



Corporate *NO: R019*

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Report *COUNCIL DATE: February 5, 2001_*

REGULAR COUNCIL

TO: **Mayor & Council** DATE: **January 18, 2001**

FROM: **General Manager, Engineering** FILE: **2141-001**

SUBJECT: **Status Report on 2000 Roads, Drainage, Water, and Sewer Capital Construction**

RECOMMENDATION

For information.

INTENT

To provide Council with a status report on the 2000 Capital Construction Program for water, sewer, roads and drainage.

BACKGROUND

The 2000 Construction Program is now substantially complete and this report provides a brief overview of what has been constructed and overall assessment of how this construction went.

2000 Capital Program Highlights

Earlier last year we provided Council with a copy of the full 2000 Capital Construction Booklet, which outlined all the capital works for this year. The following is a summarized list of the larger projects which are now substantially complete.

Highlights of Roads Program

<i>Location</i>	<i>Description</i>	<i>Cost</i> <i>(\$ millions)</i>

Nordel Way: Scott Road – 12400 Block	New arterial road construction to link Nordel Way in Delta with 88 Avenue in Surrey including significant utility relocation and land acquisition.	\$5.6
Various locations	Program of arterial road repaving to provide long-term / least cost approach for road system.	\$2.2
32 Avenue: 152 Street – 160 Street	Arterial widening between 152 Street and 15400 block, culvert upgrading at Morgan Creek.	\$0.8
Various Locations	Program of minor and collector road repaving to provide long-term / least cost approach for road system, bus stop improvements, upgrading of school drop-off/pick-ups bays and sidewalks at various locations.	\$2.0
Scott Road: 98 Avenue – 103A Avenue	Phase One of Scott Road upgrading, including retaining wall construction and preloading.	\$2.0
Various Locations	2.5km of pathway construction for the Serpentine Greenway system, collector road upgrading on 68 Avenue: 128 Street – 132 Street, 6 new traffic signals, 3 new pedestrian signals and sidewalks at various locations.	\$2.8

Highlights of Water Program

<i>Location</i>	<i>Description</i>	<i>Cost (\$ millions)</i>
Various	New and replacement water mains to meet the needs of growth and existing development.	\$2.1

Highlights of Sewer Program

<i>Location</i>	<i>Description</i>	<i>Cost (\$ millions)</i>
Crescent Road	New large diameter force main connecting King George Highway to GVRD trunk at 35A Avenue to provide for growth within King George Highway Corridor and Rosemary Heights.	\$1.6
Various	Local Improvement sanitary sewers to service properties with failing septic systems.	\$1.3
Crescent Beach	Upgrading of two sanitary sewer pump stations.	\$0.2

Highlights of Drainage Program (Including Flood Control Program)

<i>Location</i>	<i>Description</i>	<i>Cost (\$ millions)</i>
Crescent Beach	Flood/erosion protection and beach replenishment.	\$1.2
Dingwall Creek	Station trunk diversion sewer to protect Dingwall Creek from erosion.	\$1.0
Upper Serpentine pump station	2.0 m ³ /s fish friendly screw pump at 88 Avenue and 180 Street	\$1.5
Drinkwater Diversion	Storm sewer diversion to reduce flooding impact on Fry's Corner north.	\$1.0
Unwin Detention Pond	To control storm water runoff leading into Hyland Creek for	\$0.9

	erosion protection.	
Pattullo / Manson Channel	Improve the channel conveyance in the South Westminster area from flooding.	\$0.9
Bear Creek Dykes	To protect lowlands from storm water runoff from the Bear Creek catchment contained by dykes.	\$0.8
Upper Serpentine Dyke Tie-In	To protect Serpentine lowlands from upland storm water runoff. The dykes are being improved.	\$1.9
Latimer Dyke Tie-In	Relocation of Latimer Creek and Dyke tie-in. New crossing: Harvie and 184 Street.	\$1.4
Various Projects	Upgrade improvements to existing storm sewer, culverts, ditches and other drainage facilities.	\$1.0
Surrey's Creeks and Streams	SHaRP program of habitat restoration in Surrey's creeks plus environmental education and mapping work. *(See Appendix 1.)	\$0.4

Status of the Lowland Flood Control Project

The flood control program for the Serpentine Nicomekl lowlands is a comprehensive program of dyke improvement and drainage pump stations for the lands upstream of the two large sea dams just west of King George Highway. Over the last two years, extensive construction has taken place with works including the upgrading of the Upper Serpentine, Bear Creek and Latimer dykes and for 2001 a new large pump station for the Upper Serpentine area (88 Avenue and 176 Street).

Last summer, over 175,000 m³ of clay material was placed on the dykes. The new Latimer Creek was completed and activated with the completion of the crossings at 184 Street and Harvie Road. The conveyance works for the Fry's Corner pump station were also completed. All of the dyke projects were built using low-cost fill from excavations to minimize costs. Significant cost savings were also achieved by using materials from City projects such as channel excavations and detention ponds.

Following this approach of opportunistic cost savings, miscellaneous components of the future flood control works were also implemented to take advantage of additional cost savings and advance the completion schedule.

The Serpentine-Nicomekl lowland flood control project is on schedule. Phase I of the program, which is the protection of the most flood-prone areas in the Upper Serpentine, is on track, to be completed by 2002. Extensive consultation with the public has continued with additional opportunities for feedback and information through mail-outs and notices in local newspapers.

The flood protection works constructed so far resulted in a significant reduction of flooding during the recent storm on January 4. Although many components remain to be built, we are managing to keep an accelerated pace for the implementation of the flood control works and are now experiencing some of the related benefits.

Summary Comments

The works outlined in the previous tables have been constructed to meet the needs of a growing City of Surrey and to meet strategic objects established by Council. These works will help ensure that the residents of Surrey receive a high level of service from the City's utilities, are able to travel on a safe and adequate road system, and that the City's farm land will have a higher level of flood protection.

All the original capital plan has been completed within budget. Additional scope was added to a number of contracts to take advantage of having additional work constructed taking advantage of lowest tendered rates while the contractor was mobilized and working in a particular area. All such scope additions were added in

accordance with established City operational procedures.

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