



CITY of NOVI CITY COUNCIL

Agenda Item 2
June 3, 2019

SUBJECT: Approval of the Huron Rouge Sewage Disposal Sewage Retention Facility Contract, the Resolution to Approve Act 342 Agreement related to the construction, operation and ownership of the Sewage Retention Facility, and to amend the budget.

SUBMITTING DEPARTMENT: Department of Public Works, Water and Sewer Division

CITY MANAGER APPROVAL: *AK*

EXPENDITURE REQUIRED	\$ 11,300,000 (estimated)
AMOUNT BUDGETED	\$ 10,448,791
APPROPRIATION REQUIRED	\$ 854,159
LINE ITEM NUMBER	592-592.00-976.014

BACKGROUND INFORMATION:

The design for the Huron Rouge Sewage Disposal System (HRSDS) Sewage Retention Facility is underway. The purpose of this project is to address the periodic contract flow exceedances the City has experienced over the past several years. The attached December 19, 2018 Memorandum from Water & Sewer Senior Manager Ben Croy can be referenced for additional background related to this project. A 10-foot wide walking path, along with additional landscaping, will be installed in this area once the facility is constructed.

Novi's sanitary sewer contract for the HRSDS District is with the Oakland County Water Resource Commissioner's Office, who in turn has a contract with Wayne County for the conveyance and treatment of Novi's flow. Since Oakland County is the entity named in the contract, they are managing the design and construction of this retention facility, with Novi staff involved throughout the process. Since Oakland County is managing the project, and since the project is solely for the benefit of Novi, the attached HRSDS Sewage Retention Facility Contract has been drafted for execution by Novi and Oakland County. This is a standard Contract that Oakland County uses for improvement projects that benefit specific municipalities. One of the provisions of this Contract involves the commitment by the City to pay the County the cost of the project once the cost is known following the public bidding process. The current estimate for the payment that will be required at the time of the construction contract award is \$11,300,000.

Along with the Contract, the attached Resolution would be executed to acknowledge the City's approval of the Sewage Retention Facility Contract. The City Attorney's Office has reviewed and approved both the Contract and Resolution.

The current schedule for the project (attached) anticipates construction beginning in November of 2019, and completion in approximately one year. The facility will be operated and maintained by Oakland County personnel; however, Novi's DPW Water and Sewer Division will also monitor the system operations.

RECOMMENDED ACTION: Approval of the Huron Rouge Sewage Disposal Sewage Retention Facility Contract, the Resolution to Approve Act 342 Agreement related to the construction, operation and ownership of the Sewage Retention Facility, and to amend the budget.

RESOLUTION

NOW, THEREFORE BE IT RESOLVED that the following
Budget Amendment for the Huron Rouge Sewage Disposal Sewage
Retention Facility Project is authorized:

	INCREASE (DECREASE)
WATER & SEWER FUND	
APPROPRIATIONS	
Capital Outlay	854,159
TOTAL APPROPRIATIONS	<u>\$ 854,159</u>
Net Increase (Decrease) to Fund Balance	<u><u>\$ (854,159)</u></u>

I hereby certify that the foregoing is a true and complete copy of a
resolution adopted by the City Council of the City of Novi
at a regular meeting held on June 3, 2019.

Cortney Hanson
City Clerk

**HURON-ROUGE SEWAGE DISPOSAL SYSTEM
SEWAGE RETENTION FACILITY CONTRACT**

THIS CONTRACT, made and entered into as of the _____ day of _____, 2019, by and between the COUNTY OF OAKLAND, a county corporation in the State of Michigan (hereinafter sometimes referred to as the “County”), by and through its Water Resources Commissioner, County Agency, and the CITY OF NOVI (formerly the Village of Novi), a Michigan home rule city, located in the County of Oakland, State of Michigan, (the “Municipality”).

W I T N E S S E T H:

WHEREAS, pursuant to Act No. 185, Public Acts of Michigan, 1957, as amended, the Board of Commissioners (formerly the Board of Supervisors) of the County has established a county system of sewage disposal improvements and services to serve the Municipality, said system being known as the “Huron-Rouge Sewage Disposal System;” (the “HRSDS”) and

WHEREAS, the County acquired and constructed HRSDS facilities pursuant to the Huron-Rouge Sewage Disposal System Contract dated as of April 20, 1962, among the County, the Village of Novi, and the Township of Novi, as amended; and

WHEREAS, pursuant to Act No. 342, Public Acts of Michigan, 1939, as amended (hereinafter sometimes referred to as “Act 342”), the County has designated the Oakland County Drain Commissioner (now the Oakland County Water Resources Commissioner) as the county agency for the HRSDS with all powers and duties with respect thereto as are provided by Act

342 (said Water Resources Commissioner being hereinafter sometimes referred to as the “County Agency”); and

WHEREAS, the Sewage Disposal Agreement between the County and the County of Wayne (“Wayne”) dated June 1, 1962, as amended, permits the transport, treatment and disposal of sanitary sewer discharge from the HRSDS to the Rouge Valley Sewage Disposal System (the “RVSDS”); and

WHEREAS, the Construction, Finance and Service Agreement between the County and Wayne dated February 1, 1988 (the “Construction, Finance and Service Agreement”), establishes a Total Community Capacity (now known as maximum allowable flow limit or MFAL) of 20.48 cubic feet per second for the Municipality to discharge flow through the HRSDS to the RVSDS; and

WHEREAS, Wayne notified the County on April 20, 2016 of instances in which maximum allowable flow limit was exceeded by the Municipality at various times during the period from 2007 to 2016 and required that measures be taken to ensure the Municipality’s discharge into the RVSDS is managed and limited to the capacity permitted by the Construction, Finance and Service Agreement; and

WHEREAS, there is an urgent need to prevent further such exceedances by the Municipality in order to promote the health and welfare of the residents of the Municipality, which improvements would likewise benefit the County and its residents, and the parties hereto have concluded that such improvements can be provided and financed most economically and efficiently by the County through the exercise of the powers conferred by Act 342, and especially section 5 thereof; and

WHEREAS, under and subject to the terms of Act 342, the County is authorized, through the County Agency, to acquire and construct the improvements to the HRSDS, including the sewage retention facility hereinafter described (the “Project”), the County and the Municipality are authorized to enter into a contract, as hereinafter provided, for the acquisition and construction of the Project by the County and for the payment of the cost thereof by the Municipality in cash from available funds; and

WHEREAS, preliminary plans for the Project and estimates of the cost and period of usefulness thereof have been prepared, all of which have been submitted to and approved by the Board of Commissioners of the County and the governing body of the Municipality and placed on file with said Board of Commissioners in the office of the County Agency, said estimates being set forth in Exhibit B hereunto attached; and

WHEREAS, in order to provide for the acquisition and construction of the Project by the County and for other related matters, it is necessary for the parties hereto to enter into this contract.

THEREFORE, IN CONSIDERATION OF THE PREMISES AND THE COVENANTS OF EACH OTHER, THE PARTIES HERETO AGREE as follows:

1. The parties hereto approve and agree to the acquisition, construction and financing of the Project as herein provided, under and pursuant to Act 342. The Municipality by way of compliance with Section 29, Article VII, Michigan Constitution of 1963, consents and agrees to the establishment and location of the Project within its corporate boundaries and to the use by the County of its streets, highways, alleys, lands, rights-of-way or other public places for the purpose and facilities of the Project and any improvements, enlargements or extensions thereof, and the Municipality further agrees that, in order to evidence and effectuate the

foregoing agreement and consent, it will execute and deliver to the County such grants of easement, right-of-way, license, permit or consent as may be requested by the County.

2. The Project shall consist of additions and improvements to a portion of the HRSDS shown and described on Exhibit A which is attached hereto and is made a part hereof, and as are more particularly set forth in the preliminary plans which have been prepared and submitted by the consulting engineers which plans are on file with the County Agency and are approved and adopted. The Project shall be acquired and constructed substantially in accordance with said preliminary plans and in accordance with final plans and specifications to be prepared and submitted by the consulting engineers, but variations therefrom that do not materially change the location, capacities or overall design of the Project, and that do not require an increase in the total estimated cost of the Project, may be permitted on the authority of the County Agency. Other variations or changes may be made if approved by the County Agency and by resolution of the governing body of the Municipality and if provisions required by paragraph 4 hereof are made for payment of any resulting increase in the total estimated cost. The estimate of the cost of the Project and the estimate of the period of usefulness thereof as set forth in Exhibit B are approved and adopted.

3. The County Agency will obtain construction bids for the Project and, subject to the receipt of a cash payment to be made under this contract by the Municipality, shall enter into construction contracts with the lowest responsible bidder or bidders, procure from the contractors all necessary and proper bonds, cause the Project to be constructed within a reasonable time, and do all other things required by this contract and the laws of the State of Michigan. The County Agency may, in its sole discretion, retain the services of a third-party engineering firm to perform contract administration of the Project, and payment for such services shall be the responsibility of the Municipality as part of the cost of the Project as described in paragraph 5 hereof. All certificates for required payments to contractors shall be approved by the consulting

engineers before presentation to the County Agency and the latter shall be entitled to rely on such approval in making payments.

4. Except as otherwise provided herein, in the event that it shall become necessary to increase the estimated cost of the Project for any reason, or if the actual cost of the Project shall exceed the estimated cost, whether as the result of variations or changes made in the approved plans or otherwise, the County Agency shall not be obligated to pay such increased or excess cost unless the governing body of the Municipality shall have adopted a resolution approving such increase or excess and agreeing that the same (or such part thereof as is not available from other sources) shall be defrayed by increased or additional payments to be made by the Municipality to the County in the manner acceptable to the County Agency.

5. The Municipality shall pay to the County the entire cost of the Project not defrayed by grants and funds available from other sources in cash not later than the effective date of the County Agency's award of the first construction contract for the Project. The Municipality hereby acknowledges that no County general funds shall be appropriated or pledged pursuant to this contract or for the Project. The County's role in the Project is strictly limited to that set forth in Act 342, and the Municipality shall be solely responsible for all administration and construction costs (including attorney fees and all dispute resolution costs), all costs of operation and maintenance of the Project, all costs and expenses relating to lawsuits as described in paragraph 11 hereof and all items of cost described in paragraph 6 hereof. Payments shall be made by the Municipality when due whether or not the Project has then been completed or placed in operation.

6. The County Agency is hereby authorized, but not required, to utilize County personnel for the administration of the Project. The Municipality agrees that the costs of contract administration, auditing and financial services shall be part of the cost of the Project for purposes

of paragraph 5 hereof, whether such services are provided by County personnel or third parties. In the case of County personnel, the costs attributed to the Project shall include the allocable share of such personnel's salary and fringe benefits to the Project as determined by the County Agency.

7. If the Project is abandoned for any reason, the Municipality shall pay, or reimburse the County for the payment of, all engineering, legal and other costs and expenses incurred by the County Agency in connection with the Project, and the Municipality shall be entitled to all plans, specifications and other engineering data and materials.

8. After completion of the Project, the County shall own the Project and shall operate and maintain the Project as part of the HRSDES in accordance with applicable agreements between the County and the Municipality.

9. It is understood and agreed by the parties hereto that the Project is to serve the Municipality and not the individual property owners and users thereof, unless by special arrangement between the County Agency and the Municipality. The responsibility of requiring connection to and use of the Project and/or providing such additional facilities as may be needed shall be that of the Municipality wherein such property is located and such Municipality shall cause to be constructed and maintained, directly or through the County, any such necessary additional facilities. The County shall not be obligated to acquire or construct any facilities other than those designated in paragraph 2 hereof.

10. The County shall have no obligation or responsibility for providing facilities except as herein expressly provided with respect to the acquisition and construction of the Project or as otherwise provided by contract. The Municipality shall have the authority and the responsibility to provide such other facilities and shall have the right to expand the facilities of

the HRSDS by constructing or extending sewers or related facilities, connecting the same to the HRSDS, and otherwise improving the HRSDS. It is expressly agreed, nevertheless, that no such connection shall be made to the HRSDS and no improvements, enlargements or extensions thereof shall be made without first securing a permit therefor from the County. Any such permit may be made conditional upon inspection and approval of new construction by the County.

11. The parties hereto agree that the costs and expenses of any lawsuits or Claims (as hereinafter defined) arising directly or indirectly out of this contract or the construction or financing of the Project, to the extent that such costs and expenses are chargeable against the County or the County Agency, shall be deemed to constitute a part of the cost of the Project and shall be paid by the Municipality in the same manner as herein provided with respect to other costs of the Project. In the event of such litigation or claims, the County Agency shall consult with the Municipality and shall retain legal counsel agreeable to the County and the Municipality to represent the County; provided that if the County and the Municipality cannot agree as to such representation within a reasonable time, the County Agency shall exercise its discretion as to the retention of such counsel. In this contract, "Claims" means any alleged losses, claims, complaints, demands for relief or damages, liability, penalties, costs, and expenses, including, but not limited to, reimbursement for reasonable attorney fees, witness fees, court costs, investigation expenses, litigation expenses, amounts paid in settlement, and/or other amounts or liabilities of any kind which are imposed on, incurred by, or assessed against the County, County Agency or Municipality, or for which the County, County Agency or Municipality may become legally and/or contractually obligated to pay or defend against, whether direct, indirect or consequential, whether based upon any alleged violation of the federal or the State constitution, any federal or State statute, rule, regulation, or any alleged violation of Federal or State common law, whether any such claims are brought in law or equity, tort, contract, or otherwise, and/or whether commenced or threatened. This paragraph shall not apply to a lawsuit instituted by the Municipality to enforce its rights under this contract.

12. All powers, duties and functions vested by this contract in the County shall be exercised and performed by the County Agency, for and on behalf of the County, unless otherwise provided by law or in this contract.

13. In the event that any one or more of the provisions of this contract for any reason shall be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions hereof, but this contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

14. This contract shall become effective after its execution by each party hereto. This contract shall terminate one (1) year from the date of final acceptance of completion of construction of the Project by the County Agency, unless terminated earlier by mutual agreement of the parties hereto in writing. This contract shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. This contract may be executed in any number of counterparts.

[Signatures on following page]

IN WITNESS WHEREOF, the parties hereto have caused this contract to be executed and delivered by the undersigned, being duly authorized by their respective governing bodies.

COUNTY OF OAKLAND

Executed on _____, 2019

By: _____
Jim Nash
Its: County Water Resources Commissioner
(County Agency)

CITY OF NOVI

By: _____
Robert J. Gatt
Its: Mayor

Executed on _____, 2019

And: _____
Cortney Hanson
Its: Clerk

Exhibit A
Huron-Rouge Sewage Disposal System
Sewage Retention Facility
Project Description

The Huron-Rouge Sewage Disposal System (HRSDS) is operated and maintained by the Oakland County Water Resources Commissioner's Office (WRC). The HRSDS serves the City of Novi and a small portion of the City of Northville. The HRSDS discharges to the Rouge Valley Sewage Disposal System (RVSDS), which is owned and operated by Wayne County. Flow in the HRSDS is ultimately treated at the Great Lakes Water Authority Water Resource Recovery Facility. A map of the HRSDS is attached for reference.

Wayne County is under a Final Order of Abatement (FOA) with the Michigan Department of Environmental Quality (MDEQ) to eliminate sanitary sewer overflows to the environment. To accomplish this, Wayne County actively enforces the flow limits established in the sewer agreements. Between 2007 and 2016, the HRSDS exceeded its contract capacity of 20.48 cubic feet per second on five occasions. The City of Novi is a growing community and has attempted, with the assistance of WRC, to acquire additional capacity in the RVSDS since 2009 to no avail.

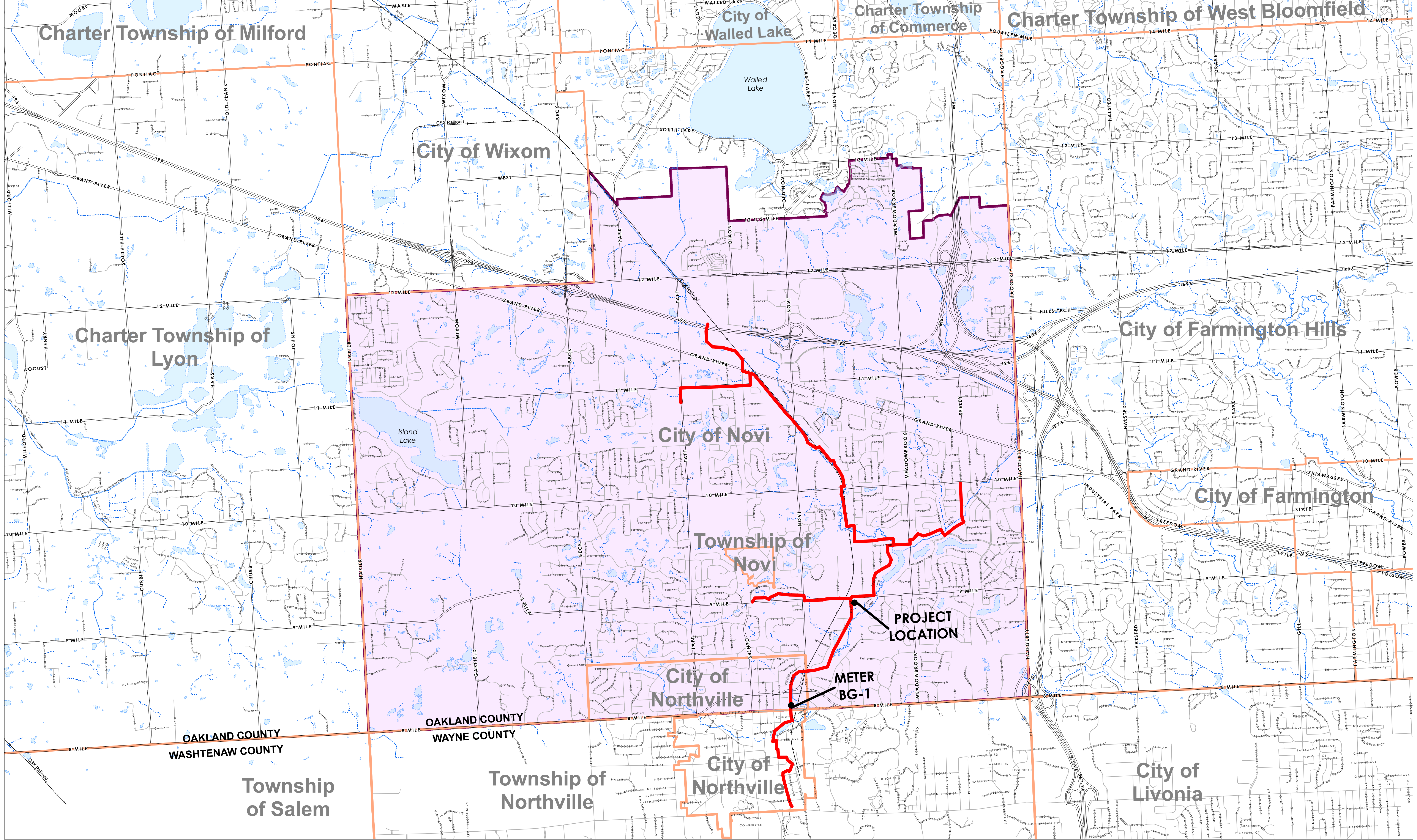
In late 2015, Wayne County abruptly halted the review MDEQ Part 41 Sanitary Sewer Permit Applications for the City due to the contract exceedances. This had a tremendous impact on economic development within the City of Novi. After a few months of negotiation, the City, the WRC, and Wayne County agreed to the design and construction of a new sewage retention facility (SRF) on the HRSDS to store flow above the contract capacity. This allowed Wayne County to resume its review of MDEQ Part 41 Permit Applications for the City.

The new SRF will be located adjacent to the existing 42-inch diameter HRSDS interceptor south of Nine Mile Road and east of Roethel Drive on parkland owned by the City of Novi as shown on Figure 1-3. The scope of the proposed SRF is as follows:

1. A new 15 feet wide by 10 feet high by approximately 1,000 feet long underground concrete sewage retention facility (SRF) which will provide approximately 1,000,000 gallons of storage
2. A new approximately 5 million gallons per day (MGD) Pump Station to fill the new SRF when required
3. A new underground concrete diversion structure including bypass, gates, weirs, baffles, and other equipment and appurtenances for diverting flow from the HRSDS into the new Pump Station and for draining the new SRF by gravity back into the HRSDS
4. A new flushing system for flushing/cleaning a portion of the new SRF and pump station with provisions for future expansion of the flushing system if needed

Exhibit A
Huron-Rouge Sewage Disposal System
Sewage Retention Facility
Project Description

5. A new building to house certain equipment associated with the new SRF and Pump Station including but not limited to variable frequency drives for the pumps, control panels, a motor control center, circuit breaker panels, supervisor control and data acquisition (SCADA) equipment, and heating, air conditioning, and ventilating equipment
6. A new paved access drive and parking area for the new SRF and Pump Station including associated drainage structures, culverts, etc.
7. A new natural gas-fired generator to provide emergency power for the facility when required
8. New landscaping, lighting, and other outdoor features
9. All associated electrical systems, instrumentation, control, and SCADA systems, fire protection systems, security systems, gas, steam, heating, ventilating, and cooling system, potable water supply systems, paving, storm drainage, and other and other related systems and appurtenances



Legend

- Huron-Rouge Sewage Disposal District
- Huron-Rouge Sewage Disposal System
- Municipal Boundary

HURON-ROUGE SEWAGE DISPOSAL SYSTEM

0 2,000 4,000 8,000 12,000

Feet

1 inch = 2,000 feet

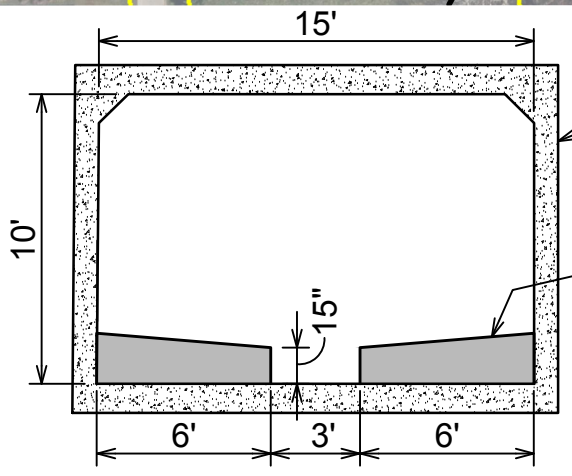
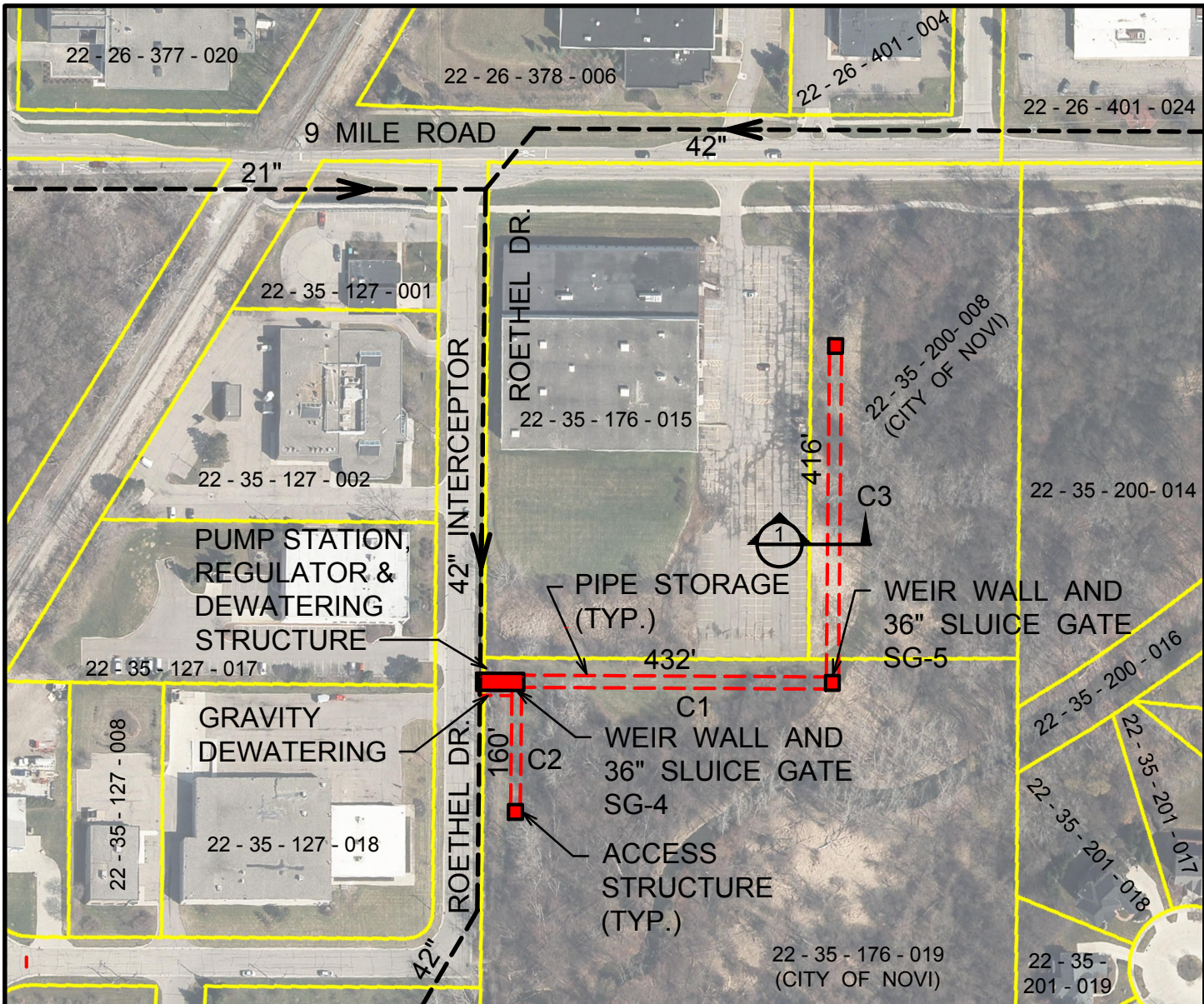
WRC
WATER RESOURCES COMMISSIONER
Jim Nash

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

DISCLAIMER:
The information displayed in this map is compiled from recorded deeds, plots, tax maps, surveys and other public records. Although this information is intended to accurately reflect public information, it is not a legally recorded map or survey and is not intended to be used as one. Users should consult primary/original information sources where appropriate.

Revision Date: January 22, 2019

DESIGNED DSN
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 CHECKED CHK
 APPROVED APR
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STORAGE PIPE SECTION 1
NO SCALE

PRECAST
 CONCRETE
 BOX CULVERT
 CONC. FILL

LEGEND

- PIPE STORAGE
- C# SEQUENCED COMPARTMENT STORAGE



SCALE IN FEET


HUBBELL, ROTH & CLARK, INC
 CONSULTING ENGINEERS SINCE 1915
 555 HULET DRIVE
 BLOOMFIELD HILLS, MICH.

JOB NO.
 20170387
 DATE
 NOV., 2018

1 M.G. PIPE STORAGE

FIGURE NO.
1-3

Exhibit B
Huron-Rouge Sewage Disposal System
Sewage Retention Facility
Estimate of Project Cost
March 1, 2019

1)	CONTRACTED SERVICES - CONSTRUCTION	
	Construction Estimate	\$ 8,756,000
	Subtotal - Contracted Services - Construction	\$ 8,756,000
2)	CONTRACTED SERVICES - PROJECT DEVELOPMENT	
	Engineering	
	Consulting Engineer	
	Study Phase	\$ 451,000
	Design Phase	\$ 533,000
	Construction Phase	\$ 449,000
	RPR Services	\$ 360,000
	Asset Management	\$ 30,000
	Scheduling Consultant	\$ 100,000
	Construction Testing	\$ 80,000
	Subtotal - Contracted Services - Project Development	\$ 2,003,000
3)	LEGAL & FINANCIAL	
	Right-of-Way	\$ 50,000
	Legal Fees	\$ 200,000
	Subtotal - Legal & Financial	\$ 250,000
4)	COUNTY SERVICES	
	Administration	\$ 95,000
	Engineering	\$ 237,000
	Right-of-Way	\$ 23,000
	Construction Inspection	\$ 329,000
	Surveying	\$ 28,000
	WRC O & M Staff	\$ 130,000
	Subtotal - County Services	\$ 842,000
5)	SUBTOTAL	\$ 11,851,000
	Contingency	\$ 1,149,000
6)	ESTIMATE OF PROJECT COST	<u>\$ 13,000,000</u>

Project Cost Allocations	
Funding Source	Amount
HRSDS Capital Investment Plan Reserve	\$ 1,700,000
City of Novi Cash Payment	\$ 11,300,000
Total	\$ 13,000,000

I certify the period of usefulness of these facilities to be thirty (30) years and upwards.

By: _____
Sid Lockhart, P.E., Special Projects Manager

**RESOLUTION APPROVING ACT 342 CONTRACT BETWEEN OAKLAND COUNTY AND THE
CITY NOVI RELATING TO ADDITIONS AND IMPROVEMENTS TO THE HURON-ROUGE SEWAGE
DISPOSAL SYSTEM**

Minutes of a regular Meeting of the City Council of the City of Novi, County of Oakland,
Michigan, held in the City Hall in said City on _____, 2019 at 7 o'clock P.M.
Prevailing Eastern Time..

PRESENT: _____

ABSENT: _____

The Clerk presented to the City Council a form of contract between the County of Oakland (the "County") and the City of Novi (the "City") relative to the acquisition, construction and financing of additions and improvements to the Huron-Rouge Sewage Disposal System (the "Project"), and the plans and estimates of the cost and period of usefulness thereof.

The following resolution was offered by _____ and seconded by _____:

BE IT RESOLVED by the City Council of the City of Novi, Oakland County, Michigan, that:

1. The City Council hereby approves the contract between the County and the City relating to the Project (the "Contract") and providing for the payment of the cost thereof by the City to the County in cash from available funds and other matters relating to the Project, all under and pursuant to Act No. 342, Public Acts of Michigan, 1939, as amended.

2. The City Council hereby approves the preliminary plans for the Project, and the estimates of the cost and period of usefulness thereof, as contained in Exhibits A and B to the Contract.

3. The Mayor and the City Clerk are authorized and directed to execute and deliver the Contract for and on behalf of the City in such number of counterparts as may be desirable.

4. A copy of the Contract as presented to the City Council and herein approved and authorized to be executed and delivered shall be attached to the minutes of this meeting and made a part thereof and shall be placed on file with the City Clerk and made available for examination by any interested person during normal business hours.

RESOLUTION DECLARED ADOPTED.

YEAS: _____

NAYS: _____

ABSTENTIONS: _____

STATE OF MICHIGAN)
)ss
COUNTY OF OAKLAND)

I, the undersigned City Clerk of the City of Novi, Oakland County, Michigan, hereby certify that the foregoing is a true and complete copy of a resolution adopted by the City Council at a regular meeting duly called and held on the ____ day of _____, 2019, the original of which resolution is on file in my office.

City Clerk

MEMORANDUM



TO: JEFFREY HERCZEG, DIRECTOR OF PUBLIC WORKS
FROM: BEN CROY, WATER AND SEWER SENIOR MANAGER
SUBJECT: HURAN ROUGE SEWAGE DISPOSAL SANITARY
RETENTION PROJECT
DATE: DECEMBER 19, 2018

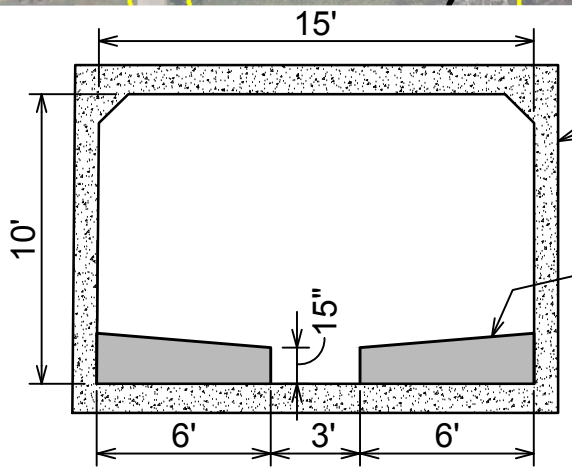
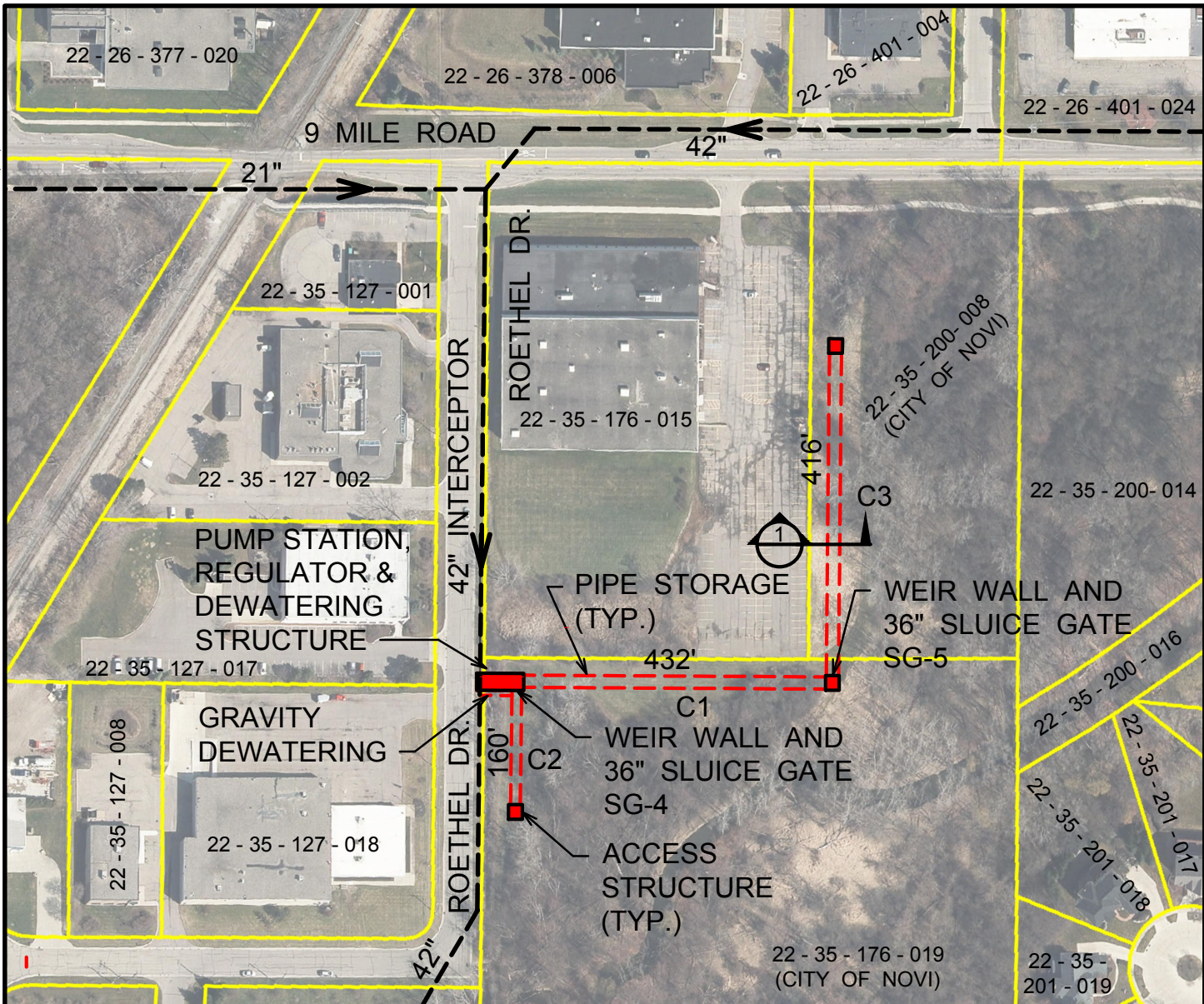
The design of the Huron Rouge Sewage Disposal System (HRSDS) Sanitary Retention facility project is underway, with construction of the facility anticipated to begin late 2019. This project, formerly known as the Eight Mile Equalization Basin, addresses the periodic contract exceedances of the city's sanitary sewer flow rate. This retention facility will temporarily detain a calculated volume and reduce the rate of release, resulting in a controlled flow from the city outlet into the HRSDS system.

The storage facility will be constructed east of Roethel Drive between Rotary Park and Nine Mile Road, as shown on the attached figure. The facility will consist of approximately 1,000 feet of box culvert pipe (10' x 15'), which is capable of storing one million gallons. This volume of storage was based on the future sanitary needs of Novi, taking into account planned and potential future development. An automated pump station will pump flow into the storage pipes at varying rates if the flow rate approaches the city's contractual rate of 20.48 cubic feet per second. The facility will be equipped with a flushing system to help clean the pipes following storage events and eliminate any odors.

The city's sanitary sewer system is comprised of three districts – the HRSDS District, the Walled Lake District, and the Commerce District. The Walled Lake and Commerce Districts (north end of city) will not contribute flow to the retention facility. The retention facility will control flows from only the HRSDS District, which encompasses 85% of the city's sanitary flow. Novi's sanitary sewer contract for the HRSDS District is with Oakland County (who in turn has a contract with Wayne County for the conveyance and treatment of Novi's flow). Since Oakland County is the entity named in the contract, they are managing the design and construction of the retention facility, with Novi staff involved throughout the process.

The current schedule for the project (attached) anticipates construction beginning in November of 2019, and completion in approximately one year. The facility will be operated and maintained by Oakland County personnel; however, Novi's Water and Sewer Division will monitor the system operations to ensure compliance with contract limitations.

DESIGNED DSN
 DRAWN/DRN
 CHECKED CHK
 APPROVED APR
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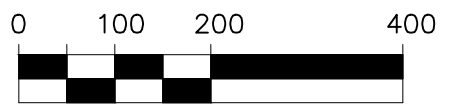


STORAGE PIPE SECTION 1
NO SCALE

PRECAST
 CONCRETE
 BOX CULVERT
 CONC. FILL

LEGEND

- PIPE STORAGE
- C# SEQUENCED COMPARTMENT STORAGE



SCALE IN FEET


HUBBELL, ROTH & CLARK, INC
 CONSULTING ENGINEERS SINCE 1915
 555 HULET DRIVE
 BLOOMFIELD HILLS, MICH.

JOB NO.
 20170387
 DATE
 NOV., 2018

1 M.G. PIPE STORAGE

FIGURE NO.
1-3

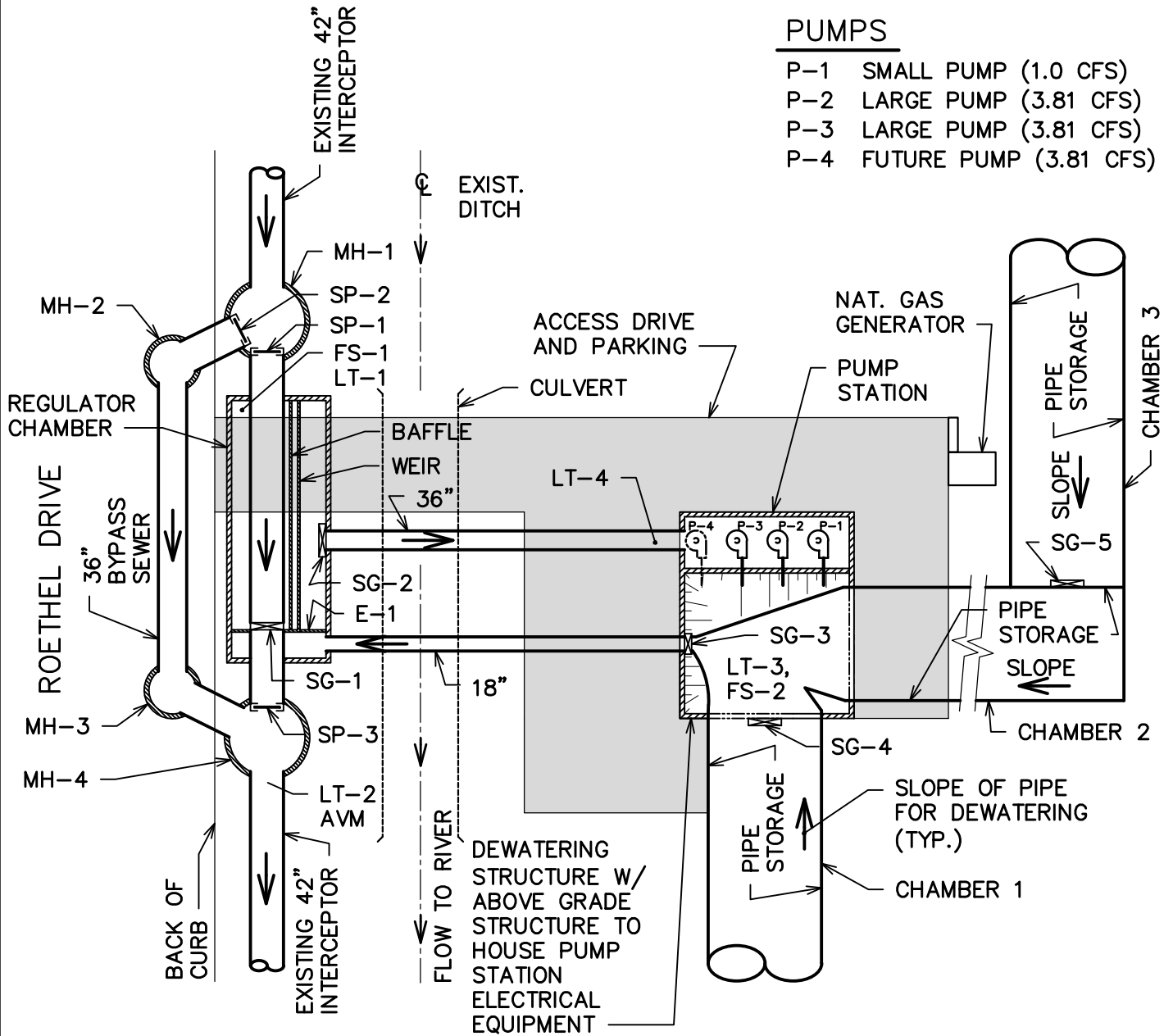
Oakland County Water Resources Commissioner

Huron Rouge Sewage Disposal System - 1 MG Pipe Storage Facility

Project Schedule

Tasks	Calendar Year		2018												2019												2020											
	Month		A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D							
TASK I - Preliminary Phase (Basis Of Design)																																						
Notice-To-Proceed (September 4, 2018)																																						
Gather/Review Existing Record Documents																																						
Set Up Document Exchange (Basecamp)																																						
Gather/Review Project Related Data																																						
Stakeholder Kick Off Meeting September 27, 2018																																						
Review Alternatives Study, Schedule, Risks, Etc.																																						
Topographic Survey																																						
Geotechnical Investigation																																						
Risk Registry/Assessment October 25, 2018																																						
Review Feasibility of Existing Facility Reuse																																						
Review Existing MDEQ Regulations and Standards																																						
Review Current Eng. Stds. to Utilize Best Methods																																						
Review Existing & Proposed Utilities for Conflicts																																						
Prepare Basis of Design																																						
Draft Submittal & Owner's Review Mtg November 7, 2018																																						
Owners BOD Response November 21																																						
Final Submittal (Owner) November 30, 2018																																						
TASK II - Design Phase																																						
Design Engineering Services																																						
Design Kick Off Meeting																																						
Novi Planning Commission Approval Process																																						
Novi Park and Recreation Commission Approval Process																																						
Geotechnical Analysis (As-needed)																																						
Geotech. Evaluation & Recommendations																																						
Wetlands & Floodplain Assessment																																						
Topographic Survey (As-needed)																																						
Set Up Document Filing System (Procore)																																						
Detailed Design																																						
Design Kick Off Meeting																																						
Site Work																																						
Process/Mechanical Design																																						
Structural/Architectural																																						
Electrical																																						
Instrumentation and Controls																																						
Specifications																																						
Permitting (MDEQ, Novi, WRC)																																						
30% Draft Owner's Review February 27, 2019																																						
50% Draft Owner's Review April 17, 2019																																						
MDEQ Design Document Review Meeting May 1, 2019																																						
90% Draft Owner's Review and MDEQ June 5, 2019																																						
Final Submittal (Owner & MDEQ) June 28, 2019																																						
Update Basis of Design																																						
Permits																																						
Part 31 - Floodplains March 27, 2019																																						
Part 41 - Sanitary Construction June 5, 2019																																						
Part 303 - Wetlands March 27, 2019																																						
Part 327 - Construction Dewatering March 27, 2019																																						
Part 365 - Threatened & Endangered Species Feb 20, 2019																																						
Bidding, Finance & Agreements																																						
Advertise Bids July 5, 2019																																						
Bid Opening August 5, 2019																																						
Construction Contract Award September 4, 2019																																						
Issue Notice To Proceed November 4, 2019																																						
Bid Holding Period (120 days) December 3, 2019																																						
TASK III - Construction Phase																																						
Construction Engineering Services																																						
Construction Pipe Storage & Control Structures																																						
Construction Pump Station																																						
Prepare O&M Manual																																						
Substantial Completion September 1, 2020																																						
Start-up & Training																																						
Punchlist & Site Restoration																																						
Final Completion October 30, 2020																																						
TASK IV - Resident Project Representative Services																																						
TASK V - Asset Management Services																																						

* - Deliverables by HRC. Owners return comments are expected within 2 weeks



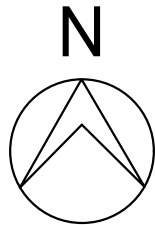
PUMPS

- P-1 SMALL PUMP (1.0 CFS)
- P-2 LARGE PUMP (3.81 CFS)
- P-3 LARGE PUMP (3.81 CFS)
- P-4 FUTURE PUMP (3.81 CFS)

LEGEND

- E-1 EMERGENCY OVERFLOW
- LT LEVEL TRANSMITTER
- FS FLOAT SWITCH
- MH MANHOLE
- SP-1 STOP PLATE FOR FLOW THRU DIVERSION DURING CONSTRUCTION AND FUTURE MAINTENANCE
- SP-3

- SG-1 SLUICE GATE FOR FLOW CONTROL SIGNAL FROM EXIST. METER BG-1 (N.O.)
- SG-2 INFLUENT PIPE TO FILLING PUMP STATION (N.C.)
- SG-3 DEWATERING SLUICE GATE MODULATING (N.C.)
- AVM AREA VELOCITY METER



NO SCALE



555 HULET DRIVE BLOOMFIELD HILLS, MICH. P.O. BOX 824 48303-0824

JOB NO. 20170387

DATE NOV., 2017

PROPOSED PUMP STATION, REGULATOR AND DEWATERING STRUCTURES PLAN

FIGURE NO. **3-1**