SUBJECT: Poulette Street/Pearl Street/Ray Street Pedestrian Crossings of the CP Rail Corridor Municipal Class Environmental Assessment (PW08136) - (Ward 1)

RECOMMENDATION:

(a) That the General Manager, Public Works, be authorized and directed to file the Poulette Street/Pearl Street/Ray Street Pedestrian Crossings of CP Rail Corridor Project File Report with the Municipal Clerk for a minimum thirty day public review period;  

(b) That the General Manager, Public Works, be authorized and directed to proceed with implementation of the preferred plan subject to funding approval through the capital budget process.

Scott Stewart, C.E.T.  
General Manager  
Public Works

EXECUTIVE SUMMARY:

The Kirkendall Neighbourhood Traffic Management Study identified pedestrian connections at Poulette and Pearl Street, crossing the Canadian Pacific Rail Line (Pearl Street is the only existing crossing location). As there was no screening process undertaken to determine the need for these crossings this Environmental Assessment looked at these locations in greater detail.

The project followed the Municipal Engineers Municipal Class Environmental Assessment process for Schedule ‘B’ projects. Three locations were evaluated to determine the preferred solution.
The decision making process determined that the existing Pearl Street bridge should be removed and replaced with a new pedestrian structure. A new pedestrian bridge at Pearl Street was recommended based on existing pedestrian usage obtained through pedestrian counts (229 people over a 10.5 hour early spring weekday count and 166 people over a 6 hour early spring weekend day count). There is strong support from the City Wide Transportation Master Plan to encourage alternative modes of transportation, other than automobile use. Pearl Street also draws from a relatively large catchment area, extending from York Boulevard in the North to Tuckett Street in the South. Along this corridor there is a French Emersion Elementary School on Pearl, just North of Main, a school crossing at Main and Pearl, a GO Transit Stop at King and Pearl and Main and Pearl, the Hamilton Amateur Athletic Association Grounds and Ryerson Community Centre and High School.

The Technical Team also concluded that there is still not sufficient rationale for replacing the Poulette Street Bridge based on:

- “close walking distances” - reasonable alternative crossings are located within 400 m;
- travel demand perspective - desire line between major origins and destinations (i.e., Main Street/Strathcona Neighbourhood to the north and Ryerson School/Recreation Centre, HAAA Grounds to the southeast) is principally along, and can be served by, the Pearl Street spine;
- the Poulette Street corridor is discontinuous in terms of serving major desire lines in the community; and
- the advantages of a Poulette crossing in meeting the needs of Hill Street Park users (leash-free facility) do not outweigh the aforementioned rationale for not replacing this crossing.

Funding for the implementation of the preferred design is subject to budget approval through the Capital Budget Process.

**BACKGROUND:**

The information/recommendations contained within this report affect Ward 1.

In September 2006, the City’s Neighbourhood Traffic Management Plan for the Kirkendall Neighbourhood in West Hamilton included the following recommendations:

- Rebuild the pedestrian bridge on Poulette Street over the CP Rail corridor; and
- Improve/maintain the pedestrian bridge on Pearl Street over the CP Rail corridor.

The City subsequently initiated a study to develop a Pedestrian Bridges Master Plan for the following three locations (initially all were constructed as vehicular crossings; however, became pedestrian only crossings due to structural issues) along the CP Rail corridor in the Kirkendall North Neighbourhood.

- Poulette Street (former pedestrian crossing; deteriorated and removed in 1986)
- Pearl Street (existing pedestrian crossing built in 1895)
- Ray Street (former pedestrian crossing demolished in 2007)

In a parallel assessment, the City has also identified bridges within its jurisdiction that are 35 years of age or older and classified them in relation to their heritage significance.
(Heritage Structure Assessment, 2002). The City prepared its *Heritage Bridge Guideline* in January 2006 for this purpose. The purpose of the Heritage Bridge Assessment was also related to the Municipal Engineers Association *Municipal Class Environmental Assessment* requirement to address the heritage value of structures that are over 40 years old when they may be altered.

**Municipal Class Environmental Assessment**

This project followed the Schedule 'B' planning and design process of the Municipal Engineers Association (MEA) Municipal Class Environmental Assessment document (October 2000, as amended in 2007) for roads, water and wastewater, and transit projects. Phases 1 (Problem Definition) and 2 (Identification and Evaluation of Alternative Solutions to determine a preferred solution) were completed and documented in a Project File Report.

**ANALYSIS/RATIONALE:**

**Bridge Improvement Alternatives**

The City’s guideline suggests that the alternative chosen should respond directly to the heritage value which has been determined for the bridge: “the higher the heritage score, the more diligent should be the efforts to conserve the bridge in the most desirable manner possible.” The Pearl Street Bridge has been categorized as a structure with moderate to high heritage value.

Since the pedestrian travel demand analysis conducted for this study concluded that an additional rail corridor crossing at Ray Street would result in only a nominal reduction in pedestrian travel times (in the order of 3 minutes) to the major attraction nodes on Main Street, and that a Ray Street structure would essentially be redundant with the Pearl Street and Queen Street crossings, only a new structure at Poulette Street was considered in combination with the existing crossing at Pearl Street.

Based on these considerations, the following options prescribed by the City’s *Heritage Bridge Guideline* were initially assessed, grouped under two major improvement scenarios:
1) Retention of the Pearl Street Bridge (including a new bridge at Poulette Street); and
2) Replacement/removal of the Pearl Street Bridge.

**Retention of Pearl Street Bridge (including new bridge at Poulette)**

A. Retention of existing Pearl Street Bridge and restoration of missing or deteriorated superstructure and substructure elements where physical or documentary evidence (e.g., photographs or drawings) can be used for their design (major rehabilitation of deck/railings; repair/strengthen/clean beams, stringers, bracing, piers, foundation, abutments, retaining walls);
B. Retention of existing Pearl Street Bridge, with no major modifications, until removal is required (Do Nothing);
C. Retention of existing Pearl Street Bridge with sympathetic design modifications (steel hand rail; timber trestle members; steel I-beams), sufficient to satisfy current bridge design standards;
D. Retention of Pearl Street Bridge (new) with sympathetically designed new structure in proximity (i.e., addition of a new bridge at Poulette Street) - New Pearl Street Bridge comprising new 3-span or single-span pre-fabricated pedestrian bridge, 3m wide and 38m long (12m – 14m – 12m spans); New Poulette Street Bridge - comprising new 3-span or single-span pre-fabricated pedestrian bridge, 3m wide and 38m long (12m – 14m – 12m spans);

E. Retention of existing bridge, no longer in use for vehicle purposes, but adapted for pedestrian walkways and/or cycle paths;

F. Relocation of existing Pearl Street Bridge to appropriate new site for continued use (see D) or adaptive re-use (see E); and

G. Retention of existing Pearl Street Bridge as a heritage monument for viewing purposes only.

Replacement/Removal of Existing Pearl Street Bridge

H. New bridge at Pearl Street, with salvage of elements/members for incorporation into new structure or future conservation work/displays (e.g., monument, museum exhibit);

I. New bridge at Pearl Street, with full recording and documentation of heritage bridge prior to demolition.

A single-span structure would cost approximately 25% more to construct than the 3-span structure due to the increased thickness of the deck in the absence of the two supporting piers used in the 3-span configuration, but would likely be simpler to build (would involve less foundation work and fewer administrative approvals from CP Rail). The bridge superstructure configuration (deck cross-section and railings) would be similar for both sub-structure options, comprising a 3 m wide deck with 1.4 m high railings

The Technical Team proceeded with the initial assessment of alternatives based on information gathered during the Winter 2008, including the previously cited limitations on the transportation demand analysis (somewhat dated pedestrian movement information at the Pearl Street crossing with no ability to collect updated pedestrian counts as there is currently no winter maintenance on the structure). This resulted in the initial conclusion that Alternative B (Do Nothing) and Alternative I (install new/replacement bridge at Pearl Street) merited further consideration; these options were assessed in more detail. Following are the principal conclusions and recommendations emerging from the initial assessment, which were presented at the March 31, 2008 Public Information Centre.

Initial Assessment

- The Pearl Street Bridge is in an advanced state of deterioration due to age and fire damage. It would be more cost effective to remove it or replace it, rather than rehabilitate it. Neither full or selective rehabilitation of the bridge (Alternatives A and C) are considered cost effective since they would have relatively short life spans (5-30 years), and would incur undue maintenance costs and demolition costs ($300,000) in the short to intermediate term.
• The Pearl Street Bridge cannot be readily moved for heritage preservation purposes (Alternative F), due to its structural condition, and relocation to a site outside its historical context would detract from its heritage value.

• Similarly, retaining the Pearl Street Bridge for viewing purposes only (Alternative G) would not be cost effective (loss of current pedestrian/cyclist function, while incurring maintenance costs and carrying ongoing safety/liability concerns).

• All CP Rail crossing locations under consideration are spaced at 400 m or less; and from Locke Street to Queen Street, the crossing locations are spaced at 300 m or less. In the context of similar, typical urban planning studies, such walking distances from any point in the Kirkendall area to routes where crossings of the CP Rail corridor exist are considered acceptable.

• The cost of adding a new pedestrian bridge at Ray Street cannot be justified because it would result in only a nominal reduction in pedestrian travel time (approximately 3 minutes) and would essentially be redundant with the Pearl Street and Queen Street crossings.

• The cost of a new pedestrian rail crossing at Poulette Street ($450,000-$500,000 capital cost plus long term maintenance costs) also cannot be justified based on the marginal benefits that it would provide (i.e., reducing travel times by approximately 3 minutes; small catchment area) and the fact that there is not a strong travel distance justification for the bridge (residents are within approximately 200 m of either Dundurn Street or Locke Street).

• Potential impacts to the natural environment are not a determinant factor, since they would be similar for most of the bridge rehabilitation or replacement options (additional mature tree loss with new bridge at Poulette). Vegetation loss is not ecologically significant and can be mitigated through a site restoration plan.

When Alternative B (Do Nothing) and Alternative I (install new/replacement bridge at Pearl Street) were subjected to further comparative assessment, the following conclusions were reached by the Technical Team.

• The previously cited acceptable walking distance to a crossing of the CP Rail corridor (i.e., within 400 m of Locke Street or Queen Street) would still be applicable to the study area if the Pearl Street crossing did not exist. Applying such a criterion, there is not a strong justification for replacing the Pearl Street crossing in the event that it is removed for safety purposes.

• While removing an existing link across the CP Rail corridor is not ideal from the perspective of community cohesion, the technically preferred planning solution emerging from the initial assessment was to remove the Pearl Street crossing, without replacement (Alternative B), when the need arises and funding is available, based primarily on the following considerations:
  - existing structural deficiencies;
  - safety and liability concerns;
  - cost considerations (capital cost of new bridge would be $750,000-$850,000 (including removal of the existing structure, estimated at $200,000-$250,000); plus ongoing maintenance costs);
- potential benefits to immediately adjacent residential properties (cessation of nuisance effects associated with loitering, vandalism, noise); and
- lack of need for an additional pedestrian crossing if the Pearl Street crossing did not exist, based on acceptable walking distance criterion.

- The Pearl Street Bridge is of moderate to high heritage value, being a tangible link to the once important TH&B Railway, and has historical importance as part of early settlement road network, with the potential for the presence of adjacent Euro-Canadian archaeological sites. Therefore, prior to removal, the bridge should be fully documented, on archival paper and under optimal light conditions, and the results should be deposited with the Hamilton Public Library’s Special Collections Department and with the City of Hamilton's Heritage and Urban Design Department. Areas that may be disturbed during demolition of the bridge should be subjected to a Stage 2 archaeological (field investigations) study.

Final Assessment Based on Supplementary Investigations

The PIC results indicated that there is still significant public sentiment in favour of retaining/replacing the pedestrian crossings of the rail corridor, despite the technical conclusion/recommendation that no crossing is required. These results led to the decision to conduct additional transportation demand investigations in April 2008 (pedestrian counts at the Pearl Street Bridge). The pedestrian counts indicate that there is significant use of the bridge – 229 crossings on the week day, with about 11% of users under 12 years of age; and 166 crossings on the weekend day. These results, in combination with further consideration of the City’s transportation and land use policy framework relative to pedestrian and cycling initiatives, formed the basis for revisiting the technical recommendation.

In light of the results of the final alternatives assessment, the Technical Team concluded that Alternative I (New/replacement bridge at Pearl Street, including full recording and documentation of the heritage bridge prior to demolition) should be adopted as the recommended planning solution. Based on ease of construction, the recommended bridge option is the single-span configuration.

The Technical Team also concluded that there is still not sufficient rationale for replacing the Poulette Street bridge based on:
- “close walking distances” – reasonable alternative crossings are located within 400 m;
- travel demand perspective – desire line between major origins and destinations (i.e., Main Street/Strathcona Neighbourhood to the north and Ryerson School/Recreation Centre, HAAA Grounds to the south) is principally along, and can be served by, the Pearl Street spine;
- the Poulette Street corridor is discontinuous in terms of serving major desire lines in the community; and
- the advantages of a Poulette crossing in meeting the needs of Hill Street Park users (leash-free facility) do not outweigh the aforementioned rationale for not replacing this crossing.

It was also concluded that the most significant considerations are expected to include the length of time that the Pearl Street Bridge will be unavailable for use during
construction (estimated one month), and the adverse impacts to residential properties in the immediate vicinity of the bridge site. During the construction period, alternative pedestrian and cyclist access will be available via Locke Street and Queen Street.

The findings and conclusions of the initial assessment relative to crossing improvement options other than Alternatives B and I, remained unchanged.

**ALTERNATIVES FOR CONSIDERATION:**

The preferred alternative solution has been identified using an evaluation and screening process that fulfils the requirements of the MEA Municipal Class EA document for Schedule ‘B’ projects. Municipal projects of this category are considered to be approved under the Environmental Assessment Act provided that the project follows the Schedule ‘B’ planning and design process outlined in the MEA Municipal Class EA document.

The MEA Municipal Class EA document was approved under the Environmental Assessment Act. If the City does not follow the process outlined in the Municipal Class EA document, the City would be in violation of the document and as a result would have contravened the EA Act. The Ministry of Environment could revisit the approval of a project or take away the City’s right to use the Municipal Class EA document.

The preferred alternative solution is not normally reconsidered at the end of the process unless there is an issue that is proven to affect the outcome of the evaluation process. There is one alternative for Council to consider with respect to the recommendations of this report:

1. To not file the Poulette Street/Pearl Street/Ray Street Pedestrian Crossings of CP Rail Corridor Project File Report with the City Clerk for a minimum 30 day public review period and, as a consequence, not proceed with implementation.

Should Council not wish to approve the filing of the environmental study report, the Municipal Class EA process will be considered by the provincial government as incomplete and the City will not have approval under provincial environmental legislation to remove the existing Pearl Street Bridge and replace it with a pedestrian bridge. The outcome would be equivalent to the “Do Nothing” alternative; however, the safety matters related to the structure would not be addressed. Eventually the City would have to repeat the Class EA process, which would likely result in the same recommendation.

**FINANCIAL/STAFFING/LEGAL IMPLICATIONS:**

**Financial**

Funding for detailed design and project construction will be brought forward to Council as part of the 2012 Capital Budget. The estimated cost, in 2008 dollars, for the Pearl Street pedestrian bridge is $750,000-$850,000 depending on the number of bridge spans. This includes $200,000-$250,000 for the removal of the existing structure and $100,000 for detailed design.

**Staffing**

There are no staffing implications.
Legal

Municipal undertakings such as road improvements, water and wastewater projects are subject to Ontario’s Environmental Assessment Act. The Act allows for the approval of Class Environmental Assessments and the municipality has the option of following the planning process set out in the Municipal Engineers Association Class Environmental Assessment (October 2000, as amended in 2007). This study has followed the Schedule ‘B’ Planning and Design Process and will fulfill phases 1 and 2 of the Class EA process. The City is required to file the Environmental Study report on the public record for a minimum 30-day review period.

Policies Affecting Proposal:

The elements of the City Wide Transportation Master Plan process of particular interest to this Class EA study are the Phase Two development of the Walking and Cycling Policy Paper (January 2005) and the subsequent Pedestrian Networks Strategy Working Paper (May 2007). The policy paper addresses the issues of walking and cycling under the broader planning area of Travel Demand, and outlines the benefits of walking and cycling, as well as the role of government in encouraging non-motorized travel.

The recommendations in the Strathcona Neighbourhood – Waterfront Trail Pedestrian Connection Environmental Study Report are consistent with the Public Works Strategic Plan. The study highlights the goals of the Public Works Strategic Plan in “greening” and “stewardship” of the City. The pedestrian connection will continue Hamilton’s strength in creating a walkable city and reducing automobile dependency.

The recommendations of this report will not bind the corporation or alter or contravene any established City Policy.

Relevant Consultation:

Public consultation is a key component of the Class EA process. Public comments and information input on this project were solicited through the Notice of Study Commencement/Public Information Centre (PIC) published twice in the Hamilton Spectator, At Your Service on March 21 and 28, 2008. The Notice of Study Commencement/PIC, along with an introductory letter, was also sent to nearby property owners within the study area and other potential stakeholders, including First Nations. As part of the consultation process, a PIC was held to provide further information on the problem/opportunity (need/justification for bridge improvements) and alternative solutions, and to receive input and comments from the public for consideration in the analysis and evaluation of alternatives. The PIC was held from 6:30 to 8:30 p.m. on March 31, 2008 at the Melrose United Church, 86 Homewood Avenue, Hamilton. Information at the PIC was presented in an open house format, with numerous display boards for public viewing. City and SLI/iTRANS staff were available to receive and respond to comments and questions.

City and consultant staff received and addressed comments directly related to the Municipal Class EA PIC session, as well as comments submitted in response to a post-PIC survey conducted by the local (Ward 1) councillor (Councillor Brian McHattie).
Staff/Agency Consultation

The following City of Hamilton departments were contacted for this project:
- Planning and Economic Development (Economic Development and Real Estate, Planning, Parking and By-Law Services, Downtown and Community Renewal)
- Public Works (Operations & Maintenance, Traffic Engineering & Operations, Capital Planning and Implementation, Open Space Development)
- Community Services (Culture)

The following agencies were contacted for this project:
- Ministry of the Environment
- Ministry of Natural Resources
- Ministry of Culture
- Ministry of Community and Social Services
- Ontario Native Affairs Secretariat
- Ministry of Transportation
- Ministry of Natural Resources
- Municipal Affairs and Housing
- Ontario Provincial Police
- Department of Fisheries & Oceans
- Environment Canada
- Hamilton Port Authority
- Transport Canada
- Indian and Northern Affairs Canada
- Canadian Environment and Assessment Agency
- Bell Canada
- CN Rail
- Canadian Pacific Rail
- Union Gas Ltd.
- Horizon Utilities Corporation
- Hamilton Conservation Authority
- Sun Canadian Pipeline
- Trans Canada Pipelines
- Enbridge Pipelines Inc.
- Hamilton Health Sciences
- Hamilton-Wentworth District School Board
- Hamilton District Catholic School Board

The following agencies provided comments:
- Transport Canada
- Hamilton Conservation Authority
- Hydro One
- Indian and Northern Affairs Canada
- CN Rail
- Association of Iroquois and Allied Indians

All comments were addressed where appropriate.
CITY STRATEGIC COMMITMENT:

By evaluating the “Triple Bottom Line”, (community, environment, economic implications) we can make choices that create value across all three bottom lines, moving us closer to our vision for a sustainable community, and Provincial interests.

Community Well-Being is enhanced. ☑ Yes ☐ No
Opportunities for physical activity are supported and enhanced.
The preferred alternative allows for the provision of a fully accessible pedestrian/cycling crossing within the Kirkendall Neighbourhood.

Environmental Well-Being is enhanced. ☑ Yes ☐ No
A sustainable transportation network provides many options for people and goods movement; vehicle dependency is reduced. The preferred plan promotes walking and cycling and reduces automobile dependency.

Economic Well-Being is enhanced. ☑ Yes ☐ No
Local Economy, to promote the Kirkendall Neighbourhood as a desirable place to live by fostering a walkable community.
Land Use in the Urban Area, to use alternative modes of movement, such as walking and cycling.

Does the option you are recommending create value across all three bottom lines? ☑ Yes ☐ No
The preferred alternative improves walkability of the neighbourhood at a reasonable cost.

Do the options you are recommending make Hamilton a City of choice for high performance public servants? ☐ Yes ☑ No
The recommendations in this report have no impact on the desired results for this commitment. (e.g. life long learning, supportive workplace).