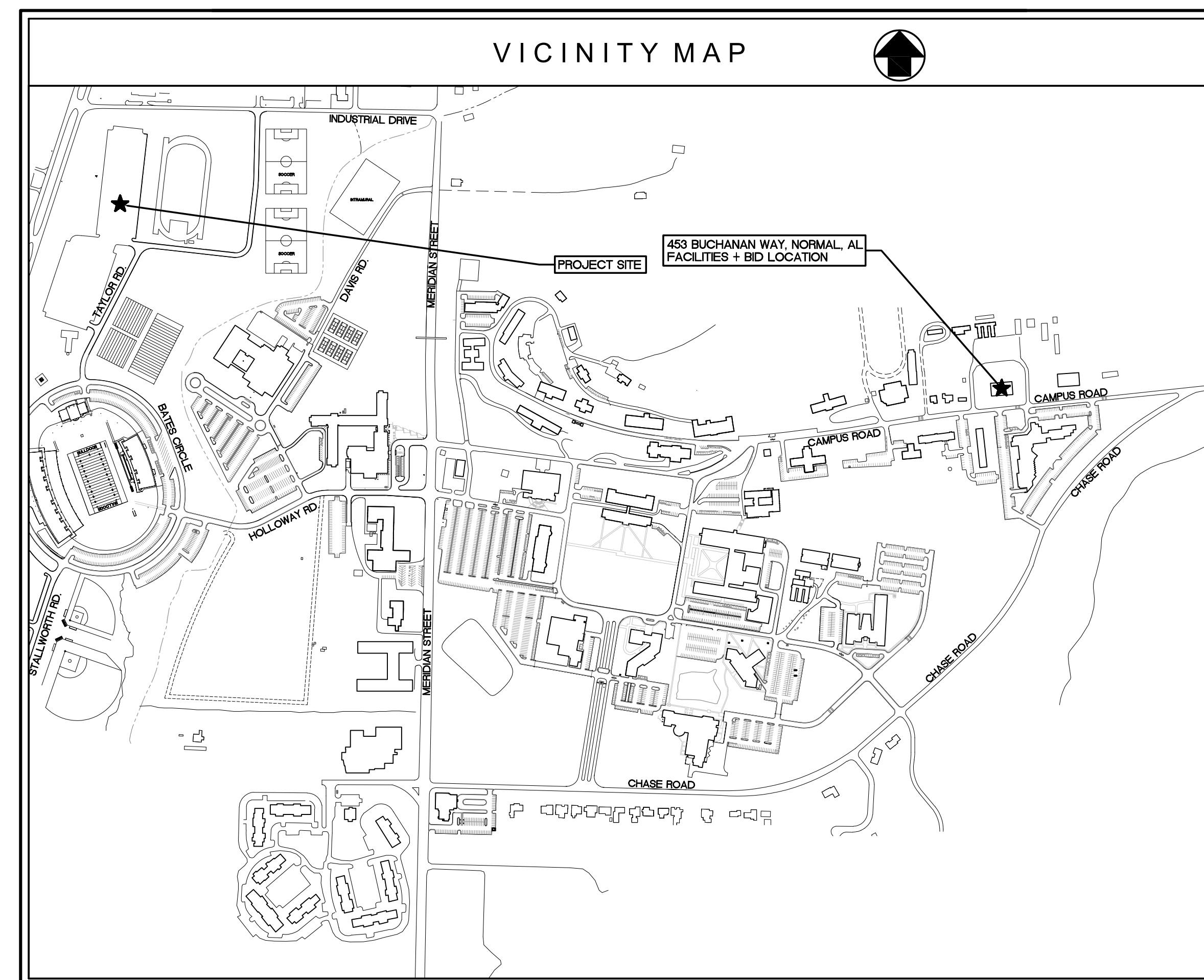


ALABAMA A&M UNIVERSITY TAILGATE ELECTRICAL NORMAL, ALABAMA

NOLA | VANPEURSEM ARCHITECTS PROJECT NUMBER 23395
DIVISION OF CONSTRUCTION MANAGEMENT NUMBER UNASSIGNED



ALABAMA A&M UNIVERSITY
TAILGATE ELECTRICAL
NORMAL, ALABAMA

INDEX OF DRAWINGS ELECTRICAL

E000	LEGEND
E101	RV PARKING ELECTRICAL PLAN
E201	RV PARKING DISTRIBUTION AND LIGHTING
E202	RV PARKING PHOTOMETRIC PLAN
E203	RV PARKING PHOTOMETRIC PLAN-ALTERNATE
E501	RV PARKING DETAILS
E601	RV PARKING DIAGRAMS AND SCHEDULES

ARCHITECT

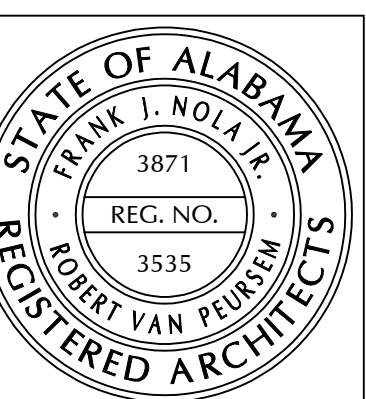
NOLA | VANPEURSEM
ARCHITECTS, P.C.
301 JEFFERSON STREET
HUNTSVILLE, ALABAMA 35801
(256) 533-6617

ELECTRICAL ENGINEER

ROCKET MEP
P.O. BOX 127
GURLEY, ALABAMA 35748
(256) 203-6373

DECEMBER 20, 2023

SET NUMBER



POWER DEVICES	
	SIMPLEX RECEPTACLE, NEMA 5-20R
	DUPLEX RECEPTACLE, NEMA 5-20R U.O.N.
	DUPLEX RECEPTACLE, CEILING
	DUPLEX RECEPTACLE, COUNTER HEIGHT
	QUADRUPLEX RECEPTACLE
	FLOOR BOX - RECEPTACLES AS INDICATED
	SPECIAL RECEPTACLE 208 OR 240V- RATING AS NOTED
	SPECIAL RECEPTACLE 480V- RATING AS NOTED
	JUNCTION BOX
RECEPTACLE DESIGNATIONS: GF- GROUND FAULT CIRCUIT INTERRUPTER WP- GFCI WITH WEATHERPROOF COVER TR- TAMPER RESISTANT EP- EXPLOSION PROOF EWC- ELECTRIC WATER COOLER, GFCI	

ONE-LINE DIAGRAM SYMBOLS	
	BUS
	BUS OR CABLE TERMINATION
	CONDUCTORS / CABLES
	BUSWAY
	TRANSFORMER, TYPE AND RATING AS INDICATED
	GENERATOR, TYPE AND RATINGS AS INDICATED
	AUTOMATIC TRANSFER SWITCH
	UNINTERRUPTIBLE POWER SUPPLY
	METER
	CURRENT TRANSFORMER
	LOW VOLTAGE POWER CIRCUIT BREAKER, DRAW-OUT FFF = FRAME RATING TTT = TRIP RATING
	LOW VOLTAGE POWER CIRCUIT BREAKER, FIXED FFF = FRAME RATING TTT = TRIP RATING
	MOLDED CASE CIRCUIT BREAKER

CIRCUIT BREAKER FEATURES AND TRIP FUNCTIONS
LSIG = LONG TIME SHORT TIME, INSTANTANEOUS,
GROUND FAULT INTERRUPTING
EO = ELECTRICALLY OPERATED
ST = SHUNT TRIP

	SWITCH (SERVICE ENTRANCE OR FEEDER)
	FUSE
	SWITCH, FUSED OR NON-FUSED AS INDICATED (BRANCH CIRCUIT OR EQUIPMENT FEEDER)
	MOTOR STARTER
	VARIABLE FREQUENCY DRIVE
	CONTACTOR
	MOTOR
	PANELBOARD, 480Y/277V
	PANELBOARD, 208Y/120V OR 240/120V
	CONNECTION TO SYSTEM GROUND OR GROUNDING ELECTRODE

ANNOTATIONS	
	KEY NOTE
	FEEDER TAG - REFER TO FEEDER SCHEDULE

FIRE ALARM	
	FIRE ALARM CONTROL PANEL - (FACP)
	FIRE ALARM ANNUNCIATOR PANEL
	MANUAL PULL STATION
	AUDIBLE AND VISUAL SIGNAL DEVICE (HORN STROBE), 75cd UNLESS OTHERWISE NOTED
	CEILING MOUNTED AUDIBLE AND VISUAL SIGNAL DEVICE (CEILING HORN STROBE), 75cd UNLESS OTHERWISE NOTED
	CEILING MOUNTED AUDIBLE AND VISUAL SIGNAL DEVICE (CEILING SPEAKER STROBE), 75cd UNLESS OTHERWISE NOTED
	VISUAL SIGNAL DEVICE (STROBE), 75cd UNLESS OTHERWISE NOTED
	CEILING MOUNTED VISUAL SIGNAL DEVICE (CEILING STROBE), 75cd UNLESS OTHERWISE NOTED
	SMOKE DETECTOR
	DUCT SMOKE DETECTOR
	HEAT DETECTOR
	FIRE ALARM TAMPER SWITCH
	FIRE ALARM FLOW SWITCH
	EXTERIOR SPRINKLER FLOW BELL
	MONITORING MODULE, "D" INDICATES DUAL INPUTS
	SMOKE DAMPER
	FIRE/SMOKE DAMPER WITH ACCESS PANEL LOCATION
	DUCT SMOKE DETECTOR REMOTE TEST INDICATION STATION
	GAS SHUTOFF SOLENOID VALVE
	RELAY
	CANDELA RATING

GROUNDING AND LPS	
	GROUND ROD
	EXOTHERMIC WELD
	TEST WELL
	CROSS CONDUCTOR
	AIR TERMINAL
	DOWN CONDUCTOR
	COUNTERPOISE CONDUCTOR

SWITCHES AND CONTROLLERS	
	MANUAL STARTER (HP RATED SWITCH)
	DISCONNECT, NON-FUSED
	DISCONNECT, FUSED
	ENCLOSED CIRCUIT BREAKER
	COMBINATION MOTOR STARTER
	VARIABLE FREQUENCY DRIVE
	PUSHBUTTON
	DISCONNECT/ENCLOSED BREAKER RATINGS RR: CONTINUOUS/FRAME RATING P: NUMBER OF POLES FF: FUSE/TRIP RATING *** = NON-FUSED X: ENCLOSURE TYPE, NEMA 1 IF OMITTED
	COMBINATION STARTER RATINGS SS: NEMA STARTER SIZE P: NUMBER OF POLES BB: BREAKER SIZE X: ENCLOSURE TYPE, NEMA 1 IF OMITTED

LIGHTING	
NOTE: ADDITIONAL FIXTURE SHAPES AND STYLES MAY BE USED THAT DO NOT APPEAR HERE. REFER TO FIXTURE SCHEDULE, LIGHTING PLANS, AND SPECIFICATIONS. * EMERGENCY FIXTURES MAY SUPPLIED BY EMERGENCY CIRCUITS OR CONTAIN INTEGRAL BACKUP BATTERY SYSTEMS.	
	LED STRIP FIXTURE, 4'
	LED STRIP FIXTURE, 4', EMERGENCY POWER*
	1' X 4' LED RECESSED FIXTURE
	1' X 4' LED RECESSED FIXTURE, EMERGENCY POWER*
	2' X 2' LED RECESSED FIXTURE
	2' X 2' LED RECESSED FIXTURE, EMERGENCY POWER*
	2' X 4' LED RECESSED FIXTURE
	2' X 4' LED RECESSED FIXTURE, EMERGENCY POWER*
	LED RECESSED DOWNLIGHT
	LED RECESSED DOWNLIGHT, EMERGENCY POWER*
	LED LINEAR SURFACE OR PENDANT
	LED LINEAR SURFACE OR PENDANT, EMERGENCY POWER*
	HIGH BAY OR LOW BAY FIXTURE
	WALL SCONCE
	LED TWIN-HEAD UNIVERSAL EMERGENCY FIXTURE
	EXIT FIXTURE, LED - ILLUMINATED FACE(S) AND DIRECTIONAL ARROWS AS INDICATED
	EXTERIOR WALL PACK
	POLE-MOUNTED FIXTURE
	SINGLE POLE SWITCH, 20A, 120/277V.
	THREE WAY WALL SWITCH.
	FOUR WAY WALL SWITCH.
	DIMMER SWITCH.
	KEYED WALL SWITCH.
	LOW VOLTAGE SWITCH.
	WALL MOUNTED OCCUPANCY SENSOR SWITCH
	SINGLE POLE SWITCH IN WEATHERPROOF ENCLOSURE
	CEILING-MOUNTED OCCUPANCY SENSOR
	CEILING-MOUNTED DAYLIGHT SENSOR
	CEILING-MOUNTED COMBINATION OCCUPANCY & DAYLIGHT SENSOR
	PHOTOCELL.

CIRCUITS	
NOTE: WIRING AND HOMERUN ARROWS MAY NOT BE SHOWN, IN WHICH CASE CIRCUITS ARE SHOWN ADJACENT TO EQUIPMENT AND FIXTURES, AND CONTRACTOR IS TO DETERMINE APPROPRIATE ROUTING OF CIRCUITS BASED ON APPLICABLE CODES, PROJECT REQUIREMENTS, AND FIELD CONDITIONS.	
	HOMERUN, CIRCUIT AS INDICATED
	WIRE TICK MARKS: SHORT: HOT CONDUCTOR(S) LONG: NEUTRAL CONDUCTOR(S) DIAGONAL: GROUND CONDUCTOR (S)
	HOMERUN OR BRANCH CONDUCTOR TAG TOP: HOT CONDUCTOR(S) MIDDLE (IF SHOWN): NEUTRAL CONDUCTOR(S) BOTTOM: GROUND CONDUCTOR(S)

DISTRIBUTION EQUIPMENT	
	DRY-TYPE TRANSFORMER, RATING AS MARKED
	PANELBOARD - 208Y/120V OR 240/120V, REFER TO SCHEDULES AND ONE-LINE DIAGRAMS
	PANELBOARD - 480Y/277V, REFER TO SCHEDULES AND ONE-LINE DIAGRAMS
	AUTOMATIC TRANSFER SWITCH
	SWITCHBOARD OR SWITCHGEAR, REFER TO SCHEDULES AND ONE-LINE DIAGRAMS
	SURGE PROTECTIVE DEVICE

COMMUNICATIONS	
	VOICE OUTLET, # OF RJ-11 PORTS AS INDICATED
	DATA OUTLET, # OF RJ-45 PORTS AS INDICATED
	COMBINATION VOICE/DATA OUTLET, AS INDICATED
	DATA FLOOR OUTLET, # OF RJ-45 PORTS AS INDICATED
	VOICE/DATA FLOOR OUTLET, # OF RJ-45 PORTS AS INDICATED
	TTB (TELEPHONE BACKBOARD)
	DATA JUNCTION BOX, SERVICE AS INDICATED
	WIRELESS ACCESS POINT
	TV OUTLET
	AUDIO SPEAKER (PROVIDED BY OWNER)

SECURITY	
	CARD READER
	ELECTRIC STRIKE
	DOOR CONTACT
	WINDOW CONTACT
	MAGNETIC DOOR HOLDER
	KEYPAD
	SECURITY SYSTEM PANEL
	INFRARED MOTION SENSOR
	CAMERA

RACEWAY AND ENCLOSURES	
	CONDUIT, EXPOSED OR ABOVE CEILING
	CONDUIT, UNDERGROUND
	CONDUIT, TURNED UP
	CONDUIT, TURNED DOWN
	CABLE TRAY, LADDER TYPE
	CABLE TRAY, WIRE BASKET TYPE
	MANHOLE OR HANDHOLE, AS INDICATED
	MISCELLANEOUS ENCLOSURE OR WIREWAY, SIZE AS INDICATED

DEVICE MOUNTING HEIGHTS	
SWITCHES	48" AFF TO CENTER LINE OF BOX, UON
RECEPTACLES	18" AFF TO CENTER LINE, UON
COUNTER HEIGHT RECEPTACLES	48" AFF TO CENTER LINE OR 2" ABOVE BACKFLASH UON
TELEPHONE/DATA OUTLET (OFFICES)	18" AFF TO CENTER LINE, UON
WALL MOUNTED TELEPHONE	48" AFF TO CENTER LINE OF BOX, UON
FIRE ALARM PULL STATIONS	48" TO CENTER LINE OF BOX
FIRE ALARM SPEAKER/STROBES	80" TO BOTTOM OF STROBE
EXTERIOR WALL RECEPTACLES	24" AFG TO BOTTOM, UON

ALL HEIGHTS ARE BASED ON NON-OBSTRUCTED REACH. MODIFY MOUNTING HEIGHTS IF/AS NECESSARY PER ADA AS REQUIRED.

ABBREVIATIONS AND ACRONYMS			
A	AMPERES	MCB	MAIN CIRCUIT BREAKER
AC	ALTERNATING CURRENT	MLO	MAIN LUG ONLY
ADA	AMERICANS WITH DISABILITIES ACT	N	NEUTRAL
AFF	ABOVE FINISHED FLOOR	NA	NOT APPLICABLE
AFG	ABOVE FINISHED GRADE	N.C.	NORMALLY CLOSED
AHU	AIR HANDLING UNIT	NF	NON-FUSED
AIC	AMPERE INTERRUPTING CAPACITY	NEC	NATIONAL ELECTRICAL CODE
ASSOC	ASSOCIATION	NIC	NOT IN CONTRACT
AV	AUDIO VISUAL	NEMA	NATIONAL ELECTRICAL MANUF ASSOC
AWG	AMERICAN WIRE GAUGE	NFPA	NATIONAL FIRE PROTECTION ASSOC
BAS	BUILDING AUTOMATION SYSTEM	NL	NIGHT LIGHTING
C	CONDUIT	N.O.	NORMALLY OPEN
CLG	CEILING	NRTL	NATIONALLY RECOGNIZED TESTING LABORATORY
COMM	COMMUNICATION	NTS	NOT TO SCALE
CU	COPPER	OC	ON CENTER
DISC	DISCONNECT	OCPO	OVER CURRENT PROTECTION DEVICE
DV	DIVISION	OH	OVERHEAD
DWG	DRAWING	PHNL	PANELBOARD
ECB	ENCLOSED CIRCUIT BREAKER	PROJ	PROJECTOR
EF	EXHAUST FAN	PVC	POLYVINYL CHLORIDE
ELEC	ELECTRICAL	RM	ROOM
EM	EMERGENCY	RECPT(S)	RECEPTACLE(S)
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM	RGS	RIGID GALVANIZED STEEL
EMT	ELECTRICAL METALLIC TUBING	SN	SOLID NEUTRAL
EST	ESTIMATED	SEC	SECURITY
ETR	EXISTING TO REMAIN	SPD	SURGE PROTECTION DEVICE
FCO	FUSED CUT-OUT	SPEC	SPECIFICATION
GF	GROUND FAULT CIRCUIT INTERRUPTER	SPST	SINGLE POLE SINGLE THROW
GND	GROUND	SQ	SQUARE
HVAC	HEATING, VENTILATING & AIR CONDITIONING	SW	SWITCH
JBOX	JUNCTION BOX	TEL	TELEPHONE
KAIC	(THOUSAND) AMPERE INTERRUPTING CAPACITY	TEMP	TEMPORARY
KCMIL	THOUSAND OF CIRCULAR MILS	TTC	TELEPHONE TERMINAL CABINET
KVA	KILOVOLT-AMPERES	TYP	TYPICAL
KW	KILOWATT	UG	UNDERGROUND
LC	LIGHTING CONTACTOR	UH	UNIT HEATER
LCP	LIGHTING CONTROL PANEL	UON	UNLESS OTHERWISE NOTED
LED	LIGHT EMITTING DIODE	USB	UNIVERSAL SERIAL BUS
LTS	LIGHTS	V	VOLTS
LTS	LIGHTS	W	WIRE
LSI	LONG, SHORT, INSTANTANEOUS	WP	WEATHER PROOF
LSIG	LONG, SHORT, INSTANTANEOUS, GROUND FAULT	XMR	TRANSFORMER
MFR	MANUFACTURER	Y	WYE (CONNECTED)

GENERAL NOTES:
1. THOROUGHLY REVIEW ALL DESIGN DOCUMENTS TO ASSURE THAT ELECTRICAL SERVICE FOR ALL ITEMS AND/OR EQUIPMENT REQUIRING ELECTRICAL SERVICE IS INCLUDED. ANY ITEM AND/OR EQUIPMENT NOT PROVIDED WITH ELECTRICAL SERVICE, REQUIRING ELECTRICAL SERVICE, SHALL BE IMMEDIATELY BROUGHT TO THE ARCHITECT AND ENGINEER'S ATTENTION.
2. FOR UNDERGROUND CONDUITS 1-1/2" AND LARGER, PROVIDE MASTIC COATED GALVANIZED RIGID METAL SWEEPS AND BENDS. PROVIDE MASTIC AROUND ALL THREADS AFTER CONDUIT ASSEMBLY.
3. WIRE AND CONDUIT SYSTEMS ARE SHOWN DIAGRAMMATICALLY AND SHALL BE ROUTED TO SUIT FIELD CONDITIONS AND EQUIPMENT LOCATIONS.
4. ALL WORK SHALL BE IN COMPLIANCE WITH THE LOCALLY ADOPTED NEC, LOCAL ORDINANCES AND REGULATIONS.
5. ADJUST WIRE AND CONDUIT SIZES FOR VOLTAGE DROP OF 3% ON ALL BRANCH CIRCUITING.
6. ALL CIRCUIT BREAKERS OR LUGS INSTALLED IN PANELBOARDS SHALL BE BOLT-ON TYPE. PLUG-IN STYLE CIRCUIT BREAKERS AND LUG KITS ARE NOT ACCEPTABLE.
7. CONTRACTOR IS RESPONSIBLE FOR ENSURING CIRCUITS SUPPLYING EQUIPMENT THAT IS PROVIDED BY OTHER TRADES ARE COMPATIBLE WITH THE ACTUAL EQUIPMENT TO BE INSTALLED. CONTRACTOR SHALL ENSURE VOLTAGE, CIRCUIT RATING, CONNECTION TYPE, AND PROTECTIVE DEVICES ARE COORDINATED FOR EACH PIECE OF EQUIPMENT. SHOP DRAWINGS AND PRODUCT DATA FOR MATERIALS PROVIDED UNDER OTHER TRADES, BUT THAT REQUIRE ELECTRICAL SUPPLY, SHALL BEAR THE STAMP OR SIGNATURE OF THE ELECTRICAL CONTRACTOR CONFIRMING A COORDINATION REVIEW PRIOR TO REVIEW BY THE ENGINEER OF RECORD. THE ABSENCE OF SUCH STAMP OR SIGNATURE CONFIRMING COORDINATION REVIEW MAY RESULT IN REJECTION OF APPLICABLE SUBMITTALS OR SHOP DRAWINGS. NO ADDITIONAL COST TO THE CONTRACT SHALL BE AWARDED FOR FAILURE TO COORDINATE THE PROPER CONNECTIONS TO EQUIPMENT.
8. PROVIDE GFCI CIRCUIT BREAKERS TO PROTECT PERMANENTLY INSTALLED APPLIANCES THAT REQUIRE GROUND FAULT CIRCUIT PROTECTION FOR PERSONNEL IN ACCORDANCE WITH NEC ARTICLES 210 AND 422.
9. FIELD MARK ELECTRICAL SERVICE EQUIPMENT WITH A CONSPICUOUS AND PERMANENT LABEL THAT INDICATES THE AVAILABLE FAULT CURRENT IN ACCORDANCE WITH NEC 110.24.
10. PROVIDE ARC-FLASH WARNING LABELS THAT COMPLY WITH NEC 110.16(A) ON ELECTRICAL EQUIPMENT.
11. PANELBOARDS SUPPLIED BY A FEEDER SHALL BE MARKED IN THE FIELD TO INDICATE THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLY ORIGINATES.
12. MULTIPLE, REPEATED REVIEWS OF SUBMITTALS/SHOP DRAWINGS WILL INCUR ADDITIONAL SERVICES AT THE CURRENT BILLING RATE FOR THE TIME REQUIRED TO PERFORM SUBSEQUENT REVIEWS AND TO COORDINATE THE REQUIREMENTS WITH CONTRACTORS.
13. CURRENT MARKET CONDITIONS HAVE LED TO UNUSUALLY LONG EQUIPMENT LEAD TIMES. IN SOME CASES, WITH PERMISSION FROM THE OWNER AND ARCHITECT, TEMPORARY EQUIPMENT MAY BE INSTALLED IN PLACE OF PERMANENT EQUIPMENT, WHILE WAITING ON FINAL DELIVERY OF EQUIPMENT. IN SUCH CASES, THE TEMPORARY EQUIPMENT MUST MEET APPLICABLE CONTINUOUS, SHORT-CIRCUIT, AND VOLTAGE RATINGS. THE USE OF TEMPORARY EQUIPMENT DOES NOT ALLEVIATE THE RESPONSIBILITY OF THE CONTRACTOR TO MEET APPLICABLE CODES AND STANDARDS.

ADD-ALTERNATES: CONTRACTOR SHALL PROVIDE SEPARATE BID PRICING FOR THE FOLLOWING ALTERNATES, TO BE SELECTED AT THE DISCRETION OF ALABAMA A&M UNIVERSITY.
ADD-ALTERNATE #1: PROVIDE A SERVICE-ENTRANCE-RATED 1200A, 120/208 3PH, 4W MANUAL TRANSFER SWITCH AHEAD OF SERVICE DISCONNECTS #1, #2, AND #3. MANUAL TRANSFER SWITCH SHALL INCLUDE AN ATTACHED GENERATOR CONNECTION BOX. MODIFY EQUIPMENT RACK AT STL#1 TO ACCOMMODATE THE MTS AS REQUIRED. BASIS OF DESIGN IS TRYSTAR #1MTS-123W-LLM-ACDR. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
ADD-ALTERNATE #2: PROVIDE ADDITIONAL LIGHT POLES AND INCREASE POLE HEIGHT TO 40' TO ACHIEVE ELEVATED LIGHTING LEVELS. REFER TO ALTERNATE PHOTOMETRIC PLAN FOR FIXTURE TYPES, QUANTITIES, LOCATIONS, AND CIRCUIT ASSIGNMENTS.

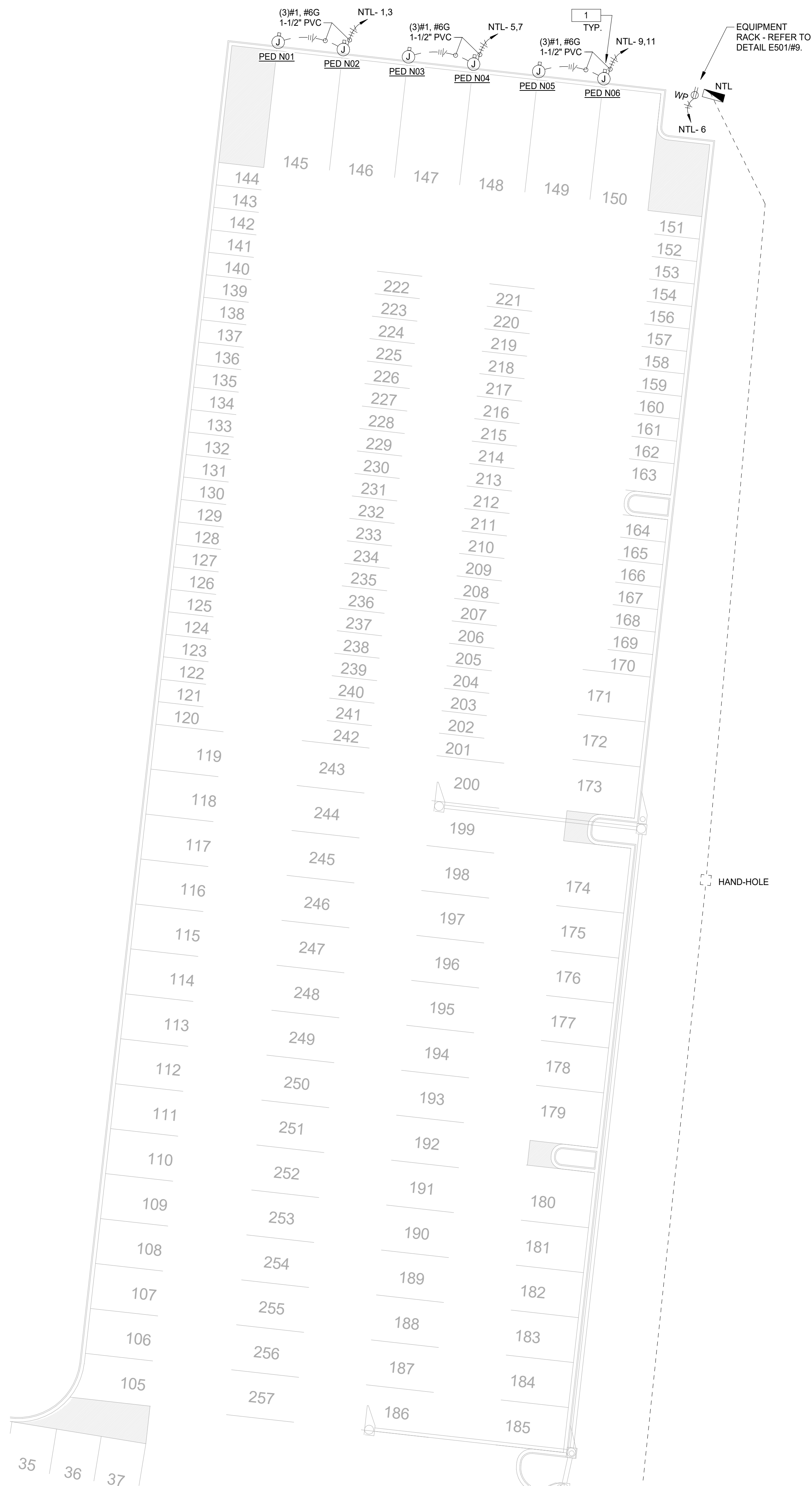
REVISIONS		
No.	Description	Date

POWER GENERAL NOTES:

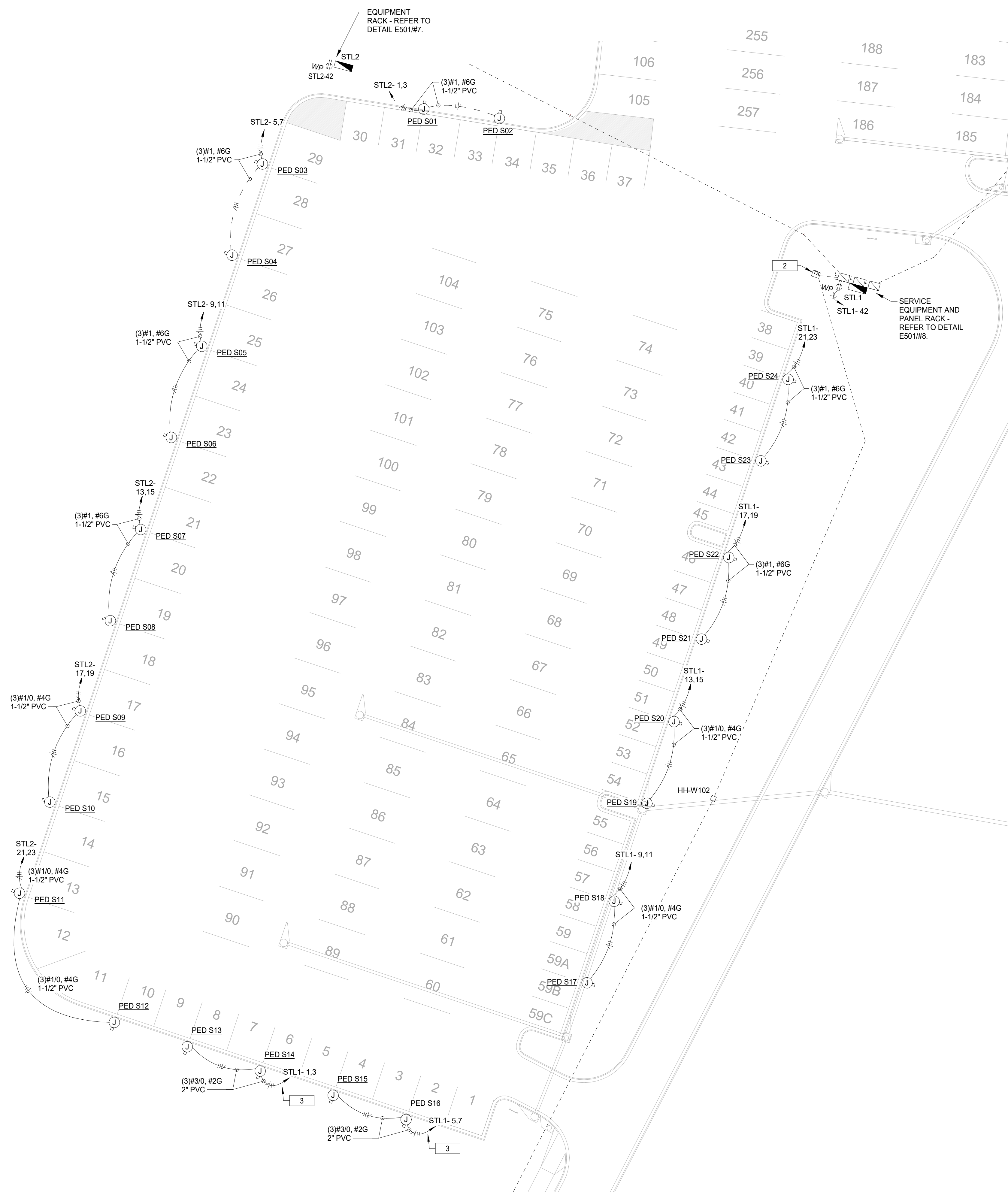
- A. BRANCH CIRCUITS SHALL HAVE DEDICATED NEUTRAL CONDUCTORS. UP TO THREE BRANCH CIRCUITS RATED NOT MORE THAN 30A, AND OF DIFFERENT PHASES, MAY BE INSTALLED IN A SINGLE CONDUIT, BUT CONDUCTOR AMPACITIES MUST BE DERATED IN ACCORDANCE WITH NEC 315.15 (B)(1).
- B. ENTIRE BRANCH CIRCUIT SHALL UTILIZE SAME CONDUCTOR SIZE AND QUANTITY BETWEEN OUTLETS AS HOMERUN UNLESS OTHERWISE NOTED.
- C. INSTALL HAND-HOLES IN CONDUIT RUNS SO THAT NO PULL SEGMENT EXCEEDS 300'. REFER TO DETAIL E501/#4 FOR TYPICAL HAND-HOLE CONFIGURATION.

POWER KEYED NOTES:

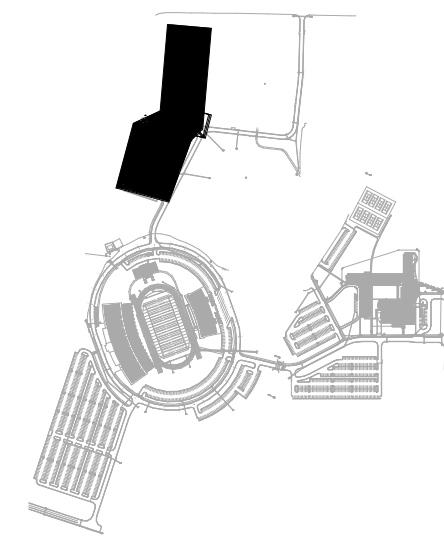
1. RV CONNECTION PEDESTAL: RV CONNECTION ENCLOSURE MOUNTED ON PRECAST CONCRETE POST. EACH PAIR SUPPLIED BY A SINGLE CIRCUIT "DAISY CHAINED" BETWEEN THEM. REFER TO DETAIL E501/#6. TYPICAL.
2. 300 KVA PAD-MOUNT TRANSFORMER PROVIDED BY OWNER. INSTALLED BY DIV. 26.
3. UTILIZE EXISTING CONDUITS INSTALLED BENEATH ENTRY DRIVE FOR INDICATED HOMERUNS.



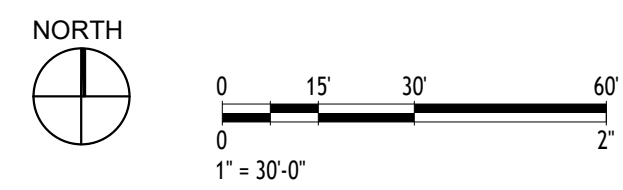
1 RV PARKING ELECTRICAL PLAN - NORTH
1" = 30'-0"



2 RV PARKING ELECTRICAL PLAN - SOUTH
1" = 30'-0"



KEY PLAN

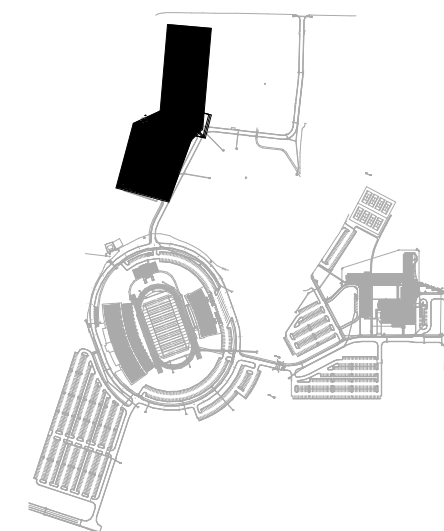
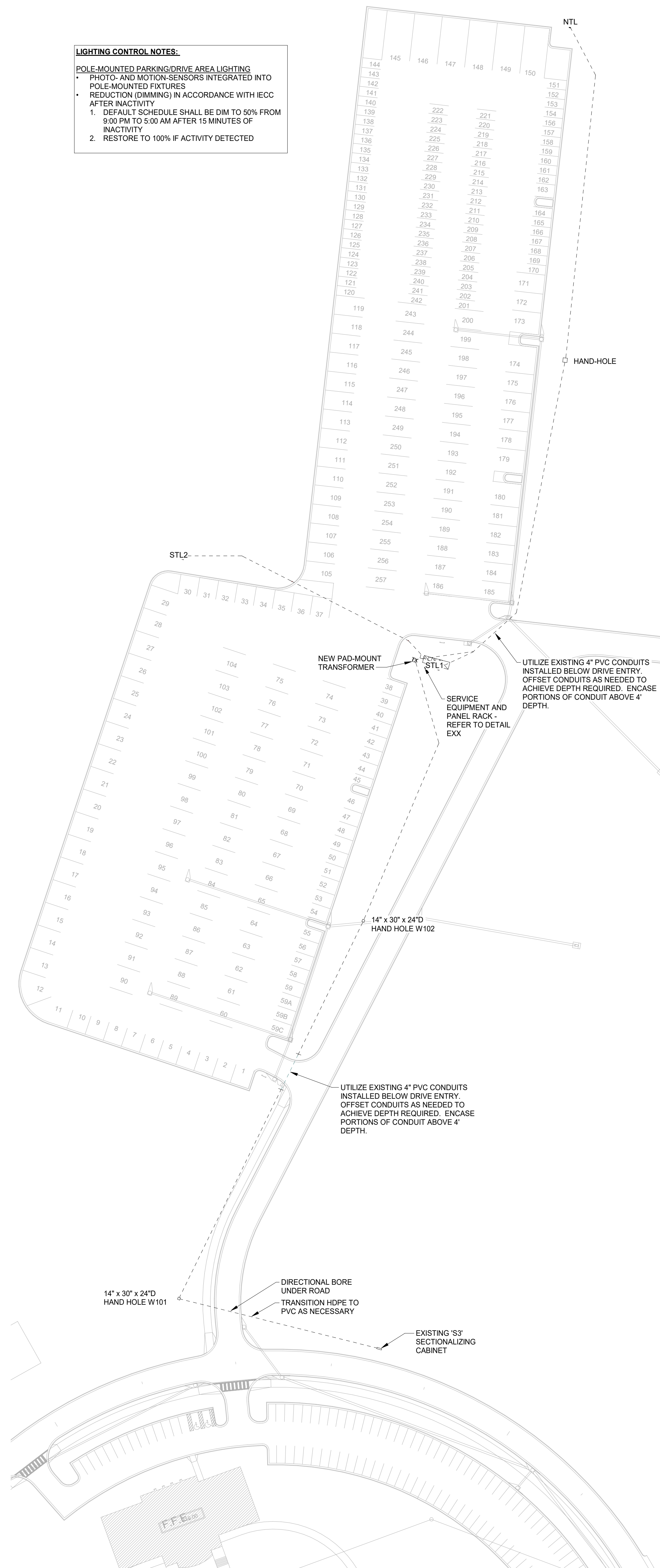


LIGHTING CONTROL NOTES:

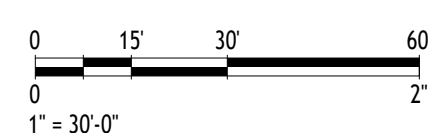
POLE-MOUNTED PARKING/DRIVE AREA LIGHTING

- PHOTO- AND MOTION-SENSORS INTEGRATED INTO POLE-MOUNTED FIXTURES
- REDUCTION (DIMMING) IN ACCORDANCE WITH IECC AFTER INACTIVITY

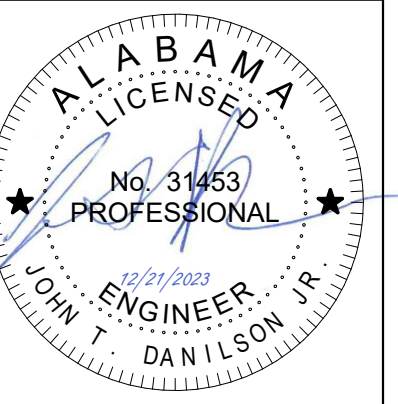
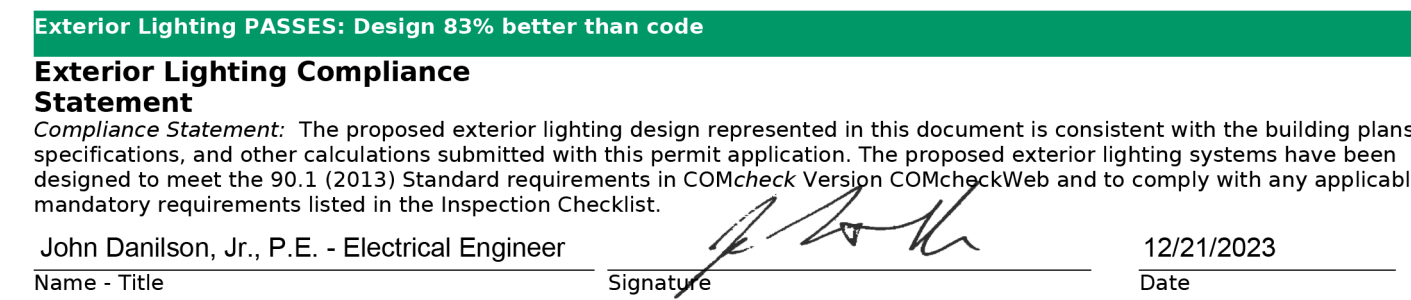
1. DEFAULT SCHEDULE SHALL BE DIM TO 50% FROM 9:00 PM TO 5:00 AM AFTER 15 MINUTES OF INACTIVITY
2. RESTORE TO 100% IF ACTIVITY DETECTED



NORTH



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
North Parking	+	1.2 fc	2.6 fc	0.6 fc	4.3:1	2.0:1
South	+	1.1 fc	2.8 fc	0.4 fc	7.0:1	2.8:1



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ALABAMA A&M UNIVERSITY

TAILGATE ELECTRICAL

HUNTSVILLE, AL

IB NUMBER
23395

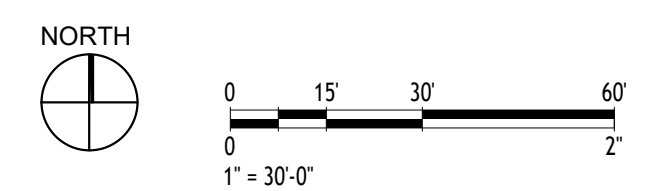
EA / JTD / 12/20/2023
AWN - CHECKED - DATE

DISPOSITIONS	
Description	Date

SHEET TITLE

**RV PARKING
PHOTOMETRIC
PLAN**

SHEET NUMBER
E202
 OF



Schedule	Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
		S FT	25	Universal Lighting	1200 LED P8 48K 1000K 100W	2-Series Size 2 Area Luminaire PS Performance Package 4800K CCT 70 CRI Forward Throw	1	47000	1	400.00
		S4	25	Universal Lighting	1200 LED P8 48K 1000K 100W	2-Series Size 2 Area Luminaire PS Performance Package 4800K CCT 70 CRI Spot 4 Module	1	47000	1	400.00

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
North Parking	+	9.4 fc	14.1 fc	7.0 fc	2.0:1	1.3:1
South	+	9.1 fc	13.6 fc	5.6 fc	2.4:1	1.6:1



COMcheck Software Version COMcheckWeb
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 90.1 (2013) Standard
Project Title: Alabama AandM Tailgate - Alt 1
Project Type: Addition
Exterior Lighting Zone: 3 (Other (LZ3))

Construction Site: Owner/Agent: Designer/Contractor:

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Fixture	D Tradable Allowed Watts Wattage	E Allowed Watts (B X C)
South Parking (Parking area)	149707 R2	0.1	Yes	14971
North Parking (Parking area)	134640 R2	0.1	Yes	13464
Total Tradable Watts (a) =				28435
Total Allowed Watts =				28435
Total Allowed Supplemental Watts (b) =				750

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 750 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

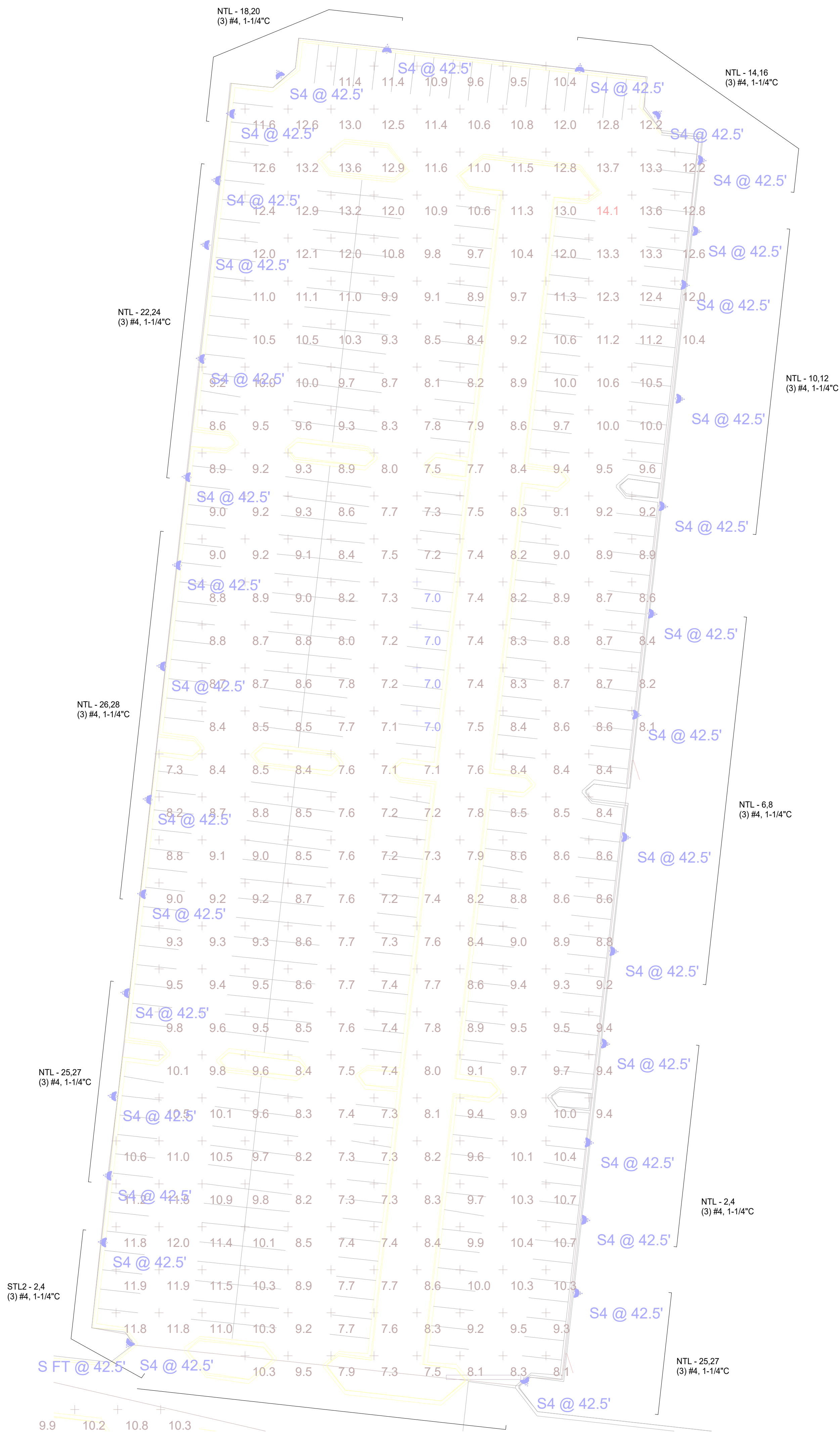
A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Wattage (C X D)	E Wattage (B X C X D)
South Parking (Parking area, 149707 R2): Tradable Wattage				
LED: S: Other:	1	28	462	12936
North Parking (Parking area, 134640 R2): Tradable Wattage				
LED: S4: Other:	1	35	462	16170
Total Tradable Proposed Watts =				29106

Exterior Lighting PASSES: Design 0.3% better than code

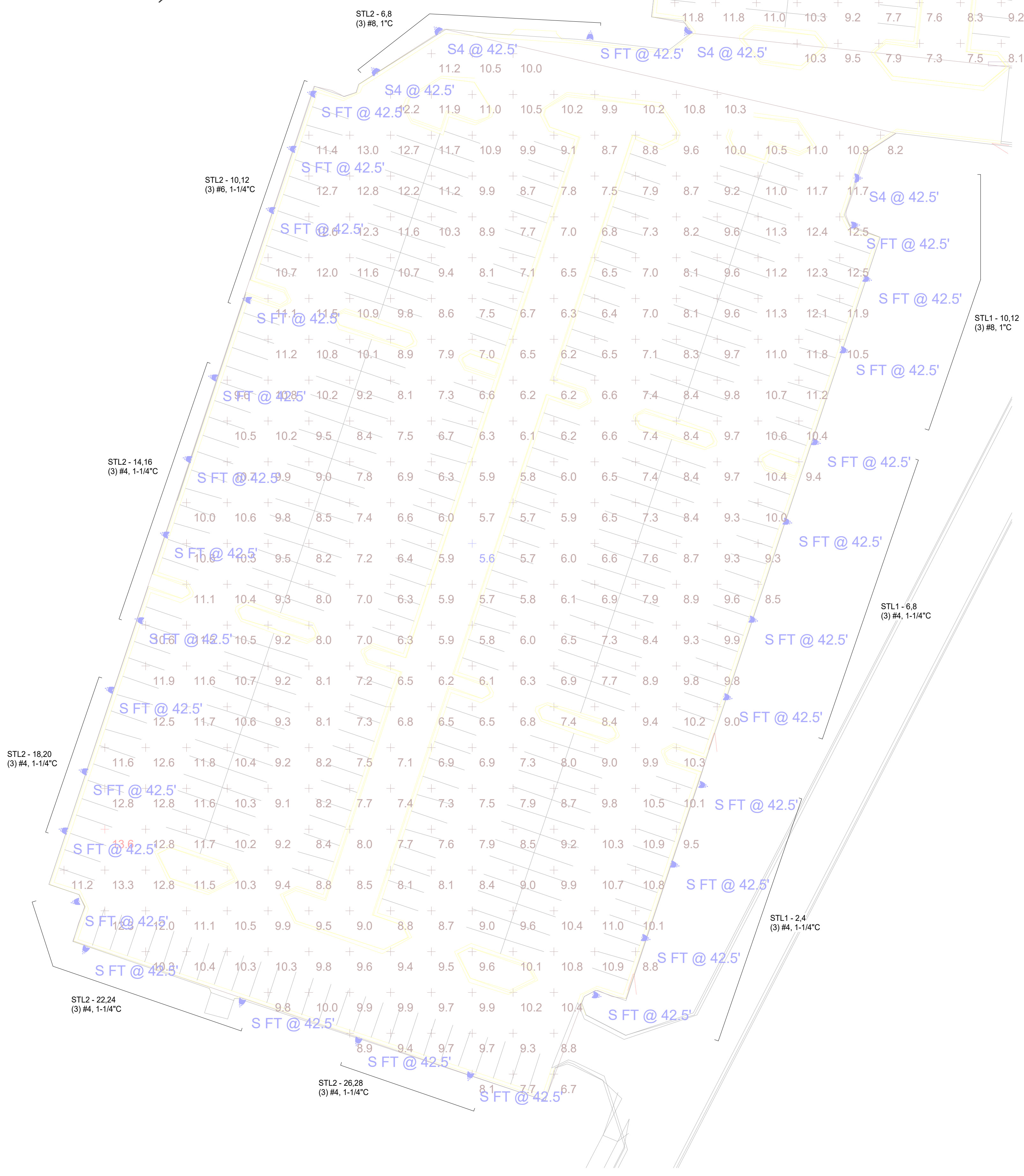
Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 90.1 (2013) Standard requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

John Damilson, Jr., P.E. - Electrical Engineer
Name - Title Signature Date 12/21/2023

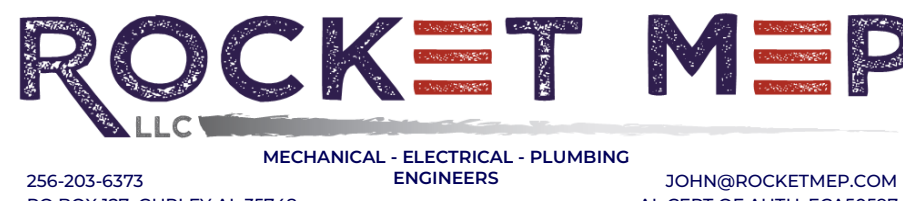
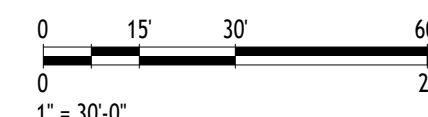


RV PARKING PHOTOMETRIC PLAN -
NORTH-ALTERNATE
1
1" = 30'-0"

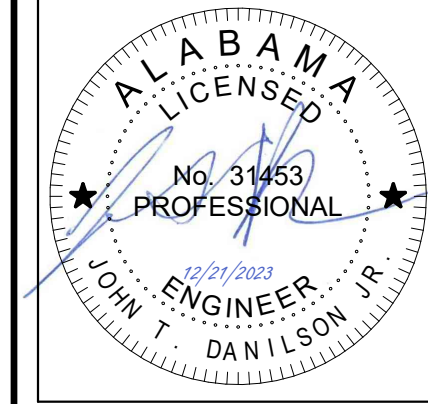


RV PARKING PHOTOMETRIC PLAN -
SOUTH-ALTERNATE
2
1" = 30'-0"

KEY PLAN



MECHANICAL - ELECTRICAL - PLUMBING ENGINEERS
256-203-6375
PO BOX 127 CUNLEY AL 35748
JOHN@ROCKETMEP.COM
AL CERT OF AUTH: ECAS0097



NOLA VANPURSEM
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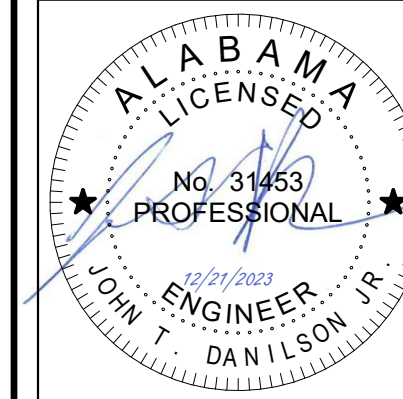
JOB NUMBER
23395

REA / JTD / 12/20/2023
DRAWN - CHECKED - DATE

REVISIONS
No. Description Date

SHEET TITLE
RV PARKING
PHOTOMETRIC
PLAN-ALTERNATE

SHEET NUMBER
E203
OF



MEMBER OF THE AMERICAN INSTITUTE OF ARCHITECTS

801 JEFFERSON STREET

(256) 533-6617

ALABAMA A&M UNIVERSITY

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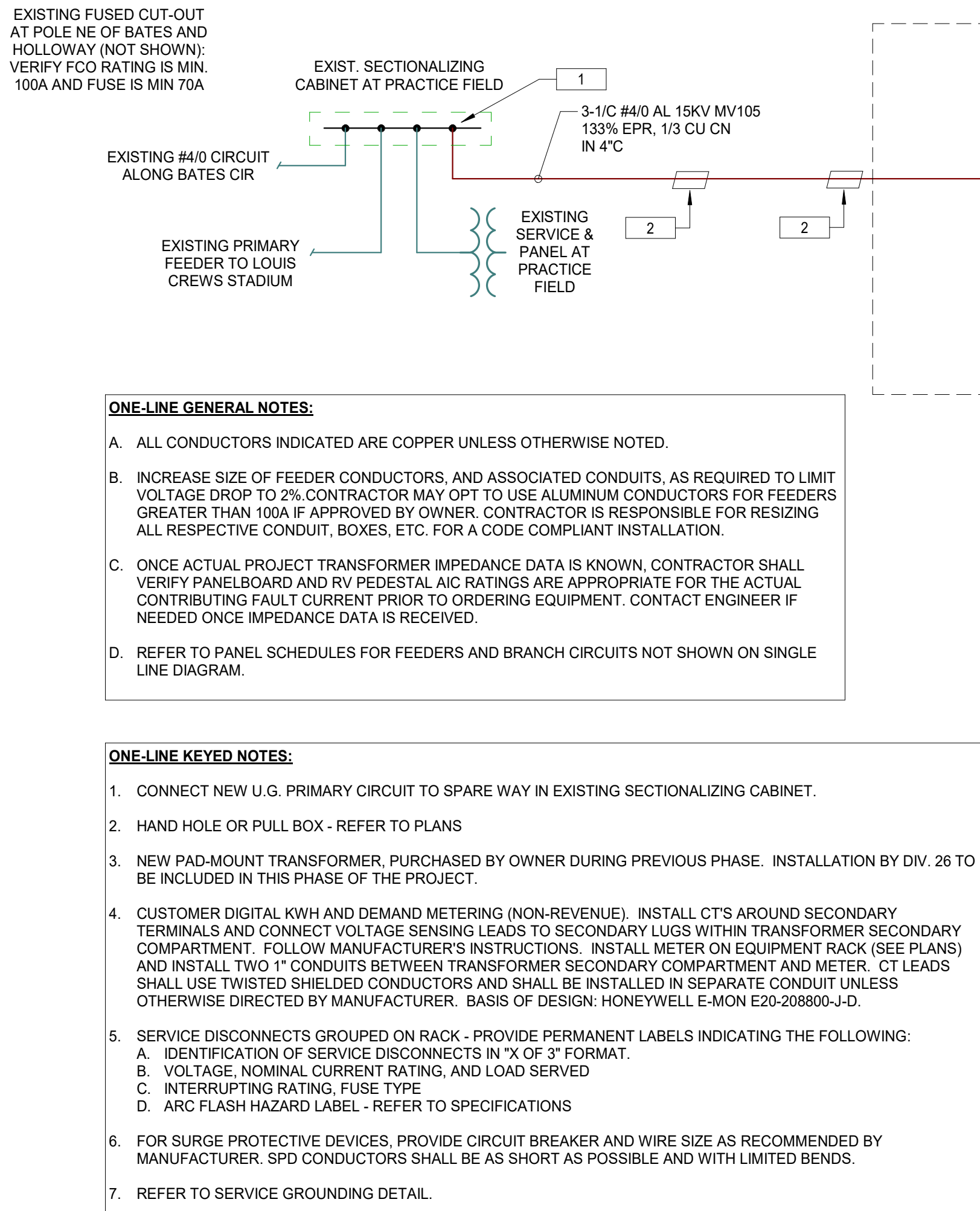
REA / JTD / 12/20/20
DRAWN - CHECKED - DATE

REVISIONS		
No.	Description	Date

SHEET NUMBER
E501
OF

3-WIRE FEEDER SCHEDULE (MIN. SIZES INDICATED)			
TAG	3-WIRE CU FEEDERS	3-WIRE AL FEEDERS	
50.3	(3) #8, #10 GND, 3/4"	~ USE CU FEEDERS ~	
60.3	(3) #6, #10 GND, 3/4"	~ USE CU FEEDERS ~	
70.3	(3) #4, #8 GND, 1"	~ USE CU FEEDERS ~	
80.3	(3) #4, #8 GND, 1"	~ USE CU FEEDERS ~	
90.3	(3) #3, #8 GND, 1"	~ USE CU FEEDERS ~	
100.3	(3) #3, #8 GND, 1"	(3) #1, #6 GND, 1-1/4"	
110.3	(3) #2, #6 GND, 1-1/4"	(3) #10, #4 GND, 1-1/2"	
125.3	(3) #1, #6 GND, 1-1/4"	(3) #20, #4 GND, 1-1/2"	
150.3	(3) #10, #6 GND, 1-1/2"	(3) #30, #4 GND, 2"	
175.3	(3) #20, #6 GND, 1-1/2"	(3) #40, #4 GND, 2"	
200.3	(3) #30, #4 GND, 2"	(3) #250, #4 GND, 2-1/2"	
225.3	(3) #40, #4 GND, 2"	(3) #300, #2 GND, 2-1/2"	
250.3	(3) #250 KCMIL, #4 GND, 2-1/2"	(3) #350, #2 GND, 2-1/2"	
300.3	(3) #350 KCMIL, #4 GND, 2-1/2"	(3) #500, #2 GND, 3"	
350.3	(3) #400 KCMIL, #3 GND, 3"	(3) #750, #1 GND, 3-1/2"	
400.3	(3) #500 KCMIL, #3 GND, 3"	(2) SETS, (3) #250 KCMIL, #1 GND, 2-1/2"	
4-WIRE FEEDER SCHEDULE (MIN. SIZES INDICATED)			
TAG	4-WIRE CU FEEDERS	4-WIRE AL FEEDERS	
50.4	(4) #8, #10 GND, 3/4"	~ USE CU FEEDERS ~	
60.4	(4) #6, #10 GND, 1"	~ USE CU FEEDERS ~	
70.4	(4) #4, #8 GND, 1-1/4"	~ USE CU FEEDERS ~	
80.4	(4) #4, #8 GND, 1-1/4"	~ USE CU FEEDERS ~	
90.4	(4) #3, #8 GND, 1-1/4"	~ USE CU FEEDERS ~	
100.4	(4) #3, #8 GND, 1-1/4"	(4) #1, #6 GND, 1-1/2"	
110.4	(4) #2, #6 GND, 1-1/4"	(4) #10, #4 GND, 1-1/2"	
125.4	(4) #1, #6 GND, 1-1/2"	(4) #20, #4 GND, 2"	
150.4	(4) #10, #6 GND, 1-1/2"	(4) #30, #4 GND, 2"	
175.4	(4) #20, #6 GND, 2"	(4) #40, #4 GND, 2-1/2"	
200.4	(4) #30, #4 GND, 2"	(4) #250 KCMIL, #4 GND, 2-1/2"	
225.4	(4) #40, #4 GND, 2-1/2"	(4) #300 KCMIL, #2 GND, 3"	
250.4	(4) #250 KCMIL, #4 GND, 2-1/2"	(4) #350 KCMIL, #2 GND, 3"	
300.4	(4) #350 KCMIL, #4 GND, 3"	(4) #500 KCMIL, #2 GND, 3"	
350.4	(4) #400 KCMIL, #3 GND, 3"	(4) #700 KCMIL, #1 GND, 4"	
400.4	(4) #500 KCMIL, #3 GND, 3"	2 SETS, (4) #250 KCMIL, #1 GND, 2-1/2"	
500.4	2 SETS, (4) #250 KCMIL, #2 GND, 2-1/2"	2 SETS, (4) #350 KCMIL, #10 GND, 3"	
600.4	2 SETS, (4) #350 KCMIL, #1 GND, 3"	2 SETS, (4) #500 KCMIL, #20 GND, 3-1/2"	
800.4	2 SETS, (4) #600 KCMIL, #10 GND, 3-1/2"	3 SETS, (4) #400 KCMIL, #30 GND, 3"	
900.4	2 SETS, (4) #750 KCMIL, #20 GND, 4"	3 SETS, (4) #500 KCMIL, #40 GND, 3-1/2"	
1000.4	3 SETS, (4) #400 KCMIL, #20 GND, 3"	3 SETS, (4) #600 KCMIL, #40 GND, 3-1/2"	
1200.4	3 SETS, (4) #600 KCMIL, #20 GND, 3-1/2"	3 SETS, (4) #500 KCMIL, #250 KCMIL GND, 3-1/2"	
1600.4	4 SETS, (4) #600 KCMIL, #40 GND, 3-1/2"	5 SETS, (4) #600 KCMIL, #350 KCMIL GND, 4"	
2000.4	5 SETS, (4) #600 KCMIL, #250 KCMIL GND, 4"	~ USE CU FEEDERS ~	
2500.4	6 SETS, (4) #600 KCMIL, #350 KCMIL GND, 4"	~ USE CU FEEDERS ~	
3000.4	7 SETS, (4) #750 KCMIL, #400 KCMIL GND, 4"	~ USE CU FEEDERS ~	
3200.4	7 SETS, (4) #750 KCMIL, #500 KCMIL GND, 4"	~ USE CU FEEDERS ~	
4000.4	9 SETS, (4) #750 KCMIL, #500 KCMIL GND, 4"	~ USE CU FEEDERS ~	
SERVICE ENTRANCE CONDUCTORS (MIN. SIZES INDICATED)			
TAG	3- AND 4-WIRE CU SERVICES	3- AND 4-WIRE AL SERVICES	
200.3SE	(3) #30, 2"	(3) #250 KCMIL, 2"	
200.4SE	(4) #30, 2"	(4) #250 KCMIL, 2-1/2"	
300.3SE	(3) #30 KCMIL, 2-1/2"	(3) #500 KCMIL, 3"	
300.4SE	(4) #30 KCMIL, 3"	(4) #500 KCMIL, 3"	
400.3SE	(4) #30 KCMIL, 3"	2 SETS, (3) #250 KCMIL, 2"	
400.4SE	(4) #30 KCMIL, 3"	2 SETS, (4) #250 KCMIL, 2-1/2"	
600.4SE	2 SETS, (4) #350 KCMIL, 3"	2 SETS, (4) #500 KCMIL, 3"	
800.4SE	2 SETS, (4) #600 KCMIL, 3-1/2"	3 SETS, (4) #400 KCMIL, 3"	
1000.4SE	3 SETS, (4) #400 KCMIL, 3"	3 SETS, (4) #500 KCMIL, 3"	
1200.4SE	3 SETS, (4) #600 KCMIL, 3-1/2"	4 SETS, (4) #500 KCMIL, 3"	
1600.4SE	4 SETS, (4) #600 KCMIL, 3-1/2"	5 SETS, (4) #600 KCMIL, 3-1/2"	
2000.4SE	5 SETS, (4) #600 KCMIL, 4"	~ USE CU FEEDERS ~	
2500.4SE	6 SETS, (4) #600 KCMIL, 4"	~ USE CU FEEDERS ~	
3000.4SE	7 SETS, (4) #750 KCMIL, 4"	~ USE CU FEEDERS ~	
3200.4SE	7 SETS, (4) #750 KCMIL, 4"	~ USE CU FEEDERS ~	
4000.4SE	9 SETS, (4) #750 KCMIL, 4"	~ USE CU FEEDERS ~	
SEPARATELY DERIVED FEEDERS (MIN. SIZES INDICATED)			
TAG	CU FEEDERS	AL FEEDERS	
100.4S	(4) #3, #8 GND, 1-1/4"	(4) #1, #6 GND, 1-1/2"	
150.4S	(4) #10, #6 GND, 1-1/2"	(4) #30, #4 GND, 2"	
250.4S	(4) #250 KCMIL, #2 GND, 2-1/2"	(4) #350 KCMIL, #10 GND, 3"	
400.4S	(4) #600 KCMIL, #10 GND, 3-1/2"	2 SETS, (4) #250 KCMIL, #10 GND, 2-1/2"	
500.4S	2 SETS, (4) #250 KCMIL, #10 GND, 2-1/2"	2 SETS, (4) #350 KCMIL, #30 GND, 3"	
800.4S	2 SETS, (4) #600 KCMIL, #30 GND, 3-1/2"	3 SETS, (4) #400 KCMIL, #40 GND, 3"	
OVERSIZED/SPECIALTY FEEDERS (MIN. SIZES INDICATED)			
TAG	CU FEEDERS	AL FEEDERS	
100.4X	(4) #1, #6 GND, 1-1/2"	-	
150.4X	(4) #20, #4 GND, 2"	-	
250.4X	(4) #350 KCMIL, #4 GND, 3"	-	
400.4X	2 SETS, (4) #500 KCMIL, #20 GND, 3-1/2"	-	
500.4X	2 SETS, (4) #350 KCMIL, #20 GND, 3"	-	
800.4X	2 SETS, (4) #600 KCMIL, #30 GND, 3-1/2"	-	
NOTES:			
1. TABLES ASSUME EQUIPMENT IS MARKED FOR 75C. IF UNMARKED, COMPLY WITH NEC 110.14.			
2. TABLES ASSUME TYPICAL FIELD INSTALLATION SITUATIONS, USING EMT, RMC, OR SCH. 40 PVC.			
TABLES DO NOT ACCOUNT FOR UNUSUAL AND MORE RESTRICTIVE CONDUITS, SOLAR HEATING OR OTHER HIGH AMBIENT TEMPERATURES, DUCTBANK HEATING, OR OTHER CONDITIONS THAT MAY REQUIRE DERATING CONDUCTOR AMPACITY.			
3. SEPARATELY DERIVED FEEDERS ARE ASSUMED TO ORIGINATE IN TRANSFORMERS. TAP CONDUCTORS AND SECONDARIES: COMPLY WITH NEC 240.21.			

1 ONE-LINE DIAGRAM - RV PARKING
N.T.S.

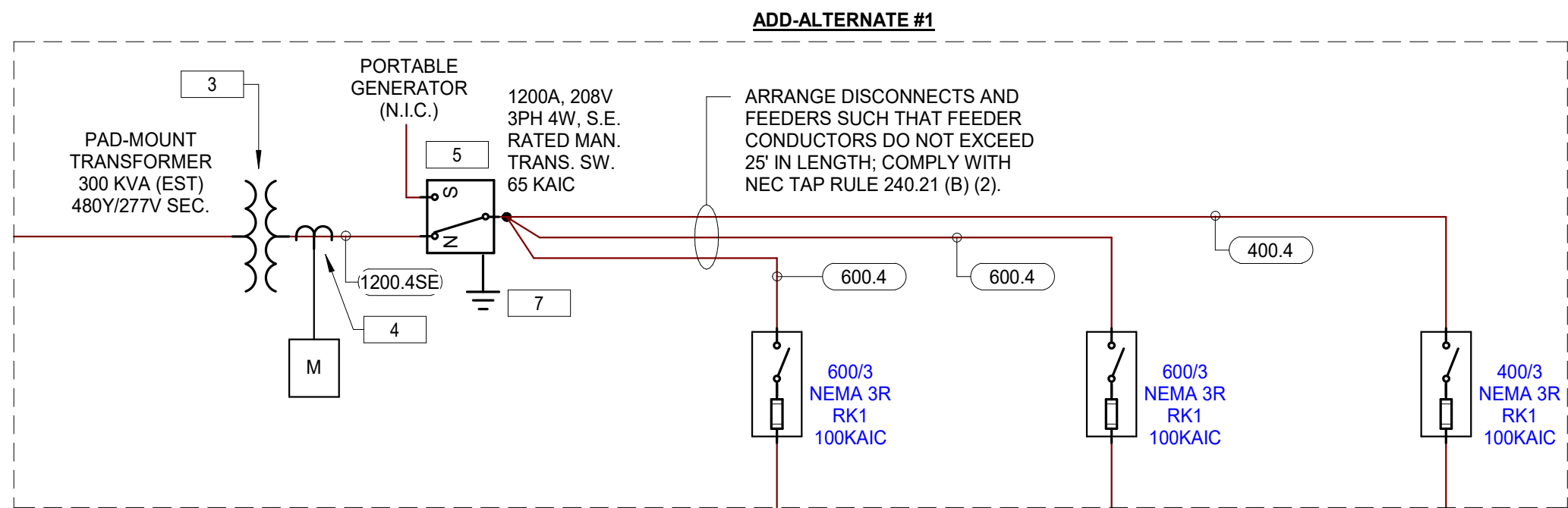


ONE-LINE GENERAL NOTES:

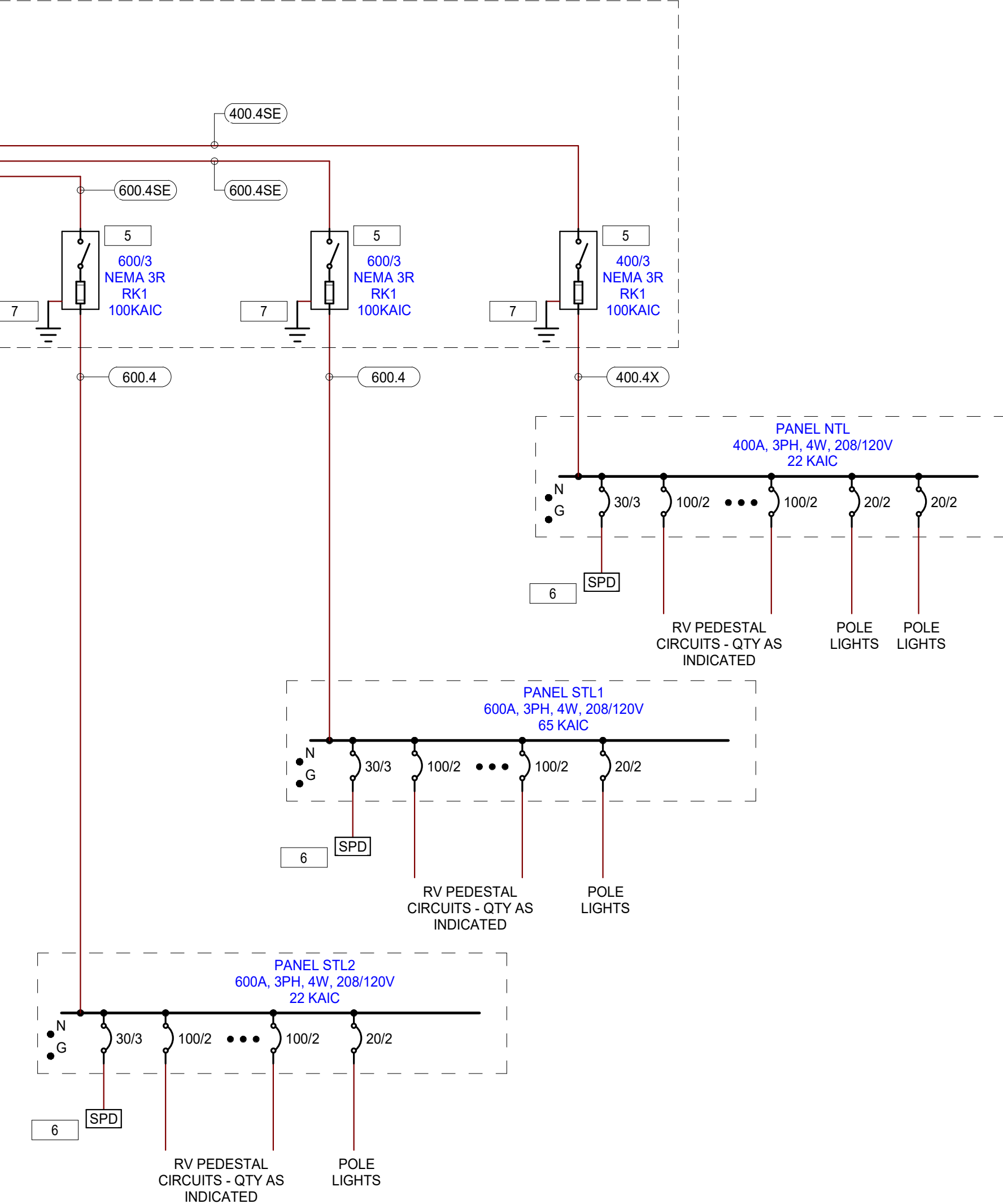
- ALL CONDUCTORS INDICATED ARE COPPER UNLESS OTHERWISE NOTED.
- INCREASE SIZE OF FEEDER CONDUCTORS, AND ASSOCIATED CONDUITS, AS REQUIRED TO LIMIT VOLTAGE DROP TO 2%. CONTRACTOR MAY OPT TO USE ALUMINUM CONDUCTORS FOR FEEDERS GREATER THAN 100A IF APPROVED BY OWNER. CONTRACTOR IS RESPONSIBLE FOR RESIZING ALL RESPECTIVE CONDUIT, BOXES, ETC. FOR A CODE COMPLIANT INSTALLATION.
- ONCE ACTUAL PROJECT TRANSFORMER IMPEDANCE DATA IS KNOWN, CONTRACTOR SHALL VERIFY PANELBOARD AND RV PEDESTAL AIC RATINGS ARE APPROPRIATE FOR THE ACTUAL CONTRIBUTING FAULT CURRENT PRIOR TO ORDERING EQUIPMENT. CONTACT ENGINEER IF NEEDED ONCE IMPEDANCE DATA IS RECEIVED.
- REFER TO PANEL SCHEDULES FOR FEEDERS AND BRANCH CIRCUITS NOT SHOWN ON SINGLE LINE DIAGRAM.

ONE-LINE KEYED NOTES:

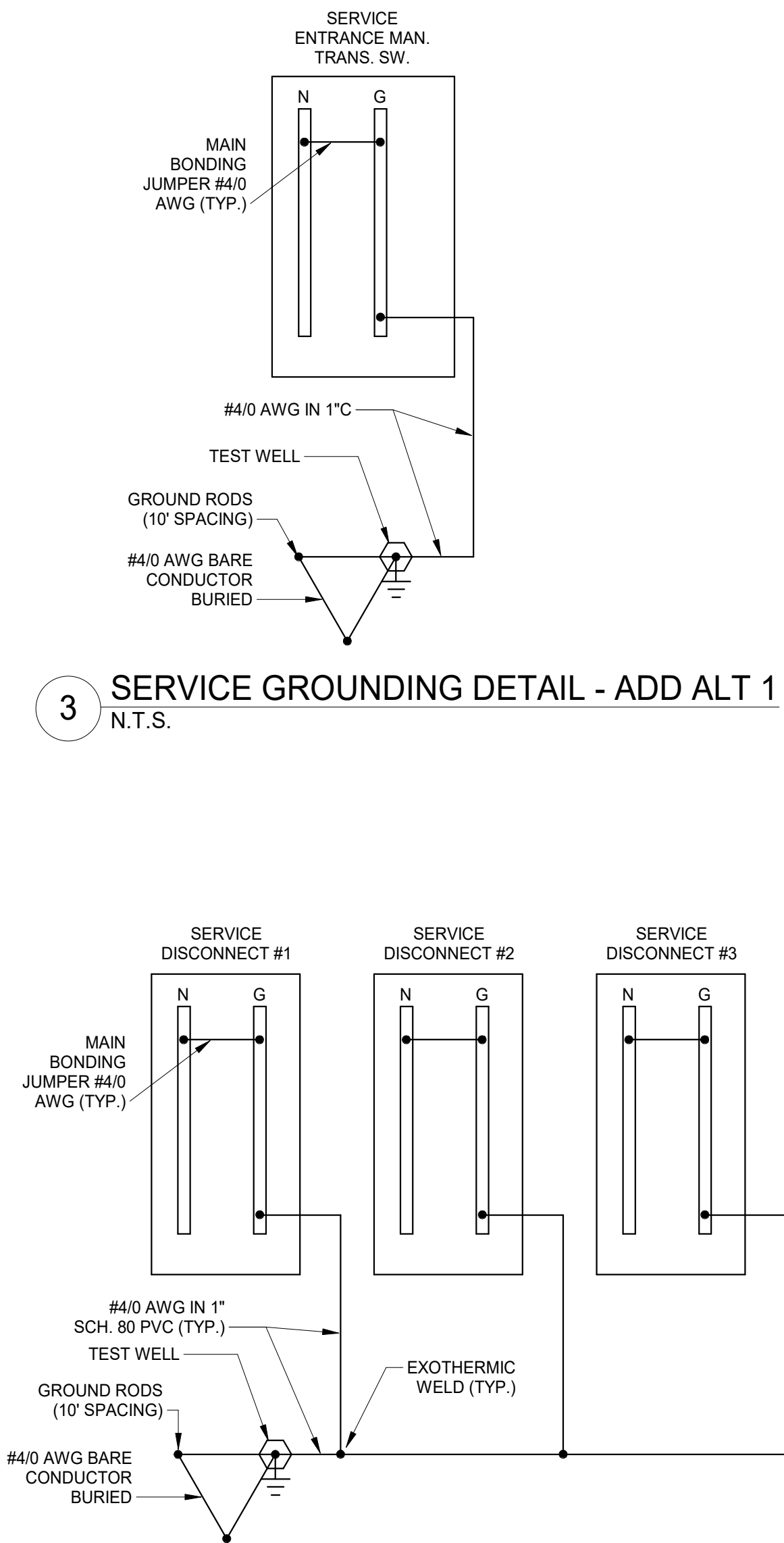
- CONNECT NEW U.G. PRIMARY CIRCUIT TO SPARE WAY IN EXISTING SECTIONALIZING CABINET.
- HAND HOLE OR PULL BOX - REFER TO PLANS
- NEW PAD-MOUNT TRANSFORMER, PURCHASED BY OWNER DURING PREVIOUS PHASE. INSTALLATION BY DIV. 26 TO BE INCLUDED IN THIS PHASE OF THE PROJECT.
- CUSTOMER DIGITAL KWH AND DEMAND METERING (NON-REVENUE). INSTALL CTS AROUND SECONDARY TERMINALS AND CONNECT VOLTAGE SENSING LEADS TO SECONDARY TRANSFORMER SECONDARY COMPARTMENT. FOLLOW MANUFACTURER'S INSTRUCTIONS. INSTALL METER ON EQUIPMENT RACK (SEE PLANS) AND INSTALL TWO 1" CONDUITS BETWEEN TRANSFORMER SECONDARY COMPARTMENT AND METER. CT LEADS SHALL USE TWISTED SHIELDED CONDUCTORS AND SHALL BE INSTALLED IN SEPARATE CONDUIT UNLESS OTHERWISE DIRECTED BY MANUFACTURER. BASIS OF DESIGN: HONEYWELL E-MON E20-208800-J-D.
- SERVICE DISCONNECTS GROUPED ON RACK - PROVIDE PERMANENT LABELS INDICATING THE FOLLOWING:
 - IDENTIFICATION OF SERVICE DISCONNECTS IN "X" OF 3" FORMAT.
 - VOLTAGE, NOMINAL CURRENT RATING, AND LOAD SERVED
 - INTERRUPTING RATING, FUSE TYPE
 - ARC FLASH HAZARD LABEL - REFER TO SPECIFICATIONS
- FOR SURGE PROTECTIVE DEVICES: PROVIDE CIRCUIT BREAKER AND WIRE SIZE AS RECOMMENDED BY MANUFACTURER. SPD CONDUCTORS SHALL BE AS SHORT AS POSSIBLE AND WITH LIMITED BENDS.
- REFER TO SERVICE GROUNDING DETAIL.



REFER TO INSET FOR ADD-ALTERNATE #1



3 SERVICE GROUNDING DETAIL - ADD ALT 1
N.T.S.



2 SERVICE GROUNDING DETAIL
N.T.S.

PANEL: NTL													
LOCATION: EXTERIOR RV LOT				SYSTEM VOLTAGE: 208Y/120V				A.I.C. RATING: 22 KAIC					
SUPPLIED FROM: UTILITY				PHASES: 3				MAINS TYPE: MLO					
MOUNTING: SURFACE				WIRES: 4				MAINS RATING: 400 A					
ENCLOSURE TYPE: TYPE 3R													
NOTE/CKT	DESCRIPTION	TRIP	POL	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	POL	TRIP	DESCRIPTION	CKT	NOTE
1	RV PED N01, N02	100 A	2	3-#1, #6G 1-1/2"	8.1/1.2			2-#4, #4G 1-1/4"	2	20 A	LIGHTING	2	
3						8.1/1.2						4	
5	RV PED N03, N04	100 A	2	3-#1, #6G 1-1/2"	8.1/1.2			2-#4, #4G 1-1/4"	2	20 A	LIGHTING	6	
7												8	
9	RV PED N05, N06	100 A	2	3-#1, #6G 1-1/2"		8.1/1.0			2	20 A	SPARE	10	
11							8.1/1.0					12	
13	SPARE	100 A	2		0/0				2	20 A	SPARE	14	
15						0/0						16	
17	SPARE	100 A	2				0/0		1	20 A	SPARE	18	
19					0/0			0/0	1	20 A	SPARE	20	
21	SPACE	--	1			0/0			1	20 A	SPACE	22	
23	SPACE	--	1				0/0		1	20 A	SPACE	24	
25	SPACE	--	1		0/0				1	20 A	SPACE	26	
27	SPACE	--	1			0/0			1	20 A	SPACE	28	
29	SPACE	--	1				0/0		1	20 A	SPACE	30	
31	SPACE	--	1		0/0				1	--	SPACE	32	
33	SPACE	--	1				0/0		1	--	SPACE	34	
35	SPACE	--	1					0/0	1	--	SPACE	36	
37					0/0				1	--	SPACE	38	
39	SPD	30 A	3	4-#10, #10G, 3/4"		0/0			1	--	SPACE	40	
41							0/0.2	2-#12, #12G, 3/4"	1	20 A	RECEPTACLE	42	
TOTAL LOAD (KVA):					18.5	17.3	17.5						
TOTAL CURRENT (AMPS):					154 A	145 A	146 A						
LOAD CLASSIFICATION				CONNECTED LOAD	DEMAND FACTOR		EST. DEMAND		PANEL TOTALS				
RECEPTACLE				0.18 kVA	100.00%		0.18 kVA		TOTAL CONN. KVA 53.4 kVA				
LIGHTING				4.8 kVA	125.00%		6 kVA		TOTAL EST. DEMAND KVA 44 kVA				
RV RECEPTACLES				48.6 kVA	78.33%		38.07 kVA		DEMAND W/ 25% SPARE 54.99 kVA				
									TOTAL CONN. CURRENT 148 A				
									TOTAL DEMAND CURRENT 122 A				
									DEMAND CURRENT W/ SPARE 153 A				
NOTES:													