ELECTRICAL POWER SYMBOLS

- 2P / 30A — MOLDED CASE CIRCUIT BREAKER, FIXED TRIP. THREE POLE UNLESS DESIGNATED '1P' OR '2P'
- 400 AF / 350 AT — MOLDED CASE CB OF A GIVEN FRAME SIZE WITH ADJUSTABLE TRIP SETTINGS
- NORMALLY OPEN MOMENTARY PUSHBUTTON
- NORMALLY CLOSED MOMENTARY PUSHBUTTON
- NORMALLY OPEN CONTACT
- NORMALLY CLOSED CONTACT
- M — ELECTRIC METER
- 3A — FUSE, SIZE AS INDICATED.
- SA 15KV D — SURGE ARRESTOR – DISTRIBUTION CLASS
- SS — GROUND CONNECTION – TO STANDARD ROD TYPE ELECTRODE TO NEAREST STRUCTURAL STEEL (#6 MIN. CONDUCTOR IF NOT SHOWN)
- TVSS — TRANSIENT VOLTAGE SURGE SUPPRESSOR
- POWER TRANSFORMER, DELTA–WYE CONFIGURATION.
- EFX M — MOTOR – EQUIPMENT SCHEDULE IDENTIFICATION AS SHOWN.
- F — FUSED DISCONNECT SWITCH, SIZE AND TYPE AS INDICATED IN SCHEDULE.
- DISCONNECT SWITCH, SIZE AND TYPE AS INDICATED IN SCHEDULE.
- DISCONNECT SWITCH FURNISHED WITH EQUIPMENT
- MOTOR STARTER, TYPE AND SIZE AS INDICATED IN SCHEDULE.
- MOTOR STARTER FURNISHED WITH EQUIPMENT
- COMBINATION STARTER W/EXTERNALLY OPERATED DISCONNECT, SIZE AND TYPE AS INDICATED IN SCHEDULE.
- COMBINATION STARTER W/EXTERNALLY OPERATED DISCONNECT, FURNISHED WITH EQUIPMENT
- E — PUSHBUTTON CONTROL STATION – 1, 2 OR 3 BUTTONS, 'E' DENOTES EMERGENCY POWER OFF.
- DRY TYPE TRANSFORMER, SIZE AS INDICATED

INTERIOR ELECTRICAL SYMBOLS

- GRADE MOUNTED UPLIGHT, SEE CIVIL DRAWINGS
- B — RECESSED INCANDESCENT OR H.I.D. LUMINAIRE, UPPER CASE LETTER INDENTIFIES FIXTURE TYPE.
- U — WALL FIXTURE – MOUNTING HEIGHT, UPPER CASE LETTER IDENTIFIES FIXTURE TYPE.
- A A — SURFACE MOUNTED OR SUSPENDED INDUSTRIAL FLUORESCENT FIXTURE NO LENS. UPPER CASE LETTER IDENTIFIES THE FIXTURE TYPE. DARKENED AREA INDICATES EMERGENCY POWERED BY A BATTERY INVERTER.
- J — RECESSED MOUNTED FLUORESCENT TROFFER FIXTURE. UPPER CASE LETTER DESIGNATES THE FIXTURE TYPE. DARKENED AREA INDICATES EMERGENCY FIXTURE POWERED BY A BATTERY INVERTER.
- A — SURFACE MOUNTED FLUORESCENT FIXTURE WITH LENS. UPPER CASE LETTER DESIGNATES THE FIXTURE TYPE.
- STO — MANUAL STARTER WITH THERMAL OVERLOADS
- SPECIAL OUTLET, TYPE AS NOTED ON DRAWING, 18" AFF.

XXXX — A CIRCUIT WITHOUT ANY DESIGNATION INDICATES THE CIRCUIT IS TO BE HOT, NEUTRAL AND GROUND. ALL CONDUIT SHALL CONTAIN A GREEN INSULATED GROUND WIRE SIZED IN ACCORDANCE WITH 1999 NEC TABLE 250–122, UNLESS OTHERWISE NOTED. REFER TO PLANS AND PANEL SCHEDULES FOR FURTHER INFORMATION ON GROUND CONDUCTORS, ISOLATED GROUND CONDUCTORS, AND NEUTRAL CONDUCTORS.

------- UP ------- CONDUIT RUN UNDERGROUND OR IN CONCRETE SLAB/TOPPING

CONDUIT RUN ABOVE GRADE

NOTE: CONDUITS SHALL BE RUN ABOVE GRADE (HIDDEN OR EXPOSED) OR BELOW GRADE AS SHOWN ON ELECTRICAL PLANS.

MISCELLANEOUS ELECTRICAL SYMBOLS

- 1 — KEYED NOTES
- 1 — EQUIPMENT CONNECTION, REFER TO APPROPRIATE SCHEDULE FOR ADDITIONAL INFORMATION.

NOTES

1. FOR GENERAL NOTES AND NON–ELECTRICAL SYMBOLS, SEE LEGEND.
2. LETTERS SUCH AS "WP", "H" ADJACENT TO ANY SYMBOL INDICATE SPECIAL CONSTRUCTION IS REQUIRED. SEE ABBREVIATIONS FOR DEFINITIONS.
3. SIZES OF WIRE AND CABLE ARE BASED ON COPPER CONDUCTORS UNLESS INDICATED OTHERWISE.
4. ELEVATIONS FOR ELECTRICAL EQUIPMENT ARE SHOWN TO CENTER OF DEVICE OR ENCLOSURE UNLESS NOTED OTHERWISE.
5. ALL SYMBOLS AND ABBREVIATIONS ARE NOT REQUIRED FOR THIS PROJECT.
6. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO CSI SECTION 16000 AND ALL SUB–SECTIONS.

ELECTRICAL ABBREVIATIONS

(NOT ALL ABBREVIATIONS REQUIRED FOR THIS PROJECT)

A, AMP	AMPERE
AF	AMPS FRAME
AFF	ABOVE FINISH FLOOR
AIC	AMPS INTERRUPTING CAPACITY (SYM RMS)
AS	AMP SWITCH
ASYM	ASYMMETRICAL
AT	AMPS TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAGE
BLDG	BUILDING
BP/IS	BYPASS/ISOLATION
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
℄	CENTER LINE
COMM	COMMUNICATION
CONT	CONTINUOUS
Cu	COPPER
db	DECIBEL
dbA	DECIBEL, A–WEIGHTED
DIM	DIMENSION
DISC	DISCONNECT
DWG	DRAWING
E	EAST
ELEC	ELECTRICAL OR ELECTRIC
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE
EP	EXPLOSION PROOF
EPO	EMERGENCY POWER OFF
EQ	EQUAL
EQUIP	EQUIPMENT
EXIST	EXISTING
EXP	EXPOSED
EXT	EXTERIOR
FACP	FIRE ALARM CONTROL PANEL
FE	FURNISHED WITH EQUIPMENT
FS	FUEL SPILL
GFGI	GOVERNMENT FURNISHED, GOVERNMENT INSTALLED
GFI	GROUND FAULT INTERRUPTER
G, GND, GRD	GROUND
GOVT	GOVERNMENT
H, HAZ	HAZARDOUS, HAZARDOUS LOCATION RATED
HPF	HIGH POWER FACTOR
IMC	INTERMEDIATE METAL CONDUIT
J–BOX	JUNCTION BOX
KAIC	KILOAMPS INTERRUPTING CAPACITY (SYM RMS)
KV	KILOVOLTS
KVA	KILOVOLT AMPERES
KW	KILOWATT
KWH	KILOWATT HOURS
M	METER
MCP	MOTOR CIRCUIT PROTECTOR
mm	MILLIMETER
MIN	MINIMUM
N	NORTH
NEC	NATIONAL ELECTRICAL CODE
N, NEUT	NEUTRAL
N.O.	NORMALLY OPEN
N.C.	NORMALLY CLOSED
OCPD	OVER CURRENT PROTECTIVE DEVICE
PNL	PANEL
PH	PHASE
PVC	POLYVINYL CHLORIDE
RECP	RECEPTACLE
REF	REFERENCE
REQD	REQUIRED
RGS	RIGID GALVANIZED STEEL
S	SOUTH
SEC	SECONDARY
SFC	SECURITY FORCES CENTER
SPEC	SPECIFICATIONS
SYM	SYMMETRICAL
TEL	TELEPHONE
TVSS	TRANSIENT VOLTAGE SURGE SUPRESSION
TYP	TYPICAL
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
V	VOLT
VA	VOLT AMPERE
VFD	VARIABLE FREQUENCY DRIVE
VT	VOLTAGE TRANSFORMER
W	WEST
W/	WITH
W/O	WITHOUT
WP	WEATHERPROOF
XMFR	TRANSFORMER

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NUMBER OF SECTION OR DETAIL — DRAWING ON WHICH SECTION OR DETAIL IS SHOWN

SECTION AND DETAIL KEY

THIS DOCUMENT CONTROLLED BY

CHANGE CONTROL SYSTEM 3

ENGINEERING PROCEDURE SNS–ENG–G001

REV	CHANGE TYPE	CHANGE CONTROL SYSTEM	CHANGE REQUEST NUMBER	DESCRIPTION	DSN	CHK	DEPT	DATE	PE	DATE	PJ	DATE	REQ	DATE	UTB	DATE	RPE	RPE ND	DATE	ST	CV	EC	EE	EM	IE	M	PD	SE	AR
0				CERTIFIED FOR CONSTRUCTION 10/26/01	LJF	JWH				11/13/01	RAD	11/13/01				11/13/01	JWH	107492	10/26/01										

REVISION OR ISSUE PURPOSE — REVISION APPROVALS — SQUAD CHECK

RPE JERRY WAYNE HARRIS REGISTERED ENGINEER AGRICULTURE COMMERCE STATE OF TENNESSEE

REV. 0 DATE 10/26/01

DRAWING APPROVALS

DSN		10/25/01
DRW		10/26/01
CHK		10/26/01
DEPT		
PE		11/13/01
PJ		11/12/01
REQ		
UTB		11/12/01

108030700-J8E-8700-A001

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PROJECT NAME:

SPALLATION NEUTRON SOURCE

TARGET BUILDING
LEGEND AND SYMBOLS
LEVEL B1, SECTOR 45

1	48	49	50	PLANT	BLDG	FL	SH.	OF	TYPE	CLASS
3	J	X	X	8	8700		1	1	G	U

51	52	53	WBS		REV
NC	NA	IN	1.8.3.7	J0.00.01	0

J0.00.01