



# KLEIN CREEK STREAMBANK STABILIZATION

SECTION I (A & B)

SECTION I-A: Kuhn Road to WRC Outfall (DRSCW)

SECTION I-B: WRC Outfall to Thunderbird Trail (IEPA 319)

## PRESENTATION SCHEDULE

- Meeting #1: Section I (A&B) - November 1, 2021
- Meeting #2: Section III – November 15, 2021
- Meeting #3: Sections II, IV, Mitchell Lakes & Kehoe Blvd – December 6, 2021
  - *Includes Summary of Impacted Properties (All Sections)*
- Public Open House (Section I & III): TBD

### Section I-A (FY23)

Kuhn Rd to WRC Outfall

### Section I-B (FY23)

WRC Outfall to Thunderbird Trl

### Section II (FY26)

Thunderbird Trl to Illini Dr

### Section III (FY24)

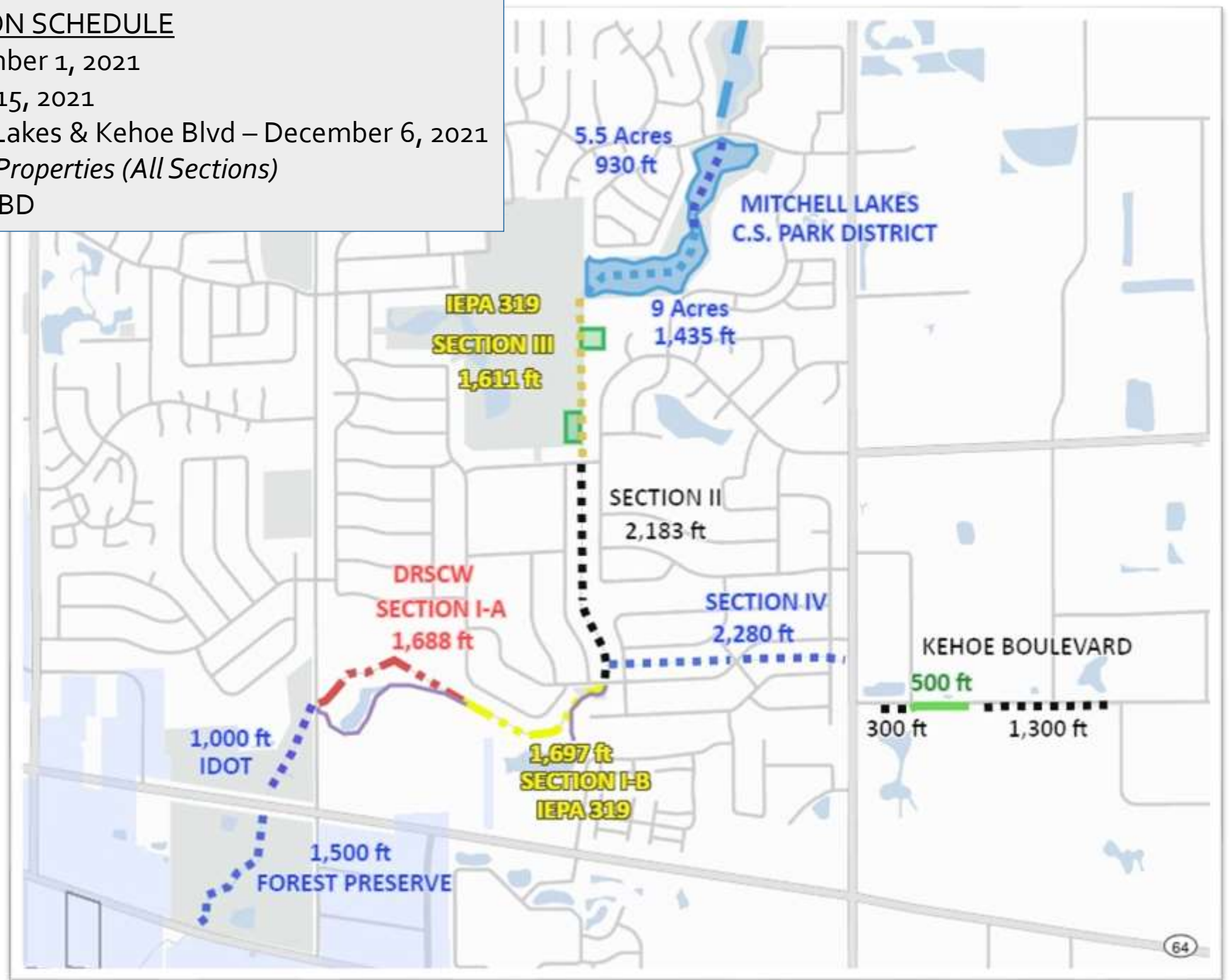
Illini Dr to Mitchell Lakes

### Section IV (FY26)

Klein Creek to Gary Ave

### Kehoe Blvd – Section I **(Complete)**

Kehoe Blvd – Section II (FY25)  
County Reservoir to Railroad Spur







LOOKING UPSTREAM (EAST)

PRIVATE  
PROPERTY

VILLAGE  
PROPERTY



VILLAGE  
PROPERTY

PRIVATE  
PROPERTY

LOOKING DOWNSTREAM (WEST)

LOOKING UPSTREAM (NORTHEAST)

PRIVATE  
PROPERTY

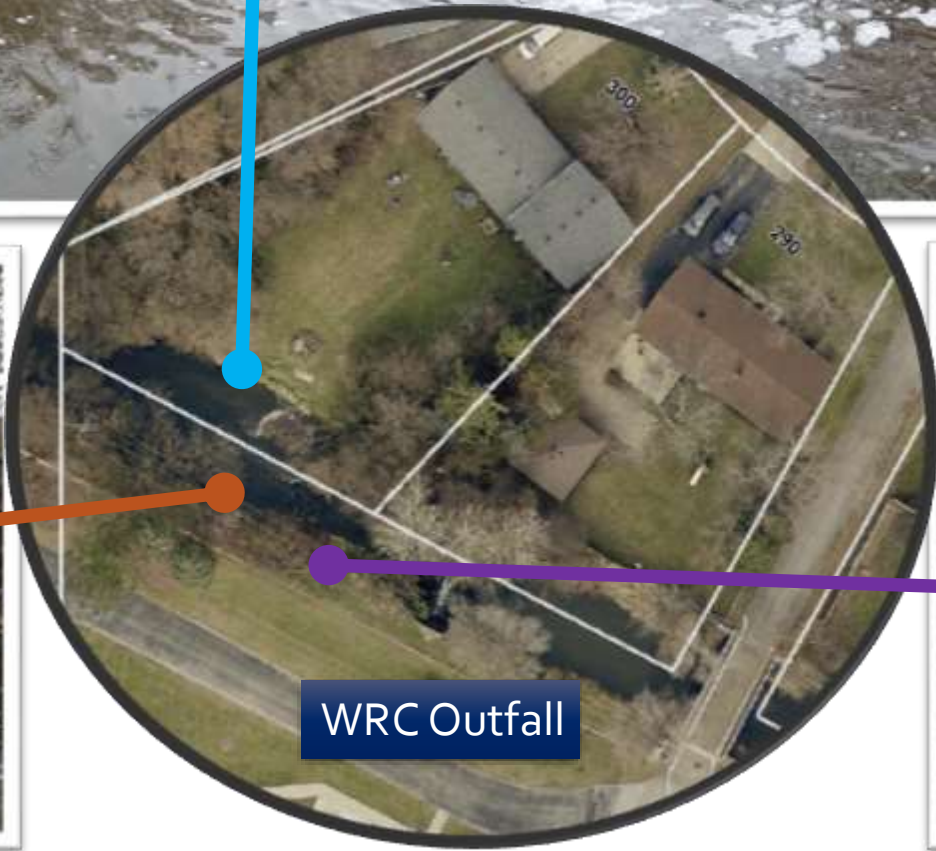
VILLAGE  
PROPERTY



VILLAGE  
PROPERTY

PRIVATE  
PROPERTY

LOOKING DOWNSTREAM (WEST)



WRC Outfall













The purpose of this Story Map is to illustrate the creek bank erosion as of March 2017. To en

# Story Map of Erosion

back to the map.



342 Thunderbird

**CAROL STREAM ILLINOIS**

SERVICES ABOUT RESIDENTS DEPARTMENTS I WANT TO...

**Klein Creek Stream Bank Stabilization**

**"EROSION"** - The wearing away of sand, soil, and rock by moving water or wind.

**INTRODUCTION**

The Village has been aware and concerned of **EROSION** along our local waterways (i.e. streams, creeks, and ponds) for several decades, and flooding for even longer. While there have been **several projects** designed and constructed to address flooding, addressing soil erosion has lagged behind.

In the early 2000's the Village restored and stabilized its **bank shorelines with native vegetation**. After years of planning and pursuit of funding, the Village is now in a position to move forward with stabilizing the stream banks. Due to the fact that most of these stream banks are within or immediately adjacent to private property, the Village is establishing this website as an initial source of information for residents.

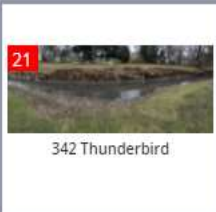
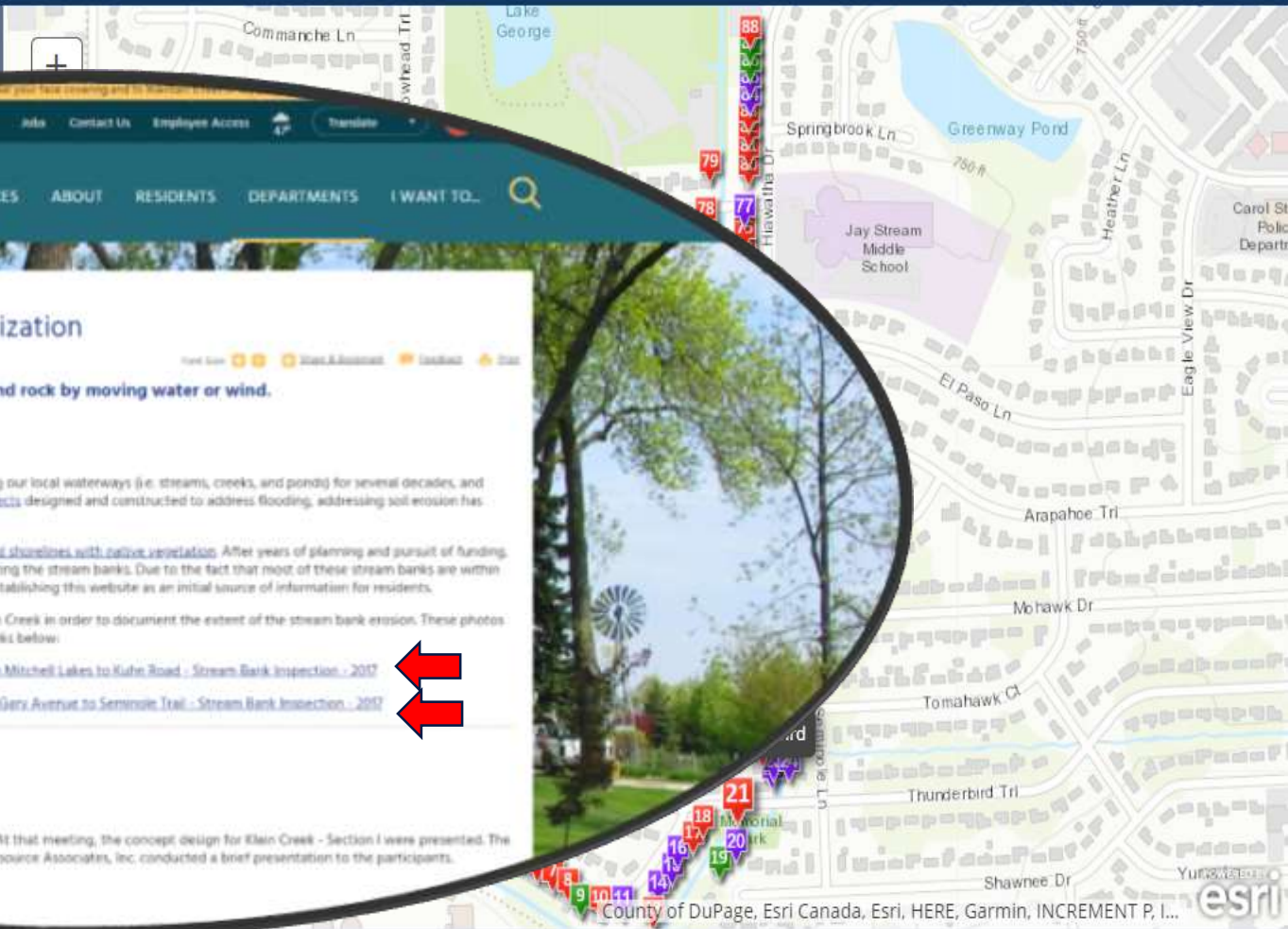
In 2017, the Village took photos of every property along Klein Creek in order to document the extent of the stream bank erosion. These photos are available as two story maps that are accessible via the links below:

- [Story Map of Erosion: Klein Creek from Mitchell Lakes to Kuhn Road - Stream Bank Inspection - 2017](#)
- [Story Map of Erosion: Klein Creek from Gary Avenue to Seminole Trail - Stream Bank Inspection - 2017](#)

**PROJECT OVERVIEW**

**PUBLIC OUTREACH**

The Village conducted a public open house on May 15, 2017. At that meeting, the concept design for Klein Creek - Section I were presented. The Village's professional engineering consultant, Engineering Resource Associates, Inc. conducted a brief presentation to the participants.



342 Thunderbird



333 Thunderbird



333 Thunderbird



328 Seminole



328 Seminole



317 Silverleaf



321 Silverleaf



342 Seminole



348 Seminole



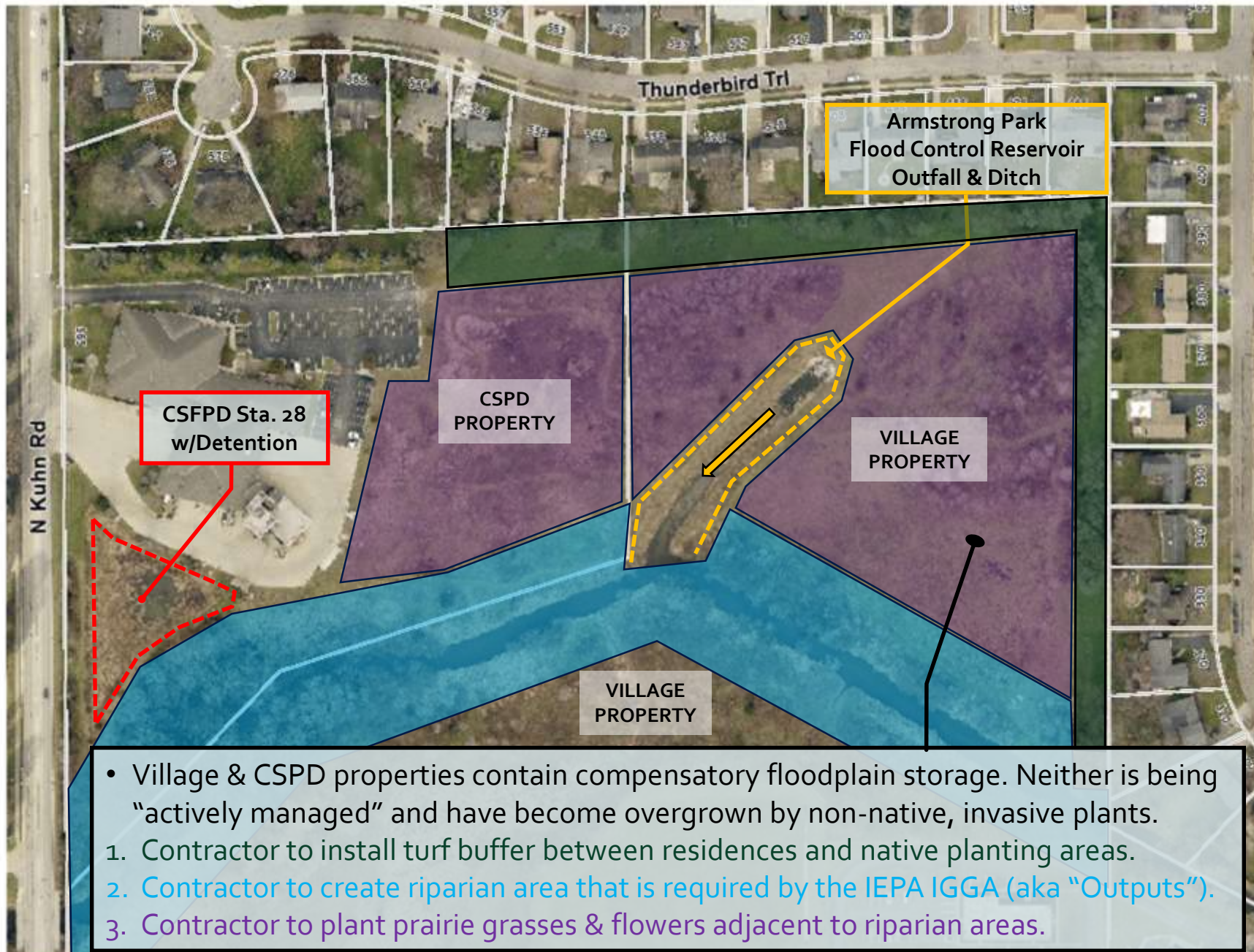
331 Silverleaf



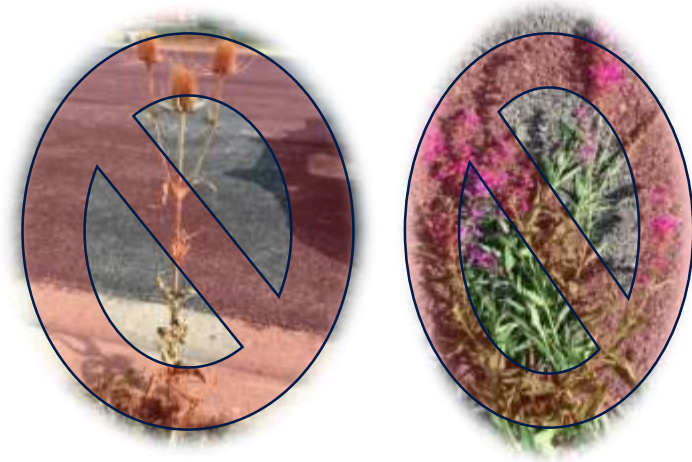
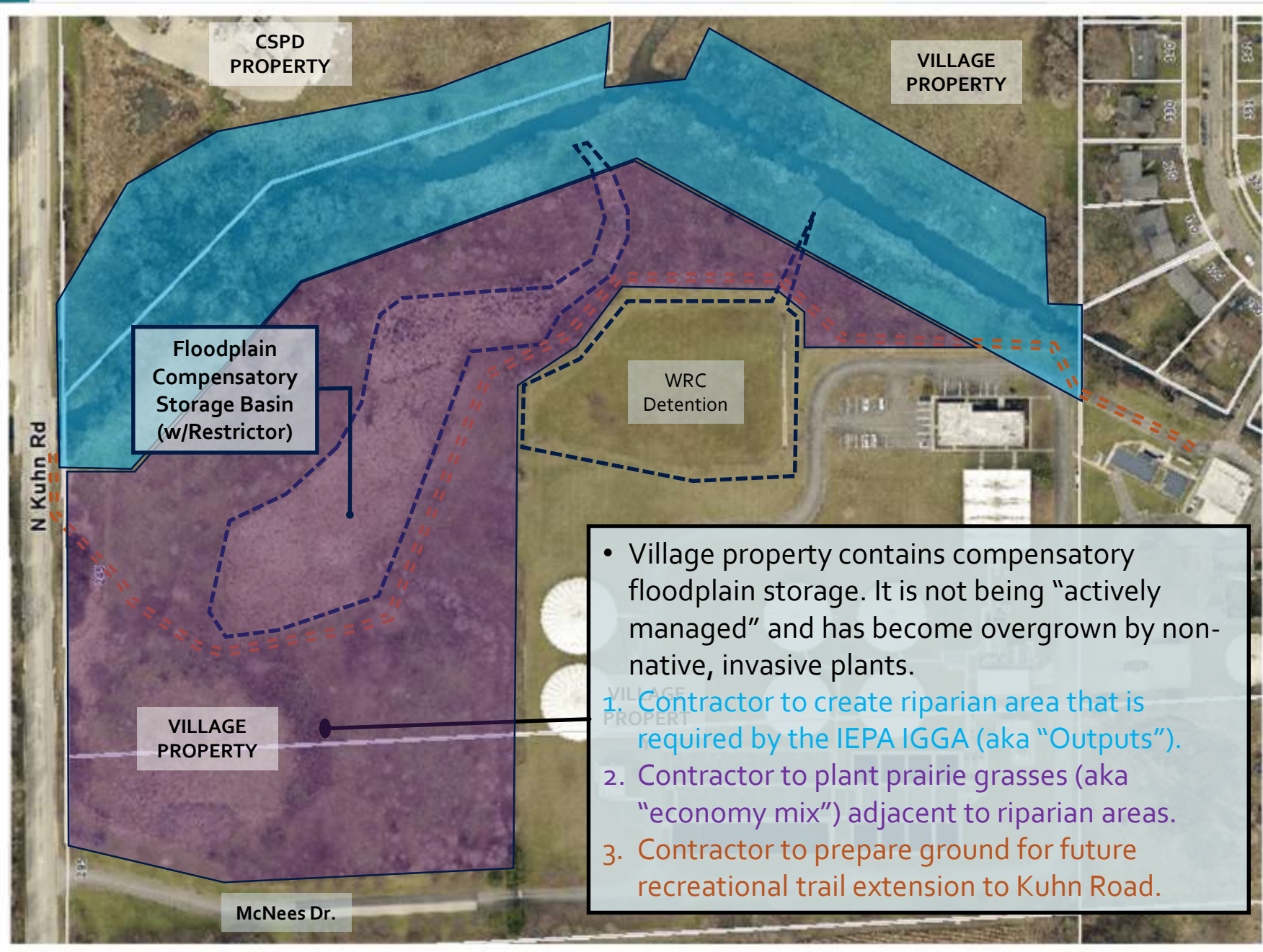
358



# VILLAGE PROPERTY & RIPARIAN BUFFER (NORTH)



# VILLAGE PROPERTY & RIPARIAN BUFFER (SOUTH)



# WRC OUTFALL, BRIDGE REPLACEMENT, AND RECREATIONAL TRAIL IMPROVEMENT

- Existing WRC bridge blocks the flow during large rainfall events (i.e. 100 year), which results in flooding of Arrowhead Drive.
  1. Contractor will remove the bridge deck.
  2. Keep the concrete abutments (i.e. foundations) for future re-use.



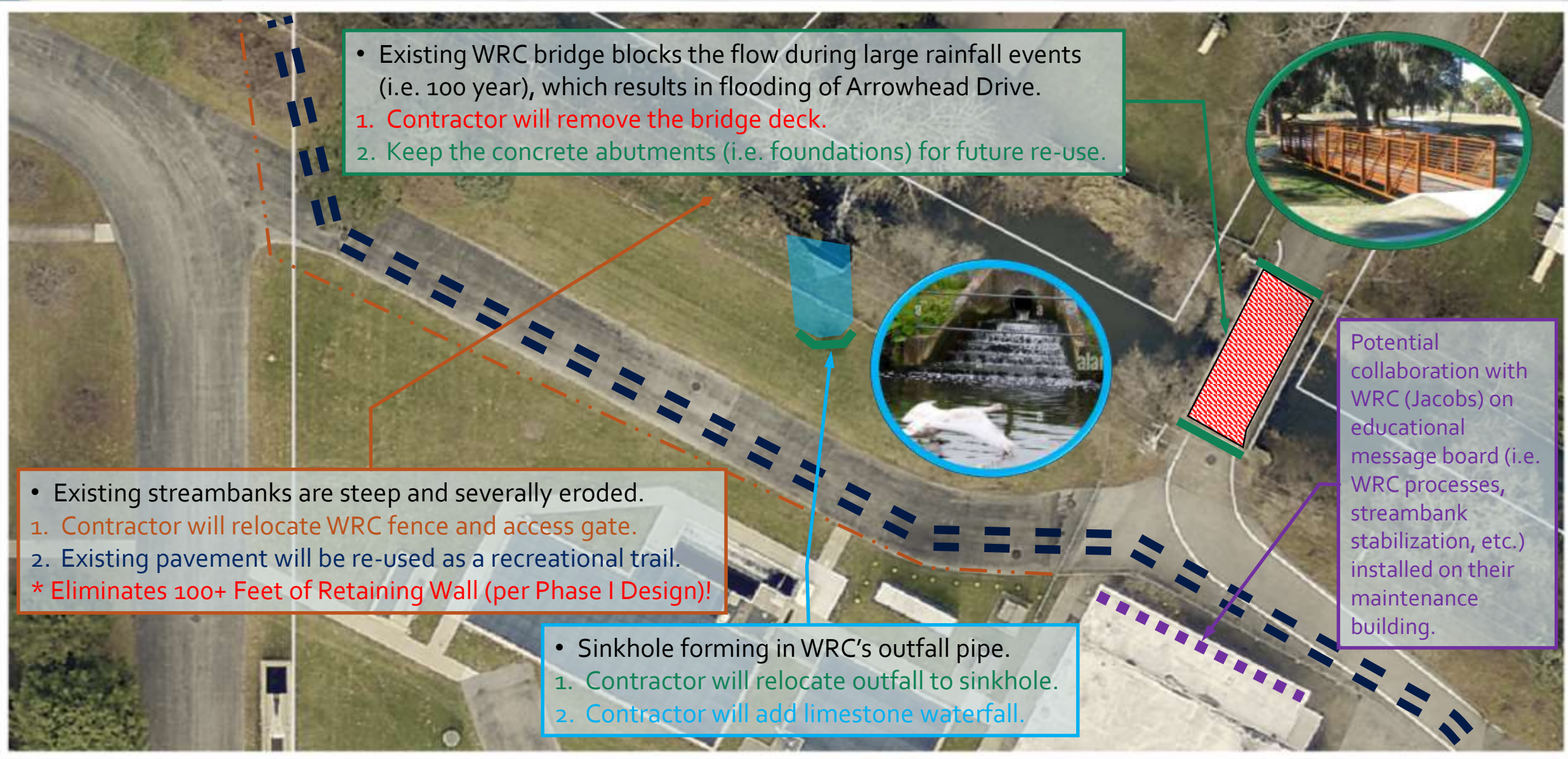
- Existing streambanks are steep and severally eroded.
  1. Contractor will relocate WRC fence and access gate.
  2. Existing pavement will be re-used as a recreational trail.

\* Eliminates 100+ Feet of Retaining Wall (per Phase I Design)!



Potential collaboration with WRC (Jacobs) on educational message board (i.e. WRC processes, streambank stabilization, etc.) installed on their maintenance building.

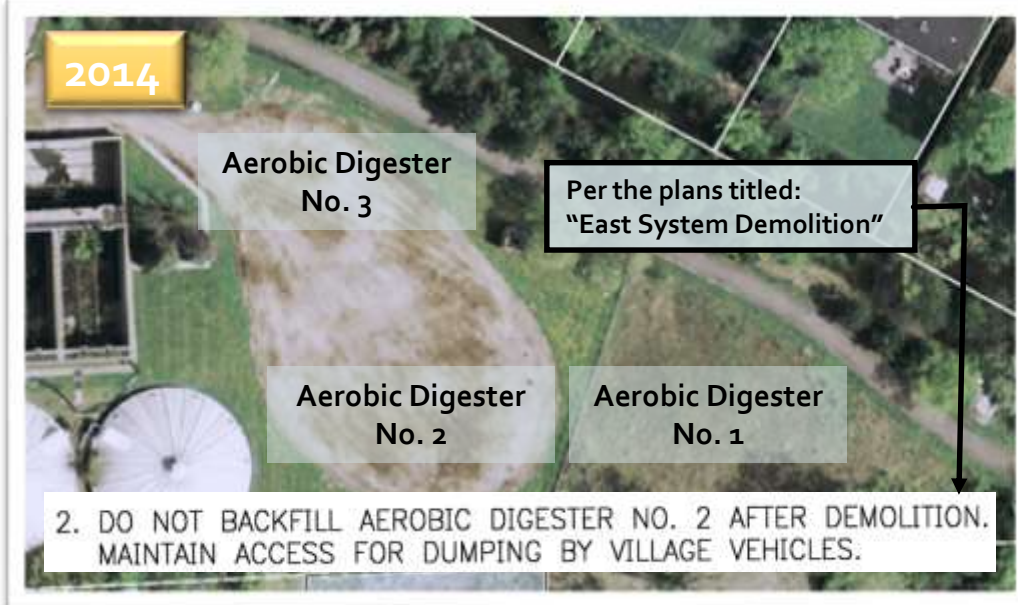
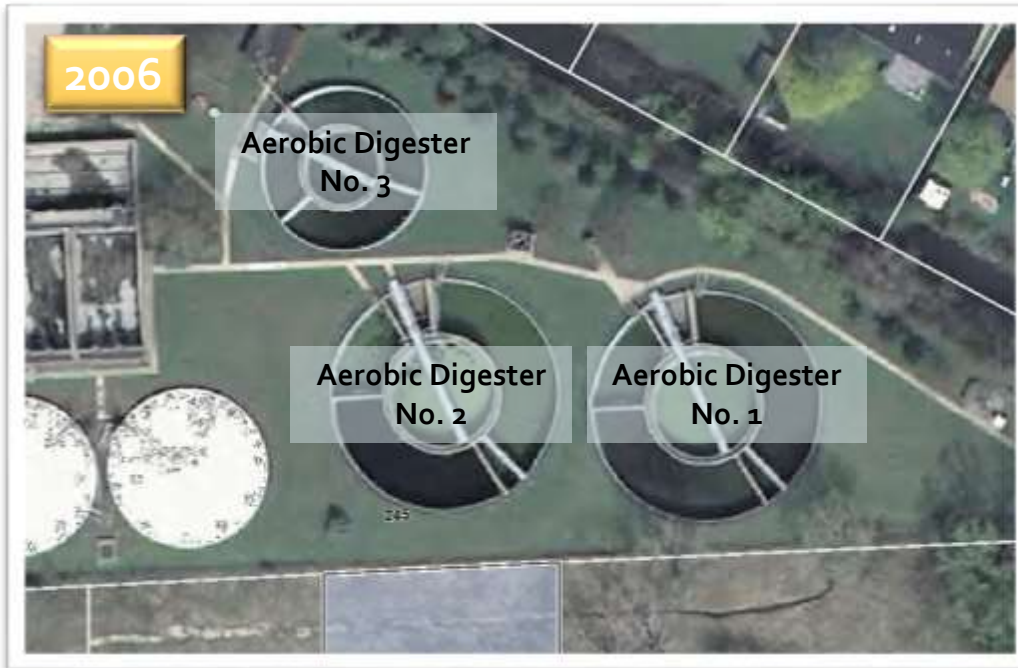
- Sinkhole forming in WRC's outfall pipe.
  1. Contractor will relocate outfall to sinkhole.
  2. Contractor will add limestone waterfall.



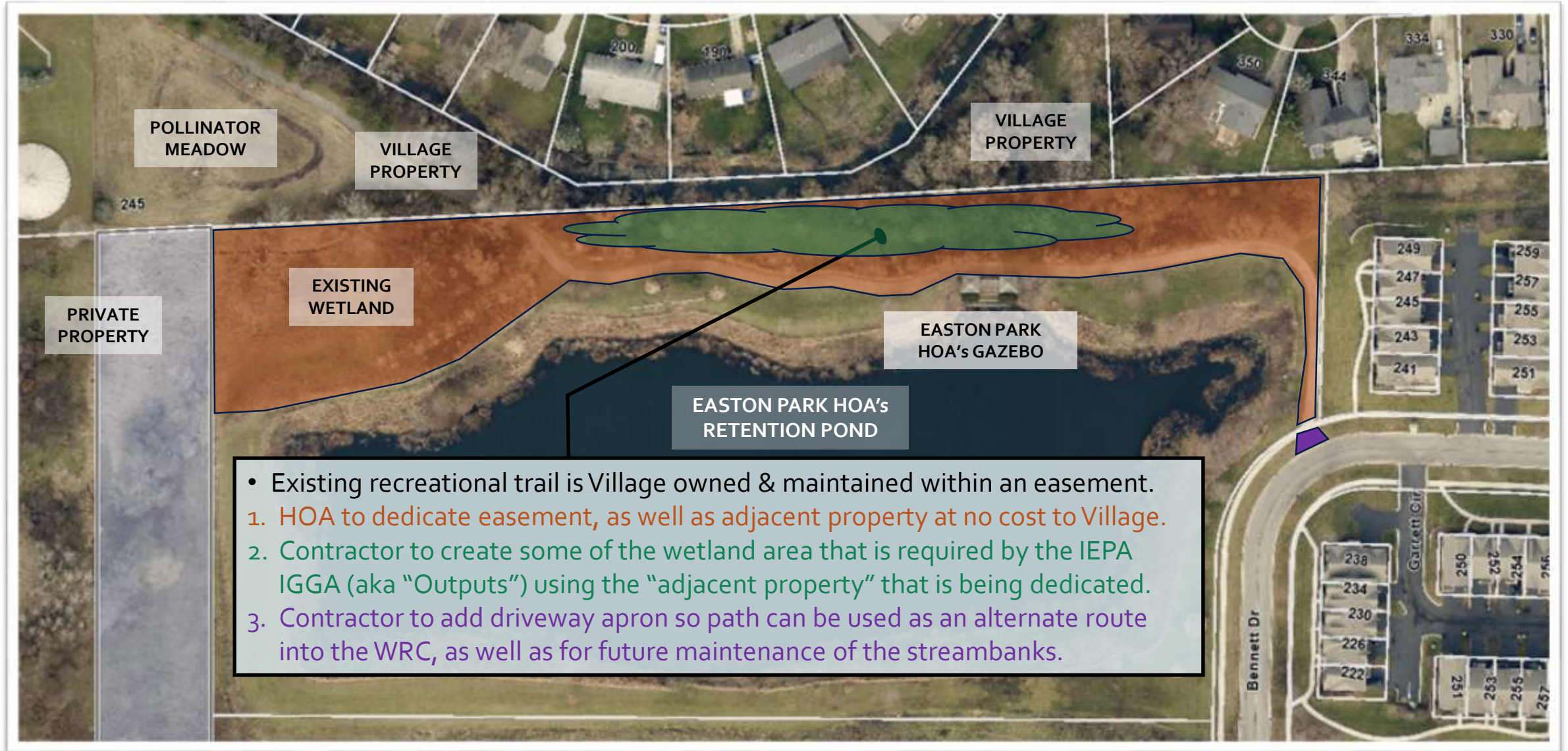


# WRC POLLINATOR MEADOW REHABILITATION

- “Sinkholes” have formed in the former dumping area of Digester No. 2.
  1. Contractor will excavate the dumping area, dispose of the material offsite, then backfill with “suitable” (i.e. clay) soil.
  2. Recreational trail will shift away (south) from Klein Creek.
  3. Streambank will not be as steep in order to support the growth and maintenance of native plantings for resiliency against future erosion.



# EASTON PARK HOA DEDICATION, WETLAND CREATION, & TRAIL IMPROVEMENTS



# VILLAGE OWNED VACANT PARCEL – WEST END OF SHAWNEE DRIVE

- Existing Village Property to be used for wetland creation.
  1. Encroachment (non-sanctioned) onto Village Property



# RECREATIONAL TRAIL – FUTURE EXTENSIONS & IMPROVEMENTS



1. Existing trail to remain or re-established in same location.
2. Extension to Kuhn Road bridge per Comprehensive Plan.
3. Replace existing bridge with pedestrian-style bridge.
4. Re-meander thru WRC Pollinator Meadow.
5. Connection to Thunderbird Trail via Memorial Park.

# SCHEDULE PER IEPA AGREEMENT

## EXHIBIT B

### DELIVERABLES OR MILESTONES

IEPA staff will review the design plans for general conformance with the IGGA "Outputs".  
**Consultant is ready to submit.**

Staff will have Easton Park HOA Dedication completed. **No other landowner agreements required!**

Staff will continue working with Jacobs, but will also proposed typical educational signage.



<u>Description</u>	<u>Completion Date</u>
<b>PROJECT COORDINATION</b>	
1. Project Coordination	July 30, 2023
<b>BEST MANAGEMENT PRACTICE (BMP) IMPLEMENTATION</b>	
2. BMP Documentation Form (Part 1) and Design	December 31, 2021
O&M Plan	December 31, 2021
Sign Design	December 31, 2021
Draft Landowner Agreement	December 31, 2021
Final Landowner Agreement	January 31, 2022
Complete Implementation of BMPs	July 15, 2023
BMP Documentation Form (Part 2) w/Invoices and Photo Documentation	September 1, 2023
<b>EDUCATIONAL SIGN AND WEBSITE INFORMATION</b>	
3. Draft Sign Design	December 31, 2021
Final Sign Design	March 31, 2022
Install Signs	May 30, 2023
<b>PROJECT REPORT</b>	
4. Draft Project Report	July 15, 2023
Final Project Report	August 30, 2023
<b>OTHER DIRECTED ACTIVITIES</b>	
Periodic Performance and Financial Reports	Quarterly as stipulated