

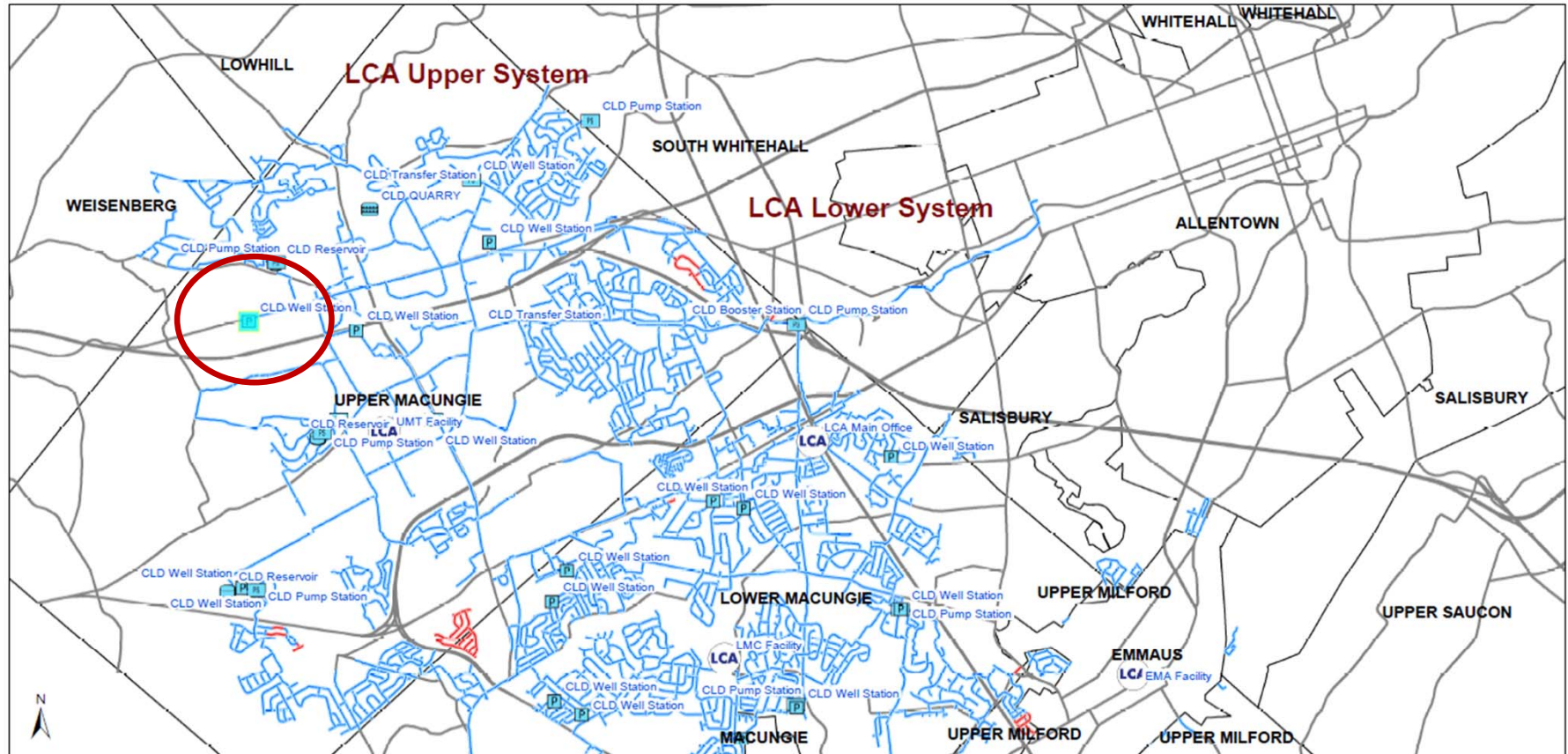
Lehigh County Authority

New Industrial Water Customer

Readington Farms – 8550 Main Street, Fogelsville

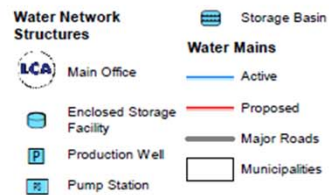
LCA Board of Directors Review – June 28, 2021

LCA Water System Network - Central Lehigh Division

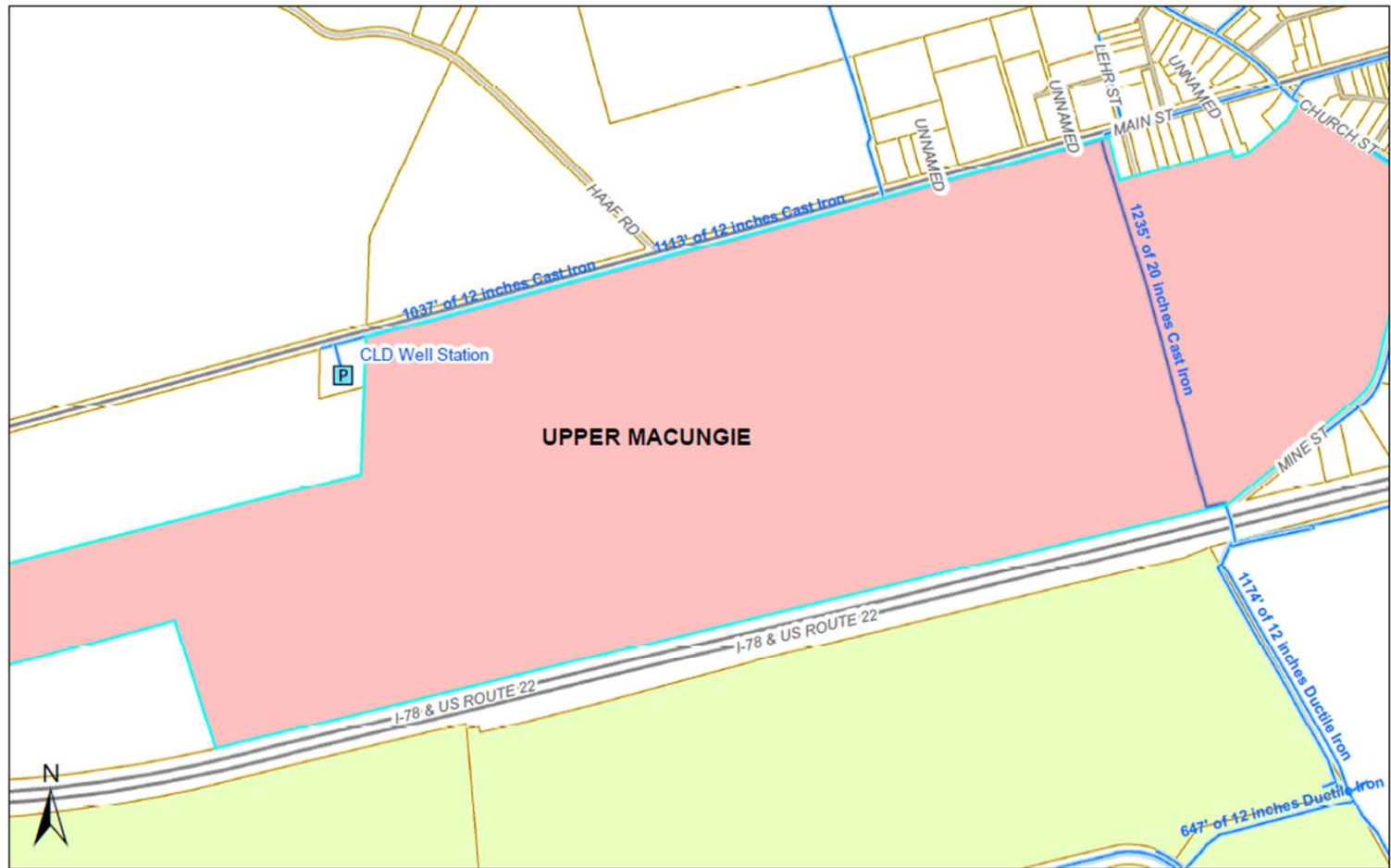


July 10, 2019

1:72,224



Site Location - Upper Macungie Twp



June 27, 2019

Water Network
Structure IDs

Water Network
Structures



Production Well

Water Mains

Active

Water Main
Labels

Major Roads
Street Names
Street
Centerlines

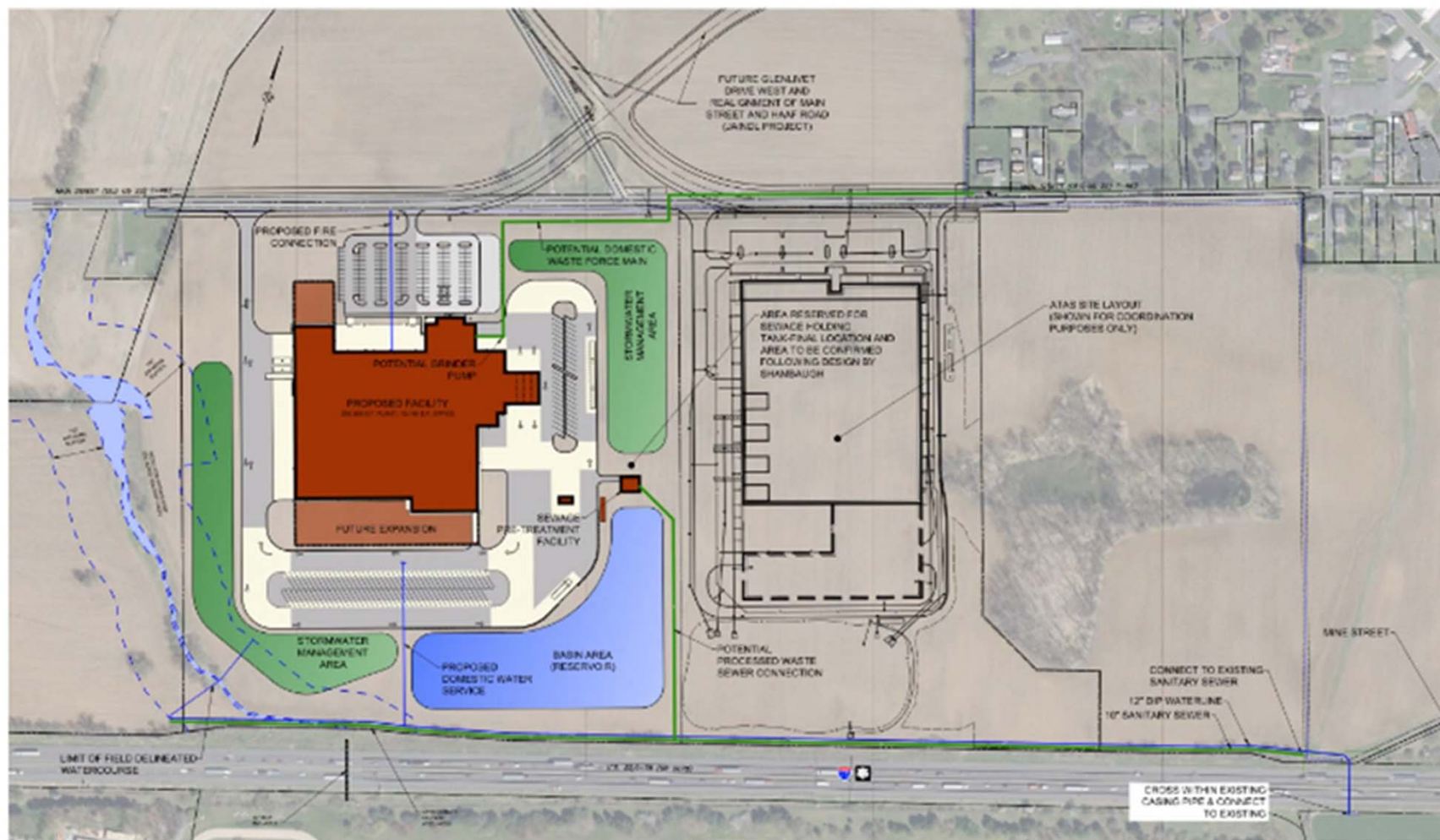
Municipality
Names
Municipalities
Parcels

Subdivision
Names
Subdivisions

1 inch = 752 feet

0 750 1,500 Feet





PROJECT ELSIE
 WATER AND SANITARY COORDINATION
 UPPER MACUNGIE TOWNSHIP, LEHIGH COUNTY, PENNSYLVANIA
 APRIL 28, 2021
 SCALE: 1" = 100'
 THE PIDCOCK COMPANY
 CIVIL & ENVIRONMENTAL PLANNING ARCHITECTURE LANDSCAPE

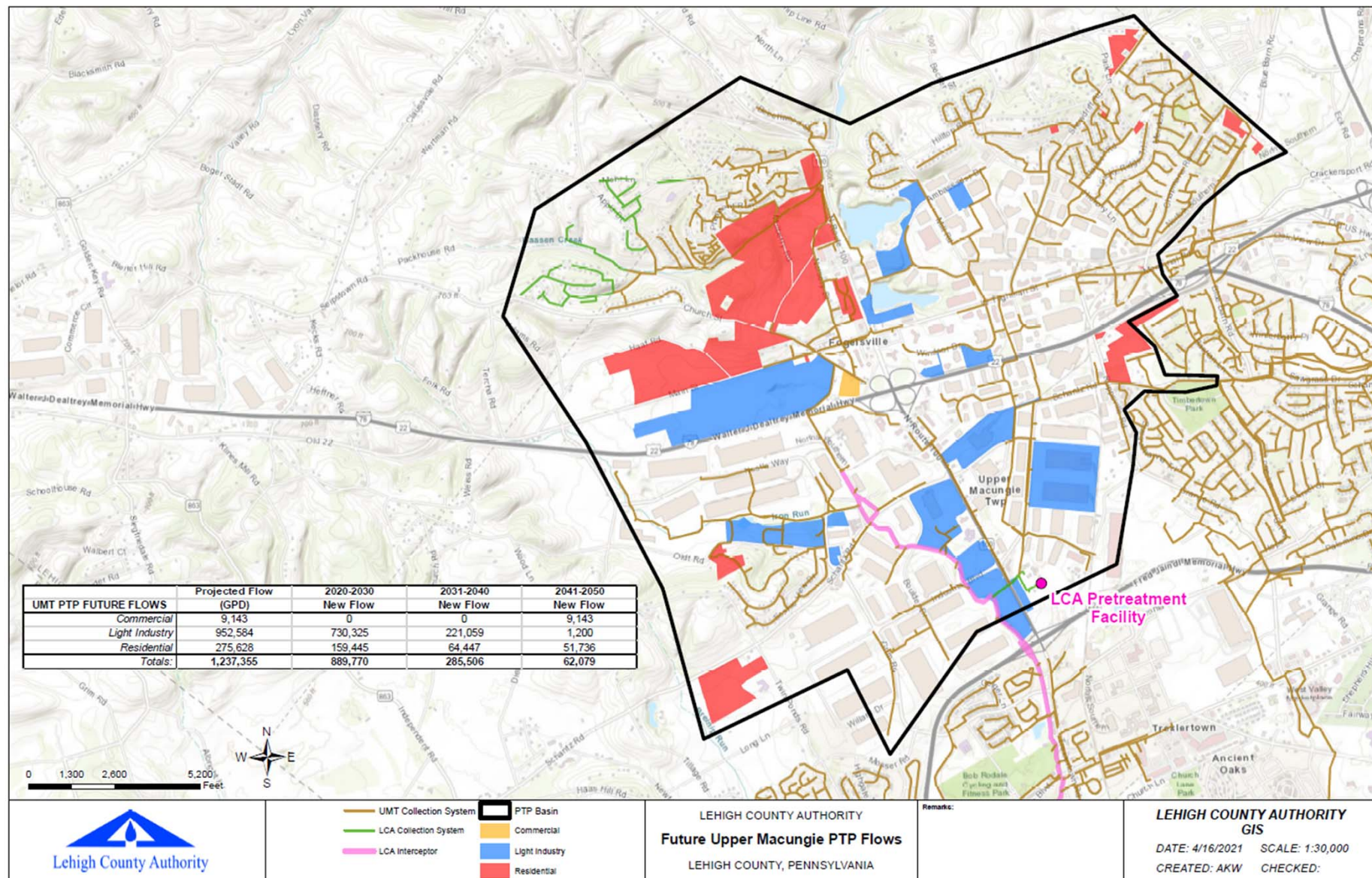


Water & Sewer Requirements:

Readington Farms

Dairy processing facility:

- **Water (LCA)**
 - 350,000 gallons per day average
 - 500,000 gallons per day peak week (1 week/year)
 - 335 gallons per minute production rate
 - 55 psi minimum residual pressure
- **Sewer (Upper Macungie Township)**
 - 250,000 gallons per day
 - BOD: 3000 milligrams per liter (requires pretreatment)
 - Notes:
 - Sewer will flow through Upper Macungie Township
 - Included in Township's 2021-2025 Connection Management Plan / Interim Act 537 Plan

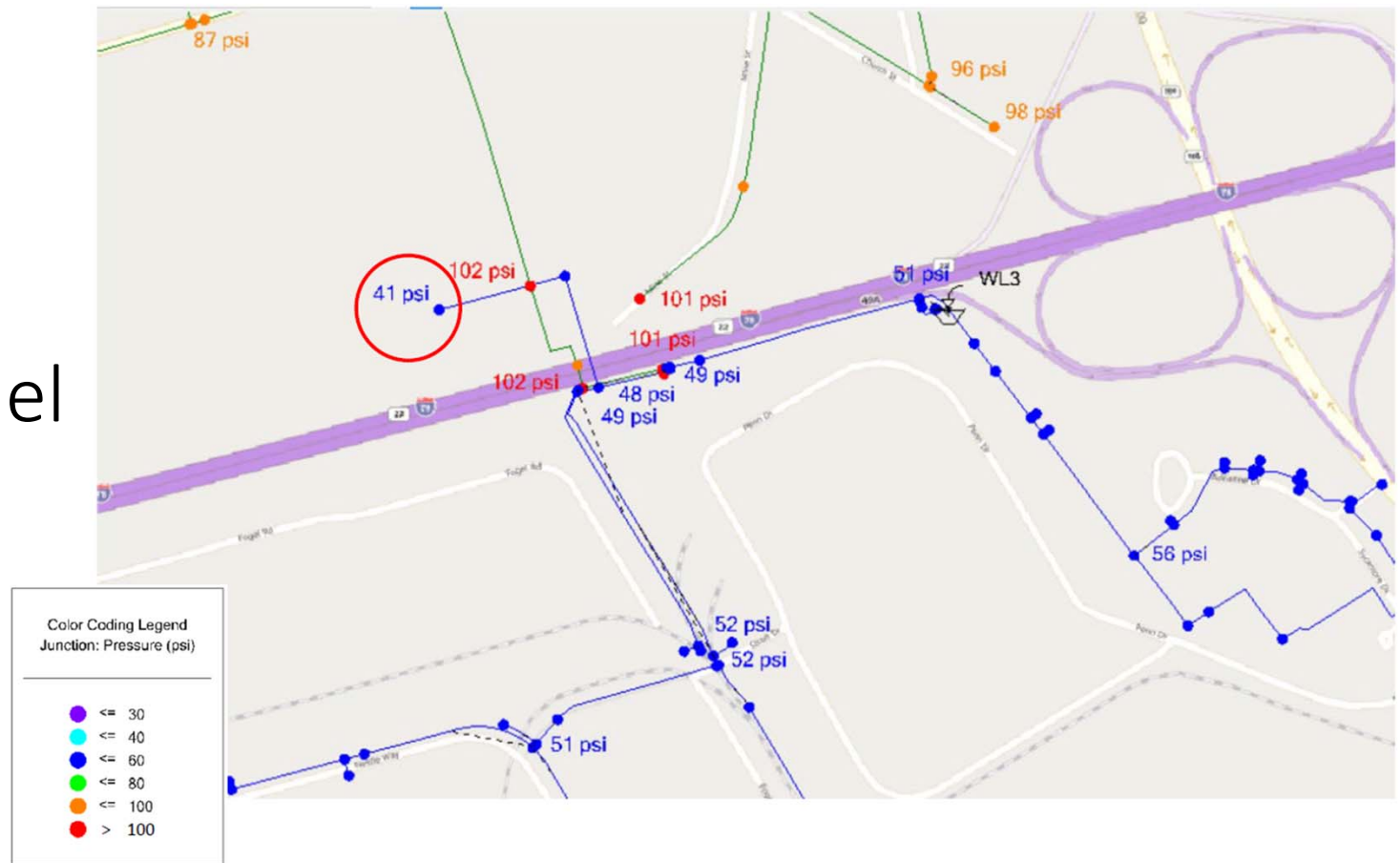


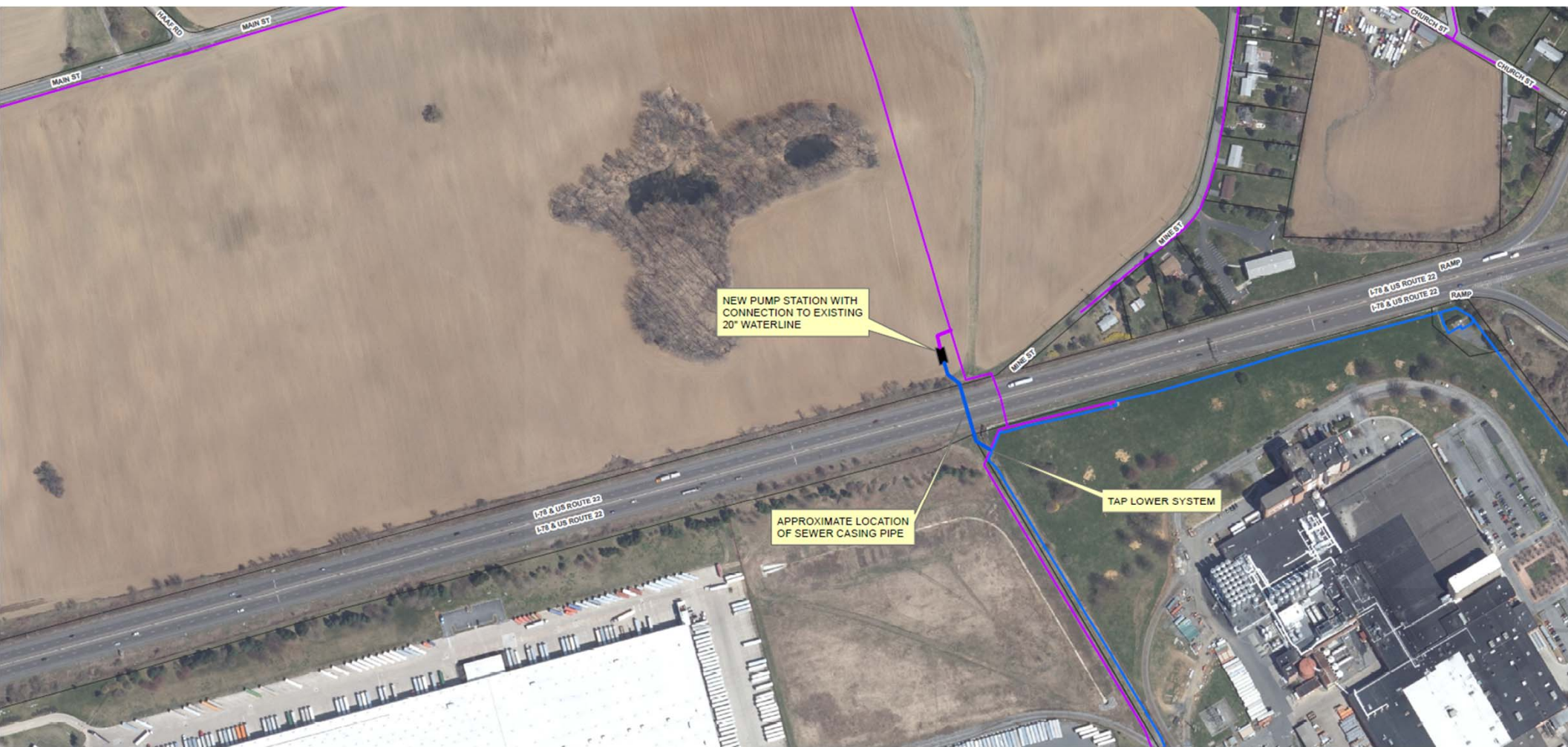
“Upper System” Planning

- Readington Farms – 350,000 gallons per day
- Additional future development – 350,000 gallons per day (estimated)
- Other industrial needs – unknown
- Upper System Challenges:
 - Reliance on 2 groundwater wells
 - Lower System will not provide adequate pressure in this location
 - Existing CLD pump station does not provide redundant capacity in event of main break

CLD Short-Term Future MDD Steady State – Pressure

LCA Water System Hydraulic Model Results





Cost-Sharing / Developer Contribution Concept

- Readington Farms pays full cost of I-78 crossing and main extension
- Readington Farms pays proportionate share of pump station cost based on facility requirements
 - 335 gallons per minute = 33.5% of pump station capacity (1000 gallons per minute)
- Future growth pays via tapping fees for remaining pump station capacity

WATER PRESSURE BOOSTER PUMP STATION & MAIN EXTENSION COST SHARING

DEVELOPMENT: Readington Farms Dairy

Upper Macungie Township, Lehigh County, PA

| | Description | Total | Developer | Developer | LCA | LCA |
|--|-------------------------------------------------------|--------------|------------|------------|------------|------------|
| | | Estimated | Obligation | Obligation | Obligation | Obligation |
| | | Value | % | Value | % | Value |
| | Pumping station: | | | | | |
| | Pumping station (contracts, misc. costs) | \$ 1,084,000 | 33.50% | \$363,140 | 66.50% | \$720,860 |
| | Engineering services & staff | \$ 235,000 | 33.50% | \$78,725 | 66.50% | \$156,275 |
| | Contingency (15%) | \$ 197,850 | 33.50% | \$66,280 | 66.50% | \$131,570 |
| | | | | | | |
| | Waterline: | | | | | |
| | 20" x 12" Tap (1) | \$ 18,000 | 100% | \$18,000 | | |
| | 12" DIP (500') | \$ 65,000 | 100% | \$65,000 | | |
| | 12" x 12" Tap (1) | \$ 12,000 | 100% | \$12,000 | | |
| | I-78 Casing Pipe Improvement (24" PVC pipe, grout) | \$ 50,000 | 100% | \$50,000 | | |
| | Contingency (15%) | \$ 21,750 | 100% | \$21,750 | | |

| | | | | | |
|--------------------------|--------------------|--|------------------|--|--------------------|
| Total Obligations | \$1,683,600 | | \$674,895 | | \$1,008,705 |
| | | | | | |

Financial Review (Assuming No Growth)

| | | |
|--------------------------------|-----------|------------------|
| LCA Contribution | \$ | 1,008,705 |
| Readington Farms Contribution | \$ | 674,895 |
| Total Project Cost | \$ | 1,683,600 |
| | | |
| | | |
| Estimated Annual O&M Cost | \$ | 149,021 |
| Estimated Annual Water Revenue | \$ | 286,120 |
| Discount Rate Applied (WACC) | | 1.561% |
| Net Present Value | \$ | 1,647,634 |
| Payback Period | | 7.1 Years |

Next Steps:

- Compare LCA project to Readington Farms construction schedule
- Prepare developer contribution agreement / water system agreement including cost-sharing concepts
 - Board approval required due to non-standard arrangement
- Secure necessary easements and permits
- Design & construct

Discussion?