

HOECHSTETTER BUILDING NEW GENOMICS LABORATORY



5560 Centre Ave
PITTSBURGH, PA 15232

PROJECT SCOPE OF WORK

THE UNIVERSITY OF PITTSBURGH MEDICAL CENTER (UPMC) IS BUILDING A GENOMICS TESTING LABORATORY. THIS FACILITY IS PLANNED FOR AN EXISTING UPMC PROPERTY LOCATED AT 5560 CENTRE AVENUE, PITTSBURGH. CURRENTLY THE FIRST FLOOR OF THIS BUILDING IS UNOCCUPIED, MOST RECENTLY HAVING BEEN USED AS A CORPORATE PRINTING LOCATION. THE SECOND FLOOR HOUSES A CRITICAL DATA CENTER FOR UPMC WHICH IS EXPECTED TO REMAIN IN OPERATION THROUGHOUT THE DURATION OF THIS CONSTRUCTION PROJECT.

THE POWER AND DATA COMMUNICATIONS INFRASTRUCTURE ON THE FIRST FLOOR HAS BEEN PARTIALLY DEMOLISHED. THE COOLING SYSTEMS, INCLUDING ONE ROOFTOP PACKAGED UNIT AND THREE PRECISION SPLIT SYSTEM UNITS ARE INTACT AND WILL BE REPURPOSED FOR THE PROJECT.

THE SCOPE INCLUDES: DEMOLITION OF THE EXISTING CEILING, CABLING DISTRIBUTION AND MECHANICAL BRANCH FEEDERS (PARTIAL). THIS WILL BE FOLLOWED BY A THOROUGH CLEANING TO REMOVE PRINTER DUST AND DEBRIS WHICH MIGHT IMPACT THE FUTURE OPERATION OF THE LABORATORY. EXISTING CONCRETE FLOORS AND WALLS WILL BE REPAIRED AND SEALED AND A NEW CEILING (GRID AND TILES) WILL BE INSTALLED IN THE LABORATORY AREAS.

A NEW UPS WILL BE INSTALLED TO FEED CRITICAL LOADS WITHIN THE FACILITY. NEW UPS DISTRIBUTION WILL BE INSTALLED FROM ONE NEW AND ONE REPURPOSED PANELBOARD. STRAIGHT UTILITY POWER CIRCUITS WILL ALSO BE INSTALLED FROM EXISTING PANELBOARDS. NEW LED LIGHTING FIXTURES WILL BE INSTALLED TO REPLACE EXISTING FLUORESCENT DEVICES; ALL NEW DATA CABLING WILL BE INSTALLED. BOTH POWER AND DATA CABLING WILL BE LOCALLY DISTRIBUTED USING CEILING HUNG SERVICE COLUMNS.

TWO OF THE THREE SPLIT SYSTEMS ON THE FIRST FLOOR WILL BE RELOCATED TO A NEW ROOM. ONE NEW 8 TON SPLIT SYSTEM WILL BE ADDED TO AUGMENT THE EXISTING COOLING CAPACITY. NEW BRANCH DISTRIBUTION AND CONTROLS WILL BE INSTALLED TO ACCOMMODATE THE NEW CEILING LAYOUTS AND ROOM CONFIGURATIONS. AN EXISTING 12.5 TON ROOFTOP UNIT WILL BE UPGRADED IN-PLACE.

FOUR LABORATORY SINKS WILL BE SITUATED THROUGHOUT THE FACILITY. THE RESTROOMS WILL BE UPDATED TO MEET LOCAL ADA REQUIREMENTS AND A SAFETY SHOWER/EYEWASH WILL BE PROVIDED. MINOR CHANGES TO THE SPRINKLER HEAD LAYOUT WILL OCCUR TO ACCOMMODATE NEW WALL LOCATIONS.

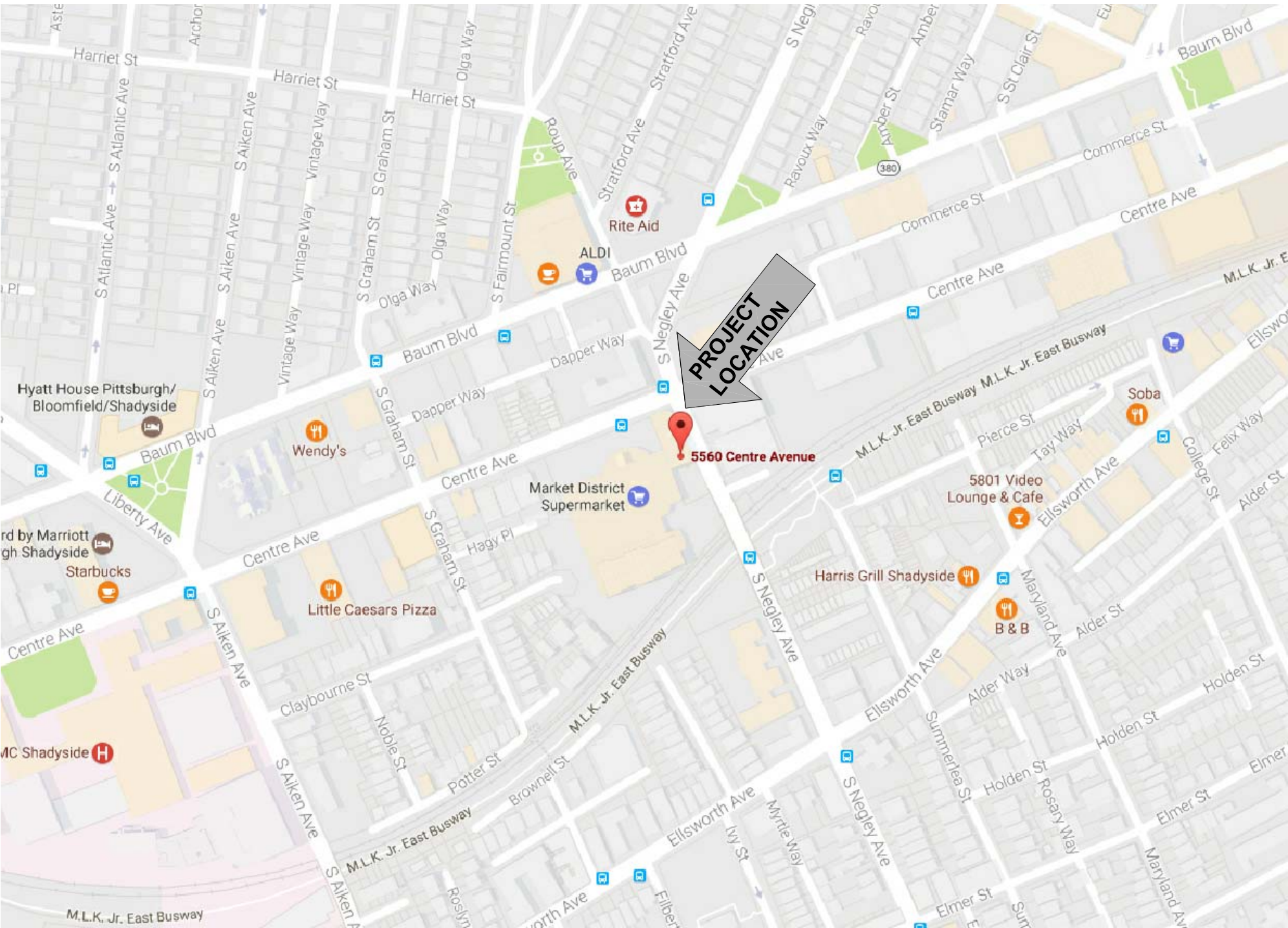
CODE REVIEW NOTES:

- BUILDING HEIGHT: 2 FLOOR (50'-0")
- GROSS FIRST FLOOR BUILDING AREA: 10,000 SQFT PROJECT AREA: 6,500 SQFT
- THE EXISTING BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC FIRE SUPPRESSION SYSTEM
- USE GROUP OF THIS BUILDING WILL REMAIN THE SAME (OFFICE, LABORATORIES AND ELECTRONIC DATA PROCESSING)

ACCESSIBILITY:

- NEW CONSTRUCTION SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG), INCLUDING, BUT NOT LIMITED TO IBC SECTION 1101.1
- THRESHOLD TO BE A MAX. 1/2" ABOVE ADJACENT FINISH FLOOR.
- MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBS FOR INTERIOR DOORS.
- THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC SLIDERS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE.
- CONTROLS AND OPERATING MECHANISMS SHALL BE ACCESSIBLE AND HAVE MOUNTING HEIGHTS COMPLYING WITH ADAAG 4.27.
- ALL ROOM, DIRECTIONAL AND INFORMATION SIGNAGE SHALL BE ACCESSIBLE DESIGN COMPLYING WITH ADAAG 4.13 AND 4.30.

ISSUED FOR BID - 7/20/2017

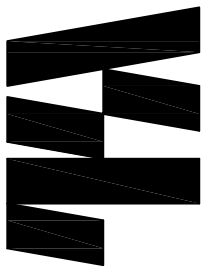


DESIGNERS/ENGINEERS:

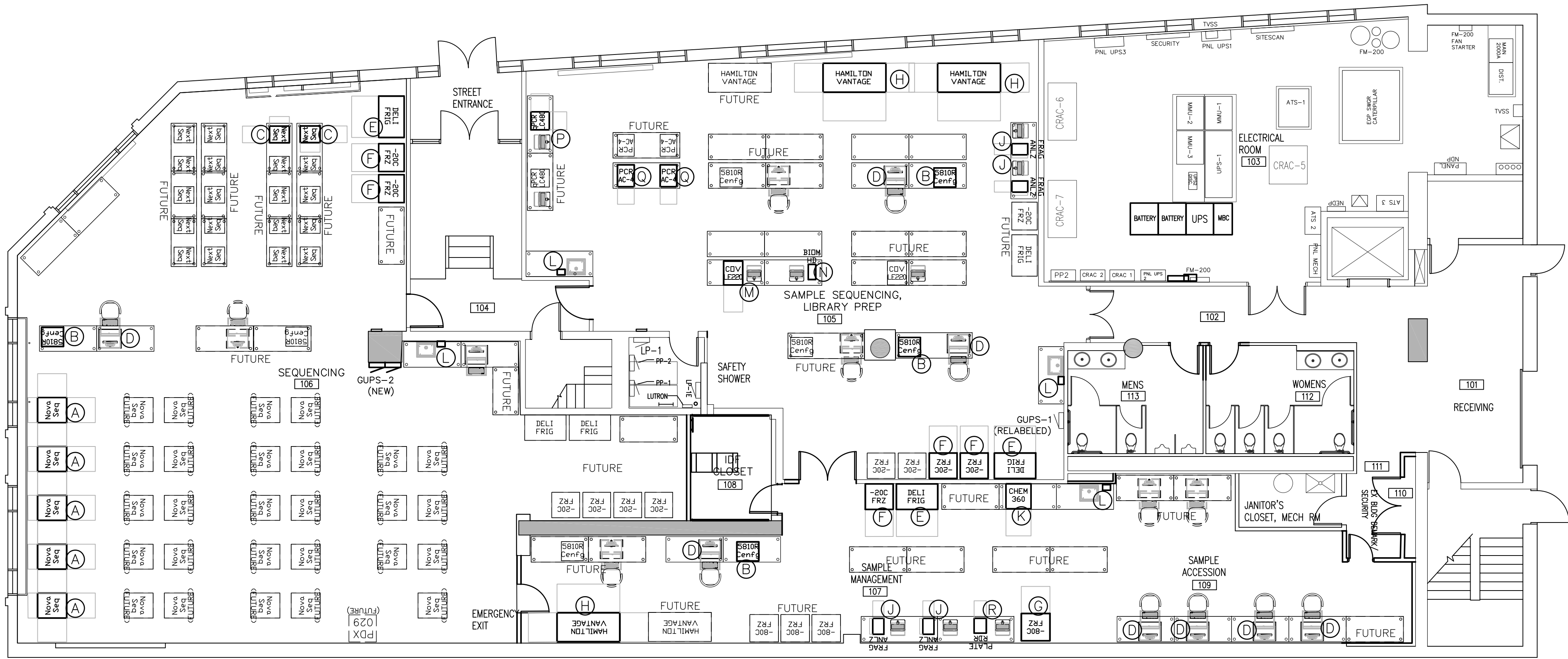


Sheet List Table	
Sheet Number	Sheet Title
--	COVER SHEET
G2.0	LAB EQUIPMENT PLAN AND SCHEDULE
A1.0	ARCHITECTURAL DEMOLITION PLAN
A2.0	ARCHITECTURAL NEW PLAN & WALL DETAILS
A2.1	ARCHITECTURAL CEILING PLANS
A2.2	ROOF MODIFICATIONS PLAN
A3.0	FINISH SCHEDULES AND WALL DETAILS
A3.1	ARCHITECTURAL ROOM & FINISH NOTES
M1.0	MECHANICAL DEMOLITION PLAN
M2.0	MECHANICAL FLOOR PLAN
M2.1	MECHANICAL ROOF PLAN
M3.0	MECHANICAL DETAILS
M5.0	MECHANICAL SCHEDULES AND NOTES
P1.0	PLUMBING DEMOLITION PLAN
P2.0	PLUMBING DVW PLAN
P2.1	PLUMBING SUPPLY PLAN
P3.0	PLUMBING DETAILS
P5.0	PLUMBING SCHEDULES
FP1.0	FIRE PROTECTION FLOOR PLANS
E0.0	ELECTRICAL SYMBOLS AND ABBREVIATIONS
E2.0	ELECTRICAL FLOOR PLANS
E2.1A	ABOVE CEILING CABLING PATHWAYS NORTH
E2.1B	ABOVE CEILING CABLING PATHWAYS SOUTH
E2.2	LIGHTING PLANS
E2.3	ELECTRICAL ROOF PLAN
E3.0	ELECTRICAL DETAILS
E3.1	ELECTRICAL DETAILS
E4.0	EXISTING AND DEMOLITION ONE LINE
E4.1	NEW ONE LINE
E5.0	ELECTRICAL SCHEDULES
T2.0	TELECOM FLOOR PLANS

REV	BY	DATE	DESCRIPTION
-	TS	07/20/17	ISSUED FOR BID

DESIGNERS/ENGINEERS:	 TechSite Your peer-approved mission-critical facility experts TechSite www.techsiteplan.com 8188 Business Way - Plain City, Ohio 43064 t 614.873.7800 f 614.873.7801
ARCHITECT:	 TKA Architects Planners & Interior Designers 4951 Centre Avenue Pittsburgh, Pennsylvania 15213 P: (412) 681-2742 F: (412) 681-5817
PROJECT:	 UPMC LIFE CHANGING MEDICINE 5560 Centre Avenue Pittsburgh, PA 15232 Hoechstetter Genomics Laboratory

TSP JOB#:	3195
-----------	------



A PLAN
HOECHSTETTER FIRST FLOOR
1/8"=1'-0"

LAB EQUIPMENT SCHEDULE				
EQUIP ID	UPS?	RECEPTACLE	NETWORK	
			DROP?	
A	YES	L6-20R	YES	Nova Sequencer
B	NO	5-20R	NO	Centrifuge 5810R
C	YES	5-20R	YES	Next Sequencer
D	YES	5-20R	YES	Workstation
E	NO	5-20R	NO	Deli Fridge
F	NO	5-20R	NO	-20 Freezer
G	NO	5-20R	NO	-80 Freezer
H	YES	5-20R	YES	Hamilton Vantage
J	YES	5-20R x2	YES	Fragment Analyzer
K	YES	5-20R	YES	PE Cemagic 360
L	NO	5-20R	YES	Milli-Q Integral
M	YES	5-20R x2	YES	Covaris LE220
N	NO	L6-20R, 5-20R	YES	Biomark HD
P	YES	L6-20R, 5-20R	YES	LightCycler 480
Q	YES	L6-20R	NO	AC-4 PCR
R	YES	5-20R x2	YES	Synergy Multi-Mode Reader

NOTE:

THIS DRAWING IS INCLUDED FOR INFORMATIONAL PURPOSES ONLY. IT IS A REPRESENTATION OF THE SITE AFTER THE WORK RELATED TO THIS SET OF ENGINEERING DOCUMENTS IS COMPLETE. THIS DRAWING ALSO ILLUSTRATES FUTURE PROJECT MODIFICATIONS.

ALL ITEMS INDICATED AS FUTURE WORK WILL NOT BE REVIEWED BY THE PERMITTING AUTHORITIES. THEIR INCLUSION ON THIS DRAWING DOES NOT INDICATE ANY PHASED OR CONDITIONAL APPROVAL FOR CONSTRUCTION.

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION



DESIGNERS:

TechSite
Your peer-approved mission-critical facility experts
www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

PROJECT

UPMC LIFE CHANGING MEDICINE

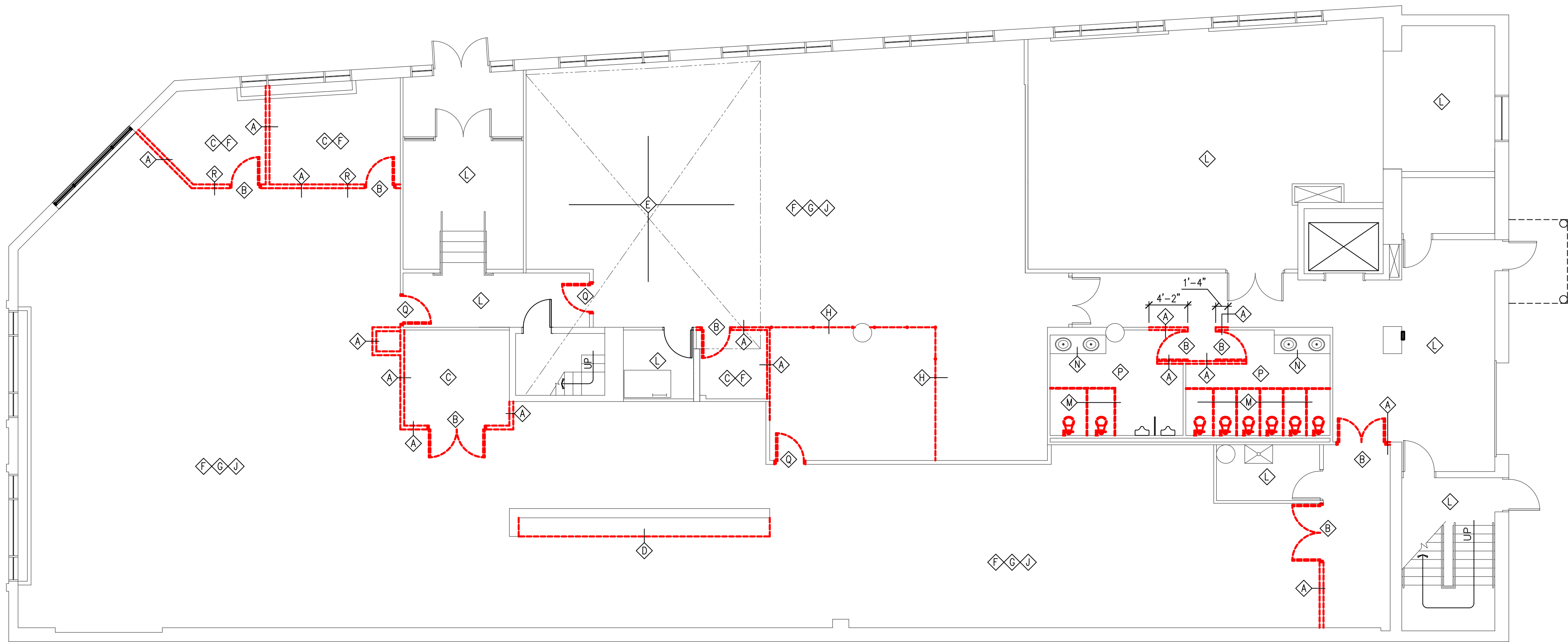
**HOECHSTETTER BUILDING
NEW GENOMICS LAB**

5560 Centre Avenue, Pittsburgh

DRAWN BY: JK	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME:
G20-3195.DWG

SEAL	TITLE	
	LAB EQUIPMENT PLAN AND SCHEDULE	
	LAST EDIT DATE: 7/12/17 SCALE: AS SHOWN	DRAWING NO. G2.0



FIRST FLOOR DEMOLITION PLAN

SCALE: 1/8"=1'-0"

NOTE:

DEMOLITION NOTES  PERTAIN TO ENTIRE SCOPE OF WORK.

AFTER GENERAL DEMOLITION AND BEFORE NEW WORK, ALL SURFACES FROM FLOOR TO CEILING TO RECEIVE A THOROUGH CLEANING TO REMOVE TONER AND PAPER DUST. ALL REMAINING DUCTWORK INTERIORS TO ALSO BE THOROUGHLY CLEANED.

DEMO NOTES

-  DEMO AND REMOVE ALL EXISTING DRYWALL PARTITION EXCEPT AS NOTED. PATCH AND REPAIR EXISTING FLOOR & ADJACENT WALLS AS NECESSARY.
-  DEMO AND REMOVE EXISTING DOOR, FRAME, AND HARDWARE. PATCH AND REPAIR ADJACENT SURFACES TO RECEIVE NEW FINISHES. WHERE APPROPRIATE, RETAIN DOOR FOR REINSTALLATION IN NEW LAYOUT.
-  DEMO AND REMOVE EXISTING FLOORING. CLEAN AND REPAIR CONCRETE SUBFLOOR TO RECEIVE NEW FINISH.
-  DEMO AND REMOVE EXISTING CASEWORK AND SHELVING AS SHOWN. PATCH AND REPAIR REMAINING SURFACES TO RECEIVE NEW FINISHES.
-  DEMO. AND REMOVE THE EXISTING FLOOR TOPPING MATERIAL IN THE AREA OVER THE BASEMENT. CLEAN AND PREPARE SUBBASE CONCRETE FLOOR TO RECEIVE NEW FLOOR TOPPING MATERIAL.
-  DEMO AND REMOVE EXISTING ACOUSTIC CEILING TILE AND GRID IN AREA/ ROOMS AS SHOWN.
-  REMOVE ALL LIGHTING FIXTURES; SEE LIGHTING-SPECIFIC DEMOLITION SHEET FOR ADDITIONAL DEMOLITION SCOPE.
-  REMOVE CHAIN LINK FENCE AND GATE. PATCH AND REPAIR FLOOR TO RECEIVE NEW FLOORING.
-  DEMO AND REMOVE ALL ABANDONED MECHANICAL, ELECTRICAL EQUIPMENT, PIPING, AND CONDUIT SUPPORTS IN THE SPACE ABOVE THE CEILING. SEE DISCIPLINE-SPECIFIC DEMOLITION SHEETS FOR ADDITIONAL DEMOLITION SCOPE.
-  DEMO AND REMOVE EXISTING MASONRY BEARING WALL. SEE STRUCTURAL DRAWINGS FOR LINTEL CONFIGURATION.
-  NO WORK; AREA NOT IN CONTRACT.
-  DEMO AND REMOVE EXISTING WATER CLOSETS AND TOILET PARTITIONS AS SHOWN. EXISTING URINALS TO REMAIN.
-  DEMO AND REMOVE EXISTING SINKS; REMOVE EXISTING COUNTERTOPS.
-  REMOVE AND SAVE ALL TOILET ACCESSORIES IN THE DEMOLISHED AREAS. REINSTALL AS SHOWN IN THE NEW PLAN.
-  DEMO AND REMOVE EXISTING DOOR, FRAME, AND HARDWARE IN PREPARATION FOR A LARGER DOOR. SEE DRAWING A2.0 AND FINISH SCHEDULE ON A3.0 FOR MORE INFORMATION. WHERE APPROPRIATE, RETAIN DOOR FOR REINSTALLATION IN NEW LAYOUT.
-  DEMO EXISTING INTERIOR WINDOW AND FRAME.

-	JS	7/20/17	ISSUED FOR BID
-	JS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION

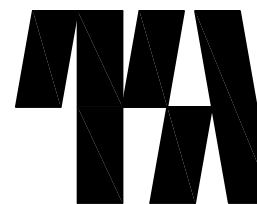
DESIGNERS:



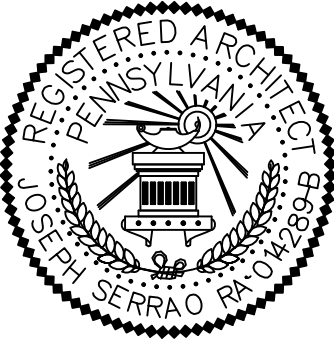
Your peer-approved mission-critical facility experts

TechSite www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

ARCHITECT:



TKA Architects
Planners & Interior Designers
4951 Centre Avenue
Pittsburgh, Pennsylvania 15213
P: (412) 681-7242
F: (412) 681-8817



PROJECT



LIFE CHANGING MEDICINE

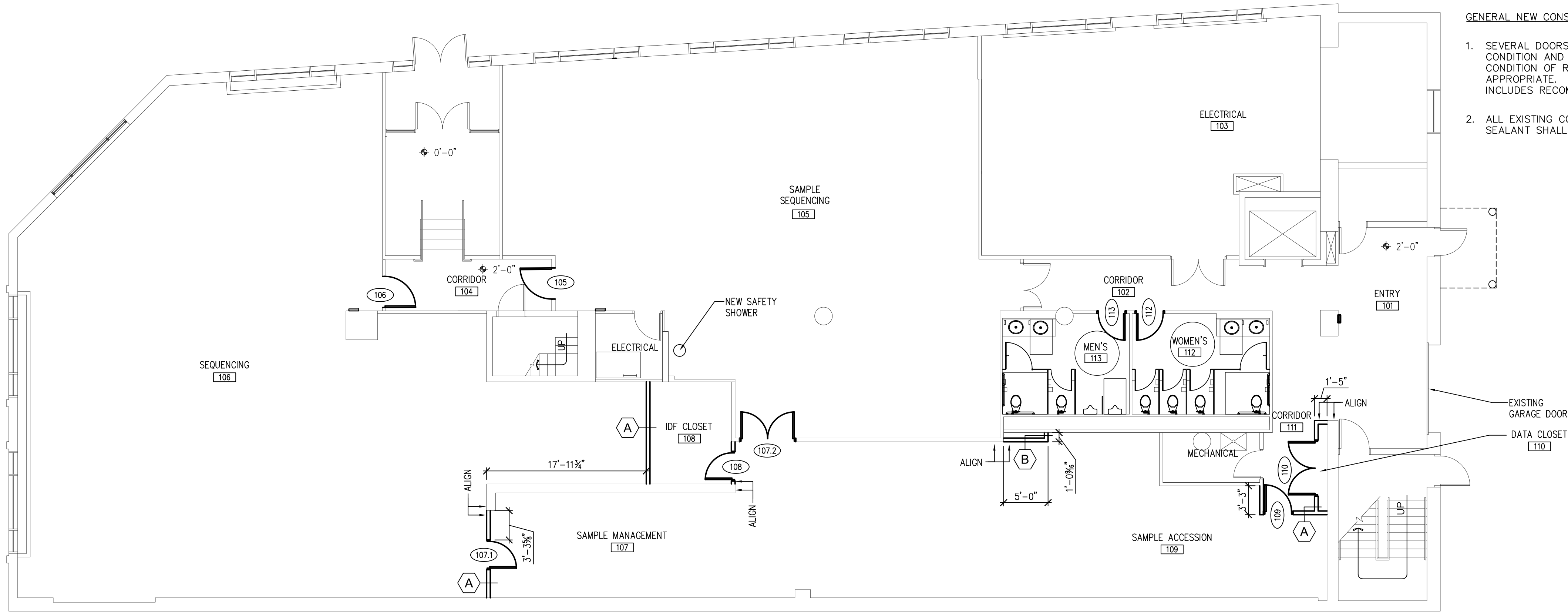
**HOECHSTETTER BUILDING
NEW GENOMICS LAB**

5560 Centre Avenue, Pittsburgh

DRAWN BY: ER	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY: JS	DATE: 06.09.17	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME: A10-3195.DWG	
SEAL	TITLE ARCHITECTURAL DEMOLITION PLAN
	LAST EDIT DATE: 7/20/17
	SCALE: AS NOTED
DRAWING NO. A1.0	

PLOT DATE: 7/30/2017 8:23:37 AM
L:\TECH SITE\PROJECTS\UPMC - GC 1313195 - GENOMICS LAB DETAILED ENGINEERING AND CAD\DRAWINGS\0-CURRENT DRAWINGS

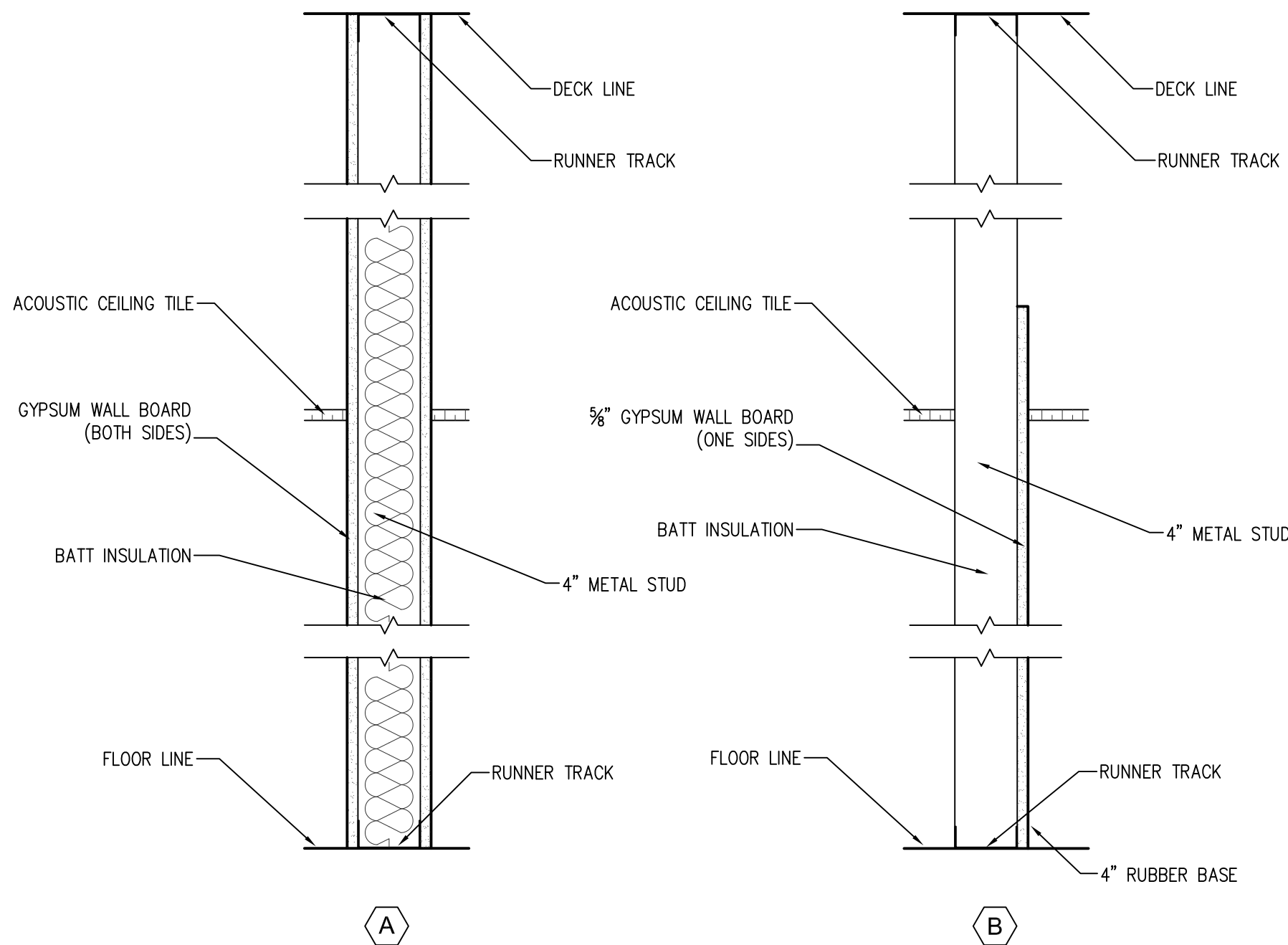


GENERAL NEW CONSTRUCTION NOTES:

- SEVERAL DOORS REMOVED DURING DEMOLITION MAY BE OF ACCEPTABLE CONDITION AND QUALITY TO REUSE IN THE NEW FLOOR PLAN. REVIEW CONDITION OF REMOVED DOORS AND DEVELOP PLAN TO REUSE AS APPROPRIATE. THE DOOR FINISH SCHEDULE ON DRAWING A3.0 INCLUDES RECOMMENDATIONS ON POTENTIAL DOOR LOCATIONS.
- ALL EXISTING CONCRETE FLOORS SHALL BE POLISHED AND A TINTED SEALANT SHALL BE APPLIED; SEE FINISH SCHEDULE, DRAWING A3.0.

FIRST FLOOR RENOVATION PLAN

SCALE: 1/8"=1'-0"



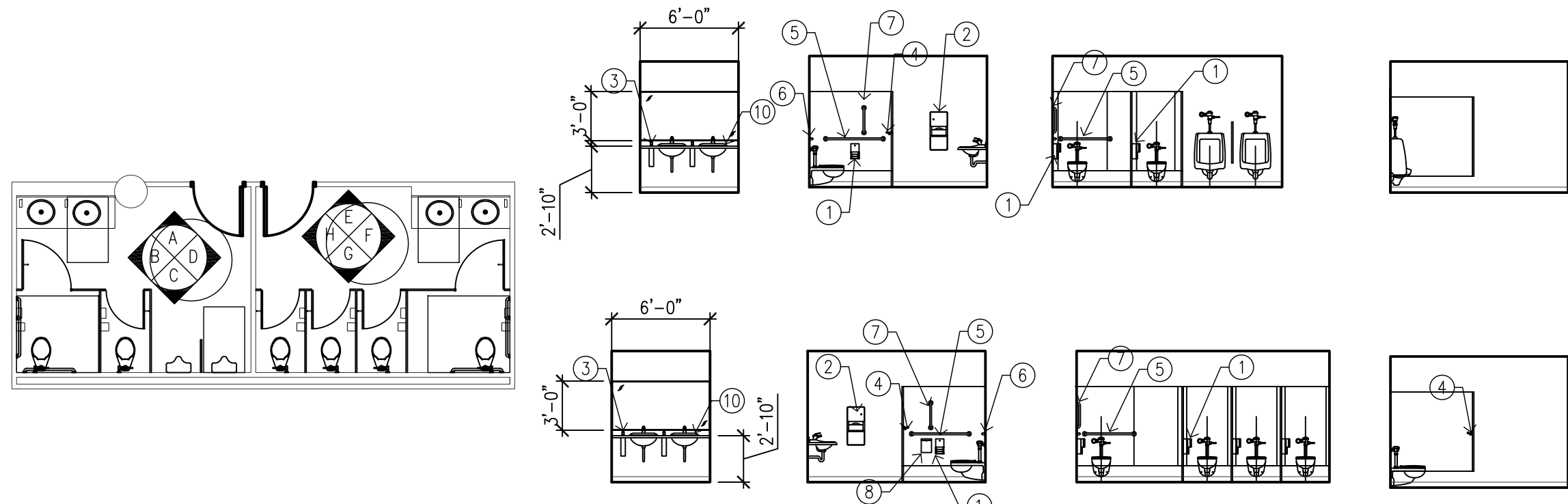
WALL TYPE

SCALE: N.T.S.

ALL WALLS TO BE TYPE A UNLESS NOTED OTHERWISE.

WALL TYPE

SCALE: N.T.S.

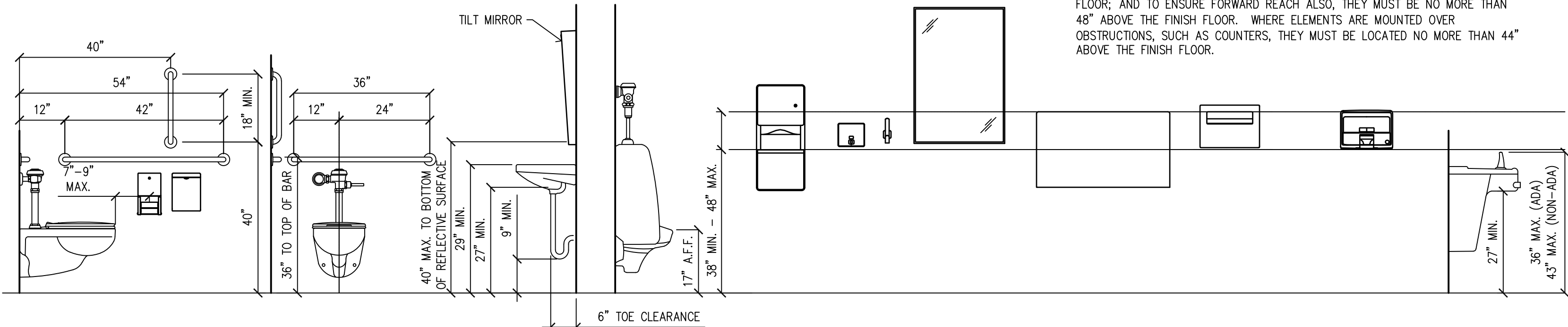


TOILET ROOM ELEVATIONS

SCALE: 1/8"=1'-0"

ACCESSORIES:

- TOILET PAPER HOLDER BOBRICK B4288
- PAPER TOWEL DISPENSER AND RECEPTACLE BOBRICK B4369
- LIQUID SOAP DISPENSER BOBRICK B40634
- COAT HOOK BOBRICK B6827
- 36" GRAB BAR (ADA) BOBRICK B6806 X36
- 42" GRAB BAR (ADA) BOBRICK B6806 X42
- 18" GRAB BAR (ADA) BOBRICK B6806 X18
- SANITARY NAPKIN DISPOSAL BOBRICK B270 WITH 270-12 LINER
- TOILET PARTITIONS AND SCREENS BOBRICK 1086
- DURALINE SERIES WITH STANDARD HARDWARE, FLOOR TO CEILING ANCHORED, COLOR S-431 WILLOW GREY
- BRADLEY OMNIDECK 2 BOWL FIXTURE, SEE SCHEDULE ON DRAWING P5.0



TYPICAL A.D.A. MOUNTING HEIGHT REQUIREMENTS

SCALE: 1/2"=1'-0"

MOUNTING HEIGHT REQUIREMENTS:

TO ALLOW SIDE REACH BY PEOPLE IN WHEELCHAIRS, IT IS RECOMMENDED THAT ACCESSORIES BE MOUNTED WITH THEIR DISPENSING MECHANISMS, START BUTTONS, COIN SLOTS, OR DISPENSER OPENINGS LOCATED 38" TO 48" ABOVE THE FINISH FLOOR; AND TO ENSURE FORWARD REACH ALSO, THEY MUST BE NO MORE THAN 48" ABOVE THE FINISH FLOOR. WHERE ELEMENTS ARE MOUNTED OVER OBSTRUCTIONS, SUCH AS COUNTERS, THEY MUST BE LOCATED NO MORE THAN 44" ABOVE THE FINISH FLOOR.

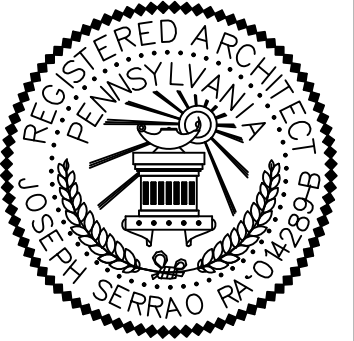
-	JS	7/20/17	ISSUED FOR BID
-	JS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION

DESIGNERS:

TechSite
Your peer-approved mission-critical facility experts
TechSite www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

ARCHITECT:

TKA Architects
Planners & Interior Designers
4951 Centre Avenue
Pittsburgh, Pennsylvania 15213
P: (412) 681-7242
F: (412) 681-8817



PROJECT

UPMC LIFE CHANGING MEDICINE
HOECHSTETTER BUILDING
NEW GENOMICS LAB
5560 Centre Avenue, Pittsburgh

DRAWN BY: ER	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY: JS	DATE: 06.09.17	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME:
A20-3195.DWG

SEAL

TITLE

ARCHITECTURAL
NEW PLAN &
WALL DETAILS

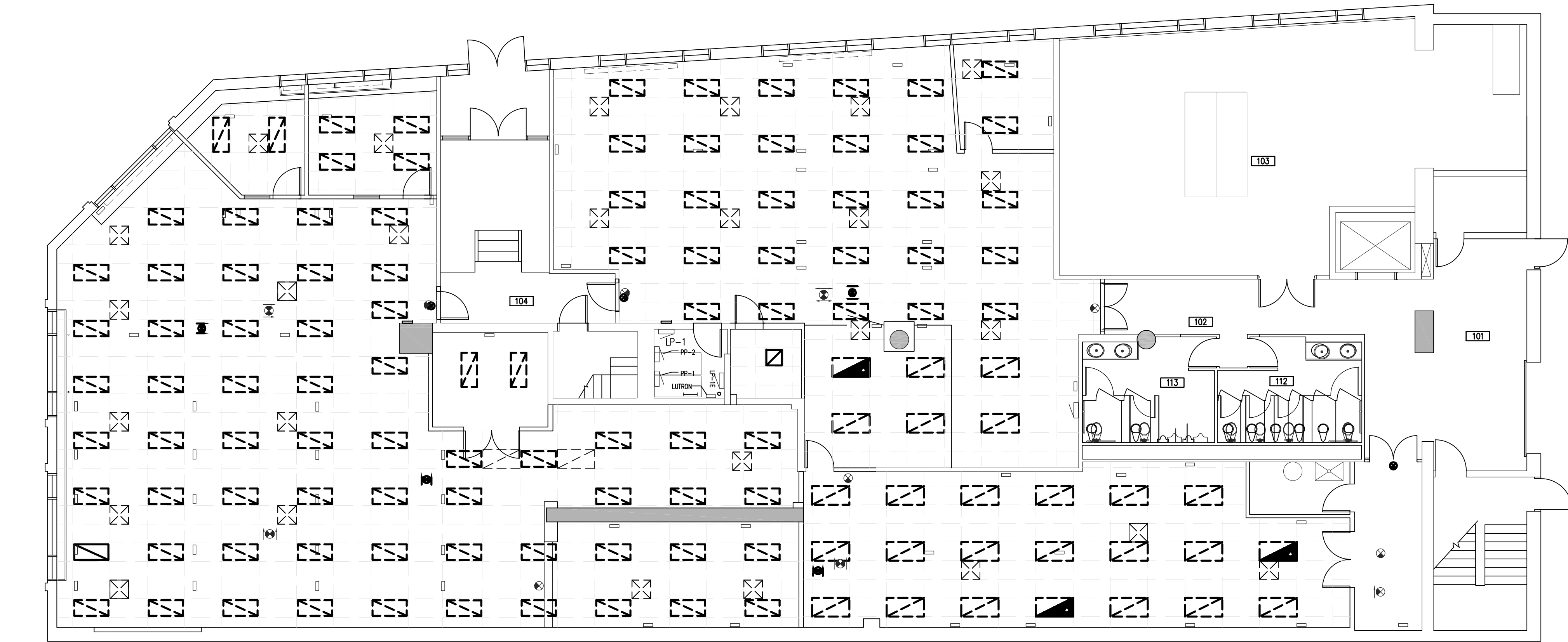
LAST EDIT DATE:
7/13/17

SCALE:
As Noted

DRAWING NO.

A2.0

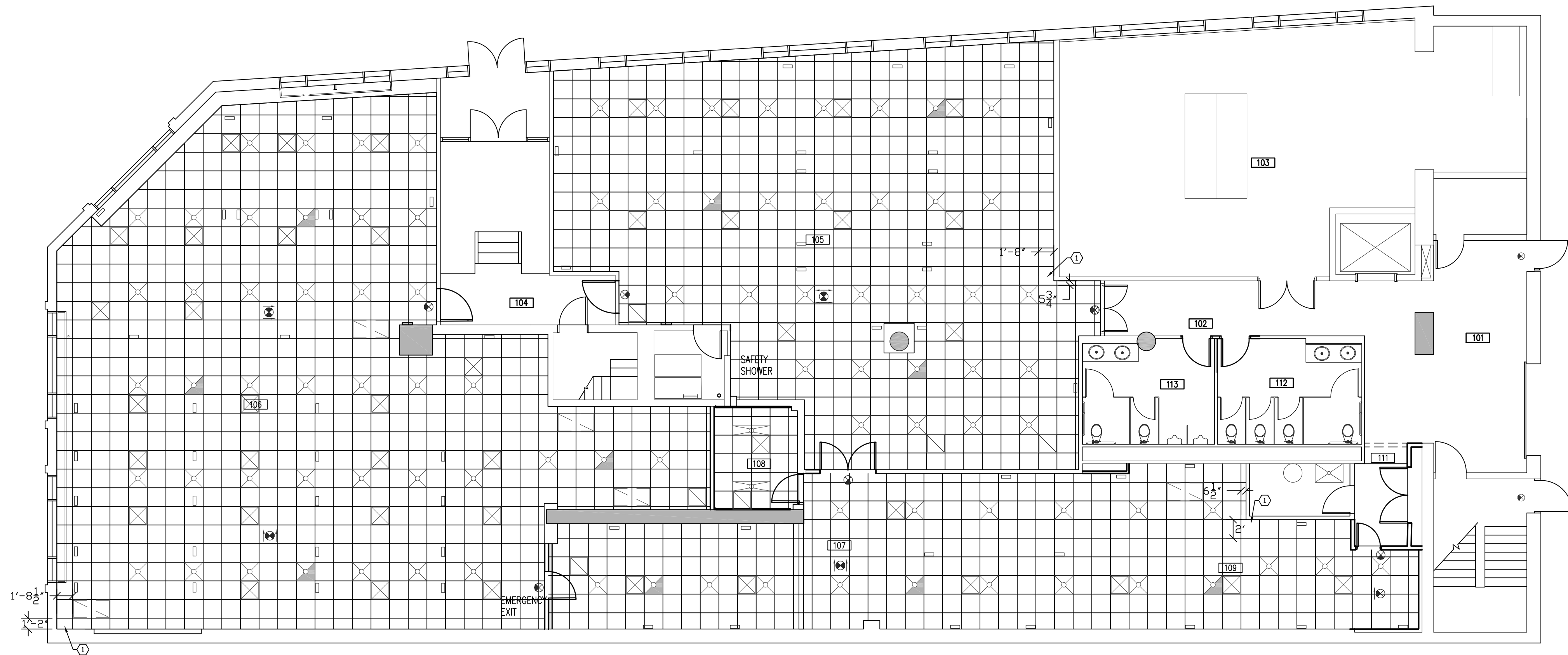
PLOT DATE \ TIME: 7/30/2017 8:23:41 AM
L:\TECH SITE\PROJECTS\UPMC - GC 13133195 - GENOMICS LAB DETAILED ENGINEERING AND CAD\DRAWINGS\0-CURRENT DRAWINGS



GENERAL DEMOLITION NOTE:
DEMOLISH ALL CEILING GRID AND TILES IN THE AREAS
DETAILS (AND PER ROOMS DEFINED ON DRAWING A1.03)
RETAIN HANGERS AS APPROPRIATE PER NEW GRID LAYOUT.

A FLOOR PLAN
CEILING DEMOLITION

1/8"=1'-0"



GENERAL NEW WORK NOTES:
ALL NEW CEILING SYSTEM SHALL BE INSTALLED; 2X2
LAY-IN DESIGN, SEE FINISH SCHEDULE ON DRAWING A2.1
FOR PRODUCT SPECIFICATION.

CODED NOTE:
1. STARTER MEASUREMENTS FOR NEW CEILING GRIDS.

B LIGHTING PLAN
ELECTRICAL NEW WORK

1/8"=1'-0"

DRAWING LINETYPE LEGEND

INDICATES EXISTING EQUIPMENT

INDICATES NEW EQUIPMENT

INDICATES EQUIPMENT TO BE DEMOLISHED

INDICATES FUTURE EQUIPMENT

TS

7/28/17

ISSUED FOR BID

TS

7/17/17

ISSUED FOR PERMIT

REV

BY

DATE

DESCRIPTION

1/8"=1'-0"

0'

4'

8'

16'

32'

DESIGNERS:

TechSite

Your peer-approved mission-critical facility experts

TechSite

www.techsiteplan.com

8188 Business Way . Plain City, Ohio 43064

t 614.873.7800 . f 614.873.7801

PROJECT

UPMC

LIFE CHANGING MEDICINE

HOECHSTETTER BUILDING

NEW GENOMICS LAB

5560 Centre Avenue, Pittsburgh

DRAWN BY:

ER

ORIGIN DATE:

05/6/17

DESIGNED BY:

DATE:

APPROVED BY:

JS

DATE:

06.09.17

CLIENT NO.

1313

JOB NO.

3195

DRAWING NAME:

A21-3195.DWG

SEAL

TITLE

ARCHITECTURAL CEILING PLANS

LAST EDIT DATE:

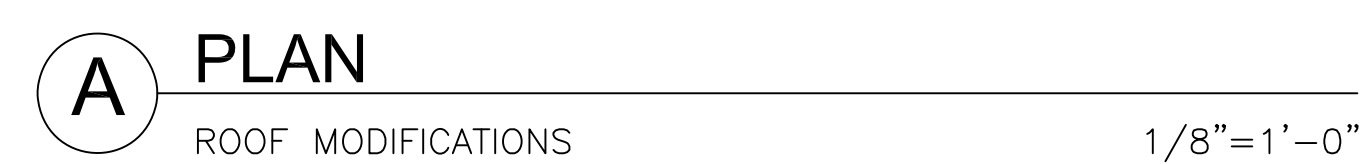
7/12/17

SCALE:

As Noted

DRAWING NO.

A2.1

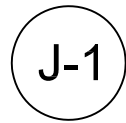
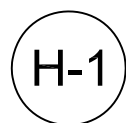


SEAL	TITLE	
	ROOF MODIFICATIONS PLAN	
	LAST EDIT DATE: 7/17/17	DRAWING NO. A2.2
	SCALE: AS SHOWN	

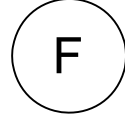
DOOR SCHEDULE																			
DOOR NO.	DOOR										FRAME				FIRE RTG	HDWR SET	REMARKS		
	TYPE	MAT.	NOMINAL SIZE				SILL DET.	LOUVER		GL.	SPEC'L DET.	TYPE	MAT.	SECTIONS					
			NO.	W.	HT.	THK.		W	H					JAMB				HEAD	SILL
105	F	HM	1	3'-6"	7'-0"	1-3/4"	-	-	-	-	1	HM	J-1	H-1	S-1	-	2		
106	F	HM	1	3'-6"	7'-0"	1-3/4"	-	-	-	-	1	HM	J-1	H-1	S-1	-	2		
107.1	F	HM	1	3'-0"	7'-0"	1-3/4"	-	-	-	-	1	HM	J-1	H-1	S-1	-	4		
107.2	F	HM	2	3'-0"	7'-0"	1-3/4"	-	-	-	-	1	HM	J-1	H-1	S-1	-	3		
108	F	HM	1	3'-0"	7'-0"	1-3/4"	-	-	-	-	1	HM	J-1	H-1	S-1	-	4		
109	F	HM	1	3'-0"	7'-0"	1-3/4"	-	-	-	-	1	HM	J-1	H-1	S-1	-	2		
110	F	HM	2	3'-0"	7'-0"	1-3/4"	-	-	-	-	1	HM	J-1	H-1	S-1	-	1		
112	F	SCW	1	3'-0"	7'-0"	1-3/4"	-	-	-	-	1	HM	J-1	H-1	S-1	-	5		
113	F	SCW	1	3'-0"	7'-0"	1-3/4"	-	-	-	-	1	HM	J-1	H-1	S-1	-	5		

HM- HOLLOW METAL
SCW- SOLID CORE WOOD

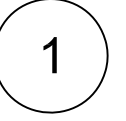
1. INSTALL BOX AND WIRING FOR FUTURE DOOR OPENER.
2. PROVIDE AND INSTALL WEATHER STRIPPING AND AUTOMATIC DOOR BOTTOM.
3. POSSIBLE CANDIDATE FOR REUSE OF DOOR SLAB REMOVED DURING DEMOLITION.



SCALE: 3"=1'-0"



SCALE: $\frac{1}{4}"=1'-0"$



SCALE: $\frac{1}{4}"=1'-0"$

ROOM FINISH SCHEDULE														
ROOM NO	ROOM NAME	FLR.	NORTH		EAST		SOUTH		WEST		CEILING			REMARKS
			BASE	WALL	BASE	WALL	BASE	WALL	BASE	WALL	MAT	HEIGHT	FINISH	
101	RECEIVING													
102	CORRIDOR													
103	ELECTRICAL													
104	CORRIDOR													
105	SAMPLE SEQUENCING	CONC.	RB	PT-1	RB	PT-1	RB	PT-1	RB	PT-1	ACT	9'-0"	-	
106	SEQUENCING	CONC.	RB	PT-1	RB	PT-1	RB	PT-1	RB	PT-1	ACT	10'-0"	-	
107	SAMPLE MANAGEMENT	CONC.	RB	PT-1	RB	PT-1	RB	PT-1	RB	PT-1	ACT	9'-0"	-	
108	IDF CLOSET	CONC.	RB	PT-1	RB	PT-1	RB	PT-1	RB	PT-1	ACT	9'-0"	-	
109	SAMPLE ACCESSION	CONC.	RB	PT-1	RB	PT-1	RB	PT-1	RB	PT-1	ACT	9'-0"	-	
110	CORRIDOR	CONC.	RB	PT-1	RB	PT-1	RB	PT-1	RB	PT-1				
111	DATA CLOSET	CONC.	RB	PT-1	RB	PT-1	RB	PT-1	RB	PT-1	ACT	10'-0"	-	
112	WOMEN'S ROOM	VCT	RB	PT-1	RB	PT-1	RB	PT-1	RB	PT-1	ACT	9'-0"	-	
113	MEN'S ROOM	VCT	RB	PT-1	RB	PT-1	RB	PT-1	RB	PT-1	ACT	9'-0"	-	

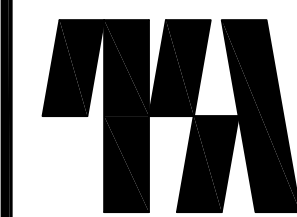
NOTES: CONC: CONCRETE; POLISH AND TREAT WITH TINTED SEALANT, VERIFY COLOR WITH ARCHITECT
VCT: REMOVE ALL EXISTING VCT; REPLACE WITH ARMSTRONG STANDARD EXCELON COLOR 51860 SOFT COOL GRAY
RB: JOHNSONITE STORM CLOUD #71
PT-1 PPG COLONIAL WHITE 414-1
PT-2 PPG COLONIAL WHITE 414-1
ACT USG MARS HEALTHCARE HIGH NRC SLT., 2'X2', W/DX GRID.

-	JS	7/20/17	ISSUED FOR BID
-	JS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION

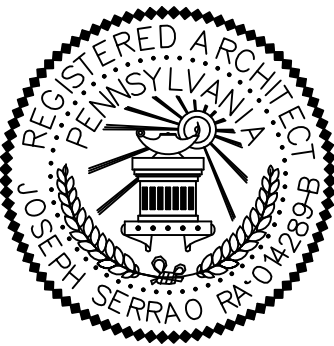
DESIGNERS:



ARCHITECT:



TKA Architects
Planners & Interior Designers
4951 Centre Avenue
Pittsburgh, Pennsylvania 15213



PROJECT

UPMC LIFE CHANGING MEDICINE

5560 Centre Avenue, Pittsburgh

DRAWN BY: ER	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY: JS	DATE: 06.09.17	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME:
A30-3195.DWG

SEAL

TITLE

LAST EDIT DATE:
7/13/17

SCALE: As Noted

DRAWING NO.

A3.0

2.01 GENERAL

The catalog numbers of the underlined manufacturers have been used in the following schedule to denote the type, weight, quality and function of hardware required. Equivalent products of the manufacturers listed will be considered acceptable.

- A. Butts: McKinney Mfg. Co.: Hager Hinge
- B. Locksets: Sargent Mfg. Company; 8200 Series LNJ Design
- C. O.H. Door Stays: Sargent Mfg. Company
- D. Door Closers: Sargent Mfg. Company
- E. Wall Bumpers and Kickplates: Rockwood Mfg. Co.
- F. Electric Strikes: H.E.S.
- G. Cylinders All cylinders will be Best Lock Co. No substitutions.
3 Master keys and 3 Change keys shall be furnished.
- H. Sliding Door Hardware by Stanley
- I. Flush Pulls Rockwood 94C
- J. Panic Hardware Exit Devices to be Sargent 80 Series.

2.02 SUBSTITUTIONS

A. If material manufactured by other than that specified or listed herewith as an equal is to be bid upon, permission must be requested from the Architect ten (10) days prior to bidding. If the substitution is allowed, it will be so noted by Addendum.

2.03 KEYS AND KEYING

- A. All locksets and cylinders shall be set to Sargent great grand master key,removable core system.
- B. All keying requirements to be coordinated and completed at factory to protect the integrity of the system. Field keying will not be permitted and will be considered as just cause for rejection of supplier.
- C. Cylinder must be an integral part of lock as manufacturer by specified lock supplier. Substitution of foreign made cylinders or components will not be allowed and also will be cause for rejection of supplier.
- D. Keys shall be furnished as follows:
1. Change keys ~ 3 each.
2. Master keys ~ 3 each.
- E. Coordinate the keying of all locks with the Owner's representative.

WOOD DOORS

1. GENERAL

- A. Provide solid core flush wood doors of the types, designs and thicknesses, labeled or non-labeled as indicated and required, as shown on Door Schedule.
- B. Grade: Fabricate the work of this Section to "premium grade" standards of the referenced organization.
- C. Wood doors as shown on the Drawings (Door Schedule) and as hereinafter Specified shall be as manufactured by Weyerhaeuser Company or equivalent as manufactured by:
1. Algoma Hardwoods, Inc.
2. Eggers Hardwood Products, Corp.
- D. INTERIOR FLUSH DOORS
- A. Interior flush doors shall be faced with hardwood veneer, factory finished.
1. Face veneer shall match existing door veneers, dark oak, contractor to verify.
- a. Book matched, premium grade.
- b. Matching solid hardwood stiles.
- c. Finish to be natural transparent.
2. Veneer construction shall be 5-ply.
- B. Solid core:
1. Core shall be solid particle board, staved lumber, or mineral core as conditions require, with hardwood crossbanding, securely bonded to core.
- a. Particle board shall be nominal 28lb. to 32lb. density, complying with AWI Type PC particle board solid core.
- b. Staved core shall comply with AWI Type SLC glued block solid core, using Type I adhesive.
- c. Non-combustible mineral core shall be "U/L" listed, with chemically treated hardwood edges and fire-retardant crossbanding.
- d. Core for lead lined doors shall be AWI Type LL core.
- C. Louvers:
- Louvers shall be manufacturer's standard solid wood, unless otherwise indicated and of size shown.

3. FABRICATION

- A. Fabricate all wood doors in strict accordance with the referenced standards for the grades Specified.
- B. Factory machine doors for application of hardware. Templates furnished under Section 08700. Comply with tolerance requirements of AWI for pre-fitting.
- C. Fitting clearances:
- Provide the following clearances unless otherwise directed:
1. 1/8 inch in 2 inches at jambs and heads.
2. 1/16 inch per leaf at meeting stiles for pairs of doors.
3. 1/8 inch from bottom of door to top of decorative floor finish or covering.
4. 1/4 inch from bottom of door to top of threshold if required.
5. For fire-rated doors, provide clearances complying with NFPA 80.
- D. Cutouts:
1. Make cutouts accurately and neatly.
2. Seal top, bottom and cut edges with varnish.
3. Provide two sets of neatly mitered wood stop moldings for all openings, one side removable, to completely cover cut edges.
4. Neatly miter stops at corners.
5. Take accurate field measurements of hardware mortises in metal frames to verify dimensions and alignment before proceeding with machinery in factory.
- E. Fire rated doors shall bear "U/L" label.
- F. Factory pre-finish to AWI finish system 4, sheen as selected by Architect.
1. Architect reserves right to select stain from manufacturer's full line.

METAL FRAMES

1. METAL FRAMES

- A. General:
1. Metal frames shall be accurately fabricated to match the doors to be installed in them. Frames shall have corners welded and ground smooth. Split-type frames are not acceptable.
2. Closers to be installed with riv nuts and not with thru bolts.
- B. Frame construction:
1. Frames shall be made of commercial grade cold rolled steel conforming to ASTM designation A-366-68 in 12, 14, and 16.
2. Corner joints shall have all contact edges tightly closed, with trim faces mitered and welded, and finished smooth.
3. Frames shall be mortised, reinforced, drilled and tapped at the factory for fully templated mortised hardware only, in accord with approved hardware schedule and templates provided by hardware contractor. Where surface-mounted hardware is to be applied, frames shall have reinforcing plates only; all drilling and tapping shall be done by others.
- C. Silencers: 3 on strike jamb of single frames, 2 on head of double frames. Use plastic plugs to keep holes clear during construction.
- D. Provide minimum of 3 anchors of type appropriate to wall construction per jamb.
- E. Spot grout door frames at hinge locations.

HARDWARE SET 1 STORE ROOM LOCKSET-DOOR #110
3 pr. Butts 4-1/2" x 4-1/2" BB 1279-US26D
1 Lockset 64-8204 - LNJ x US26D
2 O.H. Door Stay 590S - US26D
1 Permanent Core 6300 X US15
Flush Bolts - Top & Bottom No. 555-12
4 Kickplates, K1050 S.S. 8" x 34"

HARDWARE SET 2 ENTRY LOCKSET-DOORS #102, & 109
1-1/2 pr. Butts 4-1/2" x 4-1/2" BB 1279-US26D
1 Lockset 64-8216 - LNJ x US26D
1 Door Closer EN281 - 0 - DA
1 Permanent Core 6300 X US15
1 Wall Bumper 409 x US32D
2 Kickplates, K1050 S.S. 8" x 34"

HARDWARE SET 3 OFFICE LOCKSET-DOOR #107.2
3 pr. Butts 4-1/2" x 4-1/2" BB 1279-US26D
1 Lockset 64-8205 - LNJ x US26D
2 Door Closer EN281 - 0 - DA
2 O.H. Door Stay 590S - US26D
1 Permanent Core 6300 X US15
Flush Bolts - Top & Bottom No. 555-12

HARDWARE SET 4 OFFICE LOCKSET-DOORS #107.1 & 108
1-1/2 pr. Butts 4-1/2" x 4-1/2" BB 1279-US26D
1 Lockset 64-8205 - LNJ x US26D
1 Door Closer EN281 - 0 - DA
1 Permanent Core 6300 X US15
1 Wall Bumper 409 x US32D
2 Kickplates, K1050 S.S. 8" x 34"

HARDWARE SET 5 TOILET ROOM
1-1/2 pr. Butts 4-1/2" x 4-1/2" BB 1279-US26D
1 Door Pull BF107 X 70C (4" X 16") US32D
1 Push Plate 70C (4" X 16") US32D
1 Door Closer EN281 - 0 - DA
1 Wall Bumper 409 x US32D

-	JS	7/20/17	ISSUED FOR BID
-	JS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION

DESIGNERS:



1
Your peer-approved
mission-critical facility experts

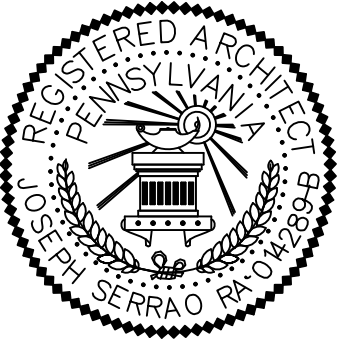
TechSite www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

ARCHITECT:



TKA Architects
Planners & Interior Designers
4951 Centre Avenue
Pittsburgh, Pennsylvania 15213

P: (412) 681-7242
F: (412) 681-8817



PROJECT



UPMC **LIFE CHANGING MEDICINE**

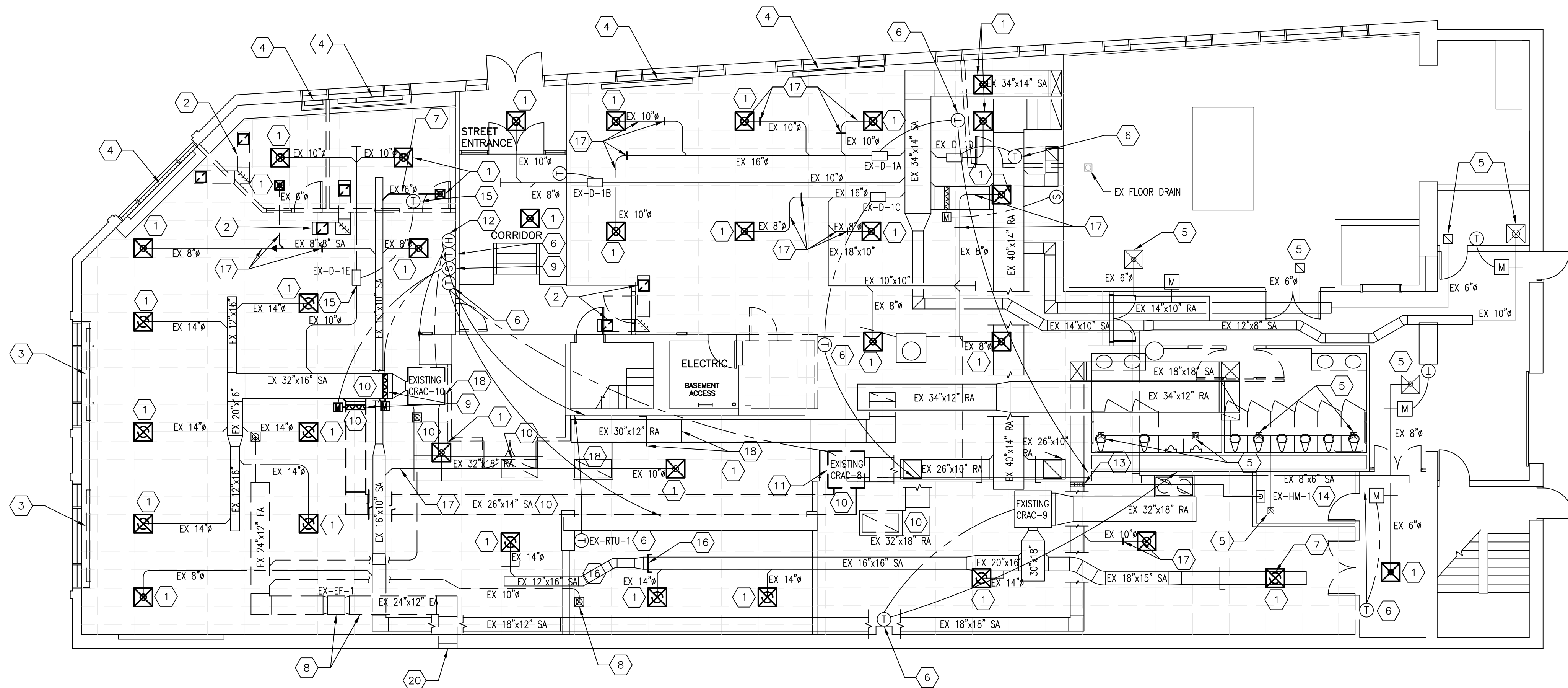
**HOECHSTETTER BUILDING
NEW GENOMICS LAB**

5560 Centre Avenue, Pittsburgh

DRAWN BY: ER	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY: JS	DATE: 06.09.17	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME:
A31-3195.DWG

SEAL	TITLE ARCHITECTURAL ROOM & FINISH NOTES	
	LAST EDIT DATE: 6/28/17	DRAWING NO. A3.1
	SCALE: As Noted	



A MECHANICAL DEMO FLOOR PLAN
MECHANICAL DEMOLITION 1/8"=1'-0"

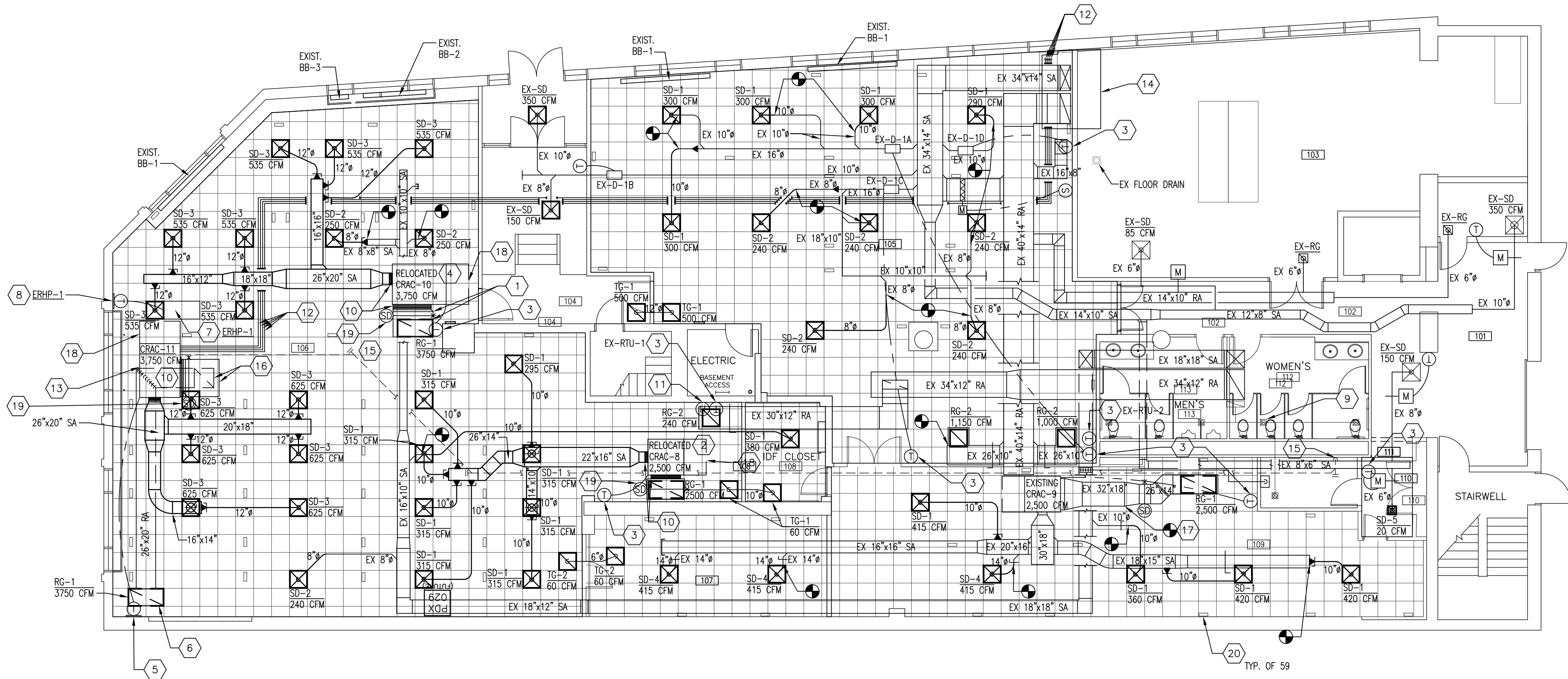
GENERAL NOTE:

1. WHEN DEMOLISHING DUCTWORK BRANCHES PER THIS DRAWING, REMOVE ALL FLEXIBLE DUCTWORK.
2. M.C. IS RESPONSIBLE TO SEAL ALL UNUSED MECHANICAL PENETRATIONS LEFT IN FULL HEIGHT WALLS ONCE DEMOLITION IS COMPLETE.

DEMOLITION KEYNOTES:

- 1 REMOVE EXISTING AIR DEVICE.
- 2 REMOVE EXISTING TRANSFER DUCTWORK.
- 3 REMOVE EXISTING ELECTRIC BASEBOARD HEATERS INCLUDING ASSOCIATED CONTROLS.
- 4 EXISTING ELECTRIC BASEBOARD HEATERS SHALL REMAIN. ENSURE BASEBOARD HEATERS ARE IN GOOD WORKING ORDER. REPAIR OR REPLACE AS NECESSARY.
- 5 EXISTING AIR DEVICE SHALL REMAIN. CLEAN AS REQUIRED.
- 6 RELOCATE EXISTING THERMOSTAT TO LOCATION SHOWN. EXTEND CONTROL WIRING AS REQUIRED. SEE SHEET M2.0 FOR NEW LOCATION.
- 7 REMOVE EXISTING DUCTWORK BACK TO MAIN AND CAP. SEE SHEET M2.0 FOR MORE INFORMATION.
- 8 REMOVE EXISTING EXHAUST FAN EX-EF-1, ALL ASSOCIATED EXHAUST DUCTWORK, AND ASSOCIATED EXHAUST GRILLES.
- 9 REMOVE EXISTING MOTORIZED DAMPERS, MANUAL CONTROL SWITCH, AND ALL ASSOCIATED POWER/CONTROL WIRING.
- 10 COMPLETELY REMOVE ALL EXISTING CRAC SUPPLY AND RETURN DUCTWORK AND ASSOCIATED AIR DEVICES.
- 11 EXISTING CRAC-8 SHALL BE RELOCATED TO SEQUENCING ROOM. SEE SHEET M2.0 FOR NEW LOCATION.
- 12 RELOCATE EXISTING HUMIDISTAT TO LOCATION SHOWN. EXTEND CONTROL WIRING AS REQUIRED. SEE SHEET M2.0 FOR NEW LOCATION.
- 13 EXISTING HUMIDIFIER DISTRIBUTION MANIFOLD TO REMAIN. THIS CONTRACTOR SHALL VERIFY THAT EXISTING HUMIDIFIER DISTRIBUTION MANIFOLD IS IN GOOD WORKING ORDER. REPAIR OR REPLACE AS REQUIRED.
- 14 EXISTING HUMIDIFIER SYSTEM EX-HM-1 SHALL REMAIN. THIS CONTRACTOR SHALL VERIFY THAT EXISTING HUMIDIFIER IS IN GOOD WORKING ORDER. REPAIR OR REPLACE AS REQUIRED.
- 15 EXISTING VAV BOX AND ASSOCIATED THERMOSTAT SHALL BE REMOVED ALONG WITH EX-CRAC-10 SUPPLY AND RETURN DUCTWORK.
- 16 REMOVE EXISTING SUPPLY DUCTWORK BACK TO POINT SHOWN AND CAP. SEAL CAP AIRTIGHT. SEE SHEET M2.0 FOR MORE INFORMATION.
- 17 REMOVE EXISTING SUPPLY DUCTWORK BACK TO POINT SHOWN. SEE SHEET M2.0 FOR MORE INFORMATION.
- 18 REMOVE EXISTING RETURN DUCTWORK BACK TO POINT SHOWN. REMOVE ASSOCIATED RETURN GRILL. RELOCATE MANUAL BALANCE DAMPER. SEE SHEET M2.0 FOR MORE INFORMATION.
- 19 EXISTING CRAC-10 SHALL BE RELOCATED WITHIN NEW SEQUENCING ROOM. SEE SHEET M2.0 FOR NEW LOCATION.
- 20 REPAIR HOLE IN EXTERIOR WALL. EXTERIOR WALL PATCH FINISH SHALL MATCH SURROUNDING AREA. COORDINATE WITH GENERAL TRADES AS REQUIRED.

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION
1/8"=1'-0"			



A FLOOR PLAN
MECHANICAL NEW WORK

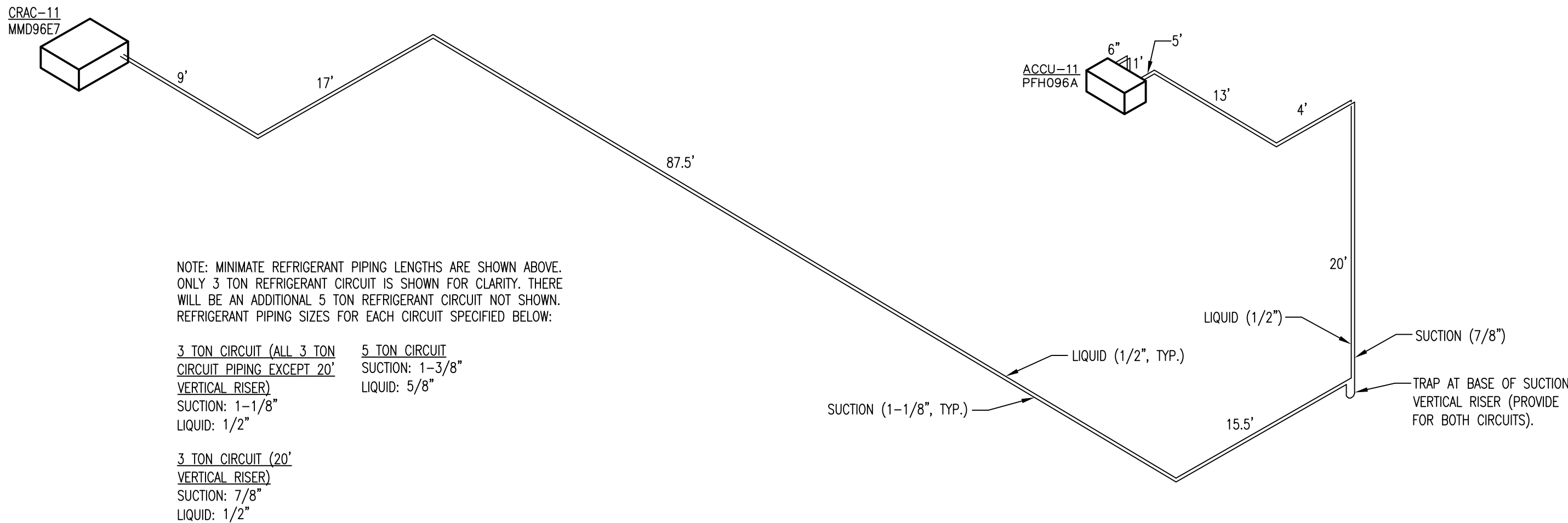
1/8"=1'-0"

NEW WORK KEYNOTES:

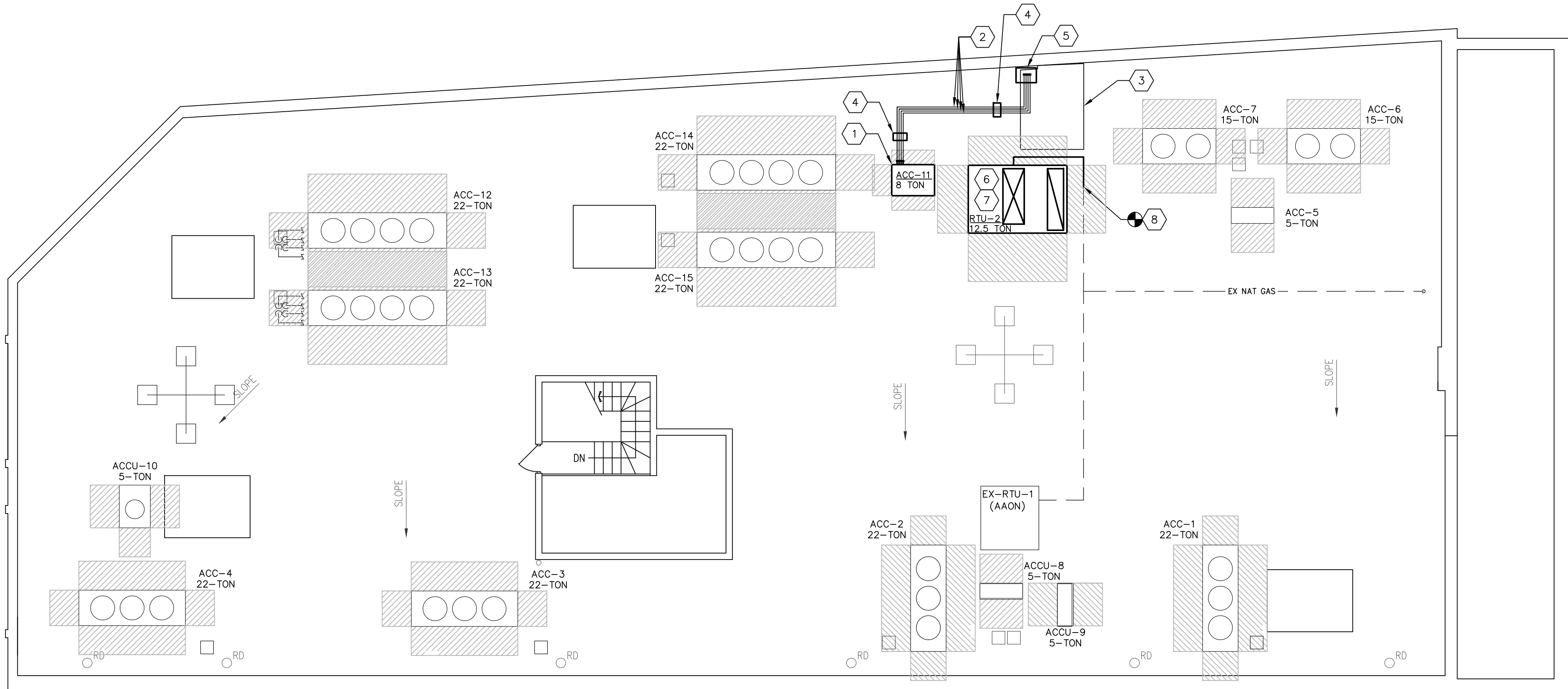
- 1 EXTEND RETURN AIR DUCT FULL SIZE OF EQUIPMENT OPENING AND THEN TRANSITION TO 54"x16" RETURN DUCT. 46"x22" PLENUM DUCT SHALL CONNECT TO RG-1 AND EXTEND UP INTO BOTTOM OF 54"x16" RETURN DUCTWORK AS SHOWN.
- 2 EXISTING CRAC-8 SHALL BE RELOCATED TO LOCATION SHOWN. EXTEND REFRIGERANT PIPING, HUMIDIFIER SUPPLY PIPING, CONTROL WIRING, AND CONDENSATE PIPING AS REQUIRED. RELOCATE OR PROVIDE NEW COIL ISOLATION SPRINGS TO REDUCE VIBRATION.
- 3 EXISTING THERMOSTAT SHALL BE RELOCATED TO 54" A.F.F. ON WALL AT LOCATION SHOWN. EXTEND CONTROL WIRING AS REQUIRED.
- 4 EXISTING CRAC-10 SHALL BE RELOCATED TO LOCATION SHOWN. EXTEND REFRIGERANT PIPING, CONDENSATE PIPING, AND CONTROL WIRING AS REQUIRED. RELOCATE OR PROVIDE NEW COIL ISOLATION SPRINGS TO REDUCE VIBRATION. SEE DETAIL D ON SHEET M3.0 FOR MORE INFORMATION.
- 5 MOUNT CRAC-11 THERMOSTAT ON INSULATED PANEL ON EXTERIOR WALL WHERE SHOWN.
- 6 26"x20" RETURN AIR DUCTWORK SHALL TAP INTO THE SIDE OF 46"x22" PLENUM BOX THAT EXTENDS DOWN AND CONNECTS TO RETURN GRILLE RG-1.
- 7 INSTALL 24"x48" ELECTRIC RADIANT HEAT PANEL ERHP-1 IN CEILING WHERE SHOWN.
- 8 INSTALL ERHP-2 THERMOSTAT 54" A.F.F. ON INSULATED PANEL ON EXTERIOR WALL WHERE SHOWN.
- 9 SHIFT EXHAUST GRILLE AND EXHAUST DUCTWORK AS NEEDED TO COMPENSATE FOR WALL RELOCATION IN RESTROOM.
- 10 NEW CRAC UNIT AND RELOCATED EXISTING CRAC UNIT SUPPLY AND RETURN DUCTWORK SHALL BE EQUIPPED WITH FLEXIBLE CONNECTIONS AT UNIT.
- 11 EXISTING HUMIDISTAT SHALL BE RELOCATED TO LOCATION SHOWN. EXTEND CONTROL WIRING AS REQUIRED.
- 12 EXTEND DUAL CIRCUIT REFRIGERANT PIPING FOR CRAC-11 TO EXISTING MECHANICAL CHASE AND UP TO ROOF AS SHOWN. SEE SHEET M2.1 FOR CONTINUATION, PIPING SIZES, AND MORE INFORMATION. INSULATE ALL NEW REFRIGERANT PIPING. REFRIGERANT PIPING SIZES ARE BASED ON ROUTING SHOWN. IF INSTALLED LAYOUT DIFFERS, SIZE PIPING PER MANUFACTURER'S RECOMMENDATIONS. ALL PENETRATIONS THROUGH FIRE AND EXTERIOR WALLS SHALL BE PROPERLY FIRESTOPPED, FLASHED, AND/OR SEALED BY M.C. SEE DETAILS A, B, C, & E ON SHEET M3.0 FOR MORE INFORMATION. COORDINATE PIPING ROUTING WITH OTHER TRADES PRIOR TO INSTALLATION.
- 13 INSTALL CRAC-11 IN LOCATION SHOWN. UTILIZE COIL ISOLATION SPRINGS WHEN HANGING UNIT TO REDUCE VIBRATION.
- 14 EXISTING MECHANICAL CHASE.
- 15 EXTEND CONDENSATE PIPING TO EXISTING MOP SINK LOCATED WITHIN EXISTING MECHANICAL ROOM.
- 16 EXTEND RETURN AIR DUCTWORK FULL SIZE OF EQUIPMENT OPENING OUT TO POINT SHOWN. 26"x20" RETURN AIR DUCT SHALL TAP INTO THE BOTTOM OF FULL SIZE OF EQUIPMENT OPENING RETURN DUCT AS SHOWN.
- 17 CONNECT 26"x14" RETURN AIR DUCTWORK TO EXISTING 32"x18" RETURN AIR DUCTWORK AS SHOWN.
- 18 M.C. SHALL MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCE FOR CRAC MAINTENANCE.
- 19 M.C. SHALL FURNISH AND INSTALL NEW SMOKE DETECTOR WITHIN CRAC RETURN AIR DUCTWORK AS SHOWN. COORDINATE WITH ELECTRICAL CONTRACTOR FOR INSTALLATION AND WIRING OF SMOKE DETECTOR.
- 20 TYPICAL (OF 59) POWER/NETWORK SERVICE COLUMNS INSTALLED DOWN THROUGH THE ACOUSTICAL CEILING; COORDINATE WITH E.C. TO ENSURE SUFFICIENT CLEARANCE IS ALLOWED ABOVE CEILING TO INSTALL THESE DEVICES.

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION
1/8"=1'-0" 0' 4' 8' 16' 32'			
DESIGNERS: TechSite Your peer-approved mission-critical facility experts TechSite www.techsiteplan.com 8188 Business Way . Plain City, Ohio 43064 t 614.873.7800 . f 614.873.7801			
PROJECT UPMC LIFE CHANGING MEDICINE HOECHSTETTER BUILDING NEW GENOMICS LAB 5560 Centre Avenue, Pittsburgh			
DRAWN BY: CBV	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195
DRAWING NAME: M20-3195.DWG			
SEAL	TITLE MECHANICAL FLOOR PLAN		
LAST EDIT DATE: 7/20/17		DRAWING NO. M2.0	
SCALE: AS SHOWN			

PLOT DATE \ TIME: 7/30/2017 8:24:07 AM
L:\TECH SITE\PROJECTS\UPMC - GC 1313\3195 - GENOMICS LAB DETAILED ENGINEERING AND CAIDRAWINGS\CURRENT DRAWINGS



B REFRIGERANT PIPING RISER
ROOF MECHANICAL N.T.S.



A PLAN
ROOF MECHANICAL 1/8"=1'-0"

GENERAL NOTES:

A LOCATION FOR NEW ACCU-11 PIPING THROUGH THE SECOND FLOOR IS SUGGESTED ON THIS DRAWING. THIS LOCATION SHALL BE FIELD VERIFIED AT START OF PROJECT TO ASCERTAIN IF A LOCATION CLOSER TO THE INDOOR UNIT IS AVAILABLE. THE PIPING INSTALLATION MUST BE SELECTED TO MINIMIZE POTENTIAL DISRUPTION TO SECOND FLOOR DATA CENTER OPERATIONS.

NEW WORK KEYNOTES:

- 1 INSTALL ACC-11 AIR COOLED CONDENSING UNIT IN LOCATION SHOWN. UTILIZE STANDARD 48" LONG EQUIPMENT RAILS (X2) FOR NEW CONDENSER MOUNTING SIMILAR TO PORTALSPLUS ER-2A STYLE; SEE DETAIL F ON SHEET M3.0. MECHANICAL CONTRACTOR (M.C.) SHALL ENSURE THAT MANUFACTURER'S RECOMMENDED CLEARANCE FOR MAINTENANCE AND AIRFLOW SHALL BE MAINTAINED.
- 2 EXTEND DUAL CIRCUIT REFRIGERANT PIPING ALONG PATH TO ROOF THROUGH EXISTING MECHANICAL CHASE AS SHOWN. INSULATE AND WEATHERPROOF REFRIGERANT PIPING EXPOSED TO THE EXTERIOR. EXTERIOR INSULATION SHALL BE CLOSED CELL ELASTOMERIC. REFRIGERANT PIPING EXPOSED TO THE EXTERIOR SHALL BE WRAPPED WITH ALUMINUM JACKETING. CONTRACTOR SHALL SIZE REFRIGERANT PIPING PER DETAIL B ON THIS SHEET.
- 3 EXISTING MECHANICAL CHASE.
- 4 SUPPORT INSULATED PIPING ON ROOF USING RUBBER SUPPORT DEVICE SUCH AS MIFAB CESTO.
- 5 NEW PIPE CURB FOR REFRIGERANT PIPING; SEE DETAIL E, DRAWING M3.0.
- 6 EXISTING CARRIER 12.5 TON RTU MODEL# 48TFED14 AND ASSOCIATED ROOF CURB IN THIS AREA SHALL BE REMOVED. EXISTING SUPPLY AND RETURN DUCTWORK DROPS SHALL REMAIN.
- 7 INSTALL NEW 12.5 TON TRANE RTU-2 WITH CUSTOM MICROMETL ROOF CURB THAT CONNECTS TO EXISTING SUPPLY AND RETURN DUCTWORK DROPS IN LOCATION AS SHOWN. RTU-2 FOOTPRINT COMPLETELY COVERS EX-RTU-2 FOOTPRINT. SEE ROOFTOP UNIT SCHEDULE NOTES ON SHEET M5.0 FOR MORE INFO ON CUSTOM ROOF CURB.
- 8 EXTEND 1/2" NATURAL GAS PIPING TO RTU-2 AS SHOWN. PROVIDE SEDIMENT TRAP, MANUAL SHUT OFF VALVE, PRESSURE REGULATOR, AND UNION AT RTU-2 CONNECTION.

DRAWING LINETYPE LEGEND

—	INDICATES EXISTING EQUIPMENT
—	INDICATES NEW EQUIPMENT
- - - - -	INDICATES EQUIPMENT TO BE DEMOLISHED
- - - - -	INDICATES FUTURE EQUIPMENT

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION



DESIGNERS:

TechSite
Your peer-approved mission-critical facility experts
TechSite www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

PROJECT

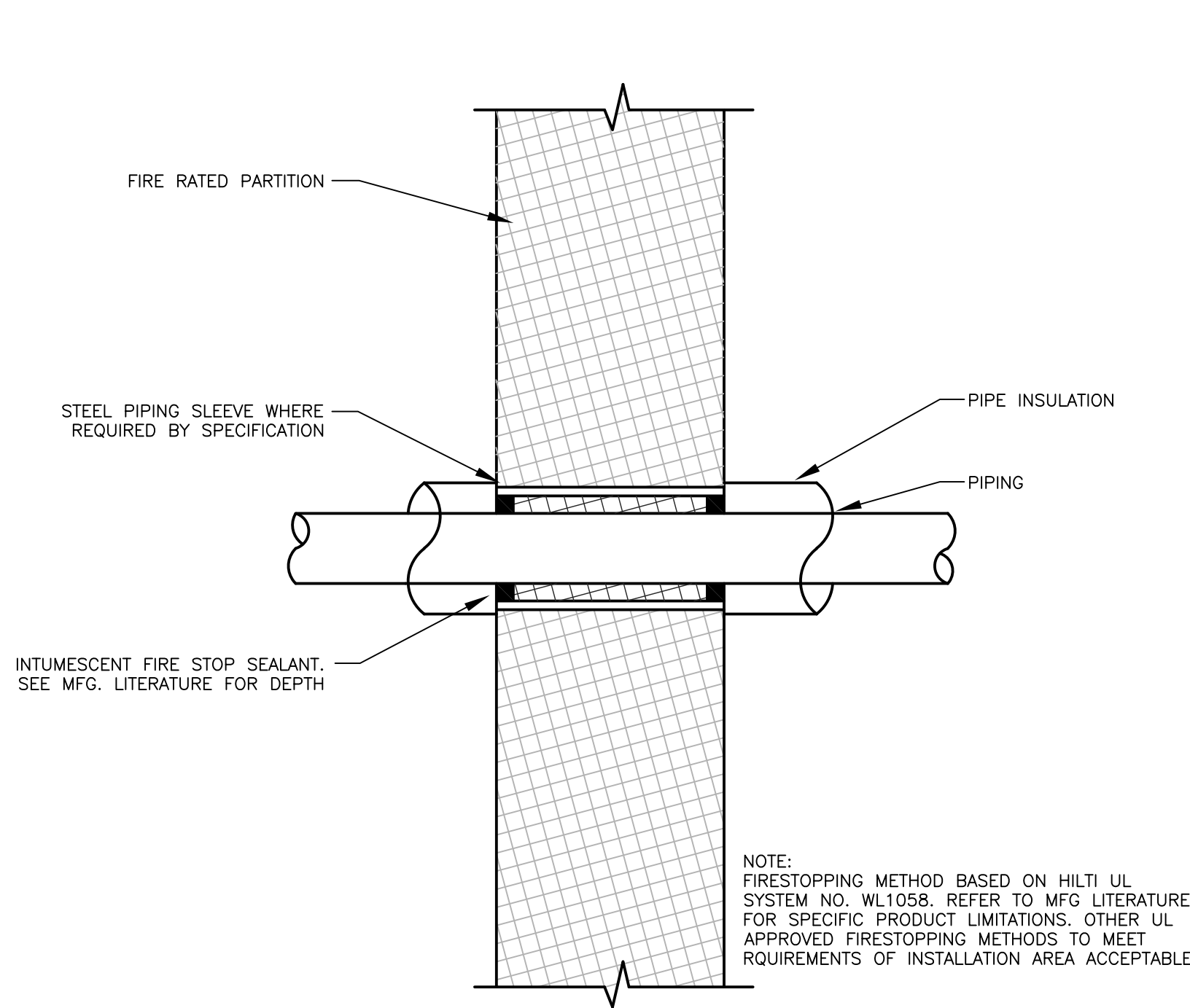
UPMC LIFE CHANGING MEDICINE
HOECHSTETTER BUILDING
NEW GENOMICS LAB
5560 Centre Avenue, Pittsburgh

DRAWN BY: CBV	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

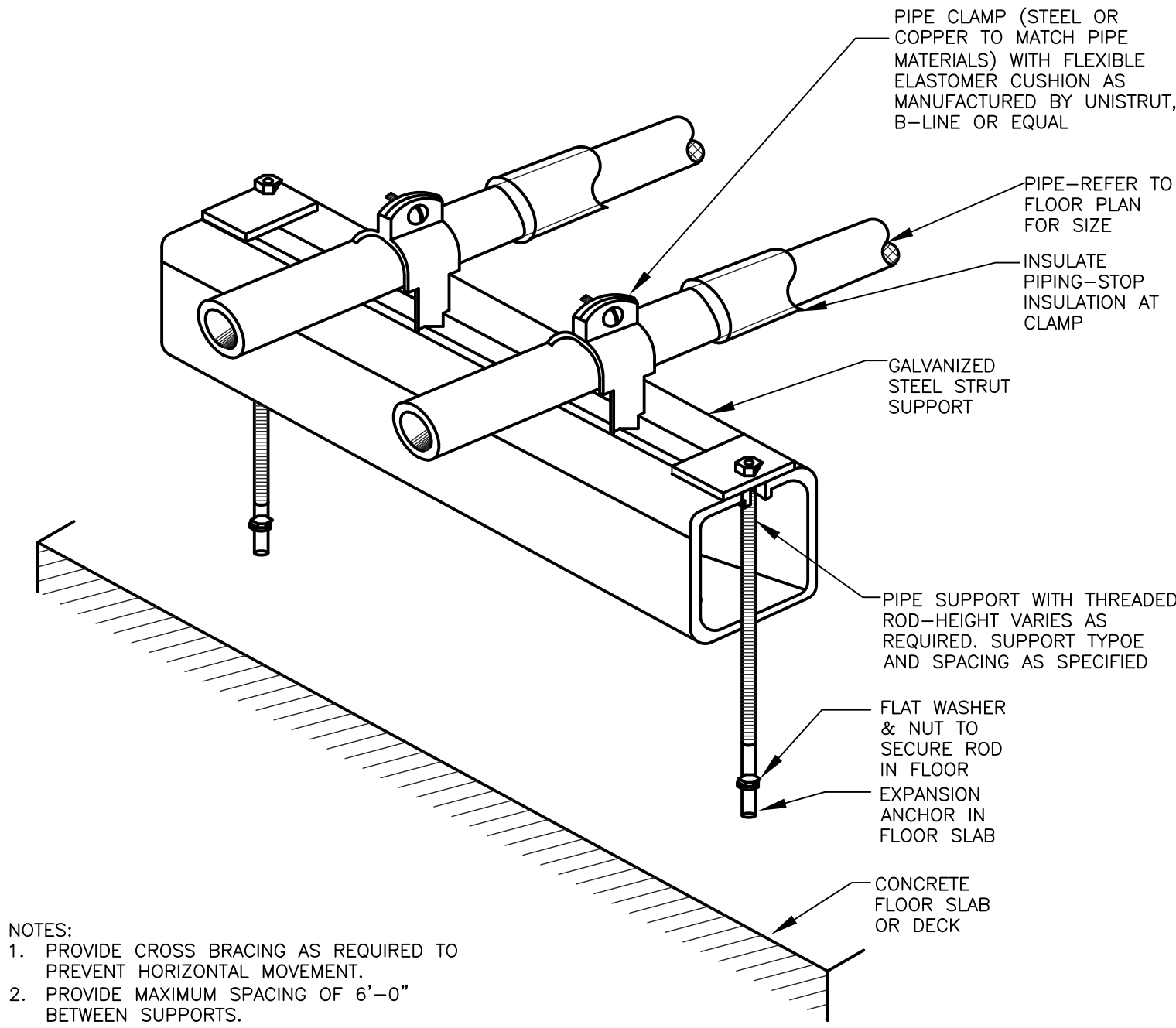
DRAWING NAME:
M21-3195.DWG

SEAL	TITLE MECHANICAL ROOF PLAN	
	LAST EDIT DATE: 7/19/17	DRAWING NO. M2.1
	SCALE: NONE	

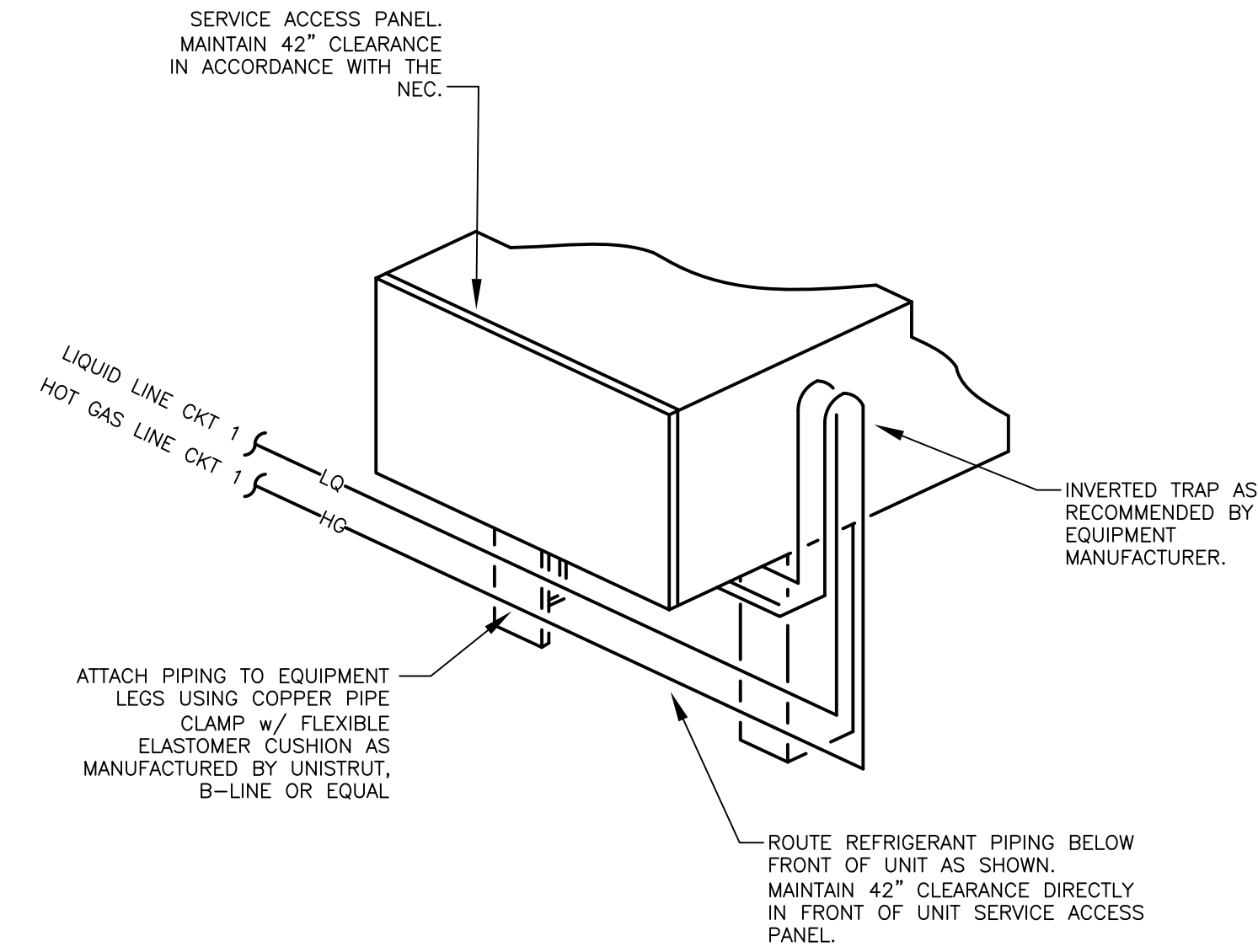
PLOT DATE \ TIME: 7/30/2017 8:24:11 AM
L:\TECH SITE\PROJECTS\UPMC - GC 13133195 - GENOMICS LAB\DETAILED ENGINEERING AND CAD\DRAWINGS\0-CURRENT DRAWINGS



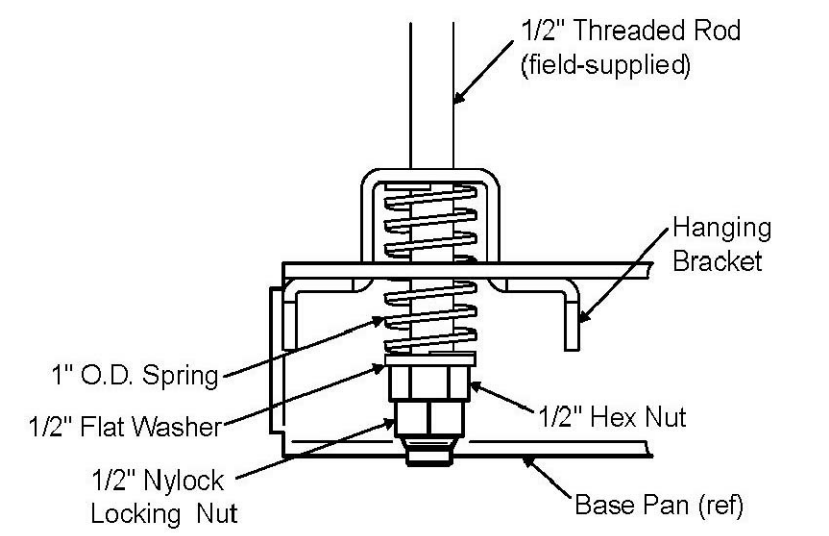
A **DETAIL**
FIRESTOPPED PIPE PENETRATION OF
RATED PARTITIONS AND FLOORS N.T.S.



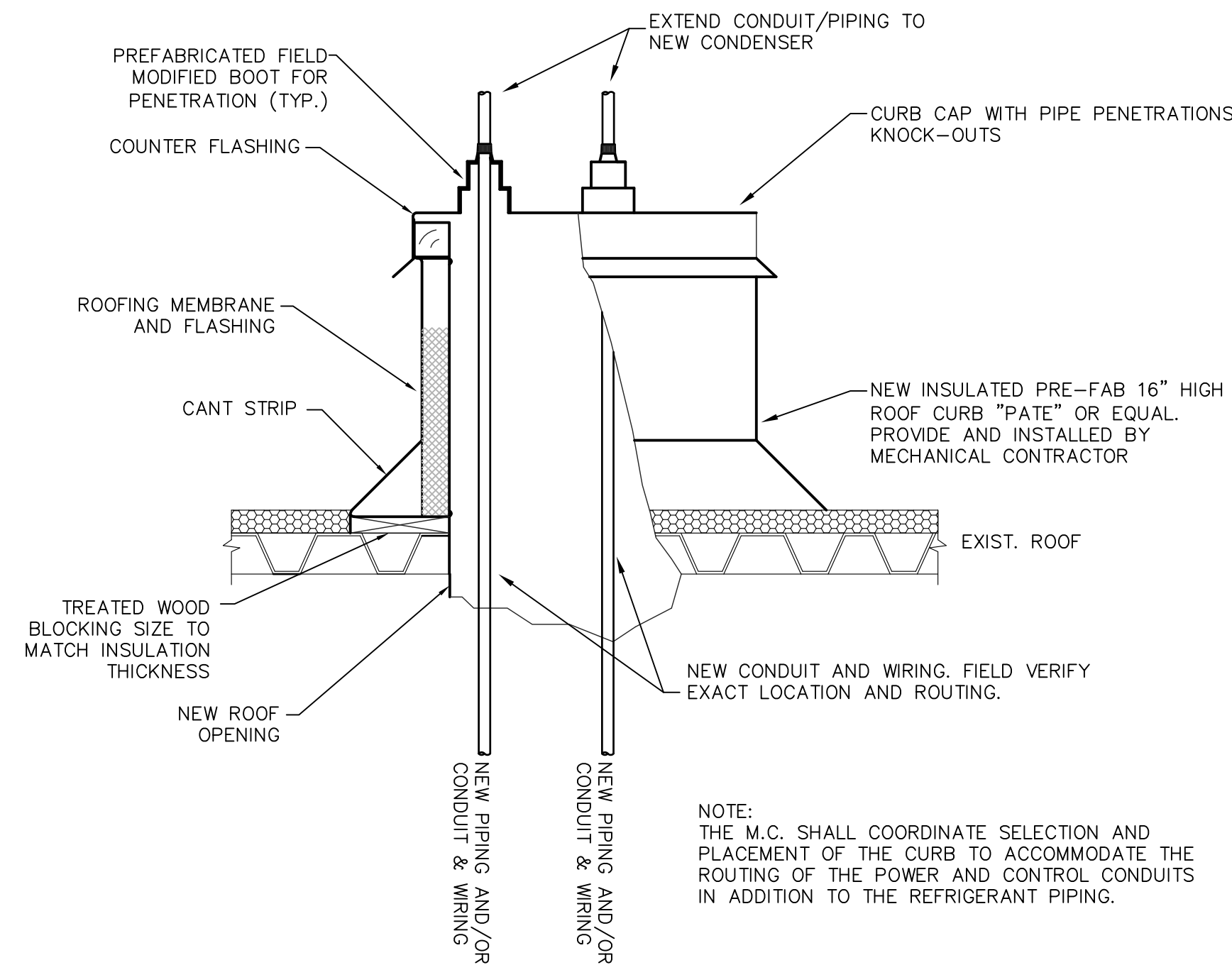
B **DETAIL**
PIPING SUPPORTS N.T.S.



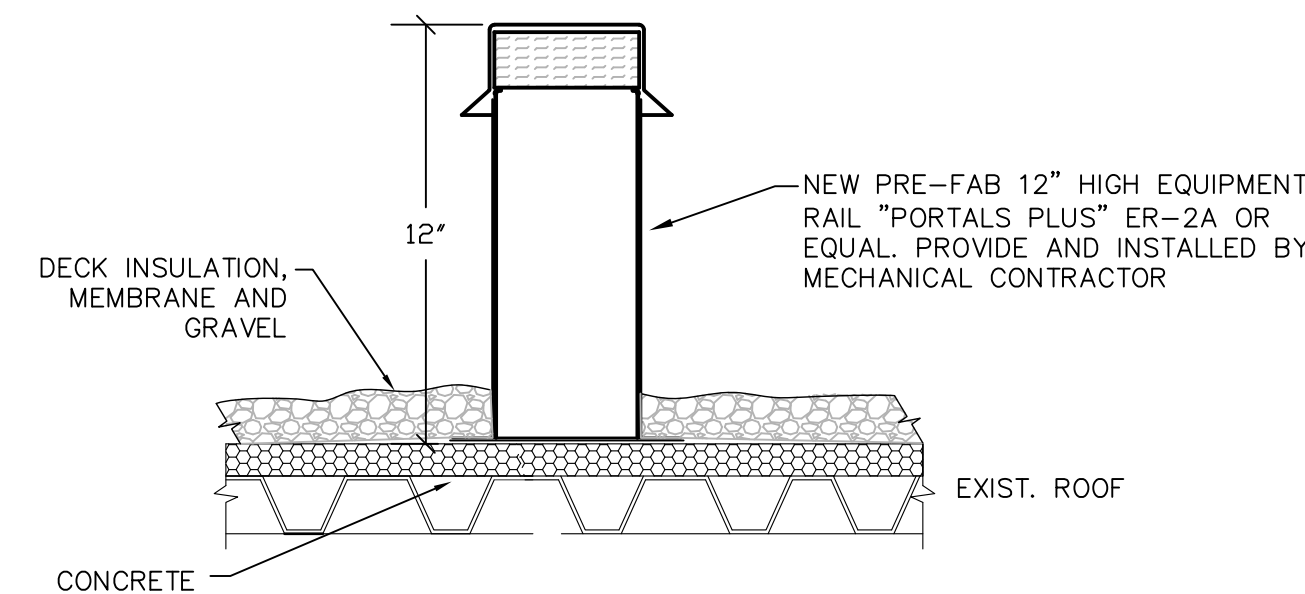
C **DETAIL**
PIPE CONNECTION TO ACC N.T.S.



D **DETAIL**
THREADED ROD AND SPRING FOR MINIMATE INSTALLATION N.T.S.



E **DETAIL**
NEW ROOF CURB FOR PIPING PENETRATION N.T.S.



F **DETAIL**
NEW ROOF EQUIPMENT SUPPORT N.T.S.

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION
DESIGNERS:			
 Your peer-approved mission-critical facility experts TechSite www.techsiteplan.com 8188 Business Way . Plain City, Ohio 43064 t 614.873.7800 . f 614.873.7801			
PROJECT			
 HOECHSTETTER BUILDING NEW GENOMICS LAB 5560 Centre Avenue, Pittsburgh			
DRAWN BY: CBV	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195
DRAWING NAME: M30-3195.DWG			
SEAL	TITLE MECHANICAL DETAILS		
LAST EDIT DATE: 7/19/17		DRAWING NO. M3.0	
SCALE: AS SHOWN			

HVAC NOTES

1. ALL WORK SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL CODES.
2. COORDINATE ALL PIPING RUNS WITH BUILDING STRUCTURE AND OTHER TRADES.
3. UNLESS NOTED OTHERWISE INSULATE ALL REFRIGERANT PIPING WITH 1" THICK INSULATION, ALL CONDENSATE PIPING WITH 1/2" THICK INSULATION, AND ALL HUMIDIFIER PIPING WITH 1/2" THICK INSULATION. UTILIZE ARMACELL AP ARMAFLEX OR APPROVED EQUAL FOR INSULATION.
4. ALL EXTERIOR INSULATION TO BE WRAPPED WITH ALUMINUM JACKETING AND SEALED TO MAKE WEATHER TIGHT.
5. INSTALL AIR VENTS AT HIGH POINTS OF SYSTEM, AS SHOWN ON DRAWINGS AND AS REQUIRED FOR PROPER VENTING OF SYSTEM.
6. UNLESS NOTED OTHERWISE CONDENSATION DRAIN PIPING TO BE TYPE "L" HARD COPPER, MINIMUM 1". WROUGHT COPPER FITTINGS WITH SEAT JOINT OF SILVER SOLDER.
7. MECHANICAL CONTRACTOR IS RESPONSIBLE TO FIRESTOP AND/OR WATER STOP ALL PENETRATIONS THROUGH WALL, FLOORS, AND ROOF DECKS.
8. SUPPORT ALL STEEL PIPE AND COPPER PIPE PER THE SPECIFICATIONS.
9. MC TO BE RESPONSIBLE FOR ALL RIGGING AND CRANE RENTAL TO EQUIPMENT INSTALLATION AND AS REQUIRED FOR SCOPE OF WORK. COORDINATE ALL CRANE WORK WITH LOCAL AIRPORT AND FAA FOR PROPER PERMITS
10. THIS CONTRACTOR TO BE FULLY RESPONSIBLE FOR ANY SAW CUTTING REQUIRED FOR THEIR SCOPE. WORK TO INCLUDE PATCHING TO MATCH EXISTING, REMOVAL OF DEBRIS, AND BACKFILLING.
11. RACK NEW PIPING TOGETHER. COORDINATE ROUTING AND LOCATION OF ALL PIPING WITH STRUCTURE AND ALL OTHER TRADES. ALL PIPING SHALL RUN ABOVE THE CEILING UNLESS NOTED OTHERWISE.
12. M.C. WILL RECEIVE AND INSPECT OWNER PROVIDED EQUIPMENT UPON DELIVERY FROM MANUFACTURER. ANY DEFECTS OR DAMAGE TO BE REPORTED TO CONSTRUCTION MANAGER WITHIN 48 HOURS.

MECHANICAL/PLUMBING LEGEND

SYMBOL	DESCRIPTION	ABBREVIATION	DESCRIPTION
	CONDENSER WATER RETURN	A.F.F.	ABOVE FINISHED FLOOR
	CONDENSER WATER SUPPLY	APPROX.	APPROXIMATELY
	DOMESTIC COLD WATER LINE	BTM.	BOTTOM
	CONDENSATE DRAIN LINE	BLDG.	BUILDING
	FUEL OIL GAGE LINE	CAB.	CABINET
	FUEL OIL RETURN	CAP.	CAPACITY
	FUEL OIL SUPPLY	CLG.	CEILING
	HOT GAS LINE	CONC.	CONCRETE
	HEATING WATER RETURN	COND	CONDENSATE
	HEATING WATER SUPPLY	COORD.	COORDINATE
	LIQUID REFRIGERANT LINE	DTL.	DETAIL
	NATURAL GAS LINE	DIA.	DIAMETER
	RETURN RISER	DIFF.	DIFFUSER
	SUPPLY RISER	DISCH.	DISCHARGE
	AIR VENT - PLAN VIEW	DN.	DOWN
	CAPPED LINE	ELEC.	ELECTRICAL
	EXISTING WORK TO REMAIN	ELEV.	ELEVATION
	EXISTING WORK TO BE REMOVED	EXH	EXHAUST
	RISE OR DROP	EXIST. OR EX.	EXISTING
	PIPE BRANCH TOP CONNECTION	FLEX.	FLEXIBLE
	PIPE BRANCH BOTTOM CONNECTION	FLR.	FLOOR
	PIPE ANCHOR	F.D.	FLOOR DRAIN
	PIPE FLANGES	FT.	FEET
	PIPE GUIDE	FURN.	FURNISH
	PIPE UNION	GA.	GAUGE
	FLEXIBLE PIPE CONNECTION	HTR.	HEATER
	FLEXIBLE DUCT	HUM.	HUMIDIFIER
	FIRE DAMPER	MFR.	MANUFACTURER
	MAN. DAMPER	MECH.	MECHANICAL
	ACCESS DOOR	MTD.	MOUNTED
	TEMPERATURE SENSOR	NOM.	NOMINAL
	HUMIDITY SENSOR	O.A.	OUTSIDE AIR
	THERMOMETER	PLBG.	PLUMBING
	CONNECT TO EXISTING	REQ'D	REQUIRED
	CONCENTRIC REDUCER	R.A.	RETURN AIR
	ECCENTRIC REDUCER	RM.	ROOM
	TEE WITH NIPPLE & CAP	SCHED.	SCHEDULE
	PLUGGED TEE	SHT.MTL.	SHEET METAL
	Y-TYPE STRAINER	SQ.	SQUARE
	PETE'S PLUG	S.A.	SUPPLY AIR
	COMB. BALANCE & STOP VALVE	TEMP.	TEMPERATURE
	BALL VALVE	THERM.	THERMOMETER
	BALL VALVE W/MEMORY STOP	TYP.	TYPICAL
	GATE VALVE (SCREWED BODY)	W/	WITH
	DRAIN VALVE WITH HOSE END		
	GLOBE VALVE		
	SOLENOID VALVE		
	CHECK VALVE		
	TEMPERATURE SENSOR		
	FLOW SWITCH		

DUCT PRESSURE CLASS & MATERIAL SCHEDULE

DUCT	PRESSURE CLASS	MATERIAL
LOW PRESSURE SUPPLY & RETURN	1 INCH	GALVANIZED STEEL
MEDIUM PRESSURE SUPPLY & RETURN	2 INCH	GALVANIZED STEEL
EXPOSED LOW PRESSURE SUPPLY	1 INCH	GALVANIZED INSULATED W/ PERFORATED LINER

NOTES:

1. INSTALL AND SEAL DUCTS IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE.
2. DURING CONSTRUCTION, INSTALL TEMPORARY CLOSURES OF METAL OR TAPED POLYETHYLENE ON OPEN DUCTWORK TO PREVENT CONSTRUCTION DUST FROM ENTERING DUCTWORK SYSTEM.
3. PROVIDE DUCT HANGERS AND SUPPORTS IN ACCORDANCE WITH SPECIFICATION SECTION 15060.
4. USE DOUBLE NUTS AND LOCK WASHERS ON THREADED ROD SUPPORTS.
5. CONNECT FLEXIBLE DUCTS TO METAL DUCTS PER MANUFACTURERS RECOMMENDATIONS.

DUCT INSULATION SCHEDULE

DUCTWORK TYPE	INSULATION
RTU-1 SUPPLY WT SYSTEM	1" FIBER INSULATION LINER OR 1 1/2" WRAP
LOW PRESSURE	1" FIBER INSULATION LINER
RETURN AIR	1" FIBER INSULATION LINER

NOTES:

1. ADHERE INSULATION WITH ADHESIVES COMPLYING WITH ASTM 916 FOR 100 PERCENT COVERAGE.
2. SECURE INSULATION WITH IMPACT DRIVEN OR WELD SECURED MECHANICAL LINER WITH NO FEWER FASTENERS THAN CALLED FOR BY MANUFACTURER'S INSTRUCTIONS. DESIGN LINER FOR 4,000 FPM IN ALL DUCTS.
3. LINER SHALL BE CUT TO ASSURE OVERLAPPED AND COMPRESSED LONGITUDINAL CORNER JOINTS. TRANSVERSE JOINTS SHALL BE NEATLY BUTTED AND THERE SHALL BE NO INTERRUPTIONS OR GAPS. SEAL AND SMOOTH JOINTS, TRANSVERSE DUCT JOINTS AND ALL EXPOSED EDGES SHALL BE COATED.
4. SEAL LINER SURFACE PENETRATIONS WITH ADHESIVE.
5. DUCT DIMENSIONS INDICATED ARE NET INSIDE DIMENSIONS REQUIRED FOR DESIGN AIRFLOW. INCREASE DUCT SIZE TO ALLOW FOR INSULATION THICKNESS.
6. AFTER INSTALLATION, BLOW OUT DUCT SYSTEM TO REMOVE FOREIGN MATERIAL REMAINING IN DUCTWORK. COORDINATE WITH OWNER AND GENERAL CONTRACTOR TO PROTECT INTERIOR BUILDING FINISHES AND FURNISHING PRIOR TO BLOWING OUT DUCT.
7. ALL INSULATION TO BE APPLIED IN FULL ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL INSULATION SHALL COMPLY WITH 25/50 FLAME AND SMOKE HAZARD RATINGS PER ASTM E-84, NFPA 255 AND UL 723

AIR DEVICE SCHEDULE

UNIT TAG	MANUF.	MODEL NUMBER	NECK SIZE INCHES	CEILING TYPE	BORDER TYPE	THROW PATTERN	FINISH	NOTES
SD-1	TITUS	TDV	10"	LAY-IN	3	4-WAY	#26 WHITE	1,2
SD-2	TITUS	TDV	8"	LAY-IN	3	4-WAY	#26 WHITE	1,2
SD-3	TITUS	TDV	12"	LAY-IN	3	4-WAY	#26 WHITE	1,2
SD-4	TITUS	TDV	14"	LAY-IN	3	4-WAY	#26 WHITE	1,2
SD-5	TITUS	TDV	6"	NO CEIL.	-	4-WAY	#26 WHITE	1,2
RG-1	TITUS	50F	46"x22"	LAY-IN	3	-	#26 WHITE	-
RG-2	TITUS	50F	22"x22"	LAY-IN	3	-	#26 WHITE	-
TG-1	TITUS	50F	10"	LAY-IN	3	-	#26 WHITE	-
TG-2	TITUS	50F	6"	LAY-IN	3	-	#26 WHITE	-

NOTES:

1. PROVIDE WITH MODEL EG EQUALIZING GRID
2. PROVIDE WITH AG-85 BUTTERFLY DAMPER

MINI-MATE SPLIT DX AIR HANDLING UNIT SCHEDULE

UNIT TAG	MANUF.	MODEL NUMBER	LOCATION	INDOOR UNIT DX COOLING AND AIR FLOW DATA				REHEAT CAPACITY		HUMIDIFIER CAPACITY		ELECTRICAL				UNIT WEIGHT	OUTDOOR AIR COOLED CONDENSING UNIT SECTION								NOTES		
				AIR FLOW CFM	E.S.P.		FAN HP	CAPACITY (MBH)		TOTAL KW	TOTAL MBH	LBS/HR	KW	VOLTAGE	FLA		W.S.A.	M.O.C.P.	UNIT TAG	MODEL #	REFRIGERANT TYPE	AMBIENT AIR (°F)	ELECTRICAL				
					"W.G.	HP		TOTAL	SENSIBLE														TOTAL KW	TOTAL MBH		LBS/HR	KW
EX-CRAC-8	LIEBERT	MMD60E	SEQUENCING	2,500	0.5	1.5	58.7	51.8	11.5	39.24	8.0	2.8	460/3/60	19.8	24.8	25.0	500	ACC-8	PFC067A	R-22	95	460/3/60	11.4	13.9	20.0	350	1, 5
EX-CRAC-9	LIEBERT	MMD60E	SAMPLE MANAGEMENT	2,500	0.5	1.5	58.7	51.8	11.5	39.24	8.0	2.8	460/3/60	19.8	24.8	25.0	500	ACC-8	PFC067A	R-22	95	460/3/60	11.4	13.9	20.0	350	1, 5
EX-CRAC-10	LIEBERT	MMD96E-A00LG	SEQUENCING	3,750	-	-	89.2	77.2	-	-	N/A	N/A	460/3/60	20.2	-	30.0	665	ACC-10	PFC096A-AL0	R-22	95	460/3/60	17.4	-	25.0	565	1, 5
CRAC-11	LIEBERT	MMD96E7AHEL	SEQUENCING	3,750	0.5	2.0	84.9	84.9	11.5	39.24	10.0	3.5	460/3/60	21.0	26.3	30.0	665	ACC-11	PFH096A-AL7	R-407C	95	460/3/60	18.1	20.6	30.0	565	2-6

NOTES:

1. EXISTING UNIT TO REMAIN. THIS CONTRACTOR SHALL ENSURE UNIT IS IN GOOD WORKING ORDER. CHANGE AIR FILTERS AT COMPLETION OF CONSTRUCTION.
2. INDOOR UNIT SHALL COME WITH DISCONNECT SWITCH, HUMIDIFIER, ELECTRIC REHEAT, LOW STATIC FAN, FILTER CLOG, SMOKE SENSOR, HIGH TEMPERATURE SENSOR, PROGRAMMABLE THERMOSTAT, CONDENSATE PUMP, AND VIBRATION ISOLATORS FROM THE FACTORY.
3. OUTDOOR AIR COOLED CONDENSING UNIT SHALL HAVE HOT GAS BYPASS, LIEBERT LEE-TEMP, AND STANDARD CONDENSER COIL FROM THE FACTORY.
4. MOUNT AIR COOLED CONDENSING UNIT ON ROOF NEXT TO EX-ACC-13. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCE FOR MAINTENANCE AND AIRFLOW PERFORMANCE. ROUTE REFRIGERANT PIPING ALONG SAME PATH AS EX-CRAC-10 TO ROOF.
5. PROVIDE (4) INTELLISLOT 485XI CARDS, ONE FOR EACH NEW AND EXISTING MINIMATE. INSTALLATION BY ELECTRICAL CONTRACTOR.
6. NO SUBSTITUTIONS ALLOWED FOR CRAC-11/ACC-11.

EXISTING ROOF TOP UNIT SCHEDULE

MARK	MFR.	MODEL	NOMINAL CFM	O/A CFM	SUPPLY FAN			COOLING COIL (DX)					HEAT EXCHANGER				WEIGHT	ELECTRICAL			EXHAUST FAN			HEAT WHEEL (SUMMER)				HEAT WHEEL (WINTER)			NOTES		
					HP	RPM	ESP	NOMINAL MBH	SENS. MBH	EDB	EWB	LDB	LWB	MBH-INPUT	MBH-OUTPUT	EAT		LAT	VOLTAGE	MCA	MOCP	HP	RPM	ESP	CFM	EDB	EWB	LDB	LWB	CFM		EAT	LAT
EX-RTU-1	AAON	RM-008	1800	1500	3.0	1760	1.25	84.9	54.4	81.6	67.6	50.2	50.0	180.0	145.8	47.0	120.6	2000 LBS.	208/3/60	54 A	60 A	2.0	1760	1.0	1,500	95	75	82.9	68.5	1,500	0	42.5	EXISTING, NOTE 1
EX-RTU-2	CARRIER	48TFE014	5000	1000	-	-	-	144.0	-	-	-	-	-	250.0	200.0	-	-	1350 LBS.	208/3/60	65.2 A	80 A	-	-	-	-	-	-	-	-	-	-	-	

NOTE:

1. EXISTING UNIT SHALL REMAIN. THIS CONTRACTOR SHALL ENSURE UNIT IS IN GOOD WORKING ORDER. CHANGE AIR FILTERS AT COMPLETION OF CONSTRUCTION.

ROOFTOP UNIT SCHEDULE

MARK	MFR.	MODEL	NOMINAL CFM	O/A CFM	SUPPLY FAN			COOLING COIL (DX)						GAS HEAT				ELECTRICAL				WEIGHT (LBS)	EER	NOTES	
					HP	RPM	ESP	NOMINAL MBH	SENS. MBH	EDB	EWB	LWB	REFRIG. TYPE	MBH-OUTPUT	MBH-INPUT	AFUE	EAT	LAT	VOLTAGE/PHASE/FREQ.	MCA	MCCP				
RTU-2	TRANE	YHD150	5000	1000	5.0	884	1.5	143.88	113.36	76.6	63.2	57.69	54.29	R-410A	203	250	81.2%	56	93	208/3/60	71 A	90 A	2571#	12.1	1.2

NOTE:

1. PROVIDE WITH ECONOMIZER WITH BAROMETRIC RELIEF, CUSTOM ROOF CURB (SEE NOTE 2 BELOW), HIGH EFFICIENCY OVERSIZED EVAPORATOR FAN MOTOR, SMOKE DETECTOR, AND PROGRAMMABLE THERMOSTAT FROM THE FACTORY.
2. CUSTOM ROOF CURB SHALL BE A COMBINATION ROOF CURB/CURB ADAPTER THAT CONNECTS TO EXISTING SUPPLY AND RETURN DUCTWORK DROPS FROM EX-RTU-2 WHILE MAINTAINING THE LARGER FOOTPRINT OF RTU-2. SEE ABOVE EXISTING RTU SCHEDULE FOR MORE INFO ON EX-RTU-2. CUSTOM ROOF CURB SHALL BE MANUFACTURED BY MICROMEITL AND BE PROVIDED THROUGH TRANE.

EXISTING HUMIDIFIER SCHEDULE

MARK	MFR.	MODEL	CAPACITY (LBS/HR)	WATER SUPPLY LINE	ELECTRICAL	AMPS	MOCP	REMARKS
EX-HM-1	DRI-STEEM	VT-16	48	3/4" - 5.8 GPM	480/3ø/60	19.2	30	EXISTING; NOTE 1

NOTE:

1. INCLUDES HUMIDISTAT, PRESSURE DIFFERENTIAL SWITCH & HIGH LIMIT SENSOR, & IN-LINE WATER FILTER

EX. ELECTRIC BASEBOARD SCHEDULE

MARK	MFR.	MODEL	LENGTH	KW	ELECTRIC	AMPS	NOTES
BB-1	BERKO	ASL3-10100	10 FEET	1.0	208/1ø/60	4.8	1
BB-2	BERKO	ASL3-07250	7 FEET	1.75	208/1ø/60	8.4	1
BB-3	BERKO	ASL3-02250	28 INCHES	0.5	208/1ø/60	2.4	1

NOTES:

1. INCLUDES INTEGRAL THERMOSTAT & DISCONNECT SWITCH.

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION

DESIGNERS:


Your peer-approved mission-critical facility experts
TechSite www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

PROJECT

UPMC LIFE CHANGING MEDICINE

HOECHSTETTER BUILDING NEW GENOMICS LAB

5560 Centre Avenue, Pittsburgh

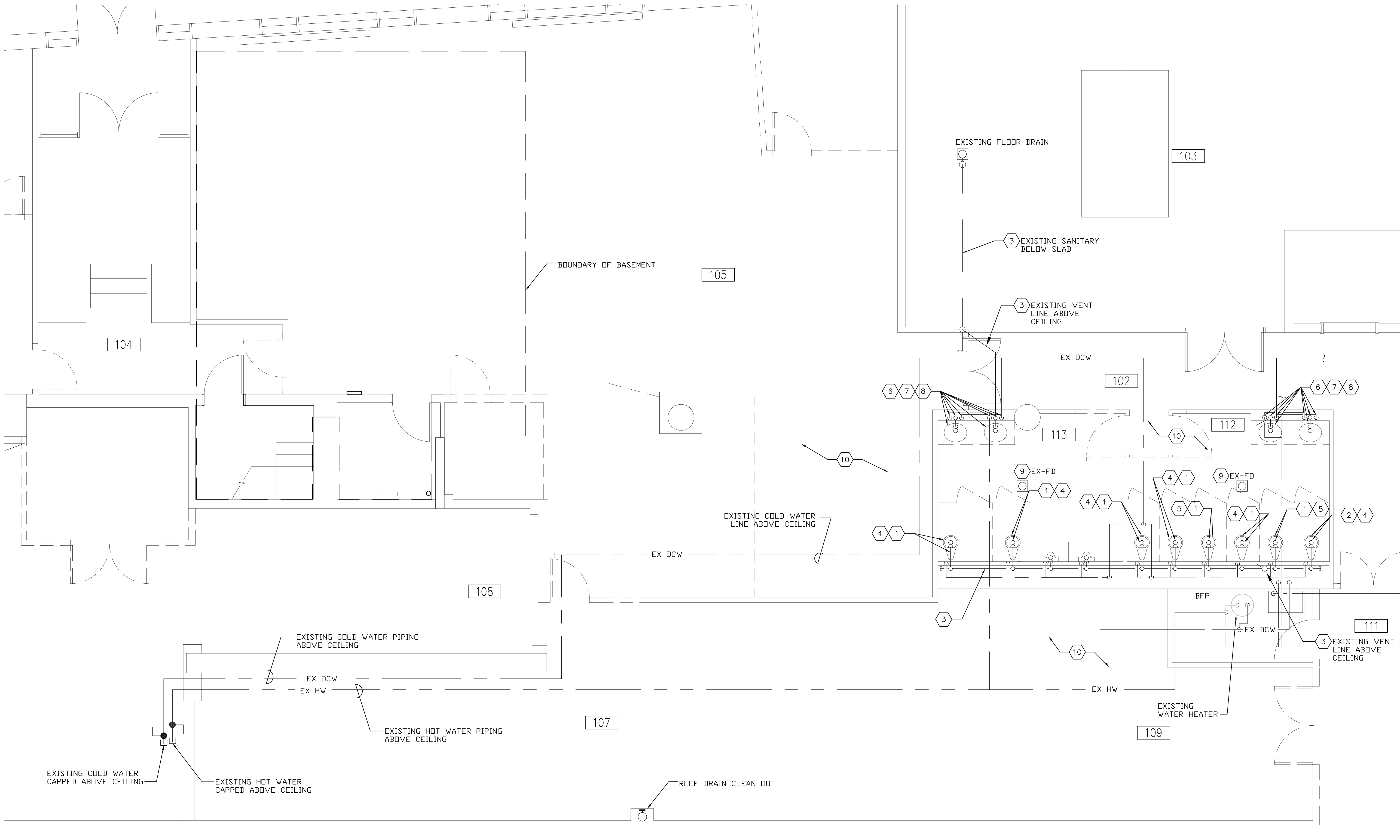
DRAWN BY: CBV	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME:

M50-3195.DWG

SEAL	TITLE		DRAWING NO. M5.0
	MECHANICAL SCHEDULES AND NOTES		
	LAST EDIT DATE: 7/19/17		
	SCALE: NONE		

PLOT DATE: 7/30/2017 8:24:19 AM
L:\TECH SITE\PROJECTS\UPMC - GC 1313195 - GENOMICS LAB DETAILED ENGINEERING AND CAD\DRAWINGS\0-CURRENT DRAWINGS



A FLOOR PLAN
SANITARY

1/4"=1'-0"

GENERAL NOTES

1. EXISTING PIPE SIZES AND LOCATIONS HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY LOCATION AND SIZES OF ALL EXISTING PIPING THAT IS BEING CONNECTED TO OR MODIFIED, AND TO VERIFY THAT PROPER SLOPES AND ELEVATIONS ARE AVAILABLE. MAINTAIN MINIMUM SLOPE OF 1/8" PER FOOT FOR SAN SEWER PIPING 4" OR LARGER. MAINTAIN MINIMUM SLOPE OF 1/4" PER FOOT FOR SAN SEWER PIPING SMALLER THAN 4".
2. PLUMBING CONTRACTOR SHALL VERIFY EXISTING SEWER AND VENT PIPE SIZE AND ELEVATION AND SHALL VERIFY THAT PROPER SLOPES ARE AVAILABLE BEFORE CUTTING FLOOR SLAB FOR NEW SEWER PIPING.
3. PROVIDE ACCESS DOORS TO NEW WATER VALVES AND CLEANOUTS AS NECESSARY WHEN INSTALLED IN INACCESSIBLE AREAS.
4. SANITARY DRAINAGE LINES AND FITTINGS (DRAIN, WASTE AND VENT) SHALL BE PVC-DWV PLASTIC SCHEDULE 40.
5. ALL FLOOR CLEANOUTS SHALL BE INSTALLED FLUSH WITH FLOOR FINISH MATERIAL OR FLUSH WITH CONCRETE SLAB IF NO FLOOR FINISH MATERIAL IS CALLED OUT FOR ON ARCHITECTURAL DRAWINGS.

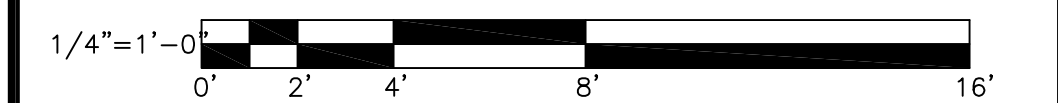
DRAWING LINETYPE LEGEND

—	INDICATES EXISTING EQUIPMENT
—	INDICATES NEW EQUIPMENT
----	INDICATES EQUIPMENT TO BE DEMOLISHED
----	INDICATES FUTURE EQUIPMENT

CODED NOTES:

1. REMOVE EXISTING PLUMBING FIXTURES AND ASSOCIATED SANITARY PIPING BACK TO MAIN AND CAP.
2. REMOVE EXISTING WATER CLOSET. EXISTING SANITARY PIPING FOR EXISTING WATER CLOSET SHALL BE REUSED FOR NEW WATER CLOSET. SEE SHEET P2.0 FOR MORE INFORMATION.
3. EXISTING SANITARY/VENT PIPING SHALL REMAIN (VERIFY LOCATION IN FIELD).
4. EXISTING DCW PIPING SERVING EXISTING PLUMBING FIXTURE SHALL BE REUSED FOR NEW WATER CLOSET. SEE SHEET P2.1 FOR MORE INFORMATION.
5. EXISTING DCW PIPING SERVING EXISTING WATER CLOSET SHALL BE REMOVED BACK TO MAIN AND CAPPED.
6. EXISTING DCW AND HOT WATER PIPING SERVING EXISTING LAVATORIES SHALL BE REUSED FOR NEW LAVATORIES. SEE SHEET P2.1 FOR MORE INFORMATION.
7. EXISTING SANITARY AND VENT PIPING SERVING EXISTING LAVATORIES SHALL BE REUSED FOR NEW LAVATORIES. SEE SHEET P2.0 FOR MORE INFORMATION.
8. REMOVE EXISTING PLUMBING FIXTURE.
9. EXISTING FLOOR DRAIN SHALL REMAIN.
10. EXISTING PLUMBING PIPING SHOWN ON PLUMBING DRAWINGS IS FROM FIELD OBSERVATIONS AND MAY NOT BE EXACT. PLUMBING CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PIPING LOCATIONS/SIZES IN FIELD.

—	TS	7/28/17	ISSUED FOR BID
—	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION



DESIGNERS:

TechSite
Your peer-approved mission-critical facility experts
www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

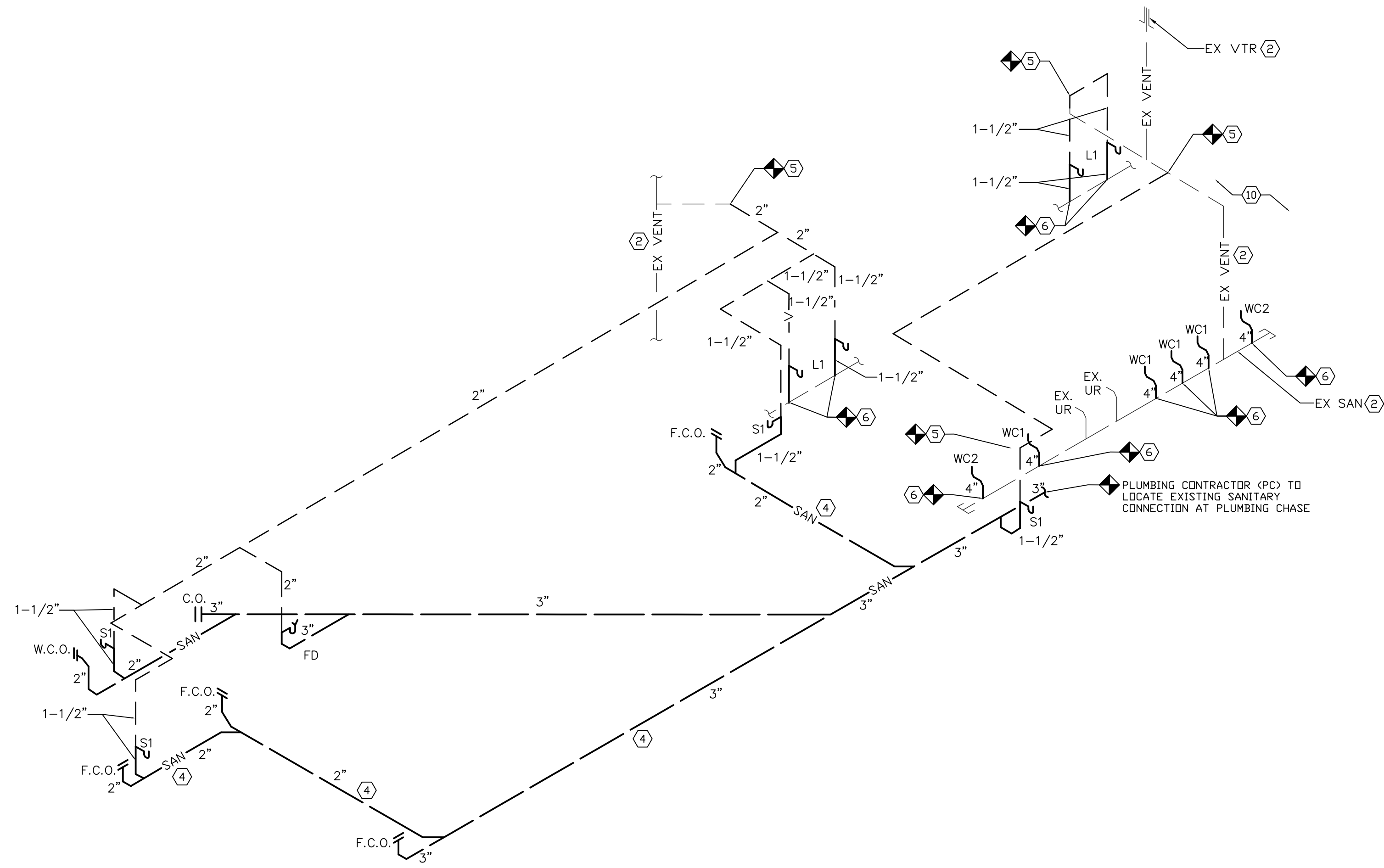
PROJECT

UPMC LIFE CHANGING MEDICINE
**HOECHSTETTER BUILDING
NEW GENOMICS LAB**
5560 Centre Avenue, Pittsburgh

DRAWN BY: CBV	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

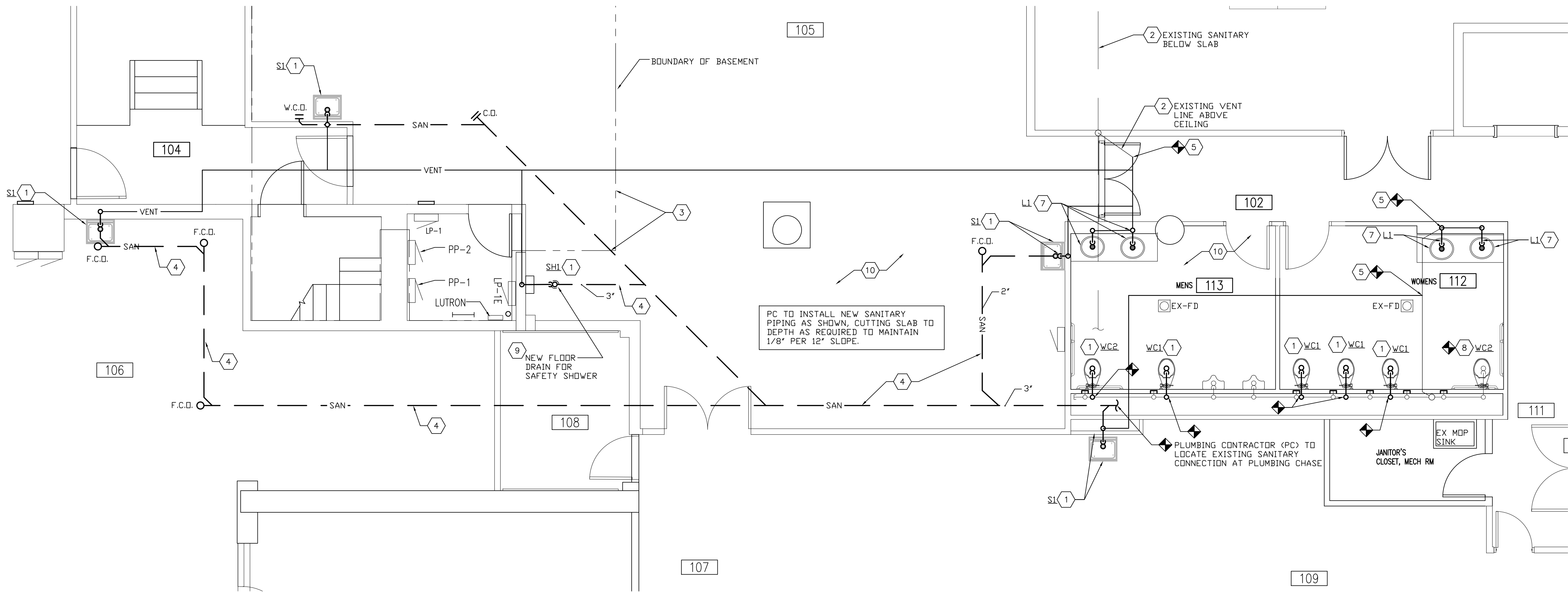
DRAWING NAME:
P10-3195.DWG

SEAL	TITLE
	PLUMBING DEMOLITION PLAN
	LAST EDIT DATE: 7/28/17
	SCALE: AS SHOWN
	DRAWING NO. P1.0



B ISOMETRIC
SANITARY STACK

NTS



A FLOOR PLAN
SANITARY

1/4"=1'-0"

GENERAL NOTES

- EXISTING PIPE SIZES AND LOCATIONS HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY LOCATION AND SIZES OF ALL EXISTING PIPING THAT IS BEING CONNECTED TO OR MODIFIED, AND TO VERIFY THAT PROPER SLOPES AND ELEVATIONS ARE AVAILABLE. MAINTAIN MINIMUM SLOPE OF 1/8" PER FOOT FOR SAN SEWER PIPING 4" OR LARGER. MAINTAIN MINIMUM SLOPE OF 1/4" PER FOOT FOR SAN SEWER PIPING SMALLER THAN 4".
- PLUMBING CONTRACTOR SHALL VERIFY EXISTING SEWER AND VENT PIPE SIZE AND ELEVATION AND SHALL VERIFY THAT PROPER SLOPES ARE AVAILABLE BEFORE CUTTING FLOOR SLAB FOR NEW SEWER PIPING.
- PROVIDE ACCESS DOORS TO NEW WATER VALVES AND CLEANOUTS AS NECESSARY WHEN INSTALLED IN INACCESSIBLE AREAS.
- SANITARY DRAINAGE LINES AND FITTINGS (DRAIN, WASTE AND VENT) SHALL BE PVC-DWV PLASTIC SCHEDULE 40.
- ALL FLOOR CLEANOUTS SHALL BE INSTALLED FLUSH WITH FLOOR FINISH MATERIAL OR FLUSH WITH CONCRETE SLAB IF NO FLOOR FINISH MATERIAL IS CALLED OUT FOR ON ARCHITECTURAL DRAWINGS.

DRAWING LINETYPE LEGEND

	INDICATES EXISTING EQUIPMENT
	INDICATES NEW EQUIPMENT
	INDICATES EQUIPMENT TO BE DEMOLISHED
	INDICATES FUTURE EQUIPMENT

CODED NOTES:

- INSTALL NEW PLUMBING FIXTURE WHERE SHOWN. INSTALL NEW SANITARY AND VENT PIPING TO SERVE NEW PLUMBING FIXTURE. SEE SANITARY STACK ON THIS SHEET FOR MORE INFORMATION ON CONNECTIONS TO EXISTING PIPING.
- EXISTING SANITARY/VENT PIPING SHALL REMAIN (VERIFY LOCATION IN FIELD).
- SANITARY PIPING SHALL BE TRENCHED UNDER SLAB UNTIL IT REACHES THE BOUNDARY OF THE BASEMENT. IN THIS AREA SANITARY PIPING MAY BE RUN ALONG CEILING IN BASEMENT SPACE. BOUNDARY OF BASEMENT IS NOTED FOR REFERENCE. PLUMBING CONTRACTOR IS TO FIELD VERIFY IF CEILING ELEVATIONS IN BASEMENT WILL ALLOW REQUIRED SLOPE. ALTERNATE SANITARY ROUTE FOR NE SINK IS THROUGH CORRIDOR 104 TO NEW SANITARY LINE IN ROOM 106.
- TRENCH NEW SANITARY DRAIN PIPING UNDER SLAB AS SHOWN.
- CONNECT NEW VENT PIPING INTO EXISTING VENT PIPING WHERE SHOWN.
- CONNECT NEW SANITARY PIPING INTO EXISTING SANITARY PIPING WHERE SHOWN.
- INSTALL NEW PLUMBING FIXTURE WHERE SHOWN. REUSE EXISTING SANITARY AND VENT PIPING FROM DEMOLITIONED FIXTURE. DRAIN PIPING UNDER LAVATORIES WILL NEED TO BE EXTENDED/REWORKED SLIGHTLY FOR NEW LAVATORIES.
- INSTALL NEW PLUMBING FIXTURE WHERE SHOWN. REUSE EXISTING SANITARY AND VENT PIPING FROM DEMOLITIONED FIXTURE.
- NEW FLOOR DRAIN WITH ZURN Z-1000 DEEP SEAL TRAP AND 1/2" TRAP PRIMER CONNECTION.
- EXISTING PLUMBING PIPING SHOWN ON PLUMBING DRAWINGS IS FROM FIELD OBSERVATIONS AND MAY NOT BE EXACT. PLUMBING CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PIPING LOCATIONS/SIZES IN FIELD.

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION



DESIGNERS:

TechSite
Your peer-approved mission-critical facility experts
www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

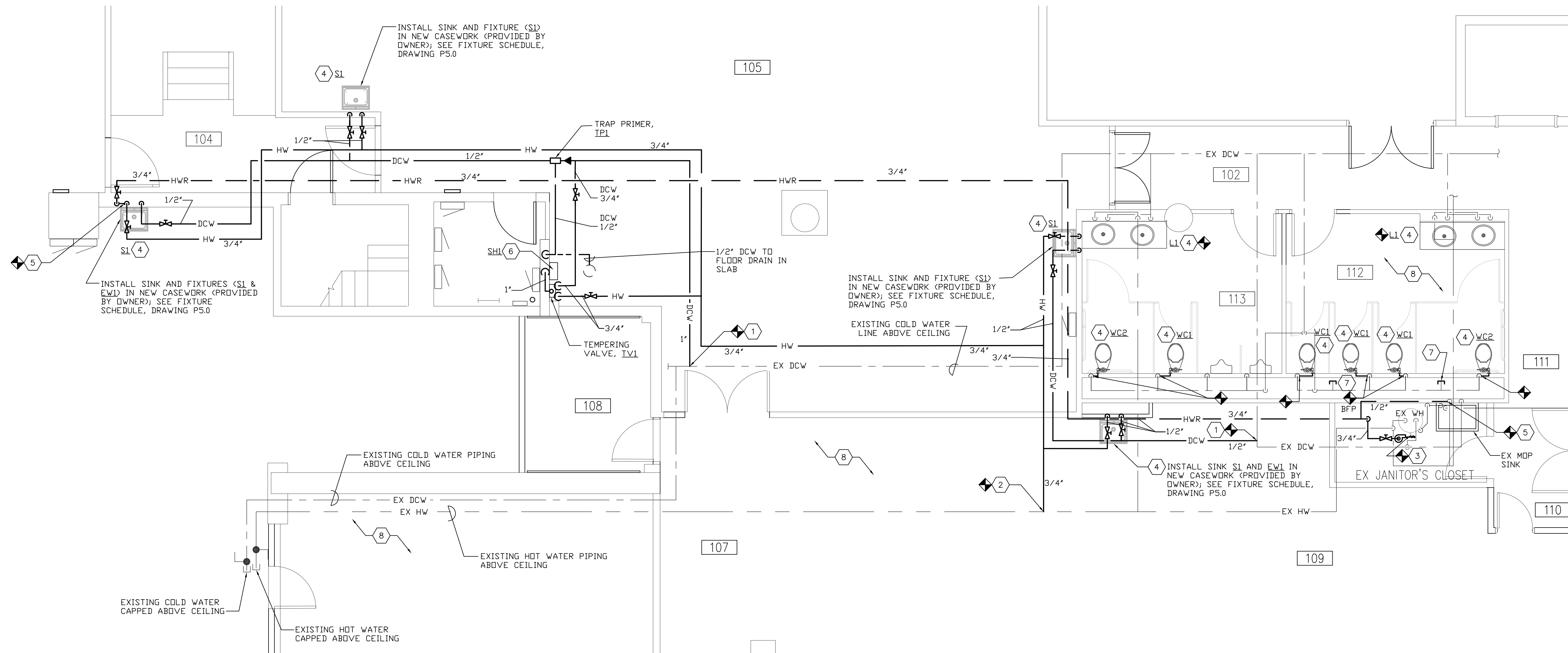
PROJECT

UPMC LIFE CHANGING MEDICINE
**HOECHSTETTER BUILDING
NEW GENOMICS LAB**
5560 Centre Avenue, Pittsburgh

DRAWN BY: CBV/JAK	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME: P20-3195.DWG		TITLE PLUMBING DWV PLAN	
SEAL		LAST EDIT DATE: 7/30/17 SCALE: AS SHOWN	DRAWING NO. P2.0

PLOT DATE \ TIME: 7/30/2017 8:24:29 AM
L:\TECH SITE\PROJECTS\UPMC - GC 13133195 - GENOMICS LAB DETAILED ENGINEERING AND CAD\DRAWINGS\0-CURRENT DRAWINGS



A FLOOR PLAN
WATER SUPPLY PIPING

1/4"=1'-0"

GENERAL NOTES

- EXISTING PIPE SIZES AND LOCATIONS HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY LOCATION AND SIZES OF ALL EXISTING PIPING THAT IS BEING CONNECTED TO OR MODIFIED, AND TO VERIFY THAT PROPER SLOPES AND ELEVATIONS ARE AVAILABLE. MAINTAIN MINIMUM SLOPE OF 1/8" PER FOOT FOR SAN SEWER PIPING 4" OR LARGER. MAINTAIN MINIMUM SLOPE OF 1/4" PER FOOT FOR SAN SEWER PIPING SMALLER THAN 4".
- PLUMBING CONTRACTOR SHALL VERIFY EXISTING SEWER AND VENT PIPE SIZE AND ELEVATION AND SHALL VERIFY THAT PROPER SLOPES ARE AVAILABLE BEFORE CUTTING FLOOR SLAB FOR NEW SEWER PIPING.
- PROVIDE ACCESS DOORS TO NEW WATER VALVES AND CLEANOUTS AS NECESSARY WHEN INSTALLED IN INACCESSIBLE AREAS.
- SANITARY DRAINAGE LINES AND FITTINGS (DRAIN, WASTE AND VENT) SHALL BE PVC-DWV PLASTIC SCHEDULE 40.
- ALL FLOOR CLEANOUTS SHALL BE INSTALLED FLUSH WITH FLOOR FINISH MATERIAL OR FLUSH WITH CONCRETE SLAB IF NO FLOOR FINISH MATERIAL IS CALLED OUT FOR ON ARCHITECTURAL DRAWINGS.
- PER THE ALLEGHENY COUNTY DEPARTMENT OF HEALTH, THE HOT WATER TEMPERATURE TO BE SET BETWEEN 130 AND 140 DEGREES. CONTRACTOR TO BALANCE SYSTEM SO THAT THE RETURN LINE (HWR) IS GREATER THAN 125 DEGREES.

DRAWING LINETYPE LEGEND

—	INDICATES EXISTING EQUIPMENT
—	INDICATES NEW EQUIPMENT
---	INDICATES EQUIPMENT TO BE DEMOLISHED

CODED NOTES:

- CONNECT TO NEAREST DOMESTIC COLD WATER PIPE OF EQUAL OR LARGER SIZE. VERIFY SIZE AND LOCATION AT SITE. PROVIDE SHUT-OFF VALVE IN NEW PIPE AT POINT OF CONNECTION.
- CONNECT TO EXISTING HOT WATER PIPE OF EQUAL OR LARGER SIZE. VERIFY SIZE AND LOCATION AT SITE. PROVIDE SHUT-OFF VALVE IN NEW PIPE AT POINT OF CONNECTION.
- CONNECT HOT WATER RETURN (HWR) PIPING INTO DRAIN OF EXISTING ELECTRIC HOT WATER HEATER AS SHOWN. SEE DETAIL A ON SHEET P3.0 FOR MORE INFORMATION.
- PLUMBING CONTRACTOR SHALL MAKE ALL NECESSARY DISCONNECTS AND RECONNECTS OF DCW AND HOT WATER FOR NEW PLUMBING FIXTURES.
- HOT WATER RETURN PIPING SHALL CONNECT INTO HOT WATER PIPING UPSTREAM OF HOT WATER SHUT OFF VALVE FOR EACH INDIVIDUAL PLUMBING FIXTURE.
- INSTALL EMERGENCY SHOWER SH1 WHERE SHOWN. SEE DETAIL B ON SHEET P3.0 AND FIXTURE SCHEDULE ON SHEET P5.0 FOR MORE INFORMATION.
- REMOVE EXISTING DCW SUPPLY LINES BACK TO MAIN AND CAP.
- EXISTING PLUMBING PIPING SHOWN ON PLUMBING DRAWINGS IS FROM FIELD OBSERVATIONS AND MAY NOT BE EXACT. PLUMBING CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PIPING LOCATIONS/SIZES IN FIELD.

—	TS	7/28/17	ISSUED FOR BID
—	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION



DESIGNERS:

TechSite
Your peer-approved mission-critical facility experts
TechSite www.techsiteplan.com
8188 Business Way, Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

PROJECT

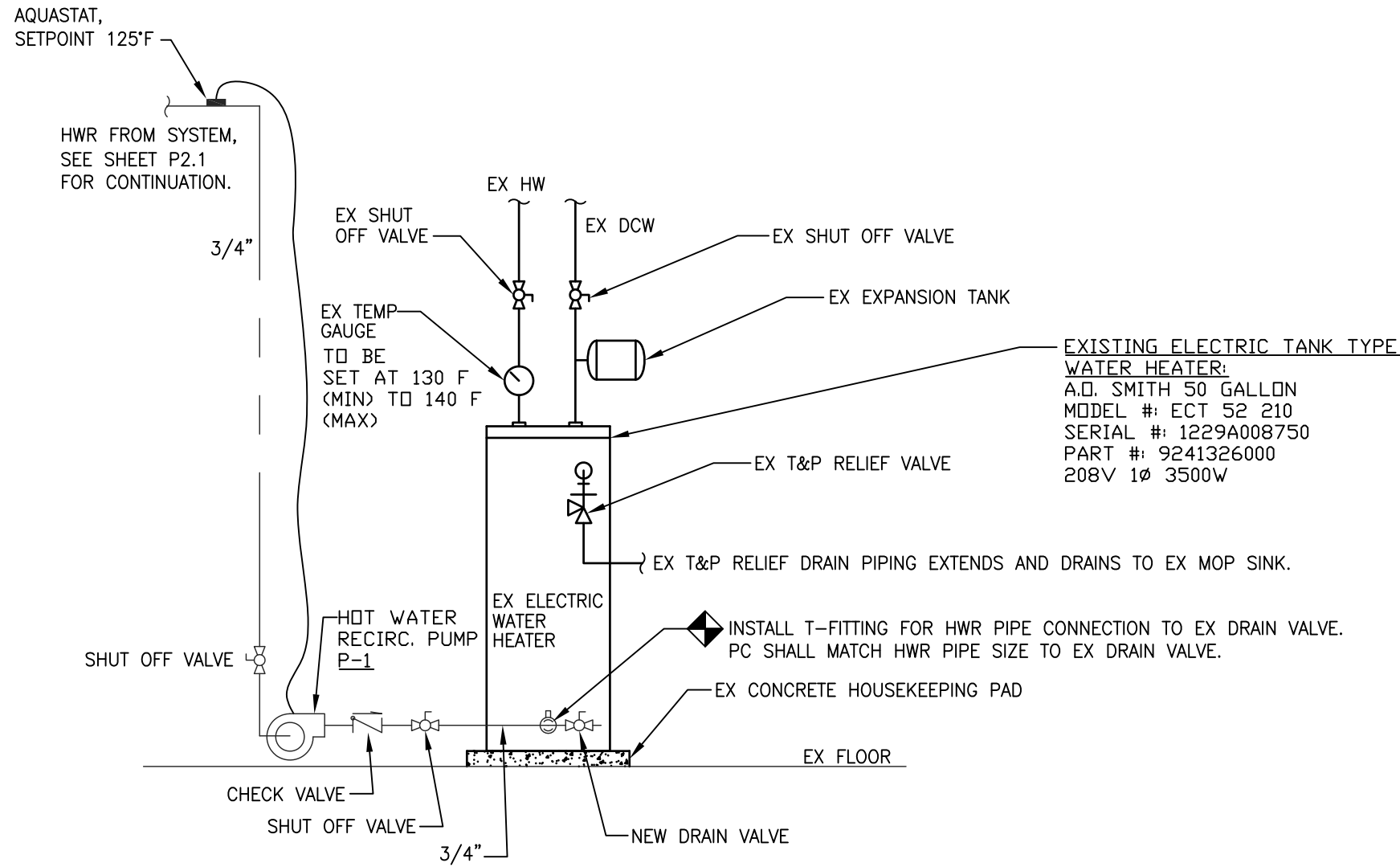
UPMC LIFE CHANGING MEDICINE
**HOECHSTETTER BUILDING
NEW GENOMICS LAB**
5560 Centre Avenue, Pittsburgh

DRAWN BY: CBV/JAK	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

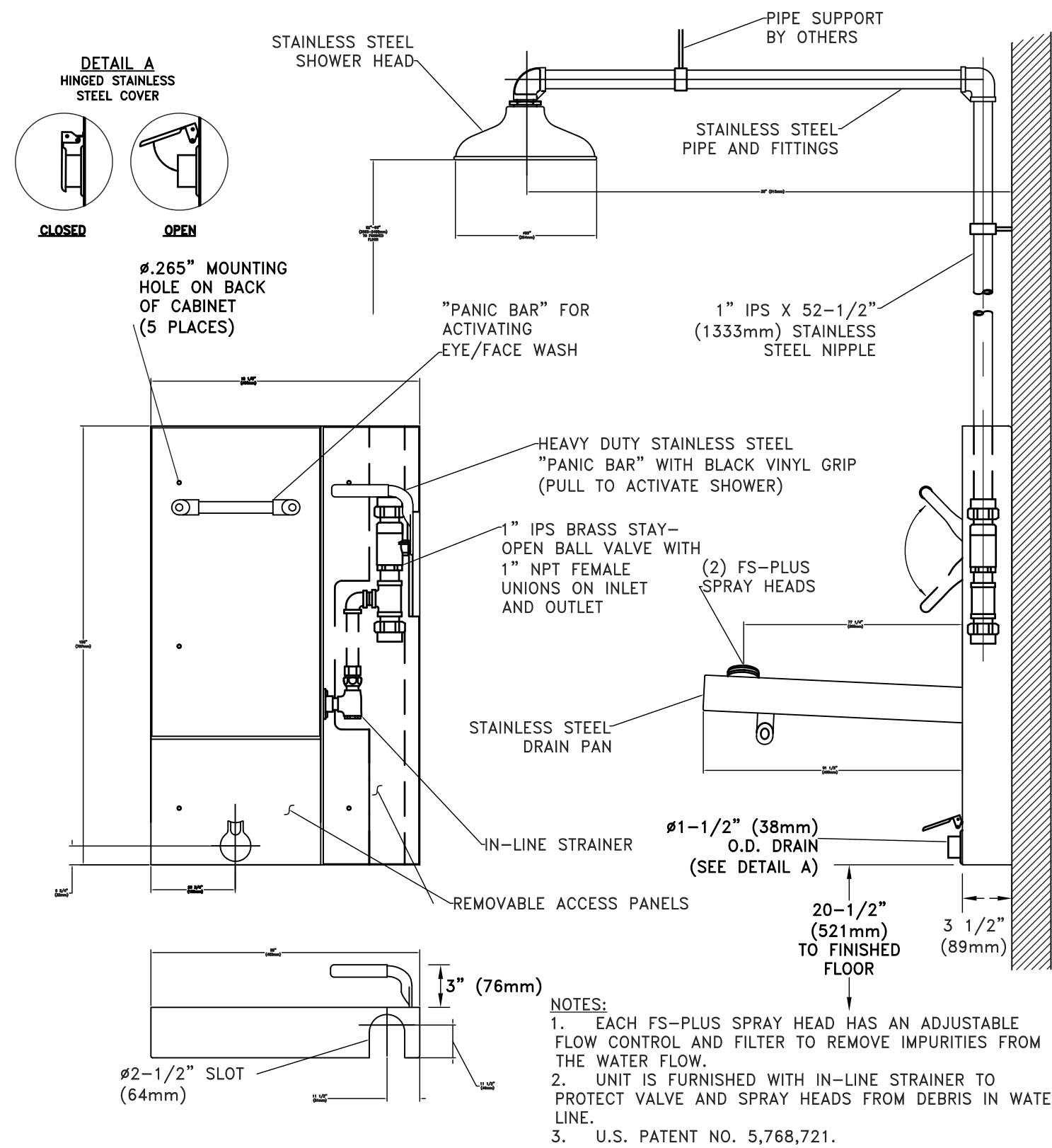
DRAWING NAME:
P21-3195.DWG

SEAL	TITLE PLUMBING SUPPLY PLAN	LAST EDIT DATE: 7/30/17 SCALE: AS SHOWN	DRAWING NO. P2.1
------	--	--	----------------------------

PLOT DATE \ TIME: 7/30/2017 8:24:33 AM
L:\TECH SITE\PROJECTS\UPMC - GC 1313195 - GENOMICS LAB\DETAILED ENGINEERING AND CAD\DRAWINGS\0-CURRENT DRAWINGS



A **DETAIL**
HOT WATER RETURN TO EXISTING WATER HEATER N.T.S.



B **DETAIL**
SAFETY SHOWER DETAILS N.T.S.

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION

DESIGNERS:



TechSite
Your peer-approved
mission-critical facility experts

TechSite www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

PROJECT



UPMC LIFE CHANGING MEDICINE

**HOECHSTETTER BUILDING
NEW GENOMICS LAB**

5560 Centre Avenue, Pittsburgh

DRAWN BY: CBV	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME: P30-3195.DWG		TITLE PLUMBING DETAILS	
SEAL		LAST EDIT DATE: 7/28/17	DRAWING NO. P3.0
		SCALE: AS SHOWN	

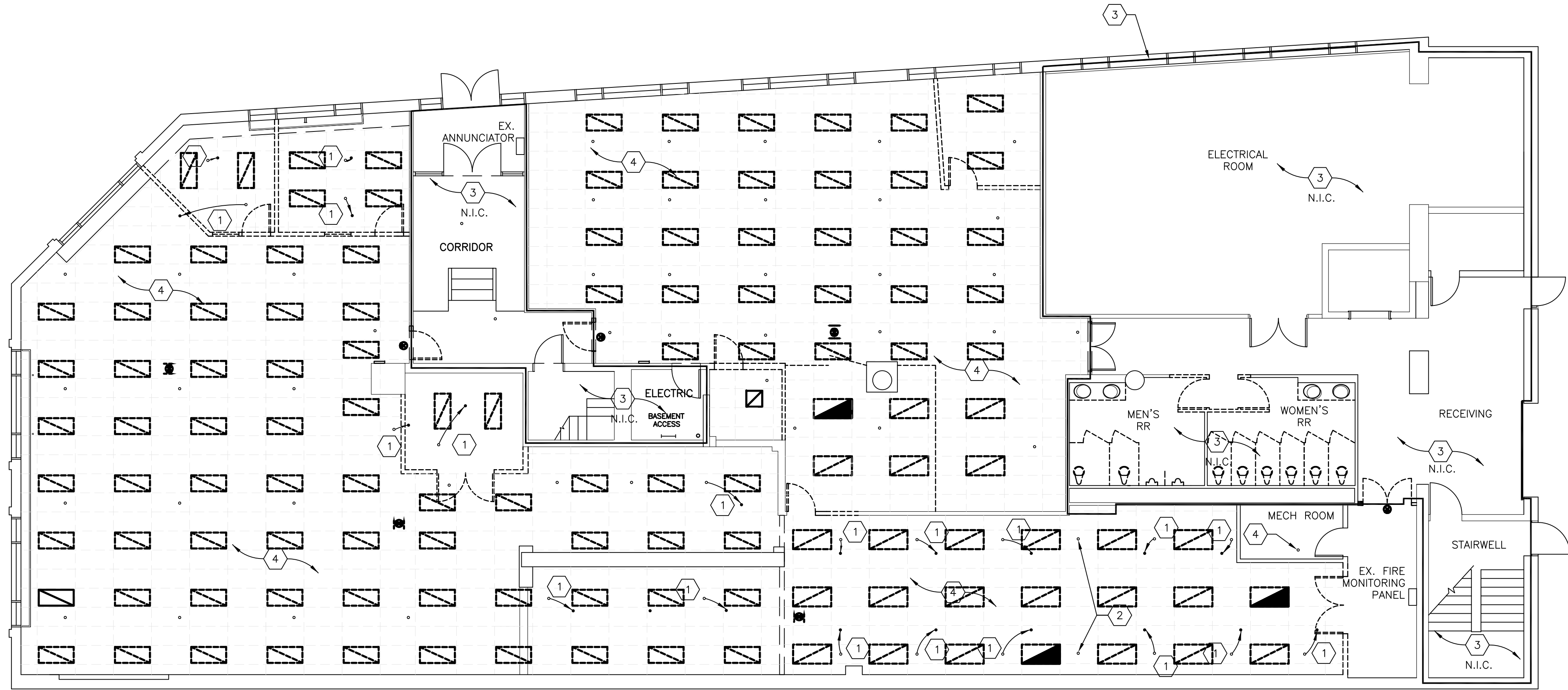
PLOT DATE \ TIME: 7/30/2017 8:24:37 AM
L:\TECH SITE\PROJECTS\UPMC - GC 13133195 - GENOMICS LAB\DETAILED ENGINEERING AND CAD\DRAWINGS\0-CURRENT DRAWINGS

PLUMBING FIXTURE SCHEDULE										
MARK	FIXTURE	BRANCH SIZES (MIN.)				MANUFACTURER	MODEL #	TRIM		
		CW	HW	WASTE	VENT					
<u>WC1</u>	WATER CLOSET (WALL MOUNT)	1 1/4"	---	4"	2"	TOTO	CT708E	FLUSH VALVE: TOTO TET1LN32#CP-WR - 1.28 GPF SENSOR OPERATED SELF GENERATING POWER SYSTEM WITH MANUAL OVERRIDE AND VANDAL RESISTANT SET SCREW ESCUTCHEON AND STOP CAP. ELONGATED SEAT: BENEKE 523, COMFORTSEATS C106C		
<u>WC2</u>	WATER CLOSET HANDICAPPED									
<u>L1</u>	LAVATORY DECK 2-BOWL	1/2" (1)	1/2" (1)	1 1/2"	1 1/2"	BRADLEY	LD-3010 -SL-T01	BRADLEY: WALL MOUNTED, ONE PIECE OMNIDECK (COLOR: PEPPERED WHITE) UNDERMOUNT 17" DIA. TERREON BOWL(S), IN "DS-WHT" (WHITE) COLOR CHROME-PLATED BRASS P-TRAP, CONTINUOUS WASTE, (1) THERMOSTATIC MIXING VALVE PER DECK (SET TO 105°F, NOT REQUIRED FOR L30, L32, L34, L36), STOPS, SUPPLIES, TRAP ENCLOSURE. PROVIDE ONE FAUCET PER BOWL: TOTO TEL3LS-10 0.5 GPM SENSOR OPERATED, SELF-GENERATING POWER SYSTEM, STANDARD SPOUT, NO COVER PLATE. PROVIDE GRID STRAINERS FOR EACH BOWL AND ESCUTCHEONS FOR WATER AND DRAIN PIPE WALL PENETRATIONS. ASSE 1070 THERMOSTATIC MIXING VALVE: ZURN ZW3870 XLT SET TO 105°F.		
<u>EW1</u>	EYEWASH STATION W/ MIXING VALVE	1/2" (1)	1/2" (1)			BRADLEY BRADLEY	S19-290B S19-2000 EFX8	DECK MOUNTED SWING DOWN EYEWASH THERMOSTATIC MIXING VALVE FOR EYEWASH		
<u>SL</u>	LABORATORY SINK	1/2" (1)	1/2" (1)	1 1/2"	1 1/2"	ORION	ARLS 15	ORION CORROSION RESISTANT LABORATORY SINK		
	MIXING FAUCET					WATERSAVER	L2222	WATERSAVER DECK MOUNTED LABORATORY MIXING FAUCET		
	DECK MOUNTED HIGH FLOW WATER VALVE					WATERSAVER	L4301-121WSA	WATERSAVER DECK MOUNTED LABORATORY HIGH FLOW WATER VALVE		
<u>SH1</u>	EMERGENCY SHOWER	1" *	-	1" **	-	GUARDIAN	GBF2173	RECESSED SAFETY SHOWER STATION WITH DRAIN PAN AND DAYLIGHT DRAIN, SURFACE MOUNTED. * - INPUT TO SHOWER IS FROM TEMPERING VALVE TV1 (MIX OF HOT AND COLD WATER SUPPLIES) ** - EXTEND EYEWASH DRAIN PIPE TO WITHIN 8" OF FLOOR		
<u>TV1</u>	TEMPERING VALVE	3/4"	3/4"	-	-	GUARDIAN	G3702	34 GALLON THERMOSTATIC MIXING VALVE IN SURFACE MOUNTED CABINET; AFTER INSTALLATION ENSURE SETTINGS MEET ANSI Z358.1-2009 REQUIREMENTS.		
<u>FD</u>	FLOOR DRAIN	-	-	3"	2"	ZURN	Z415B	ZURN FLOOR DRAIN WITH TYPE B STRAINER. Z415B SHALL BE USED IN CONJUNCTION WITH Z-1000 DEEP SEAL TRAP WITH OPTIONAL 1/2" TRAP PRIMER CONNECTION.		
<u>WCO</u>	WALL CLEAN OUT	-	-	2"	-	ZURN	Z1441	ZURN WALL CLEANDUT WITH SMOOTH ACCESS COVER.		
<u>FCD</u>	FLOOR CLEAN OUT	-	-	2"&3" SEE PLAN	-	ZURN	Z1400-K	ZURN HEAVY DUTY "LEVEL-TRDL" ADJUSTABLE FLOOR CLEAN OUT WITH ANCHOR FLANGE.		
<u>TP</u>	TRAP PRIMER	1/2"	-	-	-	ZURN	Z1022	ZURN AUTOMATIC TRAP PRIMER WITH 1/2" INLET, 1/2" OUTLET, AND 1/2" DRAIN CONNECTION. SHALL BE USED IN CONJUNCTION WITH Z-1000 DEEP SEAL TRAP WITH OPTIONAL 1/2" TRAP PRIMER CONNECTION.		

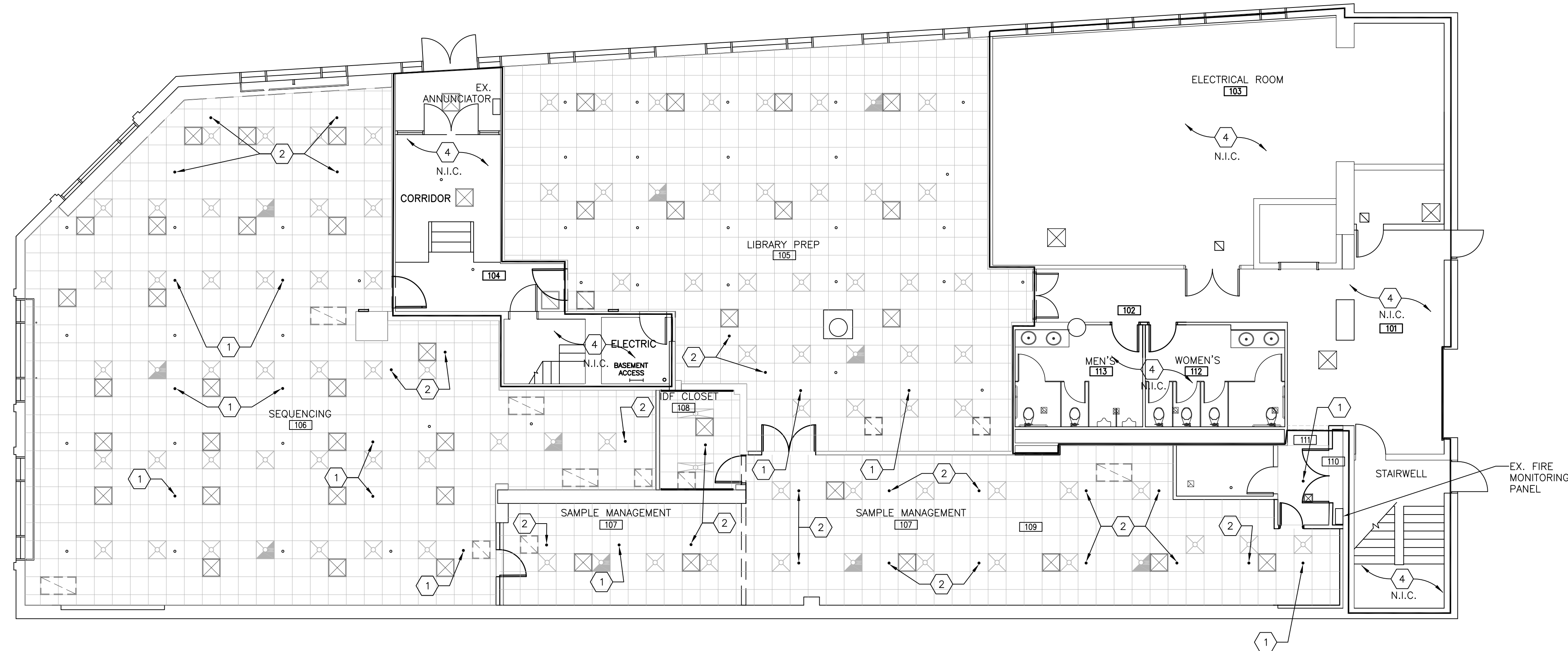
PUMP SCHEDULE											
REF. No.	SYSTEM SERVED	PUMP LOCATION	GPM	PRESS. DROP FT. HD.	OPERATING OR STANDBY	MOTOR				MANUFACTURER & MODEL	NOTES
						HP	AMPS	RPM	V-PH-HZ		
P-1	HOT WATER RECIRCULATION	EX JANITOR'S CLOSET	3	3.5	OPERATING	1/40	0.43	3250	115-1-60	TACO MODEL 003	1

NOTE:
1. PROVIDE UNIT WITH AQUASTAT. SET AQUASTAT AT 110 DEGREES F.

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION
DESIGNERS:			
 TechSite Your peer-approved mission-critical facility experts TechSite www.techsiteplan.com 8188 Business Way . Plain City, Ohio 43064 t 614.873.7800 . f 614.873.7801			
PROJECT			
UPMC LIFE CHANGING MEDICINE HOECHSTETTER BUILDING NEW GENOMICS LAB 5560 Centre Avenue, Pittsburgh			
DRAWN BY: JK	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195
DRAWING NAME: P50-3195.DWG			
SEAL	TITLE PLUMBING SCHEDULES		
	LAST EDIT DATE: 7/28/17		DRAWING NO. P5.0
	SCALE: AS SHOWN		



A DEMO FLOOR PLAN
FIRE PROTECTION DEMOLITION
1/8"=1'-0"



B NEW WORK FLOOR PLAN
FIRE PROTECTION NEW WORK
1/8"=1'-0"

DEMOLITION KEYNOTES:

- 1 EXISTING FIRE SPRINKLER HEAD SHALL BE RELOCATED TO LOCATION SHOWN. SEE NEW WORK PLAN BELOW FOR MORE INFORMATION.
- 2 REMOVE EXISTING FIRE SPRINKLER HEAD COMPLETELY. REMOVE BRANCH FIRE SPRINKLER PIPING SERVING SPRINKLER HEAD BACK TO MAIN AND CAP.
- 3 AREA IS NOT IN CONTRACT.
- 4 EXISTING SPRINKLER HEADS SHALL REMAIN UNLESS NOTED OTHERWISE.

NEW WORK KEYNOTES:

- 1 INSTALL NEW CONCEALED PENDANT SPRINKLER HEAD WHERE SHOWN. SPRINKLER HEAD TYPE AND FITMENT WITHIN NEW CEILING SHALL MATCH EXISTING SPRINKLER HEADS WITHIN SAME ROOM.
- 2 RELOCATED EXISTING SPRINKLER HEAD. SEE DEMO PLAN ABOVE FOR MORE INFORMATION.
- 3 INSTALL NEW SPRINKLER HEAD WHERE SHOWN. SPRINKLER HEAD TYPE AND FITMENT WITHIN EXISTING CEILING SHALL MATCH EXISTING SPRINKLER HEADS WITHIN CORRIDOR.
- 4 AREA NOT IN CONTRACT.

DRAWING LINETYPE LEGEND

	INDICATES EXISTING EQUIPMENT
	INDICATES NEW EQUIPMENT
	INDICATES EQUIPMENT TO BE DEMOLISHED

GENERAL NOTES:

- THIS FIRE PROTECTION DRAWING INCLUDES SUGGESTED MODIFICATIONS TO THE EXISTING SPRINKLER SYSTEM. A SPRINKLER DESIGN/BUILD CONTRACTOR REGISTERED WITH THE CITY OF PITTSBURGH SHALL BE ENGAGED FOR THIS WORK. THEY SHALL VERIFY IF THE SCOPE CONTAINED HEREIN WILL REQUIRE PERMIT SUBMISSION. THIS CONTRACTOR SHALL: SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL; PAY FOR ALL PERMITS AND INSPECTIONS (IF REQUIRED); FLUSH ALL PIPING UPON COMPLETION OF PROJECT AND TEST SYSTEM PER NFPA 13.
- THE FIRE SUPPRESSION AND ALARM SYSTEMS ARE TO REMAIN FUNCTIONALLY UNCHANGED UNLESS RECENT CODE REQUIREMENTS REQUIRE OTHERWISE. ENSURE SYSTEM CONFORMS TO NFPA 13 REQUIREMENTS.
- THE EXISTING SYSTEM IS ORDINARY HAZARD - GROUP 2 PROTECTION. DESIGN DENSITY IS 0.20 GPM/FT². SPRINKLER HEADS ARE UL LISTED QUICK-RESPONSE THROUGHOUT.
- COORDINATE REVISED SPRINKLER HEAD LOCATIONS WITH LIGHTING FIXTURES, ELECTRICAL DISTRIBUTION AND MECHANICAL SYSTEMS INSTALLED IN/THROUGH THE CEILING.
- ALL PIPE PENETRATIONS ARE TO BE SEALED WITH UL LISTED FIRE RATED MATERIALS.
- THE CONTROL PANEL FOR THE FIRE SYSTEM IS ON THE SECOND FLOOR OUTSIDE THE SOUTH WALL OF THE WOMEN'S RESTROOM.
- THE FIRE SYSTEM MONITORING PANEL (GUARDIAN) IS ON THE FIRST FLOOR OUTSIDE OF THE SOUTH STAIRWELL WALL.
- THE SPRINKLER MAINS ARE IN THE BASEMENT BELOW THE NORTH STREET ENTRANCE. ENTRANCE TO BASEMENT IS IN NORTH ELECTRICAL CLOSET.
- THE SECOND FLOOR HOUSES A CRITICAL DATA CENTER. ANY WORK THAT COULD CAUSE AN ISSUE WITH THOSE OPERATIONS MUST BE REVIEWED WITH THE OWNER PRIOR TO COMMENCEMENT.

REV	BY	DATE	DESCRIPTION
-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT



DESIGNERS:

TechSite
Your peer-approved mission-critical facility experts
TechSite www.techsiteplan.com
8188 Business Way, Plain City, Ohio 43064
t 614.873.7800 f 614.873.7801

PROJECT

UPMC LIFE CHANGING MEDICINE
HOECHSTETTER BUILDING
NEW GENOMICS LAB
5560 Centre Avenue, Pittsburgh

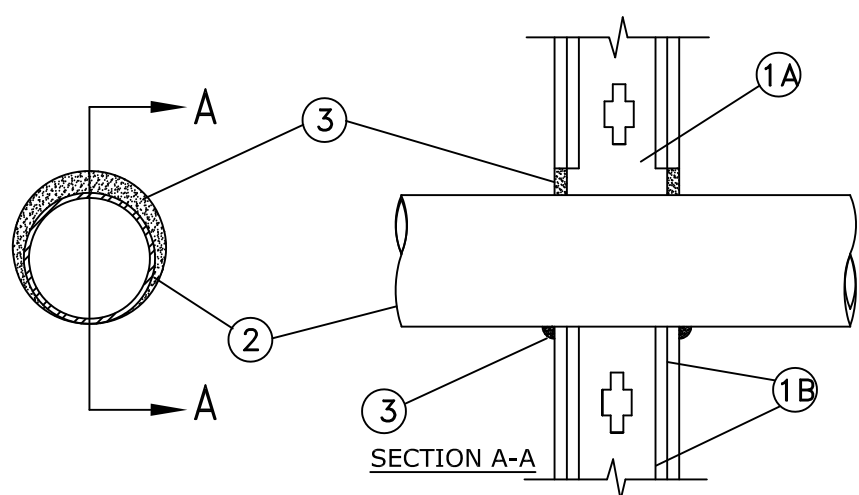
DRAWN BY: CBV	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME: FP10-3195.DWG	TITLE FIRE PROTECTION FLOOR PLANS
SEAL	LAST EDIT DATE: 7/13/17 SCALE: AS SHOWN
	DRAWING NO. FP1.0

ELECTRICAL SYMBOLS		
TYPICAL SYMBOLS AND HEIGHTS APPLY UNLESS NOTED OTHERWISE.		
SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO CENTERLINE UNLESS NOTED OTHERWISE
	EXISTING (TO REMAIN UNLESS NOTED OTHERWISE)	—
	EXISTING (TO BE REMOVED)	—
	NEW	—
	TEMPORARY, TO BE REMOVED AT PROJECT COMPLETION	—
LIGHT FIXTURES, OUTLETS, AND JUNCTION BOXES		
	CEILING FIXTURE	—
	WALL FIXTURE	SEE DRAWINGS
	CEILING MOUNTED, DOUBLE FACED EXIT SIGN WITH DIRECTIONAL ARROWS	—
	WALL MOUNTED EXIT SIGN	SEE DRAWINGS
	WALL MOUNTED EMERG. LIGHT	SEE DRAWINGS
	STRIP LIGHT FIXTURE	CEILING
	2x4 LIGHT FIXTURE	CEILING
	2x4 LIGHT FIXTURE (ALWAYS-ON, NIGHT LIGHT)	CEILING
	2x2 LIGHT FIXTURE	CEILING
	2x2 LIGHT FIXTURE (ALWAYS-ON, NIGHT LIGHT)	CEILING
	WIRED JUNCTION BOX	SEE DRAWINGS
RECEPTACLES		
	DUPLEX RECEPTACLE, 3 WIRE GROUND TYPE	18"
	DUPLEX RECEPTACLE, WEATHERPROOF	18"
	GROUND FAULT PROTECTED DUPLEX RECEPTACLE	18"
	DOUBLE DUPLEX (QUAD) RECEPTACLE	18"
	SPECIAL OUTLET UNDER RAISED FLOOR, AS REQUIRED	SLAB
	WALL MOUNTED SPECIAL OUTLET, AS REQUIRED	18"
SWITCHES AND MOTOR CONTROLS		
	TOGGLE SWITCH - SINGLE, 3-WAY, 4-WAY	48"
	WALL BOX - DIMMER	48"
	LINE VOLTAGE THERMOSTAT	48"
	ELECTRIC PANEL - SURFACE MOUNTED	6'-6" TO TOP
	ELECTRIC PANEL - FLUSH MOUNTED	6'-6" TO TOP
	SAFETY SWITCH (FUDED)	AS REQUIRED
	COMBINATION STARTER/SAFETY SWITCH	AS REQUIRED
	MANUAL MOTOR STARTING SWITCH	48"
	START/STOP PUSHBUTTON STATION	48"
	MOTOR - 1 PHASE	AS REQUIRED
	MOTOR - 3 PHASE	AS REQUIRED
COMMUNICATIONS		
	WALL TELEPHONE OUTLET	48"
	COMBINATION TELEPHONE/DATA OUTLET	18"
	DATA OUTLET, 'X' = QTY. OF CABLES	18"
FIRE ALARM		
	MANUAL ALARM BOX (PULL STATION AND PULL BOX)	48"
	FIRE ALARM AUDIO/VISUAL SIGNAL DEVICE (ADA TYPE)	80"
	FIRE ALARM AUDIO SIGNAL DEVICE	80"
	FIRE ALARM CONTROL PANEL	AS REQUIRED
	FIRE ALARM SYSTEM REMOTE ANNUNCIATOR	AS REQUIRED
	DUCT MOUNTED SYSTEM SMOKE DETECTOR WITH REMOTE INDICATORS/RESET	AS REQUIRED
	SYSTEM SMOKE DETECTOR	CEILING MOUNTED
	SYSTEM HEAT DETECTOR	CEILING MOUNTED
	FIRE ALARM WATER FLOW SWITCH	AS REQUIRED
	FIRE ALARM TAMPER SWITCH	AS REQUIRED

ABBREVIATION	DESCRIPTION
A	AMPERES
AMP	AMPERES
ARCH	ARCHITECTURAL
AFF	ABOVE FINISHED FLOOR
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BCM	BRANCH CIRCUIT MONITORING
BCV	BARE COPPER WIRE
BRK	BREAKER
CLG	CEILING
C.M.	CONSTRUCTION MANAGER
CW	CHILLED WATER
DWG	DRAWING
E.C.	ELECTRICAL CONTRACTOR
ETR	EXISTING TO REMAIN
EXST	EXISTING
FB	FURNISHED BY OTHERS
FLA	FULL LOAD AMPERES
FLR	FLOOR
GND	GROUND
J-BOX	JUNCTION BOX
KV	KILOVOLTS
KVA	KILOVOLT-AMPERES
KW	KILOWATTS
LIG	LIGHTING
MECH	MECHANICAL
MCM OR KCML	THOUSAND CIRCULAR MILS
MMU	MULTI MODULE UNIT
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PNL	PANEL
PROV	PROVISIONED FOR FUTURE BREAKER
SCC	SYSTEM CONTROL CABINET
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TYP	TYPICAL
V	VOLTS
VA	VOLTS-AMPERES
XFMR	TRANSFORMER

FIXTURE SCHEDULE						
NOTE : FIXTURE NUMBER, LETTER PREFIX INDICATES TYPE OF MOUNTING AS FOLLOWS: CL-CEILING MOUNTED; S-STEM SUSPENDED; W-WALL MOUNTED; R-CEILING RECESSED; WR-WALL RECESSED; CV-COVE MOUNTED; UC-UNDER CABINET; RF-ROOF MOUNTED; P-POST; GR-GROUND; CH-CHAIN SUSPENDED						
SYMBOL UNLESS OTHERWISE NOTED	FIXTURE NUMBER	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	LAMPS	REMARKS
	R1	2' X 2' VOLUMETRIC RECESSED LED LIGHTING FIXTURE	LITHONIA	2BLT2 40L ADP E21 LP840	LED	FURNISH WITH 0-10V DIMMING CONTROL
	R2	2' X 2' RECESSED LED CEILING LIGHT FIXTURE WITH 90 MINUTE BATTERY PACK	LITHONIA	2BLT2 40L ADP E21 LP840 WITH OPTION EL14LSD	LED	NITE-LITE AND EGRESS LIGHTING, WIRED AHEAD OF ANY SWITCHING
	R3	1' X 4' RECESSED CEILING GRID LED LIGHT FIXTURE.	LITHONIA	BLT4 40L ADP LP840	LED	-
	EX1	LED, SINGLE FACE EXIT SIGN WITH CLEAR FINISH AND RED LETTERS, WITH 90 MINUTE BATTERY	LITHONIA	LRP 1 RC(*)120/277 EL N	LED	* SPECIFY DIRECTIONAL ARROWS PER PLAN E2.2 WHEN ORDERING.
	EX2	SAME AS EX1 EXCEPT DOUBLE FACE	LITHONIA	LRP 2 RMR(*)120/277 EL N	LED	* SPECIFY DIRECTIONAL ARROWS PER PLAN E2.2 WHEN ORDERING.



System No. W-L-1146
F Ratings - 1 and 2 Hr (See Item 1)
T Rating - 0 Hr

1. **Wall Assembly** - The 1 or 2 hr fire rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 in. by 4 in. (51 mm by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 4 in. to 6 in. (102 to 152 mm) wider and 4 in. to 6 in. (102 to 152 mm) higher than the diam of the penetrating item such that, when the penetrating item is centered in the opening, a 2 in. to 3 in. (51 mm to 76 mm) clearance is present between the penetrating item and the framing in all four sides.

B. Gypsum Board* - The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm) for steel stud walls. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls.

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. **Through Penetrant** - One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (point contact) to max 2 in. (0 mm to 51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

- A. Steel Pipe - Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. Iron Pipe - Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
- C. Conduit - Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in (102 mm) diam (or smaller) steel electrical metallic tubing
- D. Copper Tubing - Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing
- E. Copper Pipe - Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

3. **Fill,Void or Cavity Materials*** - Caulk or Sealant - Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. Min 1/2 in. (13 mm) diam bead of caulk or sealant applied to the penetrant/wallboard interface at the point contact location on both sides of wall.

3M COMPANY - CP 25WB+ caulk or FB-3000 WT sealant.

*Bearing the UL Classification Mark



DETAIL

FIREPROOFING CONDUIT PENETRATIONS

N.T.S.

UPMC DATA CENTER LOAD FED FROM PAD-MOUNT TRANSFORMER	TOTAL KVA CAPACITY	CONTINGENT KVA CAPACITY	FAULT CURRENT
2,000A SERVICE-ENTRANCE SWITCHBOARD	1,000	1,000	35,600A
BUILDING SERVICE AT 480Y277V		AMPS	KVA
SERVICE CAPACITY		1203	1,000
EXISTING MAXIMUM LOAD		663	551
FUTURE MAXIMUM ADDED		193	160
TOTAL		856	711

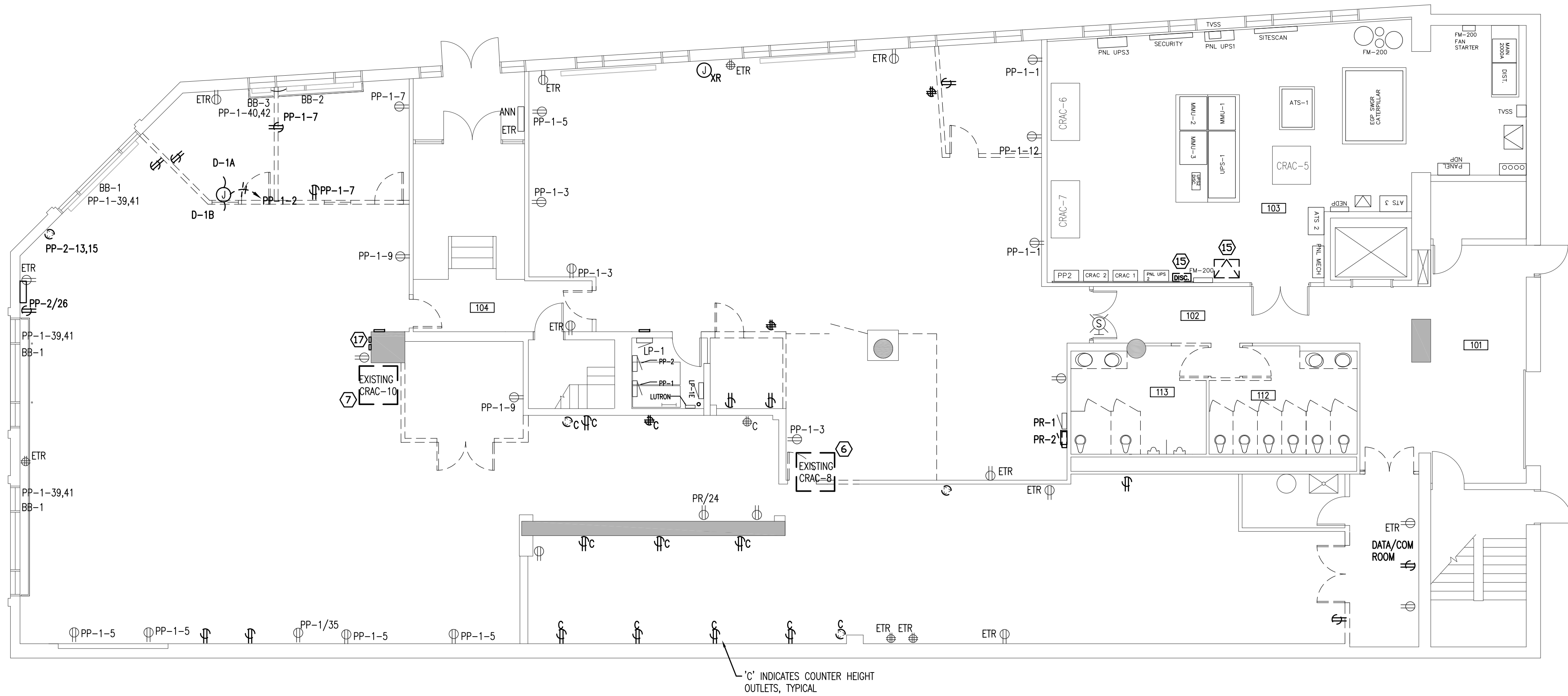
-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION

DESIGNERS:	 Your peer-approved mission-critical facility experts TechSite www.techsiteplan.com 8188 Business Way . Plain City, Ohio 43064 t 614.873.7800 . f 614.873.7801
------------	---

PROJECT	 HOECHSTETTER BUILDING NEW GENOMICS LAB 5560 Centre Avenue, Pittsburgh
---------	---

DRAWN BY: FWJ	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

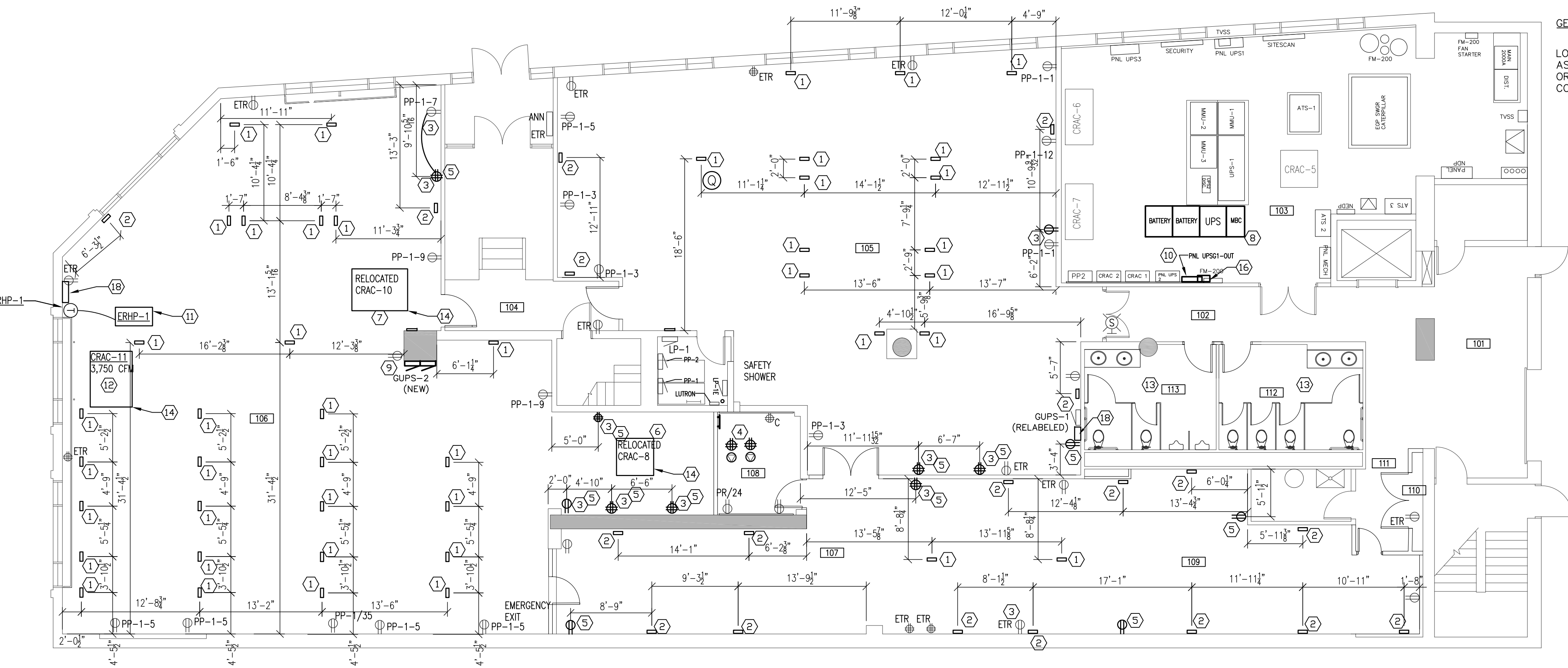
DRAWING NAME: E00-3195.DWG	
SEAL	TITLE ELECTRICAL SYMBOLS AND ABBREVIATIONS
LAST EDIT DATE: 7/19/17	DRAWING NO. E0.0
SCALE: NO SCALE	



A FLOOR PLAN
ELECTRICAL DEMOLITION
1/8"=1'-0"

GENERAL DEMOLITION NOTES:

1. REMOVE ALL DEVICES, CABLING, WALL BOXES AND CONDUITS FOR OUTLETS SHOWN WITH DASHED LINES. COORDINATE RELATED WALL REPAIRS WITH GENERAL TRADES CONTRACTOR.
2. E.C. IS RESPONSIBLE TO SEAL ALL UNUSED CONDUIT PENETRATIONS LEFT IN FULL HEIGHT WALLS ONCE DEMOLITION IS COMPLETE. SEE DETAIL ON DRAWING E0.0.



B FLOOR PLAN
ELECTRICAL NEW WORK
1/8"=1'-0"

GENERAL NEW CONSTRUCTION NOTE:

LOCATION DIMENSIONS FOR NEW DEVICES ARE APPROXIMATE AND OFFERED AS A GUIDELINE TO DESIRED LOCATION. EXACT LOCATION OF DEVICES AND ORIENTATION OF SERVICE COLUMNS MAY VARY DEPENDING ON SITE CONDITIONS.

DRAWING LINETYPE LEGEND

	INDICATES EXISTING EQUIPMENT
	INDICATES NEW EQUIPMENT
	INDICATES EQUIPMENT TO BE DEMOLISHED

CODED NOTES:

1. LEGRAND WIREMOLD VISTA COLUMN DISTRIBUTION POINT. SEE DETAIL 'A', DRAWING E3.0 FOR INSTALLATION DETAILS. SEE SCHEDULES ON DRAWINGS E2.1A AND E2.1B FOR POWER AND NETWORK OUTLET REQUIREMENTS AT EACH LOCATION.
2. LEGRAND WIREMOLD VISTA COLUMN DISTRIBUTION POINT AGAINST WALL. SEE DETAIL 'C', DRAWING E3.0 FOR INSTALLATION DETAILS. SEE SCHEDULES ON DRAWINGS E2.1A AND E2.1B FOR POWER AND NETWORK OUTLET REQUIREMENTS AT EACH LOCATION.
3. FUTURE LAB REFRIGERATION UNIT LOCATION, 120V, 20A CIRCUIT NEEDED. ADJACENT EXISTING CIRCUITS CAN BE USED FOR NEW RECEPTACLES, E.C. TO ENSURE A MAXIMUM OF (2) WALL OUTLETS PER CIRCUIT IN THIS AREA.
4. FOUR DEDICATED UPS CIRCUITS (FROM ABOVE) MOUNTED TO TOP OF 7' HIGH PANDUIT IT RACKS. TWO (2) 5-20R4, AND TWO (2) L6-20. SEE PANELBOARD SCHEDULE GUPS-2.
5. NEW HOUSE POWER OUTLET IN WALL - 18" A.F.F., NEMA 5-20R2. FEED FROM ADJACENT RECEPTACLE CIRCUIT.
6. REMOVE 480V FEEDER FROM EXISTING CRAC 8. COORDINATE WITH MECHANICAL CONTRACTOR. EXTEND FEEDER TO NEW LOCATION AND PROVIDE NEW CONTROL WIRING FROM EXISTING THERMOSTAT.
7. REMOVE 480V FEEDER FROM EXISTING CRAC 10. COORDINATE WITH MECHANICAL CONTRACTOR. EXTEND FEEDER TO NEW LOCATION AND PROVIDE NEW CONTROL WIRING FROM EXISTING THERMOSTAT.
8. PROVIDE NEW 208/120V 140kVA UPS LINE-UP PER PROJECT SPECIFICATIONS AND ONE-LINE E4.1
9. PROVIDE NEW 225A, 208/120V, DOUBLE-TUB, 84 CIRCUIT PANELBOARD GUPS-2 PER PROJECT SPECIFICATIONS AND ONE-LINE E4.1 SEE ALSO PANELBOARD SCHEDULES ON E5.0.
10. PROVIDE NEW 800A, 208/120V, MAIN-LUG PANELBOARD UPSG1-OUT PER PROJECT SPECIFICATIONS AND ONE-LINE E4.1
11. COORDINATE WITH M.C. FOR 120V, 20A POWER AND T-STAT CONNECTIONS TO CEILING-MOUNTED RADIANT HEAT PANEL (BY M.C.) PROVIDE NEW CIRCUIT FROM PANEL PP-1.
12. PROVIDE POWER AND DISCONNECT SWITCH PER E4.1 TO CEILING-MOUNTED CRAC-11 (INSTALLED BY M.C.). PROVIDE CONTROL WIRING TO ROOF-TOP CONDENSER.
13. E.C. TO PROVIDE ALLOWANCE FOR: DEMOLITION OF LIGHT SWITCHES AND OUTLETS IN RESTROOMS; INSTALLATION OF NEW SWITCHES AND ABOVE COUNTER GFCI OUTLETS. EXISTING LIGHTING FIXTURES TO REMAIN.
14. E.C. TO INSTALL CONTROL AND POWER WIRING FOR THREE (3) AIR-HANDLER SMOKE DETECTORS (CRACS 8, 10 AND 11). COORDINATE WITH M.C. AND OWNER'S FIRE ALARM CONTRACTOR.
15. LOCATION OF SWITCH AND TRANSFORMER TO BE REMOVED, SEE DRAWING E4.0.
16. LOCATION OF NEW TERMINAL BOX FOR DISCONNECTED TRANSFORMER. SEE DRAWING E4.1.
17. REMOVE (2) FLUSH-MOUNTED GENERATOR ANNUNCIATOR PANELS. DEMOLISH BACK-BOX, CONDUIT, AND WIRES BACK TO JUNCTION BOX IN MAIN ELECTRICAL ROOM 103. RETURN ANNUNCIATOR PANELS AND BACK-BOXES TO UPMC
18. E.C. TO PROVIDE AN ENCLOSURE AND 120V, 15 AMP UPS CIRCUIT FOR AIR CONDITIONER MONITORING INTERFACE BOARD(S). SEE DETAIL 'C', DRAWING E3.1 FOR MORE INFORMATION.

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION



DESIGNERS:

TechSite
Your peer-approved mission-critical facility experts
TechSite www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

PROJECT

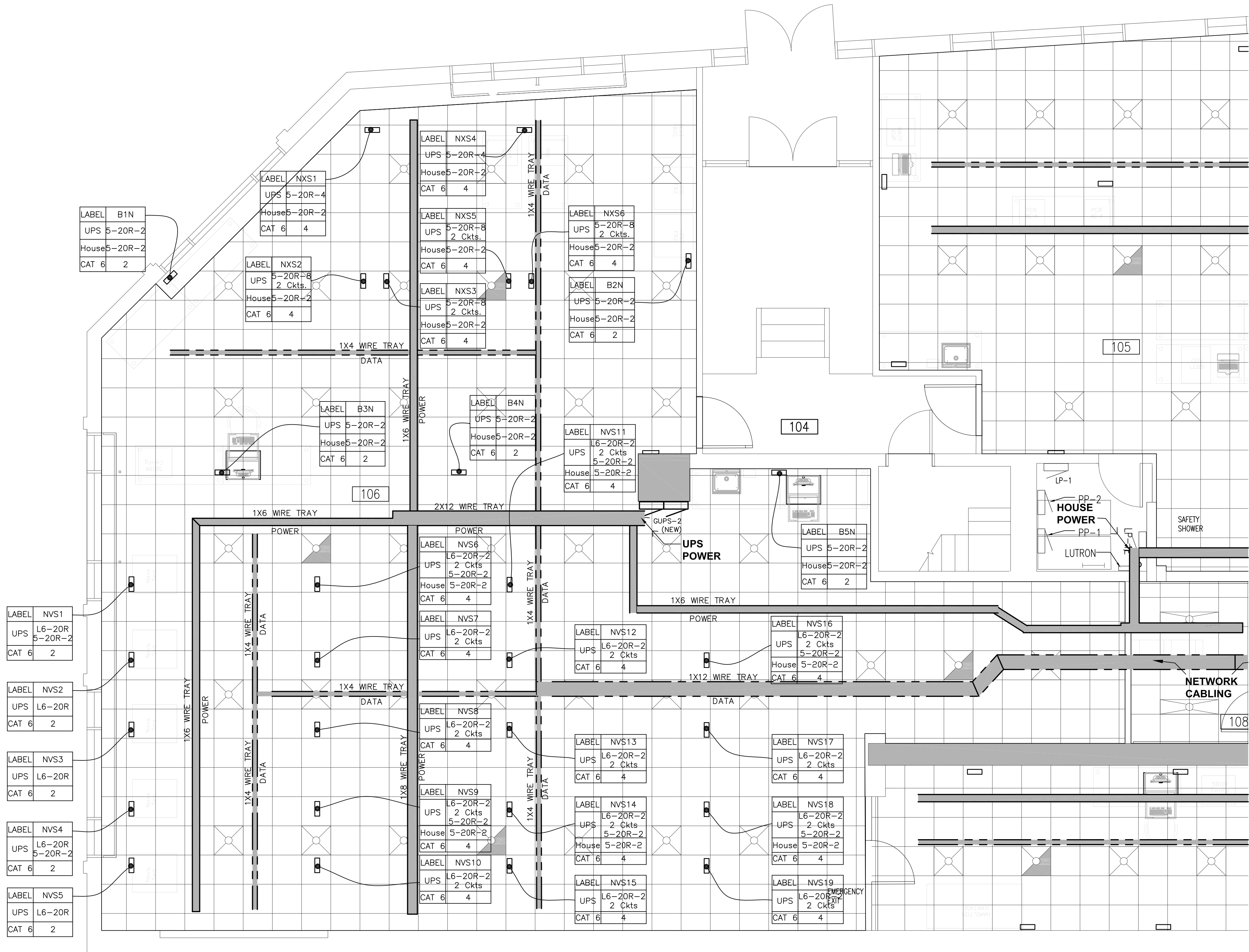
UPMC LIFE CHANGING MEDICINE

**HOECHSTETTER BUILDING
NEW GENOMICS LAB**

5560 Centre Avenue, Pittsburgh

DRAWN BY: JK	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY: FWJ	DATE: 07/13/17	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME: E20-3195.DWG	
SEAL	TITLE ELECTRICAL FLOOR PLANS
LAST EDIT DATE: 7/17/17 SCALE: AS SHOWN	DRAWING NO. E2.0



A PARTIAL PLAN
HOECHSTETTER FIRST FLOOR NORTH
1/4"=1'-0"

CODED NOTES:

1. SEE DETAIL 'A', DRAWING E3.1 FOR GROUNDING INFORMATION.

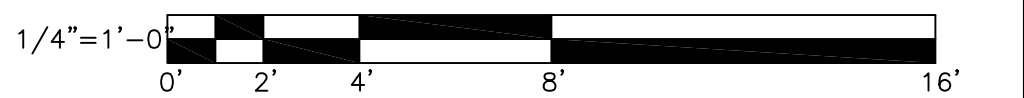
DRAWING LINETYPE LEGEND

	INDICATES EXISTING EQUIPMENT
	INDICATES NEW EQUIPMENT
	INDICATES EQUIPMENT TO BE DEMOLISHED

GENERAL NOTES:

- ELECTRICAL CONTRACTOR IS TO PROVIDE AND INSTALL ALL ABOVE CEILING CABLE TRAYS. THESE TRAYS WILL BE INSTALLED IN A ZONE BETWEEN THE SPRINKLER LINES AND MECHANICAL MAIN DUCTWORK. SEE SECTION 'D', DRAWING E3.0. FINAL COORDINATION WILL BE DETERMINED AFTER CEILING DEMOLITION.
- CABLE TRAY MANUFACTURER TO BE CABLOFIL OR APPROVED EQUAL.
- SEPARATE CABLE TRAYS SHALL BE USED FOR TRANSPORT OF CABLING FROM ELECTRICAL PANELS (FOR POWER) OR IDF CLOSET (FOR DATA) TO A POSITION CLOSE TO THE TARGET LOCATION; RUNS FROM CABLE TRAY TO TARGET LOCATION SHALL BE ROUTED LEVEL TO THE FLOOR AND PARALLEL TO THE CEILING GRID (NO DIAGONAL ROUTING). LIKE CABLING (ALL POWER OR ALL DATA) CAN BE BUNDLED AND ROUTED TOGETHER USING J-HOOKS OR SIMILAR, WHEN UL LISTED FOR THE PURPOSE. DATA CABLING SHALL BE KEPT MINIMUM 6" FROM LIGHTING FIXTURES AND POWER CABLING DURING HORIZONTAL ROUTES.
- FOR PARALLEL TWO LAYER TRAYS, DISTANCE BETWEEN BOTTOM OF UPPER TRAY AND TOP OF LOWER TRAY SHALL BE NO LESS THAN 6 INCHES. FOR SIDE-BY-SIDE TRAYS, MAINTAIN NO LESS THAN 6 INCHES BETWEEN TRAYS WITH DIFFERENT CABLE TYPES (POWER VS. DATA).
- STRUTS TO SUPPORT CABLE TRAY ARE TO BE INSTALLED NO MORE THAN 5 FEET APART. TRAY LOAD CAPACITY SHALL BE AT LEAST 50 LBS/FOOT. INCREASE SIZE OF BASKET TRAY IF NEEDED TO MEET THIS REQUIREMENT.
- ALL CABLE TRAYS SHALL BE BONDED TO THE NEW TGB (TELECOMMUNICATIONS GROUNDING BUSBAR) IN THE IDF CLOSET, RM 108. ADDITIONALLY, ALL POWER CABLE TRAYS SHALL BE ELECTRICALLY CONTINUOUS AND BONDED TO GROUND IN THE PANEL FROM WHICH THE CARRIED CIRCUITS ORIGINATE USING MINIMUM #4 AWG COPPER WIRE. EC IS RESPONSIBLE FOR ALL CONNECTIONS, SEE SPECIFICATIONS AND DRAWING E3.1 FOR ADDITIONAL INFORMATION.
- TELECOM CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ALL NEW TELECOM/CATEGORY 6 CABLING.

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION



DESIGNERS:

TechSite
Your peer-approved mission-critical facility experts
TechSite www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

PROJECT

UPMC LIFE CHANGING MEDICINE

**HOECHSTETTER BUILDING
NEW GENOMICS LAB**

5560 Centre Avenue, Pittsburgh

DRAWN BY: JK	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME:
E21-3195.DWG

SEAL

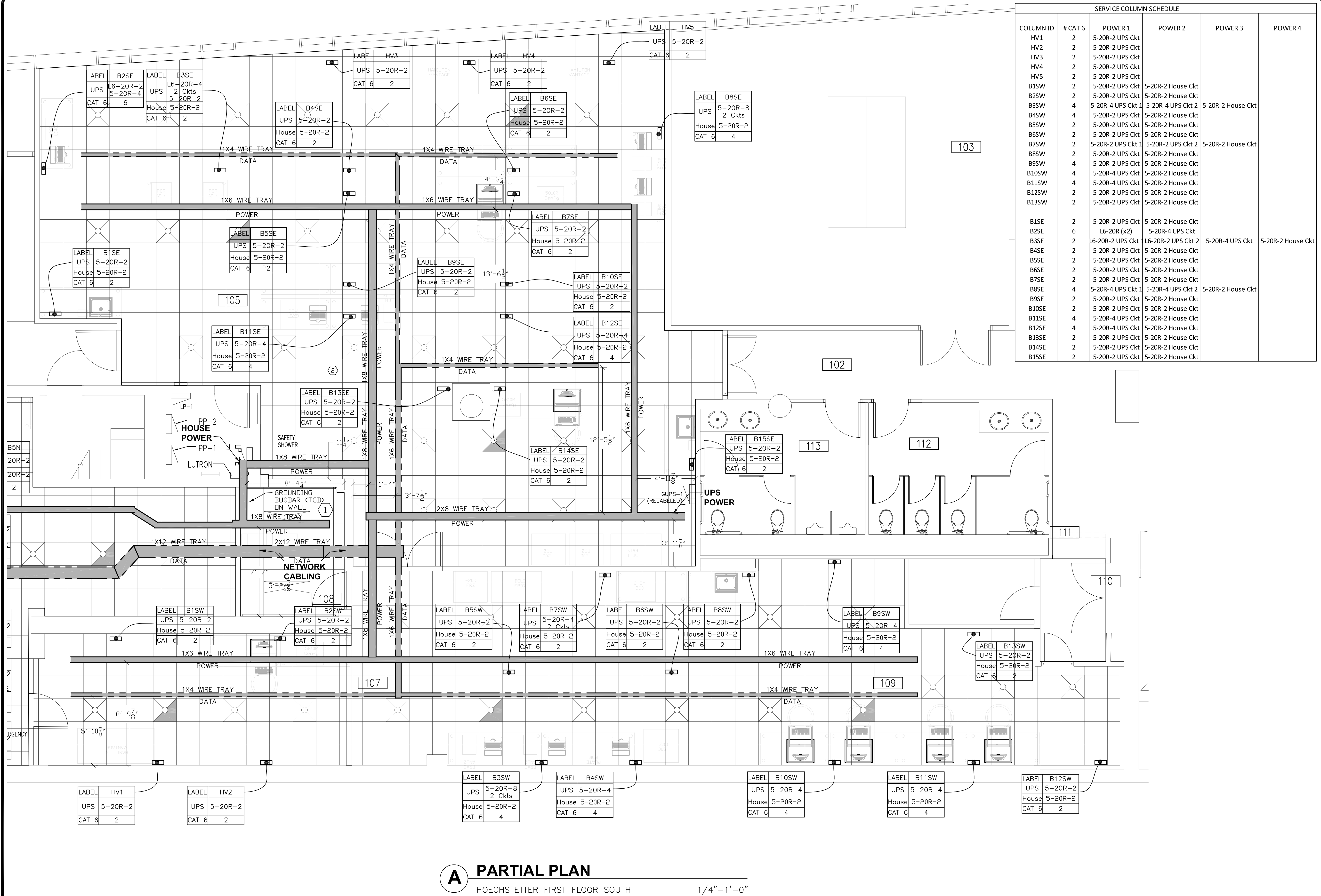
TITLE
**ABOVE CEILING
CABLING
PATHWAYS NORTH**

LAST EDIT DATE:
7/17/17

SCALE:
AS SHOWN

DRAWING NO.
E2.1A

SERVICE COLUMN SCHEDULE					
COLUMN ID	# CAT 6	POWER 1	POWER 2	POWER 3	POWER 4
NVS1	2	L6-20R			
NVS2	2	L6-20R			
NVS3	2	L6-20R			
NVS4	2	L6-20R			
NVS5	2	L6-20R			
NVS6	4	L6-20R Ckt 1	L6-20R Ckt 2	5-20R-2 UPS Ckt	5-20R-2 House Ckt
NVS7	4	L6-20R Ckt 1	L6-20R Ckt 2		
NVS8	4	L6-20R Ckt 1	L6-20R Ckt 2		
NVS9	4	L6-20R Ckt 1	L6-20R Ckt 2	5-20R-2 UPS Ckt	5-20R-2 House Ckt
NVS10	4	L6-20R Ckt 1	L6-20R Ckt 2		
NVS11	4	L6-20R Ckt 1	L6-20R Ckt 2	5-20R-2 UPS Ckt	5-20R-2 House Ckt
NVS12	4	L6-20R Ckt 1	L6-20R Ckt 2		
NVS13	4	L6-20R Ckt 1	L6-20R Ckt 2		
NVS14	4	L6-20R Ckt 1	L6-20R Ckt 2	5-20R-2 UPS Ckt	5-20R-2 House Ckt
NVS15	4	L6-20R Ckt 1	L6-20R Ckt 2		
B1N	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B2N	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B3N	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B4N	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
BSN	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
NXS1	4	5-20R-4 UPS Ckt	5-20R-2 House Ckt		
NXS2	4	5-20R-4 UPS Ckt 1	5-20R-4 UPS Ckt 2	5-20R-2 House Ckt	
NXS3	4	5-20R-4 UPS Ckt 1	5-20R-4 UPS Ckt 2	5-20R-2 House Ckt	
NXS4	4	5-20R-4 UPS Ckt 1	5-20R-4 UPS Ckt 2	5-20R-2 House Ckt	
NXS5	4	5-20R-4 UPS Ckt	5-20R-2 House Ckt		
NXS6	4	5-20R-4 UPS Ckt 1	5-20R-4 UPS Ckt 2	5-20R-2 House Ckt	



SERVICE COLUMN SCHEDULE					
COLUMN ID	# CAT 6	POWER 1	POWER 2	POWER 3	POWER 4
HV1	2	5-20R-2 UPS Ckt			
HV2	2	5-20R-2 UPS Ckt			
HV3	2	5-20R-2 UPS Ckt			
HV4	2	5-20R-2 UPS Ckt			
HV5	2	5-20R-2 UPS Ckt			
B1SW	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B2SW	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B3SW	4	5-20R-4 UPS Ckt 1	5-20R-4 UPS Ckt 2	5-20R-2 House Ckt	
B4SW	4	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B5SW	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B6SW	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B7SW	2	5-20R-2 UPS Ckt 1	5-20R-2 UPS Ckt 2	5-20R-2 House Ckt	
B8SW	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B9SW	4	5-20R-4 UPS Ckt	5-20R-2 House Ckt		
B10SW	4	5-20R-4 UPS Ckt	5-20R-2 House Ckt		
B11SW	4	5-20R-4 UPS Ckt	5-20R-2 House Ckt		
B12SW	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B13SW	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B1SE	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B2SE	6	L6-20R (x2)	5-20R-4 UPS Ckt		
B3SE	2	L6-20R-2 UPS Ckt 1	L6-20R-2 UPS Ckt 2	5-20R-4 UPS Ckt	5-20R-2 House Ckt
B4SE	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B5SE	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B6SE	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B7SE	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B8SE	4	5-20R-4 UPS Ckt 1	5-20R-4 UPS Ckt 2	5-20R-2 House Ckt	
B9SE	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B10SE	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B11SE	4	5-20R-4 UPS Ckt	5-20R-2 House Ckt		
B12SE	4	5-20R-4 UPS Ckt	5-20R-2 House Ckt		
B13SE	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B14SE	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		
B15SE	2	5-20R-2 UPS Ckt	5-20R-2 House Ckt		

A PARTIAL PLAN
HOECHSTETTER FIRST FLOOR SOUTH
1/4"=1'-0"

DRAWING LINETYPE LEGEND	
	INDICATES EXISTING EQUIPMENT
	INDICATES NEW EQUIPMENT
	INDICATES EQUIPMENT TO BE DEMOLISHED

- GENERAL NOTES:**
- ELECTRICAL CONTRACTOR IS TO PROVIDE AND INSTALL ALL ABOVE CEILING CABLE TRAYS. THESE TRAYS WILL BE INSTALLED IN A ZONE BETWEEN THE SPRINKLER LINES AND MECHANICAL MAIN DUCTWORK. SEE SECTION 'D', DRAWING E3.0. FINAL COORDINATION WILL BE DETERMINED AFTER CEILING DEMOLITION.
 - CABLE TRAY MANUFACTURER TO BE CABLOFIL OR APPROVED EQUAL.
 - SEPARATE CABLE TRAYS SHALL BE USED FOR TRANSPORT OF CABLING FROM ELECTRICAL PANELS (FOR POWER) OR IDF CLOSET (FOR DATA) TO A POSITION CLOSE TO THE TARGET LOCATION; RUNS FROM CABLE TRAY TO TARGET LOCATION SHALL BE ROUTED LEVEL TO THE FLOOR AND PARALLEL TO THE CEILING GRID (NO DIAGONAL ROUTING). LIKE CABLING (ALL POWER OR ALL DATA) CAN BE BUNDLED AND ROUTED TOGETHER USING J-HOOKS OR SIMILAR, WHEN UL LISTED FOR THE PURPOSE. DATA CABLING SHALL BE KEPT MINIMUM 6" FROM LIGHTING FIXTURES AND POWER CABLING DURING HORIZONTAL ROUTES.
 - FOR PARALLEL TWO LAYER TRAYS, DISTANCE BETWEEN BOTTOM OF UPPER TRAY AND TOP OF LOWER TRAY SHALL BE NO LESS THAN 6 INCHES. FOR SIDE-BY-SIDE TRAYS, MAINTAIN NO LESS THAN 6 INCHES BETWEEN TRAYS WITH DIFFERENT CABLE TYPES (POWER VS. DATA).
 - STRUTS TO SUPPORT CABLE TRAY ARE TO BE INSTALLED NO MORE THAN 5 FEET APART. TRAY LOAD CAPACITY SHALL BE AT LEAST 50 LBS/FOOT. INCREASE SIZE OF BASKET TRAY IF NEEDED TO MEET THIS REQUIREMENT.
 - ALL CABLE TRAYS SHALL BE BONDED TO THE NEW TGB (TELECOMMUNICATIONS GROUNDING BUSBAR) IN THE IDF CLOSET, RM 108. ADDITIONALLY, ALL POWER CABLE TRAYS SHALL BE ELECTRICALLY CONTINUOUS AND BONDED TO GROUND IN THE PANEL FROM WHICH THE CARRIED CIRCUITS ORIGINATE USING MINIMUM #4 AWG COPPER WIRE. EC IS RESPONSIBLE FOR ALL CONNECTIONS, SEE SPECIFICATIONS AND DRAWING E3.1 FOR ADDITIONAL INFORMATION.
 - TELECOM CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ALL NEW TELECOM/CATEGORY 6 CABLING.

- CODED NOTES:**
- SEE DETAIL 'A', DRAWING E3.1 FOR GROUNDING INFORMATION.

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION



DESIGNERS:

TechSite
Your peer-approved mission-critical facility experts
TechSite www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

PROJECT

UPMC LIFE CHANGING MEDICINE
**HOECHSTETTER BUILDING
NEW GENOMICS LAB**
5560 Centre Avenue, Pittsburgh

DRAWN BY: JK	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME:
E21-3195.DWG

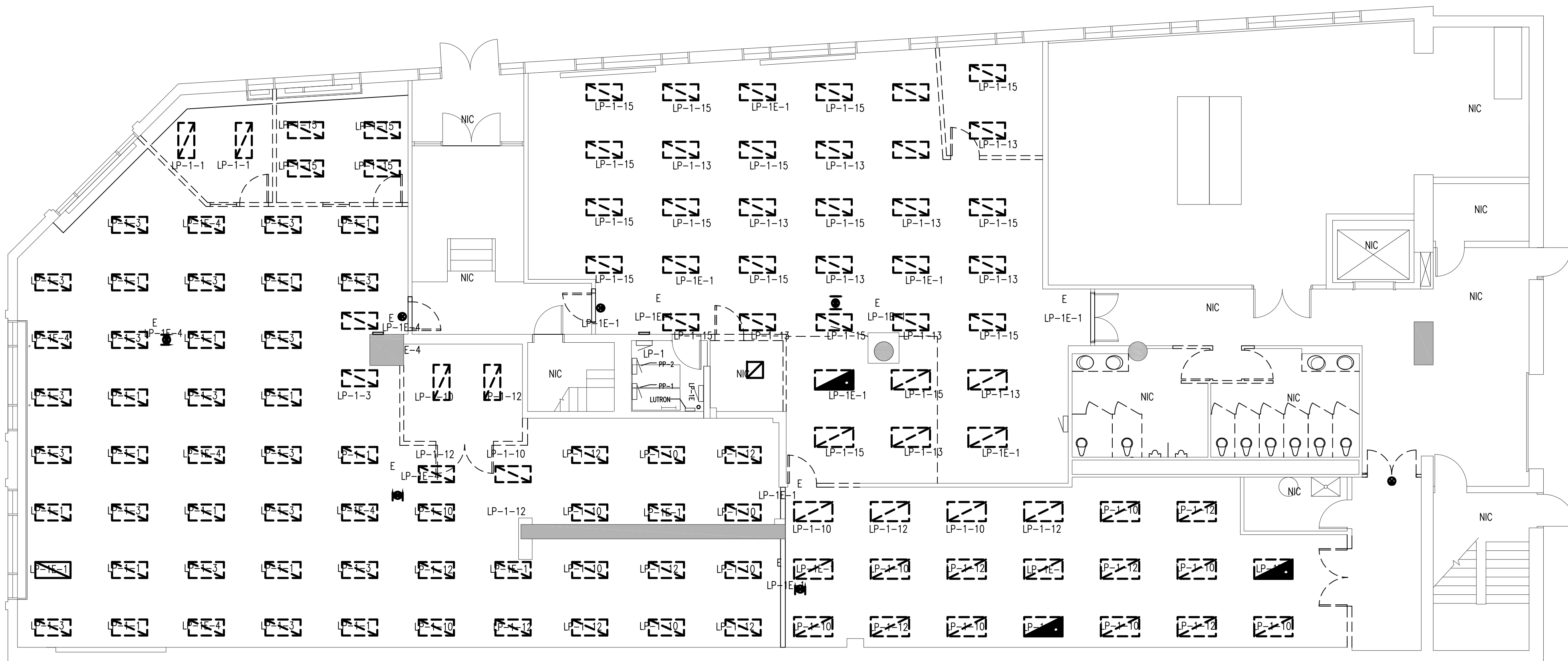
SEAL

TITLE
**ABOVE CEILING
CABLING
PATHWAYS SOUTH**

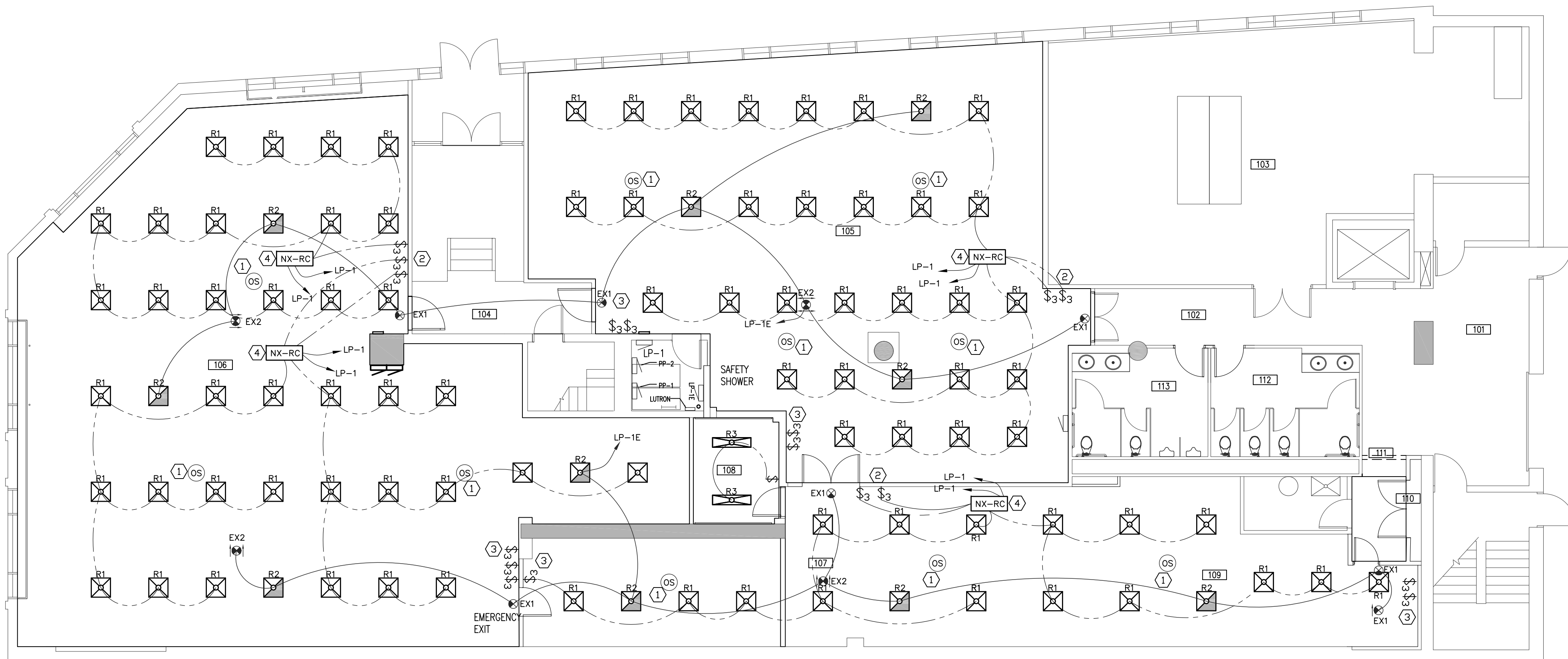
LAST EDIT DATE:
7/17/17

SCALE:
AS SHOWN

DRAWING NO.
E2.1B



A EXISTING LIGHTING PLAN
ELECTRICAL DEMOLITION 1/8"=1'-0"



B NEW LIGHTING PLAN
ELECTRICAL NEW WORK 1/8"=1'-0"

DRAWING LINETYPE LEGEND

---	INDICATES EXISTING EQUIPMENT
---	INDICATES NEW EQUIPMENT
---	INDICATES EQUIPMENT TO BE DEMOLISHED

GENERAL NOTES:

- ELECTRICAL CONTRACTOR SHALL PERFORM DEMOLITION OF ALL FLUORESCENT LIGHTING FIXTURES, CONDUCTORS, SWITCHING CIRCUITS AND CABLING IN THE PROJECT AREA AS INDICATED. RETAIN SUFFICIENT ELECTRICAL CIRCUITRY IN EACH AREA FOR NEW FIXTURES. REMOVE REMAINING POWER FEEDS BACK TO SOURCE PANEL(S).
- REFER TO LIGHTING FIXTURE SCHEDULE ON SHEET E0.0 FOR MANUFACTURER AND CATALOG NUMBERS OF NEW FIXTURES. SEE DETAILED PROJECT SPECIFICATIONS FOR LIGHTING CONTROLS.
- ALL LIGHTING SHALL COMPLY WITH CURRENT NATIONAL AND LOCAL ENERGY CODES.
- ARROWHEAD CIRCUIT LEADERS INDICATE A HOME RUN TO A DEDICATED 20A, 120V CIRCUIT IN THE LABELED PANELBOARD. LP-1 IS GENERAL LIGHTING. LP-1E IS EMERGENCY AND EGRESS/EXIT LIGHTING.

CODED NOTES:

- PROVIDE CEILING-MOUNTED DUAL-TECHNOLOGY OCCUPANCY SENSORS, HUBBELL NX AND CONTROL WIRING TO NX ROOM CONTROL MODULE.
- PROVIDE DIMMING SWITCHES AND CAT 5 CABLE CONNECTIONS TO HUBBELL NX ROOM CONTROL MODULE.
- VACANCY MODE CONTROL SWITCHES SHALL BE LOCATED AT EACH DOOR INTO THE ROOM FOR CONTROL FROM MULTIPLE LOCATIONS.
- PROVIDE HUBBELL NX ROOM CONTROLLER UNITS WITH DUAL RELAY AND DUAL 0-10V DIMMING CIRCUITS. WIRE WITH TWO DEDICATED CIRCUITS FROM LP-1. PROVIDE 120V POWER TO FIXTURES FROM NX CONTROLLER AND SEPARATE DIMMING CABLE FROM NX CONTROLLER TO EACH FIXTURE. SEE DETAIL B ON SHEET E3.1 FOR EXAMPLE WIRING.

REV	BY	DATE	DESCRIPTION
-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT



DESIGNERS:
TechSite
Your peer-approved mission-critical facility experts
TechSite www.techsiteplan.com
8188 Business Way, Plain City, Ohio 43064
t 614.873.7800 f 614.873.7801

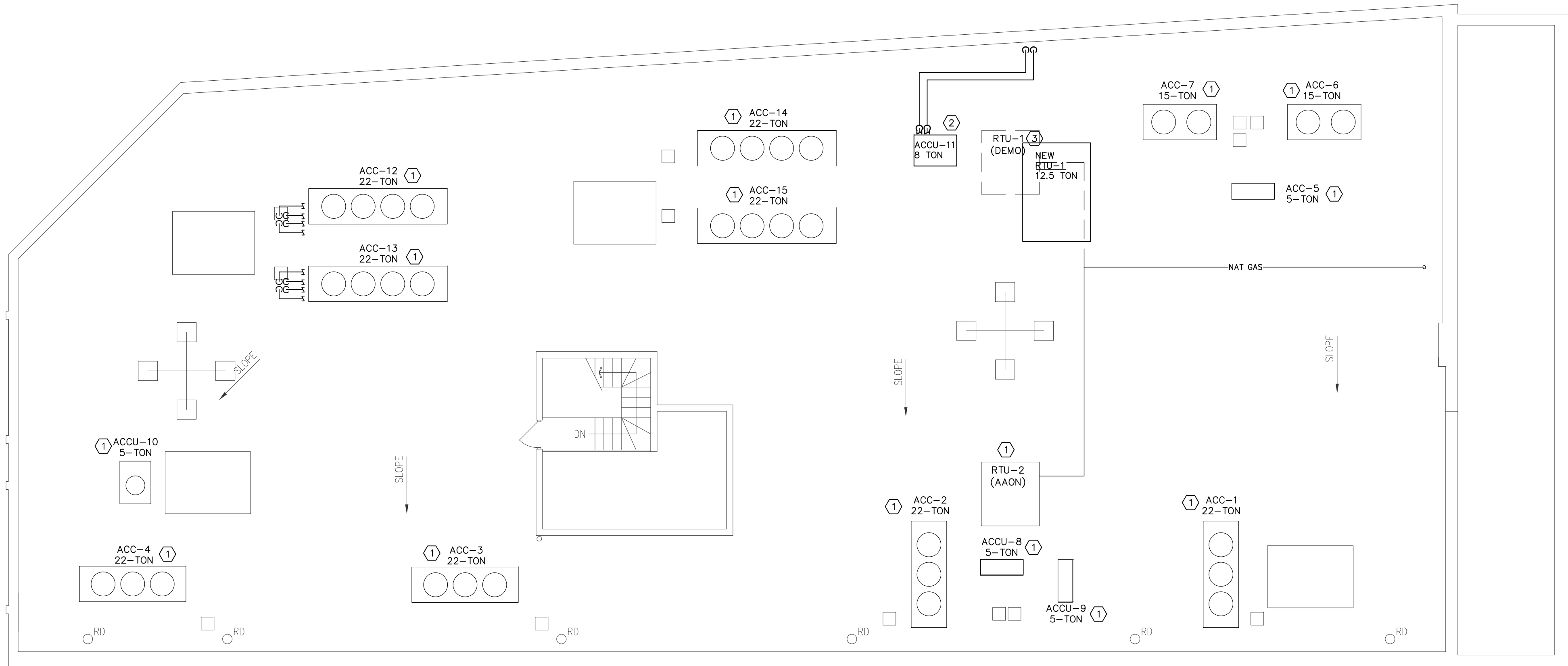
PROJECT
UPMC LIFE CHANGING MEDICINE
**HOECHSTETTER BUILDING
NEW GENOMICS LAB**
5560 Centre Avenue, Pittsburgh

DRAWN BY: JK	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME:
E22-3195.DWG

SEAL	TITLE LIGHTING PLANS
	LAST EDIT DATE: 7/15/17
	SCALE: AS SHOWN
	DRAWING NO. E2.2

PLOT DATE \ TIME: 7/30/2017 8:25:17 AM
L:\TECH SITE\PROJECTS\UPMC - GC 1313\3195 - GENOMICS LAB DETAILED ENGINEERING AND CAD\DRAWINGS\CURRENT DRAWINGS



A PLAN
ROOF ELECTRICAL
1/8"=1'-0"

DRAWING LINETYPE LEGEND

—	INDICATES EXISTING EQUIPMENT
—	INDICATES NEW EQUIPMENT
---	INDICATES EQUIPMENT TO BE DEMOLISHED

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES.
2. CONTRACTORS TO SECURE AND VERIFY ALL MEASUREMENTS AND CONDITIONS AT JOB PRIOR TO PROCEEDING W/FABRICATION OF WORK.

CODED NOTES

1. EXISTING EQUIPMENT TO REMAIN.
2. PROVIDE POWER AND CONTROL WIRING FOR MECHANICAL EQUIPMENT INSTALLED BY M.C. PROVIDE NEMA3R HEAVY-DUTY DISCONNECT SWITCH FOR POWER, 480V, 30A, 3-WIRE + GROUND.
3. EXISTING EQUIPMENT BEING REPLACED IN THIS PROJECT. DISCONNECT POWER FROM OLD UNIT AND ROUTE TO NEW. NEMA3R HEAVY-DUTY DISCONNECT FUSIBLE SWITCH FOR POWER, 480V, 100A, 3-WIRE + GROUND

—	TS	7/28/17	ISSUED FOR BID
—	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION



DESIGNERS:

TechSite
Your peer-approved
mission-critical facility experts

TechSite www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

PROJECT

UPMC LIFE
CHANGING
MEDICINE

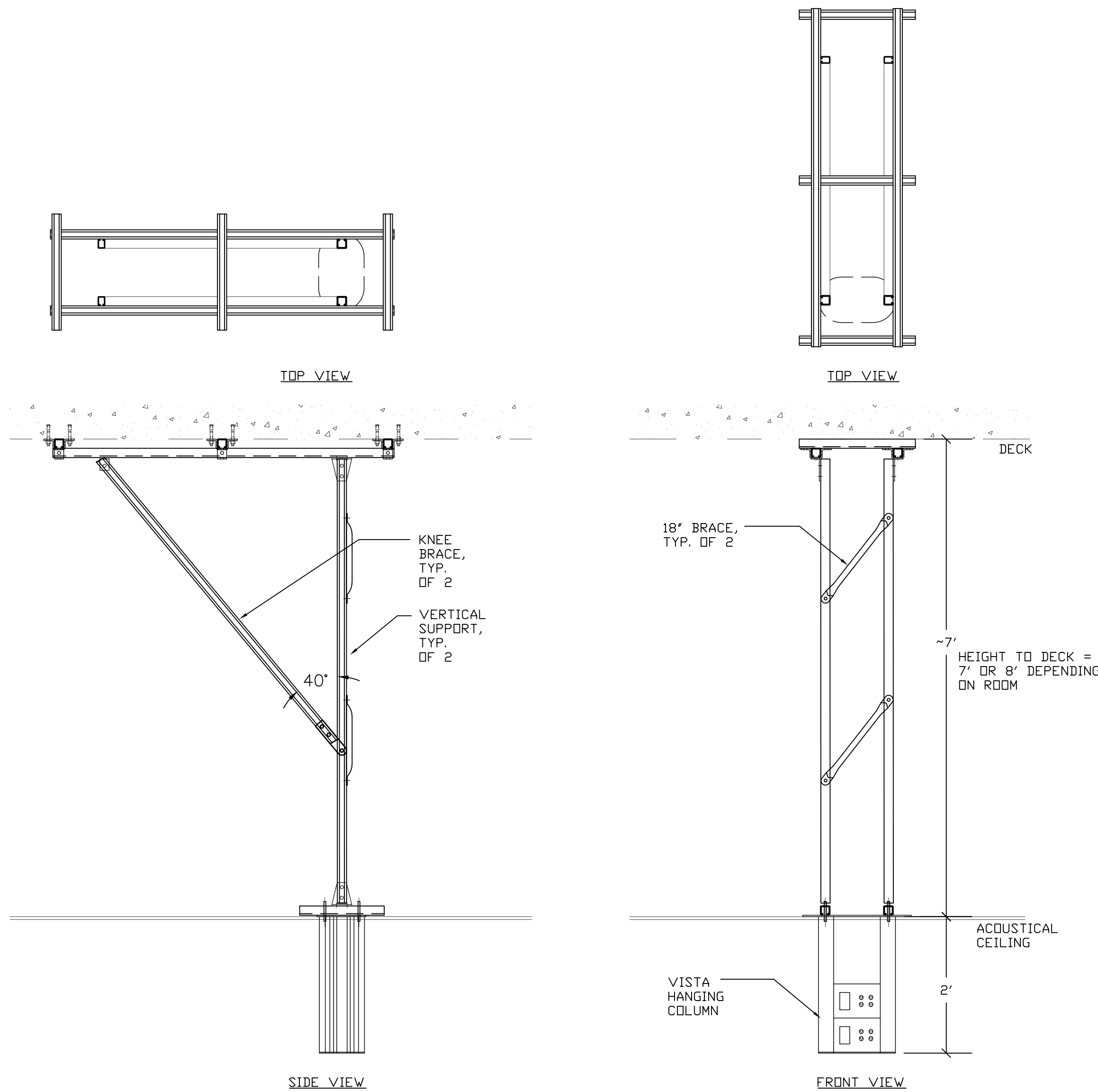
**HOECHSTETTER BUILDING
NEW GENOMICS LAB**

5560 Centre Avenue, Pittsburgh

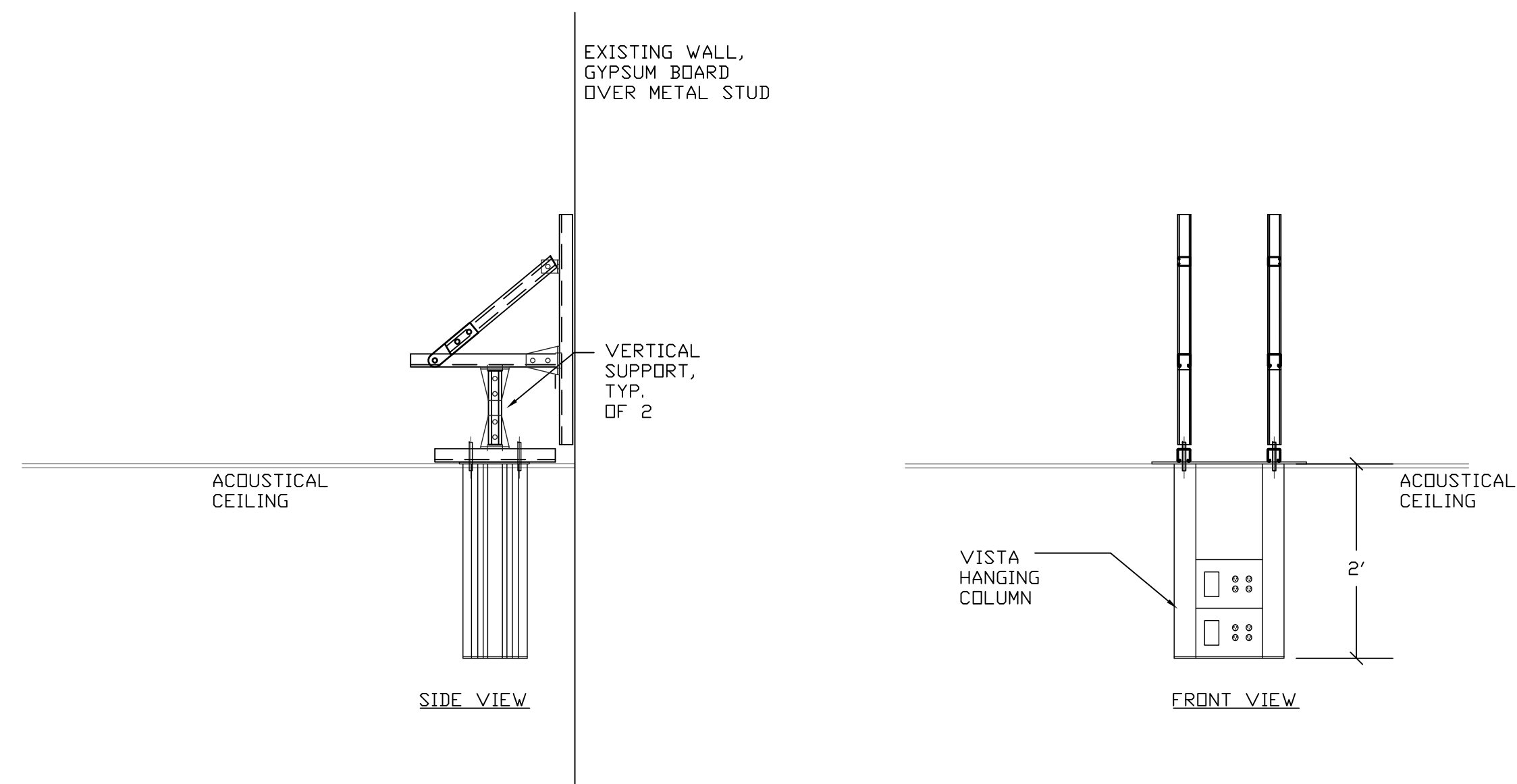
DRAWN BY: FWJ	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME:
E23-3195.DWG

SEAL	TITLE ELECTRICAL ROOF PLAN
LAST EDIT DATE: 7/17/17	DRAWING NO. E2.3
SCALE: AS SHOWN	



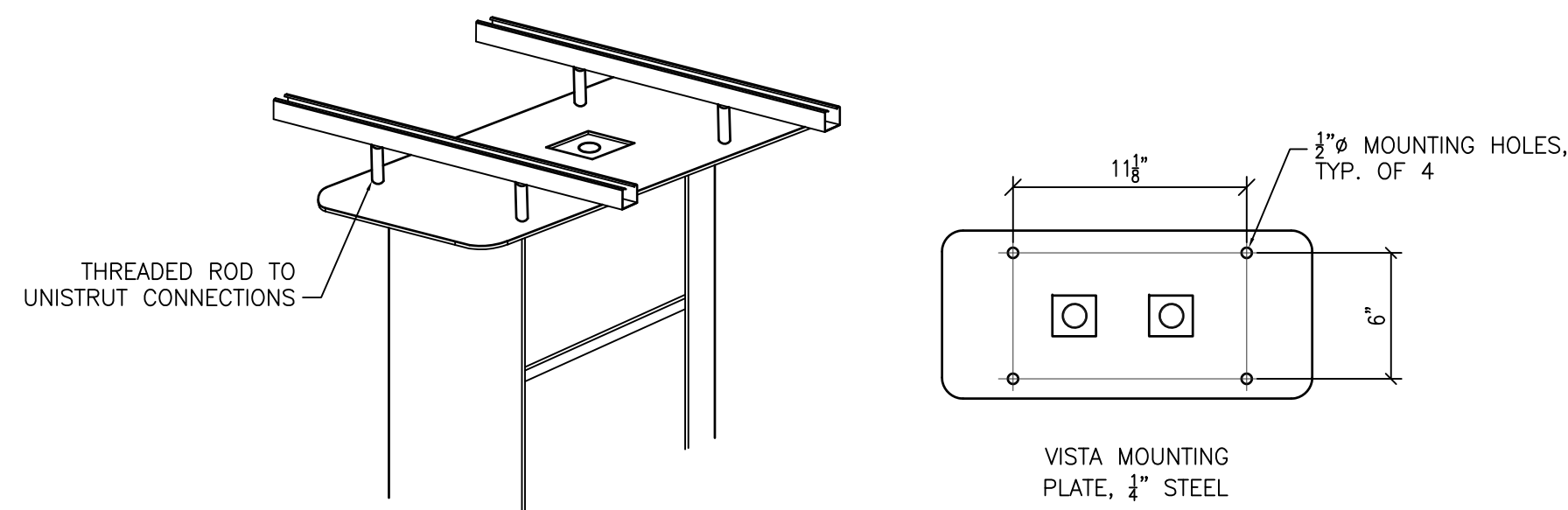
A **DETAIL**
UNISTRUT SUPPORT FOR VISTA SERVICE COLUMNS
SUPPORTED FROM DECK ABOVE
3/4"=1'-0"



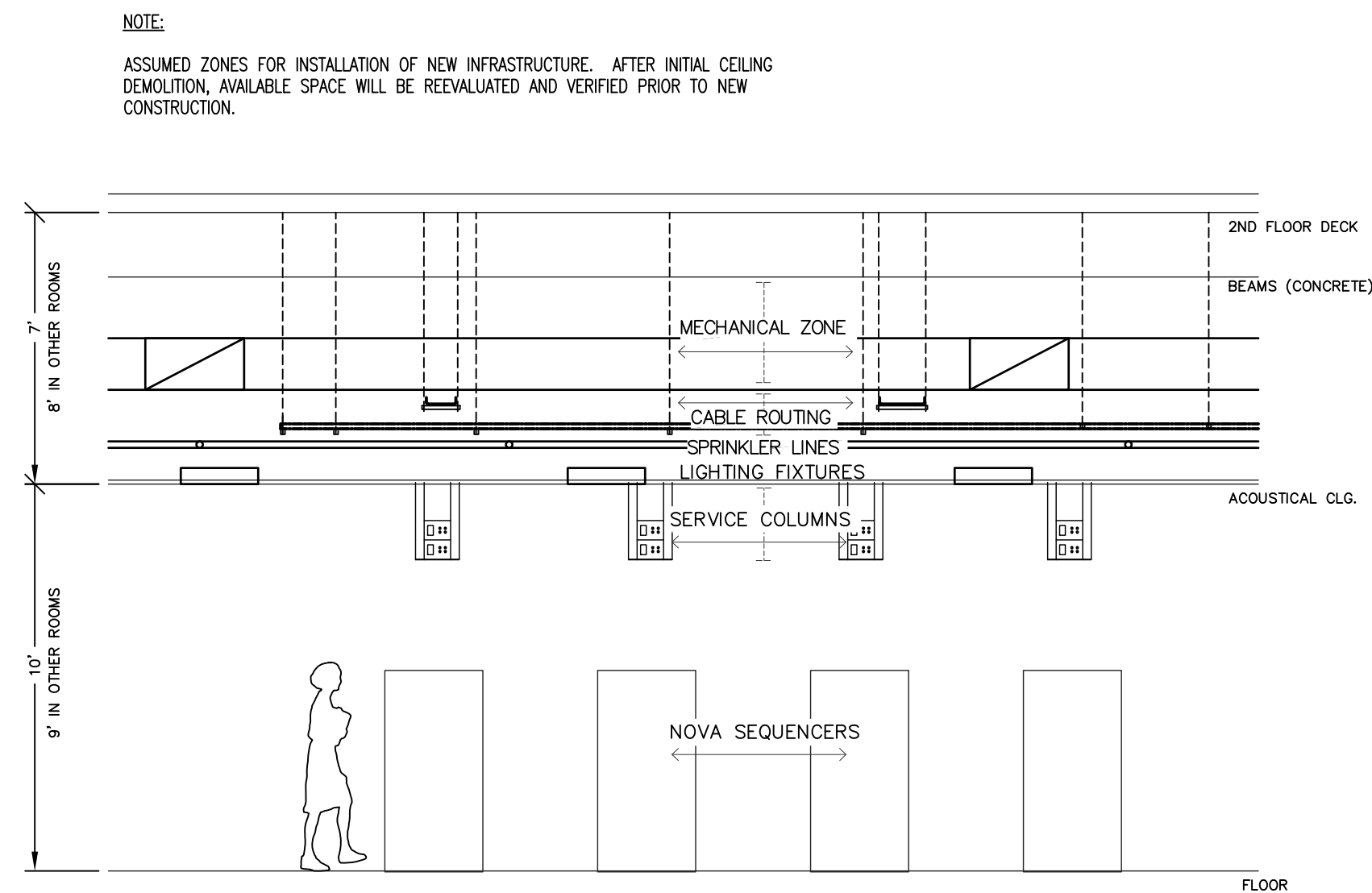
C **DETAIL**
UNISTRUT SUPPORT FOR VISTA SERVICE COLUMNS
SUPPORTED FROM WALL
3/4"=1'-0"

GENERAL NOTES:

- DETAIL A AND C ARE CONCEPTUAL IN NATURE; CONTRACTOR IS TO HIRE UNISTRUT SUPPLIER TO PROVIDE DESIGN AND MATERIALS LISTS. SHOP DRAWINGS ARE TO BE SUBMITTED TO ENGINEER FOR REVIEW PRIOR TO ORDER. STRUCTURE MUST:
 - SUPPORT THE WEIGHT
 - SUPPORT A 50 LB. LATERAL LOAD APPLIED AT LOWEST POINT OF THE HANGING COLUMN WITHOUT PERMANENT DEFORMATION
- LOAD CRITERIA: ESTIMATED WEIGHT OF VISTA COLUMN = 50 LBS.; CONNECTION DETAILS FOR COLUMN TO SUPPORT SHOWN IN DETAIL 'B', THIS DRAWING.
- ALL BOLTED CONNECTIONS INTO COLD-FORMED CHANNEL MEMBERS WITH CHANNEL NUTS SHALL BE TIGHTENED TO:
 - 19 FT-LBS FOR 3/8" BOLTS
 - 50 FT-LBS FOR 1/2" BOLTS
 - 100 FT-LBS FOR 5/8" BOLTS
- USING DRY COMPONENTS AND A PROPERLY CALIBRATED TORQUE WRENCH, CHANNEL NUT MUST BE ORIENTED SUCH THAT THE "TEETH" GRIP THE INTURNED EDGE OF THE CHANNEL.
- ALL CONCRETE ANCHORS TO BE POWERS SD1, 1/2" DIAMETER, INSTALLATION TORQUE TO BE 40 FT-LBS, INSTALLED WITH TORQUE WRENCH. INSTALLER TO BE POWERS "CERTIFIED INSTALLER".
- USE 1/2" MOUNTING HOLES IN THE STEEL MOUNTING PLATE TO SUPPORT THE HANGING VISTA COLUMN (DETAIL 'B').



B **DETAIL**
HANGING VISTA COLUMN CONNECTION POINTS
1-1/2"=1'-0"



D **SECTION**
PATHWAY COORDINATION ZONES, TYPICAL
1/4"=1'-0"

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION

DESIGNERS:

TechSite
Your peer-approved mission-critical facility experts
www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

PROJECT

UPMC LIFE CHANGING MEDICINE

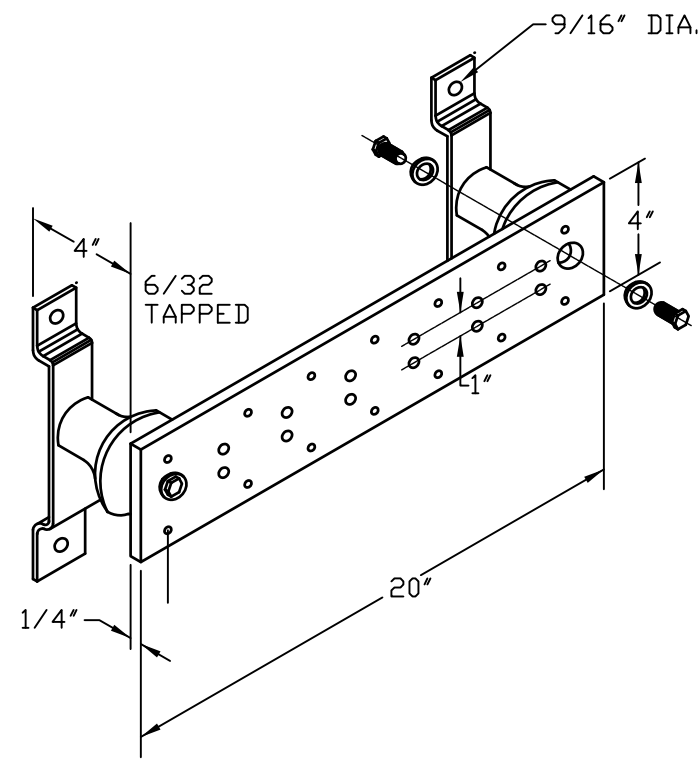
**HOECHSTETTER BUILDING
NEW GENOMICS LAB**

5560 Centre Avenue, Pittsburgh

DRAWN BY: JAK	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME: E30—3195.DWG		TITLE ELECTRICAL DETAILS	
SEAL			E3.0
		LAST EDIT DATE: 6/29/17	
		SCALE: AS SHOWN	
		DRAWING NO.	

PLOT DATE \ TIME: 7/30/2017 8:25:32 AM
L:\TECH SITE\PROJECTS\UPMC - GC 1313\195 - GENOMICS LAB\DETAILED ENGINEERING AND CAD\DRAWINGS\00-CURRENT DRAWINGS

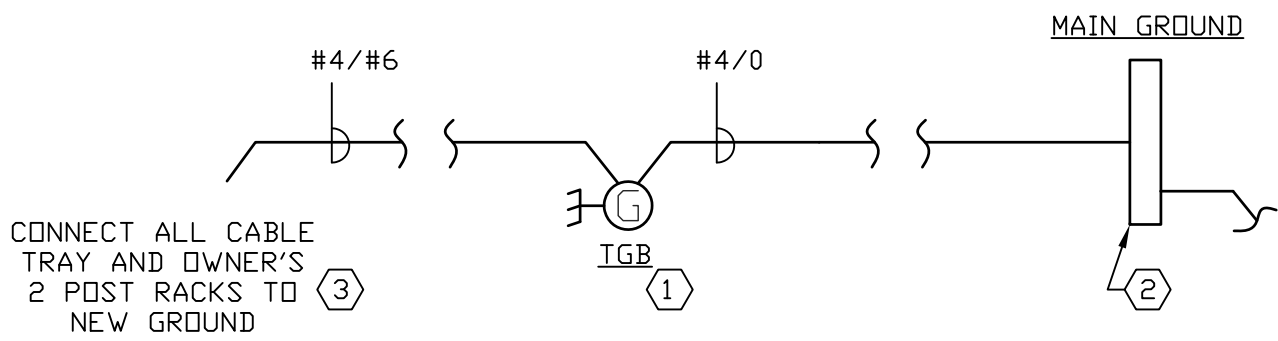


GROUND BAR DETAIL
NOT TO SCALE
1/4" x 4" x 20" Cu BUS BAR (TGB)
PANDUIT GB4B0624TPI-1 OR
APPROVED EQUAL.

CODED NOTES:

1. PROVIDE TELECOMMUNICATION GROUND BAR (TGB) IN NEW IDF CLOSET. MOUNT TGB TO WALL APPROXIMATELY 7'-0" AFF. REFER TO GROUND BAR DETAIL ON THIS SHEET. PROVIDE GROUND BAR KIT BY NEWTON INSTRUMENT COMPANY, CATALOG NUMBER 0030560010, PANDUIT, OR APPROVED EQUAL.
2. INTERCONNECT TGB TO THE BUILDING GROUND BAR IN MAIN ELECTRICAL ROOM USING GREEN INSULATED #4/0 STRANDED COPPER CONDUCTOR.
3. NEW GROUNDING CONDUCTORS FOR CABLE TRAYS SHALL BE #4 STRANDED BARE COPPER, UNLESS OTHERWISE NOTED.
4. NEW GROUNDING CONDUCTORS FOR EQUIPMENT IN IDF CLOSET TO TGB SHALL BE MINIMUM THHN 6 AWG, GREEN INSULATED WITH CRIMP LUGS (NOT MECHANICAL).

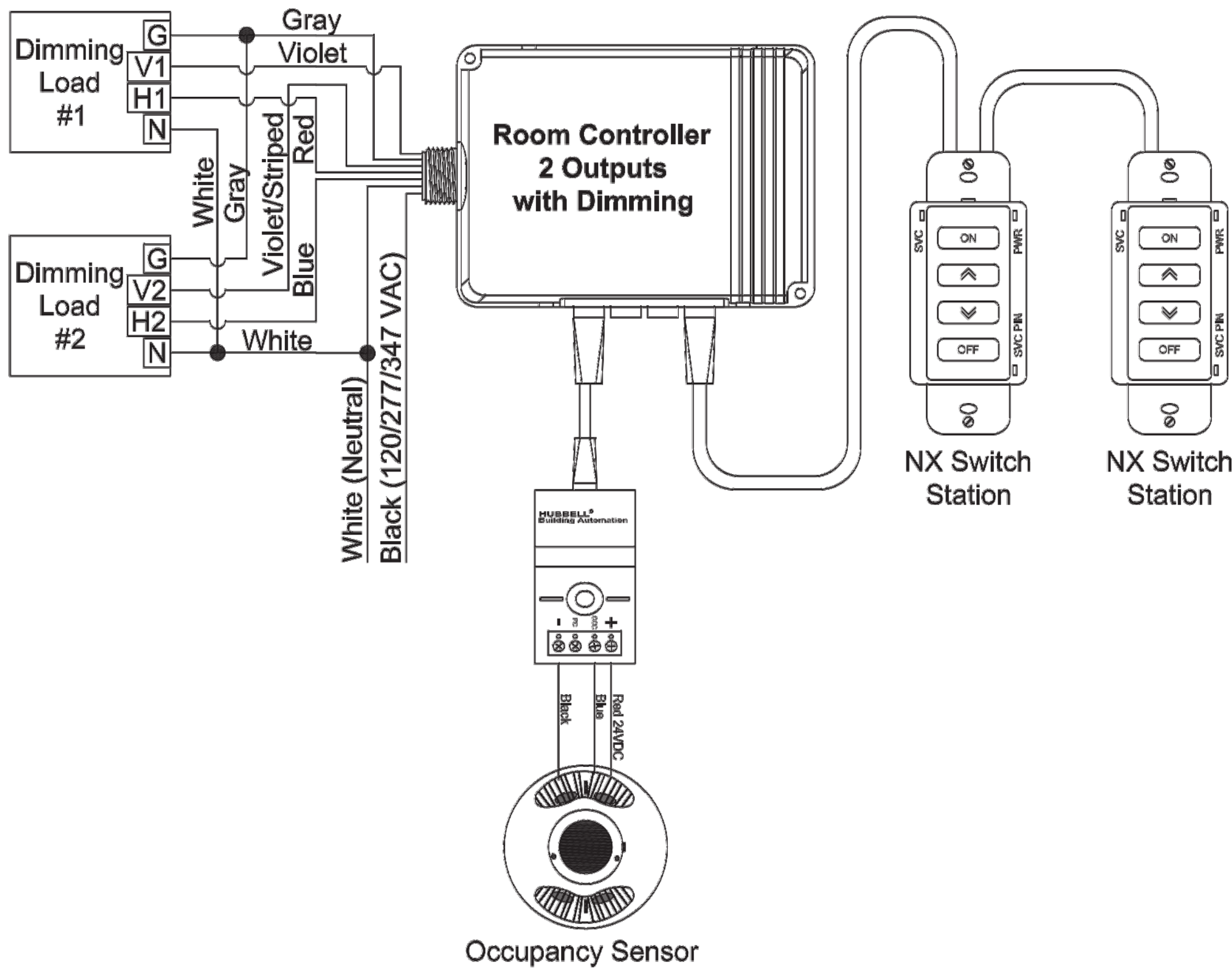
LABORATORY GROUNDING SCHEMATIC



A DETAIL

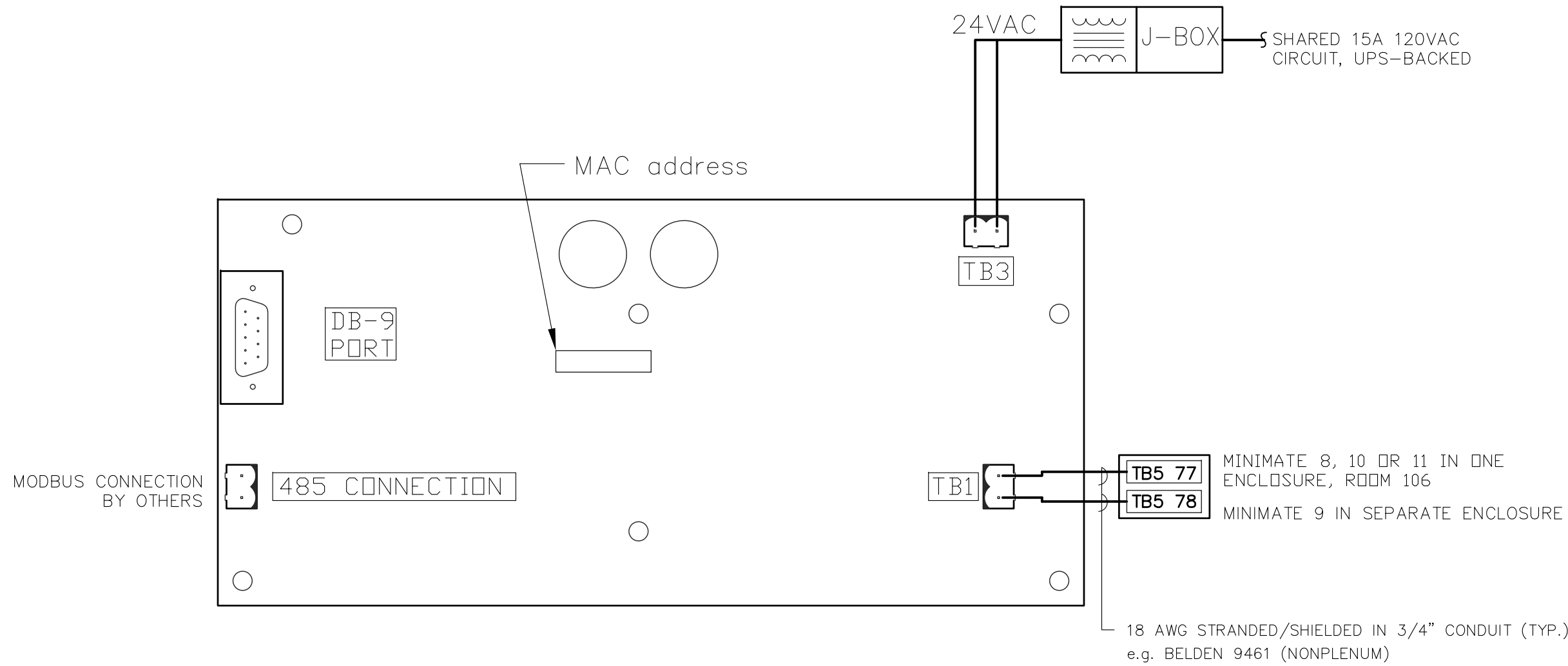
GROUNDING DETAIL

N.T.S.



B DETAIL

EXAMPLE SCHEMATIC, NX ROOM CONTROLLER



NOTE: TYPICAL OF FOUR LIEBERT INTELLISLOT 485 CARDS; ONE CARD PER MINIMATE AC UNIT. CARDS FURNISHED BY MECHANICAL CONTRACTOR; E.C. TO INSTALL THREE ROOM 106 UNITS IN THE SAME ENCLOSURE. POWER CIRCUIT CAN BE SHARED IN ONE ENCLOSURE.

C DETAIL

MINIMATE MONITORING SCHEMATIC, INTELLISLOT 485

N.T.S.

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION

DESIGNERS:
TechSite
Your peer-approved
mission-critical facility experts
TechSite www.techsiteplan.com
8188 Business Way . Plain City, Ohio 43064
t 614.873.7800 . f 614.873.7801

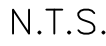
PROJECT
UPMC **LIFE CHANGING MEDICINE**
HOECHSTETTER BUILDING
NEW GENOMICS LAB
5560 Centre Avenue, Pittsburgh

DRAWN BY: JAK	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME: E31-3195.DWG			
SEAL	TITLE ELECTRICAL DETAILS		
	LAST EDIT DATE: 7/17/17		DRAWING NO. E3.1
	SCALE: NO SCALE		



DRAWING NAME: E40-3195.DWG	
SEAL	TITLE EXISTING AND DEMOLITION ONE LINE
LAST EDIT DATE: 7/17/17	DRAWING NO.
SCALE: NONE	E4.0



SEAL	TITLE	
	NEW ONE LINE DIAGRAM	
	LAST EDIT DATE: 7/18/17	DRAWING NO.
SCALE: NONE	E4.1	

Panel Designation: PNL GUPS-1										H VOLTS: 208																			
Location: Hoechstetter Bldg										Phase: 3																			
Room: South Lab										W Volt 120																			
Panel Fed From: GUPS										Wire: 3+G																			
Main: 225A MLO										Pole: 42																			
Load Description		CKT NO.	BREAKER AMP	POLE	KVA			DEVICE	DEVICE	KVA			BREAKER AMP	CKT NO.	Load Description														
A	B	C						A	B	C																			
Southwest Benches (B-) 1, 2	1	20	1	0.60			5-20R	5-20R	1.00			1	20	2	HV1														
Southwest Bench B3#1	3	20	1	1.50			5-20R	5-20R		1.00		1	20	4	HV2														
Southwest Bench B3#2	5	20	1		1.50		5-20R	5-20R			1.00	1	20	6	HV3														
SW Bench B7#1 (Chemagic)	7	20	1	1.70			5-20R	5-20R	1.00			1	20	8	HV4														
Southwest Bench B7#2, 5,6	9	20	1	0.60			5-20R	5-20R		1.00		1	20	10	HV5														
Southwest Bench B4	11	20	1		0.40		5-20R	5-20R			1.00	1	20	12	Southeast Benches (B-) 1,2														
Southwest Benches (B-) 8,9	13	20	1	0.70			5-20R		0.10			2	20	14															
Southwest Benches (B-)10,13	15	20	1	0.80			5-20R	L6-20R		0.10				16	B2SE qPCR LC480														
Southwest Benches (B-)11,12	17	20	1	0.80			5-20R				1.60			18	B3SE PCR AC-4#1,2														
Spare Breaker	19	20	1	0.00				L6-20R2			1.60			20															
Spare Breaker	21	20	1		0.00						1.60			22	B3SE PCR AC-4#3,4														
Spare Breaker	23	20	1		0.00			L6-20R2				1.60		24															
Spare Breaker	25	20	1	0.00										26	Southeast Bench B8#1														
Spare Breaker	27	20	1	0.00			5-20R	5-20R	1.50			1	20	28	Southeast Bench B8#2														
Spare Breaker	29	20	1		0.00		5-20R			1.50		0.70	1	30	Southeast Benches (B-) 3,4,5														
Spare Breaker	31	20	1	0.00			5-20R	5-20R	1.40			1	20	32	Southeast Benches (B-) 11,13														
Spare Breaker	33	20	1	0.00			5-20R	5-20R		1.40		1	20	34	Southeast Benches (B-) 12,14														
IDF Closet	35				0.00		5-20R				0.90	1	20	36	Southeast Benches (B-) 6,7,10														
IDF Closet	37			0.00					0.00					38	Bussed Space														
IDF Closet	39			0.00						0.00				40	Bussed Space														
IDF Closet	41				0.00						0.00			42	Bussed Space														
				3.00	2.90	2.70				6.60	6.60	6.80				HW= HARDWIRED													
TOTAL KVA : 28.6										AMPS										% OUT OF BALANCE									
TOTAL AMPS: 338.3										PHASE A: 80.00										PHASE A : 0.7%									
										PHASE B: 79.17										PHASE B : -0.3%									
										PHASE C: 79.17										PHASE C : -0.3%									



1. LEGRAND WIREMOLD HANGING SERVICE COLUMNS. SEE DRAWINGS E2.1A OR B FOR INFORMATION ON QUANTITY OF CATEGORY 6E DROPS THAT WILL BE REQUIRED AT EACH. SERVICE COLUMNS INSTALLED BY ELECTRICAL CONTRACTOR; CAT 6E CABLE AND TERMINATIONS BY THIS CONTRACTOR.
2. REMOVE EXISTING TELECOM ROOM EQUIPMENT. DISCONNECTION OF INCOMING FIBER CONNECTIONS MUST BE COORDINATED WITH OWNER.
3. 4" CONDUIT FOR FIBER SERVICE FROM BASEMENT DEMARK UP TO 2ND FLOOR DATA CENTER (EXISTING TO REMAIN)
4. T.C. TO INSTALL COPPER CAT 6E CABLE FROM IDF CLOSET TO LOCATION OF FUTURE WIRELESS ACCESS POINT (ABOVE CEILING); OWNER WILL PROVIDE PoE 802.3at POWER. LEAVE MIN. 15' SERVICE LOOP AT AP LOCATION.
5. OLD TELECOM PUNCHDOWN AREA TO BE FULLY DEMOLISHED; COORDINATE WITH OWNER PRIOR TO START OF WORK.
6. NEW IDF PUNCHDOWN AREA – INSTALL 3/4" THICK PLYWOOD, 4 FT. HIGH, 30" A.F.F. AND ENTIRE WIDTH OF WALL. PAINT USING WHITE, FIRE-RESISTANT COATING.
7. LOCATION OF TWO POST IT RACKS, BY OTHERS.
8. LOCATION OF PATCH PANELS FOR NEW IT CABLEING; EQUIPMENT AND TERMINATION BY OTHERS.
9. LOCATION OF TELECOMMUNICATIONS GROUNDING BUSBAR (TGB).

1. ALL EXISTING NETWORK OUTLETS IN CONSTRUCTION AREA ARE TO BE REMOVED COMPLETELY, INCLUDING CABLING (TO SOURCE), CONDUIT AND BACKBOX; WALL IS TO BE REPAIRED. DRAWING SHOWS APPROXIMATE LOCATIONS AND QUANTITY OF OUTLETS. MAJORITY OF EXISTING CABLING TERMINATES IN OLD TELECOM ROOM (SEE CODED NOTE 2 FOR LOCATION).
2. INSTALL ALL NEW CABLING ABOVE RACKS WITH 15 FT. SERVICE LOOPS. TERMINATION BY OTHERS.
3. EXISTING DATA CENTER RESIDES ON FLOOR ABOVE THE CONSTRUCTION AREA. CABLING OR OTHER INFRASTRUCTURE THAT IS ROUTED UP THROUGH FLOOR SHOULD BE TAGGED FOR REVIEW BY OWNER PRIOR TO DEMOLITION.
4. SEE SPECIFICATION 270500, CHAPTER 11 FOR LABELING REQUIREMENTS FOR CABLING AND JACKS. FOR WORK AREA OUTLETS/FACEPLATES, TOP LABEL SHALL BE 'HOC-1'. BOTTOM LABEL SHALL BE 'IDF-108'.



NOTE: SEE UPMC ISD STANDARD SPECIFICATION 270500 FOR ALL TECHNOLOGY DETAILS AND REQUIREMENTS.



DRAWING LINETYPE LEGEND	
	INDICATES EXISTING EQUIPMENT
	INDICATES NEW EQUIPMENT
	INDICATES EQUIPMENT TO BE DEMOLISHED
	INDICATES FUTURE EQUIPMENT

-	TS	7/28/17	ISSUED FOR BID
-	TS	7/17/17	ISSUED FOR PERMIT
REV	BY	DATE	DESCRIPTION

DESIGNERS:



PROJECT

UPMC LIFE CHANGING MEDICINE

HOECHSTETTER BUILDING NEW GENOMICS LAB

5560 Centre Avenue, Pittsburgh

DRAWN BY: JK	ORIGIN DATE: 05/6/17	DESIGNED BY:	DATE:
APPROVED BY:	DATE:	CLIENT NO. 1313	JOB NO. 3195

DRAWING NAME:
T20-3195.DWG

SEAL	TITLE	
	TELECOM FLOOR PLANS	
	LAST EDIT DATE: 7/18/17	DRAWING NO.
SCALE: AS SHOWN	T2.0	