STOCKTON ATLANTIC CITY CAMPUS - RESIDENTIAL COMPLEX

2020

3701 BOARDWALK ATLANTIC COUNTY ATLANTIC CITY NEW JERSEY

PLAN REVIEW DATA

APPLICABLE CODES AND STANDARDS

UNIFORM CONSTRUCTION CODE STATE OF NEW JERSEY, LATEST EDITION AND ALL OF ITS SUBCODES AND AMENDMENTS (N.J. REHAB SUB CODE)

NEW JERSEY REHABILITATION SUBCODE 5:23-6 INTERNATIONAL BUILDING CODE / 2015 NJ EDITION INTERNATIONAL RESIDENTIAL CODE / 2015 NJ EDITION INTERNATIONAL MECHANICAL CODE / 2015

INTERNATIONAL FUEL GAS CODE / 2015 ASHRAE 90.1 - 2013 (COMMERCIAL) INTERNATIONAL ENERGY CONSERVATION CODE - NJ ED, 2015 (RESIDENTIAL)

NATIONAL STANDARD PLUMBING CODE / 2015 NATIONAL ELECTRIC CODE / 2014

WFCM (WOOD FRAMED CONSTRUCTION) HIGH WIND AREAS FOR ONE & TWO FAMILY DWELLINGS

EXISTING - NO CHANGE

OCCUPANCY CLASSIFICATION

USE GROUP M (RETAIL) - EXISTING - NO CHANGE

CONSTRUCTION CLASSIFICATION

PER TABLE (504.3 & 504.4) SECTION (506.2)

2A - EXISTING - NO CHANGE TYPE ALLOWANCE AREA EXISTING - NO CHANGE ALLOWANCE HEIGHT EXISTING - NO CHANGE

BUILDING ELEMENT

FIRE RESISTANCE RATINGS

PER TABLE (601) SECTION (602)

OCCUPANT LOAD

TABLE (601) SECTION (602)		
STRUCTURAL FRAME (a) (INCLUDING COLUMNS, GIRDERS, TRUSSES)	I HOURS	
BEARING WALLS EXTERIOR (f) INTERIOR	I HOURS I HOURS	
 NON BEARING WALLS & PARTITIONS (TABLE 602) EXTERIOR INTERIOR (e) 	0 HOURS 0 HOURS	CHANGE
FLOOR CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS)	I HOURS	NO C
ROOF CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS)	I HOURS	EXISTING
• FIRE WALLS (706.4)	3 HOURS	ШX
• FIRE BARRIERS (707.3.10)	2 HOURS	
• FIRE PARTITIONS (708.3)	I HOUR	
• SHAFTS (713.4)	2 HOUR	
• EXIT ACCESS CORRIDORS (1020.1)	I HOUR	

BUILDING CHARACTERISTICS

NUMBER OF STORIES EXISTING - NO CHANGE HEIGHT OF STRUCTURE EXISTING - NO CHANGE

AREA OF RENOVATION BASE BID - RETAIL SPACE "C" +/- 2,780 SQ. FT.

ALTERNATE - RETAIL SPACE "D" +/- 4,400 SQ. FT. TOTAL AREA OF RENOVATION +/- 7,180 SQ. FT.

BUILDING DESIGN LOADS

PER CHAPTER 16

FLOORS 100 PSF LL (RETAIL FIRST FLOOR) ROOF 20 PSF LL MIN

GROUND SNOW LOADS 30 PSF BASIC WIND SPEED 130 MPH

AUTOMATIC SPRINKLER SYSTEMS

PER SECTION 903

THE AREA OF WORK IS EQUIPPED WITH AN EXISTING AUTOMATIC SPRINKLER SYSTEM. THE EXISTING SYSTEM IS TO BE MODIFIED AS REQUIRED TO SUIT NEW LAYOUT, REFER TO FIRE PROTECTION DRAWINGS. THE EXISTING SYSTEM WILL REMAIN OPERATIONAL DURING CONSTRUCTION.

INTERIOR FINISH NOTES

INT. FINISHES SHALL COMPLY W/ SECTION (803.11) & SHALL HAVE A FLAME SPREAD RATING AS OUTLINED BELOW:

REQ'D VERT. EXITS AND PASSAGEWAYS B FLAME SPREAD 26-75 SMOKE DEVELOPES 0-450 EXIT ACCESS CORRIDORS C FLAME SPREAD 76-200 SMOKE DEVELOPES 0-450 ROOMS AND ENCLOSED SPACES C FLAME SPREAD 76-200 SMOKE DEVELOPES 0-450

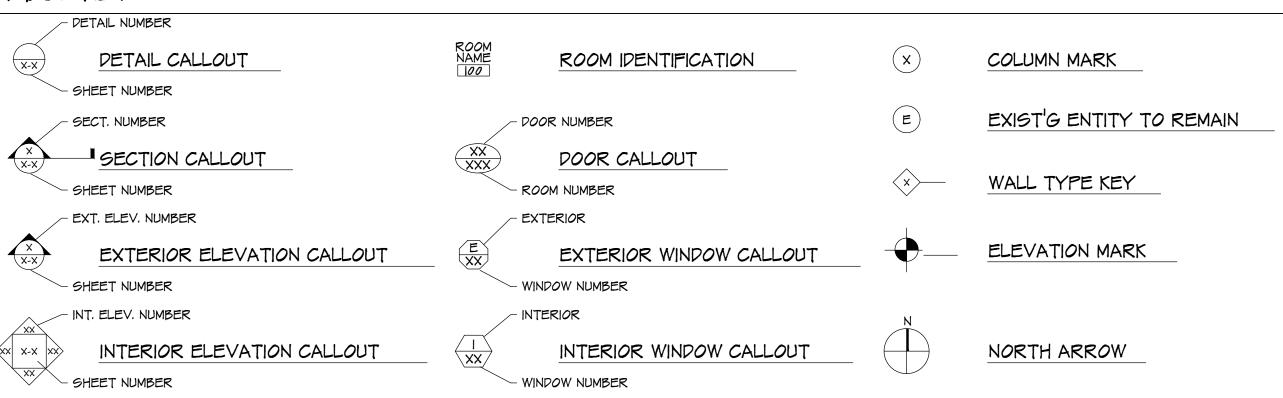
ALL INTERIOR FINISHES AT BATHROOMS SHALL BE MOISTURE RESISTANT & WASHABLE

STANDARD ABBREVIATIONS

ABOVE FINISH FLOOR	A.F.F.	FIRE EXTINGUISHER	F.E.	MASONRY	MAS.	SAFETY	SFTY.
ACOUSTICAL CEILING TILE	A.C.T.	FLOOR	FL./FLR.	MASONRY OPENING	M.O.	SCHEDULE	SCHED.
AIR CONDITIONING	A/C	FLOOR DRAIN	F.D.	MAXIMUM	MAX.	SECTION	SECT.
ALTERNATE	ALT.	FLOOR SINK	F.S.	MECHANICAL	MECH.	SOLID CORE	9.C.
ALUMINUM	ALUM.	FLUORESCENT	FLUOR.	MEMBRANE	MEMB.	SHEET	SHT.
APPROVED	APPD./APPV'D	FOOTING	FTG.	MINIMUM/MINUTE	MIN.	SIMILAR	SIM.
AT		FURNISH	FURN.	MISCELLANEOUS	MISC.	SPECIFICATIONS	SPEC.
	@	FURRING	FURR.	MISCLLLANLOUS	M190.	SQUARE	50.
BLOCK	BLK.	IDIKINO	FURK.	NORTH	N	SQUARE FOOT	5.F.
BLOCKING	BLKG.	GAUGE	GA.	NORTH NOMINAL	N NOM.	STAINLESS STEEL	9.9. 9.9.
BOARD	BD.	GALVANIZED	GA. GALV.			STEEL	9.9. STL.
BUILDING		GENERAL, GENERATOR		NOT IN CONTRACT	N.I.C.	STORAGE	STOR.
DUILVING	BLDG.		GEN.	NOT TO SCALE	N.T.S.	STORAGE CLOSET	ST. CL.
CARRET	4-0-12	GENERAL CONTRACTOR(OR)	G.C.	NUMBER	NO.	9 TORAGE CLOSET	51. CL.
CARPET	CPT.	GLASS, GLAZING	GL.			TOTAL LOAD	-T-1
CEILING	CLG.	GRADE	GR.	OFFICE	OFF.	TOTAL LOAD	T.L.
CENTERLINE	Q.	GYPSUM WALLBOARD	G.W.B./GYP. BD.	ON CENTER	O.C.	TOP OF DECK	T.O.D.
CERAMIC	CER.	GROUND FAULT INTERRUPTER	G.F.I.	OPENING	OPNG.	TOP OF FOOTING	T.O.F.
CERAMIC TILE	C.T.			OUTSIDE DIAMETER (DIMENSION)	O.D.	TOP OF MASONRY	T.O.M.
COATS	CTS.	HARDWARE	HDW./HDW ¹ R.	OVERHEAD	O.H.	TOP OF PIER	T.O.P.
COLD WATER	C.W.	HARDW <i>OO</i> D	HWD.			TOP OF SLAB	T.O.S.
COLUMN	COL.	HEATING/VENTILATING/AIR		PAINT	PT.	TOP OF STEEL	T.O.STL.
CONCRETE	CONC.	CONDITIONING	H.V.A.C.	PAINTED	PTD.	TOP OF WALL	T.O.W.
CONCRETE MASONRY UNIT	C.M.U.	HEIGHT	HT.	PARTITION	PART ['] N.	TYPICAL	TYP.
CONTINUOUS/CONTINUE	CONT.	HIGH POINT	H.P.	PARALLEL STRAND LUMBER	P.S.L.	TREAD	T
CONTRACTOR	CONTR.	HOLLOW CORE	H.C.	PLASTER	PLAS.		
CONTROL JOINT	C.J.	HOLLOW METAL	H.M.	PLASTIC LAMINATE	P.LAM.	UNDERWRITERS LABORATORIES	U.L.
CLEAN OUT	C.O.	HOLLOW METAL FRAME	H.M.F	PLATE	PL.	UNFINISHED	UNF.
•		HOSE BIB	H.B.	PLUMBING	PLBG.	UNIFORM BUILDING CODE	U.B.C.
DEAD LOAD	D.L.	HOT WATER	H.W.	POLYVINYL CHLORIDE	P.V.C.		
DEMOLISH, DEMOLITION	DEMO.	HOUR	HR.	POUNDS PER CUBIC FOOT	P.C.F.	VINYL COMPOSITION TILE	V.C.T.
DIAMETER	DIA./ Ø	1100K	ΠR.	POUNDS PER LINEAL FOOT	P.L.F.	VINYL WALL COVERING	V.W.C.
DIFFUSER	DIFF.	INSULATION	INSUL.	POUNDS PER SQUARE FOOT	P.S.F.	VERTICAL	VERT.
DIMENSION	DIM.	INTERIOR		POUNDS PER SQUARE INCH	P.S.I.	VESTIBULE	VEST.
DOWN	DN.	INVERT	INT.	PREFABRICATED	PREFAB.	VERIFY IN FIELD	V.I.F.
DITTO	"do"	INVER	INV.	TREFADRICATED	I KLI AD.		, .
DITTO	<i>ao</i>	JOINT		OHARRY THE	ΛT	WATER CLOSET	W.C.
EQUAL	EQ.	JOIN	JT.	QUARRY TILE	Q.T.	WATERPROOF, WEATHERPROOF	W.P.
EQUIPMENT	EQ. EQUIP.			CAPILIC	5 40	WELDED WIRE FABRIC	W.W.F.
EXISTING		LAMINATE(D)	LAM.	RADIUS	RAD.	WELDED WIRE MESH	W.W.M.
EXTERIOR	EXIST./EXIST'G	LAMINATED VENEER LUMBER	L.V.L.	REFERENCE	REF.	WIRE GLASS	W.GL.
EXTERIOR	EXT.	LAVATORY	LAV.	REINFORCE, REINFORCING	REINF.	WITH	
EL AAR CLEAN OUT		LIVE LOAD	L.L.	REQUIRED	REQ./REQ ¹ D.	WITHOUT	W/
FLOOR CLEAN OUT	F.C.O.	LOUVER	LVR./LOUV.	RISER	R	W11001 W00D	W/0
FEET, FOOT	FT.	144 INTENIANCE /144 INTAIN	1 4 4 11 1 	ROOF DRAIN	R.D.	14 OOV	WD.
FINISH	FIN.	MAINTENANCE/MAINTAIN	MAINT.	ROOF SCUPPER	R.S.		
FINISH FLOOR	F.F.	MANUFACTURER	MFR./MANUF.	ROUGH OPENING	R.O.		

NOTE: THIS LIST REPRESENTS ABBREVIATIONS THAT MAY OR MAY NOT APPEAR IN THESE DOCUMENTS. CONTACT YEZZI ASSOCIATES FOR ANY CLARIFICATIONS REGARDING THE ABBREVIATIONS

SYMBOL KEY



I. DO NOT SCALE DRAWINGS.

FIELD CHECK ALL DIMENSIONS PRIOR TO THE START OF CONSTRUCTION.

3. WHERE THERE MAY BE A CONFLICT BETWEEN THE DRAWINGS AND THE ACTUAL FIELD CONDITIONS THE CONTRACTOR SHALL NOTIFY THE ARCHITECTS WHO WILL MAKE THE NECESSARY REVISIONS. 4. PLANS TO CONFORM WITH THE STRUCTURE REQUIREMENTS OF THE INTERNATIONAL BUILDING

5. ALL EXISTING WORK TO REMAIN MUST BE PROTECTED. ANY SUCH WORK DAMAGED IN THE COURSE OF CONSTRUCTION WILL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS

6. ALL ITEMS TO BE REMOVED AND REUSED THAT ARE DAMAGED AND NOT REUSABLE SHALL BE REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.

7. THE CONTRACTOR SHALL MAINTAIN THE THERMAL AND ACOUSTICAL PROPERTIES OF THE BUILDING DURING CONSTRUCTION. 8. AT THE END OF EACH WORKING DAY THE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION

RUBBLE FROM THE SITE. 9. ALL ITEMS MARKED ON THE DRAWINGS TO BE REMOVED SHALL ALSO MEAN PATCH TO MATCH SURROUNDING CONDITIONS.

10. ALL TRADES TO COORDINATE THEIR WORK SO THERE WILL BE NO DUPLICATION OF WORK. II. ALL TRAPES TO DO THEIR OWN CUTTING AND PATCHING UNLESS OTHERWISE NOTED ON THE

12. THE CONTRACTOR SHALL EXAMINE ALL EXISTING CONDITIONS PRIOR TO BIDDING AND STARTING CONSTRUCTION & TAKE PHOTOGRAPHS OF ALL EXISTING CONDITIONS. ANY ALTERATIONS TO EXISTING STRUCTURE REQUIRED FOR PROPER INSTALLATION OF NEW WORK SHALL BE DONE BY THE CONTRACTOR AT HIS OWN EXPENSE, BUT ONLY AS APPROVED BY THE ARCHITECT.

13. THE GENERAL CONTRACTOR SHOULD EXAMINE THE M.E.P. DRAWINGS TO SEE THE EXTENT OF THE ENGINEERING CHANGES TO BE MADE TO THE BUILDING.

14. THE CONTRACTOR SHALL PROTECT THE EXISTING BUILDING FROM ANY POSSIBLE WATER

DAMAGE. ANY REPAIRS AS A RESULT OF DAMAGE WILL BE PAID BY THE CONTRACTOR. IG. ALL EXISTING UTILITIES IN CONFLICT WITH THE WORK SHALL BE TURNED OFF BY THE CONTRACTOR / UTILITY COMPANIES PRIOR TO START OF DEMOLITION / CONSTRUCTION.

SCOPE OF WORK

SCOPE OF WORK

AT THE ATLANTIC CITY CAMPUS RESIDENTIAL COMPLEX THE UNIVERSITY IS PROPOSING A WHITE-BOX FIT-OUT TO TWO EXISTING RETAILS SPACES, "C" & "D".

THE WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES, BUT IS NOT LIMITED TO:

BUILDING - THE REMOVAL AND REPLACEMENT OF THE EXISTING WALLS, CEILINGS, FINISHES. ETC. ALONG WITH THE INSTALLATION OF NEW WALLS, DOORS, FRAMES, CONCRETE SLABS, FINISHES, RESTROOMS ETC.

ELECTRICAL - THE RELOCATION OF EXISTING ELECTRICAL PANELS, TRANSFORMERS, ETC. TO DEDICATED ELECTRICAL ROOMS. THE REMOVAL, RELOCATION, AND MODIFICATION OF EXISTING, AND THE INSTALLATION OF PROPOSED RECEPTACLES, SWITCHES, LIGHTING, ETC. TO SUIT THE NEW LAYOUT.

FIRE - THE REMOVAL, RELOCATION, AND MODIFICATION OF EXISTING, AND THE INSTALLATION OF PROPOSED FIRE ALARM DEVICES, SPRINKLER HEADS, ETC. TO SUIT THE NEW LAYOUT.

MECHANICAL - THE REMOVAL, RELOCATION, AND MODIFICATION OF EXISTING, AND THE INSTALLATION OF PROPOSED HVAC UNITS, DUCTWORK, DIFFUSERS, THERMOSTATS, ETC. TO SUIT THE NEW LAYOUT.

PLUMBING - THE INSTALLATION OF NEW WATER CLOSETS, LAVATORIES, SINKS, ETC., TIED TO EXITING WATER, SANITARY, AND VENT PIPING.

BASE BID

ALL WORK ASSOCIATED WITH RETAIL SPACE "C" IS TO BE CONSIDERED BASE BID (TYP.)

ALTERNATES

ALTERNATE #1 - RETAIL SPACE "D" ADD ALTERNATE:

STATE THE AMOUNT, ON THE BID PROPOSAL FORM, TO BE ADDED TO THE BASE BID IF ALL WORK ASSOCIATED WITH RETAIL SPACE "D" IS ADDED TO THE PROJECTS SCOPE OF WORK.

REFER TO BID PROPOSAL FOR FOR ADDITIONAL INFORMATION.

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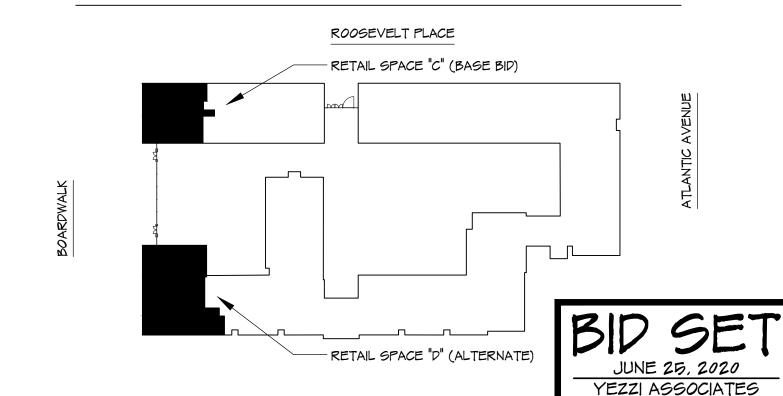
PARTIAL ELECTRICAL ROOF NEW WORK PLAN-BUILDING C - BASE BID

PARTIAL ELECTRICAL ROOF NEW WORK PLAN-BUILDING D - ALTERNATE BID FIRE ALARM

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KEY PLAN



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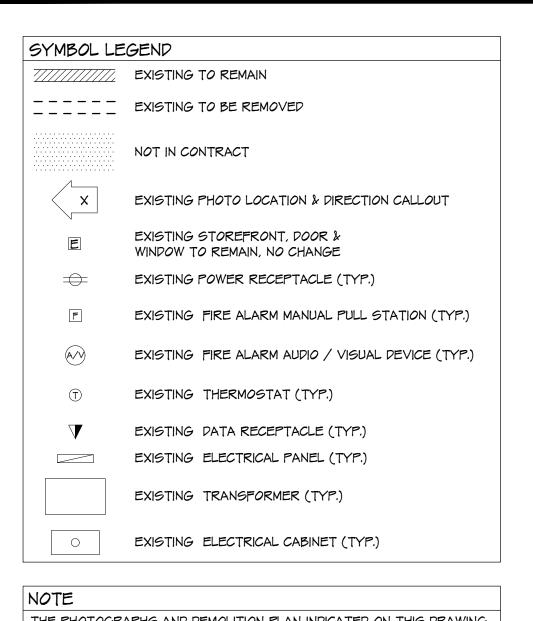
JUNE 25, 2020

PROJECT DATA, CODE RESEARCH. & SCOPE OF WORK

YC20117

ARCHITECTS PLANNERS

OWNERSHIP OF DOCUMENTS: This document, ideas and designs incorporated herein, are instruments of Yezzi Associates to insure conformance with clients scope of



THE PHOTOGRAPHS AND DEMOLITION PLAN INDICATED ON THIS DRAWING ARE FOR REFERENCE ONLY TO INDICATE THE EXISTING BUILDING CONDITIONS AT THE TIME OF OUR FIELD INSPECTION. ALL DEMOLITION REQUIRED TO SUCCESSFULLY COMPLETE THIS PROJECT SHALL BE INCLUDED IN THE GENERAL CONTRACTORS SCOPE OF WORK.

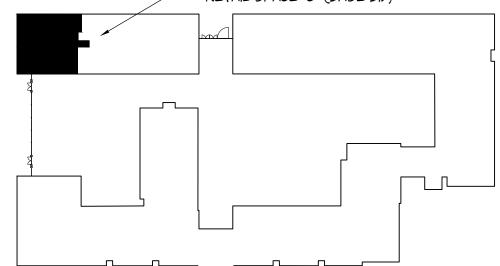
GENERAL SELECTIVE DEMOLITION NOTES

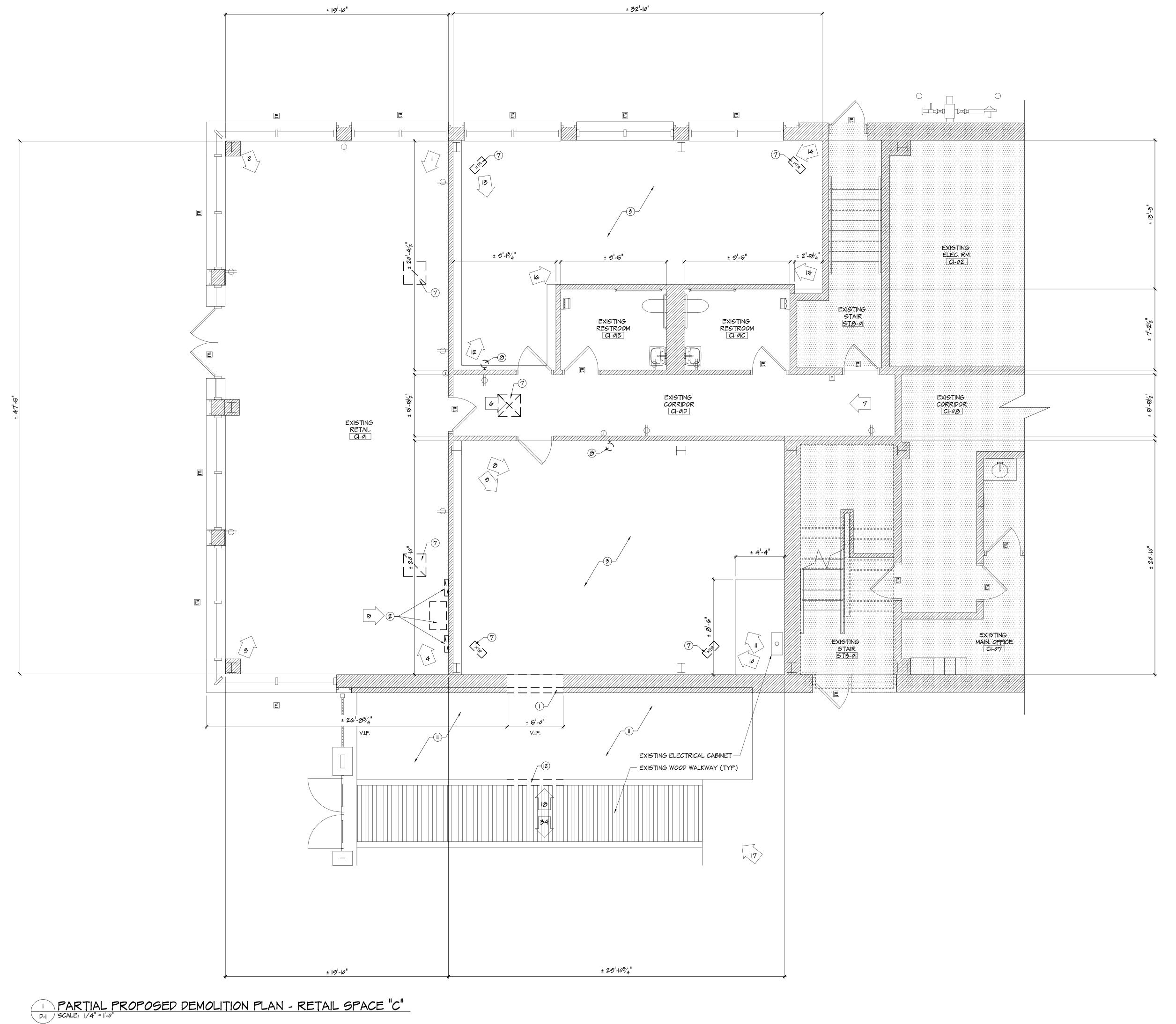
PREPARATION

- PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AT DOORWAYS WITH CODE REQUIRED SECURITY DEVICES.
- NOTIFY OWNER OF WORK WHICH MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR DISRUPTION. COORDINATE ALL WORK WITH OWNER.
- PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING AS REQUIRED.
- ERECT AND MAINTAIN TEMPORARY PARTITIONS TO PREVENT SPREAD OF DUST, ODORS AND NOISE TO PERMIT CONTINUED
- OWNER OCCUPANCY. PROTECT EXISTING ITEMS INDICATED TO REMAIN.
- DEMOLITION REQUIREMENTS:
- CONDUCT DEMOLITION TO MINIMIZE INTERFERENCE TO ADJACENT
- CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO ADJACENT ACCESSES.
- MAINTAIN PROTECTED EGRESS AND ACCESS AT ALL TIMES. CEASE OPERATIONS IMMEDIATELY WHEN ADJACENT STRUCTURAL COMPONENTS APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION AND A/E.
- SELECTIVE DEMOLITION: DEMOLISH AND REMOVE COMPONENTS IN ORDERLY AND CAREFUL MANNER, IN SEQUENCE OUTLINED IN SUBMITTED AND APPROVED
- PROTECT EXISTING SUPPORTING STRUCTURAL MEMBERS.
- CLEAN UP: REMOVE DEMOLIGHED MATERIALS FROM SITE AS WORK
- PROGRESSES.
- LEAVE AREAS OF WORK IN CLEAN CONDITION. DISPOSE OF ALL DEBRIS IN ACCORDANCE WITH ALL STATE AND MUNICIPAL REQUIREMENTS. PROVIDE LOAD TICKETS WHERE

TAGGED DEMOLITION NOTES

- PORTION OF EXISTING WALL TO BE REMOVED TO ALLOW FOR INSTALLATION OF NEW DOOR AS INDICATED ON THE DRAWINGS, PATCH TO MATCH SURROUNDING FINISHES (TYP.)
- (2) EXISTING ELECTRICAL COMPONENTS TO BE REMOVED / RELOCATED, REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFO. (TYP.)
-) MISCELLANEOUS DEBRIS TO BE REMOVED, PREP EXISTING GRADE FOR INSTALLATION OF NEW CONCRETE SLAB AS INDICATED ON THE DRAWINGS (TYP.)
- (4) EXISTING FIRE ALARM COMPONENTS TO BE REMOVED / RELOCATED, REFER TO FA DRAWINGS FOR ADDITIONAL INFO. (TYP.)
- (5) EXISTING DATA RECEPTACLE TO BE REMOVED / RELOCATED, REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFO. (TYP.) (6) EXISTING DOOR, FRAME, HARDWARE, AND ALL RELATED ITEMS TO BE
- REMOVED, RELOCATED, OR TURNED OVER TO THE OWNER (TYP.) 7) EXISTING MECHANICAL COMPONENTS TO BE REMOVED / RELOCATED,
- REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFO. (TYP.) $(oldsymbol{artheta})$ EXISTING LIGHTING TO BE REMOVED / RELOCATED, REFER TO
- ELECTRICAL DRAWINGS FOR ADDITIONAL INFO. (TYP.) 9) EXISTING CEILING TILE AND GRID TO BE REMOVED (TYP.)
- (10) EXISTING SPRINKLER HEAD TO BE REMOVED / RELOCATED, REFER
- TO FP DRAWINGS FOR ADDITIONAL INFO. (TYP.)) EXISTING SHRUBS AT THIS AREA ARE TO BE REMOVED & TURNED OVER TO THE OWNER TO ALLOW FOR INSTALLATION OF NEW HVAC
- EQUIPMENT & DOOR (TYP.) 2) PORTION OF EXITING WOOD RAIL TO BE REMOVED TO ALLOW FOR INSTALLATION OF NEW PERMEABLE PAVER WALKWAY (TYP.)







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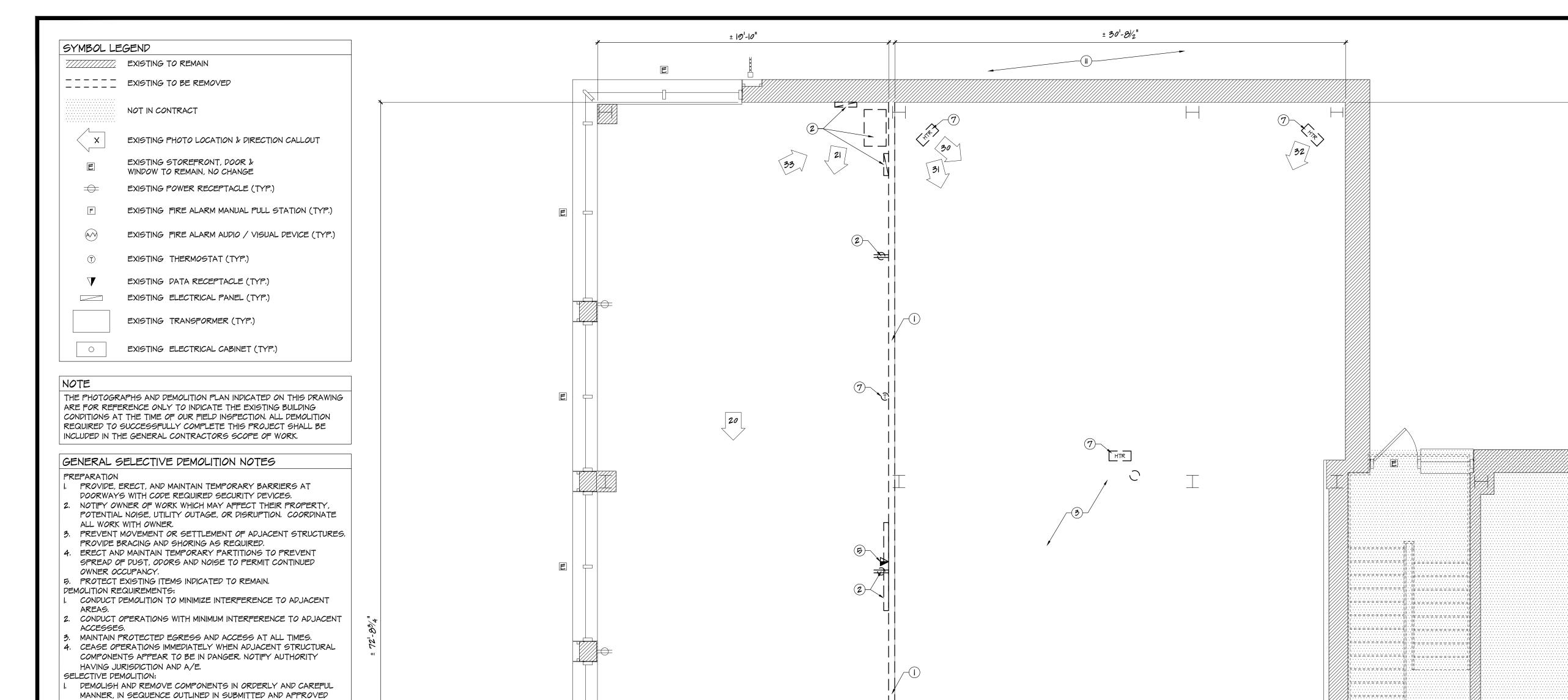
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JUNE 25, 2020

RETAIL SPACE "C" PARTIAL PROPOSED DEMOLITION PLAN

BASE BID

YC20117 OWNERSHIP OF DOCUMENTS: This document, ideas and designs incorporated herein, are instruments of Yezzi Associates to insure conformance with clients scope of woi



CLEAN UP:

PROGRESSES.

TAGGED DEMOLITION NOTES PORTION OF EXISTING WALL TO BE REMOVED TO ALLOW FOR INSTALLATION OF NEW DOOR AS INDICATED ON THE DRAWINGS, PATCH TO MATCH SURROUNDING FINISHES (TYP.)

DISPOSE OF ALL DEBRIS IN ACCORDANCE WITH ALL STATE AND MUNICIPAL REQUIREMENTS. PROVIDE LOAD TICKETS WHERE

PROTECT EXISTING SUPPORTING STRUCTURAL MEMBERS.

REMOVE DEMOLIGHED MATERIALS FROM SITE AS WORK

LEAVE AREAS OF WORK IN CLEAN CONDITION.

(2) EXISTING ELECTRICAL COMPONENTS TO BE REMOVED / RELOCATED, REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFO. (TYP.)

) MISCELLANEOUS DEBRIS TO BE REMOVED, PREP EXISTING GRADE FOR INSTALLATION OF NEW CONCRETE SLAB AS INDICATED ON THE DRAWINGS (TYP.)

(4) EXISTING FIRE ALARM COMPONENTS TO BE REMOVED / RELOCATED, REFER TO FA DRAWINGS FOR ADDITIONAL INFO. (TYP.)

(5) EXISTING DATA RECEPTACLE TO BE REMOVED / RELOCATED, REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFO. (TYP.) (6) EXISTING DOOR, FRAME, HARDWARE, AND ALL RELATED ITEMS TO BE

REMOVED, RELOCATED, OR TURNED OVER TO THE OWNER (TYP.) 7) EXISTING MECHANICAL COMPONENTS TO BE REMOVED / RELOCATED,

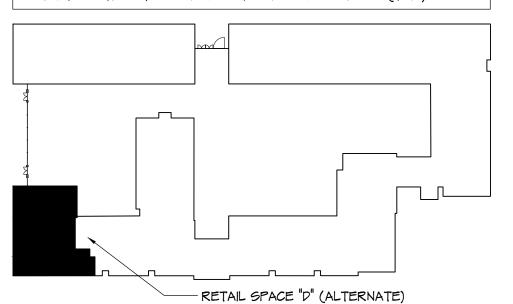
REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFO. (TYP.) $(oldsymbol{artheta})$ EXISTING LIGHTING TO BE REMOVED / RELOCATED, REFER TO

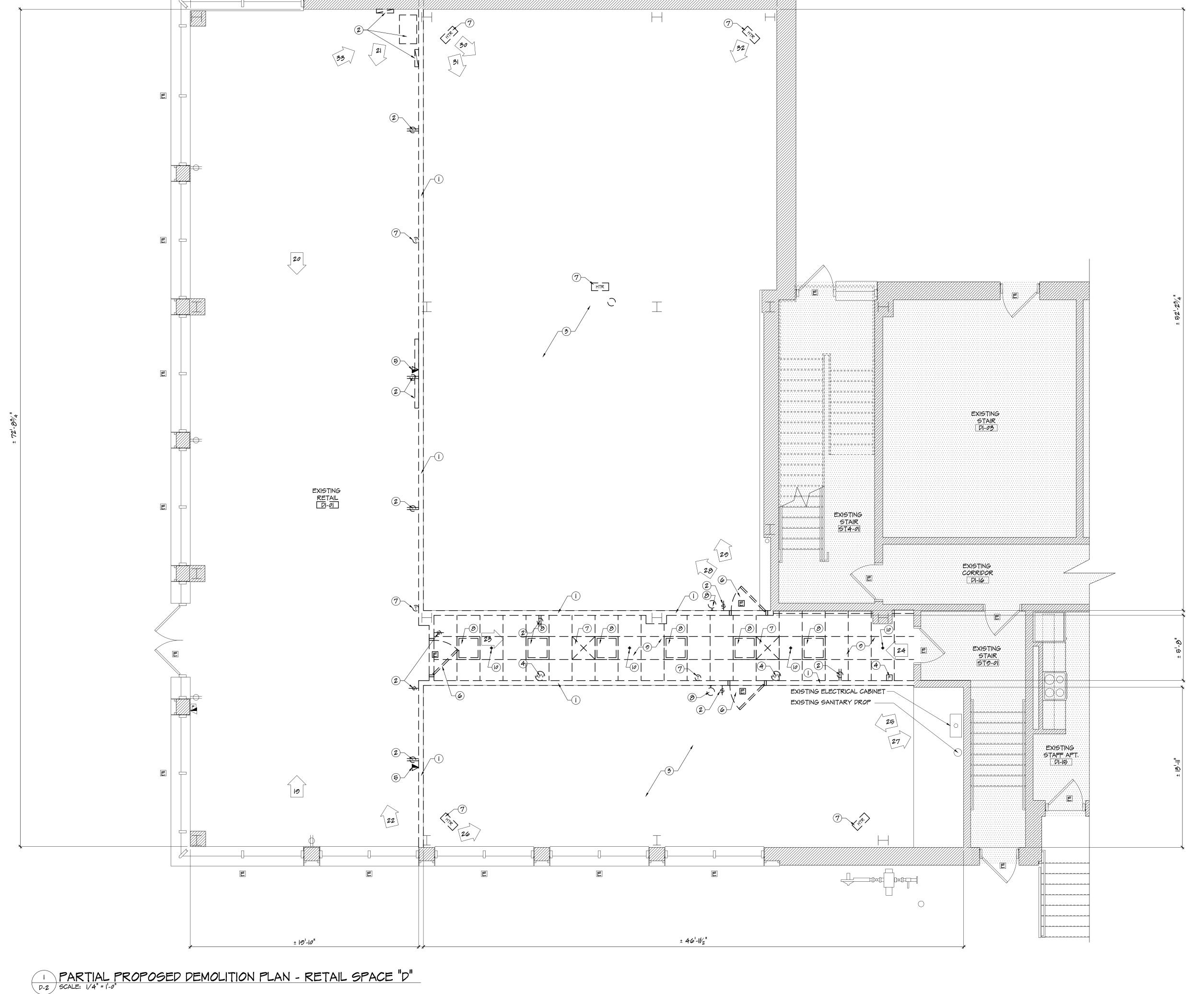
ELECTRICAL DRAWINGS FOR ADDITIONAL INFO. (TYP.) 9) EXISTING CEILING TILE AND GRID TO BE REMOVED (TYP.)

(10) EXISTING SPRINKLER HEAD TO BE REMOVED / RELOCATED, REFER TO FP DRAWINGS FOR ADDITIONAL INFO. (TYP.) I) EXISTING SHRUBS AT THIS AREA ARE TO BE REMOVED & TURNED

OVER TO THE OWNER TO ALLOW FOR INSTALLATION OF NEW HVAC EQUIPMENT & DOOR (TYP.)

(12) PORTION OF EXITING WOOD RAIL TO BE REMOVED TO ALLOW FOR INSTALLATION OF NEW PERMEABLE PAVER WALKWAY (TYP.)





YEZZI ASSOCIATES ARCHITECTURE PLANNING ENGINEERING INTERIORS 18 Washington Street P.O. Box 1638 Toms River, N.J. 08754 Tel: 732-240-3433 Fax: 732-240-3463 E-mail: info@yezziassociates.com Website: www.yezziassociates.com Massımo Francis Yezzi, Jr. Architect No. C 7475 Planner No. 2368 Architect No. 019392 Architect No. 012730B Architect No. 7460 Architect No. 8475 Architect No. 5075 Architect No. 92394 Architect No. 5733 Architect No. 9787-005 Architect No. 30014 Architect No. 30262377 Daniel M. Sernotti Architect No. 21A101897900 Architect No. 55-0008349 Architect No. RA 015346 Architect No. 73872 JUNE 25, 2020 RETAIL SPACE "D" PARTIAL PROPOSED DEMOLITION PLAN ALTERNATE YC20117 OWNERSHIP OF DOCUMENTS: This document, ideas and designs incorporated herein, are instruments of Yezzi Associates to insure conformance with clients scope of woi



BASE BID

JUNE 25, 2020

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RETAIL SPACE "C"
EXISTING CONDITION
PHOTOGRAPHS

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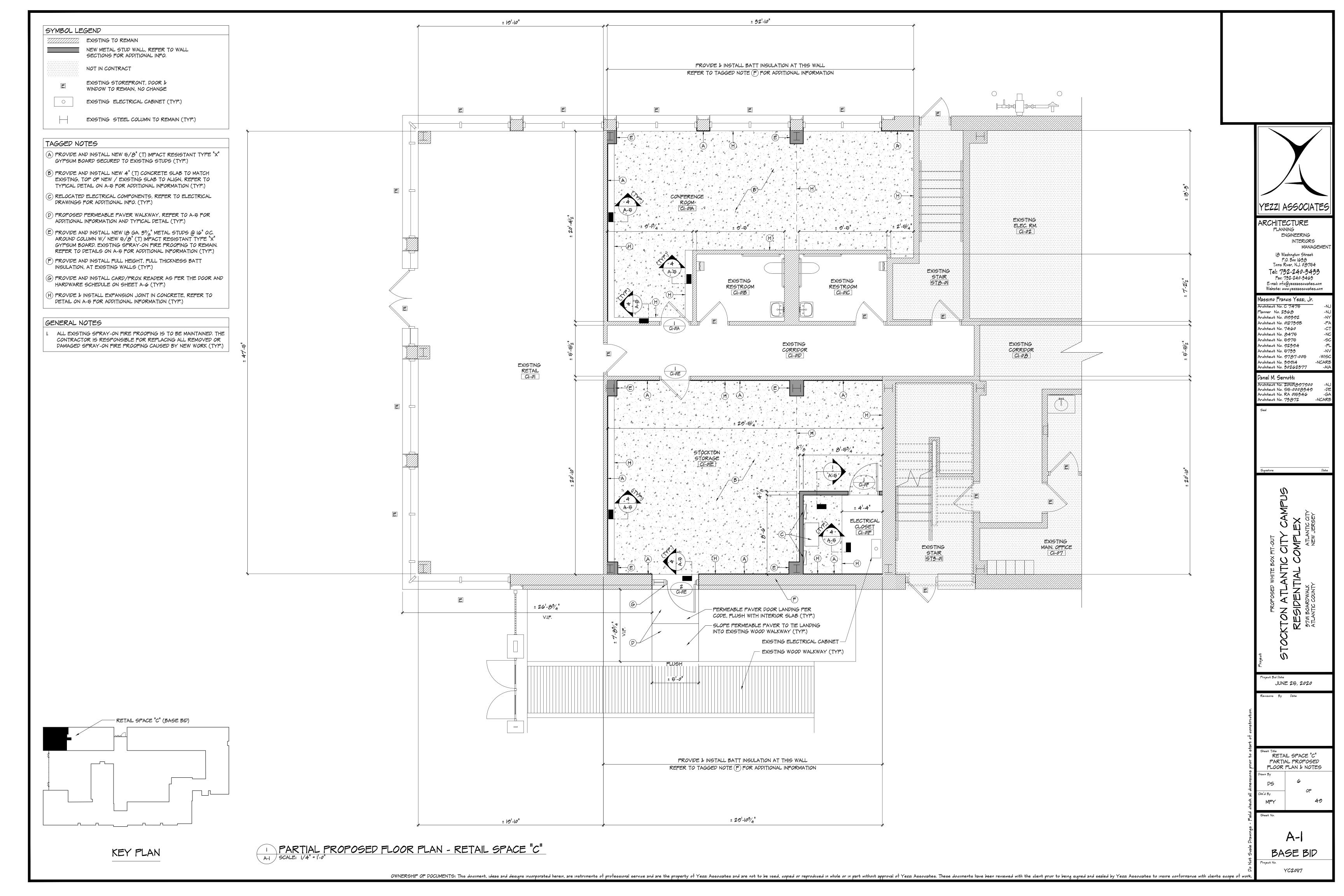
E-mail: info@yezziassociates.com Massimo Francis Yezzi, Jr. Architect No. C 7475 Planner No. 2368 Architect No. 019392 Architect No. 010302
Architect No. 012730B
Architect No. 7460
Architect No. 8475
Architect No. 5075
Architect No. 52304
Architect No. 5733
Architect No. 0787-005
Architect No. 30014
Architect No. 30262377

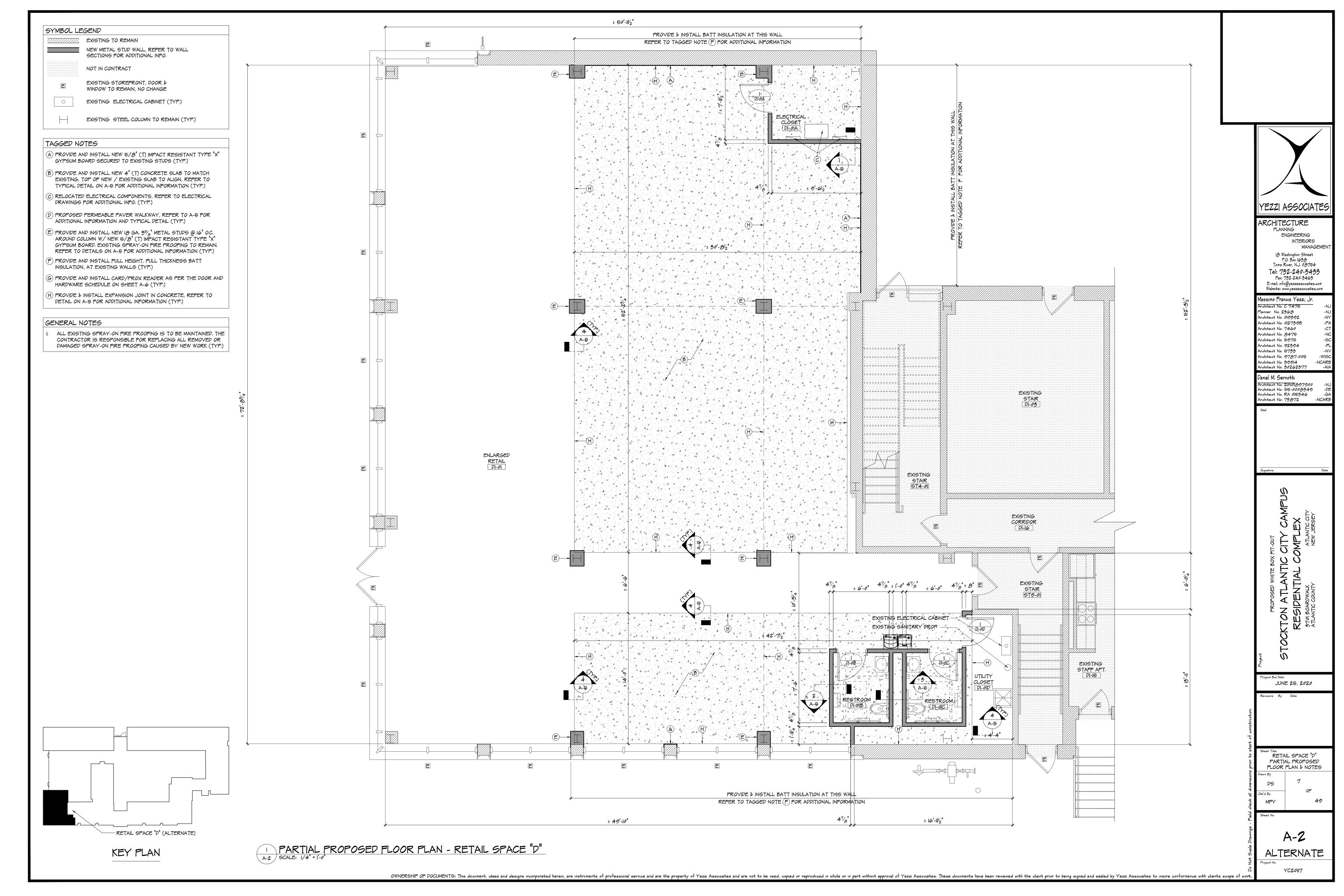
Daniel M. Sernotti Architect No. 2[A]0]807900 Architect No. 55-0008340 Architect No. RA 0|5346 Architect No. 73872

JUNE 25, 2020

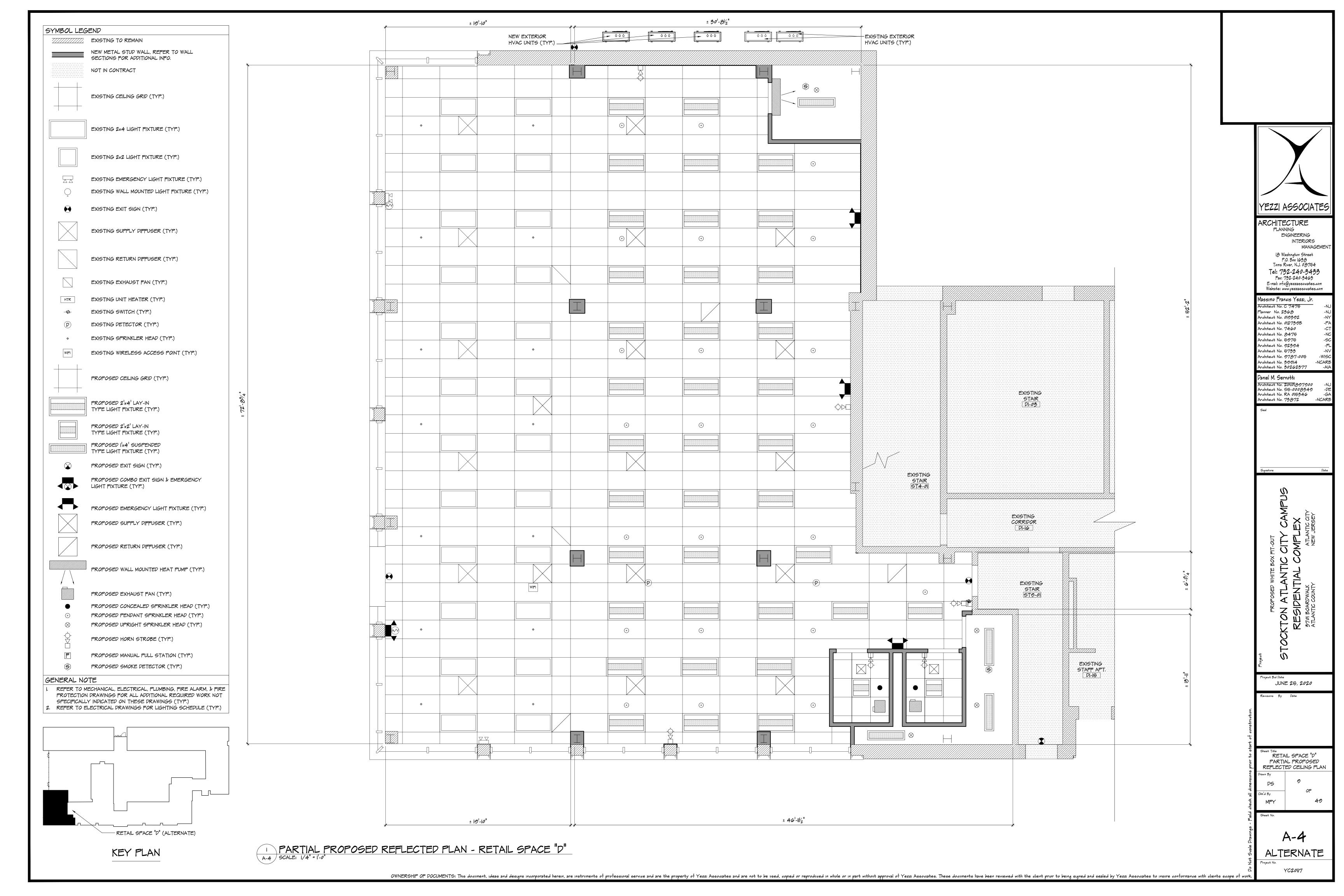
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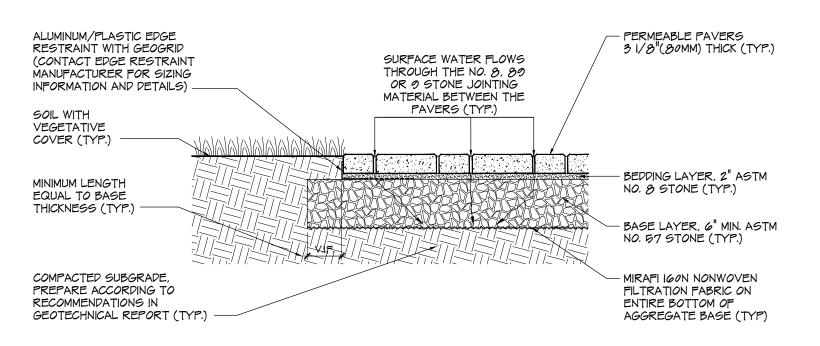
ALTERNATE











GENERAL DRAINABLE PAVER NOTES

- BASIS OF DESIGN IS "BELGARD" AQUA ROC PERMEABLE PAVER, 31/2" (80MM) THICK PERMEABLE PAVER SYSTEM, OR ARCHITECT/OWNER APPROVED EQUAL, COLOR AS SELECTED BY OWNER (TYP.) CONTRACTOR IS TO HIRE A NEW JERSEY LICENSED GEOTECHNICAL ENGINEER TO EXAMINE/TEST EXISTING SOILS AND PROVIDE
- RECOMMENDATION ON REQUIRED DEPTH OF AGGREGATE BASE, SUBGRADE PREPARATION, DRAIN PIPES, ETC. (TYP.) 2.1. THE DEPTH OF THE AGGREGATE BASE IS SUBJECT TO EXISTING SITE SPECIFIC CONDITIONS (SOIL CONDITIONS, GROUNDWATER LEVELS, CLIMATIC CONDITIONS), VERIFY AGGREGATE BASE DEPTH WITH THE GEOTECHNICAL ENGINEER (TYP.)
- 2.2. DRAIN PIPES MAY BE REQUIRED WITHIN THE AGGREGATE BASE DEPENDING ON THE PERMEABILITY OF THE SUBGRADE SOILS. VERIFY DRAINAGE NEEDS WITH THE GEOTECHNICAL ENGINEER. IF REQUIRED, ENSURE DRAIN PIPES ARE ABLE TO DRAIN TO DAYLIGHT VIA GRAVITY FLOW TO SURFACE, OR CONNECT TO CATCH BASIN (TYP.)
- G.C. MUST SUBMIT A FULL SET OF SHOP DRAWINGS FOR THE PERMEABLE PAVER SYSTEM, SUBGRADE PREPARATION, AND ALL RELATED ITEMS FOR REVIEW AND APPROVAL PRIOR TO ANY WORK BEING DONE (TYP.) 4. INSTALL AS PER MANUFACTURER REQUIREMENTS & SPECIFICATIONS.
- 5. ALL SLOPES ARE TO BE ADA COMPLIANT (TYP.) 6. AS PER MANUFACTURER, THE CROSS SECTION AS SHOWN IS SUITABLE FOR PEDESTRIAN APPLICATIONS AND RESIDENTIAL DRIVEWAYS, PATIOS, AND SIDEWALKS (TYP.)

7 TYPICAL PERMEABLE PAVER DETAIL

	ROOM	FLOOR		BASE	WA	LLS		CEILING		
RM#	NAME	MAT'L	FINISH	MAT'L	MAT'L	FINISH	MAT'L	HEIGHT		
CI-01	EXISTING RETAIL SPACE	CONCRETE	<u> </u>	EXIS	TING TO REM	IAIN —	\rightarrow	± 10¹-9"		
CI-0IA	CONFERENCE ROOM	CONCRETE	CPT-I	ВІ	GWB	PT-I	ACT-I	10'-9"		
CI-01B	EXISTING RESTROOM	CONCRETE	_	EXIS	TING TO REM	± 8¹-0"				
CI-OIC	EXISTING RESTROOM	CONCRETE		EXIS	TING TO REM	IAIN ———	\rightarrow	± 8'-0"		
CI-OID	EXISTING CORRIDOR	CONCRETE	<u> </u>	EXIS	TING TO REM	IAIN ———	\rightarrow	± 8'-0"		
CI-OIE	STOCKTON STORAGE	CONCRETE	PT-2	ВІ	GWB	PT-I	ACT-I	10'-9"		
CI-OIF	ELECTRICAL CLOSET	CONCRETE	PT-2	ВІ	GWB	PT-I	<i>O</i> TA	± 15'-21/2"		
DI-01	ENLARGED RETAIL	CONCRETE	CPT-2	ВІ	GWB	PT-I	ACT-I	± 10'-51/2" MATCH EXISTING		
DI-01A	ELECTRICAL CLOSET	CONCRETE	PT-2	ВІ	GWB	PT-I	OTA	± 15'-21/2"		
DI-01B	RESTROOM	CONCRETE	PT-2	ВІ	GWB	PT-I	ACT-2	8'-0"		
DI-OIC	RESTROOM	CONCRETE	PT-2	ВІ	GWB	PT-I	ACT-2	8'-0"		
DI-0ID	UTILITY CLOSET	CONCRETE	PT-2	ВІ	GWB	PT-I	<i>O</i> TA	± 15'-21/2"		
		LEGEND			R0	OM FINISH	GENERA	L NOTES		
CPT-I	"SHAW CONTRACT" DISPERSE 24"	X24" 50576 CARPET TILE			I. ALL M	ANUFACTURE	ERS/PRODL	JCTS LISTED IN		
CPT-2	CARPET TILE TO MATCH EXISTING	, GC TO FIELD VERIFY			THER	OOM FINISH	SCHEDULE	ARE A DESIGN		
B-I	"JOHNSONITE" 4" VINYL WALL BAS	3E						NCE CRITERIA UTIONS/EQUALS		
ACT-I	"USG" 24"×48" RADAR BASIC ACO W/ "USG" DONN DXL FIRE RATED (USTICAL PANELS 2310 SRID SYSTEM 15/16" & HOLD [POWN CLIPS		OWNE		, REFER TO	R ARCHITECT / O SPECIFICATIONS N (TYP)		
ACT-2	"USG" 24"x24" RAPAR BASIC ACOL W/ "USG" DONN DXL FIRE RATED (GRID SYSTEM 15/16" & HOLD [2. G.C. T		LL SHOP DI	RAWINGS FOR ALL		
GWB	"USG" 5/8" (T) IMPACT RESISTAN		MOISTURE		1			AND SELECTION		

ROOM FINISH SCHEDULE

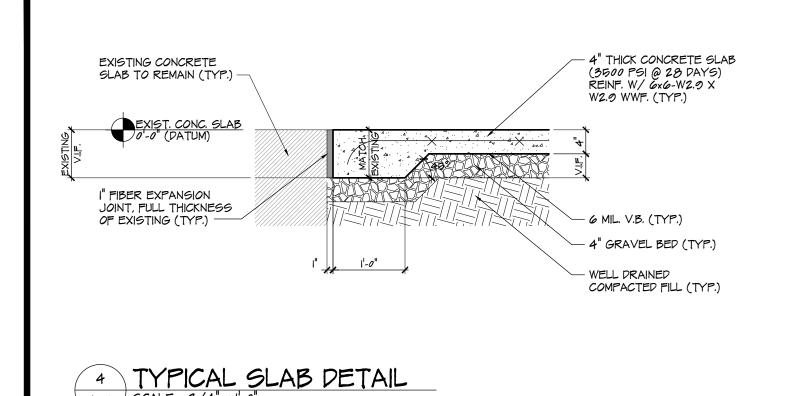
8 ROOM FINISH SCHEDULE
A-6 SCALE: N.T.S.

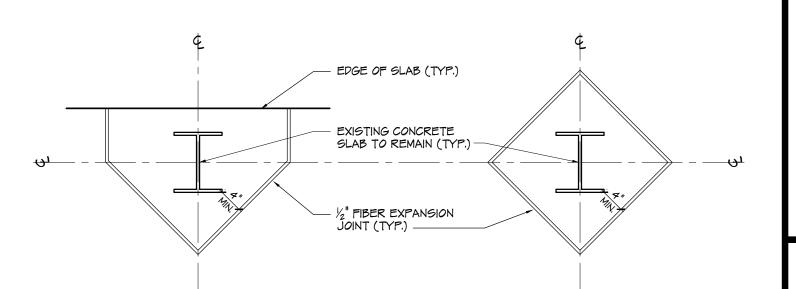
OTA OPEN TO STRUCTURE ABOVE, NO CEILING FINISH

RESISTANT TYPE AT RESTROOM AND KITCHENETTE AREA

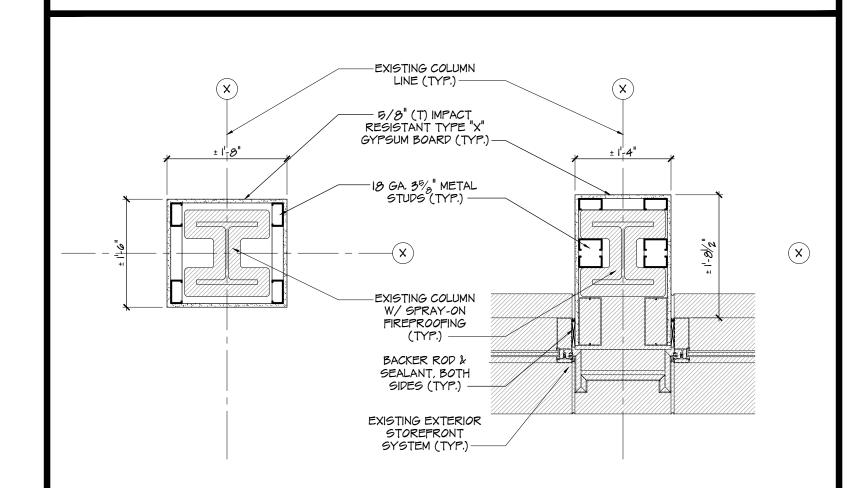
PT-2 "SHERWIN WILLIAMS" ARMOR SEAL 8100 WATERBASED EPOXY FLOOR COATING SYSTEM

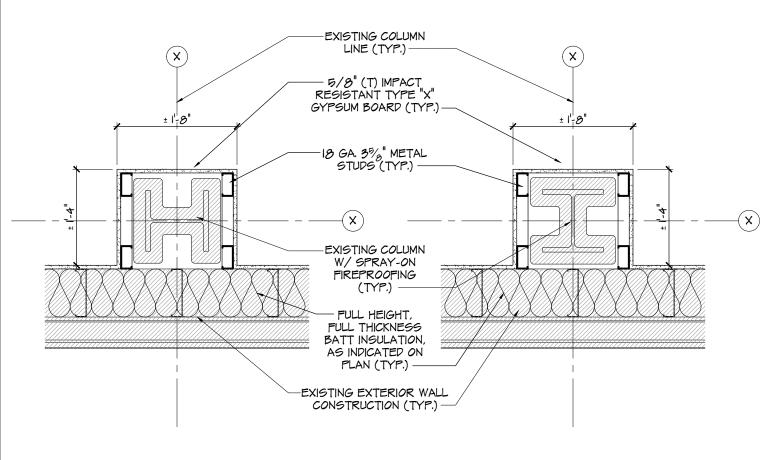
PT-I "SHERWIN WILLIAMS" PAINT, (I) COAT PRIMER (2) COATS FINISH





TYPICAL COLUMN EXPANSION JOINT DETAIL A-5 SCALE: N.T.S.

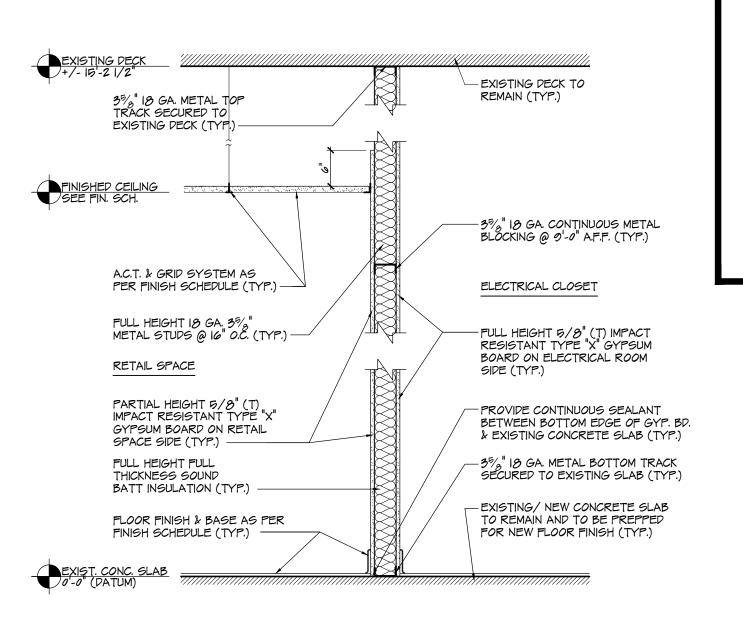




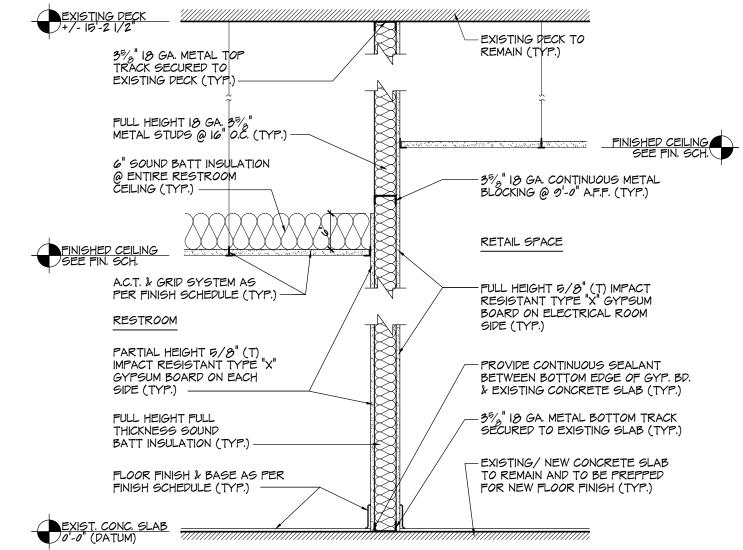
GENERAL NOTES

- ALL EXISTING SPRAY-ON FIRE PROOFING IS TO BE MAINTAINED. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ALL REMOVED OR DAMAGED SPRAY-ON FIRE PROOFING CAUSED BY NEW WORK (TYP.)
- ALL METAL STUDS ARE TO FULL HEIGHT TO DECK W/ TOP AND BOTTOM TRACKS AND THE GYPSUM BOARD IS THE EXTEND A MINIMUM OF 6" ABOVE FINISHED CEILING (TYP)
- . EXISTING COLUMN SIZES MAY VARY, CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS (TYP.)

6 TYPICAL PLAN DETAILS @ COLUMNS
SCALE: 3/4" = 1'-0"

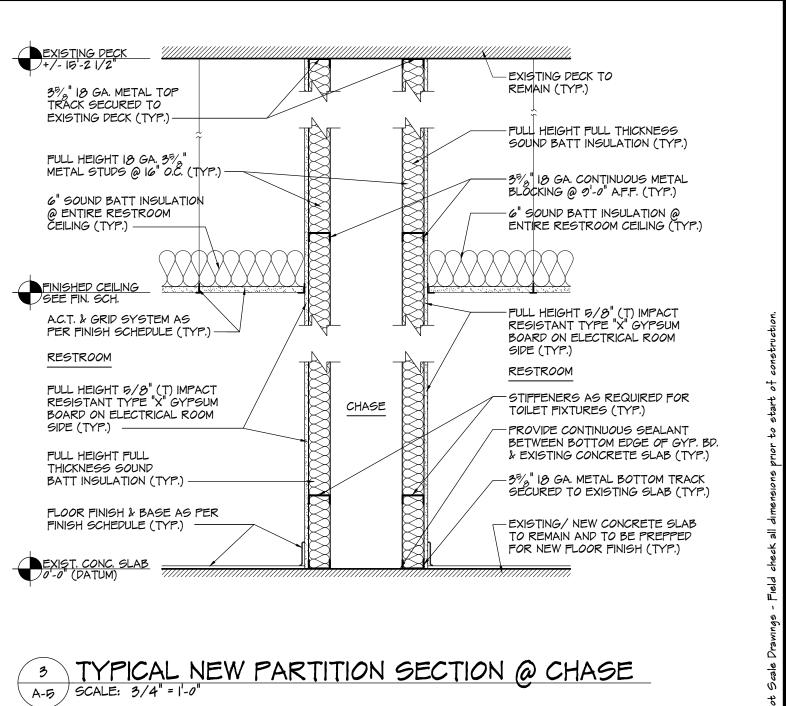


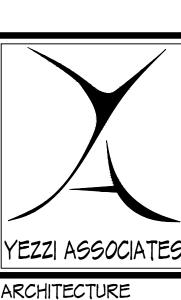
TYPICAL NEW PARTITION SECTION @ ELEC CLOSET



2 TYPICAL NEW PARTITION SECTION @ RESTROOM

A-5 SCALE: 3/4" = 1'-0"





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E-mail: info@yezziassociates.com Website: www.yezziassociates.com lassimo Francis Yezzi, Jr. Architect No. C 7475 Planner No. 2368 Architect No. 019392 Architect No. 012739B Architect No. 7460 Architect No. 8475 Architect No. 5075 Architect No. 92394 Architect No. 5733 Architect No. 9787-005 Architect No. 30014 Architect No. 30262377

Daniel M. Sernotti Architect No. 21A101897900 Architect No. 55-0008349 Architect No. RA 015346 Architect No. 73872

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RESIDENTIAL CO 0

JUNE 25, 2020

TYPICAL SECTION, DETAILS, & ROOM FINISH SCHEDULE

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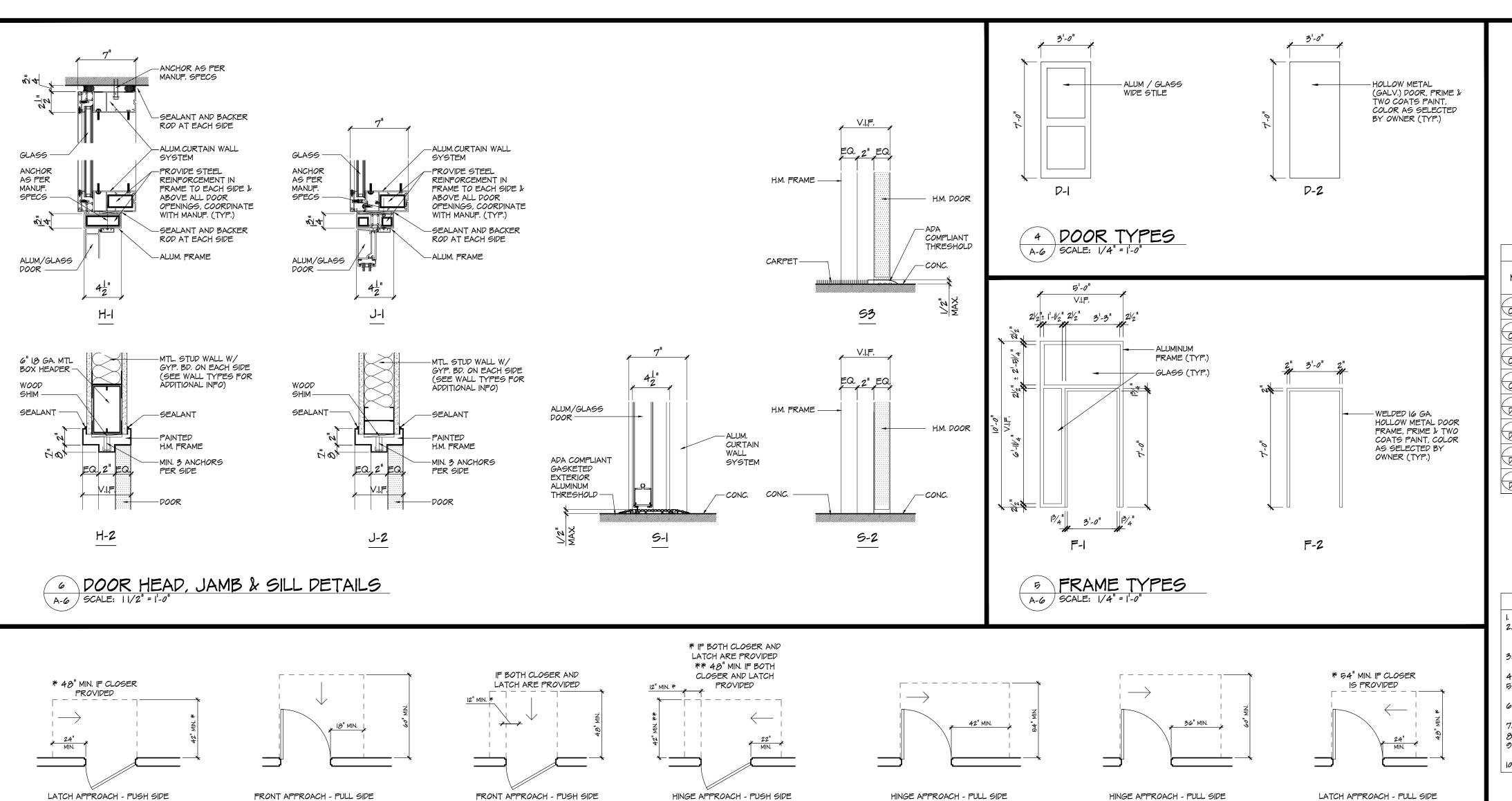
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PRIOR TO CONSTRUCTION (TYP.)

3. COLOR/PATTERN AS SELECTED BY

ARCHITECT/OWNER FROM ALL AVAILABLE

STANDARD COLORS AND PATTERNS (TYP.)



HINGE APPROACH - PULL SIDE LATCH APPROACH - PULL SIDE

7 ADA DOOR MANEUVERING CLEARANCE DETAILS
A-6 SCALE: N.T.S.

THE GENERAL CONTRACTOR TO PROVIDE AND INSTALL NEW SIGNAGE AT ALL

2. ALL SIGNAGE SHALL CONFORM WITH APPLICABLE ADA ACCESSIBILITY GUIDELINES, INCLUDING BUT NOT LIMITED TO CLEARANCES, PROPORTION, COLOR CONTRAST &

3. THE GENERAL CONTRACTOR TO PROVIDE FULL SIGNAGE SHOP DRAWINGS FOR

4. ALL SIGNAGE TO BE INSTALLED AS PER MANUFACTURER SPECIFICATIONS (TYP.)

-PICTOGRAMS SHALL HAVE A FIELD 6" MINIMUM IN HEIGHT.

CHARACTERS AND

BRAILLE SHALL

IN THE FIELD -

FONT HEIGHT

GRADE 2 BRAILLE

NOT BE LOCATED

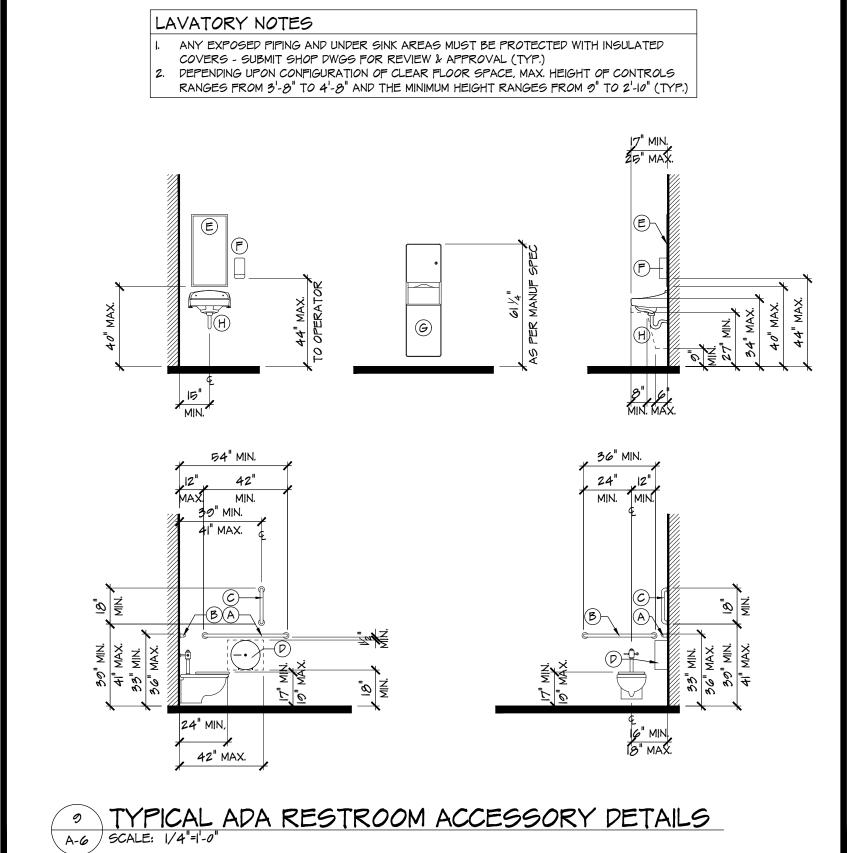
REVIEW AND APPROVAL PRIOR TO ANY WORK BEING DONE (TYP.)

RELIEF, AND GRADE 2 BRAILLE REQUIREMENTS (TYP.)

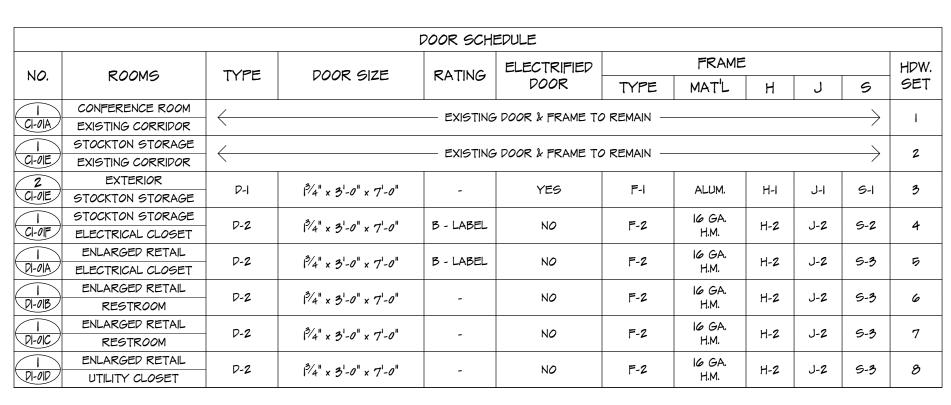
RESTROOM SIGNAGE NOTES

TOILET ROOMS (TYP.)

ADA RESTROOM SIGNAGE
SCALE: N.T.S.



TAG	ACCESSORY	MODEL #	MOUNTING HEIGHT
(A)	SIDE GRAB BAR	BRADLEY	33"-36" A.F.F
<u>v</u>	11/2"Ø 42" × L	812	TO TOP OF BAR
B)	BACK GRAB BAR	BRADLEY	33"-36" A.F.F
	11/2"Ø 36" x L	812	TO TOP OF BAR
(C)	VERTICAL GRAB BAR I 1/2"Ø 18" x L	BRADLEY 812	30"-41" A.F.F. TO BOTTOM OF BAR
P	TOILET TISSUE DISPENSER	BAY WEST 80300	18" A.F.F. TO OUTLET
E	MIRROR	BRADLEY 781-1836	40" MAX. A.F.F. TO BOTTOM OF MIRROR
F	SOAP DISPENSER	BAY WEST	44" MAX. A.F.F. TO OPERATOR
G	PAPER TOWEL DISPENSER & WASTE RECEPTACLE	BOBRICK B-43040	GI ¼" A.F.F. TO TOP OF UNIT AS PER MANUFACTURER SPECIFICATIONS
\bigoplus	P TRAP LAVATORY GUARD	_	-
	TYPICAL TOILET R	OOM NOTE	9
MAN	NUFACTURERS (OR AN ARCHITECT/OWN		•
ACC	UPACTURERS (OR AN ARCHITECT/OWN DESSORIES: "BRADLEY CORPORATION "RUBBERMAID" TURES: REFER TO PLUMBING D	ON", "BAY WE	•
ACC	CESSORIES: "BRADLEY CORPORATION "RUBBERMAID"	ON", "BAY WE PRAWINGS	•
ACC	CESSORIES: "BRADLEY CORPORATION "RUBBERMAID" TURES: REFER TO PLUMBING D	ON", "BAY WE PRAWINGS R NOTES WALL MOUN EXACT NUMB FOR GRAB BA (TYP.)	ST", "BOBRICK", TING KIT AND ER AND TYPE OF GRAB ARS ETC., CONTRACTOR
ACC FIX	TURES: "BRADLEY CORPORATION "RUBBERMAID" TURES: REFER TO PLUMBING DEPOSITION OF THE PROVIDE CONTINUOUS STAINLESS STEEL ANCHORING DEVICES, FIELD VERIFY FOR BARS, MOUNTING KITS REQUIRED (TYP.) PROVIDE SOLID BLOCKING AS REQUIRED TO VERIFY EXACT LOCATION(S) IN FIELD	ON", "BAY WE PRAWINGS NOTES WALL MOUN EXACT NUMB FOR GRAB BA (TYP.)	ST", "BOBRICK", TING KIT AND ER AND TYPE OF GRAB ARS ETC., CONTRACTOR
ACC FIX** 2. 3.	CESSORIES: "BRADLEY CORPORATION "RUBBERMAID" TURES: REFER TO PLUMBING DEVICES. FIELD VERIFY FOR BARS. MOUNTING KITS REQUIRED (TYP.) PROVIDE SOLID BLOCKING AS REQUIRED TO VERIFY EXACT LOCATION(S) IN FIELD ALL HARDWARE AND ACCESSORIES TO BE NOTES G.C. TO PROVIDE AND INSTALL ALL ACCESSORIES TO BE SHOP DRAWINGS FOR ALL TOILET ROOM ALL TOILET ROOM FIXTURES AND ACCESSORIES WITH ICC/ANSI AII7.I-2009 AND REQUIREMENTS (TYP.)	ON", "BAY WE PRAWINGS NOTES WALL MOUN EXACT NUMB FOR GRAB BA (TYP.) SE STAINLESS SORIES, G.C ACCESSORIE SORIES TO B ND N.J.U.C.C. "	ST", "BOBRICK", TING KIT AND ER AND TYPE OF GRAB ARS ETC., CONTRACTOR STEEL (TYP.) TO PROVIDE FULL S (TYP.) E INSTALLED IN BARRIER FREE" AND
ACC FIX 1. 2. 3. 1. 2. 3.	TURES: "BRADLEY CORPORATION "RUBBERMAID" TURES: REFER TO PLUMBING DEVICES. FIELD VERIFY FOR BARS. MOUNTING KITS REQUIRED (TYP.) PROVIDE SOLID BLOCKING AS REQUIRED TO VERIFY EXACT LOCATION(S) IN FIELD ALL HARDWARE AND ACCESSORIES TO BE SHOP DRAWINGS FOR ALL TOILET ROOM ALL TOILET ROOM FIXTURES AND ACCESSORIES WITH ICC/ANGI AII7.I-2009 A ADA REQUIREMENTS (TYP.) G.C. TO PROVIDE ALL RELATED ACCESSORIES TO BE SOLID BLOCKING AND ACCESSORIES TO BE SHOP DRAWINGS FOR ALL TOILET ROOM ALL TOILET ROOM FIXTURES AND ACCESSORIES TO BE SHOP DRAWINGS FOR ALL TOILET ROOM ALL TOILET ROOM FIXTURES AND ACCESSORIES TO BE SOLID BLOCKING AS REQUIREMENTS (TYP.) G.C. TO PROVIDE ALL FIXTURES & ACCESSORIES TO BE SOLID BLOCKING AS REQUIREMENTS (TYP.) G.C. TO PROVIDE ALL FIXTURES & ACCESSORIES TO BE SOLID BLOCKING AND ACCESSORIES TO BE SOLID BLOCKING AS REQUIREMENTS (TYP.)	ON", "BAY WE PRAWINGS NOTES WALL MOUN EXACT NUMB FOR GRAB BA (TYP.) SE STAINLESS SORIES, G.C ACCESSORIE SORIES TO B IND N.J.U.C.C. "	ST", "BOBRICK", TING KIT AND ER AND TYPE OF GRAB ARS ETC., CONTRACTOR STEEL (TYP.) TO PROVIDE FULL S (TYP.) E INSTALLED IN BARRIER FREE" AND
ACC FIX 2. 3.	TURES: "BRADLEY CORPORATION "RUBBERMAID" TURES: REFER TO PLUMBING DEVICES. FIELD VERIFY FOR BARS. MOUNTING KITS REQUIRED (TYP.) PROVIDE SOLID BLOCKING AS REQUIRED TO VERIFY EXACT LOCATION(S) IN FIELD ALL HARDWARE AND ACCESSORIES TO BE SHOP DRAWINGS FOR ALL TOILET ROOM ALL TOILET ROOM FIXTURES AND ACCESSORIES TO BE ADA REQUIREMENTS (TYP.) G.C. TO PROVIDE ALL RELATED ACCESSORIES TO BE ADA COMPLIANCE WITH ICC/ANSI AII7.I-2009 A ADA REQUIREMENTS (TYP.) G.C. TO PROVIDE ALL RELATED ACCESSORIES TO BE ADA COMPLAINTED SOLID SUPPORT AT WALLS FOR	ON", "BAY WE PRAWINGS NOTES WALL MOUN EXACT NUMB FOR GRAB BA (TYP.) SE STAINLESS SORIES, G.C ACCESSORIE SORIES TO B IND N.J.U.C.C. " PRIES REQUIR SOORIES (TY T W/ A MAX. T FIXTURES A	ST", "BOBRICK", TING KIT AND ER AND TYPE OF GRAB ARS ETC., CONTRACTOR S STEEL (TYP.) TO PROVIDE FULL S (TYP.) E INSTALLED IN BARRIER FREE" AND RED TO COMPLETE THE P.) GPM OF 0.5 (TYP.) ND ACCESSORIES AS
I. 2. 3. 1. 2. 3. 4.	TURES: "BRADLEY CORPORATION "RUBBERMAID" TURES: REFER TO PLUMBING DEVICES. FIELD VERIFY FOR BARS. MOUNTING KITS REQUIRED (TYP.) PROVIDE SOLID BLOCKING AS REQUIRED TO VERIFY EXACT LOCATION(S) IN FIELD ALL HARDWARE AND ACCESSORIES TO BE SHOP DRAWINGS FOR ALL TOILET ROOM ALL TOILET ROOM FIXTURES AND ACCESSORIES TO BE ADA REQUIREMENTS (TYP.) G.C. TO PROVIDE ALL RELATED ACCESSORIES TO BE ADA COMPLAIN.	ON", "BAY WE PRAWINGS NOTES WALL MOUN EXACT NUMB FOR GRAB BA (TYP.) SE STAINLESS SORIES, G.C ACCESSORIE SORIES TO B IND N.J.U.C.C." ORIES REQUIR SOORIES (TY T W/ A MAX. IT FIXTURES A PULL PRESSU IMMEDIATELY	ST", "BOBRICK", TING KIT AND ER AND TYPE OF GRAB ARS ETC., CONTRACTOR STEEL (TYP.) TO PROVIDE FULL S (TYP.) E INSTALLED IN BARRIER FREE" AND CED TO COMPLETE THE P.) GPM OF 0.5 (TYP.) ND ACCESSORIES AS RE (TYP.) TO ARCHITECT PRIOR



DOOR SCHEDULE

DOOR SCHEDULE NOTES

ALL GLAZING TO BE I" THICK INSULATED TEMPERED SAFETY GLASS ($\frac{V}{4}$ " TEMPERED SAFETY GLASS / $\frac{V}{2}$ " AIR SPACE / $\frac{V}{4}$ " TEMPERED SAFETY GLASS) (TYP.) REFER TO SPECIFICATIONS FOR HOLLOW METAL DOOR FRAME GAUGE REQUIREMENTS.

ALL H.M. FRAMES ARE TO BE 16 GAUGE (UNLESS OTHERWISE NOTED) AND ARE TO BE PRIMED & PAINTED, COLOR AS SELECTED BY OWNER (TYP.) G.C. TO COORDINATE JAMB THICKNESS PRIOR TO ANY FABRICATION OR WORK IS DONE (TYP.)

REFER TO SPECIFICATIONS FOR ALUMINUM/GLASS DOOR, FRAME AND CURTAIN WALL REQUIREMENTS. ALL CURTAIN WALLS WITH INTEGRATED DOORS ARE TO BE BY A SINGLE MANUFACTURER (TYP.)

G.C. IS TO FIELD VERIFY THE ROUGH & FINISH OPENINGS FOR ALL DOORS & FRAMES (TYP.) 5. G.C. MUST SUBMIT A FULL SET OF SHOP DRAWINGS FOR ALL DOORS, FRAMES, CURTAIN WALL, HARDWARE AND ALL RELATED ITEMS FOR REVIEW AND

APPROVAL PRIOR TO ANY WORK BEING DONE (TYP.) PROVIDE CREDENTIAL READER(S) AS INDICATED ON THE HARDWARE SCHEDULE. REFER TO FLOOR PLAN, ELECTRICAL DRAWINGS, AND SPECIFICATIONS FOR

ADDITIONAL INFORMATION REGARDING CREDENTIAL READERS (TYP.)

ALL DOORS ARE TO HAVE A MINIMUM RETURN OF 4" (TYP.) . UNDER CUT TOILET DOORS AS REQUIRED FOR HVAC, COORDINATE WITH MECHANICAL DRAWINGS (TYP.)

ALL COMPOSITE ACCESS CONTROL WIRE FOR ELECTRIFIED DOORS ARE TO RUN BACK TO THE EXISTING ACCESS CONTROL PANEL IN ROOM C2-02,

COORDINATE EXACT LOCATION & ROUTE W/ THE UNIVERSITY. THE UNIVERSITY WILL HANDLE ALL PROGRAMMING (TYP.) REFER TO ELECTRICAL DRAWINGS FOR ALL DOORS THAT REQUIRE POWER (TYP.)

2 DOOR SCHEDULE NOTES

	DOOR HARDWARE SETS	
ET I: I/CI-0IA CONFERENCE ROOM	SET 2: I/CI-01E STOCKTON STORAGE	SET 3: 2/CI-01E STOCKTON STORAGE
(EXISTING DOOR) I BEST PASSAGE LOCK 7KC-3-0-N-15-D-S3-626 I WALL STOP NOTE: CONTRACTOR TO REMOVE ALL EXISTING HARDWARE & PREP EXISTING DOOR AND FRAME AS REQUIRED TO ACCEPT PROPOSED HARDWARE CHANGES. TURN OVER ALL REMOVED HARDWARE TO THE UNIVERSITY (TYP.)	(EXISTING DOOR) I BEST STOREROOM LOCK 7KC-3-7-P-I5-P-S3-626 I BEST DOUBLE CYLINDER DEADBOLT 8T3-7-M-STK-626 I BEST COREMAX CORE - 7 PIN I WALL STOP NOTE: CONTRACTOR TO REMOVE ALL EXISTING HARDWARE & PREP EXISTING DOOR AND FRAME AS REQUIRED TO ACCEPT PROPOSED HARDWARE CHANGES. TURN OVER ALL REMOVED HARDWARE TO THE UNIVERSITY (TYP.)	PRECISION APEX 2000 P/N E2103LP-4008A-SWING-630 (THIS P/N IS NOT COMPLETE. CONFIRM W/ BEST) 24V POWER SUPPLY PSI6I-6 STANLEY CLOSER D4660-STD-680-SN BEST COREMAX CORE - 7 PIN STANLEY HEAVY DUTY HINGE @3 CBI68 4 I/2 X 4 ½-630 RIXSON 0 SERIES OVERHEAD STOP THROUGH BOLTED P/N 0-336-6468-630 (IF LH) 0-336-6469-630 (IF RH) RECESSED ALUMINUM DOOR CONTACT SPDT CARD/PROX READER BOSCH REQUEST-TO-EXIT PIR DETECTOR, DSI601 WEATHER STRIPPING ADA COMPLIANT GASKETED EXTERIOR ALUMINUM THRESHOLD
SET 4: I/CI-0IF ELECTRICAL CLOSET BEST BASIS V EXIT TRIM P/N EXBV-7-EV-IB-MS-626-LHR- PH2-RM-SH-TRK2 PRECISION APEX 2000 RIM EXIT DEVICE 2103LD X TRIM X SWING X 630 (THIS P/N IS NOT COMPLETE. CONFIRM W/ BEST) BEST COREMAX CORE - 7 PIN STANLEY CLOSER D4550-STD-680-SN STANLEY HEAVY DUTY HINGE @3 CBI68 4 I/2 X 4 ½-630 WALL STOP ROCKWOOD 400 SILENCERS	SET 6: I/DI-0IA ELECTRICAL CLOSET I BEST BASIS V EXIT TRIM P/N EXBV-7-EV-I5-MS-626-LHR- PH2-RM-SH-TRK2 I PRECISION APEX 2000 RIM EXIT DEVICE 2103LD X TRIM X SWING X 630 (THIS P/N IS NOT COMPLETE. CONFIRM W/ BEST) I BEST COREMAX CORE - 7 PIN I STANLEY CLOSER D4550-STD-680-SN 3 STANLEY HEAVY DUTY HINGE @3 CBI68 4 I/2 X 4 ½-630 I WALL STOP ROCKWOOD 400 3 SILENCERS	SET 6: I/DI-0IB RESTROOM I BEST PRIVACY LOCK 7KC-3-0-L-IB-D-S3-626 I BEST CLASSROOM DEADBOLT 8T3-7-S-STK-626 I BEST COREMAX CORE - 7 PIN 3 STANLEY HEAVY DUTY HINGE @3 CBI68 4 I/2 X 4 ½-630 I WALL STOP ROCKWOOD 409 3 SILENCERS
SET 7: I/DI-0IC RESTROOM BEST PRIVACY LOCK 7KC-3-0-L-I5-D-S3-626 BEST CLASSROOM DEADBOLT 8T3-7-S-STK-626 BEST COREMAX CORE - 7 PIN STANLEY HEAVY DUTY HINGE @3 CBI68 4 I/2 X 4 ½-630 WALL STOP ROCKWOOD 409 SILENCERS	SET 8: I/DI-0ID UTILITY CLOSET I BEST BASIS V CYLINDRICAL LOCK 0KBV-3-7-DV-IB-MS-626-TRK2 I BEST COREMAX CORE - 7 PIN I STANLEY CLOSER P4550-STD-680-SN 3 STANLEY HEAVY DUTY HINGE @3 CBI68 4 I/2 X 4 ½-630 I WALL STOP ROCKWOOD 400 3 SILENCERS	
	GENERAL DOOR HARDWARE NOTES	

3. ALL MANUFACTURERS LISTED ABOVE ARE BASIS OF DESIGN & A UNIVERSITY STANDARD, ALL SUBSTITUTIONS MUST BE APPROVED PRIOR TO ANY WORK.

3 DOOR HARDWARE SCHEDULE
A-6 SCALE: N.T.S.

4. ALL THE CORES WILL BE BEST SFIC, UNIVERSITY STANDARD (TYP.)

2. ALL HARDWARE NOTE ABOVE IS PER LEAF, UNLESS OTHERWISE NOTED (TYP.)

OWNERSHIP OF DOCUMENTS: This document, ideas and designs incorporated herein, are instruments of Yezzi Associates to insure conformance with clients scope of wall-

DOOR SCHEDULES, DOOR DETAILS, & RESTROOM ACCESSORY SCHEDULE

JUNE 25, 2020

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GENER A

- . GENERAL NOTES, SYMBOL LISTS AND DETAILS ARE APPLICABLE TO ALL MECHANICAL DRAWINGS LABELED "M".
- 2. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS AND LABOR TO PROVIDE COMPLETE AND WORKING MECHANICAL SYSTEMS WHETHER SPECIFIED OR IMPLIED.
- 3. ALL NECESSARY PERMITS AND INSPECTIONS SHALL BE PROCURED BY THE CONTRACTOR AND ALL FEES PAID BY THE COUNTY. ALL LICENSES REQUIRED BY CONTRACTOR SHALL BE PROCURED AND PAID BY THE CONTRACTOR. SUBMIT TO THE OWNER DUPLICATE

CERTIFICATES OF INSPECTION FROM THE APPROVED INSPECTION AGENCIES.

- 1. THE ENTIRE MECHANICAL INSTALLATION SHALL CONFORM TO THE LOCAL CODE, STATE LAWS, 2018 IMC, 2018 IBC, AGA, NFPA, NSPC, ASME, IFGC AND ALL OTHER GOVERNING AUTHORITIES.
- 5. DO NOT SCALE THE DRAWINGS FOR EXACT DIMENSIONS. VERIFY ALL FIGURES, CONDITIONS, DIMENSIONS, ETC., AT THE JOB SITE.
- 6. CONTRACTOR SHALL GUARANTEE THE COMPLETE INSTALLATION AGAINST DEFECTS IN THE WORKMANSHIP AND MATERIALS.
- 7. THE CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES TO PREVENT INTERFERENCE BETWEEN BEAMS, STRUCTURES, PIPING, CONDUITS, LIGHTING FIXTURES, FIRE ALARM DEVICES, FIRE SPRINKLERS, ETC.
- 8. ALL MECHANICAL EQUIPMENT SHALL BE LOCATED AT A MINIMUM FLOOR ELEVATION ABOVE THE AREA'S FEMA BASE FLOOR ELEVATION. PROVIDE ALL NECESSARY STRUCTURES. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 9. ALL MATERIALS USED IN CONSTRUCTION SHALL HAVE A FLAME SPREAD RATING OF 25 OR LESS, A SMOKE DEVELOPMENT RATING OF 50 OR LESS, AND A FUEL CONTRIBUTED RATING OF 25 OR LESS. ALL MATERIALS SHALL BE "SELF-EXTINGUISHING".
- 10. ALL PIPING, CONDUIT AND DUCT PENETRATIONS OF "FIRE RATED BUILDING CONSTRUCTION" SHALL BE SLEEVED AND SEALED WITH A FIRE BARRIER MATERIAL EQUAL TO 3M "PENETRATION SEALING SYSTEMS". REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATING OF BUILDING CONSTRUCTION.
- 11. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- 12. CONTRACTOR SHALL PROVIDE COMPLETE SETS OF BOUND OPERATING AND MAINTENANCE INSTRUCTIONS. CONTRACTOR SHALL INSTRUCT THE OWNER OR HIS AGENT WITH REGARD TO THE PROPER USE OF THE SYSTEM UNTIL SUCH INSTRUCTION IS COMPLETE TO THE OWNER'S SATISFACTION. OPERATION AND MAINTENANCE MANUAL SHALL INCLUDE A VALVE SCHEDULE IF VALVES ARE INSTALLED AS PART OF THE NEW WORK.
- 13. MECHANICAL CONTRACTOR SHALL LABEL ALL NEW MECHANICAL EQUIPMENT, PIPING AND VALVES (INDOORS AND OUTDOORS) IN A PERMANENT MANNER. MECHANICAL PIPING SHALL BE LABELED IN ACCORDANCE WITH ASME A13.1 FOR LETTERING SIZE, LENGTH OF COLOR FIELD, COLORS, AND VIEWING ANGLES OF IDENTIFICATION. DIRECTION OF FLOW SHALL BE IDENTIFIED WITH DIRECTIONAL ARROW TAPE. VALVES SHALL BE IDENTIFIED WITH BRASS VALVE TAGS, ATTACHED WITH SOLID BRASS CHAINS AND "S" HOOKS. VALVE TAGS SHALL BE COORDINATED WITH VALVE SCHEDULE PROVIDED IN OPERATION AND MAINTENANCE MANUAL. MECHANICAL EQUIPMENT SHALL BE LABELED WITH ENGRAVED PLASTIC TAGS WITH MOUNTING HOLES AND STAINLESS STEEL SCREWS. ALL LABELING SHALL HAVE HIGH CONTRAST BETWEEN LETTER AND BACKGROUND COLORS AND SHALL BE LOCATED FOR EASY VISIBILITY.
- 14. ALL MECHANICAL EQUIPMENT AND APPLIANCES INSTALLED SHALL BEAR THE LABEL OF AN APPROVED AGENCY.
- 15. THE ENTIRE MECHANICAL INSTALLATION SHALL BE MADE IN ACCORDANCE WITH THE 2018 INTERNATIONAL MECHANICAL CODE (IMC) AND ANY ADOPTED SUPPLEMENTS, AS ADOPTED BY THE STATE OF NEW JERSEY.
- 16. PROVIDE VIBRATION ISOLATION MOUNTINGS FOR ALL MOTOR OPERATED EQUIPMENT AND AS RECOMMENDED BY THE MANUFACTURER.
- 17. ALL EXTERIOR WALL OPENINGS SHALL BE SLEEVED, PROPERLY CAULKED AND SEALED WITH A HIGH QUALITY SEALANT TO PREVENT INFILTRATION OF MOISTURE AND OUTSIDE AIR.
- 18. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL. CONTRACTOR ALL POWER REQUIREMENTS OF MECHANICAL EQUIPMENT. ELECTRICAL CONTRACTOR SHALL PROVIDE POWER WIRING TO ALL MECHANICAL EQUIPMENT. ELECTRICAL CONTRACTOR SHALL FURNISH LOOSE MOTOR STARTERS AND DISCONNECT SWITCHES. INTEGRAL DISCONNECT SWITCHES SHALL BE PROVIDED WITH EQUIPMENT WHERE POSSIBLE. MECHANICAL CONTRACTOR SHALL PROVIDE ALL CONTROL AND INTERLOCK WIRING AND ALL THERMOSTATS AND ACCESSORIES.
- 19. ALL DUCT MOUNTED SMOKE OR HEAT DETECTORS SHALL BE FURNISHED AND WIRED BY THE FIRE ALARM CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR. THE FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR THE WIRING OF ALL DUCT MOUNTED DETECTORS TO ENSURE A COMPLETE OPERATING SYSTEM. THE FIRE ALARM CONTRACTOR SHALL REFER TO THE MECHANICAL DRAWINGS FOR THE LOCATIONS OF ALL DUCT MOUNTED DETECTORS. ALL DUCT MOUNTED DETECTORS AND THEIR ASSOCIATED WIRING SHALL CONFORM TO ARTICLE 300-22 OF THE 2014 EDITION OF THE NATIONAL ELECTRIC CODE. MECHANICAL CONTRACTOR'S CONTROL'S SUBCONTRACTOR IS RESPONSIBLE FOR ALL DEDICATED WIRING (AND ASSOCIATED CONTROLS PROGRAMMING) BETWEEN DUCT SMOKE AND HEAT DETECTORS REQUIRED FOR AIR HANDLING UNITS' SMOKE CONTROL OPERATIONS.
- 20. PROVIDE BALANCING OF ALL AIR SYSTEMS PER AABC, NEBB OR TABB STANDARDS. SUBMIT TEST DATA AND DEMONSTRATE IN FIELD.
- 21. EQUIPMENT ACCESS: CONTRACTOR SHALL PROVIDE ACCESS FOR CONTROL DEVICES, HEAT EXCHANGERS AND HVAC SYSTEMS THAT UTILIZE ENERGY AND ARE LOCATED IN CONCEALED PLACES. ACCESS SHALL BE PROVIDED FOR INSPECTION, REPAIR, SERVICE AND REPLACEMENT WITHOUT THE NEED FOR DISMANTLING ANY PERMANENT CONSTRUCTION INCLUDING WALLS, DUCTS, PIPING, ETC. CONSTRUCTION SHALL BE AS DESCRIBED PER THE 2018 INTERNATIONAL MECHANICAL CODE (IMC), SECTION 306.1, AS ADOPTED BY THE STATE OF NEW JERSEY.
- 22. PRIOR TO CONSTRUCTION, MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE ELECTRONIC COORDINATION DRAWINGS FOR ALL TRADES, WHICH SHALL BE SUBMITTED TO ARCHITECT FOR REVIEW. MECHANICAL CONTRACTOR SHALL COORDINATE THIS EFFORT WITH ALL OTHER TRADES PERFORMING WORK ON THE PROJECT. ANY CONFLICTS BETWEEN TRADES MUST BE RESOLVED PRIOR TO CONSTRUCTION.
- 23. SUBMIT 1/4" SCALE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. COORDINATE WITH ALL TRADES. SUBMIT TO THE ARCHITECT FOR APPROVAL, DUPLICATE SPECIFICATION SHEETS OF ALL EQUIPMENT SUPPLIED OR INSTALLED, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- A. EXHAUST FANS
- B. INDOOR AIR HANDLING UNITS
- C. CONDENSING UNITS
 D. SPLIT SYSTEM AIR CONDITIONING AND HEAT PUMP SYSTEMS
- E. GRILLES, REGISTERS & DIFFUSERS
 F. DUCTWORK LAYOUTS
- G. DUCTWORK SPECIALTIES & APPURTENANCES
- H. AUTOMATIC TEMPERATURE CONTROL SYSTEMS (INCLUDING BUILDING MANAGEMENT SYSTEM)
- I. COORDINATION DRAWINGS.J. "AS-BUILT" DRAWINGS.

<u>DUCTWORK</u>

1. UNLESS OTHERWISE NOTED, ALL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL G90 GRADE PER SMACNA. ALL DUCTS CONSTRUCTED OF GALVANIZED STEEL SHEET METAL SHALL HAVE MINIMUM GAGE THICKNESS AS FOLLOWS:

MAXIN THRO 13 31 55 OVER	UGH - - -	12 30 54 84 84	GAGE 26 24 22 20 16
DIAME THRO 13 19 29 37	UGH - - - -	(IN.) 12 18 28 36 52	<u>GAGE</u> 26 24 22 20 18

PROVIDE ALL NECESSARY CROSS-BREAKING AND DUCT REINFORCING AS REQUIRED PER SMACNA RECOMMENDATIONS.

- 2. ALL DUCTWORK SHALL BE DESIGNED, CONSTRUCTED AND INSTALLED PER SMACNA STANDARDS.
- 3. ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS (ADHESIVES), MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS, LIQUID SEALANTS OR TAPES. CLOSURE SYSTEMS, TAPES AND MASTICS USED TO SEAL METALLIC AND FLEXIBLE AIR DUCTS AND FLEXIBLE AIR CONNECTORS SHALL COMPLY WITH UL 181B AND SHALL BE MARKED "181B-FX" FOR PRESSURE-SENSITIVE TAPE OR "181B-M" FOR MASTIC. DUCT CONNECTIONS TO FLANGES OF AIR DISTRIBUTION SYSTEM EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED. MECHANICAL FASTENERS FOR USE WITH FLEXIBLE NONMETALLIC AIR DUCTS SHALL COMPLY WITH UL 181B AND SHALL BE MARKED "181B-C." CLOSURE SYSTEMS USED TO SEAL METAL ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 4. DUCT SIZES SHOWN ON DRAWINGS ARE CLEAR DIMENSIONS.
- 5. COORDINATE LOCATION OF DUCTWORK, PIPING, AND DIFFUSERS WITH ALL OTHER TRADES.
- 6. ALL DUCTWORK AND PIPING ABOVE CEILING AND IN AREAS WITHOUT CEILINGS SHALL BE INSTALLED AS HIGH AS POSSIBLE.
- 7. PROVIDE VOLUME DAMPERS AT ALL DUCT BRANCHES AND RUNOUTS.
 PROVIDE OPPOSED BLADE VOLUME DAMPERS AT ALL REGISTERS, GRILLES AND DIFFUSER NECKS IN SUPPLY, RETURN AND EXHAUST DUCTWORK WHETHER SHOWN ON DRAWINGS OR NOT.
- 8. PROVIDE PIPE SLEEVES FOR ALL MECHANICAL PIPING PENETRATING CONCRETE AND MASONRY WALLS. SEAL ALL ANNULAR SPACE BETWEEN SLEEVES AND DUCTWORK OR PIPING WITH A FIRE BARRIER MATERIAL EQUAL TO 3M "PENETRATION SEALING SYSTEM".
- 9. THE INSIDE OF ALL DUCTWORK VISIBLE THROUGH A GRILLE OR DIFFUSER SHALL BE PAINTED FLAT BLACK.
- 10. THE MECHANICAL CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF MASONRY RETURN AIR OPENINGS AND RECESSED EQUIPMENT WITH THE GENERAL CONTRACTOR.
- 11. ALL RETURN AIR OPENINGS SHALL BE ABOVE CEILING UNLESS NOTED OTHERWISE. PROVIDE AND INSTALL WIRE MESH SCREENS ON ALL OPENINGS.
- 12. ALL PIPING AND DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR SUSPENDED CEILING.
- 13. PROVIDE RETURN AIR OPENINGS AS REQUIRED. OPENING SHALL BE SIZED FOR REQUIRED CFM AT A VELOCITY NOT TO EXCEED 400 FEET PER MINUTE. PROVIDE LINTELS AS REQUIRED.
- 14. SUPPORTS FOR DUCTS SHALL BE INSTALLED AT INTERVALS OF NOT MORE THAN 10 FEET.
- 15. FLEXIBLE DUCTWORK CONCEALED ABOVE CEILING SHALL BE EQUAL TO THERMAFLEX PRO SERIES G-KM INSULATED FLEXIBLE DUCT (R-VALUE=4.2) WITH POLYETHYLENE VAPOR BARRIER JACKETING. FLEXIBLE DUCT EXPOSED TO VIEW SHALL BE EQUAL TO THERMAFLEX PRO SERIES M-KE INSULATED FLEXIBLE DUCTWORK WITH REINFORECED METALLIZED VAPOR BARRIER JACKETING. FLEX DUCT SHALL BE U.L. LISTED AND LABELED AS A CLASS 1 AIR DUCT, STANDARD 181. FLEX DUCT SHALL BE CONNECTED TO BRANCHES AND MAINS USING CONICAL FITTINGS AND SHALL NOT EXCEED 10'-0" IN LENGTH INCLUDING ONE ELBOW. FLEXIBLE DUCTWORK SHALL NOT BE USE AS RETURN AIR OR EXHAUST DUCTWORK.
- 16. DUCTWORK SHALL BE RATED FOR MINIMUM STATIC PRESSURES OF 2" E.S.P. SEAL ALL LONGITUDINAL SEAMS AND TRANSVERSE JOINTS WITH FIRE-PROOF SEALANT FOR "AIR-TIGHT" APPLICATION.
- 17. COORDINATE ALL EXTERIOR LOUVERS REQUIREMENTS WITH GENERAL CONTRACTOR AND ALL OTHER ASSOCIATED TRADES. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL EXTERIOR LOUVERS.

COORDINATION NOTE

RESPONSIBLE TO PREPARE ELECTRONIC COORDINATION DRAWINGS FOR

ALL TRADES, WHICH SHALL BE SUBMITTED TO ENGINEER FOR REVIEW. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TO

ELECTRICAL INSTALLATION WORK INCLUDING ALL LAYOUTS AND CUT

DRAWINGS. ANY CONFLICTS BETWEEN TRADES MUST BE RESOLVED

APPURTENANCES, ETC., FOR INCORPORATION INTO THE COORDINATION

PRIOR TO CONSTRUCTION, MECHANICAL CONTRACTOR SHALL BE

THE MECHANICAL CONTRACTOR ELECTRONIC COPIES OF ALL

SHEETS FOR ALL EQUIPMENT, FIXTURES, DEVICES, CONDUITS,

PRIOR TO CONSTRUCTION.

INSULATION

DUCTWORK INSULATION

- 1. ALL RIGID ROUND AND RECTANGULAR SUPPLY AND RETURN SHEET METAL DUCT "CONCEALED FROM VIEW" SHALL BE WRAPPED WITH 1-1/2" THICK FIBERGLASS DUCT INSULATION HAVING A CONDUCTIVITY OF .26 AT MEAN TEMPERATURE OF 75 DEGREES F. AND A DENSITY OF 1/5 PCF. INSULATION SHALL BE SCHULLER "MICRO-LITE" OR APPROVED EQUAL. THIS INCLUDES DUCTWORK BEYOND 20' OF AN AIR HANDLER.
- 2. ALL RIGID ROUND AND RECTANGULAR SUPPLY AND RETURN SHEET METAL SUPPLY AIR DUCTWORK <u>WITHIN 20' OF AN AIR HANDLER</u> SHALL BE LINED WITH ONE (1") THICK FIBERGLASS SPIRAL DUCT THERMAL/ACOUSTIC LINING HAVING A CONDUCTIVITY OF .23 AND R-VALUE OF 4.3 AT MEAN TEMPERATURE OF 75 F. INSULATION SHALL BE JOHNS-MANVILLE "SPIRACOUSTIC PLUS" OR APPROVED EQUAL.
- 3. INSULATION MUST BE FIRE RATED FOR FLAME SPREAD OF 25 OR LESS AND SMOKE DEVELOPED FOR 50 OR LESS.
- 4. ALL INSULATION SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 5. EXHAUST DUCTWORK SHALL BE UNINSULATED EXCEPT BETWEEN
 BACKDRAFT DAMPER AND EXHAUST LOUVER. EXHAUST DUCTWORK
 BETWEEN BACKDRAFT DAMPER AND EXHAUST LOUVER SHALL BE WRAPPED
 WITH 1-1/2" THICK FIBERGLASS DUCT INSULATION HAVING A CONDUCTIVITY
 OF .26 AT MEAN TEMPERATURE OF 75 DEGREES F. AND A DENSITY OF
 1.5 PCF. INSULATION SHALL BE SCHULLER "MICROLITE" OR APPROVED
- 6. OUTSIDE AIR DUCTWORK BETWEEN THE POINT OF CONNECTION TO RETURN AIR DUCTWORK OR RETURN AIR PLENUM AND OUTSIDE AIR INTAKE LOUVER SHALL BE WRAPPED WITH 1-1/2" THICK FIBERGLASS DUCT INSULATION HAVING A CONDUCTIVITY OF .26 AT MEAN TEMPERATURE OF 75 DEGREES F. AND A DENSITY OF 1.5 PCF. INSULATION SHALL BE SCHULLER "MICROLITE" OR APPROVED EQUAL.

REFRIGERANT PIPING

- REFRIGERANT PIPING SHALL BE TYPE "L" OR TYPE "ACR" HARD DRAWN COPPER WITH WROUGHT COPPER FITTINGS, JOINED USING 45% SILVER BRAZING SOLDER AND SILVER BRAZING FLUX.
- PROVIDE LIQUID LINE REFRIGERANT SIGHT GLASS/MOISTURE INDICATOR.
 PROVIDE LIQUID AND SUCTION LINE FILTER/DRYERS AS REQUIRED.
- 4 INSULATE REFRIGERANT SUCTION LINE WITH 1" THICK ARMAFLEX INSULATION.
- 5 REFRIGERANT ACCESS PORTS SHALL BE PROTECTED IN ACCORDANCE WITH IMC 2018 SECTION 1101.10.

GRILLES, REGISTERS AND DIFFUSERS

- 1. ALL SIZES OF CEILING DIFFUSERS, EXHAUST GRILLES AND RETURN GRILLES SHOWN ON DRAWINGS ARE MODUAL SIZES, NECK SIZES ARE INDICATED WITH THE ABREVIATION OF "NK".
- 2. ALL CEILING DIFFUSERS SHOWN ON DRAWINGS ARE 4-WAY UNLESS OTHERWISE 2. FULLY COORDINATE WITH ARCHITECT, OWNER AND ALL OTHER NOTED
- 3. ALL CEILING DIFFUSERS SHALL HAVE OPPOSED BLADE DAMPERS. ALL SIDEWALL MOUNTED SUPPLY GRILLES SHALL BE DOUBLE
- 4. DEFLECTION UNLESS OTHERWISE NOTED.
- 5. ALL CEILING DIFFUSERS SHALL BE OF ALUMINUM CONSTRUCTION UNLESS OTHERWISE NOTED.
- 6. PROVIDE SQUARE TO ROUND ADAPTORS AS NECESSARY.
- 7. ALL CEILING DIFFUSERS SHALL BE 24"X24" LAY-IN MODULES UNLESS OTHERWISE NOTED.

CONDENSATE PIPING

- 1. PIPING SHALL BE RIGIDLY SUPPORTED AT INTERVALS OF NOT MORE THAN 10
- 2. PROVIDE DIELECTRIC UNIONS IN PIPING WHERE DISSIMILAR METALS ARE JOINED TOGETHER.
- 3. THE SIZE OF ALL PIPING SHALL BE AS SHOWN ON THE DRAWINGS, OR WHERE NOT SHOWN, AS REQUIRED.
- 4. ALL COPPER PIPING SHALL BE JOINED USING 95-5 TIN/ANTIMONY SOLDER.
- 5. ALL CONDENSATE DRAIN LINES SHALL BE PIPED TO FULL SIZE OF THE UNITS DRAIN OUTLET AND PROVIDED WITH A "P" TRAP SIZED AT MINIMUM TO EXCEED FAN STATIC PRESSURE. CONNECT CONDENSATE DRAINS TO PLUMBING LINES AS INDICATED ON DRAWINGS. EXTEND LINES ON ROOF MOUNTED EQUIPMENT
- 6. <u>CONDENSATE DRAINAGE:</u> DWV COPPER TUBING, PITCHED DOWN A MINIMUM OF 1/8" PER FOOT AWAY FROM UNIT.
- 7. INSULATION SHALL CARRY THROUGH ALL WALL AND FLOOR PENETRATIONS AND PIPE HANGERS.
- 8. PROVIDE GALVANIZED METAL SHIELDS FORMED TO FIT THE INSULATION BETWEEN HANGERS AND FINISHED INSULATIONS.

SPECIFICATION NOTE

IF THE CONTRACTOR DISCOVERS A DISCREPANCY BETWEEN THE BOOK SPECIFICATION AND THE DRAWING SPECIFICATION, CONTRACTOR SHALL IMPLEMENT THE MORE STRINGENT OF THE TWO.

ALTERATIONS TO EXISTING SYSTEMS AND DEMOLITION

- 1. IT IS THE INTENT THAT ALL EXISTING PIPING, DUCTWORK, FIXTURES AND OTHER EQUIPMENT AND MATERIALS THAT INTERFERE WITH THE ALTERED EXISTING BUILDING ARRANGEMENTS AND NEW SYSTEMS BE REMOVED, RELOCATED, REROUTED OR ABANDONED. THE DRAWINGS GENERALLY INDICATE MAJOR ITEMS OF EXISTING MATERIALS AND EQUIPMENT THAT ARE TO BE REMOVED, RELOCATED, REROUTED OR ABANDONED BY EACH TRADE. IT IS NOT POSSIBLE TO INDICATE ALL RELATED ACCESSORIES, SPECIALTIES AND OTHER MINOR ITEMS. HOWEVER, THEIR REMOVAL, RELOCATIONS, REROUTING OR ABANDONMENT SHALL ALSO BE INCLUDED IN THIS CONTRACT AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- 2. EXISTING CONCEALED AND EXPOSED EQUIPMENT AND MATERIALS THAT WILL BECOME ABANDONED DUE TO NEW WORK SHALL BE REMOVED BACK TO ACTIVE RISER AND MAIN AND PROPERLY PLUGGED OR CAPPED BEHIND FINISHED SURFACES.
- 3. ALL EXISTING PIPING TO BE DEMOLISHED MAY NOT BE SHOWN. CONTRACTOR SHALL DURING PRE-BID SITE VISIT DETERMINE EXTENT OF DEMOLITION AND INCLUDE COST OF THIS WORK IN BID. SHOULD A CONTRACTOR REQUIRE REMOVAL, RELOCATION OR REROUTING OF ANOTHER TRADE'S WORK THAT IS NOT INDICATED ON DRAWINGS, THE CONTRACTOR REQUIRING SUCH WORK SHALL BE RESPONSIBLE FOR THAT WORK, AND PAY ALL REQUIRED COSTS ALL UNKNOWN BELOW SLAB PIPING ENCOUNTERED DURING INSTALLATION OF NEW WORK SHALL BE REMOVED AND CAPPED OFF AT ACTIVE MAIN OR BRANCH. ALLOWANCE SHALL BE MADE FOR THESE ITEMS IN BID PRICE.
- 4. EXISTING EQUIPMENT AND MATERIALS THAT ARE TO REMAIN, BUT BECOME EXPOSED DUE TO NEW WORK, SHALL BE RELOCATED AND RECONNECTED AS DIRECTED BY ARCHITECT.
- ALL WORK INVOLVING ALTERATIONS TO EXISTING SYSTEMS, EQUIPMENT AND MATERIALS SHALL BE REVIEWED WITH ARCHITECT AND OWNER BEFORE BEGINNING WORK.
- 6. REMOVED EQUIPMENT AND MATERIALS NOT DESIRED BY OWNER SHALL BECOME PROPERTY OF CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM SITE. EQUIPMENT AND MATERIALS DESIRED BY OWNER SHALL BE DELIVERED BY CONTRACTOR TO AN ON-SITE STORAGE LOCATION DESIGNATED BY OWNER.
- 7. THE CONTRACTOR MUST SURVEY AND VERIFY LOCATIONS AND PHYSICAL SIZES OF ALL EXISTING ITEMS AND DETERMINE WHETHER RELOCATION OR REROUTING WILL BE REQUIRED. IF RELOCATION OR REROUTING IS REQUIRED, INCLUDING THAT OF ALL RELATED ACCESSORIES, SPECIALTIES AND OTHER MINOR ITEMS, THE CONTRACTOR SHALL INCLUDE ALL NECESSARY WORK AS PART OF HIS CONTRACT AND IT SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- 8. CONTRACTOR SHALL PATCH AND REPAIR ALL ROOF, FLOOR AND WALL OPENINGS RESULTING FROM THE DEMOLITION OF EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING, DEVICES, ETC. COORDINATE THIS WORK WITH OWNER'S REPRESENTITIVES PRIOR TO DEMOLITION.

CONTINUITY OF EXISTING SYSTEMS AND SERVICES

- 1. ALL WORK SHALL BE PERFORMED AT SUCH TIME AND IN SUCH MANNER AS WILL LEAST INTERFERE WITH MAINTENANCE AND OPERATION OF OWNER'S ACTIVITIES. PROVISIONS SHALL BE MADE TO PERMIT OWNER'S USE OF ALL THE BUILDING AND OF EXISTING SYSTEMS AT ALL TIMES. PROVIDE TEMPORARY FACILITIES TO SECURE THESE CONDITIONS. REMOVE TEMPORARY FACILITIES WHEN PERMANENT WORK HAS BEEN PLACED INTO SERVICE.
- 2. FULLY COORDINATE WITH ARCHITECT, OWNER AND ALL OTHER TRADES, ALL WORK INVOLVING SHUT-DOWN AND INTERRUPTION OF EXISTING SYSTEMS AND SERVICE.
- 3. SHUT-DOWN OF EXISTING SERVICES WHERE REQUIRED TO INSTALL NEW SYSTEMS OR ALTER EXISTING, SHALL BE PERFORMED DURING HOURS THAT THE BUILDING IS NOT BEING USED BY OWNER. ALL COSTS FOR PERFORMING THIS WORK SHALL BE BORNE BY THE CONTRACTOR AND WITHOUT "EXTRA" COST TO THE OWNER.
- 4. EXISTING SYSTEMS AND SERVICES THAT ARE TEMPORARILY DISCONNECTED, BUT ARE TO REMAIN IN USE, SHALL BE PERMANENTLY RECONNECTED AND RETURNED TO PROPER OPERATION

 ABV

CD

CFM

CLG

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OBD

RA

(R)

(RE)

S.P.

T'STAT

TYP

VAV

VFD

WMS

RELOCATE EXISTING

RETURN GRILLE

SUPPLY GRILLE

STATIC PRESSURE

TRANSFER DUCT

VARIABLE AIR VOLUME

WIRE MESH SCREEN

VARIABLE FREQUENCY DRIVE

THERMOSTAT OR TEMPERATURE SENSOR

SUPPLY AIR

TYPICAL

ALL SYMBOLS OR ABBREVIATIONS ARE NOT

NECESSARILY USED ON THE CONTRACT DRAWINGS.

EXIST. (E)

5. FULLY COORDINATE WITH ARCHITECT, OWNER AND OTHER TRADES TO INSURE COMPLETE CONTINUITY OF ALL SYSTEMS AND

MECHANICAL PIPING LEGEND → — - • — → CONDENSATE DRAIN

DUCTWORK SYMBOLS

(WIDTH X DEPTH)

ROUND DUCT SIZE

(DIAMETER)

FLEXIBLE DUCT

SUPPLY DUCT

(DIAMETER SIZE)

CROSS SECTION UP

SUPPLY DUCT DN

RETURN OR EXHAUST

RETURN OR EXHAUST

SQUARE ELBOW WITH

RADIUS TURN ELBOW

TURNING VANES

CEILING DIFFUSER

ON TAKE-OFF

W/FLEXIBLE DUCT

& VOLUME DAMPER

TRANSFER DUCT ABV

CLG WITH WIRE MESH

SCREEN ON END

DUCT END CAP

VOLUME DAMPER

1" UNDERCUT DOOR

BACKDRAFT DAMPER

MOTOR OPERATED DAMPER

FIRE DAMPER

THE SYMBOLS FOR WORK TO BE DEMOLISHED AND REMOVED ARE THE SAME

AS THOSE ABOVE EXCEPT THEY ARE DRAWN WITH A DASHED LINETYPE.

SUPPLY OR OUTDOOR AIR FLOW DIRECTION

RETURN OR EXHAUST AIRFLOW DIRECTION

DUCT DN

CROSS SECTION UP

DOUBLE LINE

< 24X24 <

24″ø

<u>—</u> 24"ø

SINGLE LINE

NOTE: PIPING TO BE DEMOLISHED ARE SHOWN IN A DASHED LINETYPE.

ABBREVIATIONS MECHANICAL SYMBOLS

ABOVE BLACK IRON		<u> </u>	REVISION NUMBER
CEILING DIFFUSER CUBIC FEET PER MINUTE		O	THERMOSTAT
CEILING			CEILING DIFFUSER
DEMOLISH AND REMOVE DEMOLISH AND REMOVE DOWN			RETURN REGISTER OR EXHAUST GRILLE
EXHAUST AIR		●	CONNECTION POINT
EXHAUST GRILLE EXISTING		♦	DISCONNECT POINT
EXISTING TO REMAIN		D	DUCT SMOKE DETECTOR
LINEAR DIFFUSER MINIMUM NEW		(S)	SENSOR
NECK	· ·		
OPPOSED BLADE DAMPER			
RETURN AIR			
EXISTING SHOWN RELOCATED			

Anthony H. Caucci New Jersey Lic. # 44806

DR

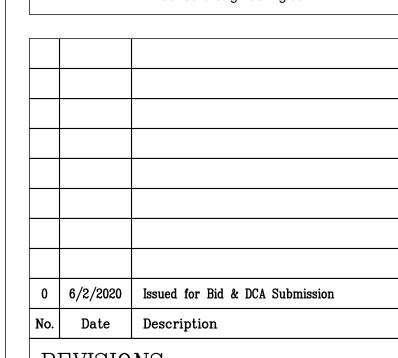
Professional Engineer
Anthony H. Caucci

CLIENT: YEZZI ASSOCIATES

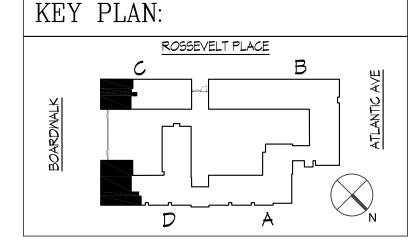
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REVISIONS:



PROJECT

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

MECHANICAL NOTES, LEGEND,
SYMBOLS & ABBREVIATIONS

SHEET: 12 OF 49

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PROJECT NO .:

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	SPLIT DOAS UNIT SCHEDULE																														
INDOOR U	IIT																				OUTDOOR UI	NIT									
								MAIN COI	L					REHEAT CO	OIL		ELECTRICAL										1				
										E.A.T.	(°F)	L.A.T	. (°F)														, 				
						0.1.50.05	41051 014		CENICIDI F							1									-0-4 1		, 				
						OUTSIDE			SENSIBLE	DB				TOTAL		L.A.T.								TOTAL	TOTAL		, '			\\/	
						AIR	RATE			(SUMMER		DB		HEATING	E.A.T.	DB/WB				WEIGHT				COOLING			'			WEIGHT	
UNIT	MFR	MODEL	QTY	STYLE	SERVING	(CFM)	(CFM)	(BTUH)	(BTUH)	/WINTER)	WB	(SUMMER)	WB	(BTUH)	(°F)	(°F)	V/PH/HZ	MCA	MOCP	(LBS)	UNIT	MFR	MODEL	(BTUH)	(BTUH)	EER	V/PH/HZ	MCA	MOCP	(LBS)	NOTES
BUILDING	•																														
AHU-1	FRESH ACCESS	AM120NNDDCV/AA	1	DUCTED	MISC	650	950	88,800	0	88.2 / 25	71.0	51.0	51.0	61,800	29.0	72 / 58.6	208V/1Ø/60	8.9	15	550	CU-1	SAMSUNG	AM096FXVAJR2AA	96,000	108,000	11.9	480/3/60	19	25	600	ALL NOTES, BASE BID
BUILDING										•																			-		<u> </u>
AHU-2	FRESH ACCESS	AM200NNDDCV/AA	1	DUCTED	RETAIL	1175	1525	146,800	0	88.2 / 25	71.0	53.0	53.0	98,700	25.0	72 / 58.7	208V/1Ø/60	14.5	15	625	CU-2	SAMSUNG	AM168HXVAJR2AA	168000	189,000	10.6	480/3/60	33	40	800	ALL NOTES, ALT BID

1. PROVIDE ELECTRICAL DISCONNECT SWITCH - INDOOR AND OUTDOOR UNITS

2. MOUNT INDOOR UNIT WITH CONDENSATE PUMP - COORDINATE WITH LOCATION ON PLAN

3. PROVIDE INTERCONNECTING CONTROL WIRE AND REFRIGRERANT PIPING AND OUTDOOR UNITS

4. PROVIDE INDOOR UNIT WITH WALL MOUNTED TEMPERATURE CONTROLS, HANGING RODS WITH VIBRATION ISOLATIOR.

5. PROVIDE LOW AMBIENT CONTROL KIT

6. PROVIDE DDC CONTOLLER CAPABLE OF INTERFACING WITH BUILDING MANAGEMENT SYSTEM

7. PROVIDE MERV 8 FILTER FOR ALL INDOOR UNITS

8. PROVIDE EMERGENCY DRAIN PAN UNDER ALL INDOOR UNITS.

9. PROVIDE A MODE CONTROL UNIT (MCU) FOR THE MAIN (COOLING) AND REHEAT COILS & ALL NECESSARY COMPONENTS.

10. PROVIDE AN ENTHALPY SENSOR IN THE OUTSIDE AIR STREAM BEFORE THE COOLING COIL.

11. AHU-1 ACTUAL LAT W/RH IS 72.0°F. AHU-2 ACTUAL LAT W/RH IS 79.0 °F. SET BOTH AHU-1 & 2 TO PROVIDE 72.0° F LAT.

12. AHU-1 ACTUAL HEATING LAT IS 80.4 °F. AHU-2 ACTUAL HEATING LAT IS 75.1 °F, SET BOTH AHU-1 & 2 TO PROVIDE 72° F LAT.

13. PROVIDE DOAS INDOOR COILS AND OUTDOOR UNITS WITH SEASHORE COATING.

	SCHEDULE OF AIR DEVICES
CD-1	CEILING DIFFUSER EQUAL TO KRUEGER MODEL 5SHR, ALUMINUM, FIXED DISCHARGE WITH ADJUSTABLE
	1, 2, 3 OR 4-WAY THROW. BORDER TYPE SHALL BE LAY-IN OR SURFACE MOUNT AS REQUIRED. ACTIVE
	DIFFUSER FACE AREA SHALL BE MAXIMUM AVAILABLE. PROVIDE MANUFACTURER'S ALUMINUM
ı	OPPOSED BLADE LEVER OPERATED DAMPER AND ROUND NECK ADAPTOR PER SIZES SHOWN ON PLAN.
	FINISH SHALL BE BAKED ACRYLIC PAINT, COLOR AS SELECTED BY ARCH. ALL DIFFUSERS ARE 24X24 FACE.
	NECK SIZE TO BE DETERMINED BY MANUFACTURER FOR AN NC LEVEL LESS THAN 30.

CEILING/SIDEWALL RETURN GRILLE EQUAL TO KRUEGER MODEL S585H-OBD, ALUMINUM WITH 1-1/4" BORDER ON ALL SIDES AND A MINIMUM BORDER THICKNESS OF 0.040 INCHES. GRILLE SHALL BE FIXED 45° DEFLECTION WITH 1/2" BLADE SPACING, FRONT BLADES PARALLEL TO LONG DIMENSION. BORDER TYPE AS REQUIRED. PROVIDE WITH ALUMINUM OPPOSED BLADE DAMPER. FINISH SHALL BE BAKED ON ACRYLIC PAINT, COLOR AS SELECTED BY ARCHITECT. NECK SIZE AS SHOWN ON DRAWINGS.

*MATCH WITH EXISTING AIR DEVICES.

	EXHAUST FAN SCHEDULE EF #														
FAN	ТҮРЕ	SERVING	MODEL NUMBER	CFM	E.S.P. IN W.C.	FRPM	НР	DRIVE	V/PH/HZ	NOTES					
EF-1, 2	CABINET CEILING	OPERATION OCC SENSOR	MFR LOREN COOK	RESTROOM	GC-186	125	0.75	929	66W		120V/1Ø/60	1 THRU 6 (ALT BID)			
EF-3	IN LINE	INTERLOCK W/AHU-1	СООК	PLENUM	GN-740	500	0.5	1453	3.9A	DIRECT	120V/1Ø/60	1,2,3,5,6,7 (BASE BID)			
EF-4	IN LINE	INTERLOCK W/AHU-2	COOK	PLENUM	GN-960	1,075	0.5	1029	5.6A	DIRECT	120V/1Ø/60	1,2,3,5,6,7 (ALT BID)			

1. PROVIDE COMBINATION DISCONNECT SWITCH AND MOTOR STARTER.

2. PROVIDE ALUMINUM BACKDRAFT DAMPER

3. SUPPORT WITH HANGING RODS AND VIBRATION ISOLATOR KIT FOR SUSPENDED INSTALLATION

4. PROVIDE WALL CAP

5. PROVIDE ECM MOTOR

6. PROVIDE MOTOR MOUNTED SPEED CONTROL

7. PROVIDE ALUMINUM CONSTRUCTION, ALUMINUM OBD'S AND INSULATED HOUSING FOR EF-3 & EF-4.

							HEA ⁻	T PUMP SC	HEDULE										
INDOOR U	INIT											OUTDOOR UI	NIT						
										NOMINAL									
							TOTAL	TOTAL		RUNNING									1
						AIRFLOW RATE	COOLING	HEATING		CURRENT									l
UNIT	SERVING	MFR	MODEL	STYLE	QUANTITY	(H/M/L)	(BTUH)	(BTUH)	V/PH/HZ	(A)	MOCP	UNIT	MODEL	COP	SEER/EER	V/PH/HZ	MCA	MOCP	NOTES
C BUILD	ING (BASE BID)																		
HP-30	RETAIL CONF. RM.	SAMSUNG	AC030MNHDCH/AA	DUCT S	1	883/777/671	30,000	32,000	208V/1Ø/60	*	-	CU-5-C	AC030JXADCH/AA	3.16	18.4 / 10.0	208V/1Ø/60	23	30	ALL NOTES
HP-24	EXISTING RETAIL, STORAGE	SAMSUNG	AC024MNHDCH/AA	DUCT S	1	700/620/530	24,000	27,000	208V/1Ø/60	*	-	CU-6-C	AC024JXADCH/AA	3.44	20 / 11.8	208V/1Ø/60	13.5	20	ALL NOTES
WHP-12	ELECTRICAL RM	SAMSUNG	AC012MNADCH/AA	WALL MNT	1	300/247/194	12,000	14,000	208V/1Ø/60	*	-	CU-7-C	AC012KXADCH/AA	2.4	18 / 9.8	208V/1Ø/60	10.7	15	ALL NOTES
D BUILD	ING (ALTERNATE BID)											_							
HP-36	RETAIL	SAMSUNG	AC036MNHDCH/AA	DUCT S	1	1,165/985/845	36,000	40,000	208V/1Ø/60	*		CU-6-D	AC036JXADCH/AA	3.54	20 / 11.5	208V/1Ø/60	26.5	40	ALL NOTES
HP-24	RETAIL	SAMSUNG	AC024MNHDCH/AA	DUCT S	1	700/620/530	24,000	27,000	208V/1Ø/60	*	-	CU-7-D	AC024JXADCH/AA	3.44	20 / 11.8	208V/1Ø/60	13.5	20	ALL NOTES
WHP-12	ELECTRICAL RM	SAMSUNG	AC012MNADCH/AA	WALL MNT	1	300/247/194	12,000	14,000	208V/1Ø/60	*	-	CU-8-D	AC012KXADCH/AA	2.4	18 / 9.8	208V/1Ø/60	10.7	15	ALL NOTES

PROVIDE INDOOR UNITS WITH:

1. VIBRATION ISOLATION MOUNTING

2. INTEGRAL DRAIN PUMP ON 1ST FLOOR UNITS.

3. MERV 8 DISPOSABLE FILTER.

4. WALL MOUNTED PROGRAMMABLE THERMOSTAT

*THE OUTDOOR UNIT SHALL SUPPLY POWER TO INDOOR UNIT

PROVIDE OUTDOOR UNITS WITH:

1. DETAILED REFRIGERANT PIPING DIAGRAMS INCLUDING SIZING, LENGTHS AND INCLUDE ALL RELATED ACCESSORIES.

2. INTEGRAL CONTROLLER.

3. INVERTER DRIVEN, DC SCROLL TYPE COMPRESSORS W/SOFT START 4. SEACOAST COATING ON COIL & CASING.

5. LOW AMBIENT OPEARATION CAPABILITY.

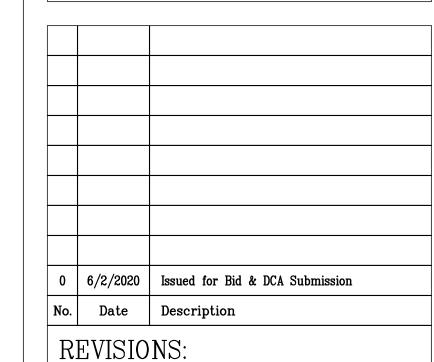
6. EQUIPMENT SUPPORT QUICK-SLING #QSMS1801 OR EQUAL.

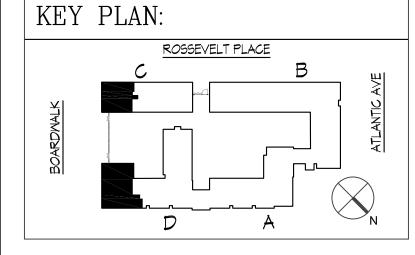
			V	ENTILA	TION SCHE	DULE	Ē						
					MECH	IANICAL	CODE REQUIRED V	'ENTILATIC	N RATE			DESIGN	
ROOM NO.	ROOM NAME	AREA (FT²)	VOLUME (FT ³)	NO. OF OCCUP. OR FIXTURES	AREA OUTDOOR AIR FLOWRATE (CFM/FT ²)	AREA O.A. REQ'D (CFM)	PEOPLE/FIXTURE OUTDOOR AIR FLOWRATE	PEOPLE O.A. REQ'D (CFM)	AIR DISTR. EFFECT	TOTAL O.A. REQ'D (CFM)	TOTAL DESIGN O.A. (CFM)	TOTAL DESIGN AIR (CFM)	EXHAUS AIR (CFM)
UILDING C - BASE	BID									ı	ı		
	EXISTING RETAIL	945		14	0.12	115	7.5	105	1	220	300	1,750	
	EXISTING CORRIDOR	218		0	0.06	15	0	0	1	15	50	300	-
	EXISTING RESTROOM	68		1	0.00	0	75	75	1	75	0	50	75
	EXISTING RESTROOM	68		1	0.00	0	75	75	1	75	0	50	75
	RETAIL CONFERENCE	492		25	0.06	30	5	125	1	155	200	1,150	
	STOCKTON STORAGE	536		0	0.12	65	0	0	1	65	100	225	
	ELECTRICAL CLOSET	72		0	0	0	0	0	1	0	0	0	
•		2,399	•	41				•	•	605	650	3,525	150
UILDING D - ALTE	RNATE BID												
	EXISTING RETAIL	1,450		22	0.12	175	7.5	165	1	340	515	1,650	
	RETAIL	2,516		38	0.12	300	7.5	285	1	585	660	2,125	
	RESTROOM	45		1	0.00	0	75	75	1	75	0	50	75
	RESTROOM	45		1	0.00	0	75	75	1	75	0	50	75
	ELECTRICAL CLOSET	75		0	0	0	0	0	1	0	0	0	
		4,131	 	61			<u> </u>			1,075	1,175	3,875	150

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PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE: MECHANICAL SCHEDULES

SHEET: 13 OF 49

PROJECT NO.:

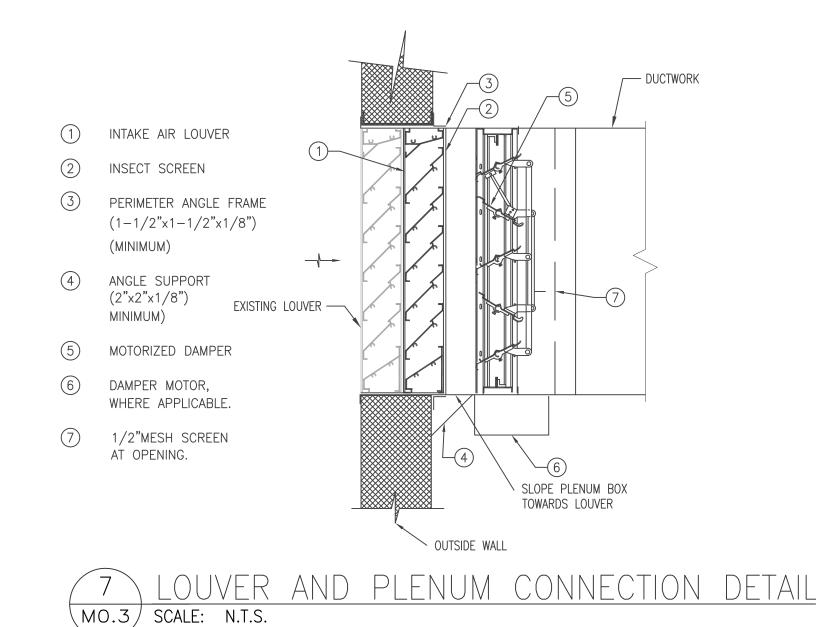
WFH SCALE: AS NOTED DWG SIZE: 36x24 DRAWN BY: BTR DRAWING NO. CHECKED BY: DATE:

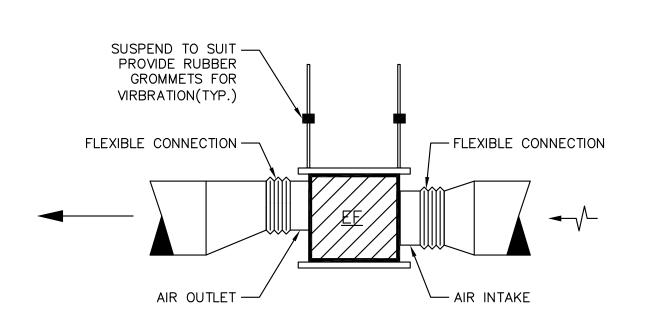
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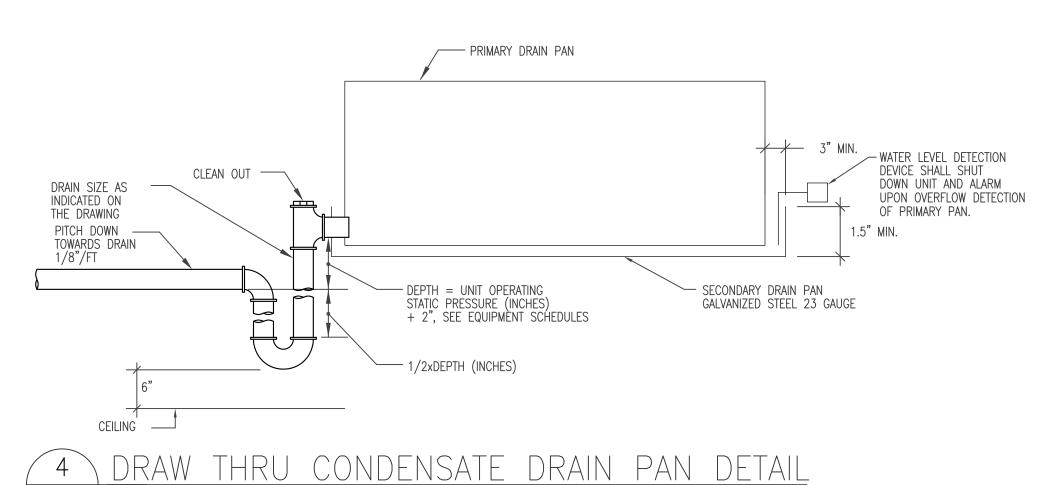
Professional Engineer Anthony H. Caucci

Anthony H. Caucci New Jersey Lic. # 44806

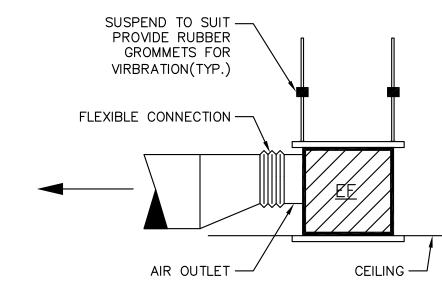




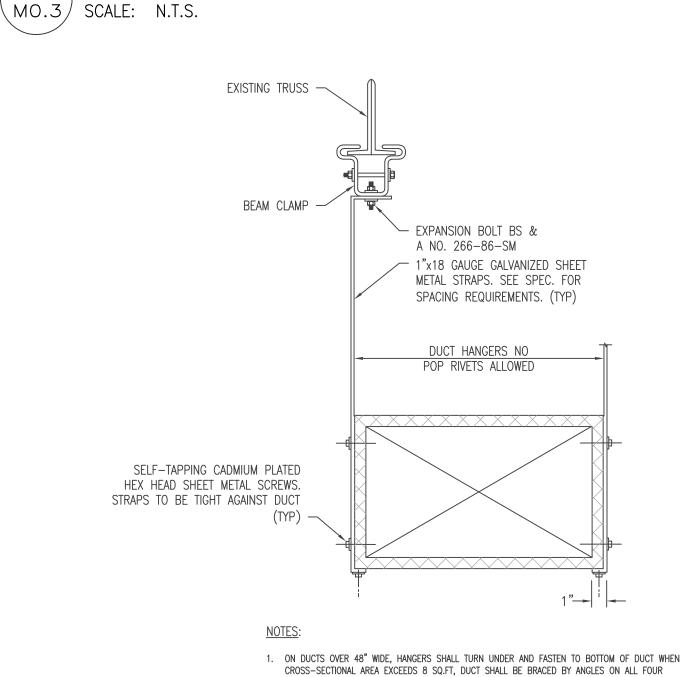




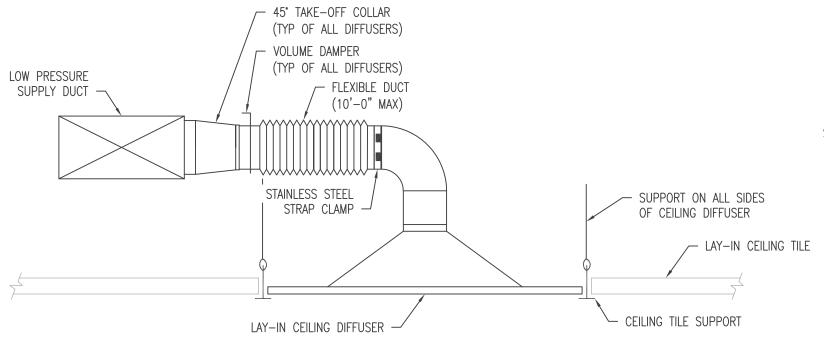
YPICAL DUCT SUPPORT DETAIL



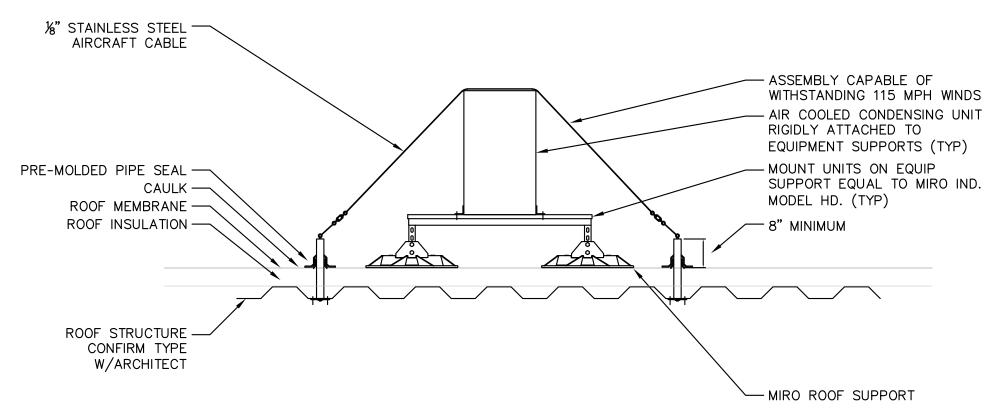
MO.3/ SCALE: N.T.S.



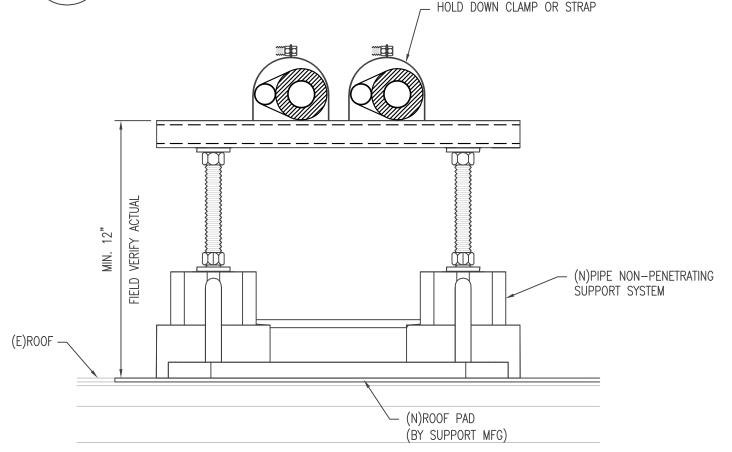
MO.3 SCALE: N.T.S.



LEXIBLE BRANCH DUCT DETAIL MO.3 SCALE: N.T.S.



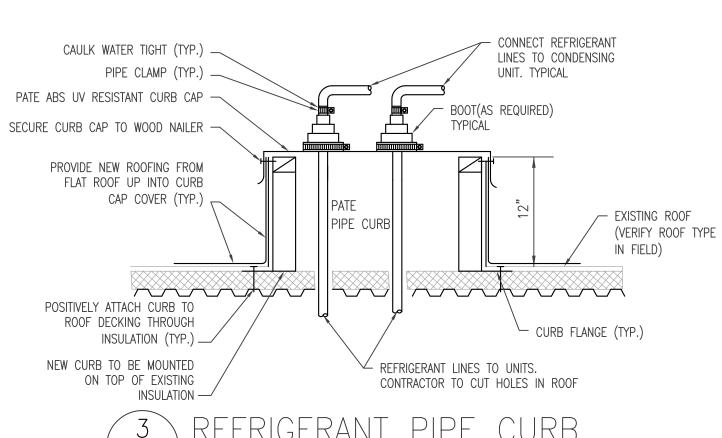
EQUIPMENT TIE-DOWN DETAIL MO.3 SCALE: N.T.S.



MO.3 SCALE: N.T.S. (NON-PENETRABLE TYPE)

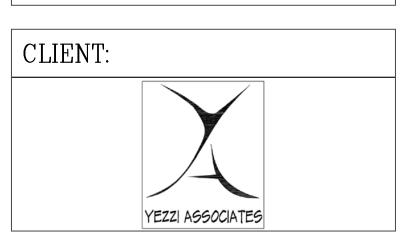
NOTES:

- 1. PROVIDE PEDESTAL MOUNTED SUPPORT SYSTEM WHERE INDICATED ON PLAN.
- 2. SUPPORT SYSTEM SHALL BE NON-PENETRATING TYPE. SPACING SHALL BE AS INDICATED ON PLAN IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 3. UNIT BASE SHALL BE TWO(2) 32"x10"x3" (TOTAL) HIGH DENSITY IMPACT POLYPROPYLENE WITH UV PROTECTION. BASE DENSITY SHALL BE 55.8 #/CU.FT.
- 4. CHANNELS SHALL BE 12 GAUGE, HOT DIP GALVANIZED CARBON STEEL, 13/16" PER MANUFACTURER'S RECOMMENDATION. PROVIDE THREE SIDES. CHANNEL SHALL BE ADJUSTABLE IN HEIGHT AND WIDTH.
- 5. HARDWARE (NUT AND WASHERS) SHALL BE HOT DIP GALVANIZED CARBON STEEL.
- 6. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 7. PROVIDE PHP SYSTEM/DESIGN, PHP-PP10, MIRO-8DSA, COOPER B-LINE OR APPROVED EQUAL.



\MO.3/ SCALE: N.T.S. NOTES:

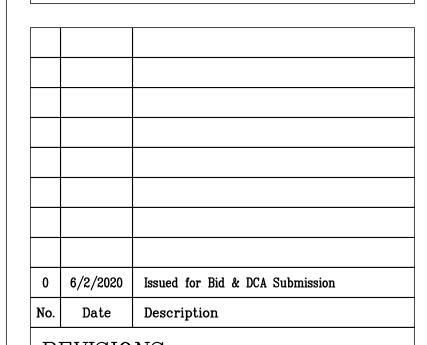
> 1. FINAL FINISH AND SEALING OF REFRIGERANT PIPE CURBS SHALL BE IN ACCORDANCE WITH METHODS APPROVED BY ROOFING MANUFACTURER



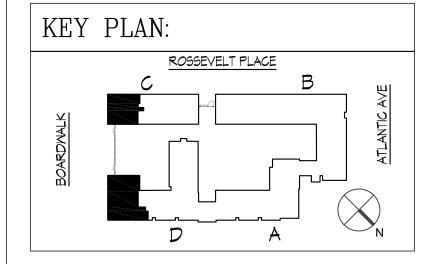
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REVISIONS:



PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE: MECHANICAL DETAILS

SHEET: 14 OF 49

Anthony H. Caucci

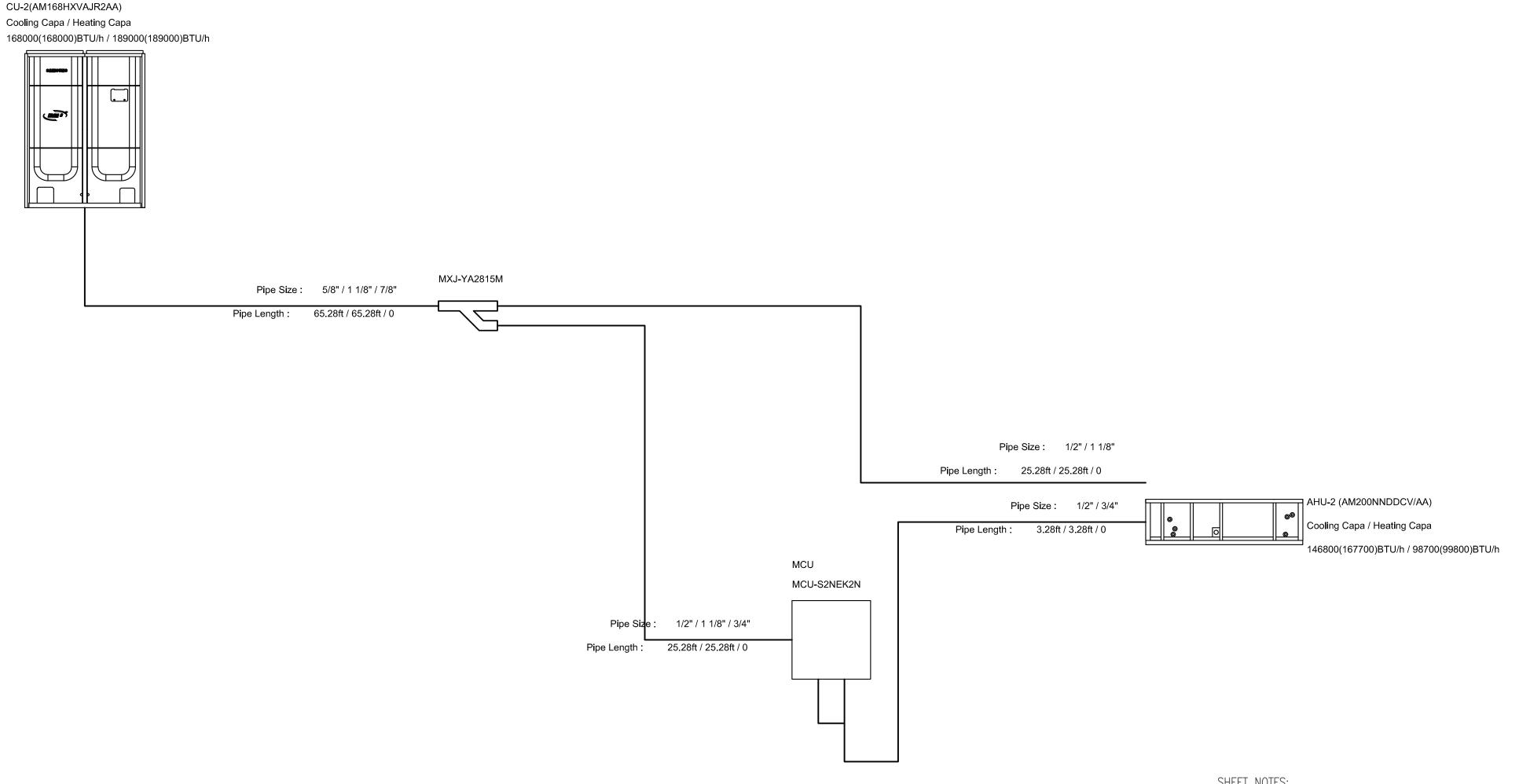
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Anthony H. Caucci

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CHECKED BY:	DRAWING NO.	REVISION
DATE : 05/22/2020	M-0	3
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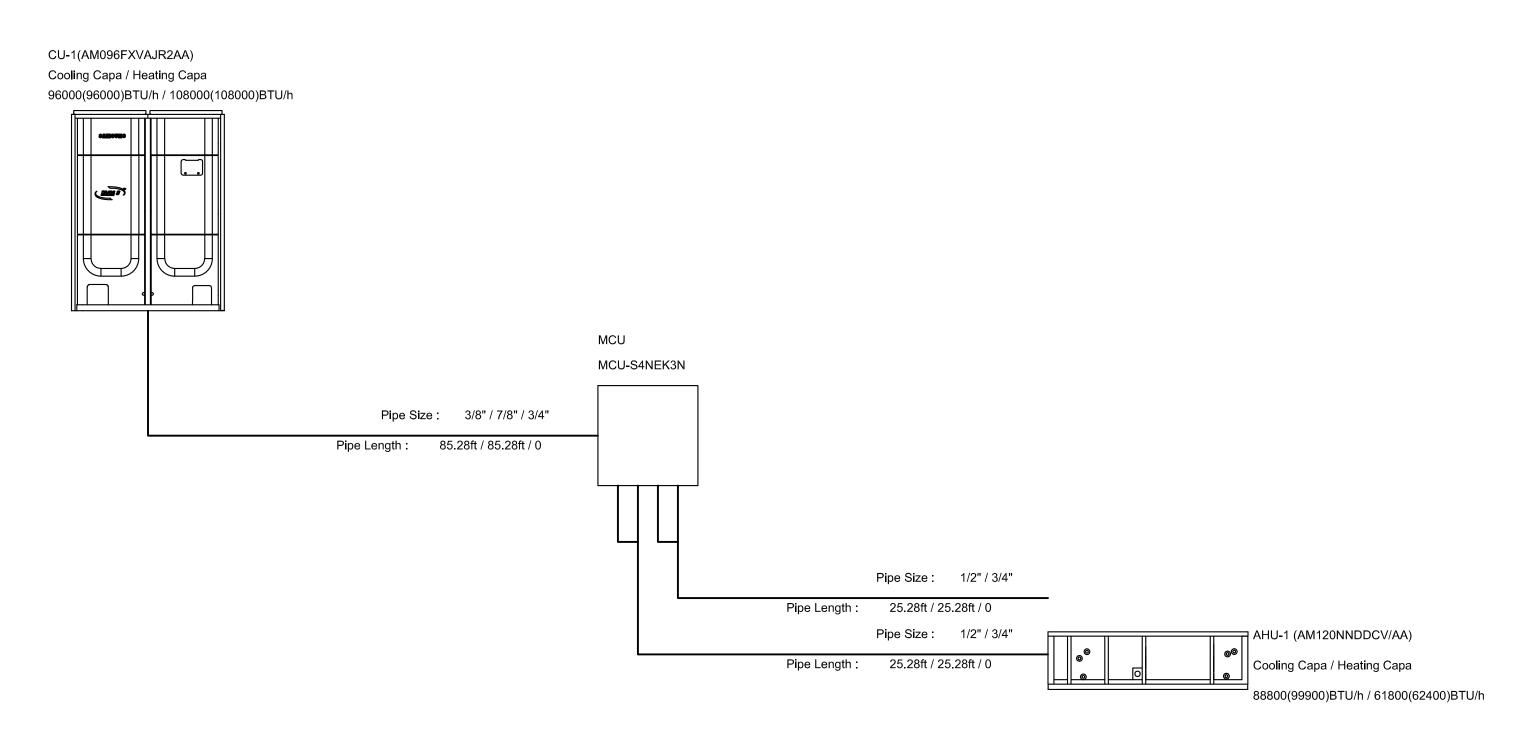
OF (E)ROOFING SYSTEM. 2. PIPE CURBS TO BE UTILIZED FOR BOTH MECHANICAL AND ELECTRICAL SERVICES. Professional Engineer



2 AHU-2 & CU-2 REFRIGERANT PIPING DIAGRAM MO.4 SCALE: NTS

SHEET NOTES:

1. REFRIGERANT PIPING DIAGRAM FOR AHU-1 WITH CU-1 AND AHU-2 WITH CU-2 ARE FOR REFERENCE ONLY. ACUTAL PIPE SIZE, PIPE LENGTH AND SYSTEM CONFIGURATION MAY BE DIFFERENT FROM THE DIAGRAM. REFER TO MANUFACTURER FOR FINAL PIPE SIZE, PIPE LENGTH AND SYSTEM CONFIGURATION.



1 AHU-1 & CU-1 REFRIGERANT PIPING DIAGRAM MO.4 SCALE: NTS

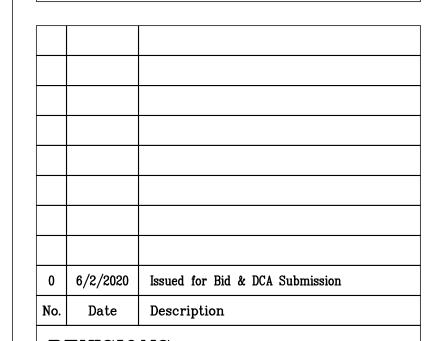
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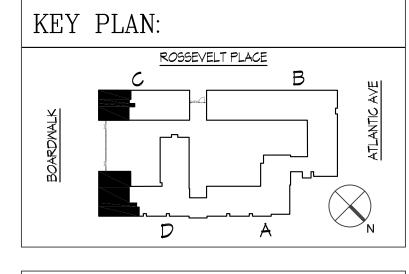
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PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE: MECHANICAL REFRIGERANT PIPING DIAGRAM

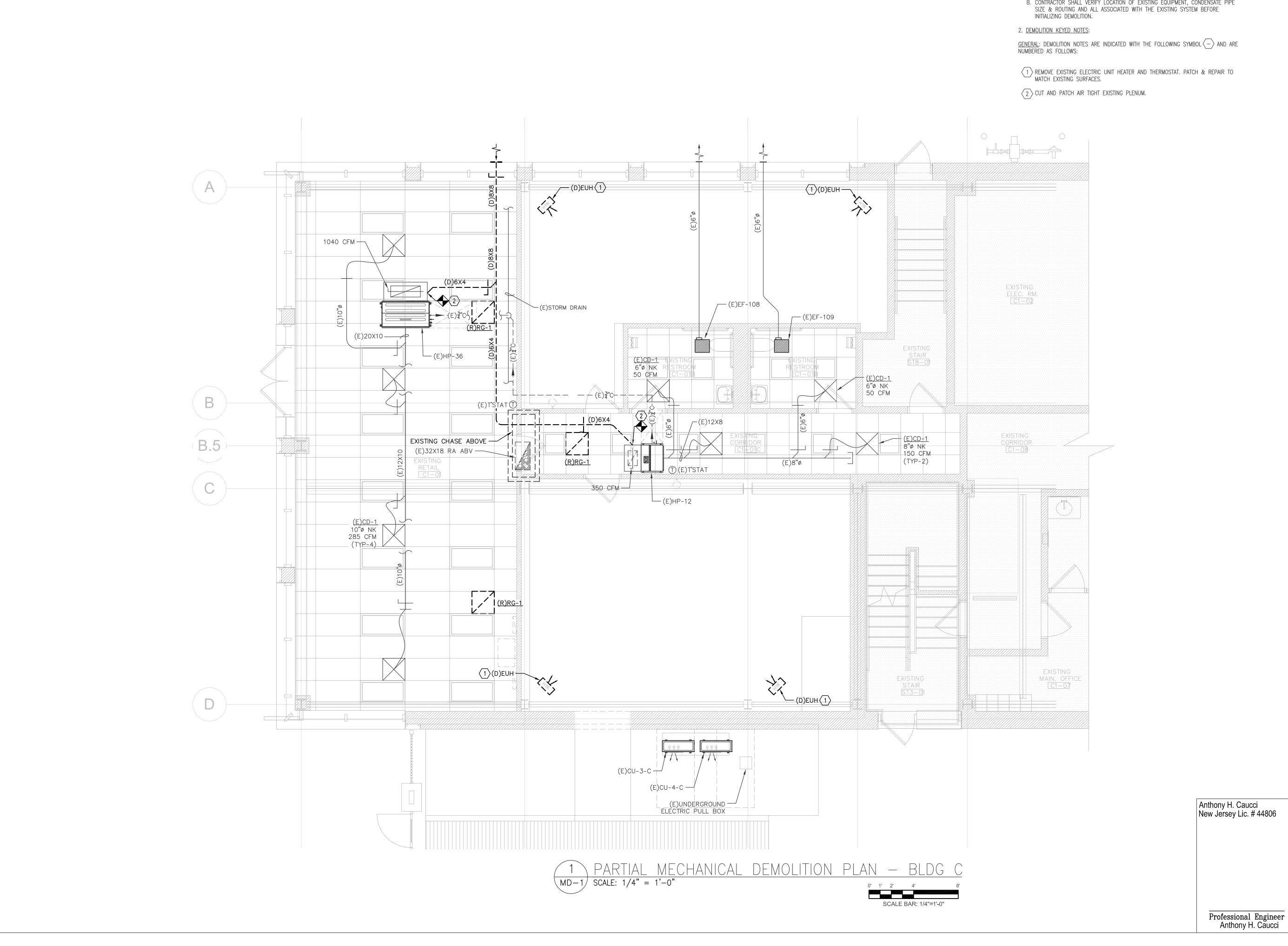
SHEET: 15 OF 49

WFH SCALE: AS NOTED DWG SIZE: 36x24 BTR DRAWING NO. CHECKED BY: DATE: PROJECT NO.:

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Professional Engineer Anthony H. Caucci

Anthony H. Caucci New Jersey Lic. # 44806



DEMOLITION OF EXISTING SYSTEM NOTES:

1. GENERAL NOTES:

- A. CONTRACTOR SHALL COORDINATE THE REMOVAL OF MECHANICAL EQUIPMENT WITH OTHER TRADES SO AS NOT TO AFFECT THE OPERATION OF EXISTING SYSTEMS. PARTICULAR ATTENTION SHALL BE GIVEN TO UTILITY SERVICES, ELECTRIC, WATER AND BUILDING UTILITIES.
- B. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING EQUIPMENT, CONDENSATE PIPE

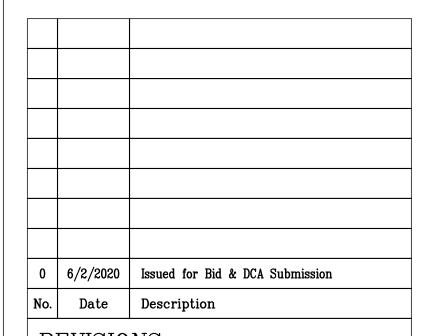
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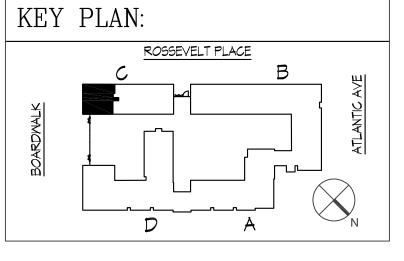
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PROJECT:

PROPOSED WHITEBOX FITOUT

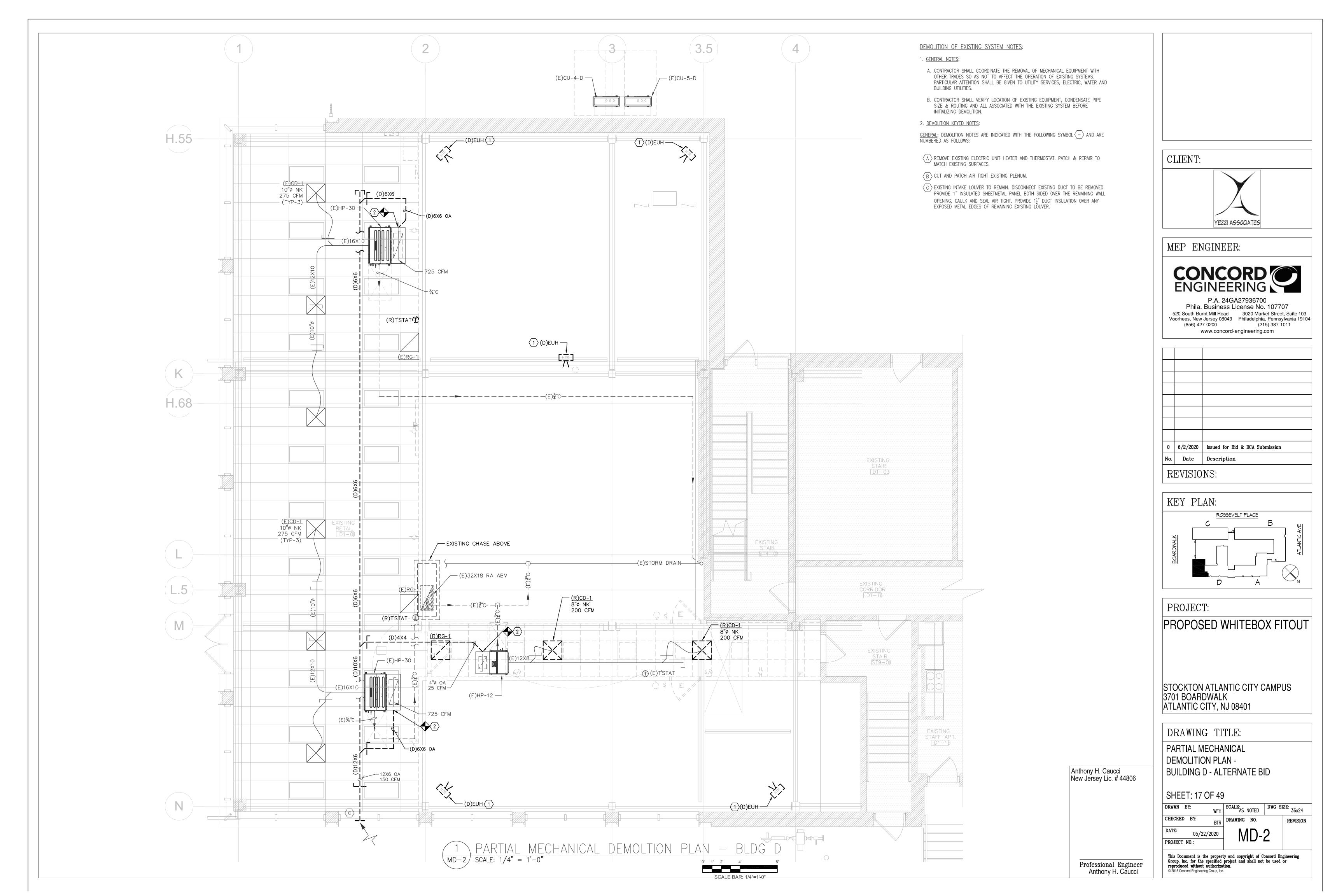
STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

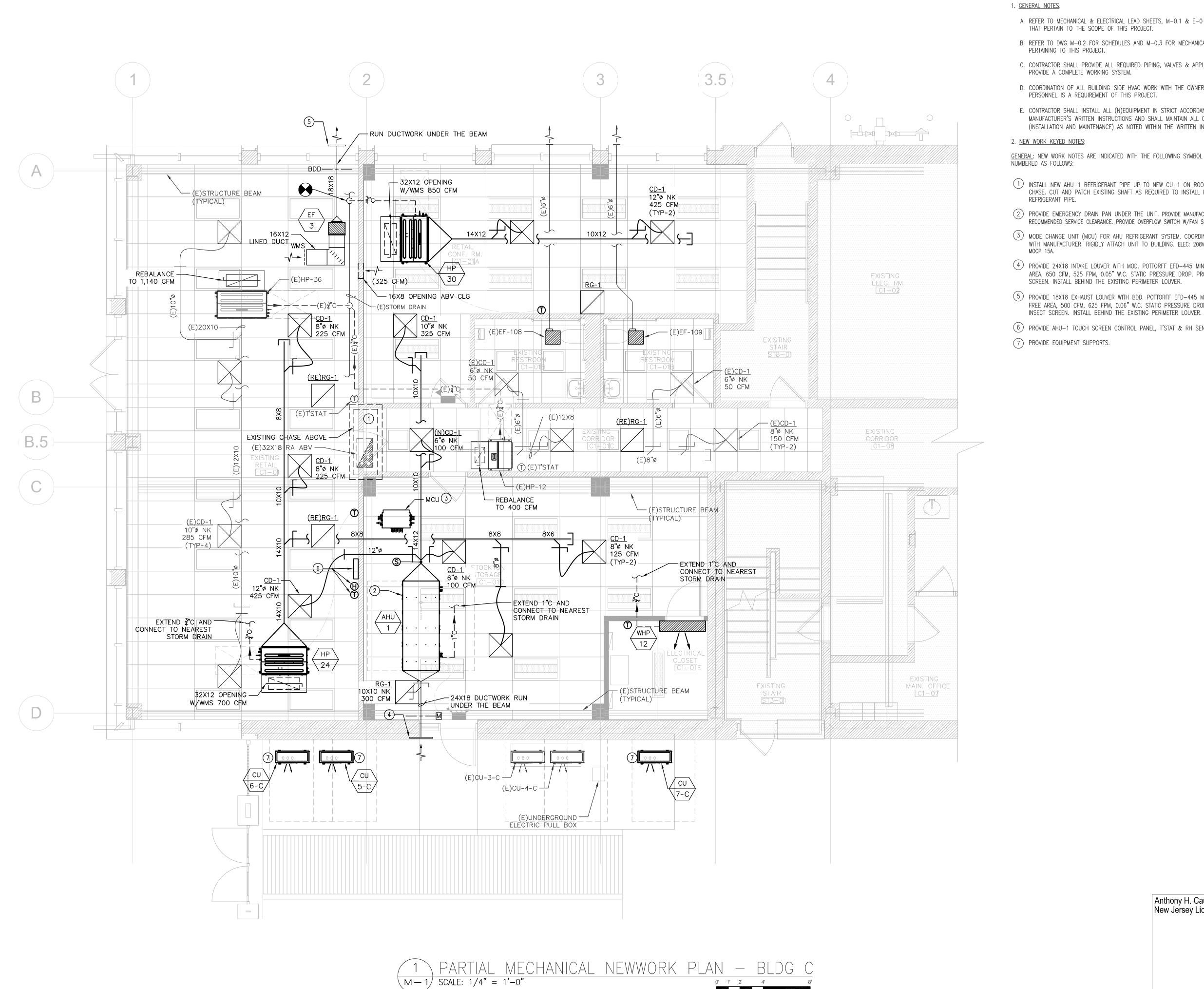
DRAWING TITLE:

PARTIAL MECHANICAL DEMOLITION PLAN -BUILDING C - BASE BID

SHEET: 16 OF 49

DRAWN B	BY:	WFH	SCALE: AS	NOTED	DWG S	IZE: 36x24
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DATE:	05/22/	2020	M	ID-	1	
PROJECT 1	NO.:		1 1 1		ı	





NEW WORK SYSTEM NOTES:

1. **GENERAL NOTES**:

- A. REFER TO MECHANICAL & ELECTRICAL LEAD SHEETS, M-0.1 & E-0 FOR "NOTES" THAT PERTAIN TO THE SCOPE OF THIS PROJECT.
- B. REFER TO DWG M-0.2 FOR SCHEDULES AND M-0.3 FOR MECHANICAL DETAILS PERTAINING TO THIS PROJECT.
- C. CONTRACTOR SHALL PROVIDE ALL REQUIRED PIPING, VALVES & APPURTENANCES TO PROVIDE A COMPLETE WORKING SYSTEM.
- D. COORDINATION OF ALL BUILDING-SIDE HVAC WORK WITH THE OWNER'S HVAC PERSONNEL IS A REQUIREMENT OF THIS PROJECT.
- E. CONTRACTOR SHALL INSTALL ALL (N)EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND SHALL MAINTAIN ALL CLEARANCES (INSTALLATION AND MAINTENANCE) AS NOTED WITHIN THE WRITTEN INSTRUCTIONS.

2. <u>NEW WORK KEYED NOTES</u>:

GENERAL: NEW WORK NOTES ARE INDICATED WITH THE FOLLOWING SYMBOL — AND ARE NUMBERED AS FOLLOWS:

- 1) INSTALL NEW AHU-1 REFRIGERANT PIPE UP TO NEW CU-1 ON ROOF IN EXISTING CHASE. CUT AND PATCH EXISTING SHAFT AS REQUIRED TO INSTALL NEW REFRIGERANT PIPE.
- 2) PROVIDE EMERGENCY DRAIN PAN UNDER THE UNIT. PROVIDE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCE. PROVIDE OVERFLOW SWITCH W/FAN SHUTDOWN.
- (3) MODE CHANGE UNIT (MCU) FOR AHU REFRIGERANT SYSTEM. COORDINATE LOCATION WITH MANUFACTURER. RIGIDLY ATTACH UNIT TO BUILDING. ELEC: 208V/1ø/60, MCA 2A,
- 4 PROVIDE 24X18 INTAKE LOUVER WITH MOD. POTTORFF EFD-445 MIN. 1.2 FT² FREE AREA, 650 CFM, 525 FPM, 0.05" W.C. STATIC PRESSURE DROP. PROVIDE INSECT SCREEN. INSTALL BEHIND THE EXISTING PERIMETER LOUVER.
- (5) PROVIDE 18X18 EXHAUST LOUVER WITH BDD. POTTORFF EFD-445 MIN. 0.8 FT² FREE AREA, 500 CFM, 625 FPM, 0.06" W.C. STATIC PRESSURE DROP. PROVIDE
- (6) PROVIDE AHU-1 TOUCH SCREEN CONTROL PANEL, T'STAT & RH SENSOR.
- (7) PROVIDE EQUIPMENT SUPPORTS.

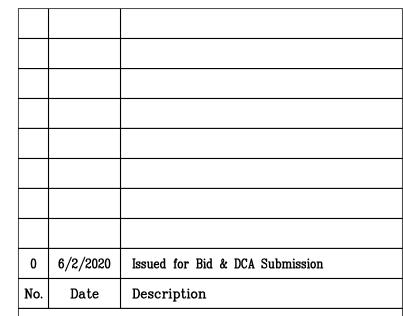
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MEP ENGINEER:



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REVISIONS:

KEY PLAN:

PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

PARTIAL MECHANICAL NEWWORK PLAN -BUILDING C - BASE BID

SHEET: 18 OF 49

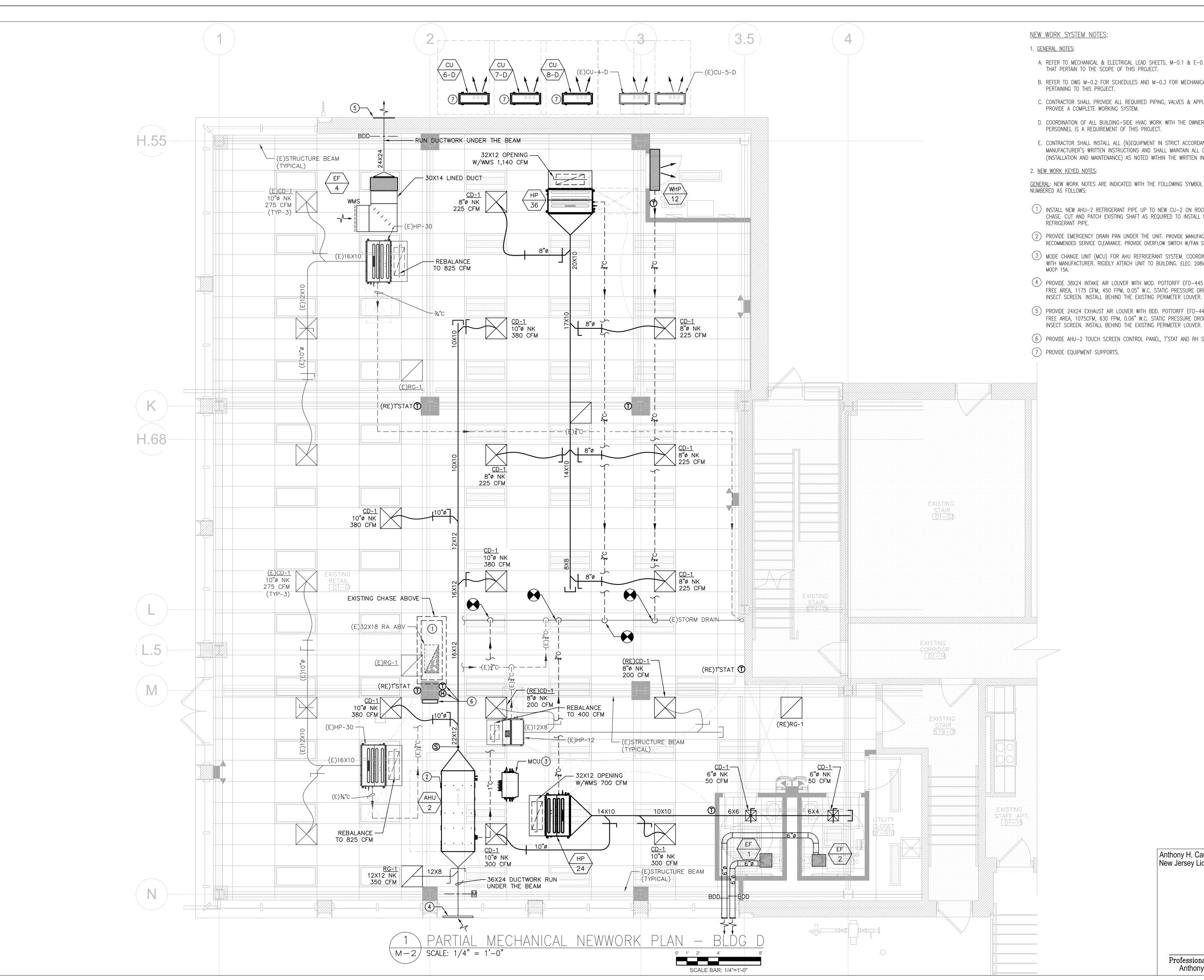
PROJECT NO.:

Anthony H. Caucci New Jersey Lic. # 44806

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SCALE BAR: 1/4"=1'-0"



- A. REFER TO MECHANICAL & ELECTRICAL LEAD SHEETS, M-0.1 & E-0 FOR "NOTES" THAT PERTAIN TO THE SCOPE OF THIS PROJECT.
- B. REFER TO DWG M-0.2 FOR SCHEDULES AND M-0.3 FOR MECHANICAL DETAILS PERTAINING TO THIS PROJECT.
- C. CONTRACTOR SHALL PROVIDE ALL REQUIRED PIPING, VALVES & APPURTENANCES TO PROVIDE A COMPLETE WORKING SYSTEM.
- D. COORDINATION OF ALL BUILDING-SIDE HVAC WORK WITH THE OWNER'S HVAC PERSONNEL IS A REQUIREMENT OF THIS PROJECT.
- E. CONTRACTOR SHALL INSTALL ALL (N)EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND SHALL MAINTAIN ALL CLEARANCES (INSTALLATION AND MAINTENANCE) AS NOTED WITHIN THE WRITTEN INSTRUCTIONS.

GENERAL: NEW WORK NOTES ARE INDICATED WITH THE FOLLOWING SYMBOL — AND ARE NUMBERED AS FOLLOWS:

- 1) INSTALL NEW AHU-2 REFRIGERANT PIPE UP TO NEW CU-2 ON ROOF IN EXISTING CHASE. CUT AND PATCH EXISTING SHAFT AS REQUIRED TO INSTALL NEW
- 2) PROVIDE EMERGENCY DRAIN PAN UNDER THE UNIT. PROVIDE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCE. PROVIDE OVERFLOW SWITCH W/FAN SHUTDOWN.
- MODE CHANGE UNIT (MCU) FOR AHU REFRIGERANT SYSTEM. COORDINATE LOCATION WITH MANUFACTURER. RIGIDLY ATTACH UNIT TO BUILDING. ELEC: 208V/10/60, MCA 2A,
- 4 PROVIDE 38X24 INTAKE AIR LOUVER WITH MOD. POTTORFF EFD-445 MIN. 2.7 FT² FREE AREA, 1175 CFM, 450 FPM, 0.05" W.C. STATIC PRESSURE DROP. PROVIDE INSECT SCREEN. INSTALL BEHIND THE EXISTING PERIMETER LOUVER.
- (5) PROVIDE 24X24 EXHAUST AIR LOUVER WITH BDD. POTTORFF EFD-445 MIN. 1.7 FT² FREE AREA, 1075CFM, 630 FPM, 0.06" W.C. STATIC PRESSURE DROP. PROVIDE
- (6) PROVIDE AHU-2 TOUCH SCREEN CONTROL PANEL, T'STAT AND RH SENSOR.
- (7) PROVIDE EQUIPMENT SUPPORTS.

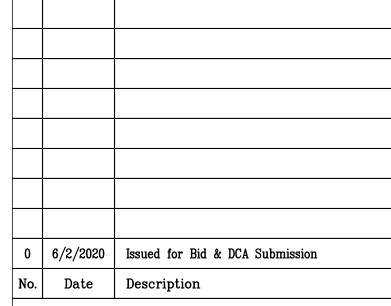
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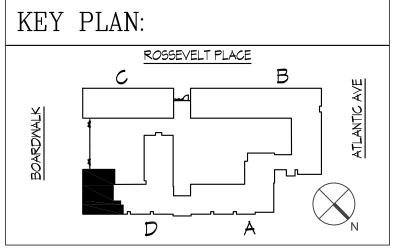
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PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

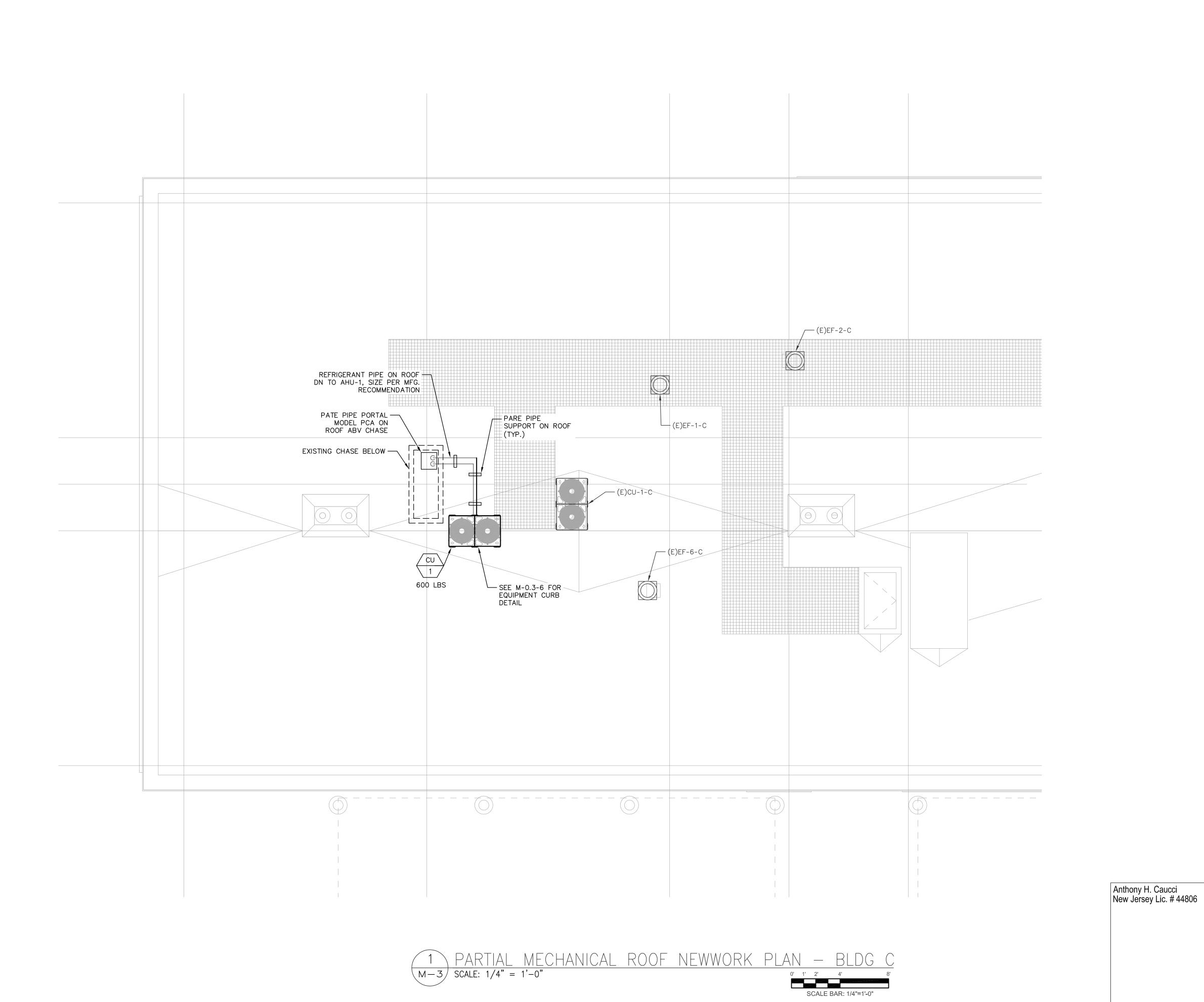
PARTIAL MECHANICAL NEWWORK PLAN -BUILDING D - ALTERNATE BID

SHEET: 19 OF 49

Anthony H. Caucci New Jersey Lic. # 44806

Professional Engineer Anthony H. Caucci

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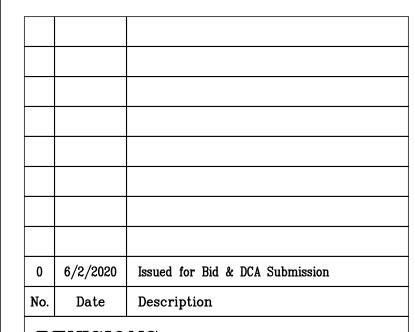




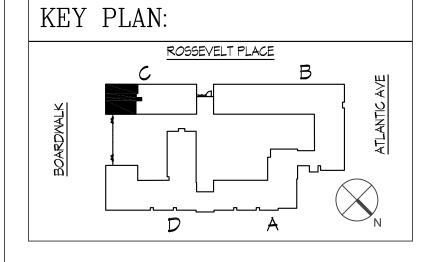
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PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

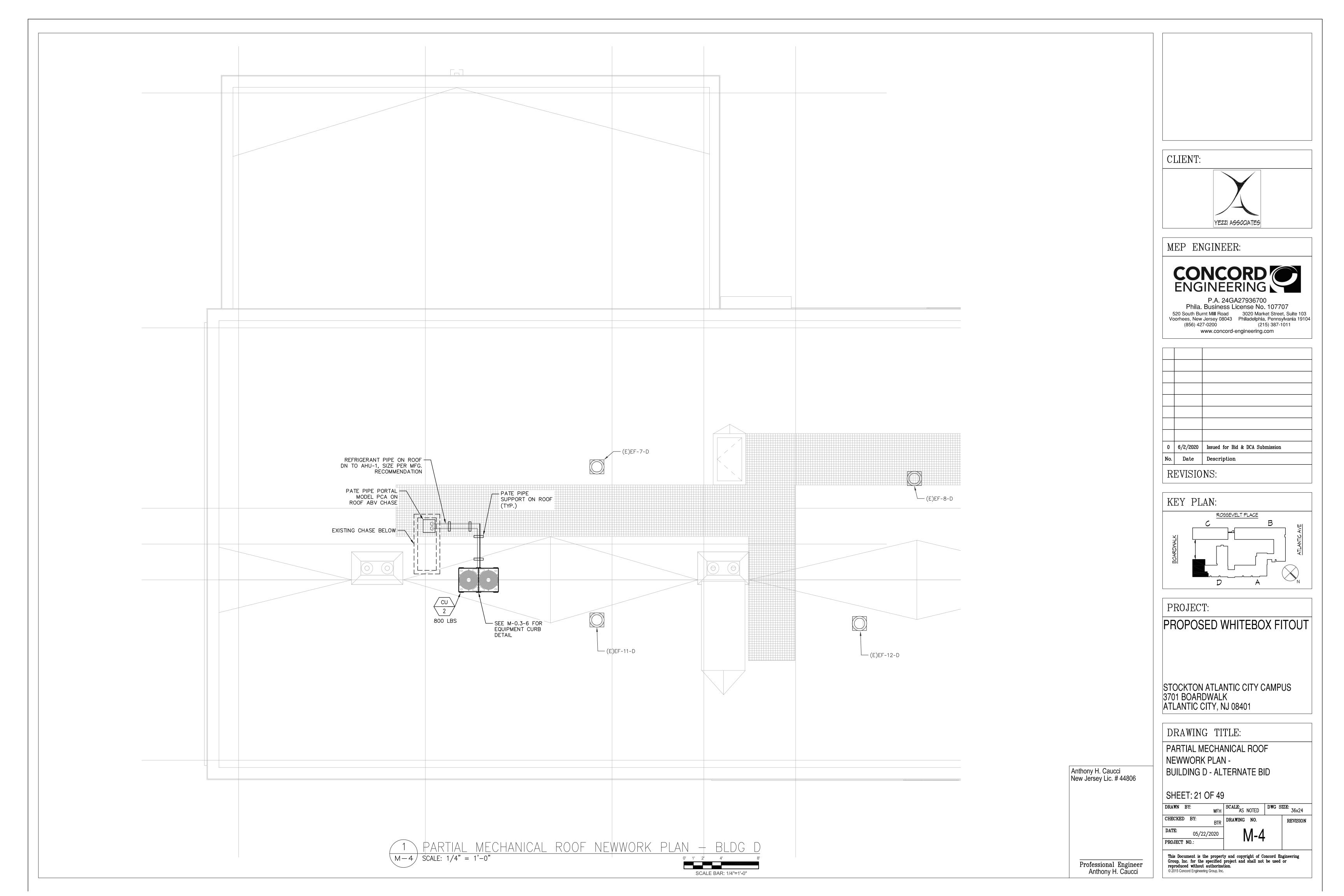
DRAWING TITLE:

PARTIAL MECHANICAL ROOF NEWWORK PLAN -BUILDING C - BASE BID

SHEET: 20 OF 49

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DATE: 05/22/2020	M-3	
PROJECT NO.:		

Professional Engineer Anthony H. Caucci



Dedicated Outside Air Split System and VRF/DOAS ATC Controls

1. Part 1 - General

1.1 SYSTEM DESCRIPTION

- A. Provide dedicated outside air split. The unit is designed to introduce 100% outside air to the spaces indicated on the plans. The system provided shall be commercial type equipment. The DOAS shall consist of a heat recovery condenser, MCU (mode control unit), and an air handler with a Variable Frequency Drive (VFD) to control the fan speed that is specifically engineered to pair with the other equipment in the system. Provide Y joints necessary for a complete operation.
- B. See plans for electrical requirement.
- C. The Split DOAS shall perform as indicated below:
- 1. Each system shall perform in accordance to the ratings shown indicated on the plans.
- (a) Incoming air must be preheated if below 23°F before entering the split DOAS unit.
- (b) The cooling coil will only operate in cooling mode. The heating coil will operate in the heating mode or to maintain the required neutral leaving air temperatures as schedule.

1.2 PIPING

2. Part 2 - Products

A. General:

2.1 HEAT RECOVERY OUTDOOR UNIT

be run tested at the factory.

cooling operation.

conditions restrictions exist).

considered an oil recovery cycle.

snow accumulation on top of unit.

D01AUN, MIM-B17BUN, and MIM-B18BUN.

manufactured after 2014).

operation modes on all split DOAS units.

seacoast coatings and construction)

- A. The specified VRF equipment manufacturer's Y-joint fittings must be used to branch the main refrigerant lines from the condenser to the different coils in the split DOAS unit.
- B. The VRF equipment manufacturer's Tee fittings must be used to connect outdoor units for modular systems (system with more than one outdoor unit).

1.3 QUALITY ASSURANCE

- A. The units shall be listed by Electrical Laboratories (ETL) and bear the ETL label.
- B. All wiring shall be in accordance with the National Electrical Code (N.E.C.).
- C. The units shall be manufactured in a facility registered to ISO 9001 and ISO14001 which is a set of standards applying to environmental protection set by the International Standard Organization (ISO).
- D. A full charge of R-410A for the condensing unit only shall be provided in the condensing unit. Additional refrigerant is required based on diameters and lengths of system liquid refrigerant lines and indoor equipment model and quantity.
- The installing contractor must have attended the specified manufacturers installation training prior to installing the system.
- F. Service and installation manuals must be readily available on the manufacturer's website without entering a username and password.

The heat recovery outdoor unit shall be used specifically with specified manufacturers equipment.

The heat recovery outdoor unit shall consist of the outdoor unit, MCU (Mode Control Unit), and

DOAS unit, and manufacturers network control systems. The outdoor units shall be equipped with multiple circuit boards that interface to the manufacturers control network systems) and

shall perform all functions necessary for operation. The outdoor unit shall have a powder coated

finish. The outdoor unit shall be completely factory assembled, piped and wired. Each unit shall

1. The heat recovery system shall have the ability of simultaneous heating and cooling

2. The Heat Recovery condensing unit salt spray test method: ASTM B117-18, - the heat

3. The heat recovery system shall have the ability to change operation mode (MAIN heating

4. The heat recovery system shall have rotational defrost capability (modular systems only) to perform defrost operations while still providing heat to indoor units (operation and

5. The outdoor unit shall have advanced oil recovery cycle logic operation that shall not

6. mode. While in heat mode, any defrost cycle lasting over three (3) minutes shall be

7. Advanced intelligent defrost logic to significantly reduce defrost cycle frequency by

8. The heat recovery system shall have installer enabled snow blowing settings to prevent

9. The heat recovery system shall have optional night quite modes to reduce unit sound in

10. The heat recovery system shall have current control to limit current (50% - 100% of

design current) adjustable at outdoor unit or central web accessible, control devices: MIM-

evenings reducing fan and/or compressor sound (4 level settings).

monitoring air resistance across the condenser coil during heating operation to determine

defrost operation initiation to prevent unnecessary defrost cycles (applies to models

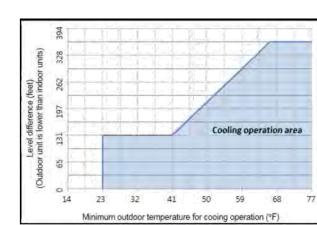
three (3) minutes while in cooling mode or six (6) minutes while in heating

interrupt heating or cooling operation. The oil recovery cycle duration shall not exceed

exchanger showed no unusual rust or corrosion development to 2,280 hours.(Provide

/ MAIN cooling) without turning off the compressors allowing for constant heating and

- 11. The heat recovery system compressors shall be per specified manufacturer, hermetically sealed, inverter driven, flash injected, asymmetric, DC scroll type. No fixed capacity compressors will be present in the refrigerant system.
- 12. Outdoor unit (individual modules) shall have a sound rating no higher than 65 dB (A).
- All three refrigerant lines from the outdoor unit to the MCU (heat recovery Mode Control Unit) shall be insulated.
- 14. The heat recovery system shall allow adjustment of target evaporator coil temperatures in cooling mode and target heating discharge pressures depending on project conditions for heating and cooling calibration thus saving energy
- 15. The heat recovery outdoor unit shall have an accumulator with ARV (accumulator return valve) control
- 16. The heat recovery outdoor unit shall have a high-pressure safety switch, high voltage fuses, over-current protection, phase detection protection, thermal fan protection, low pressure protection, compressor overcurrent protection, fan motor voltage protection, current transformer(s), crank case heating, and intelligent logic to ensure proper operation within unit design limitations and operational parameters.
- 17. The inverter compressor PCB(s) shall be cooled with liquid refrigerant circuit(s) to operate at optimal temperatures and to prevent failure due to overheating. No compressor inverter PCB's shall be cooled by air over heat sink. Cooling inverter components without air-cooling fins prevents failure due to environmental contaminants.
- 18. The heat recovery outdoor unit shall have the ability to operate with a maximum height difference of 361 feet with the condensing unit installed higher than the indoor units (with modified piping and PDM kit when greater than 164 feet). The heat pump outdoor unit shall have the ability to operate with a maximum height difference of 361 feet with the condensing unit installed lower than the indoor units (conditions apply when over 131, see graph below). Maximum 3,280 feet total refrigerant tubing length. The greatest length is not to exceed 656 (722 equivalent) feet between outdoor unit and the farthest indoor unit.



19. The heat recovery outdoor unit shall be capable of operating in heat mode between -13°F ~ 125°F ambient temperatures, while in mixed operation mode.

3

- 20. The heat recovery outdoor unit shall be capable of operating in cool mode between 23°F to 120°F ambient temperatures as standard.
- The heat recovery outdoor unit shall have high efficiency, individual oil separator(s) for each compressor plus additional logic controls to ensure adequate oil volume in the compressor is maintained.
- 22. The heat recovery outdoor unit shall have a flat-plate type subcooler to subcool liquid refrigerant further to increase capacity and performance with long pipe lengths and to decrease refrigerant sounds at indoor equipment.
- 23. The compressors shall have flash injection capability to increase performance in heating mode only. This will be automatically enabled by the outdoor unit(s) by forcing saturated refrigerant as a liquid flash mix directly into the scroll compression cycle increasing mass flow and overall system capacity. Compressors without flash injection shall not be present in the VRF heat recovery system.
- 24. The heat recovery outdoor unit shall have a removable EEPROM at the main PCB to store all unit data. All data on the outdoor unit EEPROM shall be viewable from the manufacturer provided service software. The outdoor unit main EEPROM shall be removable allowing replacement of outdoor unit PCB without losing digital, field programmed data. The outdoor unit removable EEPROM shall store the following unit data: unit model number, unit serial number, unit main PCB firmware and MICOM version, sub-PCB firmware and MICOM version, fan PCB firmware and MICOM version, inverter PCB 1 and inverter PCB 2 firmware and MICOM version, auto-trial commissioning startup data, the last 30 minutes of operation data, and field programmed unit name/tag viewable on controls and service software.
- 25. The heat recovery outdoor unit shall have the ability to discharge inverter PCB capacitor voltage using service buttons on the outdoor unit main PCB. The capacitor stored-voltage discharge feature shall allow safe inverter PCB replacement.
- 26. The heat recovery outdoor unit shall have outdoor unit pump-down operation capability allowing storage of refrigerant while opening sealed refrigerant pipe system outside of outdoor unit chassis while performing service. The outdoor unit refrigerant storage shall be greater than the supplied factory R-410A charge.
- 27. The heat recovery outdoor unit shall have individual outdoor module pump-out operation capability allowing the majority of refrigerant in an outdoor unit to be pumped out. The pump-out feature shall allow service of sealed refrigerant system within an outdoor unit chassis.
- 28. The heat recovery outdoor unit shall allow temporary disabling of individual compressors to allow system operation at reduced capacity after a compressor or compressor component related issue (when more than one compressor is present in system). Disabling of a compressor shall temporarily remove error codes and allow system operation.
- The heat recovery outdoor unit compressors shall have a soft-start function to reduce electricity demand during system start and to increase compressor reliability.

4. Refrigerant flow from the outdoor unit shall be controlled by means of capacity modulation

G. Compressor:

 The 460 VAC heat recovery systems shall have the compressor quantity noted on the plans. All compressors shall be modulation capable, flash injected, DC inverter, scroll type.

30. In the event of system error due to outdoor unit failure, the heat recovery outdoor unit

1. The chassis shall be fabricated of galvanized steel, bonderized and finished with a powder

1. The heat recovery outdoor unit shall be furnished with the fan quantities, two fans for each

2. All fan motors shall have inherent protection, thermal protection, and have permanently

6. The heat recovery outdoor units shall have the capability for ducting of discharge air up

2. Additional refrigerant is required. Amount is based on installed liquid refrigerant pipe

3. Modular systems shall require outdoor refrigerant kits for module connection as noted in

1. The outdoor coil shall be of nonferrous construction with lanced or corrugated plate fins

2. The Heat Recovery condensing unit salt spray test method: ASTM B117-18 - the heat

exchanger showed no unusual rust or corrosion development to 2,280 hours. (Provide

to 0.32" WC static pressure with factory provided dimensional design drawings. The heat

recovery outdoor units shall not require any field installed components or component

4. All fans shall be provided with a raised guard to prevent contact with moving parts.

(main PCB, HUB PCB, IPM 1, IPM 2, fan PCB).

All fan motors shall be variable speed BLDC type.

3. All fan motors shall be mounted for quiet operation.

modification to allow ducting of discharge air.

The coil shall be protected with an integral metal guard.

capable, flash injected, DC inverter, scroll compressor).

lubricated bearings, and be completely variable speed.

5. The heat recovery outdoor unit shall have vertical discharge airflow.

1. R410A refrigerant shall be required for the heat recovery outdoor systems.

diameters and lengths and indoor equipment model number and quantity.

the table below. Only the specified manufacturer outdoor Tee's are permitted.

B. Unit Cabinet:

C. Fan:

D. General:

E. Refrigerant

F. Coil:

on copper tubing.

Seacoast construction.)

coated baked enamel.

outdoor unit.

shall display codes that specify a precise error and which outdoor unit PCB is the cause

H. General:

- Crankcase heaters shall be factory mounted on the compressors. For units without crankcase heaters, the compressors shall be warmed by the compressor inverter control PCB and motor windings.
- 2. The outdoor unit compressor shall have variable modulation technology to modulate capacity. System capacity shall be completely variable down to 7,513 Btu/h.
- 3. The outdoor unit compressor(s) shall have flash injection technology which can increase the mass flow rate of refrigerant and offset refrigerant condensing temperatures resulting in a capacity and performance improvement in heating mode. Compressors without flash injection shall not be present in the VRF heat recovery system.
- 4. The compressor(s) will be equipped with an internal thermal overload.
- 5. The compressor(s) shall be mounted to avoid the transmission of vibration.

I. Electrical:

- 1. The outdoor unit shall be controlled by integral microprocessors.
- The control circuit between the indoor units, MCU (Mode Control Unit) and the outdoor unit shall be 0.5VDC - 7VDC completed using stranded, annealed copper conductor, twocore, 16 AWG, shielded cable to provide total integration of the system (F1/F2).

2.2 MCU (MODE CONTROL UNIT) FOR HEAT RECOVERY SYSTEMS

A. General:

The MCU (Mode Control Unit) shall be specifically used with R410A, heat recovery units. These units shall be equipped with a circuit board that interfaces to the manufacturers network control systems and shall perform all functions necessary for operation. The unit shall have a galvanized steel finish. The MCU shall be completely factory assembled, piped and wired. Each unit shall be run tested at the factory. The unit shall be mounted indoors.

Provide two compatible models of Mode Control Units to the DOAS systems: MCU-S2NEK2N, and MCU-S4NEK3N. The below table identifies manufacturers MCU models and DOAS compatibility.

System Model Number	MCU Compatibility
AM120NNDDCV/AA	MCU-S4NEK3N
AM200NNDDCV/AA	MCU-S2NEK2N

CLIENT:



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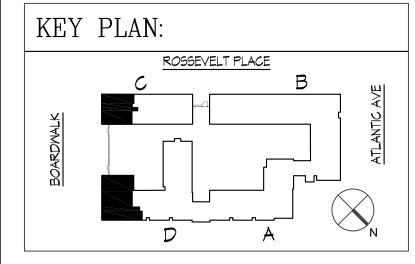
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0	6/2/2020	Issued for Bid & DCA Submission
No.	Date	Description

REVISIONS:



PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

MECHANICAL SPECIFICATIONS

Anthony H. Caucci New Jersey Lic. # 44806

SHEET: 22 OF 49

 DRAWN
 BY:
 WFH
 SCALE: AS NOTED
 DWG SIZE: 36x24

 CHECKED
 BY:
 BTR
 DRAWING NO.
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 DATE:
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Professional Engineer
Anthony H. Caucci

AM300NNDDCV/AA	MCU-S2NEK2N

- MCU-S2NEK2N shall have 2. Two (2) adjacent ports shall be twinned using Y-Joint part numbers DB96-23143A and DB96-23144A (purchased separately. The twinned port will be piped directly to the reheat coil.
- MCU-S4NEK3N shall have 4 ports. Two (2) adjacent ports shall be twinned using Y-Joint part numbers DB96-23143A and DB96-23144A (purchased separately). One pair will be piped to the cooling coil, and the other pair will be connected to the reheat coil.
- B. MCU (Mode Control Unit) Cabinet:
- The chassis shall be fabricated of galvanized steel.
- 2. Each cabinet shall house multiple refrigeration control solenoid valves and electronic expansion valves.
- 3. MCU-S2NEK2N shall house two tube-in-tube subcooling devices with electronic expansion valve and temperature sensors to maintain design refrigerant temperatures (sub cooling). All pipe connections shall be braze type.
- 4. MCU-S4NEK3N shall house four tube-in-tube subcooling devices with electronic expansion valve and temperature sensors to maintain design refrigerant temperatures (sub cooling). All pipe connections shall be braze type.
- C. Refrigerant:
- 1. R410A refrigerant shall be required for MCU's (Mode Control Units).
- D. Refrigerant valves:
- The unit shall be furnished with multiple two position solenoid valves.
- 2. Electronic expansion valves and solenoid valves shall be used to control the variable refrigerant flow inside each MCU (Mode Control Units).
- E. Integral Drain Pan:

the system.

A. General:

control system.

B. Indoor Unit.

- 1. MCU-S2NEK2N and MCU-S4NEK3N shall include an integral condensate pan. Drain connection is not required
- F. Electrical:
- 1. The unit electrical power shall be 208/230 volts, 1 phase, and 60 hertz.

2.3 SPLIT DOAS UNIT (FRESH ACCESS-DEDICATED OUTSIDE AIR SYSTEM)

Each system shall perform in accordance to the ratings shown in the table below.

minute time delay mechanism, and an auto restart function.

design software to determine all necessary components.

software to determine all necessary components.

model, pipe length, and incoming air temperature.

control options and manufacturer provided service software.

during manufacturing to simplify installation and setup.

control via BACnet protocol.

See plans for unit ratings and performance ratings.

- 2. The unit shall be capable of satisfactory operation within voltage limits of 187-228 volts (208V/60Hz) or 207-253V (230V/60Hz).
- The MCU (Mode Control Unit) shall be controlled by integral microprocessors.
- 4. The control circuit between the indoor units, MCU (Mode Control Unit) and the heat recovery outdoor unit shall be 0.5VDC - 7VDC completed using stranded, annealed

copper conductor, two conductor, 16 AWG, shielded cable to provide total integration of

The split DOAS unit shall be a high-performance, high static pressure capable, concealed ducted

unit, for indoor installation only, with a fixed horizontal discharge supply and shall have a

modulating expansion devices (gear type). The high static pressure capable, concealed ducted

unit shall be compatible with the specified heat recovery outdoor units and MCU (Mode Control Unit). The Split DOAS unit shall support individual control using the manufacturers network

1. The split DOAS unit shall be factory assembled, wired and run tested. Contained within

2. The specified model requires an MCU for the main and reheat coils. Use manufacturers

3. The specified models require an MCU for the reheat coil. Use manufacturers design

4. The split DOAS unit shall have an enthalpy sensor, (Honeywell C7400C) in the return air

5. The split DOAS unit discharge air temperature range will vary, depending on the unit's

6. The split DOAS unit discharge temperature sensor reading shall be visible on central

7. The unit option settings, address settings, and MCU address settings are programmed

8. The split DOAS unit discharge temperature setting shall be controllable via central control

options (MIM-D00AN, MIM-D01AUN, MIM-B18N, MIM-B18BUN, MIM-B17N, and MIM-

B17BUN) and MWR-WE13N and MWR-WE11N, wired controllers (in service setting

section). The MIM-B17BUN BACnet gateway shall also allow discharge air temperature

9. The split DOAS will provide heat in ambient temperatures up to 125°F (51.6 °C). Refer to

simulated capacity and discharge air temperatures in DVM Pro design software.

stream, to manage the system logic based on the incoming outside air.

the unit shall be all factory wiring, piping, electronic modulating linear expansion devices,

control circuit board and fan motors. The unit shall have a self-diagnostic function, 3-

C. Unit Cabinet:

- 1. The cabinet shall be constructed of 2" double skin baked PU casing
- D. Fan:
- 1. The split DOAS unit fan type should be a Direct-drive, plenum fan with VFD.
- External static pressure data is provided in the table below.
- 3. The indoor fan shall be statically and dynamically balanced to run on a motor with permanently lubricated bearings. The maximum static pressure shall be 2.5°.
- 4. The indoor fan shall consist of three (3) speeds, High, Mid, and Low.
- E. Filter:
- 1. Incoming air must be filtered. A disposable MERV8 filter is included as standard.
- Standard factory installed integral filter rack included.
- F. Coil:
- 1. The indoor coil shall be of nonferrous construction with slit fins on copper tubing.
- The tubing shall have inner grooves for high efficiency heat exchange.
- All tube joints shall be brazed with phos-copper or silver alloy.
- The coils shall be pressure tested at the factory.
- Condensate pans and drain shall be provided under the coil.
- There shall be two condensate connections.
- The condensate shall be gravity drained from the fan coil.
- 8. Provide Seacoast construction and coatings
- G. Electrical:
- The unit electrical power as indicated on drawings.

reheat coil PCB (lower PCB in control panel).

viewable on controls and service software.

as necessary to have a completes operable system.

B. Electrical Characteristics:

communications bus.

AWG X 2, shielded cable.

shall be 16 AWG X 2, shielded cable.

(R1/R2), to system controllers.

H. Controls:

3. Part 4 – Controls

3.1 OVERVIEW

A. General:

C. Wiring:

- 1. The unit ships with an MWR-WE13N wired controller in the control panel. This is provided for the configuration and control. This wired controller can be installed remotely if required. The wire can be extended up to 328 feet. Only "N" series wired controllers can be connected.
- 2. The unit can be controlled via central controls. Provide manufacturers central control gateway options will allow integration to standard building management systems.

3. Discharge air temperature can also be set with a simple BMS via 0-10 VDC input to the

4. The indoor unit shall have a removable EEPROM on its PCB to store all unit data. All

data on the indoor unit EEPROM shall be viewable from the manufacturer provided

service software. The indoor unit main EEPROM shall be removable allowing

replacement of indoor unit PCB without losing digital, field programmed data. The indoor

unit removable EEPROM shall store the following unit data: unit model number, unit serial

number, unit PCB firmware and MICOM version, and field programmed unit name/tag

The manufacturers existing DVM Controls Network Solution shall be capable of supporting

web based interface, graphical user workstation, and system integration to Building

remote controllers, schedule timers, system controllers, centralized controllers, an integrated

Management Systems via BACnet® and LonWorks®. Integrate the new equipment specified

into the existing Samsung control system. The existing Samsung control system is presently

integrated into Tozour Automation control system serving the existing dorm building. Provide

expansion of both the existing Samsung control system and the existing Trane control system

The DVM S Controls Solution shall operate at 12V DC (excluding MCM-A202DN ON/OFF)

1. Main system control wiring (COM1, F1/F2) shall be installed in a system daisy chain

2. Zone control wiring (COM2, F3/F4) to wired remote controllers (MWR-****N) shall be run

3. Control wiring for system controllers and centralized controllers (upper level) shall be

from the indoor unit terminal block to the controller associated with that unit. This cable

installed in a daisy chain configuration from water-source unit to water-source unit

configuration from the indoor equipment to MAIN outdoor unit. This cable shall be 16

Controller). Controller power and communications shall be via a common

Indoor unit error code

Outdoor unit compressor status

10.Outdoor unit error code

D. TYPICAL DOAS SYSTEM SEQUENCE OF OPERATION

- 1. The DOAS System consist of an air handle with a supply fan, DX cooling and heating coils, which allows for each indoor unit to heat, reheat or cool as needed to deliver a neutral leaving air temperature setpoint to the space of 72F/ 50%RH Max. and as scheduled on the construction documents.
- 2. The indoor units, outdoor units, and mode control units will operate via their factory provided and installed controls to maintain the discharge temperature setpoint of each area served. The respective motor operated outside air damper shall open whenever the air handling unit is in operation. The reverse shall occur when the unit is shut down.
- 3. Tozour Automation installed an existing VRF-SC system for each VRF systems for existing building C & D. The VRF-SC acts as a Bacnet interface to allow the bas to schedule and monitor the status of the VRF systems.
- 4. The DOAS system will initially operate in the occupied mode as schedule by the owner.
 - The BAS will monitor the following points on the VRF system:
 - 1. Indoor unit mode status
- 2. Indoor unit discharge air temperature
- 3. Indoor unit space temperature setpoint
- 4. Indoor unit space setpoint low limit enable
- Indoor unit space setpoint low limit 6. Indoor unit space setpoint high limit enable
- Indoor unit space setpoint high limit
- 8. Indoor unit error code
- Outdoor unit compressor status
- 10.Outdoor unit error code
- Outdoor air temperature
- Space relative humidity
- 13. Cooling coil leaving air temperature
- 14. Heating (Reheat) coil leaving air temperature

MST-P3P (S-Net3 software) shall be capable of being networked with up to 16: MIM-D00AN (DMS2), MIM-D01AUN (DMS2.5), MIM-B17N (BACnet gateway 2.0), MIM-B17BUN (BACnet gateway 2.5), MIM-B18 (LonWorks gateway2.0), and/or MIM-B18BUN (Lon Works gateway 2.5) system controllers for web/LAN based control for consolidated control.

D. Wiring type:

- 1. COM1 and COM2 control wiring shall be 2-conductor, 16 AWG X 2, shielded cable.
- Network wiring shall be CAT-5e with RJ-45 connection.
- 3.2 DVM CONTROL NETWORK SOLUTION (VRF and DOAS System)

A. General:

The existing SAMSUNG DVM S NASA Control Network Solution which consists of remote controllers, system controllers, centralized controllers, and/or integrated web based interface communicating over a high-speed communication bus. Connect and extend the new specified DOAS air handles and split systems to the existing Samsung control Network. The SAMSUNG DVM S NASA Control Network Solution shall support operation monitoring, scheduling, error monitor, power distribution, personal browsers, tenant billing, online maintenance support, and integration with existing Tozour Automation System Building Management Systems (BMS) using either LonWorks® or BACnet® interfaces.

- B. TYPICAL VRF SYSTEM SEQUENCE OF OPERATION
- 1. The VRF system is a Samsung Split System, which allows for each indoor unit to heat or cool as needed to maintain space temperature setpoint.
- 2. The indoor units, outdoor units, and mode control units will operate via their factory provided and installed controls to maintain the space temperature setpoint of each area served.
- 3. Tozour Automation has installed an existing VRF-SC system for each VRF systems for existing building C & D. The existing VRF-SC acts as a Bacnet interface to allow the bas to schedule and monitor the status of the VRF systems.
- 4. The VRF system will initially operate in the occupied mode as schedule by the owner.
- C. The BAS will monitor the following points on the VRF system:
- Indoor unit mode status
- 2. Indoor unit space temperature
- 3. Indoor unit space temperature setpoint
- 4. Indoor unit space setpoint low limit enable
- Indoor unit space setpoint low limit
- 6. Indoor unit space setpoint high limit enable
- Indoor unit space setpoint high limit

REVISIONS:

Date

CLIENT:

MEP ENGINEER:

(856) 427-0200

YEZZI ASSOCIATES

CONCORD ENGINEERING

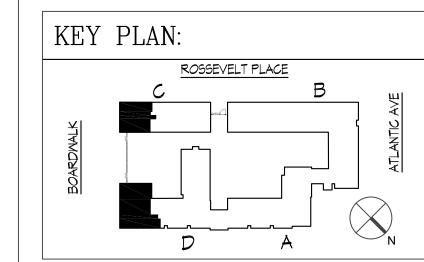
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0 6/2/2020 Issued for Bid & DCA Submission

Description

PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

MECHANICAL SPECIFICATIONS

Anthony H. Caucci New Jersey Lic. # 44806

SHEET: 23 OF 49

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DWG SIZE: 36x24 DRAWN BY: WFH SCALE: AS NOTED CHECKED BY: DRAWING NO. REVISION DATE: 05/22/2020 PROJECT NO .:

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The split DOAS unit requires incoming air below 23°F to be preheated.

Professional Engineer

4. Communication wire connection (OF1/OF2) between water-source unit modules (systems with 2 or more modules) must be connected from the MAIN unit to SUB1 and SUB2 (where applicable). This wire shall be 2-conductor, 16 AWG X 2, shielded cable.

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15. DOAS AHU-1 - Interlock new EF -3 to operate whenever AHU-1 is in operation.

a. Provide Exhaust fan status at the BAS for each exhaust fan.

16. DOAS AHU-2 – Interlock new EF-4 to operate whenever AHU-2 is in operation.

b. Provide Exhaust fan status at the BAS for each exhaust fan.

17. Provide motor operated outside air damper status at the BAS for each damper.

3.3 MULTI-FUNCTION CONTROLLER - PREMIUM INDIVIDUAL WIRED CONTROLLER (MWR-WE13N)

A. Connection:

1. The wired controller shall control up to 16 SAMSUNG indoor units or SAMSUNG ERV's (defined and controlled as one group).

B. Dimensions:

1. The wired controller shall be approximately 4 5/8" x 4 7/8" in size and white in color

C. The wired controller shall control indoor units as follows:

Air handler and ERV unified controller

2. Air handler operation ON/OFF

3. Air handler operation mode, set temperature, air flow direction, fan speed, individual louver control (with supported indoor units), discharge air temperature (with supported indoor units)

9. Options to set: desired A/C operation mode, setting temperature, power mode (ON/OFF), and

2. Partial button lock option (on/off, selection, temperature setting, fan speed, and schedule

12. Auto-off option to automatically turn the associated indoor unit(s) off after the specified time

13. System/indoor unit function and operation indication (defrost, error, restricted controller, SPi

16. Can be used to specify "Mode Master" while connected to a single indoor unit when used

20. Service mode support (Indoor unit addressing, indoor unit cycle data monitoring, option code

15. Service mode for connected indoor unit operation monitoring, addressing, and setup

4. Quiet and sleep modes

5. Error display

6. Filter replacement alarm display and reset

Single indoor unit control or multiple unit control (maximum 16 units)

8. Energy saving operation:

(a) Upper/lower temperature setting

(b) Automatic operation stop function

(c) Energy saving operation mode

(d) Weekly operating schedule setting:

Optional schedule exception day setting

setting buttons can be locked individually)

5. Upper and lower temperature setting restriction

8. Restrict wireless controller signal (optional)

9. Louver position setting (cassette and wall units)

without any interaction with the wired controller.

14. Quiet Mode setting (for supported units)

with heat pump systems.

18. Built-in room temperature sensor

Indoor unit operation state display

Individual louver/blade control for 4-way and mini 4-way cassettes.

Individual air direction control for 360 Cassette indoor units.

17. Real-time clock function - current time/day display function

monitoring and setting, and option setting/monitoring).

4. Daylight savings clock advance option

1. Different button permission levels

D. Other wired controller features:

Backlight

6. Auto mode skip

Heat mode skip (cooling only)

(e) Weekly operating schedule (A/C only, ERV only, A/C + ERV)

fan speed to operate based on weekly or daily schedules

21. Time synchronization with central DMS2.5 central control gateways (MIM-D01AUN, MIM-B17BUN, MIM-B18BUN).

E. MWR-WE13N specific features:

Wind-Free™ display and control for supported indoor unit models.

2. Motion Detection Sensor Control (On/Off, Indirect/Direct) for supported indoor unit models. Applies to optional MDS MCR-SMA, MCR-SMC, and MCR-SMD. Indirect/Direct control only applies to supported units that have MCR-SMC and MCR-SMD installed.

Clean and Long reach function for supported indoor unit models.

F. Specifications:

ltem

Fan Speed

Air Flow

Schedule

Button lock

Specified

Function

Two (2) conductor connection, PLC, (F3/F4).

DC 12V (power supplied by indoor unit via F3/F4 connection).

RS485 communication (F3/F4).

4. Can sense temperature via internal sensor, temperature sensor inside the air handler, or use the average temperature between controller and air handler temperature sensors.

5. The wired controller shall have two screw terminals for wiring connections. Wire is not included with controller.

16AWG X 2 shielded cable is necessary for proper operation.

7. The wired controller shall allow up to 328 feet of wire from the farthest connected indoor unit to the controller.

Multi-Function Controller					
Item	Description	Operation	Display		
ON/OFF	Run and stop operation for a single group Including Samsung ERV operation	Each Group	Each Group		
Operation Mode	Switches between Auto/Cool/Dry/ Fan/Heat	Each Group	Each Group		
Temperature Setting	Sets temperature for a single group. Range of temperature setting	Each Group	Each Group		
Discharge Air Temperature Setting	Sets temperature for supported ducted units	Each Group	Each Group		

Multi-Function Controller

Description

. Wind-Free™ mode enable/disable (MWR-

Models with 3 air flow speed settings:

Motion Detection Sensor Control

Air flow 2-step direction (Swing/Stop)

. ON/OFF/Temperature setting can be

done at most 10 schedules may be set for

Real-time clock function: current time, day

Button permission level setting (On/Off /

3. After power reset, the setting value is

1. Automatic stop setting (setting time

or ERV operation only depending on

Temperature setting / Mode button / Fan

Energy saving operation mode (IDU+ERV | Each Group | Each Group

4. Clean and Long reach function for

supported indoor unit models.

Direct setting at a specific angle.

High /Mid/Low/Auto

WE13N only)

Direction Setting | 3. Air flow operation varies depending on

the model.

each day.

display function

Temperature limit setting

range: 0-12 hours)

outdoor temperature)

4. Various restriction capabilities

Operation

Each Group | Each Group

Each Group Each Group

Each Group | Each Group

Each Group | Each Group

Display

individual indoor unit, a group of indoor units (up to 256 indoor units), or all indoor units (collective batch operation). This basic control set of operation controls for the BACnet® gateway shall include on/off, operation mode selection (auto, cool, heat, dry, and fan), temperature setting, fan speed setting, airflow direction setting, error email notification,

1. Easy control and monitoring through web browser (optimized for Internet Explorer).

2. The BACnet® gateway shall have basic operation controls which can be applied to an

Individual/Group control of up to 256 indoor units including SAMSUNG ERV, air handlers,

Multi-Function Controller

Operation

Each Unit | Each Unit

Each Unit | Each Unit

Each Group | Each Group

Each Group | Each Group

Each Group

Each Group

Display

Description

. Viewing/Setting indoor unit option code

Viewing/setting indoor unit MAIN address 3. Viewing/setting indoor unit RMC address

4. Viewing indoor unit cycle data

controller (-9°F~ +9°F) . Viewing RPM compensation

(+2°F or +5°F)

are displayed

can be displayed

3.4 BACnet® GATEWAY 2.5 (MIM-B17BUN)

DVM Chiller, and DVM Chiller FCU Kits.

Permit / Prohibit | Setting/releasing of simplified locking of

remote control buttons

Service Mode

Error

Local Operation

Quiet Mode

Temperature

Conditioning Engineers).

A. Function:

Setting/Viewing temperature sensor

compensation of the wired remote

Viewing/setting EEV stop step when

. Viewing/setting filter reminder time

interval (1000 hours, 2000 hours)

10. Viewing the H/W option setting

Cassette (AM0***N4DCH/AA)

. Viewing/setting indoor unit temperature

sensor compensation during Heating

11. Viewing wired remote controller software

12. Viewing/setting individual louver lock

Setting individual blade positions on 4-Way

When an error is currently occurring in the

system, the afflicted unit and the error code

Select the quiet mode to lower the fan noise

Actual room temperature or set temperature

*The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below

0.15 m/s is considered "still air" as defined by ASHRAE 55-2013 (American Society of Heating, Refrigerating, and Air-

*Some features may not be available depending on the model of connected air handler(s)

indoor unit is thermal-off during heating

3. The BACnet® gateway shall support system error notification via email. The Data description of error, effected equipment address, and current error status.

temperature limitations, operation mode limitation, and online maintenance.

4. The BACnet® gateway shall support: system configuration, 1-day/daily/weekly scheduling, remote controllers, editable user defined control logic, and malfunction monitoring.

5. Schedule Control Function through web browser. Up to 256 schedule settings, weekly and daily schedule setting, wireless/wired remote controller restriction setting. Digital

6. The Server shall allow configuration of unoccupied room settings for indoor units configured for unoccupied room control.

9. Available programmable logic to control the system based on preset monitor points. Specify various system control point inputs (indoor units, outdoor units, DI, DO) and operators (=, >, <, ≤, ≥, ≠) to manipulate system operation (indoor units, outdoor units, DI, DO) based on the status of the specified variables.

10. Optional "weighted averaging" or "representative" setting for heat pump systems to provide optimal auto changeover while in Auto mode.

connection. No management software required – PC-independent management through web browser.

12. 10 DI (Digital Input) ports available. Two digital input ports shall be for emergency shutdown with external contact control interface and 8 for other monitoring options (OPEN/CLOSE status). Full indoor unit control with simple contact input (Emergency/Lock). Digital inputs can be incorporated into control logics.

13. 8 DO (Digital Output) terminals for monitoring and control options. 2 state output (Operation/Error) for synchronous control and monitoring. 6 general purpose outputs to control other components (on: 12VDC out; off: no voltage). Digital Outputs can be incorporated into control logics and scheduling.

B. Connection:

the BACnet® gateway)

2. LAN connection for BMS, web browser, SNET3 software connection

Management Server emailed errors shall include: error occurrence time, error code with

monitoring of operation status, online maintenance tool, operation superseding of the

Outputs can be incorporated into scheduling.

7. Convenient digital display allows for easy set up.

SD memory card slot for data storage and software updating.

11. Web Server Function with remote control (with a public IP address) via internet

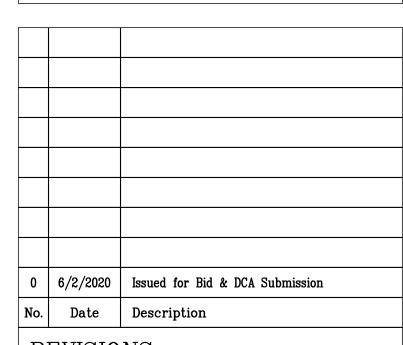
1. DC 12V, 3A power provided by AC/DC adapter (input 110-240VAC 50/60Hz, provided with

CLIENT: YEZZI ASSOCIATES

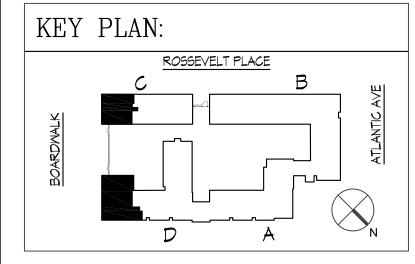
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REVISIONS:



PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE: MECHANICAL SPECIFICATIONS

Anthony H. Caucci New Jersey Lic. # 44806

SHEET: 24 OF 49

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PROJECT NO .:

DWG SIZE: 36x24 DRAWN BY: WFH SCALE: AS NOTED CHECKED BY: DRAWING NO. REVISION 05/22/2020

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Professional Engineer Anthony H. Caucci

- 3. Communication connection: ON/OFF Controller(s) (MCM-A202DN)
- 4. 16 AWG X 2 shielded cable between SAMSUNG equipment and controls is necessary for proper operation
- 5. Maximum number of RS485 connections to 1 BACnet® gateway:
- (a) 75 ON/OFF Controllers (MCM-A202DN)
- (b) 80 DVM S Series Systems (AM****X****2AA) connected direct (5 ports, 16 systems per port)
- (c) Maximum 128 indoor units (air handler and/or SAMSUNG ERV)
- 6. Upper level device connections: S-NET 3, BMS system (BACnet® IP), web client
- 7. MIM-B17BUN shall provide functions to monitor and control status of SAMSUNG DVM S Series systems (AM****X****2AA).
- 8. The Data Management Server shall support provide functions to monitor and control status of SAMSUNG DVM Plus II, Samsung DVM Plus III, Mini DVM, Free Joint Multi (MH***FXCA*A), and CAC (CH070/105/140CAV, DH105/140CAV, single zone systems) with installation of communication converter interface module per system (MIM-N01).
- 9. The Data Management Server shall support provide functions to monitor and control status of SAMSUNG CAC AC0***N**C*/AA (single zone systems) without installation of additional interface modules.
- C. Dimensions:
- 1. The BACnet® gateway shall be approximately 9.4" x 10" x 2.6" in size with stainless steel front and LCD displays.
- D. Control details:

VRF BACnet® Gateway 2.5					
Item	Description	Operation	Display		
ON/OFF	Run and stop operation for a single group	Each Group	Each Group		
Operation Mode	Switches between Auto/Cool/Dry/ /Fan/Heat	Each Group	Each Group		
Temperature Setting	Sets the temperature for a single group. Range of temperature setting a. Auto/Cool/Dry: 65°F-86°F b. Heat: 61°F-86°F Set discharge air temperature for Applicable Samsung duct units that have been configured for discharge air temperature control. Range of temperature setting: a. Cool/Dry mode: 46°F - 64°F b. Heat mode: 64°F - 86°F	Each Group	Each Group		
Fan Speed Setting	Models with 3 air flow speed settings: High /Mid/Low	Each Group	Each Group		

	VRF BACnet® Gateway 2.5		
Item	Description	Operation	Display
	history		
Unoccupied	Specify unoccupied room settings for applicable indoor units		
Room Control	a. Mode	Each Group	_
Configuration	b. Fan speed	-	
	c. Set temperature		
	Operation ON/OFF		
	2. Mode: Heat, cool, cool storage, hot water	Each Group	
DVA4 Obliga	Operation pattern: standard, rotation, efficiency		
DVM Chiller Control	4. Enable/disable Water Law		Each Group
Coridor	5. Enable/disable quiet mode		
	6. Forced fan mode		
	7. Demand/maximum current control (50~100% of design current)		

	VRF BACnet® Gateway 2.5	5		
Input Variables (Control)	Output Var	iables(Monitor)		
On/Off control	On/Off state	In/out contact state		
Operation mode	Operation mode	Emergency Stop		
Temperature setting	Set/Room temperature	Error code		
Fan speed/direction	Fan speed/direction	Indoor unit run time		
ERV operation mode	ERV operation mode	DO/DI Status		
ERV fan speed	ERV fan speed	SPI setting		
Filter alarm reset	Filter alarm	DVM Chiller Chilled water temperature		
User control restriction	User control restriction	Error status		
Operation mode lock	Thermal Off/On			
Set temperature limit	Power distribution			
Emergency stop	Operation mode lock			
Output contact control	Set temperature limit			
DO ON/OFF	Human Sensor (select units)			
Duct unit discharge air temperature set temperature (select units)	Duct unit discharge air temperature (select units)			
DVM Chiller Chilled water temperature	DVM Chiller demand limit setting			
DVM Chiller set temperature	Operation hours			
DVM Chiller demand limit setting	DVM Chiller Water Law			
DVM Chiller Water Law	DVM Chiller set temperature			

15.	The central touchscreen	controller shall	l allow screen	lock to prevent	unwanted changes
	by unauthorized users.				

- 16. The central touchscreen controller shall have an LED indicator light on front of device to display operation and error status.
- B. Connection:
- 1. The central touchscreen controller shall be powered by 100~240 VAC, 50/60 Hz.
- 2. The central touchscreen controller can connect to a single DVM S system via 2 X 16 AWG shielded cable on main system communication terminals (F1/F2). Connection on F1/F2 will allow control and monitoring of a single system.
- 3. The central touchscreen controller can connect to multiple systems via 2 X 16 AWG shielded cable on central control connections (R1/R2). Maximum 16 systems can be daisy chained on this communication line.
- 4. Multiple touchscreen controllers can be connected to a single central control connection (R1/R2, maximum 16) when used with MIM-D00AN, MIM-D01AUN, MIM-B17N, MIM-B17BUN, MIM-B18N, and MIM-B18BUN.
- C. Dimensions:
- 1. The central touchscreen controller shall be 8" x 6 5/16" x 1 1/2" (WxHxD).

VRF BACnet® Gateway 2.5									
Item	Description	Operation	Display						
Air Flow Direction Setting	 Air flow 2-step direction (Swing/Stop) Direct setting at a specific angle. Air flow operation varies depending on the model. 	Each Group	Each Group						
Web Server Function	Remote control with the public IP address No management software required – PC-independent management	Each Group	Each Group						
Accessible level / Dynamic user security Management	 Wireless/wired remote controller restriction setting Specify the scope of control and monitoring unit on a per-user 3 accessible levels: Admin/Manager/User 	Each Group	Each Group						
Error	 When an error is currently occurring in the system(s), the afflicted unit and the error code are displayed Error notification via email 	Each Group	Each Group						
Schedule Operation	 Up to 256 schedule settings Weekly and daily schedule setting 	Each Group	Each Group						
Power Distribution System	 Power distribution to 256 indoor units. Remote data query in 1-day units File saving in Microsoft Excel format. Power distribution data storage for one year MIM-B16 or MIM-B16N required for power use measurements 	Each Group	Each Group						
External Contact Interface	 Full indoor unit control with simple contact input (Emergency/Lock) State output (Operation/Error) for synchronous control 10 digital outputs (2 reserved) / 8 digital inputs (2 reserved) 	Each Channel	Each Channel						
Smart Central Management	 Control & monitoring zone edition Wireless/wired remote control restriction Temperature limit setting Operation mode restriction 	Each Group	Each Group						
User editable control logic	 User can edit control logic with arithmetic/conditional operators and parameters. Efficient energy saving realization for various operation conditions. EHP/ERV/AHU parameters + AND/OR + Arithmetic equation Function 	Each Group	Each Group						
Data backup/useful history management	Important data is stored in SD memory card (settings, schedules, errors, operation data, energy data, user settings, etc.) Record the operation history and error	Each Group	Each Group						

VRF BACnet® Gateway 2.5								
Input Variables (Control)	Output Variables(Monitor)							
DVM Chiller quiet mode	DVM Chiller quiet mode							

- 3.5 CENTRAL TOUCHSCREEN SYSTEM CONRTOLLER (MCM-A300N)
- A. Function:
- 1. The central touchscreen controller is only compatible with Samsung DVM S, CAC single zone, and Free Joint Multi (with MIM-N01 adapter) systems.
- 2. The central touchscreen controller shall provide control and monitoring via 7" touchscreen
- 3. The central touchscreen controller shall provide Individual/Group control of up to 128 indoor units (16 systems maximum.
- 4. The central touchscreen controller shall allow control and monitoring of indoor unit: operation mode, set temperature, room temperature, fan speed, louver position, remote control restriction, and power.
- 5. The central touchscreen controller shall 2 X DI (digital input) terminals to allow quick disable of equipment with a 0 volt contact
- 6. The central touchscreen controller shall have 1 X DO (digital output) that will provide 12V DC output interlocked with indoor unit operation (ON/OFF).
- 7. The central touchscreen controller shall have an SD card slot for data backup and future firmware updates.
- 8. The central touchscreen controller shall provide scheduling capability. Scheduling shall control of indoor unit: operation mode, set temperature, fan speed, louver position, remote control restriction, and power.
- 9. The central touchscreen controller shall have an all ON/OFF button
- 10. The central touchscreen controller shall allow creation of zones and grouping of indoor units regardless of connected refrigerant system.
- 11. The central touchscreen controller shall allow grouping of multiple indoor units to display as a single unit on user interface.
- 12. The central touchscreen controller shall have customizable group and zone icons on main interface to allow easy operation for user.
- 13. The central touchscreen controller shall allow restriction of ON/OFF, mode, set temperature, fan speed, and remote control use for daily (non-management) touchscreen controller users.
- 14. The central touchscreen controller shall have menu lock capability allowing restriction of indoor unit control, schedule setting/changing, and touchscreen controller settings by daily (non-management) touchscreen controller users.

AUTOMATIC TEMPERATURE CONTROLS (ATC)

GENERAL REQUIREMENTS:

- A. WORK SHALL INCLUDE THE COMPLETE FURNISHING AND INSTALLATION OF ALL MATERIALS AND EQUIPMENT NECESSARY FOR A COMPLETE AUTOMATIC CONTROL SYSTEM CONSISTING OF DIGITAL AND ELECTRONIC SENSING AND ACTUATION. THE SYSTEM SHALL BE COMPLETE IN ALL RESPECTS INCLUDING ALL LABOR, MATERIALS, EQUIPMENT AND SERVICE AS REQUIRED. ATC CONTRACTOR
- B. THE ATC CONTRACTOR SHALL PROVIDE ALL REQUIRED THERMOSTATS, TEMPERATURE SENSORS, CONTROL MODULES, CONTROL
- C. THE NEW EQUIPMENT CONTROLLERS AND ACCESSORIES SHALL BE DIRECTLY COMPATIBLE WITH THE FACILITY'S EXISTING BUILDING AUTOMATION SYSTEM (BMS) CURRENTLY SERVICED BY TOZOUR AUTOMATION. THE CONTROL SYSTEMS SHALL BE DESIGNED AND THROUGHOUT THE GUARANTEE PERIOD. ANY ITEMS DETERMINED TO BE DEFECTIVE WITHIN THE GUARANTEE PERIOD SHALL BE
- D. UPON COMPLETION OF THE CONTROL INSTALLATION, ALL EQUIPMENT PROVIDED UNDER THIS SPECIFICATION AND SHALL BE ADJUSTED AND CALIBRATED FOR PROPER OPERATION.
- E. THE ATC CONTRACTOR SHALL, UPON COMPLETION OF THE INSTALLATION AND PRIOR TO FINAL ACCEPTANCE, MAKE AVAILABLE TO THE OWNER AN ANNUAL SERVICE AGREEMENT COVERING ALL LABOR AND MATERIAL REQUIRED TO MAINTAIN AND SERVICE THE NEWLY INSTALLED CONTROL SYSTEMS.
- F. ALL ELECTRICAL WORK REQUIRED FOR THE OPERATION OF THE CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE ATC CONTRACTOR, EXCEPT AS SPECIFICALLY NOTED, AND SHALL BE IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER LOCAL AUTHORITIES HAVING JURISDICTION.
- G. ALL INDOOR ELECTRICAL WIRING SHALL BE INSTALLED IN THIN-WALL EMT CONDUIT. ALL OUTDOOR ELECTRICAL WIRING SHALL BE INSTALLED IN SCHEDULE 80 PVC CONDUIT WITH WATERTIGHT FITTINGS OR PVC COAT MC WITH WATERTIGHT FITTINGS... CONDUIT SIZES SHALL ALL BE A MINIMUM OF 3/4" IN SIZE.
- H. ALL ELECTRICAL CONTROL AND SWITCHES SHALL BE SUITABLE FOR 120 VOLTS, 60 HERTZ. UPON COMPLETION OF THE WORK, AND ELECTRICAL CERTIFICATION FROM THE LOCAL AUTHORITY HAVING JURISDICTION SHALL BE PROVIDED.
- I. ATC CONTRACTOR SHALL PROVIDE LOW VOLTAGE POWER WIRING TO ALL NEW MECHANICAL EQUIPMENT CONTROLS.
- J. THE FOLLOWING ELECTRICAL WORK SHALL BE PERFORMED BY THE ELECTRICAL CONTRACTOR:
- 2. POWER WIRING TO THE PRIMARY AUTOMATIC TEMPERATURE CONTROL PANELS.
- K. FURNISH AND INSTALL A COMPLETE CONTROL SYSTEM TO ACCOMPLISH THE FOLLOWING SEQUENCES OF OPERATIONS:
- PROVIDE BOTH MONITORING AND CONTROL BY THE BMS, OF THE UNIT'S OPERATIONS. THE BMS SHALL MONITOR STATUS AND PROVIDE CONTROL OF THE FOLLOWING POINTS:
- 2. OUTDOOR RELATIVE HUMIDITY (MONITOR ONLY).
- INDOOR RELATIVE HUMIDITY (MONITOR ONLY).
- 5. OUTSIDE AIR TEMPERATURE (MONITOR ONLY).
- 6. RETURN AIR TEMPERATURE (MONITOR ONLY).
- 8. COOLING COIL LEAVING AIR TEMPERATURE.

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- SHALL COORDINATE THE INSTALLATION OF THE ATC CONTROL SYSTEMS WITH ALL OTHER TRADES AS REQUIRED.
- WIRING, ETC., NECESSARY FOR A COMPLETE CONTROL SYSTEM THAT WILL FULFILL THE INTENT OF THESE SPECIFICATIONS.
- INSTALLED BY AN APPROVED, FACTORY TRAINED AND CERTIFIED ATC CONTRACTOR OF AUTOMATIC TEMPERATURE CONTROL SYSTEMS WHO SHALL ALSO PROVIDE STARTUP, OPERATING INSTRUCTIONS AND NECESSARY MAINTENANCE AND REPAIRS TO THE ATC SYSTEM REPAIRED OR REPLACE BY THE ATC CONTRACTOR AT NO COST TO THE OWNER.

- 1. POWER WIRING TO ALL MOTORS AND VFD'S.
- L. ATC CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR NECESSARY TO INTERFACE NEW UNITS INTO THE FACILITY'S BMS.
- 1. SUPPLY FAN VFD STATUS AND CONTROL.
- 4. RETURN, RELIEF AND OUTSIDE AIR DAMPER POSITIONS
- 7. DISCHARGE AIR TEMPERATURE.
- 9. HEATING COIL LEAVING AIR TEMPERATURE.

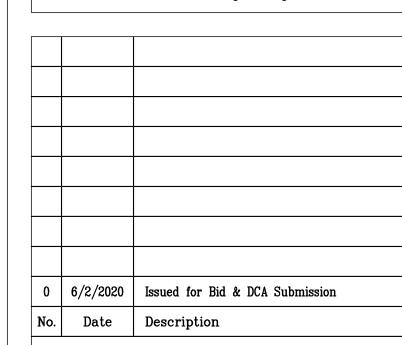
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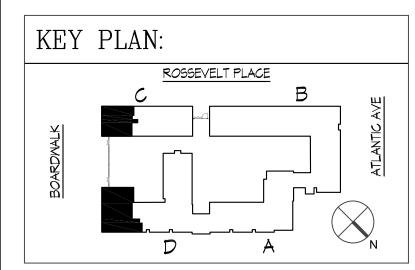
MEP ENGINEER:



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REVISIONS:



PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE: MECHANICAL SPECIFICATIONS & ATC NOTES

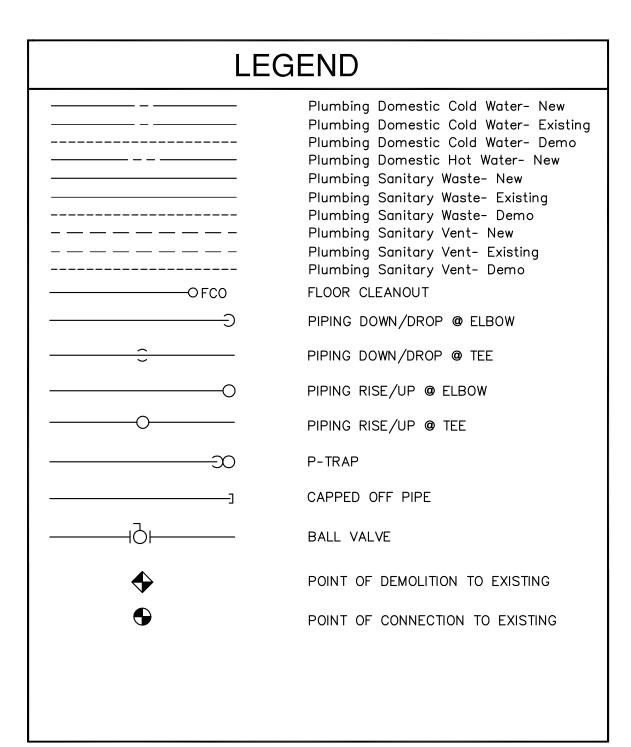
Anthony H. Caucci New Jersey Lic. # 44806

SHEET: 25 OF 49

PROJECT NO.:

WFH SCALE: AS NOTED DWG SIZE: 36x24 DRAWN BY: CHECKED BY: DRAWING NO. REVISION 05/22/2020

Professional Engineer Anthony H. Caucci



ABBREVIATIONS ABOVE CEILING ABOVE FINISHED FLOOR BLW FLR BELOW FLOOR BATHTUB BACKFLOW PREVENTER BFP **CLEANOUT** COLD WATER CW CONT CONTINUE CWFU COLD WATER FIXTURE UNIT DFU DRAINAGE FIXTURE UNIT DOWN DN ELECTRICAL CONTRACTOR EXIST EXISTING FCO FLOOR CLEAN OUT FLOOR DRAIN FORCE MAIN FNL FUNNEL FPC FIRE PROTECTION CONTRACTOR FLOOR SINK FOOD SERVICE CONTRACTOR **FSEC** GENERAL CONTRACTOR GC GREASE INTERCEPTOR GPM GALLONS PER MINUTE GW GREASE WASTE HB HOSE BIB HC HANDICAPPED ACCESSIBLE HW HOT WATER HWFU HOT WATER FIXTURE UNIT HOT WATER RETURN IW INDIRECT WASTE LAV LAVATORY SINK MC MECHANICAL CONTRACTOR MR MOP RECEPTOR MS MOP SINK MIXING VALVE ΜV PC PLUMBING CONTRACTOR PRV PRESSURE/REGULATING/REDUCING VALVE SA SHOCK ABSORBER SANITARY SHOWER SINK STAINLESS STEEL T & P TEMPERATURE & PRESSURE TBR TO BE REMOVED TD TRENCH DRAIN / TROUGH DRAIN TW TEMPERED WATER UNO UNLESS NOTED OTHERWISE UR URINAL VENT WITH WATER CLOSET

WALL CLEAN OUT

GENERAL SPECIFICATIONS

- ALL PLUMBING SHALL COMPLY WITH THE 2018 EDITION THE NATIONAL STANDARD PLUMBING CODE AS ADOPTED BY THE STATE OF NEW JERSEY.
- 2. CONTRACTOR SHALL PROVIDE AND PAY ALL FEES AND PERMITS.
- THE DRAWINGS ARE INTENDED TO SHOW APPROXIMATE AND RELATIVE LOCATIONS OF MATERIALS AND EQUIPMENT. DRAWINGS SHALL NOT BE SCALED TO DETERMINE EXACT POSITIONS AND CLEARANCES. BECAUSE OF DIAGRAMMATIC LAYOUT AND SMALL SCALE OF DRAWINGS, NOT ALL RISES, DROPS, OFFSETS, VENTS, TRAPS AND RELATED SPECIALTIES ARE INDICATED. PROVIDE ALL SUCH PIPING, FITTINGS, VALVES AND SPECIALTIES REQUIRED IN SUCH CASES TO INSURE A COMPLETE AND PROPERLY OPERATING INSTALLATION IN ACCORDANCE WITH CODES AND WITHOUT EXTRA COST TO OWNER.
- WORK SHALL BE PERFORMED BY MECHANICS SKILLED IN PARTICULAR TRADE INVOLVED, THAT IS, PLUMBING WORK SHALL BE PERFORMED BY PLUMBERS, ELECTRICAL WORK SHALL BE PERFORMED BY ELECTRICIANS, MECHANICAL WORKED PERFORMED BY STEAM FITTERS AND SHEET METAL MECHANICS.
- ALL WORK SHALL BE INSPECTED, TESTED AND APPROVED BY THE PROPER AUTHORITIES HAVING JURISDICTION. CERTIFIED COPIES OF THESE APPROVALS SHALL BE DELIVERED TO THE OWNER BEFORE FINAL PAYMENT.
- SLEEVES SHALL BE INSTALLED THROUGH FLOORS AND FIRE RATED WALLS. SLEEVES SHALL BE 2 PIPE SIZES LARGER THAN PIPE PASSING THRU AND SHALL BE SCHEDULE 40 STEEL PIPE. PROVIDE FIRE PROOF SEAL BETWEEN PIPES AND SLEEVES WHEN PASSING THRU FIRE RATED WALLS/FLOORS. SLEEVES PASSING THRU FLOORS SHALL BE EXTENDED 4"
- ESCUTCHEON PLATES SHALL BE PROVIDED ON ALL PIPE WHICH PASS THROUGH WALL PARTITIONS, FLOORS OR CEILINGS. PLATES SHALL BE ONE PIECE, CHROME FINISHED
- COREDRILLING SHALL BE ACCOMPLISHED BY MECHANICAL MEANS IN A MANNER THAT WILL NOT AFFECT THE INTEGRITY OF THE STRUCTURE. AFTER INSTALLATION OF PIPING THRU THE COREDRILL, PACK THE ANNULAR SPACE WITH OAKUM OR FIBROUS GLASS, LEAVING A MINIMUM OF TWO INCHES AT EACH END TO BE FILLED AND FINISHED WITH A "FIRE BARRIER" MATERIAL EQUAL TO 3M "PENETRATION SEALING SYSTEMS" SUCH AS "CP-25 CAULK", "303 PUTTY" OR "FS-195 WRAP". APPLICATION OF "FIRE BARRIER" MATERIAL SHALL BE IN ACORDANCE WITH MANUFACTURER'S STANDARDS AND APPLICABLE CODES.
- 9. PROVIDE COPIES OF ALL TEST REPORTS TO OWNER.
- O. COORDINATE LOCATION OF ALL ABOVE CEILING PIPING WITH MECHANICAL, ELECTRICAL & FIRE PROTECTION CONTRACTORS PRIOR TO INSTALLATION.
- 11. IF CONFLICT ARISES BETWEEN ITEMS SHOWN ON DRAWINGS AND ITEMS SPECIFIED, THE MOST STRINGENT ITEM SHALL BE USED.
- 12. THE INSTALLATION OF ALL INSULATION SHALL BE PERFORMED BY AN EXPERIENCED CRAFTSMAN IN A NEAT WORKMAN-LIKE MANNER AND SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS FOR SERVICE INTENDED.
- 13. ALL NEW PLUMBING FIXTURES SHALL MEET THE APPROPRIATE "ANSI" STANDARDS LISTED IN THE PLUMBING SUBCODE. USE OF SUBSTANDARD AND NON-CONFORMING FOREIGN MADE PRODUCTS IS PROHIBITED.
- 4. ALL PLUMBING SYSTEMS AND VALVES SHALL BE LABELED FOR PROPER IDENTIFICATION. NAMEPLATES, METAL TAGS, PLASTIC PIPE MARKERS IN ACCORDANCE WITH BRIMAR IDENTIFICATION & SAFETY PRODUCTS, BRIMAR INDUSTRIES, INC.
- 5. INSULATE EXPOSED WASTE & WATER PIPING BELOW HANDICAPPED LAVATORIES WITH TRUBRO LAV GUARD 2 FORM FIT INSULATING COVERS.
- 16. HANDICAPPED FIXTURE HEIGHTS SHALL BE IN ACCORDANCE WITH ICC/ANSI A-117.1.
- 17. ALL PLUMBING FIXTURES SHALL BE PROVIDED WITH CHROME PLATED SHUT OFF VALVES (ANGLE STOPS), CHROME PLATED SUPPLIES AND P-TRAPS.
- 18. ALL WASTE PIPING LOCATED IN ELECTRICAL ROOMS SHALL BE PANNED. DRAIN PAN SHALL BE MINIMUM 16 GAUGE SHEET METAL WITH 1 1/2" HIGH FORMED SIDES. PROVIDE 1 1/2" INDIRECT WASTE DRAIN FORM BOTTOM OF PAN TO NEAREST WASTE RECEPTACLE.
- 19. PROVIDE FIRESTOPPING FOR ALL PIPING PENETRATIONS THROUGH WALLS AND FLOORS. ALL FIRESTOPPING SHALL MEET OR EXCEED THE UL RATINGS FOR WALLS AND FLOORS AS NOTED ON ARCHITECTURAL DRAWINGS. FIRESTOPPING SHALL BE BY USE OF CAST IN PLACE OR POST INSTALLED DEVICES, CAULKING MATERIALS OR FOAMS. PENETRATIONS FOR COMBUSTIBLE PIPING SHALL BE PROVIDED WITH SEALANTS, COLLARS OR WRAP DEVICES DESIGNED TO EXPAND WHEN EXPOSED TO FIRE. CONTRACTOR SHALL SUBMIT MANUFACTURER'S SPECIFICATIONS AND TECHINCAL DATA FOR EACH TYPE OF PENETRATION REQUIRED WHICH SHALL INCLUDE COMPOSITION, LIMITATIONS, APPROVED UL LISTINGS AND INSTALLATION INSTRUCTIONS TO ENGINEER FOR REVIEW PRIOR TO INSTALLATION OF THESE DEVICES. INSTALLERS OF THESE DEVICES SHALL BE CERTIFIED, LICENSED OR OTHERWISE QUALIFIED BY THE MANUFACTURER AS HAVING BEEN PROVIDED THE NECESSARY TRAINING TO INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

CONTINUITY OF EXISTING SYSTEMS

- ALL WORK SHALL BE PERFORMED AT SUCH TIME AND IN SUCH MANNER AS WILL LEAST INTERFERE WITH MAINTENANCE AND OPERATION OF OWNER'S ACTIVITIES. PROVISIONS SHALL BE MADE TO PERMIT OWNER'S USE OF ALL THE BUILDING AND OF EXISTING SYSTEMS AT ALL TIMES. PROVIDE TEMPORARY FACILITIES TO SECURE THESE CONDITIONS. REMOVE TEMPORARY FACILITIES WHEN PERMANENT WORK HAS BEEN PLACED INTO SERVICE.
- FULLY COORDINATE WITH ARCHITECT, OWNER AND ALL OTHER TRADES, ALL WORK INVOLVING SHUT-DOWN AND INTERRUPTION OF EXISTING SYSTEMS AND SERVICES.
- SHUT-DOWN OF EXISTING SERVICES WHERE REQUIRED TO INSTALL NEW SYSTEMS OR ALTER EXISTING, SHALL BE PERFORMED DURING HOURS THAT THE BUILDING IS NOT BEING USED BY OWNER. ALL COSTS FOR PERFORMING THIS WORK SHALL BE BORNE BY THE CONTRACTOR AND WITHOUT "EXTRA" COST TO THE OWNER.
- EXISTING SYSTEMS AND SERVICES THAT ARE TEMPORARILY DISCONNECTED. BUT ARE TO REMAIN IN USE, SHALL BE PERMANENTLY RECONNECTED AND RETURNED TO PROPER OPERATION.
- FULLY COORDINATE WITH ARCHITECT, OWNER AND OTHER TRADES TO INSURE COMPLETE CONTINUITY OF ALL SYSTEMS AND SERVICES.

SUBMITTAL NOTE:

CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL PIPING, VALVES, EQUIPMENT, ETC IN ACCORDANCE WITH ARCHITECTURAL SPECIFICATIONS. NO WORK SHALL BEGIN UNTIL APPROVAL HAS BEEN OBTAINED FROM ARCHITECT/ENGINEER.

"AS BUILT" CONSTRUCTION DRAWINGS NOTES:

- CONTRACTOR SHALL SUBMIT COORDINATION DRAWINGS 1/4" SCALE MINIMUM FOR REVIEW AND APPROVAL AS STATED IN NOTE 1 ABOVE.
- A COMPLETE SET OF "AS-BUILT" DRAWINGS, (1) SET ON DISC IN PDF FORMAT AND (1) SET OF ELECTRONIC FILES PRODUCED IN AUTOCAD FORMAT SHALL BE FURNISHED TO THE OWNER AND ENGINEER UPON PROJECT COMPLETION.

PLUMBING DEMOLITION NOTES

- IT IS THE INTENT THAT ALL EXISTING PIPING, DUCTWORK, FIXTURES AND OTHER EQUIPMENT AND MATERIALS THAT INTERFERE WITH THE ALTERED EXISTING BUILDING ARRANGEMENTS AND NEW SYSTEMS BE REMOVED, RELOCATED, REROUTED OR ABANDONED. THE DRAWINGS GENERALLY INDICATE MAJOR ITEMS OF EXISTING MATERIALS AND EQUIPMENT THAT ARE TO BE REMOVED, RELOCATED, REROUTED OR ABANDONED BY EACH TRADE. IT IS NOT POSSIBLE TO INDICATE ALL RELATED ACCESSORIES, SPECIALTIES AND OTHER MINOR ITEMS. HOWEVER, THEIR REMOVAL, RELOCATIONS. REROUTING OR ABANDONMENT SHALL ALSO BE INCLUDED IN THIS CONTRACT AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- . EXISTING CONCEALED AND EXPOSED EQUIPMENT AND MATERIALS THAT WILL BECOME ABANDONED DUE TO NEW WORK SHALL BE REMOVED BACK TO ACTIVE RISER AND MAIN AND PROPERLY PLUGGED OR CAPPED BEHIND FINISHED SURFACES.
- 3. ALL EXISTING PIPING TO BE DEMOLISHED MAY NOT BE SHOWN. CONTRACTOR SHALL DURING PRE-BID SITE VISIT DETERMINE EXTENT OF DEMOLITION AND INCLUDE COST OF THIS WORK IN BID. SHOULD A CONTRACTOR REQUIRE REMOVAL, RELOCATION OR REROUTING OF ANOTHER TRADE'S WORK THAT IS NOT INDICATED ON DRAWINGS, THE CONTRACTOR REQUIRING SUCH WORK SHALL BE RESPONSIBLE FOR THAT WORK, AND PAY ALL REQUIRED COSTS. ALL UNKNOWN BELOW SLAB PIPING ENCOUNTERED DURING INSTALLATION OF NEW WORK SHALL BE REMOVED AND CAPPED OFF AT ACTIVE MAIN OR BRANCH. ALLOWANCE SHALL BE MADE FOR THESE ITEMS IN BID PRICE.
- . EXISTING EQUIPMENT AND MATERIALS THAT ARE TO REMAIN, BUT BECOME EXPOSED DUE TO NEW WORK, SHALL BE RELOCATED AND RECONNECTED AS DIRECTED BY
- 5. ALL WORK INVOLVING ALTERATIONS TO EXISTING SYSTEMS, EQUIPMENT AND MATERIALS SHALL BE REVIEWED WITH ARCHITECT AND OWNER BEFORE BEGINNING WORK.
- . REMOVED EQUIPMENT AND MATERIALS NOT DESIRED BY OWNER SHALL BECOME PROPERTY OF CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM SITE. EQUIPMENT AND MATERIALS DESIRED BY OWNER SHALL BE DELIVERED BY CONTRACTOR TO AN ON-SITE STORAGE LOCATION DESIGNATED BY OWNER.
- . THE CONTRACTOR MUST SURVEY AND VERIFY LOCATIONS AND PHYSICAL SIZES OF ALL EXISTING ITEMS AND DETERMINE WHETHER RELOCATION OR REROUTING WILL BE REQUIRED. IF RELOCATION OR REPOUTING IS REQUIRED. INCLUDING THAT OF ALL RELATED ACCESSORIES, SPECIALTIES AND OTHER MINOR ITEMS, THE CONTRACTOR SHALL INCLUDE ALL NECESSARY WORK AS PART OF HIS CONTRACT AND IT SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- 8. IN THE REMOVAL OF ANY PART OF A DRAINAGE OR WATER SYSTEM, DEAD ENDS SHALL BE AVOIDED EXCEPT WHERE NECESSARY TO EXTEND TO A CLEANOUT SO AS TO BE ACCESSIBLE.

DOMESTIC WATER SPECIFICATIONS

- DOMESTIC WATER HOT & COLD WATER DISTRIBUTION PIPING SHALL BE ASTM B88 TYPE "L" SEAMLESS COPPER TUBE WITH SOLDER JOINT FITTINGS USING 95-5 SOLDER PER ASTM B32. CONTRACTOR MAY SUBSTITUTE PROPRESS FITINGS AND JOINING METHODS. ALL HOT & COLD WATER DISTRIBUTION PIPING SHALL BE WATER RATED FOR NOT LESS THAN 100PSI @ 180°F. ALL PIPING INSTALLED IN PLENUM SPACES SHALL BE ASTM B88 TYPE "L" SEAMLESS COPPER TUBE WITH SOLDER JOINT FITTINGS USING 95-5 SOLDER PER ASTM B32 OR HAVE A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPMENT RATING OF 50 OR LESS. PIPING MATERIALS FOR USE ON DOMESTIC WATER SYSTEMS INCLUDING FIXTURES & VALVES SHALL NOT CONTAIN MORE THAN 0.2 PERCENT LEAD.
- PRIOR TO DISINFECTION, POTABLE WATER PIPING SHALL BE FLUSHED WITH WATER UNTIL NO DIRTY WATER APPEARS AT THE POINTS OF OUTLETS.
- . POTABLE WATER PIPING SHALL BE DISINFECTED PRIOR TO USE PER NATIONAL STANDARD PLUMBING CODE. THE PIPING SHALL BE FILLED WITH A WATER CHLORINE SOLUTION CONTAINING AT LEAST 50 PARTS PER MILLION OF CHLORINE AND SHALL BE VALVED OFF FOR 24 HOURS OR FILLED WITH A WATER CHLORINE SOLUTION CONTAINING AT LEAST 200 PARTS PER MILLION OF CHLORINE AND ALLOWED TO STAND FOR AT LEAST 3 HOURS. FOLLOWING THE ALLOWED STANDING TIME. THE SYSTEM SHALL BE FLUSHED WITH POTABLE WATER UNTIL NO CHLORINE REMAINS IN THE SYSTEM. PROVIDE RESULTS OF DISINFECTION TO OWNER WHEN COMPLETE.
- . DOMESTIC WATER PIPE SHALL CONSIST OF A HYDROSTATIC PRESSURE TEST OF 25 PSIG ABOVE THE WORKING PRESSURE UNDER WHICH IT IS OPERATED FOR NOT LESS THAN 60 MINUTES.
- . IF LEAKS OCCUR DURING TESTING, REPAIRS SHALL BE MADE AND SYSTEM RETESTED UNTIL NO EVIDENCE OF LEAKS EXIST FOR THE DURATION OF THE TEST.
- . DOMESTIC WATER PIPE SHALL BE INSULATED WITH 1" THICK FIBERGLASS PREFORMED INSULATION WITH VAPOR JACKET AND SELF SEALING TAPE, EQUAL TO OWENS-CORNING ASJ/SSL-2. PIPING IN EXTERIOR WALLS SHALL HAVE 2"THICK INSULATION. DOMESTIC WATER PIPE MAY BE INSULATED WITH AP/ARMAFLEX SS (SELFSEAL) FLEXIBLE ELASTOMERIC THERMAL INSULATION, 1/2" THICKNESS, OR APPROVED EQUAL. PIPING IN EXTERIOR WALLS SHALL HAVE 1" THICK INSULATION.
- BALL VALVES SHALL BE EQUAL TO APOLLO LEAD FREE SERIES 77CLF-100, 77CLF-200. 70LF-100 OR 70LF-200 RATED FOR 150 PSIG W.O.G.
- SHOCK ABSORBER SHALL BE JR SMITH FIGURE 5005 THRU 5030 AS APPLICABLE. & CERTIFIED TO BE TESTED IN ACCORDANCE WITH STANDARD PDI WH-201& ASSE 1010.
- . CHECK VALVES SHALL BE EQUAL TO APOLLO LEAD FREE SERIES 161SLF PER MSS SP-80. .
- O.BACKFLOW PREVENTER FOR FOOD SERVICE EQUIPMENT SHALL BE LEAD FREE APOLLO VALVE MODEL DUCLF4N, DUAL CHECK, AND SHALL BE LISTED UNDER ASSE 1024 STANDARDS. CARBONATED BEVERAGE BACKFLOW PREVENTERS SHALL BE LEAD FREE APOLLO VALVE MODEL 4C-100 AND SHALL BE LISTED UNDER ASSE 1022.

SANITARY WASTE PIPING SPECIFICATIONS

- SANITARY WASTE AND VENT PIPE & FITTINGS SHALL BE STANDARD WEIGHT HUBLESS CAST IRON ASTM A-888, WITH ALL STAINLESS STEEL HUBLESS COUPLING WITH NEOPRENE GASKETS IN ACCORDANCE WITH ASTM $\,$ C-564 & CISPI-310, ALL COUPLINGS TO BE HEAVY DUTY EQUAL TO HUSKY SD 4000 WITH SEALING SLEEVE CONFORMING TO ASTM C-564. ALL CAST IRON SOIL PIPE, FITTINGS COUPLINGS AND GASKETS SHALL BE MARKED W/THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE, IDENTIFIED IN ACCORDANCE WITH THE REQUIREMENTS OF CISPI 310, AND BE LISTED BY NSF INTERNATIONAL AND THE COUNTRY OF ORIGIN & IDENTIFICATION OF THE ORIGINAL
- ALL WASTE & VENT PIPE SHALL BE AIR TESTED TO NOT LESS THAN 5 PSIG PRESSURE II THE SYSTEM. PIPING SYSTEM SHALL SUSTAIN A CONSTANT PRESSURE FOR NOT LESS THAN 15 MINUTES. IF LEAKS OCCUR DURING SYSTEM TESTING, REPAIRS SHALL BE MADE AND SYSTEM RETESTED UNTIL NO EVIDENCE OF LEAKS EXIST FOR THE DURATION OF THE TEST. DRAIN & VENT PIPING LOCATED ABOVE AREAS WHERE FOOD IS STORED, PREPARED OR DISPLAYED SHALL BE AIR TESTED TO NOT LESS THAN 10 PSIG.
- CLEANOUTS SHALL BE TYLER PIPE CLEANOUT BODY STANDARD FERRULE 2-11 WITH TYPE "B" BRASS PLUG FOR ABOVE FLOOR. FLOOR CLEANOUTS SHALL BE JR SMITH SERIES 4020 W/ROUND ADJUSTABLE BRONZE TOP. WALL CLEANOUTS SHALL BE JR SMITH FIGURE 4402.
- HORIZONTAL DRAIN PIPING SHALL BE INSTALLED AT UNIFORM SLOPE NOT LESS THAN 1/4" PER FOOT FOR 2" AND SMALLER AND NOT LESS THAN 1/8" PER FOOT FOR 3" AND LARGER. INSTALL STORM DRAINAGE AS INDICATED ON PLANS.
- ALL FLOOR DRAINS SHALL HAVE DEEP SEAL TRAPS
- INDIRECT WASTE PIPING SHALL BE COPPER TUBE ASTM B306 WITH SOLDER JOINT DWV FITTINGS IN ACCORDANCE WITH ASME B16.23.
- ALL WASTE PIPING LOCATED INSIDE EXTERIOR WALLS SHALL BE INSULATED WITH 2"THICK FIBERGLASS PREFORMED INSULATION WITH VAPOR JACKET AND SELF- SEALING TAPE, EQUAL TO OWENS-CORNING ASJ/SSL-2.
- IN THE REMOVAL OF ANY PART OF A DRAINAGE SYSTEM, DEAD ENDS SHALL BE AVOIDED EXCEPT WHERE NECESSARY TO EXTEND TO A CLEANOUT SO AS TO BE ACCESSIBLE.

HANGERS & SUPPORTS

- HANGERS AND ANCHORS SHALL BE SECURELY ATTACHED TO BUILDING CONSTRUCTION AT SUFFICIENTLY CLOSE INTERVALS TO SUPPORT PIPING AND ITS CONTENTS.
- VERTICAL PIPING FOR CAST IRON SHALL BE SUPPORTED AT BASE AND AT EACH STORY
- VERTICAL PIPING FOR COPPER SHALL BE SUPPORTED AT EACH STORY HEIGHT BUT NOT MORE THAN 10 FOOT INTERVALS.
- HORIZONTAL PIPING FOR CAST IRON SHALL BE SUPPORTED WITH MINIMUM ONE HANGER LOCATED WITHIN 18" OF EACH JOINT UP TO 10 FOOT MAXIMUM PIPE LENGTH, AT CHANGES IN DIRECTION, AND AT EACH BRANCH CONNECTION. WHERE PIPE IS SUSPENDED BY NON-RIGID HANGERS MORE THAN 18" LONG PROVIDE LATERAL SUPPORT AT A MINIMUM 25 FOOT MAXIMUM SPACING. LATERAL SUPPORT SHALL CONSIST OF EITHER A SWAY BRACE OR EITHER A CHANGE IN DIRECTION OR A BRANCH CONNECTION THAT PROVIDES THE REQUIRED LATERAL SUPPORT.
- HORIZONTAL PIPING FOR COPPER SHALL BE SUPPORTED AT 6 FOOT INTERVALS FOR PIPE SIZES 1 1/4" AND SMALLER AND AT 10 FOOT INTERVALS FOR PIPE SIZES 1 1/2" AND LARGER. WHERE PIPE IS SUSPENDED BY NON-RIGID HANGERS MORE THAN 18" LONG PROVIDE LATERAL SUPPORT.
- 2. ALL SUPPORTS IN CONTACT WITH COPPER PIPING SHALL BE PLASTIC COATED.
- INSTALL METAL SHIELDS ON HANGERS SUPPORTING INSULATED PIPE.
- PROVIDE HANGERS THAT ARE U.L. LISTED AND LABELED.
- ALL DOMESTIC WATER AND SANITARY WASTE PIPE SUPPORTS SHALL BE IN ACCORDANCE WITH NSPC CHAPTER 8, MSS SP-58, 69 & 89.
- PLUMBING SYSTEMS SHALL BE INSTALLED SO AS TO PREVENT STRAINS & STRESSES WHICH WILL EXCEED STRUCTURAL STRENGTH OF PIPE. PROVISIONS SHALL BE MADE FOR EXPANSION & CONTRACTION OF PIPING.
- HANGERS, ANCHORS AND SUPPORTS SHALL BE OF METAL. OTHER MATERIAL OF SUFFICIENT STRENGTH TO SUPPORT THE PIPING AND ITS CONTENTS IS ACCEPTABLE. ALL SUPPORTS AND FASTENERS LOCATED OUTSIDE OR IN CORROSIVE AREAS SHALL BE
- . MINIMUM ROD DIAMETER FOR SINGLE RIGID SUPPORTS SHALL BE AS FOLLOWS:
- A. FOR 1/4" THRU 2" PIPE: 3/8"DIAMETER
- B. FOR $2 \frac{1}{2}$ AND 3 PIPE: $\frac{1}{2}$ DIAMETER . FOR 4" AND 5" PIPE: 5/8"DIAMETER
- D. RODS MAY BE REDUCED ONE SIZE FOR DOUBLE ROD HANGERS (3/8"DIA MIN)
- FOR ABOVE GROUND WASTE PIPING OVER 4" IN DIAMETER USING NO-HUB COUPLINGS, COUPLINGS SHALL BE RESTRAINED WITH BRACES, BLOCKS, RODDING OR OTHER SUITABLE METHODS AS RECOMMENDED BY THE COUPLING MANUFACTURER OR ENGINEER.

MEP ENGINEER:

CLIENT:



YEZZI ASSOCIATES

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	0	6/2/2020	Issued for Bid & DCA Submission

Date Description **REVISIONS:**

KEY PLAN:

PROJECT

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

PLUMBING NOTES, LEGEND, SYMBOLS & ABBREVIATIONS

SHEET: 26 of 49

DWG SIZE: 36x24 SCALE: AS NOTED DRAWN BY: CHECKED BY: DRAWING NO. REVISION DATE: 05/22/2020 PROJECT NO.:

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Professional Engineer Anthony H. Caucci

Anthony H. Caucci

New Jersey Lic. # 44806

	PLUMBING FIXTURE SCHEDULE											
TAG	FIXTURE	BASIS OF DESIGN MANUFACTURER AND MODEL	APPLICABLE STANDARD	MATERIAL	MOUNTING AND OUTLET	RIM HEIGHT	FAUCETS, FITTINGS AND ACCESSORIES	BASIS				
WC-1	WALL-MOUNTED ELONGATED WATER CLOSET	SLOAN MODEL ST-2459-A	ASME A112.19.2M ADA	VITREOUS CHINA	WALL-MOUNTED BACK-OUTLET	ADA 17"-19"	 FLUSH VALVE: SLOAN 8111-1.28 GPF, SENSOR OPERATED, BATTERY POWERED SEATS: CENTOCO #550STSCC SUPPLY: CHROME PLATED BRASS, 1-1/2" TOP INLET SPUD. CARRIER: J.R. SMITH (SINGLE OR BACK-TO-BACK) 	DESIGN CONSUMPTION: 1.28 GPF PRESSURE RANGE 15-80 PSI. COLOR: WHITE BOLT CAPS				
LAV-1	LAVATORY	SLOAN MODEL SS-3103	ASME A112.19.2M FAUCET ASME A11218.1M	VITREOUS CHINA	WALL MOUNTED ADA	32" ADA 34"	1. FAUCET: SLOAN EAF-150-ISM, SENSOR OPERATED, BATTERY POWERED 2. DRAIN: GRID TYPE, POLISHED CHROME, VANDAL RESISTANT. 3. TRAP TYPE: P-TRAP CHROME PLATED CAST BRASS BODY WITH CLEANOUT 4. SUPPLY KITS: BRAIDED S/S FLEX 5. CARRIER: J.R. SMITH WALL MOUNTED CONCEALED ARM SUPPORT	FRONT OVERFLOW 0.5 GPM FLOW RATE COLOR: WHITE				
EWC-1	ELECTRIC WATER COOLER	ELKAY MODEL LZSTL8WSLK	ASME A112.19.3	-	WALL MOUNTED - BI LEVEL	36-13/16" ADA 31-5/16"	1. PROVIDE COMPATIBLE SUPPLY, TRAP AND SUPPORTS.	8 GPH				
MR-1	MOP RECEPTOR	FIAT PRODUCT MODEL TSB 300	-	PRECAST TERRAZZO	FLOOR MOUNTED	-	1. FAUCET: "T&S BRASS" B-0662 WALL SUPPORTED CEILING MOUNTED, CHROME PLATED, W/ VACUUM BREAKER, KEY STOPS. SPOUT W/PAIL HOOK, WALL BRACE AND 3/4" HOSE THREAD 2. DRAIN: STAINLESS STEEL GRID-TYPE, POLISHED CHROME, VANDAL RESISTANT 3. RIM GUARD: STAINLESS STEEL 4. MOP HANGER NO: 889-CC-24" 5. HOSE & HOSE BRACKET NO: 832-AA-30" LONG 6. STRAINER NO: 1453-BB 16 GAUGE #302 STAINLESS STEEL ATTACHED WITH FLAT HEAD SLOTTED MACHINE SCREWS 7. SEALANT: SILICONE #833-AA 8. SS WALL GUARD MSG 2424	SPRAY OUTLET W/ 2.5 GPM FLOW RATE				

			DET 1									
SYMBOL	LOCATION	HORIZONTAL OR VERTICAL	SERVICE	TYPE	TANK VOLUME (GAL)	ACCEPTANCE VOLUME (GAL)	SIZE DIA x H	FILL	SYSTEM	WEIGHT	BASIS MANUFATCURER	OF DESIGN MODEL NUMBER
DET-1	UTILITY CLOSET	VERTICAL	DOM HOT WATER	BLADDER	2		8"x13"		3/4"	22	AMTROL	ST-5

1. NSF CERTIFIED FOR POTABLE SYSTEMS

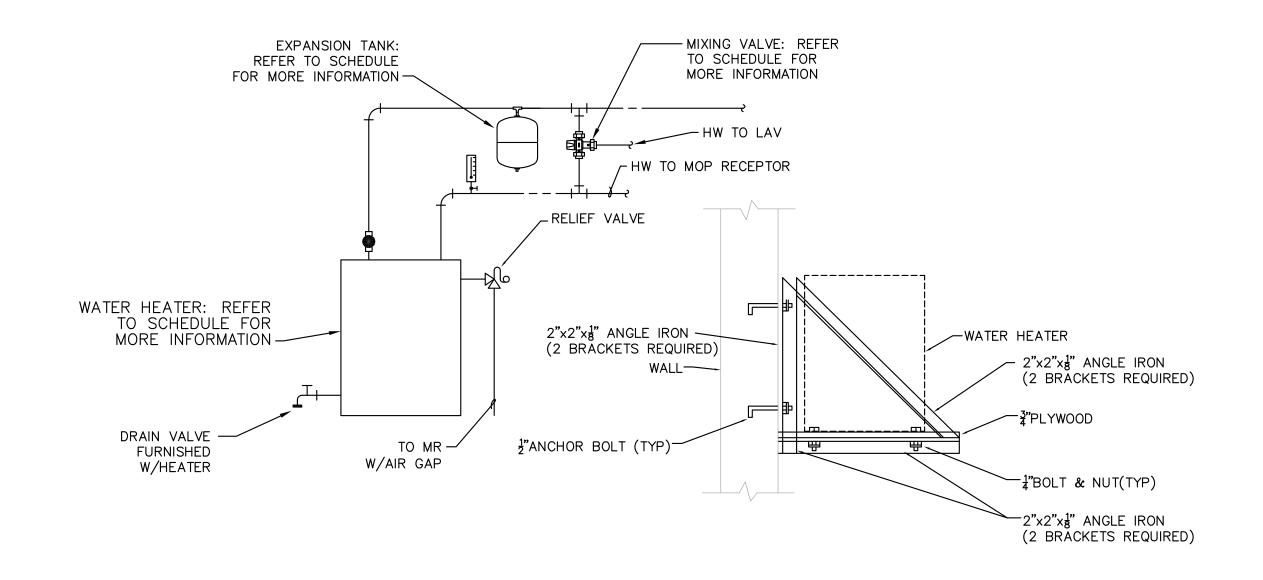
^{2. 7} YEAR WARRANTY

	ELECTRIC WATER HEATER SCHEDULE											
SYMBOL	CAPACITY (GALLONS)	WATER ENT (°F)	WATER LVG (°F)	RECOVERY (80°F RISE) (GAL/HR)	ELEMENT (WATTS)	ELEMENT CONTROL	V/PH/HZ	FLA	OPER WEIGHT (LBS)	BASIS		
EWH-1	10	40	140	8	2000	NON-SIMULTANEOUS	208/1/60	9.6	137	LOCHINVAR MODEL #EJJ010ES (18.25"H x 18"DIA)		

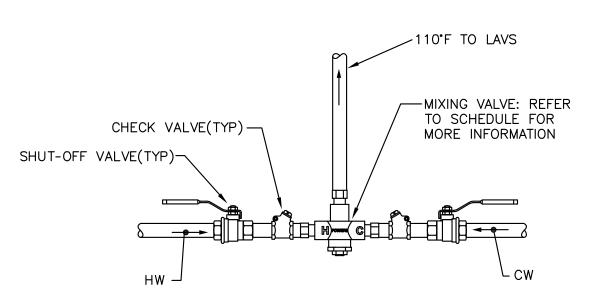
	DOMESTIC WATER MIXING VALVE SCHEDULE											
		MAX MIN		FLANGE SIZE		BASIS OF DESIGN						
SYMBOL	SERVICE	LOCATION	TYPE	GPM	PD	TEMP	FLOW	INLET	OUTLET	MANUFACTURER	MODEL NUMBER	
MV-1	DOM. HOT WATER SUPPLY	JANITORS CLOSET	THERMOSTATIC	6	10	110	.5	3/4"	3/4"	WATTS	LFMMVM1	

NOTES:

1. NSF CERTIFIED FOR POTABLE USE.





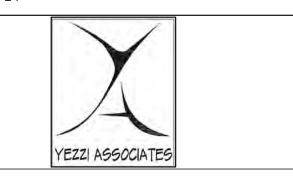


2 DETAIL — MIXING VALVE P-0.2 SCALE: NTS

Anthony H. Caucci New Jersey Lic. # 44806

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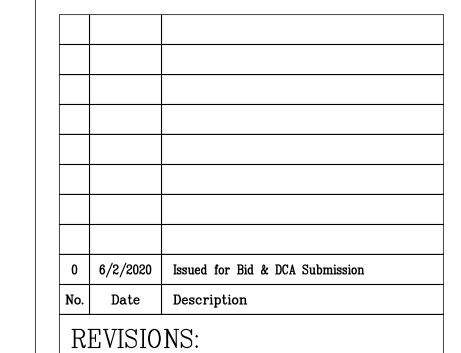
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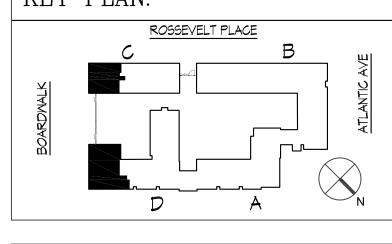
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KEY PLAN:



PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

PLUMBING SCHEDULES & DETAILS

SHEET: 27 OF 49

DRAWN BY:

DHB SCALE:
AS NOTED DWG SIZE:
36x24

CHECKED BY:

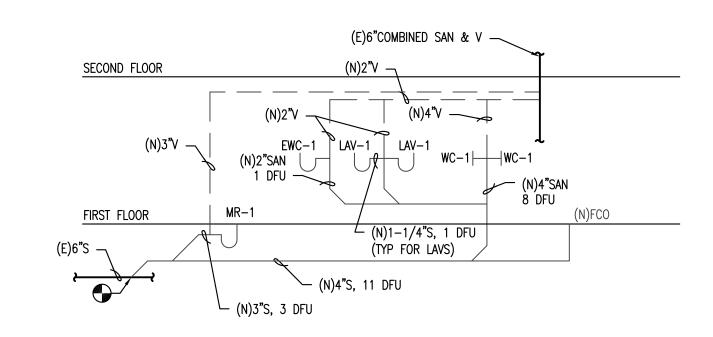
DATE:

05/22/2020

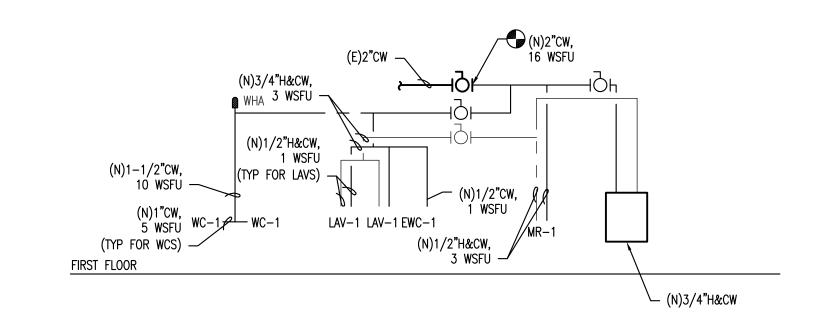
PROJECT NO.:

DHB SCALE:
AS NOTED DWG SIZE:
36x24

REVISION



1 RISER — SANITARY — ALTERNATE BID P-0.3 SCALE: NTS



2 RISER — DOMESTIC WATER — ALTERNATE BID P-0.3 SCALE: NTS

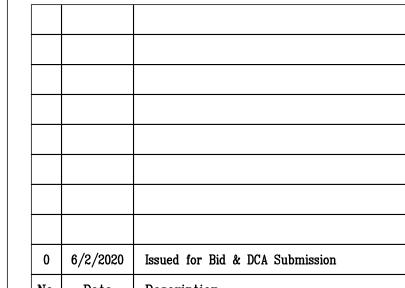




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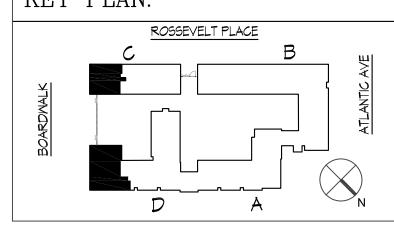


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No. Date Description REVISIONS:

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PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

PLUMBING RISER DIAGRAMS

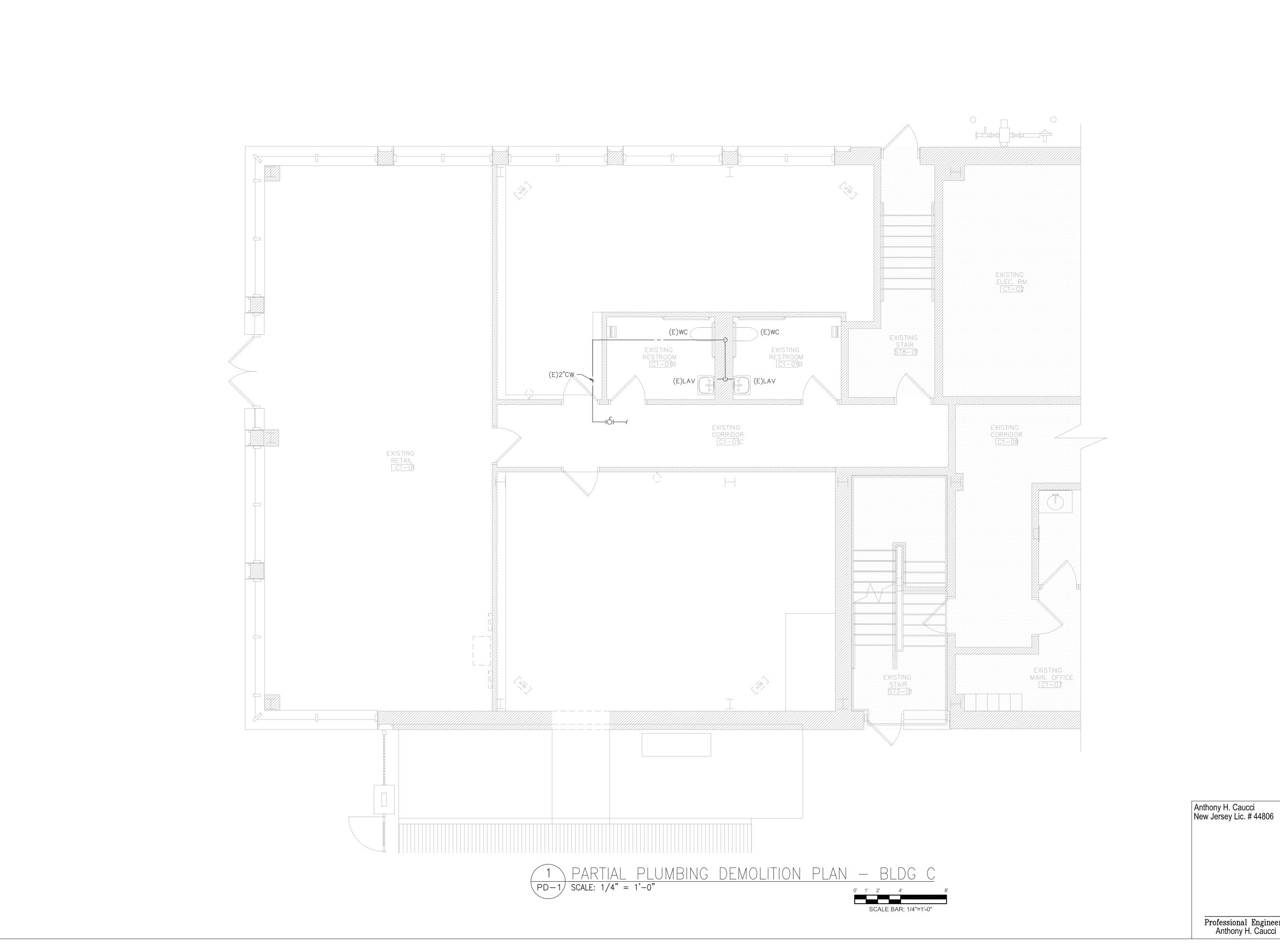
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SHEET: 28 OF 45

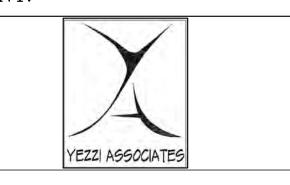
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Professional Engineer
Anthony H. Caucci



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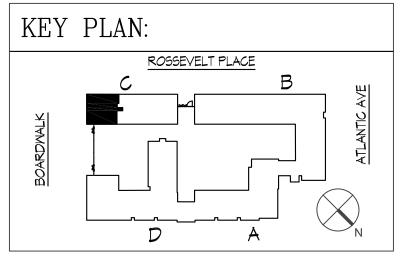
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PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

PARTIAL PLUMBING DEMOLITION PLAN -BUILDING C - BASE BID

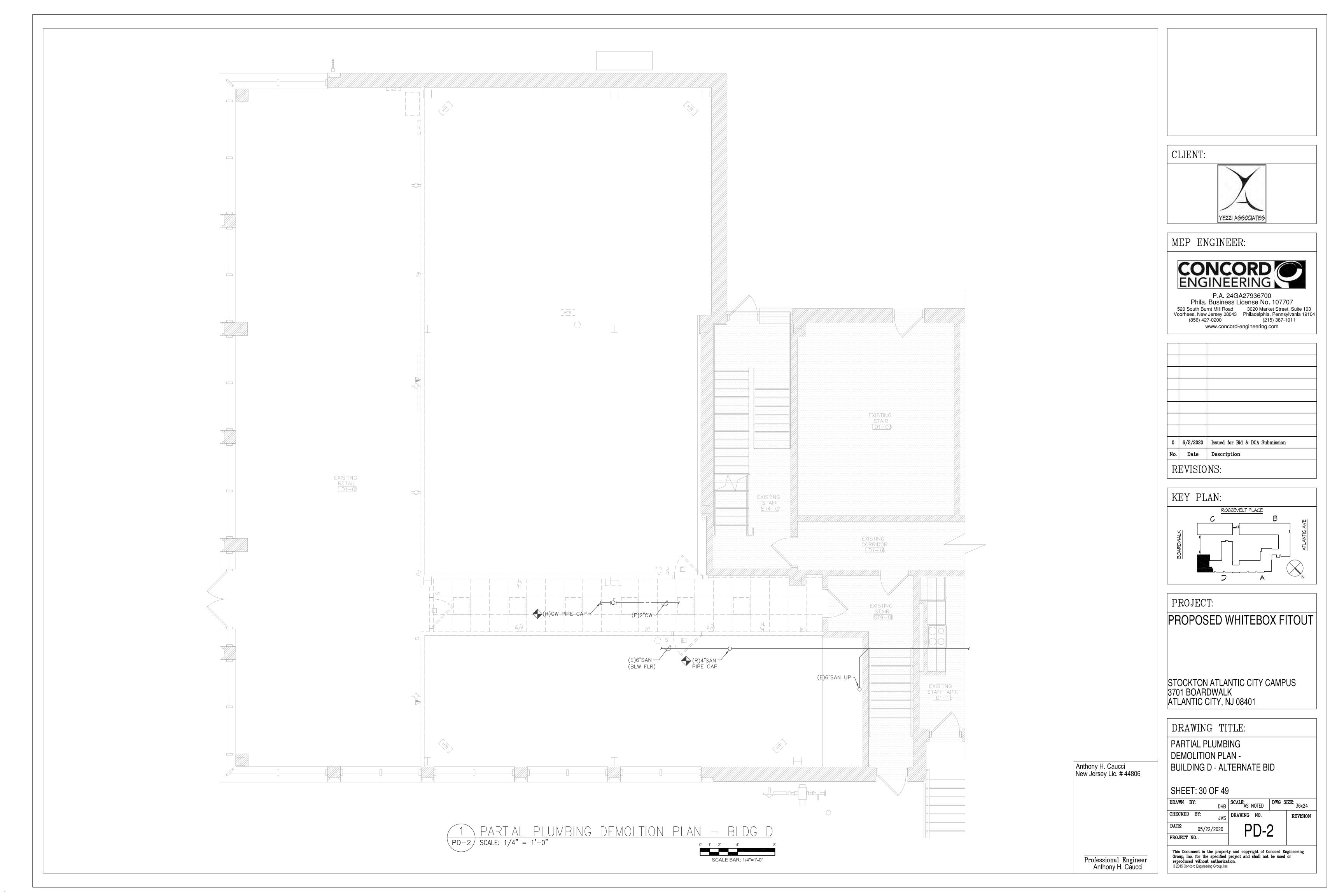
SHEET: 29 OF 49

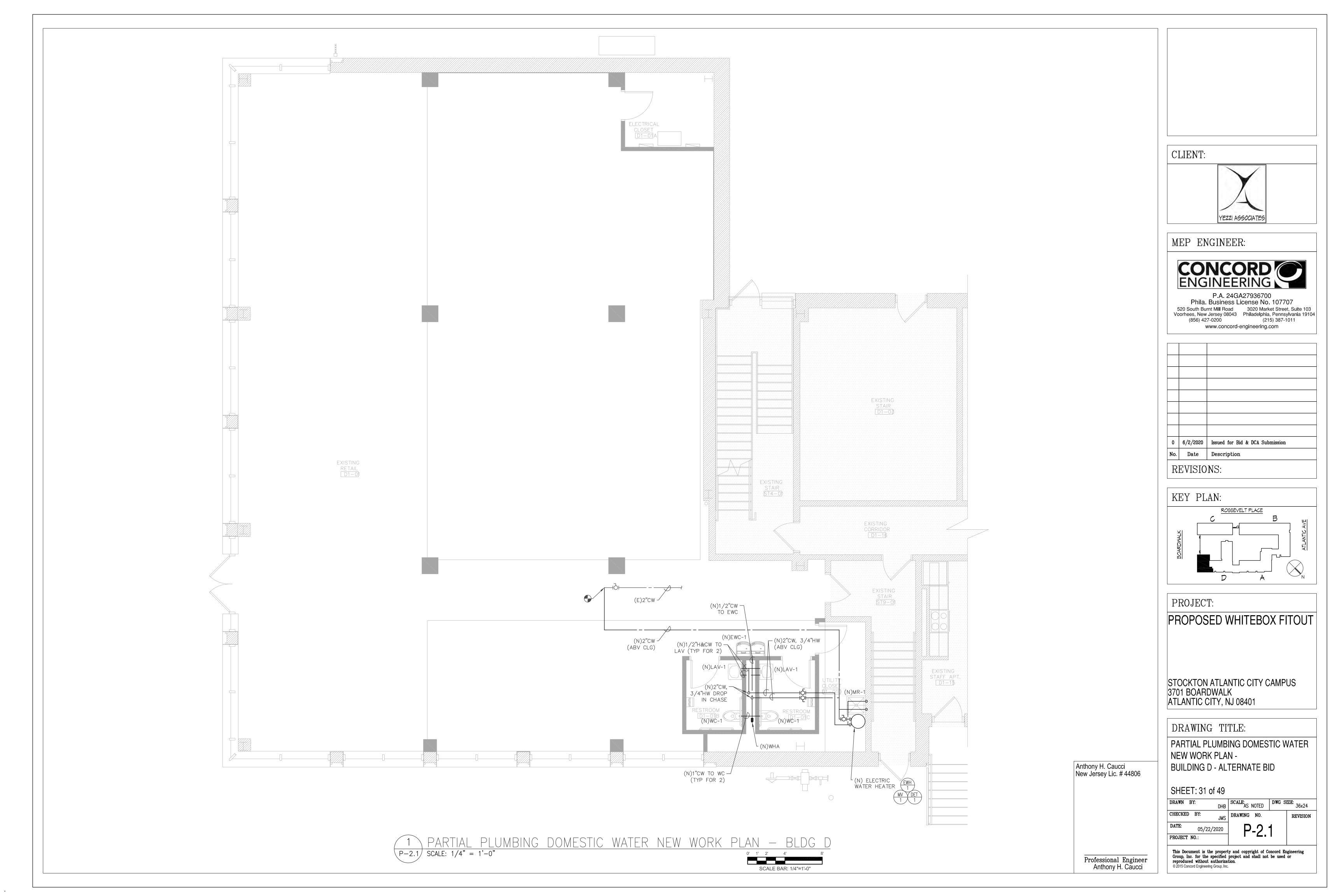
DHB SCALE: AS NOTED DWG SIZE: 36x24 DRAWN BY: JMS DRAWING NO. CHECKED BY: REVISION DATE: PROJECT NO.:

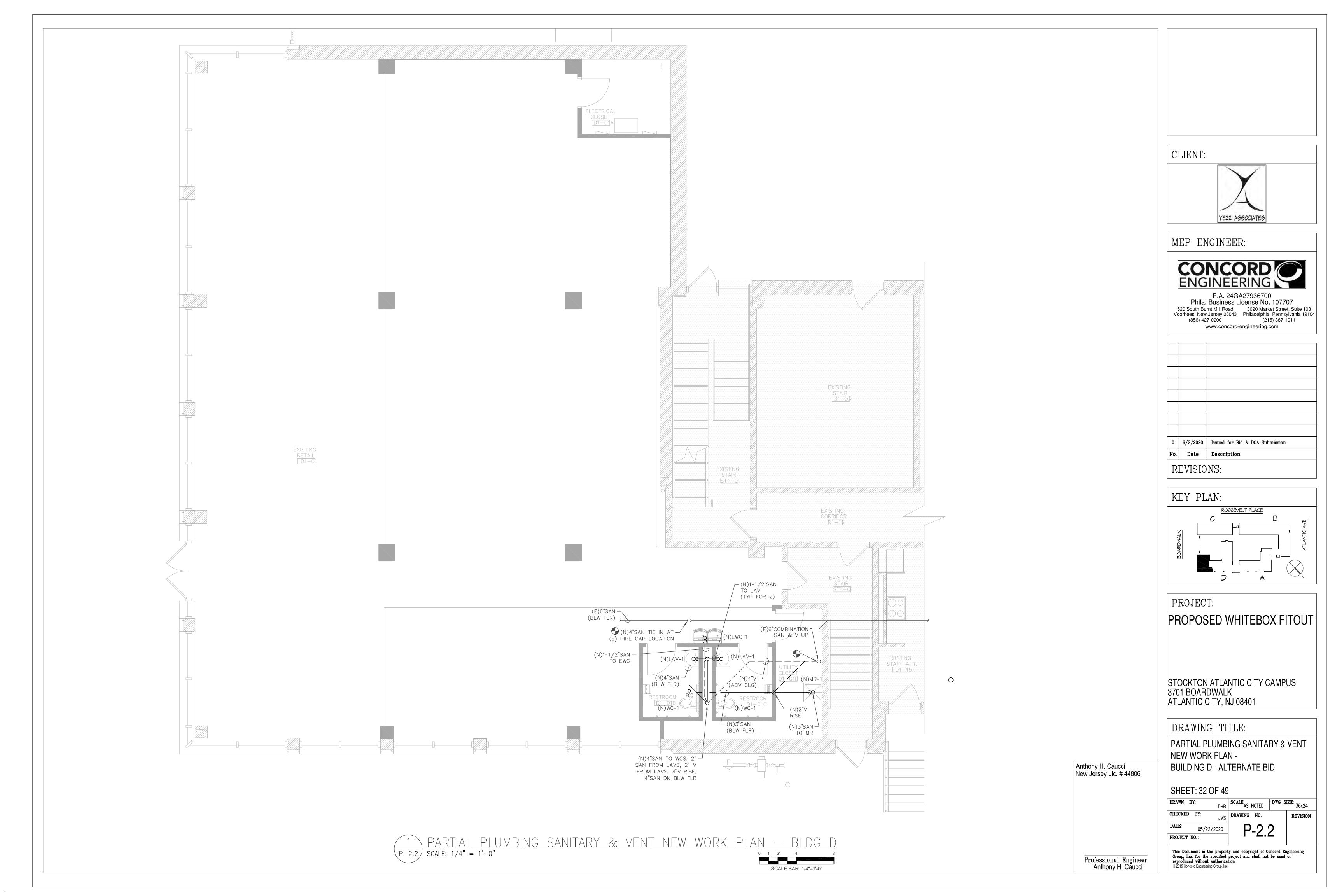
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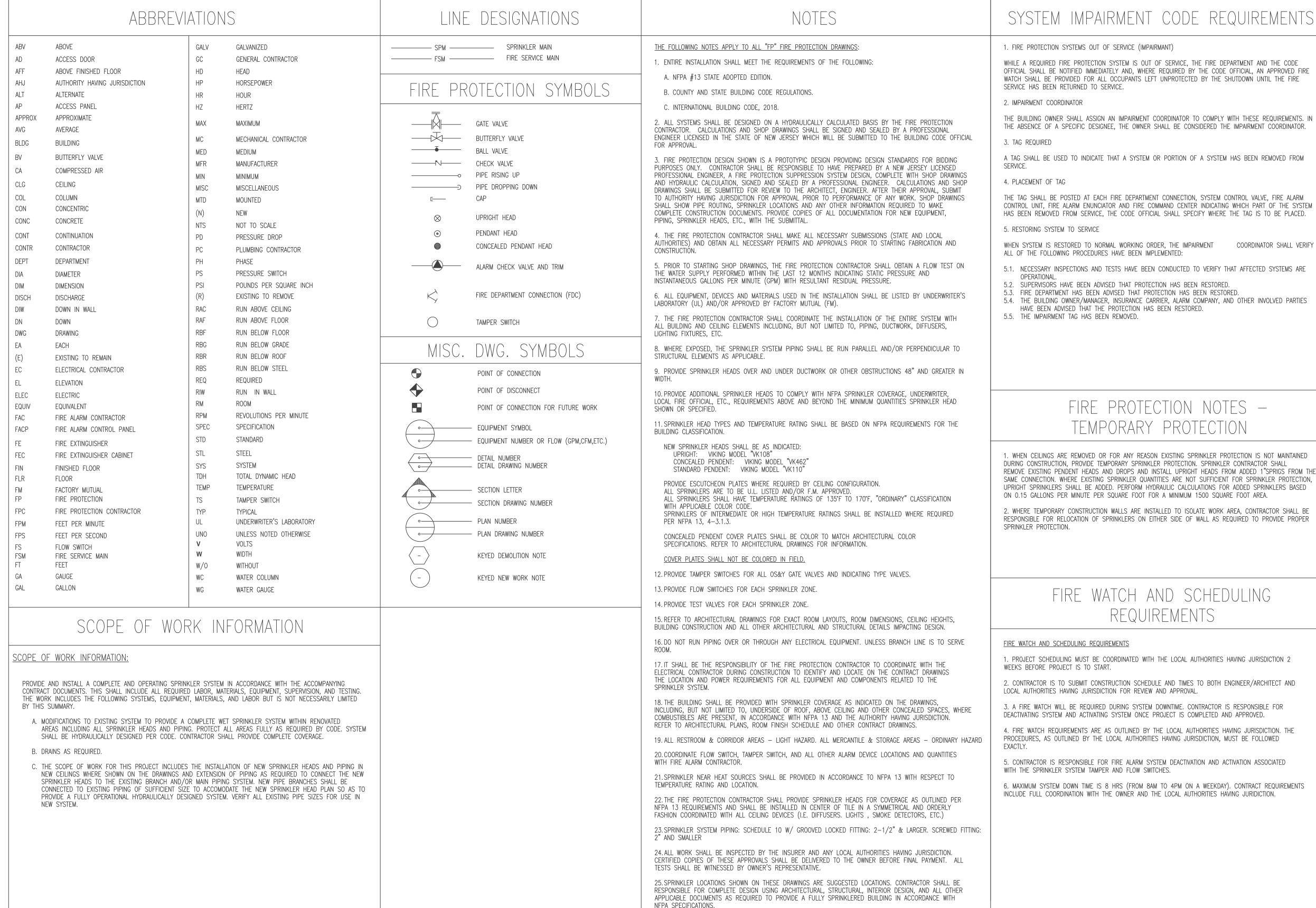
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> Professional Engineer Anthony H. Caucci

OFFICIAL SHALL BE NOTIFIED IMMEDIATELY AND, WHERE REQUIRED BY THE CODE OFFICIAL, AN APPROVED FIRE WATCH SHALL BE PROVIDED FOR ALL OCCUPANTS LEFT UNPROTECTED BY THE SHUTDOWN UNTIL THE FIRE

THE BUILDING OWNER SHALL ASSIGN AN IMPAIRMENT COORDINATOR TO COMPLY WITH THESE REQUIREMENTS. IN

A TAG SHALL BE USED TO INDICATE THAT A SYSTEM OR PORTION OF A SYSTEM HAS BEEN REMOVED FROM

THE TAG SHALL BE POSTED AT EACH FIRE DEPARTMENT CONNECTION, SYSTEM CONTROL VALVE, FIRE ALARM CONTROL UNIT, FIRE ALARM ENUNCIATOR AND FIRE COMMAND CENTER INDICATING WHICH PART OF THE SYSTEM HAS BEEN REMOVED FROM SERVICE, THE CODE OFFICIAL SHALL SPECIFY WHERE THE TAG IS TO BE PLACED.

COORDINATOR SHALL VERIFY THAT

- 5.1. NECESSARY INSPECTIONS AND TESTS HAVE BEEN CONDUCTED TO VERIFY THAT AFFECTED SYSTEMS ARE
- 5.4. THE BUILDING OWNER/MANAGER, INSURANCE CARRIER, ALARM COMPANY, AND OTHER INVOLVED PARTIES

1. WHEN CEILINGS ARE REMOVED OR FOR ANY REASON EXISTING SPRINKLER PROTECTION IS NOT MAINTAINED. DURING CONSTRUCTION, PROVIDE TEMPORARY SPRINKLER PROTECTION. SPRINKLER CONTRACTOR SHALL REMOVE EXISTING PENDENT HEADS AND DROPS AND INSTALL UPRIGHT HEADS FROM ADDED 1"SPRIGS FROM THE SAME CONNECTION. WHERE EXISTING SPRINKLER QUANTITIES ARE NOT SUFFICIENT FOR SPRINKLER PROTECTION. UPRIGHT SPRINKLERS SHALL BE ADDED. PERFORM HYDRAULIC CALCULATIONS FOR ADDED SPRINKLERS BASED

RESPONSIBLE FOR RELOCATION OF SPRINKLERS ON EITHER SIDE OF WALL AS REQUIRED TO PROVIDE PROPER

2. CONTRACTOR IS TO SUBMIT CONSTRUCTION SCHEDULE AND TIMES TO BOTH ENGINEER/ARCHITECT AND

3. A FIRE WATCH WILL BE REQUIRED DURING SYSTEM DOWNTIME. CONTRACTOR IS RESPONSIBLE FOR

4. FIRE WATCH REQUIREMENTS ARE AS OUTLINED BY THE LOCAL AUTHORITIES HAVING JURISDICTION. THE PROCEDURES, AS OUTLINED BY THE LOCAL AUTHORITIES HAVING JURISDICTION, MUST BE FOLLOWED

5. CONTRACTOR IS RESPONSIBLE FOR FIRE ALARM SYSTEM DEACTIVATION AND ACTIVATION ASSOCIATED

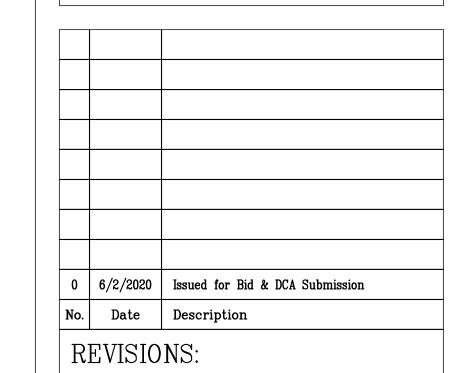
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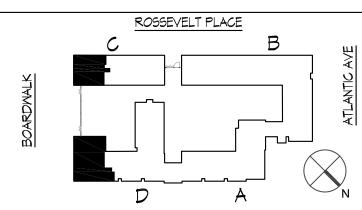
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KEY PLAN:



PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

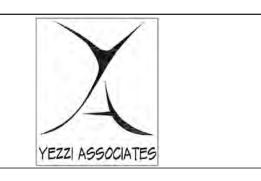
FIRE PROTECTION NOTES, LEGEND, SYMBOLS & ABBREVIATIONS

SHEET: 33 OF 49

DWG SIZE: 36x24 SCALE: AS NOTED DRAWN BY: CHECKED BY: DRAWING NO. REVISION 05/22/2020 PROJECT NO.:



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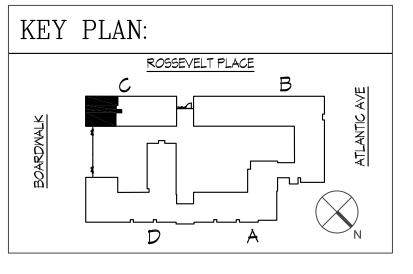


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PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

PARTIAL FIRE PROTECTION DEMOLITION PLAN -BUILDING C - BASE BID

SHEET: 34 OF 49

DHB SCALE: AS NOTED DWG SIZE: 36x24 DRAWN BY: JMS DRAWING NO. CHECKED BY: DATE: 05/22/2020

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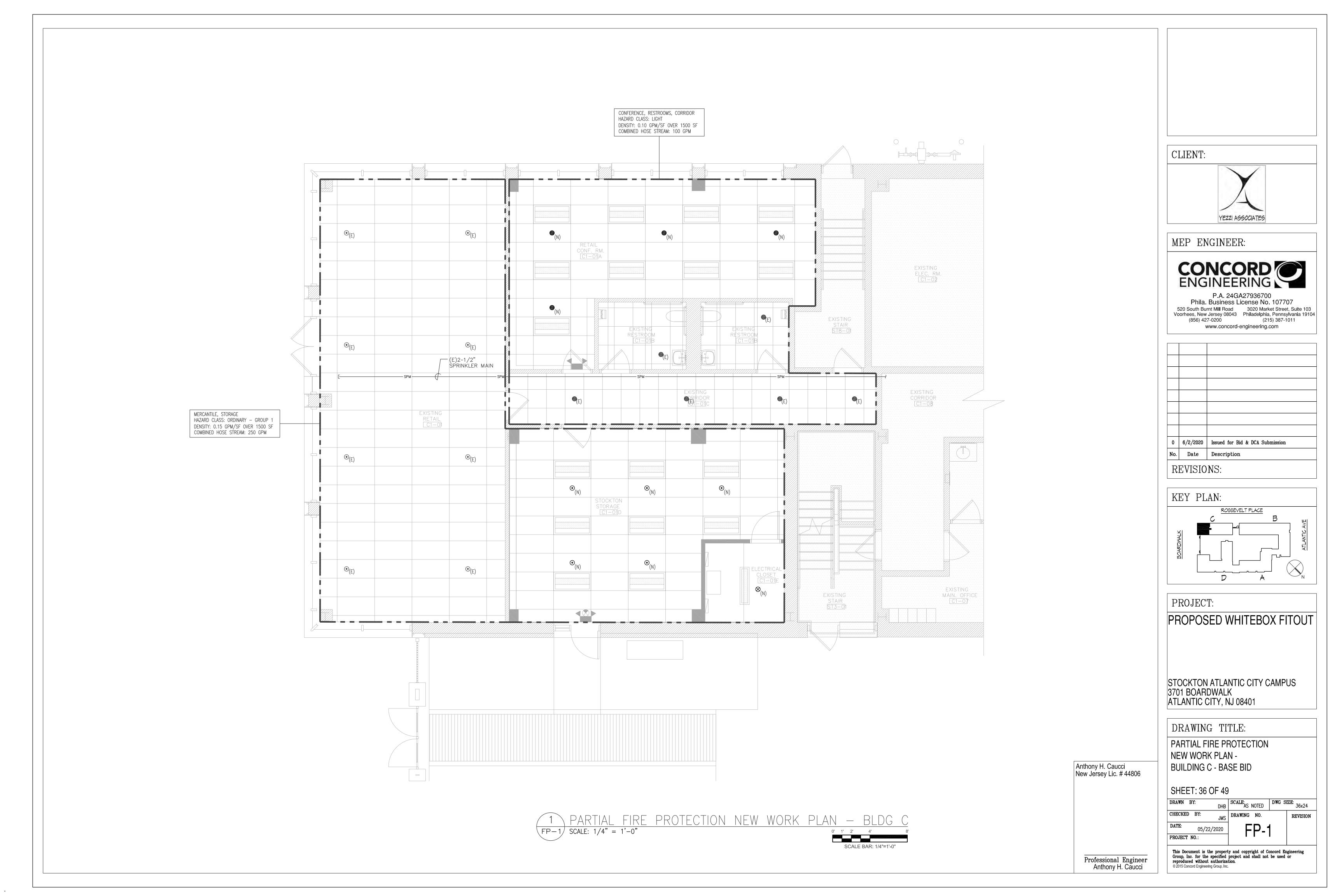
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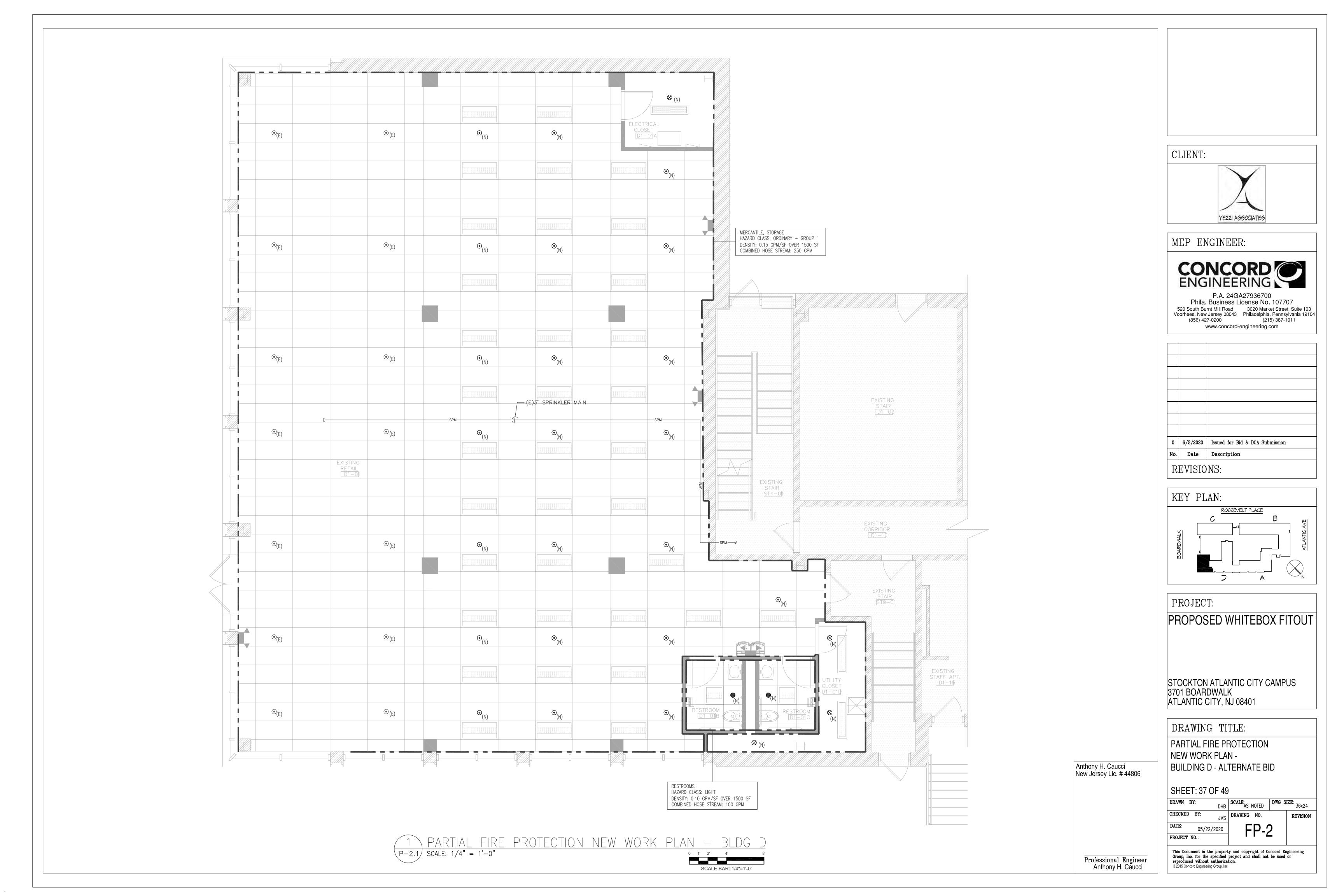
REVISION

Professional Engineer Anthony H. Caucci

Anthony H. Caucci New Jersey Lic. # 44806







ELECTRICAL LEGEND HOME RUN ARROW INDICATES PANEL AND CIRCUIT NUMBER QUADRAPLEX RECEPTACLE - E.C. SHALL FURNISH AND INSTALL A 20A, 125V, SPECIFICATION GRADE QUADRAPLEX RECEPTACLE MOUNTED AT 18" A.F.F. UNLESS DESIGNATED TO BE INSTALLED WITHIN MILLWORK. DEVICES TO BE INSTALLED WITHIN MILLWORK SHALL BE COORDINATED WITH THE ARCHITECT/OWNER IN THE FIELD TO INSURE THE DESIGN INTENT AND WORKING CLEARANCES ARE MET. DUPLEX RECEPTACLE - E.C. SHALL FURNISH AND INSTALL A 20A, 125V, SPECIFICATION GRADE DUPLEX RECEPTACLE MOUNTED AT 18" A.F.F. UNLESS DESIGNATED TO BE INSTALLED WITHIN MILLWORK, DEVICES TO BE INSTALLED WITHIN MILLWORK SHALL BE COORDINATED WITH THE ARCHITECT/OWNER IN THE FIELD TO INSURE THE DESIGN INTENT AND WORKING CLEARANCES ARE MET. DUPLEX RECEPTACLE - E.C. SHALL FURNISH AND INSTALL A 20A, 125V, SPECIFICATION GRADE DUPLEX RECEPTACLE WITH A WEATHER PROOF WHILE IN USE ENCLOSURE MOUNTED AT 18" A.F.F. UNLESS DESIGNATED TO BE INSTALLED WITHIN MILLWORK, DEVICES TO BE INSTALLED WITHIN MILLWORK SHALL BE COORDINATED WITH THE ARCHITECT/OWNER IN THE FIELD TO INSURE THE DESIGN INTENT AND WORKING CLEARANCES SPECIAL PURPOSE RECEPTACLE - E.C. SHALL FURNISH AND INSTALL A SPECIFICATION GRADE RECEPTACLE COORDINATED WITH EQUIPMENT TO BE SERVED. MOUNTED AT ELEVATION & LOCATION COORDINATED WITH EQUIPMENT TO BE SERVED. JUNCTION BOX - SIZED PER NEC REQUIREMENTS DISCONNECT SWITCH AND POINT OF CONNECTION-SIZED AS REQUIRED. FUSED DISCONNECT SWITCH, 20 AMP SWITCH WITH 15 AMP FUSES. RECESSED MOUNTED PANELBOARD SURFACE MOUNTED PANELBOARD TRANSFORMER _L/V__ INDICATES LOW VOLTAGE DATA OUTLET. E.C. SHALL FURNISH AND INSTALL (2) PLENUM RATED CAT 6 CABLES FROM EACH LOCATION TO OWNER DESIGNATED IT RACK. E.C. SHALL LABEL EACH CABLE WITH A DESCRIPTION OF THE ROOM ORIGIN OR SPACE AND PROVIDE 8'-0" OF A CABLE SLACK AT DATA RACK AND 2'-0" OF CABLE SLACK AT DEVICE. 2' X 4' RECESSED LIGHTING FIXTURE 2' X 2' RECESSED LIGHTING FIXTURE 4' LINEAR PENDANT EMERGENCY LIGHTING BATTERY PACK WITH TWO (2) LIGHTS HEADS. WIRE TO AREA'S GENERAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHES AND DIMMERS. TWO (2) REMOTE EMERGENCY LIGHT HEADS. WIRE TO AREA'S EMERGENCY EXIT SIGN OR EMERGENCY BATTERY PACK. EXIT LIGHTING WITH INTEGRAL EMERGENCY BATTERY PACK 20A, 120V, SINGLE POLE LIGHTING SWITCH LUTRON OCCUPANCY LIGHTING SWITCH GROUND FAULT INTERRUPTER MOUNTED ABOVE MILLWORK COUNTER EXISTING TO REMAIN EXISTING TO BE REMOVED AND RETURNED TO OWNER EXISTING TO BE REMOVED AND RELOCATE. RLOCATE EXISTING IN LOCATION SHOWN. WEATHERPROOF DEVICE LISTED AS IN-USE, GFIC, WEATHERPROOF DEVICE

WALL MOUNTED

CEILING MOUNTED

ABOVE FINISHED FLOOR

EXCEPT THEY ARE DRAWN WITH A DASHED LINE TYPE.

THE SYMBOLS FOR WORK TO BE DEMOLISHED AND REMOVED ARE THE SAME AS THOSE ABOVE

 $B\Phi = 8.4$ AMPS

 $C\Phi = 6.7$ AMPS

NEUTRAL = 1.2 AMPS

2. ALL SYMBOLS OR ABBREVIATIONS ARE NOT NECESSARILY USED ON THE CONTRACT DRAWINGS.

ELECTRICAL GENERAL NOTES

- ALL ELECTRICAL WORK TO BE INSTALLED IN ACCORDANCE WITH THE 2014 EDITION OF THE NATIONAL ELECTRICAL CODE ADOPTED BY THE UNIFORM CONSTRUCTION CODE - STATE OF NEW JERSEY AND ANY OTHER PARTY HAVING JURISDICTION.
- 2. ALL ELECTRICAL MATERIALS AND EQUIPMENT FOR THE PROJECT SHALL BE NEW AND APPROVED BY UNDERWRITERS LABORATORY (U.L.) OR ANY OTHER NATIONALLY RECOGNIZED TESTING AGENCY UNLESS NOTED OTHERWISE ON DRAWINGS.
- 3. ALL NECESSARY PERMITS, INSPECTIONS, AND LICENSES SHALL BE PROCURED AND ALL FEES PAID BY THE CONTRACTOR. SUBMIT TO THE OWNER DUPLICATE CERTIFICATES OF INSPECTION FROM THE APPROVED INSPECTION AGENCY.
- UPON COMPLETION OF THE WORK, THE ENTIRE WIRING SYSTEM SHALL BE FREE FROM GROUNDS. SHORT CIRCUITS, OPENS, OVERLOADS AND IMPROPER VOLTAGES.
- PRIOR TO FINAL ACCEPTANCE OF THE WORK, A WRITTEN STATEMENT SHALL BE SUBMITTED TO THE OWNER GUARANTEEING ALL EQUIPMENT AND SYSTEMS AGAINST DEFECTIVE MATERIAL AND WORKMANSHIP FOR ONE (1) YEAR FROM THE DATE OF ACCEPTANCE. UPON NOTICE ALL DEFECTIVE EQUIPMENT, MATERIALS AND SYSTEMS SHALL BE PROMPTLY REPAIRED AT NO EXPENSE TO THE OWNER.
- THIS SET OF DRAWINGS IS DIAGRAMMATIC IN NATURE AND INDICATES THE GENERAL ARRANGEMENT OF THE VARIOUS SYSTEMS AND APPROXIMATE LOCATIONS OF THE EQUIPMENT. THE DRAWINGS ARE INTENDED TO SHOW APPROXIMATE AND RELATIVE LOCATIONS OF MATERIALS AND EQUIPMENT. DRAWINGS SHALL NOT BE SCALED TO DETERMINE EXACT POSITIONS AND CLEARANCES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THAT THERE IS ADEQUATE SPACE AT THE LOCATIONS INDICATED FOR ALL EQUIPMENT PRIOR TO INSTALLATION OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. BECAUSE OF THE DIAGRAMMATIC LAYOUT AND SMALL SCALE OF DRAWINGS, NOT ALL CONDUIT, FIXTURES DEVICES AND RELATED SPECIALTIES ARE INDICATED. PROVIDE ALL SUCH DEVICES AND SPECIALTIES REQUIRED IN SUCH CASES TO INSURE A COMPLETE AND PROPERLY OPERATING INSTALLATION IN ACCORDANCE WITH CODES AND WITHOUT EXTRA COST TO OWNER.
- WORK SHALL BE PERFORMED BY MECHANICS SKILLED IN PARTICULAR TRADE INVOLVED, THAT IS, PLUMBING WORK SHALL BE PERFORMED BY PLUMBERS, ELECTRICAL WORK SHALL BE PERFORMED BY ELECTRICIANS, MECHANICAL WORKED PERFORMED BY STEAM FITTERS AND SHEET METAL
- ALL WORK SHALL BE INSPECTED, TESTED AND APPROVED BY THE PROPER AUTHORITIES HAVING JURISDICTION. CERTIFIED COPIES OF THESE APPROVALS SHALL BE DELIVERED TO THE OWNER BEFORE FINAL PAYMENT.
- ELECTRICAL CONTRACTOR SHALL SECURE SHOP DRAWINGS FROM OTHER CONTRACTORS AND VERIFY EXACT ELECTRICAL CHARACTERISTICS OF EQUIPMENT TO BE WIRED PRIOR TO ROUGH-IN. IF DISCREPANCIES ARE NOTED BETWEEN THE ELECTRICAL CONTRACT DRAWINGS AND OTHER CONTRACTOR SHOP DRAWINGS, ELECTRICAL CONTRACTOR IS TO NOTIFY ENGINEER AT ONCE. FAILURE TO PERFORM THIS DUTY WILL NOT RELIEVE THE ELECTRICAL CONTRACTOR OF THE RESPONSIBILITY TO CORRECT WIRING DEFICIENCIES AT NO EXPENSE TO THE OWNER.
- 10. ALL DEVICES OR EQUIPMENT SHOWN IN SYMBOL FORM SHALL BE WIRED TO ITS RESPECTIVE
- FEEDER AND BRANCH CIRCUIT WIRING SHALL BE COPPER, 600 VOLT CONDUCTOR INSULATION TYPE THHN. THE MINIMUM SIZE 600 VOLT CONDUCTOR SHALL BE #12 AWG FOR POWER AND LIGHTING BRANCH CIRCUIT WIRING. THE MINIMUM SIZE CONDUIT SHALL BE 3/4". ALL CIRCUIT WIRING SIZES LARGER THAN #10 AWG SHALL BE STRANDED AND SMALLER CONDUCTORS SHALL BE SOLID. BRANCH CIRCUITS 100 TO 200 FEET IN LENGTH UTILIZING #12 AWG WIRE SHALL BE INCREASED TO 25. ELECTRICAL CONTRACTOR TO PROVIDE RECEPTACLES TO MATCH PLUGS FURNISHED WITH #10 AWG TO THE CENTER OF THE CIRCUIT LOAD AND #12 WIRE TO THE REMAINING DEVICES BEYOND THE LOAD CENTER.
- 12. ALL INTERIOR WIRING SHALL BE INSTALLED IN ELECTRICAL METALLIC TUBING OR METAL CLAD CABLE AND CONCEALED IN WALLS OR IN HUNG CEILING SPACE. WHERE WIRING CANNOT BE CONCEALED IN FINISHED AREAS, IT SHALL BE RUN EXPOSED IN A NEAT MANNER VIA SURFACE RACEWAY. MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS NOTED OTHERWISE.
- 13. ALL EXTERIOR WIRING SHALL BE INSTALLED IN ELECTRICAL SCHEDULE 80 PVC CONDUIT AND CONCEALED WHERE POSSIBLE. WHERE WIRING CANNOT BE CONCEALED, IT SHALL BE RUN EXPOSED IN A NEAT MANNER VIA SURFACE RACEWAY. MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS NOTED OTHERWISE.
- 14. ALL WIRING, CONNECTIONS AND DEVICES SHALL BE PROVIDED TO COMPLY WITH THE GROUNDING REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND THE DRAWINGS UNLESS NOTED OTHERWISE. ALL EXPOSED NON-CURRENT CARRYING ELECTRICAL EQUIPMENT METALLIC PARTS RACEWAY SYSTEMS AND WIRING SYSTEM GROUNDING CONDUCTORS SYSTEM SHALL BE GROUNDED.

MAINS: 200A M.L.O.

VOLTAGE: 480Y/277V, 3Ф, 4W

- 15. PROVIDE A SEPARATE, GREEN-COLORED, INSULATED EQUIPMENT GROUNDING CONDUCTOR WITHIN EACH FEEDER AND BRANCH CIRCUIT RACEWAY. THIS CONDUCTOR SHALL BE SEPARATE FROM THE ELECTRICAL SYSTEM NEUTRAL CONDUCTOR. TERMINATE EACH END OF THIS GROUNDING CONDUCTOR ON A U.L. LISTED LUG, BUS OR BUSHING. THE GROUNDING CONDUCTOR SIZE SHALL BE IN ACCORDANCE WITH NEC, TABLE 250.122.
- 16. THE ELECTRICAL CONTRACTOR SHALL LABEL WITH PERMANENT MARKER ALL JUNCTION BOXES AND RECEPTACLE OUTLET BOXES WITH CIRCUIT NUMBER AND PANEL IDENTIFICATION.
- 17. ALL CUTTING AND PATCHING REQUIRED FOR THE ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- 18. ALL HOLES OR VOIDS CREATED TO ROUTE CONDUIT OR METAL CLAD CABLE THROUGH FIRE-RATED FLOORS, CEILINGS, AND WALLS SHALL BE PROTECTED WITH A 3-HOUR RATED, APPROVED FIRESTOP SYSTEM EQUAL TO 3M FIRE BARRIER CAULK, PUTTY, STRIP AND SHEET FORM, CAPABLE OF EXPANDING UP TO 8 TO 10 TIMES WHEN EXPOSED TO A TEMPERATURE OF 250 DEGREES FAHRENHEIT AND ABOVE. FIRESTOP SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH ASME E814 (U.L. 1479) AND NEC ARTICLE 300.21.
- 19. A COMPLETE SET OF "AS-BUILT" DRAWINGS, (1) SET IN HARD COPY REPRODUCIBLE AND (1) SET OF ELECTRONIC FILES PRODUCED IN PDF FORMAT SHALL BE FURNISHED TO THE OWNER AND ENGINEER UPON PROJECT COMPLETION.
- 20. ALL EQUIPMENT, DEVICES AND CIRCUITS SHALL BE LABELED ACCORDING TO OWNER
- TWO OR THREE POLE CIRCUIT BREAKERS SHALL BE COMMON TRIP TYPE. SINGLE POLE BREAKERS WITH YOKED HANDLE WILL NOT BE PERMITTED.
- 22. THE ELECTRICAL CONTRACTOR SHALL NOT UTILIZE A "COMMON NEUTRAL" ON MULTIPLE BRANCH
- CIRCUITS. EACH SUCH CIRCUIT SHALL BE RUN WITH ITS OWN DEDICATED NEUTRAL WIRE.
- 23. ALL SYSTEM CABLE SHALL BE PLENUM RATED OR RUN IN CONDUIT. SYSTEM CABLE EXPOSED TO PHYSICAL DAMAGE SHALL BE RUN IN CONDUIT. SYSTEM CABLE LOCATED ABOVE ACCESSIBLE CEILINGS SHALL BE INDEPENDENTLY SUPPORTED FROM THE STRUCTURE. CABLES SHALL NOT BE LAID ON CEILING TILES.
- 24. ALL WIRING AND EQUIPMENT INSTALLED IN DUCTS, PLENUMS AND OTHER AIR HANDLING SPACES TO CONFORM TO NEC, ARTICLE 300.22.
- 25. THE ELECTRICAL CONTRACTOR SHALL TEST AND ASSURE THAT ANY ELECTRICAL DEVICE OR PRODUCT WHICH ARE TO BE RELOCATED OR REUSED IS IN PROPER WORKING CONDITION IN ACCORDANCE WITH INSTRUCTIONS INCLUDED IN ITS LISTING OR LABELING. ANY DEVICE OR PRODUCT FOUND TO BE DEFECTIVE OR DAMAGED SHALL BE REPLACED WITH NEW.
- 26. SITE VISIT PRIOR TO BID SUBMISSION:
- PRIOR TO BID SUBMISSION, THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS. BIDS AS SUBMITTED WILL BE INTERPRETED TO INCLUDE ALL COSTS AND CHARGES MADE NECESSARY BY EXISTING CONDITIONS.
- ELECTRICAL CONTRACTOR SHALL VERIFY THE SIZE, LOCATION AND ELEVATION OF ALL SERVICES IN THE FIELD AFFECTED BY THIS WORK BEFORE PROCEEDING WITH CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER IMMEDIATELY IN THE EVENT OF EXISTING UTILITIES VARY APPRECIABLY FROM THOSE SHOWN ON DRAWINGS.
- C. THE ENTIRE SCOPE OF WORK SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS.
- EQUIPMENT AND POWERED FURNISHINGS.
- 26. ELECTRICAL CONTRACTOR SHALL LOCATE LIGHTING FIXTURES TO SUIT STRUCTURAL AND ARCHITECTURAL CONDITIONS IN THOSE ROOMS WHERE BEAMS, DROPPED SOFFITS, ACCESS PANELS OR SIMILAR OBSTRUCTIONS REQUIRE A CHANGE IN LIGHTING FIXTURE LAYOUT.
- 27. ELECTRICAL CONTRACTOR SHALL COORDINATE PLACEMENT OF ALL ELECTRICAL DEVICES WITH MILLWORK CONSTRUCTOR AND ARCHITECT PRIOR TO ROUGH-IN.
- 28. FOR ALL INSTALLATIONS IN WHICH OUTLET BOXES ARE INSTALLED IN A FIRE- RATED WALL. THE OUTLET BOXES SHALL BE THOMAS & BETTS UNION PHENOLIC THERMOSET BOXES OR EQUAL, INSTALLED PER MANUFACTURERS INSTRUCTIONS.

FED FROM: EXISTING

FEEDER: EXISTING

ELECTRICAL DEMOLITION NOTES

- 1. IT IS THE INTENT THAT ALL EXISTING CONDUIT, CONDUCTORS, FIXTURES AND OTHER EQUIPMENT AND MATERIALS THAT INTERFERE WITH THE ALTERED EXISTING BUILDING ARRANGEMENTS AND NEW SYSTEMS BE REMOVED, RELOCATED, REROUTED OR ABANDONED. THE DRAWINGS GENERALLY INDICATE MAJOR ITEMS OF EXISTING MATERIALS AND EQUIPMENT THAT ARE TO BE REMOVED, RELOCATED, REROUTED OR ABANDONED. IT IS NOT POSSIBLE TO INDICATE ALL RELATED ACCESSORIES. SPECIALTIES AND OTHER MINOR ITEMS. HOWEVER, THEIR REMOVAL, RELOCATIONS, REROUTING OR ABANDONMENT SHALL ALSO BE INCLUDED IN THIS CONTRACT AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- EXISTING CONCEALED AND EXPOSED EQUIPMENT AND MATERIALS THAT WILL BECOME ABANDONED DUE TO NEW WORK SHALL BE REMOVED BACK TO THE
- ALL EXISTING ELECTRICAL DEVICES TO BE DEMOLISHED MAY NOT BE SHOWN. CONTRACTOR SHALL DURING PRE-BID SITE VISIT DETERMINE EXTENT OF DEMOLITION AND INCLUDE COST OF THIS WORK IN BID. SHOULD A CONTRACTOR REQUIRE REMOVAL, RELOCATION OR REROUTING OF ANOTHER TRADE'S WORK THAT IS NOT INDICATED ON DRAWINGS, THE CONTRACTOR REQUIRING SUCH WORK SHALL BE RESPONSIBLE FOR THAT WORK, AND PAY ALL REQUIRED COSTS. ALL UNKNOWN BELOW SLAB CONDUIT ENCOUNTERED DURING INSTALLATION OF NEW WORK SHALL BE CAPPED OFF AT ACTIVE MAIN OR BRANCH. ALLOWANCE SHALL BE MADE FOR THESE ITEMS IN BID PRICE.
- EXISTING EQUIPMENT AND MATERIALS THAT ARE TO REMAIN, BUT BECOME EXPOSED DUE TO NEW WORK, SHALL BE RELOCATED AND RECONNECTED AS DIRECTED BY ARCHITECT.
- ALL WORK INVOLVING ALTERATIONS TO EXISTING SYSTEMS, EQUIPMENT AND MATERIALS SHALL BE REVIEWED WITH ARCHITECT AND OWNER BEFORE BEGINNING
- REMOVED EQUIPMENT AND MATERIALS NOT DESIRED BY OWNER SHALL BECOME PROPERTY OF CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM SITE. EQUIPMENT AND MATERIALS DESIRED BY OWNER SHALL BE DELIVERED BY CONTRACTOR TO AN ON-SITE STORAGE LOCATION DESIGNATED BY OWNER.
- THE CONTRACTOR MUST SURVEY AND VERIFY LOCATIONS AND PHYSICAL SIZES OF ALL EXISTING ITEMS AND DETERMINE WHETHER RELOCATION OR REROUTING WILL BE REQUIRED. IF RELOCATION OR REROUTING IS REQUIRED, INCLUDING THAT OF ALL RELATED ACCESSORIES, SPECIALTIES AND OTHER MINOR ITEMS, THE CONTRACTOR SHALL INCLUDE ALL NECESSARY WORK AS PART OF HIS CONTRACT AND IT SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- ALL DEMOLISHED MATERIALS SHALL BE CAREFULLY REMOVED FROM THE PREMISES BY THE MOST DIRECT PATH. ANY DAMAGE INCURRED BY THE REMOVAL PROCESS SHALL BE REPAIRED TO MATCH THE SURROUNDING WORK AND LEFT IN SATISFACTORY CONDITION. ALL AREAS SHALL BE CLEANED OF ALL DIRT AND DEBRIS RESULTING FROM DEMOLITION.
- ELECTRICAL CONTRACTOR SHALL DISPOSE OF ALL ELECTRICAL COMPONENTS SUCH AS TRANSFORMERS, FLUORESCENT LAMPS, SMOKE DETECTORS, HEAT DETECTORS, BATTERIES, LIGHTING BALLASTS, ETC. IN STRICT ACCORDANCE WITH ALL FEDERAL STATE AND LOCAL ENVIRONMENTAL LAWS. COORDINATE DISPOSAL REQUIREMENTS WITH THE GENERAL CONTRACTOR AND THE OWNER.

	200A M.C.B.															FED FROM:	EXISTING	
OLTAGE:	208Y/120V, 3Φ, 4W															FEEDER	EXISTING	
	, ,					CI	RCUI	T		(IRC	JIT						
			K	W/PHAS	SE.	BR	EAKE	R		В	REAL	KER	K	W/PHAS	SE .			
ONDUIT	WIRE SIZE	SERVICE TO:	Α	В	С	AMP	Р	NO.	Ф	NO.	Р	AMP	Α	В	С	SERVICE TO:	WIRE SIZE	CONDUIT
		EXISTING CONV. RECEP.				20	1	1	Α	2	2	50				EXISTING CU-4-D		
		EXISTING CONV. RECEP.			1	20	1	3	В	4	▼	▼				▼		
		EXISTING CONV. RECEP.				20	1	5	С	6	2	50				EXISTING CU-5-D		
		EXISTING CONV. RECEP.] '		20	1	7	Α	8	▼	▼				▼		
		EXISTING CONV. RECEP.				20	1	9	В	10	1	20				EXISTING STAIR HEATER		
		EXISTING CONV. RECEP.				20	1	11	С	12	2	20			0.20	MCU	3#12 & 1#12 GRD	3/4"
3/4"	2#12 & 1#12 GRD	ROOF CONV RECEPT.	0.18			20	1	13	Α	14	▼	▼	0.20			▼	▼	▼
3/4"	2#12 & 1#12 GRD	EF-4		0.67		20	1	15	В	16	2	20				WHP-12	3#12 & 1#12 GRD	3/4"
3/4"	2#12 & 1#12 GRD	RETAIL CONV. RECEPT.			0.36	20	1	17	С	18	▼	•				▼	▼	▼
3/4"	2#12 & 1#12 GRD	RETAIL CONV. RECEPT.	0.54			20	1	19	Α	20	2	20				HP-24	3#12 & 1#12 GRD	3/4"
3/4"	2#12 & 1#12 GRD	BATHROOM GFI RECEPT		0.54		20	1	21	В	22	•	•				▼	▼	▼
3/4"	2#12 & 1#12 GRD	MOTOR OPER. DAMPER (MOD)			0.12	20	1	23	С	24	2	20				EXISTING LOAD		
3/4"	2#12 & 1#12 GRD	WATER FOUNTAIN	0.72			20	1	25	Α	26	▼	•				▼		
3/4"	3#12 & 1#12 GRD	ELEC WATER HEATER		1.00		20	2	27	В	28	1	20		0.12		EF-1, EF-2	2#12 & 1#12 GRD	3/4"
▼	▼	▼			1.00	•	▼	29	С	30	3	20				EXISTING AC		
		SPARE				30	2	31	Α	32	▼	•				▼		
		▼				▼	▼	33	В	34	▼	•				▼		
3/4"	3#8 & 1#10 GRD	CU-6-D			2.20	40	2	35	С	36	2	20			0.85	CU-8-D	3#12 & 1#12 GRD	3/4"
▼	▼	▼	2.20			▼	▼	37	Α	38	▼	•	0.85			▼	▼	▼
3/4"	3#8 & 1#10 GRD	CU-7-D		2.20		40	2	39	В	40	2	20				HP-36	3#12 & 1#12 GRD	3/4"
▼	▼	▼	7		2.20	▼	▼	41	С	42	▼	▼				▼	▼	_

MAINS: 200A M.C.B. VOLTAGE: 208Y/120V, 3Φ, 4W FEEDER: EXISTING BREAKER BREAKER 3/4" 2#12 & 1#12 GRD STORAGE CONV. RECEP ELECTRIC DOOR LOCK 2#12 & 1#12 GRI 3/4" 3#12 & 1#12 GRD LOAD SUMMARY WITH THE ADDED NEW LOAD TO THE EXISTING MEASURED LOADS, THE ON 05/05/2020 THE LOAD ON THIS EXISTING PANEL WAS MEASURED BY PHASE AS FOLLOWS: TOTAL ESTIMATED LOADS ON THIS PANEL BY PHASE ARE: $A\Phi = 7.6$ AMPS $A\Phi = 47.4 \text{ AMPS}$

 $B\Phi = 48.3 AMPS$

 $C\Phi = 54.9 \text{ AMPS}$

EXISTING PANEL "TLP2"

·			KW/PHASE			BREAKER				BREAKER		ŒR	KW/PHASE		SE			
CONDUIT	WIRE SIZE	SERVICE TO:	Α	В	С	AMP	Р	NO.	Φ	NO.	Р	AMP	Α	В	С	SERVICE TO:	WIRE SIZE	CONDU
3/4"	2#12 & 1#12 GRD	ELEC CLOSET, STORAGE LTG				20	1	1	Α	2	3	30				EXISTING DEMAND METER		
		EXISTING LIGHTING LOAD				20	1	3	В	4	▼	▼				▼		
3/4"	2#12 & 1#12 GRD	CONFERENCE RM LTG				20	1	5	С	6	▼	▼	1			▼		
		SPARE		1		20	1	7	Α	8	3	25	4.20		,	CU-1	4#10 & 1#10 GRD	3/4"
		SPARE				20	1	9	В	10	▼	•		4.20		▼	▼	▼
		SPARE				20	1	11	С	12	▼	•			4.20	▼	▼	▼
		SPACE		1				13	Α	14						SPACE		
		SPACE						15	В	16						SPACE		
		SPACE						17	С	18						SPACE		
		SPACE		1				19	Α	20						SPACE		
		SPACE						21	В	22						SPACE		
		SPACE						23	С	24			1			SPACE		
		SPACE		1				25	Α	26						SPACE		
		SPACE						27	В	28						SPACE		
		SPACE						29	С	30						SPACE		
		SPACE		1				31	Α	32						SPACE		
		SPACE						33	В	34						SPACE		
		SPACE						35	С	36						SPACE		
		SPACE		1				37	Α	38						SPACE		
		SPACE						39	В	40						SPACE		
		SPACE						41	С	42						SPACE		
									Α		3	125				EXISTING TRANSFORMER T-2		
									В		▼	•				▼		
									С		•	•				▼		

EXISTING PANEL "THP2"

CIRCUIT CIRCUIT

							RCUI				IRC							
			×	W/PHAS			BREAKER				REAL		K	W/PHAS	_	1		
IT	WIRE SIZE	SERVICE TO:	Α	В	С	AMP	Р	NO.	θ	NO.	Р	AMP	Α	В	С	SERVICE TO:	WIRE SIZE	CONDUIT
	4#8 & 1#10 GRD	CU-2	7.30		_	40	3	1	Α	2	1	20			_	EXISTING LTG		
	▼	▼		7.30		▼	▼	3	В	4	1	20				RETAIL LTG	2#12 & 1#12 GRD	3/4"
	▼	▼		_	7.30	▼	▼	5	С	6	1	20				RETAIL LTG (NL)	2#12 & 1#12 GRD	3/4"
		SPARE				20	1	7	Α	8	3	30				EXISTING DEMAND METER		
		SPARE				20	1	9	В	10	▼	▼				▼		
		SPARE		_		20	1	11	С	12	▼	▼				▼		
		SPACE				20	1	13	Α	14	1	20				SPARE		
		SPACE						15		16	1	20				SPARE		
		SPACE		_				17	С	18						SPACE		
		SPACE						19	A	20						SPACE		
		SPACE						21		22						SPACE		
		SPACE		_				23	С	24						SPACE		
		SPACE						25	A	26						SPACE		
		SPACE						27	в	28						SPACE		
		SPACE		_				29	O	30						SPACE		
		SPACE						31	A	32						SPACE		
		SPACE						33	в	34						SPACE		
		SPACE						35	U	36						SPACE		
		SPACE						37	Α	38						SPACE		
		SPACE						39	в	40						SPACE		
		SPACE						41	U	42						SPACE		
									Α		3	125				EXISTING TRANSFORMER T-3		
									в		•	•				▼		
									C		•	•				▼		

Anthony H. Caucci New Jersey Lic. # 44806

> CHECKED BY: DRAWING NO. DATE: 05/22/2020 PROJECT NO .:

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SHEET: 38 OF 49

DRAWN BY:

CLIENT:

MEP ENGINEER:

(856) 427-0200

YEZZI ASSOCIATES

CONCORD ENGINEERING

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Phila. Business License No. 107707

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0 6/2/2020 Issued for Bid & DCA Submission

Description

ROSSEVELT PLACE

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS

ELECTRICAL NOTES, LEGEND,

SYMBOLS & ABBREVIATIONS

Date

REVISIONS:

KEY PLAN:

PROJECT

3701 BOARDWALK

ATLANTIC CITY, NJ 08401

DRAWING TITLE:

520 South Burnt Mill Road 3020 Market Street, Suite 103

Voorhees, New Jersey 08043 Philadelphia, Pennsylvania 19104

(215) 387-1011

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SCALE: AS NOTED

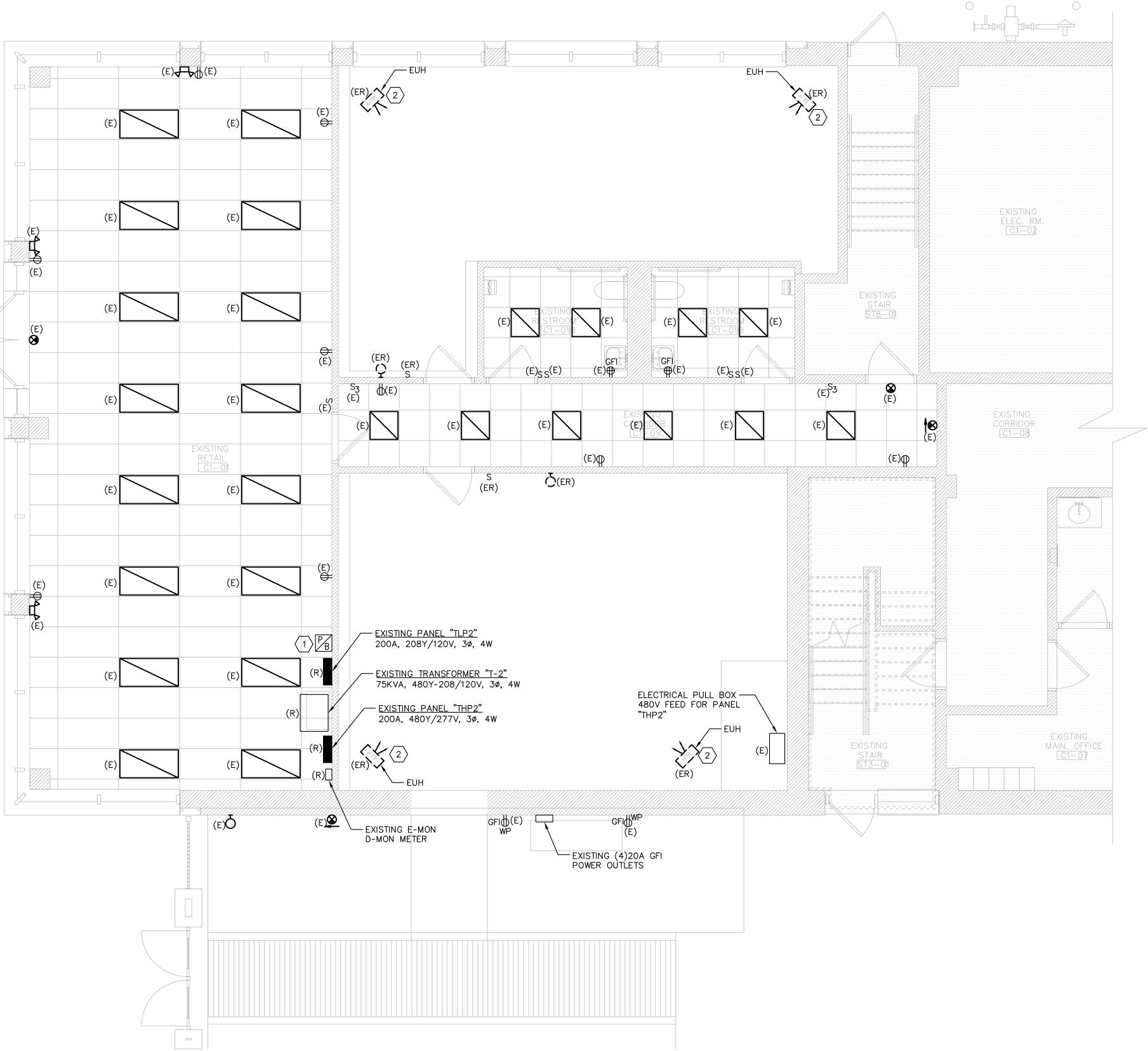
DWG SIZE: 36x24

REVISION

Professional Engineer Anthony H. Caucci

DEMOLITION KEYED NOTES:

- E.C. SHALL PROVIDE PULL BOX-SIZE AS REQIRED ABOVE CEILING AND SAFE OFF ALL EXISTING BRANCH CIRCUITS FROM EXISTING PANELS BEFORE RELOCATING THE PANELS. EXTEND ALL EXISTING BRANCH CIRCUITS FROM PULL BOX TO NEW PANELS LOCATION.
- E.C. SHALL REMOVE EXISTING CONDUCTORS/CONDUITS AND JUNCTION BOXES/LOCAL MEANS OF DISCONNECT BACK TO THE SOURCE PANEL. EXISTING CIRCUIT BREAKERS SHALL BE SALVAGED AND TURNED OVER TO OWNER



PARTIAL ELECTRICAL DEMOLITION PLAN — BLDG C

ED-1 SCALE: 1/4" = 1'-0"

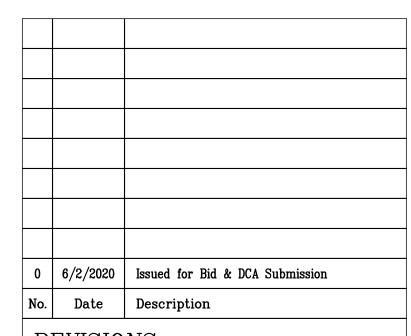
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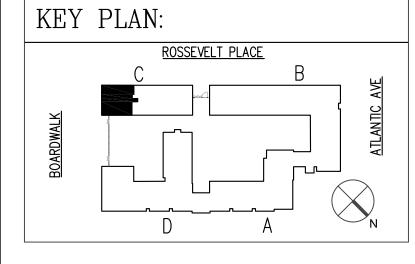
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REVISIONS:



PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

PARTIAL ELECTRICAL

DEMOLITION PLAN
BUILDING C

SHEET: 39 OF 49

DRAWN BY:

DS SCALE:
AS NOTED DWG SIZE:
36x24

CHECKED BY:

EJT DRAWING NO.

REVISION

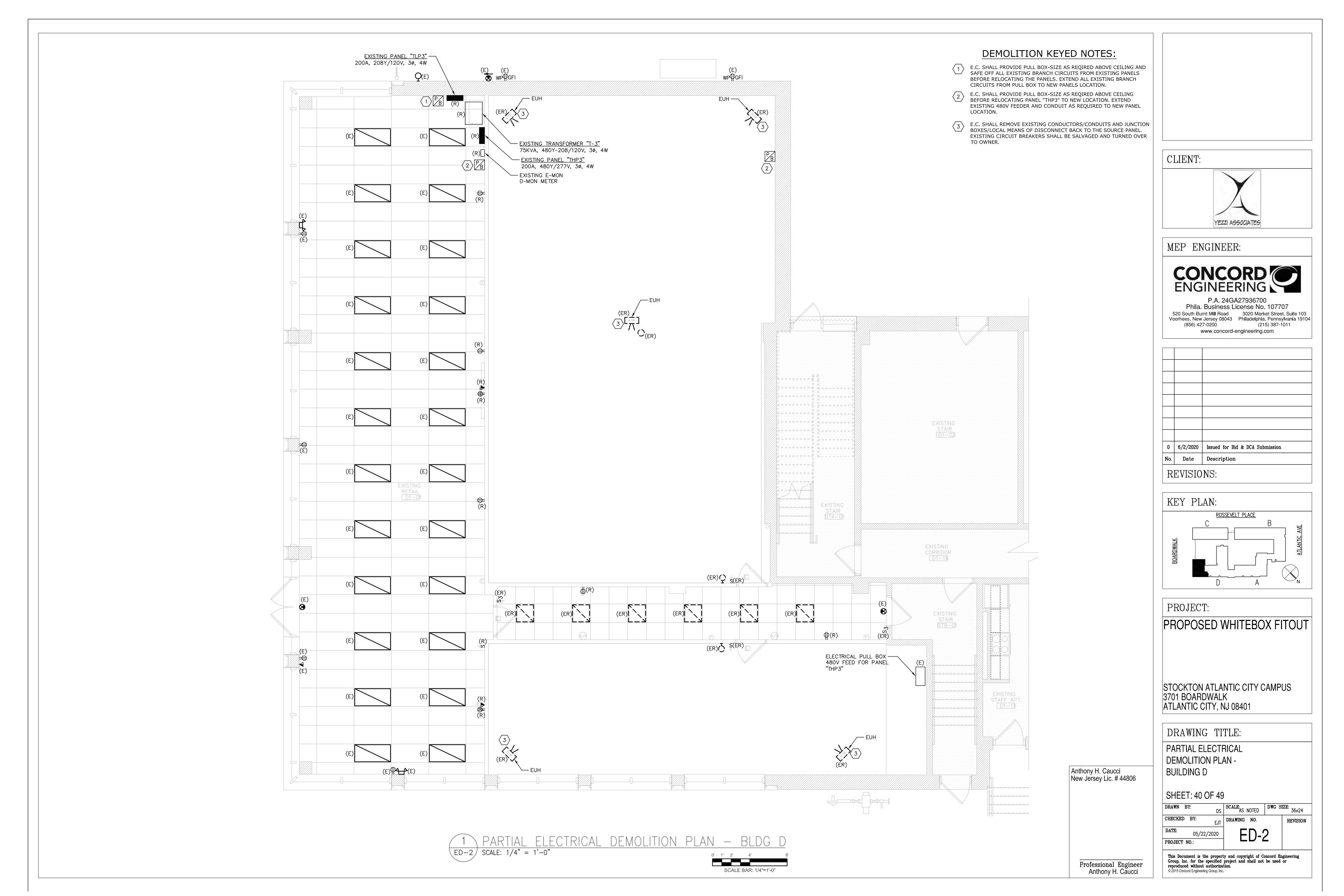
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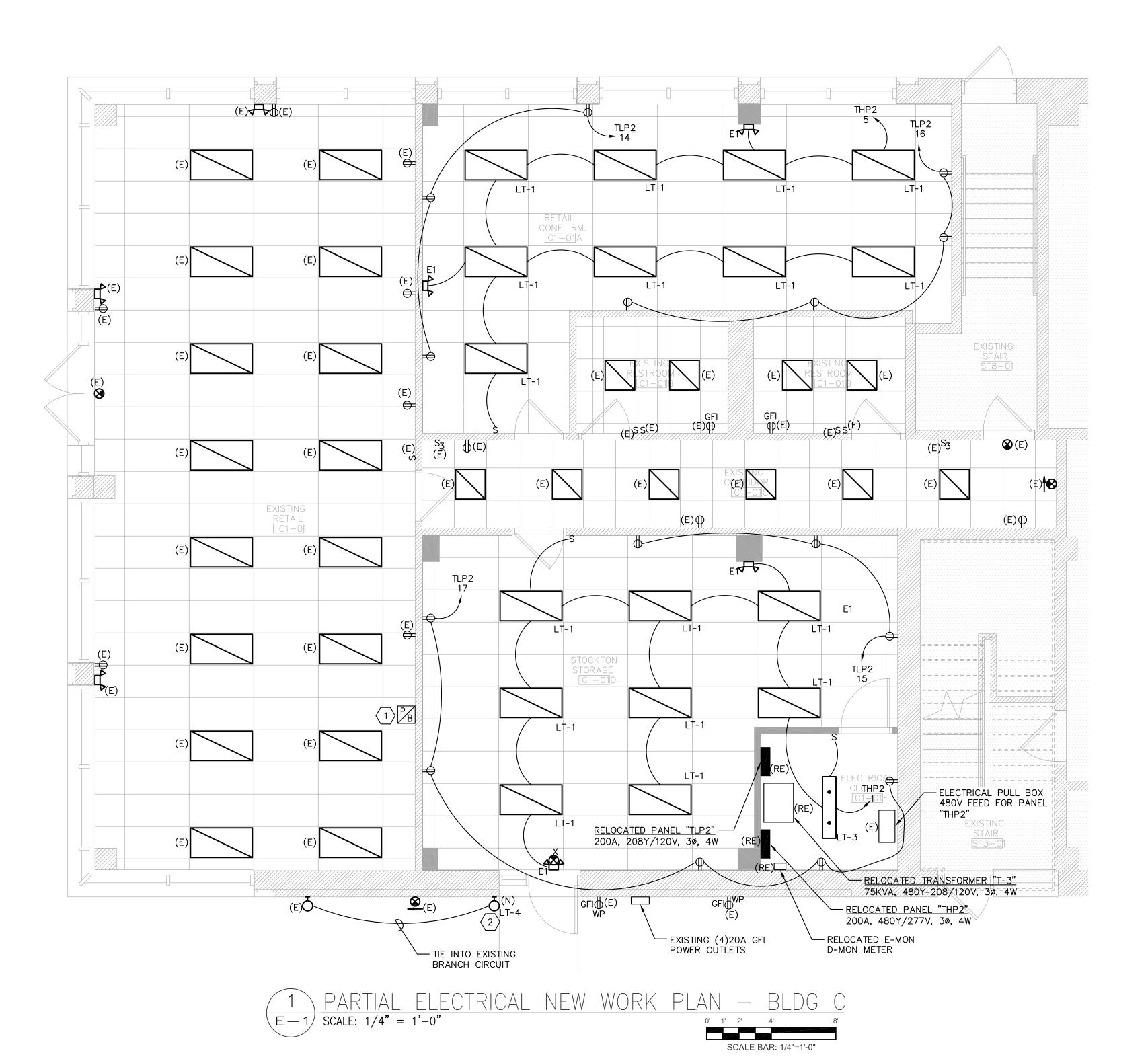
Professional Engineer
Anthony H. Caucci

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1' 2' 4' 8' SCALE BAR: 1/4"=1'-0"



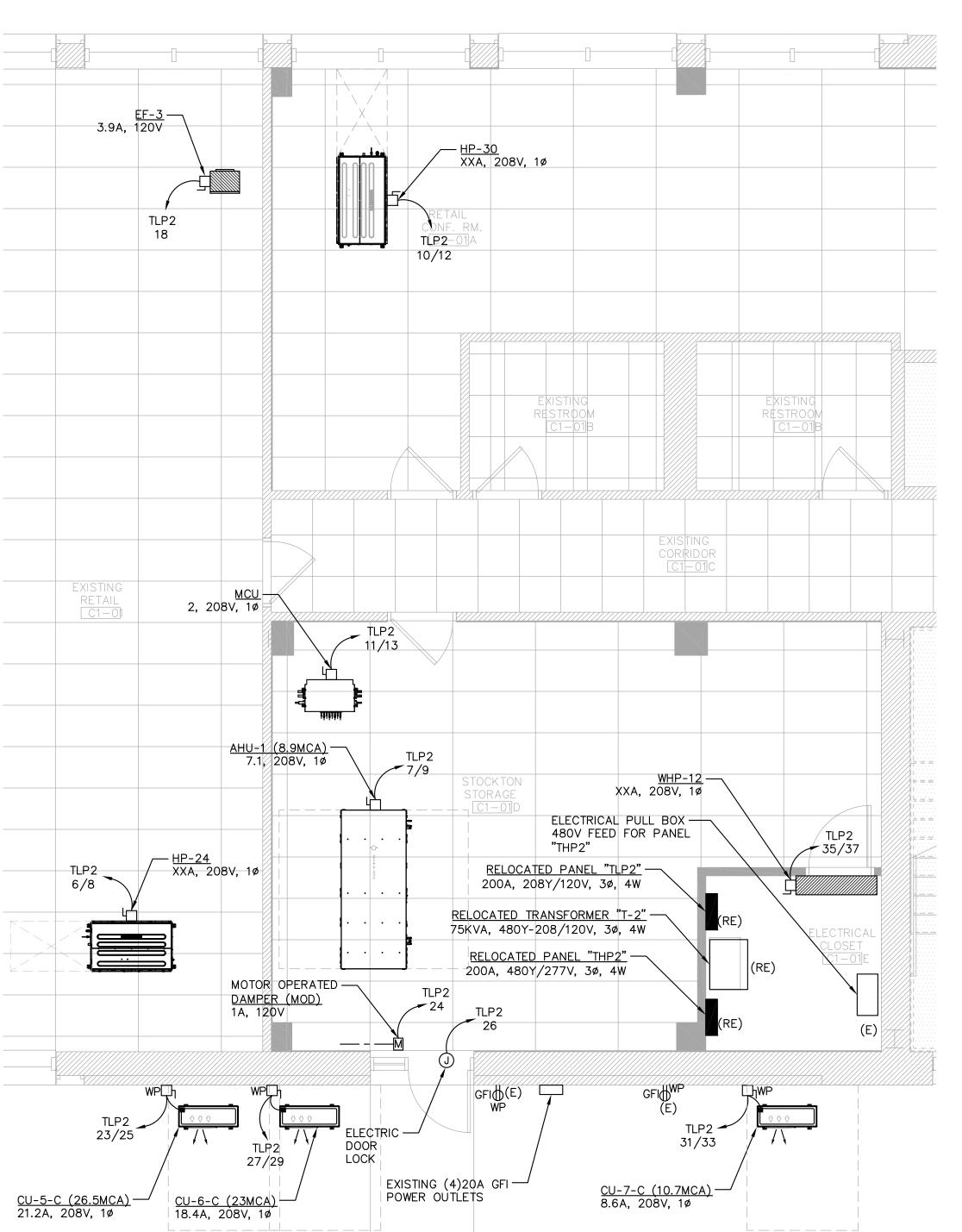


LIGHTING GENERAL NOTES:

- MATCH WITH EXISTING ZR24 2'x4' LIGHTS HIGH EFFICIENCY LED TROFFER FROM CREE LIGHTING. MATCH FINISHES AND KELVIN TEMPERATURE WITH EXISTING LIGHTS. TYPICAL FOR ALL NEW LT-1 2'x4' LIGHTING.
- 2. OWNER/ARCHITECT PROVIDED SPEC FOR LT-3 LIGHTS.
- 3. MATCH WITH EXISTING EMERGENCY BATTERY PACKS. TYPICAL FOR ALL NEW E1 EMERGENCY BATTERY PACKS.
- 4. MATCH WITH EXISTING EXIT SIGNS. TYPICAL FOR ALL NEW X EXIT SIGNS.

NEW WORK KEYED NOTES:

- E.C. SHALL PROVIDE PULL BOX-SIZE AS REQIRED ABOVE CEILING AND SAFE OFF ALL EXISTING BRANCH CIRCUITS FROM EXISTING PANELS BEFORE RELOCATING THE PANELS. EXTEND ALL EXISTING BRANCH CIRCUITS FROM PULL BOX TO NEW PANELS LOCATION.
- PROVIDE NEW WET LOCATION OUTDOOR LED LIGHT TO MATCH EXISTING EXTERIOR LIGHTS. WAC LIGHTING MANUFACTURER MODEL# WS-W53. MATCH FINISH WITH EXISTING LIGHTS.



2 PARTIAL MECH EQUIPMENT POWER NEW WORK PLAN — BLDG C E-1) SCALE: 1/4" = 1'-0"



Anthony H. Caucci New Jersey Lic. # 44806

> Professional Engineer Anthony H. Caucci

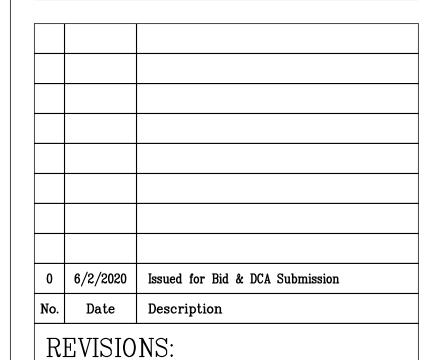
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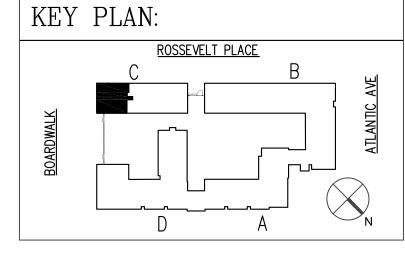


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PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

PARTIAL ELECTRICAL

NEW WORK PLAN -

BUILDING C - BASE BID

SHEET: 41 OF 49

DRAWN BY:

DS SCALE:
AS NOTED DWG SIZE:
36x24

CHECKED BY:

EJT DRAWING NO.

PROJECT NO.:

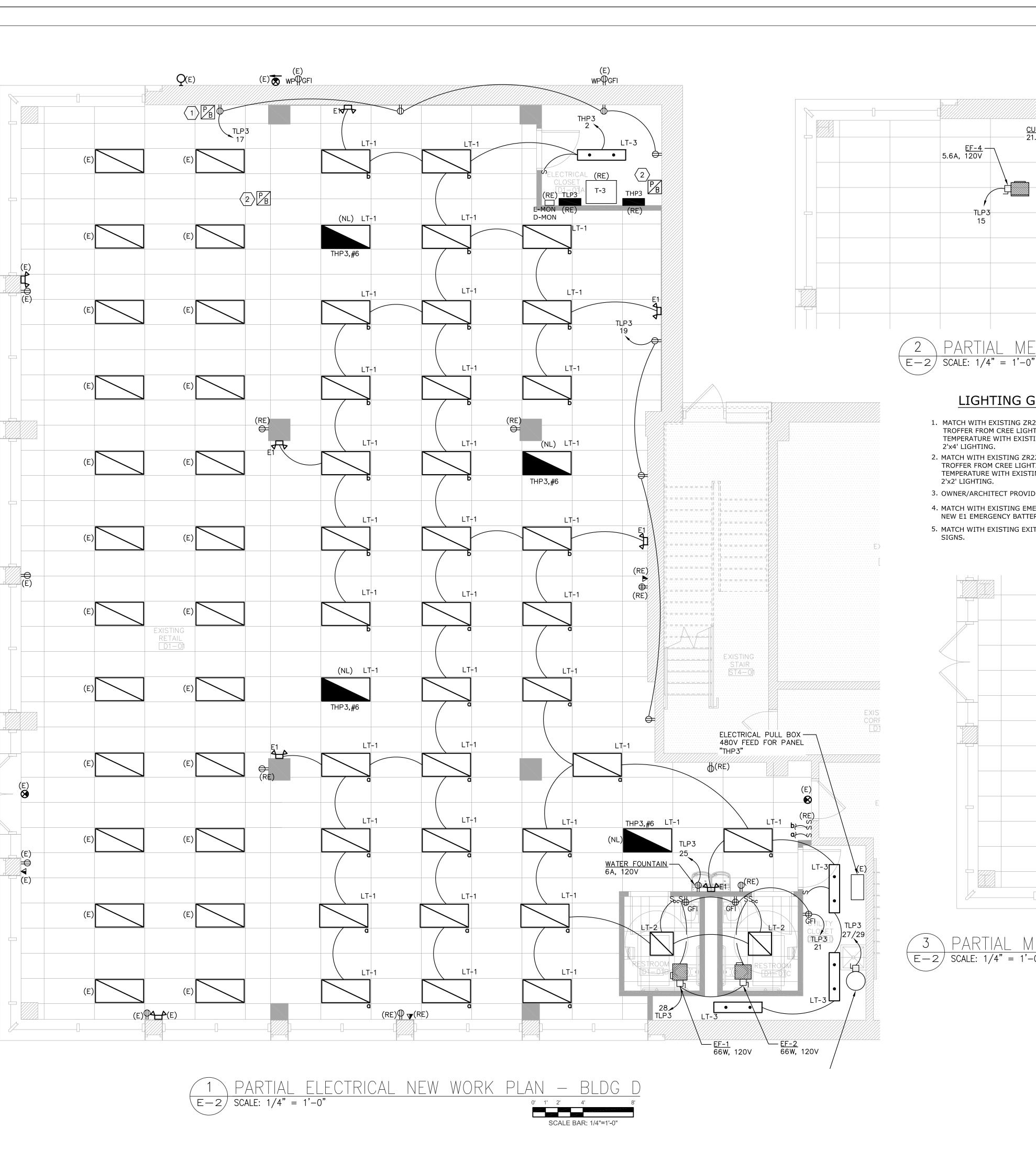
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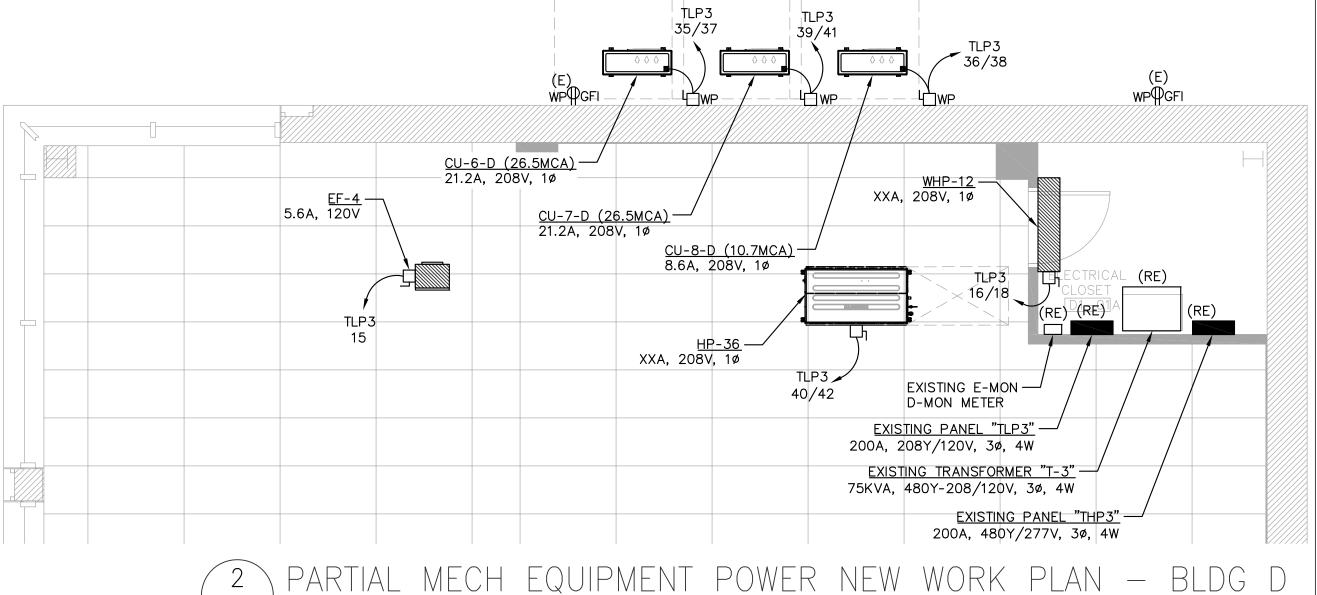
05/22/2020

PROJECT NO.:

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1. MATCH WITH EXISTING ZR24 2'x4' LIGHTS HIGH EFFICIENCY LED TROFFER FROM CREE LIGHTING. MATCH FINISHES AND KELVIN TEMPERATURE WITH EXISTING LIGHTS. TYPICAL FOR ALL NEW LT-1 2'x4' LIGHTING.

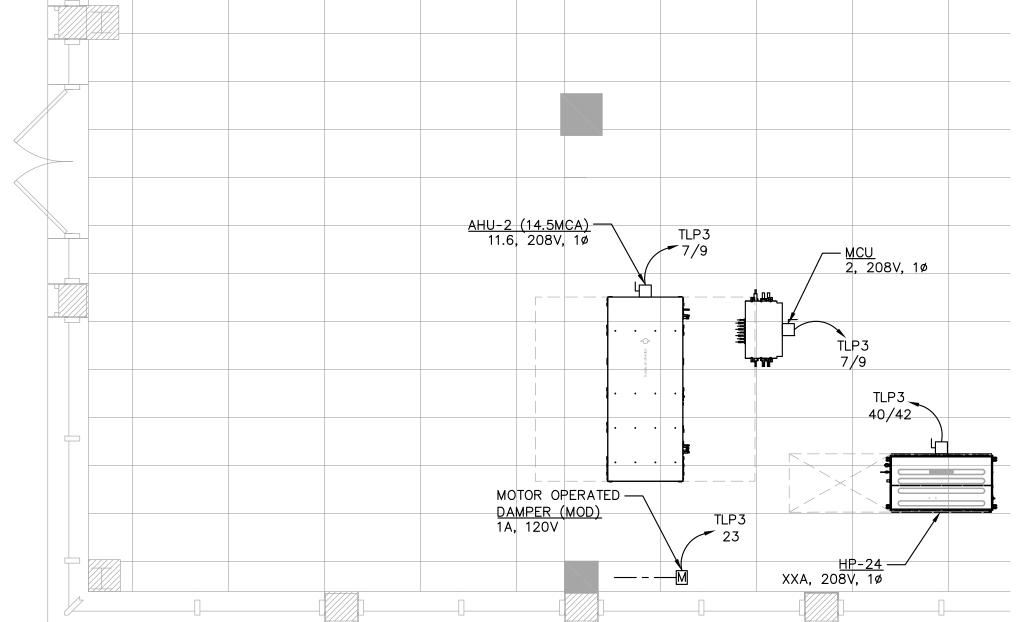
LIGHTING GENERAL NOTES:

- 2. MATCH WITH EXISTING ZR22 2'x2' LIGHTS HIGH EFFICIENCY LED TROFFER FROM CREE LIGHTING. MATCH FINISHES AND KELVIN TEMPERATURE WITH EXISTING LIGHTS. TYPICAL FOR ALL NEW LT-2 2'x2' LIGHTING.
- 3. OWNER/ARCHITECT PROVIDED SPEC FOR LT-3 LIGHTS.
- 4. MATCH WITH EXISTING EMERGENCY BATTERY PACKS. TYPICAL FOR ALL NEW E1 EMERGENCY BATTERY PACKS.
- 5. MATCH WITH EXISTING EXIT SIGNS. TYPICAL FOR ALL NEW X EXIT SIGNS.

NEW WORK KEYED NOTES:

SCALE BAR: 1/4"=1'-0"

- E.C. SHALL PROVIDE PULL BOX-SIZE AS REQIRED ABOVE CEILING AND SAFE OFF ALL EXISTING BRANCH CIRCUITS FROM EXISTING PANELS BEFORE RELOCATING THE PANELS. EXTEND ALL EXISTING BRANCH CIRCUITS FROM PULL BOX TO NEW PANELS LOCATION.
- E.C. SHALL PROVIDE PULL BOX-SIZE AS REQIRED ABOVE CEILING BEFORE RELOCATING PANEL "THP3" TO NEW LOCATION. EXTEND EXISTING 480V FEEDER AND CONDUIT AS REQUIRED TO NEW PANEL LOCATION.

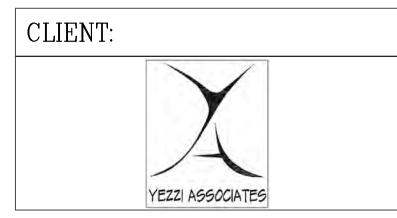


PARTIAL MECH EQUIPMENT POWER NEW WORK PLAN — BLDG [E-2 SCALE: 1/4" = 1'-0"

SCALE BAR: 1/4"=1'-0"

Anthony H. Caucci New Jersey Lic. # 44806

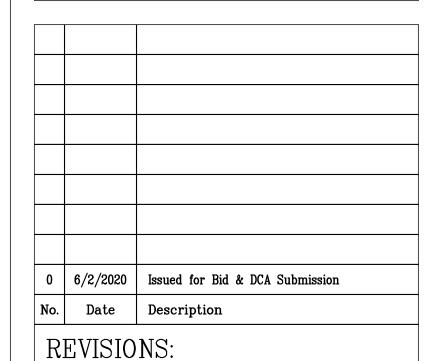
Professional Engineer Anthony H. Caucci



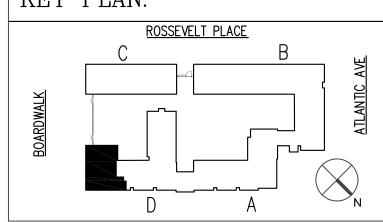
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KEY PLAN:



PROJECT:

PROPOSED WHITEBOX FITOUT

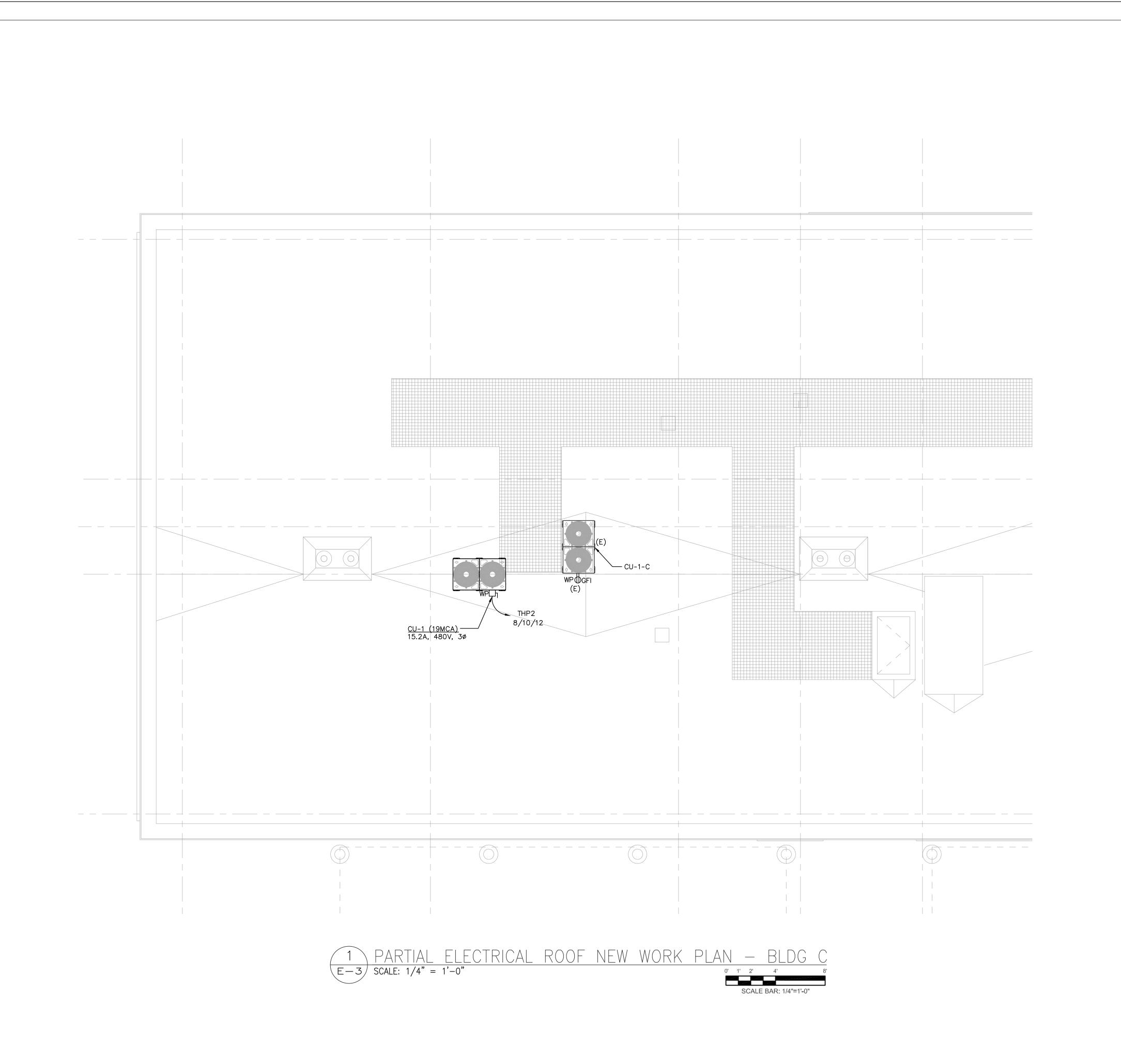
STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE: PARTIAL ELECTRICAL NEW WORK PLAN -BUILDING D - ALTERNATE BID

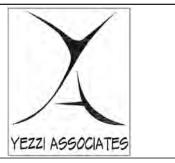
SHEET: 42 OF 49

SCALE: DWG SIZE: 36x24 DRAWN BY: EJT DRAWING NO. CHECKED BY: REVISION DATE: PROJECT NO.:

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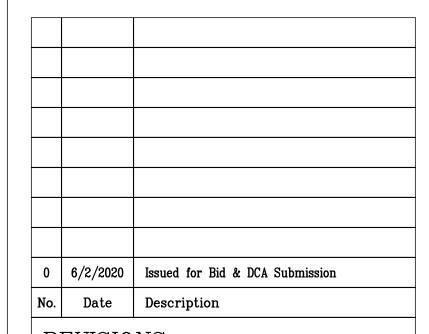
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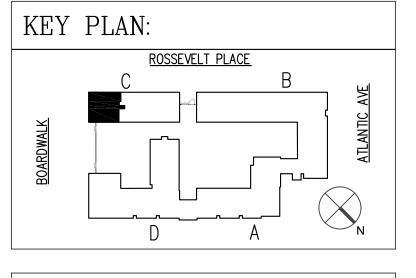
MEP ENGINEER:



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REVISIONS:



PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

PARTIAL ELECTRICAL ROOF NEW WORK PLAN -BUILDING C - BASE BID

SHEET: 43 OF 49

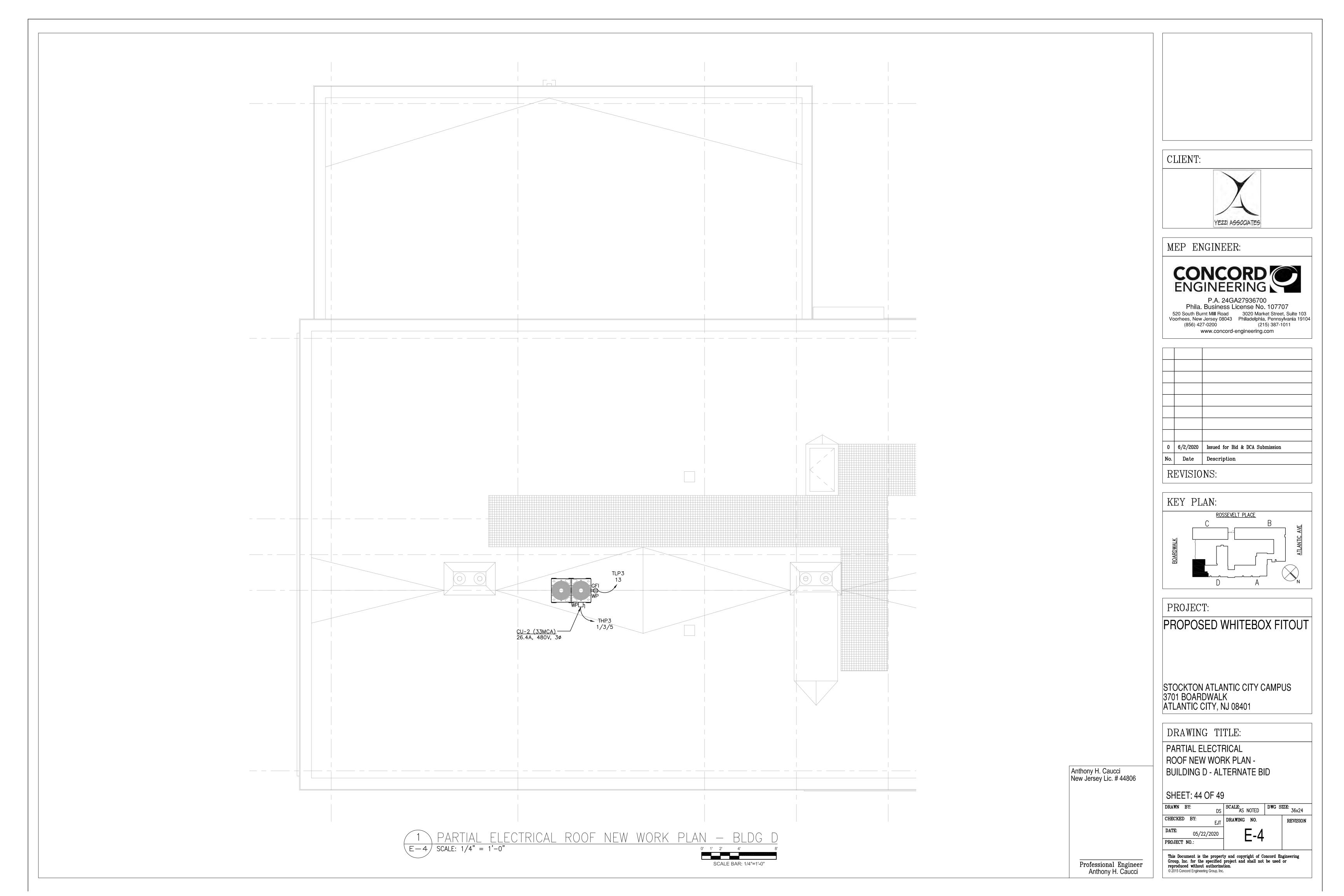
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CHECKED BY:	DRAWING NO.	REVISION
DATE : 05/22/2020	ิ F-3	
PROJECT NO.:		

Professional Engineer Anthony H. Caucci

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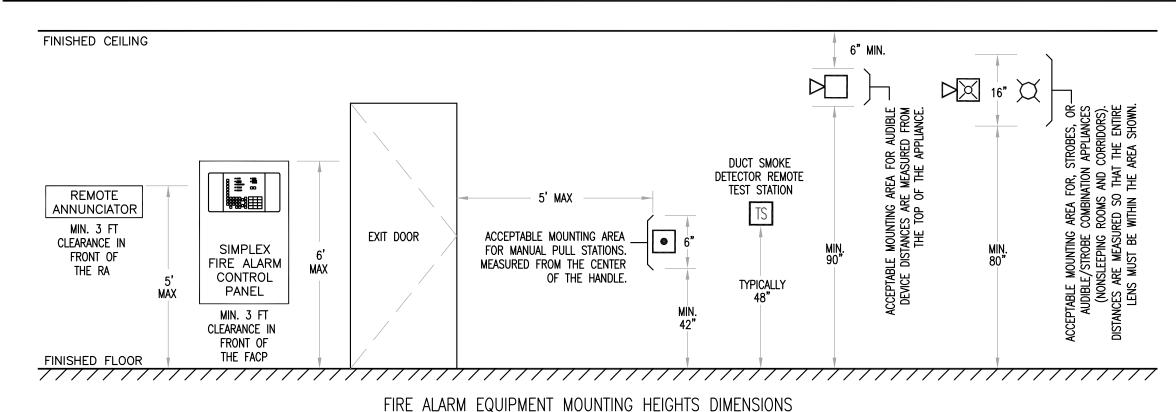
FIRE ALARM GENERAL NOTES

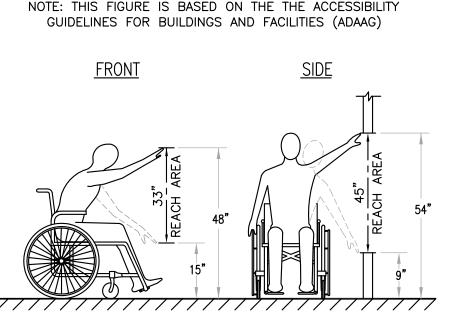
- ALL ELECTRICAL WORK TO BE INSTALLED IN ACCORDANCE WITH THE 2014 EDITION OF THE NATIONAL ELECTRICAL CODE 22. FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW ALL MECHANICAL AND ELECTRICAL DRAWINGS (NFPA 70) AS ADOPTED BY THE UNIFORM CONSTRUCTION CODE - STATE OF NEW JERSEY AND ANY OTHER PARTY HAVING JURISDICTION
- THE FIRE ALARM SYSTEM INSTALLATION SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODE REQUIREMENTS AND ANY OTHER PARTY HAVING JURISDICTION, INCLUDING 2015 IBC, 2015 IFC AS REFERENCED IN THE 2015 IBC AND NFPA & ANSI STANDARDS AS REFERENCED BY THE 2015 INTERNATIONAL IBC AND IFC.
- ALL ELECTRICAL AND FIRE ALARM EQUIPMENT FOR THE PROJECT SHALL BE NEW AND APPROVED BY UNDERWRITERS LABORATORY (U.L) OR ANY OTHER NATIONALLY RECOGNIZED TESTING AGENCY UNLESS NOTED OTHERWISE ON DRAWINGS.
- ALL NECESSARY PERMITS AND INSPECTIONS SHALL BE PROCURED BY THE CONTRACTOR, AND ALL PERMIT AND INSPECTION FEES PAID BY CONTRACTOR. ALL LICENSES REQUIRED BY CONTRACTOR SHALL BE PROCURED AND PAID BY THE CONTRACTOR. SUBMIT TO OWNER DUPLICATE CERTIFICATES OF INSPECTION FROM THE APPROVED INSPECTION 24.
- 5. UPON COMPLETION OF THE WORK, THE ENTIRE WIRING SYSTEM SHALL BE FREE FROM GROUNDS, SHORT CIRCUITS, OPENS, OVERLOADS AND IMPROPER VOLTAGES.
- 6. PRIOR TO FINAL ACCEPTANCE OF THE WORK, A WRITTEN STATEMENT SHALL BE SUBMITTED TO THE OWNER GUARANTEEING ALL EQUIPMENT AND SYSTEMS AGAINST DEFECTIVE MATERIAL AND WORKMANSHIP FOR ONE (1) YEAR FROM THE DATE OF ACCEPTANCE. UPON NOTICE ALL DEFECTIVE EQUIPMENT, MATERIALS AND SYSTEMS SHALL BE PROMPTLY REPAIRED AT NO EXPENSE TO THE OWNER.
- THIS SET OF DRAWINGS IS DIAGRAMMATIC IN NATURE AND INDICATES THE GENERAL ARRANGEMENT OF THE SYSTEM AND APPROXIMATE LOCATIONS OF THE EQUIPMENT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THAT THERE IS ADEQUATE SPACE AT THE LOCATIONS INDICATED FOR ALL EQUIPMENT PRIOR TO INSTALLATION OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL DIMENSIONS IN THE FIELD. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 8. FIRE ALARM CONTRACTOR SHALL SECURE SHOP DRAWINGS FROM OTHER CONTRACTORS AND VERIFY EXACT ELECTRICAL CHARACTERISTICS OF EQUIPMENT TO BE WIRED PRIOR TO ROUGH-IN. IF DISCREPANCIES ARE NOTED BETWEEN THE FIRE ALARM CONTRACT DRAWINGS AND OTHER CONTRACTOR SHOP DRAWINGS, FIRE ALARM CONTRACTOR IS TO IMMEDIATELY 30. NOTIFY ARCHITECT AND ENGINEER. FAILURE TO PERFORM THIS DUTY WILL NOT RELIEVE THE FIRE ALARM CONTRACTOR OF THE RESPONSIBILITY TO CORRECT WIRING DEFICIENCIES AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 9. ALL DEVICES OR EQUIPMENT SHOWN IN SYMBOL FORM SHALL BE WIRED TO ITS RESPECTIVE PANEL.
- 10. ALL WIRING, CONNECTIONS AND DEVICES SHALL BE PROVIDED TO COMPLY WITH THE GROUNDING REQUIREMENTS OF THE 31. NATIONAL ELECTRICAL CODE AND THE DRAWINGS UNLESS NOTED OTHERWISE. ALL EXPOSED NON-CURRENT CARRYING ELECTRICAL EQUIPMENT METALLIC PARTS, RACEWAY SYSTEMS AND WIRING SYSTEM GROUNDING CONDUCTORS SYSTEM SHALL BE GROUNDED.
- 11. THE FIRE ALARM CONTRACTOR SHALL PAINT RED IN COLOR ALL JUNCTION BOXES AND CONDUIT ASSOCIATED WITH THE FIRE ALARM SYSTEM. LABEL WITH PERMANENT MARKER ALL JUNCTION BOXES AND OUTLET BOXES WITH CIRCUIT NUMBER, PANEL IDENTIFICATION OR ADDRESS AS REQUIRED.
- 12. ALL CUTTING AND PATCHING REQUIRED FOR THE FIRE ALARM WORK SHALL BE THE RESPONSIBILITY OF THE FIRE ALARM 33. ALL WIRE AND CABLE SHALL HAVE A WIRE MARKER ON EACH END, OR EQUAL. ALL MARKERS SHALL BE CONTRACTOR.
- 13. ALL HOLES OR VOIDS CREATED TO ROUTE CONDUIT THROUGH FIRE RATED FLOORS AND WALLS SHALL BE SEALED WITH AN INTUMESCENT MATERIAL CAPABLE OF EXPANDING UP TO 8 TO 10 TIMES WHEN EXPOSED TO A TEMPERATURE OF 34. FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING PATCHING AND PAINTING REQUIRED 250 DEGREES FAHRENHEIT AND ABOVE. ACCEPTABLE SEALING MATERIAL SUCH AS 3M FIRE BARRIER CAULK, PUTTY, STRIP AND SHEET FORM SHALL HAVE I.C.B.O. AND BOCA APPROVED RATING OF 3 HOURS PER ASTM E-814 (U.L. 1479) AS PER NEC ART. 300-21.
- 14. A COMPLETE SET OF "AS-BUILT" DRAWINGS, (1) SET IN HARD COPY REPRODUCIBLE AND (1) SET OF ELECTRONIC FILES PRODUCED IN PDF FORMAT, SHALL BE FURNISHED TO THE OWNER AND ENGINEER UPON PROJECT COMPLETION.
- 15. ALL EQUIPMENT, DEVICES AND CIRCUITS SHALL BE LABELED ACCORDING TO OWNER REQUIREMENTS. PRIOR TO LABELING AND IDENTIFICATION OF ALL EQUIPMENT, DEVICES AND CIRCUITS, CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THESE REQUIREMENTS WITH THE OWNER.
- 16. PRIOR TO CONNECTING ANY LOADS TO PANELBOARDS, THE FIRE ALARM CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR TO VERIFY THE PANELBOARDS' TOTAL CONNECTED LOADS DO NOT EXCEED THOSE ALLOWED BY THE NATIONAL ELECTRIC CODE AS ADOPTED BY THE STATE OF NEW JERSEY.
- 17. ALL CIRCUIT BREAKERS TO BE INSTALLED IN PANELBOARDS SHALL BE OF THE SAME MANUFACTURER AND TYPE, WITH AN EQUAL OR GREATER SHORT CIRCUIT RATING MATCHING THE PANELBOARD'S BUSS RATING. ALL CIRCUIT BREAKERS 39. SERVING FIRE ALARM DEVICES SHALL BE PROVIDED A "LOCK-ON" FEATURE.
- 18. ALL LOW-VOLTAGE FIRE ALARM CABLE SHALL BE INDEPENDENTLY SUPPORTED FROM THE STRUCTURE. CABLES SHALL NOT BE LAID ON CEILING PANELS.
- 19. ALL WIRING AND EQUIPMENT INSTALLED IN DUCTS, PLENUMS AND OTHER AIR HANDLING SPACES SHALL CONFORM TO
- 20. DO NOT INSTALL ANY A.C. CURRENT CARRYING CONDUCTORS IN OR CLOSE TO THE SAME RACEWAY WITH FIRE ALARM SYSTEM CONDUCTORS.
- 21. ALL DUCT MOUNTED SMOKE OR HEAT DETECTORS SHALL BE FURNISHED AND WIRED BY THE FIRE ALARM CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR. THE FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR THE WIRING OF ALL DUCT MOUNTED DETECTORS TO ENSURE A COMPLETE OPERATING SYSTEM. THE FIRE ALARM CONTRACTOR SHALL REFER TO THE MECHANICAL DRAWINGS FOR THE LOCATIONS OF ALL DUCT MOUNTED DETECTORS. ALL DUCT MOUNTED DETECTORS AND THEIR ASSOCIATED WIRING SHALL CONFORM TO ARTICLE 300-22 OF THE 2014 EDITION OF THE NATIONAL ELECTRIC CODE.

- AND COORDINATE ALL DUCT DETECTOR LOCATIONS AND REQUIREMENTS. DUCT MOUNTED HEAT AND SMOKE DETECTORS SHALL BE WIRED AND INTERCONNECTED INTO THE FACILITY'S EXISTING FIRE ALARM SYSTEM, AND ALSO WIRED INTO THE FACILITY'S EXISTING BUILDING MANAGEMENT SYSTEM (BMS) FOR FAN SHUT-DOWN/CONTROL. COORDINATE WITH CONTROLS CONTRACTOR THE WIRING REQUIREMENTS FOR ALL DUCT DETECTORS. EACH DUCT SMOKE DETECTOR SHALL HAVE A REMOTE ALARM INDICATOR WITH KEY TEST SWITCH. INSTALLED AND WIRED. EACH AIR HANDLING SYSTEM GREATER THAN 2000 CFM IN CAPACITY SHALL BE EQUIPPED WITH RETURN AIR DUCT SMOKE DETECTORS.
- 23. FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW ALL FIRE PROTECTION DRAWINGS AND COORDINATE LOCATIONS AND QUANTITIES OF ALL TAMPER SWITCHES, FLOW SWITCHES, PRESSURE SWITCHES, ETC., AND THEIR FIRE ALARM/WIRING REQUIREMENTS. ALL FIRE PROTECTION DEVICES SHALL BE WIRED AND INTERCONNECTED INTO THE FACILITY'S EXISTING FIRE ALARM SYSTEM
- DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER THE CONSTRUCTION CLEAN-UP IS COMPLETE AND FINAL DETECTORS THAT HAVE BEEN INSTALLED PRIOR TO FINAL CLEAN-UP BY ALL TRADES SHALL BE CLEANED OR REPLACED.
- 25. EACH FIRE ALARM SYSTEM CIRCUIT SHALL NOT EXCEED 70% OF ITS RATED CAPACITY.
- 26. CONNECTED LOAD OF THE FIRE ALARM SYSTEM'S BATTERIES SHALL NOT EXCEED 70% OF ITS RATED
- 27. ALLOW FOR MINIMUM OF 25% EXPANSION OF THE FIRE ALARM SYSTEM.
- 28. ALL FIRE ALARM CABLING SHALL BE "FPLP" RATED OR RUN IN A MINIMUM 3/4" CONDUIT. ALL EXPOSED LINE AND LOW-VOLTAGE CABLE SHALL BE INSTALLED IN RIGID GALVANIZED STEEL CONDUIT.
- 29. ALL FIRE ALARM DEVICES SHALL BE GRAPHICALLY IDENTIFIED ON THE FACILITY'S EXISTING FIRE ALARM SYSTEM'S GRAPHICS WORKSTATION.
- FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE, AT HIS OWN EXPENSE, TO HAVE PREPARED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER, FIRE ALARM SYSTEM DESIGN, WITH SHOP DRAWINGS, FOR THIS PROJECT. FIRE ALARM SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY, AND SHALL BE SUBMITTED FOR REVIEW AND APPROVAL TO THE ARCHITECT, ENGINEER AND APPROVING LOCAL CONSTRUCTION OFFICIALS PRIOR TO PERFORMANCE OF ANY WORK.
- ACTUATION OF ANY ALARM DEVICES IN THE BUILDING SHALL ACTIVATE AN ALARM SIGNAL AT THE FACILITY'S FIRE ALARM CONTROL PANEL, REMOTE FIRE ALARM ANNUNCIATOR PANELS AND THE FIRE ALARM GRAPHIC WORKSTATION.
- 32. ALL WIRING SHALL COMPLY WITH PROJECT SPECIFICATIONS, 2014 NEC, 2013 NFPA 72, 2015 IBC, ADAAG, UL 1971, AND THE REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION. ALL EXPOSED WIRING OR WIRING INSTALLED IN LOCATIONS SUBJECT TO DAMAGE SHALL BE INSTALLED IN METAL RACEWAY PAINTED RED. ALL WIRING AND RACEWAYS SHALL BE INSTALLED IN A NEAT AND PROFESSIONAL MANNER.
- TYPED. SHIELDS ON ALL SHIELDED CABLE SHALL BE CONTINUOUS, GROUNDED AT THE FIRE ALARM CONTROL PANEL ONLY, AND ISOLATED FROM GROUND ELSEWHERE.
- FOR COMPLETE FIRE ALARM SYSTEM INSTALLATION.
- 35. MOUNTING FOR ALL DEVICES SHALL COMPLY WITH ALL ADOPTED NEW JERSEY STANDARDS LISTED IN THE IBC, NFPA 90A, NFPA 72, NEC, AND ADAAG.
- 36. FOR CONDUIT APPLICATIONS, USE ELECTRICAL METALLIC TUBING (EMT) AT ALL LOCATIONS INDOORS AND
- 37. FIRE ALARM CONTRACTOR SHALL REPAIR/PATCH AND /OR REPAINT TO MATCH ADJACENT AREAS. ANY

SCHEDULE 80 PVC CONDUIT OUTDOORS. ALL CONDUIT SIZE SHALL BE 3/4" MINIMUM.

- AREAS DAMAGED BY WORK OF THIS CONTRACT.
- THE FIRE ALARM VENDOR MUST CALCULATE THE NOTIFICATION APPLIANCES CANDELA AND dB RATINGS, AND DESIGNATE THEM ON THE SHOP DRAWINGS. ALL STROBE AND HORN SETTINGS MUST COMPLY WITH NEW JERSEY UCC AND NFPA 72 REQUIREMENTS.
- ALL FIRE ALARM WORK REQUIRED FOR AIR HANDLING UNIT AUTOMATIC SHUTDOWNS (UPON A DETECTION OF SMOKE BY AIR HANDLING UNIT'S DUCT SMOKE DETECTORS) SHALL BE THE RESPONSIBILITY OF THE FIRE ALARM CONTRACTOR. ALL MECHANICAL CONTROL WORK REQUIRED FOR AIR HANDLING UNIT AUTOMATIC SHUTDOWNS (UPON A DETECTION OF SMOKE BY AIR HANDLING UNIT'S DUCT SMOKE DETECTORS) SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.
- 40. ACCEPTANCE TESTING MUST BE PERFORMED IN ACCORDANCE WITH NEW JERSEY NJUCC AND 2013 NFPA 72 AS ADOPTED BY THE STATE OF NEW JERSEY. CONTRACTOR SHALL SUBMIT NEW JERSEY APPROVED ACCEPTANCE TESTING REPORTS TO OWNER AND LOCAL AUTHORITIES HAVING JURISDICTION.
- FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL PROGRAMMING NECESSARY FOR THE FACILITY'S MODIFIED FIRE ALARM SYSTEM, AND SHALL BE PERFORMED BY A TECHNICIAN CERTIFIED BY THE FIRE ALARM SYSTEM'S MANUFACTURER TO PERFORM THIS WORK. SUBMIT AS PART OF THE FIRE ALARM SHOP DRAWING ALL FIRE ALARM TECHNICIAN'S MANUFACTURER CERTIFICATIONS.
- 42. UPON COMPLETION OF FINAL TESTING, THE FIRE ALARM SYSTEM MANUFACTURER SHALL SUBMIT ELECTRONIC AND HARD COPY SETS OF RECORD DRAWINGS DETAILING AS-BUILT CIRCUITING AND INCORPORATING ALL FIELD AND DESIGN DIRECTIVES GIVEN THROUGH OUT THE PROJECT.





WHEELCHAIR ACCESSIBILITY DIMENSIONS

FIRE ALARM LEGEND

HOME RUN ARROW INDICATES PANEL AND CIRCUIT NUMBER

FIRE ALARM MANUAL PULL STATION

FIRE ALARM COMBINATION AUDIBLE/STROBE

FIRE ALARM STROBE

SMOKE DETECTOR

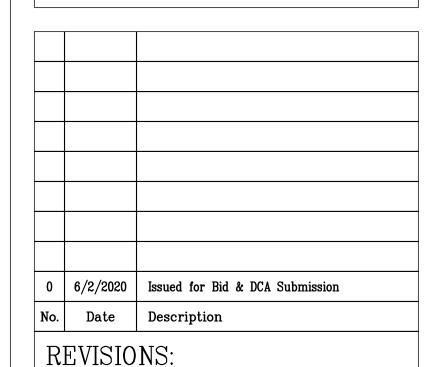
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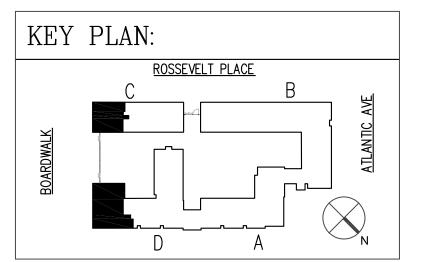


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PROJECT

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE: FIRE ALARM NOTES, LEGEND,

SYMBOLS & ABBREVIATIONS

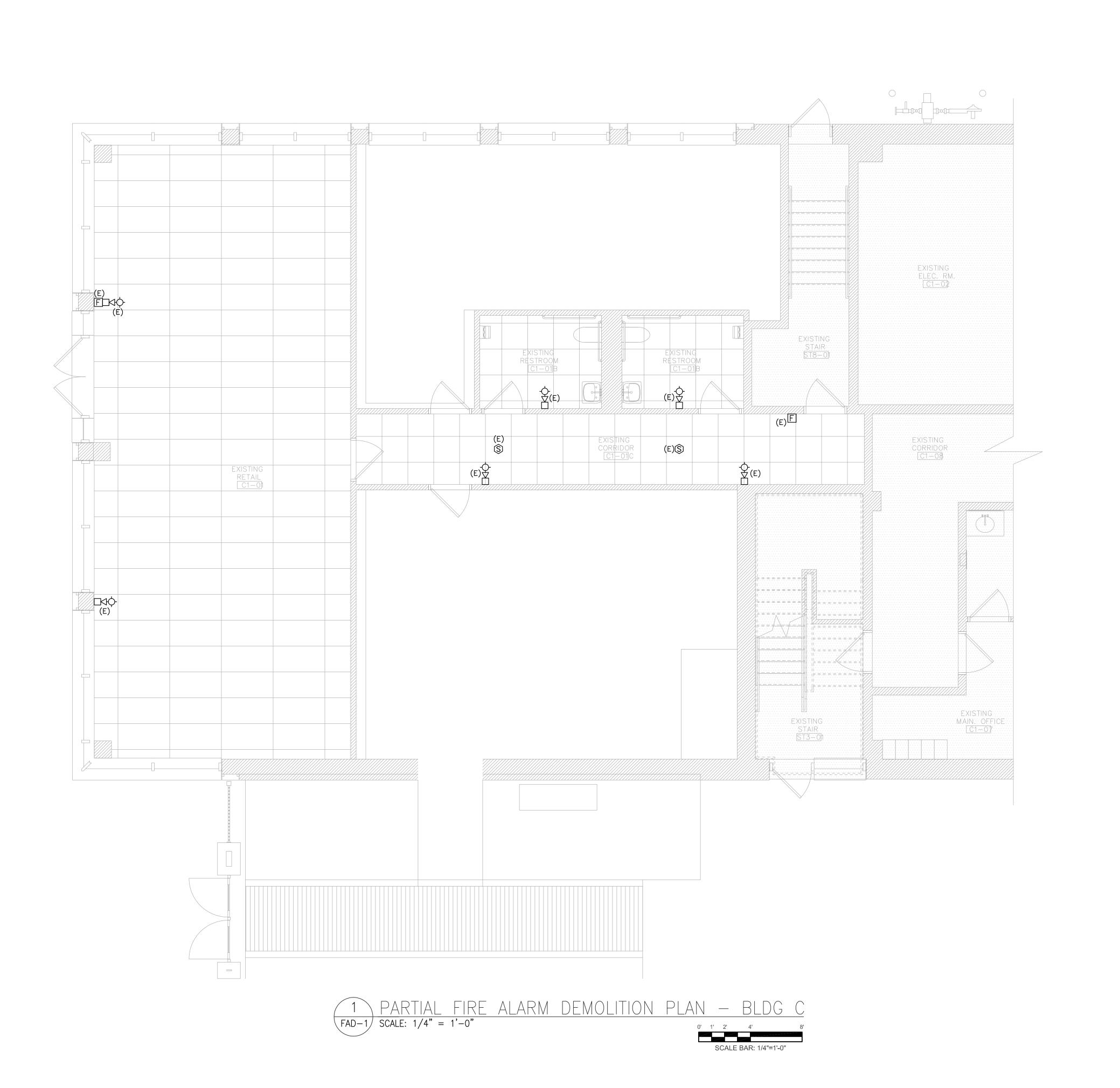
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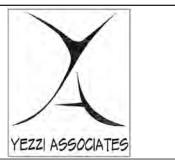
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Professional Engineer Anthony H. Caucci

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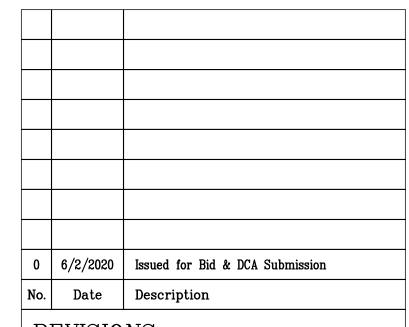




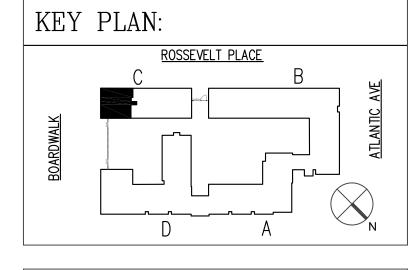
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REVISIONS:



PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE:

PARTIAL FIRE ALARM DEMOLITION PLAN -BUILDING C

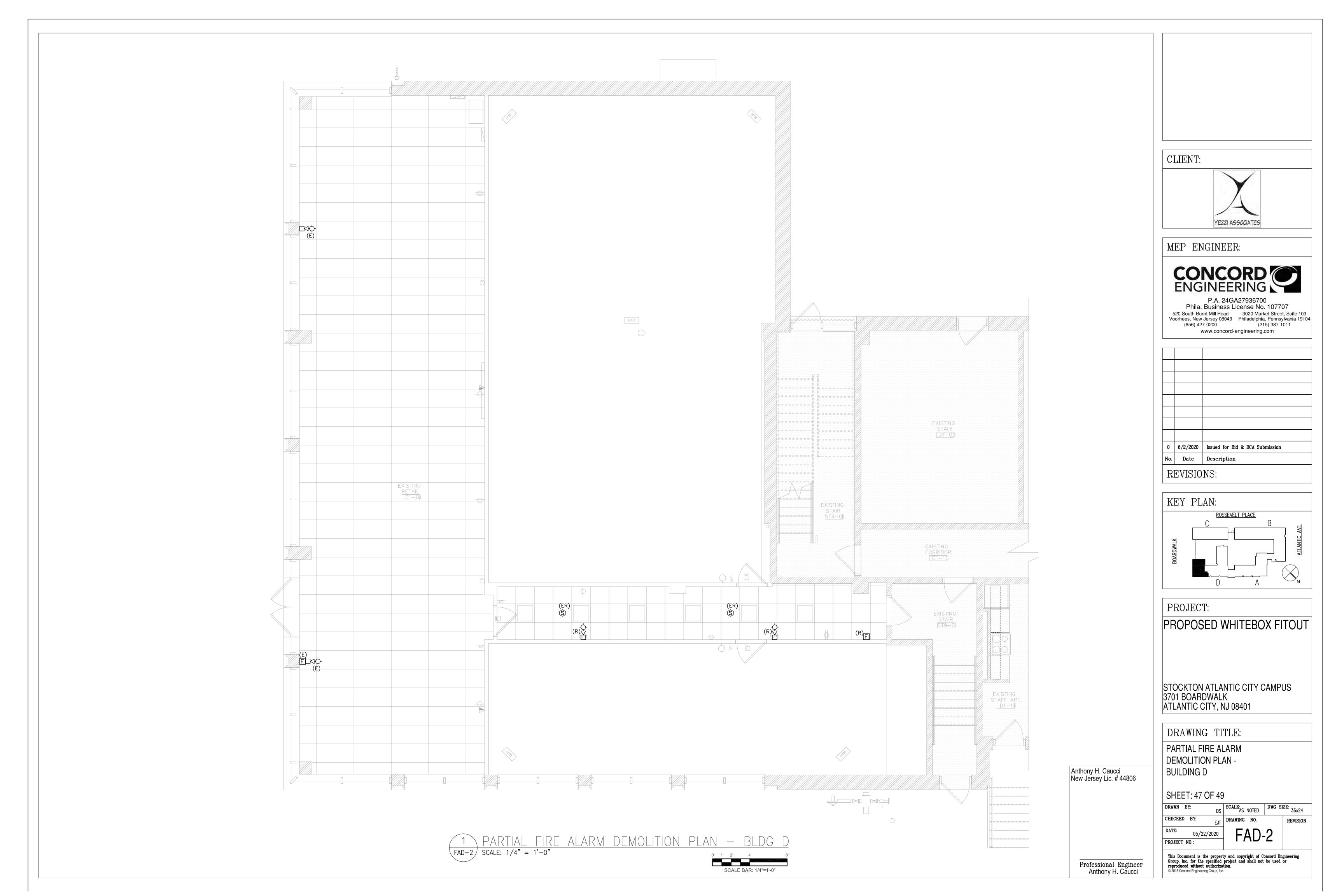
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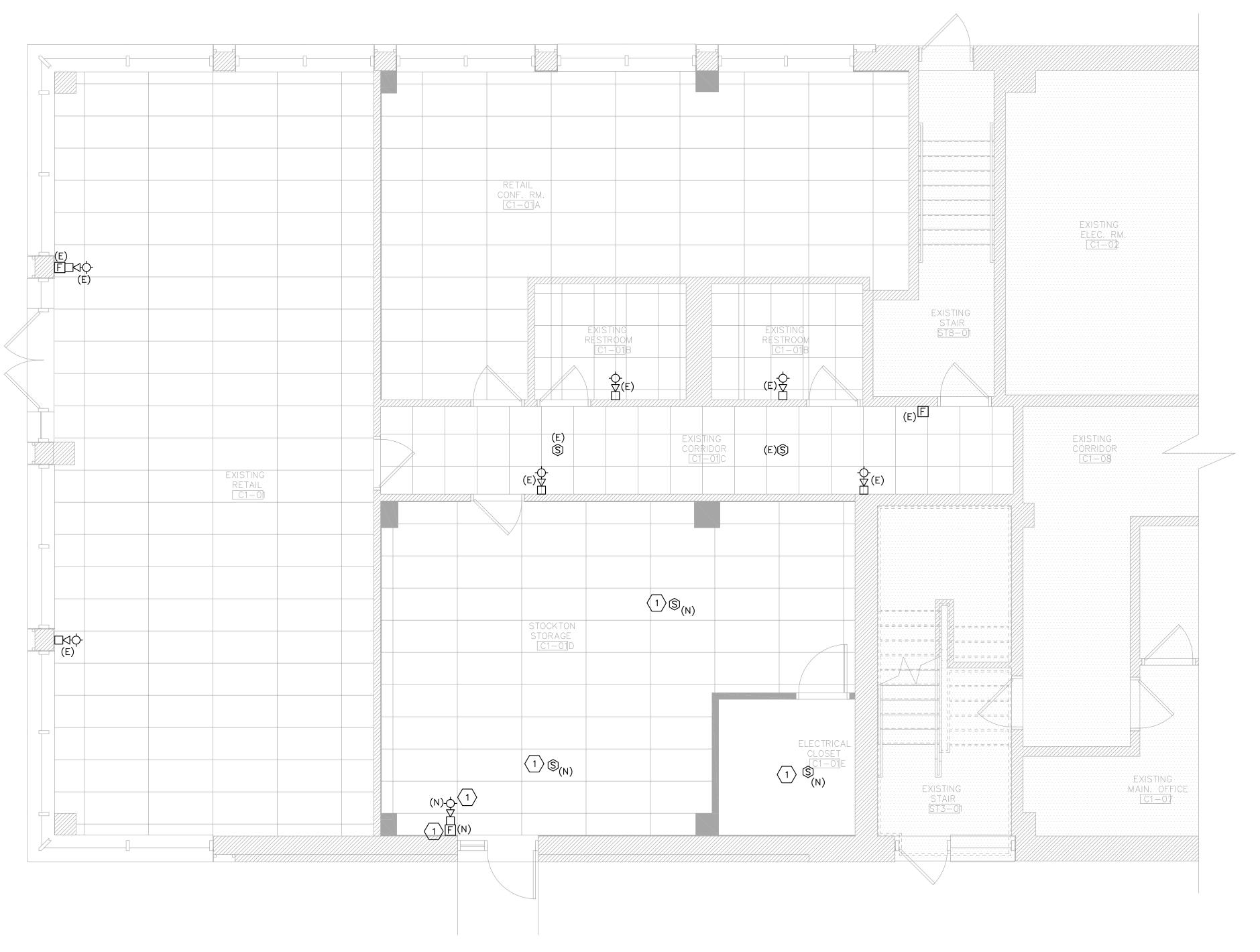
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FIRE ALARM NEW WORK KEYED NOTES:

ALL NEW EQUIPMENT SHALL BE UL LISTED FOR FIRE ALARM SERVICE AND SHALL BE COMPATIBLE WITH THE EXISTING VOICE SYSTEM. E.C. SHALL FURNISH & INSTALL ALL REQUIRED EXPANSION CARDS, AMPS, BATTERIES ETC. PROGRAMMING REQUIRED FOR A COMPLETE OPERATIONAL SYSTEM.



1 PARTIAL FIRE ALARM NEW WORK PLAN — BLDG C FA-1 SCALE: 1/4" = 1'-0" 0' 1' 2' 4' 8'

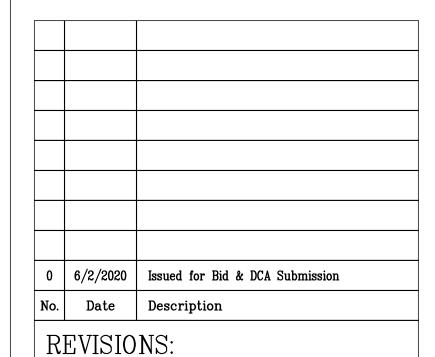
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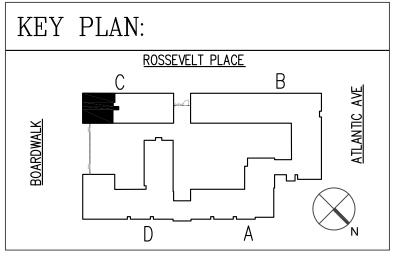


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PROJECT:

PROPOSED WHITEBOX FITOUT

STOCKTON ATLANTIC CITY CAMPUS 3701 BOARDWALK ATLANTIC CITY, NJ 08401

DRAWING TITLE: PARTIAL FIRE ALARM NEW WORK PLAN -BUILDING C

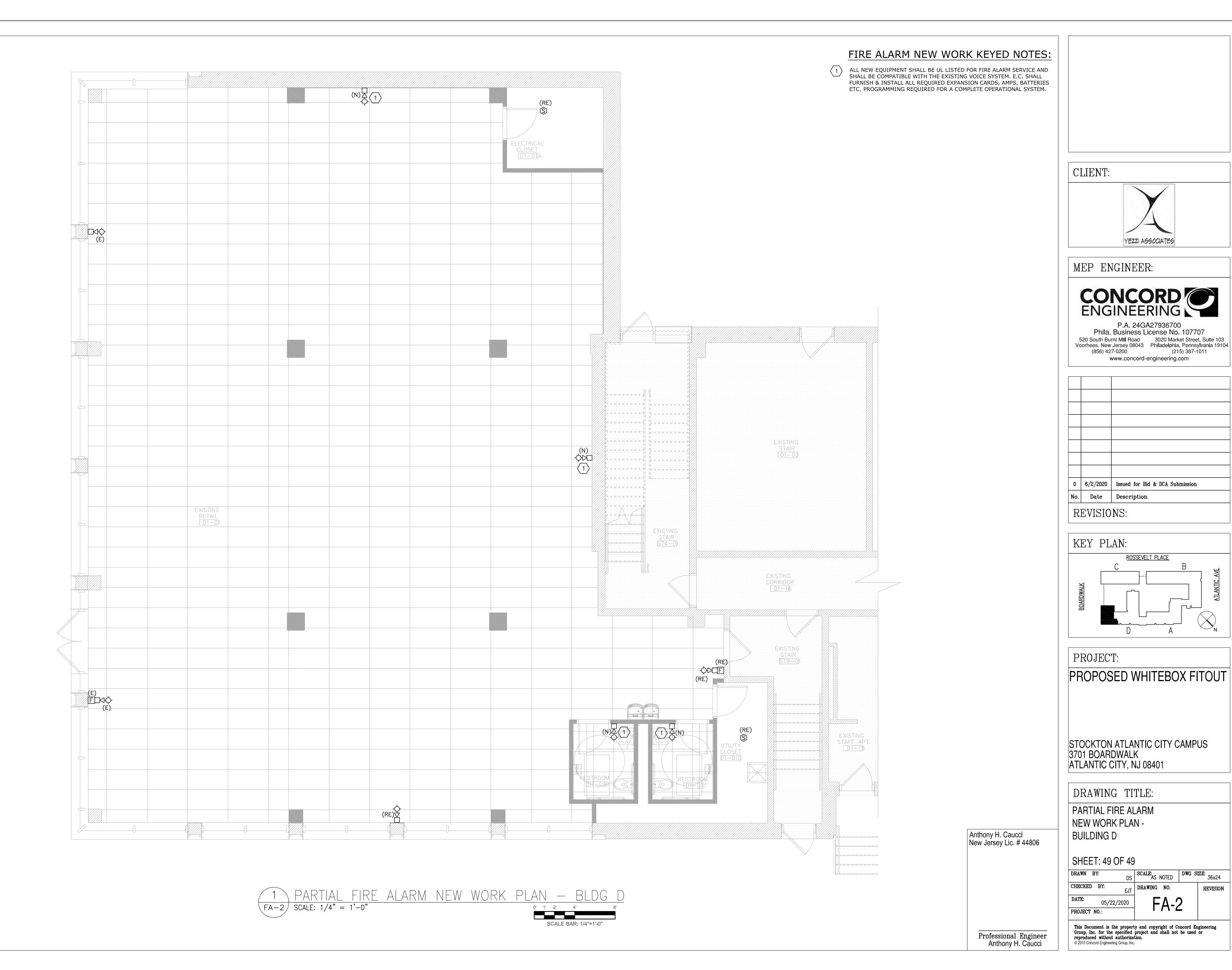
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ROSSEVELT PLACE

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FA-2

REVISION