

Comparison of Three Routes on SOI Toposheet for 220kV S/C Jakhotra - Charanka Transmission Line under Patan Forest Division of Gujarat State

Route Comparison Statement for proposed 220 KV S/C Jakhotra - GETCO's 400/220KV Charanka Transmission Line under Santalpur Range of Patan Forest Division, Gujarat

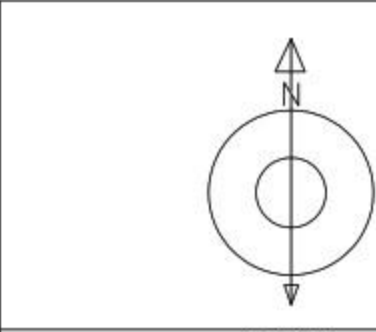
Sr. No.	Description	Alt-I(Proposed) (Red)	Alt-II (Blue)	Alt-III (Magenta)
1	Bee Line	14.38 KM	14.38 KM	14.38 KM
2	Line Length	21.01 K.M	16.14 KM	18.93 KM
3	Angle Points	16	14	15
4	Social Forest	NIL	NIL	NIL
5	Reserved Forest	3.5595 Ha	5.6636 Ha	5.961 Ha
6	Transportation & Maintenance	Good	Moderate	Moderate
7	Power Line crossings (132KV & Above)	3 No	6 No UG Cable	6 No UG Cable
8	Railway crossings	0	0	0
9	River crossings	NIL	NIL	NIL
10	Air Ports	NIL	NIL	NIL
11	Wildlife Sanctuary Area (Wild ass Sanctuary)	NIL	2.559 Ha	1.809 Ha
12	NH Crossings	0	0	0
13	Defense Area Crossing	NIL	NIL	NIL
14	Coal belt area	NIL	NIL	NIL

RESULT AND CONCLUSION:-

Referring to comparative statement for alternative routes and angle point summary, Alt-I (Proposed) Alt-II & Alt-III is positioned in right side of Bee - Line after initial inspection of physical maps updated with satellite images and walk over survey, all three corridors were explored for the best route alignment special attention has been given to the existing EHV lines, Forest, Wildlife & National Park Crossing, River crossings, National/State highways and accordingly after detailed analysis Alt-I (Marked Red) has been observed as most viable route due to its good approach for construction and maintenance of the transmission line with minimum forest area cross.

Details of Forest area of Patan Division coming under 220kV S/C Jakhotra-Charanka Transmission line route

Sr.no	Name of Village	Length in Mtr	Ha	Corridor(mtr)	Latitude	Longitude
1	Patanka	452	1.582	35	23°51'50.11"	71°13'50.14"
					23°52'1.33	71°13'42.81
2	Aluvas	565	1.9775	35	23°52'1.33	71°13'42.81
					23°52'13.87	71°13'28.93"
Total		1017	3.5595			



LEGEND

Torrent Solar Power Pvt Ltd

SCALE 1 = 50000

—	FINAL ROUTE
2/1	TOWER LOCATION
—	FOREST PATCH

Torrent Solar Power Private Limited

Scale:- 1 : 50000

PROJECT:- 220KV S/C JAKHOTRA to CHARANKA TRANSMISSION LINE PROJECT PATAN, GUJARAT STATE

TITLE:- Comparison of Three Transmission Routes

DRAWING NO.:- GU/SC/TRANS/02

sr no	Index	Route
1	Bee Line Route Length 14.38 kms.	---
2	Final Route Length (21.01 kms)	---
3	Alternative2 Length (16.14 kms)	---
4	Alternative3 Length(18.93 kms)	---
5	AP NO	1
6	Substation	---



No. F42F1

Scale 1:50,000



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CONVENTIONAL SYMBOLS



REFERENCE

1. Survey of India, 1957, National Highway No. 11.

COMPILED INDEX

A. Shaded relief (1:50,000) (Scale 1:50,000)

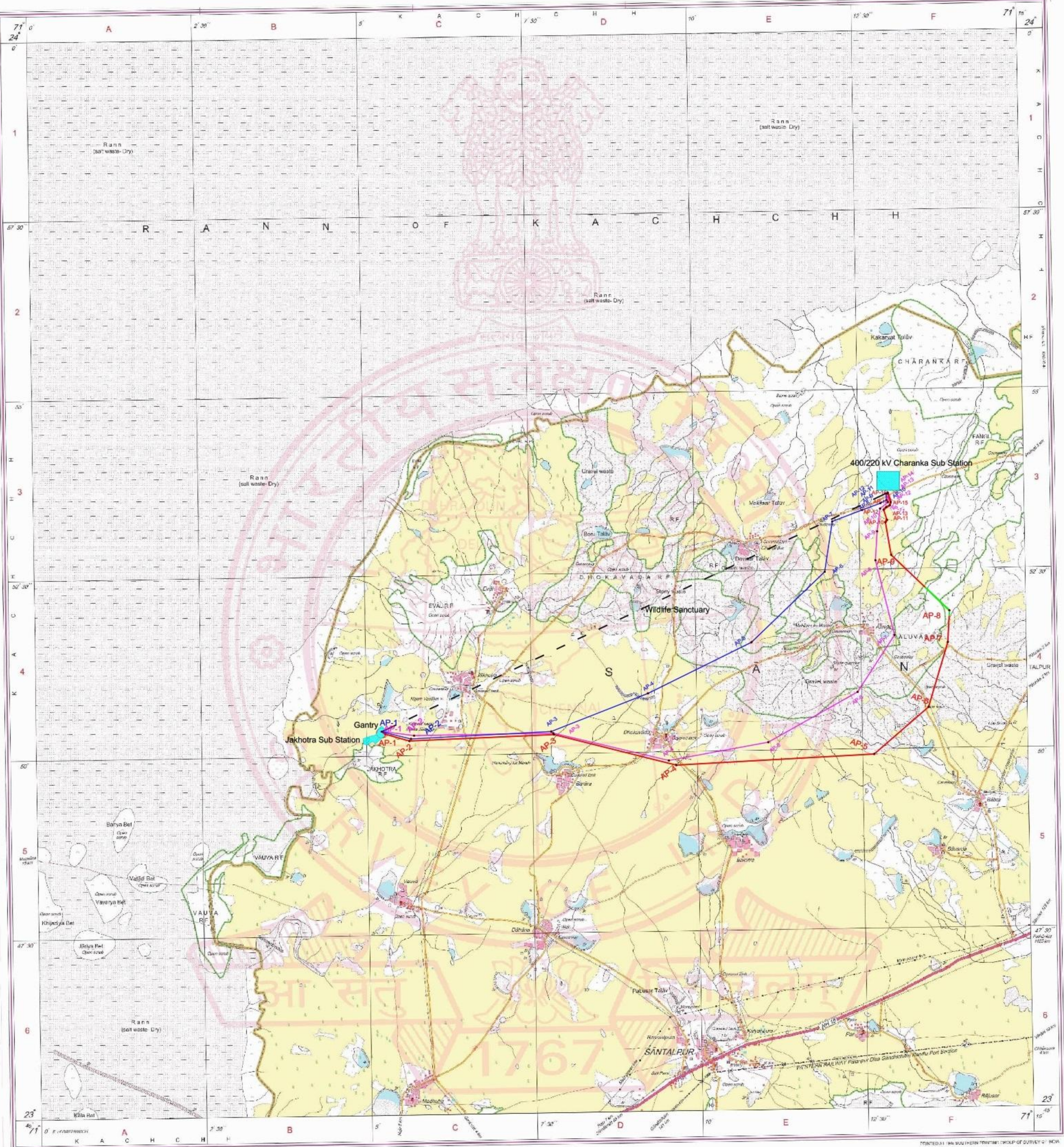
Projection - UTM Datum - WGS 84

Magnetic Variation from True North about 1° in 2005.

For further details about the map, please contact Director, Survey of India, Dehra Dun.

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