Miller Road Bridge & Roundabout Project

October 15, 2019

WASHTENAW

Celebrating 100 years
serving the people of Washtenaw County

@Washtenawroads
Agenda

1. Project Background
2. Project Details
   1. Roundabout
   2. Bridge
   3. Resurfacing
3. Construction Schedule
PROJECT BACKGROUND
Miller Road at Wagner Rd
Current State

• Intersection of two primary roads
• Congestion
  – Miller Road: 9,000 vehicles/day
  – Wagner Road: 7,200 vehicles/day

In “Top 5” busiest un-signalized intersections
- Diameter: ~120 feet
- Estimated Cost: $1,000,000
Benefits of Roundabouts

• Higher level of service
• Improved mobility
• Enhanced safety
• Improved air quality
• Smaller footprint
Examples of Success

Before v. After: Textile Road @ Hitchingham Road
ROUNDABOUT OPERATIONS

WASHTENAW COUNTY ROAD COMMISSION

Celebrating 100 years
serving the people of Washtenaw County
Roundabout

- Entering traffic yields
- Counterclockwise movement
- Islands control speed
Trucks and Large Vehicles

- Trucks may need to pass over central island.
- Splitter islands.
The Plan

• Single-lane roundabout
• Concrete curb and gutter
• Stamped concrete
• Potential landscaping in central island
• Street lights
• Improved drainage
Nighttime Illumination
Final Product
BRIDGE PROJECT

Celebrating
100 years

serving the people of
Washtenaw County
Miller Road over Honey Creek Bridge

Cost: $1,000,000
Current State

- Built in 1930s
- Structurally deficient – weight restricted
- Functionally obsolete
  - Narrow
  - Compound, horizontal curve
Current State
Miller Road over Honey Creek Bridge
Correction of Horizontal Curve
Examples
Current State

- Existing pavement in poor condition
Miller Road Resurfacing

Between Bridge and Roundabout
Potential Solutions

Pulverize and Resurface
- Keep road width within current footprint
- Fix pavement problems
- Minimal tree removal and impact to property

Pulverize, Widen and Resurface
- Re-ditching, new culverts and driveway approaches
- Widen paved shoulders
- Significant tree removal
- Need for grading permits from property owners
## Tree Removal

<table>
<thead>
<tr>
<th>Project Segment</th>
<th>Initial Design</th>
<th>Current Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roundabout</td>
<td>~81 trees</td>
<td>~72 trees</td>
</tr>
<tr>
<td>Bridge</td>
<td>~37 trees</td>
<td>~21 trees</td>
</tr>
<tr>
<td>Resurfacing</td>
<td>~76 trees</td>
<td>0 trees</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>~194 trees</td>
<td>~93 trees</td>
</tr>
</tbody>
</table>
The Plan

- Pulverize and resurface 1/3 mile between bridge and intersection

- Funding source: local funds
TIMELINE & DETOUR
Proposed Construction Schedule

- Tree removal: Spring
- Utilities relocation: Spring
- Roundabout: May – July
- Bridge and road resurfacing: July – August
Impacts to Traffic

• Roundabout Construction
  – Intersection will be closed to ALL traffic
  – Property owners will be provided access during construction
  – Detour will be posted
Posted Detour - Roundabout
Impacts to Traffic

• Bridge Construction and Road Resurfacing
  – 3 legs of intersection will be reopened
  – Bridge closed to **ALL** traffic
  – Property owners will be provided access during construction
  – Detour will be posted
Posted Detour – Bridge & Resurfacing
Connect with WCRC!

• Visit wcroads.org
• Subscribe to receive updates via email
• Contacts:

Matt MacDonell, PE  Nate Murphy, PE
macdonellm@wcroads.org  murphyn@wcroads.org
734.327.6688  734.327.6647

• Follow @WashtenawRoads on Facebook and Twitter