Relativity

SPECIFICATIONS

1. IT IS THE INTENT OF THESE CONTRACT DRAWINGS TO PROVIDE COMPLETE ELECTRICAL, LIGHTING, GROUNDING SYSTEMS.
2. PROVIDE ALL MATERIALS, EQUIPMENT, LABOR, AND SERVICES TO CONSTRUCT AND INSTALL SYSTEMS AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN.
3. THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE EXISTING CONDITIONS AND REQUIREMENTS FOR PROPER COMPLETION OF THE WORK. NO ALLOWANCES WILL BE MADE FOR ANY ALLEGED MISUNDERSTANDINGS. HE SHALL VERIFY ALL MEASUREMENTS BY ACTUAL OBSERVATION AT THE SITE AND BE RESPONSIBLE FOR ALL WORK FITTING TOGETHER IN A SATISFACTORY AND WORKMAN LIKE MANNER.
4. THE CONTRACTOR SHALL FURNISH ALL NECESSARY TEMPORARY POWER AND LIGHTING REQUIRED FROM START OF CONSTRUCTION TO COMPLETION OF PROJECT.
5. THE CONTRACTOR IS TO OBTAIN ALL PERMITS, LICENSES, INSPECTIONS, AND TESTS REQUIRED. UPON COMPLETION OF THE WORK, OBTAIN AND SUBMIT CERTIFICATES OF INSPECTION AND APPROVAL TO THE GOVERNMENT. THE CONTRACTOR IS TO PAY FOR ALL FEES AND EXPENSES FOR PERMITS, LICENSES, TESTS, AND INSPECTIONS.
6. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL MEET OR EXCEED STANDARDS SPECIFIED BY UL, NEMA AND IEEE WHEREVER SUCH STANDARDS SPECIFIED HAVE BEEN ESTABLISHED UNLESS NOTED OTHERWISE. ALL EQUIPMENT OF SAME OR SIMILAR SYSTEMS SHALL BE OF THE SAME MANUFACTURERS.
7. CONTRACTOR SHALL GUARANTEE ALL WORK IN CONNECTION WITH HIS TRADE CONTRACT, ALL MATERIALS AND WORKMANSHIP IN PRODUCTION OF THOSE MATERIALS, FREE FROM DEFECTS FOR A PERIOD OF ONE YEAR FROM THE DATE OF COMPLETION AND ACCEPTANCE AT NO COST TO THE OWNER.
8. DESIGN DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL ELEMENTS THAT MAY BE REQUIRED FOR PROPER INSTALLATION OF THE SYSTEM. SUCH WORK SHALL BE VERIFIED AT THE SITE. ADDITIONAL BENDS, OFFSETS, AND CONDUIT AS REQUIRED BY VERTICAL AND HORIZONTAL COMPONENT LOCATIONS OR OTHER JOB CONDITIONS, SHALL BE PROVIDED TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE GOVERNMENT.
9. EXCEPT WHERE SHOWN IN DIMENSIONAL DETAIL, THE LOCATIONS OF EQUIPMENT SHOWN ON PLANS ARE APPROXIMATE. SUCH ITEMS SHALL BE PLACED TO ELIMINATE INTERFERENCE WITH OTHER EQUIPMENT. THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD.
10. MATERIALS SHALL BE LISTED BY THE UNDERWRITER'S LABORATORIES, INC. OR ANOTHER APPROVED/CERTIFIED TESTING LABORATORY. SHOULD PLANS AND CODES CONFLICT, CONTACT THE CONTRACTING OFFICER. MAKE NO CHANGES, EVEN IN CASE OF CONFLICT, WITHOUT FIRST OBTAINING THE APPROVAL OF THE CONTRACTING OFFICER.
11. THE INSTALLATION OF THE LIGHTNING PROTECTION SYSTEM SHALL BE COORDINATED WITH THE WORK OF THE OTHER TRADES.
12. THE INSTALLATION SHALL BE ACCOMPLISHED BY WORKERS SKILLED IN THIS TYPE OF WORK.
13. THE CONTRACTOR SHALL INSTALL HIS WORK IN SUCH A MANNER AND AT SUCH A TIME AS WILL REQUIRE A MINIMUM OF CUTTING AND PATCHING OF THE BUILDING STRUCTURE. THE CONTRACTOR SHALL COORDINATE ALL PLANNED BUILDING MATERIAL PENETRATIONS AND PERFORATIONS REQUIRED FOR THIS WORK WITH THE BUILDING MANUFACTURER, AND VERIFY THE PROPOSED INSTALLATION DOES NOT COMPROMISE THE INTEGRITY OF THE BUILDING.
14. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING UTILITIES FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR REPAIR OR REPLACEMENT OF THE UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE COMPLETION OF THIS WORK.
15. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIONAL, AND ACCEPTED BY THE OWNER.
16. EACH CONTRACTOR SHALL INSPECT THE SITE AS REQUIRED FOR KNOWLEDGE OF EXISTING CONDITIONS PRIOR TO BIDDING AND FAILURE TO OBTAIN SUCH KNOWLEDGE SHALL NOT RELIEVE THE SUCCESSFUL BIDDER OF THE RESPONSIBILITY TO MEET EXISTING CONDITIONS IN PERFORMING THE WORK UNDER THIS CONTRACT.

AS BUILT DRAWINGS NOTES:

17. THE CONTRACTOR SHALL PROVIDE AND KEEP UP TO DATE A COMPLETE RECORD SET OF CONSTRUCTION "AS-BUILTS" BLUELINE PRINTS WHICH SHALL BE CORRECTED DAILY, AND SHALL SHOW EVERY CHANGE FROM THE ORIGINAL CONTRACT DRAWINGS, INCLUDING ADDENDA AND CHANGE ORDERS IN ACCORDANCE WITH GENERAL REQUIREMENTS AND SPECIAL CONDITIONS. THIS SET OF PRINTS SHALL BE KEPT ON THE JOB SITE, AND SHALL BE USED ONLY AS A RECORD SET. THIS SHALL NOT BE CONSTRUED AS AUTHORIZATION FOR THE CONTRACTORS TO MAKE CHANGES IN THE LAYOUT WITHOUT DEFINITE INSTRUCTION IN EACH CASE.

PROTECTION NOTES:

1. THE CONTRACTOR SHALL KEEP THE CONSTRUCTION SITE CLEAN OF ALL WASTE MATERIALS AND RUBBISH CAUSED BY HIS WORK OR EMPLOYEES. UPON COMPLETION OF THE WORK AND AT TIMES DURING PROGRESS OF THE WORK WHEN REQUESTED BY THE GOVERNMENT, THE CONTRACTOR SHALL REMOVE ALL SURPLUS MATERIALS, RUBBISH, AND DEBRIS RESULTING FROM THE OPERATION, AND SHALL LEAVE THE ENTIRE BUILDING AND INVOLVED PORTIONS OF THE SITE, INSOFAR AS THE WORK OF THE CONTRACT IS CONCERNED, IN A NEAT, CLEAN, AND ACCEPTABLE CONDITION AS APPROVED BY THE GOVERNMENT. EQUIPMENT, LIGHTING FIXTURES, MATERIALS AND ACCESSORIES SHALL BE THOROUGHLY CLEANED OF CEMENT, PLASTER, AND OTHER MATERIALS.
2. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION, WHEREVER WORK IS TO BE PERFORMED IN FINISHED/OCCUPIED SPACES, TO PREVENT DAMAGE TO ADJACENT AREAS, EQUIPMENT, OR FURNISHINGS; TO PREVENT ACCIDENTAL INJURY TO BUILDING OCCUPANTS AND THE PUBLIC; TO PREVENT THE SPREADING OF DUST, DIRT, DEBRIS, AND MOISTURE FROM THE AREA WHERE WORK IS BEING PERFORMED; AND TO PREVENT DUST, DIRT, DEBRIS, AND MOISTURE FROM GETTING ON OR IN THE BUILDING OCCUPANTS FURNISHINGS OR EQUIPMENT.
3. THE CONTRACTOR SHALL REPAIR, AT NO COST TO THE GOVERNMENT, ANY DAMAGE DONE BY HIMSELF OR HIS EMPLOYEES. HE SHALL ALSO BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED TO PROPERLY INSTALL HIS WORK.

ABBREVIATIONS

A	-	AMPERE, AMPS
AFC	-	ABOVE FINISHED COUNTER
AFF	-	ABOVE FINISHED FLOOR
AFG	-	ABOVE FINISHED GRADE
AHU	-	AIR HANDLING UNIT
AIC CAPACITY	-	AMPS INTERRUPTING
AUX	-	AUXILIARY
AMP	-	AMPERES
A/C	-	AIR CONDITIONING
AC	-	ALTERNATING CURRENT
ATS SWITCH	-	AUTOMATIC TRANSFER
AWG	-	AMERICAN WIRE GAUGE
BFF	-	BELOW FINISHED FLOOR
BFG	-	BELOW FINISHED GRADE
BIL LEVEL	-	BASIC INSULATION IMPULSE
BC	-	BARE COPPER
BD	-	BYPASS DAMPERS
BLDG	-	BUILDING
BOM	-	BILL OF MATERIAL
C, CDT	-	CONDUIT
CB	-	CIRCUIT BREAKER
CF	-	COMPACT FLUORESCENT
CFM	-	CUBIC FEET PER MINUTE
CKT	-	CIRCUIT
CLG	-	CEILING
CONC	-	CONCRETE
CONT CONTROL	-	CONTINUED, CONTINUATION,
CU	-	COPPER
CONC	-	CONCRETE
CMU	-	CONCRETE MASONRY UNIT
DIA (Ø)	-	DIAMETER
DIM	-	DIMENSION
DISC	-	DISCONNECT
DN	-	DOWN
DWG	-	DRAWING
EA	-	EACH
EL	-	ELEVATION
ELEC	-	ELECTRIC
EMT TUBING	-	ELECTRICAL METALLIC
EOP	-	EDGE OF PAVEMENT
EXH	-	EXHAUST
EXIST	-	EXISTING
FA	-	FIRE ALARM
FACP	-	FIRE ALARM CONTROL PANEL
FCU	-	FAN COIL UNIT
FLA	-	FULL LOAD AMPS
FLEX	-	FLEXIBLE
FT	-	FEET
FAC	-	FACILITY
GFI INTERRUPTER	-	GROUND FAULT
GND	-	GROUND
GB	-	GROUND BAR
GEN	-	GENERATOR
GF	-	GROUND FAULT
HDWR	-	HARDWARE
HORIZ	-	HORIZONTAL
HP	-	HORSEPOWER
HWG CONDUIT	-	HEAVY WALL GALVANIZED
I	-	CURRENT
ID	-	INSIDE DIAMETER
IDS SYSTEM	-	INSTRUCTION DETECTION
IN	-	INCH, INCHES
kV, KV	-	KILOVOLTS
KW	-	KILOWATT
LB	-	POUND
L.FT.	-	LINEAR FEET
LPS	-	LOW PRESSURE SODIUM
LV	-	LOW VOLTAGE
MCM	-	THOUSAND CIRCULAR MILS
MECH	-	MECHANICAL
MCP	-	MOTOR CIRCUIT PROTECTION
MH	-	MANHOLE
M.O.	-	MOTOR OPERATED
MPS	-	MANUAL PULL STATION
MTR	-	MOTOR
N/A	-	NOT APPLICABLE
NC	-	NORMALLY CLOSED
NIC	-	NOT IN CONTRACT
NO	-	NORMALLY OPEN
NTS	-	NOT TO SCALE
NEC	-	NATIONAL ELECTRICAL CODE
O2, 0	-	OXYGEN
OA	-	OUTSIDE AIR
OC	-	ON CENTER
OD	-	OUTSIDE DIAMETER
OPP	-	OPPOSITE
OVHD	-	OVERHEAD
PA	-	PUBLIC ADDRESS
PAW	-	PAGING AREA WARNING
PB	-	PULL BOX, PUSH BUTTON
PL	-	PLACES
PNL	-	PANEL, PANELBOARD
PRESS	-	PRESSURE
PRV	-	POWERED ROOF VENT
PVC	-	POLYVINYL CHLORIDE
QTY	-	QUANTITY
R	-	RESISTANCE
REF	-	REFERENCE
RGS	-	RIGID GALVANIZED STEEL
RM	-	ROOM
SAN	-	SANITARY
SE	-	SERVICE ENTRANCE
SHT	-	SHEET
SIG	-	SIGNAL (INDICATING) CIRCUIT
SQ.FT.	-	SQUARE FOOT, SQUARE FEET
SW	-	SWITCH
SYS	-	SYSTEM
ST. STL.	-	STAINLESS STEEL
STL.	-	STEEL
SPEC	-	SPECIFICATIONS
TEMP	-	TEMPERATURE
TMCB BREAKER	-	THERMAL MAGNETIC CIRCUIT
TRANSF	-	TRANSFORMER
TYP	-	TYPICAL
UF	-	UNDER FLOOR
UG	-	UNDERGROUND
UON	-	UNLESS OTHERWISE NOTED
VERT	-	VERTICAL
W	-	WATT
W/	-	WITH
W/O	-	WITHOUT
WP	-	WEATHERPROOF
WTR	-	WATER
W	-	WIRE
XFMR	-	TRANSFORMER

LEGEND

- PANEL BOARD - 480/277 VOLTS.
- PANEL BOARD - 120/208 VOLTS.
- JUNCTION BOX.
- DISCONNECT SWITCH, NEMA 1 (INDOOR), NEMA 4X (OUTDOOR)
- 125V AC 20 AMP DUPLEX RECEPTACLE INSTALLED AT 18" AFF OR AS REQUIRED BY OWNER.
- 125V AC 20 AMP QUAD RECEPTACLE INSTALLED AT 18" AFF OR AS REQUIRED BY OWNER.
- 125V AC 20 AMP DUPLEX GFI RECEPTACLE INSTALLED AT 18" A.F.F.
- 208V AC, 30 AMP RECEPTACLE - EXACT REQUIREMENT TO BE COORDINATED WITH OWNER
- 208V AC, 60 AMP, 3PH, 5-WIRE RECEPTACLE - MELTRIC
- 125V AC 20 AMP DUPLEX RECEPTACLE INSTALLED AT 48" AFF OR AS REQUIRED BY OWNER.
- 125V AC 20 AMP DUPLEX GFI RECEPTACLE INSTALLED AT 48" AFF OR AS REQUIRED BY OWNER.
- COMBINATION FLOOR MOUNTED, FLUSH, 20 AMP QUAD RECEPTACLE AND NETWORK CONNECTION.
- EXHAUST FAN
- EXIT LIGHT WITH BATTERY BACKUP
- 2 X 4 RECESSED LED FIXTURE
- SAME AS ABOVE W/ EMERGENCY LIGHT BACKUP (WIRED AS NIGHT LIGHT)
- 4' LED STRIP, SURFACE MOUNTED
- SAME AS ABOVE W/ EMERGENCY LIGHT BACKUP (WIRED AS NIGHT LIGHT)
- RECESSED ROUND LED FIXTURE
- EXTERIOR WALL MOUNTED LED FIXTURE W/BATTERY BACKUP
- $_D$ SINGLE POLE 20 AMP LED DIMMER SWITCH. FLUSH MOUNTED IN FINISHED AREAS. MOUNT 48" A.F.F.
- $_3$ 3-WAY 20 AMP SWITCH. FLUSH MOUNTED IN FINISHED AREAS. MOUNT 48" A.F.F.
- OS VACANCY SENSOR (MANUAL ON, AUTOMATIC OFF) CEILING MOUNTED
- PC PHOTOCELL FOR EXTERIOR LIGHTING CONTROL
- ▼ NETWORK CONNECTION POINT, PROVIDE 4 X 4 BOX AND 1" CONDUIT FROM BOX TO SERVER ROOM, COORDINATE CONDUIT STUBUP LOCATION WITH RELATIVITY. JACK AND CABLE BY OTHERS.
- NEW WORK CABLE BASKET CABLE TRAY, LOCATED ABOVE CEILING. EXACT LOCATION, ROUTING, ELEVATION, AND SIZE, TO BE SPECIFIED BY OWNER. CABLES BY OTHERS. CABLE TRAY SECTIONS SHALL BE BONDED TOGETHER WITH COPPER JUMPER, AND SHALL BE BONDED TO GROUND.

NOTE:

ALL DRAWINGS ARE SCHEMATIC. EXACT LOCATIONS SHALL BE DETERMINED BY THE CONSTRUCTION AND STRUCTURE OF THE BUILDING AND SHALL BE VERIFIED AND COORDINATED IN THE FIELD. ANY INSTALLATION OR CONSTRUCTION CONFLICTS WHICH OCCUR IN THE FIELD SHALL BE RESOLVED BY THE TRADE CONTRACTOR TO THE SATISFACTION OF THE OWNER AND ARCHITECT AND AT NO EXPENSE TO THE OWNER, ARCHITECT AND/OR ENGINEER.

CODE COMPLIANCE:

1. ALL APPLICABLE PORTIONS OF AFI 32-1065, AFMAN 91-201, UFC 3-575-01
2. NFPA 70 - 2020 EDITION

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MICHAEL PILO, PE
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CONSULTANTS:

REVISIONS

NO.	DATE	DESCRIPTION
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PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB #	RS - 22.02
DRAWN:	MP
APPROVED:	MP
DATE:	4.28.2022

DRAWING TITLE

ELECTRICAL SPECIFICATIONS

DRAWING

E-001

MICHAEL PILO
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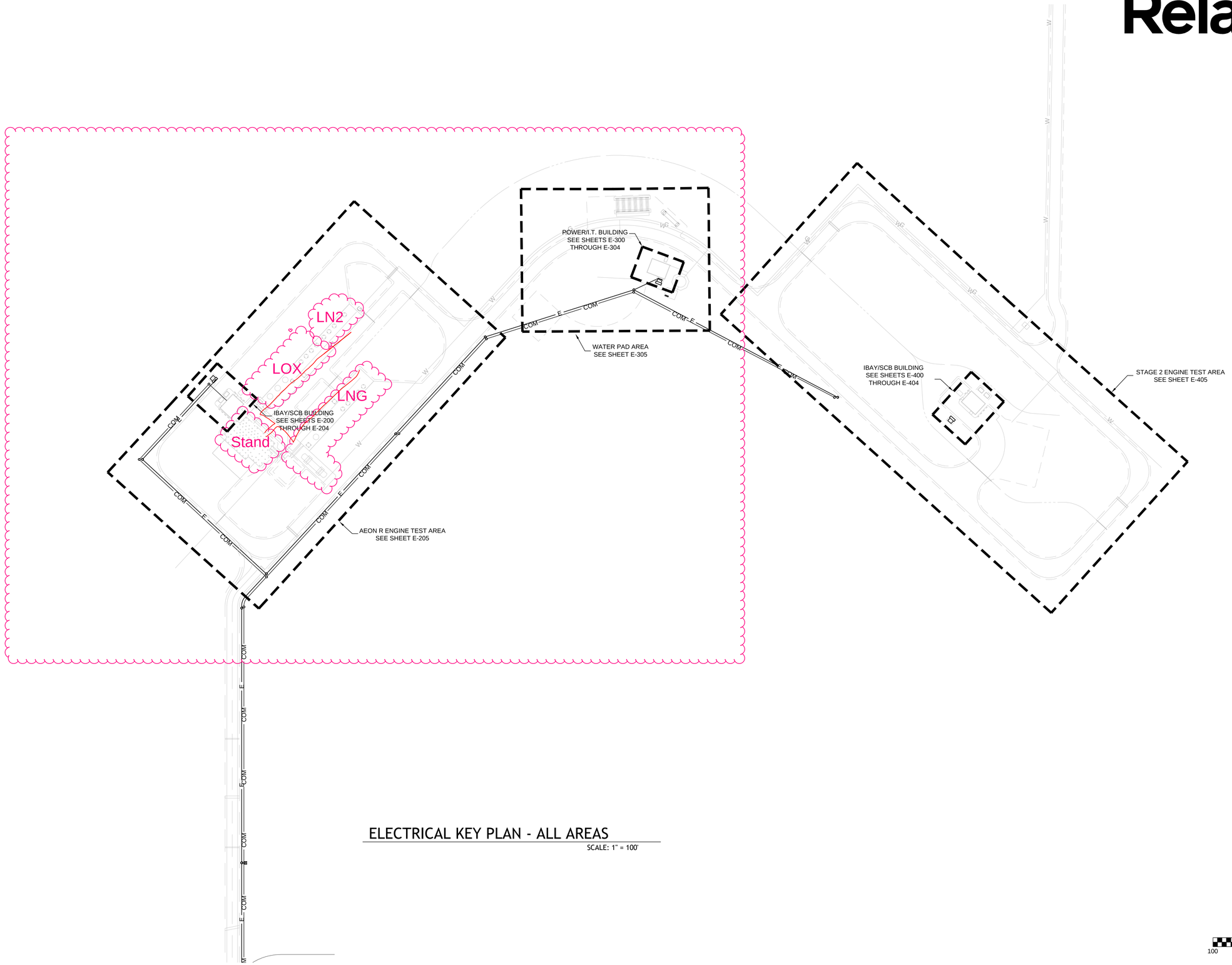
SIGNATURE

DATE

Relativity



ELECTRICAL KEY PLAN - ALL AREAS

SCALE: 1" = 100'

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PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB # RS - 22.02

DRAWN:	MP
APPROVED:	MP
DATE:	4.28.2022

DRAWING TITLE

ELECTRICAL
KEY PLAN

DRAWING

E-100

MICHAEL PILO
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SIGNATURE

DATE

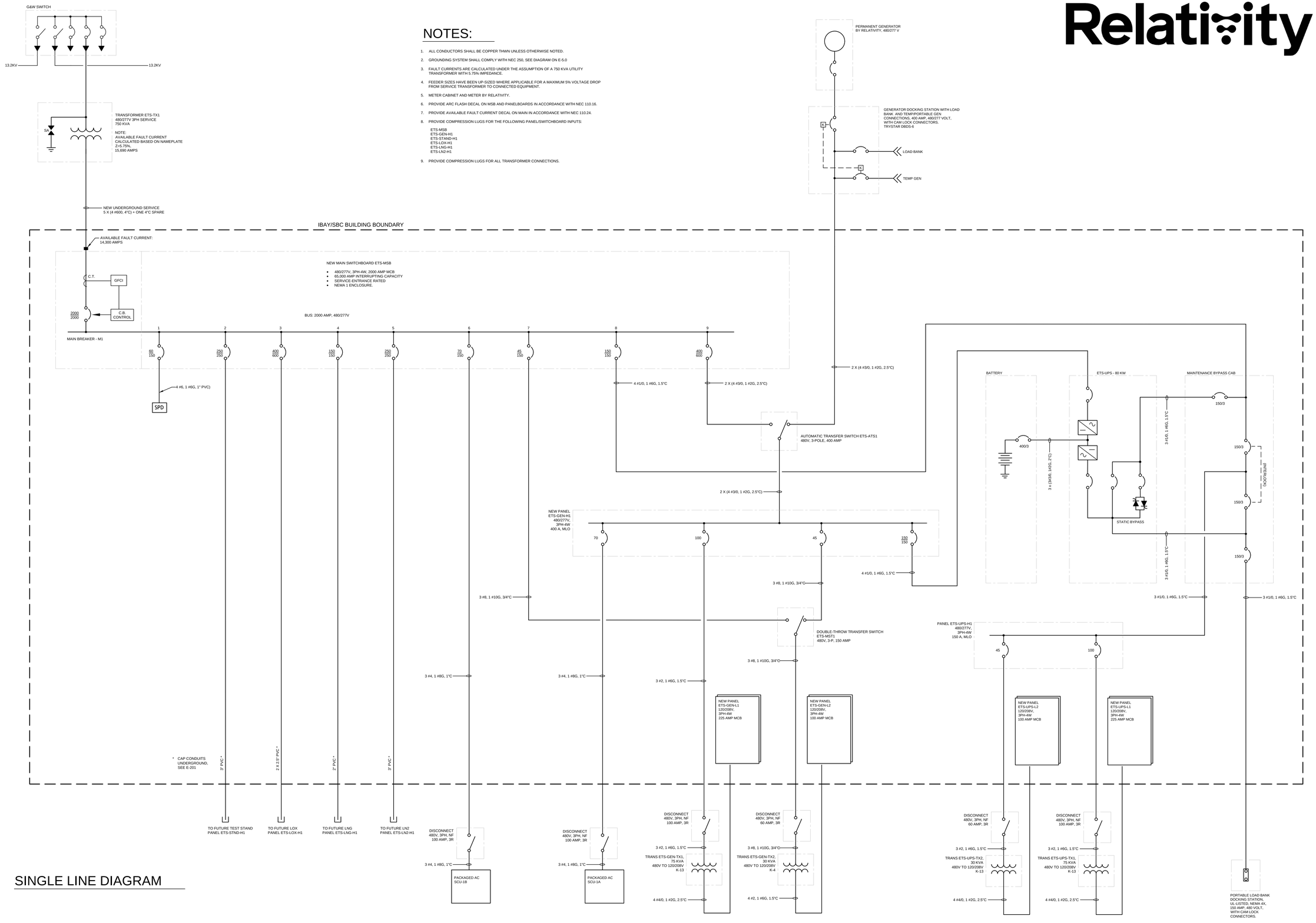
Relativity

NOTES:

1. ALL CONDUCTORS SHALL BE COPPER THWN UNLESS OTHERWISE NOTED.
2. GROUNDING SYSTEM SHALL COMPLY WITH NEC 250, SEE DIAGRAM ON E-5.0
3. FAULT CURRENTS ARE CALCULATED UNDER THE ASSUMPTION OF A 750 KVA UTILITY TRANSFORMER WITH 5.75% IMPEDANCE.
4. FEEDER SIZES HAVE BEEN UP-SIZED WHERE APPLICABLE FOR A MAXIMUM 5% VOLTAGE DROP FROM SERVICE TRANSFORMER TO CONNECTED EQUIPMENT.
5. METER CABINET AND METER BY RELATIVITY.
6. PROVIDE ARC FLASH DECAL ON MSB AND PANELBOARDS IN ACCORDANCE WITH NEC 110.16.
7. PROVIDE AVAILABLE FAULT CURRENT DECAL ON MAIN IN ACCORDANCE WITH NEC 110.24.
8. PROVIDE COMPRESSION LUGS FOR THE FOLLOWING PANEL/SWITCHBOARD INPUTS:

   ETS-MSB
   ETS-GEN-H1
   ETS-STAND-H1
   ETS-LOX-H1
   ETS-LNG-H1
   ETS-LN2-H1

9. PROVIDE COMPRESSION LUGS FOR ALL TRANSFORMER CONNECTIONS.



SINGLE LINE DIAGRAM

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PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB #	RS - 22.02
DRAWN:	MP
APPROVED:	MP
DATE:	4.28.2022

DRAWING TITLE

SINGLE LINE DIAGRAM
AEON R ENGINE AREA

DRAWING

E-200

MICHAEL PILO
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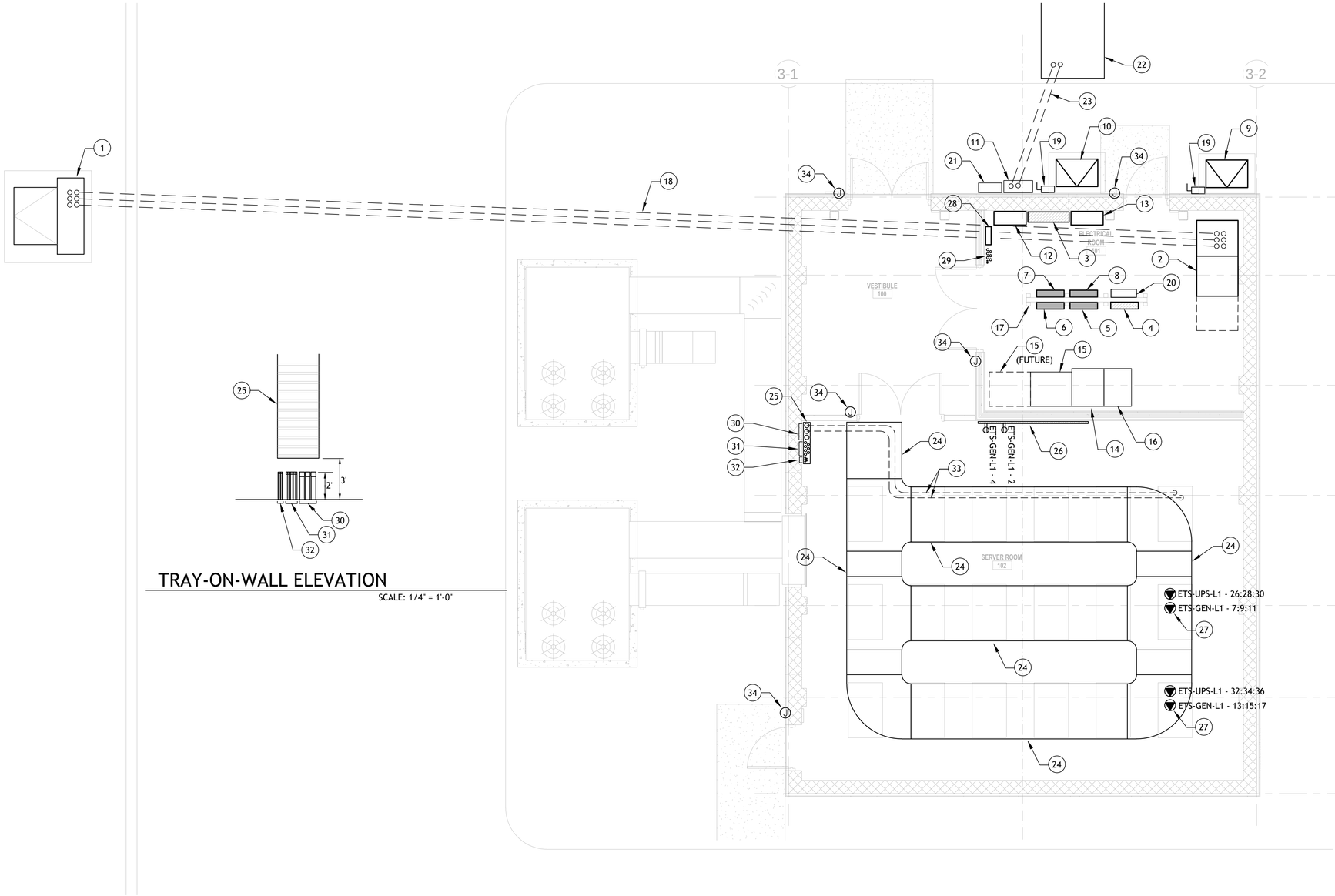
SIGNATURE

DATE

Relativity



TRAY-ON-WALL ELEVATION

SCALE: 1/4" = 1'-0"

IBAY/SCB BUILDING ELECTRICAL EQUIPMENT PLAN - AEON R ENGINE AREA

SCALE: 1/4" = 1'-0"

PLAN NOTES

1. SERVICE TRANSFORMER.
2. MAIN SWITCHBOARD ETS-MSB.
3. GENERATOR PANEL ETS-GEN-H1 (480/277V).
4. UPS PANEL ETS-UPS-H1 (480/277V).
5. UPS PANEL ETS-UPS-L1 (120/208V).
6. UPS PANEL ETS-UPS-L2 (120/208V)
7. GEN PANEL ETS-GEN-L1 (120/208V).
8. GEN PANEL ETS-GEN-L2 (120/208V) - ACTUAL LOCATION TO BE DETERMINED.
9. TRANSFORMERS ETS-UPS-TX1 AND ETS-UPS-TX2 (STACKED)
10. TRANSFORMERS ETS-GEN-TX1 AND ETS-GEN-TX2 (STACKED)
11. GENERATOR DOCKING STATION
12. AUTOMATIC TRANSFER SWITCH ETS-ATS1
13. MANUAL TRANSFER SWITCH ETS-MTS-1
14. UPS ETS-UPS
15. UPS BATTERY CABINET
16. UPS MBS
17. PROVIDE FREE-STANDING CHANNEL FRAME TO SUPPORT PANELBOARDS, FRAME SHALL BE STRUCTURALLY FASTENED TO FLOOR AND DECK. EXACT LOCATION OF FRAME SHALL ALLOW FOR MINIMUM REQUIRED CLEARANCES IN FRONT OF ELECTRICAL EQUIPMENT.
18. UNDERGROUND SERVICE CONSISTING OF THWN CONDUCTORS IN DIRECT-BURIED SCHEDULE-40 PVC CONDUIT WITH 24" COVER MINIMUM.
19. TRANSFORMER DISCONNECT.
20. LIGHTING CONTROL PANEL
21. UPS LOAD BANK DOCKING STATION
22. APPROXIMATE LOCATION OF PERMANENT GENERATOR
23. UNDERGROUND GENERATOR FEEDER CONSISTING OF THWN CONDUCTORS IN DIRECT-BURIED SCHEDULE-40 PVC CONDUIT WITH 24" COVER MINIMUM
24. INSTALL 48" X 6" CABLE TRAY ABOVE COMM RACKS AS SHOWN, TRAY SHALL BE SUSPENDED ABOVE RACKS, COORDINATE ELEVATION WITH RELATIVITY. COORDINATE TRAY TYPE & MATERIAL WITH RELATIVITY.
25. INSTALL 36" X 6" CABLE TRAY ON WALL, FROM 36" AFG TO ELEVATION TBD. COORDINATE TRAY TYPE & MATERIAL WITH RELATIVITY.
26. PROVIDE TWO SHEETS OF FIRE RATED PLYWOOD, 4' X 8' X 3/4" AND INSTALL SIDE-TO-SIDE DIRECTLY ON WALL. PROVIDE DEDICATED RECEPTACLES FOR ACCESS CONTROL SYSTEM AND HVAC CONTROL SYSTEM.
27. COORDINATE EXACT LOCATION AND ELEVATION OF MELTRIC RECEPTACLES ABOVE RACKS.
28. PROPOSED LOCATION OF GENERATOR REMOTE ANNUNCIATOR.
29. PROPOSED LOCATION OF CONDUIT STUBUPS FOR CAMERA POWER (5 X 2"), GATE POWER (1 X 2"), AND FLARE STACK POWER (2 X 1").
30. 3 X 4" CONDUIT STUBUPS FROM COMM DUCTBANK.
31. 7 X 2" CONDUIT STUBUPS FOR CAMERA DAQ (5 EA), FLARE STACK DAQ (1 EA), AND GATE NETWORK (1 EA)
32. 5 X 1" CONDUIT STUBUPS FOR CAMERA NETWORK.
33. EXTEND TWO 4-IN-1 INNER DUCTS, CONTAINING 144 STRANDS AND 24 STRANDS, FROM 4"CONDUITS TO RACKS.
34. PROVIDE FLUSH BOX FOR CARD READER, WITH 3/4" CONDUIT TO LOCATION TBD BY OWNER.

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CONSULTANTS:

REVISIONS

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PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB #	RS - 22.02
DRAWN:	MP
APPROVED:	MP
DATE:	4.28.2022

DRAWING TITLE

IBAY/SCB BUILDING
ELECTRICAL EQ. PLAN
AEON R ENGINE AREA

DRAWING

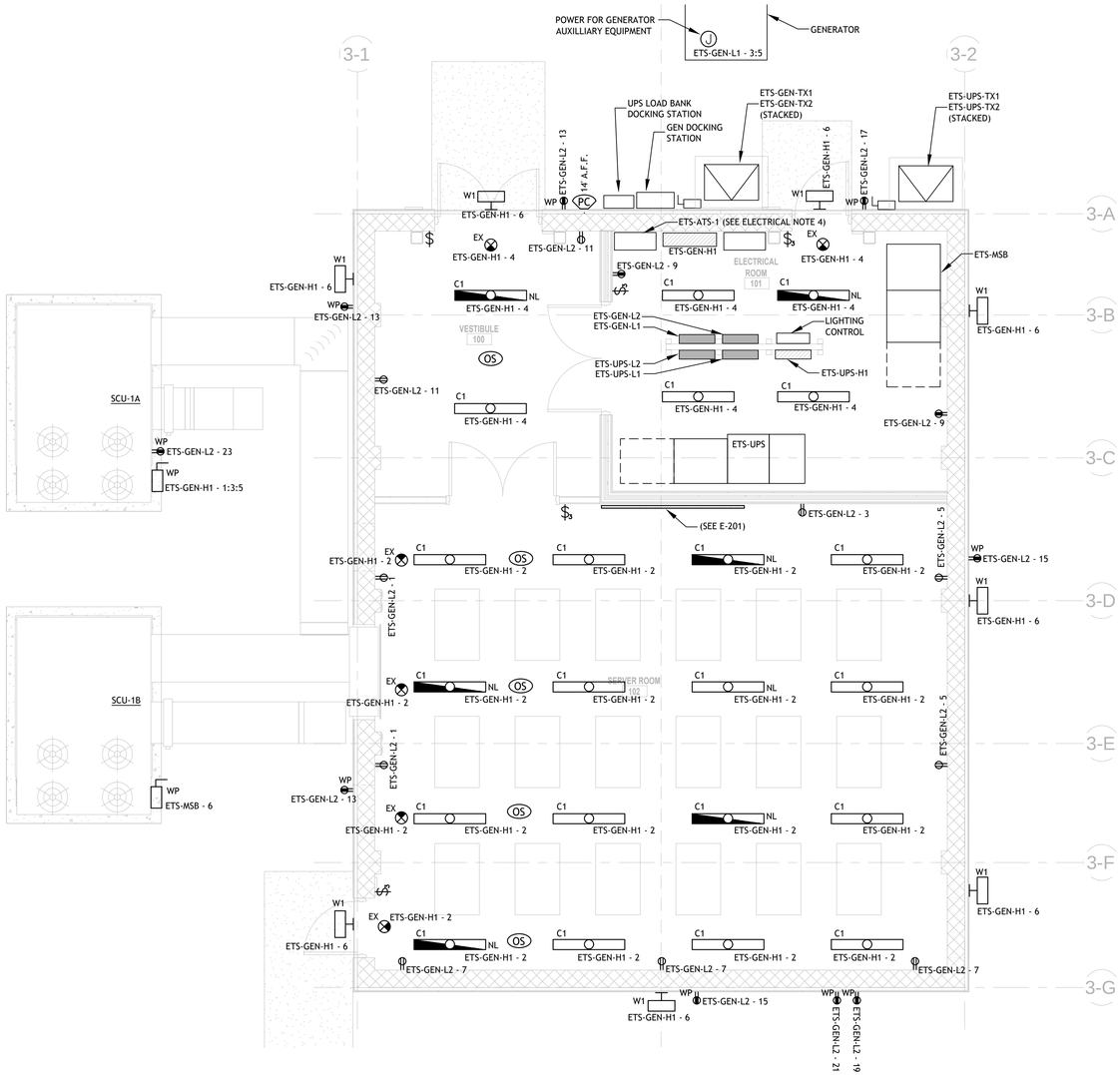
E-201

MICHAEL PILO
FL P.E. # 50067

SIGNATURE

DATE

Relativity



IBAY/SCB BUILDING ELECTRICAL AND LIGHITNG PLAN - AEON R ENGINE AREA

SCALE: 1/4" = 1'-0"

LIGHTING NOTES

1. EXIT AND EMERGENCY LIGHTS SHALL BE CONNECTED TO THE UNSWITCHED SIDE OF LIGHT CIRCUIT.
2. INTERIOR LIGHTING SHALL BE CONTROLLED THROUGH ARP LIGHTING CONTROL PANEL WITH LOW VOLTAGE WALL SWITCHES AND VACANCY SENSORS (WHERE SHOWN). EXTERIOR LIGHTING SHALL BE CONTROLLED WITH ARP LIGHTING CONTROL PANEL AND ONE LOW VOLTAGE WALL SWITCH LOCATED IN ELECTRICAL ROOM.
3. ALL LIGHTING FIXTURES SHALL BE SERVED BY PANEL AND CIRCUIT NUMBER INDICATED.
4. HALF-SHADED FIXTURES SHALL CONTAIN EMERGENCY LIGHT BATTERY BACKUP.

LIGHTING FIXTURE SCHEDULE

#	TYPE	MANUFACTURER / PART #	LAMP	LUMENS	W
C1	LINEAR SUSPENDED LED, 4', WITH STEM	LITHONIA / BLWP4-60L-AD5M-LP840	LED	6,000	60
W1	WALL MOUNTED EXTERIOR, CUTOFF	LITHONIA / DSXW1-LED-20C-350- 50K- T3S	LED	3,000	34
EX	EXIT LIGHT WITH BATTERY BACKUP	LITHONIA	LED	-	5

FIXTURE SELECTION REPRESENT BASIS OF DESIGN, EQUAL SUBSTITUTES ARE ACCEPTABLE.

ELECTRICAL NOTES

1. ALL EQUIPMENT AND DEVICES SHALL BE FED FROM PANELS AND CIRCUITS INDICATED, SEE E-201 FOR PANEL LOCATION. SEE PANEL SCHEDULES, E-204
2. PROVIDE DISCONNECTS, STARTERS, FEEDERS, AND CONNECTIONS FOR NEW DEVICES, AND HVAC EQUIPMENT AS SHOWN. ALL EQUIPMENT LOCATED OUTSIDE SHALL BE WEATHERPROOF, WIRING METHODS SHALL BE SUITABLE FOR WET LOCATIONS.
3. FOR GENERATOR AND ETS-ATS-1 PROVIDE THE FOLLOWING ITEMS:

   GENERATOR TO NETWORK ROOM - 1X 3/4" CONDUIT1- 1X CAT6 CABLE

   GENERATOR TO ATS - 2X 3/4" CONDUITS1- 8X #12 AWG THHN2- 2X BELDEN #9842

   GENERATOR TO REMOTE ANNUNCIATOR - 1X 3/4" CONDUIT1- 2X#12 AWG THHN & 1X BELDEN #9842 CABLE

   GENERATOR TO ELECTRIC ROOM - 1X 3/4"1- SPARE

   GENERATOR TO ETS-GEN-L1 - 1X 1" CONDUIT1- GENERATOR 120V CIRCUIT

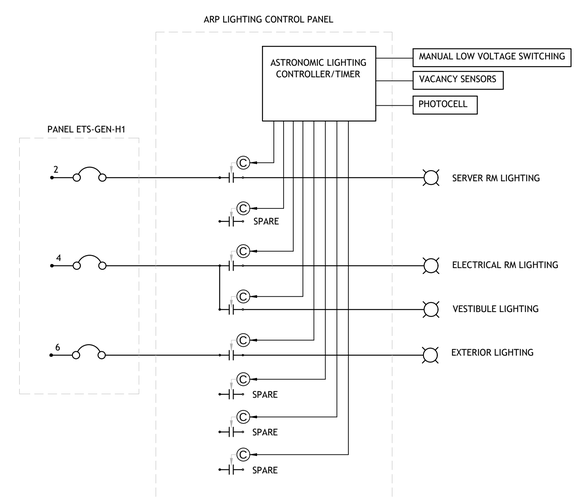
   ATS TO NETWORK ROOM - 1X 3/4" CONDUIT1- 1X CAT6 CABLEATS TO GENERATOR DOCKING STATION (GDS) - 1X 1" CONDUIT1- 10X#12 AWG THHN

   ATS TO UPS - 1X 3/4" CONDUIT1-1X BELDEN #9842 CABLE

   ATS POWER 1: 1X3/4" CONDUIT1- ATS 120V CIRCUIT ETS-GEN-L1 - 1

   ATS POWER 2: 1X3/4" CONDUIT1- ATS 120V CIRCUIT ETS-UPS-L1 - 25

   GEN AUX POWER: 1X1" CONDUIT - CIRCUIT ETS-GEN-L1 - 3:5



LIGHT CONTROL DIAGRAM

PILO ENGINEERING
540 HIBISCUS BLVD
MERRITT ISLAND, FL 32952
(321) 427-3644
MP@PILOENGINEERING.COM
WWW.PILOENGINEERING.COM
FL C.A. # 26294

MICHAEL PILO, PE
FL P.E. # 50067

CONSULTANTS:

REVISIONS

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
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6		
7		
8		
9		

PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB # RS - 22.02

DRAWN:	MP
APPROVED:	MP
DATE:	4.28.2022

DRAWING TITLE

IBAY/SCB BUILDING
ELECTR/LIGHTING PLAN
AEON R ENGINE AREA

DRAWING

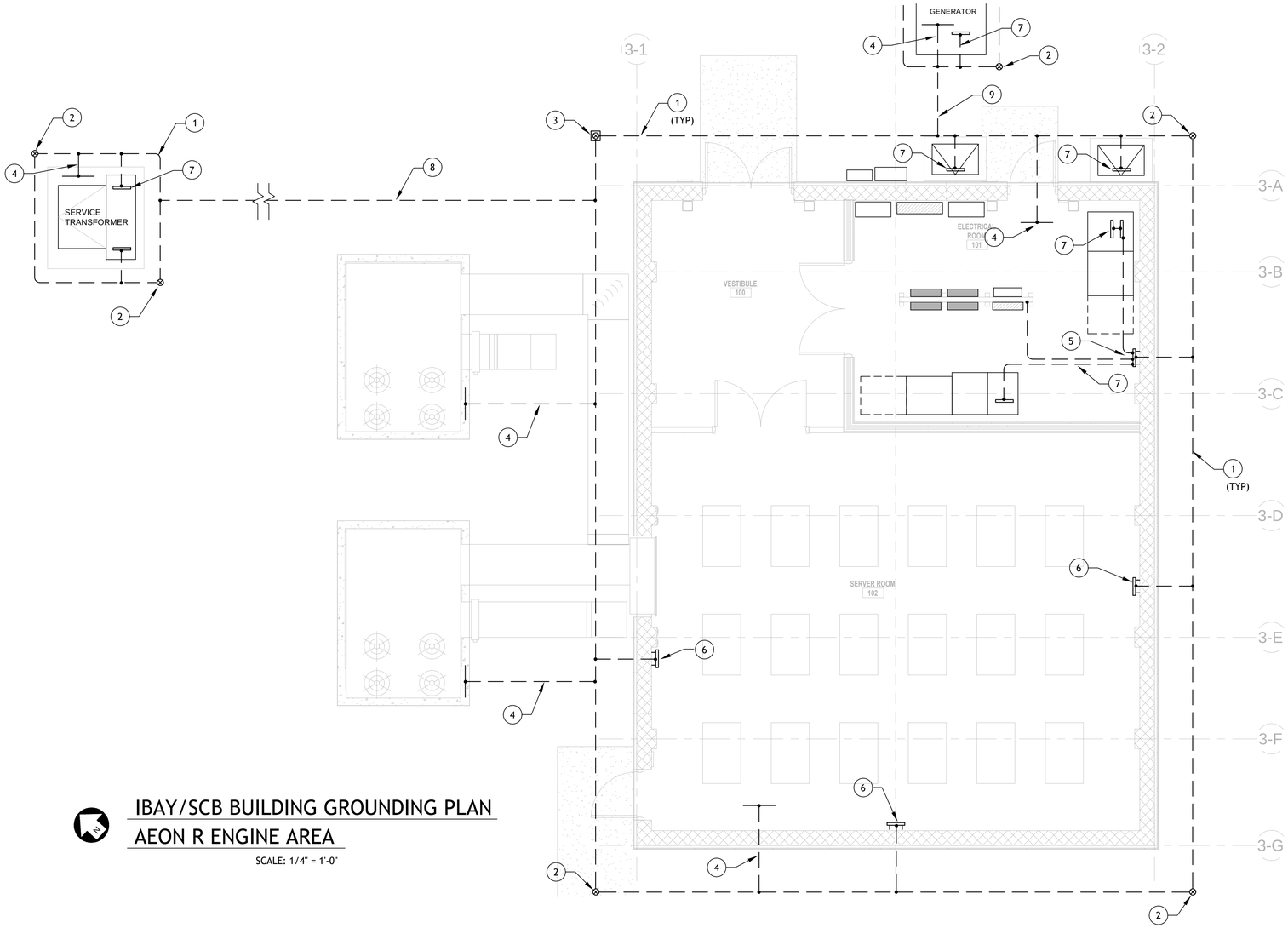
E-202

MICHAEL PILO
FL P.E. # 50067

SIGNATURE

DATE

Relativity

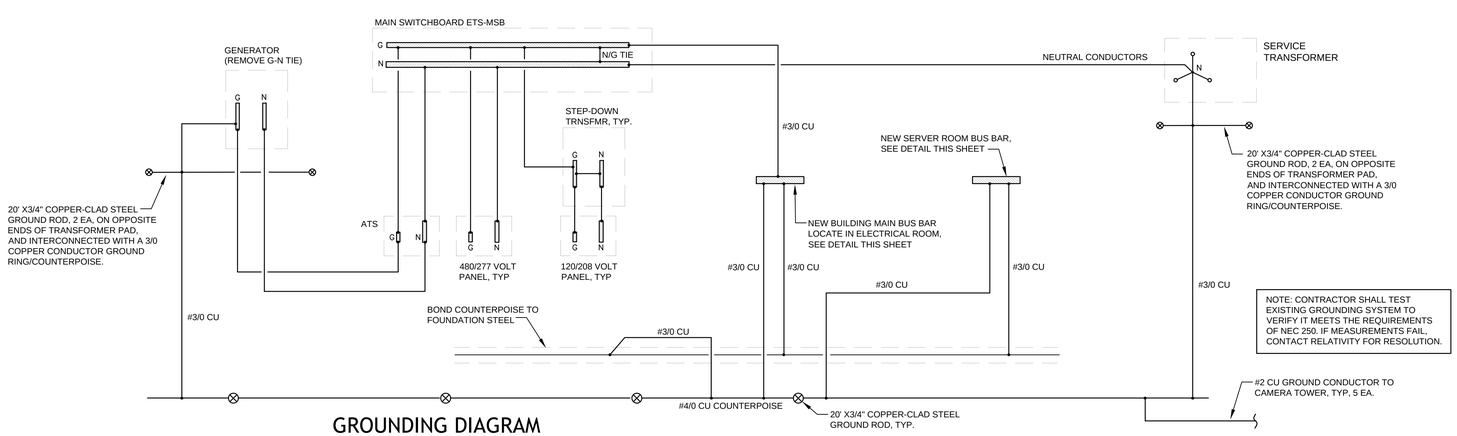


IBAY/SCB BUILDING GROUNDING PLAN
AEON R ENGINE AREA

SCALE: 1/4" = 1'-0"

PLAN NOTES (#)

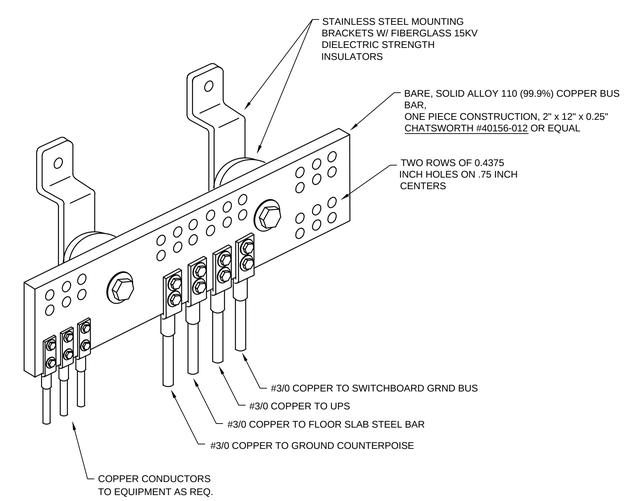
1. PROVIDE AND INSTALL GROUND RING (COUNTERPOISE), TO CONSIST OF A SINGLE STRANDED #4/0 BARE COPPER CONDUCTOR, DIRECTLY BURIED 30" BELOW GRADE AND APPROXIMATELY 4' FROM EDGE OF FOUNDATION, AND PROVIDE GROUND RODS AS INDICATED. ALL CONNECTIONS TO COUNTERPOISE AND ALL JOINTS SHALL BE EXOTHERMICALLY WELDED, WITH THE EXCEPTION OF CONNECTION TO GROUND TEST WELL, WHICH SHALL BE MADE WITH MECHANICAL CONNECTORS.
2. GROUND ROD, 20' X 3/4"D, DRIVEN TO 12" BELOW GRADE. ALL CONNECTIONS TO GROUND ROD SHALL BE EXOTHERMICALLY WELDED.
3. GROUND WELL WITH GROUND ROD, 20' X 3/4"D, AND SLEEVE W/ COVER. ALL CONNECTIONS TO GROUND ROD SHALL BE UL-LISTED MECHANICAL CLAMPS.
4. PROVIDE #3/0 BARE STRANDED COPPER BOND FROM CONCRETE FOUNDATION STEEL TO GROUND RING. CONDUCTOR SHALL BE #3/0 BARE STRANDED COPPER.
5. INSTALL GROUND BUS COPPER BAR IN ELECTRICAL ROOM, 18" A.F.F. PROVIDE #3/0 BARE STRANDED COPPER BOND TO COUNTERPOISE AND TO BUILDING FOUNDATION STEEL AS INDICATED. CABLE CONNECTIONS TO BAR SHALL BE BOLT-ON MECHANICAL CRIMP CONNECTORS.
6. INSTALL GROUND BUS COPPER BAR IN SERVER ROOM, 18" A.F.F. PROVIDE #3/0 BARE STRANDED COPPER BOND TO COUNTERPOISE AND TO BUILDING FOUNDATION STEEL AS INDICATED. CABLE CONNECTIONS TO BAR SHALL BE BOLT-ON MECHANICAL CRIMP CONNECTORS.
7. PROVIDE CONNECTIONS TO EQUIPMENT AS INDICATED.
8. PROVIDE UNDERGROUND CABLE BOND FROM TRANSFORMER GROUND RING TO BUILDING GROUND RING. CONDUCTOR SHALL BE #4/0 BARE STRANDED COPPER, 30" BELOW GRADE.
9. PROVIDE UNDERGROUND CABLE BOND FROM GENERATOR GROUND RING TO BUILDING GROUND RING. CONDUCTOR SHALL BE #4/0 BARE STRANDED COPPER, 30" BELOW GRADE



NOTE: CONTRACTOR SHALL TEST EXISTING GROUNDING SYSTEM TO VERIFY IT MEETS THE REQUIREMENTS OF NEC 250. IF MEASUREMENTS FAIL, CONTACT RELATIVITY FOR RESOLUTION.

GROUNDING DIAGRAM

SCALE: NTS



GROUND BUS BAR DETAIL

SCALE: NTS

PILO ENGINEERING
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MICHAEL PILO, PE
FL P.E. # 50067

CONSULTANTS:

REVISIONS

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1		
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7		
8		
9		

PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB #	RS - 22.02
DRAWN:	MP
APPROVED:	MP
DATE:	4.28.2022

DRAWING TITLE

IBAY/SCB BUILDING GROUNDING PLAN AEON R ENGINE AREA

DRAWING

E-203

MICHAEL PILO
FL P.E. # 50067

SIGNATURE

DATE

Relativity

SWITCHBOARD: ETS-MSB

RATING: 2000 AMP MCB | LUG LOCATION: BOTTOM | A.I.C.: 65,000
SERVICE: 480/277 V, 3Ph, 4W | MOUNTING: SURFACE

CKT. No.	EQUIPMENT SERVED	KVA A	KVA B	KVA C	CKT. BRK. P	CKT. BRK. TP.	BRANCH CIRCUIT Ø	BRANCH CIRCUIT N	BRANCH CIRCUIT G	BRANCH CIRCUIT C	CKT. No.	EQUIPMENT SERVED	KVA A	KVA B	KVA C	CKT. BRK. P	CKT. BRK. TP.	BRANCH CIRCUIT Ø	BRANCH CIRCUIT N	BRANCH CIRCUIT G	BRANCH CIRCUIT C
1	SPD	-	-	-	3	60	*	*	*	*	2	FUTURE ETS-STND-H1				3	250	*	*	*	*
3	FUTURE ETS-LOX-H1				3	400	*	*	*	*	4	FUTURE ETS-LNG-H1				3	150	*	*	*	*
5	FUTURE ETS-LN2-H1				3	250	*	*	*	*	6	SCU-1B				3	70	*	*	*	*
7	ETS-GEN-TX2				3	45	*	*	*	*	8	UPS BYPASS				3	150	*	*	*	*
9	ETS-GEN-H1				3	400	*	*	*	*	10										
11																					
13																					
15																					
TOTAL		####	####	####							TOTAL		#####	#####	#####						

EQUIPMENT SERVED	CONN. LOAD (KVA)	LF	DF	DESIGN LOAD
EQUIPMENT	#####	1	1.0	#####
TOTAL (KVA)				#####
TOTAL (AMPS)				####

* SEE FEEDER SIZE ON SINGLE LINE DIAGRAM E-200

PANEL: ETS-GEN-H1

RATING: 400 AMP MLO | LUG LOCATION: TOP | A.I.C.: 65,000
SERVICE: 480/277V, 3ø, 4W | MOUNTING: SURFACE | TYPE: PANELBOARD

CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	BRANCH CIRCUIT N	BRANCH CIRCUIT GND	BRANCH CIRCUIT C	ø	CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	BRANCH CIRCUIT N	BRANCH CIRCUIT GND	BRANCH CIRCUIT C
1	SCU-1A		3	70	(SEE DIAG)					2	LIGHTING		1	20	10	10	10	3/4
3	⊥			⊥	⊥					4	LIGHTING		1	20	10	10	10	3/4
5	⊥			⊥	⊥					6	LIGHTING		1	20	10	10	10	3/4
7	ETS-GEN-TX1		3	100	(SEE DIAG)					8	SPARE		1	20				
9	⊥			⊥	⊥					10	SPARE		1	20				
11	⊥			⊥	⊥					12	SPARE		1	20				
13	ETS-GEN-TX2	–	3	45	(SEE DIAG)					14	SPARE		1	20				
15	⊥			⊥	⊥					16	SPARE		1	20				
17	⊥			⊥	⊥					18	SPARE		1	20				
19	ETS-UPS		3	150	(SEE DIAG)					20	SPARE		1	20				
21	⊥			⊥	⊥					22	SPARE		1	20				
23	⊥			⊥	⊥					24	SPARE		1	20				
25	SPARE		1	20						26	SPARE		1	20				
27	SPARE		1	20						28	SPARE		1	20				
29	SPARE		1	20						30	SPARE		1	20				
31	SPARE		1	20						32	SPARE		1	20				
33	SPARE		1	20						34	SPARE		1	20				
35	SPARE		1	20						36	SPARE		1	20				
37	SPD	–	3	30	10	10	10	3/4		38	SPARE		1	20				
39	⊥			⊥	⊥					40	SPARE		1	20				
41	⊥			⊥	⊥					42	SPARE		1	20				

EQUIPMENT SERVED	CONN. LOAD	L.F.	D.F.	DEMAND
EQUIPMENT & SUBPANELS	KVA	1	1	KVA
TOTAL CONNECTED				KVA
MAXIMUM AMPS				XX

REMARKS: PROVIDE PANELBOARD DIRECTORY

PANEL: ETS-UPS-L1

RATING: 225 AMP MCB | LUG LOCATION: TOP | A.I.C.: 10,000
SERVICE: 120/208V, 3ø, 4W | MOUNTING: SURFACE | TYPE: PANELBOARD

CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	BRANCH CIRCUIT N	BRANCH CIRCUIT GND	BRANCH CIRCUIT C	ø	CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	BRANCH CIRCUIT N	BRANCH CIRCUIT GND	BRANCH CIRCUIT C
1	FUTURE SERVER RACK	2	2	30	10	–	10	3/4		2	FUTURE SERVER RACK	2	2	30	10	–	10	3/4
3	⊥			⊥	⊥					4	⊥			⊥	⊥			
5	FUTURE SERVER RACK	2	2	30	10	–	10	3/4		6	FUTURE SERVER RACK	2	2	30	10	–	10	3/4
7	⊥			⊥	⊥					8	⊥			⊥	⊥			
9	FUTURE SERVER RACK	2	2	30	10	–	10	3/4		10	FUTURE SERVER RACK	2	2	30	10	–	10	3/4
11	⊥			⊥	⊥					12	⊥			⊥	⊥			
13	FUTURE SERVER RACK	2	2	30	10	–	10	3/4		14	FUTURE SERVER RACK	2	2	30	10	–	10	3/4
15	⊥			⊥	⊥					16	⊥			⊥	⊥			
17	FUTURE SERVER RACK	2	2	30	10	–	10	3/4		18	FUTURE SERVER RACK	2	2	30	10	–	10	3/4
19	⊥			⊥	⊥					20	⊥			⊥	⊥			
21	FUTURE SERVER RACK	2	2	30	10	–	10	3/4		22	FUTURE SERVER RACK	2	2	30	10	–	10	3/4
23	⊥			⊥	⊥					24	⊥			⊥	⊥			
25	ETS-ATS-1 CONTROL	1	1	20	12	12	12	3/4		26	MELTRIC RECEPTACLE A1	15	3	60	6	6	8	1
27	SPARE		1	20						28								
29	SPARE		1	20						30	⊥			⊥	⊥			
31	SPARE		1	20						32	MELTRIC RECEPTACLE A2	15	3	60	6	6	8	1
33	SPARE		1	20						34								
35	SPARE		1	20						36	⊥			⊥	⊥			
37	SPARE		1	20						38	SPARE		1	20				
39	SPARE		1	20						40	SPARE		1	20				
41	SPARE		1	20						42	SPARE		1	20				

EQUIPMENT SERVED	CONN. LOAD	L.F.	D.F.	DEMAND
EQUIPMENT	KVA	1	1	KVA
TOTAL CONNECTED				KVA
MAXIMUM AMPS				XX

REMARKS: PROVIDE PANELBOARD DIRECTORY

PANEL: ETS-GEN-L1

RATING: 225 AMP MCB | LUG LOCATION: TOP | A.I.C.: 10,000
SERVICE: 120/208V, 3ø, 4W | MOUNTING: SURFACE | TYPE: PANELBOARD

CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	BRANCH CIRCUIT N	BRANCH CIRCUIT GND	BRANCH CIRCUIT C	ø	CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	BRANCH CIRCUIT N	BRANCH CIRCUIT GND	BRANCH CIRCUIT C
1	ETS-ATS-1 CONTROL	1	1	20	12	12	12	3/4		2	ACCESS CONTROL	1	1	20	12	12	12	3/4
3	GEN AUX POWER	10	2	70	4	4	8	1		4	HVAC CONTROL	1	1	20	12	12	12	3/4
5	⊥			⊥	⊥					6	SPARE		1	20				
7	MELTRIC RECEPTACLE B1	15	3	60	6	6	8	1		8	SPARE		1	20				
9	⊥			⊥	⊥					10	SPARE		1	20				
11	⊥			⊥	⊥					12	SPARE		1	20				
13	MELTRIC RECEPTACLE B2	15	3	60	6	6	8	1		14	SPARE		1	20				
15	⊥			⊥	⊥					16	SPARE		1	20				
17	⊥			⊥	⊥					18	SPARE		1	20				
19	SPARE		1	20						20	SPARE		1	20				
21	SPARE		1	20						22	SPARE		1	20				
23	SPARE		1	20						24	SPARE		1	20				
25	SPARE		1	20						26	SPARE		1	20				
27	SPARE		1	20						28	SPARE		1	20				
29	SPARE		1	20						30	SPARE		1	20				
31	SPARE		1	20						32	SPARE		1	20				
33	SPARE		1	20						34	SPARE		1	20				
35	SPARE		1	20						36	SPARE		1	20				
37	SPARE		1	20						38	SPARE		1	20				
39	SPARE		1	20						40	SPARE		1	20				
41	SPARE		1	20						42	SPARE		1	20				

EQUIPMENT SERVED	CONN. LOAD	L.F.	D.F.	DEMAND
EQUIPMENT	KVA	1	1	KVA
TOTAL CONNECTED				KVA
MAXIMUM AMPS				XX

REMARKS: PROVIDE PANELBOARD DIRECTORY

PANEL: ETS-UPS-H1

RATING: 150 AMP MLO | LUG LOCATION: TOP | A.I.C.: 25,000
SERVICE: 480/277V, 3ø, 4W | MOUNTING: SURFACE | TYPE: PANELBOARD

CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	BRANCH CIRCUIT N	BRANCH CIRCUIT GND	BRANCH CIRCUIT C	ø	CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	BRANCH CIRCUIT N	BRANCH CIRCUIT GND	BRANCH CIRCUIT C
1	SPARE		1	20						2	SPARE		1	20				
3	SPARE		1	20						4	SPARE		1	20				
5	SPARE		1	20						6	SPARE		1	20				
7	ETS-UPS-TX1		3	100	(SEE DIAG)					8	SPARE		1	20				
9	⊥			⊥	⊥					10	SPARE		1	20				
11	⊥			⊥	⊥					12	SPARE		1	20				
13	ETS-UPS-TX2	–	3	45	(SEE DIAG)					14	SPARE		1	20				
15	⊥			⊥	⊥					16	SPARE		1	20				
17	⊥			⊥	⊥					18	SPARE		1	20				
19	SPARE		1	20						20	SPARE		1	20				
21	SPARE		1	20						22	SPARE		1	20				
23	SPARE		1	20						24	SPARE		1	20				
25	SPARE		1	20						26	SPARE		1	20				
27	SPARE		1	20						28	SPARE		1	20				
29	SPARE		1	20						30	SPARE		1	20				
31	SPARE		1	20						32	SPARE		1	20				
33	SPARE		1	20						34	SPARE		1	20				
35	SPARE		1	20						36	SPARE		1	20				
37	SPD	–	3	30	10	10	10	3/4		38	SPARE		1	20				
39	⊥			⊥	⊥					40	SPARE		1	20				
41	⊥			⊥	⊥					42	SPARE		1	20				

EQUIPMENT SERVED	CONN. LOAD	L.F.	D.F.	DEMAND
EQUIPMENT & SUBPANELS	KVA	1	1	KVA
TOTAL CONNECTED				KVA
MAXIMUM AMPS				XX

REMARKS: PROVIDE PANELBOARD DIRECTORY

PANEL: ETS-UPS-L2

RATING: 100 AMP MCB | LUG LOCATION: TOP | A.I.C.: 10,000
SERVICE: 120/208V, 3ø, 4W | MOUNTING: SURFACE | TYPE: PANELBOARD

CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	BRANCH CIRCUIT N	BRANCH CIRCUIT GND	BRANCH CIRCUIT C	ø	CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	BRANCH CIRCUIT N	BRANCH CIRCUIT GND	BRANCH CIRCUIT C
1	FUTURE SERVER RACK	2	2	30	10	–	10	3/4		2	FUTURE SERVER RACK	2	2	30	10	–	10	3/4
3	⊥			⊥	⊥					4	⊥			⊥	⊥			
5	FUTURE SERVER RACK	2	2	30	10	–	10	3/4		6	FUTURE SERVER RACK	2	2	30	10	–	10	3/4
7	⊥			⊥	⊥					8	⊥			⊥	⊥			
9	FUTURE SERVER RACK	2	2	30	10	–	10	3/4		10	FUTURE SERVER RACK	2	2	30	10	–	10	3/4
11	⊥			⊥	⊥					12	⊥			⊥	⊥			
13	FUTURE SERVER RACK	2	2	30	10	–	10	3/4		14	FUTURE SERVER RACK	2	2	30	10	–	10	3/4
15	⊥			⊥	⊥					16	⊥			⊥	⊥			
17	FUTURE SERVER RACK	2	2	30	10	–	10	3/4		18	FUTURE SERVER RACK	2	2	30	10	–	10	3/4
19	⊥			⊥	⊥					20	⊥			⊥	⊥			
21	FUTURE SERVER RACK	2	2	30	10	–	10	3/4		22	FUTURE SERVER RACK	2	2	30	10	–	10	3/4
23	⊥			⊥	⊥					24	⊥			⊥	⊥			
25	SPARE		1	20						26	SPARE		1	20				
27	SPARE		1	20						28	SPARE		1	20				
29	SPARE		1	20						30	SPARE		1	20				
31	SPARE		1	20						32	SPARE		1	20				
33	SPARE		1	20						34	SPARE		1	20				
35	SPARE		1	20						36	SPARE		1	20				
37	SPARE		1	20						38	SPARE		1	20				
39	SPARE		1	20						40	SPARE		1	20				
41	SPARE		1	20						42	SPARE		1	20				

EQUIPMENT SERVED	CONN. LOAD	L.F.	D.F.	DEMAND
EQUIPMENT	KVA	1	1	KVA
TOTAL CONNECTED				KVA
MAXIMUM AMPS				XX

REMARKS: PROVIDE PANELBOARD DIRECTORY

PANEL: ETS-GEN-L2

RATING: 100 AMP MCB | LUG LOCATION: TOP | A.I.C.: 10,000
SERVICE: 120/208V, 3ø, 4W | MOUNTING: SURFACE | TYPE: PANELBOARD

CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	BRANCH CIRCUIT N	BRANCH CIRCUIT GND	BRANCH CIRCUIT C	ø	CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	BRANCH CIRCUIT N	BRANCH CIRCUIT GND	BRANCH CIRCUIT C
1	RECEPTACLES INTERIOR	1	1	20	12	12	12	3/4		2	SPARE		1	20				
3	RECEPTACLES INTERIOR	1	1	20	12	12	12	3/4		4	SPARE		1	20				
5	RECEPTACLES INTERIOR	1	1	20	12	12	12	3/4		6	SPARE		1	20				
7	RECEPTACLES INTERIOR	1	1	20	12	12	12	3/4		8	SPARE		1	20				
9	RECEPTACLES INTERIOR	1	1	20	12	12	12	3/4		10	SPARE		1	20				
11	RECEPTACLES INTERIOR	1	1	20	12	12	12	3/4		12	SPARE		1	20				
13	RECEPTACLES EXTERIOR	1	1	20	12	12	12	3/4		14	SPARE		1	20				
15	RECEPTACLES EXTERIOR	1	1	20	12	12	12	3/4		16	SPARE		1	20				
17	DEDICATED RECEP EXT	1	1	20	12	12	12	3/4		18	SPARE		1	20				
19	DEDICATED RECEP EXT	1	1	20	12	12	12	3/4		20	SPARE		1	20				
21	DEDICATED RECEP EXT	1	1	20	12	12	12	3/4		22	SPARE		1	20				
23	DEDICATED RECEP EXT	1	1	20	12	12	12	3/4		24	SPARE		1	20				
25	SPARE		1	20						26	SPARE		1	20				
27	SPARE		1	20						28	SPARE		1	20				
29	SPARE		1	20						30	SPARE		1	20				
31	SPARE		1	20						32	SPARE		1	20				
33	SPARE		1	20						34	SPARE		1	20				
35	SPARE		1	20						36	SPARE		1	20				
37	SPARE		1	20						38	SPARE		1	20				
39	SPARE		1	20						40	SPARE		1	20				
41	SPARE		1	20						42	SPARE		1	20				

EQUIPMENT SERVED	CONN. LOAD	L.F.	D.F.	DEMAND
EQUIPMENT	KVA	1	1	KVA
TOTAL CONNECTED				KVA
MAXIMUM AMPS				XX

REMARKS: PROVIDE PANELBOARD DIRECTORY

PILO ENGINEERING
540 HIBISCUS BLVD
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FL C.A. # 26294

MICHAEL PILO, PE
FL P.E. # 50067

CONSULTANTS:

REVISIONS

NO.	DATE	DESCRIPTION
1		
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PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB # RS - 22.02

DRAWN: MP
APPROVED: MP
DATE: 4.28.2022

DRAWING TITLE

PANEL SCHEDULES
AEON R ENGINE AREA

DRAWING

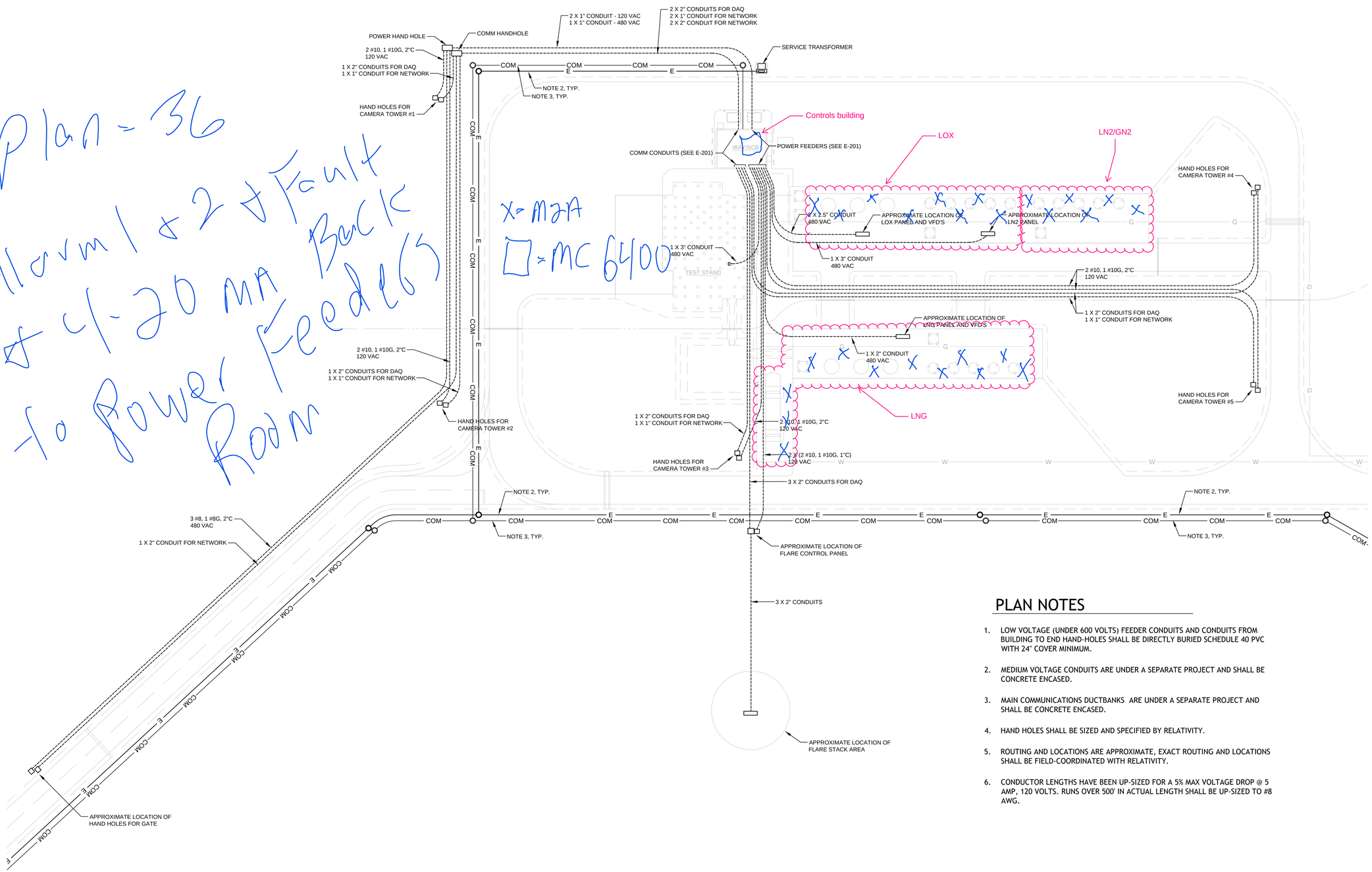
E-204

MICHAEL PILO
FL P.E. # 50067

SIGNATURE

DATE

Relativity



Plan = 36
Alarm 1 & 2 & Fault
& 4-20 mA Back
to Power Feeders
Room

X = MAA
□ = MC 6400

PLAN NOTES

1. LOW VOLTAGE (UNDER 600 VOLTS) FEEDER CONDUITS AND CONDUITS FROM BUILDING TO END HAND-HOLES SHALL BE DIRECTLY BURIED SCHEDULE 40 PVC WITH 24" COVER MINIMUM.
2. MEDIUM VOLTAGE CONDUITS ARE UNDER A SEPARATE PROJECT AND SHALL BE CONCRETE ENCASED.
3. MAIN COMMUNICATIONS DUCTBANKS ARE UNDER A SEPARATE PROJECT AND SHALL BE CONCRETE ENCASED.
4. HAND HOLES SHALL BE SIZED AND SPECIFIED BY RELATIVITY.
5. ROUTING AND LOCATIONS ARE APPROXIMATE, EXACT ROUTING AND LOCATIONS SHALL BE FIELD-COORDINATED WITH RELATIVITY.
6. CONDUCTOR LENGTHS HAVE BEEN UP-SIZED FOR A 5% MAX VOLTAGE DROP @ 5 AMP, 120 VOLTS. RUNS OVER 500' IN ACTUAL LENGTH SHALL BE UP-SIZED TO #8 AWG.

ELECTRICAL SITE PLAN - AEON R ENGINE TEST AREA

SCALE: 1" = 30'

N

HORIZONTAL SCALE: 1" = 30'

30 0 30 60

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PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB #	RS - 22.02
DRAWN:	MP
APPROVED:	MP
DATE:	4.28.2022

DRAWING TITLE

ELECTRICAL SITE PLAN
AEON R ENGINE TEST
AREA

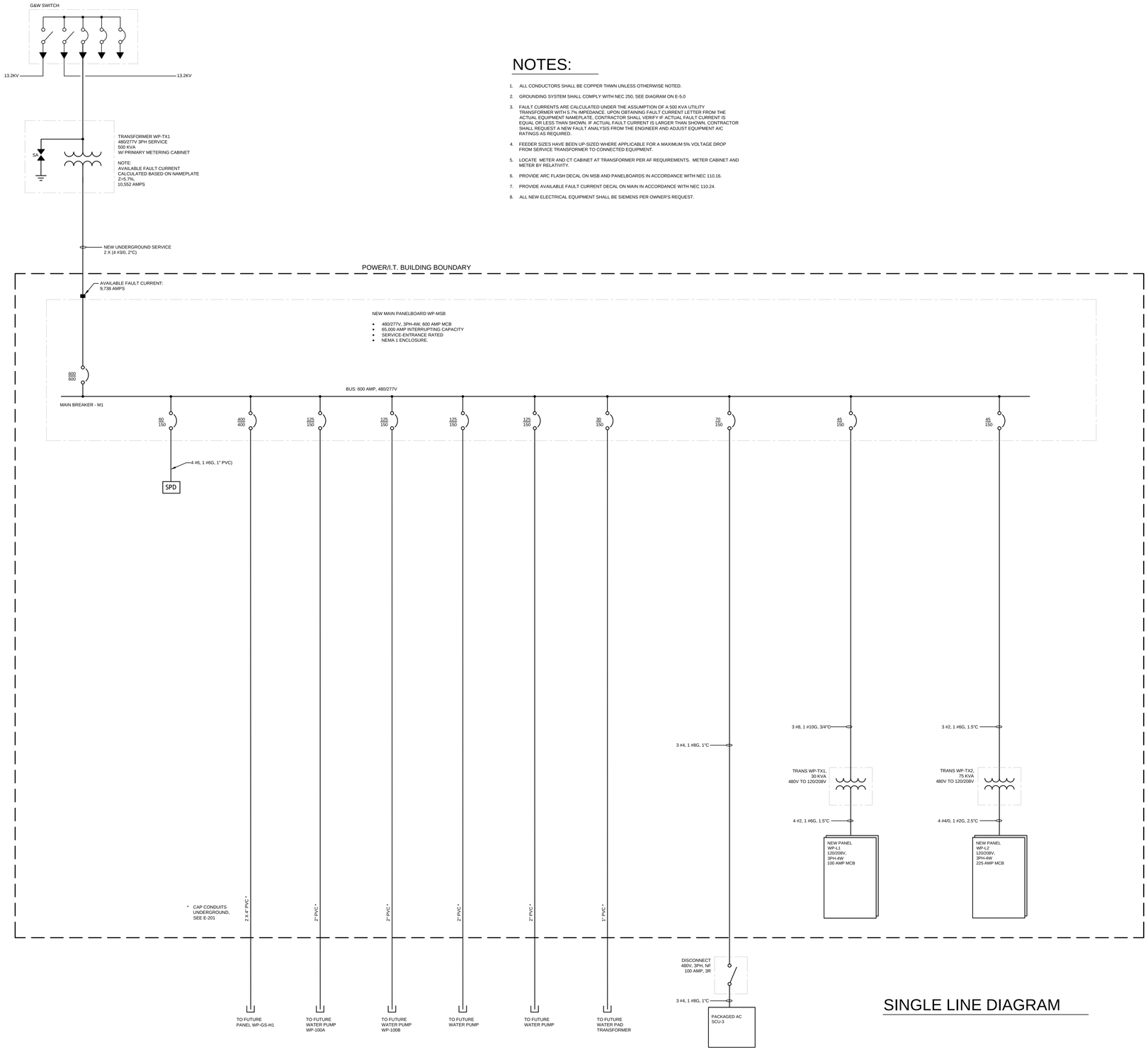
DRAWING

E-205

MICHAEL PILO
FL P.E. # 50067

SIGNATURE

DATE



NOTES:

1. ALL CONDUCTORS SHALL BE COPPER THWN UNLESS OTHERWISE NOTED.
2. GROUNDING SYSTEM SHALL COMPLY WITH NEC 250, SEE DIAGRAM ON E-5.0
3. FAULT CURRENTS ARE CALCULATED UNDER THE ASSUMPTION OF A 500 KVA UTILITY TRANSFORMER WITH 5.7% IMPEDANCE. UPON OBTAINING FAULT CURRENT LETTER FROM THE ACTUAL EQUIPMENT NAMEPLATE, CONTRACTOR SHALL VERIFY IF ACTUAL FAULT CURRENT IS EQUAL OR LESS THAN SHOWN. IF ACTUAL FAULT CURRENT IS LARGER THAN SHOWN, CONTRACTOR SHALL REQUEST A NEW FAULT ANALYSIS FROM THE ENGINEER AND ADJUST EQUIPMENT AIC RATINGS AS REQUIRED.
4. FEEDER SIZES HAVE BEEN UP-SIZED WHERE APPLICABLE FOR A MAXIMUM 5% VOLTAGE DROP FROM SERVICE TRANSFORMER TO CONNECTED EQUIPMENT.
5. LOCATE METER AND CT CABINET AT TRANSFORMER PER AF REQUIREMENTS. METER CABINET AND METER BY RELATIVITY.
6. PROVIDE ARC FLASH DECAL ON MSB AND PANELBOARDS IN ACCORDANCE WITH NEC 110.16.
7. PROVIDE AVAILABLE FAULT CURRENT DECAL ON MAIN IN ACCORDANCE WITH NEC 110.24.
8. ALL NEW ELECTRICAL EQUIPMENT SHALL BE SIEMENS PER OWNER'S REQUEST.

SINGLE LINE DIAGRAM

Relativity

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PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB #	RS - 22.02
DRAWN:	MP
APPROVED:	MP
DATE:	4.28.2022

DRAWING TITLE

SINGLE LINE DIAGRAM
WATER PAD AREA

DRAWING

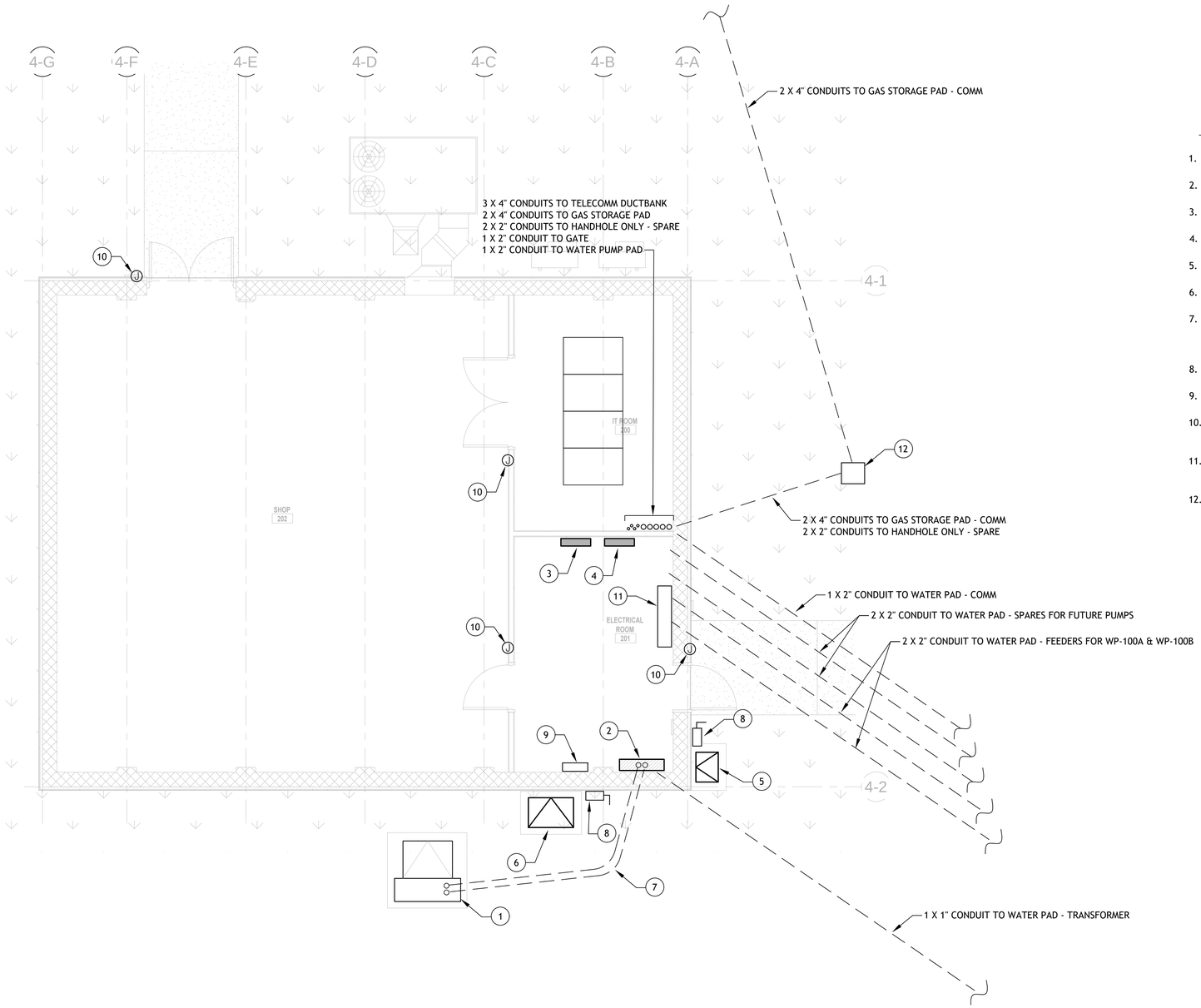
E-300

MICHAEL PILO
FL P.E. # 50067

SIGNATURE

DATE

Relativity



PLAN NOTES

1. SERVICE TRANSFORMER.
2. MAIN PANEL WP-MSB.
3. PANEL WP-L1 (120/208V).
4. PANEL WP-L2 (120/208V).
5. TRANSFORMER WP-TX1
6. TRANSFORMERS WP-TX2
7. UNDERGROUND SERVICE CONSISTING OF THWN CONDUCTORS IN DIRECT-BURIED SCHEDULE-40 PVC CONDUIT WITH 24" COVER MINIMUM.
8. TRANSFORMER DISCONNECT.
9. LIGHTING CONTROL PANEL
10. PROVIDE FLUSH BOX FOR CARD READER, WITH 3/4" CONDUIT TO LOCATION TBD BY OWNER.
11. PROPOSED LOCATION OF SOFT START EQUIPMENT FOR WATER PUMPS.
12. HAND HOLE TO BE SPECIFIED AND SIZED BY RELATIVITY.

POWER/I.T. BUILDING ELECTRICAL PLAN - WATER PAD AREA

SCALE: 1/4" = 1'-0"

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PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB #	RS - 22.02
DRAWN:	MP
APPROVED:	MP
DATE:	4.28.2022

DRAWING TITLE

POWER/I.T. BUILDING
ELECTRICAL PLAN
WATER PAD AREA

DRAWING

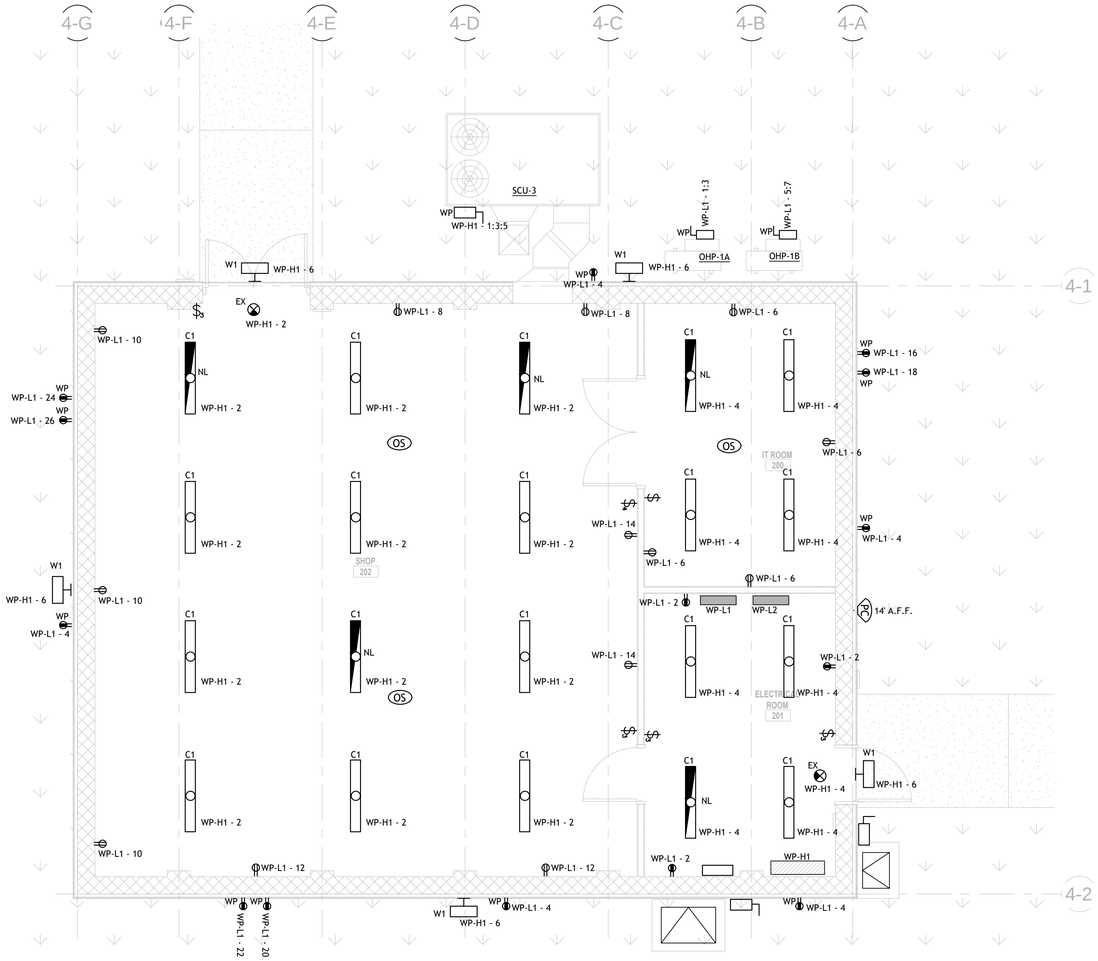
E-301

MICHAEL PILO
FL P.E. # 50067

SIGNATURE

DATE

Relativity



IBAY/SCB BUILDING ELECTRICAL AND LIGHITNG PLAN - WATER PAD AREA

SCALE: 1/4" = 1'-0"

LIGHTING NOTES

1. EXIT AND EMERGENCY LIGHTS SHALL BE CONNECTED TO THE UNSWITCHED SIDE OF LIGHT CIRCUIT.
2. INTERIOR LIGHTING SHALL BE CONTROLLED THROUGH ARP LIGHTING CONTROL PANEL WITH LOW VOLTAGE WALL SWITCHES AND VACANCY SENSORS (WHERE SHOWN). EXTERIOR LIGHTING SHALL BE CONTROLLED WITH ARP LIGHTING CONTROL PANEL AND ONE LOW VOLTAGE WALL SWITCH LOCATED IN ELECTRICAL ROOM.
3. ALL LIGHTING FIXTURES SHALL BE SERVED BY PANEL AND CIRCUIT NUMBER INDICATED.
4. HALF-SHADED FIXTURES SHALL CONTAIN EMERGENCY LIGHT BATTERY BACKUP.

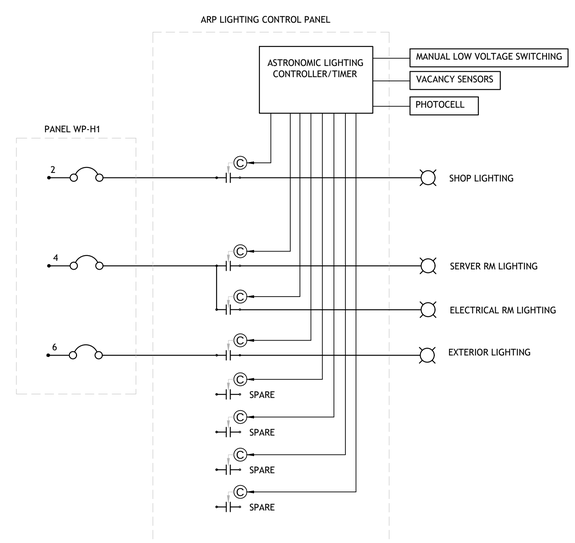
LIGHTING FIXTURE SCHEDULE

#	TYPE	MANUFACTURER / PART #	LAMP	LUMENS	W
C1	LINEAR SUSPENDED LED, 4', WITH STEM	LITHONIA / BLWP4-60L-ADSM-LP840	LED	6,000	60
W1	WALL MOUNTED EXTERIOR, CUTOFF	LITHONIA / DSXW1-LED-20C-350- 50K- T3S	LED	3,000	34
EX	EXIT LIGHT WITH BATTERY BACKUP	LITHONIA	LED	-	5

FIXTURE SELECTION REPRESENT BASIS OF DESIGN, EQUAL SUBSTITUTES ARE ACCEPTABLE.

ELECTRICAL NOTES

1. ALL EQUIPMENT AND DEVICES SHALL BE FED FROM PANELS AND CIRCUITS INDICATED, SEE E-201 FOR PANEL LOCATION. SEE PANEL SCHEDULES, E-204
2. PROVIDE DISCONNECTS, STARTERS, FEEDERS, AND CONNECTIONS FOR NEW DEVICES, AND HVAC EQUIPMENT AS SHOWN. ALL EQUIPMENT LOCATED OUTSIDE SHALL BE WEATHERPROOF, WIRING METHODS SHALL BE SUITABLE FOR WET LOCATIONS.



LIGHT CONTROL DIAGRAM

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PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB #	RS - 22.02
DRAWN:	MP
APPROVED:	MP
DATE:	4.28.2022

DRAWING TITLE

POWER/I.T. BUILDING ELECTR/LIGHTING PLAN WATER PAD AREA

DRAWING

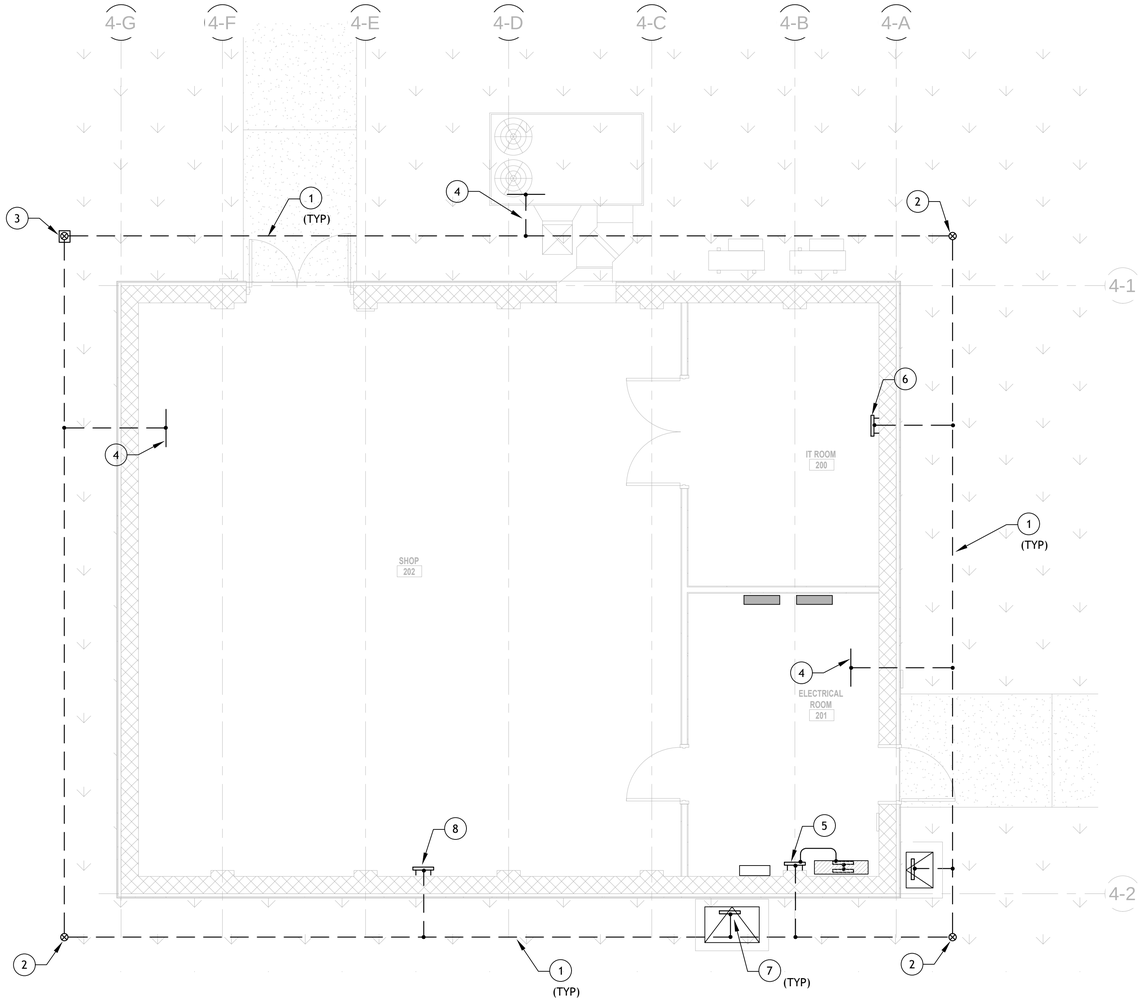
E-302

MICHAEL PILO
FL P.E. # 50067

SIGNATURE

DATE

Relativity

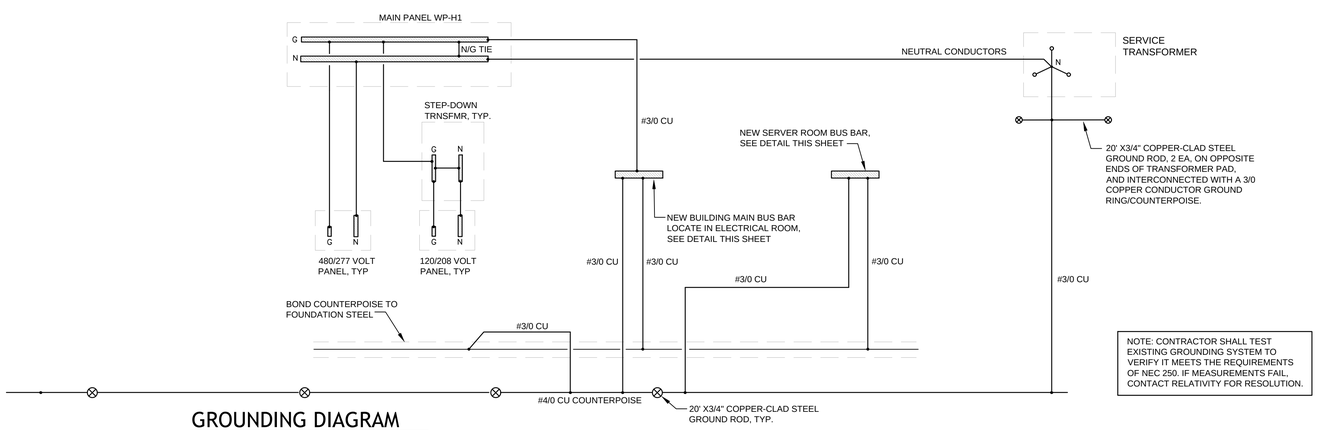


IBAY/SCB BUILDING GROUNDING PLAN - WATER PAD AREA

SCALE: 1/4" = 1'-0"

PLAN NOTES

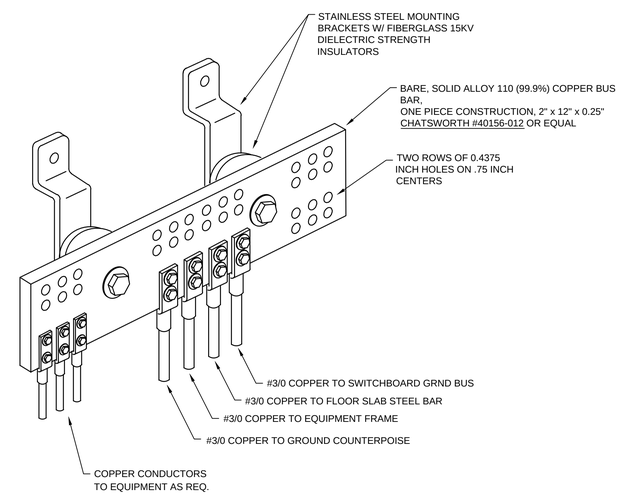
1. PROVIDE AND INSTALL GROUND RING (COUNTERPOISE), TO CONSIST OF A SINGLE STRANDED #4/0 BARE COPPER CONDUCTOR, DIRECTLY BURIED 30" BELOW GRADE AND APPROXIMATELY 4' FROM EDGE OF FOUNDATION, AND PROVIDE GROUND RODS AS INDICATED. ALL CONNECTIONS TO COUNTERPOISE AND ALL JOINTS SHALL BE EXOTHERMICALLY WELDED, WITH THE EXCEPTION OF CONNECTION TO GROUND TEST WELL, WHICH SHALL BE MADE WITH MECHANICAL CONNECTORS.
2. GROUND ROD, 20' X 3/4"D, DRIVEN TO 12" BELOW GRADE. ALL CONNECTIONS TO GROUND ROD SHALL BE EXOTHERMICALLY WELDED.
3. GROUND WELL WITH GROUND ROD, 20' X 3/4"D, AND SLEEVE W/ COVER. ALL CONNECTIONS TO GROUND ROD SHALL BE UL-LISTED MECHANICAL CLAMPS.
4. PROVIDE CABLE BOND FROM CONCRETE FOUNDATION STEEL TO GROUND RING. CONDUCTOR SHALL BE #3/0 BARE STRANDED COPPER.
5. INSTALL GROUND BUS COPPER BAR IN ELECTRICAL ROOM, 18" A.F.F. PROVIDE BOND TO COUNTERPOISE AND TO BUILDING FOUNDATION STEEL AS INDICATED. CABLE CONNECTIONS TO BAR SHALL BE BOLT-ON MECHANICAL CRIMP CONNECTORS.
6. INSTALL GROUND BUS COPPER BAR IN SERVER ROOM, 18" A.F.F. PROVIDE BOND TO COUNTERPOISE AND TO BUILDING FOUNDATION STEEL AS INDICATED. CABLE CONNECTIONS TO BAR SHALL BE BOLT-ON MECHANICAL CRIMP CONNECTORS.
7. PROVIDE CONNECTIONS TO EQUIPMENT AS INDICATED.
8. INSTALL GROUND BUS COPPER BAR IN MAINTENANCE ROOM, 18" A.F.F. PROVIDE BOND TO COUNTERPOISE AND TO BUILDING FOUNDATION STEEL AS INDICATED. CABLE CONNECTIONS TO BAR SHALL BE BOLT-ON MECHANICAL CRIMP CONNECTORS



GROUNDING DIAGRAM

SCALE: NTS

NOTE: CONTRACTOR SHALL TEST EXISTING GROUNDING SYSTEM TO VERIFY IT MEETS THE REQUIREMENTS OF NEC 250. IF MEASUREMENTS FAIL, CONTACT RELATIVITY FOR RESOLUTION.



GROUND BUS BAR DETAIL

SCALE: NTS

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CONSULTANTS:

REVISIONS

NO.	DATE	DESCRIPTION
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PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB #	RS - 22.02
DRAWN:	MP
APPROVED:	MP
DATE:	4.28.2022

DRAWING TITLE

POWER/I.T. BUILDING
GROUNDING PLAN
WATER PAD AREA

DRAWING

E-303

MICHAEL PILO
FL P.E. # 50067

SIGNATURE

DATE

Relativity

PANEL: WP-MSB

RATING: 600 AMP MCB (SERV -RATED) | LUG LOCATION: BOTTOM | A.I.C.: 65,000
SERVICE: 480/277V, 3ø, 4W | MOUNTING: SURFACE | TYPE: PANELBOARD

CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	N	GND	C	ø	CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	N	GND	C
1	SCU-3		3	70	(SEE DIAG)					2	LIGHTING		1	20	10	10	10	3/4
3	⊥			⊥	⊥					4	LIGHTING		1	20	10	10	10	3/4
5	⊥			⊥	⊥					6	LIGHTING		1	20	10	10	10	3/4
7	WP-TX2		3	100	(SEE DIAG)					8	SPARE		1	20				
9	⊥			⊥	⊥					10	SPARE		1	20				
11	⊥			⊥	⊥					12	SPARE		1	20				
13	WP-TX1	–	3	45	(SEE DIAG)					14	SPARE		1	20				
15	⊥			⊥	⊥					16	SPARE		1	20				
17	⊥			⊥	⊥					18	SPARE		1	20				
19	FUTURE WP-GS-H1		3	400	(SEE DIAG)					20	SPARE		1	20				
21	⊥			⊥	⊥					22	SPARE		1	20				
23	⊥			⊥	⊥					24	SPARE		1	20				
25	FUTURE WP-100A		3	125	(SEE DIAG)					26	SPARE		1	20				
27	⊥			⊥	⊥					28	SPARE		1	20				
29	⊥			⊥	⊥					30	SPARE		1	20				
31	FUTURE WP-100B		3	125	(SEE DIAG)					32	SPARE		1	20				
33	⊥			⊥	⊥					34	SPARE		1	20				
35	⊥			⊥	⊥					36	SPARE		1	20				
37	SPD	–	3	30	10	10	10	3/4		38	SPARE		1	20				
39	⊥			⊥	⊥					40	SPARE		1	20				
41	⊥			⊥	⊥					42	SPARE		1	20				

EQUIPMENT SERVED	CONN. LOAD	L.F.	D.F.	DEMAND
EQUIPMENT & SUBPANELS	KVA	1	1	KVA
			TOTAL CONNECTED	KVA
			MAXIMUM AMPS	XX

REMARKS:
PROVIDE PANELBOARD DIRECTORY

PANEL: WP-L1

RATING: 100 AMP MCB | LUG LOCATION: TOP | A.I.C.: 10,000
SERVICE: 120/208V, 3ø, 4W | MOUNTING: SURFACE | TYPE: PANELBOARD

CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	N	GND	C	ø	CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	N	GND	C
1	OHP-1A		2	30	10	–	10	3/4		2	RECEPTACLES INTERIOR	1	1	20	12	12	12	3/4
3	⊥			⊥	⊥					4	RECEPTACLES EXTERIOR	1	1	20	12	12	12	3/4
5	OHP-1B		2	30	10	–	10	3/4		6	RECEPTACLES INTERIOR	1	1	20	12	12	12	3/4
7	⊥			⊥	⊥					8	RECEPTACLES INTERIOR	1	1	20	12	12	12	3/4
9	SPARE		1	20						10	RECEPTACLES INTERIOR	1	1	20	12	12	12	3/4
11	SPARE		1	20						12	RECEPTACLES INTERIOR	1	1	20	12	12	12	3/4
13	SPARE		1	20						14	RECEPTACLES INTERIOR	1	1	20	12	12	12	3/4
15	SPARE		1	20						16	DEDICATED EXT RECEPT	1	1	20	12	12	12	3/4
17	SPARE		1	20						18	DEDICATED EXT RECEPT	1	1	20	12	12	12	3/4
19	SPARE		1	20						20	DEDICATED EXT RECEPT	1	1	20	12	12	12	3/4
21	SPARE		1	20						22	DEDICATED EXT RECEPT	1	1	20	12	12	12	3/4
23	SPARE		1	20						24	DEDICATED EXT RECEPT	1	1	20	12	12	12	3/4
25	SPARE		1	20						26	DEDICATED EXT RECEPT	1	1	20	12	12	12	3/4
27	SPARE		1	20						28	SPARE		1	20				
29	SPARE		1	20						30	SPARE		1	20				
31	SPARE		1	20						32	SPARE		1	20				
33	SPARE		1	20						34	SPARE		1	20				
35	SPARE		1	20						36	SPARE		1	20				
37	SPARE		1	20						38	SPARE		1	20				
39	SPARE		1	20						40	SPARE		1	20				
41	SPARE		1	20						42	SPARE		1	20				

EQUIPMENT SERVED	CONN. LOAD	L.F.	D.F.	DEMAND
EQUIPMENT	KVA	1	1	KVA
			TOTAL CONNECTED	KVA
			MAXIMUM AMPS	XX

REMARKS:
PROVIDE PANELBOARD DIRECTORY

PANEL: WP-L2

RATING: 225 AMP MCB | LUG LOCATION: TOP | A.I.C.: 10,000
SERVICE: 120/208V, 3ø, 4W | MOUNTING: SURFACE | TYPE: PANELBOARD

CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	N	GND	C	ø	CKT. NO.	EQUIPMENT SERVED	KVA	CKT.BKR. POLE	CKT.BKR. TRIP	BRANCH CIRCUIT ø	N	GND	C
1	SPARE		1	20						2	SPARE		1	20				
3	SPARE		1	20						4	SPARE		1	20				
5	SPARE		1	20						6	SPARE		1	20				
7	SPARE		1	20						8	SPARE		1	20				
9	SPARE		1	20						10	SPARE		1	20				
11	SPARE		1	20						12	SPARE		1	20				
13	SPARE		1	20						14	SPARE		1	20				
15	SPARE		1	20						16	SPARE		1	20				
17	SPARE		1	20						18	SPARE		1	20				
19	SPARE		1	20						20	SPARE		1	20				
21	SPARE		1	20						22	SPARE		1	20				
23	SPARE		1	20						24	SPARE		1	20				
25	SPARE		1	20						26	SPARE		1	20				
27	SPARE		1	20						28	SPARE		1	20				
29	SPARE		1	20						30	SPARE		1	20				
31	SPARE		1	20						32	SPARE		1	20				
33	SPARE		1	20						34	SPARE		1	20				
35	SPARE		1	20						36	SPARE		1	20				
37	SPARE		1	20						38	SPARE		1	20				
39	SPARE		1	20						40	SPARE		1	20				
41	SPARE		1	20						42	SPARE		1	20				

EQUIPMENT SERVED	CONN. LOAD	L.F.	D.F.	DEMAND
EQUIPMENT	KVA	1	1	KVA
			TOTAL CONNECTED	KVA
			MAXIMUM AMPS	XX

REMARKS:
PROVIDE PANELBOARD DIRECTORY

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CONSULTANTS:

REVISIONS

NO.	DATE	DESCRIPTION
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PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB # RS - 22.02

DRAWN: MP
APPROVED: MP
DATE: 4.28.2022

DRAWING TITLE

PANEL SCHEDULES
WATER PAD AREA

DRAWING

E-304

MICHAEL PILO
FL P.E. # 50067

SIGNATURE

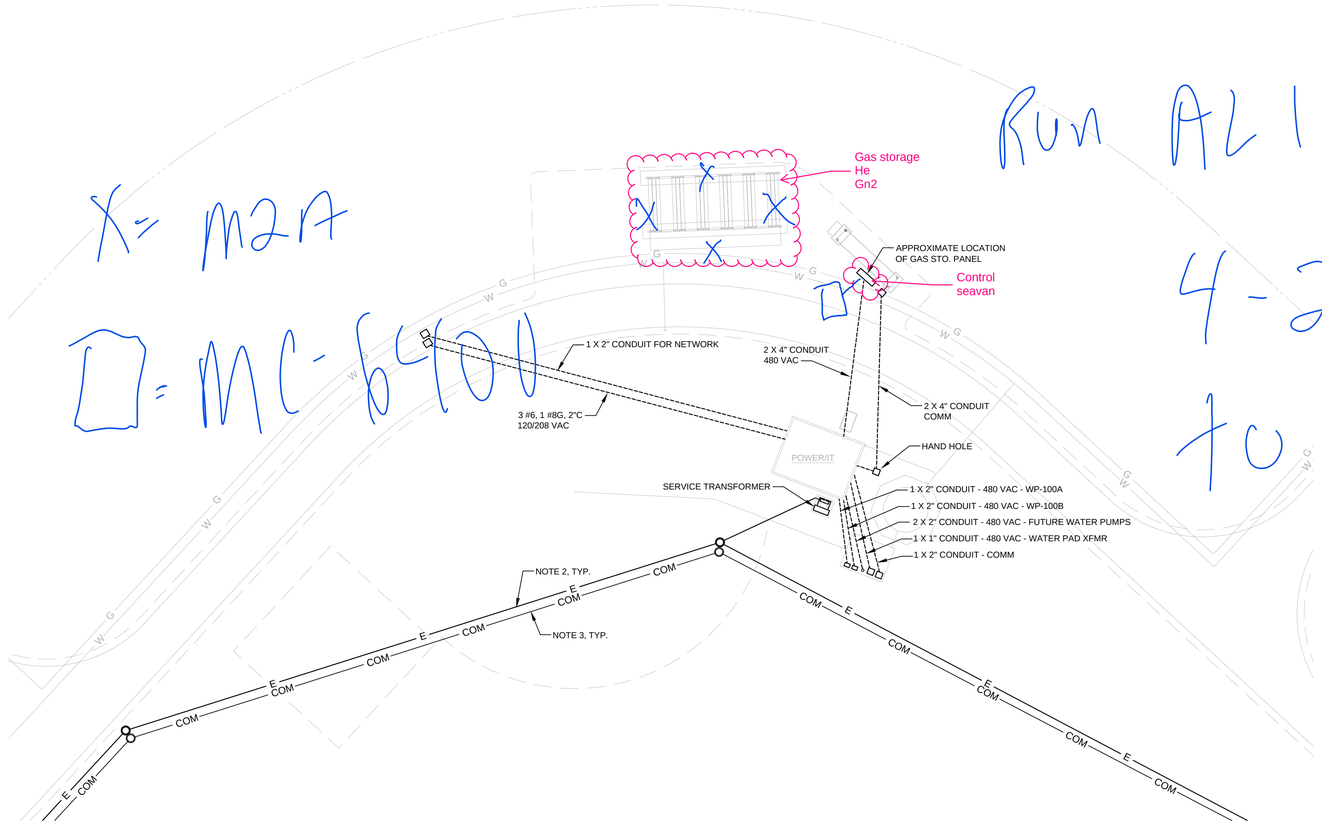
DATE

Relativity

X = M2A

□ = MC-6400

Run AL1, AL2, Fault, 4-20 mA output to Gas storage Panel



ELECTRICAL SITE PLAN - WATER PAD AREA

SCALE: 1" = 30'

Plan = 16

PLAN NOTES

1. LOW VOLTAGE (UNDER 600 VOLTS) FEEDER CONDUITS AND CONDUITS FROM BUILDING TO END HAND-HOLES SHALL BE DIRECTLY BURIED SCHEDULE 40 PVC WITH 24" COVER MINIMUM.
2. MEDIUM VOLTAGE CONDUITS ARE UNDER A SEPARATE PROJECT AND SHALL BE CONCRETE ENCASED.
3. MAIN COMMUNICATIONS DUCTBANKS ARE UNDER A SEPARATE PROJECT AND SHALL BE CONCRETE ENCASED.
4. HAND HOLES SHALL BE SIZED AND SPECIFIED BY RELATIVITY.
5. ROUTING AND LOCATIONS ARE APPROXIMATE, EXACT ROUTING AND LOCATIONS SHALL BE FIELD-COORDINATED WITH RELATIVITY.

HORIZONTAL SCALE: 1" = 30'

30 0 30 60

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CONSULTANTS:

REVISIONS

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		

PROJECT

RELATIVITY SPACE

ELECTRICAL DESIGN
VARIOUS FACILITIES

LOCATION

STENNIS SPACE CENTER
MS 39529

JOB # RS - 22.02

DRAWN:	MP
APPROVED:	MP
DATE:	4.28.2022

DRAWING TITLE

ELECTRICAL SITE PLAN
WATER PAD AREA

DRAWING

E-305

MICHAEL PILO
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SIGNATURE

DATE