

OH Scott & Waters Drain Preliminary Engineering Summary



OH Scott & Waters Drain Preliminary Engineering Summary



BOARD OF DETERMINATION OVERVIEW

- **Petition** filed by (10) freeholders for maintenance and improvements to alleviate drainage issues
- **Michigan Drain Code** requires a Board of Determination meeting
- **Board** composed of 3 disinterested members outside of Township or City affected
- Determine project **necessity** based on public health, welfare and convenience after hearing testimony



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PRELIMINARY WORK PERFORMED:

- Review the history of drainage within the area of concern at the MCDC's office. OH Scott & Waters Drain was originally established in 1939.
- Review and Research existing record information (GIS, aerial photographs, topographic info, previous design drawings, etc.)
- Evaluate appropriate drain extension(s) of the OH Scott & Waters Drain to relieve flooding.
- Field inspection of the drainage, watercourses, and potential extensions within the OH Scott & Waters Drain Drainage District.
- Provide an **independent and unbiased** assessment of the storm water conditions within the Drainage District.
- Compile all analyses and report on those findings at the Board of Determination.

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EXISTING DRAINAGE CONDITIONS OVERVIEW

- Significant flooding on Norton Avenue and Wayne Avenue
- Lack of adequate outlet for Wayne Avenue



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WORKMAN POND CONDITIONS 2011 TO 2018



2011 AERIAL IMAGE



2018 AERIAL IMAGE

(Blue line represents the 2011 water level outline)

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EXISTING DRAINAGE CONDITIONS OVERVIEW – WAYNE AVENUE



Standing water across Wayne Avenue
in front of 3512 Wayne Avenue



Standing water across Wayne Avenue in
front of Bush Concrete looking southeast

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EXISTING DRAINAGE CONDITIONS OVERVIEW – WAYNE AVENUE



Standing water across Wayne Avenue
looking northeast to Bush Concrete's yard



Standing water surrounding 3499 Wayne Avenue

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EXISTING DRAINAGE CONDITIONS OVERVIEW – WAYNE AVENUE



Standing water in front and around 3546,
3552, 3558 Wayne Avenue



Standing water in front of 3678 Airline Road

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EXISTING DRAINAGE CONDITIONS OVERVIEW – WAYNE AVENUE



Standing water across Wayne Avenue at the intersection of Wayne Avenue and Hawley Street looking northwest

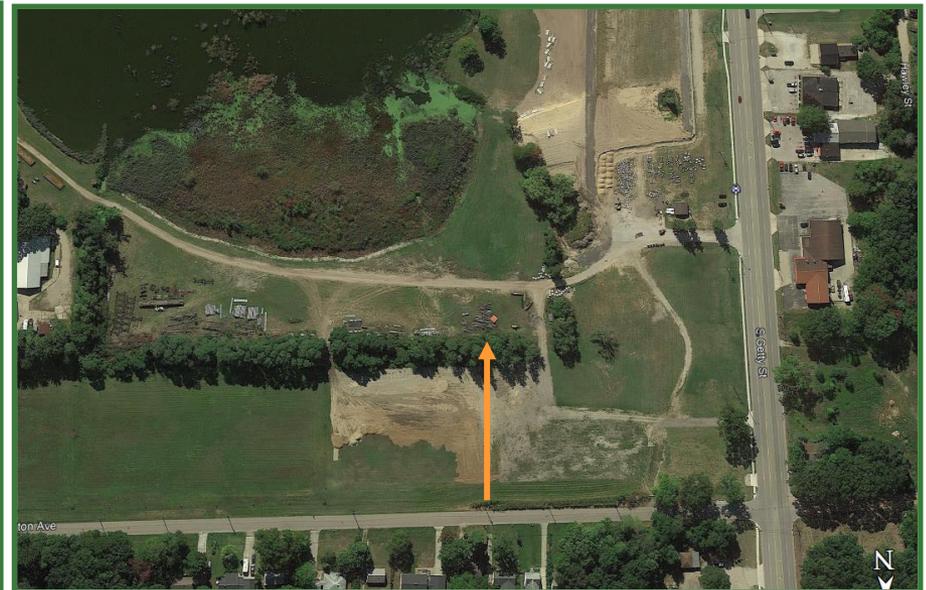
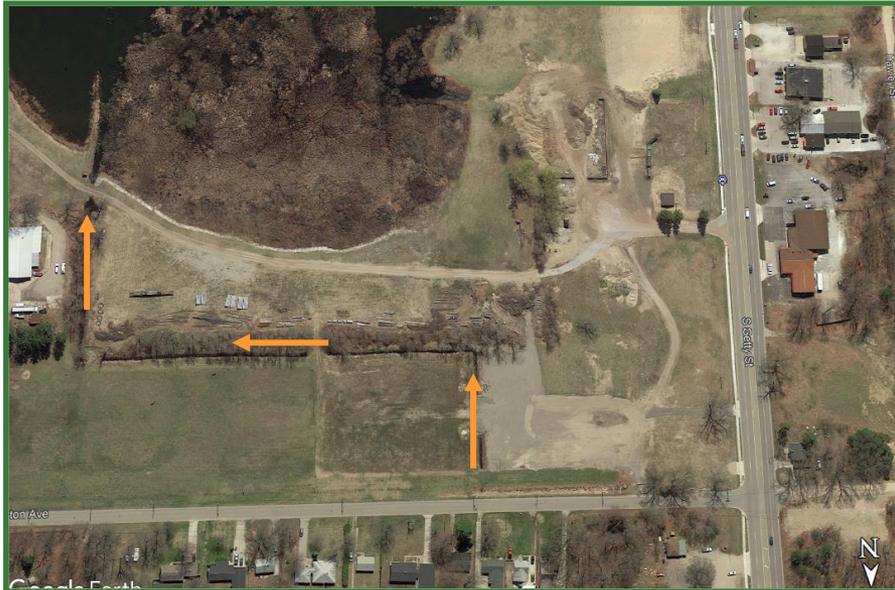


Standing water across Hawley Street and around all houses on the street

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NORTON AVENUE DRAINAGE



2016 AERIAL IMAGE

No conveyance system exists to drain the south side of Norton Avenue

2018 AERIAL IMAGE

(24" Storm Sewer)

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EXISTING DRAINAGE CONDITIONS OVERVIEW – NORTON AVENUE



Enclosed 24-inch HDPE storm sewer installed across from 880 E Norton Avenue and runs south to Workman Pond



Standing water in front of 870 E Norton Avenue

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EXISTING DRAINAGE CONDITIONS OVERVIEW – NORTON AVENUE



Standing water across E Norton Avenue and in front of 980 E Norton Ave



Standing water across and along E Norton Avenue across from 980 E Norton Avenue

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EXISTING DRAINAGE CONDITIONS SUMMARY



Standing water in front of 3546 Wayne Avenue

Summary:

- **Widespread drainage and flooding issues along Norton Avenue and Wayne Avenue**
- **Lack of adequate storm water infrastructure**
- **Lack of adequate outlet to Workman's Pond and/or Mona Lake**

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NEXT STEPS

- **Public Testimony**
- **Board to Determine Necessity of Petition**
- **If project found not necessary:**
 - Project ends
- **If project found necessary:**
 - Evaluate scope of project and design alternatives
 - Scope meeting to discuss design with property owners and municipalities
 - Finalize Design (obtain easements and permits, if necessary, and prepare bid plans)

