WATER & SEWER COMMISSION MEETING

Wednesday September 9, 2026 – 4:00 PM

In the Council Chambers at City Hall

75 N Bonson St, Platteville, WI 53818

AGENDA

1. **Call to Order**

2. **Citizens' Comments, Observations and Petitions, if any.**
   (Please limit comments to no more than five minutes)

3. **Consideration of Consent Agenda** – The following items may be approved on a single motion and vote due to their routine nature or previous discussion. Please indicate to the Commission President if you would prefer separate discussion and action.

   - Minutes – August 12, 2026
   - Financial Reports – August 2026
   - Bank Reconciliation & Investments Report – August 2026
   - Payment of Bills – 8/20-9/2/2026
   - Water Quality/Flushing Report – August 2026

Action Items

Items of Discussion

4. Additional warranty for the bowl assembly of well #6
5. Well #7 Siting Study

Adjournment

If your attendance requires **special accommodation needs,** write or call the Water and Sewer Office, P.O. Box 780, Platteville, Wisconsin 53818, (608) 348.1822; for TDD accessibility, call (608) 348.2313.

MEMBERS: If you are unable to attend, please email Renee Weaver weaverr@platteville.org

****Due to the holiday and the timing of the calendar, the items marked with an asterisk will be provided at the meeting.***

AGENDA

WATER & SEWER COMMISSION MEETING
Wednesday August 12, 2026
4:00 PM

Water and Sewer Commission President Martens called the regular meeting of the City of Platteville Water and Sewer Commission to order on Wednesday, August 12 at 4:00 p.m.

W/S Commission members present: Cindy Martens, Michael Knautz, Brian Whisenant, Jim Schneller, Steven Badger, and Barb Daus.
W/S Commission members excused/absent: Dr. JoAnne Wilson
Staff present: Public Works Director – Howard Crofoot, Administration Director – Nicola Maurer, Assistant Director of Public Works/Utility Superintendent – Ryan Kowalski, Accounting & Finance Manager – Renee Weaver
City Staff excused/absent: none.
Public present – Ivy McKernan

1. **Citizens' Comments –** Ivy McKernan appeared to discuss fluoridation of drinking water in Platteville and to make the Commission aware of a lawsuit regarding this topic.
2. **Consent Agenda** was presented for consideration. **Motion by Daus, second by Knautz, to approve the Consent Agenda:** July 8 Regular Minutes, July 2026 financial reports and payment of bills, July 2026 Water Quality/Flushing report. **Motion carried.**

ACTION ITEMS:

3. Assistant Director of Public Works Kowalski stated that the current Variable Frequency Drive (VFD) in well #5 has not been working properly. There have been communication issues between the well and the VFD and two of the three fans are not working, resulting in alarms. The VFD is used to slowly ramp up the motor to start filling up the water tower in the industrial park and feed water into the system. The lead time for Energencs is four to six weeks. Daus made a motion to approve the replacement of Well #5 VFD at a cost not to exceed $50,000.00 from either using debt proceeds or cash reserves, second by Badger. **Motion carried.**

DISCUSSION ITEMS:

2026 Water and Sewer Revenue Bonds – Director of Administration Maurer gave a report from Ehler's regarding the sale of the bonds will be issued on August 11th . The City of Platteville maintains a rating of "AA-" by the S&P. There were five bidders and a strong response to the sale. The closing date is September 2, 2026.

Adjournment: Motion by Daus, seconded by Badger, to adjourn. Motion carried.
Meeting adjourned at 4:37 p.m.

Respectfully Submitted,
Renee Weaver
Accounting & Finance Manager

PLATTEVILLE WATER AND SEWER COMMISSION

FINANCIAL REPORT

AUGUST 31, 2026

CITY OF PLATTEVILLE

SUMMARY REVENUES COMPARED TO BUDGET
FOR THE 8 MONTHS ENDING AUGUST 31, 2026

FUND 600 - WATER & SEWER FUND

	PERIOD ACTU	YTD ACTUAL	BUDGET	UNEARNED	PCNT
REVENUES					
WATER DEPARTMENT					
INTEREST INCOME	4,882.54	39,244.45	86,600.00	(47,355.55)	45.32
NON-OPERATING INCOME					
WATER SALES REVENUE	224,023.39	1,613,110.02	2,645,900.00	(1,032,789.98)	60.97
MISCELLANEOUS REVENUE	9,234.12	87,950.23	138,396.00	(50,445.77)	63.55
TOTAL WATER REVENUE	238,140.05	1,740,304.70	2,870,896.00	(1,130,591.30)	60.62
SEWER DEPARTMENT					
INTEREST INCOME	20,026.01	139,381.87	232,800.00	(93,418.13)	59.87
NON-OPERATING INCOME	22,500.00	22,500.00	.00	22,500.00	.00
SEWER SALES REVENUE	261,244.82	1,747,201.20	3,520,300.00	(1,773,098.80)	49.63
MISCELLANEOUS REVENUE	660.59	5,223.57	19,600.00	(14,376.43)	26.65
TOTAL SEWER REVENUE	304,431.42	1,914,306.64	3,772,700.00	(1,858,393.36)	50.74
TOTAL FUND REVENUE	542,571.47	3,654,611.34	6,643,596.00	(2,988,984.66)	55.01

CITY OF PLATTEVILLE

SUMMARY EXPENDITURES COMPARED TO BUDGET
FOR THE 8 MONTHS ENDING AUGUST 31, 2026

FUND 600 - WATER & SEWER FUND

	PERIOD ACTU	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
EXPENDITURES					
WATER DEPARTMENT					
DEPRECIATION					
TAXES	2,240.94	19,989.81	387,000.00	367,010.19	5.17
BONDS / LOANS PRINCIPAL	.00	.00	817,940.00	817,940.00	.00
LONG TERM DEBT	.00	89,703.18	232,034.00	142,330.82	38.66
DEBT DISCOUNTS	.00	.00	30,000.00	30,000.00	.00
DEBT TO MUNICIPALITY INTEREST					
PUMPING SUPERVISION	822.07	6,768.32	11,300.00	4,531.68	59.90
ELECTRICITY	11,352.56	82,688.38	125,400.00	42,711.62	65.94
PUMPING	830.92	6,284.57	16,000.00	9,715.43	39.28
PUMPING MISCELLANEOUS	2,211.68	10,165.09	48,300.00	38,134.91	21.05
MAINTENANCE SUPERVISION	822.07	6,768.32	12,000.00	5,231.68	56.40
MAINTENANCE OF STRUCTURES	90.51	3,970.85	12,000.00	8,029.15	33.09
MAINTENANCE OF POWER EQUIP	301.62	2,260.19	11,000.00	8,739.81	20.55
MAINTENANCE OF PUMPING EQUIP	.00	918.53	26,700.00	25,781.47	3.44
WATER TREATMENT SUPERVISION	822.07	6,768.32	11,300.00	4,531.68	59.90
CHEMICALS	32.00	13,258.22	49,900.00	36,641.78	26.57
TREATMENT	7,540.22	66,966.30	72,400.00	5,433.70	92.49
MISCELLANEOUS TREATMENT	203.33	284.66	300.00	15.34	94.89
WATER TREATMENT	822.07	6,768.32	11,300.00	4,531.68	59.90
MAINT OF STRUCTURE IMPR	409.19	18,136.23	53,000.00	34,863.77	34.22
MAINT OF WATER TREATMENT EQUI	.00	3,057.26	10,500.00	7,442.74	29.12
OPERATIONS	822.81	6,774.35	11,300.00	4,525.65	59.95
STORAGE FACILITIES	.00	.00	700.00	700.00	.00
TRANSMISSION & DISTRIBUTION	.00	2,262.64	2,900.00	637.36	78.02
METERS	1,625.91	18,411.20	5,900.00	(12,511.20)	312.05
CUSTOMER INSTALLATION	930.24	5,206.23	21,600.00	16,393.77	24.10
MISCELLANEOUS	2,350.42	28,314.09	45,000.00	16,685.91	62.92
MAINTENANCE	823.41	6,779.03	11,300.00	4,520.97	59.99
MAINT OF RESERVOIR/TOWER	844.00	1,280.91	36,000.00	34,719.09	3.56
MAINTENANCE OF MAINS	3,330.08	46,527.10	85,200.00	38,672.90	54.61
MAINTENANCE OF SERVICES	1,132.39	11,176.74	25,000.00	13,823.26	44.71
MAINTENANCE OF METERS	581.40	5,251.41	9,800.00	4,548.59	53.59
MAINTENANCE OF HYDRANTS	317.16	24,385.16	19,600.00	(4,785.16)	124.41
MAINTENANCE OF OTHER PLANT	345.00	1,098.33	2,700.00	1,601.67	40.68
TRANSPORTATION-VEHICLE LEASE	2,437.03	19,556.43	29,900.00	10,343.57	65.41
CUSTOMER ACCOUNTS	823.41	6,779.03	11,300.00	4,520.97	59.99
METER READING	465.12	3,873.53	4,300.00	426.47	90.08
CUSTOMER COLLECTIONS	3,191.31	29,900.68	55,400.00	25,499.32	53.97
UNCOLLECTIBLE ACCOUNTS					
ADMINISTRATIVE & GENERAL	7,593.09	54,875.00	95,836.00	40,961.00	57.26
OFFICE SUPPLIES & EXPENSE	382.23	5,554.39	13,400.00	7,845.61	41.45
OUTSIDE SERVICES EMPLOYED	8,424.39	46,776.06	39,100.00	(7,676.06)	119.63
PROPERTY INSURANCE	.00	18,779.25	16,600.00	(2,179.25)	113.13
INJURIES & DAMAGES	.00	7,024.50	5,000.00	(2,024.50)	140.49
EMPLOYEE BENEFITS	13,090.42	128,476.23	166,900.00	38,423.77	76.98
REGULATORY COMMISSION EXP	.00	.00	100.00	100.00	.00
MISCELLANEOUS GENERAL	285.14	1,357.87	11,900.00	10,542.13	11.41
RENT EXPENSE	90.00	720.00	1,300.00	580.00	55.38
MAINTENANCE OF GENERAL PLANT					
TRANSPORTATION CLEARING	482.59	10,377.86	.00	(10,377.86)	.00

CITY OF PLATTEVILLE

SUMMARY EXPENDITURES COMPARED TO BUDGET
FOR THE 8 MONTHS ENDING AUGUST 31, 2026

FUND 600 - WATER & SEWER FUND

	PERIOD ACTU	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
STORM DAMAGE REPAIR-WATER	.00	397.00	.00	(397.00)	.00
TOTAL WATER DEPARTMENT	78,868.80	836,671.57	2,666,410.00	1,829,738.43	31.38

CITY OF PLATTEVILLE

SUMMARY EXPENDITURES COMPARED TO BUDGET
FOR THE 8 MONTHS ENDING AUGUST 31, 2026

FUND 600 - WATER & SEWER FUND

	PERIOD ACTU	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
SEWER DEPARTMENT					
DEPRECIATION EXPENSE					
TAX EXPENSE	2,953.30	25,651.04	58,000.00	32,348.96	44.23
SEWER TAPS EXPENSE					
BONDS / LOANS PRINCIPAL	.00	.00	780,955.00	780,955.00	.00
LONG TERM DEBT	.00	127,128.85	382,561.00	255,432.15	33.23
DEBT DISCOUNTS	.00	.00	(90,000.00)	(90,000.00)	.00
DEBT TO MUNICIPALITY INTEREST					
SUPERVISION & LABOR	21,482.47	177,569.20	273,500.00	95,930.80	64.92
PUMPING & HEAT/LIGHTS	5,974.14	45,603.91	71,800.00	26,196.09	63.52
AERIATION EQUIPMENT	3,574.22	19,677.27	29,400.00	9,722.73	66.93
CHLORINE	.00	5,483.19	8,000.00	2,516.81	68.54
PHOSPHORUS	11,130.39	60,530.91	182,000.00	121,469.09	33.26
SLUDGE CHEMICALS	.00	15,088.63	33,500.00	18,411.37	45.04
OTHER CHEMICALS	5,803.92	69,708.07	88,000.00	18,291.93	79.21
SUPPLIES	17.48	10,691.93	12,500.00	1,808.07	85.54
TRANSPORTATION	2,406.17	30,349.41	42,300.00	11,950.59	71.75
MAINT OF SEWER COLLECTION	1,038.13	12,974.77	54,400.00	41,425.23	23.85
MAINTENANCE OF LIFT STATIONS	105.72	13,493.82	20,100.00	6,606.18	67.13
MAINTENANCE OF TREATMENT PLAN	2,758.54	63,457.22	78,100.00	14,642.78	81.25
MAINTENANCE OF BLDGS & GROUND	2,595.34	24,319.18	67,400.00	43,080.82	36.08
BILLING, COLLECTING, ACCTG	3,219.75	29,961.85	53,266.00	23,304.15	56.25
METER READING	465.12	3,873.53	4,300.00	426.47	90.08
UNCOLLECTIBLE ACCOUNTS	.00	.00	100.00	100.00	.00
ADMINISTRATION & OFFICE WAGES	7,593.08	54,875.24	95,900.00	41,024.76	57.22
OPERATING EXPENSES	545.03	5,540.49	20,300.00	14,759.51	27.29
OUTSIDE SERVICES	2,545.62	18,132.07	40,900.00	22,767.93	44.33
INSURANCE	.00	53,840.25	48,700.00	(5,140.25)	110.55
EMPLOYEE BENEFITS	18,229.18	178,461.27	238,900.00	60,438.73	74.70
COMMISSION EXPENSE	.00	.00	5,200.00	5,200.00	.00
MISCELLANEOUS EXPENSE	3,016.52	30,216.05	48,300.00	18,083.95	62.56
RENT EXPENSE	90.00	720.00	10,200.00	9,480.00	7.06
TOTAL SEWER DEPARTMENT	95,544.12	1,077,348.15	2,658,582.00	1,581,233.85	40.52
TOTAL FUND EXPENDITURES	174,412.92	1,914,019.72	5,324,992.00	3,410,972.28	35.94
NET REVENUE OVER EXPENDITURES	368,158.55	1,740,591.62	1,318,604.00	421,987.62	132.00

BANK RECONCILIATION AND STATEMENT OF INVESTMENTS
AUGUST 2026

BANK ACCOUNTS	TREASURERS BALANCE July	RECEIPTS	DISBURSEMENTS	TREASURERS BALANCE August	OUTSTANDING DEPOSITS	OUTSTANDING CHECKS	ADJ	BANK BALANCE August
CITY CASH	$ (2,013,154.33)	$ 3,481,092.94	$ 3,588,330.27	$ (2,120,391.66)	$ 315.99	$ 278,620.01		$ (1,842,087.64)
W/S CASH	$ 2,333,500.59	$ 504,851.39	$ 500,117.37	$ 2,338,234.61	$ 7,547.50	$ 5,603.42		$ 2,336,290.53
TOTAL	$ 320,346.26	$ 3,985,944.33	$ 4,088,447.64	$ 217,842.95	$ 7,863.49	$ 284,223.43	$ -	$ 494,202.89

INVESTMENTS

WATER AND SEWER INVESTMENTS:

CD-Heartland Credit Union	$ 251,089.60	Holding-W&S CD
CD-Heartland Credit Union	$ 25.00	Savings Acct - Membership
CD-Community First Bank	$ 264,072.38	Repl.-Sewer CD
State Investment (LGIP) #3	$ 3,650,975.25	Sewer Replacement
State Investment (LGIP) #6	$ 934,464.09	W/S Operating Fund (Bond depr fund)
State Investment (LGIP) #12	$ 1,030.09	W/S 2024C Bond
State Investment (LGIP) #13	$ 1,025,377.32	W/S Depr Fund (restricted)
State Investment (LGIP) #14	$ 1,546,245.18	W/S Debt Service Reserve
State Investment (LGIP) #16	$ -	W/S 2022B Bond
Ehler's Investments #3	$ 309,032.93	Sewer Replacement
Ehler's Investments #14	$ 265,737.95	W/S Debt Service Reserve

Respectfully Submitted,
Renee Weaver
Accounting & Finance Manager

CITY OF PLATTEVILLE | Check Register - Water/Sewer Bank 1 | Page: 1
Check Issue Dates: 8/20/2026 - 9/2/2026 | Sep 02, 2026 03:49PM

GL Period	Check Issue Date	Check Number	Payee	Amount	
08/28/2026					
08/26	08/28/2026	11911	CARDMEMBER SERVICE	830.44	M
08/26	08/28/2026	80524	CENTURYLINK	322.70	
Total 08/28/2026:				1,153.14	
09/02/2026					
09/26	09/02/2026	11912	COMELEC INTERNET SERVICES LLC	78.03	M
09/26	09/02/2026	11914	ALLEGIANT OIL LLC	2,615.82	
09/26	09/02/2026	11915	AXLEY BRYNELSON LLP	688.80	
09/26	09/02/2026	11922	DAVY LABORATORIES	661.00	
09/26	09/02/2026	11923	DELTA 3 ENGINEERING INC	11,311.25	
09/26	09/02/2026	11925	DUBUQUE HOSE & HYDRAULIC	18.03	
09/26	09/02/2026	11926	EHLERS INVESTMENT PARTNERS LL	121.33	
09/26	09/02/2026	11927	EVOQUA WATER TECHNOLOGIES LLC	2,499.04	
09/26	09/02/2026	11928	HAWKINS INC	7,506.20	
09/26	09/02/2026	11929	HERMSEN HARDWARE PLATTEVILLE	22.32	
09/26	09/02/2026	11931	IVERSON CONSTRUCTION INC	423.66	
09/26	09/02/2026	11932	J & R SUPPLY INC	6,192.91	
09/26	09/02/2026	11935	MENARDS	134.36	
09/26	09/02/2026	11939	MUNICIPAL WELL & PUMP	36,020.00	
09/26	09/02/2026	11941	NAPA AUTO PARTS	163.98	
09/26	09/02/2026	11942	OREILLY AUTO PARTS	138.90	
09/26	09/02/2026	11946	PRIMADATA LLC - POSTAGE	2,059.07	
09/26	09/02/2026	11947	PRIMADATA LLC - SERVICE	507.61	
09/26	09/02/2026	80528	ALLIANT ENERGY/WP&L	14,997.72	
09/26	09/02/2026	80529	AMAZON CAPITAL SERVICES	34.95	
09/26	09/02/2026	80538	CORNERSTONE RESTORATION LLC	132,839.37	
09/26	09/02/2026	80542	FIRST SUPPLY LLC-DUBUQUE	2,342.06	
09/26	09/02/2026	80548	KRONE AMERICA	33.99	
09/26	09/02/2026	80552	MCNETT ELECTRIC INC	968.37	
09/26	09/02/2026	80553	MZ CONSTRUCTION INC	55,030.65	
09/26	09/02/2026	80566	SOUTHWEST HEALTH CENTER	170.30	
09/26	09/02/2026	80567	SOUTHWEST WI WATER OPERATORS	100.00	
09/26	09/02/2026	80568	TEMPERLEY EXCAVATING INC	52,722.00	
Total 09/02/2026:				330,401.72	
Grand Totals:				331,554.86	

M = Manual Check, V = Void Check

July 2026

Water Quality Complaints

Date	Address	Complaint	Action	Gallons
7/1/2026	Hydrant # 256	low pressure	Flushed	4,000

Flushing Report

Date	Location	Chlorine	Condition	Gallons
7/1-7/31	(Auto Flusher #1) Hyrdrant # 400			14,400
7/1-7/31	(Auto Flusher #2) Hyrdrant # 100			14,400
7/7/2026	Hydrants # 245		Clear	4,000
7/7/2026	Hydrant # 335	0.10 - 0.33	Clear	7,500
7/7/2026	Hydrant # 620	0.59 - 0.51	Cloudy to clear	6,000
7/7/2026	Hydrant # 647	0.14 - 0.34	Clear	6,000
7/13/2026	Hydrant # 303	0.46 - 0.38	Clear	9,000
7/7/2026	Hydrant # 500	0.14 - 0.34	Clear	7,500
7/13/2026	Hydrant # 427	0.14 - 0.38	Cloudy to clear	7,500
7/13/2026	Hydrant # 626	0.46 - 0.48	Clear	6,000
7/13/2026	Hydrant # 267	0.14 - 0.41	Clear	9,000
7/13/2026	Hydrant # 423	0.11 - 0.24	Clear	7,500
7/13/2026	Hydrant # 192	0.04 - 0.24	Clear	7,500
7/14/2026	Hydrant # 245	0.25 - 0.58	Clear	3,000
7/14/2026	Hydrant # 337	0.48 - 0.34	Clear	3,000
7/15/2026	Hydrant # 250	0.55 - 0.24	Brown to clear	4,500
7/15/2026	Hydrant # 174	0.36 - 0.29	Cloudy to clear	4,500
7/21/2026	Hydrant # 562	0.14 - 0.31	Clear	9,000
7/21/2026	Hydrant # 607	0.22 - 0.30	Brown to clear	7,500
7/21/2026	Hydrant # 196	0.11 - 0.24	Clear	9,000
7/21/2026	Hydrant # 569	0.10 - 0.40	Clear	7,500
7/22/2026	Hydrant # 602	0.06 - 0.23	Clear	7,500
7/22/2026	Hydrant # 597	0.07 - 0.27	Clear	9,000

7/22/2026	Hydrant # 432	0.41 - 0.20	Clear	7,500
7/28/2026	Hydrant # 335	0.35 - 0.48	Clear	4,500
7/28/2026	Hydrant # 419	0.32 - 0.45	Clear	7,500
7/28/2026	Hydrants # 195	0.03 - 0.37	Clear	6,000
7/28/2026	Hydrants # 193	0.14 - 0.27	Brown to clear	4,500
	16 Days x 3/day x 300 Gal/min = formula			
Main Breaks				
Date	**Location**			**Gallons**
7/15/2026	927 Eila Drive			10,000
			Total	214,800

August 19, 2026

City of Platteville
Attn: Ryan Kowalski
75 North Bonson St
Platteville, WI 53818-0780

Re: Well #6 Bowl Assembly Warranty Extension

Ryan,

Municipal Well & Pump would like to provide written confirmation that we are extending the one-year warranty on the bowl assembly for an additional one year due to the issues that occurred during shipping.

This extension will provide a total warranty period of two years on the bowl assembly.

We would also like to clarify that Municipal Well & Pump has no concerns regarding the performance or operation of the bowl assembly. The additional warranty is being extended in consideration of the shipping-related issues and to provide the City with additional peace of mind.

We appreciate the City of Platteville's business and the opportunity to continue working with you. Please feel free to contact us with any questions regarding this warranty extension.

Sincerely,

Ross Griffin

Project Manager
Municipal Well & Pump
563-543-5803

Report for

City of Platteville, Wisconsin

Well No. 7 Well Siting Study

Prepared by:

STRAND ASSOCIATES, INC.®
910 West Wingra Drive
Madison, WI 53715
www.strand.com

August 2026

STRAND ASSOCIATES®
*Excellence in Engineering*SM

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or Following

APPENDICES

SECTION 1
INTRODUCTION

1.01 INTRODUCTION

The City of Platteville (City) is looking to construct a new water supply well and treatment facility to replace the existing aging Davison Plant and Well No. 3.

The purpose of this Well Siting Study (Study) is to size a well, determine recommended well and treatment facility construction, and identify a location for the well and treatment facility based on known sources of potential contamination, code-related setback distances, local geology, and water quality.

This Study evaluates three potential site locations for the proposed well and treatment facility selected by Platteville Water and Sewer Utility (Utility) staff. The items evaluated here are mandated in NR 811 of the Wisconsin Administrative Code (WAC) for the siting of new public water supply wells in the State of Wisconsin (Wisconsin). This document is a necessary first step in the well design and construction process.

1.02 ABBREVIATIONS AND DEFINITIONS

AST	aboveground storage tank
BRRTS	Bureau of Remediation and Redevelopment Tracking Services
City	City of Platteville, Wisconsin
DATCP	Department of Agriculture, Trade, and Consumer Protection
FEMA	Federal Emergency Management Agency
ft	feet
gal	gallons
gpcd	gallons per capita day
gpd	gallons per day
gpm	gallons per minute
LUST	leaking underground storage tank
MGD	million gallons per day
MGY	million gallons per year
MSL	mean sea level
NAR	No Action Required
OPC	Opinion of Probable Cost
RCRA	Resource Conservation and Recovery Act
U.S.	United States
USEPA	United States Environmental Protection Agency
USGS	United States Geologic Survey
UST	underground storage tank
Utility	Platteville Water and Sewer Utility
WAC	Wisconsin Administrative Code
WDNR	Wisconsin Department of Natural Resources
WEGS Reports	Water, Electric, Gas, and Sewer Annual Reports
Wisconsin	State of Wisconsin
WTP	water treatment plant
WWTP	wastewater treatment plant

ZOI	zone of influence

SECTION 2
ENGINEERING REPORT DATA

2.01 SUMMARY OF EXISTING WATER SYSTEM

The Utility provides water service within the City limits using these existing wells (Well Nos. 3, 5, and 6). The water system is comprised of three active groundwater wells with capacities between 900 and 1,100 gallons per minute (gpm). Well No. 3 is adjacent to the Davison Plant. Water from Well No. 3 is pumped to the facility to then be treated with sodium hypochlorite, sodium silicate, and caustic soda. Well No. 5 has a pressurized filter for iron removal and also contains equipment to add sodium hypochlorite and fluoride. The Well No. 5 facility contains a future chemical room for corrosion control chemicals, if needed. The water at Well No. 6 is treated with sodium hypochlorite, fluoride, sodium silicate, and caustic soda. The system also includes two elevated storage tanks (EST) and a 500,000-gallon ground storage reservoir located at the Davison Plant. The High Zone EST has a capacity of 400,000 gallons and the Low Zone EST has a capacity of 500,000 gallons.

2.02 REVIEW OF PREVIOUS INVESTIGATIONS

This Study relies on information developed in previous reports, which includes the *Water System Comprehensive Plan* (completed in June 2022 and revised in December 2025) and the *Addendum No. 1 for the Water System Comprehensive Plan* (completed in February 2026), both prepared by Strand Associates, Inc.®. This Study also relies on information obtained from the EnviroMapper, Bureau of Remediation and Redevelopment Tracking Services (BRRTS), Wisconsin Department of Natural Resources (WDNR), and Public Service Commission of Wisconsin (PSCW) databases. The previous water system reports are included in Appendix A.

2.03 SUMMARY OF EXISTING WATER SYSTEM

A. Population Review

The Wisconsin Department of Administration (WDOA) population projection information is shown in Table 2.03-1. The table reflects previous populations, current estimated populations, and projections published by the WDOA in 2024 out to the year 2040. It is assumed that the WDOA population estimate for 2025 best represents the current City population.

Year	Population
2016	12,824
2017	12,417
2018	12,268
2019	12,569
2020	12,262
2021	11,446
2022	11,154
2023	11,460
2024	11,710
2025	11,614
2030	11,472
2035	11,308
2040	11,143

Table 2.03-1 WDOA Population Estimates

B. Water Use

The City's historical water records were obtained from the PSCW *Water, Electric, Gas, and Sewer Annual Reports* (WEGS Reports) for the years 2016 through 2025. The historical water pumpage and sales data are summarized in Table 2.03-2. Based on water use trends over the last 5 years, an average sales to pumpage ratio of 0.95 and a maximum to average day ratio of 1.57 were determined and used to predict future water pumpage and sales data.

Year	Annual Pumpage (gal)	Average Day Pumpage (gpd)	Maximum Day Pumpage (gpd)	Average Day Sales (gpd)	Sales to Pumpage Ratio	Maximum to Average Day Ratio
2016	289,988,000	793,944	1,203,000	708,003	0.89	1.52
2017	270,127,000	739,567	1,080,000	713,711	0.97	1.46
2018	275,387,000	753,969	1,829,000	716,586	0.95	2.43
2019	285,717,000	782,251	2,400,000	742,628	0.95	3.07
2020	270,546,000	740,715	1,418,000	704,997	0.95	1.91
2021	306,879,000	840,189	1,617,000	792,468	0.94	1.92
2022	310,811,000	850,954	1,463,000	818,010	0.96	1.72
2023	310,073,000	848,934	1,183,000	814,160	0.96	1.39
2024	298,385,000	816,934	1,168,000	785,352	0.96	1.43
2025	295,351,000	808,627	1,119,000	759,754	0.94	1.38

Table 2.03-2 Water Pumpage and Sales Data

Total previous sales in million gallons per year (MGY) are shown in Table 2.03-3.

Year	Residential (MGY)	Commercial (MGY)	Industrial (MGY)	Public (MGY)	Multifamily (MGY)	Total (MGY)
2016	107.0	44.5	24.8	56.5	25.8	258.6
2017	107.0	42.6	35.4	48.8	26.9	260.7
2018	106.1	45.0	28.8	53.5	28.3	261.7
2019	103.5	44.5	40.6	55.0	27.6	271.2
2020	109.8	36.8	40.9	40.8	29.2	257.5
2021	112.1	47.6	31.4	67.5	30.8	289.4
2022	109.5	47.4	33.1	77.8	31.0	298.8
2023	111.5	49.5	35.6	69.2	31.5	297.4
2024	110.8	53.4	33.5	55.6	33.6	286.9
2025	107.8	47.6	45.9	43.6	32.7	277.5

Table 2.03-3 Summary of Previous Sales by General Customer Category

Using information based on the WEGS Reports, the residential, commercial, industrial, public, and multifamily sales in gallons per capita per day (gpcd) were determined and can be seen in Table 2.03-4.

Year	Residential (gpcd)	Commercial (gpcd)	Industrial (gpcd)	Public (gpcd)	Multifamily (gpcd)
2016	22.8	9.5	5.3	12.1	5.5
2017	23.6	9.4	7.8	10.8	5.9
2018	23.7	10.1	6.4	11.9	6.3
2019	22.5	9.7	8.8	12.0	6.0
2020	24.5	8.2	9.1	9.1	6.5
2021	26.8	11.4	7.5	16.1	7.4
2022	26.9	11.6	8.1	19.1	7.6
2023	26.6	11.8	8.5	16.5	7.5
2024	25.9	12.5	7.8	13.0	7.8
2025	25.4	11.2	10.8	10.3	7.7

Table 2.03-4 Historical Per Capita Sales by General Customer Category

In order to estimate the water sales by customer category, the averages observed over the last 5 years were used as factors. Residential sales averaged 26 gpcd, commercial averaged 12 gpcd, industrial averaged 9 gpcd, public averaged 15 gpcd, and multifamily averaged 8 gpcd.

Using the WDOA population projections and the factors and ratios based on the trends found in the WEGS Reports, water sales and pumpage values for 2030, 2035, and 2040 were developed. The projected annual water sales by customer category were determined by multiplying the population by the per capita sales factors then by 365.25 days per year to get the final projected value in MGY. The annual water pumpage was determined by dividing the total water sales by the sales to pumpage ratio of 0.95. The maximum day pumpage was determined by multiplying the average day pumpage by the maximum to average day ratio of 1.57. The corresponding values to these calculations can be seen in Tables 2.03-5 through 2.03-7.

Year	Service Population	Residential (gpcd)	Commercial (gpcd)	Industrial (gpcd)	Public (gpcd)	Multifamily (gpcd)
2030	11,472	26	12	9	15	8
2035	11,308	26	12	9	15	8
2040	11,143	26	12	9	15	8

Table 2.03-5 Projected Per Capita Sales by General Customer Category

Year	Residential (MGY)	Commercial (MGY)	Industrial (MGY)	Public (MGY)	Multifamily (MGY)	Total (MGY)
2030	109.0	50.0	38.0	63.0	34.0	294.0
2035	107.0	50.0	37.0	62.0	33.0	289.0
2040	106.0	49.0	37.0	61.0	33.0	286.0

Table 2.03-6 Summary of Anticipated Future Annual Sales

Year	Average Day Sales (gpd)	Sales to Pumpage Ratio	Annual Pumpage (gal)	Average Day Pumpage (gal)	Maximum Day Pumpage (gpd)	Maximum to Average Day Ratio
2030	804,928	0.95	308,536,504	844,727	1,326,221	1.57
2035	791,239	0.95	303,289,284	830,361	1,303,666	1.57
2040	783,025	0.95	300,140,952	821,741	1,290,134	1.57

Table 2.03-7 Future Water Pumpage and Sales Projections

2.04 CAPACITY EVALUATION

A. Existing System Capacity

Days of maximum demand can occur on several days in succession, especially during the warm summer months. As a result, water withdrawn during any one maximum day must be available to ensure an adequate supply of water for the system. Therefore, total demand on the maximum day determines the minimum amount of water that must be available to meet demand. It is recommended that the system be designed to meet maximum day domestic demands with the largest well out of service. This is also known as the firm well capacity of the system.

The Utility currently operates three wells, and Table 2.04-1 presents the total and firm well capacity of the system. In this case, the system's largest well is Well No. 5. The total well capacity is 3,000 gpm, or 4.32 MGD, and the firm well capacity is 1,900 gpm, or 2.74 MGD.

	Capacity (gpm)	Capacity (MGD)
Well No. 3	900	1.30
Well No. 5	1,100	1.58
Well No. 6	1,000	1.44
Total Capacity	3,000	4.32
Firm Capacity*	1,900	2.74

*Assumes Well No. 5 is out of service.

Table 2.04-1 Well Capacity Summary

B. System Demands

Using the information provided to the PSCW by the City and the population projections from the WDOA, the City's existing and future water demands were evaluated. Tables 2.04-2 and 2.04-3 present the average and maximum day demands for each period in gpm and gpd.

Year	Average Day (gpm)	Average Day (gpd)	Maximum Day (gpm)	Maximum Day (gpd)
2016	551	793,944	835	1,203,000
2017	514	739,567	750	1,080,000
2018	524	753,969	1,270	1,829,000
2019	543	782,251	1,667	2,400,000
2020	514	740,715	985	1,418,000
2021	583	840,189	1,123	1,617,000
2022	591	850,954	1,016	1,463,000
2023	590	848,934	822	1,183,000
2024	567	816,934	811	1,168,000
2025	562	808,627	777	1,119,000

Table 2.04-2 Average and Maximum Day Demands

Year	Average Day (gpm)	Average Day (gpd)	Maximum Day (gpm)	Maximum Day (gpd)
2030	587	844,727	921	1,326,221
2035	577	830,361	905	1,303,666
2040	571	821,741	896	1,290,134

Table 2.04-3 Projected Average and Maximum Day Demands

Figure 2.04-1 presents the average and maximum day pumpage demands compared to the firm well capacity.

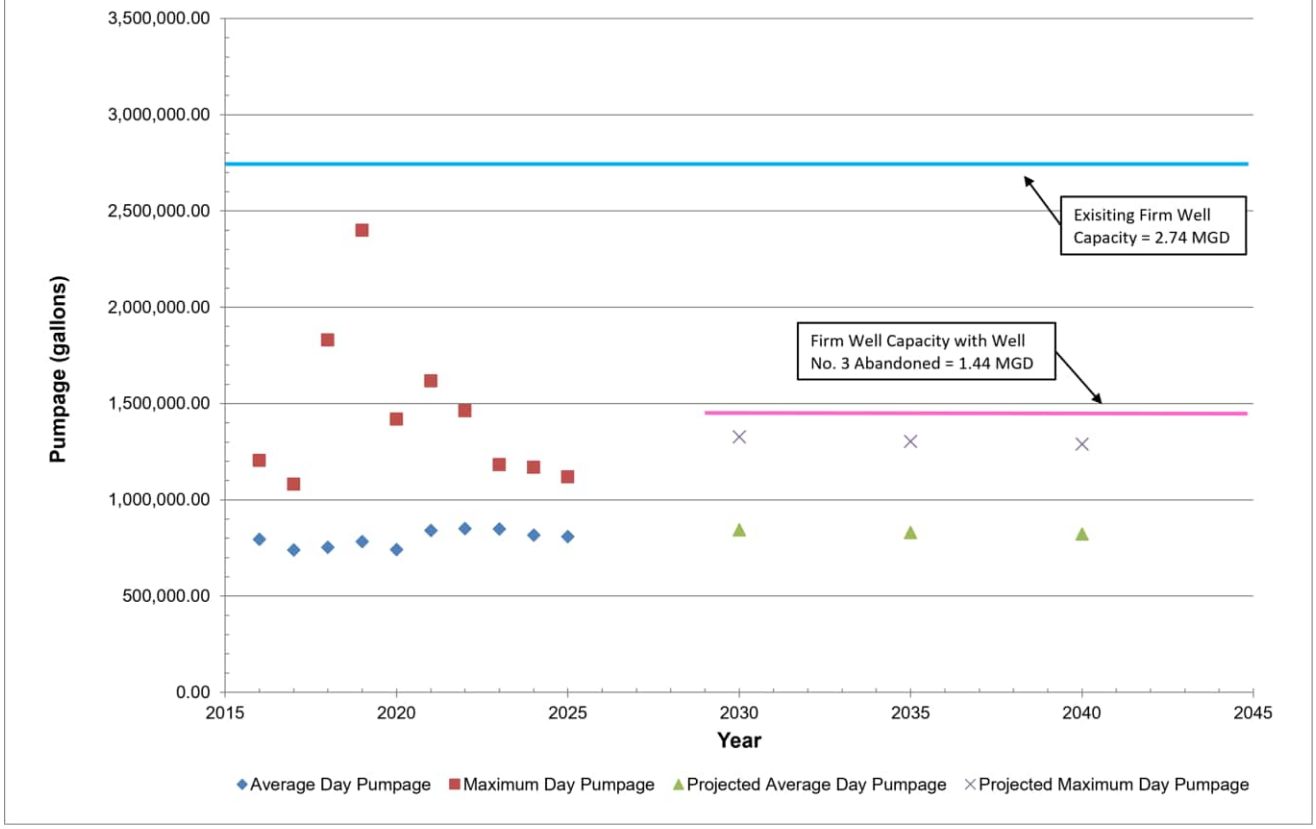


Figure 2.04-1 Pumpage Demands

Though the Utility operates three wells currently, Well No. 3 is approximately 94 years old and no longer a reliable option for long-term supply for the City. As a result, the City is planning to abandon Well No. 3 (and the other existing infrastructure at the Davison Plant) in the near future. The Utility would be operating with only two wells and the firm well capacity would be 1.44 MGD.

Though the projected average day pumpage and maximum day pumpage for the future are both below the firm well capacity line with Well No. 3 decommissioned, four of the last ten years had a maximum day pumpage that exceeded the 1.44 MGD firm well capacity that would exist without Well No. 3.

2.05 PURPOSE AND NECESSITY OF PROJECT

As discussed, a new well is needed to replace aging infrastructure. Well No. 3 is past its useful life and cannot function in the event of a power outage as the generator can only provide water without chemical treatment as the well has its own dedicated generator plug and transfer switch, as noted in the *Water System Comprehensive Plan*.

When analyzing the historical water usage trends, the maximum day pumpage was close to exceeding the existing firm well capacity in 2019 as a result of a water main break on Camp Street where approximately 2.4 million gallons (MG) were pumped in a single day. Within the last decade, there were

four years where the maximum day pumpage exceeded what the system's firm well capacity would be if Well No. 3 is abandoned and a replacement well is not constructed.

A new well is needed to replace Well No. 3 and satisfy water demands into the future.

SECTION 3
LOCATION INFORMATION

Three sites were reviewed for the location of Well No. 7: the Matador Drive Site, a vacant lot in a residential area in the far southwest corner of the City; the Harrison Park Site, a park in the near south of the City; and the High School Site, a city-owned agricultural field in the northwest of the City near the Platteville High School.

3.01 SITE LOCATION AND TOPOGRAPHY

See Figure 3.01-1 for a contour map of the City and existing distribution system.

A. Matador Drive Site

The Matador Drive Site is located in the southwest corner of the City, south of Matador Drive and west of Packers Court. Ground elevations range from 997 to 1003 feet mean sea level (MSL). The majority of the site slopes toward the northeast. The coordinates of the site are approximately 42°43'09" N 90°29'35" W. The site is located in the SW¼ of the NE¼ of Section 21 Township 3N, Range 1W. An aerial view of the proposed site can be found in Figure 3.01-2.

B. Harrison Park Site

The Harrison Park Site is located north of US 151 Business, east of Straw Avenue, south of Harrison Avenue, and west of South Court Street. Ground elevations range from 891 to 948 feet MSL. This site slopes from north to south. The coordinates of the site are approximately 42°43'39" N 90°28'50" W. The site is located in the SW¼ of the SW¼ of Section 15 Township 3N, Range 1W. An aerial view of the proposed site can be found in Figure 3.01-3.

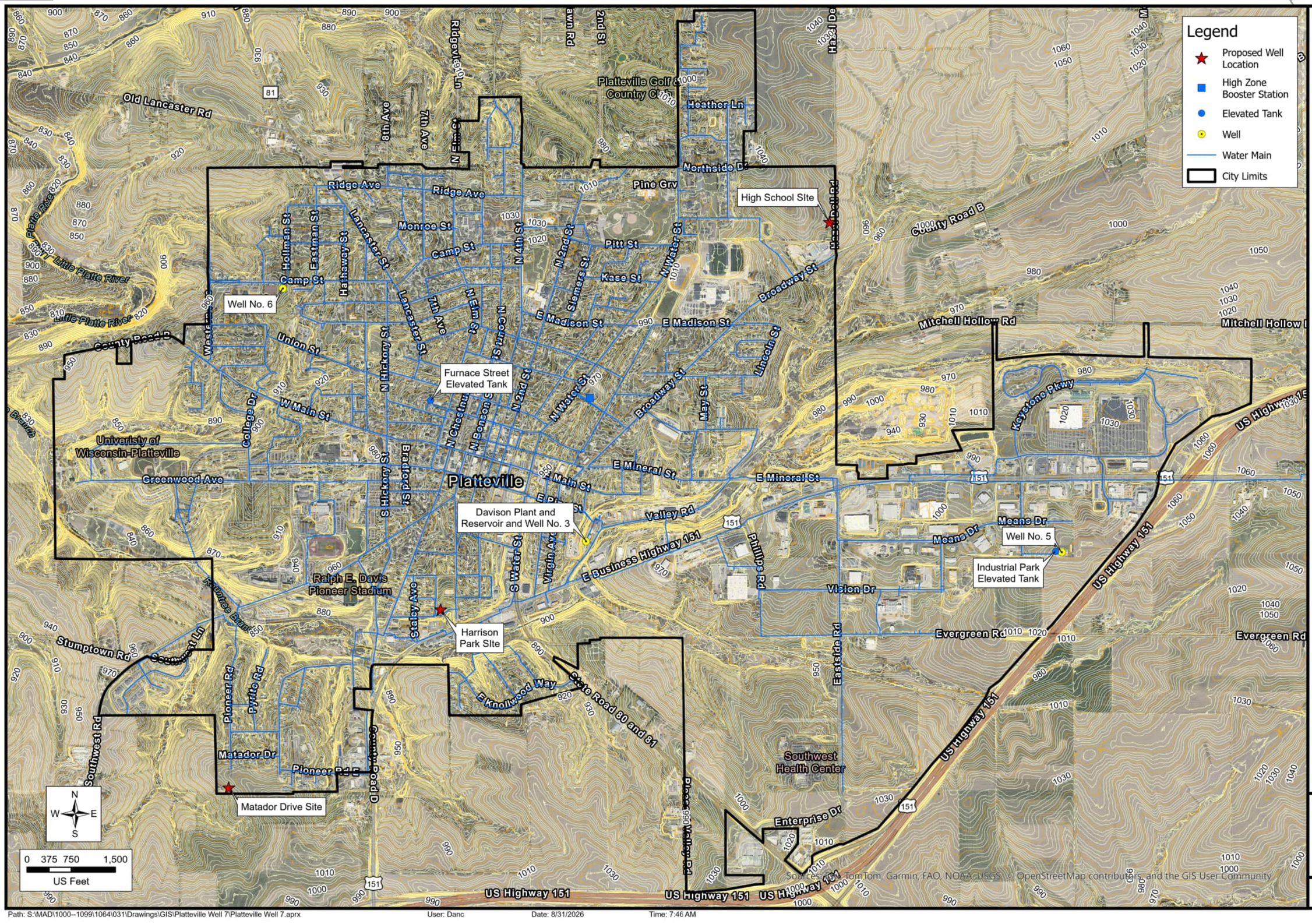
C. High School Site

The High School Site is located north of Broadway Street, east of North Water Street, and west of Hazel Dell Road. The ground elevations range from 990 to 1024 feet MSL. The site generally slopes north to south. Runoff drains to a stormwater pond on site. The coordinates of the site are approximately 42°44'41" N 90°27'31" W. The site is located in the NE¼ of the SW¼ of Section 11 Township 3N, Range 1W. An aerial view of the proposed site can be found in Figure 3.01-4.

3.02 LOCATION OF WELL ON-SITE

According to WAC NR 811.12(5)(a), the well site should have minimum dimensions of 100 by 100 feet. The well should also be located at or near the center of the lot and located a minimum of 50 feet from any property boundary. The proposed well locations meet these criteria.

Figure 3.02-1 shows a preliminary location of the proposed well sites. This figure also shows the location of the other wells and infrastructure within the City limits.



CONTOUR MAP AND WELL SITES

WELL NO. 7 WELL SITING STUDY
CITY OF PLATTEVILLE, WISCONSIN
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 3.01-1
1064.031

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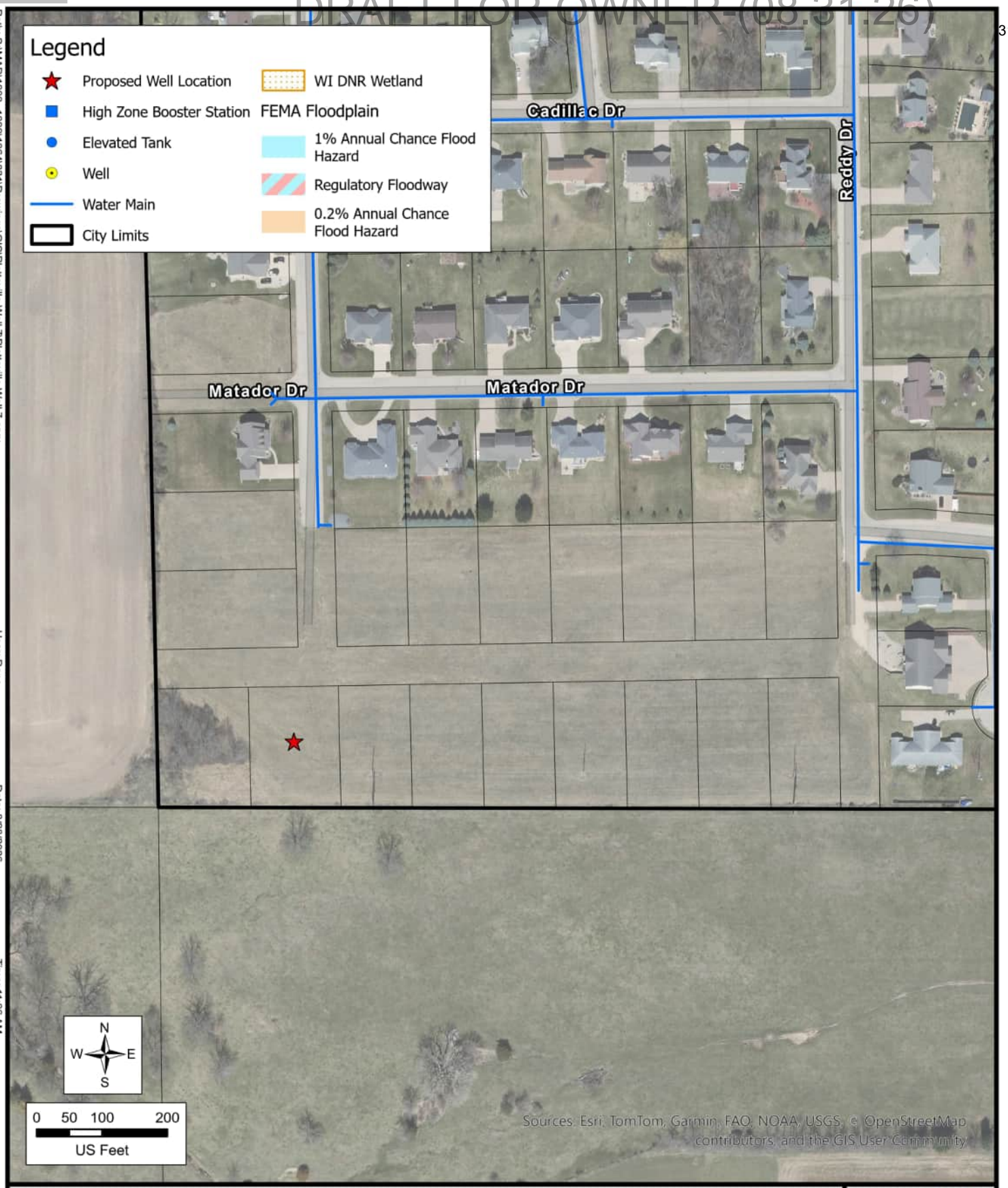

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User: Danc

Date: 8/28/2026

Time: 11:06 AM

PROPOSED WELL LOCATION
MATADOR DRIVE SITE

WELL NO. 7 WELL SITING STUDY
CITY OF PLATTEVILLE, WISCONSIN
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

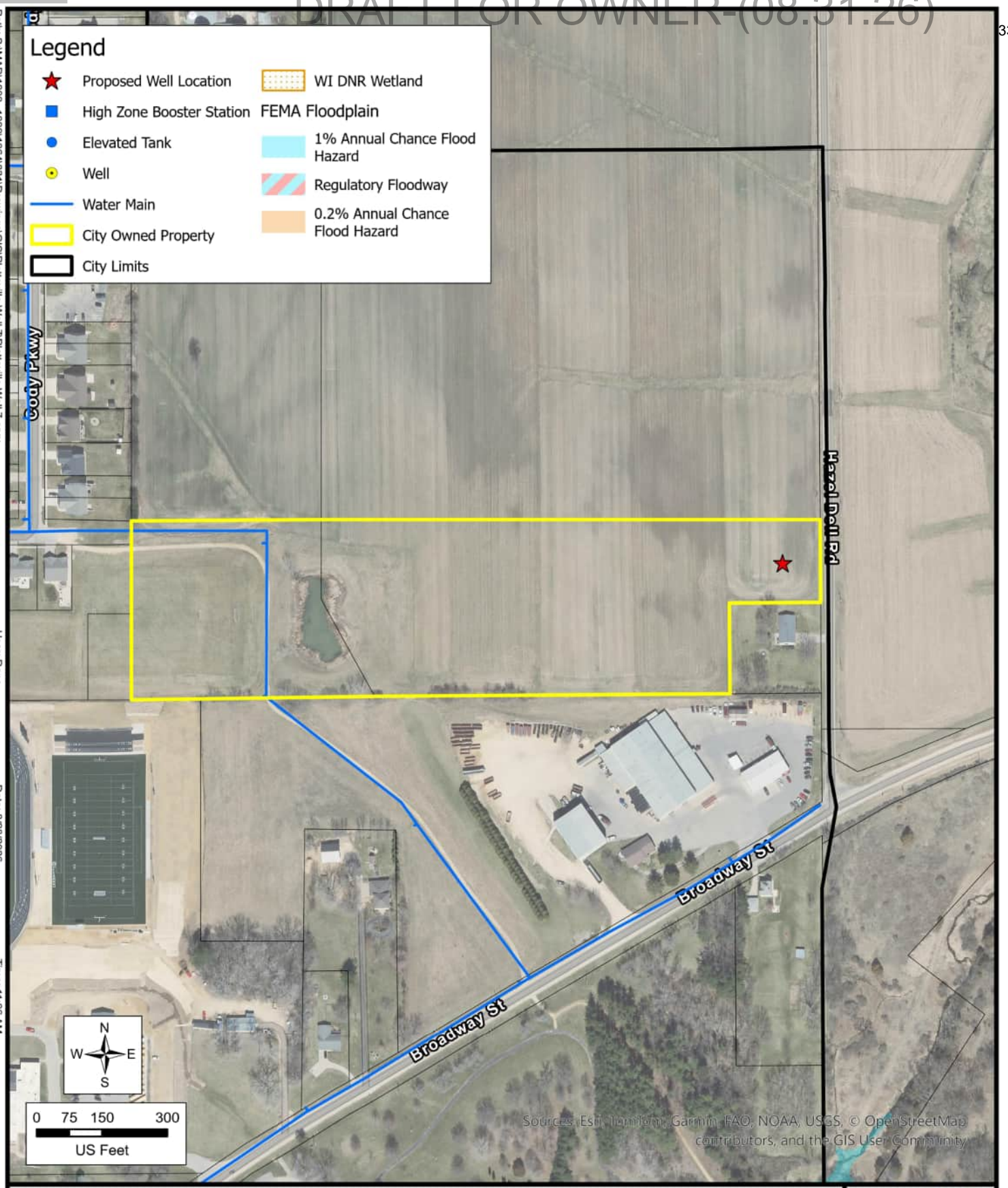
FIGURE 3.01-2
1064.031

PROPOSED WELL LOCATION
HARRISON PARK SITE

WELL NO. 7 WELL SITING STUDY
CITY OF PLATTEVILLE, WISCONSIN
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 3.01-3
1064.031

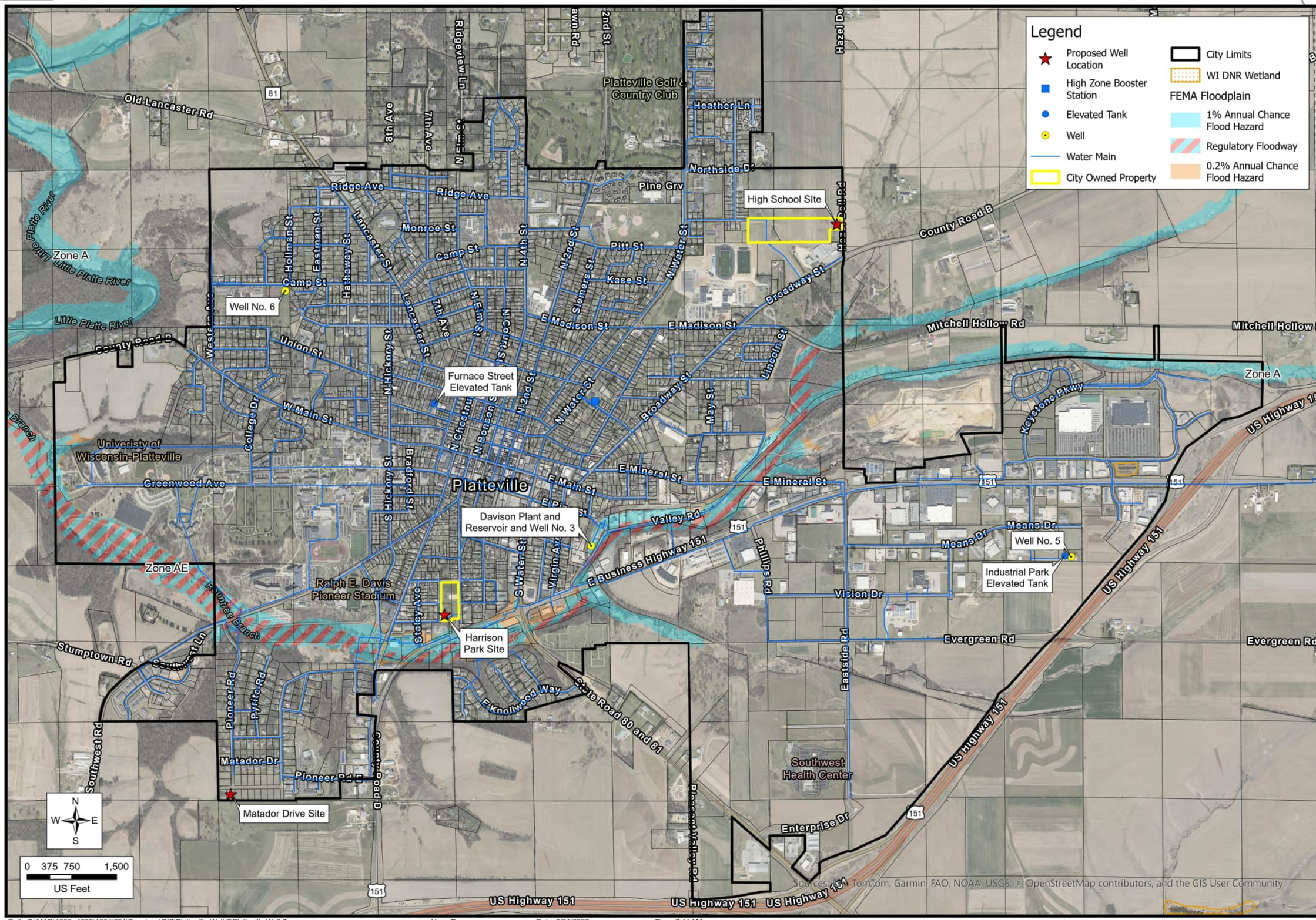


PROPOSED WELL LOCATION
HIGH SCHOOL SITE

WELL NO. 7 WELL SITING STUDY
CITY OF PLATTEVILLE, WISCONSIN
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 3.01-4
1064.031



WATER SYSTEM MAP

WELL NO. 7 WELL SITING STUDY
CITY OF PLATTEVILLE, WISCONSIN
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 3.02-1
1064.031

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3.03 SITE ADDRESSES

A. Matador Drive Site

There is no exact address for the Matador Drive Site, but it is west of the house at 1500 Packers Court, Platteville, WI 53818.

B. Harrison Park Site

The site address for the Harrison Park Site is Harrison Park, South Court Street, Platteville, WI 53818.

C. High School Site

While there is no exact site address for the High School Site, it is just north of Faherty Incorporated at 1120 Broadway Street, Platteville, WI 53818.

3.04 REGIONAL FLOOD ELEVATION AND WETLANDS

The Federal Emergency Management Agency (FEMA) provides FIRMettes for the National Flood Hazard Layer. The FIRMettes for the project sites are included in Appendix B, which are FIRMette 55043C0676F for the Matador Drive Site and the Harrison Park Site and FIRMette 55043C0677F for the High School Site. See Figure 3.02-1 for a map of proposed well sites, the existing distribution system, and FEMA flood risk zones.

All sites are located outside of the Base Flood Elevation (BFE) and the Regulatory Floodway. The southern edge of the Harrison Park Site property may border the 0.2% Annual Change Flood Hazard Zone, but the access to the well site, the well and well facility would be outside of that hazard zone. The Matador Drive Site and the High School Site are fully outside of the 0.2% Annual Change Flood Hazard Zone.

3.05 LOT INFORMATION AND LOCAL ZONING

A. Matador Drive Site

The Matador Drive Site is a rectangular area of approximately 9 acres zoned R1 One Family Residential. The area is currently a field of tall grass with residential lots not yet for sale.

B. Harrison Park Site

The Harrison Park Site is a rectangular area of approximately 5 acres. The area is zoned C1 Conservancy. The area is currently a park with a soccer field, volleyball courts, a small playground, and a shelter.

C. High School Site

The High School Site is generally rectangular with an approximate area of 13 acres. The area is zoned R2 One and Two Family Residential. The site is a majority farmland and has a stormwater pond and a soccer field.

3.06 PAST AND PRESENT USE

A. Matador Drive Site

The Matador Drive Site was previously farmland and is planned for development of residential lots.

B. Harrison Park Site

The Harrison Park Site is a community park with recreational activities and open space.

C. High School Site

The High School Site is currently farmed and owned by the City.

SECTION 4
WELL SITING INFORMATION

4.01 SUMMARY OF WELL SITING EFFORTS

In accordance with well siting criteria specified in NR 811.09(4)(j), a review was conducted to identify potential sources of contamination before selecting a proposed location for the new well. This assessment was necessary to evaluate whether required setback distances from potential contamination sources could be maintained. Based on a review of available records and environmental databases, potential sources of contamination throughout the City were identified. It is important to note that some sources may remain undetected if they are unrecorded, abandoned, or buried underground.

Records that were accessed to locate potential sources of contamination include the following:

A. BRRTS

BRRTS is an online WDNR database that provides public information regarding reports of potential contamination, properties with contamination, cleanup activities, and redevelopment activities in Wisconsin. For this Study, the BRRTS on the Web (BOTW) application was used to locate environmental repair programs (ERP), leaking underground storage tanks (LUST), spills, voluntary party liability exemptions (VPLE), and general properties (GP). This database also includes information about properties affected by contamination from another property (known as off-sites), and locations where a discharge to the environment occurred or likely occurred and based on known information, the WDNR has determined that the responsible party does not need to undertake an investigation or cleanup in response to that discharge. These sites are identified as no action required by RR program (NAR).

A VPLE site is a site where a party entered the VPLE program, conducts an environmental investigation and cleanup of an entire property, then receives limits on future liability for that contamination. GPs consist of records related to liability exemptions, liability clarifications, and cleanup agreements.

B. Resource Conservation and Recovery Act (RCRA) Information Handler Database

The United States Environmental Protection Agency's (USEPA) RCRA Information Handler Database is a national system that provides public information of facilities involved in the generation, transportation, treatment, storage, or disposal of hazardous waste under RCRA. For the purposes of this Study, the handler database was used to identify sites that manage hazardous waste, including large and small quantity generators, to assess potential environmental risks and inform site evaluation and planning.

C. EnviroMapper

EnviroMapper is a USEPA Web site that provides access to databases containing information regarding environmental activities that may affect United States air, water, or land. For this Study, EnviroMapper was used to locate hazardous waste sites, water dischargers, and toxic releases within the City.

D. Department of Agriculture, Trade, and Consumer Protection (DATCP)

The Wisconsin DATCP regulates underground and aboveground petroleum and hazardous substance storage tanks to ensure environmental and public safety. For this Study, DATCP's online Storage Tank

Database was used to identify tank locations, types, status, size, and contents to assess potential sources of contamination from current or former tank sites.

E. WDNR Surface Water Data Viewer

The WDNR Surface Water Data Viewer (SWDV) provides interactive maps with data on water quantity and water body classifications. The SWDV was used during this Study to assist in locating sites that are not near natural springs, trout streams, and outstanding resource waters (ORW) or exceptional resource waters (ERW).

The 100-year floodway, floodplain information, sanitary, and storm sewer systems were also identified.

WAC NR 811.12(5)(d) lists the required minimum separation distance from a well to contamination sources. Common separation distances from potential sources of contamination for wells are:

1. 50 feet away from a storm sewer or sanitary sewer constructed of water main-type material.

2. 200 feet from sanitary sewer constructed of non-water main-type material.

3. 300 feet from double-wall aboveground storage tanks (AST).

4. 400 feet from a cemetery or stormwater retention or detention pond.

5. 600 feet from double-walled underground storage tanks (UST).

6. 1,000 feet from land applications of waste.

7. 1,200 feet from solid waste and salt storage facilities.

4.02 POTENTIAL SOURCES OF CONTAMINATION

A. Storm and Sanitary Sewers

Storm and sanitary sewers run under most roads in the City. The selected well location will attempt to avoid any storm or sanitary sewers being within the required setback distance as best as possible, but any that are located within the setback distance from the proposed well will be lined with a water main-quality liner before placing the well in service.

B. Railroad Lines

There are no railroad lines that run through the City. The nearest railroad is the Wisconsin and Southern Railroad (previously the Chicago, Milwaukee, St. Paul and Pacific Railroad) approximately 30 miles northwest of the City in Woodman, Wisconsin.

C. Hazardous Waste Storage, Treatment, or Disposal

There are seven hazardous waste sites within the 0.5-mile radius of the Harrison Park site, the closest of which is approximately 850 feet west. The remaining six sites are outside of the 1,200-foot radius scattered north and east of the proposed Harrison Park site.

There are no hazardous waste sites within the 0.5-mile radius of the Matador Drive or High School sites.

D. Fuel Tanks, Oil Tanks, and LUSTs

1. Matador Drive Site

There is a closed LUST site at 1240 Big Jack Road, approximately 2,100 feet northeast of the proposed Matador Drive site. No other known tanks exist within 1,200 feet of the proposed site.

2. Harrison Park Site

There are approximately 52 ASTs or USTs within the 0.5-mile radius of the Harrison Park Site. These tanks are either in use, closed or removed, abandoned without product, or closed and filled with inert material, and ranging in size from 220 gallons to 56,000 gallons. Four of these sites are within 1,200 feet of the proposed Harrison Park site, the closest of which is a 220-gallon AST approximately 680 feet west that holds waste or used motor oil, and all of which are still currently in use. Eighteen of these tanks are located at 325 Lilly Street owned by New Horizons Supply Cooperative.

3. High School Site

There are a total of nine ASTs or USTs within the 1,200-foot radius of the High School Site located at 1120 Broadway Street owned by Faherty Drilling Company. This site is discussed further in Section 4, Subsection 4.02.P. Assessment of Contamination Sources.

E. Stormwater Drainage Ponds

There are several stormwater drainage ponds throughout the City, located mostly at the edges of the City limits. There are approximately six drainage ponds in the east-southeast corner, one in the northeast corner, and two in the west side of the City. None of the proposed sites are within 400 feet of a retention or detention pond, and the selected well location will be located outside of all required setback distances.

F. Spills and Clean-Up Sites

Eight spills have been reported within the 0.5-mile radius of the Harrison Park site. Seven of these spills are considered closed, and one is identified as historical. The historical spill has the BRRTS activity number of 04-22-045584 and 250 gallons of petroleum was spilled. Only one known spill has occurred within half a mile of the High School site and this site has since been closed. No spills have been reported within half a mile of the Matador Drive site.

G. Municipal Sludge Spreading Sites

There are no known municipal sludge spreading sites within a 2,500-foot radius of the three sites reviewed.

H. Quarries and Gravel Pits

Rosemeyer Quarry is located on the east side of the City at 1300 East Mineral Street.

Some other areas of interest similar to quarries and gravel pits include the Homestead Zinc Mine, also located on the east side of the City near Mound View Park and Campground. There is no specific address for the mine, but the mine is also closed with no known intentions of reopening it. Further, at 745 East Mineral Street in the City, there is a Ready-Mix Concrete plant owned and operated by Bard Materials.

I. Lakes, Rivers, and Creeks

There are no lakes within the City. The Little Platte River runs near the City and the Rountree Branch of Little Platte runs through the City. Rivers and streams are discussed further in Section 4.06 Groundwater Quantity Protection.

J. Cemeteries

There are two public cemeteries within the City limits. Greenwood Cemetery is located on the west side of the City near the University of Wisconsin–Platteville (UW–Platteville) campus at the intersection of Greenwood Avenue and College Drive. Hillside Cemetery is on the south side of the City, east of Highway 80/81. There is one private cemetery, Calvary Cemetery, in the City located at the southeast corner of Hillside Cemetery that is operated and maintained by the Catholic Church.

There is a public access park at North 4th Street identified as Indian Park. This land, approximately 1 acre in size, was deeded to the trustees of the German Presbyterian Church in 1948 for use as a public burial ground. In 1917, the land was given to the City and was deemed vacated by the state and asserted that “all but a very few of the remains had been removed”. In April 1918, a committee was formed to move any additional remains to Greenwood Cemetery. Though there is still a headstone present in the park, it is assumed at the time of this Study that there are no further burials remaining.

The minimum separation distance required between wells and cemeteries is 400 feet. All three sites reviewed are outside of the 400-foot setback distance.

K. Agriculture Fields and Livestock Grazing Sites

The City is surrounded by agricultural fields. Both the Matador Drive Site and the High School Site are located in current or prior agricultural fields. Neither of these fields are currently used for grazing, although past uses are unknown.

L. Nearby Wells

The City currently operates three wells, only Well No. 3 is located within 1 mile of any of the proposed sites. The location of the proposed well site is not expected to have a significant impact on any of the existing wells.

M. Wastewater Treatment Plant (WWTP)

The City's WWTP is located at the westernmost edge of the City limits at 1700 Greenwood Avenue, approximately 0.5 miles west of UW–Platteville and over one mile from the Matador Drive site, the closest of the three sites reviewed.

N. Landfill

The following facilities were listed on the WDNR Waste and Materials Management Public Reports list, which identifies approximately 20 different types of waste facilities or transporters, including solid waste transporters and processing and disposal facilities.

BFI Waste Services, LLC, located at 1120 Broadway Street is a licensed solid waste transfer non-exempt facility. The waste handled at this facility includes bark and brush, commercial solid waste, construction and demolition waste, garbage, recyclables, electronics, tires, wood waste, yard residuals, animal carcasses, and municipal solid waste. This facility is located approximately 600 feet from the High School site.

Rural Excavating, LLC, located at 5950 State Road 80 is a licensed solid waste transporter for solid waste only. The waste handled at this facility includes bark and brush, contaminated soil, and construction and demolition waste. This facility is approximately 4,300 feet southeast of the Harrison Park site.

Bard Materials, mentioned previously, is a licensed solid waste transporter for solid waste only that handles oil. This facility is approximately 4,000 feet northeast of the Harrison Park site.

No other licensed landfills were identified within the City.

O. Compost Site

While not directly noted in WAC NR 811, it should be noted that there is a compost site available for use by City residents in the southwest corner of the City limits, near 1670 Stumptown Road, approximately 3,100 feet northwest of the Matador Drive site. Although compost is generally good for soil health and reducing nutrient runoff, it could have potential negative effects if it is contaminated with any harmful substances.

P. Assessment of Contamination Sources

1. Matador Drive Site

There are no potential contamination sites within a 1,200-foot radius of the Matador Drive site, and within a 0.5-mile radius, there are 2 potential contamination sites identified in the BRRTS, RCRA, EnviroMapper, and DATCP databases. These sites are identified in Figure 4.02-1 and further detailed in Table 4.02-1.

The closest source of potential contamination is approximately 2,100 feet northeast of the Matador Drive site, identified in BRRTS as “Eastman Cartwright Bldg” with the activity number 03-22-001013. In mid-May 1991, a 300-gallon gasoline UST was removed and disposed, but sampling revealed some soil contamination. Following further sampling and visual inspection, the site was determined to be a clean closure site and the activity was closed in late May 1991.

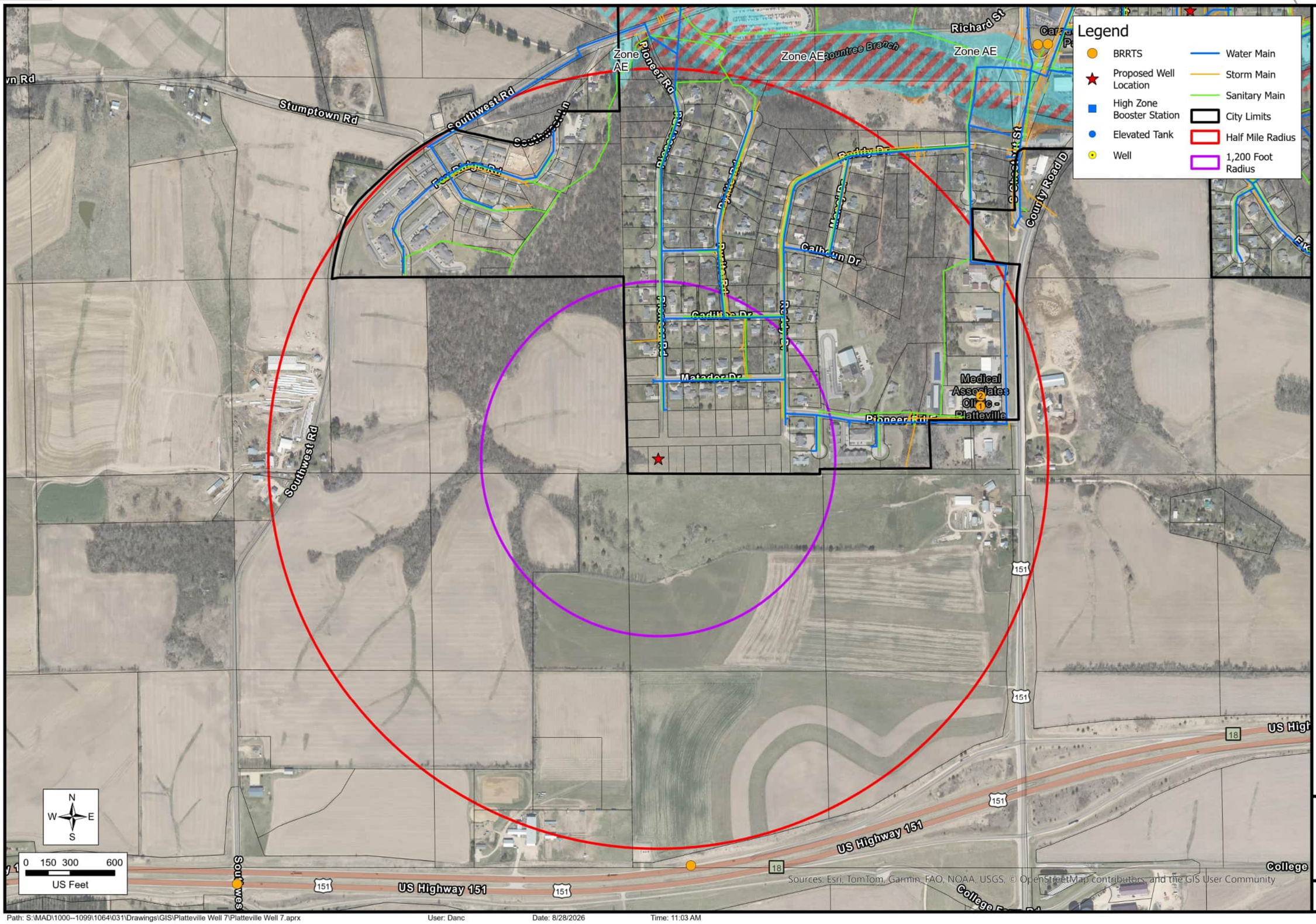
It should be noted that the nearest potential contamination site with continuing obligations is located approximately 4,400 feet southeast of the Matador Drive site. This contamination site is identified in BRRTS as “Spensley Grain Inc - Platteville” at 1291 College Farm Road, with the activity number 02-22-547244. According to the BRRTS database, soil samples collected by the DATCP in July 2002 detected elevated concentrations of ammonia, nitrate, nitrite, and low concentrations of pesticides. In a letter from the DATCP to Digman Grain Farms (the current land owners) dated April 24, 2023, it is stated that the site meets the requirements of WAC NR 725-727 for case closure with continuing obligations, and therefore the site is considered to be closed but continuing obligations are in place.

2. Harrison Park Site

Within a 1,200-foot radius of the Harrison Park site, there are 11 potential contamination sites identified and within a 0.5-mile radius, there are 86 other potential contamination sites identified in the BRRTS, RCRA, EnviroMapper, and DATCP databases. These sites are identified in Figure 4.02-2 and further detailed in Tables 4.02-2 through 4.02-5.

The closest source of potential contamination is a historical spill, approximately 550 feet west of the Harrison Park site, identified in BRRTS as “Richard St - Valley View Trailer Ct” with the activity number 04-22-045584. Approximately 250 gallons of petroleum were spilled onto the soil in March 1991.

The nearest potential contamination site with continuing obligations is located approximately 1,500 feet east of the Harrison Park site. According to the BRRTS database, 642 gallons of unleaded gasoline was spilled and reported in April 1989. This contamination site is identified in BRRTS as “Iowa Oil Co Platteville” at Business 151 and South 80/81, with the activity number 03-22-000121. The activity was closed on July 6, 2016, and most recently on September 23, 2021, a continuing obligation(s) compliance audit was completed.



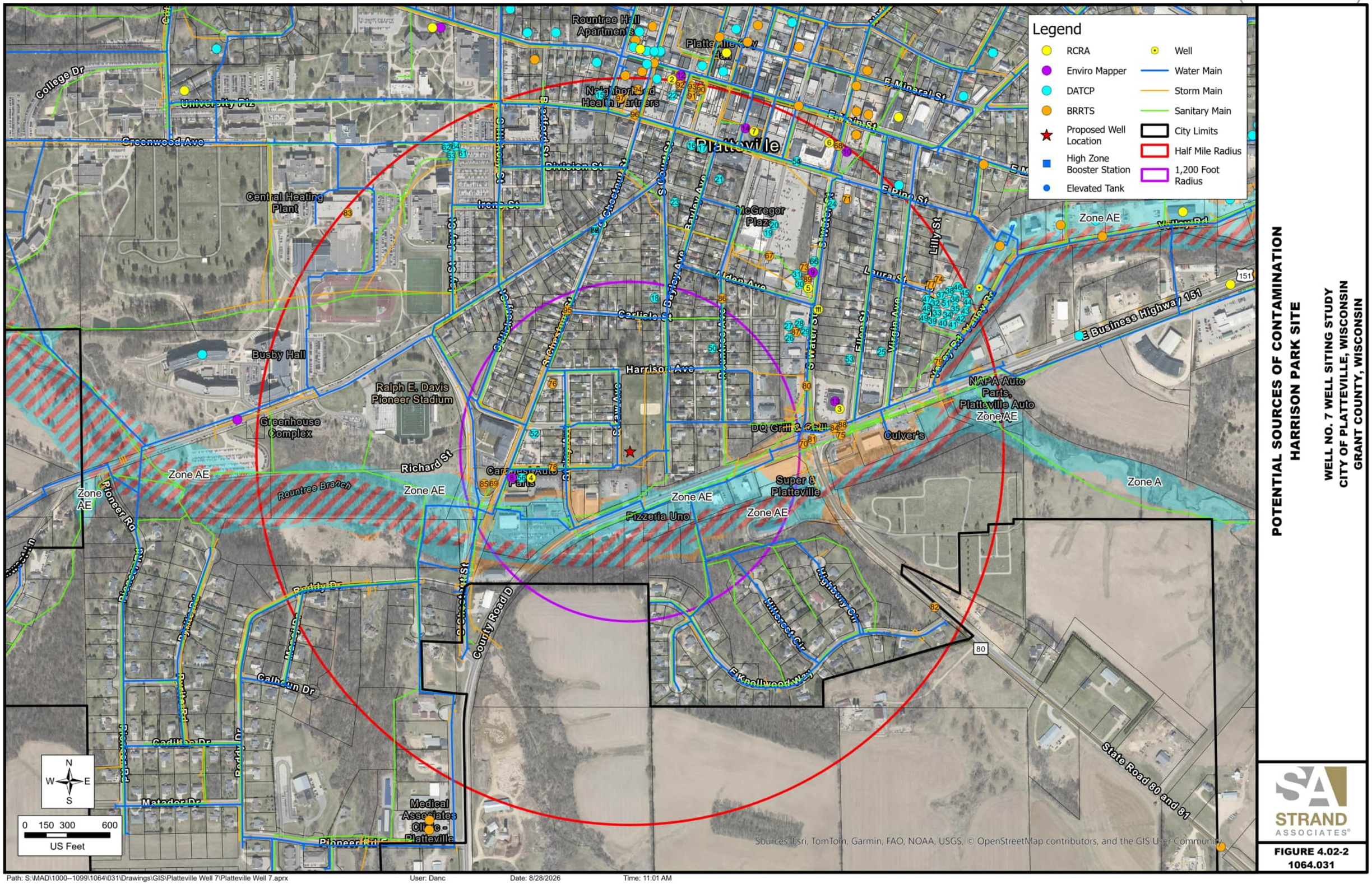
POTENTIAL SOURCES OF CONTAMINATION
MATADOR DRIVE SITE

WELL NO. 7 WELL SITING STUDY
CITY OF PLATTEVILLE, WISCONSIN
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 4.02-1
1064.031

Path: S:\MAD\1000--1099\1064\031\Drawings\GIS\Platteville Well 7\Platteville Well 7.aprx User: Danc Date: 8/28/2026 Time: 11:03 AM



POTENTIAL SOURCES OF CONTAMINATION
HARRISON PARK SITE

WELL NO. 7 WELL SITING STUDY
CITY OF PLATTEVILLE, WISCONSIN
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 4.02-2
1064.031

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Table 4.02-1 Matador Drive BRRTS Contamination Sites

BRRTS Activity No.	Name	Address	Activity	Status	Matador Drive Site Number
03-22-001013	Eastman Cartwright Building	1240 Big Jack Road	LUST	Closed	1
09-22-293971	Eastman Cartwright Building	1240 Big Jack Road	NAR		2

Table 4.02-2 Harrison Park RCRA Contamination Sites

Site ID	Site Name	Address	Activity Status	Harrison Park Site Number
WID988603080	Plattville Army National Guard	411 Water Street	Active	1
WIR000183285	Saint Croix Hospice-Platteville	115 West Main Street	Active	2
WIR000149195	Walgreens Company Store No. 12498	675 South Water Street	Active	3
WID982611089	Carquest Auto Parts Store No. 2155	825 South Chestnut	Inactive	4
WIR000122085	Kwik Trip Store No. 795	300 South Water Street	Inactive	5
WID982616120	One Hour Cleaners (Former)	50 South Water Street	Inactive	6
WI0000189027	Wisconsin Power And Light Company	65 South 3rd Street	Inactive	7

Table 4.02-3 Harrison Park EnviroMapper Contamination Sites

Name	Address	Contaminant Type	Harrison Park Site Number
Carquest Auto Parts Store No. 2155	825 South Chestnut	Hazardous Waste	8
Kwik Trip Store No. 795	300 South Water Street	Hazardous Waste	9
One Hour Cleaners (Former)	50 South Water Street	Hazardous Waste	10
Platteville Army National Guard	411 Water Street	Hazardous Waste	11
Saint Croix Hospice-Platteville	115 West Main Street	Hazardous Waste	12
Walgreen Company Store No. 12498	675 South Water Street	Hazardous Waste	13
Wisconsin Power And Light Company	65 South 3rd Street	Hazardous Waste	14

Table 4.02-4 Harrison Park DATCP Contamination Sites

Tank Type	Tank ID	Facility ID	Address	Status	Contents	Size	Facility Owner	Harrison Park Site Number
UST	100391	437499	80 South Elm	In Use	Fuel Oil	1,000	80 South Elm Housing Corporation	15
UST	94229	439816	15 West Pine	In Use	Fuel Oil	560	Chester K. Bell	16
UST	94231	439816	15 West Pine	In Use	Fuel Oil	560	Chester K. Bell	17
UST	80562	446223	460 South Court	In Use	Unleaded Gasoline	300	Curtis L. Gray	18
UST	103088	421171	Mcgregor Plaza	In Use	Fuel Oil	2,000	Dave Weittenhiller	19
UST	103089	421171	Mcgregor Plaza	In Use	Fuel Oil	2,000	Dave Weittenhiller	20
UST	99937	449831	155 Bayley Street	In Use	Fuel Oil	1,000	Dennis Troester	21
UST	98202	456340	50 South Court Street	In Use	Fuel Oil	1,000	Ferdinand J. Naze Dds	22
UST	82402	457270	65 West Mitchell Avenue	In Use	Fuel Oil	400	Fred Vandewiel	23
UST	82416	420775	175 South Water	In Use	Fuel Oil	400	Janice Patchin	24
UST	33081	465676	470 Virgin Avenue	Abandoned without Product	Unleaded Gasoline	560	Kelly Carkeet	25
UST	112633	415230	430 South Water Street	In Use	Unleaded Gasoline	12,000	Kwik Trip, Inc.	26
UST	111337	415230	430 South Water Street	In Use	Diesel	12,000	Kwik Trip, Inc.	27
UST	113791	415230	430 South Water Street	In Use	Unleaded Gasoline	15,000	Kwik Trip, Inc.	28
UST	113792	415230	430 South Water Street	In Use	Unleaded Gasoline	15,000	Kwik Trip, Inc.	29
UST	40829	416549	300 South Water Street	Closed Filled with Inert Material	Unleaded Gasoline	10,000	Kwik Trip, Inc.	30
UST	40830	416549	300 South Water Street	Closed Filled with Inert Material	Unleaded Gasoline	10,000	Kwik Trip, Inc.	31
AST	21193	435210	325 Lilly Street	In Use	Diesel	2,000	New Horizons Supply Cooperative	32
AST	21470	435210	325 Lilly Street	In Use	Unleaded Gasoline	2,000	New Horizons Supply Cooperative	33
AST	26913	435210	325 Lilly Street	In Use	Fuel Oil	17,061	New Horizons Supply Cooperative	34
AST	26914	435210	325 Lilly Street	In Use	Unleaded Gasoline	17,061	New Horizons Supply Cooperative	35
AST	27011	435210	325 Lilly Street	In Use	Diesel	18,483	New Horizons Supply Cooperative	36
AST	27115	435210	325 Lilly Street	In Use	Diesel	19,183	New Horizons Supply Cooperative	37
AST	27665	435210	325 Lilly Street	In Use	Fuel Oil	29,594	New Horizons Supply Cooperative	38
AST	27116	435210	325 Lilly Street	In Use	Unleaded Gasoline	19,183	New Horizons Supply Cooperative	39
AST	4357	435210	325 Lilly Street	Closed/Removed	Unleaded Gasoline	8,000	New Horizons Supply Cooperative	40
AST	4358	435210	325 Lilly Street	Closed/Removed	Unleaded Gasoline	8,000	New Horizons Supply Cooperative	41
AST	4655	435210	325 Lilly Street	Closed/Removed	Unleaded Gasoline	10,000	New Horizons Supply Cooperative	42
AST	5449	435210	325 Lilly Street	Closed/Removed	Diesel	17,500	New Horizons Supply Cooperative	43
AST	5450	435210	325 Lilly Street	Closed/Removed	Diesel	17,500	New Horizons Supply Cooperative	44
AST	5453	435210	325 Lilly Street	Closed/Removed	Fuel Oil	17,500	New Horizons Supply Cooperative	45
AST	5460	435210	325 Lilly Street	Closed/Removed	Unleaded Gasoline	17,500	New Horizons Supply Cooperative	46
AST	5461	435210	325 Lilly Street	Closed/Removed	Unleaded Gasoline	17,500	New Horizons Supply Cooperative	47
AST	5574	435210	325 Lilly Street	Closed/Removed	Fuel Oil	19,000	New Horizons Supply Cooperative	48
UST	47526	435210	325 Lilly Street	Closed/Removed	Unleaded Gasoline	560	New Horizons Supply Cooperative	49
UST	94689	421614	560 Roundtree	In Use	Fuel Oil	560	Nick Funk	50
UST	49452	435210	325 Lilly Street	Closed/Removed	Fuel Oil	1,000	New Horizons Supply Cooperative	51
UST	90161	423706	715 South Chestnut	In Use	Unleaded Gasoline	500	R C Miles Imp Co	52
UST	30893	446641	510 Ellen	Abandoned without Product	Fuel Oil	300	Robert Velzy	53
UST	37978	423479	140 East Pine	Closed Filled with Inert Material	Unleaded Gasoline	560	Ron Bolt	54
UST	39325	423479	140 East Pine	Closed Filled with Inert Material	Unknown	1,111	Ron Bolt	55
AST	8202	455165	825 South Chestnut Street	In Use	Waste/Used Motor Oil	220	Safety Kleen Systems, Inc.	56
UST	102162	413953	340 South Chestnut Street	In Use	Unleaded Gasoline	1,000	Thomas Nodorft	57
UST	102163	413953	340 South Chestnut Street	In Use	Unleaded Gasoline	1,000	Thomas Nodorft	58
UST	50025	413953	340 South Chestnut Street	Closed/Removed	Leaded Gasoline	1,000	Thomas Nodorft	59
UST	50855	413953	340 South Chestnut Street	Closed/Removed	Unleaded Gasoline	1,000	Thomas Nodorft	60
AST	234661	431686	935 Greenwood Avenue	In Use	Fuel Oil	56,000	UW Platteville Foundation, Inc.	61
AST	17674	431686	935 Greenwood Avenue	In Use	Diesel	706	UW Platteville Foundation, Inc.	62
UST	42928	431686	935 Greenwood Avenue	Closed/Removed	Waste/Used Motor Oil	300	UW Platteville Foundation, Inc.	63
UST	51186	431686	935 Greenwood Avenue	Closed/Removed	Unleaded Gasoline	1,000	UW Platteville Foundation, Inc.	64
AST	17396	436401	250 South Water Street	In Use	Waste/Used Motor Oil	650	Wonder Wash	65
AST	17397	436401	250 South Water Street	In Use	Waste/Used Motor Oil	650	Wonder Wash	66

Table 4.02-5 Harrison Park BRRTS Contamination Sites

BRRTS Activity No.	Name	Address	Activity	Status	Harrison Park Site Number
02-22-542885	Tandem Tire (Former)	300 Mcgregor Plaza	ERP	Closed	67
02-22-553286	Speedy Loan	50 South Water Street	ERP	Closed	68
02-22-554257	Digman Truck and Auto Repair	820 South Chestnut Street	ERP	Closed	69
03-22-000121	Iowa Oil Company Platteville	Business 151 & South 80/81	LUST	Closed	70
03-22-000318	Richardson Union 76	125 South Water Street South 81	LUST	Closed	71
03-22-000633	B & B	340 South Chestnut Street	LUST	Closed	72
03-22-002558	Kwik Trip Store No. 795	300 South Water Street	LUST	Closed	73
03-22-104781	Heer Oil Company	Lily Road	LUST	Closed	74
03-22-193914	Harleys Standard	240 East Highway 151	LUST	Closed	75
03-22-544492	Former Service Station	615 South Chestnut Street	LUST	Open	76
04-22-045403	Lilly Street .25 Mile North Highway 151	Lilly Street .25 Mile North Highway 151	SPILL	Closed	77
04-22-045584	Richard Street - Valley View Trailer Court	Richard Street	SPILL	Historical	78
04-22-188382	400 Valley Road	400 Valley Road	SPILL	Closed	79
04-22-274675	Foley Tom	584 South 80	SPILL	Closed	80
04-22-543430	Holl Fuel	Business 151 & South 80/81	SPILL	Closed	81
04-22-554539	Dick Bellmeyer	6031 South 80	SPILL	Closed	82
04-22-583670	UW Platteville	955 Greenwood Avenue	SPILL	Closed	83
04-22-596373	Wisconsin Power and Light	230 West Highway 151	SPILL	Closed	84
07-22-553275	Digman Truck and Auto Repair	820 South Chestnut Street	GP		85
09-22-286831	East Mineral Street Bridge	South 151 at Roundtree Branch	NAR		86
09-22-530341	Hardees Restaurant Property	430 South Water Street	NAR		87
09-22-547350	Harleys Standard	240 East Highway 151	NAR		88
09-22-547401	Kwik Trip Store No. 795	300 South Water Street	NAR		89
13-22-575385	75 West Main Street	75 West Main Street	Off-Site		90
13-22-575386	85 West Main Street	85 West Main Street	Off-Site		91
13-22-575387	115 West Main Street	115 West Main Street	Off-Site		92
13-22-575714	95 West Main Street	95 West Main Street	Off-Site		93
13-22-575716	50 North Chestnut Street	50 North Chestnut Street	Off-Site		94
13-22-588264	West Main Street Elm Street South Chestnut Street West Pine Street Row	West Main Street Elm Street South Chestnut Street	Off-Site		95
13-22-588280	220 West Pine Street	220 West Pine Street	Off-Site		96
13-22-588279	65 South Elm Street	65 South Elm Street	Off-Site		97

3. High School Site

Within a 1,200-foot radius of the High School site, there are nine potential contamination sites identified and within a 0.5-mile radius, there are two other potential contamination sites identified in the BRRTS, RCRA, EnviroMapper, and DATCP databases. These sites are identified in Figure 4.02-3 and further detailed in Tables 4.02-6 and 4.02-7.

The nine potential contamination sites within the 1,200 foot radius are approximately 600 feet south of the High School site. These nine potential contamination sources are a combination of in use and closed or removed ASTs or USTs that are all located at 1120 Broadway Street. There are four ASTs that are currently in use; one for unleaded gasoline, two for waste or used motor oil, and one for diesel. All five USTs have been closed or removed, three of which that were used for diesel and two that were used for leaded gasoline according to the DATCP.

The nearest potential contamination site with continuing obligations is located approximately 4,500 feet south of the High School site. This contamination site is identified in BRRTS as “Rural Excavating” at 998 East Mineral Street, with the activity number 03-22-558917. According to the BRRTS database, the site had previously been a car lot that had a 1,000-gallon gasoline UST. Soil contamination was discovered during the removal of the UST and associated piping. However, in a letter from the WDNR to Rural Excavating dated May 22, 2014, the site was determined to be closed with continuing obligations.

Based on the location of each of the potential contamination sources in relation to the proposed well sites, none of these sources appear to present either an imminent or long-term threat to the water quality of a new well at any location.

4.03 ANTICIPATED ANNUAL VOLUME OF WATER WITHDRAWAL

Based on a 1,000-gpm pumping rate and assumed 8 hours of operation per day, the proposed new well will withdraw an estimated 175 million gallons of water per year.

4.04 LOCATION OF WETLANDS

Figure 3.02-1 shows DNR wetlands. One DNR wetland is located in the Walmart stormwater pond along East Business Highway 151 and another is located approximately 4,000 feet southeast of the city. The National Wetlands Inventory shows several wetland habitat areas along the Little Platte River and the Rountree Branch stream. A map of Platteville from the National Wetlands Inventory can be found in Appendix C. The National Wetlands Inventory shows no wetland habitats on any of the proposed well and treatment facility sites.

4.05 GROUNDWATER QUANTITY PROTECTION

Chapter 820 of the WAC is intended to minimize impacts on certain groundwater and surface water features. As it relates to wells and well siting, the new well location should be kept, at a minimum, of 1,200 feet away from all natural springs, trout streams, and ORWs or ERWs. The WDNR Surface Water

Legend

- DATCP
- BRRTS
- Proposed Well Location
- High Zone Booster Station
- Elevated Tank
- Well
- Water Main
- Storm Main
- Sanitary Main
- City Limits
- Half Mile Radius
- 1,200 Foot Radius

Platteville Golf & Country Club
N 2nd St
Hazel Dell Rd
Heather Ln
Cody Pkwy
Northside Dr
Pine Grv
Fairfield Dr
Breske Center
Pitt St
Kasse St
Link Family Dental
Platteville High School
Broadway St
E Madison St
Maple Dr
Grant St
Boldt St
County Road B
Mitchell Hollow Rd
Zone AE
Zone A
1 2 7 3 9 6 8 4 5
10
11
N
W
E
S
0 150 300 600
US Feet

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

POTENTIAL SOURCES OF CONTAMINATION
HIGH SCHOOL SITE

WELL NO. 7 WELL SITING STUDY
CITY OF PLATTEVILLE, WISCONSIN
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 4.02-3
1064.031

Path: S:\MAD\1000--1099\1064\031\Drawings\GIS\Platteville Well 7\Platteville Well 7.aprx User: Danc Date: 8/28/2026 Time: 11:02 AM

Table 4.02-6 High School DATCP Contamination Sites

Tank Type	Tank ID	Facility ID	Address	Status	Contents	Size	Facility Owner	High School Site Number
AST	13900	456201	1120 Broadway Street	In Use	Unleaded Gasoline	500	Faherty Drilling Company, Inc.	1
AST	10125	456201	1120 Broadway Street	In Use	Waste/Used Motor Oil	280	Faherty Drilling Company, Inc.	2
AST	18036	456201	1120 Broadway Street	In Use	Waste/Used Motor Oil	900	Faherty Drilling Company, Inc.	3
AST	13248	456201	1120 Broadway Street	In Use	Diesel	2,000	Faherty Drilling Company, Inc.	4
UST	47210	456201	1120 Broadway Street	Closed/Removed	Diesel	560	Faherty Drilling Company, Inc.	5
UST	47209	456201	1120 Broadway Street	Closed/Removed	Diesel	560	Faherty Drilling Company, Inc.	6
UST	47211	456201	1120 Broadway Street	Closed/Removed	Diesel	560	Faherty Drilling Company, Inc.	7
UST	47400	456201	1120 Broadway Street	Closed/Removed	Leaded Gasoline	560	Faherty Drilling Company, Inc.	8
UST	53412	456201	1120 Broadway Street	Closed/Removed	Leaded Gasoline	2,000	Faherty Drilling Company, Inc.	9

Table 4.02-7 High School BRRTS Contamination Sites

BRRTS Activity No.	Name	Address	Activity	Status	High School Site Number
03-22-001414	Hansen Property	607 Mitchell Hollow Road	LUST	Closed	10
04-22-040258	Tanks at 950 Broadway	950 Broadway	SPILL	Closed	11

Data Viewer (SWDV) was used to determine the presence of any of these protected waters within the City.

Appendix D shows the results of the SWDV's trout waters search. The Rountree Branch of the Little Platte River runs through the City from east to west. The portion of the river that starts east of the City and flows toward Southwest Road, seen as light green in Appendix D, is identified as a Class 1 trout stream line. There is a segment of stream that runs beside East Business Highway 151 for approximately 1.25 miles before it joins the Rountree Branch. It is identified as a Class 2 trout stream line and can be seen in light blue in Appendix D. The part of the Rountree Branch on the western side, seen as dark green in Appendix D, extends from Southwest Road, traveling north along the City until it passes by the WWTP and is identified as a "wadable nursery water" for a smallmouth bass stream.

The WDNR identifies many of Wisconsin's highest quality waters as ORWs or ERWs. These waters are surface waters that provide outstanding recreational opportunities, support valuable fisheries and wildlife habitat, have good water quality, are not significantly impacted by human activities, and therefore warrant additional protection from the effects of pollution. While none of the rivers and streams that run directly through the City are identified as ORWs or ERWs, the Little Platte River near the northwest corner of the City is identified as an ERW, as can be seen in Appendix E.

According to the Wisconsin Geological and Natural History Survey (WGNHS), there are no known natural springs in or near the City. There are also multiple natural streams that run through or near the City whose location should be noted when selecting a well location. These can be seen in Appendix F.

4.06 PUBLIC AND PRIVATE WELLS

The municipal wells currently in operation are Well Nos. 3, 5, and 6. See Figure 3.01-1 for a map of these wells. Of these three municipal wells, the only existing well within one mile of the proposed well sites is Well No. 3, which is approximately 2,500 feet from the Harrison Park Site. The DNR Wisconsin Well Inventory Viewer (WWIV) shows many wells throughout the City, and the results are discussed in the following.

A. Matador Drive Site

Using the DNR WWIV, there are approximately 30 wells within 0.5 miles of the Matador Drive Site. Of these wells. 29 are still currently active wells and one has been sealed and filled. According to the DNR WWIV, the nearest private well is approximately 750 feet northeast of the proposed Matador Drive site.

B. Harrison Park Site

The DNR WWIV lists approximately 12 wells within 0.5 miles of the Harrison Park site, 10 of which are active wells and two which have been previously filled and sealed. The closest well to the Harrison Park site is an active private potable well located at 560 South Chestnut Street, approximately 1,100 feet northwest of the potential site, according to the DNR WWIV.

C. High School Site

There are 9 wells within 0.5 miles of the High School site according to the DNR WWIV, all of which are listed as being currently active. The nearest private well is approximately 850 feet east of the proposed High School site.

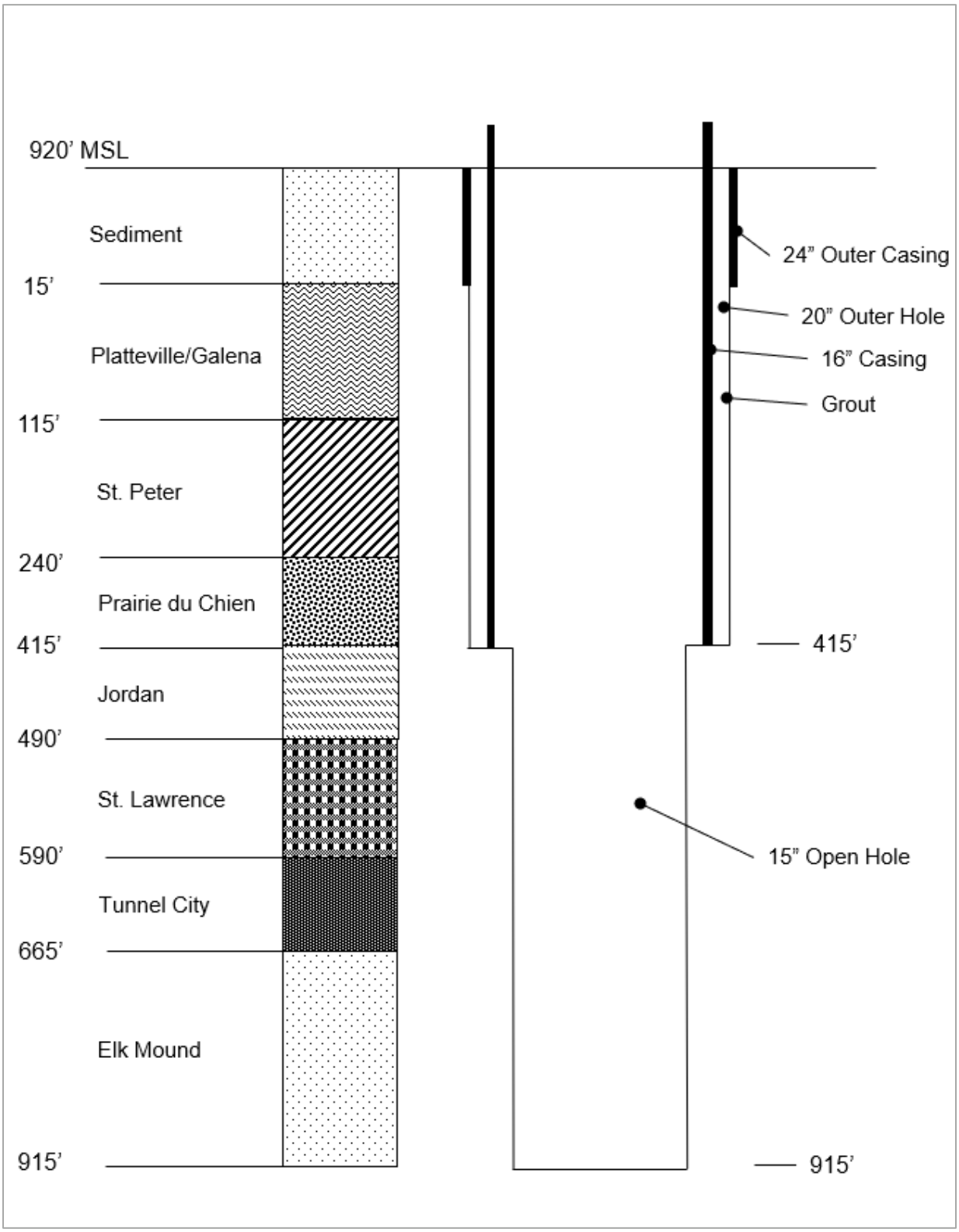
SECTION 5
PRELIMINARY WELL AND WELL FACILITY DESIGN

This section presents design criteria for the proposed well and well facility. The preliminary design characteristics of the well mainly relies on Well No. 6 as it is the nearest and most recently constructed well in the system. The tentative well construction log was developed based on existing wells and published geological data.

5.01 CASING DRILL HOLE DIAMETER AND DEPTHS

The proposed well is anticipated to be approximately 915 feet deep. A 24-inch diameter outer casing with a 20-inch outer hole will extend from the surface to the Platteville/Galena Formation, around 120 feet below the surface. 16-inch casing will extend from the surface to the Jordan Formation, around 415 feet below the surface. There will be a 15-inch hole from a depth of 415 feet to a depth of 915 feet, open to the Jordan, Saint Lawerence, Tunnel City, and Elk Mound layers. A tentative construction log is shown in Figure 5.01-1.

Figure 5.01-1 Preliminary Well Construction Log



5.02 ANTICIPATED PUMPING CAPACITY

The anticipated pumping capacity of the well is 1,000 gpm based on required additional capacity and the pumping capacities of Well Nos. 3, 5, and 6.

5.03 ANTICIPATED AQUIFERS, AQUIFER CHARACTERISTICS, AND FORMATIONS

Table 5.03-1 lists the depths and thickness of the geologic formations documented at the proposed site, based on well construction reports, well logs found on the WDNR Well Inventory Viewer, and the Wisconsin Geologic and Natural History Survey (WGNHS). Water will be withdrawn from the Elk Mound Group. The ground surface elevation in southwest corner of Harrison Park is 915 feet.

	Anticipated Depth of Formation		
Formation	**From (ft)**	**To (ft)**	**Thickness (ft)**
Sediment	0	15	15
Platteville/Galena	15	115	100
Saint Peter	115	240	125
Prairie du Chein	240	415	175
Jordan	415	490	75
Saint Lawerence	490	590	100
Tunnel City	590	665	75
Elk Mound	665	915	250

Table 5.03-1 Approximate Depth and Thickness of Formations

5.04 DIRECTION OF GROUNDWATER FLOW

The groundwater flow in the vicinity of the City is believed to be toward the West. A map of the potentiometric surface from the 1973 Water Resources of Wisconsin-Pecatonica-Sugar River Basin, Hydrologic Investigations Atlas HA453, published by the USGS, is shown in Figure 5.04-1. This map indicates a groundwater divide generally runs north and south approximately 5 miles east of the center of the City. Groundwater west of this divide is expected to flow towards the Mississippi River.

5.05 ANTICIPATED CONE OF DEPRESSION AND RECHARGE AREA

To be updated.

5.06 GENERAL FACILITY DESIGN CRITERIA

The final selected site and design for Well No. 7 will be selected and designed to meet the criteria discussed and the following general requirements.

The well will be designed for an anticipated pumping capacity of 1,000 gpm. The well facility shall provide space for the well; associated piping; all required chemical feed equipment, including, but not limited to, sodium hypochlorite, fluoride, sodium silicate, and caustic soda; and be able to meet chemical containment needs.

The site shall also provide enough space for a minimum 500,000-gallon ground-level storage reservoir, booster pumps, and a generator.

To be updated upon final site selection.

5.07 FACILITY LAYOUT

To be updated upon final site selection.

SECTION 6
CONCLUSIONS AND RECOMMENDATIONS

6.01 CONCLUSIONS AND RECOMMENDATIONS

To be updated following further discussion.

6.02 OPINION OF PROBABLE COST

Table 6.02-1 below shows the OPC for the Well No. 7 project. The OPC includes costs for well drilling and a well facility to include well pump, pressurized filtration, chemical feed, reservoir, and booster pumping. The costs are presented in 2028 dollars to account for anticipated inflation at the mid-point of construction. The costs are based on a Level 4 estimate as defined by the Association for the Advancement of Cost Engineering (AACE) which calls for a range of -30% to +50%.

Task	OPC
Well Drilling	$950,000
Well Facility	
Building Structure and Site Work	$1,100,000
Well Pump	$160,000
Treatment Equipment (filter, chemical feed)	$850,000
Mechanical and Piping	$425,000
Electrical and Controls	$650,000
Booster Pumps	$225,000
500,000-gallon CIP Reservoir	$1,600,000
Diesel Generator	$400,000
Total	$6,360,000
AACE Level 4 Low Range (-30%)	*$4,450,000*
AACE Level 4 High Range (+50%)	*$9,540,000*
Professional Services	$800,000

Costs presented in 2028 dollars.

Table 6.02-1 OPC

6.03 PROJECT IMPLEMENTATION SCHEDULE

Figure 6.03-1 shows the implementation schedule for the Well No. 7 project including well drilling, facility construction, engineering tasks, and regulatory reviews. The schedule shows completion of the project by the end of 2029.

Figure 6.03-1 Project Implementation Schedule

Well No. 7 Project		2026										2027												2028												2029											
Task		Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
A	Preliminary Design and Well Siting																																													
	WDNR/PSCW Pre-Application Meeting			★																																											
	Well Site Investigation Report				▬	▬	▬	▬																																							
	PSCW Construction Authorization Application							▬	▬																																							
	Topographic Survey								★																																						
	Geotechnical Borings									★																																					
	Submit Well Siting Report to the WDNR								★																																						
	WDNR Review Period								▬	▬																																					
	Submit to PSCW for Construction Authorization									★																																					
	PSCW Review Period									▬	▬	▬																																			
B1	Well Drilling Design																																													
	Drawings and Specifications									▬	▬																																			
	Submit to WDNR Plan Review										★																																			
	WDNR Review Period										▬	▬	▬																																	
B2	Well Drilling Bidding-Related Services																																													
	Advertisement to Bid														★																																
	Bid Opening															★																															
	Contract Award																★																														
B3	Well Drilling Construction-Related Services																																													
	Pre-construction Meeting																★																														
	Well Drilling Administration and Observation																▬	▬	▬	▬	▬	▬	▬																								
D1	Well Facility Design																																													
	Drawings and Specifications																▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬												
	Submit to WDNR Plan Review																							★																							
	WDNR Review Period																							▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬											
D2	Well Facility Bidding-Related Services																																												
	Advertisement to Bid																								★																					
	Bid Opening																									★																				
	Contract Award																										★																			
D3	Well Facility Construction-Related Services																																												
	Pre-construction Meeting																											★																		
	Construction Administration and Observation																											▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬
	Start-up and Training																																											★		
	Final Completion																																												★	
E	Well Head Protection Plan Update and WDNR Review																																					▬	▬	▬	▬	▬	▬	▬	▬	▬	▬

APPENDIX A
PREVIOUS WATER SYSTEM REPORTS

Professional

Engineering

Services

Water System Comprehensive Plan

Report

City of

Platteville, WI

June 2022

Revised December 2025

STRAND ASSOCIATES®

Report for
City of Platteville, Wisconsin

Water System Comprehensive Plan

Prepared by:

STRAND ASSOCIATES, INC.®
910 West Wingra Drive
Madison, WI 53715
www.strand.com

June 2022
Revised December 2025

STRAND ASSOCIATES®
Excellence in Engineering℠

TABLE OF CONTENTS

TABLE OF CONTENTS Continued

SECTION 1
INTRODUCTION

1.01 PURPOSE AND SCOPE

A. Purpose of Report

This report presents the comprehensive water system plan for the City of Platteville (City). The purpose of this study is to assess current distribution system performance, review existing supply and storage capacity, analyze the water system's ability to meet future demands, create and calibrate a hydraulic model of the system, and develop Opinions of Probable Construction Cost (OPCC) for water system improvements. This study will allow system improvements to be implemented in a practical and efficient manner.

B. Scope of Report

The scope of the comprehensive plan includes the following elements:

1. Summarize information from the *2006 Water System Master Plan*, the *Well No. 6 Site Investigation and Engineering Report,* and additional historical information of supply and storage facilities provided by the City.

2. Prepare a summary of the existing water supply and storage capacity of the water system.

3. Conduct a review of water system facilities to evaluate deficiencies and discuss potential improvements based on general observations.

4. Tabulate historical data from reports made to the Wisconsin Public Service Commission (PSC) dating back to 2006.

5. Use gathered data, population projections, and anticipated future growth areas to estimate current and 2040 design year demand.

6. Evaluate the existing ability of the wells and storage facilities to meet current and year 2040 maximum day demands and maximum day water plus fire demands.

7. Create a water system model in WaterGEMS that incorporates storage facility, pump, hydrant, valve, and supervisory control and data acquisition (SCADA) information.

8. Conduct up to ten field hydrant flow tests throughout the water system.

9. Perform a steady-state simulation calibration of the water model to industry-accepted standards using field hydrant flow testing results and SCADA information, and evaluate the system under current demand conditions. Evaluate the capacity of the system to meet current maximum day demand and fire flow needs.

10. Prepare a Capital Improvement Plan (CIP) that includes OPCC and implementation schedule for water system improvements developed from the system capacity and model analysis efforts.

1.02 ABBREVIATIONS AND DEFINITIONS

AWWA	American Water Works Association
CI	cast iron
CIP	Capital Improvement Plan
City	City of Platteville, Wisconsin
DI	ductile iron
GIS	geographical information system
gpcd	gallons per capita per day
gpm	gallons per minute
gpm/ft	gallons per minute per foot
HDPE	high density polyethylene
HVAC	heating, ventilation, and air conditioning
Hwy	Highway
I/O	input/output
ISO	Insurance Services Office
MCL	maximum contaminant levels
mg/L	milligrams per liter
MGD	million gallons per day
MSL	mean sea level
ND	non-detect
OPCC	Opinion of Probable Construction Cost
PSC	Wisconsin Public Service Commission
psi	pounds per square inch
PVC	polyvinyl chloride
SCADA	supervisory control and data acquisition
SCC	supervisor control center
SMCL	secondary maximum contaminant levels
USEPA	United States Environmental Protection Agency
WDNR	Wisconsin Department of Natural Resources
WDOA	Wisconsin Department of Administration
WEGS	*Water, Electric, Gas, and Sewer Annual Report*

SECTION 2
WATER FACILITIES EVALUATION

2.01 WATER DISTRIBUTION SYSTEM OVERVIEW

The City operates three wells and two elevated tanks that supply water through approximately 55 miles of water main ranging from 4 to 12 inches in diameter. There are two pressure zones in the system: a High Zone in the northeast and a Low Zone in the southwest. Table 2.01-1 summarizes the sizes and lengths of water main in the distribution system as reported to the PSC at the end of 2020. A map of the current distribution system with locations of key water facilities is shown on Figure 2.01-1.

Water Main Diameter (inches)	Length (feet)	Percentage of Total (%)
4	18,431	6.5
6	55,894	19.3
8	95,048	32.8
10	42,118	14.5
12	78,037	26.9
Total	289,807	100

Table 2.01-1 Existing Distribution System Water Main Inventory

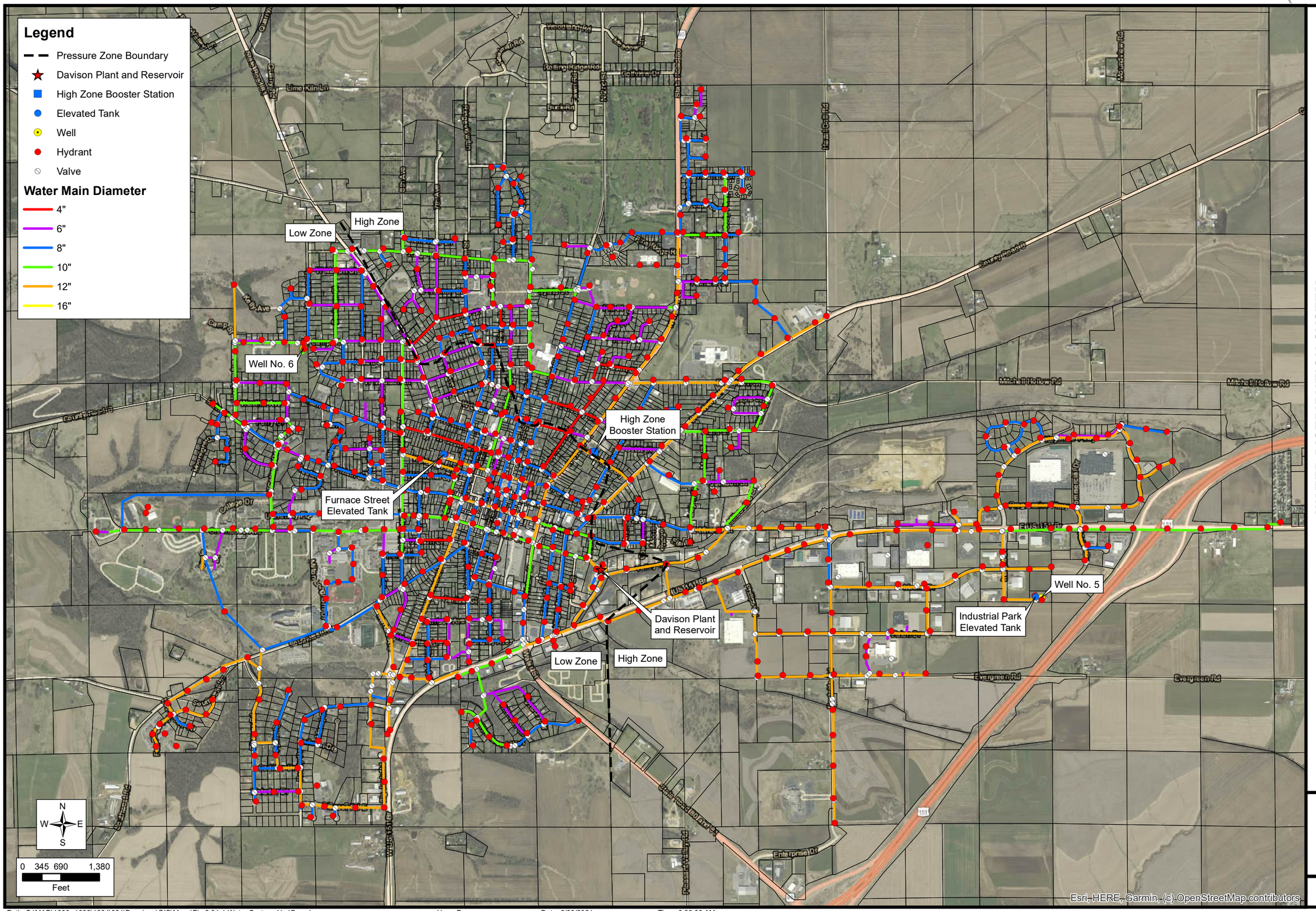
2.02 WELL SUPPLY SUMMARY

Table 2.02-1 presents the total and firm well capacities of the system. The firm well capacity of a system is defined as the total amount of capacity available when the largest well is out of service. The current capacities in this table are the pumping capacities reported by the City and are used for evaluating the ability of a system to meet present day and projected future demands. The current total well capacity for the system is 3,000 gallons per minute (gpm), or 4.32 million gallons per day (MGD). The current firm well capacity, assuming the largest well is out of service, is 1,900 gpm, or 2.74 MGD.

Well No.	Pumping Capacity (gpm)
3	900
5	1,100
6	1,000
Total Capacity	3,000
Firm Capacity*	1,900

*Assumes Well No. 5 is out of service

Table 2.02-1 Well Capacities



WATER DISTRIBUTION SYSTEM

CITY OF PLATTEVILLE
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 2.01-1
1064.021

Path: S:\MAD\1000--1099\1064\021\Drawings\GIS\Maps\Fig 2.01-1 Water System 11x17.mxd User: Danc Date: 6/30/2021 Time: 8:09:03 AM

A. Well No. 3

Well No. 3, shown in Figure 2.02-1 is located at 750 Valley Road in the Low Zone of the distribution system. This well resides approximately 250 feet to the south of the Davison Plant, which is also located on the same site. Well No. 3 was constructed in 1932 as a sandstone and dolomite well and drilled to a depth of 927 feet and cased to a depth of 334 feet. At the time of construction, the well was test pumped at 1,050 gpm at a pumping level of 311 feet below ground. The well was reported to have a specific capacity of 9.5 gallons per minute per foot (gpm/ft) at the time of construction; however, it has since decreased significantly. According to televised well log records, the well was blasted down to a depth of 1,000 feet to increase the specific capacity. The well pump has a rated capacity of 900 gpm.

The Well No. 3 building, located adjacent to the Davison Plant, contains the well head and associated electrical controls. Water from the well is pumped into the Davison Plant where it is treated with sodium hypochlorite, sodium silicate, and caustic soda. These chemicals are stored in the south end of the facility near the point where the Well No. 3 water enters the building. Water quality sampling is taken at a point downstream of these chemical injection points. Well No. 3 cannot function in the event of a power outage as the generator can only provide water without chemical treatment as the well has its own dedicated generator plug and transfer switch. After chemical treatment, water flows to an on-site 500,000-gallon reservoir for storage until use.

The Davison Plant centrifugal booster pumps and motors are also located in the Davison Plant building and pump water from the on-site reservoir to the distribution system. One of the booster pump motors was installed in 1936 and is operating beyond its typical lifespan. The City noted that, if the motor were to experience a breakdown, there would be no replacement parts available to repair it. Additionally, there is a garage space, additional offices, and storage located in the Davison Plant.

Figure 2.02-1 Well No. 3

Well No. 3 was last rehabilitated in 2015, which included the installation of a new pump. In 2019, the well pump motor was replaced. This well is over 90 years old and has lost some of its capacity from initial installation. Due to the age of this well, Well No. 3 should be considered for rehabilitation on approximately a five-year cycle if the City desires to continue to use the well.

B. Well No. 5

Well No. 5, shown in Figure 2.02-2, is located on Insight Drive in the High Zone of the distribution system. This well is located on the same site as the City's High Zone elevated storage tank. Well No. 5 was constructed in 2011 as a sandstone and dolomite well with the intent to replace the decommissioned Well No. 2, which was beyond its recommended service life. Well No. 5 was drilled to a depth of 1,040 feet and cased to a depth of 655 feet. The well was test pumped at 1,541 gpm for 20 hours at a pumping level of 440 feet below ground. The well was reported to have a specific capacity of 12.7 gpm/ft at the time of construction. The well pump has a rated capacity of 1,100 gpm, and City records have shown that this well has been able to maintain that capacity.

Figure 2.02-2 Well No. 5

The Well No. 5 facility contains a pressurized filter for iron removal including oxidation and backwash equipment. Sodium hypochlorite is fed into the water pre- and post-filtration. Fluoride is also added to the water after filtration. This facility contains a future chemical room for corrosion control, if needed. The building also includes a water utility office, break room, locker rooms, and vehicle storage area. This filter system is shown in Figure 2.02-3.

Well No. 5 was last rehabilitated in 2019. Since its construction in 2011, the City has not noted any deficiencies or losses in capacity. The well and facility are in excellent condition. Because this well is relatively new, the well should be considered for rehabilitation on an 8-year cycle.

Figure 2.02-3 Well No. 5 Well Head and Filter System

C. Well No. 6

Well No. 6, shown in Figures 2.02-4 and 2.02-5, is located on Camp Street in Westview Park, on the same site as the City's recently abandoned Well No. 4. Well No. 4 was abandoned due to a collapse in formation and failed well casing causing cascading water, air entrainment, and reductions in specific capacity and pumping capacity. Well No. 6 was constructed in 2019 to a depth of 965 feet and cased to a depth of 500 feet. The well was test pumped at 1,483 gpm for 24 hours at a pumping level of 438 feet below ground. The well was reported to have a specific capacity of 8.6 gpm/ft at the time of construction. The well pump has a rated capacity of 1,000 gpm, and City records have shown that this well has been able to maintain that capacity.

Figure 2.02-4 Well No. 6 Building

Well No. 6 includes a submersible well pump and uses a pitless unit to discharge water through buried piping to the well facility. The piping room for Well No. 6 facility contains the injection points for the chemicals and the electrical gear. The chemical room contains the storage and feed systems for sodium hypochlorite, fluoride, sodium silicate, and caustic soda. The chemical feed lines are routed through the floor and into the piping room. This facility also contains a restroom.

Because Well No. 6 was constructed and the pump installed in 2019, and there have been no noticeable losses in capacity, the well and pump are considered to be in excellent condition. The well should be scheduled for rehabilitation on an approximately eight-year cycle or as performance data dictates the need. The well facility has been upgraded over time and is in very good condition.

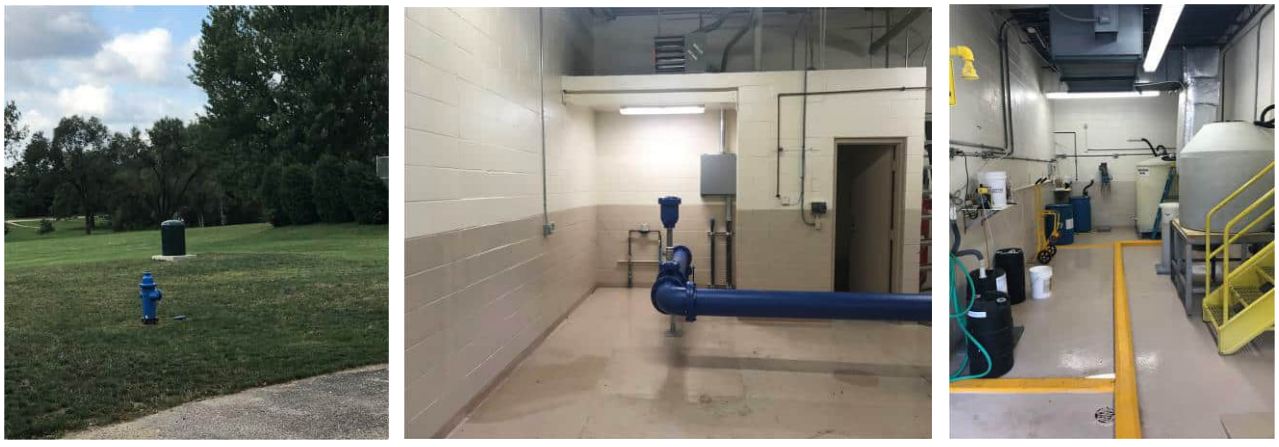


Figure 2.02-5 Well No. 6

2.03 WATER QUALITY SUMMARY

This section presents a summary of water quality in each of the raw water supply wells. Table 2.03-1 shows water quality results from the wells. Testing results are displayed as a range of minimum and maximum values that occurred during that time period or if there was a non-detect (ND). This analytical data is compared with the United States Environmental Protection Agency (USEPA) primary and secondary drinking water standards for each component. The primary drinking water standards, also known as maximum contaminant levels (MCL), are established to protect public health while secondary standards, also known as secondary maximum contaminant levels (SMCL), set maximum limits for aesthetic purposes.

Contaminant	MCL (mg/L)	SMCL (mg/L)	Well No. 3	Well No. 5	Well No. 6
Arsenic (As)	0.01	--	0 to 0.0003	0 to 0.0003	0.0012
Barium (Ba)	2	--	0.057 to 0.073	0.045 to 0.052	0.033
Chromium (Cr)	0.1	--	ND	ND	ND
Fluoride (F)	4	2	0.14 to 1.94	0.13 to 0.15	0.13
Hardness ($CaCO_3$)	--	--	315 to 331	309	330
Iron (Fe)	--	0.3	0.063 to 0.23	0.338	0.12
Manganese (Mn)	--	0.05	0 to 0.01	0.008	0.007
Mercury (Hg)	0.002	--	0 to 0.0002	ND	ND
Nickel (Ni)	0.1	--	0 to 0.0049	ND	0.0067
Nitrite-Nitrate (NO_3+NO_2)	10	--	0 to 0.26	ND	0.047
Sodium (Na)	--	--	1.43 to 12.6	1.41 to 1.51	5.2
Gross Alpha (pCi/L)	15	--	4.3 to 8.1	7.6 to 7.7	2.7 to 3.5
Combined Radium (pCi/L) (226+228)	5	--	3 to 4.5	1.1 to 1.7	0.6 to 2.6

mg/L=milligrams per liter

Table 2.03-1 Water Quality Summary

A. Well No. 3

Comparison of the inorganic and radionuclide data in Table 2.02-2 with the federal drinking water standards indicates that Well No. 3 samples do not exceed primary or secondary standards.

B. Well No. 5

Comparison of the inorganic and radionuclide data in Table 2.02-3 with the federal drinking water standards indicates that Well No. 5 complies with primary standards. The iron filter brings finished water quality below the secondary standards.

C. Well No. 6

Comparison of the inorganic and radionuclide data in Table 2.02-4 with the federal drinking water standards indicates that Well No. 6 samples did not exceed primary or secondary standards.

2.04 GROUND AND ELEVATED STORAGE SUMMARY

System storage includes two steel elevated tanks and a steel ground-level reservoir. The ground level reservoir is located at the Davison Plant in the Low Zone. Each zone includes one elevated storage tank. The High Zone elevated tank is located on Insight Drive in the eastern part of the distribution system. The Low Zone elevated tank is located on West Furnace Street near the center of the distribution system. A summary of the storage facilities is found in Table 2.04-1.

Storage Facility	Year Constructed	Capacity (gallons)	Overflow Elevation (feet MSL)
Davison Plant Reservoir	1988	500,000	937
High Zone Elevated Tank	1993	400,000	1,155
Low Zone Elevated Tank	1958	500,000	1,108
Total Storage		1,400,000	

MSL=mean sea level

Table 2.04-1 Existing Storage Capacity

A. Davison Plant Reservoir

The Davison Plant Reservoir, shown in Figure 2.04-1, is located to the north of the Davison Plant facility on the same site. This steel ground-level reservoir was constructed in 1988 and has a capacity of 500,000 gallons. The reservoir is 32 feet from the base to the overflow.

Figure 2.04-1 Davison Plant Reservoir

The tank was last cleaned in 2019. The tank's drain pipe and manway are both located on the south side of the tank. In general, the tank's exterior coatings are in good condition. This tank has also experienced issues with leakage around the base of the tank between the steel and concrete, which is presumed to be from the reservoir supply pipe.

B. High Zone Elevated Storage Tank

The High Zone Elevated Storage Tank, shown in Figure 2.04-2, is located on the same site as the Well No. 5 facility on Insight Drive. This elevated tank is a steel spheroid-style tank and was constructed in 1993. The elevated tank has a capacity of 400,000 gallons. The tank is 104 feet tall from the base to the overflow, which corresponds to an overflow elevation of 1,155 feet MSL.

The tank was last cleaned in 2019. The tank has several antennas mounted at the top of the tank. The tank's drain pipe and concrete splash pad are located on the northeast side of the tank, and the access door is located on the southeast side of the tank. The exterior coatings appear to be in good condition with a few areas near the top that are showing signs of wear.

Based on the age of the tank and original coating, the tank should be evaluated in more detail for overcoating or abrasive blasting and repainting.

Figure 2.04-2 High Zone Elevated Tank

Figure 2.04-3 Low Zone Elevated Tank

C. Low Zone Elevated Storage Tank

The Low Zone Elevated Tank, shown in Figure 2.04-3, is located near the center of the distribution system on Furnace Street. This elevated tank is a steel multi-legged tank with a capacity of 500,000 gallons. This tank was constructed in 1958 and is the oldest of the City's storage facilities. The height from the base to the overflow is 105 feet, which corresponds to an overflow elevation of 1,108 feet MSL.

The tank was last painted in 2019. The tank has several antennas mounted near the top of the tank. There are a few ancillary structures around the base of the tank owned by cellular and cable providers. The tank's drain pipe is located on the northwest side of the tank, and the ladder is located on the west side of the tank. Because the tank was last painted in 2019, new coatings are not needed in the near future. The City should plan on a 25-year life cycle for tank coatings.

2.05 CONDITION ASSESSMENTS

This section presents condition assessments of each facility based on a field visit conducted during this evaluation.

A. Well No. 3 Well House and Davison Plant

The Well No. 3 well house is in good condition overall. The City has proactively maintained the facility and the well continues to be a reliable source of water. However, the well has been in service for 90 years and is approaching the end of the typical service life. The City should plan to replace the well in the next 10 years.

The Davison Plant building, shown in Figure 2.05-1, is in fair to poor condition overall. Many parts of the building have been repurposed over time and the City has maintained the building to the extent possible. The masonry on the exterior and interior has been repaired in spots but continues to deteriorate. While the chemical feed equipment is well maintained and is in good condition, the chemicals are housed in a common room and the systems do not adhere to current Wisconsin Department of Natural Resources (WDNR) code.

Figure 2.05-1 Davison Plant

Table 2.05-1 summarizes the condition of major components of Well No. 3 and Davison Plant. The City should begin planning for a new well facility to replace Well No. 3. Further recommendations are discussed in Section 6.

Table 2.05-1 Condition of Major Components

Major Component	General Condition	Typical Remaining Life	Recommendation
Well No. 3 pump and motor	Excellent; replaced in 2015.	10 years	Continue operation and monitor performance.
Booster pumps and motors	Excellent (pumps). Poor (motors). Original motor from 1936. No replacement parts available	Pump heads: 10 to 15 years Motors: <5 years (at end of useful life)	Continue operation and monitor performance. Decommission when facility removed from service.
Electrical panels and building wiring	Fair to Poor, original equipment.	<5 years (at end of useful life)	Continue operation and monitor performance. Repair as needed.
Supervisory control center (SCC) and SCADA components	Fair.	Monitor for rehabilitation or replacement every 10 years	Continue operation and monitor performance.
Floor and wall coatings	Poor; floor coating is either missing or cracked away and spalling.	<5 years (at end of useful life)	Repair as needed.
Chemical feed equipment	Pumps and scales are in fair condition. Chemical containment curbing is needed for storage tanks.	5 to 10 years	Continue operation and monitor performance. Replace components when needed.
Water piping	Poor; paint is cracked away or peeling in many places.	10 to 15 years	Continue operation and monitor condition. Repair as needed.
Insulation	Poor; missing in some places.	<5 years (at end of useful life)	Continue operation and monitor condition. Repair as needed.
Heating, ventilation, and air conditioning (HVAC)	Poor; original equipment.	<5 years (at end of useful life)	Continue operation and monitor condition. Repair as needed.
Roof	Poor; original roof in the southern one-half of the facility. Roof is also missing insulation.	<5 years (at end of useful life)	Repair as needed.
Interior drywall	Poor; cracked or missing in many places leaving exposed brick.	<5 years (at end of useful life)	Leave as is until facility removed from service.
Brick veneer and fascia	Poor; original materials.	<5 years (at end of useful life)	Repair as needed.
Doors and hardware	Fair.	5 to 10 years	Leave as is until facility removed from service.
Driveway	Fair.	5 to 10 years	Leave as is until facility removed from service.

B. Well No. 5 Facility

The Well No. 5 facility is in excellent condition. Because the Well No. 5 facility was constructed in 2011 and has been maintained in excellent condition since its construction, all major facility components at this facility are in good working condition.

The City should continue to monitor well performance including capacity and water levels. Well rehabilitation should be performed when well performance starts to decline, or every 10 years. The well pump should be pulled every eight to 10 years to evaluate the need for repairs.

Filter performance should be monitored to look for signs of deterioration. Filter media has a typical life of 20 to 30 years. Filter media should be checked annually by visual observation to look for signs of media loss and uniform thickness. Uneven bed depths and clumping of media may be a sign of inefficient backwashing. Media should be added to top off the cells if signs of media loss are apparent.

C. Well No. 6 Facility

Well No. 6 and the well facility have undergone considerable improvements since 2018, with the drilling of the new well and installation of the new pitless unit site piping. The facility is in overall good condition with few improvements needed.

A recommended improvement at the Well No. 6 facility is the replacement of the chemically resistant floor coatings. While a portion of the coatings were replaced as a part of the 2018 project, approximately one-half of the coatings in the piping room are older and flaking in places. It is recommended that, at minimum, the floor in the piping room be recoated where it was not coated as a part of the 2018 well project.

Another potential improvement at the Well No. 6 facility is increasing the currently limited amount of additional space for input/output (I/O). If additional electronically driven processes were needed at this facility, there may not be enough space in the control cabinet to accommodate them. It is recommended to install additional space for I/O as needed.

D. Pressure Zone Transfer Station

The Pressure Zone Transfer Station, shown in Figure 2.05-2, located on Stevens Street has three pumps (with capacities of 500, 500, and 2,000 gpm, respectively) to pump water from the Low Zone to the High Zone. This facility is in excellent condition with no noted deficiencies or improvements needed. The City continues to maintain the facility regularly including rebuilding of pumps and control valves. It is recommended to continue to monitor the facility, including periodic operation of valves and pumps, to ensure the facility continues to operate in good condition.

Figure 2.05-2 Pressure Zone Transfer Station

SECTION 3
HISTORICAL AND PROJECTED DEMANDS

3.01 GENERAL

This section presents historic water demand trends observed by the City and develops a projection of future demands. Water use trends are applied to population projections and anticipated growth areas to estimate future water demands to the year 2040.

Water demand rate terminology used in this report is defined as follows:

A. Average Day

The total volume of pumped water in a year divided by the number of days in the year.

B. Maximum Day

The day of the year on which the maximum amount of water is pumped. The maximum day typically occurs during dry summer months when lawn watering is at a maximum. Maximum day use can also be attributed to main breaks and system maintenance.

C. Maximum Hour

The hour on the maximum day during which the maximum amount of water is pumped.

D. Fire Demand

The estimated amount of water required in a community to fight a fire. This demand is generally specified as a rate of flow, in gpm, for a given period of time, in hours. The calculated fire demand is added to the domestic demand during the maximum day to obtain the demand on a day that a major fire occurs. Fire demand generally increases the volume of storage that must be available on a maximum day.

Due to the number of variables impacting water consumption, it is difficult to make precise estimates of future water sales and demands. The Manual of Water Supply Practices M50 *Water Resources Planning* from the American Water Works Association (AWWA) outlines forecasting methods in Chapter 3. The Population Method was used along with reasonable usage factors and patterns experienced by the City to forecast future demands.

Prudent operation of a water utility requires that the system capacity always be in excess of system demands. Hence, recommended future improvements may be deferred until they become necessary, or be implemented sooner if demands increase at a rate faster than projected.

3.02 POPULATION

Figure 3.02-1 presents United States Census Bureau population data for the City from 1980 to 2020. This figure also shows projections from the Wisconsin Department of Administration (WDOA) Demographic Services Center and a modified projection that uses the WDOA growth rate applied to the 2020 Census value. Census data shows the City's population grew at a rate of approximately 5 percent between 2010 and 2020. The WDOA and modified growth projections reflect a growth rate of approximately 6 percent each decade. The modified growth projection is expected to provide a reasonable basis for future water supply needs.

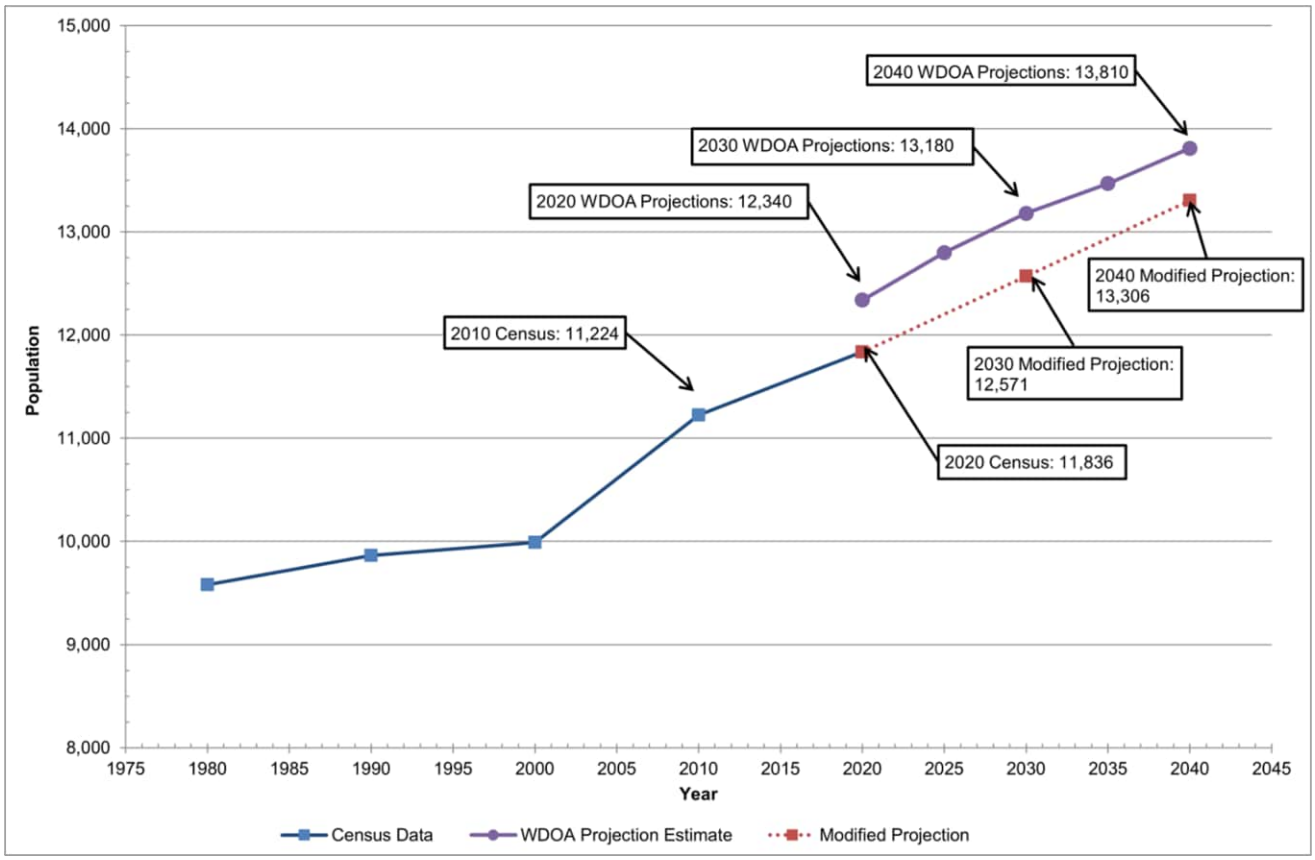


Figure 3.02-1 Population Projections

3.03 WATER SALES AND PUMPAGE

Historical water use records were obtained from the PSC *Water, Electric, Gas, and Sewer Annual Report* (WEGS) for the years 2006 through 2019. A summary of the historical water pumpage and sales data is shown in the Appendix.

A. Sales-to Pumpage Efficiency

Figure 3.03-1 presents the percentage of water pumped that was accounted for by metered sales since 2006. Sales will be less than pumpage because of meter losses, leakage, water main breaks, and hydrant flushing. This efficiency has ranged from 97 percent in 2013 and 2017 to 81 percent in 2008. The trend in efficiency has typically ranged from 90 to 95 percent in recent years, so an intermediate value of 92 percent will be used for the present day and 2040 design years.

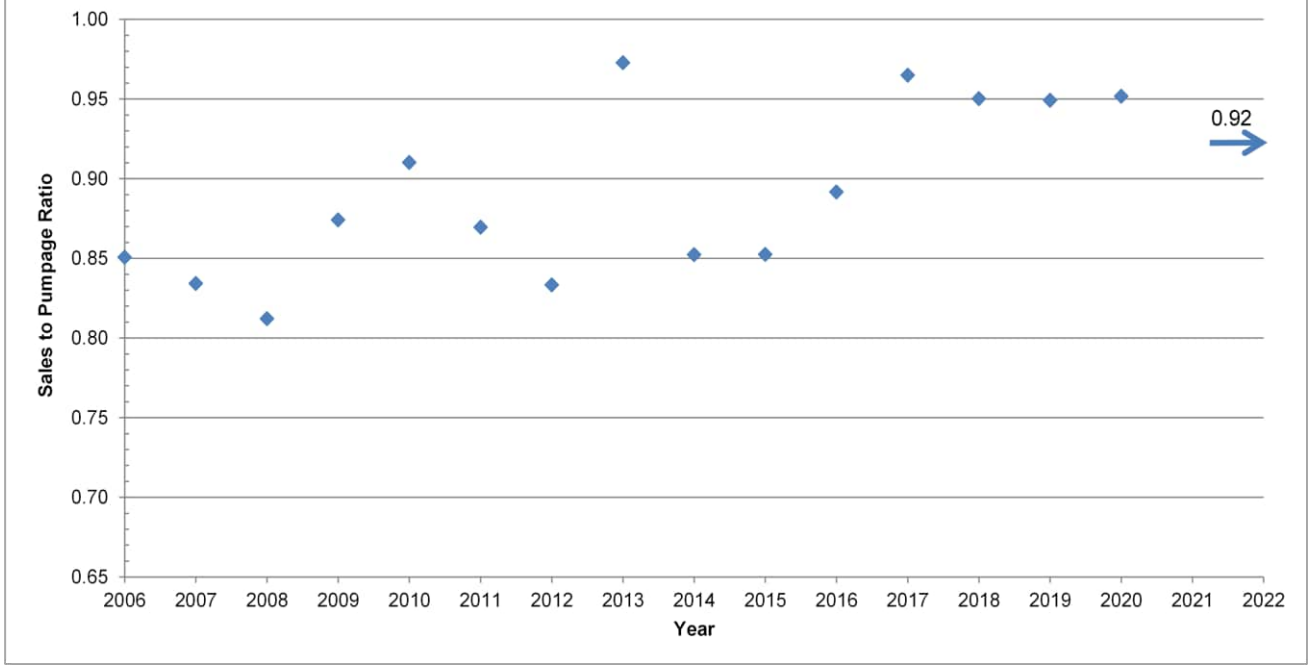


Figure 3.03-1 Sales to Pumpage Ratio

B. Maximum to Average Day Demand Ratio

Figure 3.03-2 presents maximum day to average day demand ratios since 2006.The values range from 1.43 in 2013 to 3.07 in 2019. Apart from the 2019 outlier, the maximum to average day demand ratio has typically ranged from 1.5 to 2.0 since 2006. A maximum to average day ratio of 2.5 will be used to forecast 2019 and 2040 maximum day demands. This value is higher than the 10-year average of 1.90. However, as ratios of over 3.0 have been reached in recent years, a higher ratio is being considered to provide a conservative value for planning purposes.

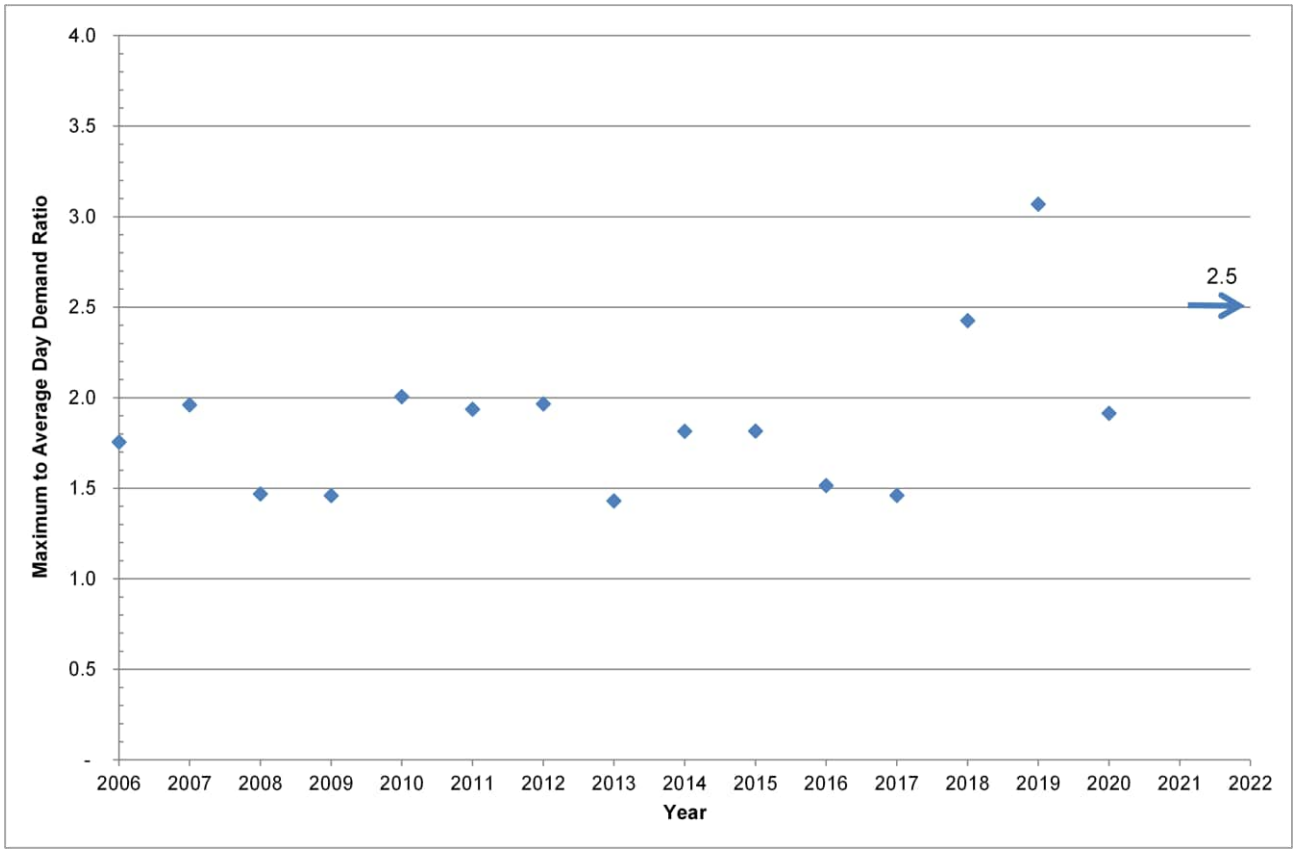


Figure 3.03-2 Maximum to Average Day Demand Ratios

C. Per Capita Sales By Category

Figure 3.03-3 presents sales per capita per day values since 2006 for residential, commercial, industrial, and public sales categories. Sales per capita is calculated by taking the total sales for each category and dividing by the estimated population that year. Industrial, public, and multifamily per capita sales have remained relatively steady since 2006 with little fluctuation. Residential sales declined in 2014 but have remained steady since the initial decline. Commercial per capita sales also showed the same trends as the residential sales, but their decline began in 2013. It is anticipated that future water use will remain consistent with past usage. To reflect recent trends in the per capita sales categories, a residential per capita sales of 25 gallons per capita per day (gpcd), a commercial per capita sales of 10 gpcd, a public

per capita sales value of 12 gpcd, an industrial per capita sales value of 7 gpcd, and a multifamily per capita value of 6 gpcd will be used.

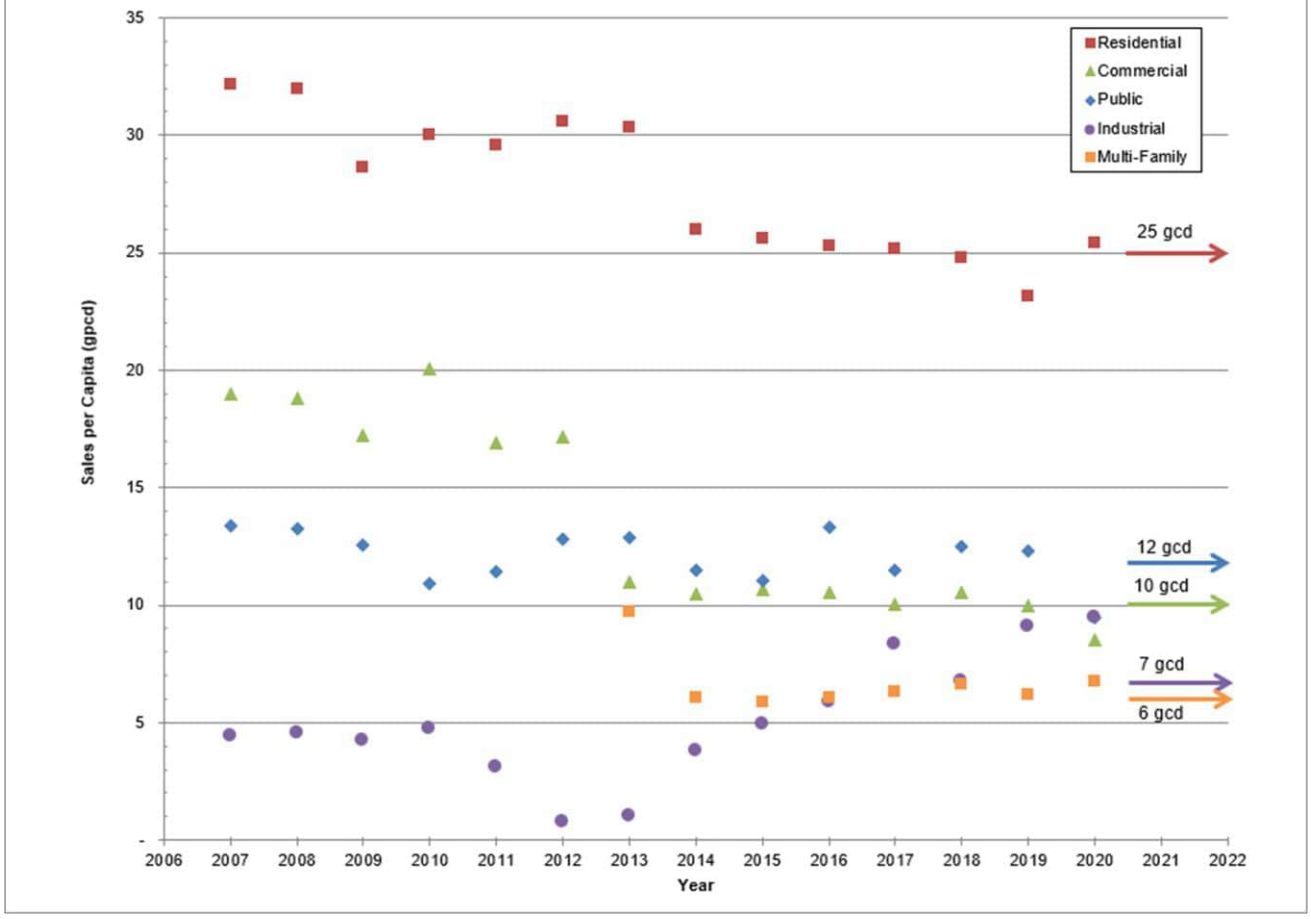


Figure 3.03-3 Per Capita Sales by Category

D. Total Per Capita Sales

Figure 3.03-4 presents total sales per capita per day values since 2006 and presents the summation of residential, commercial, industrial, public, and multifamily sales categories. Historic data shows an overall decreasing trend in the total per capita sales between 2006 and 2014, and an increasing trend since 2015. The minimum value of 53 gpcd occurred in 2015, and the maximum value of 69 gpcd occurring in 2007. Adding together the residential, commercial, industrial, public, and multifamily per capita sales forecasts results in a total per capita sales forecast of 60 gpcd. This value will be used for the present day and 2040 design year demand projections.

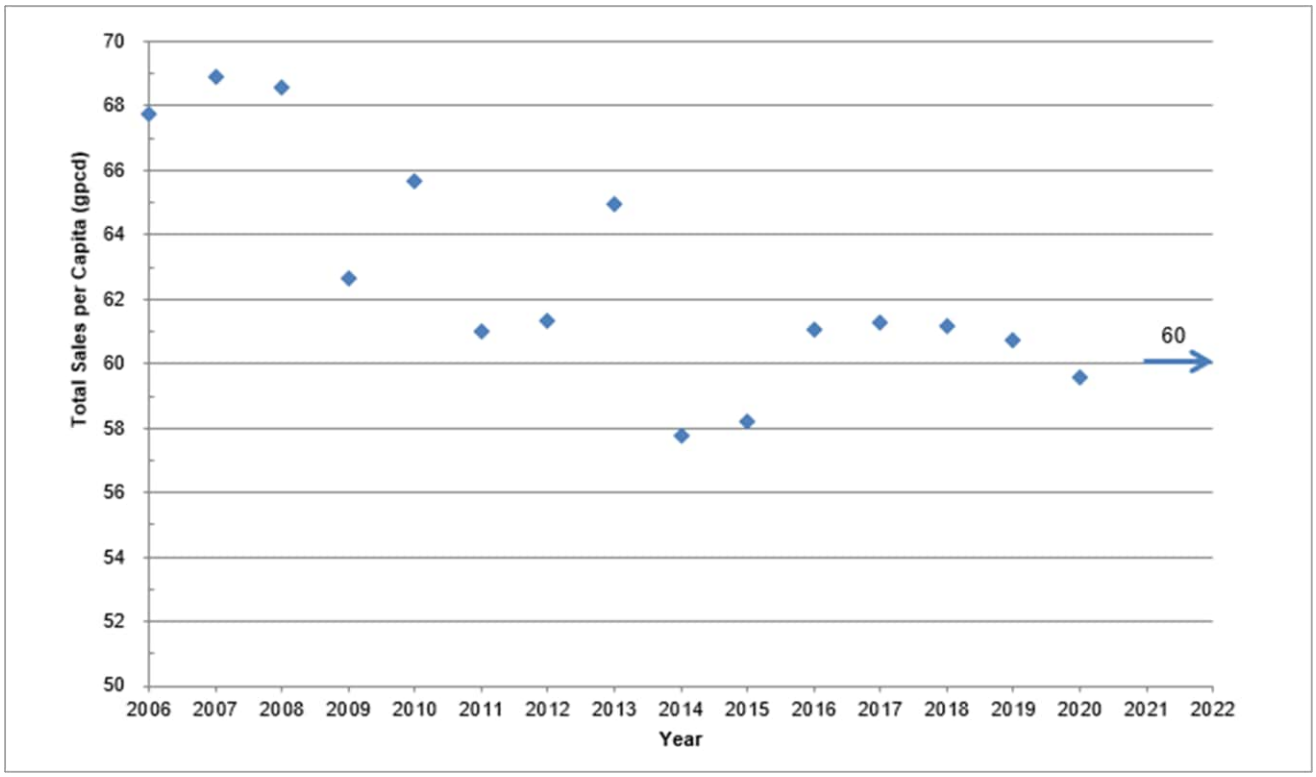


Figure 3.03-4 Total Per Capita Sales

3.04 2022 PROJECTED DEMANDS

Demand projections were calculated using the water use trends from the previous sections. The projected present day and 2040 demands will be used in the following section where demands will be compared to available supply.

A. 2022 Average Day Demand

Based on the demand factors above, the average day demand in 2022 is estimated to be 781,500 gpcd (543 gpm). This was calculated by multiplying the design population of 11,983 by the projected per capita sales (60 gpcd) and dividing by the corresponding sales to pumpage ratio (0.92).

B. 2022 Maximum Day Demand

1. Domestic

The 2022 maximum day pumpage is estimated to be approximately 1.95 MGD, which was calculated by applying the maximum to average day ratio of 2.5 to the 2022 average day pumpage. This is equal to a demand rate of 1,357 gpm.

2. Domestic Plus Fire

The Insurance Services Office (ISO) typically recommends basic fire flow requirements that are based on the amount of water a municipality should be able to supply. The required fire flow for individual buildings can range from a minimum of 500 gpm for 2 hours to a maximum of 12,000 gpm for 4 hours for large industrial complexes. The maximum basic fire flow requirement the ISO will credit a community that contains industrial-type facilities is 3,500 gpm for a duration of 3 hours. A fire flow of 3,500 gpm for 3 hours will be assumed for this study.

The total volume of water required to fight a fire on the 2020 maximum day is estimated as follows:

Domestic Maximum Day	1,953,750 gallons
Fire (3,500 gpm for 3 hours)	630,000 gallons
Total	2,583,750 gallons

The average rate at which this water would be used during the fire would be:

Domestic Maximum Day	1.95 MGD	=	1,357 gpm
Fire (3,500 gpm for 3 hours)	5.04 MGD	=	3,500 gpm
Total	5.99 MGD	=	4,857 gpm

3.05 AREAS OF FUTURE GROWTH

This section reviews areas of potential growth and the associated water system expansion needed to serve those areas. Assumed growth areas are based on previous planning documents provided by the City and discussion with City staff about recent development activity.

In general, the south and southeast areas bound by Highway (Hwy) 151 and the existing water service area provide the highest potential for growth. In particular, the City receives periodic inquiries regarding development in the corridor along Hwy 80/81. Development in this area is assumed to be a mixture of residential, commercial, and light industrial. The north part of the City is a potential area of moderate residential growth.

Areas of growth were evaluated to determine which pressure zone is best suited to serve new areas of development. Water service pressure is dictated by ground elevation and the water level in the controlling elevated storage tank in each zone. For the purpose of evaluating future areas of expansion, this study assumes a minimum acceptable service pressure of 45 psi and maximum pressure of 100 psi. Figure 3.05-1 shows ground elevations and the conceptual extension of the pressure zone boundary.

The overflow elevation of the Furnace Street water tower (low pressure zone) is 1,108 feet MSL. Assuming a minimum static system pressure of 45 psi, the corresponding maximum service elevation is 1,004 feet MSL.

The overflow elevation of the Industrial Park water tower (high pressure zone) is 1,155 feet MSL. Assuming a minimum static system pressure of 45 psi, the corresponding maximum service elevation is 1,051 feet MSL.

High Zone

Low Zone

Well No. 6

High Zone Booster Station

Furnace Street Elevated Tank

Davison Plant and Reservoir

Well No. 5

Industrial Park Elevated Tank

Conceptual future extension of pressure zone boundary.

Low Zone

High Zone

Highlighted areas denote potential areas of development north of Highway 151 at elevations greater than 1,004 ft MSL that should be served by the high pressure zone to avoid static pressure below 45 psi.

1004

1051

State Road 81

County Road XX

US Highway 151

N
W E
S

0 0.125 0.25 0.5
Miles

Esri, HERE, Garmin, (c) OpenStreetMap contributors

AREAS OF FUTURE GROWTH

CITY OF PLATTEVILLE
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 3.05-1
1064.021

Path: S:\MAD\1000--1099\1064\021\Drawings\GIS\Maps\Fig 3.05-1 Areas of Future Growth 11x17.mxd User: danc Date: 6/22/2022 Time: 9:12:26 AM

As shown on Figure 3.05-1, there are areas of land north of Hwy 151 and on both sides of Hwy 80/81 at elevations that exceed 1,004 feet MSL. These areas would best be served by the high pressure zone by extending and building upon the existing water main along Eastside Road.

There are no areas that present a concern as it relates to pressure exceeding 100 psi.

As development occurs in the south and southeast, the City should obtain a site for a future well and storage facility to replace the Davison Plant as discussed in Section 6. A pressure relief valve (PRV) should also be considered near Hwy 80/81 as the pressure zone boundary is extended. A PRV in this area will provide a redundant connection allowing the high pressure zone to feed the low pressure zone when needed.

Future development in the north part of the City can be served by either zone based on where development occurs.

3.06 2040 PROJECTED DEMANDS

A. 2040 Average Day Demand

The average day demand in 2040 was estimated to be 867,800 gpd (603 gpm). This was calculated by multiplying the design population of 13,306 by the projected per capita sales (60 gpcd) and dividing by the corresponding sales to pumpage ratio (0.92).

B. 2040 Maximum Day Demand

1. Domestic

The 2040 maximum day pumpage is estimated to be approximately 2.17 MGD, which was calculated by applying the maximum to average day ratio of 2.5 to the 2040 average day pumpage. This is equal to a demand rate of 1,507 gpm.

2. Domestic Plus Fire

The total volume of water required to fight a fire on the 2040 maximum day is estimated as follows:

Domestic Maximum Day	2,169,500 gallons
Fire (3,500 gpm for 3 hours)	630,000 gallons
Total	2,799,500 gallons

The average rate at which this water would be used during the fire would be:

Domestic Maximum Day	2.17 MGD	=	1,507 gpm
Fire (3,500 gpm for 3 hours)	5.04 MGD	=	3,500 gpm
Total	7.21 MGD	=	5,007 gpm

Figure 3.06-1 displays the historical and projected average and maximum day demands from 2006 through the 2040 design year. Note, the outlier maximum day demand in 2019 was caused by a water main break on Camp Street.

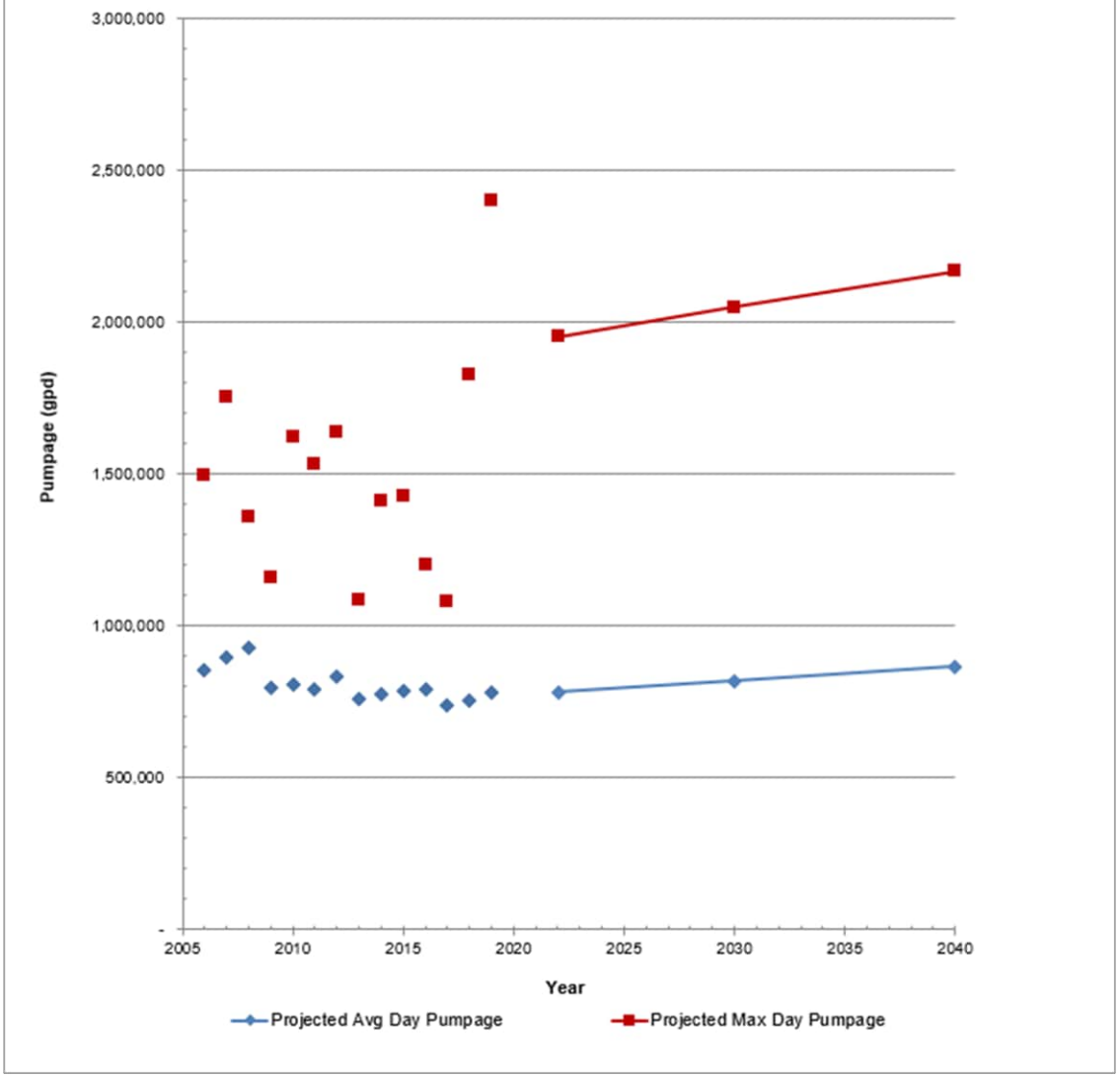


Figure 3.06-1 Historical and Projected Average and Maximum Day Pumpage

SECTION 4
ADDITIONAL REQUIRED CAPACITY

4.01 GENERAL

Days of maximum demand can occur consecutively, especially during the warm summer months. As a result, water withdrawn from storage during any one maximum day must be replaced before the following day to ensure an adequate supply of water for the next day. Therefore, total demand on the maximum day determines the minimum amount of water that must be available for the next day. It is recommended the system be designed to meet maximum day domestic demands with the most critical well out of service. The total amount of water that can be pumped from the wells with the largest well out of service is referred to as the firm capacity. If the firm capacity is less than the maximum day demand, storage will be depleted, and an inadequate amount of water may exist for the following day. Alternatively, if the firm capacity meets or exceeds total demands, all storage facilities may be refilled during any 24-hour period and water will be available to meet the following potential maximum day demand. Refer to Section 2 of this study for the current rated pump capacities.

If the firm pumping capacity just equals the maximum day domestic demand, the amount of storage required would be equal to fire requirements plus peak daily demands. Water withdrawn from storage facilities to meet fire demand does not need to be replaced the same day or the day following the fire. However, it is recommended to replenish the storage as soon as possible.

4.02 2022 CAPACITY ANALYSIS

A. 2022 Maximum Day Demand

The estimated 2022 maximum day demand is 1,357 gpm (1.95 MGD). The combined current capacity of the existing wells is 3,000 gpm (4.32 MGD). The firm capacity with Well No. 5 out of service is 1,900 gpm (2.74 MGD). Firm well capacity exceeds the 2022 maximum day demand and the system has a well supply surplus of 543 gpm. No additional well supply is needed to meet the present day maximum day demands.

B. 2022 Maximum Day Demand–Fire Flow

The total amount of water available to satisfy maximum day demand plus fire demand is equal to the firm well capacity plus the water available from usable storage. Section 3 of this study discusses the fire demand scenarios for the City. A demand rate of 4,857 gpm (1,357 gpm domestic demand plus 3,500 gpm fire demand) for three hours must be satisfied to provide the necessary fire protection for the system. Because a fire can start at any time during the day, the expected domestic demand must be taken into account when calculating available supply. It is assumed that the storage is not depleted at the start of the three-hour fire demand, and that 25 percent of elevated storage is reserved for daily operational needs.

Although there are 500,000 gallons of available storage at the ground-level reservoir at the Davison Plant, storage is only available at the capacity of its booster pumps that is in excess of the Well No. 3 pump capacity. The three booster pumps have a cumulative capacity of 4,800 gpm; however, it is assumed that only two of the booster pumps (totaling 2,800 gpm) will be operating during a fire event. Therefore, the rate of water that can be withdrawn from the Davison Plant reservoir is equal to 1,900 gpm.

Maximum Day Demand	-	1,357	gpm
Fire Demand	-	3,500	gpm
Firm Well Capacity	+	1,900	gpm
Elevated Storage Capacity[1]	+	3,750	gpm
Ground-Level Storage Capacity	+	1,900	gpm
Total	+	2,693	gpm

[1]Elevated Storage Capacity=675,000 gallons per 180 minutes

During a three-hour fire event, the system is projected to have a capacity surplus of 2,653 gpm, or approximately 485,000 gallons. Storage in the system is able to meet the 2022 maximum day demand with fire flow, and no additional storage is required.

4.03 2040 CAPACITY ANALYSIS

For the purpose of this analysis, it is assumed that no new supply or storage was constructed or decommissioned before the 2040 design year.

A. 2040 Maximum Day Demand

The total pumpage on the maximum day in 2040 is estimated to be 1,507 gpm (2.17 MGD). The existing firm well capacity is 1,900 gpm (2.74 MGD). The existing firm well capacity exceeds the 2040 projected maximum day demands. For the 2040 design year, the City has a surplus in well supply of 393 gpm and no additional well capacity is required. If an existing well were to be abandoned, additional supply would be needed to satisfy maximum day demands.

B. 2040 Maximum Day Demand–Fire Flow

The total amount of water available to satisfy maximum day demand plus fire demand is equal to the firm well capacity plus the water available from usable storage.

Maximum Day Demand	-	1,507	gpm
Fire Demand	-	3,500	gpm
Firm Well Capacity	+	1,900	gpm
Elevated Storage Capacity[1]	+	3,750	gpm
Ground-Level Storage Capacity	+	1,900	gpm
Total	+	2,543	gpm

[1]Elevated Storage Capacity=675,000 gallons per 180 minutes

During a three-hour fire event, the system is projected to have a capacity surplus of 2,543 gpm, or approximately 458,000 gallons. No additional storage is needed to meet the 2040 maximum day demand; however, the storage analysis should be reevaluated if existing storage, such as the Davison Plant reservoir, is removed from service.

4.04 CAPACITY ANALYSIS WITHOUT WELL NO. 3, DAVISON PLANT, AND RESERVOIR

Because of the age and condition of the infrastructure at the Davison Plant, it is recommended that this facility and the reservoir be taken out of service before 2040. For the purpose of this analysis, it is assumed that Well No. 3, the Davison Plant Reservoir, and the Davison Plant booster pumps are no longer in service. It is also assumed that no additional supply or storage has been constructed to replace the existing infrastructure. This will provide an estimate of supply and storage needs if these facilities are removed from service.

A. Present Day (2022) Maximum Day Demand

The total pumpage on the maximum day in 2022 is estimated to be 1,357 gpm (1.95 MGD). If Well No. 3 is abandoned, the firm well capacity of the system becomes 1,000 gpm (1.44 MGD). The firm well capacity without Well No. 3 is below the 2040 projected maximum day demands. Under this scenario, the system would have a well supply deficit of 357 gpm. Additional well capacity is needed before decommissioning Well No. 3 and the Davison Plant.

B. Present Day (2022) Maximum Day Demand–Fire Flow

The total amount of water available to satisfy maximum day demand plus fire demand is equal to the firm well capacity plus the water available from usable storage. Note: because the firm well capacity in this scenario is unable to meet the maximum day demands, a new well will be needed regardless of this storage and fire flow analysis. Because of the need for this new well, it was assumed that the firm well capacity would be sufficient enough to supply maximum day demands.

Maximum Day Demand	-	1,357	gpm
Fire Demand	-	3,500	gpm
Firm Well Capacity	+	1,357	gpm
Elevated Storage Capacity[1]	+	3,750	gpm
Ground-Level Storage Capacity[2]	+	0	gpm
Total	+	250	gpm

[1]Elevated Storage Capacity=675,000 gallons per 180 minutes
[2]Assumes Davison Plant Reservoir and booster pumps are taken out of commission

During a three-hour fire event, the system is projected to have a capacity surplus of 250 gpm, or approximately 45,000 gallons. While the projections show a system surplus of 250 gpm, additional storage is highly recommended to provide additional supply in the event of a large fire if Well No. 3 and the Davison Plant are removed from service.

C. 2040 Maximum Day Demand

The total pumpage on the maximum day in 2040 is estimated to be 1,507 gpm (2.17 MGD). If Well No. 3 is abandoned, the firm well capacity of the system becomes 1,000 gpm (1.44 MGD). The firm well capacity without Well No. 3 is below the 2040 projected maximum day demands. Under this scenario,

the system would have a well supply deficit of 507 gpm. Additional well capacity is needed if Well No. 3 and the Davison Plant were to be decommissioned.

D. 2040 Maximum Day Demand–Fire Flow

The total amount of water available to satisfy maximum day demand plus fire demand is equal to the firm well capacity plus the water available from usable storage.

Maximum Day Demand	-	1,507	gpm
Fire Demand	-	3,500	gpm
Firm Well Capacity	+	1,507	gpm
Elevated Storage Capacity[1]	+	3,750	gpm
Ground-Level Storage Capacity[2]	+	0	gpm
Total	+	250	gpm

[1]Elevated Storage Capacity=675,000 gallons per 180 minutes
[2]Assumes Davison Plant reservoir and booster pumps are taken out of commission

During a three-hour fire event, the system is projected to have a capacity surplus of 250 gpm, or approximately 45,000 gallons. Again, while this analysis projects a system storage surplus of 250 gpm, additional storage is recommended for both the 2020 and 2040 scenarios if Well No. 3 and the Davison Plant are decommissioned.

4.05 ADDITIONAL REQUIRED CAPACITY

Timing the construction of the new supply and storage facilities is critical to ensure that the Davison Plant infrastructure is not relied upon too far beyond its useful lifespan while also ensuring that system demands are met. Figure 4.05-1 shows the firm well supply with and without Well No. 3 along with historic and projected maximum day demands. The figure illustrates the need for additional well supply before removal of Well No. 3 from service. A new well with a capacity of 1,000 gpm is recommended to keep pace with population growth and allow for replacement of Well No. 3. The timing and costs of a new well are discussed in Section 6.

Similarly, demolition of the 500,000-gallon reservoir at the Davison Plant will create a near-deficit of available storage. If the reservoir is removed from service, a new water storage facility with a capacity of 400,000 gallons is recommended for construction before decommissioning the Davison Plant and reservoir. Storage can be added in the form of either elevated storage or ground-level storage as part of the new well facility.

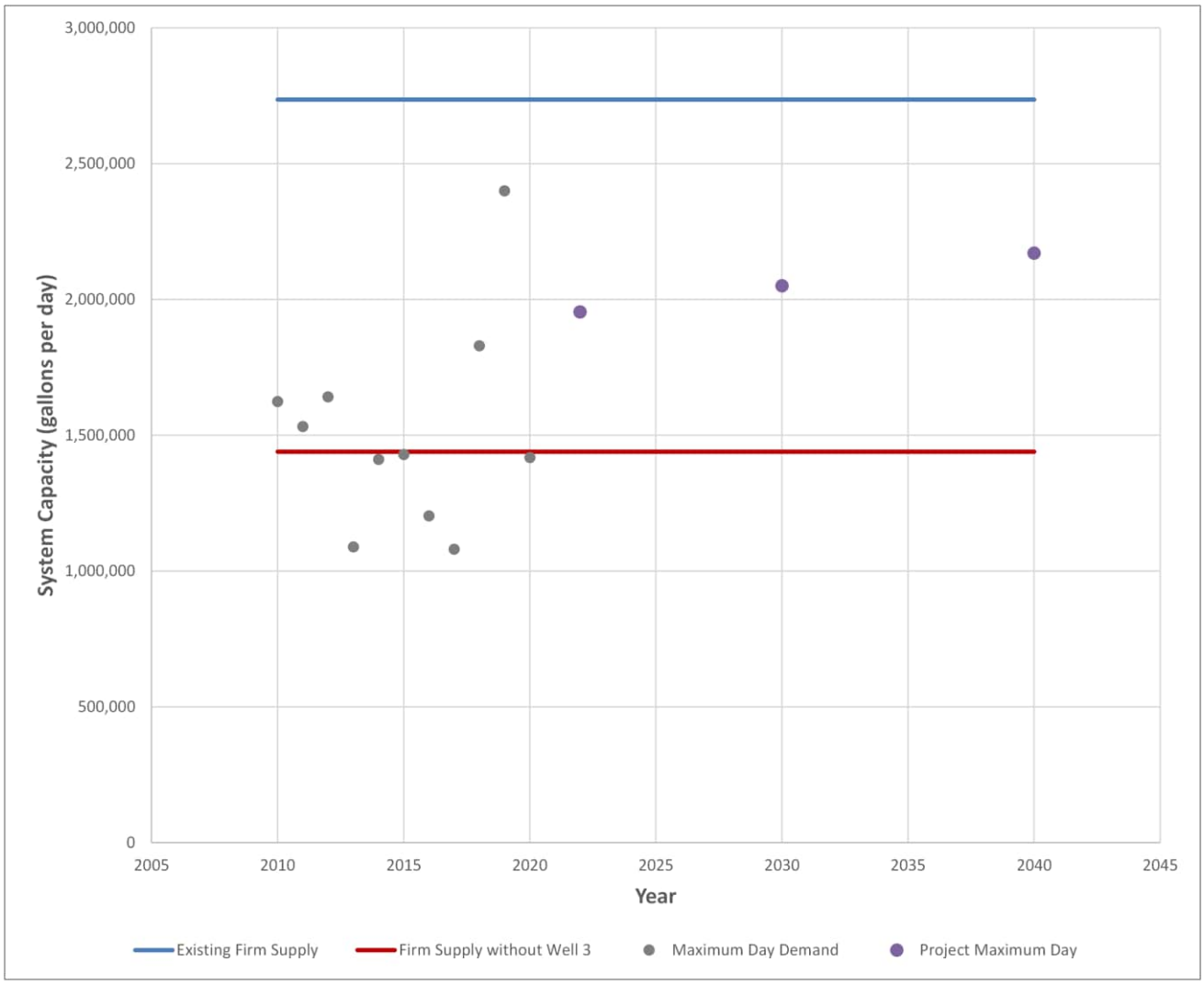


Figure 4.05-1 Demands Versus Firm Supply

SECTION 5
COMPUTER MODELING

5.01 GENERAL

This section summarizes the services completed in creating and calibrating the City's water system model, including the results of the current and future system modeling.

5.02 MODEL CREATION AND CALIBRATION

A. Model Creation with Geographic Information System (GIS) Data

A computer model of the City's water distribution system was created using WaterGEMS CONNECT software. The existing distribution system was imported into the model through the software's Model Builder tool with GIS shapefiles provided by the City. Attributes incorporated in these shapefiles include water main diameter, hydrant locations, and isolation valve locations. Well pump and storage facility information was manually entered into the model from information provided by the City. Each model junction between two (or more) pipes was assigned an elevation based on a 2-foot topographic Grant County contour map that was imported to the model using the software's Terrain Extractor tool.

The average and maximum day demands were distributed evenly through the system using a blanket demand approach.

B. Model Calibration with Field Flow Data

To properly calibrate the hydraulic model and simulate the existing pipe network, the model's results were checked against observed conditions in the system. These conditions were obtained through field testing of hydrants throughout the distribution system. On October 28, 2020, ten field fire flow tests were conducted. The locations of these field flow tests were chosen to provide a representative sample of the conditions throughout the distribution system.

Two hydrants were used for each field flow test: one monitoring hydrant and one flowing hydrant. Before the flowing hydrant was opened, a pressure gauge was attached to the monitoring hydrant to record the static pressure at the hydrant. This pressure gauge and the hydrant were both air purged before a static pressure reading was taken.

After recording the static pressure, the flowing hydrant was opened using one 2.5-inch outlet. A residual pressure reading was taken at the monitoring hydrant. If the pressure at the monitoring hydrant dropped more than 10 pounds per square inch (psi), gauge readings were recorded and the test was considered complete. If the pressure drop was less than 10 psi, an additional 2.5-inch outlet was opened. A pressure reading was taken at the flowing hydrant using a pitot tube and gauge.

After completing the field flow tests, the flows from the hydrants were calculated. This calculation was done using the pitot tube and gauge reading observed from the flowing hydrant and the diameter of the open outlet. Hydrant flow was calculated using the following equation:

$Q=(29.83)(C)(D^2)(P^{0.5})$=flow in gpm
C=outlet discharge coefficient (typically 0.9 for 2.5-inch-diameter outlets)
D=diameter of the outlet in inches
P=pitot pressure in psi

After the completion of the field flow tests, operating data including elevated storage tank levels and well pump flow was obtained from the City's SCADA system. This data was used to set the boundary conditions of the model. After inserting this data into the model, scenarios were run in the model that correspond to the flow tests under these observed conditions. Static and residual pressure results from the model simulations are presented with the field observed pressures for comparison in Table 5.02-1. The testing locations for each field flow test are shown in Figure 5.02-1.

Test Number	Flowing Hydrant Location	Field Static Pressure (psi)	Modeled Static Pressure (psi)	Field Residual Pressure (psi)	Modeled Residual Pressure (psi)	Field Measured Flow (gpm)
1	Heather Lane	45	48.2	35	33.9	1,061
2	North Elm Street	91	95.5	71	62.8	1,455
3	Jefferson Street	66	67.4	47	44.1	650
4	Cornerstone Circle	64	65.3	55	57.6	1,300
5	East Knollwood Way	70	69.8	59	54.0	1,405
6	Pyrite Road	92	90.4	78	79.6	1,500
7	Flower Court	74	74.8	60	56.6	1,405
8	Madison Circle	63	65.1	55	55.8	1,300
9	Mitchell Avenue	64	63.5	57	61.5	1,350
10	Eastside Road	65	64.3	55	55.9	1,190

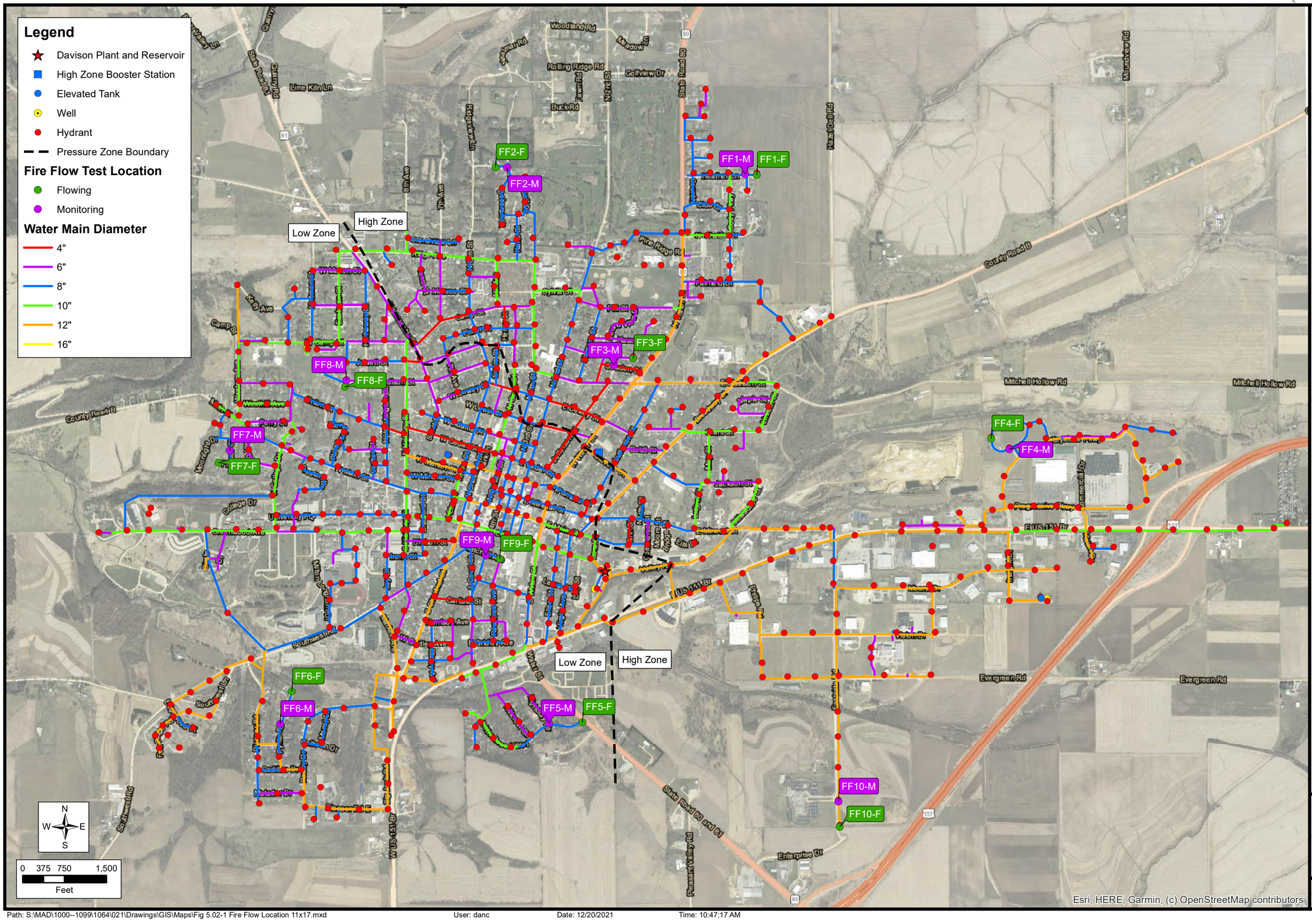
Table 5.02-1 Model Calibration Results

A computerized model is considered calibrated when static and residual pressures predicted by the model are within 5 psi of the observed field tests results. To bring the differences between the modeled and field pressures into acceptable calibration levels, C-factors were adjusted within the model based on pipe size, material, and age. For this calibration, pipe material was the primary consideration in determining C-factors using data available in the City's GIS system. The City's pipe materials ranged from polyvinyl chloride (PVC) to ductile and cast iron, all of which exhibit different roughening characteristics as they age. Table 5.02-2 displays the C-factors assigned to water main in the model based on water main material.

Pipe Material	C-Factor
HDPE	120
DI	110
CI	110
Unknown	125
PVC	125

HDPE=high density polyethylene
DI=ductile iron
CI=cast iron

Table 5.02-2 Water Model C-Factors



FIRE FLOW TEST LOCATIONS

WATER SYSTEM COMPREHENSIVE PLAN
CITY OF PLATTEVILLE
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 5.02-1
1064.021

Path: S:\MAD\1000--1099\1064\021\Drawings\GIS\Maps\Fig 5.02-1 Fire Flow Location 11x17.mxd User: danc Date: 12/20/2021 Time: 10:47:17 AM

In addition, based on the initial round of static modeling results, a transducer correction was applied to the Low Zone Tank. This was necessary as transducer readings recorded placed the tank readings outside of the actual operating range of the tank. Shifting all tank readings by this transducer correction moved the static tests into calibration.

Following the C-factor and transducer corrections to the model, Test No. 2 was the only test not within calibration. However, it was observed during flow testing that field pressure recordings swung approximately 5 psi in either direction of the recorded value while the test was taking place. The instability of the observed pressures at this location, reduces its usefulness as a calibration location and as a result it was no longer considered as part of the calibration set. The modeled results in this area were lower than the observed results, and as a result should result in conservative estimates of available flow and pressure. Care should be taken when evaluating model results in this general area.

Based on the field testing and model simulations mentioned previously, the hydraulic model is considered calibrated for steady-state simulations.

5.03 PRESENT DAY MODEL ANALYSIS

The model was used to analyze present day conditions under several demand and flow scenarios. Three types of steady-state simulations were performed with this model: an average day domestic demand (non-fire) simulation, a maximum day domestic demand simulation, and a fire flow simulation.

A steady-state simulation evaluates the behavior of the system at a specific point in time under static conditions. In this type of simulation, the behavior of the well pumps, elevated tank, and the overall supply and storage relationship can be analyzed. This type of simulation is useful for determining pressures within the distribution system and flow rates under different demand conditions.

A fire flow simulation provides an instantaneous snapshot of the amount of water available at hydrants in the system while maintaining a minimum of 20 psi residual pressure. The model simulates a separate fire event at each junction in the system and increases the flow until either the hydrant itself or any point in the system reaches the 20-psi residual pressure threshold. Very high available fire flows (greater than 5,000 gpm) are not considered realistic, but rather indicate areas of very strong hydraulic connectivity.

A. Steady-State Average Day Demand

The average day domestic demand condition, equaling 543 gpm or 0.78 MGD, was modeled using a steady-state analysis with Well Nos. 5 and 6 operating, no booster pumps operating, the Davison Plant Reservoir out of service, and the elevated tanks set to 10 feet below its overflow elevation. The model projected pressures in the system range from 33 to 109 psi. The low pressures occur in the high zone on the far east end of the system on County Road XX. The low pressures are a result of older water main at relatively higher elevations. The areas of high pressure occur in low lying areas near Southwest Road and the City’s wastewater treatment plant. The high pressures are a result of low elevations relative to the rest of the system.

While these modeled simulations show system pressures below 35 psi, water levels in the elevated tanks are typical maintained higher than 10 feet below overflow so normal operating pressures across the system are above 35 psi. Because of elevations and modeled system pressures in the area east of Highway 151 on County Road XX, additional modeling analyses should be conducted if potential developments were to occur in this area.

B. Steady-State Maximum Day Demand

The maximum day domestic demand condition, equaling 1,357 gpm or 1.95 MGD, was modeled using a steady-state analysis with Well Nos. 5 and 6 operating, no booster pumps operating, the Davison Plant Reservoir out of service, and the elevated tanks set to 10 feet below its overflow elevation. The model projected pressures in the system range from 32 to 109 psi. The high- and low-pressure locations are the same as the average day demand scenario. Figure 5.03-1 displays the resulting pressure contours from this analysis.

C. Steady-State Fire Flow Analysis

A steady-state fire flow analysis was completed in the model using the maximum day domestic demand condition. This modeled simulation had Well Nos. 5 and 6 operating, no booster pumps operating, the Davison Plant Reservoir out of service, and the elevated tanks set to 10 feet below its overflow elevation. The model-projected available fire flow, which was based on a 20-psi residual pressure threshold, ranged from 674 gpm to a model-controlled maximum of 5,000 gpm. Available fire flow can be anticipated to increase when additional pumps are brought into service. These fire flow values represent the amount of fire flow available at the end of the hydrant lead and do not take hydrant losses into consideration. Typically, the available fire flow will be highest near elevated storage, wells, and large diameter transmission main in the City. Figure 5.03-2 shows the model-generated available fire flow throughout the system.

The lowest available fire flow of 674 gpm is located at the end of the Jefferson Street cul-de-sac. This low fire flow is due to the hydrant being located on a long dead end with 4-inch-diameter cast iron water main in the area. The highest available fire flows of 5,000 gpm are all located in the low pressure zone, with the exception of the area surrounding the high pressure zone water tower. As depicted in Figure 5.03-2, fire flows are generally higher in the low pressure zone, which is because of a strong network of water main loops that are well-connected to the Furnace Street elevated tank. The high pressure zone fire flows are lower in comparison to the low pressure zone because the network of mains is more dispersed (less looping) and the north part of the system is further from the high pressure zone tank.

5.04 DAVISON PLANT ANALYSIS

Due to the age and condition of the infrastructure currently at the Davison Plant, the facility is recommended to be removed from service in the coming years. See Sections 2 and 6 of this report for additional details. This section evaluates how the system pressures and available fire flows compare with and without the Davison Plant in operation.

Legend

- Davison Plant and Reservoir
- High Zone Booster Station
- Elevated Tank
- Well
- Pressure Zone Boundary
- Water Main

Pressure (psi)

- <= 40
- <= 50
- <= 60
- <= 70
- <= 80
- <= 90
- <= 100

Low Zone

High Zone

Low Zone

High Zone

N
W E
S

0 375 750 1,500
Feet

Esri, HERE, Garmin, (c) OpenStreetMap contributors

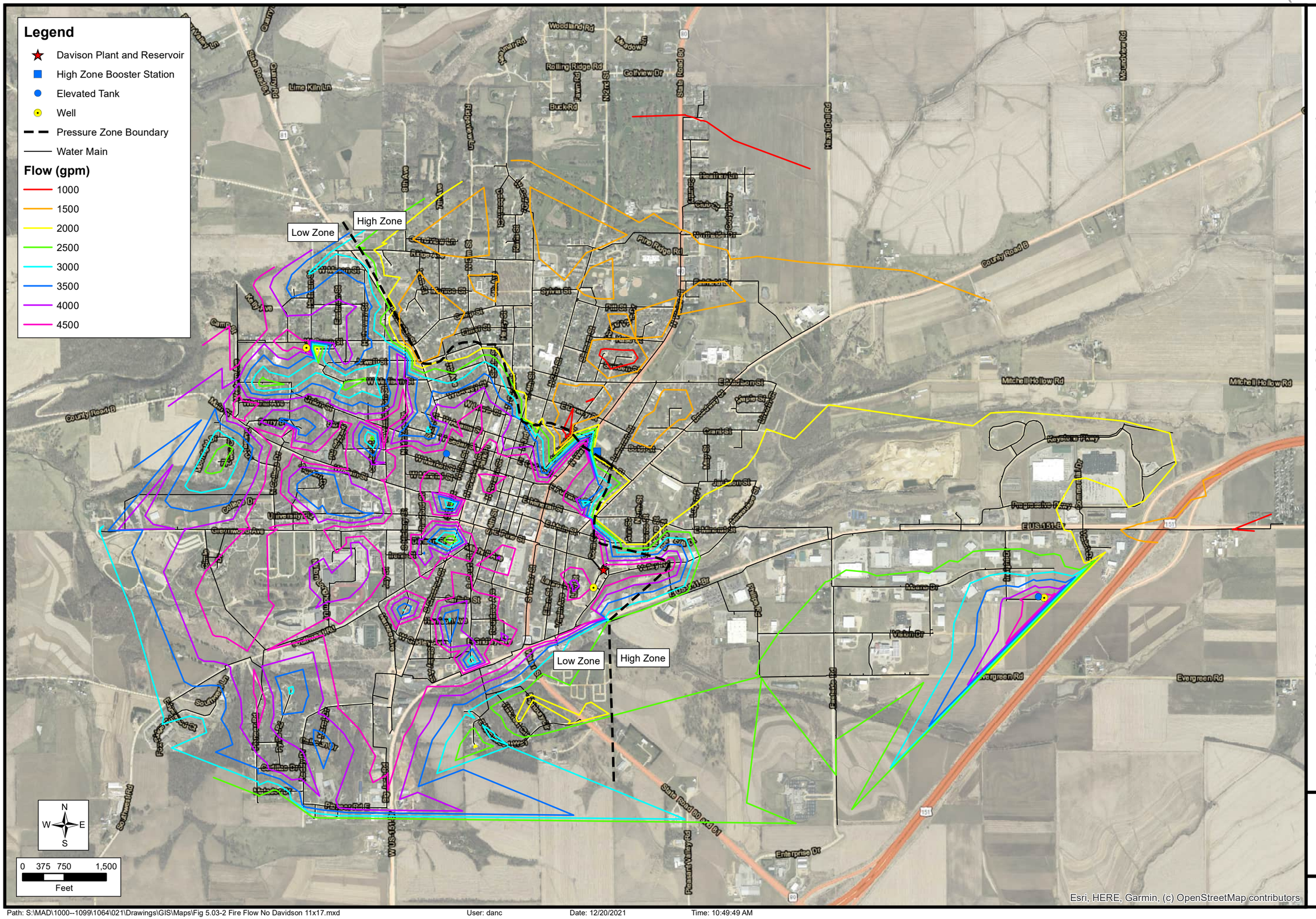
2020 MAXIMUM DAY DEMAND PRESSURE CONTOURS (NO DAVISON PLANT)

WATER SYSTEM COMPREHENSIVE PLAN
CITY OF PLATTEVILLE
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 5.03-1
1064.021

Path: S:\MAD\1000--1099\1064\021\Drawings\GIS\Maps\Fig 5.03-1 Pressure No Davidson 11x17.mxd User: danc Date: 12/20/2021 Time: 10:48:50 AM



2020 MAXIMUM DAY DEMAND FIRE FLOW CONTOURS (NO DAVISON PLANT)

WATER SYSTEM COMPREHENSIVE PLAN

CITY OF PLATTEVILLE

GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 5.03-2
1064.021

Section 5.03 evaluated the system with the Davison Plant Reservoir and booster pumps not in operation. For the steady-state scenarios evaluated in this section; it is assumed that the Davison Plant reservoir is set to 5 feet below overflow, Davison Booster Pump No. 1 is operating, Well No. 5 is operating, and the elevated tanks are set to 10 feet below their overflow elevations.

A. Steady-State Maximum Day Demand

The maximum day domestic demand condition, equaling 1,357 gpm or 1.95 MGD, was modeled using a steady-state analysis. The model projected pressures in the system range from 32 to 109 psi. The high- and low-pressure locations are the same as the steady state scenarios simulated in Section 5.03. Figure 5.04-1 displays the resulting pressure contours from this analysis.

B. Steady-State Fire Flow Analysis

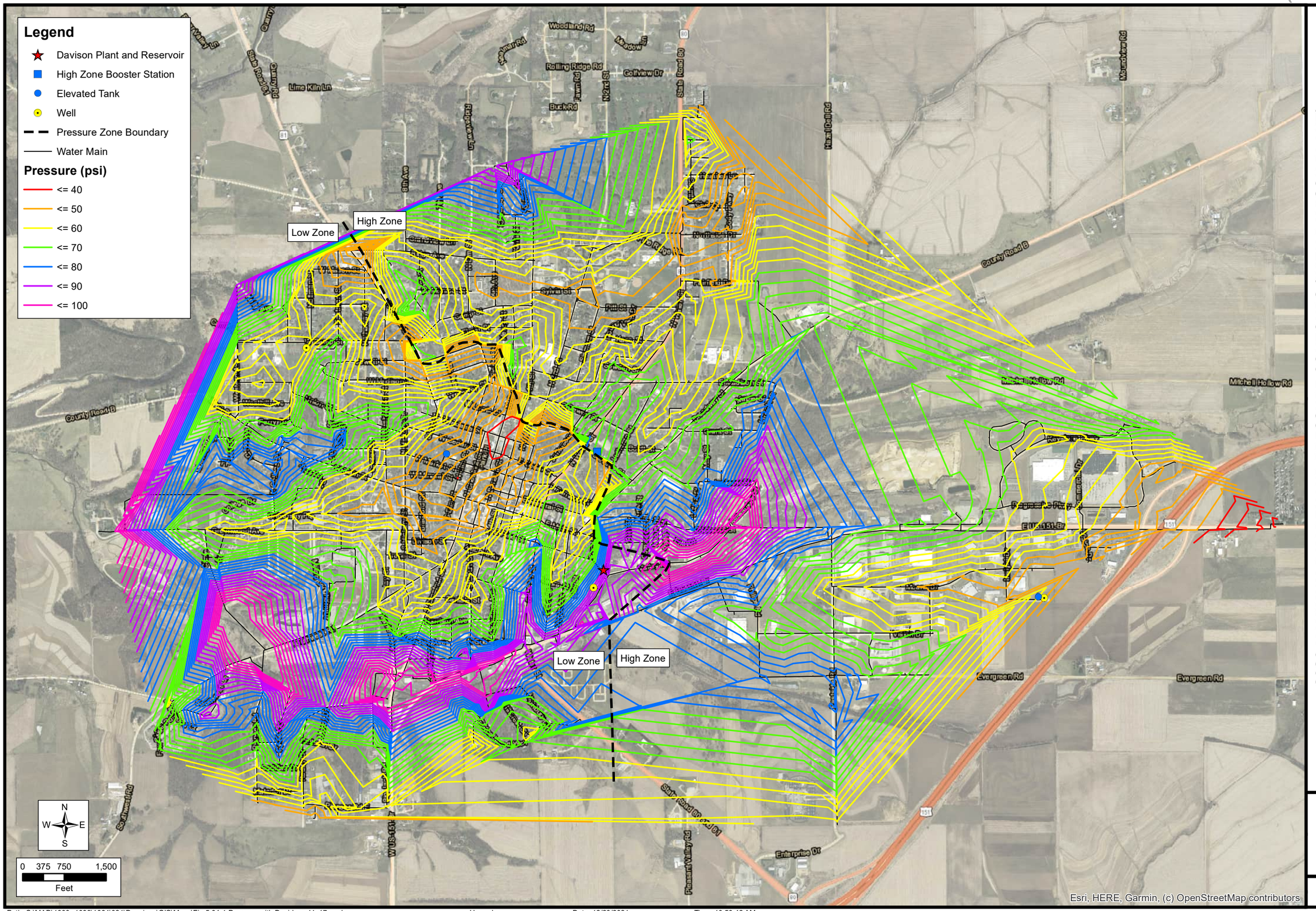
A steady-state fire flow analysis was completed in the model using the maximum day domestic demand condition. The model-projected available fire flow, which was based on a 20-psi residual pressure threshold, ranged from 674 gpm to 5,000 gpm. Areas of low fire flow in the system include hydrants located further from sources of supply and storage, on long dead ends, or on small diameter water main. Figure 5.04-2 shows the model-generated available fire flow throughout the system.

C. Comparison of Results

As shown by the pressure and fire flow contour figures in this section and Section 5.03, the system is able to sustain sufficient pressures and fire flows both with and without the Davison Plant in service. There is very little difference between supplying the low zone using Well No. 6 compared to the Davison Plant, as pressures and available fire flows are nearly identical.

The largest impact of eliminating the Davison Plant is related to the supply capacities in the low zone and the high zone. If the Davison Plant were to be decommissioned and Well No. 5 were out of service for maintenance, the high zone could still be supplied through the Stevens Street Booster Station. The same is true for the low zone. If Well No. 6 is temporarily offline, the high zone can supply the low zone through the control valve in the transfer station.

As described in the previous sections, eliminating Well No. 3 and the Davison Plant will require a new well and storage facility to satisfy long term supply and storage needs.



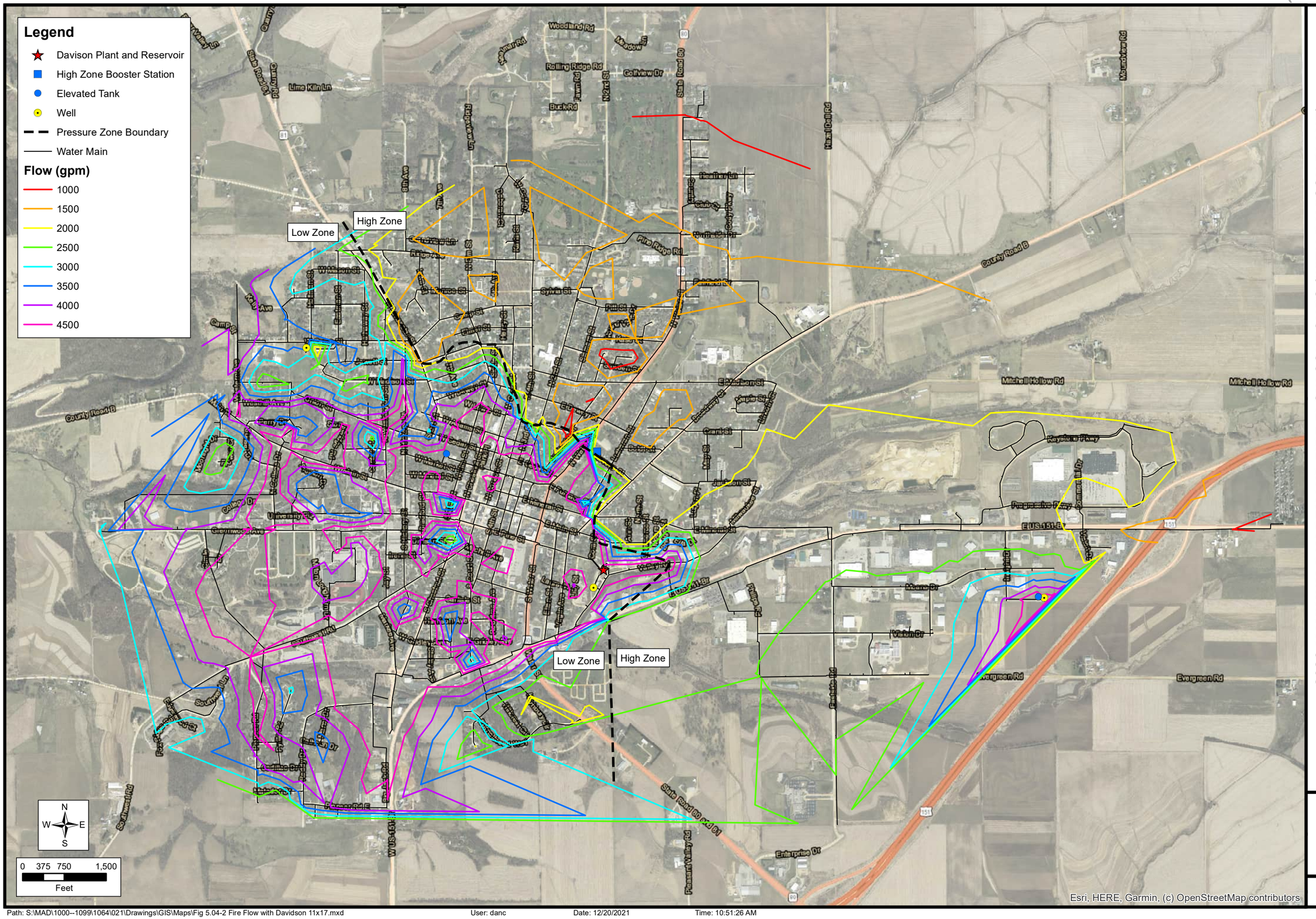
2020 MAXIMUM DAY DEMAND PRESSURE CONTOURS (WITH DAVISON PLANT)

WATER SYSTEM COMPREHENSIVE PLAN
CITY OF PLATTEVILLE
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 5.04-1
1064.021

Path: S:\MAD\1000--1099\1064\021\Drawings\GIS\Maps\Fig 5.04-1 Pressure with Davidson 11x17.mxd User: danc Date: 12/20/2021 Time: 10:50:42 AM



2020 MAXIMUM DAY DEMAND FIRE FLOW CONTOURS (WITH DAVISON PLANT)

WATER SYSTEM COMPREHENSIVE PLAN
CITY OF PLATTEVILLE
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 5.04-2
1064.021

Path: S:\MAD\1000--1099\1064\021\Drawings\GIS\Maps\Fig 5.04-2 Fire Flow with Davidson 11x17.mxd User: danc Date: 12/20/2021 Time: 10:51:26 AM

SECTION 6
RECOMMENDATIONS AND CAPITAL IMPROVEMENT PLAN

6.01 CONCLUSIONS AND RECOMMENDATIONS

This section summarizes the conclusions and recommendations of the Water System Comprehensive Plan. A list of system improvements and anticipated costs is provided along with a discussion of implementation timing. The following OPCCs are based on 2022 dollars. Contingency amounts equivalent to 30 percent are included to cover general uncertainties, market fluctuations, professional services, and administrative costs.

Despite continued growth of the City's water service area, average day water use since 2006 has remained essentially unchanged. This trend is consistent with most other communities in the state who have seen level or declining water use trends, even as populations increase. Maximum day water use is trending upward, likely because of system maintenance, extreme weather, and ongoing expansion of the water system.

The City continues to develop its water distribution system infrastructure with future growth in mind. Annual water main replacements improve aging areas of the system, and areas of development provide opportunities to construct new water main from existing parts of the system. No areas of critical deficiency were found within the existing system that give one area of water main priority over another for replacement.

A. Water Supply and System Demands

The estimated 2022 maximum day demand is 1,357 gpm. The system's firm capacity with Well No. 5 out of service is 1,900 gpm. Under the 2022 maximum day demand scenario with Well No. 5 out of service, the system has supply surplus of 543 gpm. The estimated 2040 maximum day demand is 1,564 gpm. Assuming no additional supply has been added, the City would have a supply surplus of 393 gpm.

With Well No. 3 and the Davison Plant and reservoir removed from service, the system's firm capacity becomes 1,000 gpm. Assuming no additional supply has been added after taking the plant out of service, the City would have a present day supply deficit of 357 gpm. The deficit grows to 507 gpm by 2040 without Well No. 3. Additional well capacity is required to replace Well No. 3 and to meet the 2040 maximum day demands. A new deep aquifer well with a capacity of 1,000 gpm should be constructed before removal of Well No. 3. The timing of a new well facility depends on the desired schedule for retiring Well No. 3 and the Davison Plant.

If the City wishes to pursue drilling a new deep aquifer well, further exploration of sites can proceed at any time. If future developments proceed in areas thought to be promising for a new deep well, the City may wish to secure potential well sites before buildout of the development.

B. Storage Capacity

The City operates 900,000 gallons of elevated storage. The ground-level reservoir at the Davison Plant is 500,000 gallons. As described in Section 4, the system has an existing storage surplus of approximately 478,000 gallons and a surplus of approximately 448,000 gallons based on the 2040 design year, assuming no changes to supply or storage are made.

With the eventual decommissioning of the Davison Plant and reservoir, the system is expected to have a storage surplus of only 45,000 gallons based on the 2040 design year. Additional storage is recommended for the system, and could be added in the form of a new elevated tank or ground-level storage constructed as part of a new well facility. Because the existing system has elevated storage in each zone, ground level storage constructed as part of a new well facility is recommended.

C. Water System Modeling

As a part of this comprehensive plan, a hydraulic model of the City's water system was created, calibrated, and used to simulate system operation. No significant deficiencies were noted in the system as it pertains to service pressure and available fire flow.

The model should be maintained and updated on an annual basis to reflect water main improvements installed each year. The model can be used to simulate operation of proposed well and storage facilities as those projects proceed.

D. Well and Pumping Equipment Maintenance Plan

The historic well rehabilitation activities described earlier in the report and typical rehabilitation cycles were used to estimate ongoing well rehabilitation needs. Table 6.01-1 presents the projected time frames for rehabilitation of each well. Well rehabilitation activities are anticipated to include rehabilitation of the borehole, wire brushing, chemical treatment, and possible air impulse blasting. Well pump, column, and motor replacement may also be required during this rehabilitation process. A budgetary cost of $100,000 is assumed if well and well pump work is needed.

The wells and pumping equipment may not deteriorate at the same rate. The pumping rate, static water levels, pumping water levels, and specific capacity of each well should be monitored on a monthly basis. Declines in these key indicators of well performance are anticipated to occur over time. If the rates of decline change, the timing of the rehabilitation may need to be changed accordingly. The plan assumes that Well No. 3 will be abandoned within the next 10 years.

Well No.	Rehabilitation Years
3	2024
5	2027 and 2035
6	2028 and 2036

Table 6.01-1 Well Rehabilitation Plan

E. Elevated Tank Painting

Periodic painting of the steel elevated water storage tanks is needed to protect the structures from corrosion and prolong their useful lives. Each storage tank should be inspected before painting to assess the condition of the existing coatings and determine what scope of work will provide the most benefit to the City. In general, elevated tanks will require painting on 15- to 20-year cycles. Overcoating existing paint may be possible if the existing coatings show good adhesion. Overcoats have lifetimes in the

10- to 15-year range. Full-abrasive blasting and recoating is typically needed after overcoat systems begin to fail or if the existing coatings are not suitable to support overcoating. The capital improvement plan includes a tentative schedule and costs for tank painting.

6.02 WELL AND STORAGE ALTERNATIVES

A combination of new water supply and storage facilities will be necessary to satisfy demands and fire flow needs under present and future maximum day demand scenarios if the City were to eliminate Well No. 3 and the Davison Plant. It is recommended that the City construct a new 1,000-gpm-deep aquifer well and 400,000 gallons of storage to satisfy future demands and removal of Well No. 3 and the Davison Plant. This section discusses various alternatives available for adding well capacity and storage to the system.

A. Well Drilling

Selection of a well site is the first step in developing a new well facility. Because geology of the deep aquifer is not expected to vary significantly across the City, well sites can be selected based on existing City properties, areas of growth, and system hydraulics. Table 6.02-1 presents tasks, timelines, and estimated costs associated with each phase of the well drilling process. Well facility alternatives are discussed in the following sections.

The table includes costs related to drilling deep aquifer test wells. The cost and benefits of a test well should be considered at the start of the project. The primary advantage of a deep test well is to determine water quality. In lieu of a test well, water quality can be determined based on the production well and the well facility designed with appropriate treatment systems.

Task	Timeline for Completion (months)	OPCC
Well Site Investigation (multiple sites)	3	$20,000
Land Acquisition or Easements	1 to 3	$50,000
Test Well Drilling (if desired by the City)	8	$200,000
Test Well Drilling Design	2	---
WDNR Well Drilling Permit Review	3	---
Well Drilling	3	---
Production Well Drilling	11	$580,000
Well Drilling Design and Bidding	4	---
WDNR Well Drilling Permit Review	3	---
Well Drilling	4	---
Subtotal		$850,000
Contingency and Engineering (30 Percent)		$255,000
Total	**14 to 22**	**$1,105,000**

Table 6.02-1 Well Siting and Drilling Timelines and Costs

B. Well Facility

Table 6.02-2 outlines the tasks and estimated costs associated with a new well facility. The costs for a well facility range from $1.8 million to $3.2 million and vary based on the need for treatment. A treatment system similar to the filter installed at Well No. 5 may be needed to address iron and/or radium levels if found in significant concentrations in the new well. Implementation time is approximately two years from the beginning design to start up of the facility.

Task	Timeline for Completion	OPCC
Well Facility (No Treatment)		
Facility Design	7 months	---
WDNR Well Facility Permit Review	3 months	---
Facility Construction	12 months	---
Facility Structure		$600,000
Well Pump		$100,000
Mechanical and Piping		$250,000
Electrical and Controls		$300,000
Site Work and Restoration		$150,000
Subtotal		$1,400,000
Contingency and Engineering (30 Percent)		$420,000
Total	22 months	**$1,820,000**
Well Facility (Iron and Radium Treatment)		
Facility Design	8 months	---
WDNR Well Facility Permit Review	3 months	---
Facility Construction	14 months	
Facility Structure		$750,000
Well Pump		$100,000
Treatment Equipment		$750,000
Mechanical and Piping		$350,000
Electrical and Controls		$350,000
Site Work and Restoration		$150,000
Subtotal		$2,450,000
Contingency and Engineering (30 Percent)		$735,000
Total	**25 months**	**$3,185,000**

Table 6.02-2 Well Facility Timelines and Costs

C. Storage Alternatives

Water storage can be added in the form of an elevated tank or ground-level reservoir and pumping station.

1. Elevated Storage

Table 6.02-3 summarizes the OPCC for a new 400,000-gallon elevated tank. The OPCC includes the price of the tank, cathodic protection, piping and valves, HVAC and electrical work, site work,

site acquisition, and contingency and professional services. The OPCC assumes the tank will be constructed using a standard shallow foundation. Upon preliminary design of an elevated tank, it is recommended the City hire a geotechnical engineer to determine the compatibility of the soils under the tank. If a deep foundation is required, additional project costs would be incurred. It is also recommended to verify the cost of site acquisition to determine the actual price before moving forward with tank design for budgeting purposes.

Advantages of elevated storage include reliability in the event of power loss and ease of operations. Disadvantages include the cost of periodic repainting which makes the life cycle cost higher than the cost of operating a concrete ground-level storage tank.

Task	Timeline for Completion (months)	OPCC
Preliminary Design and Siting	2	---
Tank Design	3	---
WDNR Permit Review	3	---
Construction	16	---
Tank Construction		$1,400,000
Cathodic Protection		$15,000
Electrical and HVAC		$60,000
Site Work		$150,000
Land Acquisition		$50,000
Subtotal		$1,675,000
Contingency and Engineering (30 Percent)		$502,500
Total	**24**	**$2,177,500**

Table 6.02-3 OPCC–400,000-Gallon Elevated Tank

2. Ground-Level Storage and Pumping

Additional storage could be constructed along with a new well facility to include a cast-in-place concrete reservoir and booster pumps. With this arrangement water would flow from the well, through treatment (if needed), and into the reservoir. Booster pumps would draw water from the reservoir and pump to the distribution system. This arrangement would be similar to the existing Well No. 3 and Davison Plant process. Table 6.02-4 provides costs that are intended to be additive to the well facility costs in Table 6.02-2.

Advantages of this option include a shorter timeline for implementation and lower cost of ownership.

Task	Timeline for Completion (months)	OPCC
Reservoir and Pump Design	3	---
WDNR Permit Review	3	---
Construction	9	---
Reservoir Construction		$1,200,000
Pumps and Pumping Station		$250,000
Electrical and HVAC		$100,000
Site Work		$50,000
Subtotal		$1,600,000
Contingency and Engineering (30 Percent)		$480,000
Total	**24**	**$2,080,000**

Table 6.02-4 OPCC–Ground-Level Storage and Pumping

6.03 CAPITAL IMPROVEMENT PLAN

This section provides a tentative schedule and OPCCs for improvements discussed in the report. Table 6.03-1 presents a list of projects including capital projects and major maintenance projects including tank repainting and well rehabilitation.

All costs are based on 2022 dollars and include 30 percent contingency as detailed above. The OPCC should be evaluated before implementing each project as needed to refine the project budgets.

Estimated Date	Recommendation	OPCC
2023	High Zone Elevated Tank Painting	$500,000
2023	New Well (Well No. 7) Well Site Investigation	$20,000
2024	Well No. 3 Rehabilitation	$100,000
2024	Well No. 7 Well Drilling	$1,085,000
2026	Well No. 7 Well Facility Construction	$1.8 million to $3.2 million
2026	Construct Storage Reservoir and Booster Pumps as part of Well No. 7 Facility (if desired)	$2.1 million
2027	Decommission Well No. 3 and Davison Plant	$100,000
2027	Well No. 5 Well Rehabilitation	$100,000
2028	Construction 400,000-Gallon Elevated Tank (if storage not constructed with Well No. 7 facility)	$2.2 million
2028	Well No. 6 Well Rehabilitation	$100,000

Table 6.03-1 10-Year Capital Improvement Plan

APPENDIX
HISTORIC WATER PUMPAGE AND SALES DATA

HISTORIC WATER PUMPAGE AND SALES DATA

Year	Annual Pumpage (gal)	Average Day Pumpage (gpd)	Maximum Day Pumpage (gpd)	Average Day Sales (gpd)	Sales to Pumpage Ratio	Maximum to Average Day Ratio	Revenue Water (gal)	Non-Revenue Water (gal)	Non-Revenue Water (gpd)
2006	311,942,000	854,051	1,498,000	726,667	0.85	1.75	265,415,000	46,527,000	127,471
2007	327,294,000	896,082	1,756,000	747,567	0.83	1.96	273,049,000	54,245,000	148,616
2008	338,379,000	926,431	1,360,000	752,474	0.81	1.47	274,841,000	63,538,000	174,077
2009	290,600,000	795,619	1,161,000	695,600	0.87	1.46	254,068,000	36,532,000	100,088
2010	295,862,000	810,026	1,624,000	737,320	0.91	2.00	269,306,000	26,556,000	72,756
2011	289,025,000	791,307	1,532,000	688,183	0.87	1.94	251,359,000	37,666,000	103,195
2012	304,905,000	834,784	1,641,000	695,691	0.83	1.97	254,101,000	50,804,000	139,189
2013	278,173,000	761,596	1,089,000	740,912	0.97	1.43	270,618,000	7,555,000	20,699
2014	283,978,000	777,489	1,411,000	662,694	0.85	1.81	242,049,000	41,929,000	114,874
2015	287,385,000	786,817	1,429,000	670,820	0.85	1.82	245,017,000	42,368,000	116,077
2016	289,988,000	793,944	1,203,000	708,003	0.89	1.52	258,598,000	31,390,000	86,000
2017	270,127,000	739,567	1,080,000	713,711	0.97	1.46	260,683,000	9,444,000	25,874
2018	275,387,000	753,969	1,829,000	716,586	0.95	2.43	261,733,000	13,654,000	37,408
2019	285,717,000	782,251	2,400,000	742,628	0.95	3.07	271,245,000	14,472,000	39,649

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February 16, 2026

Mr. Howard Crofoot, P.E.
City of Platteville
75 North Bonson Street
Platteville, WI 53818

Re: Water Supply Service Area Plan (WSSAP) Addendum No. 1
City of Platteville, Wisconsin (City)

Dear Mr. Crofoot:

Enclosed with this letter is the WSSAP, which is presented as an addendum to the *2022 Water System Comprehensive Plan* (2022 Plan). Many of the requirements set forth in Wisconsin Department of Natural Resources Chapter Natural Resource (NR) 854, which describes the WSSAP, are addressed in the 2022 Plan. The addendum covers certain topics that warranted updating and topics specific to the WSSAP requirements. The following presents important findings of the 2022 Plan and WSSAP.

The population projections used in the 2022 Plan were reviewed as part of the WSSAP. The 2022 Plan used population projections based on a rate of growth similar to projections published by the Wisconsin Department of Administration (WDOA). However, updated population projections from WDOA now show that the population of the City is expected to decline over the next 15 years by approximately 5 percent. After gathering input from City staff and the Southwestern Wisconsin Regional Planning Commission, it was decided to use the current WDOA projections for estimating future water system demands.

While the reduced population results in lower future water demands, it is important to note that the need to replace Well No. 3 and the Davison Plant still exists. Well No. 3 and the Davison Plant are approaching the end of their useful life and should not be relied upon for long-term supply. From initial planning to construction completion, the process for siting, well drilling, and well facility construction can be expected to take 3 years. The City should begin that process in 2026, with the goal of having a new well facility online before 2030. Once the new well and facility are online, Well No. 3 and the Davison Plant can be decommissioned and demolished.

Results of the WSSAP show that continued use of a groundwater supply is the most feasible source of water. The City continues to be proactive in planning for future improvements and maintaining efficient operation of the system.

If you have questions or comments regarding this WSSAP, please call 608-251-4843.

Sincerely,

STRAND ASSOCIATES, INC.®

Michael J. Forslund, P.E.

Olivia N. Holtz

Enclosure: Report

MJF:ONH:sjl\R:\MAD\Documents\Reports\Archive\2026\Platteville, WI\2022 Water Sys Comp Plan.Add No. 1.MJF.1064.028.Dec\Report\Cover Letter.docx

Addendum No. 1 for
City of Platteville, Wisconsin

Water System Comprehensive Plan

Prepared by:

STRAND ASSOCIATES, INC.®
910 West Wingra Drive
Madison, WI 53715
www.strand.com

February 2026

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TABLE OF CONTENTS

This Addendum No. 1 to the 2022 *Water System Comprehensive Plan* (2022 Plan) is issued to modify the original report for the City of Platteville, Wisconsin (City) to incorporate requirements from the recently adopted Wisconsin Department of Natural Resources (WDNR) administrative rule, Chapter Natural Resources (NR) 854 for completion of a Water Supply Service Area Plan (WSSAP).

ADD Section 7–NR 854 Addendum as follows:

7.01 ESTABLISHMENT OF A PLANNING PERIOD

The planning period was established in the 2022 Plan in Section 3–Historical and Projected Demands. The planning period was identified as the end of 2040.

7.02 DELINEATION OF THE AREA

The current water supply distribution system is delineated in Figure 2.01-1 of the 2022 Plan. The projected growth area for the system through 2040 is delineated in Figure 3.05-1 in the 2022 Plan. The entire study area is well outside of the Great Lakes Basin, and the entire area is located within the Mississippi Basin. An overview map of the City in relation to the Great Lakes Basin can be seen in Figure 7.02-1. This plan does not include diversions from the Great Lakes Basin.

7.03 DESCRIPTION OF THE PUBLIC WATER SUPPLY SYSTEM

A. Existing Sources

The existing sources serving the water system are described in Section 2–Water Facilities Evaluation of the 2022 Plan. Currently, three active wells supply the system.

B. Existing Water Quality

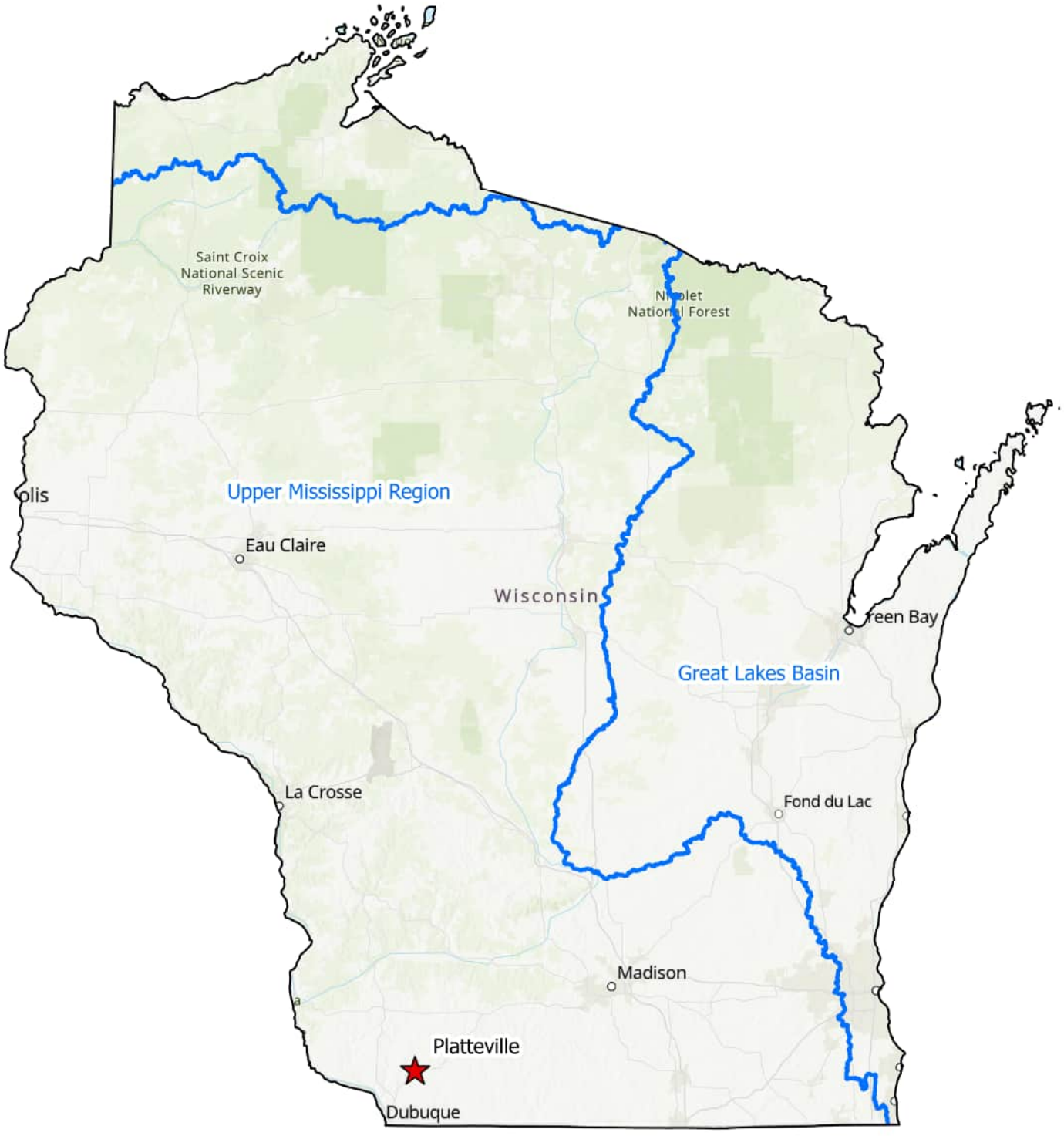
A general summary of the source water quality is described in Section 2–Water Facilities Evaluation, Subsection 2.03.

C. Consecutive Water Systems Purchasing Water

Currently, the water utility does not sell water to any consecutive water systems. There are no plans to sell water to any consecutive water systems through 2040.

D. Water System Map

A description of the water treatment facilities, water storage, and water distribution facilities are included in Section 2–Water Facilities Evaluation of the 2022 Plan. A map of the water distribution system is shown in Figure 2.01-1. The City operates three wells and two elevated tanks across two pressure zones; the High Zone in the northeast and the Low Zone in the southwest. A schematic of the water system is shown in Figure 7.03-1.



GREAT LAKES BASIN OVERVIEW MAP
WATER SUPPLY SERVICE AREA PLAN

CITY OF PLATTEVILLE
GRANT COUNTY, WISCONSIN

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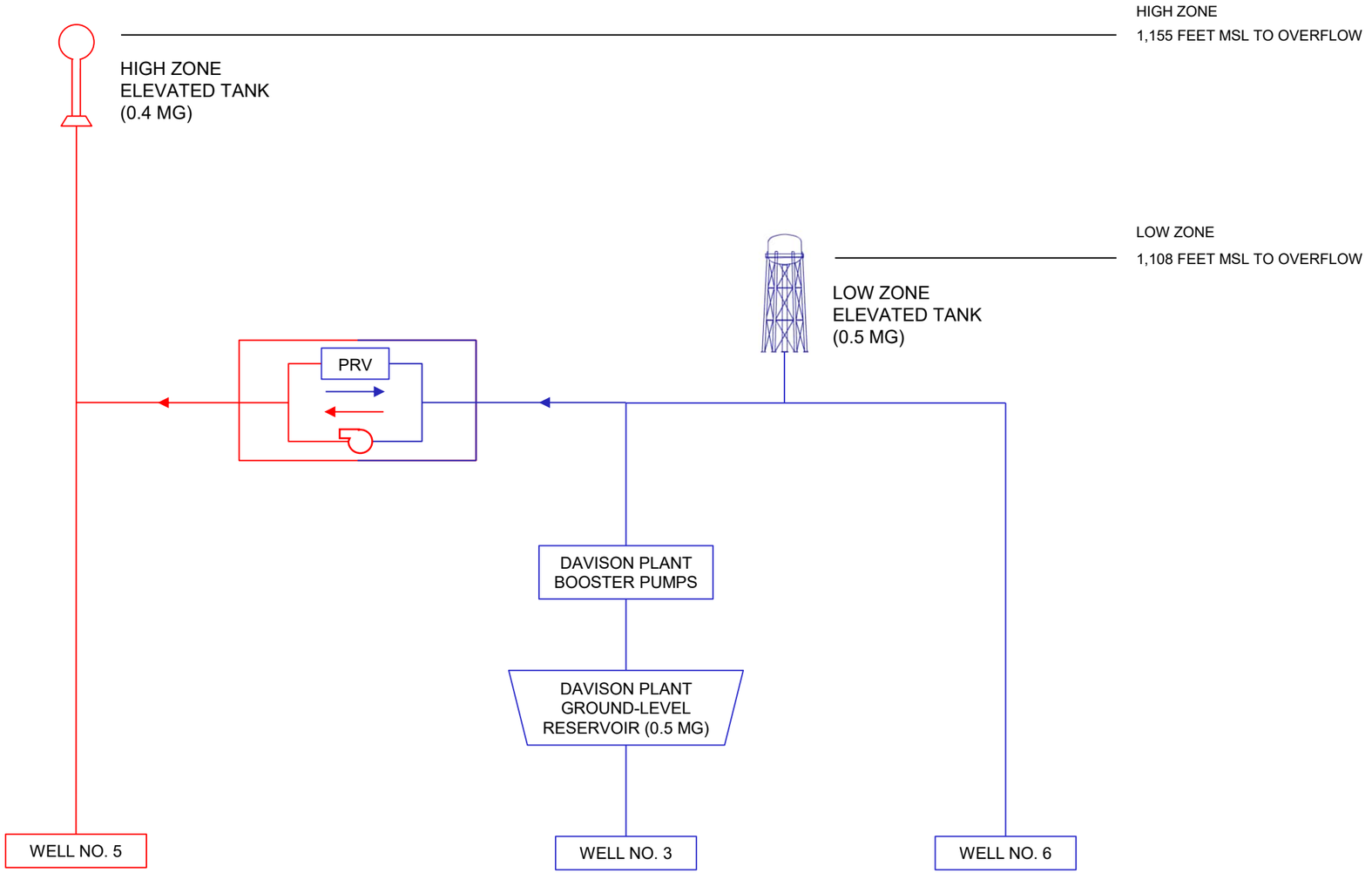
FIGURE 7.02-1
1064.028

PRESSURE ZONE

HIGH ZONE

LOW ZONE



SUPPLY FACILITIES

WATER SYSTEM SCHEMATIC

WATER SUPPLY SERVICE AREA PLAN
CITY OF PLATTEVILLE
GRANT COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 7.03-1
1064.028

7.04 DESCRIPTION OF EXISTING SOURCES AND WITHDRAWALS

A. Supply Withdrawals

The following describes the geologic formation each well is sourced from:

1. Well No. 3 is open from a depth of 334 to 927 feet. The open formations are in the Cambrian Sandstones.

2. Well No. 5 is open from a depth of 655 to 1,040 feet. The open formations are in the Cambrian Sandstones.

3. Well No. 6 is open from a depth of 500 to 965 feet. The open formations are in the Cambrian Sandstones.

The well drilling construction reports for the City wells are included as Appendix B. The construction reports include the depth of each well and additional geologic information. The average daily withdrawal for each source is listed in Table 7.04-1. The maximum withdrawal capacity of each source is listed in Section 2–Water Facilities Evaluation, Subsection 2.02 of the 2022 Plan. The average daily and total annual pumpage do not exceed maximum rated withdrawal capacities. The City does not purchase any water for its public water supply.

Table 7.04-1 Average Daily Withdrawal

Average Daily Withdrawal Amount (gallons)															
Well No.	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
3	413,098	433,807	442,442	326,390	168,789	264,093	70,223	400	410,930	203,833	0	27,362	244,479	88,701	147,083
5	-	0	0	249,520	308,454	331,543	377,087	379,524	383,817	411,685	406,678	405,791	359,376	424,079	411,888
6	-	-	-	-	-	-	-	-	-	209,821	402,297	407,165	247,110	343,235	265,328

B. Withdrawal Measurement Methods

Water withdrawal for Well Nos. 3, 5, and 6 is measured using totalizing flow meters. The City indicated that the flow meters are read daily and documented. The difference between water pumpage and sales is used to estimate the amount of water loss in a system.

C. Water Quality Treatment (WQT)

WQT measures are discussed in Section 2–Water Facilities Evaluation, Subsection 2.03 of the 2022 Plan.

D. Diversions

This plan does not include any diversions from the Great Lakes Basin.

7.05 DESCRIPTION OF EXISTING WATER USE

A. Population

The population for the 2022 Plan is discussed in Section 3–Historical and Projected Demands. As most population density mapping is delineated by census tracts, a population density map for the City is not available. The best surrogate for population density is the land use map, which shows the type of zoning and relative density of population based upon housing type. The existing and future land use maps can be found in the 2013 *City & Town of Platteville Smart Growth Comprehensive Plan* (2013 Comprehensive Plan) in Chapter 8–Land Use. A recent version of the existing land use map can be found in Appendix C. It should be noted that the City and Southwestern Wisconsin Regional Planning Commission (SWWRPC) are currently working on an update to this 2013 Comprehensive Plan.

B. Number of Retail Customers

The number of retail customers purchasing water are provided in Table 7.05-1, as published by the Public Service Commission of Wisconsin (PSCW) Water, Electric, and Gas (WEGS) annual reports.

Year	Residential	Commercial	Industrial	Public Authority	Multifamily Residential	Irrigation	Total Population
2015	3,009	337	7	80	75	0	12,788
2016	3,071	338	7	85	65	0	12,824
2017	3,541	362	7	84	67	0	12,417
2018	3,557	360	8	95	71	0	12,268
2019	3,570	362	9	93	70	0	12,569
2020	3,103	317	8	73	69	0	12,262
2021	3,127	318	8	74	69	0	11,446
2022	3,120	319	8	71	69	0	11,154
2023	3,129	316	8	73	69	0	11,460
2024	3,136	318	8	73	69	0	11,710

Table 7.05-1 Number of Retail Customers

C. Sales to Retail Customers

Table 7.05-2 shows the sales of water for residential use, commercial use, industrial use, and public use in the past 10 years.

Year	Residential	Commercial	Industrial	Public Authority	Multifamily Residential	Irrigation	Total
2015	107,863,000	44,901,000	20,892,000	46,581,000	24,780,000	0	245,017,000
2016	107,027,000	44,549,000	24,774,000	56,496,000	25,752,000	0	258,598,000
2017	106,987,000	42,602,000	35,398,000	48,817,000	26,879,000	0	260,683,000
2018	106,138,000	45,035,000	28,838,000	53,463,000	28,259,000	0	261,733,000
2019	103,502,000	44,508,000	40,610,000	54,985,000	27,640,000	0	271,245,000
2020	109,764,000	36,797,000	40,940,000	40,843,000	29,156,000	0	257,500,000
2021	112,102,000	47,602,000	31,431,000	67,512,000	30,802,000	0	289,449,000
2022	109,490,000	47,382,000	33,117,000	77,750,000	31,039,000	0	298,778,000
2023	111,534,000	49,538,000	35,580,000	69,194,000	31,526,000	0	297,372,000
2024	110,786,000	53,430,000	33,495,000	55,575,000	33,564,000	0	286,850,000

Table 7.05-2 Sales of Water

D. Largest Retail Customers

Table 7.05-3 lists the top ten largest retail customers over the past 10 years. It should be noted that data for 2018 was unavailable.

Table 7.05-3 Largest Retail Customers

	2015		2016	
	Customer	Quantity Billed (gallons)	Customer	Quantity Billed (gallons)
1	Emmi Roth USA, Inc.	24,296,141	Emmi Roth USA, Inc.	21,157,068
2	Xtreme Clean	3,318,876	Xtreme Clean	2,945,624
3	Platteville MHP LLC	2,791,536	Southwest Health Center	2,752,640
4	Southwest Health Center	2,438,749	HCR Manor Care, Site #3111	2,505,785
5	Walmart Stores #0958	2,129,347	Platteville MHP LLC	2,214,080
6	HCR Manor Care, Site #3111	1,991,894	Fendall-Sperian Prot Americas	2,142,975
7	Fendall-Sperian Prot Americas	1,693,053	Walmart Stores #0958	1,768,766
8	Tri-State Dialysis	1,605,874	Kowalski-Kieler Inc	1,685,812
9	Country Inn-Platteville	1,555,563	Twin Pines Apartments	1,600,540
10	Kowalski-Kieler Inc	1,110,705	Washington Place LLC	1,597,361

	2017		2018*	
	Customer	Quantity Billed (gallons)	Customer	Quantity Billed (gallons)
1	Emmi Roth USA, Inc.	31,707,496	-	-
2	Southwest Health Center	3,837,240	-	-
3	Xtreme Clean	2,988,260	-	-
4	Platteville MHP LLC	2,569,380	-	-
5	HCR Manor Care, Site #3111	2,297,572	-	-
6	Fendall-Sperian Prot Americas	2,149,632	-	-
7	Walmart Stores #0958	1,968,310	-	-
8	Washington Place LLC	1,930,132	-	-
9	Twin Pines Apartments	1,562,976	-	-
10	Tri-State Dialysis	1,479,267	-	-

	2019		2020	
	Customer	Quantity Billed (gallons)	Customer	Quantity Billed (gallons)
1	UW-Platteville/UW-P RE Foundation**	46,121,919	UW-Platteville	33,734,426
2	Emmi Roth USA, Inc.	33,465,527	Emmi Roth, USA Inc.	31,532,419
3	MoundView Dairy	5,916,927	MoundView Dairy	5,861,388
4	Southwest Health Center	3,901,942	Southwest Health Center	4,050,809
5	Xtreme Clean	2,587,407	Xtreme Clean	2,486,382
6	Platteville MHP LLC	2,143,020	Edenbrook	2,194,123
7	Walmart Stores #0958	2,020,198	Evergreen MHP	1,807,916
8	Edenbrook	1,807,295	Walmart Stores #0958	1,735,218
9	Washington Place LLC	1,653,843	Washington Place LLC	1,432,068
10	Country Inn	1,256,588	Platteville School District	1,271,712

	2021		2022	
	Customer	Quantity Billed (gallons)	Customer	Quantity Billed (gallons)
1	UW-Platteville	34,519,916	UW-Platteville	38,335,755
2	Emmi Roth USA, Inc.	27,710,393	Emmi Roth USA, Inc.	29,388,322
3	MoundView Dairy	6,296,477	MoundView Dairy	7,210,653
4	Southwest Health Center	4,236,679	Southwest Health Center	3,785,448
5	UW-P RE Foundation	3,688,979	UW-P RE Foundation	3,685,516
6	Xtreme Clean	2,916,332	Xtreme Clean	2,795,149
7	Ripple Management	2,027,648	Ripple Management	2,224,642
8	Evergreen MHP	1,988,932	Evergreen MHP	2,143,559
9	Walmart Stores #0958	1,932,436	Walmart Stores #0958	1,991,655
10	Edenbrook	1,882,761	Holiday Inn Express	1,730,042

	2023		2024	
	Customer	Quantity Billed (gallons)	Customer	Quantity Billed (gallons)
1	UW-Platteville	38,951,726	UW-Platteville	42,799,565
2	Emmi Roth USA, Inc.	32,219,315	Emmi Roth USA, Inc.	39,902,111
3	MoundView Dairy	8,112,950	MoundView Dairy	9,535,826
4	Southwest Health Center	4,740,891	Southwest Health Center	7,263,080
5	UW-P RE Foundation	4,412,512	UW-P RE Foundation	4,283,108
6	Xtreme Clean	2,499,427	Evergreen MHP	2,849,977
7	Ripple Management	2,281,737	Walmart Stores #0958	2,126,377
8	Evergreen MHP	2,081,048	Holiday Inn Express	2,048,525
9	GENCAP Platteville 71 LLC	2,041,516	TWAS Properties LLC	1,986,307
10	Holiday Inn Express	1,926,998	Ripple Management	1,936,886

Notes:
*Data for 2018 is not available.
**UW-Platteville and UW-P RE Foundation sales were combined for 2019.
UW-Platteville=University of Wisconsin-Platteville
UW-P RE=University of Wisconsin-Platteville Real Estate

E. Sales to Consecutive Water Systems

The water utility does not sell water to any consecutive water systems.

7.06 PROJECTED WATER DEMAND

A. Projected Growth Area

The demands discussed in Section 3.06 of the 2022 Plan are based on outdated population projection values. The updated Wisconsin Department of Administration (WDOA) population projection values are used and discussed in the following.

B. Water Demand Projection Methods

A description of the methods used to derive projected water demands is discussed in Section 3–Historical and Projected Demands, Subsections 3.03 and 3.04 of the 2022 Plan.

C. Population Projection

The current projected population through 2040 can be seen in Table 7.06-1. These projections are based on the Wisconsin Department of Administration (WDOA) Population Projections from 2024. It is assumed that the population change between decades is linear. The projections from the original 2022 Plan, presented in Figure 3.02-1, have been updated with the current WDOA 2024 population projection estimates. The 2040 projection made from the WDOA projections will be used for this planning period.

D. Projected Water System Sales

There are no projected sales to consecutive water systems through the planning period.

E. Water Demands

Table 7.06-1 shows the projected water demand during the planning period. The projected demand was updated to reflect the population trends developed in the 2024 WDOA projection estimates.

	Total Population	ADD Demand (MGD)
2025	11,710	0.82
2030	11,472	0.81
2035	11,308	0.79
2040	11,143	0.78

ADD=average day demand
MGD=million gallons per day

Table 7.06-1 Water Demand

Table 7.06-2 shows the projection of the annual ADD and maximum day demand (MDD) for 2040 in gallons per day (gpd). The table shows demands for the existing service area and projected growth area categorized by residential use, commercial use, industrial use, and public authority use.

		Residential Use	Commercial Use	Industrial Use	Public Authority Use	Multifamily Use	Total
Existing Service Area	ADD	318,060	134,564	97,865	183,496	85,632	819,617
	MDD	534,341	226,068	164,413	308,274	143,861	1,376,957
Water Use Decline with Future Service Area	ADD	(15,401)	(6,516)	(4,739)	(8,885)	(4,146)	(39,686)
	MDD	(25,873)	(10,946)	(7,961)	(14,927)	(6,966)	(66,672)
Total	ADD	**779,931**					
	MDD	**1,310,284**					

Table 7.06-2 2040 Projected ADD and MDD (gpd)

In accordance with WDNR NR 854, water supply planning must include considerations that support accurate forecasting and sustainable resource management. This includes estimating nonrevenue water associated with projected demand over the planning period, analyzing how projected demand aligns with historical usage or is otherwise justified, and identifying anticipated water use reductions resulting from conservation measures or plans. These requirements help determine if future water demand projections are reasonable and consistent with conservation objectives.

The estimate of nonrevenue water in 2040 can be found by taking the projected daily pumpage minus the projected daily sales and is based upon historical sales to pumpage ratios. The anticipated nonrevenue water for the design period is shown in Table 7.06-3.

Year	Daily Pumpage (gallons)	Daily Sales (gallons)	Nonrevenue Water (gallons)	Percent Water Loss (%)
2040	782,383	747,433	34,950	4.7

Table 7.06-3 2040 Projected Nonrevenue Water

Figure 3.06-1 in the 2022 Plan shows the past 10 years of water use compared to the projected water demands. Section 3.06.A details the planning period projected demands were calculated using the sales to pumpage ratio based on past water use.

Figure 3.03-4 shows the per capita total sales. As shown, per capita total sales generally declined from 2006 to 2014, increased in 2015 and 2016, and have remained steady through the present. Water conservation efforts likely caused the initial decline, and recent increases are attributable to industrial demand. Strand believes per capita sales are projected to plateau. The nonindustrial per capita water use is approximately 53 gallons per capita per day and is relatively low. Additional reductions due to conservation are expected to be nominal at best. Although water conservation efforts may have decreased per capita sales, Figure 3.06-1 from the 2022 Plan shows that water demands are not

expected to decrease. Based on the updated WDOA population projections from 2024, water demand is expected to decrease but only as a result of an overall decreasing population.

7.07 INVENTORY AND IDENTIFICATION OF THE SOURCES AND QUANTITIES OF WATER SUPPLIES IN THE REGION

A. Inventory of Alternative Water Sources

In general, reliable and economical water sources in the area to serve a municipal supply are the deep sandstone aquifers. There are water sources located in the local limestones, but these tend to be lower in capacity and not suitable as larger public drinking water sources. The sandstone aquifers generally consist of the Ordovician and Cambrian Sandstones. The areal extend of the Ordovician Sandstones is also somewhat limited in the City area; therefore, the utility derives water from the Cambrian Sandstones.

Alternative water sources beyond local groundwater wells include obtaining water from neighboring utilities, such as Belmont Waterworks, Lancaster Waterworks, or Cuba City Waterworks, and surface water from the Mississippi River

B. Alternative Supply Options

The City has not performed a detailed review of the viability of surface water as a water supply. The City of Dubuque, Iowa, the nearest large city located on the Mississippi River, relies on a mix of shallow alluvial wells and deep sandstone wells and does not use the surface water as a source. Generally, municipalities along the Upper Mississippi in Wisconsin use well water over river water given its relatively abundance and high water quality. The need for conventional treatment, at a minimum, and the distance to the river, makes use of it as a drinking water source cost prohibitive.

Given that the nearest municipal water system is 6 miles away and the City also relies upon the same aquifer as a water source, the value of an interconnect with an existing system is generally cost prohibitive.

7.08 PLAN RECOMMENDATIONS

A. Additional Water Supply Analysis

Section 4 of the 2022 Plan indicates that the system is projected to experience a supply deficit of approximately 500 gallons per minute (gpm) by 2040 with Well No. 3 and the Davison Plant decommissioned. Due to the change in projected populations, a review of the water use projections with the updated demand was performed following the same process used in the 2022 Plan. The results are summarized in the following.

1. 2025 MDD

The estimated 2025 MDD is 956 gpm (1.38 MGD). The firm capacity of the system is currently 1,900 gpm (2.74 MGD). Firm well capacity exceeds the 2025 MDD, and the system has a well

supply surplus of 944 gpm. No additional well supply is needed to meet the present day MDD, which is consistent with the 2022 Plan.

2. 2025 MDD with Fire Flow

Using the same assumptions from the 2022 Plan with an updated MDD of 956 gpm, a demand rate of 4,456 gpm for 3 hours must be satisfied when accounting for fire flow. During a 3-hour fire event, the system is projected to have a capacity surplus of 3,094 gpm, or approximately 557,000 gallons. Storage in the system is able to meet the 2025 MDD with fire flow, and no additional storage is required.

3. 2040 MDD

The total pumpage on the 2040 maximum day is estimated to be 913 gpm (1.31 MGD) and the firm well capacity is 1,900 gpm. The City has a surplus of 987 gpm and no additional well capacity is required.

4. 2040 MDD with Fire Flow

Using an updated MDD of 913 gpm, a demand rate of 4,413 gpm for 3 hours must be satisfied. During a 3-hour fire event, the system is projected to have a capacity surplus of 3,137 gpm, or approximately 565,000 gallons. Storage in the system is able to meet the 2040 MDD with fire flow, and no additional storage is needed.

5. 2025 MDD without Well No. 3, Davison Plant, and Reservoir

Due to the age and condition of the infrastructure at the Davison Plant, it is recommended that the facility and reservoir be taken out of service before 2040. For the following analyses, it is assumed that Well No. 3, the Davison Plant Reservoir, and the Davison Plant booster pumps are no longer in service.

The 2025 MDD is estimated to be 956 gpm (1.38 MGD). If Well No. 3 is abandoned, the firm well capacity becomes 1,000 gpm (1.44 MGD) resulting in a small surplus of 44 gpm.

6. 2025 MDD with Fire Flow without Well No. 3, Davison Plant, and Reservoir

A demand rate of 4,456 gpm for 3 hours must be satisfied in order to meet the 2025 MDD with fire flow. Without Well No. 3, the Davison Plant, and the Davison Plant Reservoir, the firm well capacity becomes 1,000 gpm, and there is no ground-level storage available. Under these conditions during a 3-hour fire event, the system is projected to have a capacity surplus of 294 gpm, or approximately 53,000 gallons.

7. 2040 MDD without Well No. 3, Davison Plant, and Reservoir

The total pumpage on the maximum day in 2040 is estimated to be 913 gpm (1.31 MGD). If Well No. 3 is abandoned, the firm well capacity of the system becomes 1,000 gpm (1.44 MGD) resulting in a surplus of 87 gpm.

8. 2040 MDD with Fire Flow without Well No. 3, Davison Plant, and Reservoir

A demand rate of 4,413 gpm for 3 hours must be satisfied in order to meet the 2040 MDD with fire flow. Without Well No. 3, the Davison Plant, and the Davison Plant Reservoir, the firm well capacity becomes 1,000 gpm and there is no ground-level storage available. Under these conditions during a 3-hour fire event, the system is projected to have a capacity surplus of 337 gpm, or approximately 61,000 gallons.

While this updated evaluation shows the system has a small capacity surplus under present-day and 2040 MDD conditions with the Davison Plant out of service, the system is put in a near-deficit and additional supply and storage is recommended before they are decommissioned. Well No. 3 and the Davison Plant have reached the end of their useful life and are in need of replacement. The City should begin planning for a new well and facility with the goal of having a new well online by 2030.

While outside the scope of the WSSAP, the City is also proactively planning for the eventual replacement of the low zone (Furnace Street) elevated tank. The Furnace Street tank was constructed in 1958. Infrastructure plans typically assign a useful life of 80 years to welded steel tanks and this tank has been in service for 67 years. Replacement of the tank is considered a lower priority than a new well facility, but should be programmed for replacement before 2040. One possible location for a new tank is a parcel east of the existing tank owned by the City. Another potential alternative is constructing a ground-level reservoir at the site of future Well No. 7.

B. Effective Utilization

Currently, all wells and facilities in the system are being used effectively. The existing system has almost one full well facility of reserve capacity, but due to the age of the Well No. 3 facility, is not as reliable, is at the end of its useful life, and is in need of replacement, resulting in minimal reserve capacity. All current infrastructure is being used and no inactive facilities are within the system.

C. Increased Water Supply

To maintain adequate supply and allow for decommissioning of the Davison Plant, a new well facility is recommended to be constructed before 2030. While a specific site has not yet been selected for the well, it is generally planned to be located in the southwest corner of the City limits. The well would be sourced from a deep aquifer, have a capacity of approximately 1,000 gpm, and be constructed with a well facility. A well siting study is required to be completed before the construction of Well No. 7. This study will provide additional details for the well and facility.

The construction of the new well and its associated facility will not be expected to cause adverse environmental impacts based on a preliminary site that will be identified when a siting study is conducted.

The proposed Well No. 7 will draw from a deep aquifer. The regional geologic and hydrogeologic setting will be stable, with no unique conditions that would be influenced by the project. Groundwater and surface water quantity and quality are not expected to change, and available aquifer drawdown data should indicate that pumping from this formation will not cause measurable declines or affect nearby water resources. Regional hydrogeologic studies and water supply assessments should support these conclusions and also indicate that existing conditions will be maintained. The addition of the well should not alter current or projected land use trends. The site will be located outside of any floodways, floodplains, and wetlands so that no impacts to wetlands or floodplains are anticipated. Additionally, no environmentally sensitive areas will be in proximity to the proposed site.

7.09 ANALYSIS OF CONSISTENCY WITH OTHER PLANS AND AGREEMENTS

A. Approved Comprehensive Plans

Comprehensive plans that include the City are the 2013 Comprehensive Plan and the *Grant County Comprehensive Plan* (Amended 2010), both prepared by the SWWRPC. The City is currently working with the SWWRPC on an update to its 2013 Comprehensive Plan. The City population projection in the 2022 Plan and, as updated in Addendum No. 1, is generally consistent with the population projection from the 2013 Comprehensive Plan. Information from the 2022 Plan does not contradict with the *2010 Grant County Comprehensive Plan*.

B. Approved Areawide Water Quality Management Plans

There are no known areawide water quality management plans that include the City.

C. Existing Land Use Agreements

The City does not have any current land use agreements. Section 3.05 of the 2022 Plan discusses areas of future development; however, these boundaries could change depending on growth extents.

D. Existing Wholesale or Retail Customer Sales Agreements

There are no known wholesale or retail customer sales agreements between the City and another entity.

E. Other Existing Agreements

There are no other known agreements between the City and another entity.

7.10 PUBLIC PARTICIPATION

This addendum to the 2022 Plan is based on requirements of WDNR NR 854 and will be available for public review and presented during an upcoming public meeting. Comments will be requested by e-mail or public comments at a public hearing. Comments will be added to this addendum as Appendix D and will be reviewed and acknowledged by the Common Council.

This addendum was presented at the Common Council meeting held on January 13, 2026. A public comments period was held, but no comments were received by the City. A copy of the approved minutes from the Common Council meeting and a copy of the presentation given during the meeting can be found in Appendix D.

7.11 SUBMISSION OF PLAN TO LOCAL GOVERNMENTS

A submission of the plan to local governments will take place after public participation. Any comments from local governments will be added to this addendum as an Appendix.

7.12 PROCEDURES FOR IMPLEMENTING AND UPDATING THE PLAN

The City will continue to monitor water demands, populations changes, and the resulting impact on the 2022 Plan. As changes are deemed necessary, the City will work with the WDNR and the PSCW to revise and update the WSSAP through the end of the planning period. At a minimum, the City will need to review and update the plan as necessary every 5 years in accordance with the requirements of the Wisconsin Administrative Code. Future updates will need to consider changes to the City's comprehensive plan, which may impact the WSSAP.

APPENDIX B
WELL DRILLING LOGS

Well Construction Report
WISCONSIN UNIQUE WELL NUMBER BF879

Drinking Water and Groundwater - DG/5
Department of Natural Resources, Box 7921
Madison WI 53707

Form 3300-077A

Property Owner: PLATTEVILLE, CITY OF			Phone #: (608)348-9741
Mailing Address: 75 N BONSON ST			
City: PLATTEVILLE	State: WI	Zip Code: 53818	
County: Grant	Co. Permit #:	Notification #:	Completed: 10-14-1932

Well Constructor (Business Name): EGERER-GALLOWAY	Lic. #: 21	Facility ID # (Public Wells): 122011560	
Address:		Well Plan Approval #:	
		Approval Date (mm-dd-yyyy): 08-23-1932	
Hicap Permanent Well #: 78893	Common Well #: 003	Specific Capacity: 9.5	

3. Well serves # of
Municipal/Community
Heat Exchange____# of drillholes

Hicap Well ?
Hicap Property ?
Hicap Potable ?

1. Well Location
City of PLATTEVILLE

Fire # (if avail.)

Street Address or Road Name and Number
VALLEY RD #3

Subdivision Name	Lot #	Block #

Latitude / Longitude in Decimal Degree (DD)			Method Code
42.73012 °N	-90.47177 °W		GPS008

NW SE or Govt Lot #	Section: 15	Township: 3 N	Range: 1 W

2. Well Type New Well
of previous unique well # constructed in

Reason for replaced or reconstructed well ?

Construction Type: Drilled

4. Potential Contamination Sources - ON REVERSE SIDE

5. Drillhole Dimensions and Construction Method

Dia. (in.)	From (ft.)	To (ft.)
24	Surface	41.9
22	41.9	334
15	334	667
12	667	927

Upper Enlarged Drillhole — Lower Open Bedrock

Rotary - Mud Circulation .....
Rotary - Air .....
Rotary - Air & Foam .....
Drill-Through Casing Hammer
Reverse Rotary
Cable-tool Bit ____in. dia...
Dual Rotary .....
Temp. Outer Casing ____in. dia
Removed? ____depth ft. (If NO explain on back side)

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification Manufacturer & Method of Assembly	From (ft.)	To (ft.)
24	DRIVE PIPE	Surface	41.9
18	G W I WELDED PIPE	0	334
Dia. (in.)	Screen type, material & slot size	From (ft.)	To (ft.)

7. Grout or Other Sealing Material

Method

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
UNKNOWN	Surface	0	

8. Geology

Geology Codes				Type, Caving/Noncaving, Color, Hardness, etc...	From (ft.)	To (ft.)
		C		CLAY	Surface	20
		L		DOLOMITE GAL PLAT	20	122
G		N		SANDSTONE GAL PLAT	122	160
	M	N	A	SANDSTONE # CONGLOMERATE STP	160	216
G		H	L	SHALE STP	216	224
		L		DOLOMITE LMAGN	224	430
G		N	L	SANDSTONE JORDAN	430	460
		L		DOLOMITE TREMP	460	575
	N	N	L	SANDSTONE-FRANCONIAN	575	605
	H	N	M	SILTSTONE-FRANCONIAN	605	615
		N	L	SANDSTONE-FRANCONIAN	615	690
I		N		SANDSTONE-DRESBACH	690	720
		N		SANDSTONE-EAU CLAIRE	720	927

9. Static Water Level	**11. Well Is**
200 ft. below ground surface	0 in. _____ grade
10. Pump Test	Developed ?
Pumping level 311 ft. below surface	Disinfected ?
Pumping at 1050 GP M for 0 Hrs.	Capped ?
Pumping Method ?	

12. Notified Owner of need to fill & seal ?

Filled & Sealed Well(s) as needed?

13. Constructor / Supervisory Driller	Lic #	Date Signed
Drill Rig Operator	Lic or Reg #	Date Signed

4a. Potential Contamination Sources Is the well located in floodplain ?

Comment: PUMP CAPACITY IS 1000 GPM

Created On: 01-13-1999 Updated On: 08-16-2022

Well Construction Report
WISCONSIN UNIQUE WELL NUMBER WQ163

Drinking Water and Groundwater - DG/5
Department of Natural Resources, Box 7921
Madison WI 53707

Form 3300-077A

Property Owner: PLATTEVILLE, CITY OF	Phone #: (608)348-9741
Mailing Address: 75 N BONSON STREET	
City: PLATTEVILLE	State: WI — Zip Code: 53818
County: Grant	Co. Permit #: — Notification #: — Completed: 06-17-2011
Well Constructor (Business Name): LAYNE CHRISTENSEN COMPANY	Lic. #: 582 — Facility ID # (Public Wells): 122011560
Address: W229 N5005 DUPLAINVILLE PEWAUKEE WI 53072	Well Plan Approval #: 2010-0654 — Approval Date (mm-dd-yyyy): 11-24-2010
Hicap Permanent Well #: 71821	Common Well #: 5 — Specific Capacity: 12.7

1. Well Location

City of PLATTEVILLE — Fire # (if avail.):

Street Address or Road Name and Number: INSIGHT DRIVE

Subdivision Name: — Lot #: — Block #:

Latitude / Longitude in Decimal Degree (DD): 42.72972 °N -90.4416 °W — Method Code: OTH001

NW SW or Govt Lot #: — Section: 13 — Township: 3 N — Range: 1 W

2. Well Type New Well

of previous unique well #: — constructed in:

Reason for replaced or reconstructed well ?:

Construction Type: Drilled

3. Well serves # of Municipality

Municipal/Community

Heat Exchange____# of drillholes

Hicap Well ? Yes

Hicap Property ? Yes

Hicap Potable ?

4. Potential Contamination Sources - ON REVERSE SIDE

5. Drillhole Dimensions and Construction Method

Dia. (in.)	From (ft.)	To (ft.)
24	Surface	32
22.75	32	655
17	655	1040

Upper Enlarged Drillhole		Lower Open Bedrock
Yes	Rotary - Mud Circulation	Yes
Yes	Rotary - Air	No
No	Rotary - Air & Foam	No
No	Drill-Through Casing Hammer	
No	Reverse Rotary	
No	Cable-tool Bit ____in. dia...	No
No	Dual Rotary	No
No	Temp. Outer Casing ____in. dia	
No	Removed? ____depth ft. (If NO explain on back side)	

8. Geology

Geology Codes				Type, Caving/Noncaving, Color, Hardness, etc...	From (ft.)	To (ft.)
-	-	Y	-	Sand & Gravel	Surface	7
-	-	L	-	Limestone/Dolomite	7	310
-	-	N	-	Sandstone	310	640
-	-	L	-	Limestone/Dolomite	640	1000
-	-	N	-	Sandstone	1000	1040

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification Manufacturer & Method of Assembly	From (ft.)	To (ft.)
24	125.49 LBS/FT API5L GR. B PEB HUSTEEL CO. LTD 0.500 WALL	Surface	32
18	A53 GRADE B PEB 70.59 LBS/FT TIPO STEEL PIPE 0.375 WALL	0	655
Dia. (in.)	Screen type, material & slot size	From (ft.)	To (ft.)

9. Static Water Level

319 ft. below ground surface

10. Pump Test

Pumping level 440 ft. below surface

Pumping at 1541 GP M for 20 Hrs.

Pumping Method ?

11. Well Is

24 in. above grade

Developed ? Yes

Disinfected ? Yes

Capped ? Yes

12. Notified Owner of need to fill & seal ?

Filled & Sealed Well(s) as needed? Yes

7. Grout or Other Sealing Material

Method guide show with Larkin Head

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
Neat Cement Grout	Surface	655	700 S

13. Constructor / Supervisory Driller	Lic #	Date Signed
DG		06-06-2011
Drill Rig Operator	Lic or Reg #	Date Signed

4a. Potential Contamination Sources Is the well located in floodplain ? No

Comment:

Created On: 06-21-2011 Updated On: 04-19-2013

Well Construction Report
WISCONSIN UNIQUE WELL NUMBER ZU710

Drinking Water and Groundwater - DG/5
Department of Natural Resources, Box 7921
Madison WI 53707

Form 3300-077A

Property Owner	PLATTEVILLE, CITY OF
Phone #	(608)348-9741
Mailing Address	75 N BONSON STREET
City	PLATTEVILLE
State	WI
Zip Code	53818
County	Grant
Co. Permit #	
Notification #	
Completed	03-14-2019
Well Constructor (Business Name)	MUNICIPAL WELL & PUMP/MIDWEST WELL
Lic. #	13
Facility ID # (Public Wells)	122011560
Address	1212 STORBECK DR WAUPUN WI 53963
Well Plan Approval #	2018-0472A
Approval Date (mm-dd-yyyy)	12-13-2018
Hicap Permanent Well #	92466
Common Well #	006
Specific Capacity	8.6

1. Well Location

City of PLATTEVILLE	Fire # (if avail.) 1085
Street Address or Road Name and Number	CAMP STREET
Subdivision Name	
Lot #	
Block #	
Latitude / Longitude in Decimal Degree (DD)	42.7418 °N -90.491 °W
Method Code	OTH001
SW SE or Govt Lot #	
Section	9
Township	3 N
Range	1 W

2. Well Type Replacement

of previous unique well # BF880 constructed in 1968

Reason for replaced or reconstructed well ?

WATER QUALITY

Construction Type Drilled

3. Well serves # of CITY

Municipal/Community

Heat Exchange____# of drillholes

Hicap Well ? Yes

Hicap Property ? Yes

Hicap Potable ? No

4. Potential Contamination Sources - ON REVERSE SIDE

5. Drillhole Dimensions and Construction Method

Dia. (in.)	From (ft.)	To (ft.)
23	Surface	430
19	430	500
15	500	965

Upper Enlarged Drillhole		Lower Open Bedrock
No	Rotary - Mud Circulation	No
No	Rotary - Air	No
No	Rotary - Air & Foam	No
No	Drill-Through Casing Hammer	
Yes	Reverse Rotary	
No	Cable-tool Bit ____in. dia...	No
Yes	Dual Rotary	Yes
Yes	Temp. Outer Casing 24in. dia	
Yes	Removed? 30depth ft. (If NO explain on back side)	

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification Manufacturer & Method of Assembly	From (ft.)	To (ft.)
24	TEMP O.500" WALL ASTM A53B	0	30
20	ASTM A53B, 0.375", PE/BEV, CHUNG HUNG STL	Surface	430
16	ASTM A53B, 0.375", PE/BEV, PARAGON IND	0	500

8. Geology

Geology Codes				Type, Caving/Noncaving, Color, Hardness, etc...	From (ft.)	To (ft.)
T		Y	C	T-TAN/BROWN Y-SAND & GRAVEL C-CLAYEY	Surface	18
Y	B	L		Y-YELLOW B-BROKEN L-LIMESTONE/DOLOMITE	18	30
Y		L	S	Y-YELLOW L-LIMESTONE/DOLOMITE S-SANDY	30	100
G		L		G-GRAY L-LIMESTONE/DOLOMITE	100	185
G	X	N	H	G-GRAY X-LENSED/STREAKED/LAYERED N-SANDSTONE H-SHALEY	185	375
I	X	N	H	I-WHITE X-LENSED/STREAKED/LAYERED N-SANDSTONE H-SHALEY	375	380
E	Q	H		E-GREEN Q-CAVING H-SHALE	380	415
R		L	S	R-RED L-LIMESTONE/DOLOMITE S-SANDY	415	490
P		N		P-PINK N-SANDSTONE	490	630
E	X	N	H	E-GREEN X-LENSED/STREAKED/LAYERED N-SANDSTONE H-SHALEY	630	955
E		H		E-GREEN H-SHALE	955	965

Dia. (in.)	Screen type, material & slot size	From (ft.)	To (ft.)

7. Grout or Other Sealing Material

Method TREMIE PIPE - PUMPED

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
NEAT CEMENT GROUT	Surface	500	665 S

9. Static Water Level

265 ft. below ground surface

10. Pump Test

Pumping level 438 ft. below surface

Pumping at 1483 GP M for 24 Hrs.

Pumping Method ? Test Pump

11. Well Is

18 in. above grade

Developed ? Yes

Disinfected ? Yes

Capped ? Yes

12. Notified Owner of need to fill & seal ? No

Filled & Sealed Well(s) as needed? Yes

13. Constructor / Supervisory Driller	Lic #	Date Signed
TG	4135	04-11-2019
Drill Rig Operator	Lic or Reg #	Date Signed
BS	4349	04-11-2019

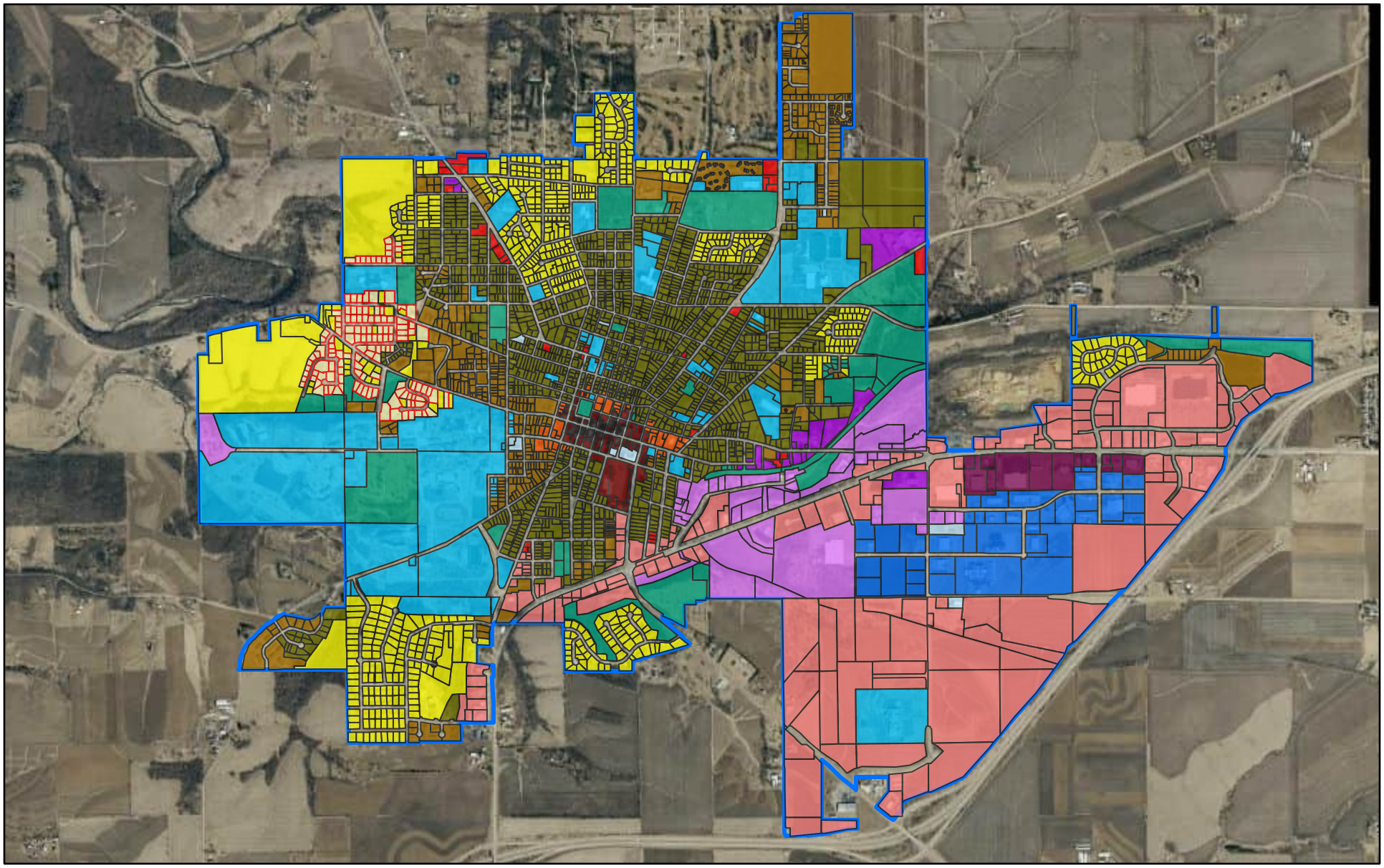
4a. Potential Contamination Sources Is the well located in floodplain ? No

Comment:

Created On: 04-11-2019 Updated On: 05-23-2019

APPENDIX C
EXISTING LAND USE MAP

Existing Land Use Map



12/3/2025, 11:10:32 AM

1:41,000

0 0.25 0.5 1 mi

0 0.4 0.8 1.6 km

Zoning (By Parcel)

- B1 - Neighborhood Business
- B2 - Central Business
- B3 - Highway Business
- C1 - Conservation
- CBT - Central Business Transition
- I1 - Institutional
- M1 - Heavy Commercial/Light Manufacturing or Industrial
- M2 - Heavy Manufacturing/Industrial
- M3 - Mixed Use Commercial/Manufacturing/Industrial
- M4 - Applied Technology District
- PUD - Planned Unit Development
- R-1 / R-LO - Limited Occupancy Residential Overlay
- R1 - One Family Residential
- R2 - One & Two Family Residential
- R3 - Multi-Family Residential
- A-T - ET Zoning
- Municipal Boundary

City of Platteville Public GIS Viewer

APPENDIX D
PUBLIC COMMENTS

PLATTEVILLE COMMON COUNCIL PROCEEDINGS
January 13, 2026

The regular meeting of the Common Council of the City of Platteville was called to order by Council President Barbara Daus at 6:00 PM in the Council Chambers of the Municipal Building.

ROLL CALL
Present: Barbara Daus, Kathy Kopp, Lynne Parrott, Tony McFall, Steven Badger, Bob Gates, and Brian Whisenant
Excused: none

PUBLIC HEARING

A. *Acceptance of the City of Platteville Water Supply Service Area Plan (WSSAP)* – Michael Forslund from Strand Associates explained that under revisions to NR 854, water utilities serving a population of 10,000 or more are required to have a Water Service Supply Area Plan (WSSAP) completed by December 31, 2025. Forslund presented the key elements to include in the WSSAP, displayed the identified current and future service areas, and highlighted that Well 3 will need to be replaced in 3-4 years at a significant expense. Motion by Gates, second by Parrott to close the public hearing. Motion carried 7-0 on a roll call vote. Motion by Gates, second by Kopp to approve the Water Service Supply Area Plan subject to public comments. Motion carried 7-0 on a roll call vote.

B. *Ordinance 26-01 Zoning Amendment – Expansion of the Residential Limited Occupancy Overlay District.* Community Development Director Joe Carroll presented that the City received a petition from 37 property owners requesting that the Limited Occupancy Overlay District (R-LO) be placed on their properties, which restricts the number of occupants that are unrelated to live in a home to two. Carroll said that staff have some concerns about the spread of this overlay district. Tom Young, 950 Kelly Avenue, Charles Dobson, 860 Eastman Street, Steve Tucker, 1180 Hollman Street, Norenne Masbruch, 920 Williams Street, Charles Clark, 875 W. Main Street, Tim Splinter, 1125 Hollman Street, Gene Weber, 1285 Union Street, and Tim Donavan, 35 Alden Avenue, registered in favor of the R-LO designation. Diana Blindert, 1125 Hollman Street, Liz Tucker, 1180 Hollman Street, and Priscilla and Mike Hahn, 920 Camp Street, spoke in favor. Bridget Wallace, UW-Platteville Chief of Staff, 1 University Plaza, spoke for informational purposes on behalf of the university. Motion by Kopp, second by Whisenant, to close the public hearing. Motion carried 7-0 on a roll call vote. Motion by Badger, second by Parrott, to approve the request to expand the R-LO overlay district designation for the 35 properties included in the petition that are eligible. Motion failed 3-4 with Kopp, McFall, Gates, and Whisenant voting against on a roll call vote.

CONSIDERATION OF CONSENT AGENDA
Motion by Gates, second by Badger to approve the consent agenda as follows: Council Minutes – 12/4/25 Special and 12/9/25 Regular; Payment of Bills in the amount of $6,720,741.93 (Preliminary); Financial Report – December; Appointments to Boards and Commissions: Airport Commission - Dustan Duggan to a partial term ending November 2026; Two Year Operator License - Brianna D Paquette, Joshua W Reuter, Braedon K Shaner, and Lacey L Verburgt; Taxi Driver Licenses - Danyel M Hargrove, Korey J Keene, Jeffrey C Kopp, and Aaron D Pluemer; "Class B" Combination Beer & Liquor License for The Ville Nightclub LLC, Platteville, WI (Mynale Nevitt, Agent), for premises at 55 N Second Street (The Ville Nightclub) – contingent upon passing all inspections. Motion carried 7-0 on a roll call vote.

CITIZENS' COMMENTS, OBSERVATIONS AND PETITIONS, if any.
Dan Faherty, 705 Lutheran Street, spoke about his concerns regarding City employment practices, snow plowing, and safety protocols.

REPORTS

A. Board/Commission/Committee Minutes – Tourism Committee, Police & Fire Commission, Airport Commission, Water & Sewer Commission, Parks, Forestry, and Recreation Committee, Museum Board, and Plan Commission
B. Other Reports - Water and Sewer Financial Report – December, Airport Financial Report – December, Department Progress Reports

ACTION

A. *Planned Unit Development: SIP – 135 S. Hickory Street* – Motion by Badger, second by Kopp, to approve the Planned Unit Development – Specific Implementation Plan for the St. Augustine Chapel at 135 S. Hickory Street as proposed, subject to the relocation of a fire hydrant and easement near the corner of Pine Street and Hickory Street at a location approved by City Staff and at the expense of the developer. Motion carried 7-0 on a roll call vote.

B. *Resolution 26-01 Approving the City of Platteville Urban Area Functional Classifications* - Motion by Kopp, second by Parrott, to approve Resolution 26-01 Approving the City of Platteville Urban Area Functional Classifications. Motion carried 7-0 on a roll call vote.

INFORMATION AND DISCUSSION

A. *Review of RFP for Trail View Development* - Community Development Director Joe Carroll explained that the City is interested in finding a developer or developers interested in the proposed Trail View Development property. Staff is proposing to utilize a Request for Proposals process to allow potential developers to submit their ideas for the development of the property. The City would then be able to select the proposals that are the most advantageous for the City. Issuance of the RFP will not have a direct budget impact. The anticipated development of the property will result in an increase in the tax base in the future. Developers may also request financial assistance through an anticipated TIF district, which will be created in 2026. The Plan Commission reviewed the RFP at its January 5 meeting. Staff requested that the Council Members review the RFP and provide any comments before the next meeting. Staff recommends approving the issuance of the RFP.

B. *Raze Order for 645 Sickle Street* - Community Development Director Joe Carroll said that the City has been working for several years to address the property maintenance issues that are present on the property at 645 Sickle Street. Numerous violation notices have been sent, citations issued, and guilty verdicts issued. To date, none of these activities have resulted in the necessary repairs or improvements being made to the property. In September, the City requested and was granted a Special Inspection Warrant, which authorized an inspection to determine if the property complies with Municipal Code and if it is unfit for human habitation and is a danger to the occupants and the public. Michael Parrott from General Engineering Company inspected the property on September 30. The inspection report indicates that the property is unsafe, unsanitary, and unfit for human habitation. The costs of making repairs

necessary to achieve code compliance are estimated to be $150,000, which is greater than 50 percent of the assessed value of the property. Based on this report, the property meets the statutory requirements that allow the City to issue a raze order. Staff is requesting Council approve a resolution that authorizes the issuance of a raze order to the owner of the property, which requires the building to be razed within 30 days of issuance. If the property owner fails to comply with the raze order, then the City can proceed with the next steps to have the owner evicted and proceed with having the building razed. The issuance of the raze order has no direct budget impact. However, it is anticipated that the owner will not comply with the request. The City will then take the steps to have the building razed at City cost. The 2026 budget includes $25,000 to pay for the razing expense, which can then be added as a lien on the property. Staff recommends approving a resolution authorizing the issuance of the raze order.

C. *Update on City Manager Recruitment*– Interim City Manager Mark Rohloff gave an update on the recruitment efforts underway. McMahon Associates has received questionnaire responses, which asked Council Members, Department Heads, and senior staff to assess the City in several key areas and to rate the importance of various traits in the next City Manager. The survey results ranked the top 5 traits as follows: integrity, decision-making ability, organizational skills, problem-solving skills, and listening skills. These results have been incorporated into the job announcement and will be the key traits used to evaluate candidates. Rohloff asked Council to keep these traits and needs in mind as they interview and select a final candidate. A salary survey conducted by the Wisconsin City-County Management Association of recent recruitments for comparable city manager/administrator positions was reviewed. McMahon Associates recommends that the starting salary be set at $140,000-$160,000. While this is over 10% more than the previous City Manager, the job recruiting market is very fluid at this point, and based on the requirements for this position, this is the salary range that people with this experience level are receiving in the market. Rohloff presented the timeline for the recruitment process and asked Council Members to decide on the date for the interviews and the Meet and Greet. The schedule will enable the City to secure a candidate by mid-March and have that person start in April or early May. The cost of interviews will depend on the location of the finalists; the final salary is subject to Council approval.

ADJOURNMENT

Motion by Badger, second by Parrott to adjourn. Motion carried 7-0 on a roll call vote. The meeting was adjourned at 8:05 PM.

Respectfully submitted,

Colette Steffen, City Clerk

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Strand Associates, Inc.®

Water Supply Service Area Plan (WSSAP)

City of Platteville
Common Council Meeting
January 13, 2026

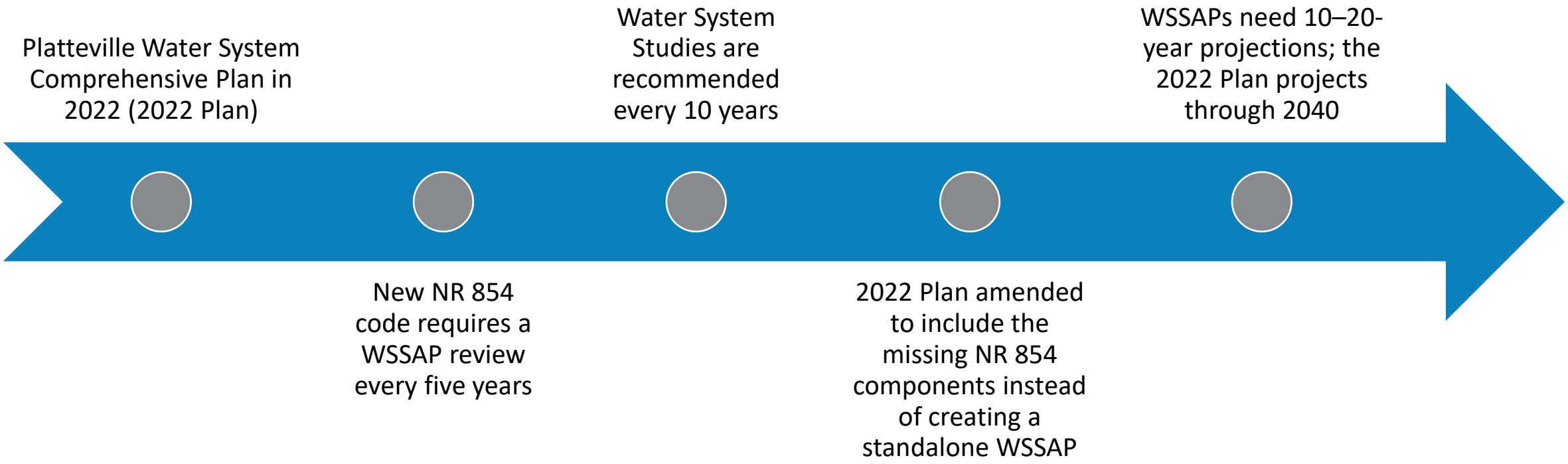
CITY OF PLATTEVILLE

STRAND ASSOCIATES®

Natural Resources (NR) 854 Water Supply Service Area Plans (WSSAP)

- Purpose of NR 854
  - Establishes procedures and requirements for public water supply systems to follow to help ensure systems can provide adequate supply of water to their customers
- NR 854 applies to
  - Public water systems serving a population of 10,000 or more that operate their own wells or surface water intakes
- WSSAP must be submitted when additional withdrawal from the Great Lakes Basin requires a new or increased water use permit
  - The City of Platteville will not need to submit the WSSAP to the Wisconsin Department of Natural Resources (WDNR); however, it will need to be available upon request
- WSSAP are due by December 31, 2025

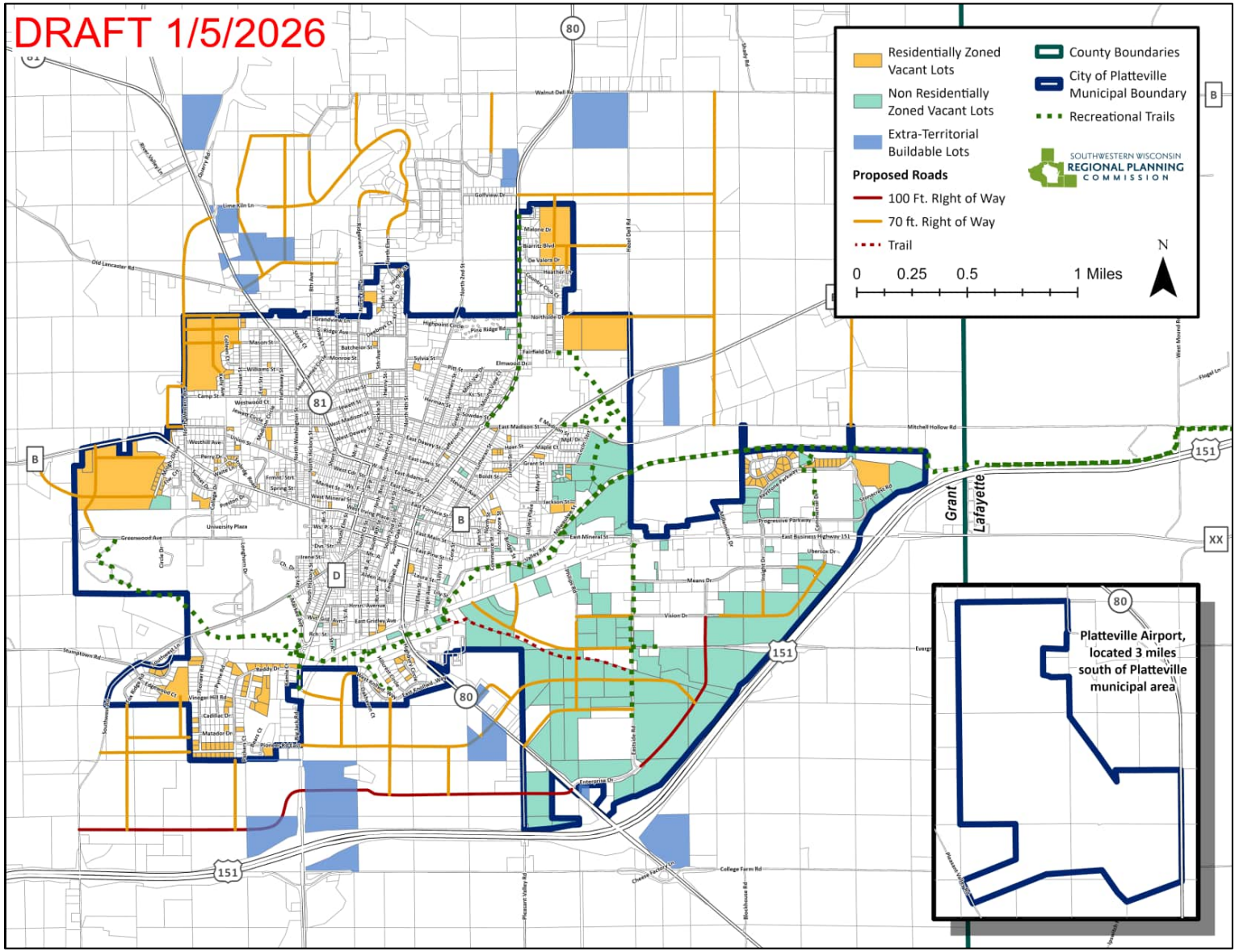
Building Upon the Platteville Water System Comprehensive Plan



Key Elements to Include in WSSAP

- Identify planning period
- Delineate service area
- Discuss water sources, population trends, future water demands, and any water sales
- Inventory the sources and quantities of the current water supplies in the area
- Assess any significant recommendations of the plan
- Analyze how the WSSAP aligns with other existing plans
- Allow the public to provide comment on the proposed WSSAP

Current and Future Service Areas Identified



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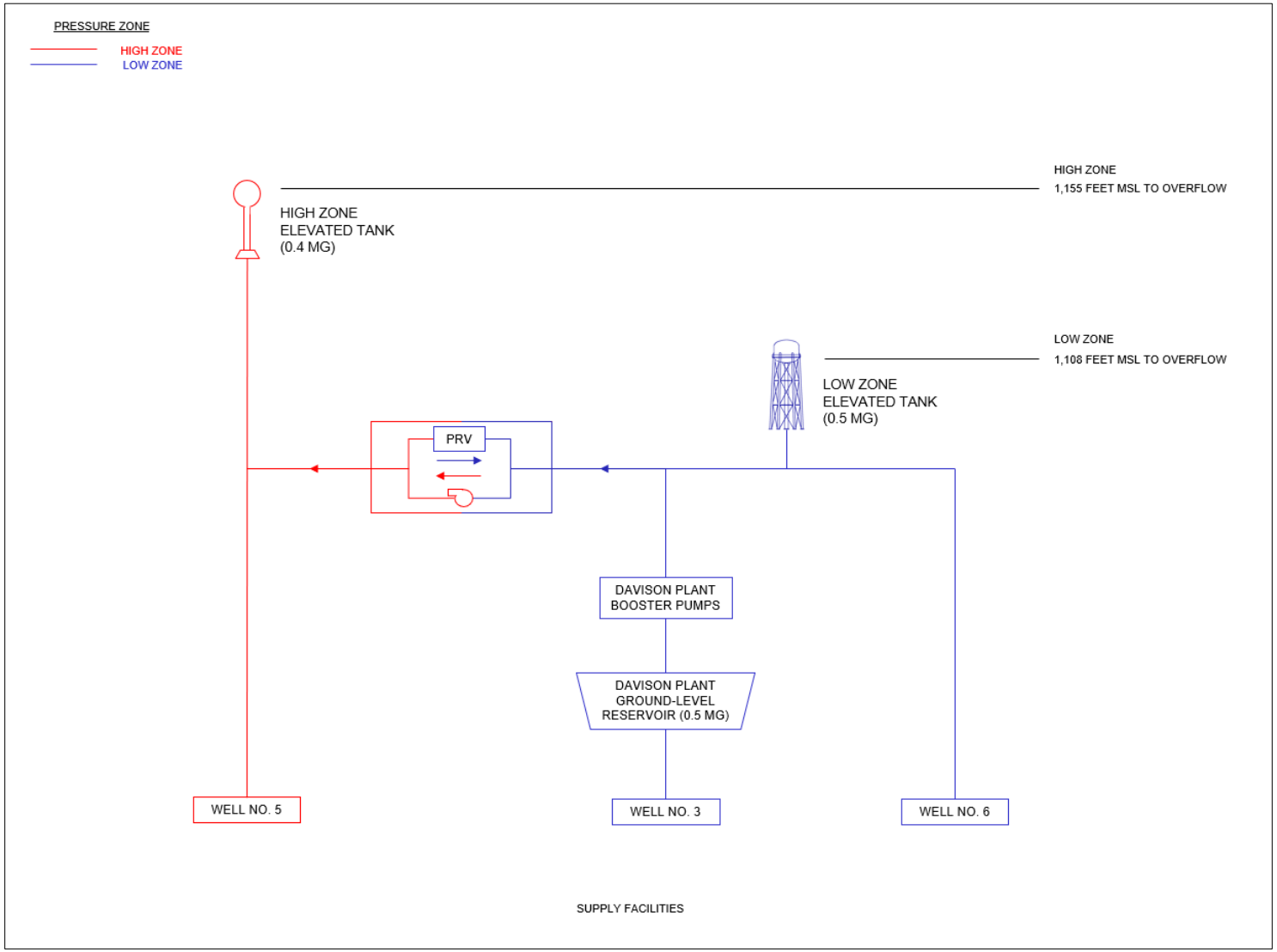
Existing Water System



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Supply and Storage Capacities

Well No.	Pumping Capacity (gpm)
3	900
5	1,100
6	1,000
Total Capacity	3,000
Firm Capacity*	1,900

*Assumes Well No. 5 is out of service

Table 2.02-1 Well Capacities

Storage Facility	Year Constructed	Capacity (gallons)	Overflow Elevation (feet MSL)
Davison Plant Reservoir	1988	500,000	937
High Zone Elevated Tank	1993	400,000	1,155
Low Zone Elevated Tank	1958	500,000	1,108
Total Storage		1,400,000	

MSL=mean sea level

Table 2.04-1 Existing Storage Capacity

Water Service Area Population Projections

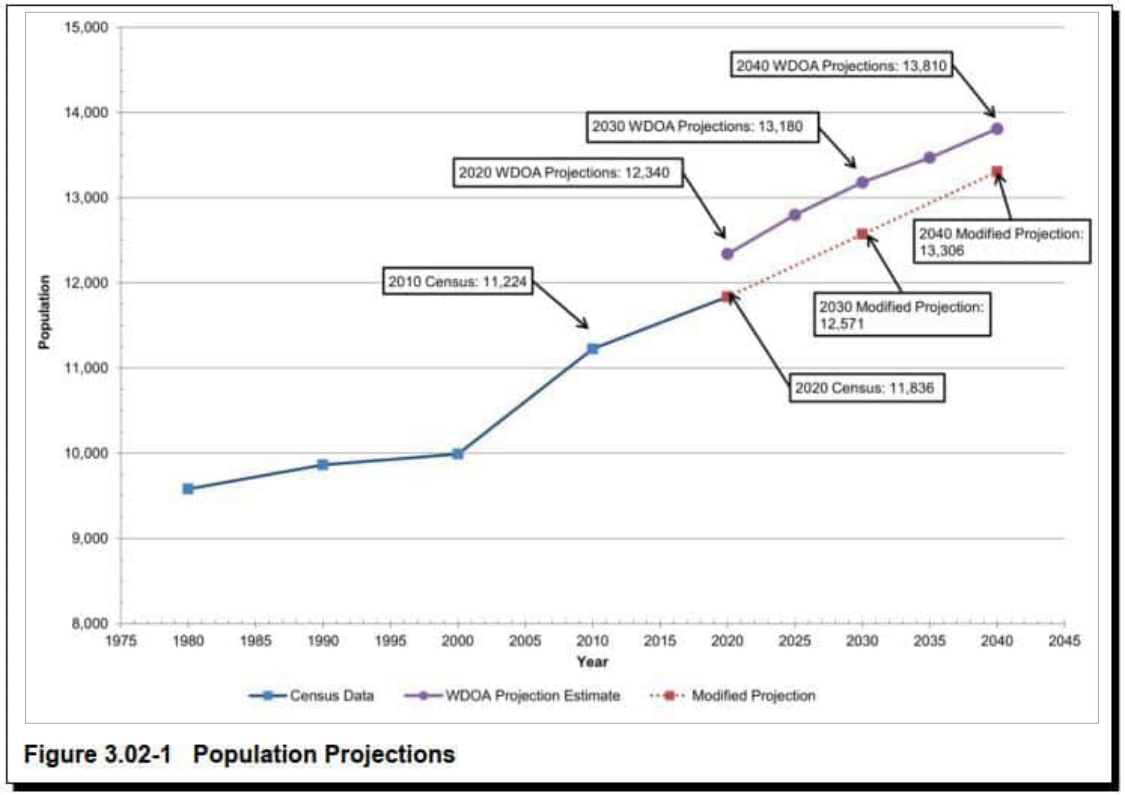

Figure 3.02-1 Population Projections

From 2022 Plan

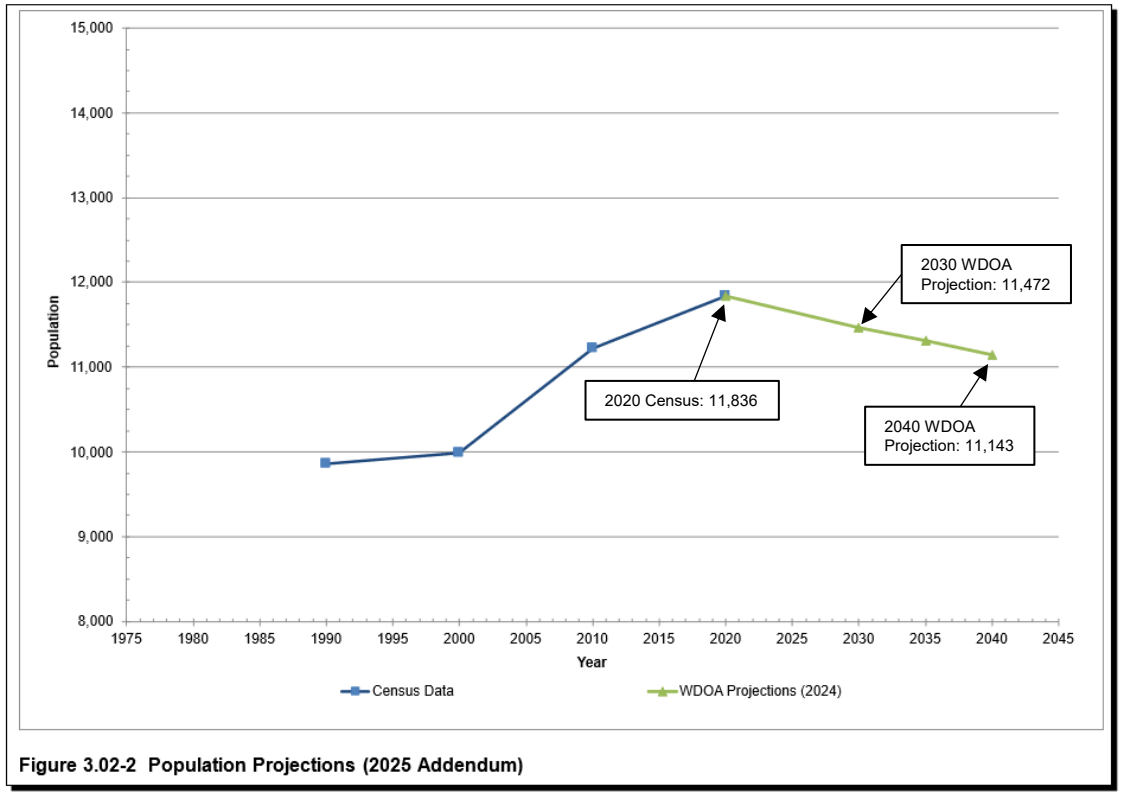

Figure 3.02-2 Population Projections (2025 Addendum)

From 2025 Addendum

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Projected Water Service Demand

	Total Population	ADD Demand (MGD)
2025	11,710	0.82
2030	11,472	0.81
2035	11,308	0.79
2040	11,143	0.78

ADD=average day demand
MGD=million gallons per day

Table 7.06-1 Water Demand

		Residential Use	Commercial Use	Industrial Use	Public Authority Use	Multifamily Use	Total
Existing Service Area	ADD	318,060	134,564	97,865	183,496	85,632	819,617
	MDD	534,341	226,068	164,413	308,274	143,861	1,376,957
Water Use Decline with Future Service Area	ADD	(15,401)	(6,516)	(4,739)	(8,885)	(4,146)	(39,686)
	MDD	(25,873)	(10,946)	(7,961)	(14,927)	(6,966)	(66,672)
Total	ADD	**779,931**					
	MDD	**1,310,284**					

Table 7.06-2 2040 Projected ADD and MDD (gpd)

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Plan Recommendations

	2025	2040
MDD	944	987
MDD with Fire Flow	3,094	3,137
MDD without Davison Plant	44	87
MDD with Fire Flow without Davison Plant	294	337

Table 7.08-1 Supply Capacity Evaluation (gpm)

- System has a present-day storage surplus
- Well No. 3 and Davison Plant are at end of useful lives
  - New well and facility recommended before these are decommissioned
- Begin planning for new well and storage facility to replace Well No. 3 by 2030

Water Source Alternatives Not Viable

- Surface water
  - Mississippi River
- Groundwater sources
  - Deep wells
  - Shallow wells
- Connections to other water utilities
  - Belmont Waterworks
  - Lancaster Waterworks
  - Cuba City Waterworks
- **Additional deep wells are currently the best alternative**
  - System's current water source is treated groundwater

Summary

- The 2022 Plan stated additional well capacity is required to meet 2040 maximum day demands
  - Updated demands show additional capacity is not needed, but aging infrastructure should still be replaced in the near future
- No significant changes to source water anticipated
- WSSAP is not intended to take the place of a detailed Utility Master Plan
- Updated demands and population projects to coincide with future comprehensive plan updates and development trends
- Planning for new well facility should start in 2026 to keep on schedule for having facility online by 2030.

Questions or Comments?

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APPENDIX B
FEMA FIRMETTES

National Flood Hazard Layer FIRMette

FEMA

90°29'49"W 42°43'23"N

90°29'12"W 42°42'56"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

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 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 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 6/30/2026 at 9:56 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.

National Flood Hazard Layer FIRMette

FEMA

90°29'10"W 42°43'51"N

90°28'32"W 42°43'24"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

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
- 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 6/30/2026 at 9:57 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.

National Flood Hazard Layer FIRMette

FEMA

90°27'46"W 42°44'55"N

90°27'9"W 42°44'28"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

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
- 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 6/30/2026 at 9:58 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.

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APPENDIX C
WETLAND INVENTORY MAP

U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands Inventory

June 24, 2026

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.

APPENDIX D
TROUT WATERS MAP

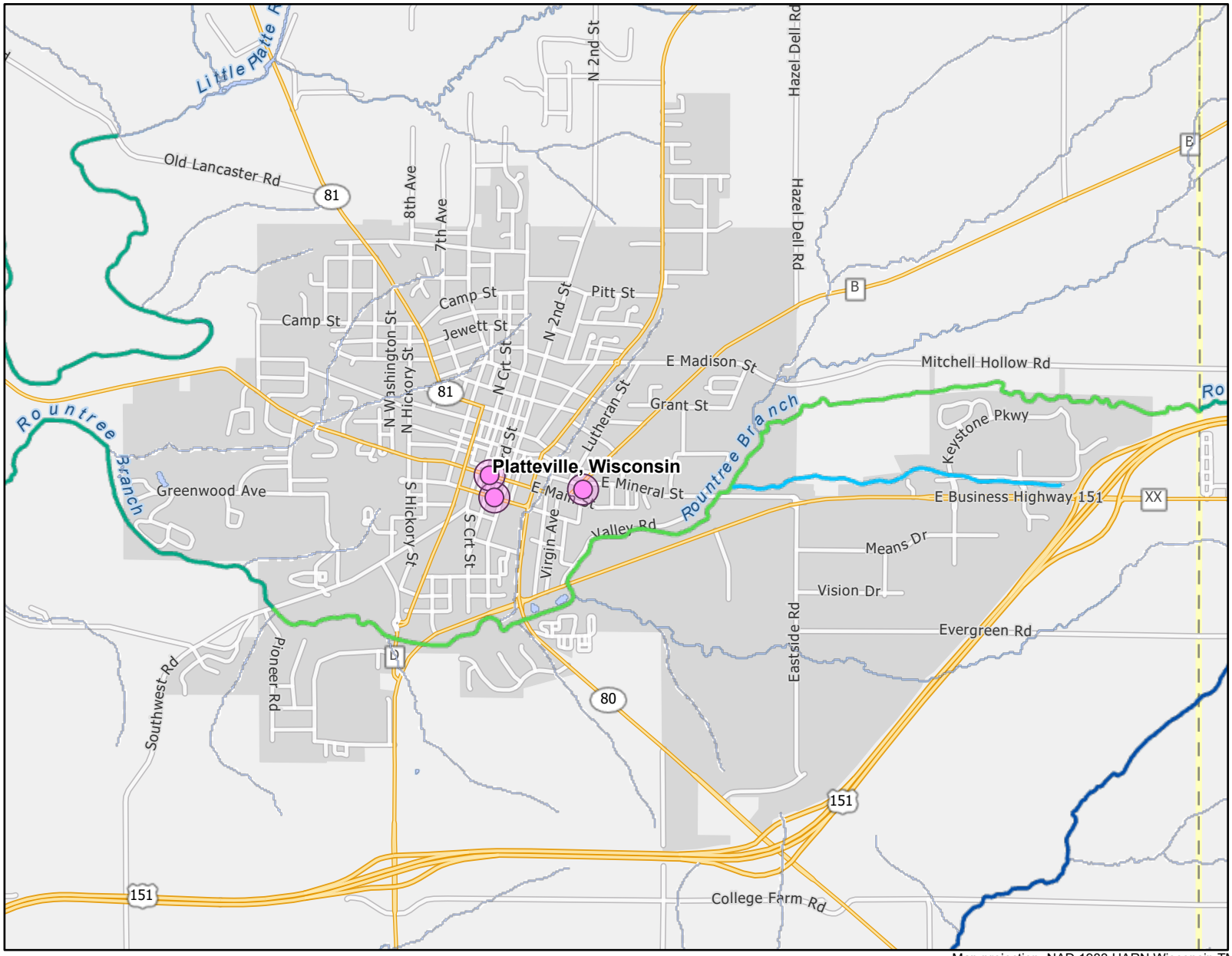
AGENDA

DRAFT FOR OWNER-(08.31.26)

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

SWDV - Trout Waters

City of Platteville, WI



Legend: (some map layers may not be displayed)

Trout Stream Lines
- Class 1
- Class 2

Smallmouth Bass Streams
- Wadable Cool Water
- Wadable Nursery Waters
- Rivers and Streams
- Intermittent Streams
- Open Water
- Rivers and Streams
- Intermittent Streams
- Open Water
- 24K Intermittent Streams
- 24K Lakes and Open Water

Notes:

Map projection: NAD 1983 HARN Wisconsin TM

N

Map: 0 2,500 5,000 Feet
0 775 1,550 Meters

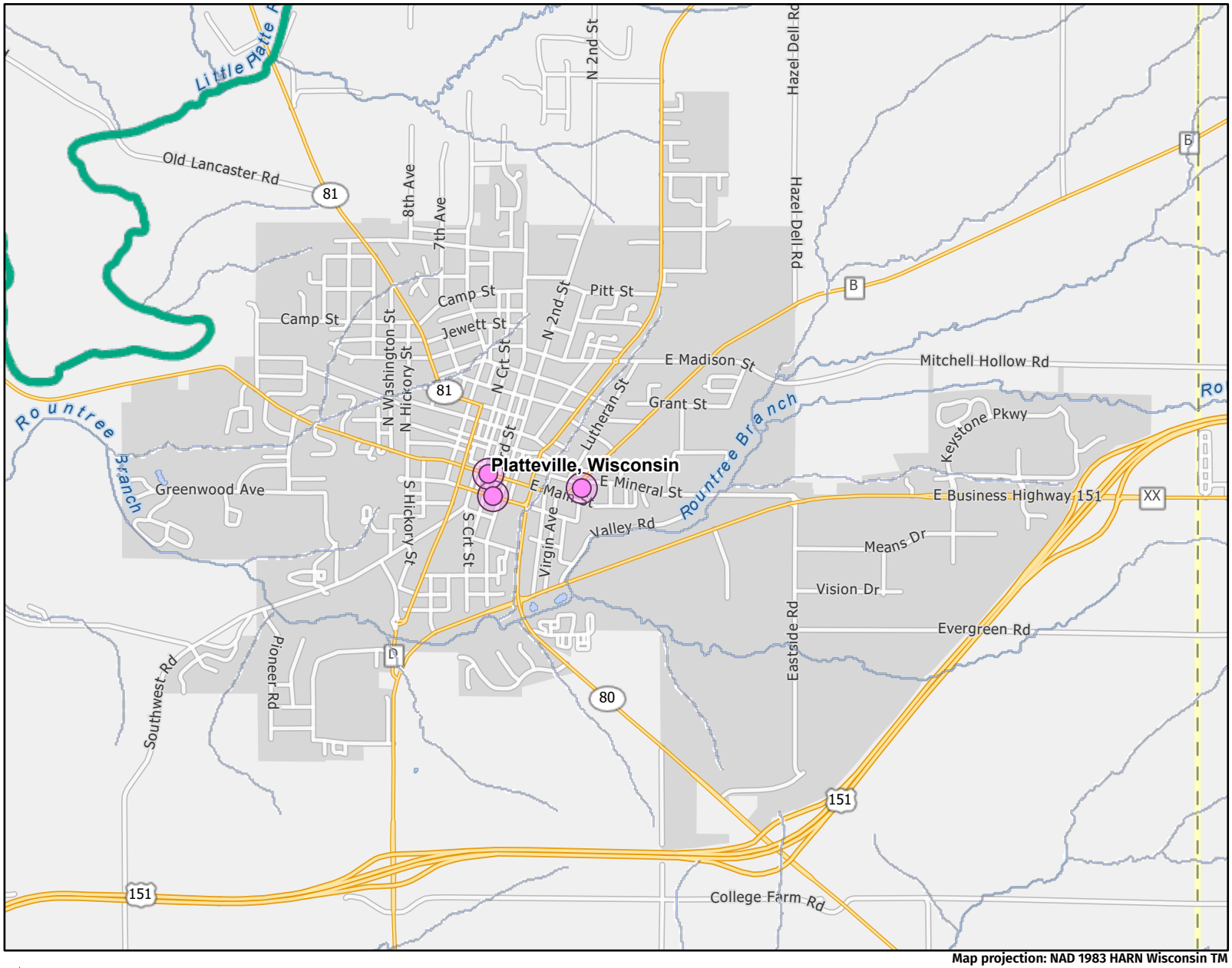
Service Layer Credits:
DNR Basic Feature VTL (WTM): Wisconsin Department of Natural Resources, GIS Section, Surface Water: WiDNR, USGS, and other data, Fisheries Management: WI Dept. of Natural Resources, Water Division

Date Printed: 3/23/2026 8:31 AM

APPENDIX E
ORW AND ERW

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

SWDV - ORW and ERW
City of Platteville, WI



Legend: (some map layers may not be displayed)

Outstanding and Exceptional Streams

- Exceptional
- Rivers and Streams
- Intermittent Streams
- Open Water
- Rivers and Streams
- Intermittent Streams
- Open Water
- 24K Intermittent Streams
- 24K Lakes and Open Water

Notes:

Map projection: NAD 1983 HARN Wisconsin TM

N

Map: 0 2,500 5,000 Feet
0 780 1,560 Meters

Service Layer Credits:
DNR Basic Feature VTL (WTM): Wisconsin Department of Natural Resources, GIS Section, Surface Water: WiDNR, USGS, and other data, Clean Water Act Standards & Uses: WI Dept. of Natural Resources, Water Quality

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APPENDIX F
NATURAL SPRINGS AND STREAMS MAP

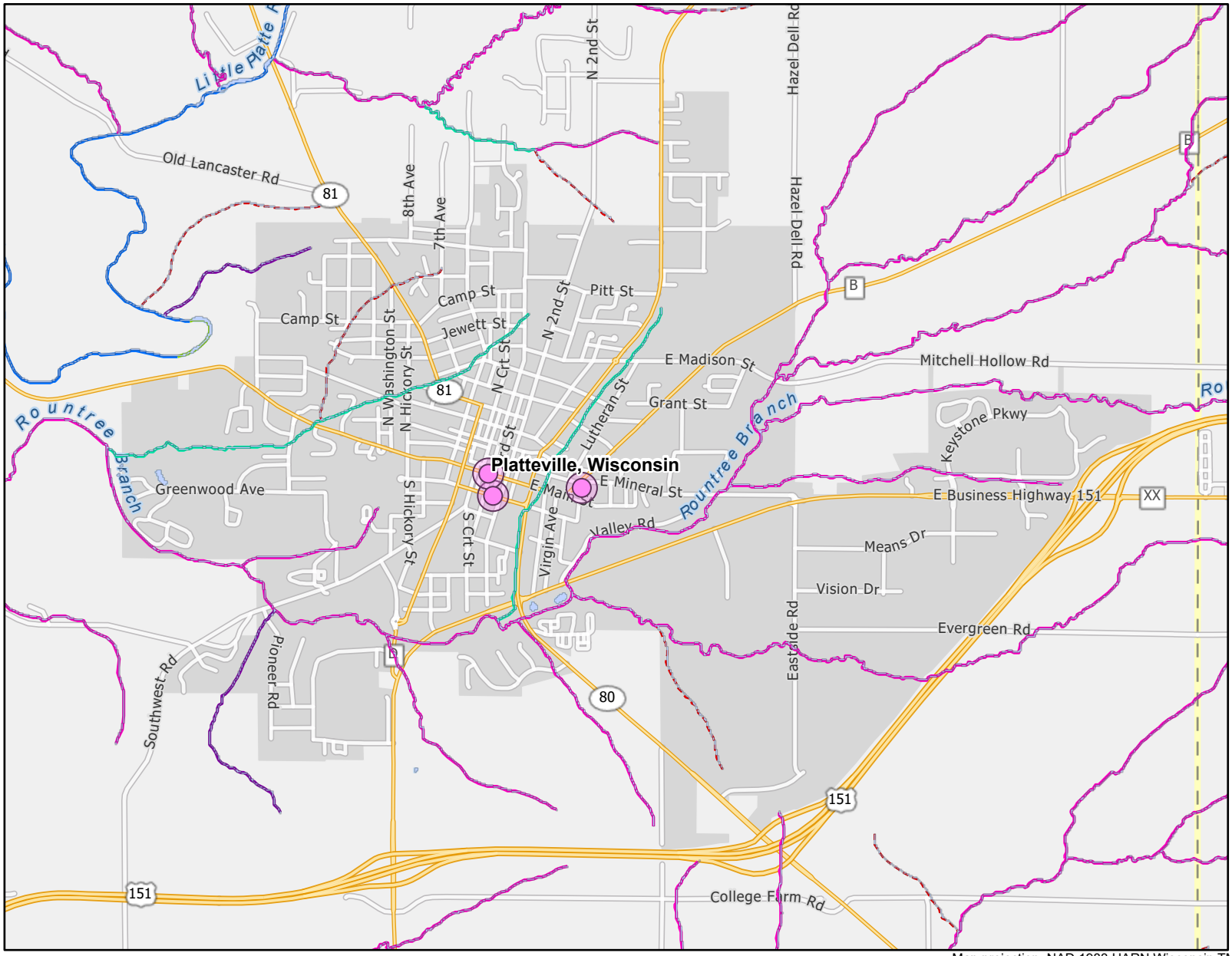
AGENDA

DRAFT FOR OWNER-(08.31.26)

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

SWDV - Natural Streams

City of Platteville, WI



Map projection: NAD 1983 HARN Wisconsin TM

N

Map: 0 2,500 5,000 Feet
0 775 1,550 Meters

Service Layer Credits:
DNR Basic Feature VTL (WTM): Wisconsin Department of Natural Resources, GIS Section, Surface Water: WiDNR, USGS, and other data

Legend: (some map layers may not be displayed)

- Rivers and Streams
- Intermittent Streams
- Open Water
- Rivers and Streams
- Intermittent Streams
- Open Water

Streams Natural Communities

- Coldwater
- Cool-Cold Headwater
- Cool-Cold Mainstem
- Cool-Warm Headwater
- Cool-Warm Mainstem
- Macroinvertebrate

Notes:

Date Printed: 3/23/2026 2:05 PM