**Section 370.2230 Preparation of Drawings and Specifications**

a) The preparation of drawings and specifications shall be executed by or be under the immediate supervision of an architect registered in the State of Illinois.

b) All drawings and specifications shall contain the architect's name and address.

c) The first submission shall be the design development drawings indicating in detail the assignment of all spaces, size of areas and rooms, and indicating in outline, the fixed and movable equipment and furniture, and the outline specifications.

d) The plans shall be drawn at a scale sufficiently large to clearly present the proposed design.

e) Plans showing the proposed location must be submitted to the Illinois Department of Transportation, Division of Water Resources to determine compliance with the State Flood Plain Regulations and Executive Order IV, 1979.

f) The drawings shall include:

1) a plan of each floor including the basement or ground floor,

2) roof plan,

3) plot plan showing roads, parking areas, sidewalks, etc.,

4) elevations of all facades,

5) sections through the building,

6) identification of all fire and smoke compartmentation.

g) Outline specifications shall provide a general description of the construction including finishes; acoustical material, floor covering; heating and ventilating systems; description of the electrical system including the emergency electrical system.

h) The total gross floor area and bed count shall be shown on the drawings.

i) A brief narrative of the proposed program shall be submitted with the design development drawings and outline specifications.

j) Following approval of the design development drawings and the outline specifications, working drawings and specifications shall be submitted. All working drawings shall be well prepared and clear and distinct prints submitted. Drawings shall be accurately dimensioned and shall include all necessary explanatory notes, schedules and legends. Working drawings shall be complete and adequate for contract purposes. Drawings shall be prepared for each of the following branches of work: Architectural, Structural, Mechanical, Electrical and Plumbing.

1) The architectural drawings shall show:

A) Site plan showing all topography, newly established levels and grades, existing structures on the site (if any), new buildings and structures, roadways, walks, and the extent of the areas to be landscaped. All structures which are to be removed under the construction contract shall be shown.

B) Plan of each floor and roof.

C) Elevation of each facade.

D) Sections through building.

E) Scale Details as necessary at a scale sufficiently large to properly indicate details of the work.

F) Schedule of finishes.

2) The structural drawings shall show:

A) Plans of foundations, floors, roofs and all intermediate levels shall show the complete design with sizes, sections, and the relative location of the various members including:

B) Schedule of beams, girders and columns.

C) Notes on design data shall include the name of the governing building code, values of allowable unit stresses, assumed live loads, wind loads, earthquake load, and soil bearing pressures.

D) Details of special connections, openings, pipe sleeves and expansion joints.

E) Special structures shall include calculations defining load assumption, shear and moment diagrams and horizontal and vertical reactions.

3) Mechanical drawings with specifications shall show the complete heating, cooling and ventilation systems plumbing and drainage systems, and shall include the following:

A) Heating, Cooling and Ventilation.

i) Air conditioning systems with required equipment, water and refrigerant piping, and ducts.

ii) Supply and exhaust ventilating systems with connections and piping.

B) Plumbing and Drainage Systems.

i) Size and elevation of: street sewer, house sewer, house drains, street water main, and water service into the building.

ii) Location and size of soil, waste, and vent stacks with connections to house drains, cleanouts, fixtures and equipment.

iii) Size and location of hot, cold and circulating mains, branches, and risers from the service entrance, and tanks.

iv) Riser diagram of all plumbing stacks with vents, water risers and fixture connections.

v) All fixtures and equipment that require water and drain connections.

4) Electrical drawings shall show all electrical wiring, outlets, and equipment which require electrical connections, and shall include the following:

A) Electrical service entrance with switches and feeders to the public service feeders, characteristics of the light and power current, transformers and their connections.

B) Location of main switchboard, power panels, light panels and equipment. Feeder and conduit sizes shall be shown with schedule of feeder breakers or switches.

C) Light outlets, receptacles, switches, power outlets, and circuits.

D) Telephone layout showing service entrance, telephone switchboard, strip boxes, telephone outlets and branch conduits as approved by the telephone company. Where public telephones are used for intercommunication, provide separate room and conduits for racks and automatic switching equipment as required by the telephone company.

E) Fire alarm system with stations, signal devices, control board and wiring diagrams.

F) Emergency electrical system with outlets, transfer switch, source of supply, feeders, and circuits.

G) All other electrically operated systems and equipment.

5) When the project is an addition, the preceding requirements apply and details and information on the existing building also shall be provided as follows:

A) Type of activities within the existing building and distribution of existing beds, etc.

B) Type of construction of existing building and number of stories in height.

C) Plans and details showing attachment of new construction to the existing structure.

D) Mechanical and Electrical systems showing connections to the existing system.

6) The Department may require submission of drawings of all or any part of the existing structure.

7) Specifications shall supplement the drawings and shall: Describe, except where fully indicated and described on the drawings, the materials, workmanship, kind, sizes, capacities, finishes, and other characteristics of all materials, products, articles and devices.