



**Shawn McWilliams**  
**Project Engineer, Regional Conveyance**



# Planned 2023 Construction Contracts

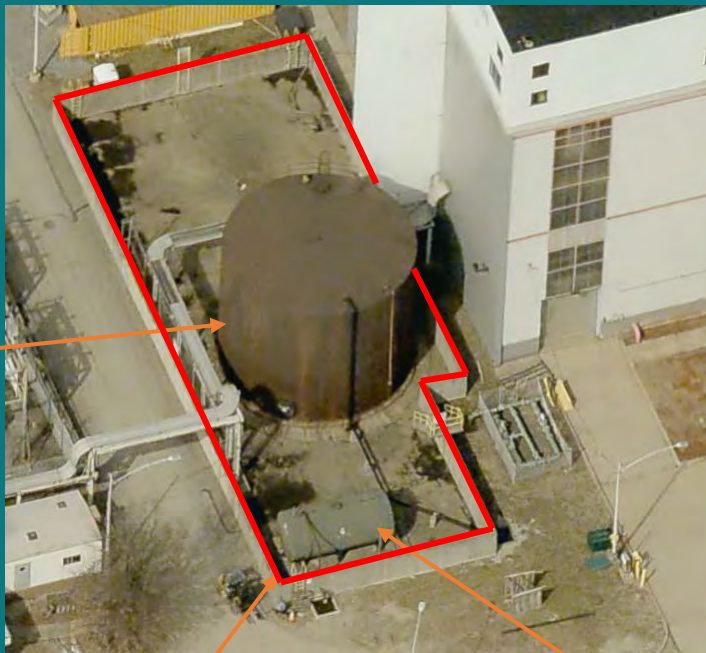


# WWTP Plant Construction

Project	Est. Budget	Bid Timeframe
Contract 1787: Misc. Tank Demo and Replacement	\$900,000	Q2 2023



# Miscellaneous Tank Demolition and Replacement



250,000 Gal  
No.2 Fuel Oil  
Tank

Tank  
Containment

12,000 Gal  
Diesel Tank

- Removal of unused 250,000 gallon tank and replacement with a 12,000 gallon double-walled tank
- Removal of unused 12,000 gallon tank
- Removal of unused containment structure



# Miscellaneous Tank Demolition and Replacement



- Removal of (3) unused lime silos from roof of Lime Building
- Perform roof repairs after silo removal





# Miscellaneous Tank Demolition and Replacement



6,000 Gal  
Defoamer Tank  
and Containment

- Removal of unused storage tanks
  - 7,000 gallon tank
  - 6,000 gallon tank
- Removal of containment structure
- Project Est. Budget: \$900,000



7,000 Gal  
Peroxide Tank



# Conveyance System Construction and Projects

Project	Est. Budget	Bid Timeframe
Contract 1746: Melanchton Pump Station Replacement	\$1,800,00	Q3/2023
Contract 1763: Access Shafts at A-40 and M-49	\$5,500,000	Q4/2023
Contract 1764: O-15/O-16 New Structure & Access Manhole	\$1,500,00	Q3/2023
Contract 1770: Various Improvements to the Ella and Corliss Pump Stations	\$4,000,000	Q4/2023
Contract 1779: 2023 Annual Interceptor Cleaning and Inspection	\$2,500,000	Q2/2023
Contract 1783: Site Demolition Contract	\$300,000	Q2/2023



# Contract 1746: Melanchton Pump Station Replacement

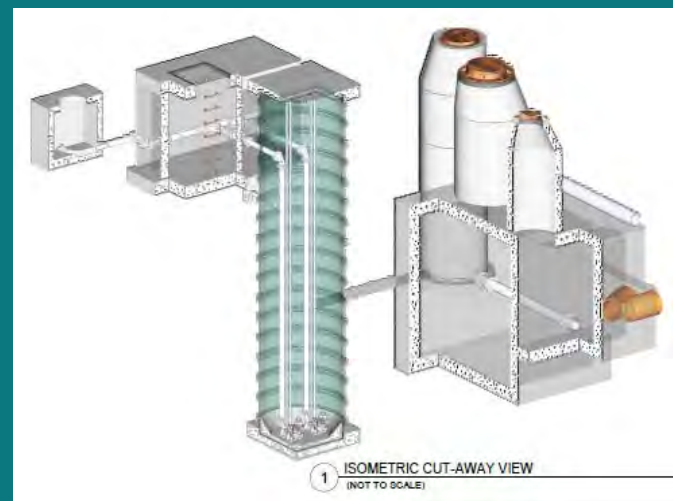
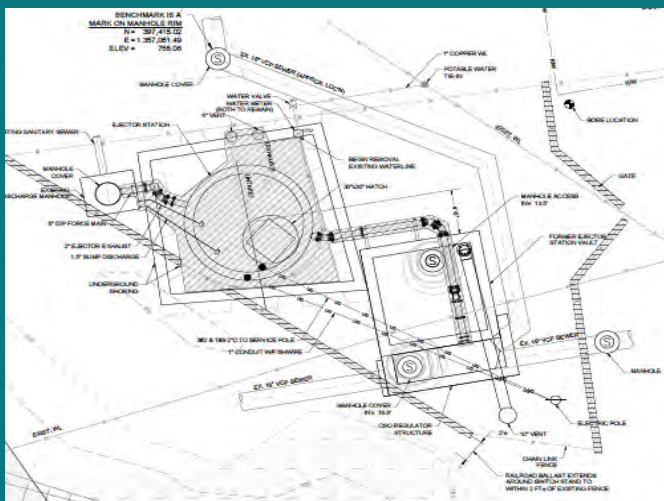
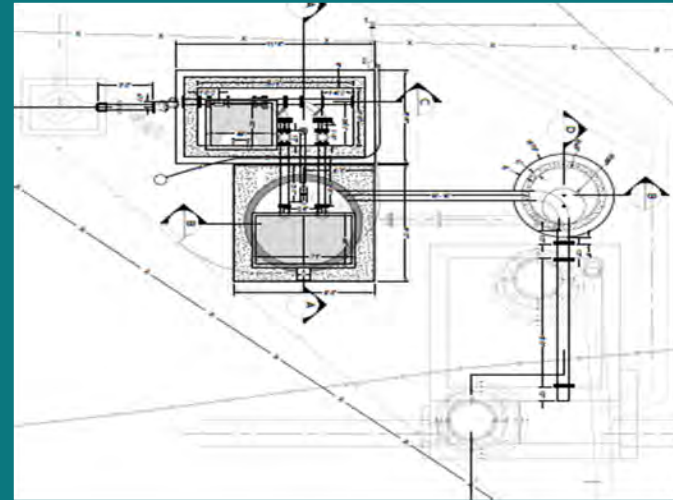


- Demolish existing ejector station within fenced (red) area
- Create fenced/gated entrance, requires clearing & grubbing (yellow)
- Install new package submersible pump station, including controls and emergency generator w/ transfer switch
- NOTE: Work is within railroad zone of influence, requiring flagging and approved support of excavation
- Project Est. Budget: \$1,800,000





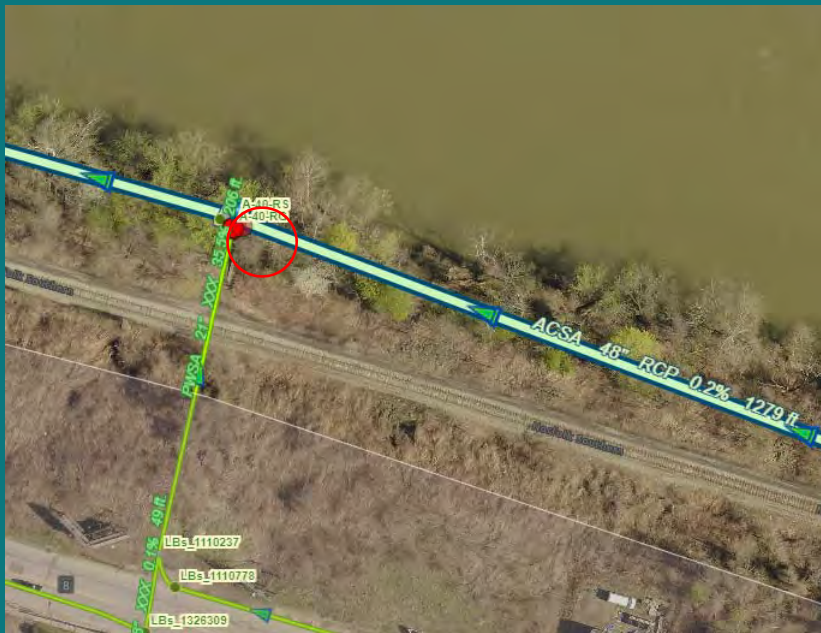
# Contract 1746: Melanchton Pump Station Replacement





# Contract 1763: Access Shafts at A-40 & M-49

A-40 Area\*



M-49 Area



\*Barge-based work anticipated due to location along river and next to railroad tracks





U.S. MAJOR LINE (APPROXIMATE)

EXISTING 48" RCP INTERCEPTOR

INSTALL ROCK LINED WALL

IMPROVED SOLDIER PILE WALL (TALL EL. 730.00)

TEMPORARY SUPPORT BEAM (SEE NOTE 2)

EXISTING GROUND LINE

14" MIN THICKNESS OF PLACEMENT

CAST IN PLACE CONCRETE APRON (TONG. EL. 718.75 SEE THIS SHEET FOR REINFORCEMENT PLAN)

6-8 ROCK SLOPE PROTECTION GROUT IN PLACE

3" MIN THICKNESS OF PLACEMENT

PRIME CONCRETE SEAL (TYP)

12" I.D. PRECAST MANHOLE

15'-0" DIAMETER

10'-0" DIAMETER

15'-0" DIAMETER

36" DIAMETER DRILLED PIER

TEMPORARY SUPPORT OF EXCAVATION (SEE NOTE 1)

CONCRETE FILL (TYP) 2,500 PSI MIN

TOP OF ROCK EL. 708.50

BOTTOM OF PILE (EL. 698.50)

6# REIN GROUTED ROCK DOVELES SPACED AT MAXIMUM 5' VERT AND HORIZ. (TYP)

CUT OPENING INTO TOP OF EXISTING 48" RCP INTERCEPTOR (SEE THIS SHEET FOR PLAN)

18" RADIAL

18" RADIAL

APPLY ONE RADIAL APPLICATIONS OF MASTIC NON-SWELL WATERSTOP (TYP)

SEE NOTE 4

CAST IN PLACE STRUCTURAL CONCRETE CAP (SEE THIS SHEET FOR REINFORCEMENT PLAN)

EXISTING 48" RCP INTERCEPTOR APPROXIMATE CROWN EL. 698.25

BOTTOM OF EXCAVATION

EXISTING 48" RCP INTERCEPTOR APPROXIMATE INVERT EL. 661.83

HYDROPHILIC WS

CAST IN PLACE STRUCTURAL FOUNDATION (SEE THIS SHEET FOR REINFORCEMENT PLAN)

SEE NOTE 3

**A-40 SITE SECTION**

SCALE: 1" = 5'-0"

**B**

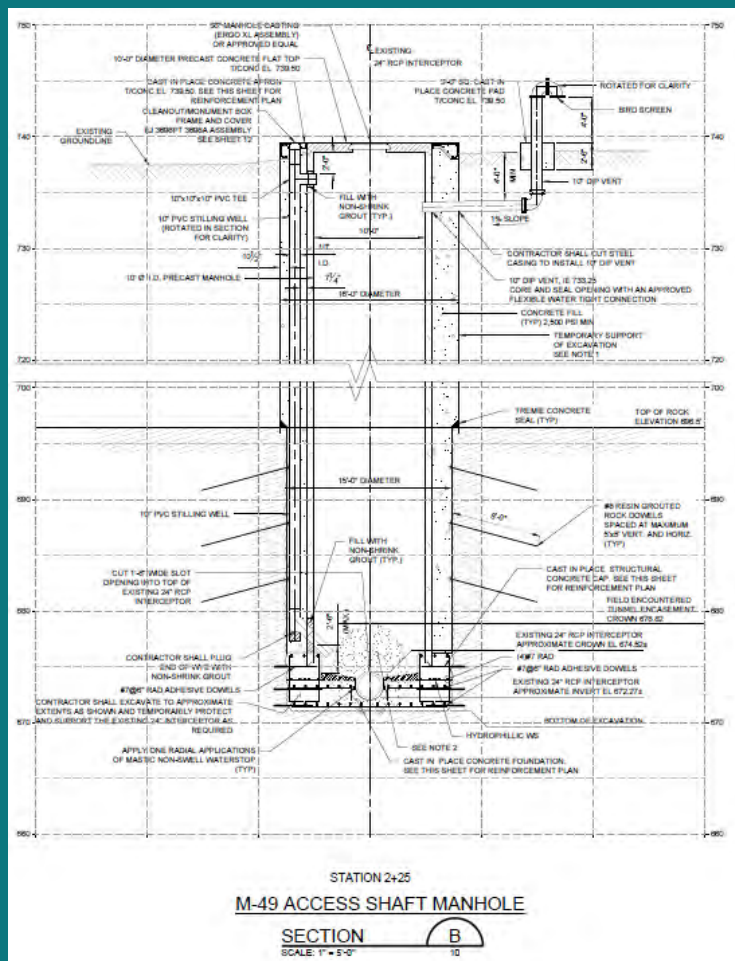
5

- Install new access shaft manhole onto existing deep tunnel interceptor
- 10-ft inside diameter finished precast concrete manhole
- Support of excavation will require measures both soil and rock
- Approximate excavation depth is 60-ft
- Retaining wall construction required on high side (R.R. up hill); soldier beam and lagging shown
- Doghouse construction shown at base over existing 48-in diameter sewer
- Barge-based work due to location



# Contract 1763: Access Shafts at A-40 & M-49

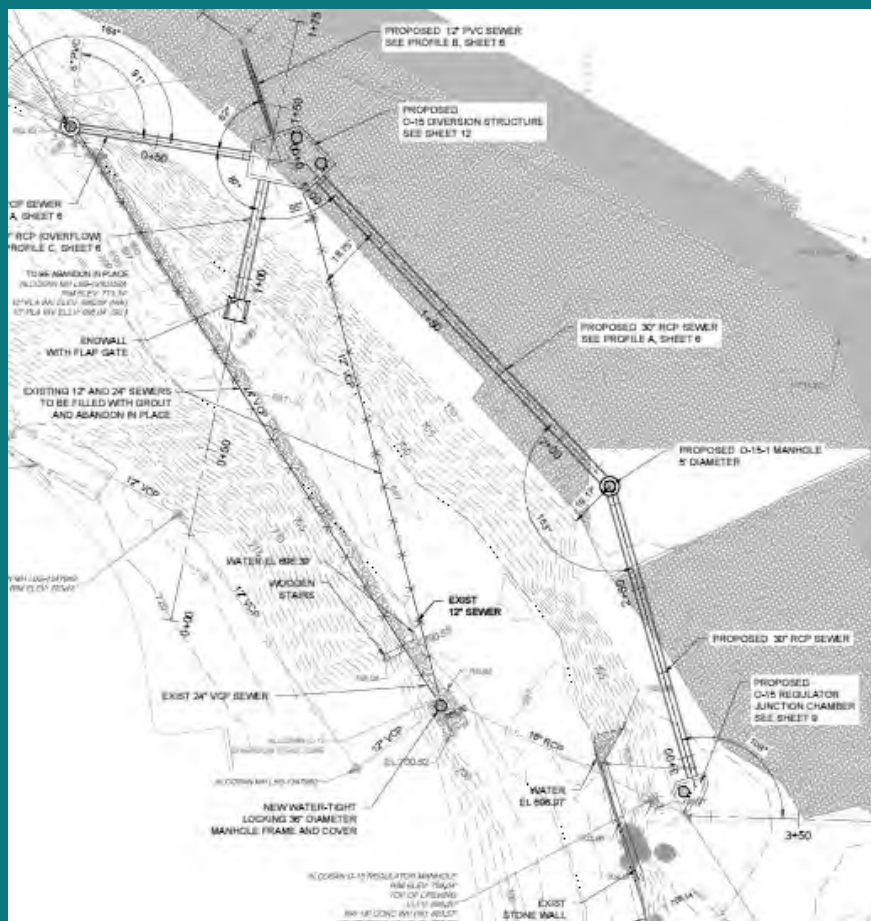
## M-49



- Install new access shaft manhole onto existing deep tunnel interceptor
- 10-ft inside diameter finished precast concrete manhole
- Support of excavation will require measures both soil and rock
- Approximate excavation depth is 70-ft
- Doghouse construction shown at base over existing 24-in diameter sewer
- Project Est. Budget: \$5,500,000

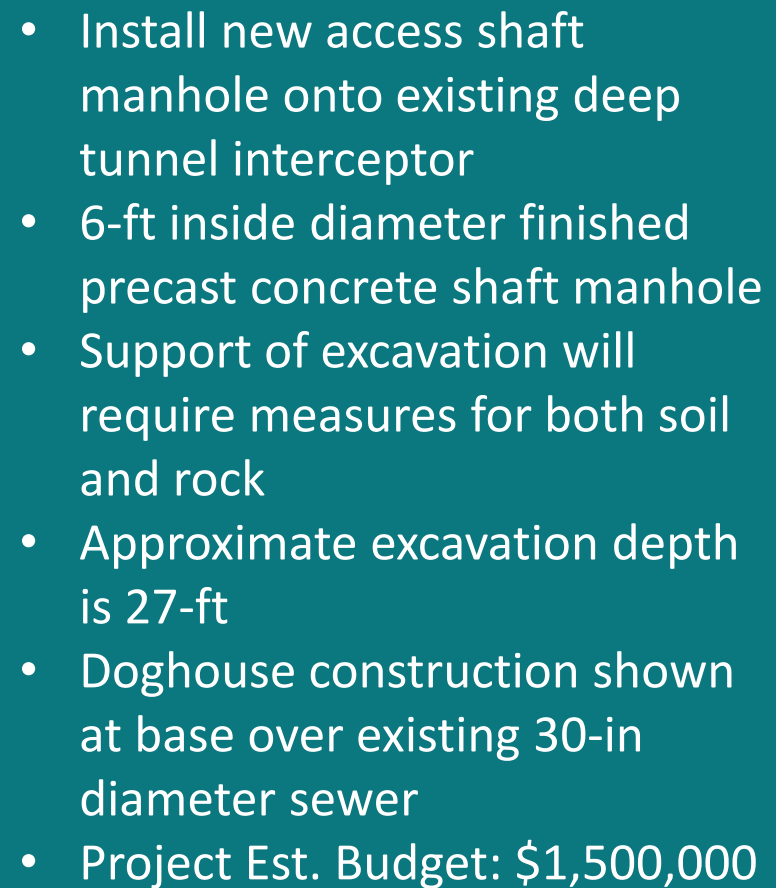


# Contract 1764: O-15/O-16 New Structure & Access Manhole



- Replace and reroute existing 24" interceptor with 30" RCP
- Relocate diversion structure upstream and create new outfall
- Install new connection to existing regulator structure and modify structure for new flow patterns







# Contract 1770: Various Improvements to Ella and Corliss Pump Stations



Ella Street Pump Station



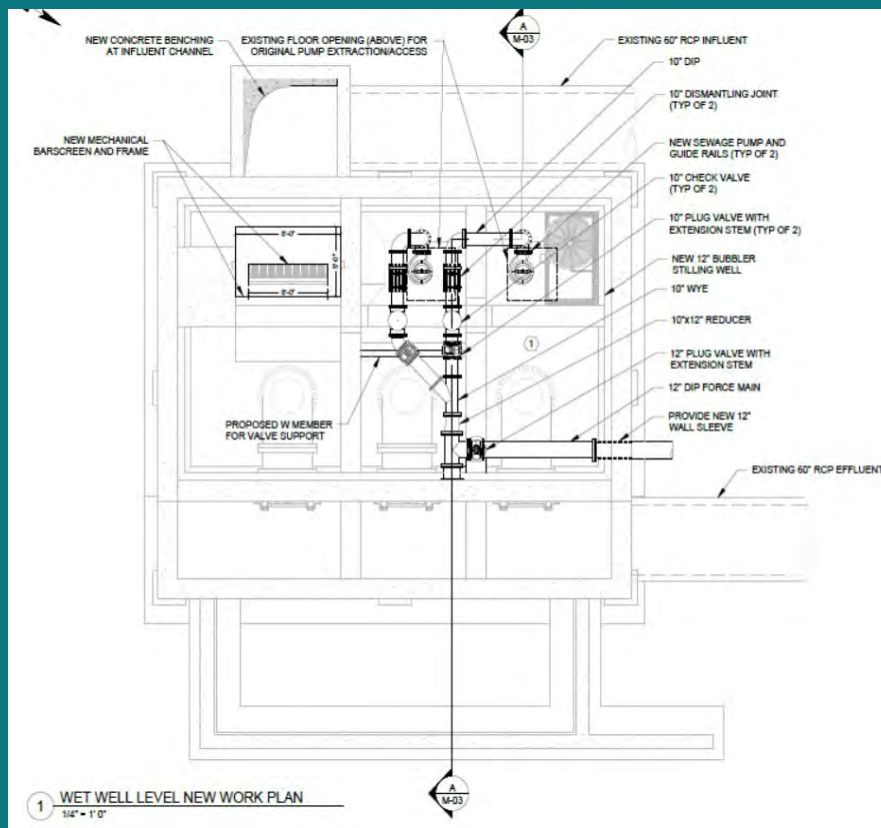
Corliss Pump Station\*

\*Barge-based work anticipated due to location along river and next to railroad tracks



# Contract 1770: Various Improvements to Ella and Corliss Pump Stations

## Ella Street Pump Station



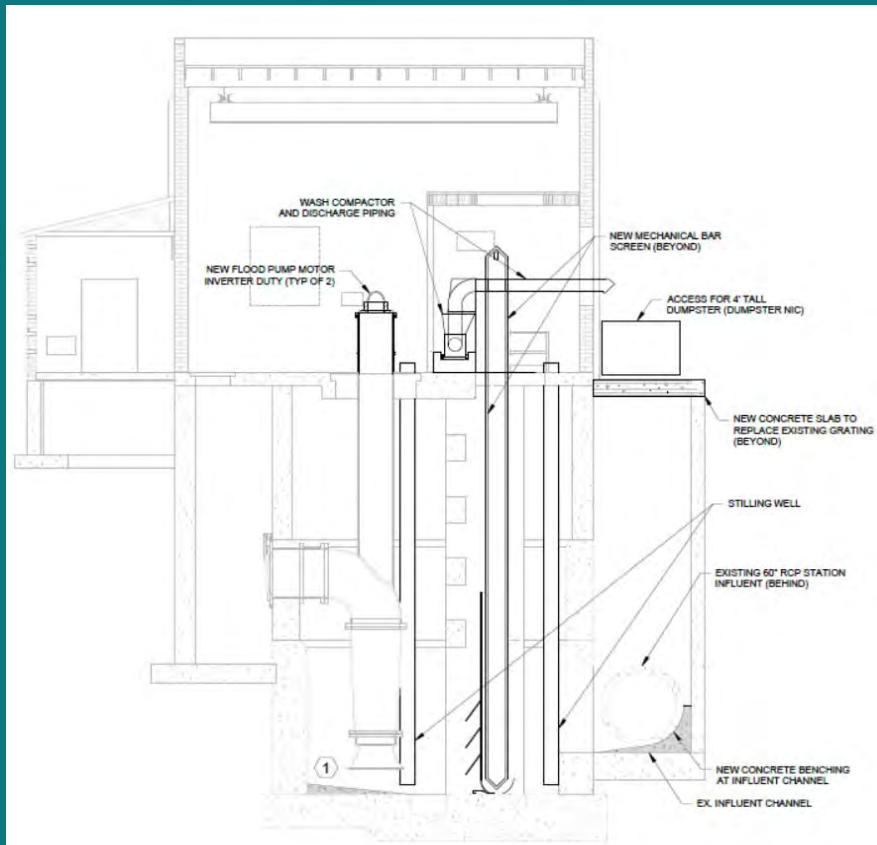
- Replacement of 10" submersible sewage pumps, internal piping and force main replacement to new manhole on property
- Installation of new meter pit with mag meter
- Replacement of approx. 225 LF of 18" gravity sewer and three manholes
- Replacement of bar screen system with added washer compactor





# Contract 1770: Various Improvements to Ella and Corliss Pump Stations

## Ella Street Pump Station

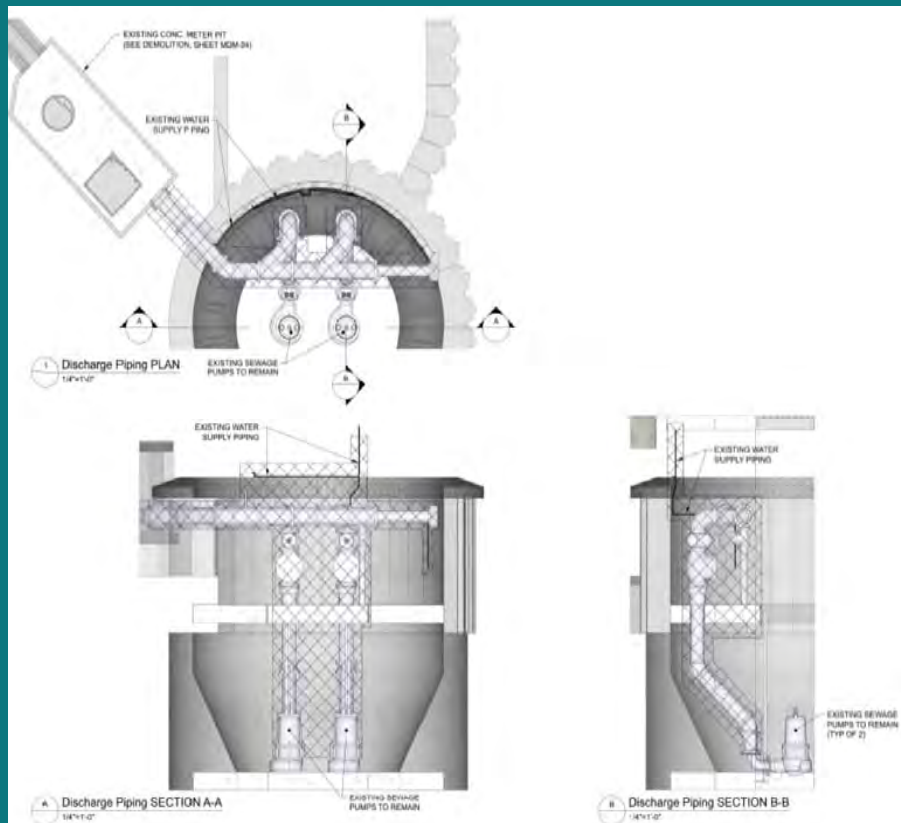


- Replacement of (3) motors for 42" storm pumps
- Addition of VFDs for sewage and storm pumps
- Relocation and replacement of level sensing equipment
- Work requires bypass pumping

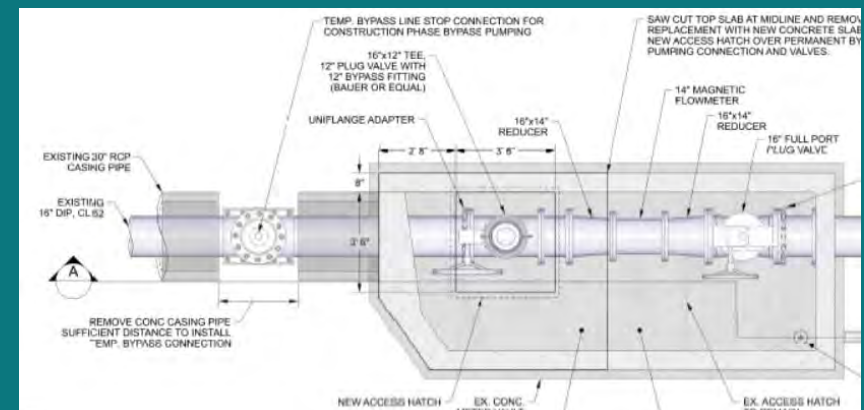


# Contract 1770: Various Improvements to Ella and Corliss Pump Stations

## Corliss Pump Station



- Replacement internal discharge piping and external piping up to valve pit
- Replacement and reconfiguration of valve equipment and piping in valve pit
- Installation of a permanent bypass pumping connection to existing force main piping
- Work requires bypass pumping

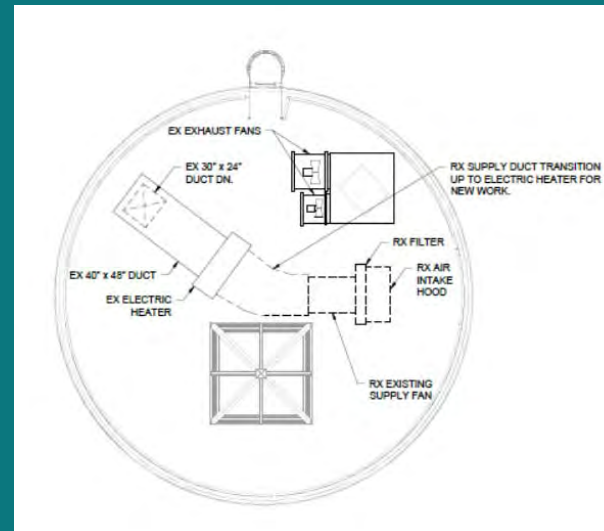
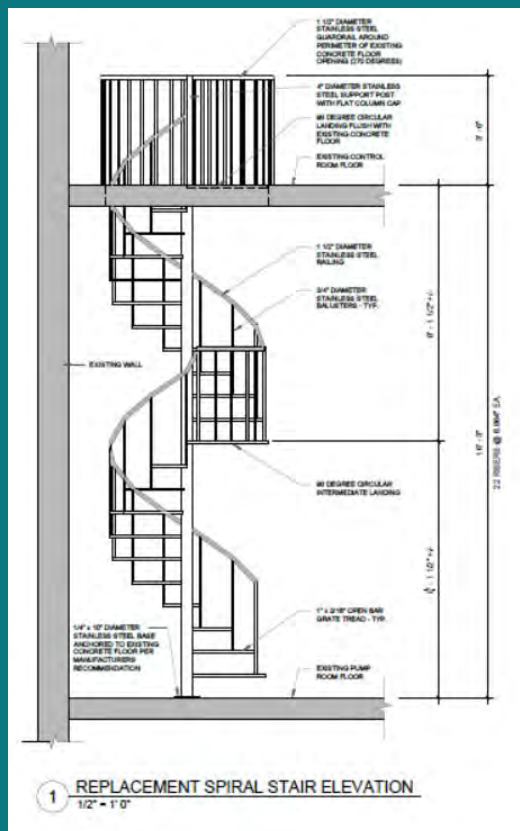






# Contract 1770: Various Improvements to Ella and Corliss Pump Stations

## Corliss Pump Station

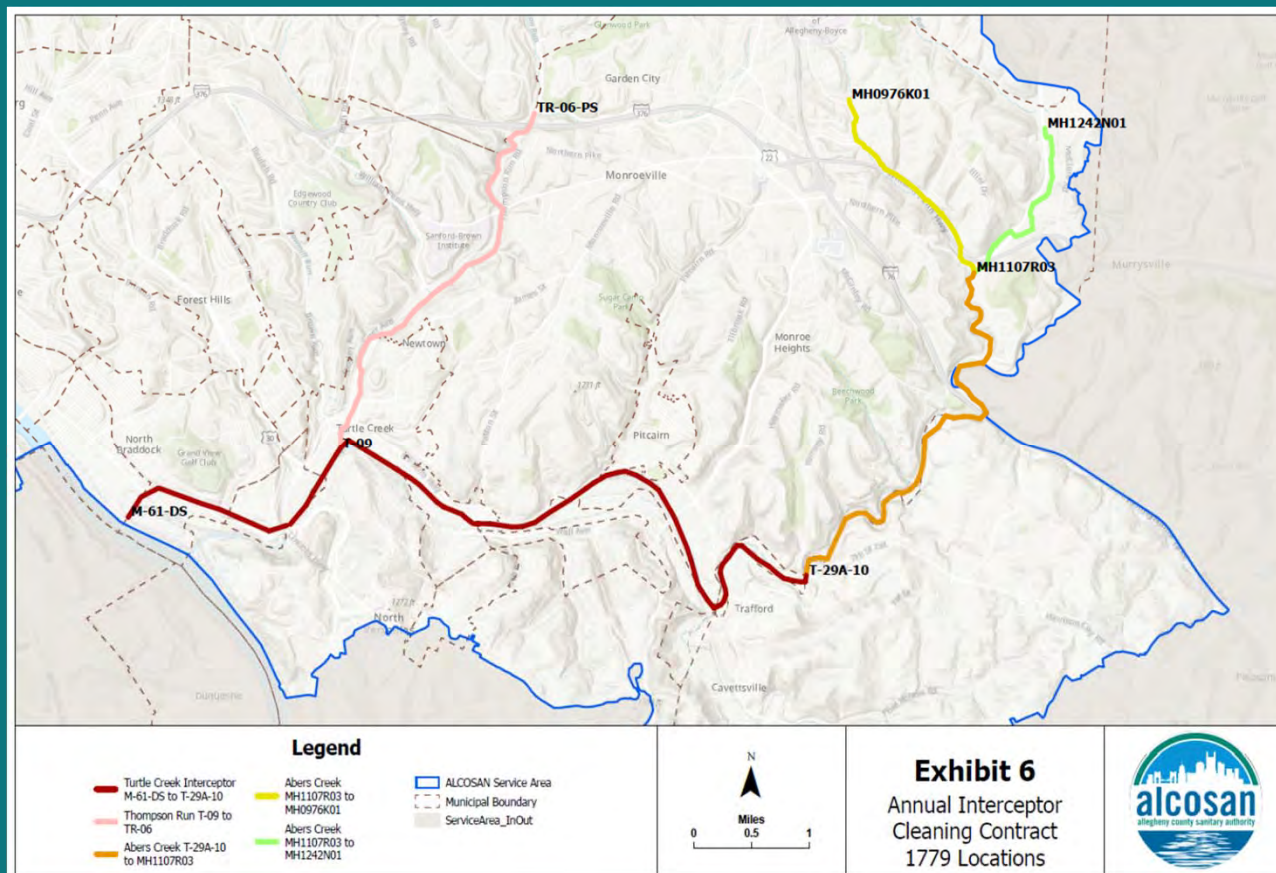


- Replacement of existing spiral staircase with stainless steel
- Replacement of all supply fan hardware
- Balancing of the HVAC system
- Replacement of roof, including the skylight
- Site access planned by barge due to location
- Project Est. Budget: \$4,000,000



# Contract 1779: 2023 Annual Interceptor Cleaning and Inspection

- Work focused primarily on pipe inspection; cleaning as needed
- Work area is the Turtle Creek / Thompson Run Interceptors
- Work includes 19.6 mi. of 10" – 54" sewers
- Project Est. Budget: \$2,500,000





# Contract 1783: Site Demolition Contract



- Demolish existing buildings
- Terminate existing utilities
- Replace/ repair fencing
- Environmental assessments for abatement currently underway





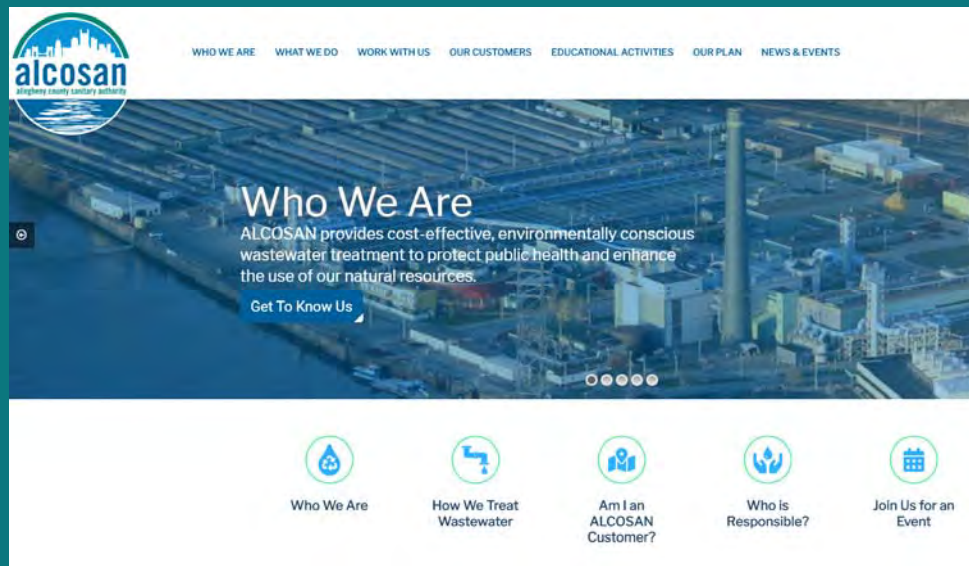
# Contract 1783: Site Demolition Contract



- Demolish existing buildings
- Terminate existing utilities
- Replace/ repair fencing
- Environmental assessments for abatement currently underway
- NOTE: Vehicles in photo already removed
- Project Est. Budget: \$300,000



# ALCOSAN Website



- [www.alcosan.org](http://www.alcosan.org)
  - Click WORK WITH US tab
    - Business Opportunities
    - Planned and Active Bids
- More Information on Awards
- Forms and policies available





# Questions / Comments?

Contact:

Shawn McWilliams

ALCOSAN

Project Engineer, Regional Conveyance

(412) 734-8053

[shawn.mcwilliams@alcosan.org](mailto:shawn.mcwilliams@alcosan.org)