



CITY OF PITTSBURGH
DEPARTMENT OF MOBILITY & INFRASTRUCTURE
CITY-COUNTY BUILDING

Application for an Encroachment on City Dedicated Right-Of-Way

Date: June 5 2024

Applicant Name: Carnegie Mellon University

Property Owner's Name (if different from Applicant): _____

Address: 4644 Forbes Avenue, Pittsburgh PA 15213

Phone Number: 412-268-6824 Alternate Phone Number: _____

Location of Proposed Encroachment: Forbes Avenue and Boundary Street

Ward: 4th Council District: 8 Lot and Block: 52-N-59

What is the properties zoning district code: EMI (zoning office 255-2241)

Planning/Zoning Case OneStop Number (if applicable): ZDR- 2023-11179

Is the existing right-of-way, a street or a sidewalk? Enc #1: Street ; Enc #2: Street ; Enc #3: Street

Width of Existing Right-of-Way (sidewalk or street): _____ (Before encroachment) Enc #1: 50' ; Enc #2: 50' ; Enc #3: Varies

Length of Existing Right-of-Way (sidewalk or street): _____ (Before encroachment) Enc #1: 333.92' ; Enc #2: 41.09' ; Enc #3: 325.85'

Width of Proposed Encroachment: Enc #1: 22.84'-29.79' ; Enc #2: 0.82' ; Enc #3: 7.45'-8.14'

Length of Proposed Encroachment: Enc #1: 333.37'-333.92' ; Enc #2: 40.67'-41.09' ; Enc #3: 325.85'

Number of feet the proposed object will encroach into the ROW: Enc #1: 22.84'-29.79' ; Enc #2: 0.82' ; Enc #3: 7.45'-8.14'

Description of encroachment: Enc#1: SOE walls, Nitrogen tank, remote filling station, & Pad, SWM vault, Storm manhole and cleanout Curb, water meter vault, retaining walls, ticket gate. Enc#2: Generator Pad, small portion of generator, Screening fence. Enc#3: Tree planters, road pull off, stone seating landscape features, corner bollards, Storm manholes and cleanout.

Reason for application:

To simplify truck maneuvering and curb cuts as part of this development, CMU is working to achieve a permanent encroachment easement to for a portion of the City property along Boundary Street, that is the area between the CMU property line parallel to Boundary Street and the Boundary Street Right-of-Way. CMU also intends to install tree planters in the sidewalk ROW along Forbes avenue to match the tree planters of similar buildings along Forbes per their masterplan. A pedestrian easement to the City is anticipated to be required and accounted for during planning. Another area of encroachment proposed is a portion of the emergency generator pad along the east side of Boundary Street.



CITY OF PITTSBURGH
DEPARTMENT OF MOBILITY & INFRASTRUCTURE
CITY-COUNTY BUILDING

APPLICATION CHECKLIST

*The following items are necessary in order to process any encroachment.
Applications missing documents remain in an incomplete status.*

- ☐ Letter of request to the Director of Mobility and Infrastructure
- ☐ **Property Owners'** Certificate of Insurance – listing the City of Pittsburgh as an additional insured in the amounts listed: Public Liability \$ 100,000.00 - \$ 300,000.00 Property Damage \$ 50,000.00 (must be the Property Owners Insurance)
- ☐ Profile picture or drawing with dimensions/specs of the proposed structure to be placed on the site of the encroached property – **STAMPED WITH ZONING APPROVAL or OneStop ZDR#**
- ☐ Copy of a survey or plot plan of the property
- ☐ Documentation from all corresponding utility companies stating approval/easement/agreement
- ☐ Application Fee \$500 made payable to Treasurer City of Pittsburgh, if paying by check

REMEMBER TO ATTACH ALL REQUIRED INFORMATION. (Letter to the Director, **Property Owner's** Insurance certificate - listing the City of Pittsburgh as an additional insured, maps, specs, zoning approved drawings or ZDR #, utility approval documentation, application fee of \$500.00)

For Office Use:

\$500.00 Application fee Received /Check # _____ Received Plot Plan or Survey _____

Received Required Insurance _____ Received detailed map of proposed encroachment _____

Received Utility Letters _____

Received drawing or picture of completed project _____

Received picture of proposed encroached property _____

All tax information in compliance _____ delinquent _____

June 4, 2024

Ms. Kim Lucas
Director
Department of Mobility and Infrastructure
414 Grant Street
Pittsburgh, PA 15219

**Re: ROW Encroachment Letter of Request
CMU – Richard King Mellon Hall of Sciences
4400 Forbes Ave, Pittsburgh, PA 15213
Langan Project No.: 250169701**

Dear Ms. Lucas:

Enclosed please find the following documents for the above-referenced project:

ROW Encroachment Letter of Request with the following attachments:

- Completed Paper Application.
- One copy of the legal description of the requested ROW encroachments.
- One copy of the ROW encroachment exhibit.
- One copy of partial utility approval letters.

Carnegie Mellon University (CMU) is developing approximately 2.9 acres within multiple parcels to be consolidated for an Interdisciplinary research and teaching facility with 4 levels of parking garage and 7 levels of institutional programming. The first floor will also include a lobby, restaurant amenities, and fine art gallery space. This proposed building will be approximately 345,000+/- GSF, and the surrounding site will include impervious pedestrian sidewalks and plaza, a service driveway, and landscaped areas. The development intends to use boundary street as the primary vehicle ingress and egress to the parking garage and loading dock.

To simplify truck maneuvering and curb cuts as part of this development, CMU is working to achieve a permanent encroachment easement to for a portion of the City property along Boundary Street, that is the area between the CMU property line parallel to Boundary Street and the Boundary Street Right-of-Way, CMU also intends to install tree planters in the sidewalk ROW along Forbes avenue to match the tree planters of similar buildings along Forbes per their masterplan. A pedestrian easement to the City is anticipated to be required and accounted for during planning. Another area of encroachment proposed is a portion of the emergency generator pad along the east side of Boundary Street. For more detailed information regarding

the areas of encroachment, please see the legal descriptions and ROW encroachment exhibit attached with this narrative.

As always, we look forward to working with you on this endeavor. Please contact me at (724) 514-5143 or egenoise@langan.com if you should have any questions or need any additional information.

Sincerely,
Langan Engineering and Environmental Services, LLC.

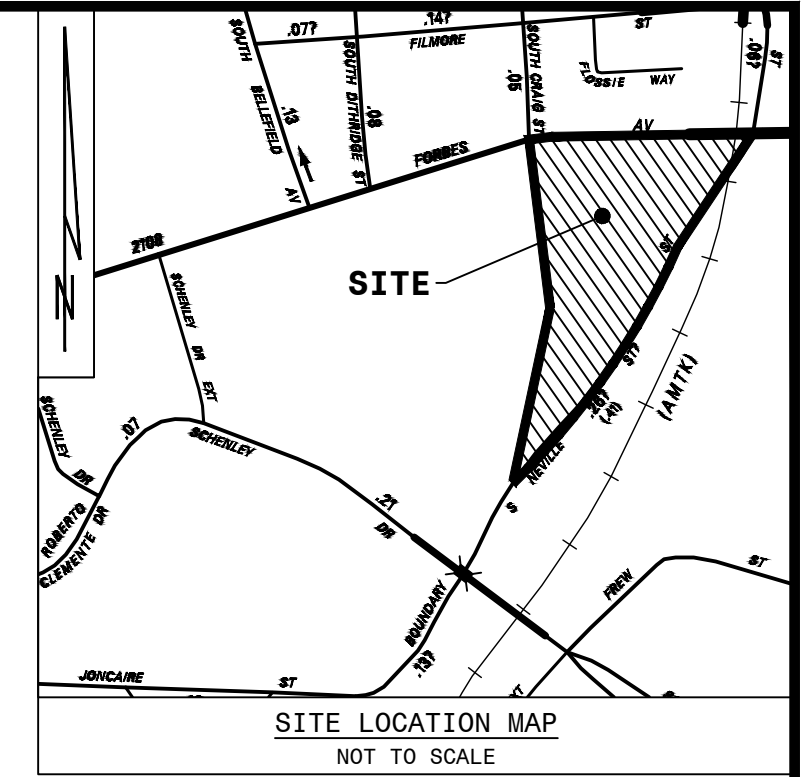
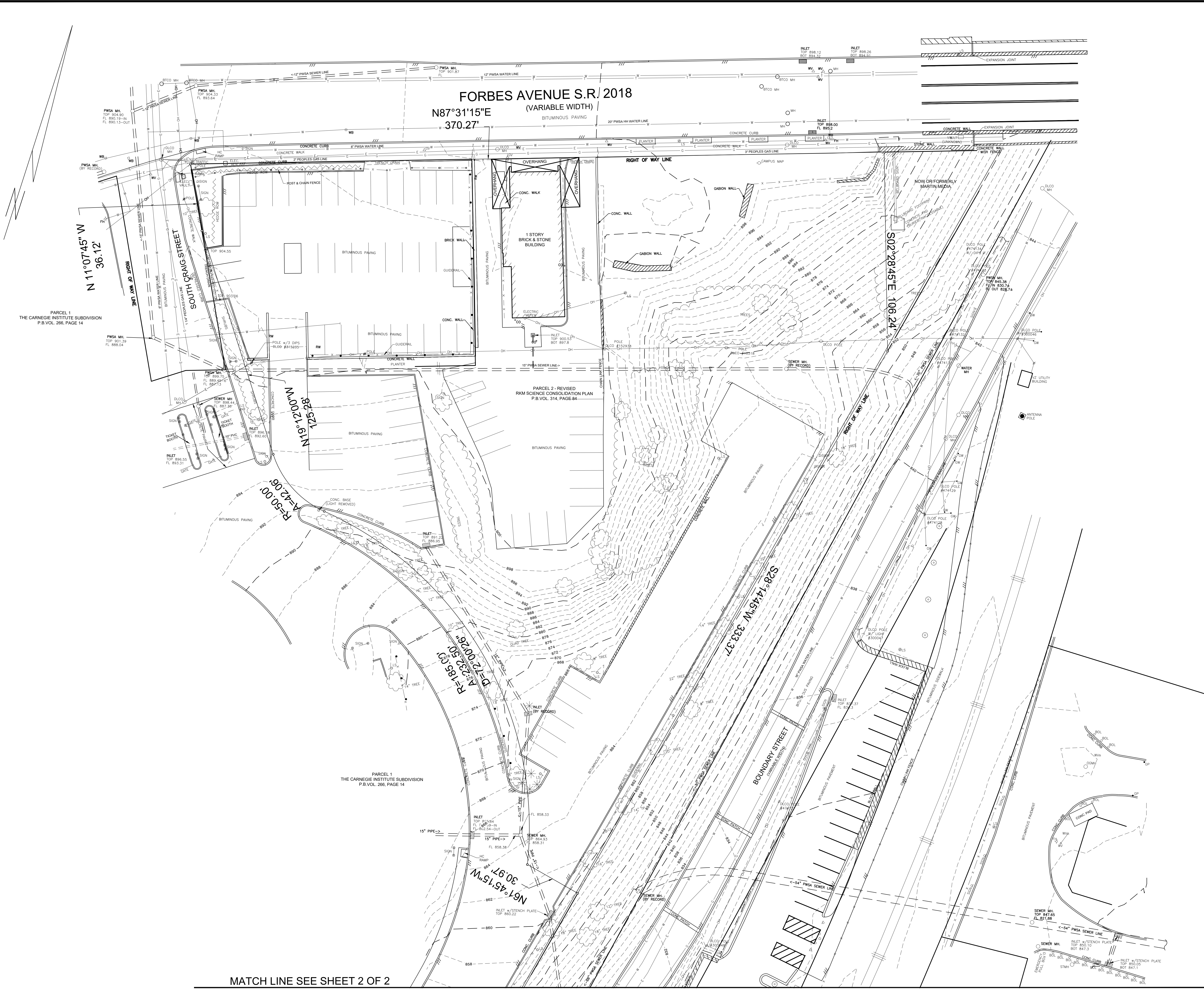


Erminio Genoese, P.E.
Project Engineer

C:\Users\jthorpe\OneDrive\Documents\Projects\1600016889 Carnegie Museums of Pittsburgh\01010 RKM Science Survey 2022\DWG\1 Base\16889.010 vsc.dwg
Print Date: 1/30/2024 2:35 PM User: J. Thorpe
Save Date: 1/30/2024 2:34 PM

16 OF 17

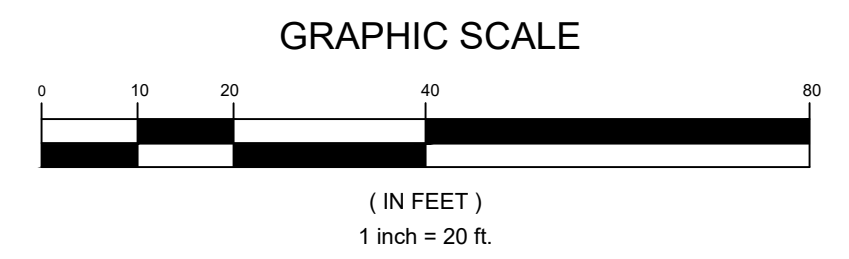
THE GATEWAY ENGINEERS, INC. RETAINS OWNERSHIP RIGHTS OF ALL DATA WITHIN THE PLANS. DATA CONTAINED WITHIN IS ONLY TO BE USED FOR ITS INTENDED PURPOSE BY ITS RESPONSIBLE PARTY. THE USE, REPLICATION, REPRODUCTION, OR REDISTRIBUTION OF DATA CONTAINED WITHIN IS STRICTLY PROHIBITED AND SUBJECT TO LEGAL ACTION.



- LEGEND
- | | |
|---|--------------------------------|
| DS - DOOR SILL | TL - SUBSURFACE LIGHTING LINE |
| VP - VENT PIPE | TL - TRAFFIC LIGHT |
| YO - YARD GRAB | TL - GAS LINE |
| WB - WATER BOX | TL - WATER LINE |
| HC - HANDICAP | TL - SUBSURFACE TELEPHONE LINE |
| CONC - CONCRETE | TL - SUBSURFACE ELECTRIC LINE |
| ELEC - ELECTRIC | TL - SUBSURFACE STEAM LINE |
| TELE - TELEPHONE | TL - OVERHEAD WIRES |
| MH - MANHOLE | TL - CABLE TV |
| TOP - TOP OF CASTING | TL - EXISTING SPOT ELEVATION |
| FL - FLOW LINE | TL - EXISTING CONTOURS |
| WV - WATER VALVE | TL - EXISTING INLET |
| GV - GAS VALVE | TL - EXISTING MANHOLE |
| FH - FIRE HYDRANT | TL - EXISTING SEWER |
| CO - CLEAN OUT | |
| RW - RETAINING WALL | |
| MB - MAILBOX | |
| OH - OVERHEAD | |
| SD - SATELLITE DISH | |
| RR - RAILROAD | |
| BOT - BOTTOM | |
| CSM - CULVERT | |
| ST - STORM | |
| GM - GAS METER | |
| JB - JUNCTION BOX | |
| CMP - CORRUGATED PLASTIC PIPE | |
| PVC - POLYVINYL CHLORIDE | |
| PWMA - PITTSBURGH WATER & SEWER AUTHORITY | |
| EGCO - EQUITABLE GAS CO. | |
| DLOCO - DUCKSHIRE LIGHT CO. | |
| BTCCO - VERIZON (FORMERLY BELL TELEPHONE CO.) | |

NOTE
THE UNDERGROUND UTILITIES SHOWN HEREON HAVE NOT BEEN PHYSICALLY LOCATED BY THE SURVEYOR. HOWEVER, THE INFORMATION WAS OBTAINED FROM EXISTING PLANS AND SURFACE FACILITIES. THE GATEWAY ENGINEERS, INC. MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. EITHER IN SERVICE OR ABANDONED. THE GATEWAY ENGINEERS, INC. DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE SHOWN AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.

MATCH LINE SEE SHEET 2 OF 2



GATEWAY ENGINEERS

The Gateway Engineers, Inc.
Full-Service Civil Engineering & Surveying
100 McMorris Road, Pittsburgh, PA 15205
www.GatewayEngineers.com 855-634-9284

REVISIONS:

JAMES A. BRETHAUER
REGISTERED PROFESSIONAL ENGINEER
STATE OF PENNSYLVANIA
SURVEYOR
No. 503478

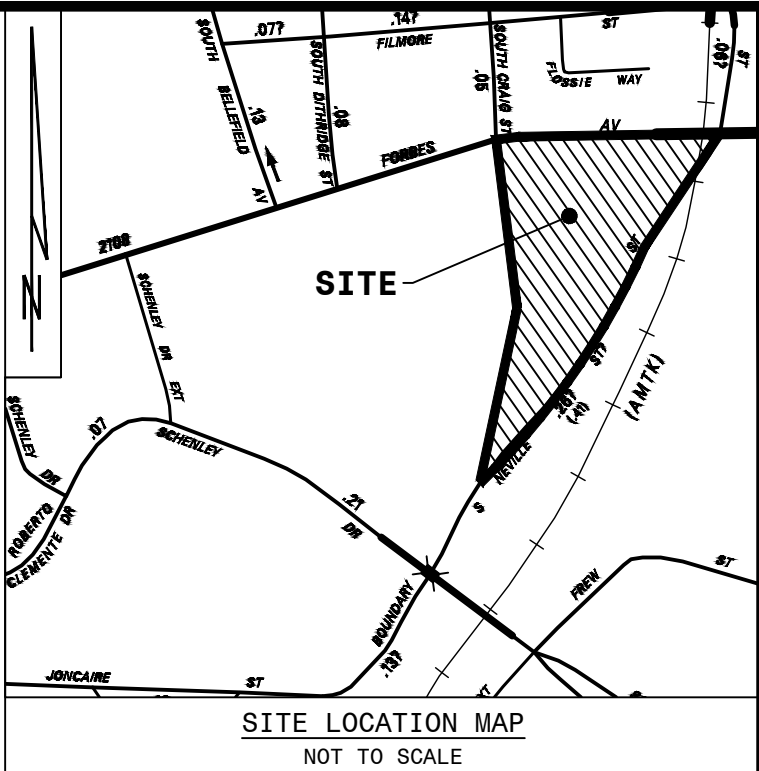
PLAN OF EXISTING CONDITIONS
SITUATE IN
4TH WARD, CITY OF PITTSBURGH
ALLEGHENY COUNTY, PA
MADE FOR
CARNEGIE MELLON UNIVERSITY

DATE: MARCH 15, 2022
SCALE: 1" = 20'

PROJECT No.: C-16889-0010
DRAWING No.: 51197 SH 1 OF 2

PM: JAB DB: MFR CB: ...

© Gateway Engineers, Inc. All Rights Reserved.

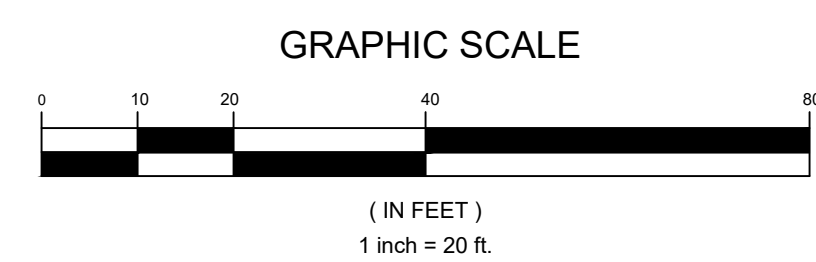



MATCH LINE SEE SHEET 1 OF 2

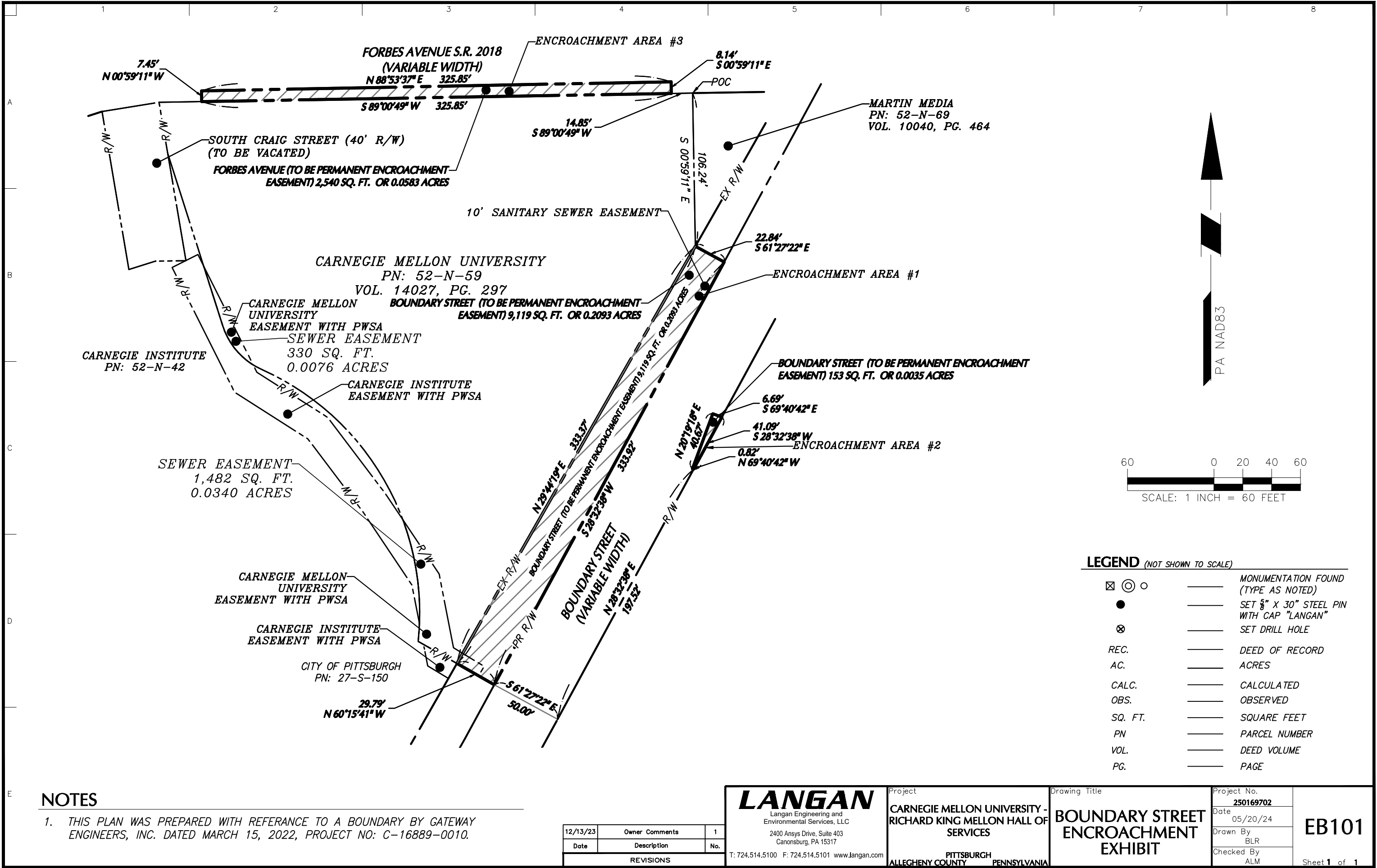


LGND			
DS - DOOR SILL	L		SUBSURFACE LIGHTING LINE
VP - VENT PIPE	TL		TRAFFIC LIGHT
YD - DOWN DRAIN	Q		GAS LINE
WB - WATER BOX	W		WATER LINE
HC - HANDICAP	S		SUBSURFACE TELEPHONE LINE
CT - CEMENT	T		SUBSURFACE ELECTRICAL LINE
ELEC - ELECTRIC	SE		SUBSURFACE STEAM LINE
TEL - TELEPHONE	SE		OVERHEAD WIRE
MH - MANHOLE	OH		CABLE TV
TOP - TOP OF	CATV		CABLE TV
FL - FLOW LINE	+ 80		EXISTING CONT'N ELEVATION
WW - WATER VALVE	80		EXISTING INLET
OV - OVERHEAD	80		EXISTING MANHOLE
FW - FIRE HYDRANT	80		EXISTING SEWER
C - CLEAN OUT			
RW - RETAINING WALL			
MB - MAILBOX			
OH - OVERHEAD			
SD - SATELLITE DISH			
LS - LIST STANDARD			
RR - RAILROAD			
BT - BOTTOM			
CLUV - CULVERT			
S - STORM			
GM - GAS METER			
J - JUNCTION BOX			
CP - CORRUGATED PLASTIC PIPE			
PVC - POLYVINYL CHLORIDE PIPE			
PO - PITTSBURGH WATER & SEWER AUTHORITY			
EQ - EQUIPABLE GAS CO.			
D - DOWNSIDE (NOT CO)			
BTCC - VENTURER (BELL TELEPHONE CO.)			

NOTE: THE UNDERGROUND UTILITIES SHOWN HEREON HAVE NOT BEEN PHYSICALLY LOCATED BY THE SURVEYOR. HOWEVER, THE INFORMATION WAS OBTAINED FROM EXISTING PLANS AND SURFACE FACILITIES. THE GATEWAY ENGINEERS, INC. MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. IT IS SERVICE OF ABANDONED. THE GATEWAY ENGINEERS, INC. DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE SHOWN AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.



	GATEWAY ENGINEERS	The Gateway Engineers, Inc. Full-Service Civil Engineering & Surveying 100 McMorris Road, Pittsburgh, PA 15205 www.GatewayEngineers.com 855-634-9284	
REVISIONS:		<p style="text-align: center;"> PLAN OF EXISTING CONDITIONS SITUATE IN 4TH WARD, CITY OF PITTSBURGH ALLEGHENY COUNTY, PA MADE FOR CARNEGIE MELLON UNIVERSITY </p>	
PM: JAB DB: MFR CB: __		DATE: MARCH 15, 2022 SCALE: 1" = 20'	PROJECT No.: C-16889-0010 DRAWING No.: 51197 SH 2 OF 2



NOTES

1. THIS PLAN WAS PREPARED WITH REFERENCE TO A BOUNDARY BY GATEWAY ENGINEERS, INC. DATED MARCH 15, 2022, PROJECT NO: C-16889-0010.

12/13/23	Owner Comments	1
Date	Description	No.
REVISIONS		

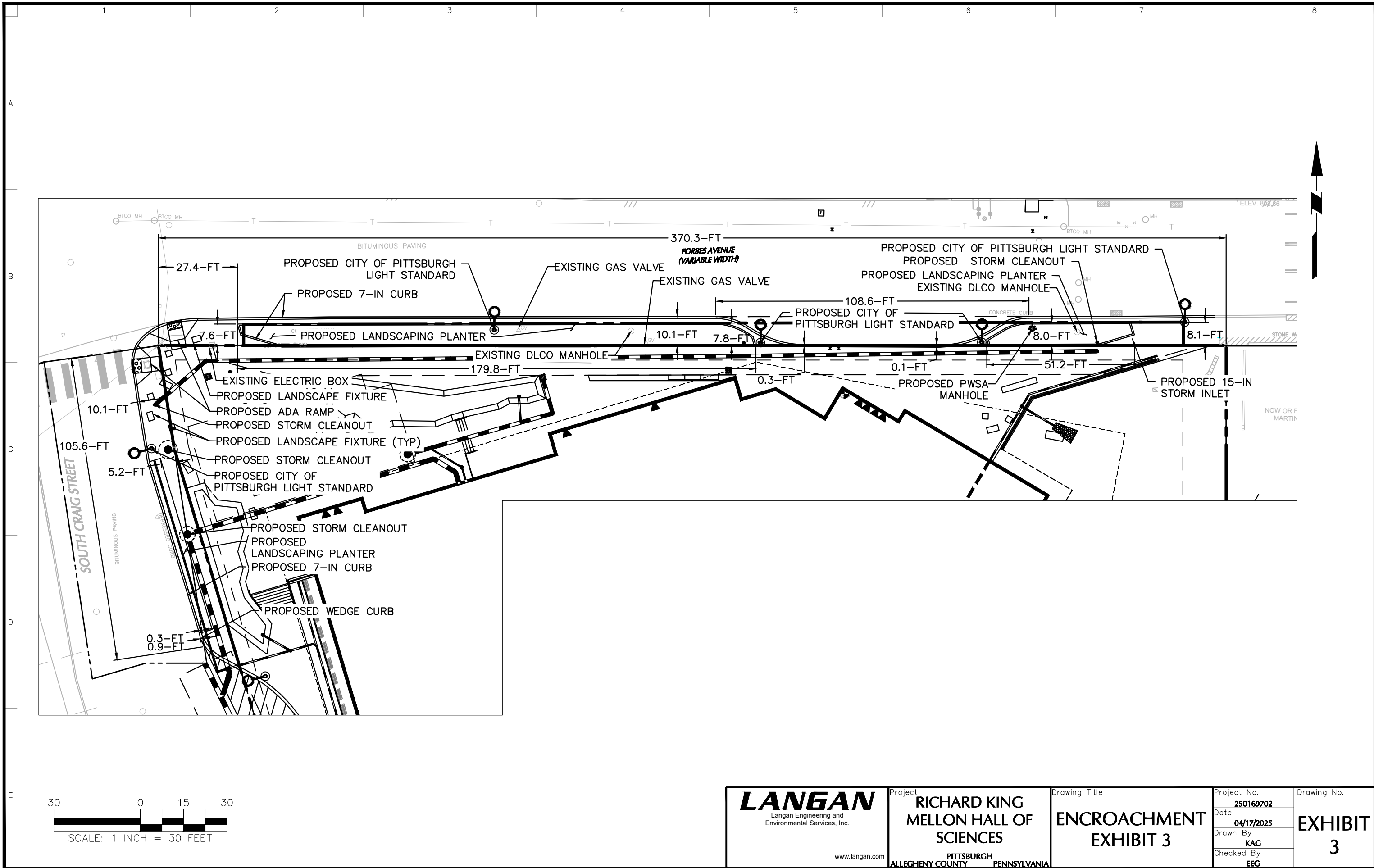
LANGAN
Langan Engineering and
Environmental Services, LLC
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317
T: 724.514.5100 F: 724.514.5101 www.langan.com

Project
**CARNEGIE MELLON UNIVERSITY -
RICHARD KING MELLON HALL OF
SERVICES**
**PITTSBURGH
ALLEGHENY COUNTY PENNSYLVANIA**

Drawing Title
**BOUNDARY STREET
ENCROACHMENT
EXHIBIT**

Project No.
250169702
Date
05/20/24
Drawn By
BLR
Checked By
ALM

EB101
Sheet 1 of 1



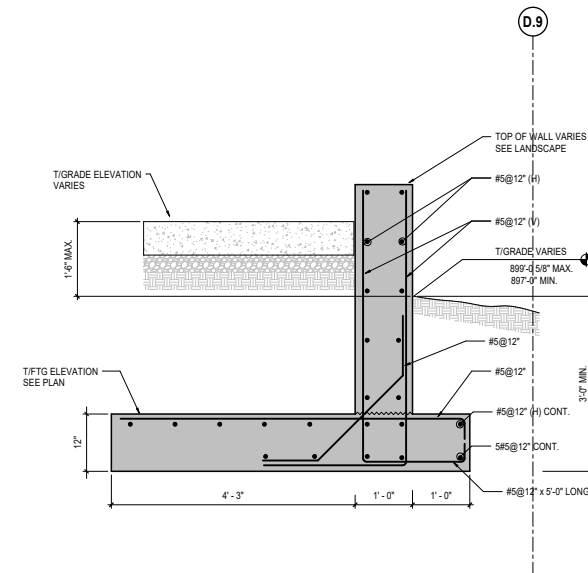
LANGAN Langan Engineering and Environmental Services, Inc. www.langan.com	Project RICHARD KING MELLON HALL OF SCIENCES PITTSBURGH ALLEGHENY COUNTY PENNSYLVANIA	Drawing Title ENCROACHMENT EXHIBIT 3	Project No. 250169702	Drawing No. EXHIBIT 3
			Date 04/17/2025	
			Drawn By KAG	
			Checked By EEG	



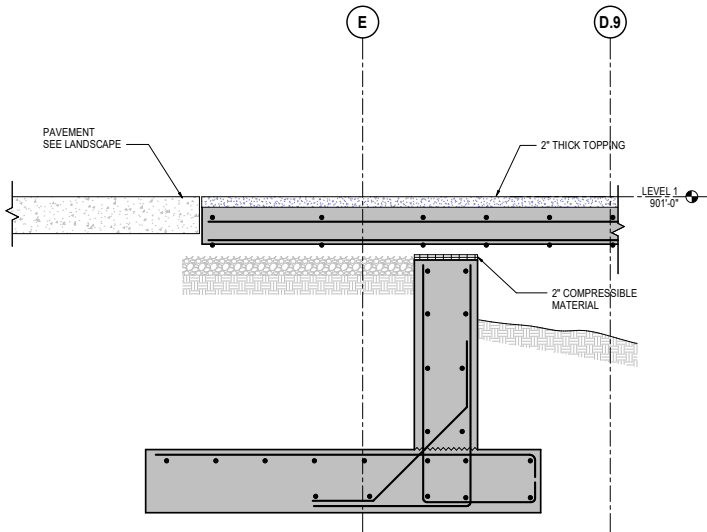
1 2 3 4 5 6 7 8

A

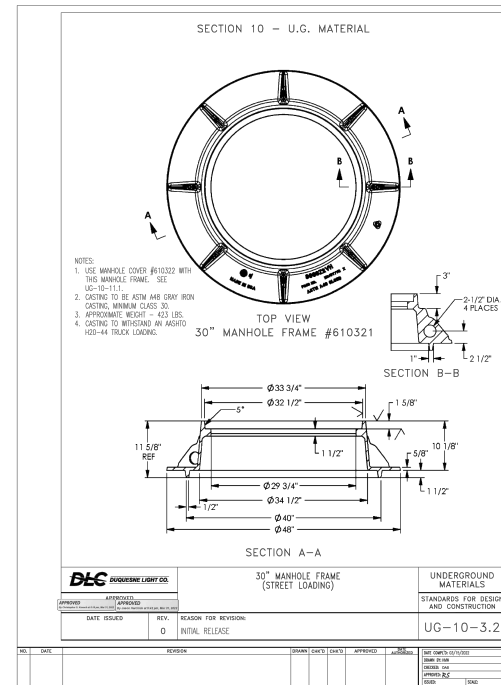
B



A NE RETAINING WALL SECTION
1" = 1'-0"



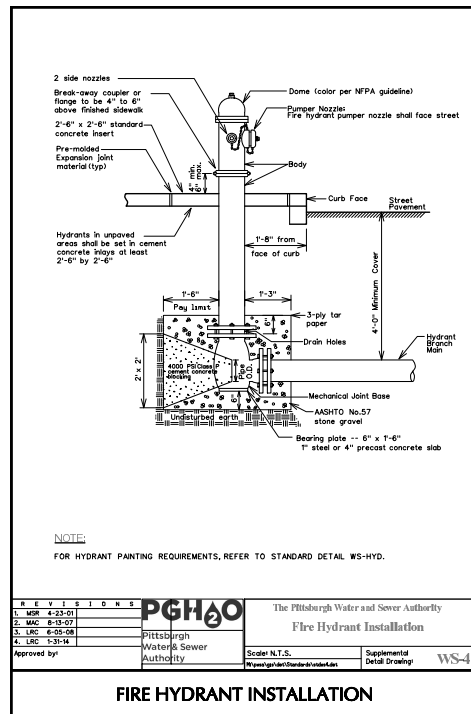
B NE RETAINING WALL UNDER L1 SLAB DETAIL
1" = 1'-0"



DLCO MANHOLE DETAILS

RETAINING WALL DETAILS

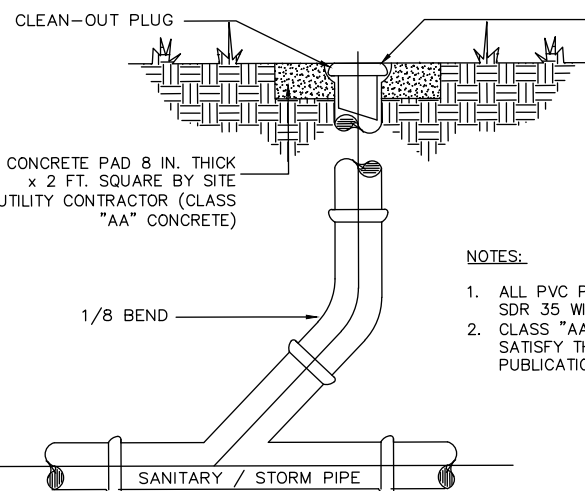
RETAINING WALL DETAILS



NOTE:
FOR HYDRANT PAINTING REQUIREMENTS, REFER TO STANDARD DETAIL WS-HYD.

REVISIONS	PGH20	The Pittsburgh Water and Sewer Authority
1. WSC 4-23-01		
2. WSC 5-13-07		
3. WSC 6-05-08		
4. WSC 10-01-14		
Approved by:	Pittsburgh Water & Sewer Authority	Scale: N.T.S.
		Supplemental Detail Drawing: WS-4
FIRE HYDRANT INSTALLATION		

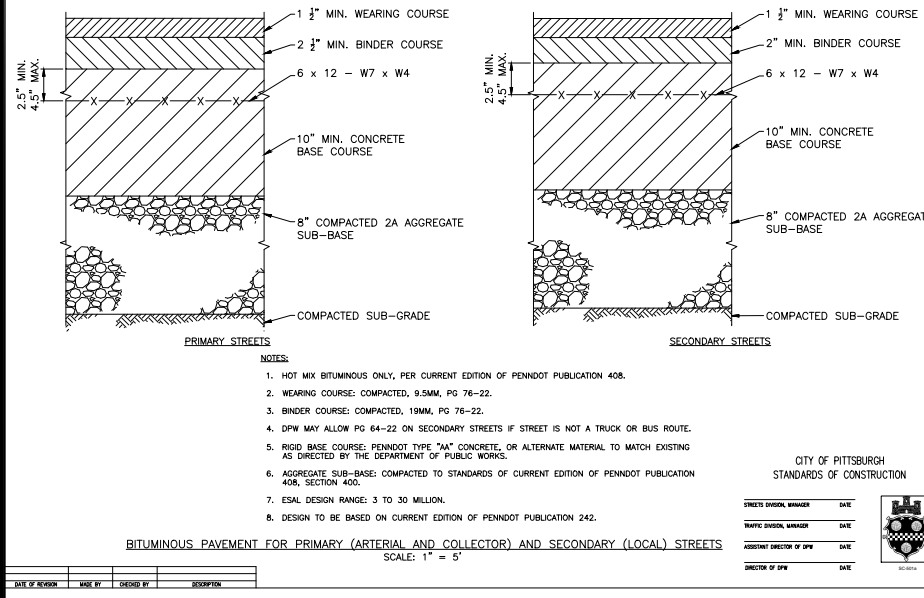
PWSA HYDRANT DETAILS



- NOTES:
- ALL PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH RUBBER GASKETED JOINTS.
 - CLASS "AA" CEMENT CONCRETE SHALL SATISFY THE REQUIREMENTS OF PADOT PUBLICATION 408, SECTION 704

PRIVATE CLEANOUT

CLEANOUT DETAILS



BITUMINOUS PAVING FOR PRIMARY (ARTERIAL AND COLLECTOR) AND SECONDARY (LOCAL) STREETS
SCALE: 1" = 5'

DOMI PAVEMENT SECTION DETAILS

LANGAN
Langan Engineering and Environmental Services, Inc.

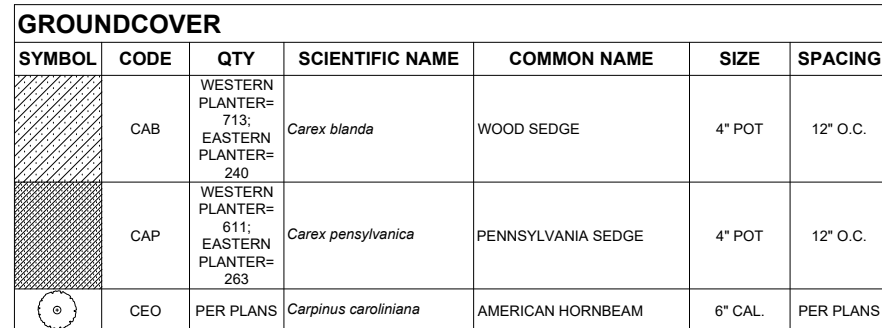
www.langan.com

Project
RICHARD KING
MELLON HALL OF SCIENCES
PITTSBURGH
ALLEGHENY COUNTY PENNSYLVANIA

Drawing Title
ENCROACHMENT
EXHIBIT 3
DETAILS

Project No.
250169702
Date
04/17/2025
Drawn By
KAG
Checked By
EEG

Drawing No.
DETAILS



FORBES LANDSCAPE PLANTER DETAILS



FORBES LANDSCAPE PLANTER DETAILS



LANDSCAPE FEATURE DETAILS










LANDSCAPE FEATURE DETAILS



CITY OF PITTSBURGH LIGHT STANDARD DETAILS

NOTE: ALL DIMENSIONS OF STRUCTURAL ELEMENTS PER STRUCTURAL ENGINEER RECOMMENDATIONS AND SHOWN FOR REFERENCE ONLY. CONFIRM ALL DIMENSIONS WITH STRUCTURAL ENGINEER.

LIGHT POST	POLE HEIGHT (FT)	DIAM. (FT)	DEPTH (FT)	TOP SURFACE CONDITION
	31.5	3	11	PLANTING
	31.5	3	6	PAVING
	12	2	5	PLANTING
	30	3	8	PLANTING
	30	3	5	PAVING
	30	3	11	PLANTING
	30	3	5	PAVING



FORBES PLAZA LANDSCAPE DETAILS



FORBES LANDSCAPE PLANTER DETAILS

www.langan.com

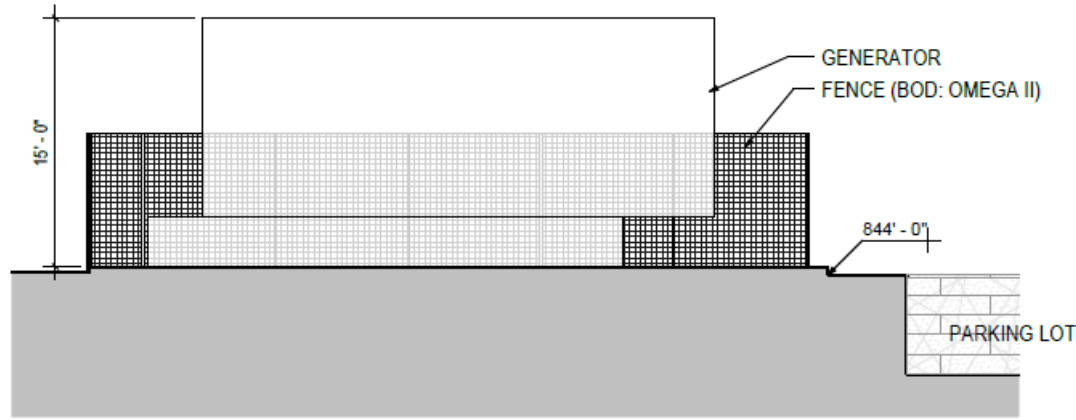
Drawing Title

**ENCROACHMENT
EXHIBIT 3
DETAILS**

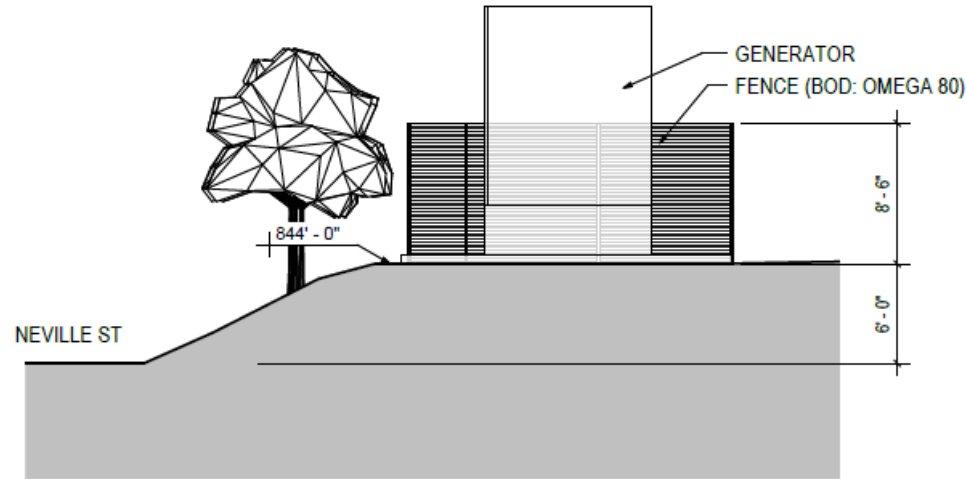
Project No.	250169702
Date	04/17/2025
Drawn By	KAG
Checked By	EEG

Drawing No.

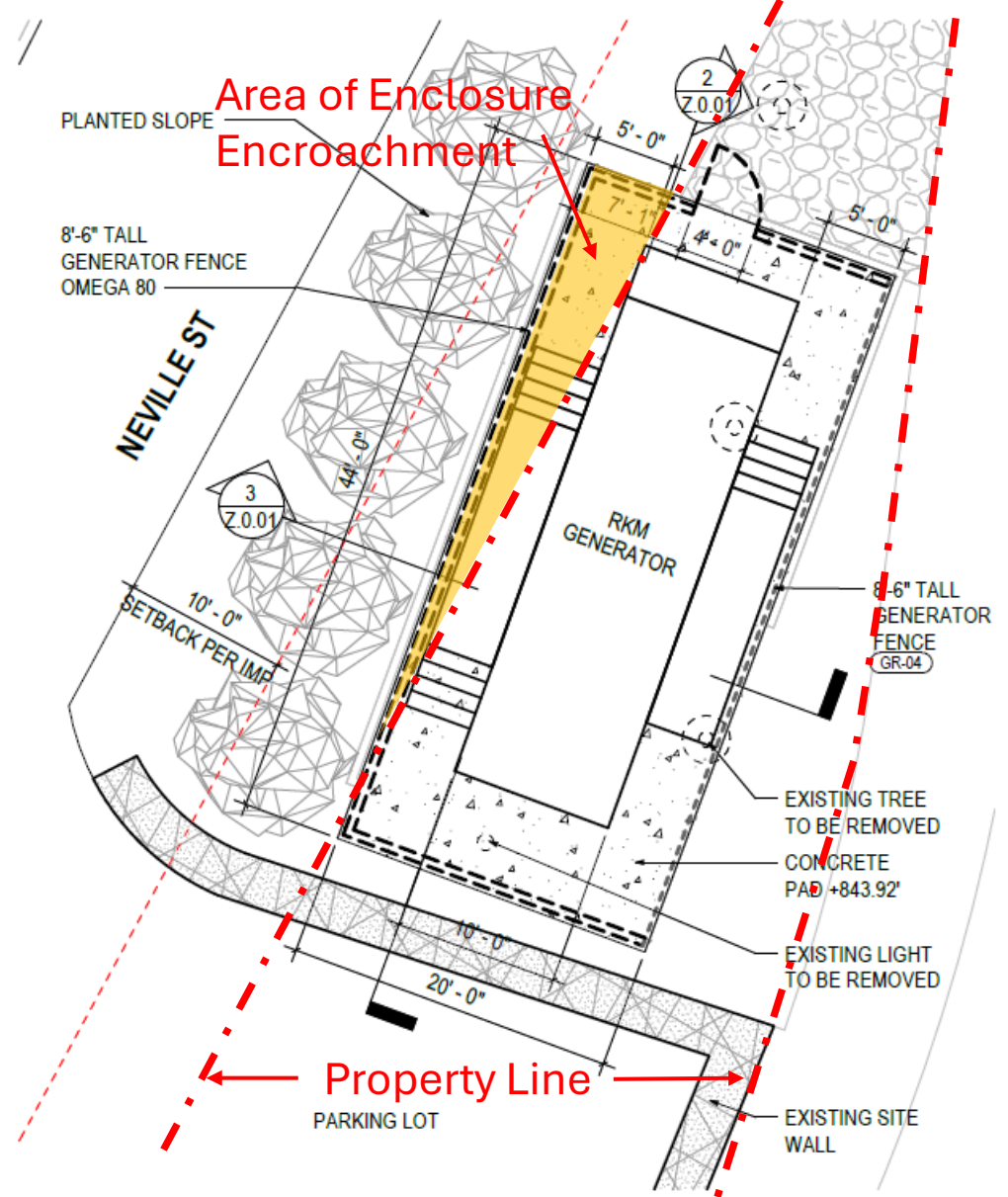
DETAILS



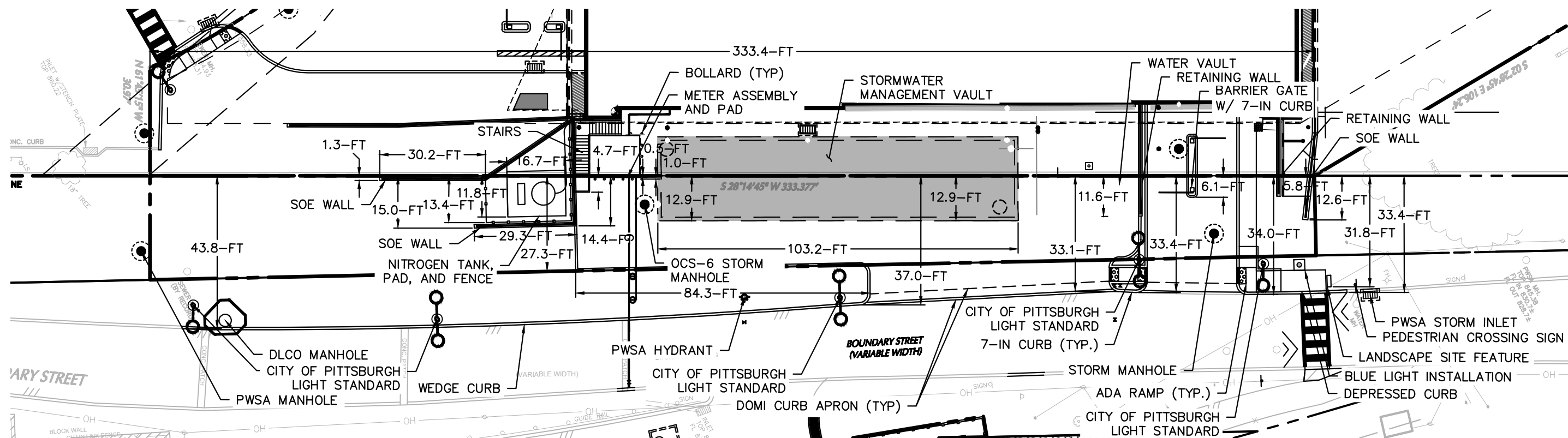
2
Z.0.01
GENERATOR SECTION A
1/8" = 1'-0"



3
Z.0.01
GENERATOR SECTION B
1/8" = 1'-0"



1
Z.0.01
GENERATOR PLAN
1/8" = 1'-0"



LANGAN
Langan Engineering and
Environmental Services, Inc.

www.langan.com

Project

**RICHARD KING
MELLON HALL OF
SCIENCES**

PITTSBURGH
ALLEGHENY COUNTY PENNSYLVANIA

Drawing Title

**ENCROACHMENT
AREA 1**

T	Project No.	250169702
	Date	04/17/2025
	Drawn By	KAG
	Checked By	EEG

Drawing No.	EXHIBIT 1
-------------	--------------



RETAINING WALL DETAILS



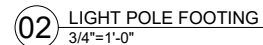
RETAINING WALL DETAILS














BOLLARD DETAILS

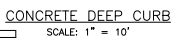
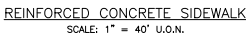
STANDARD DRAWING NUMBER
RC-39M
RC-45M

STORM MANHOLE DETAILS



CITY OF PITTSBURGH LIGHT STANDARD DETAILS

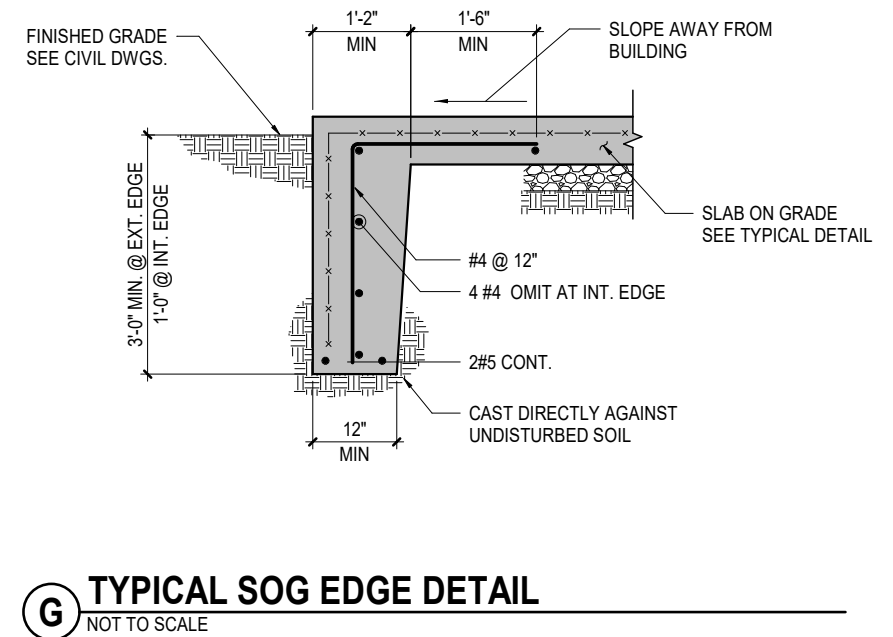
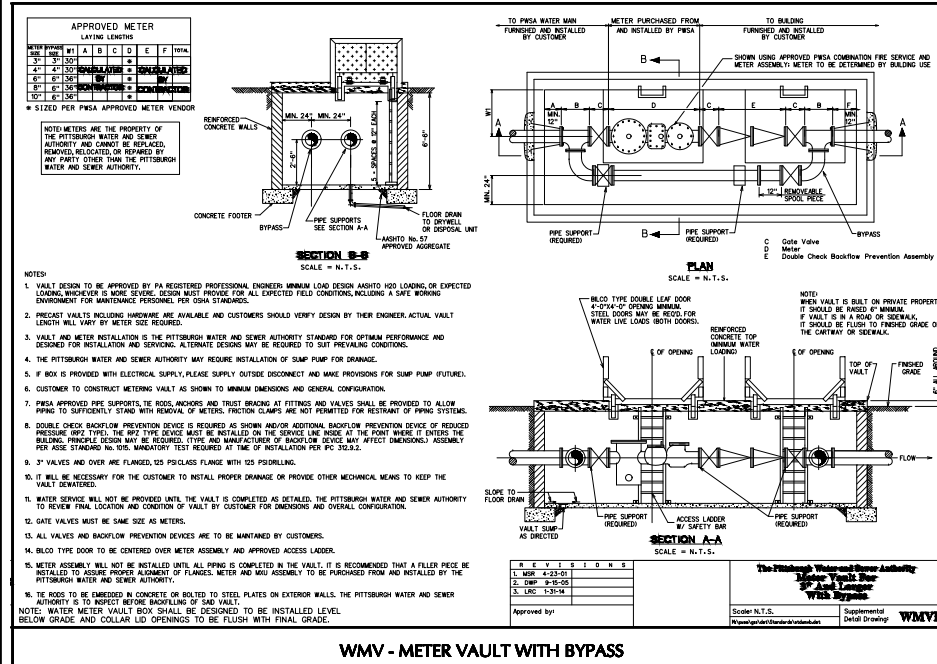
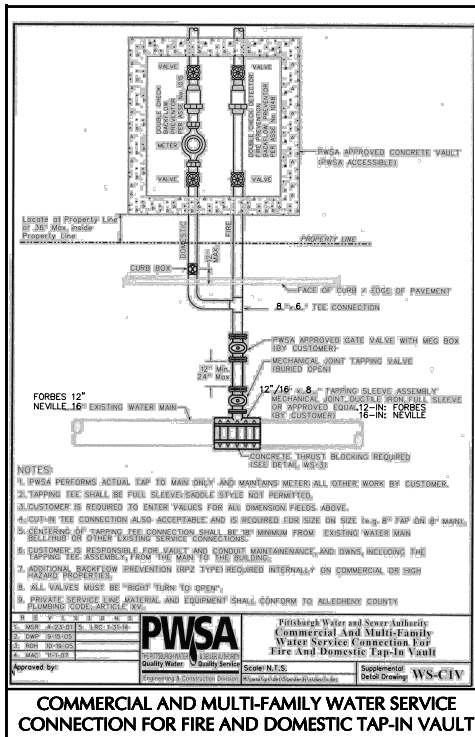
LIGHT POST	POLE HEIGHT (FT)	DIAM (FT)	DEPTH (FT)	TOP SURFACE CONDITION
	31.5	3	11	PLANTING
	31.5	3	6	PAVING
	12	2	5	PLANTING
  	30	3	8	PLANTING
  	30	3	5	PAVING
	30	3	11	PLANTING
	30	3	5	PAVING



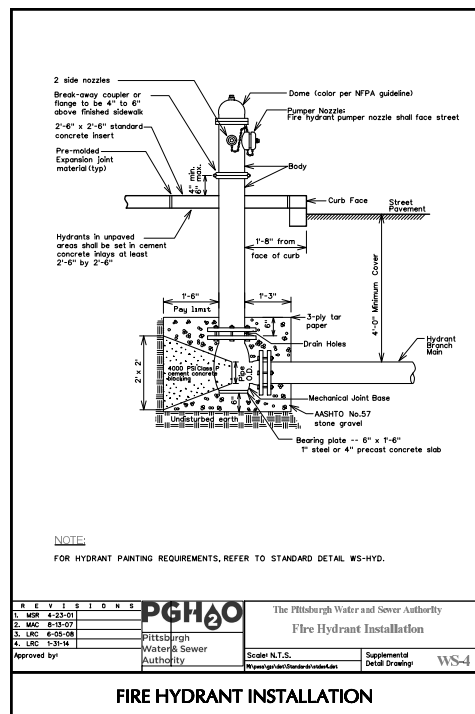
NYLOPLAST GRATE DETAILS



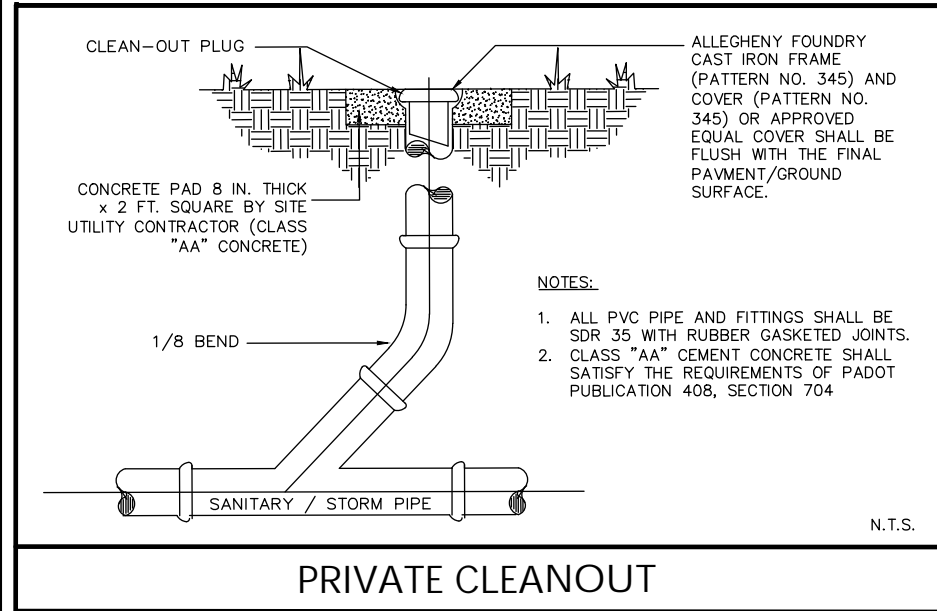
ADA CURB RAMP DETAILS



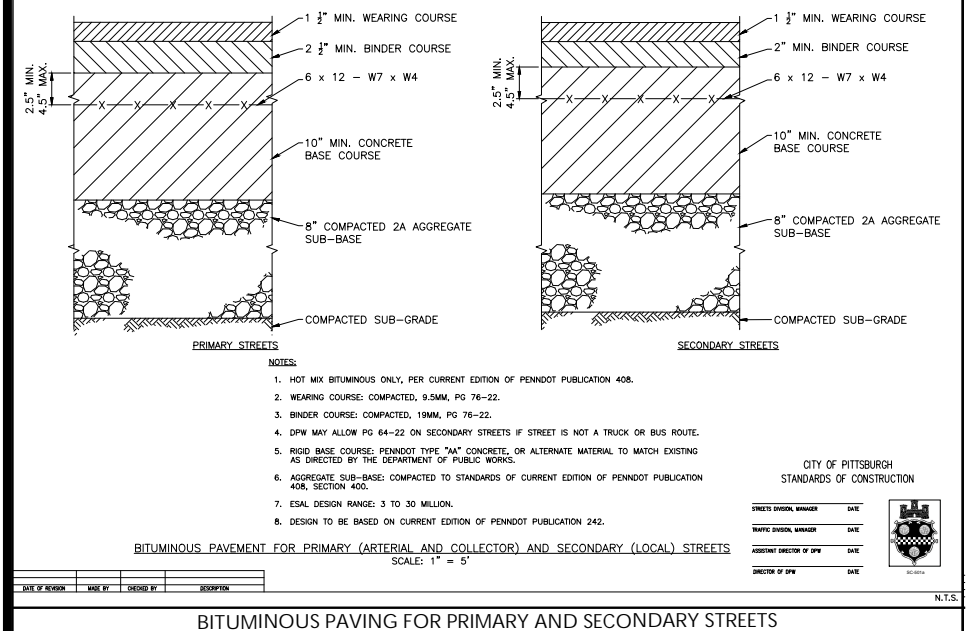
RETAINING WALL DETAILS



RETAINING WALL DETAILS



CONCRETE PAD DETAILS



PWSA HYDRANT DETAILS

CLEANOUT DETAILS

DOMI PAVEMENT SECTION DETAILS

LANGAN
Langan Engineering and
Environmental Services, Inc.

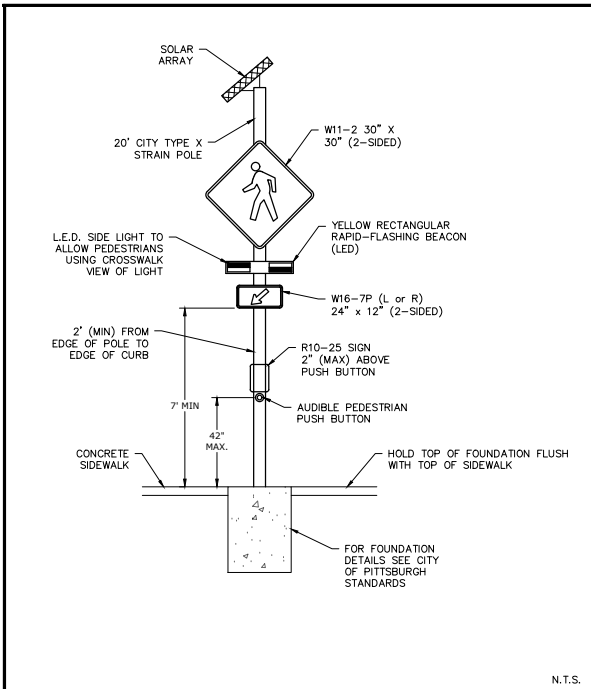
www.langan.com

Project
**RICHARD KING
MELLON HALL OF
SCIENCES**
PITTSBURGH
ALLEGHENY COUNTY PENNSYLVANIA

Drawing Title
**ENCROACHMENT
AREA 1
DETAILS**

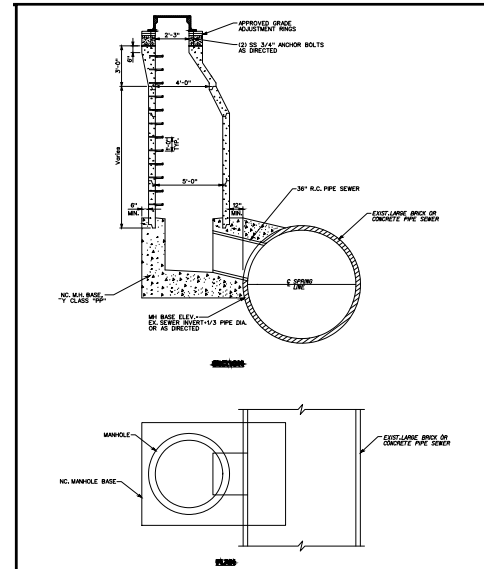
Project No.
250169702
Date
04/17/2025
Drawn By
KAG
Checked By
EEG

Drawing No.
DETAILS



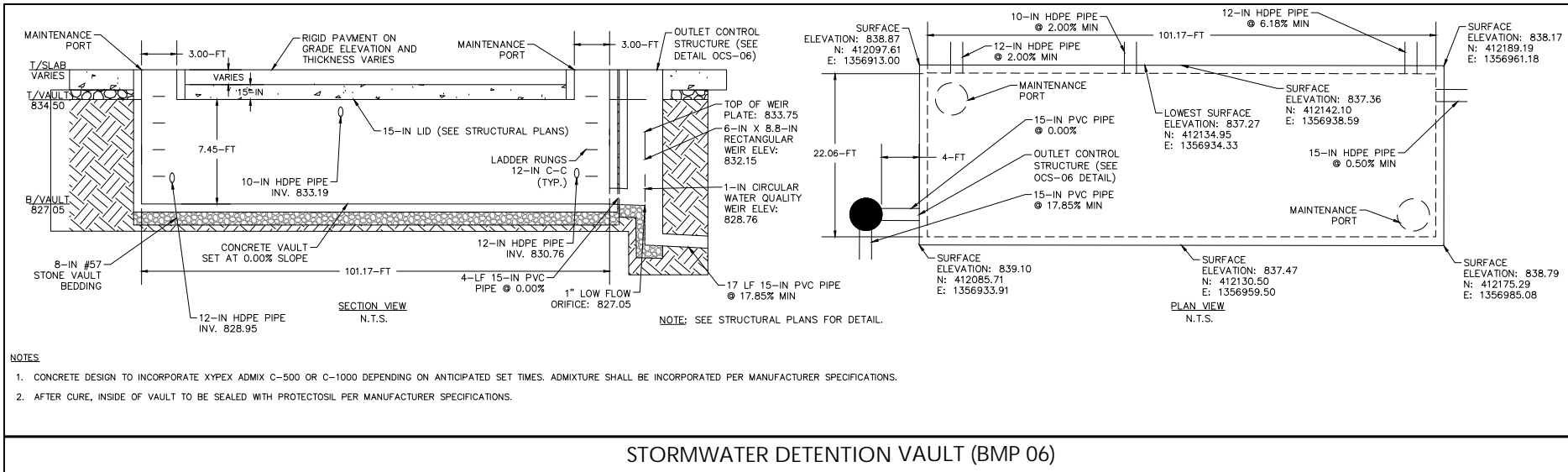
RECTANGULAR RAPID-FLASHING BEACON ASSEMBLY

PEDESTRIAN CROSSING SIGN DETAILS



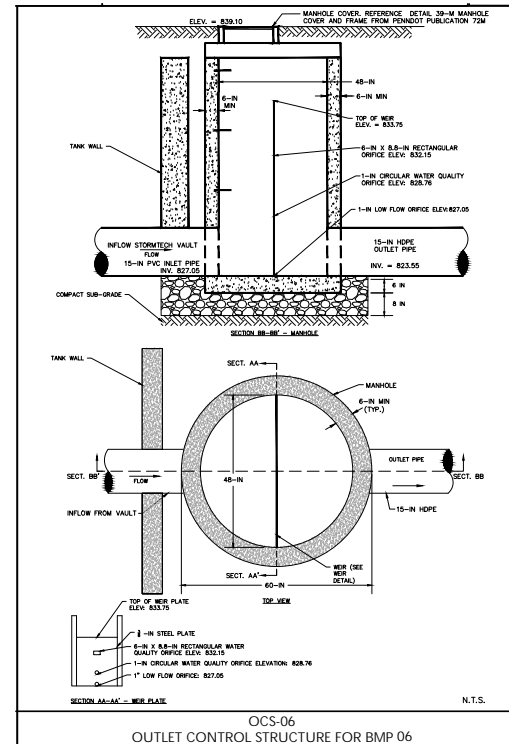
MANHOLE ON LARGE DIAMETER SEWER OFFSET

PWSA MANHOLE DETAILS



STORMWATER DETENTION VAULT (BMP 06)

STORMWATER MANAGEMENT VAULT DETAILS



STORM MANHOLE DETAILS

LANGAN
Langan Engineering and
Environmental Services, Inc.

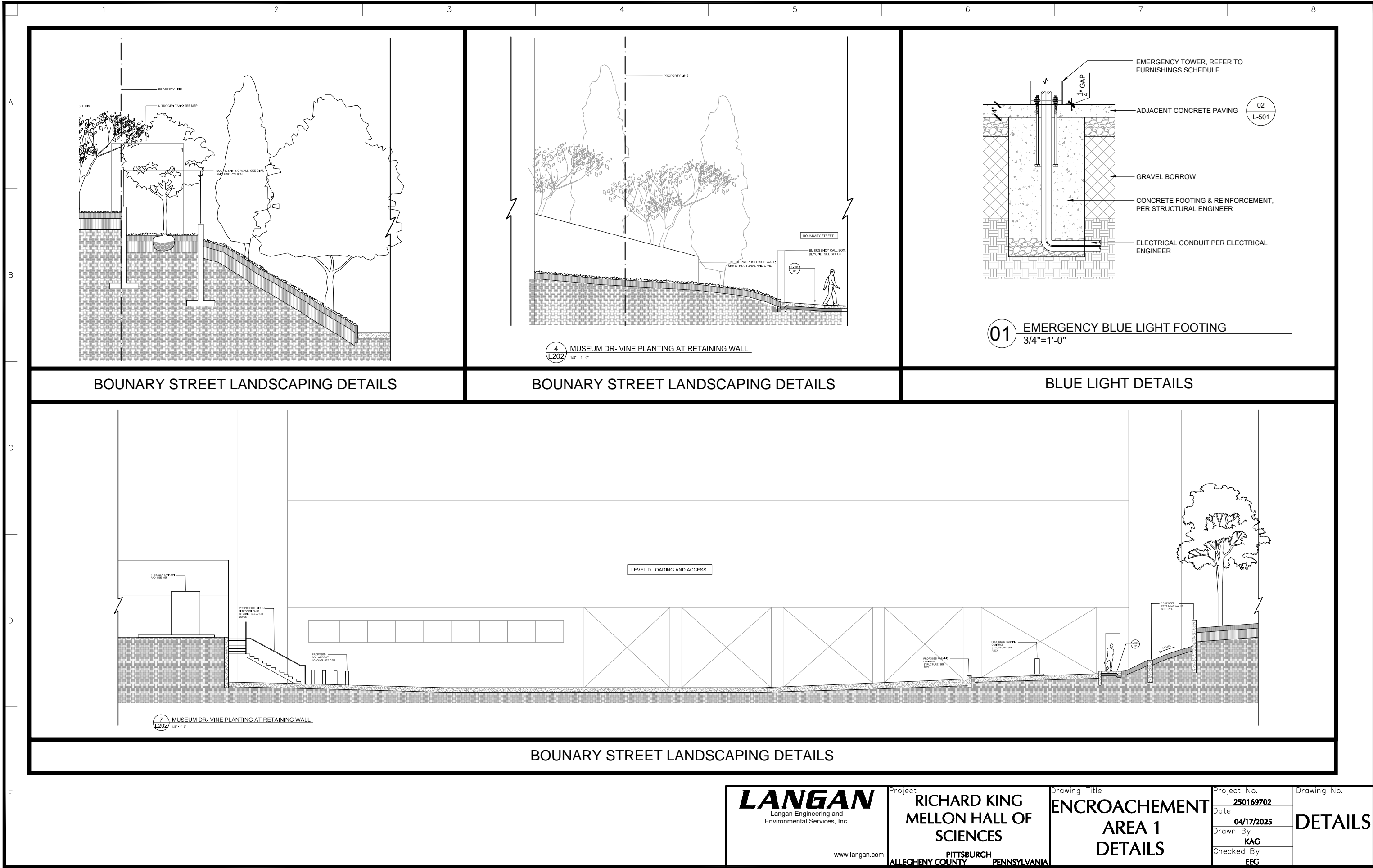
www.langan.com

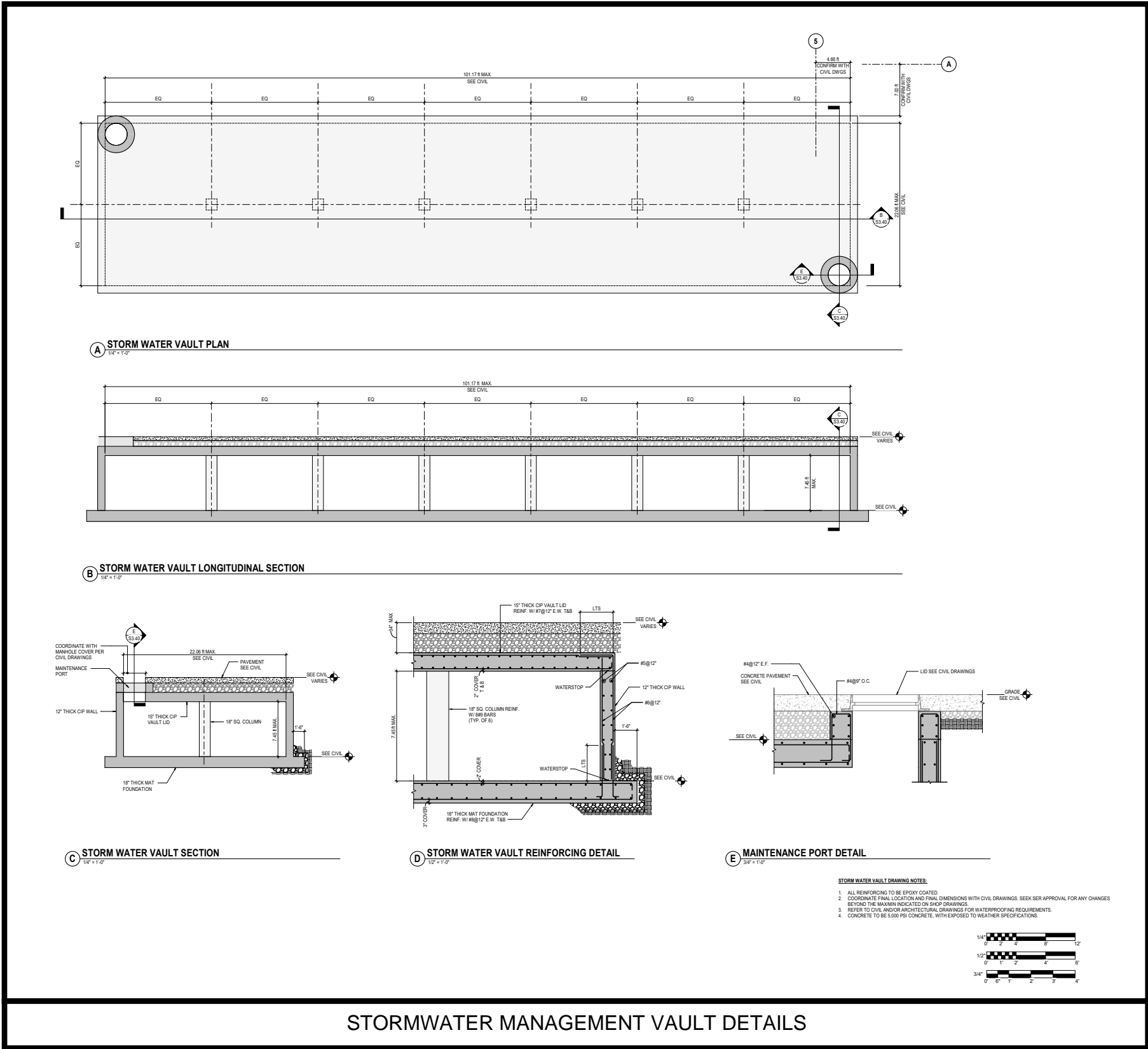
Project
**RICHARD KING
MELLON HALL OF
SCIENCES**
PITTSBURGH
ALLEGHENY COUNTY PENNSYLVANIA

Drawing Title
**ENCROACHMENT
AREA 1
DETAILS**

Project No.
250169702
Date
04/17/2025
Drawn By
KAG
Checked By
EEG

Drawing No.
DETAILS





LANGAN
Langan Engineering and
Environmental Services, Inc.

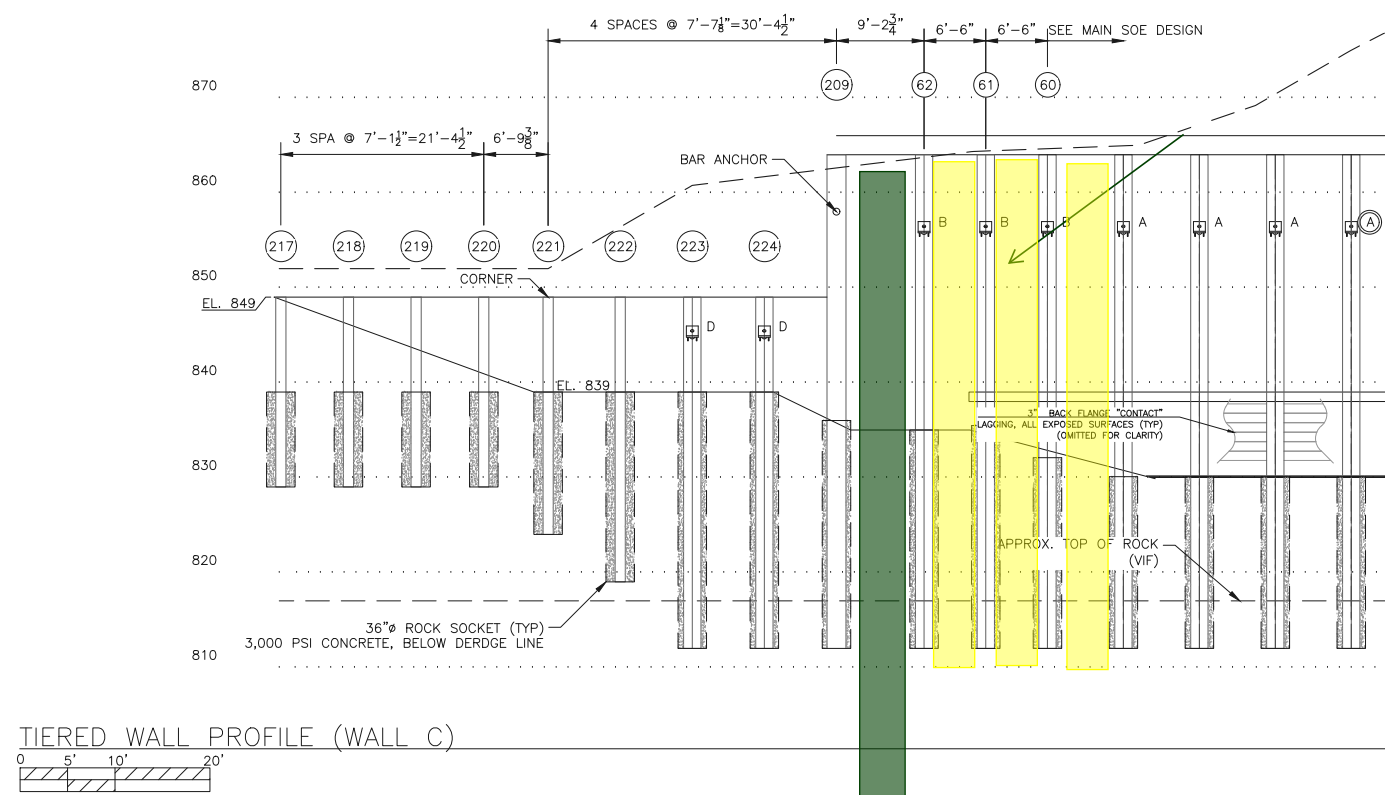
www.langan.com

Project **RICHARD KING
MELLON HALL OF
SCIENCES**
PITTSBURGH
ALLEGHENY COUNTY PENNSYLVANIA

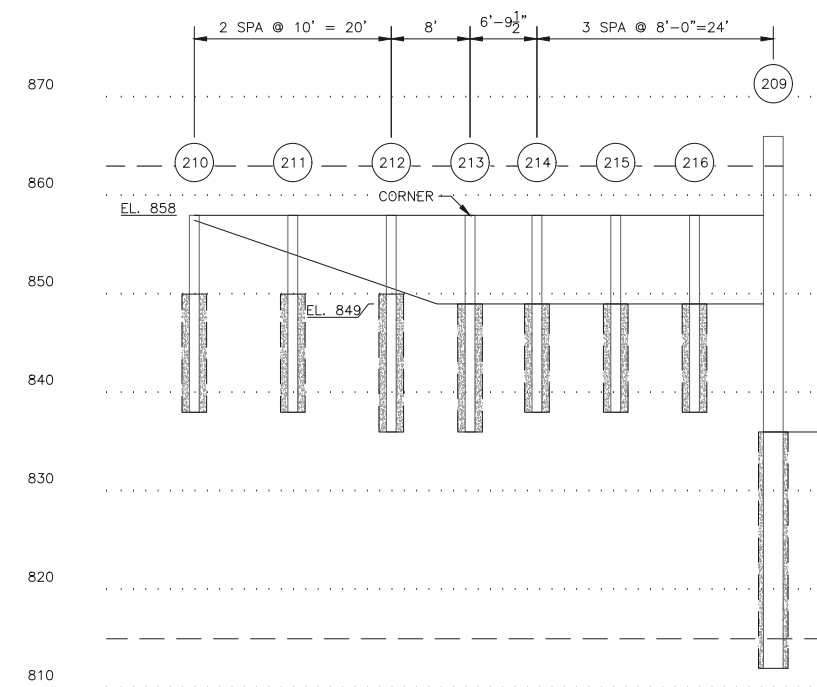
Drawing Title
**ENCROACHMENT
AREA 1
DETAILS**

Project No.
250169702
Date
04/17/2025
Drawn By
KAG
Checked By
EEG

Drawing No.
DETAILS

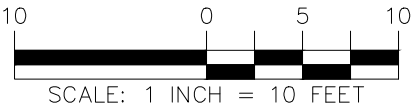
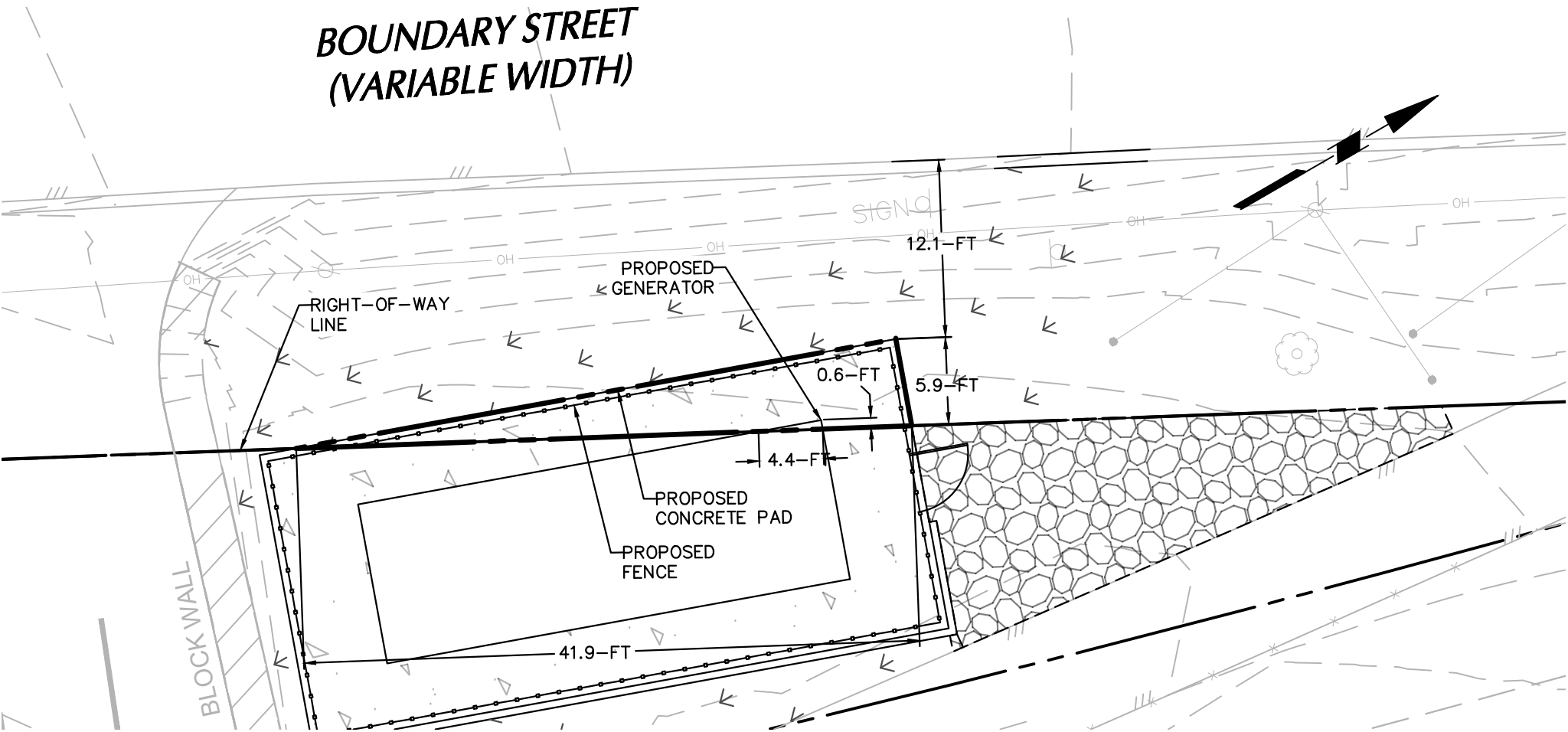


SOE WALL DETAILS



SOE WALL DETAILS

BOUNDARY STREET
(VARIABLE WIDTH)



LANGAN
Langan Engineering and
Environmental Services, Inc.

www.langan.com

Project **RICHARD KING
MELLON HALL OF
SCIENCES**
PITTSBURGH
ALLEGHENY COUNTY PENNSYLVANIA

Drawing Title
**ENCROACHMENT
EXHIBIT 2**

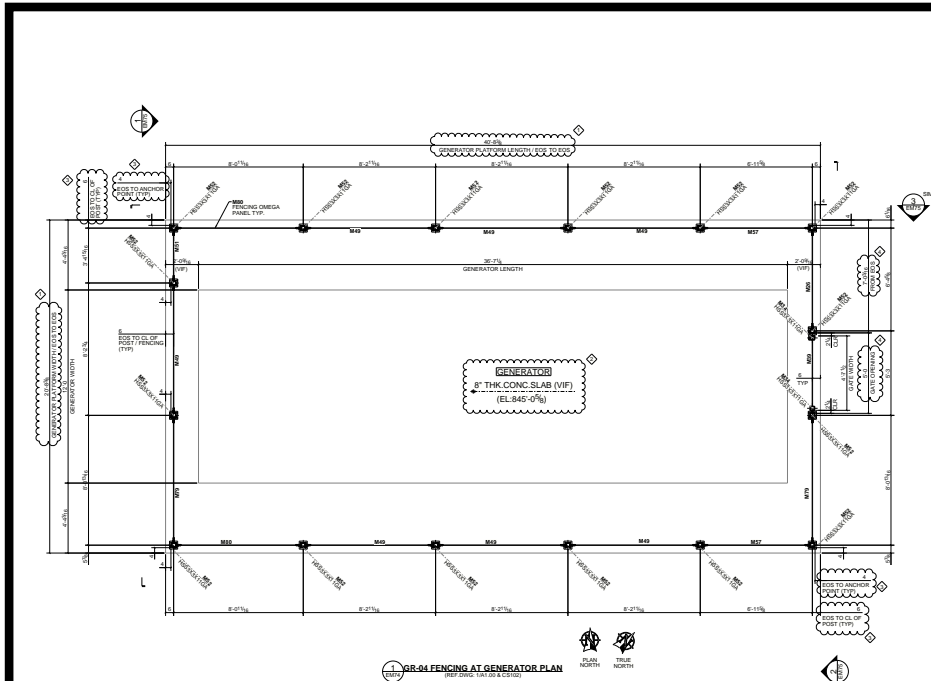
Project No.
250169702
Date
04/17/2025
Drawn By
KAG
Checked By
EEG

Drawing No.
**EXHIBIT
2**

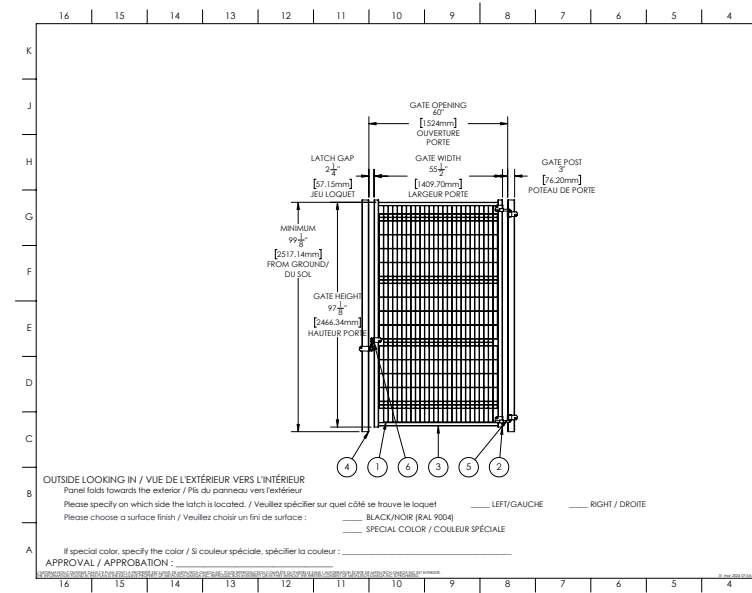
© 2023 Langan

Project No. 250169702

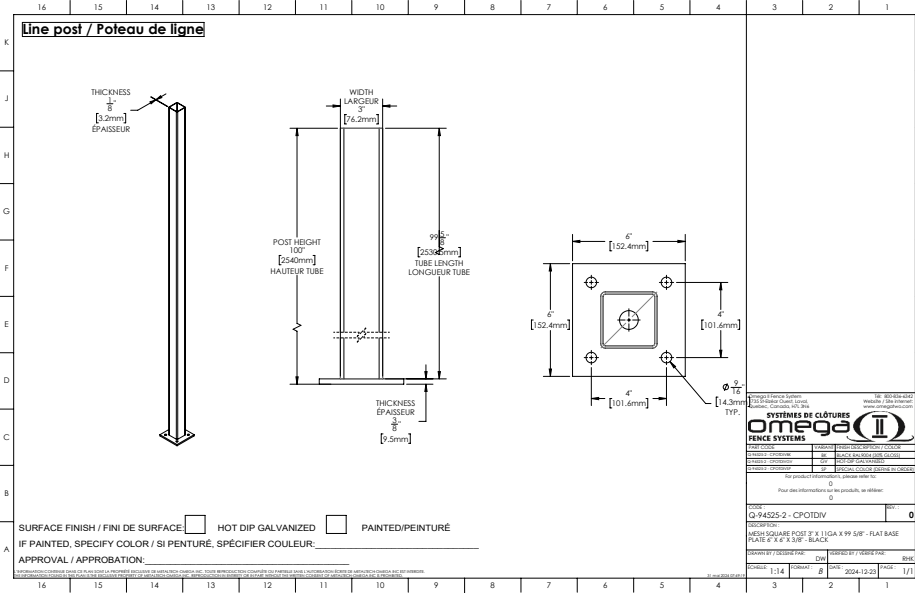
LANGAN



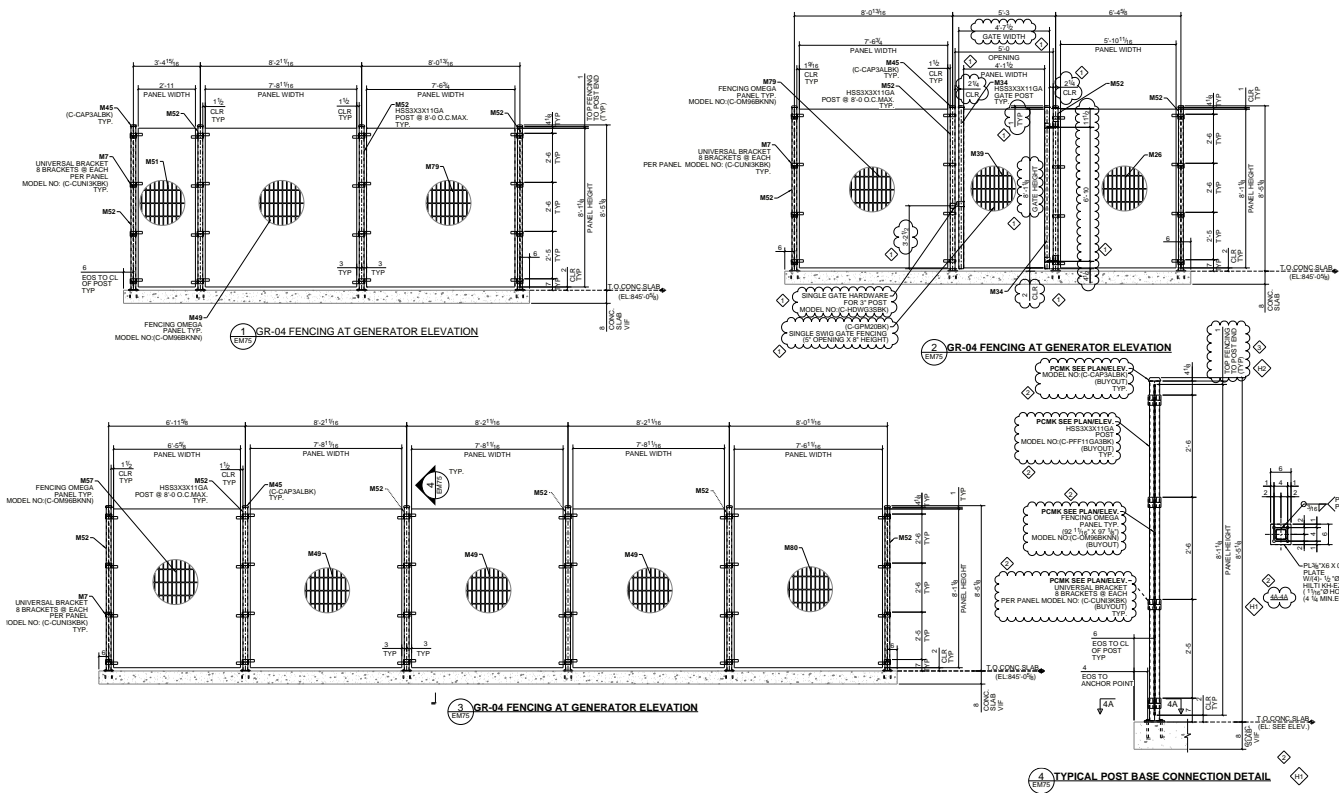
GENERATOR DETAILS



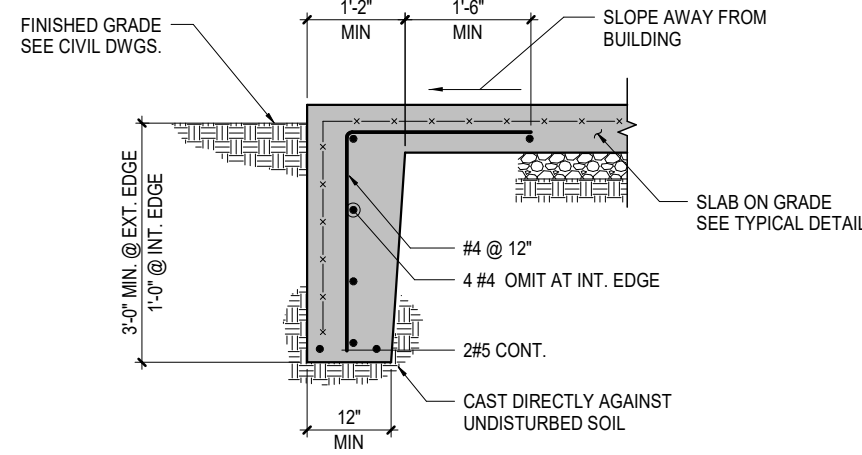
GENERATOR DETAILS



GENERATOR DETAILS



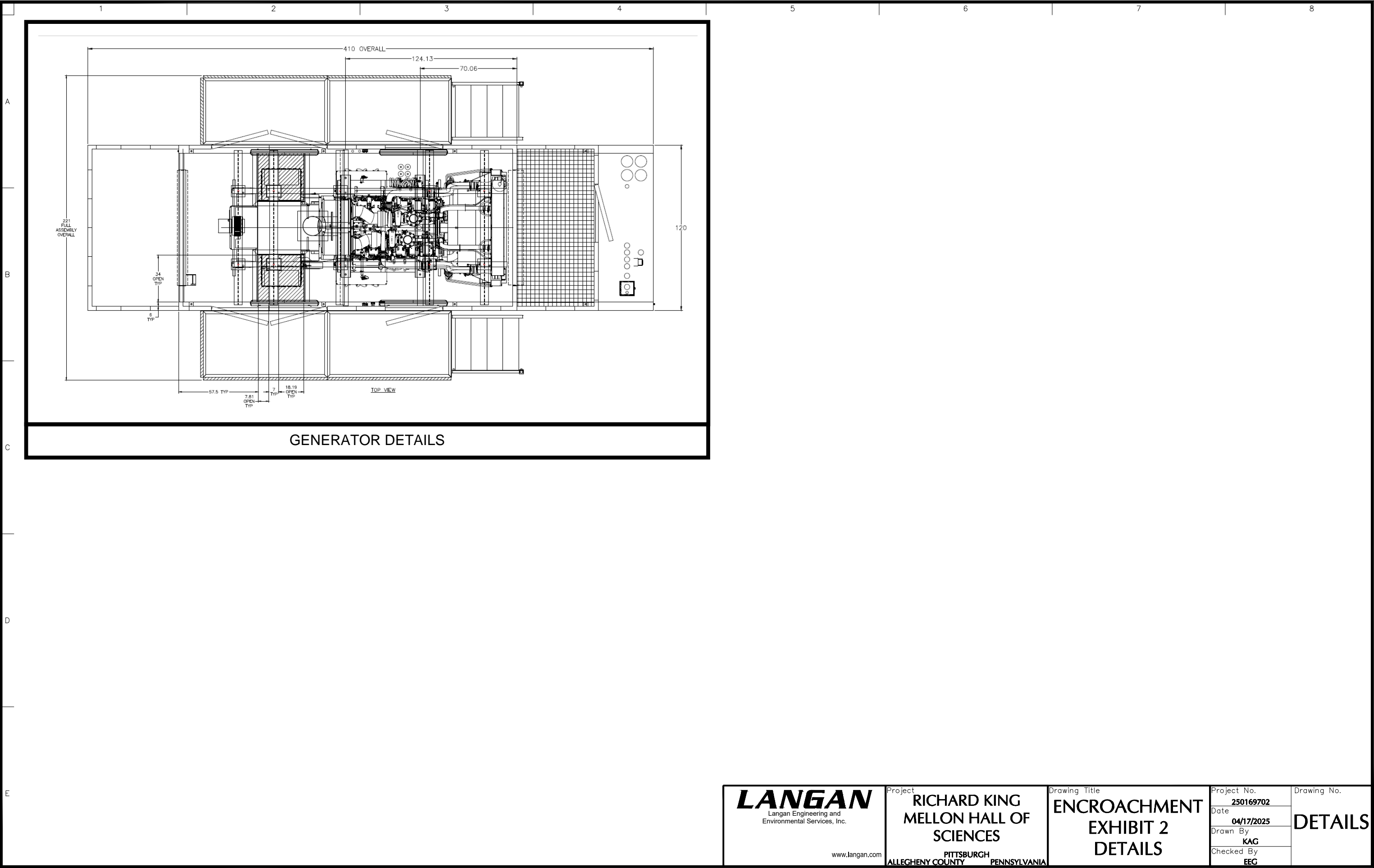
GENERATOR DETAILS



TYPICAL SOG EDGE DETAIL

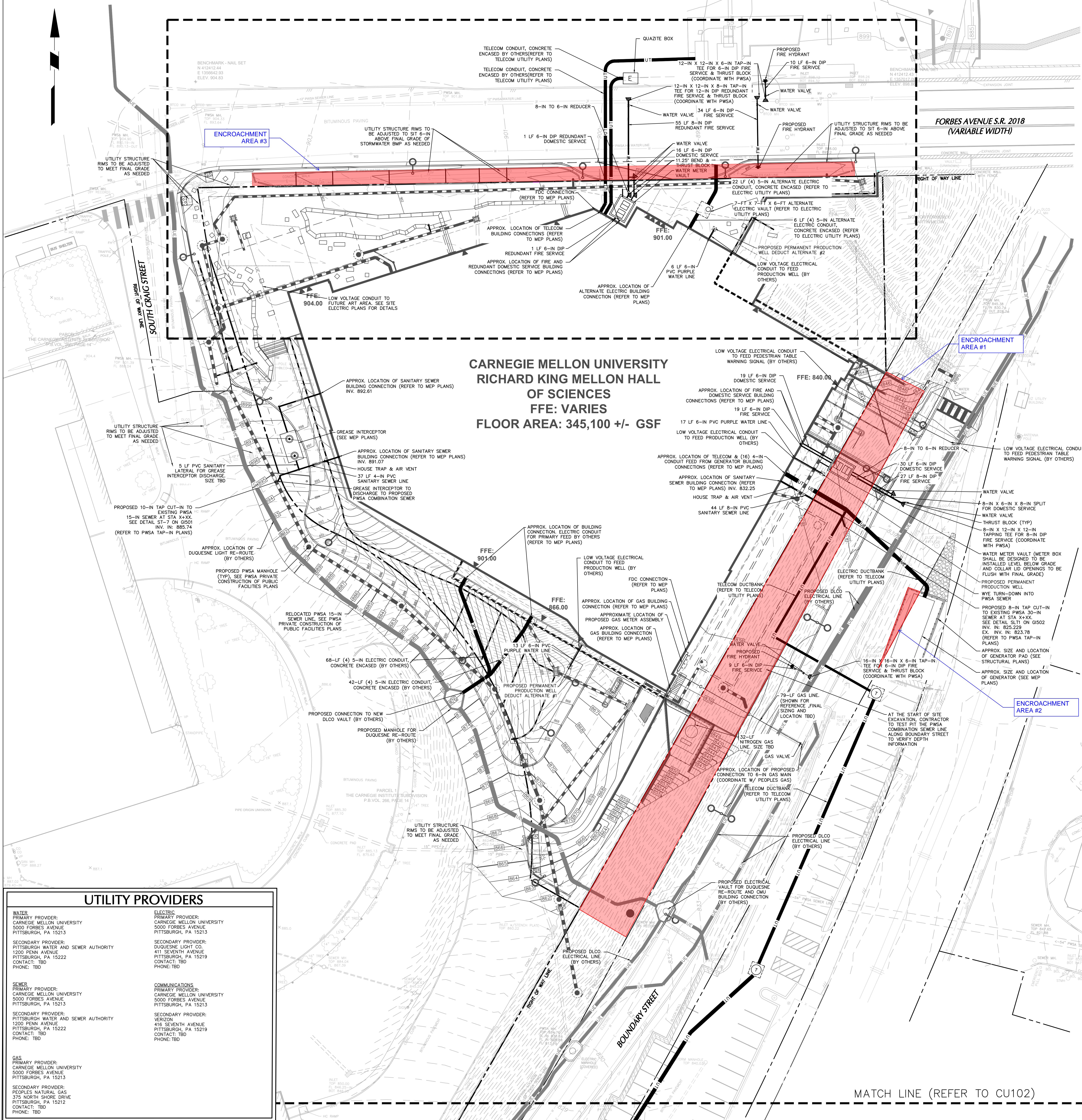
CONCRETE PAD DETAILS

LANGAN Langan Engineering and Environmental Services, Inc. www.langan.com	Project RICHARD KING MELLON HALL OF SCIENCES PITTSBURGH ALLEGHENY COUNTY PENNSYLVANIA	Drawing Title ENCROACHMENT EXHIBIT 2 DETAILS	Project No. 250169702 Date 04/17/2025 Drawn By KAG Checked By EEG	Drawing No. DETAILS



GENERAL UTILITY NOTES

- EXISTING BOUNDARY AND TOPOGRAPHY INFORMATION IS BASED ON THE PLANS TITLED "PLAN OF EXISTING CONDITIONS" FOR THE "OMU - RICHARD KING MELLON SCIENCE BUILDING" PROJECT SITUATED IN THE "CITY OF PITTSBURGH, ALLEGHENY COUNTY, PA." PREPARED BY THE GATEWAY ENGINEERS, INC., DATED MARCH 15, 2022.
- THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION. AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT NOR ARE THEY INTENDED TO REPRESENT. ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEWORK CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
- THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER AND ENGINEER MAKE NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY INFORMATION THAT WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS. CORRELATE CONDITIONS WITH THE DRAWINGS AND, RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL PERFORM ADDITIONAL TOPOGRAPHIC SURVEYS HE/SHE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR OR HIS/HER ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING. IN THE FORMAT OF AN RFI PRIOR TO BID.
- THE CONTRACTOR SHALL, WHEN HE/SHE DEEMS NECESSARY, PROVIDE A WRITTEN REQUEST FOR INFORMATION (RFI) TO THE OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM. THE RFI SHALL BE IN A FORM ESTABLISHED BY THE OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF THREE WORK DAYS FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEWORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
- INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL THOROUGHLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO BID. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS/HER ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO BID.
- THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ALL CONSTRUCTION STAKEOUT FOR THIS PROJECT MUST BE COMPLETED FROM THE SITE SPECIFIC SURVEY CONTROL (HORIZONTAL AND VERTICAL) UPON WHICH THE DESIGN IS BASED. THE CONTRACTOR SHOULD NOT RELY ON OR RE-ESTABLISH SURVEY CONTROL, BY GPS OR OTHER METHODS FOR USE IN CONSTRUCTION STAKEOUT OR ANY OTHER PURPOSE FOR THIS PROJECT. ANY DISCREPANCIES BETWEEN THE EXISTING HORIZONTAL OR VERTICAL DATA SHOWN ON THESE DRAWINGS AND THAT ENCOUNTERED IN THE FIELD MUST BE REPORTED TO THE DESIGN TEAM PRIOR TO CONSTRUCTION FOR RESOLUTION.
- WHERE CONFLICTS ARISE BETWEEN EXISTING OR PROPOSED WATER, GAS, AND ELECTRIC LINES AND PROPOSED STORMWATER CONVEYANCE PIPES OR STRUCTURES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- 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.
- 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.
- 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 MAINS: 48 INCHES TO TOP OF PIPE BARREL, 6 INCHES BELOW THE PROPOSED FIRST LINE OR ESTABLISHED BY THE LOCAL BUILDING OFFICIAL OR WATER COMPANY, WHICHEVER IS DEEPER.
 - GAS MAINS AND SERVICES: 30 INCHES MINIMUM TO TOP OF PIPE, OR AS REQUIRED BY THE LOCAL UTILITY COMPANY, WHICHEVER IS DEEPER.
- UTILITY TESTING INCLUDING (BUT NOT LIMITED TO) WATER PRESSURE TESTING, WATER SYSTEM FLUSHING, BACTERIOLOGICAL TESTING, VIDEO CAMERA TESTING, MANHOLE 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 BE GIVEN 48 HOURS NOTICE PRIOR TO ALL TESTING. THE CONTRACTOR IS RESPONSIBLE TO CONTACT AND COORDINATE THE LOCAL AND COUNTY OFFICIALS THAT ARE REQUIRED TO BE PRESENT AT ALL INSPECTIONS. LOCAL FIRE INSPECTORS SHALL BE INVITED TO INSPECT ALL FIRE SERVICE LINES PRIOR TO BACKFILLING OF TRENCHES.
- ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED IN ACCORDANCE WITH AWWA STANDARDS. LATEST REVISIONS, HYDROSTATIC TESTING FOR PVC MAINS SHALL BE 150 PSI FOR MINIMUM OF 2 HOURS AND MEET AWWA STANDARD C-651. DUCTILE IRON MAINS SHALL BE TESTED AT 150 PSI FOR MINIMUM OF 2 HOURS AND MEET AWWA STANDARD C-651. DUCTILE IRON 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 C606 AND NSF-61 CERTIFICATIONS.
- PVC POTABLE WATER MAINS SHALL BE SOLID BLUE IN COLOR. 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 ACCORDANCE WITH MANUFACTURER'S RECOMMENDED PROCEDURES.
- ALL WATER LINES ARE TO BE INSPECTED BY A LICENSED PROFESSIONAL ENGINEER DURING INSTALLATION.
- ALL WATER LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE SHALL BE INSTALLED DURING THE BACKFILLING 2 FEET ABOVE PIPE AND 2 FEET BELOW FINISHED GRADE DIRECTLY OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "CAUTION WATER PIPE". THE TAPE SHALL HAVE AN EMBEDDED METALLIC DETECTABLE STRIP AND BE BLUE IN COLOR. PROTECTION TAPE SHALL BE TERRA-TAPE OR APPROVED EQUAL.
- 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 2 FEET ABOVE THE PIPE. AT LEAST 2 FEET BELOW THE FINISHED GRADE, AND AT MOST 4 FEET BELOW THE FINISHED GRADE, THE PROTECTION TAPE SHALL BE PLACED DIRECTLY OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "SEWER". THE PROTECTION TAPE MUST BE ELECTRONICALLY LOCATABLE AND BE BRIGHTLY COLORED PLASTIC. THE SELECTION AND INSTALLATION OF THE PROTECTION TAPE MUST MEET THE REQUIREMENTS SPECIFIED WITHIN THE PEOPLE'S NATURAL GAS SERVICE LINE INSTALLATION STANDARDS (INSTALLER'S GUIDE).
- ANY WATER, SANITARY AND STORM UTILITY WITH 18 INCHES OR LESS VERTICAL SEPARATION BETWEEN OUTSIDE OF PIPE AND OUTSIDE OF PIPE SHALL BE CONCRETE ENCASED.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS AND ANY LOCAL AUTHORITIES.
- 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 ABIDE BY THE POLICES SET FORTH IN THE CITY OF PITTSBURGH RIGHT-OF-WAY PROCEDURES.
- ALL SEWER CONNECTIONS MUST BE APPROVED AND INSPECTED BY THE LOCAL GOVERNING AUTHORITY. CONTRACTOR TO RECEIVE APPROVAL FROM THE LOCAL AUTHORITY PRIOR TO CONSTRUCTION.
- PROPOSED LIGHTING TO BE COORDINATED WITH ELECTRICAL DOCUMENTS.
- ALL PROPOSED CONTOURS AND GRADING BEHIND THE CURB ALONG FORBES AVENUE AND ALONG MUSEUM DRIVE NORTH OF THE GARAGE ENTRANCE ARE FOR REFERENCE ONLY. REFER TO LA PLANS FOR FINAL GRADING.
- AT THE START OF SITE EXCAVATION, CONTRACTOR TO TEST PIT THE PSWA COMBINATION SEWER LINE ALONG BOUNDARY STREET TO VERIFY DEPTH INFORMATION.
- ALL PSWA CONNECTIONS MUST BE APPROVED PRIOR TO ANY CONSTRUCTION.



UTILITY PROVIDERS

WATER PRIMARY PROVIDER: CARNEGIE MELLON UNIVERSITY 5000 FORBES AVENUE PITTSBURGH, PA 15213 SECONDARY PROVIDER: PITTSBURGH WATER AND SEWER AUTHORITY 1200 PENN AVENUE PITTSBURGH, PA 15222 CONTACT: TBD PHONE: TBD	ELECTRIC PRIMARY PROVIDER: CARNEGIE MELLON UNIVERSITY 5000 FORBES AVENUE PITTSBURGH, PA 15213 SECONDARY PROVIDER: PITTSBURGH WATER AND SEWER AUTHORITY 1200 PENN AVENUE PITTSBURGH, PA 15219 CONTACT: TBD PHONE: TBD
SEWER PRIMARY PROVIDER: CARNEGIE MELLON UNIVERSITY 5000 FORBES AVENUE PITTSBURGH, PA 15213 SECONDARY PROVIDER: PITTSBURGH WATER AND SEWER AUTHORITY 1200 PENN AVENUE PITTSBURGH, PA 15222 CONTACT: TBD PHONE: TBD	COMMUNICATIONS PRIMARY PROVIDER: CARNEGIE MELLON UNIVERSITY 5000 FORBES AVENUE PITTSBURGH, PA 15213 SECONDARY PROVIDER: PITTSBURGH WATER AND SEWER AUTHORITY 1200 PENN AVENUE PITTSBURGH, PA 15219 CONTACT: TBD PHONE: TBD
GAS PRIMARY PROVIDER: CARNEGIE MELLON UNIVERSITY 5000 FORBES AVENUE PITTSBURGH, PA 15213 SECONDARY PROVIDER: PEOPLES NATURAL GAS 375 NORTH SHORE DRIVE PITTSBURGH, PA 15212 CONTACT: TBD PHONE: TBD	

LEGEND

	EXISTING	PROPOSED
ROW BOUNDARY		
SANITARY SEWER		
SANITARY MANHOLE		
SANITARY CLEANOUT		
STORM SEWER		
INLET		
STORM MANHOLE		
WATER LINE		
FIRE LINE		
FIRE HYDRANT		
WATER VALVE		
THRUST BLOCK		
GAS LINE		
GAS VALVE		
TELECOM LINE		
ELECTRIC LINE		
BELOW GRADE		
STEAM LINE		
ABOVE GRADE		
BELOW GRADE		
CONDENSATE LINE		
ABOVE GRADE		
CONDENSATE LINE		
ELECTRIC STRUCTURE		
TELECOM STRUCTURE		



FOR BID ONLY, NOT FOR CONSTRUCTION

MATCH LINE (REFER TO CU101)

GENERAL UTILITY NOTES

- EXISTING BOUNDARY AND TOPOGRAPHY INFORMATION IS BASED ON THE PLANS TITLED "PLAN OF EXISTING CONDITIONS" FOR THE "OMU - RICHARD KING MELLON SCIENCE BUILDING" PROJECT SITUATED IN THE "CITY OF PITTSBURGH, ALLEGHENY COUNTY, PA," PREPARED BY THE GATEWAY ENGINEERS, INC., DATED MARCH 15, 2023.
- THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION. AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT NOR ARE THEY INTENDED TO REPRESENT ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEWORK CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
- THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER AND ENGINEER MAKE NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY INFORMATION THAT WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS, AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL PERFORM ADDITIONAL TOPOGRAPHIC SURVEYS HE/SHE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
- THE CONTRACTOR SHALL, WHEN HE/SHE DEEMS NECESSARY, PROVIDE A WRITTEN REQUEST FOR INFORMATION (RFI) TO THE OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM. THE RFI SHALL BE IN A FORM ACCEPTABLE TO OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF THREE WORK DAYS FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEWORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
- INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE 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 BID. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS/HER ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO BID.
- THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
- CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ALL CONSTRUCTION STAKEOUT FOR THIS PROJECT MUST BE COMPLETED FROM THE SITE SPECIFIC SURVEY CONTROL (HORIZONTAL AND VERTICAL) UPON WHICH THE DESIGN IS BASED. THE CONTRACTOR SHOULD NOT RELY ON OR RE-ESTABLISH SURVEY CONTROL, BY GPS OR OTHER METHODS FOR USE IN CONSTRUCTION STAKEOUT OR ANY OTHER PURPOSE FOR THIS PROJECT. ANY DISCREPANCIES BETWEEN THE EXISTING HORIZONTAL OR VERTICAL DATA SHOWN ON THESE DRAWINGS AND THAT ENCOUNTERED IN THE FIELD MUST BE REPORTED TO THE DESIGN TEAM PRIOR TO CONSTRUCTION FOR RESOLUTION.
- WHERE CONFLICTS ARISE BETWEEN EXISTING OR PROPOSED WATER, GAS, AND ELECTRIC LINES AND PROPOSED STORMWATER CONVEYANCE PIPES OR STRUCTURES, THE WATER, GAS, AND ELECTRIC LINES SHALL BE ADJUSTED BENEATH OR AROUND THE PROPOSED STORMWATER CONVEYANCE PIPES OR STRUCTURES AS NECESSARY IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
- 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.
- 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.
- 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 MAINS: 48 INCHES TO TOP OF PIPE BARREL, 36 INCHES BENEATH PROPOSED FROST LINE OR ESTABLISHED BY THE LOCAL BUILDING OFFICIAL OR WATER COMPANY, WHICHEVER IS DEEPER.
 - GAS MAINS AND SERVICE: 30 INCHES MINIMUM TO TOP OF PIPE, OR AS REQUIRED BY THE LOCAL UTILITY COMPANY, WHICHEVER IS DEEPER.
- 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 OCCUPANCIES BEING ISSUED SHALL BE COORDINATED AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE ENGINEER OF RECORD SHALL BE GIVEN 48 HOURS NOTICE PRIOR TO ALL TESTING. THE CONTRACTOR IS SOLELY RESPONSIBLE TO CONTACT AND COORDINATE THE LOCAL AND COUNTY OFFICIALS THAT ARE REQUIRED TO BE PRESENT AT ALL INSPECTIONS. LOCAL FIRE INSPECTORS SHALL BE INVITED TO INSPECT ALL FIRE SERVICE LINES PRIOR TO BACKFILLING OF TRENCHES.
- ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED IN ACCORDANCE WITH AWWA STANDARDS. LATEST REVISIONS. HYDROSTATIC TESTING FOR PVC MAINS SHALL BE 150 PSI FOR MINIMUM OF 2 HOURS AND MEET AWWA STANDARD C-605. DUCTILE IRON MAINS SHALL BE TESTED AT 150 PSI FOR 2 HOURS AND MEET C-605. 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 C506 AND NSF-61 CERTIFICATIONS.
- PVC POTABLE WATER MAINS SHALL BE SOLID BLUE IN COLOR. 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 ACCORDANCE WITH MANUFACTURER'S RECOMMENDED PROCEDURES.
- ALL WATER LINES ARE TO BE INSPECTED BY A LICENSED PROFESSIONAL ENGINEER DURING INSTALLATION.
- ALL WATER LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE SHALL BE INSTALLED DURING THE BACKFILLING 2 FEET ABOVE PIPE AND 2 FEET BELOW FINISHED GRADE DIRECTLY OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "CAUTION WATER PIPE". THE TAPE SHALL HAVE AN EMBEDDED METALLIC DETECTABLE STRIP AND BE BLUE IN COLOR. PROTECTION TAPE SHALL BE TERRA-TAPE OR APPROVED EQUAL.
- 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 2 FEET ABOVE THE PIPE, AT LEAST 2 FEET BELOW THE FINISHED GRADE, AND AT MOST 4 FEET BELOW THE FINISHED GRADE. THE PROTECTION TAPE SHALL BE PLACED DIRECTLY OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "SEWER". THE PROTECTION TAPE MUST BE ELECTRONICALLY LOCATABLE AND BE BRIGHTLY COLORED PLASTIC. THE SELECTION AND INSTALLATION OF THE PROTECTION TAPE MUST MEET THE REQUIREMENTS SPECIFIED WITHIN THE PEOPLE'S NATURAL GAS SERVICE LINE INSTALLATION STANDARDS (INSTALLER'S GUIDE).
- 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.
- SANITARY SEWER CLEANOUTS SHALL BE PROVIDED WITHIN 5 FEET OF ALL BUILDING CONNECTIONS FOR ALL SEWER CONNECTIONS TO COMBINED SEWERS.
- ALL GRAVITY SANITARY SEWER PIPE SHALL BE PVC SDR26.
- 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.
- ALL GAS LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE MUST BE INSTALLED DURING THE BACKFILLING APPROXIMATELY 6 INCHES BELOW THE FINISHED GRADE. THE PROTECTION TAPE SHALL BE PLACED DIRECTLY OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "CAUTION-GAS PIPE BELOW". THE PROTECTION TAPE SHALL BE 6 INCH WIDE YELLOW PLASTIC COPPED WITH A SOLID COPPER TRACER WIRE WITH YELLOW THERMOPLASTIC COATING OF AT LEAST #12 AWG. THE SELECTION AND INSTALLATION OF THE PROTECTION TAPE AND TRACER WIRE MUST MEET THE REQUIREMENTS SPECIFIED WITHIN THE PEOPLE'S NATURAL GAS SERVICE LINE INSTALLATION STANDARDS (INSTALLER'S GUIDE).
- ANY WATER, SANITARY AND STORM UTILITY WITH 18 INCHES OR LESS VERTICAL SEPARATION BETWEEN OUTSIDE OF PIPE AND OUTSIDE OF PIPE SHALL BE CONCRETE ENCASED.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS AND ANY LOCAL AUTHORITIES.
- 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 ABIDE BY THE POLICES SET FORTH IN THE CITY OF PITTSBURGH RIGHT-OF-WAY PROCEDURES.
- ALL SEWER CONNECTIONS MUST BE APPROVED AND INSPECTED BY THE LOCAL GOVERNING AUTHORITY. CONTRACTOR TO RECEIVE APPROVAL FROM THE LOCAL AUTHORITY PRIOR TO CONSTRUCTION.
- PROPOSED LIGHTING TO BE COORDINATED WITH ELECTRICAL DOCUMENTS.
- ALL PROPOSED CONTOURS AND GRADING ARE FOR REFERENCE ONLY. REFER TO LA PLANS FOR FINAL GRADING.
- AT THE START OF SITE EXCAVATION, CONTRACTOR TO TEST PIT THE PSWA COMBINATION SEWER LINE ALONG BOUNDARY STREET TO VERIFY DEPTH INFORMATION.
- ALL PWSA CONNECTIONS MUST BE APPROVED PRIOR TO ANY CONSTRUCTION.

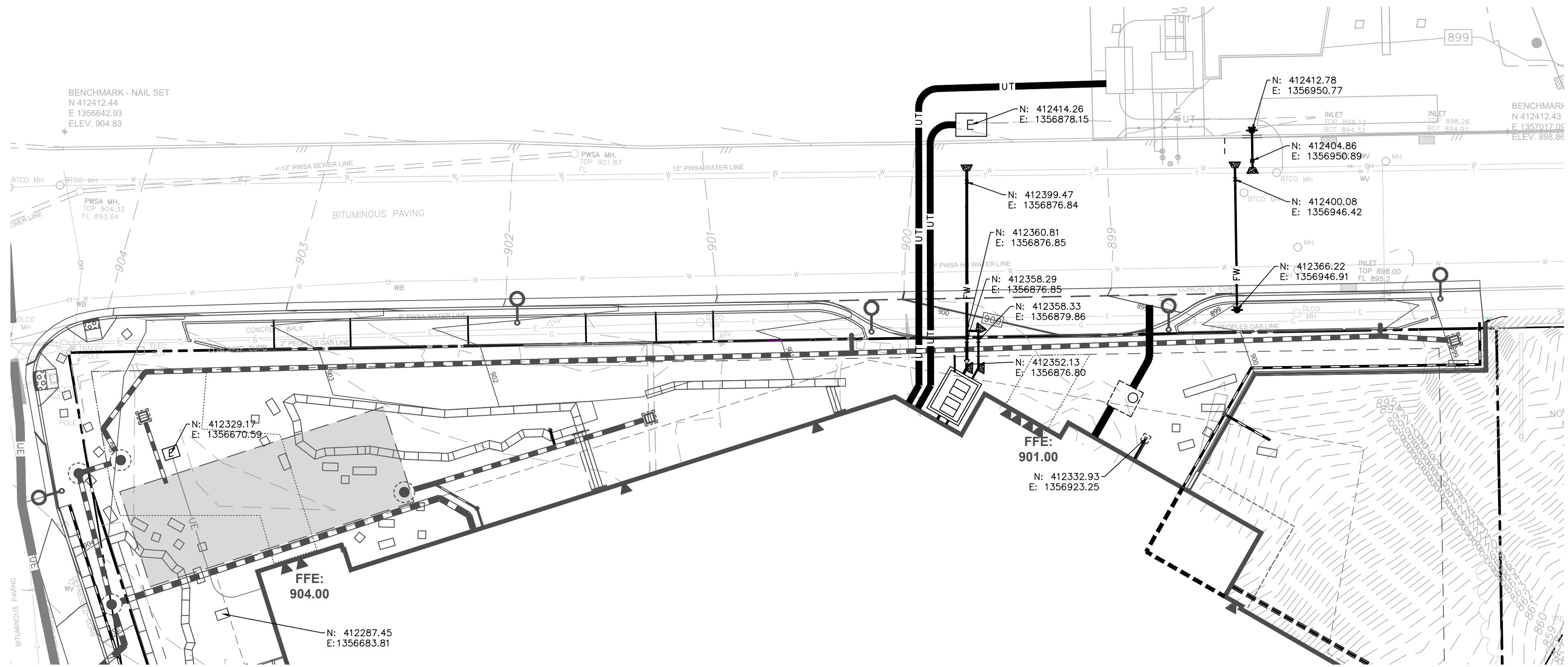
CONTRACTOR TO CONNECT PROPOSED TELECOM TO EXISTING TELECOM CONDUITS WITHIN STEAM VAULT. CONTRACTOR TO FIELD LOCATE EXISTING LINE (REFER TO TELECOM UTILITY PLANS).

LEGEND

	EXISTING	PROPOSED
ROW BOUNDARY	---	---
SANITARY SEWER	---	---
SANITARY MANHOLE	○	○
SANITARY CLEANOUT	---	---
STORM SEWER	---	---
INLET	---	---
STORM MANHOLE	○	○
WATER LINE	---	---
FIRE LINE	---	---
FIRE HYDRANT	---	---
WATER VALVE	---	---
THRUST BLOCK	---	---
GAS VALVE	---	---
TELECOM LINE	---	---
ELECTRIC LINE	---	---
BELOW GRADE	---	---
STEAM LINE	---	---
BELOW GRADE	---	---
CONDENSATE LINE	---	---
ABOVE GRADE	---	---
CONDENSATE LINE	---	---
ELECTRIC STRUCTURE	---	---
TELECOM STRUCTURE	---	---

20 0 10 20
SCALE IN FEET

FOR BID ONLY, NOT FOR CONSTRUCTION



NOTE: SEE PROFILE SHEETS FOR STORM AND INVERTS

20 0 10 20
SCALE IN FEET

ZGF
ZIMMER GUNSUL FRASCA ARCHITECTS LLP

PORLAND
SEATTLE
LOS ANGELES
WASHINGTON DC
NEW YORK
VANCOUVER BC

600 14th Street NW
Suite 800
Washington, DC 20005
T 202 380 3120
www.zgf.com

Consultants

ARCHITECT

R3A ARCHITECTURE
48 S. 14TH STREET
PITTSBURGH, PA 15203
T 412-31-2480

LANDSCAPE

STOSS LANDSCAPE URBANISM
54 OLD COLONY AVE., THIRD FL.
BOSTON, MA 02127
T 617-464-1140

STRUCTURAL

A+P ENGINEERS
1112 16TH ST. NW UNIT 920
WASHINGTON, DC 20036
T 202-628-1600

MEP ENGINEER

AFFILIATED ENGINEERS, INC.
10 S. LA SALLE ST., SUITE 2700
CHICAGO, IL 60603
T 312-977-2800

LAB PLANNING

RESEARCH FACILITIES DESIGN
555 FAYETTEVILLE ST., SUITE 300
RALEIGH, NC 27601
T 919-213-7007

FIRE PROTECTION ENGINEER

WFT ENGINEERING
1801 RESEARCH BLVD., SUITE 100
ROCKVILLE, MD 20850
T 301-230-0811

CIVIL ENGINEER

LANGAN ENGINEERING
2400 ANSYS DR., SUITE 403
CANONSBURG, PA 15317
T 724-514-5143

LIFE SAFETY

CODE CONSULTANTS, INC.
2043 WOODLAND PKWY, SUITE 300
ST. LOUIS, MO 63146
T 314-991-2633

ISSUED FOR: DATE:

50% CONSTRUCTION DOCUMENTS 2024.02.09

ISSUE FOR BID DOCUMENTS 2024.05.03

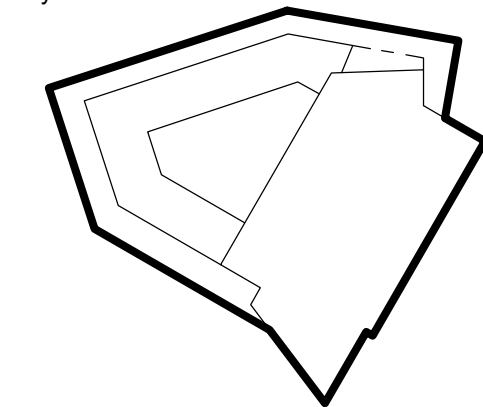
CARNEGIE MELLON
UNIVERSITY: RICHARD KING
MELLON HALL OF SCIENCES

4644 FORBES AVE
PITTSBURGH, PA 15213

Drawing Title

UTILITY PLAN

Key Plan



Date: 2024.05.03

Job No: D26023

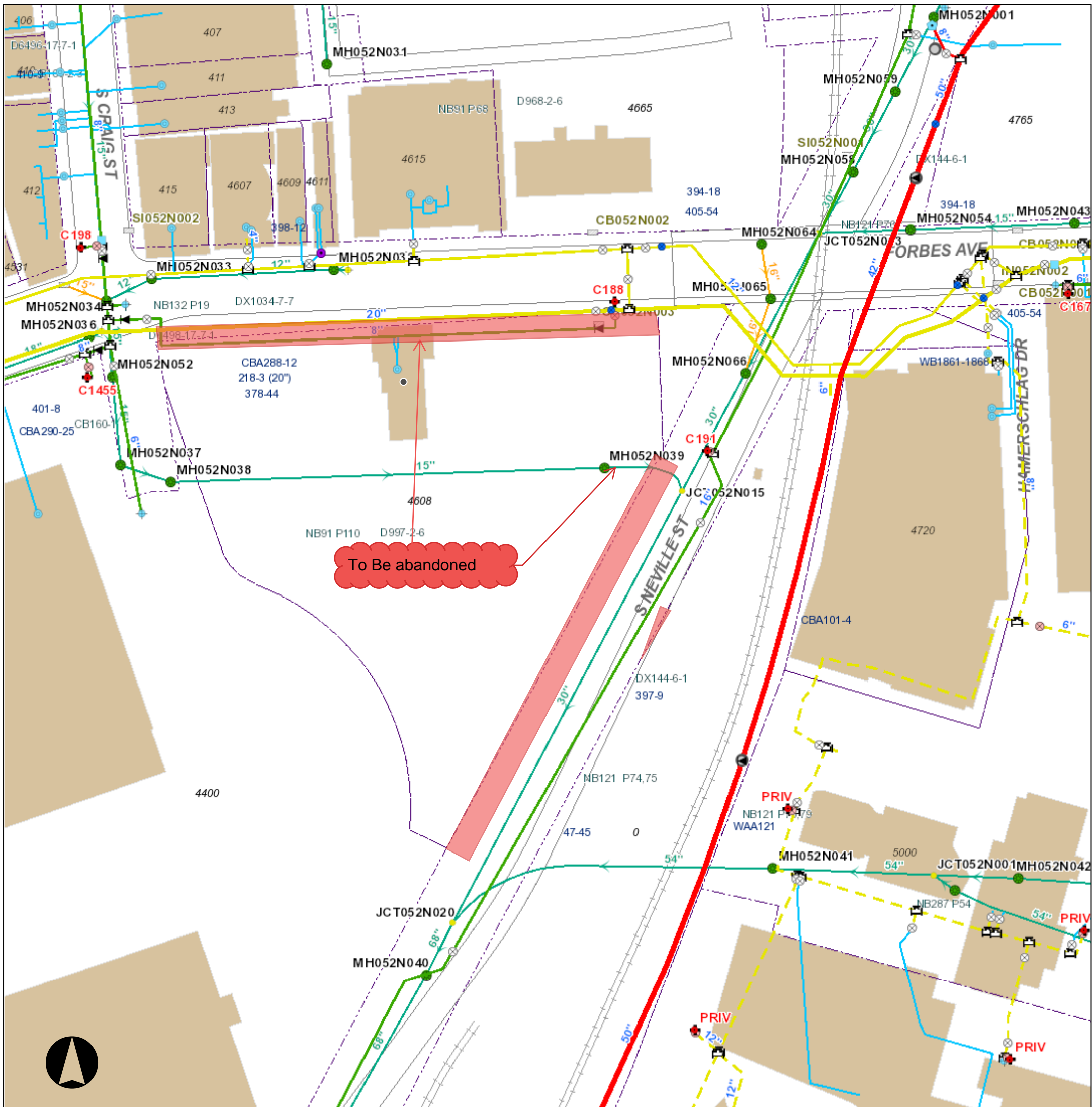
Drawn By: KAG

Checked By: EEG






































Drawing No.

CU102

4612 Forbes Encroachment Markup



Legend

- # Legend
- | | | | |
|---|-----------------------------|---|---|
|  | Pressure Monitoring Station |  | Private Inlet |
| <u>WATER</u> | |  | Outfall |
|  | Meter |  | End Cap |
|  | Curb Box |  | Sewer Pump Station |
|  | Water System Pump |  | Combined Sewer |
|  | Hydrant |  | Sanitary Sewer |
|  | System Valve |  | Storm Sewer |
|  | Dividing Pressure Valve |  | Regulated Combined Sewer |
|  | Coupling |  | Overflow Sewer |
|  | Tee |  | Interceptor |
|  | Cross |  | Sewer Force Main |
|  | Reducer |  | Private Sewer |
|  | End Cap |  | Undefined Sewer |
|  | Wash Out |  | Green Infrastructure Underground Facilities |
|  | Manhole | | |
|  | Junction | | |
|  | Inlet | | |
|  | Rising Main | | |
|  | Supply Main | | |
|  | Transmission Main | | |
|  | Distribution Main | | |
|  | Hydrant Branch | | |
|  | Private Main | | |
|  | Water Service Line | | |
| | <u>SEWER</u> | | |

0 0.02 0.04 mi



Neither the City of Pittsburgh nor the PWSA guarantees the accuracy of any of the information hereby made available, including but not limited to information concerning the location and condition of underground structures, and neither assumes any responsibility for any conclusions or interpretations made on the basis of such information. COP and PWSA assume no responsibility for any misunderstanding or representations made by their agents or employees unless such understanding or representations are expressly set forth in a duly authorized written document, and such document expressly provides that responsibility therefore is assumed by the City or the PWSA.

Date: 6/4/2024

To: Kim Lucas, Director of the Department of Mobility and Infrastructure
From: William J. Pickering, PWSA Chief Executive Officer
Date: June 12, 2024
Subject: Proposed Encroachment at 4644 Forbes Ave

The following is in response to the attached 5/23/2024 request regarding the encroachment at 4644 Forbes Ave in the 4th Ward of the City of Pittsburgh.

1. The Water Mapping (attached) indicates that there is an 8" water main within the area of the proposed encroachment. As outlined in the Development Agreement between Developer and PWSA, the water main will be abandoned.
2. The Sewer Mapping (attached) indicates that there is a 15" combination sewer within the area of the proposed encroachment. As outlined in the Development Agreement between Developer and PWSA, the sewer main will be abandoned. Please note, PWSA does not maintain records of sewer service laterals and the property owner is responsible for maintenance. We cannot confirm if the private service lateral will be affected.

PWSA has no objection to the proposed encroachment under the conditions set forth above.

JAT

Attachment



Corey Elzer
Engineering

469 Hershey Rd, Penn Hills 15235 | Mail Drop PH-TD
Tel 412-393-2614 | Email: celzer@duqlight.com

VIA EMAIL: Erminio Genoese <egenoise@langan.com >

Re: CMU – RKM Project, Boundary Street Encroachment Permit Letter - Duquesne Light

To whom it may concern,

Duquesne Light has reviewed this request, and the following guidelines needs to be adhered to proceed with encroachment as designed.

Guidelines when working near the HPFF:

- Use caution when excavating near the HPFF. A vac truck is required to avoid contact with our HPFF in one call exclusion zone.
- The pipes are buried in thermal sand.
- Caution must be taken to avoid contact with any of the HPFF lines (circulation pipe or either circuit pipe). The pipe has a special coating that helps prevent corrosion. A nick today could result in a dielectric leak in the future.
- The new lines should be at least 2 feet under any of the HPFF lines. However, DLC would like to review the plans for the new steam line to perform thermal calculations. Additional space between the steam line and the HPFF may be required depending on the results of the DLC thermal calculations.
- A steel plate will be required between the HPFF and the new steam pipe.
- If the HPFF pipes are exposed more that 5 feet, they must be supported from above. DLC shall approve the plan to support the pipe.
- When backfilling around the HPFF, a flowable thermal backfill should be used around the HPFF pipe per DLC specification.
- Prior to any backfilling around the HPFF, DLC must inspect the coating. Any coating damage will have to be repaired by a qualified contractor and tested to verify the integrity of the coating.

This letter is not intended as a full recitation of the facts or a complete review of applicable law. Nothing contained in or omitted from this letter is or shall be deemed to be a limitation, restriction, modification, or waiver of any of Duquesne Light's rights or remedies, either at law or in equity, in connection with any of the matters raised, all of which are expressly reserved.

Sincerely,

A handwritten signature in black ink that reads "Corey A Elzer".

Corey Elzer
Supervisor, Engineering
412.393.2614 (Office)
celzer@duqlight.com

Duquesne Light Company
469 Hersey Rd. Penn Hill, PA 15235
DuquesneLight.com



Jill Marie Groves
TEL 412.258.4691
MOBILE 412.588.4219
jill.groves@peoples-gas.com

May 6, 2024

Kimberly Lucas, Director
Department of Mobility and Infrastructure
City of Pittsburgh
611 Second Avenue
Pittsburgh, PA 15219

RE: Plan Revision of Generator and Pad location
4th Ward, City of Pittsburgh, Allegheny County

Dear Ms. Lucas:

This letter is in response to a request that Peoples Natural Gas Company (Peoples) received from LANGAN engineering regarding a plan revision for a generator and pad location, on behalf of CMU Richard King Mellon Hall of Sciences development.

Based on the drawings provided to Peoples, the proposed plans variances will not interfere with our gas facilities in this area.

Peoples has no objection to the proposed street vacation.

Sincerely,

Jill Marie Groves

Jill Marie Groves
Land Department