	GENERAL CONSTRUCTION IN
1. ITEMS NOTED TO BE "REMOVED & SALVAGED" SHALL EITHER BE REUSED IN NEW CONSTRUCTION SCOPE WHERE NOTED, OR OTHERWISE RETURNED TO TENANT/ GEORGIA TECH FACILITIES MANAGEMENT. ITEMS NOTED TO BE REUSED IN NEW CONSTRUCTION SHALL BE REPAIRED AND	8. SCHNEIDER WRIGHT INC. IS NOT RESPONSIBLE FOR VERIF DIMENSIONS SUBMITTED BY OTHERS (I.E., FURNITURE DEALE
2. WHERE NOTED: CONTRACTOR TO REMOVE ALL ABANDONED SECURITY EQUIPMENT AND CONTROLS LOCATED WITHIN THE PROJECT SCOPE, INCLUDING CARD READERS, DOOR SENSORS, ELECTRONIC	9. ALL WORK SHALL BE LIMITED TO THAT SHOWN ON THESE ADDITIONAL WORK SHALL BE DONE WITHOUT THE PRIOR WF GEORGIA TECH FACILITIES MANAGEMENT PROJECT REPRES WRIGHT INC.
3. WHERE NOTED : CONTRACTOR TO REMOVE ALL SURFACE MOUNTED SWITCHES, RECEPTACLES, AND	10. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REC PERMITS FOR ALL PHASES OF THE WORK PRIOR TO THE STA
CORRESPONDING CONDUIT WITHIN THE PROJECT SCOPE. PATCH ALL HOLES AND PREP FOR NEW FINISHES. REFER TO ELECTRICAL AND REFLECTED CEILING PLANS FOR NEW SWITCHING AND POWER/DATA LOCATIONS.	11. IF REQUIRED, FIRE EXTINGUISHERS ARE TO BE 10 LB. AB OTHERWISE.
4. CONTRACTOR TO USE MORTISE SET CYLINDERS WITHIN PROJECT SCOPE, AND COORDINATE KEYING OF CYLINDERS WITH GEORGIA TECH FACILITIES MANAGEMENT PROJECT REPRESENTATIVE.	12. SITE SHALL BE CLEANED AT END OF PROJECT. REMOVE AND LABELS FROM EXPOSED FINISHED SURFACES, INCLUDI
5. <u>AS REQUIRED FOR SCOPE OF WORK</u> : REMOVE INTERIOR PLAQUES, MARKER BOARDS, ETC., AND RETURN TO TENANT/GEORGIA TECH FACILITIES MANAGEMENT. WHERE WALLS ARE BEING REFINISHED/ RECOVERED, REMOVE INTERIOR PLAQUES, MARKER BOARDS, ETC., AND REINSTALL AFTER COMPLETION OF FINISH WORK.	13. THE GENERAL CONTRACTOR SHALL PROTECT AT ALL TIM INCLUDES BUT IS NOT LIMITED TO WINDOWS, FLOORS, CEILI FRAMES, MECHANICAL AND ELECTRICAL EQUIPMENT. 14. CONTRACTOR SHALL SECURE DUST BARRIERS BETWEEI
6. <u>AS REQUIRED FOR SCOPE OF WORK</u> : CONTRACTOR TO COORDINATE THE REMOVAL AND REINSTALLATION OF EXISTING/ NEW ROOM SIGNAGE WITHIN THE PROJECT SCOPE WITH GEORGIA TECH	OR PUBLIC AREAS. CONTRACTOR IS TO ERECT ALL NECESS WHILE DEMOLITION AND CONSTRUCTION ARE IN PROGRESS
FACILITIES MANAGEMENT PROJECT REPRESENTATIVE AND THE TENANT.	15. CONTRACTOR SHALL USE USG "SHEETROCK FLEXIBLE M BD. WALL CORNERS.
ELEMENTS NOTED TO REMAIN (I.E., DOORS, HARDWARE, FRAMES, FINISHES, CEILING SYSTEMS, GLASS, BLINDS, ETC.)	GENERAL RCP & LIGHTING N
	1. DO NOT SCALE THESE DRAWINGS.
GENERAL CONSTRUCTION NOTES	2. THE GENERAL CONTRACTOR SHALL COORDINATE THE INS SWITCHING, AND HVAC EQUIPMENT TO AVOID CONFLICTS. AN ARRANGEMENTS SHOWN ON THESE CONSTRUCTION DOCUM
1. DO NOT SCALE DRAWINGS / REFER TO WRITTEN DIMENSIONS ONLY.	MANAGEMENT PROJECT REPRESENTATIVE AND SCHNEIDER
2. ALL WORK DEFINED BY THESE CONSTRUCTION DRAWINGS SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL APPLICABLE LAWS, REGULATIONS, ORDINANCES AND BUILDING CODES.	3. LIGHTED EXIT SIGNS WITH DIRECTIONAL ARROWS SHALL I AND LOCAL BUILDING CODES. EXIT SIGNS SHALL BE PROVID BATTERY PACK) FOR OPERATION DURING EMERGENCIES AN
3. UNLESS NOTED OTHERWISE, ALL WORK DEFINED BY THESE CONSTRUCTION DRAWINGS SHALL BE DONE IN COMPLIANCE WITH THE GEORGIA INSTITUTE OF TECHNOLOGY CONSTRUCTION STANDARDS.	
4. CONTRACTOR IS TO FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY GEORGIA TECH FACILITIES REPRESENTATIVE AND SCHNEIDER WRIGHT INC. OF ANY DISCREPANCIES FOUND BETWEEN THESE CONSTRUCTION	4. THESE DRAWINGS REPRESENT LIGHTING AND SWITCHING TO DICTATE FIXTURE CIRCUITING. ELECTRICAL ENGINEER A CODE COMPLIANCE AND CIRCUITING. ELECTRICAL ENGINEE COORDINATE ALL ELECTRICAL LOAD REQUIREMENTS FOR LI
5. UNLESS NOTED OTHERWISE, DIMENSIONS ARE TAKEN TO THE CENTERLINE OF NEW PARTITIONS,	5. TWO OR MORE LIGHT SWITCHES IN THE SAME LOCATION S SINGLE COVER PLATE.
AND THE FACE OF EXISTING PARTITIONS. ALL DIMENSIONS TAKEN FROM EXTERIOR WINDOW WALL ARE TAKEN FROM THE INSIDE FACE OF THE KNEE WALL. MEASURE TYPICAL DOOR LOCATIONS 6" FROM THE FACE OF ADJACENT PARTITION TO THE INSIDE EDGE OF DOOR FRAME UNLESS NOTED OTHERWISE.	6. CONTRACTOR IS TO COORDINATE THE REMOVAL OF ANY CAMERAS, DETECTORS, ETC. AFFECTED BY THE PROJECT S MANAGEMENT PROJECT REPRESENTATIVE AND BUILDING T
6. PARTITIONS MEETING EXTERIOR MULLIONS SHALL BE CENTERED ON THESE MULLIONS, UNO. ALL FASTENERS AND ATTACHMENTS SHALL BE FULLY CONCEALED FROM VIEW.	7. ALL NEW SWITCHES, OCCUPANCY SENSORS, ETC., ARE T CONSTRUCTION. ALL CONDUIT SERVING SWITCHES IS TO B
7. ALL CONCEALED WOOD BLOCKING OR BRACING REQUIRED BY THESE DRAWINGS SHALL BE FIRE RETARDANT TREATED LUMBER. CONTRACTOR TO LEAVE EXPOSED AFTER INSTALLATION FOR FIRE MARSHAL'S INSPECTION.	CONSTRUCTION. ANY CONFLICTS WITH THESE REQUIREMENT ATTENTION OF THE GEORGIA TECH FACILITIES MANAGEMEN
PPLICABLE CODES	PROJECT INFORMATION:
ACCORDANCE WITH THE GEORGIA UNIFORM CODES ACT, AND IN ACCORDANCE WITH ACTION AKEN BY THE GEORGIA BOARD OF COMMUNITY AFFAIRS, THE FOLLOWING ARE A LIST OF THE FATEWIDE BUILDING AND CONSTRUCTION CODES: A CASE OF CONFLICT BETWEEN CODES / ORDINANCES, THE MORE RESTRICTIVE SHALL APPLY.	Project Scope for Cherry Emerson Building Fire meter vault, double check valve and backflow pr Provide contractor requirements to install and furnish Permit with the City of Atlanta with required easement
ternational Building Code, 18 Edition, with Georgia Amendments (2020) - (Effective January 1, 2020)	 Provide meter valit locations based on hydraulic call Run a main line to Cherry Emerson with backflow pre Landscape and hardscape documents for repairs. Standpipes at stairwells per code and standpipe drait Valve tamper switches and waterflow switches for sr
ernational Fire Code, 18 Edition, with Georgia Amendments (2020) - (Effective January 1, 2020)	Evaluate the one-way concrete slab for standpipe co Run a sprinkler loop in the corridors and fire sprinkle
ernational Plumbing Code, 18 Edition, with Georgia Amendments (2020) - (Effective January 1, 2020)	Hydraulic calculations. Structural requirements for opening into existing bric
ernational Mechanical Code, 18 Edition, with Georgia Amendments (2020) - (Effective January 1, 2020)	 elevated levels. Necessary electrical detailing for integration of the not building fire alarm.
ernational Fuel Gas Code, 018 Edition, with Georgia Amendments (2020) - (Effective January 1, 2020)	
ational Electrical Code, 17 Edition, with no Georgia Amendments (Effective January 1, 2018).	
ternational Energy Conservation Code, 015 Edition, with Georgia Supplements and Amendments (2020) - (Effective January 1, 2020) cernational Swimming Pool and Spa Code, 018 Edition, with Georgia Amendments (2020) - (Effective January 1, 2020)	

SECTIONS & DETAILS



L FIRE PROTEC	TION NOTE	ES	INDEX TO DRAWINGS	
RESPONSIBLE FOR ASSURING	NEW LIFE SAFETY W	ORK IS INSTALLED TO MEET LOCAL	ARCHITECTURAL DRAWINGS	STRUCTURAL DRAW
D CONFIRM EXISTING FIRE EXT AWINGS, ARE IN PROPER WOF	INGUISHERS & CABIN RKING ORDER, OR PRO	ETS, WHERE NOTED ON DVIDE NEW.	TA-0.0 COVER SHEET TA-SP1 ARCHITECTURAL SITE/PLAN LOCATION	S-1.0 STRUCTURAL NARRAT
L FINISH NOTE	S		- S-1.0 STRUCTURAL NARRATIVE TA-0.1 LEVEL 1 - FLOOR PLANS TA-0.2 LEVEL 2 - FLOOR PLANS	
QUIRED BY SCHNEIDER WRIGH SCONTINUED, OR DELAYED MA RE PROCEEDING. NO SUBSTITU WRITING BY SCHNEIDER WRIG	T INC. ARE INCLUDED TERIALS. NOTIFY SCH JTION OF MATERIALS N GHT INC.	HEREIN. IF THERE ARE ANY NEIDER WRIGHT INC. WILL BE ACCEPTED WITHOUT	TA-0.3LEVEL 3 -FLOOR PLANSTA-0.4PENTHOUSE -PLANSTA-1.1LEVEL 1 -REFLECTED CEILING PLANSTA-1.2LEVEL 2 -REFLECTED CEILING PLANSTA-1.3LEVEL 3PEELECTED CEILING PLANS	
E PRIOR TO BEGINNING OF INS Y PARTITIONS, DOOR LOCATION WN ON THE DRAWINGS.	TALLATION OF FINISH NS, EXISTING CONDITI AND OTHER MATERIA	ES AND NOTIFY SCHNEIDER IONS, ETC. WHICH DO NOT LS IN ACCORDANCE WITH	CIVIL DRAWINGS	
CEIVING NEW FLOORING SHAL	LL BE SMOOTH AND LE S SHALL BE REPAIRED	EVEL, AND FREE OF DEFECTS. OR BROUGHT TO THE	C-001 COVER SHEET CX-001 EXISTING CONDITIONS	FX-1.0 FIRST FLOOR PLAN - F FX-1.1 THIRD FLOOR PLAN - F
NEIDER WRIGHT INC. PRIOR TO ET TRANSITIONS AT DOORS SH RPET AND RESILIENT OR WOO) PROCEEDING. IALL OCCUR DIRECTLY D FLOORING MEET A	(UNDER DOOR IN CLOSED TRANSITION STRIP SHALL BE	CS-001 STTE PLAN CS-501 SITE DETAILS CE-101 EROSION CONTROL SINGLE PHASE CE-501 EROSION CONTROL DETAILS	FX1.2 PENTHOUSE - FIRE PR FX1.3 DETAILS - FIRE PROTE FX-5.0 DETAILS - FIRE PROTE FX-5.1 DETAILS - FIRE PROTE
NTRACTOR SHALL SUBMIT TO S S OF EACH COLOR AND SHEEN F EACH STAIN TYPE ON SPECIF SUBMIT (2) 8\" X 11" SAMPLES	SCHNEIDER WRIGHT II I SPECIFIED. PAINT SU FIED WOOD SUBSTRAT OF EACH WALL COVE	NC. FOR APPROVAL: (2) TWO 8\" BCONTRACTOR SHALL SUBMIT E FOR APPROVAL. RING SPECIFIED FOR	MEP DRAWINGS E-0.0 ELECTRICAL LEGEND, NOTES & SPECIFICATIONS E-1.1 LEVEL 1 – ELECTRICAL PLAN M-0.1 MECHANICAL NOTES	
FACES ARE TO RECEIVE A MINII S ACCORDING TO MANUFACTU THE MINIMUM NUMBER REQUI THER CONDITIONS SHOW THRC LOR, AND APPEARANCE.	MUM OF (1) ONE PRIM IRER'S WRITTEN INST RED. APPLY ADDITION DUGH FINAL COAT OF F	E COAT AND (2) FINISH COATS. RUCTIONS. THE NUMBER OF AL COATS WHEN PAINT UNTIL PAINT FILM IS OF	M-1.1 LEVEL 1 – MECHANICAL PLAN	
STERS, DIFFUSERS, ETC. SHAI ES THAT OCCUR ON WALLS WI	LL BE PAINTED TO MAT	TCH THE SURFACE ON WHICH HALL BE PAINTED TO MATCH		
OR OF THE WALLCOVERING. IG ARE TO BE STORED IN A DR' BRIC AND VINYL WALLCOVERIN IDS. ALLOW MATERIAL TO ACCI R HOURS BEFORE APPLICATIO	Y AREA, IN ORIGINAL C IG SHALL BE STORED F LIMATE TO THE AREA (N	ONTAINERS, WITH LABELS HORIZONTALLY TO PREVENT OF INSTALLATION A MINIMUM	PROJECT DIRECTORY	
		ATEX WALL PRIMER.	Ngugi Mathu	
ATING EXISTING PARTITIONS, J RMOSTAT BOXES, DATA/ PHON ARTITIONS ARE REFINISHED.	ALL EXISTING LIGHTIN IE COVERPLATES, ARE	E TO BE REMOVED, CLEANED.	470-428-0160 ngugi.mathu@facilities.gatech.edu	
			Fenella Bryant 404-769-4201 fenella bryant@facilities gatech edu	
AL SYMBOLS			Georgia Institute of Technology Facilities Design &	& Construction
	s s s s s s s s s s s s s s s s s s s		www.facilities.gatech.edu	
— COLUMN LINE	TA-X	SHEET NUMBER	ARCHITECTURE / INTERIOR DESIGN	
AWING NUMBER	E Contraction of the second se	ELEVATION NUMBER	SCHNEIDER WRIGHT INC.	CONTACT: JULIE WRIGHT
DRAWING TITLE EET NUMBER	TA-X	ELEVATION SYMBOL	ALPHARETTA, GEORGIA 30009	E-MAIL: julie@swiarch.com
BREAK LINE	ٳ	CENTER LINE		
		MATCH LINE	MEP ENGINEERING	
NUMBER	(222)	DOOR NUMBER		CONTACT: GARRY JENKIN PHONE: 770-810-8800 E-MAIL: gjenkins@barrettwo
ALIGN	(x)	- PARTITION TYPE DESIGNATION	BARRETT WOODYARD & ASSOCIATES 3495 HOLCOMB BRIDGE ROAD NORCROSS, GEORGIA 30092	CONTACT: ALLIE HEAPY PHONE: 770-810-8800
DEMOLITION NOTE	H1	HVAC NOTE		E-MAIL: aheapy@barrettwo
CONSTRUCTION NOTE	E1	ELECTRICAL NOTE		
LIGHTING NOTE	A1	DEDUCTIVE ALTERNATE NOTE	<u>CIVIL ENGINEER</u>	
PLUMBING NOTE	F1	FINISH NOTE	ERIC R. WESTCOTT, SENIOR CIVIL ENGINEER	
	DN		404-978-7438 404-580-2612 ERIC.WESTCOTT@ JACOBS.COM	
SS:	CHERRY EMERS	ON SCHOOL OF BIOLOGICAL SCIE	ATLANTA GA 30309	
	310 FERST DR N	W, ATLANTA, GA 30332	FIRE SPRINKLER DESIGNER	
	50 929 Square Fe	at	KATIE POTHIER, PE SENIOR FIRE PROTECTION	ENGINEER
			FISHER ENGINEERING, INC. 10475 MEDLOCK BRIDGE ROAD, SUITE 520 JOH	NS CREEK, GA 30097
IFICATION:			WWW.FEIFIRE.COM	50
CUPANT LOAD	<u>59,929</u> = 4	00 Persons	Stacey Morgan, PE	
RUCTION TYPE:	TYPE IIB		Senior Associate	
	NON SPRINKLERED		1230 Peachtree Street NE Suite 2500 Atlanta, GA 30309-3571 404.431.0585 [c]	
<u>MENTS</u> TRUCTION RATING:	NON RATING ON	EXISTING CORRIDOR	www.uzuncase.com	
DEAD END CORRIDOR: COMMON PATH OF TRAVEL DISTANCE TO	: 50' MAX BL AVEL: 75' MAX BL EXIT: 150' MAX B	JSINESS JSINESS NON SUSINESS SPRINKLERED		
TORY UNIT FIRE HAZARD	CLASSIFICATION	(BUILDING = CLASS B		
	·			
	M			





CHERRY L. EMERSON BUILDING <u>3 STORY BRICK WITH PENTHOUSE</u> <u>BLDG. #66</u>

ARCHITECTURAL SITE PLAN N.T.S.





CHERRY EMERSON BUILDING THE GEORGIA INSTITUTUE OF TECHNOLOGY 100% SUBMITTAL STRUCTURAL NARRATIVE UZUN + CASE, LLC (JOB #20.106) **NOVEMBER 6TH, 2020**

PROJECT DESCRIPTION:

The structure consists of a 3-story building constructed with cast-in-place concrete and used primarily as laboratory and office space. The addition of a fire sprinkler system requires new wall and slab penetrations for supply and riser pipes.

<u>Pipe Entry at East Stairwell:</u>

Based on fire protection drawings, water supply and fire department connection pipes enter the building above grade through the exterior wall. Two new 8" x 8" openings are to be cut through existing CMU and brick façade on each face. Locate the openings at unreinforced CMU cells and do not overcut. A 3/8" x 3" x 12" lintel plate (hot dip galvanized) shall be installed below the brick on exterior and interior faces at each opening, with joints sawcut each side for 2" of bearing. The pipes enter the building into Stair Storage Room #137A beneath the intermediate stair landing and will exit the closet without altering or damaging the steel stair framing.

<u>Risers at East Stairwell:</u>

Based on fire protection drawings, there is a fire protection riser, a standpipe riser, and a drain riser in the east stairwell.

- The fire protection riser occurs between the steel framed stair risers within the shaft opening and does not alter or penetrate the stair or main landing structure. • The standpipe riser occurs within the shaft opening and will penetrate the steel framed intermediate landing at the 1st and 2nd floors. A 6" maximum diameter core will be made through each intermediate landing which is constructed of a topping slab on steel pan. Steel channel and angle support framing is to be avoided and remain undamaged.
- A drain riser passes through the main landing at the 1st and 2nd levels. A 3" maximum diameter core may be made through the 48" wide x 17.5" deep reinforced concrete girder along grid line '11', within the middle third of the span, if existing rebar is not cut or damaged. Anticipated reinforcement based on existing building drawings is top and bottom longitudinal bars spaced approximately 4" apart with stirrups at varied spacing. Each girder must be scanned in advance to locate existing reinforcement. Core locations must fit between all rebar. If that is not possible, the riser shall be moved to a location approved by the fire protection consultant such that only the main landing slab is cored.

Riser at South Stairwell:

Based on fire protection drawings, the standpipe riser in the south stairwell occurs within the shaft opening and will penetrate the steel framed intermediate landing at the 1st, 2nd, and 3rd floors. A 6" maximum diameter core

1230 Peachtree St NE, Suite 2500 Atlanta, Georgia, 30309 678.553.5200

> Structural Engineers + Creative Partners Atlanta, GA I Raleigh, NC



GT Cherry Emerson Building – 100% Submittal Structural Narrative

will be made through each intermediate landing which is constructed of a topping slab on steel pan. Steel channel and angle support framing is to be avoided and remain undamaged. If required, a 6" maximum diameter core may be made through the penthouse roof slab or exterior wall for the rooftop greenhouse. <u>Riser at West Stairwell:</u>

Based on fire protection drawings, the standpipe riser in the west stairwell occurs within the shaft opening and will penetrate the steel framed intermediate landing at the 1st and 2nd floors. A 6" maximum diameter core will be made through each intermediate landing which is constructed of a topping slab on steel pan. Steel channel and angle support framing is to be avoided and remain undamaged.

UZUN+CASE, LLC

Thu Thomas A. Pfeifer, PE Principal



Page 2



105A **DEMOLITION NOTES:** D1. REFER TO FIRE PROTECTION DRAWINGS FOR NOTES REGARDING RISER LOCATIONS THROUGH SLABS. IF FIRE MARSHAL REQUIRES A DOGHOUSE OR BELOW GRADE SUPPLY PIPE ENTRY INTO THE BUILDING, A STRUCTURAL SHEET WITH NOTES AND DETAILS WILL BE PROVIDED, VERIFY REQUIREMENTS W/ FIRE MARSHAL AND UPDATE DRAWINGS ACCORDINGLY D2. REFER TO FIRE PROTECTION DRAWINGS FOR LOCATION OF DEMOLITION FOR ABOVE GRADE SUPPLY PIPE ENTRY INTO BUILDING D3. REMOVE EXISTING EQUIPMENT IN CEILING AND PLAN FOR RELOCATION, COORDINATE W/ GT FACILITIES, OIT AND GT POLICE. D4. REMOVE EXISTING DOOR(S) EXISTING FRAMES TO REMAIN. **CONSTRUCTION NOTES** INSTALLATION. • C1 ALL EXISTING PARTITIONS, DOORS, AND CASEWORK TO REMAIN, U.N.O. U.N.O. •_____ C2 EXISTING FULL HEIGHT SMOKE DOORS TO REMAIN FOR LOCATION. PROVIDE NEW 7'-0" DOOR(S) AND PANEL ABOVE TO CEILING. REUSE • C3 EXISTING DOOR FRAME. FIELD VERIFY WIDTH OF ALL DOORS TO BE REPLACED. PROPER FIRE RATINGS. • C4 EXISTING FULL HEIGHT CASED OPENING TO REMAIN.



C4. SPRINKLER SYSTEM TO BE ABOVE GRADE SUPPLY PIPE ENTRY WITH A HEAT TRACE, AND RISERS CORING THROUGH SLAB ONLY.

- C5. GENERAL CONTRACTOR TO PATCH, REPAIR AND FINISH ALL PENETRATIONS ON EXTERIOR AND INTERIOR OF BUILDING BASED ON LOCATION OF NEW SPRINKLER INSTALLATION. ALL COMPLETED REPAIRS SHALL MAINTAIN PROPER FIRE RATINGS. C6. REFER TO PROJECT MANUAL FOR DOOR SPECIFICATIONS MMM MMMM MMM
- ELECTRICAL NOTES: E1. ALL EXISTING ELECTRICAL TO REMAIN THROUGHOUT. REFER TO ELECTRICAL ENGINEERING DRAWINGS ASSOCIATED WITH TIE-IN TO BASE BUILDING FIRE ALARM.
- E2. GENERAL CONTRACTOR TO COORDINATE WITH GT FACILITIES. GT OIT AND GT POLICE TO CONFIRM/APPROVAL OF RELOCATION OF ANY EXISTING WIRELESS ACCESS POINTS, SMOKE DETECTORS, OCCUPANCY SENSORS, CEILING FIRE AND AUDIO STROBES, AND CAMERAS IF CONFLICT WITH LOCATION OF NEW FIRE SPRINKLER
- PLUMBING NOTES: PB1. PROVIDE STANDPIPE @ PENTHOUSE ON ROOF FOR GREENHOUSE COVERAGE. REFER TO ENGINEERING DRAWINGS
- FINISH NOTES: F1. PATCH, REPAIR AND PAINT ALL AREAS AFFECTED BY CONSTRUCTION. MATCH EXISTING FINISH. F2. ALL COMPLETED REPAIRS AND FINISHES SHALL MAINTAIN
- F3. PATCH EXISTING FLOORING AFFECTED BY CONSTRUCTION. INSTALL RUBBER BASE TO MATCH EXISTING.

LAYOUT

F4. PATCH EXISTING FLOORING AFFECTED BY CONSTRUCTION. INSTALL RUBBER BASE TO MATCH EXISTING. F5. REFER TO PROJECT MANUAL FOR TYPICAL FLOORING FINISHES

FINISHES

RUBBER BASE: JOHNSONITE 40 BLACK, 6" ROLL GOODS

PAINT: TYPICAL WALLS: SHERWIN WILLIAMS SW7636 ORIGAMI WHITE, EGGSHELL FINISH

DOOR FRAMES, STAIR COMPONENTS - - STEEL RAILINGS, STRINGERS AND RISERS: SHERWIN WILLIAMS SW9163 TIN LIZZIE, SEMIGLOSS FINISH FINISH SPECIFICATIONS PROVIDED BY GT FACILITIES. CONTRACTOR TO CONFIRM FINISHES SPECIFIED MATCH EXISTING FINISHES IN THE FIELD.

VCT ARMSTRONG STANDARD EXCELON



VCT-1: Z1915 CHARCOAL



VCT-3: 51874 GRAYED BLUE

RUBBER BASE: JOHNSONITE 40 BLACK, 6" ROLL GOODS

STAIR LANDINGS: VCT-2 CLASSIC BLACK STAIR TREADS: FORBO MARMOLEUM 2939 BLACK FRESCO WITH GRIT TAPE AT FRONT EDGE

REMAIN. $\land \land \land \land \land$ N NEW DOOR(S) ~_0

LEGEND

















<u>LEGEND</u>

ALL PARTITIONS WALLS, WINDOWS AND DOORS ARE EXISTING TO REMAIN.

EXISTING EXTERIOR WALL

EXISTING INTERIOR WALL



EXISTING DOOR

EXISTING STOREFRONT/WINDOW

N

NEW DOOR(S) WITH PANEL ABOVE 1 LEVEL 3 Scale: 1/8" = 1'-0"









 $1 \frac{\text{PENTHOUSE ROOF PLAN}}{1/8" = 1'-0"}$











LIGHTING NOTES:

1. EXISTING LIGHTING, CEILING GRID AND TILES TO REMAIN THROUGHOUT. GENERAL CONTRACTOR TO PATCH, REPAIR AND/OR REPLACE AS REQUIRED BY INSTALLATION OF NEW SPRINKLER LINES AND BRANCHES.

2. ROTATE OR RELOCATE EXISTING LIGHTING IN CENTRAL CORRIDOR AS REQUIRED FOR INSTALLATION OF NEW SPRINKLER LINES.

HVAC NOTES:

1. EXISTING HVAC TO REMAIN AS IS UNLESS AFFECTED BY SPRINKLER SYSTEM INSTALLATION. GENERAL CONTRACTOR TO CONTACT GT FACILITIES AND MEP ENGINEER FOR ANY CONFLICT FOR COORDINATION OF RELOCATION/REWORK AS REQUIRED.

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







LIGHTING NOTES:

1. EXISTING LIGHTING, CEILING GRID A THROUGHOUT. GENERAL CONTRACTO AND/OR REPLACE AS REQUIRED BY INS SPRINKLER LINES AND BRANCHES.

2. ROTATE OR RELOCATE EXISTING LIG CORRIDOR AS REQUIRED FOR INSTALLA SPRINKLER LINES. HVAC NOTES:

1. EXISTING HVAC TO REMAIN AS IS UNI SPRINKLER SYSTEM INSTALLATION. G CONTRACTOR TO CONTACT GT FACILIT ENGINEER FOR ANY CONFLICT FOR CO RELOCATION/REWORK AS REQUIRED. LEVEL 2 - REFLECTED CEILING PLAN Scale: 1/8" = 1'-0"

			CEIL REFER TO ELECTRI DRAWINGS. SHOWN	ING LEGEND CAL, MECHANICAL & TELE FOR COORDINATION PUF	ECOMM RPOSES	
			<u>RELOCATE EXISTING</u> THESE CONFLICTS W	DEVICES/LIGHTING FIXT	URES IF SYSTEM.	
	?'-?"	CEILING TAG CEILING HEIGHT (AFF)	Γ	MEN'S RESTROOM WAL		CEILING STROBE
ND TILES TO REMAIN)R TO PATCH, REPAIR STALLATION OF NEW		2'x2' / 2'X4' RECESSED LIGHT FIXTURE	0	MOUNTED GLOBE LIGHT	r SP	CEILING AUDIO (SPEAKER)
GHTING IN CENTRAL		2'x2' / 2'X4' SURFACE MOUNT LIGHT FIXTURE	\bigotimes	DOWNLIGHT		
ATION OF NEW		CENTERED ON GRID @ 9'-1 AFF (U.N.O.)			WA	WIRELESS ACCESS P
	<u>-2 2 2</u>	TRACK LIGHTING		1X4 LED SURFACE MOUNT		
ILESS AFFECTED BY ENERAL TIES AND MEP	\bigcirc	DOME PENDANT/SUSPENDEI FIXTURE, ROUND	D LIGHT	PENDANT LED MOUNTE TO STRUCTURE	D	LINEAR DIFFUSER
DORDINATION OF		1X4 FLOURESCENT SURFACE MOUNT		UTILITY INCANDESCENT		EXIT SIGN
		1X4 FLOURESCENT PENDANT MOUNT FROM STRUCTURE	S	SMOKE DETECTOR		PROJECTOR
		4"X4'-0" LED PENDANT MOUNT FROM STRUCTURE	OS	OCCUPANCY SENSOR		GYP. BD. CEILING
		RESTROOM WALL MOUNT OVER SINK		CAMERA		
			<u>CEILING DE</u>	MOLITION LEGEND		
		$\left(\begin{array}{c} s \end{array} \right)$	SMOKE DETECTOR DEMOD	•	CEILING STROBE DEMOD	
		< OS>	OCCUPATION SENSOR DEMO	D (WA)	WIRELESS ACCESS POINT	
		C 34	CAMERA SENSOR DEMOD	60	EXIT SIGN DEMOD	

R RELOCATE

LIGHT DEMOD



ESS POINT



LIGHTING NOTES:

1. EXISTING LIGHTING, CEILING GRID AND TIL THROUGHOUT. GENERAL CONTRACTOR TO F AND/OR REPLACE AS REQUIRED BY INSTALLA SPRINKLER LINES AND BRANCHES.

2. ROTATE OR RELOCATE EXISTING LIGHTING CORRIDOR AS REQUIRED FOR INSTALLATION SPRINKLER LINES.

HVAC NOTES: 1. EXISTING HVAC TO REMAIN AS IS UNLESS A

SPRINKLER SYSTEM INSTALLATION. GENERAL CONTRACTOR TO CONTACT GT FACILITIES AN ENGINEER FOR ANY CONFLICT FOR COORDIN RELOCATION/REWORK AS REQUIRED.

 LEVEL 3 - REFLECTED CEILING PLAN

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

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				CEIL REFER TO ELECTR DRAWINGS. SHOWN	LING LEGEND ICAL, MECHANICAL & TELI I FOR COORDINATION PUP	ECOMM RPOSES		
				RELOCATE EXISTING	G DEVICES/LIGHTING FIXT N/ NEW FIRE SPRINKLER \$	TURES IF SYSTEM.		
LES TO REMAIN	?'-?"	CEILING TAG CEILING HEIGHT (AFF)		\square	MEN'S RESTROOM WAL MOUNTED GLOBE LIGH	L T		CEILING STROBE
PATCH, REPAIR ATION OF NEW		2'x2' / 2'X4' RECESSED LIGHT FIXTURE 2'x2' / 2'X4' SURFACE		\oslash	led Downlight		SP	CEILING AUDIO (SPEAKER)
G IN CENTRAL I OF NEW		MOUNT LIGHT FIXTURE CENTERED ON GRID @ 9'-1 AFF (U.N.O.)			STRIP FLOURESCENT WALL MOUNT		WA	WIRELESS ACCESS POINT
	<u>-2 2 2</u>	TRACK LIGHTING			1X4 LED SURFACE MOUNT			
AFFECTED BY AL ND MEP	\bigcirc	DOME PENDANT/SUSPENDE FIXTURE, ROUND	ED LIGHT		PENDANT LED MOUNTE TO STRUCTURE	D		HVAC RETURN LINEAR DIFFUSER
NATION OF		1X4 FLOURESCENT SURFACE MOUNT			UTILITY INCANDESCEN	г	\otimes	EXIT SIGN
		1X4 FLOURESCENT PENDANT MOUNT FROM STRUCTURE		S	SMOKE DETECTOR			PROJECTOR
		4"X4'-0" LED PENDANT MOUNT FROM		OS	OCCUPANCY SENSOR			GYP. BD. CEILING
		RESTROOM WALL MOUNT OVER SINK			CAMERA			
				CEILING DE	EMOLITION LEGEND			
		$\left(\begin{array}{c} \\ \\ \\ \\ \end{array} \right)$	SMOKE DE	TECTOR DEMOD	•	CEILING STROBE DEN	10D	
		< (0\$)>	OCCUPATIO	ON SENSOR DEMO		WIRELESS ACCESS PO	OINT	
		K]	CAMERA SE	ENSOR DEMOD	\bigotimes	EXIT SIGN DEMOD		
		R	RELOCATE			LIGHT DEMOD		





FIRE PROTECTION NOTES

1. SEE SHEET FX-5.0 AND FX-5.1 FOR FIRE PROTECTION NOTES AND DETAILS.

FIRE PROTECTION LEGEND

•	QUICK-RESPONSE PENDENT SPRINKLER, K-5.6
	QUICK-RESPONSE PENDENT SPRINKLER, K-8.0
\bigcirc	QUICK-RESPONSE UPRIGHT SPRINKLER, K-5.6
\bigcirc	QUICK-RESPONSE UPRIGHT SPRINKLER, K-8.0
\triangleright	QUICK-RESPONSE HORIZONTAL SIDEWALL SPRINKLER, K-5.6
×	QUICK-RESPONSE DRY PENDENT SPRINKLER, K-5.6
	LIGHT HAZARD 0.10 GPM/SF OVER HYDRAULICALL MOST REMOTE 1,500 SF
	ORDINARY HAZARD - GROUP 1 0.15 GPM/SF OVER HYDRAULICALL MOST REMOTE 1,500 SF







FIRE PROTECTION NOTES

1. SEE SHEET FX-5.0 AND FX-5.1 FOR FIRE PROTECTION NOTES AND DETAILS.

igodot	QUICK-RESPONSE PENDENT SPRINKLER, K-5.6
	QUICK-RESPONSE PENDENT SPRINKLER, K-8.0
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	ORDINARY HAZARD - GROUP 1 0.15 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 SF

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ISSUED FOR PERMITTING AND CONSTRUCTION

01-08-2021

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REVISIONS PER FIRE MARSHAL COMMENTS AND RFI #1

lacksquare	QUICK-RESPONSE PENDENT SPRINKLER, K-5.6
	QUICK-RESPONSE PENDENT SPRINKLER, K-8.0
\bigcirc	QUICK-RESPONSE UPRIGHT SPRINKLER, K-5.6
Ô	QUICK-RESPONSE UPRIGHT SPRINKLER, K-8.0
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FIRE PROTECTION NOTES

1. SEE SHEET FX-5.0 AND FX-5.1 FOR FIRE PROTECTION NOTES AND DETAILS.

FIRE PROTECTION LEGEND

	FIRE PROTECTION NOTES
1.	CONTRACTOR SHALL DESIGN AND INSTALL AUTOMATIC SPRINKLER PROTECTION THROUGHOUT THE FACILITY ACCORDANCE WITH NFPA 13.
2.	PROVIDE MANUAL WET STANDPIPE SYSTEM DESIGNED INSTALLED IN ACCORDANCE WITH NFPA 14.
3.	THE SPRINKLER CONTRACTOR SHALL PREPARE AND S COMPLETE SHOP DRAWINGS WITH HYDRAULIC CALCU AND MATERIAL SPECIFICATION SHEETS FOR APPROVA THE OWNER PRIOR TO SUBMISSION TO THE AUTHORIT HAVING JURISDICTION.
4.	FIRE PROTECTION SYSTEM PIPING, FITTINGS AND SIZE SHOWN ON THE DRAWINGS ARE DIAGRAMMATICAL IN AND ARE PROVIDED FOR ESTIMATING PURPOSES ONL SHOULD NOT BE CONSIDERED REQUIREMENTS UNDER CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH OTHER TRADES. ENSURE THE P CLEARANCES ARE PROVIDED WHERE NECESSARY.
5.	CONTRACTOR SHALL PROVIDE ALL NECESSARY AUXIL DRAINS AND INSPECTORS' TEST CONNECTIONS AS RE BY NFPA 13
6.	CONTRACTOR SHALL PROVIDE ALL NECESSARY PIPE HANGERS AND SUPPORTS AS REQUIRED BY NFPA 13.
7.	ALL VALVES CONTROLLING WATERFLOW TO THE SPRI SYSTEM SHALL BE PROVIDED WITH TAMPER SWITCHE CONNECTED TO THE FIRE ALARM SYSTEM BY THE FIRE CONTRACTOR, INCLUDING POST INDICATOR VALVES.
8.	ALL PENETRATIONS THROUGH FIRE-RESISTANT ASSEM SHALL BE PROVIDED WITH A UL-LISTED THROUGH- PENETRATION FIRESTOP SYSTEM THAT IS APPROPRIA THE FIRE-RESISTANT ASSEMBLY. PENETRATIONS THE THE SMOKE BARRIERS OR SMOKE PARTITIONS SHOUL UTILIZE NONCOMBUSTIBLE, FLEXIBLE SEALANT CAPAE RESISTING THE PASSAGE OF SMOKE.
9.	CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDING CONFLICTS WITH LIGHTING FIXTURES, ROOF DRAINS, DIFFUSERS, SMOKE/HEAT VENTS, GRILLS, DUCTS, CAE TRAYS, CABLE BUNDLES, CONDUIT, PROCESS EQUIPM UTILITY PIPING AND ALL OTHER OBSTRUCTIONS ENCOUNTERED.
10.	CONTRACTOR SHALL TAKE ALL NECESSARY MEASURE KEEP THE PREMISES DRY AT ALL TIMES AND TO PREV WATER DAMAGE. CONTRACTOR SHALL REPAIR WATE DAMAGE FROM THE WORK, WHETHER INTENTIONAL O AT NO COST TO, AND TO THE SATISFACTION OF THE O
11.	NEITHER THE OWNER NOR THE ENGINEER SHALL BE RESPONSIBLE FOR PROVIDING A SAFE WORKING PLAC THE CONTRACTOR, SUBCONTRACTORS, OR THEIR EMPLOYEES, OR ANY OTHER INDIVIDUAL RESPONSIBL THEM FOR THE WORK. THIS RESPONSIBILITY RESTS S ON THE CONTRACTOR'S PROJECT SUPERINTENDENT.
12.	ALL PIPING 2 INCHES AND LESS IN DIAMETER SHALL BE SCHEDULE 40. PIPING 2 1/2 INCHES AND LARGER IN DIAMETER SHALL BE SCHEDULE 40 OR SCHEDULE 10.
13.	SPRINKLER SYSTEM(S) SHALL BE DESIGNED FOR A MA WORKING PRESSURE OF 175 PSI PER NFPA 13.
14.	ALL VALVES SHALL HAVE A PERMANENTLY AFFIXED SINFPA 13 INDICATING ITS FUNCTION AND SECURED TO VALVE WITH SUITABLE CHAIN.
15.	PROVIDE A PERMANENTLY ATTACHED HYDRAULIC NAMEPLATE FOR EACH SYSTEM RISER IN ACCORDANC NFPA 13.
16.	ALL SPRINKLERS IN CEILING TILES SHALL BE LOCATED

SECTION 26010 ELECTRICAL GENERAL

1.0 GENERAL 1.01 SCOPE

- A. Division 26 includes all Specifications in the 26000 series and the accompanying Electrical Drawings. Provide all labor, materials and equipment, and all necessary operations to provide the complete scope of the electrical systems intended under this Division. Division 26 is not a stand alone document, but a part of the complete Project Documents. B. Attention is called to the fact that there are many interfaces
- between the work required in this Division and the work required in other Divisions. Provide the necessary interface and coordination with other Divisions to provide a complete project. 1.02 CODES AND REGULATIONS
- A. All work under this Division shall comply with all local building codes, laws, regulations, ordinances and the requirements of the 2017 National Electrical Code with Georgia Amendments. B. Where conflicts of installation requirements occur between the
- aforementioned codes, regulations or the Contract Documents, the most restrictive shall govern. C. Obtain all permits and licenses and pay all fees required by local authorities. Arrange for all necessary inspections required by
- the authorities having jurisdiction and provide written certificates of approval to the project Owner or his designated representative. 1.03 DRAWINGS AND SPECIFICATIONS
- A. The Drawings and Specifications together are to be considered as the Contract Documents. Any work shown in one and not shown in the other, or implied by either, shall be provided to give a complete project.
- B. Should any conflicts exist between the Drawings and Specifications or there is an item shown/called for which is not clearly defined, immediately submit a request for clarification. No additional monies will be granted later when a conflict is resolved or an item is more clearly defined.
- C. The Drawings are schematic and are not intended to show the exact location outlets, etc. or the routing of conduit. D. The exact location of equipment requiring electrical connections
- (mechanical equipment, elevators, lights, etc.) shall be as located by other Divisions of the Contract Documents. Refer to the Architectural, Structural and Mechanical Documents for dimensions and details of building construction and provide work described in this Division so that it conforms to the details of the project. The right is reserved to relocate any receptacle, switch or other outlet a maximum of 10'-0" before it is permanently installed without incurring additions to the Contract amount.
- 1.04 SITE VISIT
- A. Visit the site and become familiar with all aspects of the site and existing conditions before submitting Contract price. No allowance will be made for lack of knowledge of existing conditions.
- 2.0 PRODUCTS 2.01 STANDARDS FOR MATERIALS AND WORKMANSHIP
- A. All materials used shall be new and shall be stamped with the label of Underwriters Laboratories, Inc. (UL).
- All materials shall meet the standards of the following
- associations and institutes where applicable: National Fire Protection Association (NFPA)
- American Society of Testing Materials (ASTM)
- American National Standards Institute (ANSI) National Electrical Manufacturer's Association (NEMA)
- Institute of Electrical and Electronic Engineers (IEEE) 2.02 SHOP DRAWINGS AND SUBMITTAL
- A. The Engineer's review of shop drawings or submittals is a cursory review to check for general compliances of submittals with the design intent of the Contract Documents. The Engineer's review does not relieve the Contractor of his responsibility of complying with the Contract Documents. All coordination of the work in strict compliance with the Contract Documents is the sole responsibility of the Contractor.
- B. The following items shall be submitted for review: 1. Fire Alarm — devices and floor plan drawings
- 2.03 RECORD (AS-BUILT) DRAWINGS AND MAINTENANCE MANUALS A. At job completion, submit to the Architect, a set of mylar sepias
- showing all deviations from the Contract Documents. The Drawings shall also have dimensions locating all underground conduits. At job completion, submit to the Architect, three (3) sets of maintenance and instruction manuals for all equipment furnished on the project. 3.0 EXECUTION
- 3.01 COORDINATION
- A. Coordinate all space requirements with all other Divisions before installing any work. Install work such that adequate space will be allotted for all other work from other Divisions to be installed and also will allow room for future access for repair and maintenance.
- B. Any work installed without proper coordination shall be relocated at the Architect's direction without increasing the Contract price.
- C. During the bidding process or the pricing for a guaranteed maximum price, coordinate with all other Divisions for the total amount of work required in Division 16. Any work shown or implied in another Division requiring work in Division 16 shall be included in the Contract price regardless of whether or not it is addressed in Division 26.

3.02 GUARANTEE

A. All systems, equipment, components, work, etc. provided under this Division shall be covered by a one year guarantee starting at the time of final acceptance of the work by the Owner. Any defects in the work, systems, equipment or components found during this year shall be corrected at no charge. The guarantee shall include providing all necessary cutting, patchwork, repainting, etc. to

make the work complete and new.

B. Present this guarantee and any additional warranties or guarantees on furnished equipment or systems to the Architect. All equipment or system guarantees are in addition to the general guarantee. SECTION 26100 ELECTRICAL BASIC MATERIALS & METHODS

2.0 PRODUCTS

1.0 GENERAL

2.03 OUTLETS

B.

N/A

2.01 CONDUIT A. Galvanized rigid steel conduit shall be low carbon, hot-dipped galvanized both inside and out with threaded joints. B. Intermediate metal conduit (IMC) shall be steel, galvanized both inside and out with threaded joints. Electrical metallic tubing (EMT) shall be steel, galvanized both inside and out.

Flexible metal conduit shall be flexible steel conduit tubing and shall meet Underwriters Laboratories Standard for Flexible Steel Conduit. E. Liquid-tight flexible metal conduit and liquid-tight non-metallic

conduits shall be liquid-tight and sunlight resistant. F. Steel conduit approved manufacturers are Allied, Triangle and Republic

2.02 CONDUCTORS Conductors shall be copper of 98% conductivity, 600 volt insulation. Sizes specified are AWG gauge for No. 4/0 and smaller and circular mils (MCM) for all sizes larger than no. 4/0. Conductors No. 10 and smaller shall be solid and type "THHN" or 'THWN" insulation. No. 8 and larger shall be stranded and type "THW" or "XHHW" insulation. Armored cable may be used in walls and millwork only amd must be MC type (with ground). All conduit to and above the plenum shall be EMT.

> Outlet boxes and covers shall be of such form and dimensions as to be adapted to their specified usage, locations, size and quantity of conduit, and size and quantity of conductors entering the boxes. In special "Fire Rated" partitions, outlets shall comply with ASTM No. E119.

Flush ceiling outlets for surface or pendant mounted lighting fixtures shall be one-piece 4" square or octagonal pressed steel boxes. Boxes for devices in unfinished masonry walls or stud walls shall be pressed steel, square corner, sectional switch boxes, or shall be 4" square box with a square cornered tile wall cover, set flush with masonry construction. Boxes in concrete ceiling slab shall be octagonal, shallow concrete boxes. Welded boxes are not acceptable.

C. Outlet box approved manufacturers are Appleton, Raco, Steel City or Crouse-Hinds. 2.04 DISCONNECT SWITCHES

A. Disconnect switches shall be "heavy-duty" type, enclosed switches of quick-make, quick-break construction. Switches shall be horsepower rated for 600 volts AC as required. Lugs shall be UL listed for copper and aluminum. Disconnect switches shall be mounted to structure. Disconnect

switches shall not be mounted to mechanical equipment or ductwork. C. Fused disconnect switches shall have rejection type fuse clips with dual element, current limiting fuses of rating shown. 2.05 NAMEPLATES

A. Nameplates shall have 3/8" high engraved letters. 120 or 208 volts: white core laminated bakelite with black finish. 277 or 480 volts: white core laminated bakelite with red finish. 2.06 WALL SWITCHES

A. Wall switches shall be plastic, totally enclosed, quiet type, self-grounding, 277 volts and 20A rating and shall match existing if possible and equal the following: Single Pole: Hubbell No. 1221 P&S No. 20AC1 Leviton No. 1221

Double Pole: Hubbell No. 1222 P&S No. 20AC2 Leviton No. 1222 Three-Way: Hubbell No. 1223 P&S No. 20AC3 Leviton No. 1223 Four-Way: Hubbell No. 1224 P&S No. 20AC4 Leviton No. 1224 B. Color shall be as selected by Architect. C. Flush motor switches with red pilot light and with overload

protection for fractional horsepower motors shall be Square "D" type FSJ-1P. 2.07 RECEPTACLES

A. Duplex receptacles shall be plastic, two-pole, three wire, selfgrounding, side wired, 125 volts and 15A rating and shall match existing if possible and be equal to the following: Duplex receptacles shall be Hubbell No. 5262 Series. Isolated ground type shall be Hubbell No. IG-5262 Series.

Single receptacles shall be two-pole, three wire, self-grounding, side wired, 125 volts and 20A rating and shall match existing i possible and be equal to the following: Single receptacles shall be Hubbell No. 5361 Series, Leviton No. 5361 Series or P&S No. 5361 Series. Isolated ground type to be Hubbell No. IG-5361 Series, Leviton No. IG-5361 Series or P&S IG-5361 Series. C. Color shall be as selected by Architect.

2.08 COVERPLATES

2.10 FUSES

A. Coverplates for flush mounted devices shall be as selected by Architect, standard size, P&S Sierra Series.

2.09 SMOKE AND FIRE STOP FITTINGS

Smoke and Fire Stop Fittings shall be UL listed for that purpose. The fittings used to seal conduit either on the outside of the conduit, busway or cable or internally shall have heat activated intumescent material which expands to fill all voids. Smoke and fire stop fittings shall be O.Z./Gedney "FIRE-SEAL" or Dow Corning silicone RTV foam with an hourly fire-rating equal to or higher than the rating of the floor, ceiling or wall through which the cable or conduit passes. The seals for conduit shall be of the flanged type.

A. Provide all fuses. All fuses shall be of the same manufacturer. All fuses shall be of the high interrupting rating (200,000 Amps), current limiting type and manufactured by Bussmann. Fuses shall be provided for each fuse cutout and the specified quantity of fuses shall be furnished for spares.

B. Circuits 0 to 600 ampere shall be protected by rejection type, current limiting BUSSMANN LOWPEAK Dual Element Fuses LPN-RK (250 volts) or LPS-RK (600 volts). All dual-element fuses shall have separate overload and short-circuit clearing chamber. The fuse must hold 500% of rated current for a minimum of 10 seconds and be listed by Underwriter's Laboratories, Inc., with an interrupting rating of 200,000 amperes RMS symmetrical. The fuses shall be UL Class RK-1.

3.0 EXECUTION 3.01 CONDUIT

- A. PVC extruded cover flexible conduit shall be used in making short flexible connections to rotating or vibrating machinery or equipment. The flexible conduit at these locations shall be as short as possible, but shall have a minimum length of 12" A green stranded bonding jumper shall be installed outside of all flexible conduit that extends directly from a non-flex conduit to a rotating or vibrating machine. Where a junction box is used, the green stranded bonding jumper shall be installed inside the flexible conduit and attached to the junction box and to the machine. When the bonding jumper is installed outside of the flexible conduit, plastic wire straps shall be used 6" o.c. to secure the jumper to the flexible conduit.
- C. EMT shall be used for branch circuits, fire alarm and telephone when not underground or in concrete in contact with the earth. Armored cable may be used in walls and millwork only and must be
- MC type (with ground). All conduit to and above the plenum shall be EM E. Rigid steel (or IMC) shall be used for service entrance and all feeders and branch circuits where exposed to damage.

3.03 WIRING A. All conductors shall be installed in conduit. No conductors shall be pulled into the conduit until the conduit system is complete and plaster had dried. Wire pulling lubricants shall be Gardner-Bender "Wireaide" or Ideal "Yellow 77

- B. Conductors shall be continuous from outlet to outlet and from outlet to junction box or pull box. All splices and joints shall be carefully and securely made to be mechanically and electrically solid with pressure type connectors, Gardner Bender "Winggard" or Ideal "Wingnut". Tape shall be "Scotch" No. 33 for indoor and No. 88 for outdoor or Gardner Bender No. 95-661. Where connection is made to any terminals of more than 30 amperes capacity and where conductors larger than No. 10 are connected to any terminal, copper terminal lugs shall be bolted to the conductors. Where multiple connections are made to the same terminal, individual lugs for each conductor shall be used. (Aluminum conductors, if used for service conductors, shall be made with high compression
- lugs as manufactured by Square D, Ideal or MAC.) C. Each conduit shall have a minimum of two (2) conductors pulled in unless that particular conduit is noted as being for systems other than electrical circuitry and/or future use or unless noted otherwise.
- D. Conductors for lighting and receptacle circuits shall have color coded jackets. The wiring shall be color coded with the same color used with its respective phase through the entire job as follows: 208/120 Volt System 480/277 Volt System

Phase A — Brown

Phase B — Orange

- Phase A Black Phase B — Red Phase C — Blue
- Phase C Yellow Neutral — Gray Neutral - White Ground – Green Ground – Green E. The feeder and service entrance conductors shall be color coded by the use of colored plastic tape applied within 6" of each conductor end
- F. Branch circuit conductors shall not be smaller than No. 12 and where the home run from center of load exceeds 100'-0", the conductors from home run outlet to panel shall be No. 10 minimum. 3.04 GROUNDING
- Provide all grounding in accordance with the requirements of the Α. 2017 National Electrical Code with Georgia Amendments. В.
- Provide an insulated green bonding jumper from the grounding lug of all receptacles to a Steel City "GEE" clip or a sheet metal screw in the outlet box. The ground wire installed behind the device mounting screws will not be acceptable.

ELECTRICAL CODE WITH GEORGIA AMENDMENTS.

- FINAL ACCEPTANCE OF THE WORK BY THE OWNER. ANY DEFECTS IN THE WORK, AND NEW.
- ALL EXISTING POWER DISTRIBUTION, FIRE ALARM, ECT., JUNCTION BOXES SHALL BE LOCATION.
- 6. ALL CONDUIT MUST BE CONCEALED IN THE WALLS OR ABOVE THE CEILING UNLESS
- THE MINIMUM WIRE SIZE SHALL BE #12 A.W.G. WITH A 167 DEGREE TEMPERATURE RATING
- ARMORED CABLE MAY BE USED FOR LIGHTING CIRCUITING ABOVE CEILINGS AND MUST
- ELECTRICAL DEVICES OR LIGHTING FIXTURES. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT OR RECONNECT AS REQUIRED ALL ACTIVE DEVICES REMAINING ON THAT
- CIRCUIT SYSTEM. STOPPED PER N.E.C. 300-21.
- 12. PROVIDE ALL GROUNDING AS REQUIRED BY N.E.C.
- EXISTING CIRCUIT.

- FIRE ALARM GENERAL NOTES OF NEW ADA APPROVED DEVICES.

ELECTRICAL GENERAL NOTES

1. ALL WORK THIS DIVISION SHALL COMPLY WITH ALL LOCAL BUILDING CODES, LAWS, REGULATIONS, ORDINANCES, AND THE REQUIREMENTS OF THE 2017 NATIONAL

THE CONTRACTOR SHALL KEEP A RECORD OF THE CHANGES WHICH ARE IN CONFLICT WITH THESE DRAWINGS AND SPECIFICATIONS. AT THE COMPLETION OF HIS WORK HE SHALL SUBMIT "AS BUILT" PRINTS TO THE OWNER. 3. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND DO NOT NECESSARILY SHOW EVERY

FITTING AND DETAIL. ALL WORK SHALL BE INSTALLED SO THAT JUNCTION BOXES AND COMPONENTS WILL BE ACCESSIBLE FOR SERVICE. 4. ALL SYSTEMS, EQUIPMENT, COMPONENTS, WORK, ETC. PROVIDED UNDER THIS DIVISION SHALL BE COVERED BY A ONE YEAR GUARANTEE STARTING AT THE TIME OF

SYSTEMS, EQUIPMENT, OR COMPONENTS FOUND DURING THIS YEAR SHALL BE CORRECTED AT NO CHARGE. THE GUARANTEE SHALL INCLUDE PROVIDING ALL NECESSARY CUTTING, PATCHWORK, REPAINTING, ETC. TO MAKE THE WORK COMPLETE

RELOCATED IF LOCATED OVER A CEILING SCHEDULED TO BE GYPSUM BOARD. ALL EXISTING JUNCTION BOXES SHALL BE RELOCATED IF NECESSARY TO AN ACCESSIBLE

OTHERWISE NOTED. MINIMUM CONDUIT SIZE IS 1/2". 7. ALL CONDUCTORS SHALL BE COPPER WITH TYPE "THW" OR "THHN" INSULATION AND

8. ALL WORK MUST BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER ACCORDING TO GENERALLY ACCEPTED PRINCIPALS OF FIRST CLASS WORKMANSHIP.

BE MC TYPE (WITH GROUND). PROVIDE EMT FOR CIRCUIT HOMERUNS. 10. WHERE WORK BY THE GENERAL CONTRACTOR (WALL REMOVAL, NEW OR RELOCATED WALL OPENING, ETC.) RESULTS IN THE REMOVAL, RELOCATION OR REFEEDING OF

11. ALL PENETRATIONS THRU RATED WALLS, FLOORS AND CEILINGS SHALL BE FIRE

13. WHERE DEMOLITION DISRUPTS ELECTRICAL CONTINUITY OF EXISTING TO REMAIN RECEPTACLES/LIGHTS, AND NO RECONNECTION IS SHOWN, RECONNECT TO ITS

14. ALL CONDUIT SHALL BE 1/2" EMT WITH 2#12AWG CONDUCTORS UNLESS OTHERWISE

15. UPDATE EACH PANEL DIRECTORY NOTING ALL CHANGES AND ADDITIONS. 16. PROVIDE #12AWG GND. FOR ALL MECHANICAL EQUIPMENT UNLESS SHOWN OTHERWISE. ALL EQUIPMENT SHALL BE GROUNDED AT THE PANEL WHICH FEEDS THE EQUIPMENT.

1. ALL NEW FIRE ALARM DEVICES SHALL BE ADA APPROVED. COORDINATE COLOR WITH ARCHITECT AND BASE BUILDING. DEVICES TO MATCH BASE BUILDING SYSTEM MANUFACTURER. PROVIDE ANY ADDITIONAL POWER AMPLIFIERS REQUIRED FOR INSTALLATION 2. ALL FIRE ALARM DEVICES. INCLUDING SPEAKERS, VISUALS, SMOKE DETECTORS, ETC. SHALL BE CONNECTED TO THE BASE BUILDING FIRE ALARM SYSTEM BY A LICENSED FIRE ALARM CONTRACTOR. COORDINATE CONNECTIONS WITH SYSTEM MANUFACTUER. COORDINATE FIRE ALARM SYSTEM SHUTDOWNS AND REPROGRAMMING WITH OWNER

4. COORDINATE THE LOCATION AND QUANTITY OF ALL FLOW SWITCHES AND TAMPER SWITCHES WITH SPRINKLER SHOP DRAWINGS. PROVIDE CONNECTIONS AS REQUIRED.

ELECTRICAL SYMBOL LEGEND

YMBOL	DESCRIPTION	ON CENTER MTG. HT.
	CONCEALED CONDUIT IN CEILING OR WALL CONCEALED CONDUIT IN FLOOR OR UNDERGROUND EXPOSED CONDUIT CIRCUIT HOMERUN TO PANEL; EACH ARROWHEAD = 1 CIRCUIT NO. OF CONDUCTORS IN CONDUIT; EACH CROSSHATCH = 1 WIRE CONDUIT STUBBED UP OR TURNED DOWN	
⊐⊖ ⊒⊖ ∉⊓	WALL MOUNTED DUPLEX RECEPTACLE OUTLET WALL MOUNTED G.F.C.I. DUPLEX RECEPTACLE OUTLET	18" 18"
Ū	JUNCTION BOX – SIZE AND MOUNTING AS REQUIRED	
XXXXX	277/480 VOLT PANELBOARD	
	120/208 VOLT PANELBOARD	
-0-	WALL MOUNTED S.P.S.T. TOGGLE SWITCH	48"
- 69- P - 69- M	WALL MOUNTED TOGGLE SWITCH WITH PILOT LIGHT MOTOR RATED TOGGLE SWITCH	48"
S(30/3) 2	DISCONNECT SWITCH (FRAME/POLES/FUSE–IF REQUIRED) MOTOR – NUMBER INDICATES HORSEPOWER (F=FRACTIONAL)	
AFF/AFG	ABOVE FINISHED FLOOR/ABOVE FINISHED GRADE	
WP	WEATHER PROOF	
(F) (T)	FIRE ALARM CONNECTION TO SPRINKLER FLOW SWITCH FIRE ALARM CONNECTION TO SPRINKLER TAMPER SWITCH	
	1	1

LEGEND NOTES (APPLY THIS SHEET ONLY)

- $\langle 1 \rangle$ provide J-box and disconnect switch for connection of heat trace. PROVIDE 120V HOMERUN TO A SPARE 20A BREAKER IN NEAREST AVAILABLE NORMAL POWER PANEL. PROVIDE NEW BREAKER TO REPLACE SPACE IF REQUIRED. COORDINATE PANEL LOCATION WITH OWNER. COORDINATE CONNECTION OF HEAT TRACE WITH DIVISION 23.
- 2 PROVIDE FLOW AND TAMPER SWITCHES FOR FIRE PROTECTION LEAD IN. COORDINATE LOCATIONS AND QUANTITIES WITH FIRE PROTECTION EQUIPMENT CONSULTANT AND INSTALLER.

ABBREVIATIONS

A, Al Al	./C D DJ	ABOVE CEILING ACCESS DOOR ADJUSTABLE	ID IN	INSIDE DIMENSION INCHES
AI AI AI	FF UTO C	ABOVE FINISHED FLOOR AUTOMATIC AIR CONDITIONING	KW	KILOWATTS
B B B B B B B	AL SDD S/F S/G S'FLY	BALANCING BACKDRAFT DAMPER BELOW FLOOR BELOW GRADE BUTTERFLY	LAT LB LG LRG LWR LWS	LEAVING AIR TEMPERATURE POUNDS LINEAR GRILLE LINEAR RETURN GRILLE LOOP WATER RETURN LOOP WATER SUPPLY
B B	BHP BCO	BRAKE HORSEPOWER BASE CLEANOUT	MIN MAX MD	MINIMUM MAXIMUM MANUAL DAMPER MOTOR OPERATED DAMPER
C C C C	FM BCR D U	CUBIC FEET PER MINUTE CURVED BLADE CEILING REGISTER CEILING DIFFUSER CONDENSING UNIT	MOD MFR	MOTOR OPERATED DAMPER MANUFACTURER
	W HWS HWR WS WR CON	COLD WATER (DOMESTIC) CHILLED WATER SUPPLY CHILLED WATER RETURN CONDENSER WATER SUPPLY CONDENSER WATER RETURN CONCENTRIC CLEANOUT	NC NG NFWH NO NOM	NORMALLY CLOSED NATURAL GAS NON-FREEZE WALL HYDRANT NORMALLY OPEN NOMINAL
C	COND	CONDENSATE	OA OD OBD	OUTSIDE AIR OUTSIDE DIMENSION OPPOSED BLADE DAMPER
d D d d	b N R o B	DRY BULB DOWN DRAIN DITTO DECIBELS DRAWING	PIU PSI	POWERED INDUCTION UNIT POUNDS PER SQUARE INCH
E, E, E E E E E E	A AT CC F OD R SP	EACH ENTERING AIR TEMPERATURE ECCENTRIC EXHAUST FAN EMERGENCY OVERFLOW DRAIN EXHAUST REGISTER EXTERNAL STATIC PRESSURE	RA RAD RED RL RS RTU RAR	RETURN AIR RADIUS RETURN AIR GRILLE REDUCER REFRIGERANT LIQUID REFRIGERANT SUCTION ROOFTOP UNIT RETURN AIR REGISTER
E` E	WT XH FF	ENTERING WATER TEMPERATURE EXHAUST EFFICIENCY	SP SPS SA SAN	STATIC PRESSURE STATIC PRESSURE SENSOR SUPPLY AIR SANITARY
F F(F(F) F1 F1 F1 F1 F1	CO CU SD D L DR LR	FAHRENHEIT FLOOR CLEANOUT FAN COIL UNIT FIRE/SMOKE DAMPER FIRE DAMPER OR FLOOR DRAIN FLOOR DRAIN (only) FLOOR	SD SEN SQ SR ST SS	SMOKE DAMPER SENSIBLE SQUARE SUPPLY REGISTER STORM SPLIT SYSTEM
F(F(F(F(F(F(F(OB OR OS OT PM PS	FLAT ON BOTTOM FUEL OIL RETURN FUEL OIL SUPPLY FLAT ON TOP FEET PER MINUTE FEET PER SECOND	TEMP TG TYP	TEMPERATURE TRANSFER GRILLE TYPICAL
F	T	FEET	UON	UNLESS OTHERWISE NOTED
G G G G G	SA SPM SL SCO	GATE GAUGE GALLONS PER MINUTE GLOBE GRADE CLEANOUT	V VA VTR VAV	VENT VALVE VENT THRU ROOF VARIABLE AIR VOLUME
T T T T T T T T T T	ID IP ITG IW IWR IWRR IWS Iz	HUB DRAIN HORSEPOWER HEATING HOT WATER (DOMESTIC) HOT WATER RETURN HOT WATER REVERSE RETURN HOT WATER SUPPLY HERTZ	wb WC WHA WT W	WET BULB WATER COLUMN WATER HAMMER ARRESTOR WEIGHT WASTE

GENERAL NOTES

1. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE TENANT MECHANICAL SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT, ACCESSORIES, OPTIONS AND CONTROLS, COMPLETELY COORDINATED WITH ALL DISCIPLINES. ALL ITEMS AND LABOR REQUIRED FOR A COMPLETE TENANT MECHANICAL SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS AND THE BASE BUILDING CONTRACT DOCUMENTS SHALL BE FURNISHED WITHOUT INCURRING ADDITIONS TO THE CONTRACT.

2. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT PARTITION LAYOUTS. REFLECTED CEILING PLANS, DIMENSIONS, ETC.

3. VISIT SITE AND CAREFULLY EXAMINE EXISTING CONDITIONS PRIOR TO SUBMITTING BID. THE EXISTING CONDITIONS SHOWN ARE BASED ON DOCUMENTS PROVIDED BY OTHERS AND HAVE NOT BEEN VERIFIED BY THE ENGINEER. IF EXISTING CONDITIONS DIFFER FROM DRAWINGS IN SUCH A MANNER THAT WILL AFFECT PRICING, CONTRACTOR WILL NOTIFY OWNER SO THAT A RESOLUTION CAN BE MADE PRIOR TO SUBMITTING BIDS. NO ALLOWANCE WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS.

SECTION 23 05 33

HEAT TRACING FOR HVAC PIPING

1.0 GENERAL

1.01 DESCRIPTION

- A. All work specified in this Section is governed by the Common Work Results for HVAC Section 23 05 00.
- B. This Section 23 05 33 and the accompanying drawings cover the provisions of all labor, equipment, appliances and materials, and performing all operations in connection with furnishing and installing the electric heat tracing as specified herein and as shown. This work includes, but is not limited to, the following:
- 1. A complete UL listed system of heaters, components, and controls to prevent water-carrying outdoor piping from freezing.
- C. Only one electrical power connection shall be required for each system.
- D. Electric heat tracing shall be UL listed.

1.02 INTENT

A. It is the intent of this Section of the specifications to provide complete, operable, fully wired electric heat tracing systems as shown and specified, which operate efficiently and automatically.

1.03 BASIS OF DESIGN

A. The basis of design is Raychem XL—Trace. Acceptable alternate manufacturers are Chromalox and nVent/Raychem, subject to substitution requirements.

2.0 PRODUCTS

2.01 ELECTRIC HEAT TRACING

- A. The self-regulating heater shall consist of two (2) 16 AWG tinned-copper bus wires embedded in parallel in a self-regulating polymer core that varies its power output to respond to temperature all along its length, allowing the heater to be crossed over itself without overheating, to be used directly on plastic pipe, and to be cut to length in the field. The heater shall be covered by a radiation cross-linked, modified polyolefin, dielectric jacket. Special attention is called to installations on plastic piping.
- Heat tracing shall be approved for plastic piping installation where applicable. B. In order to provide energy conservation and to prevent overheating, the heater shall have a self-regulating factor of at least 90 percent. The self-regulation factor is defined as the percentage reduction, without thermostatic control, of the heater output going from 40°F pipe temperature operation to 150°F pipe temperature operation.
- C. The heat tracing shall be 120V/1-phase. Coordinate with Division 26.
- D. The heat tracing shall operate on the available line voltage indicated without the use of transformers.
- E. The heater shall be sized according to the following table. The required heater output rating is in watts per foot at 50°F. Minimum Ambient of -10°F Pipe Size

Fipe Size	Minimum Amblent of -101
3 inch or less	5 watts
4 & 5 inch	5 watts
6 inch	8 watts
8 inch	2 strips of 5 watts

- 10 inch to 14 inch 2 strips of 8 watts F. Provide all power connections, end seals, splices and tee kits.
- G. The system shall be controlled by a bulb-sensing thermostat set at 40°F either
- directly or through an appropriate contactor.
- 3.0 EXECUTION

3.01 INSTALLATION

- A. The electric heat tracing and associated controls shall be installed in strict accordance with the manufacturer's recommendations.
- B. The thermostatic control system shall be completely wired under this Division 23. Wiring shall be in accordance with the NEC and shall meet all requirements for this installation.
- C. Apply the heat tracing linearly on the pipe after piping has been successfully pressure tested. Secure the heater to the piping with cable ties or fiberglass tape.
- D. Apply "ELECTRIC TRACED" signs to the outside of the piping insulation.

3.02 TESTS

A. After installation and both before and after installing the piping insulation, subject heat tracing to testing using a 1000 VDC megger. Insulation resistance shall be 20 to 1000 megaohms regardless of length.

END OF SECTION

<u> LEVEL 1 FLOOR PLAN – MECHANICAL</u> ▲ M-1.1 / 1/8"=1'-0"

KEY NOTES (APPLY TO THIS SHEET)

(1) FIRE SPRINKLER MAIN LOCATED OUTSIDE BUILDING(BY OTHERS). PROVIDE HEAT TRACE, INSULATION, AND WATER TIGHT JACKET.

 $\langle 2 \rangle$ Fire sprinkler main located below grade. See Civil plans for continuation.

HEAT TRACE AND INSULATION SPECIFICATIONS:

- PIPING INSULATION INSTALLED OUTSIDE THE BUILDING SHALL BE NOMINAL 2" THICK PREFABRICATED 2 LB/FT3 DENSITY POLYISOCYANURATE INSULATION (TRYMER 2000 XP OR APPROVED EQUAL) WITH WATERPROOF MASTIC AND GLASS FIBER JACKET FINISHED WITH AN ALUMINUM JACKET WITH WATERPROOF SILICONE CAULK JOINTS AND SEAMS. INSULATION WITH A MAXIMUM K OF 0.19 BTU/IN/HR/SF/*F AT A MEAN TEMPERATURE OF 75°F SHALL BE USED.
- PIPING INSULATION INSTALLED UNDERGROUND SHALL BE NOMINAL 2" THICK PREFABRICATED 2 LB/FT3 DENSITY POLYISOCYANURATE INSULATION (TYMER 2000 XP OR APPROVED EQUAL) WITH HDPE JACKET. JACKET SHALL CONFORM TO ASTM D1248 AND D3350, BE EXTRUDED, HAVE A MINIMUM THICKNESS OF 175 MILS.
- HEAT TRACING SHALL BE PROVIDED FOR ALL WATER-CARRYING PIPING EXPOSED TO OUTDOORS. BASIS OF DESIGN IS RAYCHEM-XL TRACE, 120V/1-PHASE, 500 WATTS. PROVIDE ALL COMPONENTS FOR A COMPLETE INSTALLATION. HEAT TRACING SHALL BE UL LISTED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

