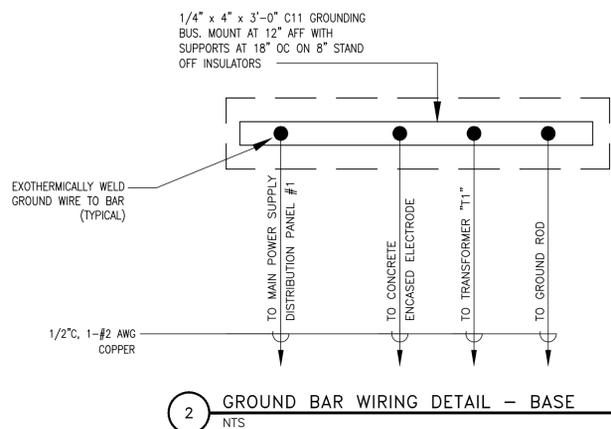


4 GROUND BAR WIRING DETAIL - TOP
NTS



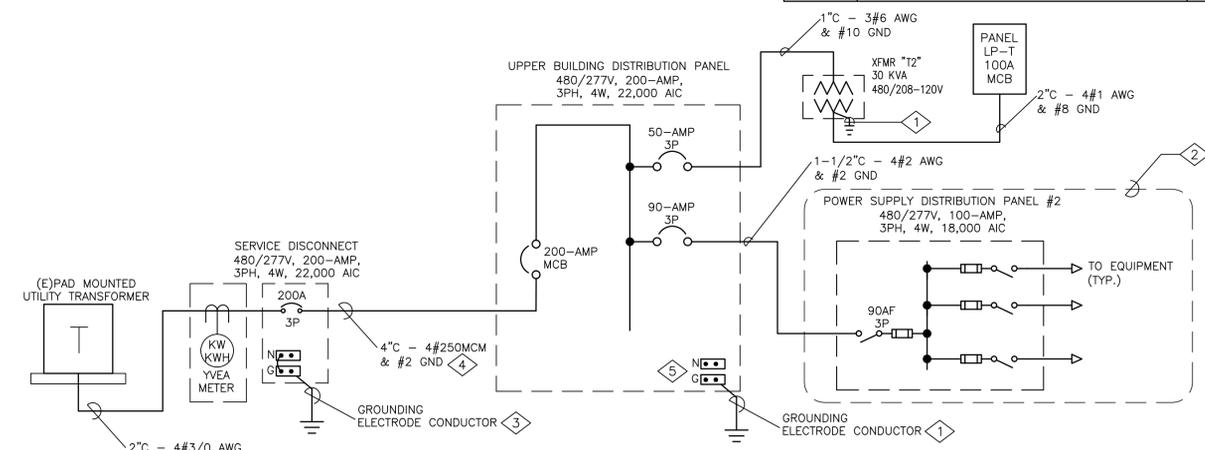
2 GROUND BAR WIRING DETAIL - BASE
NTS

SHEET LIST	
E1.0	SYMBOL LIST, SCHEDULES AND SINGLE LINE DIAGRAM
E1.1	PANEL SCHEDULES
E2.0	ELECTRICAL FLOOR PLANS
E3.0	SPECIFICATIONS

SYMBOLS	POWER SYMBOLS	NOTES
	MOTOR OUTLET	
	FUSED DISCONNECT SWITCH SWITCH XX/XX/XX = AMP SWITCH/POLES/AMP FUSE	
	HEAVY DUTY NON-FUSED DISCONNECT SWITCH SWITCH XX/XX = AMP SWITCH/POLES	
	COMBINATION MOTOR STARTER	
	MANUAL MOTOR STARTER WITH THERMAL OVERLOAD	
	STATIONARY - CIRCUIT BREAKER; RATING AS SHOWN ON PLANS	
	SWITCH AND FUSE; RATING AS SHOWN ON PLANS	
	SWITCH AND FUSE; RATING AS SHOWN ON PLANS	
	JUNCTION BOX	
	SURFACE MOUNTED PANELBOARD OR TERMINAL CABINET	

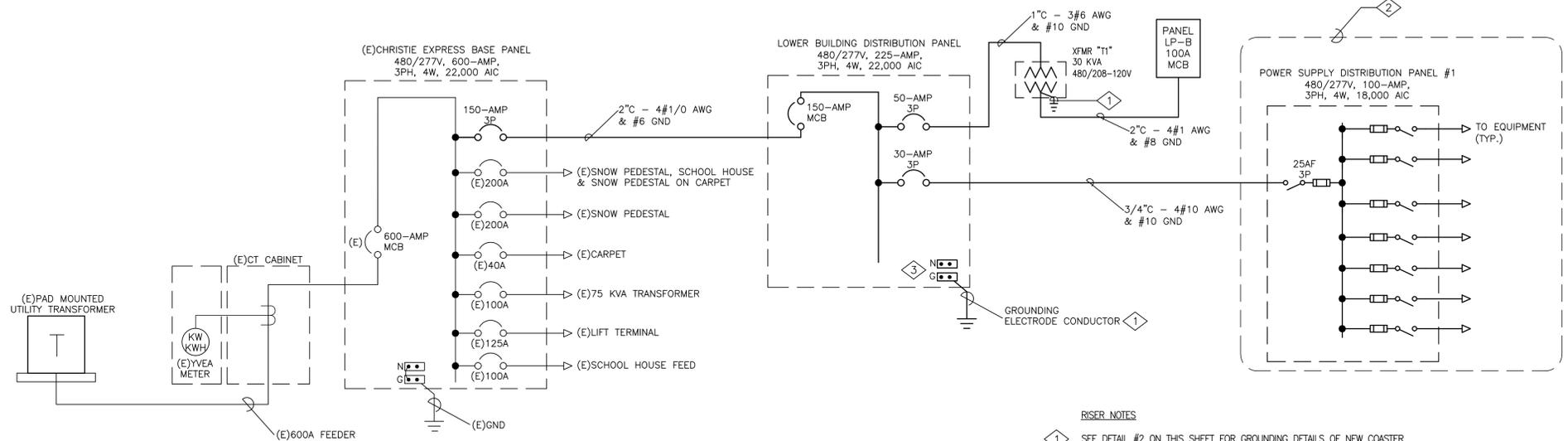
GENERAL NOTES	
1.	ALL WORK SHOWN IS NEW, UNLESS NOTED OTHERWISE.
2.	ALL WORK TO BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE, 2014 EDITION.
3.	SEAL ALL CONDUIT PENETRATIONS OF FLOORS AND FIRE RATED ASSEMBLIES TO MAINTAIN FIRE RATING.
4.	PROVIDE NEW TYPEWRITTEN DIRECTORIES REFLECTING WORK PERFORMED FOR ALL NEW PANELBOARDS IN THIS PROJECT.
5.	PLANS ARE PREPARED WITH REQUIRED BRANCH CIRCUITS INDICATED BY CIRCUIT NUMBERS. PROVIDE AND INSTALL ALL CONDUITS, CONDUCTORS, BOXES, MISCELLANEOUS FITTINGS, ETC. FOR A COMPLETE AND OPERABLE SYSTEM (HOMERUN SHOWN). BRANCH CIRCUIT INSTALLATION SHALL COMPLY WITH SPECIFICATIONS AND N.E.C.
6.	ALL NEUTRAL CONDUCTORS ON POWER BRANCH CIRCUITING ROUNDHOUSES TO BE #10 AWG UNLESS NOTED OTHERWISE.

ABBREVIATIONS		NOTES
A, AMP	AMPERE	
AIC	AMPERE INTERRUPTING CAPACITY	
AF	FRAME RATING IN AMPERES	
AS	SWITCH RATING IN AMPERES	
AT	TRIP RATING IN AMPERES	
AWG	AMERICAN WIRE GAUGE	
C	CONDUIT	
CKT	CIRCUIT	
(E)	EXISTING TO REMAIN	
EC	EMPTY CONDUIT	
ELEC	ELECTRICAL	
EMT	ELECTRO METALLIC TUBING	
FA	FIRE ALARM	
G, GND	GROUND	
HP	HORSEPOWER	
MECH	MECHANICAL	
MCB	MAIN CIRCUIT BREAKER	
(N)	NEW EQUIPMENT OR DEVICE	
NEC	NATIONAL ELECTRIC CODE	
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION	
NO	NORMALLY OPEN	
NTS	NOT TO SCALE	
Ø, PH	PHASE	
PNL	PANEL	
PVC	POLYVINYL CHLORIDE CONDUIT	
PWR	POWER	
RSC	RIGID STEEL CONDUIT	
(R)	RELOCATED EQUIPMENT	
TEL	TELEPHONE	
TYP	TYPICAL	
UON	UNLESS OTHERWISE NOTED	
V	VOLT	
VA	VOLT AMPERES	
W	WATT	
(X)	EXISTING TO BE DEMOLISHED	



- DIAGRAM NOTES**
- ALL WORK SHOWN IS NEW UNLESS OTHERWISE NOTED.
 - BRING ANY DISCOVERED CODE VIOLATIONS TO THE OWNER'S ATTENTION.
 - ALL WIRING SHOWN IS SIZED FOR COPPER CONDUCTORS, UON.
- RISER NOTES**
- SEE DETAIL #4 ON THIS SHEET FOR GROUNDING DETAILS OF NEW COASTER EQUIPMENT.
 - POWER SUPPLY DISTRIBUTION BOARD #2 TO BE SUPPLIED BY COASTER VENDOR. VERIFY MAIN FUSE PROTECTION ON SITE MATCHES WHAT IS SHOWN ON DRAWINGS. NOTIFY DESIGN TEAM IF THERE IS A DIFFERENCE.
 - BOND NEUTRAL TO GROUND BUS AND THEN TO A GROUND BAR. PROVIDE GROUND ROD AT 3/4" X 8' (COPPER CLAD STEEL).
 - FEEDER UP-SIZED FOR VOLTAGE DROP.
 - DO NOT BOND NEUTRAL TO GROUND BAR AT SERVICE ENTRANCE TO UPPER TERMINAL BUILDING.

3 SINGLE LINE DIAGRAM - MID-STATION OF CHRISTIE EXPRESS



- DIAGRAM NOTES**
- ALL WORK SHOWN IS NEW UNLESS OTHERWISE NOTED.
 - BRING ANY DISCOVERED CODE VIOLATIONS TO THE OWNER'S ATTENTION.
 - ALL WIRING SHOWN IS SIZED FOR COPPER CONDUCTORS, UON.
- RISER NOTES**
- SEE DETAIL #2 ON THIS SHEET FOR GROUNDING DETAILS OF NEW COASTER EQUIPMENT.
 - POWER SUPPLY DISTRIBUTION BOARD #1 TO BE SUPPLIED BY COASTER VENDOR. VERIFY MAIN FUSE PROTECTION ON SITE MATCHES WHAT IS SHOWN ON DRAWINGS. NOTIFY DESIGN TEAM IF THERE IS A DIFFERENCE.
 - DO NOT BOND NEUTRAL TO GROUND BAR AT SERVICE ENTRANCE TO LOWER TERMINAL BUILDING.

1 SINGLE LINE DIAGRAM - BASE OF CHRISTIE EXPRESS

SYMBOLS	WIRING DEVICE SYMBOLS
	20A, 125V, DUPLEX RECEPTACLE OUTLET +18" UNLESS NOTED OTHERWISE
	SURFACE 20A, 125V, DUPLEX RECEPTACLE OUTLET +18" UNLESS NOTED OTHERWISE
	20A, 125V, DOUBLE DUPLEX RECEPTACLE OUTLET +18" UNLESS NOTED OTHERWISE
	SURFACE 20A, 125V, DOUBLE DUPLEX RECEPTACLE OUTLET +18" UNLESS NOTED OTHERWISE, NEMA CONFIGURATION AS NOTED ON PLANS
	SPECIAL PURPOSE RECEPTACLE OUTLET, +18" UNLESS NOTED OTHERWISE, NEMA CONFIGURATION AS NOTED ON PLANS
	SURFACE SPECIAL PURPOSE RECEPTACLE OUTLET, +18" UNLESS NOTED OTHERWISE, NEMA CONFIGURATION AS NOTED ON PLANS
	20A, 125V, DEDICATED DUPLEX RECEPTACLE OUTLET +18" UON
	DUPLEX OUTLET WITH GROUND FAULT INTERRUPTER
	CEILING MOUNTED 20A, 125V, DUPLEX RECEPTACLE OUTLET
	CEILING MOUNTED 20A, 125V, DOUBLE DUPLEX RECEPTACLE OUTLET
	SPST WALL SWITCH, LETTERS INDICATE THE NUMBER OF SWITCHES AND OUTLETS THEY CONTROL
	DIMMER SWITCH
	OCCUPANCY LIGHT CONTROL SWITCH; WALL MOUNTED

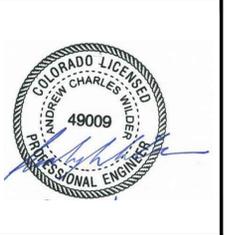
SYMBOLS	TELECOMMUNICATION
	COMBINATION (1) PORT TELEPHONE AND (1) PORT DATA OUTLET, +18" UNLESS NOTED OTHERWISE.

SYMBOLS	DESIGNATION SYMBOLS	NOTES
	FIXTURE DESIGNATION UPPER CASE LETTER INDICATES FIXTURE TYPE. LOWER CASE LETTER INDICATES SWITCH LEG NUMBER INDICATES CIRCUIT NUMBER (WHERE SHOWN).	
	LETTER INDICATES FIXTURES CONTROL (WHERE SHOWN)	
	NUMBER INDICATES CIRCUIT NUMBER (WHERE SHOWN)	

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-	PERMIT SET - 8.29.16	AW

Scale:
24x36 NTS
Description: LEGEND, SINGLE LINE DIAGS
Project Name: ALPINE COASTER
Project Number: 201658
Sheet No.
E1.0

TYPE	SYMBOL	DESCRIPTION	MANUFACTURER	ALTERNATE MANUFACTURER
F1	□	SURFACE LED FIXTURE	LITHONIA ZL1F-348-3000LM-MDD-MVOLT-35K-80CRI-WH	APPROVED EQUAL
F2	○	LED FLOODLIGHT	LITHONIA DSXF2-LED-4-A530/30K-MVOLT-THK-DMG-UBV-DOBXD	APPROVED EQUAL
F3	□	INDUSTRIAL LED STRIPLIGHT	LITHONIA XWLED	APPROVED EQUAL
F4	○	LED FLOODLIGHT	LITHONIA OLBF-8-305-DOB	APPROVED EQUAL
X1	⊕	EXIT SIGN WITH BATTERY BACKUP EGRESS LIGHTING	LITHONIA - COMBO EXIT SIGN LHQM-S-W-X-G-N	APPROVED EQUAL

SCHEDULE NOTES

- ALL LAMPS SHALL BE PROVIDED BY THE CONTRACTOR.
- CONTRACTOR TO SUBMIT FIXTURE TYPES TO OWNER AND ENGINEER PRIOR TO PURCHASE AND INSTALLATION.

3 LIGHTING FIXTURE SCHEDULE
NTS

MOUNTING SURFACE		PANEL LP-T												10,000 A.I.C. SYM			
208/120	VOLTS	3 PHASE	4 WIRE				MAIN				100 A				BUS 100 A		
VOLT AMPS			DESCRIPTION	R E C	L T C	O B G	C I R	C I R	B O R	O L T	R E G	DESCRIPTION	VOLT AMPS				
OA	OB	OC											OA	OB	OC		
348	720		LIGHTING									EUH-1	1000				
		1000	OPERATOR ROOM	4	1	20	3	B	4	-	-	-		1000			
			APPLIANCE		1	20	5	C	6	20	1	SPARE					
1000			RECEPTS	3	1	20	7	A	8	20	1	SPARE					
	540		RECEPTS	2	1	20	9	B	10	20	1	SPARE					
		360	RECEPTS	2	1	20	11	C	12			SPACE					
			SPARE	1	20	13	A	14				SPACE					
			SPARE	1	20	15	B	16				SPACE					
			SPARE	1	20	17	C	18				SPACE					
			SPARE	1	20	19	A	20				SPACE					
			SPACE				21	B	22			SPACE					
			SPACE				23	C	24			SPACE					
			SPACE				25	A	26			SPACE					
			SPACE				27	B	28			SPACE					
			SPACE				29	C	30			SPACE					
			SPACE				31	A	32			SPACE					
			SPACE				33	B	34			SPACE					
			SPACE				35	C	36			SPACE					
			SPACE				37	A	38			SPACE					
			SPACE				39	B	40			SPACE					
			SPACE				41	C	42			SPACE					
1708	1260	1360	VA LINE									1000	1000				
OA =	2708		OB = 2260									OC =	1360				
CONTINUOUS LOADS			NON-CONTINUOUS LOADS														
UP TO 10 kVA 1980			xl.00= 1980														
348	xl.25=	435	RECEPTACLES	REMAINDER								OTHER	4000	xl.00	4000		
TOTAL DESIGN KVA = 6			TOTAL DESIGN AMPS = 18														

1 PANEL SCHEDULES - TOP
NTS

MOUNTING SURFACE		PANEL LP-B												10,000 A.I.C. SYM			
208/120	VOLTS	3 PHASE	4 WIRE				MAIN				100 A				BUS 100 A		
VOLT AMPS			DESCRIPTION	R E C	L T C	O B G	C I R	C I R	B O R	O L T	R E G	DESCRIPTION	VOLT AMPS				
OA	OB	OC											OA	OB	OC		
540			LOFT RECEPTS	3	1	20	1	A	2	15	3	MINI GOLF PUMP	830				
	720		OPERATOR ROOM	4	1	20	3	B	4	-	-	-	830				
		833	LIGHTING		1	20	5	C	6	-	-	-	830				
1000			OPERATOR APP		1	30	7	A	8	20	3	MINI GOLF PUMP	1320				
	1000		OPERATOR APP		1	20	9	B	10	-	-	-	1320				
		720	RECEPTS	4	1	20	11	C	12	-	-	-	1320				
540			RECEPTS	3	1	20	13	A	14	15	1	BOILERS	540				
	1000		WORKBENCH		1	20	15	B	16	15	1	PUMP-1	528				
			WORKBENCH		1	20	17	C	18	15	1	PUMP-2	528				
1000			WORKBENCH		1	20	19	A	20	15	1	PUMP-3	528				
		540	RECEPTS	3	1	20	21	B	22	20	1	PUMP-4	1176				
		1000	FUTURE SITE LTG		1	20	23	C	24	20	1	PUMP-5	1176				
			SPARE		1	20	25	A	26	20	1	PUMP-6	1176				
			SPARE		1	20	27	B	28	20	1	PUMP-7	1176				
			SPARE		1	20	29	C	30	20	1	SPACE					
			SPACE				31	A	32	20	1	SPACE					
			SPACE				33	B	34	20	1	SPACE					
			SPACE				35	C	36			SPACE					
			SPACE				37	A	38			SPACE					
			SPACE				39	B	40			SPACE					
			SPACE				41	C	42			SPACE					
3080	3260	3553	VA LINE									4384	5030	3854			
OA =	7474		OB = 8290									OC =	7407				
CONTINUOUS LOADS			NON-CONTINUOUS LOADS														
UP TO 10 kVA 3060			xl.00= 3060														
1833	xl.25=	2291	RECEPTACLES	REMAINDER								OTHER	18278	xl.00	18278		
TOTAL DESIGN KVA = 24			TOTAL DESIGN AMPS = 66														

2 PANEL SCHEDULES - BASE
NTS

MAIN SERVICE LOAD SUMMARY - UPPER BUILDING					
Load	kVA				A
	Cont	Rec	Other	Total	
PANEL LP-T	.3	2.0	4.0	6.4	8
PANEL POWER SUPPLY 2			46.0	60.8	73
SubTotal	.3	2.0	50.0	52.4	kVA
25% of Largest Motor				14.8	kVA
Total				67.2	kVA
				80.8	Amps at 480 V
25% Growth/Spare				101.0	Amps at 480 V

(E) MAIN SERVICE LOAD SUMMARY - CHRISTIE EXPRESS					
Load	kVA				A
	Cont	Rec	Other	Total	
PANEL LP-B	1.8	3.1	18.3	23.6	28
PANEL POWER SUPPLY 1			9.0	9.8	12
(E) CARPET			16.6	16.6	20
(E) 75 KVA TRANSFORMER			50.0	50.0	60
(E) LIFT TERMINAL			20.8	20.8	25
(E) SCHOOL HOUSE FEED			50.0	50.0	60
(E) SNOW PEDESTAL			100.0	100.0	120
(E) SNOW PEDESTAL			100.0	100.0	120
SubTotal	1.8	3.1	364.7	370.0	kVA
25% of Largest Motor				0.8	kVA
Total				370.8	kVA
				446.1	Amps at 480 V

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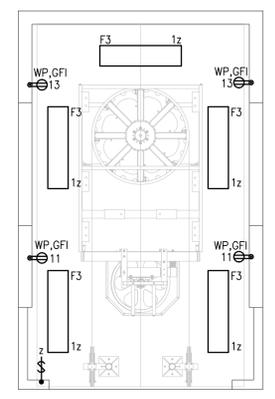


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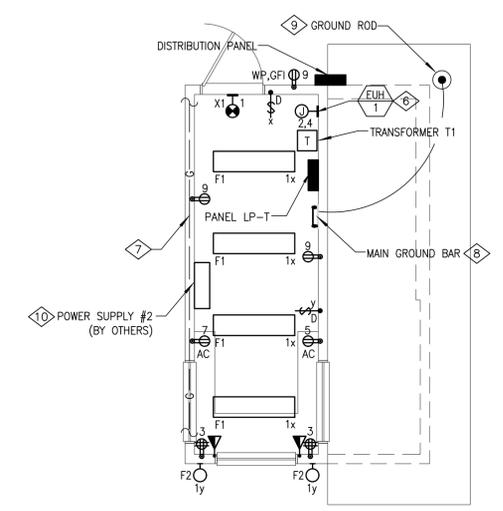
Scale:
24x36 NTS
Description: PANEL SCHEDULES
Project Name: ALPINE COASTER
Project Number: 201658
Sheet No.
E1.1

- BUILDINGS SHEET NOTES**
- 1 PROVIDE LABELS AT SWITCHES FOR LIGHTING AREAS CONTROLLED.
 - 2 STUB OUT POWER FOR FUTURE PATHWAY LIGHTING. VERIFY AND COORDINATE WITH SSRC DURING CONSTRUCTION.
 - 3 STUB OUT POWER FOR MINI-GOLF WATER PUMPS. VERIFY AND COORDINATE WITH SSRC DURING CONSTRUCTION.
 - 4 PUMPS SHOWN IN THIS LOCATION FOR CIRCUITING REQUIREMENTS. SEE NOTE 5 ON FLOOR PLAN FOR LOCATION OF PUMPS.
 - 5 LOCATION OF PUMPS, SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.
 - 6 PROVIDE MECHANICAL UNIT WITH 1/2" C - 2#10 AWG & #10 GND.
 - 7 PROVIDE AT LEAST 20 FEET OF BARE COPPER EMBEDDED IN CONCRETE. ELECTRODE TO BE COVERED WITH A MINIMUM OF 2" OF CONCRETE. CONNECT ONE END TO MAIN GROUND BUS BAR.
 - 8 GROUND BAR, REFER TO SHEET E1.0 FOR MORE DETAIL.
 - 9 PROVIDE A 3/4" DIAMETER X 10' LONG COPPER CLAD STEEL GROUND ROD.
 - 10 VERIFY FINAL LOCATION OF COASTER EQUIPMENT WITH MANUFACTURER IN THE FIELD.

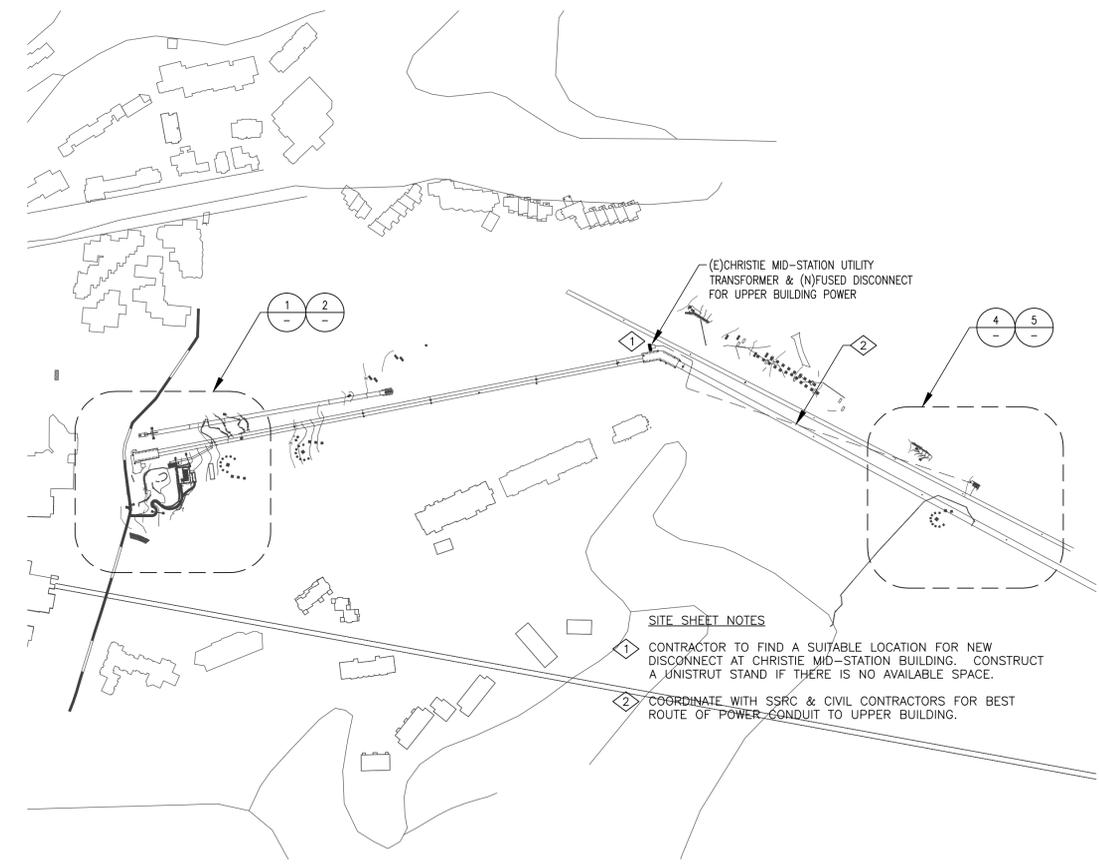
- BUILDINGS GENERAL NOTES**
1. ALL WORK SHOWN IS NEW UNLESS OTHERWISE NOTED.
 2. ALL EQUIPMENT SHOWN IN THE LOWER BUILDING IS CONNECTED TO PANEL 'LP-B', UON.
 3. ALL EQUIPMENT SHOWN IN THE UPPER BUILDING IS CONNECTED TO PANEL 'LP-T', UON.
 4. PROVIDE TYPEWRITTEN DIRECTORIES REFLECTING ALL NEW WORK PERFORMED IN THIS PROJECT.
 5. ALL WIRE SHALL BE #12 AWG MIN., 90 DEG. °C IN 1/2" C - 2#12 AWG & #12 GND, UNLESS OTHERWISE NOTED.
 6. VERIFY LOCATIONS OF ALL ELECTRICAL EQUIPMENT WITH ARCHITECTURAL DRAWINGS AND EXISTING CONDITIONS IN THE FIELD.
 7. BRING ANY DISCOVERED CODE VIOLATIONS TO THE OWNER'S ATTENTION.
 8. CONFIRM LOCATIONS OF ALL LIGHT SWITCHES WITH THE ARCHITECT AND TENANT PRIOR TO INSTALLATION.
 9. FIRE ALARM CONTRACTOR SHALL VERIFY AND COORDINATE ALL NEW EXISTING DEVICES.



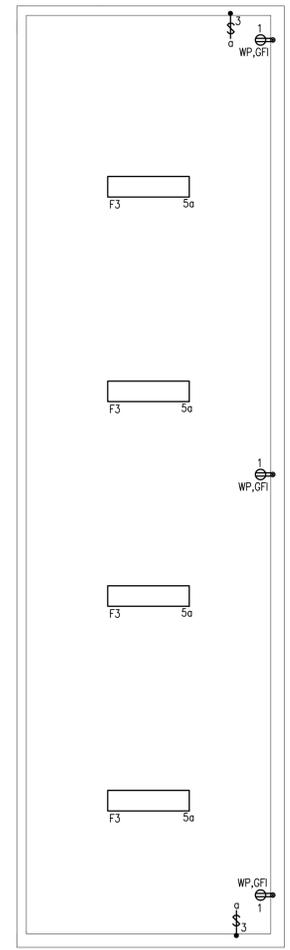
5 UPPER BUILDING MACHINE LEVEL PLAN
1/4"=1'-0"



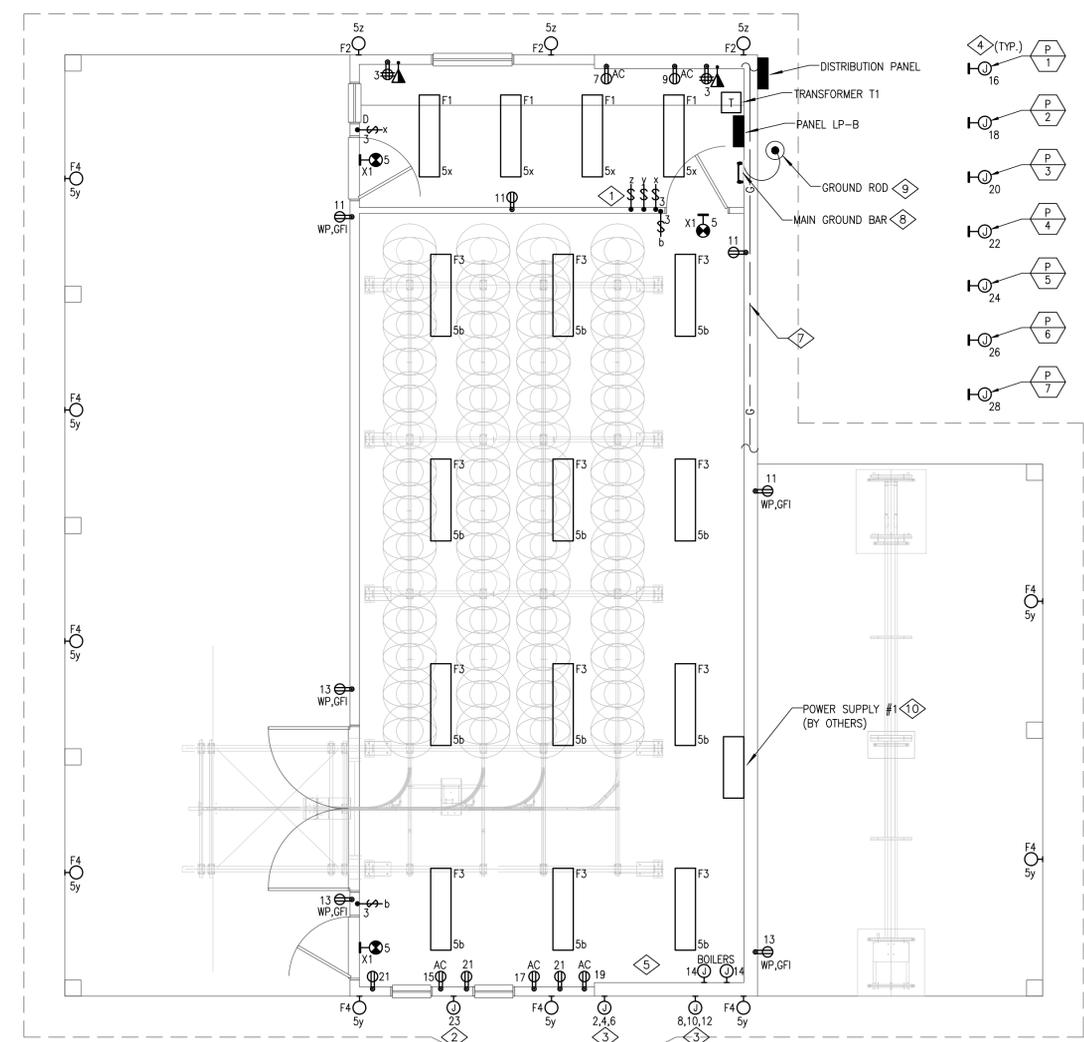
4 UPPER BUILDING MAIN LEVEL PLAN
1/4"=1'-0"



3 SITE PLAN
1"=240'-0"



2 LOWER BUILDING LOFT LEVEL PLAN
1/4"=1'-0"



1 LOWER BUILDING MAIN LEVEL PLAN
1/4"=1'-0"

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Scale:
24x36 SEE DWG
Description: ELECTRICAL FLOOR PLANS
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Project Number: 201658

Sheet No.
E2.0

