CDs:
https://psu.app.box.com/s/yIwb6qLrzgxmmgzsi5y7vx4nwga7awme

Google Doc Link Part 1 and Part 3 (bottom):
https://docs.google.com/document/d/1tniOqb75pspWo6wQMI1Vfx1Un Dit29HU3R_CsbUcXuY/edit

Google Doc Link Part 2:
https://docs.google.com/document/d/1m93RUho-jwwKlf_ccf-1S7qtr-5i_xFY6pT7EVfhpmM/edit

**Information from Construction Documents** Part 1

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

   **Architectural Firm:** Pfeiffer Partners Architects PC
Engineering Firms: Cagley & Associates (Structural), AB Consultants (Civil, Surveying, Geotechnical, Landscape), Henry Adams, LLC (MEP, Fire Protection, Energy).  

2. Do the exterior walls carry the building loads?
   No, the majority of the walls are held up by columns. A331-A359, S101

3. Does the building have a curtain wall?
   No. A331-A359. But, there is a curtain wall door (A607)

4. Is the building supported by columns? If so, what material? Yes, the building is held up by columns which are made of steel. S101

5. Do any interior walls carry the building loads?
   No, the steel columns carry the building loads. S101

6. What is the General Building Structural Type (Concrete, Steel, Wood or what combination.)
   Steel (see steel columns), S101

7. What is the Basement (or lowest) structural Floor Material (concrete, wood...)? What is the depth/thickness?
   Reinforced Concrete Slab on Grade A331-A359, -10' Deep and 5.28" Thick, A331

8. What is the Basement (or lowest) structural Floor Support (steel beam, concrete beam...)? What is the depth/thickness?
   Reinforced Concrete Wall Footing, A331-A359 11 -½' Deep, 1' Thick, A820

9. What is a Upper structural Floor Material (structural - wood..)? What is the depth/thickness?
   Concrete Slab on Metal Deck, A331-A359 15'-9" Above Ground 6.4" Thick

10. What is a Upper structural Floor Support (steel beam...)? What is the depth/thickness?
    Steel Beam, A331-A359, 2' - 7-5⁄8" x 2' - 3-5⁄8" A331

11. List two (2) materials for the front door and or frame. Hollow Metal & Aluminum (A601 - A603)
12. What is the floor finish material for the floor inside of the building at the front door/s? RF-01/RF-02 (A661)

13. What is the wall finish material for the walls inside of the building at the front door/s? BRK-EX, AL/GL-XX, PT-15 (A661)

14. What material/s are used for the windows? Metal Window Frames and ¼” Clear Glass (A623)

15. List three (3) materials for the exterior finish of the building.
   1) Metal Siding, Type MTL-01.
   2) Brick Jamb Beyond
   3) 4” Face Brick (A501)

16. How is the exterior finish attached to the building?
   Brick tie anchored to studs, ¾” horizontal 16 GA. subgirt at 24” O.C. (A501)

17. What is the roof slope or pitch?
   Elevations: 0”, 2”, 3”, 4”, 4 ¼”, 5”, 6”, 7”, 9”, 11” (A105)

18. What is the Roof finish material (shingles, etc….)
   Single Ply Roofing Membrane, Metal Trim A501-A511, A522

19. What type and thickness of insulation is in the exterior wall system?
   6” Batt Insulation (A501-A511)

20. What type and thickness of insulation is used in the roof system?
   Single-Ply Membrane Roof on Rigid Insulation, A501-A511

21. Find and list the sheet number that has a revision, list the number, date and know it’s location on the sheet.
   Sheet A101 REV: Date: 09.04.2015 Description: DGS 95% CONST. DOCS
   Location: Bottom left corner of sheet, above the sheet name.

22. What is the smallest floor to floor height?
   15’9” (A201)

23. What is the largest floor to floor height?
24. What is the thickness of the concrete floor for all floor types?

6.25” (A484)

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

2’-6” (S111N)

Alissa Anselmo
Taylor Guelich
Taylor Linus
Austin Heidelbaugh
Steven Shimkus

**Information from Construction Documents Part 2**

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

1. List one item that is listed in the specifications but would not be shown on the drawings.

   *Price and Payment Procedures, Pg. 01 2000-1*

2. List one item that is shown on the drawings but would not be listed in the specifications.
3. List a door number (with UL/fire rating) and find the material for the frame and door. What is the UL/fire rating?

Door 002C, Hollow Metal (door and frame material), 1.5 Hr Fire Rating A601

4. Find and list 3 partition type symbols and list all of the materials for a bathroom wall from the partition/wall types.

A111S

Frameless Mirror, Plywood Backing, Ceramic Wall Tile, Cementitious Backerboard, Backing, Insulation A551

5. Where is the Benchmark and what elevation is it?

The Benchmark can be found as a reference point, and can be seen on Elevation Plans like in A201 Level 01 at 140' - 0", or A211 West Elevation 139.95'

6. What is the minimum depth from exterior grade to the bottom of the footer for an exterior wall?

10" CMU Brick Shelf + depth of footer A351

7. What is the design snow depth listed in IBC for the location where is building is built?

Initial question can't be answered. The snow load of the roof can hold is 22 PSF plus unbalanced, drifting and sliding snow where applicable. The ground snow load is 25 PSF. The snow exposure factor is Ce: 1.0 (S001)

8. What is the width of the structural wall (metal studs, CMU’s, Concrete) used for a stair well?

2'-0" (A416)

9. What is the smallest interior wall width?

14.75" (13-P002 PGCC)

10. List a manufacturer for a finish floor material.

Dur-A-Flex Inc (09 6700)
11. List a manufacturer for gypsum wall board.
   USG Corporation (09 2116)

12. List a manufacturer of steel doors or steel frames.
   De La Fontaine Inc (08 1113)

13. What is the strength of the reinforcing?
   Reinforcing Steel: ASTM A615/A615M Grade 40 (40,000 psi) (280 MPa) 
billet-steel deformed bars, unfinished.
   Reinforcing Steel: Deformed bars, ASTM A996/A996M Grade 40 (280), Type A. 
   (03 0100)

   Flexural Strength: 1000 pounds per square inch (7 MPa), minimum, at 28 days, 
   when tested in accordance with ASTM C348. (03 0100)

15. What is the strength of the steel?
   Maximum Variation From Plumb: 1/4 inch (6 mm) per story, non-cumulative 
   Maximum Offset From True Alignment: 1/4 inch (6 mm).
   (05 1200)

Print out file (hard copy) and submit 1 per group to the TAs for grading.
Also add a link on your AE222 webpage for HW3 (part 2) that points to your ‘shared 
with edit’ Google Doc url.
Information from Construction Documents Part 3

Reference Architectural Graphic Standards and Building Construction Illustrated

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

Mechanical

1. Give the abbreviations for chilled water supply and chilled water return.
   
   Chilled Water Supply – CHS, Chilled Water Return – CHR M001

2. What is the symbol used to represent a supply diffuser, grille, or register? What is the symbol for a return?

   supply, return M002

3. Give the total CFM value for the largest air handling unit listed on the schedules sheet.

   Unit No. ATU-149, Max CFM= 6,110 M603

   What is the entering air temperature (EAT) and leaving air temperature (LAT) for the unit from question number 3?

   EAT= 55, LAT=78 M603

4. Who is the given manufacturer and what is the model number for the unit from question number 3?

   Associate D AHU (Air Handling Unit) AHU-8, Henry Adams, LLC M603
Electrical

6. What is the symbol used to represent a receptacle?

![Receptacle Symbol]

Receptacle - NEMA Configuration 5-20R Duplex E002

7. What letter is shown in the symbol for a junction box?

The letter is: J E001

8. Find and list a room that has more than one light switch in it. (Hint: look for the “S” symbol.) Mech Room ME3-1 E123E

9. List the given information for the type A lighting fixture/luminaire.

Conduit Designation: 1 Theater Box Number: 1003 Homerun: 9 MBP-19
Quantity of Circuits: 1 Wiring: 2#12AWG + #12GW Conduit Size: ¾" E802

10. What’s the total connected amps for the largest panel given within the electrical panel schedules?

322 A E714

Plumbing

11. What does the symbol for a gate valve look like?

![Gate Valve Symbol]

Solenoid Valve P001
12. Give the tag, the manufacturer and model number for one of the water closets used in the building.

   Afwall 2257.001 22 4000-3 P-1

13. What is the flow rate (GPM) of the largest hot water heater in the building? What does GPM stand for?

   582 GPH or 9.7 GPM GPM - Gallons per minute (P601)

14. What are the fixtures shown in the largest men’s restroom on the first floor of the building? List their type and their fixture tag.

   Lavatories - Luceme P-4 , Urinals - Trimbrook P-3, Water Closets - Afwall P-1 (22 4000-3)

15. What type of fixture can you find in a janitor’s closet?

   Janitorial closets (02 8313 - 3)