

Design & Construction List of Terms

1. **CON (Certificate of Need):** Certificate of approval granted by the authorized state agency to a health care provider (where state law warrants such preapproval), stating that the need for such a facility/service/equipment in the proposed location is deemed by the state to be warranted.
2. **Functional Space Program:** A listing, allocating the appropriate floor space required for each programmatic function. The Functional Space Program has a description, size, and quantity of each space. The space allocation may be derived based on frequency of use (volume), number of persons using the space, or other space-driving criteria such as size and quantity of materials and equipment.
3. **Functional Bubble Diagram:** A diagrammatic representation of adjacencies and connectivity based on the space program that is important for an overall understanding of the layout of spaces and their functions.
4. **Cost Model:** Itemized cost estimate based on broad design estimates and historic information.
5. **Scale 1/8" 1/4" NTS:** Terms applied to drawings to describe actual size in relation to the size or the plan drawn. Examples may include:
 - a) **Scale: 1/8"=1'-0"**: An eighth of an inch on the drawing represents a foot in reality.
 - b) **Scale: 1/4"=1'-0"**: A fourth of an inch on the drawing represents a foot in reality.
 - c) **NTS (Not to Scale):** The drawing is not representative of true dimensions in a measurable way.

Standard scales (architect/engineer's rulers) are available to measure the drawings and easily convert the scaled size to actual size. These scales have multiple sides calibrated into the most standard scaling conversions used in the construction industry.



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- b) **DD (Design Development):** A stage subsequent to schematic design where the schematic design decisions are worked out in greater detail. A clear and coordinated description of all aspects of the design including Architectural, Mechanical, Plumbing, Electrical and Fire Protection Systems is worked out providing a basis for the preparation of construction documents.
 - c) **CD (Construction Documents):** Documents that set forth the detailed requirements for the construction of a building project. They consist of Drawings and Specifications. Drawings are the illustrative component of construction documents, whereas Specifications are written requirements pertaining to building materials, equipment, and construction systems that outline the standards to be met in the construction of a project.
 - d) **B&N (Bidding & Negotiation):**
 - 1) **Bid:** The proposed price at which a contractor offers to complete construction of a project usually based on the information presented in the Construction Documents.
 - 2) **Negotiation:** A two-way process whereby the owner through the services rendered by the architect contests the offer made by the contractor to obtain more favorable terms that better match the proposed construction intent and the owner's budget.
 - e) **CA (Construction Administration):** A process wherein the architect acts in the capacity of an agent of the owner, overseeing construction to ensure conformity to construction drawings, specifications, and standards.
7. **Fast Track:** A method of implementation where construction and design phases are overlapped to expedite completion of the project.
8. **Phasing:** To carry out construction systematically in stages usually in order to mitigate disruption of the normal functioning of the building while construction work is in progress.



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10. **MEP:** Mechanical, Electrical and Plumbing. These are the systems that provide the building with HVAC (Heating, Ventilation, and Air Conditioning), Electricity, and Sanitation. Other items may also include Medical Gas, Computer Infrastructure, Phone/Communications systems, and Life Safety Systems such as fire alarms or fire suppression systems.

11. **GMP (Guaranteed Maximum Price):**

- a) A fee arrangement between the client and the architect whereby the total remuneration payable to the architect for services rendered is restricted to a pre-agreed maximum.
- b) A fee arrangement between the client and the contractor whereby the total amount payable to the contractor for the construction of the project is restricted to a pre-agreed maximum.

12. **Contractor/Subcontractor:**

- a) **Contractor:** Person or entity that enters into a contractual agreement with the owner to perform construction work on the project in accordance with the specified requirements and standards typically the Prime Contractor.
- b) **Subcontractor:** Person or entity often skilled in a specific type of construction work that enters into a contractual agreement with the prime contractor to perform a part of the construction work.

13. **FF&E (Furniture Fixtures and Equipment):**

- a) **Furniture:** The movable articles in a room or an establishment that make it fit for living or working.
- b) **Fixtures:** Something attached as a permanent appendage, apparatus, or appliance
- c) **Equipment:** Devices either fixed or moveable necessary for the day-to-day operation of the project.
 - 1) **Fixed Equipment:** Appliance or apparatus fixed securely in a place.
Examples include:
 - ? MRI/CT equipment
 - ? Hydrotherapy Tub



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switch gear and distribution lines, plumbing supply and waste lines, heating and cooling equipment and ducts and building structural and support systems.

15. **RFI (Request For Information /Change Order):**

- a) **Request For Information:** Document submitted by the contractor to the architect in charge of construction administration requesting clarification on any matter pertaining to construction requirements.

16. **Change Order:** Request made by the Owner or Contractor to make a modification to the existing construction requirements. If the contractor initiates the change, it will be submitted in the form of an RFI (request for information). The Architect typically issues the change order to the Contractor. The change order requires the owner's approval if additional costs will be incurred as a result of the change order.

17. **“Five Eights” Vs “Four Tens”:** Forty-hour weekly work schedule comprising five work days of eight hours each or four workdays of ten hours each.

18. **Construction Bond:** Guarantee extended by a third party (usually an insurance company) to complete construction in accordance with the terms of the contract at no additional cost to the owner in the event the contractor fails to perform according to the terms of the contract.

19. **Sub-Contractor/Specialty Contractors:**

- a) **Sub-Contractor:** Person or entity that enters into a contractual agreement with a prime contractor to perform a part of the construction work.
- b) **Specialty Contractor:** Person or entity usually specialized in the performance of a specific task that enters into a contractual agreement directly with the owner to perform a part of the construction or installation work on a project.

20. **Certificate of Occupancy (CO):** A certificate issued by a local building department, indicating that the building complies with the applicable building codes and is in proper condition to be occupied.



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- c) **NSF (Net Square Feet):** Typically area as defined in the space program. Includes the space within the walls of each identified program space.
- d) **DGSF (Departmental Gross Square Feet):** Gross area occupied by the constituent departments of a building excluding common spaces shared by multiple departments such as common mechanical and circulation spaces. This area will include wall thickness, circulation pathways within the department, and other spaces typically not listed as part of the functional space program for each department.

22. **ASTM, CSI, UL:** Terms used to describe the testing standards for materials, systems, and equipment performance.

- a) **ASTM (American Society for Testing and Materials):** A voluntary standards development organization providing technical standards for materials, products, systems, and services.
- b) **CSI (Construction Specifications Institute):** A technical society formed by an association of individual members in the U.S. non-residential building design and construction industry including specifiers, architects, engineers, contractors, suppliers, and building owners. They develop voluntary standards for the preparation of specifications, organize continuing education sessions to train practitioners to read and write written construction documents, and hold product shows in their effort to continually improve the process of non-residential building design and construction.
- c) **UL (Underwriters Laboratories):** A non-profit organization that classifies, tests, and inspects electronic devices, fire protection equipment and assemblies, and specific construction materials for life-safety performance and certifies their compliance with National Building Codes.