Reference **Architectural Graphic Standards** and **Building Construction Illustrated**

Use your group’s CDs for this homework, except questions noted as NCS (National Cad Standard) or Sweets Catalog/Network online at [http://sweets.construction.com/](http://sweets.construction.com/) (free registration at site) or the large green Sweets Catalogs.

This is a group homework. Try sharing a google document so all members can edit the file at the same time.

see [https://support.google.com/drive/answer/2494822?hl=en](https://support.google.com/drive/answer/2494822?hl=en)

For all answers either list the **Drawing sheet number and detail number or Specification page number**

1. List the architectural firm and three (3) engineering firms and their major (one) responsibility.

   **Ayers Saint Gross Architects and Planners (Architecture, Landscape Architecture, Sustainability)**

   **Hope Furrer Associates (Structural Engineering)**

   **JVP Engineers (Fire Protection)**

   **Kozera DW Inc. (Geotechnical Engineering)**

   A0-01

2. Do the exterior walls carry the building loads?

   **Yes, A0-01 Version 1 Page 1**

3. Does the building have a curtain wall?

   **No curtain wall, A0-01 Version 1 Page 1**

4. Is the building supported by columns? If so, what material?

   **Yes, the column material is concrete with strength of 4000 psi and steel, S1.00 Version 1 Pg 25, S2.00.5NW Version 1 Page 26, S.2.10-N Version 1 Page 33**

5. Do any interior walls carry the building loads?

   **No, the interior walls do not carry the building loads. The columns do. S6.01 Version 1 Page 55**
6. What is the General Building Structural Type (Concrete, Steel, Wood or what combination.)

   Steel and Concrete (S1.00) Version 1 Page 25

7. What is the Basement (or lowest) structural Floor Material (concrete, wood...)? What is the depth/thickness?

   5” thick Concrete Slab on Grade (S2.00.5NW) Version 1 Page 26

8. What is the Basement (or lowest) structural Floor Support (steel beam, concrete beam...)? What is the depth/thickness?

   Concrete footers and piers, similar to our Revit Houses
   Footers: 1’-6” Height  3’-4” Width  Version 1 Page 47
   Concrete Piers: 1’-4” Width  S4.00

9. What is an Upper structural Floor Material (structural - wood..)? What is the depth/thickness?

   24” x 24” Concrete Slab on Grade  Version 1 S6.00 Page 54

10. What is a Upper structural Floor Support (steel beam..)? What is the depth/thickness?

    24” x 24” Concrete Beams Version 1 S6.00 Page 54

11. List two (2) materials for the front door and or frame.

    Two materials are Hollow Metal and Aluminum A9-01 Version 1 Page 133

12. What is the floor finish material for the floor inside of the building at the front door/s?

    Wood(WD) and Hollow Metal (HM) A0-05 Version 1 Page 56 and A9-00
    Version 1 Page 132

13. What is the wall finish material for the walls inside of the building at the front door/s?

    Gypsum Wallboard (GWB) A9-30 Version 1 Page 136

14. What material/s are used for the windows?

    Glass  (A9.10 & 5.10-S) No further details shown

15. List three (3) materials for the exterior finish of the building.

    i. Gypsum Board
    ii. Masonry Veneer
    iii. Stone Wool in stud space (A5.20)
16. How is the exterior finish attached to the building?

   Masonry Ties @ 16” O.C. (A5.20)

17. What is the roof slope or pitch?

   No slope A0-01 Version 1 Page 1

18. What is the Roof finish material (shingles, etc.)

   Lightweight Insulating Concrete on 1-½” x 20 Gauge Type ‘B’ Metal Roof Deck On Steel Beams and Girders S2.23-S Version 1 Page 42

19. What type and thickness of insulation is in the exterior wall system?

   3.5” Stone wool in Stud space Thermal and Acoustical Insulation NOM R-15.00 & 2.5” Dual Density stone wool cavity Wall Continuous Insulation NOM R-10.75 (A5.20)

20. What type and thickness of insulation is used in the roof system?

   Lightweight insulating concrete system with layers of rigid insulation(thickness varies according to height) and a slurry coat of concrete (A5.20)

21. Find and list the sheet number that has a revision, list the number, date and know it’s location on the sheet.

   There are no revisions listed in the construction documents (All pages)

22. What is the smallest floor to floor height?

   9’-4” (A4.06-N)

23. What is the largest floor to floor height?

   12’ (A4.06-N)

24. What is the thickness of the concrete floor for all floor types?

   All floors 5” Concrete Slab (S2.11-S)

25. What is the largest foundation footer/pad thickness/depth?

   42” (S4.01)