

Project Charter

Project: **Johnson Street Bridge Replacement**

Author: Project Steering Committee

Date: February 4, 2011

Adopted: Special Council meeting February 4, 2011

Amended: March 21, 2013

Background & Purpose

The Problem to be Solved

This project focuses on the replacement of the existing bridge with a more reliable, safer and more sustainable bridge with improved cyclist and pedestrian amenities.

Project or Program Background

A referendum was held on November 20, 2010 approving the borrowing of \$49.2 million for the Johnson Street Bridge replacement project. Staff have been working with the lead consultant, MMM Group, to continue detailed design work. A Project Charter is required to establish an understanding of the expected deliverables for the Project and to help guide both the City and consultant team in its management and completion.

Benefits of the Johnson Street Bridge Project include:

- Improved amenities for cyclists and pedestrians;
- Improved safety and accessibility;
- An estimated \$0.5 billion in economic development activities [estimated by the Urban Development Institute];
- Minimal disruption to the downtown;
- Creation of approximately 900 jobs over the construction period.

Purpose of Charter

The Project Charter outlines the scope, schedule, budget, milestones, delivery strategy [for design / construction], and significant risks and mitigation strategies associated with the Project. The completion of the Project Charter will allow the team to finalize a detailed construction schedule.

Once approved by Council, the Charter and any amendments will guide management of the project.

Defining Success:

Mission:

The mission of this project is to build a new bascule bridge that will provide an improved sustainable transportation link across the Inner Harbour that enhances safety, improves views from the Inner Harbour and the Old Town area of the City, is respectful of the Old Town design guidelines, and provides links to key existing and future trails and pathways. This is consistent with City and regional policies related to both development and transportation, and helps to support the economic vitality of the downtown with jobs created during the construction period and with minimal traffic impact to and from the downtown.

Strategic Alignment:

This project contributes to the City's strategic objectives by enhancing a vital transportation link within the City of Victoria, and the region, which also supports the economic vitality of the downtown. The following policies and bylaws indicate the importance of the bridge as part of a multimodal transportation corridor:

- a) Relative to Council's Strategic Priorities, the Johnson Street Bridge is the City's number one infrastructure priority;
- b) The City of Victoria Official Community Plan [OCP];
- c) City of Victoria *Bicycle Master Plan*;
- d) City of Victoria *Harbour Plan*;
- e) City of Victoria *Greenways Plan*;
- f) *Victoria West Transportation Plan*;
- g) City of Victoria *Pedestrian Master Plan*;
- h) City of Victoria *Harbour Pathway Plan*;
- i) Capital Regional District [CRD] *Regional Growth Strategy*;
- j) CRD *TravelChoices Long-Range Transportation Study*.

It is a key regional corridor as defined in the Capital Regional District's Long Range Transportation Strategy (known as TravelChoices) and is a major transit corridor for BC Transit.

Indicators of Success:

The success of the Project will be based on:

- Completion of the project on time and on budget;
- Improved alternative transportation amenities;
- Value of the project for the investment;
- Improved safety and reliability;
- Improved crossing experience, particularly for pedestrians and cyclists;
- Short-term job creation;
- Reduced annual maintenance and operating costs;
- Rail corridor preserved;
- Completion of 'lessons learned' report;
- This becomes a model for future City projects.

Stakeholders who will help in determining the Project's success include Council; Victoria residents and businesses; bridge users; funding partners; industry; and the Project Team. To help in assessing the level of success, it is proposed that the City undertake an outreach program with stakeholders [i.e., residents, businesses, bridge users, funding partners and industry] during the project.

Defining the Scope:

In Scope:

The scope of work or deliverables for this Project include:

- Construction of a new bascule lift bridge to a lifeline seismic standard;
- 3 travel lanes;
- On-road bike lanes in both directions on the bridge deck;
- Multi-use trail for both pedestrians and cyclists;
- Separate pedestrian pathway on the south side of the bridge;
- New signalized intersection at Esquimalt Road / Harbour Road;
- Links to existing and future pathways and trails;
- Marine navigation channel to modern standards;
- Improved road approaches on both sides;
- Improved safety and accessibility;
- Preserved rail corridor for future use;
- Temporary rail station on the west side;
- Utility relocations;
- Decommissioning of existing bridges;
- Landscaping; and
- Public art.

Scope Exclusions:

The following are excluded from the project scope of work – rail bridge; development, servicing or enhancement of adjacent properties; construction of the future Harbour Pathway north or south of the bridge; and construction of the future E&N Rail Trail.

Defining Budgets, Timelines & Assumptions

Budget:

The revised cost of designing and constructing the new bridge is estimated at \$92.8 Million [without rail], and assuming no change to current economic conditions and specifically steel prices and availability of qualified labour. The revised cost estimate was approved by Council in March 2012 and includes a construction contingency of 10% as recommended by the MMM Group. The revised estimate was based on a due diligence review prior to initiating the procurement process and included market sounding of key project elements, as well as a value engineering review. This bridge contains a significant portion of steel, which represents approximately 40% of the current estimate [includes material, fabrication, painting, erection and transport]. Cost control measures are to be employed to track and monitor the budget.

Funding for the Project is as follows:

- \$48.5 million – City borrowing [\$49.2 million authorized in November 2010 Referendum]
- \$6.8 million – Reprioritization of City capital projects and other internal sources
- \$21 million – federal Contribution Agreement
- \$16.5 million – General Strategic Priorities Fund

TOTAL \$92.8 million

Timeline:

The schedule for this project considers the time required for detailed design; steel manufacturing and fabrication; bridge assembly, erection and testing; and construction of the piers, abutments and approaches, and demolition of the existing structures. The project must be complete by no later than March 31, 2016, which is the end of the federal Building Canada Fund. This must also consider the necessary coordination with federal fisheries work windows which occur during the period July 1 to February 15 annually. This is the period when in-water work in the harbour can be conducted.

External Dependencies:

The following are external dependencies related to the completion of this Project, most of which are not directly controlled by the Project Team.

1. Fisheries restrictions for active work in the water
2. Regulatory requirements
3. Utility relocations
4. Construction economy and availability of resources and affordable materials
5. Competing projects in Western Canada and elsewhere for critical resources
6. Global steel market

Assumptions:

The Project's scope, schedule and budget for completion assumes the following:

1. Economic situation does not change dramatically
2. Steel prices do not significantly increase
3. Qualified Contractors are available and interested in the project
4. Few changes in site ground conditions
5. Utilities will be relocated on time and within budget
6. Coordination with fisheries windows to minimize delay construction
7. Steel materials and fabrication resources are available
8. Rail bridge decommissioning will be completed on time and within budget
9. Existing bridge decommissioning can be achieved in a reasonable, sustainable and affordable way to meet the project schedule
10. Decisions are made on time according to schedule

Project Team

Mike Lai, the Johnson Street Bridge Special Project Director, has been replaced by Senior Project Manager, Ken Jarvela, P. Eng. In addition, the Project Team will be supported by professional expertise within City departments and key staff in areas of engineering, finance, procurement, legal, auditing, communications, and other areas as required. Additional resources are required to supplement City departments in supporting the project as approved under the amended project budget. The project management organizational structure is outlined in Appendix A. The organizational structure has been amended to reflect the complexity and high-profile nature of the City's largest capital project and the need to provide additional support.

The team will also be supported by a project advisor as required. The project advisor will have experience and expertise in project and construction management and processes related to large capital projects, in particular bridge capital projects, within a municipal environment. The project advisor will also provide assistance with project management delivery specific to the City, including consultant management, design processes, risk management, procurement process development and implementation, as well as budget development and management.

The project team will have professional engineering support during the project from the lead consultant, MMM Group, a large multidisciplinary consulting firm. This includes support from sub-consultants [geotechnical, structural, mechanical / electrical, quantity survey, bridge architecture, landscape architecture] to the MMM Group during each phase of the project – project initiation, design, construction, and completion. The MMM Group has experience and expertise relating to moveable bridges. In addition, the consulting team can provide the City with recommendations related to the procurement process to retain the general contractor or proponent for the project.

Specialized legal and procurement advice will be provided by John Haythorne of Fraser Milner Casgrain LLP. Mr Haythorne is an engineer and a lawyer who specializes in the areas of construction, engineering and infrastructure, with special emphasis on negotiating, drafting and advising on contracts. He is particularly experienced in public-private partnerships, advising owners on the structure and administration of procurement and legal issues relating to design and construction. He has acted for municipal, healthcare authorities and the Province of British Columbia advising on the law relating to tenders, requests for proposals and complex procurements.

Project Magnitude, Management & Accountability

Project Magnitude Issues, Observations & Comments

1. This is one of the largest infrastructure projects undertaken by the City of Victoria.
2. There are numerous stakeholder groups with diverse interests.
3. The project will engage numerous and diverse disciplines with different perspectives including engineers, lawyers, procurement specialists, accountants, risk managers, project management specialists, architects, communications specialists and more.
4. The City will engage future (not yet identified) contractors.

5. The Urban Development Institute has indicated that with the new bridge, an estimated \$0.5 billion in development activities would not be impacted
6. Not completing the project would impact many citizens and would be very visible to the public.
7. The global economy is potentially recovering and may lead to a large number of pending projects starting in the same timeframe as this project.
8. Staff from various departments will need to participate in and support the project as necessary to set this project up for success and make sure that it is delivered as effectively as possible.
9. Some additional support will be required by the dedicated team from professional expertise within the City of Victoria staff, including legal, risk, audit, procurement, engineering, communications and other advice.

Management & Accountability Approach

Accountability Structure

The accountability structure for this Project is outlined in Appendix A. The Steering Committee is comprised of the City Manager as Chair, General Manager of Operations, Director of Corporate Communications, Director of Engineering & Public Works, Director of Finance, and City Solicitor. The Steering Committee meets as necessary to provide strategic direction to the Management Team and when key decisions of Council are required. The Management Team provides administrative oversight to the project related to its scope, schedule and budget at an operational level and meets weekly. The Management Team is comprised of the Director of Engineering & Public Works as Chair, Special Project Director, and the Project Advisor. The Technical Team is comprised of key departmental staff providing support to the project as required.

Progress Reporting to Council and the Public

It is recognized that this project has a high level of interest in the community as it is located adjacent to the downtown along a busy inter-municipal route and within an active working harbour. To ensure that Council and the public are kept informed of the progress of the project, regular reports and updates will be provided in several ways. Formal reporting will be quarterly in a summary report to the Steering Committee and Council in addition to more specific reports at key milestones and decisions [see Appendix B for timeline estimates]. Coordinated with upcoming Governance & Priorities Committee meetings, quarterly reports for the balance of 2013 will be provided on:

- June 20th
- September 26th
- December 5th

In addition, at the end of the Request for Qualifications and Request for Proposal processes there will be a reporting out to the public.

Council will be provided with the new schedule for the quarterly updates in December of every year of the project.

In addition, Council will be provided weekly status updates by email after the weekly Management Team meetings.

The internet will be used to keep both staff and the public informed of developments on this project.

Regular reports and updates to the public will be posted on the project website and provided by email through a subscription [eNews]. In addition, communities will be informed of pending work that may affect them.

Internal project documentation will provide for regular monthly status reports.

Fairness Monitor

As part of the procurement process, the City has engaged an independent Fairness Monitor who will have the authority to monitor the procurement process so as to be in a position, at the conclusion of each of the procurement stages, to give a written report of whether or not the procurement process was properly and fairly followed by the City. The Fairness Monitor report will be provided directly to City Council and to the firms or entities that participate in the procurement process. Final reports from the Fairness Monitor will be made public.

Change Management

Significant scope changes related to project scope or budget will be approved by Council [i.e., changes to the items listed under Scope]. Changes that fundamentally alter the mandate of this Charter will be presented to Council for final approval [e.g., change to the deliverables listed under Scope].

The City Johnson Street Bridge Project Director will have authority to make decisions critical to maintaining construction momentum.

Quality Assurance

The prime consultant will be the MMM Group who will be responsible for the overall design integrity of all the Works to be undertaken under this contract. The prime contractor or proponent, when appointed, will be responsible for compliance with the design intent as set out in the documents prepared by the MMM Group. The quality assurance program will deliver regular reports during fabrication and construction in a form agreed to by the City project team.

Cost Management

A project control budget will be developed. Costs will be monitored and compared to actual work completed prior to the City authorizing payment. Actual costs will be reported against a baseline using an appropriate project costing software package. Estimates at completion will be updated in conjunction with the schedule and cash flow forecasts. Risks will be reassessed and potential impact will be used to assess cost and schedule impacts. A contingency fund management plan will be put in place.

Public Engagement

Key policy decisions to date regarding scope and funding to address the Johnson Street Bridge have been informed through extensive public input. Public interest in this project is expected to be high throughout construction and will require considerable information sharing and consultation with the community to minimize impacts and communicate progress and challenges.

Guiding Principles

- Throughout construction, the City will provide the public with balanced and objective information and where necessary will obtain public feedback on analysis, alternatives and/or decisions.
- Where further input or involvement is required, public and administrative advisory committees will be utilized.
- Those affected directly by construction will be consulted on mitigation strategies.
- The project and the engagement process will continue to be informed by the input collected and understanding established within the earlier phases of bridge project.
- The public engagement process will support the overall project budget and timeline

Public Engagement Values

- The project will continue to be guided by the Council endorsed Core Values for the Practice of Public Participation.
- Public participation is based on the belief that those who are affected by a decision have a right to be involved in the decision-making process.
- Public participation includes the promise that the public's contribution will influence the decision.
- Public participation promotes sustainable decisions by recognizing and communicating the needs and interests of all participants, including decision makers.
- Public participation seeks out and facilitates the involvement of those potentially affected by or interested in a decision.
- Public participation seeks input from participants in designing how they participate.
- Public participation provides participants with the information they need to participate in a meaningful way.
- Public participation communicates to participants how their input affected the decision

Public Engagement Objectives:

The four phases of the project will focus on information and consultation levels of the public participation spectrum.

	Inform	Consult	Involve	Collaborate	Empower
Public participation goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision-making in the hands of the public.
Promise to the public	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.
Example techniques	<ul style="list-style-type: none"> ▪ Fact sheets ▪ Web sites ▪ Open houses 	<ul style="list-style-type: none"> ▪ Public comment ▪ Focus groups ▪ Surveys ▪ Public meetings 	<ul style="list-style-type: none"> ▪ Workshops ▪ Deliberative polling 	<ul style="list-style-type: none"> ▪ Citizen advisory committees ▪ Consensus-building ▪ Participatory decision-making 	<ul style="list-style-type: none"> ▪ Citizen juries ▪ Ballots ▪ Delegated decision

Risk Management

Risks will be reviewed and updated on a regular basis to reflect the current understanding of risks and uncertainties as actual events occur.

Design & Contracting Strategy

Since receiving public approval to borrow the funds necessary to replace the Johnson Street Bridge, the staff and consulting team have been further exploring various construction methods (design-bid-build, design-build and design assist) to identify the most suitable to this project based on the project scope, timelines, and risks.

To engage qualified proponents early, a procurement process that incorporates a competitive design-assist approach leading to a fixed price contract will be used. This includes a pre-qualification process to identify and shortlist three qualified proponent teams with strong experience in building complex structures and moveable bridges in an urban environment. After three proponents have been selected, all design information [Indicative Design] from the City's lead consultant will be provided to them under the second step of the procurement process – the Request for Proposals.

During this period, the short-listed proponents will be invited to critically review the indicative design, during the preparation of their proposals, to investigate whether any design alterations or adjustments can be identified that will optimize the design of the replacement bridge and deliver the project on time or under budget. This could include modifications that offer additional functionality or cost reduction, bearing in mind the architectural design of the replacement bridge. To assist in the indicative design review, separate commercial in-confidence meetings can be facilitated between the proponents and the City's design team. This is intended to seek design or constructability innovations that could lead to efficiencies and cost savings for the implementation of the indicative design.

Shortlisted proponents will be asked to provide an indication of the adequacy of the revised project budget as soon as possible to help determine if material changes to the project are required. The proponents will submit a confidential non-binding indicative price to the project management team. Council will be advised of the general outcome of this budget review in June 2012. Proponents will submit final proposals in the Fall 2012 leading to an award of a fixed price contract.

The Fairness Monitor will observe the processes and meetings as necessary up to the contract award and will provide an independent report to the City as noted earlier.

This "design assist" method is the recommended approach for advancing the Johnson Street Bridge project as it is a collaborative team-oriented method that seeks to capitalize on the benefits of early engagement of the City's design team and proponents. The expected major benefits of this are more efficient project delivery; elimination of costs caused by inefficient and un-constructible designs, better control of the effects of design creep on the budget, and best value options and systems analysis.

Key Council Milestones & Decision Points

Key Council Decisions:

The project will be completed in 4 phases – Project Initiation, Design, Construction and Completion. Key milestones and decisions for Council are shown on the attached diagram [Appendix B], which include project updates and key decision points for Council. The key decision points for Council include:

1. Project Charter [Project Initiation Phase] – Council approval of the Charter is required to allow the Project to continue moving forward. This gives the project team the mandate to deliver the Project. [February 2011]
2. Design Review & Shortlist of Proponents [Design Phase] – Prior to the commencement of the procurement process to retain the proponent for the project, a report and presentation was given to Council as part of a due diligence review that included a comprehensive refinement of project scope, schedule, risks and costs. Council gave approval to continue moving forward with a revised project budget and a two-step procurement process on March 15, 2012. [March 2012]

A Request for Qualifications will be issued to shortlist three proponents to a Request for Proposals. Shortlisted proponents will be asked to undertake a design review and to submit a confidential indicative price for the project based on the detailed design information completed at that time. This will determine the adequacy of the revised project budget and the need for any material changes in the project that may be required to bring the project within budget. Council will be advised of the general outcome of the confidential indicative price submissions. If indicative prices received from proponents significantly exceed the available budget, Council will need to consider alternatives. [June 2012]

3. Proponent Proposals [Construction Phase] – Short-listed proponents will submit proposals including fixed prices for the project based on the detailed design and considering any approved design changes they may recommend that result in savings or quality enhancements. Staff intend to bring forward a report after proposals from the proponents have been received and a recommendation for contracting with the selected proponent is made for the proposal that is in the best interests of the City. [Fall 2012]
4. Project Celebration [Completion Phase] – 2016

In addition to quarterly updates on the status of the project, Council will also be updated on the following [see Appendix B]:

- Completion of detailed design;
- Completion of mechanical / electrical systems and installation of bascule bridge; and
- New bridge ready to accept traffic

Identifying Major Risks & Mitigation Strategies

The presence of many risks are typical of a construction project and are generally manageable (e.g., lengthy gap between construction disciplines on project – better coordination or scheduling; conflicting instructions from client’s staff to contractor – designate single point of contact between client and contractor; supplier is short of material for project – engage another supplier, etc.). These can typically be managed with the use of appropriate cost control measures and project management techniques.

For this project, there are several major risks that could potentially have a significant impact on budget and/or schedule. Some can be directly controlled or influenced by the project team, whereas some are not and depend on market conditions. Steel represents a significant portion of the bridge material and cost (approximately 40% of construction cost) and is influenced by market demand. It will be important to employ the mitigation strategies outlined below to help reduce risk.

Major Risks

Mitigation Strategies

1. Steel prices are affected by global economic drivers	1. Secure a proponent team through a fixed price contract as soon as possible
2. Change in construction market conditions	2. Secure proponent as early as possible
3. Competing projects draw resources and contractor interest away from this project	3. Same as above
4. Actual site conditions vary significantly from expected	4. Undertake additional geotechnical investigation work to determine the extent and condition of harbor bedrock
5. Significant delay in utility relocations	5. Work towards cooperative and coordinated work with external utilities

As discussed under “Design & Contracting Strategy”, the recommended procurement strategy is a collaborative approach that allows design efficiencies to be created to help reduce cost. This provides the opportunity for a value-added design approach.

In the event that major risks do emerge and the relevant mitigation strategies identified earlier are not effective, the following cost saving opportunities could be considered:

1. Reducing the navigation channel width;
2. Reviewing land opportunities related to the Project;
3. Phasing or reducing landscaping;
4. Reprioritization of other City capital projects
5. Others

Should this become necessary, staff would report back to Council prior to finalizing any considerations.

Getting Overall Project Plan Approval:

Mike Lai

Mike Lai, P. Eng.
JSB Special Project Director

April 25, 2012

Date

E. Robak for

Dwayne Kalynchuk, P. Eng.
Director of Engineering & Public Works

April 25, 2012

Date

Katie Josephson

Katie Josephson,
Director of Corporate Communications

April 25 2012

Date

Peter Sparanese

Peter Sparanese, P. Eng.
General Manager of Operations

April 25, 2012

Date

Gail Stephens

Gail Stephens, City Manager
Sponsor

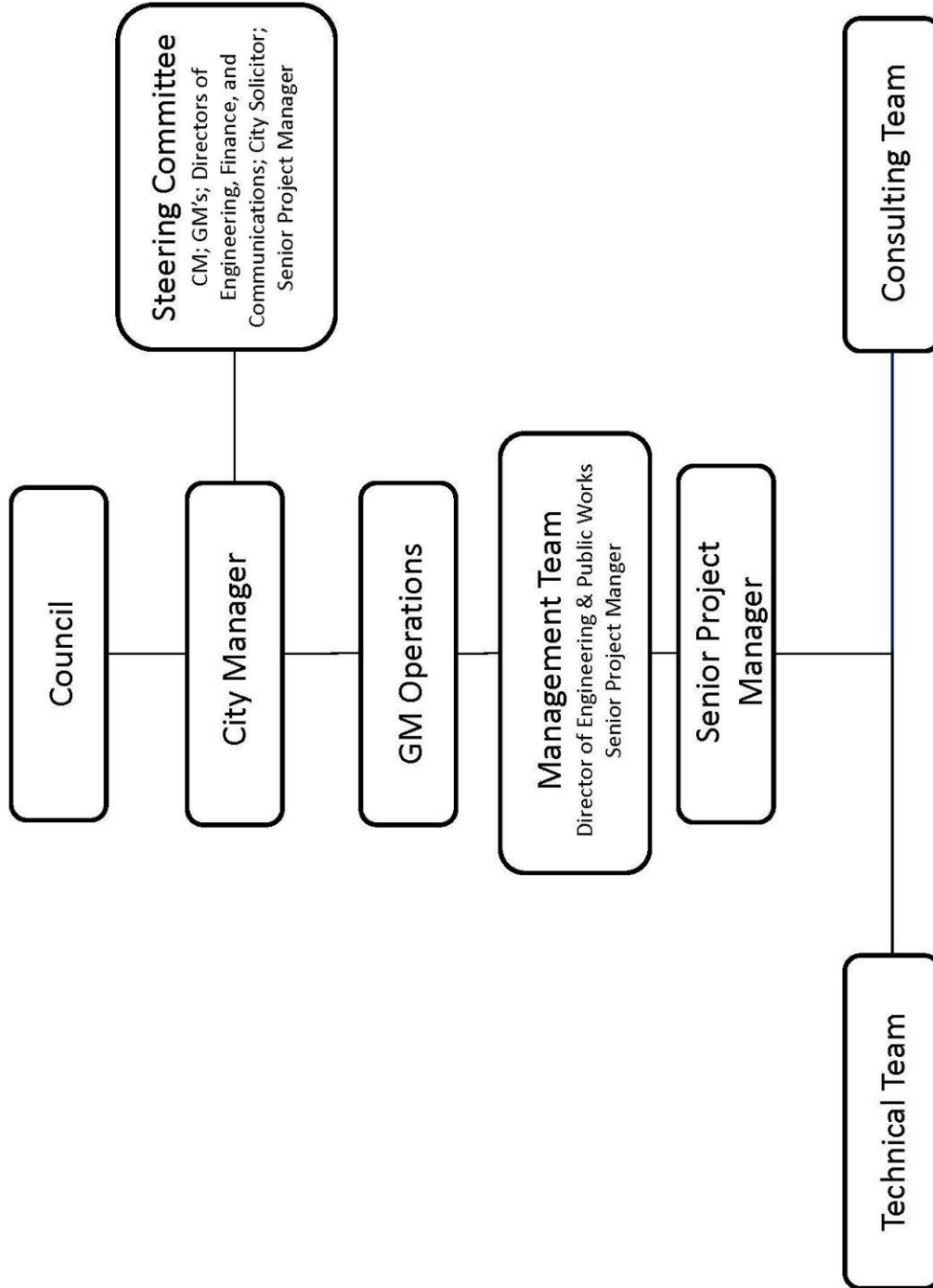
April 25, 2012

Date

FOR

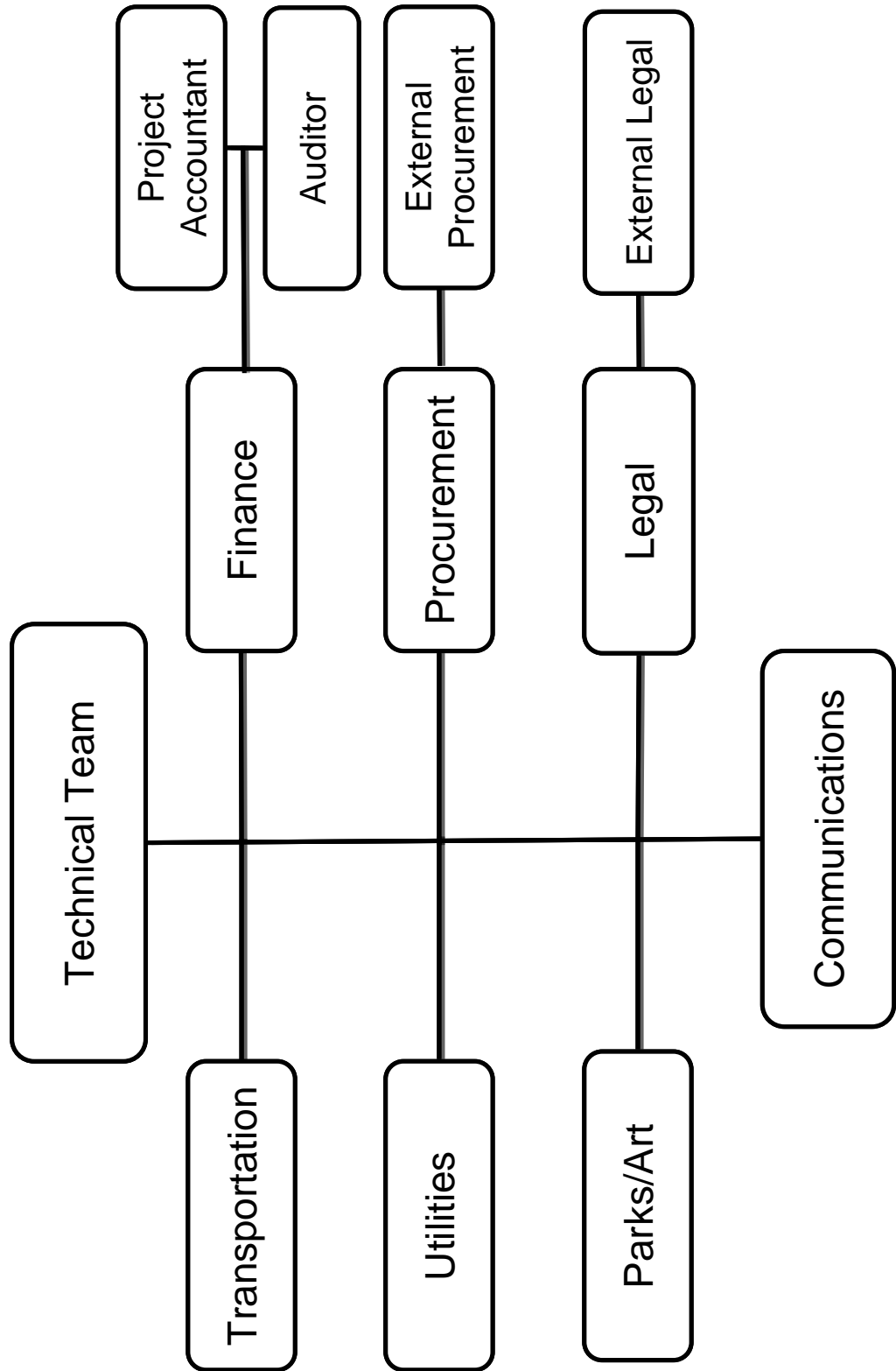
Appendix A

Johnson Street Bridge Project Accountability Structure



NOTE: Referrals to public and administrative advisory committees will be made as necessary.

Appendix A-1 Johnson Street Bridge Project Accountability Structure



Appendix B Project Timeline

Johnson Street Bridge Replacement Project Timeline

