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### SOUTHEASTERN WISCONSIN REGIONAL **PLANNING** COMMISSION

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Serving the Counties of:

KENOSHA MILWAUKEE OZAUKEE RACINE WALWORTH WASHINGTON WAUKESHA



SUBJECT: Certification of Amendment to the Adopted Regional Water Quality

Management Plan (Yorkville Sanitary Sewer Service Area)

TO: The Legislative Bodies of Concerned Local Units of Government within

the Southeastern Wisconsin Region, namely: the County of Racine and the

Village of Yorkville

This is to certify that at the meeting of the Southeastern Wisconsin Regional Planning Commission, held on the 16th day of September 2020, the Commission did by unanimous vote of all Commissioners present, being 11 ayes and 0 nays, and by appropriate Resolution, a copy of which is made a part hereof and incorporated by reference to the same force and effect as if it had been specifically set forth herein in detail, adopt an amendment to the regional water quality management plan, which plan was originally adopted by the Commission on the 12th day of July 1979, as part of the master plan for the physical development of the Region. Said amendment to the regional water quality management plan pertains to the refined Yorkville sanitary sewer service area and consists of the documents attached hereto and made a part hereof. Such action taken by the Commission is recorded on, and is a part of, said plan, and the plan as amended is hereby transmitted to the constituent local units of government for consideration, adoption, and implementation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal and cause the Seal of the Southeastern Wisconsin Regional Planning Commission to be hereto affixed. Dated at the City of Pewaukee, Wisconsin, this 16th day of September 2020.

> Charles L. Colman, Chairman Southeastern Wisconsin

**Regional Planning Commission** 

Charles of Cohna

ATTEST:

Kevin J. Muhs, Deputy Secretary

### **RESOLUTION NO. 2020-08**

RESOLUTION OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION AMENDING THE ADOPTED REGIONAL WATER QUALITY MANAGEMENT PLAN, THAT PLAN BEING A PART OF THE MASTER PLAN FOR THE PHYSICAL DEVELOPMENT OF THE REGION CONSISTING OF THE COUNTIES OF KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH, WASHINGTON, AND WAUKESHA IN THE STATE OF WISCONSIN (YORKVILLE SANITARY SEWER SERVICE AREA)

WHEREAS, pursuant to Section 66.0309(10) of the *Wisconsin Statutes*, the Southeastern Wisconsin Regional Planning Commission, at a meeting held on the 12th day of July 1979, duly adopted a regional water quality management plan as documented in the three-volume SEWRPC Planning Report No. 30, *A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000*; and

WHEREAS by letter dated December 9, 2019, the Village of Yorkville requested that the Commission prepare an amendment to the regional water quality management plan that would establish a refined Yorkville sanitary sewer service area and designate the Village as the management agency that would operate an upgraded wastewater treatment plant that would serve that area; and

WHEREAS, the Commission, working with the Village of Yorkville and other concerned units and agencies of government, has completed a sewer service area plan for the Village of Yorkville, such plan being set forth in SEWRPC Community Assistance Planning Report No. 337, Sanitary Sewer Service Area for the Yorkville Sewer Utility District No. 1, Racine County, Wisconsin; and

WHEREAS, the aforementioned community assistance planning report recommends a sewerage system including an upgraded wastewater treatment plant discharging to an unnamed tributary to Hoods Creek as the most cost-effective means for providing sanitary sewer service to the Village of Yorkville and environs; designates the Village of Yorkville as the management agency that would operate such an upgraded wastewater treatment plant; and identifies a planned sanitary sewer service area for the Yorkville Sewer Utility District No. 1; and

WHEREAS, the aforementioned community assistance planning report addresses the pertinent comments included in the record of a public hearing on the proposed sewer service area plan sponsored by the Village of Yorkville and the Regional Planning Commission on July 13, 2020; and

WHEREAS, Section 66.0309(9) of the *Wisconsin Statutes* authorizes and empowers the Regional Planning Commission, as the work of making the whole master plan progresses, to amend, extend, or add to the master plan or carry any part or subject thereof into greater detail;

### NOW, THEREFORE, BE IT HEREBY RESOLVED:

<u>FIRST</u>: That the regional water quality management plan for the Southeastern Wisconsin Region, being a part of the master plan for the physical development of the Region and comprised of SEWRPC Planning Report No. 30, Volumes One, Two, and Three, which was adopted by the Commission as a part of the master plan on the 12th day of July 1979, and which was subsequently amended to include the Yorkville sanitary sewer service area, be and the same hereby is amended to include the refined sewer service area plan for the Village of Yorkville as documented in SEWRPC Community Assistance Planning Report No. 337, Sanitary Sewer Service Area for the Yorkville Sewer Utility District No. 1, Racine County, Wisconsin.

### **RESOLUTION NO. 2020-08**

<u>SECOND</u>: That the Executive Director is authorized to submit findings to the Wisconsin Department of Natural Resources and the Wisconsin Department of Safety and Professional Services that public and private sanitary sewer extensions necessary to serve the anticipated development on the lands concerned are in conformance with, and would serve to implement, the adopted regional water quality management plan as herein amended.

<u>THIRD</u>: That a true, correct, and exact copy of this resolution, together with the aforementioned SEWRPC Community Assistance Planning Report No. 337, shall be forthwith distributed to each of the local legislative bodies of the local governmental units within the Region entitled thereto and to such other bodies, agencies, or individuals as the law may require or as the Commission, its Executive Committee, or its Executive Director, at their discretion, shall determine and direct.

The foregoing resolution, upon motion duly made and seconded, was regularly adopted at the meeting of the Southeastern Wisconsin Regional Planning Commission held on the 16th day of September 2020, the vote being: Ayes 11; Nays 0.

Charles L. Colman, Chairman

Charles of Cohna

ATTEST:

Kevin J. Muhs, Deputy Secretary

### COMMUNITY ASSISTANCE PLANNING REPORT NUMBER 337

### SANITARY SEWER SERVICE AREA FOR THE YORKVILLE SEWER UTILITY DISTRICT NO. 1

### **RACINE COUNTY, WISCONSIN**

Prepared by the
Southeastern Wisconsin Regional Planning Commission
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	APIEK		
INT	RODU	CTION	1
1.1		FROUND	
1.2	NEED I	FOR REFINEMENT AND DETAILING OF LOCAL SANITARY SEWER SERVICE AREAS	1
1.3	THE YO	DRKVILLE SANITARY SEWER SERVICE AREA REFINEMENT PROCESS	. 2
CU /	APTER	2	
_		SANITARY SEWER SERVICE AREA	_
2.1		DUCTION NTLY ADOPTED YORKVILLE SANITARY SEWER SERVICE AREA	
2.3		ED YORKVILLE SANITARY SEWER SERVICE AREA	
		ulation Within the Proposed Sewer Service Areaironmentally Significant Lands Within the Proposed Sewer Service Area	
		Restrictions on Sewered Development in Environmentally Significant Areas	
2.4		R QUALITY IMPACTS	
		EFFECTIVENESS ANALYSIS OF SEWAGE CONVEYANCE	. /
2.5		PREATMENT ALTERNATIVES	7
2.6		EWATER TREATMENT PLANT CAPACITY	
2.7		C REACTION TO THE PLAN AMENDMENT	
2.7		NAL HOUSING PLAN: JOB/HOUSING BALANCE	
		ACTION ON THE PLAN AMENDMENT	
		LUDING RECOMMENDATION	
		DNSIN DEPARTMENT OF NATURAL RESOURCES	. 0
2.11		ION ON THE PLAN AMENDMENT	1∩
	7101	ON THE PERMITMENT AND INCOME.	
ΔDD	PENDIX	<b>ν</b> Δ	
SUN	MMAR	Y OF PROCEDURES USED TO IDENTIFY ENVIRONMENTAL	
COF	RRIDO	RS AND ISOLATED NATURAL RESOURCE AREAS	19
•••			
APF	PENDIX	КВ	
		L HOUSING PLAN: JOB/HOUSING BALANCE ANALYSIS	21
APF	PENDIX	K C	
WIS	CONS	IN DEPARTMENT OF NATURAL	
RES	OURC	ES ACTION ON THE PLAN AMENDMENT	25
LIST	Γ OF M	IAPS	
-	pter 1		
Мар	1.1	Planned Sanitary Sewer Service Areas in the Region: September 2019	. 4
Chai	pter 2		
Map	•	Proposed Changes to the Yorkville Sewer Utility	
map		District No. 1 Planned Sanitary Sewer Service Area	11
Мар	22	Yorkville Sewer Utility District No. 1 Planned Sanitary Sewer Service Area	
Мар		Index of Maps Showing Environmentally Significant Lands and Planned Sanitary	٠_
Ινιαρ	2.5	Sewer Service Area for the Yorkville Sewer Utility District No. 1	13
Man	2.3a	Environmentally Significant Lands and Planned Sanitary Sewer	13
Ινιαρ	<b>2.5</b> u	Service Area for the Yorkville Sewer Utility District No. 1	14
Man	2.3b	Environmentally Significant Lands and Planned Sanitary Sewer	17
ар	55	Service Area for the Yorkville Sewer Utility District No. 1	15
		Colvice / and for the following Devel Office Pro. 1	ر ،
Ann	endix B		
Map		Projected Job/Housing Imbalances in Sewered Communities	
٦,		in the Southeastern Wisconsin Region: 2035	23

### LIST OF TABLES

Α	р	p	en	d	ix	Α

Table A.1	Values Assigned to Natural Resource Base and Resource	
	Base-Related Elements in the Process of Delineating	
	Environmental Corridors and Isolated Natural Resource Areas	20

INTRODUCTION

### 1.1 BACKGROUND

On July 12, 1979, the Southeastern Wisconsin Regional Planning Commission formally adopted an areawide water quality management plan for Southeastern Wisconsin. The plan's intent is to achieve clean and wholesome surface waters within the seven-county Region, surface waters that are "fishable and swimmable."1

The plan has five basic elements: 1) a land use element, consisting of recommendations for the location of new urban development in the Region and for the preservation of primary environmental corridors and prime agricultural lands; 2) a point source pollution abatement element, including recommendations concerning the location and extent of sanitary sewer service areas, the location, type, and capacity of, and the level of treatment to be provided at, sewage treatment facilities, the location and configuration of intercommunity trunk sewers, and the abatement of pollution from sewer system overflows and from industrial wastewater discharges; 3) a nonpoint source pollution abatement element, consisting of recommendations for the control of pollutant runoff from rural and urban lands; 4) a sludge management element, consisting of recommendations for the handling and disposal of sludges from sewage treatment facilities; and 5) recommendations for the establishment of continuing water quality monitoring efforts in the Region.

The plan was formally certified over the period July 23 to September 20, 1979, to all of the local units of government in the Region and to the concerned State and Federal agencies. The plan was formally endorsed by the Wisconsin Natural Resources Board on July 25, 1979. Such endorsement is particularly important because under State law and administrative rules, certain actions by the Wisconsin Department of Natural Resources (WDNR) must be in accordance with the adopted and endorsed plan. These actions include, among others, WDNR approval of waste discharge permits, WDNR approval of State and Federal grants for the construction of wastewater treatment and conveyance facilities, and WDNR approval of locally proposed sanitary sewer extensions.

### 1.2 NEED FOR REFINEMENT AND DETAILING OF LOCAL SANITARY SEWER SERVICE AREAS

The adopted regional water quality management plan includes recommended sanitary sewer service areas attendant to each recommended sewage treatment facility (see Map 1.1). There were in the plan, as initially adopted, a total of 85 such identified sanitary sewer service areas. The initially recommended sanitary sewer service areas were based upon the urban land use configuration identified in the Commission-adopted regional land use plan for the year 2000.<sup>2</sup> As such, the delineation of the areas was necessarily general, and may not have reflected detailed local planning considerations.

Section NR 110.08(4) and Section SPS 382.20(4) of the Wisconsin Administrative Code require that the Wisconsin Department of Natural Resources, with respect to public sanitary sewers, and the Wisconsin Department of Safety and Professional Services, with respect to private sanitary sewers, make a finding that all proposed sanitary sewer extensions are in conformance with adopted areawide water quality management plans, including the sanitary sewer service areas identified in such plans. In carrying out their responsibilities in this respect, these Departments require that the Southeastern Wisconsin Regional Planning Commission,

<sup>&</sup>lt;sup>1</sup> The adopted areawide water quality management plan is documented in SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; Volume Two, Alternative Plans; and Volume Three, Recommended Plan.

<sup>&</sup>lt;sup>2</sup> See SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation System Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; and Volume Two, Alternative and Recommended Plans.

as the designated areawide water quality management planning agency for Southeastern Wisconsin, review and comment on each proposed sewer extension as to its relationship to the approved plan and sewer service areas. In order to properly reflect local, as well as areawide planning concerns in the execution of this review responsibility, the Regional Planning Commission, in adopting the areawide water quality management plan, recommends that steps be taken to refine and detail each of the 85 sanitary sewer service areas delineated in the plan in cooperation with the local units of government concerned. The refinement and detailing process consists of the following seven steps:

- 1. Prepare a base map at an appropriate scale for each sanitary sewer service area identified in the areawide water quality management plan.
- 2. Delineate on that base map a sanitary sewer service area consistent with the objectives set forth in the adopted regional water quality management plan.<sup>3</sup>
- 3. Conduct intergovernmental meetings involving the local or areawide unit or units of government concerned. At these meetings, present and discuss the initial sanitary sewer service area delineation and solicit the positions of each of the units of government concerned.
- 4. Prepare modifications to the initially proposed sanitary sewer service area to reflect concerns expressed at the intergovernmental meetings. These modifications would meet, to the fullest extent practicable, the objectives expressed both in the adopted areawide water quality management and regional land use plans and in any adopted local land use and sanitary sewerage system plans.
- 5. Hold a public hearing jointly by the Commission and the local or areawide unit or units of government concerned to obtain public reaction to site-specific sewer service area issues that the proposed sewer service area delineation might raise.
- 6. Prepare a final sanitary sewer service area map and accompanying report.
- 7. The Commission would then adopt the final sewer service area map, and the Wisconsin Department of Natural Resources and the U.S. Environmental Protection Agency would certify the map, as an amendment to the adopted areawide water quality management plan. Desirably, the Commission would adopt the map following endorsement of the map by the local or areawide unit or units of government concerned. While the Commission always seeks such a consensus by the local governments concerned, it is recognized that in some cases unanimous support of the refined and detailed sanitary sewer service areas may not be achieved. In those cases, the Commission will have to weigh the positions of the parties concerned and make a final determination concerning the issues involved.

### 1.3 THE YORKVILLE SANITARY SEWER SERVICE AREA REFINEMENT PROCESS

By letter dated December 9, 2019, the Village of Yorkville requested that the Regional Planning Commission undertake the refinement and detailing of the sanitary sewer service area tributary to the Yorkville Sewer Utility District No. 1 sewage treatment facility.<sup>4</sup> Minor amendments to the regional water quality plan to refine portions of the unrefined Yorkville sewer service area were completed in 1985 and 1990.

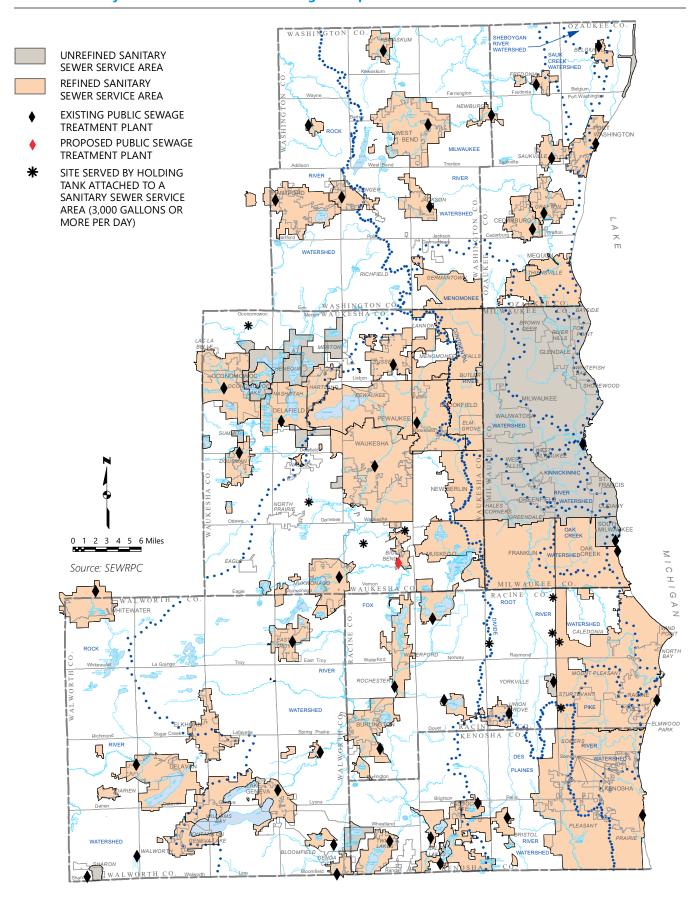
The refined sewer service area plan revision includes the consideration of local and county comprehensive plans; 2015 Wisconsin Wetlands Inventory; new FEMA floodplain maps; 2015 environmental corridors; and year 2015 orthophotography for the area. This community assistance planning report presents the refined sewer service area plan. The plan sets forth a proposed sanitary sewer service area for the Yorkville Sewer Utility District No. 1, identifying where sanitary sewer service may be provided. The plan also identifies

<sup>&</sup>lt;sup>3</sup> The sewer service areas in the water quality management plan were based upon the urban land use configurations as set forth in the Commission's design year 2000 land use plan. The Commission has since completed and adopted a design year 2050 land use plan, which served as the point of departure in the delineation of the sewer service area set forth in this report.

<sup>&</sup>lt;sup>4</sup> This area is referred to as the "Town of Yorkville or Ives Grove" unrefined sanitary sewer service area in the regional water quality management plan and the regional land use plan.

environmentally significant lands within the proposed sewer service area, along with an explanation of the policies that prohibit or otherwise restrict the extension of sewers within such areas. In addition, the plan presents and evaluates alternative systems for wastewater conveyance and treatment for the Yorkville area and identifies a recommended system. It draws upon the cost-effectiveness analyses developed under alternatives prepared for the Yorkville sewer utility district.

**Map 1.1 Planned Sanitary Sewer Service Areas in the Region: September 2019** 



### 2.1 INTRODUCTION

A sanitary sewer service area plan is a long-range plan that serves as a guide to extending sanitary sewer service in a locality by identifying the area within which sanitary sewers may extend. Including land within a planned sewer service area enables, but does not mandate, the provision of sanitary sewer service.

A sanitary sewer service area plan also identifies environmentally significant lands within the planned sanitary sewer service area. There are certain restrictions on providing sanitary sewer service within the identified environmentally significant lands, as described later in this chapter.

### 2.2 CURRENTLY ADOPTED YORKVILLE SANITARY SEWER SERVICE AREA

The initial generalized delineation of the Yorkville sanitary sewer service area as set forth in SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, considers several important factors. These factors were also an important consideration in developing the adopted regional land use plan. They included, among others, the location, type, and extent of existing urban development; the location of areas where onsite soil absorption sewage disposal systems were known to be failing; the location and extent of gravity drainage areas tributary to existing major sewerage system pumping stations or to sewage treatment plants; the location and capacity of existing and planned trunk sewers; and certain pertinent aspects of the natural resource base, including the location and extent of soils suitable for urban development, the location and extent of primary environmental corridors, and the location and extent of prime agricultural lands.

The planned year 2000 sanitary sewer service area tributary to the Yorkville sewage treatment facility as delineated under the adopted regional water quality management plan, as amended in 1985 and 1990, is shown as a blue shaded area on Map 2.1. That service area encompasses about 938 acres (1.5 square miles).

### 2.3 REFINED YORKVILLE SANITARY SEWER SERVICE AREA

The purpose of this refinement effort is to comprehensively review the sewer service needs of lands envisioned to be tributary to the Yorkville Sewer Utility District No. 1 sewage treatment facility and to specify the sewer service area boundaries to accommodate the design year 2050 population levels envisioned for this service area. Factors taken into account in determining the refined sanitary sewer service area included the existing boundaries of the Yorkville Sewer Utility District No. 1; the Village of Yorkville comprehensive plan; and SEWRPC Planning Report No. 55, VISION 2050: A Regional Land Use and Transportation Plan for Southeastern Wisconsin, as updated in 2020.

Map 2.1 shows the proposed refinements/addition to the currently adopted Yorkville sanitary sewer service area identified by Village of Yorkville officials as a result of this effort.

As identified on Map 2.1, the area proposed by the Village of Yorkville adds about 356 acres to the sewer service area. With the additional acreage, the refined sewer service area encompasses a total of about 1,294 acres, including about 741 acres of existing (2015) developed land and existing street rights-of-way; about 140 acres of environmentally significant lands; and about 413 acres of agricultural and other open land.

Under the Village comprehensive plan, the developable land within the Village-proposed addition to the sewer service area would consist primarily of business park and industrial uses. The existing and planned residential areas within the entire refined sewer service area would accommodate an estimated population of about 310 people under full development conditions.

Map 2.2 shows the refined Yorkville sanitary sewer service area as proposed by the Village. Map 2.2 also shows the environmentally significant lands within the proposed expanded sewer service area. The expanded sewer service area encompasses, in total, about 1,294 acres (2.0 square miles), an increase of 356 acres (0.5 square miles), or 38 percent, over the currently approved sewer service area. The identified environmentally significant lands encompass about 140 acres, or 11 percent of the total sewer service area.

### **Population Within the Proposed Sewer Service Area**

The year 2050 regional land use plan adopted by the Regional Planning Commission in 2020 includes a future population range for each sanitary sewer service area in Southeastern Wisconsin. Under the regional land use plan, the year 2050 population of the Yorkville sewer service area would range from 380 people under an intermediate growth scenario to about 570 people under a high-growth scenario. The planned population of the Yorkville sewer service area under the 2040 stage of the regional land use plan ranges from 370 to 513 under the intermediate and high-growth scenarios. The refined Yorkville sanitary sewer service area would accommodate a population of about 310 persons, assuming full development of vacant lands within the sewer service area as envisioned under the adopted Village comprehensive plan. This population level lies below the intermediate growth end of the range of population levels envisioned under the Commission 2050 regional land use plan, and as such, is not wholly consistent with the adopted regional land use plan. However, it can be noted that this population level is consistent with the Village's comprehensive plan and is anticipated to be consistent with the population level set forth in the Yorkville Facility Plan that is currently nearing completion.

### **Environmentally Significant Lands Within the Proposed Sewer Service Area**

The environmentally significant lands shown on Map 2.2 include areas identified as secondary environmental corridors, isolated natural resource areas, and small wetlands and surface water areas less than five acres in size located outside the environmental corridors and isolated natural resource areas. The series of maps presented as Map 2.3 shows more detailed mapping of the proposed sewer service area and of the environmentally significant lands.

The Regional Planning Commission delineates environmental corridors and isolated natural resource areas as part of its continuing regional planning program. They encompass concentrations of wetlands, woodlands, wildlife habitat, surface water, and other natural resource and resource-related features. Primary environmental corridors are the largest of these, by definition being at least 400 acres in area, two miles in length, and 200 feet in width. No primary environmental corridors currently exist in the Yorkville sewer service area. Secondary environmental corridors are by definition at least 100 acres in area and one mile in length. Isolated natural resource areas are by definition at least 5 acres in area and 200 feet in width. Appendix A of this report explains the methodology used to identify these areas.

The proposed expanded sanitary sewer service area encompasses 97 acres of secondary environmental corridors (7 percent of the sewer service area); and 14 acres of isolated natural resource areas (1 percent of the sewer service area). The proposed sewer service area also encompasses a total of 29 acres of small wetlands and surface water areas located outside the environmental corridors and isolated natural resource areas, accounting for 2 percent of the sewer service area.

Map 2.2 also identifies undeveloped 100-year floodplains located outside the proposed sewer service area. During any future expansions of the sewer service area, this plan will consider such floodplains as potential additions to the adjacent environmental corridors or isolated natural resource areas. Map 2.2 identifies these floodplains in a tan color.

### Restrictions on Sewered Development in Environmentally Significant Areas

The regional land use and water quality management plans recommend preserving primary environmental corridors in essentially natural, open use and recommend that County and local units of government consider protecting and preserving secondary environmental corridors and isolated natural resource areas. Consistent with regional plans, policies adhered to by the Wisconsin Department of Natural Resources and Department of Safety and Professional Services in their regulation of sanitary sewerage systems prohibit or otherwise limit the extension of sanitary sewers to serve development in such areas. The following restrictions apply:

- 1. This plan confines the extension of sanitary sewers to serve new development in primary environmental corridors to limited recreational and institutional uses and rural-density residential development (maximum of one dwelling unit per five acres) in areas other than wetlands, floodplains, riparian buffers, and steep slopes. As noted earlier, no primary environmental corridors currently exist within the proposed Yorkville sewer service area.
- 2. This plan does not permit the extension of sanitary sewers to serve development in portions of secondary environmental corridors and isolated natural resource areas comprised of wetlands, floodplains, riparian buffers, or steep slopes. Map 2.3 identifies the portions of secondary environmental corridors and isolated natural resource areas comprised of wetlands, floodplains, riparian buffers, or steep slopes within the proposed sewer service area with an orange background color.

This report recognizes that its mapping of environmentally significant areas is a representation of conditions based upon the most recent available natural resource base information. In many cases, as specific development proposals arise, a field survey will be necessary to more precisely identify the boundaries of environmental corridors and isolated natural resource areas in the vicinity of the proposed development.

### 2.4 WATER QUALITY IMPACTS

The regional water quality management plan and the Yorkville sanitary sewer service area plan presented herein envision that all new urban development within the planned sewer service area would receive sanitary sewer service. These plans intend that the restrictions on sewered urban development in environmentally significant areas, described in the previous section, will avoid significant adverse water quality impacts attendant to the extension of sanitary sewer service. In addition, the planned sanitary sewer service area may provide public sewer service to those lands that are already developed and served by private onsite wastewater sewage systems, which in turn may reduce pollutant loadings from the existing onsite wastewater treatment systems to both surface and ground waters. Assuming that any applicable Federal, State, and local permits are obtained, and that proper site development and construction practices are employed, there should be no significant adverse water quality impacts attributable to the development of the planned sewer service area.

### 2.5 COST-EFFECTIVENESS ANALYSIS OF SEWAGE **CONVEYANCE AND TREATMENT ALTERNATIVES**

As detailed in the sanitary sewer service area plan for the City of Racine and environs (SEWRPC Community Assistance Planning Report No. 147 (2nd Edition), Sanitary Sewer Service Area for the City of Racine and Environs, Racine and Kenosha Counties, Wisconsin, June 2003), it was anticipated that the entire Yorkville system would be connected to the sewerage system tributary to the City of Racine sewage treatment plant, and the Yorkville sewage treatment plant abandoned when the Yorkville plant reached the end of its useful life, pending cost-effectiveness analyses to be conducted at that time.

Three alternatives for serving the refined sewer service area were evaluated by the Village of Yorkville and its consultant as part of their facility planning process as set forth in the draft document entitled "WWTP Facilities Plan, Yorkville Utility District No. 1, Village of Yorkville, WI", dated June 12, 2020, prepared by Short Elliott Hendrickson Inc. (SEH).

- Alternative 1 consists of retaining and modifying the existing Yorkville plant to include construction of a new continuous flow sequencing batch rector (SBR) plant and grit removal system. The 20-year net present worth cost of this alternative would be approximately \$7M.
- Alternative 2 consists of abandoning the existing treatment plant and connecting the Yorkville service area to the City of Racine plant, whose collection system is currently within one mile of Yorkville's refined sewer service area. Alternative 2 would have a 20-year net present worth cost of approximately \$14M.

Alternative 3 consists of abandoning the existing treatment plant and connecting the Yorkville service area to the Village of Union Grove treatment plant, which would require construction of approximately five miles of gravity and force main pipe. Alternative 3 would have a 20-year net present worth cost of approximately \$18M.

On the basis of the foregoing analysis, Alternative 1, consisting of modifying the existing Yorkville plant to include construction of a new continuous flow sequencing batch reactor (SBR) plant and new grit removal system, is the lowest cost alternative, and as such, is the recommended alternative.

### 2.6 WASTEWATER TREATMENT PLANT CAPACITY

Current average annual wastewater flows to the wastewater treatment plant from the Yorkville service area are approximately 0.07 million gallons per day (mgd). The new sewer service area, including developable lands within the current sewer service area, could accommodate an increase in population of about 130 people and add about 300 acres of new industrial/business park and commercial development under full development conditions. The anticipated flow to be generated as a result of this development would result in sewage flow rates ranging from about 0.18 mgd to 0.37 mgd on an average annual basis, depending on the amount of flow generated by industrial/business park and commercial development. Thus, the total average annual flow would range from about 0.25 mgd to 0.44 mgd following development of the proposed sewer service area. The current plant capacity is 0.15 mgd. Therefore, the wastewater flows to the Village plant would exceed the current plant capacity if the planned growth in the Village's sewer service area occurs, and it will be necessary for the Village of Yorkville to initiate facility planning for a plant expansion sometime in the planning period prior to the wastewater flows exceeding the plant capacity.

### 2.7 PUBLIC REACTION TO THE PLAN AMENDMENT

A public hearing was held on July 13, 2020, at the Union Grove Municipal Center to receive public comment on, and reaction to, the proposed sewer service area amendment. The hearing was sponsored by the Village of Yorkville and the Regional Planning Commission. A summary of the amendment was presented prior to receiving public comment. No other persons spoke at the hearing.

### 2.8 REGIONAL HOUSING PLAN: JOB/HOUSING BALANCE

Appendix B provides job/housing balance information for the Village of Yorkville developed under the SEWRPC regional housing plan. The inclusion of information from the regional housing plan in sewer service area amendment reports is based upon a regional housing plan recommendation (one of 50 recommendations made under the plan) that 1) SEWRPC provide the findings of the approximate job/ housing balance analysis conducted under the regional housing plan to communities requesting an amendment of their sanitary sewer service area and 2) for those communities with a job/housing imbalance, that recommendations be provided to the community for their future consideration in addressing that imbalance. However, it is important to note that the regional housing plan does not intend that meeting the job/housing balance is to be a requirement of any individual sewer service area amendment.

### 2.9 LOCAL ACTION ON THE PLAN AMENDMENT

The Yorkville Village Board approved the sewer service area amendment following the public hearing on July 13, 2020.

### 2.10 CONCLUDING RECOMMENDATION

The Regional Planning Commission's evaluation of proposed sanitary sewer service area amendments includes a consideration of whether the amendment is consistent with the regional land use plan, the regional water quality management plan, and the provisions of the Wisconsin Administrative Code governing water quality management plans, and whether established procedures for amending sewer service areas have been followed.

### **Consistency with the Regional Land Use Plan**

The regional land use plan recommends that, in addition to the infilling and redevelopment of existing urban centers, new urban development within the Region be accommodated through the orderly expansion of existing urban centers in locations which can be readily served by basic urban facilities, including sanitary sewer service, with the overall amount of new urban development consistent with projected growth in population and the economic base. The regional land use plan further recommends the preservation of primary environmental corridors and that consideration be given to the preservation of secondary environmental corridors and isolated natural resource areas. The proposed sewer service area amendment is consistent with these recommendations of the regional land use plan.

### **Consistency with the Regional Water Quality Management Plan**

The regional water quality management plan recommends that new urban development within the Region be provided with centralized sanitary sewer service. The plan designates a wastewater treatment plant to serve each of the urban centers within the Region that are identified in the regional land use plan. In the case at hand, the regional plan initially recommended that wastewater from the Yorkville urban service area be conveyed to and treated at the Yorkville wastewater treatment plant.

However, as detailed in the sanitary sewer service area plan for the City of Racine and environs (SEWRPC Community Assistance Planning Report No. 147 (2nd Edition), Sanitary Sewer Service Area for the City of Racine and Environs, Racine and Kenosha Counties, June 2003), it was anticipated that the entire Yorkville system would be connected to the sewerage system tributary to the City of Racine sewage treatment plant, and the Yorkville sewage treatment plan abandoned when the Yorkville plant reached the end of its useful life, pending cost-effectiveness analyses to be conducted at that time. As set forth in this report, and in the draft document entitled "WWTP Facilities Plan, Yorkville Utility District No. 1, Village of Yorkville, WI", dated June 12, 2020, prepared by Short Elliott Hendrickson Inc. (SEH), it was determined that the most cost-effective approach was to retain and modify the existing Yorkville plant to include construction of a new continuous flow sequencing batch rector (SBR) plant and grit removal system.

Therefore, the proposed sewer service area amendment is consistent with these recommendations of the regional water quality management plan.

### Consistency with Chapter NR 121 of the Wisconsin Administrative Code

Chapter NR 121 of the Wisconsin Administrative Code governs the preparation of areawide water quality management plans, including the component sewer service area plans. The code requires that sewer service areas be determined in a way that promotes cost-effective and environmentally sound wastewater collection and treatment and that is consistent with 20-year population projections. Under the code, sewer service area plans must identify lands that are to be excluded from sewer service because of physical or environmental constraints or potential adverse water quality impacts. The proposed sewer service area amendment is consistent with these provisions of the Wisconsin Administrative Code.

### **Consistency with Procedural Requirements**

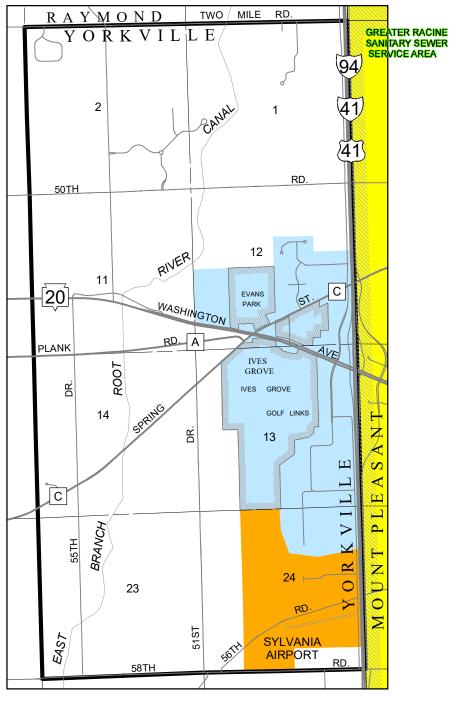
As carried out by the Regional Planning Commission, the sewer service area amendment process must begin with a request to the Commission from the appropriate local unit of government or government agency to process the amendment. A public hearing must be held on the proposed amendment; and the hearing must be jointly sponsored by the Regional Planning Commission and the requesting agency or unit of government. Subsequent to the public hearing, the requesting agency or unit of government must act to approve the amendment as presented at the hearing, approve a modified amendment, or deny the amendment. Only after approval by the requesting agency or unit of government will the proposed amendment be considered for adoption by the Regional Planning Commission as an amendment to the areawide water quality management plan. All of the Commission's procedural requirements have been met for this amendment.

Given all of the foregoing, it is recommended that the Southeastern Wisconsin Regional Planning Commission formally amend the Yorkville Sanitary District sanitary sewer service area as documented in SEWRPC Community Assistance Planning Report No. 337, in the manner shown on Map 2. It is also recommended that the Wisconsin Department of Natural Resources approve this sewer service area plan amendment and transmit the plan amendment to the U.S. Environmental Protection Agency for certification.

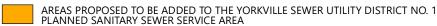
### 2.11 WISCONSIN DEPARTMENT OF NATURAL RESOURCES **ACTION ON THE PLAN AMENDMENT**

The Wisconsin Department of Natural Resources approved the sewer service area amendment by letter dated December 9, 2020. A copy of this letter is included as Appendix C.

Map 2.1
Proposed Changes to the Yorkville Sewer Utility District No. 1 Planned Sanitary Sewer Service Area

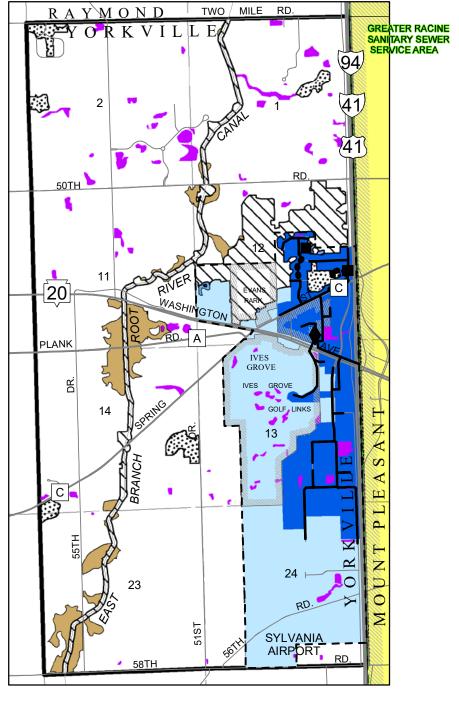


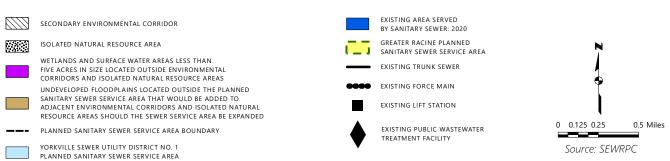




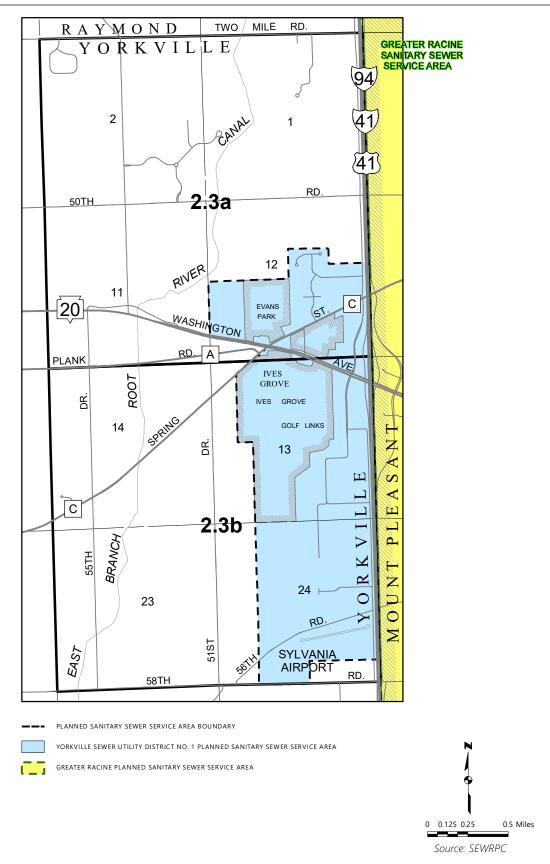




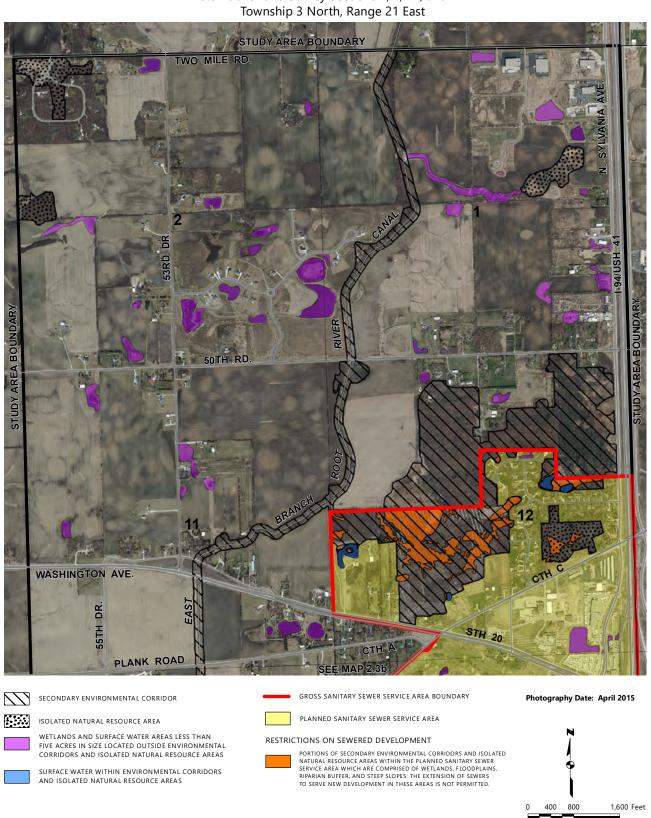




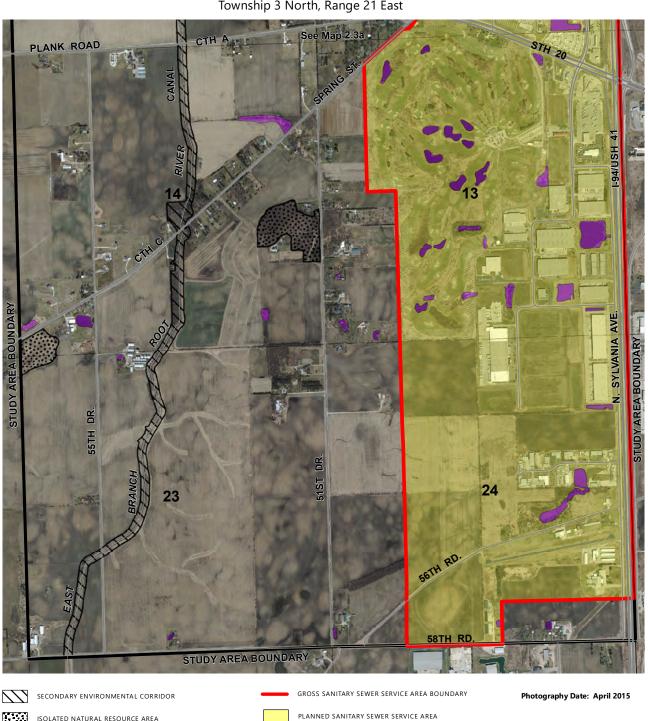
Map 2.3 **Index of Maps Showing Environmentally Significant Lands and Planned Sanitary** Sewer Service Area for the Yorkville Sewer Utility District No. 1



U.S Public Land Survey Sections 1, 2, 11, and 12



U.S Public Land Survey Sections 13, 14, 23, and 24 Township 3 North, Range 21 East





Source: SEWRPC

## **APPENDICES**

# MMARY OF PROCEDURES USED .

One of the most important tasks completed by the Commission under the regional planning program for Southeastern Wisconsin is delineating environmental corridors. Environmental corridors are linear areas in the landscape containing concentrations of natural resource and resource-related amenities. These corridors generally lie along the major stream valleys, around major lakes, and in the Kettle Moraine area of Southeastern Wisconsin. Almost all the remaining high-value wetlands, woodlands, wildlife habitat areas, major bodies of surface water, and delineated floodplains and riparian buffers are contained within these corridors. In addition, significant groundwater recharge and discharge areas, many of the most important recreational and scenic areas, and the best remaining potential park sites are located within the environmental corridors. Such corridors are, in effect, a composite of the most important individual elements of the natural resource base in Southeastern Wisconsin, and have immeasurable environmental, ecological, and recreational value.

The process of delineating environmental corridors began with the mapping of individual natural resource and resource-related elements on aerial photographs at a scale of one inch equals 400 feet. The various natural resource and resource-related elements were assigned a numeric rating intended to reflect the value of their natural characteristics. The types of natural resource and resourcerelated features that were mapped and the point values assigned are indicated in Table A.1.

Areas having a total point value of 10 or more based upon this mapping were identified as having "significant" natural resource value. These areas were, in turn, classified as primary environmental corridors, secondary environmental corridors, or isolated natural resource areas based upon the following criteria:

- Primary environmental corridors encompass at least 400 acres and have a minimum length of at least two miles and a minimum width of at least 200 feet
- Secondary environmental corridors encompass at least 100 acres and have a minimum length of at least one mile
- Isolated natural resource areas encompass at least five acres and have a minimum width of at least 200 feet

Table A.1 Values Assigned to Natural Resource Base and Resource Base-Related Elements in the **Process of Delineating Environmental Corridors and Isolated Natural Resource Areas** 

Natural Resource Base Element			
Element	Point Value		
Lake			
Major (50 acres or more)	20		
Minor (5-49 acres)	20		
Rivers or Streams (perennial)	10		
Riparian Buffer			
Lake or Perennial River or Stream	10		
Intermittent Stream	5		
Floodplain (100-year recurrence interval)	3		
Wetland	10		
Woodland	10		
Wildlife Habitat			
Class I	10		
Class II	7		
Class III	5		
Steep Slope			
20 Percent or More	7		
12-19 Percent	5		
Prairie	10		

Natural Resource Base-Related	Element
Element	Point Value
Existing Park or Open Space Site	
Rural Open Space Site	5
Other Park and Open Space Site	2
Potential Park Site	
High-Value	3
Medium-Value	2
Low-Value	1
Historic Site	
Structure	1
Other Cultural	1
Archaeological	2
Scenic Viewpoint	5
Natural Area	
State Scientific Area	15
Statewide or Greater Significance	15
County or Regional Significance	10
Local Significance	5

Source: SEWRPC

The resulting definitions are held out as subject to field verification where appropriate. The Commission staff is frequently called upon by county and local units of government to verify and stake in the field the boundaries of these environmentally significant lands.

Additional documentation regarding the environmental corridor delineation process is presented in an article titled "Refining the Delineation of Environmental Corridors in Southeastern Wisconsin" published in SEWRPC Technical Record, Volume Four, Number Two, dated 1981, which may be viewed on the Regional Planning Commission website.

On March 13, 2013, the Regional Planning Commission adopted a regional housing plan for the seven-county Southeastern Wisconsin Region. That plan is documented in SEWRPC Planning Report No. 54, A Regional Housing Plan for Southeastern Wisconsin, dated March 2013. The plan addresses a range of housing issues and concerns, including the balance between jobs and housing throughout the Region. The plan includes a generalized analysis of the "job/housing balance" for subareas of the Region. The regional housing plan recommends providing the findings of the job-housing analysis to communities seeking to amend their sanitary sewer service areas, with the intent to inform communities of any job/housing imbalance, and to encourage them to consider addressing the imbalance when they review and update their community comprehensive plan and zoning ordinance. Accordingly, the findings of that analysis are summarized in this appendix.

The job/housing analysis conducted under the regional housing study examined the relationship between jobs and housing that would exist in areas planned by local governments to be served by a public sanitary system, assuming implementation of adopted long-range comprehensive plans for those areas. For each sewered community, the analysis compared the projected relative shares of lower-cost, moderate-cost, and higher-cost housing<sup>5</sup> with the projected relative shares of lower-wage, moderate-wage, and higher-wage jobs,6 respectively. Job/housing imbalances identified under this analysis are indicated on Map B.1. A "lower-cost" job/housing imbalance indicates a community projected to have a higher percentage of lower-wage jobs than lower-cost housing. A "moderate-cost" job/ housing imbalance indicates a community projected to have a higher percentage of moderate-wage jobs than moderate-cost housing.

<sup>&</sup>lt;sup>5</sup> For purposes of the analysis, lower-cost housing generally includes multi-family dwellings and single- and two-family dwellings at densities of 6,000 square feet or less per dwelling unit; moderate-cost housing includes single- and two-family dwellings at densities of one dwelling per 6,000 to 20,000 square feet for homes constructed prior to 2000 and at densities of one dwelling per 6,000 to 10,000 square feet for housing constructed after 2000; and higher-cost housing includes the balance of the housing stock.

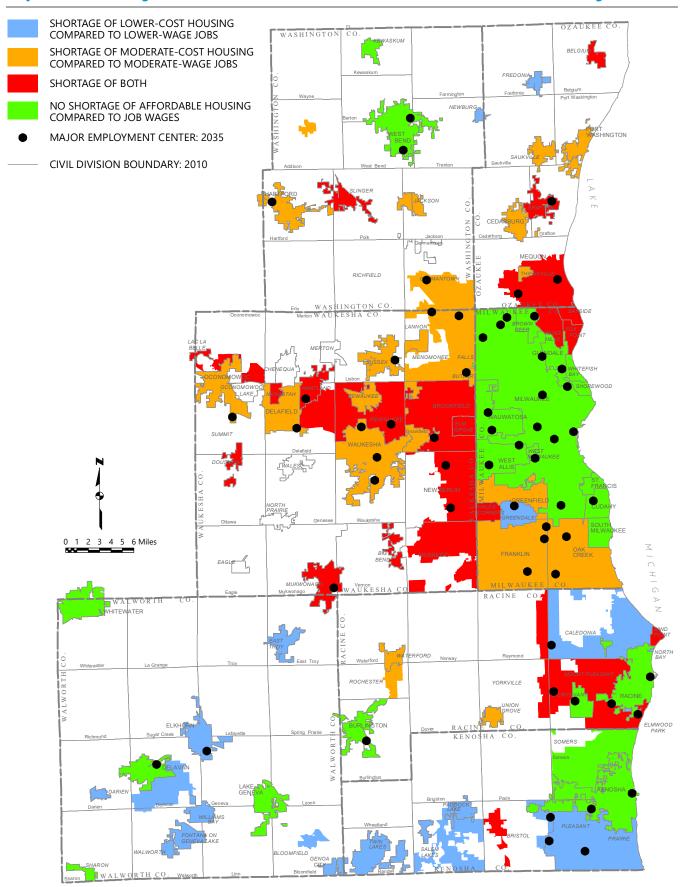
<sup>&</sup>lt;sup>6</sup> For purposes of the analysis, lower-wage jobs include those with an average annual wage that is 80 percent or less than the average annual wage for all jobs in the county; moderate-wage jobs include those with an average annual wage between 80 percent and 135 percent of average annual wage for all jobs in the county; and higher-wage jobs include those with an average annual wage that is 135 percent or more of the annual average wage for all jobs in the county.

Map B.1 shows the Village of Yorkville is projected to have lower-cost and moderate-cost job/housing imbalances. The regional housing plan would encourage the Village to consider conducting a more detailed job/housing analysis specific to their community, with the community-level analysis considering communityspecific wage data and housing price data. The community-specific analysis could also consider the effect of multiple workers in a household, which was not incorporated in the regional-level analysis.

The regional housing plan further recommends that communities which are demonstrated to have a job/ housing imbalance following a community-specific analysis consider making changes to their comprehensive plan and zoning ordinance, as appropriate, to enable the provision of housing suitable for the people holding jobs in their community. Actions to address a moderate-cost job/housing imbalance could include modifying the comprehensive plan to permit some single-family residences on smaller lots (1/4 acre or less) and of modest square footage (1,200 square feet). Actions to address a lower-cost job/housing imbalance could include modifying the comprehensive plan to permit some modest multifamily housing (density of at least 10 housing units per acre and 800 to 850 square feet per two bedroom apartment).

Additional information about the housing plan and the job/housing balance analysis is available on the SEWRPC website (www.sewrpc.org/sewrpc/housing.htm) or by contacting the SEWRPC staff.

Map B.1 Projected Job/Housing Imbalances in Sewered Communities in the Southeastern Wisconsin Region: 2035



### RESOURCES ACTION ON THE PLAN AMENDMENT **WISCONSIN DEPARTMENT OF NATURAL** APPENDIX C

State of Wisconsin **DEPARTMENT OF NATURAL RESOURCES** 101 S. Webster Street Box 7921 Madison WI 53707-7921

Tony Evers, Governor Preston D. Cole, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463



DNR Project No: SE163

December 9. 2020

Kevin Muhs, AICP, P.E., Executive Director Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607 Waukesha, WI 35187-1607

Subject: Amendment Request to the Regional Water Quality Management Plan (SEWRPC Community Assistance Planning Report No. 337, Sanitary Sewer Service Area for the Yorkville Sewer Utility District No. 1, Racine County, Wisconsin)

Dear Mr. Muhs:

We have completed our review of the subject sewer service area amendment request from the Village of Yorkville (Resolution 2020-08) received in September 2020. The proposed amendment establishes a refined Yorkville sanitary sewer service area and designates the Village as the management agency that will operate an upgraded wastewater treatment plant that will serve that area. A public hearing for this action was held on July 13, 2020 and the letter of recommendation was submitted to the Department in September 2020. The Southeastern Wisconsin Regional Planning Commission formally amended the Yorkville Sanitary District sanitary sewer service area as documented in SEWRPC Community Assistance Planning Report No. 337, in the manner shown on Map 2. The Wisconsin DNR approves of this amendment.

### **Amendment Details**

This amendment recommends a sewerage system including an upgraded wastewater treatment plant discharging to an unnamed tributary to Hoods Creek as the most cost-effective means for providing sanitary sewer service to the Village of Yorkville and environs; designates the Village of Yorkville as the management agency that would operate such an upgraded wastewater treatment plant; and identifies a planned sanitary sewer service area for the Yorkville Sewer Utility District No. 1.

As identified on Map 2, the area proposed by the Village of Yorkville adds about 356 acres to the sewer service area. The refined sewer service area encompasses a total of about 1,294 acres, including about 741 acres of existing (2015) developed land and existing street rights-of-way; about 140 acres of environmentally significant lands; and about 413 acres of agricultural and other open land. The expanded sewer service area encompasses 2.0 square miles, an increase of 356 acres (0.5 square miles), or 38 percent, over the currently approved sewer service area. The identified environmentally significant lands encompass about 140 acres, or 11 percent of the total sewer service area. Full buildout of this area will require an expanded plant capacity to be addressed in a future facilities planning process.

### **Yorkville Sanitary Sewer Service Area Refinement**

By letter dated December 9, 2019, the Village of Yorkville requested that SEWRPC undertake the refinement and detailing of the sanitary sewer service area tributary to the Yorkville Sewer Utility District No. 1 sewage treatment facility, as described in SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000.

dnr.wi.gov wisconsin.gov Naturally WISCONSIN



The refined sewer service area plan sets forth a proposed sanitary sewer service area for the Yorkville Sewer Utility District No. 1 and identifies environmentally significant lands within the proposed sewer service area, along with policies that prohibit or otherwise restrict the extension of sewers within such areas. In addition, the plan presents and evaluates alternative systems for wastewater conveyance and treatment for the Yorkville area and identifies a recommended system. It draws upon the cost-effectiveness analyses developed under alternatives prepared for the Yorkville sewer utility district. Finally, the plan requires that the Village of Yorkville undertake facility planning to address increased capacity needs prior to full sewer service area plan buildout.

### Cost-Effectiveness Analysis of Sewage Conveyance and Treatment Alternatives

Three alternatives for serving the refined sewer service area were evaluated by the Village of Yorkville and its consultant as part of their facility planning process as set forth in the draft document entitled "WWTP Facilities Plan, Yorkville Utility District No. 1, Village of Yorkville, WI", dated June 12, 2020, prepared by Short Elliott Hendrickson Inc. (SEH). The most cost effective option is considered Alternative 1, retaining and modifying the existing Yorkville plant to include construction of a new continuous flow sequencing batch rector (SBR) plant and grit removal system. The 20-year net present worth cost of this alternative would be approximately \$7M.

### **Wastewater Treatment Plant Capacity**

The new sewer service area, including developable lands within the current sewer service area, could accommodate an increase in population of about 130 people and add about 300 acres of new industrial/business park and commercial development under full development conditions. At full development, wastewater flows to the Village plant will exceed the current plant capacity and it will be necessary for the Village to initiate facility planning for a plant expansion sometime in the planning period prior to the wastewater flows exceeding the plant capacity.

### Statewide AWQM Plan Amendment

This amendment is a formal update to the state's Areawide Water Quality Management Plan and the Sanitary Sewer Service Area for the Village of Dousman and Environs, Waukesha County, Wisconsin, dated March 2007, as amended, and will be sent to the US Environmental Protection Agency to meet the requirements of the Clean Water Act of 1987 (Public Law 92-500 as amended by Public Law 95-217) and outlined in the federal regulations 40 CFR, Part 35. This review is an integrated analysis action under s. NR 150.20 (2) (a) 3, Wis. Adm. Code. By means of this review, the Department has complied with ch. NR 150, Wis. Adm. Code, and with s. 1.11, Stats. The approval of this sewer service area amendment does not constitute approval of any other required local, state, or federal permit for sewer construction or associated land development activities.

### Appeal Rights:

Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., a party has 30 days after the decision is mailed, or otherwise served by the Department, to file a petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Wis. Stats., a party has 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with section NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with section NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30-day period for filing a petition for judicial review.

Sincerely,

Timothy R. Asplund **Monitoring Section Chief Bureau of Water Quality** Division of Environmental Management

Lisa Helmuth, Water Resources Specialist, DNR Matthew Droese, Wastewater Engineer, DNR Andrew Dutcher, Facility Plan Review Engineer, DNR Bryan Hartsook, Southeast Region Wastewater Supervisor, DNR Marsha Burzynski, Southeast Region Water Resources Supervisor, DNR Charles Colman, Chairman, SEWRPC Joel Dietl, Chief Land Use Planner, SEWRPC