



City of Westminster
**GREGORY HILL PUMP STATION AND TANK
REPLACEMENT PROJECT**



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Project Open House Meeting June 21, 2017

This is Your Community

**The Intent of This Discussion is
to Review How This Project
Affects You**



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Frequent Questions and Comments Heard to Date

1. Why wasn't the public asked to comment on design and site selection?
2. Why must facilities be built on the existing Gregory Hill site?
3. Can tanks remain on the western portion of the site?
4. Whom do these tanks serve water to?
5. What will happen with site runoff and drainage?

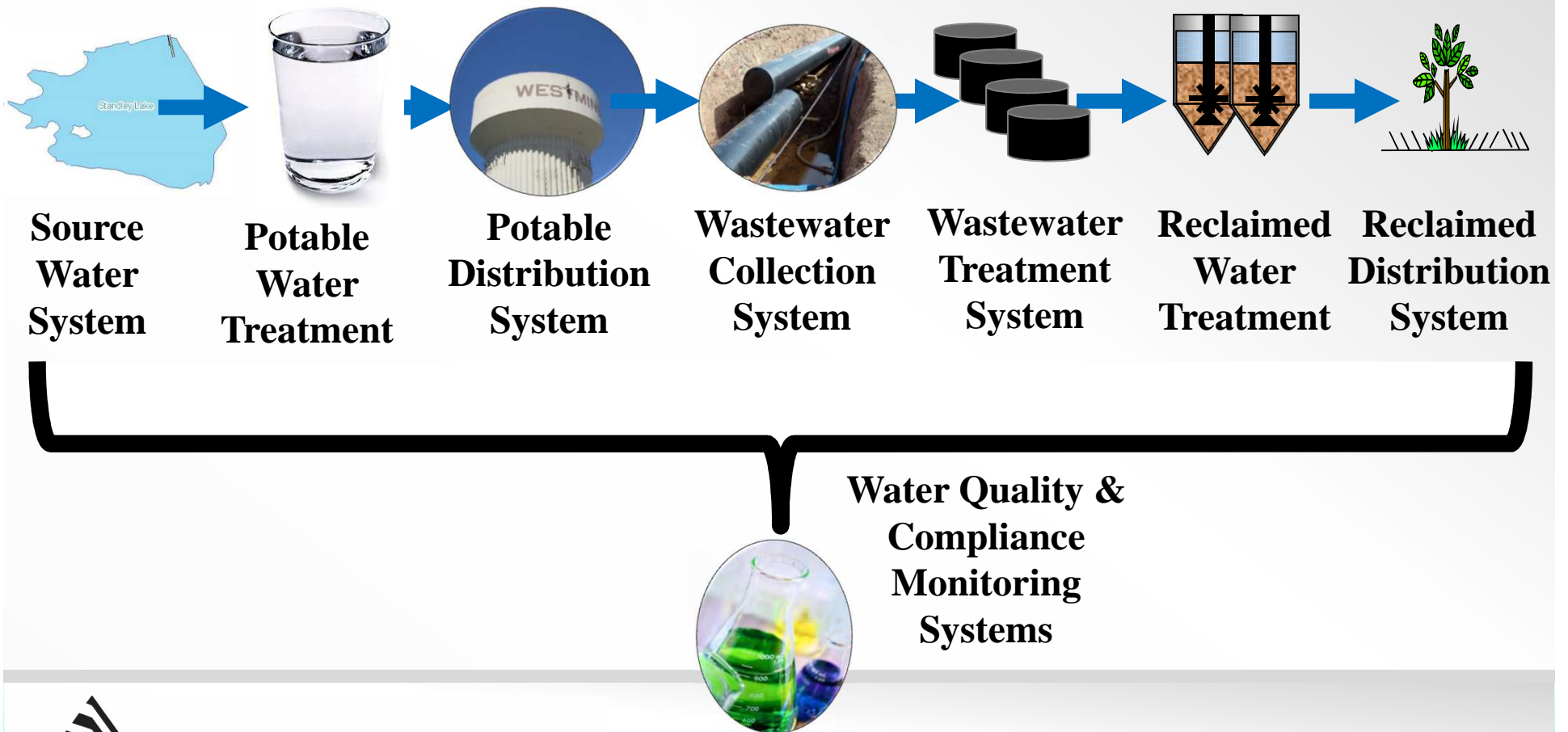


Discussion Outline

1. Background on the Utility System
2. Review the Pressure Zone 3 Project
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6. Proposed Schedule
7. Questions



Westminster Is a Full-Service Utility Valued at \$4Billion



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Despite Massive Infrastructure Wastewater is Treated at Low Cost

1. Convey and Treat a Toilet Flush for Just a Penny.



=



X 1



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Despite Massive Infrastructure Water is Delivered at Low Cost

1. Fill 8-ounce cup at the faucet 58 times for just a penny



=



X 58



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There are Five Core Goals For the Potable Water System

1. Safety for Public and Ops Staff
2. Regs Compliance & multiple barriers
3. Deliver exceptional water quality
4. Deliver exceptional reliability
5. Deliver exceptional value



Potable Water Service is Enhanced via Adjusting System Pressures

1. Pumps – increase pressure
 2. Pressure Reducing Valves - decrease pressure
 3. Tanks - sustain pressure & flow for a period of time
- Redundancy is Important



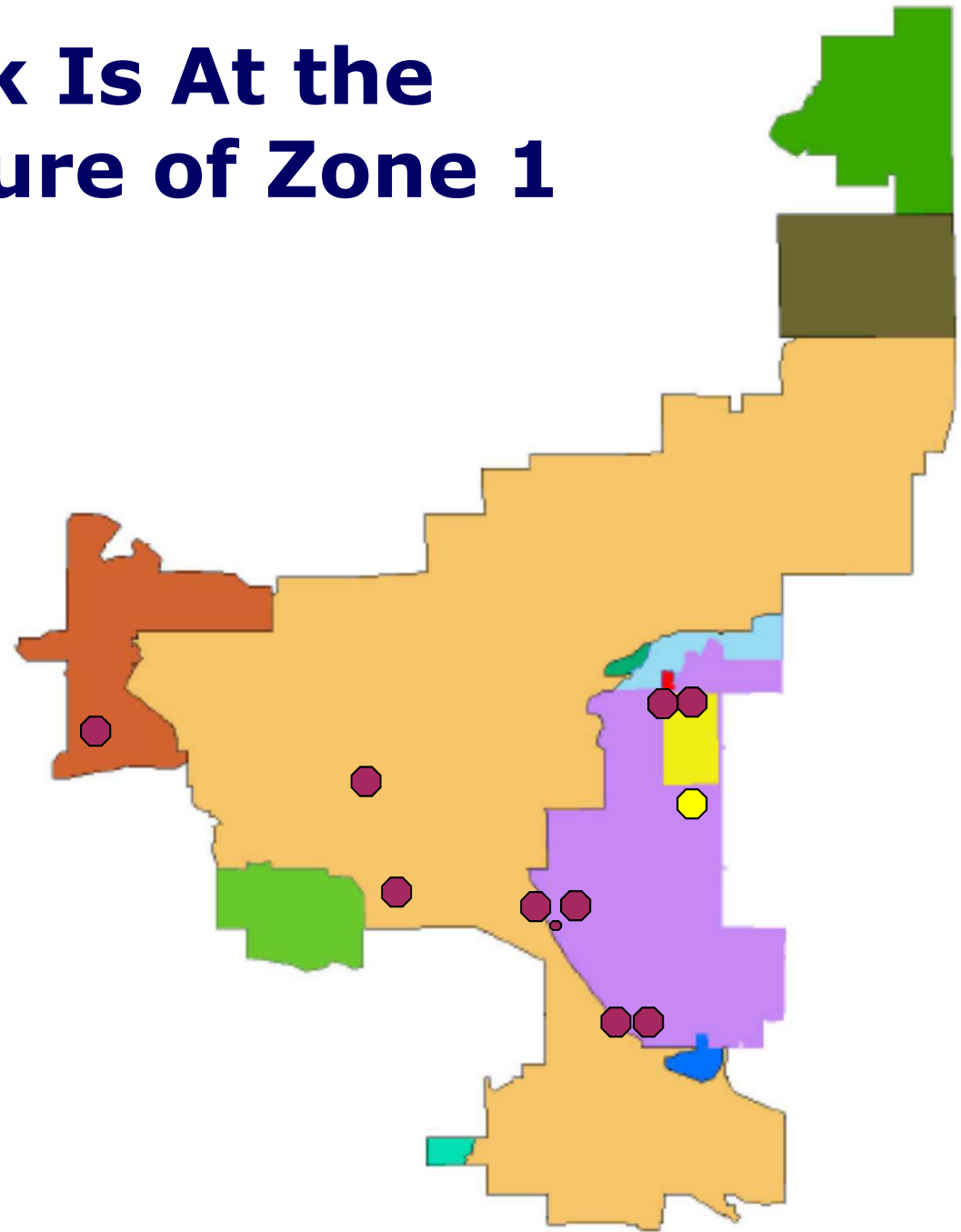
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Water Tanks and Pump Stations are Important for Three Main Reasons

1. Provide Sustained Water Pressure In The System
2. Provide Water Flow During Periods of High Demand
3. Provide Water During Emergency Situations
 - Power and/or Water Supply Outages – 1 day of demand in storage.
 - Fire Protection



All But One Tank Is At the Hydraulic Pressure of Zone 1



● ● *Existing Water tanks*



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Infrastructure is Maintained with a Clear Mission

**Plan, Prioritize, and Implement
Capital Improvement Projects
within a Responsible Budget To
Sustain Quality Utility Services**

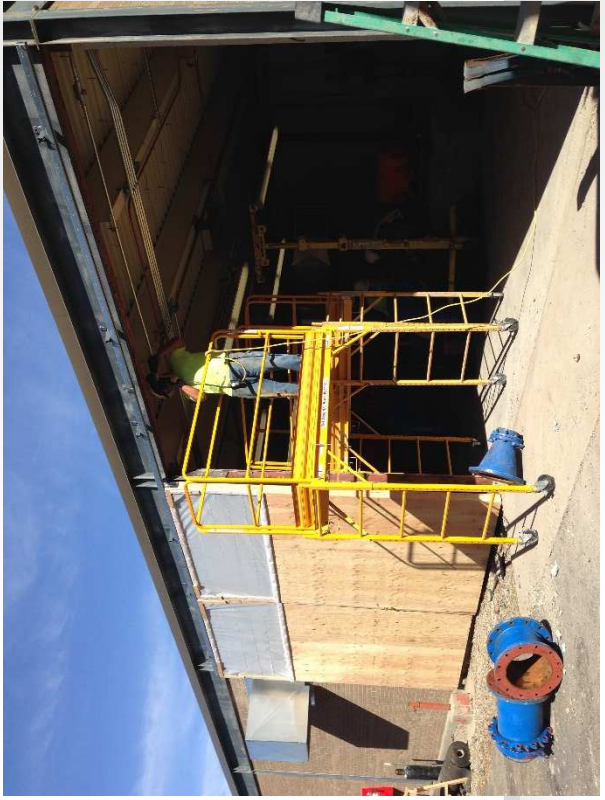


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Recent Examples of Your Utility Dollars Hard at Work

1. Tanks and Pump Stations
 - a. Wandering View Tanks and Pump Station
 - b. Northridge Tank and Pump Station
 - c. Countryside Tanks and Pump Station
 - d. Eaton, Jim Baker, and Silo Pump Stations
2. Treatment Facilities
 - a. Repairs to Semper & Northwest Water Treatment Facility
 - b. Repairs Big Dry Creek Waste Water Treatment Facility
3. Water and Sewer Mains
 - a. 87th & Wads Sewer Lift Station
 - b. Little Dry Creek Interceptor Sewer
 - c. Sheridan Water & Sewer
 - d. 88th/104th Water Mains





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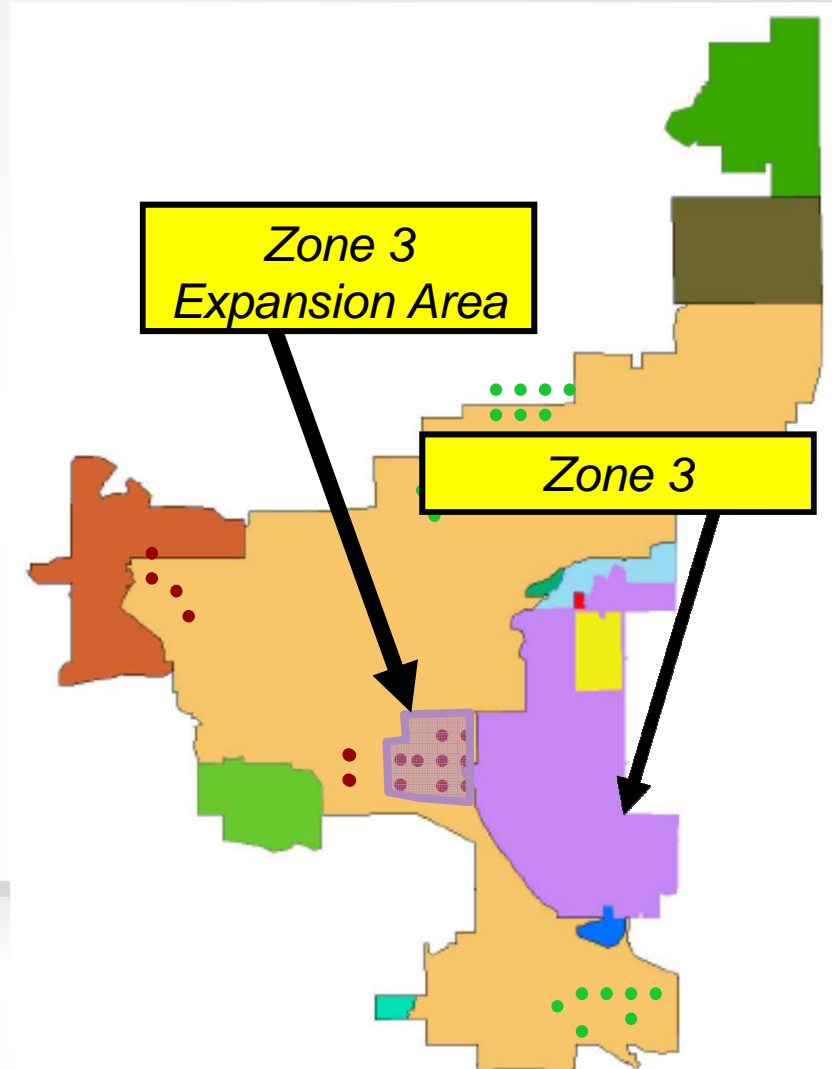
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The Zone 3 Expansion Program Is The Latest Series of System Improvement Projects

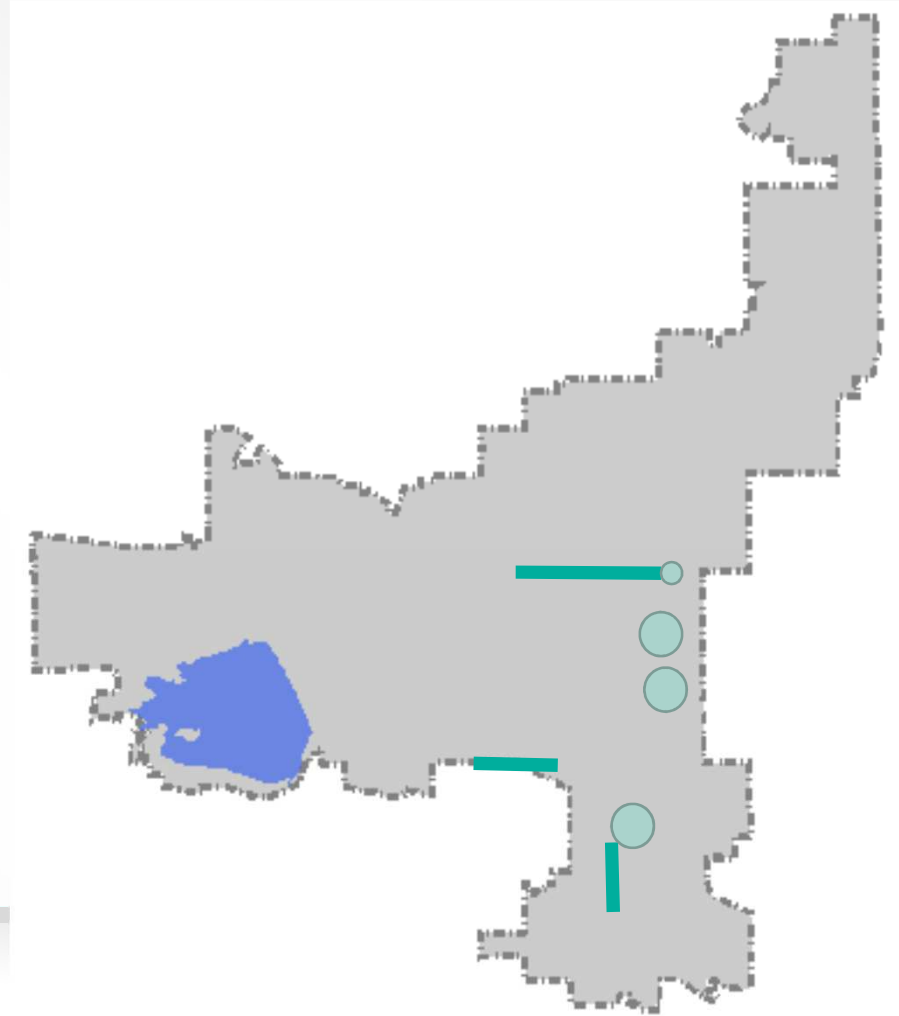
1. Correct Large Areas of Long-Standing Low Pressure
2. Increase Water Storage
3. Connect Existing Storage to More Customers
4. Increase Redundancy to the Existing Pump Stations
5. Replace Aging Infrastructure



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The Zone 3 Expansion Scope Includes 7 System Improvements

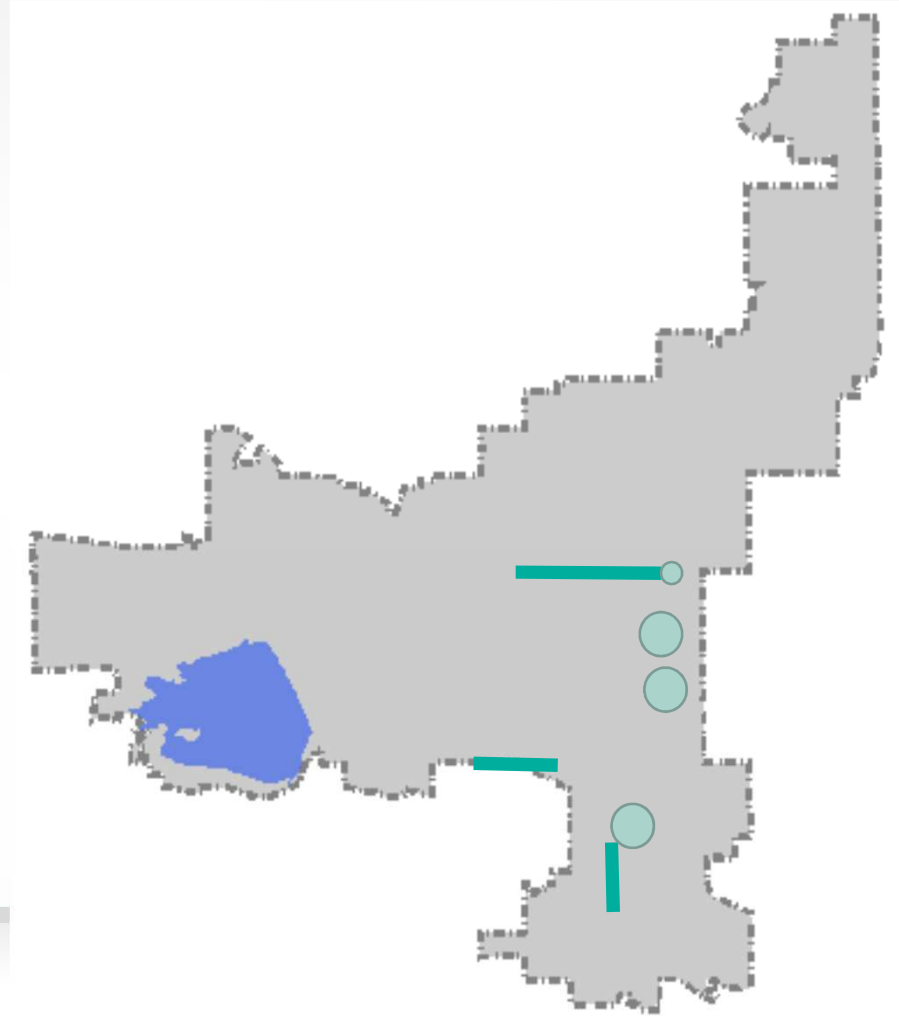
1. Demo Sunset Ridge Tank
2. 104th Transmission Main
3. 88th Transmission Main
4. Gregory Hill Pipelines
5. GH Site PS & Tank
6. New Elevated Tank
7. Surge Protection Equipment



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The Gregory Hill Site Is Adjacent to Pillar of Fire and Observatory Heights



Work for Gregory Hill Pipeline Improvements is In Progress

- Existing Area Waterlines are in Poor Condition and Need More Capacity *20"BFV*



Infrastructure Reinvestment is Necessary For Tanks/Pump Station

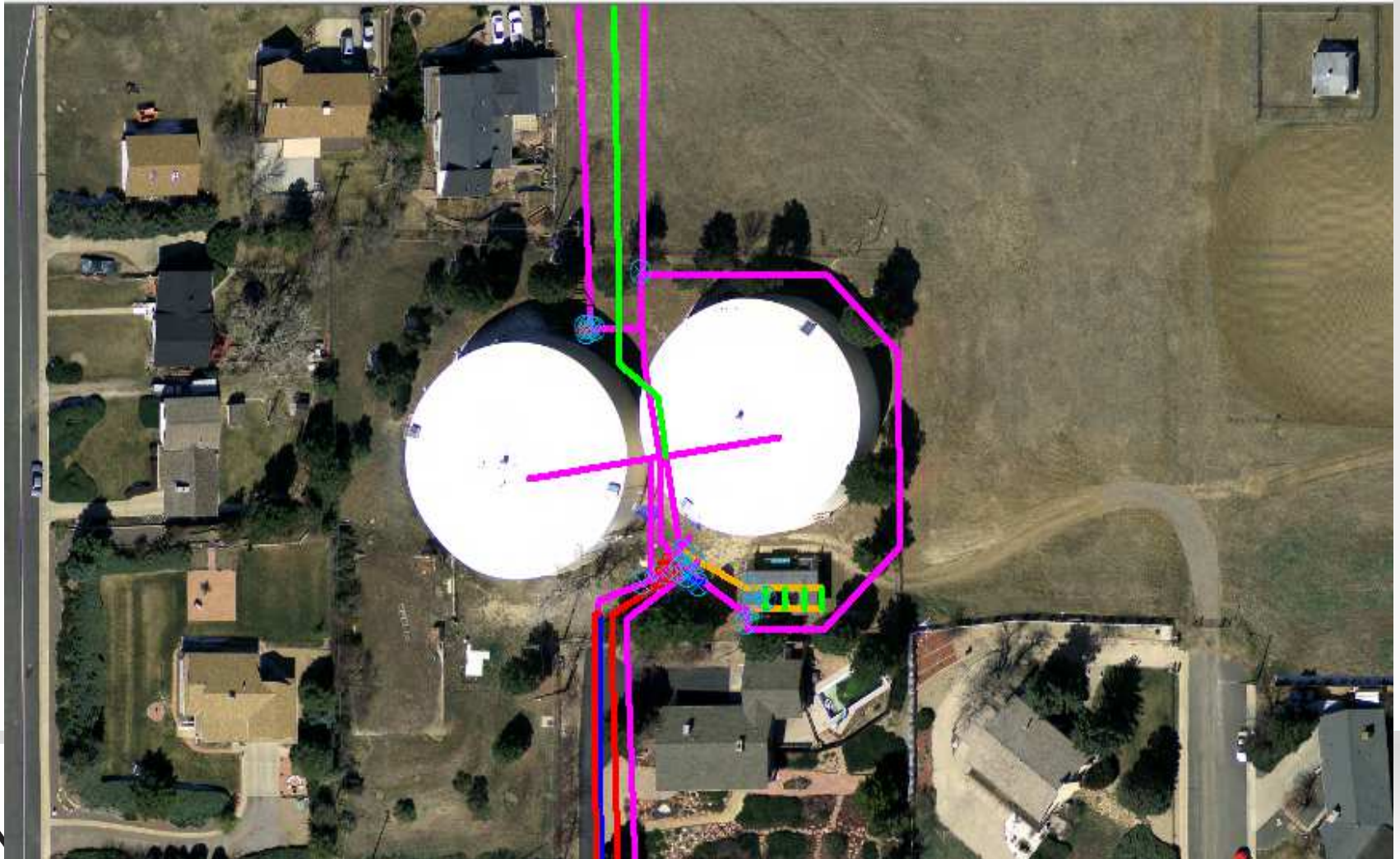
1. Tanks and Piping Constructed in the 1950's
2. Intake/Outlet Piping is in Poor Condition and Too Small
3. The Tanks are in Poor Condition and Cannot Practically be Repaired
4. The Pump Station is too Small
5. More Space is Necessary for Improvements



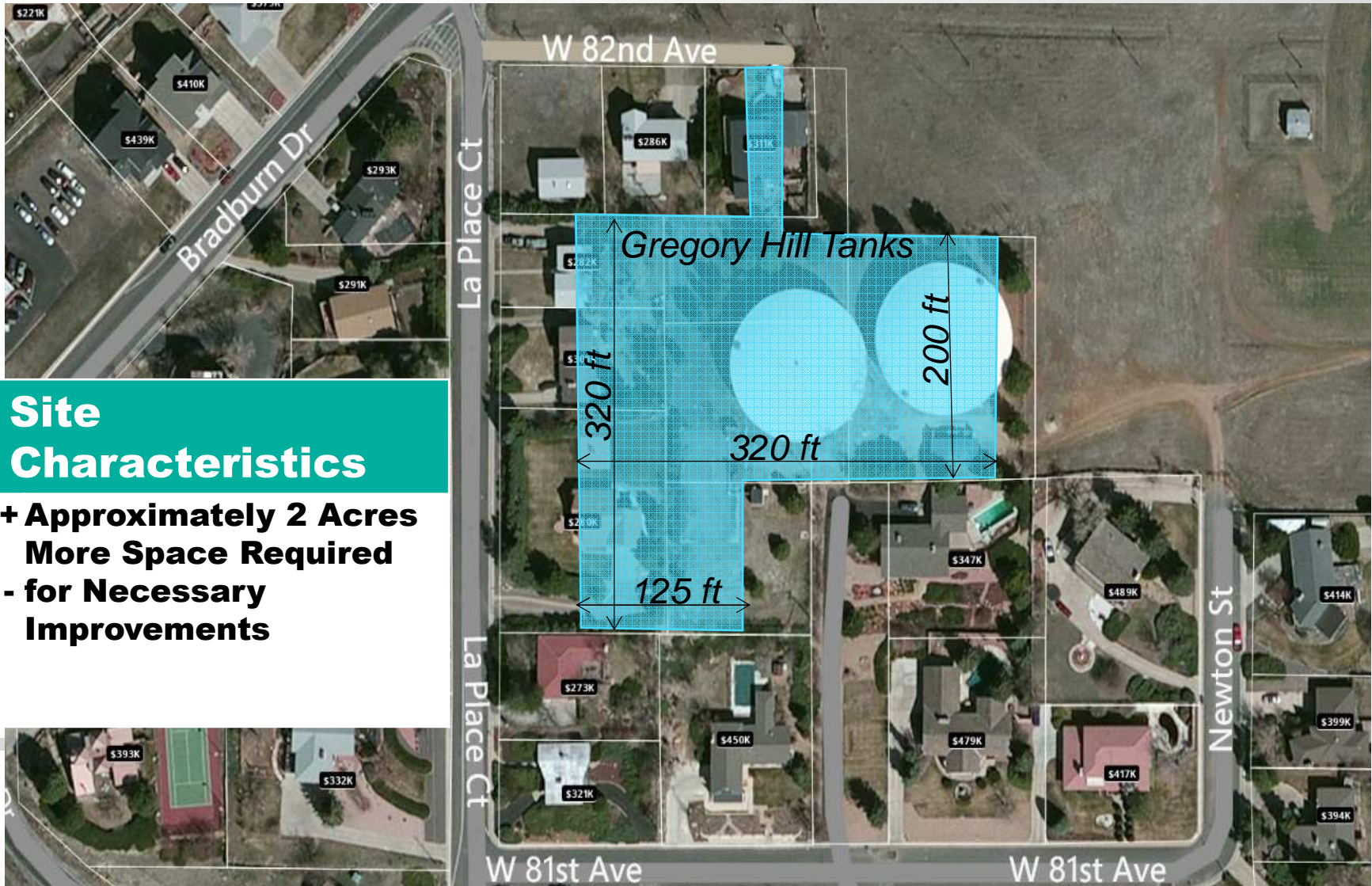
Gregory Hill Site Constraints



Site Piping is Inaccessible



Existing Tanks, Pump Station and Yard Piping Need Replacement



Site Characteristics

- + Approximately 2 Acres More Space Required
- for Necessary Improvements



Former Concrete Tank Should be Removed to Enhance Safety



Site Selection For New Tanks Considered Many Factors

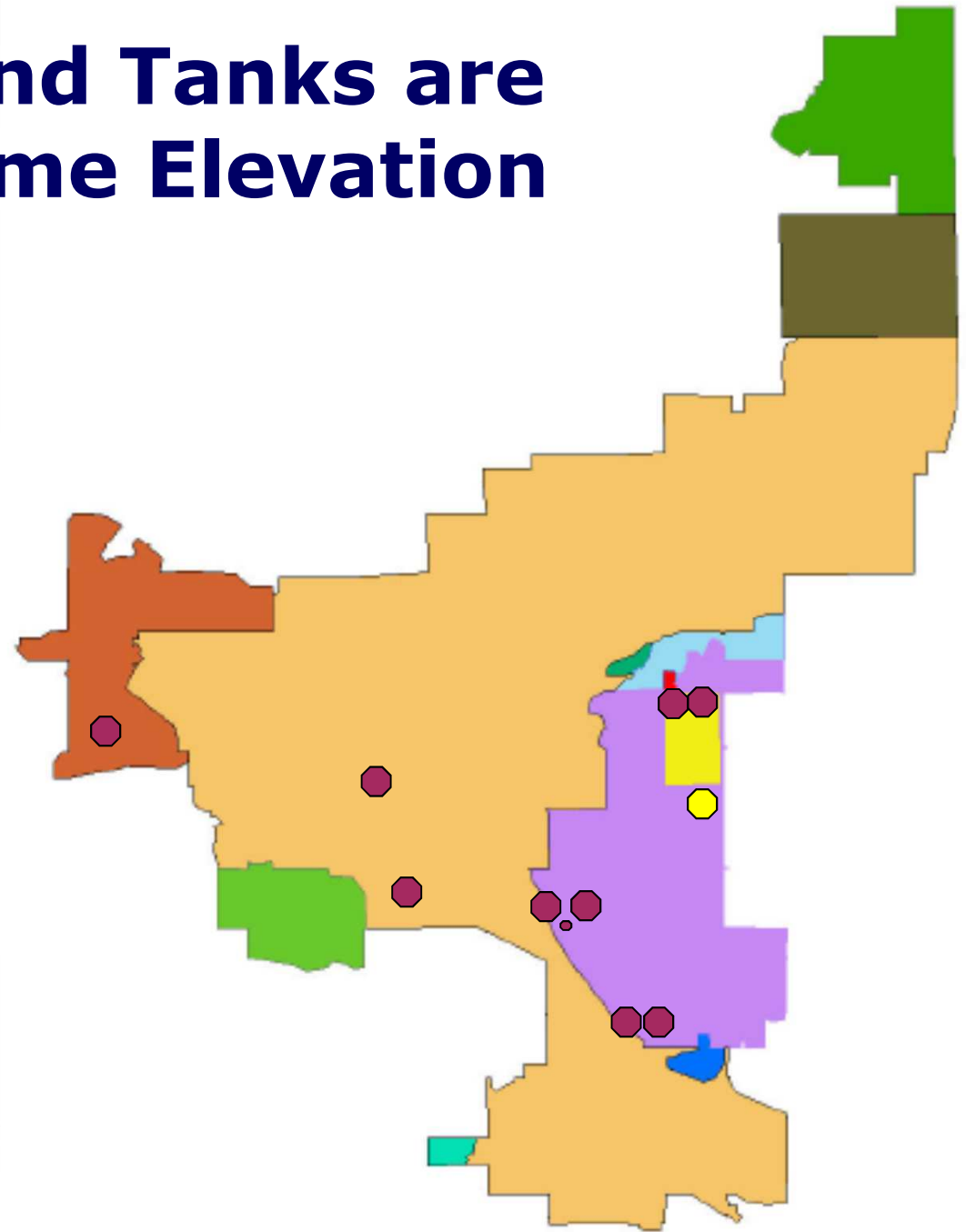
1. Source Water Availability/Hydraulics
2. Long Term Impacts to Neighbors
3. Land Acquisition
4. Constructability
5. Short Term Impacts to Neighbors
6. Expansion Flexibility
7. Economic Development- Near Term & Long Term
8. Ease of Access for O&M
9. Connections to Transmission Distribution System
10. Vulnerability – Long Term



All Zone 3 Ground Tanks are at About the Same Elevation

1. Elevation is a Driving Factor for Tanks and Pump Station Location.

  Existing Water tanks

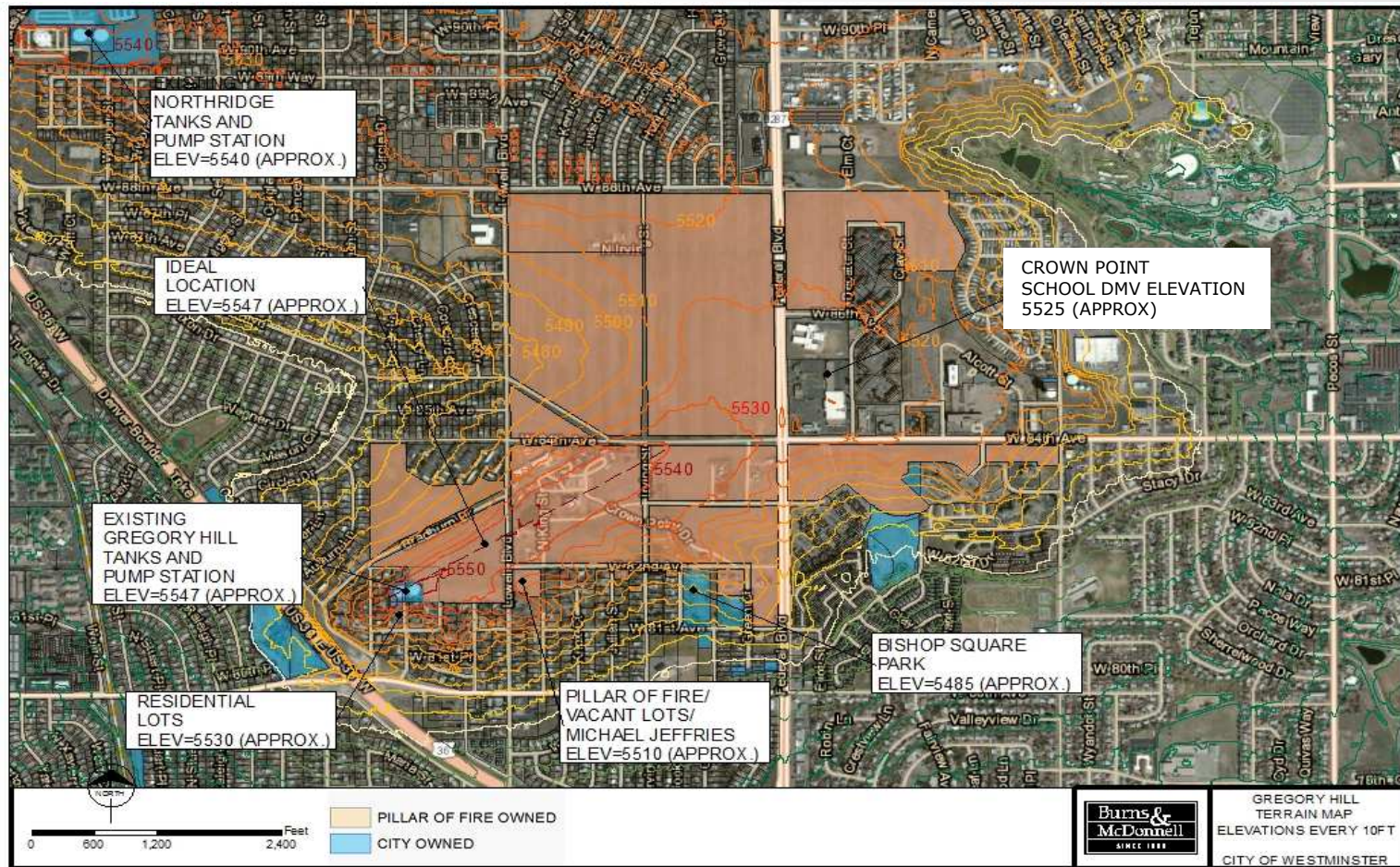


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Elevation is a Driving Factor for the Tanks and Pump Station



Gregory Hill Remains the Best Site For the Tanks & Pump Station



New Tanks & Station Improve Flow & Emergency Service

1. Tanks Information
 - a. Two 3-Million Gallon Tanks
 - b. ~40 feet in Height
 - c. ~150 feet in Diameter
 - d. Similar Color to Existing
2. Pump Station
 - a. 15 MGD Capacity
 - b. 3500 square feet
 - c. 26 feet in Height



The Project Includes Many Site Enhancements

1. Maximized Use of Existing Site
2. Drainage Improvements
3. Proper Access for Operations & Maintenance
4. Landscaping
5. Improved Distance Between Facilities and Houses
6. Acoustical Rated Generator and Pump Station

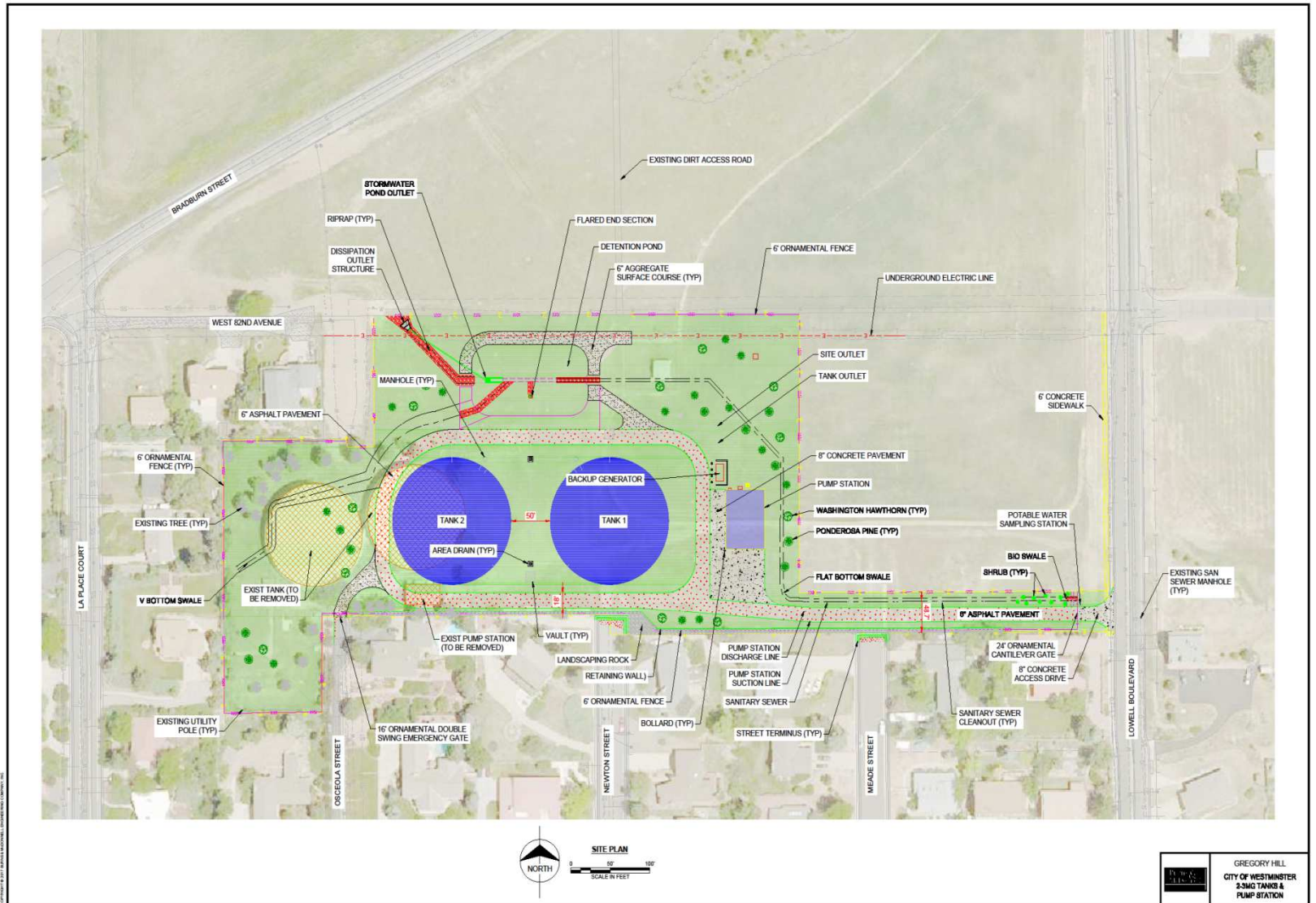


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New Project Extends East for Significant Reasons

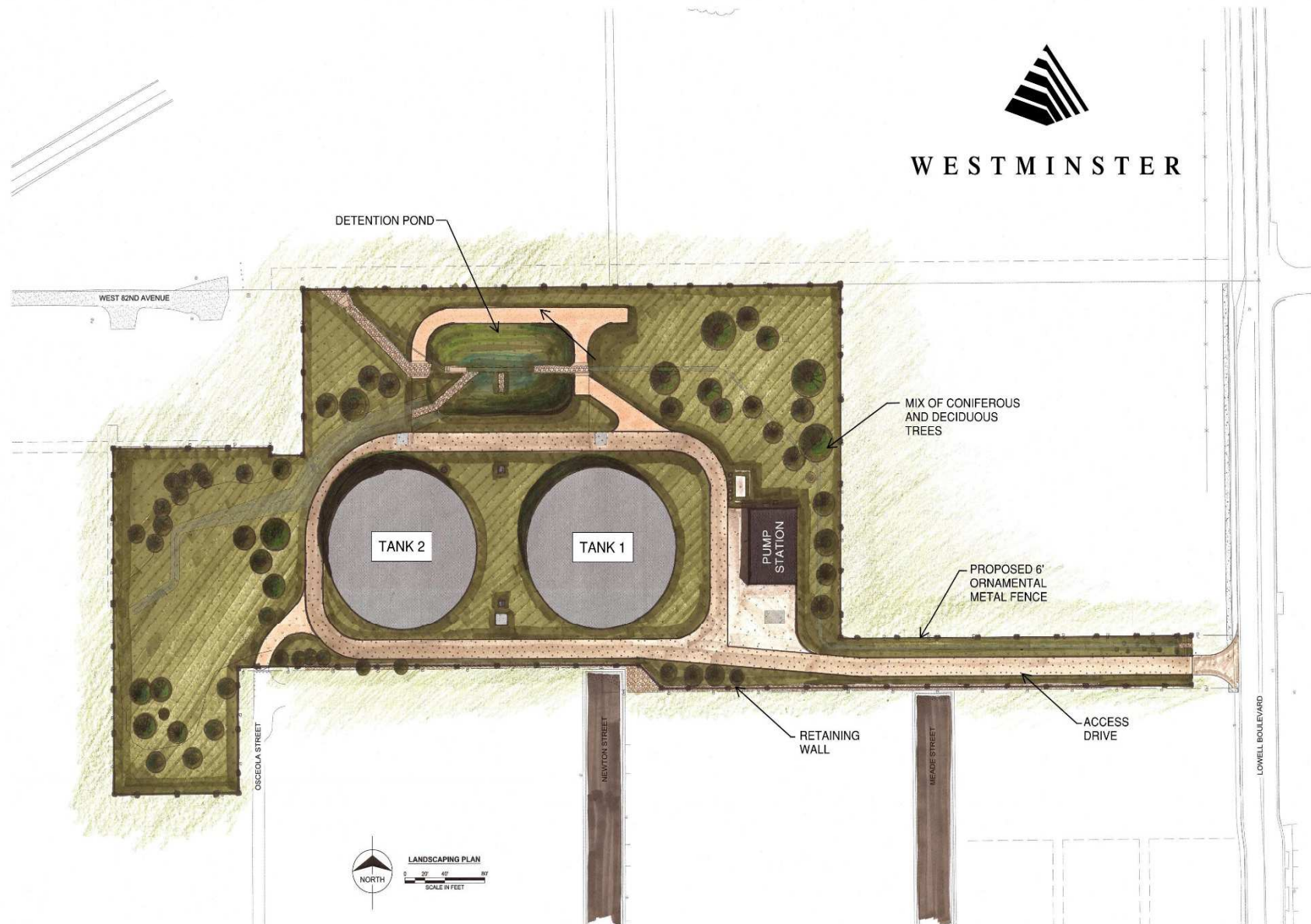


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New Landscaping Adds 42 Trees



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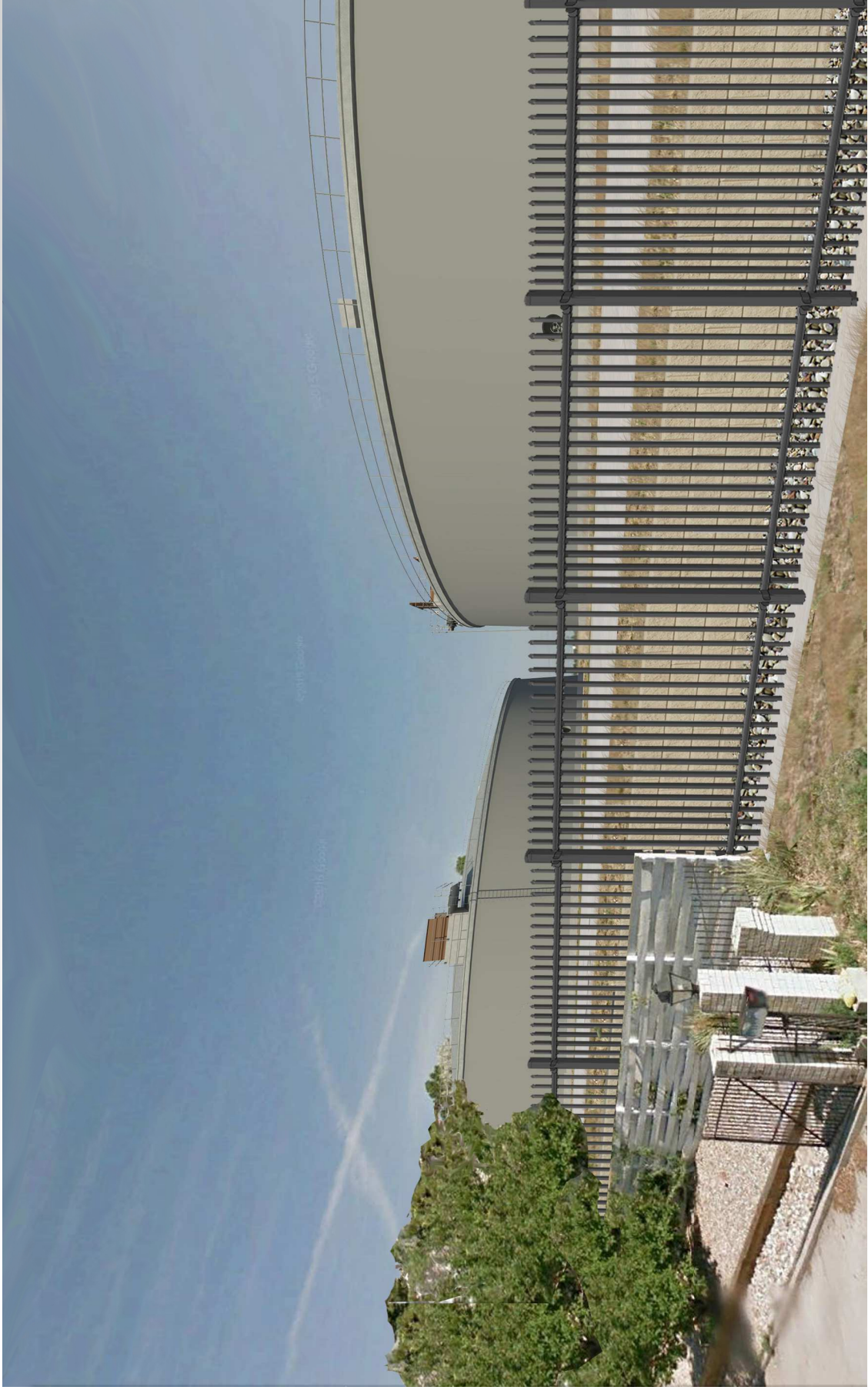




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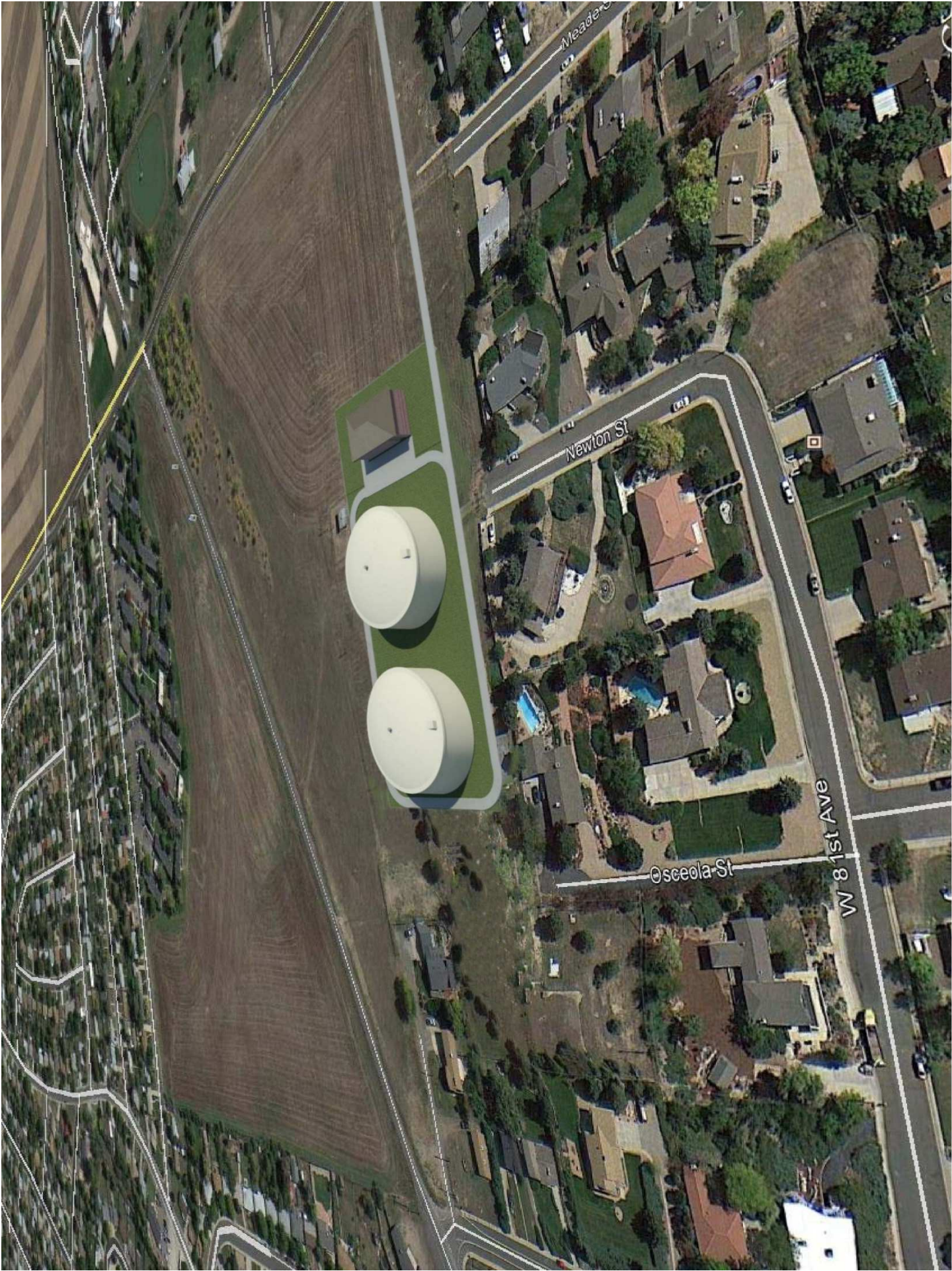
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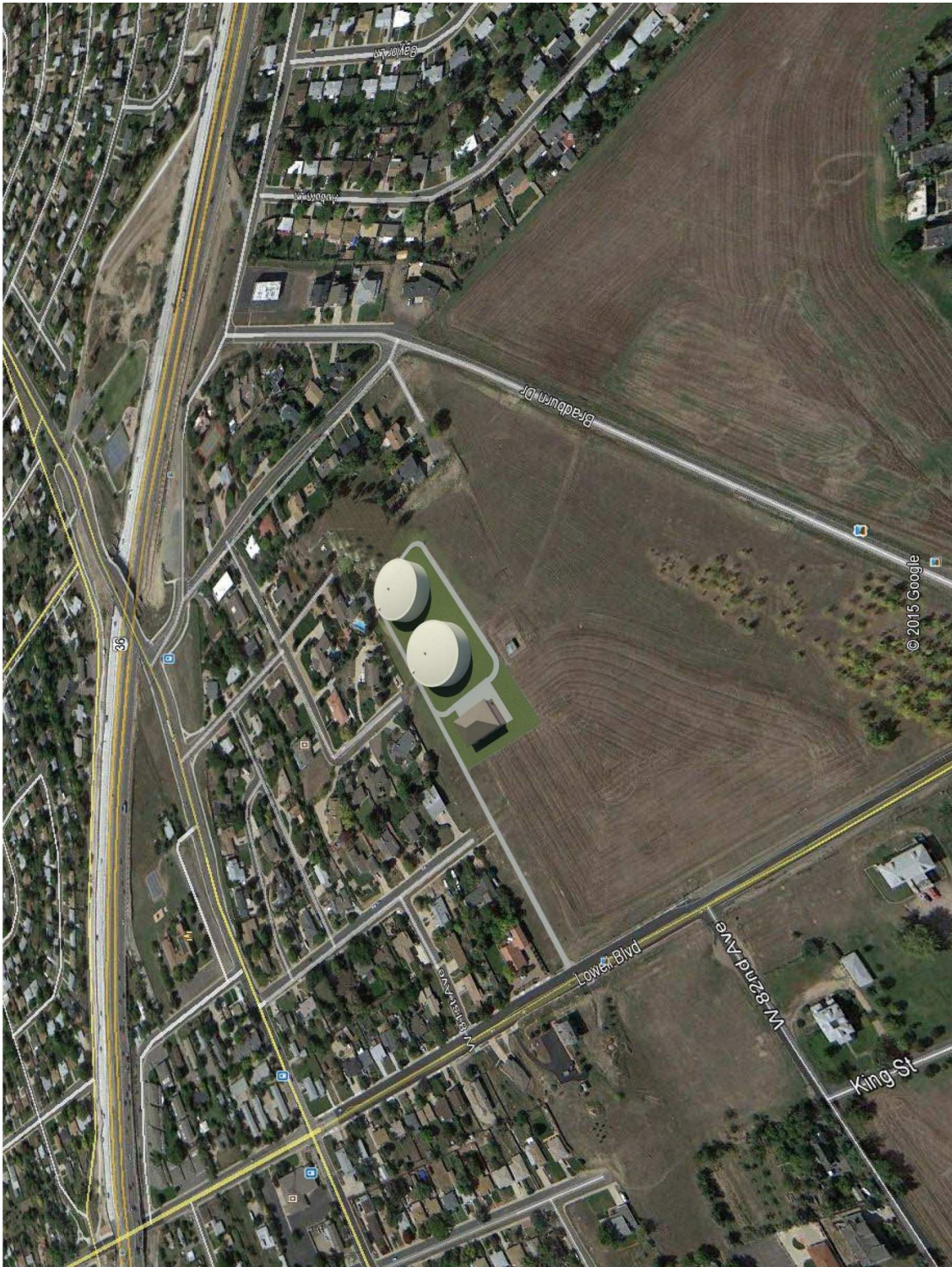


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Safe Construction and Maintenance Requires Space



Northridge Tank No. 3 2016



Northridge Tank No. 3 2016



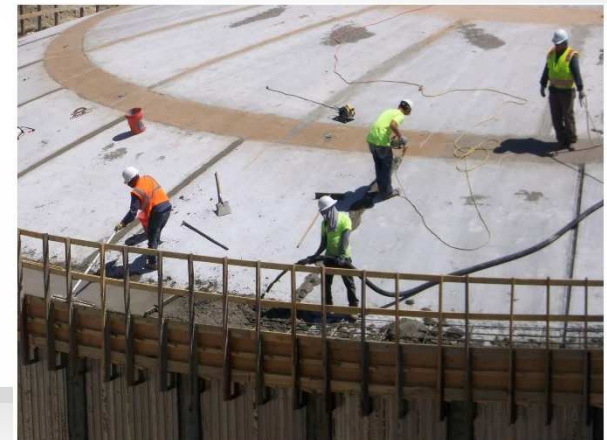
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Construction Precautions Aim to Minimize Disruption to You

1. Hiring a Specialty Contractor with High Qualifications for This Type of Work
2. Restricting Work Times
 - a. Work hours typically M-F 7am-5pm to limit impact of equipment and noise.
 - b. Sequencing to Minimize Service Disruptions
3. Noise and Dust Control
4. Monitoring Wind Speed



Gregory Hill Construction Is Targeted Near-Term

1. Pipelines Work in Streets
 - Begins in July
2. Tanks and Pump Station
 - City Has Procured Access to the New Property
 - Design has Been Completed
 - Construction is Estimated to be 18-20 Months (Aug 2017 – Mar 2019)



The Project Benefits Westminster and the Neighborhood

1. Neighborhood Benefits Include:
 - Addresses Aging Infrastructure
 - Maintains Water Quality
 - Removes Old Concrete Tank
 - Improved Site Drainage
 - Increases Setbacks
 - O&M Access from Lowell, not neighborhood
 - Aesthetic landscaping and fencing
 - Acoustical rated equipment
 - Less frequent major maintenance



Frequent Questions and Comments Heard to Date

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Questions



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