2023 PERIODIC REVIEW REPORT
LOWER GENESEE RIVER
OPERABLE UNIT 5 (OU-5)
OF THE EASTMAN BUSINESS PARK

ENVIRONMENTAL RESPONSE TRUST
NYSDEC SITE NUMBER: 828177
EPA ID NO. NYD980592497
ROCHESTER, NEW YORK

Prepared For:

NEW YORK STATE | Department of Environmental Conservation

New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, NY 12233-7012

Prepared By:

PARSONS

301 Plainfield Road, Suite 350
Syracuse, New York 13212

JANUARY 2024

CERTIFICATION STATEMENT

I, EDWARD C. GLAZA, certify that I am currently a New York state-registered Professional Engineer as in defined in 6 NYCRR Part 375 and that this Periodic Review Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

a) The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department.

b) Nothing has occurred that would impair the ability of such control to protect the public health and environment.

c) Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control.

d) Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control.

EDWARD C. GLAZA, P.E.

JANUARY 10, 2024

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ACRONYMS

ACRONYM	Definition
AC	Administrative Control
AOC	area of concern
bgs	below ground surface
CAMP	Community Air Monitoring Plan
CAO	Corrective Action Objective
cfs	cubic feet per second
CPOI	chemical parameter of interest
cy	cubic yard
DER	Division of Environmental Remediation
EBP	Eastman Business Park
EC	Engineering Control
EWP	Excavation Work Plan
GPS	global positioning system
HASP	Health and Safety Plan
IC	Institutional Control
KLWWTP	Kings Landing Wastewater Treatment Plant
NRCS	Natural Resources Conservation Service
NOAA	National Oceanic and Atmospheric Administration
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
OU	Operable Unit
PE	Professional Engineer
ppm	parts per million
QEP	Qualified Environmental Professional
RCRA	Resource Conservation and Recovery Act
RTK	real-time kinematics
SMP	Site Management Plan
SOB	Statement of Basis
sp.	species
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency

1.0 EXECUTIVE SUMMARY

Remediation of the Lower Genesee River Operable Unit 5 of the Eastman Business Park (formerly Kodak Park) was completed from April 2021 to December 2021. Work included:

1. Dredging and off-site disposal of river sediments from an approximate 4.1-acre area (Areas of Concern [AOC] 1 and AOC 2) followed by placement of an isolation cover system; and
2. Dredging and off-site disposal of wetland sediments from an approximate 2-acre area of Wetland C followed by placement of backfill and restoration of the wetland.

In accordance with the Site Management Plan (SMP; Parsons 2023a), sitewide monitoring was completed at the Lower Genesee River in 2023. Sitewide monitoring included collection of bathymetry measurements in AOC 1 and AOC 2 and completion of performance monitoring in Wetland C in summer 2023.

The 2023 monitoring results verified that the isolation cover system remains compliant with the design intent. The 2023 bathymetric survey results indicated that neither AOC 1 nor AOC 2 presented a loss of greater than 6 inches of elevation over a contiguous 10,000-square-foot area or 20 percent of an individual cover area, when comparing the 2021 post-construction surveys to the 2023 compliance monitoring surveys or the 2022 compliance monitoring surveys to the 2023 compliance monitoring surveys. These metrics were defined in the SMP such that, if exceeded, and cannot be reliably accounted for based on settlement, a second tier of monitoring may be conducted, including probing and visual investigation (e.g., underwater camera, diver inspection, side-scan sonar where appropriate) of the cover area (Parsons 2023a). Manual probing was also performed concurrent with the 2023 manual depth measurements in near-shore areas to assist in evaluation of the isolation cover. Where probing was completed, gravel cover material was observed to be present at the surface or immediately beneath a layer of soft depositional sediment. A visual inspection of the AOC 1 and AOC 2 near-shore cover systems was also performed concurrent with the 2023 bathymetric survey, where conditions allowed. Little, if any, disturbance of the cover systems was observed during the visual inspection.

The 2021 post-construction surveys, the 2022 and 2023 monitoring surveys, and future monitoring surveys will all be used for future cap performance evaluations to allow differentiation between potential loss of cover material and consolidation and associated settlement of the cover material.

Based on the results of the second-year performance monitoring completed in 2023, Wetland C supports a diversity of native wetland flora and fauna and has developed several primary indicators of wetland hydrology and hydric soils. The 2023 wetland monitoring data indicate that Wetland C is achieving the overall restoration objective of no net loss of wetland acreage and for the function and values of Wetland C that existed prior to the remedy to be maintained and/or enhanced. However, likely due to high water levels during the growing season of 2023, the emergent wetland areas of Wetland C experienced a decrease in total plant cover compared to 2022. Maintenance plantings in these areas are proposed for 2024 to further support the achievement of restoration objectives.

All requirements of the SMP were met during the reporting period. With the exception of maintenance planting in Wetland C, no changes to the plan are recommended at this time.

2.0 SITE OVERVIEW

2.1 Site Description

The Lower Genesee River is part of the Eastman Kodak Company's (Kodak) Eastman Business Park (EBP) which encompasses approximately 1,200 acres within the City of Rochester and the Town of Greece, New York (**Figure 2.1**). Construction and manufacturing processes at the EBP began in 1891, which included the manufacturing of various photographic materials and products as well as the production of synthetic organic chemicals, dyes, and couplers. Wastewater generated from photographic film and paper-making operations contained several heavy metals, most notably silver. Over time these metals migrated into the sediments of the Lower Genesee River and its adjoining wetlands.

The EBP is comprised of nine operable units (OUs) (New York State Department of Environmental Conservation [NYSDEC] Site No. 828177) to address remaining contamination at the EBP. The Lower Genesee River is OU-5 (also referred to as the Site) extending from the mouth of the river at Lake Ontario south approximately 4 miles upstream to State Route 104 (Veteran's Memorial) Bridge, which crosses the river just upstream of the Kings Landing Wastewater Treatment Plant (KLWWTP). Current land use upstream of the Turning Basin is primarily park land, cemeteries, and undeveloped areas due to steep topography located along much of the shoreline. From the Turning Basin downstream to its mouth, the river is characterized by reinforced banks and bulkheads, boat docks, and marinas. A navigation channel extends upstream from the mouth of the river to approximately 0.5 miles upstream of the Turning Basin. The Lower Genesee River is designated as an area of concern (AOC) in the Great Lakes region under the United States-Canada Great Lakes Water Quality Agreement.

As a result of Kodak's bankruptcy and related settlement agreements, the Kodak Environmental Response Trust was established in 2008 to fund environmental response actions related to pre-existing contamination associated with historical releases from the EBP, including releases to the river. The NYSDEC is responsible for administering trust obligations under the conditions of the United States Environmental Protection Agency (USEPA) Resource Conservation and Recovery Act (RCRA) Part 373 Hazardous Waste Permit (RCRA ID# NYD980592497).

2.2 Remedial Program

Corrective Action Objectives (CAOs) were developed for the Site with the goal of protecting both the environment and human health. Silver was identified as the chemical parameter of interest (CPOI) for the Site. Other metals (cadmium, zinc, total chromium) were generally collocated with the silver and were addressed under the site-specific cleanup goal for silver. No impacts to human health from silver were identified at the river; therefore, a corrective action was not required for protection of human health. For environmental protection, the following CAOs were identified for this Site:

- Prevent the potential for migration of silver contamination related to EBP operations that may result in adverse impacts to surface water, river sediment, and wetland/floodplain soil/sediment contamination.
- Prevent the potential for adverse impacts to biota from exposure to silver related to EBP operations in river surface water, river sediment, and wetland/floodplain sediments and soils.

To achieve these CAOs, the Site was remediated in accordance with the remedy selected by the NYSDEC in the Final Statement of Basis (SOB) Corrective Measures Selection (NYSDEC 2020). The remedy consisted of the following:

1. Dredging and off-site disposal of river sediments from an approximate 4.1-acre area (AOC 1 and AOC 2) where there was the potential for greater than 4 inches of scour during a 100-year flow event to accommodate placement of an isolation cover system over deeper sediments exceeding the site-specific toxicity action level of 70 parts per million (ppm).
2. Dredging and off-site disposal of wetland sediments from an approximate 2-acre area of Wetland C where silver concentrations exceeded the site-specific toxicity action level of 70 ppm, and placement of backfill (sand and/or topsoil) meeting Title 6 of the New York Codes, Rules, and Regulations (NYCRR) Part 375 ecological standards.
3. Placement of an isolation cover system within the riverbed remedial boundaries (AOC 1 and AOC 2). The cover system is comprised of a minimum of 12 inches of clean sand (grain size less than ¾ inches) overlain by a minimum of 12 inches of fine gravel (grain size ½-inch to 4 inches) (NYSDEC 2020).

During remediation, habitat enhancements were incorporated in Wetland C. The habitat enhancements consisted of backfilling portions of Wetland C to elevations less than the original grade, thus creating areas with greater water depth and varied habitat within Wetland C.

3.0 REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

3.1 AOC 1 and AOC 2

The remedy completed in AOC 1 and AOC 2 (April 2021 to December 2021) was effective in achieving the remedial goals for the Site. In accordance with the SOB, dredging and off-site disposal of river sediments was conducted from an approximately 4.1-acre area (AOC 1 and AOC 2) where there was the potential for greater than 4 inches of scour during a 100-year flow event in areas where sediments exceeded the site-specific toxicity action level of 70 ppm to accommodate placement of an isolation cover system. Following dredging, an isolation cover system designed to withstand a 100-year flow event was placed over deeper sediments exceeding the site-specific toxicity action level of 70 ppm. The cover system was comprised of a minimum of 12 inches of clean sand (grain size less than ¾ of an inch) overlain by a minimum of 12 inches of fine gravel (grain size ½-inch to 4 inches).

In AOC 1, approximately 3.2 feet of river sediments totaling 4,620 cubic yards (cy) were dredged from upstream and downstream of the KLWWTP and disposed of off-site (**Figure 3.1**). No dredging occurred adjacent to the KLWWTP due to stability concerns related to the KLWWTP sheet pile and tank walls. An isolation cover system, consisting of a minimum of 12 inches of clean sand overlain by a minimum of 12 inches of fine gravel, was installed over remaining sediment with silver concentrations exceeding 70 ppm in both the dredged and undredged areas (**Figure 3.2**). Silver concentrations in remaining sediment below the isolation cover system exceeding the site-specific toxicity action level of 70 ppm range from 71.1 ppm (2 to 3 feet below ground surface [bgs]) to 1,550 ppm (4 to 6 feet bgs) (**Figure 3.3**).

In AOC 2, approximately 2.9 feet of river sediments totaling 9,285 cy were dredged and disposed of off-site (**Figure 3.4**). An isolation cover system consisting of a minimum of 12 inches of clean sand overlain by a minimum of 12 inches of fine gravel was installed over remaining sediment with silver concentrations that exceed 70 ppm (**Figure 3.5**). Silver concentrations in remaining sediment below the isolation cover system exceeding 70 ppm range from 72 ppm (2 to 3 feet bgs) to 130 ppm (4 to 5 feet bgs) (**Figure 3.6**).

3.2 Wetland C

The remedy completed in Wetland C was effective in achieving the remedial goals for the Site. In accordance with the SOB, dredging and off-site disposal of Wetland C sediments occurred over an approximately 2-acre area where silver concentrations exceeded the site-specific toxicity action level of 70 ppm. A total of 18,859 cy of sediment (7,068 cy from Wetland C South and 11,791 cy from Wetland C North) was dredged and disposed off-site. All sediment exceeding the site-specific cleanup goal was removed from Wetland C prior to restoration (**Figure 3.7**).

Backfill (sand and/or topsoil) meeting 6 NYCRR Part 375 ecological standards was placed in dredged areas of Wetland C. Equipment access channels dredged into Wetland C during remediation were not backfilled to original grade to create areas with greater water depth and varied habitat within Wetland C. The access channels were backfilled with approximately 12 inches of clean sand and planted with a variety of native floating and submerged aquatic plants (**Figure 3.8**). The non-access areas were backfilled with approximately 12 inches each of clean sand overlain by topsoil and planted with a variety of native emergent wetland plants (**Figure 3.8**).

Wetland C was restored with a mixture of over 12,000 emergent and submergent plants comprised of 20 species and a seed mix comprised of 18 species planted in random clusters throughout the area. Planting occurred from August 13 through September 1, 2021, and June 21 through June 24, 2022.

4.0 INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS PLAN COMPLIANCE

4.1 Institutional Controls/Engineering Controls Requirements and Compliance

Since remaining contamination exists at the Site within AOC 1 and AOC 2, Institutional Controls (ICs) and Engineering Controls (ECs) are required for those areas.

4.1.1 Institutional Controls

ICs at the Site are required to (1) implement, maintain, and monitor EC systems; (2) prevent future exposure to remaining contamination; and (3) limit the use and development of the Site to commercial uses (i.e., only passive recreational use).

As an IC, Administrative Controls (ACs) have been established for this Site that identify the limits of remaining contamination within protected remedial boundaries (**Figures 4.1 and 4.2**).

ACs have been implemented through permit administration under the NYSDEC's Regional 401 Water Quality Certification jurisdictional review. Future work within the waterway will be reviewed on a case-specific basis and under consult with the NYSDEC Division of Environmental Remediation (DER) to ensure protection and restoration associated with any work proposed within the remedial boundaries. Permit applicants will be required to submit a work plan for review and approval by the DER prior to permit issuance. The approved work plan will be incorporated by reference as a special permit condition. ACs shall remain in place at the Site in perpetuity as a state-lead responsibility managed under the Kodak Environmental Response Trust.

4.1.2 Engineering Controls

ECs are provided by an isolation cover system placed over dredged and undredged areas of AOC 1 and AOC 2 to prevent exposure to remaining contamination within those areas. The isolation cover system is comprised of a minimum of 12 inches of clean sand (grain size less than ¾ of an inch) overlain by a minimum of 12 inches of fine gravel (grain size ½-inch to 4 inches). **Figures 4.1 and 4.2** present the plan view location of the cover system, and **Figures 3.2 and 3.5** present applicable profile layers. Procedures for the inspection of this isolation cover are provided in the Monitoring Plan included in Section 4.0 of the Site Management Plan (SMP) (Parsons 2023a).

General procedures that must be implemented in the event the isolation cover system is breached, penetrated, or temporarily removed are provided in the Excavation Work Plan (EWP) presented in Appendix C of the SMP (Parsons 2023a). If work that may disturb the isolation cover system is proposed, the EWP will be revised by the person(s) proposing the work and submitted to the NYSDEC project manager for approval. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and associated Community Air Monitoring Plan (CAMP) prepared as a part of the EWP. The HASP and CAMP will be prepared by the person(s) proposing the work and submitted to the NYSDEC project manager for approval. Any disturbance of the Site's isolation cover system must be overseen by a qualified environmental professional (QEP) as defined in 6 NYCRR Part 375, a Professional Engineer (PE) who is licensed and registered

in New York state, or a qualified person who directly reports to a PE who is licensed and registered in New York state.

4.1.3 Status of Institutional Controls/Engineering Controls

The ECs for the Site remain in place, based on the findings of the 2023 Site monitoring for the isolation cover system inspection and bathymetric survey, as discussed in Section 5. NYSDEC has verified that the ICs remain in place since the permitting process remains and no permit applications were granted which would result in disturbance of the cover system.

4.1.4 Corrective Measures

No corrective measures are required for the ICs/ECs based on the findings of the 2023 Site monitoring for the isolation cover system inspection and bathymetric survey.

4.1.5 Conclusions and Recommendations

No deficiencies in the ECs were identified during the 2023 Site monitoring for the isolation cover system inspection and bathymetric survey; therefore, no changes to the ECs are recommended. Since NYSDEC has verified that the ICs remain in place since the permitting process remains, no deficiencies in the ICs were identified, and there, no changes to the ICs are recommended.

4.2 Institutional Controls/Engineering Controls Certification

Certification of the ICs/ECs is provided on the NYSDEC Site Management Periodic Review Report Notice IC/ECs Certification Form (**Appendix A**).

5.0 MONITORING PLAN COMPLIANCE REPORT

5.1 Components of the Monitoring Plan

As specified in the SMP, sitewide inspections will be performed at a minimum of once per year for the first five years after completion of the remedy, and then once every five years until the NYSDEC issues a Performance Standards Attained determination. Sitewide inspections will also be performed after severe weather conditions that may affect ECs (i.e., a flood event with a magnitude at or exceeding the first post-remedy 100-year design recurrence interval for the cover system or a flood event with a magnitude at or exceeding the 500-year design recurrence interval for the cover system). Inspections will also be performed in the event of an emergency.

The following table summarizes the inspections, monitoring, maintenance, and reporting activities required by the SMP (Parsons 2023a).

Inspections: 1. Isolation Cover System Inspection (AOC 1 and AOC 2)	Frequency: 1. Annually for a five-year period and once every five years thereafter, or as otherwise determined by the NYSDEC
Monitoring: 1. Wetland C Monitoring 2. Wetland C Aerial Photography	Frequency: 1. Annually for a five-year period 2. Years 1, 3, and 5
Maintenance: 1. Isolation Cover System Maintenance 2. Wetland C Maintenance	Frequency: 1. As needed 2. As needed
Reporting: 1. Interim Monitoring/Inspection Report 2. Maintenance Report 3. Periodic Review Report	Frequency: 1. As needed 2. As needed 3. Annually for a five-year period and once every five years thereafter

5.2 Monitoring Completed During Reporting Period (2023)

In accordance with the SMP, sitewide monitoring was completed at the Site in 2023, which was the second year of monitoring. Sitewide monitoring included collection of bathymetry measurements in AOC 1 and AOC 2 and completion of performance monitoring in Wetland C in summer 2023.

5.2.1 Isolation Cover System Inspection and Bathymetric Survey

Given that the isolation cover system is underwater, visual inspections are not a significant component of the cover system monitoring program. Rather, verifying that the cover system is intact and protective relies primarily on bathymetry measurements to measure cover elevations for comparison to prior measured elevations.

Compliance monitoring of the isolation cover system in AOC 1 and AOC 2 was completed on August 28 and 29, 2023 consistent with the methods specified in the SMP. Comprehensive bathymetric surveys were conducted in AOC 1 and AOC 2 in accordance with the specifications contained in the United States Army Corps of Engineers

(USACE) Engineer Manual EM 1110-2-1003 “Hydrographic Surveying” (USACE 2013). Monitoring survey data were collected at sufficient density to establish sub-bottom contours at 1-foot intervals. Where water depths allowed watercraft access (areas of depth greater than 3 feet), a multi-beam survey was conducted that obtained 100 percent sub-bottom surface coverage. Typical repeatability for multi-beam bathymetry measurements is +/- 0.3 feet; therefore, bathymetry measurement is anticipated to detect minor changes in the elevation of the cover system. Where shallow water depths prohibited watercraft access (areas of depth less than 3 feet), manual depth measurements were collected at 5-foot intervals along transect lines running generally perpendicular to the slope of the river and spaced approximately 25 feet apart (**Figures 5.1 and 5.2**). Data collection for both methods used real-time kinematic (RTK) global positioning system (GPS) equipment. The 2023 survey results for AOC 1 and AOC 2 are presented on **Figures 5.3 and 5.4**, respectively.

Probing was performed concurrent with the 2023 manual depth measurements to assist in evaluation of the isolation cover in the near-shore shallow areas. Where probing was performed, gravel was observed to be present at the surface or immediately beneath a layer of soft sediment.

A visual inspection of the AOC 1 and AOC 2 near-shore cover systems was performed concurrent with the 2023 bathymetric survey, where conditions allowed. Little, if any, disturbance of the cover systems was observed during the visual inspection.

In accordance with the RCRA Facility Investigation Report, the selected 100-year design recurrence interval was based on data from the Ford Street Bridge stream gauge (#04231600). The maximum flow rate observed in the period of 1952 to 2015, after the construction of the Mt. Morris Dam, was 29,600 cubic feet per second (cfs) on June 25, 1972 (Parsons 2016). The cover system was designed to be protective during conditions comparable to those produced during that event. No flood events with a magnitude at or exceeding 29,600 cfs occurred during the 2023 monitoring period. The maximum flow rate observed during the period of January 1, 2023 to November 30, 2023 was 10,900 cfs, which occurred on April 6, 2023 (U.S. Geological Survey [USGS] 2023).

5.2.2 Wetland C Monitoring

As part of the remediation, all sediment exceeding the site-specific cleanup goal was removed from Wetland C followed by backfill with material meeting an ecological use standard. Therefore, long-term monitoring of Wetland C focuses on the overall objective of the wetland restoration to achieve no net loss of wetland acreage and to maintain and/or enhance the function and values that existed prior to the remedy. The Site monitoring required to track this objective extends over a five-year wetland performance monitoring period (i.e., Year 1 [2022] through Year 5 [2026]).

As required by the SMP, the second year of performance monitoring was completed at Wetland C in the summer of 2023 (August 31, 2023) to evaluate the cover, distribution, and composition of wetland communities. Additionally, wetland wildlife usage and the development of indicators of wetland hydrology and soils were assessed. Aerial photos of the wetland were taken on October 3, 2023 (**Appendix B-1**).

5.2.2.1 Vegetation

The second year of the five-year performance monitoring was completed in 2023 during this reporting period. Photographs showing representative areas of Wetland C North and South were taken from permanent photograph locations (**Appendix B-2**, **Figure B1**).

Monitoring was conducted in a total of 25 randomly placed stations previously designated at the time of the first-year growing season assessment in 2022. Seventeen stations (stations 1 through 17) were located in the north area of Wetland C (Wetland C North) and eight stations (stations 18 through 24) were located in the south area

of Wetland C (Wetland C South). In Wetland C North, 12 stations were located in the shallow emergent planting zones (two stations within each distinct "peninsula") and five stations were located in the floating aquatic/submerged aquatic zones (one station within each distinct "embayment"). In Wetland C South, the eight stations were distributed such that the eastern and western halves both contained four stations (**Appendix B-3**, **Figure B2**).

At each station, monitoring occurred within a 100-square-foot area. Each monitoring station area was established in the field using a stake marking the center of the station and a 5.6-foot-long string, the radius of a circle equaling 100-square-feet in area. At each monitoring station, species were identified to the lowest possible taxonomic level, the percent covers of each species were estimated, and the overall percent cover of plants was estimated. In addition, invasive species cover and distribution (as defined by 6 NYCRR Part 575 Prohibited and Regulated Invasive Species) was recorded. Multiple photographs were taken at each monitoring station and are provided in **Appendix B-3**. Monitoring station datasheets that show individual percent covers for each species identified, as well as overall percent cover of each monitoring station, are provided in **Appendix B-4**. Throughout Wetland C, the boundaries of dominant wetland community types were sketched on field maps and described in terms of hydrologic conditions and dominant species. The boundaries of dominant wetland community types are provided in **Figure 5.5**.

During the Year 2 performance monitoring, a total of 20 plant species were observed, 17 of which are native species (**Table 5.1**). Because the species that were installed in seed mixes and plantings are native and common in the region, it is difficult to positively identify any individual as installed or volunteer; however, eight of the 17 native species that were identified during monitoring were species that were included in seed mixes and/or plantings installed during the initial planting event (**Table 5.1**).

To assess vegetative cover in the sample plots, the following metrics were calculated:

- Individual plant percent cover – estimated area of cover for individual plants within the sample plot
- Species percent cover – sum of the cover of individual plants of the same species within the plot
- Total percent plant cover – estimated vegetative cover overall within the sample plot
- Relative percent cover – divide the species percent cover by the total percent plant cover

Percent cover of each individual plant and total percent plant cover are two different estimates. The sum of individual plant percent covers may be greater than 100 percent in the sample plot due to the vertical projection area of each plant (including leaves, stalks, and branches) overlapping with other individuals. Total percent plant cover is the percentage of the plot area covered by plants when looking from above. Relative percent cover is the percent cover of a particular species as a proportion of total percent plant cover; the sum of relative percent covers for different species in a given area equals 100 percent. Relative percent cover is used to illustrate relative dominance among species.

The relative percent covers of species across Wetland C are presented in **Table 5.2**. The most common species observed in Wetland C North were coontail (*Ceratophyllum demersum*), sago pondweed (*Stuckenia pectinata*), and hybrid cattail (*Typha x glauca*), while the most common species observed in Wetland C South were white water lily (*Nymphaea odorata*), Coontail, and brittle naiad (*Najas minor*).

In Year 2, the average of total percent plant cover of monitoring stations within Wetland C North was 13.6 percent. In Year 2, The average of total percent plant cover of monitoring stations within Wetland C South was 35.1 percent (**Table 5.3**).

The average of invasive species cover across all stations in Wetland C North was extremely low at 0.7 percent and included Eurasian watermilfoil (*Myriophyllum spicatum*) and purple loosestrife (*Lythrum salicaria*) (**Table 5.3**). The average of invasive species cover in Wetland C South was 0.6 percent and included Eurasian watermilfoil (**Table 5.3**). No areas of concern were identified at the time of monitoring.

Two dominant wetland community types were qualitatively mapped throughout Wetland C: emergent wetland and floating aquatic/submerged aquatic wetland (**Figure 5.5**). The emergent wetland community is characterized by shallow water, and likely goes through periods of inundation and dryness throughout the year. The floating aquatic/submerged aquatic wetland community is characterized by persistent, deeper inundation throughout the year and, therefore, can support plant species that are intolerant of periods of dryness. Wetland C North contained both community types, and Wetland C South contained only floating aquatic/submerged aquatic wetland. The most common species in the emergent wetland community were cattails (*Typha* species [sp.]) and yellow pond lily (*Nuphar lutea*). The most common species in the floating aquatic/submergent aquatic wetland community were white water lily, coontail, and brittle naiad.

A photographic log of the permanent photograph locations showing broader areas is provided in **Appendix B-2.** A photographic log presenting close-up photographs from each vegetation monitoring station is provided in **Appendix B-3**.

5.2.2.2 Hydrology and Soils

In order to document the development of wetland hydrology and hydric soils, three USACE wetland determination plots were performed throughout the emergent wetland communities at Wetland C North. The locations of wetland determination plots are presented in **Appendix B-5**, **Figure B3**. A photographic log displaying the soil cores is provided in **Appendix B-5**. The USACE wetland determination data forms are provided in **Appendix B-6**.

According to the 1987 USACE Wetland Delineation Manual, a minimum of one primary indicator of wetland hydrology is required to meet the criteria for the presence of wetland hydrology (Environmental Laboratory 1987). Several primary indicators of wetland hydrology were observed in Wetland C including surface water, soil saturation, water marks, water-stained leaves, and aquatic fauna, thus the criteria for wetland hydrology have been met.

At each wetland determination plot, a soil core was extracted from 0 to 18 inches in depth, or to the maximum depth that a sample could be retrieved. Each sample was described by texture and color, and evaluated for the characteristics of hydric soil, as defined by *Munsell Soil Color Book* and the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) *Field Indicators of Hydric Soils in the United State*s (Munsell Color 2010; USDA NRCS 2018).

At plot 1W, soils were composed of clay loam with a matrix color of 10YR 4/2. Redox features with a color of 7.5YR 4/6 accounting for 5 percent of the core were observed from 8 to 18 inches in depth. At plot 2W, soils were composed of clay loam with a matrix color of 10YR 4/2. Redox features with a color of 7.5YR 4/4 accounting for 10 percent of the core were observed from 0 to 12 inches in depth. At plot 2W, loose sand was observed at depths greater than 12 inches, and a sample from this depth could not be retrieved. At plot 3W, soils were composed of clay loam from 0 to 14 inches and gravelly sandy loam from 14 to 16 inches with a dominant matrix color of 10YR 4/2. Soils greater than 16 inches depth became coarser stone and loose sand and could not be retrieved. At plot 3W, redox features with colors of 5YR 3/4 and 7.5YR 4/4 were observed from 0 to 14 inches in depth and accounted for 5 to 10 percent of the core. Although the development of many hydric soil indicators present in native wetland soils may take many years, all three soil cores showed the development of redox features. Although the samples do not yet meet the definition of hydric soils, the development of redox features shows that prolonged conditions of soil saturation are present, and it is anticipated that hydric soil indicators will continue to develop over time.

5.2.2.3 Wildlife

Observations of wildlife were conducted during Year 2 monitoring to assess the functional value of Wetland C to local wildlife. In total, 27 species of wildlife were recorded during monitoring either by direct visual observation or by the observation of wildlife sign (tracks or scat) (**Table 5.4**).

A variety of native wading birds, waterfowl, and songbirds are utilizing Wetland C. Shallow water areas were observed as providing hunting and feeding opportunities for wading birds, including Great Blue Heron (*Ardea heroidias*) and for waterfowl, including Canada goose (*Branta canadensis*) and Double-crested Cormorant (*Phalacrocorax auratus*). Wetland C is also providing diversity in vegetation and structure that is being utilized by songbirds such as Red-Winged Blackbird (*Agelaius phoeniceus*), Northern Flicker (*Colaptes auratus*), and Gray Catbird (*Dumetella carolinensis*).

Several native species of game and non-game fishes were observed utilizing the Wetland C area. Observed species of non-game fishes included Banded Killifish (*Fundulus diaphanus*), Brook Silverside (*Labidesthes sicculus*), and Eastern Shiner (*Notropis* sp.). Observed species of game fishes include Longnose Gar (*Lepisosteus osseus*), Sunfish (*Lepomis* sp.), and Largemouth Bass (*Micropterus nigricans*). Notably, individual Largemouth Bass and Sunfish were small in size, suggesting that the shallow waters and submerged aquatic vegetation of Wetland C are being utilized as nursery habitat.

The accumulation of woody debris in the embayments of Wetland C North is providing additional habitat for Painted Turtles (*Chrysemys picta*), which were observed basking on floating woody debris. Structures such as basking logs are a limiting feature for many species of turtles, so the accumulation of woody debris from the Genessee River is creating additional wildlife habitat value in Wetland C.

A variety of native macroinvertebrates, representing filter-feeders, pollinators, and predators were observed utilizing Wetland C. Additionally, Unionid mussels (family Unionidae) were observed utilizing the downriver (northern) edges of the emergent wetland areas. The downward slopes along the edges of the emergent wetland peninsulas provide shelter from flow and suitable substrate for colonization by freshwater mussels. Freshwater Unionid mussels are cryptic, often requiring collection and close inspection to identify at the species level. Collection and/or handling of state-imperiled freshwater mussels is prohibited without a NYSDEC-issued License to Collect and Possess, and as a conservative measure, identification to the species level was not completed in the field.

No mammal sign was observed in Year 2 monitoring. However, the presence of standing water across Wetland C North would not preserve animal sign such as tracks and scat.

Several invasive species were observed during monitoring. Mute Swans (*Cygnus olor*) were observed loafing with cygnets in the Genessee River channel adjacent to Wetland C. Aquatic invasives including zebra mussel (*Dreissena polymorpha*) and Round Goby (*Neogobius melanostomus*) were also observed. Additionally, the invasive Red-eared Slider (*Trachemys scripta elegans*) was observed basking with native Painted Turtles on floating woody debris in Wetland C North.

The habitat usage observed during Year 2 monitoring indicates that Wetland C is providing a functionally diverse habitat for numerous local wildlife species.

5.3 Comparison with Remedial Objectives

5.3.1 Isolation Cover System

The objectives of the isolation cover system monitoring for AOC 1 and AOC 2 are to:

1. Determine whether the physical integrity of the cover system has been maintained.
2. Determine whether there is a need for additional protective measures.

These objectives are achieved by using the bathymetric survey results to determine whether there has been a significant decrease in isolation cover material elevation since the isolation cover system was installed and

between monitoring events. A significant decrease in isolation cover elevation is defined as a loss of greater than 6 inches of elevation over a contiguous 10,000-square-foot area or 20 percent of an individual area, whichever is less, considering the accuracy of the measurement technique, the nature of the isolation cover surface (e.g., irregular rock surface), and the nature of the substrate.

As detailed in Section 5.2.1, compliance monitoring of the isolation cover system in AOC 1 and AOC 2 was completed on August 28 and 29, 2023, approximately one year and four months after compliance monitoring of the isolation cover conducted in May 2022. The 2023 survey results for AOC 1 and AOC 2 are presented on **Figures 5.3 and 5.4**, respectively.

The August 28 and 29, 2023 compliance monitoring surveys were compared to the October 18, 2021 post-construction surveys to determine areas with a decrease in elevation of 6 inches or more (**Appendix C, Figures C-1 [AOC 1] and C-2 [AOC 2], see also Figures C-5 and C-6**). The August 28 and 29, 2023 compliance monitoring surveys were also compared to the May 2, 2022 compliance monitoring surveys to determine areas with a decrease in elevation of 6 inches or more (**Appendix C, Figures C-3 [AOC 1] and C-4 [AOC 2], see also Figures C-7 and C-8**). In AOC 1, the dredge and cap areas were compared separately from the cap only areas.

The results of the 2023 monitoring verified that the isolation cover system remains compliant with the design intent. The 2023 bathymetric survey results indicated that neither AOC 1 nor AOC 2 showed a decrease in elevation of greater than 6 inches over a contiguous 10,000-square-foot area nor 20 percent of an individual cover area, when comparing the 2023 compliance monitoring survey results to the 2021 post-construction survey results or the 2023 compliance monitoring survey results to the 2022 compliance monitoring survey results. Further, probing was performed concurrent with the 2023 manual depth measurements in near-shore areas to assist in evaluation of the isolation cover. Where probing was completed, gravel cover material was observed to be present at the surface or immediately beneath a layer of depositional soft sediment. A visual inspection of the AOC 1 and AOC 2 near-shore cover systems was also performed concurrent with the 2023 bathymetric survey, where conditions allowed. Little, if any, disturbance of the cover systems was observed during the visual inspection.

The maximum contiguous area of elevation loss greater than 6 inches and the total percentage of area with a cover elevation loss of greater than 6 inches in each isolation cover area were as follows:

AOC		AOC 1			AOC 2
Isolation Cover Type		Dredge and Cap (North)	Dredge and Cap (South)	Cap Only	Dredge and Cap
Isolation Cover Area (square feet [SF])		28,823	11,467	32,663	86,911
2023 vs. 2021 Post-Construction Bathymetry Comparison	Maximum Contiguous Area with a decrease of 6 inches or more (SF)[1]	1,898	1,223	1,686	816
	Total Area of Elevation Decrease of 6 inches or more (SF)[1]	1,929	1,263	3,911	3,304
	Percent of Total Elevation Decrease (6 inches or more) of Individual Cover Area[1]	6.7	11.0	12.0	3.8
2023 vs. 2022 (Baseline) Bathymetry Comparison	Maximum Contiguous Area with a decrease of 6 inches or more (SF)[1]	0	0	255	359
	Total Area of Elevation Decrease of 6 inches or more (SF)[1]	0	0	458	1,097
	Percent of Total Elevation Decrease (6 inches or more) of Individual Cover Area[1]	0	0	1.4	1.3
2021 Post-Construction vs. 2021 Post-Dredge Bathymetry Comparison	Baseline Average Cover Effective Thickness (inches)[1]	35.5	30.3	35.3	33.3
2023 vs. 2021 Post-Dredge Bathymetry Comparison	Average Cover Effective Thickness (inches)[1]	37.9	28.4	31.4	37.4
	Average Cover Gain (+)/Loss (-) (inches)[1] from Baseline	+2.4	-1.9	-3.9	+4.3

[1] Typical repeatability for multi-beam bathymetry measurements is +/- 0.3 feet.

For future monitoring events, a significant decrease in isolation cover elevation will continue to be defined as a loss of greater than 6 inches of elevation over a contiguous 10,000-square-foot area or 20 percent of an individual area, whichever is less, considering the accuracy of the measurement technique, the nature of the isolation cover surface (e.g., irregular rock surface), and the nature of the substrate. The 2021 post-construction surveys, the 2022 and 2023 monitoring surveys, and future monitoring surveys will all be used for future cap performance evaluations to allow differentiation between potential loss of cover material and consolidation and associated settlement of the cover material.

5.3.2 Wetland C

The overall objective of the restoration of Wetland C is to achieve no net loss of wetland acreage and for the function and values of Wetland C that existed prior to the remedy be maintained and/or enhanced following

restoration. Wetland C plantings were installed from August 2021 through November 2021 (emergent wetland plantings) and in June 2022 (submergent aquatic plantings). Emergent plantings were installed throughout the shallow emergent planting zones, and floating aquatic and submerged aquatic species were planted throughout the deeper floating aquatic/submerged aquatic zones.

As detailed in Section 5.2.2, performance monitoring was completed at Wetland C on August 31, 2023, approximately 11 months after performance monitoring was conducted in September 2022, to evaluate the cover, distribution, and composition of wetland communities and to analyze Wetland C function.

The Year 2 2023 performance monitoring results indicated that Wetland C is achieving the overall restoration objective. Based on the results of the 2023 monitoring, Wetland C supports a diversity of native flora and fauna and has developed several primary indicators of wetland hydrology and hydric soils. In addition, the average of total plant cover in Wetland C South, which is primarily floating aquatic/submerged aquatic wetland community, increased by 31.1 percent in 2023 (from 4.0 percent in 2022 to 35.1 percent in 2023). However, the average of total plant cover in Wetland C North decreased by 27 percent in 2023 (from 40.6 percent in 2022 to 13.6 percent in 2023).

This reduction in plant cover is likely due to high water levels in 2023, which caused prolonged periods of inundation in the emergent wetland areas in Wetland C North, excluding many facultative wetland species that were observed in 2022. Water levels on the Lower Genessee River are largely driven by the water level of Lake Ontario. The closest source of continuous water level data to Wetland C is National Oceanic and Atmospheric Administration (NOAA) station 9052058, located on Lake Ontario in Rochester, New York. Monthly water level means at station 9052058 for the 2023 growing season (March through October) averaged approximately 0.5 feet higher than the average for the 2022 growing season (NOAA 2023). All species observed in Wetland C in 2023 were obligate wetland species. The floating aquatic/submerged aquatic zones of Wetland C North and Wetland C South did not appear to be subject to a substantial reduction in plant cover in 2023, likely because floating aquatic and submerged aquatic species, which prefer permanent inundation, were planted in this area.

Overall trends in the average of total plant cover are as follows:

Monitoring Year	Wetland C North[1]	Wetland C South
1 (2022)	40.6 percent	4.0 percent
2 (2023)	13.6 percent	35.1 percent

[1] Wetland C North consists of emergent and floating aquatic/submerged aquatic/floating aquatic planting zones. The decrease of total plant cover in 2023 is primarily due to a decrease is emergent planting zone cover.

In consideration of the creation of areas with greater water depth and varied habitat, the installation of native plantings, and the development of primary indicators of wetland hydrology, Wetland C appears to be achieving the overall restoration objective, however, to address the decrease in the average of total plant cover in Wetland C North emergent planting zones, maintenance plantings are proposed for 2024. Maintenance plantings will be focused on obligate wetland species that can tolerate both periods of dryness and more prolonged periods of inundation and exclude facultative wetland species that cannot tolerate prolonged periods of inundation. The details of the maintenance planting plan are presented in **Appendix D**.

5.4 Monitoring Deficiencies

Sitewide monitoring completed in 2023 complied with the monitoring plan as outlined in the SMP.

A minor modification to bathymetric survey collection methods was implemented during sitewide monitoring in 2023. Consistent with data collection methods used in the 2021 post-construction surveys and 2022 monitoring surveys, multi-beam survey methods were used in lieu of single-beam survey methods that were proposed in the SMP. Multi-beam survey data was collected at sufficient density to establish sub-bottom contours at 1-foot intervals, in accordance with the SMP. In contrast to single-beam survey data collection, which would achieve sub-bottom surface coverage at only 25-foot intervals, the multi-beam survey obtained 100 percent sub-bottom surface coverage. Typical repeatability for multi-beam bathymetry measurements is +/- 0.3 feet (standard deviation 0.8) whereas typical repeatability for single-beam bathymetry measurements is +/- 0.5 feet.

5.5 Conclusions and Recommendations for Changes

The results of the 2023 monitoring verified that the isolation cover system remains compliant with the design intent and the cover system remains protective of human health and the environment. A decrease in the average of total plant cover across the emergent wetland areas of Wetland C North was noted during the 2023 monitoring event. Maintenance plantings in these areas are proposed for 2024 to further support the achievement of restoration objectives (**Appendix D**).

The results of the 2023 monitoring verified that the isolation cover system remains compliant with the design intent. The 2023 bathymetric survey results indicated that neither AOC 1 nor AOC 2 showed a decrease in elevation of greater than 6 inches over a contiguous 10,000-square-foot area nor 20 percent of an individual cover area, when comparing the 2023 compliance monitoring survey results to the 2021 post-construction survey results or the 2023 compliance monitoring survey results to the 2022 compliance monitoring survey results. Further, probing was performed concurrent with the 2023 manual depth measurements in near-shore areas to assist in evaluation of the isolation cover. Where probing was completed, gravel cover material was observed to be present at the surface or immediately beneath a layer of depositional soft sediment. A visual inspection of the AOC 1 and AOC 2 near-shore cover systems was also performed concurrent with the 2023 bathymetric survey, where conditions allowed. Little, if any, disturbance of the cover systems was observed during the visual inspection.

The 2021 post-construction surveys, the 2022 and 2023 monitoring surveys, and future monitoring surveys will all be used for future cap performance evaluations to allow differentiation between potential loss of cover material and consolidation and associated settlement of the cover material. These evaluations will be used to determine if there is a future significant decrease in isolation cover elevation due to loss of cover material, which is defined as a loss of greater than 6 inches over a contiguous 10,000-square-foot area or 20 percent of an individual area, whichever is less, considering the accuracy of the measurement technique, the nature of the isolation cover surface (e.g., irregular rock surface), and the nature of the substrate.

The isolation system cover system monitoring plan will continue to include multi-beam survey methods consistent with the 2021 post-construction surveys, and 2022 and 2023 monitoring surveys. The isolation cover system monitoring plan will continue to include manual probing in the near-shore shallow areas surveyed with pole shots to confirm the presence of the isolation cover's gravel layer.

Based on the results of the second-year performance monitoring, Wetland C supports a diversity of native flora and fauna and has developed several primary indicators of wetland hydrology and hydric soils. The presence of native obligate wetland species, the development of primary indicators of wetland hydrology, and the development of indicators of hydric soils were observed in 2023. Year 2 wetland monitoring data indicate that Wetland C appears to be achieving the overall restoration objective of no net loss of wetland acreage and for the function and values of Wetland C that existed prior to the remedy to be maintained and/or enhanced.

The data collected at vegetation monitoring stations in 2023 show an expansion of floating aquatic/submerged aquatic vegetation throughout the embayments of Wetland C North and throughout Wetland C South. However, a decrease in the average of total plant cover across the emergent wetland areas of Wetland C North was observed during the 2023 monitoring events, likely due to high water levels during the growing season of 2023. To address the decrease in the average of total plant cover in Wetland C North, maintenance plantings are proposed for 2024. Maintenance plantings will be focused on obligate wetland species that can tolerate both periods of dryness and more prolonged periods of inundation and exclude facultative wetland species that cannot tolerate prolonged periods of inundation. The details of the maintenance planting plan are presented in Appendix D.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Compliance with SMP

All requirements of the SMP were met during the reporting period:

- The ICs/ECs for the Site are unchanged and remain in place.
- Monitoring of the cover system and Wetland C were completed.
- No isolation cover system maintenance was required during the reporting period.
- Wetland C maintenance was observed as required during the reporting period, with maintenance plantings proposed to be installed during the 2024 growing season.

6.2 Performance and Effectiveness of Remedy

The results of the 2023 monitoring verified that the isolation cover system remains compliant with the design intent. The 2023 bathymetric survey results indicated that neither AOC 1 nor AOC 2 showed a decrease in elevation of greater than 6 inches over a contiguous 10,000-square-foot area nor 20 percent of an individual cover area, when comparing the 2023 compliance monitoring survey results to the 2021 post-construction survey results or the 2023 compliance monitoring survey results to the 2022 compliance monitoring survey results. Further, probing was performed concurrent with the 2023 manual depth measurements in near-shore areas to assist in evaluation of the isolation cover. Where probing was completed, gravel cover material was observed to be present at the surface or immediately beneath a layer of depositional soft sediment. A visual inspection of the AOC 1 and AOC 2 near-shore cover systems was also performed concurrent with the 2023 bathymetric survey, where conditions allowed. Little, if any, disturbance of the cover systems was observed during the visual inspection.

Based on the results of the second-year performance monitoring, Wetland C supports a diversity of native flora and fauna and has developed several primary indicators of wetland hydrology and hydric soils. The presence of native obligate wetland species, the development of primary indicators of wetland hydrology, and the development of indicators of hydric soils were observed in 2023. Year 2 wetland monitoring data indicate that Wetland C appears to be achieving the overall restoration objective of no net loss of wetland acreage and for the function and values of Wetland C that existed prior to the remedy to be maintained and/or enhanced.

The data collected at vegetation monitoring stations in 2023 show an expansion of floating aquatic/submerged aquatic vegetation throughout the embayments of Wetland C North and throughout Wetland C South. However, a decrease in the average of total plant cover across the emergent wetland areas of Wetland C North was observed during the 2023 monitoring events, likely due to high water levels during the growing season of 2023. To address the decrease in the average of total plant cover in Wetland C North, maintenance plantings are proposed for 2024. Maintenance plantings will be focused on obligate wetland species that can tolerate both periods of dryness and more prolonged periods of inundation and exclude facultative wetland species that cannot tolerate prolonged periods of inundation. The details of the maintenance planting plan are presented in **Appendix D**.

6.3 Future PRR Submittals

No changes to the frequency of PRR submittals are recommended. Sitewide inspections will continue to be performed in accordance with the SMP:

- For AOC 1 and AOC 2, annually for the first five years after completion of the remedy, and then once every five years until the NYSDEC issues a Performance Standards Attained determination.
- For Wetland C, annually for the first five years after completion of the remedy.
- After severe weather conditions that may affect ECs, (i.e., a flood event with a magnitude at or exceeding the first post-remedy 100-year design recurrence interval for the cover system or a flood event with a magnitude at or exceeding the 500-year design recurrence interval for the cover system).
- In the event of an emergency.

7.0 REFERENCES

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual,* Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Munsell Color (Firm). 2010. *Munsell Soil Color Book*. Munsell Soil Color Charts: With Genuine Munsell Color Chips. Grand Rapids, Michigan.

NOAA. NOAA/NOS/CO-OPS Verified Monthly Means at 9052058, Rochester, NY From 2022/01/01 00:00 LST/LDT to 2023/11/21 23:59 LST/LDT. NOAA Tides and Currents. https://tidesandcurrents.noaa.gov/waterlevels.html?id=9052058&units=standard&bdate=20220101&edate=20231121&timezone=LST/LDT&datum=IGLD&interval=m&action=. Accessed November 21, 2023.

NYSDEC. 2020. *Final Statement of Basis Corrective Measures Selection. Lower Genesee River Operable Unit 5 (OU-5) of Eastman Business Park*. Environmental Response Trust Site No. 828177 EPA ID No. NYD980592497. Division of Environmental Remediation. January.

Parsons, 2016. *RCRA Facility Investigation (RFI) for the Genesee River (Operable Unit 5 of the Eastman Business Park.* NYSDEC Site No. 828177 EPA ID No. NYD980592497. Prepared for the New York State Department of Environmental Conservation. September.

Parsons. 2023a. *Site Management Plan. Lower Genesee River Operable Unit 5 (OU-5) of the Eastman Business Park*. NYSDEC Site No. 828177 EPA ID No. NYD980592497. Prepared for the New York State Department of Environmental Conservation. January.

Parsons. 2023b. *2022 Periodic Review Report. Lower Genesee River Operable Unit 5 (OU-5) of the Eastman Business Park*. NYSDEC Site No. 828177 EPA ID No. NYD980592497. Prepared for the New York State Department of Environmental Conservation. July.

USACE. 2013. *Army Corps of Engineers Hydrographic Surveying Manual* EM 1110-2-1003. November.

USDA NRCS. 2018. *Field Indicators of Hydric Soils in the United States,* Version 8.2. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

USGS. 2023. Genessee River at Ford Street Bridge, Rochester, NY – 04231600. https://waterdata.usgs.gov/monitoring-location/04231600/#parameterCode=00060&showMedian=true&startDT=2023-01-01&endDT=2023-11-30. Accessed November 30, 2023.

Werier, David, Kyle Webster, Troy Weldy, Andrew Nelson, Richard Mitchell†, and Robert Ingalls†. 2023 *New York Flora Atlas*. [S. M. Landry and K. N. Campbell (original application development), USF Water Institute. University of South Florida]. New York Flora Association, Albany, New York.

TABLES

TABLE 5.1 PLANT SPECIES OBSERVED
2023 PERFORMANCE MONITORING

Scientific Name[1]	Common Name	Wetland Indicator Status[2,3]	Planted or Seeded During Implementation
Native			
Azolla cristata	Mosquito fern	OBL	
Bidens cernua	Nodding beggar ticks	OBL	✓
Carex lacustris	Lake sedge	OBL	✓
Ceratophyllum demersum	Coontail	OBL	✓
Heteranthera dubia	Water star grass	OBL	
Lemna minor	Duckweed	OBL	
Nuphar lutea	Yellow pond-lily	OBL	✓
Nymphaea odorata	White water lily	OBL	✓
Pontederia cordata	Pickerelweed	OBL	✓
Potamogeton nodosus	Long-leaf pondweed	OBL	
Ranunculus sceleratus	Cursed buttercup	OBL	
Sagittaria latifolia	Common arrowhead	OBL	✓
Sparganium eurycarpum	Giant bur-reed	OBL	✓
Stuckenia pectinata	Sago pondweed	OBL	
Typha latifolia	Broadleaf cattail	OBL	
Typha x glauca	Hybrid cattail	OBL	
Vallisneria americana	Water celery	OBL	
Non-Native			
Najas minor	Brittle naiad	OBL	
Invasive[4]			
Lythrum salicaria	Purple loosestrife	OBL	
Myriophyllum spicatum	Eurasian watermilfoil	OBL	

[1] Botanical nomenclature follows New York Flora Atlas (Werier et al. 2023).

[2] Wetland Indicator Status nomenclature:

- Obligate Wetland (OBL): occurs almost always (estimated probability >99%) in wetlands.
but is occasionally found in non-wetlands.
- Facultative (FAC): equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).
but is occasionally found in wetlands (estimated probability 1%-33%).
- Obligate Upland (UPL): occurs almost always (estimated probability >99%) in non-wetlands.

[3] References for wetland indicator status throughout document follow New York Flora Atlas (Werier et al. 2023).

[4] Invasive species are defined in 6 NYCRR Part 575 Prohibited and Regulated Invasive Species (NYSDEC 2014).

TABLE 5.2 RELATIVE PERCENT COVER OF SPECIES THROUGHOUT MONITORING STATIONS
2023 PERFORMANCE MONITORING

Scientific Name[1]	Common Name	Wetland Indicator Status[2,3]	Relative Percent Cover[4]	Planted or Seeded During Implementation
Native				
Nymphaea odorata	White water lily	OBL	24.8%	✓
Ceratophyllum demersum	Coontail	OBL	21.4%	✓
Stuckenia pectinata	Sago pondweed	OBL	10.3%	
Typha x glauca	Hybrid cattail	OBL	9.4%	
Nuphar lutea	Yellow pond-lily	OBL	6.8%	✓
Potamogeton nodosus	Long-leaf pondweed	OBL	2.9%	
Lemna minor	Duckweed	OBL	1.5%	
Typha latifolia	Broadleaf cattail	OBL	0.9%	
Non-Native				
Najas minor	Brittle naiad	OBL	19.1%	
Invasive[5]				
Myriophyllum spicatum	Eurasian watermilfoil	OBL	2.1%	
Lythrum salicaria	Purple loosestrife	OBL	0.9%	
		Total	100%	

[1] Botanical nomenclature follows New York Flora Atlas (Werier et al. 2023).

[2] Wetland Indicator Status nomenclature:

- Obligate Wetland (OBL): occurs almost always (estimated probability >99%) in wetlands.

but is occasionally found in non-wetlands.

- Facultative (FAC): equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).

99%).

- Obligate Upland (UPL): occurs almost always (estimated probability >99%) in non-wetlands.

[3] References for wetland indicator status throughout document follow New York Flora Atlas (Werier et al. 2023).

[4] Relative percent cover is the cover of a particular species as a percentage of plant cover equaling 100%.

[5] Invasive species are defined in 6 NYCRR Part 575 Prohibited and Regulated Invasive Species (NYSDEC 2014).

TABLE 5.3 MONITORING STATION PERCENT PLANT COVER
2023 PERFORMANCE MONITORING

Wetland Monitoring Locations		
Monitoring Station	Total Plant Cover (Percent)	Total Invasive Cover (Percent)
Wetland C North		
Emergent Planting Zones		
1	0	0
2	25	0
4	15	0
5	0	0
7	0	0
8	5	5
10	0	0
11	0	0
13	70	2
14	20	0
16	0	0
17	15	0
Floating Aquatic/Submerged Aquatic Planting Zones		
3	2	0
6	70	5
9	0	0
12	0	0
15	10	0
Wetland C South		
Floating Aquatic/Submerged Aquatic Planting Zones		
18	15	0
19	70	0
20	0	0
21	25	0
22	1	0
23	100	5
24	20	0
25	50	0
Average Cover		
Wetland C North Emergent Planting Zone	**12.5**	**0.6**
Wetland C North Floating Aquatic/Submerged Aquatic Planting Zone	**16.4**	**1.0**
Wetland C North Overall	**13.6**	**0.7**
Wetland C South	**35.1**	**0.6**
Wetland C (All)	**20.5**	**0.7**

TABLE 5.4 WILDLIFE SPECIES OBSERVED
2023 PERFORMANCE MONITORING

Scientific Name	Common Name	Type of Observation
Native		
Birds		
Agelaius phoeniceus	Red-winged Blackbird	Visual
Ardea heroidias	Great Blue Heron	Visual
Branta canadensis	Canada Goose	Visual
Buteo jamaicensis	Redtailed Hawk	Visual
Colaptes auratus	Northern Flicker	Song
Dumetella carolinensis	Gray Catbird	Visual
Larus delawarensis	Ring-billed Gull	Visual
Phalacrocorax auritus	Double-crested Cormorant	Visual
Reptiles		
Chrysemys picta	Midland painted turtle	Visual
Invertebrates		
Amphipoda	Scud	Visual
Anax sp.	Darner	Visual
Enallagma cyathigerum	Common Blue Damselfly	Visual
Gyrinus sp.	Whirlygig	Visual
Ischnura sp.	Eastern Forktail	Visual
Rhagovelia	Water Strider	Visual
Unionidae	Unionid Mussel	Visual
Vespidae	Yellowjacket	Visual
Fish		
Fundulus diaphanus	Banded Killifish	Visual
Labidesthes sicculus	Brook Silverside	Visual
Lepisosteus osseus	Longnose Gar	Visual
Lepomis sp.	Sunfish	Visual
Micropterus nigricans	Largemouth Bass	Visual
Notropis sp.	Eastern Shiner	Visual
Invasive[1]		
Cygnus olor	Mute Swan	Visual
Dreissena polymorpha	Zebra Mussel	Visual
Neogobius melanostomus	Round Goby	Visual
Trachemys scripta elegans	Red-eared Slider	Visual

[1] Invasive species are defined by 6 NYCRR Part 575 Prohibited and Regulated Invasive Species (NYSDEC 2014).

FIGURES

WETLAND C NORTH REMEDIATION AREA

WETLAND C SOUTH REMEDIATION AREA

TURNING BASIN

AOC 2

AOC 1

KINGS LANDING WASTEWATER TREATMENT PLANT

EASTMAN BUSINESS PARK

ROCHESTER AREA

SITE LOCATION

NEW YORK

1000 500 0 1000 2000

SCALE: 1"=1000'

LEGEND:

APPROXIMATE BOUNDARIES OF WORK

FIGURE 2.1

NEW YORK STATE Department of Environmental Conservation

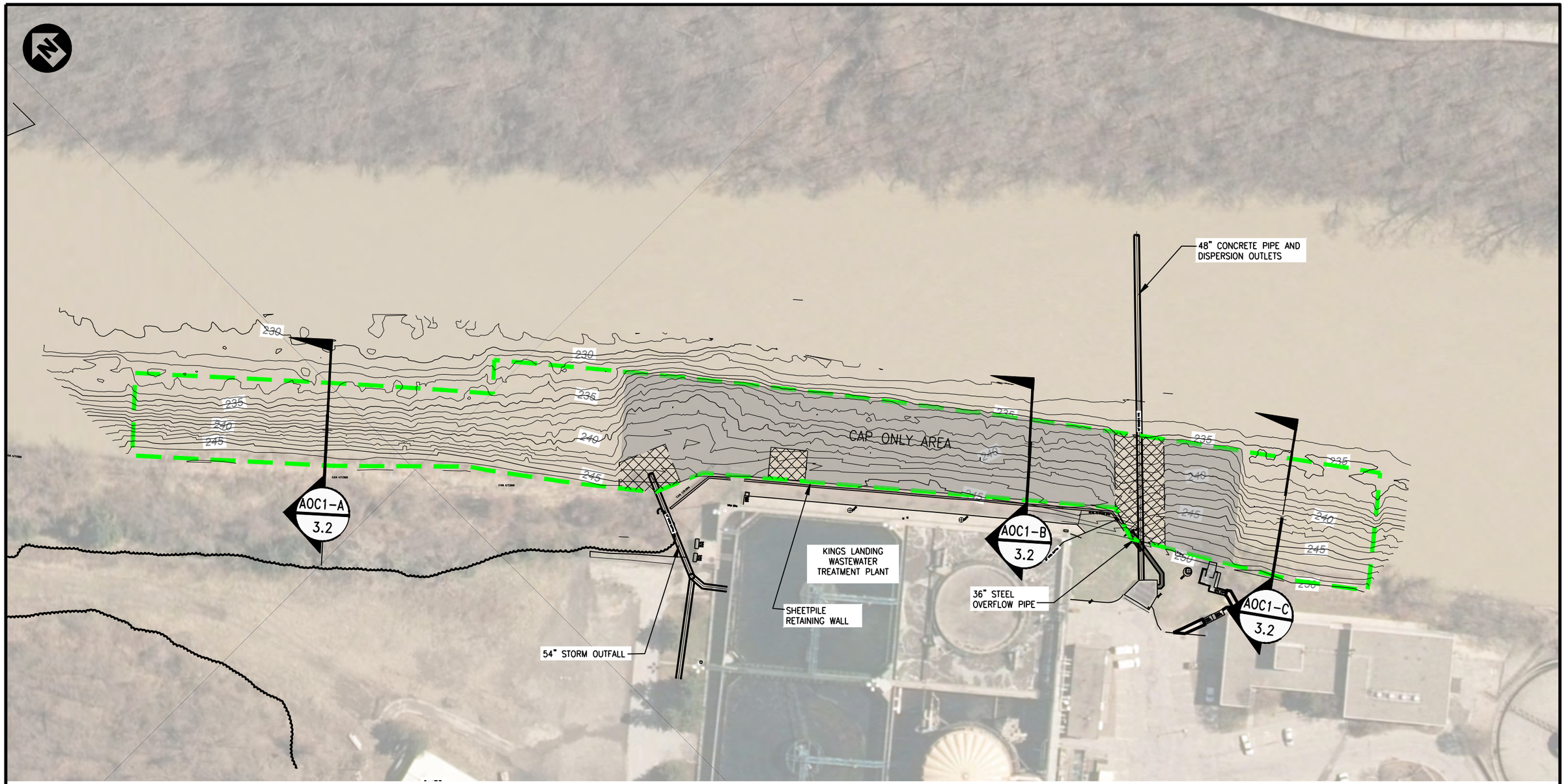
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

SITE LOCATION MAP

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2023 PERIODIC REV RPT\453233-2023-PRR-SLM.DWG
PLOT DATE: 12/4/2023 11:25 AM PLOTTED BY: RUSSO, JILL [US-US]



NOTES:

1. CONTOURS SHOWN ARE FROM THE WHITE LAKE DOCK AND DREDGE POST-CAP BATHYMETRIC SURVEY DATED OCTOBER 7, 2021.

LEGEND:

- AOC 1 BOUNDARY
- NO DREDGING OR CAPPING AREA
- NO DREDGING/ CAP ONLY AREA

80 40 0 80 160

SCALE: 1"=80'

FIGURE 3.1

NEW YORK STATE Department of Environmental Conservation

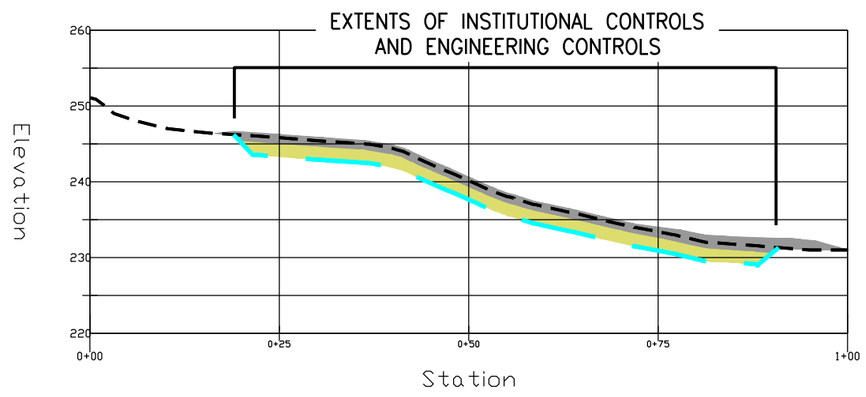
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

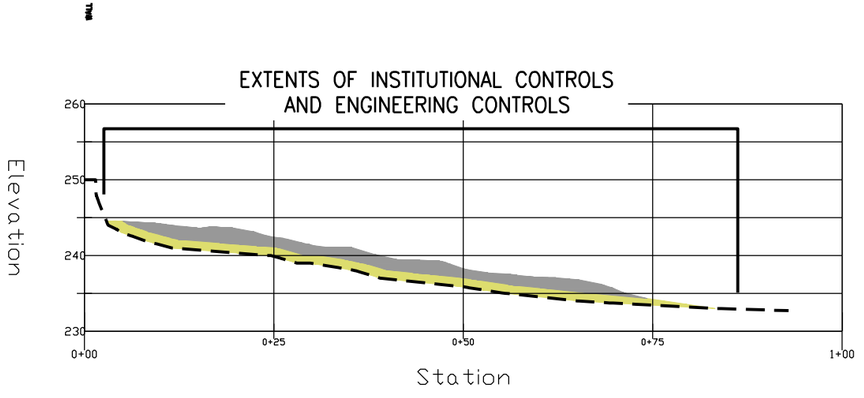
AS-BUILT PLAN
AOC 1

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

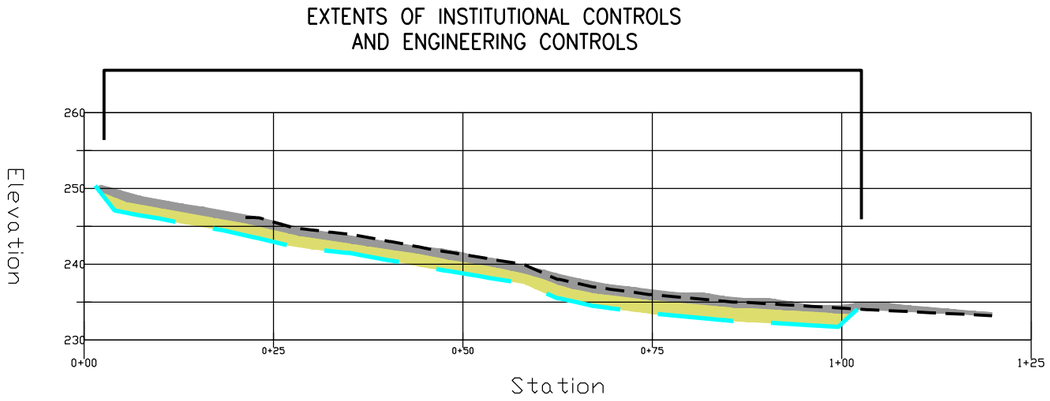
FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2022 PERIODIC REV.RPT\453233-2022-PRR-IC-BOUNDARIES.DWG
PLOT DATE: 10/9/2023 11:16 AM PLOTTED BY: RUSSO, JILL [US-US]



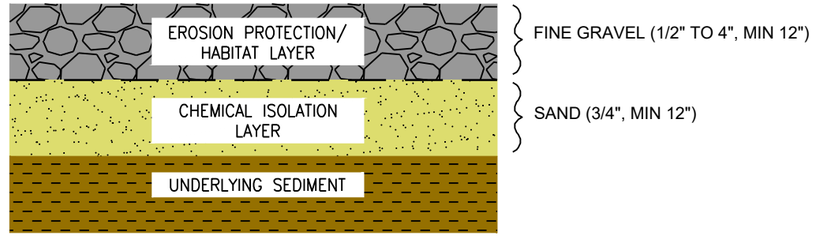
AOC1-A TYPICAL PROFILE VIEW



AOC1-B TYPICAL PROFILE VIEW



AOC1-C TYPICAL PROFILE VIEW



TYPICAL ISOLATION CAP

LEGEND:

- APPROXIMATE ORIGINAL RIVER SEDIMENT SURFACE
- APPROXIMATE EXTENTS OF SEDIMENT REMOVAL
- APPROXIMATE ISOLATION CAP GRADE
  - -EROSION PROTECTION/HABITAT LAYER
  - -CHEMICAL ISOLATION LAYER

20 10 0 20 40

SCALE: 1"=20'

NOTES:

1. ELEVATIONS SHOWN ARE FROM THE WHITE LAKE DOCK AND DREDGE POST-CAP BATHYMETRIC SURVEY DATED OCTOBER 7, 2021.

FIGURE 3.2

NEW YORK STATE Department of Environmental Conservation

2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AS-BUILT CAP SECTIONS
AOC 1

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2023 PERIODIC REV RPT\453233-2023-PRR-IC-BOUNDARIES.DWG
PLOT DATE: 11/22/2023 2:02 PM PLOTTED BY: RUSSO, JILL [US-US]

LGR-STA-42	
Depth	mg/kg
0-2'	CAP
2-3'	478
3-4'	36.2
4-5'	10.4

LGR-STA-45	
Depth	mg/kg
0-2'	CAP
2-3'	6.4
3-4'	219
4-5'	104

LGR-STA-46	
Depth	mg/kg
0-2'	CAP
2-3'	117
3-4'	61.7
4-5'	379

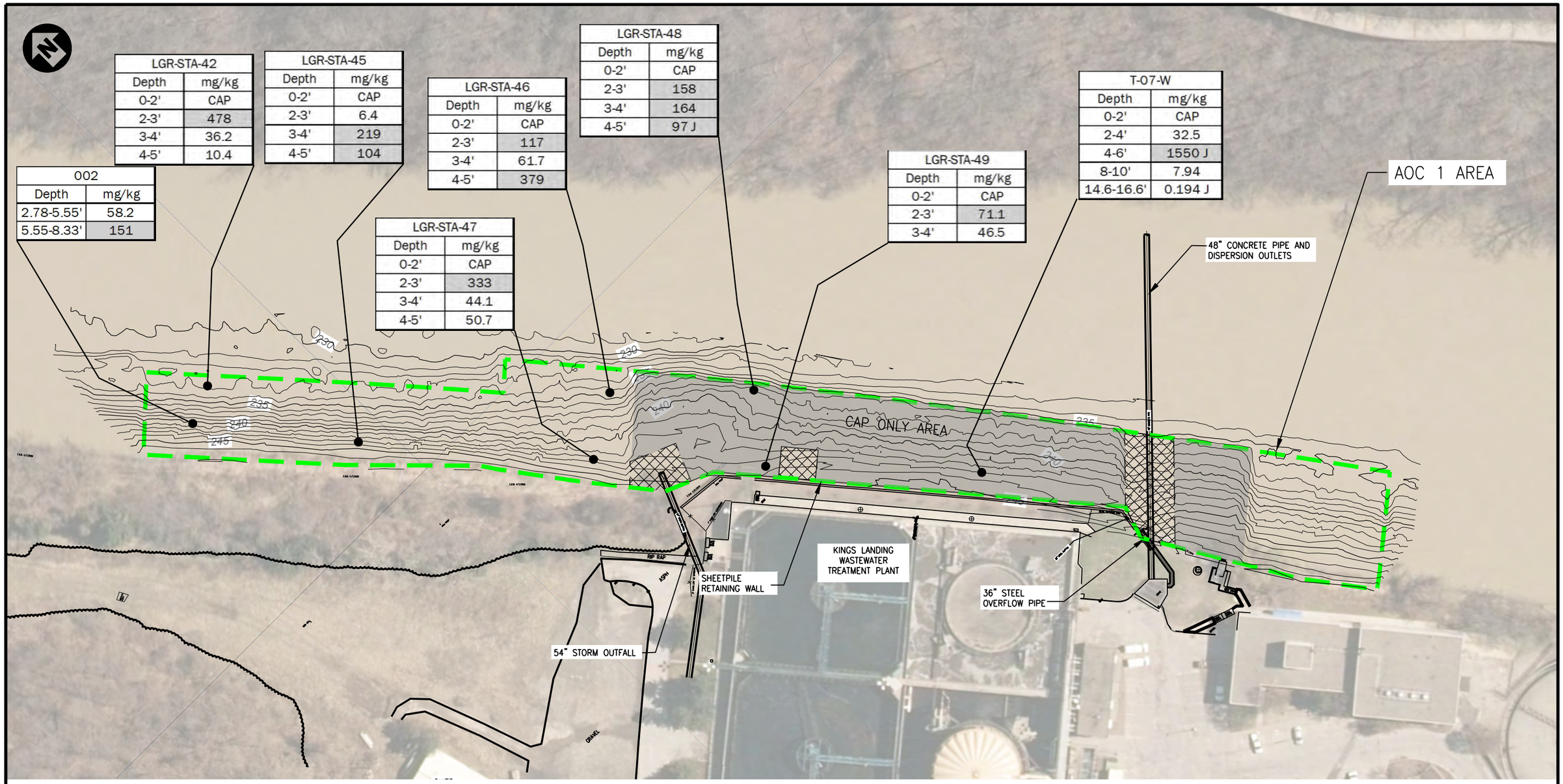
LGR-STA-48	
Depth	mg/kg
0-2'	CAP
2-3'	158
3-4'	164
4-5'	97 J

002	
Depth	mg/kg
2.78-5.55'	58.2
5.55-8.33'	151

LGR-STA-47	
Depth	mg/kg
0-2'	CAP
2-3'	333
3-4'	44.1
4-5'	50.7

LGR-STA-49	
Depth	mg/kg
0-2'	CAP
2-3'	71.1
3-4'	46.5

T-07-W	
Depth	mg/kg
0-2'	CAP
2-4'	32.5
4-6'	1550 J
8-10'	7.94
14.6-16.6'	0.194 J



NOTES:

1. SAMPLE RESULTS ARE TOTAL SILVER CONCENTRATION. SHADING IN GRAY INDICATES AN EXCEEDANCE OF THE SITE SPECIFIC TOXICITY ACTION LEVEL OF 70 MG/KG SILVER.
2. J-ESTIMATE ABOVE THE METHOD DETECTION LIMITS AND BELOW THE ADJUSTED REPORTING LIMIT.
3. SEDIMENT DEPTHS ARE FROM THE ORIGINAL ELEVATIONS PRIOR TO DREDGING AND CAPPING.
4. CONTOURS SHOWN ARE FROM THE WHITE LAKE DOCK AND DREDGE POST-CAP BATHYMETRIC SURVEY DATED OCTOBER 7, 2021.

LEGEND:

- RIVER SAMPLE LOCATIONS
- AOC 1 BOUNDARY
- NO DREDGING OR CAPPING AREA
- NO DREDGING/ CAP ONLY AREA

80 40 0 80 160

SCALE: 1"=80'

FIGURE 3.3

NEW YORK STATE Department of Environmental Conservation

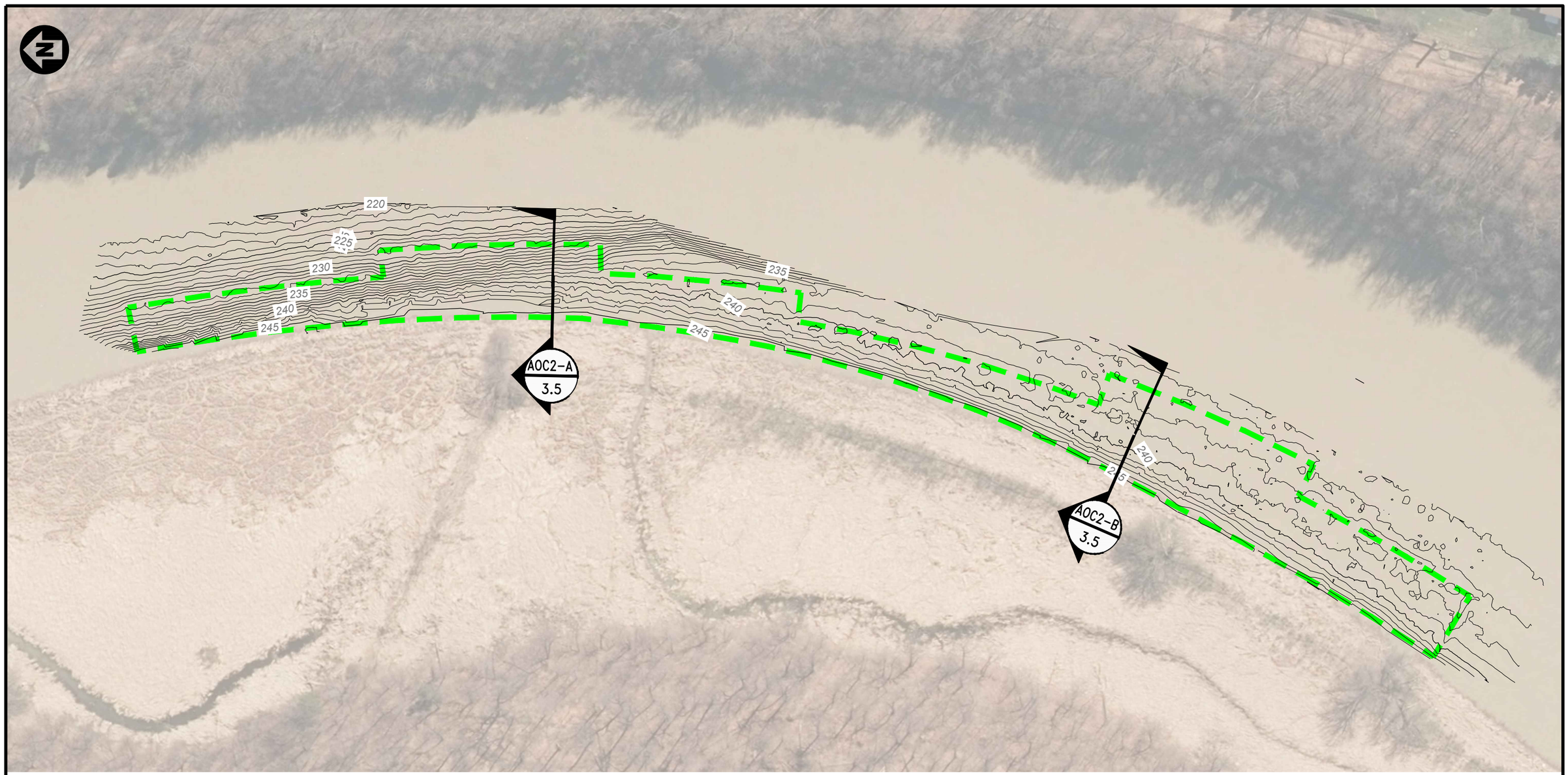
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

REMAINING SEDIMENT SAMPLE EXCEEDANCES
AOC 1

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2023 PERIODIC REV RPT\453233-2023-PRR-REMAINING.DWG
PLOT DATE: 11/27/2023 8:46 AM PLOTTED BY: RUSSO, JILL [US-US]



LEGEND:

AOC 2 BOUNDARY

100 50 0 100 200

SCALE: 1"=100'

NOTES:

1. CONTOURS SHOWN ARE FROM THE WHITE LAKE DOCK AND DREDGE POST-CAP BATHYMETRIC SURVEY DATED OCTOBER 18, 2021.

FIGURE 3.4

NEW YORK STATE Department of Environmental Conservation

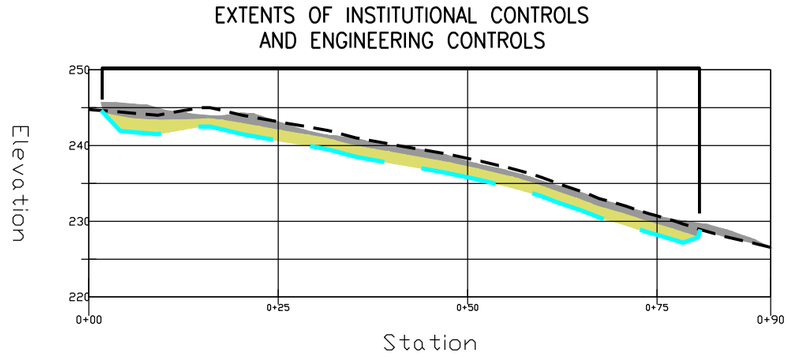
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AS-BUILT PLAN
AOC 2

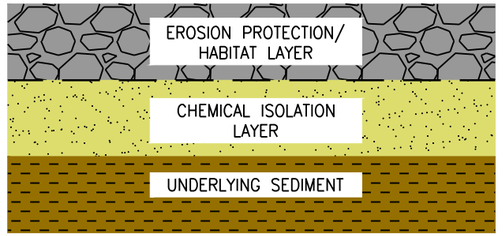
PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2022 PERIODIC REV.RPT\453233-2022-PRR-IC-BOUNDARIES.DWG
PLOT DATE: 10/9/2023 11:16 AM PLOTTED BY: RUSSO, JILL [US-US]



AOC2-A
3.4

AOC2-A TYPICAL PROFILE VIEW



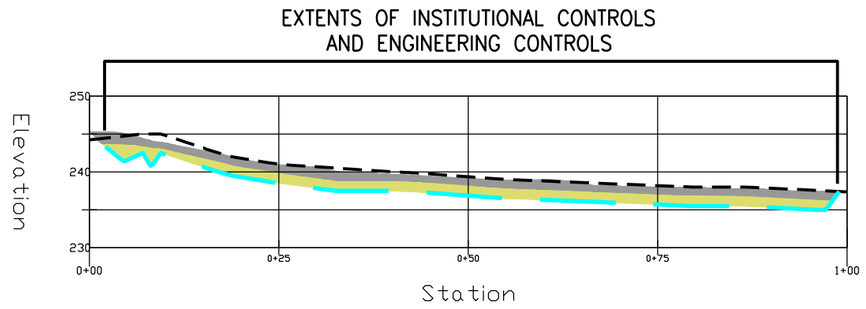
TYPICAL ISOLATION CAP

LEGEND:

APPROXIMATE ORIGINAL RIVER SEDIMENT SURFACE

APPROXIMATE EXTENTS OF SEDIMENT REMOVAL

APPROXIMATE ISOLATION CAP GRADE
-EROSION PROTECTION/HABITAT LAYER
-CHEMICAL ISOLATION LAYER



AOC2-A
3.4

AOC2-A TYPICAL PROFILE VIEW

NOTES:

1. ELEVATIONS SHOWN ARE FROM THE WHITE LAKE DOCK AND DREDGE POST-CAP BATHYMETRIC SURVEY DATED OCTOBER 18, 2021.

20 10 0 20 40

SCALE: 1"=20'

FIGURE 3.5

NEW YORK STATE Department of Environmental Conservation

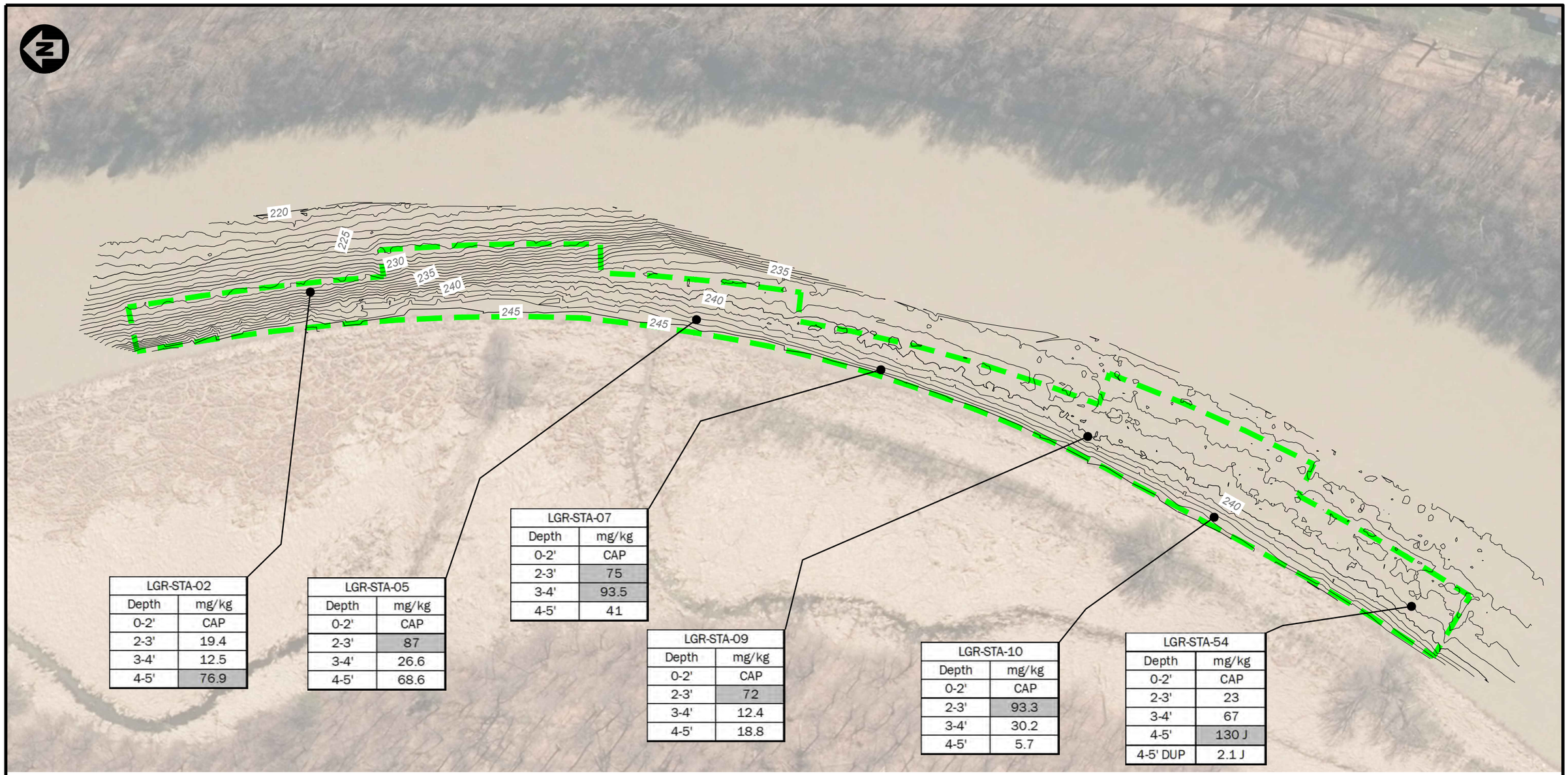
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AS-BUILT CAP SECTIONS
AOC 2

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2023 PERIODIC REV RPT\453233-2023-PRR-IC-BOUNDARIES.DWG
PLOT DATE: 11/22/2023 2:02 PM PLOTTED BY: RUSSO, JILL [US-US]



LGR-STA-02	
Depth	mg/kg
0-2'	CAP
2-3'	19.4
3-4'	12.5
4-5'	76.9

LGR-STA-05	
Depth	mg/kg
0-2'	CAP
2-3'	87
3-4'	26.6
4-5'	68.6

LGR-STA-07	
Depth	mg/kg
0-2'	CAP
2-3'	75
3-4'	93.5
4-5'	41

LGR-STA-09	
Depth	mg/kg
0-2'	CAP
2-3'	72
3-4'	12.4
4-5'	18.8

LGR-STA-10	
Depth	mg/kg
0-2'	CAP
2-3'	93.3
3-4'	30.2
4-5'	5.7

LGR-STA-54	
Depth	mg/kg
0-2'	CAP
2-3'	23
3-4'	67
4-5'	130 J
4-5' DUP	2.1 J

NOTES:

1. SAMPLE RESULTS ARE TOTAL SILVER CONCENTRATION. SHADING IN GRAY INDICATES AN EXCEEDANCE OF THE SITE SPECIFIC TOXICITY ACTION LEVEL OF 70 MG/KG SILVER.
2. J-ESTIMATE ABOVE THE METHOD DETECTION LIMITS AND BELOW THE ADJUSTED REPORTING LIMIT.
3. CONTOURS SHOWN ARE FROM THE WHITE LAKE DOCK AND DREDGE POST-CAP BATHYMETRIC SURVEY DATED OCTOBER 18, 2021.

LEGEND:

- SAMPLE LOCATIONS
- AOC 2 BOUNDARY

100 50 0 100 200

SCALE: 1"=100'

FIGURE 3.6

NEW YORK STATE Department of Environmental Conservation

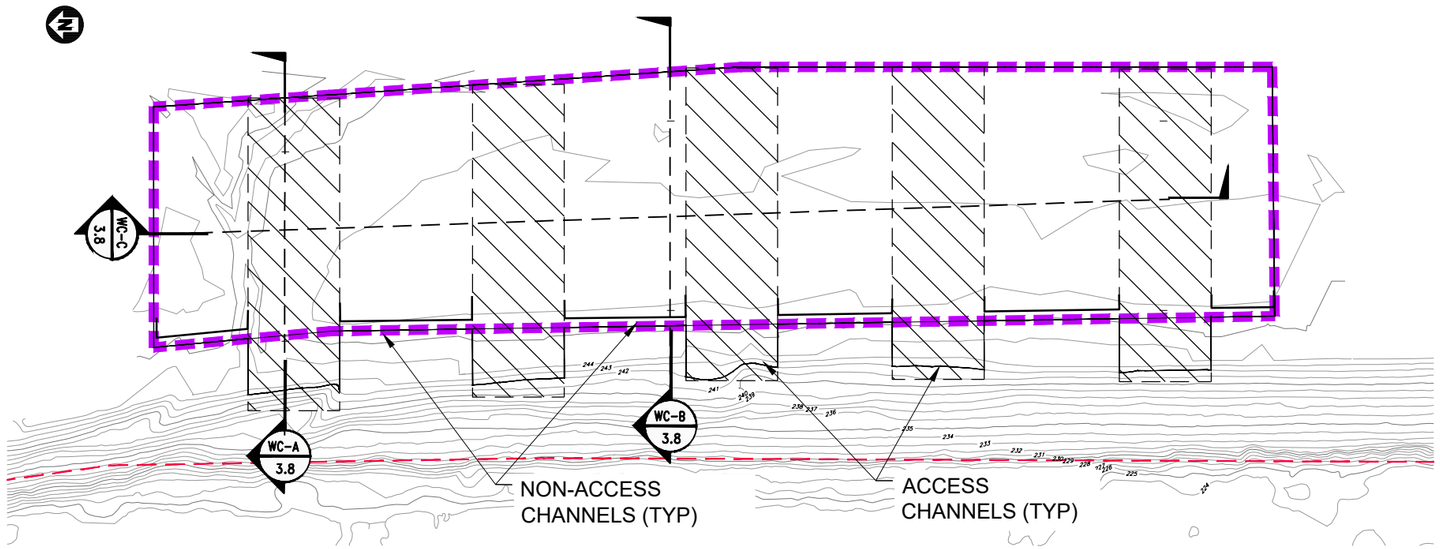
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

REMAINING SEDIMENT SAMPLE EXCEDANCES
AOC 2

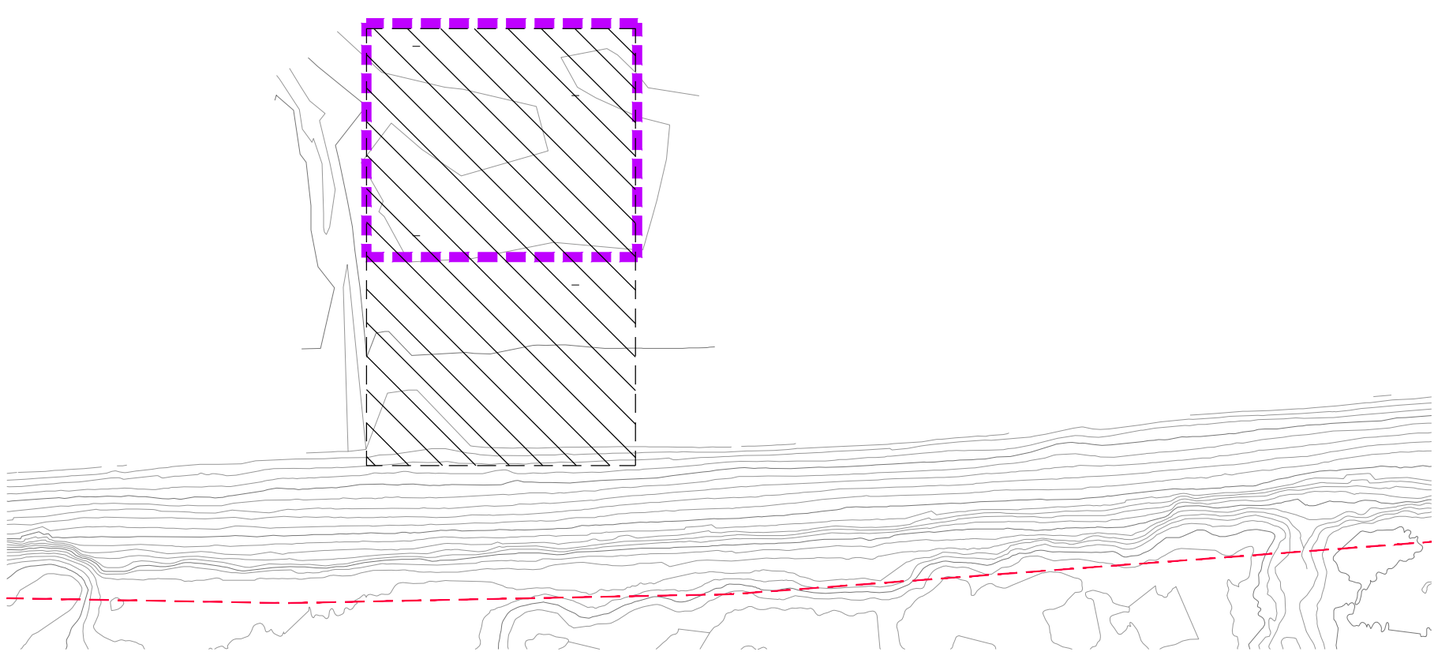
PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2023 PERIODIC REV RPT\453233-2023-PRR-REMAINING.DWG
PLOT DATE: 11/27/2023 8:46 AM PLOTTED BY: RUSSO, JILL [US-US]



WETLAND C AREA NORTH

SCALE: 1"=40'-0"



WETLAND C AREA SOUTH

SCALE: 1"=40'-0"

LEGEND:

REMEDIATED PORTION OF WETLAND C

FINAL GRADE

NAVIGATIONAL CHANNEL

ACCESS CHANNEL

NOTE:

1. CONTOURS SHOWN ARE FROM THE WHITE LAKE DOCK AND DREDGE POST-CAP BATHYMETRIC SURVEY DATED OCTOBER 18, 2021.

80 40 0 80 160

SCALE: 1"=80'

FIGURE 3.7

NEW YORK STATE Department of Environmental Conservation

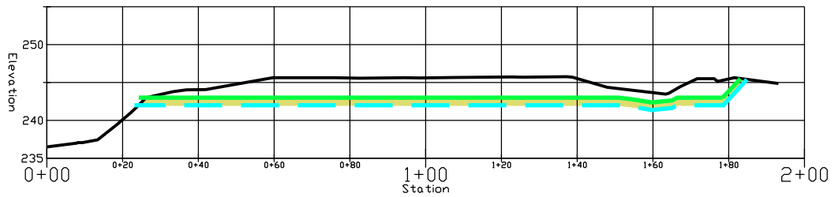
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AS-BUILT PLAN
WETLAND C

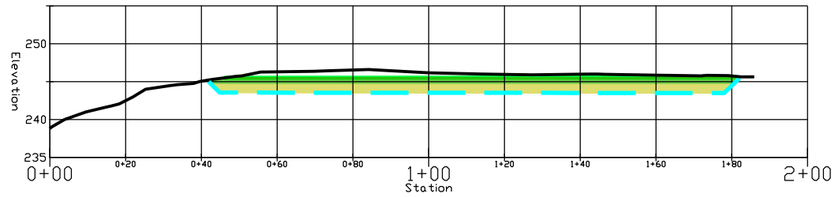
PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2022 PERIODIC REV.RPT\453233-2022-PRR-CHANNEL.DWG
PLOT DATE: 11/22/2023 3:07 PM PLOTTED BY: RUSSO, JILL [US-US]



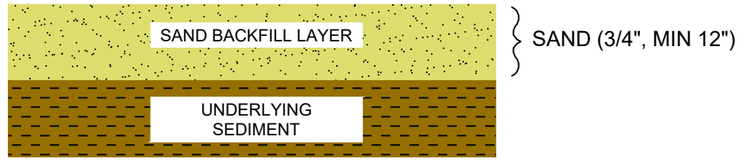
WETLAND C NORTH - CROSS SECTION A AT ACCESS CHANNEL

WA-A 3.7

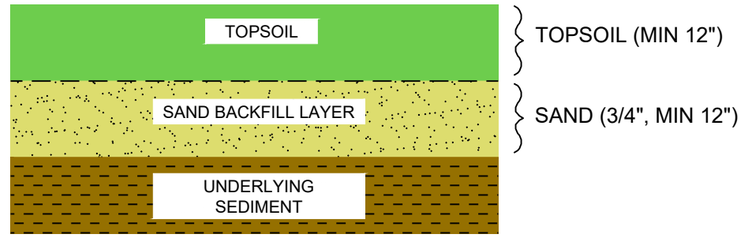


WETLAND C NORTH - CROSS SECTION B AT NON-ACCESS CHANNEL

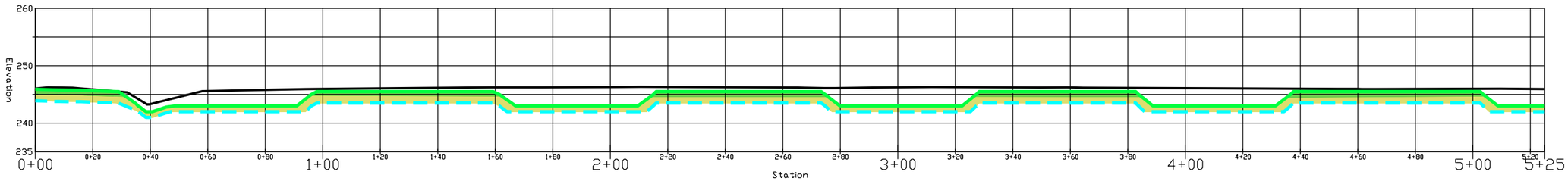
WA-B 3.7



TYPICAL BACKFILL SECTION AT ACCESS CHANNEL



TYPICAL BACKFILL SECTION AT NON-ACCESS CHANNEL



WETLAND C SOUTH - CROSS SECTION C

WA-C 3.7

LEGEND:

- APPROXIMATE ORIGINAL GRADE
- POST DREDGING GRADE
- APPROXIMATE BACKFILL GRADE
- TOPSOIL LAYER
- SAND BACKFILL LAYER

FIGURE 3.8

NEW YORK STATE Department of Environmental Conservation

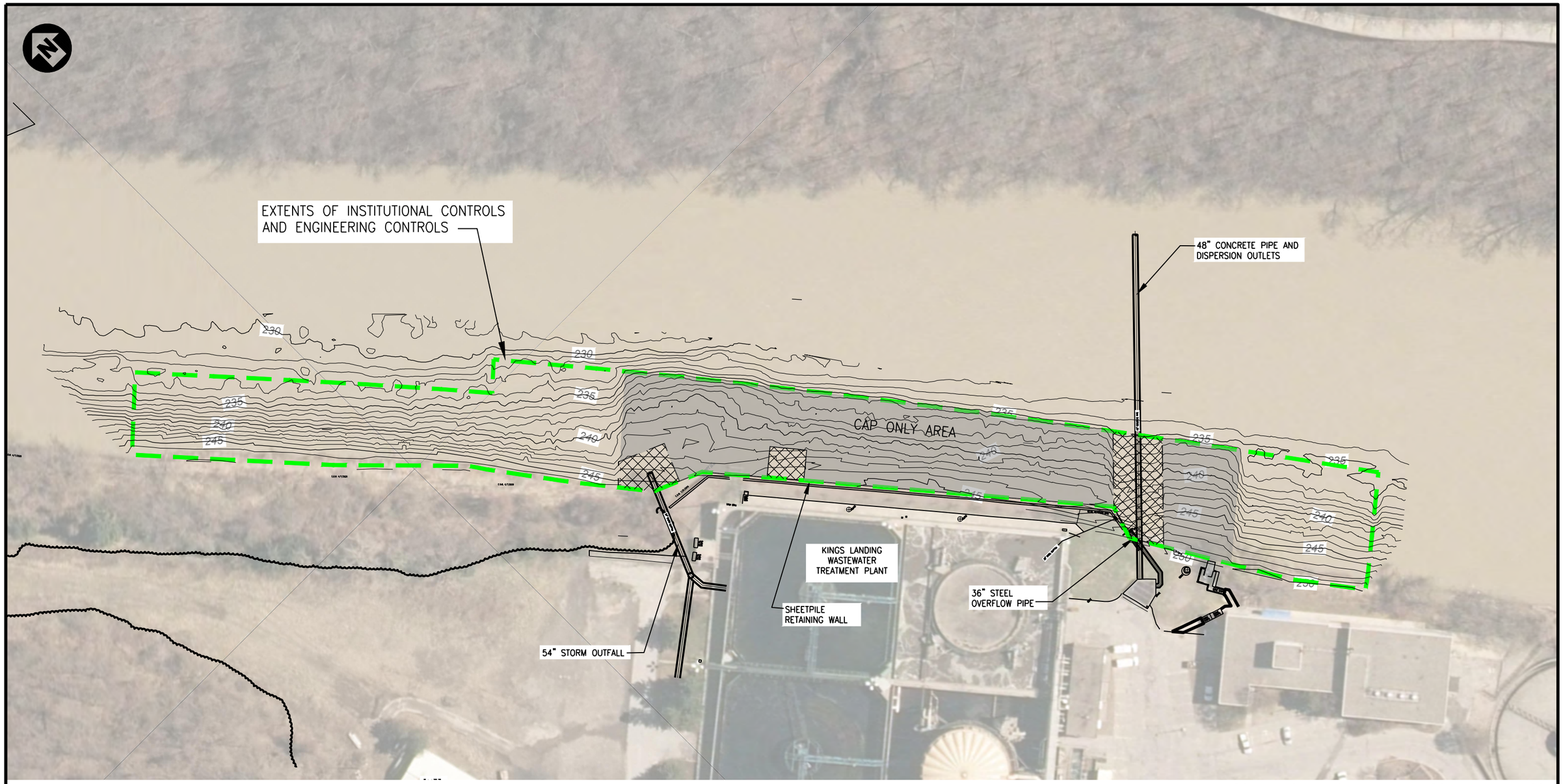
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AS-BUILT SECTIONS
WETLAND C

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2022 PERIODIC REV.RPT\453233-2022-PRR-WETC.DWG
PLOT DATE: 10/9/2023 11:14 AM PLOTTED BY: RUSSO, JILL [US-US]



80 40 0 80 160

SCALE: 1"=80'

LEGEND:

AOC 1 BOUNDARY

NO CAP ZONE

NOTES:

1. CONTOURS SHOWN ARE FROM THE WHITE LAKE DOCK AND DREDGE POST-CAP BATHYMETRIC SURVEY DATED OCTOBER 7, 2021.

FIGURE 4.1

NEW YORK STATE Department of Environmental Conservation

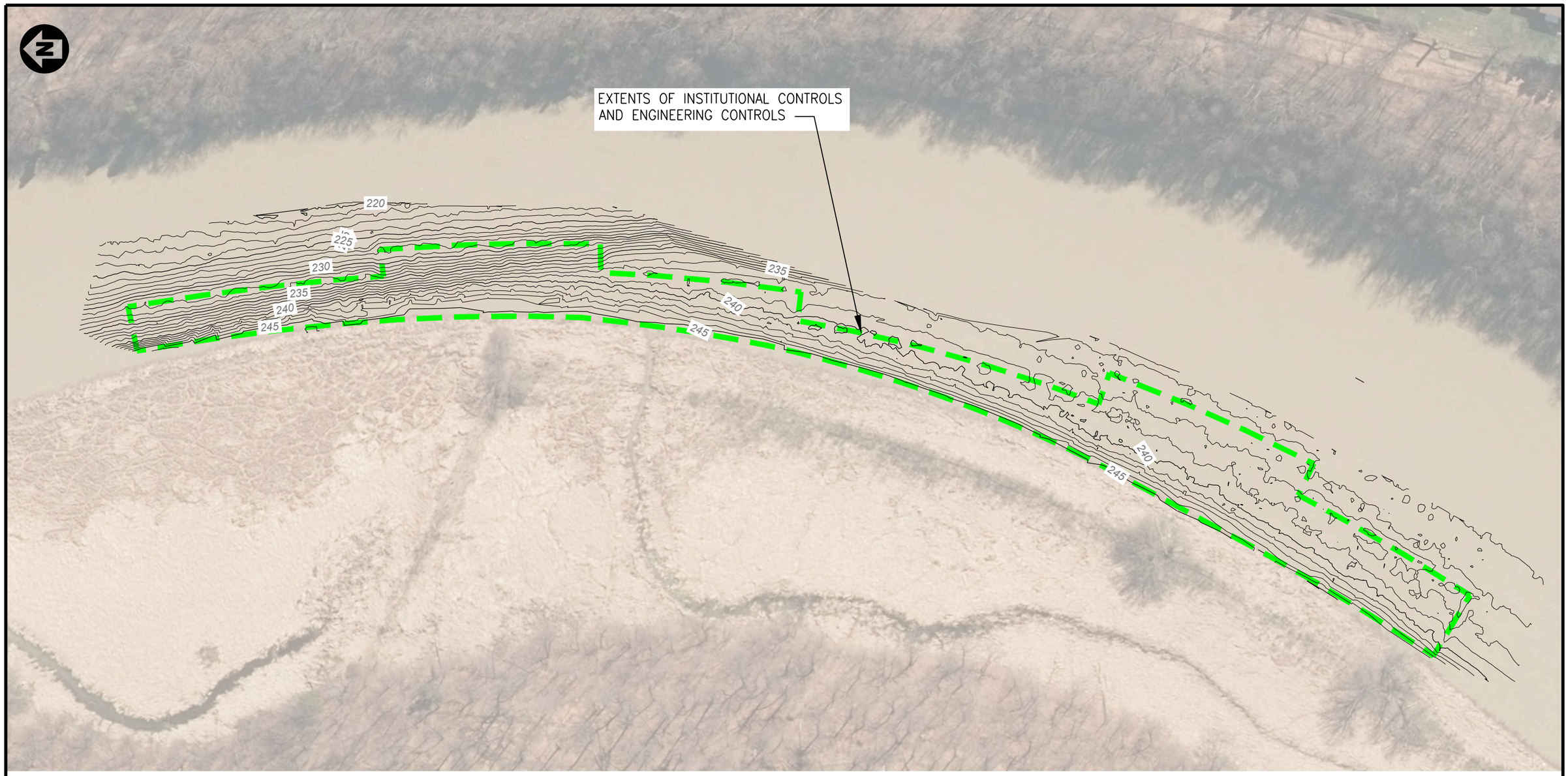
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

IC BOUNDARIES AND EC PLAN VIEW
AOC 1

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2022 PERIODIC REV.RPT\453233-2022-PRR-IC-BOUNDARIES.DWG
PLOT DATE: 4/20/2023 5:03 PM PLOTTED BY: RUSSO, JILL [US-US]



LEGEND:

AOC 2 BOUNDARY

100 50 0 100 200

SCALE: 1"=100'

NOTES:

1. CONTOURS SHOWN ARE FROM THE WHITE LAKE DOCK AND DREDGE POST-CAP BATHYMETRIC SURVEY DATED OCTOBER 18, 2021.

FIGURE 4.2

Department of Environmental Conservation

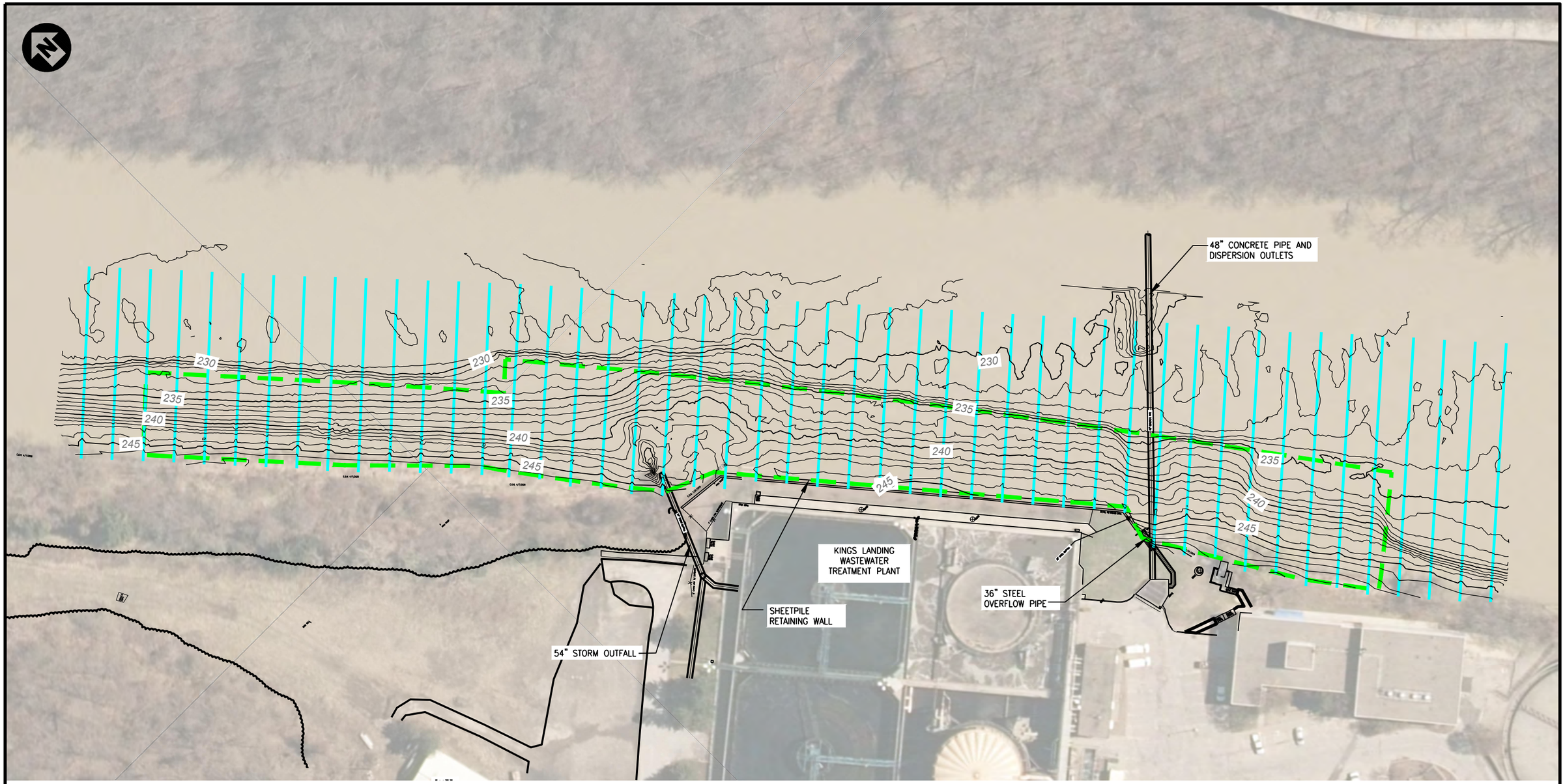
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

IC BOUNDARIES AND EC PLAN VIEW
AOC 2

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2022 PERIODIC REV.RPT\453233-2022-PRR-IC-BOUNDARIES.DWG
PLOT DATE: 4/20/2023 5:03 PM PLOTTED BY: RUSSO, JILL [US-US]



80 40 0 80 160

SCALE: 1"=80'

LEGEND:

AOC 1 BOUNDARY

SITE COVER MONITORING TRANSECT LOCATION

NOTES:

1. CONTOURS SHOWN ARE FROM THE THEW ASSOCIATES LAND SURVEYORS BATHYMETRIC SURVEY COLLECTED AUGUST 29 AND 30, 2023.

FIGURE 5.1

NEW YORK STATE Department of Environmental Conservation

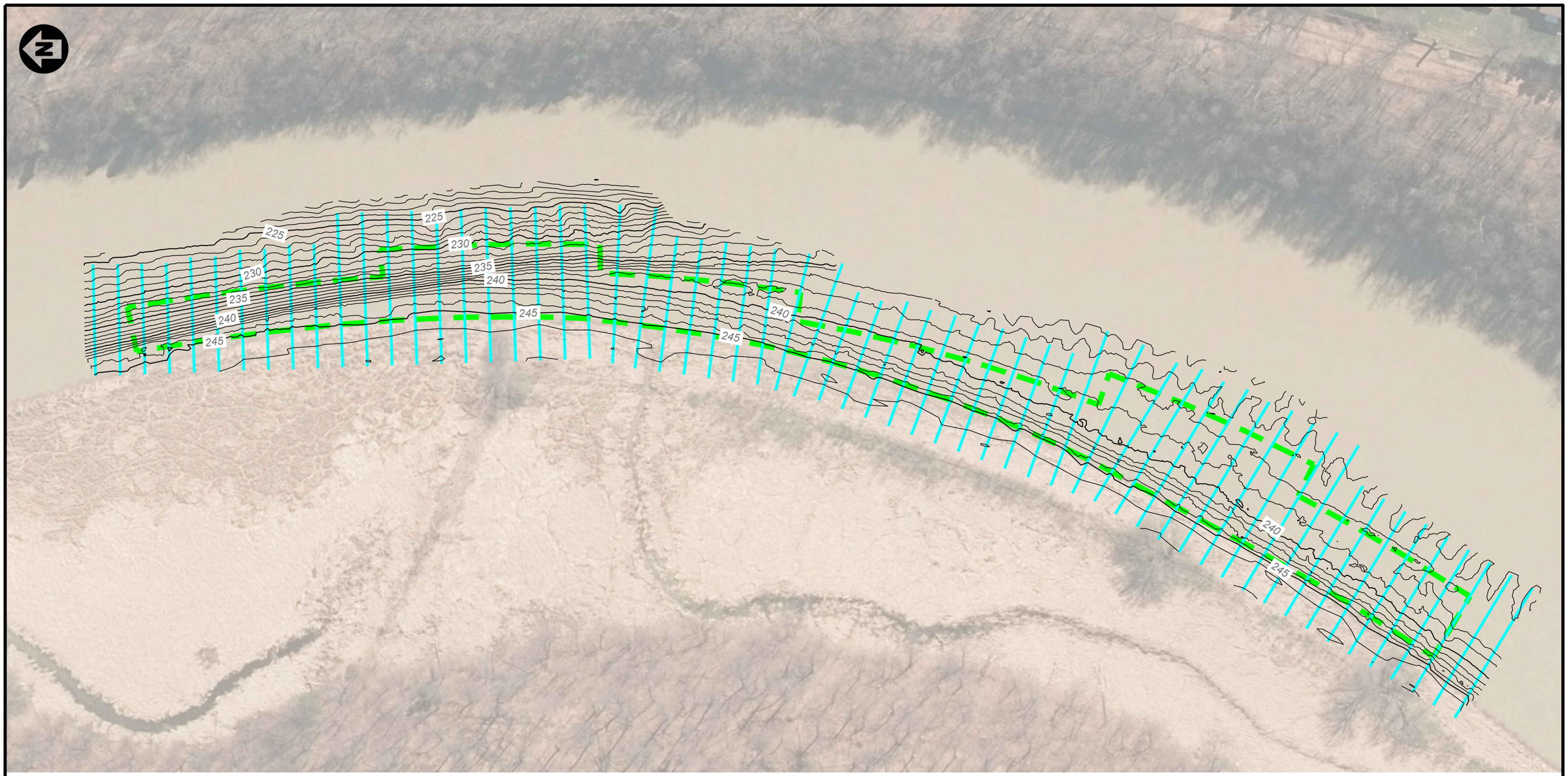
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

ISOLATION COVER 2023 MONITORING TRANSECT LOCATIONS AOC 1

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2023 PERIODIC REV RPT\453233-2023-PRR-SITE COVER-TRANSECT.DWG
PLOT DATE: 10/10/2023 12:52 PM PLOTTED BY: RUSSO, JILL [US-US]



LEGEND:

AOC 2 BOUNDARY

SITE COVER MONITORING TRANSECT LOCATION

100 50 0 100 200

SCALE: 1"=100'

NOTES:

1. CONTOURS SHOWN ARE FROM THE THEW ASSOCIATES LAND SURVEYORS BATHYMETRIC SURVEY COLLECTED AUGUST 29 AND 30, 2023.

FIGURE 5.2

NEW YORK STATE Department of Environmental Conservation

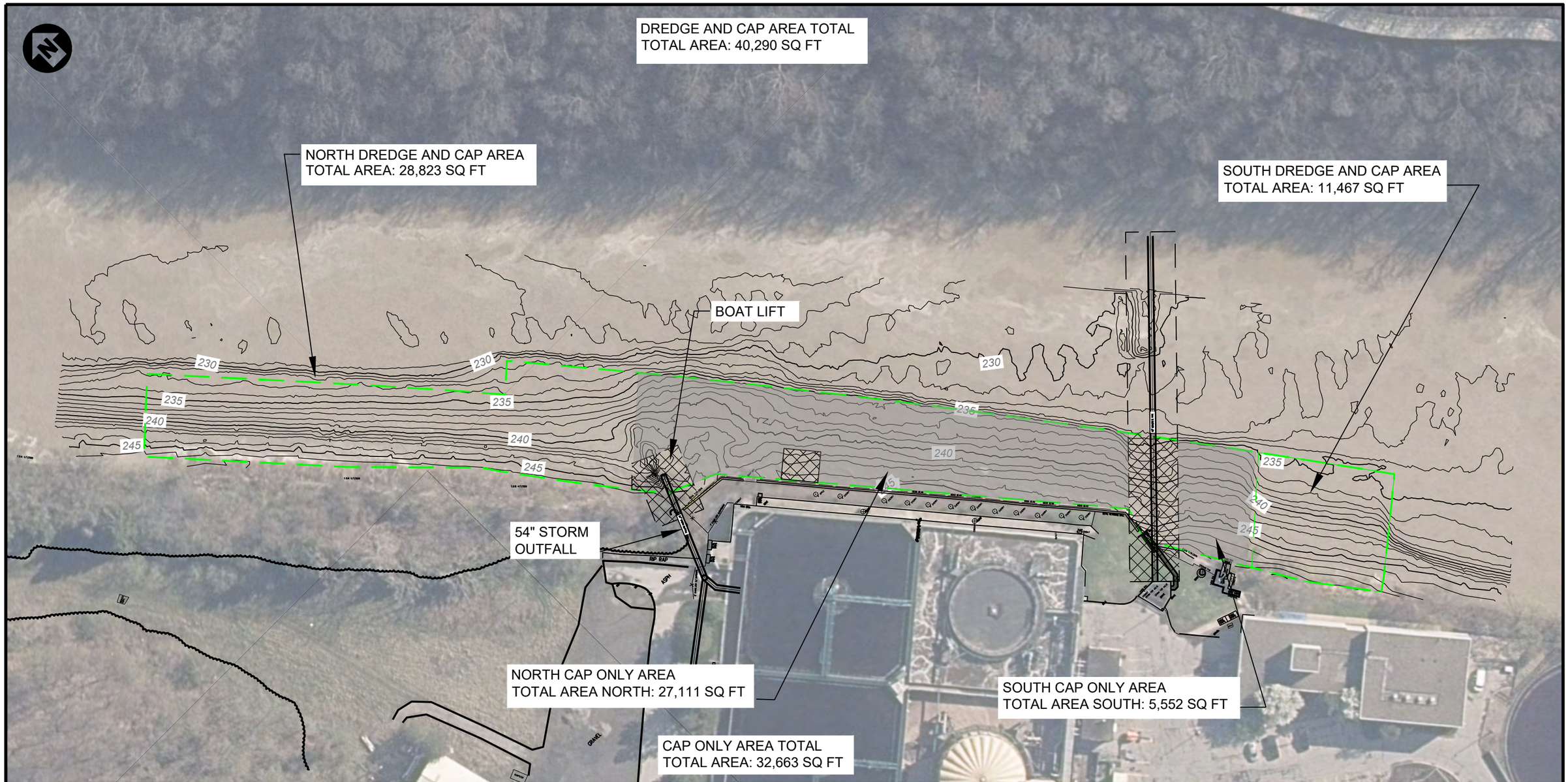
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

ISOLATION COVER 2023 MONITORING TRANSECT LOCATIONS AOC 2

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2023 PERIODIC REV RPT\453233-2023-PRR-SITE COVER-TRANSECT.DWG
PLOT DATE: 10/10/2023 12:52 PM PLOTTED BY: RUSSO, JILL [US-US]



80 40 0 80 160

SCALE: 1"=80'

LEGEND:

- EXISTING BATHYMETRY (SEE NOTE 1)
- AOC 1 BOUNDARY
- NO DREDGING OR CAPPING AREA
- NO DREDGING/ CAP ONLY AREA

NOTES:

1. CONTOURS SHOWN ARE FROM THE THEW ASSOCIATES LAND SURVEYORS BATHYMETRIC SURVEY COLLECTED AUGUST 29 AND 30, 2023.

FIGURE 5.3

NEW YORK STATE Department of Environmental Conservation

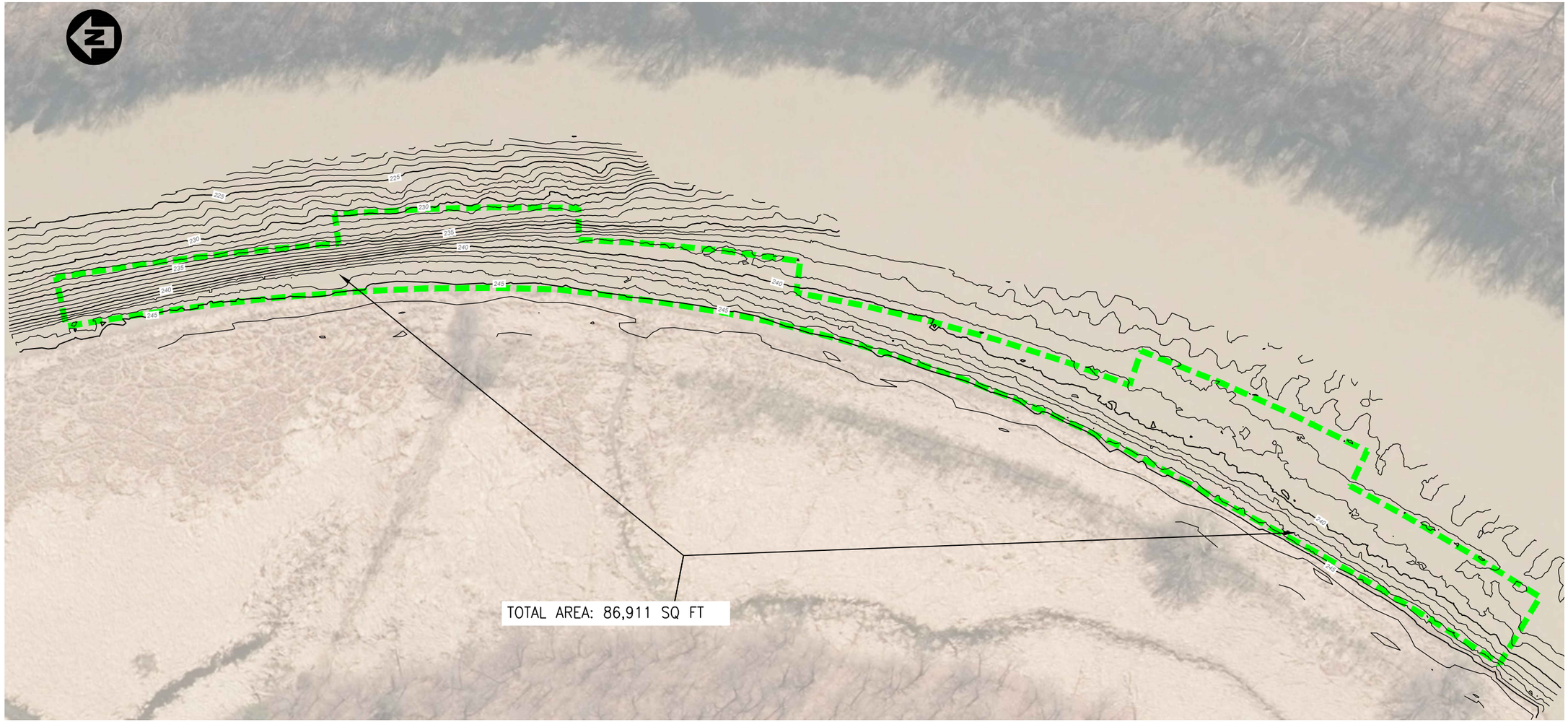
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

2023 BATHYMETRIC SURVEY RESULTS
AOC 1

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2023 PERIODIC REV RPT\453233-2023-PRR-AOC1- 6-INCH COMPARISON.DWG
PLOT DATE: 12/4/2023 1:36 PM PLOTTED BY: RUSSO, JILL [US-US]



LEGEND:

AOC 2 BOUNDARY

50 25 0 50 100

SCALE: 1"=50'

NOTES:

1. CONTOURS SHOWN ARE FROM THE THEW ASSOCIATES LAND SURVEYORS BATHYMETRIC SURVEY COLLECTED AUGUST 29 AND 30, 2023.

FIGURE 5.4

NEW YORK STATE Department of Environmental Conservation

2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

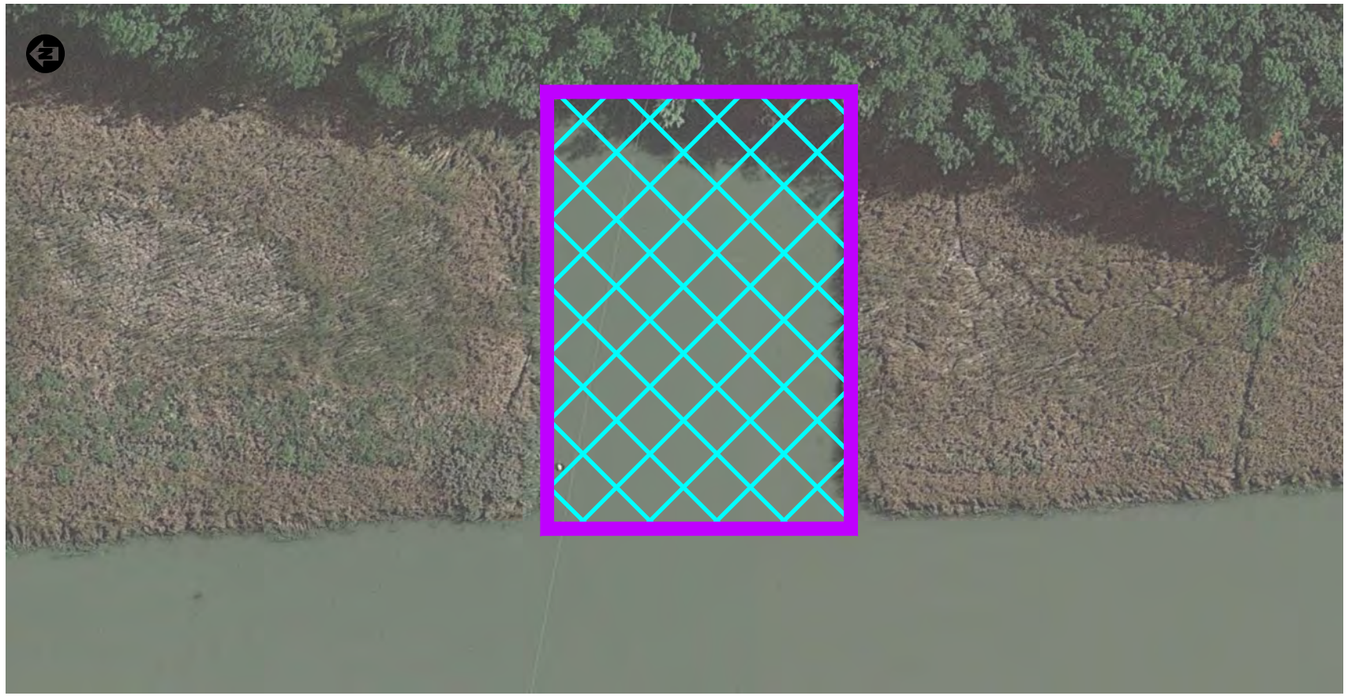
LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

2023 BATHYMETRIC SURVEY RESULTS
AOC 2

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2023 PERIODIC REV RPT\453233-2023-PRR-AOC2-6-INCH-THEW.DWG
PLOT DATE: 11/22/2023 4:28 PM PLOTTED BY: RUSSO, JILL [US-US]

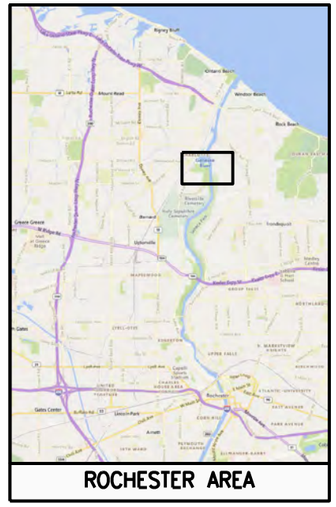
WETLAND C NORTH



WETLAND C SOUTH

LEGEND:

- WETLAND C RESTORATION AREA
- EMERGENT WETLAND COMMUNITY
- FLOATING AQUATIC/SUBMERGED AQUATIC WETLAND COMMUNITY



ROCHESTER AREA

80 40 0 80 160

SCALE: 1"=80'

FIGURE 5.5

NEW YORK STATE Department of Environmental Conservation

2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

WETLAND COMMUNITY TYPES BASED ON 2023 MONITORING WETLAND C

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2022 PERIODIC REV.RPT\453233-2022-PRR-WETLAND COMMUNITY.DWG
PLOT DATE: 10/9/2023 11:13 AM PLOTTED BY: RUSSO, JILL [US-US]

APPENDIX A IC/EC CERTIFICATION FORM

Enclosure 1
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. 828177

Site Name Eastman Kodak Co.- Eastman Business Park OU-5 Lower Genesee River

Site Address: 1669 Lake Avenue Zip Code: 14615
City/Town: Rochester
County: Monroe
Site Acreage: 6.5 Acres

Reporting Period: January 1, 2023 through December 31, 2023

	YES	NO
1. Is the information above correct?	x	❑
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? **N/A**	❑	x
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	❑	x
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	❑	x
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	❑	x

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below?	x	❑
Passive Recreation		
7. Are all ICs in place and functioning as designed? (Admin Controls Only)	x	❑

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	❑	x

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? **N/A** (The Qualitative Exposure Assessment must be certified every five years)	❑	❑

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. 828177 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
AOC-1; AOC2; Wetland C	NYSDEC (Trustee) - State of NY	Administrative Controls

Note: IC is administered through the Region 8 Division of Environmental Permits under consult with Division of Environmental Remediation. No permits were reviewed or issued during this reporting period.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
AOC-01	**Sediment CAP**

The engineering controls are limited to an engineered cap. Monitoring is performed by the Eastman Business Park Environmental Trust, administered by the NYSDEC, as a consequence of the Kodak bankruptcy settlement.

AOC-02	**Sediment CAP**

The engineering controls are limited to an engineered cap. Monitoring is performed by the Eastman Business Park Environmental Trust, administered by the NYSDEC, as a consequence of the Kodak bankruptcy settlement.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted

engineering practices; and the information presented is accurate and compete.

YES	NO
x	❑

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
x	❑

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATION
SITE NO. 828177

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I, Edward C. Glaza, P.E., at 301 Plainfield Road, Suite 350, Syracuse, NY 13212, am certifying as a Designated Representative for the NYSDEC for the Site named in the Site Details Section of this form.

Edward C Glaze
Signature of Designated Representative for the NYSDEC

1/10/24
Date

EC CERTIFICATIONS

Box 7

Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I, Edward C. Glaza, P.E., at 301 Plainfield Road, Suite 350, Syracuse, NY 13212, am certifying as a Designated Representative for the NYSDEC.

Edward Glaza

Signature of Designated Representative for the NYSDEC

Stamp

1/10/24

Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
   Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
   B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
   C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
   1. whether all requirements of each plan were met during the reporting period
   2. any requirements not met
   3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals
   1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
   2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation
625 Broadway, 11th Floor, Albany, NY 12233-7020
P: (518)402-9543 | F: (518)402-9547
www.dec.ny.gov

2/22/2023

Lisa Gorton
Project Manager
NYSDEC
625 Broadway
Albany, NY 12233
lisa.gorton@dec.ny.gov

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: Eastman Kodak Co.- Eastman Business Park
Site No.: 828177
Site Address: 1669 Lake Avenue
Rochester, NY 14615

Dear Lisa Gorton:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site-specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **January 18, 2024**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, must be submitted in electronic format to the Department of Environmental Conservation. The required format for documents is an Adobe PDF file with optical character recognition and no password protection. Data must be submitted as an electronic data deliverable (EDD) according to the instructions on the following webpage:

https://www.dec.ny.gov/chemical/62440.html

Documents may be submitted to the project manager either through electronic mail or by using the Department's file transfer service at the following webpage:

https://fts.dec.state.ny.us/fts/

The Department will not approve the PRR unless all documents and data generated in support of the PRR have been submitted using the required formats and protocols.

You may contact Lisa Gorton, the Project Manager, at 518-402-9574 or lisa.gorton@dec.ny.gov with any questions or concerns about the site. Please notify the project manager before conducting inspections or field work. You may also write to the project manager at the following address:

New York State Department of Environmental Conservation
Division of Environmental Remediation, BURE
625 Broadway

Albany, NY 12233-7017

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

ec: w/ enclosures

ec: w/ enclosures
Lisa Gorton, Project Manager
Benjamin Rung, Section Chief
David Pratt, Hazardous Waste Remediation Supervisor, Region 8

The following parcel owner did not receive an ec:
Kodak - Parcel Owner
Lidestri Properties Management Llc - Parcel Owner

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7**):**

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.

- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **828177**

Site Name Eastman Kodak Co.- Eastman Business Park

Site Address: 1669 Lake Avenue Zip Code: 14615
City/Town: Rochester
County: Monroe
Site Acreage: 940.000

Reporting Period: January 13, 2020 to December 19, 2023

	YES	NO
1. Is the information above correct?	❑	❑
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	❑	❑
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	❑	❑
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	❑	❑
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	❑	❑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below?	❑	❑
7. Are all ICs in place and functioning as designed?	❑	❑

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____
Signature of Owner, Remedial Party or Designated Representative Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	❑	❑

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	❑	❑

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. 828177 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
089.04-1-3.2	LiDestri Properties Management LLC	Ground Water Use Restriction Landuse Restriction Site Management Plan

An environmental easement has been filed on the property. Use is restricted to commercial. A site management plan has been prepared for the property. There are two levels of controls, general requirements for the full property, and enhanced controls for a defined subarea of the property where more stringent/restrictive controls are required due to presence of remaining contamination.

090.36-1-30.2	Kodak	Ground Water Use Restriction Landuse Restriction Site Management Plan

An environmental easement was filed on the property in May 2017 due to residual petroleum related contamination. A basic site management plan specific to the easement controlled area is in place. Note that the controlled area is a small portion of the tax parcel, not the whole parcel. Kodak as owner is responsible for ensuring property use is compliant with easement, and that access/non-interference with monitoring wells is maintained.

090.36-1-39	Kodak	Ground Water Use Restriction Landuse Restriction Site Management Plan

An environmental easement was filed on the property in May 2017 due to residual petroleum related contamination. A basic site management plan specific to the easement controlled area is in place. Kodak as owner is responsible for ensuring property use is compliant with easement, and that access/non-interference with monitoring wells is maintained.

090.54-1-4	LiDestri Properties Management LLC	Ground Water Use Restriction Landuse Restriction Site Management Plan

An environmental easement has been filed on the property. Use is restricted to commercial. A site management plan has been prepared for the property. There are two levels of controls, general requirements for the full property, and enhanced controls for a defined subarea of the property where more stringent/restrictive controls are required due to presence of remaining contamination.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
090.36-1-30.2	Monitoring Wells
The engineering controls are limited to monitoring wells at the site. Monitoring is performed by the Eastman Business Park Environmental Trust, administered by the NYSDEC, as a consequence of the Kodak bankruptcy settlement.	
090.36-1-39	Monitoring Wells
The engineering controls are limited to monitoring wells at the site. Monitoring is performed by the Eastman Business Park Environmental Trust, administered by the NYSDEC, as a consequence of the Kodak bankruptcy settlement.	

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
□	❑

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
□	❑

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 828177

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I_____at_____,
print name print business address

am certifying as_____(Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

_____ _____
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification Date

EC CERTIFICATIONS

Box 7

Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I_____at_____,
print name print business address

am certifying as a for the _____
(Owner or Remedial Party)

_____ _____ _____
Signature of , for the Owner or Remedial Party, Rendering Certification | Stamp (Required for PE) | Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
   Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
   B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
   C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
   1. whether all requirements of each plan were met during the reporting period
   2. any requirements not met
   3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals
   1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
   2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

APPENDIX B WETLAND C MONITORING

APPENDIX B1 AERIAL PHOTOGRAPHS

Aerial Photographs

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Date: October 3, 2023

Area: Wetland C South (foreground) and Wetland C North (in distance)

Date: October 3, 2023

Area: Wetland C North (foreground) and Wetland C South (in distance)

Aerial Photographs

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Date: October 3, 2023

Area: Wetland C South

Date: October 3, 2023

Area: Wetland C North

Aerial Photographs

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

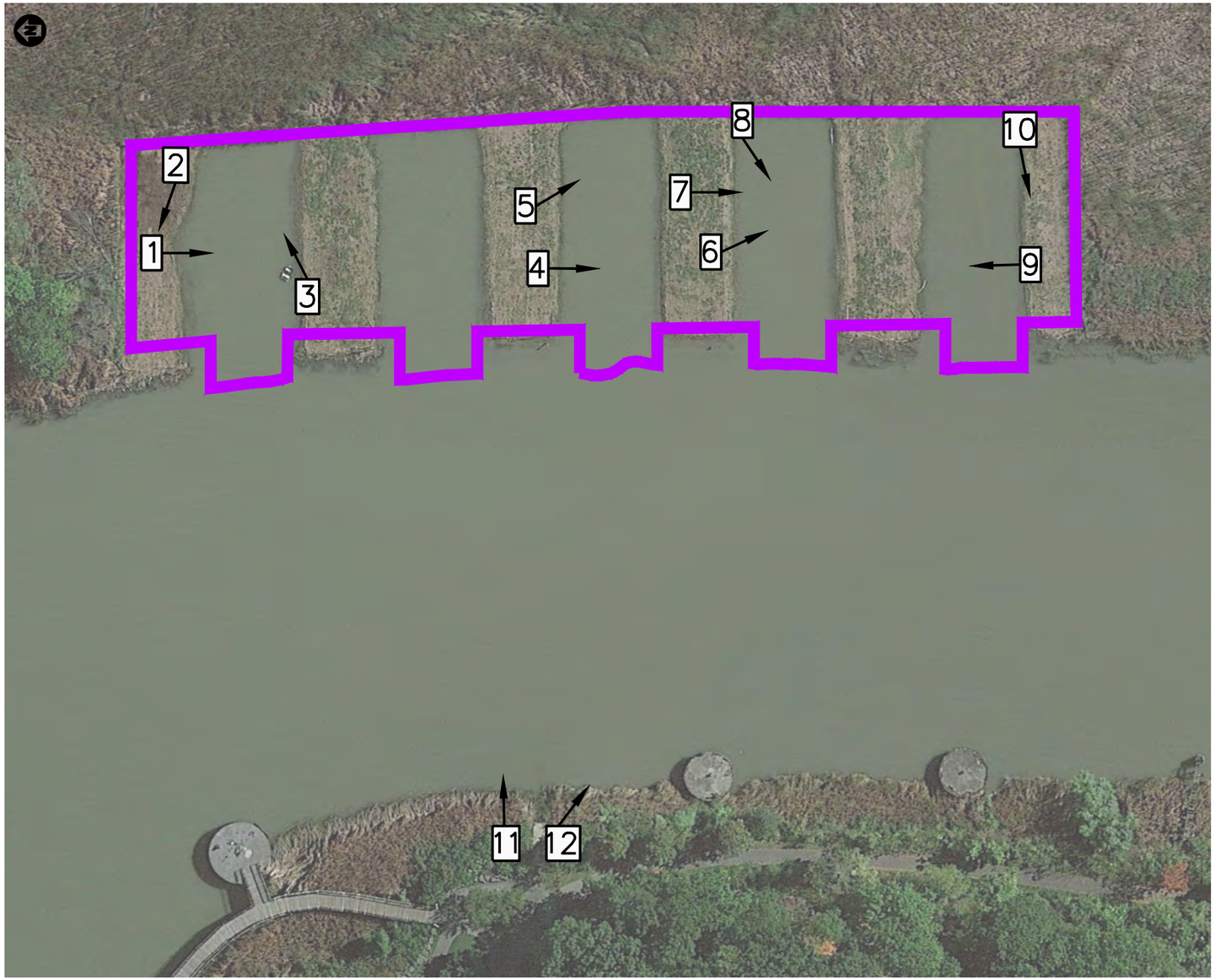
Date: October 3, 2023

Area: Wetland C North (southern portion)

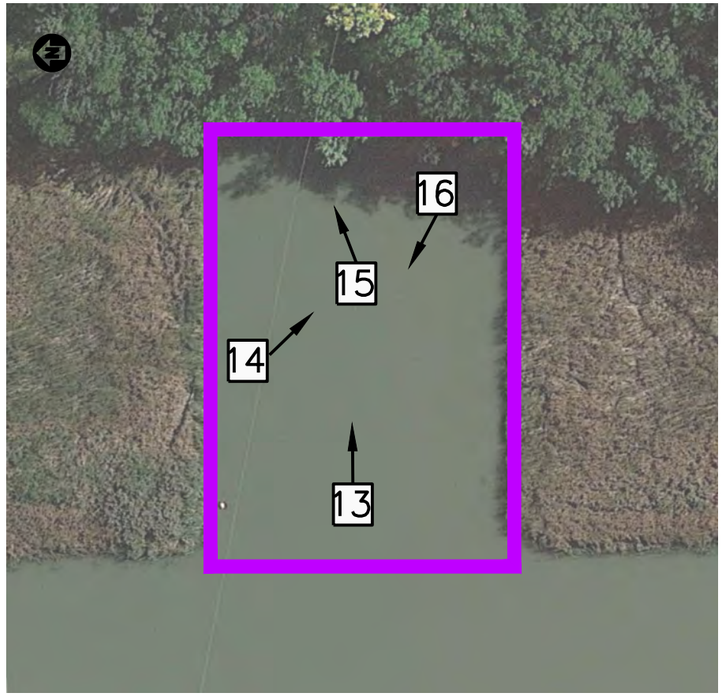
Date: October 3, 2023

Area: Wetland C North (northern portion)

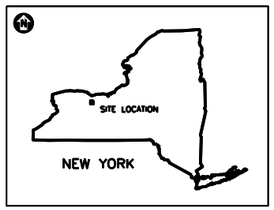
APPENDIX B2 PERMANENT LOCATIONS PHOTOGRAPHIC LOG

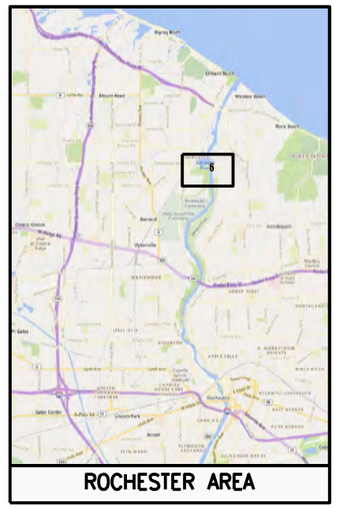


WETLAND C NORTH



WETLAND C SOUTH





ROCHESTER AREA

LEGEND:

WETLAND C RESTORATION AREA

9 PERMANENT PHOTO LOCATION AND DIRECTION

80 40 0 80 160

SCALE: 1"=80'

FIGURE B1

NEW YORK STATE Department of Environmental Conservation

2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

WETLAND C
PERMANENT PHOTO LOCATIONS

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2023 PERIODIC REV RPT\4536233-PRR-VEG-2023.DWG
PLOT DATE: 12/4/2023 3:01 PM PLOTTED BY: RUSSO, JILL [US-US]

Permanent Locations Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Photograph Location 1

Area: Wetland C North

Description: Photograph location 2

Area: Wetland C North

Permanent Locations Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Photograph location 3

Area: Wetland C North

Description: Photograph location 4

Area: Wetland C North

Permanent Locations Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Photograph location 5

Area: Wetland C North

Description: Photograph location 6

Area: Wetland C North

Permanent Locations Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Photograph location 7

Area: Wetland C North

Description: Photograph location 8

Area: Wetland C North

Permanent Locations Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Photograph location 9

Area: Wetland C North

Description: Photograph location 10

Area: Wetland C North

Permanent Locations Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Photograph location 11

Area: Wetland C North

Description: Photograph location 12

Area: Wetland C North

Permanent Locations Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Photograph location 13

Area: Wetland C South

Description: Photograph location 14

Area: Wetland C South

Permanent Locations Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

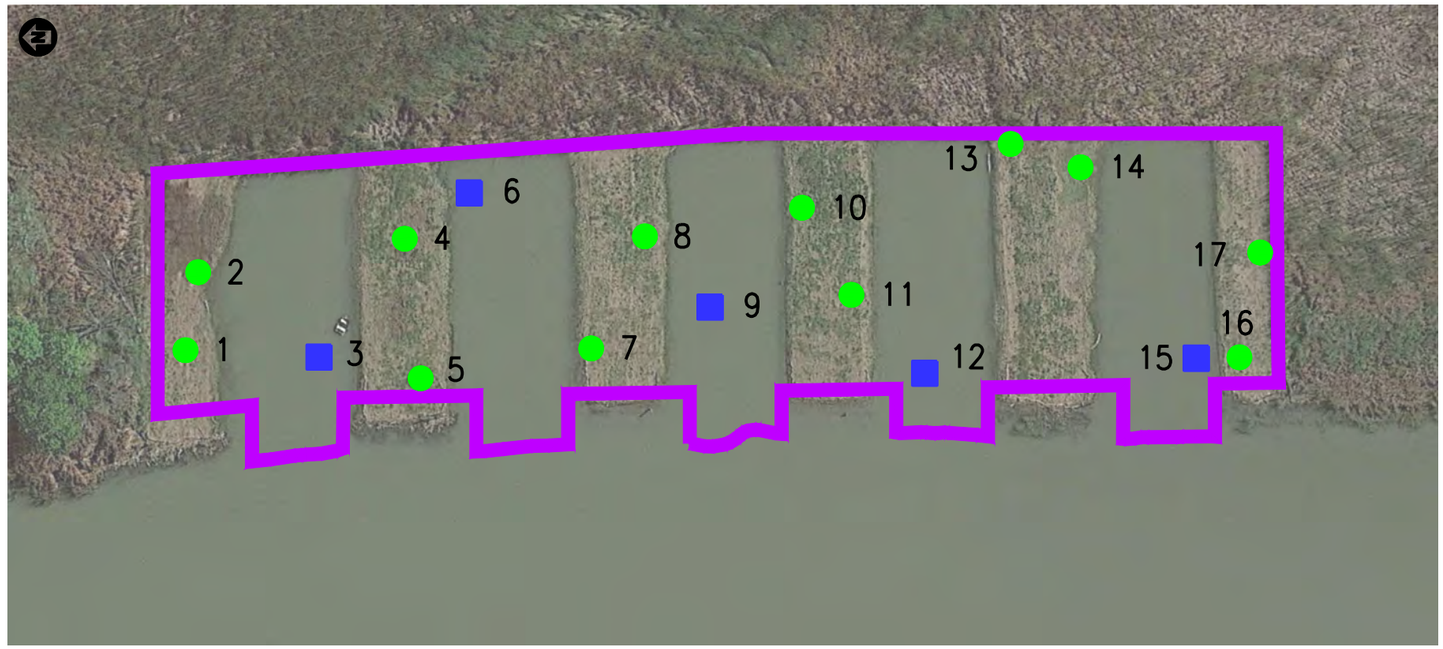
Description: Photograph location 15

Area: Wetland C South

Description: Photograph location 16

Area: Wetland C South

APPENDIX B3 VEGETATION MONITORING STATION PHOTOGRAPH LOG

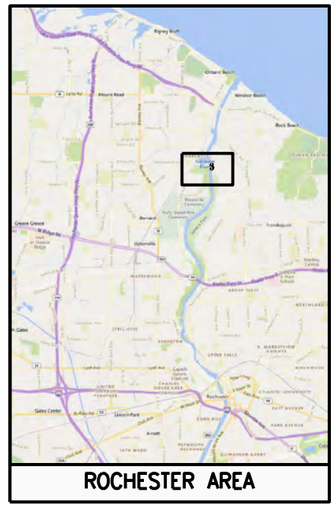


WETLAND C NORTH

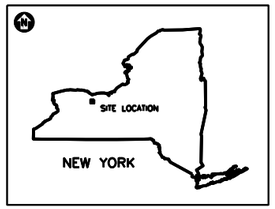
WETLAND C SOUTH

LEGEND:

- WETLAND C RESTORATION AREA
- FLOATING AQUATIC/SUBMERGE AQUATIC ZONE VEGETATION MONITORING STATION AND PHOTO LOCATION
- EMERGENT PLANTING ZONE VEGETATION MONITORING STATION AND PHOTO LOCATION



ROCHESTER AREA



80 40 0 80 160

SCALE: 1"=80'

FIGURE B2

NEW YORK STATE Department of Environmental Conservation

2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

WETLAND C VEGETATION MONITORING STATION AND PHOTO LOCATION

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2023 PERIODIC REV RPT\4536233-PRR-VEG-2023.DWG
PLOT DATE: 12/4/2023 3:01 PM PLOTTED BY: RUSSO, JILL [US-US]

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 1

Area: Wetland C North, Emergent Planting Zone

Description: Monitoring Station 2

Area: Wetland C North, Emergent Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 2 - Native yellow pond-lily (*Nuphar lutea*) and long-leaf pondweed (*Potamogeton nodosus*)

Area: Wetland C North, Emergent Planting Zone

Description: Monitoring Station 3

Area: Wetland C North, Floating Aquatic/Submerged Aquatic Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 4

Area: Wetland C North, Emergent Planting Zone

Description: Monitoring Station 4 – Native yellow pond-lily (*Nuphar lutea*)

Area: Wetland C North, Emergent Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 5

Area: Wetland C North, Emergent Planting Zone

Description: Monitoring Station 6

Area: Wetland C North, Floating Aquatic/Submerged Aquatic Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 6 - Native sago pondweed (*Stuckenia pectinata*)

Area: Wetland C North, Floating Aquatic/Submerged Aquatic Planting Zone

Description: Monitoring Station 7

Area: Wetland C North, Emergent Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 8

Area: Wetland C North, Emergent Planting Zone

Description: Monitoring Station 9

Area: Wetland C North, Floating Aquatic/Submerged Aquatic Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 10

Area: Wetland C North, Emergent Planting Zone

Description: Monitoring Station 11

Area: Wetland C North, Emergent Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 12

Area: Wetland C North, Floating Aquatic/Submerged Aquatic Planting Zone

Description: Monitoring Station 13

Area: Wetland C North, Emergent Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 13 – Native Coontail (*Ceratophyllum demersum*)

Area: Wetland C North, Emergent Planting Zone

Description: Monitoring Station 14

Area: Wetland C North, Emergent Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 14 – Native long-leaf pondweed (*Potamogeton nodosus*)

Area: Wetland C North, Emergent Planting Zone

Description: Monitoring Station 15

Area: Wetland C North, Floating Aquatic/Submerged Aquatic Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 15 - Native coontail (*Ceratophyllum demersum*)

Area: Wetland C North, Floating Aquatic/Submerged Aquatic Planting Zone

Description: Monitoring Station 16

Area: Wetland C North, Emergent Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 17

Area: Wetland C North, Emergent Planting Zone

Description: Monitoring Station 17 - Native yellow pond-lily (*Nuphar lutea*)

Area: Wetland C North, Emergent Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 18

Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone

Description: Monitoring Station 19

Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 19 – Native white water-lily (*Nymphaea odorata*)

Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone

Description: Monitoring Station 20

Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 21

Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone

Description: Monitoring Station 21- Native white water-lily (*Nymphaea odorata*)

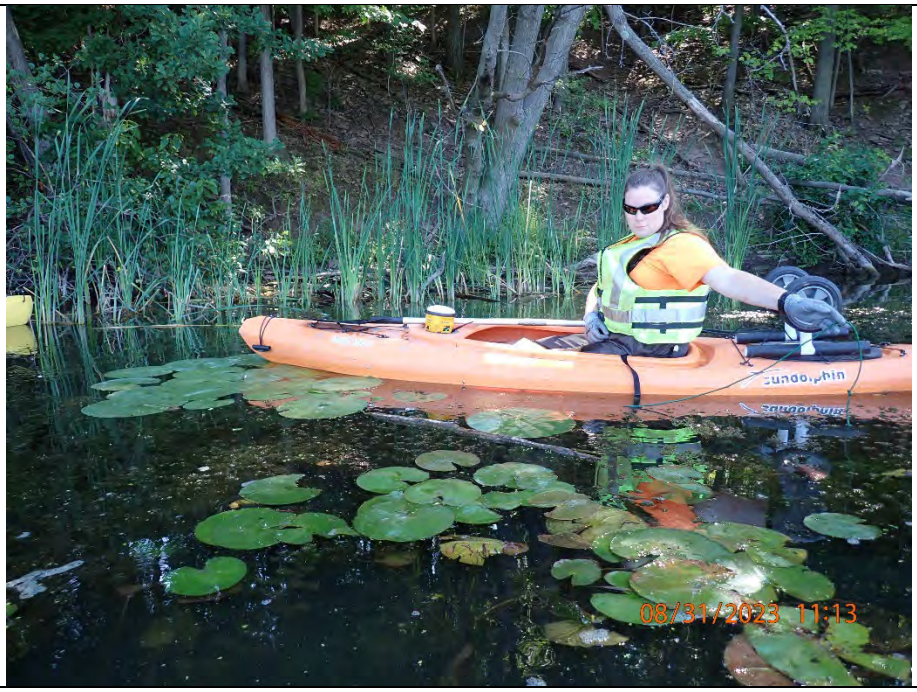
Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 22

Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone



Description: Monitoring Station 23

Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 23 - Native white water-lily (*Nymphaea odorata*)

Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone

Description: Monitoring Station 24

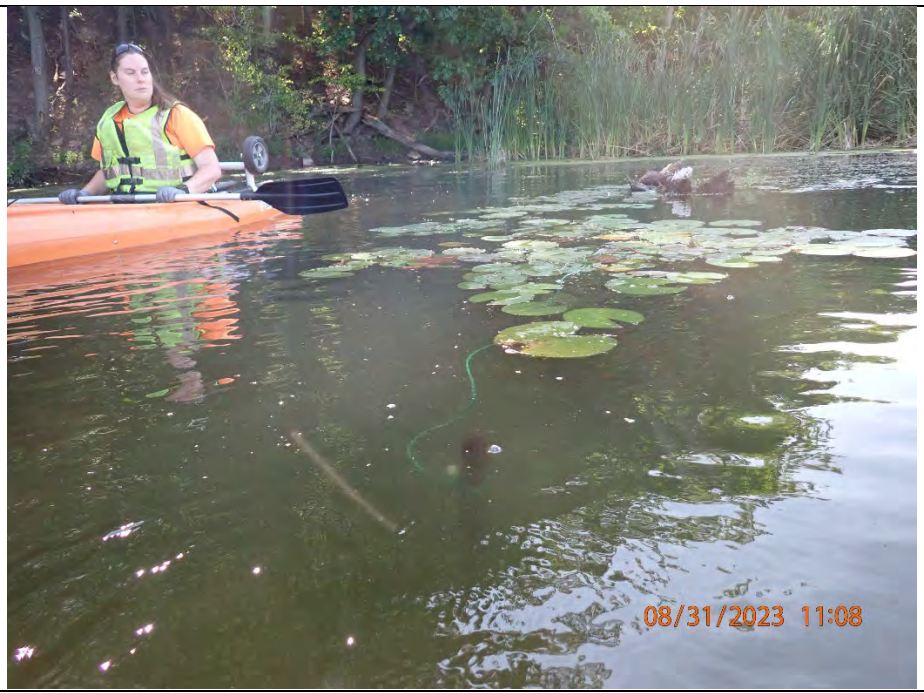
Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 24 – Native coontail (*Ceratophyllum demersum*)

Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone



Description: Monitoring Station 25

Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone

Vegetation Monitoring Station Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Monitoring Station 25 - Native White water lily (*Nymphaea odorata*)

Area: Wetland C South, Floating Aquatic/Submerged Aquatic Planting Zone

APPENDIX B4 WETLAND C MONITORING STATION DATASHEETS

Date:	8/31/2023	**Water Depth:**	3 inches
Location:	Lower Genesee River	**Cover Type:**	Emergent
Plot #:	V-1	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 0%

Notes:

Date:	8/31/2023	**Water Depth:**	6 inches
Location:	Lower Genesee River	**Cover Type:**	Emergent
Plot #:	V-2	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Yellow pond-lily	*Nuphar lutea*	OBL	20.0
2	Sago pondweed	*Stuckenia pectinata*	OBL	10.0
3	Long-leaf pondweed	*Potamogeton nodosus*	OBL	5.0
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 25 %

Notes: Tall sedge

Date: 8/31/2023 **Water Depth:** 4.5 feet

Location: Lower Genesee River **Cover Type:** Floating/submerged aquatic

Plot #: V-3 **Datasheet #:** 1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Long-leaf pondweed	*Potamogeton nodosus*	OBL	2.0
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 2%

Notes: Vallisneria

Date:	8/31/2023	**Water Depth:**	6 inches
Location:	Lower Genesee River	**Cover Type:**	Emergent
Plot #:	V-4	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Yellow pond-lily	*Nuphar lutea*	OBL	15.0
2	Sago pondweed	*Stuckenia pectinata*	OBL	5.0
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 15%

Notes: *Bidens connata*

Date:	8/31/2023	**Water Depth:**	3 inches
Location:	Lower Genesee River	**Cover Type:**	Emergent
Plot #:	V-5	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 0%

Notes:

Date: 8/31/2023 **Water Depth:** 3.5 feet

Location: Lower Genesee River **Cover Type:** Floating/submerged aquatic

Plot #: V-6 **Datasheet #:** 1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	White water lily	*Nymphaea odorata*	OBL	40.0
2	Coontail	*Ceratophyllum demersum*	OBL	15.0
3	Brittle naiad	*Najas minor*	OBL	10.0
4	Sago pondweed	*Stuckenia pectinata*	OBL	10.0
5	Eurasian watermilfoil	*Myriophyllum spicatum*	OBL	5.0
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 70%

Notes:

Date:	8/31/2023	**Water Depth:**	6 inches
Location:	Lower Genesee River	**Cover Type:**	Emergent
Plot #:	V-7	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 0%

Notes:

Date:	8/31/2023	**Water Depth:**	6 inches
Location:	Lower Genesee River	**Cover Type:**	Emergent
Plot #:	V-8	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Purple loosestrife	*Lythrum salicaria*	OBL	5.0
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 5%

Notes:

Date:	8/31/2023	**Water Depth:**	5 feet
Location:	Lower Genesee River	**Cover Type:**	Floating/submerged aquatic
Plot #:	V-9	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 0%

Notes:

Date:	8/31/2023	**Water Depth:**	8 inches
Location:	Lower Genesee River	**Cover Type:**	Emergent
Plot #:	V-10	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 0%

Notes: *Pontederia cordata*

Date:	8/31/2023	**Water Depth:**	6 inches
Location:	Lower Genesee River	**Cover Type:**	Emergent
Plot #:	V-11	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 0%

Notes:

Date:	8/31/2023	**Water Depth:**	5 feet
Location:	Lower Genesee River	**Cover Type:**	Floating/submerged aquatic
Plot #:	V-12	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 0%

Notes:

Date: 8/31/2023 **Water Depth:** 6 inches

Location: Lower Genesee River **Cover Type:** Emergent

Plot #: V-13 **Datasheet #:** 1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Hybrid cattail	*Typha x glauca*	OBL	55.0
2	Coontail	*Ceratophyllum demersum*	OBL	10.0
3	Sago pondweed	*Stuckenia pectinata*	OBL	5.0
4	Brittle naiad	*Najas minor*	OBL	5.0
5	Duckweed	*Lemna minor*	OBL	2.0
6	Eurasian watermilfoil	*Myriophyllum spicatum*	OBL	2.0
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 70%

Notes: *Sparganium eurycarpum*

Date: 8/31/2023 **Water Depth:** 6 inches

Location: Lower Genesee River **Cover Type:** Emergent

Plot #: V-14 **Datasheet #:** 1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Long-leaf pondweed	*Potamogeton nodosus*	OBL	10.0
2	Sago pondweed	*Stuckenia pectinata*	OBL	10.0
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 20%

Notes:

Date:	8/31/2023	**Water Depth:**	4 feet
Location:	Lower Genesee River	**Cover Type:**	Floating/submerged aquatic
Plot #:	V-15	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Brittle naiad	*Najas minor*	OBL	5.0
2	Coontail	*Ceratophyllum demersum*	OBL	5.0
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 10%

Notes:

Date:	8/31/2023	**Water Depth:**	6 inches
Location:	Lower Genesee River	**Cover Type:**	Emergent
Plot #:	V-16	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 0%

Notes:

Date:	8/31/2023	**Water Depth:**	6 inches
Location:	Lower Genesee River	**Cover Type:**	Emergent
Plot #:	V-17	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Coontail	*Ceratophyllum demersum*	OBL	10.0
2	Yellow pond-lily	*Nuphar lutea*	OBL	5.0
3	Broadleaf cattail	*Typha latifolia*	OBL	5.0
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 15%

Notes: *Nuphar lutea* , *Potamogeton illinoiensis* , *Sagittaria latifolia* , *Nymphaea odorata*

Date: 8/31/2023 **Water Depth:** 4.5 feet

Location: Lower Genesee River **Cover Type:** Floating/submerged aquatic

Plot #: V-18 **Datasheet #:** 1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Coontail	*Ceratophyllum demersum*	OBL	15.0
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 15 %

Notes: Near channel. Sparse.

Date: 8/31/2023 **Water Depth:** 4.5 feet

Location: Lower Genesee River **Cover Type:** Floating/submerged aquatic

Plot #: V-19 **Datasheet #:** 1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Brittle naiad	*Najas minor*	OBL	25.0
2	Coontail	*Ceratophyllum demersum*	OBL	25.0
3	Sago pondweed	*Stuckenia pectinata*	OBL	15.0
4	White water lily	*Nymphaea odorata*	OBL	5.0
5	Duckweed	*Lemna minor*	OBL	2.0
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 70%

Notes: Painted turtles basking on logs

Date:	8/31/2023	**Water Depth:**	3.5 feet
Location:	Lower Genesee River	**Cover Type:**	Floating/submerged aquatic
Plot #:	V-20	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 0%

Notes: *Sagittaria latifolia, Typha latifolia, Lythrum salicaria, Nymphaea odorata, Stuckenia pectinata, Najas* sp., *Vallisneria americana, Ranunculus sceleratus, Myriophyllum spicatum, Najas minor* , Banded Killifish

Date:	8/31/2023	**Water Depth:**	4.5 feet
Location:	Lower Genesee River	**Cover Type:**	Floating/submerged aquatic
Plot #:	V-21	**Datasheet #:**	1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	White water lily	*Nymphaea odorata*	OBL	25.0
2	Coontail	*Ceratophyllum demersum*	OBL	5.0
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 25%

Notes:

Date: 8/31/2023 **Water Depth:** 5.5 feet

Location: Lower Genesee River **Cover Type:** Floating/submerged aquatic

Plot #: V-22 **Datasheet #:** 1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Duckweed	*Lemna minor*	OBL	1.0
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 1%

Notes:

Date: 8/31/2023 **Water Depth:** 3.5 feet

Location: Lower Genesee River **Cover Type:** Floating/submerged aquatic

Plot #: V-23 **Datasheet #:** 1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Brittle naiad	*Najas minor*	OBL	60.0
2	White water lily	*Nymphaea odorata*	OBL	40.0
3	Eurasian watermilfoil	*Myriophyllum spicatum*	OBL	5.0
4	Coontail	*Ceratophyllum demersum*	OBL	5.0
5	Duckweed	*Lemna minor*	OBL	2.0
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 100%

Notes:

Date: 8/31/2023 **Water Depth:** 4 feet

Location: Lower Genesee River **Cover Type:** Floating/submerged aquatic

Plot #: V-24 **Datasheet #:** 1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	Coontail	*Ceratophyllum demersum*	OBL	15.0
2	Brittle naiad	*Najas minor*	OBL	5.0
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 20%

Notes: *Potamogeton nodosus*

Date: 8/31/2023 **Water Depth:** 4 feet

Location: Lower Genesee River **Cover Type:** Floating/submerged aquatic

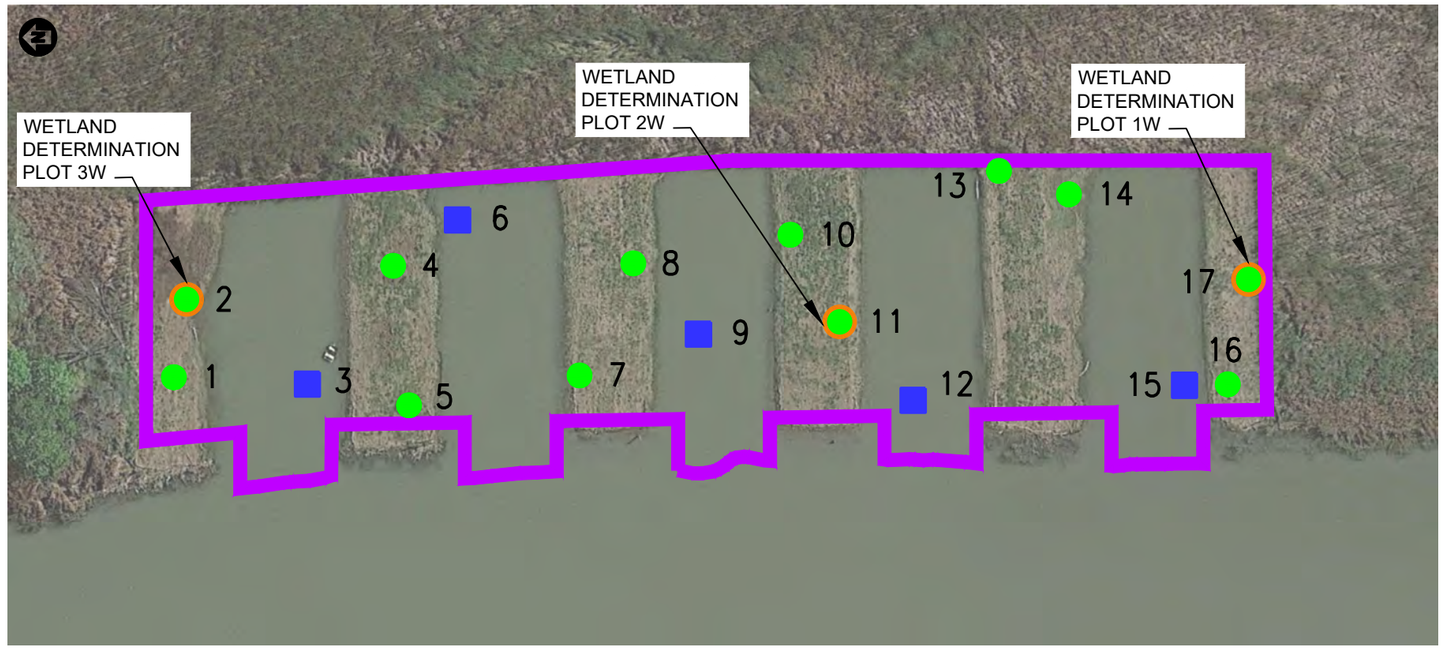
Plot #: V-25 **Datasheet #:** 1 of 1

nº	Common Name	Scientific Name	Indicator Status	Percent Cover
1	White water lily	*Nymphaea odorata*	OBL	35.0
2	Coontail	*Ceratophyllum demersum*	OBL	20.0
3	Sago pondweed	*Stuckenia pectinata*	OBL	5.0
4	Brittle naiad	*Najas minor*	OBL	2.0
5	Duckweed	*Lemna minor*	OBL	2.0
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Total percent areal cover: 50%

Notes: *Heteranthera dubia* , *Potamogeton crispus*

APPENDIX B5 WETLAND DETERMINATION SOIL CORE PHOTOGRAPHIC LOG

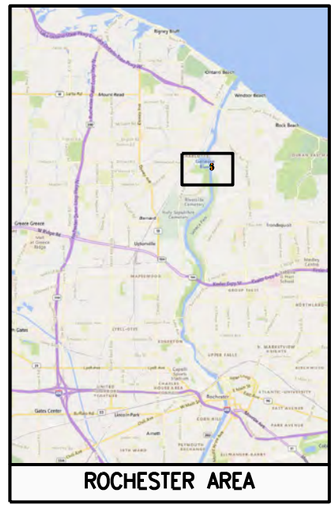


WETLAND C NORTH

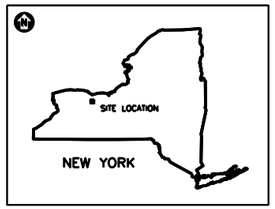
WETLAND C SOUTH

LEGEND:

- WETLAND C RESTORATION AREA
- FLOATING AQUATIC/SUBMERGE AQUATIC ZONE VEGETATION MONITORING STATION AND PHOTO LOCATION
- EMERGENT PLANTING ZONE VEGETATION MONITORING STATION AND PHOTO LOCATION
- WETLAND DETERMINATION SOIL CORE LOCATION



ROCHESTER AREA



80 40 0 80 160

SCALE: 1"=80'

FIGURE B3

NEW YORK STATE Department of Environmental Conservation

2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK
WETLAND C VEGETATION MONITORING STATIONS AND 2023 WETLAND DETERMINATION SOIL CORE LOCATIONS

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\453233 - WA #40 - LGR SITE MONITORING\10.0 TECHNICAL CATEGORIES\10.1 CAD\FIGURES\2023 PERIODIC REV RPT\4536233-PRR-VEG-2023.DWG
PLOT DATE: 12/4/2023 2:53 PM PLOTTED BY: RUSSO, JILL [US-US]

Wetland Determination Soil Core Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Wetland determination plot 1W. Co-located with Monitoring Station 17.

Area: Wetland C North

Description: Wetland determination plot 1W soil core.

Area: Wetland C North

Wetland Determination Soil Core Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Wetland determination plot 1W showing the development of redoxymorphic features.

Area: Wetland C North

Description: Wetland determination plot 2W. Co-located with Monitoring Station 11.

Area: Wetland C North

Wetland Determination Soil Core Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Wetland determination plot 2W soil core.

Area: Wetland C North

Description: Wetland determination plot 2W showing the development of redoxymorphic features.

Area: Wetland C North

Wetland Determination Soil Core Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Wetland determination plot 3W. Co-located with Monitoring Station 2.

Area: Wetland C North

Description: Wetland determination plot 3W soil core.

Area: Wetland C North

Wetland Determination Soil Core Photographic Log

Site: Lower Genesee River OU-5 of the Eastman Business Park, Wetland C

Description: Wetland determination plot 3W showing the development of redoxymorphic features.

Area: Wetland C North

APPENDIX B6 UNITED STATES ARMY CORPS OF ENGINEERS WETLAND DETERMINATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lower Genesee River City/County: Rochester/Monroe County Sampling Date: 8/31/23

Applicant/Owner: NYSDEC State: NY Sampling Point: 1W

Investigator(s): Kaitlyn Moranz, Jim Molloy Section, Township, Range: N/A

Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR or MLRA): LRR K, MLRA 94A Lat: 43°13'44.9458" N Long: 77°36'54.4106" W Datum: NAD83

Soil Map Unit Name: NA, non-native soil. NWI classification: R2UBH, PEM1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Plot is located in constructed wetland where contaminated soils were removed and replaced with clean non-native soil. Shallow standing water is present. Aquatic fauna including Whirligig Beetles (family Gyrinidae) were noted within the plot. The plot is co-located with permanent vegetation monitoring Plot 17 on the south end of Wetland C North.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ____ High Water Table (A2)
- X Saturation (A3)
- X Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- X Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- ____ Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 6
Water Table Present?	Yes X	No ____	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
The plot is located in a constructed wetland with non-native soils as a result of site remediation.

VEGETATION – Use scientific names of plants. Sampling Point: 1W

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size:)			
1. *Typha X glauca*	5	Yes	OBL
2. *Ceratophyllum demersum*	2	Yes	OBL
3. *Nuphar lutea*	2	Yes	OBL
4. *Stuckenia pectinata*	2	Yes	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	11 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	11	x 1 =	11
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	11 (A)		11 (B)

Prevalence Index = B/A = 1.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

Low percent cover of vegetation is likely caused by deeper water conditions than were expected during site design. Additionally, Wetland C is located on the eastern bank of the Genessee River, and high flows may be causing the destruction/removal of vegetation before they can become established. The surrounding plant community along the Genessee River channel is a monoculture of cattail (Typha spp.)

SOIL

Sampling Point: 1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/2	95					Loamy/Clayey	5% aggregate
8-18	10YR 4/2	95	7.5YR 4/6	5			Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Because the plot is located in a constructed wetland where contaminated soils were removed and replaced with clean non-native soil, the development of the full suite of hydric soil indicators may take many years. Although the sample does not currently qualify as a hydric soil, the delvelopment of redox features shows that long periods of inundation are present, and hydric soil indicators are developing.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lower Genesee River City/County: Rochester/Monroe County Sampling Date: 8/31/23

Applicant/Owner: NYSDEC State: NY Sampling Point: 2W

Investigator(s): Kaitlyn Moranz, Jim Molloy Section, Township, Range: N/A

Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR or MLRA): LRR K, MLRA 94A Lat: Long: Datum: NAD83

Soil Map Unit Name: NA, non-native soil. NWI classification: R2UBH, PEM1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil X , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes	No X	**within a Wetland?** **Yes** **No** X
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Plot is located in constructed wetland where contaminated soils were removed and replaced with clean non-native soil. Shallow standing water is present. The plot is co-located with permanent vegetation monitoring Plot 11 in Wetland C North.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- x High Water Table (A2)
- X Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No	Depth (inches): 6
Water Table Present?	Yes X	No	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches):

Wetland Hydrology Present? **Yes** X **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
The plot is located in a constructed wetland with non-native soils as a result of site remediation.

VEGETATION – Use scientific names of plants. Sampling Point: 2W

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size:)			
1.			
2.			
3.			OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	=Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

Low percent cover of vegetation is likely caused by deeper water conditions than were expected during site design. Additionally, Wetland C is located on the eastern bank of the Genessee River, and high flows may be causing the destruction/removal of vegetation before they can become established. The surrounding plant community along the Genessee River channel is a monoculture of cattail (Typha spp.)

SOIL

Sampling Point: 2W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/2	90	7.5YR 4/4	10			Loamy/Clayey	Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Loose, unconsolidated sand at 12 inches depth. Sample was not retrievable at depths greater than 16 inches.

Because the plot is located in a constructed wetland where contaminated soils were removed and replaced with clean non-native soil, the development of the full suite of hydric soil indicators may take many years. Although the sample does not currently qualify as a hydric soil, the delvelopment of redox features shows that long periods of inundation are present, and hydric soil indicators are developing.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lower Genesee River City/County: Rochester/Monroe County Sampling Date: 8/31/23

Applicant/Owner: NYSDEC State: NY Sampling Point: 3W

Investigator(s): Kaitlyn Moranz, Jim Molloy Section, Township, Range: N/A

Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR or MLRA): LRR K, MLRA 94A Lat: Long: Datum: NAD83

Soil Map Unit Name: NA, non-native soil. NWI classification: R2UBH, PEM1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil X , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes	No X	**within a Wetland?** **Yes** **No** X
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Plot is located in constructed wetland where contaminated soils were removed and replaced with clean non-native soil. Shallow standing water is present. The plot is co-located with permanent vegetation monitoring Plot 2 in Wetland C North.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No	Depth (inches): 3
Water Table Present?	Yes X	No	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches):

Wetland Hydrology Present? **Yes** X **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
The plot is located in a constructed wetland with non-native soils as a result of site remediation.

VEGETATION – Use scientific names of plants. Sampling Point: 3W

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size:)			
1.			
2.			
3.			OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	=Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: (A)

Total Number of Dominant Species Across All Strata: (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

Low percent cover of vegetation is likely caused by deeper water conditions than were expected during site design. Additionally, Wetland C is located on the eastern bank of the Genessee River, and high flows may be causing the destruction/removal of vegetation before they can become established. The surrounding plant community along the Genessee River channel is a monoculture of cattail (Typha spp.)

SOIL

Sampling Point: 3W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/2	60	5YR 3/4	10			Loamy/Clayey	
	10YR 4/1	30						
8-14	10YR 4/2	95	7.5YR 4/4	5			Loamy/Clayey	
14-16	10YR 4/2	100					Sandy	Gravelly sand/loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Loose, unconsolidated sand and gravel at 14 inches depth. Sample was not retrievable at depths greater than 16 inches.

Because the plot is located in a constructed wetland where contaminated soils were removed and replaced with clean non-native soil, the development of the full suite of hydric soil indicators may take many years. Although the sample does not currently qualify as a hydric soil, the delvelopment of redox features shows that long periods of inundation are present, and hydric soil indicators are developing.

APPENDIX C ISOLATION COVER SYSTEM BATHYMETRIC COMPLIANCE MONITORING SURVEY QUALITATIVE RESULTS

DREDGE AND CAP (NORTH)

CAP ONLY

CAP ONLY
TOTAL AREA: 32,663 SQ FT
TOTAL AREA OF ELEVATION DECREASE ≥6": 3,911 SQ FT (12.0%)
MAXIMUM CONTIGUOUS AREA DECREASE ≥6": 1,686 SQ FT

48" CONCRETE PIPE AND DISPERSION OUTLETS

DREDGE AND CAP (SOUTH)

230
235
240
245

KINGS LANDING WASTEWATER TREATMENT PLANT

36" STEEL OVERFLOW PIPE

SHEETPILE RETAINING WALL

54" STORM OUTFALL

GRAVEL

DREDGE AND CAP (NORTH)
TOTAL AREA: 28,823 SQ FT
TOTAL AREA OF ELEVATION DECREASE ≥6": 1,929 SQ FT (6.7%)
MAXIMUM CONTIGUOUS AREA DECREASE ≥6": 1,898 SQ FT

DREDGE AND CAP (SOUTH)
TOTAL AREA: 11,467 SQ FT
TOTAL AREA OF ELEVATION DECREASE ≥6": 1,263 SQ FT (11.0%)
MAXIMUM CONTIGUOUS AREA DECREASE ≥6": 1,223 SQ FT

2023 VS 2021 POST CONSTRUCTION

2023 SURVEY ELEVATION LOWER THAN 2021 POST-CONSTRUCTION GRADE

>1 FOOT LOWER

0.5 to 1 FOOT LOWER

ALL OTHER

2023 SURVEY ELEVATION HIGHER THAN 2021 POST-CONSTRUCTION GRADE

LEGEND:

- AOC 1 BOUNDARY
- BATHYMETRIC CONTOURS (2023 SHOWN)
- OHWM (ORDINARY HIGH WATER MARK) APPROX 249.13'
- CAP ONLY AREA
- NO DREDGING OR CAPPING AREA

NOTES:

1. CONTOURS SHOWN ARE FROM THE THEW BATHYMETRIC SURVEY DATED AUGUST 28 AND 29, 2023.

80 40 0 80 160

SCALE: 1"=80'

FIGURE C-1

NEW YORK STATE Department of Environmental Conservation

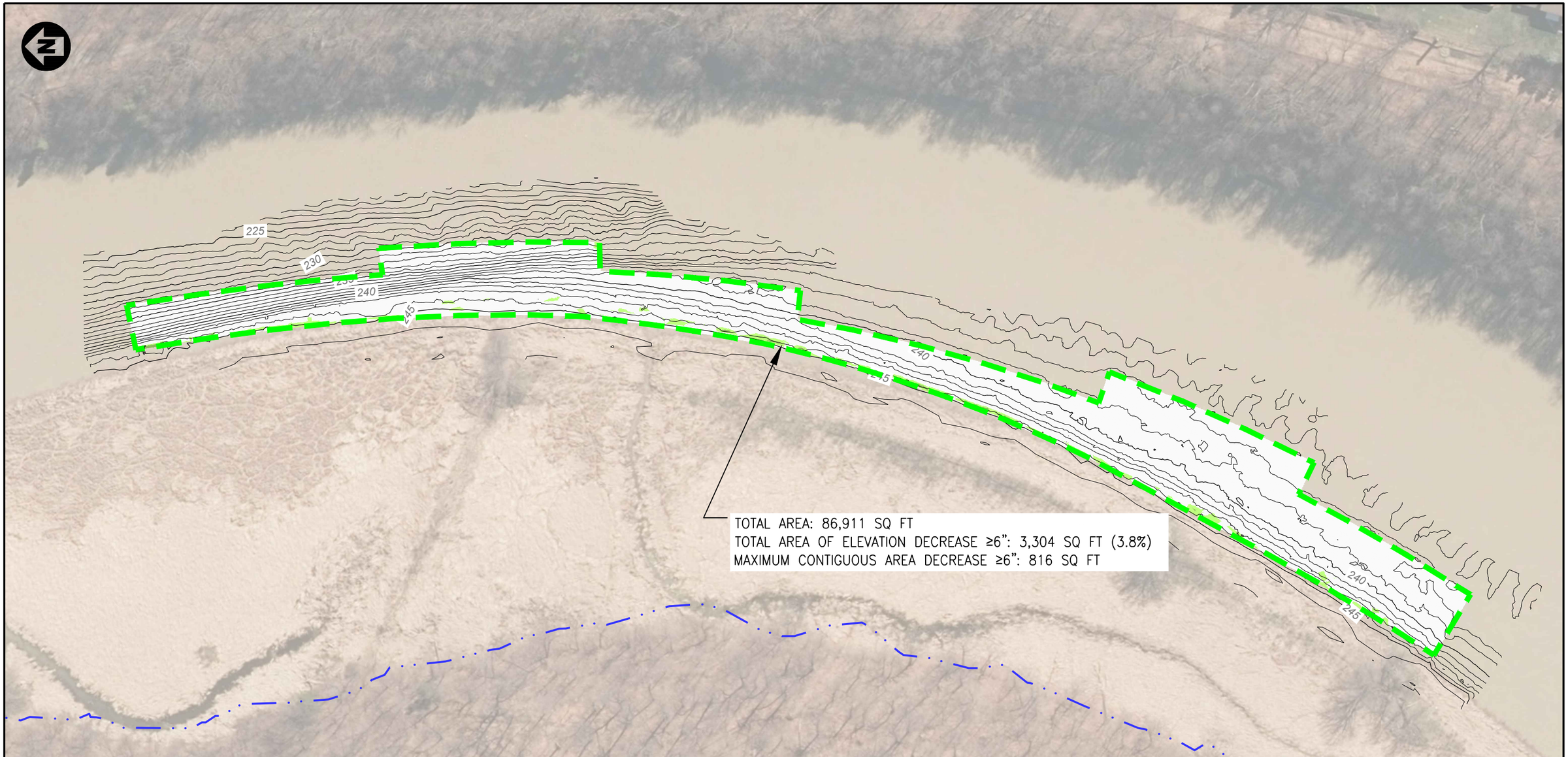
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AOC1 COMPLIANCE METRICS
2023 VS 2021 POST-CONSTRUCTION BATHYMETRY COMPARISON

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\452506 - WA #19 - LOWER GENESEE RIVER CM\10.0 TECHNICAL CATEGORIES\10.10 CAD\RECORD DWG\FIGURES\2023\452506-AOC1- 2021-2023-6-INCH THEW.DWG
PLOT DATE: 12/5/2023 10:51 AM PLOTTED BY: RUSSO, JILL [US-US]



2023 VS 2021 POST CONSTRUCTION

- >1 FOOT LOWER
- 0.5 to 1 FOOT LOWER
- ALL OTHER

2023 SURVEY ELEVATION LOWER THAN 2021 POST-CONSTRUCTION GRADE

2023 SURVEY ELEVATION HIGHER THAN 2021 POST-CONSTRUCTION GRADE

LEGEND:

- AOC 2 BOUNDARY
- BATHYMETRIC CONTOURS (2023 SHOWN)
- OHWM (ORDINARY HIGH WATER MARK) APPROX 249.13'

NOTES:

1. CONTOURS SHOWN ARE FROM THE THEW BATHYMETRIC SURVEY DATED AUGUST 28 AND 29, 2023.

100 50 0 100 200

SCALE: 1"=100'

FIGURE C-2

NEW YORK STATE Department of Environmental Conservation

2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AOC2 COMPLIANCE METRICS
2023 VS 2021 POST-CONSTRUCTION
BATHYMETRY COMPARISON

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\452506 - WA #19 - LOWER GENESEE RIVER CM\10.0 TECHNICAL CATEGORIES\10.10 CAD\RECORD DWG\FIGURES\2023\452506-AOC2-2021V2023-6-INCH-THEW.DWG
PLOT DATE: 12/4/2023 5:10 PM PLOTTED BY: RUSSO, JILL [US-US]

DREDGE AND CAP (NORTH)

CAP ONLY

CAP ONLY
TOTAL AREA: 32,663 SQ FT
TOTAL AREA OF ELEVATION DECREASE ≥6": 458 SQ FT (1.4%)
MAXIMUM CONTIGUOUS AREA DECREASE ≥6": 255 SQ FT

48" CONCRETE PIPE AND DISPERSION OUTLETS

DREDGE AND CAP (SOUTH)

230
235
240
245

KINGS LANDING WASTEWATER TREATMENT PLANT

SHEETPILE RETAINING WALL

36" STEEL OVERFLOW PIPE

RIP RAP

ASPH

54" STORM OUTFALL

GRAVEL

DREDGE AND CAP (NORTH)
TOTAL AREA: 28,823 SQ FT
TOTAL AREA OF ELEVATION DECREASE ≥6": 0 SQ FT (0%)
MAXIMUM CONTIGUOUS AREA DECREASE ≥6": 0 SQ FT

DREDGE AND CAP (SOUTH)
TOTAL AREA: 11,467 SQ FT
TOTAL AREA OF ELEVATION DECREASE ≥6": 0 SQ FT (0%)
MAXIMUM CONTIGUOUS AREA DIFFERENCE ≥6": 0 SQ FT

2023 VS 2022 BASELINE

>1 FOOT LOWER

0.5 to 1 FOOT LOWER

ALL OTHER

2023 SURVEY ELEVATION LOWER THAN 2022 POST-CONSTRUCTION GRADE

2023 SURVEY ELEVATION HIGHER THAN 2022 POST-CONSTRUCTION GRADE

LEGEND:

- AOC 1 BOUNDARY
- BATHYMETRIC CONTOURS (2023 SHOWN)
- OHWM (ORDINARY HIGH WATER MARK) APPROX 249.13'
- CAP ONLY AREA
- NO DREDGING OR CAPPING AREA

NOTES:

1. CONTOURS SHOWN ARE FROM THE THEW BATHYMETRIC SURVEY DATED AUGUST 28 AND 29, 2023.

80 40 0 80 160

SCALE: 1"=80'

FIGURE C-3

NEW YORK STATE Department of Environmental Conservation

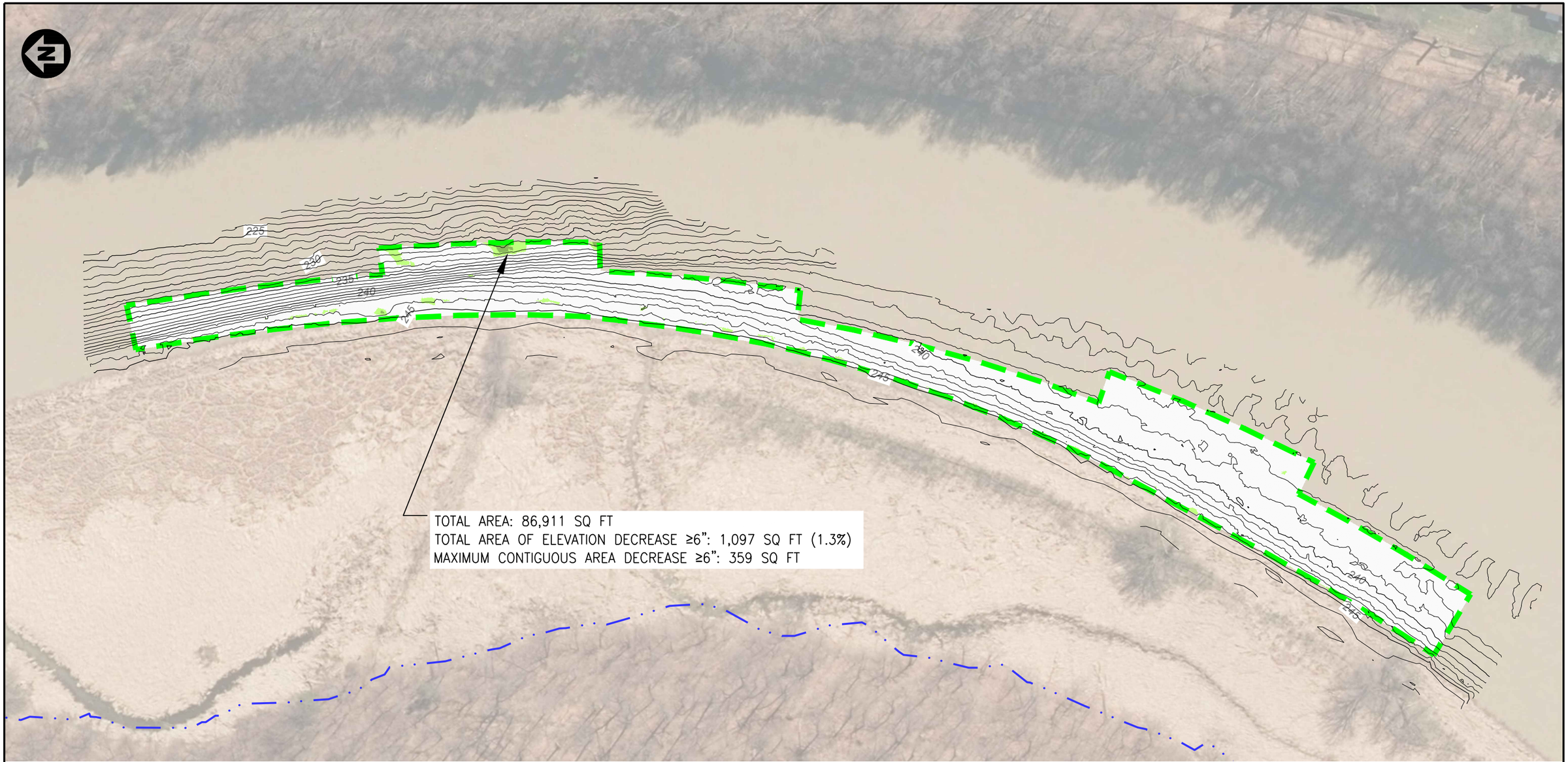
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AOC1 COMPLIANCE METRICS
2023 VS 2022 (BASELINE)
BATHYMETRY COMPARISON

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\452506 - WA #19 - LOWER GENESEE RIVER CM\10.0 TECHNICAL CATEGORIES\10.10 CAD\RECORD DWG\FIGURES\2023\452506-AOC1- 2022-2023-6-INCH THEW.DWG
PLOT DATE: 12/4/2023 5:12 PM PLOTTED BY: RUSSO, JILL [US-US]



2023 VS 2022 BASELINE

>1 FOOT LOWER

0.5 to 1 FOOT LOWER

ALL OTHER

2023 SURVEY ELEVATION LOWER THAN 2022 POST-CONSTRUCTION GRADE

2023 SURVEY ELEVATION HIGHER THAN 2022 POST-CONSTRUCTION GRADE

LEGEND:

AOC 2 BOUNDARY

BATHYMETRIC CONTOURS (2023 SHOWN)

OHWM (ORDINARY HIGH WATER MARK) APPROX 249.13'

NOTES:

1. CONTOURS SHOWN ARE FROM THE THEW BATHYMETRIC SURVEY DATED AUGUST 28 AND 29, 2023.

100 50 0 100 200

SCALE: 1"=100'

FIGURE C-4

NEW YORK STATE Department of Environmental Conservation

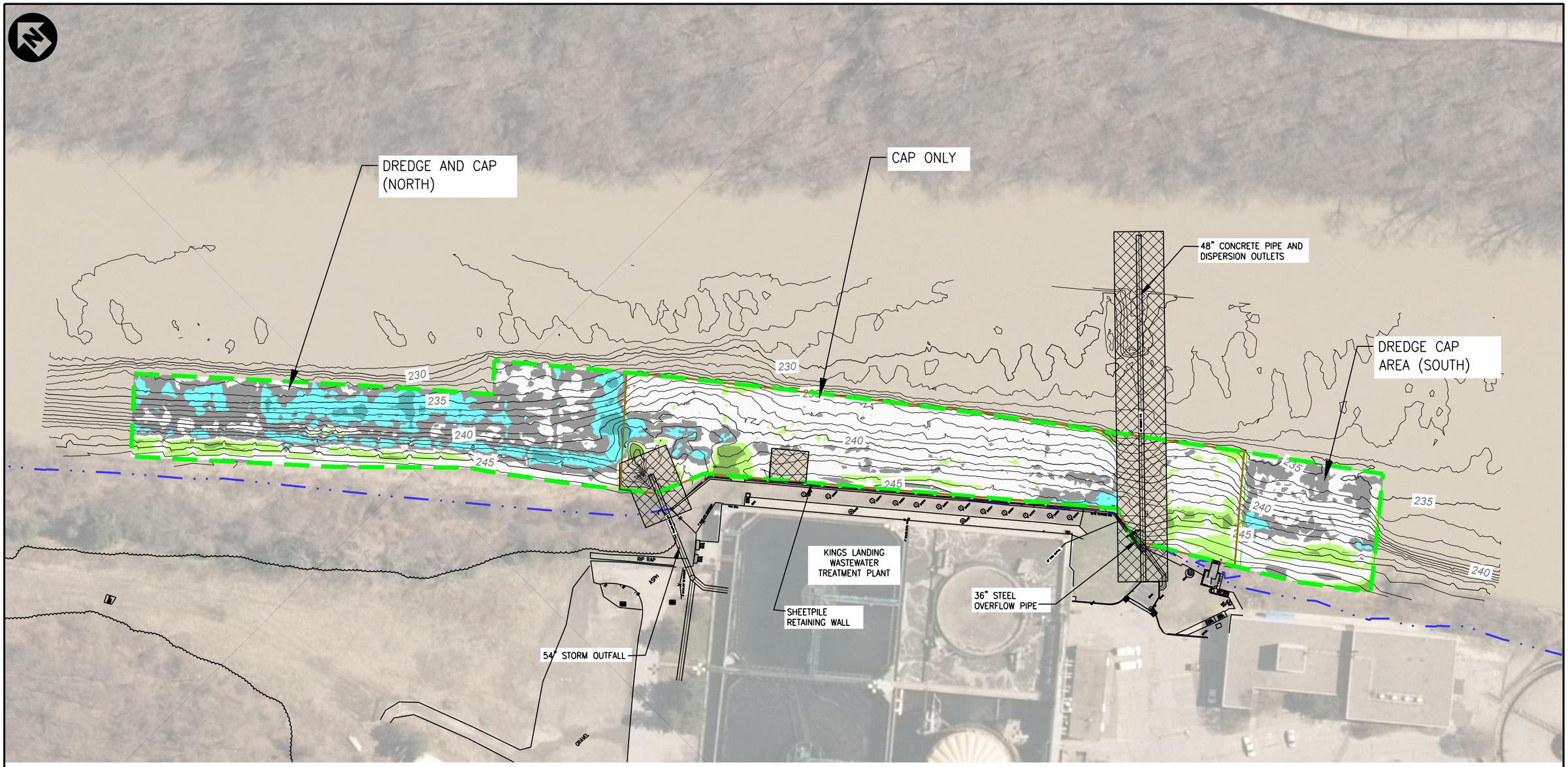
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AOC2 COMPLIANCE METRICS
2023 VS 2022 (BASELINE)
BATHYMETRY COMPARISON

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\452506 - WA #19 - LOWER GENESEE RIVER CW\10.0 TECHNICAL CATEGORIES\10.10 CAD\RECORD DWG\FIGURES\2023\452506-AOC2-2022V2023-6-INCH-THEW.DWG
PLOT DATE: 12/4/2023 5:17 PM PLOTTED BY: RUSSO, JILL [US-US]



2023 VS 2021 POST CONSTRUCTION

	> 1 FOOT LOWER
	0.5 to 1 FOOT LOWER
	0 to 0.5 FOOT LOWER
	.5 to 0 FOOT HIGHER
	.5 to 1 FOOT HIGHER
	> 1 HIGHER

2023 SURVEY ELEVATION
LOWER THAN 2021
POST-CONSTRUCTION GRADE

2023 SURVEY ELEVATION
HIGHER THAN 2021
POST-CONSTRUCTION GRADE

LEGEND:

- AOC 1 BOUNDARY
- BATHYMETRIC CONTOURS (2023 SHOWN)
- OHWM (ORDINARY HIGH WATER MARK) APPROX 249.13'
- CAP ONLY AREA
- NO DREDGING OR CAPPING AREA

NOTES:

1. CONTOURS SHOWN ARE FROM THE THEW BATHYMETRIC SURVEY DATED AUGUST 28 AND 29, 2023.

80 40 0 80 160

SCALE: 1"=80'

FIGURE C-5

NEW YORK STATE Department of Environmental Conservation

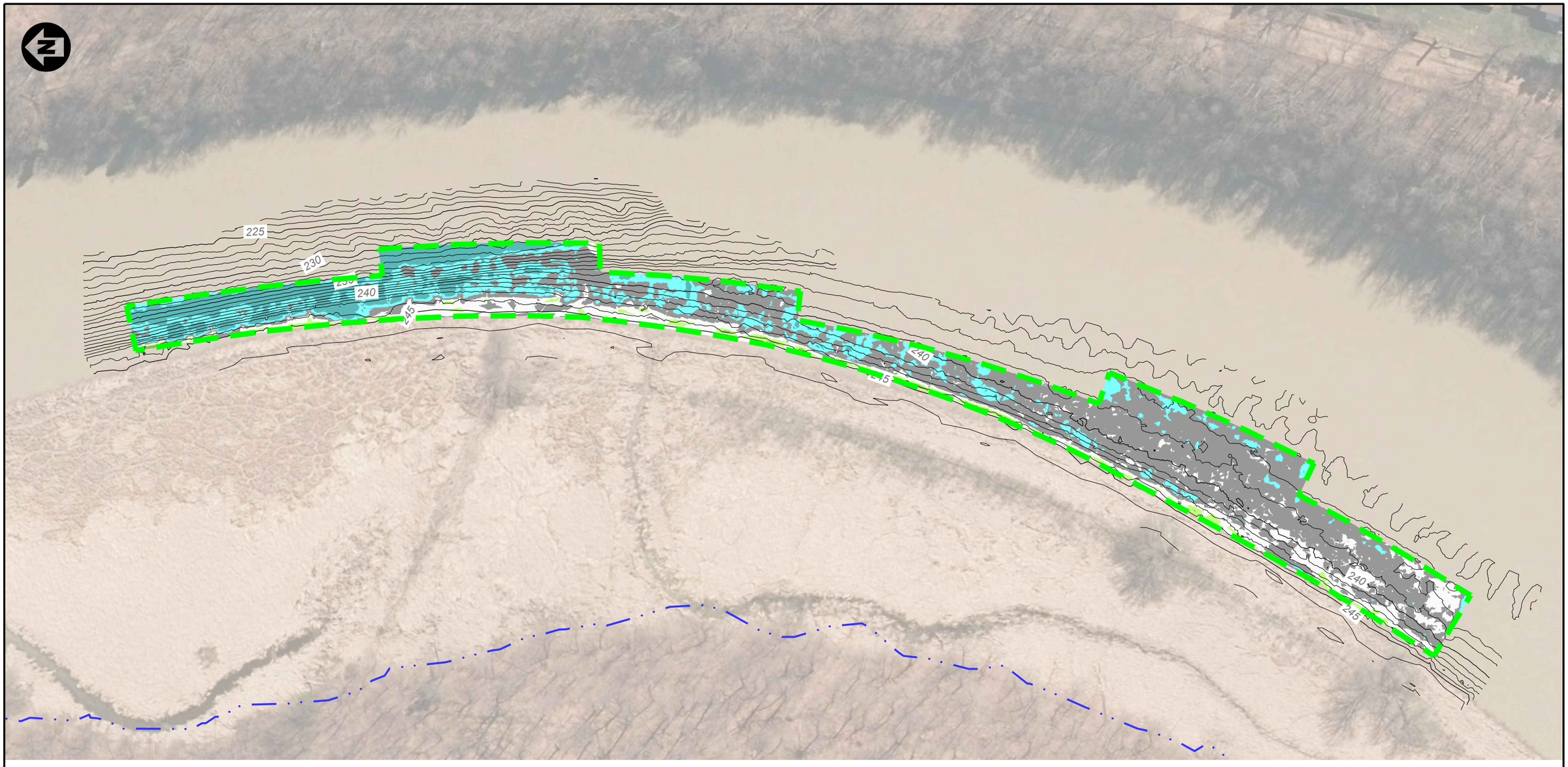
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AOC1 2023 VS 2021 POST-CONSTRUCTION BATHYMETRY COMPARISON

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\452506 - WA #19 - LOWER GENESEE RIVER CM\10.0 TECHNICAL CATEGORIES\10.10 CAD\RECORD DWG\FIGURES\2023\452506-AOC1- 2021-2023-12-INCH THEW.DWG
PLOT DATE: 12/5/2023 10:55 AM PLOTTED BY: RUSSO, JILL [US-US]



2023 VS 2021 POST CONSTRUCTION

- > 1 FOOT LOWER
- 0.5 to 1 FOOT LOWER
- 0 to 0.5 FOOT LOWER
- .5 to 0 FOOT HIGHER
- .5 to 1 FOOT HIGHER
- > 1 HIGHER

2023 SURVEY ELEVATION LOWER THAN 2021 POST-CONSTRUCTION GRADE

2023 SURVEY ELEVATION HIGHER THAN 2021 POST-CONSTRUCTION GRADE

LEGEND:

- AOC 2 BOUNDARY
- BATHYMETRIC CONTOURS (2023 SHOWN)
- OHWM (ORDINARY HIGH WATER MARK) APPROX 249.13'

NOTES:

1. CONTOURS SHOWN ARE FROM THE THEW BATHYMETRIC SURVEY DATED AUGUST 28 AND 29, 2023.

100 50 0 100 200

SCALE: 1"=100'

FIGURE C-6

NEW YORK STATE Department of Environmental Conservation

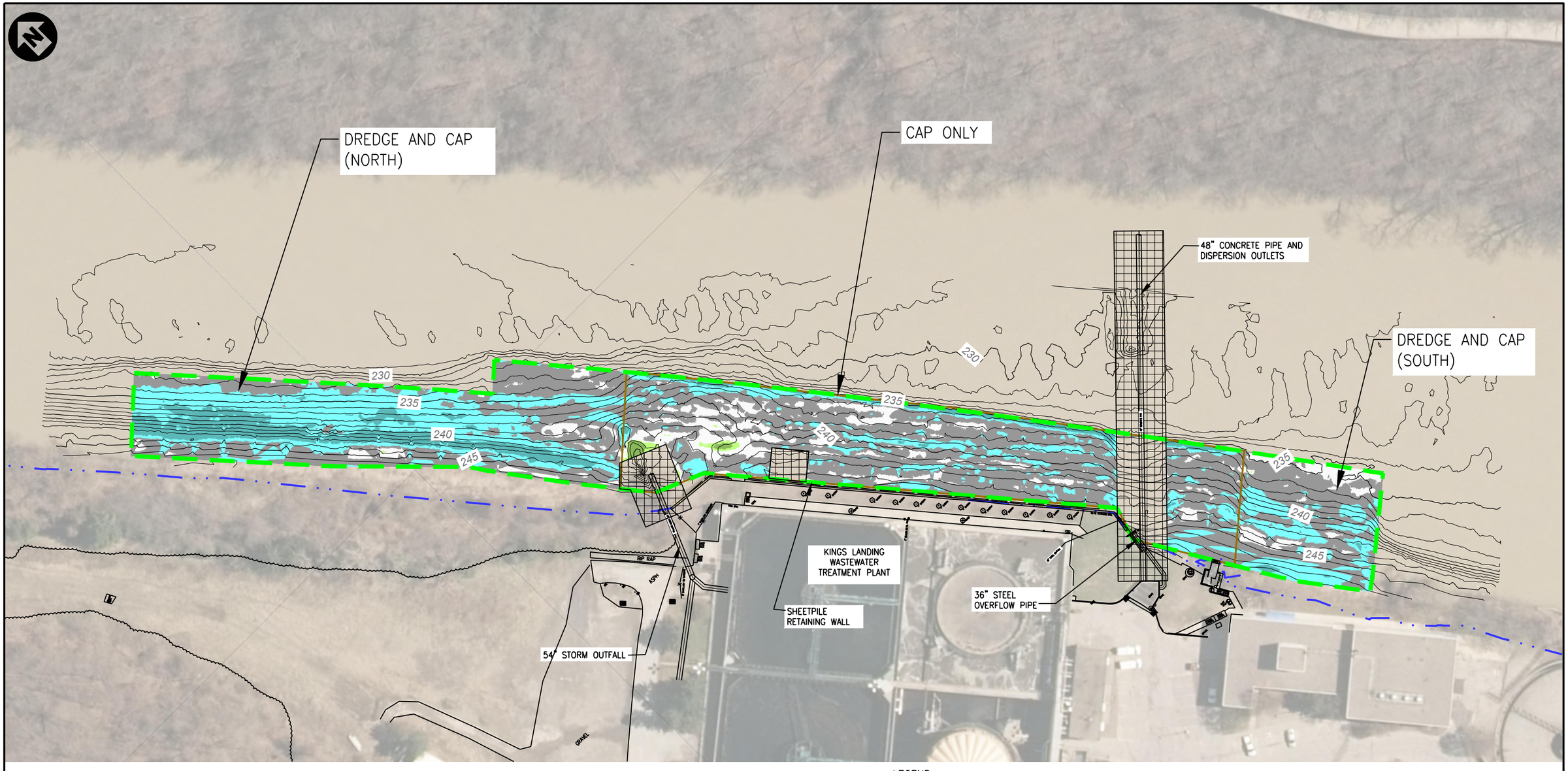
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AOC2 2023 vs 2021 POST CONSTRUCTION BATHYMETRY COMPARISON

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\452506 - WA #19 - LOWER GENESEE RIVER CM\10.0 TECHNICAL CATEGORIES\10.10 CAD\RECORD DWG\FIGURES\2023\452506-AOC2-2021V2023-12-INCH-THEW.DWG
PLOT DATE: 12/5/2023 10:44 AM PLOTTED BY: RUSSO, JILL [US-US]



2023 VS 2022 BASELINE

	> 1 FOOT LOWER
	0.5 to 1 FOOT LOWER
	0 to 0.5 FOOT LOWER
	.5 to 0 FOOT HIGHER
	.5 to 1 FOOT HIGHER
	> 1 HIGHER

2023 SURVEY ELEVATION LOWER THAN 2022 POST-CAPPING GRADE

2023 SURVEY ELEVATION HIGHER THAN 2022 POST-CAPPING GRADE

LEGEND:

- AOC 1 BOUNDARY
- BATHYMETRIC CONTOURS (2023 SHOWN)
- OHWM (ORDINARY HIGH WATER MARK) APPROX 249.13'
- CAP ONLY AREA
- NO DREDGING OR CAPPING AREA

NOTES:

1. CONTOURS SHOWN ARE FROM THE THEW BATHYMETRIC SURVEY DATED AUGUST 28 AND 29, 2023.

80 40 0 80 160

SCALE: 1"=80'

FIGURE C-7

NEW YORK STATE Department of Environmental Conservation

2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AOC1 2023 VS 2022 (BASELINE) BATHYMETRY COMPARISON

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\452506 - WA #19 - LOWER GENESEE RIVER CM\10.0 TECHNICAL CATEGORIES\10.10 CAD\RECORD DWG\FIGURES\2023\452506-AOC1- 2022-2023-12-INCH THEW.DWG
PLOT DATE: 11/27/2023 12:15 PM PLOTTED BY: RUSSO, JILL [US-US]

2023 VS 2022 BASELINE

- > 1 FOOT LOWER
- 0.5 to 1 FOOT LOWER
- 0 to 0.5 FOOT LOWER
- .5 to 0 FOOT HIGHER
- .5 to 1 FOOT HIGHER
- > 1 HIGHER

2023 SURVEY ELEVATION LOWER THAN 2022 POST-CAPPING GRADE

2023 SURVEY ELEVATION HIGHER THAN 2022 POST-CAPPING GRADE

LEGEND:

- AOC 2 BOUNDARY
- BATHYMETRIC CONTOURS (2023 SHOWN)
- OHWM (ORDINARY HIGH WATER MARK) APPROX 249.13'

NOTES:

1. CONTOURS SHOWN ARE FROM THE THEW BATHYMETRIC SURVEY DATED AUGUST 28 AND 29, 2023.

100 50 0 100 200

SCALE: 1"=100'

FIGURE C-8

NEW YORK STATE Department of Environmental Conservation

2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

AOC2 2023 VS 2022 (BASELINE) BATHYMETRY COMPARISON

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

FILE NAME: P:\NYSDEC PROGRAM\452506 - WA #19 - LOWER GENESEE RIVER CM\10.0 TECHNICAL CATEGORIES\10.10 CAD\RECORD DWG\FIGURES\2023\452506-AOC2-2022V2023-12-INCH-THEW.DWG
PLOT DATE: 12/5/2023 10:42 AM PLOTTED BY: RUSSO, JILL [US-US]

APPENDIX D WETLAND C MAINTENANCE PLAN

MEMORANDUM

January 9, 2024

To: Lisa Gorton (NYSDEC)

From: Parsons

Subject: Wetland C Maintenance Plan

Summary

Year 2 wetland monitoring data indicate that Wetland C appears to be achieving the overall restoration objective of no net loss of wetland acreage and for the function and values of Wetland C that existed prior to the remedy to be maintained and/or enhanced. However, the emergent wetland areas of Wetland C North experienced a decrease in the average of total plant cover in 2023 as compared to 2022. Maintenance plantings in the emergent wetland areas of Wetland C North are proposed in 2024 to support the achievement of restoration objectives.

The reduction in plant cover in the emergent wetland areas of Wetland C North is likely due to high water levels in 2023, which caused prolonged periods of inundation, excluding many facultative wetland species that were observed in 2022. All species observed in Wetland C in 2023 were obligate wetland species. The floating aquatic/submerged aquatic embayments of Wetland C North and Wetland C South did not appear to be subject to a reduction in plant cover in 2023, likely because floating aquatic and submerged aquatic species, which prefer permanent inundation, were planted in these areas. This Wetland C Maintenance Plan addresses the selection of species, and planting logistics to maximize the success of maintenance plantings.

Plant Material Selection

Emergent vegetation will be installed in maintenance planting areas as 2-inch plugs. Because the planting areas are frequently inundated, no maintenance seed will be installed. Plugs will be installed at a density of approximately 2-foot on center and will be installed with steel dibble bars.

The species selected for maintenance plantings are obligate wetland species that can tolerate both periods of dryness and prolonged periods of inundation. Floating aquatic/submerged aquatic species that cannot tolerate dryness and facultative wetland species that cannot tolerate prolonged inundation will not be installed. Proposed species and quantities of maintenance plantings are as follows:

Scientific Name	Common Name	Size	Quantity
Peltandra virginica	Green arrow arum	2-inch plug	1,000
Pontederia cordata	Pickerelweed	2-inch plug	4,000
Sagittaria latifolia	Common arrowhead	2-inch plug	1,000
Schoenoplectus tabernaemontani	Soft-stemmed bulrush	2-inch plug	7,000
Sparganium americanum	American bur-reed	2-inch plug	2,000
		Total Quantity	15,000

Planting Logistics

To maximize the success of maintenance plantings, the following measures will be taken: (1) protection from the flow of the Lower Genesee River with the installation of fiber rolls; (2) protection from herbivory with the installation of plant enclosures; and (3) strict observation of planting procedures for the handing and care of plant materials, plug installation, and timing.

Protection from Flow

The Lower Genesee River flows south to north past Wetland C. During periods of high water, the emergent wetland areas of Wetland C north are inundated and subject to river flows. Well-established plant communities are resilient to high flow disturbances. However, newly-planted plugs are often damaged or removed by high flows. To protect the newly-installed maintenance plantings, 12-inch coconut coir logs will be installed along the southern and western edges of the maintenance planting areas. The coconut coir logs will remain permanently and provide protection from scouring flow while maintenance plantings become established. The location of coconut coir logs is presented on **Figure D-1A**, and installation instructions are provided on **Figure D-1B.**

Protection from Herbivory

Herbivory from waterfowl can damage newly-installed plantings. The maintenance plantings at Wetland C North will be protected from herbivory with fenced plant enclosures. Six enclosures will be installed around the perimeter of each of the distinct emergent maintenance planting areas (**Figure D-1A**). The perimeter of the enclosures will be constructed from steel T-posts and Tenax C-Flex "Deer-proof" fencing attached to the T-posts with UV-stabilized cable ties. To prevent waterfowl from entering the planted area via flight, a string grid will be placed over the top of the planting areas. Wooden stakes will be installed within the enclosures, approximately 20-foot on center, and masonry string will be strung from stakes to the enclosure steel T-posts to create a grid. Occasional pink flagging tape will be attached to the masonry string to increase the visibility of the grid and further deter herbivory. A detail of the fenced enclosures is presented on **Figure D-1B**.

All enclosure materials (fencing, steel T-posts, cable ties, masonry string, and wooden posts) will be removed by December 2024 to prevent damage and loss of materials due to ice flows.

Planting Procedures

Handling and Care of Plugs

At the time of plant delivery from the nursery, all flats of plugs will be inspected to verify that they are in satisfactory condition. Flats of plugs will be imported to the project site on a daily basis. Plants will be loaded directly onto boats at a pre-determined location for transport directly to Wetland C North. Emergent flats of plugs will be watered prior to importation and will be placed in water holding trays at a predetermined staging area prior to transport to Wetland C North as needed to reduce the need for additional watering. If necessary, shade tents will be assembled at the staging area to prevent sun scorching.

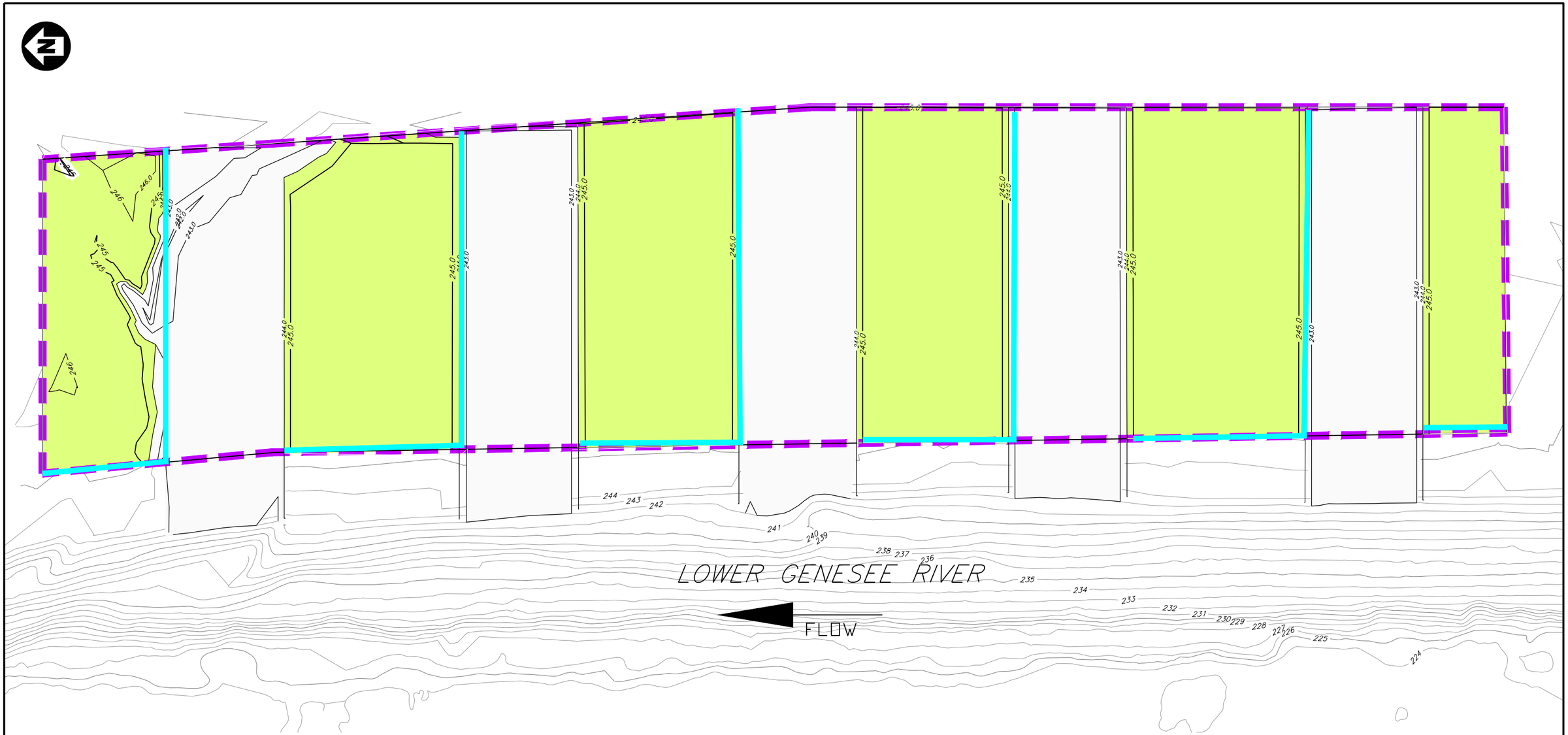
Plug Installation

All emergent plugs will be installed with steel dibble bars. Dibble bars create a 2-inch diameter hole in soil that allows for the easy installation of 2-inch plugs. Each plug will be installed slightly below ground surface, and then carefully pressed around the edges to expel air pockets and secure the plug. A detail showing proper plug installation is presented on **Figure D-1B**.

Timing

To maximize the survival of maintenance plantings, plantings will occur in June or July. Depending on nursery availability, plantings will occur as early as possible in June, as newly-planted plugs require time to root and become established before their first winter.

FIGURES



NOTES:

1. REFER TO FIGURE D-1B FOR DETAILS REGARDING PLANT SPECIES AND QUANTITIES TO BE INSTALLED. PLANTINGS SHALL BE INSTALLED AT A DENSITY OF APPROXIMATELY 2-FOOT ON-CENTER.
2. PLANT ENCLOSURES TO DETER HERBIVORY WILL BE INSTALLED AROUND EACH OF THE SIX MAINTENANCE PLANTING AREAS. REFER TO FIGURE D-1B FOR PLANT ENCLOSURE INSTALLATION DETAIL.
3. REFER TO FIGURE D-1B FOR FIBER ROLL INSTALLATION DETAIL.
4. CONTOURS SHOWN IN THE WETLAND C AREA ARE FROM WHITE LAKE DOCK & DREDGE COMPANY, DATED 7/31/21.

LEGEND:

- WETLAND C BOUNDARY
- FINAL GRADE
- MAINTENANCE PLANTING AREA (NOTES 1 & 2)
- 12" DIA FIBER ROLL (NOTE 3)

100 50 0 100 200

SCALE: 1"=100'

FIGURE D-1A

NEW YORK STATE Department of Environmental Conservation

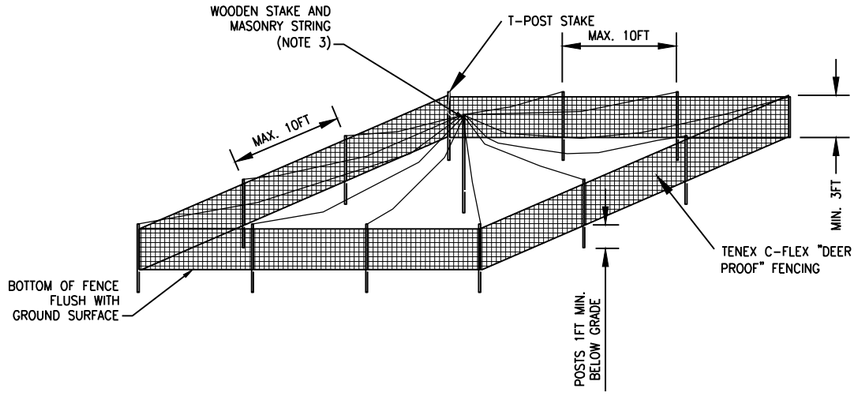
2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK

WETLAND C NORTH MAINTENANCE PLANTING PLAN

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560

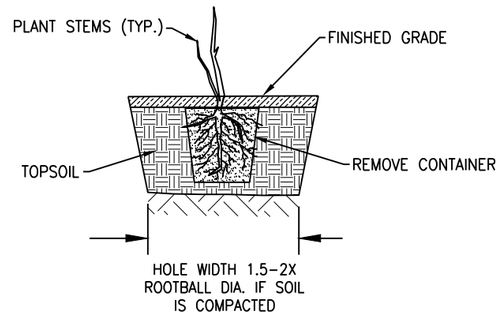
FILE NAME: P:\NYSDEC PROGRAM\452506 - WA #19 - LOWER GENESEE RIVER CW\10.0 TECHNICAL CATEGORIES\10.10 CAD\RECORD DWG\FIGURES\2023\452506-CHANNEL.DWG
PLOT DATE: 11/9/2023 8:36 AM PLOTTED BY: RUSSO, JILL [US-US]



NOTES:

1. ENCLOSURE DIMENSIONS AND SHAPE SHALL BE MODIFIED TO FIT FIELD CONDITIONS.
2. FENCE HEIGHT SHALL BE A MINIMUM OF 3 FT. AND EXTEND ABOVE THE WATER SURFACE. TALLER FENCE MAY BE USED.
3. WOODEN STAKES SHALL BE INSTALLED WITHIN THE ENCLOSURES, APPROXIMATELY 20-FOOT ON CENTER, AND MASONRY STRING SHALL BE STRUNG FROM STAKES TO THE ENCLOSURE STEEL T-POSTS TO CREATE A GRID. OCCASIONAL PINK FLAGGING TAPE SHALL BE ATTACHED TO THE MASONRY STRING TO INCREASE THE VISIBILITY OF THE GRID AND FURTHER DETER HERBIVORY.

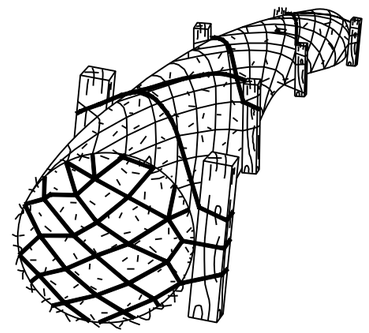
PLANT ENCLOSURE
NOT TO SCALE



NOTES:

1. SEE TABLE D-1 FOR SPECIES, SIZE AND QUANTITY REQUIREMENTS.
2. COMPLETELY REMOVE CONTAINER AND LOOSEN ROOTBALL PRIOR TO BACKFILLING.
3. ALL EMERGENT PLUGS SHALL BE INSTALLED WITH STEEL DIBBLE BARS. EACH PLUG SHALL BE INSTALLED SLIGHTLY BELOW GROUND SURFACE, AND THEN CAREFULLY PRESSED AROUND THE EDGES TO EXPEL AIR POCKETS AND SECURE THE PLUG.

HERBACEOUS PLUG AND BARE ROOT PLANTING (TYP.)
NOT TO SCALE



TYPICAL ANCHORAGE OF FIBER ROLL

NOTES:

1. ALTERNATE TWO (2) 2"x2"x36" WOODEN STAKES ON SIDES OF FIBER ROLL WITH NYLON/POLYESTER/HEMP ROPE HOLDING ROLL DOWN.
2. FIBER ROLL SHALL BE MADE OF COIR (COCONUT FIBER). THE MATERIAL SHALL BE ENCASED IN A NETTING OF BURLAP UNLESS THE MATERIAL HAS INHERENT STRUCTURAL STABILITY.
3. SHALL CONSIST OF 100% BIODEGRADABLE MATERIALS AND NO PHOTODEGRADABLE POLYPROPYLENE OR OTHER PLASTIC COMPONENT SHALL BE CONTAINED IN ANY PART OF THE PRODUCT.
4. FIBER ROLL ENDS SHALL BE BUTTED OR OVERLAPPED TO PREVENT GAPS.

FIBER ROLL DETAIL
NOT TO SCALE

TABLE D-1

SCIENTIFIC NAME	COMMON NAME	SIZE	QUANTITY
PELTANDRA VIRGINICA	GREEN ARROW ARUM	2-INCH PLUG	1,000
PONTEDERIA CORDATA	PICKERELWEED	2-INCH PLUG	4,000
SAGITTARIA LATIFOLIA	COMMON ARROWHEAD	2-INCH PLUG	1,000
SCHOENOPLECTUS TABERNAEMONTANI	SOFT-STEMMED BULLRUSH	2-INCH PLUG	7,000
SPARGANIUM AMERICANUM	AMERICAN BURR-WEED	2-INCH PLUG	2,000
		TOTAL QUANTITY	15,000

NOTES:

1. BOTANICAL NOMENCLATURE FOLLOWS NEW YORK FLORA ATLAS (WERIER ET AL. 2023)
2. SUBSTITUTIONS MAY BE MADE WITH SIMILAR NATIVE SPECIES BASED ON SUPPLIER AVAILABILITY.

FIGURE D-1B

NEW YORK STATE Department of Environmental Conservation

2023 PERIODIC REVIEW REPORT
ROCHESTER, NY

LOWER GENESEE RIVER OU-5 OF THE EASTMAN BUSINESS PARK
WETLAND C NORTH
MAINTENANCE
PLANTING PLAN DETAILS

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 • 315-451-9560