

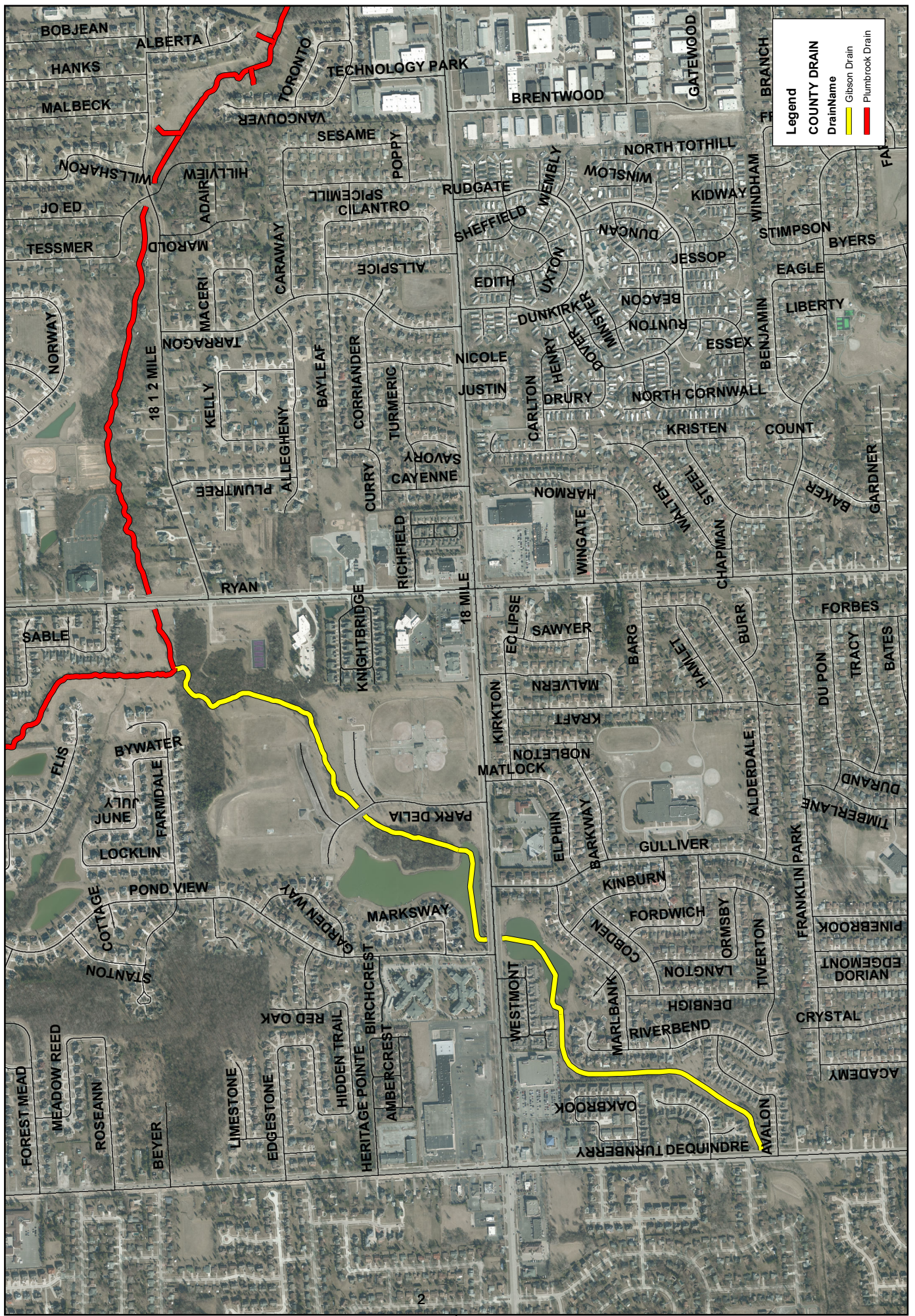
GIBSON IMPROVEMENT DRAIN
INTRA-COUNTY DRAINAGE BOARD
APRIL 8, 2024
10:45 A.M.
AGENDA

NOTE: THIS MEETING WILL BE HELD BY TELECONFERENCE

Call in Number: 1-470-499-2258
Access Code: 415 487 641

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for April 8, 2024	
3. Approval of Minutes for December 14, 2020	3
4. Public Participation	
5. Requested Fund Transfer to Gibson Intercounty Chapter 6 Drain – Bruce Manning	5
Motion: To approve the transfer of \$25,580 of surplus Gibson Chapter 20 drain funds to the Gibson Chapter 6 Intercounty Drain as requested by the City of Sterling Heights for their share of HRC services for a Pond Sedimentation Engineering Study.	
6. Financial Report – Bruce Manning	10
7. Adjourn	

Gibson Drain



An adjourned meeting of the Intra-County Drainage Board for the **GIBSON DRAIN** was held via telephone conference per the State Public Act 228 of 2020 due to the COVID-19 pandemic, on December 14, 2020, at 10:29 A.M.

PRESENT: Candice S. Miller, Chair
Location: Harrison Township, MI

Rob Mijac, Member
Location: Sterling Heights, MI

Bryan Santo, Member
Location: Mt. Clemens, MI

ALSO PRESENT: Board of Commissioner Elect Don VanSyckel; Brian Baker, Chief Deputy, Karen Czernel, Deputy, Stephen Downing, Construction & Maintenance Manager, Bruce Manning, Financial Manager, Tom Stockel, Construction Engineer, Jeff Bednar P.E., Environmental Resources Manager, Vince Astorino, Operations & Flow Manager, Kellie Kource, Drain Account Specialist, Emily Engelmann, Administrative Assistant, Macomb County Public Works; Sebastian Previti, Patrick Meagher, Washington Township; Sydney Hilgendorf, Sterling Heights; Bob Gorski

The meeting was called to order by the Chair, Candice S. Miller. A motion was made by Mr. Mijac, supported by Mr. Santo to approve the agenda as presented.

Adopted: YEAS: 3
NAYS: 0

Minutes of the meeting of May 24, 2005 were presented, noting that no current Board Members were present at this meeting. A motion was made by Mr. Mijac, supported by Mr. Santo to approve the minutes as presented.

Adopted: YEAS: 3
NAYS: 0

The meeting was opened to public participation, then closed, there being no comments from the public.

Mr. Baker updated the board that Sterling Heights would like to clean out the sediment in ponds along 18 Mile Road near Dequindre. In the past they have received cost sharing from the city of Troy and would like to have other cities as well as both counties help share in these costs since they contribute to the sediment. The Gibson Inter-County Drain has established a contract with Hubbell, Roth and Clark to examine this issue and we would like to transfer these funds for Sterling Heights' share to that drain to fund that study.

A motion was made by Mr. Mijac, supported by Mr. Santo to approve the transfer of \$20,000 of surplus Gibson Chapter 20 Drain Funds to the Gibson Chapter 6 Intercounty Drain as requested by Sterling Heights to fund their share of the Gibson Drainage Study.

Adopted: YEAS: 3
NAYS: 0

A motion to receive and file the financial report given by Mr. Manning was made by Mr. Santo and supported by Mr. Mijac.

Adopted: YEAS: 3
NAYS: 0

There being no further business, it was moved by Mr. Mijac, supported by Mr. Santo that the meeting of the Gibson Drain Board be adjourned.

Adopted: YEAS: 3
NAYS: 0

The meeting was adjourned at 10:42 a.m.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

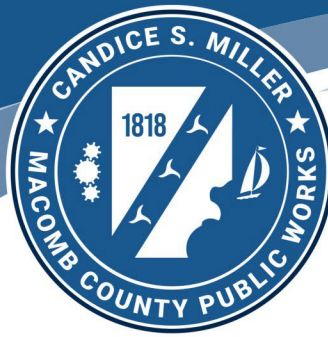
STATE OF MICHIGAN
COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taking by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on December 14, 2020 the original of which is on file in the Public Works Commissioner's Office. Public notice of the meeting was given pursuant to Act No. 267, Public Acts of Michigan, 1975, including, in the case of a special or rescheduled meeting or a meeting secured for more than 36 hours, notice by posting at least 18 hours prior to the time set for the meeting.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

DATED: 12/14/20



TO: Gibson Improvement Drain Drainage District Board Members

FROM: Bruce Manning, Financial Manager

DATE: April 8, 2024

RE: Fund Transfer Request – Gibson Preliminary Engineering Services to Hubbell, Roth & Clark, Inc.

The Gibson Drain Improvement was formed as part of an improvement project in the City of Sterling Heights. At the completion of the project the Drainage District had unused surplus funds that have remained in the Drain Account.

The Gibson Drain Improvement account has approximately \$142,540.

The Chapter 21 Gibson Drain Board approved on November 13, 2023 a preliminary engineering study to evaluate and select the most feasible and cost-effective alternatives for the Drain improvements to minimize ongoing pond dredging and long-term maintenance. The cost of the study is \$51,160 to be split evenly between Troy and Sterling Heights. Sterling Heights has requested that surplus funds be used to pay their share.

The recommendation is that the Chapter 20 Gibson Improvement Drain Drainage District authorize the transfer of \$25,580 into the Chapter 21 Gibson Drain account.

October 4, 2023

Macomb County Public Works Commissioner's Office
21777 Dunham Road
Clinton Township, MI 48036

Attn: Mr. Jeff Bednar, P.E., Environmental Resources Manager

Re: Proposal for Professional Engineering Services
Gibson Drain Improvements

HRC Job No. 20230732

Dear Mr. Bednar:

Pursuant to your request, HRC is pleased to submit this proposal to perform preliminary engineering services including complete hydraulic and geomorphology analyses as described herein, discussed at the meeting held on August 28, 2023, and our previous involvement in the Gibson and Plumbrook Drain projects.

As you are aware, the history of the various County Drains over the stretch of watercourse called the Gibson or Plumbrook in the City of Sterling Heights is not conclusive as it relates to jurisdiction. In 2021, Hubbell, Roth and Clark, Inc. (HRC) was contracted to perform a feasibility study on the establishment of a new Chapter 21 Intercounty Drain over what is now the Gibson Drain (Drain). HRC identified previous Drain centerlines from previous Drainage Board proceedings, evaluated the Drain conditions with O&M needs, developed a capital improvement plan, defined the drainage district, referenced available easements, and performed preliminary cost estimates and apportionments. The Macomb County Public Works Office (MCPWO), Oakland County Water Resources Commissioner's Office (WRC), the City of Troy, and the City of Sterling Heights (collectively, the Parties) are working together toward a strategy to resolve the current Drain documentation and establish an Intercounty Drain. However, there is an immediate need to address ongoing sedimentation in the in-line pond south of 18 Mile and east of Dequindre and normal Drain maintenance throughout the stretch from Dequindre to Ryan Roads.

The Gibson Drain (Chapter 20) traverses through two in-line ponds on either side of 18 Mile Road. The Drain has a base load of sediment that is depositing in the ponds, predominantly the south pond, due to the water control structure on the historic channel in the north pond. The south pond has been dredged previously. With escalating costs to dredge and recurring regularity, it is desired by all the parties to avoid future dredging.

The parties are seeking a preliminary engineering study to evaluate and select the most feasible and cost-effective alternatives for the Drain improvements to minimize ongoing pond dredging and long-term maintenance. Three alternatives will be reviewed: do nothing, ongoing pond dredging, and bypassing the ponds with a Drain relocation, thus converting the in-line ponds to off-line. The do nothing option will generally focus on the estimates of sediment accumulation in the ponds and how use and aesthetics may be impacted for all parties and the public to understand the outcomes should nothing be done. Based on the findings of this analysis, we will prepare a cost estimate for each option and recommendations for the suitability of each project to attract grant funding. Our study will be used in support of a Memo of Understanding (MOU) between the parties to proceed with the improvements associated with the ponds while the parties simultaneously pursue the new Intercounty Drain. Further, our study will be used for the parties to potentially discuss the project with the public after the parties agree on a direction.

Delhi Township
2101 Aurelius Rd.
Suite 2A
Holt, MI 48842
517-694-7760

Detroit
535 Griswold St.
Buhl Building, Ste 1650
Detroit, MI 48226
313-965-3330

Grand Rapids
801 Broadway NW
Suite 215
Grand Rapids, MI 49504
616-454-4286

Howell
105 W. Grand River
Howell, MI 48843
517-552-9199

Jackson
401 S. Mechanic St.
Suite B
Jackson, MI 49201
517-292-1295

Kalamazoo
834 King Highway
Suite 107
Kalamazoo, MI 49001
269-665-2005

Lansing
215 S. Washington SQ
Suite D
Lansing, MI 48933
517-292-1488

SCOPE/TASKS

A breakdown of our proposed services and budgeted hours is summarized below:

1. **Data Collection and Review Existing Data:** HRC will review the available information, including any available record drawings, previous hydraulic studies, streambank restoration plans conducted in 2009, existing models, plans, and existing utilities.

Estimated Hours – 15
2. **Topographic Survey and Field Assessment:** The HRC Team performed a topographic survey in 2021 to locate the Drain and develop an updated Route and Course. The feasibility, scope, and impacts of reestablishing a channel through this section are dependent on the 18-Mile crossing invert elevations and other control points that were not detailed enough in the previous survey. A limited supplemental topographic survey will be conducted for this current study for the hydraulic and geomorphology studies. HRC will perform the needed topographic survey of the stream and road crossing structures and supplement it with the previous topographic survey and LiDAR elevation data. Three datasets will be stitched together to create a merged Digital Elevation Model. In addition, we will prepare longitudinal and cross-sectional profiles from the merged data for the hydraulic study.

Estimated Hours – 40
3. **Perform a Geomorphology Study:** One of the alternatives that will be investigated in this project is creating an appropriately dimensioned channel through the two ponds and converting in-line ponds to off-line ponds. To size the channel and bank heights, the HRC Team will visit the site, identify the bankfull indicators (if available), and perform a geomorphologic analysis. The instream structures and bank stabilization measures will be sized as part of this task. The overall intent of this task is to size the stable stream channel within the south and north ponds.

Estimated Hours – 50
4. **Evaluate the Impact of Converting In-line to Off-line Ponds:** Constructing a channel through the two ponds and converting in-line to off-line ponds may alter flows and water surface elevations throughout the range of expected storm events. To determine how much water surface elevation changes in storm events, inform our design of the new slopes, and convey expectations to the property owners, HRC will develop the HecRAS model to reflect the current and proposed conditions. As part of this task, the technical report and the base design concepts will be prepared. The overall intent of this task is to ensure converting in-line to off-line ponds does not cause a harmful impact. The results of this analysis can be utilized in selecting appropriate natural vegetation types for stabilizing streambank and creating natural habitats.

Estimated Hours – 180
5. **Letter Report, Concept Plan, and Cost Estimate:** HRC will prepare a letter report to present the findings of this study. This letter will also review and compare three alternatives: do nothing, pond dredging, and converting the in-line ponds to off-line ones. The most feasible alternative will be selected according to the project's grant eligibility, costs, long-term maintenance cost schedules, and constructability. The concept plan presenting the proposed bankfull channel, instream structures, cross sections, and profiles will be delivered. The report package, including the concept plan and cost estimates, will be provided to the new Intercounty Drain Drainage Board for the next steps. The concept plan will be presented in a format suitable for public distribution such as a rendering, graphic, or illustration.

Estimated Hours – 80

6. **Meetings:** This task includes meeting materials preparation and attending one virtual and two in-person meetings, including 3 people, and one 5-hour on-site meeting, including 2 people, to update the project team and discuss the project with the Project Team.

Estimated Hours – 25

Task	Hours	Cost
1.) Data Collection and Review Existing Data	15	\$ 1,870
2.) Topographic Survey and Field Assessment	40	\$ 6,080
3.) Perform Geomorphology Study	50	\$8,180
4.) Evaluate the Impact of Converting In-line to Off-line Ponds	180	\$20,600
5.) Concept plan, Letter Report and Cost Estimate	80	\$10,360
6.) Meetings	25	\$4,070
Totals	390	\$51,160

BUDGETS FOR TASKS NOT INCLUDED IN THE BASE SCOPE

Grant Application: Provided an opportunity, HRC will provide grant application assistance for obtaining the State/Federal Funds to improve the Drain. Working with the MDNR to remove the dam(s) will result in the opportunity to receive state funding. This task is not included in the budget at this time; however, \$5,000 should be allocated for a future grant application.

Estimated Budget – \$5,000

ITEMS NOT INCLUDED

At this time, our plans will be suitable for selecting the most feasible and cost-effective option, attaching to grant applications, and seeking contractor budgeting pricing but not permitting, public bidding, and future construction. Additional effort will be needed should your office desire this to be bid. This proposal does not cover any EGLE permitting and FEMA mapping efforts for the current study.

Further, concurrent with the above efforts, the Parties intend to seek to officially establish a new Chapter 21 Intercounty Drain. We have not included costs to help with this effort at this time. We will need to work with the Parties and legal counsel to identify the scope and level of effort needed from HRC for this process.

SCHEDULE

HRC is prepared to begin work following the MCPWO's authorization to proceed and complete the study within 60 days.

FEE SUMMARY

Based on the identified scope, **HRC estimates approximately 390 hours to complete the tasks as described. The estimated total budget for the provided scope is \$51,160** and has been developed following our agreed-upon hourly rate fee schedule. This amount will not be exceeded without prior written authorization.

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.



James Burton, P.E.
Vice President

fb/jfb

pc: Macomb County Public Works Office: Mr. Brian Baker
Oakland County Water Resource Commissioners; Mr. Steve Korth
City of Troy; Mr. Kurt Bovensiep, Mr. Scott Finlay
City of Sterling Heights; Mr. Brent Bashaw, Mr. Jeff Bahorski
HRC, M. MacDonald, F. Babakhani, File

Accepted By:

Signature: _____

Title: _____

Printed Name: _____

Dated: _____

YTD Trial Balance

Fund: Gibson Improvement

As of Fiscal Period: Oct 1, 2023-March 31, 2024

	O&M Balance 9/30/2023	O&M	Total 3/31/2024
Cash - Operating	142,099	441	142,540
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		441	441
Expenditures			0
Equity	142,099		142,540