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Seal

Revisions  
No. Description Date  
01 REVISION 1 - BID SUBMISSION 09.03.2021

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Center  
100 Tech St, Pittsburgh, PA 15213

BID SET

UTILITY PLAN

Scale	1" = 30'
Drawn By	NRK
Checked By	SML
Date	August 20, 2021
BCJ Project Number	20201

CU101

## UTILITY NOTES

1. THESE PLANS ARE COMPLETED WITH EXISTING BOUNDARY AND TOPOGRAPHY INFORMATION BASED ON A PLAN TITLED "ALTA/NPS LAND TITLE SURVEY" FOR THE "CMU HEALTH AND WELLNESS CENTER" PROJECT PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC., DATED OCTOBER 27, 2020.
2. THE CONTRACTOR IS RESPONSIBLE TO BECOME THOROUGHLY FAMILIAR WITH THE ENGINEERING, DRAINAGE, AND UTILITY STANDARDS OF THE LOCAL MUNICIPALITY AND COUNTY THAT THE PROJECT IS LOCATED IN. ALL LOCAL MUNICIPAL AND COUNTY STANDARDS WILL TAKE PRECEDENCE OVER THE DETAILS, SPECIFICATIONS, AND NOTES PROVIDED ON THESE DRAWINGS, UNLESS SPECIFICALLY ADDRESSED OTHERWISE BY LANGAN DURING THE PROJECT UPDATES PROVIDED TO THE CONTRACTOR.
3. THE CONTRACTOR SHALL NOTIFY ONE CALL OF PENNSYLVANIA, AND ANY OTHER UTILITY COMPANIES NOT REPRESENTED BY ONE CALL OF PENNSYLVANIA, 72 HOURS PRIOR TO CONSTRUCTION FOR LOCATION OF EXISTING UTILITIES. NOTIFY ONE CALL OF PENNSYLVANIA AT 1-800-242-1776.
4. TRENCH DEPTH REQUIREMENTS MEASURED FROM FINISHED GRADE SHALL MEET THE FOLLOWING:
  - STORM SEWER: DEPTHS, ELEVATIONS, AND GRADES AS INDICATED ON DRAWINGS.
  - SANITARY SEWER: DEPTHS, ELEVATIONS, AND GRADES AS INDICATED ON DRAWINGS.
  - WATER: DEPTHS, ELEVATIONS, AND GRADES AS INDICATED ON DRAWINGS. 48 INCHES BELOW THE FROST LINE OR ESTABLISHED BY THE LOCAL BUILDING OFFICIAL OR WATER COMPANY, WHICHEVER IS DEEPER.
5. UTILITY TESTING INCLUDING, BUT NOT LIMITED TO, WATER PRESSURE TESTING, WATER SYSTEM FLUSHING, BACTERIOLOGICAL TESTING, VIDEO CAMERA TESTING, MANDREL TESTING, OR ANY OTHER TESTING REQUIRED BY LOCAL, COUNTY, OR STATE AGENCIES PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, AND CERTIFICATE OF OCCUPANCY BEING ISSUED, SHALL BE COORDINATED AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE ENGINEER OF RECORD SHALL TEST UTILITIES 48 HOURS PRIOR TO ALL TESTING. THE CONTRACTOR IS SOLELY RESPONSIBLE TO CONTACT AND COORDINATE WITH THE LOCAL COUNTY OFFICIALS AND AGENT TO PRESENT AT ALL INSPECTIONS. LOCAL FIRE INSPECTORS SHALL BE INVITED TO INSPECT ALL FIRE SERVICE LINES PRIOR TO BACKFILLING OF TRENCHES.
6. THE LOCATIONS (VERTICAL AND HORIZONTAL) OF ALL EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF THE UTILITIES PRIOR TO CONSTRUCTION. ANY UTILITIES (WHETHER THEY ARE SHOWN OR NOT SHOWN ON THE DRAWINGS) DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S COST.
7. WHERE CONFLICTS ARISE BETWEEN EXISTING OR PROPOSED WATER LINES AND OTHER UTILITIES, STORMWATER CONVEYANCE SYSTEMS OR STRUCTURES, THE WATER LINES SHALL BE ADJUSTED BEAUFND AROUND THE CONFLICT AS NECESSARY IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
8. DUCTILE IRON WATER MAINS SHALL BE PAINTED WITH BLUE BANDS. CONTRACTORS SHALL INSTALL ALL NEW OR ALTERED WATER PIPES IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS AND / OR ACCORDING TO MANUFACTURER'S RECOMMENDED PROCEDURES.
9. ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED IN ACCORDANCE WITH AWWA STANDARDS, LATEST REVISIONS. DUCTILE IRON MAINS SHALL BE TESTED AT 150 PSI FOR 2 HOURS AND MEET AWWA STANDARD C-600. ALL NEW MAINS SHALL BE DISINFECTED PER AWWA STANDARD C-651. BACTERIOLOGICAL TESTS FOR 2 CONSECUTIVE DAYS SHALL BE APPROVED PRIOR TO PLACING SYSTEM INTO SERVICE. CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER OF RECORD WITH AWWA C-600 AND NSF-1 CERTIFICATIONS.
10. ALL WATER LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE SHALL BE ELECTRONICALLY LOCATABLE AND BE BRIGHTLY COLORED PLASTIC. THE SELECTION AND INSTALLATION OF "SEWER", THE PROTECTION TAPE MUST MEET THE REQUIREMENTS SPECIFIED WITHIN THE PWSA PROCEDURES MANUAL.
11. ALL SANITARY SEWER LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE SHALL BE INSTALLED DURING BACKFILLING AT LEAST TWO FEET ABOVE THE PIPE, AT LEAST TWO FEET BELOW THE FINISHED GRADE, AND MORE THAN TWO FEET FROM THE EXISTING PIPE. THE PROTECTION TAPE SHALL BE ELECTRONICALLY LOCATABLE AND BE BRIGHTLY COLORED OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "CAUTION WATER PIPE". THE TAPE SHALL HAVE AN EMBEDDED METALLIC DETECTABLE STRIP AND BE BLUE COLOR. PROTECTION TAPE SHALL BE TERRA-TAPE OR APPROVED EQUAL.
12. ALL GRANTY SANITARY SEWER PIPE SHALL BE PVC SDR26 WHEN CONNECTING TO A COMBINED SEWER MAIN.
13. AT THE POINT WHERE THE PROPOSED SANITARY SEWER CONSTRUCTION MEETS A LIVE, OR EXISTING SEWER, THE NEW SANITARY SEWER SHALL BE SECURELY PLUGGED UNTIL THE ENTIRE NEW SANITARY SEWER CONSTRUCTION IS COMPLETED AND READY FOR FINAL INSPECTION.
14. SANITARY SEWER CLEAUNOTS SHALL BE PROVIDED WITHIN FIVE FEET OF ALL BUILDING CONNECTIONS FOR ALL SEWER CONNECTIONS TO COMBINED SEWERS.
15. GRAVITY SANITARY SEWER LINES SHALL BE TESTED FOR INFILTRATION BY MEASURING FLOW OVER A V-NOTCH OR TESTED FOR EXFILTRATION BY FILLING THE LINE WITH WATER TO 10 FEET ABOVE THE INVERT OF THE MANHOLE. THE LIMITING RATE OF INFILTRATION SHALL NOT EXCEED 200 GALLONS PER 1-INCH DIAMETER PER MILE PER 24 HOURS. AN ALTERNATE TESTING METHOD SHALL BE AIR PRESSURE TESTING AT 5 PSI FOR A DURATION OF 10 MINUTES YIELDING NO OBSERVED DROP IN PRESSURE.
16. ANY UTILITY CONFLICTS WITH 18 INCHES OR LESS VERTICAL SEPARATION BETWEEN OUTSIDE OF PIPE AND OUTSIDE OF PIPE SHALL BE CONCRETE ENCASED.
17. ONCE EXISTING UTILITIES TO REMAIN ARE LOCATED, ANY POTENTIAL CONFLICTS WITH OTHER UTILITIES, RELOCATED UTILITY POLES, ETC. SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
18. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECENT AND VARIOUS UTILITY COMPANY AND OTHER POSSIBLE HEARINGS HELD. THE CONTRACTOR MAY NOT BE ADVISED OF THE EXISTENCE OF UTILITIES BEING EXCAVATED OR COMPLETED. CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE, OR IN RIGHT-OF-WAYS AT LEAST 72 HOURS BEFORE ANY EXCAVATION OR GRADING TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR ANY UTILITIES WHICH HAVE BEEN PREVIOUSLY LOCATED AND CONSIDERED TO BE IN CONFLICT AND TO DIFFER FROM THOSE SHOWN ON THESE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF LANGAN ENGINEERING. CALL PENNSYLVANIA ONE CALL SYSTEM—1-800-242-1776.
19. ADJUST ALL EXISTING AND PROPOSED UTILITY FRAMES, GRATES, MANHOLE COVERS, VALVE BOXES, ETC. TO BE FLUSH WITH THE PROPOSED SURFACE ELEVATIONS WITHIN THE LIMITS OF CONSTRUCTION.
20. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS AND ANY LOCAL AUTHORITIES.
21. INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRADE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INFORMATION WHICH IS INCONSISTENT WITH THE CONTRACT DOCUMENTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO CONSTRUCTION.
22. STREET PAVEMENT AFFECTED BY TRENCHING OR OTHER CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ITS ORIGINAL AND PROPER CONDITION. ALL WORK PERFORMED WITHIN THE PUBLIC RIGHT-OF-WAY AND ALL RESTORATION OF STREET PAVEMENTS SHALL ABE BY THE POLICIES SET FORTH IN THE CITY OF PITTSBURGH RIGHT-OF-WAY PROCEDURES MANUAL.
23. CONTRACTOR TO RECEIVE ALLEGHENY COUNTY HEALTH DEPARTMENT APPROVAL PRIOR TO START OF CONSTRUCTION.
24. THESE PLANS ARE SUBJECT TO CHANGE PENDING THE FOLLOWING REGULATORY AGENCY REVIEW AND APPROVAL.
  - PENNSYLVANIA DEP
  - ALLEGHENY COUNTY HEALTH DEPARTMENT
  - ALLEGHENY COUNTY CONSERVATION DISTRICT
  - CITY OF PITTSBURGH
  - PITTSBURGH WATER AND SEWER AUTHORITY
  - CITY OF PITTSBURGH DEPARTMENT OF PUBLIC WORKS
25. CONTRACTOR TO CONFIRM THE LOCATIONS AND ELEVATIONS OF SANITARY AND STORM SEWERS PRIOR TO INSTALLATION. CONTRACTOR TO NOTIFY ENGINEER OF THE LOCATION AND ELEVATION OF THE EXISTING SEWER PRIOR TO INSTALLATION.
26. EXISTING TUNNEL LOCATION BASED UPON CAD RECEIVED FROM AEI ON 08/13/2021. CONTRACTOR TO FIELD VERIFY TUNNEL LOCATIONS PRIOR TO MAKING UTILITY CONNECTIONS.

## LEGEND

	EXISTING	PROPOSED
PROPERTY LINE	—	—
SANITARY SEWER	—	—
SANITARY CLEAUNOUT	—	—
SANITARY MANHOLE	—	—
STORM SEWER	—	—
CATCH BASIN/INLET	—	—
STORM MANHOLE	—	—
WATER LINE	—	—
WATER LINE	—	—
WATER HYDRANT	—	—
WATER VALVE	—	—
UTILITY POLE	*	—
ELECTRIC LINE	—	—
COMMUNICATIONS LINE	—	—
GAS LINE	—	—
UNDERGROUND TUNNEL	—	—

30 0 15 30  
SCALE IN FEET

NOT FOR CONSTRUCTION

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