



The Department of Buildings and General Services

Phases of Building Construction



Programming

Defining the scope
of work, budget,
and schedule

6 -14 Months

- Also known as Planning and Pre-design
- Define project objectives
- Determine building and user requirements
- Develop a scope of work.
- Gather information from the intended building occupant(s), determine effect on existing facilities or projects-in-planning and need for corollary projects.
- Identify zoning, code, and other regulatory requirements.



Schematic Design

Outline for how the project will look and function

5 – 15 Months

- Convert the project program into physical drawings of space.
- Determine areas, physical requirements, and relationships of all the required building spaces and components.
- Complete description of building systems.
- Several renditions to develop a set of schematic drawings, floor plans, site plans and building elevations, and probable cost of construction.



Design Development

Refinement of the plans, specifications, and estimate

5 – 12 Months

- Schematic plans and elevations are reviewed, revised, and expanded to incorporate all the details and specs required for construction.
- Issues vetted that could affect constructability or are critical to project program.
- May require changes to program or budget, or both.
- Design drawings and specs sufficiently complete to establish size, function, configuration and spaces, use of equipment and materials for principal building structures and systems.
- Probable cost is updated.
- Permit applications are developed



Construction Documents

Complete and accurate drawings and specifications for bidding

6 – 20 Months

- Construction documents compiled from design development docs.
- Includes all drawings and specifications necessary to complete project.
- The basis of the bid documents and the construction contract.
- Permit applications have been submitted and are awaiting approval.
- A final estimate of probable construction cost is submitted with final set of plans and specifications.



Bidding

Advertising/inviting contractors to submit a bid on the project and select a contractor

2 – 4 Months

- Bid process is the method of selecting and hiring contractors.
- Qualified companies and subs are provided with bid documents, which they use to determine costs and prices for their bid package.
- Submissions reviewed and accepted based on completeness of package, compliance with terms in the docs, construction suitability, and cost.
- After all bids are reviewed, sometimes all the submitted bids exceed authorized project budget.
- For construction to proceed, either the project budget must be increased, or changes made to the scope or quality of the project.



Construction Administration

Answer questions, provide updates, and resolve problems

6 – 24 Months

- Monitor construction to make sure contractor building project per plans and specs.
- Review and approve submittals and shop drawings and resolve issues that develop on the site.
- Occupancy of building can occur when project is substantially complete, and fire marshal issues a certificate of occupancy.
- At substantial completion, docs are produced or obtained that complete construction docs including "as-builts", "record drawings", "markups", "closeouts", manuals, permits, warranties and other docs necessary to occupy and maintain the facility.



SMALL DESIGN PROJECT SCHEDULE - 18 TO 24 Months

TASK	DUR.	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6				YEAR 7													
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4										
		A	M	J	D	J	A	S	D	N	D	J	F	M	A	M	J	J	A	S	D	N	D	J	F	M	A	M	J	J	A	S	D	N	D	J	F	M	A
Programming <small>(Not always required)</small>	8 MO		X	X	X																																		
Schematic Design	8 MO				X	X	X																																
Design Development	8 MO						X	X	X	X	X	X	X																										
Construction Documents	8 MO											X	X	X	X	X																							
Bid & Award	2 MO												X	X																									

MEDIUM DESIGN PROJECT SCHEDULE - 42 TO 45 Months

TASK	DUR.	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6				YEAR 7													
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4										
		A	M	J	D	J	A	S	D	N	D	J	F	M	A	M	J	J	A	S	D	N	D	J	F	M	A	M	J	J	A	S	D	N	D	J	F	M	A
Programming	10 MO		X	X	X	X																																	
Schematic Design	8 MO				X	X	X	X																															
Design Development	8 MO											X	X	X	X	X																							
Construction Documents	14 MO																	X	X	X	X	X	X	X															
Bid & Award	3 MO																		X	X	X																		

LARGE DESIGN PROJECT SCHEDULE - 65 Months

TASK	DUR.	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6				YEAR 7													
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4										
		A	M	J	D	J	A	S	D	N	D	J	F	M	A	M	J	J	A	S	D	N	D	J	F	M	A	M	J	J	A	S	D	N	D	J	F	M	A
Programming	14 MO		X	X	X	X	X																																
Schematic Design	18 MO						X	X	X	X	X																												
Design Development	12 MO													X	X	X	X	X	X																				
Construction Documents	20 MO																				X	X	X	X	X	X	X	X											
Bid & Award	4 MO																					X	X	X	X														

Developmental Bid Use Only X X X X X