

CTC 450 – Water and Wastewater Design

Project 2 – Reading Contract Plans - Exam

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1. Which specification section defines the concrete mix types and uses?
2. Which of the concrete mix designs should be used in the CN cells 1-8 shown on drawing S304?
3. Identify a drawing or drawings that show the secant pile wall construction.
4. What is the designed 28-day compressive strength for concrete mix B?
5. What does CPL stand for in specification section 03100?
 - a) Concrete Placement Log
 - b) Controlled Permeability Form Liner
 - c) Concrete Permeability Limit
 - d) None of the above
6. What grade of reinforcing is specified on the drawings and in the specifications?
7. What is the elevation of the top of influent channel?
8. What is the elevation of the base slab in CN 9-14?
9. Structural column details can be found on which drawing?
10. Extent of heavy duty grating for CN 1-8 can be found on which drawings?
11. Which architectural drawing shows an 8'-0" x 8'-0" equipment access door? What is the section detail for the access door?
12. Which ACI codes and standards are referenced for cover in specification section 03200?
13. What is the minimum concrete cover required for slabs and joists as shown on the GS drawings?

14. What is the corridor fire rating in the Headworks Facility according to 2010 Building code of NYS?
15. What is the maximum floor area per occupant in CN319 as shown on A002?
16. Identify all door numbers shown on drawing A304.
17. Identify which section shows and elevation cut through the East stair as shown on drawing A305.
18. Which method of construction is shown on drawing S317 to be used for groundwater cutoff?
19. What is the typical hydrostatic load for each trench cover shown on S319?
20. What is the structural design criteria floor live load for the Blower Building ground floor slab?
21. What is the design pile capacity at the Blower Building as shown on S319?
22. What is the reinforcing splice class required for the wetwell as shown on S370?
23. What is the splice length required for a #6 horizontal bar as shown on S901?
24. What is the size of an HH-B3 beam as indicated on S908?
25. What reinforcing is required for a HH-B3 beam? Refer to section a-a.
26. What is the vertical reinforcing required for a HWF-C1 column?
27. Which mechanical drawing shows the Plant Water Schematic?
28. What is the unit ID for the Split System Air Handling Unit for the CN Facility main electrical room as shown on H003?
29. What is the unit ID for the dehumidifier for the CN Gallery as shown on H003?
30. What does the Motor Starter B 3514A control as shown on E390?