



CiorbaGroup
CONSULTING ENGINEERS

Little Calumet River Basin
Development Commission



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UPDATE TO COMPREHENSIVE WATERSHED PLAN LITTLE CALUMET RIVER - LAKE COUNTY BASIN

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SECTION 1

NARRATIVE

1.0 INTRODUCTION

The intent of this report is to update the 2013 Comprehensive Watershed Plan of Little Calumet River - Lake County Basin to account for projects that have been completed, add new projects that would benefit the watershed and develop updated priorities for implementation of projects included in the plan. A review of the original Master Plan was completed to conduct a status review of the listed projects with the Commission and local agencies. Local agencies within the Little Calumet River Basin in Lake County were contacted to identify completed projects, update cost estimates and scopes for projects yet to be completed and to discuss new potential projects.

2.0 2013 COMPREHENSIVE MASTER PLAN

The Little Calumet River Basin Development Commission prepared a Comprehensive Master Plan in 2013 to protect and manage the quality and quantity of water within the Little Calumet River (LCR) watershed. The Commission is responsible for management decisions that impact water and other natural resources of the entire watershed and is not solely limited by political jurisdictions. The Commission has thus developed collaborative partnerships with local communities and developed the Master Plan that serves as a guide for the implementation and development of projects and programs that enhance the integrity of the watershed.

According to the 2013 Comprehensive Watershed Plan, the LCR watershed has a total drainage area of approximately 587 square miles and extends from Cook and Will County, Illinois to Lake, Porter and LaPorte County, Indiana. The river's main tributaries are Thorn Creek, Midlothian Creek and Calumet Union Drainage Ditch in Illinois and Hart Ditch, Deep River, Salt Creek and the East Branch of the Little Calumet River in Indiana. Fifteen Lake County municipalities and approximately 203 square miles of portions of unincorporated Lake County drain to the Little Calumet River through 280 miles of open drains.

The main objective of the 2013 Plan was to identify opportunities within the LCR watershed that aim to improve quality of life through the management of stormwater. Outreach efforts were conducted with the fifteen constituent communities and regulatory agencies to assess watershed needs, challenges, and future project opportunities. Projects were categorized based on size of positive impact—Regional, Semi-Regional, Local, Maintenance and Operational.

The 2013 Comprehensive Master Plan concludes with prioritization and implementation strategies for the project opportunities identified based on potential flood control or operational effect. Commission-led projects are prioritized first, followed by Regional, Semi-Regional and Local partnership projects. Additionally, the Plan provides information for funding for local communities. In March of 2012, Indiana Governor Mitch Daniels signed into law legislation that introduced an annual fee for all property owners within the LCR watershed, which should generate approximately \$7,300,000 per year for the Commission. After setting aside funds to cover operational and maintenance costs, the Commission can provide funding for partner projects. Municipalities can apply for LCRBDC funding for projects through an application on the Commission website, although funding amount varies each year.

3.0 METHODOLOGY - DATA COLLECTION

Ciorba Group sent an initial questionnaire to the fifteen participating municipalities, Lake County, the Lake County Highway Department (LCHWY), and the Little Calumet River Basin Development Commission (LCRBDC). The questionnaire included queries to gather information on the status of the stormwater projects listed in the 2013 Comprehensive Master Plan, including the projects that have been completed, any projects currently ongoing and future projects to be completed in the next 10 years. A template of the questionnaire can be found in Appendix A.

At the time of writing of this report, thirteen municipalities, the LCHWY and the LCRBDC responded to the initial questionnaire with various levels of detail and information. In addition to the questionnaire, Ciorba Group conducted meetings with responding entities to gather additional information on projects, challenges, and future goals.

Of the 92 projects that were listed in the 2013 Master Plan, a status update is available for 90 projects. According to the results of the survey, 15 projects have been completed thus far, 39 projects are ongoing or will be completed in the future and 36 projects will no longer be considered for implementation. Also, information for the 2 remaining projects listed in the 2013 Master Plan have currently not been provided as a response was not received from the City of Gary and Town of Cedar Lake.

4.0 RESULTS OF QUESTIONNAIRE

Based on the results of the survey and meetings held with municipalities and agencies, the following sections describe the status of projects listed in the 2013 Master Plan organized by community or agency, and new projects are also presented if provided. The projects are thus defined as completed, ongoing or will be completed in the future. Cost estimates and project completion dates are also included if the data was provided.

4.1 CEDAR LAKE, TOWN OF

The Town of Cedar Lake did not have any projects listed in the 2013 Master Plan. Although no projects were listed in the Plan, a questionnaire was sent to the municipality to establish if the community has completed or is planning to complete stormwater projects that aim to achieve the goals of the Commission and 2013 Master Plan. At the time of this report, Ciorba Group has not received a response to the questionnaire from the Town of Cedar Lake.

4.2 CROWN POINT, CITY OF

1. Stillwater Subdivision Drainage Improvements

- i. Per response from the City of Crown Point, the project was completed in 6/2014 for a total cost of \$600,000.

2. Beaver Dam Ditch Maintenance (Maintenance Project)

- i. Per response from the City of Crown Point, the project is currently ongoing and is considered a county project instead of the municipality.

3. CSO 004 Parallel Interceptor Project (NEW)

- i. Installation of a new, parallel interceptor eliminating 50 Mgal/year of raw sewage discharge to Beaver Dam Ditch and providing a new dedicated storm line to drain over 248 acres of storm water from areas of severe flooding currently lacking an outlet from the city. The project has a total project cost estimate of \$4,000,000 with a \$400,000 project design budget and \$320,000 request of record with the LCRBDC. Currently awaiting funding consideration from LCRBDC; no anticipated completion date yet.

4. Sauerman Woods (NEW)

- i. Storm water improvement for the Briarwood neighborhood, Sauerman Woods Park, the Sportsplex Ditch, and US 231, all of which flow into the main Beaver Dam Ditch and all benefit the Little Calumet River Basin. Anticipated 2021-2022 completion date.

5. Retention/Detention Ponds, Operation, Maintenance and Replacement Alternatives (NEW)

- i. According to the 2018 Stormwater Utility Master Plan, currently the City of Crown Point owns only 15% of the ponds and there is a growing concern over the large number of ponds with no defined maintenance requirements. Also, 48 out of the existing 176 ponds have been identified as critical through its 2017 MS4 inspections. Various alternatives are being considered by the City, such as repair of 2017 city reported inspection deficiencies, removal of existing sediment, and other typical operation and maintenance activities.

6. High Priority Areas of Concern (AOCs) (NEW)

- i. Five high priority AOCs were identified in the 2018 Stormwater Utility Master Plan by community members and City staff—denoted as AOC1 Silverhawk, AOC2 Liberty Park, AOC3 Briar Creek, AOC4 Fairgrounds, and AOC 5 Combined Sewers. These areas are at high risk of flooding due to undersized pipes and culverts, insufficient number of storm inlets, flat grades, etc. Total estimated cost to correct deficiencies for all five areas is approximately \$8,012,940.

7. Additional Areas of Potential Deficiency (AAOPDs) (NEW)

- i. Eleven AAOPDs were determined based on a stormwater system model analysis for various storm events. A number of storage and conveyance improvements, green infrastructure alternatives, and a large interceptor are recommended to alleviate flooding in these areas. As presented by the 2018 Stormwater Utility Master Plan, the total estimated project cost for AAOPD improvements is \$62,634,000 for storage alternatives and \$20,329,000 for a larger conveyance alternative.

4.3 DYER, TOWN OF

1. Longwood Golf Course Regional Detention Facility

- i. The Longwood Golf Course Regional Detention Facility provides the opportunity to store over 1,000 acre-feet of stormwater. The project would provide direct flood reduction benefits to the Town of Dyer and downstream for the Towns of Schererville, Munster, Highland and Hammond. Per response from the Town of Dyer, the project will not be completed as the project is not viable with the Will County FPD.

2. Hart Ditch Widening (EJ&E RR to Main Street)

- i. Per response from the Town of Dyer, the Town will not be pursuing this project due to the priority of completing Hart Ditch 2-Stage Channel project.

3. Hart Ditch 2-Stage Channel for Flood Storage

- i. Per response from the Town of Dyer, the project is ongoing and is scheduled to be completed Summer 2021. The project has an estimated cost of \$3,100,000, and funding has been allocated.

4. Cook County Detention Facilities Alternatives

- i. Per response from the Town of Dyer, the project will no longer be pursued.

5. 14-Acre Parcel Storage Project

- i. Per response from the Town of Dyer, the project will be completed in the future. The project has an estimated cost \$3,200,000 to \$4,200,000 and funding has currently not been allocated.

6. Hart Ditch Flap Gate Project (Northgate Subdivision)

- i. Per response from the Town of Dyer, the project will be completed in the future. The project has an estimated cost of \$60,000, although funding has not been allocated at this time.

7. Berens Monaldi Flood Control Project (NEW)

- i. The project was the final stage of bringing storm sewers to lift station and included berms to protect the subdivision from overbank flooding. The project was completed on 9/1/2019 for a cost of \$1,200,000.

8. Harrison Avenue Storm Sewer Project (NEW)

- i. The project included storm sewer and detention improvements to relieve flooding issues. The project was completed Fall 2020 for a cost of \$2,300,000.

9. Northgate Detention Storage Project (NEW)

- i. The purpose of this project is to alleviate neighborhood flooding. A future completion date is to be determined, although the project has an estimated cost of \$15,000,000.

10. Calumet Avenue Regional Storage (NEW)

- i. This future project strives to access available storage at an existing pond adjacent to Hart Ditch for regional detention storage or Hart Ditch flood storage. The estimated cost for the project varies and the completion date is to be decided in the future.

11. Sandy Ridge Pump Station Upgrades (NEW)

- i. The goal of this project is to upgrade the aging Sandy Ridge Pump Station with new pumps and possibly higher capacity. The project is currently not scheduled but has an estimated cost of \$900,000 to \$1,500,000.

12. Sandy Ridge Storm Sewer Improvements (NEW)

- i. The project will include upsizing of storm sewers and additional detention to alleviate flooding. The project is not yet scheduled but has an estimated cost of \$1,800,000.

4.4 GARY, CITY OF

The City of Gary did not respond to the questionnaire and multiple attempts at communication were not reciprocated. The City of Gary had the following two

projects listed in the 2013 Master Plan, although an update on the status is currently not available. It is to be noted that City of Gary and the Little Calumet River Basin Development Commission work collectively to determine the projects that will best meet the needs of the commission and the Federal flood control efforts.

1. Undersized Pipes at I-94/Grant Interchange

- i. No response was received, and a status update is not available.

2. Black Oak Ditch Project

- i. No response was received, and a status update is not available.

4.5 GRIFFITH, TOWN OF

1. River Road Levee Project Completion

- i. This project involves the completion of the levee system between Cline Avenue and the railroad to protect areas south of River Drive. Also, construction of a second equalization basin next to the existing one with flood protection for both. Per response from the Town of Griffith, the project has not been completed.

2. Deep Tunnel Project (Maintenance Project)

- i. Per response from the Town of Griffith, the project is currently ongoing.

3. I/I Analysis (NEW)

- i. Per response from the Town of Griffith, this is a future project.

4. Comprehensive Storm Water Analysis (NEW)

- i. Per response from the Town of Griffith, this project will be pursued in the future.

4.6 HAMMOND, CITY OF

1. Dowling Park Pump Station - Removal of Homes in Floodplain

- i. Per response, the project was completed on 7/13/2016.

4.7 HIGHLAND, TOWN OF

1. Cady Marsh Ditch Detention Project

- i. This project would provide between 70 acre-feet and 170 acre-feet of stormwater storage which would increase flood control and positively impact the communities of Griffith, Highland and Munster. Per response from the Town of Highland, this project is no longer under consideration.

2. Spring Street Ditch Culvert Replacements

- i. A number of culverts between Hart Road and Cady Marsh Ditch are undersized and have the potential for failure and are in need of replacement. Per response from the Town of Highland, this project is a county project and does not fall under the town's jurisdiction.

3. Cady Marsh Ditch Pump Station and Storm Sewer Project

- i. Per response from the Town of Highland, the project is named "Martha Street Pump Station and Storm Sewer Project." The project was completed on 8/16/2018 for a total cost of \$1,358,026.

4. Grace Street Storm Sewer Improvement Project (NEW)

- i. The project involved a new 24" and 42" diameter storm sewer along 9000/9100 block of Grace Street and 3400 block of Laverne Drive. Also, a new 42" diameter outlet to Cady Marsh Ditch will replace the existing 24" diameter outlet. The project will be completed on 11/25/2020 for a cost of \$465,054.

4.8 HOBART, CITY OF

1. Maple Lake Storage

- i. Per response from the City of Hobart, the project will be completed in the future and currently no funding has been allocated.

2. 61st Ave. and County Line Road Regional Detention Basin

- i. Per response from the City of Hobart, the project will be completed in the future and currently no funding has been allocated.

3. Northwinds Regional Detention Basin

- i. Per response from the City of Hobart, the project will be completed in the future and currently no funding has been allocated.

4. Nob Hill Regional Detention Basin

- i. Per response from the City of Hobart, the project will no longer be constructed as detention at this location would be counterproductive.

5. Evergreen Memorial Park Storage

- i. Per response from the City of Hobart, the project will no longer be completed.

6. Hillman Heights Drainage Improvements and Detention Creation

- i. Per response from the City of Hobart, the project will be completed in the future with a tentative completion date of 12/1/2022 and funding has been allocated.

7. Eagle Plaza Detention

- i. Per response from the City of Hobart, the project will no longer be completed.

8. Mundell Field Storage

- i. Per response from the City of Hobart, the project will no longer be completed.

9. County Line Road Drainage Improvements

- i. Per response from the City of Hobart, the project will be completed in the future with a tentative completion date of 12/1/2028 and funding has been allocated.

10. Crestwood Subdivision Drainage Improvements

- i. Per response from the City of Hobart, the project was completed in 2017.

11. “Stinky Creek”

- i. Per response from the City of Hobart, the project is currently ongoing and will be completed by 12/1/2022 and funding has been allocated.

12. Brickie Bowl Flooding

- i. Per response from the City of Hobart, the project will be completed in the future and funding has not yet been allocated.

13. Barrington Ridge Stormwater Drainage Improvements

- i. Per response from the City of Hobart, the project was completed in 2018.

14. 61st Ave. and Wisconsin Street Regional Storage

- i. Per response from the City of Hobart, the project was completed in 2018.

15. Preserves Storage

- i. Per response from the City of Hobart, the project will be completed in the future and funding has not yet been allocated.

16. Liverpool Road Constructed Wetland

- i. Per response from the City of Hobart, the project will no longer be completed.

17. Lake George Dredging (Maintenance Project)

- i. Per response from the City of Hobart, the project is currently ongoing and is scheduled to be completed in 2025.

18. Sediment Control for Deep River and Turkey Creek (Maintenance Project)

- i. Per response from the City of Hobart, the project will no longer be completed.

19. Lake George Shoreline Stabilization (Maintenance Project)

- i. Per response from the City of Hobart, the project was completed in 2017.

20. Deep River Outfall Project (NEW)

- i. The project includes an outfall replacement and BMP installation. The project will be completed by 3/30/2021 and cost \$500,000.

21. 3rd Street Bridge Replacement (NEW)

- i. The project involves the replacement of County Bridge 253-3rd Street over Deep River/Lake George. The project is set to be completed on 4/30/2021 and cost \$7,000,000.

22. Wisconsin Street Bridge Causeway (NEW)

- i. The Wisconsin Street over the Deep River/Lake George will be replaced, and the causeway will be raised to prevent overtopping. The project will be completed by 12/1/2022 and cost \$5,000,000.

23. Cresmoor Storm Sewers (NEW)

- i. Storm sewers will be installed throughout the Cresmoor subdivision to alleviate flooding. The project is anticipated to be completed by 12/1/2022 and cost \$3,000,000.

24. Stinky Creek Diversion and Turkey Creek Lateral 6 Overflow (NEW)

- i. The project will encompass construction of a large storm sewer through Hobart, New Chicago, and Lake Station to alleviate flooding in Hobart, Merrillville and Gary, while improving drainage in New Chicago and Lake Station. The project will reduce the peak flow in the Deep River by reducing the distance and time to reach Burns Ditch. The project is anticipated to be completed by 12/1/2022 and cost and estimated \$7,000,000.

25. Ross Township Ditching and Regional Detention (NEW)

- i. This project will involve the cleaning of various ditches and replacement of multiple culverts to alleviate flooding in Ross Township and the construction of one or more regional detention basins to mitigate flooding in Lake George. The project is anticipated to be completed by 12/1/2025 and cost \$2,500,000.

26. Nob Hill Storm Sewer Reconstruction (NEW)

- i. The project will result in the reconstruction of the remaining storm sewers in the Nob Hill subdivision to provide positive drainage to the area. The project is anticipated to be completed by 12/1/2026 and cost \$3,355,000.

27. Duck Creek Stream Rehabilitation (NEW)

- i. The project will consist of a multi-phase restoration to improve flooding of County Line Road and improve the water quality in Duck Creek and ultimately Deep River. The project is anticipated to be completed by 12/1/2028 and cost \$3,500,000.

4.9 LAKE STATION, CITY OF

1. Deep River Dam Rehabilitation Project

- i. Alternatives include rehabilitating the Deep River Dam as it is in poor condition and in need of repairs or removing the dam. Per response from the City of Lake Station, the project is currently ongoing with the LCRBDC and the USACE, and the City has had very little involvement in the project.

2. Lake George Dam Control Policy

- i. Elevation of the Lake George Dam is controlled by regulatory agencies, but local communities are seeking flexibility in lowering water levels in advance of major storm events to add storage to the system and possibly reduce stormwater flows and flooding. Changes to the dam control policy will require regulatory and public outreach and hydraulic modeling. The City of Lake Station states that the Lake George Dam is in City of Hobart, therefore, Lake station has no information on the project and it will not be completed under their jurisdiction.

3. Residential Drainage Improvements Between 27th and 29th Avenues

- i. According to the City of Lake Station, the City has had minimal involvement, and the projects are ongoing with the LCRBDC and USACE.

4.10 MERRILLVILLE, TOWN OF

1. Lincoln Gardens and Southbrook Subdivision Drainage Project
 - i. The project includes culvert replacement, waterway stabilization and construction of 35 acre-feet of storage to minimize flooding. Per response from the Town of Merrillville, project is currently ongoing in the design phase. A tentative completion date is to be decided pending funding. The project has an estimated cost of \$8,400,000 in 2014 dollars and funding will be available over time depending on cost share and town funding from stormwater utility fees.
2. Country Club Heights & Meadowdale Subdivision Drainage Project
 - i. Per response from the Town of Merrillville, the project is ongoing as engineering has been completed on flood storage, Bon Aire Lake and Cleveland Street portions of the project. Other aspects of the project include the Hickory Ridge apartment flood project, flood berm, pump station and culvert improvements. Flood storage will be completed in Fall 2020, while other drainage improvements will be constructed as funding allows. The project has an estimated cost of \$13,900,000 in 2014 dollars for all components and funding will be available over time depending on cost share and town funding from stormwater utility fees.
3. Turkey Creek Stabilization (Maintenance Project)
 - i. Per response from the Town of Merrillville, the project is ongoing and is being coordinated with Lake County Surveyors Office.
4. Regional Flood Storage Study for Turkey Creek Lateral #6 (NEW)
 - i. The project is currently ongoing with assistance from the LCRBDC. The Town is pursuing a regional floodwater storage project in Unincorporated Lake County open space. 13 properties have so far been acquired on tax sale in the location of the proposed future flood storage basin. The ultimate project will consist of between 60-170 acre-ft of flood storage. The project will benefit City of Gary, Hobart, Unincorporated Lake County and the Town of Merrillville. Estimated cost of \$4,800,000 to \$17,200,000 and no current completion date.

5. Green Streets and Green Infrastructure Projects (NEW)

- i. The Town has completed several green infrastructure projects such as rain gardens, green streets, etc. The projects vary in cost and completion dates.

6. Taft Street Culvert Improvement (NEW)

- i. The project consists of the replacement of a 36-inch culvert with a 8'x4' box culvert. The project was completed in Fall 2019 for \$113,800.

7. Independence Street Drainage Project (NEW)

- i. The project involved storm sewer improvements to drain a depressional storage area on Independence Street south of Lincoln Highway. Also, the outlet storm sewer tied into the Taft Street drainage project. The project was completed in Spring 2018 for \$307,631.

8. 57th and Hendricks Flood Storage (NEW)

- i. An anticipated completion date and cost is to be decided. The goal for the project is flood storage in cooperation with other stakeholders.

9. Chapel Manor Drainage Improvement Projects (NEW)

- i. This project consists of 100 acre-ft of floodwater storage at Broadway Avenue and 67th Avenue, a culvert replacement at 78th Avenue and 20 acre-ft of upland floodwater storage at 89th Avenue. The project has an estimated cost of \$8,700,000 in 2014 dollars and no current completion date.

10. North Central Turkey Creek Watershed Improvements (NEW)

- i. The project encompasses 20 acre-ft of floodwater storage at Skinner Park, storm sewer improvements on Delaware Street and streambank stabilization. The project has an estimated cost of \$1,700,000 in 2014 dollars and no current completion date.

11. Northeast Turkey Creek Watershed Improvements (NEW)

- i. The project consists of 25 acre-ft of floodwater storage on the Diocese of Gary property and a 42-inch relief sewer along 58th Avenue in the vicinity of

Broadway Avenue. The project has an estimated cost of \$2,300,000 in 2014 dollars and no current completion date.

12. Stormwater Master Plan Update (NEW)

- i. The Town of Merrillville will update the 2014 Stormwater Master Plan in 2024. The anticipated completion date is 2024 for a total cost of \$100,000.

4.11 MUNSTER, TOWN OF

1. Munster Ridge and Calumet Streetscape Improvements (NEW)

- i. Through the Lake Michigan Coastal Program, the Town of Munster is in the process of planning infrastructure improvements that will reduce stormwater runoff from the portion of Ridge Road from the Illinois border to the municipal complex at 1005 Ridge Road as well as Calumet Avenue from the Calumet River to Ridge Road. Anticipated Completion date of 2030.

4.12 NEW CHICAGO, TOWN OF

1. Culvert Improvements under Wisconsin St. and Huber Blvd.

- i. Per response from the Town of New Chicago, the project was completed on 6/12/2015.

2. Twin Oaks Park Pond Improvements

- i. Per response from the Town of New Chicago, the project was completed on 7/14/2020.

4.13 SCHERERVILLE, TOWN OF

1. Potential Increase in Hartsdale Pond Storage

- i. Per response from the Town of Schererville, the project has not been completed and funding has not been allocated.

2. Potential Stormwater Storage Project (Schererville 6)

- i. Per response from the Town of Schererville, the project will be completed in the future, but funding has not been allocated.

3. Potential Stormwater Storage Project (Schererville 7)

- i. Per response from the Town of Schererville, the project has not been completed and funding has not been allocated.

4. Potential Stormwater Storage Project (Schererville 8)

- i. Per response from the Town of Schererville, the project is currently ongoing.

5. Sunset Boulevard Detention Modifications

- i. Per response from the Town of Schererville, the project is currently ongoing.

6. Shultz Drive and Harder Court Stormwater Detention Project

- i. Per response from the Town of Schererville, the project is currently ongoing.

7. Pennsy Ditch Maintenance (Maintenance Project)

- i. Per response from the Town of Schererville, the project has been completed, with a total cost of \$1,246,631.

4.14 ST. JOHN, TOWN OF

1. Prairie West Park Drainage Improvements

- i. Per response from the Town of St. John, the project is not under the jurisdiction of the municipality.

2. Golf Lake Dam Improvements

- i. Per response from the Town of St. John, the project involves maintenance only.

3. Culvert Improvements Under Conrail Railroad

- i. Per response from the Town of St. John, the project is not under the jurisdiction of the municipality.

4.15 WINFIELD, TOWN OF

1. Hidden Creek Subdivision Regional Stormwater Project
 - i. The project consists of the expansion of existing facilities and waterway improvements to decrease flooding. Per response from the Town of Winfield, the project will be completed in the future with a tentative completion date of 9/30/2021 and estimated cost of \$1,500,000.
2. Storm Water Design Manual Adoption and Storm Water Ordinance Revision (NEW)
 - i. The Town in late 2014 began an initiative to rewrite the current Storm Water Ordinance and created a Storm Water Technical Design Manual. In addition, the process developed a water quality policy for the Town that was previously lacking in the Town Code as it existed at the Time. The project was completed on 5/4/2015 with an estimated cost of \$6,500.
3. Stormwater Projects of Winfield 01/01/2013 to 09/01/2020 (NEW)
 - i. The Town undertook various storm water projects based on identified issues from the 2009 Town of Winfield Storm Water Master Plan; some areas were also remedied in conjunction with other capital or maintenance improvements. The projects have an estimated cost of \$817,000 that reflects construction expended by the Town in the timeframe indicated.
4. 109th Avenue and Grand Boulevard Intersection Improvement (NEW)
 - i. The Town of Winfield identified several issues at the intersection of 109th Avenue and Grand Boulevard, such as stopping sight distance, intersection sight distance, lack of turn lanes, lack of shoulder width and an undersized culvert crossing. The culvert crossing was identified as undersized in the Town of Winfield Storm Water Master Plan. In 2020, the Town applied and secured an 80/20 match from the LCRBDC for replacement of the culvert to an appropriately sized box structure. This work will take place in conjunction with addressing the intersection deficiencies. The project is scheduled to begin Spring 2021 and be completed by 11/30/2021, with an estimated cost of \$2,000,000.

4.16 LAKE COUNTY, INDIANA

1. Upper Beaver Dam Ditch Detention
 - i. The Upper Beaver Dam Ditch Detention project will provide storage capacity of over 1,400 acre-feet for flood reduction and improve water quality by settling suspended solids. The project will be completed in the future with a tentative completion date of 12/31/2021, estimated cost of \$1,700,000 and no funding currently allocated.
2. Beaver Dam Ditch - Lateral 2 (Regional Detention Basin)
 - i. Culverts under Broadway (SR 53) at 101st Avenue in Crown Point are undersized and are not able to carry stormwater runoff from 1,150 acres in Crown Point and Merrillville. This project will include culvert and ditch improvements. The project is set to be completed by 11/30/2021 and has a total estimated cost of \$550,000 with no funding allocated.
3. Cady Marsh Ditch Detention Project (Whitcomb and 4th)
 - i. This project would provide additional flood plain storage for Cady Marsh Ditch on the east side of Whitcomb Street. According to the Lake County Surveyor's Office, the project will no longer be considered.
4. Upper Turkey Creek Stormwater Storage Project
 - i. The area south of 77th Avenue and west of Cline Avenue in the Town of Schererville has been identified as an area of additional detention storage of approximately 44 acre-feet. Also, the site can be used as a buffer for peak flows for two branches of the Upper Turkey Creek. According to the Lake County Surveyor's Office, the project will no longer be implemented.
5. Upper Turkey Creek Overbank Detention
 - i. This project includes the construction of a two-stage ditch for Turkey Creek east of Broad Street to Arbogast Street. Currently, the bank areas are steep and wooded with high potential for erosion. The two-stage ditch will provide a stable overbank for flood conveyance and reduce the sediment load downstream and increase water quality. The project is set

to be completed by 11/30/2021 and has a total estimated cost of \$275,000 with no funding obtained.

6. 121st and Iowa Drainage Improvements with NRCS

- i. The project aims to increase runoff storage while also providing water quality improvements as the surrounding area is predominantly agricultural and sediment pollution is of major concern for Indiana waterways. According to the Lake County Surveyor's Office, the project will no longer be considered.

7. Unregulated Deep River Cleaning (Maintenance Project)

- i. The project is set to be completed by 1/31/2022 at a total cost of \$500,000 and funding has been acquired.

8. Unregulated Hart Ditch Cleaning (Maintenance Project)

- i. According to the Lake County Surveyor's Office, the project is currently ongoing and is set to be completed by 9/23/2024. The project has a total cost of \$1,500,000 and funding has been allocated.

9. Schererville Ditch/Dyer Ditch - Teibel Ponds Restoration (NEW)

- i. The project involves the excavation of approximately 24 acres, to a depth of 3-feet, totaling 116,160 cubic yards for the restoration of Schererville Ditch/Dyer Ditch in the Town of Schererville. Also, the project will include the excavation of approximately 8 acres, to a depth of 1.5-feet, totaling 19,360 cubic yards for the restoration of Teibel Ponds in the Town of Schererville. The project has an anticipated completion date of 12/31/2021 and has an estimated cost of \$3,500,000 to \$9,300,000.

10. Beaver Dam Ditch Maintenance - Phase 1 (NEW)

- i. The project will be completed in the Cities of Crown Point and Hobart and will involve channel and bank clearing to improve access to Beaver Dam Ditch. Project limits start ½ mile west of Cline Avenue easterly to ¾ mile east of Clay Street, spanning approximately 12 miles. The project is scheduled to be completed by 12/31/2021 at a total cost of \$750,000.

11. Turkey Creek Maintenance - Phase 1 (NEW)

- i. The project will comprise of channel and bank clearing of Turkey Creek to enhance access through the Towns of Schererville and Merrillville and City of Hobart. The project will span approximately 9 miles and start at Cline Avenue then easterly to ¼ mile east of Liverpool Road. The project is scheduled to be completed by 12/31/2021 at a total cost of \$650,000.

12. Turkey Creek 2-Stage Ditch Storage and Culvert Replacement at James Wittchen Drive (NEW)

- i. The project is located in the Town of Schererville and will convert 750 linear feet of distressed and falling streambank into a 2-stage ditch profile with bio-engineered streambank stabilization measures. 6,800 cubic yards of upland area on the North and South side of Turkey Creek will be excavated to create a protracted bench area with 3.6 acre-feet of new on-line flood storage area. This project will improve ditch permanency, reduce sediment and nutrient loadings, and create 0.96 acres of new habitat with native plants. The project will also replace a undersized structures at James Wittchen Drive. The project is set to be completed by 12/31/2021 for a cost of \$850,000.

13. Graper Ditch Maintenance (NEW)

- i. The project will be constructed in the Town of Winfield and will replace undersized culverts to reduce flooding, replace 100-year old tile and re-establish overland swale. The project will be completed by 7/31/2021 for an estimated cost of \$450,000.

14. Hart Ditch 2-Stage Ditch Riparian Corridor Restoration Phase 1 (NEW)

- i. For the Town of Dyer, the project will transform 300 linear feet of near vertical streambank into a 2-stage ditch profile with bio-engineered stabilization measures. By excavating 3,400 cubic yards of upland area on the north side of Hard Ditch, an extended bench area will be created with 1.8 acre-feet of new flood storage area which will improve ditch stability, reduce sediment and nutrient loadings, and create 0.48 acres of new habitat. The project has an estimated cost of \$3,200,000, while an anticipated completion date is currently not available.

4.17 LAKE COUNTY HIGHWAY DEPARTMENT (LCHWY)

1. Harrison Avenue Bridge Reconstruction
 - i. To reduce the impacts of flooding, the project will include reconstruction of the roadway and bridge to elevations that provide the same level of protection. Per response from the LCHWY, the project was completed in 2019.
2. Bridge 360 Reconstruction (Kleinman Road, Highland, IN)
 - i. Per response from the LCHWY, the project will be completed in the future with a tentative completion date of 2030.
3. Bridge 350 Reconstruction (Liable Road, Highland, IN)
 - i. Per response from the LCHWY, the project has not been completed.
4. Bridge 362 Reconstruction (Colfax Street, Griffith, IN)
 - i. Per response from the LCHWY, the project will be completed in the future with a tentative completion date of 2023 and estimated cost of \$100,000 (pending confirmation).
5. Bridge 254 Reconstruction (Wisconsin Street, Hobart, IN)
 - i. Per response from the LCHWY, the project is currently ongoing with a scheduled completion date in 2021 and cost of \$1,750,000.
6. Bridge 252 Reconstruction (Old Ridge Road, Hobart, IN)
 - i. Per response from the LCHWY, the project was completed in 2014 at a total cost of \$558,323.
7. Bridge 89 Reconstruction (101st Avenue, Crown Point, IN)
 - i. Per response from the LCHWY, the project was completed in 2015 at a total cost of \$1,085,269.
8. Bridge 98 Reconstruction (Clay Street, Merrillville, IN)
 - i. Per response from the LCHWY, the project will be completed with a 2025 tentative completion date and estimated cost of \$1,890,000.

9. Bridge 92 Reconstruction (Colorado Street, Winfield, IN)

- i. Per response from the LCHWY, the project will be completed in the future with a 2024 tentative completion date and estimated cost of \$155,000 (pending confirmation).

10. Bridge 264 Reconstruction (Hart Street, Dyer, IN)

- i. Per response from the LCHWY, the project is currently ongoing and is scheduled to be completed in 2020. The project has an estimated cost of \$1,999,700 and funding has been allocated.

11. Bridge 261 Reconstruction (213th Street, Dyer, IN)

- i. Per response from the LCHWY, the project will be completed in the future with a 2024 tentative completion date and total estimated cost of \$830,000.

12. Bridge 260 Reconstruction (Main Street, Munster, IN)

- i. Per response from the LCHWY, the project was completed in 2019 at a cost of \$1,503,988.

13. Bridge 259 Reconstruction (45th Street, Munster, IN)

- i. Per response from the LCHWY, the project is currently ongoing and will be completed in 2025 with total cost of \$4,000,000.

14. Bridge 116 Reconstruction (Hendricks Street, Schererville, IN)

- i. Per response from the LCHWY, the project was completed in 2016 at a total cost of \$658,003.

15. Bridge 113 Reconstruction (Arbogast Avenue, Schererville, IN)

- i. Per response from the LCHWY, the project will be completed in the future with a 2030 tentative completion date.

16. 45th Avenue - Colfax to Grant

- i. Per response from the LCHWY, the project is currently ongoing and has a total estimated cost of \$11,491,530.25.

17. Enclave Subdivision

- i. No response was provided by the LCHWY for this project.

4.18 LITTLE CALUMET RIVER BASIN DEVELOPMENT COMMISSION (LCRBDC)

1. Realignment of Hart Ditch at Confluence with LCR

- i. Realignment of the confluence of Hart Ditch and the Little Calumet River to promote water flow to the east.

2. Kennedy Avenue Bridge Reconstruction

- i. The project aims to reconstruct the Kennedy Avenue Bridge to provide flood protection at or above the levee wall elevation and eliminate the need to install protective measures that prohibit traffic from utilizing the bridge. Also, improvements to the substructure will decrease the collection of debris around the piers.

3. Conveyance Improvements from Hart Ditch to Kennedy Avenue

- i. This project includes the removal of sediment deposits to improve water movement towards to the east.

4. Thorn Creek Diversion Alternate Operation or Modifications Study

- i. Various alternatives are being assessed to improve storage and conveyance function of the Little Calumet River. Further investigations need to be conducted to determine feasibility of making operation changes or modifications of the Thorn Creek diversion structure.

5. Storage Adjacent to LCR at I-65/I-80

- i. This project has the capacity to provide additional floodplain storage and facilitate draining of the Little Calumet River and Deep River.

6. Burns Ditch Conveyance Improvements

- i. Widening of Burns Ditch may provide opportunities to reduce flood levels within levee confines and the Deep River.

7. Deep River Deep Tunnel

- i. The Deep River Deep Tunnel project aims to reduce the flow path of the Deep River by short circuiting with a diversion pipe to minimize flooding in Hobart and Lake Station. The project is still in the development phase as regulatory and public outreach and a detailed engineering study is required.

8. I-65/I-94 Interchange Storage Area Repairs

- i. This project involves investigation into the efficiency of the conveyance system of the I-65/I-94 Interchange Storage Area. Currently the areas are not draining properly and have the potential to create “dead” storage zones.

9. Georgia Street Approach

- i. Alternatives for this project include Georgia Street to be raised to provide the same elevation protection as the levee, or to raise all of Georgia Street and place culverts beneath it to allow floodwaters to pass under.

10. Broadway Avenue Bridge and Approach

- i. The Broadway Avenue Bridge is to be raised to the height of the level wall to provide the same elevation protection.

11. Marshalltown Levee

- i. Reconstruction of the Marshalltown Levee is needed to provide the same level of protection for a 200-year storm as the rest of the levee system; currently the Marshalltown Levee provides protection for a 100-year storm.

12. Culvert Repair between Chase and Grant, Deep River (Maintenance Project)

13. Aerial Sanitary Sewer East of Broadway (Maintenance Project)

14. Vigo Street Ditch Reconstruction (NEW)

- i. The project consisted of purchasing one 3-acre home and reconstructing 380 feet of ditches to reestablish proper drainage (homeowner had previously filled ditches). The project was completed on 10/10/2020 at a cost of \$50,000.

15. Service Street Storm Sewer Replacement (NEW)

- i. This project is currently in the design phase and construction is planned for 2021 at an estimated cost of \$260,000. The project encompasses the replacement of approximately 750 feet of storm sewer with a new 24-inch sewer discharging to Grand Lake. The project will also add a storm water quality unit prior to discharging into Grand Lake.

16. Viking Village Storm Water Improvements (NEW)

- i. This project installed 575 feet of 30-inch storm sewer, regraded ditch over pipe and installed a new outfall to Deep River. The project was completed in 2019 at a total cost of \$63,300.

17. Montgomery Street Storm Sewer Improvement (NEW)

- i. The project replaced 330 feet of 18-inch storm sewer from Montgomery Street to the Deep River. The project was completed in 2015 and had a total cost of \$16,000.

18. Storm Water Master Plan (NEW)

- i. This project involves the development of a master plan to identify storm water issues within Lake Station, identify solutions, development of cost estimates and prioritization of project construction. The Storm Water Master Plan is estimated to be completed on 3/1/2021 at a cost of \$97,400.

19. 18th and Union Storm Water Improvements (NEW)

- i. The project will provide additional storm water drainage facilities and an outfall directly to Burns Ditch for the undeveloped area north of 21st Street and west of Vanderburg and north of 18th and east of Warren. Also, additional storm water piping will be added in the 18th and Union neighborhood where no storm water facilities exist and appropriate BMPs

will be incorporated prior to discharge to Burns Ditch. Construction will start in 2022 and be completed in 2024.

20. Marquette and Montgomery Storm Sewer Project (NEW)

- i. The project aims to upsize the storm sewer from Montgomery at Central to Marquette Street and Grand Lake. A water quality device will be added upstream of Grand Lake discharge. This project will also work in conjunction with the 28th and Green Sewer Reroute that requires additional discharge capacity from Grand Lake directly to Burns Ditch. Construction is anticipated to start in 2024 and finish in 2025.

21. 28th and Green Sewer Reroute (NEW)

- i. The project will route the storm system at 28th and Green to Grand lake to remove storm water from the 27th and Wyoming outfall. The reroute will push flow to Burns Ditch instead of Deep River and the two bridges bottleneck. A new outfall will be built in an existing right of way to Burns Ditch. Additionally, consideration of flood elevations may require a pump station to discharge to Burns Ditch during some flooding events and installing water quality devices prior to discharge to Burns Ditch and Grand Lake. Construction is anticipated to start in 2026 and be completed in 2027.

22. Wyoming and 27th Neighborhood (NEW)

- i. This project will include the purchase of property that is within the floodway of the Deep River, and work with Gary and Lake County regarding the bottleneck of the bridges at Central Avenue and the railroad tracks. A levee and storm water pump station will be considered if flooding cannot be controlled otherwise. The project is anticipated to start in 2028 and finish in 2029.

23. 34th and Wisconsin Neighborhood Storm Water Improvements (NEW)

- i. The project will replace an existing failing storm sewer, construct a new outfall into Rosser Lake, ditch maintenance and creation for areas without proper drainage facilities. Also, the project will involve coordination with the owner of the pipe under I-65 and the gate for the maintenance of the pipe and gate. Furthermore, water quality units will be added as appropriate. Construction will start in 2030 and finish in 2031.

24. 25th and Vermillion Street Storm Water Improvements (NEW)

- i. The project will construct additional storm sewers to serve areas without adequate drainage and increase existing pipe sizes as determined necessary to eliminate flooding of the existing streets. Also, storm water quality devices will be added prior to discharge to the Deep River. Construction will start in 2032 and finish in 2033.

25. Wayne and 23rd Street Water Improvements (NEW)

- i. Currently there is storm sewer discharge to a lake that has a compromised outfall. Work will be with the City of Portage to resolve the outfall. Also, appropriate BMPs will be added prior to discharge to the lake.

5.0 COMPLETED PROJECTS - 2013 MASTER PLAN

Based on the responses received and meetings held with participating municipalities and agencies, 15 projects that were originally listed in the 2013 Master Plan have been completed, which is approximately 16% of the 92 projects that were listed in the Plan. The LCHWY has completed the most projects of all participants, followed by the City of Hobart. The total cost of the completed projects is \$7,010,233. Eight municipalities and Lake County have indicated that no projects that were included in the 2013 Master Plan had been completed. Table 1 presents the number of completed projects and estimated costs for each municipality and agency.

Table 1. Completed Projects Listed in the 2013 Master Plan.

Municipality or Agency	# of Projects Listed in 2013 Master Plan	# of Completed Projects Listed in 2013 Master Plan	Completed Projects Cost (\$)
Cedar Lake*	0	-	-
Crown Point	2	1	600,000
Dyer	6	0	-
Gary*	2	-	-
Griffith	2	0	-
Hammond	1	1	-
Highland	3	1	1,358,016
Hobart	19	4	-
Lake Station	3	0	-
Merrillville	3	0	-
Munster	0	0	-
New Chicago	2	2	-

Schererville	7	1	1,246,631
St. John	3	0	-
Winfield	1	0	-
Lake County	8	0	-
LCHWY	17	5	3,805,584
LCRBDC	13	0	-
TOTAL	92	15	7,010,231

* Did not receive response to questionnaire.

6.0 ONGOING/FUTURE PROJECTS - 2013 MASTER PLAN

According to the survey results, 39 projects, or 42% of the projects that were listed in the 2013 Master Plan are currently ongoing or are planned for the near future, where 28 projects are specifically planned for the future. The ongoing or future projects for which cost estimates were provided have a median total cost of \$57,401,230, with much of this cost associated with the Town of Merrillville and the LCHWY. Table 2 lists the number of ongoing or future projects, along with low, median, and high cost estimates.

Table 2. Ongoing and future projects from the 2013 Master Plan.

Municipality or Agency	# of Projects Listed in 2013 Master Plan	# of Ongoing/Future Projects Listed in 2013 Master Plan	Ongoing/Future Projects Cost Low Estimate (\$)	Ongoing/Future Projects Cost High Estimate (\$)	Ongoing/Future Projects Cost Median Estimate (\$)
Cedar Lake*	0	-	-	-	-
Crown Point	2	1	-	-	-
Dyer	6	3	6,360,000	7,360,000	6,860,000
Gary*	2	-	-	-	-
Griffith	2	1	-	-	-
Hammond	1	0	-	-	-
Highland	3	0	-	-	-
Hobart	19	9	-	-	-
Lake Station	3	2	-	-	-
Merrillville	3	3	22,300,000	22,300,000	22,300,000
Munster	0	0	-	-	-
New Chicago	2	0	-	-	-
Schererville	7	4	-	-	-

St. John	3	0	-	-	-
Winfield	1	1	1,500,000	1,500,000	1,500,000
Lake County	8	5	4,525,000	4,525,000	4,525,000
LCHWY	17	10	22,216,230	22,216,230	22,216,230
LCRBDC	13	0	-	-	-
TOTAL	92	39	56,901,230	57,901,230	57,401,230

* Did not receive response to questionnaire.

7.0 2013 MASTER PLAN PROJECTS THAT WILL NOT BE IMPLEMENTED

The agencies indicated in their responses that 36 projects from the 2013 Master Plan will no longer be pursued by municipalities or agencies due to changes in priorities or viability. The municipalities of Dyer, Griffith, Highland, Hobart, Lake Station, Schererville, and St. John will not complete 18 of the projects that were initially listed in the Plan, while Lake County, LCHWY, and LCRBDC will not complete 18 projects.

The Town of Dyer will not be pursuing three projects due to projects not being viable with the Will County Forest Preserve District and prioritizing the Hart Ditch 2-Stage Channel project that will lead to greater flood storage. The Town of Highland will not continue with two projects as one is no longer being pursued and the other is considered a county project and does not fall within the jurisdiction of the Town. The City of Hobart will not complete four projects and indicated that detention in the Nob Hill Regional Detention Basin project area will be counterproductive. The Town of St. John has not completed three projects as two are not considered to be under the Town's authority, and the Golf Lake Dam Improvements are solely maintenance. The City of Lake Station will not complete the Lake George Dam Control Policy project as the dam is located in the City of Hobart, and Lake Station has no information on the project. The City of Griffith, the Town Schererville, Lake County, the LCHWY and the LCRBDC will not be completing 1, 2, 3, 2, and 13 projects, respectively, for which they did not provide further comment or reasoning behind the decision.

8.0 NEW PROJECTS NOT LISTED IN THE 2013 MASTER PLAN

The questionnaire and meetings held with communities and agencies sought information on projects that were completed or are planned for the future but were not listed in the 2013 Master Plan. 53 new projects were completed or will be pursued by participants, with 10 being completed, 3 ongoing, and 41 planned for the future. For the projects for which cost estimates were provided, the total median cost for the projects not listed in the 2013 Master Plan is approximately \$147,937,125, although funding allocation was not indicated for projects at this time. The Towns of Crown

Point, Dyer, Hobart and Merrillville have completed or will complete 28 of the new projects and account for nearly \$132,000,000 or 90% of the total cost. Table 3 describes the number, cost estimate and status of projects that were not included in the 2013 Master Plan for each municipality and agency.

Table 3. New Projects not listed in 2013 Master Plan.

Municipality or Agency	# of New Projects	Low Cost Estimate (\$)	High Cost Estimate (\$)	Median Cost Estimate (\$)	Completed	Ongoing or Future
Cedar Lake*	-	-	-	-	-	-
Crown Point	5	33,141,940	75,446,940	54,294,440	-	5
Dyer	6	21,200,000	21,800,000	21,500,000	2	4
Gary*	-	-	-	-	-	-
Griffith	2	-	-	-	-	2
Hammond	0	-	-	-	-	-
Highland	1	456,054	456,054	456,054	1	
Hobart	8	31,855,000	31,855,000	31,855,000	-	8
Lake Station	-	-	-	-	-	-
Merrillville	9	18,021,431	30,421,431	24,221,431	2	7
Munster	1	-	-	-	-	1
New Chicago	0	-	-	-	-	-
Schererville	0	-	-	-	-	-
St. John	0	-	-	-	-	-
Winfield	3	2,823,500	2,823,500	2,823,500	2	1
Lake County	6	9,400,000	15,200,000	12,300,000	-	6
LCHWY	-	-	-	-	-	-
LCRBDC	12	486,700**	486,700**	486,700**	3	9
TOTAL	53	117,384,625	178,489,625	147,937,125	10	43

* Did not receive response to questionnaire.

** Cost of 5 projects out of 12.

9.0 PROJECT PRIORITIZATION - 2013 MASTER PLAN

The 28 projects that were defined as planned for the future from the 2013 Master Plan were categorized based on three levels of the engineering design process—engineering design complete, in progress, or not started. The level of priority towards the funding and construction of projects should be placed on projects that have completed the design process or are in progress. 14 projects that total about

\$50,000,000 have completed the engineering design process and should be highly prioritized for construction and funding. 8 projects, for a total of about \$6,000,000, are in progress of the engineering design phase, while 6 projects have not started the design process and cost estimates are not available. Refer to Sections 9.1-9.3 for more information on project locations and cost estimates.

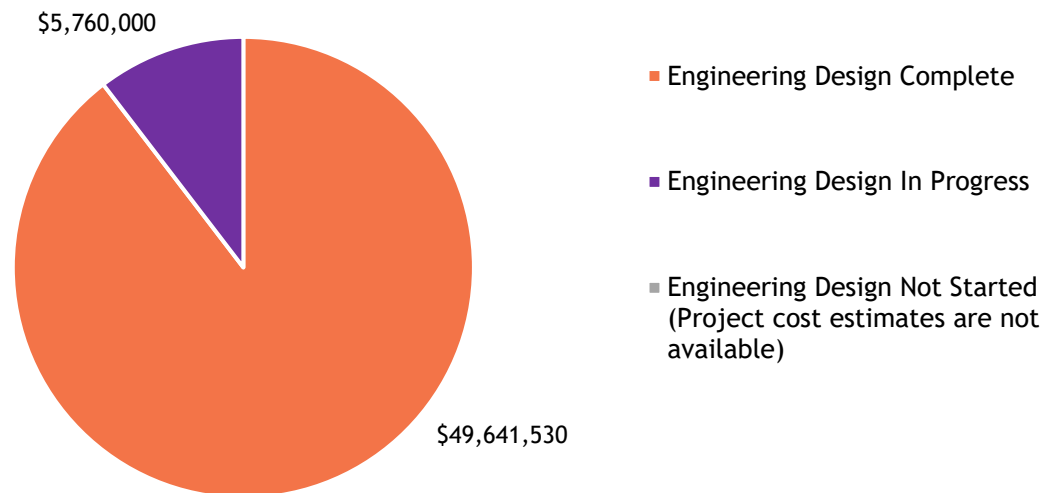


Figure 1. Project Prioritization - 2013 Master Plan

9.1 ENGINEERING DESIGN COMPLETE

Of the 28 projects defined as planned for the future, 14 have completed the engineering design process and are considered to be of high priority for construction. Funding should therefore be prioritized for these projects as the design and cost estimates have been established. Seven of these projects are led by the LCHWY, while the remaining seven are in the towns of Dyer, Merrillville, Winfield, and Lake County. The total costs of the projects are approximately \$47,116,530. Four of the LCHWY's projects (Bridge 254, 98, 92, and 261) do not have funding acquired and this cost totals \$4,625,000. Of the seven projects that are not under the LCHWY, the total cost of projects is \$29,425,000. The Towns of Dyer and Merrillville have indicated that funding has been acquired for their projects, although the specific amount is undefined. The Town of Winfield project has not secured funding at this time and has stated that Phase 1 of the proposed project is set to begin construction in 2021 if funding can be secured. Also, Lake County's three projects have not secured funding.

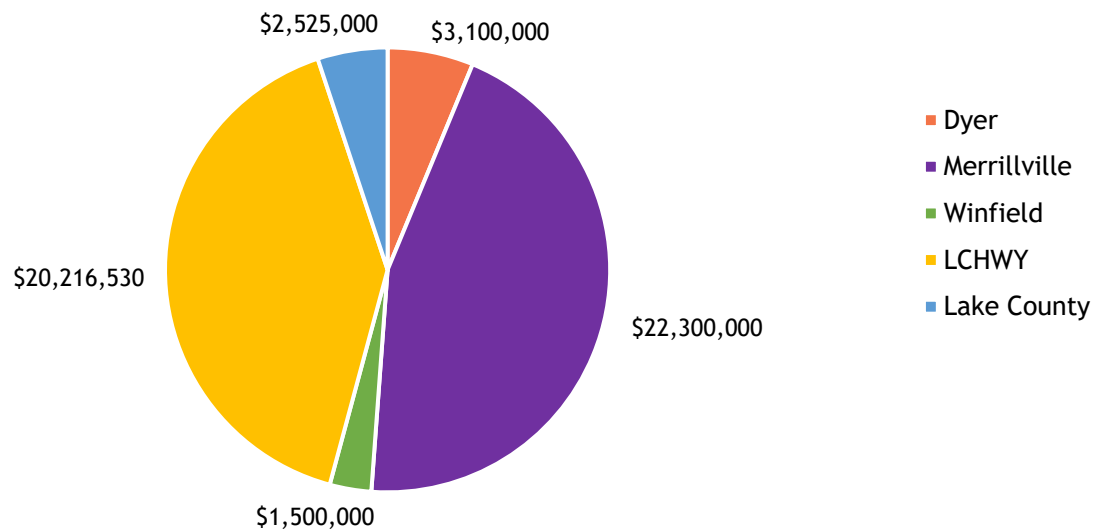


Figure 2. 2013 Master Plan - Engineering Design Complete

Dyer, Town of

- Hart Ditch 2-Stage Channel for Flood Storage (\$3,100,000)

Merrillville, Town of

- Lincoln Gardens and Southbrook Subdivision Drainage Project (\$8,400,000)
- Country Club Heights and Meadowdale Subdivision Drainage Project (\$13,900,000)

Winfield, Town of

- Hidden Creek Subdivision Regional Stormwater Project (\$1,500,000)

Lake County Highway Department

- Bridge 362 Reconstruction (Colfax Street, Griffith, IN) (\$100,000)
- Bridge 254 Reconstruction (Wisconsin Street, Hobart, IN) (\$1,750,000)
- Bridge 98 Reconstruction (Clay Street, Merrillville, IN) (\$1,890,000)
- Bridge 92 Reconstruction (Colorado Street, Winfield, IN) (\$155,000)
- Bridge 261 Reconstruction (213th Street, Dyer, IN) (\$830,000)
- Bridge 259 Reconstruction (45th Street, Munster, IN) (\$4,000,000)
- 45th Avenue - Colfax to Grant (\$11,491,530)

Lake County

- Upper Beaver Dam Ditch Detention (\$1,700,000)
- Beaver Dam Ditch - Lateral 2 (Regional Detention Basin (\$550,000)
- Upper Turkey Creek Overbank Detention (\$275,000)

9.2 ENGINEERING DESIGN IN PROGRESS

Additionally, four projects in the City of Hobart, two projects in the Town of Dyer and two projects under the jurisdiction of Lake County have started the engineering design process and thus have a second level of priority. Cost estimates are currently not available for the City of Hobart projects, while the median cost estimate of the Town of Dyer and Lake County projects is about \$5,760,000.

The Town of Hobart has indicated that funding has been secured for all four of the projects, although the amount has not been specified. Lake County has also secured funding for both projects for a total of \$2,000,000. The Town of Dyer has noted that funding has currently not been secured for either project.

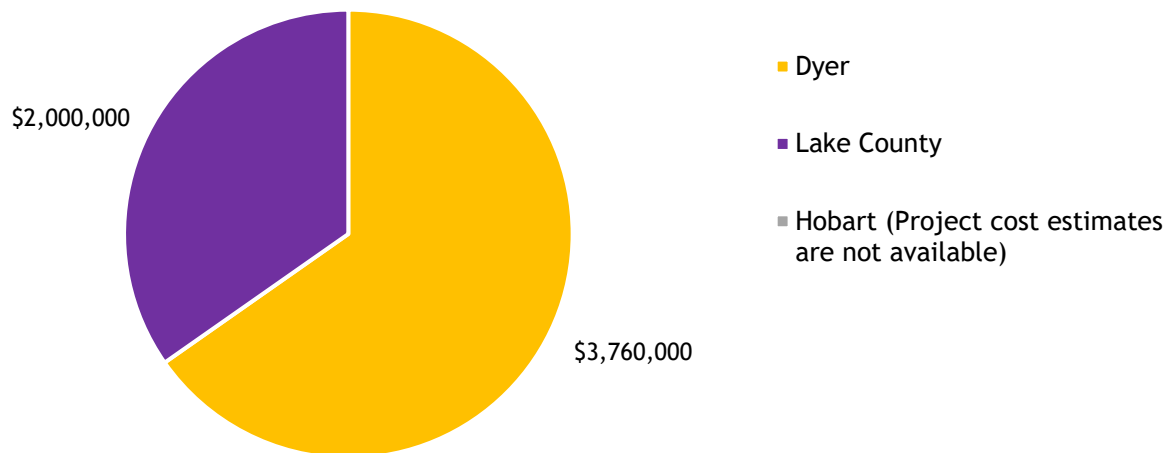


Figure 3. 2013 Master Plan - Engineering Design In Progress

Dyer, Town of

- 14-Acre Parcel Storage Project (\$3,700,000)
- Hart Ditch Flap Gate Project (Northgate Subdivision) (\$60,000)

Hobart, City of

- Hillman Heights Drainage Improvements and Detention Creation
- County Line Road Drainage Improvements
- “Stinky Creek”
- Lake George Dredging

Lake County

- Unregulated Deep River Cleaning (Maintenance Project) (\$500,000)
- Unregulated Hart Ditch Cleaning (Maintenance Project) (\$1,500,00)

9.3 ENGINEERING DESIGN HAS NOT BEEN STARTED

Design engineering has not been started for 6 projects for the City of Hobart and Town of Schererville. Based on this, these projects have the lowest priority in terms of funding and construction.

Hobart, City of

- Maple Lake Storage
- 61st Ave. and County Line Road Regional Detention Basin
- Northwinds Regional Detention Basin
- Brickie Bowl Flooding
- Preserves Storage

Schererville, Town of

- Potential Stormwater Storage Project (Schererville 6)

10.0 PROJECT PRIORITIZATION - NEW PROJECTS

41 new projects, not previously listed in the 2013 Master Plan, are planned for the future and are at various levels in the engineering design process. 11 projects, for a total estimated cost of about \$31,000,00, have completed engineering design and should thus be prioritized for construction and funding. 9 projects are in progress of engineering design, while the remaining 21 projects have not started the design phase. Refer to Sections 10.1-10.3 for more information on project locations and cost estimates.

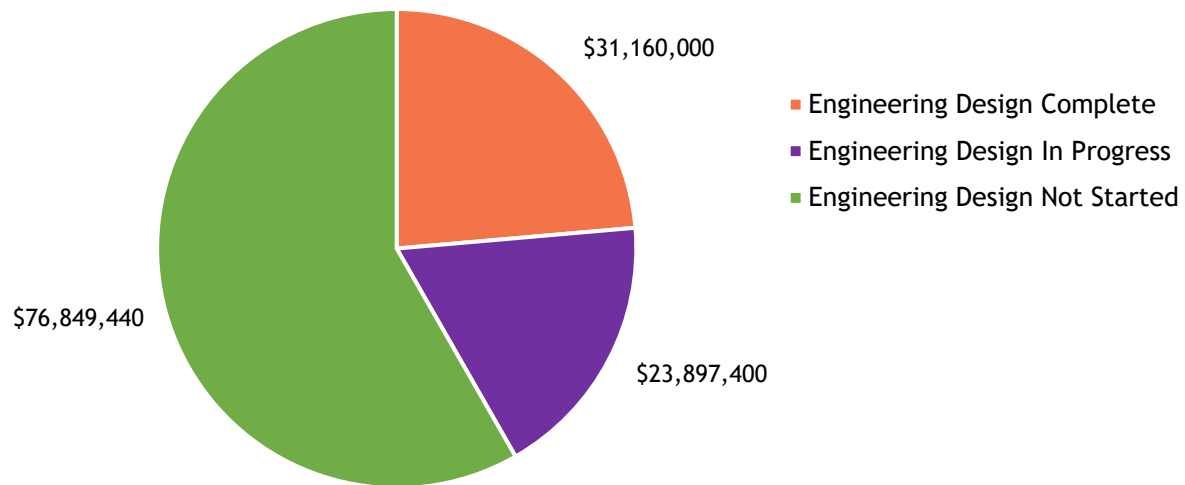


Figure 4. Project Prioritization - New Projects

10.1 ENGINEERING DESIGN COMPLETE

From the list of new projects that were not previously defined in the 2013 Master Plan and are planned for the future, 11 have completed the engineering design process and should also be prioritized for construction and funding. These projects are in the City of Crown Point, City of Hobart, Town of Winfield, and under the jurisdiction of Lake County and the LCRBDC. The 11 projects are listed below and have an estimated total cost of \$31,160,000. Specifically, the City of Crown Point has stated that the project is awaiting funding consideration from the LCRBDC to establish timeframe for construction. Also, the Town of Winfield project was able to secure an 80/20 match from the LCRBDC, while the City of Hobart and Lake County did not indicate if funding had been secured at this time.

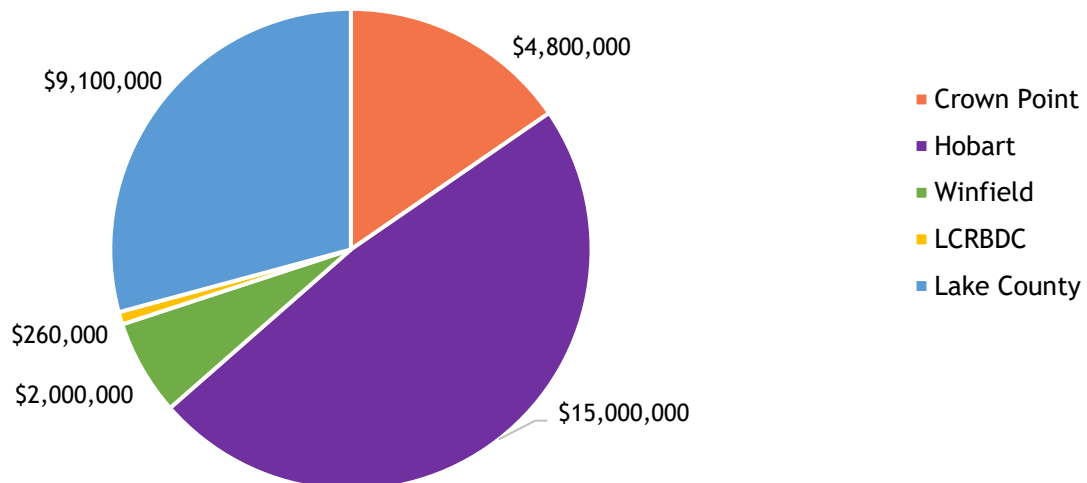


Figure 5. New Projects - Engineering Design Complete

Crown Point, City of

- CSO 004 Parallel Interceptor Project (\$4,800,000)

Hobart, City of

- Wisconsin Street Bridge and Causeway (\$5,000,000)
- Cresmoor Storm Sewers (\$3,000,000)
- Stinky Creek Diversion and Turkey Creek Lateral 6 Overflow (7,000,000)

Winfield, Town of

- 109th Avenue and Grand Boulevard Intersection Improvement (\$2,000,000)

Little Calumet River Basin Development Commission

- Service Street Storm Sewer Replacement (\$260,000)

Lake County

- Schererville Ditch/Dyer Ditch - Teibel Ponds Restoration (\$6,400,000)
- Beaver Dam Ditch Maintenance - Phase 1 (\$750,000)
- Turkey Creek Maintenance - Phase 1 (\$650,000)
- Turkey Creek 2-Stage Ditch Storage and Culvert Replacement at James Wittchen Drive (\$850,000)
- Graper Ditch Maintenance (\$450,000)

10.2 ENGINEERING DESIGN IN PROGRESS

Nine projects have begun the engineering design process and thus have second level priority for funding and construction. Many of these projects are in the Town of Merrillville, where the median estimated cost is \$23,800,000. Lake County and the LCRBDC have one project in progress of engineering design, at an estimated cost of \$3,200,000 and \$97,400, respectively. The municipalities of Crown Point and Munster did not provide a cost estimate at the time of completion of this report.

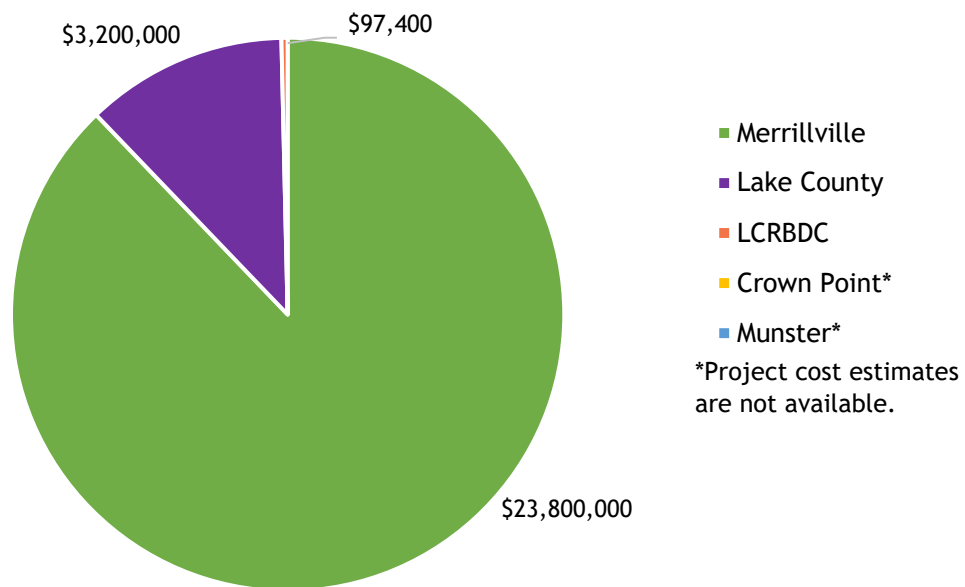


Figure 6. New Projects - Engineering Design In Progress

Crown Point, City of

- Sauerman Woods

Merrillville, Town of

- Regional Flood Storage for Turkey Creek Lateral #6 (\$11,000,000)
- Chapel Manor Drainage Improvement Projects (\$8,700,000)
- North Central Turkey Creek Watershed Improvements (\$1,700,000)
- Northeast Turkey Creek Watershed Improvements (\$2,300,000)
- Stormwater Master Plan Update (\$100,000)

Munster, Town of

- Munster Ridge and Calumet Streetscape Improvements

Little Calumet River Basin Development Commission

- Storm Water Master Plan (\$97,400)

Lake County

- Hart Ditch 2-Stage Ditch Riparian Corridor Restoration Phase 1 (\$3,200,000)

10.3 ENGINEERING DESIGN HAS NOT BEEN STARTED

A majority of the future projects, total of 21, that were not included in the 2013 Master Plan have not started the engineering design process at the time of this report. Based on the results, these projects have the lowest priority in terms of funding and construction.

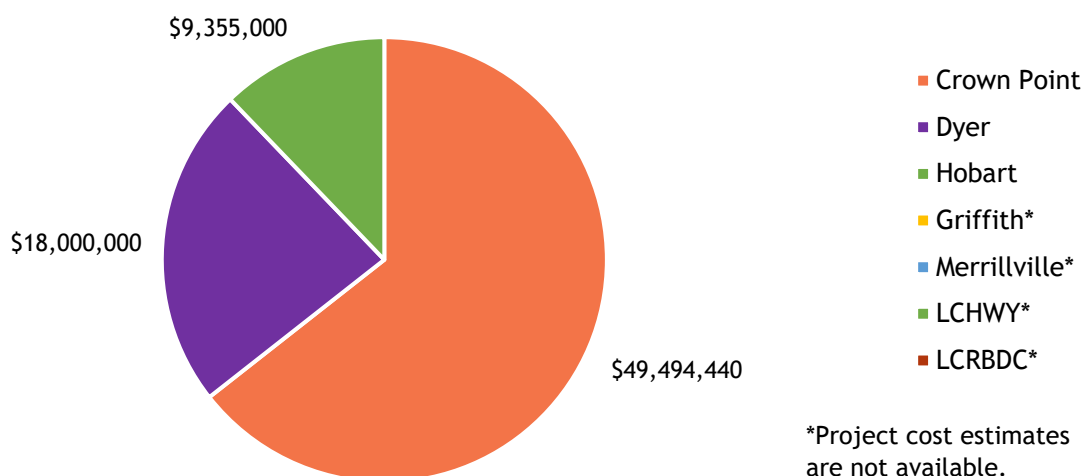


Figure 7. New Projects - Engineering Design Not Started

Crown Point, City of

- High Priority Areas of Concern (AOCs) (\$8,012,940)
- Additional Areas of Potential Deficiency (AAOPDs) (\$41,481,500)

Dyer, Town of

- Northgate Detention Storage Project (\$15,000,000)
- Calumet Ave Regional Storage
- Sandy Ridge Pump Station Upgrades (\$1,200,000)
- Sandy Ridge Storm Sewer Improvements (\$1,800,000)

Griffith, Town of

- I/I Analysis
- Comprehensive Storm Water Analysis

Hobart, City of

- Ross Township Ditching and Regional Detention (\$2,500,000)
- Nob Hill Storm Sewer Reconstruction (\$3,355,000)
- Duck Creek Stream Rehabilitation (\$3,500,000)

Merrillville, Town of

- 57th and Hendricks Flood Storage

Lake County Highway Department

- Bridge 360 Reconstruction (Kleinman Road, Highland, IN)
- Bridge 113 Reconstruction (Arbogast Avenue, Schererville, IN)

Little Calumet River Basin Development Commission

- 18th and Union Storm Water Improvements
- Marquette and Montgomery Storm Sewer Project
- 28th and Green Sewer Reroute
- Wyoming and 27th Neighborhood
- 34th and Wisconsin Neighborhood Storm Water Improvements
- 25th and Vermillion Street Storm Sewer Improvements
- Wayne and 23rd Street Storm Sewer Improvements

11.0 CONCLUSION

The update to the 2013 Comprehensive Plan collected information on stormwater projects listed in the 2013 Plan as well as projects previously not included. As noted in the methodology section, a questionnaire was sent to the 15 participating municipalities in the basin, Lake County, the LCHWY and the LCRBDC. At the time of writing of this report, 13 municipalities, Lake County, the LCHWY and the LCRBDC responded to the survey, while the Town of Cedar Lake and the City of Gary did not provide any response. Based on the results of the survey, 15 projects have been completed, 39 projects are ongoing or will be completed in the future and 36 projects will no longer be considered for implementation. Furthermore, 53 new projects not originally listed in the 2013 Master Plan have been identified, including 10 which have been completed and 43 which are ongoing or will be considered in the future. The total cost of completed projects listed in the 2013 Master Plan, based on provided estimates, is \$7,010,231 and the median cost of ongoing and future projects is approximately \$57,401,230.

All future projects were assessed to determine prioritization based on the level of engineering design process. Of all the projects considered for the future, both listed and not listed in the 2013 Master Plan, 22 have completed the engineering design process and have the highest priority for funding and construction as the design and cost estimates have been established. These projects are described in Sections 9.1 and 10.1 and have an approximate median cost of \$81,000,000.

SECTION 2

APPENDICES

APPENDIX A

QUESTIONNAIRE TEMPLATE

To: Person Responsible, Agency Name
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 12/10/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

Ciorba Group (Ciorba) is under contract with Little Calumet River Basin Development Commission (LCRBDC) to update the Comprehensive Watershed Plan for Little Calumet River - Lake County Basin dated August 13, 2013. The original 2013 document can be found here: <http://www.heyroman.com/river/pdf/WatershedStudy.pdf>

As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Project Name

Complete: Yes ☐ No ☐ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

2. Project Name

Complete: Yes ☐ No ☐ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☐

If yes, please list the projects implemented with a brief description:

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

APPENDIX B

AGENCY RESPONSES

To: Mr. David Uran, Mayor, City of Crown Point, IN
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 9/15/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

Ciorba Group (Ciorba) is under contract with Little Calumet River Basin Development Commission (LCRBDC) to update the Comprehensive Watershed Plan for Little Calumet River - Lake County Basin dated August 13, 2013. The original 2013 document can be found here: <http://www.heyroman.com/river/pdf/WatershedStudy.pdf>

As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Stillwater Subdivision Drainage Improvements

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☒ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: Click or tap here to enter text.

2. Beaver Dam Ditch Maintenance (Maintenance Project) - *County Project?*

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☒ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.

Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: Click or tap here to enter text.

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☒

If yes, please list the projects implemented with a brief description:

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: CSO 004 Parallel Interceptor Project

Anticipated Completion Date: Awaiting Funding Consideration from Little Calumet Basin Development Commission

Brief Description: Installation of a new, parallel interceptor eliminating 50Mgal/year of raw sewage discharge to Beaver Dam Ditch and providing a new dedicated storm line to drain over 248 Acres of storm water from areas of known, significant, and severe flooding currently lacking an outlet from the City.

Cost Estimate (if available): \$4.8M Total Project Cost; \$400,000 Project Design Budget; \$320,000 request of record with LCBDC

Project Name: Click or tap here to enter text. *Saurinus Woods*

Anticipated Completion Date: Click or tap to enter a date. *2021-22*

Brief Description: Click or tap here to enter text. *Storm water improvement for the Brianwood neighborhood*

Cost Estimate (if available): Click or tap here to enter text. *Saurinus Woods park, the sportsplex Ditch, US231 add which flow into the main Beaver Dam Ditch - all benefits to the Little Calumet River Basin*

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

To: Mr. Tom Deguilio, Town Manager, Town of Dyer, IN
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 12/7/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

Ciorba Group (Ciorba) is under contract with Little Calumet River Basin Development Commission (LCRBDC) to update the Comprehensive Watershed Plan for Little Calumet River - Lake County Basin dated August 13, 2013. The original 2013 document can be found here: <http://www.heyroman.com/river/pdf/WatershedStudy.pdf>

As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Longwood Golf Course Regional Detention Facility

Complete: Yes ☐ No ☒ Completion Date: 7/1/2020
Ongoing: Yes ☐ No ☒ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☐ No ☒ N/A ☐ Tentative Completion Date: Click or tap to enter a date.
For Future Projects: Project is not viable with the Will Co FPD
Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: Click or tap here to enter text.

2. Hart Ditch Widening (EJ&E RR to Main Street)

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☒ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☐ No ☒ N/A ☐ Tentative Completion Date: Click or tap to enter a date.
For Future Projects: Not pursuing this project due to priority of completing Hart Ditch 2-stage channel project.
Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: Click or tap here to enter text.

3. Hart Ditch 2-Stage Channel for Flood Storage

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐

Scheduled Completion Date: Summer 2021

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: Summer 2021

For Future Projects:

Funding Allocated: Yes ☒ No ☐

Engineer's Estimation of Cost: \$3.1M

4. Cook County Detention Facilities Alternatives

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☒ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects: Not pursuing

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

5. 14-Acre Parcel Storage Project

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects: The Town has designated this as a possible future project

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: \$3.2M - \$4.2M

6. Hart Ditch Flap Gate Project (Northgate Subdivision)

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects: The Town has designated this as a possible future project

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: \$60,000

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If yes, please list the projects implemented with a brief description:

Project Name: Berens Monaldi Flood Control Project

Completion Date: 9/1/2019

Brief Description: Final stage of bringing storm sewers to lift station. Project also included berms to protect the subdivision from overbank flooding and lift station that were completed previously.

Cost: \$1.2M

Project Name: Harrison Avenue Storm Sewer Project

Completion Date: Fall 2020

Brief Description: Storm sewer and detention to relieve flooding issues

Cost: \$2.3M

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Northgate Detention Storage Project

Anticipated Completion Date: TBD

Brief Description: Problem to alleviate neighborhood flooding

Cost Estimate (if available): \$15M

Project Name: Calumet Ave Regional Storage

Anticipated Completion Date: TBD

Brief Description: Access available storage in existing pond adjacent to Hart Ditch for regional detention storage or Hart Ditch flood storage

Cost Estimate (if available): Varies

Project Name: Sandy Ridge Pump Station Upgrades

Anticipated Completion Date: Not scheduled

Brief Description: Upgrade old pump station with new pumps and possibly higher capacity.

Cost Estimate (if available): \$900,000 to \$1.5M

Project Name: Sandy Ridge Storm Sewer Improvements

Anticipated Completion Date: Not scheduled

Brief Description: Upsized storm sewers and additional detention to alleviate flooding.

Cost Estimate (if available): \$1.8M

To: Mr. Rick Konopasek, Director of Public Works, Town of Griffith, IN
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 12/10/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

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As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. River Road Levee Project Completion

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☐ N/A ☒ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☐ No ☐ N/A ☒ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

2. Deep Tunnel Project (Maintenance Project)

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☒ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: Click or tap here to enter text.

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If yes, please list the projects implemented with a brief description:

Project Name: I/I Analysis

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Comprehensive Storm Water Analysis

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Comprehensive Storm Water Analysis

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

To: Mr. Dean Button, P.E., City Engineer, City of Hammond, IN
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 9/30/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

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As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Dowling Park Pump Station - Removal of Homes in Floodplain

Complete: Yes ☒ No ☐

Completion Date: 7/13/2016

Ongoing: Yes ☐ No ☐ N/A ☒

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☒

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☒

If yes, please list the projects implemented with a brief description:

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☒

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

To: Mr. Mark Knesek, Public Works Director, Town of Highland, IN
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 12/10/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

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As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Cady Marsh Ditch Detention Project (NO LONGER UNDER CONSIDERATION)

Complete: Yes ☐ No ☐ Completion Date: _____
Ongoing: Yes ☐ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.
For Future Projects:
Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

2. Spring Street Ditch Culvert Replacements (COUNTY PROJECT, NOT TOWN)

Complete: Yes ☐ No ☐ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.
For Future Projects:
Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

3. ~~Cady Marsh Ditch~~ **Martha Street** Pump Station and Storm Sewer Project **(\$1,358,016.52)**

Complete: Yes ☒ No ☐

Completion Date: 8/16/2018

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If yes, please list the projects implemented with a brief description:

Project Name: **Grace Street Storm Sewer Improvement Project**

Completion Date: **11/25/2020**

Brief Description: **New 24" dia. & 42" dia. storm sewer along 9000/9100 block of Grace Street and 3400 block of Laverne Drive. New 42" dia. outlet to Cady Marsh Ditch replaces existing 24" dia. outlet.**

Cost: **\$456,054.35**

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

To: Mr. Tim Kingsland, Stormwater District/MS4 Coordinator, City of Hobart, IN
From: Tony Wolff, P.E., CFM
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 12/10/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

Ciorba Group (Ciorba) is under contract with Little Calumet River Basin Development Commission (LCRBDC) to update the Comprehensive Watershed Plan for Little Calumet River - Lake County Basin dated August 13, 2013. The original 2013 document can be found here: <http://www.heyroman.com/river/pdf/WatershedStudy.pdf>

As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Maple Lake Storage

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☒ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☒ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: Click or tap here to enter text.

2. 61st Ave. and County Line Road Regional Detention Basin

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☒ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☒ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: Click or tap here to enter text.

3. Northwinds Regional Detention Basin

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

4. Nob Hill Regional Detention Basin

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☒ N/A ☐

Tentative Completion Date: Detention here

would be counter productive

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

5. Evergreen Memorial Park Storage

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☒ N/A ☐

Tentative Completion Date:

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

6. Hillman Heights Drainage Improvements and Detention Creation

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: 12/1/2022

For Future Projects:

Funding Allocated: Yes ☒ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

7. Eagle Plaza Detention

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☒ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

8. Mundell Field Storage

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☒ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

9. County Line Road Drainage Improvements

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: 12/1/2028

For Future Projects:

Funding Allocated: Yes ☒ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

10. Crestwood Subdivision Drainage Improvements

Complete: Yes ☒ No ☐

Completion Date: 2017

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

11. "Stinky Creek"Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: 12/1/2022

For Future Projects:

Funding Allocated: Yes ☒ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

12. Brickie Bowl FloodingComplete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

13. Barrington Ridge Stormwater Drainage ImprovementsComplete: Yes ☒ No ☐

Completion Date: 2018

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

14. 61st Ave. and Wisconsin Street Regional StorageComplete: Yes ☒ No ☐

Completion Date: 2018

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

15. Preserves Storage

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

16. Liverpool Road Constructed Wetland

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☒ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

17. Lake George Dredging (Maintenance Project)

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐

Scheduled Completion Date: 2025

Funding Allocated: Yes ☒ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

18. Sediment Control for Deep River and Turkey Creek (Maintenance Project)

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

19. Lake George Shoreline Stabilization (Maintenance Project)

Complete: Yes ☒ No ☐

Completion Date: 2017

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If yes, please list the projects implemented with a brief description:

Project Name: Deep River Outfall Project

Completion Date: 4/30/2021

Brief Description: Outfall replacement and BMP installation

Cost: 500000

Project Name: 3rd Street Bridge Replacement

Completion Date: 4/30/2021

Brief Description: Replacement of County Bridge 253 - 3rd Street over Deep River/Lake George

Cost: 7000000

Project Name: Wisconsin Street Bridge and Causeway

Completion Date: 12/1/2022

Brief Description: Replacement of Wisconsin Street Bridge over Deep River/Lake George and raising of the causeway to prevent overtopping.

Cost: 5000000

Project Name: Cresmoor Storm Sewers

Completion Date: 12/1/2022

Brief Description: Storm sewer installation throughout the subdivision to alleviate flooding.

Cost: 3000000

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Stinky Creek Diversion and Turkey Creek Lateral 6 Overflow

Anticipated Completion Date: 12/1/2022

Brief Description: Construction of a large storm sewer through Hobart, New Chicago, and Lake Station to alleviate flooding in Hobart, Merrillville, and Gary while improving drainage in New Chicago and Lake Station. This project will also reduce the peak flow in Deep River by reducing the distance and time to reach Burns Ditch.

Cost Estimate (if available): 7000000

Project Name: Ross Township Ditching and Regional Detention

Anticipated Completion Date: 12/1/2025

Brief Description: Cleaning of various ditches and replacement of multiple culverts to alleviate flooding in Ross Township and the construction of one or more regional detention basins to mitigate flooding in Lake George.

Cost Estimate (if available): 2500000

Project Name: Nob Hill Storm Sewer Reconstruction

Anticipated Completion Date: 12/1/2026

Brief Description: Reconstruction of the remaining storm sewers in the Nob Hill subdivision to provide positive drainage to the area.

Cost Estimate (if available): 3355000

Project Name: Duck Creek Stream Rehabilitation

Anticipated Completion Date: 12/1/2028

Brief Description: Multi-phase stream restoration to improve flooding of County Line Road and improve the water quality in Duck Creek and ultimately Deep River.

Cost Estimate (if available): 3500000

To: Mr. Bill Carroll, Mayor, City of Lake Station, IN
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 12/10/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

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As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Deep River Dam Rehabilitation Project

Complete: Yes ☐ No ☐ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☒ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

2. Lake George Dam Control Policy

Complete: Yes ☐ No ☐ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

3. Residential Drainage Improvements Between 27th and 29th AvenuesComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☐

If yes, please list the projects implemented with a brief description:

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

To: Mr. Matthew Lake, Stormwater Management Executive Director, Town of Merrillville, IN

From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group

CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission

Date: 12/10/2020

Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

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SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Lincoln Gardens and Southbrook Subdivision Drainage Project

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐ Scheduled Completion Date: TBD - Engineering completed on 6 of the project components

Future: Yes ☒ No ☐ N/A ☐ Tentative Completion Date: TBD - pending funding

For Future Projects:

Funding Allocated: Yes ☒ No ☐ Engineer's Estimation of Cost: \$8.4M in 2014 dollars. Funding will be available over time depending on cost share. Town funding from stormwater utility fees.

2. Country Club Heights & Meadowdale Subdivision Drainage Project

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐ Scheduled Completion Date: Engineering completed on flood storage, Bon Aire Lake and Cleveland St portions of the project. Other

aspects of the project include Hickory Ridge apartment flood project, flood berm, pump station and culvert improvements.

Future: Yes ☒ No ☐ N/A ☐ Tentative Completion Date: Flood storage to be completed in Fall 2020. Other drainage improvements to be constructed as funding allows.

For Future Projects:

Funding Allocated: Yes ☒ No ☐ Engineer's Estimation of Cost: \$13.9M for all projects in 2014 dollars. Funding will be available over time depending on cost share. Town funding from stormwater utility fees.

3. Turkey Creek Stabilization (Maintenance Project)

Complete: Yes ☐ No ☒ Completion Date

Ongoing: Yes ☒ No ☐ N/A ☐ Scheduled Completion Date: Ongoing

Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: Generally coordinated with Lake County Surveyors office

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If yes, please list the projects implemented with a brief description:

Project Name: Regional Flood Storage Study for Turkey Creek Lateral #6

Completion Date: Ongoing

Brief Description: With assistance from the LCRBC, the Town is pursuing regional floodwater storage project in Unincorporated Lake County open space - 13 properties have so far been acquired on tax sale in the location of the proposed future flood storage basin.

Cost: Tax Sale Purchase of Property - no cost

Project Name: Green Streets and Green Infrastructure Projects

Completion Date: Varies

Brief Description: The Town has completed a number of green infrastructure projects such as rain gardens, green streets, etc.

Cost: Varies

Project Name: Taft Street Culvert Improvement

Completion Date: Fall 2019

Brief Description: Replacement of a 36-inch culvert with a 8'x4' Box Culvert

Cost: \$113,800

Project Name: Independence Street Drainage Project

Completion Date: Spring 2018

Brief Description: This project consisted of storm sewer improvements to drain a depressional storage area on Independence Street just south of Lincoln Highway. The outlet storm sewer tied into the Taft Street drainage project, which was completed in 2013.

Cost: \$307,631

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: 57th and Hendricks Flood Storage

Anticipated Completion Date: TBD

Brief Description: Flood Storage in cooperation with other stakeholders

Cost Estimate (if available): TBD

Project Name: Regional Flood Storage for Turkey Creek Lateral #6

Anticipated Completion Date: TBD

Brief Description: With assistance from the LCRBC, the Town is pursuing regional floodwater storage project in Unincorporated Lake County open space - 13 properties have so far been acquired on tax sale in the location of the proposed future flood storage basin. The ultimate project will consist of between 60-170 acre-ft of flood storage. The project will benefit City of Gary, Hobart, Unincorporated Lake County and the Town of Merrillville.

Cost Estimate (if available): \$4.8M -\$17.2M

Project Name: Chapel Manor Drainage Improvement Projects

Anticipated Completion Date: TBD

Brief Description: This project consists of 100 acre-ft of floodwater storage at Broadway Avenue and 67th Avenue, a culvert replacement at 78th Avenue and 20 acre-ft of upland floodwater storage at 89th Avenue. The project is outlined in the 2014 Town Stormwater Master Plan.

Cost Estimate (if available): \$8.7M in 2014 dollars

Project Name: North Central Turkey Creek Watershed Improvements

Anticipated Completion Date: TBD

Brief Description: This project consists of 20 acre-ft of floodwater storage at Skinner Park, storm sewer improvements on Delaware Street and streambank stabilization. The project is outlined in the 2014 Town Stormwater Master Plan.

Cost Estimate (if available): \$1.7M in 2014 dollars

Project Name: Northeast Turkey Creek Watershed Improvements

Anticipated Completion Date: TBD

Brief Description: This project consists of 25 acre-ft of floodwater storage on the Diocese of Gary property and a 42-inch relief sewer along 58th Avenue in the vicinity of Broadway Avenue. The project is outlined in the 2014 Town Stormwater Master Plan.

Cost Estimate (if available): \$2.3M in 2014 dollars

Project Name: Stormwater Master Plan Update

Anticipated Completion Date: 2024

Brief Description: To keep current with stormwater needs, the Town would update the 2014 Stormwater Master Plan in 2024. The Town goal is to update the plan every 10 years.

Cost Estimate (if available): \$100,000

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

To: Mr. Dustin Anderson, Town Manager, Town of Munster, IN
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 12/10/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

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As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects (quality of life improvement) currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

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Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☒

If yes, please list the projects implemented with a brief description:

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 2

SECTION 2: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Munster Ridge and Calumet Streetscape Improvements

Anticipated Completion Date: 2030

Brief Description: Through the Lake Michigan Coastal Program, the Town is in process of planning infrastructure improvements that will reduce stormwater runoff from the portion of Ridge Road from the Illinois boarder to the municipal complex at 1005 Ridge Road as well as Calumet Avenue from the Calumet River to Ridge Road.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

To: Mrs. Alicia Barber, Town of New Chicago, IN
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 9/10/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

Ciorba Group (Ciorba) is under contract with Little Calumet River Basin Development Commission (LCRBDC) to update the Comprehensive Watershed Plan for Little Calumet River - Lake County Basin dated August 13, 2013. The original 2013 document can be found here: <http://www.heyroman.com/river/pdf/WatershedStudy.pdf>

As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Culvert Improvements under Wisconsin St. and Huber Blvd.

Complete: Yes ☒ No ☐

Completion Date: 6/12/2015

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: No cost no engineer

2. Twin Oaks Park Pond Improvements

Complete: Yes ☒ No ☐

Completion Date: 7/14/2020

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☒ No ☐

Engineer's Estimation of Cost: no cost no engineer

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☒

If yes, please list the projects implemented with a brief description:

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☒

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

To: Mr. Robert Volkmann, Town Manager, Town of Schererville, IN
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 12/10/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

Ciorba Group (Ciorba) is under contract with Little Calumet River Basin Development Commission (LCRBDC) to update the Comprehensive Watershed Plan for Little Calumet River - Lake County Basin dated August 13, 2013. The original 2013 document can be found here: <http://www.heyroman.com/river/pdf/WatershedStudy.pdf>

As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Potential Increase in Hartsdale Pond Storage

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☒ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☐ No ☒ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: Click or tap here to enter text.

2. Potential Stormwater Storage Project (Schererville 6)

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☒ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☒ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: Click or tap here to enter

text.

3. Potential Stormwater Storage Project (Schererville 7)

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☒

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☒

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

4. Potential Stormwater Storage Project (Schererville 8)

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

5. Sunset Boulevard Detention Modifications

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: Click or tap here to enter text.

6. Shultz Drive and Harder Court Stormwater Detention Project

Complete: Yes ☐ No ☒

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: Click or tap here to enter text.

7. Pennsy Ditch Maintenance (Maintenance Project)

Complete: Yes ☒ No ☐

Completion Date: 6/1/2016

Ongoing: Yes ☐ No ☒ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: \$1,246,631.90

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☒

If yes, please list the projects implemented with a brief description:

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

To: Mr. Craig Phillips, Town Manager, Town of St. John, IN
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 12/10/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

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As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Prairie West Park Drainage Improvements

Complete: Yes ☐ No ☒ Completion Date: Not a Town Project
Ongoing: Yes ☐ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.
For Future Projects:
Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

2. Golf Lake Dam Improvements

Complete: Yes ☐ No ☒ Completion Date: Maintenance only
Ongoing: Yes ☐ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.
For Future Projects:
Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

3. Culvert Improvements Under Conrail Railroad

Complete: Yes ☐ No ☒

Completion Date: Not a Town Project

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☒

If yes, please list the projects implemented with a brief description:

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☒

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

To: Mr. Anthony Clark, Public Works Director, Town of Winfield, IN
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 12/10/2020
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

Ciorba Group (Ciorba) is under contract with Little Calumet River Basin Development Commission (LCRBDC) to update the Comprehensive Watershed Plan for Little Calumet River - Lake County Basin dated August 13, 2013. The original 2013 document can be found here: <http://www.heyroman.com/river/pdf/WatershedStudy.pdf>

As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Hidden Creek Subdivision Regional Stormwater Project

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☒ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☒ No ☐ N/A ☐ Tentative Completion Date: 9/30/2021

For Future Projects:

Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: \$1,5000,000

Phase 1 of project proposed to be in 2021 provided funding can be secured.

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If yes, please list the projects implemented with a brief description:

Project Name: **Storm Water Design Manual Adoption and Storm Water Ordinance Revision**

Completion Date: **5/4/2015**

Brief Description: **The Town in late 2014 began an initiative to completely rewrite the current Storm Water Ordinance and create a Storm Water Technical Design Manual. In addition, this process developed a water quality policy for the Town that was lacking in the Town Code as it existed at that time.**

Cost: **\$6,500.00**

Project Name: **Stormwater Projects Town of Winfield 01/01/2013 to 09/01/2020**

Completion Date: **9/1/2020**

Brief Description: **The number below reflects construction and engineering costs expended by the Town in the timeframe indicated on various storm water projects undertaken by the Town. Several of these were identified issues from the 2009 Town of Winfield Storm Water Master Plan. Other projects were identified after the 2009 plan or were areas that were remedied in conjunction with other capital or maintenance improvements within the Town. (It should be noted that this total does not reflect the costs incurred by the Town when they either did the work entirely with Town personnel or provided Town personnel to assist a contractor).**

Cost: **\$817,000.00**

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: **109th Avenue and Grand Boulevard Intersection Improvement**

Anticipated Completion Date: **11/30/2021**

Brief Description: **The Town of Winfield has identified that the above referenced intersection has several deficiencies. The roadway has a stopping sight distance issues, intersection sight distance issues, lack of turn lanes, lack of shoulder width and an undersized culvert crossing. The culvert crossing was identified as being undersized during the creation of the Town of Winfield's 2009 Storm Water Master Plan. In 2020, the Town of Winfield applied for and was successful in securing an 80/20 match from the LCRBDC for replacement of the culvert to an appropriately sized box structure. This work will take place in conjunction with the Town addressing the intersection deficiencies tentatively scheduled for the spring of 2021.**

Cost Estimate (if available): **\$2,000,000.00**

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

To: Jan Smoljan, Superintendent, Lake County Highway Department,
Lake County, IN

From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group

CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission

Date: 12/10/2020

Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

Ciorba Group (Ciorba) is under contract with Little Calumet River Basin Development Commission (LCRBDC) to update the Comprehensive Watershed Plan for Little Calumet River - Lake County Basin dated August 13, 2013. The original 2013 document can be found here: <http://www.heyroman.com/river/pdf/WatershedStudy.pdf>

As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Harrison Avenue Bridge Reconstruction

Complete: Yes ☒ No ☐

Completion Date: 2019

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

2. Bridge 360 Reconstruction

Complete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: 2030 Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

3. Bridge 350 ReconstructionComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date:

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

4. Bridge 362 ReconstructionComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: 2023

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: \$100,000

5. Bridge 254 ReconstructionComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐

Scheduled Completion Date: 2021

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: \$1,750,000

6. Bridge 252 ReconstructionComplete: Yes ☒ No ☐

Completion Date: 2014

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date:

For Future Projects:

Funding Allocated: Yes ☒ No ☐

Engineer's Estimation of Cost: \$558,323.29

7. Bridge 89 ReconstructionComplete: Yes ☒ No ☐

Completion Date: 2015

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: \$1,085,269.61

8. Bridge 98 ReconstructionComplete: Yes ☐ No ☐

Completion Date:

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: 2025

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: \$1,890,000

9. Bridge 92 ReconstructionComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: 2024

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: \$155,000

10. Bridge 264 ReconstructionComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐

Scheduled Completion Date: 2020

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☒ No ☐

Engineer's Estimation of Cost: \$1,999,700.00

11. Bridge 261 ReconstructionComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: 2024

For Future Projects:

Funding Allocated: Yes ☐ No ☒

Engineer's Estimation of Cost: \$830,000

12. Bridge 260 ReconstructionComplete: Yes ☒ No ☐

Completion Date: 2019

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☒ No ☐

Engineer's Estimation of Cost: \$1,503,988.67

13. Bridge 259 ReconstructionComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐

Scheduled Completion Date: 2025

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☒ No ☒

Engineer's Estimation of Cost: \$4,000,000.00

14. Bridge 116 ReconstructionComplete: Yes ☒ No ☐

Completion Date: 2016

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☒ No ☐

Engineer's Estimation of Cost: \$658,003.28

15. Bridge 113 ReconstructionComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: 2030

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

16. 45th Avenue - Colfax to GrantComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☒ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☒ No ☐

Engineer's Estimation of Cost: \$11,491,530.25

17. Enclave SubdivisionComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☐

If yes, please list the projects implemented with a brief description:

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.

To: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission

From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group

CC:

Date: 11/5/2020

Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

Ciorba Group (Ciorba) is under contract with Little Calumet River Basin Development Commission (LCRBDC) to update the Comprehensive Watershed Plan for Little Calumet River - Lake County Basin dated August 13, 2013. The original 2013 document can be found here: <http://www.heyroman.com/river/pdf/WatershedStudy.pdf>

As a local agency included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your agency.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Realignment of Hart Ditch at Confluence with LCR

Complete: Yes ☐ No ☐ Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

2. Kennedy Avenue Bridge Reconstruction

Complete: Yes ☐ No ☐ Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

3. Conveyance Improvements from Hart Ditch to Kennedy AvenueComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

4. Thorn Creek Diversion Alternate Operation or Modifications StudyComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

5. Storage Adjacent to LCR at I65/I80Complete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

6. Burns Ditch Conveyance ImprovementsComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

7. Deep River Deep TunnelComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

8. I-65/I-94 Interchange Storage Area RepairsComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

9. Georgia Street ApproachComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

10. Broadway Bridge and ApproachComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

11. Marshalltown LeveeComplete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐

Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

12. Culvert Repair between Chase and Grant, Deep River (Maintenance Project)Complete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

13. Aerial Sanitary Sewer East of Broadway (Maintenance Project)Complete: Yes ☐ No ☐

Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐

Scheduled Completion Date: Click or tap to enter a date.

Funding Allocated: Yes ☐ No ☐

Engineer's Estimation of Cost: Click or tap here to enter text.

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☐

If yes, please list the projects implemented with a brief description:

Project Name: Vigo Street Ditch Reconstruction

Completion Date: 10/10/2020

Brief Description: Purchased one home with three acres and reconstructed 380 feet of ditches to reestablish proper drainage (homeowner had filled existing ditches).....

Cost: \$50,000

Project Name: Service Street Storm Sewer Replacement

Completion Date: Under design, construction planned in 2021

Brief Description: Replace approximately 750 feet of storm sewer with new 24-inch sewer discharging to Grand Lake. The project will add a storm water quality unit prior to discharging into Grand Lake.

Cost: estimated \$260,000

Project Name: Viking Village Storm Water Improvements

Completion Date: 2019

Brief Description: Installed 575 feet of 30-inch storm sewer and regraded ditch over pipe, installed new outfall to Deep River

Cost: \$63,300

Project Name: Montgomery Street Storm Sewer Improvement

Completion Date: 2015

Brief Description: Replaced 330 feet of 18-inch storm sewer from Montgomery Street to Deep River

Cost: \$16,000

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Storm Water Master Plan

Anticipated Completion Date: 3/1/2021

Brief Description: Development of a master plan to identify storm water issues within Lake Station, identify solutions, development of cost estimates, and prioritization of project construction.

Cost Estimate (if available): \$97,400

Project Name: 18th & Union Storm Water Improvements

Anticipated Completion Date: Start 2022, complete in 2024

Brief Description: Provide additional storm water drainage facilities and an outfall directly to Burns Ditch for the undeveloped area north of 21st Street and west of Vanderburg and north of 18th and east of Warren. Add additional storm water piping in the 18th & Union neighborhood where no storm water facilities exist. Add appropriate BMPs prior to discharge to Burns Ditch.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: Marquette and Montgomery Storm Sewer Project

Anticipated Completion Date: Start 2024, finish 2025

Brief Description: Upsize the storm sewer from Montgomery at Central to Marquette Street and Grand Lake. Add a water quality device upstream of Grand Lake Discharge. This project will work in concert with the 28th & Green Sewer Reroute that requires additional discharge capacity from Grand Lake Directly to Burns Ditch.

Cost Estimate (if available): Click or tap here to enter text.

Project Name: 28th & Green Sewer Reroute

Anticipated Completion Date: Start 2026, finish 2027

Brief Description: Route the storm system at 28th & Green to Grand Lake to remove it from the 27th & Wyoming outfall. The reroute will push flow to Burns Ditch instead of Deep River and the two bridges bottleneck. Project will include a new outfall in an existing right of way to Burns Ditch. Consideration of flood elevations may require a pump station to discharge to Burns Ditch during some flooding events. Install appropriate water quality devices prior to discharge to Burns Ditch and Grand Lake.

Cost Estimate (if available): [Click or tap here to enter text.](#)

Project Name: Wyoming and 27th Neighborhood

Anticipated Completion Date: Start 2028, finish 2029

Brief Description: Continue purchase of property that is within the floodway of Deep River, Work with Gary and Lake County regarding the bottleneck of the bridges at Central Avenue and the Railroad tracks. Consideration of Levee and storm water pump station if cannot control flooding otherwise.

Cost Estimate (if available): [Click or tap here to enter text.](#)

Project Name: 34th & Wisconsin Neighborhood Storm Water Improvements

Anticipated Completion Date: Start 2030 finish 2031

Brief Description: Replacement of existing failing storm sewer, construction of a new outfall into Rosser Lake, Ditch maintenance/creation for areas without proper drainage facilities. Coordination with owner of pipe under I-65 and the gate for maintenance of the pipe and gate. Add water quality units as appropriate.

Cost Estimate (if available): [Click or tap here to enter text.](#)

Project Name: 25th & Vermillion Street Storm Water Improvements

Anticipated Completion Date: Start 2032, finish 2033

Brief Description: Construct additional Storm Sewers to serve areas without adequate drainage. Increase existing pipe sizes as determined necessary to eliminate flooding of the existing streets. Add Storm Water Quality devices prior to discharge to Deep River.

Cost Estimate (if available): [Click or tap here to enter text.](#)

Project Name: Wayne and 23rd Street Storm Water Improvements

Anticipated Completion Date: Start 2034, finish 2035

Brief Description: Storm sewers discharge to a lake that has a compromised outfall. Work will be with the City of Portage to resolve the outfall. Add appropriate BMPs prior to discharge to Lake.

Cost Estimate (if available): [Click or tap here to enter text.](#)

To: Bill Emerson, Jr., County Surveyor, Lake County, Indiana
From: Rajat Das, P.E., Ciorba Group & Tony Wolff, P.E., CFM, Ciorba Group
CC: Mr. Dan Repay,
Executive Director, Little Calumet River Basin Development Commission
Date: 3/24/2021
Reference: Little Calumet River Basin Comprehensive Watershed Plan Update.

Ciorba Group (Ciorba) is under contract with Little Calumet River Basin Development Commission (LCRBDC) to update the Comprehensive Watershed Plan for Little Calumet River - Lake County Basin dated August 13, 2013. The original 2013 document can be found here: <http://www.heyroman.com/river/pdf/WatershedStudy.pdf>

As a local municipality included within the LCRBDC boundary, the LCRBDC wishes to get an update from you on the stormwater projects listed in the original 2013 report, including the projects that are completed, any projects currently ongoing, and any you may be contemplating in the next 5 to 10 years. The following questionnaire is intended to gather the aforesaid information from your Municipality.

SECTION 1: PROJECTS LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

1. Upper Beaver Dam Ditch Detention

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☒ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☒ No ☐ N/A ☐ Tentative Completion Date: 12/31/2021

For Future Projects:

Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: \$1,700,000

2. Beaver Dam Ditch - Lateral 2 4 (Regional Detention Basin)

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.
Ongoing: Yes ☐ No ☒ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.
Future: Yes ☒ No ☐ N/A ☐ Tentative Completion Date: 11/30/2021

For Future Projects:

Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: \$550,000

~~3. Cady Marsh Ditch Detention Project~~

Complete: Yes ☐ No ☐ Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

~~4. Upper Turkey Creek Stormwater Storage Project~~

Complete: Yes ☐ No ☐ Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

5. Upper Turkey Creek Overbank Detention

Complete: Yes ☐ No ☒ Completion Date:

Ongoing: Yes ☐ No ☒ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☒ No ☐ N/A ☐ Tentative Completion Date: 11/30/2021

For Future Projects:

Funding Allocated: Yes ☐ No ☒ Engineer's Estimation of Cost: \$275,000

~~6. 121st and Iowa Drainage Improvements with NRCS~~

Complete: Yes ☐ No ☐ Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☐ N/A ☐ Scheduled Completion Date: Click or tap to enter a date.

Future: Yes ☐ No ☐ N/A ☐ Tentative Completion Date: Click or tap to enter a date.

For Future Projects:

Funding Allocated: Yes ☐ No ☐ Engineer's Estimation of Cost: Click or tap here to enter text.

7. Unregulated Deep River Cleaning (Maintenance Project)

Complete: Yes ☐ No ☒ Completion Date: Click or tap to enter a date.

Ongoing: Yes ☐ No ☒ N/A ☐ Scheduled Completion Date: 1/31/2022

Funding Allocated: Yes ☒ No ☐ Engineer's Estimation of Cost: \$500,000

8. Unregulated Hart Ditch Cleaning (Maintenance Project)Complete: Yes ☐ No ☒

Completion Date: 9/23/2024

Ongoing: Yes ☒ No ☐ N/A ☐

Scheduled Completion Date: 12/31/2021

Funding Allocated: Yes ☒ No ☒

Engineer's Estimation of Cost: \$1,500,000

Please continue to Section 2

SECTION 2: QUALITY OF LIFE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Has the Municipality implemented additional stormwater related Quality of Life Projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☐ No ☐

If yes, please list the projects implemented with a brief description:

Project Name:

Anticipated Completion Date: Click or tap to enter a date.

Brief Description:

Cost: Click or tap here to enter text.

Project Name:

Anticipated Completion Date:

Brief Description:

Cost: Click or tap here to enter text.

Project Name:

Anticipated Completion Date:

Brief Description:

Cost: \$

Project Name:

Anticipated Completion Date:

Brief Description:

Cost: Click or tap here to enter text.

Please continue to Section 3

SECTION 3: FUTURE PROJECTS NOT LISTED IN 2013 COMPREHENSIVE WATERSHED PLAN:

Is the Municipality currently under process to implement additional stormwater related projects not listed in the 2013 Comprehensive Watershed Plan? Yes ☒ No ☐

If you have answered yes, please list the projects currently under consideration with a brief description, anticipated schedule of completion and cost estimate (if available):

Project Name: Schererville Ditch/Dyer Ditch - Teibel Ponds Restoration (Schererville)

Anticipated Completion Date: 12/31/2021

Brief Description: Excavation of approximately 24 acres to a depth of 3' totaling 116,160 yd³ for a cost of approximately \$3.5M to \$9.3M and the excavation of approximately 8 acres to an average depth of 1.5' totaling 19,360 yd³ for a cost of approximately \$0.5M to \$1.5M

Cost Estimate (if available): \$4,000,000

Project Name: Beaver Dam Ditch Maintenance - Phase I (Crown Point & Hobart)

Anticipated Completion Date: 12/31/2021

Brief Description: Clear and snag channel and minimal bank clearing for access. Starting ½ mile west of Cline Avenue easterly to ¾ mile east of Clay Street (approximately 12 miles)

Cost Estimate (if available): \$750,000

Project Name: Turkey Creek Maintenance - Phase I (Schererville, Merrillville & Hobart)

Anticipated Completion Date: 12/31/2021

Brief Description: Clear and snag channel and minimal bank clearing for access. Starting at Cline Avenue then easterly to ¼ mile east of Liverpool Road (approximately 9 miles)

Cost Estimate (if available): \$650,000

Project Name: Turkey Creek 2 Stage Ditch (Storage) & Culvert Replacement @ James Wittchen Drive (Schererville)

Anticipated Completion Date: 12/31/2021

Brief Description: To convert 750 linear feet of distressed, near vertical and falling streambank into a 2-stage ditch profile with bio-engineered streambank stabilization measures. By excavating 6,800 cubic yards of upland area on the north & south side of Turkey Creek, we will: create an protracted bench area with 3.6 acre-feet of new on-line flood storage area, significantly improve ditch permanency, reduce sediment and nutrient loadings, and create 0.96 acres of new habitat with native plantings on the bench. Also, replace undersized structures at James Wittchen Drive.

Cost Estimate (if available): \$850,000

Project Name: Graper Ditch Maintenance (Winfield)

Anticipated Completion Date: 7/31/2021

Brief Description: Replace undersized culverts to reduce flooding. Replace 100 year old tile with new tile and re-establish overland swale.

Cost Estimate (if available): \$450,000

Project Name: Hart Ditch 2-Stage Ditch Riparian Corridor Restoration Phase 1 (Dyer)

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: To transform 300 linear feet of distressed, near vertical and slumping streambank into a 2-stage ditch profile with bio-engineered streambank stabilization measures. By excavating 3,400 cubic yards of upland area on the north side of Hart Ditch, we will: create an extended bench area with 1.8 acre-feet of new on-line flood storage area, significantly improve ditch stability, reduce sediment and nutrient loadings, and create 0.48 acres of new habitat with native plantings on the 2-stage ditch bench.

Cost Estimate (if available): \$3,200,000

Project Name: Click or tap here to enter text.

Anticipated Completion Date: Click or tap to enter a date.

Brief Description: Click or tap here to enter text.

Cost Estimate (if available): Click or tap here to enter text.