## **ALLEGHENY COUNTY SANITARY AUTHORITY**

# January 14, 2021

# CONTRACT NO. 1729 G, E, H, P

#### **EAST HEADWORKS**

#### ADDENDUM NO. 4

All bidders bidding Contract No. 1729 G, E, H, P shall read and take note of this Addendum No. 4. The Contract Documents for Contract No. 1729 G, E, H, P – East Headworks are hereby revised and/or clarified as stated below.

# Acknowledgement of Contract No. 1729 G, E, H, P; Addendum No. 4

The Acknowledgement attached to Addendum No. 4 is to be signed and returned immediately via email to Dustin Copenhaver at <a href="mailto:Dustin.Copenhaver@alcosan.org">Dustin.Copenhaver@alcosan.org</a> and acknowledged with the Bidder's Proposal.

Kimberly Kennedy, P.E.

Director – Engineering and Construction

# ACKNOWLEDGEMENT OF CONTRACT NO. 1729 G, E, H, P – EAST HEADWORKS

# **ADDENDUM NUMBER 4**

| FIRM NAME: |  |  |  |
|------------|--|--|--|
| SIGNATURE: |  |  |  |
| TITLE:     |  |  |  |
| DATE:      |  |  |  |

# **January 14, 2021**

# CONTRACT NO. 1729 G, E, H, P

# **EAST HEADWORKS**

# **ADDENDUM NO. 4**



# **JANUARY 14, 2021**

## CONTRACT NO. 1729 G, E, H, P

#### EAST HEADWORKS

## **ADDENDUM NO. 4**

# A. Contract Documents – Volume 1

- 1. Article 2
  - a) Page Article 2 10 Remove the strikethrough on 2.15 B.
- 2. Article 4
  - a) Page Article 4 2 P Table states that construction milestones are for 1729 E. DELETE 1729 E and REPLACE with 1729 P.

# B. Contract Specifications – Volume 2

- 1. Summary of Work (Section 01 11 00)
  - a) Paragraph 1.2.A.2.b, DELETE "security camera".
  - b) Paragraph 1.2.A.1, ADD paragraph y as follows, "y. Demolish and remove existing Construction Manager trailers. Furnish and install new Construction Manager Site Office."
  - c) Paragraph 1.2.A.3, ADD paragraph m as follows, "m. Installation of 1.5-inch water line from point of connection to new Construction Manager Site Office and installation of drains from new Construction Manager Site Office to existing sanitary sewer."
  - d) Paragraph 1.4.A, ADD paragraph 8 as follows, "8. Electrical hookup to Construction Manager Construction Site Office."
- 2. Measurement and Payment (Section 01 22 00)
  - a) Paragraph 1.6.D.2, ADD the following item, "m. Furnishing, installation and integration of video cameras and camera equipment."

- b) Paragraph 1.6.D.2, ADD the following item, "n. Installation of field mounted instruments and flow measuring devices."
- c) Paragraph 1.6.E.2.c, DELETE item 1.6.E.2.c in its entirety.
- d) Paragraph 1.6.E.2.i, DELETE item 1.6.E.2.i in its entirety.
- e) Paragraph 3.1.H.1, REVISE 2<sup>nd</sup> Sentence to, "Sheeting to be left in-place shall be cut off 4 feet below subgrade, or as directed by the Engineer."
- 3. ADD New Specification Section 01 50 13 Construction Manager Site Office

# C. Contract Specifications – Volume 3

- 1. Hydronic Piping Specialties (Section 23 21 16)
  - a) Paragraph 2.6.A, first sentence, REPLACE "DowFrost" with "DowFrost HD".
- 2. Management, Handling, and Disposal of Excavated Soil and Other Excavated Material (Section 31 23 00)
  - a) Paragraph 1.3.F.6 has a formatting error. Line 4 in this paragraph ends with a "6". From 6 through vegetative material should be returned as a new 1.3 F.7. 1.3 F.7 becomes 1.3 F.8 and 1.3 F.8 becomes 1.3 F.9.
- 3. Butterfly Valves (Section 40 05 64)
  - a) Paragraph 2.1.A, DELETE the last two sentences beginning with, "Disc seating shall be..." and REPLACE with the following: "Disc seating shall be replaceable PTFE, suitable for temperatures of at least 250 degrees F at 150 psi working pressure rating, bubble-tight at 50 psi differential pressure. The butterfly valve shall be Model BHP as manufactured by DeZurik, or equal."
- 4. Functional Descriptions (Section 40 61 93)
  - a) Paragraph 13.2.B, DELETE paragraph 1, RE-NUMBER paragraphs 2, 3, and 4 to 1, 2, and 3.

# D. Contract Drawings

- 1. Drawing CDM-02
  - a) DELETE this drawing and REPLACE with the attached drawing CDM-02.
- 2. Drawing C-10

DELETE this drawing and REPLACE with the attached drawing C-10.

3. Drawing C-21

DELETE this drawing and REPLACE with the attached drawing C-21.

4. Drawing C-22

DELETE this drawing and REPLACE with the attached drawing C-22.

5. Drawing C-24

DELETE this drawing and REPLACE with the attached drawing C-24.

# E. Questions

**36. QUESTION:** Reference specifications 01 11 00 (Summary of Work) and 01 22 00 (Measurement and Payment); There appears to be a conflict between the Summary of Work for the G&E Contract. Please clarify which Contract G or E is responsible for providing, installing, testing and commissioning of the video cameras/ security camera system.

01 11 00 1.2.A.1.w WORK COVERED BY CONTRACT/General Construction 1729G: Furnish, installation and integration of video cameras and camera equipment.

01 22 00 1.6.E.2.i APPLICATION FOR PAYMENT/Electrical: *Installation and testing of security camera systems*.

**RESPONSE:** The Application for Payment Specification 01 22 00 is incorrect and will be modified through addendum. Specification 01 11 00 is correct. The General Contractor is responsible for furnish, installation and integration of the video cameras and camera equipment. The Electrical Contractor is responsible for wiring of the video cameras and camera equipment.

**37. QUESTION:** Reference specifications 01 11 00 (Summary of Work) and 01 22 00 (Measurement and Payment); There appears to be a conflict between the Summary of Work for the G&E Contract. Please clarify which Contract G or E is responsible for providing, installing, testing and commissioning of the Instrumentation.

01 11 00 1.2.A.1.x WORK COVERED BY CONTRACT/General Construction 1729G: Installation of field mounted instruments and flow measuring devices. 01 22 00 1.6.E.2.c APPLICATION FOR PAYMENT/Electrical: Installation of flow switches, flow meter transmitters, level transmitters, and associated wiring.

**RESPONSE:** The Application for Payment Specification 01 22 00 is incorrect and will be modified through addendum. Specification 01 11 00 is correct. The General Contractor is responsible for the installation of field mounted instruments and flow measuring devices. The Electrical Contractor is responsible for purchase, furnish, wire and calibrate the field mounted instruments and flow measuring devices.

**38. QUESTION:** Reference specification 27 11 16 COMMUNICATION CABINETS, RACKS, FRAMES, AND ENCLOSURES: Is there a specific manufacturer for the Cabinets specified?

**RESPONSE:** There is no specific manufacturer named for the Cabinets specified. Quality products of well-established manufactures such as Black Box, Hoffman, APC/SCHNEIDER ELECTRIC are acceptable.

**39. QUESTION:** Reference specification 27 11 16 COMMUNICATION CABINETS, RACKS, FRAMES, AND ENCLOSURES: The Communication Drawings details (1) horizontal wire manager in the IDF while the Scope states that we are to install (1) horizontal wire manager above and below each piece of equipment as needed. How many pieces of equipment will require horizontal wiring managers?

**RESPONSE:** Each piece of equipment or rack shall have one (1) horizontal wire manager above and below as needed. The number of known equipment are as shown on the drawings and the others will be furnished by Owner.

**40. QUESTION:** Reference specification 27 11 16 COMMUNICATION CABINETS, RACKS, FRAMES, AND ENCLOSURES: The Specification calls for "Vertical Mounting Rail Supports" to attach to the "Communications Cabinet" with a "Front Insertion Rectangular Split Ring Type Wire Support." Will Vertical Wire Managers be required, or will Rack Mounted D-Rings be acceptable for this application?

**RESPONSE:** Vertical Mounting Rail Supports are the preferred method, Rack Mounted D-Rings are acceptable.

**41. QUESTION:** Reference specification 27 15 13 COMMUNICATION COPPER HORIZONTAL CABLING: The Scope and Details specify unshielded cable to the wall phones, will shielded cable be required for Voice and Data outside of the Administration Area. Please clarify where shielded and unshielded cable should be used for Voice and Data?

**RESPONSE:** Yes, shielded cable will be required for Voice and Data outside of the Administration Area. Shielded cable will be required for areas where it is not being installed inside a metallic conduit. Unshielded cable can only be installed inside a metallic conduit such as EMT or Flexible Metal conduit.

**42. QUESTION:** Reference specification 27 15 13 COMMUNICATION COPPER HORIZONTAL CABLING: The Drawings and Specifications require the Contractor to install 1 24 Port Patch Panel for the PA Speaker Outlets as well as IP67 Outlets at the locations with a CAT6A Cable. The Drawing Detail specifies a 14/2C cables?

**RESPONSE:** PA Speaker Outlets are to be connected via 2#14 AWG conductors; reference 530-TR-01. The patch panels are for the Voice/Data system that use CAT6A Cable; reference 530-TR-05. Please note that the so call Voice/Data outlets are basically Data outlets.

**43. QUESTION:** Reference specification 27 05 44 (3.3 & 3.13) SLEEVES AND SLEEVE SEALS FOR COMMUNICATIONS PATHWAYS AND CABLING: The Specification requires the Contractor to install Junction Boxes having interior access doors at each end of the fire-stops, overlapping and open to the entire and open to the entire fire-stop opening and fastened to the wall of floor at a minimum of four locations. Should the Contractor interpret this requirement as meaning that the sleeves will enter the Junction Box on the ceiling and floor on either side of our penetrations through the Floor?

**RESPONSE:** The sleeves can enter the Junction Box on the ceiling and floor on either side or both side of the penetrations, if the installation can create an effective fire stop at both side of the floor or wall.

**44. QUESTION:** Section 406193 Page 46 under 13.2 SUMP PUMPS, Item B. Plan Sheet Numbers: 1. indicates that Drawing No. 520-I-01 shows Sump Pumps SPP010-520 and SPP011-520 in the West and East Pipe Galleries. We are not finding Drawing 520-I-01 in the Instrumentation Drawings. Please issue this drawing if it is applicable to the bid for Contract 1729G.

**RESPONSE:** The drawing referenced in the specifications is incorrect. Refer to drawing 530-I-14 for Sump Pumps SPP010-520 and SPP011-520.

- **45. QUESTION:** Section 011100 Summary of Work 1.2 A. 1. w. states that the General Construction Contract is responsible to furnish, install and integrate video cameras and camera equipment. Same Section 1.2 A. 2. b. states that the Electrical Contract is responsible to furnish and install electrical distribution, security camera and control wiring and conduits. Also Section 1.2. A.2. o. states that wiring of POE for video cameras is by the Electrical Contract. Two questions:
  - a. Is the General Contractor or the Electrical Contractor to furnish, install, wire, and integrate video cameras and camera equipment for this Contract?
  - b. Please provide Specifications, Construction Drawings, Construction Details, etc. as required for bidding to the Contractor responsible for this work

**RESPONSE:** The General Contractor will be responsible for furnishing, installation and integration of the video cameras and camera equipment as described in Section 01 11 00, paragraph 1.2.A.1.w. The Electrical Contractor will be responsible for wiring the POE for video cameras and installation of network switches and enclosures as described in Section 01 11 00, paragraph 1.2.A.2.o. Paragraph 1.2.A.2.b will be modified to remove "security camera" from the sentence.

**46. QUESTION:** Section 406193 Functional Descriptions 1.1 C. please clarify that the Electrical Contractor is responsible for installation of Emerson DCS equipment, as described in the contract specifications and/or as indicated on the contract drawings. (Purchase of new DCS equipment is by the Owner)

**RESPONSE:** See Specification 01 11 00 1.7 "Owner Furnished Products". The Owner will purchase and furnish the Emerson DCS equipment to the electrical contractor. The contractor shall be responsible for installing this Emerson DCS equipment.

**47. QUESTION:** Section 406193 Functional Descriptions, Typical C. Functional Descriptions please clarify the responsibilities of work related to the following:

**RESPONSE:** This section describes the functionality required by each piece of equipment/instrument listed. See other portions of specifications and drawings for delineation of responsibilities.

At Field - Knife gate valves, slide gates (various types and locations), ultrasonic level transmitters, scrubber recirculation pumps, scrubber pH controllers, scrubber ORP controllers, scrubber exhaust fans, odor scrubber level switches, odor scrubber differential pressure transmitters, caustic metering pumps, sodium hypochlorite metering pumps, sodium hypochlorite injection point ball valve limit switches, inline grinders, sample pumps, composite type samplers, bar racks (various types and locations), screenings conveyor, dewatering pre-crusher, grit tank submerged grit screws, grit tank sump process water motorized butterfly valves, grit pumps, grit hydrocyclones, grit classifier screws, grit classifier plant water solenoid valves, grit classifier high level switches, grit conveyor, grit truck scale, ultrasonic flow meters, differential pressure

orifice plate flowmeters, sump pumps, air lock limit switches, differential pressure transmitters, and combustible gas transmitters and sensors are furnished and installed by the General Contractor and/or the Mechanical Contractor. All other work required is by the Owner and/or the Electrical Contractor

**RESPONSE:** This is incorrect, all instrumentation, unless provided as part of a manufacturers packaged system, shall be purchased, furnished, and calibrated by the electrical contractor. Refer to Section 01 11 00 – Summary of Work and the ELECTRICAL/GENERAL CONTRACTOR DIVISION OF SCOPE OF WORK located on contract Drawing I-02.

**<u>At MCC</u>** - All work required is by the Electrical Contractor

**RESPONSE:** Confirmed.

**At DCS** - All work required is by the Owner

**RESPONSE:** Electrical contractor shall be responsible for termination of conductors at DCS Input/Output cards. All programming and configuration of the DCS shall be provided by the Owner's representative. Termination wiring diagrams will be provided to the electrical contractor indicating which Input/Ouput points to terminate at in DPU panels.

**<u>At VFD</u>** - All work is required by the Electrical Contractor

**RESPONSE:** Confirmed.

**48. QUESTION:** Section 409500 Control System Hardware and Wiring, please confirm that all work required by this Section is by the Electrical Contractor

**RESPONSE:** This specification describes the requirements for "Control System Hardware and Wiring." See other portions of specifications and drawings for delineation of responsibilities.

This section applies to both the G and E contracts. This section also states requirements for manufacturer provided control panels, supplied under the General Contract.

**49. QUESTION:** Should all excavated material be considered contaminated or residual waste and should it be disposed of off site?

**RESPONSE:** As stated in Article 2.15.C.4.a, all excavated soils and other materials are assumed to be Residual Waste, as defined in Specification 31 23 00, unless documentation demonstrates that another Waste or Fill classification applies. Except as set forth in Article 2.15.C.3, the costs to test all excavated soil and other excavated material (regardless of the Waste or Fill classification) must be included in the bid price. The bid price must also include the costs for permitting, storage, handling, transportation and disposal of all Residual Waste and all Construction/Demolition Waste, as defined in Specification 31 23 00. To the extent that "Other Contaminated Waste," as defined in Specification 31 23 00, is encountered, all costs relating to the permitting, storage, handling, transportation and disposal of such Other Contaminated Waste shall be paid by force account. The term "Other Contaminated Waste" excludes all Residual Waste and Construction/Demolition Waste.

**50. QUESTION:** Do all spoils need to be taken to a landfill?

**RESPONSE:** Article 2.15.C.4.c and Article 2.15.C.4.d, respectively, provide additional guidance as to when, and under what conditions, Excavated Clean Fill and Regulated Fill may be able to be reused offsite, in lieu of being disposed in a landfill. All applicable laws and regulations must be followed in excavating, managing and disposing of all excavated materials.

**51. QUESTION:** Will any excavated material be able to be reused?

**RESPONSE:** No excavated material can be reused onsite. As stated in Article 2.15.C.4.c and Article 2.15.C.4.d, respectively, "Excavated Clean Fill," as defined in Specification 31 23 00, cannot be used as Fill onsite, and "Regulated Fill," as defined in Specification 31 23 00, cannot be used as Fill onsite. Article 2.15.C.4.c and Article 2.15.C.4.d, respectively, provide additional guidance as to when, and under what conditions, Excavated Clean Fill and Regulated Fill may be able to be reused offsite, in lieu of being disposed in a landfill. All applicable laws and regulations must be followed in excavating, managing and disposing of all excavated materials.

**52. QUESTION:** We respectfully submit for your consideration a request to approve Tufftec Lockers as an accepted substitute on New East Headworks.

**RESPONSE:** ALCOSAN will not be adding any products to the list for any of the listed products during the bid period. Not listed products will have to go through the substitution process if submitted by the successful bidder after the notice to proceed.

**53. QUESTION:** The scale on drawings 520-M-10 and 520-M-30 seem to be different.

**RESPONSE:** The scales are the same (1/4"=1'-0") for both drawings. The overall length of piping may seem shorter on 520-M-10 due to the breaklines south of the new 14" PAL going through the roof of the tunnel as well as the breaklines through the buried piping.

# F. Clarifications

1. Note correction issued for Drawing C-21 in Addendum No. 3 incorrectly referenced Keynote No. 6. The note revision applies to Keynote No. 15. This is correctly shown on re-issued Drawing C-21.

#### Attachments:

#### *Specifications:*

Section 01 50 13 – Construction Manager Site Office

#### **Drawings:**

CDM-02

C-10

C-21

C-22

C-24

#### **Reference Drawings:**

Existing Waterline Elevations for Existing ALCOSAN Unoccupied Trailers Existing Trailers ALCOSAN Plant Enlarged Utility Plan

\* \* \* \* END OF ADDENDUM NO. 4 \* \* \* \*

#### **SECTION 01 50 13**

#### CONSTRUCTION MANAGER SITE OFFICE

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. The General Contractor shall remove the two existing trailers, skirting, their contents (consisting of old office furnishings) and the covered porch between them.
- B. The General Contractor to rake area free of debris.
- C. The General Contractor shall provide a site office as specified throughout this Section for use by the Construction Manager at the site of the Work until the project final completion. On that date the CM site office and all its furnishings, electrical, HVAC, and plumbing utilities and appurtenances shall be left in place for continued use by the CM on future projects. After final completion of the 1729 contract the 1729G contractor will no longer be responsible for CM site office maintenance, and upkeep, and will turnover ownership of this site office to the Owner.
- D. The General Contractor is solely responsible for the provision, installation, maintenance, upkeep, and turn-over of this Office.
- E. The General Contractor shall include in his Bid the costs associated with the general requirements of paragraph 1.1A & B and any fees and other expenses related to Contractor responsibilities for the Office specified throughout this specification.
- F. The General Contractor to excavate and backfill trench required for water line installation.
- G. The Plumbing contractor to replace 2" copper line with 1.5" HDPE line from existing point of connection, a buried 2" valve, to a valved, vertical riser. Install shut off valve inside trailer if one is not present. Neither the water hydrant nor the connection to the north need to be reconnected
- H. The Plumbing contractor to reconnect trailer drain lines to existing sanitary riser.
- I. The General Contractor to furnish and install heat wrap pipe tape all to water lines above grade with connections to (1) inside thermostat with on/off switch. Owner to provide power.
- J. The Construction Manager and Owner shall provide its own wireless telephone service and all internet connectivity, wiring, and hardware for the CM interface with Owner eBuilder.
- K. Owner responsible for electrical connections from point of origin to the trailer electrical panel.

#### 1.2 CONSTRUCTION MANAGER SITE OFFICE

- A. The General Construction Contractor shall provide the following CM Site Office facility.
  - 1. Structure: Provide a field office for the exclusive use of the CM and their authorized representatives, in a location approved by the CM or as shown on the Site Utilization Plan.
    - a. Have the field office equipped and ready for use within sixty days after the date of the Notice to Proceed.
    - b. The office shall be a modular office as approved by the CM and have a minimum of 760 square feet of gross floor space. (See 2.1A below)
    - c. Equip the office with an adequate heating and cooling system which is automatically and thermostatically controlled to maintain a minimum inside temperature of 70 DEGF during cold weather, and a maximum of 75 DEGF in hot weather.
    - d. Provide two entrance doors with dead-bolt locks and two keys per lock. Stairs and landing shall be provided at both doors.
    - e. The office shall conform to the Occupational Safety and Health Act of 1970 (PL 91-596).

- 2. Lighting and Electric Power: Provide adequate intensity fluorescent ceiling lighting and electric wall receptacles for entire floor space.
- 3. Sanitary Facilities: Equip the field office with sanitary facilities for exclusive use of the CM. Provide one bathroom.
  - a. Provide bathroom suitably enclosed within the field office, equipped with hot and cold running potable water and sewage/waste connection to lawful disposal facilities.
    - If there is not a potable water line at the office site, Contractor shall provide a
      portable source of potable water for the office bathroom and kitchen area described
      below
  - b. Equip bathroom with a ADA approved sink and fixtures, flush type toilet, a wall mirror, toilet paper holder, wall mounted soap dispenser, wall mounted grab bar at toilet, waste receptacle, seat cover dispenser and paper towel dispenser.
- 4. Maintenance: Provide weekly or as needed janitorial services for the Office; furnish, replace and replenish light bulbs, wastebasket liners, copier paper, toner and maintenance, first aid kit, fluorescent tubes, toilet paper, paper towels, soap, seat covers for dispenser, and bottled water. Wash the office floors and washroom facilities at least once each week. Sweep office floors, empty trash and dust furnishings weekly. Wash office windows at the request of the CM.
- 5. Furnishings: Provide the following furnishings (which shall remain the property of the Contractor) in clean, neat and operating condition:
  - a. One Copy Machine; HP Color Jet Pro M283fdw or equal
  - b. Four Desks; 2.5 feet x 5 feet w/drawers
  - c. Two Corner Desks w/ drawers
  - d. Five Desk type swivel armchairs
  - e. Four Padded folding chairs
  - f. Four Four drawer, filing cabinets with lock and key
  - g. Three 3'x 4' metal erasable white board w/ supplies
  - h. Eight Metal Wastebaskets.
  - i. One Plan Rack, sized to hold minimum of 5 sets of full-sized plans.
  - j. One Lockable supply cabinet, double door
  - k. Two Wall mounted fire extinguishers.
  - 1. One Wall mounted First Aid Kit.
  - m. One Bottled Water refrigerated type water cooler and water supply.
  - n. One Standard 14.3 cubic foot refrigerator.
  - o. One 3'x4' Corkboard
  - p. Four Laminated 2'6"x6' folding tables (one not shown on drawing)
  - q. Two Exterior heavy duty boot scrappers
  - r. One ADA entry ramp to Office (field constructed by Contractor if required by CM)
  - s. One Integral sink/counter/cabinet at location shown
  - t. Two Awnings over entrance doors
  - u. One -20 gallon hot water heater
  - v. General layout of CM Office to be provided (below). Not all items listed throughout this specification are shown. The CM shall approve the floor plan and furnishings for this field office prior to its shipment to the site.



B. CM's Parking Area: Provide adequate parking space, adjacent to the office for 4 cars for CM staff only. Provide an acceptable driveway to the parking area. Provide "CM Parking Only" signage.

#### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

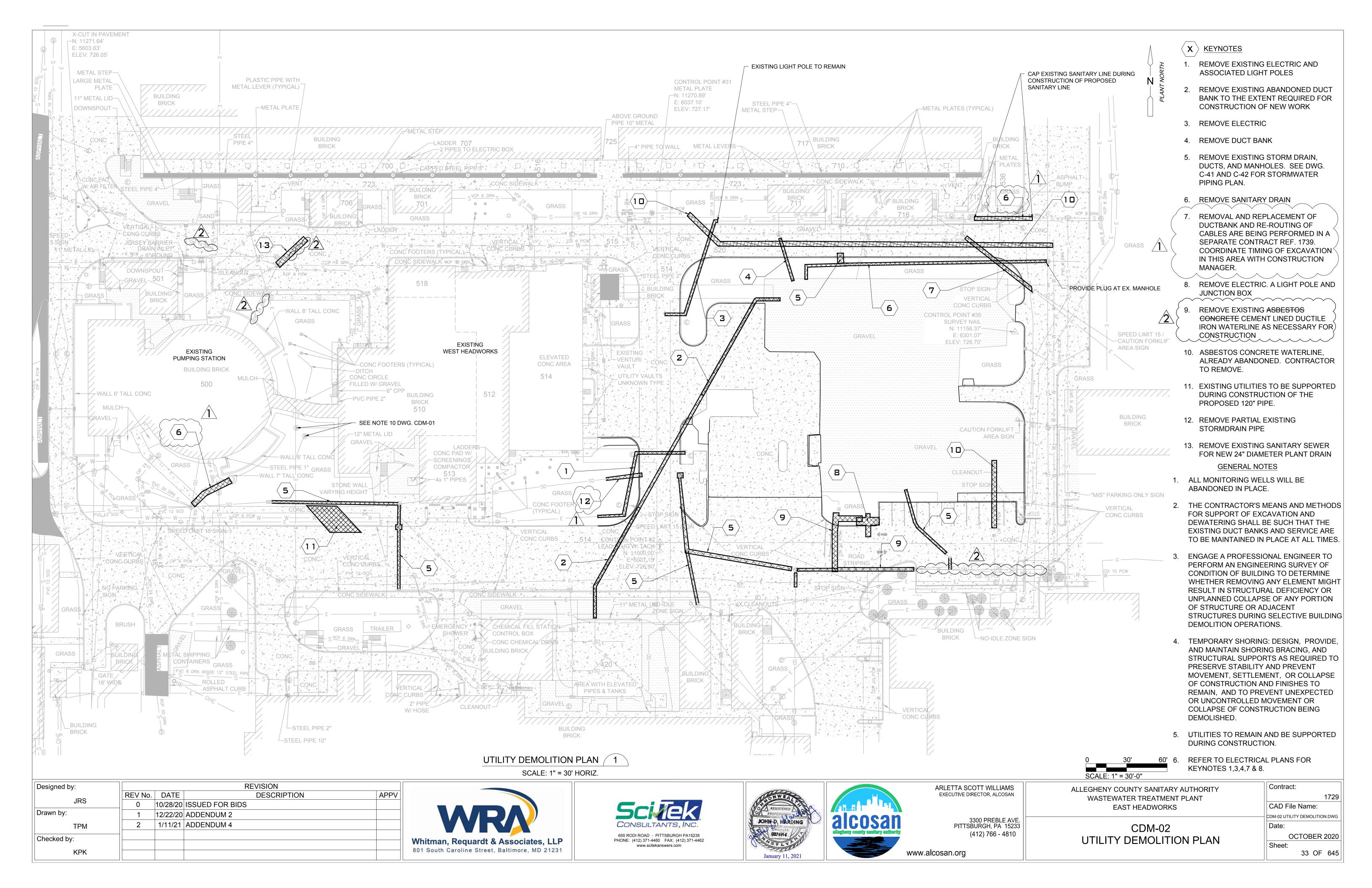
- A. Site office:
  - 1. Willscot 64' x 12' Modular Office Trailer.
  - 2. Or Approved Equal.

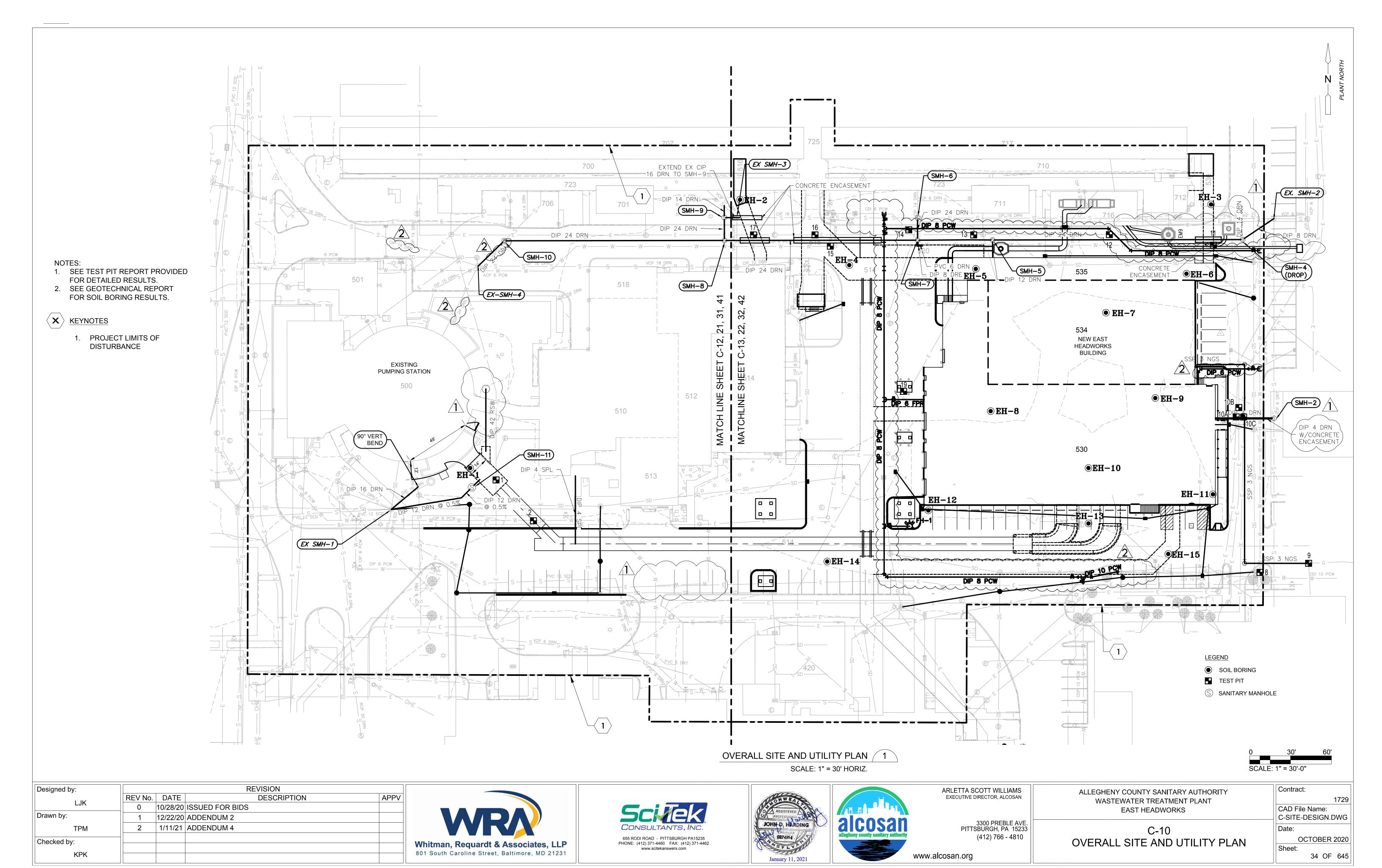
#### PART 3 - EXECUTION

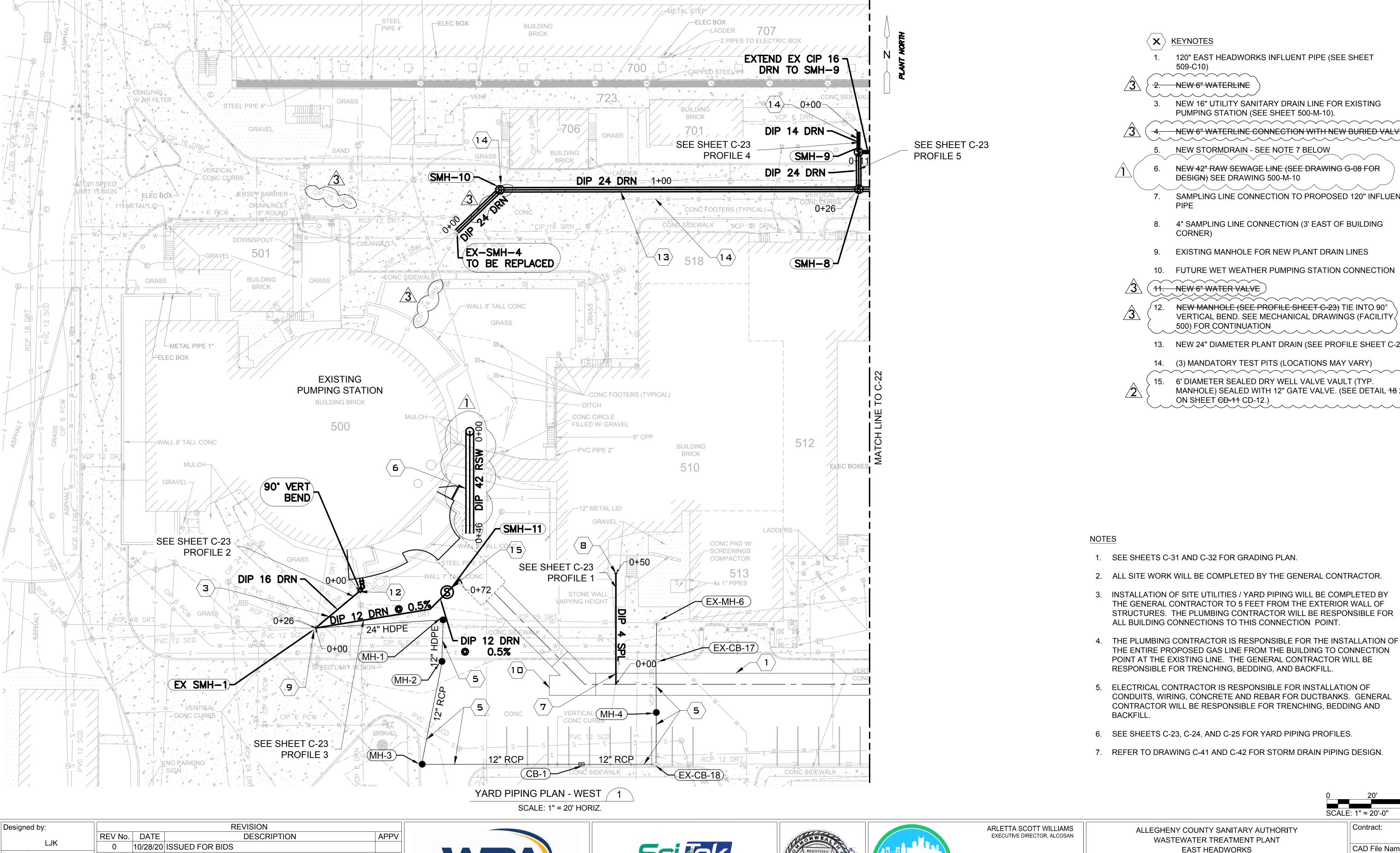
#### 3.1 INSTALLATION

- A. General Contractor to deliver and install site office; trailer shall be securely installed, level and plumb. Responsible for trailer, HVAC, heat trace and furnishings' maintenance. New 64' x 12' Modular Office Trailer to be located in the same location as the removed 66' x 13' trailer with entrance doors facing south.
- B. Plumbing contractor to install potable water and sanitary pipe and make reconnections to existing utilities as shown on drawings. Water and sanitary lines to be hung from trailer in a neat and organized manner. Responsible for all plumbing and sanitary maintenance.
- C. Owner to provide power. Responsible for electrical connections between source and breaker box.
- D. ALCOSAN/CM responsible for all IT maintenance.

#### **END OF SECTION**







120" EAST HEADWORKS INFLUENT PIPE (SEE SHEET

NEW 16" UTILITY SANITARY DRAIN LINE FOR EXISTING PUMPING STATION (SEE SHEET 500-M-10).

NEW 42" RAW SEWAGE LINE (SEE DRAWING G-08 FOR

- SAMPLING LINE CONNECTION TO PROPOSED 120" INFLUENT
- EXISTING MANHOLE FOR NEW PLANT DRAIN LINES
- 10. FUTURE WET WEATHER PUMPING STATION CONNECTION

NEW MANHOLE (SEE PROFILE SHEET C-23) TIE INTO 90° VERTICAL BEND. SEE MECHANICAL DRAWINGS (FACILITY

- 13. NEW 24" DIAMETER PLANT DRAIN (SEE PROFILE SHEET C-25)
- 14. (3) MANDATORY TEST PITS (LOCATIONS MAY VARY)

15. 6' DIAMETER SEALED DRY WELL VALVE VAULT (TYP. MANHOLE) SEALED WITH 12" GATE VALVE. (SEE DETAIL 18 20

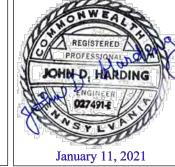
- 2. ALL SITE WORK WILL BE COMPLETED BY THE GENERAL CONTRACTOR.
- 3. INSTALLATION OF SITE UTILITIES / YARD PIPING WILL BE COMPLETED BY THE GENERAL CONTRACTOR TO 5 FEET FROM THE EXTERIOR WALL OF STRUCTURES. THE PLUMBING CONTRACTOR WILL BE RESPONSIBLE FOR ALL BUILDING CONNECTIONS TO THIS CONNECTION POINT.
- THE ENTIRE PROPOSED GAS LINE FROM THE BUILDING TO CONNECTION POINT AT THE EXISTING LINE. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR TRENCHING, BEDDING, AND BACKFILL
- 5. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF CONDUITS, WIRING, CONCRETE AND REBAR FOR DUCTBANKS. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR TRENCHING, BEDDING AND
- SEE SHEETS C-23, C-24, AND C-25 FOR YARD PIPING PROFILES.
- 7. REFER TO DRAWING C-41 AND C-42 FOR STORM DRAIN PIPING DESIGN.



10/28/20 ISSUED FOR BIDS Drawn by: 12/22/20 ADDENDUM 2 1/5/21 | ADDENDUM 3 TPM | 1/11/21 | ADDENDUM 4 Checked by: KPK





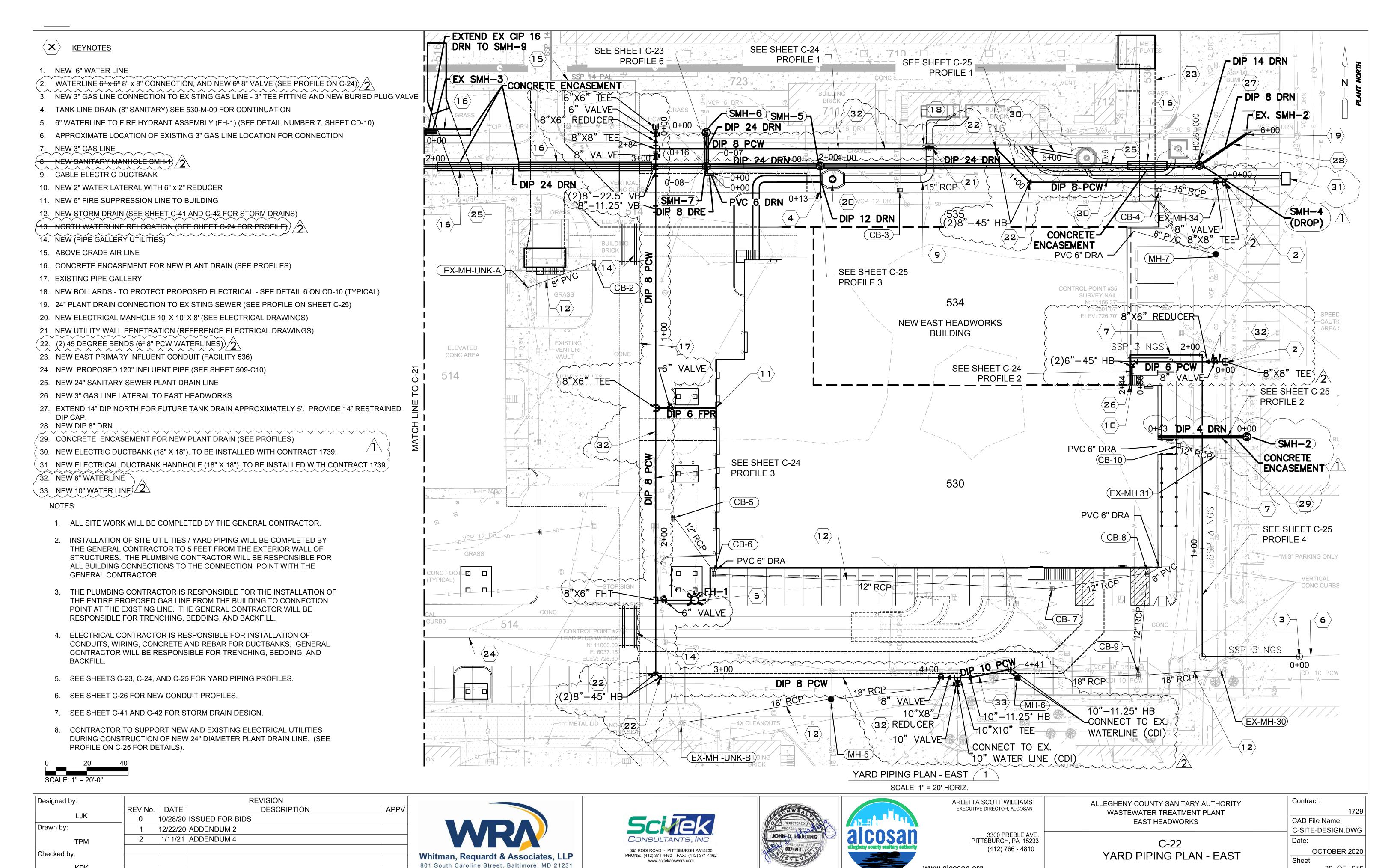




3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766 - 4810

C-21 YARD PIPING PLAN - WEST Contract: 1729 CAD File Name: C-SITE-DESIGN.DWG

> OCTOBER 2020 Sheet: 38 OF 645

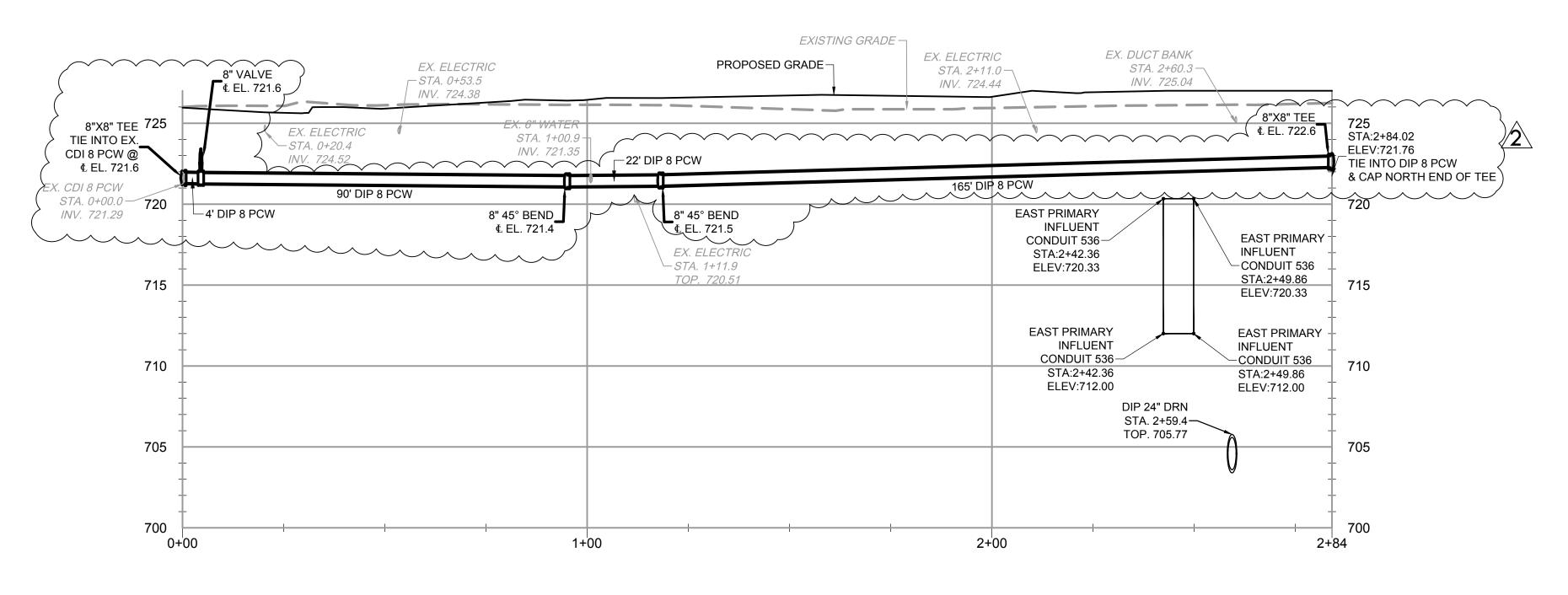


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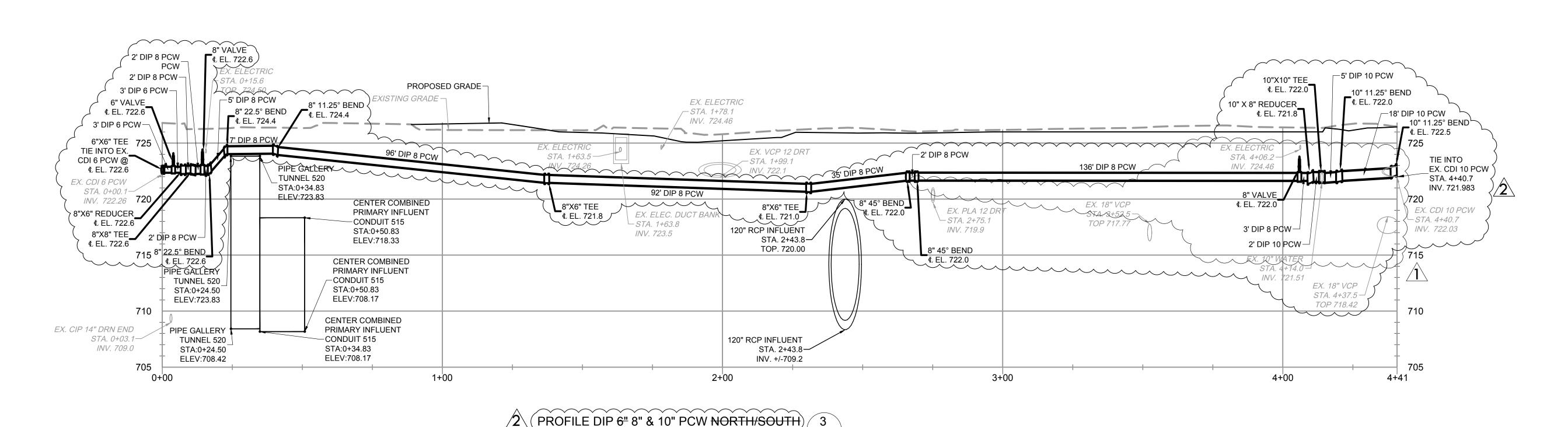
**KPK** 





# **NOTES**

- SEE SHEETS C-21 AND C-22 FOR YARD PIPING PLAN VIEW WEST AND EAST.
- 2. ALL VALVES SHOWN ON PROFILES WILL HAVE CASTINGS ACCESSIBLE FROM GRADE.



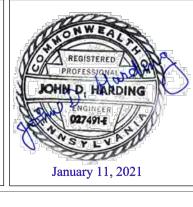
SCALE: 1" = 20' HORIZ.

1" = 5' VERT.

**REVISION** Designed by: APPV REV No. DATE DESCRIPTION 10/28/20 ISSUED FOR BIDS Drawn by: 12/22/20 ADDENDUM 2 | 1/11/21 | ADDENDUM 4 TPM Checked by:









|    | ARLETTA SCOTT WILLIAMS EXECUTIVE DIRECTOR, ALCOSAN |
|----|--|
|    |  |
| an | 3300 PREBLE AVE<br>PITTSBURGH, PA 1523             |

| 3300 PREBLE AVE.                         |  |
|--|--|
| 3300 PREBLE AVE.<br>PITTSBURGH, PA 15233 |  |
| (412) 766 - 4810                         |  |
|  |  |

| ALLEGHENY COUNTY SANITARY AUTHORITY |
|-------------------------------------|
| WASTEWATER TREATMENT PLANT          |
| EAST HEADWORKS                      |
|                                     |

SSP 3" NGS

─STA. 0+11.2

TOP. 722.99

EX. ELECTRIC

┌STA. 0+15.5

TOP. 722.81

3' DIP 6 PCW-

6" 45° BEND

⊈ EL. 721.6

34' DIP 6 PCW

-3' DIP 8 PCW

-STA. 0+04.5

TOP 719.97

SCALE: 1" = 20' HORIZ.

1" = 5' VERT.

-PROPOSED GRADE

EXISTING GRADE

725

-9' DIP 6 PCW

\_6" 45° BEND

**\_**€ EL. 721.6

715

710

705

0+56

STA:0+55.61

ELEV:721.34

6"X2" REDUCER

TIE INTO EAST HEADWORKS

2" SERVICE LINE WITH

EX. ELECTRIC

8"X6" REDUĆER\_

715

710

705

8" VALVE

£ EL. 721.6

4' DIP 8 PCW-

TIE INTO

EX. CDI 8 PCW

STA. 0+00.0-

INV. 721.24

8" X 8" TEE

EX CDI 8 PCW @

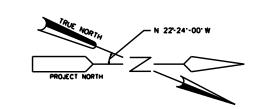
€ EL. 721.6

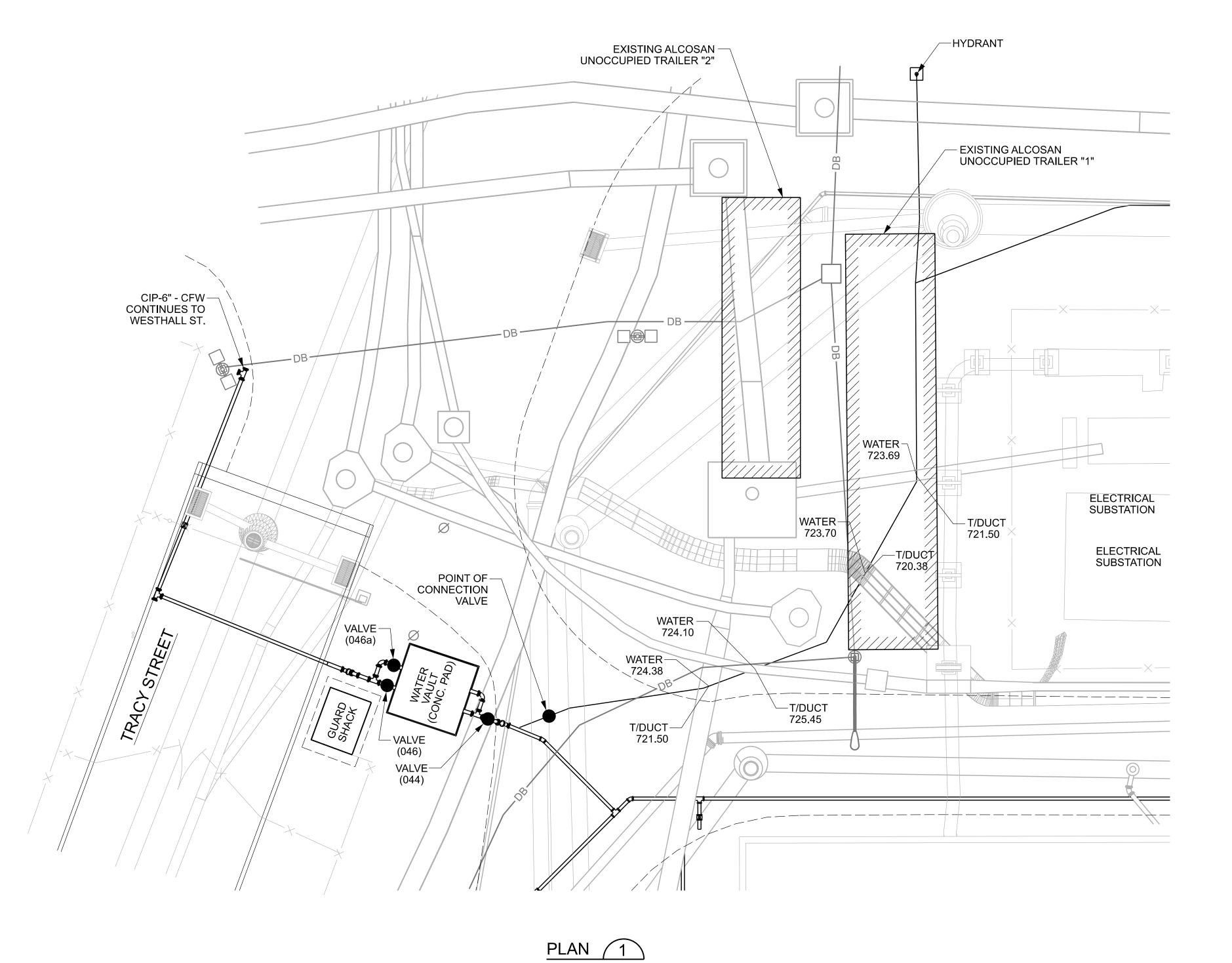
⊈ EL. 721.6

STA. 0+09.6-

| WASTEWATER TREATMENT PLANT | 1729                           |
|----------------------------|--------------------------------|
| EAST HEADWORKS             | CAD File Name:                 |
|                            | C-23 - 25 YARD PIPING PROFILES |
| C-24                       | Date:                          |
| YARD PIPING PROFILES       | OCTOBER 2020                   |
| TAND FIF ING FIXOUELS      | Sheet:                         |
|                            | 41 OF 645                      |

Contract:



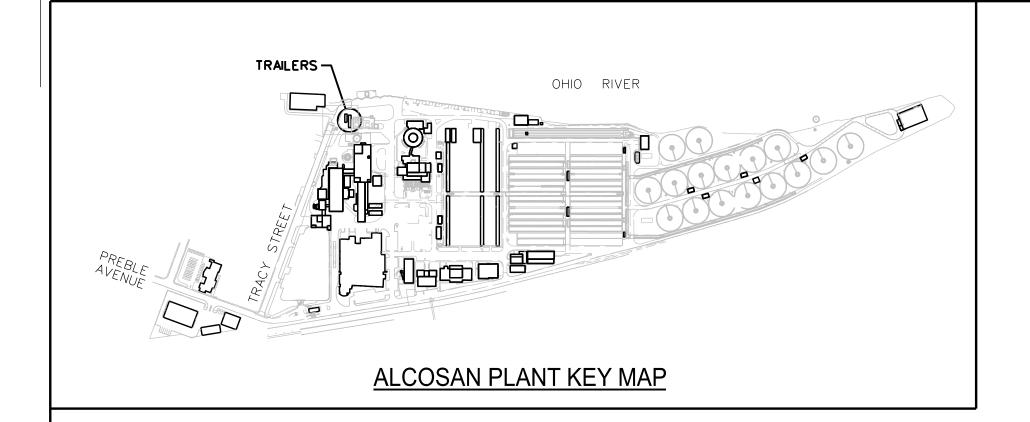


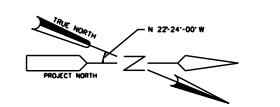
NOTE: 1. ALCOSAN PLANT ELEVATION IS 727.00

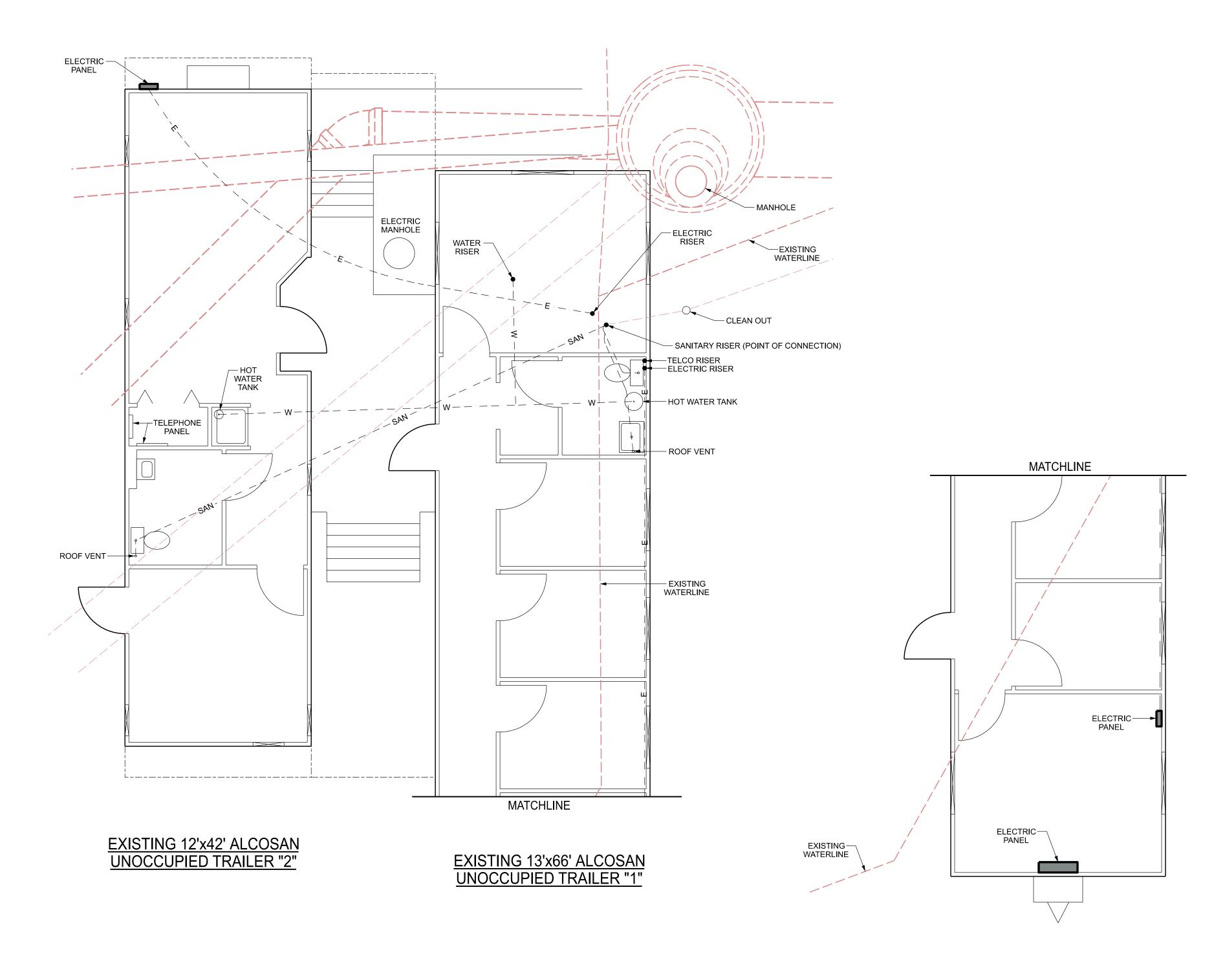
SCALE: 1" = 10'

10 5 0 5 10

| Designed by:  | REVISION                      |  |  |                                    | ARLETTA SCOTT WILLIAMS                     | ALLEGHENY COUNTY SANITARY AUTHORITY | Contract:           |
|---------------|-------------------------------|--|--|------------------------------------|--|-------------------------------------|---------------------|
|               | REV No. DATE DESCRIPTION APPV |  |  |                                    | EXECUTIVE DIRECTOR, ALCOSAN                | WASTEWATER TREATMENT PLANT          |                     |
| D. COPENHAVER |                               |  |  |                                    |  |                                     | CAD File Name:      |
| Drawn by:     |                               |  |  |                                    |  |                                     |                     |
|               |                               |  |  | alcosan                            | 3300 PREBLE AVE.  <br>PITTSBURGH, PA 15233 | EXISTING WATERLINE ELEVATIONS       | Date:               |
| K. WILCOX     |                               |  |  | allegheny county sanitary authorit | (412) 766 - 4810                           |                                     | 01/14/2021          |
| Checked by:   |                               |  |  |                                    | (112)100 1010                              | I ON EXISTING ALCOSAN               |                     |
|               |                               |  |  |                                    | www.alcosan.org                            | UNOCCUPIED TRAILERS                 | Sheet:              |
| S. MILLER     |                               |  |  |                                    | www.aicosaii.oig                           |                                     | ]  1 of 1  <b> </b> |







LEGEND:

Designed by:

---- Surface mounted utilities \_\_\_\_ UNDERGROUND UTILITIES ----- OVERHEAD ROOF

REV No. DATE

ARLETTA SCOTT WILLIAMS EXECUTIVE DIRECTOR, ALCOSAN

3300 PREBLE AVE. PITTSBURGH, PA 15233

(412) 766 - 4810

ALLEGHENY COUNTY SANITARY AUTHORITY WASTEWATER TREATMENT PLANT

**EXISTING TRAILERS ALCOSAN PLANT** 

| _  | SCALE: <sup>1</sup> / <sub>4</sub> " = 1'-0" |        |                   |   |         |  |
|----|--|--------|-------------------|---|---------|--|
| 2  | 1  | 0      | 2                 | 4 |         |  |
|    | Со   | ntract | t:                |   |         |  |
|    |  |        | e Name<br>Utility |   | lan     |  |
| NT |  | ite:   |                   |   | <u></u> |  |

Sheet:

12/15/2020

D. COPENHAVER Drawn by: K. WILCOX Checked by: S. MILLER

REVISION

DESCRIPTION

APPV



ENLARGED UTILITY PLAN