

AIR HANDLING UNIT SCHEDULE														
	DAIKIN	AIRFLOW	OUTDOOR	ESP	BRAKE	MOTOR	HEATIN	IG COIL		CC	OOLING	COIL		
TAG	MODEL NO.	CFM	AIR-CFM	IN. WG	H.P.	H.P.	KW	STEPS	EADB/WB	LADB/WB	GPM	WTR. P.D.	MAX-FPM	REMARKS
												FT. WTR.		
AHU-1	CAH008GDAM	3,000	1,500	1.5	2.37	3	17	SCR	84.2/71.2	54.2/54.0	32.8	13.5	400	1,2,3,4,5,6

STRUCTURE

BOLT & LOCK WASHER

1-1/2"x1-1/2"x1/4"

2 AIR HANDLING UNIT SUPPORT DETAIL

ANGLE IRON

L.P. SUPPLY

TRUNK DUCT

(INSULATED)

22 GAUGE GALVANIZED DRAIN

PAN 3" LARGER THAN AHU

ON ALL SIDES, 3" DEEP

SEISMIC RESTRAINT CABLE -

AT 45 DEGREE ANGLES

SECURED TO STRUCTURE

TYPICAL FOR 4 CORNERS

SUSPENDED FROM —

STRUCTURE ABOVE

1. UNIT SELECTION SHALL INCLUDE 0.57" FILTER LOAD.

ENTERING CHILLED WATER TEMPERATURE SHALL BE 48°F AND THE WATER TEMPERATURE RISE SHALL BE 10°F. 3. PROVIDE FLAT FILTER SECTION WITH FOUR INCH THICK MERV 8 FILTERS AND 2 EXTRA SETS OF FILTERS.

4. FAN SECTION SHALL BE INTERNALLY ISOLATED WITH EXTENDED LUBE LINES.

PROVIDE UNIT MOUNTED HAND/OFF/AUTO VARIABLE FREQUENCY DRIVE WITH INTEGRAL DISCONNECT. 6. AIR HANDLER TO BE HORIZONTAL DRAW THRU WITH 4" BASE RAIL. CONFIGURATION SHALL BE FLAT FILTER/ELECTRIC HEATING COIL/CW COIL/FAN.

	SINGLE DUCT TERMINAL UNIT SCHEDULE									
TAC	PRICE	AIR INLET	COOLING		HEATING			MAX. UNIT P.D. REMAI	REMARKS	
TAG	MODEL	INCHES	MAX CFM	MIN CFM	CFM	KW	STAGES	IN. W.C.	KLWAKKS	
V-1-1	SDV5	12ø	1,800	700	700	7.8	2	0.25	1,2,3	
V-1-2	SDV5	8ø	600	300	300	3.3	2	0.25	1,2,3	
V-1-3	SDV5	8ø	500	150	150	1.7	1	0.25	1,2,3	
V-1-4	SDV5	8ø	700	400	400	4.4	2	0.25	1,2,3	

PROVIDE ELECTRIC HEATING COIL ON BOX DISCHARGE WITH 4'-0" STRAIGHT PLENUM BEFORE FITTINGS OR TAKEOFFS. PROVIDE 1" THICK FOIL FACED INSULATION, DOOR INTERLOCKING DISCONNECT SWITCH, AND LINE FUSE. CONTROLS SHALL BE PROVIDED BY THE CONTROLS CONTRACTOR AND FACTORY MOUNTED.

AIR HANDLING

→ 3/8"ø (TYPICAL FOR 6)

- DRAIN TRAP

PER DETAIL

- NORMALLY CLOSED

BALL VALVE

FLOAT SWITCH

─ 4" BASE RAIL

SPIN-IN FITTING WITH 45° EXTRACTOR

ROUND SHEET METAL RUNOUT (INSULATED)

4 SLOT DIFFUSER DETAIL

AND MANUAL BALANCING DAMPER WITH

STANDOFF LOCKING QUADRANT (INSULATED)

NEAREST

FLOOR DRAIN

FLEXIBLE DUCT RUNOUT (SAME SIZE

AS DIFFUSER NECK) 8'-0" LONG MAX.

SLOT DIFFUSER (SEE SCHEDULE

FOR MODEL AND SIZE)

GALVANIZED METAL PLENUM EXTERNALLY

SEE ARCHITECTURAL DRAWINGS

AND SPECIFICATIONS FOR EXACT CEILING TYPE

INSULATED TO MATCH DUCT

00	1,2,3,4,5,6		0	SQ. PLAQUE SUPPLY	PRICE	SPD AS	LAY-IN	551-750	14"ø
			(D)	PERFORATED RET/EXH	PRICE	APDDR	LAY-IN	0-300	10"x10"
			Œ	PERFORATED RET/EXH	PRICE	APDDR	LAY-IN	0-1,000	22"x22"
			F LINEAR SLOT SUPPLY		PRICE	TBD3100	LAY-IN	126-250	8"ø
			<u> </u>	LINEAR SLOT SUPPLY	PRICE	SDS100	TYPE 2	251-350	10"ø
l.			\bigcirc	LINEAR SLOT RET/EXH	PRICE	SDR100	TYPE 2	251-350	10"ø
		J	\odot	HD LOUVERED RET/EXH	PRICE	96	SURFACE		18"x36"
	 PROVIDE WITH STANDARD WHITE FINISH. PROVIDE WITH BLACK B-17 FINISH. PROVIDE ALUMINUM OR ALUMINIZED STEEL CONSTRUCTION. PROVIDE WITH TWO (2) 1" SLOTS, T-BAR CLIPS, AND CENTER NOTCH. 								
UNIT D.	REMARKS 7. PROVIDE HEAVY GAUGE STEEL CONSTRUCTION.								N.

MANUFACTURER

PRICE

PRICE

DESCRIPTION

SQ. PLAQUE SUPPLY

SQ. PLAQUE SUPPLY

IS	OLATION A	ND SI	EISMI	C SCHEDUL	_E		
RISK	CATEGORY = III		SEISMIC DESIGN CATEGORY = D				
EQUIPMENT TAG	COMPONENT lp	ISOLATION SPECIFICATION				SEISMIC REST. SPECIFICATION	ISOLATION DEFLECTION
AIR HANDLING UNITS (SUSP.)	1.0	INTERNAL BY MANUFACTURER					
INLINE FANS	1.0	SPEC D		SPEC SC	1"		
VAV (NON-FAN) <= 75 LBS	1.0	NO	NE	NONE	N/A		
VAV (NON-FAN) > 75 LBS	1.0	NO	NONE SPEC		N/A		
AIR DISTRIBUTION > 20 LBS	1.0	NONE		TWO 12 GA WIRE TO STRUCTURE	N/A		
AIR DISTRIBUTION <= 20 LBS	1.0	NO	NE	NOTE 2	N/A		

AIR DISTRIBUTION SCHEDULE

SPD AS LAY-IN

FRAME

LAY-IN

0-125

126-250

6"ø

8"ø

CFM NECK SIZE FACE SIZE MAX NC REMARKS

24"x24"

24"x24"

24"x24"

12"x12"

24"x24"

4"x48"

6¾"x48"

6¾"x48"

20"x38"

35

35

35

1,3

1,3

1,3

1,3

2,4

2,5,6

2,5,6

1,7

MODEL

SPD AS

BE SIZED BY THE SEISMIC RESTRAINT SUPPLIER.

DIFFUSERS WEIGHING LESS THAN 20 LBS MUST BE MECHANICALLY ATTACHED TO CEILING GRID UNLESS NOTED OTHERWISE, BUT REQUIRE NO ADDITIONAL RESTRAINT.

		FAI	N SCH	EDULE			
TAG	GREENHECK MODEL NO.	TYPE	CFM	ESP	MOTOR H.P./W.	SONES (MAX.)	REMARKS
SF-1	SQ-130-VG	INLINE	1,500	1.0	3/4	15	1,2,3

- PROVIDE DIRECT DRIVE CENTRIFUGAL INLINE FAN WITH DISCONNECT SWITCH, SLOPED FILTER
- MEASURING STATION.

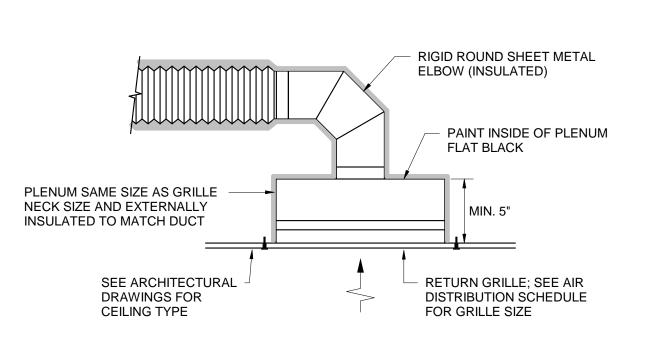
1.0 1.0	ISOLATION SPECIFICATION INTERNAL BY MANUFACTURER SPEC D NONE	SEISMIC REST. SPECIFICATION SPEC SC NOTE 1 SPEC SC	ISOLATION DEFLECTION 2" 1"
1.0	MANUFACTURER SPEC D	NOTE 1 SPEC SC	1"
1.0	NONE	NONE	N/A
1.0	NONE	SPEC SC	N/A
AIR DISTRIBUTION > 20 LBS		TWO 12 GA WIRE TO STRUCTURE	N/A
AIR DISTRIBUTION <= 20 LBS 1.0		NOTE 2	N/A
	1.0	1.0 NONE	1.0 NONE TWO 12 GA WIRE TO STRUCTURE

FAN SCHEDULE										
TAG	GREENHECK MODEL NO.	TYPE	CFM	ESP	MOTOR H.P./W.	SONES (MAX.)	REMARKS			
SF-1	SQ-130-VG	INLINE	1,500	1.0	3/4	15	1,2,3			

- BOX WITH 2" THICK MERV 8 FILTERS, AND 1" THICK INSULATED HOUSING FOR FAN AND FILTER PROVIDE VARI-GREEN EC MOTOR WITH CONSTANT AIRFLOW CONTROL AND AIRFLOW
- INTERLOCK FAN TO OPERATE WITH ASSOCIATED AIR HANDLING UNIT DURING OCCUPIED
- TIMES THROUGH THE CENTRAL CONTROL SYSTEM.

H = FAN INLET PRESSURE (IN. W.C.) + 1' HAND-TIGHT THREADED ── HVAC EQUIPMENT CLEANOUT PLUG (TYP.) FROM COIL EXTEND TO FLOOR DRAIN FAN INLET PRESSURE (NEGATIVE) WATER SEAL

5 CONDENSATE DRAIN DETAIL



MODULATING

CONTROL VALVE

→ PT PORT (TYPICAL)

- ¾" GATE VALVE

AND MALE HOSE

FLEXIBLE DUCT RUNOUT (SAME SIZE

AS DIFFUSER NECK) 8'-0" LONG MAX.

RIGID ROUND SHEET METAL

ELBOW (INSULATED)

PI 2-WAY

COOLING

COIL

SPIN-IN FITTING WITH 45° EXTRACTOR

ROUND SHEET METAL

RUNOUT (INSULATED)

INSULATE BACKPAN

DIFFUSER (SEE SCHEDULE FOR MODEL AND SIZE)

OF ALL DIFFUSERS

AND GRILLES

(3) CEILING DIFFUSER DETAIL

AND MANUAL BALANCING DAMPER WITH

STANDOFF LOCKING QUADRANT (INSULATED)

1 AHU PIPING DETAIL

EX SHUT-OFF VALVE ->

Y-STRAINER WITH

MANUAL AIR VENT

THERMOMETER ——

UNION (TYPICAL) ---

L.P. SUPPLY

TRUNK DUCT

(INSULATED)

DRAIN

VALVE

(TYPICAL)

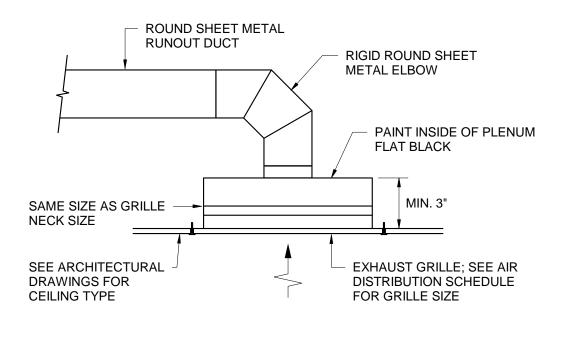
BLOWDOWN

(TYPICAL)

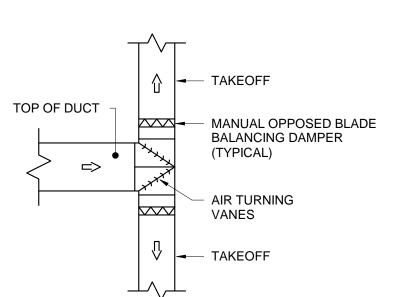
(TYPICAL)

(TYPICAL)

6 DUCTED RETURN GRILLE DETAIL



7 EXHAUST GRILLE DETAIL



8 SPLITTER DETAIL M2.1 NO SCALE

GENERAL NOTES

- 1. VISIT SITE PRIOR TO BIDDING. THIS CONTRACTOR SHALL DETERMINE DIFFICULTY OF INSTALLATION AND REFLECT THIS IN HIS BIDDING.
- 2. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING
- PLANS FOR EXACT LOCATIONS OF DOORS, WINDOWS, AIR DISTRIBUTION, ETC. 3. THIS CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND LOCATIONS IN THE FIELD.
- 4. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
- 5. EXISTING PIPE, DUCTWORK, CONDUIT, ETC. THAT INTERFERES WITH THE ROUTING OF NEW SYSTEMS SHALL BE RELOCATED. THIS CONTRACTOR SHALL INCLUDE THE COST OF SUCH IN HIS BID UNLESS NOTED OTHERWISE.
- 6. WATER SYSTEMS SHALL BE DRAINED AS REQUIRED FOR INSTALLATION OF WORK. UPON COMPLETION, SYSTEM SHALL BE FILLED WITH WATER AND VENTED OF ALL AIR.
- 7. ALL PIPING AND DUCTWORK INSULATION SHALL BE RUN CONTINUOUSLY THROUGH
- 8. ALL PIPING IS SHOWN DIAGRAMMATIC. HOWEVER, THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, PIPING AND INSULATION FOR ALL OFFSETS AND/OR CHANGES
- IN ELEVATION. 9. EXTEND ALL DRAIN LINES TO NEAREST FLOOR DRAIN OR AS INDICATED – SO ROUTED
- AIR HANDLING UNITS SHALL BE TRAPPED PER STATIC PRESSURE REQUIREMENTS. ALL WATER PIPING SHALL PITCH DOWN IN DIRECTION OF FLOW ONE-INCH PER FIFTY

AS TO AVOID INTERFERENCE WITH PASSAGEWAYS AND MAINTENANCE, DRAINS FROM

FEET WITH MANUAL AIR VENTS AT ALL HIGH POINTS AND 3/4-INCH DRAIN VALVES WITH STANDARD HOSE CONNECTION AT ALL LOW POINTS.

11. ALL VALVES AND SPECIALTIES SHALL BE LINE SIZE UNLESS NOTED OTHERWISE, USING

- ECCENTRIC REDUCERS ON AUTOMATIC VALVES AS REQUIRED. 12. MINIMUM PIPE SIZE SHALL BE 3/4-INCH UNLESS INDICATED OTHERWISE.
- 13. ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE SPECIFICATIONS AND FURTHER SUPPORTS OR HANGERS SHALL BE PROVIDED TO PREVENT WEIGHT OF PIPING BEING PLACED ON EQUIPMENT.
- 14. ALL DUCTWORK SPECIFIED TO BE LINED SHALL BE INCREASED IN SIZE TO ALLOW FOR
- 15. WHERE TRUNK DUCTS ARE ROUTED ABOVE INACCESSIBLE CEILINGS PROVIDE CABLE

OPERATED REMOTE CONTROLLED VOLUME DAMPERS AT BRANCH TAKEOFFS.

- DAMPERS SHALL BE METROPOLITAN AIR TECHNOLOGY MODEL RT-150 OR APPROVED
- 16. WHERE 2'-0" x 2'-0" LAY IN GRILLES ARE SPECIFIED IN HARD CEILINGS, A PLASTER FRAME SHALL BE PROVIDED SO THE GRILLE CAN LAY IN THE CEILING.
- 17. PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING OR ADJUSTMENT PER MANUFACTURER'S INSTRUCTIONS. PROVIDE FULL SPACE FOR COIL REMOVAL AND REPLACEMENT FOR ALL CHILLED WATER AIR HANDLING UNITS.
- 18. INSTALL ALL VAV BOXES WITHIN 24" OF CEILING TO ALLOW FOR SERVICE ACCESS.
- 19. THIS CONTRACTOR SHALL PROVIDE ALL ITEMS OF MISCELLANEOUS STEEL AS

REQUIRED FOR INSTALLATION OF ALL MECHANICAL ITEMS.

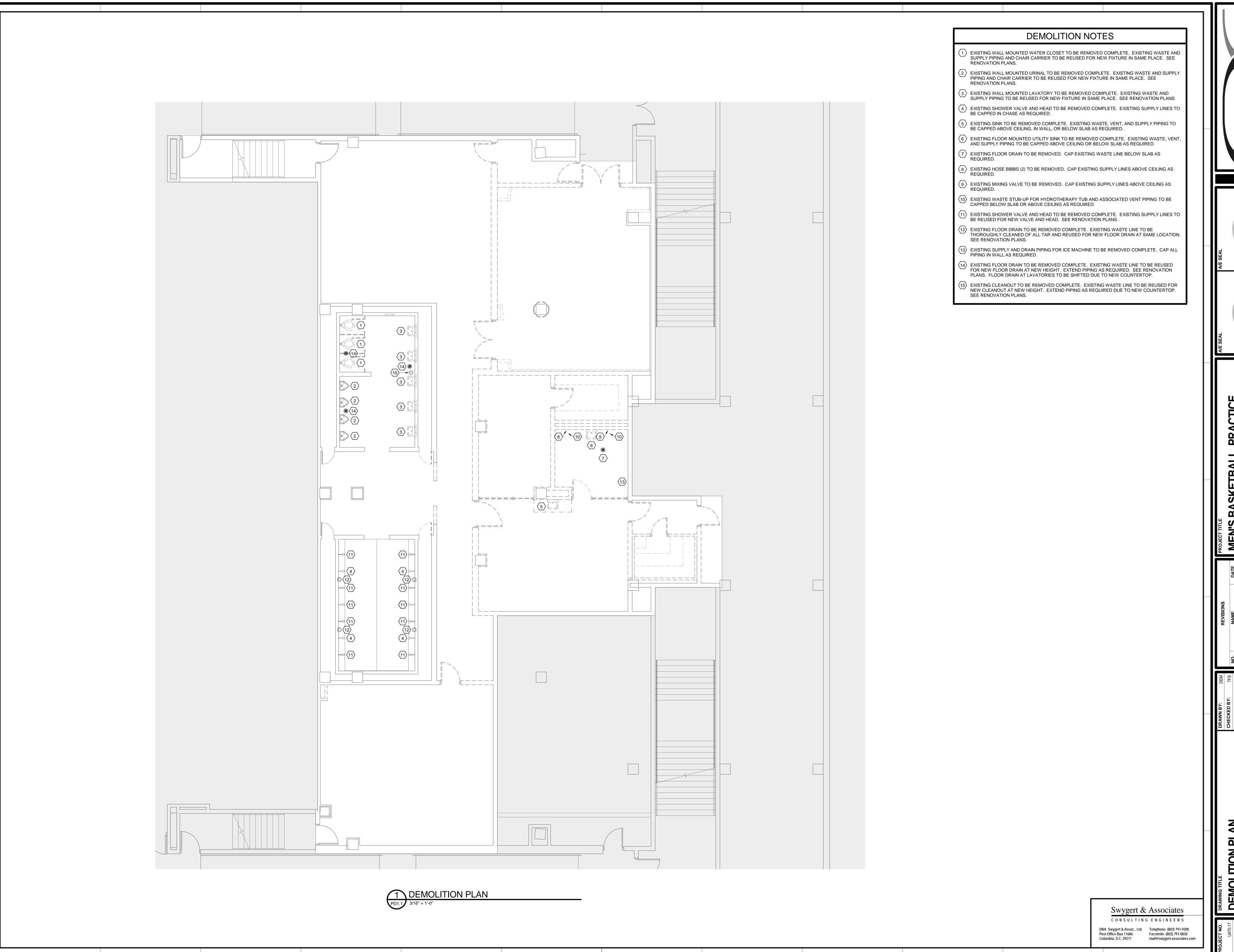
DIVISION 23.

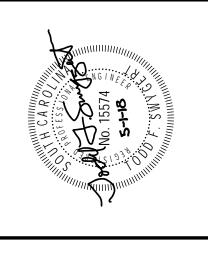
- 20. THIS CONTRACTOR SHALL DO ALL CONTROL WIRING. DIVISION 26 WILL DO ALL POWER WIRING. ALL WIRING SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE. CONTROL WIRING SHALL BE CONCEALED WITHIN WALL AND ALL CONTROL WIRING SHALL BE ROUTED IN EMT CONDUIT. DUCT DETECTORS PROVIDED BY DIVISION 26 SHALL BE INSTALLED BY DIVISION 23. POWER WIRING AND FIRE ALARM CONNECTIONS SHALL BE BY DIVISION 26. CONTROL WIRING FOR UNIT SHUTDOWN SHALL BE BY
- 21. LOCATE ALL SPACE CONTROL INSTRUMENTS 4'-0" ABOVE FINISHED FLOOR TO TOP OF DEVICE IN ACCORDANCE WITH ADA. COORDINATE LOCATIONS WITH ARCHITECTURAL ELEVATIONS TO AVOID ITEMS INCLUDING BUT NOT LIMITED TO CUSTOM FINISHES, FIXED CASEWORK, FURNITURE, AND DOOR SWINGS. IN THE EVENT OF CONFLICTS IN THE FIELD, THE CONTRACTOR SHALL BRING THIS TO THE ATTENTION OF THE A/E FOR FINAL APPROVAL OF LOCATION.
- 22. INSTRUMENT TEST HOLES SHALL BE LOCATED IN EACH SUPPLY DUCT OR ZONE DUCT, IN EACH RETURN AIR DUCT AND EACH OUTSIDE AIR DUCT.
- 23. CORRECT SETTINGS ON ALL BALANCING FITTINGS SHALL BE PERMANENTLY MARKED. PROVIDE ORANGE FLAGGING RIBBON ON EACH DAMPER HANDLE FOR EASY
- 24. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY DISMANTLING OF EQUIPMENT TO BE REMOVED.
- 25. ITEMS REMOVED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS NOTED OTHERWISE, AND SHALL BE DISPOSED OF PROPERLY.
- 26. THE HVAC SYSTEMS SHALL NOT BE OPERATED DURING HEAVY CONSTRUCTION OPERATIONS INCLUDING MASONRY, GYPSUM BOARD SANDING, HEAVY CLEANUP ACTIVITIES, OR OTHER ACTIVITIES THAT CREATE AIRBORNE PARTICLES OR DEBRIS. ALL SYSTEMS SHALL BE CLEAN OF CONSTRUCTION DEBRIS, DUST AND DIRT AT FINAL COMPLETION. DUCT CLEANING AND UNIT/COIL CLEANING SHALL BE PERFORMED AS

LEGEND							
SYMBOL	DESCRIPTION						
¿—CHWS—-	CHILLED WATER SUPPLY LINE						
¿—CHWR—-}	CHILLED WATER RETURN LINE						
<u></u> → D →	DRAIN LINE						
$\longrightarrow \bowtie \longrightarrow$	SHUTOFF VALVE						
≥ } 	STRAINER WITH BLOWDOWN						
⊱ —- >	UNION						
د ے , وےے	PIPE TURNS TO, AWAY						
چ آ ج	THERMOMETER / PRESSURE GAGE						
ج ۲۰۰۱ ج	THERMOMETER WELL CAPPED / GAGE COCK						
├	CONCENTRIC REDUCER						
₹	ECCENTRIC REDUCER						
A)100	TYPE "A" DIFFUSER, 100 CFM						
T	ZONE TEMPERATURE SENSOR						
Θ	RELATIVE HUMIDITY SENSOR						
(c)	CARBON DIOXIDE SENSOR						
MBD	MANUAL OPPOSED BLADE BALANCING DAMPER						
	RECTANGULAR SUPPLY DUCTWORK						
	RETURN AND FRESH AIR DUCTWORK						
	EXHAUST DUCTWORK						
48x24	48"x24" RECTANGULAR DUCT						
4	LOUVERED DOOR BY GENERAL CONTRACTOR						
AFF	ABOVE FINISHED FLOOR						
•	CONNECTION POINT OF NEW TO EXISTING						

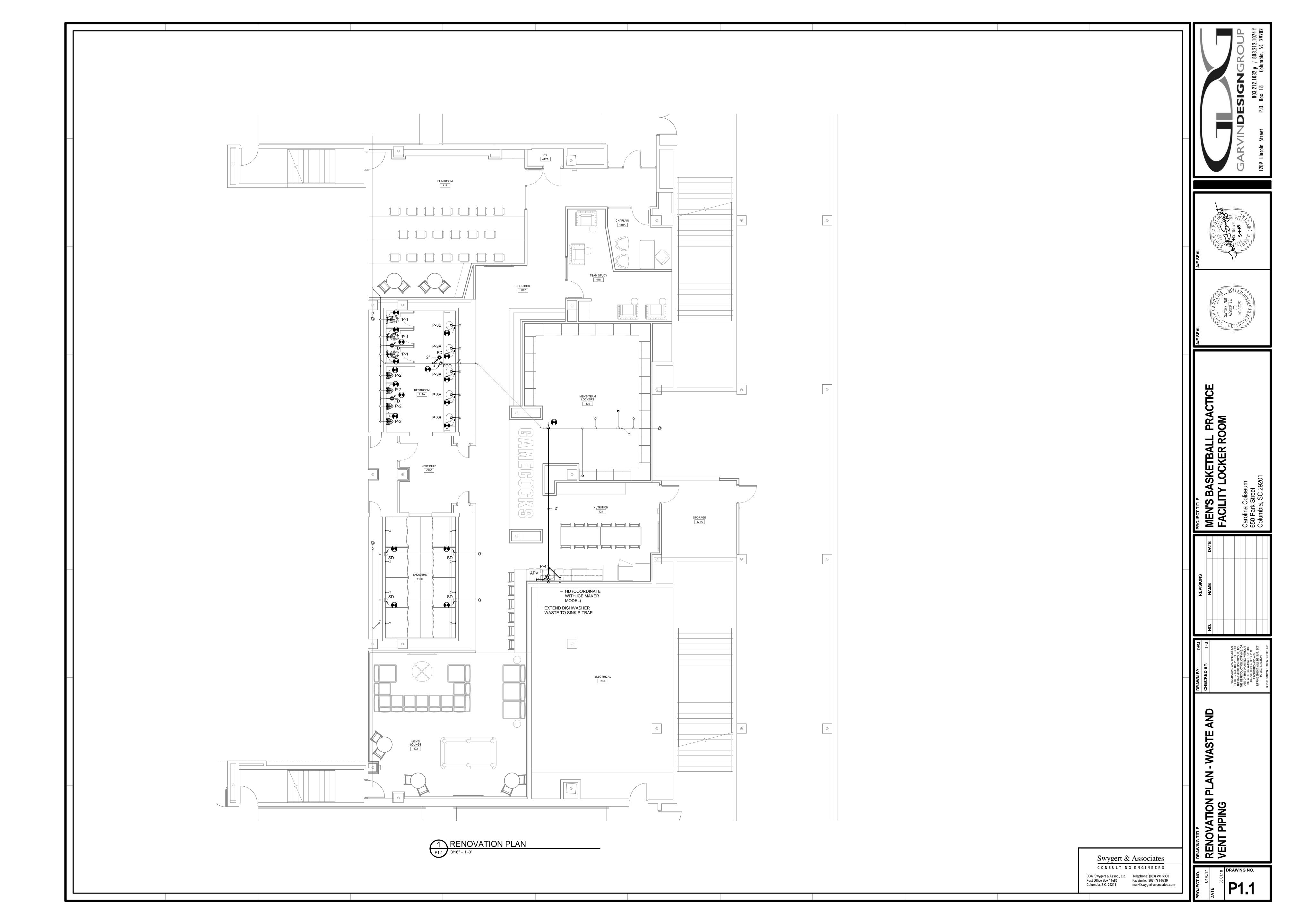
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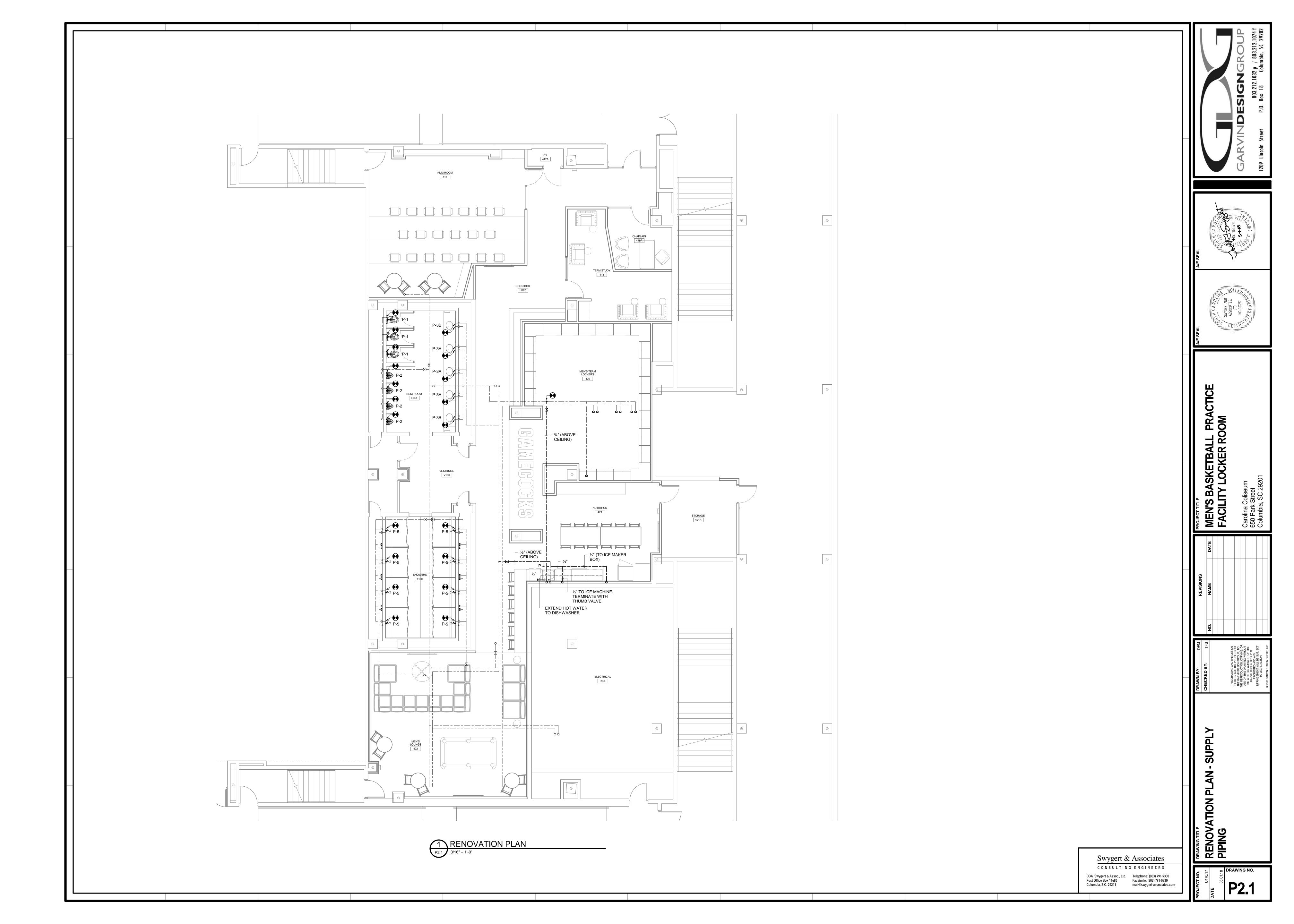
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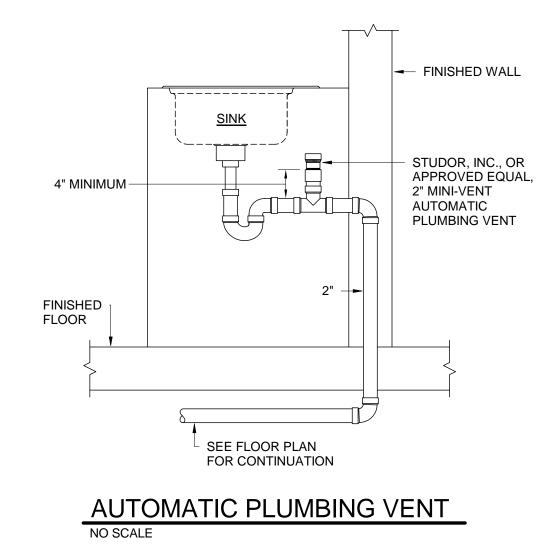
		P	LUMBING	G FIXTURI	E SCHED	ULE		
						MIN. S	UPPLY	
P. NO.	FIXTURE	MFGR.	NAME	MFGRS. NO.	SIZE	CW	HW	REMARKS
P-1	WATER CLOSET	KOHLER	KINGSTON	K-4325		1"		WITH SLOAN MODEL 111-XL FLUSH VALVE, AND BENEKE 527 SEAT. REUSE EXISTING CARRIER.
P-2	URINAL	KOHLER	DEXTER	K-5016-ET		3/4"		WITH SLOAN MODEL 186-0.5-XL FLUSH VALVE. REUSE EXISTING CARRIER.
P-3A	LAVATORY	KOHLER	CAXTON	K-2210	19¼"x16¼"	3/8"	3/8"	UNDERCOUNTER MOUNTED WITH DELTA MODEL 22C651 FAUCET, WATTS, OR APPROVED EQUAL, SERIES LFUSG-B ASSE 1070 THERMOSTATIC MIXING VALVE, McGUIRE 155A GRID DRAIN, McGUIRE H165 3/8" CAST BRASS SUPPLIES WITH STOPS, AND McGUIRE 8872 1-1/4" P-TRAP. MOUNT MIXING VALVE AS HIGH AS POSSIBLE UNDER COUNTERTOP.
P-3B	LAVATORY	KOHLER	CAXTON	K-2211	20¼"x17¼"	3/8"	3/8"	UNDERCOUNTER MOUNTED WITH DELTA MODEL 22C651 FAUCET, WATTS, OR APPROVED EQUAL, SERIES LFUSG-B ASSE 1070 THERMOSTATIC MIXING VALVE, McGUIRE 155WC OFFSET GRID DRAIN, McGUIRE H165 3/8" CAST BRASS SUPPLIES WITH STOPS, AND McGUIRE 8872 1-1/4" P-TRAP. MOUNT MIXING VALVE AS HIGH AS POSSIBLE UNDER COUNTERTOP.
P-4	SINK	ELKAY	LUSTERTONE	ELUH281610	30½"x18½"	1/2"	1/2"	UNDERCOUNTER MOUNTED WITH DELTA MODEL 9978-DST FAUCET WITH PULL OUT SPRAY HOSE, LK-35 CUP STRAINER, McGUIRE 2167 1/2" CAST BRASS SUPPLIES WITH STOPS, McGUIRE 8912 1-1/2" P-TRAP, AND T&S BRASS MODEL B-1210- 01-WFK GLASS FILLER WITH WATER FILTRATION KIT. NOTE DEPTH OF SINK WHEN ROUGHING IN PIPING.
P-5	SHOWER	DELTA		T17240		1/2"	1/2"	WITH MONITOR 17 SERIES PRESSURE BALANCED MIXING VALVE AND RP42758 TOUCH CLEAN SHOWER HEAD.
FD	FLOOR DRAIN	ZURN		ZN-415-S				WITH 5"x5" NICKLE BRONZE STRAINER, P-TRAP, AND PROSET, OR APPROVED EQUAL, TRAP GUARD.
SD	SHOWER DRAIN	ZURN		ZN-400-7K				WITH 6-5/8"x7" NICKLE BRONZE ANGULAR STRAINER, AND P- TRAP.

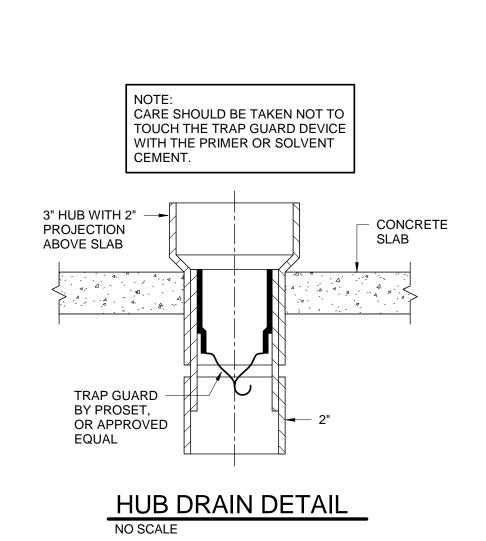
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OL	1 N L I	\ /\		

- 1. ALL WORK SHALL BE PERFORMED ACCORDING TO ALL LOCAL, STATE, NATIONAL CODES, AND THE 2015 INTERNATIONAL PLUMBING CODE.
- DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS, FIXTURE LOCATIONS, ETC.
- 3. CONTRACTOR SHALL, PRIOR TO BIDDING, VISIT THE SITE AND DETERMINE SCOPE OF WORK, MATERIALS REQUIRED AND DIFFICULTY OF INSTALLATION. WORK SHALL BE INSTALLED
- 4. COORDINATE CLOSELY WITH ALL WORK DONE UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE AND CONFLICT.
- 5. OPENINGS THROUGH WALLS AND FLOORS SHALL BE CUT NO LARGER THAN REQUIRED FOR INSTALLATION AND SHALL BE SMOOTH.
- 6. ALL OPENINGS THROUGH WALLS SHALL BE FLASHED AND COUNTER FLASHED. ALL PIPING IS SHOWN DIAGRAMMATIC. HOWEVER, CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS AND PIPING FOR ALL OFFSETS AND/ OR CHANGES IN ELEVATION.
- 8. ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE SPECIFICATIONS, AND AS
- DETAILED ON THESE DRAWINGS.
- CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS AND INVERTS OF THE EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
- 10. ALL PIPING INSULATION SHALL BE RUN CONTINUOUSLY.

COMPLETE AND OPERATIVE.

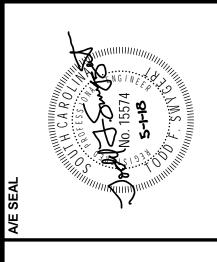
	LEGEND
SYMBOL	DESCRIPTION
~	SANITARY WASTE LINE
~ - ~ ~	DOMESTIC COLD WATER LINE
~ − − ~	DOMESTIC HOT WATER LINE
├ →	DOMESTIC HOT WATER RECIRCULATING LINE
\longrightarrow	SHUTOFF VALVE
جــــ , وــــــ <u>-</u>	PIPE TURNS TO, AWAY
FCO	FLOOR CLEANOUT
APV	AUTOMATIC PLUMBING VENT
HD	HUB DRAIN
$oldsymbol{\Theta}$	CONNECTION POINT OF NEW TO EXISTING



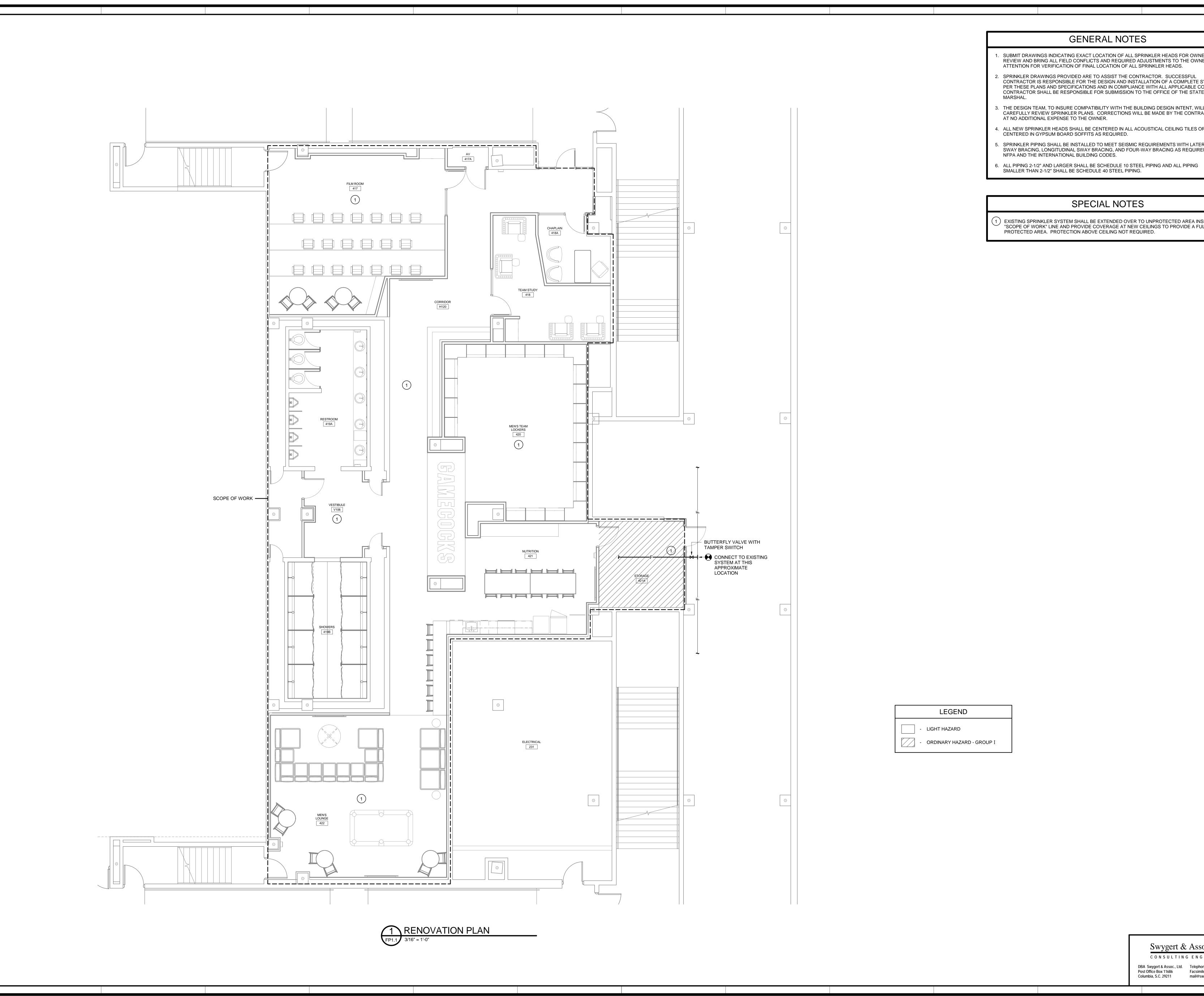


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- 1. SUBMIT DRAWINGS INDICATING EXACT LOCATION OF ALL SPRINKLER HEADS FOR OWNER'S REVIEW AND BRING ALL FIELD CONFLICTS AND REQUIRED ADJUSTMENTS TO THE OWNER'S ATTENTION FOR VERIFICATION OF FINAL LOCATION OF ALL SPRINKLER HEADS.
- SPRINKLER DRAWINGS PROVIDED ARE TO ASSIST THE CONTRACTOR. SUCCESSFUL CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF A COMPLETE SYSTEM PER THESE PLANS AND SPECIFICATIONS AND IN COMPLIANCE WITH ALL APPLICABLE CODES. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMISSION TO THE OFFICE OF THE STATE FIRE
- THE DESIGN TEAM, TO INSURE COMPATIBILITY WITH THE BUILDING DESIGN INTENT, WILL CAREFULLY REVIEW SPRINKLER PLANS. CORRECTIONS WILL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 4. ALL NEW SPRINKLER HEADS SHALL BE CENTERED IN ALL ACOUSTICAL CEILING TILES OR CENTERED IN GYPSUM BOARD SOFFITS AS REQUIRED.
- SPRINKLER PIPING SHALL BE INSTALLED TO MEET SEISMIC REQUIREMENTS WITH LATERAL SWAY BRACING, LONGITUDINAL SWAY BRACING, AND FOUR-WAY BRACING AS REQUIRED BY

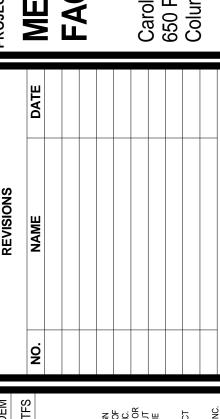
1) EXISTING SPRINKLER SYSTEM SHALL BE EXTENDED OVER TO UNPROTECTED AREA INSIDE "SCOPE OF WORK" LINE AND PROVIDE COVERAGE AT NEW CEILINGS TO PROVIDE A FULLY

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GENERAL "ELECTRICAL" NOTES

- BRANCH CIRCUIT WIRING SHALL BE NO. 12 AWG UNLESS NOTED OTHERWISE. WHERE CONDUCTOR AND RACEWAY SIZE ARE SHOWN AT HOMERUN, SUCH SIZE SHALL BE USED FOR THE ENTIRE CIRCUIT. EXCEPTION: FINAL CONNECTION TO DEVICES, IN OUTLET BOXES, IS NOT REQUIRED TO BE LARGER THAN NO.
- 20A/120V BRANCH CIRCUITS EXCEEDING 100' IN LENGTH FROM PANEL TO FARTHEST DEVICE OR FIXTURE SHALL USE NO. 10 CONDUCTORS AND 3/4"C.
- PRIOR TO ROUGH—IN, COORDINATE THE LOCATION AND MOUNTING HEIGHT OF ALL WALL AND CEILING MOUNTED DEVICES WITH THE ARCHITECTURAL ELEVATIONS, MILLWORK SHOP DRAWINGS, AND EXISTING CONDITIONS. IN THE EVENT OF A CONFLICT, NOTIFY THE ARCHITECT. MINOR ADJUSTMENTS IN DEVICE LOCATION, I.E. 5'-0" IN ANY DIRECTION SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- COORDINATE THE LOCATION OF ALL FLOOR-MOUNTED OUTLETS WITH THE ARCHITECT PRIOR TO ROUGH-IN. PROVIDE FLEXIBLE CONDUIT FOR ALL CONDUITS CROSSING EXPANSION JOINTS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF EXPANSION JOINTS.
- OUTLET BOXES FOR SWITCHES, RECEPTACLES, ETC MOUNTED ON OPPOSITE SIDES OF FIRE RATED PARTITIONS SHALL NOT BE MOUNTED IN THE SAME WALL CAVITY. SEPARATE WALL PENETRATIONS BY MOUNTING ON OPPOSITE SIDES OF WALL STUDS OR OTHER VERTICAL STRUCTURAL MEMBER IN THE WALL.
- ALL FLOOR BOXES SHALL BE INSTALLED TO MAINTAIN THE FIRE RATING OF THE FLOOR. COORDINATE CORE DRILLING HOLES IN FLOOR WITH STRUCTURAL ENGINEER.
- RACEWAYS SHALL BE INSTALLED CONCEALED IN NEW WALL CONSTRUCTION ABOVE CEILINGS, BELOW FLOOR, AND IN OTHER CAVITIES TO THE GREATEST EXTENT POSSIBLE. WHERE EXPOSED RACEWAYS MUST BE USED, LAYOUT RACEWAYS TO MINIMIZE THE NUMBER OF VERTICAL RUNS.
- FEEDER CONDUITS, BRANCH CIRCUITS AND CABLE TRAY ROUTING SHALL COMPLY WITH DETAILS ON DRAWINGS AND SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES BEFORE AND DURING CONSTRUCTION.
- WHERE LIGHT SWITCH AND ABOVE COUNTER RECEPTACLES ARE INDICATED TO BE MOUNTED ADJACENT TO EACH OTHER, THE DEVICES SHALL BE MOUNTED AT THE SAME HEIGHT UNDER A COMMON DEVICE PLATE. REFER TO THE ARCHITECTURAL DRAWINGS FOR PROJECT PHASING.
- 12 THE ARRANGEMENT, GROUPING, AND ROUTING OF BRANCH CIRCUITS SHALL BE PROVIDED AT THE CONTRACTOR'S DISCRETION IN ACCORDANCE WITH GENERALLY ACCEPTED PRACTICE FOR ELECTRICAL WORK,
- THE NATIONAL ELECTRICAL CODE REQUIREMENTS, LOCAL ORDINANCES, AND THE FOLLOWING: 2.1 A COMMON NEUTRAL SHALL NOT BE INSTALLED IN A HOMERUN FOR 2 OR 3 BRANCH CIRCUITS UNLESS
- DIRECTION IS PROVIDED BY THE ENGINEER IN WRITTING FOR A SPECIFIC APPLICATION. 2.2 MULTIPLE SINGLE—POLE BRANCH CIRCUITS (UP TO 3 HOTS, 3 NEUTRALS, 1 GROUND) RATED FOR 30—AMPS OR LESS MAY BE PULLED INTO A SINGLE RACEWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING
- 2.3 BRANCH CIRCUIT, FEEDER & COMMUNICATION CIRCUITS SHALL BE ROUTED OVERHEAD UNLESS PRIOR
- 2.4 A GROUND CONDUCTOR SHALL BE PROVIDED IN ALL RACEWAYS UNLESS NOTED OTHERWISE. 13 PROVIDE EXPANSION JOINT COUPLINGS ANYWHERE A CONDUIT PASSES THROUGH A BUILDING EXPANSION
- 14 WHERE FLOOR MOUNTED RECEPTACLES/DEVICES ARE GROUPED, PROVIDE DEVICES GROUPED IN ONE FLOOR
- 15 COORDINATE THE ROUTING OF UNDERGROUND CONDUCTORS/CONDUIT WITH STRUCTURAL FOOTINGS AND
- 17 SEAL ALL EXISTING AND NEW FIRE RATED WALL AND FLOOR PENETRATIONS IN THE CONSTRUCTION AREA
- 18 SEE THE ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS OF FIRE RATED WALLS.
- O UNDERCABINET LIGHT LIGHT FIXTURES, RECEPTACLES OTHER DEVICES TO BE MOUNTED INSIDE CABINETS SHALL BE REVIEWED W/ THE ARCHITECT PRIOR TO ROUGH—IN, TO CONFIRM EXACT LOCATION OF FIXTURES
- WHERE CARD READERS AND / OR DOOR CONTACTS ARE SHOWN ON DRAWINGS, COORDINATE WITH ACCESS CONTROL AND DOOR HARDWARE SUPPLIER TO ENSURE THAT ALL RACEWAYS AND BOXES FOR POWER, SIGNALING, AND DATA ARE PROVIDED TO CARD READER LOCATIONS, DOOR FRAME, POWER SUPPLIES, AND CABLE-TRAY.

GENERAL EXISTING CONDITION NOTES

- DESIGN. AS SUCH CONTRACTOR SHALL VERIFY ALL UTILITIES IN AREA OF WORK BEFORE DEMOLITION OF ANY SERVICE. ANY ELECTRICAL COMPONENTS NOT SHOWN SHALL BE IDENTIFIED AND THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED AS SOON AS POSSIBLE. NO ELECTRICAL REWORK SHALL BE COMMENCED WITHOUT COORDINATION OF BOTH ARCHITECT AND ENGINEER.
- IN AREAS WHERE THE EXISTING CEILINGS ARE NOT SLATED TO BE REMOVED, THE CONTRACTOR SHALL WORK THRU THE EXISTING CEILINGS (SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR AREA OF WORK). THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY DAMAGED TILE OR GRID THAT IS A RESULT OF
- REFER TO ARCHITECTURAL PLANS FOR PHASING OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING A FIRESTOP SYSTEM IN ALL PENETRATIONS OF FIRE-RATED WALLS CREATED BY THE REMOVAL OF EXISTING ELECTRICAL CONDUIT OR CABLES, AS WELL AS THOSE CREATED BY NEWLY INSTALLED CONDUITS AND SLEEVES.
- WHERE INSTALLATION REQUIRES CUTTING OR DRILLING OF THE EXISTING FLOOR SLAB, THE CONTRACTOR SHALL X-RAY THE EXISTING SLAB PRIOR TO WORK TO ENSURE THAT NO EXISTING UTILITIES OR STRUCTURAL ELEMENTS IN THE SLAB WILL BE COMPROMISED BY THE WORK. NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS THAT WILL REQUIRE RELOCATING THE PROPOSED SLAB WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGED UTILITIES OR STRUCTURAL ELEMENTS CAUSED BY THE SLAB
- SUPPORT ALL EXISTING CONDUITS AND JUNCTION BOXES ABOVE THE CEILING PER NEC IN THE
- CONSTRUCTION AREA. PROVIDE JUNCTION BOX COVER PLATES ON ALL EXISTING JUNCTION BOXES ABOVE THE CEILING IN THE
- CONSTRUCTION AREA. SUPPORT ALL EXISTING COMMUNICATION CABLES ABOVE THE CEILING IN THE CONSTRUCTION AREA WHERE INFORMATION SHOWN ON THESE DRAWINGS CONFLICTS WITH VERIFIED FIELD CONDITIONS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER

-EXISTING TEL/COMM ROOM

GENERAL "LIGHTING" NOTES

- SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR THE EXACT LOCATION OF ALL CEILING MOUNTED LIGHTING
- EXACT LOCATIONS OF LIGHTING FIXTURES IN MECHANICAL SPACES SHALL BE DETERMINED IN THE FIELD. DO NOT SUPPORT FIXTURES FROM DUCT OR PIPING. PROVIDE CHAIN OR TRAPEZE—TYPE HANGERS WHERE FIXTURES CAN NOT BE MOUNTED DIRECTLY TO CEILING.
- LIGHTING FIXTURE CATALOG NUMBERS ARE INDICATIVE OF THE STYLE OF FIXTURE REQUIRED. CONTRACTOR SHALL PROVIDE FIXTURES WITH THE PROPER TRIM, VOLTAGE AND OPTIONS NECESSARY FOR INSTALLATION. 4 DOUBLE—FACED EXIT FIXTURES SHALL BE OF THE SAME MANUFACTURER & SERIES AS THE SINGLE TYPE
- REGARDLESS OF CATALOG NUMBER INDICATED IN SCHEDULE, PROVIDE BATTERY PACKS FOR ALL FIXTURES INDICATED ON THE DRAWINGS TO BE EMERGENCY TYPE.
- 6 ALL EXIT SIGNS SHALL BE CONNECTED TO LOCAL LIFE SAFETY LIGHTING CIRCUIT AHEAD OF ALL SWITCHING. REGARDLESS OF CATALOG NUMBER INDICATED IN SCHEDULE, ALL EXIT SIGNS SHALL BE PROVIDED WITH A
- BATTERY PACK, SHALL BE WIRED AHEAD OF LOCAL SWITCH AND SHALL NOT BE SWITCHED. 8 REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS OF LIGHT FIXTURE TO ACOUSTICAL CEILING
- SYSTEM AND STRUCTURE

GENERAL "SIGNAL" NOTES

- PROVIDE CONDUIT FOR HVAC CONTROL CIRCUITS AS REQUIRED TO INTER—CONNECT HVAC UNIT TO CONTROL CIRCUITS. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR AND CONTROLS PROVIDER TO DETERMINE SCOPE OF CONDUITS REQUIRED FOR HVAC CONTROLS. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED CONDUIT. COORDINATE POINTS OF CONNECTION WITH DIVISION 23. PROVIDE PULL CORD IN ALL EMPTY CONDUITS. SEE MECHANICAL PLANS FOR EXACT LOCATIONS OF ALL HVAC
- EQUIPMENT AND CONTROL DEVICES. EXTEND A 1" CONDUIT WITH PULL WIRE FROM EACH COMMUNICATIONS OUTLET TO NEAREST CABLE-TRAY OR THE COMMUNICATION BACKBOARD. TURN CONDUIT 12" INTO CEILING CAVITY A MINIMUM OF 6" ABOVE THE CEILING AND TERMINATE WITH AN INSULATED PROTECTIVE BUSHING. COMMUNICATION OUTLET BOX SHALL BE 4" SQUARE WITH SINGLE GANG RING.
- PROVIDE ALL DUCT SMOKE DETECTORS AND ACCESSORIES NECESSARY FOR INTERLOCKING WITH MECHANICAL EQUIPMENT (AHU'S, SMOKE DAMPERS, ETC). COORDINATE WITH MECHANICAL PLANS FOR LOCATIONS AND REQUIREMENTS. DETECTORS SHALL BE FURNISHED BY ELECTRICAL CONTRACTOR, INSTALLED BY MECHANICAL CONTRACTOR, WIRED TO FIRE ALARM SYSTEM BY ELECTRICAL CONTRACTOR, AND TIED TO MECHANICAL CONTROLS FOR AHU SHUTDOWN BY MECHANICAL CONTRACTOR.
- 4 ALL COMMUNICATIONS OUTLET BOXES SHALL BE 2-1/2" DEEP. PROVIDE 1" CONDUIT TO ABOVE THE LOCAL ACCESIBLE CEILING FOR ALL COMMUNICATION WALL MOUNTED DEVICES. PROVIDE SLEEVES SIZED FOR 40% EXPANSION THROUGH CORRIDOR WALLS.
- 6 CABLE SHALL BE CONCEALED IN ALL FINISHED AREAS AND ROUTED PARALLEL OR PERPENDICULAR TO THE
- ' ALL FIRE ALARM CABLE SHALL BE INSTALLED IN METALLIC CONDUIT. COORDINATES WITH FIRE ALARM SYSTEM lacksquareMANUFACTURER FOR CABLE ROUTING AND QUANTITIES.

GENERAL "POWER" NOTES

- ALL BRANCH CIRCUITS INDICATED ON THESE PLANS TO BE LARGER THAN NO. 12 AWG SHALL BE SIZED AS
- INDICATED FOR THE ENTIRE LENGTH OF THE CIRCUIT. WHEN A RECEPTACLE IS INDICATED TO BE MOUNTED ADJACENT TO A COMPUTER/TELEPHONE/ TELEVISION
- OUTLET, THE DEVICE(S) SHALL BE MOUNTED WITHIN 6" CENTER-TO-CENTER. PROVIDE AND INSTALL AN ENGRAVED LAMINATED PLASTIC NAMEPLATE ON EACH ITEM OF ELECTRICAL EQUIPMENT SERVING MECHANICAL EQUIPMENT WHICH MATCH MECHANICAL DESCIPTIONS, TO INDICATE THE
- DESIGNATION OF THE UNIT ON THE PLANS & THE BRANCH CIRCUIT SERVING THE EQUIPMENT. 4 PROVIDE NEMA CONFIGURATION RECEPTACLES TO MATCH PLUGS ON EQUIPMENT FURNISHED. WHERE SPEED CONTROLLER IS INDICATED TO BE PROVIDED WITH FANS, IT SHALL BE PROVIDED BY
- MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.
- 6 PROVIDE LABEL ON INSIDE FACE OF COVER PLATE OF ALL RECEPTACLES, SWITCHES & WALL MOUNTED
- DEVICES INDICATING PANEL AND BRANCH CIRCUIT TO WHICH EACH DEVICE IS CONNECTED. ALL WIRING DEVICES SHALL BE GREY WITH SMOOTH STAINLESS STEEL WALL PLATES.

GENERAL "DEMOLITION" NOTES

- ALL ELECTRICAL EQUIPMENT TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIALS UNTIL RELEASED BY OWNER'S PROJECT MANAGER. MATERIALS THAT OWNER'S PROJECT MANAGER CHOOSES TO RETAIN SHALL BE DELIVERED BY THE CONTRACTOR TO A LOCATION DESIGNATED BY THE PROJECT MANAGER. ALL OTHER MATERIALS SHALL BE
- REMOVE ALL EXPOSED ABANDONED COMMUNICATION CABLE FOUND DURING THE CONSTRUCTION PROCESS. SUPPORT ALL EXISTING REMAINING CABLE PER THE NEC.
- ELECTRICAL DEVICES NOT SHOWN ON WALLS TO BE DEMOLISHED SHALL BE DEMOLISHED AT NO ADDITIONAL COST TO OWNER.
- 4 ELECTRICAL DEVICES NOT SHOWN ON CEILINGS OR WALLS TO REMAIN SHALL REMAIN IN PLACE. PROTECT FROM DAMAGE DURING CONSTRUCTION
- ELECTRICAL DEVICES NOT SHOWN ON CEILINGS TO BE REMOVED SHALL BE TEMPORARILY DISCONNECTED AND REMOVED DURING DEMOLITION AND RE-INSTALLED ON NEW CEILING IN SAME LOCATION.

ABBREVIATIONS

DESCRIPTION

SYMBOL DESCRIPT

<u>MOUNTED)</u>

JUNCTION BOX (WALL MTD)

JUNCTION BOX (FLOOR MOUNTED)

JUNCTION BOX (CEILING)

PUSH BUTTON CONTROL

LIGHT SWITCH, SINGLE POLE

LIGHT SWITCH, 3 WAY TYPE

LIGHT SWITCH, 4 WAY TYPE

LIGHT SWITCH, DIMMER TYPE

PHOTOCELL LIGHTING CONTROL

DUPLEX RECEPTACLE (CEILING MOUNTED)

DUPLEX RECEPTACLE (FLOOR MOUNTED)

QUADPLEX RECEPTACLE (CEILING MOUNTED)

QUADPLEX RECEPTACLE (FLOOR MOUNTED)

QUADPLEX REC/DATA COMBINATION (FLOOR

igvee Phone or data outlet (wall mounted @ 18"AFF)

ightharpoonup | Phone or data outlet (MTD above counter)

PHONE OR DATA OUTLET (FLOOR MOUNTED)

\$ LIGHT SWITCH, AUTOMATIC (CONNECT TO LCS)

LIGHT SWITCH, DIGITALLY TIMED (0-30 MINUTES)

MOTOR RATED SNAP SWITCH IN NEMA 1 ENCLOSURE

LIGHTING CONTROL CALLOUT (REFER TO SCHEDULE)

KITCHEN EQUIPMENT CALLOUT (REFER TO SCHEDULE)

(#) KEY NOTE CALLOUT (REFER TO KEY NOTES ON SHEET)

LOWER CASE SUBSCRIPT INDICATES SWITCH-LEG

MULTI-LEVEL SWITCHING CONFIGURATION

OCCUPANCY SENSOR (CEILING MOUNTED)

OCCUPANCY SENSOR (WALL MOUNTED)

#" C. CONDUIT CALLOUT (# INDICATES DIAMETER)

DUPLEX REC/DATA COMBINATION (FLOOR MOUNTED)

MULTI-PHASE RECEPTACLE (AS NOTED ON PLAN)

- (E) EXISTING AFC ABOVE FINISHED CEILING
- AFF ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GRADE AHU AIR HANDLING UNIT
- BAS BUILDING AUTOMATION SYSTEM BFC BELOW FINISHED CEILING
- BFG BELOW FINISHED GRADE
- BOD BOTTOM OF DEVICE CBB COMMUNICATIONS BACK BOARD
- cd CANDELA
- CLG CEILING ECB ENCLOSED CIRCUIT BREAKER
- EF EXHAUST FAN
- FACP FIRE ALARM CONTROL PANEL FCU FAN COIL UNIT
- FSD FIRE/SMOKE DAMPER GBB GROUND BUSS BAR

FDS FUSED DISCONNECT SWITCH

- GFCI GROUND-FAULT CIRCUIT-INTERRUPTING
- GFI GROUND-FAULT INTERRUPTING GP GENERAL PURPOSE
- HP HEAT PUMP
- ICP IRRIGATION CONTROL PANEL
- IG ISOLATED GROUND
- I-BOX JUNCTION BOX LCS LIGHTING CONTROL SYSTEM
- NEC NATIONAL ELECTRIC CODE NFDS NON-FUSED DISCONNECT SWITCH
- OC ON CENTER RFAP REMOTE FIRE ALARM ANNUNCIATOR PANEL
- RTU ROOF TOP UNIT SD SMOKE DETECTOR
- SPD SURGE PROTECTION DEVICE
- TGB TELEPHONE GROUNDING BUSS BAR UNO UNLESS OTHERWISE NOTED
- UTP UNSHIELDED TWISTED PAIR
- VFD VARIABLE FREQUENCY DRIVE
- W/ WITH WH WATER HEATER
- WP WEATHERPROOF KFMR TRANSFORMER

DEMOLITION/RENOVATION NOTATION

- IF NO ANNOTATION IS SHOWN ASSUME EXISTING TO REMAIN IN PLACE FOR SOLID LINES AND DEMOLISH FOR DASHED LINES. DEVICES AND EQUIPMENT NOT SHOWN SHALL BE ASSUMED TO BE EXISTING TO REMAIN IN PLACE.
- E EXISTING FIXTURE OR DEVICE TO REMAIN IN PLACE. REPLACE ANY BROKEN DEVICES OR PLATES; COLOR TO MATCH EXISTING. EXISTING FIXTURE OR DEVICE TO BE REMOVED BY THE

ELECTRICAL CONTRACTOR. MAINTAIN CONTINUITY OF REMAINING

- PORTIONS OF BRANCH CIRCUIT. RE EXISTING DEVICE TO BE REMOVED BY THE ELECTRICAL CONTRACTOR. EXISTING CIRCUIT SHALL BE RETAINED. PROVIDE NEW DEVICE AS SHOWN ON RENOVATION PLANS.
- RN RELOCATED FIXTURE (NEW LOCATION). RR EXISTING FIXTURE TO BE RELOCATED BY THE ELECTRICAL CONTRACTOR TO NEW LOCATION SHOWN ON RENOVATION PLAN.

ELECTRICAL SYMBOL LEGEND

	EEEGTRIGAE STI	WIDOL LLC	32110
)L	DESCRIPTION	SYMBOL	DESCRIPTION
	SINGLE RECEPTACLE (WALL MOUNTED @ 18"AFF)	F	FIRE ALARM PULL STATION (WALL MOUNTED @ 48" AFF TOP OF BOX)
	DUPLEX RECEPTACLE (WALL MOUNTED @ 18"AFF)	A	FIRE ALARM AUDIBLE DEVICE (WALL MOUNTED @ 7'-6" AFF)
	DUPLEX RECEPTACLE (GFI TYPE @ 18"AFF)		FIRE ALARM VISUAL DEVICE (WALL MOUNTED @ 7'-6" AFF)
	DUPLEX RECEPTACLE (USB TYPE @ 18"AFF)	A/V 	FIRE ALARM AUDIBLE/VISUAL DEVICE (WALL MOUNTED 7'-6" AFF)
	DUPLEX RECEPTACLE (@ 6" ABOVE COUNTER)	А	FIRE ALARM AUDIBLE DEVICE (CEILING MOUNTED)
	DUPLEX RECEPTACLE (GFI TYPE @ 6" ABOVE COUNTER)	V	FIRE ALARM VISUAL DEVICE (CEILING MOUNTED)
	DUPLEX RECEPTACLE (USB TYPE @ 6" ABOVE COUNTER)	A/V	FIRE ALARM AUDIBLE/VISUAL DEVICE (CEILING MOUNTE
	QUAD RECEPTACLE (WALL MOUNTED @ 18"AFF)	\$	SMOKE DETECTOR (WALL MOUNTED)
	QUAD RECEPTACLE (GFI TYPE @ 18"AFF)	(S)	SMOKE DETECTOR (CEILING MOUNTED)
	QUAD RECEPTACLE (USB TYPE @ 18"AFF)	◐	SMOKE DETECTOR (DUCT MOUNTED)
	QUAD RECEPTACLE (@ 6" ABOVE COUNTER)	\bigcirc	HEAT DETECTOR (WALL MOUNTED)
	QUAD RECEPTACLE (GFI TYPE @ 6" ABOVE COUNTER)	$\qquad \qquad \bigoplus$	HEAT DETECTOR (CEILING MOUNTED)
	QUAD RECEPTACLE (USB TYPE @ 6" ABOVE COUNTER)	\Diamond	REMOTE TEST STATION FOR DUCT MOUNTED DETECTORS (WALL MOUNTED)

(CEILING MOUNTED)

T | FIRE ALARM TAMPER SWITCH

FIRE ALARM FLOW SWITCH

FIRE / SMOKE DAMPER

SECURITY CARD READER

SECURITY KEY PAD

CONTROL TYPE)

CABLE TRAY

PRESSURE INDICATING VALVE

CCTV CAMERA (WALL MOUNTED)

SURGE PROTECTION DEVICE

SPEAKER (WALL MOUNTED)

SPEAKER (CEILING MOUNTED)

ELECTRICAL METERING DEVICE

PANELBOARD (SURFACE MOUNTED)

PANELBOARD (RECESS MOUNTED)

CONTROL PANEL (RECESS MOUNTED)

DISCONNECT SWITCH, (REFER TO EQUIPMENT

DISCONNECT SWITCH, (NON PROTECTED)

REMOTE FEED-THRU GFCI DEVICE WITH

ELECTRICAL DRAWING INDEX

EO.1 ELECTRICAL NOTES & LEGENDS EO.2 LIGHTING & EQUIPMENT SCHEDULES EO.3 ELECTRICAL ONE-LINE DIAGRAM

EO.4 ELECTRICAL PANEL SCHEDULES E1.1 LIGHTING RENOVATION PLAN

ED1.1 LIGHTING DEMOLTION PLAN

E2.1 POWER/SYSTEMS RENOVATION PLAN

SHEET NAME

INDICATOR LIGHT. (NO RECEPTACLE)

MOTOR CONNECTION (AS NOTED)

CONTROL PANEL (SURFACE MOUNTED)

CONNECTION SCHEDULE)

CCTV CAMERA (CEILING MOUNTED)

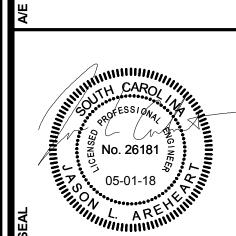
| Wi-Fi ACCESS POINT (CEILING MOUNTED)

ELECTRICAL UTILITY METER & C/T CABINET

ADDRESSABLE INTERFACE UNIT (MONITOR OR

FIRE ALARM PRESSURE SWITCH

REMOTE TEST STATION FOR DUCT MOUNTED DETECTORS **BELKA ENGINEERIN** ASSOC. INC.



ED2.1 POWER/SYSTEMS/MECHANICAL POWER DEMOLITION PLAN

CONTACT: CLIFF STRINGFIELD 7 CLUSTERS COURT, SUITE 201 | COLUMBIA, SC | 29210 (803) 731-0650 p | (803) 731-2880 f

BEAT) ENGINEERING ASSOCIATES, INC.

CSTRINGFIELD@BEA-Consulting.com

E0.1 SCALE: 1" = 40'-0"

PARTIAL GROUND FLOOR PLAN

THE RACEWAYS AND DERATING CONDUCTORS PER NEC ARTICLE 310.15.

APPROVAL HAS BEEN GRANTED BY THE ARCHITECT AND ENGINEER.

UNDERGROUND UTILITIES.

16 THE USE OF MC CABLE IS NOT ALLOWED.

19 WHEREVER ON THE ELECTRICAL DRAWINGS THE WORD "PROVIDE" IS USED, IT SHALL BE INFERRED TO MEAN

- AREAS OF WORK EXIST FOR THIS PROJECT WHICH ARE NOT ACCESSIBLE OR HAVE LIMITED ACCESS DURING
- THEIR WORK.

- CONSTRUCTION AREA. REMOVE ALL ABANDONED CONDUIT, WIRE, AND COMMUNICATION CABLES ABOVE THE CEILING IN THE

PROPERLY DISPOSED OF BY THE CONTRACTOR.

	[EQUIPMENT CO	NNECTION	SCHEDULE	- -	
UNIT		EL	ECTRICAL			
I.D.	VOLTS	# OF POLES	AMPS	NEMA	LOAD (VA)	NOTES
AHU-1	480 V	3	30 A	М	3991	1,2
AHU-1 HEATING COIL	480 V	3	30 A	М	17000	1,2
SF-1	277 V	2	30 A	М	1912	1,2
V-1-1	480 V	3	30 A	М	10642	1,2
V-1-2	480 V	3	30 A	М	4490	1,2
V-1-3	277 V	2	30 A	М	2327	1,2
V-1-4	480 V	3	30 A	М	5986	1,2

EQUIPMENT CONNECTION SCHEDULE NOTES 1 ALL SWITCHES SHALL BE GENERAL DUTY TYPE, FUSIBLE UNLESS NOTED WITH "NF"

(NON-FUSIBLE).

2 "M" DENOTES DISCONNECT SWITCH INTEGRAL WITH MECHANICAL EQUIPMENT.

3 PROVIDE RECEPTACLE AS INDICATED.

			LIC	SHT FIXTURE SCHEDU	ILE				
		FIXTUR	E SPECIFICATION	S	LAMPING	ELECT	ΓRICAL		
SYMBOL	TYPE	FIXTURE DESCRIPTION 4' LINEAR SLOT FIXTURE, FLANGE	MANUFACTURER NULITE	CAT. # RF2 06L35 UNV D 1C FRF WH 4'	LAMP TYPE LED, 2,900 LUMENS, 3500K	FIXT. LOAD	VOLTS 277 V	MOUNTING REMARKS RECESSED	NOTES
	AFE	SAME AS FIXTURE "AF" EXCEPT WITH BATTERY	NULITE	RF2 06L35 UNV D 1C FRF WH 4' EMG	LED, 2,900 LUMENS, 3500K	26	277 V	RECESSED	
	AG	4' LINEAR SLOT FIXTURE, GRID	NULITE	RG2 06L35 UNV D 1C FRF WH 4'	LED, 2,900 LUMENS, 3500K	26	277 V	GRID	
	AGA	12' LINEAR SLOT FIXTURE, GRID	NULITE	RG2 06L35 UNV D 1C FRF WH 12'	LED, 8,780 LUMENS, 3500K	77	277 V	GRID	
	AL1	"L" CONFIGURED LINEAR SLOT FIXTURE, FLANGE	NULITE	RG2 06L35 UNV D 1C FRF WH "L" 8'X12'	LED, 14,650 LUMENS, 3500K	128	277 V	RECESSED	
	BF	4' LINEAR SLOT FIXTURE, FLANGE, LOW OUTPUT	NULITE	RF2 03L35 UNV D 1C FRF WH 4'	LED, 1,570 LUMENS, 3500K	13	277 V	RECESSED	
	BFE	SAME AS FIXTURE "BF" EXCEPT WITH BATTERY	NULITE	RF2 03L35 UNV D 1C FRF WH 4' EMG	LED, 1,570 LUMENS, 3500K	13	277 V	RECESSED	
	BG	4' LINEAR SLOT FIXTURE, GRID, LOW OUTPUT	NULITE	RG2 03L35 UNV D 1C FRF WH 4'	LED, 1,570 LUMENS, 3500K	13	277 V	GRID	
	BGE	SAME AS FIXTURE "BG" EXCEPT WITH BATTERY	NULITE	RG2 03L35 UNV D 1C FRF WH 4' EMG	LED, 1,570 LUMENS, 3500K	13	277 V	GRID	
0	CC	2'X2' BASKET TYPE GRID FIXTURE	COLUMBIA	LCAT 22-35-MLG-R-ED1-U	LED, 3,400 LUMENS, 3500K	29	277 V	GRID	
	CCE	SAME AS FIXTURE "CC" EXCEPT WITH BATTERY	COLUMBIA	LCAT 22-35-MLG-R-ED1-U-EL L14	LED, 3,400 LUMENS, 3500K	29	277 V	GRID	
0	DA	2'X4' FLAT PANEL GRID FIXTURE	COLUMBIA	CFP24-4135	LED, 4,300 LUMENS, 3500K	40	277 V	GRID	
	DAE	SAME AS FIXTURE "DA" EXCEPT WITH BATTERY	COLUMBIA	CFP24-4135-EMG	LED, 4,300 LUMENS, 3500K	40	277 V	GRID	
0	DD	2'X2' FLAT PANEL GRID FIXTURE	COLUMBIA	CFP22-3335	LED, 3,300 LUMENS, 3500K	32	277 V	GRID	
	DDE	SAME AS FIXTURE "DD" EXCEPT WITH BATTERY	COLUMBIA	CFP22-3335-EMG	LED, 3,300 LUMENS, 3500K	32	277 V	GRID	
	FF	2' STRIP FIXTURE	COLUMBIA	LCL2-35LW-E-U	LED, 2,700 LUMENS, 3500K	24	277 V	CEILING SURFACE	
0	GG	4" DIAMETER DOWNLIGHT, SPECULAR REFLECTOR	LITON	LHALD411C35-D10P1/LRA LD4SSF062-T35	LED, 1,100 LUMENS, 3500K	13	277 V	RECESSED	
0	НН	2" DIAMETER DOWNLIGHT, SPECULAR REFLECTOR	LITON	LHBLD2/LR2LH2-C-T35	LED, 600 LUMENS, 3500K	10	277 V	RECESSED	
	JJ	POOL TABLE PENDANT FIXTURE	EGLO	TERROS EGL577330	LED, 1,350 LUMENS, 3000K	18	120 V	PENDANT	
	KK	2' LINEAR SURFACE FIXTURE	COLUMBIA	LCAT 12-35MW-SM-R-E-U	LED, 2,000 LUMENS, 3500K	18	277 V	CEILING SURFACE	
	KKE	SAME AS FIXTURE "KK" EXCEPT WITH BATTERY	COLUMBIA	LCAT 12-35MW-SM-R-E-U-EL L14	LED, 2,000 LUMENS, 3500K	18	277 V	CEILING SURFACE	
	LL	RECESSED DISPLAY TAPE LIGHT IN MOUNTING TRACK	ACOLYTE	RBHI-24-3.0-35/AR2F	LED, 270 LUMENS/FT, 3500K	3W/FT	120 V	RECESSED IN SHELVING	
0	ММ	2" DIAMETER DOWNLIGHT, BLACK REFLECTOR	PRIMA	8721H-RD-358-S-BLACK		18	277 V	RECESSED	
⊢\$	XX	EXIT SIGN, EDGE LIT, MIRROR BACK WITH BATTERY	LIGHTALARMS	6 UEN RM	LED	3	277 V	CEILING AND END	

LIGHT FIXTURE SCHEDULE NOTES

1 LUMENS LISTED IN SCHEDULE REPRESENT DELIVERED LUMENS OF FIXTURES. 2 SEE ARCHITECTURAL RCP AND ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHTS.

3 CONFIRM QUANTITIES OF FIXTURES SHOWN IN RCP MATCH QUANTITIES SHOWN ON ELECTRICAL PLANS PRIOR TO BID. IF NO DISCREPANCIES ARE NOTED PRIOR TO BID THE HIGHEST QUANTITY OF EACH FIXTURE TYPE SHOWN SHALL BE PROVIDED.

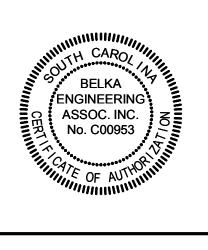
			LIGHTING	CONTRO	DL SCHE	ME LEGEN	1D			
	MANUAL / WALL	MULTI-LEVEL	OCCUPANCY	VACANCY	SCHEDULED	SCHEDULED	DAYLIGHT	CONTROL	PLUGLOAD	
MARK	STATION(S)	SWITCHED/ZONED	SENSOR	SENSOR	AUTO-ON	AUTO-OFF	DAYLIGHT ON / OFF	DAYLIGHT DIMMED	CONTROL	NOTES
1	Yes	No	No	No	No	No	No	No	No	1,2,3
2	Yes	No	No	Yes	No	No	No	No	No	1,3
3	No	No	Yes	No	No	No	No	No	No	1,3
2 3										

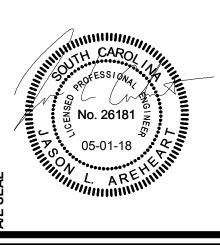
LIGHTING CONTROL SCHEME NOTES 1 MANUAL WALL SWITCH SHALL BE PART OF THE LIGHTING CONTROL SYSTEM. REFER TO PLANS FOR MANUAL WALL STATION LOCATION(S) IN EACH SPACE. 2 NO AUTOMATIC CONTROL SHALL BE UTILIZED IN THIS SPACE FOR SAFETY CONCERNS. LIGHTING SHALL BE ROUTED THROUGH LIGHTING CONTROL SYSTEM

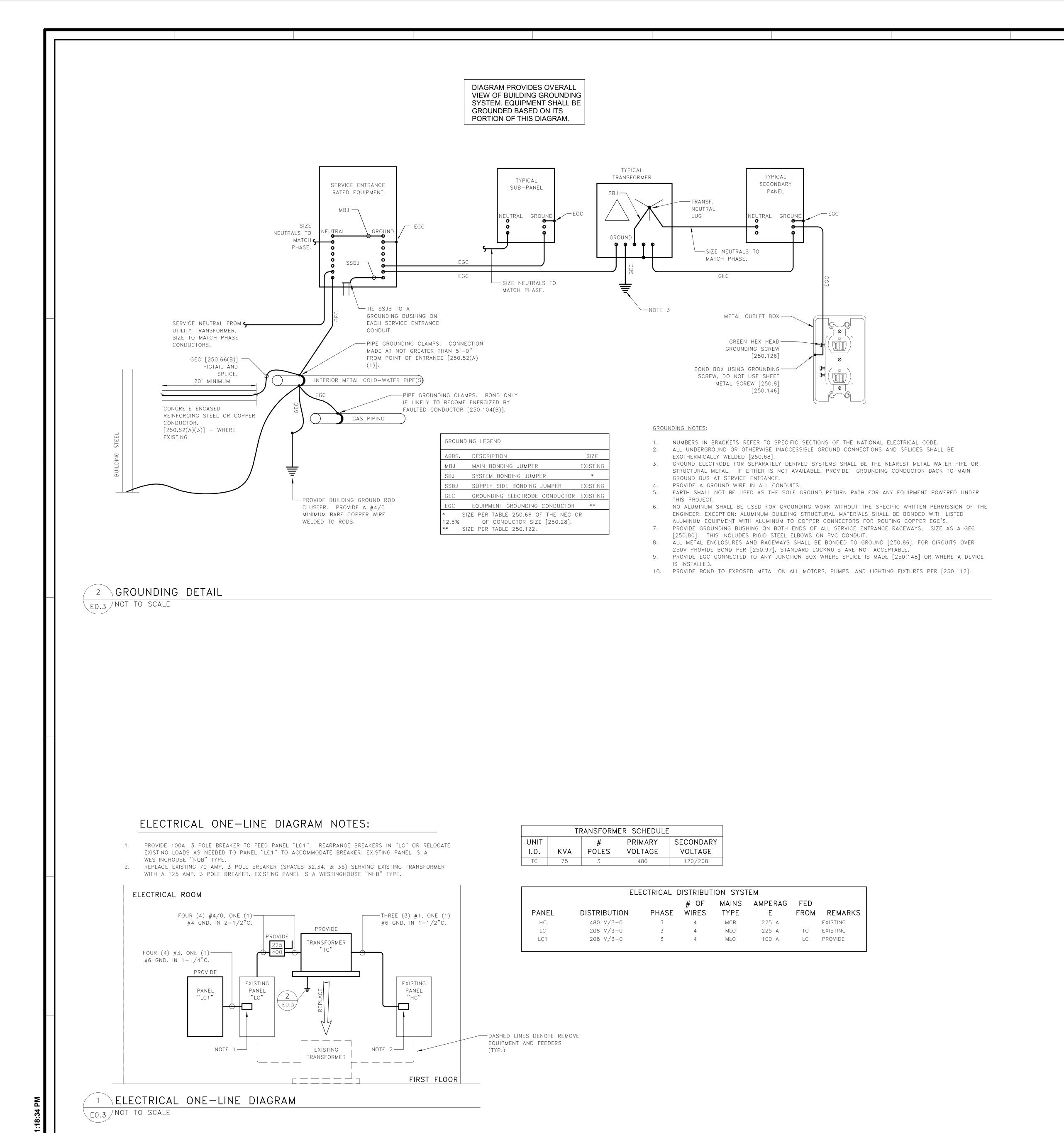
FOR MONITORING PURPOSES ONLY. 3 ROOMS WITH DIMMING TYPE SWITCHES SHOWN IN PLAN WILL REQUIRE DIMMING CONTROL

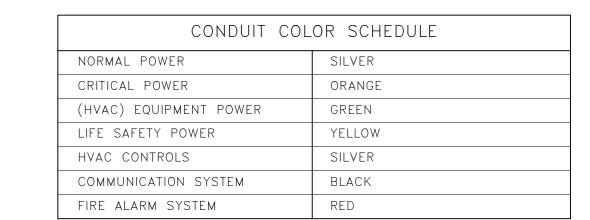


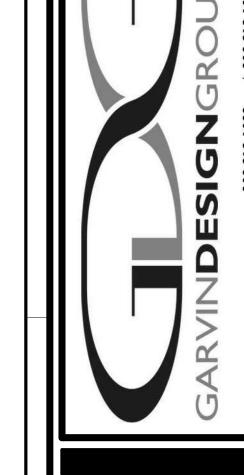
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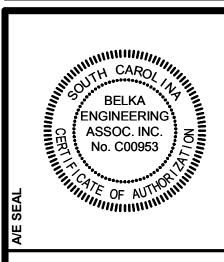














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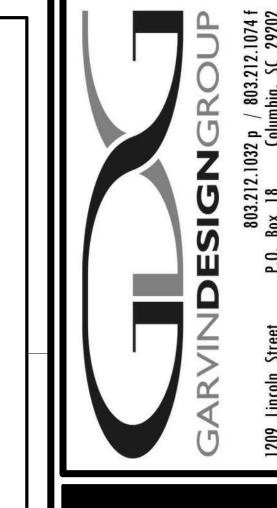
		STING PANELBOARD: HC					BUTION:	•	77 Wye	;		A.I.C. RATING: EXISTING		
							HASES:					MAINS RATING: 225 A		
		SUPPLIED FROM: EXISTING					WIRES:	4				MCB RATING: 225 A		
		MOUNTING: SURFACE				ENCL	OSURE:	Type 1						
WIRE SIZE	CKT	DESCRIPTION	BKR	Р		A	1	В	(2	Р	BKR DESCRIPTION	СКТ	WIRE SIZE
1-#12, 1-#12, 1-#12	1	LIGHTING	20	1	2.3	1.3							2	
	3	EXISTING LOAD					0.0	1.3			3	20 ** AHU-1	4	3-#12, 1-#12, 1-#12
	5	EXISTING LOAD							0.0	1.3			6	
	7	EXISTING LOAD			0.0	5.7							8	
	9	EXISTING LOAD					0.0	5.7			3	30 ** AHU-1 HEATING COIL	10	3-#10, 1-#10, 1-#10
	11	EXISTING LOAD							0.0	5.7			12	
	13	EXISTING LOAD			0.0	3.5							14	
	15	EXISTING LOAD					0.0	3.5			3	20 ** V-1-1	16	3-#12, 1-#12, 1-#12
	17	EXISTING LOAD							0.0	3.5			18	
	19	EXISTING LOAD			0.0	1.5							20	
	21	EXISTING LOAD					0.0	1.5			3	20 ** V-1-2	2.2	3-#12, 1-#12, 1-#12
	23	EXISTING LOAD							0.0	1.5			24	
	25	EXISTING LOAD			0.0	2.0							26	
	27	EXISTING LOAD					0.0	2.0			3	20 ** V-1-4	28	3-#12, 1-#12, 1-#12
	29	EXISTING LOAD							0.0	2.0			30	
	31	EXISTING LOAD			0.0	7.4							32	
	33	EXISTING LOAD					0.0	7.3			3	125 ** PANEL "LC" VIA XFMR "TC"	34	*
	35	EXISTING LOAD							0.0	6.4			36	
		EXISTING LOAD			0.0	0.0						EXISTING LOAD	38	
1-#12, 1-#12, 1-#12		** SF-1	20	1			1.9	0.0				EXISTING LOAD	40	
1-#12, 1-#12, 1-#12	41	** V-1-3	20	1					2.3	0.0		EXISTING LOAD	42	
		TOTAL	PER PHASE	KVA:	23	3.7	23	3.2	22	2.7		ADD. CONNECTED KV	۸:	69.7
		TOTAL PER	PHASE AMPA	CITY:	8	36	8	4	8	2		ADD. CONNECTED AMP	5:	84

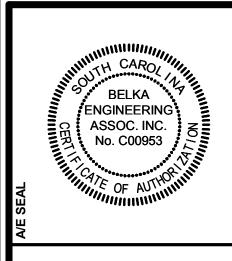
ELECTRICAL CONTRACTOR SHALL PROVIDE BREAKER

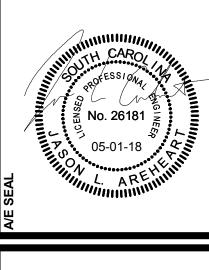
		PANELBOARD: LC1				DISTRIE	3UTION:	: 120/2	08 Wye			A.I.C. RATING: 10,000		
						P!	HASES:	3				MAINS RATING: 100 A		
		SUPPLIED FROM: LC					WIRES:	4				MCB RATING: MAIN LUGS ONLY		
		MOUNTING: SURFACE				ENCL	OSURE:	Type 1						
WIRE SIZE	СКТ	DESCRIPTION	BKR	Р	/	Α	F	В	(;	Р	BKR DESCRIPTION	СКТ	WIRE SIZE
1-#12, 1-#12, 1-#12	1	PROJECTOR/RECEPTACLES - FILM ROOM	20	1	0.5	0.9					1	20 RECEPTACLES - NUTRITION/STORAGE	2	1-#12, 1-#12, 1-#
1-#12, 1-#12, 1-#12	3	RECEPTACLES - FILM ROOM	20	1			0.7	0.7			1	20 RECEPTACLES/TV - NUTRITION	4	1-#12, 1-#12, 1-
1-#12, 1-#12, 1-#12	5	RECEPTACLE - AV	20	1					0.4	1.6	1	20 COOLER - NUTRITION	6	1-#12, 1-#12, 1-
1-#12, 1-#12, 1-#12	7	RECEPTACLE - AV	20	1	0.4	1.6					1	20 FREEZER — NUTRITION	8	1-#12, 1-#12, 1-
1-#12, 1-#12, 1-#12	9	RECEPTACLES/TV - CORRIDOR	20	1			0.7	1.6			1	20 FRIDGE — NUTRITION	10	1-#12, 1-#12, 1-
1-#12, 1-#12, 1-#12	11	RECEPTACLES — CHAPLAIN	20	1					0.7	0.2	1	20 MICROWAVE - NUTRITION	12	1-#12, 1-#12, 1-
1-#12, 1-#12, 1-#12	13	RECEPTACLES — TEAM STUDY	20	1	1.3	0.2					1	20 MICROWAVE - NUTRITION	14	1-#12, 1-#12, 1-
1-#12, 1-#12, 1-#12	15	RECEPTACLES - LOCKERS	20	1			0.7	1.0			1	20 ICE MACHINE - NUTRITION	16	1-#12, 1-#12, 1-
1-#12, 1-#12, 1-#12	17	RECEPTACLES - LOCKERS	20	1					0.9	1.0	1	30 DISHWASHER - NUTRITION	18	1-#10, 1-#10, 1-
1-#12, 1-#12, 1-#12	19	RECEPTACLES - LOCKERS	20	1	0.9	0.9					1	20 RECEPTACLES/TV - MEN'S LOUNGE	20	1-#12, 1-#12, 1-
1-#12, 1-#12, 1-#12	21	RECEPTACLES - LOCKERS	20	1			0.9	0.7			1	20 RECEPTACLES - MEN'S LOUNGE	22	1-#12, 1-#12, 1-
1-#12, 1-#12, 1-#12	23	RECEPTACLES - RESTROOM/VESTIBULE	20	1					0.9	0.5	1	20 RECEPTACLES/TV - MEN'S LOUNGE	24	1-#12, 1-#12, 1-
1-#12, 1-#12, 1-#12	25	RECEPTACLES — CORRIDOR COUNTER	20	1	0.7	0.1					1	20 LTG - SHELF LED TAPE/POOL TABLE PENDANT	26	1-#12, 1-#12, 1-
1-#12, 1-#12, 1-#12	27	BLENDER - NUTRITION	20	1			0.2	0.0			1	20 SPARE	28	
1-#12, 1-#12, 1-#12	29	BLENDER - NUTRITION	20	1					0.2	0.0	1	20 SPARE	30	
		TOTAL PER	PHASE	KVA:	7	.4	7	7.3	6.	4		CONNECTED KVA:		21.1
		TOTAL PER PHAS	E AMPA	CITY:	6	63	6	52	5	3		CONNECTED AMPACITY:		59

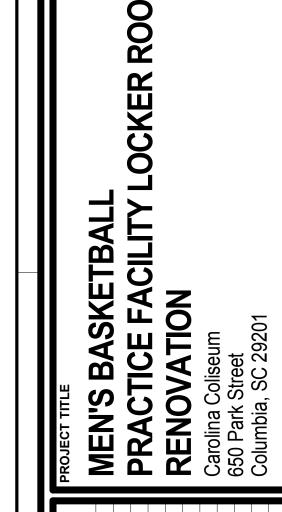


- 1 FIELD VERIFY EXISTING LOAD SERVED BY EACH BRANCH AND CLEARLY LABEL IN PANELBOARD SCHEDULES.
- 2 CIRCUITS INDICATED TO FEED NEW LIGHTING AND ELECTRICAL DEVICES ARE DIAGRAMMATIC IN NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MOVING EXISTING BREAKERS WHERE ADDITIONAL SPACE IS NEEDED BUT AVAILABLE.
- 3 EXISTING BREAKERS SHOWN IN PANEL SCHEDULES ARE FOR REFERENCE ONLY.









PROJECT TI	M M M	PRAC	RENC	Carolina	650 Park	Columbia	
	DATE						
REVISIONS	NAME						
	NO.						
JJS	2		IGN Y OF	TES,	NEN	H .	

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