



US Army Corps of Engineers ®

Levee Inspection Report

Name of System: Munster
 Name of Segment: NPS - Borman
 NLD System ID: 2605000006 NLD Segment ID: 2604000018

Segment Type: Locally Constructed, Locally Operated and Maintained
 Levee Sponsor (Name and Organization): INDOT
 Inspection Report Prepared by: Chris Schaal Date(s) of Inspection: 05/03/2024 - 05/01/2024
 Inspection Report Prepared by: Mike Cook
 Inspection Report Prepared by: Youa Yang

Other Segments Within This System

Segment Name	NLD Segment ID#	Segment Type
Munster	2604000009	USACE Constructed, Public sponsor O&M

Contents of Levee Inspection Report:

- Levee Inspection Summary
- General Items
- Levee Embankment
- Floodwalls
- Interior Drainage System
- Pump Stations
- FRM Channels
- Public Sponsor Pre-Inspection Form
- Levee Inspection Reference Guide
- Photos

Type of Inspection: Formal Inspection PL84-99 Inspection Special Inspection (mark this if purpose is Initial Eligibility Inspection or Continuing Eligibility Inspection for non-federal systems)

Approval Signature: *John A Groboski* Date Approved: 7/26/2024

Levee Inspection Team Members (Levee Sponsor, USACE, and Others)

Name	Organization	Discipline	Phone Number
Yuki Galisanao	USACE - Chicago District	LSPM	
Chris Schaal	USACE - Chicago District	Geotech	
Mike Cook	USACE - Chicago District	Geotech	
Youa Yang	USACE - Chicago District	Geotech	
Andrew Lin	USACE - Chicago District	Structural	
Sylvia Pimentel	USACE - Chicago District	H&H	

Levee Segment Inspection Summary:

[Provide an Executive Summary of the segment inspection considering (1) the general condition of the segment, (2) the rationale for key Item ratings, categorized by Feature , and (3) the quantity or severity of notable observations/deficiencies and (4) notable changes in condition since the last inspection.]

There were two Minimally Acceptable items relating to fencing that encroached on the slope next to the retaining wall.

Levee System Inspection Summary:

[Synthesize information from the Levee Segment Inspection Summaries for each segment within the levee system. For single-segment levee systems, see Levee Segment Inspection Summary above.]

Munster had 3 significant comments related to inoperable louvre fans and sump pump at the pump stations and other minor comments related to animal burrow holes, unwanted vegetation on or near the levee embankment and floodwalls, silted in flap gates, minor cracks, spalling, or degraded joint filler in the concrete floodwalls, encroachments, depressions or rutting and bank or slope caving/erosion.

The overall system rating has not changed.

General Items

Rated Item	Rating	Rating Guidelines		Observation Locations with Descriptions and Resulting Item Rating Justification
1. Operations and Maintenance Manuals	M	A	Levee Owner's Manual, O&M Manuals, and/or manufacturer's operating instructions are present.	Justification: There is no O&M manual developed for this segment. The sponsor should coordinate with INDOT to clarify O&M responsibilities for the segment.
		M	Sponsor manuals are lost or missing or out of date; however, sponsor will obtain manuals prior to next scheduled inspection.	
		U	Sponsor has not obtained lost or missing manuals identified during previous inspection.	
2. Emergency Supplies and Equipment (A or M only)	A	A	The sponsor maintains a stockpile of sandbags, shovels, and other flood fight supplies which will adequately supply all needs for the initial days of a flood fight. Sponsor determines required quantity of supplies after consulting with inspector.	Justification: INDOT maintains their own flood fight supplies to operate the sluice gate. The sponsor can also provide sandbags for initial flood fighting if required.
		M	The sponsor does not maintain an adequate supply of flood fighting materials as part of their preparedness activities.	
3. Flood Preparedness and Training (A or M only)	M	A	Sponsor has a written system-specific flood response plan that will be used to trigger emergency operation activities and a solid understanding of how to operate, maintain, and staff the levee system during a flood, including demonstration that sufficient flood warning time exists for the completed operation of all closure structures. Sponsor maintains a list of emergency contact information for appropriate personnel and other emergency response agencies.	Justification: INDOT has a good working knowledge of flood response activities, but there is no documentation of system-specific emergency procedures and emergency contact personnel. Additional coordination is required.
		M	The sponsor maintains a good working knowledge of flood response activities, but documentation of system-specific emergency procedures and emergency contact personnel is insufficient or out of date.	

Key: A = Acceptable. M = Minimally Acceptable. U = Unacceptable. N/A = Not Applicable.

Levee Embankments

Rated Item	Rating	Rating Guidelines		Observation Locations with Descriptions and Resulting Item Rating Justification
1. Unwanted Vegetation Growth	A	A	The levee has little or no unwanted vegetation (trees, bush, or undesirable weeds), except for vegetation that is properly contained and/or situated on overbuilt sections, such that the mandatory 3-foot root-free zone is preserved around the levee profile. The levee has been recently mowed. The vegetation-free zone extends 15 feet from both the landside and riverside toes of the levee to the centerline of the tree. If the levee access easement doesn't extend to the described limits, then the vegetation-free zone must be maintained to the easement limits. Reference EP 1110-2-18 and other relevant Corps policy.	Justification: No issues observed.
		M	Minimal vegetation growth (brush, weeds, or trees 2 inches in diameter or smaller) is present within the zones described above. This vegetation must be removed but does not currently threaten the operation or integrity of the levee.	
		U	Significant vegetation growth (brush, weeds, or any trees greater than 2 inches in diameter) is present within the zones described above and must be removed to reestablish or ascertain levee integrity.	
2. Sod Cover	A	A	There is good coverage of sod over the levee.	Justification: No issues observed.
		M	Approximately 25% of the sod cover is missing or damaged over a significant portion or over significant portions of the levee embankment. This may be the result of over-grazing or feeding on the levee, unauthorized vehicular traffic, chemical or insect problems, or burning during inappropriate seasons.	
		U	Over 50% of the sod cover is missing or damaged over a significant portion or portions of the levee embankment.	
		NA	Surface protection is provided by other means.	

Key: A = Acceptable. M = Minimally Acceptable. U = Unacceptable. N/A = Not Applicable.

Levee Embankments

Rated Item	Rating	Rating Guidelines		Observation Locations with Descriptions and Resulting Item Rating Justification
3. Encroachments	M	A	No trash, debris, unauthorized farming activity, structures, excavations, or other obstructions present within the easement area. Encroachments have been previously reviewed by the Corps, and it was determined that they do not diminish proper functioning of the levee.	2024-0001 : Fence on slope.(M) 2024-0005 : Fence encroaching on wall(M) Recommendation: Remove encroaching fencing from slope of wall.
		M	Trash, debris, unauthorized farming activity, structures, excavations, or other obstructions present, or inappropriate activities noted that should be corrected but will not inhibit operations and maintenance or emergency operations. Encroachments have not been reviewed by the Corps.	
		U	Unauthorized encroachments or inappropriate activities noted are likely to inhibit operations and maintenance, emergency operations, or negatively impact the integrity of the levee.	
4. Closure Structures	NA	A	Closure structure in good repair. Placing equipment, stoplogs, and other materials are readily available at all times. Components are clearly marked and installation instructions/ procedures readily available. Trial erections have been accomplished in accordance with the O&M Manual.	
		U	Any of the following issues is cause for this rating: Closure structure in poor condition. Parts missing or corroded. Placing equipment may not be available within the anticipated warning time. The storage vaults cannot be opened during the time of inspection. Components of closure are not clearly marked and installation instructions/ procedures are not readily available. Trial erections have not been accomplished in accordance with the O&M Manual.	
		NA	There are no closure structures along this component of the levee segment / system.	
5. Slope Stability	A	A	No slides, sloughs, tension cracking, slope depressions, or bulges are present.	Justification: No issues observed.
		M	Minor slope stability problems that do not pose an immediate threat to the levee embankment.	
		U	Major slope stability problems (ex. deep seated sliding) identified that must be repaired to reestablish the integrity of the levee embankment.	

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Levee Embankments

Rated Item	Rating	Rating Guidelines		Observation Locations with Descriptions and Resulting Item Rating Justification
6. Erosion/Bank Caving	A	A	No erosion or bank caving is observed on the landward or riverward sides of the levee that might endanger its stability.	Justification: No issues observed.
		M	There are areas where minor erosion is occurring or has occurred on or near the levee embankment, but levee integrity is not threatened.	
		U	Erosion or caving is occurring or has occurred that threatens the stability and integrity of the levee. The erosion or caving has progressed into the levee section or into the extended footprint of the levee foundation and has compromised the levee foundation stability.	
7. Settlement	A	A	No observed depressions in crown. Records exist and indicate no unexplained historical changes.	Justification: No issues observed.
		M	Minor irregularities that do not threaten integrity of levee. Records are incomplete or inclusive.	
		U	Obvious variations in elevation over significant reaches. No records exist or records indicate that design elevation is compromised.	
8. Depressions / Rutting	A	A	There are scattered, shallow ruts, pot holes, or other depressions on the levee that are unrelated to levee settlement. The levee crown, embankments, and access road crowns are well established and drain properly without any ponded water.	Justification: No issues observed.
		M	There are some infrequent minor depressions less than 6 inches deep in the levee crown, embankment, or access roads that will pond water.	
		U	There are depressions greater than 6 inches deep that will pond water.	
9. Cracking	A	A	Minor longitudinal, transverse, or desiccation cracks with no vertical movement along the crack. No cracks extend continuously through the levee crest.	Justification: No issues observed.
		M	Longitudinal and/or transverse cracks up to 6 inches in depth with no vertical movement along the crack. No cracks extend continuously through the levee crest. Longitudinal cracks are no longer than the height of the levee.	
		U	Cracks exceed 6 inches in depth. Longitudinal cracks are longer than the height of the levee and/or exhibit vertical movement along the crack. Transverse cracks extend through the entire levee width.	

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Levee Embankments

Rated Item	Rating	Rating Guidelines		Observation Locations with Descriptions and Resulting Item Rating Justification
10. Animal Control	A	A	Continuous animal burrow control program in place that includes the elimination of active burrowing and the filling in of existing burrows.	Justification: No issues observed.
		M	The existing animal burrow control program needs to be improved. Several burrows are present which may lead to seepage or slope stability problems, and they require immediate attention.	
		U	Animal burrow control program is not effective or is nonexistent. Significant maintenance is required to fill existing burrows, and the levee will not provide reliable flood protection until this maintenance is complete.	
11. Culverts / Discharge Pipes (This item includes both concrete and corrugated metal pipes.)	NA	A	There are no breaks, holes, cracks in the discharge pipes/ culverts that would result in significant water leakage. All joints appear to be closed and the soil tight. The interior condition of pipes has been verified using television camera videotaping or visual inspection methods within the frequency determined in accordance with Levee Inspections and Site Visits: Standard Operating Procedures. The exterior pipe conditions observed are in good condition.	
		M	There are some defects noted that should be monitored. The interior condition of pipes has been verified using television camera videotaping or visual inspection methods at the frequency determined in accordance with Levee Inspections and Site Visits: Standard Operating Procedures. The exterior pipe conditions observed do not indicate a change in condition since the last condition assessment.	
		U	One or more significant defects exist. The exterior pipe conditions observed indicate there may be a change in pipe condition since the last condition assessment. The interior condition of pipes has not been verified using television camera videotaping or visual inspection methods at the frequency determined in accordance with Levee Inspections and Site Visits: Standard Operating Procedures.	
		NA	There are no discharge pipes / culverts.	

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Levee Embankments

Rated Item	Rating	Rating Guidelines		Observation Locations with Descriptions and Resulting Item Rating Justification
12. Riprap Revetments & Bank Protection	NA	A	No riprap displacement or stone degradation that could pose an immediate threat to the integrity of channel bank. Riprap intact with no woody vegetation present.	
		M	Minor riprap displacement or stone degradation that could pose an immediate threat to the integrity of the channel bank. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant riprap displacement, exposure of bedding, or stone degradation observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Rock protection is hidden by dense brush, trees, or grasses.	
		NA	There is no riprap protecting this feature of the system, or riprap is discussed in another section.	
13. Revetments other than Riprap	NA	A	Existing revetment protection is properly maintained, undamaged, and clearly visible.	
		M	Minor revetment displacement or deterioration that does not pose an immediate threat to the integrity of the levee. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant revetment displacement, deterioration, or exposure of bedding observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Revetment protection is hidden by dense brush and trees.	
		NA	There are no such revetments protecting this feature of the system.	

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Levee Embankments

Rated Item	Rating	Rating Guidelines		Observation Locations with Descriptions and Resulting Item Rating Justification
14. Underseepage Relief Wells/ Toe Drainage Systems	NA	A	Toe drainage systems and pressure relief wells necessary for maintaining levee segment / system stability during high water functioned properly during the last flood event and no sediment is observed in horizontal system (if applicable). Nothing is observed which would indicate that the drainage systems won't function properly during the next flood, and maintenance records indicate regular cleaning. Wells have been pumped tested within the past 5 years and documentation is provided.	
		M	Toe drainage systems or pressure relief wells are physically damaged or are experiencing some clogging or performance losses as evidenced by performance data, pumping tests, or observation. The performance losses are not expected to significantly affect levee performance during full loading. Wells have been pump tested, drainage systems have been inspected within the past 5 years, and documentation is provided. Maintenance records indicate some well rehabilitation is needed.	
		U	Toe drainage systems or pressure relief wells necessary for maintaining levee segment / system stability during flood events have fallen into disrepair or have become clogged. No maintenance records. No documentation of the required pump testing.	
		NA	There are no relief wells/ toe drainage systems along this component of the levee segment / system.	
15. Seepage	A	A	No evidence or history of unrepaired seepage, saturated areas, or boils.	Justification: No issues observed.
		M	Evidence or history of minor unrepaired seepage or small saturated areas at or beyond the landside toe but not on the landward slope of levee. No evidence of soil transport.	
		U	Evidence or history of active seepage, extensive saturated areas, or boils.	

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Photos



Inspect ID: 2024-0001

Feature Details: Levee Embankments - Encroachments - Waterside Slope

Station Start:

Station End:

Caption: Minimally Acceptable - Fence on slope.



Inspect ID: 2024-0005

Feature Details: Levee Embankments - Encroachments

Station Start:

Station End:

Caption: Minimally Acceptable - Fence encroaching on wall



**US Army Corps
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Levee System 2605000006 / Segment 2604000018 Levee Sponsor Pre-Inspection Form

Purpose: To collect the best and most recent information to ensure all maintenance activities, including any improvements or repair work, and any other changes in condition are appropriately noted and documented during this inspection. This information is important to help pre-plan locations for inspectors during the field inspection.

Directions: To be filled out directly by the levee sponsor/maintaining agency or by USACE through interviewing the levee sponsor/maintaining agency during coordination efforts in preparation for the inspection. If the requested information is contained in supplemental documentation that was provided to USACE separately then only referencing to that supplemental documentation or providing information different than what is in the supplemental documentation is required on this form.

Levee Sponsor/Maintaining Agency: INDOT

Date of last USACE Inspection: 04/30/2018

Date Levee Sponsor was notified of upcoming Inspection: 01/24/2024

1. Summary of maintenance/repairs/modifications performed since the last USACE inspection (if not captured in maintenance logs/documentation that has been provided separately):

None available.

2. Summary of planned actions/improvements/recommendations, but not yet accomplished:

None available.

3. Results from inspections conducted by the levee sponsor/maintaining agency (if inspection documentation has not been provided separately):

No inspections performed.

4. Description of any performance information observed, including successful performance, since the last USACE inspection. Include intervention measures taken, such as floodfighting or operational actions (e.g. operating pumps or closures) during high water events:

No performance information available.

5. Identify any specific locations or components that you would like to be closely inspected or have planned testing scheduled (e.g. for pump stations/closures/relief wells) to correspond with the USACE inspection:

N/A

6. Provide any other information you want to note to have occurred since the last USACE inspection, such as any training/testing/emergency exercises or communication activities:

N/A

Levee Inspection Reference Guide

The purpose of the Levee Inspection Reference Guide is to provide supporting direction for conducting formal and special levee inspections, determining item ratings and finalizing the results of the inspection. This Checklist is to be used with the Standard Operation Procedures (SOP) for Levee Inspections and Site Visits.

A. Definitions:

Approved Alteration - Any action that builds upon, alters, improves, moves, or occupies a levee system. For federally authorized levee systems, a USACE Section 408 permission has been issued. For non-federally constructed and locally maintained levee systems, the levee sponsor is aware of and has approved the alteration. Often, observations of approved alterations are handled under the Encroachment item in the Levee Inspection Checklist. These observations should be noted as such and details included in the observation descriptions.

Encroachment - A non-project item such as trash, debris, structures, obstructions or unauthorized/inappropriate activities within the easement/right-of-way of the levee. For federally authorized levee systems, no USACE Section 408 permission has been issued. For non-federally constructed and locally maintained levee systems, the levee sponsor is unaware of and/or has not approved the non-project item or activity.

Feature - A component of a levee segment/system (e.g. Embankment, Floodwall, Channel, etc.). Levee segments/systems may have multiple Features that function together to exclude water from a defined leveed area. Main Features have their own section in the Levee Inspection Checklist.

Formal Inspection - A pre-scheduled comprehensive levee inspection by a team of subject matter experts led by a professional engineer or professional geologist to (1) document levee condition, (2) assess progress of ongoing risk management activities, (3) inform risk assessments and new risk management recommendations, and (4) include specific evaluations or testing, such as exercising closures or performing relief well pump tests.

Item - A characteristic of a levee Feature (e.g. Encroachments, Sod Cover, Seepage, etc.) that is used to assess the condition of the levee, inform risk assessments, and/or evaluate adequacy of operations and maintenance.

Levee Segment - A levee segment is a discrete portion of a levee system that is operated and maintained by a single entity. A levee segment may be composed of one or more levee features.

Levee System or Levee - A man-made structure that does not cross a watercourse, usually an earthen embankment or floodwall, designed and constructed with the principle function of excluding flood waters for a limited range of flood events from a portion of the floodplain (referred to as "leveed area").

Non-Project Segment - a form of manmade high ground which a levee system/segment ties into, whose existence and performance is necessary for excluding flood waters from the leveed area, but is not under any USACE authority.

Observation - A specific location (point or line) where an Item is evaluated and rated based on the rating guidelines (e.g. an area of levee that has less than 50% sod coverage).

Observation Location Description - Information that further describes the observation location such as land or waterside of the levee or proximity along the slope or crown that provides the reader with sufficient information to find the observation during future maintenance activities or inspections. Observation location descriptions may include the following: landside toe, landside toe and slope, landside levee slope only, landside slope and crown, slopes and crown, crown, slopes, toes, waterside toe, waterside toe and slope, waterside levee slope only, waterside slope and crown, other.

Observation Number - A numeric value that is used to identify a specific observation location during an inspection.

Rating Guidelines - Established parameters to assist an inspector in assessing the visual condition of a specific location (point or line) or multiple locations that serve as the rationale for a final Item rating.

Special Inspection - A formally documented visual inspection that is requested by the levee sponsor or required due to changed conditions or to document performance.

Use of the Levee Inspection Checklist:

General Notes:

- Each individual levee segment will have its own inspection results.
- Include only the feature sections of the Checklist that apply to the segment being inspected.
- The Levee Inspection Summary and the section labeled "General Items" is required for every formal and special inspection.
- Specific data fields have been included in the National Levee Database (NLD) to document frequency of inspection, testing or operation and condition for the following Features or Items: pipes, gates, relief wells, toe drains and closures. Applicable tables should be attached to the Levee Inspection Report (see Appendix J of the SOP for Levee Inspections and Site Visits. Specific corrective recommendations should not be included with the inspection results. Inspection results should be used to develop risk-informed recommendations as part of the Levee Risk Management Summary (See EC 1165-2-218).
- If there is a non-project segment as part of a levee system with a federally authorized segment that rights-of-entry could not be obtained, then visual observations should be documented in a Site Visit Summary.

Specific Levee Inspection Features Sections and Items:

- The items labeled "Culverts and Discharge Pipes" includes all gravity flow and pressurized pipes that pass over or through the levee and its foundation, as well as pipes away from the levee. Judgment and consistency should be exercised when determining if pipes should be rated under the Levee Embankment Feature or the Interior Drainage Feature "Culverts and Discharge Pipes" rated items. Pipe closures and drainage features should be rated in their respective items under the Interior Drainage System Feature. This includes all associated gates and drainage ditches, ponding areas and structures that are functioning as interior drainage components along the levee. The pump station feature has a separate item for intake and discharge pipes associated with those Features.
- The items labeled "Closure Structures" includes all closure structures, sandbag and earthen closures, stop logs and gates. Conduit and culvert closures are documented and rated in the appropriate items within the Interior Drainage System Feature.
- The starting and stopping location for embankments, floodwalls and closures shall be determined in a case-by-case basis.
- The section labeled "Flood Risk Management Channels" includes channels that have been constructed in association with the levee system. This section may also be used to inspect channels independent of levees. For "shoaling", the rating guidelines describing vegetation in a shoal are intended to document the permanence of the shoal and its likely impact on channel integrity or flow capacity.
- The Feature section labeled "Pump Stations" includes the structure of the pump station and all associated intake/discharge pipe, mechanical/electrical systems and equipment.
- For "Interior Drainage System", "Flood Risk Management Channels", and "Pump Stations", conditions of Items that impact levee embankments or floodwalls (e.g. ditches, ponding areas, bank stability or erosion) should also be rated under the appropriate Levee Embankments or Floodwalls section to reflect the impact on levee integrity.

C. Observation Ratings:

General Notes:

- For each Observation noted during the inspection, the inspector will apply a rating to the Observation based on the rating guidelines associated with the corresponding Item. Overall Item ratings are assigned based on summarizing all Observations for that Item.
- When an observation is associated with more than one feature (e.g. observed erosion identified in or near a levee embankment and a flood risk management channel), observations shall be recorded, described, and rated within each appropriate feature and item.
- Inspectors should document any observation/activity that can be visually seen from the levee that may adversely affect the integrity of the levee, even if the concern is beyond the limits of the easement/right- of-way, with documentation that the Observation is outside the easement/right-of-way. It is understood that resolution of these instances may be beyond the control of the levee sponsor.
- Observations associated with approved Section 408 permissions or levee sponsor permits for modifications should be rated under the corresponding Item and feature or under “Encroachments” and documented as such.
- Seepage Observation ratings should consider information collected during recent flood events.
- Most levee systems have components that may require testing or inspection to occur at a frequency that is outside of or more frequent than during pre-scheduled formal inspections to assess their internal condition or operability. These components usually are culverts and discharge pipes; relief wells and toe drains; closures, gates, and valves; and operational systems in pump stations. Requirements for testing/inspection of these components are typically prescribed in the levee’s operations and maintenance manual. A field observation must be recorded of visible conditions of each component during an inspection. This will be used to supplement internal conditional assessments using PACP defect codes for culverts and discharge pipes and toe drains; internal conditional assessments from pump testing for relief wells; and operational adequacy from testing/installation records for closures, gates and valves, and operational systems in pump stations in the Item Rating determination.
- If Districts schedule a walk-through pipe inspection (in accordance with EM 1110-2-2902 and EM 385-1-1) in conjunction with a levee inspection, inspectors must document both the interior conditions by assigning a PACP defect code and the pipe’s exterior conditions with an inspection Observation Rating.

General Guidelines for Assigning Observation Ratings:

Acceptable	Minimally Acceptable	Unacceptable
An “Acceptable” observation rating generally means that it has been operated and maintained in a way that meets the intent of the “Acceptable” rating guidelines herein, and is not expected to have a negative impact on performance.	A “Minimally Acceptable” observation rating generally means that it has deficiencies that should be corrected, but are not currently expected to have a negative impact. If not corrected, these deficiencies could lead to a negative impact on performance.	An “Unacceptable” observation rating generally means that it has serious deficiencies that require correction because these deficiencies are expected to have a negative impact on performance.

Documentation of the levee inspection observations should include, at a minimum:

- Observation number associated with the point or line
- Observation rating of “Acceptable”, “Minimally Acceptable” or “Unacceptable” based on rating guidelines for the Item
- Observation location description
- Levee station, river mile and/or GPS latitude/longitude associated with the point or line
- Description of the observation which is a detailed narrative that explains why an observation was documented and the rationale for the observation rating

- Photo associated with the observation point or line.
- Photo number related to a photograph of the observation point or line.

D. Item Ratings:

- Item ratings will be determined by considering all associated Observation ratings comprehensively. Rationale for overall Item ratings must be documented in the Levee Inspection Checklist.
- If the Item does not exist within the levee segment, the Item should be rated “N/A”.

General Guidelines for Assigning Item Ratings:

Acceptable Item	Minimally Acceptable Item	Unacceptable Item
Observations are rated “Acceptable”, or one or more observations are rated “Minimally Acceptable” but the number or severity of “Minimally Acceptable” Observations collectively is not expected to have a negative impact on performance. No Observations were rated as “Unacceptable.”	One or more Observations are rated “Minimally Acceptable” or one or more Observations were rated “Unacceptable” but the number or severity of Observations collectively are not currently expected to have a negative impact, but if not corrected deficiencies could lead to a negative impact on performance.	One or more Observations are rated “Unacceptable” and the number or severity of Observations collectively has are expected to have a negative impact on performance.

National Levee Database

NLD

LEVEE INSPECTION MAPBOOK

Levee Segment
NPS - Borman

NLD Levee Segment ID
2604000018

Location
Munster

Inspection Type
Formal

Start Date
03-May-2024

End Date
01-May-2024

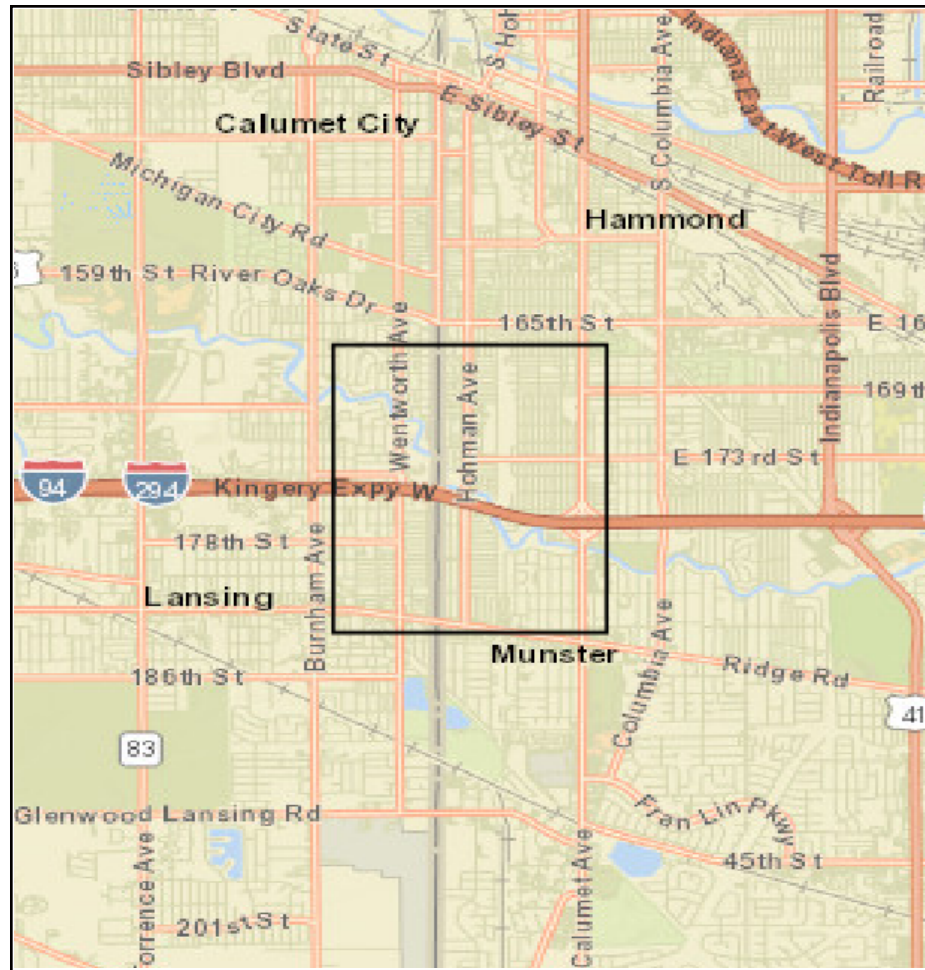
Inspected By
Chris Schaal, Mike Cook, Youa Yang



US Army Corps
of Engineers

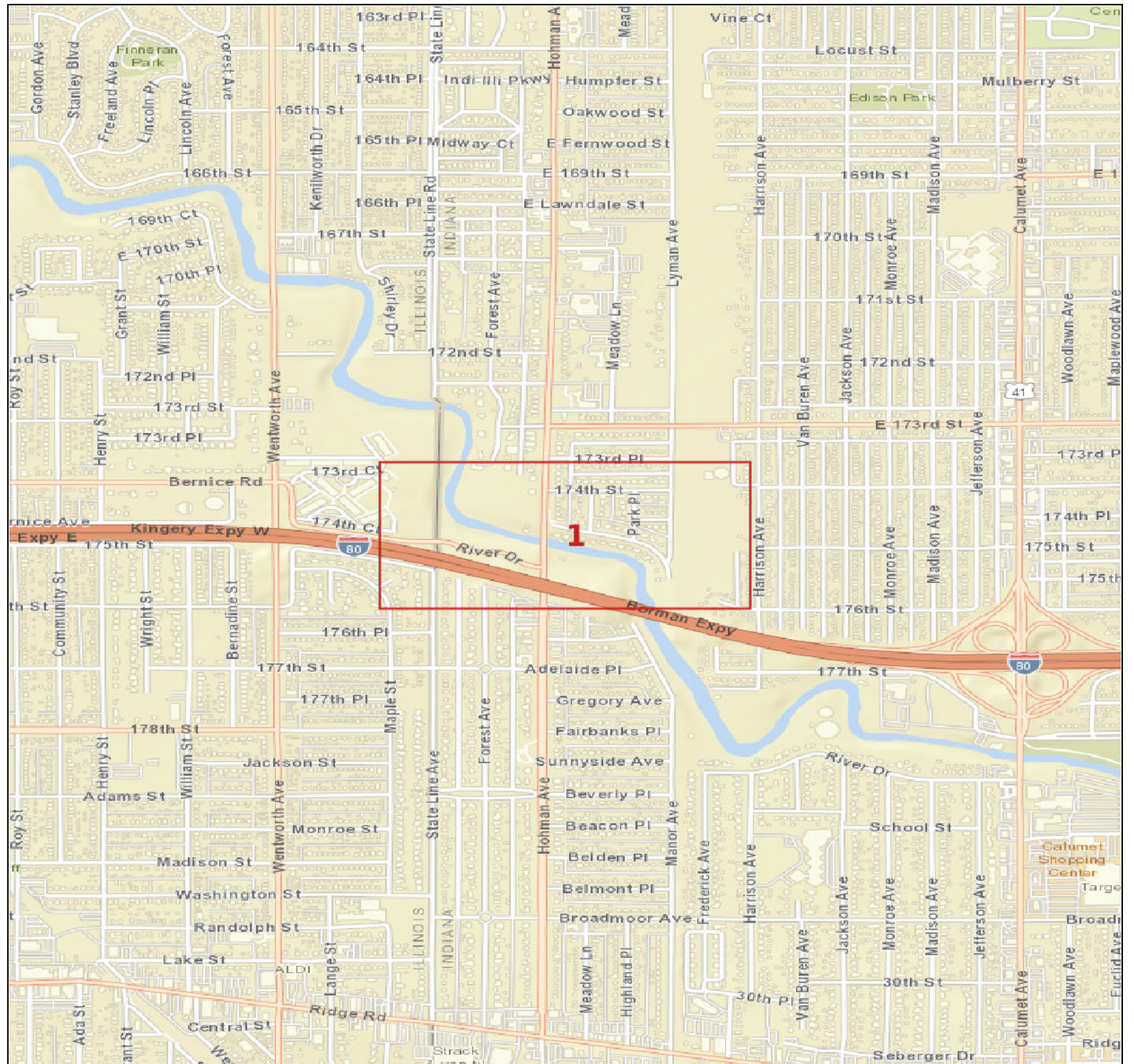
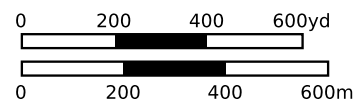
SHEET INDEX

Levee: NPS - Borman

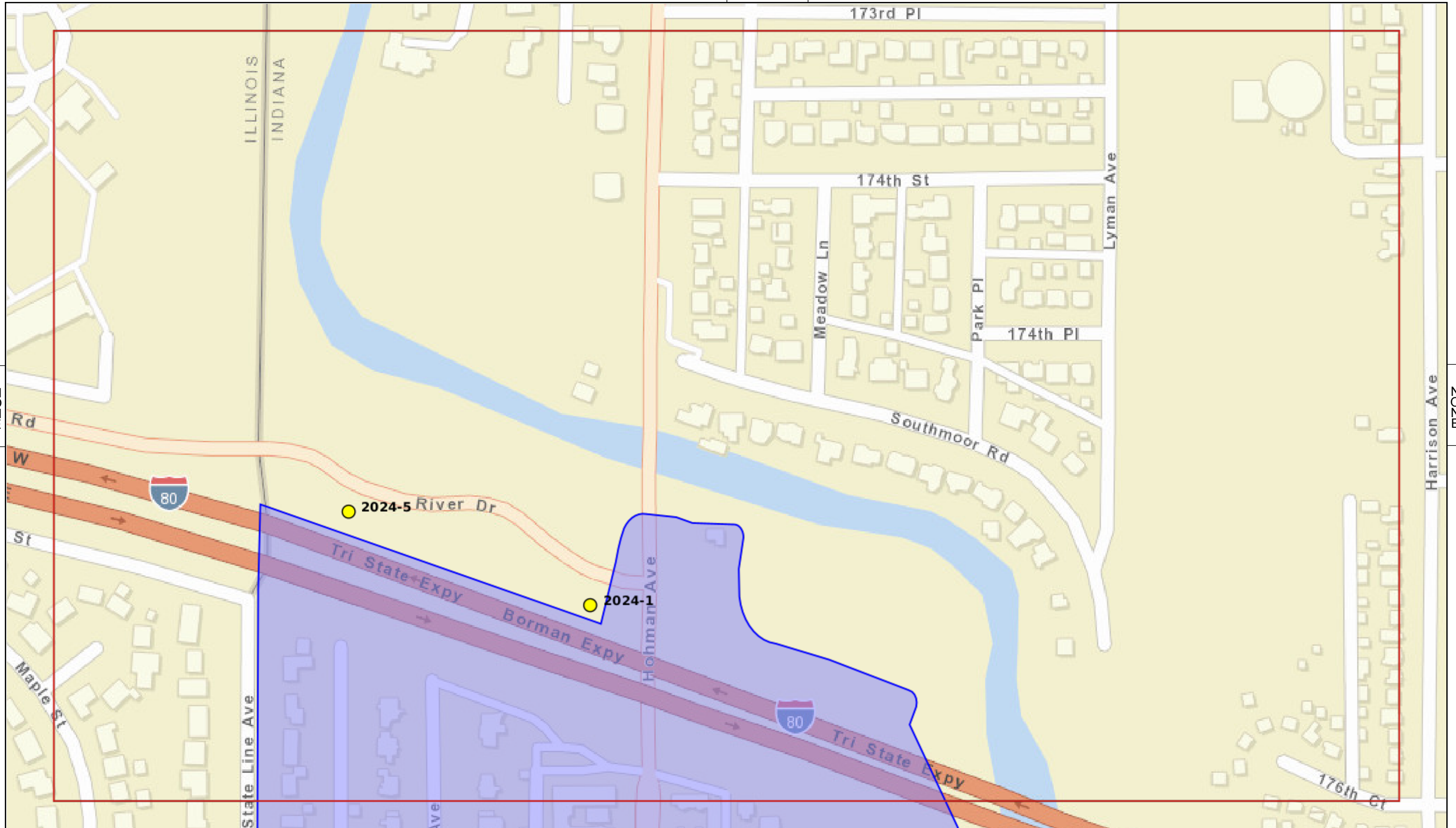


MAP ELEMENTS

1 Standard Sheets



NONE



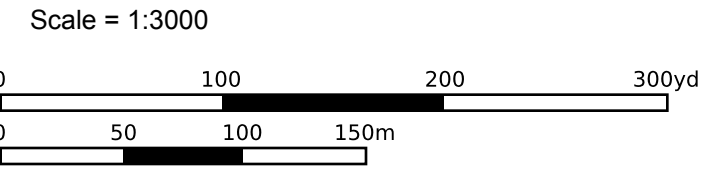
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NONE



- OBSERVATIONS**
- Acceptable
 - Minimally Acceptable
 - Unacceptable
 - Not Applicable



NLD	Sheet: 1	03-May-2024
	NPS - Borman	
	Type: Formal	01-May-2024