Concrete Roundabout Construction

- Joint Layout Plan
  - Bring up Pavement Markings Layer/Level in CAD
  - Coordinate joint layout with traffic engineers
- Maintenance of Traffic
- Field Engineering
  - Contractor Joint Layout; Must match MOT/staging/phasing

Concrete Roundabout Jointing

- Develop a jointing plan
  - Bird’s eye view
  - Remember rules
  - Follow the steps
  - Be practical!
- Allow for field adjustments

2-Lane Pinwheel
3-Lane Directional (pour diagram)

Joint Layout – Pencil and Paper

MDOT Contractor Joint Layout Special Provision

Cass Avenue Roundabouts - Construction Issues

• Construction of Concrete Roundabouts Under Traffic
  • Plan Your Stages Carefully
  • Partner with Contractor!
  • Development of Paving Plan
    • Pavement Widths
    • Elevations
    • Cross Section
    • Joint Layout
Maintenance of Traffic

Concept Designs

Exp. Joints Isolating Roundabout
M-5 Roundabout at Pontiac Trail, Commerce Township, Oakland County, 2011

- 10" non reinforced concrete
- Doweled in the roundabout
- Three lanes
- Constructed in three stages

M-5 & Pontiac Trail
60,000 ADT
What not to do…
What not to do…

• Joint Types need to match!

Thank You!

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