

# Open Ditch Assessment

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## □ Storm Drainage

### ■ Open Ditch Evaluation (Adequacy $\equiv$ CDP)

- Cross Section/Elevations/Roadway Limits

### ■ Road Culvert Inadequacy (Impacts to Mobility)

- Culvert Size/Material/End Elevations

# SWEET Parameters

## Storm Drainage

**Table 2.1**  
**Storm Drainage Need Prioritization Weighting Factors**

Parameter	Percent
<b>Capacity of Existing Storm Drainage System</b>	<b>38%</b>
Design Event System Adequacy	40%
Extreme Event System Adequacy	20%
Reported "Non-Structural" Flooding	40%
<b>Existence of Structural Flooding</b>	<b>38%</b>
Reported "Structural" Flooding	65%
Flood Insurance Claims	35%
<b>Drainage Impacts to Mobility</b>	<b>24%</b>
Reported "Street Impassable" Flooding	100%

Incorporate  
Ditch  
Adequacy

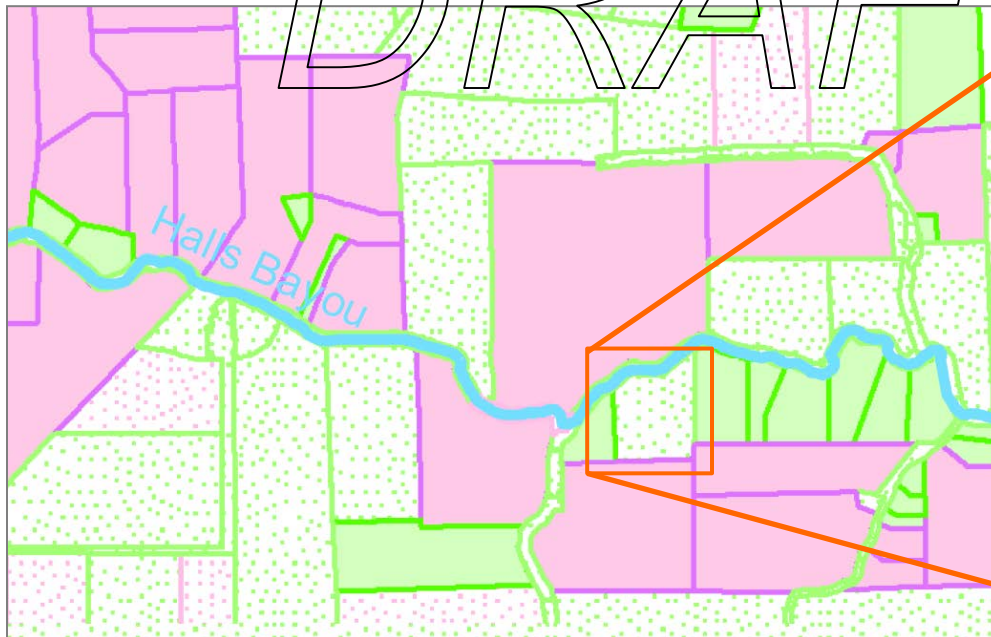
Incorporate  
Culvert  
Adequacy

# Open Drainage Assets

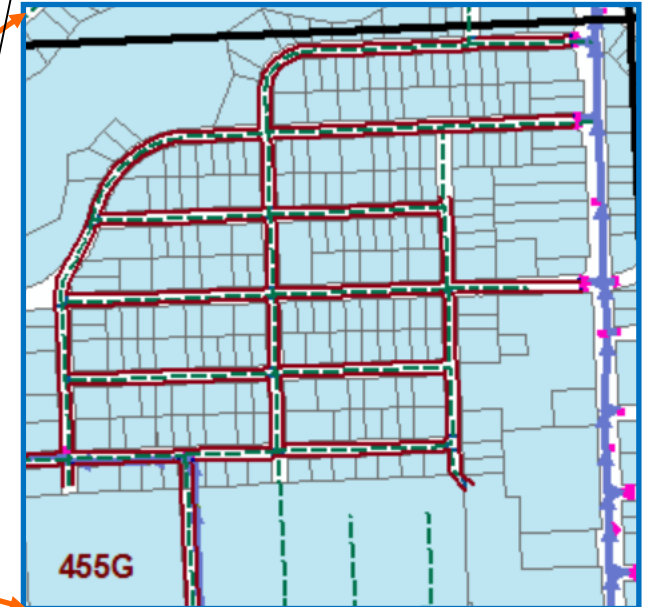
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- BEFORE: Adequacy “by Observation” relied on reported structural flooding
- AFTER: Inventory and Survey Data will be used to Analyze Drainage Area and Capacity (Adequate/Inadequate)

DRAFT



Design System Adequacy Parameter

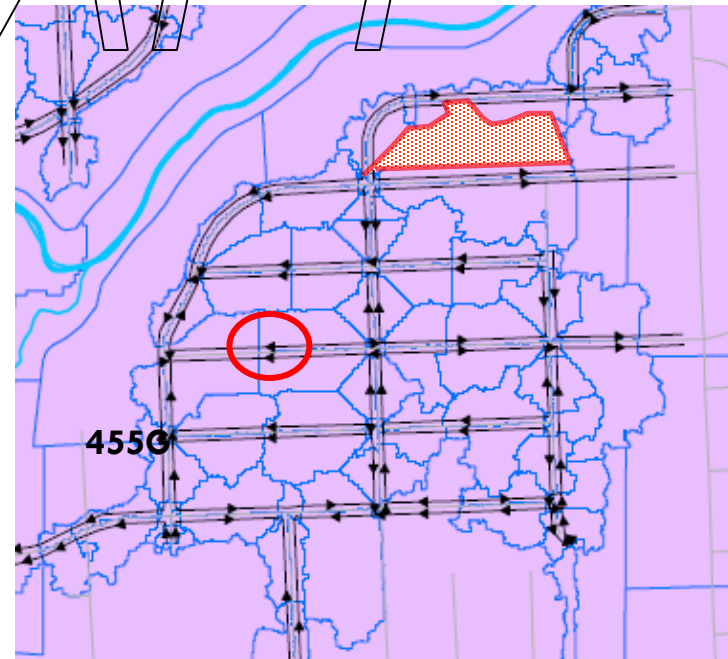
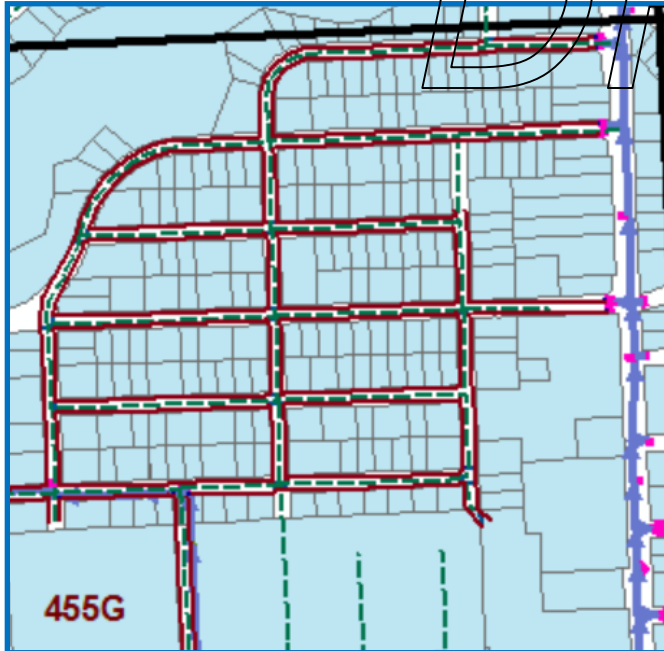


Key Map 455G

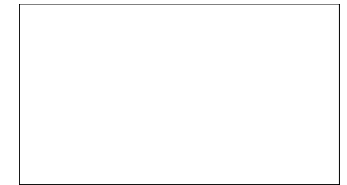
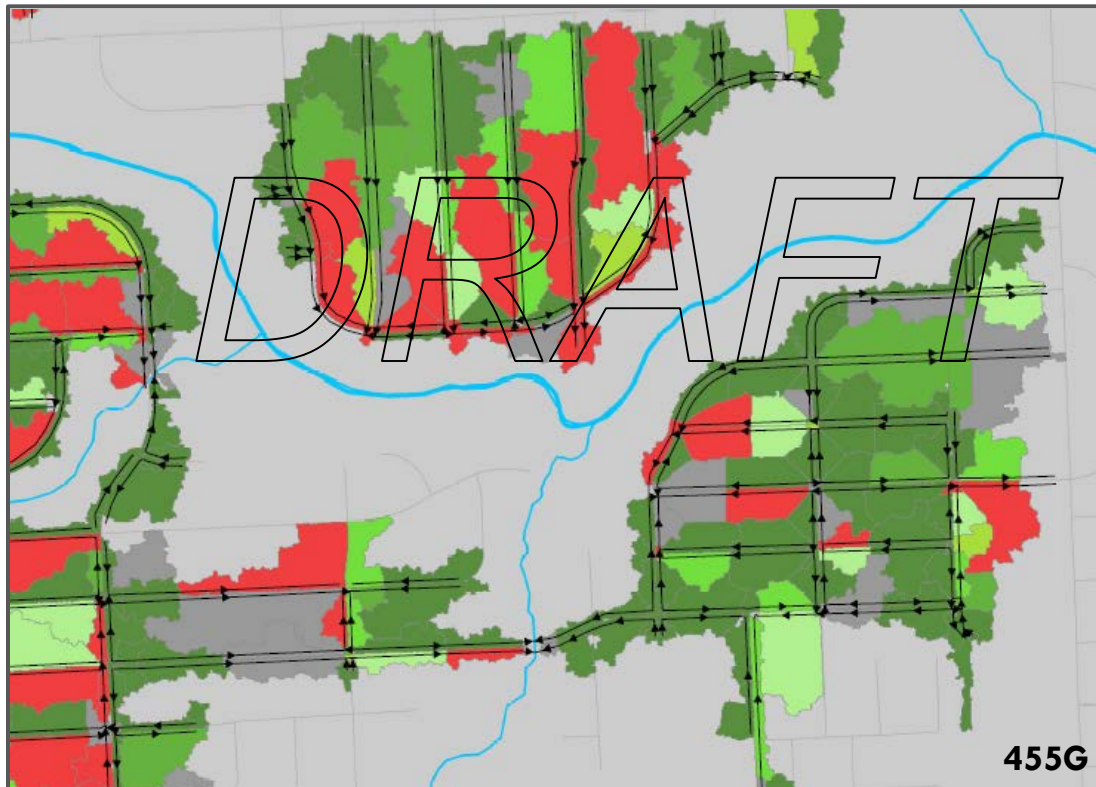
# Open Ditch Evaluation

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- Define Drainage Areas for Roadside Ditch Segments
- Determine Flow Patterns
- Calculate Design Condition Flows



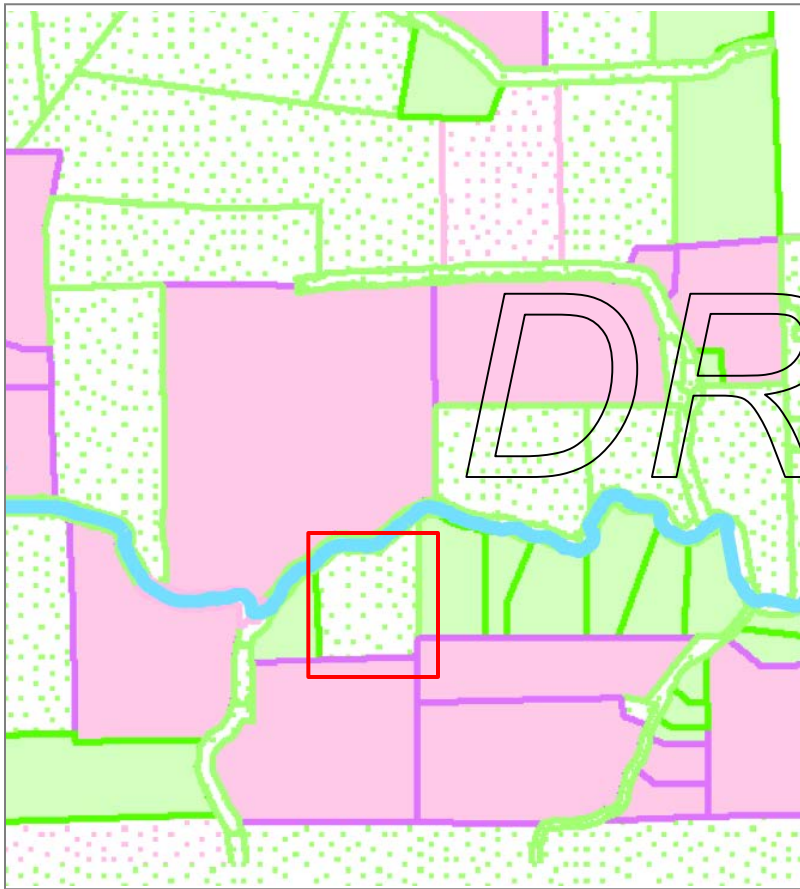
- Compare Design Flows to Roadside Ditch Capacity



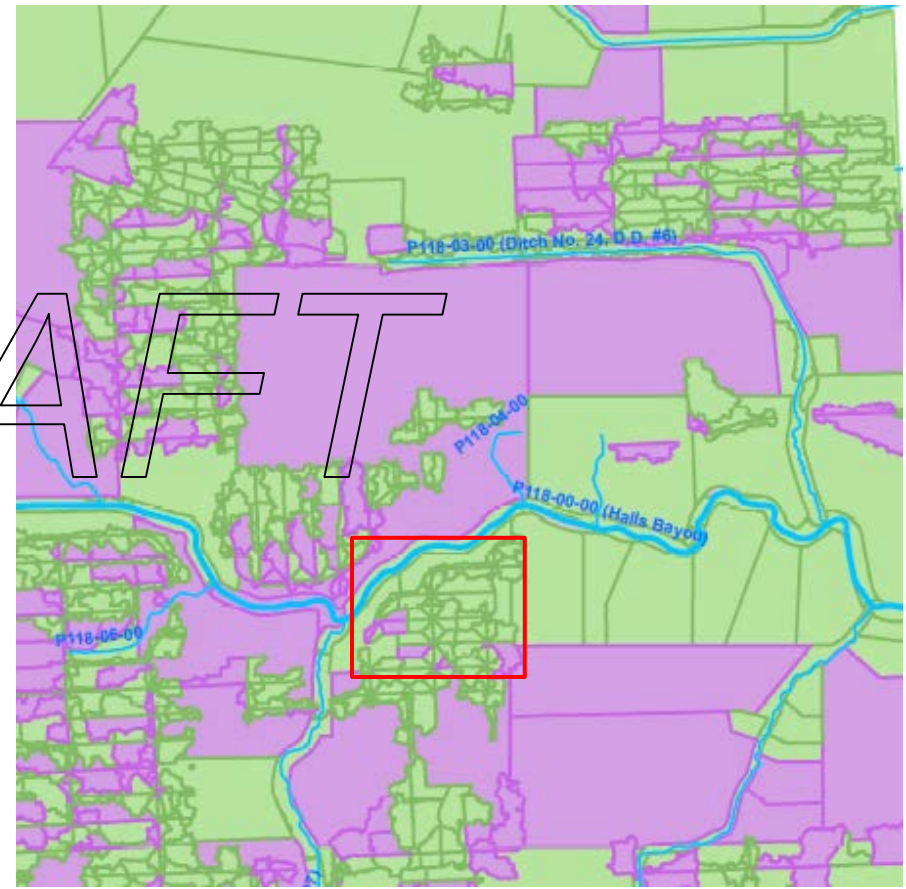


# Open Ditch Evaluation Improved Data

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Before Open Ditch Assessment



Current

# Open Ditch Evaluation

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- Options to Address Issues: Maintenance, Local Drainage Project, or CIP (Repair, Rehabilitate, Replace)

