

### Alternative Route Alignment Analysis Sheet for

**Full title of the Project:** "Construction of 765 KV D/C Sikar-II -Aligarh Transmission line, District- Sikar, Jaipur & Alwar (Rajasthan) in Rajasthan Portion Ap-01 to Ap-183 Common Point Rajasthan State Boundary. Total Route Length 174.350km."

**Proposal No.** : FP/RJ/TRANS/144853/2021

**Date of Proposal** : 26-07-2021

**Diversion Area** : 15.6043 Ha.

S.No	Alternative Details	Segment	Length (M)	Width (M)	Area (Sqm)	Area (Ha)	Reason for Selection / Rejection
1.	Alternative Route -1 (Selected Alignment Marked in Blue Color)	4	2329	67	156043	15.6043	In Alternative Alignment-1 forest land Proposed for Diversion is less than the Alternative Route-2 and Alternative Route-3 hence we have selected the Route-1
2.	Alternative Route -2 (Selected Alignment Marked in Red Color)	7	11262	67	754554	75.4554	In Alternative Route-2 forest land Proposed for Diversion is More than the Alternative Route-1 Hence we have rejected the Route-2
3.	Alternative Route -3 (Selected Alignment Marked in Magenta Color)	10	14620	67	979540	97.954	In Alternative Route-3 forest land Proposed for Diversion is More than the Alternative Route-1 Hence we have rejected the Route-3

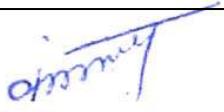
Note : No other Alternative is feasible except above mentioned 2 alignment due protected forest Crossing.

Analysis of above three route has been done route-1 has been selected because it is minimum forest land and low project cost.

**Place :** Alwar

**Date :** 26/07/2021

Countersigned  
Divisional Forest officer  
Forest Division-----  
Office Seal-----

  
के.के. चौधरी/K.K. Choudhary  
वरिष्ठ महाप्रबन्धक/Sr. GM  
Sikar-II Aligarh Transmission Ltd.  
(100% Subsidiary of POWERGRID)  
अलवर/ALWAR

(Kanchan Kumar Choudhary)  
Sr. General Manager  
Sikar-II Aligarh Transmission Ltd (100% Subsiding of POWERGRID)  
Alwar

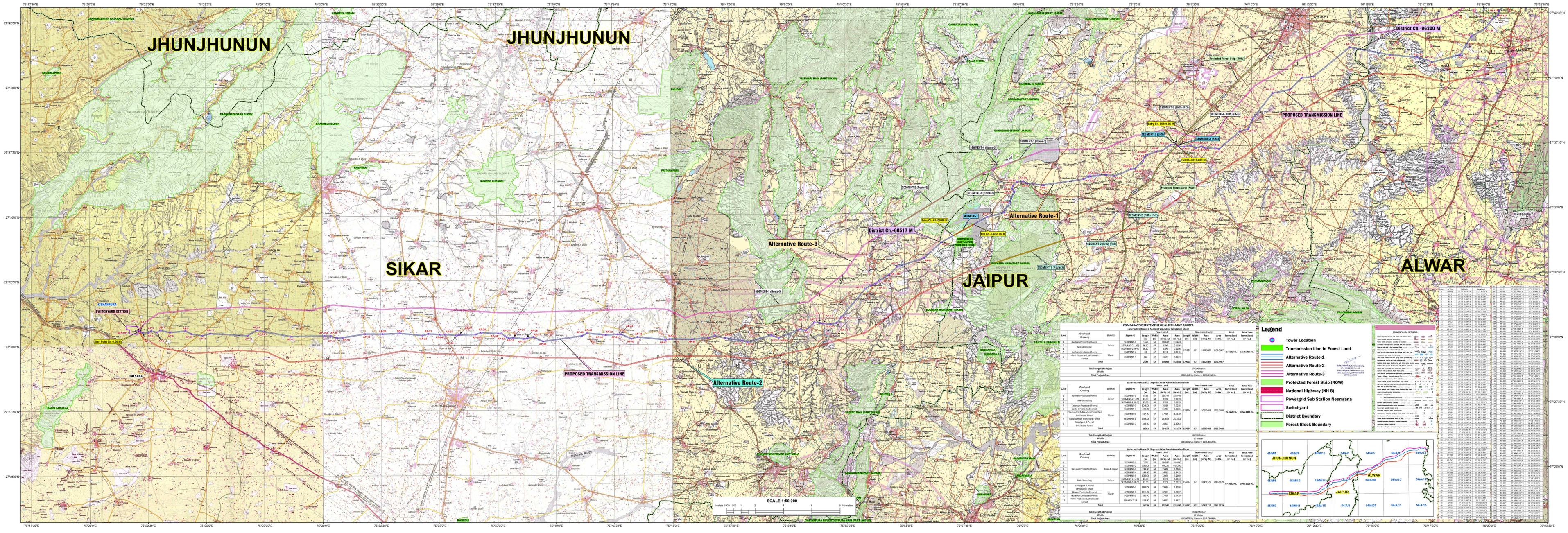
# ALTERNATIVE ROUTE MAP SHOWING GEO-REFERENCE SURVEY OF INDIA TOPOSHEET WITH PROPOSED 765 KV D/C SIKAR-II - ALIGARH TRANSMISSION LINE ALIGNMENT, REQUIRED FOREST LAND AND TOWER LOCATION

Full title of the Project : "Construction of 765 KV D/C Sikar-II - Aligarh Transmission line, District- Sikar, Jaipur & Alwar (Rajasthan)" in Rajasthan Portion Ap-01 to Ap-183 Common Point Rajasthan State Boundary. Total Route Length 174.350 Km.

Proposal No. : FP/RJ/TRANS/144853/2021 Applied Diversion Area : 15.6043 Ha.



PART-1



COMPARATIVE STATEMENT OF ALTERNATIVE ROUTES

(Alternative Route-1) Segment Wise Area Calculation Sheet

S.No.	Overhead Crossing	District	Segment	Forest Land				Non-Forest Land				Total Forest Land (In Ha.)	Total Non-Forest Land (In Ha.)
				Length (In Km)	Width (In M)	Area (In Sq. M)	Area (In Ha.)	Length (In Km)	Width (In M)	Area (In Sq. M)	Area (In Ha.)		
1	Baithari Protected Forest	Jaipur	SEGMENT-1 (RHS)	1051	67	105617	11042.7	1104.27	1051	67	105617	11042.7	1104.27
2	NH & Crossing	Jaipur	SEGMENT-2 (LHS)	1630	67	163000	16300.0	1630.00	1630	67	163000	16300.0	1630.00
3	Charanji Protected Forest	Alwar	SEGMENT-3 (RHS)	622	67	622000	62200.0	62200.00	622	67	622000	62200.0	62200.00
4	NH & Crossing	Alwar	SEGMENT-4 (RHS)	2129	67	2129000	212900.0	212900.00	2129	67	2129000	212900.0	212900.00
Total				5432	67	5432000	543200.0	543200.00	5432	67	5432000	543200.0	543200.00
Total Length of Project				134200 Meters									
Total Project Area				11581400 Sq. Meter = 1158.1400 Ha.									

(Alternative Route-2) Segment Wise Area Calculation Sheet

S.No.	Overhead Crossing	District	Segment	Forest Land				Non-Forest Land				Total Forest Land (In Ha.)	Total Non-Forest Land (In Ha.)
				Length (In Km)	Width (In M)	Area (In Sq. M)	Area (In Ha.)	Length (In Km)	Width (In M)	Area (In Sq. M)	Area (In Ha.)		
1	Baithari Protected Forest	Jaipur	SEGMENT-1 (RHS)	1258	67	1258000	125800.0	125800.00	1258	67	1258000	125800.0	125800.00
2	NH & Crossing	Jaipur	SEGMENT-2 (LHS)	1700	67	1700000	170000.0	170000.00	1700	67	1700000	170000.0	170000.00
3	Talapat Protected Forest	Alwar	SEGMENT-3 (RHS)	2450	67	2450000	245000.0	245000.00	2450	67	2450000	245000.0	245000.00
4	NH & Crossing	Alwar	SEGMENT-4 (RHS)	3221	67	3221000	322100.0	322100.00	3221	67	3221000	322100.0	322100.00
5	Charanji & Bawal Protected Forest	Alwar	SEGMENT-5 (RHS)	557	67	557000	55700.0	55700.00	557	67	557000	55700.0	55700.00
6	Charanji & Bawal Protected Forest	Alwar	SEGMENT-6 (RHS)	3749	67	3749000	374900.0	374900.00	3749	67	3749000	374900.0	374900.00
7	Maharajgarh Protected Forest	Alwar	SEGMENT-7 (RHS)	2500	67	2500000	250000.0	250000.00	2500	67	2500000	250000.0	250000.00
8	NH & Crossing	Alwar	SEGMENT-8 (RHS)	2003	67	2003000	200300.0	200300.00	2003	67	2003000	200300.0	200300.00
Total				11285	67	11285000	1128500.0	1128500.00	11285	67	11285000	1128500.0	1128500.00
Total Length of Project				118700 Meters									
Total Project Area				11158000 Sq. Meter = 1115.8000 Ha.									

(Alternative Route-3) Segment Wise Area Calculation Sheet

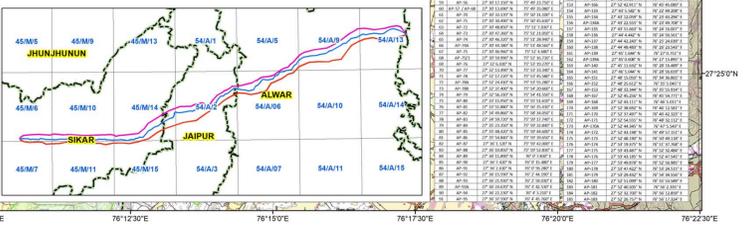
S.No.	Overhead Crossing	District	Segment	Forest Land				Non-Forest Land				Total Forest Land (In Ha.)	Total Non-Forest Land (In Ha.)
				Length (In Km)	Width (In M)	Area (In Sq. M)	Area (In Ha.)	Length (In Km)	Width (In M)	Area (In Sq. M)	Area (In Ha.)		
1	Baithari Protected Forest	Jaipur	SEGMENT-1 (RHS)	2790	67	2790000	279000.0	279000.00	2790	67	2790000	279000.0	279000.00
2	Charanji Protected Forest	Sikar & Jaipur	SEGMENT-2 (LHS)	6000	67	6000000	600000.0	600000.00	6000	67	6000000	600000.0	600000.00
3	NH & Crossing	Jaipur	SEGMENT-3 (RHS)	2480	67	2480000	248000.0	248000.00	2480	67	2480000	248000.0	248000.00
4	NH & Crossing	Jaipur	SEGMENT-4 (LHS)	2400	67	2400000	240000.0	240000.00	2400	67	2400000	240000.0	240000.00
5	Charanji & Bawal Protected Forest	Alwar	SEGMENT-5 (RHS)	1000	67	1000000	100000.0	100000.00	1000	67	1000000	100000.0	100000.00
6	Charanji & Bawal Protected Forest	Alwar	SEGMENT-6 (RHS)	1730	67	1730000	173000.0	173000.00	1730	67	1730000	173000.0	173000.00
7	Subargan & Patal Protected Forest	Alwar	SEGMENT-7 (RHS)	1100	67	1100000	110000.0	110000.00	1100	67	1100000	110000.0	110000.00
8	NH & Crossing	Alwar	SEGMENT-8 (RHS)	7996	67	7996000	799600.0	799600.00	7996	67	7996000	799600.0	799600.00
9	Charanji & Bawal Protected Forest	Alwar	SEGMENT-9 (RHS)	1311	67	1311000	131100.0	131100.00	1311	67	1311000	131100.0	131100.00
10	NH & Crossing	Alwar	SEGMENT-10 (RHS)	2600	67	2600000	260000.0	260000.00	2600	67	2600000	260000.0	260000.00
11	NH & Crossing	Alwar	SEGMENT-11 (RHS)	8330	67	8330000	833000.0	833000.00	8330	67	8330000	833000.0	833000.00
Total				34020	67	34020000	3402000.0	3402000.00	34020	67	34020000	3402000.0	3402000.00
Total Length of Project				13000 Meters									
Total Project Area				11530000 Sq. Meter = 1153.0000 Ha.									

**Legend**

- Tower Location
- Transmission Line in Forest Land
- Alternative Route-1
- Alternative Route-2
- Alternative Route-3
- Protected Forest Strip (ROW)
- National Highway (NH-8)
- Powergrid Sub Station Neemrana
- Switchyard
- District Boundary
- Forest Block Boundary

**CONVENTIONAL SYMBOLS**

Various symbols for roads, rivers, and other geographical features.



SCALE 1:50,000

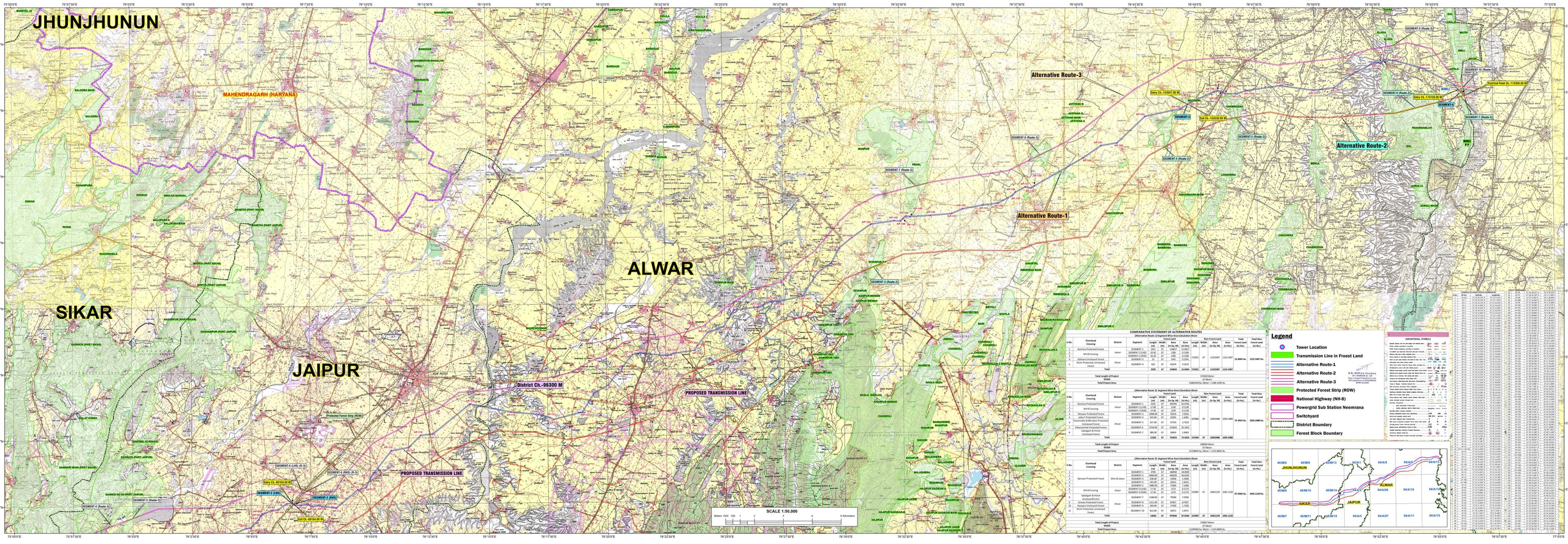
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Proposal No. : FP/RJ/TRANS/144853/2021 Applied Diversion Area : 15.6043 Ha.



PART-2



**COMPARATIVE STATEMENT OF ALTERNATIVE ROUTES**

Alternative Route-1: Segment Wise Area Calculation Sheet

S.No.	Overhead Crossing	District	Segment	Length (m)	Width (m)	Area (sq.m)	Forest Land (sq.m)	Non-Forest Land (sq.m)	Total Forest Land (sq.m)	Total Non-Forest Land (sq.m)
1	Banbara Protected Forest	Jaipur	SEGMENT-1 (RHS)	1871	67	125397	115047	10362	125397	10362
2	NH & Crossing	Jaipur	SEGMENT-2 (RHS)	1630	67	109210	109210	0	109210	0
3	Govindraji Protected Forest	Alwar	SEGMENT-3 (RHS)	281	67	18827	18827	0	18827	0
4	NH Protected Forest	Alwar	SEGMENT-4 (RHS)	622	67	41594	41594	0	41594	0
5	NH Protected Forest	Alwar	SEGMENT-5 (RHS)	1129	67	75623	75623	0	75623	0
Total				2829	67	180671	180671	0	180671	0
Total Length of Project				12420 Meter						
Total Project Area				1158242.50 Meter x 12420 Meter = 14387400.00 Sq.m						

Alternative Route-2: Segment Wise Area Calculation Sheet

S.No.	Overhead Crossing	District	Segment	Length (m)	Width (m)	Area (sq.m)	Forest Land (sq.m)	Non-Forest Land (sq.m)	Total Forest Land (sq.m)	Total Non-Forest Land (sq.m)
1	Banbara Protected Forest	Jaipur	SEGMENT-1 (RHS)	1259	67	84363	84363	0	84363	0
2	NH & Crossing	Jaipur	SEGMENT-2 (RHS)	1739	67	116513	116513	0	116513	0
3	Talpur Protected Forest	Alwar	SEGMENT-3 (RHS)	1049	67	70263	70263	0	70263	0
4	Govindraji Protected Forest	Alwar	SEGMENT-4 (RHS)	243	67	16341	16341	0	16341	0
5	Govindraji Protected Forest	Alwar	SEGMENT-5 (RHS)	557	67	37319	37319	0	37319	0
6	Govindraji Protected Forest	Alwar	SEGMENT-6 (RHS)	3750	67	251250	251250	0	251250	0
7	NH Protected Forest	Alwar	SEGMENT-7 (RHS)	863	67	57821	57821	0	57821	0
8	Govindraji Protected Forest	Alwar	SEGMENT-8 (RHS)	1129	67	75623	75623	0	75623	0
Total				6055	67	405403	405403	0	405403	0
Total Length of Project				11820 Meter						
Total Project Area				1115242.50 Meter x 11820 Meter = 13185000.00 Sq.m						

Alternative Route-3: Segment Wise Area Calculation Sheet

S.No.	Overhead Crossing	District	Segment	Length (m)	Width (m)	Area (sq.m)	Forest Land (sq.m)	Non-Forest Land (sq.m)	Total Forest Land (sq.m)	Total Non-Forest Land (sq.m)
1	Banbara Protected Forest	Jaipur	SEGMENT-1 (RHS)	2776	67	185892	185892	0	185892	0
2	NH & Crossing	Jaipur	SEGMENT-2 (RHS)	6000	67	402000	402000	0	402000	0
3	Govindraji Protected Forest	Alwar	SEGMENT-3 (RHS)	2480	67	166160	166160	0	166160	0
4	Govindraji Protected Forest	Alwar	SEGMENT-4 (RHS)	240	67	16080	16080	0	16080	0
5	Govindraji Protected Forest	Alwar	SEGMENT-5 (RHS)	1000	67	67000	67000	0	67000	0
6	NH & Crossing	Jaipur	SEGMENT-6 (RHS)	1739	67	116513	116513	0	116513	0
7	NH Protected Forest	Alwar	SEGMENT-7 (RHS)	1188	67	79696	79696	0	79696	0
8	Govindraji Protected Forest	Alwar	SEGMENT-8 (RHS)	1311	67	87817	87817	0	87817	0
9	Govindraji Protected Forest	Alwar	SEGMENT-9 (RHS)	2603	67	174201	174201	0	174201	0
10	NH Protected Forest	Alwar	SEGMENT-10 (RHS)	833	67	55711	55711	0	55711	0
11	NH Protected Forest	Alwar	SEGMENT-11 (RHS)	1420	67	95140	95140	0	95140	0
Total				14203	67	970461	970461	0	970461	0
Total Length of Project				13002 Meter						
Total Project Area				1143000.00 Meter x 13002 Meter = 14860000.00 Sq.m						

**Legend**

- Tower Location
- Transmission Line in Forest Land
- Alternative Route-1
- Alternative Route-2
- Alternative Route-3
- Protected Forest Strip (ROW)
- National Highway (NH-8)
- Powergrid Sub Station Neemrana
- Switchyard
- District Boundary
- Forest Block Boundary

**CONVENTIONAL SYMBOLS**

Scale: 1:50,000

Meters 1000 500 1 2 4 6 8 Kilometers