CLASSIFICATION NOTES

1. CLASSIFICATIONS ARE PER NFPA-497, NEC 514, & NEC 515.
2. NFPA-497: ALL LOW PRESSURE (LESS THAN 100PSIG) PIPING CONTAINING FLAMMABLE LIQUID: CLASS I, DIV. 2 FOR A 3 FOOT RADIUS IN ALL DIRECTIONS AND 10 FOOT HORIZONTAL DIRECTION UP TO 18" ABOVE FINISHED GRADE.
3. NFPA-497: ALL MODERATE/HIGH PRESSURE (MORE THAN 100PSIG) PIPING CONTAINING FLAMMABLE LIQUID: CLASS I, DIV. 2 FOR A 25 FOOT RADIUS IN ALL DIRECTIONS AND A 100 FOOT HORIZONTAL DIRECTION UP TO 24" AFG.
4. NFPA-497: ALL LOW PRESSURE (LESS THAN 100PSIG) VALVES CONTAINING FLAMMABLE LIQUID: CLASS I, DIV. 2 FOR A 3 FOOT RADIUS IN ALL DIRECTIONS AND A 10 FOOT HORIZONTAL DIRECTION UP TO 18" AFG.
5. NFPA-497: ALL MODERATE/HIGH PRESSURE (MORE THAN 100PSIG) VALVES CONTAINING FLAMMABLE LIQUID: CLASS I, DIV. 2 FOR A 25 FOOT RADIUS IN ALL DIRECTIONS AND A 100 FOOT HORIZONTAL DIRECTION UP TO 24" AFG.
6. ANY BELOW GRADE LOCATION, E.G., A SUMP, PIT, OR TRENCH, WITHIN ANY CLASSIFIED AREA SHALL BE CLASSIFIED AS CLASS 1, DIVISION 1 AREAS.
7. NFPA-497: ANY LOADING AND UNLOADING AREA DESIGNATED WITH TANK TRUCKS CONTAINING FLAMMABLE LIQUID, SHALL BE CLASSIFIED PER NFPA 497 FIGURES 5.9.4(b) THRU 5.9.4(e).
8. UNDERGROUND TANK FILL OPENING AREAS SHALL BE CLASS 1, DIVISION 2 FOR THE AREA WITH A HORIZONTAL RADIUS OF 10' SURROUNDING THE OPENING UP TO 18" AFG AND CLASS 1, DIVISION 1 WHERE ANY PIT/SPACE IS BELOW GRADE IN THAT AREA.
9. ALL AREAS INSIDE OF FLAMMABLE GAS VENT PIPING OR OPENINGS OR AREAS WITHIN 5' EXTENDING IN ALL DIRECTIONS OF OPEN END OF VENT SHALL BE CLASS I DIVISION 1.

ALL ELECTRICAL SERVICE AND DISTRIBUTION EQUIPMENT, PANELBOARDS, DISCONNECT SWITCHES AND LIGHTING FIXTURES TO BE FURNISHED BY OWNER.

GENERAL NOTES

1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) & THE AMERICANS WITH DISABILITIES ACT (ADA).
2. REFER TO RELATED ARCHITECTURAL, MECHANICAL, AND STRUCTURAL DRAWINGS FOR RELATED INFORMATION.
3. REFER TO THE SPECIFICATIONS FOR DATA NOT ON THE DRAWINGS.
4. E.C. SHALL REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTION OF INTERLOCKING AND CONTROLS OF MECHANICAL UNITS AND THERMOSTAT LOCATIONS.
5. COORDINATE OUTLET BOX LOCATIONS WITH MASONRY TO MINIMIZE CUTTING OF BRICK OR BLOCK.
6. ALL MOUNTING HEIGHTS TO CENTERLINE OF ITEM UNLESS OTHERWISE NOTED. VERIFY ALL OUTLET LOCATIONS ON THE JOB PRIOR TO ROUGH-IN.
7. CONDUIT RUN W/CONDUCTORS AS INDICATED & GROUND WIRE SIZED PER N.E.C. 250.122. CONDUIT SIZE AS REQUIRED.
8. WHEN INCREASED CONDUCTOR SIZES ARE SHOWN ON THE PLANS, THE LARGER CONDUCTOR SIZE SHALL BE USED THROUGHOUT THE LENGTH OF THE CIRCUIT, INCLUDING NEUTRAL AND GROUND. WHERE CIRCUIT CONDUCTOR SIZES ARE INCREASED FOR VOLTAGE DROP, INCREASE THE SIZE OF EQUIPMENT GROUNDING CONDUCTOR PROPORTIONATELY PER NEC.
9. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION. MULTIWIRE BRANCH CIRCUITS SHALL MEET THE REQUIREMENTS OF NEC ARTICLE 210.4
11. LABEL THE FRONT OF EACH RECEPTACLE COVERPLATE WITH PANEL DESIGNATION AND CIRCUIT NUMBER USING CLEAR THERMAL TRANSFER (ELECTRONIC DYMO) LABELS WITH 1/8" HIGH BLACK LETTERS (OR CONTRASTING COLOR IF PLATES ARE BLACK OR BROWN). LABELS SHALL BE SUITABLE FOR INDOOR/OUTDOOR USE. LABEL THE BACK OF EACH LIGHT SWITCH COVERPLATE WITH PANEL DESIGNATION AND CIRCUIT NUMBER USING A FINE BLACK PERMANENT MARKER.
12. JUNCTON BOX OR RECEPTACLE FOR DRINKING FOUNTAINS SHALL BE LOCATED BEHIND THE EQUIPMENT SKIRT UNLESS OTHERWISE NOTED. COORDINATE CONNECTION TYPE AND LOCATION WITH EQUIPMENT PROVIDED.
13. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES. THE FIRE RATING OF THE SEALANT SHALL MATCH THE RATING OF THE WALL OR CEILING.
14. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, VOICE, DATA, ETC.) IN THE RATED WALLS OR CEILING SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
15. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LIGHT FIXTURE LOCATIONS. VERIFY ALL DISCREPANCIES WITH ARCHITECT PRIOR TO ROUGH-IN.
16. OUTLET BOXES (ELECTRIC, VOICE, DATA, ETC.) SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE. OUTLET BOXES ON OPPOSITE SIDES OF THE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
17. PROVIDE 18" LONG (MIN.) CONDUIT SLEEVES THRU ALL WALLS WHERE CABLES ARE INDICATED OR REQUIRED TO PASS THRU WALLS. PROVIDE BUSHINGS ON BOTH ENDS. SIZE CONDUIT FOR CABLES INSTALLED. MAXIMUMS SHALL BE:

    2"C. = 10 CABLES
    2 1/2"C. = 20 CABLES
    3"C. = 30 CABLES
    4"C. = 50 CABLES

F1. FIELD VERIFY LOCATION OF AREA SMOKE DETECTORS DO NOT LOCATE WITHIN 36" OF A HVAC DIFFUSER (SUPPLY OR RETURN), IN A DIRECT AIR FLOW, WITHIN 36" OF A SPRINKLER HEAD, OR WITHIN 36" OF THE TIP OF A CEILING FAN BLADE. SMOKE DETECTORS FOR DOOR RELEASE SHALL BE LOCATED ON THE CENTER LINE OF THE DOOR AND A MAXIMUM OF 5 FEET FROM THE DOOR. THE MINIMUM DISTANCE FROM THE DOOR IS THE DEPTH OF THE WALL SECTION ABOVE THE DOOR, BUT NOT LESS THAN 12".

F2. LABEL REMOTE ALARM INDICATOR FOR DUCT MOUNTED SMOKE DETECTORS (IE: RTU-1 SUPPLY, RTU-2 RETURN, FIRE/SMOKE DAMPER, ETC.). DUCT DETECTORS SHOULD BE LOCATED IN THE AREA BETWEEN 6 AND 10 DUCT EQUIVALENT DIAMETERS OF STRAIGHT, UNINTERRUPTED DUCTWORK. DUCT DETECTORS FOR FIRE/SMOKE DAMPERS SHOULD BE LOCATED BETWEEN THE LAST INLET OR OUTLET UPSTREAM OF THE DAMPER AND THE FIRST INLET OR OUTLET DOWNSTREAM OF THE DAMPER.

F3. FAN SHUTDOWN RELAY WIRING SHALL BE LOCATED WITHIN 3 FEET OF THE FAN CONTROLS AND THE WIRING TO THE RELAY SHALL BE MONITORED.

T1. EACH VOICE, DATA, OR OTHER SYSTEMS OUTLET REQUIRES 1"C. WITH PULL ROPE STUBBED 6" ABOVE NEAREST ACCESSIBLE CEILING UNLESS OTHERWISE NOTED ON PLANS. CONDUITS STUBBED UP ABOVE CEILINGS SHALL BE TURNED OUT 90°. PROVIDE INSULATED BUSHINGS ON ALL CONDUITS. LABEL CONDUIT TO IDENTIFY ITS INTENDED USE (IE: VOICE, DATA, ETC.). VOICE/DATA JACKS AND CABLING PROVIDED BY OWNER.

C1. LABEL EACH COMPUTER RECEPTACLE COVERPLATE 'COMPUTER' USING CLEAR THERMAL TRANSFER (ELECTRONIC DYMO) LABELS WITH 1/8" HIGH BLACK LETTERS.

C2. THE COLOR OF ISOLATED GROUND RECEPTACLES AND COVERPLATES SHALL MATCH THOSE OF OTHER DEVICES ON THE JOB.

C3. FOR ISOLATED GROUND CIRCUITS, PROVIDE AN ISOLATED GROUND CONDUCTOR THROUGHOUT THE LENGTH OF THE CIRCUIT IN ADDITION TO THE PHASE, NEUTRAL, AND GROUND CONDUCTORS.

SYMBOL LIST

SYMBOL	DESCRIPTION	MOUNTING
	LIGHT FIXTURE & FIXTURE LETTER	CEILING
	STRIP LIGHT FIXTURE & FIXTURE LETTER	CEILING
	LIGHT FIXTURE & FIXTURE LETTER	CEILING
	LIGHT FIXTURE & FIXTURE LETTER	WALL
	EXIT LIGHT (SHADING DENOTES EXIT FACE SIDE)	CEIL./WALL
	LIGHT FIXTURE & FIXTURE LETTER	WALL
	FIXTURE ON EMERG. POWER	CEILING
	FIXTURE, NIGHT LIGHT	CEILING
	EMERGENCY BATTERY LIGHT FIXTURE	CEIL./WALL
$	SWITCH, SINGLE POLE	46"AFF
$3	SWITCH, 3-WAY	
$M	SWITCH, MANUAL MOTOR	
$ K	SWITCH, KEYED	WALL
$ T	HBA DIGITAL TIMER SWITCH - TD200	WALL
$ P	SWITCH, PILOT	WALL
OS 1	ULTRASONIC WALL SWITCH OCC. SENSOR	WALL
OS 2	PIR DIMMER WALL SWITCH OCC. SENSOR	WALL
OS 3	ULTRASONIC CEILING OCC. SENSOR	CEILING
OS 4	DUAL-TECH WALL SWITCH OCC. SENSOR	WALL
OS 5	LOW TEMP OCC. SENSOR.	WALL
OS 6	ULTRASONIC WALL SWITCH OCC. SENSOR, BI-LEVEL	WALL
OS 7	ULTRASONIC, LOW TEMPERATURE CEILING OCC. SENSOR	CEILING
P	POWER PACK	
	DISCONNECT SWITCH / FUSED DISCONNECT SWITCH	
J T	JUNCTION BOX / THERMOSTAT	
DS	DAYLIGHTING SENSOR	
(P)	PARTIAL CIRCUIT	
	RECEPTACLE, DUPLEX	18"AFF, UNO
	RECEPTACLE, DUPLEX, MOUNTED HORIZONTALLY	18"AFF, UNO
	RECEPTACLE, GFCI	18"AFF, UNO
	RECEPTACLE, DOUBLE DUPLEX	18"AFF, UNO
	RECEPTACLE, DUPLEX ISOLATED GROUND	18"AFF, UNO
	RECEPTACLE, DOUBLE DUPLEX, ISOLATED GROUND	18"AFF, UNO
	RECEPTACLE, SIMPLEX	18"AFF, UNO
	CLG-MTD DUPLEX GROUNDED RECEPT.	CEILING MTD
	SPECIAL OUTLET (NEMA CONFIG AS NOTED)	18"AFF, UNO
	FLOOR MOUNTED RECEPTACLE AND VOICE/DATA	FLOOR
	UNDERGROUND CONDUIT RUN	
	LOW VOLTAGE CIRCUITRY	CEIL./WALL
	CONDUIT HOME RUN	CEIL./WALL
	MOTOR	
x-x	EQUIPMENT - SEE EQUIPMENT CONNECTION SCHEDULE	
	ELECTRICAL DISTRIBUTION EQUIPMENT	
	EQUIPMENT PANEL (SURFACE)	WALL
	EQUIPMENT PANEL (FLUSH)	WALL
S	SPEAKER	CEILING
PC	PHOTOCELL	
	VOICE/DATA,	18"AFF
	ESO (EMERGENCY SHUT-OFF OFF)	
S	PHOTO ELECTRIC AREA SMOKE DETECTOR (GEN NOTE F1)	CEILING
	DUCT SMOKE DETECTOR (GEN NOTE F2)	DUCTWORK
FACP	FIRE ALARM CONTROL PANEL	
SAP	SPRINKLER ALARM PANEL	
E	ELECTRIC DOOR STRIKE	
	DOOR RELEASE BUTTON	
A	REMOTE ANNUNCIATOR FOR DUCT SMOKE DETECTOR (GEN NOTE F2)	WALL
CO2	CO2 SENSOR/ HORN STROBE	
B	DOOR BELL / PUSH BUTTON	WALL
TV	TELEVISION	WALL

ABREVIATIONS

AFF	ABOVE FINISHED FLOOR	NL	NIGHT LIGHT
EC	ELECTRICAL CONTRACTOR	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
EM	LIGHT FIXTURE ON EMERGENCY POWER	TYP	TYPICAL
C	CONDUIT	UNO	UNLESS NOTED OTHERWISE
G	GROUND	W	WALL
GC	GENERAL CONTRACTOR	WP	WEATHERPROOF
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	WR	WATER RESISTANT
MC	MECHANICAL CONTRACTOR		

HFA
HARRISON FRENCH
& ASSOCIATES, LTD

t 479.273.7780

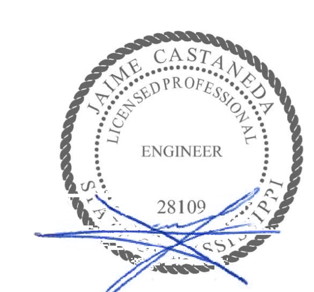
1705 S. Walton Blvd., Suite 3
Bentonville, Arkansas 72712
www.hfa-ae.com

STIPULATION FOR REUSE
THIS DRAWING WAS PREPARED FOR USE ON A SPECIFIC SITE AT NICHOLSON, MS CONTEMPORANEOUSLY WITH ITS ISSUE DATE ON 2/7/2023 , AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

Love's
STORE NUMBER: 860
I-59, EXIT 1
NICHOLSON, MS 39466
JOB NUMBER: 03-23-30009
TIER 1 180

ISSUE BLOCK

CHECKED BY:	CAR
DRAWN BY:	SED
DOCUMENT DATE:	2/7/2023
PROTO:	TIER 1 180
PROTO CYCLE:	Q4 - 2022



2023.02.07 14:25:18-06'00'

ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES

SHEET:
E001

2/7/2023 1:05:24 PM
C:\Users\sam.dempster\Documents\2021 Revit Projects\Loves_Nicholson, MS_MEP_T2_180_v21_HFA.Sam.Dempster.rvt
4500-E001-ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES