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**YORK-PEEL WATER SUPPLY PROJECT UPDATE
PROJECT NO. 77300**

The Transportation and Works Committee recommends:

- 1. The deputation by Lloyd Ferguson, General Manager, Dufferin Construction Company be received; and**
- 2. The recommendations contained in the following report, February 20, 2004, from the Commissioner of Transportation and Works be adopted:**

1. RECOMMENDATIONS

It is recommended that:

1. The following report be received for information by Committee and Regional Council.
2. The Regional Clerk forward copies of this report to the Clerks of the City of Vaughan, and the Towns of Markham, Richmond Hill, Aurora, and Newmarket.

2. PURPOSE

The purpose of this report is to update Committee and Regional Council on the progress achieved to date as well as forecast activities over the next few months on the York-Peel Water Partnership (YPWP) project.

3. BACKGROUND

3.1 York-Peel Water Partnership Projects

The primary objective of the YPWP project is to design, construct, and put into service a major east-west supply system to convey up to 388 ML/d (85 MIGD) of treated water from the Regional Municipality of Peel to York Region's Maple Reservoir. The project consists of 30 km of large-diameter feeder mains through the cities of Brampton and Vaughan, as well as a new reservoir and pumping station facility located in Brampton. The project is a major component of the Region's preferred strategy for long-term water supply, and is being implemented in co-operation with the Regional Municipality of Peel.

The various contract packages constituting the YPWP project are shown in the Key Plan provided as *Attachment 1* to this report.

York Region has assumed primary management responsibility for the above-noted works, while the Regional Municipality of Peel has retained primary management responsibility for project components within its Regional boundaries.

All projects included in the YPWP are currently on schedule, which will enable both Regions to meet the required commissioning date of December 2004.

4. ANALYSIS AND OPTIONS

4.1 York Peel Feedermain

4.1.1 Progress Update

Since the last report to Council, the project team has focussed on the following activities:

- Moving forward on necessary property acquisition.
- Liaising with utilities and regulatory agencies.
- Project meetings to confirm organization, lines of communication, and procedures to be followed during the design, construction, and commissioning phases.
- Regular design review and project scheduling meetings with the design-builder.
- Additional field surveys and investigations by the design-builder.
- Ensuring critical approval submissions have been forwarded to regulatory authorities having jurisdiction.
- Road reconstruction works on Rutherford Road, Weston Road and Teston Road.

4.1.2 Property Acquisition Status

The Region is currently negotiating for all outstanding property; property acquisition status for different sections of the feedermain and road reconstruction is as follows:

- Rutherford Road and Weston Road.
 - All property has been acquired for feedermain installation and road reconstruction.
- Block 33.
 - Agreements have been drafted and reference plans have been prepared. Finalization of the property agreements is underway.
- Teston Road.
 - Negotiations have commenced to acquire property for road widening and the Highway 400 feedermain crossing. Reference plans have been prepared and fee appraisals are currently being obtained.
 - Property on the south side of Teston Road is owned either by York Region or the City of Vaughan. York Region must reach an agreement with the City of Vaughan to provide easements or transfer property to the Region for the feedermain and road construction. Property acquisition on the north side of Teston Road is being negotiated with individual landowners. Reference plans have been prepared and fee appraisals are currently being obtained. The earliest date for property acquisition by expropriation is August 30, 2004, although some property agreements have been signed and are subject to other reports to Council. All property required for the feedermain installation is in place. Arrangements for

relocation of a church building are underway to permit proposed road improvements.

4.1.3 Contract Award and Execution

On June 26, 2003, Regional Council authorized the award of design-build Contract No. 03-04 in the amount of \$72,310,643.87 including GST for feedermain installation and road reconstruction to Dufferin Construction Company, a division of St. Lawrence Cement Inc.

The concrete pressure pipe for this project will be supplied by Munro Concrete Products, an existing concrete pipe manufacturer in Barrie Ontario. Construction of the manufacturer's facilities was completed in early 2004.

Dufferin had provided assurances to the Region that alternate suppliers will be used if schedule commitments by the Munro facility are not met. Dufferin's assurances include firm dates on which decisions to procure pipe from alternate suppliers would be finalized. In January, Regional staff visited the Munro facility to assess the progress of the new concrete pressure pipe manufacturing facility. Staff have been involved in weekly meetings with Munro and Dufferin to monitor the progress at the facility. Although the construction of the new facility was completed as scheduled, Munro Concrete Products have experienced some delays in commissioning some components of the plant.

As of February 19, it appears that the commissioning delays have been rectified. The pipe manufacturing schedule has been adjusted to match Dufferin's overall schedule on the project. The original schedule indicated pipe delivery on February 15, 2004. The revised schedule submitted to the Region now indicates pipe delivery on March 15, 2004.

Dufferin Construction has assured the Region that this one month delay in pipe delivery will not affect their overall schedule. The delays will be mitigated through the use of additional work crews.

Quality Control (QC) and Quality Assurance (QA) for the concrete pressure pipe in accordance with American Water Works Association (AWWA) Standard C301 was a requirement of the design-build Request for Proposal. Dufferin's QA/QC plan includes the retention of an independent inspection company to ensure compliance with the AWWA Standard C301. The independent inspection company is currently on site and has provided reports to both York Region and Dufferin Construction.

This inspector is responsible for reporting on the construction and commissioning of the new facility and the many components of the pipe production equipment. At the time of this report, the inspections to date indicate that all AWWA standards are being met.

4.1.4 Schedule Overview

Table 1 provides milestone dates for future activities.

Table 1
Project Master Schedule Key Dates

Task	Schedule Date
Construction start on Rutherford Road – CPR to Napa Valley Avenue.	September 2003
Start of Elder Mills and Robinson Creek – Bridge reconstruction.	December 2003
Construction start on Weston Road – Rutherford Road to Major Mackenzie Drive.	September 2003
Construction start on Teston Road – Keele Street to Jane Street.	September 2003
Commence highway and water crossings.	January 2004
Commence concrete pipe delivery/installation.	February 2004
Construction start on Weston Road – North of Major Mackenzie Drive.	May 2004
Construction start on Teston Road – Jane Street to Block 33.	May 2004
Feedermain construction substantially performed – Including testing.	October 2004
Complete overall water supply system commissioning – Including Airport Road Reservoir and Pumping Station.	November 2004
Construction (inclusive of road works) substantially performed.	September 2005
Total Performance of the work.	November 2005
Final Acceptance (end of warranty period).	November 2007

4.1.5 Forecast Activities for the Next Quarter

The following are key events scheduled over the next few months:

- Completion of design.
- Obtain regulatory agency approvals.
- Finalize property acquisition (for road construction).
- Finalize and implement QA/QC, traffic management, environmental management, safety, and public communications plans.
- Continue preparatory work (removal and vegetation, utility relocation, etc.).
- Continue road and bridge reconstruction in three areas.
- Commence major highway and water crossings.
- Commence watermain installation.

5. FINANCIAL IMPLICATIONS

The current estimates for the major components of the work are provided in Table 2. These amounts include management contingencies and GST, but may not reflect the final cost of land acquisition.

Table 2
Total Design-Build Project Costs Within York Region

Project	Design/Build Contract P-03-04
1 York Peel Feedermain	
• Rutherford Road (York Contract T-02-102A)	
• Airport Rd. Reservoir Pumping Stn. to Hwy. 50 (Peel Region Design/Build)	
• Highway 50 to Maple Reservoir (York Region Design/Build)	\$39,328,000
2 Teston Road Improvements	
• Jane Street to Keele Street	9,669,500
3 Rutherford Road Improvements	
• Highway 50 to Napa Valley Avenue	12,173,300
4 Weston Road Improvements	
• Rutherford Road to Major Mackenzie Drive	7,475,500
5 Pressure District 7 Watermain (funded by City of Vaughan)	3,700,000
Total	\$72,346,300

In addition to the work shown in Table 2, a section of the feedermain on Rutherford Road (Napa Valley Avenue to Weston Road) was completed in 2003 at a cost of \$13,800,000.

Financial responsibility for the pipeline works in Peel Region is subject to the terms of the York-Peel Water Supply Agreement. Each municipality is funding ancillary road and other infrastructure work from separate budgets.

The Region's 10 year Capital Plan include sufficient budget to cover engineering, construction, and project management costs for the feedermain and road works incorporated in design-build contract.

Where Regional Council has approved advancing road improvement expenditures, the relevant line items in the 10 year Roads Capital Plan have been adjusted in the draft 2004 Business Plan and Budget.

6. LOCAL MUNICIPAL IMPACT

The York-Peel Feedermain project is required to accommodate future growth within York Region including the City of Vaughan and to supplement the existing water supply from the City of Toronto.

There is no reason to expect adverse impacts on local municipalities other than impacts normally associated with large projects of this nature.

7. CONCLUSION

The York-Peel Feedermain installation and road reconstruction project being undertaken in York Region is progressing. The feedermain portion of the work is scheduled for commissioning by the end of November 2004.

The Senior Management Group has reviewed this report.

(A copy of the attachment referred to in the foregoing is included with this report and is also on file in the Office of the Regional Clerk.)