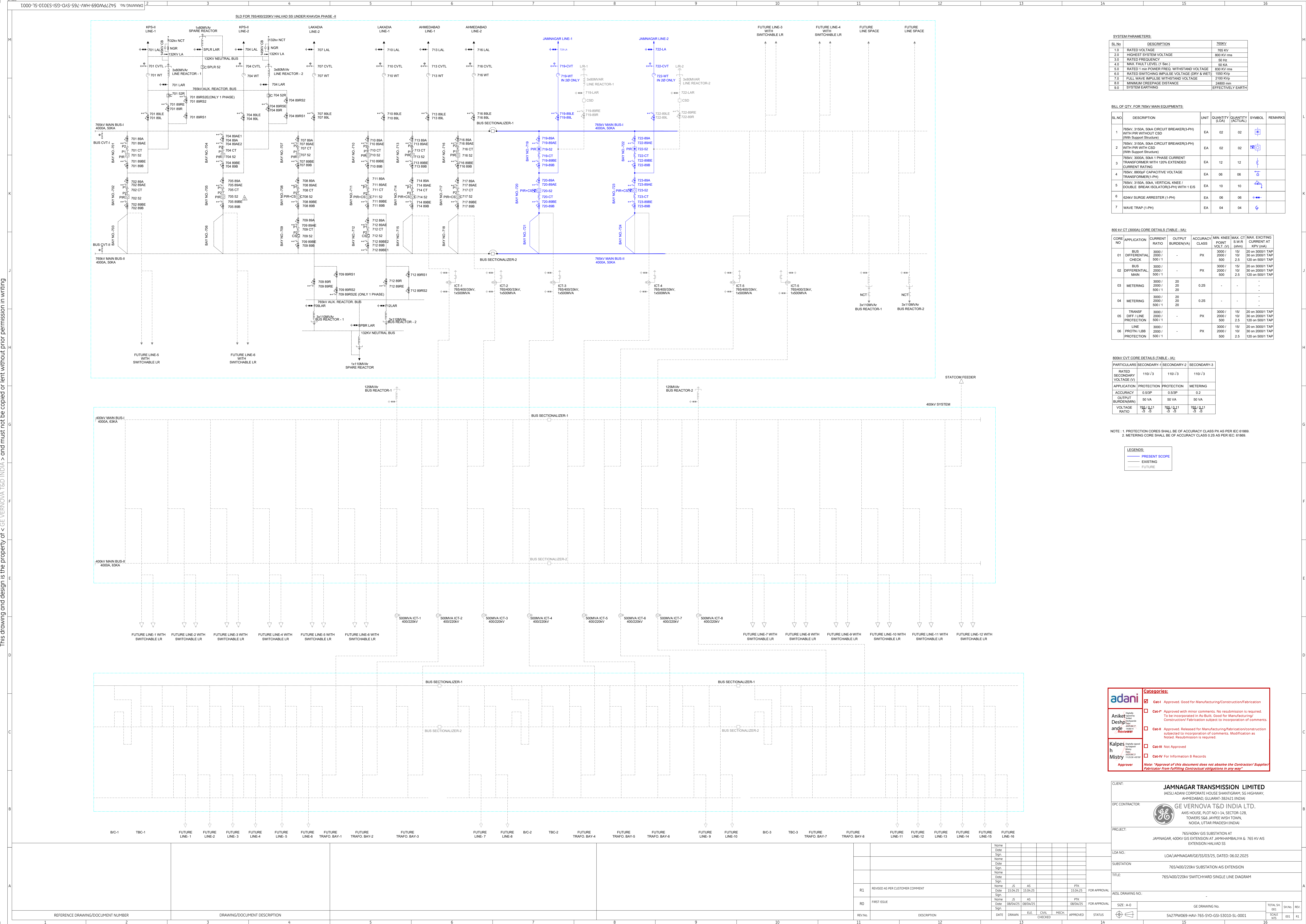


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SYSTEM PARAMETERS:			
SL No	DESCRIPTION	765KV	
1.0	RATED VOLTAGE	765 KV	
2.0	HIGHEST SYSTEM VOLTAGE	800 KV rms	
3.0	RATED FREQUENCY	50 Hz	
4.0	MAX. FAULT LEVEL (1 Sec)	80 KA	
5.0	RATED 1 min POWER FREQ. WITHSTAND VOLTAGE	830 KV rms	
6.0	RATED SWITCHING IMPULSE VOLTAGE (DRY & WET)	1550 Kvp	
7.0	FULL WAVE IMPULSE WITHSTAND VOLTAGE	2100 Kvp	
8.0	MINIMUM CREEPAGE DISTANCE	24000 mm	
9.0	SYSTEM EARTHING	EFFECTIVELY EARTH	

BILL OF QTY. FOR 765KV MAIN EQUIPMENTS:						
SL NO	DESCRIPTION	UNIT	QUANTITY (LOA)	QUANTITY (ACTUAL)	SYMBOL	REMARKS
1	765KV, 315DA, 50KA CIRCUIT BREAKER(3-PH) WITH PIR WITHOUT CSD (With Support Structure)	EA	02	02		
2	765KV, 315DA, 50KA CIRCUIT BREAKER(3-PH) WITH PIR WITH CSD	EA	02	02		
3	765KV, 300DA, 50KA 1 PHASE CURRENT TRANSFORMER WITH 120% EXTENDED CURRENT RATING	EA	12	12		
4	765KV, 8800PF CAPACITIVE VOLTAGE TRANSFORMER(1-PH)	EA	06	06		
5	765KV, 315DA, 50KA VERTICAL KNEE / DOUBLE BREAK ISOLATOR(3-PH) WITH 1 E/S	EA	10	10		
6	624KV SURGE ARRESTER (1-PH)	EA	06	06		
7	WAVE TRAP (1-PH)	EA	04	04		

800KV CT (3000A) CORE DETAILS (TABLE -IIA)									
CORE NO	APPLICATION	CURRENT RATIO	OUTPUT BURDEN(VA)	ACCURACY CLASS	MIN. POINT VOLT. (V)	MAX. CT S.W.R (amp)	MAX. EXCITING CURRENT AT KVP (VA)	MAX. EXCITING TAP	MAX. EXCITING TAP
01	BUS DIFFERENTIAL CHECK	3000 / 2000 / 500 / 1	-	PX	3000 / 2000 / 500	15 / 10 / 2.5	20 on 3000/1 TAP	30 on 2000/1 TAP	120 on 500/1 TAP
02	BUS DIFFERENTIAL MAIN	3000 / 2000 / 500 / 1	-	PX	3000 / 2000 / 500	15 / 10 / 2.5	20 on 3000/1 TAP	30 on 2000/1 TAP	120 on 500/1 TAP
03	METERING	3000 / 2000 / 500 / 1	20 / 20 / 20	0.2S	-	-	-	-	-
04	METERING	3000 / 2000 / 500 / 1	20 / 20 / 20	0.2S	-	-	-	-	-
05	TRANSF. DIFF. / LINE PROTECTION	3000 / 2000 / 500 / 1	-	PX	3000 / 2000 / 500	15 / 10 / 2.5	20 on 3000/1 TAP	30 on 2000/1 TAP	120 on 500/1 TAP
06	PROTN / LBB PROTECTION	3000 / 2000 / 500 / 1	-	PX	3000 / 2000 / 500	15 / 10 / 2.5	20 on 3000/1 TAP	30 on 2000/1 TAP	120 on 500/1 TAP

800KV CVT CORE DETAILS (TABLE -IIB)			
PARTICULARS	SECONDARY-1	SECONDARY-2	SECONDARY-3
RATED SECONDARY VOLTAGE (V)	110 / 3	110 / 3	110 / 3
APPLICATION	PROTECTION	PROTECTION	METERING
ACCURACY	0.5/3P	0.5/3P	0.2
OUTPUT BURDEN(MIN)	50 VA	50 VA	50 VA
VOLTAGE RATIO	765 / 0.11	765 / 0.11	765 / 0.11

NOTE : 1. PROTECTION CORES SHALL BE OF ACCURACY CLASS PX AS PER IEC 61869.
2. METERING CORE SHALL BE OF ACCURACY CLASS 0.2S AS PER IEC 61869.

LEGENDS:	
	PRESENT SCOPE
	EXISTING
	FUTURE

Aniket Deshpande
Kalpes h Mistry

Categories:

☒ Cat-I Approved. Good for Manufacturing/Construction/Fabrication

☐ Cat-II Approved with minor comments. No resubmission is required. To be incorporated in As-Built. Good for Manufacturing/ Construction/ Fabrication subject to incorporation of comments.

☐ Cat-III Approved. Released for Manufacturing/Fabrication/Construction subject to incorporation of comments. Modification as Noted. Resubmission is required.

☐ Cat-III Not Approved

☐ Cat-IV For Information & Records

Approver

Note: "Approval of this document does not absolve the Contractor/ Supplier/ Fabricator from fulfilling Contractual obligations in any way"

CLIENT:
JAMNAGAR TRANSMISSION LIMITED
(AESLI ADANI CORPORATE HOUSE SHANTIGRAM, 5G HIGHWAY, AHMEDABAD, GUJARAT-382421 INDIA)

ERC CONTRACTOR:
 GE VERNOVA T&D INDIA LTD.
AXIS HOUSE, PLOT NO-1A, SECTOR-128, TOWERS S&G JAYVEE WISH TOWNS, NOIDA, UTTAR PRADESH (INDIA)

PROJECT:
765/400KV GIS SUBSTATION AT JAMNAGAR, 400KV GIS EXTENSION AT JAMKHAMBALIYA & 765 KV AIS EXTENSION HALVAD SS

LOA NO:
SUBSTATION
TITLE:

LOA/JAMNAGAR/GE/SS/03/25, DATED: 06.02.2025

765/400/220KV SUBSTATION AIS EXTENSION

765/400/220KV SWITCHYARD SINGLE LINE DIAGRAM

AESL DRAWING NO:
SIZE: A-0

FOR APPROVAL

FOR APPROVAL

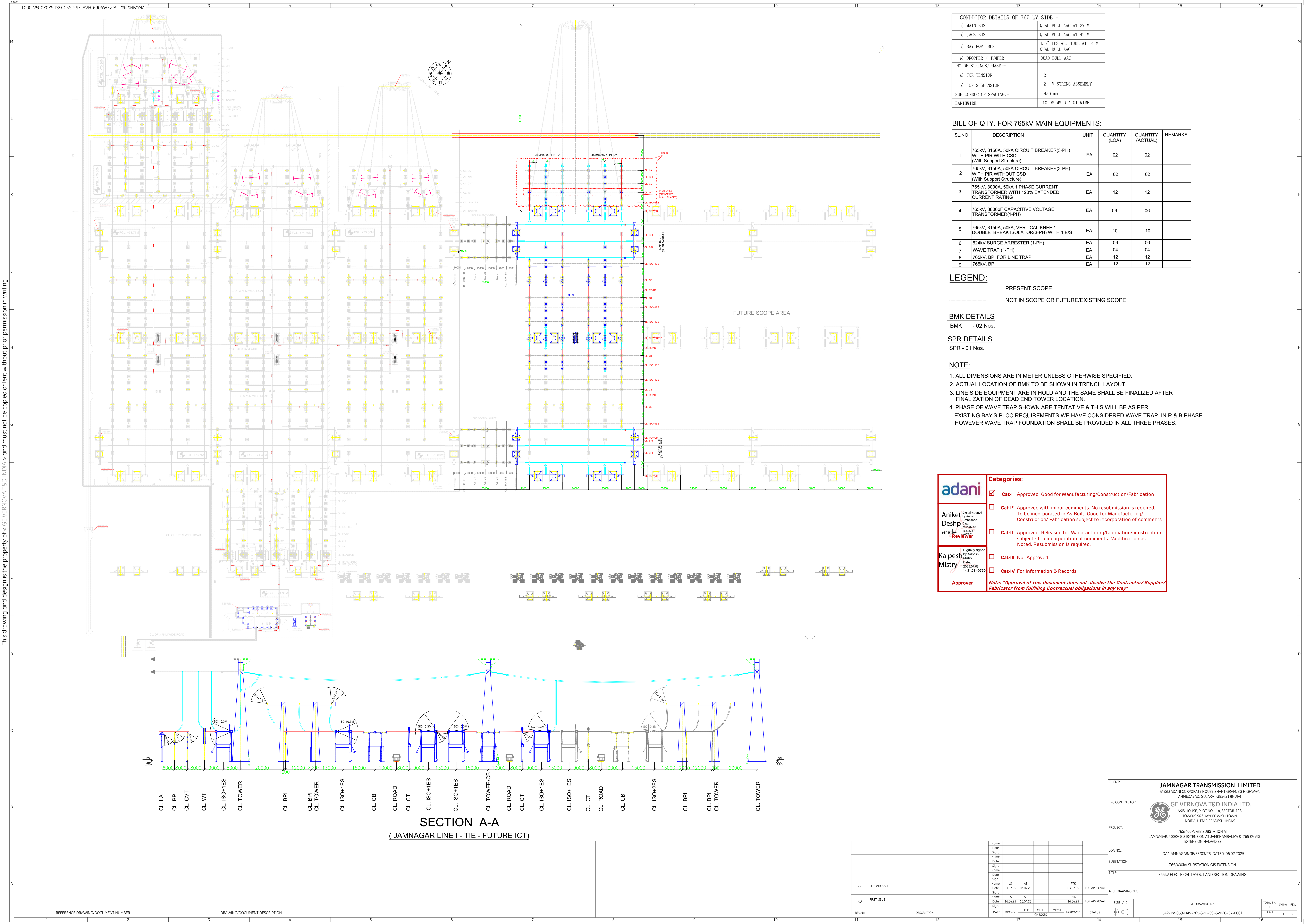
GE DRAWING NO.

5427PW069-HAV-765-SYD-GSI-S3010-SL-0001

TOTAL SH. 001

SCALE: NTS

REV. 001 R1



CONDUCTOR DETAILS OF 765 kV SIDE:-	
a) MAIN BUS	QUAD BULL AAC AT 27 M.
b) JACK BUS	QUAD BULL AAC AT 42 M.
c) BAY EQPT BUS	4.5" IPS AL. TUBE AT 14 M QUAD BULL AAC
d) DROPPER / JUMPER	QUAD BULL AAC
NO. OF STRINGS/PHASE:-	
a) FOR TENSION	2
b) FOR SUSPENSION	2 V STRING ASSEMBLY
SUB CONDUCTOR SPACING:-	
EARTHWIRE.	
10.98 MM DIA GI WIRE	

BILL OF QTY. FOR 765KV MAIN EQUIPMENTS:

SL.NO.	DESCRIPTION	UNIT	QUANTITY (LOA)	QUANTITY (ACTUAL)	REMARKS
1	765KV, 3150A, 50KA CIRCUIT BREAKER(3-PH) WITH PIR WITH CSD (With Support Structure)	EA	02	02	
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3	765KV, 3000A, 50KA 1 PHASE CURRENT TRANSFORMER WITH 120% EXTENDED CURRENT RATING	EA	12	12	
4	765KV, 8800pF CAPACITIVE VOLTAGE TRANSFORMER(1-PH)	EA	06	06	
5	765KV, 3150A, 50KA, VERTICAL KNEE / DOUBLE BREAK ISOLATOR(3-PH) WITH 1 E/S	EA	10	10	
6	624KV SURGE ARRESTER (1-PH)	EA	06	06	
7	WAVE TRAP (1-PH)	EA	04	04	
8	765KV, BPI FOR LINE TRAP	EA	12	12	
9	765KV, BPI	EA	12	12	

LEGEND:
PRESENT SCOPE
NOT IN SCOPE OR FUTURE/EXISTING SCOPE

BMK DETAILS
BMK - 02 Nos.

SPR DETAILS
SPR - 01 Nos.

- NOTE:
- ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE SPECIFIED.
 - ACTUAL LOCATION OF BMK TO BE SHOWN IN TRENCH LAYOUT.
 - LINE SIDE EQUIPMENT ARE IN HOLD AND THE SAME SHALL BE FINALIZED AFTER FINALIZATION OF DEAD END TOWER LOCATION.
 - PHASE OF WAVE TRAP SHOWN ARE TENTATIVE & THIS WILL BE AS PER EXISTING BAY'S PLCC REQUIREMENTS WE HAVE CONSIDERED WAVE TRAP IN R & B PHASE HOWEVER WAVE TRAP FOUNDATION SHALL BE PROVIDED IN ALL THREE PHASES.

adani

Aniket Deshpande

Reviewer

Digitally signed by Aniket Deshpande

Date: 2025.07.23 16:52:28

Kalpesh Mistry

Approver

Digitally signed by Kalpesh Mistry

Date: 2025.07.23 14:31:08 +0530

Categories:

☒ Cat-I Approved. Good for Manufacturing/Construction/Fabrication

☐ Cat-I* Approved with minor comments. No resubmission is required. To be incorporated in As-Built. Good for Manufacturing/ Construction/ Fabrication subject to incorporation of comments.

☐ Cat-II Approved. Released for Manufacturing/fabrication/construction subjected to incorporation of comments. Modification as Noted. Resubmission is required.

☐ Cat-III Not Approved

☐ Cat-IV For Information & Records

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SECTION A-A
(JAMNAGAR LINE I - TIE - FUTURE ICT)

REV/NO	DESCRIPTION	DATE	DRAWN	CHECKED	MECH	APPROVED	STATUS	SIZE	GE DRAWING NO.	TOTAL SH	SH NO	REV
R1	SECOND ISSUE	03.07.25	AS	AS			FOR APPROVAL	A0	5427PW069-HAV-765-YD-GSI-S2020-GA-0001	1	1	R1
R0	FIRST ISSUE	16.04.25	AS	AS			FOR APPROVAL	A0	5427PW069-HAV-765-YD-GSI-S2020-GA-0001	1	1	R0