

### Facility Project Process

1. **Project Initiation** - this initial scoping stage will outline the business case for the project. It will include information on the existing facility condition assessment (if renewal), or alternatively the needs assessment and business partner requirements for a new or enhanced service (if growth). An order of magnitude cost figure may be developed at this stage to provide indicative costs based on similar projects (Class 5 Cost Estimate -50%/+100%).

#### CHECKPOINT 1

2. **Functional Program** - this phase of development will expand the service definition to better understand the business partner program based on current and projected service level needs. This process builds out the business case to outline the broader capital requirements for the project to align with the level of service and business partner expectations. This stage also represents the initial phase of public engagement informing the project development.
3. **Concept Design** - this initial design stage generally represents the first translation of a functional program into a design drawing. The general design effort remains fairly low at this stage and only represents up to 10% design effort. A cost estimate will generally accompany this initial stage of design with a low confidence (Class 4 Cost Estimate -30%/+50%).

#### CHECKPOINT 2

4. **Schematic Design** - this stage of design will begin to layer on additional design parameters and influences such as relevant codes, policies, and bylaws and make adjustments as necessary to evolve the design. This will also include information relative to the architectural finishes for both the exterior and internal design. The general design effort for this stage represents about 30% design effort.
5. **Design Development** - at this stage construction detailing is factored into the design. A Construction Manager will often have been retained as part of the project development team to assist with providing input into the design to capture efficiency, offer cost saving alternatives and innovations, etc. The general design effort for this stage represents about 60% design effort (Class 3 Cost Estimate -20%/+30%).

### CHECKPOINT 3

6. **Detailed Design** - the final design and deliverable for this stage includes the Issued-For-Tender or Issued-For-Construction drawings and technical specifications which form the basis of the contract with the General Contractor and Subcontractors responsible for delivering the project. This concludes the design phase, 100%, and the cost projections converge further taking into account market condition pricing on all labour materials and equipment (Class 2 Cost Estimate -15%/+20%).

### CHECKPOINT 4

7. **Build Phase** - this includes the work to procure and construct the labour, materials, and equipment necessary to complete the project. This will include all scopes of work from site servicing, civil work, foundations, structural, mechanical, electrical, and interior/exterior finishes (Class 1 Cost Estimate -10%/+15%). This phase also includes the necessary resources to undertake the contract administration and quality assurance for the work performed.
8. **Commissioning** - following technical completion of the construction phase, there is additional work required to prepare the facility for operations. This can include items such as air balancing, and building envelope leakage testing as part of a broader more comprehensive quality assurance program prior to transitioning the facility operations to the business partner.

### CHECKPOINT 5

9. **Contract Warranty** - following the commissioning stage, each facility will include a comprehensive contract warranty. This warranty is bookended by a turnover to City Operations (start) and the turnover to City Maintenance (finish). The term of a contract warranty is typically 1-year for a facility project.