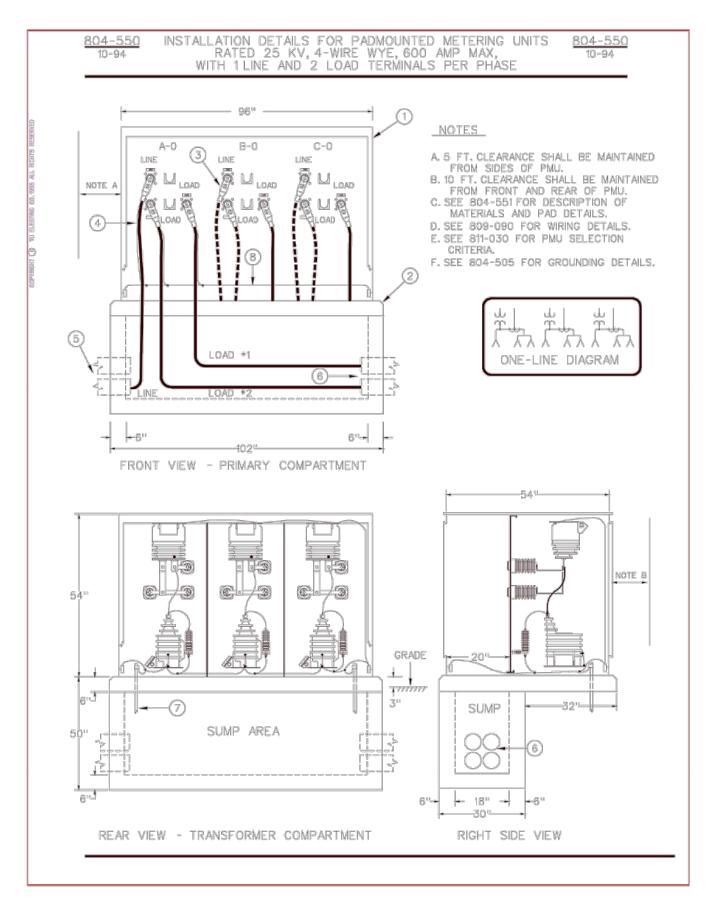
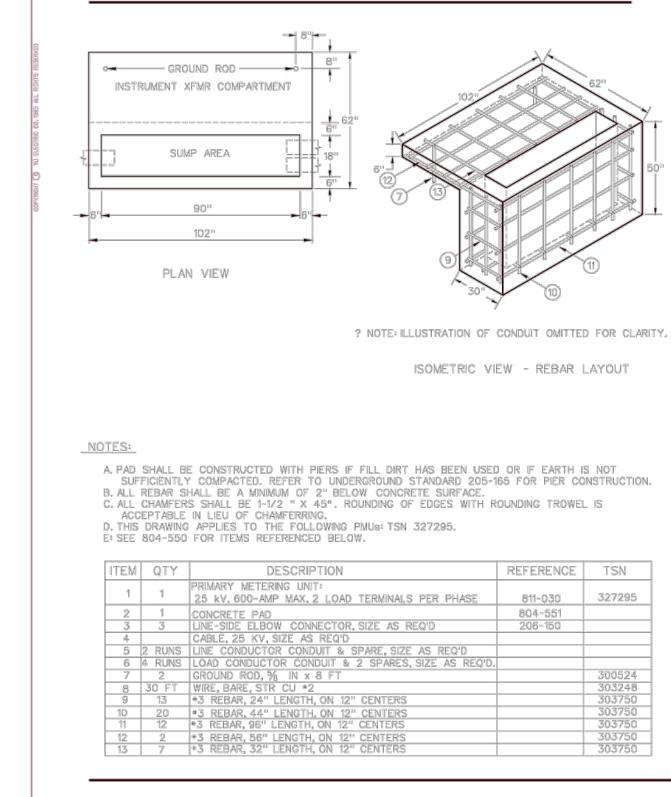


FOR REVIEW ONLY **Kimley Morn** P.E. No. 132280 Date 03/07/2023

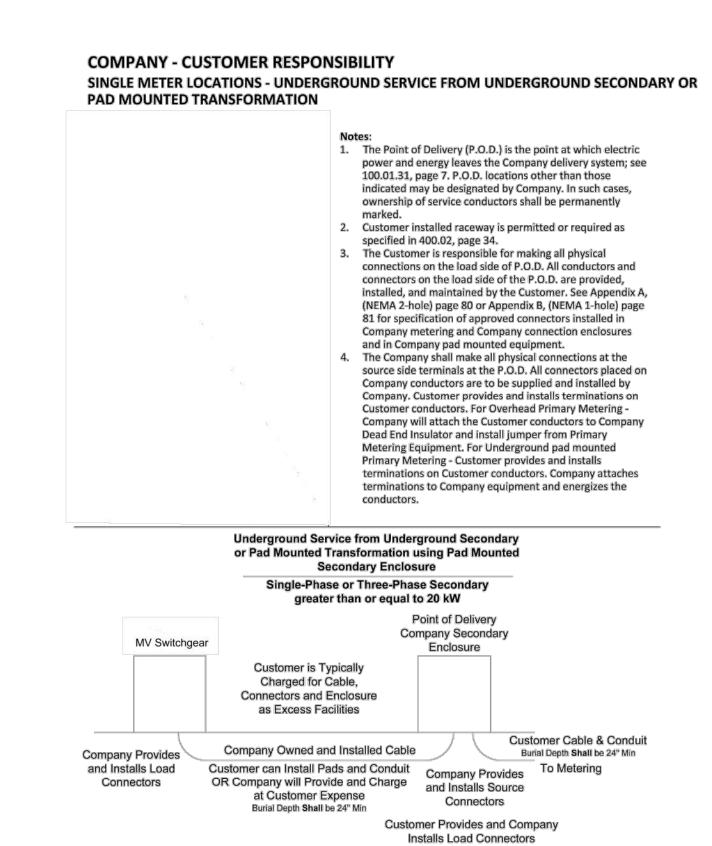
CONSTRUCTION DETAIL





PAD AND CONDUIT DETAILS FOR PMUS RATED 25 KV, 4-WIRE WYE, 600 AMP MAX, WITH 1 LINE AND 2 LOAD TERMINALS PER PHASE

804-551 10-94



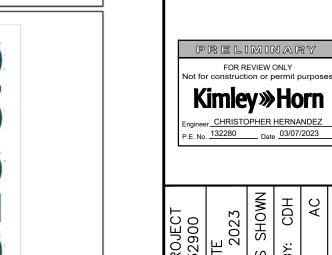
Copyright 2021 Oncor Electric Delivery Company. All rights reserved.





This document has been electronically signed and sealed by Eduardo-Reyes Hidalgo, PE on the date and time shown on the signature using a SHA authentication code. Printed copies of this document are not considered signed and sealed, and the SHA authentication code must be verified on any electronic copies.

PERMITTING





2	
SYSTEM SIZE:	10MW/10MWhr
UTILITY VOLTAGE:	24.9 kV
BUILDING NAME: PARK 121 BLDG 4	
PROJECT SITE:	

360 N FREEPORT PKWY

COPPELL, TX 75019-3801

REVIEWED BY: RAVENVOLT ASSISTED BY: DRAWN BY: PROJECT MANAGER: DYLAN JACKSON ELECTRIC UTILITY: ONCOR AHJ: CITY OF COPPELL

	REVISION HISTORY	
REV	REVISION DESCRIPTION	DAT
0	PERMITTING	12/22/20
<u> </u>		+
\vdash		_
<u> </u>		
SHE	ET TITLE UTILITY SCOPE	

INTERCONNECT DESIGN E8

RAVENVOL THIS DRAWING IS 24" X 36" AT FULL SIZE SITE ID: DAL 05406

> SHEET NUMBER C-07

DETAIL

ONSTRUCTION

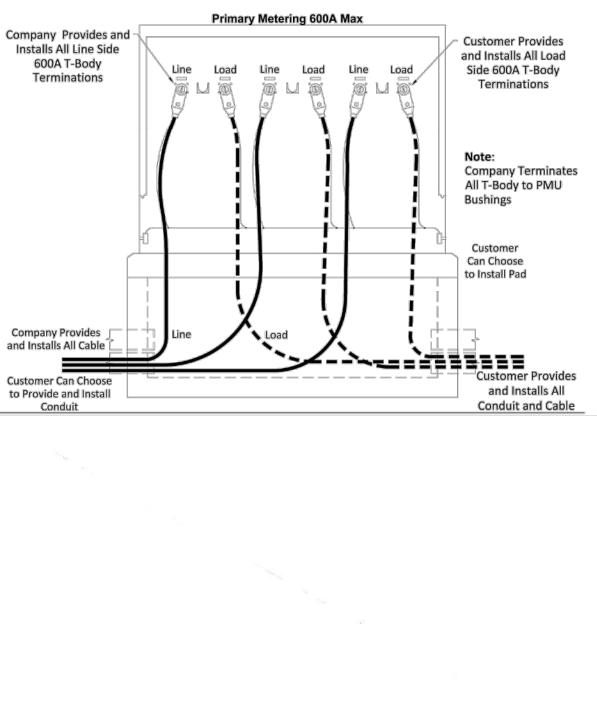
 \ddot{O}

Primary Metering 600A Max Company Provides and Customer Provides Installs All Line Side and Installs All Load 600A T-Body Side 600A T-Body Terminations Terminations Company Terminates All T-Body to PMU Bushings Can Choose to Install Pad Company Provides and Installs All Cable Customer Can Choose and Installs All to Provide and Install Conduit and Cable Conduit

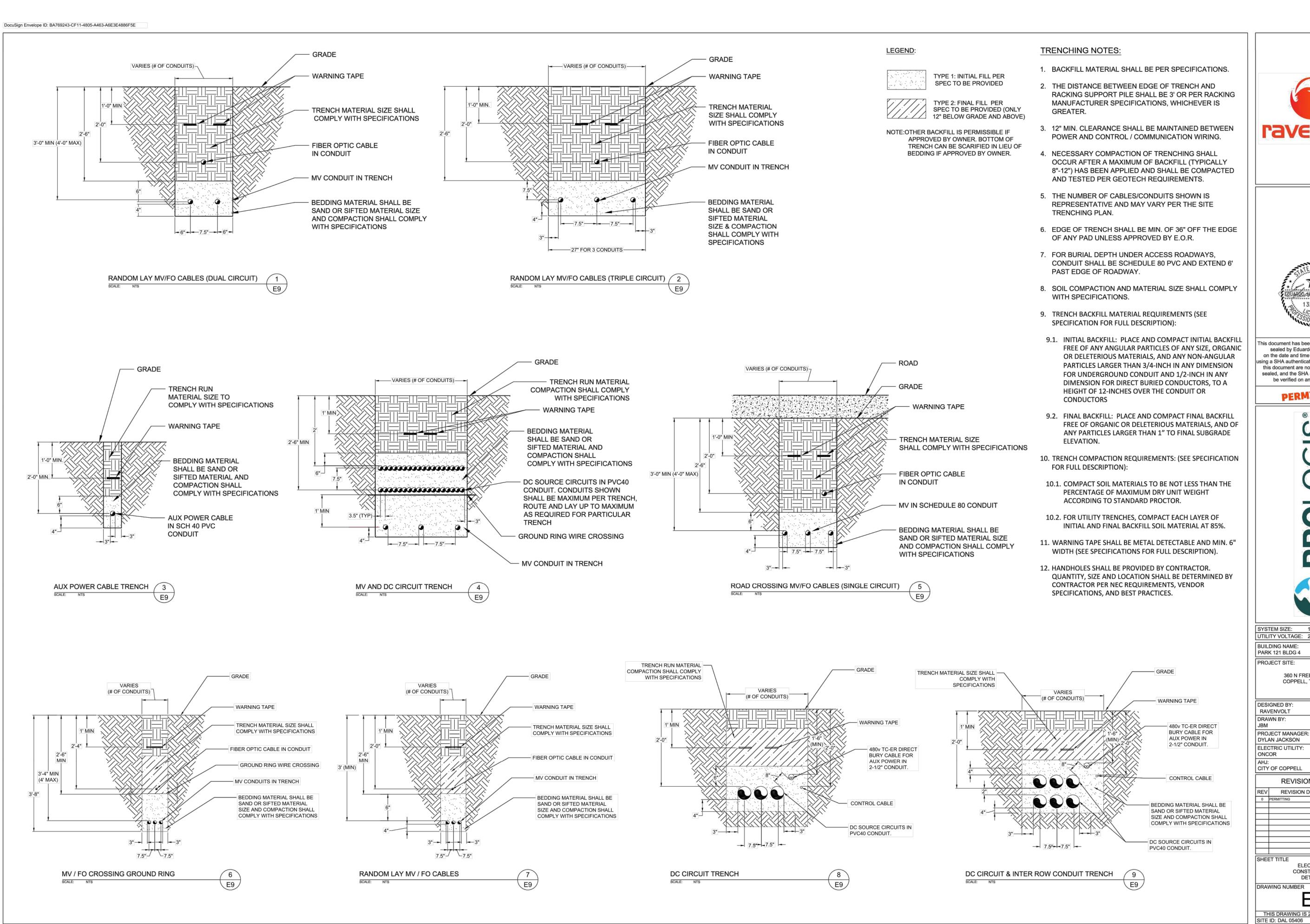
SINGLE METER LOCATIONS - OVERHEAD AND UNDERGROUND PRIMARY VOLTAGE SERVICE

COMPANY - CUSTOMER RESPONSIBILITY

Copyright 2021 Oncor Electric Delivery Company. All rights reserved.



Page 51







his document has been electronically signed and sealed by Eduardo-Reyes Hidalgo, PE on the date and time shown on the signature using a SHA authentication code. Printed copies of this document are not considered signed and sealed, and the SHA authentication code must be verified on any electronic copies.

PERMITTING



PRELIMINARY

FOR REVIEW ONLY

Kimley%Horn

P.E. No. <u>132280</u> Date <u>03/07/2023</u>

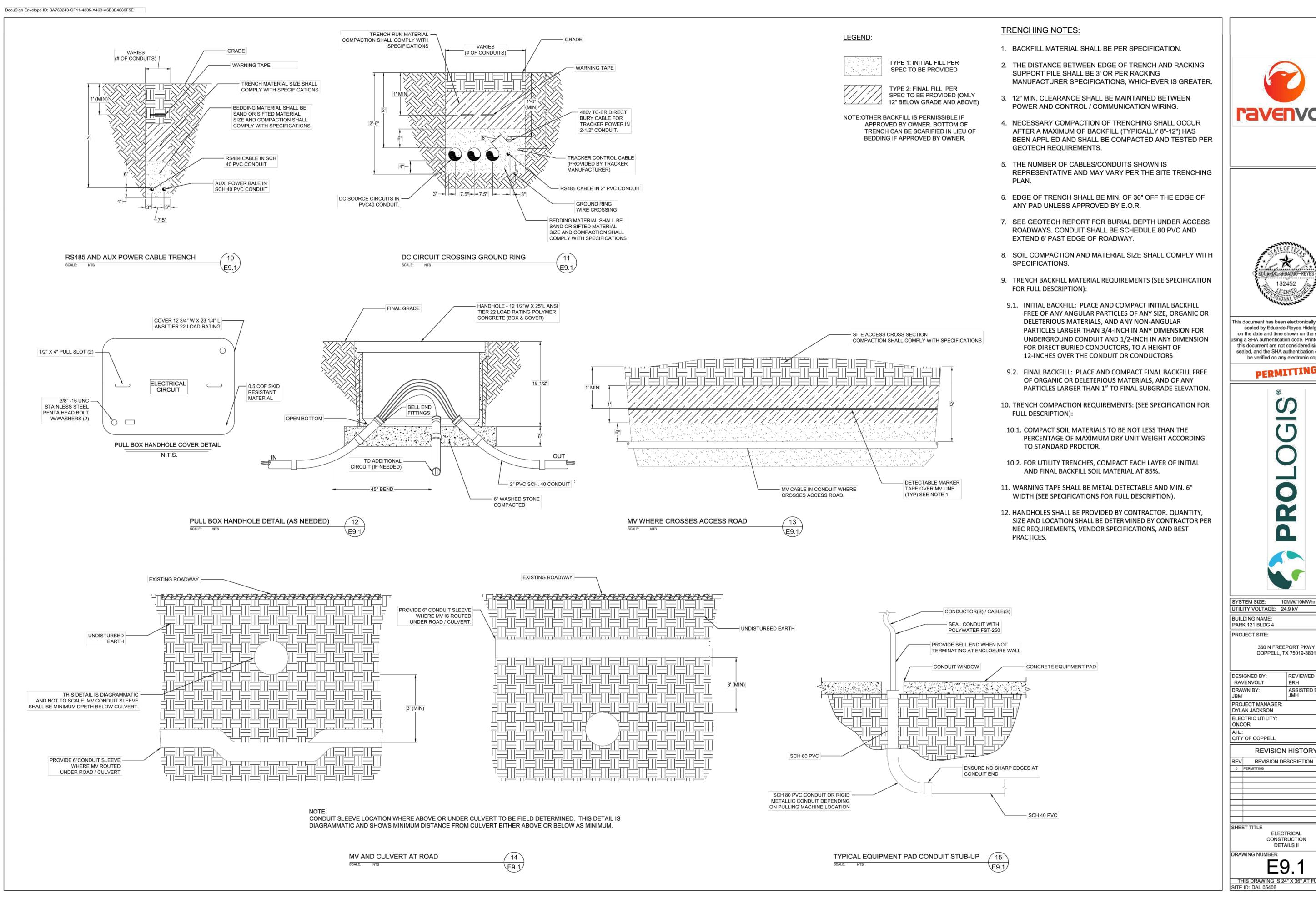
ONSTRUCTION

SYSTEM SIZE: 10MW/10MWhr UTILITY VOLTAGE: 24.9 kV BUILDING NAME: PARK 121 BLDG 4 PROJECT SITE: 360 N FREEPORT PKWY COPPELL, TX 75019-3801 REVIEWED BY: RAVENVOLT ASSISTED BY: DRAWN BY:

ONC	OR			
AHJ: CITY OF COPPELL				
	REVISION HISTORY			
REV	REVISION DESCRIPTION	DA		
0	PERMITTING	12/22/		
		_		
		+		
		+		
		+		
		+		
SHE	ET TITLE ELECTRICAL CONSTRUCTION			

DETAILS I DRAWING NUMBER

THIS DRAWING IS 24" X 36" AT FULL SIZE SITE ID: DAL 05406

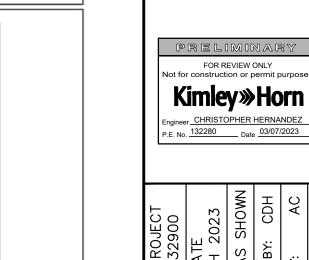






This document has been electronically signed and sealed by Eduardo-Reyes Hidalgo, PE on the date and time shown on the signature using a SHA authentication code. Printed copies of this document are not considered signed and sealed, and the SHA authentication code must be verified on any electronic copies.

PERMITTING



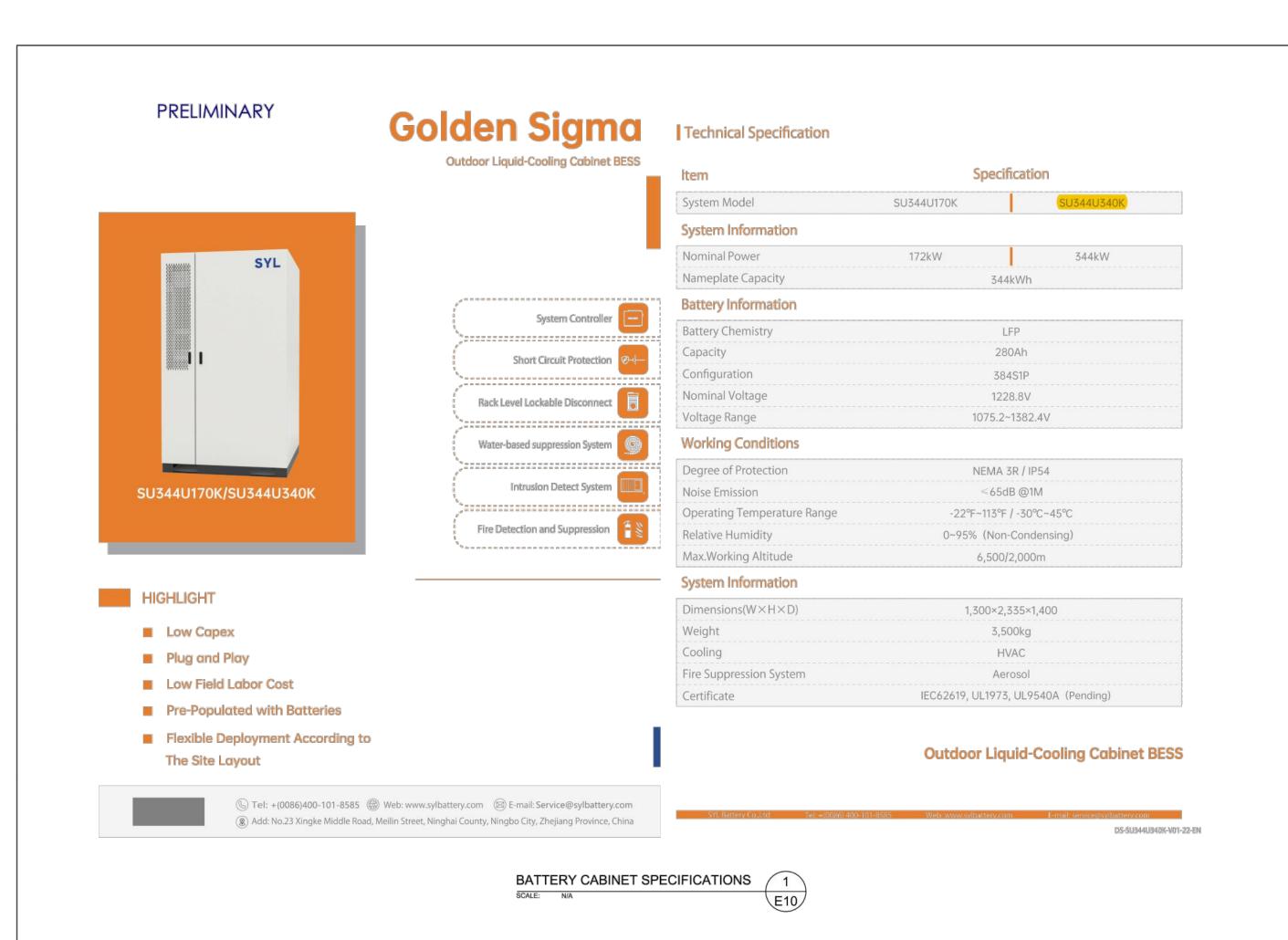
≪

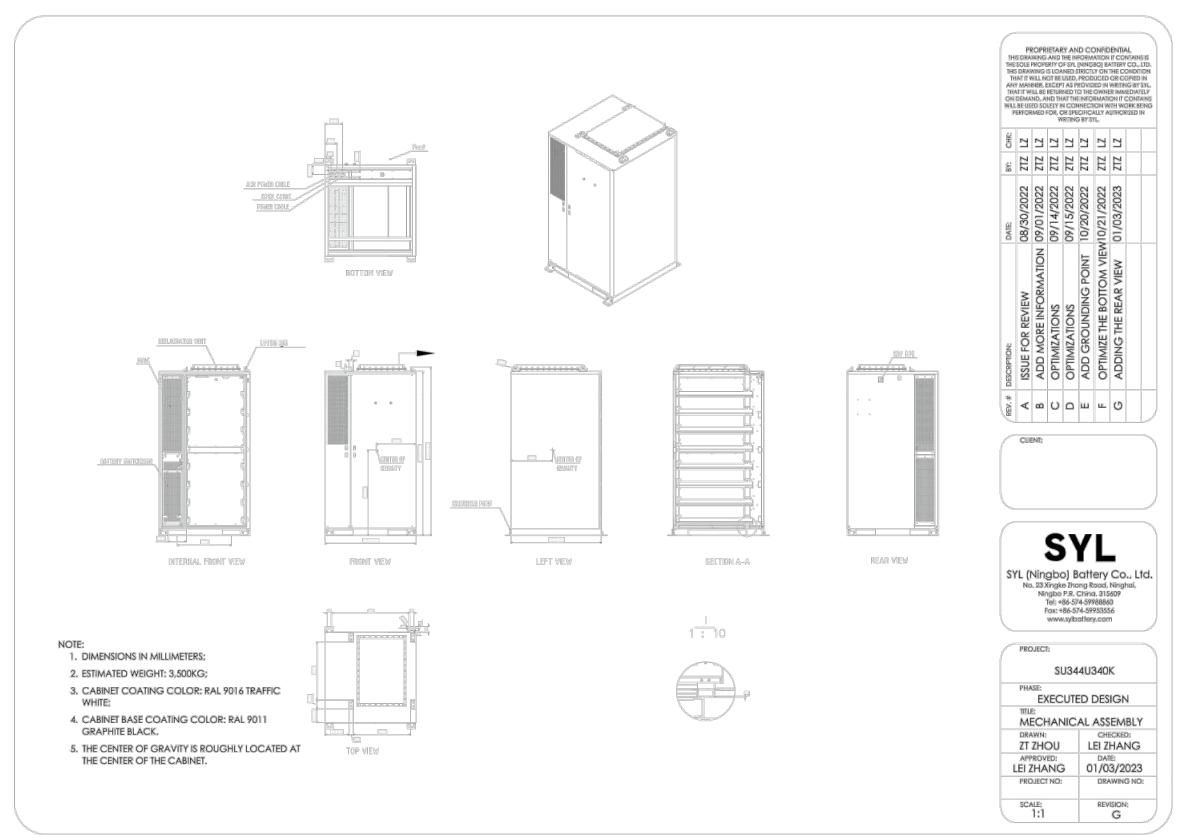


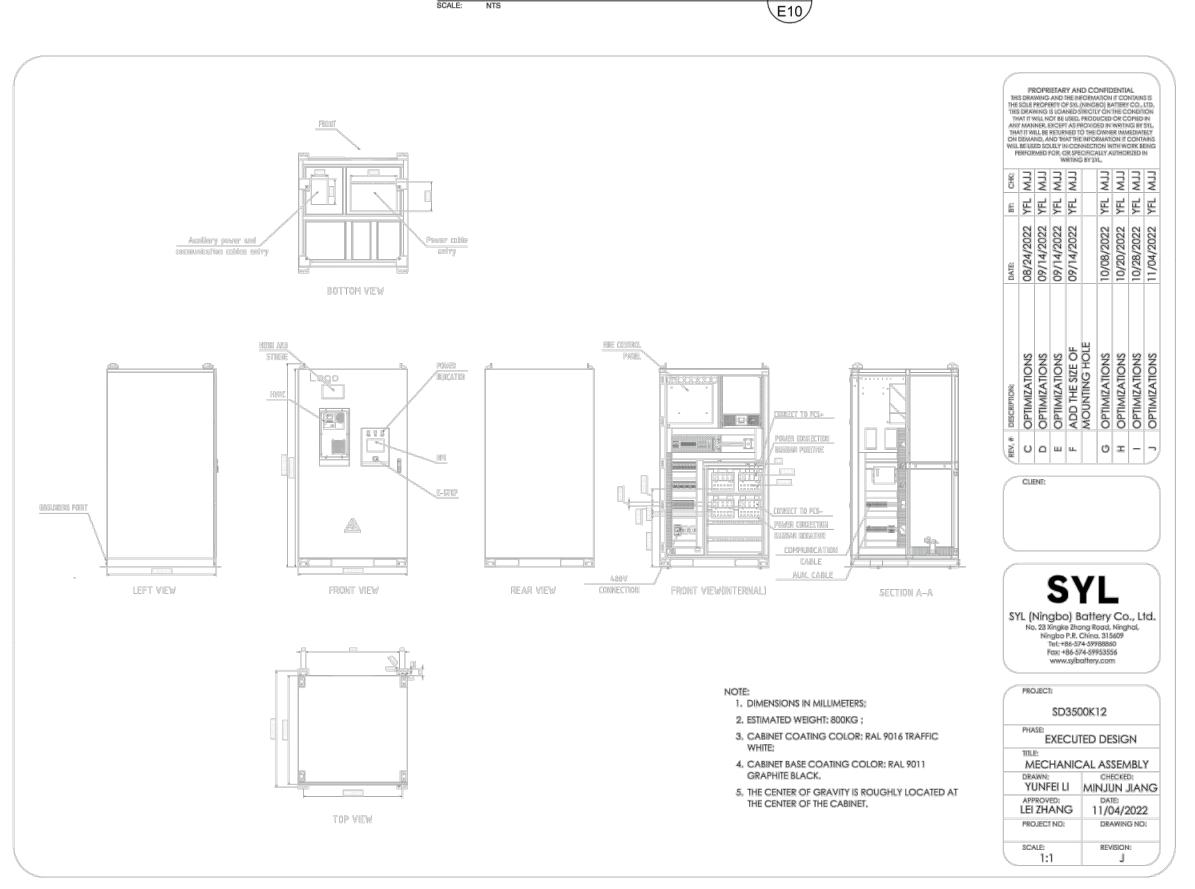
BUILDING NAME: PARK 121 BLDG 4	
PROJECT SITE:	
360 N FREE COPPELL, T	PORT PKWY X 75019-3801
DESIGNED BY: RAVENVOLT	REVIEWED BY: ERH
DRAWN BY: JBM	ASSISTED BY: JMH
PROJECT MANAGER: DYLAN JACKSON	
ELECTRIC UTILITY: ONCOR	

CITY	OF COPPELL	
	REVISION HISTORY	
REV	REVISION DESCRIPTION	DA
0	PERMITTING	12/22
		+
		+
		_
		+
		1
SHEE	ET TITLE	
	ELECTRICAL CONSTRUCTION DETAILS II	

THIS DRAWING IS 24" X 36" AT FULL SIZE SITE ID: DAL 05406



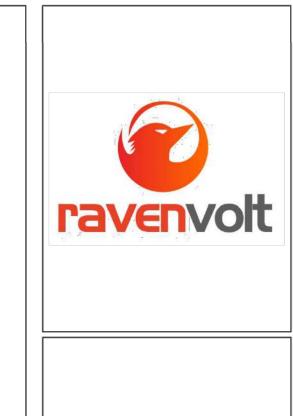




BCP (BATTERY CONTROL PANEL) MECHANICAL DESIGN 3

E10

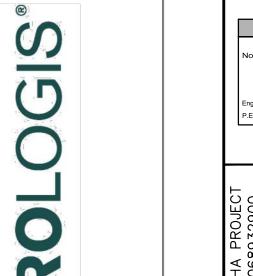
BATTERY CABINET MECHANICAL DESIGN





This document has been electronically signed and sealed by Eduardo-Reyes Hidalgo, PE on the date and time shown on the signature using a SHA authentication code. Printed copies of this document are not considered signed and sealed, and the SHA authentication code must be verified on any electronic copies.

PRELIMINARY





SYSTEM SIZE: 10MW/10MWhr UTILITY VOLTAGE: 24.9 kV BUILDING NAME: PARK 121 BLDG 4 PROJECT SITE:

360 N FREEPORT PKWY COPPELL, TX 75019-3801 REVIEWED BY:

RAVENVOLT ASSISTED BY: DRAWN BY: PROJECT MANAGER: DYLAN JACKSON ELECTRIC UTILITY: ONCOR AHJ: CITY OF COPPELL

REVISION HISTORY
 REV
 REVISION DESCRIPTION
 DATE

 0
 PERMITTING
 12/22/2022
 SHEET TITLE EQUIPMENT

SPECIFICATIONS I E10 THIS DRAWING IS 24" X 36" AT FULL SIZE SITE ID: DAL 05406 PRELIMINARY FOR REVIEW ONLY
Not for construction or permit purpo **Kimley»Horn** Engineer <u>CHRISTOPHER HERNANDEZ</u>
P.E. No. <u>132280</u> Date <u>03/07/2023</u>

DETAIL ONSTRUCTION

Ö ENVOL.

RAV



Modular design, easy for maintenance

to applications close to the sea

Rule 21 and HECO 14H

installation

GRID SUPPORT

High protection degree, easy for outdoor

Optional C5 anti-corrosion degree, adjust

· Compliant with UL1741, IEEE1547, UL1741 SA,

L/HVRT, FRT, soft start/stop, specified power

factor control and reactive power support

Fast active/reactive power response

M HIGH YIELD

 Advanced three-level technology, max. efficiency 99% Effective forced air cooling, no derating up to 45 °C (113 °F)
 Wide DC voltage operation window, full power operation at 1500 V

FLEXIBLE APPLICATION Bidfrectional power conversion system with full

black start function integrated

four-quadrant operation Compatible with high voltage battery system, low system cost Battery charge & dis-charge management and

CIRCUIT DIAGRAM

© 2021 Sungrow Power Supply Co., Ltd. All rights reserved. Subject to change without notice. Version 142

Max. DC voltage Min. DC voltage DC voltage range Max. DC current No. of DC inputs AC Side (Grid) AC output power
Converter port max. AC output current
Converter port nominal AC voltage
Converter port AC voltage range 2750 kVA @ 45 °C (113 °F) 3150 kVA @ 45 °C (113 ° Nominal grid frequency / Grid frequency range
Harmonic (THD)
Power factor at nominal power / Adjustable power factor 60Hz / 55~65Hz Adjustable reactive power range Feed-in phases / AC connection -100% ~ 100% 3 / 3 AC Side (Off-Grid) Converter port nominal AC voltage Converter port AC voltage range 60 Hz / 55 – 65 Hz Efficiency Inverter Max. efficiency Transformer LV / MV voltage Transformer vector ONAN (optional: KNAN)
Mineral oil(PCB free) or degradable oil on request Transformer cooling type Protection DC input protection
Converter output protectio Load break switch + fuse Circuit breaker AC output protection
Surge protection
Grid monitoring / Ground fault me
Insulation monitoring
Overheat protection Load break switch + fuse DC Type II / AC Type II

SUNGROW Clean power for all

60000

Grid support

General Data

Degree of protection

Max. operating altitude

Operating ambient temperature range Allowable relative humidity range Cooling method

8/2021 Sungrow Power Supply Co., Ltd. All rights reserved. Subject to change without notice. Version 1/4.2

6058*2896*2438mm 238.5''*114.0''*96.0'' 16000kg 35274 lbs TYPE 3R

-35 ~ 60°C (> 45°C derating) -31 ~ 140°F (> 113°F derating) 0 ~ 100%

Temperature controlled forced air cooling

1000m (standard) / > 1000m (optional)

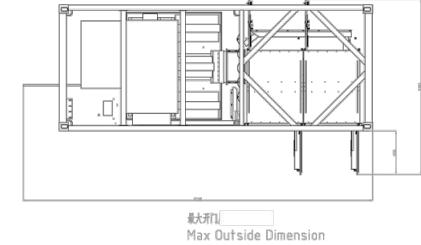
3280.8 ft (standard) / > 3280.8 ft (optional) LED, WEB HMI

RS485, CAN, Ethernet

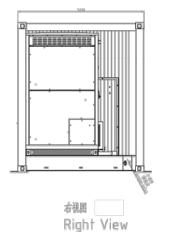
UL1741, UL1741 SA, IEEE 1547, Rule 21, HECO 14H, CSA C22.2 No.107.1-16

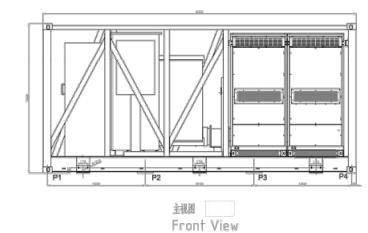
L/HVRT, FRT, active & reactive power control and power ramp rate

control, Volt-var, Volt-watt, Frequency-watt

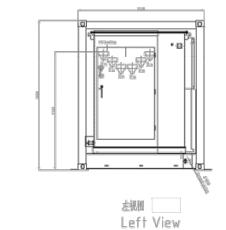


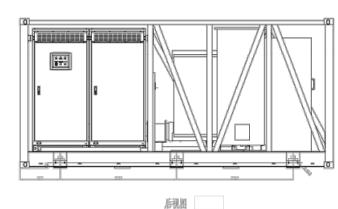
(Door opening)





Top View





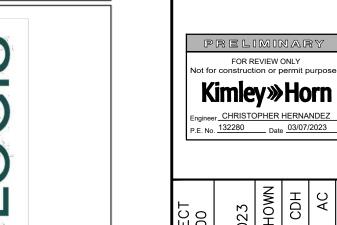
后视图 Back View



ravenvolt

This document has been electronically signed and sealed by Eduardo-Reyes Hidalgo, PE on the date and time shown on the signature using a SHA authentication code. Printed copies of this document are not considered signed and sealed, and the SHA authentication code must be verified on any electronic copies.

PRELIMINARY



SYSTEM SIZE:	10MW/10MWhr
UTILITY VOLTAGE:	24.9 kV
BUILDING NAME: PARK 121 BLDG 4	
PROJECT SITE:	

		DESIGNED BY: RAVENVOLT	REVIEWED BY: ERH
		DRAWN BY: JBM	ASSISTED BY: JMH
		PROJECT MANAGER: DYLAN JACKSON	
		ELECTRIC UTILITY: ONCOR	
		AHJ: CITY OF COPPELL	
	REVISION HISTORY		

REVISION HISTORY			
REV	REVISION DESCRIPTION	DAT	
0	PERMITTING	12/22/2	
SHE	ET TITLE EQUIPMENT SPECIFICATIONS II		

E10.1

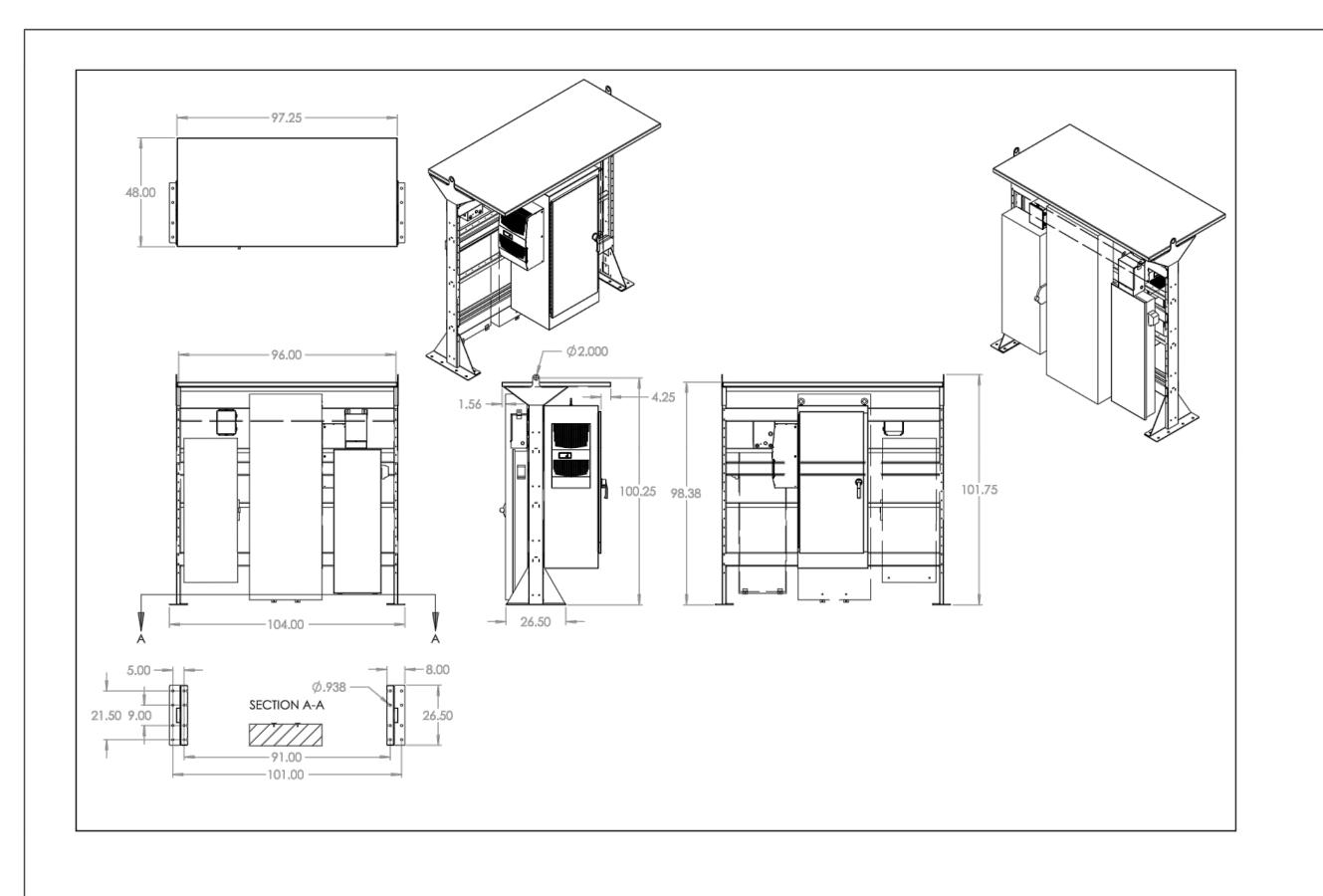
PCS MECHANICAL DESIGN

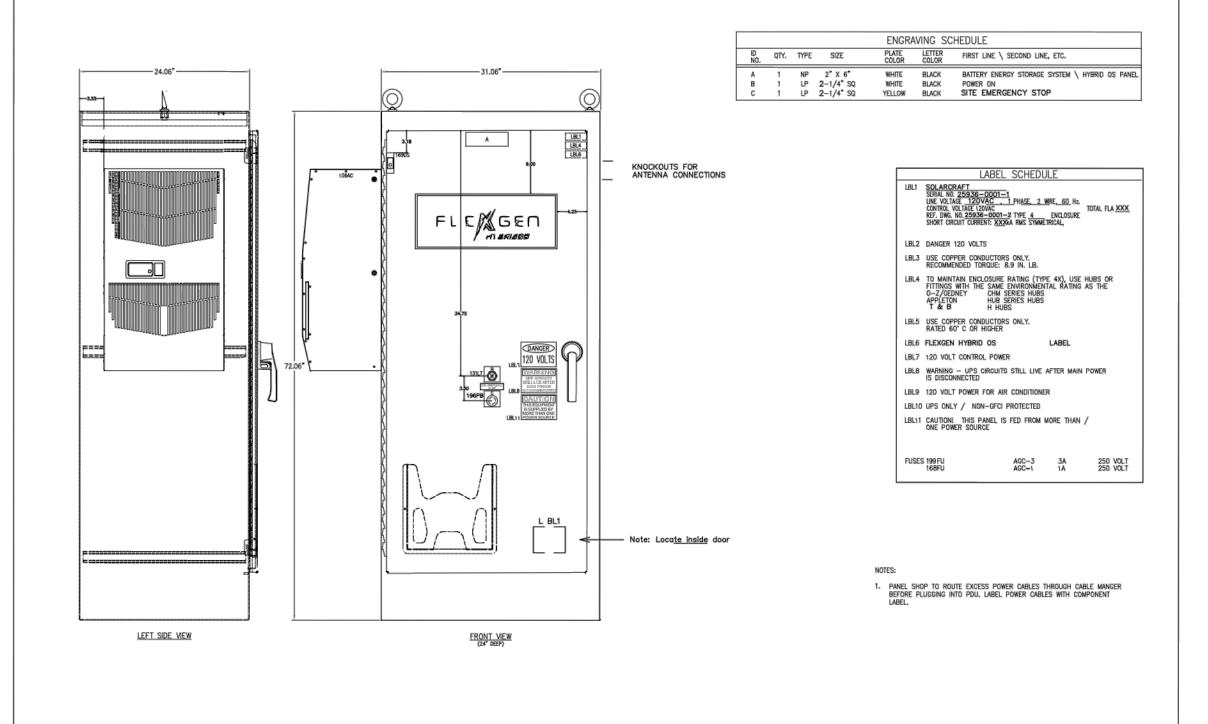
PCS (POWER CONVERSION SKID) SPECIFICATIONS 1

Kimley Horn P.E. No. <u>132280</u> Date <u>03/07/2023</u> **DETAIL**(

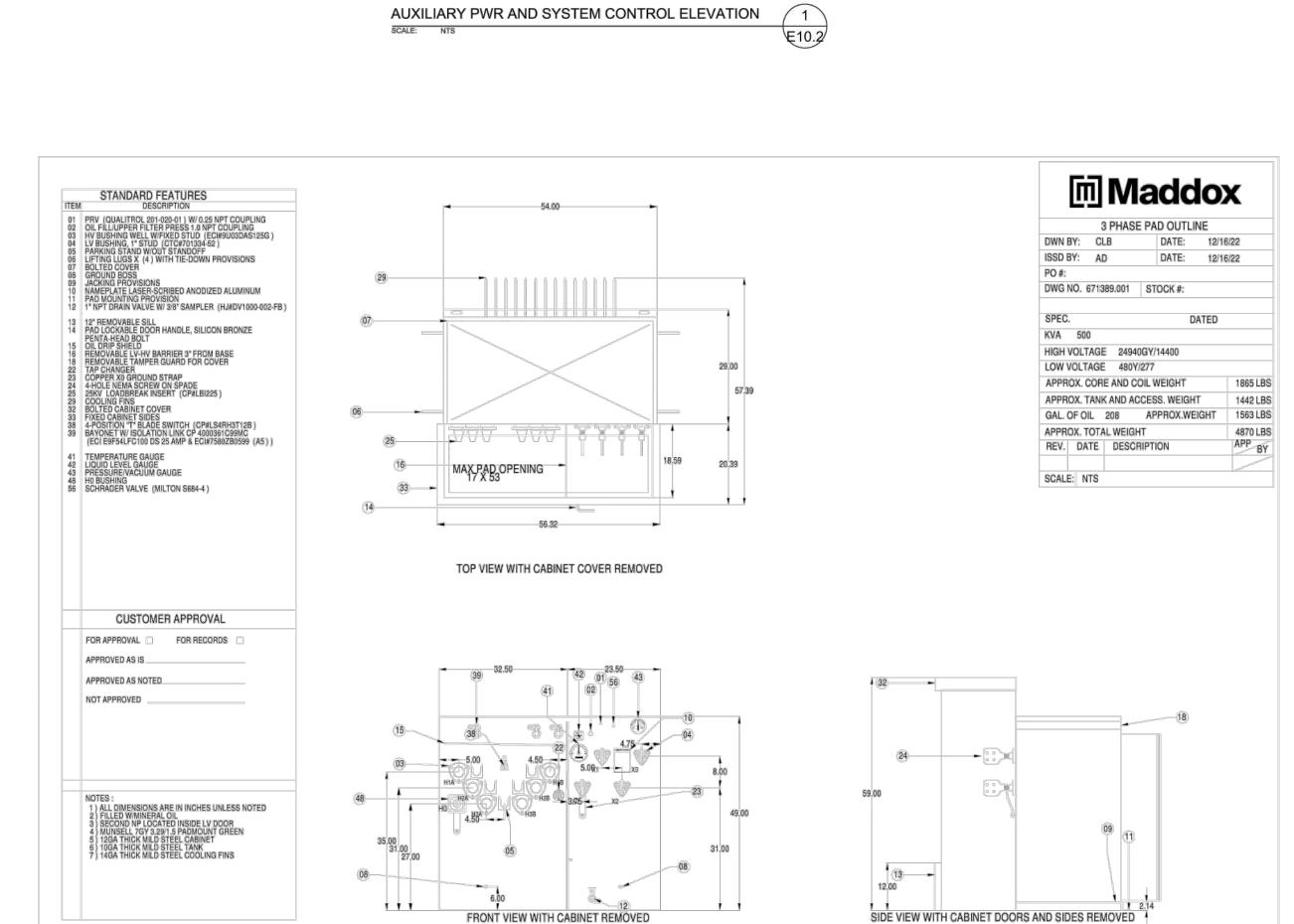
CONSTRUCTION

RAVENVOL



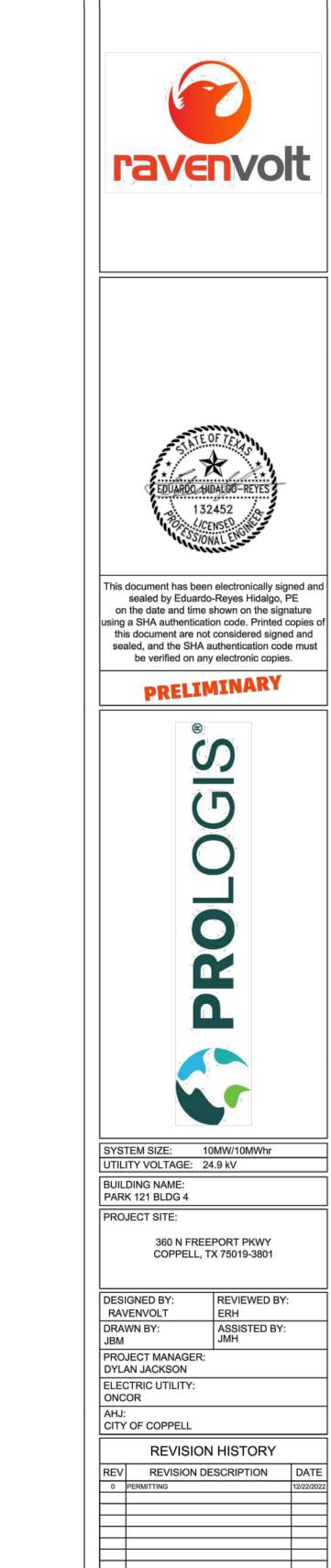






AUX PWR TRANSFORMER SPECS

E10.2



SHEET TITLE

EQUIPMENT

SPECIFICATIONS III

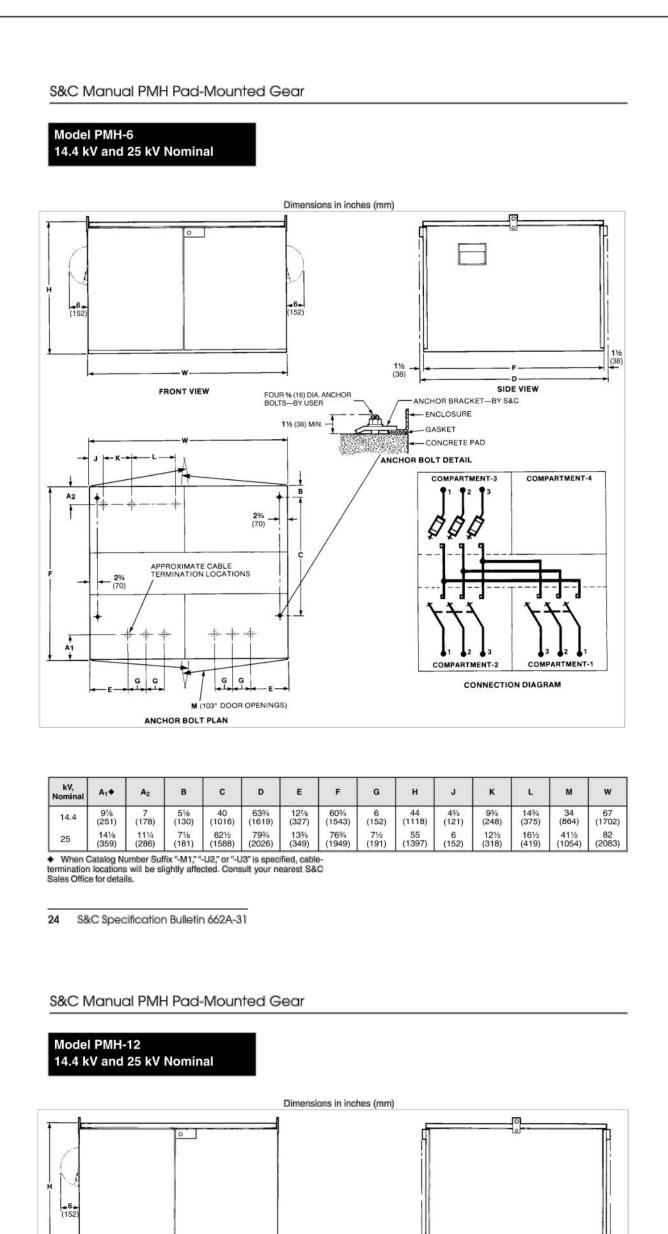
THIS DRAWING IS 24" X 36" AT FULL SIZE SITE ID: DAL 05406

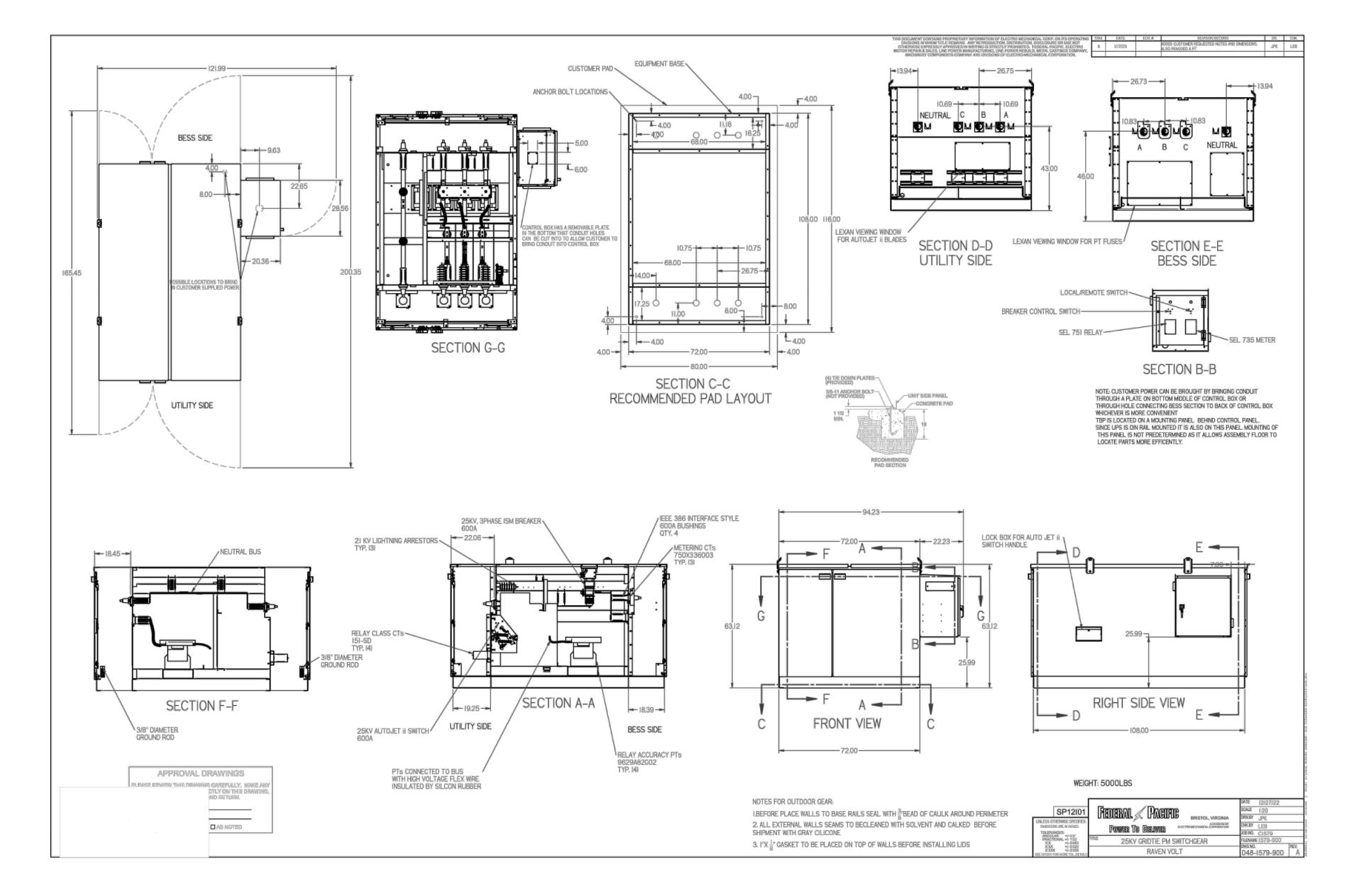
ravenvolt \Rightarrow This document has been electronically signed and sealed by Eduardo-Reyes Hidalgo, PE on the date and time shown on the signature using a SHA authentication code. Printed copies of this document are not considered signed and sealed, and the SHA authentication code must be verified on any electronic copies. **PRELIMINARY** PRELIMINARY FOR REVIEW ONLY
Not for construction or permit purpo **Kimley **Horn** Engineer CHRISTOPHER HERNANDEZ
P.E. No. 132280 Date 03/07/2023 SYSTEM SIZE: 10MW/10MWhr 360 N FREEPORT PKWY

> BE RAVENVOL

DETAIL

CONSTRUCTION











This document has been electronically signed and sealed by Eduardo-Reyes Hidalgo, PE on the date and time shown on the signature using a SHA authentication code. Printed copies of this document are not considered signed and sealed, and the SHA authentication code must be verified on any electronic copies.

PRELIMINARY

FOR REVIEW ONLY **Kimley Horn** P.E. No. <u>132280</u> Date <u>03/07/2023</u>

) -
SYSTEM SIZE		10MW/10MWhr
UTILITY VOL	ΓAGE:	24.9 kV
BUILDING NA PARK 121 BL		
PROJECT SIT	E:	
		EEPORT PKWY ., TX 75019-380°

DESIGNED BY: REVIEWED BY: RAVENVOLT ASSISTED BY: DRAWN BY: PROJECT MANAGER: DYLAN JACKSON ELECTRIC UTILITY: ONCOR AHJ: CITY OF COPPELL

OITT OF COLLECT			
REVISION HISTORY			
REV	REVISION DESCRIPTION	DA [*]	
0	PERMITTING	12/22/	
		-	
		-	
		+	
		\vdash	
		_	
SHE	ET TITLE		
	EQUIPMENT		
	SPECIFICATIONS III		
DRA	PRAWING NUMBER		

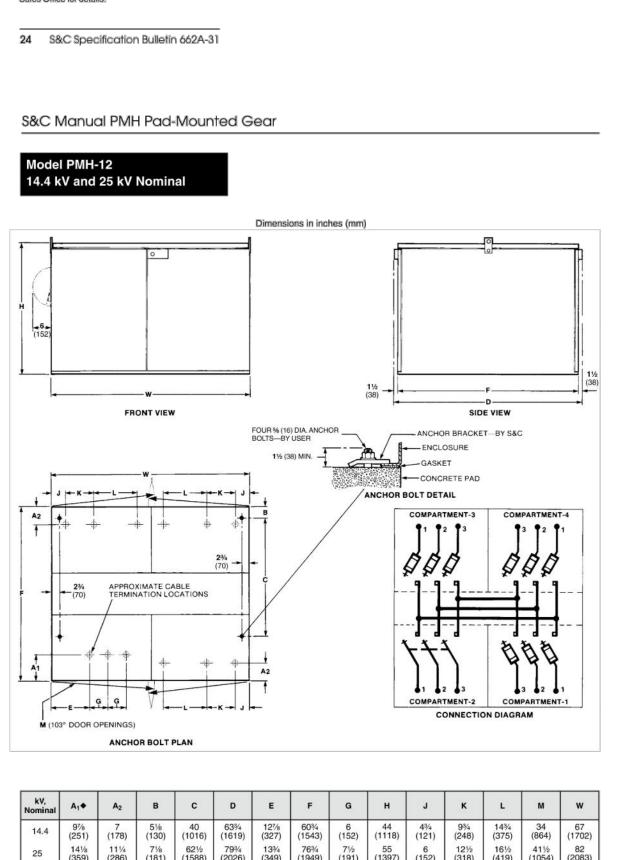
E10.3

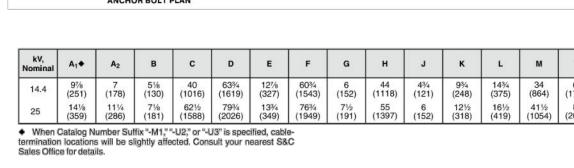
THIS DRAWING IS 24" X 36" AT FULL SIZE SITE ID: DAL 05406

ONSTRUCTION

DETAIL

SHEET NUMBER C-13





30 S&C Specification Bulletin 662A-31

DISTRIBUTION SWITCHGEAR SPECIFICATIONS

