

## **COMMITTEE OF THE WHOLE - JUNE 20, 2005**

### **ROAD RESURFACING, ROAD RECONSTRUCTION AND RURAL ROADS UPGRADING PROGRAM: 2006**

#### **Recommendation**

The Commissioner of Engineering and Public Works recommends:

1. That the proposed 2006 road resurfacing, road reconstruction and rural road upgrade program be endorsed in principle by Council; and
2. That the Commissioner of Engineering and Public Works be authorized to engage external professional services for the preliminary engineering and design of the priority projects in accordance with the approved 2005 Capital Budget and Forecast (Project Nos. 1566-0-05, 1575-0-05 and 1577-0-05).

#### **Economic Impact**

There is no additional economic impact to the City of Vaughan as the necessary resources have been allocated and approved.

#### **Purpose**

To seek Council endorsement in principle of the proposed 2006 road program and authorization to employ external professional engineering services for the preliminary engineering and design of these proposed construction projects.

#### **Background - Analysis and Options**

##### **City Road System and Needs**

In the spring of 2005, the City undertook to review the condition of the existing roads that were previously identified with "Now", "1-5 Year", "6-10 Year" and "Adequate" needs. A list was prepared with priority ratings, type of improvement recommended and an estimated cost for each road section proposed for 2006.

##### **Current Methodology**

In the report to Council on June 28, 2004, Item 37, Report No. 55, Council endorsed a Five Year Road Program (2005-2009). The adoption of this program was to deal with the increasing backlog of deteriorating roads and to provide Council with a comprehensive plan for road upgrading across the City. These programs (Road Resurfacing, Road Reconstruction and Rural Road Upgrading) were prepared and road sections are evaluated utilizing factors such as traffic volumes and condition rating of the road facility. Consideration was also given to other factors such as other roads that are in the same vicinity that are also deficient and that were constructed in the same era.

Additionally, ongoing discussions take place with staff from our Public Works Department regarding the condition of existing underground services such as sewers and watermains. If there is also a potential need to perform substantial repairs or replacement of underground services in the near future, then the road need in those locations will be deferred to be addressed at the same time as the underground services remediation. This approach proves to be much more cost effective and also minimizes inconvenience to the residents due to the construction activities.

As of our latest road assessment inventory completed in May 2004, approximately 60 kilometers of road were found deficient and required rehabilitation and/or reconstruction at an estimated cost of \$27.4 Million. An additional 58 kilometers requires resurfacing at an estimated cost of \$12 Million within 5 years to avoid further deterioration into the deficient category.

It is noted that the 2005 - 2009 five year road program and estimated costs are preliminary only and will be revised and updated through the development of the Pavement Management System (PMS) Software (Project 1536-0-04) which is planned for implementation commencing in the fall of 2005. The analysis from the new system will better define our needs for sustaining pavements and model our road network performance over the complete road life cycle. As a product of the modeling and analysis, the Engineering and Public Works Department will be bringing forward a revised, 5 year Roads Program and presentation to a future Committee of the Whole Working Session.

The 2005 Capital Budget funding has been approved for the pre-engineering and detailed design of the proposed 2006 Road Resurfacing (Project No. 1577-0-05), Road Reconstruction (Project No. 1575-0-05) and Rural Road Upgrade (Project No. 1566-0-05) programs. The implementation of the 2006 programs will require employment of external professional engineering services.

### **Relationship to Vaughan Vision 2007**

This report is consistent with the priorities previously set by Council.

### **Conclusion**

In order to keep up with the road needs, current funding levels should be maintained to continue to implement the five year program for road resurfacing, road reconstruction and rural road upgrade. External professional engineering services are required to assist City Engineering staff in the preliminary and detail design activities.

### **Attachments**

1. 2006 Road Program

### **Report prepared by:**

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Respectfully submitted,

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Commissioner of Engineering and Public Works

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Director of Engineering Services

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## Attachment 1

<b>2006 ROAD PROGRAM</b>								
ITEM NO.	ROAD NAME	PRIORITY RATING	FROM	TO	LENGTH (M)	TYPE OF ROAD	URBAN / RURAL	ESTIMATE COST
<b>RESURFACING</b>								
RS03-52	ALBION-VAUGHAN RD.	37	0.5KM. N. OF HWY. 50	KIRBY RD.	200	ARTERIAL	RURAL	\$9,000
RS03-53	EDGELEY BLVD.	37	APPLEWOOD CRES.	0.15KM. NORTH OF	670	INDUSTRIAL	URBAN	\$175,000
RS03-54	MULLEN DR.	27	NEW WESTMINSTER DR.	COLVIN CRES.	360	LOCAL	URBAN	\$113,000
RS03-55	YORK HILL BLVD.	25	HILDA AVE.	CLARKE AVE.W.	840	LOCAL	URBAN	\$182,000
RS03-56	CAMPBELL AVE.	19	REJANE CRES.	ARNOLD AVE.	400	LOCAL	URBAN	\$72,000
RS03-57	CAMPBELL AVE.	11	ARNOLD AVE.	SOUTH END	110	LOCAL	URBAN	\$9,000
RS03-58	YORK HILL BLVD.	19	LISA CRES.	THEODORE PL.	600	LOCAL	URBAN	\$132,000
RS03-59	CONLEY ST.	18	STEELES AVE.	NEW WESTMINSTER	670	LOCAL	URBAN	\$211,000
RS03-60	CONLEY ST.	11	W. OF THURMAN RD.	NEW WESTMINSTER	270	LOCAL	URBAN	\$59,000
RS03-61	PINEWOOD DR.	10	POWELL RD.	HILDA AVE.	490	LOCAL	URBAN	\$89,000
RS03-62	ESTHER CRES.	10	NORTH MEADOW CR.	YORK HILL BLVD.	545	LOCAL	URBAN	\$136,000
RS03-63	MULLEN DR.	18	COLVIN CR.	MCMORRAN CR.	900	LOCAL	URBAN	\$284,000
RS03-64	DONNA MAE CRES.	15	CENTRE ST.	SOUTH END	300	LOCAL	RURAL	\$24,000
RS03-65	NETHERFORD RD.	15	MAJOR MACKENZIE DR.	NAYLON ST.	350	LOCAL	URBAN	\$63,000
RS03-66	MERINO RD.	14	KEELE ST.	RYDER RD.	100	LOCAL	URBAN	\$18,000
RS03-67	MILNER GATE	13	MULLEN DR.	BATHURST ST.	220	LOCAL	URBAN	\$49,000
RS03-68	JOANNA CR.	12	YORK HILL BLVD.	CLARK AVE. WEST	550	LOCAL	URBAN	\$98,000
RS03-69	THORNBURY CIRCLE	12	SPRING GATE BLVD.	SPRING GATE BLVD.	340	LOCAL	URBAN	\$65,000
RS03-70	PLANCHETT RD.	12	LANGSTAFF RD.	NORTH END	430	INDUSTRIAL	URBAN	\$91,000
RS03-71	GILMORE CRES.	11	MULLEN DR.	MULLEN DR.	340	LOCAL	URBAN	\$85,000
RS03-72	CAMPBELL AVE.	10	ATKINSON AVE.	REJANE CT.	390	LOCAL	URBAN	\$82,000
RS03-73	BASALTIC RD.	10	PLANCHET RD.	0.47M NORTH	470	INDUSTRIAL	URBAN	\$98,000
RS03-74	RICHMOND ST.	10	MAJOR MACKENZIE DR.	WEST LIMIT	100	LOCAL	URBAN	\$28,000
RS03-75	TANGREEN CIRCLE	6	SPRING GATE BLVD.	SPRING GATE BLVD.	380	LOCAL	URBAN	\$67,000
RS03-76	MARITA PLACE	6	GLEN SHIELDS AVE.	GLEN SHIELDS AVE.	410	LOCAL	URBAN	\$74,000
RS03-77	CALVIN CHAMBERS	6	130M W OF CLARKHAVEN ST.	WEST END	170	LOCAL	URBAN	\$31,000
RS03-78	REJANE CRES.	7	CAMPBELL AVE.	CAMPBELL AVE.	370	LOCAL	URBAN	\$66,000
<b>RECONSTRUCTION</b>								
RC03-30	WINDRUSH CT.	31	STEGMAN'S MILLS RD.	NORTH END	150	LOCAL	RURAL	\$61,000
RC03-31	CEDAR VALLEY CR.	29	STEVENSON AVE.	EAST END	340	LOCAL	RURAL	\$86,000
RC03-32	RANCHTRAIL RD.	28	HUNTINGTON RD.	WEST END	800	LOCAL	RURAL	\$382,000
RC03-33	HOWLAND HILL RD.	25	NASHVILLE RD.	WEST END	100	LOCAL	RURAL	\$143,000
RC03-34	MILLWOOD PARKWAY	22	0.4KM. NORTH MAJOR MACK.	0.87KM. NORTH	470	LOCAL	RURAL	\$132,000
RC03-35	PETERMAR DR.	21	MILLWOOD PARKWAY	0.39 KM. WEST	390	LOCAL	RURAL	\$100,000
RC03-36	HIGHVALLEY CT.	20	KIPLING AVE.	EAST END	400	LOCAL	RURAL	\$111,000
RC03-37	HEDGEROW LANE	19	HWY. 27	WEST END	470	LOCAL	URBAN	\$226,000
RC03-38	COLDSRING RD.	19	NASHVILLE RD.	SOUTH END	480	LOCAL	RURAL	\$135,000
RC03-39	MILLWOOD PARKWAY	18	MAJOR MACKENZIE DR.	0.4 KM. NORTH	396	LOCAL	RURAL	\$110,000
RC03-40	VALLEYVIEW CT.	17	STEVENSON AVE.	EAST END	152	LOCAL	RURAL	\$43,000
RC03-41	KLEIN'S RIDGE	16	NASHVILLE RD.	NORTH END	351	LOCAL	RURAL	\$99,000
RC03-42	BELL CT.	16	ISLINGTON AVE.	WEST LIMIT	100	LOCAL	RURAL	\$24,000
RC03-43	HEDGEROW CT.	13	HEDGEROW LANE	SOUTH END	90	LOCAL	URBAN	\$70,000
RC03-44	KIPLING AVE.	13	TESTON ROAD	HIGH VALLEY CT.	180	LOCAL	RURAL	\$48,000
RC03-45	MILLWOOD COURT	10	MILLWOOD PARKWAY	EAST END	152	LOCAL	RURAL	\$43,000
RC03-46	WOODEND PLACE	12	MAJOR MACKENZIE DR.	SOUTH END	300	LOCAL	RURAL	\$84,000
RC03-47	STEVENSON AVE.	26	NASHVILLE RD.	VALLEYVIEW CT.	229	LOCAL	RURAL	\$65,000
RC03-48	GREEN VALLEY CT.	16	HIGH VALLEY CT.	SOUTH END	160	LOCAL	RURAL	\$41,000
RC03-49	SHADY VALE LANE	18	NESVER CT.	PHILLIPS LANE	470	LOCAL	URBAN	\$363,000
RC03-50	RIMWOOD CIRCLE	13	PHILLIPS LANE	NORTH END	40	LOCAL	URBAN	\$26,000
RC03-51	NESVER CT.	13	SHADY VALE LANE	EAST END	60	LOCAL	URBAN	\$40,000
RC03-52	LOUISE CIRCLE	12	SHADY VALE LANE	WEST END	40	LOCAL	URBAN	\$26,000
<b>RURAL ROAD UPGRADE</b>								
RR03-13	KING VAUGHAN	36	ALBION VAUGHAN RD.	COLD CREEK RD.	990	N/A	RURAL	\$189,000
RR03-14	COLD CREEK RD.	32	KIRBY ROAD	KING VAUGHAN RD.	2050	N/A	RURAL	\$503,000
RR03-15	KIRBY RD.	29	COLD CREEK RD.	HUNTINGTON RD.	2040	N/A	RURAL	\$1,130,000
*According to Road Needs Study 2000 - 2004 Update								
The larger the priority rating, the greater the need for improvement								