

Review Only Not For Construcion

SERVICE ENTRANCE:
- LOCATION OF METERS TO BE APPROVED
- CONDUIT SHOULD BE INSTALLED ON THE SECONDARY VOLTAGE SIDE OF THE TRANSFORMER

DISTRIBUTION SYSTEM NOTES

1. THE MICROGRID DISTRIBUTION SYSTEM WILL BE AN UNDERGROUND ELECTRICAL RING DISTRIBUTION SYSTEM
2. THE DISTRIBUTION NETWORK IS ENGINEERED AND DESIGNED AS A RING NETWORK
3. THE SYSTEM IS A PRIMARY SELECTIVE OPEN LOOP CONFIGURATION CONFIGURED AS A 12.47/7.2 KV DELTA SYSTEM OPERATING AT 600 AMPS
4. PRIMARY DISTRIBUTION SWITCHGEAR AND OVERCURRENT DEVICES SHALL BE DESIGNED FOR 15 MVA/ 65 KA OF AVAILABLE FAULT CURRENT
5. BUSHINGS, INSULATORS, AND ARRESTORS MUST BE RATED FOR A FULL 15KV TO GROUND, NOT THE 8 KV TYPICAL OF A GROUNDED WYE SYSTEM
6. THE MAIN RING SYSTEMS HAVE SECTION ISOLATORS AT VARIOUS POINTS, IF A FAULT OCCURS, THE AFFECTED SECTION CAN BE ISOLATED USING THESE ISOLATORS, KEEPING THE REST OF THE SYSTEM OPERATIONAL

	UNDERGROUND VAULT	FIBER OPTIC HANDHOLE
ZONE 1	1	0
ZONE 2	1	0
ZONE 3	1	0
ZONE 4	1	0
ZONE 4	1	
TOTAL	5	0

LINETYPES

- SERVICE ENTRANCE 480V
- DISTRIBUTION, 12kV
- COMMUNICATIONS
- CHAIN-LINK FENCE
- CONDUIT
- GROUND
- NEW EQUIPMENT
- FUTURE EQUIPMENT

SYMBOLS

- FO FIBER OPTIC HANDHOLE
- UNDERGROUND VAULT

PROJECT DESCRIPTION

TEP-ITKN RED BUD HOUSING
ISLANDED MICROGRID
PROJECT# 25001
WHITE CLOUD, KS 66094
SOLAR 1.204 MW DC/ 1.0 MW AC (INITIAL)
.45 MW AC GENERATOR (INITIAL)
15,048 KWH / 3.0 MW AC STORAGE (INITIAL)

DEVELOPER

GREY SNOW SOVEREIGN SOLUTIONS
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SEAL&SIGNATURE

ENGINEERING & DESIGN

SOLAR DESIGN studio

NABCEP CERTIFICATIONS

CERTIFIED PV Installation Professional

REV	ISSUED DESCRIPTION	DATE
1	10% Design	1/03/2025
2	30% Design	6/1/2025
3	30% Design Updated MV One Line & BESS	9/22/2025
4	30% Design for Bidding	10/30/2025
5	60% Design	11/17/2025
6	60% Design Updates	7/20/2026
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-

Sheet Title
DISTRIBUTION ZONES

Sheet Number
DS.03