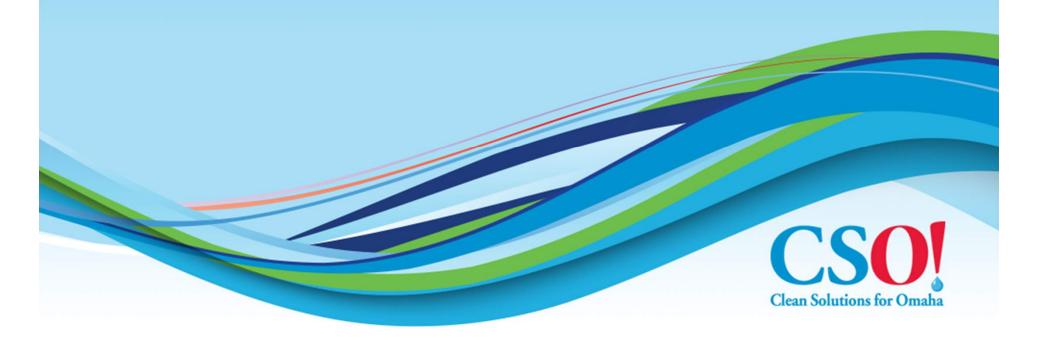
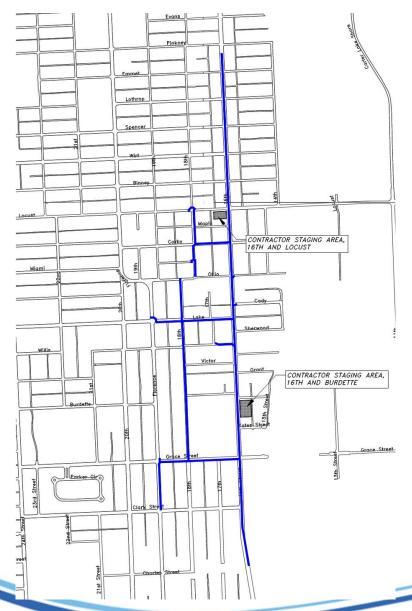
OPW53753 NICHOLAS STREET SEWER EXTENSION – PHASE 3B



Contractor Meetings
December 2020



Project Extents



16th Street Corridor:

Charles to Pinkney

East/West Streets:

Grace / Willis / Lake / Corby

Addt'l North/South Streets:

18th Street / Florence Blvd

Dedicated Contractor Staging:

16th & Burdette (SE)

16th & Locust (SW)



Project Scope

- Pavement Removal
- Traffic Signal Removal
 - 16th & Lake and 16th & Locust
- Sanitary Sewer
 - Downstream Connection
 - Diversion Connection
- Storm Sewer
 - Downstream Connection
- Water Infrastructure
- Pavement Replacement
 - Narrowed Section in 16th Street
- Landscape Restoration



Project Schedule

- Plan Early Advertising: January 2021
- Bid Opening: March 2021
- Expected Notice to Proceed July 1 September 1, 2021
- Begin Construction July 1 September 1, 2021
- Substantial Completion August 31, 2024
- Final Completion October 31, 2024
- Liquidated Damages
 - \$4,700 (For Substantial Completion)
 - \$2,400 (For Final Completion)



Small & Emerging Small Business Program (SEB)

- Developed 2009
- Omaha Municipal Code Chapter 10
- Arranged by Tiers Geographic Location
- SEB Requirement of 3.8% of Total Base Bid for This Contract
- Program Information
 - Heather Tippey Pierce, Public Works
 - htpierce@cityofomaha.org
 - 402-444-3275



Joint Contracting with Metropolitan Utilities District (MUD)

- MUD Provider of Gas and Water Services in Omaha
- Infrastructure in Project Area Being Replaced
- Gas Design and Construction by MUD 2020/2021
- Water Design by MUD Incorporated into Contract Documents
 - 36" DIPJ 50 lf
 - 12" DIRJ 6,050 lf
 - 8" DIRJ 3,470 lf
 - 6" DIRJ 11,210 lf
 - Hydrants, water services, curb stops
- Chlorination & Testing



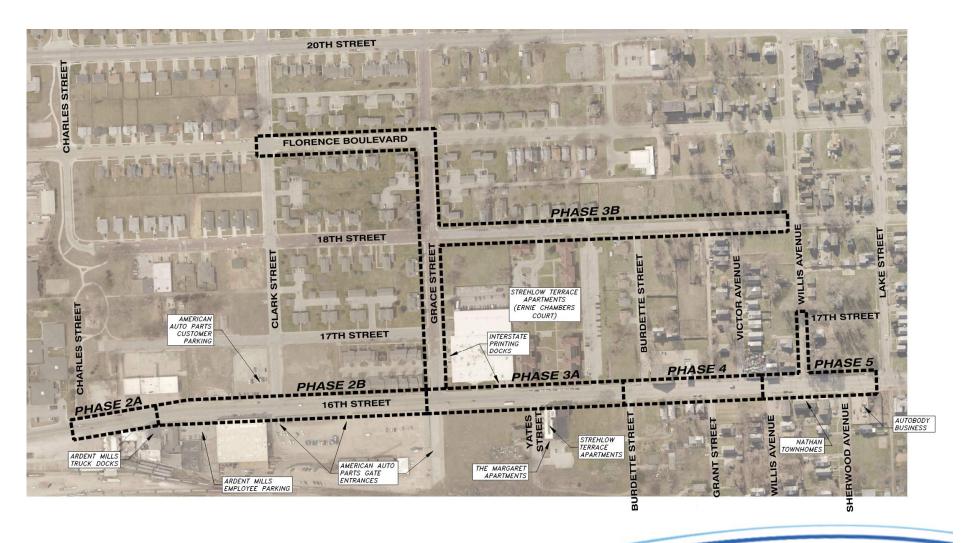
Project Phasing – Phase 1



- Temporary Sanitary Sewer (Remove 3 Services from a Combined Line in Corby)
- Connect to Existing Sanitary in 16th Street



Project Phasing – Phases 2 - 5





Project Phasing – Phases 6 - 8





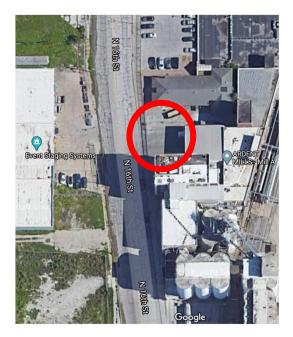
Access to Properties

- Maintaining Access to Properties is Critical
- All Phases, Including Removals, Water, Sewer, Pavement
- Provide Access or Work with Individual Property Owners for Alternatives
- Business Access
 - Ardent Mills Dock Drive
 - Interstate Printing
- Emergency Access
- Garbage / Mail Delivery



Project Scope – Ardent Mills Docks

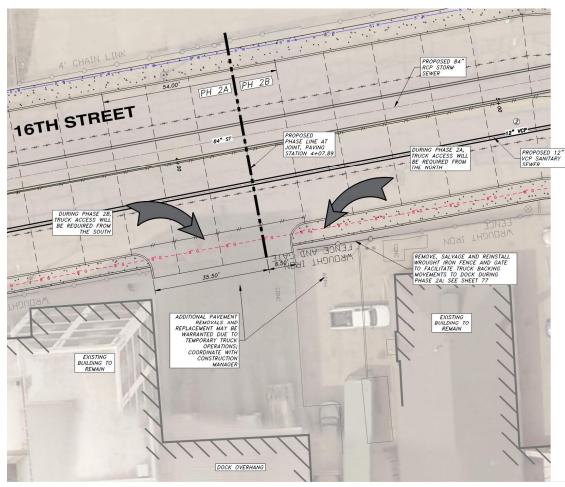








Project Scope – Ardent Mills Docks



- Flour Mill
- Truck Access
 - 24 hr/day
 - 7 days/ wk
- Phase 2A/2B Line North of Drive Centerline
- Remove & Reinstall Wrought Iron Fence
- Use of Shag Truck



- Storm Sewer
 - o 16th Street
 - 15" to 84" RCP Open Cut
 - Inlet Laterals Throughout
 - Depth Varies 20' at Southern End
 - Downstream Connection to Existing Structure at Charles
 - Large Manholes (96" & 120" rather than Structures)
- Storm Sewer
 - o Corby, Lake, Grace, 18th & Florence
 - 15" to 54" RCP Open Cut



Storm Sewer Quantities

```
\circ 84" - 40 If (d 0.01 = 3,000 lb); 1290 If (d 0.01 = 2,000 lb)
```

$$\circ$$
 72" - 1685 | f (d 0.01 = 2,000 lb)

$$\circ$$
 60" - 230 lf (d 0.01 = 1,350 lb)

$$\circ$$
 54" - 590 If (d 0.01 = 2,000 lb); 325 If (d 0.01 = 1,350 lb)

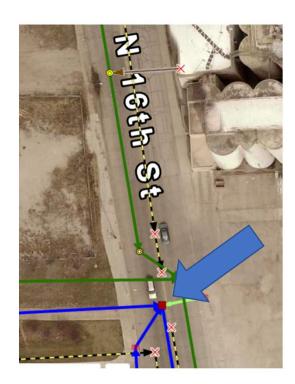
$$\circ$$
 48" - 365 If (d 0.01 = 1,350 lb)

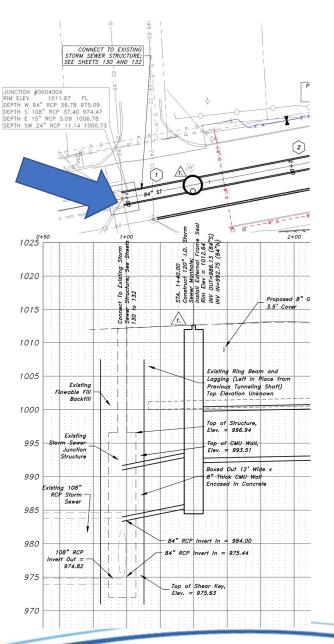
$$\circ$$
 36" - 395 If (d 0.01 = 2,000 lb); 1100 If (d 0.01 = 1,350 lb)

- 30" 1660 If (Class III)
- \circ 24" 275 lf (Class IV); 2600 lf (Class III)
- \circ 18" 1450 lf (Class III)
- \circ 15" 2990 lf (Class III)



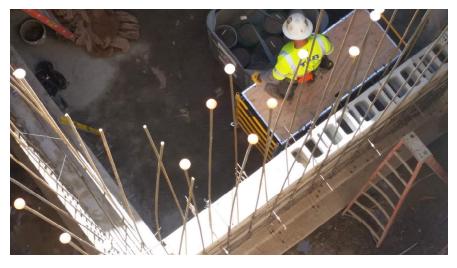
- Storm Sewer
 - Connection at Charles to an Existing
 Structure Constructed in Phase 2



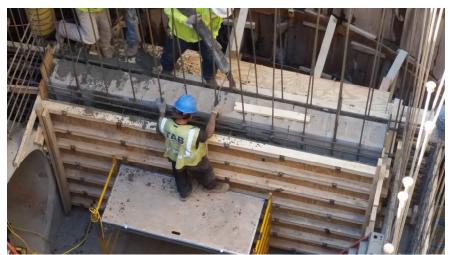




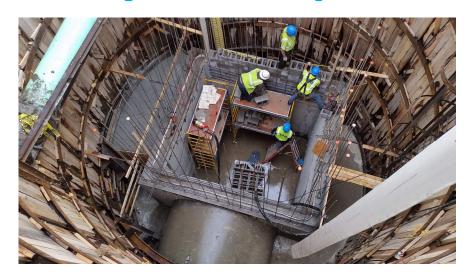


























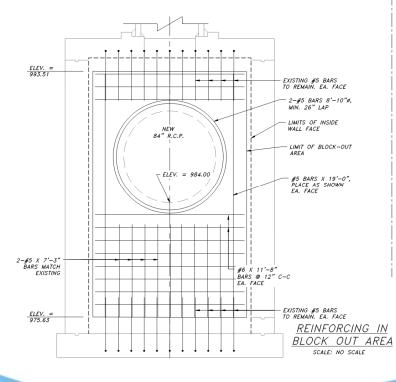


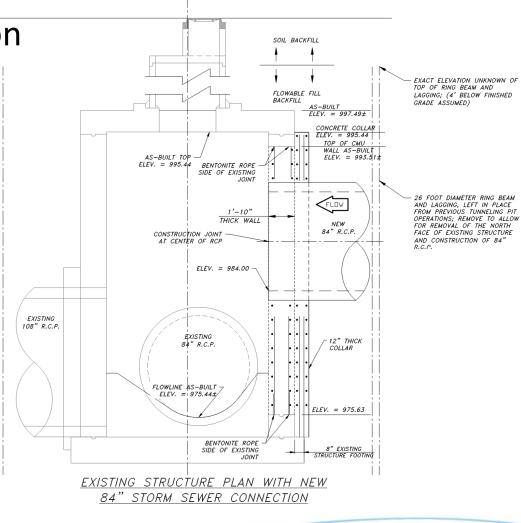


Storm Sewer Connection

Concrete Collar

• Fill in Block Out Area



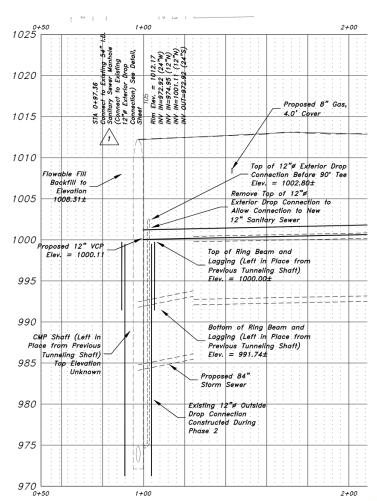




- Sanitary Sewer
 - o 16th Street
 - 6,265 LF 12" VCP
 - Same Alignment as Existing
 - Replaces 8" VCP Constructed in the 1880s
 - Typically 12′ 13′ Deep
 - Downstream Connection to Existing MH at Charles St
 - Interior Drop Connection at Existing MH at Grace St
 - Willis/Corby/Wirt
 - 1,160 LF 8" VCP



- Sanitary Sewer
 - Downstream Connection at Charles (Exterior 12" Drop)







- Sanitary Sewer
 - Downstream Connection at Charles (Exterior 12" Drop)

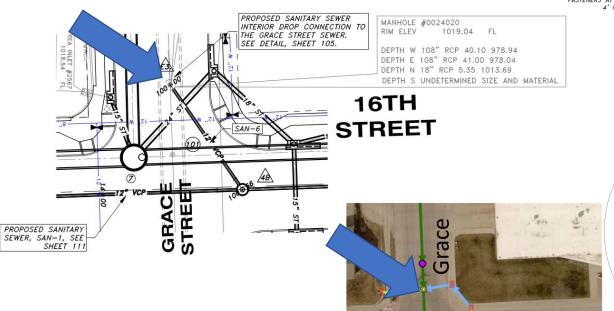




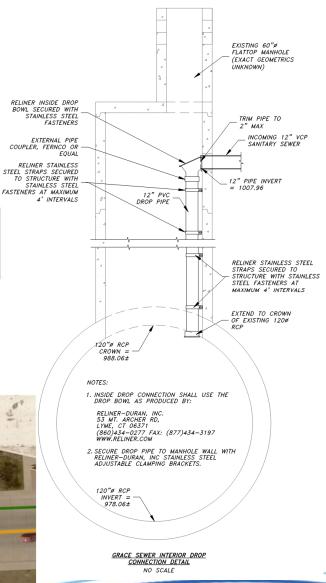




- Sanitary Sewer
 - Interior Drop Connection at Grace with Reliner Inside Drop System



16th St





Unsuitable Soils

- Geotechnical Reports and Conversations with Thiele Geotech
 - Upper 5' of Sewer Trenches Suitable for Reuse
 - Unsuitable (Due to Moisture):
 - All But Upper 5' in Sanitary Sewer Trenches
 - All But Upper 5' in Storm Sewer Trenches for Pipes 24" and Greater
 - Paid Under "Construct Trench Excavation (Unsuitable Material)"
 - Includes Excavation, Segregation of Suitable, Haul-Off of Unsuitable, Haul-In Suitable Backfill



Historical / Critical Properties

- Historical Properties
 - 2024 & 2107 N 16th St, Strehlow Ter (Constructed 1905-1916)
 - 2103 N 16th St, The Margaret Apartments (1916)
 - 2501 N 16th St, The Sherman Apartments (1897)
 - 2514 N 16th St, The Apartments at 2514 N 16th (1929)
 - 2920-2922 N 16th St, The Grand Theater Building (1914)
 - 1609 Binney St, The Atlas (Allas) Apartments (1919)



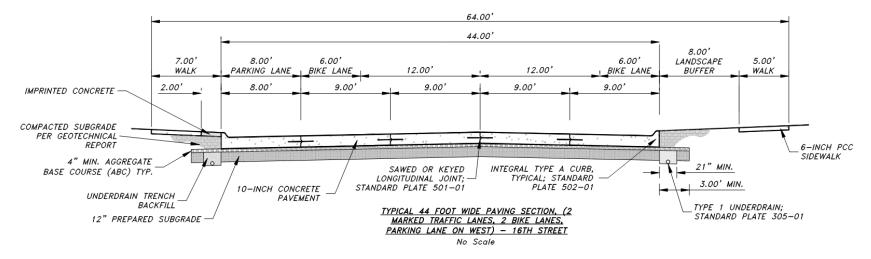
Historical / Critical Properties

- Critical Properties
 - Ardent Mills
 - 1515 N 16th Street
 - 1521 N 16th Street
 - Interstate Printing
 - 2002 N 16th Street
 - 1702 Grace Street
- Temporary Environmental Controls Spec (01 35 05)
 - Pre-Construction Surveys
 - Vibration Monitoring Requirements



Project Scope - Streets

- 16th Street
 - Full Pavement Removal (Including Sidewalks)
 - 10" Concrete; Pavement Narrowing

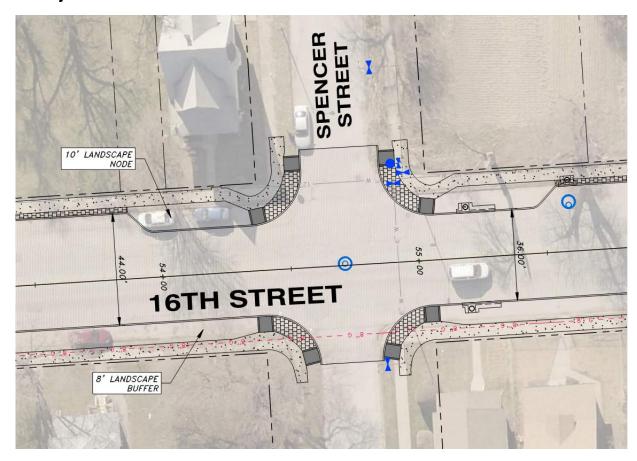


- Bike Lanes; Parking Lane (West); Landscape Nodes/Buffer
- New Sidewalks (ADA Route West Side), Ramps, Imprinted Surfacing



Project Scope - Streets

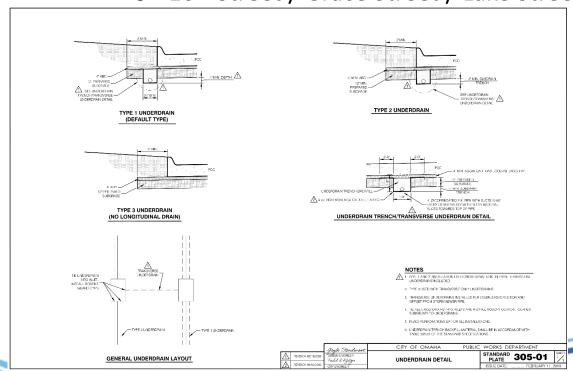
Aerial Overlay

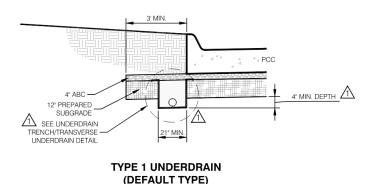




Project Scope - Streets

- Aggregate Base Course / Underdrains
 - o 2020 City of Omaha Standard Plate 305-01
 - 4" Aggregate Base Course & Underdrains
 - Arterial Streets
 - o 16th Street / Grace Street / Lake Street







Project Scope – Streets

- Corby, Willis, Lake, Grace, 18th & Florence
 - Full Pavement Removal (Including Sidewalks)
 - 7" Concrete (Residential)
 - 10" Concrete Florence, Grace & Lake
 - New Sidewalks, Ramps

Pavement

- 10" PC Street Paving 42,000 SY
- o 7" PC Street Paving − 12,500 SY
- 7" PC Driveway 3,900 SY
- o 6" PC Sidewalk 136,000 SF
- o 6" Ramps 8,000 SF
- 6" Imprinted 11,250 SF



Project Scope - Landscaping

- Landscaping Restoration
 - Soil Restoration
 - o Sod
 - Seeding / Rolled Erosion Control



Utility Relocations

- Omaha Public Power District (OPPD)
 - Relocation of Poles, Power Lines, New Street Lighting
 - Support Underground at Utility Trenches
 - Spring/Summer 2021 & Concurrently w/Construction
- CenturyLink Lumen
 - Existing Fiber and Telephone Network
 - Fiber Relocation
 - To East Side of 16th Between Lake and Locust
 - Support Underground at Utility Trenches
 - Spring/Summer 2021 & Concurrently w/Construction



Utility Relocations

- Cox Communications
 - Mainly Overhead on OPPD Poles
 - Support Underground at Utility Trenches
 - Spring/Summer 2021 & Concurrently w/Construction
- Unite Private Networks (UPN)
 - Existing Fiber
 - Support Underground at Utility Trenches
 - Spring/Summer 2021 & Concurrently w/Construction



Environmental/Permitting

- Owner Obtained
 - PCWP Grading Permit
 - NDEE CSO-NOI Grading & Erosion Control Permit
 - NDEE Wastewater Construction Review
 - Nebraska State Historic Preservation Office Review
 - Omaha Lead Hazard Program
- Contractor Obtained
 - NDEE Dewatering Discharge from Contaminated Sites
 - City of Omaha Dewatering
 - NDEE Hydrostatic Testing
 - NDNR Water Well Registration (Dewatering > 90 Days/Well)



Right of Way Update

- Types
 - Temporary/Permanent Easements
 - Acquisitions
 - Right of Way Dedications
- Anticipated to Have in Place Prior to Construction

