

Community Group Led Construction Projects Guide



Last revised May 14, 2019



Strategy

Concept

Design

Build

Operate



Table Of Contents

1.0	INTRODUCTION.....	12
2.0	STARTING THE PROJECT - STRATEGY PHASE	16
3.0	DEVELOPING A CONCEPT - CONCEPT PHASE	20
4.0	DEVELOPING THE DETAILED DESIGN - DESIGN PHASE	27
5.0	CONSTRUCTING THE PROJECT - BUILD PHASE	33
6.0	ONGOING OPERATIONS - OPERATE PHASE	41
7.0	PROJECT COMPLETION.....	43
8.0	ROLES AND RESPONSIBILITIES.....	44
9.0	MAKING A PROJECT A SUCCESS	54
10.0	APPENDICES.....	55
	LINK to TERMS OF REFERENCE	55
	LINK to STRATEGY DOCUMENT TEMPLATE	55
	LINK to STRATEGY PHASE READINESS CRITERIA AND HANDOVER TOOL	55
	LINK to CONCEPT PHASE READINESS CRITERIA AND HANDOVER TOOL	55
	LINK to BUSINESS CASE TEMPLATE	55
	LINK to PUBLIC ENGAGEMENT PLAN TEMPLATE	55
	LINK to COST ESTIMATION CHECKLIST	55
	LINK to PROJECT MANAGER PROCUREMENT.....	55
	LINK to PRIME CONSULTANT PROCUREMENT.....	55
	LINK to BONDS.....	55

We have gone to great lengths to ensure that all the information in the guide is correct and actual. However, the City of Edmonton does not assume responsibility for potential errors that this guide or related documents may still contain, nor for any potential damages or losses from relying on or applying the information contained herein.



Acronyms and Definitions

ACRONYMS

ARP	Area Redevelopment Plan
CCA	Canadian Construction Association
CCC	Construction Completion Certificate
CCDC	Canadian Construction Documents Committee
CoE	City of Edmonton
COR	Certificate of Recognition
ECA	Edmonton Construction Association
EDC	Edmonton Design Committee
EFCL	Edmonton Federation of Community Leagues
FFE	Furniture, Fixtures and Equipment
IIS	Integrated Infrastructure Services (Department within City of Edmonton)
O & M Manuals	Operations and Maintenance Manuals
OHS	Occupational Health and Safety
NRC	Neighbourhood Resource Coordinator
MIA	Municipal Improvement Agreement
PEP	Public Engagement Plan
PM	Project Manager
RFP	Request for Proposal
SCC	Substantial Completion Certificate
SPL	Sport and Partner Liaison

DEFINITIONS

As Built Drawings	Drawings provided by the Construction Contractor which show on-site changes to the original construction documents.
Bid	Proposal including cost estimate.
Build Phase	The Build Phase involves the actual construction of a facility or park.
Building Permit	Written approval that plans meet the standards of the Alberta Building Code.
Business Case	A multi-purpose, decision making document that generates the support and participation required to turn an idea into reality. It explains what the idea, problem or opportunity is about, how and who it will impact, alternatives, the risks, cost/benefits and recommendations. Within the Business Case, timelines will be provided and it will articulate the strategic goals that will be achieved once the project is completed.
City of Edmonton (CoE) Liaisons	City of Edmonton staff who support assigned Community Groups on an ongoing basis includes Neighbourhood Resource Coordinators, Parkland Amenity Resource Coordinators, Sport and Partner Liaisons, Community Building Social Workers and Multicultural Liaisons.
CoE Project Manager	Member of the City of Edmonton team assigned to support the Community Group in completion of their project. The CoE Project Manager leads the creation of the Municipal Improvement Agreement and is the primary support to the Community Group to: <ul style="list-style-type: none"> • engage an external project manager • procure design consultants and obtain a functional program, concept drawings and other studies as required • achieve design and build deliverables with support defined as per the Municipal Improvement Agreement
Commissioning	Process by which equipment or a facility (which is installed, or is complete or near completion) is tested to verify if it functions according to its design objectives or specifications. As part of commissioning, training is provided to those maintaining the equipment or facility on how to operate the systems.

Community Group	For the purpose of this document it is an umbrella term for any not for profit organization formed to further community, recreation, sport, art, cultural or social objectives. Examples include but are not limited to: Community Leagues, Minor Sport Organizations, Speciality Sport Organizations, Arts Organizations and Multicultural Organizations.
Concept Phase	During the Concept Phase, the initial idea or opportunity is built upon in order to develop a better understanding of the proposed project and the stakeholder requirements for the project. The Concept Phase is also used to evaluate the overall feasibility of the project prior to moving forward to subsequent phases of the project. The City of Edmonton must approve the Concept Phase for projects located within City of Edmonton spaces and defined by a lease, license or agreement and; as per the terms of their license, lease or agreement are required to receive City approval when making alterations to their facility or space.
Concept/Pre-design	<p>Concept/Pre-Design consists of detailing the program (required functions) for the project based on project goals and requirements. Concept/Pre-Design includes:</p> <ul style="list-style-type: none"> • a rendering (drawing) of the proposed facility or park development-general shape and size, essence of design • the preliminary program (needs) and spatial/functional requirements of the project • estimated overall square footage • the approximate location within the site • preliminary relationships between proposed amenities/buildings • access, parking, landscaping, and/or other features on the site • Class 5 cost estimate (-50%/+100%)
Concept Phase Readiness Criteria	Concept Phase Readiness Criteria is a review of the project for readiness to move from the concept to the design phase and enter into a municipal improvement agreement that will define the provision of municipal support/oversight through the life of the project or for the provision of the improvement.
Construction Contractor	Responsible for the day-to-day oversight of a construction site, management of vendors and trades, and communication of information to involved parties throughout the course of a construction project.
Construction Documents	Highly detailed design drawings which will include specifications for construction details and materials. These drawings include all pertinent information required for the contractor to price and build the project. Also includes Class 1 cost estimate (-10%/+15%).

Consultant	External person or company that undertakes consulting and design work in accordance with the prescribed scope, standards and specifications provided by the project owner.
Context Analysis	Analysis of the broader situation in which a group operates. Focuses on identifying both internal and external conditions which may impact the project.
Contingency	Contingency refers to costs that will probably occur based on past experience, but with some uncertainty regarding the amount. Contingency is “ <i>expected to be expended</i> ”. In other words, it is an item in an estimate like any other, and should be estimated and included in every estimate and every budget. Contingency should be a separate line item on budgets and estimates. Determining the amount of contingency starts with risk identification, and only then are the probable cost of those risks quantified. As a project progresses contingency should decrease as project certainty increases. The amount of contingency is typically reflected as a percent of the overall budget for example 10%. The percentage used depends on project risks and certainty.
Cost Escalation	Cost escalation is defined as changes in the cost or price of specific goods or services in a given economy over a period. A cost estimate on multi-year projects needs to contain an escalation factor.
Cost Estimate and Classes	<ul style="list-style-type: none"> • Cost estimate - predicting and assembling costs of a project through economic evaluation and consideration of project investment costs and future trends and costs. • Estimate accuracy is traditionally represented as a +/- percentage range around the point estimate; with a stated confidence level that the actual cost outcome will fall within this range. • Depending on phase of design will determine estimate accuracy. <ul style="list-style-type: none"> • Class 5 - 50%/+100% • Class 4 - 30%/+50% • Class 3 - 15%/+35% • Class 2 - 15%/+25% • Class 1 - 10%/+10%
Crime Prevention Through Environmental Design (CPTED)	Multi-disciplinary approach to deterring criminal behaviour through environmental design. For more information refer to the City of Edmonton Design Guide for a Safer City found online at www.edmonton.ca search Safer City Guide.
Deficiency	Characteristic or condition that fails to meet a standard, or is not in compliance with a requirement or specification.

Deliverable	A measurable, tangible and verifiable product, outcome, result, service or item to be produced to complete a project or part of a project.
Demographics	Statistical data relating to the population and particular groups within it.
Design Development	Design Development takes the design documents from schematic one step further. This phase lays out mechanical, electrical, structural and architectural details. Deliverables consist of floor plans, sections and elevations with full dimensions. Drawings include door and window details and outline material specifications. Includes Class 2 Cost Estimate (-15% to +25% estimate accuracy).
Design Phase	The Design Phase focuses on preparing for project implementation. At the conclusion of the Design Phase all the preparatory work needed to implement the project should be complete.
Development Permit	Written approval from the City of Edmonton that plans are in accordance to the Edmonton Zoning Bylaw regulations.
Environmental Review	Most development activities proposed for lands within the North Saskatchewan River Valley Area Redevelopment Plan (ARP) are subject to environmental review. An Environmental Review is the planning process that identifies, predicts and interprets the potential impact of an activity or alternatives to the activity and suggests mitigation where required . Depending on the scale of the project the resulting environmental report may require City Council approval. Where City Council approval is required, a Site Location Study is completed as part of the environmental review process.
Environmental Site Assessment	May be a requirement of the project to determine if the site is suitable for the intended use.
Functional Program	Part of Concept Development, a functional program defines the intent of each of the spaces and specific requirements for these spaces.
Geotechnical Report	A geotechnical report is a tool used to communicate the site conditions and design and construction recommendations to the site design, building design, and construction personnel. Provides specific information on subsurface soil, rock, and water conditions.
Indemnity	Security against or exemption from legal responsibility for one's actions.

Maintenance Agreement	An agreement that occurs if there is an enhancement to a City park or facility that requires City maintenance services which exceed the prescribed base level. The agreement will define who is responsible for the maintenance and any associated fees.
Municipal Improvement Agreement (MIA)	An agreement for the provision of municipal support/oversight through the life of a project or for the provision of an improvement such as gutters, power and street lighting on City owned land.
Needs Assessment	A systematic process for identifying stakeholder needs or gaps between current conditions (what is) and desired conditions (what should be). Needs assessments involve making decisions about how important the needs are, why they exist and how they can be addressed.
Occupancy Permit	Written approval from the City of Edmonton to occupy a building when all construction is complete and meets the requirements as set out in the Safety Codes Act, the Regulations and Bylaw.
Operate Phase	The Operate Phase focuses on the completion and close-out of the project and transition to operating.
Out of Scope	Elements that are outside of the parameters of the project.
Park and Facility Development Process	The Park and Facility Development Process is the steps required to obtain the City's approval to make changes or improvements to City of Edmonton parkland or facilities. It is in alignment with the City's Project Management Framework and follows five standard phases: Strategy, Concept, Design, Build and Operate.
Parkland	City, District and Neighbourhood park and school land and open space maintained by City of Edmonton including grassed boulevards and buffers within road right-of-way and pipeline right-of-way, and the River Valley.

Prime Consultant	<p>Responsible for designing the building landscaping and other types of community led projects that required professional design services.</p> <p>Depending on the nature of the project, the Prime Consultant will either be a registered architect or professional engineering firm.</p> <p>Typically architects are the Prime Consultants when building design is required. The Prime Consultant is the main contact with the project owner, working with the project owner to define scope of services needed and bring in other members of the design team. Other team members are usually mechanical, electrical and structural engineers and other specialist consultants as necessary. The Prime Consultant is responsible for the overall management and coordination of this team.</p>
Prime Contractor	<p>Legal definition of the party responsible to manage work site health and safety.</p>
Project	<p>A temporary endeavour undertaken by an organization to create a unique product, service or result.</p>
Project Committee	<p>A project committee, reports to the Community Group, and is responsible for planning and delivery of the project as defined in the Committee Terms of Reference.</p>
Project Manager (hired by the community)	<p>The Project Manager is accountable directly to the Community Group for all deliverables and work throughout the project. The Project Manager coordinates the entire project, ensuring all consultants and contractors are retained, work and deliverables are completed within scope, on-time and on-budget throughout the entire project. The Project Manager is responsible for overseeing procurement management for both services and materials.</p>
Project Owner	<p>The Community Group that initiates a project, finances it, contracts it out and benefits from its outputs.</p>
Public Engagement Plan (PEP)	<p>A PEP is implemented through the life of a project and it clearly defines the project stakeholders and how the stakeholders will be involved and engaged through the project phases.</p>
Real Property Report	<p>A legal document that clearly illustrates the location of significant visible improvements relative to property boundaries. It takes the form of a plan or illustration of the various physical features of the property and provides an accurate representation of the improvements on a property.</p>

Record Drawings	A drawing that reflects on-site changes the contractor noted in the as-built drawings.
Request for Proposal (RFP)	<p>An RFP invites interested Prime Consultants to submit a proposal to work on a project.</p> <p>The RFP contains project background, budget, information to be included in the Prime Consultant's proposal (experience, design and technical skills, project understanding, project delivery and schedule, including sub-consultants and fee proposal) and how the proposals will be evaluated. Using the information in the RFP, interested consultants respond with a detailed proposal, not with only a price quotation.</p>
Schematic Design	Schematic Design consists of a site plan, floor plans, sections, an elevation, overall dimensions and estimated cost of construction. Includes Class 3 cost estimate (-15% to +35% estimate accuracy).
Scope	Definition of the products and services to be provided by the project.
Stakeholder	People impacted by the project. Stakeholders can be categorized. For example, internal stakeholders are within the Community Group and external stakeholders are outside of the Community Group. Primary stakeholders are those most affected by a project while secondary stakeholders are affected but to a lesser degree. Understanding the type of stakeholders helps to inform communications and public involvement.
Site Location Study	A study that details the social, financial, environmental and institutional constraints that make location of the proposed project within the North Saskatchewan River Area Redevelopment Plan (ARP) (Bylaw 7188) boundaries, essential.
Strategy Phase	The Strategy Phase of a project ensures project alignment with the overall vision and strategic priorities of the organization and those of the City of Edmonton.
Strategy Phase Readiness Criteria	The Strategy Phase Readiness Criteria reviews the project for readiness to begin concept planning; this includes assessment of the project for maturity and appropriate definition of need and scope.
Substantial Completion Certificate (SCC)	The Construction Contractor posts a substantial completion certificate (SCC) to verify work is substantially complete and holdback monies withheld under the contract are to be released in accordance with timing stipulated by the Builders' Lien Act.

Tender	Tendering is the process by which bids or proposals are solicited, received and evaluated.
Terms of Reference	A document that describes the purpose, scope and authority of the committee. It is a written road map for a committee and contains clear and specific information on how the committee is organized, what the committee is trying to achieve, who the members are and when they meet.
Warranty	Warranties establish the standards for determining defective work and define and limit the responsibility of service or product providers for repairs.
Zoning Bylaw 12800	<p>The Zoning Bylaw contains the rules and regulations for the development of land in Edmonton. For the purpose of land development, the City of Edmonton is divided into zones. The zone determines the permitted and discretionary uses of the land.</p> <p>There are 15 residential zones and seven commercial zones. The zone that a particular property is located in determines what can be built on that property.</p>



Updating, renovating or developing new community amenities is an exciting undertaking for Community Groups. But it is also an involved process with many requirements along the way. The City of Edmonton partners with Community Groups through grants and staff resources to successfully facilitate the development and redevelopment of community amenities. For the purposes of this guide **Community Group** refers to not for profit organizations formed to further community, recreation, sport, art, cultural or social objectives. Examples include but are not limited to: Community Leagues, Minor Sport Organizations, Speciality Sport Organizations, Arts Organizations and Multicultural organizations

1.1 TYPES OF PROJECTS THAT THIS GUIDE ADDRESSES

This guide is intended to assist Community Groups through the development of a construction project from idea stage through completion and ready to operate. This guide applies specifically to projects that:

- ❖ are led by a Community Group and operated upon completion by the Community Group
- ❖ are located within City of Edmonton spaces and defined by a license, lease or agreement
- ❖ as per the terms of their license, lease or agreement with the City of Edmonton, the group is required to receive City approval and follow City process when making alterations to their facility or space. An example of one agreement type is:
 - » **Tri-Partite License Agreement** - Agreement between the City of Edmonton, a Community League and Edmonton Federation of Community Leagues (EFCL). Through this agreement Community Leagues are licensed land on neighbourhood parks to develop and operate recreation facilities and amenities such as community halls and skating rinks. Term 15 of the agreement states; The Community League will not add, permit to be added or remove from the Site new, extended or added facilities without consulting their Neighbourhood Resource Coordinator and having the project vetted through all appropriate and required City processes. This provision applies to any change to the Site that would normally require a Development and/or Building Permit from the City, including any change of use, or additional uses to the building or site. This would not include interior/non structural improvements, such as the replacement or repair of flooring; ceiling/wall repairs and painting; countertop repairs or replacement; addition of security equipment; appliance replacement; or interior cosmetic improvements.

- » **Consent to Alterations Clause in Lease agreements (City Facility or Parkland leased to Community Group) Term 5.1** *The Tenant shall make no alterations to the Premises without the Landlord's prior written consent. The Tenant acknowledges that the Landlord's consent may entail, if deemed necessary in the Landlord's discretion, participation in the Landlord's formalized review of the Tenant's proposed renovation or development project. This formal review is known as either the Facility Development Process or Parkland Development Process, or both, as applicable (collectively, the "Process"), which Process may be amended by the Landlord from time to time. All alterations to the Premises shall be made at the Tenant's expense and shall be made to the satisfaction of the Landlord. Without limiting the Landlord's foregoing right to consent, if, in the Landlord's sole and unfettered opinion, the Tenant cannot demonstrate to the Landlord that the Tenant could bear both the expense of the proposed alteration, and the subsequent Additional Improvements Costs resulting therefrom, the Landlord may withhold its consent.*
- » *Agreement for maintenance, on parkland or within a facility may also be required.*

AN IMPORTANT FIRST STEP FOR COMMUNITY GROUPS UNDERTAKING PROJECTS IS TO REVIEW THE TERMS OF THEIR LICENSE, LEASE OR AGREEMENT WITH THE CITY OF EDMONTON TO UNDERSTAND THE CITY'S REQUIREMENTS.

Projects vary in size and complexity.

- ❖ **Small** - Small in size and complexity, few stakeholders, low risk, minor improvements to facility or land
 - » Examples: signage
- ❖ **Medium** - Many stakeholders, medium to high level risk
 - » Examples: minor facility renovations, rink re-development, addition of a storage shed
- ❖ **Large** - High complexity, many stakeholder, major constraints, high risk
 - » Examples: facility development, building additions, expansions or major renovations

The focus of this guide is to present deliverables for consideration for projects. Based on the project scope not all deliverables may be required and those that are not will be identified, by the City of Edmonton, in collaboration with the Community Group as the project progresses.

1.2 PARK AND FACILITY DEVELOPMENT PROCESS

This guide will present the process for park and facility development and identify the activities, deliverables, requirements, roles and responsibilities for each phase of a construction project.

The Park and Facility Development Process is based on an interdisciplinary team approach to project management. Community Group project committee members, retain professionals such as a Project Manager, Prime Consultant and Construction Contractor receive support from City staff, to plan and complete project deliverables and oversee the design and construction of the project. For a greater understanding refer to **Section 8.0 Roles and Responsibilities**.

Primary City Staff working with Community Groups on these projects are a **CoE Liaison**, and (Neighbourhood Resource Coordinator, Parkland & Amenity Resource Coordinator, Sport and Partner Liaison, Multicultural Liaison, Community Building Social Worker, etc.)

CoE Project Manager. There will be two CoE Project Managers that will support the Community Group, based on expertise. The planning and design project manager will be the primary support during concept and early design, the delivery project manager will be the primary support during the detailed design and build. City staff support the development of deliverables, review project submissions, and recommend approvals or changes throughout the project process.

The Park and Facility Development Process ensures the following:

- ❖ all legal and legislative requirements are met
- ❖ project aligns with both the City of Edmonton's and the Community Group's plans and initiatives
- ❖ stakeholders are consulted throughout the process ensuring community support
- ❖ project approvals are documented
- ❖ projects are planned, developed and constructed in an efficient and timely manner
- ❖ projects are viable, now and in the future, ensuring long term sustainability

The Park and Facility Development Process aligns with the City of Edmonton's project management framework, and includes five phases of work as follows:



1.3 USING THIS GUIDE

THIS GUIDE IS A STEP BY STEP MANUAL WHICH WILL SUPPORT COMMUNITY GROUPS WITH THE SUCCESSFUL DEVELOPMENT OF CONSTRUCTION PROJECTS THAT ARE LED AND OPERATED BY THE COMMUNITY GROUP, LOCATED WITHIN CITY OF EDMONTON SPACES AND DEFINED BY A LICENSE, LEASE OR AGREEMENT.

This guide is set up in ten sections

- Section 1.0 Introduction – sets the context of the manual and explains the City’s Park and Facility Development Process.
- Sections 2.0 - 7.0 Divides the project into phases and explains the deliverables and tasks needed to finish each phase. During the Strategy and Concept Phases the process of planning, doing, checking and approving deliverables is guided through the use of the Phase Readiness Criteria and Handover Package. The Municipal Improvement Agreement continues to guide the process during the design and build phases of the project.
- At the end of each section, critical success factors or actions will be described which all Community Groups should follow for successful phase/project completion.
- Section 8.0 Roles and responsibilities are outlined. This includes roles of: Community Group, Community Group Retained Professionals and City of Edmonton.
- Section 9.0 Summary of what makes a project successful.
- Section 10.0 Appendices – supplementary information, tools and templates.

NOTE: The method to execute projects presented in this manual is the design-bid-build approach.

*In a design-bid-build, the design work occurs separately from the actual build. The design work and the build work are tendered separately. Once the design is produced it is sent to tender, bids are received and one of the submitted bids is awarded the tender and contracted for the construction. There are alternatives to the design-bid-build approach that a Community Group may choose, such as design-build, in which the design and build occur together and are bid on together at the early stage of the project. **However, for the purpose of this manual the design-bid-build method is presented.***

NOTE: Projects located within the River Valley Area Redevelopment Plan (ARP) are subject to an Environmental Review and approval.

An Environmental Review is the planning process that identifies, predicts and interprets the potential impact of an activity or alternatives to the activity and suggests mitigation where required.

2.0



Starting The Project - Strategy Phase

Where we are today

Strategy

Concept

Design

Build

Operate

Key Deliverables

Project Committee
Strategy Document
Strategy Phase
Readiness Criteria
and Handover

Strategy Phase

In the **STRATEGY PHASE**, project ideas emerge, a project committee forms, readiness criteria for the Community Group to proceed is developed and project alignment with the Community Group's strategic goals and objectives is confirmed.

The Community Group is supported in **STRATEGY PHASE** primarily by their CoE Liaison. In addition, if support from a CoE Project Manager is required, that will be made available.

[STRATEGY PHASE READINESS CRITERIA & HANDOVER PACKAGE LINK](#)

2.1 STRATEGY PHASE – PLAN

Deliverables of the Strategy Phase are established at the beginning of the phase using the Strategy Transition Readiness Criteria and Handover Package tool (Link). The Community Group, CoE (Led by the CoE Liaison) will meet to review and agree upon the mandatory deliverables and any additional requirements that may assist in achieving project readiness. The CoE liaison and CoE supervisor identify the review team composition that includes the Community Group representative, a CoE Project Manager and may include other city representatives, external representatives and experts as appropriate to the size, complexity, and sensitivity of the project.

2.2 STRATEGY PHASE – DO (DELIVERABLES)

The Community Group leads the completion of all agreed upon deliverables with support from the CoE liaison. The Community Group confirms that all "Mandatory for Readiness" items have been completed and discusses with the CoE liaison that the project is ready to move to the next step in the process. Deliverables include:

2.2.1 Project Committee

Projects start to take shape when the Community Group forms a project committee to explore the ideas. A project committee is responsible for the planning and delivery of a project. It investigates the viability of an idea and successfully moves the project forward if it is deemed to be feasible.

When organizing a project committee, choose members with different backgrounds, perspectives and skills. Diversity will make the committee stronger and improve the decisions made. Key expertise required on the project committee is to have individuals with strong financial and project management knowledge. As the project progresses there will be many financial and project requirements that will demand a significant level of expertise. However, one trait that should be consistent with all committee members is *commitment*.

A critical requirement for a successful project committee is a Terms of Reference. A Terms of Reference describes the purpose, scope and authority of the project committee. It provides the roadmap of how the committee will operate and the reporting relationship to the larger organization. ([Link to Terms of Reference template](#))

2.2.2 Strategy Document

To move forward on project ideas, the Community Group must complete a Strategy Document ([Link to Strategy Document Template](#)) that will assess the Group's readiness to proceed and confirm that the proposed project is grounded and aligned with their strategic goals and objectives. The Strategy Document is multi-faceted and will take time to complete. This document will support the Community Group in decision making throughout many projects and will also address some the requirements of the Business Case to be developed in the **CONCEPT PHASE**.

The Strategy Document should include:

i) Organizational Profile

A Organizational Profile provides an overview of the Community Group Organization and describes:

- ❖ organization vision, mission, core values and guiding principles and how the proposed project aligns
- ❖ organization structure: how the group is organized including roles, responsibilities and decision making process, membership and description of any affiliations with other organizations
- ❖ organization assets: summarizes existing resources including facilities, programs, volunteers and finances

ii) Project Committee Terms of Reference

As described in **Section 2.2.1**.

iii) Public Engagement Plan (PEP) and Results (What we Heard)

A Public Engagement Plan (PEP) clearly defines the project stakeholders and how the stakeholders will be involved through the project phases. The City of Edmonton has a Public Engagement Template ([Link to PEP template](#)). Public engagement is used to:

- ❖ complete needs assessment
- ❖ refine and confirm project scope
- ❖ review proposed concepts and plans
- ❖ inform stakeholders of project progress (through all phases of the project)

The What we Heard document provides an analysis of the feedback captured through the consultation process.

iv) Project Description

A brief description of the opportunity/problem that the project is trying to address and the strategic goals and objectives of the proposed project.

v) Demographics

Demographics assist in understanding the community served by the Community Group. Once compiled, a Community Group can assess how these impact strategic goals and objectives.

It is important to go beyond the typical such as “age” statistics and examine statistics in other applicable categories. There are existing resources to support this work including City of Edmonton Neighbourhood web pages: [LINK](#)

vi) Context Analysis

A Context Analysis provides an understanding of current and anticipated external factors as well as opportunities and challenges that may impact the Community Group and the community they serve.

An analysis of key trends is critical to understand existing and emerging trends. Knowing what is happening in the community and where existing amenities, programs and services are available to the community (both geographically or interest based) is important to understanding and meeting needs.

A Context Analysis provides an understanding of what other organizations have done or are doing to address similar situations. This analysis includes any findings from research studies that identify industry trends and best practices. For example, identify how other community organizations have addressed the problem/opportunity; identify other service providers in

the area addressing the situation; outline trends/research that support this direction.

vii) Activity Based Needs Assessment

A needs assessment is the process for identifying and understanding stakeholder needs, perceptions and attitudes. It can identify gaps between current conditions (what is) and desired conditions (what should be). A needs assessment entails public engagement and uses tools such as surveys, focus groups and open houses. In the context of park and facility development, a needs assessment should seek input on desired activities or experiences rather than seeking input on specific construction ideas. Activity or experience based input will then inform the design development (solution) to best meet the needs rather than starting with a prescribed facility or park solution. A solid activity based needs assessment can provide a road map for numerous projects over a number of years. Confirmation that the needs remain current over time can be achieved through the PEP.

viii) Alternatives

To further solidify the project idea the Community Group should investigate and document potential alternatives for addressing the needs and priorities to determine the most preferred and viable option. Provide the rationale as to why some alternatives have been eliminated. One alternative to present is "do nothing" (status quo). Another may be to share space rather than build a new facility, or there may be alternatives to reduce projected space needs. The data compiled in the context analysis and needs assessment will provide valuable insights to support the direction selected.

Outline for each viable alternative the high level project scope, budget, schedule and organization change impact.

2.3 STRATEGY PHASE – CHECK

When the CoE liaison and Community Group are ready to enter into the strategy check/ approve process the CoE Liaison leads the process by requesting a CoE project manager.

1. The CoE Liaison convenes the review team that includes the Community Group and the CoE Project Manager and others appropriate to the size, complexity and sensitivity of the project.
2. The mandatory deliverables are reviewed by the review team for completeness and quality. Depending on the scope of the project this check phase may require a circulation of the documents.
3. The review team CoE Liaison, Community Group and CoE Project Manager Approve and respective supervisors sign off.

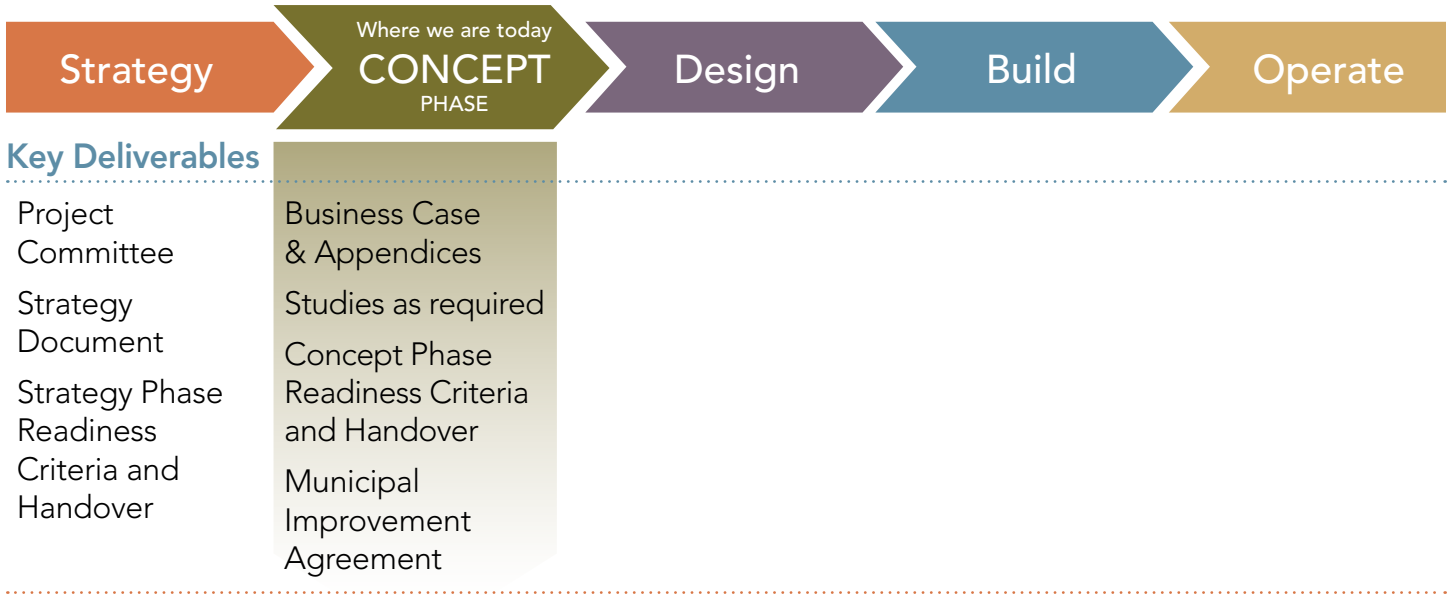
2.4 STRATEGY PHASE – APPROVE

1. The completed Strategy Phase Readiness Criteria and Handover Package is then reviewed by the CoE Liaison Director and approved to move forward into concept phase.

3.0



Developing A Concept - Concept Phase



Concept Phase

During the **CONCEPT PHASE**, the Community Group's project is further defined. The project idea or opportunity is built upon in order to develop a better understanding of the proposed project and the stakeholder requirements for the project. The **CONCEPT PHASE** is also used to evaluate the overall feasibility of the project prior to moving forward to subsequent phases of the project.

The Community Group is supported in **CONCEPT PHASE** by a team of City staff including a **CoE Liaison, CoE Project Manager**. The CoE Liaison is the primary support for the group in development of the Business Case and Public Engagement Plan. The CoE Project Manager will be the primary support for the Community Group for the development of the Municipal Improvement Agreement and as the group works with their Prime Consultant in the development of the functional program, concept drawings, budget and other studies as required.

In **CONCEPT PHASE** the Community Group should consider timing of engaging a Project Manager (hired by the community). It is the role of a Project Manager to ensure that the project is completed on time, on budget and within scope on behalf of the Community Group. Depending on capacity, a Community Group may engage a Project Manager in **CONCEPT PHASE** or appoint a member of the project committee in this role. Once in design, it is critical that a Project Manager be in place and is someone who understands the City's development process and has construction experience and accreditation (**See 8.0 Roles and Responsibilities**).

[CONCEPT PHASE READINESS CRITERIA & HANDOVER PACKAGE LINK](#)

3.1 CONCEPT PHASE – PLAN

Deliverables of the Concept Phase are established at the beginning of the phase using the Concept Transition Readiness Criteria and Handover Package tool (Link). The Community Group, CoE Program Manager and CoE Liaison will meet to review and agree upon the mandatory deliverables and any additional requirements that may assist in achieving project readiness. This review team will review the deliverables agreed upon once completed by the Community Group.

The Community Group representative, CoE Project Manager and CoE Liaison sign, indicating that they agree to the deliverables in the “PLAN” section.

The CoE Project Manager, CoE Liaison and Community Group identify the review team composition, that may include other City representatives, external representatives and experts as appropriate to the size, complexity, and sensitivity of the project.

3.2 CONCEPT PHASE – DO (DELIVERABLES)

The Community Group leads the completion of all agreed upon deliverables with support from the CoE Project Manager and CoE Liaison. The CoE Project Manager leads the development of the Municipal Improvement Agreement in collaboration with the Community Group.

3.2.1 Business Case

The Business Case ([Link to Business Case Template](#)) is a multi-purpose, decision-making document that turns an idea into reality. It builds on the Strategy Document and it explains what the idea, problem or opportunity is about, how and who it will impact, alternatives, the associated impacts, risks, cost/benefits and makes recommendations. It is also the time to start thinking about interim operations while the project is under construction. The Business Case provides timelines and it articulates the strategic goals that will be achieved once the project is completed. It is a worthwhile endeavour to ensure that all aspects and impacts of the project are considered before moving forward. **Depending on the complexity of the project, the Business Case may take significant time to complete.** Some groups hire consultants specializing in business cases to complete this work.

Contents of the Business Case include:

- ❖ Executive Summary
- ❖ Background
- ❖ Initiative Description
- ❖ Strategic Alignment
- ❖ Context Analysis
- ❖ Alternatives
- ❖ Organizational Change Impact
- ❖ Cost/Benefits (includes funding strategy)
- ❖ Resourcing
- ❖ Key Risks and Mitigating Strategy
- ❖ Operational Plan
- ❖ Recommendation, Review and Approval Process
- ❖ Appendices

Required appendices to the Business Case are:

i) Functional Program and Concept/Pre-Design Drawings

Functional Programs and Concept Drawings are completed by a Prime Consultant (architect or engineer see **Section 8.0 Roles and Responsibilities** and [Link to Prime Consultant Procurement](#)).

To retain a Prime Consultant typical practice is to put out a request for proposals (RFP). An RFP invites interested Prime Consultants to submit a proposal to work on a project.

The scope of services by a Prime Consultant, during the **CONCEPT PHASE**, should only be for the functional program and concept work as the project will require City of Edmonton approval prior to proceeding into further design.

City of Edmonton staff will assist the Community Group in navigating and achieving these deliverables. But it will still be the responsibility of the Community Group to retain and manage their Prime Consultant.

Functional Program

Functional programming can be described as the decision-making process that clearly defines the problem and scope of work for design. It will identify the Community Group requirements.

The purpose of a functional program is to provide the Community Group and design team with a clear understanding of the activities to be accommodated and the functional criteria to be achieved in the design of new or renovated facilities or amenities. In addition, functional programs are used to evaluate potential design solutions or alternatives during the design process. A functional program can also be used to generate a Class 5 - 50%/+100%.

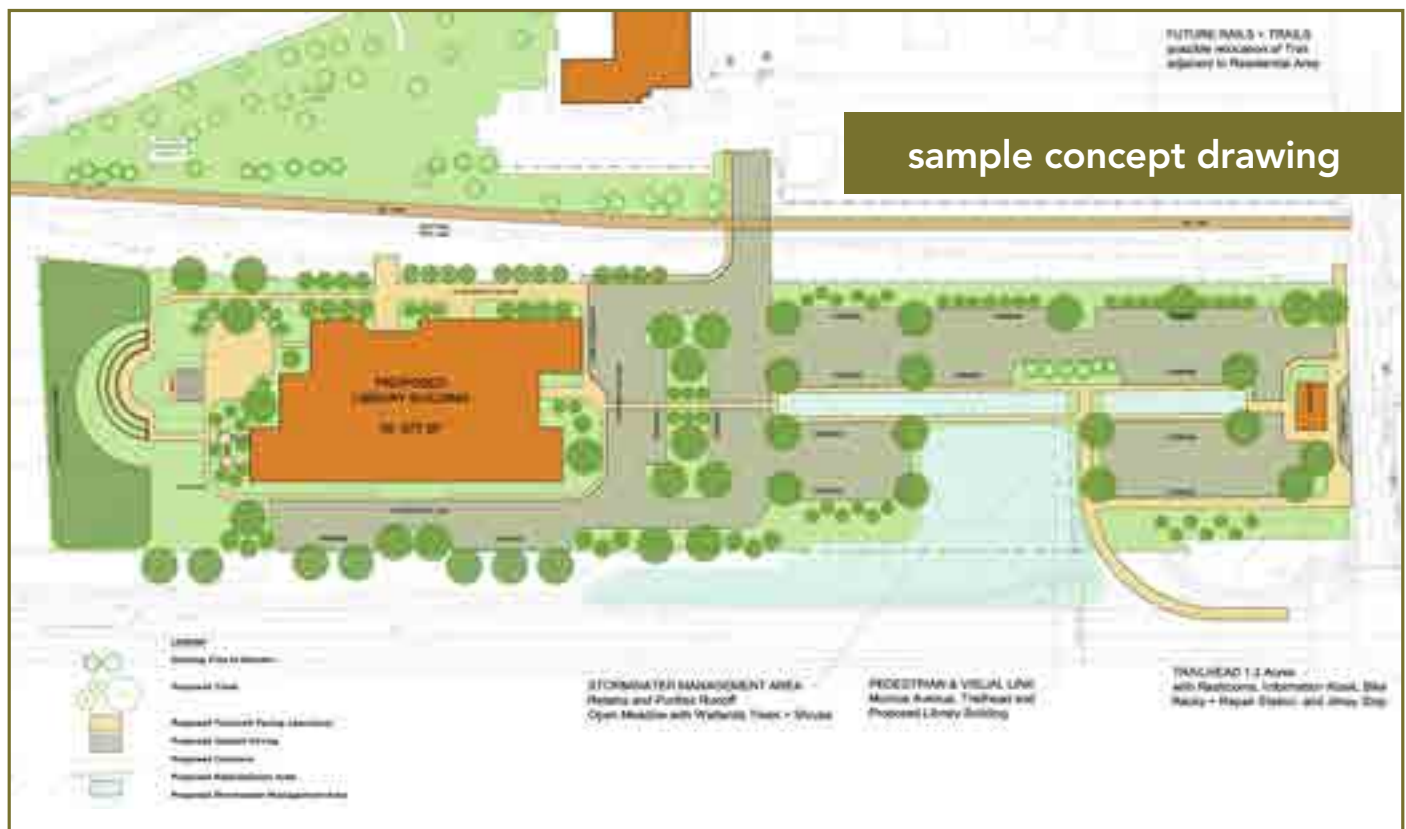
A functional program is generally created through the following activities:

- ❖ describing the client's philosophy, vision and goals
- ❖ describing the services that are to be provided by the new or renovated facility
- ❖ identifying how the services will be delivered and/or operational characteristics
- ❖ identifying activities, workload, and other measurements that may have an impact on space
- ❖ identifying the number of people and/or staff required to provide the services and all other occupants
- ❖ identifying major equipment used in the provision of services
- ❖ identifying relationships between spaces or groups of spaces
- ❖ preparing detailed space requirements

Concept Drawings

Concept drawings are based on the functional program and are completed by the Prime Consultant. Concept Drawings establish the scale (estimated square footage) and relationships among the components of the project and provide a cost estimate. While the drawings are not detailed design drawings, and do not need engineering or construction details, concept drawings do need to show:

- ❖ general facility size and shape
- ❖ the proposed location on site
- ❖ proposed and existing amenities/buildings, access, parking, landscaping and/or other features on site
- ❖ haul route - the path that will be used by construction related vehicles to access the work site and laydown area
- ❖ laydown area - a temporary space that has been identified for the storage and staging of construction related materials, supplies and equipment
- ❖ full project cost estimate Class 4 Estimate (-30%/+50%)



ii) Public Engagement Plan (PEP)

The PEP first developed in **STRATEGY PHASE** should be revised as needed and continued to be implemented. The CoE Liaison will work with the Community Group to update this plan and will continue to support its implementation throughout the project.

iii) Project Committee Terms of Reference

Developed in **STRATEGY PHASE** and attached as an appendix to the Business Case.

iv) Detailed Project and Operating Budgets

The Community Group will need to develop both a project budget and operating budget as part of the overall Business Case.

- ❖ Project Budget – The project budget will articulate the full project costs and the means by which the Community Group will meet the budget and timelines. Include all costs in Project Budget. It is critical that the Community Group understand the costs involved for project management, consultants and Construction Contractor throughout the project. Rule of Thumb: depending on project scale and scope, approximately 70-80% of the overall budget will be construction costs (materials and labour to complete the project) and 20-30% will be soft costs (consultant fees, permits, furniture, fixtures and equipment). Contingency must also be allocated for both construction costs and soft cost and provides funds for the unexpected but should be expected to be expended. Contingency should be included in every estimate.

It is important to understand how contingency has been captured in the cost estimates and the percentage. The Community Group must have a comfort that the contingency is based on thorough risk assessment. Cost escalations must also be considered - these are the changes in costs that will occur from the time of estimates to build. Escalations should be included with the estimates.

- » The Cost Estimation Checklist ([Link to Cost Estimation Checklist](#)) is a helpful tool for ensuring all project costs have been accounted for.
- » Consider what will happen if grants are not received.
- ❖ Operating Budget – The Community Group’s operating budget will need to be updated to include the ongoing impacts of the project. This includes consideration of how the project will generate new revenues, initiate new expenses or reduces expenses. This will allow the Community Group to determine the economic viability for the project being proposed.
 - » The operating budget is to include a 12 month profit and loss projection, 3 to 5 year projected balance sheet and 3 to 5 year projected income statement. Together these spreadsheets represent a reasonable estimate of an organization’s financial future.
 - » The profit and loss projections should be accompanied by an explanation of the major assumptions used to estimate the organization’s income and expenses.
 - » Community groups are recommended to create a capital reserve to cover the cost of repairing and/or replacing capital items as they reach the end of their useful life (eg. roof replacement in 25 years).
- ❖ A CoE Liaison will be able to assist in the development of these budgets.

3.2.2 Studies as required

Depending on the project scope, scale and location, projects may require the following deliverables prior to moving to the **DESIGN PHASE**:

- ❖ environmental review and/or environmental site assessment
- ❖ other studies such as geotechnical, traffic and parking impacts, utilities, Crime Prevention Through Environmental Design or a topographical study
- ❖ the requirements for these studies may be identified by the Prime Consultant or CoE staff

3.2.3 Municipal Improvement Agreement

Through the Business Case development and assessment of risk and capacity during the Concept Phase, the City of Edmonton (CoE) and the Community Group will develop a draft Municipal Improvement Agreement that will guide future phases of the project by defining the key milestones and reviews/approvals required to manage scope, budget, quality and schedule in addition to defining the level of City support for each phase. Execution of the municipal improvement agreement formulates the final approval to proceed into design.

3.2.4 Community Group Review

At the completion of the Business Case and Appendices the Community Group must review and confirm or challenge its commitment to proceed with the project. The review should be based on the proposed budget including all project elements – construction costs, project management and consultant fees, site preparation and demolition, permit fees, contingency, functionality (i.e. will the project, as proposed, meet community needs/goals), proposed timelines and resource capabilities. The review should also involve stakeholders as defined in the Public Engagement Plan. At this point the Community Group may:

1. Proceed with the project as planned and defined confirming with the city project manager that all deliverables have been completed and the project is ready to proceed to concept phase check.
2. Revisit and revise the plans to date in order to more appropriately shape the project and its intended objectives. It is far less costly to change the concept now than once architects and engineers have completed detailed design planning.
3. Cancel the project.

Notes: Approval by the group to move forward should include approval of the funding strategy including the use of Community Group funds for the project. Record of these approvals, captured in meeting minutes, will need to be included in the appendices of the Business Case.

3.3 CONCEPT PHASE CHECK

The CoE Project Manager convenes the review team that includes the Community Group, CoE Liaison and others appropriate to the size, complexity and sensitivity of the project. The mandatory deliverables are reviewed by the review team for completeness and quality. The Community Group, CoE Liaison, CoE Project Manager and respective supervisors sign indicating all items have been completed and verified. This review will be followed by a broader review as the CoE Project Manager circulates the package to relevant City of Edmonton departments and external stakeholders (e.g. affected school boards and/or utility companies) for their comments, conditions and advisements. Following this review and circulation the project may require further changes or modifications

3.4 CONCEPT PHASE APPROVE

The completed Concept Phase Readiness Criteria and Handover Package is reviewed by the CoE director.

If approved to move forward to DESIGN PHASE, the Community Group will receive approval of the Concept phase Readiness Criteria and Handover Package and a CONCEPT PHASE approval letter from the City of Edmonton with approval to enter into a Municipal Improvement Agreement.

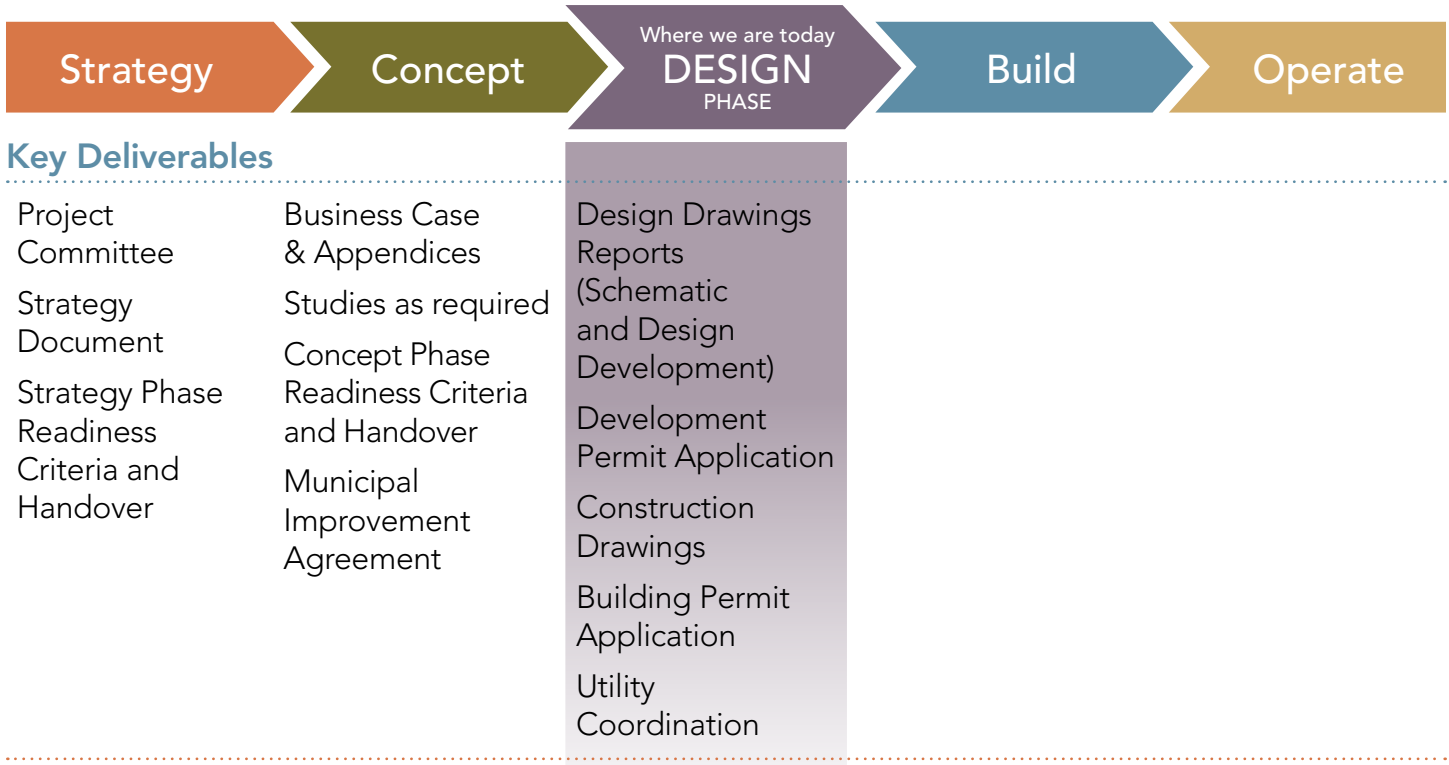
3.4 CRITICAL SUCCESS FACTORS FOR CONCEPT PHASE COMPLETION

- ❖ Allocate time and resources to develop the Business Case and required appendices. The value of the work done in **CONCEPT PHASE** cannot be overstated. It sets the path for project success. Consultants and time will be required to generate the materials needed to determine project options and ultimately project viability. Determining best practices for acquiring these consultants and understanding City of Edmonton requirements will be supported by the team of City staff assigned to the project.
- ❖ Starting in **CONCEPT PHASE**, if the project involves demolishing or renovating a facility, an important risk to consider and plan for is the possible existence of hazardous materials which can significantly impact costs and schedule. This risk should be first identified in the Business Case during **CONCEPT PHASE** and then continued to be addressed in subsequent phases.
- ❖ Understand that there are City policies, such as the Corporate Tree Management Policy or Edmonton Design Committee that will apply/impact the project. CoE staff can assist in identifying these.

4.0



Developing The Detailed Design - Design Phase



Design Phase

The **DESIGN PHASE** focuses on preparing for project implementation. It is critical that the Community Group have funds in place to complete the **DESIGN PHASE** including all necessary permitting and associated costs. If these funds are not in place, then the group will need to work on obtaining these funds prior to initiating any of the activities of the **DESIGN PHASE**. The **DESIGN PHASE** presents another (and necessary) opportunity to plan ahead. At the conclusion of the **DESIGN PHASE** all the preparatory work needed to implement the **BUILD PHASE** of the project should be complete. The Municipal Improvement Agreement guides the Plan, Do, Check, Approve steps through the **DESIGN PHASE**.

4.1 DESIGN PHASE DELIVERABLES

4.1.2 Design Drawings Reports

To develop design drawings the Community Group will build upon the functional program and concept plans (see **Section 3.1.1**) and will need to retain a Prime Consultant (architect or engineer see **Section 8.0 Roles and Responsibilities** and [Link to Prime Consultant Procurement](#)). The Community Group may wish to continue working with the Prime Consultant who completed concept plans for the group. An updated proposal with the design and build phase scope may be required from the Prime Consultant. This is an important opportunity to confirm going forward that the Prime Consultant is aligned with the approved Concept and that services will be within budget. Development of Design Drawings will also engage stakeholders as defined in the PEP.

4.1.2.1 Schematic Design Report

Utilizing the approved concept the next refinement of design is Schematic Design. A schematic design report consists of a site plan, floor plans, an elevation, overall dimensions and estimated Class 3 cost of construction (-15% to +35% estimate accuracy).

4.1.2.2 Design Development Report

Design development takes the design documents from schematic one step further. This phase lays out in greater details the mechanical, electrical, structural and architectural details. Deliverables consist of floor plans, sections and elevations with full dimensions. Drawings include door and window details and material specifications. The report also includes a Class 2 cost estimate (-15% to +25% estimate accuracy). Design Development drawings position the project to be ready for a Development Permit application.

4.1.3 Development Permit Application

To proceed further into the **DESIGN PHASE**, a Development Permit from the City is required. A Development Permit approves the use of a site, as well as the size and location of any buildings or structures. It also determines criteria such as parking requirements, landscaping, and a property's appearance in the context of a neighbourhood. **Development Permit approvals must be obtained for new construction, renovations, businesses or changes of use to existing buildings.** A Development Permit is typically applied for by the Prime Consultant. A Development Permit is written approval from the City of Edmonton that plans are in accordance with Edmonton Zoning Bylaw regulations. For more information and application submission requirements, follow the website link: www.edmonton.ca/developmentpermits.

The Edmonton Service Centre (See www.edmonton.ca for street address) is an excellent resource for information and also the location for submitting a completed Development Permit application. Staff are available to answer questions about applications and will screen the application for completeness at the time of submission. No appointment is necessary.

For major and/or complex development proposals, an applicant may request a pre-application meeting (fees applicable) prior to formally submitting a Development Permit application. This is recommended.

Notes:

- ❖ the Community Group should review and approve, as per governance structure, the completed Development Permit package prior to application
- ❖ with the Development Permit application attach a copy of the CoE Municipal Improvement Approval letter, authorizing the Community Group to move forward to design
- ❖ Development Permit applications are subject to applicable fees as outlined in the fee schedule; follow the website link: www.edmonton.ca/permitfees
- ❖ minor amendments to an approved Development Permit application may be assessed an additional fee; the development officer shall determine when to impose the additional fee
- ❖ major amendments to an approved Development Permit will require a new Development Permit application with full application fees; the development officer shall determine whether changes to an application are considered major
- ❖ the Community Group may be required to enter into a second municipal improvement agreement (MIA) with City of Edmonton for additional site related improvements

Timeframe from Development Permit application submission to decision is dependant upon the scope and complexity of the proposed development and volume of applications received by the Current Planning Service Centre. Approved Development Permits may also be subject to a 14-day notification period and the right of appeal.

4.1.4 Construction Drawings

Construction Drawings, including progress submissions and finally a pre-bid submission, are the complete set of drawings and specifications intended to convey all information necessary to allow a Construction Contractor to bid and construct the project. These drawings include a Class 1 Cost Estimate (-10%to +10%). As construction drawings are developed, they are submitted to the Community Group for review at agreed upon points of progress until they are 100% complete. The number of report submittals and reviews should reflect the scope and scale of the project and will be defined by the contract with the Consultant.

4.1.5 Building Permit Application

A Building Permit is required for the construction, alteration or demolition of buildings and structures and for installing new signs. Building Permits are used to ensure that what is being built meets all safety standards as per the Alberta Building Code. For more information: www.edmonton.ca/currentplanningforms (*Commercial Building Permit Application & Guide to Completing Commercial Building Permit Application*).

The Edmonton Service Centre (see www.edmonton.ca for street address) is an excellent resource for information and also the location for submitting a completed Building Permit application. Staff are available to answer questions about applications and will screen the application for completeness at the time of submission. No appointment is necessary.

Typically, the Prime Consultant will apply for the Building Permit on behalf of the Community Group.

A Building Permit is issued after the detailed construction drawings are reviewed by a Plans Examiner to determine if the project complies with the Alberta Building Code. If the design meets code requirements, a Building Permit is issued. If the Examiner notes any infractions on the drawings or has questions regarding the design, the applicant will receive a plan examination report to request more information or changes. Extra information will be reviewed and once everything is properly addressed, the Building Permit will be issued. The Building Permit may be subject to conditions that will be noted on the plans or permit.

Once the Building Permit is issued, construction may start. Inspections will be conducted by Safety Codes Officers based on the type and scope of the undertaking, ultimately leading to a final building inspection, including issuance of an Occupancy Permit.

Notes:

- ❖ construction drawings required for a Building Permit and associated permits are significantly more detailed than those required for a Development Permit
- ❖ **construction drawings often take between 6-8 months to develop**
- ❖ construction drawings must reflect current City of Edmonton Design and Construction Standards. www.edmonton.ca/designconstructionstandards
- ❖ the Building Permit can only be processed after the Development Permit is approved
- ❖ Building Permit fees and associated permit fees are based on cost of construction, as defined in the "Guide to Completing Commercial Building Permit Application" (www.edmonton.ca/currentplanningforms Guide to Completing Commercial Building Permit Application)
- ❖ ensure the Community Group has a copy of all received permits

Mechanical Permit Applications

The Building Permit application will likely include mechanical and/or electrical work for which separate permits are required but typically are applied for at the same time as the Building Permit itself. Mechanical permits are mandatory when altering and installing plumbing, gas, heating and ventilation (including hydronic or hot water heating) and sewer and water servicing. Electrical permits are required for installing or altering a power service or any electrical wiring work in a structure or on site. Unless advised in writing by a Safety Codes Officer, permits are mandatory to ensure work conforms to the Safety Codes Permit Bylaw. Only those qualified to do this type of work can apply for these permits. *For more information:* [Mechanical Permit Application](#)

4.1.6 Utility Coordination

To set up electricity, gas (heat), phone/data lines, water and sewer for the first time, or to make changes to existing services, coordinating utilities will be required. Review the terms of the license, lease or agreements with the City of Edmonton to understand the requirements or obligations.

Electricity

EPCOR provides installation of new electrical service or modification of existing service lines. Details about what will be required are available on their website: www.epcor.com
Approximate timeline: the entire process can be 12 plus weeks from start to finish

Gas (Heat)

ATCO provides installation of new gas service or modification of existing service
Details about what will be required are available on their website: www.atcogas.com
Approximate timeline: apply 4-6 weeks before service is required

Phone/Data/Fibre/Cable

Connect with the Community Group's chosen service provider to make arrangements for service installation.

Water and Sewer

Details about what will be required for water and sewer are available on the City of Edmonton website: www.edmonton.ca/city_government/utilities.aspx

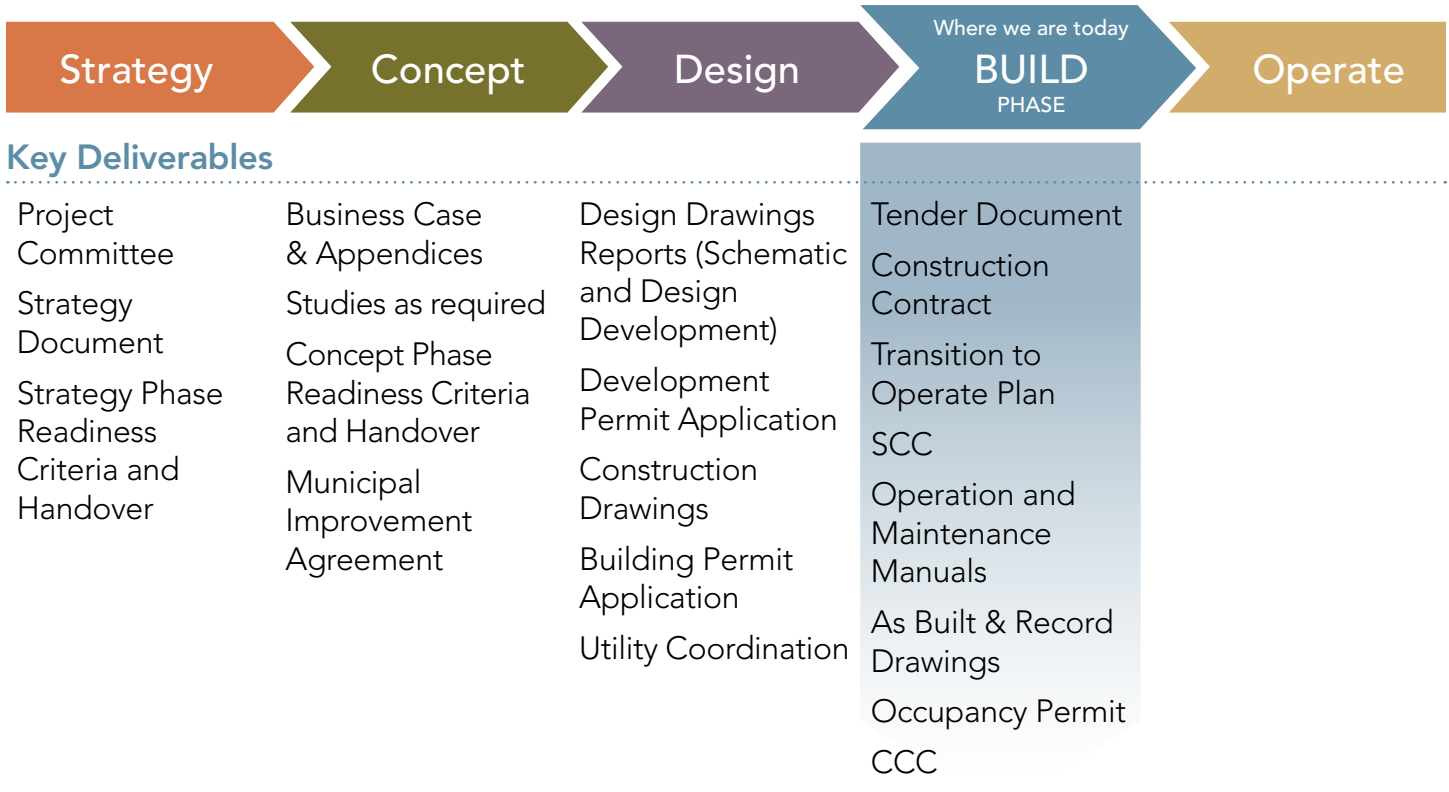
4.2 CRITICAL SUCCESS FACTORS FOR DESIGN PHASE COMPLETION

- ❖ Remember the functional program. It is important to reference the functional program throughout the **DESIGN PHASE** and confirm on an ongoing basis that the design reflects the needs identified in the functional program.
- ❖ Furniture, Fixtures and Equipment (FFE) development and refinement – the **DESIGN PHASE** should consider all the assets required when the project is complete including furniture, fixtures, security system, window coverings, appliances, audio/visual and office equipment, janitorial and maintenance, and signage/wayfinding. Ensure that the full budget at the **DESIGN PHASE** includes FFE. For budgeting it is recommended that 2-4% of the project budget is set aside for renewed FFE and 6-8% for new FFE. Acquiring these will be the responsibility of the Community Group and will not be part of the construction contract unless clearly defined within the construction contract.
- ❖ If the project is a renovation of an existing facility the Community Group needs to consider:
 - » Removal, storage and/or disposal of unwanted furniture, fixtures, equipment
 - » Operational impacts:
 - › Do programs and services need to be re-located? Is so when, where and for how long?
 - › Revenue impacts due to loss or reduction of programs and services
 - › How will these changes be communicated?
 - › Who will be responsible for developing and implementing the plan?
- ❖ Confirm funding is in place to equal or greater value than project budget (utilizing consultant cost of construction estimates plus adding “soft costs” such as consultant fees, permits, contingency, escalation etc.). Prior to commencing construction it is imperative that fundraising is complete and meets or exceeds all the costing and budget requirements.
- ❖ Continue to involve stakeholders as per the Public Engagement Plan.

5.0



Constructing The Project - Build Phase



Build Phase

The **BUILD PHASE** involves the actual construction of a facility or change to parkland.

NOTE: This phase **does not begin** until all deliverables and milestones, as defined in the MIA, have been met for the **DESIGN PHASE**. The Municipal Improvement Agreement guides the Plan, Do, Check, Approve steps through the **CONSTRUCTION PHASE**.

5.1 BUILD PHASE DELIVERABLES

5.1.1 Tender Document

Tendering is the process by which bids (proposals) are invited from interested Construction Contractors to carry out the required construction work. The primary objective of the tendering process is to obtain goods, services, and construction in a timely manner and at the best value for money through unbiased competitive bidding and contractual agreements.

Tendering requires tender documents (typically done by the Prime Consultant with input from the Project Manager). This is a legal document that identifies the project and its requirements to the intending bidders.

A tender document includes:

- ❖ an advertisement for bids
- ❖ instructions to bidders
- ❖ the bid form (standard form given to bidders so Construction Contractors may submit the information required for evaluation of the bid in correct format and sequence)
- ❖ relevant documents including drawings, specifications, photographs and reports
- ❖ the owner-contractor agreement
- ❖ labour and material payment bond
- ❖ other sections necessary to ensure that a complete price is obtained

5.1.2 Construction Contract

Using the criteria established in the tender documents (**section 8.2.3.2**), the Project Manager, on behalf of the Community Group, recommends a tender be awarded. The bid must be below or at budget. If the bid is above budget, the Community Group will need to put the project on hold until full funding is in place or modify their project to suit their budget.

Formal contracts between the Community Group and Construction Contractor must be completed prior to any work beginning on the project. The Construction Contractor provides day-to-day oversight of the construction site and all of the material, labour, equipment and services necessary for the construction of the project. The Construction Contractor can hire specialized subcontractors to perform all or portions of the construction work. Thus, the contract is inclusive of a multitude of subcontractor bids for each specific trade and the Construction Contractor's fee is built into the contract.



Insurance and Bonds

Before executing the contract, the Community Group must verify that the Construction Contractor's insurance bonds, and workers' compensation insurance are in place. This verification can be done by the Project Manager. It is recommended that the Community Group retains a lawyer to review any contracts between the parties.

Insurance

The Construction Contractor will need to verify that their insurance is in place before they are allowed to start work on the project. General liability insurance provides indemnity should the Construction Contractor's negligence result in property damage or bodily injury to a third party during construction. **Course of Construction Insurance** provides that the project will be insured from a property perspective during the construction phase up until the time of substantial completion when the Community Group would become responsible for insuring the new structure.

It is recommended that at a minimum the Construction Contractor complies with the types and limits of insurance as set out in the Canadian Construction Documents Committee (CCDC) construction contracts (see **Type of Contract**) as they relate to construction insurance.

Surety Bonds

A surety bond is a three-way contract between the Construction Contractor (a.k.a. principal), the project owner (a.k.a. obligee) and the surety company. Should the Construction Contractor become financially incapable of finishing the project the surety company will step in and provide the resources to complete the project.

The Construction Contractor should not be allowed to start work until the original surety bonds are provided to the Community Group see [Link to Bonds](#) for more information about types of bonds required.

Workers' Compensation Board

The Workers' Compensation Board (WCB) is a statutory corporation created by the Government of Alberta. If a Community Group hires contractors or sub-contractors, the Community Group is responsible for the workers' compensation insurance unless the workers have their own valid WCB account. A clearance certificate is a letter from WCB-Alberta advising if a contractor or sub-contractor has a WCB account and is in good standing. If the Contractor does not have workers' compensation insurance and the Community Group does not cover them and such individuals are injured, the Community Group is not protected from a lawsuit by the individual. See www.wcb.ab.ca for more information.

Certificate of Recognition (COR)

An added requirement of a Construction Contract can be that the Construction Contractor has a Certificate of Recognition (COR). A COR is awarded to employers who develop health and safety programs that meet established standards. A COR shows that the employer's health and safety management system has been evaluated by a certified auditor and meets provincial standards. These standards are established by Occupational Health and Safety.

Type of Contract

The Edmonton Construction Association (edmca.com) has, available for purchase, Canadian Construction Documents Committee (CCDC) standard contracts and guides. These are industry standard contracts for use.

For a design-bid-build project, a Stipulated Fixed Price Contract (a.k.a. CCDC2) is a suitable contract template. In this contract, a pre-determined amount is agreed upon for construction of the entire work. The contract is between the Community Group and the Construction Contractor, and is based on a single, pre-determined fixed price or lump sum.

Warranties

Warranties protect the Community Group against defects or failures within the warranty period. The overall warranty period will be outlined in the construction contract (typically one year from project completion). During this time the Construction Contractor will be responsible to correct defects or deficiencies in the work, at the contractor's expense.

Warranties for longer than one year may be specified for certain products or portions of the work as specified in the construction contract.

Change Orders

A change order is a written agreement for changes to the scope of work of a contract that have been agreed to by the Community Group, contractor and/or consultant.

The construction contract will define how change orders will be processed.

The Project Manager typically generates a change order that describes the new work to be done (or not done) and the price to be paid for this new work.

The Prime Consultant can estimate/validate the cost of the construction change order.

Progress Payments

As work progresses under a contract, progress payments are made based on cost incurred, a percentage of completion accomplished or for a meeting a particular stage of completion. Progress payments should only be made when adequate documentation, itemizing the work that has been completed, has been received. The contract should identify the schedule and criteria for progress payments.

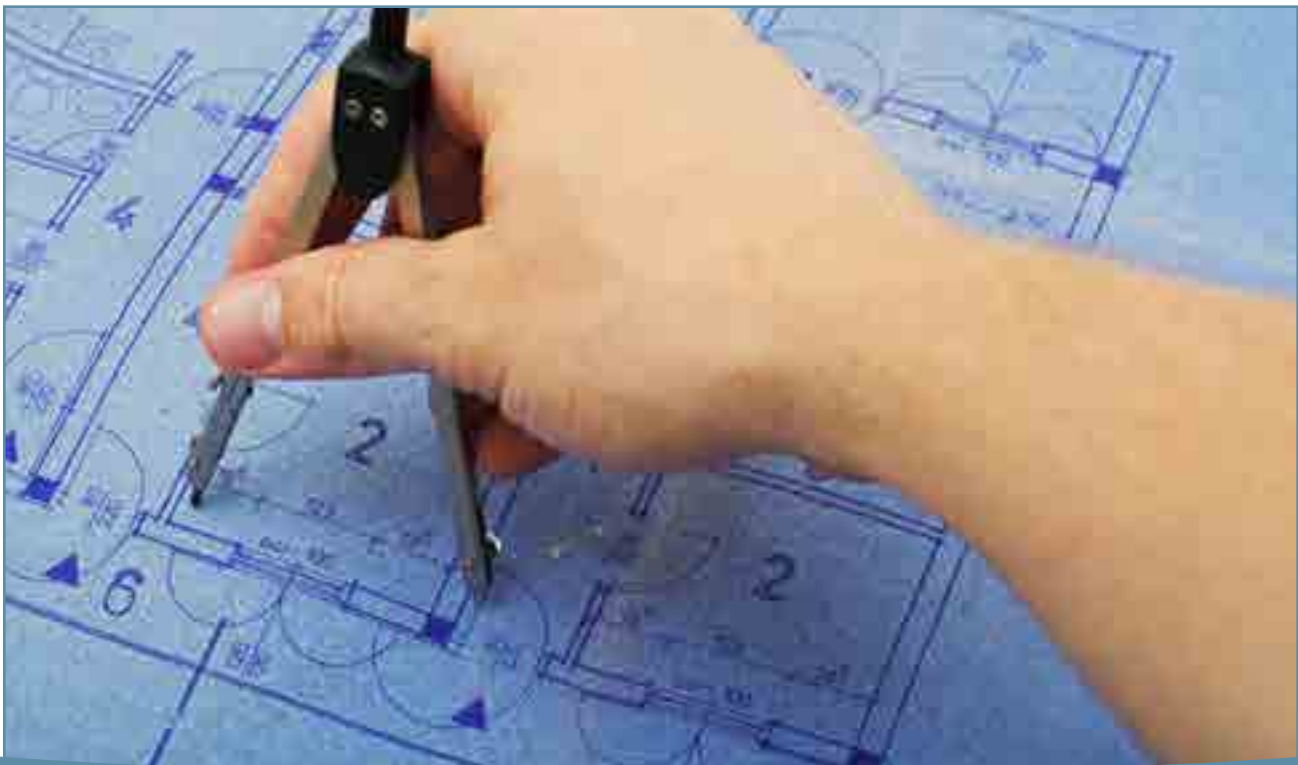
NOTE: The Builders Lien Act states that irrespective of what is specified in the contract (instalment payments or payment on completion of the contract), the project owner shall, when making payment on the contract, retain an amount equal to 10% of the value of the work actually done and materials actually furnished until eligible for release as defined by the Builders' Lien Act.

Transfer Assignment of Prime Contractor

Section 3(1) of Alberta's Occupational Health and Safety (OHS) Act requires a Prime Contractor whenever two or more employers engage in work at a work site, even if they are not working at the same time. The Prime Contractor is responsible for coordinating potentially incompatible internal health and safety systems of multiple employers and for coordinating effective communication in relation to health and safety at a work site. The general duty of the Prime Contractor is to do what is reasonably practicable to ensure that the OHS legislation is complied with on the work site (Section 3(3) of the OHS Act).

In cases where a Prime Contractor is required, the owner of the work site is the Prime Contractor unless other arrangements have been made. **The Community Group will need to transfer, in writing, the Prime Contractor title and responsibility to the Construction Contractor.**

For more information: www.work.alberta.ca/occupational-health-safety/295.html



5.1.3 Transition to Operate Plan

With construction underway, it is critical to start preparing for taking on the operations of the new or updated building or amenity. This is a significant task for the Community Group to undertake during construction. Building on the operating plan that was developed as part of the Business Case, identify all that is required to successfully start operating the new or renovated facility/amenity. This will include development of a management plan, policies and procedures related to the operation of the new or renovated facility/amenity. Also, a maintenance schedule outlining how the amenity will be maintained appropriately should be created.

5.1.4 Substantial Completion Certificate (SCC)

When the Construction Contractor is of the opinion that the contract is substantially performed, the Contractor issues and posts a Substantial Completion Certificate (SCC) to verify work is substantially complete.

The *Builders' Lien Act* of Alberta defines a contract or a subcontract is substantially performed

- (a) when the work under a contract or a subcontract or a substantial part of it is ready for use or is being used for the purpose intended; and,
- (b) when the work to be done under the contract or subcontract is capable of completion or correction at a cost of not more than:
 - (i) 3% of the first \$500,000 of the contract or subcontract price;
 - (ii) 2% of the next \$500,000 of the contract or subcontract price; and,
 - (iii) 1% of the balance of the contract or subcontract price.

Upon issuing of the SCC, the Project Manager, Prime Consultant and Community Group inspect the site to deem acceptance. If the full project is deemed substantially complete as per the *Builders' Lien Act*, the Community Group releases the major lien holdback in accordance with timing stipulated by the *Builders' Lien Act* (45 days).

For more information: www.qp.alberta.ca/documents/acts/b07.pdf

Even though the project is deemed substantially complete, there will likely be some incomplete or deficient work. At this time, the Project Manager will compile a list of deficiencies to be corrected by the Contractor along with an associated value to be retained until the deficiencies are corrected.

5.1.5 Operation and Maintenance Manual (O & M Manual)

As the site work nears completion, the Construction Contractor is responsible for providing the Prime Consultant and Project Manager with the Operation and Maintenance (O & M) Manuals. O & M Manuals define the requirements and procedures for the effective operation and maintenance of the building. These manuals include details of the building's construction materials, maintenance and operation, instructions for equipment and guarantees and warranties. Drawings, manufacturer's literature, certificates and other specialist data are all included. The Prime Consultant and Project Manager will review the manuals and then forward them to the Community Group. The Community Group should receive two hard copies and/or, preferably, an electronic version.

5.1.6 As-Built & Record Drawings

As the site work nears completion, the Construction Contractor is responsible for providing the Prime Consultant and Project Manager as-built drawings. These drawings identify on-site changes to the original construction documents. The Prime Consultant will then provide changes to the documents and issue record drawings. A copy of record drawings will be required by the City of Edmonton and are to be submitted to the CoE Project Manager.

5.1.7 Occupancy Permit

Once the Building Permit is issued, construction may start. Inspections will be conducted by Safety Codes Officers based on the type and scope of the undertaking, leading ultimately to a final building inspection, at which time the determination is made that the project appears to be in compliance with the terms and conditions of the Building Permit and Alberta Building Code, and thus deemed occupiable. At that time an Occupancy Permit is issued. Conditions may be attached to the occupancy most notably with respect to maximum permitted occupant load in the building or some of its rooms.

5.1.8 Construction Completion Certificate (CCC)

Once the Construction Contractor has completed the outstanding work and deficiencies noted during substantial completion, he/she notifies the Project Manager for inspection. The Community Group, Project Manager and Prime Consultant complete an inspection with the Construction Contractor to certify that the work in the contract is complete. A Construction Completion Certificate (CCC) is issued by the Project Manager as approved by the Community Group. Forty-five days after the CCC is issued the minor lien holdback is to be released. The CCC confirms that all work of the contract is complete. If the inspection deems the contract is not yet complete, the deficiencies will be noted and the Construction Contractor must address these and then request another inspection.

5.2 CRITICAL SUCCESS FACTORS FOR BUILD PHASE COMPLETION

- ❖ All financing and permits must be in place before excavation or construction commences.
- ❖ Keep membership up-to-date on project and timelines as per the Public Engagement Plan.
- ❖ Site Start-Up Meeting - before commencing construction and subsequent to the Building Permit being approved, there should be a site start-up meeting with the Project Manager, Prime Consultant, Construction Contractor and assigned CoE staff. This meeting is an opportunity to review scope, schedule, and cost, and to ensure all requirements will be met. It is also the time to review how change orders will be processed, progress claims made, and how occupational health and safety and environmental requirements will be met. This meeting should be coordinated by the Project Manager and minutes taken. Regular project status meetings to update on these items should be scheduled at this time.
- ❖ Monitor Project Scope, Schedule and Cost - throughout the **BUILD PHASE**, the Community Group, with the assistance of the Project Manager, will need to regularly review and update the project costs, scope and schedule. This should happen at regularly scheduled status meetings and review of progress reports and claims for payment. Monitoring should also include regular site visits.
- ❖ Furniture, Fixtures and Equipment (FFE) Ordering, Purchasing and Receiving - during the **BUILD PHASE**, the ordering, purchasing and installation of FFE should occur after SCC, to ensure the facility will be ready for operations when it is opened. Receiving and installation of FFE will need to be coordinated with the Construction Contractor.
- ❖ Utility Coordination - work with the Construction Contractor to coordinate and schedule utility hook ups.
- ❖ Commissioning – Commissioning ensures that the finished project operates initially as it was intended. Through this process the Community Group is trained in how to operate and maintain the building/structure and knowledge is exchanged through demonstrations, project documentation, review of O & M Manuals and record drawings.
- ❖ As the project is wrapped up, it is important to collect lessons learned from all stages of the project. Lessons learned records successes and challenges of a project; causes and impacts; and recommendations for repeating successes and avoiding challenges. This document can be completed by the Project Manager.
- ❖ At the end of the **BUILD PHASE** create a project close out binder that will assist in future operations and maintenance. The binder should contain: all warranties (construction, equipment etc.), the O & M manuals, copies of all permits, as built and record drawings, pertinent contact information (construction contractor, suppliers) and lessons learned document.

6.0



Ongoing Operations - Operate Phase



Key Deliverables

Project Committee	Business Case & Appendices	Design Drawings Reports (Schematic and Design Development)	Tender Document	Execution of Agreements
Strategy Document	Studies as required	Development Permit Application	Construction Contract	Final Funding Reconciliations
Strategy Phase Readiness Criteria and Handover	Concept Phase Readiness Criteria and Handover	Construction Drawings	Transition to Operate Plan	
	Municipal Improvement Agreement	Building Permit Application	SCC	
		Utility Coordination	Operation and Maintenance Manuals	
			As Built & Record Drawings	
			Occupancy Permit	
			CCC	

Operate Phase

The **OPERATE PHASE** focuses on operating and ongoing maintenance. Final reports are completed and project is operational.

6.1 OPERATE PHASE DELIVERABLES

6.1.1 Execution of Agreements

With the project complete, the terms and conditions of any required agreements (i.e. maintenance, leases, licenses etc.) will start to take effect.

6.1.2 Final Funding Reconciliations

With the project complete, there will be a need to reconcile any outstanding grants received.

6.2 CRITICAL SUCCESS FACTORS FOR OPERATE PHASE COMPLETION

- ❖ Warranty period – this is the time in which defects or failures can be remedied. The Contractor is responsible to correct at his/her own expense, defects or deficiencies in the work which appear during the warranty period. Typically the warranty period is one year. The warranty period needs to be defined in the construction contract. It is important to fully understand the requirements for warranty and identify a process within the Community Group for identifying and communicating issues.
- ❖ Transition to Operate Plan - the work done earlier in the Build Phase to identify operational policy and procedures will now be critical to moving forward.



7.0



Project Completion

Strategy

Concept

Design

Build

Operate

Project Committee

Strategy Document

Strategy Phase Readiness Criteria and Handover

Business Case & Appendices

Studies as required
Concept Phase Readiness Criteria and Handover

Municipal Improvement Agreement

Design Drawings Reports (Schematic and Design Development)

Development Permit Application

Construction Drawings

Building Permit Application

Utility Coordination

Tender Document
Construction Contract

Transition to Operate Plan
SCC

Operation and Maintenance Manuals

As Built & Record Drawings

Occupancy Permit
CCC

Execution of Agreements

Final Funding Reconciliations

7.1 CRITICAL SUCCESS FACTORS FOR PROJECT COMPLETION

- ❖ Celebrate with an Official Opening – Now is the time to celebrate! All of the hard work has come to fruition – enjoy and celebrate with an official opening. Make sure to include recognition of donors and funders. NOTE: plan for this a few months after predicted completion to ensure all deficiencies are rectified and ensure special guests are given ample notice of the event.

8.0



Roles And Responsibilities

8.1 COMMUNITY GROUP

- ❖ project owner and sponsor, ultimately accountable for all deliverables and project completion
- ❖ establishes project committee of Community Group members to work directly on the project
- ❖ appoints project committee members who will attend design and construction meetings and act as the key contact with the Project Manager
- ❖ identifies the needs and the requirements of the project and develops the Business Case
- ❖ retains Project Manager, who in turn will retain the other required consultants and contractors on behalf of the group
- ❖ complies with the City of Edmonton processes, requirement, policies, standards and guidelines (e.g. Park and Facility Development Process, Tree Policy, Zoning Bylaws, etc.)
- ❖ complies with applicable legislation
- ❖ transfers occupational health and safety prime contractor status
- ❖ secures funding for the project, provides budget oversight and accounts for finances
- ❖ reviews and approves all deliverables prior to submission to City of Edmonton
- ❖ reviews and approves all change orders and scope changes
- ❖ ensures that Strategic, Financial and Development plans meet ongoing stakeholder and member needs
- ❖ ensures Operating Plan reflects project scope to support the ongoing operation and maintenance for the project in **OPERATE PHASE**

8.2 COMMUNITY GROUP RETAINED PROFESSIONALS

Depending on scope and scale, below is a description of the professionals that will be retained by the Community Group for a construction project that is led and operated by the Community Group, and located within a City of Edmonton space that is leased, licensed or occupied by the Community Group under an agreement.

8.2.1 PROJECT MANAGER

The Project Manager coordinates the entire project, ensuring all consultants and contractors are retained, work and deliverables are completed within scope, on-time and on-budget throughout the entire project. The Project Manager is responsible for overseeing procurement management for both services and materials.

THE PROJECT MANAGER IS ACCOUNTABLE DIRECTLY TO THE COMMUNITY GROUP FOR ALL DELIVERABLES AND WORK THROUGHOUT THE PROJECT.

Engaging a Project Manager assigns a leadership role to one person who will guide the project from planning to execution. There are many tasks to be accomplished; a Project Manager will take the burden off of the Community Group and provides invaluable expertise and guidance as the project progresses.

A Project Manager must bring an experienced view and vigilance in managing change, controlling competing interests, assessing project risk, and avoiding cost and schedule overruns. Ideally the Project Manager should have their Project Management Professional (PMP) designation.

BEST PRACTICE - THE PROJECT MANAGER SHOULD BE INDEPENDENT OF THE PRIME CONSULTANT AND CONSTRUCTION CONTRACTOR.



8.2.1.1 Key Responsibilities

On behalf of the Community Group the Project Manager:

- ❖ has the delegated responsibility for the planning, execution and closing of a project
- ❖ works to ensure that the facility/amenity meets time, quality and cost objectives
- ❖ facilitates the definition of project scope, goals and deliverables in conjunction with the Community Group and further refines with the Prime Consultant
- ❖ defines project tasks and resource requirements
- ❖ identifies requirements for consultants and contractor
- ❖ coordinates and manages consultants and contractors
- ❖ manages project budget, scope and schedule
- ❖ provides a communication channel between all parties
- ❖ coordinates permit applications, procurement and insurance
- ❖ identifies and manages project risks
- ❖ is responsible for occupational health and safety requirements
- ❖ coordinates utility and FFE needs
- ❖ coordinates site meetings and site inspections in conjunction with Prime Consultant and Construction Contractor
- ❖ constantly monitors and reports on progress of the project to all stakeholders
- ❖ implements and manages project changes to achieve project outputs
- ❖ coordinates payment of fees and release of funds
- ❖ conducts project evaluations and assessment of results
- ❖ develops and maintains project documentation and provides reports as determined for handover to Community Group
- ❖ adheres to the requirements of the Municipal Improvement Agreement

8.2.1.2 Retaining a Project Manager

Position Posting

- ❖ Prior to recruitment, the Community Group may need to create a Project Manager position posting that includes a project background, main tasks and responsibilities, desired qualifications and application requirements.
- ❖ See *Sample Project Manager Position Posting* ([Link to Project Manager Procurement](#))

Recruitment and Selection

- ❖ Opportunities can be posted on the Project Management Institute of Northern Alberta www.pminac.com
- ❖ Request that applicants submit a resume, references, proposed methodology and fee for service.
- ❖ Interview and select a candidate - See *Project Manager Key Competencies* ([Link to Project Manager Procurement](#))

Agreement

- ❖ When retaining a Project Manager (volunteer or paid), there should be a written agreement, of the services to be provided by the Project Manager, reporting relationship to the committee and fees. Prior to signing, this agreement should be reviewed by a lawyer hired by the Community Group. The contract would include an insurance requirement.
- ❖ Project Managers are hired on a percent of total project cost basis or a fixed fee. A rule of thumb is to budget 3% of total construction budget towards their fees (may vary depending on project scope and scale).
- ❖ **IN CONCEPT PHASE** the Community Group is still working towards concept approval from the City of Edmonton; therefore, a clear agreement needs to be in place stating that the services to be provided by the Project Manager are for the **CONCEPT PHASE** only and the next phases of project management services will be subject to the project moving forward and approvals from the City of Edmonton.

8.2.1.3 Orientation

- ❖ As part of their orientation, take the time to review all the work done to date with the Project Manager—the more they know, the more help they can be. Review with them their agreement and project assumptions, expectations, risks/constraints, roles and responsibilities and reporting structure.

8.2.2 PRIME CONSULTANT (Architect or Engineer)

The Community Group will require a “Prime Consultant”, which, depending on the nature of the project, will either be a registered architect or professional engineering firm. The Project Manager will identify the type of Prime Consultant best suited to the project.

Typically architects are the Prime Consultants when building design is required. Other team members may be mechanical, electrical or structural engineers, and other specialist consultants as necessary. The Prime Consultant is responsible for the overall management and coordination of this team.

NOTE: If the project is landscaping in focus, then the Prime Consultant may be a landscape architect.



8.2.2.1 Key Responsibilities

The Prime Consultant:

- ❖ retains and manages necessary subconsultants for speciality work such as audio/visual, elevator, acoustics or roofing
- ❖ coordinates off-site utility reviews
- ❖ provides project scheduling and costing throughout
- ❖ prepares contract document for their services including sub-consultants
- ❖ prepares architectural design, documentation, drawings and specifications
- ❖ prepares structural design, documentation, drawings and specifications
- ❖ prepares mechanical design, documentation, drawings and specifications
- ❖ prepares electrical design, documentation, drawings and specifications
- ❖ prepares civil design, documentation, drawings and specifications
- ❖ prepares landscape design, documentation, drawings and specifications
- ❖ identifies design impacts to operating
- ❖ assists with tender documents, analysis and evaluation
- ❖ completes Development and Building Permit applications
- ❖ responds to quotation requests and change orders during build (review, approvals and recommendations)
- ❖ reviews and provides recommendations on progress claims
- ❖ attends site meetings
- ❖ performs ongoing site inspections during construction to confirm compliance
- ❖ ensures receipt of Occupancy Permits
- ❖ reviews of as-built drawings, O & M Manuals
- ❖ provides record drawings
- ❖ participates in year-end warranty inspection
- ❖ supports requirements of Municipal Improvement Agreement

The Consulting Architects of Alberta and Consulting Engineers of Alberta scope of services document is an excellent resource that outlines the professional relationship with the Prime Consultant, agreements needed, and, in greater detail, basic services provided. Refer to: www.consultingarchitects.ab.ca

8.2.2.2 Retaining a Prime Consultant

Request for Proposal

- ❖ To retain a Prime Consultant, typical practice is to put out a request for proposals (RFP).
- ❖ The Project Manager, with input from the Community Group, can coordinate the RFP, recruitment and selection of a Prime Consultant
- ❖ An RFP invites interested Prime Consultants to submit a proposal to work on a project.
- ❖ The RFP will contain project background, budget, information to be included in the Prime Consultant's proposal (experience, design and technical skills, project understanding, project delivery and schedule, including sub-consultants and fee proposal) and how the proposals will be evaluated.
- ❖ Typical factors in selecting Prime Consultant:
 - » professional capability, past experience and expertise of the firm and team members proposed
 - » suitability for the project including compatibility, creativity, approach to managing the work, commitment to project schedule, budget and quality
 - » confirmation of fee for services
 - » see *Prime Consultant Key Competencies* ([Link to Prime Consultant Procurement](#))
- ❖ Consulting Architects of Alberta has developed a RFP template. Refer to: www.consultingarchitects.ab.ca
- ❖ If the Prime Consultant is an engineer refer to Association of Professional Engineers and Geoscientists of Alberta website (www.apenga.ca) for similar resources.

Recruitment and Selection

- ❖ The Alberta Association of Architects (www.aaa.ab.ca) and the Association of Professional Engineers and Geoscientists of Alberta (www.apenga.ca) both have member directories.
- ❖ Receive the proposals, review and shortlist candidates for interviews. As a committee, interview the shortlisted firms. Using the previously developed selection criteria, the interview should include both a presentation from the Prime Consultant and questions from the committee. It is important that the Prime Consultant is a good fit with the committee and project. Be sure to check references.

Contract

- ❖ When retaining a Prime Consultant, a written understanding is required, in the form of a contract of the services to be provided, reporting relationship to the committee and fees.
- ❖ Any contracts should be reviewed by a lawyer hired by the Community Group.
- ❖ Architecture Canada (www.raic.org) and Association of Consulting Engineering Companies Canada (www.acec.ca) both have industry standard contract documents and guides available for download.
- ❖ In determining the fees for consulting services, the Consulting Architects of Alberta and Consulting Engineers of Alberta agreed to an industry standard scope of services and fee schedule that can be applied to projects.
 - » Refer to the Consulting Architects of Alberta and the Consulting Engineers of Alberta Scope of Services document www.consultingarchitects.ab.ca
 - » This document will help predict the fees for the Prime Consultant based on the project type, anticipated project budget and project phase.
- ❖ **IN CONCEPT PHASE** the Community Group is still working towards concept approval by the City of Edmonton; therefore, a clear agreement must be in place that states the services to be provided by the Prime Consultant are for **CONCEPT PHASE** only.

8.2.2.3 Orientation/Start up Meeting

- ❖ As part of their orientation, take the time to review all the work done to date with the Prime Consultant, and include the Project Manager in this discussion. Review with them the contract, assumptions and expectations to ensure everyone has the same understanding.

8.2.3 CONSTRUCTION CONTRACTOR

The Construction Contractor is the Company with the main responsibility for the construction of the project in accordance with the design drawings and specifications and the contract with the Community Group.

8.2.3.1 Key Responsibilities

The Construction Contractor:

- ❖ is responsible for the day-to-day oversight of a construction site, management of vendors and trades, and communication of information to involved parties throughout the course of a building project
- ❖ is responsible for providing all of the coordination of the material, labour, equipment and services necessary for the construction of the project; the Construction Contractor hires specialized subcontractors to perform portions of the construction work

8.2.3.2 Retaining a Construction Contractor

The Project Manager and Prime Consultant will coordinate the tender, recruitment and selection of the Construction Contractor

Tender

- ❖ Tendering is the process by which bids (proposals) are invited from interested Construction Contractors to carry out the required construction work. The primary objective of the tendering process is to obtain goods, services, and construction through competitive bidding and contractual agreements.
- ❖ Tendering requires tender documents (typically done by the Prime Consultant with input from the Project Manager). These are legal documents that identify the project and its requirements to the intending bidders.

Recruitment and Selection

- ❖ The Edmonton Construction Association (www.edmca.com) has a comprehensive directory of contractors
- ❖ The tender document will outline the criteria for award of the contract. Options are:
 - » Lowest Bid – lowest bid wins the project
 - » Best Value – defining factors for success beyond lowest price is used to evaluate the bids (e.g. organization's history and record, reputation); criteria must be established before the tender (evaluated tender)
 - » Qualification Selection – Construction Contractors submit qualifications and the most qualified firm is selected, then the project scope of work, schedule, budget, and fees are negotiated

Contract

- ❖ Formal contracts between the Community Group and Construction Contractor must be completed prior to any work beginning on the project. The Construction Contractor provides day to day oversight of the construction site and all of the material, labour, equipment and services necessary for the construction of the project. The Construction Contractor hires specialized subcontractors to perform portions of the construction work. Thus, the contract is inclusive of a multitude of subcontractor bids for each specific trade and the Construction Contractor's fee is built into the contract.
- ❖ The Edmonton Construction Association (www.edmca.com) has, available for purchase, Canadian Construction Documents Committee standard contracts and guides. These are industry standard contracts for use.
- ❖ For a design-bid-build project a Stipulated Fixed Price Contract is a suitable contract template. In this contract, a pre-determined amount is agreed upon for construction of the entire work. The contract is between the Community Group and the Construction Contractor, and is based on a single, pre-determined fixed price or lump sum.
- ❖ Contracts between the Community Group and the Construction Contractor should be reviewed by a lawyer hired by the Community Group.

8.2.3.3 Orientation

- ❖ Once the contract is in place, the Project Manager will arrange a start-up meeting with the Construction Contractor, project committee, Prime Consultant and City of Edmonton Staff to review the project, roles and responsibilities, expectations and assumptions to ensure clarity on the vision going forward.

8.3 CITY OF EDMONTON

A team of City of Edmonton staff will be assigned to work with the Community Group throughout this process and to assist the Community Group to understand the overall process, issues and requirements needed to complete a project.

Team members will assist at different stages in the process. The team consists of a CoE Liaison (i.e. a Neighbourhood Resource Coordinator, Parkland & Amenity Resource Coordinator, Sport and Partner Liaison, Community Building Social Worker or Multicultural Liaison), CoE Project Manager and other resources as required.

8.3.1 CoE Liaison (i.e. Neighbourhood Resource Coordinator, Parkland & Amenity Resource Coordinator, Sport and Partner Liaison, Community Building Social Worker or Multicultural Liaison)

- ❖ orientates the Community Group to the overall Park and Facility Development Process and City of Edmonton requirements
- ❖ primary support to the Community Group to:
 - » develop strategy document
 - » initiate the project through establishment of a project committee, confirming alignment with Community Group and City of Edmonton strategic priorities and development of readiness criteria for Strategy Transition
 - » develop the Business Case, Public Engagement Plan and funding strategy
 - » ongoing implementation of the Public Engagement Plan
 - » complete any operating and/or maintenance agreements or sublicenses emerging from the project
 - » develop an operating plan
 - » reconcile grants received for the project and plan grand opening celebrations
- ❖ as a member of the City team assigned to support the project, the CoE Liaison will also support:
 - » Business Case assessment and review
 - » development of the Municipal Improvement Agreement

8.3.2 CoE Project Manager

- ❖ as a member of the review team, participates in the Strategy Phase Readiness Criteria and Handover Transition, reviewing deliverables and establishing readiness of the project to move forward into the concept phase.
- ❖ identifies land, bylaw and policy issues (e.g. zonings) and negotiates/supports resolving issues
- ❖ provides preliminary reviews and feedback on Business Case before completion if required or requested
- ❖ coordinates Business Case assessment and review including circulation to internal and external stakeholders
- ❖ provides City of Edmonton **CONCEPT PHASE** approval which authorizes the group to move to **DESIGN PHASE**
- ❖ leads creation of the municipal improvement agreement
- ❖ participates in Development Permit review
- ❖ leads project debrief at end of project
- ❖ primary support to the Community Group to:
 - » engage a Project Manager
 - » procure design consultants and obtain a functional program, concept drawings and other studies as required
 - » achieve design and build deliverables with support defined as per the Municipal Improvement Agreement
- ❖ as a member of the City team assigned to support the project, the CoE Project Manager will also support, as required, the CoE Liaison and Community Group to:
 - » develop the strategy document
 - » develop the Business Case, Public Engagement Plan and funding strategy

8.3.3 Additional staff support

- ❖ support from CoE staff of the Integrated Infrastructure Services (IIS) Department to:
 - » review and provide input, technical expertise and advice as defined in the Municipal Improvement Agreement

8.3.4 Sustainable Development

- ❖ Edmonton is governed by the Municipal Government Act, in particular the Edmonton Zoning Bylaw, the Alberta Building Code and the Safety Code Act of Alberta. Permits will be required for projects; these will be obtained during the design and build phases through Sustainable Development

8.3.5 Other Departments

- ❖ As part of the park and facility development process, submitted plans will be circulated to other City sections/departments that may be impacted for their awareness, comments and questions. Examples include: Utility Operations, Building and Parks Operations, Waste Management and Transportation.

9.0



Making A Project A Success!

THIS GUIDE HAS OUTLINED A NUMBER OF CRITICAL SUCCESS FACTORS TO MAKING A PROJECT SUCCESS. THESE CAN BE SUMMARIZED AS FOLLOWS:

WHAT MAKES A PROJECT SUCCESSFUL

- Stakeholder involvement
- Community group board support
- Clear vision and objectives
- Thorough Business Case and evaluation of project viability
- Proper planning
- Realistic expectations
- Regular meetings to ensure ongoing monitoring of project scope, schedule and budget
- Solid operating model
- Utilizing the right people

HOW PROJECTS FAIL

- Lack of stakeholder input
- Incomplete or changing project requirements
- Project goals are not well defined or understood
- Lack of resources (insufficient funding, unskilled Project Manager)
- Lack of board support or involvement
- Unrealistic expectations
- Unrealistic time frames
- Insufficient planning
- Breakdown in communications
- Lack of documentation or contracts
- Lack of communication with membership or broader stakeholder group

THIS GUIDE PROVIDES AN OVERVIEW OF THE STEPS TO PROJECT SUCCESS.

10.0



Appendix to Community Group Led Construction Project Guide

APPENDICES LINK DOWNLOADS

- [TERMS OF REFERENCE LINK](#)
- [STRATEGY DOCUMENT TEMPLATE LINK](#)
- [STRATEGY PHASE READINESS CRITERIA & HANDOVER PACKAGE LINK](#)
- [CONCEPT PHASE READINESS CRITERIA & HANDOVER PACKAGE LINK](#)
- [BUSINESS CASE TEMPLATE LINK](#)
- [PUBLIC ENGAGEMENT PLAN TEMPLATE LINK](#)
- [COST ESTIMATION CHECKLIST LINK](#)
- [PROJECT MANAGER PROCUREMENT LINK](#)
- [PRIME CONSULTANT PROCUREMENT LINK](#)
- [BONDS LINK](#)

Click on links above and the links will jump to other electronic documents including attachments, or to websites.



COST ESTIMATION CHECKLIST

Adapted from the City of Edmonton Corporate Centre for Project Management

The estimation checklist is intended to be used as a guideline only to assist in identifying various items that may need to be included for costing in the project.

Assumptions/Tools: Latest historical rates, inflation rate used as per industry standard, lessons learned for similar projects reviewed.

DESCRIPTION	YES ACTION TO BE TAKEN	NOT APPLICABLE
STRATEGY PHASE		
Strategic Direction Setting - Needs Assessment and Public Involvement Expenses		
CONCEPT PHASE		
Consultant Fees (Business Case Development)		
Consultant Fees (Functional Program, Concept Plan and Cost Estimate)		
Project Management Fees		
Studies as Required		
<ul style="list-style-type: none"> • Environmental Impact/Hazardous Materials Assessment 		
<ul style="list-style-type: none"> • Geotechnical 		
<ul style="list-style-type: none"> • Survey 		
<ul style="list-style-type: none"> • Parking/Traffic 		
<ul style="list-style-type: none"> • Crime Prevention Through Environmental Design 		
<ul style="list-style-type: none"> • Topographical 		
<ul style="list-style-type: none"> • Disability/Accessibility 		
Public Involvement		
Contingency		
Escalation (if concept phase will be multi-year)		

DESCRIPTION	YES ACTION TO BE TAKEN	NOT APPLICABLE
DESIGN PHASE		
Consultant Fees (Design)		
Project Management Fees		
Studies as Required		
• Environmental Impact		
• Geotechnical		
• Survey		
• Parking/Traffic		
• Crime Prevention Through Environmental Design		
• Topographical		
Approvals/Permits		
• Development Permit		
• Building Permit		
• Electrical/Plumbing/Gas Permits		
• Sign Permits		
• Capital Health Permit		
Utility and Right of Way Costs (power, gas, telephone, fibre optics/cable, water)		
Public Involvement		
Contingency		
Escalation (if design phase will be multi-year)		

DESCRIPTION	YES ACTION TO BE TAKEN	NOT APPLICABLE
BUILD PHASE		
Project Manager Fees		
Consultant Fees (for tender document preparation, construction contract administration including sub-consultants)		
Testing		
Construction Contract including:		
• Construction Management		
• Site removals/demolition/hazardous materials abatement		
• Site excavation/preparation		
• Facility Construction (materials, equipment and labour)		
• Parking Lot Construction (materials, equipment and labour)		
• Site Office		
• Site Security		
• Project information Signage (inside and outside)		
• Fencing		
• Landscaping (hard and soft)		
• Mobilization Costs		
• Demobilization Costs		
• Insurance		
Furniture, Fixtures and Equipment (inside and outside)		
Permanent Facility Signage		
Occupancy or Commissioning Costs		
Public Involvement		
Operation and Maintenance Manuals		
Contingency		
Record Drawings		
Escalation (if build phase will be multi-year)		
OPERATE PHASE		
Grand Opening Celebration Costs		

PROJECT MANAGER PROCUREMENT

Procurement or engagement of a Project Manager is critical to project success.

Position Description

Prior to recruitment, the Community Group will need to create a Project Manager position description that includes a project background, main tasks and responsibilities, desired qualifications and application requirements. **This is a sample position description. There may be other requirements.**

Sample Project Manager Position Description

Position Title: [Insert]

Project Background

[Describe what the project entails, the organizational structure with which it resides (i.e. committee of a Community Group), timelines and the budget]

Description of Work

[Describe the Services the Project Manager is expected to perform]

Examples:

The Project Manager will be responsible for the overall direction, coordination, implementation, execution, control and completion of _____ project ensuring consistency with organizational and City of Edmonton strategy, commitments and goals.

The Project Manager, on behalf of the Community Group:

- has the delegated responsibility for the planning, execution and closing of a project
- works to ensure that the facility meets time, quality and cost objectives
- facilitates the definition of project scope, goals and deliverables in conjunction with the architect
- defines project tasks and resource requirements
- develops project management plan
- identifies requirements for consultants and contractor
- retains and manages consultants and contractor
- manages project budget, scope and schedule
- coordinates permit applications
- coordinates utility and FFE
- coordinates site meetings and site inspections in conjunction with Prime Consultant
- provides quality assurance
- constantly monitors and reports on progress of the project to all stakeholders
- implements and manages project changes and interventions to achieve project outputs
- completes project evaluations and assessment of results
- maintains all project documentation

Qualifications

[Identify the qualifications and experience required (see 10.6.2 Project Manager Key Competencies)]

Reporting Structure

[Describe who does the Project Manager directly report to; the decision making authority of the Project Manager and the reports are required by the project committee]

Applications

Interested applicants are required to submit:

- Resume – highlighting qualifications and experience
- Proposed Project Methodology
- Fees for Service
- References

Project Manager Key Competencies

Project Manager Key Competencies and Indicators

The following can be used to help evaluate and interview potential Project Manager candidates. Consider the competencies unique to the project.

1. Project Management Experience and Qualifications

Indicators:

- Demonstrates expertise and track record in similar projects
- Project Manager accreditation or training
- Demonstrates leadership abilities with managing teams on projects of similar scale and scope

2. Proposed Methodology

Indicators:

- Demonstrates ability and understanding of project management processes (defining project scope, deliverables, tasks, schedule, budgets, risk assessment, change management and reporting mechanisms)
- Demonstrates ability to deliver a project within scope, on-time and on-budget
- Demonstrates ability to procure and manage Prime Consultant and Construction Contractors including the Request for Proposal process

3. Ability to Meet Schedules

Indicators:

- Demonstrates thoroughness of process - identifies all activities, milestones with starts and finishing dates, accounts for external factors

4. Stakeholder Engagement

Indicators:

- Demonstrates thoroughness of stakeholder engagement process - key contacts, site meetings, meeting minutes and distribution, other updates as required

5. Risk Management

Indicators:

- Demonstrates thoroughness of risk management process - upfront risk assessment, successful mitigation strategies, monitoring risks throughout

6. Community Expertise

Indicators:

- Demonstrates understanding of what a Community Group is and the time and funding limitations of Community Groups

7. References

Indicators:

- References confirm work was done to quality, schedule and budget
- References would re-hire
- Claims or litigation history

8. Fees

Indicators:

- Clear explanation of how fees are derived (ie. fixed fee, % of construction cost or hourly)
- Estimate of fees per phase of project.
- Clear explanation of charges for disbursements (office supplies, travel, etc.)
- Estimated disbursements

PRIME CONSULTANT PROCUREMENT

Prime Consultant Key Competencies and Indicators

The following can be used to help evaluate and interview potential Prime Consultant candidates. Consider the competencies unique to the project.

1. Prime Consultant Experience and Qualifications

Indicators:

- Demonstrates expertise and track record in similar projects
- Demonstrates experience managing a project team (sub-consultants) for a project of similar scale and scope

2. Proposed Methodology

Indicators:

- Address description of work in RFP
- Demonstrates ability to deliver the project within scope, on-time and on budget

3. Ability to Meet Schedules

Indicators:

- Demonstrates thoroughness of process - identifies all activities, milestones with starts and finishing dates, accounts for external dependencies
- Proposed project schedule is reasonable given time and budget constraints
- Appropriate manpower to address tasks

4. Stakeholder Engagement

Indicators:

- Demonstrates thoroughness of stakeholder engagement process for both project committee and external stakeholders - key contacts, site meetings, regular project updates, public consultation and awareness activities

5. Community Expertise

Indicators:

- Demonstrates understanding of what a Community Group is and the time and funding limitations of Community Groups

6. Ability to Add Value

Indicators:

- Specialized expertise in an area that adds value
- Demonstrates ability or capability to integrate or complete project team

7. References

Indicators:

- References confirm work was done to quality, schedule and budget
- References would re-hire
- Claims or litigation history

8. Fees

Indicators:

- Clear explanation of how fees are derived (ie. fixed fee, % of construction cost or hourly)
- Estimate of fees per phase of project
- Clear explanation of charges for disbursements (office supplies, travel, etc.)
- Estimated disbursements

BONDS

SURETY BONDS

A surety bond is a form of a financial guarantee. It is a three party contract between a surety company, the contractor (a.k.a. principal) and the owner (a.k.a. obligee). Should the contractor become financially unable to complete the project the surety company will step in on behalf of the contractor and complete the project as per the requirements of the underlying contract.

A surety bond requirement in the tender documents ensures that the Community Group is retaining financially solvent and reputable contractors for the project. It also ensures that if the contractor does become financially unable to complete the project, the surety company will be there to guarantee completion.

There are several different types of surety bonds used in a construction project:

Bid Bond

A bid bond is provided by the contractor with the tender documents when bidding on a project. A bid bond provides financial assurance to the owner of the project that the bid for the work has been submitted in good faith and that the bidder intends to enter into the contract at the price bid. The bid bond also provides assurance to the project owner that should the bidder be successful, he/she will provide any other required bonds as stipulated (such as a performance bond or labour and materials bond). Additionally, should the bidder pull out of a tendered project, the surety company guarantees under the bond that any additional costs incurred in selecting another contractor will be paid by the surety company.

Performance Bond

A performance bond protects the project owner from financial losses if the Construction Contractor becomes financially unable to complete the project. Should a contractor failure occur the surety company would step in and complete the project up to the stipulated limit on the bond. Since most contractor defaults happen after the construction has started, a bond in the amount of 50% of the contract sum is adequate to protect the interests of the owner. In some situations, bonds in the amount of 100% of the contract sum are obtained should the project be heavily financed or if the owner is risk-adverse. Understandably a bond for 100% of the contract sum is more expensive than a bond which covers 50% of the contract sum. A performance bond can be purchased on its own without the necessity of a labour and materials bond.

The requirement of a performance bond is set out in the tender documents. Work cannot commence until the bond is provided to the owner.

Labour and Material Payment Bond

A labour and material payment bond protects the interest of subcontractors, material suppliers and labourers against forfeiture of payment from the Construction Contractor. As in the case of the performance bond, a labour and material bond can be sold in increments of 50% and 100% of contract value. A labour and material payment bond cannot be purchased on its own but must be purchased in tandem with a performance bond.

The requirement for a labour and materials bond is set out in the tender documents. Work cannot commence until the bond is provided to the owner.