

**NOTICE OF MEETINGS**  
**DRAINAGE BOARD FOR THE FOLLOWING DRAINS:**

1. Drainage District Policy
2. Clinton River Water Resource Recovery Facility
3. Northwest Oakland Sanitary Sewer Drain
4. Acacia Park CSO
5. Birmingham CSO
6. Bloomfield Village CSO
7. George W. Kuhn Drain
8. Evergreen-Farmington Sanitary Drain
9. Henry Graham Drain

NOTICE IS HEREBY GIVEN THAT MEETINGS OF THE DRAINAGE BOARD FOR THE ABOVE-MENTIONED DRAINS WILL COMMENCE IN THE OAKLAND COUNTY PUBLIC WORKS BUILDING, ONE PUBLIC WORKS DRIVE, WATERFORD, MICHIGAN, AND VIA **MICROSOFT TEAMS** AT 2:00 P.M., ON **TUESDAY, JUNE 27, 2023**, TO CONDUCT NECESSARY AND APPROPRIATE BUSINESS OF THE DRAIN BOARDS. THOSE THAT WISH TO PARTICIPATE REMOTELY MAY FOLLOW THE INSTRUCTIONS ATTACHED TO THIS NOTICE. ALL BOARD MEMBERS WILL BE PARTICIPATING IN-PERSON.

DURING THE MEETING, THERE WILL BE AN AGENDA ITEM FOR PUBLIC COMMENT, DURING WHICH THE PUBLIC MAY PROVIDE INPUT OR ASK QUESTIONS OF THE BOARD. IN THE EVENT A MEMBER OF THE PUBLIC WOULD LIKE TO SUBMIT THEIR INPUT OR QUESTIONS TO BE READ AT THE MEETING BY THE BOARD CHAIRPERSON, PLEASE PROVIDE THE INPUT OR QUESTIONS IN WRITING TO STEPHANIE LAJDZIAK AT [LAJDZIAKS@OAKGOV.COM](mailto:LAJDZIAKS@OAKGOV.COM). PERSONS WITH DISABILITIES THAT NEED ASSISTANCE PARTICIPATING IN THE MEETING SHOULD CONTACT STEPHANIE LAJDZIAK AT [LAJDZIAKS@OAKGOV.COM](mailto:LAJDZIAKS@OAKGOV.COM).

JIM NASH  
Oakland County Water Resources Commissioner  
Telephone: 248-858-0958

Posted by: June 23, 2023

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# Microsoft Teams meeting

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## **1. Drainage District Policy**

## **AGENDA**

### **DRAINAGE BOARD FOR POLICY MATTERS**

June 27, 2023

1. Call meeting to order
2. Approve minutes of meeting of March 28, 2023
3. Public Comments
4. Present Memorandum from Steve Korth, Water Resources Commissioner Chief Manager and Megan Koss, Water Resources Commissioner Attorney, dated June 27, 2023, requesting the Board receive and file the Drainage District Public Officials' Liability Insurance memorandum
5. Present Memorandum from Jim Nash, Oakland County Water Resources Commissioner, dated June 27, 2023, requesting the Board authorize staff to coordinate with Corporation Counsel and Fiscal Services personnel to assist with the analysis and review of Road Commission drain assessments
6. Present Memorandum from Lynne Seymour, P.E., Chief Engineer, dated June 27, 2023, requesting the Board approve the Plan Review and Permitting Fee Schedule for all separate and combined Chapter 20 drains with implementation commencing on July 1, 2023
7. Other business
8. Approve pro rata payment to Drainage Board members
9. Adjourn



**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR POLICY MATTERS**

March 28, 2023

A meeting of the Drainage Board for Policy Matters was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 28th day of March 2023.

The meeting was called to order by the Chairperson.

PRESENT: Anne Vaara, Chairperson, Chief Deputy Oakland County Water Resources Commissioner

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: David Woodward, Chairperson of the Oakland County Board of Commissioners

Jim Nash, Oakland County Water Resources Commissioner

Minutes of the meeting held January 24, 2023, were presented for consideration. It was moved by Markham, supported by Vaara, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Vaara asked if there were any public comments. There were none.

Steve Korth presented the 2022 Drain Annual Report and briefly advised on the content detailed in the report. It was moved by Markham, supported by Vaara, to receive and file the 2022 Drain Annual Report as presented.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Vaara, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Ms. Markham.

ADOPTED: Yeas - 2  
Nays - 0

There being no further business, the meeting was adjourned.



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Anne Vaara, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for Policy Matters, Oakland County, Michigan, held on the 28<sup>th</sup> day of March 2023, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for Policy Matters.



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Anne Vaara, Chairperson

Dated: March 28, 2023

**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER****MEMORANDUM**

**TO:** Jim Nash, Chairman  
Drainage District for Policy Matters

**FROM:** Steven Korth, P.E., Chief Manager and Megan Koss, Water Resources  
Commissioner Attorney

**SUBJECT:** Drainage District Public Officials' Liability Insurance

**DATE:** June 27, 2023

At the April 25, 2023 meeting of the Chapter 20 drain boards, Salvatore Saputo, Executive Vice President of Meadowbrook Insurance Agency, provided a proposal to renew the Evergreen-Farmington Sanitary Drain Drainage District's property, public officials' liability, general liability, excess liability, and pollution liability insurance policies. During the presentation, Commissioner David Woodward questioned whether it was necessary to insure any Chapter 20 drainage district for public officials' liability coverage because they may already be covered under Oakland County's separate public officials' liability policy. He was concerned about duplicative and/or overlapping public officials' liability coverage.

Robert Erlenbeck, Insurance Risk Administrator for Oakland County, recommends that drainage districts purchase their own public officials' liability coverage to ensure that the legal entity created by the establishment of the drainage district is adequately protected.

Erlenbeck clarified that although Oakland County has two separate programs that include public officials' liability insurance, one for WRC operations, and another for cities, villages, and townships operating under contract with the county, those policies do not include coverage for any legally established drainage district. Insurance coverage for drainage districts is placed separately. Oakland County's Master Insurance Program includes a \$5 million self-insured retention before any coverage is provided. Self-insurance retention is the amount that must be paid by the insured prior to the policy covering any loss. Further, the county's master program only applies to individually named commissioners and does not cover separate drainage districts.

Given Mr. Erlenbeck's recommendation, with which we concur, Chapter 20 drainage districts will continue to pursue public officials' liability insurance separate from any coverage sought and bound by Oakland County.

**Requested Action: Receive and file.**

**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER****MEMORANDUM**

**TO:** David T. Woodward, Chairman of the Oakland County Board of Commissioners

**FROM:** Jim Nash, Oakland County Water Resources Commissioner

**SUBJECT:** Road Commission Drain Assessment

**DATE:** June 27, 2023

It has been the practice of the previous Oakland County administration to pay the drain assessments levied against the county's road commission. Recently, we have reviewed the relevant statute and have determined that the Road Commission for Oakland County (RCOC) is responsible for paying its properly calculated portion of drain assessments. Currently, the financial implications approach approximately \$1.7 million per year, but actual savings are about half of that amount. That's because state law, specifically MCL 247.664a, provides that 50% of the cost of a drain assessment against the county for the drainage of county roads "**shall be paid by the county road commission from county road funds.**" (Emphasis added.)

Although the practice of paying the entire amount from the county's general fund has been a time-honored tradition in Oakland County, such accommodation is not codified in law and has not been addressed by any resolution offered by the Board of Commissioners. Recognizing that the final decision rests with the Board of Commissioners, I recommend that this issue be assigned to Corporation Counsel for formal analysis and review.

For my part, I would be happy to direct my staff to coordinate with both Corporation Counsel and Fiscal Services personnel to assist with this important endeavor.

**TO:** Jim Nash, Chairperson  
Drainage Board for Policy Matters

**FROM:** Lynne Seymour, P.E., Chief Engineer

**SUBJECT:** Adoption of Oakland County's Stormwater Plan Review and Permit Fees Plan for Chapter 20 Drains

**DATE:** June 27, 2023

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The Oakland County Water Resources Commissioner's Office requires landowners to submit an engineering plan for review and approval before performing work involving a County Drain or within a County Drain easement. The specifications that need to be met are outlined in the Stormwater Engineering Design Standards adopted in May 2021.

Our current standards allow for an annual update to the stormwater fee schedule. Over the past year, WRC staff has evaluated the current fees compared to neighboring counties, current staff wages, and staff effort required to ensure that permit revenue covers actual expenses. The attached fee schedule reflects current costs associated with plan review and permitting and are consistent with the fees charged by our neighboring counties. WRC staff will continue to track plan review and permitting efforts to assist with an annual fee review.

**Recommended Action:**

**Approve the attached Plan Review and Permitting Fee Schedule for all Separate and Combined Chapter 20 Drains with implementation commencing on July 1, 2023.**

## Storm Water Permit Fee Schedule

Permit Type	Plan Review Fee	Inspection
Tap- Sump	\$300	\$350
Tap- Open County Drain	\$350	\$350/Tap
Tap- Enclosed County Drain	\$350	\$350/Tap
Culvert Installation/Replacement	\$500	\$500/Culvert min.*
Crossing- Bored	\$350	\$500 each (1-5), each add'l \$250
Crossing- Open Cut	\$350	\$500 each (1-5), each add'l \$250
Crossing- Bridge	\$450	\$500/Bridge min.*
Drain Clean Out	\$400	\$500 min*
Easement Use Agreement	\$350	N/A
Structure Adjustments	\$400	\$150/Each

\* Fee may be higher based on inspection requirements due to culvert size, location, site conditions, project duration, etc.

## Storm Water Plan Review Fee Schedule

Plan Review Type	Review Fee
Preliminary Plat (all)	\$400
Construction- less than 5 acres	\$600
Construction- 5 - 19.99 acres	\$1,400
Construction - 20 - 49.99 acres	\$2,400
Construction- 50 - 99.99 acres	\$3,200
Construction - 100 acres or more	\$4,000

Approved By Drainage Board on

\_\_\_\_\_.

\_\_\_\_\_  
 Jim Nash  
 Water Resources Commissioner

**2. Clinton River Water  
Resource Recovery Facility**

## AGENDA

### DRAINAGE BOARD FOR THE CLINTON RIVER WATER RESOURCE RECOVERY FACILITY DRAIN OPTIMIZATION PROJECT

June 27, 2023

1. Call meeting to order.
2. Approve minutes of meeting of May 23, 2023.
3. Public Comments
4. Offer and file proofs of publication and of mailing of notice of the hearing.
5. Open the hearing.
6. Receive written objections.
7. Ask for comments or objections from those present.
8. Close the hearing.
9. Adopt resolution to confirm apportionment and direct the Chairperson to issue a Final Order of Apportionment.
10. Chairperson execute Final Order of Apportionment and present it to the Board.
11. Motion to approve and file Final Order of Apportionment.
12. Present Memorandum from Razik Alsaigh, P.E., Civil Engineer III, dated June 27, 2023, requesting the Board receive and file the Total Project Cost of \$62,645,000 for the Drainage District's Optimization Phase 1 Project, based on available cost estimates prior to project bid results
13. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$544,054.71
14. Other Business.
15. Approve pro rata payment to Drainage Board members
16. Adjourn



MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
CLINTON RIVER WATER RESOURCE RECOVERY FACILITY  
DRAIN OPTIMIZATION PROJECT

May 23, 2023

A meeting of the Drainage Board for the Clinton River Water Resource Recovery Facility Drain Optimization Project was held in Waterford, Michigan, on May 23, 2023.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: None.

The meeting was called to order by the Chairperson. The minutes of the April 25, 2023 meeting of this Board were presented. It was moved by Markham and seconded by Woodward and unanimously adopted that the said minutes be approved as presented.

The Chairperson presented proofs of the publication and mailing of the notice of hearing. By [unanimous consent] the proofs of publication and mailing were placed on file with the Chairperson.

The Chairperson announced that this was the time and place for the meeting of this Board to hear any objections to the proposed drain project, to the petition therefor, and to the matter of assessing the cost of the project to the public corporation heretofore designated by this Board.

There were the following questions and objections: None.

There were the following written objections: None.

The Chairperson declared the hearing closed.

The following resolution was offered by Markham and seconded by Woodward:

WHEREAS, petitions were filed with the Oakland County Water Resources Commissioner under the provisions of Chapter 20 of Act 40, Public Acts of Michigan, 1956, as amended, on April 6, 2023, by the City of Auburn Hills, Oakland County, Michigan, and on April 12, 2023, by the Charter Township of Orion, Oakland County, Michigan, petitioning for the

location, establishment and construction of an intra-county drain project, as set forth in the petitions, which proposed drain project is necessary for the public health; and

WHEREAS, the necessary proceedings have been taken in respect to the petition including the holding of a hearing for the purpose of receiving any objections to the proposed drain project, to the petition therefor and to the matter of assessing the cost to the public corporation named in the notice of said hearing.

THEREFORE, BE IT RESOLVED BY THE DRAINAGE BOARD FOR THE CLINTON RIVER WATER RESOURCE RECOVERY FACILITY DRAIN OPTIMIZATION PROJECT, as follows:

1. That the petition is sufficient in all respects; that the drain project is practicable and should be constructed; that it has become necessary for the public health to construct the drain project; and that the following public corporations should be assessed for the cost thereof, to-wit:

- City of Auburn Hills
- Charter Township of Independence
- City of Lake Angelus
- Village of Lake Orion
- Charter Township of Oakland
- Charter Township of Orion
- Charter Township of Oxford
- Village of Oxford
- City of Pontiac
- City of Rochester
- City of Rochester Hills
- Charter Township of Waterford
- Charter Township of West Bloomfield

2. That the Chairperson of this Board is hereby authorized and directed to issue on behalf of the Board its final order of determination in accordance with the determinations made in this resolution.

ADOPTED: Yeas – 3

Nays - 0

The Chairperson of the Drainage Board proceeded to execute the Final Order of Determination and after doing so, presented the same to the Drainage Board. The order was executed and dated on May 23, 2023.

It was moved by Markham and seconded by Woodward that the Final Order of Determination, In Re Clinton River Water Resource Recovery Facility Drain Optimization Project, as this date executed and presented to this Drainage Board by the Chairperson, be and it hereby is confirmed, ratified and approved and ordered filed with the Chairperson on this date.

ADOPTED: Yeas - 3

Nays - 0

The Chairperson presented plans and specifications for the Clinton River Water Resource Recovery Facility Drain Optimization Project previously prepared by registered professional engineers and on file with the Oakland County Water Resources Commissioner. After examination of said plans and specifications it was, on motion by Markham, seconded by Woodward:

RESOLVED, that said plans and specifications be and they hereby are received, adopted and approved and ordered filed with the Chairperson of this Board.

ADOPTED: Yeas - 3

Nays - 0

The Chairperson presented a route and course of the Clinton River Water Resource Recovery Facility Drain Optimization Project.

The following resolution was offered by Markham and seconded by Woodward:

RESOLVED, that the following be approved and adopted as the route and course of the Clinton River Water Resource Recovery Facility Drain Optimization Project:

(See Attached Exhibit A)

ADOPTED: Yeas – 3

Nays – 0

The Chairperson presented a description of the area to be served by the drain project.

The following resolution was offered by Markham and seconded by Woodward\_:

RESOLVED, that the following be designated as the area to be served by the drain project:

(See Attached Exhibit B)

ADOPTED: Yeas – 3

Nays – 0

The following resolution was offered by Markham and seconded by Woodward:

The Chairperson presented an estimate of the cost of the drain project, which estimate is in the aggregate amount of \$75,000,000.

Upon motion by Markham, seconded by Woodward, it was:

RESOLVED, that the estimate of cost of the drain project, in the amount of \$75,000,000, be and the same hereby is adopted, approved and accepted.

ADOPTED: Yeas - 3  
Nays - 0

The following resolution was offered by Markham and seconded by Woodward:

A tentative apportionment of costs was presented to the Board and ordered filed with the Chairperson.

The following resolution was offered by Markham and seconded by Woodward:

RESOLVED, as follows:

1. That this Board hereby tentatively establishes that the cost of the Clinton River Water Resource Recovery Facility Drain Optimization Project shall be apportioned against public corporations, as follows:

<u>Public Corporation</u>	<u>Tentative Percentage of Cost</u>
City of Auburn Hills	5.257%
Charter Township of Independence	4.090%
City of Lake Angelus	0.000%
Village of Lake Orion	0.570%
Charter Township of Oakland	1.315%
Charter Township of Orion	4.487%
Charter Township of Oxford	1.841%
Village of Oxford	0.572%
City of Pontiac	54.800%
City of Rochester	2.486%
City of Rochester Hills	10.242%
Charter Township of Waterford	11.198%
Charter Township of West Bloomfield	3.142%

2. That this Drainage Board shall meet on the 27<sup>th</sup> day of June 2023, at 2:00 p.m., prevailing Eastern Time, at the Office of the Oakland County Water Resources Commissioner, One Public Works Drive, Waterford, Michigan, for the purpose of hearing any objections to said apportionment.

3. That the notice of such hearing shall be in substantially the following form, to wit:

CITY OF AUBURN HILLS, CHARTER TOWNSHIP OF INDEPENDENCE, CITY OF LAKE ANGELUS, VILLAGE OF LAKE ORION, CHARTER TOWNSHIP OF OAKLAND, CHARTER TOWNSHIP OF ORION, CHARTER TOWNSHIP OF

OXFORD, VILLAGE OF OXFORD, CITY OF PONTIAC, CITY OF ROCHESTER,  
CITY OF ROCHESTER HILLS, CHARTER TOWNSHIP OF WATERFORD AND  
CHARTER TOWNSHIP OF WEST BLOOMFIELD  
COUNTY OF OAKLAND

CLINTON RIVER WATER RESOURCE RECOVERY FACILITY  
DRAIN OPTIMIZATION PROJECT

NOTICE OF MEETING TO HEAR OBJECTIONS  
TO APPORTIONMENT OF COST OF ABOVE  
INTRA-COUNTY DRAIN PROJECT

NOTICE IS HEREBY GIVEN, that the cost of the Clinton River Water Resource Recovery Facility Drain Optimization Project which consists of locating, establishing, studying, designing and constructing an intra-county drain project consisting of improving the Clinton River Water Resource Recovery Facility, an intra-county drain for the treatment of sanitary sewage located in the City of Pontiac, and all improvements necessary to bring the Clinton River Water Resource Recovery Facility into compliance with the Consent Judgment ordered by the Ingham County Circuit Court on July 24, 2009, between the City of Pontiac and the Michigan Department of Environmental Quality (subsequently renamed as the Michigan Department of Environment, Great Lakes, and Energy) with respect to the Clinton River Water Resource Recovery Facility, in accordance with the provisions of Chapter 20 of Act 40, Public Acts of Michigan, 1956, as amended, all as more fully set forth in the petition filed by the Charter Township of Orion and the City of Auburn Hills with respect to the drain project, has been tentatively apportioned as follows, to wit:

<u>Public Corporation</u>	<u>Tentative Percentage of Cost</u>
City of Auburn Hills	5.257%
Charter Township of Independence	4.090%
City of Lake Angelus	0.000%
Village of Lake Orion	0.570%
Charter Township of Oakland	1.315%
Charter Township of Orion	4.487%
Charter Township of Oxford	1.841%
Village of Oxford	0.572%
City of Pontiac	54.800%
City of Rochester	2.486%
City of Rochester Hills	10.242%
Charter Township of Waterford	11.198%
Charter Township of West Bloomfield	3.142%

NOTICE IS FURTHER GIVEN, that the Drainage Board for the Clinton River Water Resource Recovery Facility Drain Optimization Project, will meet at 2:00p.m., prevailing Eastern Time, on the 27<sup>th</sup> day of June, 2023, in the Office of the Oakland County Water Resources Commissioner, One Public Works Drive, Waterford, Michigan, for the purpose of hearing any objections to said apportionment.

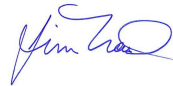
NOTICE IS FURTHER GIVEN, that the plans, specifications, route and course and estimate of cost of the Clinton River Water Resource Recovery Facility Drain Optimization Project and also a description of the area to be served thereby are on file in the office of the Oakland County Water Resources Commissioner, One Public Works Drive, Waterford, Michigan. The estimated cost of the drain project is \$75,000,000, but the apportionment percentages as finally established by the Drainage Board shall apply to the actual cost of the aforementioned portions of the drain project when finally completed.

NOTICE IS FURTHER GIVEN, that at said hearing the public corporations to be assessed, or any taxpayer thereof, will be entitled to be heard.

NOTICE IS FURTHER GIVEN, that after consideration of all objections to the apportionment the Drainage Board shall determine whether the apportionment fairly reflects the benefits to accrue to each public corporation and the extent to which each public corporation contributes to the conditions which make the drain project necessary. If the Drainage Board determines that the apportionment is equitable it will enter a Final Order of Apportionment confirming the apportionment. Section 483 of Act 40, Public Acts of Michigan, 1956, as amended, provides that the Final Order of Apportionment shall not be subject to attack in any court, except by proceedings in certiorari brought within 20 days after the order is filed in the office of the Oakland County Water Resources Commissioner, with the Chairperson of the Drainage Board for the Clinton River Water Resource Recovery Facility Drain Optimization Project, and that if no such proceedings shall be brought within said 20 day period the legality of the assessments for the drain shall not thereafter be questioned in any suit at law or in equity, either on jurisdictional or nonjurisdictional grounds.

NOTICE IS FURTHER GIVEN, that if the Drainage Board enters the Final Order of Apportionment a special assessment roll assessing the estimated cost of the drain project against said public corporations in accordance with the confirmed apportionment will be prepared and presented to the Drainage Board for approval.

This notice is given to and for the benefit of the aforesaid mentioned public corporations and all taxpayers thereof by order of the Drainage Board for the Clinton River Water Resource Recovery Facility Drain Optimization Project.



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Jim Nash  
Chairperson of the Drainage Board for the  
Clinton River Water Resource Recovery  
Facility Drain Optimization Project;  
Oakland County Water Resources Commissioner

4. That said notice shall be published twice in The Oakland Press, a newspaper published in the County of Oakland, the first publication to be not less than twenty (20) days prior to the time of said hearing.

5. That said notice shall be sent by registered or certified mail to the Clerk of each of the City of Auburn Hills, the Charter Township of Independence, the City of Lake Angelus, the Village of Lake Orion, the Charter Township of Oakland, the Charter Township of Orion, the Charter Township of Oxford, the Village of Oxford, the City of Pontiac, the City of Rochester, the City of Rochester Hills, the Charter Township of Waterford, the Charter Township of West Bloomfield, the County Clerk of the County of Oakland and the County Road Commission of the County of Oakland, which mailing shall be not less than twenty (20) days prior to the time of said hearing.

6. That all resolutions or parts of resolutions in conflict herewith are hereby rescinded.

ADOPTED: Yeas -  
Nays -

A memorandum from Lesli Maes, Operations Engineer, dated May 23, 2023, requesting the Board approve a not-to-exceed budget of \$100,000 to address Lease F building improvements and authorize PM Environmental to proceed with the Sub-Slab Depressurization System Package was presented. It was moved by Markham, supported by Woodward, to approve a not-to-exceed budget of \$100,000 to address Lease F building improvements and authorize PM Environmental to proceed with the Sub-Slab Depressurization System Package as presented.

ADOPTED: Yeas – 3  
Nays - 0

A memorandum from Jeffrey Parrott, Supervisor Right of Way, dated May 23, 2023, requesting the Board accept the Motor City Electric Co. offer to lease property and authorize the Chairperson to execute the lease on behalf of the Board was presented. It was moved by Markham, supported by Woodward, to accept the Motor City Electric Co. offer to lease property and authorize the Chairperson to execute the lease on behalf of the Board as presented.

ADOPTED: Yeas – 3  
Nays - 0

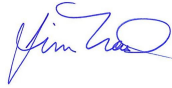
A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund from the Maintenance Fund in the amount of \$868,536.73 (as attached) was presented. It was moved by Markham, supported by Woodward, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund from the Maintenance Fund in the amount of \$868,536.73.

ADOPTED: Yeas – 3  
Nays – 0

It was moved by Nash, supported by Markham to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward and Ms. Markham.

ADOPTED: Yeas – 3  
Nays – 0

There being no further business to come before the meeting, upon motion by Markham, seconded by Woodward, and unanimously adopted, the meeting was adjourned.



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Chairperson

Dated: May 23, 2023



STATE OF MICHIGAN    )  
                                  ) SS:  
COUNTY OF OAKLAND )

I hereby certify that the foregoing is a true and complete copy of the minutes of a meeting of the Drainage Board for the Clinton River Water Resource Recovery Facility Drain Optimization Project, Oakland County, Michigan, held on May 23, 2023, and that the minutes are on file in the offices of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that notice of the meeting was given in accordance with the Open Meetings Act.

\_\_\_\_\_  
Chairperson of the Drainage Board

AFFIDAVIT OF MAILING NOTICE OF MEETING TO HEAR OBJECTIONS TO  
APPORTIONMENT OF COST

**RE: CLINTON RIVER WATER RESOURCE RECOVERY FACILITY  
DRAIN OPTIMIZATION PROJECT IN THE CITY OF AUBURN HILLS, CHARTER  
TOWNSHIP OF INDEPENDENCE, CITY OF LAKE ANGELUS, VILLAGE OF LAKE  
ORION, CHARTER TOWNSHIP OF OAKLAND, CHARTER TOWNSHIP OF ORION,  
CHARTER TOWNSHIP OF OXFORD, VILLAGE OF OXFORD, CITY OF PONTIAC,  
CITY OF ROCHESTER, CITY OF ROCHESTER HILLS, CHARTER TOWNSHIP OF  
WATERFORD AND CHARTER TOWNSHIP OF WEST BLOOMFIELD**

STATE OF MICHIGAN     )  
  )ss  
COUNTY OF OAKLAND    )

Stephanie Lajdziak, of the office of the Oakland County Water Resources Commissioner, of the County and State aforesaid, being duly sworn, deposes and says that on May 30, 2023, by United States certified mail, return receipt requested, she mailed (at least 20 days before the hearing described) a copy of the attached Notice of Meeting Re: Clinton River Water Resource Recovery Facility Drain Optimization Project in the above-described communities with respect to the meeting to hear objections to apportionment of cost to be held on June 27, 2023 to the following persons:

- SEE ATTACHED SERVICE LIST

Stephanie Lajdziak  
Stephanie Lajdziak, Staff Assistant

Subscribed and sworn to before me on  
this 6<sup>th</sup> day of June 2023

Bette J. Twyman  
NOTARY PUBLIC, Oakland County, Michigan

BETTE J. TWYMAN  
NOTARY PUBLIC, STATE OF MI  
COUNTY OF OAKLAND  
MY COMMISSION EXPIRES May 30, 2024  
ACTING IN COUNTY OF Oakland

1. City of Auburn Hills  
Attn: Laura Pierce  
1827 N. Squirrel Rd.  
Auburn Hills, MI 48326  
*Article No.: 7018 2290 0002 1421 2858*
  
2. Charter Township of Independence  
Attn: Cari Neubeck  
6483 Waldon Center Dr.  
Clarkston, MI 48346  
*Article No.: 7018 2290 0002 1421 2865*
  
3. City of Lake Angelus  
Attn: Sarah Razzaque  
45 Gallogly Rd.  
Lake Angelus, MI 48326  
*Article no.: 7018 2290 0002 1421 2872*
  
4. Village of Lake Orion  
Attn: Susan Galeczka  
21 E. Church St.  
Lake Orion, MI 48362  
*Article No.: 7018 2290 0002 1421 2759*
  
5. Charter Township of Oakland  
Attn: Dave Mabry  
4393 Collins Rd.  
Oakland Charter Twp., MI 48306  
*Article No. 7018 2290 0002 1421 2766*
  
6. Charter Township of Orion  
Attn: Penny Shults  
2323 Joslyn Rd.  
Lake Orion, MI 48360  
*Article No. 7018 2290 0002 1421 2773*
  
7. Charter Township of Oxford  
Attn: Curtis Wright  
300 Dunlap Rd.  
Oxford, MI 48371  
*Article No. 7018 2290 0002 1421 2780*
  
8. Village of Oxford  
Attn: Tere Onica  
22 W. Burdick  
P.O. Box 94

Oxford, MI 48371  
Article No. 7018 2290 0002 1421 2797

9. City of Pontiac  
Attn: Garland Doyle  
47450 Woodward Ave.  
Pontiac, MI 48342  
Article No. 7018 2290 0002 1421 2803

10. City of Rochester  
Attn: Lee Ann O'Connor  
400 Sixth St.  
Rochester, MI 48307  
Article No. 7018 2290 0002 1421 2810

11. City of Rochester Hills  
Attn: Leanne Scott  
1000 Rochester Hills Dr.  
Rochester Hills, MI 48309  
Article No. 7018 2290 0002 1421 2827

12. Charter Township of Waterford  
Attn: Kim Markee  
5200 Civic Center Dr.  
Waterford Twp., MI 48329  
Article No. 7018 2290 0002 1421 2834

13. Charter Township of West Bloomfield  
Attn: Debbie Binder  
4550 Walnut Lake Rd.  
West Bloomfield, MI 48323  
Article No. 7018 2290 0002 1421 2841

CITY OF AUBURN HILLS, CHARTER TOWNSHIP OF INDEPENDENCE, CITY OF LAKE ANGELUS, VILLAGE OF LAKE ORION, CHARTER TOWNSHIP OF OAKLAND, CHARTER TOWNSHIP OF ORION, CHARTER TOWNSHIP OF OXFORD, VILLAGE OF OXFORD, CITY OF PONTIAC, CITY OF ROCHESTER, CITY OF ROCHESTER HILLS, CHARTER TOWNSHIP OF WATERFORD AND CHARTER TOWNSHIP OF WEST BLOOMFIELD

COUNTY OF OAKLAND

CLINTON RIVER WATER RESOURCE RECOVERY FACILITY  
DRAIN OPTIMIZATION PROJECT  
NOTICE OF MEETING TO HEAR OBJECTIONS  
TO APPORTIONMENT OF COST OF ABOVE  
INTRA-COUNTY DRAIN PROJECT

NOTICE IS HEREBY GIVEN, that the cost of the Clinton River Water Resource Recovery Facility Drain Optimization Project which consists of locating, establishing, studying, designing and constructing an intra-county drain project consisting of improving the Clinton River Water Resource Recovery Facility, an intra-county drain for the treatment of sanitary sewage located in the City of Pontiac, and all improvements necessary to bring the Clinton River Water Resource Recovery Facility into compliance with the Consent Judgment ordered by the Ingham County Circuit Court on July 24, 2009, between the City of Pontiac and the Michigan Department of Environmental Quality (subsequently renamed as the Michigan Department of Environment, Great Lakes, and Energy) with respect to the Clinton River Water Resource Recovery Facility, in accordance with the provisions of Chapter 20 of Act 40, Public Acts of Michigan, 1956, as amended, all as more fully set forth in the petition filed by the Charter Township of Orion and the City of Auburn Hills with respect to the drain project, has been tentatively apportioned as follows, to wit:

<u>Public Corporation</u>	<u>Tentative Percentage of Cost</u>
City of Auburn Hills	5.257%
Charter Township of Independence	4.090%
City of Lake Angelus	0.000%
Village of Lake Orion	0.570%
Charter Township of Oakland	1.315%
Charter Township of Orion	4.487%
Charter Township of Oxford	1.841%
Village of Oxford	0.572%
City of Pontiac	54.800%
City of Rochester	2.486%
City of Rochester Hills	10.242%
Charter Township of Waterford	11.198%
Charter Township of West Bloomfield	3.142%

NOTICE IS FURTHER GIVEN, that the Drainage Board for the Clinton River Water Resource Recovery Facility Drain Optimization Project, will meet at 2:00 p.m., prevailing Eastern Time, on the 27th day of June, 2023, in the Office of the Oakland County Water Resources Commissioner, One Public Works Drive, Waterford, Michigan, for the purpose of hearing any objections to said apportionment.

NOTICE IS FURTHER GIVEN, that the plans, specifications, route and course and estimate of cost of the Clinton River Water Resource Recovery Facility Drain Optimization Project and also a description of the area to be served thereby are on file in the office of the Oakland County Water Resources Commissioner, One Public Works Drive, Waterford, Michigan. The estimated cost of the drain project is \$75,000,000, but the apportionment percentages as finally established by the Drainage Board shall apply to the actual cost of the aforementioned portions of the drain project when finally completed.

NOTICE IS FURTHER GIVEN, that at said hearing the public corporations to be assessed, or any taxpayer thereof, will be entitled to be heard.

NOTICE IS FURTHER GIVEN, that after consideration of all objections to the apportionment the Drainage Board shall determine whether the apportionment fairly reflects the benefits to accrue to each public corporation and the extent to which each public corporation contributes to the conditions which make the drain project necessary. If the Drainage Board determines that the apportionment is equitable it will enter a Final Order of Apportionment confirming the apportionment. Section 483 of Act 40, Public Acts of Michigan, 1956, as amended, provides that the Final Order of Apportionment shall not be subject to attack in any court, except by proceedings in certiorari brought within 20 days after the order is filed in the office of the Oakland County Water Resources Commissioner, with the Chairperson of the Drainage Board for the Clinton River Water Resource Recovery Facility Drain Optimization Project, and that if no such proceedings shall be brought within said 20 day period the legality of the assessments for the drain shall not thereafter be questioned in any suit at law or in equity, either on jurisdictional or non jurisdictional grounds.

NOTICE IS FURTHER GIVEN, that if the Drainage Board enters the Final Order of Apportionment a special assessment roll assessing the estimated cost of the drain project against said public corporations in accordance with the confirmed apportionment will be prepared and presented to the Drainage Board for approval.

This notice is given to and for the benefit of the aforesaid mentioned public corporations and all taxpayers thereof by order of the Drainage Board for the Clinton River Water Resource Recovery Facility Drain Optimization Project.



Jim Nash  
Chairperson of the Drainage Board for the  
Clinton River Water Resource Recovery  
Facility Drain Optimization Project;  
Oakland County Water Resources Commissioner

MINUTES OF MEETING OF THE DRAINAGE BOARD  
FOR THE CLINTON RIVER WATER RESOURCE RECOVERY FACILITY  
DRAIN OPTIMIZATION PROJECT

June 27, 2023

At a meeting of the Drainage Board for the Clinton River Water Resource Recovery Facility Drain Optimization Project held in Waterford, Michigan, on the 27th day of June, 2023.

PRESENT:

ABSENT:

The meeting was called to order by the Chairperson.

The Chairperson presented the minutes of the meeting of this Board held on May 23, 2023. Upon motion by \_\_\_\_\_, seconded by \_\_\_\_\_ and unanimously adopted, the minutes were approved as presented.

The Chairperson announced that this was the time and place set to hear any objections to the apportionment of the cost of the Clinton River Water Resource Recovery Facility Drain Optimization Project as tentatively adopted by this Drainage Board on May 23, 2023 and as set forth in the notice of this hearing. The Chairperson presented affidavits of the publication and mailing of the notice of this hearing.

The Chairperson inquired if any public corporation to be assessed or any taxpayer thereof desired to object to the tentative apportionment of the cost of the Clinton River Water Resource Recovery Facility Drain Optimization Project as set forth in the resolution of this

Board adopted May 23, 2023 and in the notice of this hearing. There were the following objections or questions: [\_\_\_\_\_] [None].

The Chairperson declared the hearing closed.

The following resolution was offered by \_\_\_\_\_ and seconded by \_\_\_\_\_:

WHEREAS, the Drainage Board for the Clinton River Water Resource Recovery Facility Drain Optimization Project, on the 23rd day of May, 2023, tentatively established an apportionment of the cost of the Clinton River Water Resource Recovery Facility Drain Optimization Project, to be borne by the several public corporations, as follows:

City of Auburn Hills	5.257%
Charter Township of Independence	4.090%
City of Lake Angelus	0.000%
Village of Lake Orion	0.570%
Charter Township of Oakland	1.315%
Charter Township of Orion	4.487%
Charter Township of Oxford	1.841%
Village of Oxford	0.572%
City of Pontiac	54.800%
City of Rochester	2.486%
City of Rochester Hills	10.242%
Charter Township of Waterford	11.198%
Charter Township of West Bloomfield	3.142%

; and

WHEREAS, after due notice the Drainage Board met on the 27th day of June, 2023 to hear any objections to the apportionment; and

WHEREAS, the apportionment of the cost of the Clinton River Water Resource Recovery Facility Drain Optimization Project has been made by taking into consideration the benefits to accrue to each of the public corporations to be assessed and by taking into consideration the extent to which each such public corporation contributes to the conditions

which made the Clinton River Water Resource Recovery Facility Drain Optimization Project necessary;

WHEREAS, this Drainage Board has given due and full consideration to all objections offered thereto; and

WHEREAS, the Clinton River Water Resource Recovery Facility Drain Optimization Project is necessary for the public health.

NOW, THEREFORE, BE IT RESOLVED BY THE DRAINAGE BOARD FOR THE CLINTON RIVER WATER RESOURCE RECOVERY FACILITY DRAIN OPTIMIZATION PROJECT:

1. That the apportionment of cost as above set forth be and the same is fixed and confirmed.

2. That the Chairperson of this Drainage Board is authorized and directed to issue on behalf of the Board its Final Order of Apportionment setting forth the apportionment against the several public corporations as herein fixed and confirmed.

3. That all former resolutions and orders of this Board, insofar as the same may be in conflict with the terms of this resolution, are rescinded.

ADOPTED: Yeas --

Nays --

The Chairperson proceeded to sign the Final Order of Apportionment as directed in the foregoing resolution, and he then presented the order to the Board. The order was dated June 27, 2023.

It was moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Final Order of Apportionment In Re Clinton River Water Resource Recovery Facility Drain Optimization Project, dated June 27, 2023, be approved and filed with the Chairperson.

ADOPTED: Yeas --

Nays --



Upon motion by \_\_\_\_\_, seconded by \_\_\_\_\_ and unanimously adopted, the meeting was adjourned.

\_\_\_\_\_  
Chairperson

June 27, 2023

STATE OF MICHIGAN    )  
                                  )  
COUNTY OF OAKLAND   )

I hereby certify that the foregoing is a true and complete copy of the minutes of a meeting of the Drainage Board for the Clinton River Water Resource Recovery Facility Drain Optimization Project, Oakland County, Michigan, held on June 27, 2023, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that notice of the meeting was given in accordance with the Michigan Drain Code and the Open Meetings Act.

\_\_\_\_\_  
Chairperson of the Drainage Board

Dated:        June 27, 2023

4856-6870-9479 v1 [9007-447]

FINAL ORDER OF APPORTIONMENT

IN RE

CLINTON RIVER WATER RESOURCE RECOVERY FACILITY  
DRAIN OPTIMIZATION PROJECT

In accordance with a resolution adopted by the Drainage Board for the Clinton River Water Resource Recovery Facility Drain Optimization Project on the 27th day of June, 2023, the apportionment of the cost of the Clinton River Water Resource Recovery Facility Drain Optimization Project to be borne by the several public corporations is as follows:

City of Auburn Hills	5.257%
Charter Township of Independence	4.090%
City of Lake Angelus	0.000%
Village of Lake Orion	0.570%
Charter Township of Oakland	1.315%
Charter Township of Orion	4.487%
Charter Township of Oxford	1.841%
Village of Oxford	0.572%
City of Pontiac	54.800%
City of Rochester	2.486%
City of Rochester Hills	10.242%
Charter Township of Waterford	11.198%
Charter Township of West Bloomfield	<u>3.142%</u>
	100.000%

DRAINAGE BOARD FOR THE CLINTON RIVER  
WATER RESOURCE RECOVERY FACILITY  
DRAIN OPTIMIZATION PROJECT

By \_\_\_\_\_  
Chairperson

Dated: June 27, 2023

Filed: June 27, 2023

**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER****MEMORANDUM**

**TO:** Jim Nash, Chairman Clinton River Water Resource Recovery Facility Drain Board

**FROM:** Razik Alsaigh, P.E., Civil Engineer III

**SUBJECT:** CRWRRF Optimization Project – Phase I Project Estimate

**DATE:** June 27, 2023

At its November 15, 2022 meeting, the Drainage Board for the Clinton River Water Resource Recovery Facility Drainage District authorized the award of the CRWRRF Optimization Project design to Jacobs Consultant, Inc. Three months later, on February 28, 2023, the Board authorized the award of the CRWRRF Optimization Project Construction Manager at Risk to Walsh Construction Group.

Since then, Walsh developed construction cost estimates based on design documents that exceeded the initial anticipated project cost. The initial project was addressed in two parts. The first part was intended to deal with the electrical components while the second part is focused on improvement of the treatment capabilities of the secondary clarifiers. Accordingly, the Optimization Project is being separated into two phases. The CRWRRF Optimization Project Phase I is going out for bids this summer, while Phase II will be temporarily suspended. Phase I of the project consists primarily of:

- New 15 kV medium voltage switchgear to replace existing old switchgear, currently residing in the 100-year flood plain.
- Construction of a new electrical building at the north end of the property to accommodate the new switchgear.
- The installation of two backup 1,500 kW generators to consolidate emergency generators at the plant.
- The installation of two 600 kW power and heat generators called “Cogen” units.
- Electrical improvement to the East Boulevard Plant.

Now, that the Phase I project design is complete, the current total project cost for the CRWRRF Optimization Phase I Project is \$62,645,000. This amount is based on Walsh’s latest construction cost estimate and other costs needed to complete the project as detailed in the attached document.

**Requested Action : Receive and file the Total Project Cost of \$62,645,000 for the CRWRRF Optimization Phase I Project, based on available cost estimates prior to project bid results.**



**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the CLINTON RIVER WATER RESOURCE RECOVERY FACILITY DRAIN - (Maintenance)

**FROM:** Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting *For Shawn Phelps*

**DATE:** June 27, 2023

**SUBJECT:** Request for Approval of Invoices

The following is a detail of charges paid from the Drain Revolving Fund and Invoices

Payable To	Ref No.	For	Amount
Cambi Inc	V # SIN00185679	Invoice # 609810-SP-026 - Material and Supplies	\$ 12,039.28
CleanNet of Greater Michigan, Inc	V # SIN00179688	Invoice # DET0105527 - Contracted Services - June 2023	1,601.38
CSM Mechanical LLC	V # SIN00189869	Invoice # 22-435.4 - Contracted Services	17,213.18
D3W Industries	V # SIN00187332	Invoice # 3864 - Material and Supplies	5,720.00
D3W Industries	V # SIN00189868	Invoice # 3876 - Material and Supplies	5,720.00
Eurofins Environment Testing America	V # SIN00189865	Invoice # 1900052882 - Laboratory Fees	2,786.20
Gamalski Building Specialties Inc	V # SIN00188221	Invoice # 161763 - Material and Supplies	3,500.00
Haviland Products Company	V # SIN00184538	Invoice # 471798 - Chemical Treatment	6,051.00
Haviland Products Company	TBP	Invoice # 471797 - Chemical Treatment	2,389.10
Jones Chemicals Inc	V # SIN00184539	Invoice # 913173 - Chemical Treatment	6,927.13
Jones Chemicals Inc	V # SIN00184541	Invoice # 913382 - Chemical Treatment	2,358.22
Jones Chemicals Inc	V # SIN00186249	Invoice # 914318 - Chemical Treatment	6,920.66
Jones Chemicals Inc	V # SIN00189864	Invoice # 915356 - Chemical Treatment	7,087.15
Jones Chemicals Inc	TBP	Invoice # 915623 - Chemical Treatment	3,480.20
Paragon Laboratories	V # SIN00186270	Invoice # 104420-233639 - Lab Fees	1,222.00
PVS Technologies Inc	V # SIN00184554	Invoice # 333987 - Chemical Treatment	5,154.68
PVS Technologies Inc	V # SIN00186297	Invoice # 334350 - Chemical Treatment	2,168.76
PVS Technologies Inc	V # SIN00187339	Invoice # 334973 - Chemical Treatment	4,300.32
PVS Technologies Inc	V # SIN00188227	Invoice # 335250 - Chemical Treatment	4,023.80
Southeast Michigan Council of Governments	V # SIN00188728	Invoice # INV00930 - SEMCOG Membership Dues - 2021	4,215.56
Southeast Michigan Council of Governments	V # SIN00188730	Invoice # INV01359 - SEMCOG Membership Dues - 2022	4,215.56
Waste Management	V # SIN00187345	Invoice # 8684379-1714-9 Garbage & Rubbish Disposal	2,595.93
		<b>Subtotal</b>	<b>\$ 111,690.11</b>
Jacobs Consultants, Inc	V # SIN00189874	Invoice # C6A21700-05 - Engineering Survey - Proj # 1-7239	\$ 422,210.70
JMK Engineering Inc	V # SIN00189872	Invoice # 1516 - Professional Services - 05/31/23 - Proj # 1-7239	3,179.00
		<b>Subtotal - Project 1-7239</b>	<b>\$ 425,389.70</b>
Fishbeck	V # SIN00189855	Invoice # 424302 - Engineering Services - 06/09/23 - Proj # 1-3042	\$ 904.90
		<b>Subtotal - Project 1-3042</b>	<b>\$ 904.90</b>
Tetra Tech, Inc	V # SIN00189876	Invoice # 52081416 - Project Construction - 5/26/23	\$ 6,070.00
		<b>Subtotal - Project 1-3304</b>	<b>\$ 6,070.00</b>
		<b>Total</b>	<b>\$ 544,054.71</b>

### **3. Northwest Oakland Sanitary Sewer Drain**

AGENDA

MEETING OF THE DRAINAGE BOARD FOR THE  
NORTHWEST OAKLAND SANITARY SEWER DRAIN

June 27, 2023

1. Call meeting to order.
2. Approve minutes of meeting of May 23, 2023.
3. Public Comments
4. Offer and file proofs of publication and of mailing of notice of hearing on necessity.
5. Open the hearing on necessity.
6. Ask for any written objections.
7. Ask for comments or objections from those present.
8. Close the hearing.
9. Adopt resolution approving petition and drain project and directing issuance of Final Order of Determination.
10. Chairperson executes Final Order of Determination and presents it to Board.
11. Adopt resolution to accept and file Final Order of Determination.
12. Adopt resolution approving plans and specifications for drain project.
13. Adopt resolution approving route and course of drain.
14. Adopt resolution designating area to be served by drain project.
15. Adopt resolution approving estimate of cost of drain project (\$-0-).
16. Adopt resolution to:
  - A. Approve tentative apportionment of cost of drain project.

Village of Ortonville	22.8%
Township of Groveland	25.4%
Township of Holly	29.2%
Charter Township of Brandon	22.6%
  - B. Set hearing date on tentative apportionment.



- C. Approve the form of notice.
  - D. Direct that notice be published.
  - E. Direct that notice be mailed
- 
- 17. Present the Kearsley Creek Interceptor Construction Agreement to receive and file
  - 18. Present Memorandum from Jen Cook, P.E., Project Engineer and Sid Lockhart, P.E., Deputy and Special Project Manager, dated June 27, 2023, requesting the Board to receive and file the Project Update on the Request for Proposal for the Engineering Study for the Drainage District Project
  - 19. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$7,939.50
  - 20. Approve pro rata payment to Drainage Board Members
  - 21. Other business.
  - 12. Adjourn.

DRAINAGE BOARD FOR THE NORTHWEST OAKLAND SANITARY SEWER DRAIN  
FIRST MEETING FOR NEW DRAIN PROJECT

MAY 23, 2023

The first meeting of the Drainage Board for the hereinafter mentioned Oakland County, Michigan drain project was held at the office of the Oakland County Water Resources Commissioner, Waterford, Michigan on May 23, 2023.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: None.

The meeting was called to order by the Chairperson.

Minutes of the meeting held April 25, 2023, were presented for consideration. It was moved by Markham, supported by Woodward, that the minutes be approved.

ADOPTED: Yeas - 3

Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

The Chairperson presented to the Drainage Board the petitions referred to in the following resolution, attached to which petitions was a certified copy of each resolution of the respective governing body of the public corporation signing the same, authorizing the execution of the respective petition. The Chairperson stated that the petitions with the attached resolutions were filed in his office on April 24, 2023, by the Village of Ortonville, on May 1, 2023, by the Township of Groveland, and on May 1, 2023, by the Charter Township of Brandon. After examination and consideration of the petitions, by unanimous consent, they were ordered filed with the Chairperson.

The following resolution was offered by Markham and seconded by Woodward:

BE IT RESOLVED BY THE DRAINAGE BOARD FOR THE HEREINAFTER MENTIONED OAKLAND COUNTY, MICHIGAN DRAIN PROJECT, as follows:

1. That this Drainage Board has considered the petitions and attached resolutions filed with the Oakland County Water Resources Commissioner on May 3, 2023 by the Village of Ortonville; on May 10, 2023 by the Township of Groveland; and on May 3, 2023 by the Charter Township of Brandon, which petitions are as follows:

2. That this Drainage Board determines that the sanitary wastewater to be carried by the proposed drain project originates in the County of Oakland only; and that the drain project is necessary for the public health.

3. That this Drainage Board tentatively determines that the petitions are sufficient; that the drain project proposed therein is practical; and that the following public corporations be assessed to pay the cost of the project to wit:

Village of Ortonville  
Township of Groveland  
Township of Holly  
Charter Township of Brandon

4. That the name “NORTHWEST OAKLAND SANITARY SEWER DRAIN” is hereby given to the drain project and the name “NORTHWEST OAKLAND SANITARY SEWER DRAIN DRAINAGE DISTRICT” is hereby confirmed for the drainage district therefor.

5. That this Drainage District shall meet on the 27<sup>th</sup> day of June 2023, at 2:00 p.m., prevailing Eastern Time at the Office of the Oakland County Water Resources Commissioner, Waterford, Michigan for the purpose of hearing any objections to the aforementioned drain project, to the petitions therefor, and to the matter of assessing the cost of the drain project to the public corporations above named.

6. That a notice of said meeting shall be prepared which notice shall contain the information required by the Drain Code and shall be published twice in The Oakland Press, a newspaper published in the County of Oakland, State of Michigan, the first publication to be not less than twenty (20) days prior to the time of the hearing.

7. That the notice shall be sent by registered or certified mail to each the Clerk of the Village of Ortonville, the Township of Groveland, the Township of Holly and the Charter

Township of Brandon, which mailing shall be made not less than twenty (20) days prior to the time of the hearing.

ADOPTED: Yeas - 3

Nays - 0

A memorandum from Brian Coburn, P.E., Manager dated May 23, 2023, requesting the Board approve the agreement with Genesee County to purchase sewer capacity in the Kearsley Creek Interceptor as presented and authorize the Chairperson to execute the agreement after the \$10 million appropriation has been approved by Oakland County Board of Commissioners was presented. Motion by Markham, seconded by Woodward to approve the agreement with Genesee County to purchase sewer capacity in the Kearsley Creek Interceptor as presented and authorize the Chairperson to execute the agreement after the \$10 million appropriation has been approved by Oakland County Board of Commissioners as presented.

ADOPTED: Yeas - 3

Nays - 0

A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund from the Maintenance Fund in the amount of \$9,028.10 (as attached) was presented. It was moved by Markham, supported by Woodward, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund from the Maintenance Fund in the amount of \$9,028.10.

ADOPTED: Yeas - 3

Nays – 0

Motion by Woodward, seconded by Markham, that the Drain Board resolves that it is the intention of the Board that Oakland County Park and Recreation not be required to pay its future

capital connection charges related to the Groveland Oaks County Park in consideration for the \$10 Million appropriation approved by the Oakland County Board of Commissioners for the benefit of the Drainage District.

ADOPTED: Yeas - 3

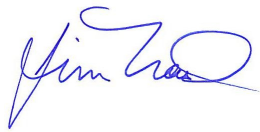
Nays - 0

Motion by Nash, seconded by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward and Ms. Markham

ADOPTED: Yeas - 3

Nays - 0

Upon motion by Markham, seconded by Woodward and unanimously adopted, the meeting was adjourned.



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Chairperson

May 23, 2023

STATE OF MICHIGAN     )  
  )SS  
COUNTY OF OAKLAND    )

I hereby certify that the foregoing is a true and complete copy of the minutes of a meeting of the Drainage Board for the Northwest Oakland Sanitary Sewer Drain, Oakland County, Michigan, held on May 23, 2023, and that the minutes are on file in the offices of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that notice of the meeting was given in accordance with the Open Meetings Act.



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Chairperson of the Drainage Board

Dated: May 23, 2022

AFFIDAVIT OF MAILING NOTICE OF HEARING

**RE: PETITIONS TO LOCATE, ESTABLISH AND CONSTRUCT AN INTRA-COUNTY DRAIN PROJECT IN THE TOWNSHIP OF HOLLY, TOWNSHIP OF GROVELAND, VILLAGE OF ORTONVILLE, CHARTER TOWNSHIP OF BRANDON, OAKLAND COUNTY, MICHIGAN**

STATE OF MICHIGAN     )  
  )ss  
COUNTY OF OAKLAND    )

Stephanie Lajdziak, of the office of the Oakland County Water Resources Commissioner, of the County and State aforesaid, being duly sworn, deposes and says that on May 30, 2023 by United States certified mail, return receipt requested, she mailed (at least 20 days before the hearing described) a copy of the attached Notice of Hearing Re: Petitions to locate, establish and construct an intra-county drain project in the above-described communities with respect to the hearing to be held on June 27, 2023 to the following persons:

- SEE ATTACHED SERVICE LIST

Stephanie Lajdziak  
Stephanie Lajdziak, Staff Assistant

Subscribed and sworn to before me  
this 30<sup>th</sup> day of May 2023

Bette J. Twyman  
NOTARY PUBLIC, Oakland County, Michigan

BETTE J. TWYMAN  
NOTARY PUBLIC, STATE OF MI  
COUNTY OF OAKLAND  
MY COMMISSION EXPIRES May 30, 2024  
ACTING IN COUNTY OF Oakland



1. Township of Holly  
Attn: Karin Winchester, Township Clerk  
102 Civic Drive  
Holly, MI 48442

*Article No.: 7018 2290 0002 1421 2919*

2. Township of Groveland  
Attn: Patti Back, Township Clerk  
4695 Grange Hall  
Groveland Township, MI 48442

*Article No.: 7018 2290 0002 1421 2896*

3. Village of Ortonville  
Attn: Amber Wilson, Village Clerk  
476 Mill Street  
P.O. Box 928  
Ortonville, MI 48462

*Article no.: 7018 2290 0002 1421 2889*

4. Charter Township of Brandon  
Attn: Roselyn Blair, Township Clerk  
395 Mill Street  
P.O. Box 929  
Ortonville, MI 48462

*Article No.: 7018 2290 0002 1421 2902*

**VILLAGE OF ORTONVILLE, TOWNSHIP  
OF GROVELAND, TOWNSHIP OF HOLLY,  
CHARTER TOWNSHIP OF BRANDON  
COUNTY OF OAKLAND**

**NOTICE OF HEARING**

RE: PETITIONS TO LOCATE, ESTABLISH AND CONSTRUCT  
AN INTRA-COUNTY DRAIN PROJECT IN THE VILLAGE OF  
ORTONVILLE, TOWNSHIP OF GROVELAND, TOWNSHIP  
OF HOLLY, CHARTER TOWNSHIP OF BRANDON,  
OAKLAND COUNTY, MICHIGAN.

NOTICE IS HEREBY GIVEN, that pursuant to the provisions of  
Chapter 20 of Act No. 40 of the Public Acts of 1956, as amended,  
petitions were filed with the Water Resources Commissioner of Oakland  
County, Michigan, petitioning for the location, establishment and  
construction of an intra-county drain project consisting of improvements  
to the Northwest Oakland Sanitary Sewer Drain to extend sanitary  
sewer service from the Oakland County, Michigan border with Genesee  
County, Michigan to serve certain properties located within the Village of  
Ortonville, Groveland Township, Holly Township, and Brandon Township.

NOTICE IS FURTHER GIVEN, that the Drainage Board for the  
drain project has considered the petitions and has made a tentative  
determination that the petitions are sufficient and that the drain project  
is practical; has given the name "NORTHWEST OAKLAND SANITARY  
SEWER DRAIN" as the name of the drain project and confirming the  
name "NORTHWEST OAKLAND SANITARY SEWER DRAINAGE  
DISTRICT" as the name of the drainage district therefor, and has made  
a tentative determination that the following public corporations should be  
assessed for the cost of the drain project, to wit:

Village of Ortonville  
Township of Groveland  
Township of Holly  
Charter Township of Brandon

NOTICE IS FURTHER GIVEN, that the Drainage Board will meet on  
the 27th day of June, 2023, at 2:00 p.m., prevailing Eastern Time, at  
the Office of the Oakland County Water Resources Commissioner, One  
Public Works Drive, Waterford, Michigan, for the purpose of hearing any  
objections to the drain project, to the petitions therefor, and to the matter  
of assessing the cost thereof to the public corporations above named.  
This notice is given to and for the benefit of the said public corporations  
and all taxpayers thereof. At the hearing any of said public corporations  
or any taxpayer thereof will be entitled to be heard.

NOTICE IS FURTHER GIVEN, that after such hearing the Drainage  
Board shall make a determination as to the sufficiency of the petitions,  
the practicability of the drain project, whether the drain project should  
be constructed, and if so, the public corporations to be assessed  
and shall issue an order known as the Final Order of Determination.  
Section 483 of Act No. 40 of the Public Acts of 1956, as amended,  
provides that the Final Order of Determination shall not be subject to  
attack in any court, except by proceedings in certiorari brought within  
20 days after the order is filed in the Office of the Oakland County Water  
Resources Commissioner, the Chairperson of the Drainage Board  
for the Northwest Oakland Sanitary Sewer Drain, and that if no such  
proceeding shall be brought within said 20 day period the drain project  
shall not thereafter be questioned in any suit at law or in equity, either on  
jurisdictional or non-jurisdictional grounds.

This notice is given by order of the Drainage Board for the Northwest  
Oakland Sanitary Sewer Drain.



Jim Nash  
Chairperson of the Drainage Board for the  
Northwest Oakland Sanitary Sewer Drain;  
Oakland County Water Resources  
Commissioner

MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
NORTHWEST OAKLAND SANITARY SEWER DRAIN

June 27, 2023

A meeting of the Drainage Board for the Northwest Oakland Sanitary Sewer Drain was held in Waterford, Michigan, on June 27, 2023.

PRESENT:

ABSENT:

The meeting was called to order by the Chairperson. The minutes of the May 23, 2023 meeting of this Board were presented. It was moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ and unanimously adopted that the said minutes be approved as presented.

The Chairperson presented proofs of the publication and mailing of the notice of hearing. By [unanimous consent] the proofs of publication and mailing were placed on file with the Chairperson.

The Chairperson announced that this was the time and place for the meeting of this Board to hear any objections to the proposed drain project, to the petition therefor, and to the matter of assessing the cost of the project to the public corporation heretofore designated by this Board.

There were the following questions and objections:

There were the following written objections:

The Chairperson declared the hearing closed.

The following resolution was offered by \_\_\_\_\_ and seconded by \_\_\_\_\_:

WHEREAS, petitions were filed with the Oakland County Water Resources Commissioner under the provisions of Chapter 20 of Act 40, Public Acts of Michigan, 1956, as amended, on April 24, 2023, by the Village of Ortonville, on May 1, 2023, by the Township of Groveland, and on May 1, 2023, by the Charter Township of Brandon, Oakland County, Michigan, petitioning for the location, establishment and construction of an intra-county drain project, as set forth in the petitions, which proposed drain project is necessary for the public health; and

WHEREAS, the necessary proceedings have been taken in respect to the petition including the holding of a hearing for the purpose of receiving any objections to the proposed drain project, to the petition therefor and to the matter of assessing the cost to the public corporation named in the notice of said hearing.

THEREFORE, BE IT RESOLVED BY THE DRAINAGE BOARD FOR THE NORTHWEST OAKLAND SANITARY SEWER DRAIN, as follows:

1. That the petition is sufficient in all respects; that the drain project is practicable and should be constructed; that it has become necessary for the public health to construct the drain project; and that the following public corporations should be assessed for the cost thereof, to-wit:

Village of Ortonville  
Township of Groveland  
Township of Holly  
Charter Township of Brandon

2. That the Chairperson of this Board is hereby authorized and directed to issue on behalf of the Board its final order of determination in accordance with the determinations made in this resolution.

ADOPTED: Yeas –

Nays -

The Chairperson of the Drainage Board proceeded to execute the Final Order of Determination and after doing so, presented the same to the Drainage Board. The order was executed and dated on June \_\_\_\_, 2023.

It was moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Final Order of Determination, In Re Northwest Oakland Sanitary Sewer Drain, as this date executed and presented to this Drainage Board by the Chairperson, be and it hereby is confirmed, ratified and approved and ordered filed with the Chairperson on this date.

ADOPTED: Yeas -

Nays -

The Chairperson presented plans and specifications for the Northwest Oakland Sanitary Sewer Drain previously prepared by registered professional engineers and on file with the Oakland County Water Resources Commissioner. After examination of said plans and specifications it was, on motion by \_\_\_\_\_, seconded by \_\_\_\_\_:

RESOLVED, that said plans and specifications be and they hereby are received, adopted and approved and ordered filed with the Chairperson of this Board.

ADOPTED: Yeas -  
Nays -

The Chairperson presented a route and course of the Northwest Oakland Sanitary Sewer Drain.

The following resolution was offered by \_\_\_\_\_ and seconded by \_\_\_\_\_:

RESOLVED, that the following be approved and adopted as the route and course of the Northwest Oakland Sanitary Sewer Drain:

(See Attached Exhibit A)

ADOPTED: Yeas –  
Nays –

The Chairperson presented a description of the area to be served by the drain project.

The following resolution was offered by \_\_\_\_\_ and seconded by \_\_\_\_\_:

RESOLVED, that the following be designated as the area to be served by the drain project:

(See Attached Exhibit B)

ADOPTED: Yeas –  
Nays –

The following resolution was offered by \_\_\_\_\_ and seconded by \_\_\_\_\_:

The Chairperson presented an estimate of the cost of the drain project, which estimate is in the aggregate amount of \$-0-

Upon motion by \_\_\_\_\_, seconded by \_\_\_\_\_, it was:

RESOLVED, that the estimate of cost of the drain project, in the amount of \$-0-, be and the same hereby is adopted, approved and accepted.

ADOPTED: Yeas -  
Nays -

The following resolution was offered by \_\_\_\_\_ and seconded by \_\_\_\_\_ :

A tentative apportionment of costs was presented to the Board and ordered filed with the Chairperson.

The following resolution was offered by \_\_\_\_\_ and seconded by \_\_\_\_\_ :

RESOLVED, as follows:

1. That this Board hereby tentatively establishes that the cost of the Northwest Oakland Sanitary Sewer Drain, if any, shall be apportioned against public corporations, as follows:

<u>Public Corporation</u>	<u>Tentative Percentage of Cost</u>
Village of Ortonville	22.8%
Township of Groveland	25.4%
Township of Holly	29.2%
Charter Township of Brandon	22.6%

2. That this Drainage Board shall meet on the \_\_\_ day of July, 2023, at 2:00 p.m., prevailing Eastern Time, at the Office of the Oakland County Water Resources Commissioner, One Public Works Drive, Waterford, Michigan, for the purpose of hearing any objections to said apportionment.

3. That the notice of such hearing shall be in substantially the following form, to wit:

VILLAGE OF ORTONVILLE; TOWNSHIP OF GROVELAND; TOWNSHIP OF HOLLY; CHARTER TOWNSHIP OF BRANDON  
COUNTY OF OAKLAND

NORTHWEST OAKLAND SANITARY SEWER DRAIN  
NOTICE OF MEETING TO HEAR OBJECTIONS  
TO APPORTIONMENT OF COST OF ABOVE  
INTRA-COUNTY DRAIN PROJECT

NOTICE IS HEREBY GIVEN, that the cost of the Northwest Oakland Sanitary Sewer Drain which consists of locating, establishing and constructing an intra-county drain project consisting of improvements to the Northwest Oakland Sanitary Sewer Drain to extend sanitary sewer service from the Oakland County, Michigan border with Genesee County, Michigan to serve certain properties located within the Village of Ortonville, Groveland Township, Holly Township, and Brandon Township, all as more fully set forth in the petition filed by the Village of Ortonville, the Township of Groveland, and the Charter Township of Brandon with respect to the drain project, has been tentatively apportioned as follows, to wit:

<u>Public Corporation</u>	<u>Tentative Percentage of Cost</u>
Village of Ortonville	22.8%
Township of Groveland	25.4%
Township of Holly	29.2%
Charter Township of Brandon	<u>22.6%</u>

NOTICE IS FURTHER GIVEN, that the Drainage Board for the Northwest Oakland Sanitary Sewer Drain, will meet at 2:00 p.m., prevailing Eastern Time, on the \_\_\_\_ day of July, 2023, in the Office of the Oakland County Water Resources Commissioner, One Public Works Drive, Waterford, Michigan, for the purpose of hearing any objections to said apportionment.

NOTICE IS FURTHER GIVEN, that the plans, specifications, route and course and estimate of cost of the Northwest Oakland Sanitary Sewer Drain and also a description of the area to be served thereby are on file in the office of the Oakland County Water Resources Commissioner, One Public Works Drive, Waterford, Michigan. The estimated cost of the drain project is \$-0-, but the apportionment percentages as finally established by the Drainage Board shall apply to the actual cost of the aforementioned portions of the drain project when finally completed.

NOTICE IS FURTHER GIVEN, that at said hearing the public corporations to be assessed, or any taxpayer thereof, will be entitled to be heard.

NOTICE IS FURTHER GIVEN, that after consideration of all objections to the apportionment the Drainage Board shall determine whether the apportionment fairly reflects the benefits to accrue to each public corporation and the extent to which each public corporation contributes to the conditions which make the drain project necessary. If the Drainage Board determines that the apportionment is equitable it will enter a Final Order of Apportionment confirming the apportionment. Section 483 of Act 40, Public Acts of Michigan, 1956, as amended, provides that the Final Order of Apportionment shall not be subject to attack in any court, except by proceedings in certiorari brought within 20 days after the order is filed in the office of the Oakland County Water Resources Commissioner, with the Chairperson of the Drainage Board for the Northwest Oakland Sanitary Sewer Drain, and that if no such proceedings shall be brought within said 20 day period the legality of the assessments for the drain shall not thereafter be questioned in any suit at law or in equity, either on jurisdictional or nonjurisdictional grounds.

NOTICE IS FURTHER GIVEN, that if the Drainage Board enters the Final Order of Apportionment a special assessment roll assessing the estimated cost of the drain project against said public corporations in accordance with the confirmed apportionment will be prepared and presented to the Drainage Board for approval.

This notice is given to and for the benefit of the aforesaid mentioned public corporations and all taxpayers thereof by order of the Drainage Board for the Northwest Oakland Sanitary Sewer Drain.

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Jim Nash  
Chairperson of the Drainage Board for the

Northwest Oakland Sanitary Sewer Drain;  
Oakland County Water Resources Commissioner

4. That said notice shall be published twice in The Oakland Press, a newspaper published in the County of Oakland, the first publication to be not less than twenty (20) days prior to the time of said hearing.

5. That said notice shall be sent by registered or certified mail to the Clerk of each of the Village of Ortonville, Township of Groveland, Township of Holly, Charter Township of Brandon, the County Clerk of the County of Oakland and the County Road Commission of the County of Oakland, which mailing shall be not less than twenty (20) days prior to the time of said hearing.

6. That all resolutions or parts of resolutions in conflict herewith are hereby rescinded.

ADOPTED: Yeas -  
Nays -

There being no further business to come before the meeting, upon motion by \_\_\_\_\_, seconded by \_\_\_\_\_, and unanimously adopted, the meeting was adjourned.

\_\_\_\_\_  
Chairperson

Dated: June \_\_, 2023



STATE OF MICHIGAN    )  
  ) SS:  
COUNTY OF OAKLAND )

I hereby certify that the foregoing is a true and complete copy of the minutes of a meeting of the Drainage Board for the Northwest Oakland Sanitary Sewer Drain, Oakland County, Michigan, held on June 27, 2023, and that the minutes are on file in the offices of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that notice of the meeting was given in accordance with the Open Meetings Act.

\_\_\_\_\_  
Chairperson of the Drainage Board

FINAL ORDER OF DETERMINATION

IN RE

NORTHWEST OAKLAND SANITARY SEWER DRAIN

WHEREAS, pursuant to the provisions of Chapter 20 of Act No. 40, Public Acts of Michigan, 1956, as amended, petitions were filed with the Oakland County Water Resources Commissioner on April 24, 2023, by the Village of Ortonville, Oakland County, Michigan, on May 1, 2023, by the Township of Groveland, Oakland County, Michigan, and on May 1, 2023, by the Charter Township of Brandon, Oakland County, Michigan, petitioning for the following drain project as necessary for the public health, to-wit:

The location, establishment and construction of an intra-county drain project consisting of improvements to the Northwest Oakland Sanitary Sewer Drain to extend sanitary sewer service from the Oakland County, Michigan border with Genesee County, Michigan to serve certain properties located within the Village of Ortonville, Groveland Township, Holly Township, and Brandon Township.

WHEREAS, the necessary proceedings have been taken in respect to the petition, including the holding of a hearing for the purpose of receiving any objections to the proposed drain project, to the petition therefor and to the matter of assessing the cost to the public corporations designated by this Board;

THEREFORE, the Drainage Board for the Northwest Oakland Sanitary Sewer Drain issues this order making the following determinations in accordance with a resolution adopted by it on June 27, 2023, to-wit:

That the said petitions are sufficient in all respects; that the drain project is practicable and should be constructed; that it has become necessary for the public health to construct the drain project; and that the following public corporations should be assessed for the cost thereof, to-wit:

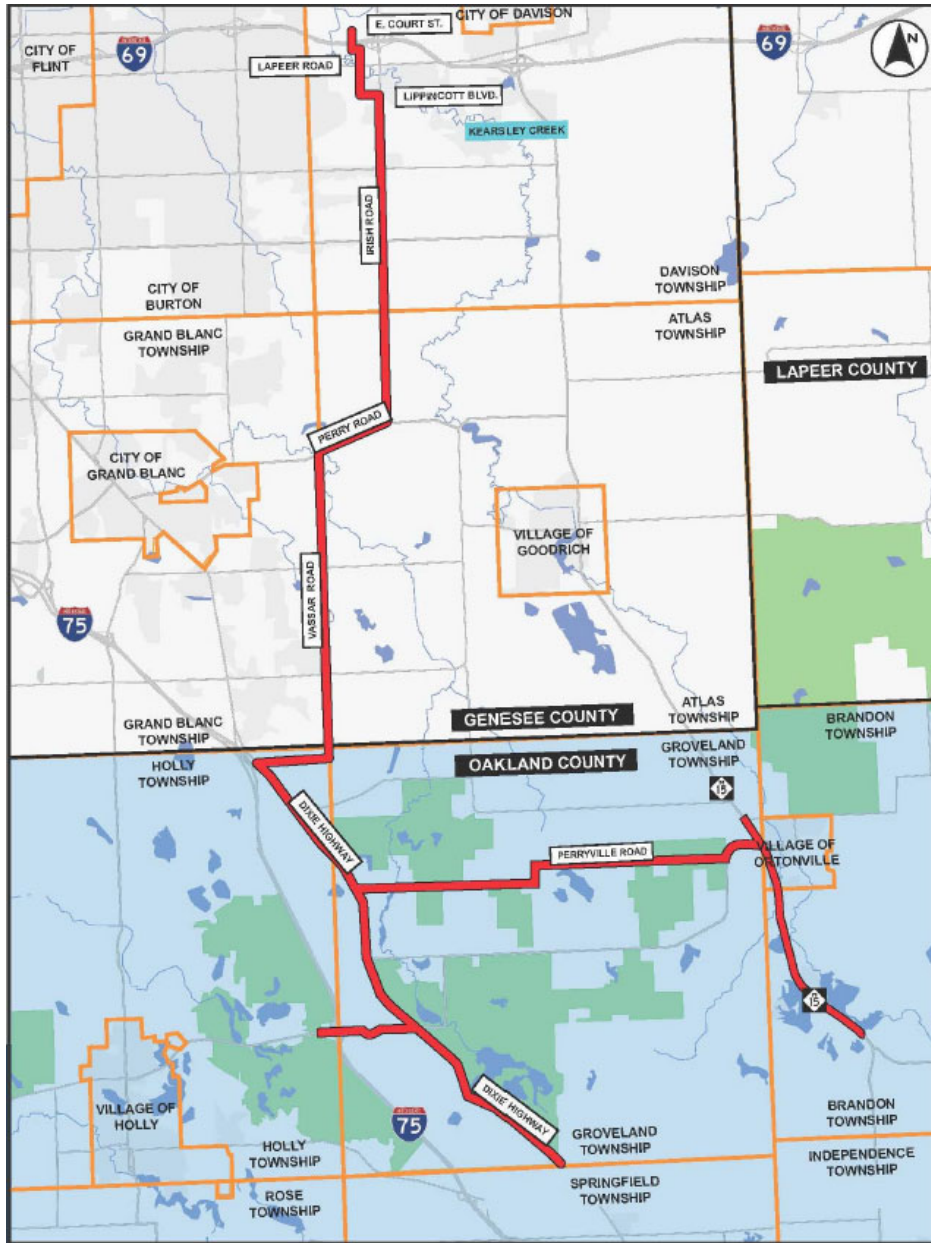
Village of Ortonville  
Township of Groveland  
Township of Holly  
Charter Township of Brandon

DRAINAGE BOARD FOR THE  
NORTHWEST OAKLAND SANITARY  
SEWER DRAIN

By: \_\_\_\_\_  
Chairperson

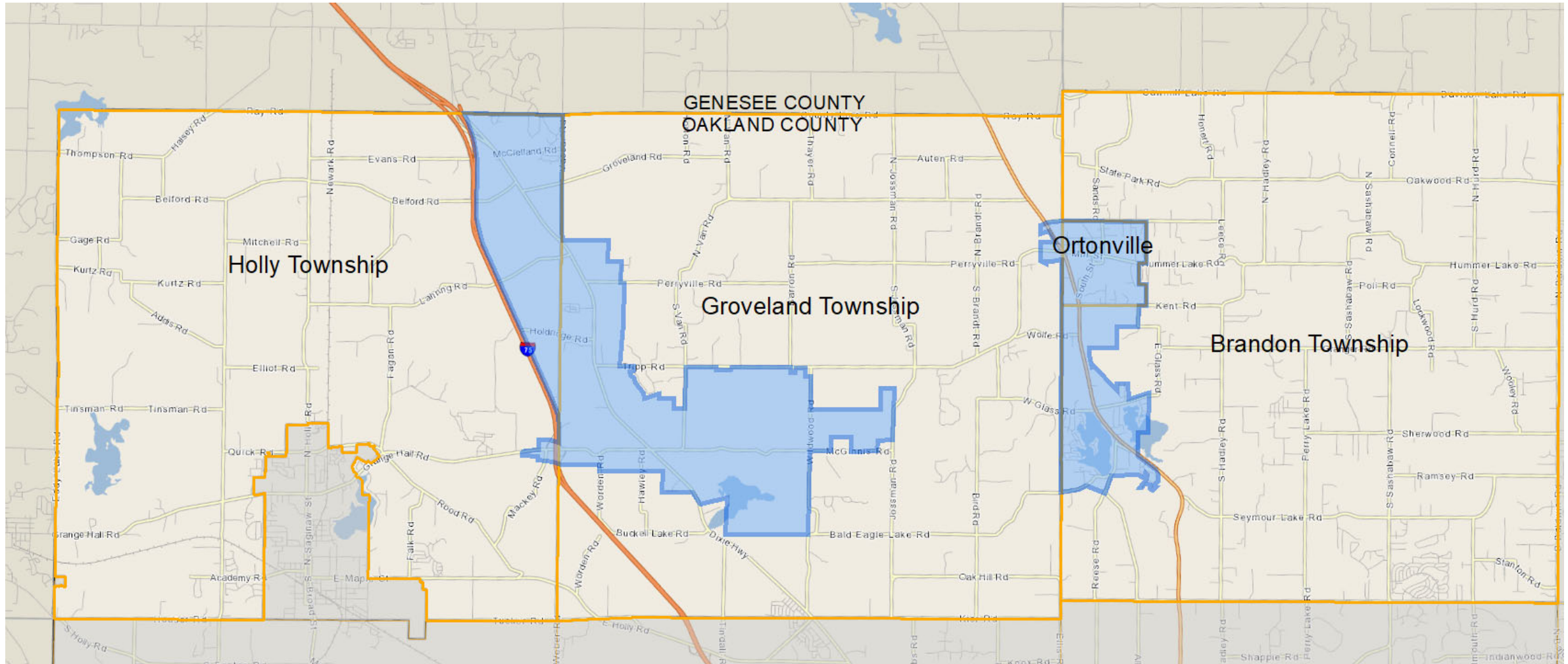
Dated: June 27, 2023  
Filed: June 27, 2023  
4880-4915-5179 v1 [12840-435]

## ROUTE AND COURSE OF NORTHWEST OAKLAND SANITARY DRAIN





# SERVICE AREA MAP

## NORTHWEST OAKLAND SANITARY DRAIN



### Legend

-  Sanitary District
-  NW Oakland Sanitary Drain Communities



GENESEE COUNTY DRAIN COMMISSIONER'S OFFICE

- DIVISION OF -

WATER & WASTE SERVICES

G-4610 BEECHER ROAD - FLINT, MICHIGAN 48532-2617

PHONE (810) 732-7870 - FAX (810) 732-9773

JEFFREY WRIGHT  
COMMISSIONER

June 13, 2023

Mr. Brian Coburn, PE, Manager  
Water Resources Commission  
One Public Works Drive  
Building 95 West  
Waterford, MI 48328

Re: Kearsley Creek Interceptor Construction Agreement

Dear Mr. Coburn:

Enclosed please find a fully executed copy of the Kearsley Creek Interceptor Construction Agreement for your use.

I will be forwarding a draft copy of the Operating Agreement in the next few weeks.

In the interim, should you have any questions, please do not hesitate to contact this office.

Sincerely,

A handwritten signature in blue ink, appearing to read "John F. O'Brien".

John F. O'Brien, PE, BCEE, Director  
Division of Water & Waste Services

JFO/JMW

Enclosure

cc: Matthew T. Raysin, PE, Assistant Director-Engineering  
Karl Kramer, Division Finance Officer



## KEARSLEY CREEK INTERCEPTOR CONSTRUCTION AGREEMENT

This **KEARSLEY CREEK INTERCEPTOR CONSTRUCTION AGREEMENT** (“Agreement”), effective as of the 13<sup>th</sup> of June, 2023, is entered into by and between the **COUNTY OF GENESEE** (the “County”), a Michigan municipal corporation, acting by and through its Drain Commissioner, in his capacity as the duly appointed and acting county agency (“County Agency”) pursuant to the provisions of Act 342, Public Acts of Michigan, 1939, as amended (“Act 342”), and the **DRAINAGE BOARD FOR THE NORTHWEST OAKLAND SANITARY DRAIN DRAINAGE DISTRICT** (“NW Oakland District”), a drainage district organized and formed under and pursuant to Chapter 20 of Act 40, Public Acts of Michigan, 1956, as amended (“Drain Code”) (the County and the NW Oakland District are sometimes referred to herein as a “Party,” and collectively, as the “Parties”).

WHEREAS, Act 342 provides that a county board of commissioners of a county may authorize and direct that there be established a system or systems of water, sewer, or sewage disposal improvements and services within or between cities, villages, townships, charter townships, or any duly authorized and established combinations thereof, within or without the county, and to enter into contracts with drainage districts established under Chapter 20 of the Drain Code; and

WHEREAS, the Board of Commissioners (formerly the Board of Supervisors) of the County, by resolution adopted on October 8, 1961 (“Resolution”), authorized and directed that there be established, pursuant to Act 342, a system of sewer and sewage disposal improvements and services (designated therein as “Genesee County Sanitary Sewage Disposal System No. 1,” and sometimes referred to herein as the “System”) to provide sewers and sewage disposal improvements and services to units of government (as defined in Act 342), as approved from time to time by the Board of Commissioners; and

WHEREAS, pursuant to the Resolution, the County Agency has been designated as the “county agency” of the County under the provisions of Act 342 in connection with the establishment of the System and as the person to have supervision and control of the management and operation of the System; and

WHEREAS, the NW Oakland District was established pursuant to Chapter 20 of the Drain Code and is authorized by Section 471 of the Drain Code to contract with any public corporation, including, but not limited to, the County; and

WHEREAS, the NW Oakland District service area includes portions of the Township of Holly, the Charter Township of Brandon, the Township of Groveland, and the Village of Ortonville, each located in Oakland County, Michigan, as more particularly described herein (“NW Oakland District Service Area”); and

WHEREAS, the NW Oakland District has requested that the County acquire and construct an extension to the System, to be known as the Genesee County Kearsley Creek Interceptor (“KCI”), for the purpose of transporting sewage flow from the NW Oakland District Service Area to the County’s Anthony Ragnone Treatment Plant (“ARTP”) for treatment and disposal, all as more particularly described herein; and

WHEREAS, the Charter Township of Grand Blanc, the Charter Township of Davison, the Village of Goodrich and the Township of Atlas, each a unit of local government located in the County (collectively, the "Genesee Municipalities"), will purchase additional units of capacity in the KCI for the transportation and disposal of sewage flow originating in the Genesee Municipalities pursuant to contracts to be entered into by and among the County, acting through the County Agency, and the Genesee Municipalities; and

WHEREAS, the County Agency has caused to be prepared maps, plans, designs, specifications and an estimate of cost of the KCI, and has caused the same to be filed with the Board of Commissioners of the County; and

WHEREAS, the County and the NW Oakland District desire to set forth the terms and conditions upon which the County, acting through the County Agency, will acquire and construct the KCI for the transportation of sewage flow from the service area of the NW Oakland District for treatment and disposal at the ARTP.

NOW, THEREFORE, THE COUNTY OF GENESEE, ACTING THROUGH THE COUNTY AGENCY, AND THE DRAINAGE BOARD FOR THE NORTHWEST OAKLAND SANITARY DRAIN DRAINAGE DISTRICT, MUTUALLY AGREE AS FOLLOWS:

1. Acquisition and Construction of the KCI; Service Area. The County will acquire and construct, pursuant to the provisions of Act 342, and as otherwise provided by law, the sewer and sewage disposal system improvements shown and described in Exhibit A attached ("Improvements and sometimes referred to herein as the 'Project'"). The improvements to be acquired and constructed pursuant to this Agreement shall comprise and be designated as the "Genesee County Kearsley Creek Interceptor" ("KCI"). The KCI will be designed and constructed as an extension of the System, which will transport sewage flow from the service area of the NW Oakland District described in Exhibit B ("NW Oakland District Service Area"), and from the Genesee Municipalities, to the ARTP for treatment and disposal.

2. Construction; Plans and Specifications. Subject to the terms of this Agreement, the KCI will be acquired and constructed by the County substantially in accordance with the preliminary plans which have been secured by the County Agency, and in accordance with the final plans to be secured by the County Agency, but variations therefrom which do not materially change the location, capacity, or overall design of the KCI shall be permitted by the County Agency if, in its reasonable judgment, circumstances so warrant.

3. NW Oakland District Service Area Local Collection System. The KCI is to serve the NW Oakland District and not the individual property owners located in the NW Oakland District Service Area, unless an exception shall be made by the County Agency by special written agreement between the County Agency and the NW Oakland District. The NW Oakland District Service Area, area from which sewage is to be transported and disposed, shall not be enlarged or extended into new or additional territories without the prior written approval of the County. NW Oakland District may modify its service area but cannot change the area subject to this Agreement without the written approval of the County. The NW Oakland District shall be solely responsible for the collection of sewage flow in the NW Oakland District Service Area and for transporting the same to the sanitary sewage interceptors of the KCI. The acquisition, construction, financing,

operation and maintenance of all collecting sewers and sewage disposal improvements necessary to transport sewage flow from the NW Oakland District Service Area to the sanitary sewage interceptors of the KCI shall be the sole responsibility of the NW Oakland District, and the County shall have no responsibility therefor.

4. Capacity; Maximum Flow. The Main Interceptor and Pumping Stations and Branches (as those terms are described and depicted in the preliminary plans) of the KCI are designed to accept a maximum rate of flow in cubic feet per second (“cfs”) from the NW Oakland District and from each of the Genesee Municipalities as set forth in Section 6 hereof. Except as provided in Section 11(b) of this Agreement, the NW Oakland District and each of the Genesee Municipalities will be limited to the specific maximum rate of flow specified in Section 6 hereof.

5. Estimated Cost of the KCI. The estimated total cost of the KCI Improvements, as established by the County’s consulting engineers, Rowe Professional Services Company (the “Consulting Engineers”), is \$35,090,000, which includes both design and construction, and said estimate of Cost is approved by the NW Oakland District and Genesee Municipalities. As used in this Agreement, the term “Cost” is defined as follows: the total cost of the physical structures, the acquisition of property for sites and rights-of-way, permits, labor and materials necessary to acquire and construct the improvements comprising the KCI, engineering and legal fees, administration expenses during the period of construction, reasonable and customary contingencies, and other reasonable costs incidental to the acquisition and construction of the KCI Improvements.

6. Allocation and Payment of Cost of the KCI. The cost of the KCI Improvements shall be allocated among the NW Oakland District and the Genesee Municipalities in accordance with the percentages set forth in the following table under the heading, “Allocable Percent Share of the KCI Cost.” The following table also sets forth the respective capacity rights of the NW Oakland District and each of the Genesee Municipalities in the KCI, measured in residential equivalent units (“REUs”), and the corresponding maximum rate of flow (measured in cfs) of the NW Oakland District and each of the Genesee Municipalities.

Entity	Allocable Percent Share of KCI Cost	Residential Equivalent Units
NW Oakland District	28.50	4,092
Atlas Township	5.57	800
Charter Township of Davison	6.97	1,000
Charter Township of Grand Blanc	42.63	6,121
Village of Goodrich	2.09	300
Genesee Reserve Capacity	14.24	2,044
TOTAL	100%	14,357

The County will reserve 2,044 REUs “Reserve Capacity” upon completion of the Project. NW Oakland District has the right of first refusal to acquire some or all of the Reserve Capacity. The cost for the Reserve Capacity shall be calculated as the total Project cost (\$35,090,000) divided



by the total number of REUs (14,357), which in this case is \$2,444.10 per REU. The County shall offer the units first to the NW Oakland District in writing. The NW Oakland District has sixty (60) days to determine if it will exercise their claim to the units. After NW Oakland District's response, or sixty (60) days has lapsed, the County may convey or allocate any of the Reserve Capacity to any other entity, including, but not limited to, a Genesee Municipality. The NW Oakland District's declination of its right of first refusal to some of the Reserve Capacity does not waive its right of first refusal to the remainder of the Reserve Capacity. If the NW Oakland District selects to exercise its claim on the units under consideration, it has One Hundred Twenty (120) days to purchase the units from the County.

7. Final Plans and Specifications; Bidding and Contracting. After execution of this Agreement by the Parties, the County Agency shall complete or cause the following to be completed:

- (a) Direct the Consulting Engineers to prepare final plans and specifications for the KCI Improvements.
- (b) Take bids for the construction of the KCI Improvements from responsible bidders.
- (c) After receipt of bids for construction of the KCI Improvements, and before the final award of any construction contracts, provide the NW Oakland District with (i) a detailed summary of bids received, (ii) the total estimated Cost of the construction of the KCI Improvements, taking into account the as-bid contract prices of the lowest responsible bidders, and (iii) the NW Oakland District's share of the Cost of the KCI Improvements, which for the NW Oakland District is fixed at \$10,000,000 (the "Total NW Oakland District Cost").

8. Payment of Total NW Oakland District Cost. Within sixty (60) days of receipt of the information described in Section 7(c) of this Agreement, the NW Oakland District shall pay, or cause to be paid, to the County, the Total NW Oakland District Cost. All funds received by the County pursuant to this Section 8 for the payment of the Total NW Oakland District Cost shall be maintained by the County Agency, or by the Treasurer of the County, as a separate account, and shall be applied by the County solely to the payment of the Cost of the acquisition and construction of the KCI Improvements. Following receipt of payment in full by the NW Oakland District of the Total NW Oakland District Cost, the County Agency shall proceed to make a final award of construction contracts for the KCI, negotiate and enter into construction contracts, apply for any necessary permits and right-of-way not yet obtained, and proceed with the acquisition and construction of the KCI Improvements. The County Agency shall not be obligated to make any final award of contracts for construction of the KCI, or to enter into any construction contracts, until such time as the NW Oakland District has paid the total NW Oakland District Cost as provided in this Section 8.

9. Cost Overruns; Cost Savings.

- (a) For the NW Oakland District, the Total NW Oakland District Cost is fixed at \$10,000,000. Therefore, in the case of a cost overrun, the number of REUs and percent capacity assigned to NW Oakland District would be reduced using newly calculated cost per REU. The method described in Section 6 shall be used to calculate the newly calculated cost per REU.
- (b) If, upon final completion of the acquisition and construction of the KCI Improvements and the payment of all Costs in connection therewith, there remain any surplus funds for the acquisition and construction of the KCI Improvements from the funding sources as provided in Section 6 or Section 9(a) of this Agreement due to cost savings or otherwise (“Construction Surplus”), the total amount of the Construction Surplus shall be allocated and credited to the NW Oakland District and each of the Genesee Municipalities in the same allocation proportion in Section 6 of this Agreement. The County shall, within sixty (60) days of the County Agency’s final accounting of the amount of any Construction Surplus, remit the NW Oakland District’s proportionate share of the Construction Surplus (if any) to or upon order of the NW Oakland District.

10. Operation and Use of the KCI. Before, and as a condition of, making any connection to the KCI, the NW Oakland District shall enter into a mutually acceptable sewer use and operating agreement (the “Operating Agreement”) with the County, acting through the County Agency, which will establish the agreement of the Parties relative to the use and operation of the KCI and the fees and charges to be assessed against the NW Oakland District for use of the sewage transport and disposal services furnished by the KCI and the ARTP. The Operating Agreement will, among other things, contain provisions governing:

- (a) Connections to the KCI during or after completion of construction of the KCI, which shall be made by the NW Oakland District at its own expense, after first securing a permit therefor from the County Agency, which permit shall not be unreasonable withheld.
- (b) The character of sewage flow discharged to the KCI, which shall be subject to the County Agency’s standards and regulations, including regulations governing the discharge of industrial and/or commercial type wastes.
- (c) The operation, maintenance and calibration of a master meter through which all sewage discharge originating in the NW Oakland District Service Area must flow (“Master Meter”). The NW Oakland District’s charges for the transportation and treatment of sewage flow from the NW District Service Area, as described in Section 10(d) below, shall be based on the Master Meter readings. The NW Oakland District shall have reasonable access to the Master Meter data, including, but not limited to, an exclusive split data signal feed. The Master Meter is included in the Cost of the KCI and will be installed and owned by the County. No final

connection to the KCI shall be made by the NW Oakland District prior to the installation of the Master Meter.

- (d) Payment by the NW Oakland District of monthly or quarterly service charges established from time to time by the County Agency for the transportation and treatment of sewage flow from the NW Oakland District Service Area. Such charges shall be calculated upon the basis of metered sewage flow from the NW Oakland District Service Area using such reasonable means as the County Agency may determine, without unjust enrichment. The rates and charges to be established from time to time by the County Agency and assessed against the NW Oakland District and the Genesee Municipalities will be sufficient to provide for (i) the costs of operating and maintaining the KCI and the treatment and disposal of sewage flow at the ARTP received by the ARTP from the KCI, and (ii) the establishment and maintenance of reserve funds in such amounts as may be reasonably determined by the County Agency for the maintenance, repair and replacement of the physical assets of the KCI and of the ARTP.
- (e) Payment by the NW Oakland District of the applicable County Capital Improvement Fee ("CCIF") for each connection to the KCI. The KCI is connected to, and is an extension of, the Northeast Extension Sewer Interceptor ("NEES"). The County Agency has established a CCIF for each direct or indirect connection to the NEES. The NW Oakland District shall pay to the County Agency a CCIF for each connection to be made to the KCI in accordance with the CCIF methodology established by the County Agency for connections to the NEES, which methodology shall be set forth in the Operating Agreement.
- (f) Late payment charges for failure by the NW Oakland District to make payment of any charges provided by the Operating Agreement when due, which shall accrue on all past due amounts at the rate of one-half of one percent (1/2 of 1%) for each month or fraction thereof that the same remains unpaid after the due date, unless there is good faith dispute pursuant to the dispute resolution provisions of the Operating Agreement.

11. Project Completion; Assignment of Capacity Rights.

- (a) Upon completion of the acquisition and construction of the KCI, the connection of the NW Oakland District to the KCI and the KCI accepting sewage flow from the NW Oakland District, and the execution by the Parties of the Operating Agreement pursuant to Section 10 hereof, the County will, subject to the terms of this Agreement and the Operating Agreement, accept for transportation and treatment the sewage flow from the NW Oakland District Service Area; provided, however, that the NW Oakland District will be limited to the specific maximum rate of flow specified Section 6 of this Agreement. Except as otherwise provided in Section 11(b) of this Agreement, after such maximum rate of flow has been reached by the NW Oakland District (which maximum flow rate shall be defined in the Operating

Agreement), the County is not required to allow any new lateral sewer of the NW Oakland District to be connected to the KCI, or to any sewer connected directly or indirectly to the sanitary sewer systems served by the ARTP where such lateral sewer is for the delivery of sewage to be transported by the KCI and treated by the ARTP.

- (b) The NW Oakland District may, by separate agreement with one or more of the Genesee Municipalities, assign any part of its allocated maximum rate of flow as measured in cfs in the KCI, as provided in this Agreement, to one or more of the Genesee Municipalities, or accept an assignment from one or more of the Genesee Municipalities of part of its allocated maximum rate of flow in the KCI, upon such terms as may be agreed upon, and in each case subject to the written approval of the County Agency, which approval shall not be unreasonably withheld. No assignment of capacity rights as provided in this Section 11(b) shall in any way affect, change or in any way diminish the obligations of the NW Oakland District as set forth in this Agreement.

12. Governing Law. This Agreement is made and entered into in the state of Michigan and shall be interpreted, enforced, and governed under the laws of the state of Michigan. The language of this Agreement is intended to be construed as a whole according to its fair meaning and not construed strictly for or against any Party.

13. Lawsuits and Claims. The Parties agree that each must bear all the costs (direct or indirect) and expenses of any lawsuits, disputes, or claims of any kind arising directly or indirectly out of this Agreement.

14. Third Party Beneficiaries. There are no intended third party beneficiaries to this Agreement.

15. Governmental Function. This Agreement does not, and is not intended to, impair, divest, delegate, or contravene any constitutional, statutory, or other legal right, privilege power, obligation, duty, or immunity of the Parties. The obligations in this Agreement are in the exercise or discharge of a governmental function.

16. Notices. Notice of a legal nature shall be sent by certified first class mail, return receipt requested or by personal delivery as follows:

County and County Agency: Jeff Wright  
Genesee County Drain Commissioner  
G-4610 Beecher Rd.  
Flint, Michigan 48532

NW Oakland District: Jim Nash  
Oakland County Water Resources Commissioner  
One Public Works Drive, Building 95-West  
Waterford, Michigan 48328

All Notices shall be considered delivered to a Party on the date of receipt as represented by the return receipt or by proof of personal service. Any Notice given must be signed by an authorized representative.

17. Entire Agreement, Amendment, Counterparts, and Enforceability. This Agreement sets forth the entire understanding of the Parties concerning its subject matter. The terms and conditions are contractual and not mere recital. This Agreement may be amended only by a writing executed by all Parties with persons with legal authority to bind the respective Party. This Agreement may be executed in several counterparts, each of which shall be considered an original, but all of which shall constitute one and the same instrument. The exhibits and the recital and whereas provisions of this Agreement are considered an integral part of this Agreement. If any provision of this Agreement is judicially determined to be invalid or unenforceable, the remainder of this Agreement (other than those found to be invalid or unenforceable) is not affected and is enforceable, provided that the invalid or unenforceable provision does not substantially alter the Agreement or make execution impractical.

18. Successor and Assigns. This Agreement is binding on, and for the benefit of, the Parties and their respective their successors and assigns.

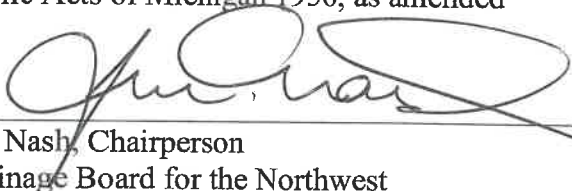
19. Effective Date. This Agreement shall become effective as of the date first written above.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed effective as of the date and year first above written.

In the presence of:

**NORTHWEST OAKLAND SANITARY DRAIN DRAINAGE DISTRICT**, a drainage district organized and existing under and pursuant to Chapter 20 of Act No. 40, Public Acts of Michigan 1956, as amended

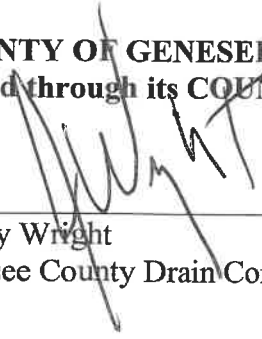
  
\_\_\_\_\_  
BRIAN COBURN

By   
\_\_\_\_\_  
Jim Nash, Chairperson  
Drainage Board for the Northwest  
Oakland Sanitary Drain Drainage District

In the presence of:

**COUNTY OF GENESEE, MICHIGAN,**  
by and through its **COUNTY AGENCY**

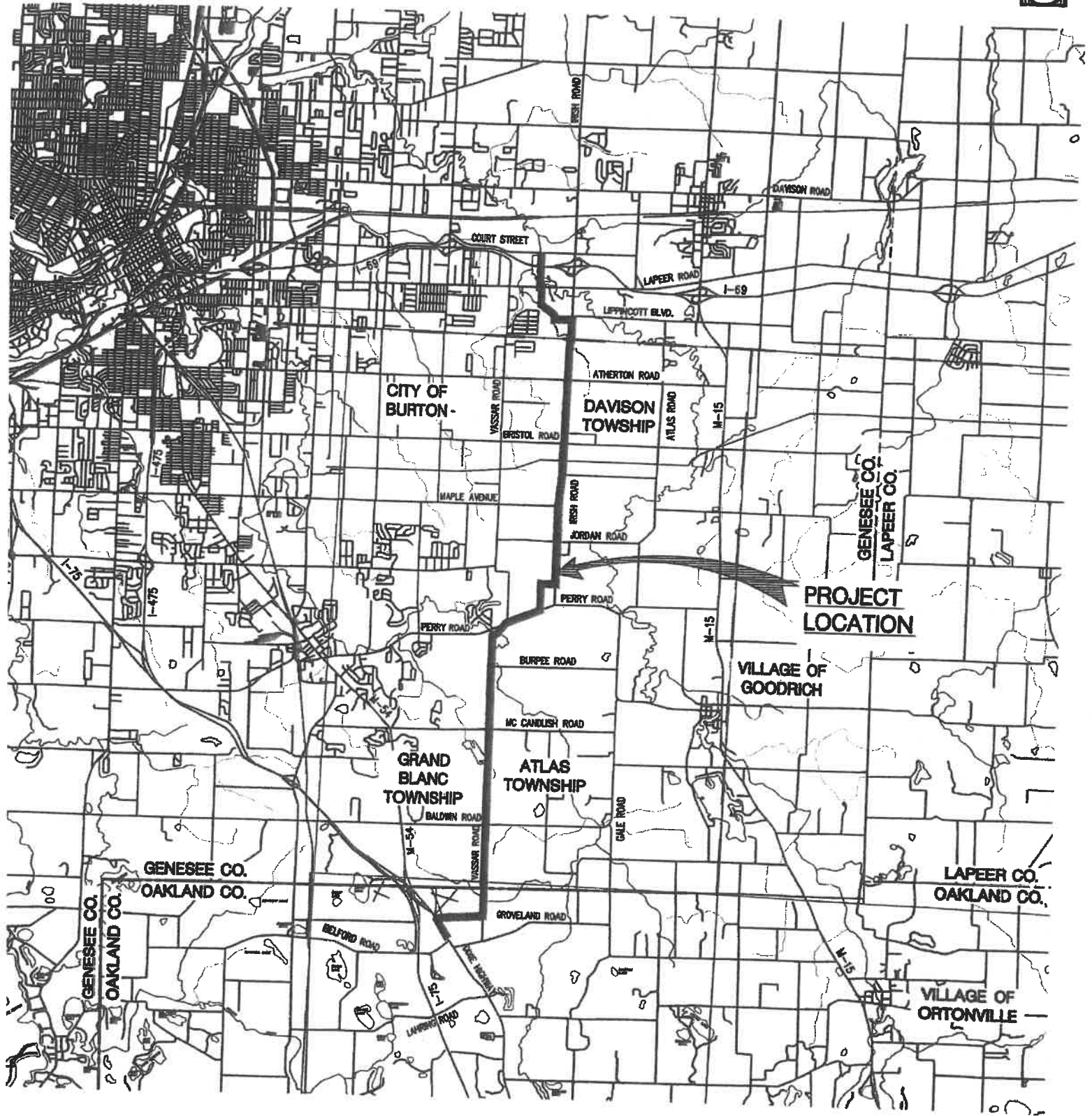
  
\_\_\_\_\_  
John F. O'Brien

By   
\_\_\_\_\_  
Jeffrey Wright  
Genesee County Drain Commissioner

**EXHIBIT A**

**KCI ROUTE**

EXHIBIT A  
KCI PHASE 1



LOCATION MAP

**EXHIBIT B**

**KEARSLEY CREEK SERVICE AREA**

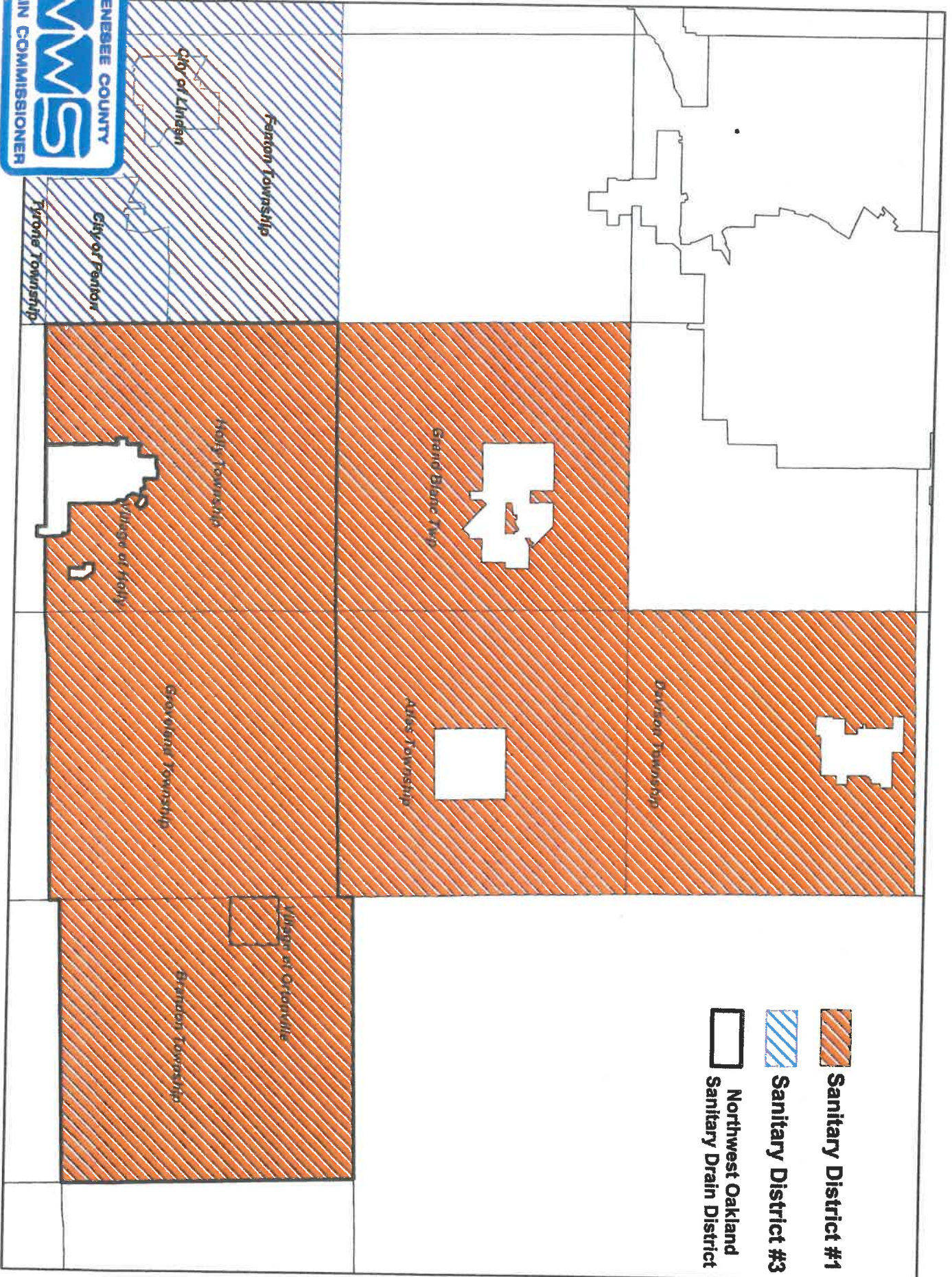


# KCI Service Area

Exhibit B



-  Sanitary District #1
-  Sanitary District #3
-  Northwest Oakland Sanitary Drain District



**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER****MEMORANDUM**

**TO:** Jim Nash, Chairperson  
Northwest Oakland Drain Drainage District

**FROM:** Jen Cook, P.E., Project Engineer  
Sid Lockhart, P.E., Deputy and Special Project Manager

**SUBJECT:** Engineering Study for Northwest Oakland Sanitary Drain Project  
Update

**DATE:** June 27, 2023

The Northwest Oakland Drain Drainage District was created to connect portions of Holly Township, Groveland Township, Brandon Township as well as the Village of Ortonville. The Northwest Oakland Sanitary Drain will provide sanitary service for discrete areas of these municipalities along the commercial corridors and residential homes around Lake Louise and Bald Eagle Lake. The project will help protect the Flint River Watershed from the environmental hazards caused by failed septic systems. The project also will promote economic activity and protect public health and safety of those living in the region. The project is to be completed in three phases:

- Phase 1 involves the payment for the right to place sanitary flow to a sewer line of appropriate capacity into a Genesee County system that will be extended to the Oakland County and Genesee County line at an estimated cost of \$45 million. It will provide future capacity to serve the area and better protect the environment.
- Phase 2 involves the construction of a sewer extension along Dixie Highway and Grange Hall Road at an estimated cost of \$49 million. This Phase would immediately serve Holly and Groveland Townships and prepare for future services to Brandon Township and the Village of Ortonville.
- Phase 3 is to encompass an additional sewer extension along Perryville Road at an estimated cost of \$59 million. This extension would complete service to Brandon Township and the Village of Ortonville.

Last month, the Oakland County Board of Commissioners approved the appropriation of \$10 million for Phase 1 of the project to participate in the construction of Genesee County's project to acquire 28.5% of the capacity. The appropriation included \$250,000 from the General Fund and \$9.75 million in American Rescue Plan Act funds for the NW Oakland Sanitary Sewer Project.

The Drainage District received a Congressionally Funded Community Projects Grant from Congresswoman Elissa Slotkin's office in the amount of \$1.25 million. This grant requires a non-federal match of \$250,000, which was appropriated from the General Fund by the Board of Commissioners in May as part of Phase 1. The remaining \$1 million will be used to fund the scope of services in the Request for Qualifications (RFQ).

It is the intent of this office to have the RFQ for the Engineering Study for the Northwest Oakland Sanitary Sewer Drain Project prepared and solicited during July 2023. A Quality Based Selection process will be utilized whereby price or cost is not a selection criterion to recommend an engineering consultant firm for this work. A Recommendation for Award is anticipated to be presented to this Board in the fall of 2023.

**Requested Action: Receive and file the Project Update on the Request for Proposal for the Engineering Study for Northwest Oakland Sanitary Drain Project.**

**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the NORTHWEST OAKLAND SANITARY DRAIN

**FROM:** Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

*FOR SHAWN PHELPS*

**DATE:** June 27, 2023

**SUBJECT:** Request for Board approval of payment of the following invoices:

<u>Date</u>	<u>Ref No.</u>	<u>Paid To</u>	<u>For</u>	<u>Amount</u>
6/16/2023	V # SINV00188689	Dickinson Wright PLLC	Invoice # 1816167 - Legal Services - 05/31/23 - Prj # 1-7076	\$ 7,939.50
			<b>Total - Proj #1-7076</b>	<b>\$ 7,939.50</b>

## **4. Acacia Park CSO**

## **AGENDA**

### **DRAINAGE BOARD FOR THE ACACIA PARK CSO DRAIN**

June 27, 2023

1. Call meeting to order
2. Approve minutes of meeting of May 23, 2023
3. Public Comments
4. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$576.60
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE ACACIA PARK CSO DRAIN**

May 23, 2023

A meeting of the Drainage Board for the Acacia Park CSO Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 23<sup>rd</sup> day of May 2023.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: None.

Minutes of the meeting held April 25, 2023, were presented for consideration. It was moved by Markham, supported by Woodward, that the minutes be approved.

ADOPTED: Yeas - 3  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

A memorandum from George Nichols, P.E., Civil Engineer III, dated May 23, 2023, requesting the Board approve the closed-circuit television (CCTV) program project in the amount of \$25,000 from the Major Maintenance reserves fund was presented. It was moved by Markham, supported by Woodward, to approve the closed-circuit television (CCTV) program project in the amount of \$25,000 from the Major Maintenance reserves fund as presented.

ADOPTED: Yeas - 3  
Nays - 0

A Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$1,153,770 for the Acacia Park CSO Drain (as attached) were presented. It was moved by Markham, supported by Woodward, to adopt the Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$1,153,770 as presented.

ADOPTED: Yeas - 3  
Nays - 0

A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$8,512.61 (as attached) was presented. It was moved by



Markham, supported by Woodward, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$8,512.61.

ADOPTED: Yeas - 3  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward and Ms. Markham.

ADOPTED: Yeas - 3  
Nays - 0

There being no further business, the meeting was adjourned.



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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Acacia Park CSO Drain, Oakland County, Michigan, held on the 23<sup>rd</sup> day of May 2023, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Acacia Park CSO Drain Drainage District.



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Jim Nash, Chairperson

Dated: May 23, 2023



MEMO TO: Mr. Jim Nash, Chairman  
of the Drainage Board for the ACACIA PARK CSO DRAIN

FROM: Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

*FOR SHAWN PHELPS*

DATE: June 27, 2023

SUBJECT: Request for Approval of Invoices

The following is a detail of Maintenance charges paid from the Drain Revolving Fund and Invoices for the period ending June 16, 2023

G/L Date	Ref No.	Paid To	For	Amount
	TBP	Hubbell Roth & Clark Inc	Invoice # 0207029 - Contracted Services - 5/27/23 - Proj 1-7086	\$ 576.60
			<b>Total</b>	<b>\$ 576.60</b>

## **5. Birmingham CSO**

## **AGENDA**

### **DRAINAGE BOARD FOR THE BIRMINGHAM CSO DRAIN**

June 27, 2023

1. Call meeting to order
2. Approve minutes of meeting of May 23, 2023
3. Public Comments
4. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$9,875.76
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE BIRMINGHAM CSO DRAIN**

May 23, 2023

A meeting of the Drainage Board for the Birmingham CSO Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 23<sup>rd</sup> day of May 2023.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: None.

Minutes of the meeting held April 25, 2023, were presented for consideration. It was moved by Markham, supported by Woodward, that the minutes be approved.

ADOPTED: Yeas - 3  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

A memorandum from George Nichols, P.E., Civil Engineer III, dated May 23, 2023, requesting the Board approve the closed-circuit television (CCTV) program project in the amount of \$30,000 from the Major Maintenance reserves fund was presented. It was moved by Markham, supported by Woodward, to approve the closed-circuit television (CCTV) program project in the amount of \$30,000 from the Major Maintenance reserves fund as presented.

ADOPTED: Yeas - 3  
Nays - 0

A Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$1,090,020 for the Birmingham CSO Drain (as attached) were presented. It was moved by Markham, supported by Woodward, to adopt the Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$1,090,020 as presented.

ADOPTED: Yeas - 3  
Nays - 0

A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$53,525.93 (as attached) was presented. It was moved by


Markham, supported by Woodward, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$53,525.93.

ADOPTED: Yeas - 3  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward and Ms. Markham

ADOPTED: Yeas - 3  
Nays - 0

There being no further business, the meeting was adjourned.



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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Birmingham CSO Drain, Oakland County, Michigan, held on the 23<sup>rd</sup> day of May 2023, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for Birmingham CSO Drain Drainage District.



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Jim Nash, Chairperson

Dated: May 23, 2023

MEMO TO: Mr. Jim Nash, Chairman  
of the Drainage Board for the BIRMINGHAM CSO DRAIN

FROM: Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

*FOR SHAWN PHELPS*

DATE: June 27, 2023

SUBJECT: Request for Approval of Invoices

The following is a detail of Maintenance charges paid from the Drain Revolving Fund and Invoices  
for the period ending June 16, 2023

<u>G/L Date</u>	<u>Ref No.</u>	<u>Paid To</u>	<u>For</u>	<u>Amount</u>
	TBP	Hubbell, Roth, & Clark, Inc	Invoice # 0207028 - Contracted Services - 05/27/23	\$ 673.20
			<b>Subtotal Project # 1-7087</b>	<b>\$ 673.20</b>
5/30/2023	V # SIN00184837	Sigma Associates Inc	Invoice #653.000 -0010034 - Contracted Services 3/26/23-04/29/23	\$ 925.64
6/22/2023	V # SIN00189875	Sigma Associates Inc	Invoice #653.000 -0010062 - Contracted Services 4/30/23-05/27/23	\$ 2,776.92
			<b>Subtotal Project # 1-7272</b>	<b>\$ 3,702.56</b>
6/14/2023	V # SIN00188223	Kennedy Industries Inc	Invoice # 636998 - Contracted Services	\$ 2,875.00
6/14/2023	V # SIN00188226	Kennedy Industries Inc	Invoice # 636999 - Contracted Services	2,625.00
			<b>Subtotal Project # 1-7319</b>	<b>\$ 5,500.00</b>
			<b>Total</b>	<b>\$ 9,875.76</b>

## **6. Bloomfield Village CSO**



## **AGENDA**

### **DRAINAGE BOARD FOR THE BLOOMFIELD VILLAGE CSO DRAIN**

June 27, 2023

1. Call meeting to order
2. Approve minutes of meeting of May 23, 2023
3. Public Comments
4. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$4,735.11
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE BLOOMFIELD VILLAGE CSO DRAIN**

May 23, 2023

A meeting of the Drainage Board for the Bloomfield Village CSO Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 23<sup>rd</sup> day of May 2023.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: None.

Minutes of the meeting held April 25, 2023, were presented for consideration. It was moved by Markham, supported by Woodward, that the minutes be approved.

ADOPTED: Yeas - 3  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

A memorandum from George Nichols, P.E., Civil Engineer III, dated May 23, 2023, requesting the Board approve the closed-circuit television (CCTV) program, spot repairs, and pipe grouting projects in the amount of \$110,000 from the Major Maintenance reserves fund was presented. It was moved by Markham, supported by Woodward, to approve the closed-circuit television (CCTV) program, spot repairs, and pipe grouting projects in the amount of \$110,000 from the Major Maintenance reserves fund as presented.

ADOPTED: Yeas - 3  
Nays - 0

A Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$1,943,690 for the Bloomfield Village CSO Drain (as attached) were presented. It was moved by Markham, supported by Woodward, to adopt the Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$1,943,690 as presented.

ADOPTED: Yeas - 3  
Nays - 0

A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$19,997.34 (as attached) was presented. It was moved by

Markham, supported by Woodward, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$19,997.34.

ADOPTED: Yeas - 3  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward and Ms. Markham.

ADOPTED: Yeas - 3  
Nays - 0

There being no further business, the meeting was adjourned.



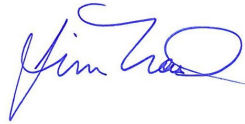
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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Bloomfield Village CSO Drain, Oakland County, Michigan, held on the 23<sup>rd</sup> day of May 2023, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for Bloomfield Village CSO Drain Drainage District.



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Jim Nash, Chairperson

Dated: May 23, 2023

MEMO TO: Mr. Jim Nash, Chairman  
of the Drainage Board for the BLOOMFIELD VILLAGE CSO DRAIN

FROM: Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

*J For Shawn Phelps*

DATE: June 27, 2023

SUBJECT: Request for Approval of Invoices

The following is a detail of Maintenance charges paid from the Drain Revolving Fund and Invoices  
for the period ending June 16, 2023

<u>G/L Date</u>	<u>Ref No.</u>	<u>Paid To</u>	<u>For</u>	<u>Amount</u>
5/26/2023	V # SINV00184236	Pro-Seal Service Group	Invoice #231757 - Material and Supplies	\$ 1,422.63
				<b>Total</b> \$ 1,422.63
5/26/2023	V # SINV00184240	Detroit Pump & Mfg Co	Invoice # 1077302- Contracted Services	\$ 2,687.58
				<b>Subtotal Project # 1-3551</b> \$ 2,687.58
	TBP	Hubbell Roth & Clark Inc	Invoice # 0207030- Contracted Services	\$ 624.90
				<b>Subtotal Project # 1-7088</b> 624.90
				<b>Total</b> \$ 4,735.11

## **7. George W. Kuhn Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE GEORGE W. KUHN DRAIN**

June 27, 2023

1. Call meeting to order
2. Approve minutes of meeting of May 23, 2023
3. Public Comments
4. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$27,868.91
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE GEORGE W. KUHN DRAIN**

May 23, 2023

A meeting of the Drainage Board for the George W. Kuhn Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 23<sup>rd</sup> day of May 2023.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: None.

Minutes of the meeting held April 25, 2023, were presented for consideration. It was moved by Markham, supported by Woodward, that the minutes be approved.

ADOPTED: Yeas - 3  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

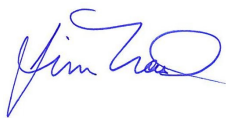
A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$58,334.04 (as attached) was presented. It was moved by Markham, supported by Woodward, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$58,334.04.

ADOPTED: Yeas - 3  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward and Ms. Markham.

ADOPTED: Yeas - 3  
Nays - 0

There being no further business, the meeting was adjourned.



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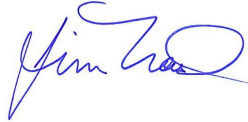
Jim Nash, Chairperson



STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the George W. Kuhn Drain, Oakland County, Michigan, held on the 23<sup>rd</sup> day of May 2023, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for George W. Kuhn Drain Drainage District.



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Jim Nash, Chairperson

Dated: May 23, 2023

**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the GEORGE W. KUHN DRAIN

**FROM:** Shawn Phelps, Chief of Fiscal Services *for Shawn Phelps*  
OCWRC Accounting

**DATE:** June 27, 2023

**SUBJECT:** Request for Board approval of payment of the following invoices:

<u>Payable To</u>	<u>Ref No.</u>	<u>For</u>	<u>Amount</u>
ICS Integration Services LLC	V # SINV00183073	Invoice # 2723 Contracted Services	\$ 2,499.00
Orchard Hiltz & McCliment Inc	V # SINV00188687	Invoice # 63557 - Professional Services - 05/20/23	1,682.50
Center for Watershed Protection	V # SINV00189513	Invoice # W-22-37 #4 - Contracted Services - 5/1/23-5/31/23	2,883.75
		<b>Subtotal</b>	<b>\$ 7,065.25</b>
Owen Tree Service	V # SINV00183582	Invoice # 1877447 - Contracted Services - Proj 1-3167	\$ 1,750.00
		<b>Project 1-3167</b>	<b>\$ 1,750.00</b>
ICS Integration Services LLC	V # SINV00182552	Invoice # 2722 Contracted Services - Proj 1-3408	\$ 5,831.00
		<b>Project 1-3408</b>	<b>\$ 5,831.00</b>
Hubbell Roth & Clark Inc	V # SINV00185729	Invoice # 0206382- Contracted Services - 04/29/23 - Proj 1-3484	\$ 9,275.63
		<b>Project 1-3484</b>	<b>\$ 9,275.63</b>
Hubbell Roth & Clark Inc	TBP	Invoice # 0207026 - Contracted Services - 05/27/23 - Proj 1-7089	2,394.30
Hubbell Roth & Clark Inc	TBP	Invoice # 0207027 - Contracted Services - 05/27/23 - Proj 1-7089	1,552.73
		<b>Project 1-7089</b>	<b>\$ 3,947.03</b>
		<b>Total</b>	<b>\$ 27,868.91</b>

**8. Evergreen-Farmington  
Sanitary Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE EVERGREEN-FARMINGTON SANITARY DRAIN**

June 27, 2023

1. Call meeting to order
2. Approve minutes of meeting of May 23, 2023
3. Public Comments
4. Present Change Order No. 3 for Pipeline Management Company for Construction of the S. Evergreen Interceptor Rehabilitation for a net decrease in the amount of \$507,123.00
5. Present Final Construction Estimate for Pipeline Management Company for the S. Evergreen Interceptor Rehabilitation for a final reserve payment to the contractor in the amount of \$98,848.53
6. Present Construction Estimate No. 15 for Walsh Construction Company II, LLC for the 8 Mile Road Pump Station & SSO Chamber Improvements – Phase 1 in the amount of \$1,747,664.96 with a transfer to the Oakland County Treasurer in the amount of \$194,185.00
7. Present Construction Estimate No. 1 for Midwest Power Systems for the Construction of the Lathrup SRT in the amount of \$161,100.00 and a transfer to the Oakland County Treasurer in the amount of \$17,900.00
8. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$9,205.12
9. Other business
10. Approve pro rata payment to Drainage Board members
11. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE EVERGREEN -FARMINGTON SANITARY DRAIN**

May 23, 2023

A meeting of the Drainage Board for the Evergreen-Farmington Sanitary Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 23<sup>rd</sup> day of May 2023.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: None.

Minutes of the meeting held April 25, 2023, were presented for consideration. It was moved by Markham, supported by Woodward, that the minutes be approved.

ADOPTED: Yeas - 3  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

A memorandum from Evans Bantios, P.E., Assistant Chief Engineer, dated May 23, 2023, requesting the Board approve the budget request for the design phase of the Walnut 1 Corrective Action Plan for \$450,000 was presented. It was moved by Markham, supported by Woodward, to approve the budget request for the design phase of the Walnut 1 Corrective Action Plan for \$450,000 as presented.

ADOPTED: Yeas - 3  
Nays - 0

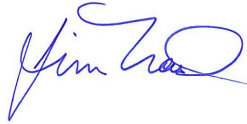
Construction Estimate No. 14 for Walsh Construction Company II, LLC for the 8 Mile Road Pump Station & SSO Chamber Improvements – Phase 1 in the amount of \$902,043.62 with a transfer to the Oakland County Treasurer in the amount of \$100,227.07 was presented. It was moved by Markham, supported by Woodward, to approve Construction Estimate No. 14 for Walsh Construction Company II, LLC for the 8 Mile Road Pump Station & SSO Chamber Improvements – Phase 1 in the amount of \$902,043.62 with a transfer to the Oakland County Treasurer in the amount of \$100,227.07 as presented.

ADOPTED: Yeas - 3  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward and Ms. Markham.

ADOPTED: Yeas - 3  
Nays - 0

There being no further business, the meeting was adjourned.



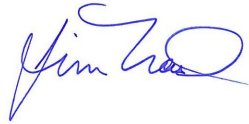
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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Evergreen-Farmington Sanitary Drain, Oakland County, Michigan, held on the 23<sup>rd</sup> day of May 2023, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Evergreen-Farmington Sanitary Drain Drainage District.



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Jim Nash, Chairperson

Dated: May 23, 2023

**CHANGE ORDER NO. 3**

**Evergreen Farmington Sanitary Drain Drainage District Board  
For Construction of the S. Evergreen Interceptor Rehabilitation  
Beverly Hills, Birmingham & W. Bloomfield Township  
Oakland County, Michigan**

Authorization for Extras To & Changes In Contract

Department No.: 6010101  
Fund No.: 58410  
Project No.: 1-2914

Account No. : 370373  
Program No. : 149662  
Project Activity: FAC

Contractor:  
Pipeline Management Company  
2673 E. Maple Road  
Milford, MI 48381

Contract No. : CON9294  
Date of Contract: 1/10/2022  
Completion Date: 6/10/2022  
Extended to: N/A

Auth No.	Location-Description-Reason	Unit Used	Est. Qty.	Unit Price	Amount Increase	Amount Decrease
3A	<b>LOCATION:</b> Entire Project					
	<b>DESCRIPTION:</b>					
	Bid Item 5 - HMA Surface, Rem	Syd	-99.7	\$25.00	---	\$2,492.50
	Bid Item 6 - Interceptor, Manhole Reconstruct	Ea	-1.0	\$7,500.00	---	\$7,500.00
	Bid Item 8 - Bypass Pumping System, Pump Rental	days	-9.0	\$4,000.00	---	\$36,000.00
	Bid Item 9 - Bypass Pumping System, Pump Operation	days	-15.0	\$1,500.00	---	\$22,500.00
	Bid Item 12 - Interceptor Manhole Lining	Sft	341.4	\$80.00	\$27,312.00	---
	Bid Item 13 - Concrete Repair, Prep and Patch	Ea	-3.0	\$1,500.00	---	\$4,500.00
	Bid Item 14 - Grouting System Setup, Joint (Incl. 4 Ports)	Ea	38.0	\$1,250.00	\$47,500.00	---
	Bid Item 15 - Chemical Grout	Gal	-4078.0	\$25.00	---	\$101,950.00
	Bid Item 16 - Aggregate Base, 21AA, 8 Inch, Special	Syd	-99.7	\$25.00	---	\$2,492.50
	Bid Item 17 - HMA 5E3, Mod	Ton	-42.4	\$200.00	---	\$8,470.00
	Bid Item 19 - Permit Allowance Free	Lsum	-0.9	\$15,000.00	---	\$13,500.00
	Bid Item 20 - Exploratory Excavation for Utilities	Vft	-10.0	\$600.00	---	\$6,000.00
	Bid Item 21 - Fracture Repair	Vft	-50.0	\$150.00	---	\$7,500.00
	Bid Item 22 - Reinforcement Repair	Ea	-20.0	\$1,750.00	---	\$35,000.00
	Bid Item 23 - Additional Grout Port	Ea	20.0	\$1.00	\$20.00	---
	Bid Item 24 - Concrete Repair, Prep and Patch, Directed	Ea	15.0	\$1,200.00	\$18,000.00	---



Auth No.	Location-Description-Reason	Unit Used	Est. Qty.	Unit Price	Amount Increase	Amount Decrease
	Bid Item 25 - Chemical Grouting System Setup, Joint (Incl. 4 Ports), Directed	Ea	-13.0	\$1,750.00	---	\$22,750.00
	Bid Item 26 - Chemical Grout, Directed	Gal	-3152.0	\$25.00	---	\$78,800.00
	Bid Item 27 - Cement Grout, Mobilization	Lsum	-1.0	\$32,000.00	---	\$32,000.00
	Bid Item 28 - Cement Grout, Demobilization	Lsum	-1.0	\$10,000.00	---	\$10,000.00
	Bid Item 29 - Cement Grout, Ports	Ea	-50.0	\$500.00	---	\$25,000.00
	Bid Item 30 - Cement Grout	Cft	-1600.0	\$60.00	---	\$96,000.00
	Bid Item 31 - Spin-Cast Geopolymer Lining 54 inch	Lft	-25.0	\$1,500.00	---	\$37,500.00
	Bid Item 32 - Allowance for Odor Control	Lsum	-1.0	\$50,000.00	---	\$50,000.00
	<b>REASON:</b> Bid quantities have been adjusted to as-built quantities installed.					
Totals					\$92,832.00	\$599,955.00
Net Decrease					---	\$507,123.00

CHANGE ORDER NO. 3

Evergreen Farmington Sanitary Drain Drainage District Board  
For Construction of the S. Evergreen Interceptor Rehabilitation  
Beverly Hills, Birmingham & W. Bloomfield Township  
Oakland, MI

Prepared by: Evangelos Bantios Date: 5/30/2023  
Evangelos Bantios, P.E. - Project Engineer

Recommended by: Bradley Shepler Date: 6/01/2023  
Bradley W. Shepler, P.E. - Hubbell, Roth & Clark, Inc.

Approved by: Joel Brown Date: 6/16/23  
Joel Brown, P.E. - Chief Engineer

The Contractor agrees to do the work described above and agrees to accept payment in full on the basis indicated.

Accepted by: David Lusky Digitally signed by David Lusky  
Date: 2023.06.01 08:29:42  
David Lusky  
Pipeline Management Company, LLC

Approved by: Sid Lockhart Date: 6/20/2023  
Sid Lockhart, P.E. - Special Projects Manager

The Contractor is hereby authorized and instructed to do the work described above in accordance with the terms of the Contract.

This Change Order No. 3 was approved by the Drain board on:

**Jim Nash, Oakland County Water Resources Commissioner  
S. Evergreen Interceptor Rehabilitation  
Beverly Hills, Birmingham & W. Bloomfield Township  
Oakland County, Michigan**

## Final Construction Payment

Department No.: 6010101  
Fund No.: 58410  
Project No.: 1-2914

Account No.: 730373  
Program No.: 149662  
Activity: FAC

Contractor:  
Pipeline Management Company, LLC  
2673 E. Maple Road  
Milford, MI 48381

Account No.: 730373  
Date of Contract: January 10, 2022  
Completion Date: June 10, 2022  
Extended to: N/A

Original Contract Amount:		\$1,854,000.00
Previous Change Order Number: CO#1 & CO#2		\$122,970.50
Change Order This Estimate: Final Balancing Change Order		(\$507,123.00)
Total Net Change Orders:	✓	(\$384,152.50)
Adjusted Contract Amount:		\$1,469,847.50
Final Sub-Total: (Sheet 3 of 3 Column 7)		\$1,469,847.50
Less Deductions: (Sheet 3 of 3 Column 7)	\$	-
Gross Estimate: (Work in Place)	100.00%	\$1,469,847.50
Less Amount Reserved:		\$0.00
Final Amount Allowed:		\$1,469,847.50
Less Previous Estimates:		\$1,370,998.97
Final Payment Request To Be Paid To Contractor:		\$0.00
Final Reserve Payment to Contractor		\$98,848.53
Balance of Contract To Date	✓	\$0.00 Accounting Auditor: <u>BCR</u> 5/30/2023
Amount To Be Reserved (From Above)		\$0.00
Less Previous Transfers To Reserve:	✓	\$98,848.53
Amount of Current Transfer:		(\$98,848.53)

Prepared by: Evangelos Bantios  
Evangelos Bantios, P.E. - Project Engineer

Date: 5/30/2023

Recommended by: Bradley Shepler  
Bradly W. Shepler, P.E. - Hubbell, Roth & Clark, Inc.

Date: 6/01/2023

Approved by: Joel Brown  
Joel Brown, P.E. - Chief Engineer

Date: 6/16/23

Approved For Payment: Sid Lockhart  
Sid Lockhart, P.E. - Special Project Manager

Date: 6/20/2023

Final Construction Payment

Approved By Board On: \_\_\_\_\_

**JIM NASH  
OAKLAND COUNTY WATER RESOURCES COMMISSIONER**

**Jim Nash, Oakland County Water Resources Commissioner  
Evergreen Farmington Sanitary Drain Drainage District  
8 Mile Road CAP 8 Mile Road Pump Station & SSO Chamber Improvements - Phase 1  
Southfield  
Oakland County, Michigan**

Construction Estimate No. 15

May 1, 2023 to May 31, 2023

Department No. : 6010101  
Fund No. : 58410  
Project No. : 1-3181



Account No. : 730352  
Program No. : 149667  
Activity : FAC  
Vendor No. : 23191  
Contract No. : 6628  
Date of Contract : 2/2/2022  
Completion Date : 8/13/2027

Contractor :  
Walsh Construction Company II, LLC  
3031 W Grand Blvd, Suite 640  
Detroit, MI 48202

Original Contract Amount:		\$0.00
Previous Change Order Numbers: CO Nos. 1, 2, 3, 4, 5, 6, and 7.		\$50,177,000.25
Change Orders This Estimate Number:		
Total Net Change Orders:		\$50,177,000.25
<u>Adjusted Contract Amount:</u>		\$50,177,000.25 ✓
Subtotal To Date: (Sheet 2 of 3 Column 7)		\$4,881,865.39
Less Deductions to Date: (Sheet 2 of 3 Column 7)		\$0.00
Gross Estimate: (Work in Place)	9.73%	\$4,881,865.39
Less Amount Reserved: (10% of Gross Estimate)		\$488,186.54 ✓
Total Amount Allowed To Date:		\$4,393,678.85
Less Previous Estimates:		\$2,646,013.89
Net Payment Request To Be Paid To Contractor:		\$1,747,664.96
Reserve Payment to Contractor		\$0.00
Balance of Contract To Date	✓ \$45,295,134.86	Accounting Auditor: <i>BCR</i> 6/6/2023
Less Previous Transfers To Reserve:		\$294,001.54 ✓
<u>Amount of Current Transfer:</u>		\$194,185.00

Prepared by: *Charles J. Roarty, Jr.* Date: June 6, 2023  
Charles J. Roarty, Jr., P.E. - NTH Consultants

Recommended by: *Joe Siwek* Date: June 6, 2023  
Joe Siwek, P.E. - Consulting Engineer (Fishbeck)

Recommended by: *Evangelos Bantios* Date: 6/6/2023  
Evangelos Bantios, P.E. - Project Engineer

Approved by: *Joel Brown* Date: 6/16/23  
Joel Brown, P.E. - Chief Engineer

Approved by: *Sid Lockhart* Date: 6/20/2023  
Sid Lockhart, P.E. - Special Project Manager

Approved by Board on: \_\_\_\_\_

**JIM NASH  
OAKLAND COUNTY WATER RESOURCES COMMISSIONER**

**Jim Nash, Oakland County Water Resources Commissioner  
 Evergreen Farmington Sanitary Drain Drainage District  
 For Construction of the Lathrup SRT  
 Lathrup Village  
 Oakland County, Michigan**

Construction Estimate No. 1

4/19/2023 to 6/7/2023

Department No. : 6010101  
 Fund No. : 58410  
 Project No. : 1-3433



Account No. : 730639  
 Program No. : 149667  
 Activity : FA C  
 Vendor No. : 40564  
 Contract No. : CON00010270  
 Date of Contract : 4/19/2023  
 Completion Date : 5/3/2024

Contractor :  
 Midwest Power Systems  
 2401 Hickory Oak Lane  
 Milford, MI 48380

Original Contract Amount: \$2,313,504.20

Previous Change Order Numbers (none): \$0.00

Change Orders This Estimate Numbers (none): \$0.00

Total Net Change Orders: \$0.00

Adjusted Contract Amount: \$2,313,504.20

Subtotal To Date: (Sheet 2 of 2 Column 7) \$179,000.00

Less Deductions to Date: (Sheet 2 of 2 Column 7) \$0.00

Gross Estimate: (Work in Place) 7.74% \$179,000.00

Less Amount Reserved: (10% of Gross Estimate) \$17,900.00 ✓

Total Amount Allowed To Date: \$161,100.00

Less Previous Estimates: \$0.00

Net Payment Request To Be Paid To Contractor: \$161,100.00

Reserve Payment to Contractor \$0.00

Balance of Contract To Date ✓ \$2,134,504.20 Accounting Auditor: BCR 6/15/2023

Less Previous Transfers To Reserve: \$0.00 ✓

Amount of Current Transfer: \$17,900.00

Prepared by: Evangelos Bantios Date: 6/15/2023  
 Evangelos Bantios, P.E. - Project Engineer

Recommended by: John Bergsma Jr. Date: 6/15/2023  
 John Bergsma Jr., P.E. - Consulting Engineer

Approved by: Joel Brown Date: 6/15/23  
 Joel Brown, P.E. - Chief Engineer

Approved by: Sid Lockhart Date: 6/20/2023  
 Sid Lockhart, P.E. - Special Project Manager

Approved by Board on: \_\_\_\_\_

**JIM NASH  
 OAKLAND COUNTY WATER RESOURCES COMMISSIONER**

**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the EVERGREEN - FARMINGTON SANITARY DRAIN SYSTEM

**FROM:** Shawn Phelps, Chief of Fiscal Services *for Shawn Phelps*  
OCWRC Accounting

**DATE:** June 27, 2023

**SUBJECT:** Request for Board approval of payment of the following invoices:

<u>Date</u>	<u>Ref No.</u>	<u>Paid To</u>	<u>For</u>	<u>Amount</u>
6/15/2023	V # SINV00188687	Orchard Hiltz & McCliment Inc	Invoice # 63557 - Contracted Services - 05/20/23	1,682.50
5/18/2023	V # SINV00182574	ICS Integration Services LLC	Invoice # 2713 - Contracted Services	7,522.62
			<b>Total</b>	<b>\$ 9,205.12</b>

## **9. Henry-Graham Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE HENRY-GRAHAM DRAIN**

June 27, 2023

1. Call meeting to order
2. Approve minutes of meeting of February 28, 2023
3. Public Comments
4. Present Memorandum from Geoff Wilson, P.E. – Chief Engineer, dated June 27, 2023, requesting the Board authorize DVM Utilities to preform work established in its proposal within existing contract CON00008744 for an amount not-to-exceed \$365,917.75 and approve \$504, 238 total project cost for Drainage District Maintenance Repairs for 2023
5. Present Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$504,238
6. Other business
7. Approve pro rata payment to Drainage Board members
8. Adjourn



**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE HENRY-GRAHAM DRAIN**

February 28, 2022

A meeting of the Drainage Board for the Henry-Graham Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 11:00 a.m. on the 28<sup>th</sup> day of February 2022.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: None.

Minutes of the meeting held December 14, 2021, were presented for consideration. It was moved by Markham, supported by Woodward, that the minutes be approved.

ADOPTED: Yeas - 3  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

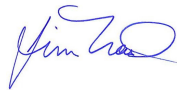
A memorandum from Brian Bennett, Civil Engineer III, dated February 22, 2022, requesting the Board to authorize the Chairperson to sign the Easement Use Agreement to accommodate John and Rebecca McClintock's request was presented. It was moved by Markham, supported by Woodward, to authorize the Chairperson to sign the Easement Use Agreement to accommodate John and Rebecca McClintock's request as presented.

ADOPTED: Yeas - 3  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Ms. Markham and Mr. Woodward

ADOPTED: Yeas - 3  
Nays - 0

There being no further business, the meeting was adjourned.



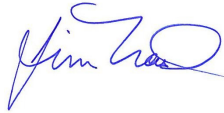
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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for Henry-Graham Drain, Oakland County, Michigan, held on the 28<sup>th</sup> day of February 2022, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Henry-Graham Drain Drainage District.



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Jim Nash, Chairperson

Dated: February 28, 2022

**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER****MEMORANDUM**

**TO:** Jim Nash - Chairperson of the Henry Graham Drain Drainage Board

**FROM:** Geoff S. Wilson, P.E. - Chief Engineer

**SUBJECT:** Henry Graham Maintenance Repairs 2023

**DATE:** June 27, 2023

The Henry Graham Drain was inspected in 2019 and requires maintenance. The enclosed storm drain consists of reinforced concrete pipe originally built in 1979 that primarily requires the sealing of leaking joints and repair of corroded reinforcing steel. A project scope was established, and pricing was received from multiple contractors with existing maintenance contracts with WRC. The total project estimate is based on the contractor pricing received in June 2023. The City of Troy and the City of Madison Heights have budgeted for these expenses and plan to pay the project cost through a single assessment in Summer 2023.

**Requested Actions:**

**Authorize DVM Utilities to perform the work established in its proposal within existing contract CON00008744 for an amount not to exceed \$365,917.75.**

**Approve \$504,238 total project cost for Henry Graham Maintenance Repairs for 2023.**



Henry Graham Repairs 2023  
Location/Pay Items

Estimated      Unit of  
Quantity      Measure      Unit Price      Item Total

**N/A to ROT002003 (Asset ID 24044) - Grout**

Circular, 27 In Diameter, 10' Long  
Local system upstream of main. Grout: IR @ 2' U/S of ROT002003  
Traffic Control: Close crossover per 310-SP-CROSS-C-NFW (sign both directions)

Chemical Grouting System Setup, Joint	1	Ea	\$5,000.00	\$5,000.00
Post Construction PACP CCTV	10	Ft	\$28.50	\$285.00
Traffic Control	1	Lump Sum	\$1,500.00	\$1,500.00

**ROT002004 to ROT002003 (Asset ID 24046) - Grout**

Circular, 60 In Diameter, 343' Long  
Grout: IR @ 64'; ID @ 268' (lift hole) D/S of ROT002004  
Traffic Control: 003 - Close cross over per 310-SP-CROSS-C-NFW (sign both directions).  
004 - Work outside shoulder per 4000-M-SHL-OU.

Chemical Grouting System Setup, Joint	2	Ea	\$2,000.00	\$4,000.00
Post Construction PACP CCTV	343	Ft	\$1.25	\$428.75
Traffic Control	1	Lump Sum	\$1,500.00	\$1,500.00

**N/A to ROT002005 (Asset ID 24047) - Grout**

Circular, 30 In Diameter, 10' Long  
Local system upstream of main. Grout: IR @ 2' U/S of ROT002005  
Traffic Control: 005 - Close cross over per 310-SP-CROSS-C-NFW (sign both directions)

Chemical Grouting System Setup, Joint	1	Ea	\$1,200.00	\$1,200.00
Post Construction PACP CCTV	10	Ft	\$28.50	\$285.00
Traffic Control	1	Lump Sum	\$1,000.00	\$1,000.00



Henry Graham Repairs 2023

Location/Pay Items

Estimated  
Quantity

Unit of  
Measure

Unit Price

Item Total

**ROT005001 to ROT002009 (Asset ID 24054) - Grout**

Circular, 60 In Diameter, 198.3' Long

Grout: IR @ 8' D/S of ROT005001

Traffic Control: 009 - Close lane per 123-NFW-1LC-R. \*ROT005001 OR ROT008024 - Work outside shoulder per 4000-M-SHL-OU.

Chemical Grouting System Setup, Joint	1	Ea	\$2,000.00	\$2,000.00
Post Construction PACP CCTV	198	Ft	\$1.50	\$297.00
Traffic Control	1	Lump Sum	\$1,000.00	\$1,000.00

**TRT143024 to ROT002022 (Asset ID 24681) - Grout**

Rectangular/Triple Box, 171x171, 155' Long

Grout: IR @6'; IR @ 49'; IR @ 106' D/S of TRT143024BT

Traffic Control: None for 035

Chemical Grouting System Setup, Joint	3	Ea	\$2,300.00	\$6,900.00
Post Construction PACP CCTV	155	Ft	\$2.00	\$310.00
Traffic Control	1	Lump Sum	\$1,850.00	\$1,850.00

**ROT002018 to ROT002027(BT) (Asset ID 24690) - Grout**

Circular, 36 In Diameter, 17' Long

Grout: IR @ 12' D/S of ROT002018

Traffic Control: Minor Devices Only for 018

Chemical Grouting System Setup, Joint	1	Ea	\$1,200.00	\$1,200.00
Post Construction PACP CCTV	17	Ft	\$17.00	\$289.00
Traffic Control	1	Lump Sum	\$450.00	\$450.00



Henry Graham Repairs 2023

Location/Pay Items

Estimated  
Quantity

Unit of  
Measure

Unit Price

Item Total

**ROT002026 to ROT002028 (Asset ID 24688 (24684)) - Grout**

Rectangular/Triple Box, 171x171, 1231' Long

Grout: IR @ 43' D/S of ROT002026

Traffic Control: Minor Devices Only for 026

Location/Pay Items	Estimated Quantity	Unit of Measure	Unit Price	Item Total
Chemical Grouting System Setup, Joint	1	Ea	\$2,700.00	\$2,700.00
Post Construction PACP CCTV	43	Ft	\$7.50	\$322.50
Traffic Control	1	Lump Sum	\$500.00	\$500.00

**ROT003004 to ROT003003 (Asset ID 22676) - Grout**

Circular, 48 In Diameter, 428' Long

Grout: IR @ 67'; IG @ 314' U/S of ROT003003

Traffic Control: 004 - Close right lane per 123-NFW-1LC-R. 003 - Work outside shoulder per 4000-M-SHL-OU.

Location/Pay Items	Estimated Quantity	Unit of Measure	Unit Price	Item Total
Chemical Grouting System Setup, Joint	2	Ea	\$2,000.00	\$4,000.00
Post Construction PACP CCTV	428	Ft	\$1.50	\$642.00
Traffic Control	1	Lump Sum	\$1,500.00	\$1,500.00

**ROT005002 to ROT005001 (Asset ID 22711) - Grout**

Circular, 36 In Diameter, 26' Long

Grout: HSV @ 15' D/S of ROT005002

Traffic Control: 002 - Close lane per 123-NFW-1LC-R (from east side of John R intersection. Taper radius at NW side of John R + 14 Mile intersection). ROT005035\* - Work outside shoulder per 4000-M-SHL-OU.

Location/Pay Items	Estimated Quantity	Unit of Measure	Unit Price	Item Total
Chemical Grouting System Setup, Joint	1	Ea	\$1,200.00	\$1,200.00
Post Construction PACP CCTV	26	Ft	\$11.00	\$286.00
Traffic Control	1	Lump Sum	\$900.00	\$900.00



Henry Graham Repairs 2023

Location/Pay Items

Estimated  
Quantity

Unit of  
Measure

Unit Price

Item Total

**ROT008019 to ROT008012 (Asset ID 22688) - Grout**

Circular, 24 In Diameter, 195' Long

Grout: ID @ 18'; ID @ 65' D/S of ROT008019

Traffic Control: 019 - Close right lane per 123-NFW-1LC-R (intersection signing). 012 -

Work outside shoulder per 4000-M-SHL-OU

Chemical Grouting System Setup, Joint	2	Ea	\$1,200.00	\$2,400.00
Post Construction PACP CCTV	195	Ft	\$1.50	\$292.50
Traffic Control	1	Lump Sum	\$1,000.00	\$1,000.00

**TRT100003 to TRT100002 (Asset ID 25846) - Grout**

Square or Rectangular, 171x171, 466' Long

Grout: ID @ 151'; IR @ 212'; ID @ 343'; ID @ 398' D/S of TRT100003

Traffic Control: 002 - Work outside shoulder per 4000-M-SHL-OU. None for 003 (rear

yard).

Chemical Grouting System Setup, Joint	4	Ea	\$2,375.00	\$9,500.00
Post Construction PACP CCTV	466	Ft	\$1.50	\$699.00
Traffic Control	1	Lump Sum	\$500.00	\$500.00

**TRT100005 to TRT100004 (Asset ID 25838) - Grout**

Square or Rectangular, 171x171, 632' Long

Grout: ID (2) @ 31'; IR @ 150' D/S of TRT100005

Traffic Control: None for 005 (rear yard). None for 004 (rear yard).

Chemical Grouting System Setup, Joint	2	Ea	\$2,700.00	\$5,400.00
Post Construction PACP CCTV	632	Ft	\$1.50	\$948.00
Traffic Control	1	Lump Sum	\$250.00	\$250.00



Henry Graham Repairs 2023

Location/Pay Items

Estimated  
Quantity

Unit of  
Measure

Unit Price

Item Total

**TRT098063 to TRT100006 (Asset ID 25834) - Grout**

Square or Rectangular, 171x171, 607' Long

Grout: ID @ 241'; ID @ 278'; ID @ 337'; IR @ 465' D/S of TRT098063

Traffic Control: Minor devices only for 063. None for 006 (rear yard).

Location/Pay Items	Estimated Quantity	Unit of Measure	Unit Price	Item Total
Chemical Grouting System Setup, Joint	4	Ea	\$2,400.00	\$9,600.00
Post Construction PACP CCTV	607	Ft	\$1.50	\$910.50
Traffic Control	1	Lump Sum	\$500.00	\$500.00

**TRT143013 to TRT143011 (Asset ID 25399) - Grout**

Circular, 102 In Diameter, 542' Long

Grout: IR @ 139' D/S of TRT143013

Traffic Control: 013 - Close right lane per 123-NFW-1LC-R. 011 - Work outside shoulder per 4000-M-SHL-OU.

Location/Pay Items	Estimated Quantity	Unit of Measure	Unit Price	Item Total
Chemical Grouting System Setup, Joint	1	Ea	\$2,700.00	\$2,700.00
Post Construction PACP CCTV	542	Ft	\$1.75	\$948.50
Traffic Control	1	Lump Sum	\$1,100.00	\$1,100.00

**TRT143015 to TRT143014 (Asset ID 25408) - Grout**

Circular, 102 In Diameter, 266' Long

Grout: IR @ 47'; ID (lift hole) @ 133'; ID @ 161' U/S of TRT143014

Traffic Control: 014 - Close right lane per 123-NFW-1LC-R. ROT005013\* - Close right lane per 123-NFW-1LC-R.

Location/Pay Items	Estimated Quantity	Unit of Measure	Unit Price	Item Total
Chemical Grouting System Setup, Joint	3	Ea	\$2,500.00	\$7,500.00
Post Construction PACP CCTV	542	Ft	\$1.75	\$948.50
Traffic Control	1	Lump Sum	\$1,800.00	\$1,800.00





Henry Graham Repairs 2023

Location/Pay Items

Estimated  
Quantity

Unit of  
Measure

Unit Price

Item Total

**TRT142003 to TRT143021 (Asset ID 25866) - Grout**

Square or Rectangular, 171x171, 692' Long

Grout: IR/ID @406'; ID @ 457'; IR @ 585' D/S of TRT142003

Traffic Control: None for 003 (access through basin). None for 024 (access through basin).

Chemical Grouting System Setup, Joint	3	Ea	\$2,500.00	\$7,500.00
Post Construction PACP CCTV	692	Ft	\$1.50	\$1,038.00
Traffic Control	1	Lump Sum	\$550.00	\$550.00

**TRT094016 to TRT144001 (Asset ID 26218) - Grout**

Circular, 42 In Diameter, 10' Long

Local system upstream of main. Grout: IR @ 3'; IR @ 8' U/S of TRT094007

Traffic Control: None for 016 (access from Wattles via basin parcel).

Chemical Grouting System Setup, Joint	2	Ea	\$2,000.00	\$4,000.00
Post Construction PACP CCTV	10	Ft	\$33.00	\$330.00
Traffic Control	1	Lump Sum	\$475.00	\$475.00

**TRT144004 to TRT144003 (Asset ID 25440) - Grout**

Circular, 72 In Diameter, 363' Long

Grout: IR @ 111'; IR @ 142'; ID @ 218'; IR @ 292'; D/S TRT144004

Traffic Control: 004 - Close lane per 123-NFW-1LC-R. 003 - Work outside shoulder per 4000-M-SHL-OU.

Chemical Grouting System Setup, Joint	4	Ea	\$1,700.00	\$6,800.00
Post Construction PACP CCTV	363	Ft	\$1.75	\$635.25
Traffic Control	1	Lump Sum	\$2,250.00	\$2,250.00



Henry Graham Repairs 2023

Location/Pay Items

Estimated  
Quantity

Unit of  
Measure

Unit Price

Item Total

**TRT144006 to TRT144004 (Asset ID 25437) - Grout**

Circular, 66 In Diameter, 284' Long

Grout: IR @ 93'; IR @ 150' D/S of TRT144006

Traffic Control: 006 - Close lane per 123-NFW-1LC-R. Keep closed for 004.

Chemical Grouting System Setup, Joint	2	Ea	\$2,000.00	\$4,000.00
Post Construction PACP CCTV	284	Ft	\$2.25	\$639.00
Traffic Control	1	Lump Sum	\$1,500.00	\$1,500.00

**TRT144009 to TRT144006 (Asset ID 25432) - Grout**

Circular, 66 In Diameter, 378' Long

Grout: IR @ 6'; ID @ 38'; IR@ 78'; ID@ 161'; IR@ 361' D/S of TRT144006

Traffic Control: 009 - Close lane per 123-NFW-1LC-R. Keep closed for 006.

Chemical Grouting System Setup, Joint	5	Ea	\$2,450.00	\$12,250.00
Post Construction PACP CCTV	378	Ft	\$1.75	\$661.50
Traffic Control	1	Lump Sum	\$2,450.00	\$2,450.00

**TRT144014 to TRT144011 (Asset ID 25425) - Grout/Deposits**

Circular, 54 In Diameter, 434' Long

Grout: IR @ 343' D/S of TRT144014. Deposits Removal @ 420' D/S of TRT144014

Traffic Control: 014 - Close acceleration taper per 122-NFW-SHL-R. Keep cones extended on curb line to 011.

Chemical Grouting System Setup, Joint	1	Ea	\$2,000.00	\$2,000.00
Deposits Removal	1	Ea	\$300.00	\$300.00
Post Construction PACP CCTV	434	Ft	\$1.50	\$651.00
Traffic Control	1	Lump Sum	\$1,150.00	\$1,150.00



Henry Graham Repairs 2023  
 Location/Pay Items

Estimated Unit of  
 Quantity Measure Unit Price Item Total

**TRT143016 to TRT143015 (Asset ID 24055) - Grout/Reinforcement Repair**

Circular, 96 In Diameter, 436' Long  
 Grout: ID @ 7'; ID @ 284'; ID@ 292'; IR @ 381'; ID@ 424 U/S of TRT143015. Reinf Repair:  
 12 (8sft - 4 ft rebar) @ 342'; 9 to 2 (12 sft - 11 ft rebar) @ 376' U/S of TRT143015  
 Traffic Control: Minor devices only for TRT143016\*. TRT143014\* - Close right lane per  
 123-NFW-1LC-R.

Chemical Grouting System Setup, Joint	5	Ea	\$2,450.00	\$12,250.00
Concrete Repair, Prep and Patch	20	Sft	\$275.00	\$5,500.00
Corroded/Missing Reinforcement Repair	15	Ft	\$150.00	\$2,250.00
Post Construction PACP CCTV	436	Ft	\$1.50	\$654.00
Traffic Control	1	Lump Sum	\$1,900.00	\$1,900.00

**ROT003011 to ROT003017 (Asset ID 24041) - Reinforcement Repair**

Circular, 60 In Diameter, 280' Long  
 Reinf Repair: Joint 2 to 3 (9 sft - 8 ft rebar) 60' D/S of ROT003011  
 Traffic Control: 011 - Work outside shoulder per 4000-M-SHL-OU. ROT001032\* Minor  
 devices only.

Concrete Repair, Prep and Patch	9	Sft	\$350.00	\$3,150.00
Corroded/Missing Reinforcement Repair	8	Ft	\$150.00	\$1,200.00
Post Construction PACP CCTV	280	Ft	\$1.25	\$350.00
Traffic Control	1	Lump Sum	\$800.00	\$800.00

**TRT051046 to TRT051045 (Asset ID 26200) - Reinforcement Repair**

Circular, 144 In Diameter, 578.1' Long  
 Reinf Repair: joint 1 to 4 (30 sft) @ 49'; 12 to 1 (18 sft) @ 85'; joint 12 to 1 (9 sft) @ 337';  
 11 to 2 (80 sft) @ 338'; 12 to 1 (9 sft) @ 536' D/S of TRT 051046  
 Traffic Control: None for 046 (access through basin). None for 045 (rear yard).

Concrete Repair, Prep and Patch	146	Sft	\$165.00	\$24,090.00
Corroded/Missing Reinforcement Repair	60	Ft	\$100.00	\$6,000.00
Post Construction PACP CCTV	578	Ft	\$1.50	\$867.00
Traffic Control	1	Lump Sum	\$500.00	\$500.00



Henry Graham Repairs 2023  
 Location/Pay Items

Estimated      Unit of  
 Quantity      Measure      Unit Price      Item Total

**TRT051049 to TRT051046 (Asset ID 26197) - Reinforcement Repair**

Circular, 144 In Diameter, 537.6' Long  
 Reinf Repair: joint 11 (6 sft -1 ft rebar) @ 46'; joint 12 (6sft - 1 ft rebar); joint 12 to 1 (6 sft - 3 ft rebar) @ 343'; joint 2 to 3 (6 sft - 3 ft rebar) @ 368'; Joint 1 (6 sft - 1 ft rebar) @ 440'; 9 to 12 (36 sft - 16 ft rebar); 12 to 2 (36 sft - 16 ft rebar) D/S of TRT051049  
 Traffic Control: None for 046 (access through basin). None for 049 (rear yard).

Concrete Repair, Prep and Patch	102	Sft	\$185.00	\$18,870.00
Corroded/Missing Reinforcement Repair	40	Ft	\$135.00	\$5,400.00
Post Construction PACP CCTV	538	Ft	\$1.50	\$807.00
Traffic Control	1	Lump Sum	\$500.00	\$500.00

**TRT051050 to TRT051049 (Asset ID 26196) - Reinforcement Repair**

Circular, 144 In Diameter, 411' Long  
 Reinf Repair: joint 7 (6 sft -1 ft rebar) @ 14'; Joint 11 to 2 (36 sft - 12 ft rebar) @ 129'; joint 10 (6 sft - 2 ft rebar) @ 202'; joint 10 (6 sft - 1 ft rebar) @ 217'; joint 10 (6 sft-1 ft rebar) @ 266'; joint 9 to 10 (10 sft - 3 ft rebar) @ 345' D/S of TRT051050  
 Traffic Control: None for 050 (access through stub road). None for 049 (rear yard).

Concrete Repair, Prep and Patch	70	Sft	\$225.00	\$15,750.00
Corroded/Missing Reinforcement Repair	20	Ft	\$135.00	\$2,700.00
Post Construction PACP CCTV	411	Ft	\$1.75	\$719.25
Traffic Control	1	Lump Sum	\$500.00	\$500.00



Henry Graham Repairs 2023  
Location/Pay Items

Estimated      Unit of  
Quantity      Measure      Unit Price      Item Total

**TRT051001 to TRT051050 (Asset ID 26195) - Reinforcement Repair**

Circular, 144 In Diameter, 488' Long  
Reinf Repair: joint 2 (8 sft-2 ft rebar) @ 67'; joint 3 (6 sft - 1 ft rebar) @ 116'; 12 (16 sft - 10 ft rebar - HOLE DRILLED IN PIPE AT THIS LOCATION) @ 183'; joint 1 to 2 (14 sf - 8 ft rebar) @ 340'; joint 2 (6 sft - 1 ft rebar) @ 348'; joint 11 (6 sft - 1 ft rebar) @363'; U/S of TRT051050  
Traffic Control: None for 050 (access through stub road). None for 001 (rear yard).

Concrete Repair, Prep and Patch	56	Sft	\$225.00	\$12,600.00
Corroded/Missing Reinforcement Repair	23	Ft	\$205.00	\$4,715.00
Post Construction PACP CCTV	488	Ft	\$1.50	\$732.00
Traffic Control	1	Lump Sum	\$500.00	\$500.00

**TRT051045 to TRT094020 (Asset ID 26201) - Reinforcement Repair**

Circular, 144 In Diameter, 590.4' Long  
Reinf Repair: joint 1 (6 sft - 1 ft rebar) @ 31'; joint 4 (8 sft - 4 ft rebar) @ 249'; D/S of TRT051045  
Traffic Control: 020 -Work outside shoulder per 4000-M-SHL-OU. None for 045 (rear yard).

Concrete Repair, Prep and Patch	14	Sft	\$385.00	\$5,390.00
Corroded/Missing Reinforcement Repair	5	Ft	\$200.00	\$1,000.00
Post Construction PACP CCTV	590	Ft	\$1.50	\$885.00
Traffic Control	1	Lump Sum	\$500.00	\$500.00

**ROT003014 to ROT008006 (Asset ID 22705) - Spot Liner**

Circular, 30 In Diameter, 64' Long  
SL: IR 6' U/S of ROT008006 (actual size is 30")  
Traffic Control: 014 - Close right lane per 123-NFW-1LC-R. 006 - Work outside shoulder per 4000-M-SHL-OU.

Spot Liner, 30 In	1	Ea	\$4,200.00	\$4,200.00
Post Construction PACP CCTV	64	Ft	\$5.00	\$320.00
Traffic Control	1	Lump Sum	\$950.00	\$950.00



Henry Graham Repairs 2023  
 Location/Pay Items

Estimated      Unit of  
 Quantity      Measure      Unit Price      Item Total

**PROJECT WIDE ITEMS:**

Additional Grout Port, Directed	15	Ea	\$50.00	\$750.00
Acrylimide Grout	3305	Gal	\$27.50	\$90,887.50

**TOTAL ALL ITEMS:**

**\$365,917.75**

**ROT005013 to TRT143015 (Asset ID 24040) - OPTIONAL - CIPP LINE SEGMENT**

Circular, 54 In Diameter, 199' Long  
 CIPP Line in 2030. Under intersection.  
 Traffic Control: 013 - Close right lane per 123-NFW-1LC-R. TRT143014\* - Close right lane per 123-NFW-1LC-R

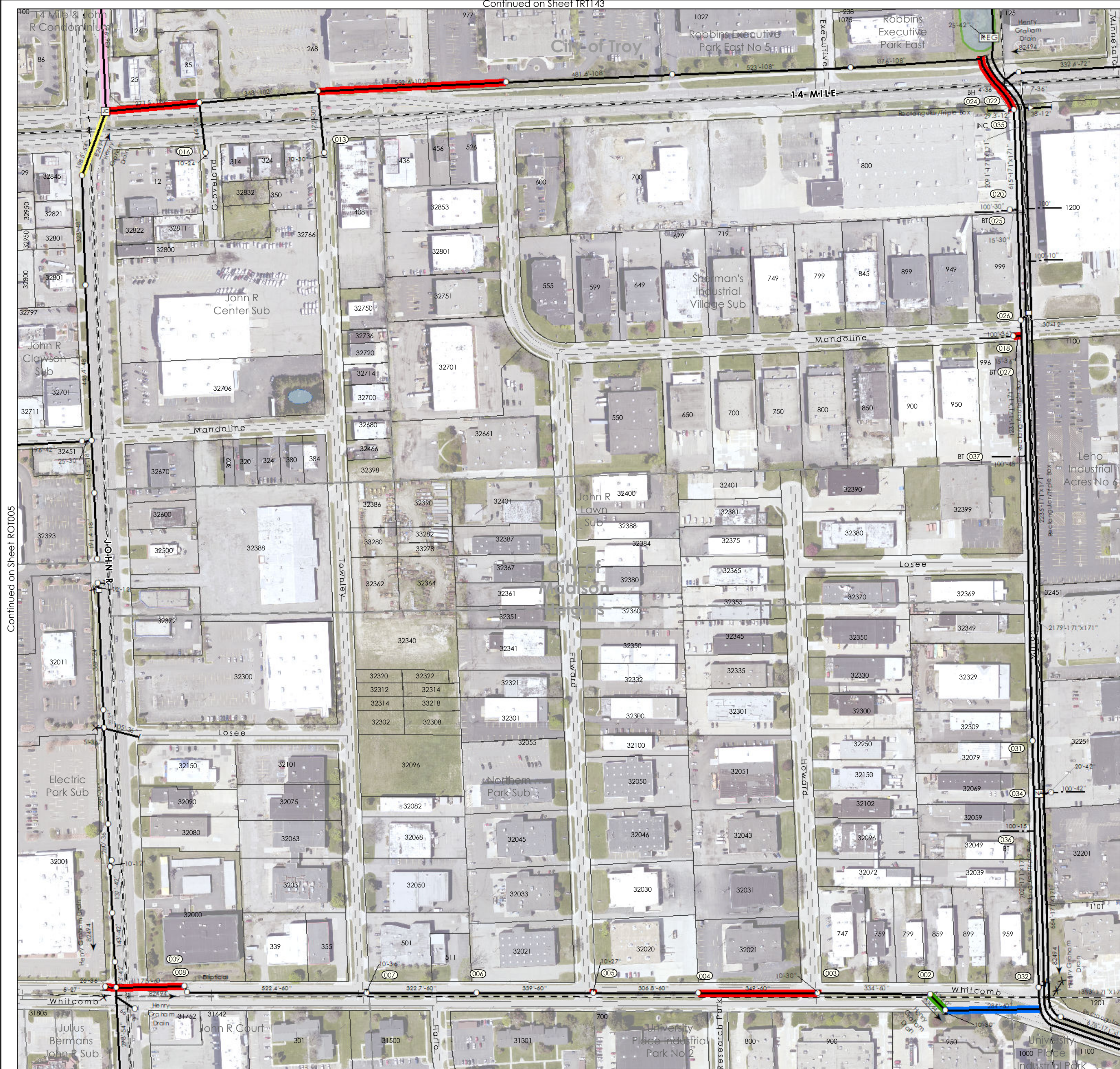
Pre Cleaning and CCTV	199	Ft	\$17.00	\$3,383.00
CIPP Lining, 54 In Diameter	199	Ft	\$620.00	\$123,380.00
Post Construction PACP CCTV	199	Ft	\$2.00	\$398.00
Traffic Control	1	Lump Sum	\$3,200.00	\$3,200.00

**ROT002002 to ROT003011 (Asset ID 24042) - OPTIONAL - Spot Liner**

Circular, 60 In Diameter, 62' Long  
 SL: 50' U/S of ROT003011  
 Traffic Control: 002 - Close cross over per 310-SP-CROSS-C-NFW (sign both directions).  
 011 - Work outside shoulder per 4000-M-SHL-OU.

Spot Liner, 60 In	1	Ea	\$13,750.00	\$13,750.00
Post Construction PACP CCTV	62	Ft	\$5.00	\$310.00
Traffic Control	1	Lump Sum	\$950.00	\$950.00





Continued on Sheet RO1005

Continued on Sheet RO1001

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### HENRY GRAHAM DRAIN REPAIRS

One Public Works Drive  
 Building 95 West  
 Waterford, Michigan  
 48328-1907



STORM DRAIN LEGEND	
	Storm Gravity Pipe
	Combined Non-Gravity Main
	Lifecycle Status, Subtype, Easement for Maintenance
	HydroDrain Water Body
	Storm Structures
	Storm Siphons
	Storm Force Main
	Pipe Outlet w/ End Section
	Pipe Outlet w/ Headwall
	Access Manhole
	Access Point
	Air Release Valve
	Cleanout
	Bulkhead or Cap
	Inlet w/ Reducer
	Barrel Tap, ISV, or Blind Connection
	No Access Chamber
	Restrictor / Office
	Weir
	Diversion Chamber
	Flow Regulator
	Dam
	Dam Maintained by Others
	Augmentation Well
	Control Structure
	Overflow Structure
	Special Structure
	Oil Grease Separator Structure
	Gout
	Gout/Deposits
	Gout/Reinforcement Repair
	Reinforcement Repair
	Spot Liner
	Optional - Spot Liner
	Optional - CPP

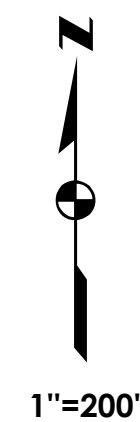
NW Section 1

MADISON HEIGHTS  
 STORM DRAIN SYSTEMS  
 Township of Royal Oak

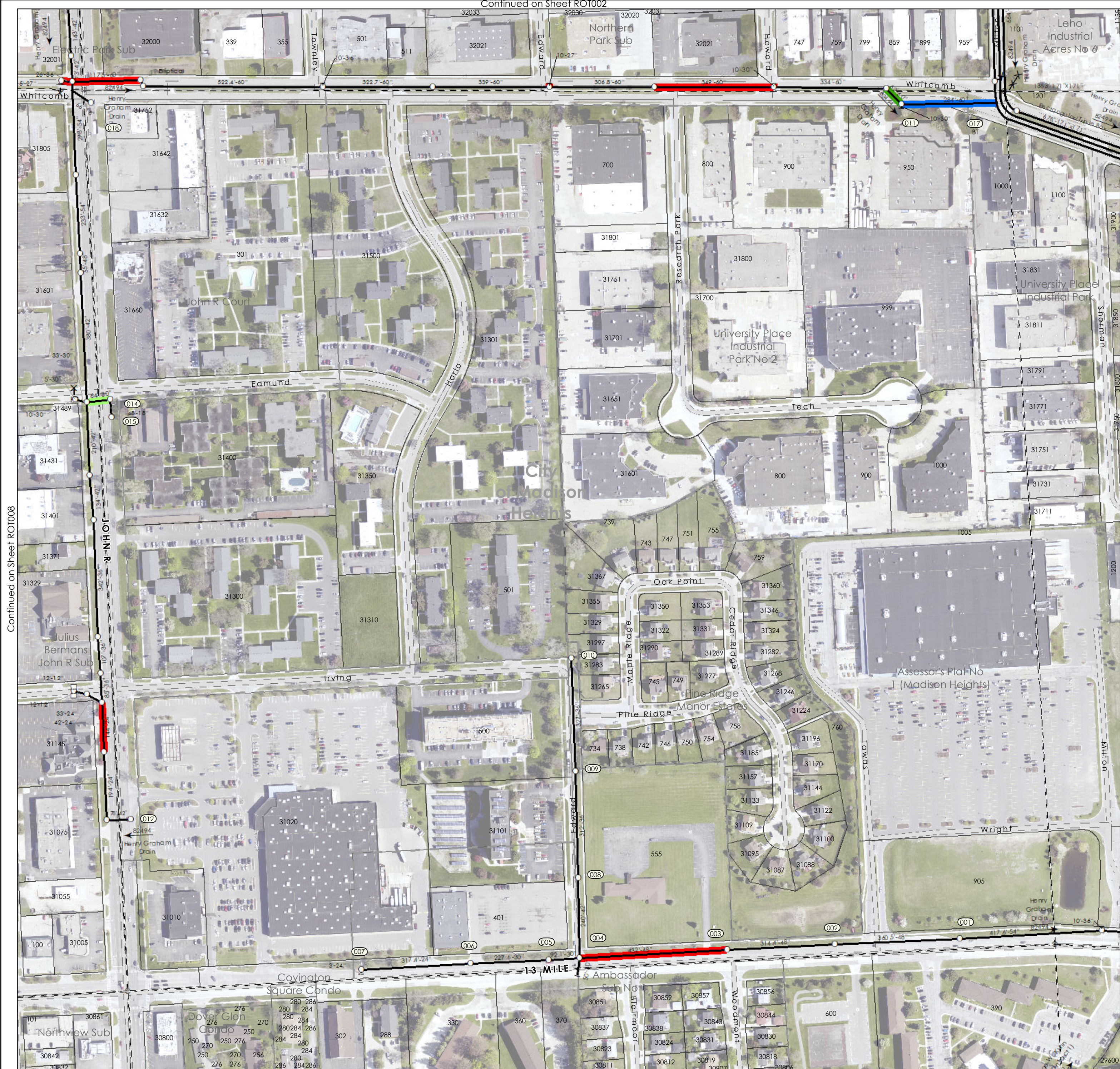
SHEET 002



Continued on Sheet ROT002



1"=200'



Continued on Sheet ROT046

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### HENRY GRAHAM DRAIN REPAIRS

One Public Works Drive  
Building 95 West  
Waterford, Michigan  
48328-1907



STORM DRAIN LEGEND	
<b>Storm Gravity Pipe</b>	<b>Combined Non-Gravity Main</b>
Online Storm Pipe	Comb FM Interceptor
Online Storm Culvert	Comb FM Trunk
Prop Storm Pipe / Culvert	Aband Comb FM Interceptor
Aband Storm Pipe / Culvert	Aband Comb FM Trunk
Private / Maint. by Others	Aband Comb FM/PS Lateral
Virtual Drain Line	Aband Comb FM/PS Trunk or Lateral
Artificial Hydro Pathway	Private or Maint. by Others Comb FM/PS
Channel - No Easement	
Sewer	
Spillway	
Aband Channel	
Storm/River	
Sediment Basin/Silt/Basin	
Private Retention/Detention Basin	
WRC Lake Level	
WRC Channel	
Private Retention/Detention Basin	
Non WRC Lake/Pond or Stream/River	
Non WRC Swamp / Marsh	
Non WRC Swamp / Marsh	
Storm Structures	
Standard Manhole / Access Point	
Ball Over Line MH	
Junction Chamber	
Siphon	
Standard Inlet	
Special Inlet	
Catch Basin	
Private Siphon	
Aband Siphon	
Storm Force Main	
Online Force Main	
Prop Force Main	
Aband Force Main	
Private / Maint. by Others	
Pipe Outlet w/ End Section	
Pipe Outlet w/ Headwall	
Access Manhole	
Access Point	
Air Release Valve	
Cleanout	
Bulkhead or Cap	
Increase / Reducer	
Barrel Tap, TSV, or Blind Connection	
No Access Chamber	
Restrictor / Office	
Weir	
Diversion Chamber	
Flow Regulator	
Dam	
Dam Maintained by Others	
Augmentation Well	
Drain / Lake Level Lift Station	
Control Structure	
Overflow Structure	
Special Structure	
Oil/Grit Separator Structure	
Grout	
Grout/Deposit	
Grout/Reinforcement Repair	
Reinforcement Repair	
Spot Liner	
Optional - Spot Liner	
Optional - CPP	

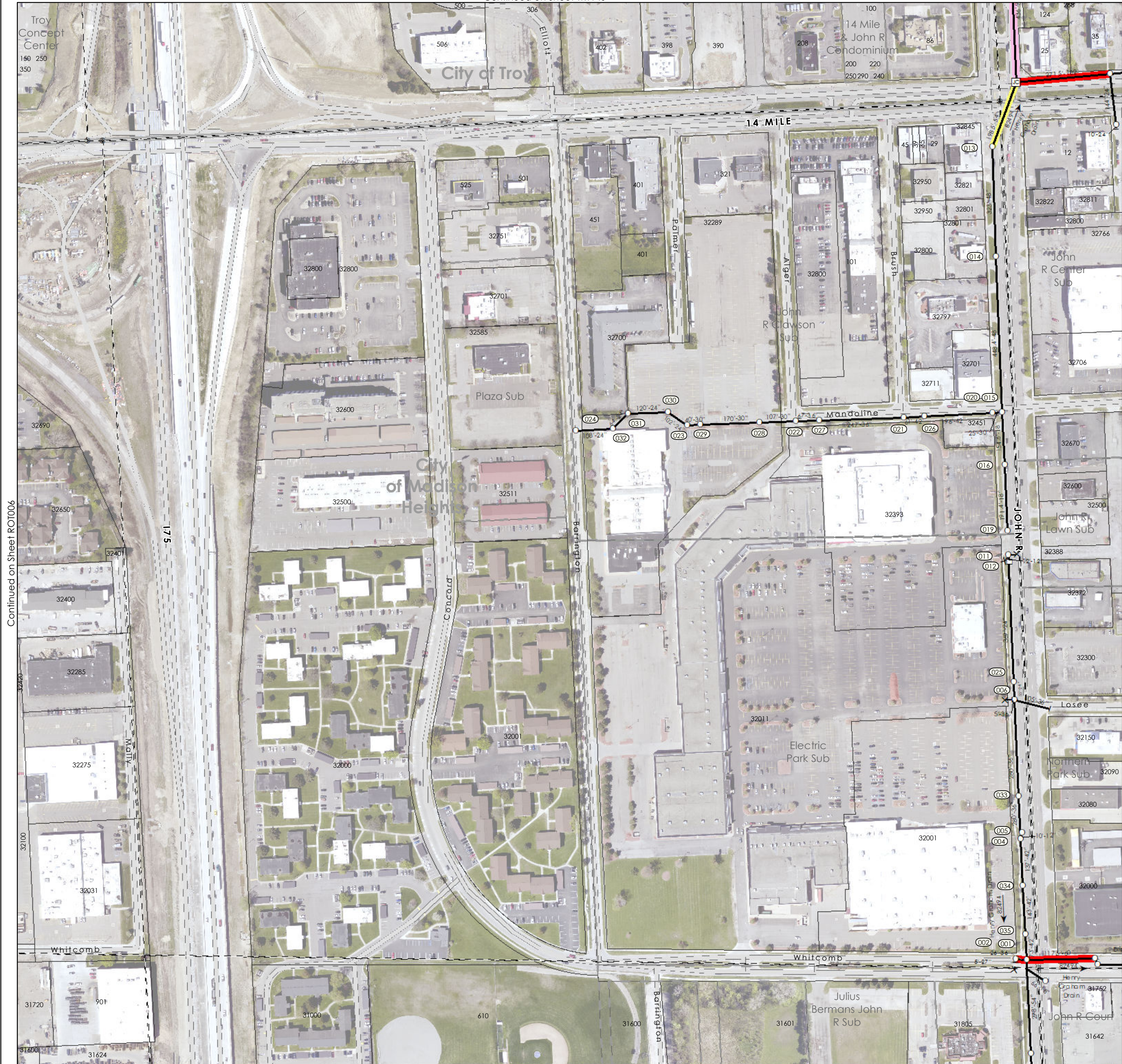
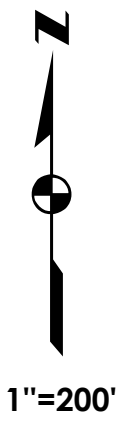
SW Section 1

MADISON HEIGHTS  
STORM DRAIN SYSTEMS  
Township of Royal Oak

SHEET 003

Map Printed May 24, 2023





Continued on Sheet ROT006

Continued on Sheet ROT002

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### HENRY GRAHAM DRAIN REPAIRS

One Public Works Drive  
 Building 95 West  
 Waterford, Michigan  
 48328-1907



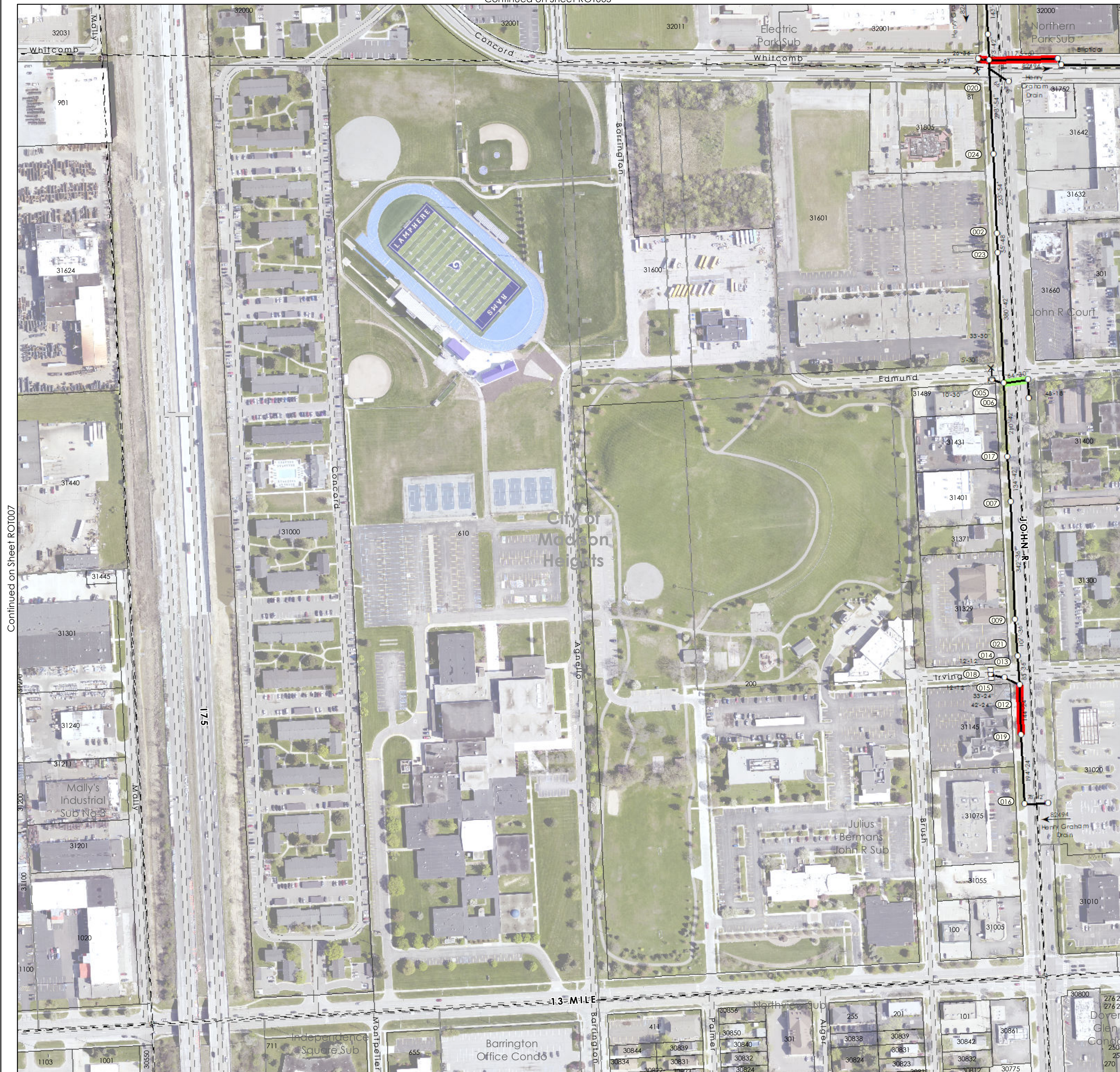
STORM DRAIN LEGEND		
<b>Storm Gravity Pipe</b>	<b>Combined Non-Gravity Main</b>	Pipe Outlet w/ End Section
Online Storm Pipe	Comb FM Interceptor	Pipe Outlet w/ Headwall
Online Storm Culvert	Comb FM Trunk	Access Manhole
Prop Storm Pipe / Culvert	Aband Comb FM Interceptor	Access Point
Aband Storm Pipe / Culvert	Aband Comb FM Trunk	Air Release Valve
Private / Maintained by Others	Comb FMPHS Lateral	Cleanout
Non WRC Culvert	Aband Comb FMPHS Trunk or Lateral	Bulkhead or Cap
Virtual Drain Line	Private or Maint. by Others Comb FMPHS	Increase / Reducer
Artificial Hydro Pathway	Channel - No Easement	Borel Tap, TV, or Blind Connection
Channel	Channel - No Easement	No Access Chamber
Sewer	Aband Channel	Restrictor / Orifice
Spillway	Aband Comb Lateral	Weir
Aband Channel	Comb Lateral	W
Sediment Basin / Silt Basin	Proposed Comb Lateral	DIV
WRC Retention/Deletion Basin	Aband Comb Lateral	REG
WRC Lake Level	Private or Maint. by Others Comb	DAM
WRC Channel	Proposed Private or Maint. by Others	D
Private Retention/Deletion Basin	Virtual Combined Line	W
Non WRC Lake/Pond or Stream/River	Vault	LS
Non WRC Swamp / Marsh	Large pipe	Control Structure
Non WRC Swamp / Marsh	Private Large Pipe	Overflow Structure
Storm Structures	Retention/Deletion Vault/Basin	Special Structure
Standard Manhole / Access Point	Private Retention/Deletion Vault/Basin	Oil/Grit Separator Structure
Bull Over Line MH	Storm Siphons	Grout
Junction Chamber	Online Siphon	Grout/Deposits
Siphon	Prop Siphon	Grout/Reinforcement Repair
Standard Inlet	Private Siphon	Reinforcement Repair
Catch Basin	Aband Siphon	Spot Liner
Inlet w/ End Section	Storm Force Main	Optional - Spot Liner
Yard Inlet	Online Force Main	Optional - CPP
Rear Yard Catch Basin	Prop Force Main	
Leaching Basin	Aband Force Main	
Field/Trench Drain, NOT WRC	Private / Maintained by Others	
Roof Drain, NOT WRC		
Inlet w/ Headwall		

NE Section 2

MADISON HEIGHTS  
 STORM DRAIN SYSTEMS  
 Township of Royal Oak

SHEET 005





Continued on Sheet ROT007

Continued on Sheet ROT003

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# HENRY GRAHAM DRAIN REPAIRS

One Public Works Drive  
Building 95 West  
Waterford, Michigan  
48328-1907



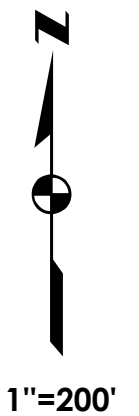
STORM DRAIN LEGEND	
<b>Storm Gravity Pipe</b>	<b>Combined Non-Gravity Main</b>
Online Storm Pipe	Comb FM Interceptor
Prop Storm Pipe / Culvert	Comb FM Trunk
Aband Storm Pipe / Culvert	Aband Comb FM Interceptor
Private / Maint. by Others	Aband Comb FM Lateral
Non WRC Culvert	Aband Comb FM Trunk or Lateral
Virtual Drain Line	Private or Maint. by Others Comb FM/PS
Artificial Hydro Pathway	Channel - No Easement
Comb Interceptor	Channel - Spillway
Aband Comb Interceptor	Aband Channel
Private or Maint. by Others Interceptor	Sediment Basin/Sitting Basin
Comb Lateral	Storm/River
Proposed Comb Lateral	Private Retention/Retention Basin
Aband Comb Lateral	WRC Lake Level
Private or Maint. by Others Comb	WRC Channel
Proposed Private or Maint. by Others	Private Retention/Retention Basin
Virtual Combined Line	Non WRC Lake/Pond or Stream/River
Vault	Non WRC Swamp / Marsh
Large pipe	Storm Structures
Private Large Pipe	Standard Manhole / Access Point
Retention/Retention Vault/Basin	Bull Over Line MH
Private Retention/Retention Vault/Basin	Junction Chamber
<b>Storm Siphons</b>	Siphon
Online Siphon	Standard Inlet
Prop Siphon	Catch Basin
Private Siphon	Inlet w/ End Section
Aband Siphon	Yard Inlet
<b>Storm Force Main</b>	Rear Yard Catch Basin
Online Force Main	Leaching Basin
Prop Force Main	Field/Trench Drain, NOT WRC
Aband Force Main	Roof Drain, NOT WRC
Private / Maint. by Others	Inlet w/ Headwall
	Pipe Outlet w/ End Section
	Pipe Outlet w/ Headwall
	Access Manhole
	Access Point
	Air Release Valve
	Cleanout
	Bulkhead or Cap
	Boiler Tap, TV, or Blind Connection
	No Access Chamber
	Restrictor / Orifice
	West
	Diversion Chamber
	Flow Regulator
	Dam
	Dam Maintained by Others
	Augmentation Well
	Drain / Lake Level Lift Station
	Control Structure
	Overflow Structure
	Special Structure
	Oil/Grease Separator Structure
	Gout
	Gout/Deposits
	Gout/Reinforcement Repair
	Spot Liner
	Optional - Spot Liner
	Optional - CPP

SE Section 2

MADISON HEIGHTS  
STORM DRAIN SYSTEMS  
Township of Royal Oak

SHEET  
008





1"=200'



Continued on Sheet TR1056

Continued on Sheet TR1052

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### HENRY GRAHAM DRAIN REPAIRS

One Public Works Drive  
Building 95 West  
Waterford, Michigan  
48328-1907



STORM DRAIN LEGEND	
<b>Storm Gravity Pipe</b>	<b>Combined Non-Gravity Main</b>
Online Storm Pipe	Comb FM Interceptor
Online Storm Culvert	Comb FM Trunk
Prop Storm Pipe / Culvert	Aband Comb FM Interceptor
Aband Storm Pipe / Culvert	Comb FMPHS Lateral
Private / Maint. by Others	Aband Comb FMPHS Trunk or Lateral
Non WRC Culvert	Private or Maint. by Others Comb FMPHS
Virtual Drain Line	<b>Lifecycle Status, Subtype, Easement for Maintenance</b>
Artificial Hydro Pathway	Channel - No Easement
Channel	Sewer
Aband Channel	Sediment Basin/Sitting Basin
Private or Maint. by Others Interceptor	Storm/River
Aband Comb Interceptor	Private Retention/Retention Basin
Comb Lateral	Non WRC Lake/Pond or Stream/River
Proposed Comb Lateral	Non WRC Swamp / Marsh
Aband Comb Lateral	<b>Storm Structures</b>
Private or Maint. by Others Comb	Standard Manhole / Access Point
Proposed Private or Maint. by Others	Bull Over Line MH
Virtual Combined Line	Junction Chamber
Vault	Siphon
Large pipe	Standard Inlet
Private Large Pipe	Catch Basin
Retention/Retention Vault/Basin	Inlet w/ End Section
Private Retention/Retention Vault/Basin	Yard Inlet
<b>Storm Siphons</b>	Rear Yard Catch Basin
Online Siphon	Leaching Basin
Prop Siphon	Field/Trench Drain, HOT WRC
Private Siphon	Roof Drain, NOT WRC
Aband Siphon	Inlet w/ Headwall
<b>Storm Force Main</b>	
Online Force Main	
Prop Force Main	
Aband Force Main	
Private / Maint. by Others	
	Pipe Outlet w/ End Section
	Pipe Outlet w/ Headwall
	Access Manhole
	Access Point
	Air Release Valve
	Cleanout
	Bulkhead or Cap
	Increase / Reducer
	Barrel Tap, TV, or Blind Connection
	No Access Chamber
	Restrictor / Orifice
	West
	Diversion Chamber
	Flow Regulator
	Dam
	Dam Maintained by Others
	Augmentation Well
	Drain / Lake Level Lift Station
	Control Structure
	Overflow Structure
	Special Structure
	Oil/Grit Separator Structure
	Grout
	Grout/Deposit
	Grout/Reinforcement Repair
	Spot Liner
	Optional - Spot Liner
	Optional - CPP

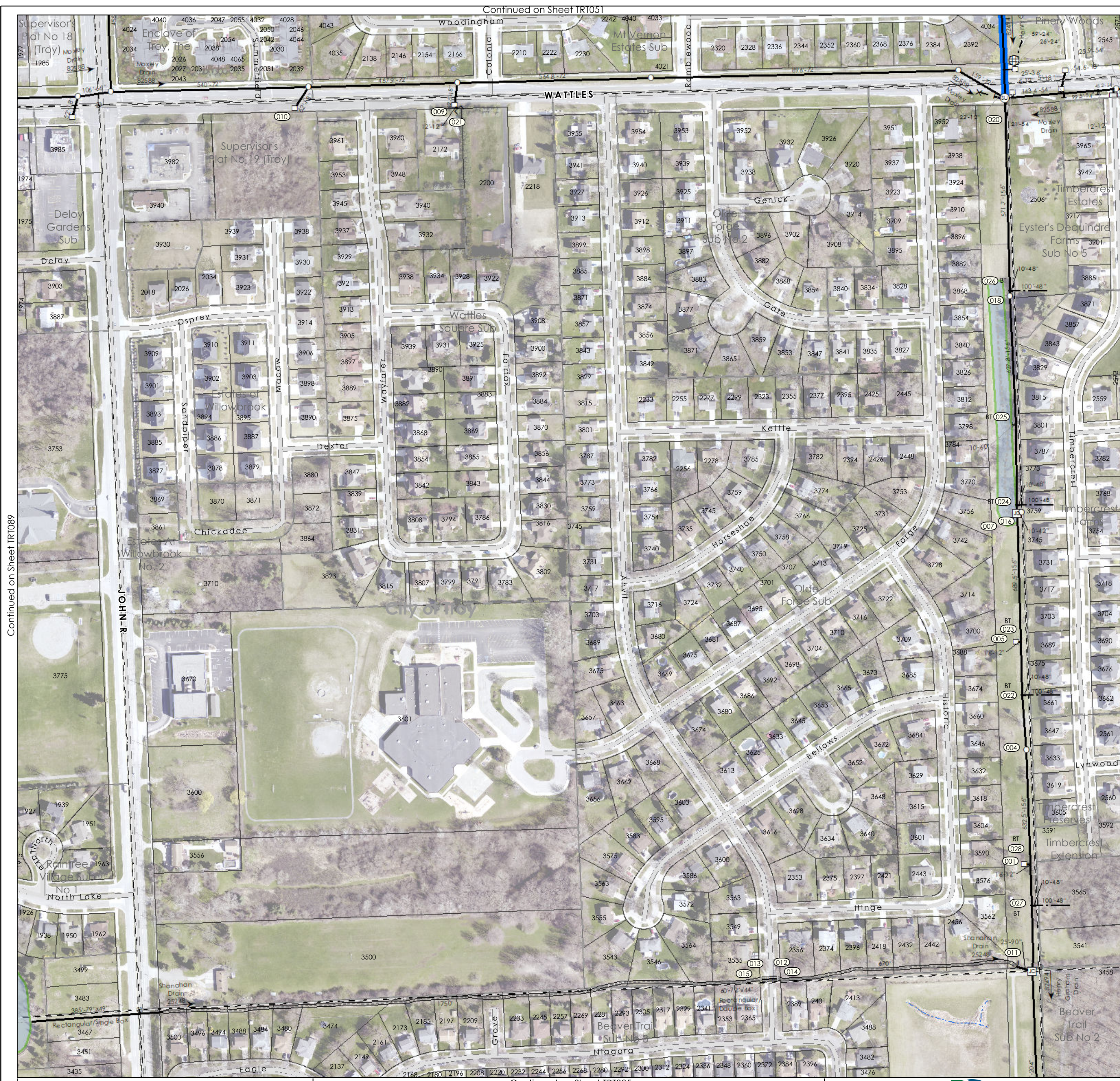
SW Section 13

TROY STORM DRAIN SYSTEMS Township of Troy

SHEET 051

Map Printed May 24, 2023





Continued on Sheet TR1089

Continued on Sheet TR1093

Continued on Sheet TR1051

Continued on Sheet TR1095

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## HENRY GRAHAM DRAIN REPAIRS

One Public Works Drive  
Building 95 West  
Waterford, Michigan  
48328-1907



STORM DRAIN LEGEND	
<b>Storm Gravity Pipe</b>	<b>Combined Non-Gravity Main</b>
Online Storm Pipe	Comb FM Interceptor
Online Storm Culvert	Comb FM Trunk
Prop Storm Pipe / Culvert	Aband Comb FM Interceptor
Aband Storm Pipe / Culvert	Aband Comb FM Trunk
Private / Maint. by Others	Aband Comb FM/PS Lateral
Virtual Drain Line	Aband Comb FM/PS Trunk or Lateral
Artificial Hydro Pathway	Private or Maint. by Others Comb FM/PS
Channel - No Easement	Non WRC Culvert
Spillway	Aband Storm Pipe / Culvert
Aband Channel	Aband Storm Pipe / Culvert
Sediment Basin/Sitting Basin	Access Manhole
Non WRC Swamp / Marsh	Access Point
WRC Retention/Deletion Basin	Air Release Valve
WRC Lake Level	Cleanout
WRC Channel	Bulkhead or Cap
Private Retention/Deletion Basin	Increase / Reducer
Non WRC Lake/Pond or Stream/River	Barrel Tap, TV, or Blind Connection
Non WRC Swamp / Marsh	No Access Chamber
Storm Structures	Restrictor / Orifice
Standard Manhole / Access Point	West
Ball Over Line M/I	W
Junction Chamber	DIV
Siphon	REG
Standard Inlet	DAM
Catch Basin	D
Inlet w/ End Section	W
Yard Inlet	LS
Rear Yard Catch Basin	Control Structure
Leaching Basin	Overflow Structure
Field/Trench Drain, HOT WRC	Oil/Git Separator Structure
Roof Drain, HOT WRC	Grout
Inlet w/ Headwall	Grout/Deposit
	Grout/Reinforcement Repair
	Spot Liner
	Optional - Spot Liner
	Optional - CPP

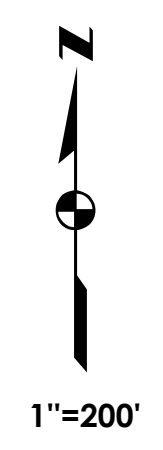
NW Section 24

TROY  
STORM DRAIN SYSTEMS  
Township of Troy

SHEET  
094

Map Printed May 24, 2023





Continued on Sheet TR1097

Continued on Sheet TR101

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### HENRY GRAHAM DRAIN REPAIRS

One Public Works Drive  
 Building 95 West  
 Waterford, Michigan  
 48328-1907



STORM DRAIN LEGEND	
	Online Storm Pipe
	Online Storm Culvert
	Prop Storm Pipe / Culvert
	Aband Storm Pipe / Culvert
	Private / Maint. by Others
	Non WRC Culvert
	Virtual Drain Line
	Artificial Hydro Pathway
	Channel - No Easement
	Spillway
	Aband Channel
	Private or Maint. by Others
	Aband Comb Interceptor
	Comb Lateral
	Proposed Comb Lateral
	Aband Comb Lateral
	Private or Maint. by Others Comb
	Proposed Private or Maint. by Others
	Virtual Combined Line
	Vault
	Large pipe
	Private Large Pipe
	Retention/Retention Vault/Basin
	Private Retention/Retention Vault/Basin
	Storm Siphons
	Online Siphon
	Prop Siphon
	Private Siphon
	Aband Siphon
	Storm Force Main
	Online Force Main
	Prop Force Main
	Aband Force Main
	Private / Maintained by Others
	Combined Non-Gravity Main
	Online Comb FM
	Comb FM Trunk
	Aband Comb FM Interceptor
	Aband Comb FM Lateral
	Aband Comb FM/PS Trunk or Lateral
	Private or Maint. by Others Comb FM/PS
	Lifecycle Status, Subtype, Easement for Maintenance
	Channel - No Easement
	Spillway
	Aband Channel
	Private or Maint. by Others
	Sediment Basin/Sitting Basin
	Storm Structures
	Standard Manhole / Access Point
	Bull Over Line MH
	Junction Chamber
	Siphon
	Standard Inlet
	Catch Basin
	Inlet w/ End Section
	Yard Inlet
	Rear Yard Catch Basin
	Leaching Basin
	Field/Trench Drain, HOT WRC
	Roof Drain, HOT WRC
	Inlet w/ Headwall
	Pipe Outlet w/ End Section
	Pipe Outlet w/ Headwall
	Access Manhole
	Access Point
	Air Release Valve
	Cleanout
	Bulkhead or Cap
	Increase / Reducer
	Bornel Tap, TSV, or Blind Connection
	No Access Chamber
	Restrictor / Orifice
	Weir
	Diversion Chamber
	Flow Regulator
	Dam
	Dam Maintained by Others
	Augmentation Well
	Drain / Lake Level Lift Station
	Control Structure
	Overflow Structure
	Special Structure
	Oil/Git Separator Structure
	Grout
	Grout/Deposit
	Grout/Reinforcement Repair
	Reinforcement Repair
	Spot Liner
	Optional - Spot Liner
	Optional - CPP

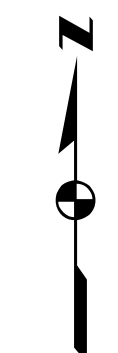
NW Section 25

TROY STORM DRAIN SYSTEMS Township of Troy

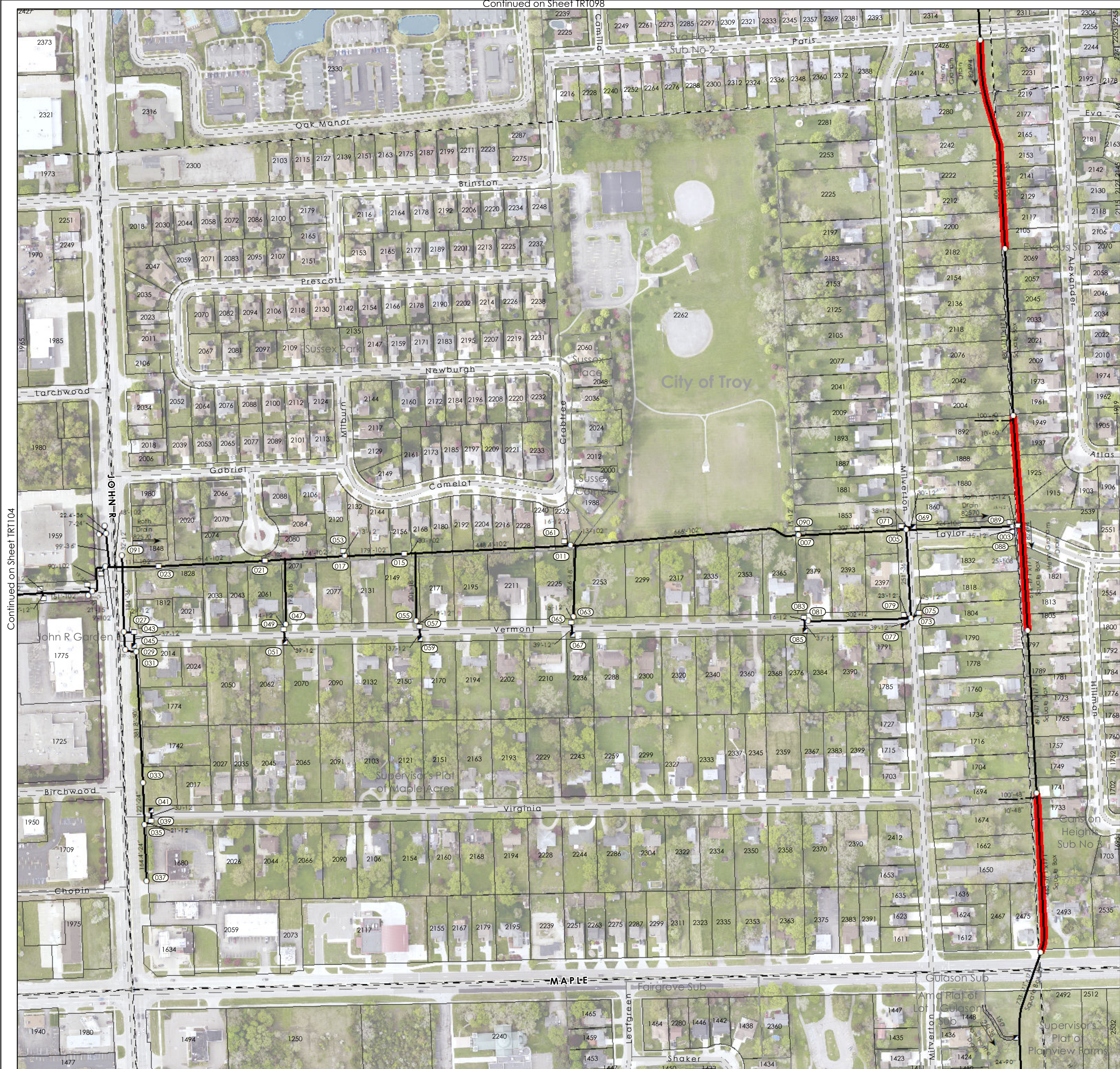
SHEET 098

Map Printed May 24, 2023





1"=200'



Continued on Sheet TR104

Continued on Sheet TR100

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### HENRY GRAHAM DRAIN REPAIRS

One Public Works Drive  
Building 95 West  
Waterford, Michigan  
48328-1907



STORM DRAIN LEGEND	
<b>Storm Gravity Pipe</b>	<b>Combined Non-Gravity Main</b>
Online Storm Pipe	Comb FM Interceptor
Prop Storm Pipe / Culvert	Comb FM Trunk
Aband Storm Pipe / Culvert	Aband Comb FM Interceptor
Private / Maint. by Others	Aband Comb FM Trunk or Lateral
Virtual Drain Line	Private or Maint. by Others Comb FM/PS
Artificial Hydro Pathway	Channel - No Easement
Channel	Channel - No Easement
Aband Storm Pipe / Culvert	Sewer/Flow
Private / Maint. by Others	Sediment Basin/Sitting Basin
Virtual Combined Line	WRC Retention/Detention Basin
Aband Comb Interceptor	WRC Lake Level
Comb Lateral	WRC Channel
Proposed Comb Lateral	Private Retention/Detention Basin
Aband Comb Lateral	Non WRC Lake/Pond or Stream/River
Private or Maint. by Others Comb	Non WRC Swamp / Marsh
Proposed Private or Maint. by Others	
Virtual Combined Line	
Vault	
Large pipe	
Private Large Pipe	
Retention/Detention Vault/Basin	
Private Retention/Detention Vault/Basin	
<b>Storm Siphons</b>	
Online Siphon	
Prop Siphon	
Private Siphon	
Aband Siphon	
<b>Storm Force Main</b>	
Online Force Main	
Prop Force Main	
Aband Force Main	
Private / Maintained by Others	
	<b>Storm Structures</b>
	Standard Manhole / Access Point
	Bull Over Line MH
	Junction Chamber
	Siphon
	Standard Inlet
	Catch Basin
	Inlet w/ End Section
	Yard Inlet
	Rear Yard Catch Basin
	Leaching Basin
	Field/Trench Drain, NOT WRC
	Roof Drain, NOT WRC
	Inlet w/ Headwall
	Pipe Outlet w/ End Section
	Pipe Outlet w/ Headwall
	Access Manhole
	Access Point
	Air Release Valve
	Cleanout
	Bulkhead or Cap
	Increase / Reducer
	Barrel Tap, TSV, or Blind Connection
	No Access Chamber
	Restrictor / Orifice
	Well
	Diversion Chamber
	Flow Regulator
	Dam
	Dam Maintained by Others
	Augmentation Well
	Drain / Lake Level Lift Station
	Control Structure
	Overflow Structure
	Special Structure
	Oil/Grit Separator Structure
	Grout
	Grout/Deposits
	Grout/Reinforcement Repair
	Spot Liner
	Optional - Spot Liner
	Optional - CPP

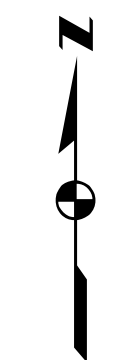
SW Section 25

TROY STORM DRAIN SYSTEMS Township of Troy

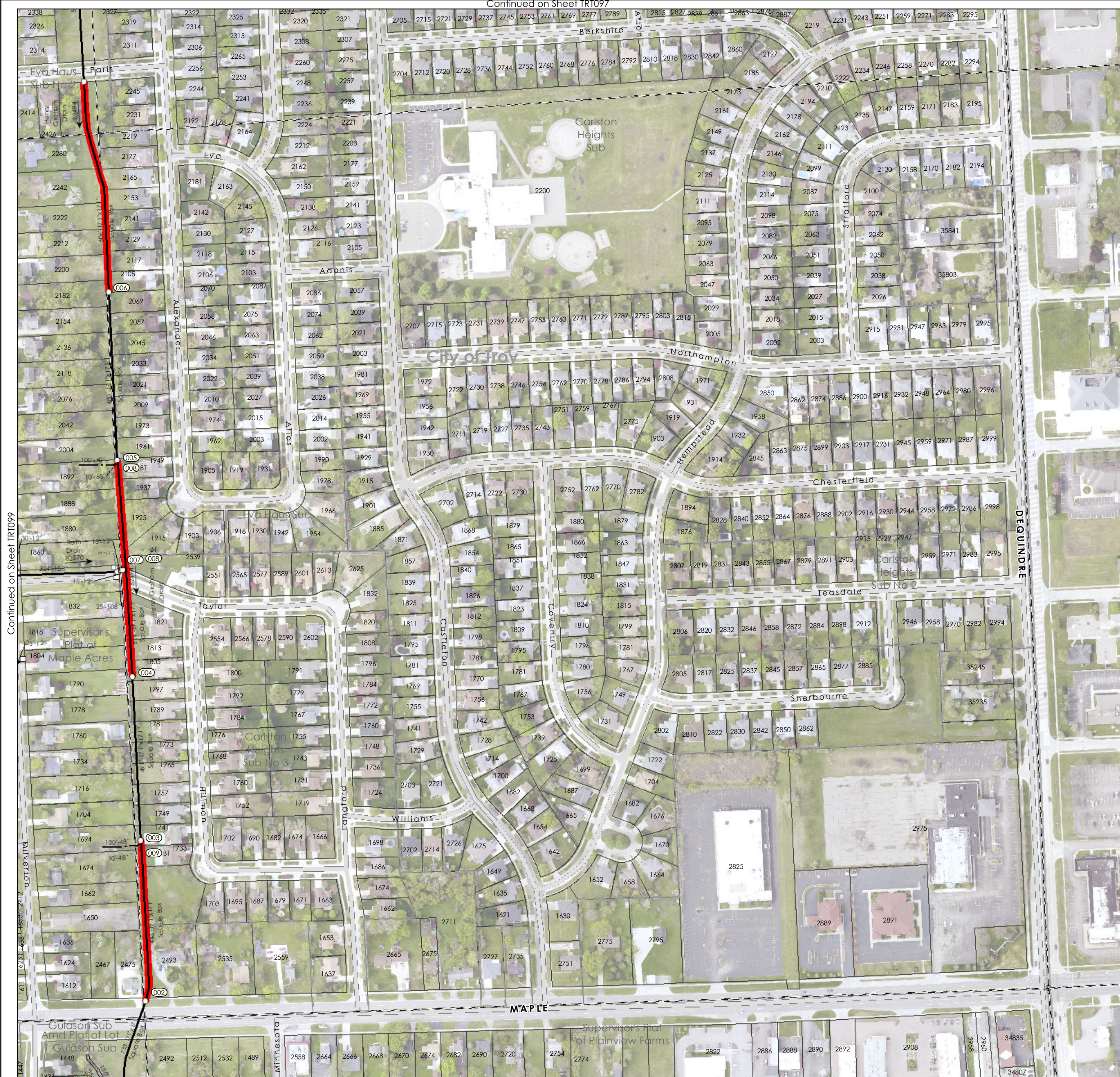
SHEET 099

Map Printed May 24, 2023





1"=200'



Continued on Sheet TR1099

Continued on Sheet ST1119

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### HENRY GRAHAM DRAIN REPAIRS

One Public Works Drive  
Building 95 West  
Waterford, Michigan  
48328-1907



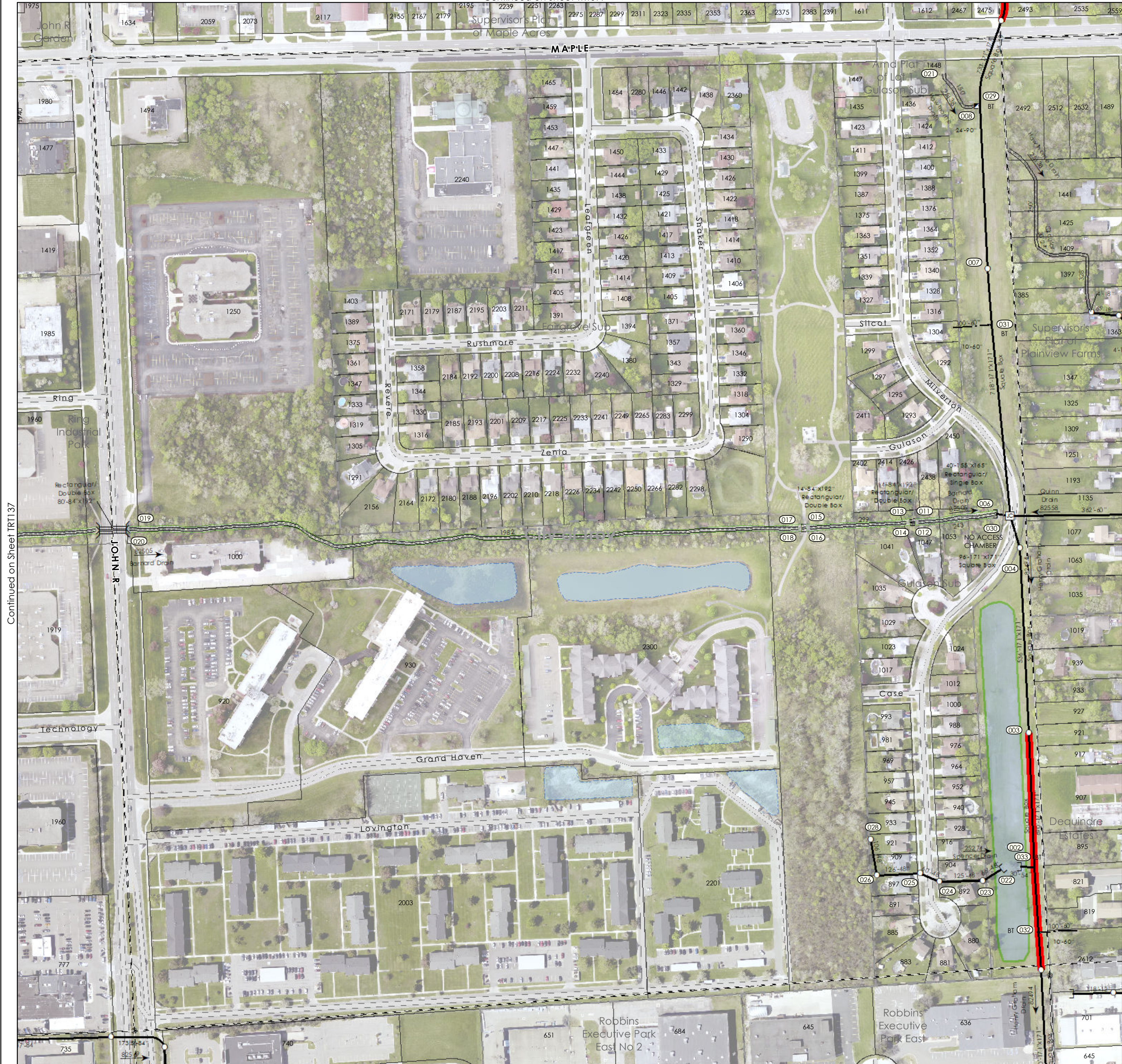
STORM DRAIN LEGEND	
<b>Storm Gravity Pipe</b>	<b>Combined Non-Gravity Main</b>
Online Storm Pipe	Comb FM Interceptor
Online Storm Culvert	Comb FM Trunk
Prop Storm Pipe / Culvert	Aband Comb FM Interceptor
Aband Storm Pipe / Culvert	Aband Comb FM Trunk
Private / Maint. by Others	Aband Comb FM/PS Lateral
Private WRC Culvert	Aband Comb FM/PS Trunk or Lateral
Virtual Drain Line	Private or Maint. by Others Comb FM/PS
Artificial Hydro Pathway	Channel - No Easement
Channel	Sewer/Flow
Spillway	Aband Channel
Aband Channel	Sediment Basin/Sitting Basin
Private or Maint. by Others Interceptor	Aband Channel
Aband Comb Interceptor	Proposed Private or Maint. by Others
Comb Lateral	Virtual Combined Line
Proposed Comb Lateral	Vault
Aband Comb Lateral	Large pipe
Private or Maint. by Others Comb	Private Large Pipe
Proposed Private or Maint. by Others	Retention/Retention Vault/Basin
Virtual Combined Line	Private Retention/Retention Vault/Basin
Vault	<b>Storm Siphons</b>
Large pipe	Online Siphon
Private Large Pipe	Prop Siphon
Retention/Retention Vault/Basin	Private Siphon
Private Retention/Retention Vault/Basin	Aband Siphon
<b>Storm Force Main</b>	<b>Storm Structures</b>
Online Force Main	Standard Manhole / Access Point
Prop Force Main	Bull Over Line MH
Aband Force Main	Junction Chamber
Private / Maint. by Others	Control Structure
	Siphon
	Standard Inlet
	Catch Basin
	Inlet w/ End Section
	Yard Inlet
	Rear Yard Catch Basin
	Leaching Basin
	Field/Trench Drain, HOT WRC
	Roof Drain, NOT WRC
	Inlet w/ Headwall
	Pipe Outlet w/ End Section
	Pipe Outlet w/ Headwall
	Access Manhole
	Access Point
	Air Release Valve
	Cleanout
	Bulkhead or Cap
	Increase / Reducer
	Barrel Top, TSV, or Blind Connection
	No Access Chamber
	Restrictor / Office
	West
	Diversion Chamber
	Flow Regulator
	Dam
	Dam Maintained by Others
	Augmentation Well
	Drain / Lake Level Lift Station
	Control Structure
	Overflow Structure
	Special Structure
	Oil/Git Separator Structure
	Grout
	Grout/Deposit
	Grout/Reinforcement Repair
	Reinforcement Repair
	Spot Liner
	Optional - Spot Liner
	Optional - CPP

SE Section 25

TROY  
STORM DRAIN SYSTEMS  
Township of Troy

SHEET 100





Continued on Sheet TR1137

Continued on Sheet TR1141

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### HENRY GRAHAM DRAIN REPAIRS

One Public Works Drive  
Building 95 West  
Waterford, Michigan  
48328-1907

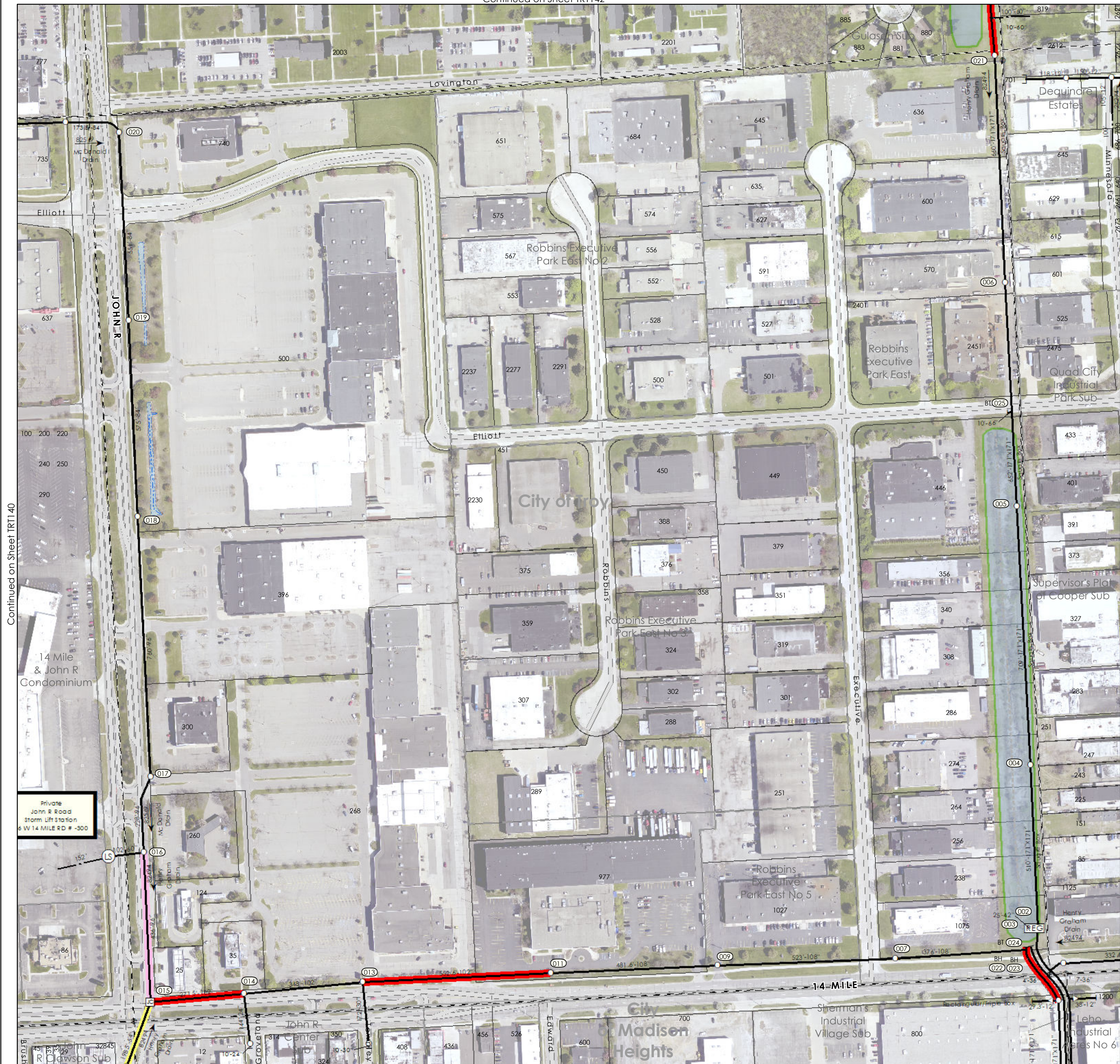


STORM DRAIN LEGEND	
<b>Storm Gravity Pipe</b>	<b>Combined Non-Gravity Main</b>
Online Storm Pipe	Comb FM Interceptor
Online Storm Culvert	Comb FM Trunk
Prop Storm Pipe / Culvert	Aband Comb FM Interceptor
Aband Storm Pipe / Culvert	Aband Comb FM Trunk
Private / Maint. by Others	Aband Comb FM Trunk or Lateral
Non WRC Culvert	Private or Maint. by Others Comb FM/PS
Virtual Drain Line	<b>Lifecycle Status, Subtype, Easement for Maintenance</b>
Artificial Hydro Pathway	Channel - No Easement
Channel - No Easement	Channel - Easement
Aband Channel	Sewer/Flow
Aband Storm Pipe / Culvert	Sediment Basin/Sitting Basin
Private or Maint. by Others Interceptor	Spillway
Proposed Private or Maint. by Others	Aband Channel
Virtual Combined Line	Private or Maint. by Others Comb FM/PS
Vault	Proposed Private or Maint. by Others
Large pipe	Virtual Combined Line
Private Large Pipe	Retention/Detention Vault/Basin
Retention/Detention Vault/Basin	Private Retention/Detention Basin
Storm Siphons	WRC Lake Level
Junction Siphon	WRC Lake
Prop Siphon	WRC Channel
Private Siphon	Private Retention/Detention Basin
Aband Siphon	Non WRC Lake/Pond or Stream/River
Storm Force Main	Non WRC Swamp / Marsh
Online Force Main	Storm Structures
Prop Force Main	Standard Manhole / Access Point
Aband Force Main	Bull Over Line MH
Private / Maint. by Others	Junction Chamber
	Siphon
	Standard Inlet
	Catch Basin
	Inlet w/ End Section
	Yard Inlet
	Rear Yard Catch Basin
	Leaching Basin
	Field/Trench Drain, NOT WRC
	Roof Drain, NOT WRC
	Inlet w/ Headwall
	Pipe Outlet w/ End Section
	Pipe Outlet w/ Headwall
	Access Manhole
	Access Point
	Air Release Valve
	Cleanout
	Bulkhead or Cap
	Increase / Reducer
	Barrel Tap, TV, or Blind Connection
	No Access Chamber
	Restrictor / Orifice
	Weir
	Diversion Chamber
	Flow Regulator
	Dam
	Dam Maintained by Others
	Augmentation Well
	Control Structure
	Overflow Structure
	Special Structure
	Oil/Grease Separator Structure
	Grout
	Grout/Deposit
	Grout/Reinforcement Repair
	Spot Liner
	Optional - Spot Liner
	Optional - CPP





1"=200'



Continued on Sheet TR1140

Continued on Sheet TR1144

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Continued on Sheet ROT002

## HENRY GRAHAM DRAIN REPAIRS

One Public Works Drive  
 Building 95 West  
 Waterford, Michigan  
 48328-1907



STORM DRAIN LEGEND		
<b>Storm Gravity Pipe</b>	<b>Combined Non-Gravity Main</b>	Pipe Outlet w/ End Section
Online Storm Pipe	Comb FM Interceptor	Pipe Outlet w/ Headwall
Online Storm Culvert	Comb FM Trunk	Access Manhole
Prop Storm Pipe / Culvert	Aband Comb FM Interceptor	Access Point
Aband Storm Pipe / Culvert	Aband Comb FM Trunk	Air Release Valve
Private / Maint. by Others	Comb FM/PS Lateral	Cleanout
Virtual Drain Line	Aband Comb FM/PS Trunk or Lateral	Bulkhead or Cap
Artificial Hydro Pathway	Private or Maint. by Others Comb FM/PS	Increase / Reducer
Channel - No Easement	Non WRC Culvert	Barrel Tap, TV, or Blind Connection
Channel - With Easement	Prop Storm Pipe / Culvert	No Access Chamber
Spillway	Aband Storm Pipe / Culvert	Restrictor / Orifice
Aband Channel	Comb Interceptor	West
Strap/River	Private or Maint. by Others Interceptor	[DIV] Diversion Chamber
Sediment Basin/Sitting Basin	Comb Lateral	[REG] Flow Regulator
WRC Retention/Deletion Basin	Proposed Comb Lateral	[DAM] Dam
WRC Lake Level	Aband Comb Lateral	[D] Dam Maintained by Others
WRC Channel	Private or Maint. by Others Comb	[W] Augmentation Well
Private Retention/Deletion Basin	Proposed Private or Main, by Others	[LS] Drain / Lake Level Lift Station
Non WRC Lake/Pond or Stream/River	Virtual Combined Line	[C] Control Structure
Non WRC Swamp / Marsh	Vault	[O] Overflow Structure
Non WRC Swamp / Marsh	Large pipe	[S] Special Structure
Private Retention/Deletion Basin	Private Large Pipe	[SU] Oil/Grease Separator Structure
Private Retention/Deletion Basin	Retention/Deletion Vault/Basin	Grout
Private Retention/Deletion Basin	Private Retention/Deletion Vault/Basin	Grout/Deposits
Storm Siphons	Online Siphon	Grout/Reinforcement Repair
Online Siphon	Prop Siphon	Spot Liner
Prop Siphon	Private Siphon	Optional - Spot Liner
Private Siphon	Aband Siphon	Optional - CPP
Aband Siphon	Storm Force Main	
Storm Force Main	Online Force Main	
Online Force Main	Prop Force Main	
Prop Force Main	Aband Force Main	
Aband Force Main	Private / Maint. by Others	
Private / Maint. by Others		

SW  
 Section 36

TROY  
 STORM DRAIN SYSTEMS  
 Township of Troy

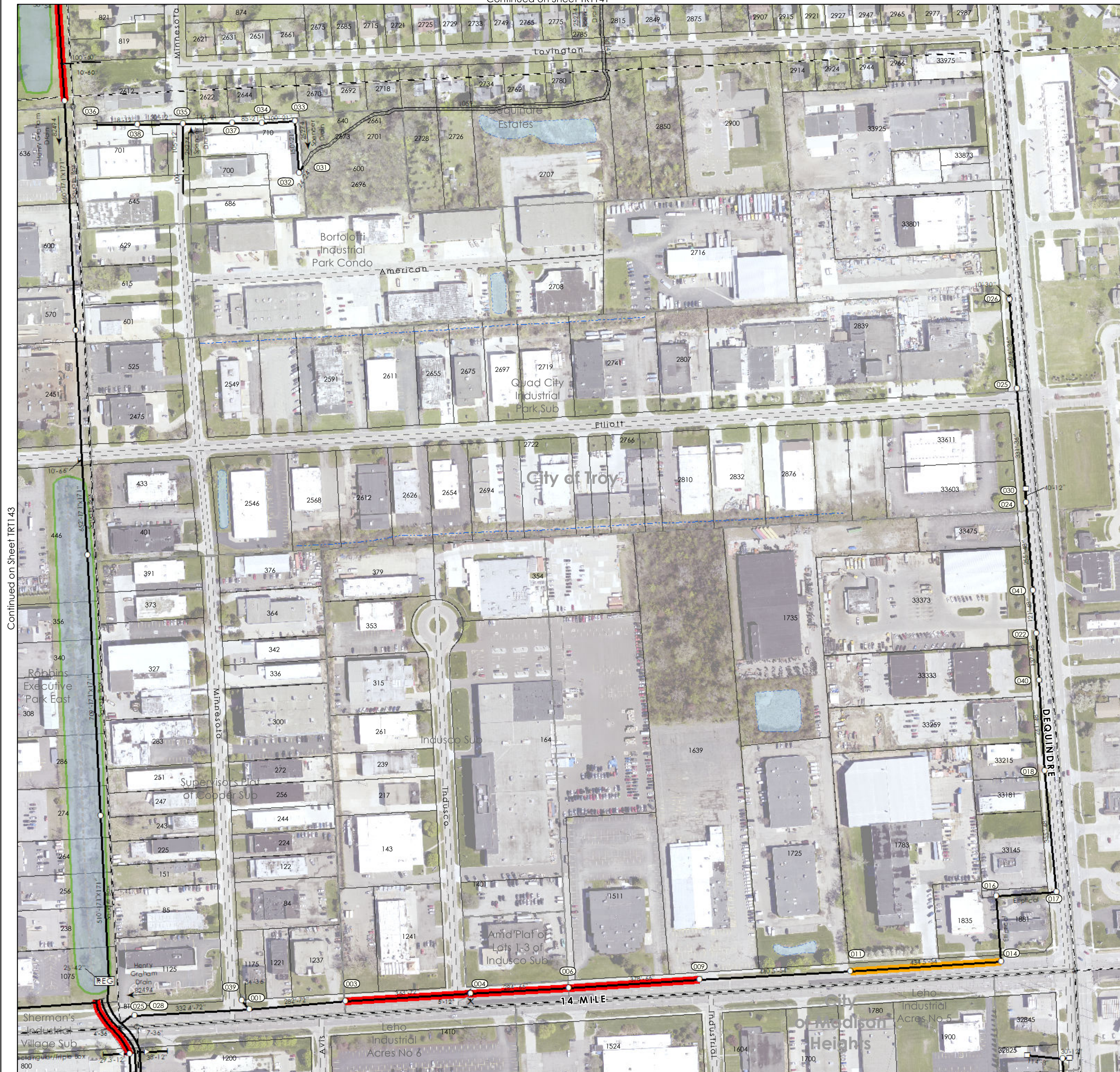
SHEET  
 143

Map Printed May 24, 2023





1"=200'



Continued on Sheet RT1143

Continued on Sheet ST1123

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### HENRY GRAHAM DRAIN REPAIRS

One Public Works Drive  
Building 95 West  
Waterford, Michigan  
48328-1907



STORM DRAIN LEGEND	
<b>Storm Gravity Pipe</b>	<b>Combined Non-Gravity Main</b>
Online Storm Pipe	Comb FM Interceptor
Online Storm Culvert	Comb FM Trunk
Prop Storm Pipe / Culvert	Aband Comb FM Interceptor
Aband Storm Pipe / Culvert	Aband Comb FM Trunk
Private / Maint. by Others	Comb FM/PS Lateral
Virtual Drain Line	Private or Maint. by Others Comb FM/PS Trunk or Lateral
Artificial Hydro Pathway	Private or Maint. by Others Comb FM/PS
Channel - No Easement	Channel - No Easement
Sewer	Sewer
Aband Channel	Aband Channel
Sediment Basin/Sitting Basin	Sediment Basin/Sitting Basin
Spillway	Spillway
WRC Retention/Deletion Basin	WRC Retention/Deletion Basin
WRC Lake Level	WRC Lake Level
WRC Channel	WRC Channel
Private Retention/Deletion Basin	Private Retention/Deletion Basin
Non WRC Lake/Pond or Stream/River	Non WRC Lake/Pond or Stream/River
Non WRC Swamp / Marsh	Non WRC Swamp / Marsh
Storm Structures	Storm Structures
Standard Manhole / Access Point	Standard Manhole / Access Point
Bull Over Line MH	Bull Over Line MH
Junction Chamber	Junction Chamber
Siphon	Siphon
Standard Inlet	Standard Inlet
Catch Basin	Catch Basin
Inlet w/ End Section	Inlet w/ End Section
Yard Inlet	Yard Inlet
Rear Yard Catch Basin	Rear Yard Catch Basin
Leaching Basin	Leaching Basin
Field/Trench Drain, NOT WRC	Field/Trench Drain, NOT WRC
Roof Drain, NOT WRC	Roof Drain, NOT WRC
Inlet w/ Headwall	Inlet w/ Headwall
Pipe Outlet w/ End Section	Pipe Outlet w/ End Section
Pipe Outlet w/ Headwall	Pipe Outlet w/ Headwall
Access Manhole	Access Manhole
Access Point	Access Point
Air Release Valve	Air Release Valve
Cleanout	Cleanout
Bulkhead or Cap	Bulkhead or Cap
Increase / Reducer	Increase / Reducer
Barrel Top, ISV, or Blind Connection	Barrel Top, ISV, or Blind Connection
No Access Chamber	No Access Chamber
Restrictor / Orifice	Restrictor / Orifice
Weir	Weir
Diversion Chamber	Diversion Chamber
Flow Regulator	Flow Regulator
Dam	Dam
Dam Maintained by Others	Dam Maintained by Others
Augmentation Well	Augmentation Well
Drain / Lake Level Lift Station	Drain / Lake Level Lift Station
Control Structure	Control Structure
Overflow Structure	Overflow Structure
Special Structure	Special Structure
Oil/Grease Separator Structure	Oil/Grease Separator Structure
Grout	Grout
Grout/Deposits	Grout/Deposits
Grout/Reinforcement Repair	Grout/Reinforcement Repair
Reinforcement Repair	Reinforcement Repair
Spot Liner	Spot Liner
Optional - Spot Liner	Optional - Spot Liner
Optional - CPP	Optional - CPP

SE Section 36

TROY  
STORM DRAIN SYSTEMS  
Township of Troy

SHEET  
144

Map Printed May 24, 2023



**HENRY GRAHAM MAINTENANCE REPAIRS 2023**  
**ESTIMATE OF PROJECT COSTS**  
**REVISED: JUNE 22, 2023**

	Project Costs
<b>1) Contracted Services: Construction Cost</b>	
a Constuction Cost (as-bid)	\$ 365,918
b Add More if Multiple Phases/ Contracts	
<b>Subtotal Construction Cost</b>	<b>\$ 365,918</b>
<b>2) Engineering Consultants</b>	
a Design Phase	
b Construction Administration	
c Scheduling Consultant for Large Projects	
d Reinforcement Repair Construction Administration	\$ 11,000
e	
f	
<b>Subtotal Engineering Consultants</b>	<b>\$ 11,000</b>
<b>3) Legal &amp; Financial</b>	
a Easements	\$ 7,000
b Legal Costs	
c Financial Consultant (For Bond Sale Only) TBD	
d Bond Counsel (Bond Issue Only) TBD	
e OCIP Insurance	
f Official Statement	
g Wetland Mitigation	
<b>Subtotal Legal &amp; Financial</b>	<b>\$ 7,000</b>
<b>4) County Services:</b>	
a Administration & General (ADM)	\$ 14,637
b Engineering (ENG)	\$ 25,614
c Right-Of-Way (ROW)	\$ 7,318
d Construction Inspection (INS)	\$ 32,500
e GIS Mapping (ADM)	\$ 3,659
f Operation Staff (STD) (Shutdowns, Training New Facilities, etc.)	
g Survey (SUR)	
<b>Subtotal County Services</b>	<b>\$ 83,729</b>
<b>Project Subtotal</b>	<b>\$ 467,647</b>
<b>5) 10% Construction Contingency</b>	<b>\$ 36,592</b>
<b>6) Less Anticipated Grant Funds</b>	
<b>7) Total Project Cost</b>	<b>\$ 504,238</b>

**OAKLAND COUNTY WATER RESOURCES COMMISSIONER**  
**MAINTENANCE ASSESSMENT RECOMMENDATION FOR THE**  
**Henry-Graham Drain**

Assessment for the Henry Graham Maintenance Repairs 2023 Project

Date last assessment approved: 08/24/21  
 Last Assessment: \$270,262

<b>Expenditure History:</b>	<b>Fiscal Year</b>	<b>Amount</b>
	2016	\$10,243
	2017	(\$5,059)
	2018	\$12,637
	2019	\$40,670
	2020	\$23,852
	2021	\$25,847
	2022	\$7,457
	2023 YTD	\$8,851

**Recommended Assessment:**

Total Anticipated Maintenance Expenses*	\$0
Henry Graham Maintenance Repairs 2023 Project Expenses	\$504,238

**TOTAL RECOMMENDED ASSESSMENT** **\$504,238**

\*Anticipated Maintenance Expenses for 2021-2023 were previously collected with the 8/24/2021 assessment

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Geoff Wilson, P.E. - Chief Engineer

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Gary Nigro, P.E. - Manager

**SPECIAL ASSESSMENT ROLL FOR THE MAINTENANCE  
OF THE HENRY-GRAHAM DRAIN**

<b>Public Corporation</b>	<b>*Percentage of Apportionment</b>	<b>Total Amount of Assessment</b>	<b>Payment #1</b>	<b>Payment #2</b>	<b>Payment #3</b>
City of Madison Heights	6.1182%	\$ 30,850.29	\$ 30,850.29	-	-
City of Troy	89.1016%	\$ 449,284.12	\$ 449,284.12	-	-
County of Oakland	2.0181%	\$ 10,176.03	\$ 10,176.03	-	-
State of Michigan	2.7621%	\$ 13,927.56	\$ 13,927.56	-	-
<b>Total</b>	<b>100.0000%</b>	<b>\$ 504,238.00</b>	<b>\$ 504,238.00</b>	<b>\$ -</b>	<b>\$ -</b>

\*Apportionment based on Final Order of Apportionment dated 2/25/1971.

Assessment Payment Due Date(s): Payment #1 07/31/2023

I hereby certify that I have prepared the Special Assessment Roll for the Maintenance of the Henry-Graham Drain in accordance with the direction of the Drainage Board and the statutory provisions applicable thereto.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the Henry-Graham Drain

The foregoing Special Assessment Roll for the maintenance of the Henry-Graham Drain was approved by the Drainage Board on \_\_\_\_\_.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the Henry-Graham Drain