

Hetzel, Brianne

From: Rowe, Charles
Sent: Thursday, December 04, 2014 8:42 AM
To: Hetzel, Brianne; Koenig, Adam
Subject: PE stuff

Hey guys,

Here is a list of things that I can remember from the PE.

Geotechnical:

Soil classifications AASHTO and USCS
Ultimate/net bearing capacity
General earth pressure diagrams (will help with retaining wall questions)
Method of sections (not in CERM)

Transportation:

Geometry (horizontal and vertical curves)
Superelevations
Bearing and distances
Coordinates
Stationing
Sight distance (stopping sight distance and intersection sight distances and at RR tracks)
Decision sight distance and passing sight distance
Crash rates/accident analysis
Intersection conflict points
Taper lengths

Construction:

Earthwork volumes
Quantities and production rates
Scheduling
Worker health and safety

Environmental/Water:

Runoff analysis
Storm sewers sizing, flow rates and velocities (Mannings)
Open channel flow
Closed/pressure conduits (Reynolds number, Darcy-Weisbach, Hazen-Williams)
Pumps

Structures:

Bending moments/stress (Know where the equations are in the CERM to plug and chug)
Shear
Shear and moment diagrams (know where they are in the CERM)
Trusses with zero members
Column footing pressure
More conceptual questions and problems to work

Other stuff:

There were a couple basic physics questions (ex – with two accelerations what is the time for a car to overtake another car)
I had 2 econ questions future cost/worth (afternoon)
Unit Conversions a big

Make sure you know what the question is asking for. They give a lot of useless info.

Afternoon trans:

platoon affect for vehicles (not covered in School of PE)

know horizontal and vertical curves inside and out

superelevations and reverse curves

pavement conceptual question (I had a question about Fog Sealing)

green book (a lot of questions)

MUTCD

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