



## New Meadows Water System Improvements Project Summary

### **DISTRIBUTION MAIN REPLACEMENT COMPONENT**

This portion of the project replaces all remaining metallic pipe in the distribution system. Project components include the following:

- **Colt Street Replacement:**
  - Replaces ~750 feet of existing main between Heigho and Peterson Memorial Avenue with new 8" C900 PVC main
  - New 4-valve cluster and fire hydrant at Miller and Colt intersection
  - New 4-valve cluster at Heigho and Colt intersection
  - New customer meter boxes, reinstallation of existing customer meters, and reconnection of customer services
  - Service line replacement between main and meter
- **Katherine/Virginia Street Alley West Replacement (alley south of City Hall):**
  - Replacement of ~200 feet of 2.5" metallic pipe with 4" C900 PVC
  - Two new 2" blowoff connections on ends of main
  - Installation of new 2" polyethylene (PE) main to serve two customers on east side of Norris Street
  - New customer meter boxes, reinstallation of existing customer meters, and reconnection of customer services
  - Service line replacement between main and meter
- **Katherine/Virginia Street Alley East Replacement:**
  - Replacement of existing 2.5" metallic main with new 4" C900 PVC
  - New 2" blowoff connection on end of main
  - New isolation valve at Heigho Ave.
  - New customer meter boxes, reinstallation of existing customer meters, and reconnection of customer services
  - Service line replacement between main and meter
- **Benedict Street Replacement:**
  - Replacement of existing dead-end 4" main serving one customer with new 2" PE main
  - New 2" blowoff connection on end of main
  - New isolation valve at Heigho Ave.
  - New customer meter box, reinstallation of existing customer meter, and reconnection of customer service

### **WELL HOUSE CONSTRUCTION COMPONENT**

This portion of the project includes constructing a well house for Well No. 5, a gravel access road to the well site, and piping connecting the well to the well house and the distribution system. Project components include the following:

- Gravel access road extension to well lot
- Chain-link fencing around well lot
- Dimensions of 16'8" X 22'8" (building), includes 9'4" wide covered pad for portable generator parking, similar to Well 4 design.

- Split-face gray CMU (concrete block) construction, fiber-cement vertical siding and trim on gable ends, metal roof, concrete slab floor with floor drains
- Unit heater to prevent freezing and fan for cooling during summer
- 6" ductile iron mechanical piping with AWWA gate valves for isolation
- Pressure relief valve, air/vacuum release valve, and pump-to-waste piping at well house
- Sample taps for water quality monitoring
- Provisions for installation of chlorination equipment if city elects to chlorinate in the future
- 500-gpm capacity well pump, submersible turbine type, matched to aquifer recharge capacity of approximately 420 gpm.
- Pump motor controlled by variable frequency drive to match pump speed and production rate to demand
- Instrumentation includes:
  - Magnetic flow meter for well production measurement
  - Pressure transducer for discharge pressure measurement and pump control
  - Submersible level transducer in well for water level monitoring
- Local pump control as well as integration into city SCADA network through radio communication