



CITY of NOVI CITY COUNCIL

Agenda Item 3
June 3, 2019

SUBJECT: Approval of permanent sanitary sewer easements and temporary construction easements on city property, known as Rotary Park, for the construction and operation of the Huron Rouge Sewage Disposal System Sanitary Retention Facility (parcels 50-22-35-176-019 and 50-22-200-008).

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

CITY MANAGER APPROVAL: *PR*

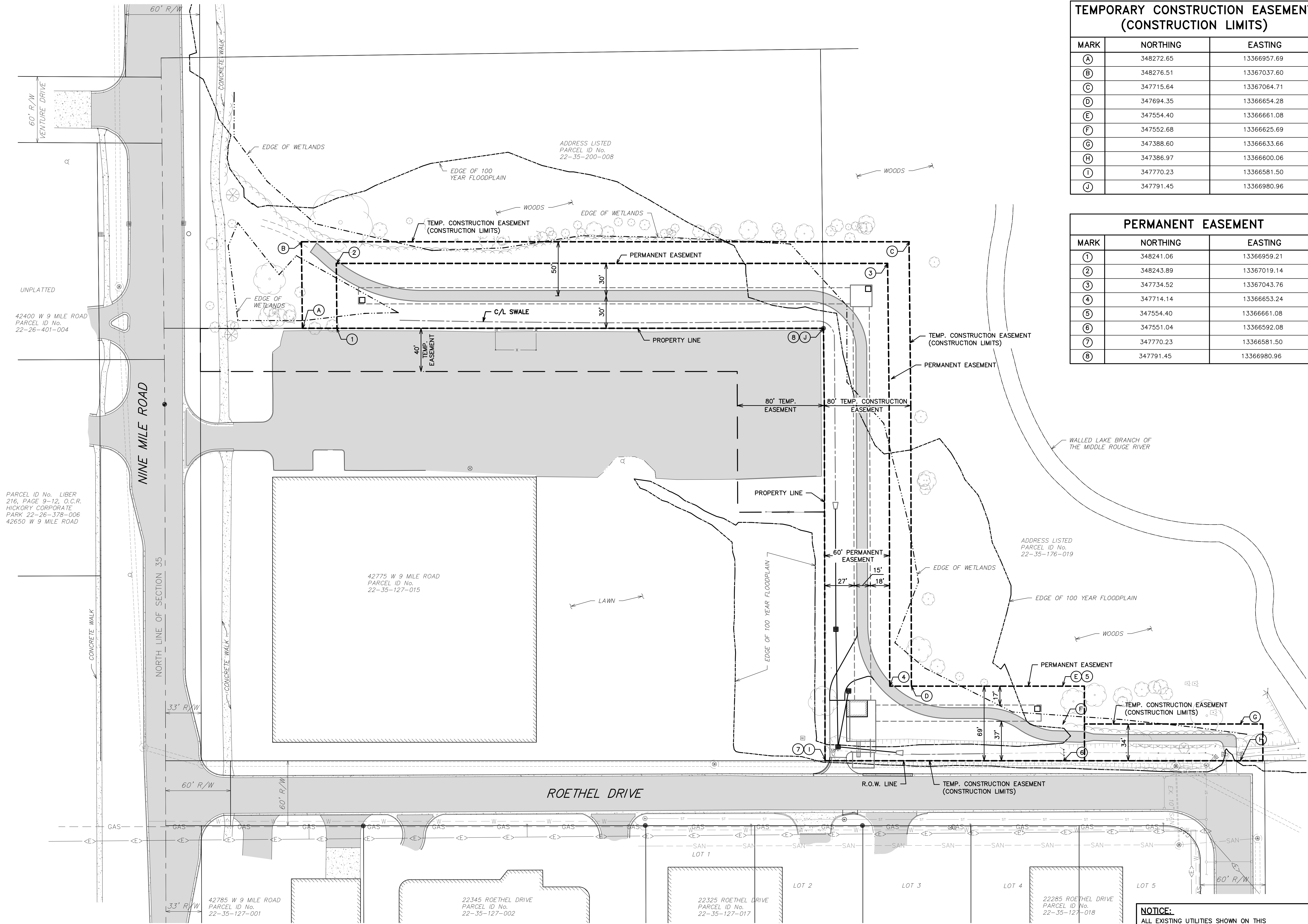
BACKGROUND INFORMATION:

The design for the Huron Rouge Sewage Disposal System (HRSDS) Sanitary 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. 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. The enclosed permanent sanitary sewer easements and the temporary construction easements will allow Oakland County to operate and maintain the facility.

The City Attorney's Office has reviewed and approved the easements. The current schedule for the project (attached) anticipates construction beginning in November of 2019, and completion in approximately one year.

RECOMMENDED ACTION: Approval of permanent sanitary sewer easements and temporary construction easements on city property, known as Rotary Park, for the construction and operation of the Huron Rouge Sewage Disposal System Sanitary Retention Facility (parcels 50-22-35-176-019 and 50-22-200-008).



TEMPORARY CONSTRUCTION EASEMENT (CONSTRUCTION LIMITS)

MARK	NORTHING	EASTING
(A)	348272.65	13366957.69
(B)	348276.51	13367037.60
(C)	347715.64	13367064.71
(D)	347694.35	13366654.28
(E)	347554.40	13366661.08
(F)	347552.68	13366625.69
(G)	347388.60	13366633.66
(H)	347386.97	13366600.06
(I)	347770.23	13366581.50
(J)	347791.45	13366980.96

PERMANENT EASEMENT

MARK	NORTHING	EASTING
(1)	348241.06	13366959.21
(2)	348243.89	13367019.14
(3)	347734.52	13367043.76
(4)	347714.14	13366653.24
(5)	347554.40	13366661.08
(6)	347551.04	13366592.08
(7)	347770.23	13366581.50
(8)	347791.45	13366980.96

UNPLATTED
42400 W 9 MILE ROAD
PARCEL ID No. 22-26-401-004

PARCEL ID No. LIBER 216, PAGE 9-12, O.C.R. HICKORY CORPORATE PARK 22-26-378-006 42650 W 9 MILE ROAD

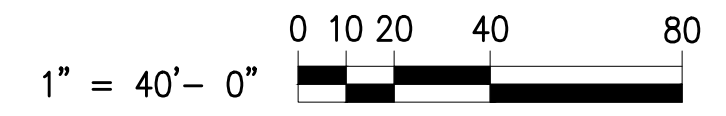
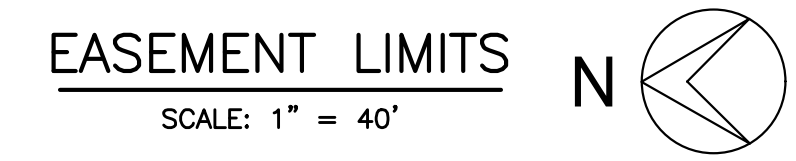
42775 W 9 MILE ROAD
PARCEL ID No. 22-35-127-015

42785 W 9 MILE ROAD
PARCEL ID No. 22-35-127-001

22345 ROETHEL DRIVE
PARCEL ID No. 22-35-127-002

22325 ROETHEL DRIVE
PARCEL ID No. 22-35-127-017

22285 ROETHEL DRIVE
PARCEL ID No. 22-35-127-018



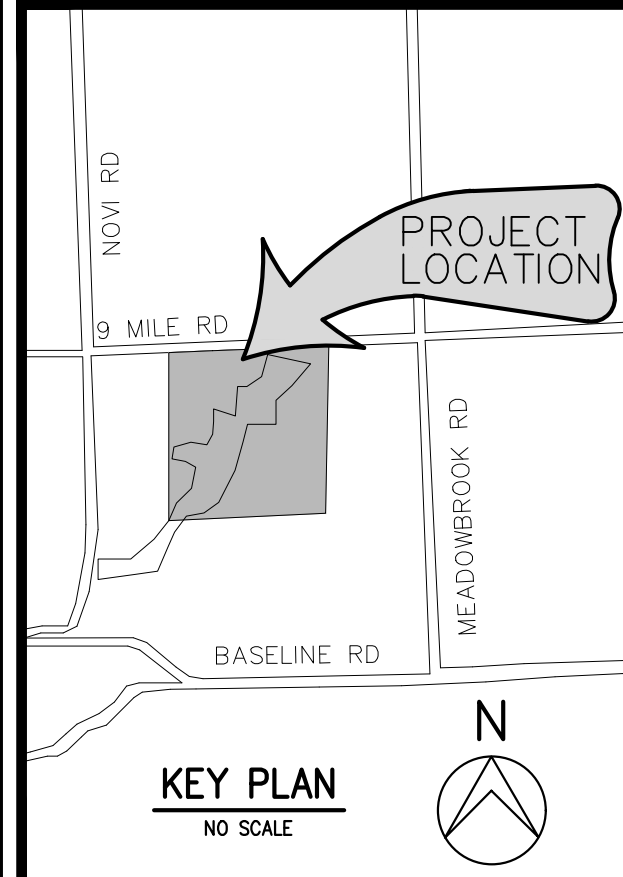
811
CALL MISS DIG 72 HOURS (3 WORKING DAYS) BEFORE YOU DIG 1-800-482-7171 or 811
CALL811.COM (TOLL FREE)

NOTICE:
ALL EXISTING UTILITIES SHOWN ON THIS TOPOGRAPHIC SURVEY HAVE BEEN TAKEN FROM VISUAL OBSERVATION, AND RECORD MAPPING WHERE AVAILABLE. NO GUARANTEE IS MADE, OR SHOULD BE ASSUMED, AS TO THE COMPLETENESS OR ACCURACY OF THE UTILITIES SHOWN ON THIS DRAWING. PARTIES UTILIZING THIS INFORMATION SHALL FIELD VERIFY THE ACCURACY AND COMPLETENESS PRIOR TO CONSTRUCTION ACTIVITIES.

WRC
WATER RESOURCES COMMISSIONER

HRC
HUBBELL, ROTH & CLARK, INC.
CONSULTING ENGINEERS SINCE 1915
555 HULET DRIVE BLOOMFIELD HILLS, MICH. P.O. BOX 824 48303-0824
PHONE: (248) 454-6300
FAX (1st. Floor): (248) 454-6312
FAX (2nd. Floor): (248) 454-6359
WEB SITE: <http://www.hrcengr.com>

DATE	ADDITIONS AND/OR REVISIONS
4-16-2019	60% REVIEW SUBMITTAL
4-9-2019	ROW PERMIT
3-29-2019	SITE PLAN REVIEW
2-11-2019	NOVI PLANNING COMM. REVIEW
DESIGNED	T.G.M.
DRAWN	T.W.R.
CHECKED	T.G.M.
APPROVED	



OAKLAND COUNTY WATER RESOURCES COMMISSIONER

HURON-ROUGE SEWAGE DISPOSAL SYSTEM SEWAGE RETENTION FACILITY

PROPOSED EASEMENTS AND CONSTRUCTION LIMITS

HRC JOB NO. 20170387	SCALE AS NOTED
DATE April 2019	SHEET NO. C-2 OF

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EASEMENT

Parcel No. 1
Project: HRSDS SRF

KNOW ALL MEN BY THESE PRESENTS, that the **CITY OF NOVI, a Michigan Municipal Corporation**, GRANTOR(S), whose address is **45175 Ten Mile Road, Novi, Michigan 48375**, for and in consideration of the sum of **ONE DOLLAR (\$1.00)** receipt of which is hereby acknowledged, paid to them by the **County of Oakland, a Michigan Constitutional Corporation**, by and through the Oakland County Water Resources Commissioner, in his capacity as “**County Agency**” for the **HURON-ROUGE SEWAGE DISPOSAL SYSTEM**, pursuant to 1939 P.A. 342, as amended and 1957 P.A. 185, as amended, GRANTEE whose address is the Office of the Oakland County Water Resources Commissioner, One Public Works Drive, Bldg. 95 West, Waterford, Michigan 48328-1907, GRANTOR does hereby grant to GRANTEE the right to construct, operate, maintain, repair or replace a sanitary sewer system, in accordance with the terms and conditions set forth herein:

RECITALS:

A. The GRANTOR is the owner of certain real property described as follows (the “Premises”):

A parcel of land of part of the Northwest ¼ of the Northeast ¼ of Section 35, T.01N., R.08E., City of Novi, Oakland County, Michigan, being more particularly described as follows: BEGINNING at a point on the north line of Section 35, said point being N. 89°02’35”E., 70.88 ft. from the North ¼ corner of Section 35; thence continuing along said north line, N. 89°02’35”E., 258.18 ft.; thence S. 00°20’21”E., 610.04 ft.; thence S. 89°02’35”W., 258.18 ft.; thence N. 00°20’21”W., 610.04 ft. to the point of beginning.

Sidwell No. 22-35-200-008

and,

B. The GRANTEE desires to acquire from the GRANTOR certain rights to the Premises in order to construct, operate, maintain, repair or replace a sanitary sewer system.

IT IS THEREFORE AGREED:

1. **Grant of Temporary Easement.** Grantor hereby grants to Grantee a temporary easement for the construction of a sanitary sewer system, described as follows, and which shall terminate upon completion of construction of the system:

The West 80.00 ft. of the South 482.00 ft. of the above-described parcel excepting therefrom the below-described Permanent Easement.

2. **Grant of a Permanent Easement.** Grantor hereby grants to Grantee a perpetual easement described as follows:

The West 60.00 ft. of the South 450.00 ft. of the above-described parcel.

3. **Purpose of the Easements.** The temporary easement granted herein shall be used only for the initial construction of the system in accordance with the plans and specifications approved by the GRANTEE. The temporary easement may be used to move workers and equipment and to store materials and equipment. The permanent easement granted herein shall be used for the purpose of the operation, maintenance, repair or replacement of the system constructed in accordance with the plans and specifications approved by the GRANTEE.

4. **General Conditions.**

a. GRANTOR agrees not to build or convey to others permission to build any permanent structures on the above-described permanent easement. Examples of permanent structures include, but are not limited to, fixtures, structures with footings, culverts, dams, bridges and structures of a similar nature.

b. Except as otherwise agreed in writing between the GRANTOR and GRANTEE, GRANTEE may remove all trees and shrubbery within the temporary easement during the initial construction of the system and shall remove all trees and shrubbery within the permanent easement. GRANTEE shall be required to replace trees and shrubbery removed based on a landscape plan approved by GRANTOR.

c. Except as otherwise provided herein, if the Premises shall be disturbed by GRANTEE, then the Premises shall be restored to substantially the condition that existed prior to entering upon said Premises by the GRANTEE, its contractors, agents or assigns.

d. GRANTOR retains, reserves, and shall continue to enjoy the use of the permanent easement for any and all purposes which do not interfere with, obstruct the use of or prevent the use by GRANTEE. Any unauthorized use or obstruction may be removed by GRANTEE.

e. It is understood that the easement, rights, and privileges granted herein are nonexclusive, and GRANTOR reserves and retains the right to convey similar easements and rights to such other persons as GRANTOR may deem proper provided such similar easements do not affect GRANTEE'S easement.

f. This Easement shall be binding upon and inure to the benefit of the Parties hereto, their heirs, representatives, successors and assigns.

g. A map of the above-described Easement is attached hereto and made a part thereof.

h. This instrument contains the entire agreement between the Parties relating to the rights herein granted and the obligations herein assumed. Any oral representations or modifications concerning this instrument shall be of no force and effect. Any modification of this Easement must be in writing and must be signed by the party to be charged.

i. This Easement is made and entered into in the State of Michigan and shall in all respects be interpreted, enforced and governed under the laws of the State of Michigan. The language of all parts of this Easement is intended to and, in all cases, shall be construed as a whole according to its fair meaning, and not construed strictly for or against any party.

j. It is further understood and agreed between the Parties that the terms and conditions herein are contractual and are not a mere recital, and there are no other agreements, understandings, contracts, or representations between GRANTOR and GRANTEE in any way related to the subject matter hereof, except as expressly stated herein.

k. If any provision of this Easement or its application to any person or circumstance shall to any extent be invalid or unenforceable, the remainder of this Easement shall not be affected and shall remain valid and enforceable to the fullest extent permitted by law.

l. It is understood and agreed between the Parties that a failure by either Party to fulfill a condition or term set forth in this Easement shall not result of extinguishment of the easement rights granted herein or constitute a waiver of such term or condition.

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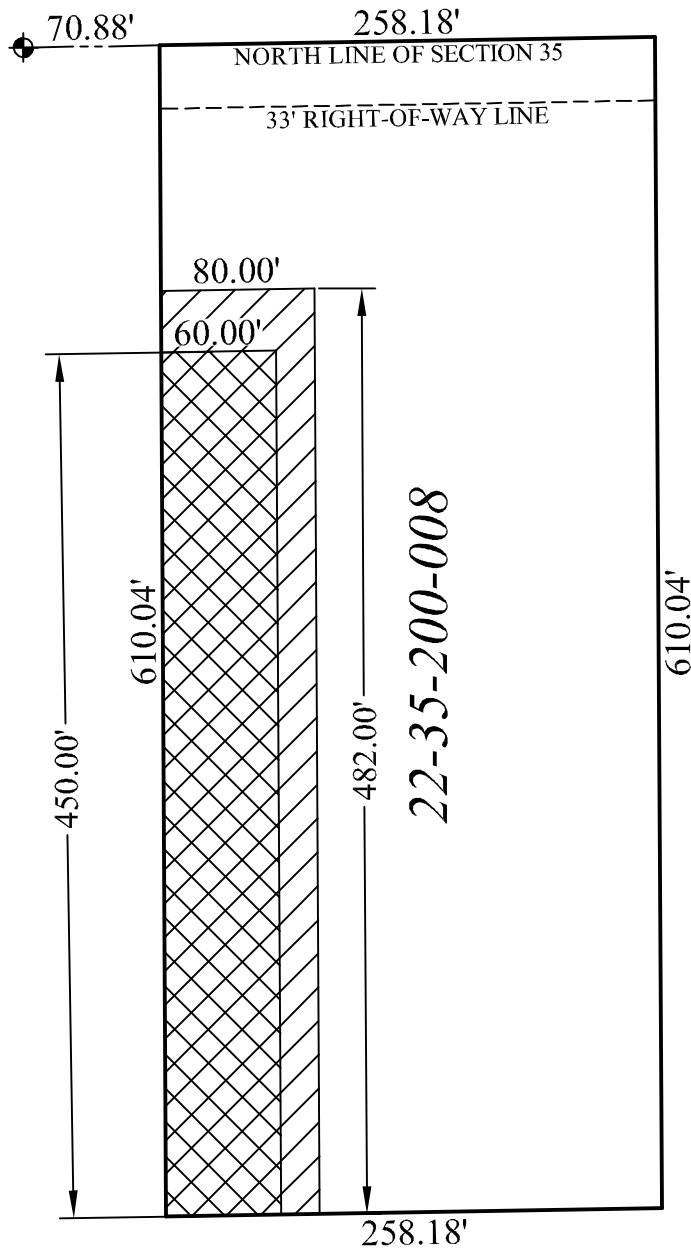
NOTE: NO FIELD WORK PERFORMED
DESCRIPTION TAKEN FROM RECORD.



SCALE: 1 = 100

NORTH 1/4
CORNER
SECTION 35
T. 01 N., R. 08 E.

NINE MILE ROAD



PROJECT: HURON ROUGE SEWAGE RETENTION FACILITY

03/04/2019

PERMANENT EASEMENT



EASEMENT PARCEL NO. 1 DWG. 1 OF 1

TEMPORARY EASEMENT



SIDWELL NO. 22-35-200-008

Part of the N.W. 1/4 of the N.E. 1/4 of Section 35, T. 01 N., R. 08 E., City of Novi, Oakland County, Michigan

EASEMENT

Parcel No. 2
Project: HRSDS SRF

KNOW ALL MEN BY THESE PRESENTS, that the **CITY OF NOVI, a Michigan Municipal Corporation**, GRANTOR(S), whose address is **45175 10 Mile Road, Novi, Michigan 48375**, for and in consideration of the sum of **ONE DOLLAR (\$1.00)** receipt of which is hereby acknowledged, paid to them by the **County of Oakland, a Michigan Constitutional Corporation**, by and through the Oakland County Water Resources Commissioner, in his capacity as “**County Agency**” for the **HURON-ROUGE SEWAGE DISPOSAL SYSTEM**, pursuant to 1939 P.A. 342, as amended and 1957 P.A. 185, as amended, GRANTEE whose address is the Office of the Oakland County Water Resources Commissioner, One Public Works Drive, Bldg. 95 West, Waterford, Michigan 48328-1907, GRANTOR does hereby grant to GRANTEE the right to construct, operate, maintain, repair or replace a sanitary sewer system, in accordance with the terms and conditions set forth herein:

RECITALS:

A. The GRANTOR is the owner of certain real property described as follows (the “Premises”):

A parcel of land located in Section 35, T.01N., R.08E., City of Novi, Oakland County, Michigan, is described as follows: Commencing at the southwest corner of said Section 35, thence along the west line of Section 35, N. 02°48’41” W., 1,701.81 ft., thence along the northerly line of “**CHASE ARMS SUBDIVISION**”, (recorded in Liber 213 of Plats, Pages 4 through 13, Oakland County Records), N. 87°11’19” E., 260.00 ft. to the **POINT OF BEGINNING**, thence N. 02°29’38” W., 172.28 ft., thence N. 87°11’19” E., 55.61 ft., thence N. 42°52’45” E., 127.95 ft., thence N. 78°44’24” E., 393.65 ft., thence N. 42°50’38” E., 231.66 ft., thence N. 20°20’44” E., 339.04 ft. thence N. 25°36’12” E., 201.95 ft., thence N. 33°26’49” E., 208.56 ft., thence N. 25°37’22” E., 192.50 ft., thence N. 07°56’59” W., 175.50 ft., thence N. 08°14’23” W., 324.59 ft., thence N. 65°08’24” W., 114.13 ft., thence along the southerly line of Ashbury Drive (60 feet wide) the following four (4) courses (1) thence 253.92 ft. along a non-tangent curve to the right (having a central angle of 61°54’34”, a Radius of 235.00 ft. and a

chord bearing N. 55°48'42" E., 241.75 ft.), thence N. 86°46'00" E., 256.52 ft., thence 369.56 ft. along a tangent curve to the left (having a central angle of 81°26'24", a Radius of 260.00 ft. and a chord bearing N. 46°02'48" E., 339.23 ft.), thence N. 05°19'36" E., 42.38 ft., thence N. 87°07'47" E., 669.56 ft., thence S. 12°45'20" W., 298.44 ft., thence S. 35°55'47" W., 216.97 ft., thence S. 22°59'51" W., 553.93 ft., thence S. 41°35'43" W., 210.00 ft., thence S. 60°01'43" W., 221.36 ft., thence S. 40°58'42" W., 186.24 ft., thence S. 54°05'09" W., 377.71 ft., thence S. 16°13'56" W., 645.32 ft., thence S. 66°17'56" W., 444.20 ft., thence N. 50°49'09" W., 166.72 ft., thence S. 72°33'26" W., 190.63 ft., thence S. 87°11'19" W., 215.32 ft. (recorded as 215.36 feet) to the Point of Beginning. Also, Commencing at the North ¼ corner of said Section 35, thence along the north section line, S. 89°32'25" W., 329.12 ft., thence S. 00°20'13" E., 610.04 ft. to the **POINT OF BEGINNING**, thence S. 00°20'13" E., 706.65 ft., thence N. 89°23'47"E., 329.18 ft., thence N. 89°08'54"E., 329.05 ft., thence N. 00°20'21"W., 706.42 ft., thence S. 89°02'35" W., 329.06 ft., thence S.89°32'25" W., 329.14 ft. to the Point of Beginning.

Sidwell No. 22-35-176-019

and,

B. The GRANTEE desires to acquire from the GRANTOR certain rights to the Premises in order to construct, operate, maintain, repair or replace a sanitary sewer system.

IT IS THEREFORE AGREED:

1. **Grant of Temporary Easement.** Grantor hereby grants to Grantee a temporary easement for the construction and or repair of a sanitary sewer system, described as follows, and which shall terminate upon completion of construction of the system:

A TEMPORARY EASEMENT "A" DESCRIBED AS FOLLOWS:

Beginning at a point on the north parcel line, said point located distant N. 89°32'25" E., 329.14 ft. along the north parcel line and N. 89°02'35" E., 130.88 ft. along said north line from the northwest corner of said parcel; thence from said **POINT OF BEGINNING** continuing N. 89°02'35" E., 20.00 ft., along said north line; thence S. 00°20'21" E., 80.00 ft.; thence S. 89°02'35" W., 150.72 ft.; thence S. 89°32'30" W., 260.32 ft.; thence N. 00°20'13" W., 20.00 ft.; thence N. 89°32'30" E., 260.30 ft.; thence N. 89°02'33" E., 130.72 ft.; thence N. 00°20'21" W., 60.00 ft. to the point of beginning.

A TEMPORARY EASEMENT "B" DESCRIBED AS FOLLOWS:

Beginning at a point located S. 00°20'13" E., 240.00 ft. along the west parcel line from the northwest corner of the above-described parcel; thence from said **POINT OF BEGINNING** continuing S. 00°20'13" E., 165.00 ft. along said west line; thence N. 89°32'30" E., 34.00 ft.; thence N. 00°20'13" W., 165.00 ft.; thence S. 89°32'30" W., 34.00 to the point of beginning.

2. **Grant of a Permanent Easement.** Grantor hereby grants to Grantee a perpetual easement described as follows:

Beginning at the northwest corner of the above-described parcel, thence from said **POINT OF BEGINNING** N. 89°32'30" E., 329.14 ft. along the north parcel line; thence N. 89°02'35" E., 130.88 ft. along said north line; thence S. 00°20'21" E., 60.00 ft.; thence S. 89°02'35" W., 130.72 ft.; thence S. 89°32'30" W., 260.30 ft.; thence S. 00°20'13" E., 180.00 ft.; thence S. 89°32'30" W., 69.00 ft. to the west parcel line; thence N. 00°20'13" W., 240.00 ft. to the point of beginning.

3. **Purpose of the Easements.** The temporary easement granted herein shall be used only for the initial construction of the system in accordance with the plans and specifications approved by the GRANTEE. The temporary easement may be used to move workers and equipment and to store materials and equipment. The permanent easement granted herein shall be used for the purpose of the operation, maintenance, repair or replacement of the system constructed in accordance with the plans and specifications approved by the GRANTEE.

4. **General Conditions.**

a. GRANTOR agrees not to build or convey to others permission to build any permanent structures on the above-described permanent easement. Examples of permanent structures include, but are not limited to, fixtures, structures with footings, culverts, dams, bridges and structures of a similar nature.

b. Except as otherwise agreed in writing between the GRANTOR and GRANTEE, GRANTEE may remove all trees and shrubbery within the temporary easement during the initial construction of the system and may remove all trees and shrubbery within the permanent easement. GRANTEE shall be required to replace trees and shrubbery removed based on a landscape plan approved by GRANTOR.

c. Except as otherwise provided herein, if the Premises shall be disturbed by GRANTEE, then the Premises shall be restored to substantially the condition that existed prior to entering upon said Premises by the GRANTEE, its contractors, agents or assigns.

d. GRANTOR retains, reserves, and shall continue to enjoy the use of the permanent easement for any and all purposes which do not interfere with, obstruct the use of or prevent the use by GRANTEE. Any unauthorized use or obstruction may be removed by GRANTEE.

e. It is understood that the easement, rights, and privileges granted herein are nonexclusive, and GRANTOR reserves and retains the right to convey similar easements and rights to such other persons as GRANTOR may deem proper provided such similar easements do not affect GRANTEE'S Easement.

f. This Easement shall be binding upon and inure to the benefit of the Parties hereto, their heirs, representatives, successors and assigns.

g. A map of the above-described Easement is attached hereto and made a part thereof.

h. This instrument contains the entire agreement between the Parties relating to the rights herein granted and the obligations herein assumed. Any oral representations or modifications concerning this instrument shall be of no force and effect. Any modification of this Easement must be in writing and must be signed by the party to be charged.

i. This Easement is made and entered into in the State of Michigan and shall in all respects be interpreted, enforced and governed under the laws of the State of Michigan. The language of all parts of this Easement is intended to and, in all cases, shall be construed as a whole according to its fair meaning, and not construed strictly for or against any party.

j. It is further understood and agreed between the Parties that the terms and conditions herein are contractual and are not a mere recital, and there are no other agreements, understandings, contracts, or representations between GRANTOR and GRANTEE in any way related to the subject matter hereof, except as expressly stated herein.

k. If any provision of this Easement or its application to any person or circumstance shall to any extent be invalid or unenforceable, the remainder of this Easement shall not be affected and shall remain valid and enforceable to the fullest extent permitted by law.

l. It is understood and agreed between the Parties that a failure by either Party to fulfill a condition or term set forth in this Easement shall not result of extinguishment of the easement rights granted herein or constitute a waiver of such term or condition.

(Remainder of this page intentionally left blank)

IN WITNESS WHEREOF, the GRANTOR has hereunto affixed their signatures this _____ day of _____, 2019.

WITNESSES:

**CITY OF NOVI,
a Michigan Municipal Corporation**

_____ By : _____(L.S.)
Robert J. Gatt
It's: Mayor

_____ By : _____(L.S.)
Cortney Hanson
It's: Clerk

ACKNOWLEDGEMENT

STATE OF MICHIGAN)
)SS.
COUNTY OF OAKLAND)

On this _____ day of _____, 2019, before me, a Notary Public in and for said County, personally appeared **Robert J. Gatt** and **Cortney Hanson** to me personally known, who being by me duly sworn did say that they are the **Mayor** and **Clerk** of the **CITY OF NOVI, a Michigan Municipal Corporation**, a corporation created and existing under the laws of the **State of Michigan**, and that the said Easement Grant was signed and sealed on behalf of said corporation by authority of its City Council, and the said **Mayor** and **Clerk** acknowledged the said instrument to be the free act and deed of the said Corporation.

Notary Public
_____ County, _____
My Commission Expires: _____
Acting in the County of _____

This instrument drafted by:

Jeffrey S. Parrott, Office of the
Oakland County Water Resources Commissioner
Building 95 West
One Public Works Drive
Waterford, Michigan 48328-1907

JSP/DL/kmb
Kimberly Brown's files\documents\HRSDS SRF EASEMENTS\City of Novi'19.P2 (3-25-2018) (4-15-2019)

EASEMENT SKETCH

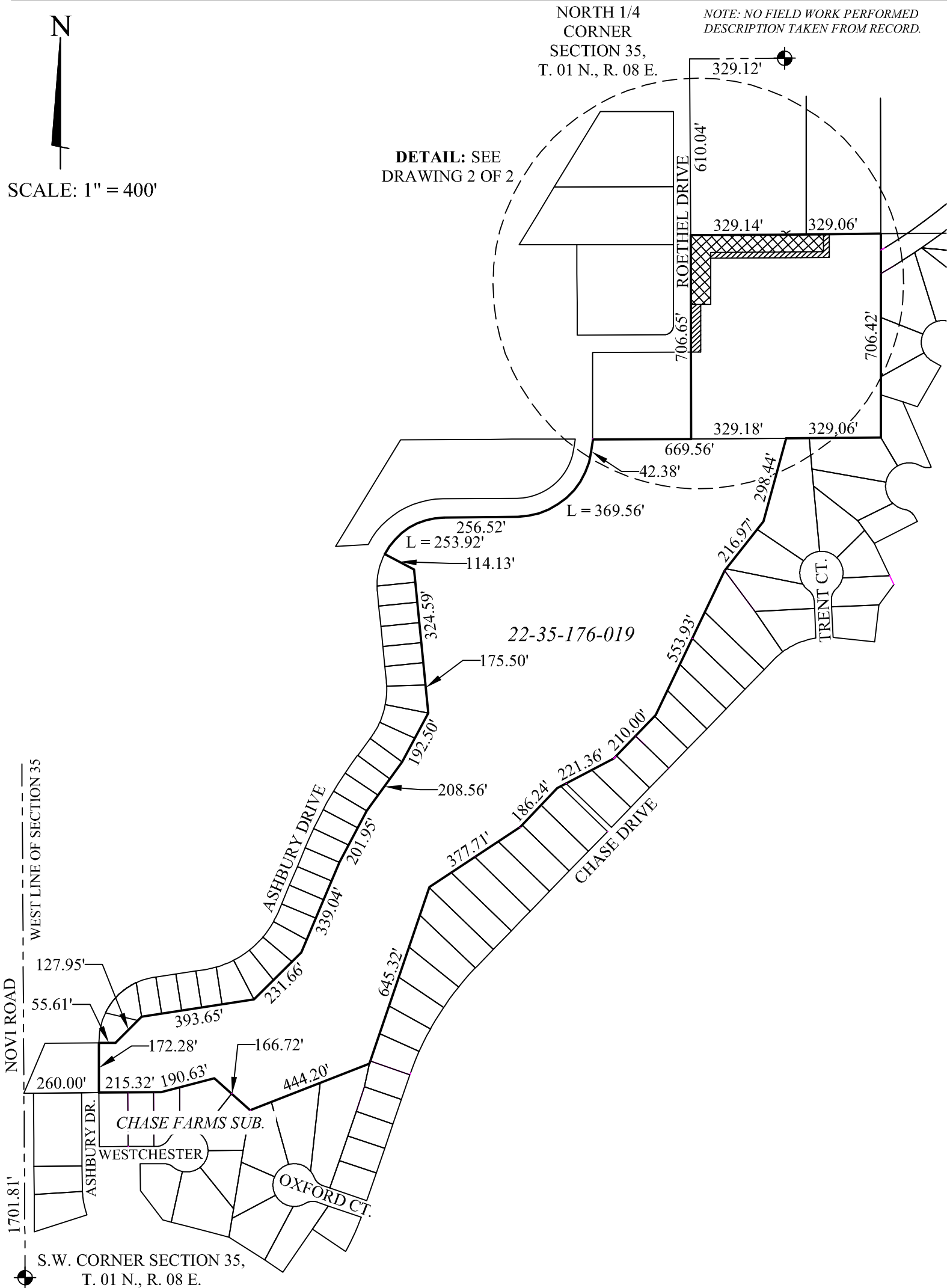
NORTH 1/4
CORNER
SECTION 35,
T. 01 N., R. 08 E.

NOTE: NO FIELD WORK PERFORMED
DESCRIPTION TAKEN FROM RECORD.



SCALE: 1" = 400'

DETAIL: SEE
DRAWING 2 OF 2



NOVI ROAD
WEST LINE OF SECTION 35
1701.81'

PROJECT: HURON ROUGE SEWAGE RETENTION FACILITY

03/28/2019

PERMANENT EASEMENT



EASEMENT PARCEL NO. 2 DWG. 1 OF 2

TEMPORARY EASEMENT



SIDWELL NO. 22-35-176-019

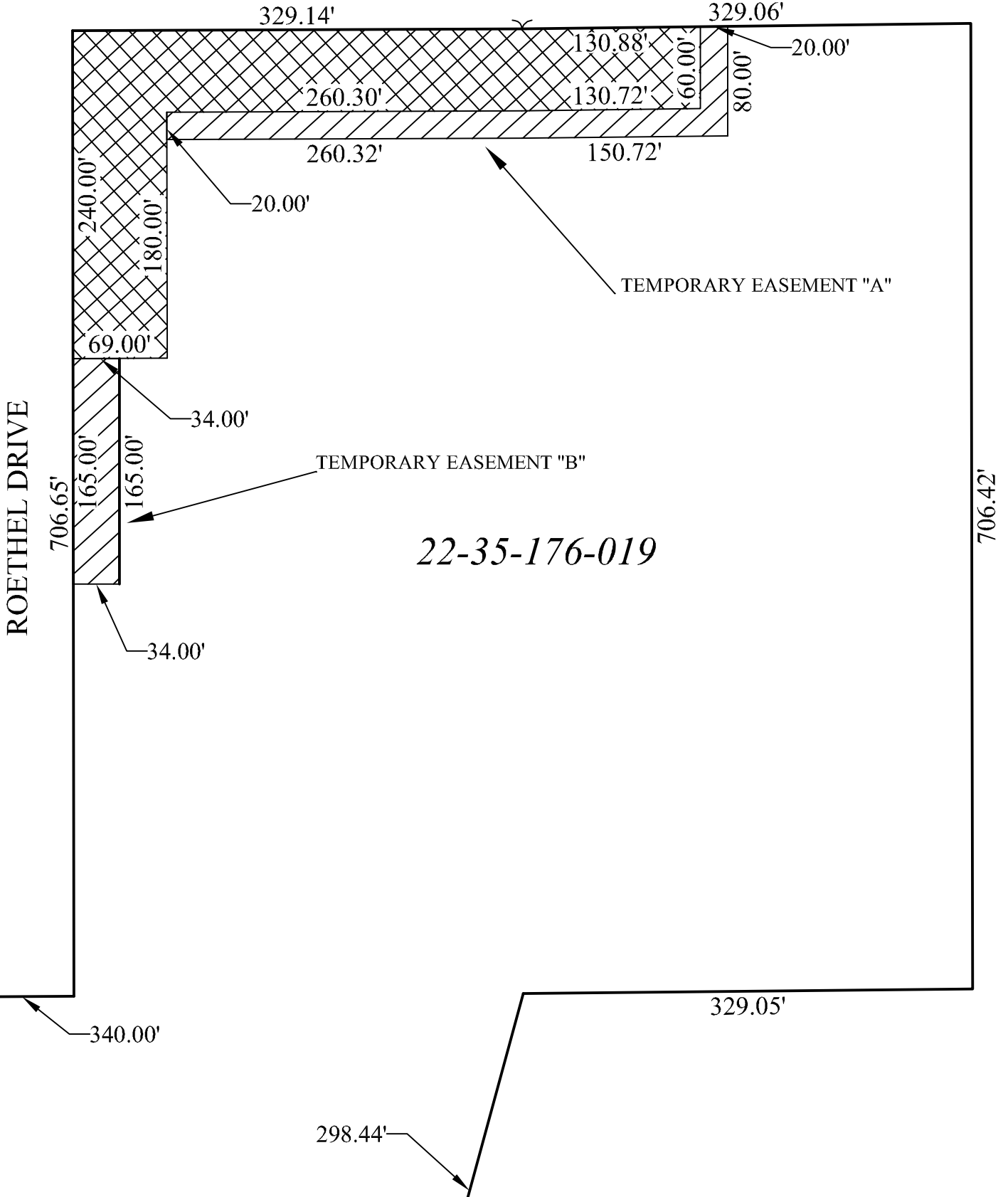
Part of Section 35, T. 01 N., R. 08 E., City of Novi, Oakland County, Michigan

EASEMENT SKETCH

NOTE: NO FIELD WORK PERFORMED
DESCRIPTION TAKEN FROM RECORD.



SCALE: 1" = 100'



22-35-176-019

PROJECT: HURON ROUGE SEWAGE RETENTION FACILITY

04/15/2019

PERMANENT EASEMENT



EASEMENT PARCEL NO. 2 DWG. 2 OF 2

TEMPORARY EASEMENT



SIDWELL NO. 22-35-176-019

Part of Section 35, T. 01 N., R. 08 E., City of Novi, Oakland County, Michigan

MEMORANDUM



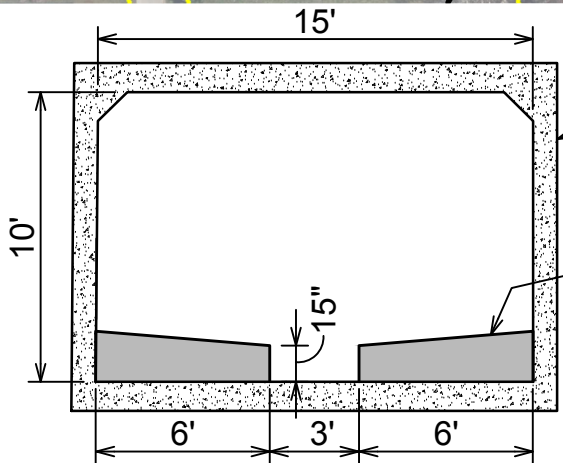
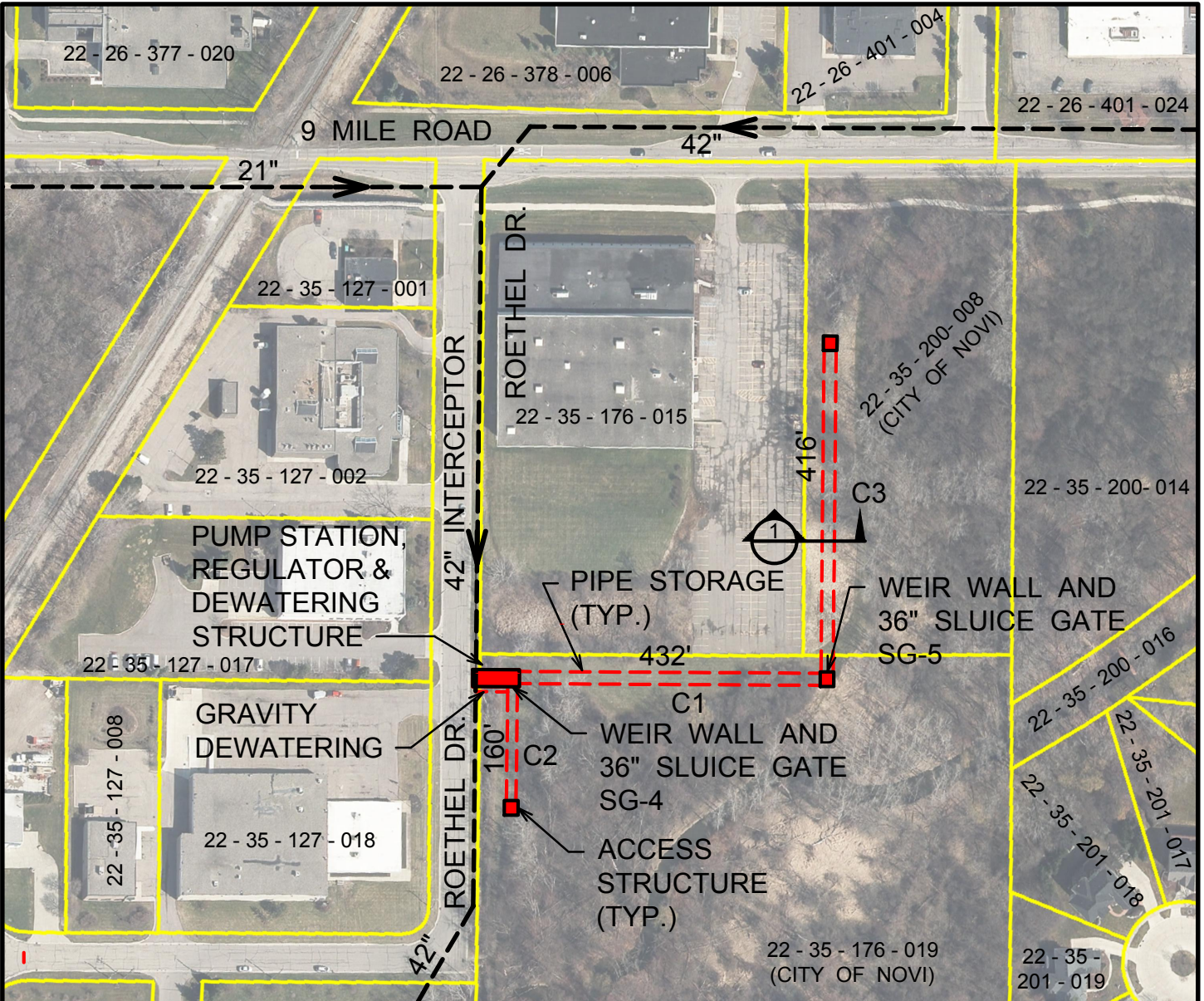
TO: JEFFREY HERCZEG, DIRECTOR OF PUBLIC WORKS
FROM: BEN CROY, WATER AND SEWER SENIOR MANAGER
SUBJECT: HURAN ROUGE SEWAGE DISPOSAL SANITARY
RETENTION PROJECT
DATE: DECEMBER 19, 2018

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.



STORAGE PIPE SECTION 1
NO SCALE

PRECAST
CONCRETE
BOX CULVERT
CONC. FILL

LEGEND

- PIPE STORAGE
- C# SEQUENCED COMPARTMENT STORAGE



SCALE IN FEET

HRC
HUBBELL, ROTH & CLARK, INC
CONSULTING ENGINEERS SINCE 1915
555 HULET DRIVE BLOOMFIELD HILLS, MICH. P.O. BOX 824 48303-0824

JOB NO.
20170387
DATE
NOV., 2018

1 M.G. PIPE STORAGE

FIGURE NO.
1-3

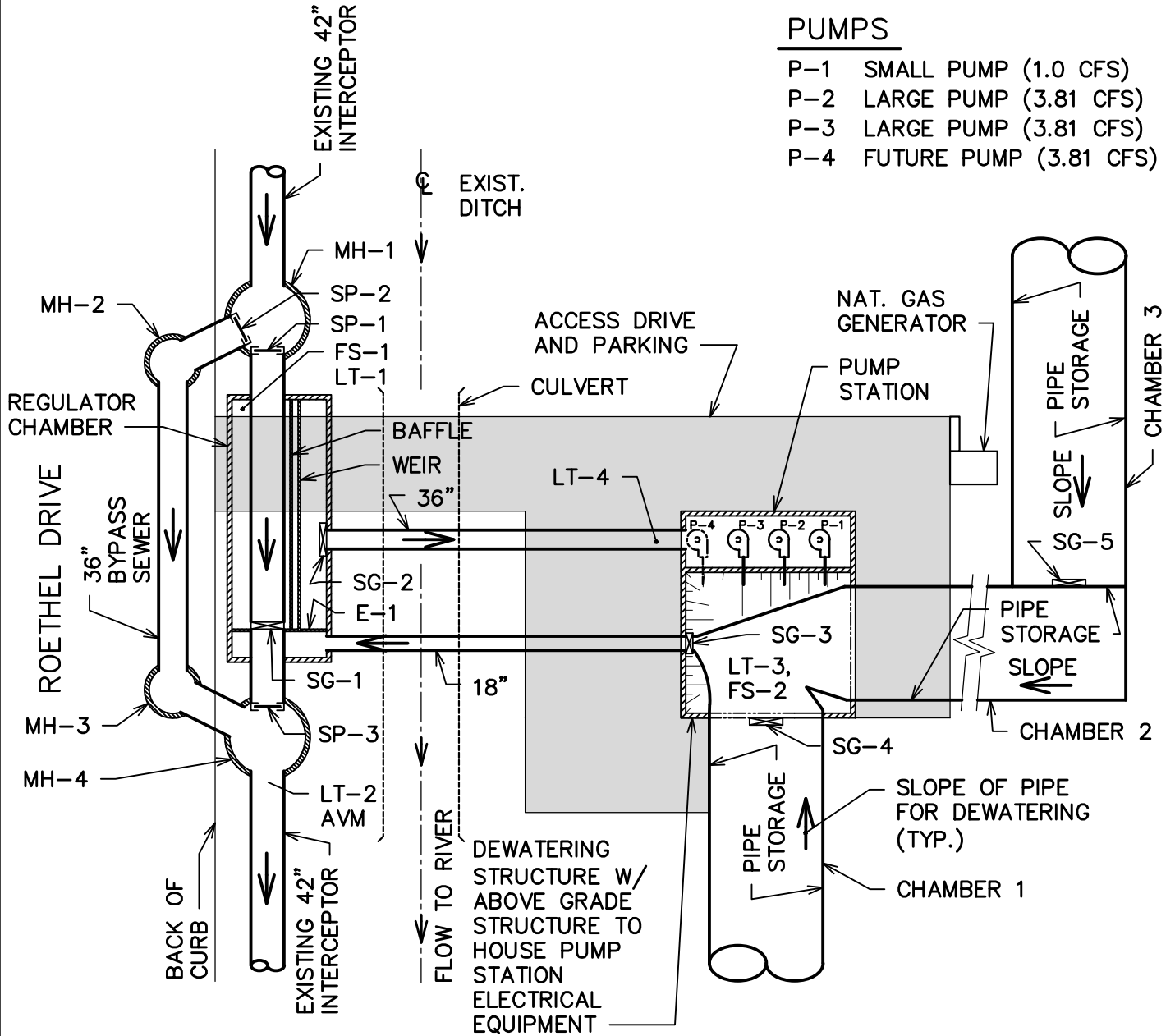
Oakland County Water Resources Commissioner

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
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



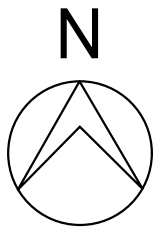
PUMPS

- 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



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PROPOSED PUMP STATION, REGULATOR AND DEWATERING STRUCTURES PLAN

FIGURE NO.

3-1