



**Public Facilities Needs Assessment**

**West Elderberry Neighborhood Sanitary Sewer Improvement  
Impact Fee District**

**June 15<sup>th</sup>, 2018**

## **Introduction**

Pursuant to the requirements of Wis. Stat. Sec. 66.0617(4), the City of Madison has prepared this public facilities needs assessment for certain sanitary sewer improvements for which impact fees may be imposed. Sanitary sewer improvements are necessary to accommodate land development within the Lower Badger Mill Creek watershed consistent with the Elderberry Neighborhood Development Plan. This work shall serve the area identified as the West Elderberry Neighborhood (WEN) Sanitary Sewer Improvement Impact Fee District (the “District”).

The WEN watershed is a developing watershed that is a subsection of the Lower Badger Mill Creek (LBMC) watershed both of which are part of the larger Upper Sugar River Watershed. The WEN is located on the far west side of Madison, and includes portions of land within the City of Madison and the Town of Middleton. With future development, the portion within the City of Madison is expected to expand. Per intermunicipal agreement with the Town of Middleton, Pioneer Road (extended north and south) shall be Madison’s ultimate boundary to the west. The watershed generally includes land from Old Sauk Road south to Mineral Point Road, and from Pioneer Road (extended) east to Schewe Road and Bear Claw Way. A map of the District is attached hereto as Exhibit A. It is anticipated that this area will continue to experience steady development, necessitating sanitary sewer improvements to accommodate the land development.

The City of Madison is proposing to extend and construct a new sanitary sewer interceptor as part of the proposed sanitary sewer improvements for this watershed in order to serve new development in the District. There is a proposed development on the east side of Pioneer Road 2700’ north of Mineral Point Road which requires the proposed sewer improvements in order to proceed. Exhibit B depicts the proposed improvements that are necessary to accommodate land development in the District, along with the existing sanitary sewer infrastructure.

The new sanitary sewer will be a branch off of the original infrastructure built with the LBMC Impact Fee and provide sanitary sewer service necessary for localized development within the District. This branch was not included as part of the improvements to be funded by the LBMC Impact Fee, although the District is within the boundaries of the LBMC Impact Fee District. Therefore, because development within the District necessitates the improvements to be funded by the WEN Sanitary Sewer Improvement Impact Fee, yet will also utilize the existing regional infrastructure already built with the LBMC District, the development in the District will be charged fees for both impact fee districts.

The WEN Sanitary Sewer Impact Fee District is being created to help finance these improvements for the watershed it serves, improvements which are necessary to accommodate land development within the District. As the WEN watershed develops, other nearby areas may require establishment of additional impact fee districts, depending on timing, location, and specific improvements needed for each development. Rather than funding these specific improvements over the entire LBMC watershed, they shall be funded by the specific properties being served by those localized improvements.

## **Location and Description of Impact Fee District**

The District shall include the following:

Any and all undeveloped parcels (platted and/or metes and bounds), or portions thereof, that are located within, or that are altered or pumped to discharge sewer outflow within the WEN Sanitary Sewer Improvement service area. These lands are located within the City of Madison and Town of Middleton as follows: Parts of the NE ¼ of Section 20, all of the SE ¼ of Section 20, and parts of the SW ¼ of Section 21, all within Town 7 North, Range 8 East, located in the Town of Middleton and the City of Madison. (See Exhibit A, attached.)

## **Existing Public Facilities**

Within the WEN Sanitary Sewer Impact Fee Zone, approximately 322.8 acres are undeveloped. It is assumed that 60% of this area (193.7 acres) shall be developed and will be assessed impact fees.

Presently, a 21-inch diameter sewer interceptor reaches the southern portion of the District on the north side of W Mineral Point Rd and drains to the City's Mid-Town Lift Station. The interceptor and lift station were built by the original Lower Badger Mill Creek Sanitary Impact Fee. The Mid-Town Lift Station currently connects to MMSD's 24-inch diameter sewer interceptor (Nine Springs Valley/ Midtown Ext.) at Mid-Town Road and County Highway M. MMSD's sewer interceptor will have adequate capacity until the Lower Badger Mill Creek Lift Station has reached its projected service limit.

MMSD plans to extend a sewer interceptor from Verona (MMSD's Lower Badger Mill Creek Interceptor) to relieve the City's lift station on Mid-Town Road (Mid-Town Lift Station) when it has exhausted its capacity.

## **New Public Facilities Required for Land Development**

Preliminarily, the City of Madison is proposing to extend new 10-, 12-, and 15-inch sanitary sewer interceptors to serve development in the District. Pipe sizes may be adjusted with final design plans. In general, the new sanitary sewer interceptors shall follow proposed or existing roads in order to ensure that the sewer can be easily serviced. In areas where road design is conceptual, the location is subject to change as plat plans are developed. In areas where the sewer will be installed before the road is built, the sewer will be built in a 30-ft wide sanitary sewer easement. Easement acquisition costs, including temporary construction easements, shall be included in the Impact Fee. In some areas, the location may change if necessary due to various currently unknown factors. See Exhibit B for the layout of the proposed sanitary sewer improvements.

The estimated capital costs associated with easement acquisition, planning, designing, permitting, and constructing the sanitary sewer improvements that are necessary to accommodate land development in the District are set forth in Exhibit C. These costs do not include expenses for operation or maintenance of the improvements following construction.

## **Project Funding**

To finance these sanitary sewer improvements, the City of Madison, pursuant to Wis. Stats. Sec. 66.0617(2), is proposing to amend Sec. 20.08 of the Madison General Ordinances to create an impact fee that will require developers to pay for the capital costs incurred by the City to make the sanitary sewer improvements needed to accommodate land development within the District. In the District, these costs would be associated with the installation of the sanitary interceptors, including costs for easement or fee acquisition, surveying, planning, design, permitting, and construction.

## **Impact Fee**

The impact fees shall be based on the *net developable* area of the proposed development. The net developable area is the area of a proposed development, exclusive of street rights of ways and drainage areas or Park areas. The rate will be the same for all land uses and zoning districts. It is assumed for this impact fee that 60% of the total undeveloped lands in the District would be included in the net developable areas. It is assumed that the remaining 40% will not be developed due to the use of lands for public purposes such as street rights of ways, public parks, public drainage land, and other public natural areas. Net acres of developed lands are the total area of land, excluding the street rights of way, that are already developed.

Properties that are undeveloped shall pay an impact fee at the time of development in accord with State Statutes and City Ordinance. The estimated total cost to complete the sanitary sewer interceptor and land acquisition components of the project is calculated to be \$921,923.96 (2018 dollars). The total estimated cost is divided by the net developable area (193.7 acres) within the District. The fee rate is calculated to be \$4,759.55 per acre, or \$109.26 per 1,000 square feet of Net Developed Area.

As noted above, properties within the District will be also be responsible for payment of impact fees related to the sewer improvements constructed as part of the Lower Badger Mill Creek impact fee as shown on Exhibit A. The LBMC impact fee includes the sewer interceptor improvements from Mid-Town Road to Mineral Point Road including the connection fees associated with connecting to the Mid-Town Lift Station until the lift station has reached the 1000 dwelling unit connection limit.

## **Sanitary Assessment and Connection Fees**

Lands within the District that are already developed may be charged with a sanitary assessment or a connection fee in the future at the time they connect to public sanitary sewer. The sanitary assessments and/or connection fees are based on the same rates developed as part of this impact fee. Until those properties connect to the public sewerage system, the Madison Sewer Utility shall pay the proportionate share for any developed properties that will/may contribute to the sewer system, but are not obligated to pay the impact fee as they have been previously developed at the time of creation of this impact fee district. If a property currently has an on-site sewerage disposal system in place, an assessment/connection fee for sanitary sewer improvements will be due at the actual time of connection to the sanitary sewer system. The assessment rate and connection fee was calculated to be \$4,759.55 per net acre. (They would incur additional assessments not included in this rate for the local main, lateral, etc.).

## **Adjustments to Impact Fee**

The WEN Sanitary Sewer Improvement Impact Fee and associated assessments and connection fees shall be adjusted annually for inflation, based on the Construction Cost Index as published in the *Engineering News Record*. The base month/year for calculating such adjustment shall be the month/year of final Common Council adoption of this Impact Fee Ordinance.

## **Effect of Sanitary Impact Fees on Housing Costs**

For each parcel within the District, development fees will include sanitary interceptor/land acquisition impact fees/assessments. The fees were estimated to be \$4,759.55 per net acre for sanitary interceptor (\$109.26 per 1,000 square feet of Net Developed Area). The effect on housing costs was also calculated, based on anticipated lot size and average housing densities for a variety of residential zones, including the two examples that follow. The current (2018) minimum lot size for TR-C3, single-family housing, is 3,000 square feet whereas the average city lot size is 0.25 acre (10,890 square feet). The City anticipates development in the WEN watershed will average 6,000 square feet. The additional cost incurred by new dwelling units in the District would be as follows:

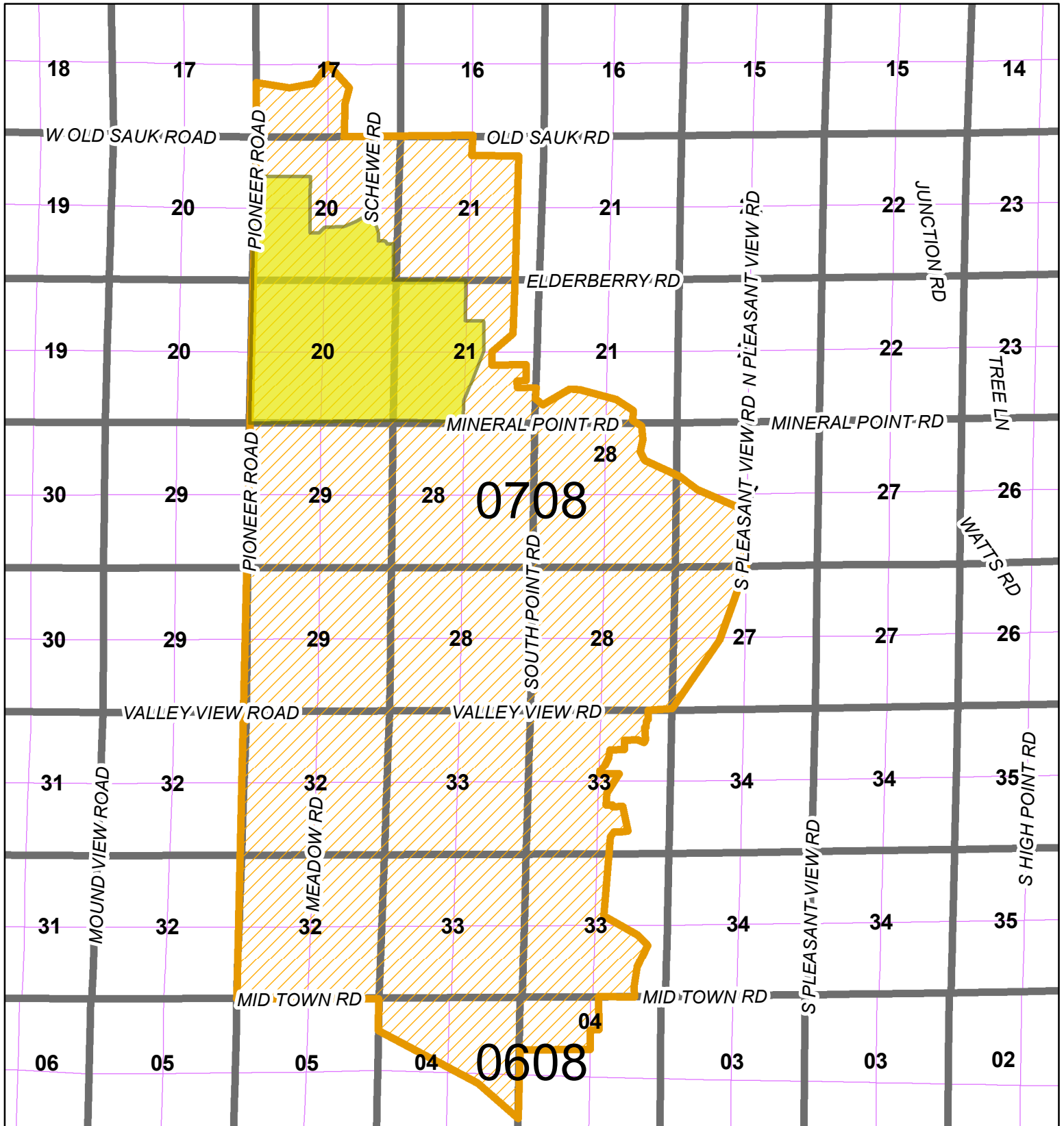
	<b>WEM Sanitary Impact Fees</b>	
<b>Size of Lot</b>	6000 ft <sup>2</sup>	.25 acre
<b>Additional Cost for New Dwelling Unit</b>	\$655.59	\$1,189.89



\*Note that other applicable Impact Fees would be applied separately

The City of Madison has over 119,196 existing dwelling units, many of which are affordable to a wide range of households. The City has prepared a Comprehensive Plan which includes objectives and policies to increase housing affordability within the City. This Plan builds on plans targeted specifically at providing affordable housing including the Comprehensive Housing Affordability Strategy, the Five Year Housing and Community Development (Consolidated) Plan and the Madison Community Development Authority's Public Housing Plans. The City has also worked to preserve the quality of its existing housing stock and to provide new housing and higher relative densities as one way to reduce the per unit cost of land and to increase the efficiency of service provided to housing which is built. Impact fees charged for new development in the City cover the provision of basic infrastructure and capital facilities that are a prerequisite for development in the areas covered by the fees. The amount of the fees is directly related to the need to provide capital facilities which are necessitated by and attributable to the benefitting development. These fees represent a small proportion of the total costs to provide housing when considering the cost of land, other infrastructure requirements, the cost to construct housing and financing. Hence, the cumulative effect of all the Impact Fees already imposed by the City of Madison, as well as the effect of the WEN Impact Fees, should not have a significant negative impact on the availability of affordable housing within the community.

# EXHIBIT A

## West Elderberry Neighborhood Sanitary Sewer Improvement Impact Fee District



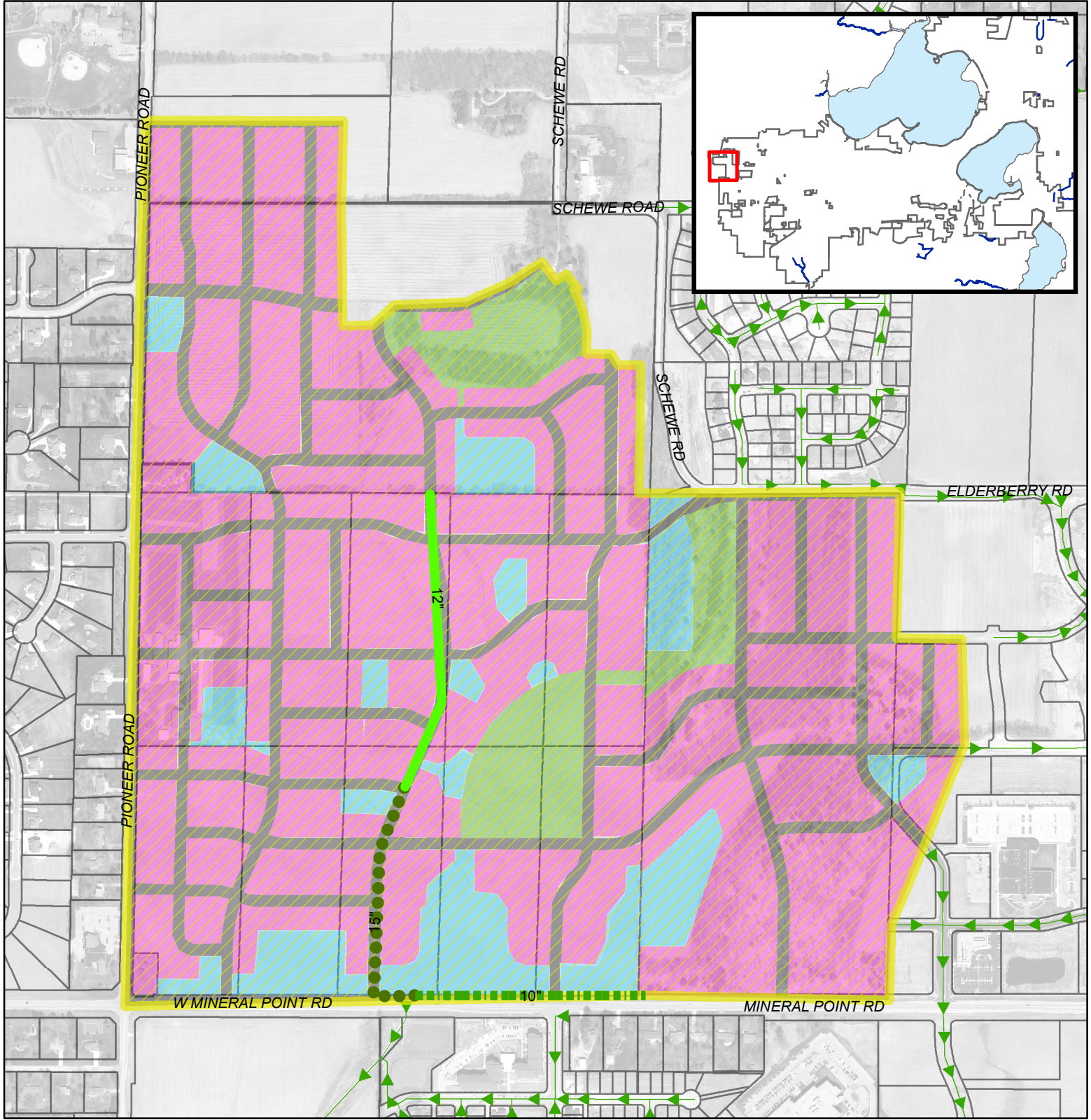
-  West Elderberry Neighborhood Sanitary Sewer Improvement Impact Fee District
-  LBMC Impact Fee (Regional)

0 1,000 2,000 4,000 Feet



# EXHIBIT B

## West Elderberry Neighborhood Sanitary Sewer Improvement Impact Fee District



<ul style="list-style-type: none"> <li> Sanitary Impact Fee District</li> <li> Parcel Boundaries</li> <li> Existing Sanitary Sewer</li> </ul>	<p><b>Proposed Sanitary Sewer</b></p> <ul style="list-style-type: none"> <li> 10" Diameter</li> <li> 12" Diameter</li> <li> 15" Diameter</li> </ul>	<p><b>Planned Landuse</b></p> <ul style="list-style-type: none"> <li> Developable</li> <li> Proposed Open Space</li> <li> Right of Way</li> <li> Utilities</li> </ul>	<p>N</p>
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0      487.5      975  
Feet

## EXHIBIT C

### West Elderberry Neighborhood Sanitary Sewer Improvement Impact Fee Cost

Item #	Item	Quantity	Unit	Unit Cost	Total Cost
10704	TRAFFIC CONTROL FOR SANITARY SEWER INSTALLATION	1	L.S.	\$10,000.00	\$10,000.00
10721	TRAFFIC CONTROL SIGN- PORTABLE CHANGEABLE MESSAGE BOARD	14	DAYS	\$125.00	\$1,750.00
10914	MOBILIZATION FOR SANITARY SEWER INSTALLATION	1	L.S.	\$20,000.00	\$20,000.00
20109	FINISH GRADING	1	L.S.	\$5,000.00	\$5,000.00
20217	CLEAR STONE 3"	500	Ton	\$15.00	\$7,500.00
20218	CRUSHED STONE (SEWER ACCESS ROADS)	1,272	Ton	\$14.00	\$17,814.72
21002	EROSION CONTROL INSPECTION	10	EACH	\$750.00	\$7,500.00
21011	CONSTRUCTION ENTRANCE	1	EACH	\$2,000.00	\$2,000.00
21013	STREET SWEEPING	1	L.S.	\$3,500.00	\$3,500.00
21022	SILT FENCE- PROVIDE- INSTALL & MAINTAIN	4049	L.F.	\$2.00	\$8,098.00
21023	SILT FENCE- PROVIDE- REMOVE AND RESTORE	4049	L.F.	\$0.50	\$2,024.50
21064	EROSION MATTING, CLASS 1, URBAN TYPE B ORGANIC	4,499	S.Y.	\$2.50	\$11,247.50
21014	CLEAR STONE BERM (DITCH CHECK)	10	EACH	\$300.00	\$3,000.00
50201	ROCK EXCAVATION	200	C.Y.	\$65.00	\$13,000.00
50202	TYPE II DEWATERING	1	L.S.	\$5,000.00	\$5,000.00
50212	SELECT BACKFILL FOR SANITARY SEWER	4049	T.F.	\$8.00	\$32,392.00
50227	UTILITY TRENCH Patch TYPE IV	20	T.F.	\$30.00	\$600.00
50302	10" PVC SANITARY SEWER	1184	L.F.	\$85.00	\$100,640.00
50303	12" PVC SANITARY SEWER	1546	L.F.	\$95.00	\$146,870.00
50305	15" PVC SANITARY SEWER	1319	L.F.	\$110.00	\$145,090.00
50701	4' DIAMETER SAS	3	EACH	\$5,000.00	\$15,000.00
50702	5' DIAMETER SAS	11	EACH	\$5,500.00	\$60,500.00
50979	EXTERNAL SEWER ACCESS STRUCTURE JOIN SEAL	5	EACH	\$500.00	\$2,500.00
90071	SALVAGE TOPSOIL	4049	T.F.	\$3.60	\$14,576.40
90072	TOPSOIL PLACEMENT-FARMLAND	2651	T.F.	\$7.00	\$18,557.00
90073	TOPSOIL PLACEMENT-GENERAL	1398	T.F.	\$3.00	\$4,194.00
90074	TERRACE SEEDING	1398	T.F.	\$2.25	\$3,145.50
90075	TEMPORARY SEEDING	2651	T.F.	\$2.00	\$5,302.00
<i>Subtotal</i>					<i>\$654,160.12</i>
Engineering & Contingencies at 20%					\$130,832.02
<b>Total</b>					<b>\$784,992.14</b>

<u>SANITARY LAND COST</u>					
	Length (ft)	Width (ft)	Total Acres	Cost/Acre	Total Cost
Easement Acquisition	2,651	30	1.83	\$75,000.00	\$136,931.82
<b>Total Land Costs</b>					<b>\$136,931.82</b>

**Total Sanitary Costs** **\$921,923.96**

Area Benefitting	322.8	Acres
Developable Area (60%)	193.7	Acres
Cost/ Acre	\$4,759.55	/Acre
Cost/ 1000 sf	\$109.26	/1000 sf