Pre-Bid Meeting (Mandatory) September 16, 2021 North Ave Waterline Replacement Project (29 Rd to I70B)

## Project Description:

- Approx. 3,117 LF of 12-inch; 1,195 LF of 8-inch DR18 C900 PVC Pipeline (water main) and domestic DI fittings as indicated on the Contract Documents and described as Bid Schedule Item 5 (a-c).
- Correspondingly (bullet above), Bid Schedule Items 2 (a-c) and 4 (a-i) relate to the pipeline trench excavation & backfill and pipeline trench surface restoration, respectively.
  - All of the pipeline trench excavation & backfill (Bid Schedule Items 2a-2c) is Class I (excavated native material removed offsite; imported placed/consolidated ¼-in minus chat or Type C in pipe zone and Type E pit run imported placed/compacted in trench zone). Select aggregate base course Type A shall be compacted 12-inch thick under asphalt and 6-inch thick on shoulder (Bid Item 2a-2c and according to Contract Documents).
  - Due to the timing of the project (discussed later), temporary cold asphalt pavement will be processed from recycled asphalt millings. Existing asphalt shall be milled & stockpiled or left in-place & compacted to provide driving surface outside of the traffic control set ups.
- Bid Item 3 Engineering-Directed Material to be used only as directed by Engineer for various purposes, but generally to address/improve unsuitable subgrade and provide foundation stabilization. The District is not performing this work even though the unit prices have been filled into the bid schedule; rather, this is the unit price the District will pay for base, pit run, and rock. These unit prices are above the average observed from previous bids. It's acceptable to the District and more than reasonable for the Contractor. We have tried leaving this bid item out and negotiate pricing which hasn't always worked well; we have tried making the qty small so the extended price has little effect on the total bid amount, but that isn't cost effective for the District either.
- Bid Schedule Items 4 (a-i) relate to the pipeline trench surface restoration as described, but in general:
  - North Avenue (CDOT HMA spec) is (3) 2-inch lifts, Class A
  - o Harmony (CDOT HMA spec) is (2) 2-inch lifts, Class A
  - o All Mill & Overlay (CDOT HMA spec) is (1) 2-inch lift, Class A

There are bid items (4d-4f) for temporary cold asphalt pavement for North Ave (6-inch) and Harmony (4-inch) which will be processed from recycled asphalt millings – placed, compacted, and graded to create surface smoothness.

After the District advertised, CDOT agreed to allow the traffic islands/medians to be restored to 4-inch thick using recycled asphalt matching existing which will be

CDOT's responsibility to remove for their upcoming US 6 North Ave Overlay & Median Project (advertises Jan 13, 2022); therefore, the District will re-evaluate the quantity of Class D.

Additionally, bid item 4g allows for reimbursement of cold asphalt pavement repairs as directed by Engineer.

Bid Item 4h is for gravel shoulder restoration along Harmony (Type A – Class 6 CDOT base) compacted to 6-inch thick.

Bid Item 4i is Class D surface restoration for concrete curb & gutter; reconstructed per Ute Detail which implies conformance with CDOT M Standard (match existing).

- Eleven (11) new fire hydrant assemblies are proposed. Bid Item 6 includes: trench excavation & backfill, concrete blocks and thrust blocks, surface restoration, pipe, valve, fittings, restraints, hydrant assembly, and removal/disposal of existing fire hydrant. Sheets 14 & 15 show hydrant profiles and surface restoration requirements; profile should provide information to determine the hydrant bury depth required for each unique installation.
- All of the Water Main, Fire Line and Meter Service Connections are itemized individually under Bid Item 7. There are (46) re-connections (a-at) under bid item 7 which uniquely describe the reference station, a description of the work, plan & profile sheet or the correlating cross section sheet and standard detail. Each includes: all material, labor, and equipment necessary to connect existing services, mains and fire lines; includes tee, saddle, corporation stops, valves, pipe and fittings. Assumes all Class 1 trench excavation & backfill, surface restoration, QA disinfection & pressure-testing and abandonment of replaced water facilities.
- Bid Item 8 will be used to reimburse for pipe joint restraints (RieberLok gaskets) for 6-, 8- & 12-inch pipe in-place as directed by the Engineer; a field decision not to be confused with the specified restrain joint pipe already indicated on the P&P sheets.
- Sanitary Sewer Protection to cap or encase SS based on direction from Engineer in the field and reimbursed according Bid Items 9a & 9b. This work includes: all material, labor, and equipment necessary to concrete cap or encasement SS (which is generally 10-ft ea side of waterline Xing); assumes all Class 1 trench excavation & backfill, surface restoration. (Trench Crossing of Sewer Details, Sheet 17).
- The District has included an adder for flaggers on the bid schedule to address traffic control (Bid Item 10).
- According to our design presented, construction of the initial 740 LF of 8-inch along North Ave will include: installation of a temporary 2-inch waterline and

disinfection; connection to existing main; connection to existing 5 services; removal and disconnection; surface restoration; and coordination with the District.

- Removal and disposal of ex 3-inch pvc waterline only as necessary to facilitate construction on new 8-inch is Bid Item 12.
- In similar District fashion (Loma Area Upgrade Project), the District is asking the Contractor to investigate cost to construct the 12-inch C900 DR18 from Sta.20+00 to Sta.51+17 as a trenchless alternative using fully restrained joint pipe. The effort includes all: excavation, backfill, materials, labor, equipment, and surface restoration for complete pipe installation per UWCD specifications.
- The District provided the results of a significant subsurface investigation of
  existing utilities along our proposed alignment which are shown on the P&P
  sheets. The District performs the SUE to meet the intent of the law; which is also
  intended to provide certainty and confidence in Contractor bidding. Please
  review the utility identification notes on Sheet 3.
- During the potholing investigation, the was no obvious indication of groundwater within our exploration. Irrigation should be off by November 1<sup>st</sup> and remain off until April 1, 2022. All equipment, labor and materials required by the contractor to manage/mitigate groundwater conditions during all phases of construction shall be considered incidental to the work. Any necessary discharge permitting is the responsibility of the contractor to obtain and maintain.
- The Contractor should bid every item on the schedule of values except as designed to help facilitate bidding the alternative.

## Construction Sequence (District's Opinion)

 Please review the District's opinion of construction sequence which generally begins with constructing the temporary waterline to facilitate the 8-inch along North Avenue (consistent with the project milestone discussed below); then construct 12-inch along North Ave with services, fire lines, and mains to edge of asphalt; then 8-inch Harmony Rd segment before QC disinfection and pressure testing and re-connecting services and completing other contract items. It's documented in better detail on Sheet 3 of the Drawings.

### **Project Milestones:**

- Bid Date: September 23, 2021 at 2pm
- Notice-of-Award within 10 days, Notice-to-Proceed once Contract executed and Insurance, Performance & Payment Bonds are received.
- Project Milestone: per Contract Document, fully constructed 8-inch Sta.10+00 to Sta17+40 including temp surface restoration and removal of temporary waterline by December 31, 2021.
- Substantial completion by April 2, 2022
- Final completion by April 16, 2022.

## Construction Staking

- Owner may provide construction staking as needed; ie fittings, grade critical locations, and other areas as necessary. The District can stake the limits of asphalt removal.
- Contractor must provide necessary QC Surveying to assure construction within tolerances described in the Contract Documents.

#### Easements

 N/A all of the Project is within the CDOT (North Av) and GJ City (Harmony) ROWs

# Access Roads & Staging Area

Staging Areas will be the Contractor's responsibility.

# **Project Water**

- Ute Water will have project water available at no charge to the Contractor for loading the mainline, soil moisture-conditioning, dust control, and road maintenance as necessary using one of the existing appurtenances on our water system adjacent to the work area as approved by the District.
- The Contractor must provide labor and equipment necessary to use the water. The water truck must have an approved backflow prevention device.
- Water for flushing the main will be available. We would assume connect both
  ends with necessary means of loading & evacuating air; flush both directions to
  an opposite side fire hydrant and the blow offs.

## **Project Permits**

 Owner will obtain the necessary CDOT & GJ City ROW Utility permits. Please submit your traffic control plan ASAP.

### **Subsurface Conditions**

 Existing utilities depicted based on best information available from subsurface investigation; test hole (TH) information is quality level A & B; SS and Storm are quality level B based on engineering judgement not geophysical or pothole methods; other utilities depicted are quality level C & D – not fully investigated due to proximity of proposed construction.

### Traffic Control

Joel Berschauer (CDOT) & Tim Patty (GJ City)

#### QA/QC

 The Contractor shall chlorinate the main line and appurtenances as necessary to obtain a minimum chlorine residual in accordance with the Contract Documents.

- Owner will provide bacteriological laboratory sampling of the water from the main after flushing at multiple locations as necessary. If the presence of a bacterial indicator exists, additional chlorination or flushing could be required at no expense to the Owner.
- After successful bacteriological testing, the Contractor shall perform a field hydrostatic pressure test of the system for 4 hours within the allowable leakage described in the Contract Documents at the low point.
- Owner will hire a qualified materials testing firm to provide: laboratory and field testing of backfill material including soils, concrete, asphalt, and etc.

### Submittals

Owner will review submittals and provide comments in a timely manner.

## Addendum Items

- Potholing as directed by the Engineer as needed for additional subsurface investigation could be a Bid Item consideration in a future addendum.
- In the event there is a shortage of temporary cold asphalt pavement from the recycled millings, the District may consider adding a line item to reimburse for furnishing this material to the site.

#### Other

Owner will not require record drawings from the Contractor.

## **Contractor Questions**

- The District will follow up and respond to a Contractor who asked if the District was aware of mill tailings in North Avenue.
- Please submit all questions by then end of Monday, September 20<sup>th</sup>.

## **Utility Owners**

- Gas Xcel Energy
- Electric Xcel Energy
- Sewer GJ City
- Phone Century Link
- Cable Charter
- Irrigation GJ City