REGION OF OTTAWA-CARLETON

RÉGION D'OTTAWA-CARLETON

MEMORANDUM NOTE DE SERVICE

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<u>Information Previously Distributed</u>

To Be Listed on Transportation

DATE 31 March 1999

Committee Agenda 19 May 99

TO/DEST.

The Chair and Members of Council

FROM/EXP.

Director, Infrastructure Maintenance Division Environment and Transportation Department

SUBJECT/OBJET

1999 RESURFACING PROGRAMME

The Environment and Transportation Department's 1999 Resurfacing Programme was circulated in draft form to all Regional Councillors, Regional Departments, Area Municipalities, Utility Companies and the Regional Cycling Advisory Group in December 1998 and January 1999 to ensure a coordinated effort to our collective infrastructure efforts this year.

The finalized programme based on the comments received and follow-up investigations is outlined in Annex A. The finalized Former Provincial Highways programme is outlined in Annex B.

Pavement structural condition information along with traffic loading data and other information is used by the Department's Pavement Management System to determine the optimum time (time that provides the lowest life cycle cost) for resurfacing work. If resurfacing is delayed beyond this optimum time, the pavement structure starts to rapidly deteriorate toward a "failed" state and road maintenance costs increase dramatically.

The most effective treatment for failed pavement is total reconstruction. Since this costs at least 10 times as much as resurfacing, it is important to carry out preventative maintenance work in a timely fashion.

Some road sections with failed pavements are included on the 1999 Resurfacing Programme due to limited reconstruction capital budgets. The objective for these pavements is to apply the most economical maintenance strategies required to keep these road sections in at least a minimal safe and passable condition pending reconstruction. Depending on the construction schedule envisioned in the Capital Budget and other variables, these strategies will range from carrying out very localized repairs e.g. spot repairs around catchbasins and other ironworks, severe areas of cracking etc. to full resurfacing.

Priorities for road sections identified as requiring resurfacing in the current year are established based on cost-effectiveness. User costs and the overall road system condition are considered. Roads with larger traffic volumes involve greater user costs if the roadway is allowed to deteriorate substantially. Also, the road network as a whole must be kept to a minimum standard regardless of traffic volume. These factors are used to optimize the overall year's resurfacing programme and determine the optimum priority for each road section.

The 1999 resurfacing Capital Budget is insufficient to cover all of the 1999 needs. Subject to identification of further coordination conflicts, works shown in Annexes A and B will be carried out in order of priority down to the limits of available funding.

Should insufficient funds exist to complete a prioritized location on the list, this location will be passed over and the next location(s) that can be completed within the budget allocation will be selected. For illustration purposes, based on preliminary cost estimates, the current resurfacing budget of \$7 M would permit works to be completed at all locations (excluding those with conflicts) down to approximately rank 27 on the list shown in Annex A in 1999. Again, for illustration purposes, based on preliminary cost estimates, the current former provincial highways resurfacing budget of \$2 M would permit works to be completed down to approximately rank 3 on the list shown in Annex B in 1999. A map showing the 1999 resurfacing programme based on the above budget figures is attached. The map includes work planned on former provincial highways.

The actual number of road sections that can be completed will depend on tender prices received. Works not constructed in 1999, due to lack of funding or due to co-ordination conflicts, will be carried over for reconsideration in the 2000 programme.

In 1999, the Environment and Transportation Department will continue to use "hot in-place" and "cold in-place" recycling on various projects to significantly reduce the amount of new aggregate and asphalt used. The Department is also embarking on a plan that targets a zero net production of waste material from the Resurfacing Programme. Revised quality assurance procedures and new asphalt materials introduced in recent years are expected to reduce life-cycle costs. Some examples of initiatives in this area include the implementation of "end-result" contract specifications, the use of "thin lift nuclear density gauges" to measure asphalt compaction, the use of polymer-modified asphalts and "ultrathin high-friction asphalt mixes" as well as the use of state-of-the-art materials, testing procedures and equipment. It has been found that a 1% improvement in pavement process control can increase the length of the pavement life cycle by at least 10%.

If you require additional information, please do not hesitate to contact the undersigned.

Approved by L. Ross on behalf of W. S. Beveridge, P. Eng.

Attach. (3)

ANNEX A

Region of Ottawa-Carleton Environment and Transportation Department Infrastructure Maintenance Division 1999 Resurfacing Programme (Priority Order)

Priority	Name	From	То	Comment
1	Carling Avenue (RR 38)	Moodie Dr. (RR 59)	Bayshore Dr.	Surface Treatment only
2	Rideau Valley Drive North (RR 13)	Island View Cres. South Limit	Old Hwy 16 (RR 73)	Coordinate traffic management for bridge work and coordinate with local sidewalk improvements
3	Kirkwood Avenue (RR 67)	Carling Ave. (RR 38)	Richmond Rd. (RR 36)	Coordinate with 1999 watermain project
4	Somerset Street W. (RR 36)	Kent St. (RR 83)	Elgin St. (RR 91)	Delete – sewer works 1999 & 2003
5	O'Connor Street (RR 87)	Isabella St. (RR 62)	Somerset St. (RR 36)	Coordinate with traffic management and City of Ottawa projects at Waverly St., McLeod St., and Catherine St.
6	Metcalfe Street (RR 89)	McLeod Ave. (RR 89)	Laurier Ave. (RR 48)	Coordinate with traffic management and City of Ottawa sewer separation need
7	Roger Stevens Drive (RR 6)	Malakoff Rd.	McCordick Rd.	•
8	Victoria Street (RR 6)	West limits Village Metcalfe	East limits Village Metcalfe	
9	Albert Street (RR 40)	Bay St.	Bank St. (RR 31)	Coordinate with traffic management
10	Russell Road (RR 26)	Saumure Rd. (RR 37)	East Limit Ottawa-Carleton	Ÿ
11	Parkdale Avenue (RR 71)	Wellington St. (RR 36)	Ottawa River Pkwy.	Delete – 2000 watermain project
12	Hunt Club Road (RR 32)	Transitway Overpass	Cahill Dr. East	Coordinate with Daze St. widening
13	Orleans Boulevard (RR 56)	Innes Road (RR 30)	St. Joseph Blvd. (RR 34)	Coordinate with cathodic protection programme
14	Blair Road (RR 27)	Ogilvie Rd. (RR 50)	Montreal Rd. (RR 34)	Coordinate with cathodic protection programme
15	Data Center Road (RR 111)	Heron Rd. (RR 16)	Transitway Entrance @ Billings Sta.	
16	Carling Avenue (RR 38)	Bayshore Dr.	Richmond Rd. (RR 36)	
17	Lyon Street (RR 81)	Somerset St. (RR 36)	50 m south of Wellington St. (RR 36)	Delete – 2001 watermain project
18	Catherine Street (RR 60)	Bronson Ave. (RR 79)	Elgin St. (RR 91)	Coordinate with watermain upgrade/extension project
19	Walkley Road (RR 74)	Riverside Dr. (RR 19)	Bank St. (RR 85)	
20	Prince of Wales Drive & Preston St. (RR 73)	,	Carling Ave. (RR 38)	
21	Vanier Parkway (RR 19)	Coventry Rd. (RR 50)	Beechwood Ave. (RR 44)	Coordinate with cathodic protection programme
22	Laurier Avenue (RR 48)	Bronson Ave. (RR 79)	Kent St. (RR 83)	Delete – City of Ottawa 2002 sewer project
23	March Road (RR 49)	Klondike Rd.	Dunrobin Rd. (RR 9)	Coordinate with possible watermain extension
24	Richmond Rd. & Wellington St. (RR 36)		Western Ave.	Delete – watermain, sewer, road project
25	Robertson Road (RR 36)	200 m East of Westcliffe Rd.	210 m East of Stinson Ave.	
26	Riverside Drive (RR 19)	Uplands Dr.	Brookfield Rd. (RR 51)	Coordinate with cathodic protection programme
27	Thomas Dolan Parkway (RR 46)	Carp Rd. (RR 5)	Dunrobin Rd. (RR 9)	
28	Greenbank Road (RR 13)	Fallowfield Rd. (RR 12)	300 m South of Hunt Club (RR 32)	
29	Hunt Club Road (RR 32)	Riverside Dr. (RR 19)	100 m East of Bowesville Rd.	Coordinate with NavCan entrance widening
30	River Road (RR 19)	Flag Station Rd.	Lewer St.	Coordinate traffic management for bridge work and coordinate with Armstrong Rd. realignment
31	McArthur Road (RR 68)	Vanier Pkwy. (RR 19)	St. Laurent Blvd. (RR 26)	Coordinate with watermain & sewer project 1999/2000
32	Jeanne D'Arc Blvd. (RR 55)	Innes Road (RR 30)	St. Joseph Blvd. (RR 34)	Coordinate with cathodic protection programme and new traffic signal installations
33	Ogilvie Road (RR 50)	Blair Rd. (RR 27)	Montreal Road (RR 34)	Coordinate with cathodic protection programme
34	St. Joseph Boulevard (RR 34)	Jeanne D'Arc Blvd. (RR 55)	Gabriel St.	Defer to 2000 for Gloucester & Cumberland improvement programme
35	Woodroffe Avenue (RR 15)	Hwy 417	Carling Ave. (RR 38)	Coordinate traffic management with Maitland Ave. /Hwy 417 overpass rehabilitation, Woodroffe forcemain construction south of Hwy 417 and with cathodic protection programme
36	River Road (RR 68)	Montreal Rd. (RR 34)	River Rd. (RR 68)	and man damed to proteotion programme

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Region of Ottawa-Carleton Environment and Transportation Department Infrastructure Maintenance Division 1999 Resurfacing Programme (Priority Order)

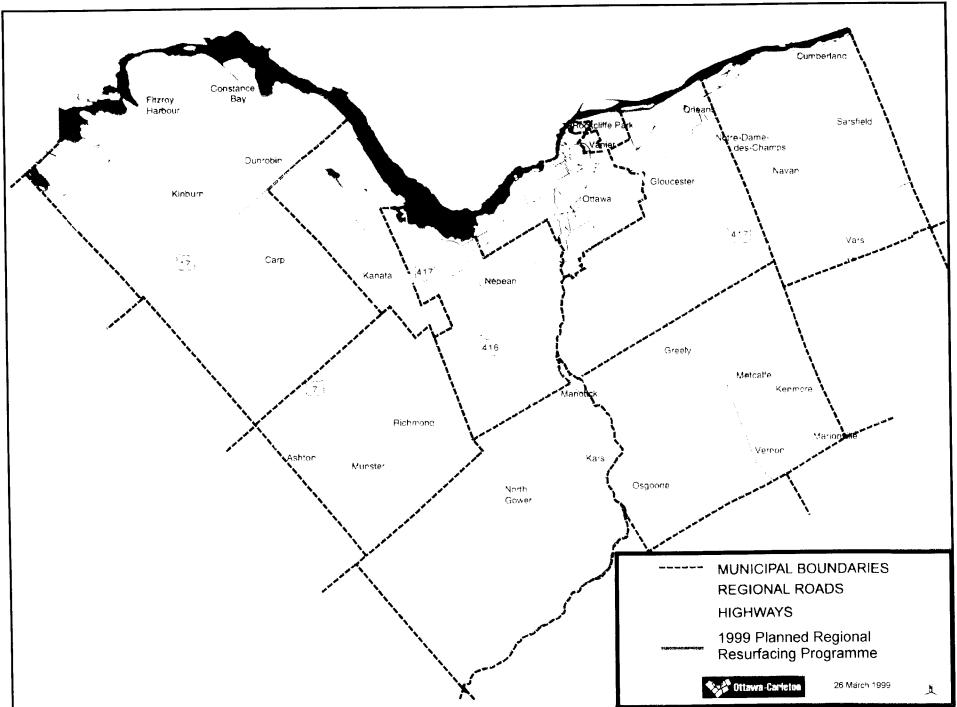
Priority	Name	From	То	Comment
37	Brookfield Road (RR 51)	Riverside Dr. (RR 19)	Airport Pkwy. (RR 79)	Coordinate with cathodic protection programme and Flannery Dr. modifications
38	McArthur Road (RR 68)	River Road (RR 68)	Vanier Parkway (RR 19)	
39	Beechwood (RR 44)	Rideau River Bridge Deck	Birch Ave.	Coordinate with cathodic protection programme and possible sewer work
40	Innes Road (RR 30)	100 m West of Dorima St.	450 m West of O' Toole Rd.	Defer – development on-going
41	Kent Street (RR 83)	Chamberlain Ave. (RR 62)	Wellington St. (RR 36)	Coordinate with watermain sliplining access at Gloucester St. and with traffic management
42	Colonial Road (RR 28)	Navan Rd. (RR 28)	Rockdale Rd.	•
43	Sussex Drive (RR 93)	E. Limit MacD. Cartier Br. Overpass	Princess Ave.	Defer – intersection modifications
44	Walkley Road (RR 74)	100 m West of Hwy 417 Overpass	Base Line Rd. (RR 43)	
45	Russell Road (RR 26)	400 m East of Hawthorne Rd. (RR 32)	Leitrim Rd. (RR 14)	Coordinate with cathodic protection programme
46	St. Joseph Blvd. & Queen St. (RR 34)	500 m East of Tenth Line Rd. (RR 47)	Dunning Rd. (RR 35)	Coordinate with St. Joseph & Tenth Line safety study, intersection modification at Access Rd. A and with cathodic protection programme
47	Holland Avenue (RR 69)	Carling Ave. (RR 38)	Scott St. (RR 40)	
48	Richmond Road (RR 36)	Acres Rd. (RR 16)	Carling Ave. (RR 38)	Defer - West Transitway 2003
49	Merivale Road (RR 63)	Baseline Road (RR 16)	Kirkwood Ave. (RR 67)	Delete – roadway modification due to development
50	Hemlock Road (RR 44)	Birch Ave.	St. Laurent Blvd. (RR 26)	Coordinate with cathodic protection programme
51	Wellington Street (RR 36)	Western Ave.	Parkdale Ave. (RR 71)	Delete – 2000 City of Ottawa sewer project
52	Wellington Street (RR 36)	Parkdale Ave. (RR 71)	Somerset St. (RR 36)	
53	Uplands Drive (RR 107)	Alert Rd.	Hunt Club Road (RR 32)	Coordinate with cathodic protection programme
54	St. Patrick Street (RR 44)	Sussex Dr. (RR 93)	King Edward Ave. (RR 99)	Delete – 2002 City of Ottawa sewer project
55	Leitrim Road (RR 14)	Old Hwy 31 (RR 31)	Base Line Rd. (RR 43)	Coordinate with cathodic protection programme
56	Regional Rd. 114 & Main St. (RR 114)	River Road (RR 19)	Logan Farm Dr.	
57	Scott, Wellington & Albert St. (RR 40)	Churchill Ave. (RR 65)	Bay St.	Delete – City of Ottawa sewer separation project on-going, Region chamber work at Albert and Bronson
58	Dalmeny Road (RR 4)	River Road (RR 19)	2nd Line Rd.	
59	Ferry Road (RR 7)	Galetta Side Rd. (RR 22)	Ottawa River Ferry Dock	
60	Fallowfield Road (RR12)	Dwyer Hill Rd. (RR 3)	Munster Side Rd. (RR 45)	

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Region of Ottawa-CarletonEnvironment and Transportation Department Infrastructure Maintenance Division 1999 Former Provincial Highways Resurfacing Programme (Priority Order)

Priority	Name	From	То	Comments
1	Old Hwy 31 (RR 31)	Snake Island Rd. (RR 6)	South Limit Ottawa-Carleton	
2	Old Hwy 17 (RR 174)	Westbound Ramps @ Champlain St.		
3	Old Hwy 17 (RR 174) West Bound Lanes	Blair Rd. (RR 27)	Montreal Rd. (RR 34)	Coordinate with Bus Lane reconstruction
4	Old Hwy 17 (RR 174)	Montreal Rd. (RR 34) Bridge Deck	350 m East of Jeanne D'Arc Blvd. (RR 55)	Coordinate traffic management with other RR 174 work
5	Old Hwy 15 (RR 29)	South East Limit Ottawa-Carleton	Waba Rd.	

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ANNEX A