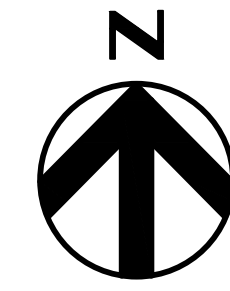


Joint Application Exhibit 2

Brown NGCC

Maps, Conceptual Plans, Specifications, and Drawings



Revisions

A	Project: 10358480	12/09/2022
	ISSUED FOR CPCN	12/09/2022
	Dwn: EDC	12/09/2022
	Chkd: J C	12/09/2022
	Appd: MAW	12/09/2022

SITE PLAN

SCALE: 1" = 300'-0"



Location and Unit:	EW BROWN	Drawn:	ELP
Scale:	1" = 300'-0"	Contract No.:	12092022
Engineering discipline:	CIVIL	Drawing type:	PLAN
Approved:	MAW	Released for:	CPCN
Alternate Drawing No.:	C1000		
Originator:	HDR ENGINEERING, INC	Job or Project No.:	10358480
Drawing No.:	12GA-C1000	Rev.:	A



COMBINED CYCLE GENERATION PROGRAM
 EW BROWN UNIT 12
 SITE PLAN





EMISSION POINTS				
EMISSION POINT NUMBER (EPN)	NAME	SPCS NAD83 (FEET)	UTM ZONE 16S (METERS)	HEIGHT ABOVE GRADE (FEET)
1	HRSG STACK	N2172032.34 E1940747.52	N4184860 E701582	185
2	COOLING TOWER CELL 1	N2171912.57 E1940964.27	N4184825 E701648	55
3	COOLING TOWER CELL 2	N2171878.67 E1941008.46	N4184815 E701662	55
4	COOLING TOWER CELL 3	N2171844.75 E1941052.65	N4184804 E701676	55
5	COOLING TOWER CELL 4	N2171810.84 E1941096.82	N4184794 E701689	55
6	COOLING TOWER CELL 5	N2171868.40 E1940974.54	N4184811 E701638	55
7	COOLING TOWER CELL 6	N2171834.48 E1940930.36	N4184801 E701652	55
8	COOLING TOWER CELL 7	N2171800.57 E1941018.73	N4184791 E701666	55
9	COOLING TOWER CELL 8	N2171766.66 E1941062.92	N4184781 E701679	55
10	AUXILIARY BOILER	N2172145.20 E1940780.56	N4184895 E701591	60
11	EMERGENCY DIESEL GENERATOR	N2172207.23 E1940689.40	N4184913 E701563	16
12	FUEL GAS HEATER	N2172418.97 E1940660.03	N4184978 E701554	18
13	DIESEL FIRE PUMP	N2172196.80 E1940994.16	N4184911 E701656	13

ALL COORDINATES ARE BASED ON NAD83 KENTUCKY STATE PLANE SOUTH ZONE 1602, US SURVEY FEET. ALL ELEVATIONS ARE BASED ON NAVD88 VERTICAL DATUM.



FACILITY LEGEND:

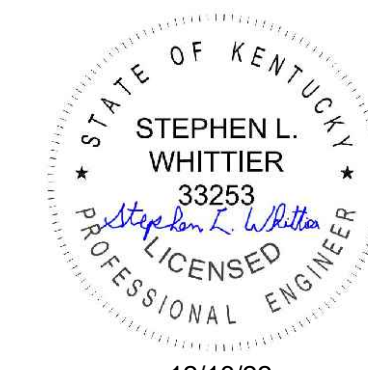
- ① GAS TURBINE (GT)
- ② HEAT RECOVERY STEAM GENERATOR (HRSG)
- ③ STEAM TURBINE BUILDING
- ④ HRSG STACK
- ⑤ ADMINISTRATION / CONTROL BUILDING
- ⑥ GAS YARD
- ⑦ GAS COMPRESSOR BUILDING
- ⑧ CIRCULATING WATER PUMPS
- ⑨ EMERGENCY GENERATOR
- ⑩ DEMIN WATER STORAGE TANK
- ⑪ PLANT PARKING
- ⑫ GSU TRANSFORMER
- ⑬ BATTERY ENCLOSURE
- ⑭ COOLING TOWER
- ⑮ EXCITATION / STATIC START ENCLOSURE
- ⑯ AMMONIA FLOW CONTROL
- ⑰ DUCT BURNER SKID
- ⑱ UNIT AUX TRANSFORMERS
- ⑲ SERVICE / FIRE WATER STORAGE TANK
- ⑳ FIRE PROTECTION PUMP HOUSE
- ㉑ CEMS SHELTER
- ㉒ WASTE WATER TANK
- ㉓ CIRCULATING WATER CHEMICAL FEED BUILDING
- ㉔ AUXILIARY BOILER BUILDING
- ㉕ HRSG RECIRCULATION PUMPS
- ㉖ BOILER FEED PUMP / ELECTRICAL BUILDING
- ㉗ DEMIN FORWARDING PUMPS
- ㉘ WASTE WATER PUMP SKID
- ㉙ SERVICE WATER PUMP SKID
- ㉚ AMMONIA UNLOADING / STORAGE / FORWARDING
- ㉛ SINGLE SHAFT PEECC
- ㉜ CO2 BULK STORAGE TANK
- ㉝ NITROGEN STORAGE TANK
- ㉞ HRSG BLOWDOWN TANK / PIT
- ㉟ MEDIUM VOLTAGE PDC
- ㊱ SPARE GSU TRANSFORMER
- ㊲ OIL / WATER SEPARATOR
- ㊳ HRSG BLOWDOWN SUMP
- ㊴ SAMPLE PANEL
- ㊵ CYCLE CHEMICAL FEED
- ㊶ WATER TREATMENT BUILDING

Revisions

A	Project: 10358480	12/02/2022
INITIAL ISSUE		
Dwn: EDC 12/02/2022 Chkd: MAW 12/02/2022 Appd:		
B	Project: 10358480	12/09/2022
ISSUED FOR CPCN		
Dwn: EDC 12/09/2022 Chkd: J.C 12/09/2022 Appd: MAW 12/09/2022		

EMISSION POINT LOCATION PLAN

SCALE: 1" = 100'-0"



12/13/22

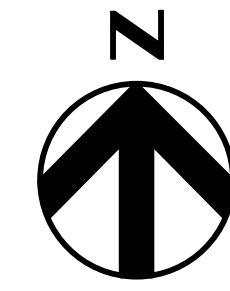
Location and Unit: EW BROWN	Contract No. 12092022	Drawn: GAP
Scale: 1" = 100'-0"	Engineering discipline: CIVIL	Checked: J.P.
Drawing type: PLAN	PPL companies	Approved: MAW
Title: COMBINED CYCLE GENERATION PROGRAM EW BROWN UNIT 12 EMISSION POINT LOCATION PLAN		Released for: CPCN
Originator: HDR ENGINEERING, INC	Job or Project No. 10358480	Drawing No. 12GA-C1002



Revisions

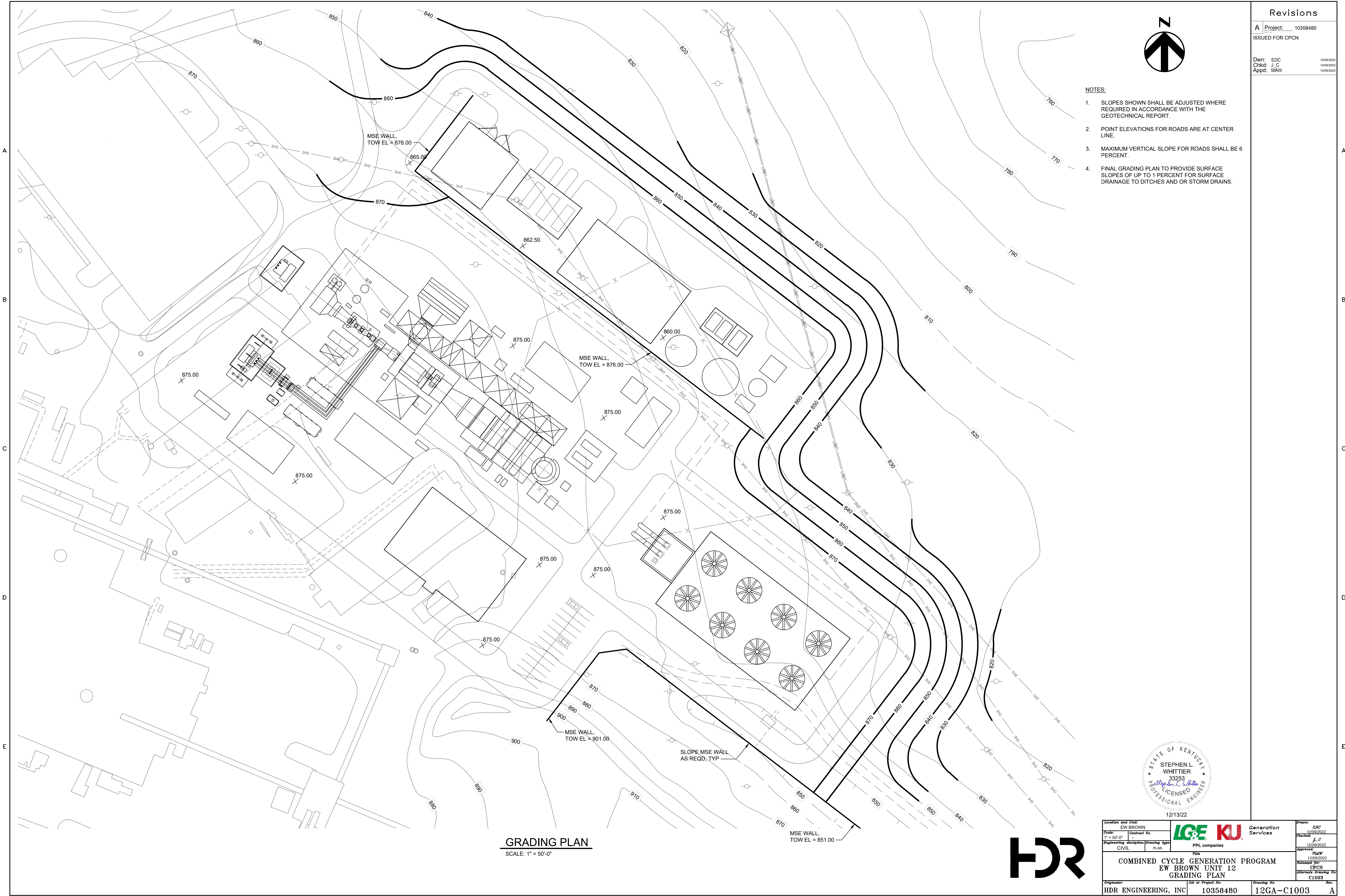
A Project: 10358480
ISSUED FOR CPCN

Dwn: EDC 12/09/2022
Chkd: J.C 12/09/2022
Appd: MAW 12/09/2022



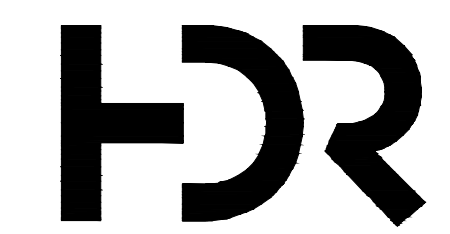
NOTES:

1. SLOPES SHOWN SHALL BE ADJUSTED WHERE REQUIRED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
2. POINT ELEVATIONS FOR ROADS ARE AT CENTER LINE.
3. MAXIMUM VERTICAL SLOPE FOR ROADS SHALL BE 6 PERCENT.
4. FINAL GRADING PLAN TO PROVIDE SURFACE SLOPES OF UP TO 1 PERCENT FOR SURFACE DRAINAGE TO DITCHES AND OR STORM DRAINS.



GRADING PLAN
SCALE: 1" = 50'-0"

SLOPE MSE WALL AS REQD. TYP



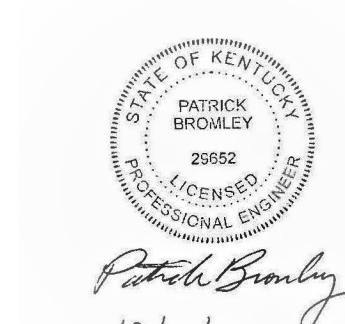
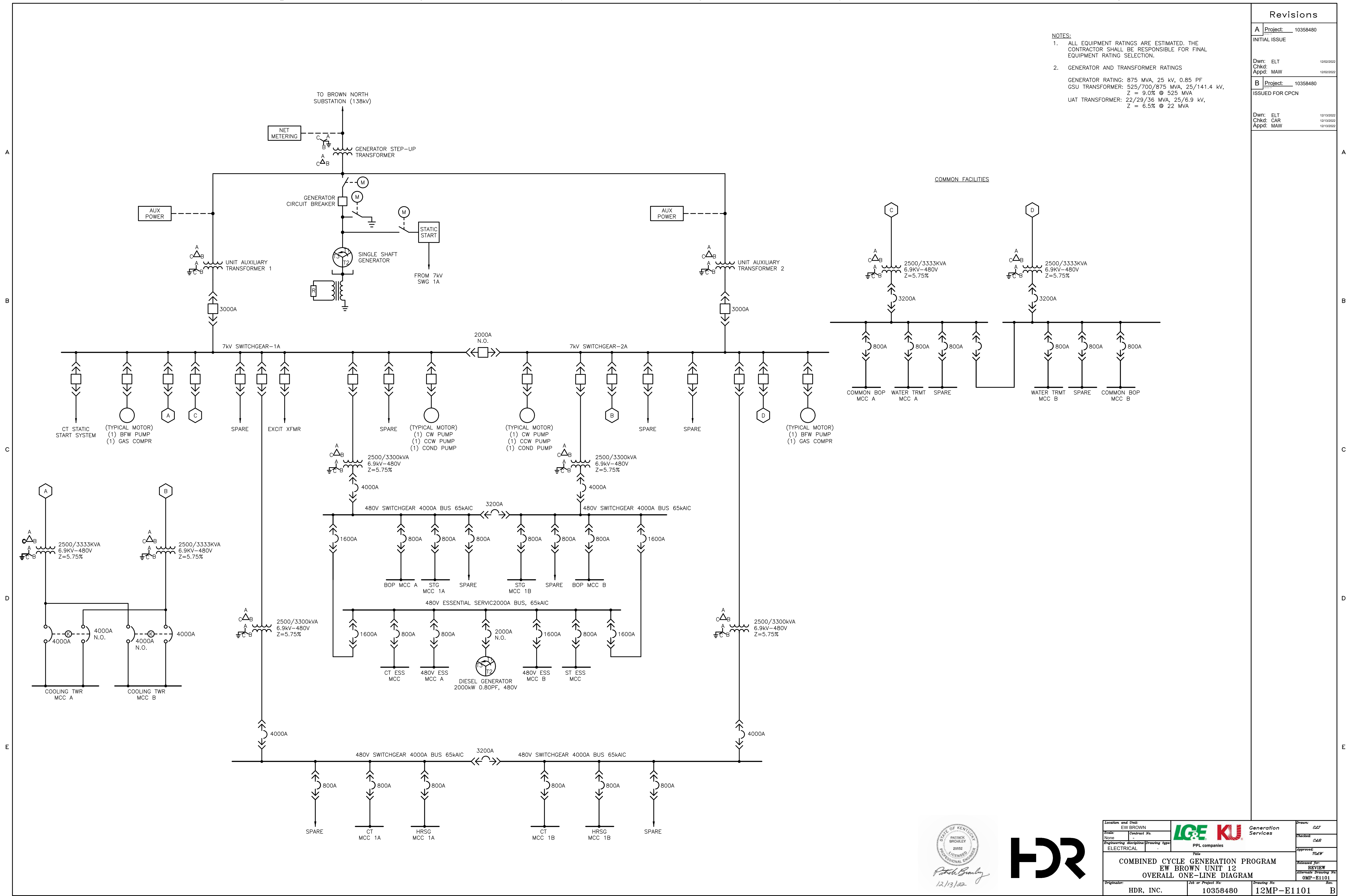
Location and Unit: EW BROWN	Contract No. 10358480	Generation Services	Drawn: ZBP
Scale: 1" = 50'-0"	Engineering discipline: CIVIL	Drawing type: PLAN	Checked: J.C
PPL companies		Approved: MAW	Released from: CPCN
Title: COMBINED CYCLE GENERATION PROGRAM EW BROWN UNIT 12 GRADING PLAN		Alternate Drawing No. C1003	Rev: A
Originator: HDR ENGINEERING, INC	Job or Project No. 10358480	Drawing No. 12GA-C1003	Rev: A

Revisions

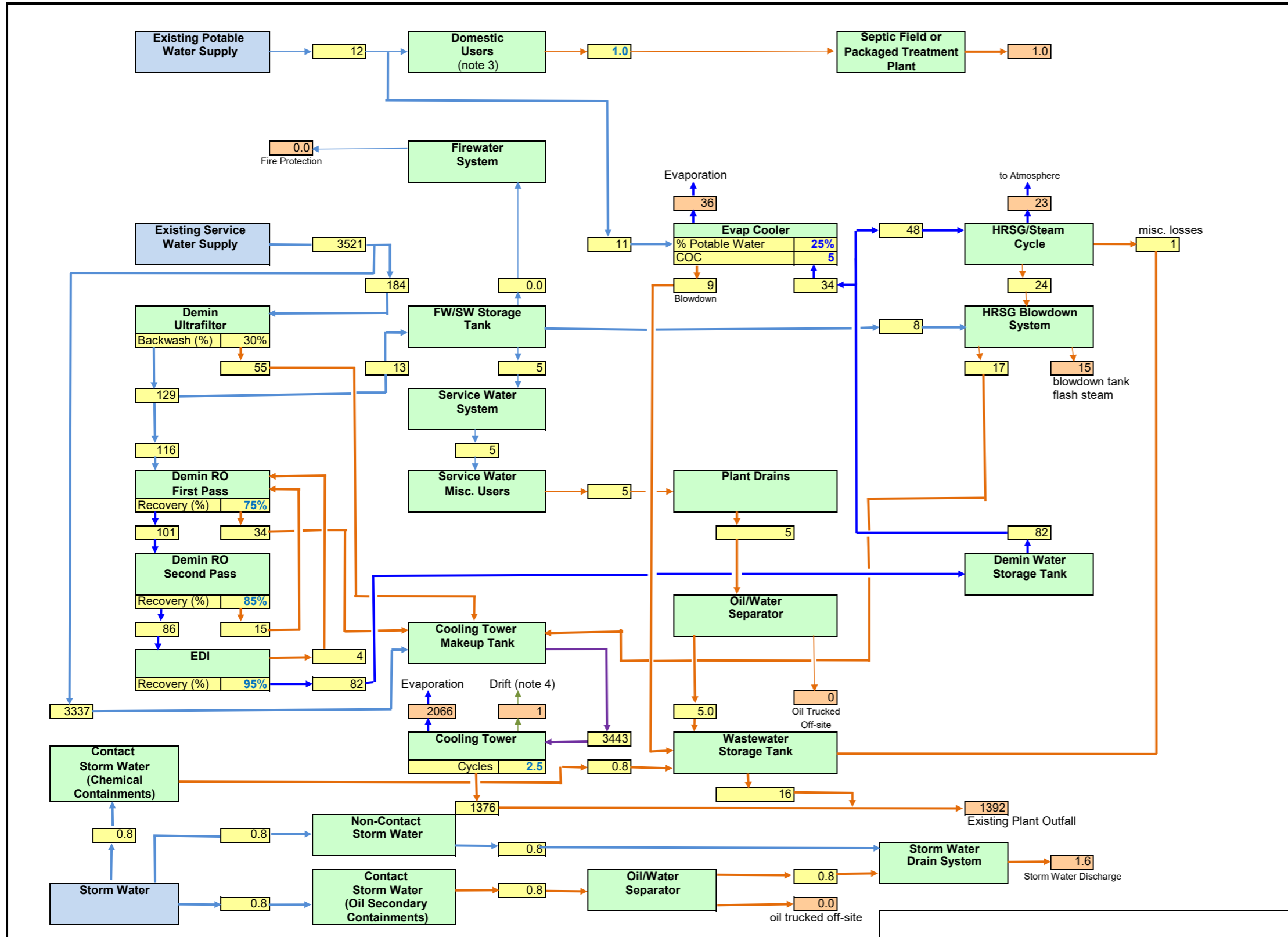
A	Project: 10358480	Drawn: ELT	12/02/2022
	INITIAL ISSUE	Chkd: MAW	12/02/2022
B	Project: 10358480	Drawn: ELT	12/13/2022
	ISSUED FOR CPCN	Chkd: CAR	12/13/2022
		Appd: MAW	12/13/2022

NOTES:

- ALL EQUIPMENT RATINGS ARE ESTIMATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL EQUIPMENT RATING SELECTION.
- GENERATOR AND TRANSFORMER RATINGS
 GENERATOR RATING: 875 MVA, 25 kV, 0.85 PF
 GSU TRANSFORMER: 525/700/875 MVA, 25/141.4 kV, Z = 9.0% @ 525 MVA
 UAT TRANSFORMER: 22/29/36 MVA, 25/6.9 kV, Z = 6.5% @ 22 MVA



Location and Unit: EW BROWN	Scale: -	Contract No. -	LGE KU Generation Services	Drawn: ELT
Engineering discipline: ELECTRICAL	Drawing type: -	PPL companies		Checked: CAR
Title: COMBINED CYCLE GENERATION PROGRAM EW BROWN UNIT 12 OVERALL ONE-LINE DIAGRAM				Approved: MAW
Originator: HDR, INC.	Job or Project No. 10358480	Drawing No. 12MP-E1101	Reviewed: REVIEW	Alternate Drawing No. OMP-E1101
			Rev: B	SWI Version 2.0



Notes:
 1. Based on assumed turbine performance, actual vendor data needed.
 2. Cycle Make-Up assumed to be 2% of main steaming rate. Blowdown assumed to be 1% of main steaming rate.
 3. Potable water flows assume 20 people on site at a time.
 4. Drift assumed to be 0.001% of circulating water flow.

Legend

- Major Process Flow (Thick black line)
- Minor Process Flow (Thin black line)
- Raw/Potable Water (Blue line)
- Cooling Water (Green line)
- Waste Stream (Orange line)
- Recovered/Recycled Water (Purple line)
- Steam (Red line)
- High Purity Water (Light Blue line)

Orange box: Indicates material that leaves the system
 Yellow box: Internal flow
 Blue box: Water Source

All flows are in US GPM unless otherwise specified.

Case or Scenario:		Summer Day, Fired				
Configuration		1X1 CC				
Turbines in Service		1				
Plant Net Power (MW)		621				
Ambient temperature (deg F)		90				
Ambient relative humidity, %		50				
Evaporative inlet cooler effectiveness (%)		90				
Cooling Tower COC		2.5				

Rev	Date	Description	Drwn	Chckd	Eng	PEng	PMgr
A	12/2/22	Initial Issue	JMH	JC	JMH	ND	MW
B	12/13/22	Issued for CPCN	JMH	JC	JMH	ND	MW

Drawn By	Date	Professional Engineer Stamp				
J. Horan	12/13/22					
Checked By	Date					
J. Cummings	12/13/22					
Engineer	Date					
J. Horan	12/13/22					
Project Engineer	Date	12/13/22				
N. Duval	12/13/22					
Project Manager	Date					
M. Wiitanen	12/13/22					

IG&E KU

EW Brown Unit 12
Plant Water Balance Diagram

Scale: N/A
 Dwg No 10358480-12WB-M1000 | Sheet No. 01 | Rev B