

VIEW KEY		
	NAME LEVEL NAME HEIGHT ABOVE PROJECT 0'-0"	KEYNOTE: INDICATES NOTE USED TO DESCRIBE ADDITIONAL INFORMATION ABOUT WORK REQUIRED, SPECIFIC TO THE SHEET AND/OR DETAIL
LINE TYPE AND TAG KEY:		
NEW WORK BY THIS CONTRACTOR (WIDE LINE)		
NEW		
----- EXISTING TO BE REMOVED (SHORT DASHED PATTERN)		
----- EXISTING UNDERFLOOR OR UNDERGROUND (LONG DASHED PATTERN)		
EXISTING TO REMAIN OR WORK BY OTHERS (NARROW LINE)		
----- EXISTING		
----- EXISTING TO BE REMOVED BY OTHERS (SHORT DASHED PATTERN)		
----- EXISTING UNDERFLOOR OR UNDERGROUND (LONG DASHED PATTERN)		
HALFTONING DOES NOT MODIFY SCOPE.		
TAG-E TAGS WITH DASH 'E' INDICATES THE REFERENCED OBJECT IS EXISTING		
TAG-1 UNDERLINED TAG INDICATES OBJECT IS IN-SCOPE. IF NEW, ADDITIONAL INFORMATION IS AVAILABLE IN A SCHEDULE, MATERIAL LIST, OR SYMBOL LIST		
INDICATES AN EXISTING SYSTEM'S POINT OF CONNECTION/REMOVAL		

APPLICABLE CODES		
CONTRACTOR SHALL COMPLY WITH APPLICABLE CODES AND LOCAL AMENDMENTS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:		
BUILDING CODE:	INDIANA BUILDING CODE 2014 EDITION	WITH AMENDMENTS
FIRE CODE:	INDIANA FIRE CODE 2014 EDITION	WITH AMENDMENTS
PLUMBING CODE:	INDIANA PLUMBING CODE 2014 EDITION	WITH AMENDMENTS
MECHANICAL CODE:	INDIANA MECHANICAL CODE 2014 EDITION	WITH AMENDMENTS
ELECTRICAL CODE:	INDIANA ELECTRICAL CODE 2009 EDITION (NFPA 70-2008)	WITH AMENDMENTS
ENERGY CONSERVATION CODE:	INDIANA ENERGY CONSERVATION CODE 2010	WITH AMENDMENTS
LOCAL BUILDING CODE:	CURRENT EDITION	

CONTRACTOR ABBREVIATION KEY	
ABBR:	DESCRIPTION:
A.C.	ASBESTOS ABATEMENT CONTRACTOR
A.V.C.	AUDIO/VISUAL CONTRACTOR
C.C.	CIVIL CONTRACTOR
C.M.	CONSTRUCTION MANAGER
E.C.	ELECTRICAL CONTRACTOR
F.P.C.	FIRE PROTECTION CONTRACTOR
F.S.C.	FOOD SERVICE CONTRACTOR
G.C.	GENERAL CONTRACTOR
H.C.	HEATING CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
N.C.C.	NURSE CALL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
S.C.	SECURITY CONTRACTOR
T.C.	TECHNOLOGY CONTRACTOR
T.C.C.	TEMPERATURE CONTROLS CONTRACTOR
V.C.	VENTILATION CONTRACTOR

ELECTRICAL ABBREVIATION KEY	
ABBR:	DESCRIPTION:
ABV	ABOVE
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ASR	ARCHITECTURAL SURFACE RACEWAY
BC	BELOW COUNTER
C	CONDUIT (BRANCH CIRCUIT OR FEEDER CONTEXT)
CO	CONDUIT AND BOX ROUGH-IN ONLY (ROUGH-IN ONLY)
EG	EQUIPMENT GROUND
EGC	EQUIPMENT GROUNDING CONDUCTOR
NC	NORMALLY CLOSED
NEMA #	NEMA RATING
NIC	NOT IN CONTRACTED SCOPE
NO	NORMALLY OPEN
ROOF	EQUIPMENT LOCATED ON ROOF ABOVE
SM	SURFACE MOUNTED
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED

ELECTRICAL SYMBOL LIST			
SYMBOL:	TAG:	SPEC SECTION:	DESCRIPTION:
	ECONN	26 05 33	ELECTRICAL CONNECTION
	JB	26 05 33	JUNCTION BOX
	FB-# or PT-#	26 27 26	FLOOR BOX or POKE THROUGH
	RL-TECH	26 05 33	TECHNOLOGY OUTLET ROUGH-IN
	RL-TECH-C	26 05 33	TECHNOLOGY ROUGH-IN, CEILING
	RL-TECH-W	26 05 33	TECHNOLOGY ROUGH-IN, WALL PHONE
	RL-TV	26 05 33	TV ANTENNA OUTLET ROUGH-IN
	WM-#	26 05 35	MULTI OUTLET SYSTEM
	WW-#	26 05 35	ELECTRICAL WIREWAY w/ DEVICES SHOWN
	PANEL-###	26 24 16	PANELBOARD - RECESS MOUNT
	PANEL-###	26 24 16	PANELBOARD - SURFACE MOUNT
	MX-#MS-# CB-#DCS-# MD-#DS-# AS-#SS-# MCS-# AMS-#	26 24 19 26 24 19 26 28 16	SURFACE OR RECESS MOUNTED MANUAL SWITCH / STARTER / COMBINATION STARTER/ CIRCUIT BREAKER, MANUAL DISCONNECT / FUSED SWITCH (PLUG FUSE) / AUTOMATIC STARTER / SOLID STATE - SOFT STARTER / COMBINATION STARTER / MOTOR CIRCUIT PROTECTOR / ASSEMBLED MOTOR STARTER. REFER TO DISC/STA SCHEDULE.
	FCS-#	26 28 16	FUSED COMBINATION STARTER REFER TO DISC/STA STARTER
	SW-1P	26 09 33	SWITCH SUBSCRIPTS: BLANK = SINGLE POLE
	SW-3W SW-4W SW-D SW-D3 SW-DO	26 27 26	3 = THREE WAY 4 = FOUR WAY D = DIMMER - STAND ALONE D3=DIMMER - THREE WAY WITH S3 TYPE DO=DIMMER - OCCUPANCY/VACANCY SENSORS - DUAL TECHNOLOGY ULTRASONIC/ACOUSTIC AND PIR O = DUAL TECHNOLOGY OCCUPANCY SENSOR WITH WALL SWITCH
	SW-VC-D	26 09 33	VACANCY SENSOR - CEILING MOUNTED SUBSCRIPTS: BLANK = DUAL TECHNOLOGY
	FA-211		COMBINATION AUDIO HORN/CHIME AND VISUAL ALARM DEVICE, WALL MOUNTED # = CANDELA RATING

LUMINAIRE CIRCUIT AND CONTROL KEY	
	E1 = FIXTURE TAG T= CIRCUIT NUMBER a = SWITCH DESIGNATION z1=ZONE DESIGNATION "NL" INDICATES LUMINAIRE IS UNSWITCHED FOR NIGHT LIGHT. "SE" INDICATES LUMINAIRE IS SWITCHED/CONTROLLED DURING NORMAL OPERATION AND OPERATES FROM EMERGENCY BATTERY (EXTEND UNSWITCHED CIRCUIT LEG TO BATTERY) UPON LOSS OF POWER. *IF LABEL IS ORIENTED HORIZONTALLY A SLASH WILL SEPARATE THIS INFORMATION. EX: F1 / 1 / a / NL

RECEPTACLE SUBSCRIPT KEY:	
DEVICE KEY:	# = MOUNTING (IF APPLICABLE) 1 = CIRCUIT NUMBER
*IF LABEL IS ORIENTED HORIZONTALLY A SLASH WILL SEPARATE THIS INFORMATION. EX: A / 1	
ELECTRICAL MOUNTING SUBSCRIPT KEY:	
A	MOUNT AT 4" TO CENTERLINE ABOVE COUNTER OR BACKSPASH
C	MOUNT AT CEILING (DEVICE OR ROUGH-IN CONTEXT)
H	MOUNT ORIENTED HORIZONTALLY
L	MOUNT IN CASEWORK
M	MOUNT IN MODULAR FURNITURE
N	WIRING DEVICE, OCCUPANCY CONTROLLED
O	MOUNT IN SURFACE RACEWAY
R	MOUNT IN SURFACE RACEWAY
S	SURFACE MOUNTED
W	WEATHERPROOF WIRING DEVICE, NEMA 3R WHILE-IN-USE COVER, WR LISTED
WG	WIRE GUARD
WP	WEATHERPROOF

ELECTRICAL SHEET INDEX	
E000	ELECTRICAL COVERSHEET
E101	FIRST FLOOR MEP DEMOLITION PLAN
E211	FIRST FLOOR LIGHTING PLAN
E221	FIRST FLOOR POWER & SYSTEMS PLAN
E222	FIRST FLOOR TECHNOLOGY PLAN
E400	ELECTRICAL DETAILS
E600	ELECTRICAL SCHEDULES
GRAND TOTAL: 7	

ELECTRICAL SYMBOL LIST			
SYMBOL:	TAG:	SPEC SECTION:	DESCRIPTION:
	REC-DUP-O	26 27 26	DUPLEX RECEPTACLE CONTROLLED BY OCCUPANCY
	REC-QUAD-O	26 27 26	QUAD RECEPTACLE CONTROLLED BY OCCUPANCY
	REC-DUP	26 27 26	DUPLEX RECEPTACLE, 125V
	REC-DUP-GFI	26 27 26	DUPLEX GFI RECEPTACLE, 125V
	REC-DUP-GFLR	26 27 26	GROUND FAULT DEVICE
	REC-DUP-WP	26 27 26	DUPLEX GFI WEATHERPROOF RECEPTACLE 125V
	REC-DUP-XP	26 27 26	DUPLEX RECEPTACLE, EXPLOSION PROOF, 125V
	REC-ISO	26 27 26	ISOLATED GROUND RECEPTACLE, 125V
	REC-ISO-SUR	26 27 26	ISOLATED GROUND RECEPTACLE WITH SURGE SUPPRESSION, 125V
	REC-ISO-SURQUAD	26 27 26	ISOLATED GROUND QUAD RECEPTACLE WITH SURGE SUPPRESSION, 125V
	REC-USB	26 27 26	DUPLEX RECEPTACLE, USB CHARGING
	REC-ARC	26 27 26	ARC FAULT CIRCUIT INTERRUPTER RECEPT 125V
	REC-AFGF	26 27 26	REC AFCI, GFCI, TAMPER RESISTANT
	REC-SIM-520R	26 27 26	SIMPLEX RECEPTACLE, 125V
	REC-SIM-530R	26 27 26	RECEPTACLE, 125V
	REC-SIM-550R	26 27 26	RECEPTACLE 125V, 50A, 125V
	REC-SIM-620R	26 27 26	RECEPTACLE, 6-20R, 250V
	REC-SIM-630R	26 27 26	RECEPTACLE, 6-30R, 250V
	REC-SIM-650R	26 27 26	RECEPTACLE, 6-50R, 250V
	REC-SIM-720R	26 27 26	RECEPTACLE, 7-20R, 277V
	REC-SIM-730R	26 27 26	RECEPTACLE, 7-30R, 277V
	REC-SIM-750R	26 27 26	RECEPTACLE, 7-50R, 277V
	REC-SIM-1420R	26 27 26	RECEPTACLE, 14-20R, 125/250V
	REC-SIM-1430R	26 27 26	RECEPTACLE, 14-30R, 125/250V
	REC-SIM-1450R	26 27 26	RECEPTACLE, 14-50R, 125/250V
	REC-SIM-1460R	26 27 26	RECEPTACLE, 14-60R, 125/250V
	REC-SIM-1520R	26 27 26	RECEPTACLE, 15-20R, 250V, 3PH
	REC-SIM-1530R	26 27 26	RECEPTACLE, 15-30R, 250V, 3PH
	REC-SIM-1550R	26 27 26	RECEPTACLE, 15-50R, 250V, 3PH
	REC-SIM-1560R	26 27 26	RECEPTACLE, 15-60R, 250V, 3PH
	REC-SIM-XP	26 27 26	RECEPTACLE, EXPLOSION PROOF, 125V
	REC-TAMP	26 27 26	DUPLEX RECEPTACLE, TAMPER RESISTANT, 125V
	REC-TAMP-GFI	26 27 26	GFI DUPLEX RECEPTACLE, TAMPER RESISTANT, 125V
	REC-QUAD	26 27 26	QUAD RECEPTACLE, TAMPER RESISTANT, 125V
	REC-QUAD-GFI	26 27 26	QUAD GFI RECEPTACLE, 125V
	REC-QUAD-USB	26 27 26	QUAD RECEPTACLE, USB 125V
	REC-QUAD-WP	26 27 26	QUAD GFI WEATHERPROOF RECEPTACLE, 125V
	REC-DUP-PED	26 27 26	RECEPTACLE - PEDESTAL STYLE
	REC-PED-QUAD	26 27 26	RECEPTACLE - PEDESTAL STYLE
	REC-Z#	26 27 26	IEC PIN AND SLEEVE RECEPTACLE, 600V
	PP#	26 27 23	POWER POLE

TECHNOLOGY SYMBOL LIST			
SYMBOL:	EQUIPMENT LIST ABBREV.:	DESCRIPTION:	NOTE:
	SC-IO-W	INFORMATION OUTLET (WALL)	
	N/A	INFORMATION OUTLET (WALL) EXISTING	
	SC-WAP-W	WIRELESS ACCESS WITH POINT ENCLOSURE (WALL)	
	N/A	WIRELESS ACCESS POINT WITH ENCLOSURE (WALL) EXISTING	
	AV-SP1-C	AV PERFORMANCE SPEAKER (CEILING)	
GENERAL NOTES:			
1. ALL SYMBOLS AND ABBREVIATIONS LISTED MAY NOT BE APPLICABLE TO THIS PROJECT.			
2. ALL SYMBOLS LISTED ABOVE ARE FOR REFERENCE ONLY. REFER TO PLANS AND LINE TYPE KEY FOR NEW, EXISTING TO REMAIN AND TO BE REMOVED ITEMS FOR ADDITIONAL INFORMATION.			

ELECTRICAL RENOVATION NOTES:

- THESE NOTES APPLY TO ALL ELECTRICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, LIGHTING, POWER, FIRE ALARM, AND OTHER LOW VOLTAGE SYSTEMS.
- EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS, EXISTING BUILDING DOCUMENTS, CONTRACTOR SHALL REVIEW EXISTING CONDITIONS AND REPORT CONFLICTS.
 - NOT ALL EXISTING EQUIPMENT, LUMINAIRES, AND CONDUIT ARE SHOWN. CONTRACTOR SHALL REVIEW EXISTING CONDITIONS AND REPORT CONFLICTS.
 - CONTRACTOR SHALL REVIEW EXISTING CONDITIONS PRIOR TO FABRICATION OF CABLE TRAY, BUSWAY, CONDUIT RACKS, AND OTHER SYSTEMS. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING FIELD CONDITIONS.
 - ELECTRICAL CONTRACTOR SHALL REVIEW EXISTING CONDITIONS TO VERIFY ACCESSIBILITY TO THE AREAS OF THEIR WORK INCLUDING WALLS, FLOOR, CEILINGS, CEILING TILES/GRID, AND ROOF. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE CUTTING, REMOVAL, PATCHING, AND REINSTALLATION OF AFFECTED AREAS ASSOCIATED WITH THEIR WORK BY COORDINATING WITH THE GENERAL CONTRACTOR OR QUALIFIED CONTRACTOR.
 - WHERE EXISTING ELECTRICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, CONDUIT, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING ELECTRICAL SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK.

ELECTRICAL INSTALLATION NOTES:

- THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE ADA STANDARDS FOR ACCESSIBLE DESIGN. REFER TO THE ADA GUIDELINES FOR ALL CONFIGURATION DETAILS ON THIS PAGE FOR ADDITIONAL INFORMATION.
- CIRCUIT NUMBERS ARE SHOWN FOR CIRCUIT IDENTIFICATION. CIRCUITING SHALL AGREE WITH NUMBERING ON THE PANEL PROVIDED. COMMON NEUTRALS MAY NOT BE USED FOR BRANCH CIRCUITS. BALANCE THE LOAD ON PANEL AS EVENLY AS POSSIBLE BETWEEN EACH PHASE.
- LIFE SAFETY, CRITICAL, EQUIPMENT BRANCH WIRING FOR FEEDERS AND BRANCH CIRCUITS SHALL BE ROUTED IN SEPARATE RACEWAY, JUNCTION BOXES, PULL BOXES, AND CABINETS. WIRING FOR EACH BRANCH SHALL BE INDEPENDENT FROM OTHER BRANCHES, INCLUDING THE NORMAL BRANCH.
- FLUSH MOUNT ALL LIGHTING CONTROL DEVICES AT +42" FROM FLOOR (CENTERLINE DIMENSION), EXCEPT WHERE OTHERWISE NOTED.
- FLUSH MOUNT ALL DUPLEX RECEPTACLES AND TECHNOLOGY OUTLETS AT +18" FROM FLOOR (CENTERLINE DIMENSION), EXCEPT WHERE OTHERWISE NOTED. RECEPTACLES AND OUTLETS MAY BE SURFACE MOUNTED WHEN CONDUIT IS SPECIFIED EXPOSED. MOUNT EXTERIOR LOCATED RECEPTACLES WITH WHILE-IN-USE COVERS AT +20" FROM FINISHED GRADE (CENTER DIMENSIONS) TO MAINTAIN INSTALLATION ADA COMPLIANCE.
- ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS. REFER TO DIVISION 7 FOR ADDITIONAL INFORMATION AND REQUIREMENTS SPECIFIC TO FIRESTOPPING.
- INSTALL ALL WALL MOUNTED FIRE ALARM NOTIFICATION DEVICES AT 90" ABOVE FINISHED FLOOR OR 6" BELOW THE CEILING, WHICHEVER IS LOWER, EXCEPT WHERE OTHERWISE NOTED. HEIGHT SHALL BE MEASURED TO THE TOP OF THE DEVICE.
- CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL CEILING MOUNTED DEVICES AND EQUIPMENT WITH LUMINAIRES, SPRINKLER, AND CEILING DIFFUSERS. CENTER ALL DEVICES IN CEILING TILE PATTERN. SMOKE DETECTORS, CARBON MONOXIDE DETECTORS, AND OCCUPANCY/VACANCY SENSORS SHALL BE LOCATED NO CLOSER THAN 3 FEET TO AN AIR SUPPLY DIFFUSER OR RETURN GRILLE. CARBON MONOXIDE DETECTORS SHALL BE LOCATED 10 PLUS FT FROM FIRE PLACES, COOKING, AND SIMILAR FUEL-BURNING APPLIANCES.
- CONTRACTOR SHALL VERIFY ALL FURNITURE, MODULAR FURNITURE, AND EQUIPMENT LOCATIONS WITH ARCHITECTURAL PLANS, ELEVATIONS, AND REVIEWED SHOP DRAWINGS. PRIOR TO MAKING THE ACTUAL ELECTRICAL INSTALLATION, THIS CONTRACTOR SHALL ADJUST RECEPTACLES, OUTLETS, OR CONNECTION LOCATIONS TO ACCOMMODATE FURNITURE AND/OR EQUIPMENT.
- ELECTRICAL AND TECHNOLOGY EQUIPMENT SHALL BE MOUNTED TO AVOID IMPEDANCE OF OPERATION OF, AND/OR ACCESS TO ELECTRICAL AND MECHANICAL EQUIPMENT. ALL MOUNTING OF ELECTRICAL AND TELECOMMUNICATIONS EQUIPMENT, ON EQUIPMENT SUPPLIED BY ANOTHER CONTRACTOR, SHALL BE APPROVED IN ADVANCE BY THE OTHER CONTRACTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.
- EACH CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS TO THE WALLS, FLOORS, CEILINGS, AND ROOFS. THE CONTRACTOR WHOSE WORK CAUSES DAMAGE IS RESPONSIBLE FOR PATCHING TO MATCH ORIGINAL CONSTRUCTION, FIRE RATING, AND FINISH.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL, TECHNOLOGY AUDIO/VISUAL, AND OTHER ELECTRICAL PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES, OTHER THAN SPRINKLERS.
- ELECTRICAL IDENTIFICATION. REFER TO SPECIFICATION SECTION 26 05 53 FOR COLOR/LABEL REQUIREMENTS FOR CONDUIT, BOX, CABLE/WIRE, AND EQUIPMENT.

DELV
DESIGN

P PURDUE
UNIVERSITY

LILY HALL TEACHING
LAB 1-129
RENOVATION

ARCHITECT

DELV Design
212 W 10th St, STE F125
Indianapolis, IN 46202
(317) 296-7400

MEP

IMEG
8900 Keystone Crossing #210
Indianapolis, IN 46240
(317) 848-5045

100% CONSTRUCTION
DOCUMENTS

REGISTERED PROFESSIONAL ENGINEER
No. 11400159
STATE OF INDIANA
10.03.24

No.	Description	Date

PROJECT #: 24005124.00
ISSUE DATE: 10.03.2024
DRW: RT | CHK: CJE

ELECTRICAL
COVERSHEET

E000