CONCRETE PAVEMENTS

- Design Issues
  - Project Design
  - Contract Design

- Details

- Specifications

Design Issues

Project
- Profile
  - Underdrains
- Thickness
- Cross Slope
- # of Lanes
- Width
- Pay Items

Contract
- "D" Cracking (AP)
- Rideability (Profilograph)
- Strength (flexural test)
- Surface Friction (Tire, Texture & FA)
- Durability (Air Content)
- Cracking (Joint spacing / Subgrade)
  - Transverse
  - Longitudinal
- Joints (Match Reqmt's)
- Scaling (Curing)
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**Examples**: Photos of various road conditions and materials.
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QUALITY CONTROL

Joints
- Transverse Joints
  - D-1 Joints Shoulder Line to Shoulder Line
- Longitudinal Joints
  - At Lane Lines
    - Exception @ Inside Shoulder
- Construction Joints
  - Rebar
  - Dowel
- Tapered Panels
- Intersections
CONTRACT DETAILS

- Joints
  - Transverse Joints
  - Longitudinal Joints
    - At Lane Lines
    - Exception @ inside shoulder
  - Construction Joints
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- Intersections

INDOT SPECIFICATION BOOK
- DESIGN MANUAL
- STANDARD DRAWINGS
- SPECIFICATION BOOK
  - SUPPLEMENTAL SPECS
  - SPECIAL PROVISIONS

SPECIFICATIONS
- QC/QA PCCP = CA+FA+PC+Air+ADMS+H₂O
INDOT SPECIFICATION BOOK

501  500 Section
QC/QA PCCP = CA+FA+CM+Air+ADMS+H₂O
Mix Design

900 Section

MIX DESIGN
- Concrete Mix Design (Project)
  - 501.05
- Portland Cement (Project)
- Aggregate Selection (Project)
  - Fine Aggregate
  - Coarse Aggregate
- Admixture (Project)

VOLUMETRIC PROPERTIES
- Flexural Strength
- AIR Content
- Thickness
- Smoothness

ACCEPTANCE

THE END

THANK YOU