

TRANSFER SWITCH SCHEDULE

ATS NAME	VOLTAGE	SIZE	SWITCH TYPE	TRANSFER POLES	TRANSITION	MOUNTING	ACCESS	OPTIONS	NOTES
ATS-EV63	480 V	300 A	AUTOMATIC	3	OPEN	WALL	FRONT	LSR	1
ATS-EV180	480 V	300 A	AUTOMATIC	3	OPEN	WALL	FRONT	LSR	1

TRANSFER SWITCH OPTIONS:

BI - BYPASS ISOLATION	ESR - ELEVATOR/ESCALATOR PRE-TRANSFER	ON - OVERSIZED NEUTRAL
DO - DRAW OUT	IPM - IN-PHASE MONITOR	PM - POWER MANAGER
ECC - ELEVATOR CONTROL CONTACTS	LSR - LOAD SHED RELAY	RA - REMOTE ANNUNCIATOR
ECM - ETHERNET COMMUNICATIONS MODULE	MDR - MOTOR DISCONNECT RELAY	SCM - SERIAL COMMUNICATION MODULE
		SMDR - SEQUENTIAL MOTOR DISCONNECT RELAY

GENERAL NOTES:
A. SEE RISER DIAGRAM FOR CALCULATED AVAILABLE FAULT CURRENT. TRANSFER SWITCH SHALL HAVE HIGHER SHORT-CIRCUIT CURRENT RATING THAN CALCULATED VALUE SHOWN ON RISER DIAGRAM.

ELECTRICAL NOTES:
1. PROVIDE NEMA 3R ENCLOSURE WITH INTERNAL STRIP HEATER.

FEEDER SCHEDULE

FEEDER	FEEDER DESCRIPTION	CONDUIT	NOTES
100-3T	1-1/4" C, 3#3 + #6 G	EMT	1
200-3T	2" C, 3#3/0 + #6 G	EMT	
250-3T	2-1/2" C, 3#250KCMIL + #4 G	EMT	

-2 SINGLE PHASE
-3 THREE PHASE

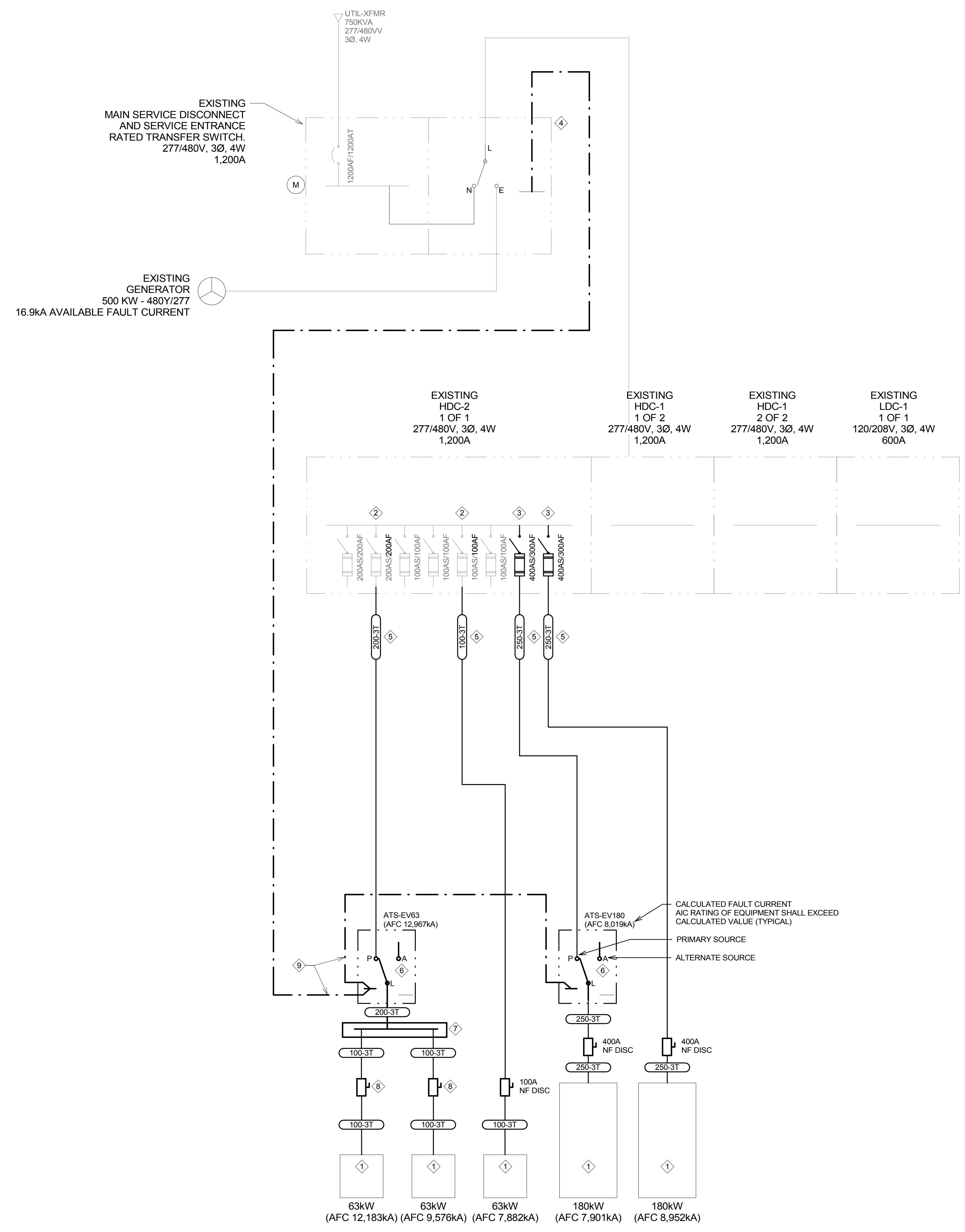
SE SERVICE ENTRANCE
S SECONDARY (LV TRANSFORMER)
D SIZED FOR VOLTAGE DROP
P PVC
U UNDERGROUND
L ALUMINUM
N ADDED NEUTRAL
T THREE WIRE ONLY, NO NEUTRAL

GENERAL NOTES:
A. NOMENCLATURE DEFAULTS WITH A SINGLE NEUTRAL AND A GROUND.

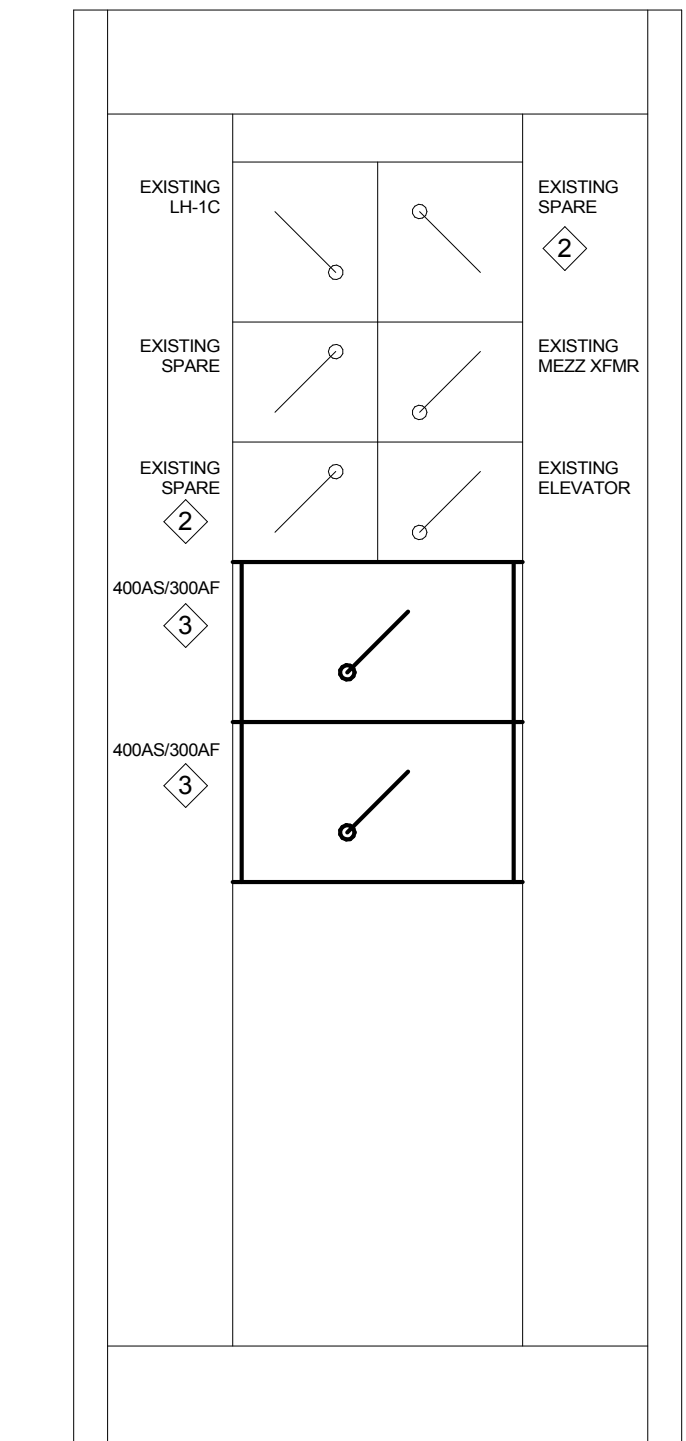
NOTES:
1. FEEDER SIZE INCREASED DUE TO UNKNOWN CHARGER MANUFACTURE AND EXACT CHARGER TO BE FURNISHED BY OWNER.

- ### KEY NOTES:
- OWNER FURNISHED AND INSTALLED EV CHARGER. CONTRACTOR TO MAKE FINAL CONNECTIONS.
 - PROVIDE NEW FUSES IN EXISTING SWITCH.
 - PROVIDE 400AS/300AF SWITCH IN EXISTING SWITCHBOARD.
 - EXISTING TRANSFER SWITCH IS ZENITHSTATS ELECTRIC. INCLUDE COSTS FOR ANY REQUIRED PROGRAMMING/EQUIPMENT MODIFICATIONS TO SEND TRANSFER SIGNAL TO ATS-EV50 AND ATS-EV180
 - ALL FEEDERS SHALL BE ROUTED OVERHEAD, TIGHT TO CEILING STRUCTURE TO MAINTAIN MAXIMUM CLEARANCES (TYPICAL).
 - ALTERNATE BUS TO BE OPEN/NOT CONNECTED FOR LOAD SHEDDING DURING GENERATOR OPERATION.
 - PROVIDE 6"x6"x48" WIREWAY.
 - PROVIDE 100A FUSED SWITCH AND SIZE FUSES PER EV CHARGER MANUFACTURER'S RECOMMENDATION.
 - PROVIDE 3/4" C, 2#12 CABLING TO RECEIVE SIGNAL FROM SERVICE ENTRANCE ATS TO ATS-EV50 AND ATS-EV180.

- ### GENERATOR OPERATION SEQUENCE
- UPON GENERATOR STARTING AND SERVICE ENTRANCE TRANSFER SWITCH SWITCHING TO ALTERNATE SOURCE, TRANSFER SWITCH SHALL SEND SIGNAL TO ATS-EV50 AND ATS-EV180 THAT THE BUILDING IS OPERATING ON ALTERNATE POWER SOURCE.
 - UPON RECEIVING SIGNAL THAT BUILDING IS OPERATING ON ALTERNATE POWER SOURCE, ATS-EV50 AND ATS-EV180 SHALL TRANSFER TO ALTERNATE SOURCE (LOAD SHED MODE).
 - AFTER UTILITY POWER IS RESTORED AND SERVICE ENTRANCE ATS HAS TRANSFERRED BACK TO PRIMARY POWER SOURCE, ALTERNATE SOURCE SIGNAL IS LOST, AND ATS-EV50 AND ATS-EV180 SHALL TRANSFER BACK AUTOMATICALLY TO PRIMARY SOURCE.



1 ELECTRICAL ONE-LINE DIAGRAM
NO SCALE



2 EXISTING HDC-2
NO SCALE



3 MDS LINEUP PHOTO
NO SCALE



4 HDC FRONT PHOTO
NO SCALE

LOCATION FOR NEW 400A FUSED SWITCH. EXISTING SWITCHBOARD SECTION MANUFACTURED BY EMI.

ELECTRICAL LOAD CALCULATION

SWT BLDG MAX DEMAND PER OWNERS LOAD STUDY:	221.00KW
DEMAND FACTOR PER NEC 220.87:	1.25%
DESIGN MAXIMUM DEMAND:	276.25KW
ADDED EV CHARGER LOAD:	510KW
TOTAL BUILDING DESIGN LOAD:	786.25KW

BUILDING SERVICE SIZE:	1200A
TOTAL BUILDING DESIGN:	946A
BUILDING SERVICE SPARE CAPACITY:	254A

