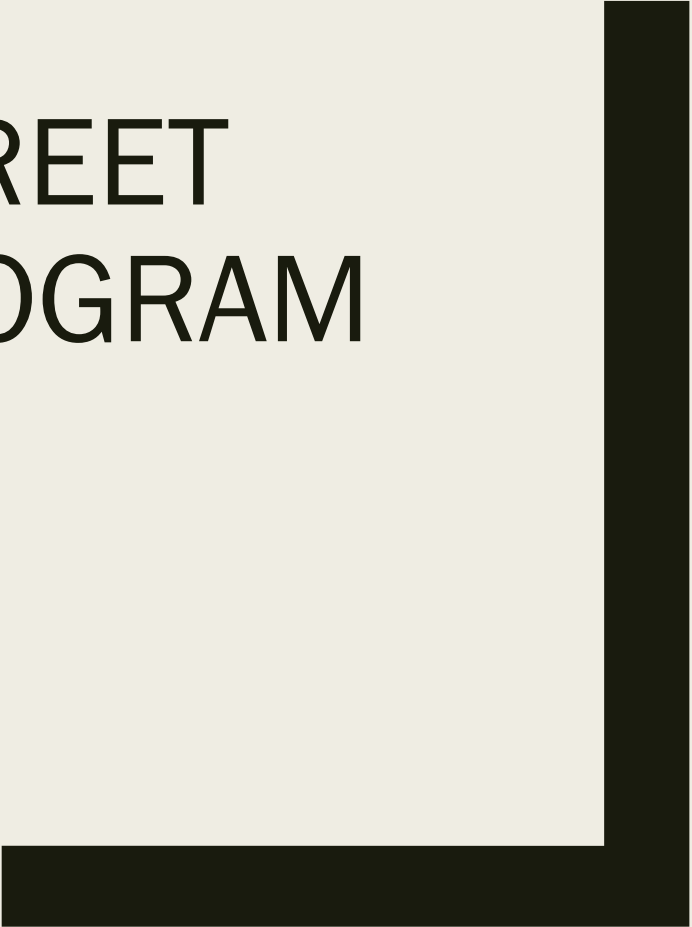


MAPA Spring Training 2020
February 28, 2020

BOONE COUNTY STREET RECONSTRUCTION PROGRAM

Micah Taylor, P.E.
Design Engineer
Boone County Resource Management

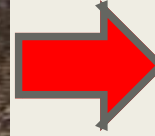


Topics of Discussion

- What is a reconstruction/rehab project?
- How do you choose project areas?
- Project Design
- Project Construction
- Lessons Learned & Suggestions
- Questions

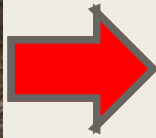
What is a reconstruction project?

- A reconstruction project is the complete removal of the existing pavement (concrete) and replacing it with a new full asphalt pavement section.

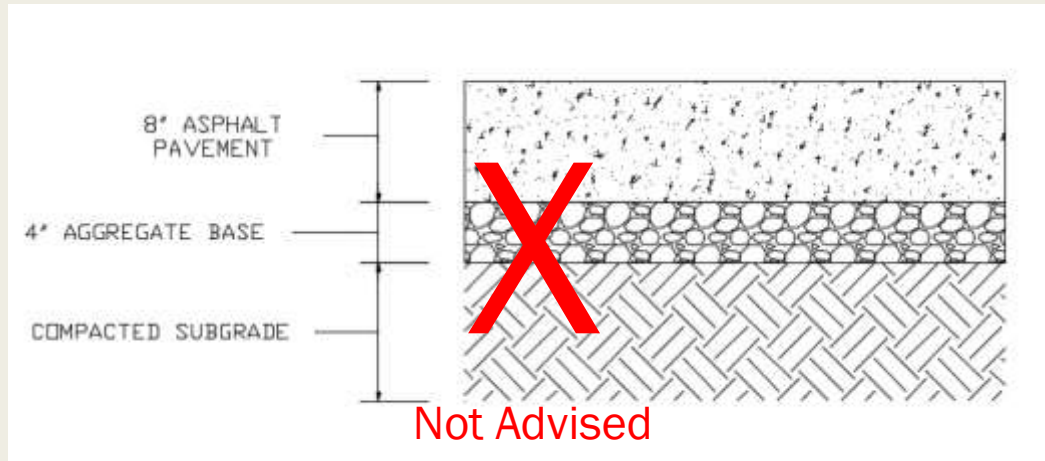


How do you choose project areas?

- Pavement management system.
 - *Every other year rate each individual panel in our 24-mile concrete network*
 - Rated as “Good”, “Damaged”, or “Replace”
 - Reconstruction candidates have >50% “Damage” & “Replace” area

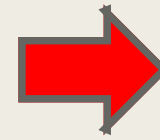
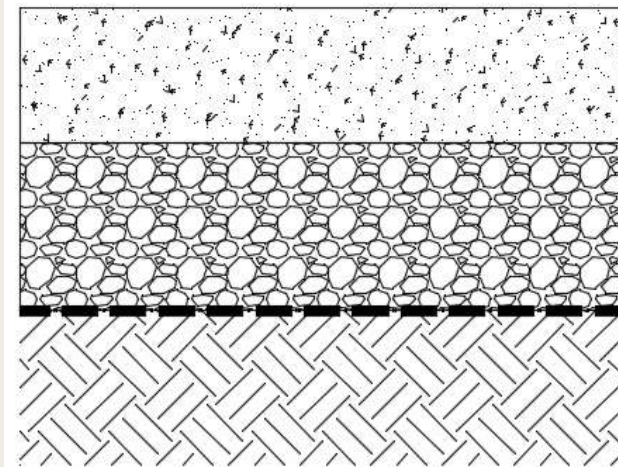


Project Design



Slap your standard section on the Plans and go

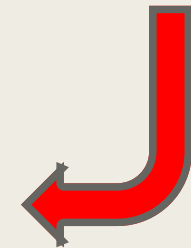
8" Asphalt Pavement
8"-10" Aggregate Base
Geotextile or Geogrid
Subgrade



Chances are the subgrade will not be great and you will not have the time or space for drying and compacting

Instead Perhaps:

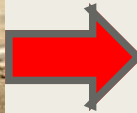
- Hire geotech to estimate subgrade strength
- Design construction platform based on strength
- Design asphalt layer based on traffic. If established area, traffic should be more predictable for design.



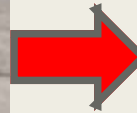
Project Construction



Step 1: Saw Cut Gutterlip



Step 2: Curb and Gutter Repair

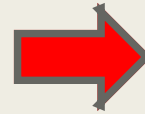


Step 3: Pavement Removal/Excavation

Project Construction



Step 4: Fabric & Base Rock Installation



Step 5: Asphalt Paving

Lessons Learned & Suggestions

- Communication is key
 - *Resident Outreach*
 - Meetings, postcards, & construction updates
- Evaluate all infrastructure in the area
 - *Stormwater & utilities*
 - *Best time for upgrades, replacements, or relocations*
- Design for the future
- Protect the investment



Questions?

Thank you

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