

# STORMWATER Program Update

Presented to  
UTILITIES COMMITTEE  
November 13, 2018



## NR 216 Permit

- Public Education and Outreach
  - Northeast Wisconsin Stormwater Consortium (NEWSWC)
  - Summer Camp, Fox River Academy
- Public Involvement and Participation
  - Tied to Public Education and Outreach
  - April 21, 2018 River Cleanup



## NR 216 Permit

- Illicit Discharge Detection and Elimination
  - On-going field screening (2018 Field Work Done)
- Construction Site Pollution Control
  - Implementing Program



## NR 216 Permit

- Post-Construction Stormwater Management
  - Implementing program and ordinance
  - Plan reviews 15 in 2014, 21 in 2015, 28 in 2016, 11 in 2017, 37 so far in 2018
- Pollution Prevention
  - Implementing program



## NR 216 Permit

- Stormwater Quality Management
  - City-wide SWMP update fall 2014
  - Continuing to implement plan
  - Continuing to monitor technical changes
  - Continuing to monitor Lower Fox River TMDL implementation
  - Continuing to monitor development of Upper Fox River TMDL
- Storm Sewer System Map and Annual Report
  - New On-line DNR Annual Report form



## NR 216 Permit

- Current permit expires April 30, 2019
  - Five years from issue date
- Re-application due November 1, 2018 (Done)
- WDNR hosted input sessions on the new permit
  - September 12 webinar
  - September 19 NE Region meeting
  - October 5 statewide survey



## NR 216 Permit

- Anticipated schedule for new permit from WDNR
  - Other regions hosting input meetings, Fall 2018
  - EPA review December 2018
  - Issued for statewide public comment January 2019
  - Re-issued May 1, 2019





# Appleton's Implementation Plan for City-wide Stormwater Management Plan

- 2015
  - Final design/permitting of Northland Pond (Done)
  - Work with Counties to clarify credit
    - Calumet and Winnebago (Done)
    - Outagamie County (In Progress)
  - Evaluate potential Mud Creek project (DONE)
  - Relocate public storm sewer at WWTP to address Illicit Discharge (Done)





## Appleton's Implementation Plan –Con't

- 2016
  - Solicit bids for Northland Pond (Done)
  - Work with WDOT to clarify credit (waiting for DNR/DOT agreement)
- 2017
  - Construct Northland Pond (Done)
  - Evaluate possibility of adding private street sweeping contract to supplement City staff (Done)
  - Final Design and Purchase Land for Leona Street Pond (Done)

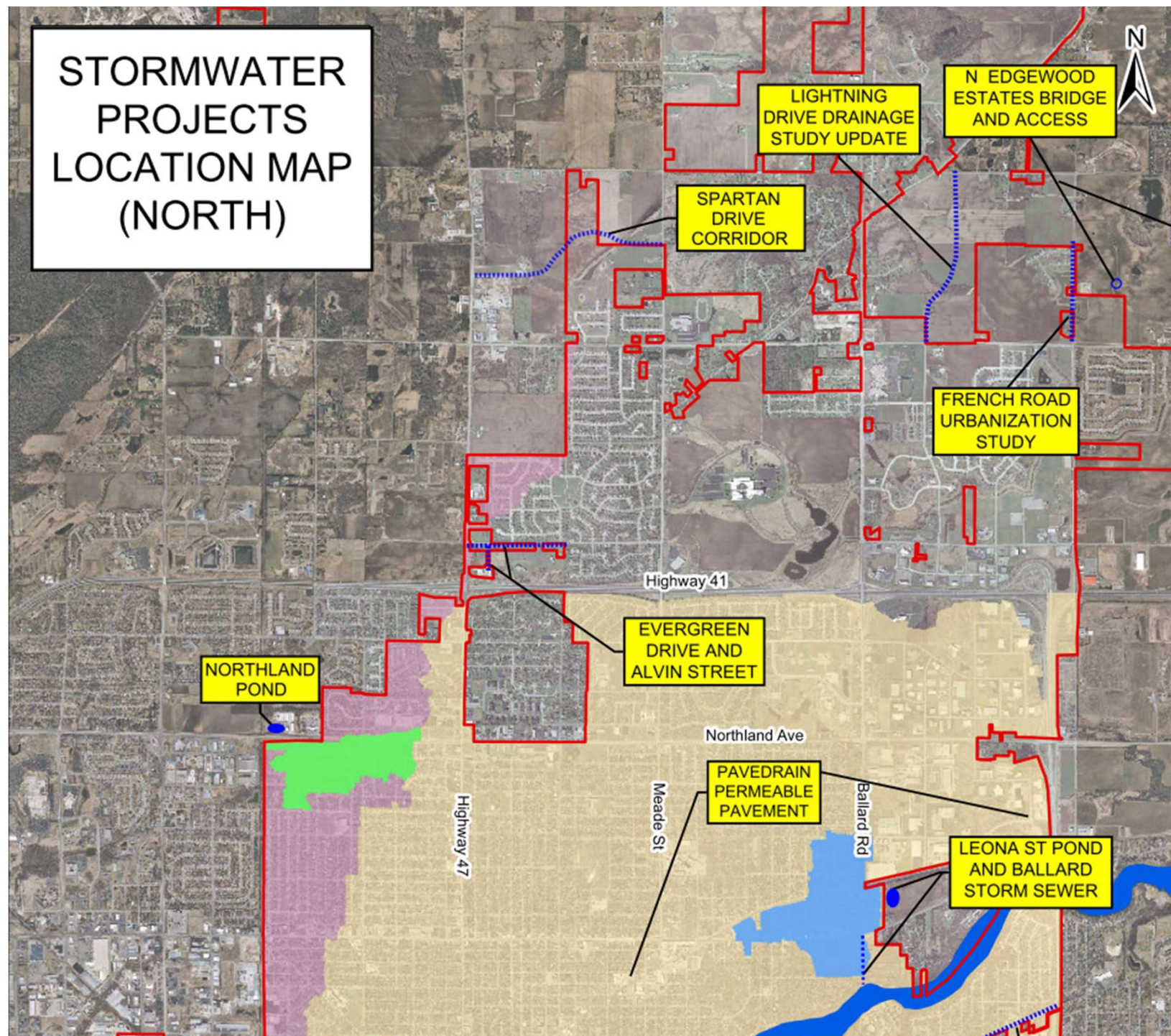


## Appleton's Implementation Plan –Con't

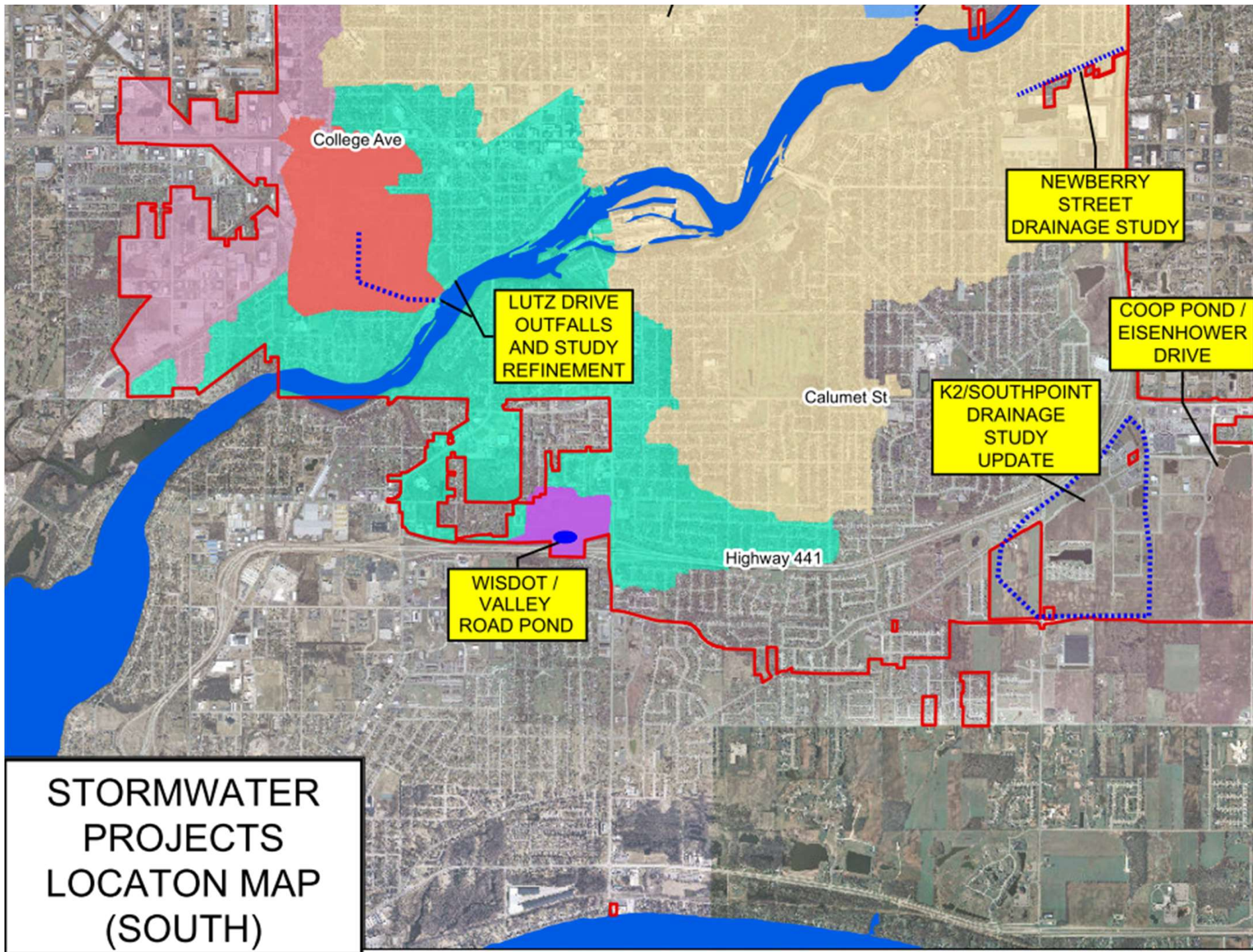
- 2018
  - Construct Leona Street Pond (Moved to 2019)
  - Possibly construct pond with WDOT 441 Project (Done)
- 2019
  - Request 2020 budget for next City-wide plan update
  - Fall 2019 issue RFP for consultant selection
- 2020-2021
  - High Efficiency Street Sweeper Upgrade (Moved to 2022)
  - Update the City-wide Stormwater Management Plan



# STORMWATER PROJECTS LOCATION MAP (NORTH)







# 2018 Capital Projects

- Northland Pond (Done)
- WISDOT/Valley Road Pond (Done)
- Leona Street Pond (Pre-final plans. January 2019 bid)
- Spartan Drive Corridor (In Design)
- CTH JJ/Lightning Drive Pond (Done)
- Coop Pond/Eisenhower Drive (Done)
- Lutz Drive Outfalls (Outfall work done, upstream route refinements under study)
- Evergreen Drive (Under Construction)
- Alvin Street (In Design)



# Regulations/Guidance

- Technical Standards
  - Ditch Checks (Final March)
  - Trackout Control Practices (Final July)
  - Rain Garden (Final September)
- Guidance Documents
  - Interim phosphorus reduction credit for leaf management programs (Final March)
- Wetland regulations (effective July 1)
- NR 152 Model ordinances (effective August 1)

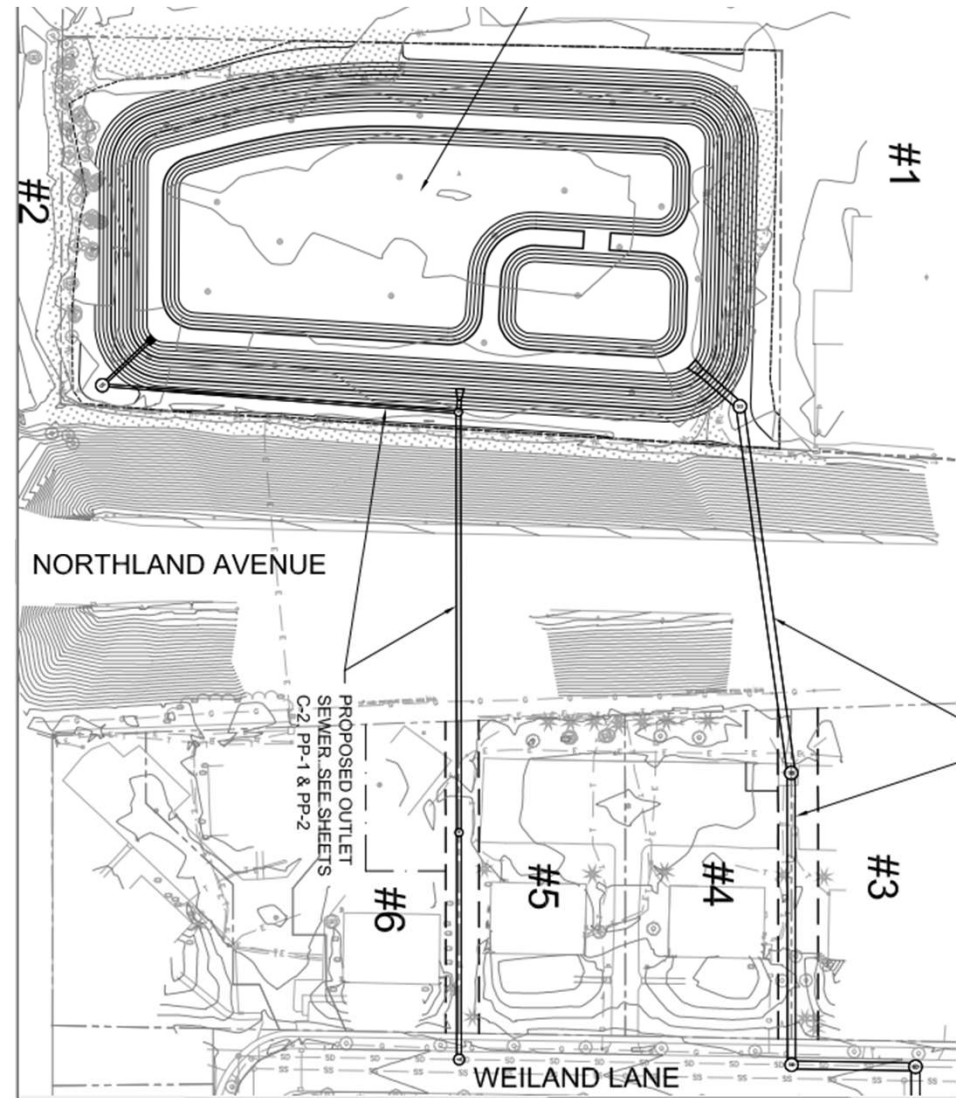
# Regulations/Guidance

- Recently out for Public Comment
  - Tech Std 1052 Non-channel erosion mat
  - Tech Std 1053 Channel erosion mat
  - Guidance for modeling post-construction stormwater management
  - Guidance for artificial wetland exemptions
  - Guidance for non-federal wetland exemptions
  - UNPS grant application instructions



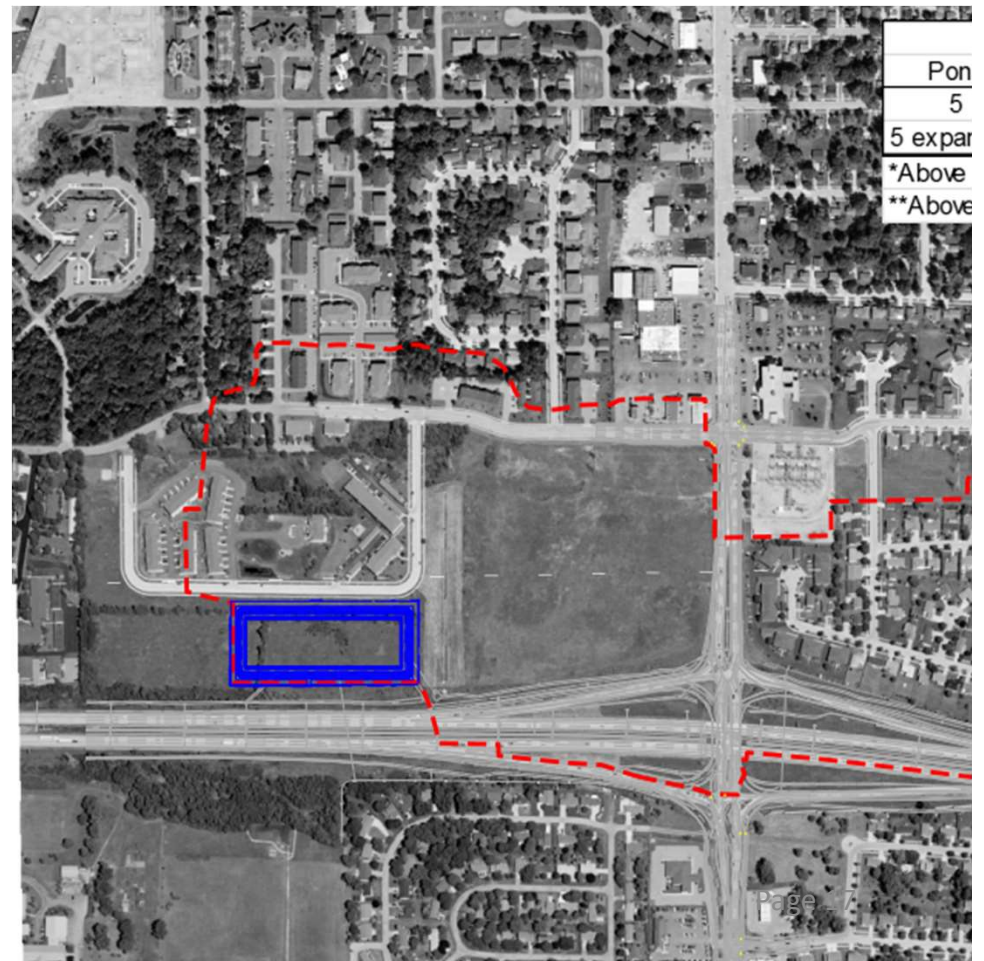
# NORTHLAND POND

- Part of West Wisconsin Ave Study Selected Alternative to reduce flooding west of Mason Street
- Construction completed Fall 2018
- Punchlist and grant closure items pending



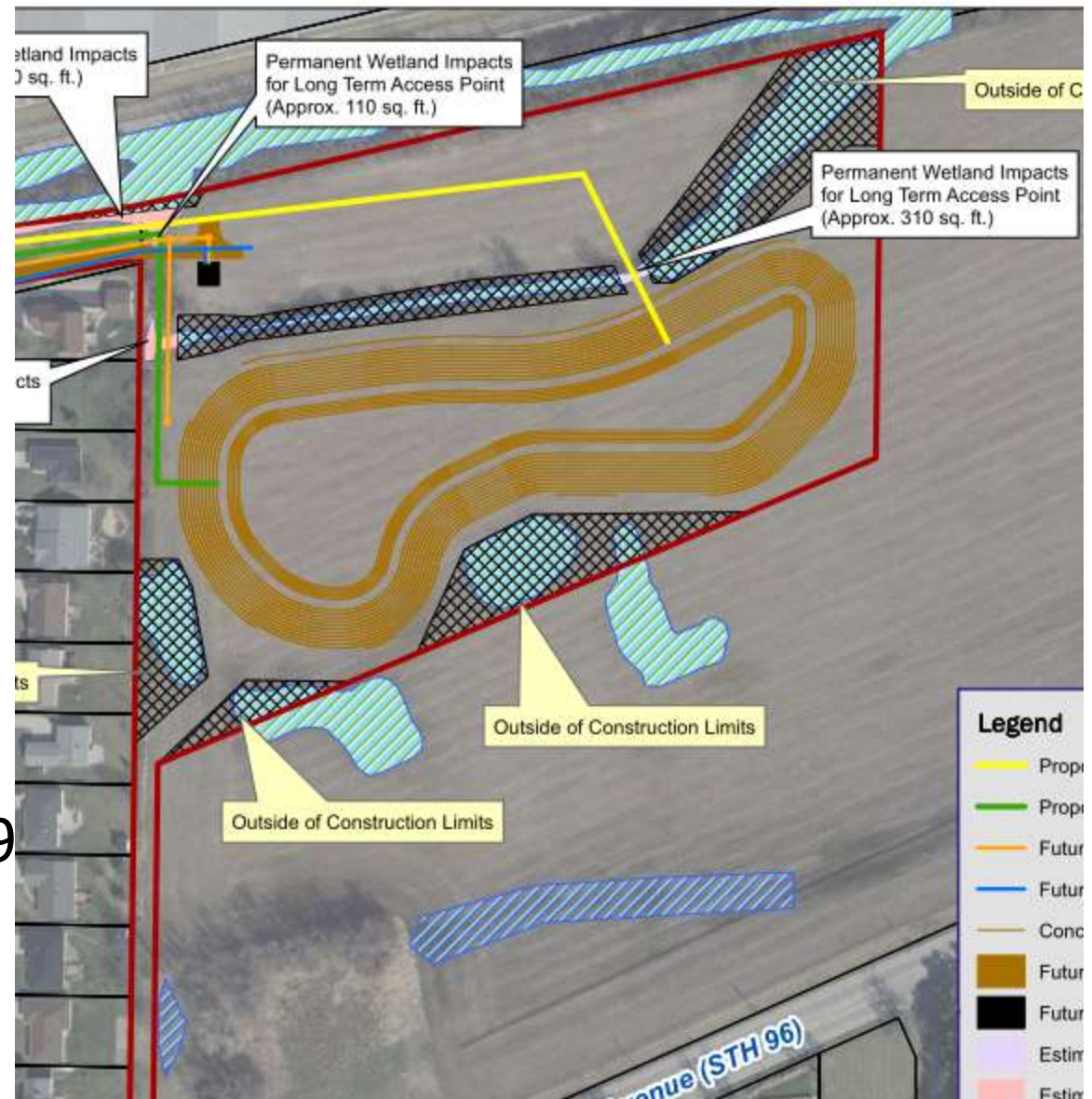
# WisDOT/Valley Road Pond

- DOT- led project to expand existing pond
- Agreement approved by Council last November
- Pond construction 95% complete
- Site being buttoned up for winter
- Complete June 2019



# Leona Street Pond

- DNR and ACOE permits received
- Urban NPS grant approved
- Waiting to hear on flood control grant
- Bidding December 2018 for January award
- Spring/Summer 2019 Construction





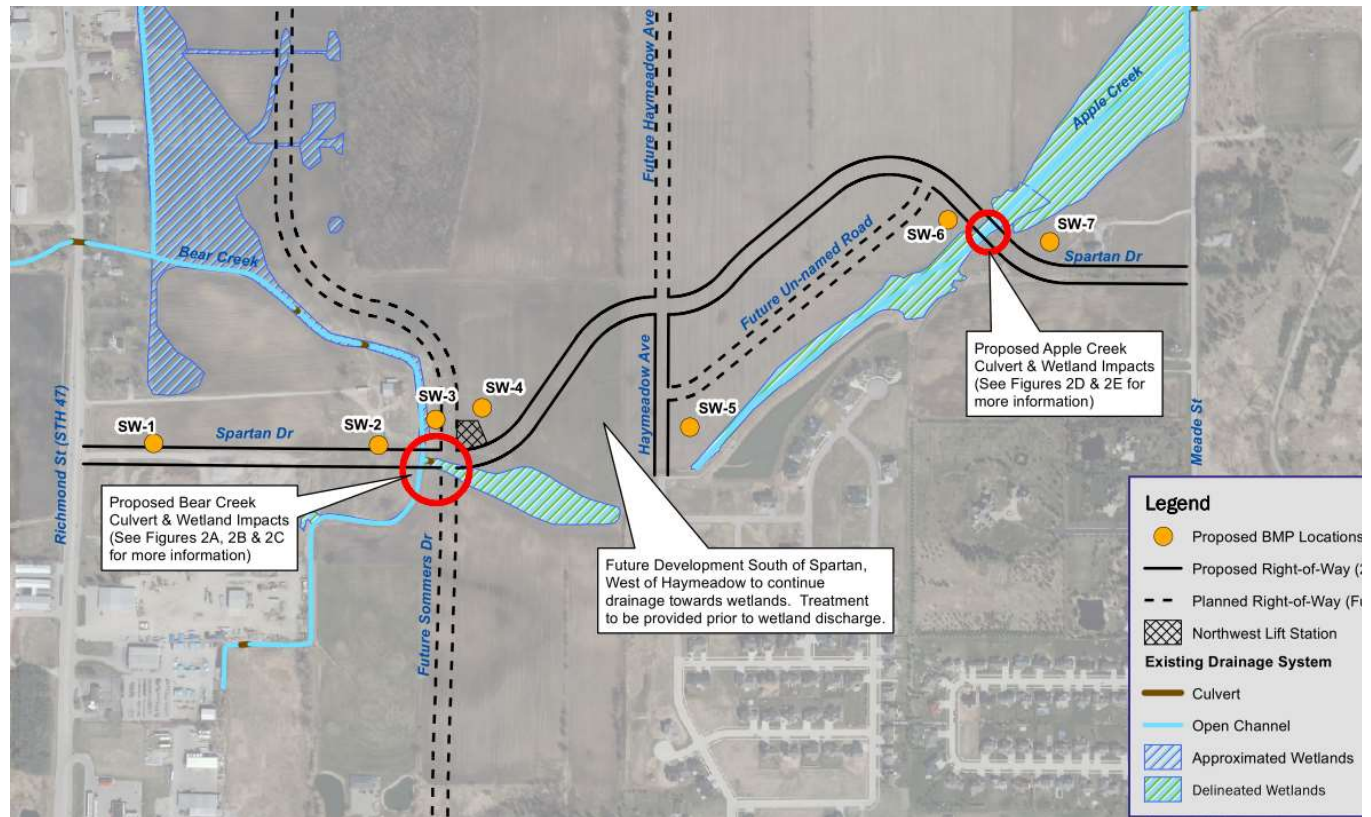
# PaveDrain Permeable Pavement

- Pilot Projects at Fire Station #1 (2015) & Sandra St (2016)
- Flood Reduction and Water Quality
- Performance Monitoring is Ongoing



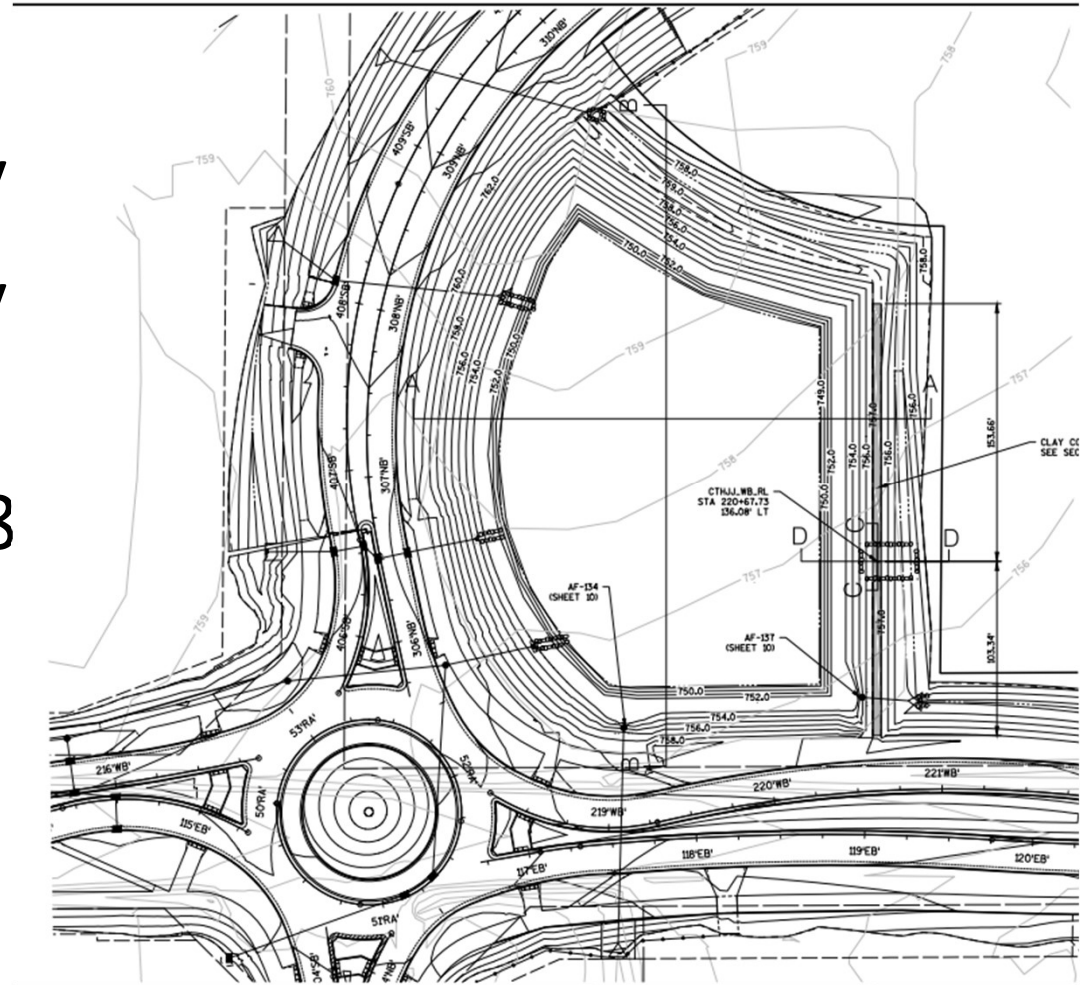
# Spartan Drive

- 60% Design and Permitting in progress
- land acquisition complete on east side
- Development agreements anticipated over winter



# CTH JJ/Lightning Drive Pond

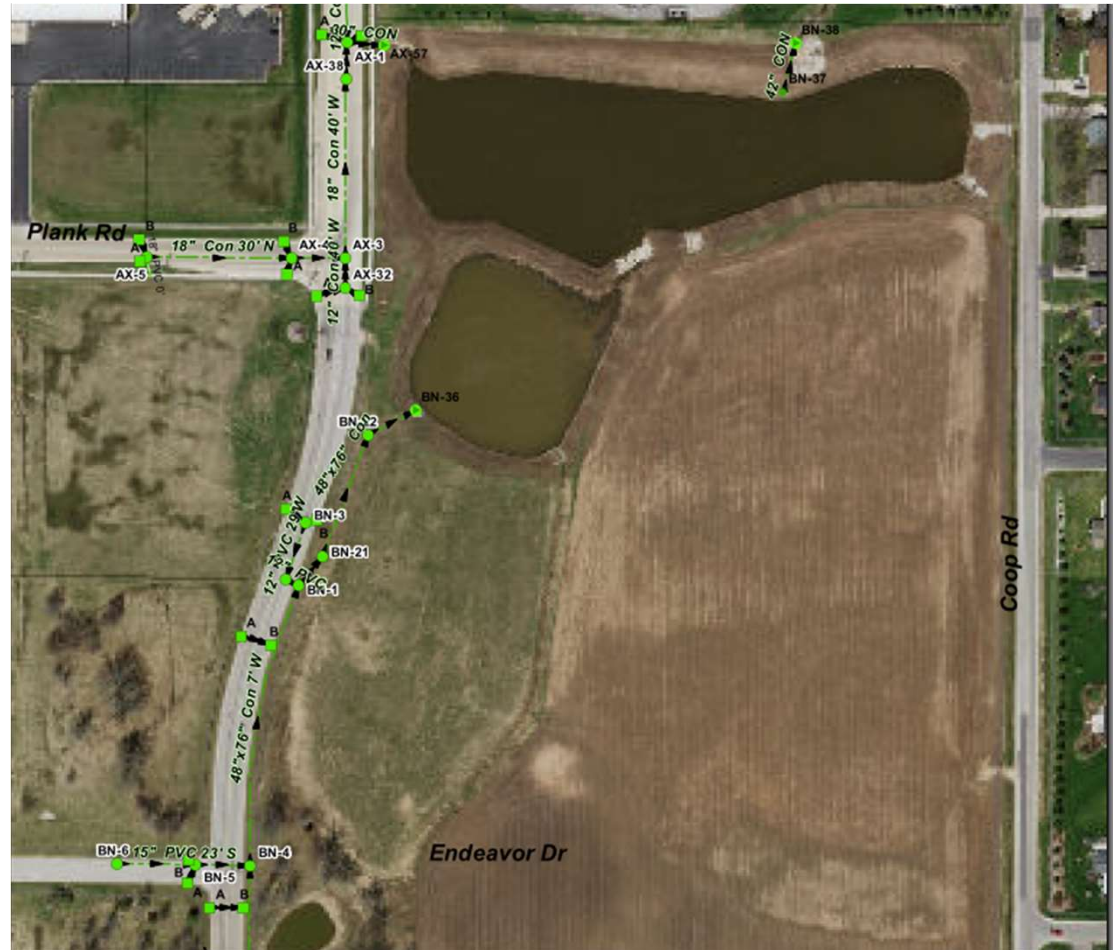
- Joint Project with Outagamie County
- Outagamie County began in 2017
- Completed in 2018





# Coop Pond/Eisenhower Dr Sewer

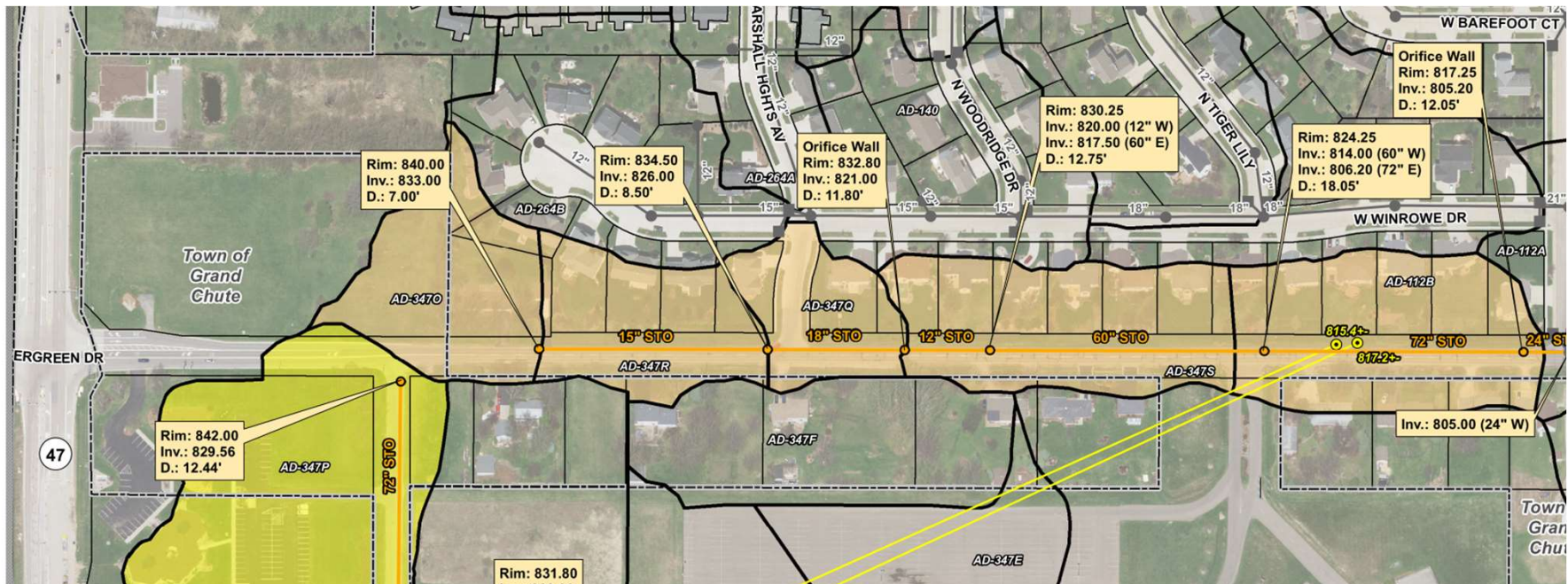
- AECOM evaluated Pond function under current technical standards
- Additional storm sewer done in 2017
- Outlet structure modification done in 2018





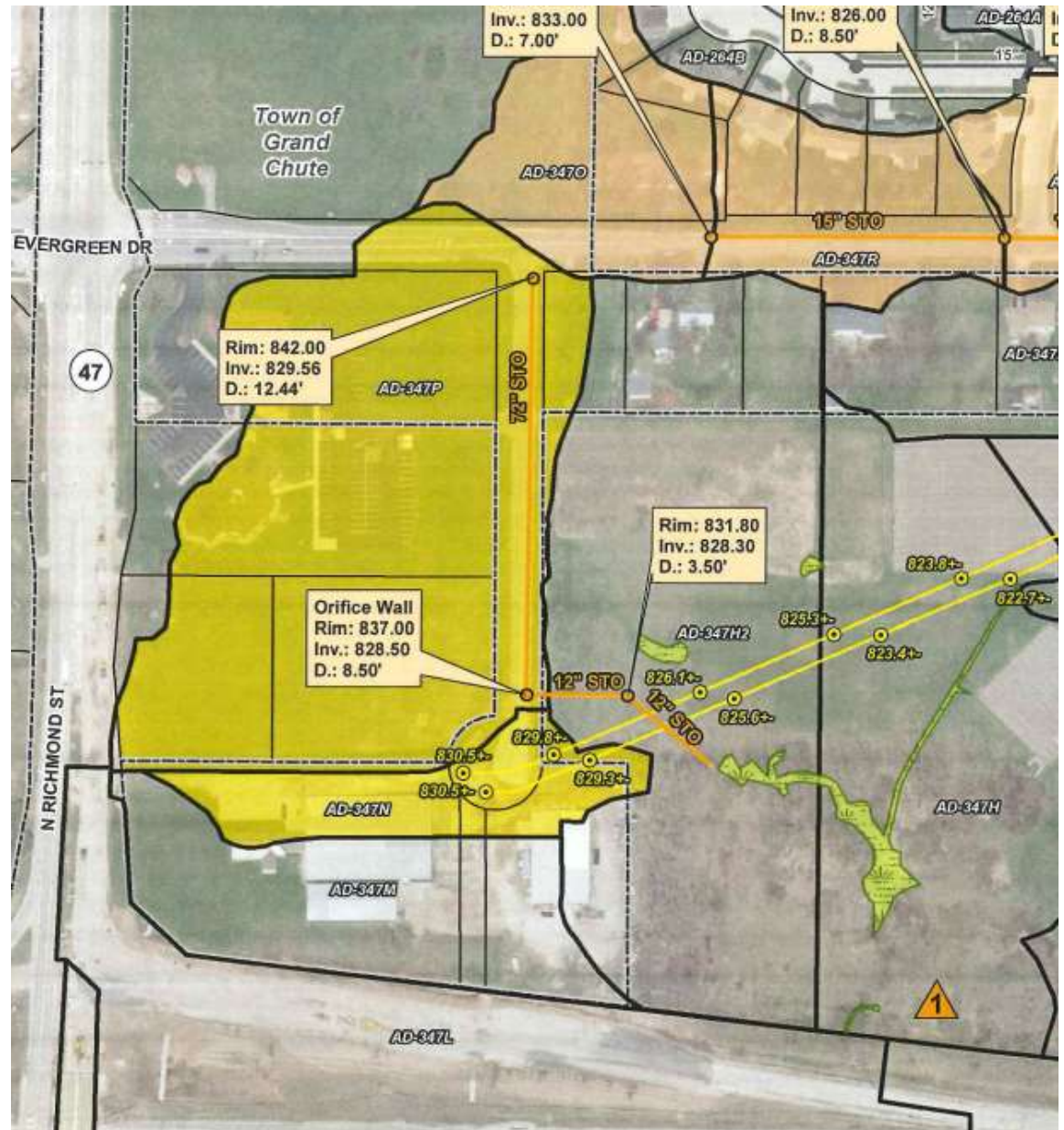
# Evergreen Drive

- Joint project with Town of Grand Chute
- Need additional permit from WisDOT for connection to Richmond Street for sidewalks
- Storm sewer construction underway



# Alvin Street

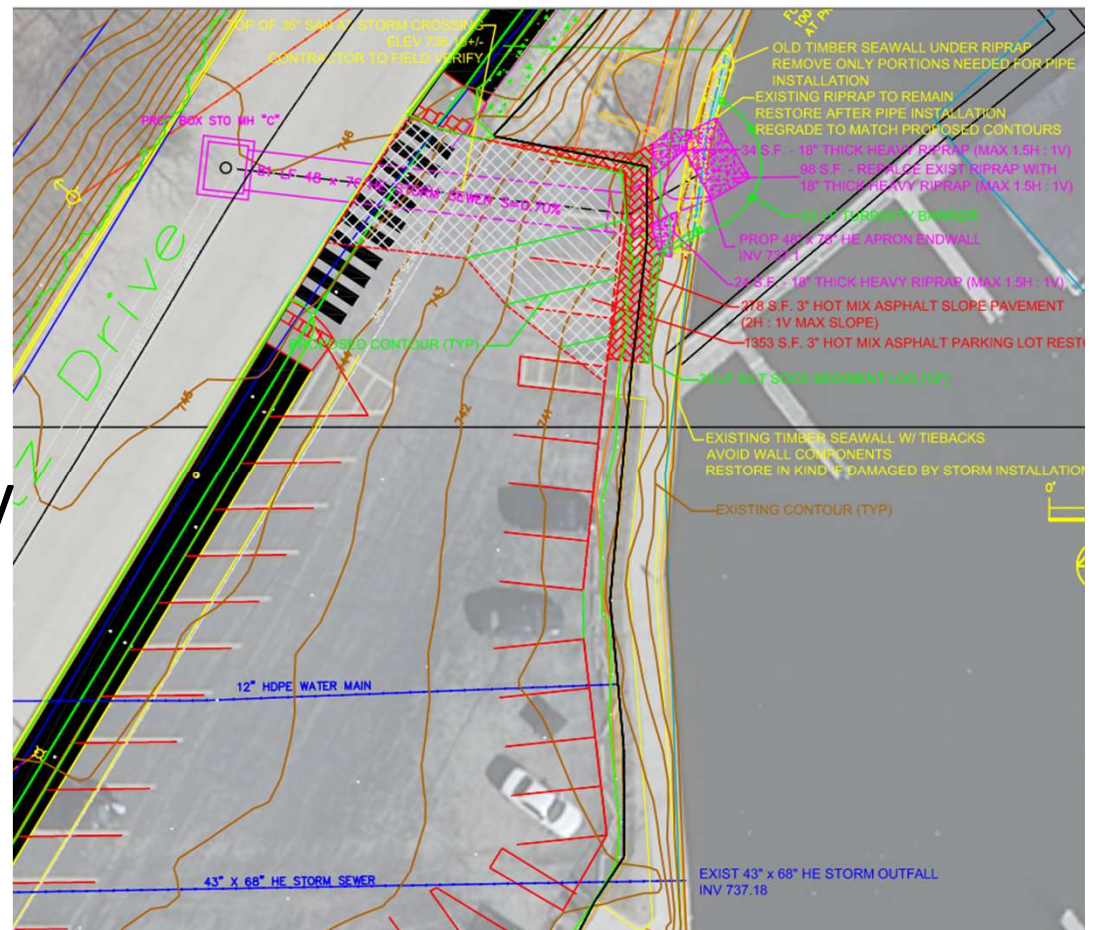
- Refined Alternatives in coordinating w/ Church and new owner/developer
- Design and permitting in progress





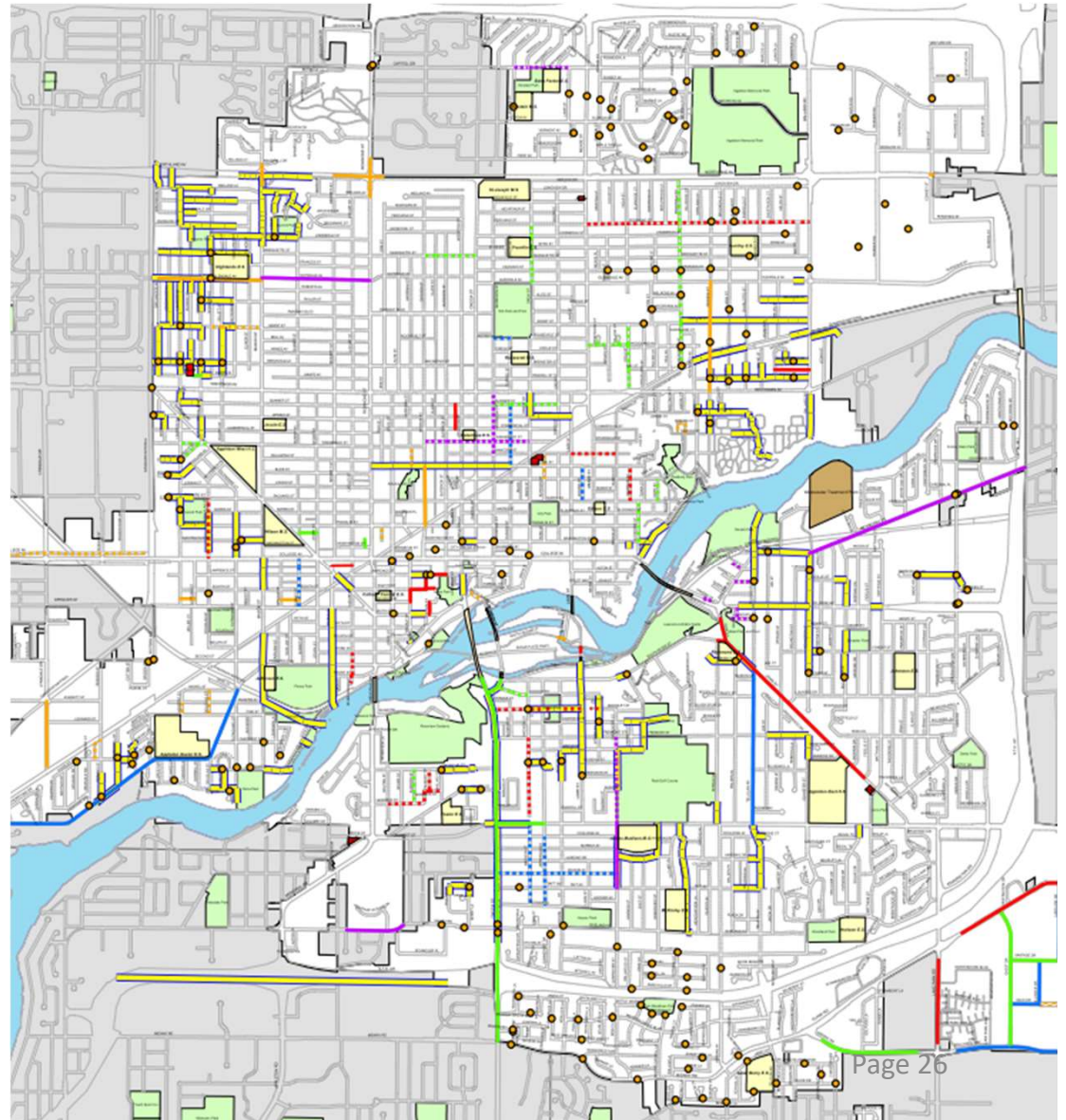
# Lutz Drive Outfalls

- Part of Spencer/Locust Basin Study selected alternative to reduce flooding
- Yacht Club Parking  
Completed in 2017
- Pierce Ave  
Completed in 2018
- Upstream study refinement underway



# Storm Sewer Upgrades

- Pursuing drainage study recommendations
- Coordinating with paving schedule where feasible



# Preparing for 2019

- RFP issued October 5<sup>th</sup>
  - Stormwater Plan review for site plans and plats
  - North Edgewood Estates box culvert and access road
  - Newberry Street storm sewer evaluation prior to reconstruction
  - Lightning Drive extension stormwater management alternatives
  - Evaluation of K2A and K2B ponds and conveyance

# Preparing for 2019

- Additional RFP's to be issued in January
  - Wetland delineations
  - On-going field screening for Illicit Discharge Detection and Elimination
- Future single source requests
  - Urban NPS Planning Grant application
  - Spartan Drive final design and bidding
  - French Road urbanization
  - Leona Pond Construction-Related Services

# 2018 Major Storms

- July 25 (1-hour, 10-year event in some areas)
- August 28 (1-hour, 25-year event in some areas)
- September 4 (saturated ground conditions)
- Additional dam inspections advised by DNR
- Arbutus Park stormwater lift station worked as intended
- Northland Pond on-line morning of August 28
- Modifications made to Memorial Park South Pond