

3

INFRASTRUCTURE DESIGN AND CONSTRUCTION CAPITAL CONSTRUCTION PROGRAMS UPDATE

The Transportation and Works Committee recommends:

- 1. The presentation by Dino Basso, Assistant Director, Engineering, be received; and**
- 2. The recommendation contained in the following report, August 27, from the Commissioner of Transportation and Works be adopted:**

1. RECOMMENDATION

It is recommended that the following report be received for information by Committee and Council.

2. PURPOSE

The purpose of this report is to update Committee and Council on the status of the 2004 Capital Construction Programs for Roads, Water and Wastewater. A presentation will be made to the Transportation and Works Committee on September 8th, 2004, on the Capital Construction Programs Update in conjunction with this report.

3. BACKGROUND

In the 2004 Capital Budget council approved an unprecedented \$812.7 M for capital projects in an effort to accommodate the tremendous growth experienced in our Region. Of the \$812.7 M Capital Budget, approximately \$596 M was allocated for the Roads, Water and Wastewater programs of which approximately \$392 M is allocated for Design and Construction:

Table 1
Summary of Capital Budgets

Program	Total Capital Budget	Design and Construction
Roads	\$141 M	\$115 M
Water	\$276 M	\$136 M
Wastewater	\$179 M	\$141 M
Total	\$596 M	\$392 M

The difference between \$596 M and \$392 M is capital work by Transportation and Works Operations, Peel Region and The City of Toronto.

Included in the 2004 Design and Construction Capital Budgets are previously tendered projects that have construction expenditures in 2004 estimated at \$221 M (over 50% of the total 2004 ID&C Budget). Additionally, the remaining 2004 budgets can be further broken down between engineering and construction from new tenders as shown in Table 2 below:

Table 2
Capital Budget Breakdown

Program	2004 Construction From Previously Tendered Projects	Non-Construction Activities (Design, EA, Property, etc.)	2004 Construction (New Tenders)	Total Design and Construction Capital Budgets
Roads	\$58 M	\$23 M	\$34 M	\$115 M
Water	\$76 M	\$10 M	\$50 M	\$136 M
Wastewater	\$87 M	\$6 M	\$48 M	\$141 M
Total	\$221 M	\$44 M	\$144 M	\$409 M

Tender calls are scheduled for the earliest date that design and contract documentation can be completed. Specifically, tenders are not released until all required permits and properties are acquired, utilities are relocated, and financing is in place. This results in projects being scheduled for tender throughout the course of the year. Accordingly, construction budgets are set, forecasting, construction expenditures based on the time of year contracts are awarded and the remaining months of construction in the year.

4. ANALYSIS AND OPTIONS

There has been great progress in delivery of the capital program during the last twelve months. A brief listing of major construction project accomplishments is provided. A more detailed presentation will be made at the September 8th, 2004 Transportation and Works Committee meeting. A summary of accomplishments is provided in the following sections.

4.1 Roads Major Capital

Excellent progress has been made in delivery of the Roads Major Capital program during the last year including the completion of work on five major arterial roadways in late 2003, ongoing construction on a further twenty roadways in 2004 with an additional five to begin early in 2005.

4.1.1 Roads Capital Construction Projects Completed in late 2003

Construction of the following road projects was completed in late 2003.

- Major Mackenzie Drive at Angus Glen Community Centre – Town of Markham.
- Rutherford Road – Weston Road to Napa Valley Avenue – City of Vaughan.
- 16th Avenue – Woodbine Avenue to Leslie Street including Highway 404 Interchange – Town of Markham.
- Major Mackenzie Drive – Weston Road to Highway 400 including Highway 400 Overpass – City of Vaughan.
- Keele Street – Highway 407 to Highway 7 – City of Vaughan.
- Concrete Box Culvert Replacements at Woodbine Avenue south of Stouffville Road and at York Durham Line north of Stouffville Road – Town of Whitchurch-Stouffville.

4.1.2 2004 Construction from Previously Tendered Roads Capital Projects

The following projects were tendered prior to 2004 and are currently in construction.

- Elgin Mills Road – Bayview to Victoria Square including Highway 404 interchange and new overpass – Town of Markham.
- Bathurst Street / Green Lane – Highway 9 to Yonge Street – Towns of Newmarket and East Gwillimbury and Township of King.
- Markham By-pass Phase 2 – Town of Markham.
- Rutherford Road – Napa Valley Avenue to Highway 50 – City of Vaughan.
- Teston Road – Keele Street to Highway 400 - City of Vaughan.
- Markham By-pass Phase 1 at Highway 407 ETR – Town of Markham.
- Lloydtown-Aurora Road Intersection Improvements at Weston Road, Jane Street North and Jane Street South – Township of King.
- Weston Road – Rutherford Road to Major Mackenzie Drive – City of Vaughan.
- Islington Avenue – Highway 7 to Langstaff Road – City of Vaughan.

4.1.3 2004 New Construction Tenders

The following projects were tendered in 2004 and have recently started construction.

- Bayview Avenue – Wellington Street to St. John's Sideroad – Town of Aurora.
- Intersection improvement – Aurora Road at Warden Avenue – Town of Whitchurch-Stouffville.
- St John's Sideroad – Yonge Street to Bayview Avenue – Town of Aurora.
- Langstaff Road – Weston Road to Islington Avenue – City of Vaughan.
- Islington Avenue – Langstaff Road to Rutherford Road – City of Vaughan.
- Islington Avenue – Rutherford Road to Major Mackenzie Drive – City of Vaughan.
- Rutherford Road – Jane Street to Weston Road (Vaughan Mills) – City of Vaughan.
- McNaughton Road at Major Mackenzie Drive – City of Vaughan.
- Bathurst Street North of Highway 7 – Town of Richmond Hill and City of Vaughan.
- Queensville Sideroad at 2nd Concession – Town of East Gwillimbury.
- Warden Avenue at Ravenshoe Road – Towns of Georgina and East Gwillimbury.

The following projects have been recently tendered and will commence construction in spring 2005.

- Major Mackenzie Drive – McCowan Road to Highway 48 – Town of Markham.
- 16th Avenue at Mural Street / Vogell Road – Town of Richmond Hill.

The following projects are scheduled for tendering in late 2004 with construction starting in spring 2005.

- Bathurst Street – King Road to Wellington Street – Township of King and Towns of Aurora and Richmond Hill.
- Dufferin Street – Rutherford Road to Major Mackenzie Drive – City of Vaughan.
- Gamble Sideroad – Yonge Street to Bathurst Street – Town of Richmond Hill.
- Major Mackenzie Drive – Kennedy Road to McCowan Road – Town of Markham

4.2 Water Major Capital

Excellent progress has been made in delivery of the Water Major Capital program during the last year including the completion of work on six major water capital construction projects in late 2003, ongoing construction on a further thirteen water projects and an additional eleven projects scheduled for tender in 2004.

4.2.1 Water Capital Construction Projects Completed in late 2003

- Georgina Water Treatment Plant – Town of Georgina.
- PD8 North Richmond Hill Pumping Station Upgrade.
- Bayview Watermain Aurora Well 6 to Brooker Ridge – Town of Aurora.
- PD7 Interconnection Watermain (Vaughan to Richmond Hill) – City of Vaughan.
- Wellington Street Watermain Berczy to Bayview Avenue – Town of Aurora.
- PD6 Major Mackenzie Watermain from Warden Avenue to past the Angus Glen Community Centre – Town of Markham.

4.2.2 2004 Construction from Previously Tendered Water Capital Projects

- Wellington Street Watermain from Berczy to Orchard Heights Pump Station – Town of Aurora.
- Yonge Street Watermain from Bloomington Road to Ridge Road Reservoir – Town of Aurora.
- Metro Road Watermain from WTP to Woodbine – Town of Georgina.
- Woodbine Watermain from Metro Road to Old Homestead Road – Town of Georgina.
- Boyers Sideroad Watermain – Town of Georgina.
- Mount Albert Elevated Tank – Town of East Gwillimbury.
- PD5 Langstaff Watermain from Islington Avenue to East Woodbridge Elevated Tank – City of Vaughan.
- York Peel Feedermain from Airport Road Reservoir in Peel Region to Maple Reservoir in York Region – Peel Region and City of Vaughan.
- PD6 McNaughton Road Watermain from Keele Street to Major Mackenzie Drive – City of Vaughan.
- PD6 Major Mackenzie Watermain from McNaughton Road to Dufferin Street – City of Vaughan.

- Mount Albert Road Watermain from Leslie Street to 2nd Concession – Town of East Gwillimbury.
- PD7 Elgin Mills Road Bayview to Woodbine Avenue – Towns of Richmond Hill and Markham.

4.2.3 2004 New Construction Tenders

- Maple PD8 Pump Station – City of Vaughan.
- Markham PD6 Reservoir – Town of Whitchurch-Stouffville.
- Stouffville Zone 1 Elevated Tank – Town of Whitchurch-Stouffville.
- Aurora/Newmarket PD8 Break Pressure Tank.
- Yonge Street Watermain from Savage Road to Mulock Drive – Town of Newmarket.
- PD8 Watermain Teston Road to Wellington Street – City of Vaughan, Towns of Richmond Hill and Aurora.
- PD6 Major Mackenzie Watermain from Bathurst Street to Dufferin Street – Town of Richmond Hill.
- 10th Line Watermain and Zone 1/2 Booster Pumping Station – Town of Whitchurch-Stouffville.

4.3 Wastewater Major Capital

Significant progress has been made in delivery of the Wastewater Major Capital program during the last year including the completion of work on three major wastewater capital construction projects in late 2003, ongoing construction on a further eight wastewater projects and an additional four projects scheduled for tender in 2004.

4.2.4 Wastewater Capital Construction Projects Completed in late 2003

- YDSS 16th Avenue Trunk from 9th Line to Stone Mason Avenue – Town of Markham.
- Sutton WPCP – Town of Georgina.
- Islington Avenue Trunk Sewer – City of Vaughan.

4.2.5 2004 Construction from Previously Tendered Wastewater Capital Projects

- Metro Road Main Pump Station and Forcemain – Town of Georgina.
- YDSS Humber Forcemain to Peel – City of Vaughan and Peel Region.
- Mount Albert WPCP Expansion – Town of East Gwillimbury.
- Schomberg Pump Station Upgrade – Township of King.
- YDSS Duffin Creek Optimization – Region of Durham.
- High Street Pump Station Upgrade and Forcemain Replacement – Town of Georgina.
- Mount Albert Forcemain Replacement – Town of East Gwillimbury.
- YDSS – 9th Line Trunk Sewer extension to Stouffville – Towns of Markham and Whitchurch-Stouffville.

4.2.6 2004 New Construction Tenders

- King City Forcemain – Township of King.

- King City Collection System – Township of King.
- Pine Valley Wastewater Pump Station – City of Vaughan.
- YDSS 16th Avenue Trunk Sewer Phase II from Stone Mason Road to Woodbine Avenue – Town of Markham.

5. FINANCIAL IMPLICATIONS

Excellent progress has been made in delivering a capital plan of this magnitude for 2004. A brief summary of the financial implications is provided below.

5.1 Roads Capital

The Roads Capital program is on track for 2004. Of the fifteen new 2004 Roads construction contracts ten are now in construction and the remaining five are either recently tendered or will be tendered shortly with construction starting early in 2005. When combined with the other ongoing construction contracts and the engineering and non-construction activities the total forecast 2004 Roads capital expenditures for Design and Construction is estimated to be equal to the entire \$115M budget (100%).

Additionally, the successful tendering of these projects will commit approximately \$72M in construction in the 2005 Roads Capital budget.

Construction prices received on recent 2004 construction tenders have increased from 2004 budgeted amounts and revised budgets and forecasts will be reflected in the upcoming 2005 Roads Capital budget.

5.2 Water Capital

It is anticipated that another eleven contracts will be tendered and awarded in 2004. At this time, the project expenditures for 2004 are \$93 million out of the \$136 million ID & C Capital Budget for Water Infrastructure.

The shortfall in the anticipated expenditures is primarily due to delays in the supply of pipe for the York-Peel Feedermain and minor delays to various contracts to be tendered in 2004. It should be noted that all the projects related to these tenders are anticipated to be completed on schedule.

5.3 Wastewater Capital

It is anticipated that another four contracts will be awarded in 2004. At this time the projected expenditures for 2004 are \$116 million out of the \$141 million ID & C Capital Budget for Wastewater Infrastructure.

The shortfall in the anticipated expenditures is primarily due to delays in securing regulatory approvals for trunk sewer projects that involve dewatering.

6. LOCAL MUNICIPAL IMPACT

The successful timely delivery of key infrastructure is critical to meet the needs of approved growth in York Region. The additional capacity generated by the York Region 2004 capital projects will have a beneficial impact on local municipalities in the provision of water, wastewater and transportation improvements. Region staff have and will continue to work closely with staff from local municipalities to ensure that local requirements for additional infrastructure have been incorporated into Region construction contracts where practical.

7. CONCLUSION

The 2004 Capital Plan is the largest in York Region's history (with an aggressive schedule of completion for all works). When complete, the 2004 capital projects will deliver much needed transportation, water and wastewater capacity to meet the growing traffic and population demands of our communities. Excellent progress has been made, and to date most projects are moving ahead as scheduled.

Construction is currently underway on 20 road projects, 13 water projects, and eight wastewater projects. Before the end of 2004, an additional five road projects, eight water projects, four wastewater projects will be tendered.

For 2004, expenditures expressed as a percentage of the approved budgeted amounts on projects managed by ID & C are forecast as 100%, 68% and 82% for roads, water and wastewater projects, respectively. This represents a substantial improvement in infrastructure delivery and is an unprecedented achievement at York Region.

The Senior Management Group has reviewed this report.