

Proposed Areas A, C, F, and Z Water Distribution Improvements

Public Information Meeting

July 10, 2019

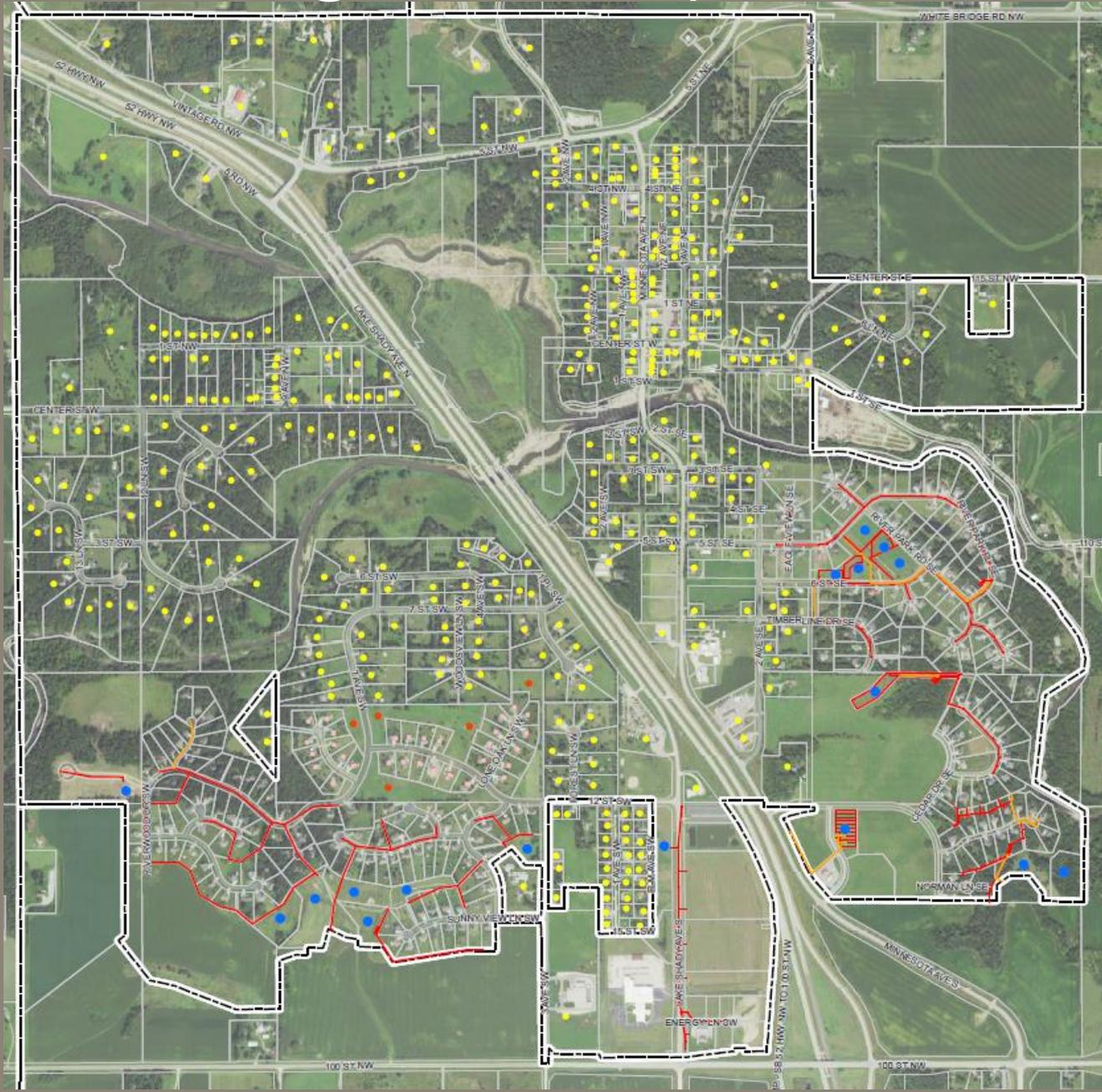
Presentation: Joe Palen and Mark Hanson



Introduction / Background

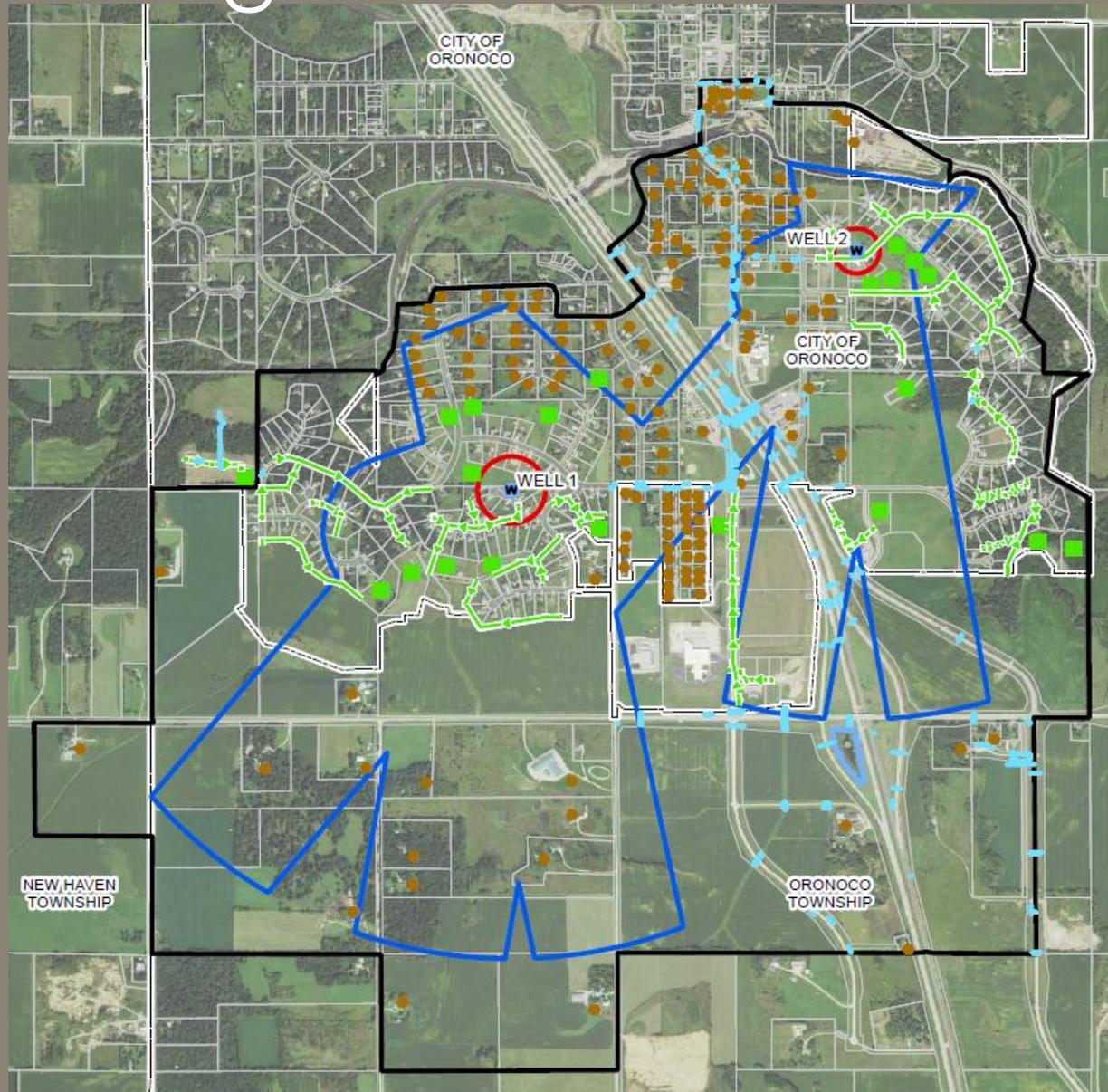
June 2017	State Authorizes \$500K Grant for Regional Wastewater Study
December 2017/ January 2018	Present Draft Regional Wastewater Study: - City of Oronoco/Pine Island/Rochester
April 2018	Public Information Meeting (Regional Wastewater Study)
May 2018	State Approves \$2.5M grant for Regional Wastewater System Design
July 2018	Oronoco Council Selects: Regional WWTF Option
December 2018	Wastewater / Water Facility Plan Public Hearing
April / May 2019	Present Water Distribution Feasibility Report to W&S Committee and City Council.
January – July 2019	Review WWFP/Antidegradation Analysis/Total Phosphorous (TP) Trading Agreement, NPDES Permit (New Wastewater Treatment Facility) with Minnesota Pollution Control Agency (MPCA)

Existing Sewer System



- SUBSURFACE SEWER TREATMENT SYSTEM
- INDIVIDUAL SEPTIC TANK CONNECTED TO CLUSTER DRAINFIELDS
- CLUSTER SYSTEM DRAIN FIELDS
- COMMUNITY DRAIN FIELDS
- EXISTING GRAVITY SANITARY
- EXISTING SANITARY FORCEMAIN
- ▭ CITY LIMITS
- ▭ PARCEL

Wellhead Protection Plan Management Area



SANITARY SEWER SYSTEM

- SANITARY GRAVITY PIPE
- SANITARY SEWER COMMUNITY DRAIN FIELD
- SUBSURFACE SEWAGE TREATMENT SYSTEM

STORM SEWER SYSTEM

- STORM PIPE
- STORM POND

WELLHEAD PROTECTION AREA

- PUBLIC SUPPLY WELL
- EMERGENCY RESPONSE AREA
- WELLHEAD PROTECTION AREA

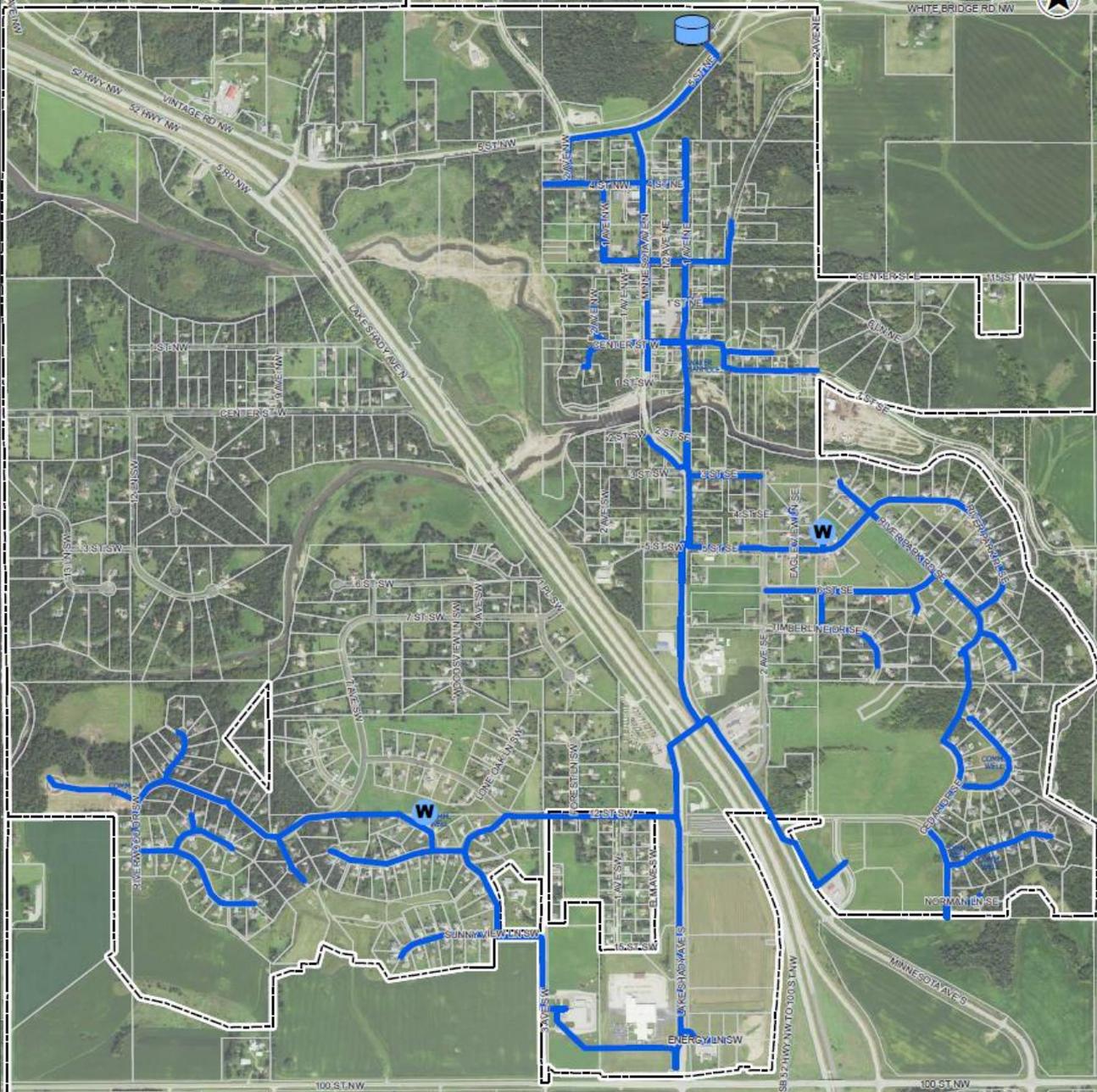
DRINKING WATER SUPPLY MANAGEMENT AREA

- DRINKING WATER SUPPLY MANAGEMENT AREA

BASE MAPPING

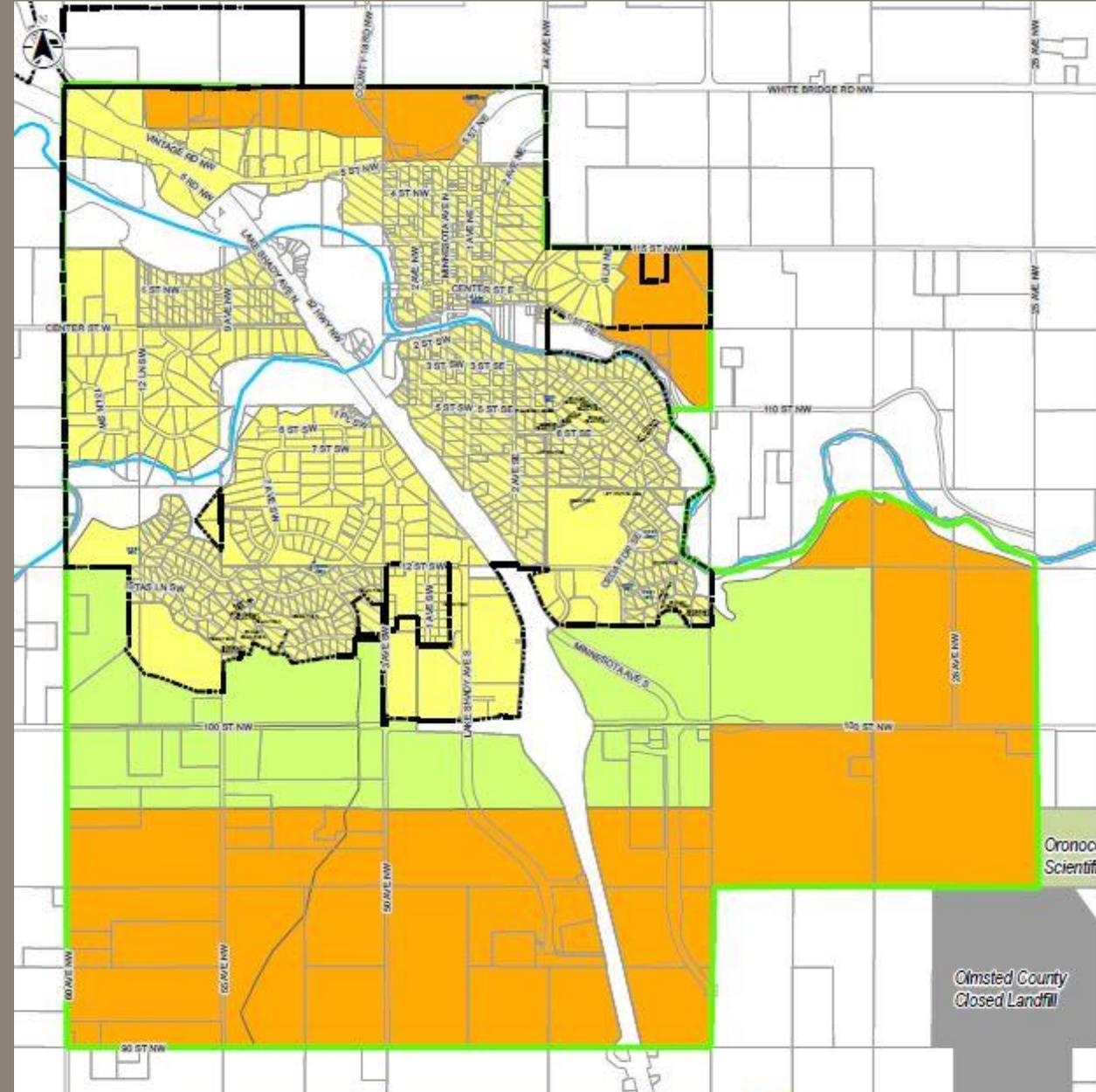
- PARCEL
- CITY LIMITS

Existing Water System



-  WATER TANK
-  SUPPLY WELL
-  WATER MAIN
-  CITY LIMITS
-  PARCEL

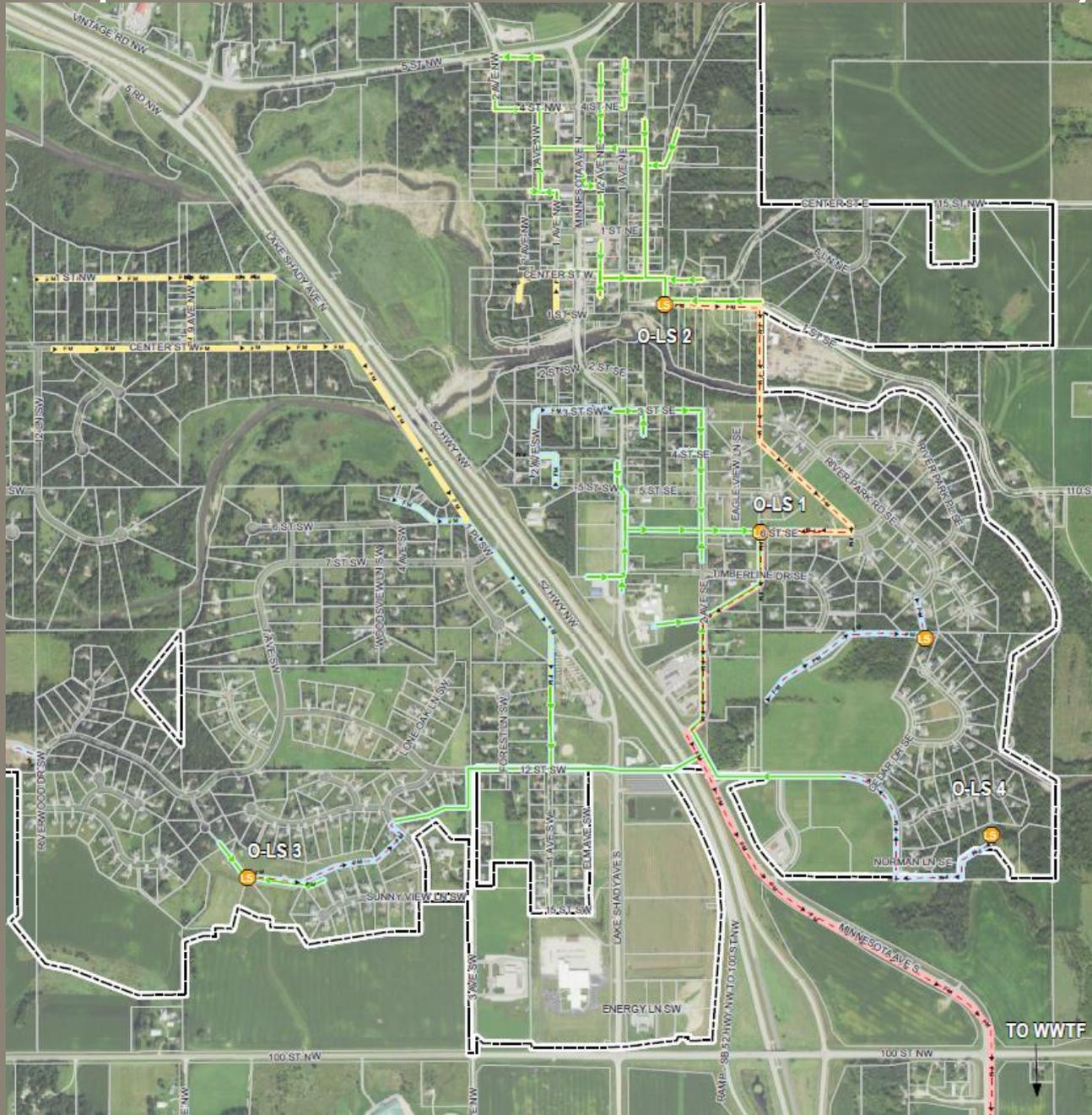
Ultimate Service Area Sewer Phasing



- City Limits
- Oronoco Estates
- Landfill
- River
- Oronoco Ultimate Service Area
- Phase 1A (+2022)
- Phase 1B (+2025 to 2031)
- Phase 1C (Growth ~2022 to 2043)
- Phase 2 Service Area Beyond 2043

Oronoco Scientific
Olmsted County Closed Landfill

Proposed Collection Sanitary Sewer



Sanitary

- FM Forcemain
- FM Low Pressure Forcemain
- Gravity Pipe
- LS Lift Stations

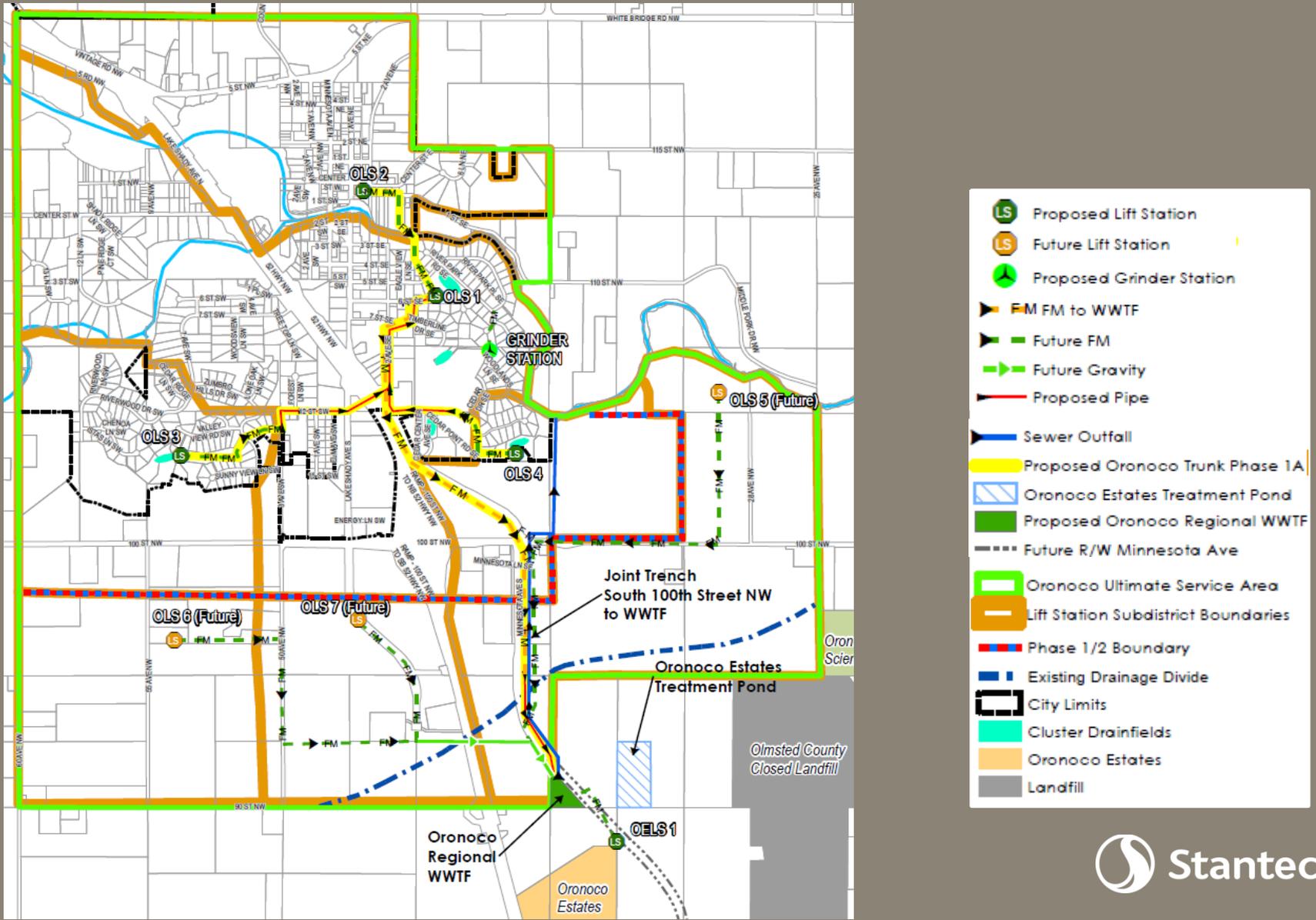
Contract

- Contract 2
- Contract 3
- Contract 4

Base Mapping

- Parcel
- City Limits

Trunk Sewer Layout & WWTF Location



Proposed Collection Water



Oronoco Population/Households Water Usage

2019 Estimated Population	1500
2043 Projected Population	2940
2019 Estimated Households	575

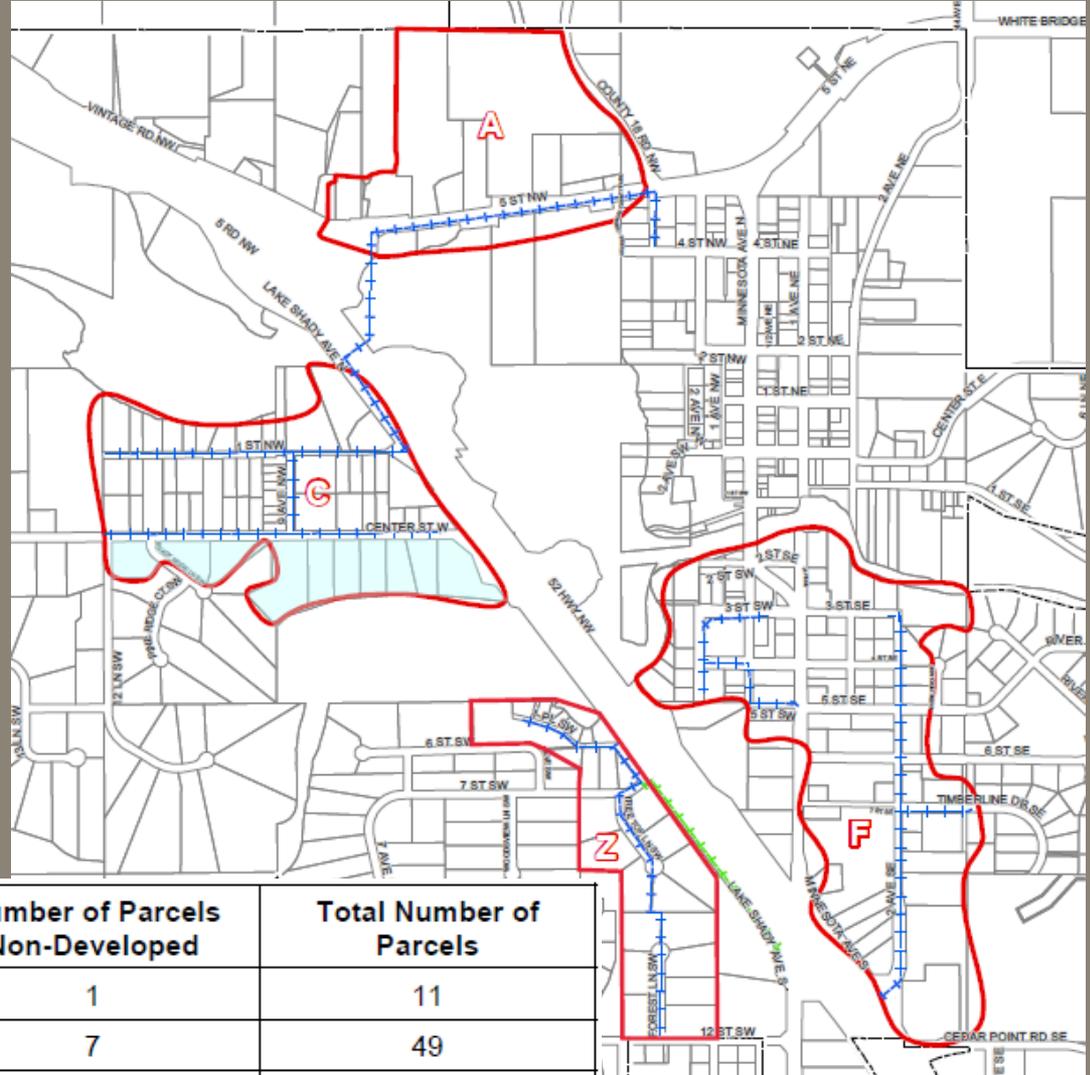
Water Usage	February 2018	March 2018
Water Usage (GAL)	1,343,873	1,255,969
Number of Active Accounts	339	339
Approximate # Pumping Days	28	31
Water Usage/Accounts (Gals/Acct)	142	120
Estimated Capita/Account	2.25	2.25
Estimated Gallons/Capita	62.9	53.1

Preliminary Cost Estimate Water Distribution

Improvement Area	Estimated Lateral Cost	Estimated Trunk Cost	Total Estimated Cost
Area A, C	\$ 340,000	\$ 1,170,000	\$ 1,510,000
Area F	\$ 220,000	\$ 690,000	\$ 910,000
Area Z	\$ 110,000	\$ 460,000	\$ 570,000
Total	\$ 670,000	\$ 2,320,000	\$ 2,990,000

Areas A, C, F, Z

Water		Base Mapping	
	Proposed Water		Parcel
	Alternate Alignment		City Limits
	Water Improvement Areas		
	Optional Parcel - Upon Resident request		



Number of Parcels Included by Area

Improvement Area	Number of Parcels Developed	Number of Parcels Non-Developed	Total Number of Parcels
Area A	10	1	11
Area C	42	7	49
Area F	21	5	26
Area Z	23	0	23
Total	96	13	109

Proposed Assessment

Lateral Cost Estimate – Areas A, C, F, Z:	\$670,000
Parcels Included:	109
Lateral Cost/Parcel:	\$6,150

Lateral Cost Includes

- 6-inch diameter equivalent water main
- 100 front feet (FF) per parcel
- Water main is abutted by parcels on both sides; therefore, $\frac{1}{2}$ the water main cost is included in the lateral equivalent cost/parcel
- Hydrants are included assuming 400 foot spacing
- 6-inch gate valves are included assuming 600 foot spacing
- Each parcel includes a water service to the property line

Proposed Assessment

No proposed assessment to undeveloped parcels unless the property owner requests to be included.

Undeveloped parcels that elect not to accept the lateral assessment at this time will be responsible for the lateral costs and fees in accordance with city policy at the time the parcel connects.

The large developed parcels adjacent to Area C (south of Center Street) will NOT be served and assessed as part of the proposed water distribution project unless they request service (in writing) to be included in the project.

Duplex residential unit be assessed 80% of one (1) Equivalent Residential Unit (ERU) or 0.8 ERU per unit. (A duplex = 1.6 ERUs)

Residential and Commercial Parcels will be assessed at the same rate.

The cost to oversize a typical 6 or 8" diameter water main to a 10 to 12" diameter trunk water main is not proposed for assessment.

Water Project Finance/Revenue

Lateral Cost per Parcel (1)	\$6,150
Number Developed Parcels	97.2 ERU
Lateral Cost Revenue	\$597,780
2019 WAC (2)	\$2,461.17/Developable acre
Connection Fee (2)	\$1,630/Developed Lots
Connection Fee (2)	\$7,380.37/Undeveloped Lot

Notes:

(1) Cost to be assessed to developed ERUs served by the proposed water system improvements. The yearly cost per ERU over a 20-year term would be \$308 plus interest (1-3%).

(2) Fee would not be imposed for non-subdividable parcels served and assessed as part of the proposed water system improvements.

Note WAC = Water Available Charge

Monthly Water User Rates

Monthly User Rate

- 2019 Monthly Base Charge \$17.40 Flat Fee
- Cost/1000 GAL Water Usage \$3.10 (< 5,000 GAL)
- Monthly Well Fee \$5.00 Flat Fee
- Typical Monthly Residential Charge \$31.70 (estimate 3,000 GAL)
- February/March 2018 \$12,300 (Average Monthly Revenue)

Project Schedule

April 2019	Present Water Distribution Improvements (Areas A,C,F,Z) Feasibility Report
May 2019	Submit PFA Application for PPL
July 2019	Public Information Meeting (Water Improvements)
September/ October 2019	MPCA Comment Period (WWFP, Trade Agreement TP, EAW, NPDES Permit)
September 2019	Begin Preparation Plans/Specifications for Bidding
November 2019	Public Assessment Hearing (Sewer/Water)
January 2020	Complete Funding Packages 2020 Legislative Session
August 2020	Bidding/Consider Contract Award
September 2020	Start Construction
Summer 2022	Substantial Completion (Sewer and Water Improvements)

Questions?