CDOT-ACPA Concrete Pavement Inspector Certification
Course Outline

Section 1 – Introduction & Resources
  a. Schedule for the day
  b. Available publications & other resources

Section 2 – Concrete Materials
  a. Ingredients in concrete
  b. Material characteristics

Section 3 – Concrete Batch Plant
  a. Types of plants & how they work
  b. Specifications and inspection of scales

Section 4 – Concrete Batch Tickets
  a. What is required on a batch ticket?
  b. How do you include the % moisture in the sand and aggregate?
  c. How do you check the w/cm ratio & yield?
  d. Sample calculations

Section 5 – Field Testing
  a. Evaluating field tests results
  b. Requirements of field lab
  c. Strength
  d. Coring & thickness measurement

Section 6 – Concrete Mix Designs
  a. Tests & their importance
  b. Certifications
  c. Forms 1188 & 1373

Section 7 – Concrete Pavement Overview
  a. Types of concrete pavements & typical thickness
  b. Concrete pavement joint types

Section 8 – Pavement Subgrade
  a. New alignment
  b. Trimming, grading, compaction
  c. Soft spots and proof rolling
  d. Testing of base
  e. Asphalt base
  f. String line and off set
Section 9 – Paving Equipment
   a. Slipform pavers
   b. Screeds
   c. Hand tools
   d. Consolidation

Section 10 – Steel Placement
   a. Test section
   b. Random testing

Section 11 – Pavement Finish
   a. Surface
   b. Hand finishing
   c. Texturing
   d. Stationing
   e. Curing
   f. Smoothness

Section 12 – Pavement Joints
   a. Sawing
   b. Sealing

Section 13 – Construction Defects, Repairs & Replacement
   a. Cracks
   b. Surface defects
   c. Missing steel
   d. Low strength

Section 14 – Measurement & Payment
   a. Review of specification
   b. Documentation required
      (Form 266)
   c. Worksheet with calculations
   d. Incentive/Disincentive

Section 15 – Review and Test
   a. Q&A
   b. Administer Test – Must have 80% to pass