# **APPENDIX 2-A**

Schematic Design Quality Checklist

# Appendix 2-A: Schematic Design Quality Checklist (30%)

The following drawing document definitions are developed from AIA Quality Management standard requirements, and are additional criteria to drawing requirements outlined in the Standards and Criteria, Design Standards Manual.

#### Schematic Design

### a. Architectural

- Develop typical project functional components (i.e. a typical office plan, floor or function component of a floor such as tenant or airline room types.) Components should be graphically correct and coordinated with structural and MEP. Representative dimensions shown and representative partitions tagged. Show schematic furniture layouts to confirm spatial and program requirements of unit types.
- Develop typical project components and core elements including new elevators, new stairs and MEP risers, public toilet rooms. Components should be graphically correct and dimensioned. Minor or a typical elements should be reflected in the plans and building sections. Confirm that all circulation elements conform to building and accessibility codes.
- □ Prepare Study models, perspective sketches, or digital modeling.
- Develop typical exterior wall sections, typical exterior details and typical exterior wall types with sufficient detail delineated in the drawings and adequately described in the Basis of Design.
- Prepare general description of a typical and high finish spaces such as lobbies, public corridors and amenities. Describe in the form of narratives and/or freehand sketches (or BIM).
- Prepare general typical toilet room and kitchen/breakrooms in plan and interior room elevations.
- Establish ceiling heights on a preliminary typical or representative reflected ceiling plan(s) as the basis to initiate project coordination. Indicate on the floor plans and building sections. If possible layout a small representative portion to establish design intent.
- Prepare an Outline Specification with Project Description, general and regulatory requirements, preliminary building code, preliminary accessibility analysis, outline basic interior and exterior construction and materials, include preliminary elevator study.

## b. Structural

- □ Determine Structural system.
- Establish major grid lines, columns, shearwalls, brace frames, and other vertical elements.
  Determine dimensional requirements and size structural components.
- Address major slab openings on typical floor(s), size major beams and spandrel beams.
- □ Address unique foundation conditions.
- □ Prepare Slab loading diagrams.
- □ Prepare an Outline Specification with structural requirements

#### c. MEP / FP

- Develop design criteria including indoor and outdoor conditions, ventilation, air circulation, minimum exhaust, sound levels, system diversities and building envelope thermal characteristics.
- □ Prepare outline specification including detailed system descriptions. For ductwork provide maximum air velocity criteria and duct insulation requirements.
- Prepare preliminary fixture selections general space requirements and types of plumbing fixtures, general criteria for light fixture types.
- □ Prepare riser diagrams for all mechanical, fire protection and electrical systems including information on number of risers and general sizes.
- Develop preliminary layout of major mechanical rooms.
- Develop typical floor space requirements including electrical rooms, any mechanical rooms, major risers, chase requirements, etc., include weights of equipment, major horizontal and vertical penetrations.
- Determine typical floor MEP & FP distribution systems and other mechanical, fire protection and electrical systems that can impact structural, architectural plans and reflected ceiling plans. Examples include: HVAC supply duct loop criteria for typical fan coil units, and sprinkler main routing
- Prepare an Outline Specification with MEP requirements
- Prepare Energy code analysis.

### d. Other

- □ Establish LEED level if applicable.
- □ Prepare preliminary acoustical report sufficient to establish typical wall types and to provide general guidelines in the Outline Specification.