



## Public Facilities Needs Assessment

For the Elderberry Neighborhood  
Sanitary Sewer Improvement Impact Fee District

**August 27, 2008**

## **Introduction**

The City of Madison has prepared this public facilities needs assessment. Improvements to the public sanitary sewer system are required to facilitate well-planned development in a portion of the Elderberry Neighborhood Development Plan. This work is referred to as the Elderberry Neighborhood Sanitary Sewer Improvement Impact Fee District.

The Elderberry Neighborhood Development Plan was adopted in 2002 by the City of Madison to guide development. The area is located in the west area of the City of Madison and presently includes parts of the Town of Middleton (refer to the map in *Exhibit B*). The plan includes recommendations for lands to be reserved for parks, open space, and drainage based on existing topography and natural features.

The majority of the lands upstream of the proposed sanitary sewer are in the early stages of development planning with exception of the Woodstone plat, which is schedule to begin construction in the Fall of 2008. The developing lands will require connection to this public sewerage system. Where possible, these facilities are designed to function by gravity. To serve these lands, the sanitary sewer system needs to be extended from the intersection of Elderberry Road and Pleasant View Road south 1,094 ft on the west right of way of Pleasant View Road and then west thru the University owned lands for 2,632 ft. All of the work thru the University owned lands shall be completed within City-acquired easements.

## **Existing Public Facilities**

Currently, a 15" diameter City of Madison sanitary sewer interceptor exists on the west side of Pleasant View Road at the intersection of Elderberry Road with capacity to accept the additional projected service area.

## **New Public Facilities**

The improvements to the public sanitary sewer system consist of extending approximately 3,726 linear ft of 12" PVC sanitary sewer interceptor main and structures.

## **Impact Fees**

In order to finance the improvements, the City of Madison, pursuant to Wis. Stats. §66.0617(2), has passed an Impact Fee Ordinance (Chapter 20 of Madison Code of Ordinances) that can require fees to be paid by developers to compensate for the capital costs necessary to accommodate land development in unplatted areas. In areas already platted, special assessments shall be used to finance a proportionate share of the costs of this project. For the Elderberry Neighborhood Sanitary Sewer Interceptor Impact Fee District, there is an impact fee assessment for sanitary sewer interceptor improvements. There is no fee rate difference between platted and unplatted areas.

## **Adjustments to Impact Fee**

The impact fee shall be adjusted annually for inflation, based on the Construction Cost Index as published in the *Engineering News Record* (<http://enr.construction.com/>). The base month/year for calculating such adjustment shall be the month/year of final Common Council adoption of this Impact Fee Ordinance.

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

Any and all parcels (platted and/or metes and bounds), or portions thereof, that reside within, or is altered or pumped to discharge within the service areas defined in *Exhibit B*. These lands are located within the City of Madison and Town of Middleton as follows:

Parts of the South ½ of Section 21 and parts of the southwest ¼ of Section 22, Town 7 North, Range 8 East in the Town of Middleton and the City of Madison.

### **Effect of impact fees on housing costs**

The total estimated cost for the sanitary sewer extension is \$789,644.33, which includes an additional 10% for engineering and 10% contingency. The final cost for the sanitary sewer interceptor shall include sanitary pipe, backfill, structures, trench patches, and all related incidental costs.

The Elderberry Neighborhood is 244.5 acres. There are 3.86 acres of existing right-of-way, and 13.20 acres of developed parcels. It is estimated that 65% of the remaining 227.44 acres shall be developed with the other 35% dedicated to open space and right of way. This leaves 147.84 acres of developable land.

For new development, sanitary impact fees are estimated to be \$4,908.74 per net acre, or \$112.69 per 1,000 square feet, in accordance with Exhibit A. The effect on housing was calculated for several residential densities. A single-family, R2Z-zoned 3,500 sq ft lot, would incur an additional \$394.41 in impact fees. A 10,000 sq ft lot would have an additional \$1,126.89. A medium-density, multi-family development in an R-4 general residential district would see an average of \$225.38 per unit.

**Sanitary Main Cost**

Item #		Quantity	Unit	Unit Cost	Total Cost
10704	Traffic Control for Sanitary Sewer Installation	1	L.S.	\$5,000.00	\$5,000.00
10914	Mobilization for Sanitary Sewer Installation	1	L.S.	\$10,000.00	\$10,000.00
20109	Finish Grading	1	L.S.	\$5,000.00	\$5,000.00
20217	Crushed Stone (Sewer Access Road UW property)	2,139	Ton	\$10.00	\$21,390.00
20218	Clear Stone 3"	300	Ton	\$15.00	\$4,500.00
20303	Sawcut Bituminous Pavement	1,000	L.F.	\$3.00	\$3,000.00
21001	Silt Fence Complete	3726	L.F.	\$2.00	\$7,452.00
21004	Erosion Matting, Class 1, Type B	4,140	S.Y.	\$2.50	\$10,350.00
21012	Erosion Bales Complete	30	Each	\$10.00	\$300.00
21013	Clear Stone Berm for Erosion Control	10	Each	\$300.00	\$3,000.00
21014	Construction Entrance	2	Each	\$2,000.00	\$4,000.00
21021	Terrace Restoration	3726	T.F.	\$5.00	\$18,630.00
40101	4-Inch Crushed Aggregate Base Course (Gradation #1)	480	Ton	\$9.00	\$4,320.00
40102	6-Inch Crushed Aggregate Base Course (Gradation #2)	720	Ton	\$9.00	\$6,480.00
40203	HMA Pavement Type E-1 Binder	210	Ton	\$45.00	\$9,450.00
40203	HMA Pavement Type E-1 Surface	210	Ton	\$45.00	\$9,450.00
50201	Rock Excavation	300	C.Y.	\$75.00	\$22,500.00
50212	Select Backfill for Sanitary Sewer	3726	T.F.	\$13.00	\$48,438.00
50303	12" PVC Sanitary Sewer SDR-26	3726	L.F.	\$90.00	\$335,340.00
50390	Sewer Electronic Markers	1	Each	\$20.00	\$20.00
50701	4' Diameter SAS	12	Each	\$2,500.00	\$30,000.00
50771	Internal Chimney Seal	8	Each	\$400.00	\$3,200.00
50791	Sanitary Sewer Tap	2	Each	\$750.00	\$1,500.00
50801	Utility Line Opening (undistributed)	2	Each	\$500.00	\$1,000.00
90070	Remove and Replace Fence	1	L.S.	\$1,000.00	\$1,000.00

SUBTOTAL		<b>\$565,320.00</b>
ENG/CONT	20%	\$113,064.00
<b>Phase 2 subtotal (Const) =</b>		<b>\$678,384.00</b>

**Sanitary Easements**

**Descriptions**

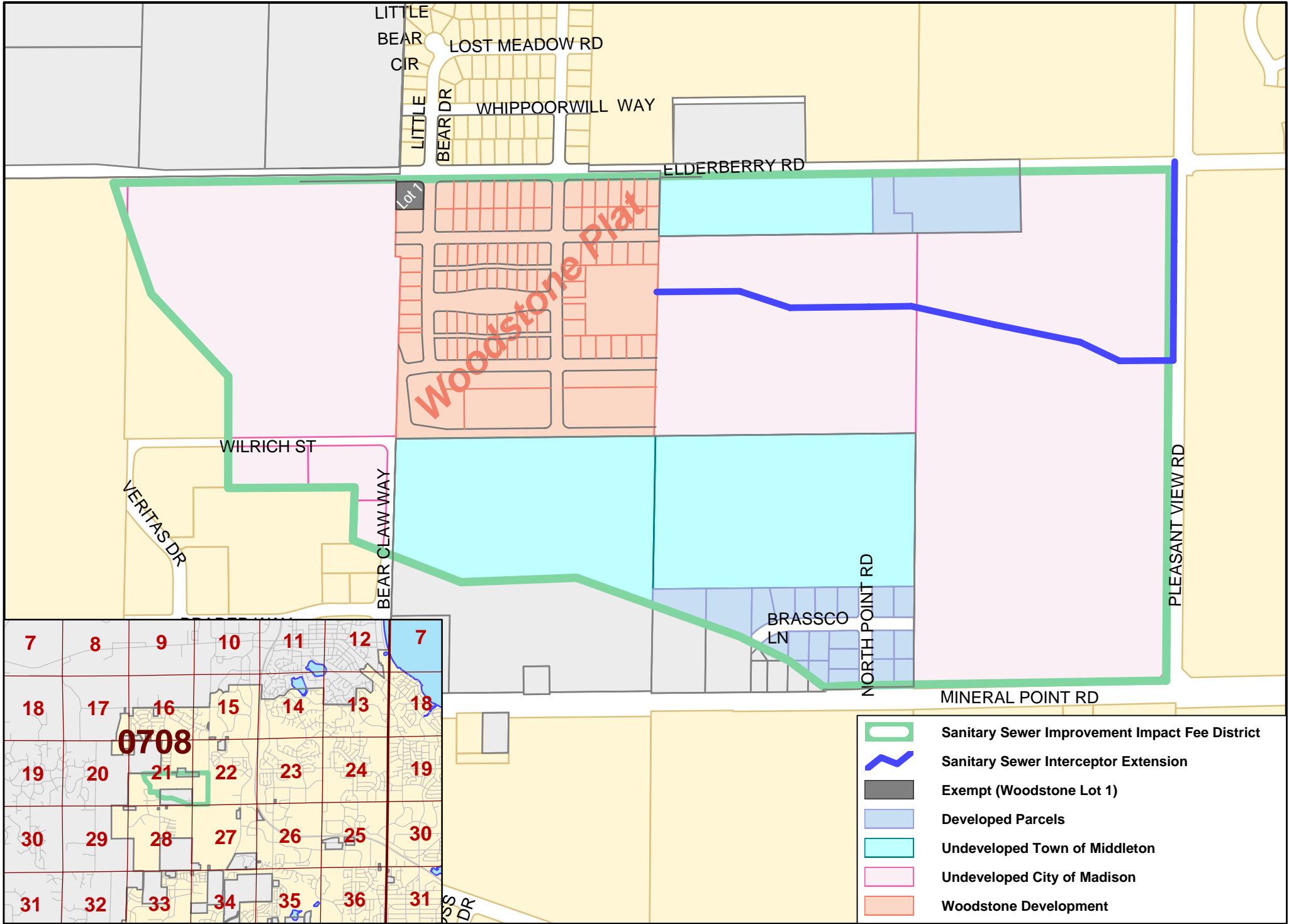
EASEMENT ACQUISITION 12" MAIN (Real Estate Costs)	2632	20	\$	<b>2,500.00</b>
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
**Land Cost**

EASEMENT ACQUISITION 12" MAIN	<u>LENGTH</u> 2632	<u>WIDTH</u> 20	\$	<b>108,760.33</b>
<b>Phase 2 Total =</b>				<b>\$789,644.33</b>

	Total Acres	% developable	Net Acres
<b>Total developed</b>	13.2	100%	13.2
<b>Total undeveloped</b>	189.04	65%	122.88
<b>Woodstone Plat</b>	38.4	65.68%	25.22
<b>Woodstone Lot 1 (exempt)</b>	0.432	0%	0.432
<b>Net developable</b>			<b>160.87</b>
<b>Total cost</b>			<b>\$789,644.33</b>
<b>Cost per acre</b>			<b>\$4,908.74</b>

# ELDERBERRY NEIGHBORHOOD - SANITARY SEWER IMPROVEMENT IMPACT FEE DISTRICT



-  Sanitary Sewer Improvement Impact Fee District
-  Sanitary Sewer Interceptor Extension
-  Exempt (Woodstone Lot 1)
-  Developed Parcels
-  Undeveloped Town of Middleton
-  Undeveloped City of Madison
-  Woodstone Development