

CITY OF HAMILTON

PUBLIC WORKS DEPARTMENT
Operations & Maintenance Division

Report to: Chair and Members
Public Works,
Infrastructure &
Environment Committee

Submitted by: Peter M. Crockett, P.Eng.
General Manager

Date: May 21, 2004

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Extension 4577

SUBJECT: **Cycling Infrastructure Initiatives - (PW03072a) - (City Wide)**
**Public Works, Infrastructure & Environment Committee Outstanding
Business Item (I)**

COMMENDATION:

- (a) That an Environmental Assessment be undertaken at an estimated cost of \$15,000 from account 4039117124, and subject to a successful Environmental Assessment, on-street reserved bicycle lanes be installed on both sides of York Boulevard between Dundurn Street North and the City of Burlington boundary, at a cost of approximately \$40,000 from account 4039117124, as per direction of Council in the previous report "Status of Cycling Infrastructure Initiatives in the City of Hamilton (PW03072).
- (b) That the concept of future construction of a widened and extended off-street multi-use trail on the east side of York Boulevard from Dundurn Castle to Valley Inn Road or the Rock Garden entrance, be endorsed and supported, with the understanding that such improvements would be funded by the Hamilton Waterfront Trust or others.
- (c) That the following bicycle projects be undertaken in the listed order, based on the availability of funding, successful land acquisition and/or leasing where required, and successful Environmental Assessment approvals where required, with the cost of all projects to be charged to account 4039117124:
 - (i) Sterling Street on-street reserved bicycle lanes between King Street West and Forsyth Avenue (estimated cost \$8,000);
 - (ii) Hunter Street on-street reserved bicycle lanes between Wellington Street South and Dundurn Street South (estimated cost \$50,000);
 - (iii) The installation of bike racks in various B.I.A. (estimated cost of \$50,000);
 - (iv) Longwood Road North on-street reserved bicycle lanes and pedestrian walkways between Franklin Avenue and the Royal Botanical Gardens Princess Point entrance (estimated cost \$3,000);
 - (v) Preparation of Bikeway and Trail Maps (estimated cost \$20,000);

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- (vi) King Street East on-street reserved bicycle lanes, between Nash Road North and Pottruff Road (estimated cost \$287,000);
 - (vii) Upper Paradise Road on-street reserved bicycle lanes, between Mohawk Road West and Scenic Drive (estimated cost \$3,000);
 - (viii) Stone Church Road on-street reserved bicycle lanes between Upper Wellington and Pritchard (estimated cost \$20,000);
 - (ix) Canal Lift Bridge bicycle lanes, ramps, widened sidewalks and/or stairway troughs (estimated cost \$30,000);
 - (x) Canadian Pacific Rail Trail in West Hamilton (estimated cost for the preliminary design phase, \$20,000);
 - (xi) Southcote Road new bicycle shoulders between Garner Road West and Highway 403 overpass (estimated cost \$577,000);
 - (xii) King Street West contra-flow reserved bicycle lane between Macklin Road and Paradise Road North (estimated cost \$25,000).
- (d) That the installation of bike racks on Hamilton Street Railway (HSR) buses not be pursued at this time.
- (e) That an Environmental Assessment (EA) be undertaken for the following projects, with the costs to be charged to account 4039117124:
- (i) Hunter Street between Wellington Street South and Dundurn Street South;
 - (ii) King Street West between Macklin Road and Longwood Road North.
- (f) That the By-law for on-street bicycle lanes, Sterling Street, King Street West to Forsythe Avenue; Longwood Road, Franklin Street to Royal Botanical Gardens Princess Point Entrance; and Upper Paradise Street, Scenic Drive to Mohawk Road West, as outlined in Report PW03072A as Appendix "A" to amend the City of Hamilton Traffic By-law 01-215, be passed and enacted.
- (g) That item I, "Cycling Issues", be deleted from the outstanding business list of the Public Works, Infrastructure, and Environment Committee.
- (h) That Parking By-law 01-218 is amended accordingly, to reflect the necessary parking regulation changes as necessary to coincide with the bicycle lane implementations.

Peter M. Crockett, P.Eng.
General Manager
Public Works



EXECUTIVE SUMMARY:

The previous report "Status of Cycling Infrastructure Initiatives in the City of Hamilton" (PW03072) recommended the following:

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- (a) That Report PW03072 is received for information and distributed to the Regional Cycling Committee, the Transportation for Liveable Communities group, and other interested organizations.
- (b) That staff be directed to continue to investigate, and implement as and when feasible and funded, the program of cycling infrastructure improvements identified in Tables 2 and 3 of Report PW03072, as well as other feasible initiatives that may be brought forward, with the next priority project to be the development of a trail/designated lane system on York Boulevard from Dundurn Castle to the Burlington boundary.
- (c) That Outstanding Business Items (Cycling Report and Shifting Gears) referred from the Committee of the Whole meeting of March 4, 2003, and the Hearings Sub-Committee meeting of March 26, 2003, not be removed from the Outstanding Business list.
- (d) That staff be directed to review the installation of bike racks on all buses with all interested parties and report back to Committee on all the implications.
- (e) That staff carry out an immediate review of the City bike network with all interested parties and report back as soon as possible.
- (f) That staff carry out an immediate review of the City website information and links regarding cycling, and carry out the required enhancements to make the information user-friendly, and report back.

In response to Council's direction, Public Works staff has utilized the "Shifting Gears" report, the results of on-going feasibility and design investigations, and comments and recommendations from other organizations presently developing cycling facilities or interesting in encouraging cycling in Hamilton, to develop a short and medium term plan for cycling infrastructure improvements in Hamilton. The City's web connections were also reviewed, revised and expanded as per Council direction.

There is presently approximately \$600,000 available from previous capital budgets for cycling facilities improvements. The 2004 capital budget, as approved initially by Committee of the Whole in March 2004, contains an additional \$300,000 for cycling facilities. Furthermore, at the Monday April 26th, 2004 special Committee of the Whole budget meeting, the \$300,000 that had been dedicated to the proposed pedestrian/bicycle bridge from Ottawa Street South to the Escarpment Rail Trail was re-allocated with \$200,000 being dedicated to other projects and \$100,000 to the Bicycle Account. The combination of these funding sources should be sufficient to complete the York Boulevard project, as well as projects 2 through 11, plus allocate the remaining funds towards item 12, as identified in the list below and shown in Table 1 further on in this report. However, the order of the projects should also be flexible to reflect the City's Trails Master Plan so that the priorities could be revised should the need arise to provide an important linkage to an off-road facility.

Staff recommends that the following projects be undertaken, assuming funding is available, environmental assessments (where required) are successfully completed, and land acquisition and/or leasing (where required) is completed:

1. York Boulevard between Dundurn Castle and the City of Burlington boundary;
2. Sterling Street between King Street West and Forsyth Avenue;

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3. Hunter Street between Wellington Street and Dundurn Street South;
4. The installation of bike racks in various B.I.A.;
5. Longwood Road North between Franklin Avenue and the Royal Botanical Gardens;
6. Preparation of Bikeway and Trail Maps;
7. King Street East between Nash Road North and Pottruff Road;
8. Upper Paradise Road between Mohawk Road West and Scenic Drive;
9. Stone Church Road between Wellington and Pritchard;
10. Canal Lift Bridge;
11. Preliminary design for the Canadian Pacific Rail Trail in West Hamilton
12. Southcote Road between Garner Road West and Highway 403 overpass;
13. King Street West between Macklin Road and Longwood Road North;

 **BACKGROUND:**

The information/recommendations contained within in the report have city wide implications.

Following are details of the recommended projects, in priority order:

1. **York Boulevard (Dundurn Castle to the Burlington boundary)** - Council previously (June 25, 2003) endorsed this project in concept. This link has been identified as valuable by the Hamilton Cycling Committee. The facility would support commuter cyclists, by connecting to bike lanes in Burlington. As well, it would also have recreational value, given the proximity to Hamilton Harbour and the Royal Botanical Gardens, and a linkage via stairs to the existing Harbourfront Trail. The project consists of painted bicycle lanes along York Boulevard between Dundurn Street North and the Burlington boundary. A number of design concepts were evaluated. In order to best implement the bicycle lanes without expensive works to remove the existing concrete centre median, it is proposed to reduce traffic flow on York Boulevard between Highway 403 and the City of Burlington boundary to one travel lane in each direction. As such, this project will require an Environmental Assessment be undertaken. The recommended option is to provide the following:

Design Details:

EASTBOUND

- Between Dundurn Street North and the Highway 403 on-ramp (Toronto bound), two travel lanes and a 1.8 meter painted bicycle lane will be provided by eliminating the centre painted median area;
- At the Highway 403 on-ramp motorists in the curb lane will be required, physically and through signing, onto the highway on-ramp.
- From the 403 on-ramp to the Burlington boundary one through lane and a 2.0 metre painted bicycle lane will be provided. The bicycle lane will be buffered from the adjacent traffic by a 1.0 metre crosshatched area.

WESTBOUND

- From the Burlington boundary through traffic will be narrowed into the median lane as the curb lane (Hamilton bound) will become a 2.0 metre painted bicycle lane, with a 1.0 metre buffer area. The reduction in the number of

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through lanes will occur west of the signalized intersection of Plains Road West and York Boulevard.

- Just west of the Highway 403 off-ramp, two lanes and a 1.8 meter painted bicycle lane will be provided to Dundurn Street North.

Issues:

- The proposed design reduces roadway capacity on York Boulevard. This means the environmental assessment process must be followed, prior to initiating the proposed changes. The process required is a relatively straightforward one, but will require at least one public open house. The “public open house” will be scheduled for September to avoid the summer vacation period, and project implementation will follow in the spring of 2005.
- Based on existing traffic volumes York Boulevard between Highway 403 and the Burlington boundary will operate satisfactorily with a single through lane in each direction, although the roadway will not operate as freely or at the same speed as at present.
- York Boulevard is an emergency by-pass, should an accident occur on Highway 403 between Highway 6 and Main Street/King Street. Reducing the road to a single through lane in each direction east of the 403 ramps will limit the capability of the road to service this diverted traffic in the event of a freeway event.
- Almost all additional traffic generated by the proposed RBG development at the Arboretum should occur in the off-peak hours, such that the reduction in the number of lanes will not have a significant impact on the roadway operation.
- This project has been “on hold” since Council’s endorsement, pending action by the Hamilton Waterfront Trust on a multi-use path that is to be the extension of the existing Harbourfront Trail toward the Royal Botanical Gardens and Burlington. The investigations and discussions have proceeded to the point at which it appears unlikely that a bicycle trail can be built at the water’s edge. The alternative for the Waterfront Trust is an off-road facility along York Boulevard. The design proposed by the City for York Boulevard commuter lanes is an on-road painted reserved lane facility, and is intended for more skilled cyclists. However, it is compatible with a future off-road multi-use path system. Reducing the number of travelled lanes from four to two not only provides width for the painted commuter lanes, but makes it possible to widen the sidewalks on the bridges along the route, which is required for a multi-use pathway to be constructed. A multi-use pathway would then serve recreational users such as walkers and roller-bladers, as well as less confident cyclists. This path would be constructed by the Hamilton Waterfront Trust or others, but it is recommended that the City confirm its support of the project, much of which would be on City right-of-way.

Installation costs for the “on-street” reserved commuter lanes would include signing, new and revised pavement markings including the sandblasting of the existing pavement markings, bollards at the Highway 403 on and off ramps and changes to catch basins that are not bicycle friendly. The estimated cost to

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undertake the above noted items is \$55,000. This cost includes the cost of the Environmental Assessment.

- 2. Sterling Street (King Street West to Forsyth Avenue)** - The Ainslie Wood / Westdale Neighbourhood Transportation Master Plan Study recommended that on-street bicycle lanes be placed on Sterling Street.

Design Details:

The recommended cross-section of Sterling from Forsyth Avenue to King Street West is:

- Westbound combined parking / bicycle lane;
- Westbound through traffic lane;
- Eastbound through traffic lane;
- Eastbound bicycle lane;

Issues:

In order to implement the designated bicycle lanes parking along the south side of Sterling Street would have to be prohibited. This would result in the elimination of 43 on-street parking spaces. On-street parking along the north side of Sterling Street would be maintained.

The cost to revise pavement markings and install the appropriate signing is estimated at \$8,000.

- 3. Hunter Street (Wellington Street to Dundurn Street South)** - There does not exist at present, a simple viable direct commuter bicycle option from McMaster University to downtown or return. This is the routing with the highest demand for bicycle travel in the entire City. As an alternative to Main and King Streets, the next best route that has been identified is Hunter Street. The Downtown Master Transportation Plan recommends both bicycle lanes and two-way traffic on Hunter Street. With the existing pavement width, it is not possible to do both and maintain parking as well. Through discussions with the area Councillors, the Durand Neighbourhood Association and Corktown Neighbourhood resident association (in development of the Corktown traffic plan), it was agreed that the preferred alternative is to maintain parking, maintain the existing one-way operation and incorporate a two-way designated bicycle lane system.

Design Details:

Following review of the design options, the recommended option is:

- From Wellington to Queen:
 - the north curb lane to be a combination of off-peak on-street parking and a peak hour westbound vehicular lane;
 - the middle lane to be a through westbound traffic lane;
 - the south curb lane to be an eastbound and westbound reserved two-way painted bicycle lane system.
- The westbound painted reserved bicycle lane system will be terminated at Queen Street South and bicycle routing signs will be used to direct cyclists to follow Hunter Street to Locke Street. From that point cyclists would use

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Locke Street to connect to King Street and the reserved lane system which commences west of Dundurn Street.

- The eastbound bicycle routing would connect to the reserved lane on the Main Street crossing of the 403. The routing for eastbound cyclists will be from Main Street West, south along Dundurn Street South, to the paved path connecting to Canada Street, one block east and one block south to Jackson Street, then to Queen Street South for one block connecting to the reserved lane system on Hunter Street, from Queen easterly. While this has several turns, it does not take the cyclist south of Hunter Street, and is considered direct enough to be adequate for commuting.

Issues:

- Hunter Street would be reduced to one westbound travel lane between John Street South and James Street South. Given the existing traffic volumes, during the AM and PM peak periods of the day, particularly during the arrival of the three afternoons GO trains, through traffic will experience delays, possibly significant for short periods of time. It is expected that some diversion of traffic from Hunter Street to parallel routes will occur, which will allow the street to continue to operate satisfactorily.
- The proposed design reduces roadway capacity on Hunter Street. This means the Environmental Assessment process must be followed, prior to initiating the proposed changes. The process required is a relatively straightforward one, but will require at least one public open house. With the summer months and holidays fast approaching, it is preferred not to hold the open house until the fall of 2004. This will not allow sufficient time for all approvals and the review period to have the facility completed for very much of the 2004 cycling season. As such, the present plan is to start implementation as soon as painting season commences in 2005.
- On-street parking along the south side of Hunter Street between Wellington Street and Queen Street would have to be prohibited. A proportion of these on-street parking spaces can be recovered by relocating them to the north side of Hunter Street. Presently, parking is prohibited on the north side of Hunter Street. However, there is not the same available curb side parking space on the north side of Hunter Street. As such, approximately 22 on-street and 19 metered parking spaces would be lost. The loss of 19 parking meters on Hunter Street will result in revenue losses to the Hamilton Municipal Parking System in the order of \$50,000 yearly. Some of this revenue may be recovered, however, as the two closest off-street parking lots are both municipal lots, one of which is City Hall.
- Due to the two way configuration of this bicycle lane, a "No Stopping" regulation will be required, that will eliminate any loading/unloading activities on the south side of Hunter Street.

Installation costs would include the signing, pavement markings, bollards at some intersections, the relocation of the parking meters, new parking regulation signing, additional traffic signal displays and changes to catch basins that are not bicycle friendly. The estimated cost to undertake the above noted items are \$50,000, including

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the Environmental Assessment will have to be successfully completed prior to the initiation of any changes.

4. **Bike Racks in various B.I.A.** - This item is an on-going project, with the Hamilton Cycling Committee identifying places of high cyclist parking demand. As per the Shifting Gears report, staff are recommending \$50,000 be expended towards installing bicycle racks in various Business Improvement Areas. The recommended budget will allow for about 70 bicycle racks. So far, twenty-four locations have been identified in the Westdale B.I.A. The locations for the remaining racks are on-going pending further discussions with the Hamilton Cycling Committee, B.I.A. and various Councillors.
5. **Longwood Road North (Franklin Avenue to Princess Point Entrance to the Royal Botanical Gardens)** - As identified by the previous Ward Councillor, this section of Longwood Road has no sidewalks. As such pavement marking can be introduced to better separate and organize pedestrians, cyclists and motorists.

Design Details:

The proposed alternative will provide a 1.5 meter designated area for pedestrians and 1.5m designated bicycle lane on each side of the road along this rural cross-section roadway. The bike lanes will connect with the existing signed cycling route south of Franklin Avenue and will feed into the Waterfront Trail multi-use path system which commences at the Princess Point entrance to the Royal Botanical Gardens at the north end.

The estimated cost of \$3,000 includes the bicycle designation signing and pavement markings.

6. **Maps and Signing** - The 2004 supply of City of Hamilton Bike & Trail promotional maps (20,000) has been fully depleted by requests from distributing agencies. Presently a further 15,000 copies are in production to maintain an adequate supply to meet the expected demand for the remainder of 2004.
7. **King Street East (Nash Road North to Pottruff Road)** - At a recent Committee of the Whole meeting, which considered the capital budget for 2004, it was recommended that the capital budget for the reconstruction of King Street East, Nash Road North to Pottruff Road, be reduced by \$300,000. In order to complete the basic reconstruction of the road, the reduction in budget means the elimination of the proposed on-street reserved bicycle lanes proposed as part of the project and approved in the project EA. The "Shifting Gears" report identifies this section of road as an important component of the on-street bicycle routing through the east end of the City. Consequently, rather than missing this opportunity to have the on-street cycling facility provided as part of the reconstruction, an alternative funding source is suggested. The staff proposal, supported by the Hamilton Cycling Committee, is to use the Bicycle account funds for the extra cost of the construction project which can be attributed to road widening and sidewalk relocation required for the implementation of the on-street bicycle lanes. The added project cost for the bike lanes is estimated at \$287,000.
8. **Upper Paradise Road (Mohawk Road West to Scenic Drive)** - Most of this project was completed in 2003, with the re-striping from Mohawk Road West to

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Stone Church Road West. Route signing will be added this year between Stone Church Road West and Rymal Road. Remaining works involve the extension of the designated lanes north from Mohawk Road West to connect to Scenic Drive. The estimated cost of \$3,000 includes the bicycle designation signing and pavement markings.

Issue:

Parking is currently permitted on both sides of Upper Paradise Road between Sanatorium Road and Scenic Drive. Parking is prohibited along both sides of Upper Paradise Road from Mohawk Road West and Sanatorium Road. Depending on the configuration of the bicycle lanes, it will be necessary to prohibit parking on either one side or both sides of Upper Paradise Road between Mohawk Road West and Scenic Drive.

- 9. Stone Church Road - Upper Wellington Street South to Pritchard Road** - This item is partially dependent on construction scheduling. As per the Shifting Gears report, staff are recommending the provision of eastbound and westbound on-street painted bicycle lanes, to replace the existing wide curb lanes (unmarked).

The portion from West 5th Street to Upper Wellington Street cannot be completed until the road is reconstructed, but the part from Upper Wellington to Pritchard can be done this summer. Once completed, Stone Church Road would provide a continuous on-street designated facility from the Meadowlands area to the Red Hill Valley.

Design Details:

- Garth Street to Upper Wellington Street - Eastbound and westbound bicycle lanes will be installed as part of the road reconstruction to a three lane cross-section. Stone Church Road between Upper Wellington Street and Upper James Street is tentatively scheduled for reconstruction in 2005, while the section between West 5th Street and Garth Street is scheduled for 2008. The bicycle account will be deducted the cost to widen the road an additional 3.0 meters (1.5 meters per side). On-street parking is presently prohibited along both side of Stone Church Road through these limits. A short stretch of Stone Church Road from just east of West 5th Street to just east of Upper James Street was widened in 2003.
- Upper Wellington Street to Pritchard Road – It is recommended that this section of Stone Church Road be converted from wide curb lanes to designated painted on-street bicycle lanes. On-street parking is presently prohibited along both side of Stone Church Road through these limits.
- Pritchard Road to Winterberry Drive - Presently this section of Stone Church Road is a rural cross-section (no curb and gutter) with one lane in each direction. On-street parking is presently prohibited along both sides of Stone Church Road through these limits. An option would be to pave the shoulder and install bicycle lanes or wait until the road is reconstructed and then pay for the additional widening to accommodate on-street bicycle lanes. It is recommended that the bicycle lanes be installed at the time of reconstruction of Stone Church Road through these limits.

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The installation costs for the on-street reserved bicycle lanes between Upper Wellington Street and Pritchard Road will be for the designated signs, the new pavement markings including the all sandblasting and changes to catch basins that are not bicycle friendly. The estimated cost to undertake the above noted items is \$20,000.

- 10. Canal Lift Bridge** - This project is in cooperation with three partners, the City of Burlington, the Government of Canada and the Hamilton Waterfront Trust. The existing paved multi-use paths in Hamilton and Burlington are on the lake side, while the at-grade crossing of the canal on the lift bridge is on the harbour side. Consequently, cyclists travelling along the lake side paths have to cross Eastport Drive twice at grade in order to cross over the lift bridge. City staff has forwarded a number of design alternatives to the Public Works Department of Government Services Canada for their review. At the time of this report, discussions are still on-going with the partners. Although an exact cost cannot yet be associated to the project, based on the preliminary designs, City staff are recommending \$30,000 be assigned to this project to complete the necessary works.
- 11. Preliminary Design for the Canadian Pacific Rail Trail in West Hamilton** - Staff have spent a considerable amount of time trying to develop an extension of the Hamilton Conservation Authority Ancaster/Brantford Rail Trail through to Chedoke Golf Course and Beddoe Drive. This would provide a fine connection between the HCA rail trail which presently ends at Ewen Road and the Chedoke Golf Course parking lot (albeit via one steep hill) allowing access to the Chedoke rail trail, the bike friendly stairs to Scenic Drive and the pedestrian/bike trail leading to Dundurn Street. However, this short segment of about 2.1 kilometres has no fewer than five different major design issues, only one of which has been solved to date. These are, starting from the west end:

Design Details:

- There is a one block segment which runs through the Allan Candy plant parking lot, which requires discussion with that company for permission.
- Under site plan, the proposed Fortino's grocery store development incorporates a bike path in their parking lot/landscape design.
- East of Fortino's is a section of former rail right-of-way to the north of the Henkel lands, and while Canadian Pacific Railway has offered this portion of land for sale, the asking price is extremely high given the amount of property required for a bike path. As well, there is the possibility that the property is most likely contaminated from underground material travelling from the adjacent property. The potential contamination would present a future liability issue for the City.
- Between Emerson and Stroud, Canadian Pacific has indicated that it might be possible to have the bicycle path parallel the railroad tracks which are still used occasionally. This piece of the path is really required to make the path a viable continuous project.
- CP has indicated that it would be possible to lease lands from Stroud across the CP Rail Bridge to a point just east of the bridge.
- From east of the 403 rail bridge, we are faced with a design dilemma in that CP does not want the bike path on their property but the only alternative is to

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place the path on the edge of the golf course fairway. Preliminary design work is underway to determine if there is a way to resolve this difficulty.

This trail alignment has tremendous potential benefit; however the confirmation of an implementation plan has been fraught with several difficulties. Staff have been engaged in communications with CP rail staff for the past four years in order to deal with the segment easterly of the CP Rail Bridge, and presently they are requesting the submission of a formal application for their consideration. The application will require surveys and detailed design drawings for which a budget allowance of \$20,000 is provided.

Although the above items need to be resolved prior to any works, Public Works staff has developed a preliminary cost estimate for a bike path along the rail lands from Ewen Road to Stroud Road, and that cost is expected to be about \$350,000. This estimate includes the clearing of bush, trimming of trees, grading of the trail, erecting a 2 meter high chain link fence along side of the tracks, entrance plaza gates similar to other trails, installation of catch basins and storm sewers. Additional costs would be related to the long-term lease or purchase of the bridge crossing of Highway 403, east of Stroud Road; plus delivering a path connection from the bridge to Beddoe Drive. These costs have not been determined due to unknowns associated with CP Rail's position on the project.

- 12. Southcote Road (Garner Road West to Highway 403 overpass) –**Southcote Road connects the Golf Links Road route and lanes to various rural routes south of Garner Road West, providing excellent commuting and recreational cycling opportunities. As identified by the Hamilton Cycling Committee, Southcote Road in its present condition is less than ideal for on-road cycling. Southcote Road from Garner Road West to the Highway 403 overpass is a rural cross-section (no curb and gutter), narrow in width, and a rough road surface with high traffic volumes.

Design Details:

The preferred option is a 1.8 meter paved bicycle shoulder on each side of Southcote Road at an estimated cost of \$577,000.

Issues:

This project could be scheduled when the road is resurfaced or reconstructed. However, since there is little additional cost associated with constructing the shoulders separately from the full road reconstruction, and since reconstruction of this roadway is not planned for the next one to five years, it is recommended that this project proceed as soon as funding is available and the project can be designed and tendered. There is sufficient funding in the bicycle budget to support the design in 2004, plus allocate most of the funds required for the project. The remaining funding would come from future bike budgets, and this project would be next in line for completion.

- 13. King Street West (Macklin to Longwood Road North) -** At present, eastbound commuter cyclists on King Street are required to detour at Paradise or Longwood and travel via the parallel neighbourhood street, Glen Road. Many choose to ride on the sidewalk from Paradise to Macklin instead of taking the longer route. The Hamilton Cycling Committee suggests that the need for this connection along King

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Street West is less important if the proposed path is installed through Churchill Park. Consequently the final decision regarding the need for this project should be deferred until the Churchill Park pathway has been approved or rejected, to see if the path actually reduces the incidence of sidewalk riding. If the path through Churchill Park is constructed, staff have identified and reviewed alternatives to provide an eastbound connection from Longwood Road North to Macklin Road.

Design Details:

The preferred option is to provide the following:

- A designated 1.2 meter bicycle lane along the south curb of King Street West from Longwood Road North to Paradise Road;
- Eastbound and westbound 1.2 meter bicycle lanes along the north side of King Street West from Macklin to Paradise Road;

Issues:

There are two extremely high demand H.S.R. bus stops along the north side of King Street West between Macklin and Paradise. If implemented, passengers waiting for the H.S.R. service would have to cross the proposed bicycle lanes. Staff suggests that to allow passengers to cross a bicycle lane is less than ideal, and suggest that it would be preferable to remove and relocate the bus stops. However, there are no clear alternative locations that would serve the H.S.R. clients satisfactorily.

If implemented, project costs would include signing, pavement markings, bollards, traffic signals and changes to catch basins that are not bicycle friendly. The estimated cost to undertake the above noted items is \$10,000. As well, an Environmental Assessment will have to be completed prior to the installation of the bicycle lanes, at an estimated cost of \$15,000 for a total of \$25,000.

14. Bike racks on the H.S.R. - Council directed a complete feasibility review for bike rack installations on the front of H.S.R. buses. Previously, Transit purchased ten bike racks and undertook a limited trial on a dedicated route. Constraints, such as space limitations in the transit storage facility and conflicts with the allocation of low-floor fleet to dedicated routes, meant that the ten buses equipped with bike racks could not be dedicated to the designated route on a reliable basis. Transit fleet maintenance has expressed concerns with potential damage to the racks in the automated wash system. More critically, with the bike rack installation, the longer overall transit vehicle length resulted in the loss of inside vehicle storage, thus impacting the storage capacity of the entire Mountain Transit Centre (MTC) which is already exceeded. As such, the small scale trial of ten transit vehicles was not deemed feasible and was discontinued.

At present cyclists are permitted, at the discretion of the Transit Operator, to bring bicycles on board the 115 Accessible Low Floor buses that presently make up 57% of the HSR bus fleet.

The issues of adding racks to the bus fleet are still relevant. However, based on the interest expressed by Council and others, the Transit Division has further reviewed the operation with other transit properties. The experience in other municipalities, even those with strong cycling cultures, suggests limited use.

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Equipping the entire fleet with racks would cost approximately \$140,000. The addition of a bicycle rack to the front of every H.S.R. vehicle would add fifty centimetres per vehicle. Implementation of this project would require additional fleet storage space outside the garage since both the inside storage and the outside parking facility are at capacity. At present, additional space outside does not exist. Therefore an asphalt storage facility would have to be constructed to accommodate the displaced vehicles from the inside garage. The paved area, including catch basins, fencing, lighting and a turning pad would cost approximately \$600,000 to build. Even with outside storage space, it would be preferable to remove the racks from all buses to put as many as possible inside the building during the winter, for environmental reasons. An additional ongoing expense would then be the annual cost to install the bike racks each spring and then remove the bike racks from the buses every fall. This cost is estimated to be \$10,000 each year. Funding will come from the Bicycle account for the first year and then rely on an increase in the current budget to cover the costs annually from there. Consequently the total cost to provide the bike racks on the entire H.S.R. fleet and to accommodate them by providing an additional outside storage area, is \$750,000.

An option under consideration to increase storage capacity is to find a permanent location for the DARTS specialized transit operation. This would free up additional storage capacity to accommodate expansion of the bike rack program. H.S.R. staff is actively pursuing alternative locations for the DARTS program.

This project has been shown widespread support and interest, but there are operational obstacles that must be addressed before advancing, as previously indicated. Additionally, the cost for the H.S.R. bike rack program alone is equal to achieve several other major bike infrastructure improvements. As such, this item is not being recommended at this time.

15. **Ottawa Street South Connection to the Escarpment Rail Trail** - The previous report "Status of Cycling Infrastructure Initiatives in the City of Hamilton" recommended that a consultant be employed to do preliminary design for the proposed bridge from Ottawa Street South to the Escarpment Rail Trail. However, at the Monday April 26th, 2004, Special Committee of the Whole budget meeting the \$300,000 dedicated to this project was reallocated with \$200,000 dedicated to other projects and \$100,000 to the Bicycle Account. Consequently, this project although still worthwhile will be assigned a lower rating and will be dependent on an alternative funding source from the Bicycle account.

 **ANALYSIS OF ALTERNATIVES:**

Cycling is a viable and sustainable transportation mode. Development of bicycling facilities promotes cycling as an alternate transportation mode and a healthy recreational activity. If the cycling program were not supported and continued, these advantages would not be realized.

FINANCIAL/STAFFING/LEGAL IMPLICATIONS:

Financial

The funding available in the cycling capital account at present is approximately \$600,000. An additional \$300,000 has been initially approved in the Capital budget for 2004. As well, \$100,000 originally budgeted for the pedestrian/bicycle bridge from Ottawa Street South to the Escarpment Rail Trail has been transferred to the Bicycle account. Thus total available funding is approximately \$1,000,000. Depending on final design details, this funding should be sufficient to complete the York Boulevard project as well as projects 2 through 11, plus allocate the remaining funds towards the item 12, as noted below.

The table below shows the recommended projects and their relationship to the funding available.

CYCLING INFRASTRUCTURE IMPROVEMENTS TABLE 1.0

Project	Limits / Notes	Total Cost	Cumulative Cost
1. York Boulevard	Dundurn to City Limits	\$55,000	\$55,000
2. Sterling Street	King St to Forsyth (McMaster entrance)	\$8,000	\$63,000
3. Hunter Street	Wellington St to Dundurn	\$50,000	\$113,000
4. Bike Racks	various B.I.A locations	\$50,000	\$163,000
5. Longwood	Franklin to Royal Botanical Gardens	\$3,000	\$166,000
6. Maps	Bikeway Maps	\$10,000	\$176,000
7. King Street East	Nash to Pottruff	\$287,000	\$463,000
8. Upper Paradise	Mohawk to Scenic	\$3,000	\$466,000
9. Stone Church Road	Wellington to Pritchard	\$20,000	\$486,000
10. Canal Lift Bridge	Hamilton side of the lift bridge	\$30,000	\$516,000
11. CP Rail Line	Preliminary Design Phase	\$20,000	\$536,000
12. Southcote Road	403 Overpass to Garner Rd.	\$577,000	\$1,113,000
13. King Street West	Paradise to MacKlin	\$25,000	\$1,138,000
Cumulative Total		\$1,138,000	

The loss of nineteen parking meters on Hunter Street will result in a revenue shortfall of approximately \$50,000 annually, to the Hamilton Municipal Parking System, although this may be mitigated by higher revenues in adjacent municipal off-street lots.

Staffing

There is limited staffing resources available for cycling initiatives. As part of the 2005 budget process, and in conjunction with the development of a transit growth strategy, staff will look at the need for additional resources to advance cycling initiatives.

Legal

There are some legal issues associated with purchase or lease of property for future cycling facilities.

POLICIES AFFECTING PROPOSAL:

N/A

**CONSULTATION WITH RELEVANT
DEPARTMENTS/AGENCIES:**

In development of potential cycling facilities, staff has consulted with the Transit and Capital Planning & Implementation Divisions of Public Works, with Legal and Real Estate, with Canadian Pacific Railways, the Hamilton Cycling Committee, the Waterfront Trust, the City of Burlington, the Royal Botanical Gardens, the Ministry of Transportation of Ontario and West Harbourfront Trails groups. The list of recommended projects and their priority has been discussed with, and endorsed by, the Hamilton Cycling Committee.

CITY STRATEGIC COMMITMENT:

Cycling promotes a healthy lifestyle. It reduces air pollution by removing vehicles from the roadway. It presents a positive image as a City which supports alternate modes of travel.

Authority: Item, Name of Committee
Report
CM: Date

Bill No.

CITY OF HAMILTON
BY-LAW NO. 04-

To Amend By-law No. 01-215
Being a By-law To Regulate Traffic

WHEREAS Section 210(123) of the Municipal Act, R.S.O. 1990, Chapter M.45, as amended, confers upon the councils of all municipalities the power to enact By-laws for regulating traffic on highways subject to the Highway Traffic Act;

AND WHEREAS Section 314(7) of the Municipal Act confers upon councils of all municipalities the power to enact By-laws to provide for placing, regulating and maintaining upon the public highways traffic signs for the purpose of guiding and directing traffic;

AND WHEREAS on the 18th day of September, 2001, the Council of the City of Hamilton enacted By-law No. 01-215 to regulate traffic;

AND WHEREAS it is necessary to amend By-law No. 01-215;

NOW THEREFORE the Council of the City of Hamilton enacts as follows:

1. Schedule 18 (Bicycle Lanes) of By-law No. 01-215, as amended, is hereby further amended by adding to Section "E" thereof the following item, namely:

"Sterling Street; King Street West to Forsythe Avenue, North Curb Lane; Anytime; Westbound"

"Sterling Street; King Street West to Forsythe Avenue, South Curb Lane; Anytime; Eastbound"

"Longwood Road; Franklin Street to the Royal Botanical Gardens Princess Point Entrance, East Curb Lane, Anytime; Northbound"

"Longwood Road; Franklin Street to the Royal Botanical Gardens Princess Point Entrance, West Curb Lane, Anytime; Southbound"

"Upper Paradise Street; Scenic Drive to Mohawk Road West; East Curb Lane; Anytime; Northbound"

"Upper Paradise Street; Scenic Drive to Mohawk Road West; West Curb Lane; Anytime; Southbound"

2. Subject to the amendments made in this By-law, in all other respects, By-law No. 01-215, including all Schedules thereto, as amended, is hereby confirmed unchanged.

3. This By-law shall come into force and take effect on the date of its passing and enactment.

PASSED and ENACTED this day of , 2004

MAYOR

CLERK