





### ELECTRICAL SYMBOL SCHEDULE

- SEE FIXTURE SCHEDULE FOR TYPE, MOUNTING AND WATTAGE.
- HEIGHT MEASURED TO CENTER LINE OF THE BOX FROM THE FINISHED FLOOR.
- REFER TO DRAWINGS FOR DIRECTIONAL ARROWS.
- SUBSCRIPT KEYS SWITCH TO FIXTURES CONTROLLED.
- NEMA TYPE "ND" NON-FUSED UNLESS NOTED "F" (FUSED). USE "HD" 480 V.
- HEIGHT TO BE THE LOWER OF EITHER 80" A.F.F. OR 6" BELOW CEILING.
- PROVIDE H.O.A. AND S.S. PUSHBUTTONS AS REQUIRED.
- DOUBLE ARROWS DENOTE A DOUBLE FACE UNIT.
- COORDINATE WITH SHOP DRAWINGS.
- SUBSCRIPT DENOTES NEMA CONFIGURATION.
- HEIGHT MEASURED TO BOTTOM OF THE BOX FROM FINISHED FLOOR.
- SUBSCRIPT U INDICATES ULTRASONIC, P INDICATES PASSIVE INFRARED.

SYMBOL	DESCRIPTION	MOUNTING HEIGHT	NOTES
—	ONE CIRCUIT, TWO WIRE HOME RUN TO PANEL		
—	CONDUIT RUN CONCEALED IN WALL OR CEILING		
—	CONDUIT RUN CONCEALED IN FLOOR OR GROUND		
—	CONDUIT UP		
—	CONDUIT DOWN		
—	CONDUIT STUB LOCATION	CAP CONDUIT	
⊙	JUNCTION BOX ("F" IN FLOOR)	AS NOTED	
[B42]	ARCHITECTURAL ROOM NUMBER		
Ⓢ	EQUIPMENT NUMBER		
①	REFERENCE NOTE		

### PHASING NOTES

PHASE 1  
1. REMOVE EXISTING GENERATOR AND REINSTALL AS TEMPORARY GENERATOR SERVING LIFE SAFETY LOADS.

PHASE 2  
1. INSTALL NEW GENERATOR AND NEW SERVICE ENTRANCE EQUIPMENT.  
2. INSTALL NEW CHAIN LINK FENCING.

PHASE 3  
1. REMOVE TEMPORARY LIFE SAFETY GENERATOR AND TURN OVER TO OWNER.

### GENERAL NOTES

- VERIFY ALL EQUIPMENT DIMENSIONS AND LOCATIONS BEFORE BEGINNING ROUGH IN. CONSULT ALL APPLICABLE CONTRACT DRAWINGS AND SHOP DRAWINGS TO INSURE NEC CODE CLEARANCES REQUIRED AROUND ALL ELECTRICAL EQUIPMENT.
- SEE APPLICABLE SHOP DRAWINGS FOR ROUGH IN LOCATION OF ALL EQUIPMENT, WIRING DEVICES, ETC. WHERE APPLICABLE MOUNT ALL WIRING DEVICES ABOVE BACK SPLASH EXCEPT THOSE SERVING UNDER COUNTER EQUIPMENT.
- SEE SPECIFICATION FOR ENERGY SAVING LAMP AND BALLAST REQUIREMENTS.
- ALL PENETRATIONS OF FIRE RATED FLOORS, WALLS, AND CEILINGS SHALL BE SEALED WITH APPROVED MATERIAL TO MAINTAIN FIRE RATING OF SURFACE PENETRATED.
- CIRCUITS EXTENDING OVER 70' FOR 120 VOLT 20 AMP CIRCUITS SHALL BE RUN WITH MINIMUM #10 CONDUCTORS.
- CONCEAL ALL NEW CONDUIT IN WALLS AND CEILING SPACES OR PROVIDE SURFACE MOUNTED RACEWAY (E WIREMOLD).

### DEMOLITION NOTES

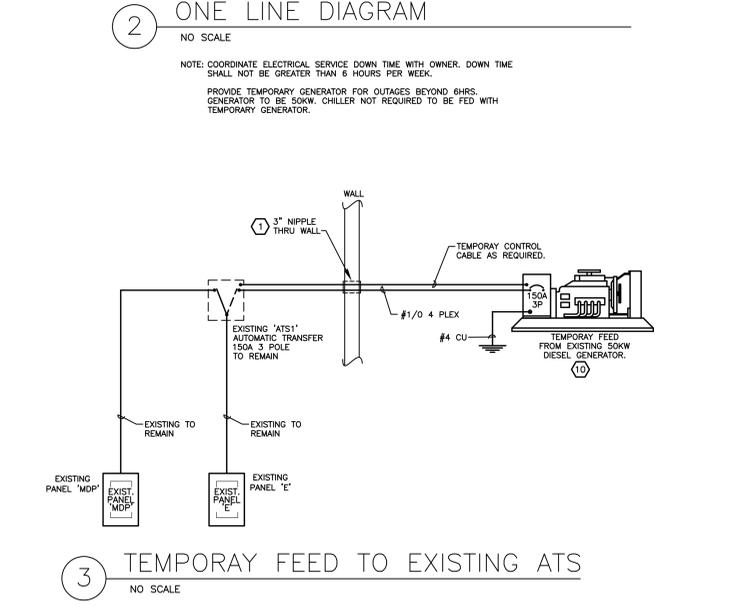
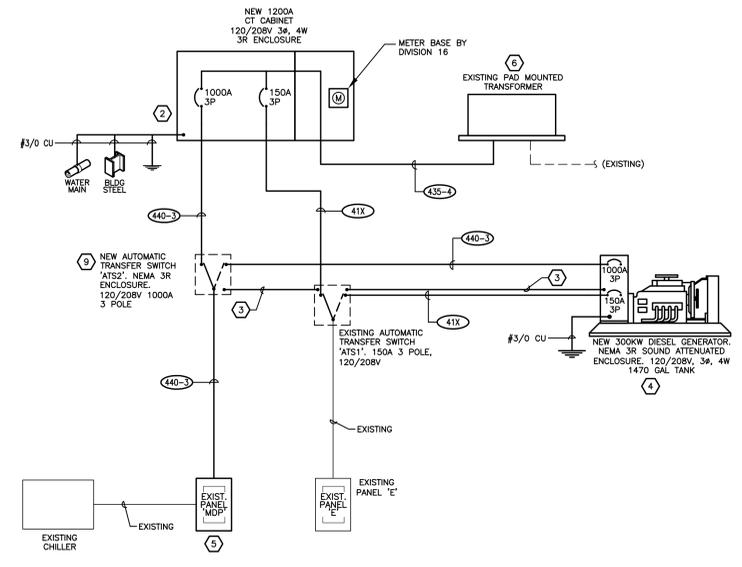
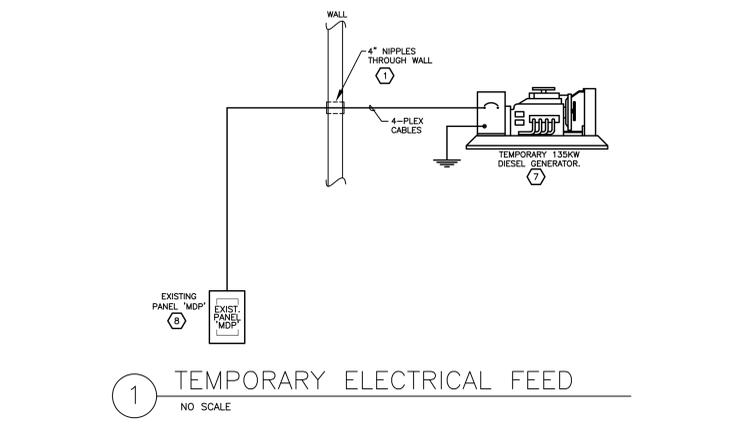
- COORDINATE ALL NEW ELECTRICAL EQUIPMENT REQUIREMENTS AND MAKE CONNECTION TO EXISTING SYSTEMS. THIS INCLUDES LIGHTING, POWER, SIGNAL, RACEWAY AND OTHER SYSTEMS INCLUDED UNDER DIVISION 16.
- RELOCATE, REWIRE AND/OR RECONNECT EXISTING ELECTRICAL DEVICES AND/OR EQUIPMENT THAT FOR ANY REASON OBSTRUCTS CONSTRUCTION.
- CONCEAL ALL RACEWAY AND WIRING IN EXISTING WALLS, CEILINGS, FLOORS, ETC. EXCEPT WHERE THE USE OF SURFACE METAL RACEWAYS (E.G. WIRE MOLD) IS INDICATED ON DRAWINGS OR IN SPEC.
- LEAVE ALL EXISTING EQUIPMENT, IN PORTIONS OF THE BUILDING NOT BEING REMODELED, IN WORKING CONDITION. RESTORE ALL INTERRUPTED BRANCH CIRCUITS, FEEDERS, ETC. TO WORKING CONDITION.
- EXISTING RACEWAYS MAY BE REUSED (IN PLACE) WHERE POSSIBLE, AND WHERE IN COMPLIANCE WITH THE SPECIFICATIONS, AND THE INTENT OF THE CONTRACT DOCUMENTS. INSURE INTEGRITY OF EXISTING RACEWAY BEFORE REUSE.
- REMOVE ALL RACEWAYS, CONDUCTORS, BOXES, DEVICES, EQUIPMENT, ETC. THAT ARE NOT TO BE REUSED. REMOVE CONDUCTORS BACK TO THE PANEL LABEL CIRCUIT BREAKER AS "SPARE".
- DO NOT PENETRATE STRUCTURAL ELEMENTS OF FLOORS, WALLS, CEILINGS, ROOFS, ETC.

### SHEET KEYNOTES

- PROVIDE TEMP 4-PLEX CABLES FROM TEMPORARY GENERATOR TO EXISTING MAIN DISTRIBUTION PANEL "MDP" AS RECOMMENDED BY RENTAL COMPANY. REGROUT HOLES THROUGH WALL WHEN JOB IS COMPLETE.
- BOND NEUTRAL AND GROUND IN NEW CT CABINET.
- 1" CONDUIT WITH CONTROL WIRING PER MANUFACTURER.
- OWNER TO PROVIDE FUEL FOR EMERGENCY GENERATOR. COORDINATE FUEL DELIVERY DATES WITH OWNER.
- REMOVE EXISTING BONDING JUMPER BETWEEN NEUTRAL AND GROUND.
- DFCM WILL PAY FOR ALL ROCKY MOUNTAIN POWER CONNECTION FEES.
- COORDINATE LOCATION ON SITE WITH OWNER.
- TURN BREAKER FEEDING EXISTING CHILLER TO OFF POSITION WHILE ON TEMPORARY GENERATOR.
- CONFIGURE AUTOMATIC TRANSFER SWITCH "ATS" FOR LOAD SHED IN THE EVENT OF AN OVERLOAD OF THE EMERGENCY SYSTEM.
- REMOVE EXISTING GENERATOR AFTER NEW 300KW INSTALLATION IS COMPLETE.

### INDEX OF ELECTRICAL DRAWINGS

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ES102	ELECTRICAL SITE PLAN



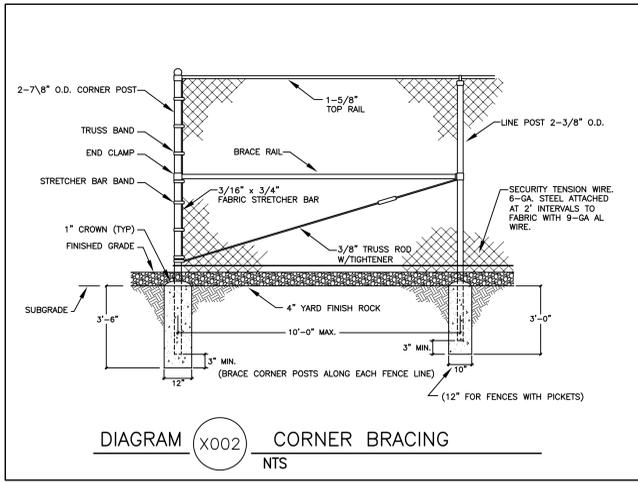
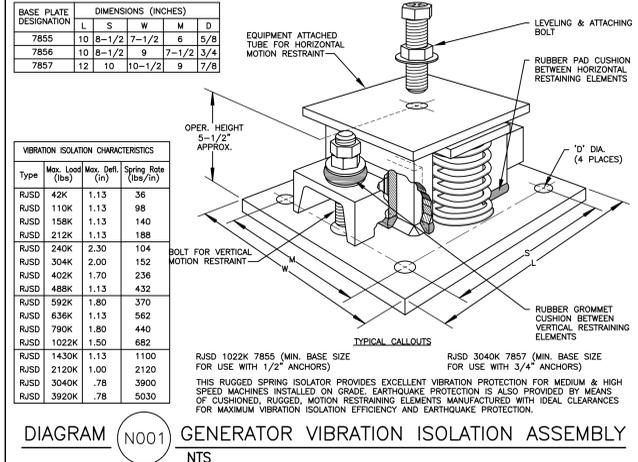
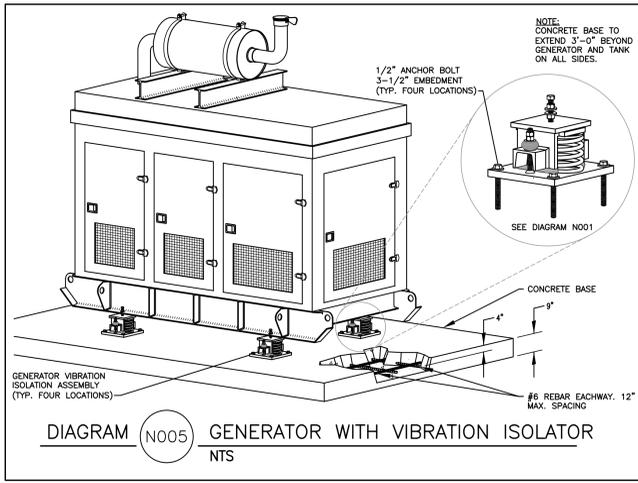
### COPPER CONDUCTOR & CONDUIT SCHEDULE

TYPE	AMP.	COND. SIZE	COND. QUAN.	CONDUIT SIZE	INSUL. ACTION	EQ. GND. COND.
(20)	30	3/4"	2	10	THHN	10
(30)	30	3/4"	3	10	THHN	10
(40)	30	3/4"	4	10	THHN	10
(28)	40	3/4"	2	8	THHN	10
(38)	40	3/4"	3	8	THHN	10
(48)	40	3/4"	4	8	THHN	10
(26)	55	3/4"	2	6	THHN	8
(36)	55	3/4"	3	6	THHN	8
(46)	55	3/4"	4	6	THHN	8
(24)	70	3/4"	2	4	THHN	8
(34)	70	1"	3	4	THHN	8
(44)	70	1-1/4"	4	4	THHN	8
(23)	85	1"	2	3	THHN	8
(33)	85	1"	3	3	THHN	8
(43)	85	1-1/4"	4	3	THHN	8
(32)	95	1-1/4"	3	2	THHN	6
(42)	95	1-1/4"	4	2	THHN	6
(31)	110	1-1/4"	3	1	THHN	6
(41)	110	1-1/2"	4	1	THHN	6
(51)	110	2"	5	1	THHN	6
(31X)	150	1-1/2"	3	1/0	THHN	6
(41X)	150	1-1/2"	4	1/0	THHN	6
(51X)	150	2"	5	1/0	THHN	6
(32X)	175	1-1/2"	3	2/0	THHN	6
(42X)	175	2"	4	2/0	THHN	6
(52X)	175	2"	5	2/0	THHN	6
(33X)	200	2"	3	3/0	THHN	6
(43X)	200	2"	4	3/0	THHN	6
(53X)	200	2-1/2"	5	3/0	THHN	6
(34X)	230	2"	3	4/0	THHN	4
(44X)	230	2-1/2"	4	4/0	THHN	4
(54X)	230	2-1/2"	5	4/0	THHN	4
(32S)	255	2"	3	250	THHN	4
(42S)	255	2-1/2"	4	250	THHN	4
(52S)	255	2-1/2"	5	250	THHN	4
(33S)	310	2-1/2"	3	350	THHN	3
(43S)	310	3"	4	350	THHN	3
(53S)	310	3"	5	350	THHN	3
(340)	335	3"	3	400	THHN	3
(440)	335	3"	4	400	THHN	3
(540)	335	3"	5	400	THHN	3
(350)	380	3-1/2"	3	500	XHHW	3
(450)	380	3-1/2"	4	500	XHHW	3
(550)	380	3-1/2"	5	500	XHHW	3

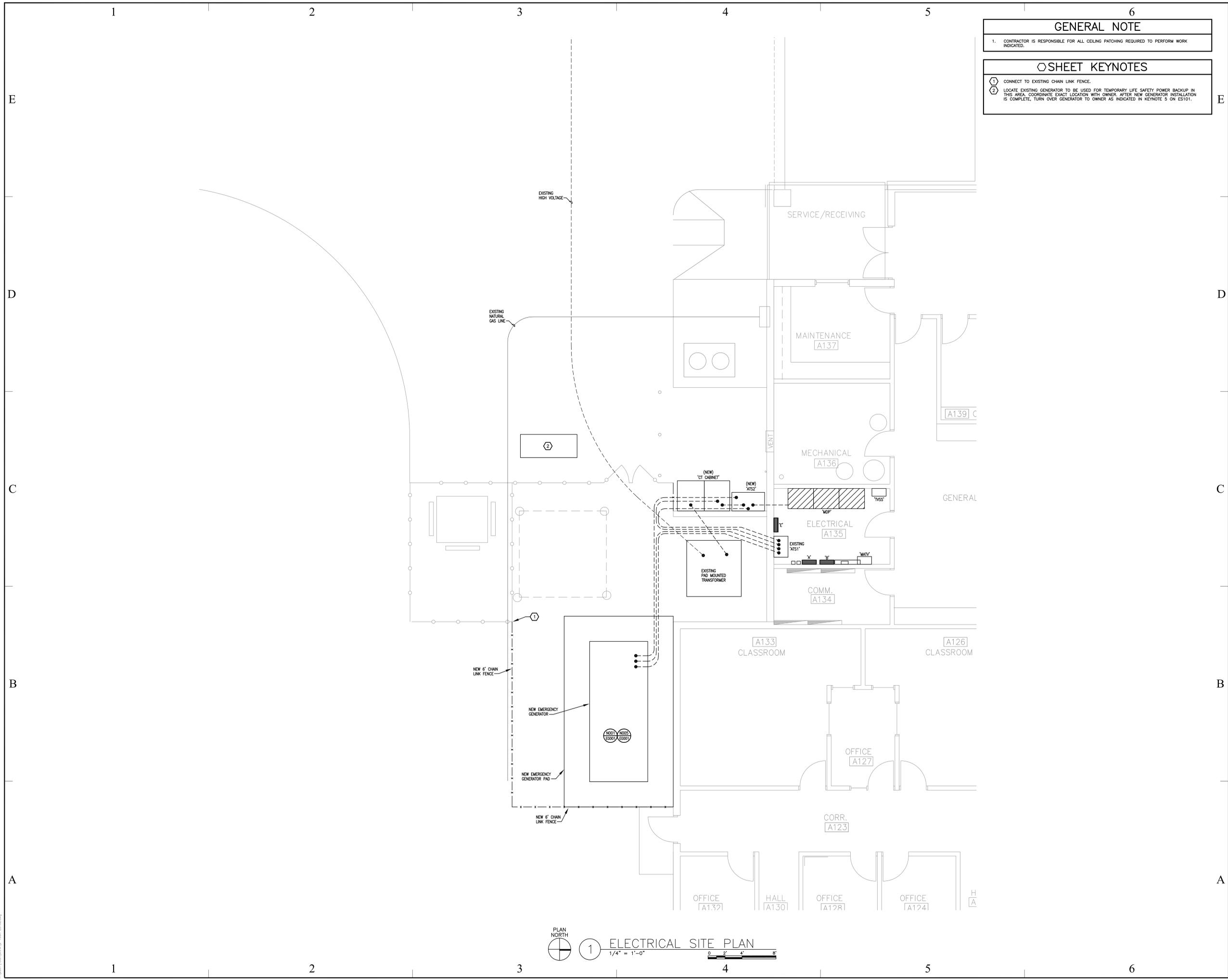
### COPPER CONDUCTOR & CONDUIT SCHEDULE FOR PARALLEL RUNS

TYPE	MAX. O.C. PROT.	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUIT SIZE	EQ. GND. COND.	
(25-2)	600	510	2	3	250	2-1/2"	1
(45-2)	600	510	2	4	250	2-1/2"	1
(65-2)	600	510	2	5	250	2-1/2"	1
(45-3)	700	620	2	4	350	3"	1/0
(60-2)	700	670	2	4	400	3"	1/0
(60-3)	800	760	2	3	500	3"	1/0
(60-4)	800	760	2	4	500	4"	1/0
(60-5)	800	760	2	5	500	4"	1/0
(60-6)	800	840	2	4	600	4"	1/0
(35-3)	900	930	3	3	350	3"	2/0
(45-3)	900	930	3	4	350	3"	2/0
(65-3)	900	930	3	5	350	3"	2/0
(40-3)	1000	1005	3	3	400	3"	2/0
(40-4)	1000	1005	3	4	400	3"	2/0
(60-3)	1000	1005	3	5	400	3"	2/0
(45-4)	1200	1240	4	4	350	3"	3/0
(65-4)	1200	1240	4	5	350	3"	3/0
(60-4)	1200	1260	3	4	600	4"	3/0
(35-5)	1500	1550	5	3	350	3"	4/0
(40-5)	1600	1675	5	4	400	3"	4/0
(60-5)	1600	1675	5	5	400	3"	4/0
(60-6)	1600	1680	4	4	600	4"	4/0
(40-6)	2000	2010	6	4	400	3"	250
(60-6)	2500	2520	6	4	600	4"	350
(60-8)	3000	3040	8	4	500	4"	400
(60-11)	4000	4180	11	4	500	4"	500

NOTES  
IN PARALLEL RUNS SIZE GND. COND. IN ACCORDANCE WITH NEC PARA. 250-122.  
GND. CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS  
\* 200% NEUTRAL







**GENERAL NOTE**

1. CONTRACTOR IS RESPONSIBLE FOR ALL CEILING PATCHING REQUIRED TO PERFORM WORK INDICATED.

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**SHEET KEYNOTES**

① CONNECT TO EXISTING CHAIN LINK FENCE.  
 ② LOCATE EXISTING GENERATOR TO BE USED FOR TEMPORARY LIFE SAFETY POWER BACKUP IN THIS AREA. COORDINATE EXACT LOCATION WITH OWNER. AFTER NEW GENERATOR INSTALLATION IS COMPLETE, TURN OVER GENERATOR TO OWNER AS INDICATED IN KEYNOTE 5 ON ES101.



Professional Stamp

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CONSULTANTS



State of Utah - Department of Administration Services  
**DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT**  
 415 STATE OFFICE BUILDING • 500 WEST 600 SOUTH • SALT LAKE CITY, UTAH 84102

Project Title:  
**Northern Utah  
 Community  
 Correction Center  
 Generator Upgrade**  
 Utah Department of  
 Corrections

Building Name:  
**Northern Utah  
 Community  
 Correction Center**  
 2445 S Water Tower Way  
 (1125 W) Ogden, Utah  
 84401

MARK	DATE	DESCRIPTION
		ISSUE TYPE: CONSTRUCTION DOCUMENTS
		DATE: 10/19/2007
		DFCM PROJECT NO: 07116120
		STATE PROPERTY ID NO:
		CAD DWG FILE: 198AB-ES102
		DRAWN BY: BNA    CHK'D BY: FGK
		SCALE: GRAPHIC

Sheet Title:  
 ELECTRICAL  
 SITE PLAN

Sheet Number:  
**ES102**

PLAN NORTH  
 ① **ELECTRICAL SITE PLAN**  
 1/4" = 1'-0"  
 0 2' 4' 8'

By: J. H. H. Oct 19, 2007 - 8:30am  
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