MEMORANDUM
NOTE DE SERVICE

Our File/N/Réf. Your File/V/Réf.

DATE

TO/DEST. The Chair and Members of Council
FROM/EXP. Director Infrastructure Maintenance Division Environment and Transportation Department

SUBJECT/OBJET 1997 RESURFACING PROGRAMME

## BACKGROUND

The Department's 1997 Resurfacing Programme was circulated in draft form to all Regional Councillors, Regional Departments, Area Municipalities, Utility Companies and the Regional Cycling Advisory Group in November 1996 and February 1997.

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

Pavement structural and 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 cost-effective treatment for "failed" pavements is total reconstruction. Since this costs about 10 times as much as resurfacing, it is important to carry out "preventative maintenance" works in a timely fashion.

Some road sections with "failed" pavements are included on the 1997 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 iron works, severe areas of cracking, etc.) to full resurfacing.

Since the 1997 Resurfacing Capital Budget is insufficient to cover all of the 1997 needs, subject to the identification of further conflicts, works shown in Annex A will be carried out in order of priority down to the limit of the 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.

Based on the preliminary cost estimates, it is expected that it will be possible to complete works at all locations, excluding those with conflicts, down to rank 36 on the attached list in 1997.

The actual number of road sections that will be completed will depend on tender prices received.
Works not constructed in 1997, due to lack of funding or due to co-ordination conflicts, will be carried over for reconsideration in the 1998 programme.

In 1997, the Department will use "hot-in-place" recycling and continue to employ "cold-in-place" recycling and cold milling rehabilitation strategies on various projects to significantly reduce the amount of new aggregate and asphalt used (non-renewable natural resources).

Revised quality control procedures and new asphalt materials introduced in recent years are expected to reduce life-cycle costs.

Some examples of staff 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 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 $10 \%$.

If you require additional information, please do not hesitate to contact Mr. L.A. Ross (Ext. 1114) or Mr. W.S. Beveridge (Ext. 1113).

Approved by
L.A. Ross for W.S. Beveridge

## LAR/ms

Attach. ( 1 )

## 1997 RESURFACING PROGRAMME

| PRIORITY | STREET | FROM | TO | PROPOSED WORK |
| :---: | :---: | :---: | :---: | :---: |
| 1 | TRAIL RD | MOODIE DR | RMOC LANDFILL SITE | Pulverized and two lifts asphalt |
| 2 | BRONSON AVE S/B | RIDEAU CANAL BRIDGE | SUNNYSIDE AVE | Coordinated with Engineering Services, asphalt portion |
| 3 | BRONSON AVE | DUNBAR BRIDGE | SUNNYSIDE AVE | Coordinated with Engineering Services, asphalt portion |
| 4 | ISABELLA ST | BANK ST | ELGIN ST | Mill and Overlay |
| 5 | SUSSEX DR | 0.1 km S OF RIDEAU ST | MURRAY ST | Defer - Embassy Construction |
| 6 | HAWTHORNE RD | HUNT CLUB RD | RUSSELL RD | Defer - Reconstruction 1998 |
| 7 | RIVERSIDE DR | OTTAWA CITY LIMITS | BEG OF CURBS | Defer - RMOC Watermain |
| 8 | METCALFE ST | LAURIER AVE | WELLINGTON ST | Mill and Overlay |
| 9 | ST PATRICK ST | SUSSEX DR | DALHOUSIE ST | Defer - Ottawa Sewer |
| 10 | MOODIE DR | FITZGERALD RD | CORKSTOWN RD | Defer - Nepean Sewer |
| 11 | LAURIER AVE | TRANSITWAY | CHARLOTTE ST | Coordinated with Engineering Services, asphalt portion |
| 12 | RICHMOND RD | GOLDEN AVE | WESTERN | Defer - Ottawa Sewer - Spot Repairs 1997 |
| 13 | WOODROFFE AVE | ADIRONDACK DR | QUEENSWAY | Mill and Overlay |
| 14 | SLATER ST | BANK ST | ELGIN ST | Mill and Overlay |
| 15 | KING EDWARD AVE | LAURIER AVE | RIDEAU ST | Defer - Water and Sewer |
| 16 | WELLINGTON ST | ISLAND PARK DR | HOLLAND AVE | Defer - Ottawa Sewer - Spot Repairs 1997 |
| 17 | CATHERINE ST | BRONSON AVE | ELGIN ST | Coordinated with Engineering Services, asphalt portion |
| 18 | CARLING AVE | HERTZBERG RD | MOODIE DR | Cold In Place Recycling |
| 19 | LEES AVE | MAIN ST | QUEENSWAY | Mill and Overlay |
| 20 | FISHER AVE | MEADOWLANDS DR | BASELINE RD | Mill and Overlay ( 2 lifts min) |
| 21 | ELGIN ST | PRETORIA BRIDGE | LAURIER AVE | Defer - Ottawa Sewer - Spot Repairs 1997 |
| 22 | ELGIN ST | LAURIER AVE | WELLINGTON ST | Delete- Wellington St \& NCC construction |
| 23 | MITCH OWENS RD (RR\#8) | RIVER RD (RR\#19) | HWY\#31 | Cold In Place Recycling |
| 24 | DWYER HILL RD(RR\#3) | FRANKTOWN RD (RR\#10) | JOCK RIVER | Cold In Place Recycling |
| 25 | DWYER HILL RD(RR\#3) | JOCK RIVER | HWY \# 7 | Hot In Place Recycling |
| 26 | CHURCHILL AVE | CARLING AVE | SCOTT ST | Mill and Overlay |
| 27 | LYON ST | SOMERSET ST | ALBERT ST | Defer - Spot Repairs Done in 1996/Sidewalk |
| 28 | CYRVILLE RD | INNES RD | OGILVIE RD | Mill and Overlay |
| 29 | CARLING AVE | CHURCHILL AVE | KIRKWOOD AVE | Joints, Mill and Overlay |
| 30 | BANK ST | SURREY AVE * | ALTA VISTA DR | Mill and Overlay |
| 31 | SISKEN CRT | McCLELLAND RD | CUL-DE-SAC | Microsurfacing |
| 32 | CARLING AVE | MOODIE DR | RICHMOND RD | Hot In Place Recycling |
| 33 | METCALFE ST | ISABELLA ST | ARGYLE ST | Mill and Overlay |
| 34 | CARLING AVE EASTBOUND | PRESTON ST | BRONSON AVE | Joints, Mill and Overlay |
| 35 | CARLING AVE WESTBOUND | SHERWOOD DR | BRONSON AVE | Joints, Mill and Overlay |

## TO

ROPOSED WORK

| PRIORITY | STREET | FROM | TO | ROPOSED WORK |
| :---: | :---: | :---: | :---: | :---: |
| 36 | FRANKTOWN RD (RR\#10) | MUNSTER SIDE RD (RR\#45) | CONLEY RD | Hot In Place Recycling |
| 37 | STEWART ST | WALLER ST | KING EDWARD AVE | Defer - Ottawa Sewer |
| 38 | HAWTHORNE AVE | ELGIN ST | MAIN ST | Remove Composite Pavement, Full Depth Asphalt |
| 39 | WALLER ST | STEWART ST | DALY AVE | Defer - MacKenzie King Bridge |
| 40 | MARVELVILLE RD (RR\#4) | YORKS CORNERS RD(RR\#29) | GREGOIRE RD(RR\#41) | Patch and Overlay |
| 41 | RR\#174 EASTBOUND | 1 km FROM HWY\#417 | 3 km FROM HWY\#417 | Mill and Overlay |
| 42 | RR\#117 | HWY\#417 and HWY\#15 | HWY\#417 | Mill and Overlay |
| 43 | MURRAY ST | MACKENZIE AVE | SUSSEX DR | Defer - Embassy Construction |
| 44 | HUNT CLUB RD | HWY\#16 | RIVERSIDE DR | Mill and Overlay |
| 45 | MERIVALE RD | JAMIE AVE | WOODFIELD DR | Mill and Overlay |
| 46 | KENT ST | SOMERSET ST | ALBERT ST | Mill and Overlay |
| 47 | MERIVALE RD | CALDWELL AVE | KIRKWOOD AVE | Mill and Overlay |
| 48 | HERON RD | RIVERSIDE DR | BRONSON AVE | Hot In Place Recycling |
| 49 | HERON RD | BRONSON AVE | BANK ST | Hot In Place Recycling |
| 50 | EAGLESON RD (RR\#49) | CADENCE GATE | HAZELDEAN RD (RR\#36) | Spot Repairs - Iron Works |
| 51 | MOODIE DR (RR\#59) | CORKSTOWN RD (RR\#18) | CARLING AVE (RR\#36) | Cold In Place Recycling |
| 52 | MAIN ST | TORONTO ST | COLONEL BY DR | Mill and Overlay |
| 53 | MEADOWLANDS DR | WOODROFFE AVE | MERIVALE RD | Hot In Place Recycling |
| 54 | HOLLAND AVE | CARLING AVE | WELLINGTON ST | Defer - Ottawa Sewer |
| 55 | FALLOWFIELD RD (RR\#12) | EAGLESON RD (RR\#49) | RICHMOND RD (RR\#59) | Cold In Place Recycling |
| 56 | MERIVALE RD | MACFARLANE RD | JAMIE | Mill and Overlay/Hot In Place |
| 57 | RIVERSIDE DR | WALKLEY RD | HOG'S BACK RD | Mill and Overlay/Hot In Place |
| 58 | ALBERT ST | BANK ST | ELGIN ST | Mill and 2 lifts Overlay |
| 59 | OLD HWY\#31 (RR\#85) | MITCH OWENS RD (RR\#8) | LEITRIM RD (RR\#14) | Cold In Place Recycling with 2 lifts Overlay |
| 60 | PARKDALE AVE | CARLING AVE | WELLINGTON ST | Hot In Place Recycling |
| 61 | DONNELLY RD (RR\#2) | DWYER HILL RD (RR\#3) | BECKETT'S LANDING RD(RR\#5) | Cold In Place Recycling with Overlay |
| 62 | GREENBANK RD | JOCKVALE RD | MALVERN DR | Mill and 2 lifts Overlay |
| 63 | KING EDWARD AVE | RIDEAU ST | ST PATRICK ST | Mill and Overlay |
| 64 | HERON RD | BANK ST | WALKLEY RD | Hot In Place Recycling |
| 65 | BOOTH ST | PRIMROSE AVE | ALBERT ST | Hot In Place Recycling |
| 66 | KING ED AV RAMP | BOTELER ST ENT | SUSSEX DR | Mill and Overlay |
| 67 | RICHMOND RD | HOPE SIDE RD | SEYTON RD | Hot In Place Recycling |
| 68 | GREENBANK RD | FALLOWFIELD RD | KNOXDALE RD | Mill and 2 lifts Overlay |
| 69 | INNES RD (RR\#30) | BLACKBURN BYPASS | MER BLEUE | Mill and 2 lifts Overlay |
| 70 | PLACE D'ORLEANS BLVD | ST. JOSEPH BLVD(RR34) | CHAMPLAIN ST (RR\#39) | Mill and Overlay |
| 71 | HERON RD W/B RAMP | VMP PARKING LOT | HERON RD | Hot In Place Recycling |

* note limits extended from
circulated limits

