flow equalization tank is to provide temporary containment of process waste flow streams that occur intermittently at high flow rates over short time periods, and to allow the waste to be introduced to downstream treatment processes at a constant, predetermined rate. Each of the treatment options that were investigated necessitated the construction of an equalization tank.

(b) Transfer to Sewage Treatment Plant

Flow from the equalization tank can be discharged, at a constant rate, to the sanitary sewer that is located along Baseline Road. Currently, this sanitary gravity sewer collects sanitary waste from the plant and discharges into the Libby Street pump station, which transfers the flows to the Wallaceburg Wastewater Pollution Control Plant. Preliminary calculations have determined that the discharge from the equalization tank would need to be 77 m³/hr, or 60 percent of the sewer capacity. It has been suggested that a dedicated force main be constructed from the equalization tank to the pump station to alleviate the possibility of surcharge in the existing gravity sewer.

(c) Gravity Clarifier

Flow from the equalization tank would be transferred to a gravity clarifier. Using plate settlers could minimize the size of the gravity clarifier. Supernatant from the clarifier could be discharged to the Sydenham River dependant on meeting Provincial Water Quality Objectives. The settled sludge would then either be pumped to the sanitary sewer or transferred to gravity thickeners for further on-site treatment.

(d) Gravity Thickener

The solids concentration of the settled sludge from the gravity clarifier could be further increased in gravity thickeners. In this process, the wastewater is slowly stirred allowing agglomeration of the solids and the release of water trapped within the sludge. To improve efficiency of this process, it is normally necessary to chemically condition the sludge. Supernatant from the clarifier could be discharged to the Sydenham River dependant on meeting Provincial Water Quality Objectives. There are several options for the treatment of the thickened sludge from this process.

2. (e) Thickened Sludge Treatment

Several options are available for the treatment of the thickened sludge from the sludge thickener. Selection of the preferred option depends on several factors including land availability, sludge disposal methods, capital and operating costs and the capacity of the sewage treatment plant. Treatment options include transfer of the sludge to the sewage treatment plant, filter pressing of the sludge, running the sludge through a centrifuge and natural dewatering of the sludge.

(f) Ultimate Disposal of Treated Water and Sludge

In order for waste streams to be discharged to the Sydenham River, they must meet the parameters as listed in the Provincial Water Quality Objectives as well as discharge criteria set by the Ontario Ministry of the Environment. Typically, the Ministry's discharge criteria are as follows:

- Biochemical Oxygen Demand - 25 mg/L (annual average)
- Total Suspended Solids - 25 mg/L (annual average)
- Total Chlorine Residual - 0.0 mg/L

Supernatant from both the clarifier and the sludge thickener, as well as the filtrate or centrate from a sludge dewatering operation, should meet the above criteria following chlorination/dechlorination. Dechlorination would require a chamber and chemical feed system for a dechlorinating agent. The final disposal of sludge cake from either a mechanical or natural dewatering operation would normally involve trucking it to landfill. Sludge cake from the water treatment plant would have a high concentration of aluminum and would be require to satisfy the landfill's slump test requirements. The following table is a summary of the estimated costs for the process waste options:

Option	Description	Est. Capital Cost	Est. Annual Cost for Sludge Haulage
1	Equalization tank, forcemain to Libby St. pump station, sludge cake haulage from WPCP to landfill	\$1.85 M	\$10,000
2	Equalization tank, process waste haulage from WTP to WPCP, additional liquid and solids treatment at WPCP, sludge cake haulage from WPCP to landfill	\$1.5 M	\$1.8 M
3	Equalization tank, clarifier, dechlorination, sludge forcemain to Libby St. pump station, sludge cake haulage from WPCP to landfill	\$3.6 M	\$10,000
4	Equalization tank, clarifier, thickener, dechlorination, thickened sludge haulage from WTP to WPCP, sludge cake haulage from WPCP to landfill	\$5.1 M	\$65,000
5	Equalization tank, clarifier, thickener, filter press, dechlorination, sludge cake haulage from WTP to landfill	\$8.1 M	\$7,000
6	Equalization tank, clarifier, thickener, centrifuge, dechlorination, sludge cake haulage from WTP to landfill	\$7.8 M	\$10,000

CONSULTATIONS

The Area Manager, Water & Wastewater Services North, worked directly with CH2MHill Consulting during the data collection and development of the Waste Study Report.

FINANCIAL IMPLICATIONS

The total projected cost, including a contingency allowance of \$365,000 for the entire undertaking, is estimated to be \$1,850,000. There is approximately \$564,000 in the capital budget for 2006 for the required upgrades and the remaining estimated \$1,286,000 would be included in the 2007 capital budget for water.

The recommended expenditures are summarized in the following table:

	Item	Description	Est. Cost
1	General Requirements	Insurance, Bonds, Mobilization, Security, Trailer, Rentals, Power, Etc.	\$50,000
2	Civil – Structural	Excavation, Concrete Work, Backfill and Grading for 1200 m³ Equalization Tank with Small Superstructure, Misc. Metals	\$600,000
3	Civil – Site	Process Waste Drain to Equalization Tank, Forcemain from Equalization Tank to Libby Street Pump Station	\$150,000
4	Mechanical	Valves, Slide Gates, Submersible Pumps, Submersible Mixers	\$225,000
5	Electrical / Instrumentation and Control	Additions to MCC, Power and Signal Wiring, Programming, Instrumentation	\$210,000
Subtotal			\$1,235,000
Estimating Contingency			\$365,000
Subtotal			\$1,600,000
Engineering			\$250,000
Total			\$1,850,000

Prepared by:

Tom Kissner,
Area Manager (North),
Chatham-Kent PUC

Reviewed by:

Scott Prail, C.E.T., B. Comm.
General Manager,
Chatham-Kent PUC

Reviewed by:

Jack Sonneveld
Senior Advisor

Reviewed by:

Gerry Wolting, B. Math, CA.
Acting Chief Administrative Officer

Moved by Commissioner Vercouteren and seconded by Commissioner Brown.

“That Administration advise CH2MHill Ltd. to proceed with the design of a process waste handling system for the Wallaceburg Water Treatment Plant consisting of an equalization tank and a forcemain to Libby Street pumping station,

Administration prepare a report for the Ministry of the Environment, outlining the plan for the handling of the process waste streams from the Wallaceburg Water Treatment Plant, including a timeline for implementation of the plan.”

Motion carried

5. INFORMATION

- a) PUC Newsletter
- b) FCM Green Municipal Fund
- c) Performance Measures

Moved by Commissioner Brown and seconded by Commissioner Vercouteren.

“To receive the information and forward (a) & (c) to Council for information.”

Motion carried

6. NEW BUSINESS

Water filtering companies are in the area. The PUC will be sending out a flyer to informing the public.

7. NEXT MEETING

The next PUC Commission meeting is scheduled for Thursday, September 21, 2006 at 4:00 PM at the PUC boardroom.

8. ADJOURNMENT

Moved by Commissioner Vercouteren and seconded by Commissioner McGuigan.

“That the Regular meeting be adjourned at 5:10 PM.”

Motion carried