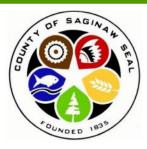


# Richland Township Administrative Offices August 31, 2023, 6:00 p.m.

### **Brian J. Wendling**

**Saginaw County Public Works Commissioner** 





#### **PURPOSE OF PUBLIC INFORMATIONAL MEETING:**

- Review the known existing issues along the drain
- Inform landowners within the drainage district of proposed improvements
- Receive input and comments from the landowners on the proposed plan











#### **DRAIN BACKGROUND:**

- Established as a county drain in 1905
- Last maintenance project performed in 1952
- Current Landowner Petition
  - Dated June 28, 2022
  - Received August 12, 2022
- Board of Determination
  - Held on December 8, 2022
  - Found the project to be necessary





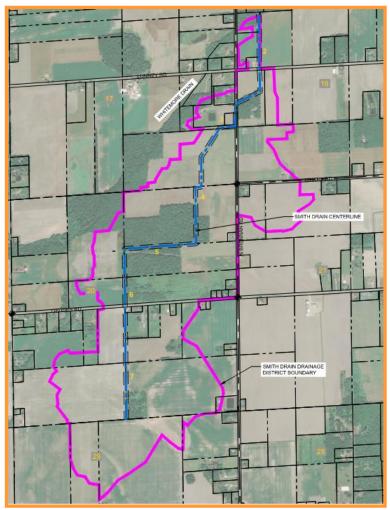


#### **DRAINAGE DISTRICT:**

- Approximately 610 acres
- Contains 44 parcels
- Located entirely in Richland Township, Saginaw County

#### **SURVEY:**

- Surveyed approximately 2.2 miles of open drain
- Collected flowline elevations approximately every 50 feet
- Collected cross sections approximately every 200 feet
- Collected topography within the drain right of way
- Collected elevations of all culvert crossings







#### **DESIGN:**

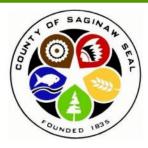
- 10-Year Design Storm
  - Saginaw County Standard Level of Service
  - 1.43 inches of rain in 1 hour
  - 3.05 inches of rain in 24 hours

#### **CHANNEL IMPROVEMENTS:**

- Debris removal
- Erosion repair and bank tapering
- Tree removal
- Channel cleanout

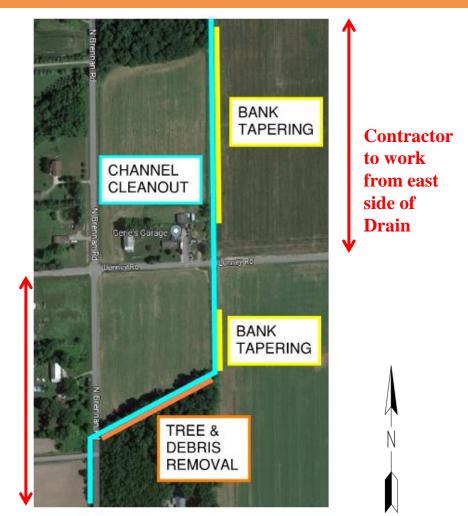






#### **CHANNEL IMPROVEMENTS:**

Contractor to work from west side of Drain

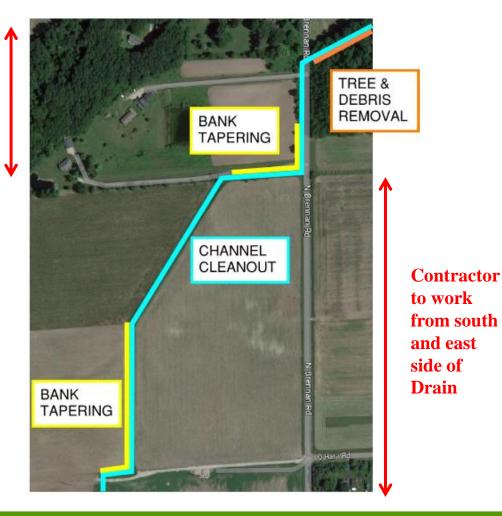






#### **CHANNEL IMPROVEMENTS:**

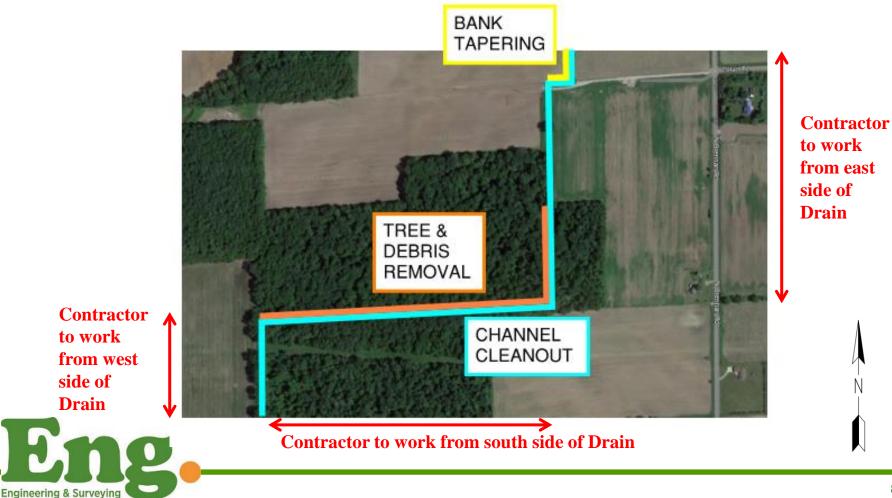
Contractor to work from west side of Drain







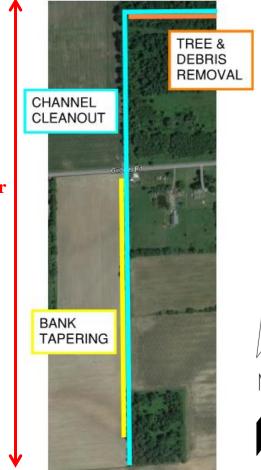
#### **CHANNEL IMPROVEMENTS:**





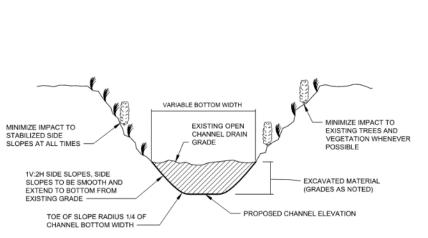
#### **CHANNEL IMPROVEMENTS:**

Contractor to work from west side of Drain









OPEN DRAIN CLEANOUT DETAIL

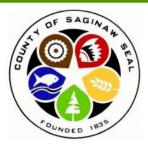
#### **Existing Condition**

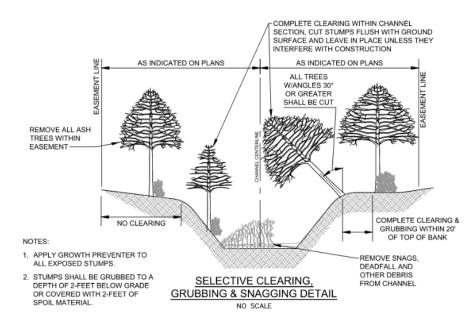


**Proposed Condition** 









#### **Existing Condition**

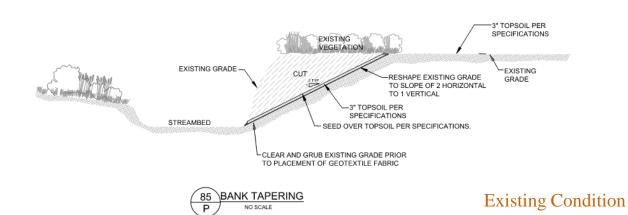




Proposed Condition







#### Proposed Condition











#### **DRAIN CROSSINGS:**

- Total of 7 drain crossings
  - 3 Roads (Lunney, Brennan, Geddes)
  - 3 Drive crossings
  - 1 Field crossing
- Measured length, elevation and size of all drain crossings
- Assessed condition of crossings and headwalls



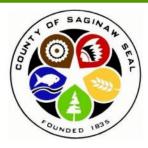




#### **CLEANUP AND RESTORATION:**

- Trees and brush within the drain Right-of-Way will be removed as needed for construction
- All spoils will be leveled as applicable along the drain within the drain right of way
- Any disturbed lawn or roadside ditch areas will be restored with a minimum of 4 inches of topsoil, mulch, and seed
- All driveways and roads will be restored in kind

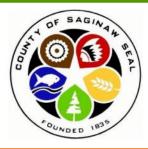




#### **TENTATIVE PROJECT SCHEDULE:**

- Day of Review of Drainage District Boundary
  - Completed August 30, 2018
- Bid Project
  - Bid opening to be September 14, 2023 @ 10 a.m. at the Office of the Public Works Commissioner
- Day of Review of Apportionments (Notice will be mailed)
  - Early October 2023
- Contractor Notice to Proceed
  - Beginning of January 2024
- Completion
  - October 15, 2024





#### **PROJECT COST:**

- Estimated Cost: \$225,000.00 (final project cost determined by Contractor's bid)
  - Open channel improvements
  - Culvert cleaning and replacements
  - Erosion repair
  - Cleanup and restoration
  - Utility coordination
  - Engineering, survey, and design
  - Permitting fees
  - Financing fees
  - Construction staking and inspection
  - Contingencies



