Exhibit I

Preliminary Basis of Design for Recommended Alternative

PRELIMINARY BASIS OF DESIGN

PROPOSED WASTEWATER TREATMENT PLANT (WWTP) IMPROVEMENTS

CITY OF VILLA GROVE, ILLINOIS

Date: 11/5/2020

I. GENERAL

A. Project Description:

The proposed project includes construction of the following major facilities for dry weather flows:

- Reconstruction of the dual existing activated sludge plants to provide a new anoxic reactor structure for BNR process, compartments for aerobic treatment of wastewater, and compartments for digestion of sludge.
- Refurbishment of the existing control building to upgrade labs, HVAC, effluent pumps, blowers, and non-potable water systems.
- New sludge storage tanks.
- Plant site piping, manholes, valves, and appurtenances.
- Plant electrical controls, instrumentation, and PLCs.
- Plant site electrical and generator
- Miscellaneous site improvements, including access driveways, sidewalks, fencing, painting, etc.
- Other miscellaneous structures and facilities.

B. **Design Year 2040 Flow and Loads**

Wastewater Parameter	Units	Existing Basis of Design	20-year (2040) Design Values
Flow			
Monthly Average	[MGD]	0.60	No Change
Daily Maximum	[MGD]	1.20	No Change
Peak Hourly	[MGD]	1.90	No Change
Excess Flow	[MGD]	4.28	No Change
Temperature			
Winter	[°F]	50	No Change
Summer	[°F]	80	No Change
BOD_5			
Concentration	[mg/L]	204	No Change
Load	[lbs/day]	1,020	No Change
TSS			
Concentration	[mg/L]	240	No Change
Load	[lbs/day]	1,200	No Change
TKN			
Concentration	[mg/L]	36	No Change
Load	[lbs/day]	180	No Change
TP			
Concentration	[mg/L]	-	6
Load	[lbs/day]	-	30
Hydraulic P.E. (2)	[P.E.]	6,000	No Change
Organic P.E. (1)	[P.E.]	6,000	No Change
SS P.E. (1)	[P.E.]	6,000	No Change
TKN P.E. (1)	[P.E.]	6,000	No Change
Total-P P.E. (1)	[P.E.]	-	6,000

(1) Based on unit loading factors found in Table 3-16 from Metcalf & Eddy *Wastewater Engineering: Treatment, Disposal, and Reuse*, 5th ed. Copyright 2014, The McGraw-Hill Companies, New York, N.Y.

(2) Based on 100 gpd/person as found in 35 IAC 370 Section 520.c.

C. Expected Effluent Limitations:

Parameter	Load Limits, lbs./day DAF (DMF)			Concentration Limits, mg/L		
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum
Flow (MGD)	0.6 MGD (Monthly Average) and 1.2 MGD (Daily Maximum)					
$CBOD_5$	50 (100)	-	100 (200)	10	-	20
Suspended Solids	60 (120)	-	120 (240)	12	-	24
pH	Shall be in the range of 6.0 to 9.0 standard units					
Fecal Coliform	Monitor Only					
Chlorine Residual	-	-	-	-	-	0.05
Ammonia - Nitrogen as N:						
April-May/Sept.-Oct.	7 (14)	22 (43)	24 (47)	1.4	4.3	4.7
June-August	7 (14)	19 (38)	24 (47)	1.4	3.8	4.7
Nov.-Feb.	20 (40)	-	36 (71)	2.7	-	7.1
March	8.5 (17)	22 (43)	36 (71)	1.7	4.3	7.1
Total Phosphorous (as P)	5 (10)	-	10 (20)	1.0	-	2.0
Total Nitrogen (as N)	Monitor Only					
Dissolved Oxygen				Monthly Average not less than	Weekly Average not less than	Daily Minimum
March-July	-	-	-	N/A	6.0	5.0
August-February	-	-	-	5.5	4.0	3.5

D. Existing Permits

- NPDES Permit Number IL0059005

II. DRY WEATHER FLOW TREATMENT FACILITIES

A. PRELIMINARY TREATMENT (Existing)

1. Coarse Screening with Overflow

No. of Units	[Each]	1
Total Capacity	[MGD]	6.00

2. Aerated Equalization Basin

No. of Basins	[Each]	1
Dimensions	[Feet]	35 x 35
Side Water Depth	[Feet]	6.5
Total Capacity	[MG]	0.08
	[cu. Ft.]	7,962
Detention Time		
Daily Average Flow	[Hours]	3.1
Daily Maximum Flow	[Hours]	1.6
Peak Hour Flow	[Hours]	1.0
Excess Flow + Peak Hour Flow	[Hours]	0.3
Mixing Requirement (30 SCFM / 1,000 c.f)	[SCFM]	240

B. SECONDARY BIOLOGICAL TREATMENT (MODIFIED)

1. Modified BNR Process Retrofit

Design Flows		
Daily Average Flow	[MGD]	0.60
Daily Maximum Flow	[MGD]	1.20
Peak Hour Flow	[MGD]	1.90
Treatment Goal	[Type]	BOD Removal, Nitrification, and De-Nitrification
No. of Process Trains	[Each]	2
No. of Anaerobic Reactors per Train	[Each]	0
No. of Pre-Anoxic Reactors per Train	[Each]	4
No. of Aeration Tanks per Train	[Each]	2
Pre-Anoxic Reactor #1		
Tank Structure	[Type]	Converted
Approximate Dimensions	[Sq. Ft.]	141
Side Water Depth	[Feet]	16.2
Volume	[Gallons]	17,100
	[Cu. Feet]	2,287
Pre-Anoxic Reactor #2		
Tank Structure	[Type]	Converted
Approximate Dimensions	[Sq. Ft.]	301
Side Water Depth	[Feet]	16.2
Volume	[Gallons]	36,400
	[Cu. Feet]	4,871
Pre-Anoxic Reactor Totals		
Total Pre-Anoxic Volume, Each Train	[Gallons]	53,500
	[Cu. Feet]	7,158
Total Pre-Anoxic Volume, All Trains	[Gallons]	107,000
	[Cu. Feet]	14,316
Total No. of Mixers	[Total]	4
Total HRT @ DAF	[Hours]	4.3
Aeration Tank		
Tank Structure	[Type]	Converted
Number of Trains	[Each]	2
Total Volume	[Gallons]	227,500
	[cu. Feet]	30,412
Total HRT @ DAF	[Hours]	9.1
Oxygen Requirement (AOR)		
BOD (1 lb AOR : 1 lb BOD)	[lb O_2/day]	1,020

TKN (4.6 lb AOR : 1 lb TKN)		[lb O_2/day]	828
	TOTAL	[lb O_2/day]	1,848
Total Number of Mixers		[Each]	2

System Summary

Total HRT @ DAF	[Hours]	13.4
SRT	[Days]	20
Waste Sludge Volume @ 1.0% TS	[Gal / day]	8,400
BOD Volumetric Loading	[lbs/1000 CF]	22.8[1]
F:M	[unitless]	.09
MLSS	[mg/L]	5,000
MLVSS	[mg/L]	4,000

[1] F:M and Volumetric Loading are higher than conventional nitrifying systems to maximize specific denitrification rates and total nitrogen removal.

Internal Recycles

RAS Recycle (% of Influent)	[% of DAF]	25-100
Nitrified Recycle (% of Influent)	[% of DAF]	100-400
RAS Recycle Flow Rate (varying)	[MGD}	0.15-0.60
	[GPM]	104-417
Nitrified Recycle Flow Rate (varying)	[MGD]	0.60-2.40
	[GPM]	417-1,667

2. Secondary Clarifiers (Refurbished)

Peak Hour Flow	[MGD]	1.90
No. of Clarifiers	[Each]	2
Dia. Of Each Clarifier	[Feet]	35
Side Water Depth	[Feet]	11.5
Freeboard	[Feet]	1.5
Surface Area of Each Clarifier	[sq. Feet]	962
Total Surface Area	[sq. Feet]	1,924
Weir Length Each Clarifier	[Feet]	91
Total Weir Length	[Feet]	182
Surface Overflow Rate	[GPD/sq. ft.]	987
Solids Loading Rate	[PPD/sq.ft.]	54.2
Weir Loading Rate	[GPD/ft]	10,400

3. Aerobic Digesters and Sludge Storage Tanks

Aerobic Digesters (Converted)

Number of Tanks per Train	[Each]	3
Number of Tanks Total	[Each]	6
Sludge Production		
Waste Activated Sludge	[GPD]	8,400
Chemical Phosphorus Sludge	[GPD]	3,400
TOTAL	[GPD]	11,800
Surface Area, Each	[sq. ft.]	566
Surface Area, Total	[sq. ft.]	3,399
Side Water Depth	[Feet]	16.2
Volume, Total	[Gallons]	411,900
	[cu. Feet]	55,064
Retention Time	[Days]	35
Volatile Solids Removal	[%]	30
Mixing Requirement (30 SCFM / 1,000 cu. Ft.)	[SCFM]	1,650

Sludge Storage Tanks (New)

Digested Sludge Production	[GPD]	4,100
	[PPD]	676
No. of Units	[Each]	2
Dimensions, Each	[Feet]	50 x 50
Side Water Depth	[Feet]	16
Volume, Total	[Gallons]	598,400
	[cu. Feet]	80,000

Retention Time	[Days]	146

C. CHEMICAL PHOSPHORUS REMOVAL (NEW)

1. Influent Design Basis

Average Flow	[MGD]	0.60
Total Phosphorus	[PPD]	30

2. Chemical Feed Pumps

No. of Units	[Each]	2
Assumed Chemical		
Type		Alum
Concentration	[%]	40
Unit Weight	[lbs / Gal]	11
Dose for 95% P Removal	[Alum : P]	22:1[1]
Weight of Alum Required	[PPD]	660
Volume of Alum Solution Required	[GPD]	150
Total Capacity, Each	[GPH]	6.3

[1] Table 16.9, WEF MOP 8

3. Chemical Storage Tanks

No. of Units	[Each]	2
Capacity, Each	[Gal]	1,500
Capacity, Total	[Gal]	3,000
Delivery Interval	[Days]	20

D. AIR DELIVERY SYSTEM

1. Air Requirements

Actual Oxygen Required (AOR)	[lb O_2/day]	1,848
Assumed AOR : SOR	[unitless]	0.33
Diffuser Depth	[Feet]	14
Standard Oxygen Transfer Efficiency	[%]	28
Required Air		
Oxygenation	[SCFM]	800
EQ Basin Mixing	[SCFM]	240
Digester Mixing/Aeration	[SCFM]	1,650
TOTAL	[SCFM]	2,690

2. Blowers

Number of Blowers	[Each]	2
Type of Blower	[Type]	HST
Controls	[Type]	Variable Speed Drive
Blower Capacity, Each	[SCFM]	1,350
Firm Blower Capacity (w/ 1 unit as standby)	[SCFM]	2,700

D. EFFLUENT PUMPS

1. Effluent Pumps

Peak Hour Flow	[MGD]	1.9
	[GPM]	1,319
No. of Units	[Each]	2
Capacity, Each	[GPM]	1,320

Exhibit J

Environmental Signoffs

Illinois Department of
Natural Resources
One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

JB Pritzker, Governor
Colleen Callahan, Director

October 11, 2019

Michelle Brown
Fehr-Graham & Associates, LLC
120 North Main Street
Villa Grove, IL 61956

RE: Wastewater Treatment Plant Improvements
Consultation Program
EcoCAT Review #2003524
Douglas County

Dear Mrs. Brown,

The Department has received your submission of this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075. Additionally, the Department may offer advice and recommendations for species covered under the *Fish & Aquatic Life Code* [515 ILCS 5, *et seq.*]; the *Illinois Wildlife Code* [520 ILCS 5, *et seq.*]; and the *Herptiles-Herps Act* [510 ILCS 69].

The proposed action consists of upgrading several facilities within the existing wastewater treatment plant. This includes construction of new clarifiers and sludge storage tanks as well as improvements to existing structures. The waste water facility serves the township of Villa Grove, IL.

EcoCAT has indicated records for the following State-Listed species within the project vicinity:

Little Spectaclecase *(Villosa lienosa)*
Mudpuppy *(Necturus maculosus)*

Due to the project location and proximity to threatened resources, the Department recommends the following actions be considered in order to avoid causing adverse impacts:

1. The Department recommends utilization and strict adherence to sediment and erosion control BMP's during and after construction.

Given the above recommendations are adopted, the Department has determined that impacts are unlikely. In accordance with 17 Ill. Adm. Code 1075.40(h), please notify the Department of your decision regarding these recommendations.

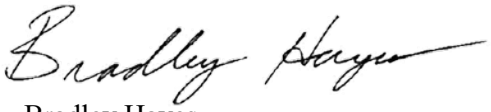
Consultation on the part of the Department is closed unless additional information or advice related to this proposal is required. Consultation for Part 1075 is valid for two years unless new information becomes

available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal and should not be regarded as a final statement on the project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations.

Please contact Kyle Burkwald of this office at 217-785-4984 or Kyle.Burkwald@illinois.gov for additional information on this review, or if providing a response to this correspondence.

Thank you,



Bradley Hayes
Resource Planner
Office of Realty & Capital Planning
Illinois Dept. of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271
bradley.hayes@illinois.gov
Phone: (217) 782-0031

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Illinois Department of **Natural Resources**

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov
Mailing Address: 1 Old State Capitol Plaza, Springfield, IL 62701

JB Pritzker, Governor
Colleen Callahan, Director

FAX (217) 524-7525

Douglas County
Villa Grove
New Construction, Reconstruction, Control Building Refurbishment and Site Improvements at the Wastewater Treatment Plant
700 N. West St.
F-G-19-406
SHPO Log #016030220

April 14, 2020

Michelle Brown
Fehr Graham
1610 Broadmoor Dr.
Champaign, IL 61821

Dear Ms. Brown:

We have reviewed the documentation submitted for the referenced project in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please call 217/782-4836.

Sincerely,

Robert F. Appleman
Deputy State Historic
Preservation Officer

Exhibit K

Five Year Financial Projection

City of Villa Grove, Illinois - Sewer Fund

Five Year Projection of Revenues, Operations, Maintenance, and Debt Service

	Actual - Previous 3 Years			Estimated - Next 5 Years, Starting with Current Fiscal Year				
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Last year rate increase/Proposed Rate Increase	**0.0%**	**0.0%**	**0.0%**	**-1.7%**	**52.8%**	**0.0%**	**0.0%**	**0.0%**
Operating Revenues								
User charge (system) revenue	$ 504,939	$ 496,172	$ 488,615	$ 480,251	$ 733,756	$ 733,756	$ 733,756	$ 733,756
Contributions from customers - tap fees	-	-	-	-	-	-	-	-
Late fees	-	-	-	-	-	-	-	-
Other (please describe)	-	-	-	-	-	-	-	-
Other (please describe)	-	-	-	-	-	-	-	-
Total Operating Revenues	***504,939***	***496,172***	***488,615***	***480,251***	***733,756***	***733,756***	***733,756***	***733,756***
Operating Expenses								
Personal Services	165,261	165,498	190,289	200,984	202,994	205,024	207,074	209,145
Supplies and Materials	96,706	70,638	77,968	73,780	74,518	75,263	76,016	76,776
Contractual Services	144,194	192,657	192,544	193,000	193,000	193,000	193,000	193,000
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Other (Describe)	-	-	-	-	-	-	-	-
Other (Describe)	-	-	-	-	-	-	-	-
Total Operating Expenses	***406,161***	***428,793***	***460,801***	***467,764***	***470,512***	***473,287***	***476,090***	***478,921***
Operating Income Before Depreciation	**98,778**	**67,379**	**27,814**	**12,487**	**263,244**	**260,469**	**257,666**	**254,835**
Depreciation	67,822	72,441	74,622	72,441	74,614	76,853	79,158	81,533
TOTAL OPERATING INCOME	**30,956**	**(5,062)**	**(46,808)**	**(59,954)**	**188,630**	**183,617**	**178,508**	**173,302**
Non Operating Revenues (Expenses)								
Investment Income	-	-	-	-	-	-	-	-
Grant	-	-	-	-	-	-	-	-
Property Taxes	-	-	-	-	-	-	-	-
Debt Service (Princial and Interest) - Existing prior to this loan	(60,052)	(75,052)	(75,052)	(15,000)	(15,000)	-	-	-
Other (Describe)	-	-	-	-	-	-	-	-
Total Non-Operating Income (Loss)	**(60,052)**	**(75,052)**	**(75,052)**	**(15,000)**	**(15,000)**	**-**	**-**	**-**
Net Change in Position Before Capital Items	(29,096)	(80,114)	(121,860)	(74,954)	173,630	183,617	178,508	173,302
Capital Items								
Transfers (Describe)	-	-	-	-	-	-	-	-
New IEPA Debt Service	-	-	-	-	-	(175,576)	(175,576)	(175,576)
Other (Describe)	-	-	-	-	-	-	-	-
Total Capital Items	-	-	-	-	-	(175,576)	(175,576)	(175,576)
NET CHANGE IN POSITION	$ (29,096)	$ (80,114)	$ (121,860)	$ (74,954)	$ 173,630	$ 8,041	$ 2,932	$ (2,274)

Exhibit L

Existing User Rate Ordinance

CITY OF VILLA GROVE
DOUGLAS COUNTY, ILLINOIS

ORDINANCE NO. 2020-MC09

AN ORDINANCE AMENDING SECTION 53.01 OF TITLE V, CHAPTER 53 OF THE MUNICIPAL CODE OF THE CITY OF VILLA GROVE (REGARDING SEWER USER RATES)

PASSED BY THE CITY COUNCIL AND
APPROVED BY THE MAYOR OF THE
CITY OF VILLA GROVE, ILLINOIS
THIS THIRTEENTH DAY OF JULY 2020

PUBLISHED IN PAMPHLET FORM BY AUTHORITY OF THE MAYOR AND CITY COUNCIL OF THE CITY OF VILLA GROVE, DOUGLAS COUNTY, ILLINOIS THIS FOURTEENTH DAY OF JULY 2020.

CITY OF VILLA GROVE
DOUGLAS COUNTY, ILLINOIS

ORDINANCE NO. 2020-MC09 July 13, 2020

AN ORDINANCE AMENDING SECTION 53.01 OF TITLE V, CHAPTER 53 OF THE MUNICIPAL CODE OF THE CITY OF VILLA GROVE (REGARDING SEWER USER RATES)

WHEREAS, the City of Villa Grove, Douglas County, Illinois, is a municipality as contemplated under Article VII, Section 7 of the Constitution of the State of Illinois, and the passage of this Ordinance constitutes an exercise of City's powers and functions as granted in the same; and

WHEREAS, the City of Villa Grove has heretofore established City-owned municipal water works and sanitary sewer facilities which provide potable water and sewer disposal to properties; and

WHEREAS, Section 53.01 of the Municipal Code of the City of Villa Grove entitled "Basic User Rates; Minimum Charges" establishes rates necessary for the provision of such water and sewer services; and

WHEREAS, the municipal authorities have determined that certain amendments should be made to Section 53.01 as sewer user minimum charges rates have increased by only $0.45 since 2010 while water rates were increased substantially in anticipation of the recent Water Plant construction project from 2015-2017; and

WHEREAS, the wastewater treatment costs have increased substantially in the past ten years, primarily in infrastructure maintenance, chemicals and labor; and

WHEREAS, the water costs have changed but installation of the new treatment plant was anticipated in the prior rate increases per Illinois EPA requirements, therefore no increase in those rates is needed at this time; and

WHEREAS, the City Council has determined that such amendments would be in the best interest of the City and its retail utility customers and should therefore be effected.

NOW, THEREFORE BE IT ORDAINED BY THE MAYOR AND COUNCIL, CITY OF VILLA GROVE, DOUGLAS COUNTY, ILLINOIS, as follows:

SECTION 1: Title V, Chapter 53, Section 53.01, Basic User Rates; Minimum Charges of the Municipal Code of the City of Villa Grove is amended to read as follows:

53.01 BASIC USER RATES; MINIMUM AND OVERAGE CHARGES.

(A) There shall be and there are hereby established minimum monthly charges and basic user rates for the use of and for utility services supplied by the Public Works Department for the period up to and including July 15, 2020, which have been in effect since May 16, 2017 as follows:

Sewer Minimum (includes first 1000 gallons)..... $21.162
Sewer bulk rate (each additional 100 gallons)..... 0.692

Water Minimum (includes first 1000 gallons)..... $22.030
Water bulk rate (each additional 100 gallons)..... 0.630

(B) The minimum monthly charges and basic user rates for the use of and for utility service supplied by the Public Works Department for the period beginning on or after July 13, 2020, through March 15, 2021, shall be as follows:

Sewer Minimum (includes first 1000 gallons)..... $22.470
Sewer bulk rate (each additional 100 gallons)..... 0.730

Water Minimum (includes first 1000 gallons)..... $22.030
Water bulk rate (each additional 100 gallons)..... 0.630

(C) The minimum monthly charges and basic user rates for the use of and for utility service supplied by the Public Works Department for the period beginning on and after March 16, 2021, through March 15, 2022, shall be as follows:

Sewer Minimum (includes first 1000 gallons)..... $23.970
Sewer bulk rate (each additional 100 gallons)..... 0.770

Water Minimum (includes first 1000 gallons)..... $22.030
Water bulk rate (each additional 100 gallons)..... 0.630

(D) There shall be and there is hereby continued a basic user rate for the use of and for water service supplied by the Public Works Department to the Village of Camargo, which has been in effect since March 16, 2017, as follows:

Water wholesale rate (each 1000 gallons) $3.798

(E) The minimum monthly charges and basic user rates for the use of and for utility service supplied by the Public Works Department (including to the Village of Camargo) for the period beginning on and after March 16, 2022, shall be determined by a new water and sewer rate study analysis to be completed no later than December 31, 2021.

SECTION 2: Priority. To the extent that this ordinance conflicts with the provisions of other City ordinances, such other provisions shall be deemed suspended and the terms and authority of this ordinance shall have priority and shall apply.

SECTION 3: Severability. If any section, paragraph, subdivision, clause, sentence or provision of this Ordinance shall be adjudged by any Court of competent jurisdiction to be invalid, such judgment shall not affect, impair, invalidate or nullify the remainder thereof, which remainder shall remain and continue in full force and effect.

SECTION 4: Effective date. That this Ordinance shall be in full force and effect from and after its passage and approval as provided by law, and shall be published in pamphlet form pursuant to law.

PRESENTED, PASSED, APPROVED AND ADOPTED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF VILLA GROVE, ILLINOIS, at its regular meeting on this thirteenth day of July, A.D., 2020, by a roll call vote as follows:

Blaney, Thelma I. yea

Eversole-Gunter, Cassandra A. —

Garrett, Ryan P. yea

Griffith, Darrel M. yea

Hooker, Anthony L. yea

Johnson, Derek S. yea

Pangburn, Matthew M. yea

APPROVED:

CASSANDRA A. EVERSOLE-GUNTER
Mayor

ATTEST:

MICHELLE L. OSBORNE
City Clerk

SEAL

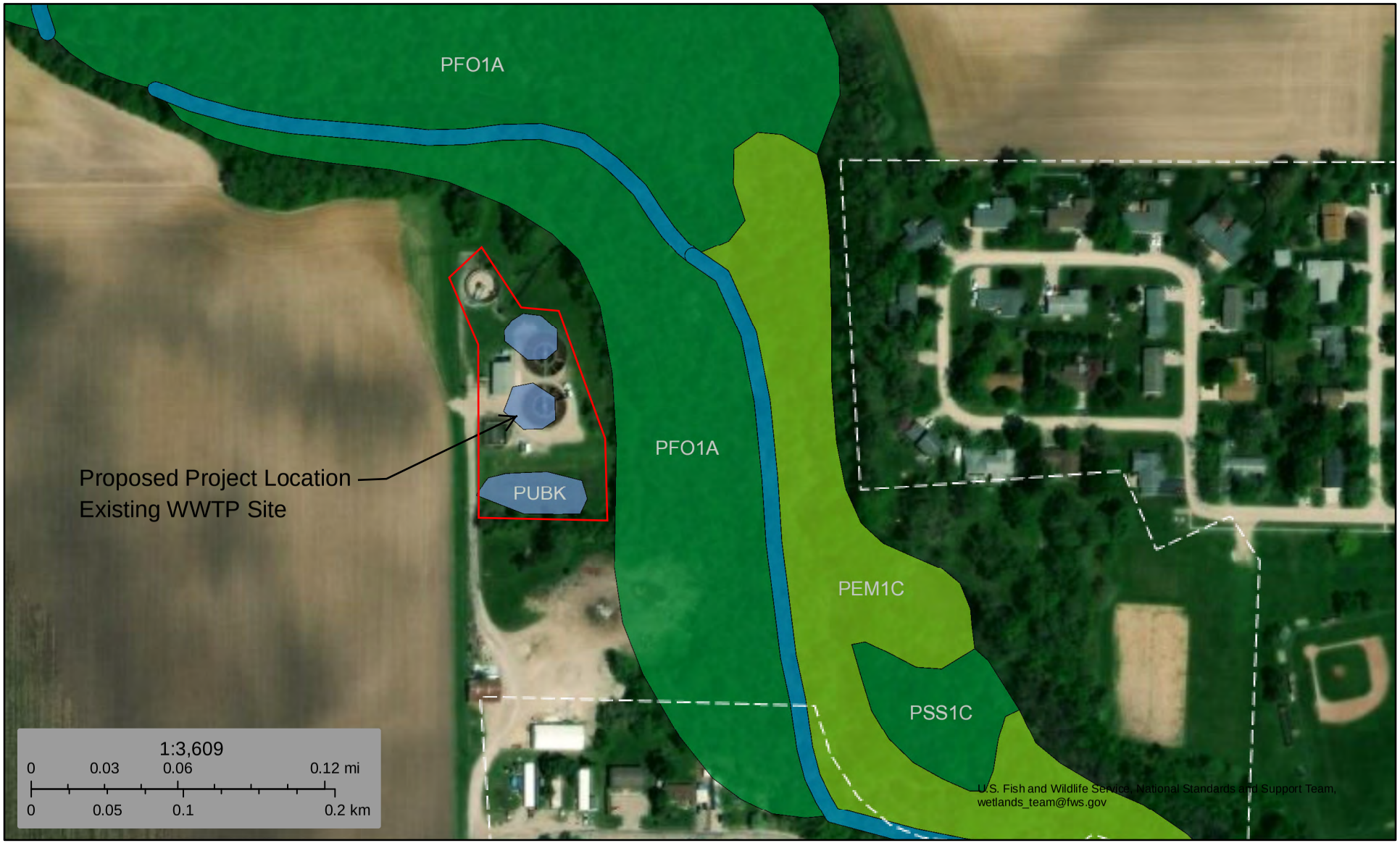
CITY OF VILLA GROVE
CORPORATE
SEAL
DOUGLAS COUNTY, ILLINOIS

Exhibit M

Wetland Map

U.S. Fish and Wildlife Service
National Wetlands Inventory

19-406 Villa Grove WWTP



October 2, 2019

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

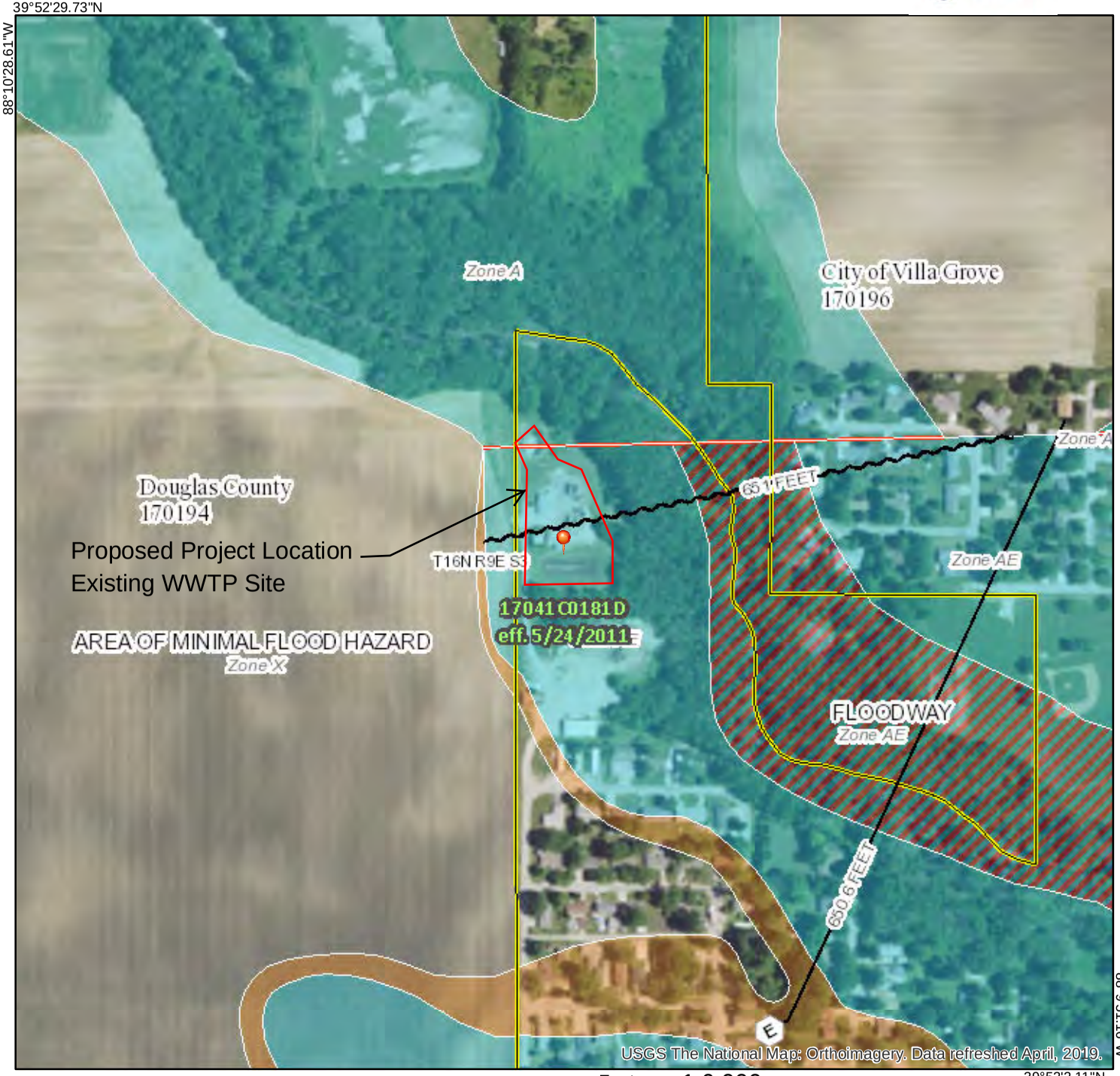
National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Exhibit N

FIRMETTE Map

National Flood Hazard Layer FIRMette

FEMA



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/2/2019 at 1:59:54 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

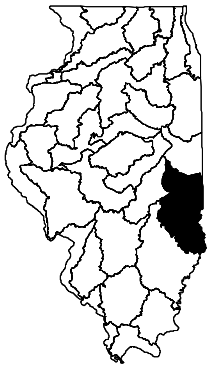
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

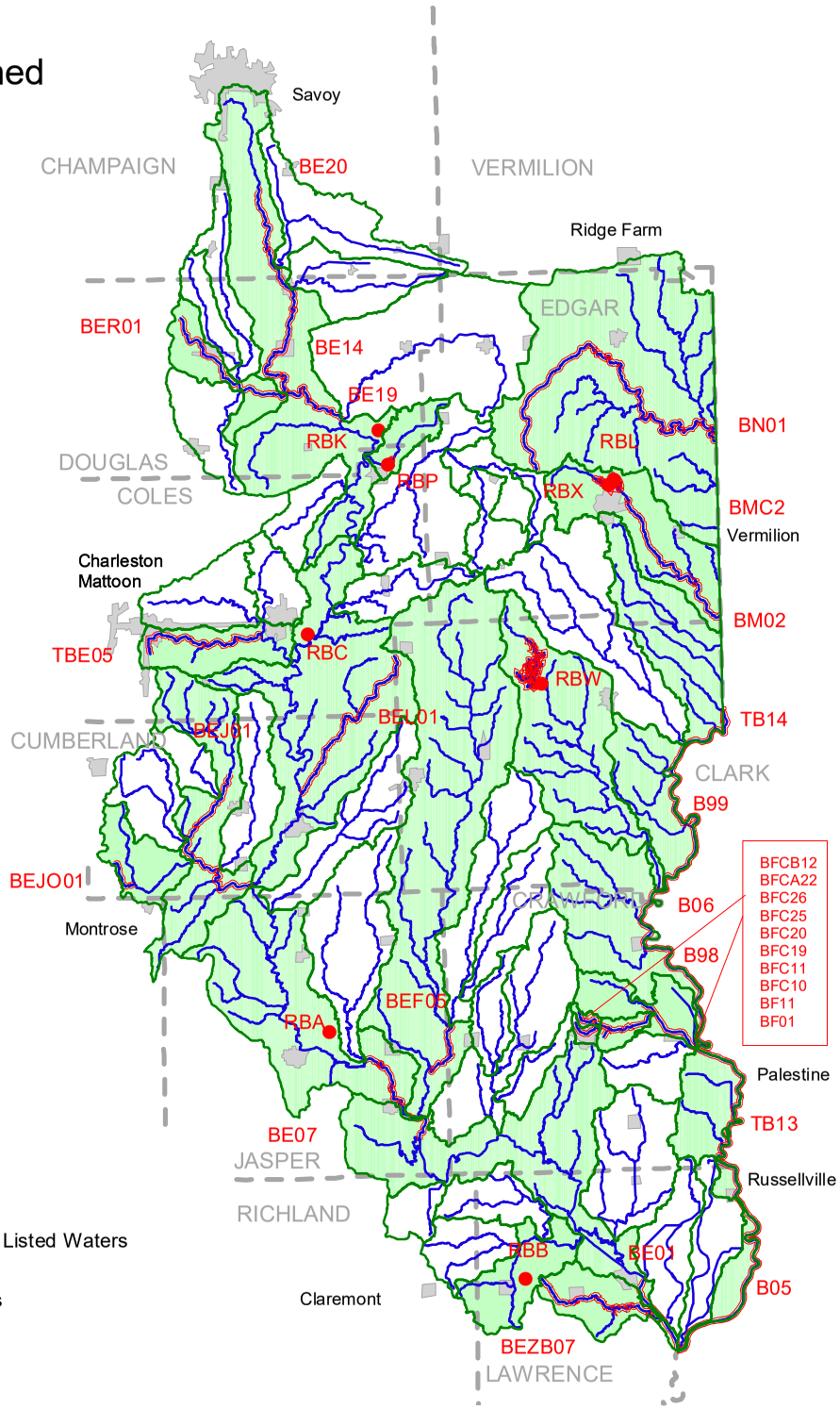
Exhibit O

303 (d) Map for Impaired Waterways

Figure 30. Embarras/Middle Wabash River Watershed 303d Listed Waters (2002)

WSID	WBSEG	NAME
ILB06	B 05	Wabash River
	B 06	Wabash River
	B 98	Wabash River
	B 99	Wabash River
	TB 13	Wabash River
	TB 14	Wabash River
ILBE01	BE 01	Embarras River
ILBE07	BE 07	Embarras River
	RBA	Sam Parr
ILBE09	BEL 01	Hurricane Creek
	RBC	Charleston Side Channel
ILBE14	BE 14	Embarras River
	BE 19	Embarras River
	BE 20	Embarras River
ILBEA01	RBB	Red Hills State Park
ILBEF05	BEF 05	North Fork Embarras River
ILBEJ01	BEJ 01	Muddy Creek
ILBEJE01	BEJO 01	Spring Point Creek Tributary
ILBEN01	TBE 05	Kickapoo Creek
ILBER01	BER 01	Scattering Fork
ILBEZB07	BEZB 07	Indian Creek
ILBEZX01	RBK	Walnut Point
	RBP	Oakland
ILBF22	BF 01	Sugar Creek
	BF 11	Sugar Creek
ILBFC10	BFC 10	Robinson Creek
	BFC 11	Robinson Creek
	BFC 19	Robinson Creek
	BFC 20	Robinson Creek
	BFC 25	Robinson Creek
	BFC 26	Robinson Creek
	BFCA 22	Marathon Creek
ILBFCB12	BFCB 12	Quail Creek
ILBH01	RBW	Mill Creek Pond
ILBM02	BM 02	Sugar Creek
	BM C2	Sugar Creek
	RBL	Paris Twin East
	RBX	Paris Twin West
ILBN01	BN 01	Brouilletts Creek





LEGEND

- 303d Listed Lakes
- 303d Listed Stream
- Subwatersheds with 303d Listed Waters
- Streams
- Subwatershed Boundaries
- Reference Communities
- County Boundaries

Illinois EPA
BOW/Watershed Management Section
May 2002

FEHR GRAHAM

ENGINEERING & ENVIRONMENTAL

www.fehr-graham.com