BASELINE WATER LINE CONNECTION AND NORTH TANK DRAINAGE IMPROVEMENTS

Presenting: Michael Woodruff, Director of Infrastructure
Project Manager: Matt Amidei, Staff Engineer

STRATEGIC PLAN

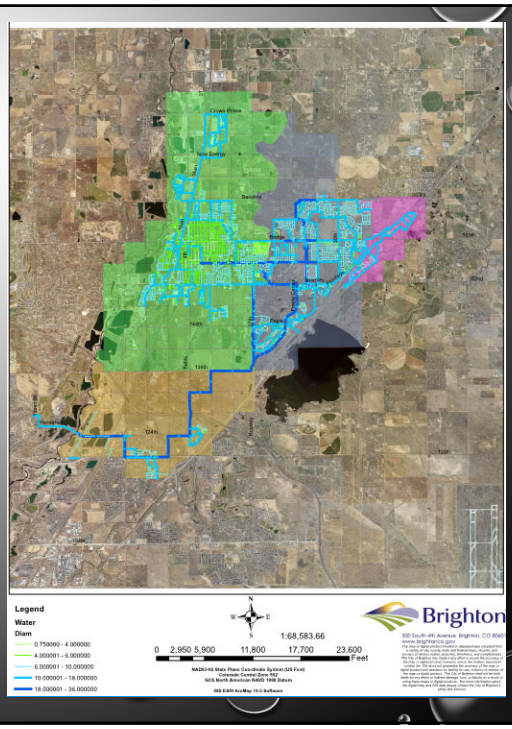
Supportive and Sustainable Infrastructure

INTRODUCTION

- PROJECT BACKGROUND
- PROJECT OBJECTIVES
- PROJECT DETAILS
- BID PROCESS AND RESULTS
- FINAL RECOMMENDATION

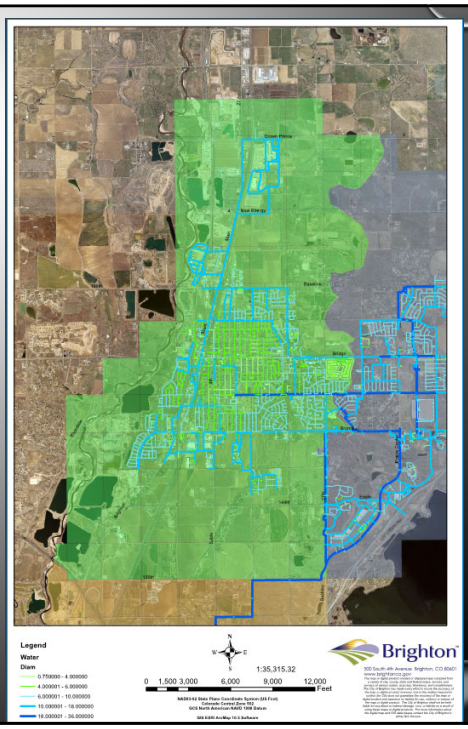
PROJECT BACKGROUND

- 4 Pressure Zones
  - Low (West of 27th)
  - Mid (South of 136th)
  - High (27th to Speer Canal)
  - Reduced (East of Speer Canal)



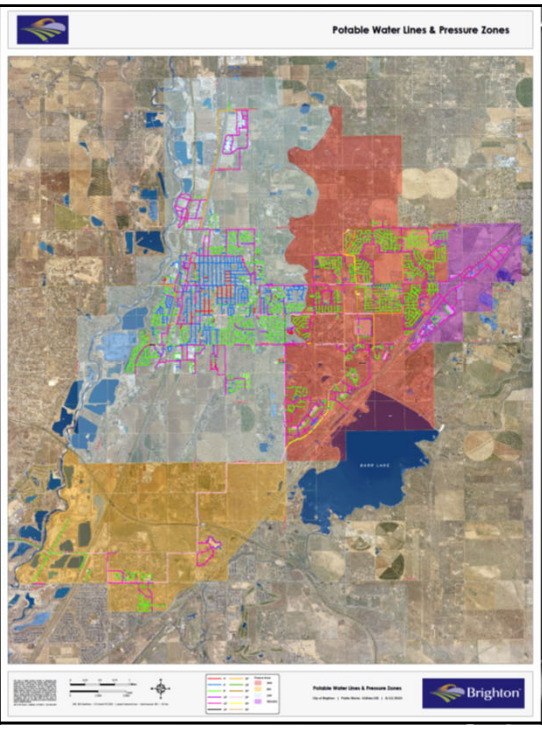
PROJECT BACKGROUND

- Low Zone
  - 2 Main Transmission Lines
    - 24in. on Southern, 12in. on Bridge
- Issues
  - 24in. moves 4x more water than 12in.
  - Repercussions of break on 24in.
  - Water hammer and pressure fluctuations



PROJECT BACKGROUND

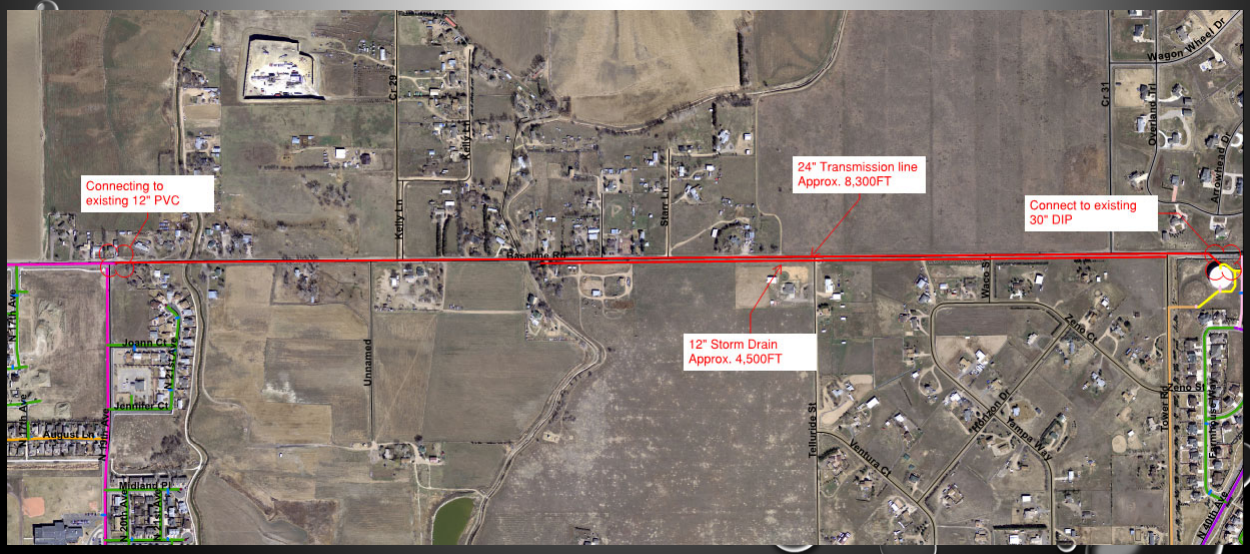
- North Tank
  - Volume – 5 Million Gallons
  - Drainage from Tank
- Issue
  - Potential Flooding



PROJECT BACKGROUND

- This project will construct approximately 8,300 feet of 24in. water line to complete a connection on Baseline Rd (168th Ave.) between 19th St. and Tower Rd.
- 4,500 feet of storm drain will also be installed to facilitate drainage from the North Tank

PROJECT LOCATION

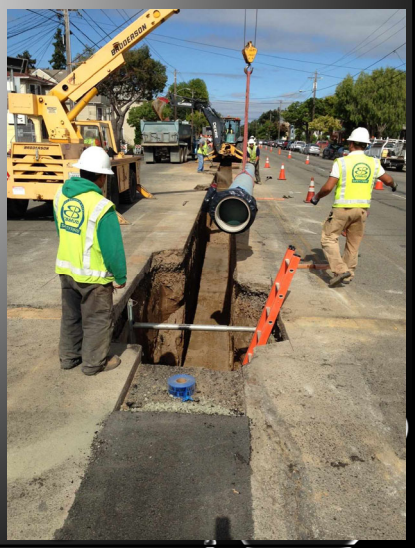


PROJECT OBJECTIVES

- Benefits of the 24in Water line on Baseline
  - Provide better Transmission Line Redundancy into the Low Zone
  - Reduce water pressure fluctuations due to fire hydrant operations
  - Reduce the number waterline breaks due to water hammer
- Benefits of North Tank Drain Line
  - Safely allow operations to drain the North Tank to the Brighton Lateral, which will reduce the possibility of flooding to the neighborhood to the North.

PROJECT DETAILS - TRENCHING

- The water line installation will use the open trench method.
- This helps ensures existing conditions are known.
- Traffic Control will be critical on Baseline.



BID PROCESS AND RESULTS

- Bids were solicited through a formal bid process. The bid opening was 12/4 with six contractors bidding on services.
- Bids ranged from $3,382,427 to $5,050,802
- Redline Pipeline was selected based on providing the lowest unit cost of the bidding contractors.
- The final amount of the proposed project is $3,382,427.00.

FINAL RECOMMENDATION

Staff believes that selecting Redline Pipeline for the Baseline Waterline Connection Project would accomplish the following:

- Provide higher quality water service to residents in the area.
- Provide water redundancy to the area.


QUESTIONS?