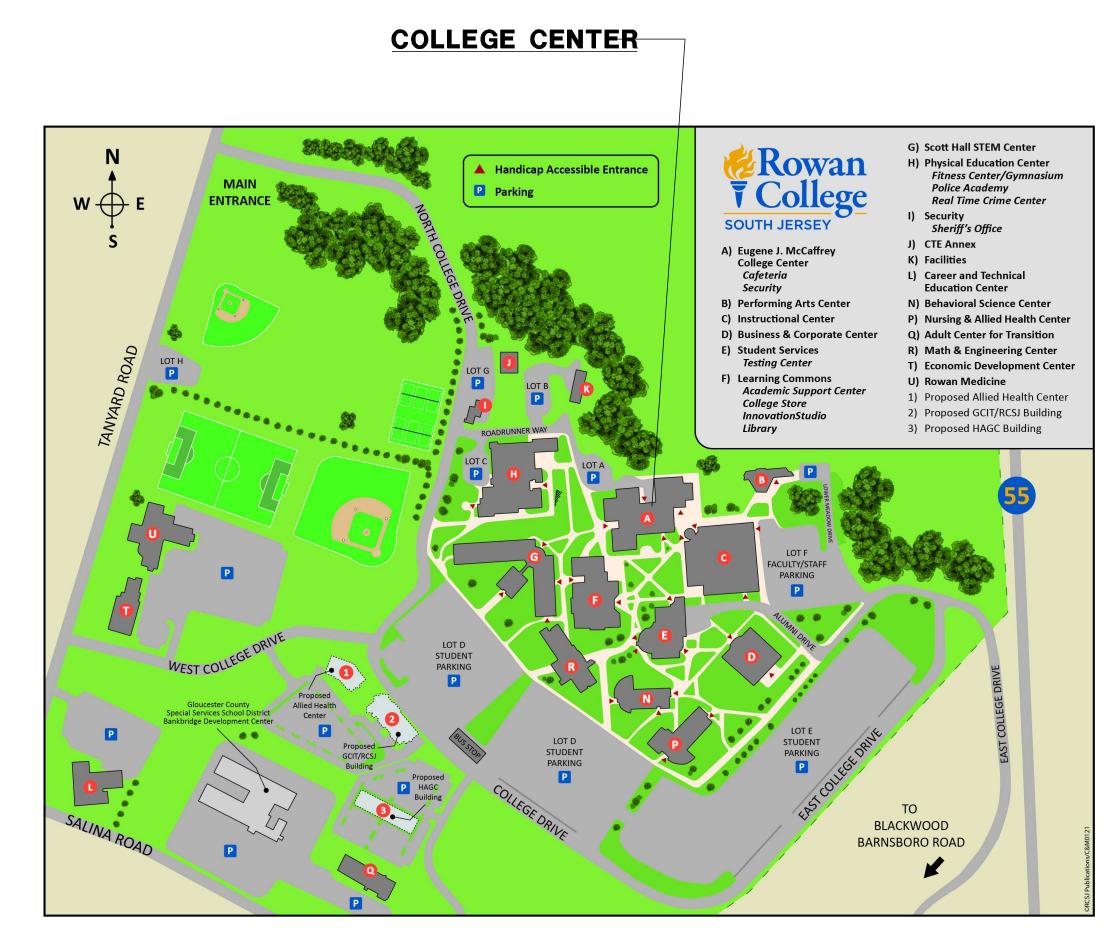
© ROWAN COLLEGE SOUTH JERSEY COLLEGE CENTER 2021 EOF & CAP OFFICE RENOVATIONS

1400 TANYARD ROAD, SEWELL, NEW JERSEY 08080



EOF OFFICE AREA OF WORK CAP CENTER AREA OF WORK OF WORK

COLLEGE CENTER SECOND FLOOR PLAN

DESIGN CODES:

UCC ENHANCEMENTS

INTERNATIONAL BUILDING CODE/2018/ NJ EDITION
INTERNATIONAL MECHANICAL CODE/2018
INTERNATIONAL FUEL GAS CODE/2018
NATIONAL STANDARD PLUMBING CODE/2018
ASHRAE 90.1-2016 ENERGY STANDARD
NATIONAL ELECTRICAL CODE(NFPA 70)/2017
INTERNATIONAL FIRE CODE/2018
ELEVATOR SUBCODE (NJAC 5:23-12):

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)
BARRIER FREE SUBCODE:ICC/ANSI A117.1-2009
N.J. REHAB CODE NJAC 5:23-6, NJUCC. SUBCHAPTER 6, 2018
NJ UCC BULLETIN 00-3: PUBLIC SCHOOLS-FACILITY PLANNING STANDARDS &

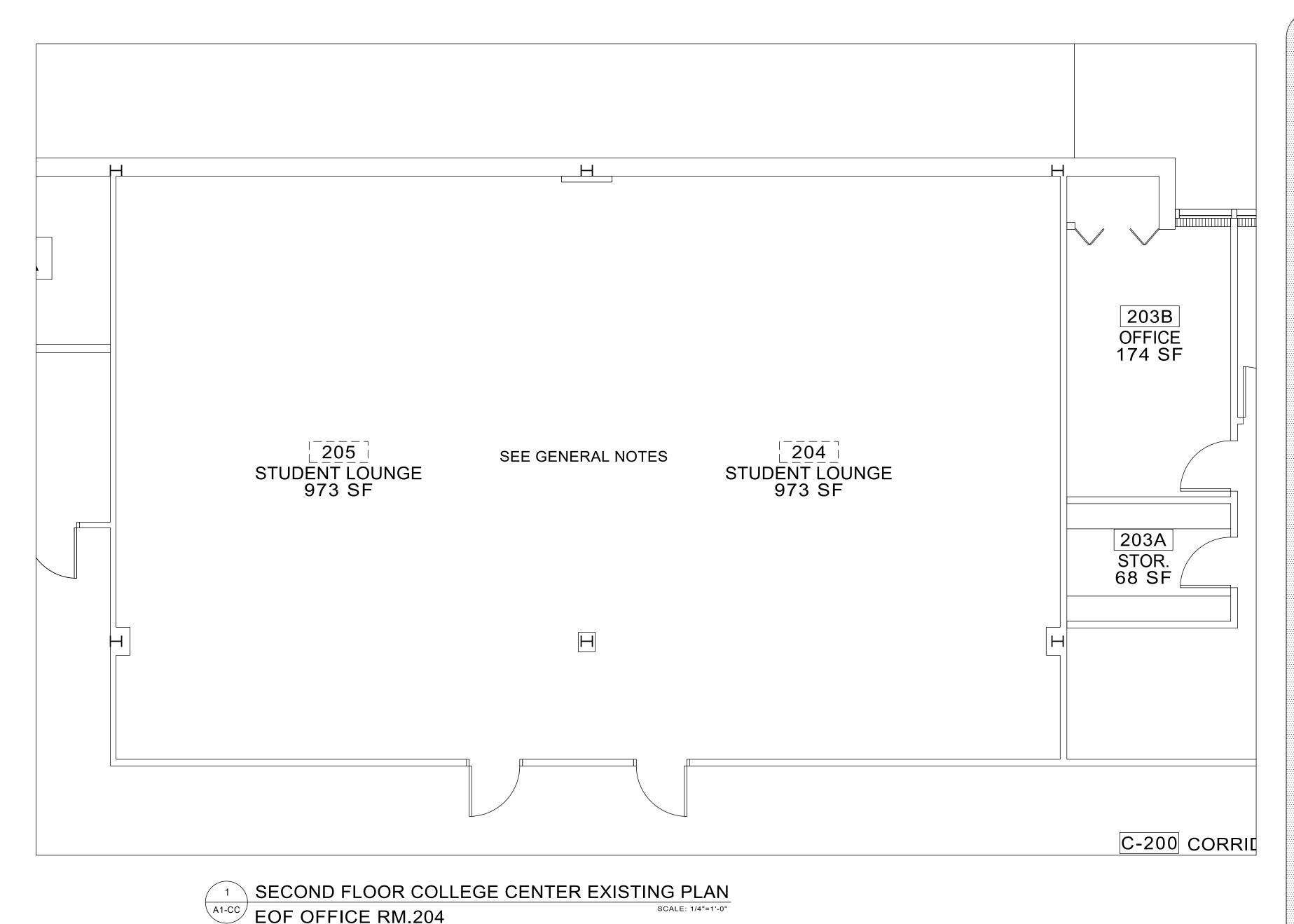
MECHANICAL, PLUMBING & ELECTRICAL ENGINEER:

MULHERN CONSULTING ENGINEERS
AND ASSOCIATES, INC.
321 SOUTH YORK ROAD HATBORO, PA 19040
P: 215-293-9900 F: 215-293-9214

A Professional Corporation of Architects and Planners 713 CREEK ROAD, BELLMAWR, NJ 08053 (856) 396-6200 F(856) 396-6205

COLLEGE CENTER EOF & CAP CENTER OFFICES DRAWING INDEX COVER SHEET ARCHITECTURAL DRAWINGS A1-CC EXISTING & PROPOSED FLOOR PLAN ROOM 204 EOF OFFICE A2-CC EXISTING & PROPOSED FLOOR PLAN ROOM 212 CAP CENTER A3-CC WALL DETAILS, DOOR DETAILS AND DOOR AND ROOM FINISH SCHEDULES MECHANICAL DRAWINGS M1-CC PARTIAL MECHANICAL FLOOR PLANS FP1-CC FIRE PROTECTION FLOOR PLANS ELECTRICAL DRAWINGS E1-CC EOF & CAP OFFICES, LIGHTING & POWER PLANS E2-CC ELECTRICAL NOTES AND DETAILS

GENERAL NOTES:



SECOND FLOOR COLLEGE CENTER PROPOSED PLAN EOF OFFICE RM.204

CEILING/RENOVATION NOTES:

LEGEND (REFER TO SHEET A3-CC) **ROOM NAME** | #]---- ROOM NUMBER EXISTING WALLS/PARTITIONS TO REMAIN EXISTING WALLS/PARTITIONS TO BE REMOVED '----**NEW WALLS/PARTITIONS** NEW DOOR TYPE:

> KEY NOTES: # **EXISTING DOOR TO REMAIN EXISTING DOOR & FRAME**

SYSTEM TO BE REMOVED INFILL AREA TO MATCH ADJACENT SURFACE

ALL DIMENSIONS OR SCALES SHOWN AS PLUS OR MINUS (±) ARE FOR INFORMATIONAL PURPOSES AND SHALL NOT BE TAKEN AS EXACT. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND OPENINGS.

THE OWNER AND ARCHITECT ASSUME NO RESPONSIBILITY FOR THE EXISTING ACTUAL CONDITIONS THAT THE CONTRACTOR MAY ENCOUNTER DURING THE COURSE OF THE WORK.

EXISTING FLOOR/FLOOR FINISH, WALLS, CEILING & LIGHTING TO REMAIN. PROTECT DURING RENOVATIONS / CONSTRUCTION. 4 PATCH HOLES IN EXISTING WALLS WITH MATERIALS TO MATCH

ADJACENT SURFACES.

6 ALL ELECTRICAL WORK BY LICENSED ELECTRICAL CONTRACTOR AND TO COMPLY WITH THE LATEST NEC ELECTRICAL CODE.

PAINT ALL EXISTING AND NEW WALLS IN THE OFFICE SUITE.

ELECTRICAL CONTRACTOR TO DISCONNECT, CAP AND REMOVE OR RELOCATE LIGHT FIXTURES, TV CAMERAS, SWITCHES, WALL OUTLETS, POWER POLES, EMERGENCY POWER SHUT OFFS, ELECTRICAL PANELS, ETC. AND ALL RELATED APPURTENANCES IN A CODE APPROVED MANNER. RELOCATE & RECONNECT ELECTRICAL ITEMS PER OWNER'S DIRECTION. THE RELOCATION TO INCLUDE ANY RE-WIRING, POWER AND/OR SWITCHES.

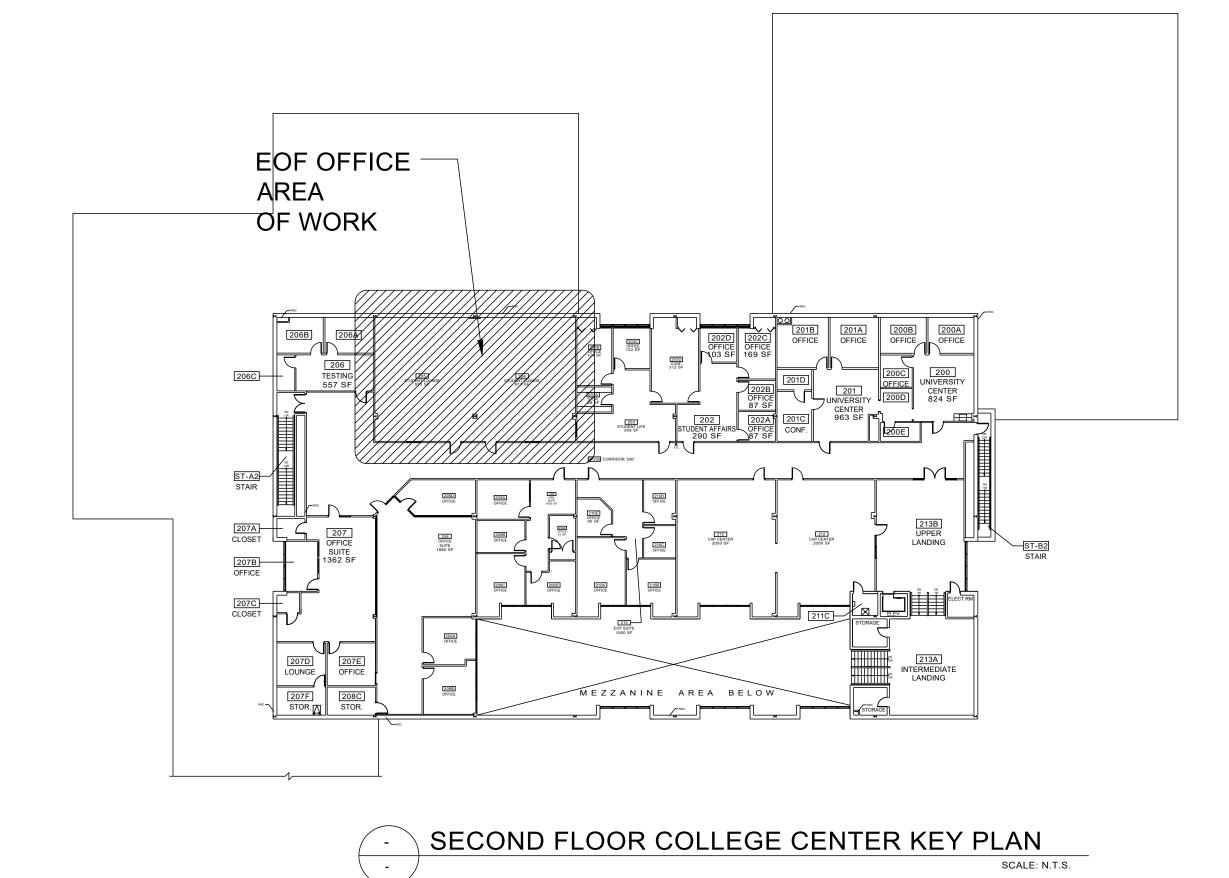
EXISTING CEILING SYSTEM TO REMAIN. WHERE WORK IS TO BE DONE ABOVE EXISTING LAY-IN CEILING SYSTEM, IT IS THE SOLE RESPONSIBILITY OF THAT DESIGNATED CONTRACTOR TO REMOVE AND/OR CUT NECESSARY CEILING TILES AND GRID REQUIRED FOR INSTALLATION, THEN PATCH GRID AND REINSTALL CEILING TILES AFTER INSTALLATION. RESTORE ROOM TO PREVIOUS CONDITION PRIOR TO RENOVATION.

DURING CONSTRUCTION, CLEAN AND PROTECT WORK IN PROGRESS. PROMPTLY REMOVE ANY DEBRIS FROM THE SITE. NO TRASH ACCUMULATION IS PERMITTED. TRANSPORT AND LEGALLY DISPOSE OF MATERIAL OFF SITE.

10 COORDINATE WITH OWNER ALL DEMOLITION WORK PRIOR TO CONSTRUCTION TO DETERMINE WHICH ITEMS TO SALVAGE AND TO GIVE TO OWNER.

EXISTING CEILING TO REMAIN: EXISTING SUSPENDED ACOUSTICAL CEILING SYSTEM TO REMAIN. SEE ELEC. DWGS. FOR REVISED SWITCHING, ETC. RELOCATE EXISTING AND/OR ADD HVAC AIR DEVICES AS SHOWN. SEE MECH. DWGS. FOR ANY HVAC RELATED SCOPE OF WORK. FIRE ALARM DEVICE LOCATIONS AND QUANTITIES SHALL BE MODIFIED AS REQUIRED BY NEW ROOM LAYOUT (SEE ELEC. DWGS.) EXISTING FIRE SPRINKLER LAYOUT AND QUANTITIES SHALL BE MODIFIED AS REQUIRED BY NEW ROOM LAYOUT NEW SPRINKLER HEADS & HEAT DECTORS SHALL BE PROVIDED PER THIS PLAN. REPLACE CEILING TILES TO MATCH ADJACENT EXISTING AS REQUIRED TO COVER SIGNS OF RENOVATION.

REFER TO MECHANICAL & ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR MORE INFORMATION. THE MAJORITY OF CEILING MOUNTED LIGHT FIXTURES AND AIR DEVICES ARE SHOWN HERE FOR BASIC INTENT. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING COMPREHENSIVE COORDINATION DRAWINGS, VERIFYING AVAILABLE AREA AND ABOVE CEILING CLEARANCE. DRAWINGS SHALL INCORPORATE THE WORK OF ALL APPLICABLE TRADES AND ALL CEILING MOUNTED EQUIPMENT, INCLUDING ALL EXISTING POTENTIAL CONFLICTS (EXISTING PIPE, DUCT, ETC.).



ISSUED FOR BID: 10/06/2021

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REVISIONS

Project No. 21-88

Scale: NOTED

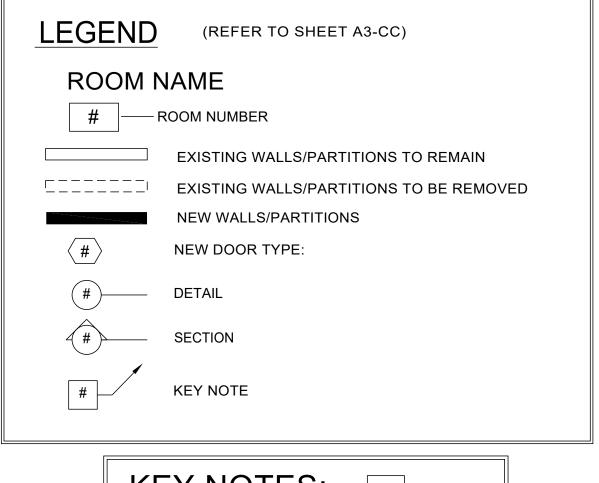
EXISTING &

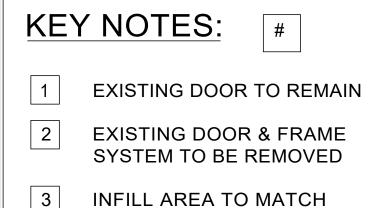
PROPOSED FLOOR PLANS

A1-CC

1 SECOND FLOOR COLLEGE CENTER PROPOSED PLAN

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



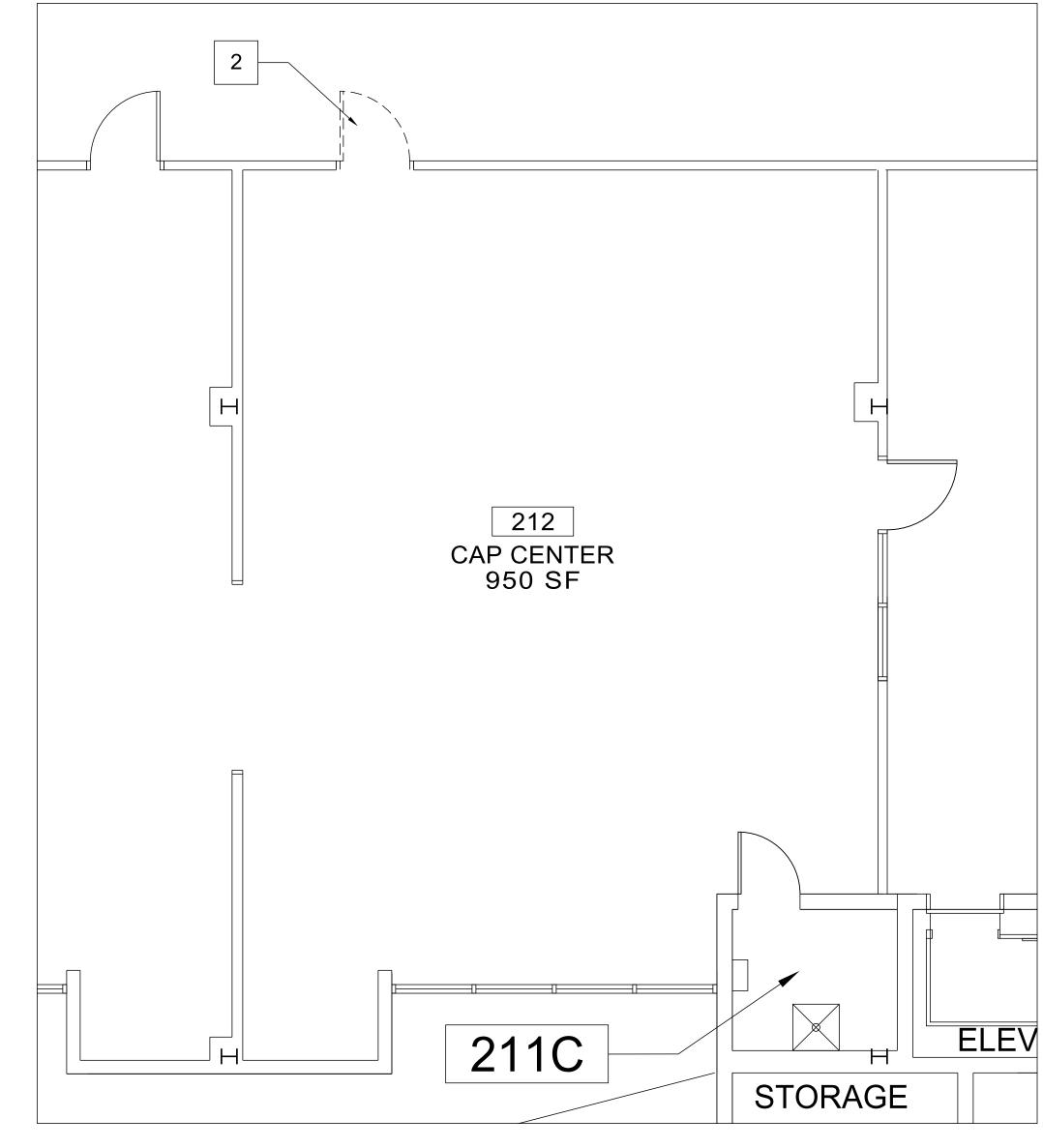


ADJACENT SURFACE

GENERAL NOTES:

ADJACENT SURFACES.

- 1 ALL DIMENSIONS OR SCALES SHOWN AS PLUS OR MINUS (±)
 ARE FOR INFORMATIONAL PURPOSES AND SHALL NOT BE
 TAKEN AS EXACT. CONTRACTOR SHALL FIELD VERIFY ALL
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- EXISTING FLOOR/FLOOR FINISH, WALLS, CEILING & LIGHTING TO REMAIN. PROTECT DURING RENOVATIONS / CONSTRUCTION.
 PATCH HOLES IN EXISTING WALLS WITH MATERIALS TO MATCH
- 5 PAINT ALL EXISTING AND NEW WALLS IN THE OFFICE SUITE.
- 6 ALL ELECTRICAL WORK BY LICENSED ELECTRICAL CONTRACTOR AND TO COMPLY WITH THE LATEST NEC ELECTRICAL CODE.
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- 9 DURING CONSTRUCTION, CLEAN AND PROTECT WORK IN PROGRESS. PROMPTLY REMOVE ANY DEBRIS FROM THE SITE. NO TRASH ACCUMULATION IS PERMITTED. TRANSPORT AND LEGALLY DISPOSE OF MATERIAL OFF SITE.
- 10 COORDINATE WITH OWNER ALL DEMOLITION WORK PRIOR TO CONSTRUCTION TO DETERMINE WHICH ITEMS TO SALVAGE AND TO GIVE TO OWNER.



SECOND FLOOR COLLEGE CENTER EXISTING PLAN

A2-CC CAP CENTER RM.212

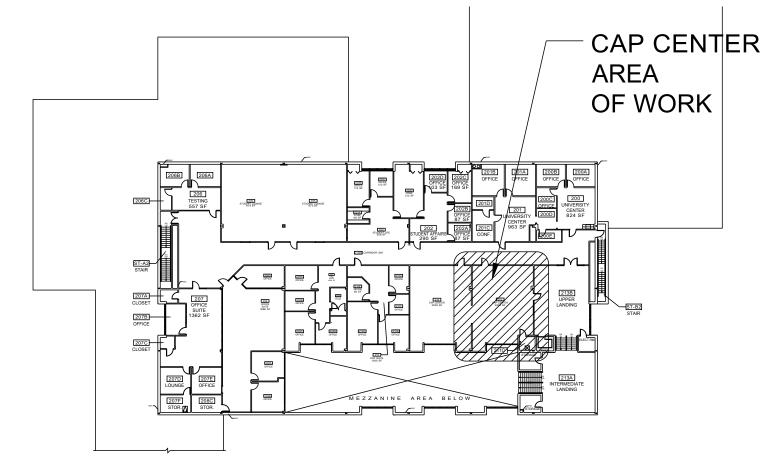
SCALE: 1/4"=1'-0"

CEILING/RENOVATION NOTES:

EXISTING CEILING TO REMAIN: EXISTING SUSPENDED ACOUSTICAL CEILING SYSTEM TO REMAIN. .

SEE ELEC. DWGS. FOR REVISED SWITCHING, ETC. RELOCATE EXISTING AND/OR ADD HVAC AIR
DEVICES AS SHOWN. SEE MECH. DWGS. FOR ANY HVAC RELATED SCOPE OF WORK. FIRE ALARM
DEVICE LOCATIONS AND QUANTITIES SHALL BE MODIFIED AS REQUIRED BY NEW ROOM LAYOUT (SEE
ELEC. DWGS.) EXISTING FIRE SPRINKLER LAYOUT AND QUANTITIES SHALL BE MODIFIED AS REQUIRED
BY NEW ROOM LAYOUT NEW SPRINKLER HEADS & HEAT DECTORS SHALL BE PROVIDED PER THIS
PLAN. REPLACE CEILING TILES TO MATCH ADJACENT EXISTING AS REQUIRED TO COVER SIGNS OF
RENOVATION.

REFER TO MECHANICAL & ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR MORE INFORMATION. THE MAJORITY OF CEILING MOUNTED LIGHT FIXTURES AND AIR DEVICES ARE SHOWN HERE FOR BASIC INTENT. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING COMPREHENSIVE COORDINATION DRAWINGS, VERIFYING AVAILABLE AREA AND ABOVE CEILING CLEARANCE. DRAWINGS SHALL INCORPORATE THE WORK OF ALL APPLICABLE TRADES AND ALL CEILING MOUNTED EQUIPMENT, INCLUDING ALL EXISTING POTENTIAL CONFLICTS (EXISTING PIPE, DUCT, ETC.).



SECOND FLOOR COLLEGE CENTER KEY PLAN

ISSUED FOR BID: 10/06/2021

COLLEGE CENTER 2021 EOF AND CAP OFFICE RE

1400 TANYARD ROAD
SEWELL, NEW JERSEY 08080

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REVISIONS

a.8-31-2020
b.11-13-2020
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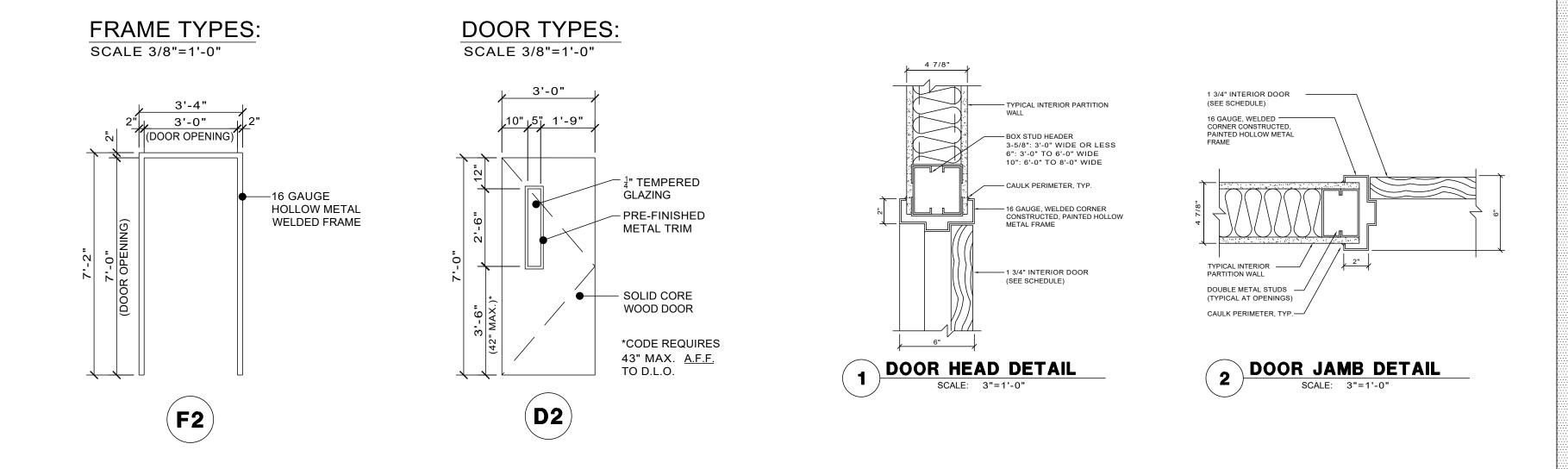
Project No. 21-88

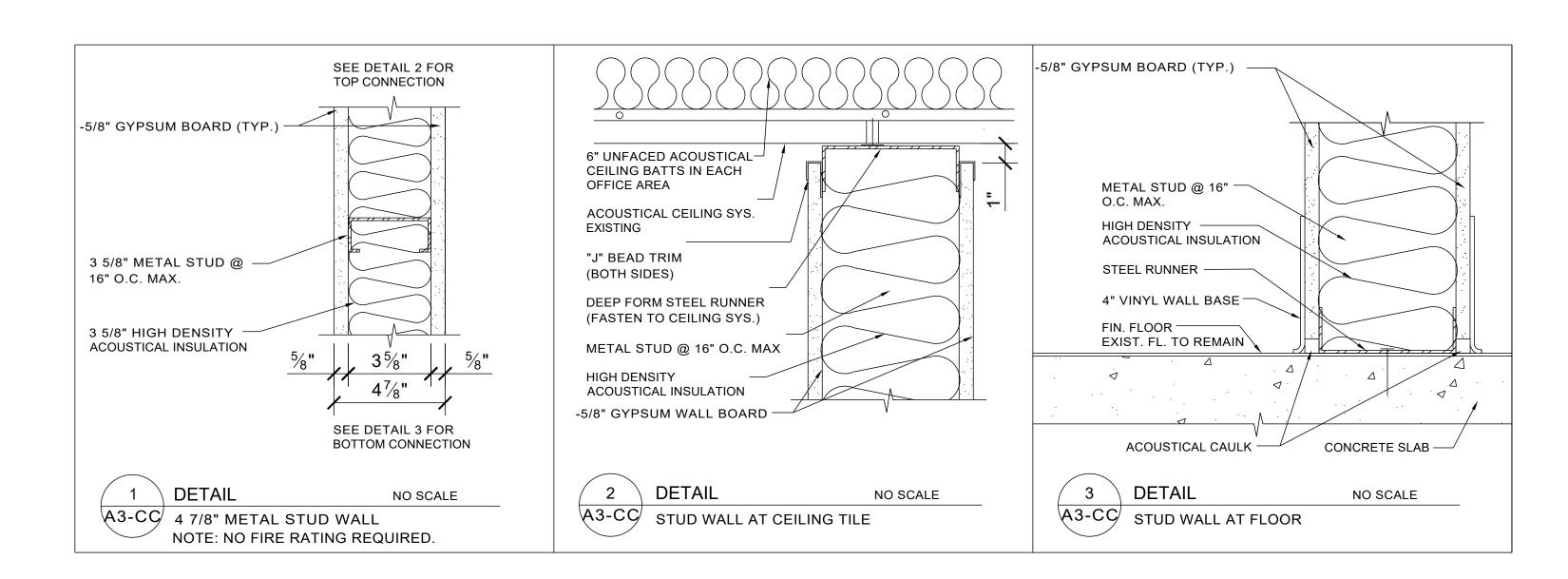
Date:
Scale: NOTED

PROPOSED FLOOR PLANS

	D O	O R &	F	R A	M E	S	СН	E D	U L	E F	ROOM 2	12 (CAP	CE	ENTI	ER	
			DC	OOR			FRAME			FIRE RATING	T				IDENTIFICATION SIGNAGE		
NO.	LOCATION	WIDTH	HEIGHT	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH	(MIN.)	HARDWARE SET	HEAD	JAMB	SILL	TYPE	TEXT	REMARKS
				_							ш						
212A	OFFICE (212A)	3'-0"	7'-0"	D2	SC. WD.	CHERRY MATCH EXIST'G CHERRY	F2	НМ	PTD.	-	RDWAR	1	2	-	A	NAME & NUMBER TBD	
212B	OFFICE (212B)	3'-0"	7'-0"	D2	SC. WD.	CHERRY MATCH EXIST'G CHERRY	F2	НМ	PTD.	-	HAR	1	2	-	A	NAME & NUMBER TBD	
212C	OFFICE (212C)	3'-0"	7'-0"	D2	SC. WD.	CHERRY MATCH EXIST'G	F2	НМ	PTD.	-	9	1	2	-	А	NAME & NUMBER TBD	

HARDWARE SCHEDULE NOTE: MATCH EXISTING DOORS AND ALLEGION - SCHLAGE HARDWARE PROVIDE CONSTRUCTION CORES. THE OWNER WILL PROVIDE THE PROPRIETARY CORES AND KEYS





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REVISIONS

a.8-31-2020 b.11-13-2020

Project No. 21-88 Date:____ Scale:___NOTED DOOR schedules, notes and details A3-CC

ISSUED FOR BID: 10/06/2021

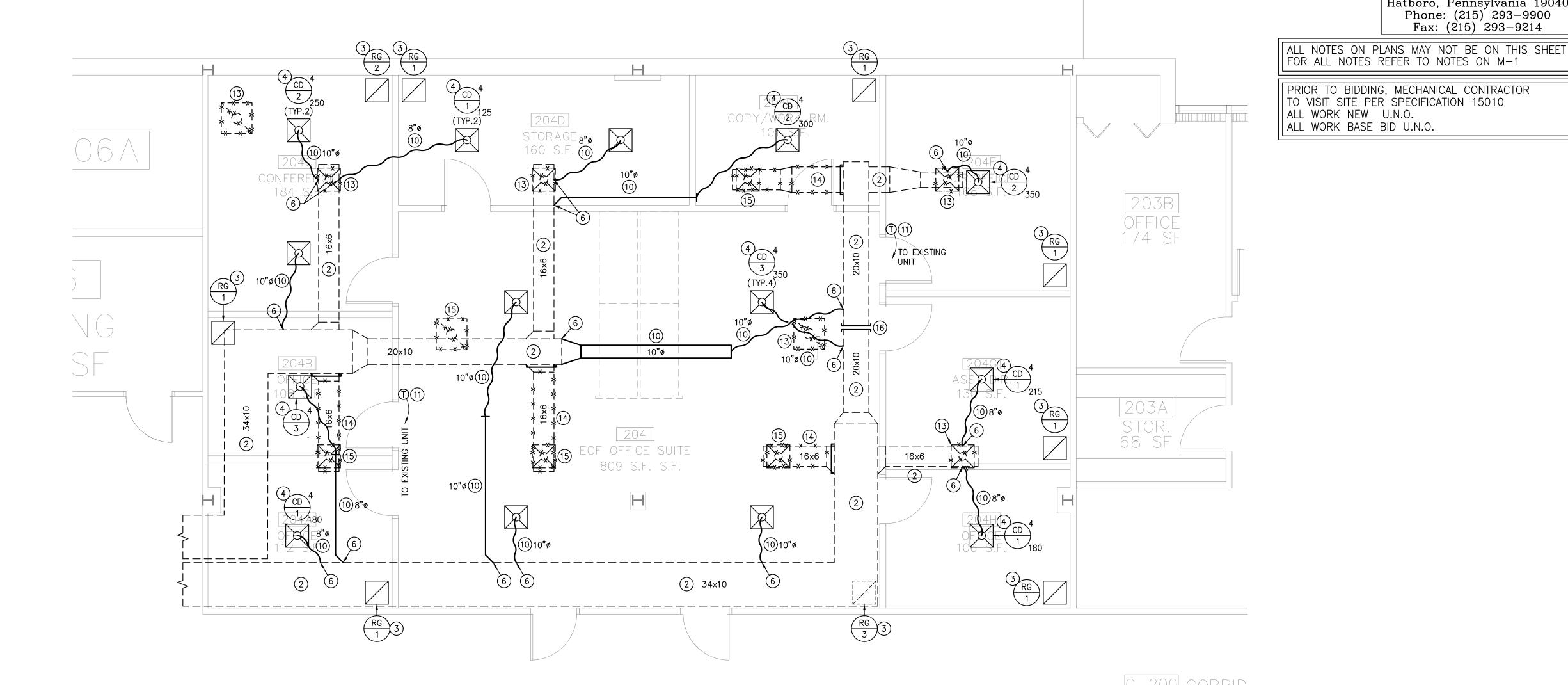
<u>MECHA</u>	NICAL LEGEND		CONDENSATE PIPE
. /	ACCUCTION LY LINED		HOT WATER HEATING SUPPLY (SYSTEM)
A/L	71000011071EET EINED		HOT WATER HEATING RETURN (SYSTEM)
AP	7100200 1 711122		CHILLED WATER RETURN (SYSTEM)
ACD			·
ADR			CHILLED WATER SUPPLY (SYSTEM) CONDENSER WATER RETURN
BDD			
BTJ			CONDENSER WATER SUPPLY
CS CB	CHILLED WATER SUPPLY -		REFRIGERANT PIPE
CR CD	CHILLED WATER RETURN CEILING DIFFUSER	⊠	GATE VALVE
CU	CONDENSING UNIT	— 	CHECK VALVE
DBR	DOWN BLOW REGISTER	-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	RELIEF VALVE
DL	DOOR LOUVER	Å	CONTROL VALVE
DN	DOWN	盛	AUTOMATIC THREE-WAY VALVE
DX	DIRECT EXPANSION COIL	M	GLOBE VALVE
		ı ∴	PRESSURE REDUCING VALVE
(E)	EXISTING	ℵ	AUTOMATIC TWO-WAY VALVE
EF 50	EXHAUST FAN	ð	PLUG OR BALL VALVE
EG	EXHAUST GRILLE	ĭ	BALANCING VALVE
ER FDR	EXHAUST REGISTER FIRE DAMPER		STRAINER
FVAV	FAN POWERED VAV UNIT	 	UNION
GV	GATE VALVE	\bigcirc H	HEATING THERMOSTAT
HR	HOT WATER HEATING RETURN	①HC	HEATING & COOLING THERMOSTAT
HS	HOT WATER HEATING SUPPLY		COOLING THERMOSTAT
LAD	LOUVER/AUTO DAMPER	Фc	
LBD	LOUVER/BACKDRAFT DAMPER	\overline{P}	THERMOMETER
LID	LINEAR DIFFUSER	—⋈ ∓०	PRESSURE GAUGE W/GAUGE COCK
LMD	LOUVER/MANUAL DAMPER	∏aav	AUTOMATIC AIR VENT
LVR	LOUVER		FLEXIBLE CONNECTION
MUA MVD	MAKEUP AIR UNIT MANUAL VOLUME DAMPER	�	NEW CONNECTION TO EXISTING
OAI	OUTSIDE AIR INTAKE	$\overline{\bullet}$	POINT OF DEMOLITION
RG	RETURN GRILLE	-D $-$	DUCT REDUCER
RR	RETURN REGISTER	_	
SG	SUPPLY GRILLE		
SF	SUPPLY FAN		
SR	SUPPLY REGISTER		
SDR/FDR	SMOKE/FIRE DAMPER		
TF	TRANSFER FAN		
TWJ	THROUGH WEB OF JOIST		
TYP	TYPICAL (OF QUANTITY)		
UNO	UNLESS NOTED OTHERWISE		
VAV	VARIABLE AIR VOLUME TERMINAL UN	IT	
VVT	VARIABLE AIR VOLUME TEMPERATURE	UNIT	
WMS	WIRE MESH SCREEN		

AIR	DEVIC	CE SCH	IEDUL	E				
NO.	CD	LID	SR SG	RR RG	ER EG	LAD LBD	WMS	REMARKS
1	9x9			12x12				
2	12x12			24x12				
3				24x24				
<u> </u>			BER OF BI					

MECHANICAL NOTES

1 EXISTING DIFFUSER REMOVE AND REPLACE FOR NEW CEILING AND REBALANCE.

- 2 EXISTING SUPPLY AIR DUCT TO REMAIN, VERIFY LOCATION.
- 3 NEW RETURN AIR GRILLE OPEN TO CEILING PLENUM WITH ACOUSTICALLY LINED PLENUM BOX SAME SIZE AS GRILLE. 12" HIGH OPEN ON ONE SIZE.
- 4 NEW CEILING DIFFUSER.
- 5 NOT USED.
- 6 CONNECT NEW DUCT TO EXISTING DUCT.
- 7 NOT USED.
- 8 NOT USED. 9 NOT USED.
- 10 NEW DUCT.
- 11 EXISTING ROOM SENSOR TO BE REPLACED WITH NEW ROOM SENSOR AT SAME LOCATION AND WIRE BACK TO EXISTING UNIT.
- 12 NOT USED.
- 13 EXISTING CEILING DIFFUSER TO BE REMOVED. REMOVE BRANCH DUCT FROM DUCT TO EXISTING DIFFUSER. CONNECT NEW DUCT O NEW DIFFUSER AND TO EXISTING OPENING.
- 14 REMOVE EXISTING DUCT. CAP DUCT AT MAIN.
- 15 REMOVE EXISTING CEILING DIFFUSERS AND BRANCH DUCT. CAP DUCT AS
- 16 A PORTION OF THE EXISTING 20"X10" DUCT TO BE REMOVED AND CAPPED BOTH SIDES.

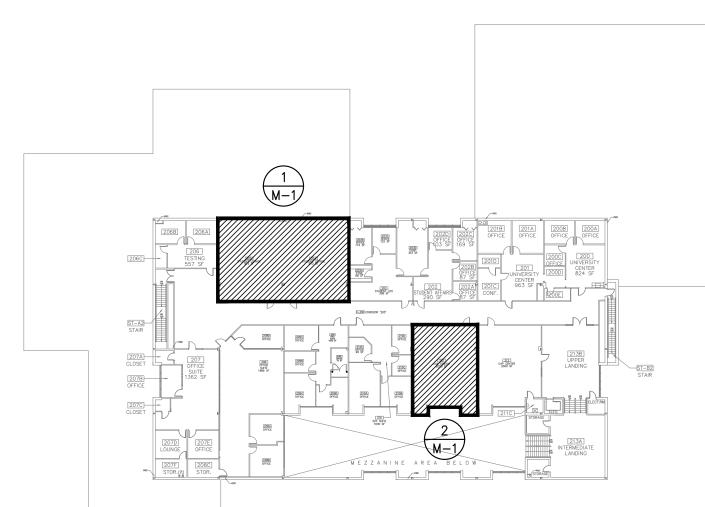


SECOND FLOOR MECHANICAL EOF FLOOR PLAN SCALE: 1/4" = 1'-0" 2 MAIN SUPPLY FROM OTHER AREA RG 8

STORAGE

SECOND FLOOR
MECHANICAL CAP OFFICE FLOOR PLAN

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



BUILDING KEY PLAN - SECOND FLOOR
SCALE: NTS

ISSUED FOR BID: 10-06-2021

ERSEY AND

MULHERN
and ASSOCIATES, Incorporated
321 South York Road
Hatboro, Pennsylvania 19040
Phone: (215) 293-9900
Fax: (215) 293-9214

REVISIONS Project No. 21-88

> Scale: AS NOTED MECHANICAL PARTIAL FLOOR PLANS

M1-CC

<u>MULHERN</u>

ALL WORK NEW U.N.O. ALL WORK BASE BID U.N.O.

ALL WORK BY FIRE PROTECTION CONTRACTOR U.N.O.

1 EXISTING SPRINKLER PIPE TO REMAIN. VERIFY LOCATION AND SIZE IN FIELD. 2 NOT USED.

- 3 CONNECT NEW SPRINKLER PIPE TO EXISTING SPRINKLER PIPE. VERIFY EXACT LOCATION IN FIELD.
- 4 REMOVE EXISTING SPRINKLER HEAD. VERIFY EXACT LOCATION IN FIELD.
- 5 EXISTING SPRINKLER HEAD TO REMAIN. VERIFY EXACT LOCATION IN FIELD.
- 6 NOT USED. 7 NOT USED.

FIRE PROTECTION NOTES

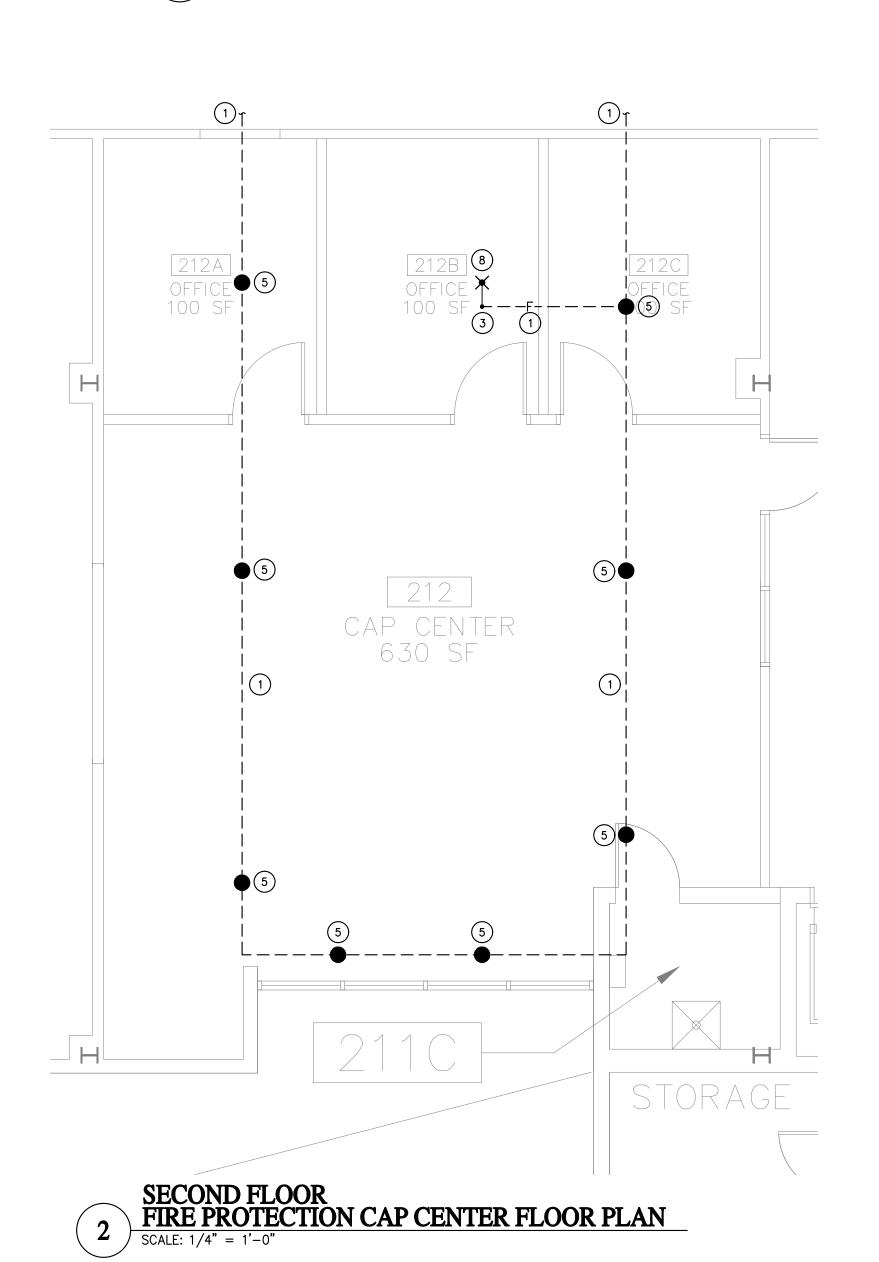
8 NEW SPRINKLER HEAD.

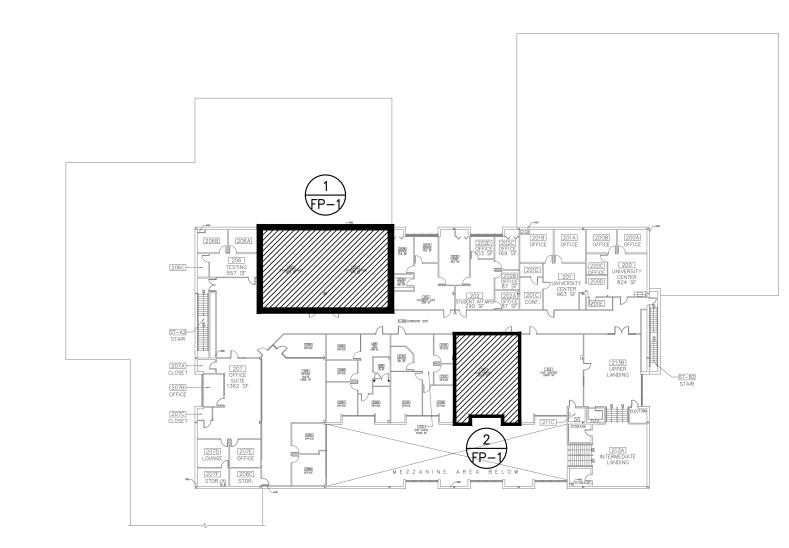
HAVING JURISDICTION FOR REVIEW.

PIPE & HEAD LAYOUT SHOWN FOR CODE COMPLIANCE PROVIDE A COMPLETE AUTOMATIC SPRINKLER SYSTEM WITH ALL HEADS & APPURTENANCES. REMOVE, RELOCATE & ADD NEW SPRINKLER HEADS &/OR PIPE BASED ON NEW ARCHITECTURAL LAYOUT TO PROVIDE COVERAGE PER NFPA, LOCAL CODE, INSURER &/OR FIRE MARSHALL. FINAL SPRINKLER PIPE & HEAD LAYOUT PER SPRINKLER CONTRACTOR SHOP DRAWINGS. SUBMIT SHOP DRAWINGS AND CALCULATIONS SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER TO ALL APPLICABLE AUTHORITIES

OY/WORK RM. 204C CONFERENC DIR.OFFICE 184 S.F. _____ 204 EOF OFFICE SUITE 809 S.F. S.F. OFFICE 112 S.F.

SECOND FLOOR FIRE PROTECTION EOF FLOOR PLAN SCALE: 1/4" = 1'-0"





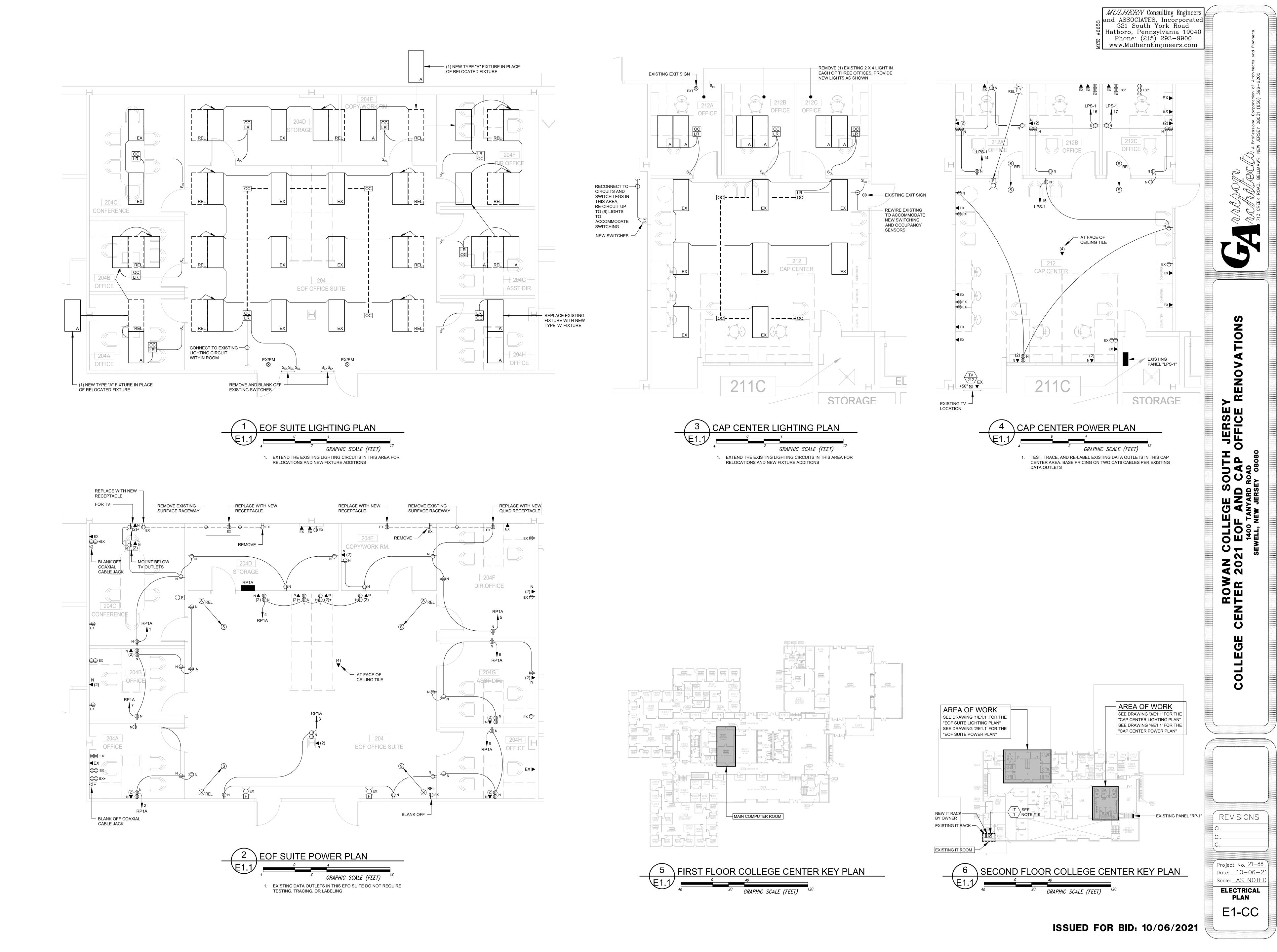
BUILDING KEY PLAN - SECOND FLOOR

ISSUED FOR BID: 10-06-2021

COLLEGE SOUTH JERSEY
CAP OFFICE RENOVATION:
1400 TANYARD ROAD
SEWELL, NEW JERSEY 08080 ROWAN EOF AND

REVISIONS ⁷ Project No. <u>21–88</u>

> Scale: AS NOTED PARTIAL FIRE PROTECTION FLOOR PLANS FP1-CC



LUMINAIRE SCHEDULE												
TYPE	DESCRIPTION	MA NUFA CTURER	CA TA LOG NUMBER	ILLUMINATION/ LAMPS	REMA RKS							
Α	2X4 RECESSED LED - 5416 LUMENS	FINELITE	HPR-LED-A-2X4-DCO-H-835-120/277V-SC	5416 LUMENS, 3500 DEG K 41 WATTS	ANGLED DOOR. DIFFUSE CENTER OPTICAL. 120/277V DRIVER. 80 CRI SINGLE CIRCUIT. 0-10V DIMMING DRIVER. 10% TO 100% DIMMING							
				41 WATTS	CONTRACTOR TO VERIFY CEILING TYPE							
EX	EXISTING LIGHTING FIXTURE TO REWAIN				IN CAP CENTER AND EPO SUITE REWIRE AS SHOWN TO ACCOMDATE NEW SWITCHING. IN CAP CENTER, CLEAN AND RELAMP EXISTING 4 LAMP FIXTURE INCLUDE COSTS IN BID TO SURVEY EXISTING LAMPS FOR WATTAGE AND COLOR TEMPERATURE							
					IN EPO CENTER, EXISTING LIGHTS ARE LED TY PE							
REL	EXISTING LIGHTING FIXTURE RELOCATE AS SHOWN				RELOCATE AND EXTEND EXISTING WIRING IN CAP CENTER, CLEAN AND RELAMP EXISTING 4 LAMP FIXTURE. INCLUDE COSTS IN BID TO SURVEY EXISTING.							
					LAMPS FOR WATTAGE AND COLOR TEMPERATURE IN EPO CENTER, EXISTING LIGHTS ARE LED TYPE							
EX/EM	COMBINATION EXIT SIGN AND EMERGENCY LIGHTING UNIT, TWO (2)	EMERGI-LITE	W PR 1224M 4 R 2 LI-D3	(2) 5W, 340LM,12VDC MR16 LED AND INTEGRAL	120-277VAC/12VDC OPERATION, CONNECT TO NEARBY LIGHTING CIRCUIT, UNIVERSAL MOUNTING (COORDINATE MOUNTING WITH A RCHITECT),							
	INTEGRAL LIGHTING HEADS, FOR CONNECTING REMOTE EMERGENCY LIGHTING HEADS, RED LETTERS ON			DIFFUSED LED	QUANTITY OF FACES AS REQUIRED, PROVIDE DIRECTIONAL ARROWS WHERE SHOWN ON DRAWINGS, WHITE "CONTEMPORARY" STYLE THERMOPLASTIC HOUSING, INTEGRAL PbCa BATTERY BACKUP (24W							
	WHITE FACE AND HOUSING				MINIMUM CA PACITY FOR CONNECTING UP TO TWO (2) REMOTE LIGHTING HEADS), TIME DELAY ON POWER RESTORATION							

NOTES:

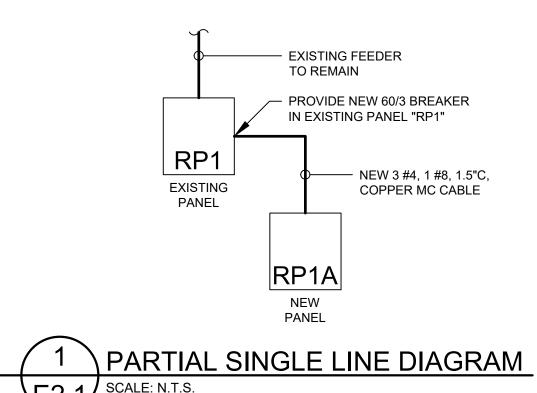
1 PROVIDE ALL LUMINAIRES AS UNIVERSAL 120 V AND 277 V OPERATION, UNLESS INDICATED OTHERWISE.
2 VERIFY ALL DEPTHS OF RECESSED LUMINAIRES PRIOR TO ORDERING, COORDINATE WITH CEILING DEPTHS.

PROVIDE ALL LIGHT EMITTING DIODE (LED) LUMINAIRES WITH UNIVERSAL VOLTAGE (120-277 V) SOLID STATE ELECTRONIC

- DRIVERS, UNLESS INDICATED OTHERWISE.

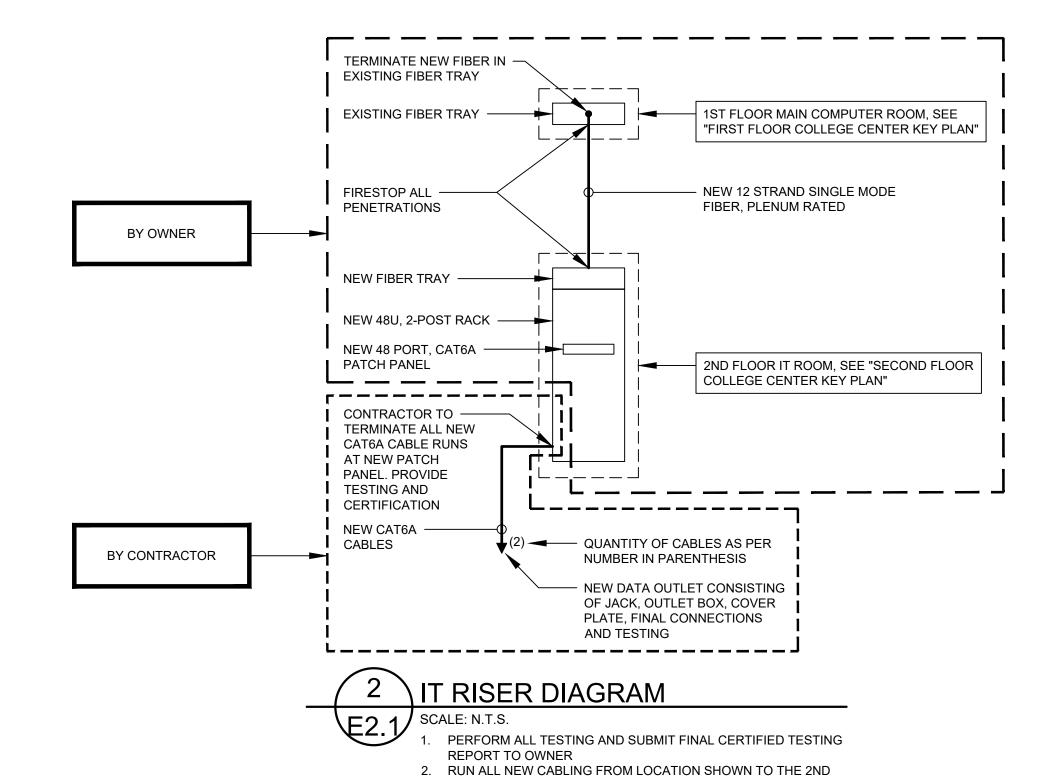
 FOR ALL LED LUMINAIRES SHOWN ON THIS SCHEDULE WITH 0-10 V DIMMABLE DRIVERS/BALLASTS (WHEREVER 0-10 V DIMMING IS INDICATED IN THE DESCRIPTION, LAMPS, OR REMARKS ABOVE OR WHERE A CATALOG NUMBER IS USED ABOVE WHICH DENOTES 0-10 V DIMMABLE DRIVERS/BALLASTS IN MANUFACTURER'S DATA), PROVIDE BOTH POWER WIRING AND 0-10 V CONTROL WIRING TO ALL LUMINAIRES. RUN CONTROL WIRING AS REQUIRED FROM ALL LIGHTS WITH 0-10 V DIMMABLE DRIVERS/BALLASTS TO THE RESPECTIVE DIMMER OR SWITCH CONTROLLING THE LIGHTING. WHERE DIMMERS ARE SHOWN ON THE DRAWINGS (INCLUDING COMBINATION SENSORS/DIMMERS), INTERCONNECT CONTROL WIRING WITH DIMMERS AS PER MANUFACTURER. WHERE DIMMERS ARE NOT SHOWN ON THE DRAWINGS, INSTALL CONTROL WIRING TO THE SWITCH (NON-DIMMED) LOCATION AND SAFELY INSULATE AND CAP OFF CONTROL WIRING AS REQUIRED (TO FACILITATE FUTURE
- REPLACEMENT OF NON-DIMMED SWITCH WITH DIMMER).

 5 FOR ALL LUMINAIRES SHOWN ON THIS SCHEDULE AS DLC LISTED, PROVIDE ONLY LUMINAIRES QUALIFIED AND LISTED IN THE DESIGN LIGHTS
 CONSORTIUM (DLC) QUALIFIED PRODUCTS LISTING (QPL) AVAILABLE AT THE DLC WEBSITE (SEE BELOW). SUBMIT INFORMATION SHOWING LISTING
 IN THE DLC QLP AS PART OF SHOP DRAWINGS FOR REVIEW AND APPROVAL.
- 6 MANUFACTURERS SHOWN ABOVE INDICATE THE BASIS OF DESIGN. OTHER MANUFACTURERS (INCLUDING, BUT NOT LIMITED, TO THOSE SHOWN IN THE LIGHTING SPECIFICATIONS) SHALL BE CONSIDERED. FACTORY FOOTCANDLE CALCULATIONS WILL BE REQUIRED FOR ANY FIXTURE SUBSTITUTIONS



	PA NEL	-	LPS-1 (E	XISTIN	G PA	NEL))		VOLT.	A GI	≣	120/	240	
	FOR	-	GENERA	_ POW	ÆR			1	PHAS	Е	-	1	PH-3W	
	LOCATIO	N -	ELECTRIC	CLOS	SET			1	MAIN		-	60	A MCB	
									MOUN	ITIN	G-	SURFAC	=	
DESCRIPTION	LTG.	EQUIP.	HVAC	BKF	₹.		BUS		BKF	₹.	HVAC	EQUIP.	LTG.	DESCRIPTION
	VA	VA	VA	AMP	s	COI	NECT	TON	AMPS		VA	VA	VA	
EXISTING CIRCUIT				20	T 1 T	1	ΑΙ	2	20	1				EXISTING CIRCUIT
EXISTING CIRCUIT				20	1	3	I B	4	20	1				EXISTING CIRCUIT
EXISTING CIRCUIT				20	11	5	A I	6	20	1				EXISTING CIRCUIT
EXISTING CIRCUIT				20	1	7	ΙB	8	20	1				EXISTING CIRCUIT
EXISTING CIRCUIT				20	1	9	ΑI	10	20	1				EXISTING CIRCUIT
EXISTING CIRCUIT				20	1	11	B	12	20	1				EXISTING CIRCUIT
EXISTING CIRCUIT				20	1	13	ĀI	14	20*	1*				OFFICE 212A RECEPTA CLE
OFFICE 212B RECEPTA CLES*				20*	1	15	B	16	20*	1*				OFFICE 212C RECEPTA CLE
OFFICE 212 RECEPTA CLES*				20*	1	17	Α	18						EXISTING SPACE
TOTALS	T 0	0	0								0	0	ol	TOTALS
1017(20													<u> </u>	101/120
LOAD DESCRIPTION	CONN.	DMD.					PANEL	_ SCI	HEDULE					PHA SE BA LA NCE VA
(CONNECTED/DEMAND)	VA	VA		MULHERN CONS					TING EN	IGIN	IEERS			
LIGHTING	0	0		ANDASSO					ATES, I	NC.				
GENERAL POWER	0	0		321 SOUTH					ORK RO	DAD)		Α	0
HVAC EQUIPMENT	0	0		HATBORO, PENNS'			SYLV	YLVANIA 19040-3417				В	0	
_				PH	ONE:	215	-293-	9900	/FX: 21	5-44	41-5984			
TOTAL	0	_			w	ww	.Mulh	ern⊟	ngineer	s.cc	om		TOTAL	0
PERCENT LOA DED	0%	0%										-	SD (σ)	0

* INDICATES NEW CIRCUIT, PROVIDE NEW CIRCUIT BREAKER IN EXISTING SPACE



FLOOR 'IT ROOM'

	PA NEL	-	RP1A (NE						VOL	-		120/		
	FOR	-	GENERAL	_ POW	BR				PHAS	E	-	3	PH-4W	
	LOCATIO	N -	204D ST	ORA GE	ERC	MOC			MAIN		-	125	A MLO	
	A.I.C.	-	22,000						MOU	VTIN	G-	SURFACE		
DESCRIPTION	LTG.	EQUIP.	HVAC	BKR	2.		BUS	3	BKI	₹.	HVAC	EQUIP.	LTG.	DESCRIPTION
	VA	VA	VA	AMP	s_	CC	NNEC	OIT	N AMF	rs_	VA	VA	VA	
CONF. RM 204C RECEPTA CLES		1,000	1	20	1	<u> </u>	ΑΙ	2	2 20	Τ1		1,200		OFFICE 204A 204B RECEP
204 OFFICE RECEPTACLES		800		20	1	3	ΙB	 		1		800		OFFICE 204 RECEPTACLES
204E 204F RECEPTA CLES		1,000		20	1	5	110	<u> </u>		1		1,200		204G 204H OFFICES
204 B RECEPTACLES		800		20	1	7	A	1 8		2		2,000		IT RACK
204H OFFICES		800		20	1	9	ΙB	i 10	0 ////////	//////	///////////////////////////////////////	111111111111111111111111111111111111111	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
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SPARE				20	1	25	Α	20						TVSS
SPARE				20	1	27	B	2	8 ////////	//////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////	711111111111111111111111111111111111111
				20	1	29	(30	0 ////////	//////	///////////////////////////////////////	'//////////////////////////////////////	///////////////////////////////////////	
TOTALS	0	4,400	0								0	5,200	0	TOTALS
LOAD DESCRIPTION	CONN.	DMD.	1 1				DA NE	1 0/	CHEDUL			1 1		PHA SE BALANCE VA
(CONNECTED/DEMAND)	VA	VA			AII II				LTING E		IEEDS			Phase Balance va
LIGHTING	VA		-	'	VIOL				_	_	VLLI \O		А	4,000
GENERAL POWER	9,600	4,800		AND ASSOC					,		,		В	3,400
HVAC EQUIPMENT	3,000	4,000	-	НΔ	TRO						, 40-3417		С	2.200
TO LOCOII IVILIA											41-5984		<u> </u>	2,200
TOTAL	9,600	4,800	1		١	www	.Mull	erni	Enginee	rs.co	om		TOTAL	9,600
TOTAL														

NOTES:

1) PROVIDE PANEL WITH DOOR-IN-DOOR COVER.

- 2) PROVIDE PANEL WITH INTEGRAL TRANSIENT VOLTAGE SURGE SUPPRESSION (TVSS). PROVIDE BRANCH CIRCUIT BREAKER IN PANEL TO SERVE TVSS WITH EXACT AMPERE RATING AS PER TVSS MANUFACTURER (WHERE TVSS IS
- LISTED FOR DIRECT BUS CONNECTION WITHOUT OVERCURRENT PROTECTION, TVSS MAY CONNECT DIRECTLY TO BUS AND PROVIDE THREE (3) 20/1 SPARE CIRCUIT BREAKERS IN PLACE OF THE TVSS BREAKER SHOWN ABOVE).

3) PROVIDE PANEL WITH DOUBLE MAIN LUGS.

and ASSOCIATES, Incorporated
321 South York Road
Hatboro, Pennsylvania 19040
Phone: (215) 293-9900
www.MulhernEngineers.com

ELECTRICAL NOTES

- 1) PERFORM ALL WORK IN STRICT ACCORDANCE WITH THE LATEST ADOPTED EDITIONS OF THE NATIONAL ELECTRICAL CODE (NEC), OSHA REQUIREMENTS, ALL FEDERAL, STATE, AND LOCAL CODES AND ALL OWNER REQUIREMENTS.
- 2) INCLUDE ALL TEMPORARY POWER AND LIGHTING, PERMIT, LICENSE, AND INSPECTION COSTS IN BID.
- 3) VERIFY EXACT LOCATIONS AND MOUNTING OF ALL LUMINAIRES, SWITCHES, RECEPTACLES, OUTLETS, FIRE ALARM, AND OTHER EQUIPMENT WITH ARCHITECTURAL DRAWINGS AND IN THE FIELD PRIOR TO ROUGH IN.
- 4) VERIFY ELECTRICAL RATINGS, CONNECTION REQUIREMENTS, AND EXACT LOCATIONS OF ALL MECHANICAL, KITCHEN, AND OTHER UTILIZATION EQUIPMENT (WHERE APPLICABLE) IN FIELD PRIOR TO PURCHASING ASSOCIATED ELECTRICAL EQUIPMENT. PROVIDE A COMPLETE AND WORKING INSTALLATION.
- 5) THE TERM "PROVIDE" MEANS, "FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR", AND THE TERMS "CONTRACTOR" AND "E.C." MEAN "ELECTRICAL CONTRACTOR", UNLESS INDICATED OTHERWISE. ALL WORK INDICATED ON THE ELECTRICAL DRAWINGS AND ELECTRICAL SPECIFICATIONS IS BY THE E.C. (UNLESS INDICATED OTHERWISE) AND IS NEW (UNLESS INDICATED OTHERWISE). WHERE THE PROJECT IS PERFORMED BY MULTIPLE PRIME CONTRACTORS UNDER "MULTIPLE PRIME BIDS" THIS DESIGNATES THE WORK BY THE ELECTRICAL PRIME CONTRACTOR. WHERE THE PROJECT IS PERFORMED BY A SINGLE OVERALL CONTRACTOR UNDER "LUMP SUM BIDS" THIS APPROXIMATELY DESIGNATES THE WORK BY THE ELECTRICAL TRADE SUBCONTRACTOR (EXACT DIVISION OF TRADE SUBCONTRACTOR WORK DIVISION SHOWN ON THE DRAWINGS/SPECIFICATIONS IS FOR REFERENCE AND CONVENIENCE ONLY).
- 6) COORDINATE ALL REQUIRED SHUTDOWNS WITH THE OWNER (AND UTILITY COMPANY WHERE APPLICABLE) A MINIMUM OF FOURTEEN (14) DAYS IN ADVANCE. INCLUDE OVERTIME COSTS IN BID TO PERFORM ALL SHUTDOWNS (INCLUDING SHUTDOWNS FOR AREAS WHICH MAY BE UNOCCUPIED DURING CONSTRUCTION) AFTER NORMAL WORKING HOURS AS COORDINATED WITH THE OWNER. NO EXTRA CLAIMS OR COMPENSATION WILL BE GRANTED FOR OVERTIME COSTS ASSOCIATED WITH PERFORMING SHUTDOWNS.
- 7) PROVIDE MOUNTING HEIGHTS OF EQUIPMENT AS REQUIRED BY ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND STANDARDS, INCLUDING ALL APPLICABLE DISABLED (HANDICAPPED) ACCESS CODES AND THE AMERICANS WITH DISABILITIES ACT (ADA). CONTACT ANY AND ALL AUTHORITIES HAVING JURISDICTION TO VERIFY REQUIRED MOUNTING HEIGHTS.
- VERIFY ALL UTILITY (ELECTRIC, TELEPHONE, DATA, CABLE TELEVISION, ETC. WHERE APPLICABLE) REQUIREMENTS IN WRITING WITH EACH UTILITY COMPANY AND OBTAIN APPROVALS FROM ALL UTILITIES (INCLUDING SUBMITTING ANY REQUIRED SERVICE APPLICATIONS AND SHOP DRAWINGS ON SERVICE-RELATED EQUIPMENT TO UTILITIES) PRIOR TO ROUGH-IN OR PURCHASING ANY SERVICE RELATED EQUIPMENT. THE ELECTRICAL CONTRACTOR IS SOLELY RESPONSIBLE TO FULLY COORDINATE AND VERIFY SERVICE REQUIREMENTS WITH UTILITY COMPANIES (INCLUDE ALL COSTS IN BID). NO EXTRA CLAIMS OR COMPENSATION WILL BE GRANTED UNDER ANY CIRCUMSTANCE ASSOCIATED WITH FAILURE TO FULLY COORDINATE WITH OR OBTAIN FULL APPROVALS FROM UTILITY COMPANIES.
- PERFORM ALL WORK IN PHASES AND SEQUENCES AS DIRECTED BY THE SPECIFICATIONS. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. FULLY COORDINATE PHASES/SEQUENCES IN DETAIL WITH ALL CONTRACTORS/TRADES, THE ARCHITECT, AND THE OWNER PRIOR TO PERFORMING WORK AND INCLUDE ALL COSTS IN BID.
- WHERE EXISTING WIRING TO BE REMOVED (AS INDICATED ABOVE) OR OTHERWISE AFFECTED BY CONSTRUCTION (BY ANY CONTRACTOR OR TRADE, INCLUDING GENERAL CONSTRUCTION, MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, ETC.) FEEDS LOADS WHICH REMAIN OR FEEDS LOADS IN ADJACENT OR OTHER AREAS NOT WITHIN THE SCOPE OF WORK, THE WIRING SHALL REMAIN. RELOCATE, EXTEND, AND/OR RE-FEED THE EXISTING WIRING AS REQUIRED TO MAINTAIN SERVICE, UNLESS INDICATED OTHERWISE. BASE PRICING ON THE ASSUMPTION THAT RELOCATING, EXTENDING, AND RE-FEEDING IS NECESSARY IN ALL AREAS OF DEMOLITION AND ALL AREAS OF PROPOSED NEW WORK (BY ANY TRADE), UNLESS ACTUALLY VERIFIED OTHERWISE BY THE ELECTRICAL CONTRACTOR. INCLUDE ALL COSTS IN BID.
- 11) WHERE RE-FEEDING EXISTING ELECTRICAL CIRCUITS AND LOADS, VERIFY ALL REQUIREMENTS IN THE FIELD AND INCLUDE ALL COSTS IN BID. VERIFY EXACT CONDUCTOR SIZES AND AMPACITY, EXISTING CIRCUIT BREAKER AND/OR FUSE AMPS, LOAD NAMEPLATE RATINGS, CONDUIT SIZES, ETC.. FOR EQUIPMENT TO BE RE-FED, PROVIDE ALL NEW WIRING DIRECTLY TO THE EQUIPMENT. DO NOT REUSE EXISTING WIRING TO RE-FEED EQUIPMENT, UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS.
- 12) INFORMATION REGARDING EXISTING CONDITIONS AND EQUIPMENT AND ALL INFORMATION REGARDING REMOVALS (INCLUDING INFORMATION REGARDING THE SCOPE OF REMOVALS ON ARCHITECTURAL DRAWINGS) INDICATES GENERAL CONDITIONS AND ARE A GUIDE TO PRICING ONLY. PRIOR TO SUBMITTING BID, VISIT THE PROJECT SITE AND VERIFY ALL EXISTING CONDITIONS AND EQUIPMENT, ALL REMOVALS AND REQUIREMENTS, AND ALL TIE-INS TO EXISTING EQUIPMENT AND WIRING IN DETAIL. INCLUDE ALL COSTS IN BID. NO EXTRA CLAIMS OR COMPENSATION WILL BE GRANTED FOR NOT FIRST VERIFYING ALL CONDITIONS.
- 13) FOR ALL NEW CIRCUIT BREAKERS IN EXISTING BRANCH AND DISTRIBUTION PANELS, PROVIDE CIRCUIT BREAKERS MATCHING AND COMPATIBLE WITH EXISTING CIRCUIT BREAKERS.
 PROVIDE WITH SHORT CIRCUIT INTERRUPTING RATINGS EQUAL TO OR EXCEEDING THE HIGHEST RATED EXISTING BRANCH CIRCUIT BREAKER IN THE PANEL. CIRCUIT BREAKER TYPES INDICATED ON THE DRAWINGS (WHERE APPLICABLE) ARE GUIDES TO PRICING ONLY. VERIFY EXACT TYPE AND ALL REQUIREMENTS IN FIELD PRIOR TO RELEASING EQUIPMENT.
- FOR ALL WIRING AND WORK INDICATED, INCLUDING ALL SYSTEMS (POWER, LIGHTING, FIRE ALARM, CONTROL, SIGNAL, SOUND, TELECOMMUNICATIONS, DATA, AND ALL OTHER SYSTEMS, WHERE APPLICABLE), PROVIDE ALL NEW CONDUITS, RACEWAYS, OUTLETS, AND CONDUCTORS, INCLUDE ALL COSTS IN BID. WHERE EXISTING CONDUITS AND RACEWAYS ARE DETERMINED BY THE ENGINEER TO BE IN ADEQUATE CONDITION, AND WHERE SPECIFICALLY APPROVED BY THE OWNER, ARCHITECT, AND ENGINEER, EXISTING CONDUITS AND RACEWAYS MAY BE REUSED. PROVIDE A SEPARATE GROUNDING CONDUCTOR, IN ADDITION TO ALL OTHER GROUNDING CONDUCTORS SPECIFIED, AND BOND TO ALL RACEWAYS, CONDUITS, BOXES, AND OUTLETS WHERE RACEWAYS ARE REUSED. DO NOT DEPEND ON EXISTING CONDUITS/RACEWAYS FOR GROUNDING PATHS. REUSE EXISTING CONDUCTORS ONLY WHERE SPECIFICALLY INDICATED ON THE DRAWINGS.
- PROVIDE ENGRAVED LAMINATED PLASTIC NAMEPLATES FOR ALL ELECTRICAL EQUIPMENT (INCLUDING, BUT NOT LIMITED TO, SAFETY SWITCHES, ENCLOSED CIRCUIT BREAKERS, BRANCH PANELS, DISTRIBUTION PANELS/SWITCHBOARDS, TRANSFORMERS, FUSED EQUIPMENT, POWER OUTLETS, THERMAL OVERLOAD SWITCHES, CONTACTORS, TIME CLOCKS, PHOTOCELLS, METER SOCKETS, MODULAR METER CENTERS, FIRE ALARM DEVICES, LIGHTING CONTROLLERS, DIMMING CABINETS, CAPACITORS, SNOW MELTING EQUIPMENT, GENERATORS, MOTOR CONTROL CENTERS, MOTOR CONTROLS, HIGH VOLTAGE EQUIPMENT, SWITCHES AND RECEPTACLES SERVING EQUIPMENT, ETC., WHERE APPLICABLE), REFER TO SPECIFICATIONS FOR INFORMATION. PROVIDE ENGRAVED PLASTIC NAMEPLATES FOR ALL CONVENIENCE RECEPTACLES.
- 16) COMPLETELY SEAL AND FIRE STOP ALL PENETRATIONS OF ALL FIRE AND/OR SMOKE RATED WALLS, FLOORS, CEILINGS, AND ANY OTHER CONSTRUCTION (INCLUDING ALL WALLS REQUIRED TO BE RATED BY CODE) TO A RATING MATCHING OR EXCEEDING THE FIRE RATING OF THE CONSTRUCTION. COMPLETELY SEAL AND WEATHERPROOF ALL PENETRATIONS OF EXTERIOR, AT OR BELOW GRADE, AND WET LOCATION WALLS AND FLOORS AND ROOF PENETRATIONS. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR INFORMATION ON FIRE RATINGS OF BUILDING CONSTRUCTION AND INCLUDE ALL COSTS IN BID. COMPLY WITH AND INSTALL FIRE STOPPING IN ACCORDANCE WITH ALL APPLICABLE FIRE RATING CODES AND STANDARDS (INCLUDING THE NEC, NFPA, IBC, AND THE UL "FIRE RESISTANCE DIRECTORY").
- 17) PROVIDE 120 V POWER TO ALL SECURITY AND DOOR HARDWARE. COORDINATE ALL REQUIREMENTS WITH ARCHITECTURAL DOCUMENTS, THE OWNER, AND SECURITY SUPPLIER. OBTAIN POWER FROM A SUITABLE NEARBY BRANCH CIRCUIT.
- PROVIDE NEC AND OSHA APPROVED TEMPORARY LIGHTING AT ALL TEMPORARY PROTECTED EGRESS COVERS (I.E. AT CERTAIN EXITS DURING CONSTRUCTION). PROVIDE TEMPORARY CODE APPROVED ILLUMINATED EXIT SIGNS AS REQUIRED TO IDENTIFY THE ENTIRE TEMPORARY EGRESS PATH. PROVIDE TEMPORARY EMERGENCY LIGHTING (UTILIZING BATTERY UNIT AND/OR REMOTE HEADS) AS REQUIRED TO SATISFY CODE REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR INFORMATION AND LOCATIONS.
- 19) PROVIDE 3#8, 1"C FROM NEW PANEL RP1A TO NEW IT RACK. PROVIDE 30 AMP, 120/208V, SINGLE PHASE RECEPTACLE NEXT TO RACK. OWNER MAY REQUIRE NEW CIRCUIT RUN FROM THE SECOND FLOOR IT RACK TO THE MAIN IT ROOM ON THE FIRST FLOOR. INCLUDE COSTS IN BID FOR EITHER DESTINATION. AT THE MAIN IT ROOM ON THE FIRST FLOOR, PROVIDE A 30 AMP 2 POLE BREAKER AND INSERT INTO AN EXISTING BRANCH PANEL.

ELECTRICAL SYMBOL LIST

- S S₃ S₄ 20 A, 277/120 V SWITCH, SINGLE POLE (S), THREE-WAY (S-3), AND FOUR-WAY (S-4), RESPECTIVELY, SPECIFICATION GRADE, FLUSH MOUNTED, FINISH AND COVER PLATE AS PER ARCHITECT
- 120 V INCANDESCENT ELECTRONIC LOW VOLTAGE OR CFL/LED DIMMER SWITCH (S-DE), SINGLE POLE (RATED 600W INCANDESCENT, 300W ELECTRONIC LOW VOLTAGE, AND 250W COMPACT FLUORESCENT OR LED), SLIDE TYPE (WITHOUT ON/OFF TOGGLE OR ROCKER SWITCH), FULLY RATED, SPECIFICATION GRADE, FLUSH MOUNTED, LOW PROFILE, FINISH AND COVER PLATE AS PER ARCHITECT, FOR DIMMING MAXIMUM OF 250 W COMPACT FLUORESCENT OR LIGHT EMITTING DIODE (LED) MODULES, OF A TYPE COMPATIBLE WITH THREE-WAY OPERATION VIA REMOTE STANDARD THREE-WAY SWITCHES, UTILIZE LUTRON #DVELV-303P-** OR #DVCL-253P-** (OR EQUIVALENT BY HUBBELL OR LEVITON); REFER TO SPECIFICATIONS WHERE GANGED WITH SINGLE POLE, THREE-WAY, OR FOUR-WAY SWITCHES; WHERE USED WITH CFL/LED LIGHTING SEE LUMINAIRE SCHEDULE AND FULLY COORDINATE IN DETAIL WITH LUMINAIRE AND DIMMER MANUFACTURER (INCLUDE COSTS IN BID TO USE DIFFERENT TYPES OF DIMMER SWITCHES AS APPLICABLE FOR EACH DIFFERENT LUMINAIRE TYPE CONTROLLED)
- 0-10 V, 30 Ma, 8 A, 120/277 V, LIGHT EMITTING DIODE (LED) DRIVER OR FLUORESCENT ELECTRONIC BALLAST DIMMER SWITCH (S-DL), SINGLE POLE, SLIDE TYPE (WITHOUT ON/OFF TOGGLE OR ROCKER SWITCH), FULLY RATED, SPECIFICATION GRADE, FLUSH MOUNTED, LOW PROFILE, FINISH AND COVER PLATE AS PER ARCHITECT, OF A TYPE COMPATIBLE WITH THREE-WAY OPERATION VIA REMOTE STANDARD THREE-WAY SWITCHES; LUTRON #DVSTV-** (OR EQUIVALENT), UTILIZE EXACT RESPECTIVE DIMMER SWITCH TYPE COORDINATED WITH DIMMABLE LED DRIVERS OR DIMMABLE FLUORESCENT BALLASTS IN CONTROLLED LUMINAIRE (FULLY COORDINATE IN DETAIL WITH LUMINAIRE AND DIMMER MANUFACTURER AND INCLUDE COSTS IN BID TO USE DIFFERENT TYPES OF DIMMER SWITCHES AS APPLICABLE FOR EACH DIFFERENT LUMINAIRE TYPE CONTROLLED); WHERE CIRCUIT LOAD EXCEEDS 8 A UTILIZE #PP-DV POWER PACK(S) AS APPLICABLE TO FACILITATE LOAD
- OCCUPANCY/VACANCY SENSOR LIGHTING CONTROL WITH INTEGRAL PUSH BUTTON (S-OC), FLUSH MOUNTED ON WALL (ON FLUSH MOUNTED OUTLET BOX), SELF-CONTAINED "STAND-ALONE" TYPE (SINGLE SENSOR FOR LOCAL LIGHTING CONTROL OF A SINGLE CIRCUIT ONLY), MULTI-TECHNOLOGY PASSIVE INFRARED (PIR) AND ULTRASONIC TYPE WITH INTEGRAL SWITCHING RELAY, RATED MINIMUM 800 W, 1,200 VA FOR 120 V OPERATION AND RATED MINIMUM 2,700 VA FOR 277 V OPERATION, SINGLE POLE, NOMINAL 93 m2 (1,000 SQ FT) COVERAGE, MEETING NEMA WD7 STANDARD, INTEGRAL SELECTABLE AMBIENT LIGHT LEVEL SENSOR, SELECTABLE AUTOMATIC (OCCUPANCY SENSOR WITH "OVERRIDE-TO-OFF" PUSH BUTTON) OR MANUAL (VACANCY SENSOR WITH "MANUAL-ON" PUSH BUTTON) MODES, SPECIFICATION GRADE, WHITE FINISH, EATON/COOPER #ONW-D-1001-MV-* (OR EQUIVALENT)
- OCCUPANCY SENSOR LIGHTING CONTROL [OC], FLUSH MOUNTED IN CEILING, FOR COMMON CONTROL OF LIGHTING (MULTIPLE SENSORS FOR LIGHTING CONTROL IN CONJUNCTION WITH REMOTE LIGHTING CONTROL RELAY MODULE(S)), MULTI-TECHNOLOGY PASSIVE INFRARED (PIR) AND ULTRASONIC TYPE, 360 DEGREE NOMINAL 186 m2 (2,000 SQ FT) COVERAGE, MEETING NEMA WD7 STANDARD, INTEGRAL SELECTABLE AMBIENT LIGHT LEVEL SENSOR, SPECIFICATION GRADE, WHITE FINISH; PROVIDE LOW VOLTAGE CONTROL WIRING BETWEEN SENSOR AND CONTROL RELAY
- LIGHTING CONTROL RELAY MODULE [LR], INTERCONNECT (UTILIZING LOW VOLTAGE CONTROL WIRING) WITH OCCUPANCY SENSORS AS SHOWN ON THE DRAWINGS, RATED 1,800 VA FOR 120 V OPERATION AND RATED 4,800 VA FOR 277 V OPERATION, SINGLE POLE, SPECIFICATION GRADE; PROVIDE A MINIMUM OF ONE (1) RELAY PER CIRCUIT CONTROLLED (WHERE MULTIPLE RELAYS ARE SHOWN OR OTHERWISE APPLICABLE, PROVIDE EXACT QUANTITY NEEDED [INCLUDING ADDITIONAL RELAYS OR MODULES AS APPLICABLE] TO SUPPORT THE SWITCHING CONTROL SHOWN ON DRAWINGS IN CONJUNCTION WITH THE QUANTITY OF CONTROLLING SENSORS INVOLVED), INTERCONNECT AUXILIARY CONTACTS FOR SIMULTANEOUS CONTROL); WHERE WALL SWITCHES (SINGLE POLE, THREE-WAY, OR FOUR-WAY) ARE INDICATED ALONG WITH OCCUPANCY SENSOR ON THE DRAWINGS, ARRANGE AND INTERCONNECT SWITCHES (AS RECOMMENDED BY OCCUPANCY

LUMINAIRE, TYPE AS INDICATED ON THE LUMINAIRE SCHEDULE

- EXIT SIGN. NEW. UNLESS INDICATED OTHERWISE
- NEW 20 A, 120 V DUPLEX RECEPTACLE (NEMA 5-20R), (RECEP-N) SPECIFICATION GRADE, TAMPER RESISTANT, FLUSH MOUNTED, FINISH AND STAINLESS STEEL COVER PLATE AS PER OWNER, (+) INDICATES ABOVE COUNTER MOUNTING HEIGHT, (*) INDICATES MOUNTED HIGH ON WALL AT DISPLAY/SCREEN OR ABOVE BOARD
- ⊕ EX EXISTING RECEPTACLE TO REMAIN (RECEP-EX)
- 20 A, 120 V DUPLEX GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TYPE/PROTECTED RECEPTACLE (NEMA 5-20R), SPECIFICATION GRADE, TAMPER RESISTANT, FLUSH MOUNTED, FINISH AND COVER PLATE AS PER ARCHITECT, (+) INDICATES ABOVE COUNTER MOUNTING HEIGHT, (WP) INDICATES WEATHER-RESISTANT TYPE RECEPTACLE MOUNTED IN A WEATHERPROOF OUTLET BOX WITH SINGLE SPRING-LATCHED WEATHERPROOF-WHILE-IN-USE COVER; FEED-THROUGH PROTECTION OF STANDARD TYPE RECEPTACLES IS NOT ACCEPTABLE; PROTECTION OF STANDARD TYPE RECEPTACLES IN READILY ACCESSIBLE LOCATIONS FROM GFCI CIRCUIT BREAKERS IS NOT ACCEPTABLE (SEE BELOW FOR INACCESSIBLE RECEPTACLES); FOR INACCESSIBLE RECEPTACLES (LOCATIONS WHICH ARE NOT READILY ACCESSIBLE AS PER THE NEC, FOR EXAMPLE WHERE LOCATED BEHIND EQUIPMENT, APPLIANCES, OR OBSTACLES) THE USE OF GFCI TYPE RECEPTACLES IS PROHIBITED AND PROTECTION OF STANDARD TYPE RECEPTACLES FROM GFCI CIRCUIT BREAKER MUST BE USED (IDENTIFY RECEPTACLES AS PROTECTED AS PER
- 20 A, 120 V COMBINATION DUPLEX RECEPTACLE (NEMA 5-20R) AND DUPLEX UNIVERSAL SERIAL BUS (USB) CHARGER (U), WITH TWO (2) INTEGRAL 3.6 A, 5 VDC USB 2.0 PORTS (WITHOUT DATA CAPABILITY) POWERED FROM INTERNAL DIGITAL DC POWER SUPPLY DESIGNED TO OPTIMIZE PERIPHERAL DEVICE CHARGING, SPECIFICATION GRADE, TAMPER RESISTANT, FLUSH MOUNTED,
- FINISH AND COVER PLATE AS PER OWNER, (+) INDICATES ABOVE COUNTER MOUNTING HEIGHT, (*) INDICATES MOUNTED HIGH ON WALL AT DISPLAY/SCREEN

 NEW QUADRUPLEX ("DOUBLE DUPLEX", "QUAD") RECEPTACLE (QUAD-N), WITH RECEPTACLE TYPE AS INDICATED

SENSOR MANUFACTURER) TO OPERATE AS MANUAL "OVERRIDE-TO-OFF" UNLESS SPECIFICALLY INDICATED OTHERWISE

- ☐ EQUIPMENT CONNECTION [X], REFER TO THE EQUIPMENT SCHEDULE AND THE EQUIPMENT NOTES FOR INFORMATION
- EQUIPMENT DESIGNATION (HEXAGON), FOR REFERENCE TO THE EQUIPMENT SCHEDULE
- ELECTRICAL PANEL, REFER TO THE SINGLE LINE DIAGRAM AND RESPECTIVE PANEL SCHEDULE
- INDICATES HOME RUN OF WIRING TO PANEL AND CIRCUIT INDICATED
- NEW TELEPHONE/DATA OUTLET, (TRIANGLE-N). FLUSH MOUNTED, NUMBER INSIDE PARENTHESIS (EXAMPLE (2)) INDICATES THE NUMBER OF CATEGORY 6A CABLES AND NUMBER OF JACKS PER OUTLET. ALL TELEPHONE/DATA WIRING, CONDUIT, JACKS, COVER PLATES, TESTING AND FINAL CERTIFICATIONS ARE BY THE CONTRACTOR. RUN DATA LINES FROM LOCATION SHOWN TO IT ROOM. REFERENCE LEGENDS & IT RISERS. PROVIDE OWNER APPROVED 1-GANG OUTLET BOX IN WALL AND ONE (1) 1" CONDUIT RUN FROM OUTLET STUBBED AND CAPPED INTO NEARBY ACCESSIBLE CEILING SPACE, (+) INDICATES ABOVE COUNTER MOUNTING HEIGHT OR WALL MOUNTED TELEPHONE MOUNTING HEIGHT (COORDINATE WITH ARCHITECT/OWNER DURING CONSTRUCTION), (*) INDICATES MOUNTED HIGH ON WALL AT TELEVISION OR ABOVE BOARD; WITH COVER PLATES AND JACKS BY CONTRACTOR AS PER SPECIFICATIONS.
- ▼ EX EXISTING DATA OUTLET.
- ·

 FIRE ALARM AUDIO/VISUAL HORN/STROBE. "EX" INDICATES EXISTING TO REMAIN. "REL" INDICATES RELOCATE AND EXTEND WIRING UNDER SUPERVISION OF TYCO, OWNER'S FIRE ALARM.
- FIRE ALARM VISUAL ONLY STROBE. PROVIDE OUTLET BOX IN WALL AND CONDUIT STUB UP TO CEILING. HORN SHALL BE FURNISHED AND INSTALLED BY TYCO, OWNER'S FIRE ALARM VENDOR
- F UNDER A SEPARATE CONTRACT.

 S DEL FIRE ALARM SMOKE DETECTOR (S-REL). "REL" INDICATES RELOCATE AND EXTEND WIRING UNDER SUPERVISON OF TYCO, OWNER'S FIRE ALARM VENDOR.

ROWAN COLLEGE SOUTH JERSEY

CENTER 2021 EOF AND CAP OFFICE RENC

ISSUED FOR BID: 10/06/2021

REVISIONS

Project No. <u>21-88</u>

Date: 10-06-2

Scale: AS NOTE

ELECTRICAL

NOTES AND DETAILS

E2-CC