



**US Army Corps
of Engineers®**

Levee Inspection Report

Name of System: Hammond Forest Ave

Name of Segment: Hammond Forest Ave

NLD System ID: 2605000010

NLD Segment ID: 2604000010

Segment Type: USACE Constructed, Public sponsor O&M

Levee Sponsor (Name and Organization): Little Calumet River Basin Development Commission

Inspection Report Prepared by: Yuki Galisanao

Date(s) of Inspection: 07/06/2020 - 07/08/2020

Other Segments Within This System

Segment Name	NLD Segment ID#	Segment Type	Segment Inspection Rating

Contents of Inspection Report:

☐ Levee Inspection Summary

Inspection Checklist

- ☒ General Items
- ☒ Levee Embankment
- ☒ Concrete Floodwalls
- ☒ Interior Drainage System
- ☒ Pump Stations
- ☐ FDR System Channels

☒ Public Sponsor Pre-Inspection Form

☐ National Flood Insurance Program (NFIP) - 44 CFR 65.10
Provision Evaluation

☒ General Instructions

☒ Maps

Type of Inspection: ☒ Routine Inspection ☐ Periodic Inspection ☐ Special Inspection

Purpose of Special Inspection: _____

Ratings:

Segment Rating: ☐ Acceptable ☒ Minimally Acceptable ☐ Unacceptable ☐ No Verdict

System Rating: ☐ Acceptable ☐ Minimally Acceptable ☐ Unacceptable ☐ No Verdict

LSPM Signature: _____

William A. Rockford

Date Approved: 29 Sept 2020

LSO Signature: _____

Date Approved: _____

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

Name	Organization	Discipline	Phone Number
Yuki Galisanao	USACE - Chicago District	Geotechnical	
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Dan Repay	LCRBDC		
Multiple reps	City of Hammond		
Multiple reps	HSD		

Segment Rating Rationale:

[Describe the basis of the Segment rating considering (1) the general condition of the segment, (2) the rationale for Item ratings, categorized by Feature that contributed to the Segment rating, and (3) the number or severity of notable observations/deficiencies. The summary may also include information related to the condition of the levee, not otherwise captured in the Levee Inspection Checklist, if applicable.]

Minor issues with trees and tall vegetation, encroachments, steep slopes, bank erosion, settlement, depressions, animal burrows, condition of pipes, tilting retaining wall, minor spalling, exposed water stops, gabion damage, spalling and exposed rebar on the concrete cap, vegetation and silt at the outlets, erosion around headwalls, blocked check valves, displaced riprap, minor structural issues at the pump stations, debris on the fencing, vent issues, loose groundwater, and megger testing.

System Rating Rationale:

[Synthesize information from the Segment rating rationales for each Segment within the System. For single-segment systems, see segment rating rationale above.]

Same as segment rating.

General Items for All Flood Damage Reduction Segments / Systems
For use during all inspections of all Flood Damage Reduction Segments / Systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Operations and Maintenance Manuals	A	A	Levee Owner's Manual, O&M Manuals, and/or manufacturer's operating instructions are present.	Justification: Forest Ave Levee System O&M Manual was developed for certification. Manuals are maintained by the City Engineering Department at City Hall.
		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: City of Hammond has ready inventory of flood fighting supplies and equipment. Primary resources are available through Public Works Department, but also can be supplemented by other city departments. Street Dept Public Works facility at 601 Conkey maintains pay loaders, 12 new trucks, 30 existing trucks, 4 front loaders, 26 concrete blocks, portable welders, approximately 80 pallets (100/pallet) of shrink-wrapped sandbags last checked 1-2 years ago, 2 forklifts, pile of sand, 5k empty sandbags, and visqueen. Borrow source is Krooswyk. Hammond manually fills sandbags or uses a salt spreader to fill large quantities of bags.
		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)	A	A	Sponsor has a written system-specific flood response plan and a solid understanding of how to operate, maintain, and staff the FDR system during a flood. Sponsor maintains a list of emergency contact information for appropriate personnel and other emergency response agencies.	Justification: Hammond uses the RAVE emergency notification system to send messages to residents via phone, email, and web. They also use reverse 911, WJOB radio station, door to door, loud speaker, and police to relay information. Public Works also uses frequency radios with the police and fire departments. Evacuation areas include City Hall, Civic Center, Jean Shepherd Community Center, Armory, Purdue University Calumet, Area Career Center. Fire Department has rescue boats. Public Works and Sanitary District were ready to mobilize. Dyer and Grimmer were on hand to assist with flood fighting if required. Updated Flood Handbooks were provided in 2019.
		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.	

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Levee Embankments

For use during Initial and Continuing Eligibility Inspections of levee segments / systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Unwanted Vegetation Growth ¹	M	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 EM 1110-2-301 or Corps policy for regional vegetation variance.	2020-0002 : Trees on riverside toe. (M) 2020-0004 : Trees on landside toe. (M) 2020-0018 : Tall vegetation on riverside toe. (M) 2020-0034 : Trees on landside toe. (M) 2020-0046 : Small tree near the landslide toe. (M) 2020-0066 : Large tree near the landslide toe. (M) 2020-0080 : Tall vegetation on the riverside toe. (M)
		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.	2020-0016 : Good sod cover. (A)
		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.	
		N/A	Surface protection is provided by other means.	
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.	2020-0052 : Fence at landside toe. (M) 2020-0064 : Rock garden and plants on the landside slope. (M)
		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.	
		N/A	There are no closure structures along this component of the FDR segment / system.	

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Levee Embankments

For use during Initial and Continuing Eligibility Inspections of levee segments / systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
5. Slope Stability	M	A	No slides, sloughs, tension cracking, slope depressions, or bulges are present.	2020-0050 : Steep slope below FA-04 manhole. Recommend adding material to regrade. (M)
		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.	
6. Erosion/ Bank Caving	M	A	No erosion or bank caving is observed on the landward or riverward sides of the levee that might endanger its stability.	2020-0068 : Erosion on riverside toe. (M) 2020-0070 : Erosion on riverside toe. (M) 2020-0078 : Erosion on riverside toe. (M)
		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 ²	A	A	No observed depressions in crown. Records exist and indicate no unexplained historical changes.	2020-0006 : Low spot on crest next to pump station. (M) Justification: No issues noted.
		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	M	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.	2020-0014 : Gully next to west side of spillway. (M) 2020-0022 : Low spot, 4" inches deep on landslide crest. (M) 2020-0028 : Wide depression on riverside slope. (M) 2020-0030 : Deep rut on riverside slope. (M) 2020-0036 : Low spot on landslide crest. (M)
		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 noted.
		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.	
10. Animal Control	M	A	Continuous animal burrow control program in place that includes the elimination of active burrowing and the filling in of existing burrows.	2020-0024 : 5 inch deep burrow on crest. (M) 2020-0026 : 2 ft deep burrow on river side slope. (M) 2020-0032 : Collapsed burrow on riverside slope. (M) 2020-0040 : Collapsed burrow on riverside slope. (M)
		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.	

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**Flood Damage Reduction Segments / Systems
Inspection Report**

**Levee Embankments
Page 2 of 4**

Levee Embankments

For use during Initial and Continuing Eligibility Inspections of levee segments / systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
11. Culverts/ Discharge Pipes ³ (This item includes both concrete and corrugated metal pipes.)	M	A	There are no breaks, holes, cracks in the discharge pipes/ culverts that would result in significant water leakage. The pipe shape is still essentially circular. All joints appear to be closed and the soil tight. Corrugated metal pipes, if present, are in good condition with 100% of the original coating still in place (either asphalt or galvanizing) or have been relined with appropriate material, which is still in good condition. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	Justification: FA-04 (12 inch RCP) - Partial inspection due to partially closed gate at manhole preventing further inspection. Previously existing sluice gates were supposed to have been removed. (M) FA-02 (15 inch RCP) - Debris in the pipe, (M) FA-01 (12 inch RCP) - Structural defects at the following locations from the manhole: circumferential crack (13.3 ft south), wide joint separation (7.9 ft south), misalignment at broken joints (8 ft north), wide joint separation (14.4 ft north), etc. (M) Camera inspection performed in June 2018. These pipes did not demonstrate any performance issues during the Feb 2018 flood event. Address deficiencies. Repair plan should be developed and coordinated with USACE before implementing. Next camera inspection should be performed before the 2023 inspection.
		M	There are a small number of corrosion pinholes or cracks that could leak water and need to be repaired, but the entire length of pipe is still structurally sound and is not in danger of collapsing. Pipe shape may be ovalized in some locations but does not appear to be approaching a curvature reversal. A limited number of joints may have opened and soil loss may be beginning. Any open joints should be repaired prior to the next inspection. Corrugated metal pipes, if present, may be showing corrosion and pinholes but there are no areas with total section loss. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	
		U	Culvert has deterioration and/or has significant leakage; it is in danger of collapsing or as already begun to collapse. Corrugated metal pipes have suffered 100% section loss in the invert. HOWEVER: Even if pipes appear to be in good condition, as judged by an external visual inspection, an Unacceptable Rating will be assigned if the condition of pipes has not been verified using television camera video taping or visual inspection methods within the past five years, and reports for all pipes are not available for review by the inspector.	
		N/A	There are no discharge pipes/ culverts.	
12. Riprap Revetments & Bank Protection	A	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.	Justification: No issues noted.
		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.	
		N/A	There is no riprap protecting this feature of the segment / system, or riprap is discussed in another section.	
13. Revetments other than Riprap	M	A	Existing revetment protection is properly maintained, undamaged, and clearly visible.	2020-0076 : Retaining wall at toe tilting. Repair or replace. (M)
		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.	
		N/A	There are no such revetments protecting this feature of the segment / system.	

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**Flood Damage Reduction Segments / Systems
Inspection Report**

**Levee Embankments
Page 3 of 4**

Levee Embankments

For use during Initial and Continuing Eligibility Inspections of levee segments / systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
14. Underseepage Relief Wells/ Toe Drainage Systems	NA	A	Toe drainage systems and pressure relief wells necessary for maintaining FDR 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 damaged and may become clogged if they are not repaired. Maintenance records are incomplete or indicate irregular cleaning and pump testing.	
		U	Toe drainage systems or pressure relief wells necessary for maintaining FDR segment / system stability during flood events have fallen into disrepair or have become clogged. No maintenance records. No documentation of the required pump testing.	
		N/A	There are no relief wells/ toe drainage systems along this component of the FDR segment / system.	
15. Seepage	A	A	No evidence or history of unrepaired seepage, saturated areas, or boils.	Justification: No issues noted.
		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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Floodwalls

For use during Initial and Continuing Eligibility Inspections of all floodwalls

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Unwanted Vegetation Growth ¹	M	A	A grass-only or paved zone is maintained on both sides of the floodwall, free of all trees, brush, and undesirable weeds. The vegetation-free zone extends 15 feet from both the land and riverside of the floodwall, at ground-level, to the centerline of the tree. Additionally, an 8- foot root-free zone is maintained around the entire structure, including the floodwall toe, heel, and any toe-drains. If the floodwall access easement doesn't extend to the described limits, then the vegetation-free zone must be maintained to the easement limits. Reference EM 1110- 2-301 and/or Corps policy for regional vegetation variance.	2020-0042 : Small bushes on riverside. (M) 2020-0054 : Decorative trees on landside. (M) 2020-0056 : Tree near wall on landslide next to pump station. (M) 2020-0062 : Small bush on riverside. (M) 2020-0110 : Tree on riverside. (M) 2020-0118 : Tree on riverside. (M) 2020-0120 : Small trees on riverside. (M)
		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 floodwall.	
		U	Significant vegetation growth (brush, weeds, or any trees greater than 2 inches in diameter) is present within the zones described above. This vegetation threatens the operation or integrity of the floodwall and must be removed.	
2. Encroachments	M	A	No trash, debris, unauthorized 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 floodwall.	2020-0044 : Garden beds within 10 ft of the wall. (M)
		M	Trash, debris, unauthorized 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 floodwall.	
3. Closure Structures (Stop Log Closures and Gates) (A or U only)	A	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.	2020-0082 : South closure stop log warping. Last exercise performed in Oct 2017. Next exercise due in 2022. (A) 2020-0086 : North closure stop logs warping. Last exercise performed in Oct 2017. Next exercise due in 2022. (A)
		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.	
		N/A	There are no closure structures along this component of the FDR segment / system.	
4. Concrete Surfaces	A	A	Negligible spalling, scaling or cracking. If the concrete surface is weathered or holds moisture, it is still satisfactory but should be seal coated to prevent freeze/ thaw damage.	2020-0084 : Broken concrete. (A)
		M	Spalling, scaling, and open cracking present, but the immediate integrity or performance of the structure is not threatened. Reinforcing steel may be exposed. Repairs/ sealing is necessary to prevent additional damage during periods of thawing and freezing.	
		U	Surface deterioration or deep cracks present that may result in an unreliable structure. Any surface deterioration that exposes the sheet piling or lies adjacent to monolith joints may indicate underlying reinforcement corrosion and is unacceptable.	

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Floodwalls

For use during Initial and Continuing Eligibility Inspections of all floodwalls

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
5. Tilting, Sliding or Settlement of Concrete Structures ²	A	A	There are no significant areas of tilting, sliding, or settlement that would endanger the integrity of the structure.	Justification: No issues noted.
		M	There are areas of tilting, sliding, or settlement (either active or inactive) that need to be repaired. The maximum offset, either laterally or vertically, does not exceed 2 inches unless the movement can be shown to be no longer actively occurring. The integrity of the structure is not in danger.	
		U	There are areas of tilting, sliding, or settlement (either active or inactive) that threaten the structure's integrity and performance. Any movement that has resulted in failure of the waterstop (possibly identified by daylight visible through the joint) is unacceptable. Differential movement of greater than 2 inches between any two adjacent monoliths, either laterally or vertically, is unacceptable unless it can be shown that the movement is no longer active. Also, if the floodwall is of I-wall construction, then any visible or measurable tilting of the wall toward the protected side that has created an open horizontal crack on the riverside base of a monolith is unacceptable.	
6. Foundation of Concrete Structures ¹	A	A	No active erosion, scouring, or bank caving that might endanger the structure's stability.	Justification: No issues noted.
		M	There are areas where the ground is eroding towards the base of the structure. Efforts need to be taken to slow and repair this erosion, but it is not judged to be close enough to the structure or to be progressing rapidly enough to affect structural stability before the next inspection. For the purposes of inspection, the erosion or scour is not closer to the riverside face of the wall than twice the floodwall's underground base width if the wall is of L-wall or T-wall construction; or if the wall is of sheetpile or I-wall construction, the erosion is not closer than twice the wall's visible height. Additionally, rate of erosion is such that the wall is expected to remain stable until the next inspection.	
		U	Erosion or bank caving observed that is closer to the wall than the limits described above, or is outside these limits but may lead to structural instabilities before the next inspection. Additionally, if the floodwall is of I-wall or sheetpile construction, the foundation is unacceptable if any turf, soil or pavement material got washed away from the landside of the I-wall as the result of a previous overtopping event.	
7. Monolith Joints	M	A	The joint material is in good condition. The exterior joint sealant is intact and cracking/ desiccation is minimal. Joint filler material and/or waterstop is not visible at any point.	2020-0098 : Vegetation growing in joint. (M) 2020-0104 : Water stop exposed. Reseal. (M) 2020-0108 : Water stop exposed. Repair and reseal. (M) 2020-0112 : Crack in the sealant. (M)
		M	The joint material has appreciable deterioration to the point where joint filler material and/or waterstop is visible in some locations. This needs to be repaired or replaced to prevent spalling and cracking during freeze/ thaw cycles, and to ensure water tightness of the joint.	
		U	The joint material is severely deteriorated or the concrete adjacent to the monolith joints has spalled and cracked, damaging the waterstop; in either case damage has occurred to the point where it is apparent that the joint is no longer watertight and will not provide the intended level of protection during a flood.	
		N/A	There are no monolith joints in the floodwall.	

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Floodwalls

For use during Initial and Continuing Eligibility Inspections of all floodwalls

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
8. Underseepage Relief Wells/ Toe Drainage Systems	NA	A	Toe drainage systems and pressure relief wells necessary for maintaining FDR 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 damaged and may become clogged if they are not repaired. Maintenance records are incomplete or indicate irregular cleaning and pump testing.	
		U	Toe drainage systems or pressure relief wells necessary for maintaining FDR segment / system stability during flood events have fallen into disrepair or have become clogged. No maintenance records. No documentation of the required pump testing.	
		N/A	There are no relief wells/ toe drainage systems along this component of the FDR segment / system.	
9. Seepage	A	A	No evidence or history of unrepaired seepage, saturated areas, or boils.	Justification: No issues noted.
		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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Interior Drainage System

For use during Initial and Continuing Eligibility Inspections of interior drainage systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Vegetation and Obstructions	M	A	No obstructions, vegetation, debris, or sediment accumulation noted within interior drainage channels or blocking the culverts, inlets, or discharge areas. Concrete joints and weep holes are free of grass and weeds.	2020-0072 : FA-02: Gate silted in with vegetation. (M)
		M	Obstructions, vegetation, debris, or sediment are minor and have not impaired channel flow capacity or blocked more than 10% of any culvert openings, but should be removed. A limited volume of grass and weeds may be present in concrete channel joints and weep holes.	
		U	Obstructions, vegetation, debris, or sediment have impaired the channel flow capacity or blocked more than 10% of a culvert opening. Sediment and debris removal required to reestablish flow capacity.	
2. Encroachments	A	A	No trash, debris, unauthorized 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 interior drainage system.	Justification: No issues noted.
		M	Trash, debris, unauthorized 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 this component of the interior drainage system.	
3. Ponding Areas	NA	A	No trash, debris, structures, or other obstructions present within the ponding areas. Sediment deposits do not exceed 10% of capacity.	
		M	Trash, debris, excavations, structures, or other obstructions present, or inappropriate activities that will not inhibit operations and maintenance. Sediment deposits do not exceed 30% of capacity.	
		U	Trash, debris, excavations, structures, or other obstructions, or other encroachments or activities noted that will inhibit operations, maintenance, or emergency work. Sediment deposits exceeds 30% of capacity.	
		N/A	There are no ponding areas associated with the interior drainage system.	
4. Fencing and Gates 1	NA	A	Fencing is in good condition and provides protection against falling or unauthorized access. Gates open and close freely, locks are in place, and there is little corrosion on metal parts.	
		M	Fencing or gates are damaged or corroded but appear to be maintainable. Locks may be missing or damaged.	
		U	Fencing and gates are damaged or corroded to the point that replacement is required, or potentially dangerous features are not secured.	
		N/A	There are no features noted that require safety fencing.	

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Interior Drainage System

For use during Initial and Continuing Eligibility Inspections of interior drainage systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
5. Concrete Surfaces (Such as gatewells, outfalls, intakes, or culverts)	M	A	Negligible spalling, scaling or cracking. If the concrete surface is weathered or holds moisture, it is still satisfactory but should be seal coated to prevent freeze/ thaw damage.	2020-0074 : FA-02: Crack in wingwall at outlet. Seal. (M)
		M	Spalling, scaling, and open cracking present, but the immediate integrity or performance of the structure is not threatened. Reinforcing steel may be exposed. Repairs/ sealing is necessary to prevent additional damage during periods of thawing and freezing.	
		U	Surface deterioration or deep cracks present that may result in an unreliable structure. Any surface deterioration that exposes the sheet piling or lies adjacent to monolith joints may indicate underlying reinforcement corrosion and is unacceptable.	
		N/A	There are no concrete items in the interior drainage system.	
6. Tilting, Sliding or Settlement of Concrete and Sheet Pile Structures ² (Such as gate wells, outfalls, intakes, or culverts)	A	A	There are no significant areas of tilting, sliding, or settlement that would endanger the integrity of the structure.	Justification: No issues noted.
		M	There are areas of tilting, sliding, or settlement (either active or inactive) that need to be repaired. The maximum offset, either laterally or vertically, does not exceed 2 inches unless the movement can be shown to be no longer actively occurring. The integrity of the structure is not in danger.	
		U	There are areas of tilting, sliding, or settlement (either active or inactive) that threaten the structure's integrity and performance. Any movement that has resulted in failure of the waterstop (possibly identified by daylight visible through the joint) is unacceptable. Differential movement of greater than 2 inches between any two adjacent monoliths, either laterally or vertically, is unacceptable unless it can be shown that the movement is no longer active. Also, if the floodwall is of I-wall construction, then any visible or measurable tilting of the wall toward the protected side that has created an open horizontal crack on the riverside base of a monolith is unacceptable.	
		N/A	There are no concrete items in the interior drainage system.	
7. Foundation of Concrete Structures ³ (Such as culverts, inlet and discharge structures, or gatewells.)	M	A	No active erosion, scouring, or bank caving that might endanger the structure's stability.	2020-0058 : FA-03: Erosion on south side of headwall. Restore bank. (M) 2020-0060 : FA-03: Erosion on north side of headwall. Restore bank. (M)
		M	There are areas where the ground is eroding towards the base of the structure. Efforts need to be taken to slow and repair this erosion, but it is not judged to be close enough to the structure or to be progressing rapidly enough to affect structural stability before the next inspection. The rate of erosion is such that the structure is expected to remain stable until the next inspection.	
		U	Erosion or bank caving observed that may lead to structural instabilities before the next inspection.	
		N/A	There are no concrete items in the interior drainage system.	
8. Monolith Joints	A	A	The joint material is in good condition. The exterior joint sealant is intact and cracking/ desiccation is minimal. Joint filler material and/or waterstop is not visible at any point.	Justification: No issues noted.
		M	The joint material has appreciable deterioration to the point where joint filler material and/or waterstop is visible in some locations. This needs to be repaired or replaced to prevent spalling and cracking during freeze/ thaw cycles, and to ensure water tightness of the joint.	
		U	The joint material is severely deteriorated or the concrete adjacent to the monolith joints has spalled and cracked, damaging the waterstop; in either case damage has occurred to the point where it is apparent that the joint is no longer watertight and will not provide the intended level of protection during a flood.	
		N/A	There are no monolith joints in the interior drainage system.	

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Interior Drainage System

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
9. Culverts/ Discharge Pipes ⁴	M	A	There are no breaks, holes, cracks in the discharge pipes/ culverts that would result in significant water leakage. The pipe shape is still essentially circular. All joints appear to be closed and the soil tight. Corrugated metal pipes, if present, are in good condition with 100% of the original coating still in place (either asphalt or galvanizing) or have been relined with appropriate material, which is still in good condition. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	Justification: FA-04 (12 inch RCP) - Partial inspection due to partially closed gate at manhole preventing further inspection. Previously existing sluice gates were supposed to have been removed. (M) FA-02 (15 inch RCP) - Debris in the pipe, (M) FA-01 (12 inch RCP) - Structural defects at the following locations from the manhole: circumferential crack (13.3 ft south), wide joint separation (7.9 ft south), misalignment at broken joints (8 ft north), wide joint separation (14.4 ft north), etc. (M) Camera inspection performed in June 2018. These pipes did not demonstrate any performance issues during the Feb 2018 flood event. Address deficiencies. Repair plan should be developed and coordinated with USACE before implementing. Next camera inspection should be performed before the 2023 inspection.
		M	There are a small number of corrosion pinholes or cracks that could leak water and need to be repaired, but the entire length of pipe is still structurally sound and is not in danger of collapsing. Pipe shape may be ovalized in some locations but does not appear to be approaching a curvature reversal. A limited number of joints may have opened and soil loss may be beginning. Any open joints should be repaired prior to the next inspection. Corrugated metal pipes, if present, may be showing corrosion and pinholes but there are no areas with total section loss. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	
		U	Culvert has deterioration and/or has significant leakage; it is in danger of collapsing or as already begun to collapse. Corrugated metal pipes have suffered 100% section loss in the invert. HOWEVER: Even if pipes appear to be in good condition, as judged by an external visual inspection, an Unacceptable Rating will be assigned if the condition of pipes has not been verified using television camera video taping or visual inspection methods within the past five years, and reports for all pipes are not available for review by the inspector.	
		N/A	There are no discharge pipes/ culverts.	
10. Sluice / Slide Gates ⁵	NA	A	Gates open and close freely to a tight seal or minor leakage. Gate operators are in good working condition and are properly maintained. Sill is free of sediment and other obstructions. Gates and lifters have been maintained and are free of corrosion. Documentation provided during the inspection.	
		M	Gates and/or operators have been damaged or have minor corrosion, and open and close with resistance or binding. Leakage quantity is controllable, but maintenance is required. Sill is free of sediment and other obstructions.	
		U	Gates do not open or close and/or operators do not function. Gate, stem, lifter and/or guides may be damaged or have major corrosion.	
		N/A	There are no sluice/ slide gates.	
11. Flap Gates/ Flap Valves/ Pinch Valves ¹	M	A	Gates/ valves open and close easily with minimal leakage, have no corrosion damage, and have been exercised and lubricated as required.	2020-0048 : FA-04: Gate silted in. (M)
		M	Gates/ valves will not fully open or close because of obstructions that can be easily removed, or have minor corrosion damage that requires maintenance.	
		U	Gates/ valves are missing, have been damaged, or have deteriorated to the point that they need to be replaced.	
		N/A	There are no flap gates.	

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Interior Drainage System

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
12. Trash Racks (non-mechanical)	A	A	Trash racks are fastened in place and properly maintained.	Justification: No issues noted.
		M	Trash racks are in place but are unfastened or have bent bars that allow debris to enter into the pipe or pump station, bars are corroded to the point that up to 10% of the sectional area may be lost. Repair or replacement is required.	
		U	Trash racks are missing or damaged to the extent that they are no longer functional and must be replaced. (For example, more than 10% of the sectional area may be lost.)	
		N/A	There are no trash racks, or they are covered in the pump stations section of the report.	
13. Other Metallic Items	A	A	All metal parts are protected from corrosion damage and show no rust, damage, or deterioration that would cause a safety concern.	Justification: No issues noted.
		M	Corrosion seen on metallic parts appears to be maintainable.	
		U	Metallic parts are severely corroded and require replacement to prevent failure, equipment damage, or safety issues.	
		N/A	There are no other significant metallic items.	
14. Riprap Revetments of Inlet/ Discharge Areas	M	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.	2020-0012 : Riprap has trees and some stone displaced. (M)
		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.	
		N/A	There is no riprap protecting this feature of the segment / system, or riprap is discussed in another section.	
15. Revetments other than Riprap	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.	
		N/A	There are no such revetments protecting this feature of the segment / system.	

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Pump Stations

For use during Initial and Continuing Eligibility Inspections of pump stations

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Pump Stations Operating, Maintenance, Training, & Inspection Records	A	A	Operation, maintenance and inspection records are present at the pump station and are being used and updated, and personnel have been trained in pump station operations. Names and last training date shown in the record book.	Justification: Operation, maintenance and inspection records are present.
		M	Operation, maintenance and inspection records are present but not adequately used and updated.	
		U	No operation, maintenance and inspection records are present, or refresher training for personnel has not been conducted.	
2. Pump Station Operations and Maintenance Equipment Manuals	A	A	Operation and Maintenance Equipment Manuals and/or posted operating instructions are present and updated as required, and adequately cover all pertinent pump station features. O&M manuals include points of contact for manufacturers and suppliers of major equipment used in the facility.	2020-0009 : PS-SH: Operation manuals inside the pump station. (A) 2020-0039 : PS-FA: Operation manuals present. (A)
		M	Operation and Maintenance Equipment Manuals and/or posted operating instructions are present and adequately cover all pertinent pump station features. However, they are incomplete and the necessary updates have not been made.	
		U	Operation and Maintenance Equipment Manuals are not available.	
3. Safety Compliance	A	A	Safety compliance inspection reports by applicable local, state, or federal agencies available for review.	2020-0003 : PS-SH: Added confined space warning label. (A) 2020-0005 : PS-SH: Arc flash warning label added. (A) 2020-0033 : PS-FA: Confined space warning label added. (A) 2020-0037 : PS-FA: Arc flash warning labels added. (A)
		M	No safety compliance inspection reports are available for review.	
4. Communications (A or M only)	A	A	A telephone, cellular phone, two-way radio, or similar device is available to pump station operator and maintenance personnel.	Justification: A telephone, cellular phone, two-way radio, or similar device is available to pump station operator and maintenance personnel.
		M	A telephone, cellular phone, two-way radio, or similar device is not available to pump station operator and maintenance personnel.	
5. Plant Building	M	A	The building is in good structural condition with no major foundation settlement problems. The roof is not leaking, intake & exhaust louvers are clear of debris, fans are operational, etc.	2020-0008 : PS-SH: Crack in spillway. (M) 2020-0013 : PS-SH: Platform has a crack caused by railing. (M) 2020-0015 : PS-SH: New roof put on both buildings. (A) 2020-0021 : PS-SH: Cracked in platform in pump room has slight spalling. (M) 2020-0023 : PS-SH: Corrosion on door frame. Needs cleaning. (M) 2020-0025 : PS-FA: Roof beam replaced. (A) 2020-0027 : PS-FA: Vent screen dirty. (M) 2020-0029 : PS-FA: Paint peeling. (M) 2020-0035 : PS-FA: Drop ceiling tiles have been replaced. (A)
		M	There are minor structural defects, minimal foundation settlement, leaks, or other conditions noted that need repair. Defects do not threaten the structural integrity or stability of the building, and will not impact pumping operations.	
		U	The structural integrity or stability of the building is threatened, or there is damage to the building that threatens safety of the operator or impacts pumping operations.	
6. Fencing and Gates	A	A	Fencing is in good condition and provides protection against falling or unauthorized access. Gates open and close freely, locks are in place, and there is little corrosion on metal parts.	2020-0010 : PS-SH: Debris on fence. (A)
		M	Fencing or gates are damaged or corroded but appear to be maintainable. Locks may be missing or damaged.	
		U	Fencing and gates are damaged or corroded to the point that replacement is required, or potentially dangerous features are not secured.	
		N/A	There are no features noted that require safety fencing.	

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Pump Stations

For use during Initial and Continuing Eligibility Inspections of pump stations

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
7. Pumps ¹	A	A	All pumps are properly maintained and lubricated. Systems are periodically tested and documented for review. No vibration, cavitation noises or unusual sounds are noted when the pump is operated. Bearing temperature sensor records don't indicate any problems.	Justification: No issues noted.
		M	Minor deficiencies noted that need to be closely monitored or repaired, such as the presence of slight vibrations, leakage of packing gland, bearing temperature sensors are inoperable or no record is present. However, the pumps are operational and are expected to perform through the next period of usage.	
		U	Major deficiencies identified that may significantly reduce pumping operations. For example, bearing sensor records indicate problems, excessive vibration noted, impellers are badly corroded, or there are eroded or missing blades.	
8. Motors, Engines, Fans, Gear Reducers, Back Stop Devices, etc.	M	A	All items are operational. Preventative maintenance and lubrication is being performed and the system is periodically subjected to performance testing. Instrumentation, alarms, bearing sensors and auto shutdowns are operational.	2020-0011 : PS-SH: Operator said vents open when pump is running, but couldn't verify. (M)
		M	Systems have minor deficiencies, but are operational and will function adequately through the next flood. Bearing sensors are not operational.	
		U	One or more of the primary motors or systems is not operational, or noted deficiencies have not been corrected.	
9. Sumps / Wet well	A	A	Clear of debris, sediment, or other obstructions. Procedures are in place to remove debris accumulation during operation.	Justification: No issues noted.
		M	Debris, sediment, or other obstructions may be present and must be removed, but the sump/ wet well will function as intended during the next flood. Procedures are in place to remove debris accumulation during operation.	
		U	Large debris or excessive silt present which will hinder or damage pumps during operation, or no procedures established to remove debris accumulation during operation.	
10. Mechanical Operating Trash Rakes ¹	A	A	Drive chain, bearing, gear reducers, and other components are in good operating condition and are being properly maintained.	Justification: No issues noted.
		M	The trash rake is in need of maintenance, but is still operational.	
		U	Trash rake not operational or deficiencies will inhibit operations during the next flood event.	
		N/A	There are no mechanical trash rakes.	
11. Non-Mechanical Trash Racks	A	A	Trash racks are fastened in place and properly maintained.	Justification: No issues noted.
		M	Trash racks are in place but are unfastened or have bent bars that allow debris to enter into the pipe or pump station, bars are corroded to the point that up to 10% of the sectional area may be lost. Repair or replacement is required.	
		U	Trash racks are missing or damaged to the extent that they are no longer functional and must be replaced. (For example, more than 10% of the sectional area may be lost.)	
		N/A	There are no trash racks, or they are covered in the pump stations section of the report.	

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**Flood Damage Reduction Segments / Systems
Inspection Report**

**Pump Stations
Page 2 of 4**

Pump Stations

For use during Initial and Continuing Eligibility Inspections of pump stations

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
12. Fuel System for Pump Engines	A	A	Fuel system is operational, day tank present and operational, fuel fresh and rotated regularly.	Justification: No issues noted.
		M	Fuel system is operational and of adequate capacity, but day tank is missing or fuel is not fresh and rotated regularly.	
		U	Fuel system not functional.	
		N/A	No fuel system.	
13. Power Source	A	A	The normal power source and backup generators, if installed, are operational, properly exercised and well maintained. Surge protection, grounding, lightning protection, transformers, and automatic/manual transfer of main power to backup system is working.	2020-0019 : PS-SH: Submersible pumps have non-removable power cables. Cannot be placed in conduit. (A)
		M	Normal power source and backup units, if applicable, are operational with minor discrepancies or maintenance, inspection and exercising record is present but not up to date. Preventative maintenance or repairs are required.	
		U	Normal power source or generators are not operational and must be repaired; or generator, if required, is not on site.	
14. Electrical Systems 2	M	A	Operational and maintained free of damage, corrosion, and debris. Preventative maintenance and system testing is being performed periodically.	2020-0031 : PS-FA: Grounding wire loose. (M)
		M	Operational with minor discrepancies. Preventative maintenance or repairs are required, but the components are expected to function adequately during the next flood event.	
		U	Components of the electrical system will not function adequately during the next flood event and must be replaced.	
15. Megger Testing on Pump Motors and Critical Power Cables	M	A	Results of megger tests on pump motors or critical power cables show that the insulation meets manufacturer's or industry standards. Tested within the last year.	Justification: Megger testing performed in 2018.
		M	Megger testing not conducted within the past year. If megger tests on pump motors indicate that insulation resistance is below the manufacturer's or industry standard, but the resistance can be corrected with proper application of heat, this is minimally acceptable. (The application of heat does not relate to critical power cables.)	
		U	Megger tests not conducted within past two years, or tests indicate that insulation resistance is low enough that the equipment will not be able to meet design standards of operation; or evidence of arcing or shorting is detected visually.	
16. Enclosures, Panels, Conduit and Ducts	A	A	All enclosures, panels, conduits, and ducts are protected from corrosion damage and show no rust, damage, or deterioration that would cause a safety concern.	Justification: No issues noted.
		M	Minor surface corrosion which appears to be maintainable. Cleaning and painting required.	
		U	Severely corroded and must be replaced to prevent failure, equipment damage, or safety issues.	
17. Intake and Discharge Pipelines	A	A	Intake and discharge pipelines have no corrosion and paint is intact, except for minor touch up required. Pipe couplings and anchors have no leakage or corrosion.	Justification: No issues noted.
		M	Intake and discharge pipelines have minor corrosion and repair and painting is required. Pipe coupling with anchors have minor leakage, corrosion and require bolts to be tightened.	
		U	Intake and discharge pipelines have major corrosion and replacement is required. Pipe coupling with anchors have major leakage and is heavily corroded and requires replacement.	

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Pump Stations

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
18. Sluice/ Slide Gates ³	A	A	Gates open and close freely to a tight seal or minor leakage. Gate operators are in good working condition and are properly maintained. Sill is free of sediment and other obstructions. Gates and lifters have been maintained and are free of corrosion. Documentation provided during the inspection.	2020-0001 : PS-SH: Influent sluice gate is now in operation. (A)
		M	Gates and/or operators have been damaged or have minor corrosion, and open and close with resistance or binding. Leakage quantity is controllable, but maintenance is required. Sill is free of sediment and other obstructions.	
		U	Gates do not open or close and/or operators do not function. Gate, stem, lifter and/or guides may be damaged or have major corrosion.	
		N/A	There are no sluice/ slide gates.	
19. Flap Gates/ Flap Valves/ Pinch Valves ¹	A	A	Gates/ valves open and close easily with minimal leakage, have no corrosion damage, and have been exercised and lubricated as required.	Justification: No issues noted.
		M	Gates/ valves will not fully open or close because of obstructions that can be easily removed, or have minor corrosion damage that requires maintenance.	
		U	Gates/ valves are missing, have been damaged, or have deteriorated to the point that they need to be replaced.	
		N/A	There are no gates on discharge lines from pump station.	
20. Cranes ¹	A	A	Cranes operational and have been inspected and load tested in accordance with applicable standards within the last year. Documentation is on hand.	Justification: No issues noted.
		M	Cranes have not been inspected or operationally tested within the past year, or there are visible signs of corrosion, oil leakage, etc, requiring maintenance.	
		U	Cranes are not operational, and this may prevent the pump station from functioning as required. No documentation available on cranes.	
		N/A	There are no cranes.	
21. Other Metallic Items (Equipment, Ladders, Platform Anchors, etc)	A	A	All metal parts are protected from corrosion damage and show no rust, damage, or deterioration that would cause a safety concern.	Justification: No issues noted.
		M	Corrosion seen on metallic parts appears to be maintainable.	
		U	Metallic parts are severely corroded and require replacement to prevent failure, equipment damage, or safety issues.	
		N/A	There are no other significant metallic items.	

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**Flood Damage Reduction Segments / Systems
Inspection Report**

**Pump Stations
Page 4 of 4**

Photos

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Inspect ID: 2020-0002 **Title:** 2604000010_CELRC_2020_A_0002_1_20200708T132631.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Trees on riverside toe.



Inspect ID: 2020-0004 **Title:** 2604000010_CELRC_2020_A_0004_1_20200708T132723.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Trees on landside toe.

Photos

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Inspect ID: 2020-0018 **Title:** 2604000010_CELRC_2020_A_0018_1_20200708T134149.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Tall vegetation on riverside toe.



Inspect ID: 2020-0034 **Title:** 2604000010_CELRC_2020_A_0034_1_20200708T140902.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Trees on landslide toe.

Photos

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Inspect ID: 2020-0046 **Title:** 2604000010_CELRC_2020_A_0046_1_20200708T143214.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Small tree near the landslide toe.



Inspect ID: 2020-0066 **Title:** 2604000010_CELRC_2020_A_0066_1_20200708T145018.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Large tree near the landslide toe.

Photos

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Inspect ID: 2020-0080 **Title:** 2604000010_CELRC_2020_A_0080_1_20200708T150243.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Tall vegetation on the riverside toe.



Inspect ID: 2020-0016 **Title:** 2604000010_CELRC_2020_A_0016_1_20200708T134007.jpg **Rated Item:** 2. Sod Cover **Caption:** Acceptable - Good sod cover.

Photos

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Inspect ID: 2020-0052 **Title:** 2604000010_CELRC_2020_A_0052_1_20200708T143903.jpg **Rated Item:** 3. Encroachments **Caption:** Minimally Acceptable - Fence at landside toe.



Inspect ID: 2020-0064 **Title:** 2604000010_CELRC_2020_A_0064_1_20200708T144832.jpg **Rated Item:** 3. Encroachments **Caption:** Minimally Acceptable - Rock garden and plants on the landside slope.

Photos

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Inspect ID: 2020-0050 **Title:** 2604000010_CELRC_2020_A_0050_1_20200708T143609.jpg **Rated Item:** 5. Slope Stability **Caption:** Minimally Acceptable - Steep slope below FA-04 manhole.



Inspect ID: 2020-0068 **Title:** 2604000010_CELRC_2020_A_0068_1_20200708T145344.jpg **Rated Item:** 6. Erosion/ Bank Caving **Caption:** Minimally Acceptable - Erosion on riverside toe.

Photos

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Inspect ID: 2020-0070 **Title:** 2604000010_CELRC_2020_A_0070_1_20200708T145440.jpg **Rated Item:** 6. Erosion/ Bank Caving **Caption:** Minimally Acceptable - Erosion on riverside toe.



Inspect ID: 2020-0078 **Title:** 2604000010_CELRC_2020_A_0078_1_20200708T150057.jpg **Rated Item:** 6. Erosion/ Bank Caving **Caption:** Minimally Acceptable - Erosion on riverside toe.

Photos

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Inspect ID: 2020-0006 **Title:** 2604000010_CELRC_2020_A_0006_1_20200708T132829.jpg **Rated Item:** 7. Settlement **Caption:** Minimally Acceptable - Low spot on crest next to pump station.



Inspect ID: 2020-0014 **Title:** 2604000010_CELRC_2020_A_0014_1_20200708T133726.jpg **Rated Item:** 8. Depressions/ Rutting **Caption:** Minimally Acceptable - Gully next to west side of spillway.

Photos

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Inspect ID: 2020-0022 **Title:** 2604000010_CELRC_2020_A_0022_1_20200708T134524.jpg **Rated Item:** 8. Depressions/ Rutting **Caption:** Minimally Acceptable - Low spot, 4" inches deep on landslide crest.



Inspect ID: 2020-0028 **Title:** 2604000010_CELRC_2020_A_0028_1_20200708T135826.jpg **Rated Item:** 8. Depressions/ Rutting **Caption:** Minimally Acceptable - Wide depression on riverside slope.

Photos

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Inspect ID: 2020-0030 **Title:** 2604000010_CELRC_2020_A_0030_1_20200708T140022.jpg **Rated Item:** 8. Depressions/ Rutting **Caption:** Minimally Acceptable - Deep rut on riverside slope.



Inspect ID: 2020-0036 **Title:** 2604000010_CELRC_2020_A_0036_1_20200708T141221.jpg **Rated Item:** 8. Depressions/ Rutting **Caption:** Minimally Acceptable - Low spot on landslide crest.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0024 **Title:** 2604000010_CELRC_2020_A_0024_1_20200708T134916.jpg **Rated Item:** 10. Animal Control **Caption:** Minimally Acceptable - 5 inch deep burrow on crest.



Inspect ID: 2020-0026 **Title:** 2604000010_CELRC_2020_A_0026_3_20200708T135525.jpg **Rated Item:** 10. Animal Control **Caption:** Minimally Acceptable - 2 ft deep burrow on river side slope.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0032 **Title:** 2604000010_CELRC_2020_A_0032_1_20200708T140454.jpg **Rated Item:** 10. Animal Control **Caption:** Minimally Acceptable - Collapsed burrow on riverside slope.



Inspect ID: 2020-0040 **Title:** 2604000010_CELRC_2020_A_0040_1_20200708T142434.jpg **Rated Item:** 10. Animal Control **Caption:** Minimally Acceptable - Collapsed burrow on riverside slope.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0076 **Title:** 2604000010_CELRC_2020_A_0076_1_20200708T145929.jpg **Rated Item:** 13. Revetments other than Riprap **Caption:** Minimally Acceptable - Retaining wall at toe tilting. Repair or replace.



Inspect ID: 2020-0042 **Title:** 2604000010_CELRC_2020_A_0042_1_20200708T142716.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Small bushes on riverside.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0054 **Title:** 2604000010_CELRC_2020_A_0054_1_20200708T144037.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Decorative trees on landside.



Inspect ID: 2020-0056 **Title:** 2604000010_CELRC_2020_A_0056_1_20200708T144229.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Tree near wall on landslide next to pump station.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0062 **Title:** 2604000010_CELRC_2020_A_0062_1_20200708T144630.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Small bush on riverside.



Inspect ID: 2020-0110 **Title:** 2604000010_CELRC_2020_A_0110_1_20200708T153341.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Tree on riverside.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0118 **Title:** 2604000010_CELRC_2020_A_0118_1_20200708T154130.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Tree on riverside.



Inspect ID: 2020-0120 **Title:** 2604000010_CELRC_2020_A_0120_1_20200708T154247.jpg **Rated Item:** 1. Unwanted Vegetation Growth **Caption:** Minimally Acceptable - Small trees on riverside.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0044 **Title:** 2604000010_CELRC_2020_A_0044_1_20200708T142956.jpg **Rated Item:** 2. Encroachments **Caption:** Minimally Acceptable - Garden beds within 10 ft of the wall.



Inspect ID: 2020-0082 **Title:** 2604000010_CELRC_2020_A_0082_1_20200708T151233.jpg **Rated Item:** 3. Closure Structures (Stop Log Closures and Gates) (A or U only) **Caption:** Acceptable - South closure stop log warping. Last exercise performed in Oct 2017. Next exercise due in 2022.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0086 **Title:** 2604000010_CELRC_2020_A_0086_1_20200708T151705.jpg **Rated Item:** 3. Closure Structures (Stop Log Closures and Gates) (A or U only) **Caption:** Acceptable - North closure stop logs warping. Last exercise performed in Oct 2017. Next exercise due in 2022.



Inspect ID: 2020-0084 **Title:** 2604000010_CELRC_2020_A_0084_1_20200708T151550.jpg **Rated Item:** 4. Concrete Surfaces **Caption:** Minimally Acceptable - Broken concrete.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0098 **Title:** 2604000010_CELRC_2020_A_0098_1_20200708T152830.jpg **Rated Item:** 7. Monolith Joints **Caption:** Minimally Acceptable - Vegetation growing in joint.



Inspect ID: 2020-0104 **Title:** 2604000010_CELRC_2020_A_0104_1_20200708T153115.jpg **Rated Item:** 7. Monolith Joints **Caption:** Minimally Acceptable - Water stop exposed. Reseal.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0108 **Title:** 2604000010_CELRC_2020_A_0108_1_20200708T153251.jpg **Rated Item:** 7. Monolith Joints **Caption:** Minimally Acceptable - Water stop exposed. Repair and reseal.



Inspect ID: 2020-0112 **Title:** 2604000010_CELRC_2020_A_0112_1_20200708T153508.jpg **Rated Item:** 7. Monolith Joints **Caption:** Minimally Acceptable - Crack in the sealant.



Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems

	<p>Inspect ID: 2020-0072 Title: 2604000010_CELRC_2020_A_0072_1_20200708T145720.jpg Rated Item: 1. Vegetation and Obstructions Caption: Minimally Acceptable - FA-02: Gate silted in with vegetation.</p>
	<p>Inspect ID: 2020-0074 Title: 2604000010_CELRC_2020_A_2020-0074_1_20200708T145844.jpg Rated Item: 5. Concrete Surfaces (Such as gate wells, outfalls, intakes, or culverts) Caption: Minimally Acceptable - FA-02: Crack in wingwall at outlet. Seal.</p>

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems

	<p>Inspect ID: 2020-0058 Title: 2604000010_CELRC_2020_A_0058_1_20200708T144444.jpg Rated Item: 7. Foundation of Concrete Structures (Such as culverts, inlet and discharge structures, or gateways.) Caption: Minimally Acceptable - FA-03: Erosion on south side of headwall. Restore bank.</p>
	<p>Inspect ID: 2020-0060 Title: 2604000010_CELRC_2020_A_0060_1_20200708T144526.jpg Rated Item: 7. Foundation of Concrete Structures (Such as culverts, inlet and discharge structures, or gateways.) Caption: Minimally Acceptable - FA-03: Erosion on north side of headwall. Restore bank.</p>

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0048 **Title:** 2604000010_CELRC_2020_A_0048_1_20200708T143541.jpg **Rated Item:** 11. Flap Gates/ Flap Valves/ Pinch Valves **Caption:** Minimally Acceptable - FA-04: Gate silted in.



Inspect ID: 2020-0012 **Title:** 2604000010_CELRC_2020_A_0012_1_20200708T133204.jpg **Rated Item:** 14. Riprap Revetments of Inlet/ Discharge Areas **Caption:** Minimally Acceptable - Riprap has trees and some stone displaced.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0009 **Title:**
2604000010_CELRC_2020_A_0009_1_20200707T135143.jpg **Rated**
Item: 2. Pump Station Operations and Maintenance Equipment Manuals
Caption: Acceptable - PS-SH: Operation manuals inside the pump station.



Inspect ID: 2020-0039 **Title:**
2604000010_CELRC_2020_A_0039_1_20200707T160054.jpg **Rated**
Item: 2. Pump Station Operations and Maintenance Equipment Manuals
Caption: Acceptable - PS-FA: Operation manuals present.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0003 **Title:** 2604000010_CELRC_2020_A_0003_1_20200707T134709.jpg **Rated Item:** 3. Safety Compliance **Caption:** Acceptable - PS-SH: Added confined space warning label.



Inspect ID: 2020-0005 **Title:** 2604000010_CELRC_2020_A_0005_1_20200707T134759.jpg **Rated Item:** 3. Safety Compliance **Caption:** Acceptable - PS-SH: Arc flash warning label added.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0033 **Title:** 2604000010_CELRC_2020_A_0033_1_20200707T155658.jpg **Rated Item:** 3. Safety Compliance **Caption:** Acceptable - PS-FA: Confined space warning label added.



Inspect ID: 2020-0037 **Title:** 2604000010_CELRC_2020_A_0037_1_20200707T155942.jpg **Rated Item:** 3. Safety Compliance **Caption:** Acceptable - PS-FA: Arc flash warning labels added.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0008 **Title:** 2604000010_CELRC_2020_A_0008_1_20200708T133032.jpg **Rated**
Item: 5. Plant Building **Caption:** Minimally Acceptable - PS-SH: Crack in spillway.



Inspect ID: 2020-0013 **Title:** 2604000010_CELRC_2020_A_0013_1_20200707T135634.jpg **Rated**
Item: 5. Plant Building **Caption:** Minimally Acceptable - PS-SH: Platform has a crack caused by railing.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0015 **Title:** 2604000010_CELRC_2020_A_0015_1_20200707T135723.jpg **Rated Item:** 5. Plant Building **Caption:** Acceptable - PS-SH: New roof put on both buildings.



Inspect ID: 2020-0021 **Title:** 2604000010_CELRC_2020_A_0021_1_20200707T140210.jpg **Rated Item:** 5. Plant Building **Caption:** Minimally Acceptable - PS-SH: Cracked in platform in pump room has slight spalling.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0023 **Title:** 2604000010_CELRC_2020_A_0023_1_20200707T140257.jpg **Rated Item:** 5. Plant Building **Caption:** Minimally Acceptable - PS-SH: Corrosion on door frame. Needs cleaning.



Inspect ID: 2020-0025 **Title:** 2604000010_CELRC_2020_A_0025_1_20200707T155305.jpg **Rated Item:** 5. Plant Building **Caption:** Acceptable - PS-FA: Roof beam replaced.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0027 **Title:** 2604000010_CELRC_2020_A_0027_1_20200707T155401.jpg **Rated Item:** 5. Plant Building **Caption:** Minimally Acceptable - PS-FA: Vent screen dirty.



Inspect ID: 2020-0029 **Title:** 2604000010_CELRC_2020_A_0029_1_20200707T155503.jpg **Rated Item:** 5. Plant Building **Caption:** Minimally Acceptable - PS-FA: Paint peeling.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0035 **Title:** 2604000010_CELRC_2020_A_0035_1_20200707T155823.jpg **Rated Item:** 5. Plant Building **Caption:** Acceptable - PS-FA: Drop ceiling tiles have been replaced.



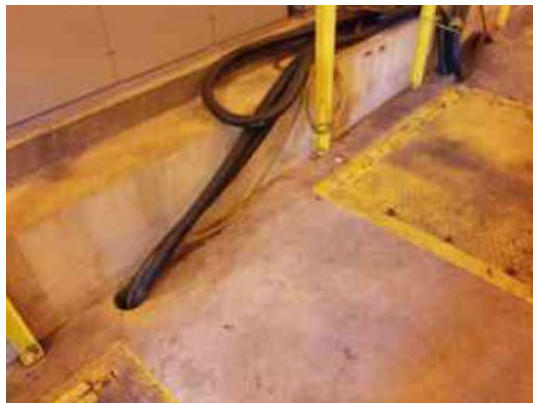
Inspect ID: 2020-0010 **Title:** 2604000010_CELRC_2020_A_0010_1_20200708T133117.jpg **Rated Item:** 6. Fencing and Gates **Caption:** Minimally Acceptable - PS-SH: Debris on fence.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0011 **Title:** 2604000010_CELRC_2020_A_0011_1_20200707T135440.jpg **Rated Item:** 8. Motors, Engines, Fans, Gear Reducers, Back Stop Devices, etc. **Caption:** Minimally Acceptable - PS-SH: Operator said vents open when pump is running, but couldn't verify.



Inspect ID: 2020-0019 **Title:** 2604000010_CELRC_2020_A_0017_1_20200707T135958.jpg **Rated Item:** 13. Power Source **Caption:** Acceptable - PS-SH: Submersible pumps have non-removable power cables. Cannot be placed in conduit.

Photos

For use during Initial and Continuing Eligibility Inspections of levee segments / systems



Inspect ID: 2020-0031 **Title:** 2604000010_CELRC_2020_A_0031_1_20200707T155558.jpg **Rated Item:** 14. Electrical Systems **Caption:** Minimally Acceptable - PS-FA: Grounding wire loose.



Inspect ID: 2020-0001 **Title:** 2604000010_CELRC_2020_A_0001_1_20200707T134240.jpg **Rated Item:** 18. Sluice/ Slide Gates **Caption:** Acceptable - PS-SH: Influent sluice gate is now in operation.



**US Army Corps
of Engineers ®**

Flood Damage Reduction System 2605000010 / Segment 2604000010

Public Sponsor Pre-Inspection Form

The following information is to be provided by the levee district sponsor prior to an inspection. This information will be used to help evaluate the organizational capability of the levee district to manage the levee segment / system maintenance program.

1. Levee segment / system and sponsor: (name of the segment / system and levee sponsor) System 2605000010 / Segment 2604000010 CELRC		
2. Reporting period: (month/day/year to month/day/year) 05/01/2019 to 07/07/2020		
3. Summary of maintenance required by last inspection report: Weeding, filling settlement holes, fill ruts.		
4. Summary of maintenance performed this reporting period: Exercise and grease gates, oil locks, mow, fill holes, monitor pumps, remove fallen trees, monitor levee.		
5. Summary of maintenance planned next reporting period: General maintenance, weeding, fill settlement holes, monitor levee.		
6. Summary of changes to segment / system since last inspection: N/A		
7. Problems/ issues requiring the assistance of the US Army Corps of Engineers: N/A		

General Instructions for the Inspection of Flood Damage Reduction Segments / Systems

A. Purpose of USACE Inspections

The primary purpose of these inspections is to prevent loss of life and catastrophic damages; preserve the value of Federal investments, and to encourage non-Federal sponsors to bear responsibility for their own protection. Inspections should assure that Flood Damage Reduction structures and facilities are continually maintained and operated as necessary to obtain the maximum benefits. Inspections are also conducted to determine eligibility for Rehabilitation Assistance under authority of PL 84-99 for Federal and non-Federal systems. (ER 1130-2-530, ER 500-1-1)

B. Types of Inspections:

The Corps conducts several types of inspections of Flood Damage Reduction systems, as outlined below:

Initial Eligibility Inspections	Continuing Eligibility Inspections	
	Routine Inspections	Periodic Inspections
IEIs are conducted to determine whether a non-Federally constructed Flood Damage Reduction system meets the minimum criteria and standards set forth by the Corps for initial inclusion into the Rehabilitation and Inspection Program.	RIIs are intended to verify proper maintenance, owner preparedness, and component operation.	PIIs are intended to verify proper maintenance and component operation and to evaluate operational adequacy, structural stability, and safety of the system. Periodic Inspections evaluate the system's original design criteria vs. current design criteria to determine potential performance impacts, evaluate the current conditions, and compare the design loads and design analysis used against current design standards. This is to be done to identify components and features for the sponsor that need to be monitored more closely over time or corrected as needed. (Periodic Inspections are used as the basis of risk assessments.)

C. Inspection Boundaries:

Inspections should be conducted so as to rate each Flood Damage Reduction "Segment" of the system. The overall system rating will be the lowest segment rating in the system.

Project	System	Segment
A flood damage reduction project is made up of one or more flood damage reduction systems which were under the same authorization.	A flood damage reduction system is made up of one or more flood damage reduction segments which collectively provide flood damage reduction to a defined area. Failure of one segment within a system constitutes failure of the entire system. Failure of one system does not affect another system.	A flood damage reduction segment is defined as a discrete portion of a flood damage reduction system that is operated and maintained by a single entity. A flood damage reduction segment can be made up of one or more features (levee, floodwall, pump stations, etc).

D. Land Use Definitions:

The following three definitions are intended for use in determining minimum required inspection intervals and initial requirements for inclusion into the Rehabilitation and Inspection Program. Inspections should be considered for all systems that would result in significant environmental or economic impact upon failure regardless of specific land use.

Agricultural	Rural	Urban
Protected population in the range of zero to 5 households per square mile protected.	Protected population in the range of 6 to 20 households per square mile protected.	Greater than 20 households per square mile; major industrial areas with significant infrastructure investment. Some protected urban areas have no permanent population but may be industrial areas with high value infrastructure with no overnight population.

E. **Use of the Inspection Report Template:**

The report template is intended for use in all Army Corps of Engineers inspections of levee and floodwall systems and flood damage reduction channels. The section of the template labeled \"Initial Eligibility\" only needs to be completed during Initial Eligibility Inspections of Non-Federally constructed Flood Damage Reduction Systems. The section labeled \"General Items\" needs to be completed with every inspection, along with all other sections that correspond to features in the system. The section labeled \"Public Sponsor Pre-Inspection Report\" is intended for completion before the inspection, if possible.

F. **Individual Item / Component Ratings:**

Assessment of individual components rated during the inspection should be based on the criteria provided in the inspection report template, though inspectors may incorporate additional items into the report based on the characteristics of the system. The assessment of individual components should be based on the following definitions.

Acceptable Item	Minimally Acceptable Item	Unacceptable Item
The inspected item is in satisfactory condition, with no deficiencies, and will function as intended during the next flood event.	The inspected item has one or more minor deficiencies that need to be corrected. The minor deficiency or deficiencies will not seriously impair the functioning of the item as intended during the next flood event.	The inspected item has one or more serious deficiencies that need to be corrected. The serious deficiency or deficiencies will seriously impair the functioning of the item as intended during the next flood event.

G. **Overall Segment / System Ratings:**

Determination of the overall system rating is based on the definitions below. Note that an Unacceptable System Rating may be either based on an engineering determination that concluded that noted deficiencies would prevent the system from functioning as intended during the next flood event, or based on the sponsor's demonstrated lack of commitment or inability to correct serious deficiencies in a timely manner.

Acceptable System	Minimally Acceptable System	Unacceptable System
All items or components are rated as Acceptable.	One or more items are rated as Minimally Acceptable or one or more items are rated as Unacceptable and an engineering determination concludes that the Unacceptable items would not prevent the segment / system from performing as intended during the next flood event.	One or more items are rated as Unacceptable and would prevent the segment / system from performing as intended, or a serious deficiency noted in past inspections (which had previously resulted in a minimally acceptable system rating) has not been corrected within the established timeframe, not to exceed two years.

H. **Eligibility for PL84-99 Rehabilitation Assistance:**

Inspected systems that are not operated and maintained by the Federal government may be Active in the Corps' Rehabilitation and Inspection Program (RIP) and eligible for rehabilitation assistance from the Corps as defined below:

If the Overall System Rating is Acceptable	If the Overall System Rating is Minimally Acceptable	If the Overall System Rating is Unacceptable
The system is active in the RIP and eligible for PL84-99 rehabilitation assistance.	The system is Active in the RIP during the time that it takes to make needed corrections. Active systems are eligible for rehabilitation assistance. However, if the sponsor does not present USACE with proof that serious deficiencies (which had previously resulted in a minimally acceptable system rating) were corrected within the established timeframe, then the system will become Inactive in the RIP.	The system is Inactive in the RIP, and the status will remain Inactive until the sponsor presents USACE with proof that all items rated Unacceptable have been corrected. Inactive systems are ineligible for rehabilitation assistance.

I. Reporting:

After the inspection, the Corps is responsible for assembling an inspection report (or a summary report if it was a Periodic Inspection) including the following information:

- a. All sections of the report template used during the inspection, including the cover and pre-inspection materials. (Supplemental data collected, and any sections of the template that weren't used during the inspection do not need to be included with the report.)
- b. Photos of the general system condition and noted deficiencies.
- c. A plan view drawing of the system, with stationing, to reference locations of items rated less than acceptable.
- d. The relative importance of the identified maintenance issues should be specified in the transmittal letter.
- e. If the Overall System Rating is Minimally Acceptable, the report needs to establish a timeframe for correction of serious deficiencies noted (not to exceed two years) and indicate that if these items are not corrected within the required timeframe, the system will be rated as Unacceptable and made Inactive in the Rehabilitation Inspection Program.

J. Notification:

Reports are to be disseminated as follows within 30 days of the inspection date.

If the Overall System Rating is Acceptable	If the Overall System Rating is Minimally Acceptable	If the Overall System Rating is Unacceptable
Reports need to be provided to the local sponsor and the county emergency management agency.	Reports need to be provided to the local sponsor, state emergency management agency, county emergency management agency, and to the FEMA region.	Reports need to be provided to the local sponsor, state emergency management agency, county emergency management agency, FEMA region, and to the Congressional delegation within 30 days of the inspection.

National Levee Database

NLD

For Official Use Only

LEVEE INSPECTION MAPBOOK

Levee Segment Hammond Forest Ave

NLD Levee Segment ID
2604000010

Location
Hammond Forest Ave

Inspection Type
Routine

Start Date
06-Jul-2020

End Date
08-Jul-2020

Inspected By
Jeremy Harris, Yuki Galisanao

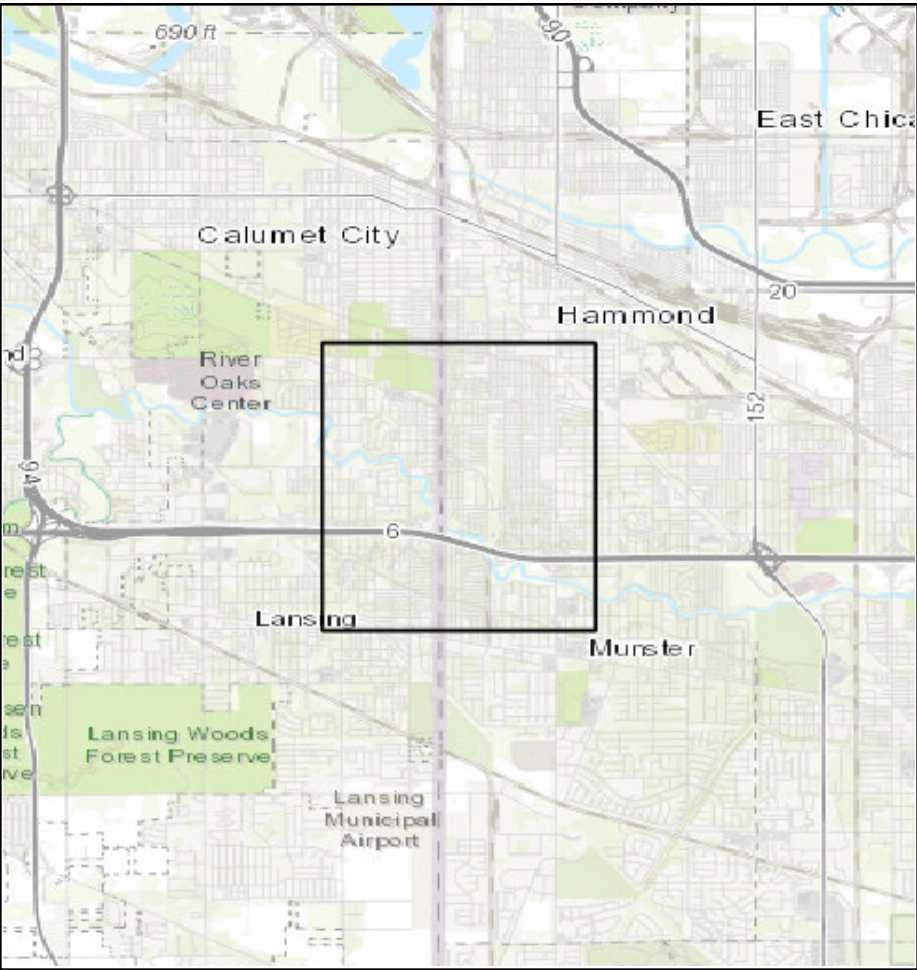


US Army Corps
of Engineers

SHEET INDEX

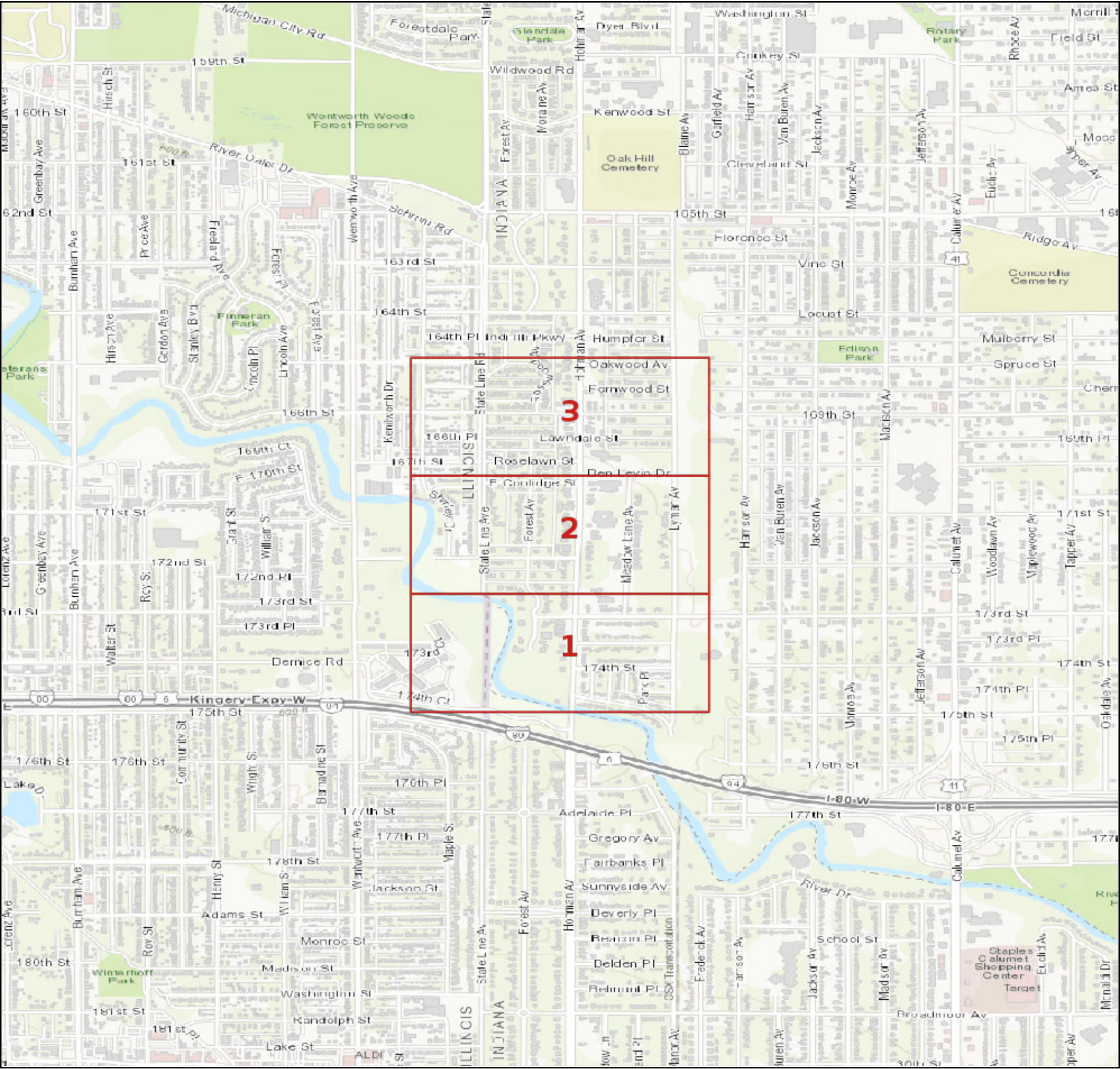
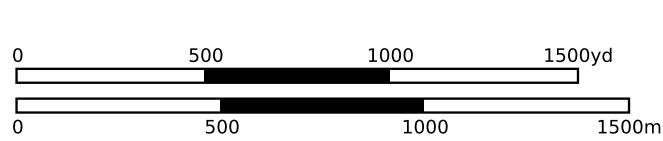
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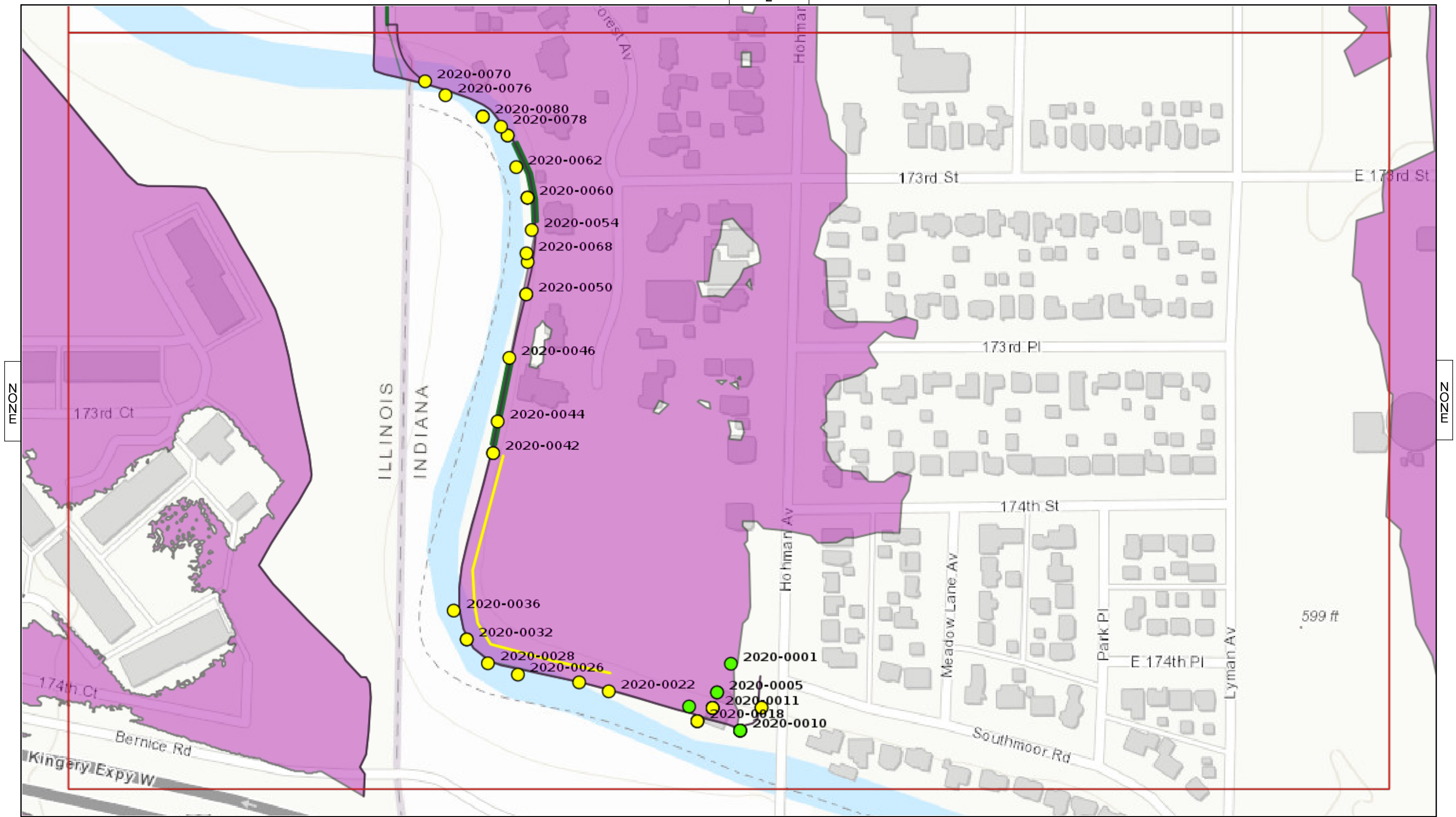
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MAP ELEMENTS

3 Standard Sheets



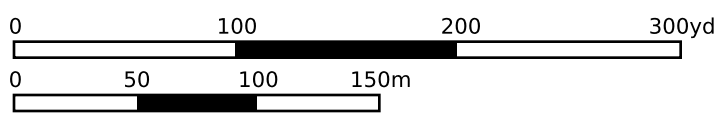


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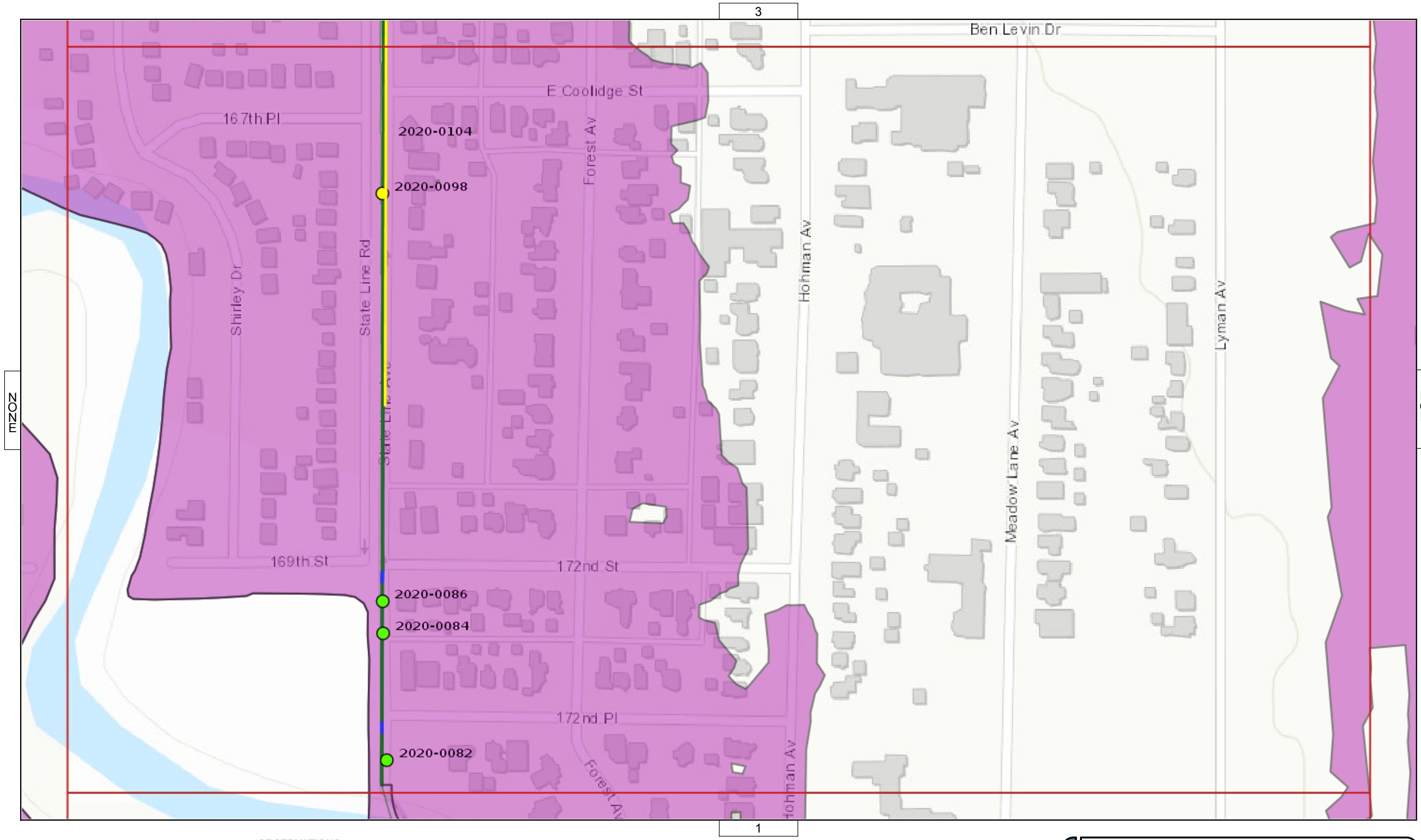


- OBSERVATIONS**
- Acceptable
 - Minimally Acceptable
 - Unacceptable
 - Not Applicable

Scale = 1:3000



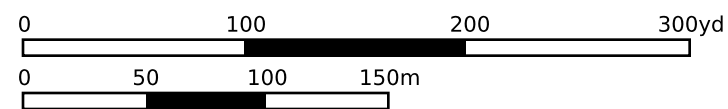
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	Hammond Forest Ave	
	Type: Routine	08-Jul-2020



OBSERVATIONS

-  Acceptable
-  Minimally Acceptable
-  Unacceptable
-  Not Applicable

Scale = 1:3000



NLD	Sheet: 2	06-Jul-2020
	Hammond Forest Ave	
	Type: Routine	08-Jul-2020

NONE

2020

2020

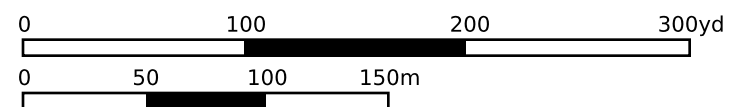
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OBSERVATIONS

- Acceptable
- Minimally Acceptable
- Unacceptable
- Not Applicable

Scale = 1:3000



NLD	Sheet: 3	06-Jul-2020
	Hammond Forest Ave	
	Type: Routine	08-Jul-2020

Rehabilitation Program Eligibility Determination

In order to be eligible, all of the following items must be rated A, M, N/A, or Yes.

Note: Item numbers listed below refer to their placement in the Inspection Checklist.

Name of Segment/System:		
Public Sponsor(s):		
Sponsor Representative:		
Sponsor Phone:		
Sponsor Email:		
Inspection Date:		
Rehabilitation Program Eligibility Determination		
Yes	<input type="checkbox"/>	Public sponsor provided maintenance information per the Public Sponsor Pre-Inspection Form.
No	<input type="checkbox"/>	
Yes	<input type="checkbox"/>	Non-federal levee system meets Initial Eligibility criteria.
No	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
If either of the above items is marked "No" the levee system is not eligible.		
Rating	Rated Item	
Levee Embankments		
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	3. Encroachments
A U N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	4. Closure structures (Stop Log, Earthen Closures, Gates, or Sandbag Closures)
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	5. Slope Stability
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	6. Erosion/ Bank Caving
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	10. Animal Control
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	11. Culverts/Discharge Pipes (This item includes both concrete and corrugated metal pipes.)
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	14. Underseepage Relief Wells/Toe Drainage Systems
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A M U N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

Floodwalls		
A	<input type="checkbox"/>	2. Encroachments
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
A	<input type="checkbox"/>	3. Closure Structures (Stop Log Closures and Gates)
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input type="checkbox"/>	5. Tilting, Sliding, or Settlement of Concrete Structures
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
A	<input type="checkbox"/>	6. Foundation of Concrete Structures
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
A	<input type="checkbox"/>	8. Underseepage Relief Wells/Toe Drainage Systems
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
Interior Drainage Systems		
A	<input type="checkbox"/>	9. Culvert/Discharge Pipes
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input type="checkbox"/>	10. Sluice/Slide Gates
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input type="checkbox"/>	11. Flap gates/Flap Valves/Pinch Valves
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
Pump Stations		
A	<input type="checkbox"/>	17. Intake and Discharge Pipelines
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
A	<input type="checkbox"/>	18. Sluice/Slide Gates
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input type="checkbox"/>	19. Flap Gates/Flap Valves/Pinch Valves
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	

Rehabilitation Program Status		
Active	<input type="checkbox"/>	System meets all interim eligibility criteria, including having received a rating of A, M, N/A or Yes for all subsets items and is therefore eligible for rehabilitation assistance.
Inactive	<input type="checkbox"/>	System does not meet interim eligibility requirements.
Comments: <div style="border: 1px solid black; height: 350px; width: 100%;"></div>		

Final Approval By: