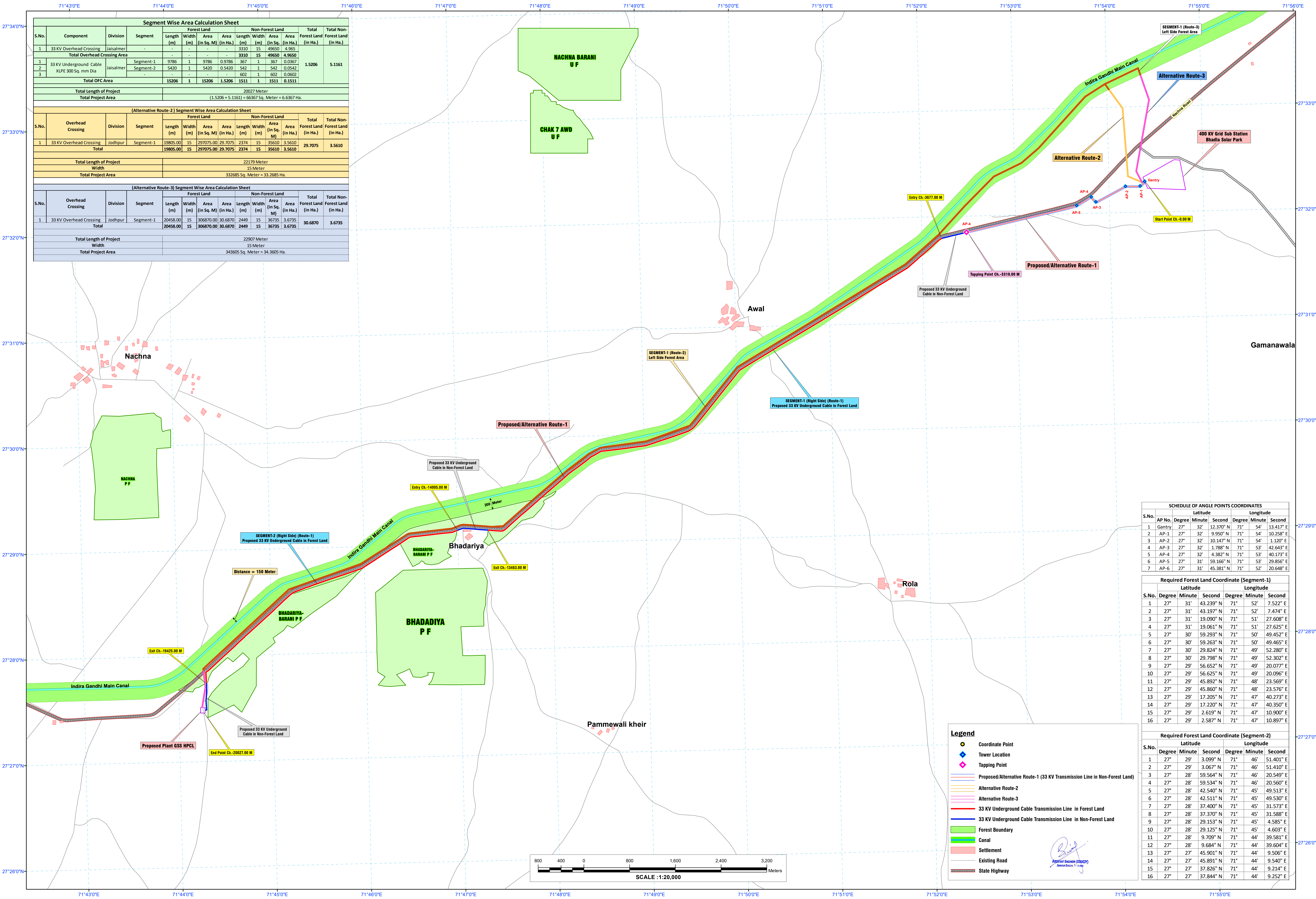
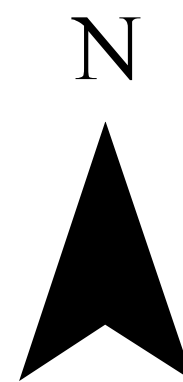


ALTERNATIVE ROUTE DIGITAL MAP SHOWING OF PROPOSED 33 KV (400 KV GSS BHADLA TO HPCL, RAJASTHAN REFINERY LTD.) TRANSMISSION LINE  
WITH REQUIRED FOREST LAND AND TOWER LOCATION

Full Title of the Project : “Construction of 33 KV Transmission Line Overhead/ Underground 33 KV XLPE 300 Sq. mm Cable From 400 KV GSS Bhadla to HPCL Rajasthan Refinery Ltd Nachana District -Jaisalmer”

Proposal No. : FP/RJ/TRANS/152039/2022 Applied Area : 1.5206 Ha.



| Segment Wise Area Calculation Sheet                       |                                             |           |           |                                                   |           |                 |               |                 |           |                 |               |                            |                                |
|-----------------------------------------------------------|---------------------------------------------|-----------|-----------|---------------------------------------------------|-----------|-----------------|---------------|-----------------|-----------|-----------------|---------------|----------------------------|--------------------------------|
| S.No.                                                     | Component                                   | Division  | Segment   | Forest Land                                       |           |                 |               | Non-Forest Land |           |                 |               | Total Forest Land (In Ha.) | Total Non-Forest Land (In Ha.) |
|                                                           |                                             |           |           | Length (m)                                        | Width (m) | Area (In Sq. M) | Area (In Ha.) | Length (m)      | Width (m) | Area (In Sq. M) | Area (In Ha.) |                            |                                |
| 1                                                         | 33 KV Overhead Crossing                     | Jaisalmer | -         | -                                                 | -         | -               | -             | 3310            | 15        | 49650           | 4.965         | 1.5206                     | 5.1161                         |
| Total Overhead Crossing Area                              |                                             |           |           | -                                                 | -         | -               | -             | 3310            | 15        | 49650           | 4.9650        |                            |                                |
| 2                                                         | 33 KV Underground Cable XLPE 300 Sq. mm Dia | Jaisalmer | Segment-1 | 9786                                              | 1         | 9786            | 0.9786        | 367             | 1         | 367             | 0.0367        |                            |                                |
| 3                                                         |                                             |           | Segment-2 | 5420                                              | 1         | 5420            | 0.5420        | 542             | 1         | 542             | 0.0542        |                            |                                |
| Total OFC Area                                            |                                             |           |           | 15206                                             | 1         | 15206           | 1.5206        | 1511            | 1         | 1511            | 0.1511        |                            |                                |
| Total Length of Project                                   |                                             |           |           | 20027 Meter                                       |           |                 |               |                 |           |                 |               |                            |                                |
| Total Project Area                                        |                                             |           |           | (1.5206 + 5.1161) = 6.6367 Sq. Meter = 6.6367 Ha. |           |                 |               |                 |           |                 |               |                            |                                |
| (Alternative Route-2) Segment Wise Area Calculation Sheet |                                             |           |           |                                                   |           |                 |               |                 |           |                 |               |                            |                                |
| S.No.                                                     | Overhead Crossing                           | Division  | Segment   | Forest Land                                       |           |                 |               | Non-Forest Land |           |                 |               | Total Forest Land (In Ha.) | Total Non-Forest Land (In Ha.) |
|                                                           |                                             |           |           | Length (m)                                        | Width (m) | Area (In Sq. M) | Area (In Ha.) | Length (m)      | Width (m) | Area (In Sq. M) | Area (In Ha.) |                            |                                |
| 1                                                         | 33 KV Overhead Crossing                     | Jodhpur   | Segment-1 | 19805.00                                          | 15        | 297075.00       | 29.7075       | 2374            | 15        | 35610           | 3.5610        | 29.7075                    | 3.5610                         |
| Total                                                     |                                             |           |           | 19805.00                                          | 15        | 297075.00       | 29.7075       | 2374            | 15        | 35610           | 3.5610        |                            |                                |
| Total Length of Project                                   |                                             |           |           | 22179 Meter                                       |           |                 |               |                 |           |                 |               |                            |                                |
| Width                                                     |                                             |           |           | 15 Meter                                          |           |                 |               |                 |           |                 |               |                            |                                |
| Total Project Area                                        |                                             |           |           | 332685 Sq. Meter = 33.2685 Ha.                    |           |                 |               |                 |           |                 |               |                            |                                |
| (Alternative Route-3) Segment Wise Area Calculation Sheet |                                             |           |           |                                                   |           |                 |               |                 |           |                 |               |                            |                                |
| S.No.                                                     | Overhead Crossing                           | Division  | Segment   | Forest Land                                       |           |                 |               | Non-Forest Land |           |                 |               | Total Forest Land (In Ha.) | Total Non-Forest Land (In Ha.) |
|                                                           |                                             |           |           | Length (m)                                        | Width (m) | Area (In Sq. M) | Area (In Ha.) | Length (m)      | Width (m) | Area (In Sq. M) | Area (In Ha.) |                            |                                |
| 1                                                         | 33 KV Overhead Crossing                     | Jodhpur   | Segment-1 | 20458.00                                          | 15        | 306870.00       | 30.6870       | 2449            | 15        | 36735           | 3.6735        | 30.6870                    | 3.6735                         |
| Total                                                     |                                             |           |           | 20458.00                                          | 15        | 306870.00       | 30.6870       | 2449            | 15        | 36735           | 3.6735        |                            |                                |
| Total Length of Project                                   |                                             |           |           | 22907 Meter                                       |           |                 |               |                 |           |                 |               |                            |                                |
| Width                                                     |                                             |           |           | 15 Meter                                          |           |                 |               |                 |           |                 |               |                            |                                |
| Total Project Area                                        |                                             |           |           | 343605 Sq. Meter = 34.3605 Ha.                    |           |                 |               |                 |           |                 |               |                            |                                |

| SCHEDULE OF ANGLE POINTS COORDINATES |        |        |        |         |                   |           |        |         |             |           |           |
|--------------------------------------|--------|--------|--------|---------|-------------------|-----------|--------|---------|-------------|-----------|-----------|
| S.No.                                | AP No. | Degree | Minute | Second  | Latitude          | Longitude | Second | Minute  | Degree      | Latitude  | Longitude |
| 1                                    | Gantry | 27°    | 32'    | 12.370" | 27° 32' 12.370" N | 71° 13'   | 54"    | 13.417" | 71° 13' 54" | 13.417" E | 13.417" E |
| 2                                    | AP-1   | 27°    | 32'    | 9.950"  | 27° 32' 9.950" N  | 71° 13'   | 54"    | 10.258" | 71° 13' 54" | 10.258" E | 10.258" E |
| 3                                    | AP-2   | 27°    | 32'    | 10.147" | 27° 32' 10.147" N | 71° 13'   | 54"    | 1.120"  | 71° 13' 54" | 1.120" E  | 1.120" E  |
| 4                                    | AP-3   | 27°    | 32'    | 1.788"  | 27° 32' 1.788" N  | 71° 13'   | 53"    | 42.643" | 71° 13' 53" | 42.643" E | 42.643" E |
| 5                                    | AP-4   | 27°    | 32'    | 4.382"  | 27° 32' 4.382" N  | 71° 13'   | 53"    | 40.173" | 71° 13' 53" | 40.173" E | 40.173" E |
| 6                                    | AP-5   | 27°    | 31'    | 59.166" | 27° 31' 59.166" N | 71° 13'   | 53"    | 29.856" | 71° 13' 53" | 29.856" E | 29.856" E |
| 7                                    | AP-6   | 27°    | 31'    | 45.381" | 27° 31' 45.381" N | 71° 13'   | 52"    | 20.648" | 71° 13' 52" | 20.648" E | 20.648" E |

| Required Forest Land Coordinate (Segment-1) |        |        |         |                   |           |        |         |             |           |           |           |
|---------------------------------------------|--------|--------|---------|-------------------|-----------|--------|---------|-------------|-----------|-----------|-----------|
| S.No.                                       | Degree | Minute | Second  | Latitude          | Longitude | Second | Minute  | Degree      | Latitude  | Longitude | Second    |
| 1                                           | 27°    | 31'    | 43.239" | 27° 31' 43.239" N | 71° 13'   | 52"    | 7.522"  | 71° 13' 52" | 7.522" E  | 7.522" E  | 7.522" E  |
| 2                                           | 27°    | 31'    | 43.197" | 27° 31' 43.197" N | 71° 13'   | 52"    | 7.474"  | 71° 13' 52" | 7.474" E  | 7.474" E  | 7.474" E  |
| 3                                           | 27°    | 31'    | 19.090" | 27° 31' 19.090" N | 71° 13'   | 51"    | 27.608" | 71° 13' 51" | 27.608" E | 27.608" E | 27.608" E |
| 4                                           | 27°    | 31'    | 19.061" | 27° 31' 19.061" N | 71° 13'   | 51"    | 27.625" | 71° 13' 51" | 27.625" E | 27.625" E | 27.625" E |
| 5                                           | 27°    | 30'    | 59.293" | 27° 30' 59.293" N | 71° 13'   | 50"    | 49.452" | 71° 13' 50" | 49.452" E | 49.452" E | 49.452" E |
| 6                                           | 27°    | 30'    | 59.263" | 27° 30' 59.263" N | 71° 13'   | 50"    | 49.465" | 71° 13' 50" | 49.465" E | 49.465" E | 49.465" E |
| 7                                           | 27°    | 30'    | 29.824" | 27° 30' 29.824" N | 71° 13'   | 49"    | 52.280" | 71° 13' 49" | 52.280" E | 52.280" E | 52.280" E |
| 8                                           | 27°    | 30'    | 29.798" | 27° 30' 29.798" N | 71° 13'   | 49"    | 52.302" | 71° 13' 49" | 52.302" E | 52.302" E | 52.302" E |
| 9                                           | 27°    | 29'    | 56.652" | 27° 29' 56.652" N | 71° 13'   | 49"    | 20.077" | 71° 13' 49" | 20.077" E | 20.077" E | 20.077" E |
| 10                                          | 27°    | 29'    | 56.625" | 27° 29' 56.625" N | 71° 13'   | 49"    | 20.096" | 71° 13' 49" | 20.096" E | 20.096" E | 20.096" E |
| 11                                          | 27°    | 29'    | 45.892" | 27° 29' 45.892" N | 71° 13'   | 48"    | 23.569" | 71° 13' 48" | 23.569" E | 23.569" E | 23.569" E |
| 12                                          | 27°    | 29'    | 45.860" | 27° 29' 45.860" N | 71° 13'   | 48"    | 23.576" | 71° 13' 48" | 23.576" E | 23.576" E | 23.576" E |
| 13                                          | 27°    | 29'    | 17.205" | 27° 29' 17.205" N | 71° 13'   | 47"    | 40.273" | 71° 13' 47" | 40.273" E | 40.273" E | 40.273" E |
| 14                                          | 27°    | 29'    | 17.220" | 27° 29' 17.220" N | 71° 13'   | 47"    | 40.350" | 71° 13' 47" | 40.350" E | 40.350" E | 40.350" E |
| 15                                          | 27°    | 29'    | 2.619"  | 27° 29' 2.619" N  | 71° 13'   | 47"    | 10.900" | 71° 13' 47" | 10.900" E | 10.900" E | 10.900" E |
| 16                                          | 27°    | 29'    | 2.587"  | 27° 29' 2.587" N  | 71° 13'   | 47"    | 10.897" | 71° 13' 47" | 10.897" E | 10.897" E | 10.897" E |

| Required Forest Land Coordinate (Segment-2) |        |        |         |                   |           |        |         |             |           |           |           |
|---------------------------------------------|--------|--------|---------|-------------------|-----------|--------|---------|-------------|-----------|-----------|-----------|
| S.No.                                       | Degree | Minute | Second  | Latitude          | Longitude | Second | Minute  | Degree      | Latitude  | Longitude | Second    |
| 1                                           | 27°    | 29'    | 3.099"  | 27° 29' 3.099" N  | 71° 13'   | 46"    | 51.401" | 71° 13' 46" | 51.401" E | 51.401" E | 51.401" E |
| 2                                           | 27°    | 29'    | 3.067"  | 27° 29' 3.067" N  | 71° 13'   | 46"    | 51.410" | 71° 13' 46" | 51.410" E | 51.410" E | 51.410" E |
| 3                                           | 27°    | 28'    | 59.564" | 27° 28' 59.564" N | 71° 13'   | 46"    | 20.549" | 71° 13' 46" | 20.549" E | 20.549" E | 20.549" E |
| 4                                           | 27°    | 28'    | 59.534" | 27° 28' 59.534" N | 71° 13'   | 46"    | 20.560" | 71° 13' 46" | 20.560" E | 20.560" E | 20.560" E |
| 5                                           | 27°    | 28'    | 42.540" | 27° 28' 42.540" N | 71° 13'   | 45"    | 49.513" | 71° 13' 45" | 49.513" E | 49.513" E | 49.513" E |
| 6                                           | 27°    | 28'    | 42.511" | 27° 28' 42.511" N | 71° 13'   | 45"    | 49.530" | 71° 13' 45" | 49.530" E | 49.530" E | 49.530" E |
| 7                                           | 27°    | 28'    | 37.400" | 27° 28' 37.400" N | 71° 13'   | 45"    | 31.573" | 71° 13' 45" | 31.573" E | 31.573" E | 31.573" E |
| 8                                           | 27°    | 28'    | 37.370" | 27° 28' 37.370" N | 71° 13'   | 45"    | 31.588" | 71° 13' 45" | 31.588" E | 31.588" E | 31.588" E |
| 9                                           | 27°    | 28'    | 29.153" | 27° 28' 29.153" N | 71° 13'   | 45"    | 4.585"  | 71° 13' 45" | 4.585" E  | 4.585" E  | 4.585" E  |
| 10                                          | 27°    | 28'    | 29.125" | 27° 28' 29.125" N | 71° 13'   | 45"    | 4.603"  | 71° 13' 45" | 4.603" E  | 4.603" E  | 4.603" E  |
| 11                                          | 27°    | 28'    | 9.709"  | 27° 28' 9.709" N  | 71° 13'   | 44"    | 39.581" | 71° 13' 44" | 39.581" E | 39.581" E | 39.581" E |
| 12                                          | 27°    | 28'    | 9.684"  | 27° 28' 9.684" N  | 71° 13'   | 44"    | 39.604" | 71° 13' 44" | 39.604" E | 39.604" E | 39.604" E |
| 13                                          | 27°    | 27'    | 45.901" | 27° 27' 45.901" N | 71° 13'   | 44"    | 9.506"  | 71° 13' 44" | 9.506" E  | 9.506" E  | 9.506" E  |
| 14                                          | 27°    | 27'    | 45.891" | 27° 27' 45.891" N | 71° 13'   | 44"    | 9.540"  | 71° 13' 44" | 9.540" E  | 9.540" E  | 9.540" E  |
| 15                                          | 27°    | 27'    | 37.826" | 27° 27' 37.826" N | 71° 13'   | 44"    | 9.214"  | 71° 13' 44" | 9.214" E  | 9.214" E  | 9.214" E  |
| 16                                          | 27°    | 27'    | 37.844" | 27° 27' 37.844" N | 71° 13'   | 44"    | 9.252"  | 71° 13' 44" | 9.252" E  | 9.252" E  | 9.252" E  |

**Legend**

- Coordinate Point
- Tower Location
- Tapping Point
- Proposed/Alternative Route-1 (33 KV Transmission Line in Non-Forest Land)
- Alternative Route-2
- Alternative Route-3
- 33 KV Underground Cable Transmission Line in Forest Land
- 33 KV Underground Cable Transmission Line in Non-Forest Land
- Forest Boundary
- Canal
- Settlement
- Existing Road
- State Highway

Assistant Engineer (R&D)  
Jaisalmer District, Rajasthan