



Learning Facilities

Minister's Symposium on Schools Implementation Plan

Recommendation Subcommittee Reports



Learning Facilities

Minister's Symposium on Schools Implementation Plan

Planning and Design Process Subcommittee Report



Planning and Design Process

SUBCOMMITTEE STAKEHOLDER REPRESENTATION

- Alberta Architects Association
- Alberta Infrastructure
- Alberta Learning
- Association of School Business Officials of Alberta
- Buffalo Trail Public Schools
- College of Alberta School Superintendent
- Council of Educational Facilities Planners International
- Edmonton Public Schools

Subcommittee Chair: David Ryder, Barr Ryder Architects and Planners

External Consultant: David Ryder, Barr Ryder Architects and Planners

Learning Facilities Branch, Alberta Infrastructure

Project Director: Doug Ramsey, Alberta Infrastructure



Planning and Design Process

EXECUTIVE SUMMARY

One of the outcomes of the December 2001 Minister's Symposium on Schools was a recommendation for a Subcommittee to create a process for planning and designing schools to best meet student needs and to be service centres of communities for the 21st Century.

A Subcommittee was established in January 2003, to respond to the recommendation and to develop a document that would assist the Boards as leaders of the process, to understand and to implement the process identified.

This document is the formal response to that recommendation and is based on the following assumptions:

- That schools are integral partners with the community in support and provision of life-long learning.
- That sustainable funding is provided throughout all phases of the process.
- That there will be broad based ongoing consultation.
- That there may be opportunities for appropriate partnering both public-public and public-private partners.
- That as a basis for the process, School Boards will create a consolidated learning and facility 3-year planning document integrated with a 10-Year Strategic Facility Plan.
- That both Alberta Infrastructure and Alberta Learning will be an ongoing part of the consultation process.
- That the current Alberta Infrastructure and Alberta Learning standards and guidelines for school facilities form the basis and minimum requirements for design and planning.
- That the planning guidelines will address the primary program needs for:
 - Primary/Elementary Schools: 25 plus years
 - Middle/Junior Schools: 35 plus years
 - Senior Schools: 50 plus years
- That the design guidelines will allow adaptive reuse of the facility beyond primary program use.



Planning and Design Process

EXECUTIVE SUMMARY (Cont'd)

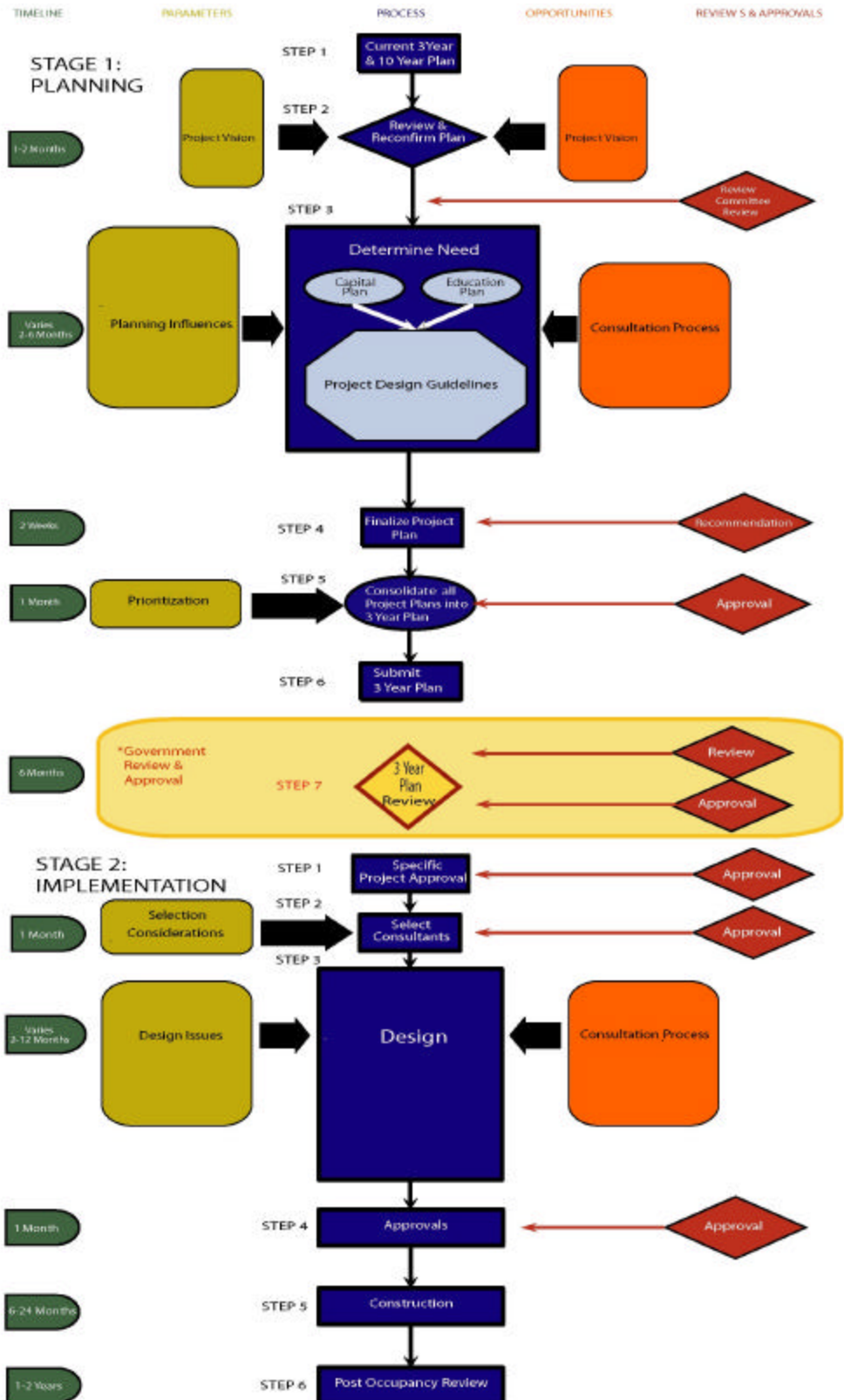
The process outlined in the enclosed charts is to be read both horizontally and vertically. It describes a primary process comprised of various steps within two stages. Each of the steps is supported by input from specific parameters and opportunities that are updated on an ongoing basis throughout the process. Suggested timelines are identified for each step with required reviews and approvals at specific steps noted.

This model is intended to be generic and as such flexible to the specific needs of the Board and its projects. The overall framework is however appropriate for all projects as the basis on which to plan and design schools for the 21st Century.



Planning and Design Process

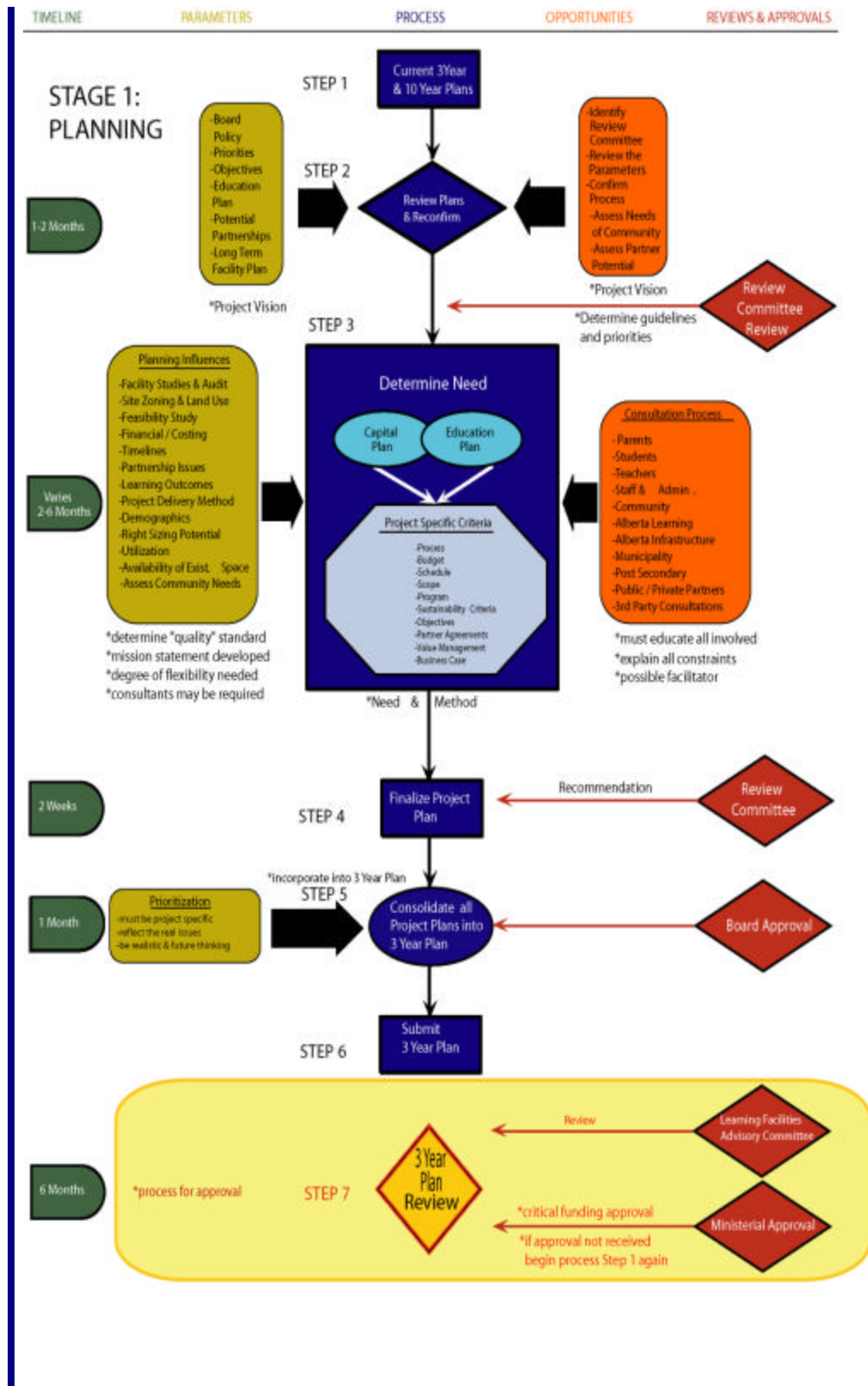
STAGE 1: PLANNING





Planning and Design Process

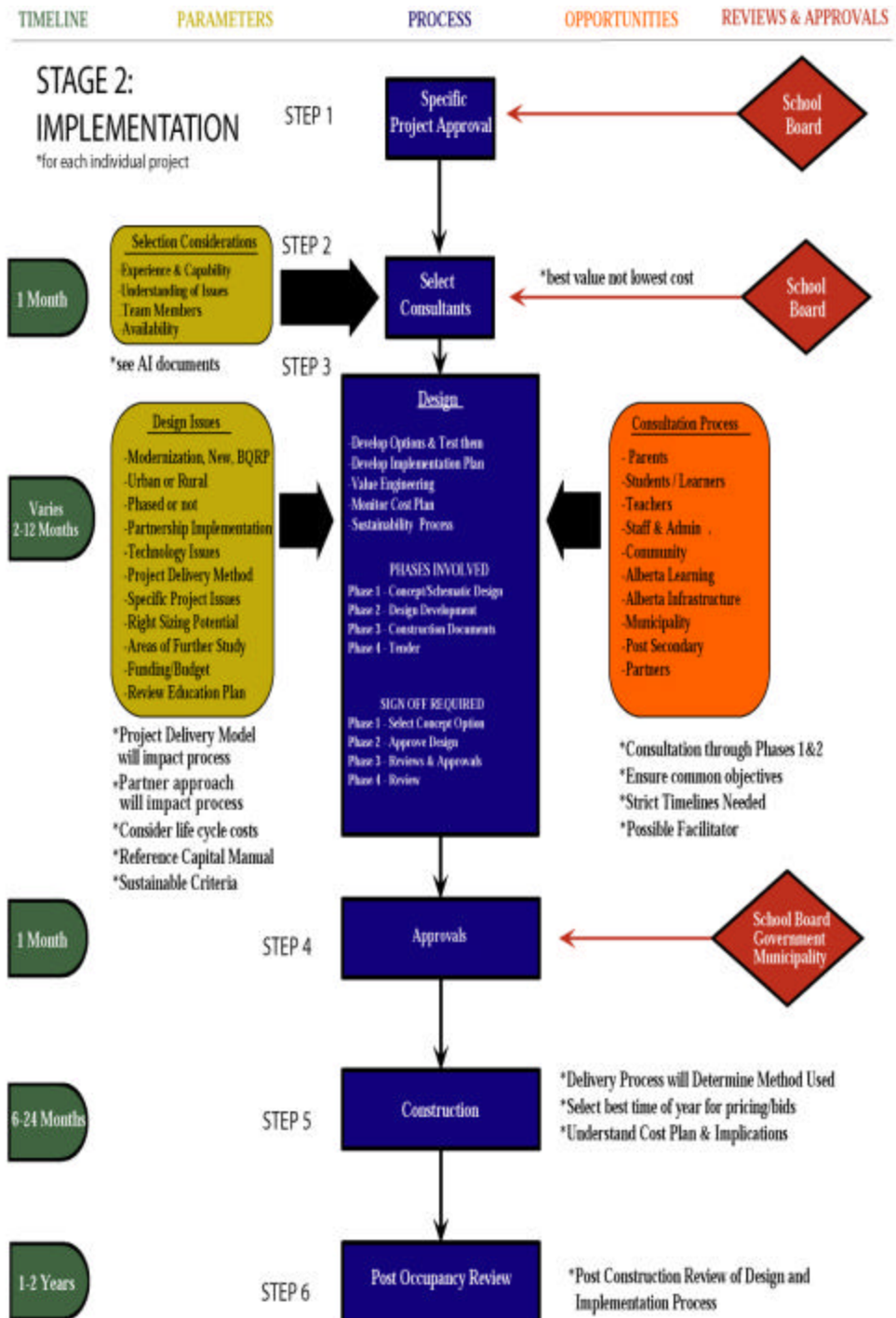
STAGE 1: PLANNING





Planning and Design Process

STAGE 2: IMPLEMENTATION





Planning and Design Process

INTRODUCTION

1.1 Objectives of the Initiative

The December 2001 Minister's Symposium on Schools mandate was to develop fresh ideas and to create new solutions on issues revolving around the development of school facilities.

Three distinct themes formed the basis of the Symposium with Theme #3 related to the functionality and utilization of school facilities.

An outcome of this theme supported that learning is considered to be a life-long process, and that design should be flexible particularly since resources are ultimately limited. The outcome was a recommendation that a subcommittee be established to:

- Create a process for planning and designing schools to best meet student needs and to be service centres of communities for the 21st Century; and
- test the process in a pilot project.

Primary feedback comments received included:

- The school should serve as a centre of the community and accommodate the needs of learners – life-long learning.
- The school should allow for flexibility and adaptability to changing needs – evolve with changing demographics and socioeconomic factors.
- The school should result from a planning and design process involving all stakeholders.
- The school that is shared with community agencies and government departments should receive shared funding.
- Learning is a life-long process; design should be flexible particularly as resources are limited.

Further it was noted that with schools needing to be built and modernized in the coming decade, communities should design schools in ways that can make an enduring difference for generations. These buildings will have a profound impact not only on students but also on entire communities.



Planning and Design Process

DEFINITIONS AND ASSUMPTIONS

2.1 Definitions

In the context of school projects the following definitions apply within this document:

- **3-Year Capital Plan:** The plan is an operational framework that addresses the highest priority school facility needs identified in the 10-Year Strategic Facility Plan. The 3-Year Capital Plan allows the objectives of the 3-year and annual education plan to be achieved. The 3-Year Capital Plan prioritizes short-term and long-term jurisdiction infrastructure requirements in relation to life-long learning, community needs and existing infrastructure. The 3-Year Capital Plan and the 10-Year Strategic Facility Plan are developed in collaboration with key partners.
- **10-Year Strategic Facility Plan:** The purpose of the plan is to identify long range facility needs in support of the School Board's education and technology plans and ensure effective use of capital funding.
- **Business Case:**

A Business Case is a tool to secure approval, resources and organizational support for a project by providing the "Why, What, When, Who and How" of the project.

Information to be included in a Business Case should specify WHAT the project is about, HOW the project fits with the organization's business plan/direction and WHY support for the project will improve the overall efficiency and/or effectiveness of the organization. The Business Case should also include, the role of staff/personnel involved (WHO), and estimated timelines for completion of the project (WHEN).
- **Capital Plan:** The capital plan is two plans, a 10-Year Strategic Facility Plan and a 3-Year Capital Plan.



Planning and Design Process

DEFINITIONS AND ASSUMPTIONS (Cont'd)

2.1 Definitions (Cont'd)

- **Education Plan:** The jurisdiction plan, which describes the philosophy, purposes, policies, practices and learning program implementation. The plan is designed within the context of the provincial accountability as defined by the School Act and Alberta Learning. The 3-year and annual education plan is linked to the 3-Year Capital Plan and the 10-Year Strategic Facility Plan. The education plan establishes the criteria used in the development of new and existing learning facilities. The education plan is developed in collaboration with key partners.
- **Facilitator:** A person who makes a group's work easier by structuring and guiding the participation of group members.
- **Implementation Plan:** Based primarily on timeline schedule with clearly described milestones reflecting the order of activities necessary from start through to completion of the process involved.
- **Life Cycle Cost:** A method of evaluating alternative building projects based on initial, operating and maintenance costs over the economic life of the project. For new buildings it is used to evaluate options concerning design, sites and materials on the basis of total life cycle costs.
- **Life Expectancy:** Represents the minimum number of years for design purposes, within which it is not anticipated that the primary building fabric nor its various systems will need to be upgraded.
- **Life-Long Learning:** Life-long learning is a process by which people acquire and apply knowledge and skills throughout life to help them reach employment goals, enjoy a high quality of life, and be active and responsible citizens. Life-long learning begins in early childhood and continues into senior years. Life-long learning enables Albertans to participate and contribute in an ever-changing economy and society. (Definition is based on the draft definition provided by Alberta Learning.)



Planning and Design Process

DEFINITIONS AND ASSUMPTIONS (Cont'd)

2.1 Definitions (Cont'd)

- **Major Project:** Is the unique atypical project that either as a result of its program complexity, size and/or value, does not represent the average model for elementary, junior or high school projects. For these projects, specific and special baseline criteria must be established.
- **Milestone:** From a scheduling perspective, milestones represent key activities that are on the critical path of the process. They represent major junctures in the process that typically require decisions and approvals.
- **Mission Statement:** Document designed at the jurisdiction level, which identifies long term learning outcomes and processes to achieve goals.
- **Partnership:** Both public and private partnership opportunities individually or collectively are considered project stakeholders that can both enhance and legitimize the planning process. Their particular needs and unique perspectives will involve consideration for specific programs, operational agreements, project funding models and maintenance conditions.
- **Planning:** The process of setting goals, developing strategies and outlining tasks, concepts, criteria and schedules to accomplish the goals.
- **Project Delivery Method:** The approach taken for the construction process selected from options: stipulated price; design-build; construction management; project management or third party developer.
- **Strategic Value Management:** Process to determine clear and tested business strategies prior to formal commitment to program/project development. This is based on a formal value methodology.
- **Sustainability:** A holistic process that will meet the needs of the present without compromising the ability of future generations to meet their needs. (See Sustainable School Buildings Subcommittee Report.)



Planning and Design Process

DEFINITIONS AND ASSUMPTIONS (Cont'd)

2.1 Definitions (Cont'd)

- **Sustainability Criteria:** Sustainability is measured in three areas: financial, environmental and social.

Financial – The process must provide appropriate value to the community.

Environmental – Must be an environmentally friendly building.

Social – Must meet the needs and future requirements of the whole community.

2.2 Assumptions

In order to establish a common baseline and to ensure the viability for success of the process identified, the following key assumptions apply:

- That schools are integral partners with the community in support and provision of life-long learning.
- That sustainable funding is provided throughout all phases of the process.
- That there will be broad based ongoing consultation.
- That there may be opportunities for appropriate partnering both public-public and public-private partners.
- That as a basis for the process, School Boards will create a consolidated learning and facility 3-year planning document integrated with a 10-Year Strategic Facility Plan.
- That both Alberta Infrastructure and Alberta Learning will be an ongoing part of the consultation process.
- That the current Alberta Infrastructure and Alberta Learning standards and guidelines for school facilities form the basis and minimum requirements, for design and planning.



Planning and Design Process

DEFINITIONS AND ASSUMPTIONS (Cont'd)

2.2 Assumptions (Cont'd)

- That the planning guidelines will address the primary program needs for:
 - Primary/Elementary Schools: 25 plus years
 - Middle/Junior Schools: 35 plus years
 - Senior Schools: 50 plus years

- That the design guidelines will allow adaptive reuse of the facility beyond the primary program use.



Planning and Design Process

PLANNING AND DESIGN FRAMEWORK

3.1 General

To be appropriate, the planning and design process for school facilities should adopt a consistent and staged approach.

A generic process has therefore been developed that is felt to provide the necessary guidance and flexibility to allow each individual project to customize the process to its specific needs.

It is recognized that there are numerous variables possible such as whether the project is in an urban or rural area, whether it involves modernization or is a new facility, and specifically with issues such as scope, budget, partnerships.

In spite of the vagaries of each project, the generic model presented can be applied and will enable an efficient consistent approach.

The process identified consists of two distinct stages – Stage 1: The Planning Process, and Stage 2: Project Implementation. Within these stages, individual process steps are developed including necessary reviews and approvals.

For each step, supportive information is indicated including anticipated timelines, parameters involved and opportunities to assist with development and the reviews and approvals necessary.

As the process proceeds, each step is able to progressively develop a design and planning initiative in a well-considered and efficient manner.

3.2 Chart Information

.1 Timelines

The timelines identified are approximate and indicate a reasonable range that might be expected for smaller modernizations through to all but exceptionally large new (major) projects. It is important to recognize realistic and reasonable timelines for each step in the process and to plan and determine milestones accordingly.



Planning and Design Process

PLANNING AND DESIGN FRAMEWORK (Cont'd)

3.2 Chart Information (Cont'd)

.2 Parameters

Parameters beginning with a project vision, form the basic building blocks on which the process evolves. These parameters including the criteria determined, is developed over the various steps in the process and allow for a consistent and detailed review of all of the issues that impact the project.

.3 Process

The process is the primary planning and design model presented in two stages each of which is comprised of independent steps. This process will lead the development of the 3-year plan and the related projects and can be molded to the specific requirements of each project.

.4 Opportunities

Opportunities represent the various inputs required at each step of the process to ensure that the project parameters and controls clearly respect the many and varied individuals, groups and organizations that must be consulted.

.5 Reviews and Approvals

To achieve a reasonable process timeline, clearly defined milestones and contingencies must be determined. Critical milestones include those at which required reviews, recommendations and/or approvals are necessary so as to proceed to the next step.

3.3 Chart Descriptive

The following charts graphically depict the overall generic process. Accompanying the charts is an expanded descriptive of the various steps indicating what is felt to be key information so as to assist with the implementation of the planning process. The process indicated is both horizontal and vertical.



STAGE 1: PLANNING

Current 3 Year &
10 Year Plans

Current 3 Year &
10 Year Plans

STEP 1 – Current 3-Year Capital Plan & 10-Year Strategic Facility Plan

The 3-Year Plan and 10-Year Strategic Facility Plan and in particular the 3-Year Plan, is considered a “living document”. As such, they require ongoing review and reconfirmation with the introduction of new data and needs. To proceed with this process on a yearly basis, this first step requires broad scope overview decisions:

- Identify Review Committee
 - Define purpose and goals to be achieved.
 - Members for STAGE 1 only (District-wide focus). Different membership for STAGE 2 (specific Design Phase), or a member could be the same throughout both stages.
 - Initiate a process with a Facilitator.
 - Equality in representation.
 - During the process of developing a project various individuals or specific interest groups will have specific requests. As a rule the most reasonable requests can be incorporated by employing a process which is inclusive and has “representation” (not one group overpowering another) that will allow for self monitoring within the group.

- 10-Year Strategic Facility Plan

The purpose of the plan is to identify long-range facility needs in support of the School Board’s education and technology plans and ensure effective use of capital funding.

- 3-Year Capital Plan

The plan is an operational framework that addresses the highest priority school facility needs identified in the 10-Year Strategic Facility Plan. The 3-Year Capital Plan allows the objectives of the 3-year and annual education plan to be achieved. The 3-Year Capital Plan prioritizes short-term and long-term jurisdiction infrastructure requirements in relation to life-long learning, community needs and existing infrastructure. The 3-Year Capital Plan and the 10-Year Strategic Facility Plan are developed in collaboration with key partners.

- Education Plan

The jurisdiction plan, which describes the philosophy, purposes, policies, practices and learning program implementation. The plan is designed within the context of the provincial accountability as defined by the School Act and Alberta Learning. The 3-year and annual education plan is linked to the 3-Year Capital Plan and the 10-Year Strategic Facility Plan. The education plan establishes the criteria used in the development of new and existing learning facilities. The education plan is developed in collaboration with key partners.



STAGE 1: PLANNING



STEP 2 – Review & Reconfirm the Plans

The 3-Year and 10-Year Plans must be reviewed based upon previous decisions as well as new implications and possible changes to requirements and opportunities. This with the understanding that this process leads to submission of each individual project’s needs within a consolidated and updated 3-Year Plan.

The School Board through consultation with school facility and community stakeholders, Alberta Learning and Alberta Infrastructure, reviews the current capital and learning priorities and either reconfirms the priorities or reprioritizes the projects according to changes in the capital plans and education plans.

- Review the Parameters
 - Define game rules at the initial meeting.
 - Clearly define anticipated timelines.
 - Clearly define constraints: budget, allowable areas, type of project and other fixed information.
 - Clearly define opportunities: share uses, flexibility.
 - Allow for process or design work to occur.
- Description or Projects

A brief description of the proposed project.

 - Priorities/Objectives
 - Establish programming and facility standards that meet or exceed Alberta Infrastructure’s minimum guidelines.
 - Develop guiding principles to aid in prioritizing the facility and program needs of each school and the Division.
 - New Construction
 - Enrollment pressures
 - Program delivery/needs
 - Modernization
 - High audit score
 - Program delivery/needs
 - Education Plan
 - Capital request must include the relevant portions of the Board’s 3-year education plan related to facility requirements for program delivery.
 - Demographics, Right Sizing, Utilization and Availability of Existing Space
 - Each of the above items needs to be addressed.
 - Potential Partnerships
 - Board does a review of potential partners that could be involved in the project.
 - 10-Year Strategic Facility Plan
 - Board needs to ensure that the 3-year capital requests address the needs identified in the 10-Year Strategic Facility Plan.



**STAGE 1: PLANNING
(Cont'd)**



- Identify Review Committee
- Review the Parameters
- Confirm Process
- Assess Needs of Community
- Assess Partner Potential

STEP 2 – Review & Reconfirm the Plans (Cont'd)

- Confirm Process
 - Purpose is information gathering and sharing.
 - Ideas requests are recorded for consideration.
 - Consensus rather than vote and veto should be the spirit of the process.
 - All have a right to be heard.
 - All will receive a response at a later session (may not be what they want to hear but shows all ideas considered).
 - A written and graphic report document to be provided as a summary post last session.
- Determine if advanced project funding is required for detailed facility and enrollment review.
- Review Opportunities

Start with shared beliefs and a collective vision; develop a list of facilities needs:

 - What will we need to do to enact our beliefs about schooling and our vision of schools?
 - What kinds of facilities will we need to have to accomplish those activities?
 - What kinds of learning environments will we need?
 - What will our future educational system look like?

Require a common understanding and clear picture of what is:

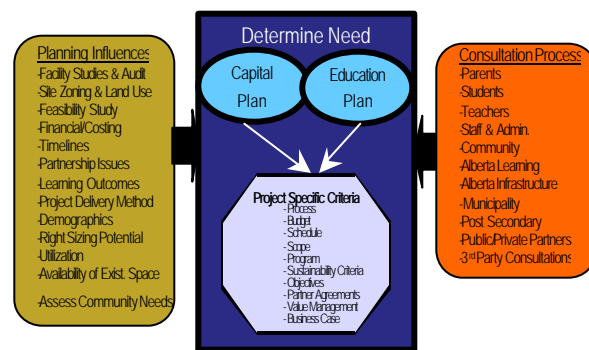
 - Common demographic studies.
 - District wide 10-Year Strategic Facility Plan.
 - Learning goals, student achievement data and graduation requirements.
 - Provincial and national standards.
 - Attitudes and perspectives of stakeholders.

Compile a list of shared beliefs about education, schools and their role in the community:

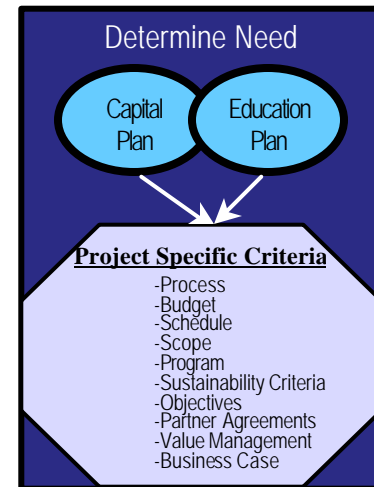
 - The community is a critical partner in schools.
 - Positive relationships are key to learning and strong communities.
 - All student/citizens need access to technological tools for learning.
 - Life-long learning is desired and necessary strategy for survival in today's world.
- Assess Partnership Potential
 - School district has determined, based on an assessment of the appropriateness of the arrangement, that is in the best interest of the public.
 - Evaluation of the partnership qualifications, value for money, meets real needs and has educational merit.
 - Explore the demands and long-term effects on the school jurisdiction/ provincial government.
 - Implementation details, budget, risk allocations, schedule.
 - Identify proprietary information and permitted uses.
 - Consider what could be done to achieve a common future focus review.
 - Future trends and potential implications for students, schools and communities.
 - Innovation models from other districts and communities.



**STAGE 1: PLANNING
(Cont'd)**



STEP 3 – Determine Need



The overall planning needs must be consolidated for each individual project in order that they can be represented within the 3-Year Capital Plan submission.

The Education Plan and the Capital Plan are developed by the School Board and are submitted to Alberta Learning and Alberta Infrastructure on an annual basis. The education plan provides the foundation for the both the 10-Year Strategic Facility Plan and the 3-Year Capital Plan.

- **Education Plan**

The jurisdiction plan, which describes the philosophy, purposes, policies, practices and learning program implementation. The plan is designed within the context of the provincial accountability as defined by the School Act and Alberta Learning. The 3-year and annual education plan is linked to the 3-Year Capital Plan and the 10-Year Strategic Facility Plan. The education plan establishes the criteria used in the development of new and existing learning facilities. The education plan is developed in collaboration with key partners.

- **Capital Plan**

The capital plan is two plans, a 10-Year Strategic Facility Plan and a 3-Year Capital Plan. The purpose of the 10-Year Strategic Facility Plan is to identify long-range facility needs in support of the School Board’s education and technology plans and ensure effective use of capital funding. The 3-Year Capital Plan is an operational framework that addresses the highest priority school facility needs identified in the 10-Year Strategic Facility Plan. The 3-Year Capital Plan allows the objectives of the 3-year and annual education plan to be achieved. The 3-Year Capital Plan prioritizes short-term and long-term jurisdiction infrastructure requirements in relation to life-long learning, community needs and existing infrastructure. The 3-Year Capital Plan and the 10-Year Strategic Facility Plan are developed in collaboration with key partners.

- Each project within the 10-Year Strategic Facility Plan and the 3-Year Capital Plan would be reviewed under the Project Specific Criteria. Project Specific Criteria drill down through the project to define the project via the Planning influences and Consultation Process.

- **Budget**

- Establish the initial budget for the project based on the area and costs per square meter at estimate time of construction and location factor. Include costs and funds previously forwarded to the project. Board budgeting should include other cost such as soils testing, hazardous materials testing and removal.

- **Schedule**

- Establish a realistic schedule, which takes into account partnerships, design and construction. The schedule will impact the budget with regard to projections of future markets.



STAGE 1: PLANNING (Cont'd)

STEP 3 – Determine Need (Cont'd)

- Scope
 - The scope of the project will be defined by the education plan, Alberta Infrastructure standards and guidelines and partner requirements.
 - The scope of the project will impact the schedule and the budget and vice versa.
- Program
 - Life-long learning, the education plan, partner program delivery requirements and sustainable concepts on long-term programming define project program. The program will define the scope, schedule and budget.
- Sustainability Criteria and Life Cycle Costing and Facilities
 - Sustainable criteria present holistic process that will meet the needs of the present without compromising the ability of future generations to meet their needs. High Performance (Green) Buildings: These are buildings that offer superior performance in a variety of areas that will decrease life cycle costs without necessarily increasing capital costs demands on the Province. (See the Sustainable School Buildings Report and Recommendations.)
- Objectives
 - These are set by the education plan, which establish life-long learning outcomes to be achieved by the building.
 - The project will be defined through the partners and stakeholder consultation process.
- Partner Agreements
 - Potential partners both public and private need to be identified.
 - The schedule needs to allow for relationship building, consultation with stakeholders and the community around the partnership. The basis of the working relationship and agreement needs to be established prior to the identification of the partner requirements.
 - Partnerships will have an impact on the budget, scope, schedule, program, objectives and sustainability of the project. (See the Alternate Procurement Opportunities Report and Recommendations.)
- Strategic Value Management
 - Process of assessing value in relation to cost in the design strategies, details, options and scheduling. The best price is not necessarily the lowest cost, such as life cycle costs.
- Business Case
 - A business case analysis should be done on all projects.
 - Where public-public and public-private partnerships are involved a business case analysis would be required.



**STAGE 1: PLANNING
(Cont'd)**

STEP 3 – Determine Need (Cont'd)

- The partnership/relationship development stages will provide the information needed to develop the Business Case* for the initiative. This will include:
 - An Executive Summary
 - Background
 - Project Description
 - Strategic Alignment (if any)
 - Environmental Analysis
 - Business and Operational Impacts
 - Project Risk Assessment
 - Cost/Benefit Analysis
 - Conclusions and Recommendations

*The template for the Business Case can be found on the Alberta Infrastructure web site www.infras.gov.ab.ca.



**STAGE 1: PLANNING
(Cont'd)**

Finalize Project Plan

Finalize Project Plan

STEP 4 - Finalize Project Plan

As a final step in determining needs for the specific project, the information and guidelines developed are consolidated into a specific project plan.

- Develop a final Project Plan suitable to be included within the overall updated 3-Year Plan.
- Review Committee to review and submit a recommendation to the respective Board for acceptance.
- Existing Studies/Audits
 - Refer to Facility Audit Report or school studies.
- Site Requirement/Zoning and Development
 - Determine site requirements for the project.
- Financial/Costing
 - Estimate project cost based on facility audit and current government funding levels.
- Timelines
 - Determine when the project is required.
- Development of Partnership Opportunities
- Education Criteria
 - Proposed project must address program delivery.
- Project Delivery
 - Construction method needs to be chosen from options:
 - Stipulated Bid Price
 - Construction Management
 - Design-Build
 - Project Management
 - Third Party Construction



**STAGE 1: PLANNING
(Cont'd)**

STEP 4 - Finalize Project Plan (Cont'd)

- Other Project considerations:
 - Modernization and/or new construction
 - Urban or rural
 - Single or multi-phased
 - Partnership criteria
 - Education program delivery
 - Rightsizing potential



**STAGE 1: PLANNING
(Cont'd)**

Consolidate all
Project Plans into
3 Year Plan

Consolidate all
Project Plans into 3
Year Plan

STEP 5 – Consolidate all Project Plans into Updated 3-Year Capital Plan

To properly update the 3-Year Capital Plan, each individual project plan must be incorporated in a well-considered manner recognizing the overall 10-Year Strategic Facility Plan.

- Incorporate all individual Project Plans into a Consolidated 3-Year Master Plan.
- Present 3-Year Capital Plan to the Board for Approval.
- Prioritization
 - Review the proposed project requests and prioritize the requests to meet established criteria of the Board.



**STAGE 1: PLANNING
(Cont'd)**

Submit 3 Year
Plan

Submit 3 Year
Plan

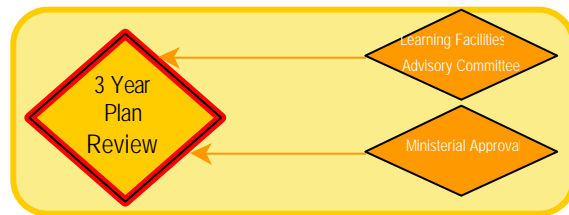
STEP 6 – 3-Year Capital Plan Submission

Once the individual project plans are consolidated into the 3-Year Capital Plan, the final document is submitted as required to Alberta Infrastructure.

- Board approved 3-Year Capital Plan submitted to Infrastructure for Learning Facilities Advisory Committee Review and Ministerial Approval (both Infrastructure and Learning).



**STAGE 1: PLANNING
(Cont'd)**



STEP 7 – 3-Year Capital Plan Government Review and Approval

At this stage in the process, STAGE 1 PLANNING is complete and STAGE 2 IMPLEMENTATION cannot commence until the internal Government review and approval process is complete.

- Learning Facilities Advisory Committee Review of overall 3-Year Capital Plan and recommendation to Minister(s).
- Ministerial approvals of individual projects.
- Projects not receiving approval return to STAGE 1, STEP 1.
- Projects receiving approval continue to STAGE 2, STEP 1.



**STAGE 2:
IMPLEMENTATION**

Specific
Project Approval

Specific
Project Approval

STEP 1 – Specific Project Board Approval

Following Ministerial approval of specific projects from within the 3-Year Capital Plan, the Board will review the criteria for each project and provide their approval for it to proceed as part of the STAGE 2 process.



**STAGE 2:
IMPLEMENTATION
(Cont'd)**

Select
Consultants

Select
Consultants

STEP 2 – Select Consultants

Prior to proceeding with the specific planning and design process for each project, a consultant team must be selected. Although the type of project delivery (construction) process selected may have an impact on the consultant selection process and criteria, there are generic considerations that should apply.

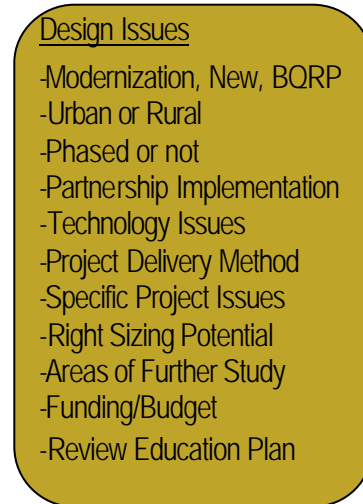
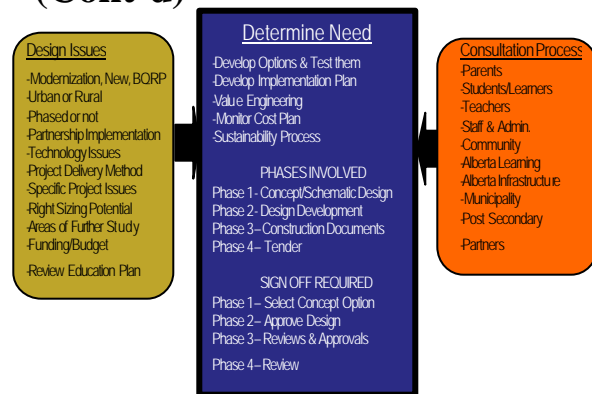
- Review the available Recommendations and Guideline documents from Alberta Infrastructure and the Alberta Association of Architects (AAA) related to the fees and conditions of consultant engagement. (See AAA website www.aaa.ab.ca)
- The consultant selection approach will vary depending on the method for construction; the degree of partnerships; and the complexity of the project.
- Selection should not be based on lowest cost but rather best value. Best value relates to the consultant’s expertise, experience, team members, methodology and anticipated rapport with the client partnership team and its philosophies.
- Selection Consideration

The following needs to be taken into consideration when selecting an architect:

- History of Firm (and if applicable, history of the firm related to the school division based on past performance).
- Details of projects completed in recent years and recent related experience on school design along with familiarity with Alberta Infrastructure guidelines as they relate to school construction.
- Names and qualifications of senior staff who would be assigned to the project.
- Project references from:
 - Clients
 - Contractors
 - Financial Institutions
- Whether the architect will use in-house specialists or outside consultants. If outside consultants are being used the architect needs to list the structural, mechanical and electrical consultants they are currently using.
- Details on insurance coverage related to the firm and the project.
- Consultant ability to meet the School Boards timelines.



**STAGE 2:
IMPLEMENTATION
(Cont'd)**



STEP 3 – Design Issues

In order to undertake the formal design process, specific project parameters must be developed and used as the basis for the design process and its related reviews.

- Issues Specific to the Project
 - Particular to Urban and/or Rural Projects
 - Single or Multi-phased
 - Partnership Implementation
 - Technology
 - Project Delivery Method
 - Issues related to construction method chosen.
 - Rightsizing Potential (if applicable)
 - Areas of Further Study (life cycle costs, value management, sustainability)
 - Funding/Budget
 - Ensure project is within provincial funding guidelines.
 - Review of Education Plan
 - Incorporate educational criteria and learning outcomes established by the Board in the project design.



**STAGE 2:
IMPLEMENTATION
(Cont'd)**

Determine Need
-Develop Options & Test them
-Develop Implementation Plan
-Value Engineering
-Monitor Cost Plan
-Sustainability Process

PHASES INVOLVED
Phase 1 - Concept/Schematic Design
Phase 2 - Design Development
Phase 3 – Construction Documents
Phase 4 – Tender

SIGN OFF REQUIRED
Phase 1 – Select Concept Option
Phase 2 – Approve Design
Phase 3 – Reviews & Approvals
Phase 4 – Review

STEP 3 - Design

While the design process may be influenced by the project delivery method selected, and potentially by partnership agreements, the primary steps necessary to undertake the design are similar. These steps are normally typical to all projects and their specific requirements are outlined within existing documentation available from both the Alberta Association of Architects and Alberta Infrastructure.



**STAGE 2:
IMPLEMENTATION
(Cont'd)**

- Consultation Process
- Parents
 - Students/Learners
 - Teachers
 - Staff & Admin.
 - Community
 - Alberta Learning
 - Alberta Infrastructure
 - Municipality
 - Post Secondary
 - Partners

- Consultation Process
- Parents
 - Students/Learners
 - Teachers
 - Staff & Admin.
 - Community
 - Alberta Learning
 - Alberta Infrastructure
 - Municipality
 - Post Secondary
 - Partners

STEP 3 – Consultation Process

The process for consultation established within STAGE 1 continues through the design stage but in a more detailed fashion. To facilitate the design process, strict timelines need to be identified within the implementation plan and adhered to by all involved. Possible use of a facilitator may be appropriate in order to achieve these schedules and to ensure that the input in conjunction with the design issues identified are appropriate for the process required.

- **Facilitator**
For specific projects the use of a Facilitator during certain planning stages may be appropriate. The role of a Facilitator is to ensure that a group has the necessary processes, structure and methodology it needs to accomplish the task at hand to the optimum.

Possible benefits to facilitation:

- Group members are more motivated to support the decision made.
- Best efforts of groups usually yield better results than individual efforts.
- Results are produced more quickly because people are committed to the decisions made.
- A forum is created for constructive conflict resolution and preventing misunderstanding.

Typical Facilitator responsibilities:

- Remain neutral on content.
- Draw out participation.
- Ensure balanced participation.
- Encourage dialogue among participants.
- Provide structure and processes for group work.
- Record, organize, and summarize input from group members.

- **Students**
 - Represent a wealthy pool of new ideas, creativity and enthusiasm.
- **Parents**
 - Are the primary educators and are essential partners in the educational journey.
 - Parents' ongoing involvement in schools, which we know is a critical factor in student success and primary source of information when it comes to determining what supports they and their families need.

Teachers/Staff and Administration

- Changing the configuration of the learning environment without changing the practice of teachers and learners creates imbalance. New technologies, team teaching, interdisciplinary learning, multimedia incorporation, cooperative work groups, collaborative problem solving, block scheduling have enhanced learning. These approaches significantly affect the kinds of spaces required in a school as well as the furniture and equipment needed.
- Teachers and administrators must take a leading role in the process of developing facilities master plans that support the best they know about learning.



STAGE 2: IMPLEMENTATION (Cont'd)

STEP 3 – Consultation Process (Cont'd)

- School Boards/District Administrators
 - Board members can use their power and influence to bring the right players to the table, create best possible conditions for action and leverage the necessary resources to support the whole process.
 - Serve as a liaison to the committee or as a member.
 - Superintendent and other senior officers have a critical leadership role to fulfill.
 - An inclusive broad-based approach to consultation and planning based upon participatory decision making and shared governance requires strong leadership due to the complication and complexities of such a process.
- Community
 - By pulling together all of the community's resources into a common vision for the future - one in which schools play a central role – everyone stands to benefit.
- Government
 - All levels of government working together to build the best schools in the best locations that we can - coordinating our efforts and leveraging our resources to make our school sites not only centres for education, but as centres of civic life in their communities.
 - Law enforcement and fire departments need to be involved for safety and security. Representatives of these local agencies need to be consulted, as they will be the ones charged with maintaining the safety of school facilities and the welfare of their users.
 - **Alberta Infrastructure and Alberta Learning** should be consulted early in and throughout the process to access their expertise.
- Business
 - Their involvement can enhance and legitimize a school district's planning process.
 - As primary customers for the products schools produce, businesses have particular needs and unique perspectives to add to the conversation.
- Post Secondary
 - Assist with the linkages to life-long learning providing a seamless vision from secondary to post secondary in support of community endeavours in teaching and learning.
 - Provide recent research data, studies on best practices.
- Private /Public Partners
 - When appropriate for such uses as museums, libraries, parks, health services etc. to join forces with schools, a community can extend the use of these resources by applying them directly to enhance student learning leading to more intelligent and efficient uses of dollars, space, personnel and expertise.



**STAGE 2:
IMPLEMENTATION
(Cont'd)**

Approvals

Approvals

STEP 4 - Approvals

Upon completion of the design process and prior to commencing construction, there are approval steps necessary.

- Reviews by the Review Committee occur at key milestones throughout Design.
- Specific approvals are provided by the Committee, to proceed to each stage of Design.
- Approval by the Minister of Infrastructure to go to tender.
- Acceptance of the tender by the Board and the Minister of Infrastructure to proceed with construction.



**STAGE 2:
IMPLEMENTATION
(Cont'd)**

Construction

Construction

STEP 5 - Construction

The method of construction will be determined by a number of project variables including: Scope of work; project complexity: type of project (i.e. preservation or new); degree and type of partnership involvement; project objectives; funding; and market conditions.

During the early planning stages, the method of construction will need to be determined in conjunction with other key decisions so as to properly understand schedule and cost implications.

The approach to construction whether it be: Stipulated bid price; design-build; construction management; project management; or by a third party developer, will have direct implications, constraints and both advantages and disadvantages to the project.



**STAGE 2:
IMPLEMENTATION
(Cont'd)**

Post Occupancy Review

Post Occupancy Review

STEP 6 – Post Occupancy Review

Construction typically carries a warranty period of one year following substantial completion. At that time, a review is undertaken specific to the original contract to ensure that any operational deficiencies or concerns are addressed.

The post-occupancy review suggested as part of this process is distinct from that warranty in that a follow-up review is undertaken after warranties are complete and the various systems have been operating under the control of the owner.

This specific review is intended to provide constructive feedback to all parties involved in the original project. It will enable future Provincial projects to benefit from the findings of this educational exercise. (See Sustainable School Buildings Report and Recommendations.)



Planning and Design Process

RECOMMENDATIONS

In consideration of the planning and design process identified and its continued application, the following recommendations are provided:

- That funding should be sustainable to avoid the peaks and valleys in the funding and artificially inflated construction markets, and the planning process requires that funding be at a sustainable annual level to be distributed to Boards on their 3-year plan and 10-year plan windows.
- That all project design respects the evolving educational needs of the facility and the learner by adopting a contextual-based consultation process.
- That the current capital funding standards, Plant Operation and Maintenance funding standards and design funding standards be re-evaluated and revised as necessary for the continued provision of sustainable schools.
- That advanced funding be approved on the basis of the process milestone steps.
- That Alberta Infrastructure review and modify the current funding model based on the specific process needs.
- That Alberta Infrastructure implement a formal process for revisiting the school facility audits every 5 years, as the audit is an important instrument used in the planning and design process.

In support for the use of this document on an ongoing basis, the following are recommended:

- That a consultation process and its associated framework be developed.
- That a training package be created including an interactive computer model.