



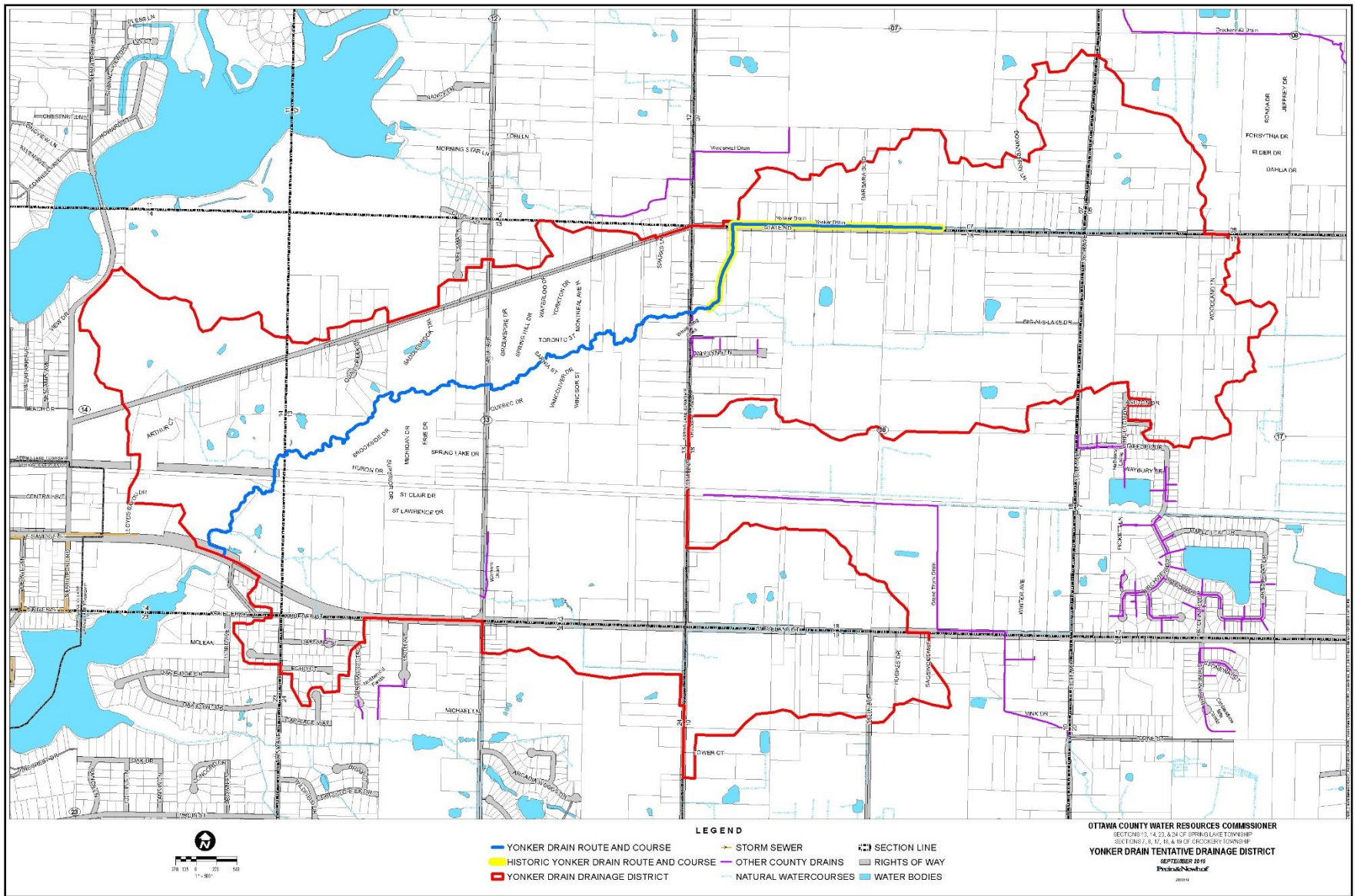
October 22, 2019

Yonker Drain Board of Determination

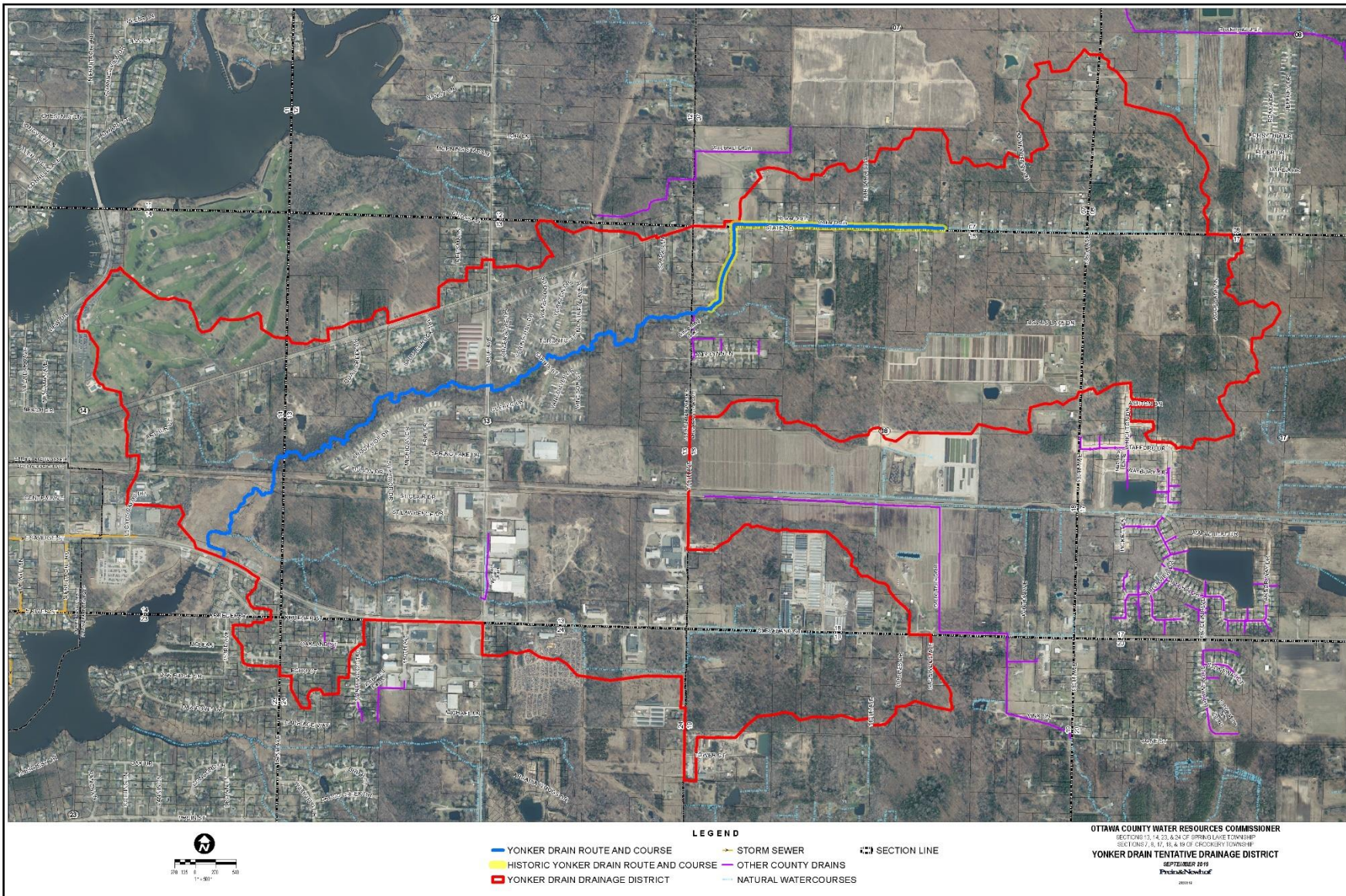
Yonker Drain

- Existing county drain located in Crockery Township. The drain discharges into a watercourse located east of 144th Avenue and south of State Road. This watercourse is considered an orphan system.
- The orphan watercourse outlets into Lloyd's Bayou by M-104.
- Orphan systems lack authorized local and county governmental jurisdiction and administrative, procedural, and funding mechanisms to address current/future needs for maintenance and improvements.
- Petitioned by Spring Lake Township on September 9, 2019 under Chapter 8 of the Michigan Drain Code of 1956.
- Michigan Drain Code requires a Board of Determination Meeting





Proposed Drainage District and Route and Course



Proposed Drainage District and Route and Course



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36 inch Culvert Failure – North Bank Trail

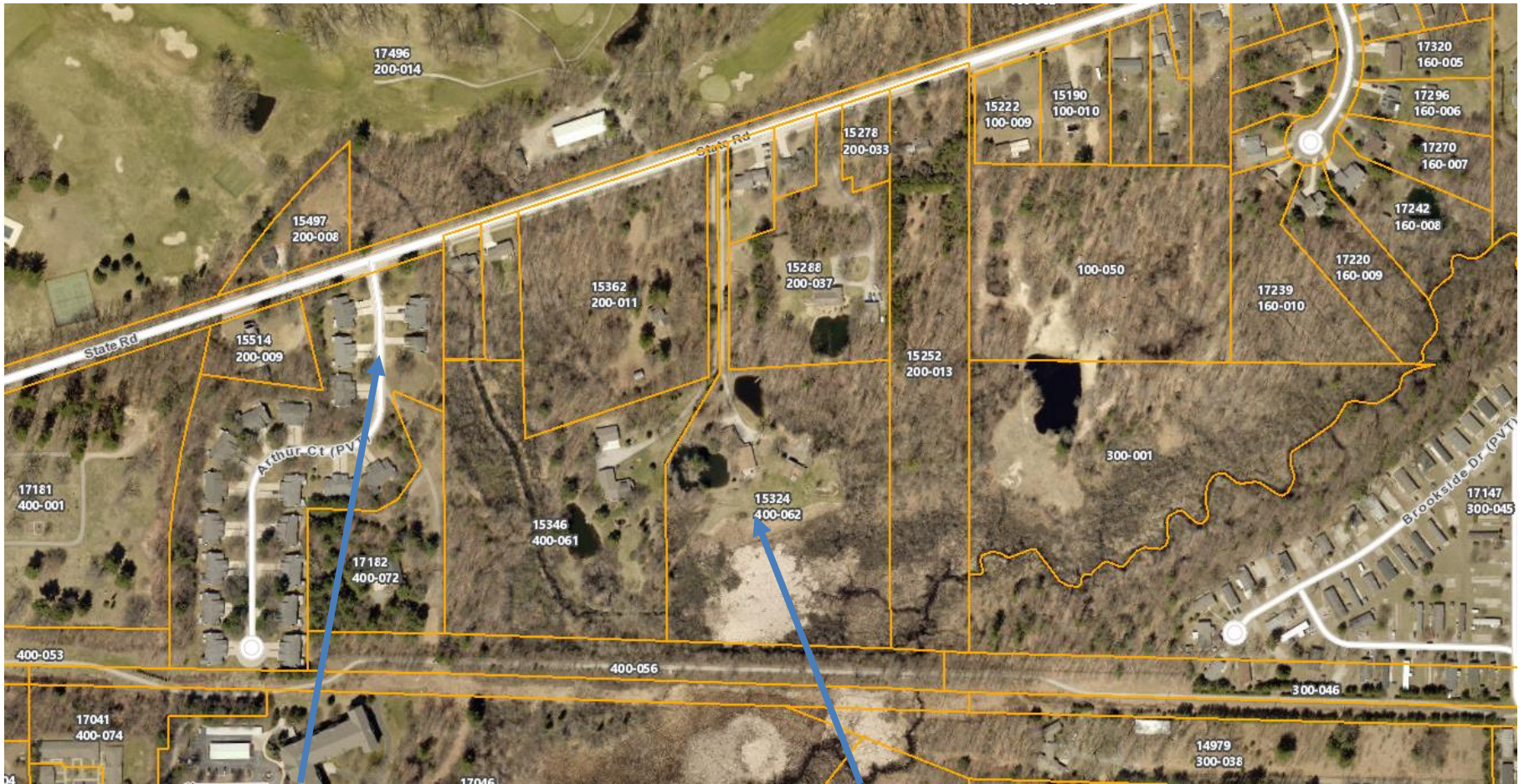
Yonker Drain – North Bank Trail General Timeline

- Summer 2019:
 - Sinkhole in bike trail forms. Suspected reason for the sinkhole is the 36 inch culvert underneath the bike trail.
 - Televising of the 10 inch sanitary sewer indicated significant settling due to sinkhole in path
 - Water levels upstream of culvert increased, concerning residents with potential of flooding.
- Fall 2019:
 - 10 inch sanitary sewer was repaired and stabilized with a beam in case additional settling to occur to prevent failure
 - Culvert has been dug out on the upstream and downstream ends multiple times to allow the culvert to flow.
 - After the cleanout, the culvert becomes blocked again with debris and sediment and requires another cleanout at the upstream/downstream ends.
 - The blocked culvert then backs up water upstream and threatens flooding of upstream properties.





Sinkhole in Path (filled in multiple times and continues to exhibit signs of settling)



Arthur Court Condos: high water levels
nearing walkout basements of houses on east
side of road near State Road intersection

15324 State Road: high water levels in
backyard



Flooding of wetlands upstream of culvert.



Flooding of wetlands upstream of culvert.



15324 State Road, Spring Lake, MI,
summer 2019 during low water level.



15324 State Road, Spring Lake, MI
49456 (9/16/2019).



Ponding by Arthur Court Condos (near driveway for 17182 Arthur Court)

Yonker Drain

- Next Steps:
 - Public testimony
 - Board to determine necessity of petition based on public health, welfare, and/or convenience after hearing testimony
 - then the
 - If a petition is deemed necessary:
 - Yonker Drain will be extended to include the orphan watercourse
 - Project Design
 - Easement Acquisition
 - Project Bid and Construction
 - Day of Review of Apportionments
 - If petition is deemed not necessary:
 - No further action will occur

