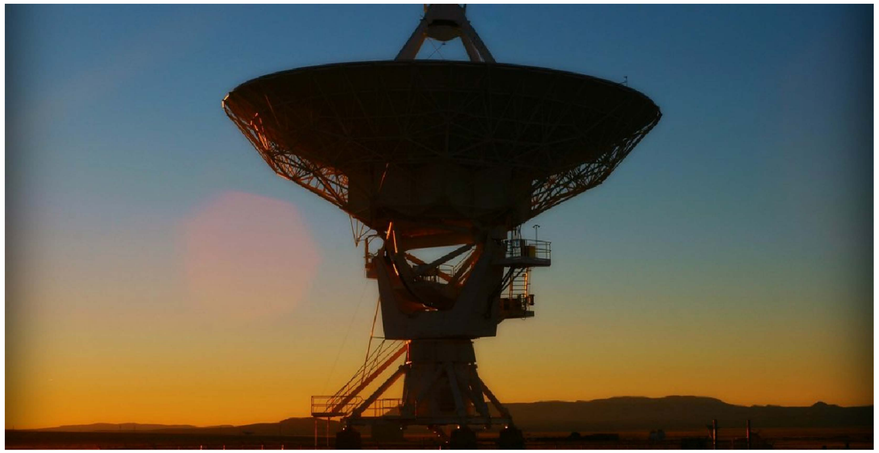
NATIONAL RADIO ASTRONOMY OBSERVATORY
DSOC DATA CENTER PDU REPLACEMENT

1003 LOPEZVILLE RD, SOCORRO NM 87801

ATTACHMENT 1 - CONSTRUCTION DOCUMENTS 06-09-2022



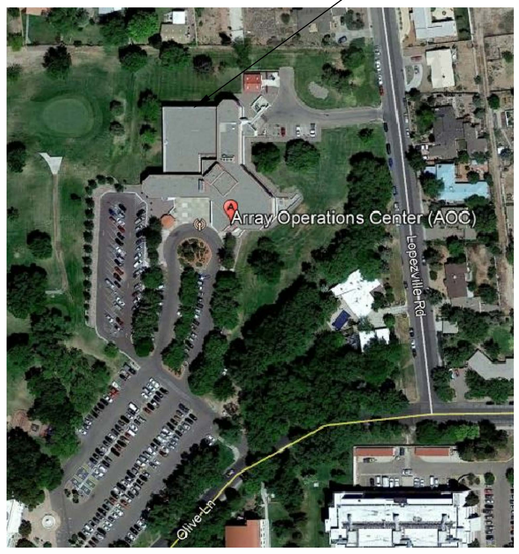
PROJECT LOCATION

VICINTIY MAP

PN & N

INDEX OF DRAWINGS

PROJECT LOCATION



LOCATION MAP

PN & N

CONSTRUCTION DOCUMENTS

WHPacific
AN NV5 COMPANY
6501Americas Parkway
Albuquerque, NM 87110
(505) 510-0850

PHILLIP J. SITGES
NEW MEXICO
22284
PROFESSIONAL ENGINEER
6/9/2022

REVISIONS & ADDENDUMS		
#	DATE	REMARKS

DRAWING INFO.	
DESIGNED	PJS
DRAWN	PJS
CHECKED	WPF
APPROVED	
LAST EDIT	
PLOT DATE	
SUBMITTAL	

COVER SHEET & INDEX

NATIONAL RADIO ASTRONOMY OBSERVATORY
DSCO D_TA CENTER PDU REPLACEMENT

PROJECT NUMBER	DRAWING FILE NAME	DRAWING SCALE
P65121-0003400.00	XXXXXXXXX-G-001.DWG	AS NOTED

SHEET NUMBER
G-001

LIGHTING LEGEND

	LIGHTING FIXTURE - SURFACE (CEILING)
	LIGHTING FIXTURE - RECESSED
	WALL MOUNTED FIXTURE
	2x2 RECESSED FIXTURE
	2x4 RECESSED FIXTURE
	1x4 RECESSED FIXTURE
	2x2 SURFACE MOUNTED FIXTURE
	2x4 SURFACE MOUNTED FIXTURE
	1X4 SURFACE MOUNTED FIXTURE
	PENDANT MOUNTED FIXTURE
	WALL MOUNTED FIXTURE
	STRIP FIXTURE
	TRACK LIGHTING SYSTEM
	POLE MOUNTED AREA LIGHT
	EXIT SIGN - CEILING MOUNTED (SOLID INDICATES EXIT SIGN FACING)
	EXIT SIGN - WALL MOUNTED (SOLID INDICATES EXIT SIGN FACING)
	EMERGENCY LIGHT
	EMERGENCY LIGHT REMOTE HEAD
	LIGHT FIXTURE W/ EMERGENCY BATTERY
	PHOTOCELL, AS NOTED
$	SINGLE POLE SWITCH +48" U.O.N.
$K	KEY OPERATED SWITCH +48" U.O.N.
$D	DIMMER SWITCH, AS NOTED, +48" U.O.N.
$3 $4	3-WAY & 4-WAY SWITCH +48" U.O.N.
$PL	SINGLE POLE SWITCH W/ PILOT LIGHT (PL "ON" WHEN LIGHT IS "OFF" - U.O.N.) + 48" U.O.N.
$OS2	OCCUPANCY SENSOR - WALL MOUNTED (2 INDICATES DUAL - CIRCUIT)
OS	OCCUPANCY SENSOR - CEILING MOUNTED
OS	OCCUPANCY SENSOR - WALL MOUNTED

POWER LEGEND

	ELECTRIC METER
	PANELBOARD
	MOTOR CONNECTION
G	GENERATOR
$T	FRACTIONAL HP MOTOR DISCONNECT SWITCH W/INTEGRAL THERMAL PROTECTION
	DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	COMBINATION MOTOR STARTER DISCONNECT
	EQUIPMENT CONNECTION
T	TRANSFORMER

WIRING DEVICES LEGEND

	RECEPTACLE - SINGLE +18" U.O.N.
	RECEPTACLE - DUPLEX +18" U.O.N.
	RECEPTACLE - QUAD +18" U.O.N.
	RECEPTACLE - SPLIT WIRED +18" U.O.N.
GFCI	RECEPTACLE - GFCI OR ON GFI CIRCUIT
GFCI	RECEPTACLE - QUAD - GFCI ON GFI CIRCUIT +18" U.O.N.
	RECEPTACLE - 220V +18" U.O.N.
	RECEPTACLE - HIGH VOLTAGE
	RECEPTACLE - SPECIAL +18" U.O.N.
	RECEPTACLE - FLOOR MOUNTED
	RECEPTACLE - CEILING MOUNTED
	JUNCTION BOX
	PUSH BUTTON
W	PLUG MOLD
	POWER POLE

WIRING CIRCUITS LEGEND

	CONDUIT - CONCEALED
	CONDUIT - EXPOSED
	CONDUIT - UNDERGROUND
	CONDUIT - FLEX
A-2	HOMERUN (PANEL AND CIRCUIT #)
	CONDUIT STUB-UP
	CONDUIT STUB-DN

FIRE ALARM SYSTEM LEGEND

F	FA MANUAL PULL STATION
	FA HORN STROBE
	FA STROBE
M	MAGNETIC DOOR HOLD OPEN
135°F	FA HEAT DETECTOR (FIXED TEMP. NOTED)
	SMOKE DETECTOR - IONIZATION TYPE
P/CO/A	SMOKE /CO DETECTOR - PHOTO ELECTRIC TYPE W/AUDIO
P	SMOKE DETECTOR - PHOTO ELECTRIC TYPE
P	SMOKE DETECTOR - DUCT MOUNTED
S	FA SPEAKER
FACP	FIRE ALARM CONTROL PANEL
FAAP	FIRE ALARM ANNUNCIATOR PANEL

COMMUNICATIONS LEGEND

	TELECOM OUTLET, 2 JACKS UON
	TELECOM OUTLET - FLOOR MOUNTED, 2 JACKS UON
	TELECOM OUTLET - CEILING MOUNTED, 2 JACKS UON
	EXISTING TELECOM AND/OR DATA OUTLET
TV	TELEVISION OUTLET
S	SPEAKER - WALL MOUNTED
S	SPEAKER - CEILING MOUNTED
	BELL
S	SPEAKER / CLOCK
	CLOCK - WALL MOUNTED
	CLOCK - CEILING MOUNTED
TTB	TELEPHONE TERMINAL BOARD

SECURITY LEGEND

	WALL MOUNT CCTV
	RECESSED CEILING MOUNT CCTV WITH DOME
	CEILING MOUNT DOME
	RACK
G	GLASS BREAK SENSOR
D	MAGNETIC DOOR SENSOR
M	MOTION SENSOR
KP K	KEYPAD
RIM	REMOTE ALARM INPUT MODULE
CR	CARD READER
ACU	NETWORKED INTELLIGENT CONTROLLER

LINE TYPE LEGEND

	EXISTING
	NEW
	DEMOLITION

THIS IS A STANDARD (TYPICAL) SYMBOLS LIST. NOT ALL SYMBOLS ARE NECESSARILY USED ON THIS PROJECT. ALSO, ADDITIONAL SYMBOLS MAY BE INTRODUCED ON DRAWINGS AND DEFINED THEREIN.

ELECTRICAL ABBREVIATIONS

NOTE: NOT ALL ABBREVIATIONS USED ON THIS PROJECT

AC	ABOVE COUNTER	(E)	EXISTING	IBO	INSTALLED BY OTHERS	PA	PUBLIC ADDRESS
AFCI	ARC FAULT CIRCUIT INTERRUPTER	EM	EMERGENCY	INC	INCANDESCENT	PC	PHOTOCELL
AFF	ABOVE FINISHED FLOOR	EMCS	ENERGY MANAGEMENT CONTROL SYSTEM	ITB	INTERCOM TERMINAL BOX	PH	PHASE
AFG	ABOVE FINISHED GRADE	EO	ELECTRICALLY OPERATED			PL	PILOT LIGHT
AMP	AMPERES	EP	EXPLOSION PROOF	KSU	KEY SWITCH UNIT	PNL	PANEL
ATS	AUTOMATIC TRANSFER SWITCH	EKSU	ELECTRONIC KEY SWITCH UNIT			PTZ	PAN, TILT, ZOOM
		ETR	EXISTING TO REMAIN	LC	LIGHTING CONTACTOR		
BB	BASEBOARD (HEATER)	EWC	ELECTRIC WATER COOLER	LPS	LOW PRESSURE SODIUM	QTZ	QUARTZ
BCU	BARE COPPER						
BFC	BELOW FINISH CEILING (BOTTOM OF DEVICE)	FAAP	FIRE ALARM ANNUNCIATOR PANEL	MAX	MAXIMUM	ROW	RIGHT OF WAY
BLDG	BUILDING	FACP	FIRE ALARM CONTROL PANEL	MCB	MAIN CIRCUIT BREAKER		
		FA	FIRE ALARM	MCC	MOTOR CONTROL CENTER	SEC	SECTION
CB	CIRCUIT BREAKER	FBO	FURNISHED BY OTHERS	MDP	MAIN DISTRIBUTION PANEL	SSP	SECURITY SYSTEM PANEL
CFF	CLEARANCE FINISH FLOOR (SURFACE TO SURFACE)	FWP	FACTORY WIRED PANEL	MDS	MAIN DISTRIBUTION SWITCHBOARD		
CFC	CLEARANCE FINISH CEILING (SURFACE TO SURFACE)			MH	MOUNTING HEIGHT	TC	TIME CLOCK
CLG	CEILING	GFI	GROUND FAULT INTERRUPTER	MLO	MAIN LUGS ONLY	TTB	TELEPHONE TERMINAL BOARD
CKT	CIRCUIT	GND	GROUND	MTD	MOUNTED	TTC	TELEPHONE TERMINAL CABINET
CO	CONDUIT ONLY			MTS	MANUAL TRANSFER SWITCH		
C	CONDUIT	HID	HIGH INTENSITY DISCHARGE			UON	UNLESS OTHERWISE NOTED
CP	CONTROL PANEL	HIT	HIGH INTENSITY TUNGSTEN	NIC	NOT IN CONTRACT		
		HP	HORSEPOWER	NL	NIGHT LIGHT	VEL	VERIFY EXACT LOCATION
DC	DIRECT CURRENT	HPS	HIGH PRESSURE SODIUM	NTS	NOT TO SCALE	VOS	VERIFY ON SITE
DCS	DIGITAL CONTROL SYSTEM	HWH	HOT WATER HEATER			VTR	VENT THROUGH ROOF
DIST	DISTANCE			OC	ON CENTER		
				OL	OVERLOAD	W/	WITH
						W/O	WITHOUT
						WP	WEATHER PROOF
						XFRM	TRANSFORMER

GENERAL ELECTRICAL NOTES

(APPLICABLE TO ALL ELECTRICAL DRAWINGS)

A. CONTRACTOR IS STRONGLY ENCOURAGED TO VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE SITE AFFECTED BY THIS WORK BEFORE SUBMITTING PROPOSALS, SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT EXECUTION OF THE WORK.

B. ALL ELECTRICAL WORK AND MATERIALS MUST CONFORM TO THE LATEST STANDARDS FOR THE NATIONAL ELECTRICAL CODE AND ANY OTHER APPLICABLE CODES. MATERIALS SHALL BE LISTED BY THE UNDERWRITER'S LABORATORIES, INC. SHOULD PLANS AND CODES CONFLICT, THE CODE TAKES PREFERENCE. MAKE NO CHANGES, EVEN IN CASE OF CONFLICT, WITHOUT FIRST OBTAINING APPROVAL OF THE CONTRACTING OFFICER.

C. PROVIDE AS USED HERE ON THE DRAWINGS, PROVIDE IS AN ALL-INCLUSIVE TERM REQUIRING CONTRACTOR TO FURNISH, INSTALL, WIRE AND CONNECT ALL SPECIFIED EQUIPMENT AS WELL AS COMPONENTS, ACCESSORIES, WIRING, AND MOUNTING HARDWARE TO INSURE THAT SPECIFIED EQUIPMENT FUNCTIONS TO MEET SYSTEM(S) REQUIREMENTS.

D. UNLESS OTHERWISE NOTED, ALL POWER CIRCUIT CONDUCTORS SHALL BE COPPER AND MINIMUM #12 AWG IN 3/4" CONDUIT.

E. A GREEN, COPPER GROUND WIRE SHALL BE INSTALLED IN ALL CONDUIT SYSTEMS AND SHALL BE BONDED TO ALL ENCLOSURES, BOXES, AND EQUIPMENT.

F. EXISTING CONDITIONS AND UTILITIES INDICATED ARE TAKEN FROM EXISTING CONSTRUCTION DOCUMENTS, VARIOUS SURVEYS, AND FIELD INVESTIGATIONS.

G. 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 UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE COMPLETION OF THIS WORK.

H. REMOVE EXISTING EXPOSED POWER, MATERIAL AND EQUIPMENT WHICH ARE MADE OBSOLETE OR WHICH INTERFERE WITH THE CONSTRUCTION OF THE PROJECT.

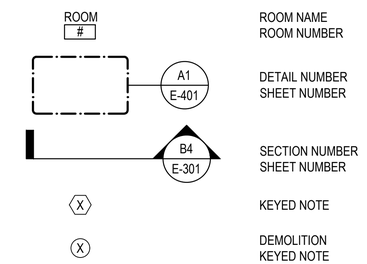
I. REINSTALL ANY SUCH POWER, MATERIALS AND EQUIPMENT WHICH ARE REQUIRED TO REMAIN ACTIVE FOR THE FACILITY TO BE FULLY FUNCTIONAL.

J. REMOVE ALL EXISTING ELECTRICAL IN AREAS OF REMODELING UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS REQUIRED FOR CONTINUITY OF CIRCUITS IN AREAS NOT IN REMODEL AREA.

K. ALL ITEMS REMOVED AND NOT RE-USED SHALL BECOME CONTRACTOR'S PROPERTY AND REMOVED FROM PROPERTY UNLESS DIRECTED OTHERWISE BY THE OWNER.

L. COORDINATE ALL ELECTRICAL SERVICE WORK WITH NRAO. NOTIFY THE FACILITY MANAGER IN WRITING A MINIMUM OF 14 DAYS PRIOR TO ANY OUTAGES.

TAGS & DETAIL REFERENCES



ROOM NAME
ROOM NUMBER

DETAIL NUMBER
SHEET NUMBER

SECTION NUMBER
SHEET NUMBER

KEYED NOTE

DEMOLITION
KEYED NOTE

CONSTRUCTION DOCUMENTS

WHPacific
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22284
PROFESSIONAL ENGINEER
6/9/2022

REVISIONS & ADDENDUMS		
#	DATE	REMARKS

DRAWING INFO.	
DESIGNED	
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LAST EDIT	
PLOT DATE	
SUBMITTAL	

ELECTRICAL LEGEND, ABBREVIATIONS & GENERAL NOTES
NATIONAL RADIO ASTRONOMY OBSERVATORY
DSCO DATA CENTER PDU REPLACEMENT

PROJECT NUMBER	P5121-0003400.00
DRAWING FILE NAME	XXXXXXXXX-E-001.DWG
DRAWING SCALE	AS NOTED

SHEET NUMBER
E-001

A1 ELECTRICAL DATA CENTER DEMOLITION PLAN

SCALE: 3/8"=1'-0"

KEYED DEMOLITION NOTES

1. CONTRACTOR TO MOVE RAC CABLE FROM EXISTING RECEPTACLE, ONE AT A TIME AND EXTEND TO NEW PDU . SEE E-102 FOR MORE INFORMATION. SEE ATTACHED PHOTO FOR CURRENT UNDERFLOOR INSTALLATION CONDITIONS.
2. CONTRACTOR TO DEMOLISH OLD PDU, CONDUIT AND CONDUCTORS BACK TO ELECTRICAL ROOM ONCE ALL DATA RACKS AND FEEDERS ARE CONNECTED TO NEW PDU.
3. PANEL EXISTING TO REMAIN, CONTRACTOR TO REFEED FROM NEW PDU. SEE E-102 FOR MORE INFORMATION.

B5 PDU ENTRY CABLING

SCALE: N/A

0 2' 4' 6'

SCALE:3/8"=1'

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DRAWN	PJS
CHECKED	WPF
APPROVED	
LAST EDIT	
PLOT DATE	
SUBMITTAL	

ELECTRICAL DATA CENTER DEMOLITION PLAN

NATIONAL RADIO ASTRONOMY OBSERVATORY
DSCO DATA CENTER PDU REPLACEMENT

PROJECT NUMBER	DRAWING FILE NAME
P5121-0003400.00	P0014007W-A-101.DWG

DRAWING SCALE
AS NOTED

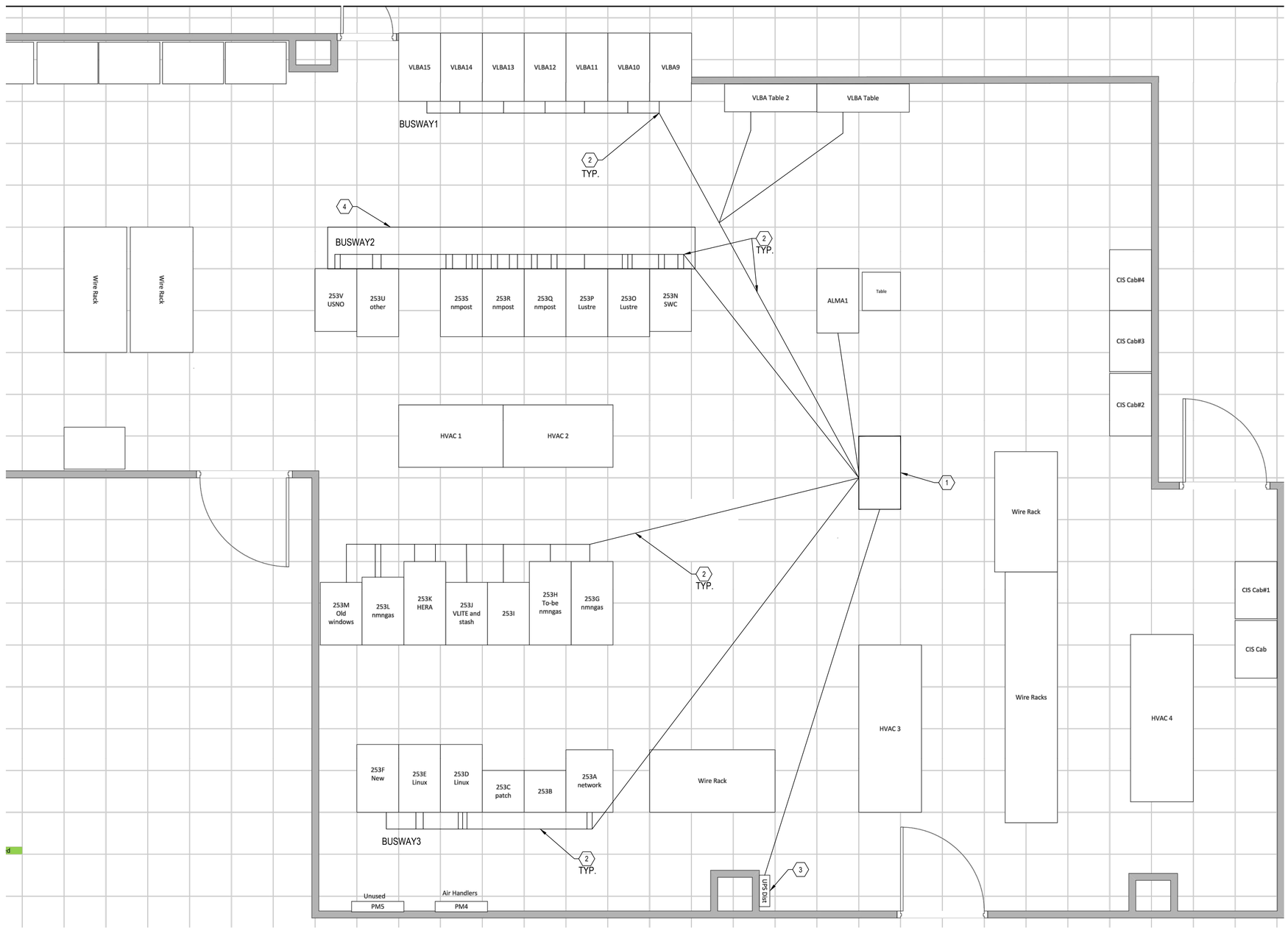
SHEET NUMBER
E-101

GENERAL NOTES

A. ALL CONDUCTORS TO BE #12AWG AND IN 3/4" CONDUIT MINIMUM UNLESS NOTED OTHERWISE.
B. CONTRACTOR TO COORDINATE THE EXACT LOCATION OF THE NEW PDU IN THE FIELD WITH NRAO.

KEYED NOTES

1. NEW SCHNEIDER ELECTRIC APC INFRASTRUXURE PDU MODEL # PDPB150G6F 480V:208V, 84 SLOTS. SEE E-601 FOR MORE INFORMATION.
2. EXISTING CABLE FEEDERS GOING TO EXISTING RACKS TO BE EXTENDED TO NEW PDU ONE AT A TIME.
3. EXISTING PANEL 'UPS DIST' TO BE CONNECTED TO NEW PDU. SEE E-601 FOR MORE INFORMATION.
4. SEE ATTACHED PHOTO OF TYPICAL UNDER FLOOR CABLING.



A1 ELECTRICAL DATA CENTER POWER PLAN
SCALE: 1/8"=1'-0"

B5 ELECTRICAL CABLING
SCALE: N/A

0 2' 4' 6'
SCALE:3/8"=1'

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DRAWING INFO.

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APPROVED	
LAST EDIT	
PLOT DATE	
SUBMITTAL	

ELECTRICAL DATA CENTER POWER PLAN

NATIONAL RADIO ASTRONOMY OBSERVATORY
DSCO DATA CENTER PDU REPLACEMENT

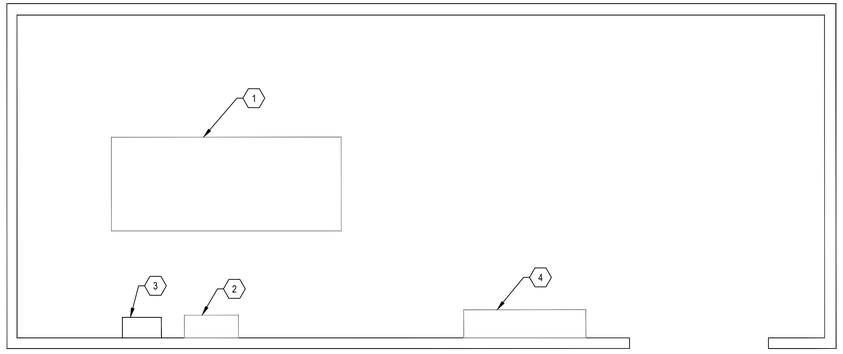
DRAWING SCALE: AS NOTED

PROJECT NUMBER: P55121-0003400.00
DRAWING FILE NAME: P0014007W-A-101.DWG

SHEET NUMBER
E-102

KEYED NOTES

1. EXISTING SCHNEIDER ELECTRIC GALAXY VM1 MODULE 160kVA UPS WITH OUTPUT TRANSFORMER CABINET.
2. EXISTING BYPASS PANEL 'M90AFH1XXX'.
3. NEW PULL BOX. SEE E-601 FOR MORE INFORMATION.
4. EXISTING MAIN DISTRIBUTION PANELBOARD.



A2 ELECTRICAL ROOM POWER PLAN

SCALE: 1/8"=1'-0"

0 4' 8' 16'

SCALE:1/8"=1'

CONSTRUCTION DOCUMENTS

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6/9/2022

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#	DATE	REMARKS

DRAWING INFO.	
DESIGNED	PJS
DRAWN	PJS
CHECKED	WPF
APPROVED	
LAST EDIT	
PLOT DATE	
SUBMITTAL	

ELECTRICAL ROOM POWER PLAN

NATIONAL RADIO ASTRONOMY OBSERVATORY
DSCO DATA CENTER PDU REPLACEMENT

PROJECT NUMBER	P55121-000340O.00
DRAWING FILE NAME	P001400TW-A-101.DWG
DRAWING SCALE	AS NOTED

SHEET NUMBER
E-103

PANEL 'PDU1'

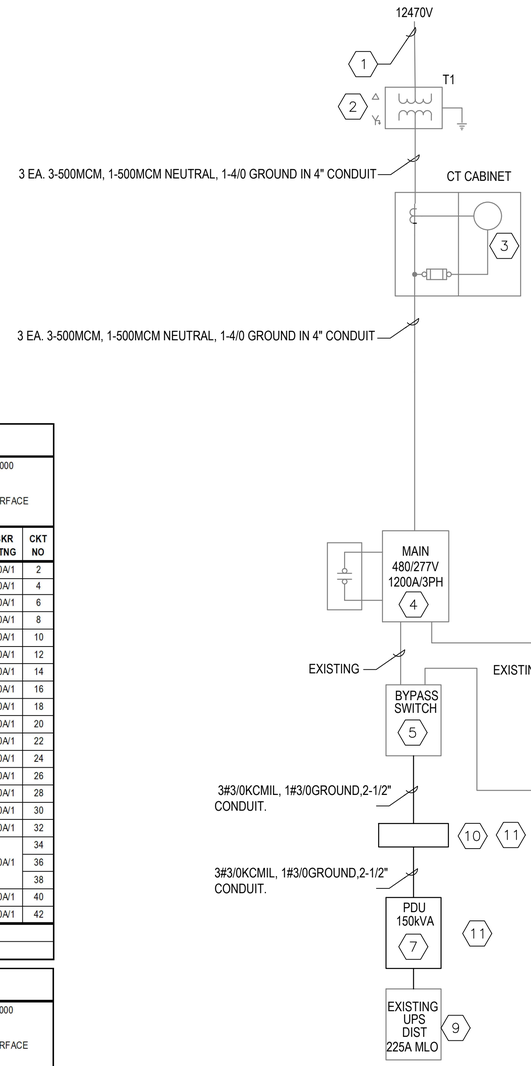
VOLTAGE:	120/208V	**FRAME:**	225A FRAME	**MIN AIC RATING:**	14,000
PHASE:	3 PHASE	**MAIN:**	MAIL LUGS ONLY	**CIRCUITS:**	42
WIRE:	4 WIRE	**ENCLOSURE:**	NEMA 1 DOOR-IN-DOOR	**MOUNTING:**	SURFACE
FEED:	BOTTOM	**LOCATION:**	ROOM #		

CKT NO	BKR RTNG	LOAD DESCRIPTION	VA	CONNECTED VA LOAD A	B	C	VA	LOAD DESCRIPTION	BKR RTNG	CKT NO
1	30A/1	25eF-PDU-1	1872	3552			1680	VLBA6/7	20A/1	2
3	20A/1	VLBA TABLE2 (VLBA2/3)	1680		3360		1680	VLBA10	20A/1	4
5	20A/1	VLBA TABLE (VLBA4/5)	1680			3360	1680	VLBA11	20A/1	6
7	20A/1	VLBA12	1680	3360			1680	VLBA15	20A/1	8
9	20A/1	VLBA13	1680		3360		1680	VLBA21/22	20A/1	10
11	20A/1	VLVA14	1680			3360	1680	VLBA23/24	20A/1	12
13			1872	3552			1680	253R	20A/1	14
15	30A/1	253H-PDU-1	1872		3552		1680	253S	20A/1	16
17			1872			3552	1680	253S	20A/1	18
19	30A/1	253N-PDU-2	1872	3744			1872	253R-PDU-1	30A/1	20
21	30A/1	253N-PDU-1	1872		3744		1872	253R-PDU-2	30A/1	22
23	30A/1	253N-PDU-4 (253P)	1872			3744	1872	253R-PDU-3	30A/1	24
25	30A/1	253O-PDU-3	1872	3744			1872	253R-PDU-4	30A/1	26
27	30A/1	253Q-PDU-4	1872		3744		1872	253S-PDU-1	30A/1	28
29	30A/1	253Q-PDU-3	1872			3744	1872	253S-PDU-1	30A/1	30
31	30A/1	253Q-PDU-1	1872	3744			1872	253S-PDU-4	30A/1	32
33	20A/1	253Q-PDU-2	1680		3360		1680			34
35	20A/1	253S-PDU-3	1680			3360	1680	253Q-PDU-5	20A/1	36
37	20A/1	SPARE		1680			1680			38
39	20A/1	SPARE			1872		1872	253V	30A/1	40
41	20A/1	SPARE				1872	1872	253V-PDU-1	30A/1	42
		CONNECTED LOAD (VA) PER PHASE	23376	22992	22992		**69360**	**TOTAL CONNECTED LOAD (VA)**		
							192.8	**TOTAL CONNECTED LOAD (AMPS)**		

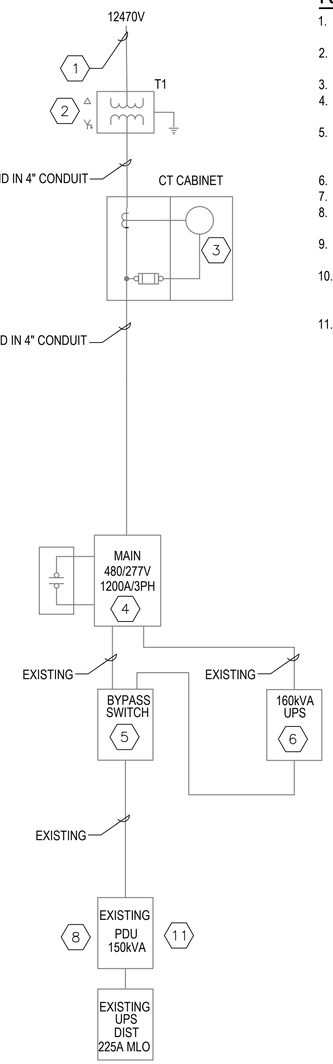
PANEL 'PDU2'

VOLTAGE:	120/208V	**FRAME:**	225A FRAME	**MIN AIC RATING:**	14,000
PHASE:	3 PHASE	**MAIN:**	MAIL LUGS ONLY	**CIRCUITS:**	42
WIRE:	4 WIRE	**ENCLOSURE:**	NEMA 1 DOOR-IN-DOOR	**MOUNTING:**	SURFACE
FEED:	BOTTOM	**LOCATION:**	ROOM #		

CKT NO	BKR RTNG	LOAD DESCRIPTION	VA	CONNECTED VA LOAD A	B	C	VA	LOAD DESCRIPTION	BKR RTNG	CKT NO
1			1170	3042			1872			2
3	30A/1	253G-PDU-1	1170		3042		1872	253P-PDU-1	30A/1	4
5			1170			3042	1872			6
7	20A/1	253F	1680	2850			1170			8
9	20A/1	253F	1680		2850		1170	253K-PDU-1(253L)	30A/1	10
11	20A/1	253F	1680			2850	1170			12
13	30A/1	WIRE RACK	2880	2880				WIRE RACK	30A/1	14
15	125A/1	UPS DISTRIBUTION PANEL	8450		10322		1872	253D-PDU-3	30A/1	16
17			8450			10322	1872	WIRE RACK	30A/1	18
19	30A/1	253L-PDU-1	1872	3744			1872			20
21	30A/1	253I	1872		3744		1872	253J-PDU-1(253I)	30A/1	22
23	30A/1	253L-PDU-2	1872			3744	1872			24
25	30A/1	253I	1872	3744			1872	253I	30A/1	26
27	30A/1	253K	1872		3744		1872	253I-PDU-1	30A/1	28
29	30A/1	253G	1872			3744	1872	253I-PDU-2	30A/1	30
31	30A/1	253N-PDU-3	1872	3744			1872	253A-PDU-2	30A/1	32
33	30A/1	253U	1872		3744		1872	253U-PDU-2	30A/1	34
35	30A/1	253S-PDU-2	1872			3744	1872	253U-PDU-1	30A/1	36
37	30A/1	253V-PDU-2	1872	3744			1872	253D-PDU-2	30A/1	38
39	30A/1	SPARE			0			SPARE	30A/1	40
41	30A/1	SPARE				0		SPARE	30A/1	42
		CONNECTED LOAD (VA) PER PHASE	23748	27446	27446		**78640**	**TOTAL CONNECTED LOAD (VA)**		
							218.5	**TOTAL CONNECTED LOAD (AMPS)**		



A2 FINAL ONE-LINE DIAGRAM
SCALE: NO SCALE



A4 DEMO ONE-LINE DIAGRAM
SCALE: NO SCALE

KEYED NOTES

1. EXISTING UNDERGROUND PRIMARY TO TRANSFORMER.
2. EXISTING UTILITY PROVIDED 750kVA LIQUID FILLED 480Y/277V TRANSFORMER.
3. EXISTING CT CABINET AND METER SOCKET.
4. EXISTING 1600AMP FRAME WITH 1200AMP PLUG MAIN SWITCHBOARD.
5. EXISTING EATON PRL 4B BY PASS SWITCH, SWITCHES POWER FROM UTILITY POWER FROM UPS POWER TO PDU IN DATA CENTER.
6. EXISTING 160kVA UPS.
7. NEW APC 150kVA PDU IN DATACENTER.
8. EXISTING PDU, CONDUIT AND CONDUCTORS TO BE DEMOLISHED ONCE NEW PDU IS IN PLACE.
9. REFEED POWER TO 120/208V, 1PH PANEL 'UPS DIST', 3#3/0KCMIL, 1#6AWG GROUND, 2" CONDUIT.
10. CONTRACTOR TO INSTALL NEW PDU, CONDUIT, CONDUCTORS AND NEW PULLBOX PRIOR TO REMOVING POWER TO EXISTING PDU.
11. CONTRACTOR TO EXTEND CONDUIT AND CONDUCTORS FROM NEW PULLBOX TO EXISTING BYPASS SWITCH AND REMOVE OLD PDU, CONDUIT AND CONDUCTORS. COORDINATE OUTAGE WITH NRAO PRIOR TO REMOVING POWER.

CONSTRUCTION DOCUMENTS

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PHILLIP J. SITGES
NEW MEXICO
22284
PROFESSIONAL ENGINEER
6/9/2022

REVISIONS & ADDENDUMS

#	DATE	REMARKS

DRAWING INFO.

DESIGNED	PJS
DRAWN	PJS
CHECKED	WF
APPROVED	
LAST EDIT	
PLOT DATE	
SUBMITTAL	

ELECTRICAL DIAGRAMS & SCHEDULES
NATIONAL RADIO ASTRONOMY OBSERVATORY
DSCO DATA CENTER PDU REPLACEMENT

DRAWING SCALE: AS NOTED

PROJECT NUMBER: P55121-0003400.00
DRAWING FILE NAME: P0020227W-E-601

SHEET NUMBER
E-601

IMAGES OF CURRENT INSTALLED PDU