



OFFICE OF THE SENIOR PROJECT MANAGER, INFRASTRUCTURE DIVISION  
ODISHA BRIDGE & CONSTRUCTION CORPORATION LIMITED  
(A Government of Odisha Undertaking under Works Department)  
O.M.P. Square, Cuttack – 753003 | Email: ctcdv3@obcc.in

No: 338/WE

Date: 14-07-2022

To

**The Executive Engineer (Elect),  
CDD-II, Badambadi,  
TPCODL, Cuttack**

**Sub:** Reconstruction & shifting of existing electrical utilities at the project site of Netaji Bus Terminus at Khannagar, Cuttack / **Regarding corrected estimate under 100% deposit scheme.**

**Ref:** Your Office Letter No- CDD-II/EE/Tech-01/No- 1390(4), Dt-22-06-2022

Sir,

In inviting a reference to the subject cited above, I am directed to forward you the corrected estimate amounting to **₹2,03,51,277.00** pertaining to the reconstruction & shifting of existing electrical utilities at the project site of Netaji Bus Terminus at Khannagar, Cuttack.

The corrected estimate is enclosed herewith for your information & necessary concurrence.

**Encl:-** Corrected Estimate (27 Pages)

Yours faithfully,

**Sr. Project Manager,  
Infrastructure Division  
O.B. & C.C. Ltd, Cuttack**

Memo No. \_\_\_\_\_ / Dt \_\_\_\_\_

Copy submitted to the E.I.C-cum-M.D., O.B. & C.C. Ltd., Bhubaneswar/ Senior Chief General Manager, O.B. & C.C. Ltd. Bhubaneswar for favour of kind information and necessary action.

**Sr. Project Manager,  
Infrastructure Division  
O.B. & C.C. Ltd, Cuttack**

**ABSTRACT FOR TPCODL LETTER NO: 4517 DTD 02.06.2022****(Estimate No. 24/22-23 dtd 02.06.2022)**

<b>SL NO:</b>	<b>Estimate</b>	<b>Cost Submitted by TPCODL</b>	<b>Cost After Correction</b>
1	PART-A	18258019.67	14691482.98
2	PART-B	1811425.24	1312044.33
3	PART-C	2391164.92	1877173.64
4	PART-D	775142.89	664224.87
5	PART-E	499330.99	428833.39
6	PART-F	1806526.89	1307243.17
7	PART-G	82924.61	70275.09
9	Insepection charges	9725.00	
10	GST @ 18% on Insepection Charges	1750.50	
	<b>TOTAL</b>	<b>25636010.71</b>	<b>20351277.47</b>

**ABSTRACT FOR TPCODL LETTER NO: 4518 DTD 02.06.2022****(Estimate No. 25/22-23 dtd 02.06.2022)**

<b>SL NO:</b>	<b>Estimate</b>	<b>Cost Submitted by TPCODL</b>	<b>Cost After Correction</b>
1	PART-A	418986.11	418986.11
2	PART-B	11590.41	11590.41
	<b>TOTAL</b>	<b>430576.52</b>	<b>430576.52</b>

## PART- A

### Electrical

Supply Cost of Material	5675902.52
Total Landed cost	5675902.52
Stock, Storage & insurance i.e, @ 3%	170277.08
Sub total	5846179.60
Contingency @ 3%	175385.39
Tools & Plants @ 2%	218.77
Transportation @ 7.5%	438463.47
Erection charges on earthing only @ 10%	1093.86
<b>Total</b>	<b>6461341.09</b>

### CIVIL

Total Material Cost=	5181921.27
Total Landed cost	5181921.27
Total Cost	11643262.36
Salvage value deduction@8%	34708.00
Total	11608554.36
Other overheads including 6% supervisioin charges	696513.26
Sub total	12339775.62
GST @ 18%	2221159.61
CESS @ 1%	123397.76
Gross Total (Material + Services)=	14684332.98
add insepection fee	7150.00
	<b>14691482.98</b>

## PART-B

### Electrical

Supply Cost of Material	595238.00
Total Landed cost	595238.00
Stock, Storage & insurance i.e, @ 3%	17857.14
Sub total	613095.14
Contingency @ 3%	18392.85
Tools & Plants @ 2%	0.00
Transportation @ 7.5%	45982.14
Erection charges on earthing only @ 10%	0.00
<b>Total</b>	<b>677470.13</b>

### CIVIL & ERECTION

Total Material Cost=	362163.87
Total Landed cost	362163.87
Total Cost	1039634.00
Salvage value deduction@8%	0.00
Total	1039634.00
Other overheads including 6% superivision charges	62378.04
Sub total	1102012.04
GST @ 18%	198362.17
CESS @ 1%	11020.12
Gross Total (Material + Services)=	1311394.33
add insepection fee	650.00
	<b>1312044.33</b>

## PART-C

### Electrical

Supply Cost of Material	632245.47
Total Landed cost	632245.47
Stock, Storage & insurance i.e, @ 3%	18967.36
Sub total	<b>651212.83</b>
Contingency @ 3%	19536.39
Tools & Plants @ 2%	0.00
Transportation @ 7.5%	48840.96
Erection charges on earthing only @ 10%	0.00
<b>Total</b>	<b>719590.18</b>

### CIVIL & ERECTION

Total Material Cost=	768061.35
Total Landed cost	768061.35
Total Cost	<b>1487651.53</b>
Salvage value deduction@8%	0.00
Total	<b>1487651.53</b>
Other overheads including 6% supervision charges	89259.09
Sub total	<b>1576910.62</b>
GST @ 18%	283843.91
CESS @ 1%	15769.11
Gross Total (Material + Services)=	<b>1876523.64</b>
add insepection fee	650.00
	<b>1877173.64</b>

## PART-D

### Electrical

Supply Cost of Material	384649.40
Total Landed cost	384649.40
Stock, Storage & insurance i.e, @ 3%	11539.48
Sub total	396188.88
Contingency @ 3%	11885.67
Tools & Plants @ 2%	7923.78
Transportation @ 7.5%	29714.17
Erection charges on Transformer only @ 5%	7955.09
Erection charges on Transformer only @ 10%	22554.77
<b>Total</b>	<b>476222.35</b>

### CIVIL & Services

Total service Cost=	49879.50
Total Landed cost	49879.50
Total Cost	526101.85
Other overheads including 6% supervision charges	31566.11
Sub total	557667.96
GST @ 18%	100380.23
CESS @ 1%	5576.68
Gross Total (Material + Services)=	663624.87
add inspection fee	600.00
	<b>664224.87</b>

## PART-E

### Electrical

Supply Cost of Material	185849.22
Total Landed cost	185849.22
Stock, Storage & insurance i.e, @ 3%	5575.48
Sub total	191424.70
Contingency @ 3%	5742.74
Tools & Plants @ 2%	3828.49
Transportation @ 7.5%	14356.85
Erection Charges on Trans, Breaker, WPB/Hpole @5%	9571.23
Erection charges on Transformer only @ 10%	13839.08
<b>Total</b>	<b>238763.10</b>

### CIVIL & Services

Total service Cost=	100668.00
Total Landed cost	100668.00
Total Cost	339431.10
Other overheads including 6% supervision charges	20365.87
Sub total	359796.96
GST @ 18%	64763.45
CESS @ 1%	3597.97
Gross Total (Material + Services)=	428158.39
add inspection fee	675.00
	<b>428833.39</b>

## PART- F

### Electrical

Supply Cost of Material	619129.20
Total Landed cost	619129.20
Stock, Storage & insurance i.e, @ 3%	18573.88
Sub total	<b>637703.08</b>
Contingency @ 3%	19131.09
Tools & Plants @ 2%	0.00
Transportation @ 7.5%	47827.73
Erection charges on earthing only @ 10%	0.00
<b>Total</b>	<b>704661.90</b>

### CIVIL

Total Material Cost=	331681.19
Total Landed cost	331681.19
Total Cost	<b>1036343.09</b>
Other overheads including 6% supervision charges	62180.59
Sub total	<b>1098523.67</b>
GST @ 18%	197734.26
CESS @ 1%	10985.24
Gross Total (Material + Services)=	<b>1307243.17</b>
add insepection fee	0.00
	<b>1307243.17</b>

## PART- G

### DISMANTLING PORTION

Supply Cost of Material	55711.98
Total Landed cost	55711.98
Supervision charges @ 6%	3342.72
Sub total	59054.70
GST @ 18%	10629.85
CESS @ 1%	590.55
<b>Total</b>	<b>70275.09</b>
	<b>70275.09</b>

# TPCODL By, e-mail

No. TPCODL/TECH- 294 (Vol-IX) / 4517 Dated - 2 JUN 2022

To

**The Circle Head,  
TPCODL, Cuttack.**

Sub: Sanction of revised estimate for Reconstruction and shifting of existing electrical utilize at the project site of Netaji Bus Terminal, Khannagar under Badambadi Electrical Section of CDD-II, Cuttack in 100% deposit work scheme

Ref: 1. T.O. Sanction Estimate No. 49/2021-22 circulated vide letter no. 8547 / 22.06.2021.  
2. T.O. Sanction Estimate No. 135/2021-22 circulated vide letter no. 2293 / 25.03.2022.

Sir,

With reference to the above and as per your recommendation the following work is hereby sanctioned under 100% deposit work Scheme.

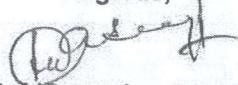
Name of the work	Divn.	Scope of work	Sanct. Estt. No. Amount
Reconstruction and shifting of existing electrical utilize at the project site of Netaji Bus Terminal, Khannagar under Badambadi Electrical Section of CDD-II, Cuttack in 100% deposit work scheme	X B C CDD-II, Cuttack	<ul style="list-style-type: none"> <li>1. Laying of 11KV 3C 400mm<sup>2</sup> Cable with 1 Run spare in open trench method – 0.620 Km.</li> <li>2. Laying of 11KV 3C 400mm<sup>2</sup> Cable with 1 Run spare in HDD method – 0.640 Km.</li> <li>3. Laying of 11KV 3C 150mm<sup>2</sup> Cable with 1 Run spare in open trench method – 0.200 Km.</li> <li>4. Laying of 11KV 3C 120mm<sup>2</sup> Cable with 1 Run spare in open trench method – 0.150 Km.</li> <li>5. Laying of 11KV 3C 120mm<sup>2</sup> Cable with 1 Run spare in HDD method – 0.100 Km.</li> <li>6. Installation of DP with AB switch – 3 Nos.</li> <li>7. Const. of 100KVA 11/0.4KV pole mounted DSS – 2 Nos. (Existing DT will be installed)</li> <li>8. Laying of 4Cx300mm<sup>2</sup> 1.1KV XLPE UG cable (armoured) with 1 no. of LT feeder piller - 200Mtr.</li> <li>9. Dismantling portion.</li> </ul> <p>All the scope of works are to be executed &amp; maintained by TPCODL</p>	No. 24 / 2022-23 Rs.2,56,36,011.00 (Gross Amount)

The work may be executed departmentally after deposit of sanctioned 100% estimated amount by the party. The additional amount if any is to be borne by the party after execution of the work in 100% deposit work scheme.

As such detail permission is to be issued to the party observing all departmental formalities and codal procedure of TPCODL.

Encl: Sanctioned Estt. No. 24 / 2022-23

Regards,



Chief Operation Services  
TPCODL, BBSR

CC to:

1. Divisional Manager, CDD-II, Cuttack.
2. Head ( E&Q), TPCODL, BBSR
3. Head (KCG), TPCODL, BBSR
4. Sr. Project Manager, Infrastructure Division, O. B & C.C. Ltd. Cuttack. (email ID: [ctcdv3@obcc.in](mailto:ctcdv3@obcc.in))

TP CENTRAL ODISHA DISTRIBUTION LIMITED

(A Tata Power & Odisha Government Joint Venture)

Head Office: IDCO Tower, 2<sup>nd</sup> Floor, Janpath, Bhubaneswar – 751 022, Odisha  
Phone : 0674-2545681, 2541727, Fax: 0674-2543125

## TP CENTRAL ODISHA DISTRIBUTION LTD.

Date: 01.06.2022

Name of the Division :-	CDD-2	
Name of the Sub-Division :-	Badambadi	
Name of the Section :-	Badambadi	
Name of Consumer :-	OB & CC	
Name of the Work :-	Reconstruction & shifting of existing electrical utilities at the project site of Netaji Bus Terminal, Khannagar under Badambadi section, Cuttack	
Scope of work:-	<p>1. Laying of 0.620 KM 11 KV 3C, 400 sq.mm. cable with 1 Run Spare in open trench method (Refer SLD: A-B, C-D, I-J)</p> <p>2. Laying of 0.640 KM 11 KV 3C, 400 sq.mm. cable with 1 Run Spare in HDD method (Refer SLD: E-F, G-H)</p> <p>3. Laying of 0.200 KM 11 KV 3C, 150 sq.mm. cable with 1 Run Spare in open trench method (Refer SLD: P-Q)</p> <p>4. Laying of 0.150 KM 11 KV 3C, 120 sq.mm. cable with 1 Run Spare in open trench method (Refer SLD: M-N)</p> <p>5. Laying of 0.100 KM 11 KV 3C, 120 sq.mm. cable with 1 Run Spare in HDD method (Refer SLD: K-L)</p> <p>6. Installation of DP with AB Switch- 3 Nos. (Refer SLD: A, F, J)</p> <p>7. Construction of 2 Nos. 100 KVA, 11/0.4 KV pole mounted DSS (Existing DT will be installed)</p> <p>8. Laying of 200 Mtr. 4Cx 300 Sq.mm. 1.1 KV XLPE U/G Cable (armoured) with 1 no. of LT Feeder pillar (Ref. SLD- N-O)</p> <p>9. Dismantling Portion</p>	
Names of Schemes:-	100% deposit work.	
Type of Work	Shifting	
Abstract of Estimate		
Sl. No.	Description	Gross
1	PART-A: 1. Laying of 0.620 KM 11 KV 3C, 400 sq.mm. cable with 1 Run Spare in open trench method (Refer SLD: A-B, C-D, I-J) 2. Laying of 0.640 KM 11 KV 3C, 400 sq.mm. cable with 1 Run Spare in HDD method (Refer SLD: E-F, G-H)	1,82,58,019.87
2	PART-B: 1. Laying of 0.200 KM 11 KV 3C, 150 sq.mm. cable with 1 Run Spare in open trench method (Refer SLD: P-Q)	18,11,425.24
3	PART-C: 1. Laying of 0.150 KM 11 KV 3C, 120 sq.mm. cable with 1 Run Spare in open trench method (Refer SLD: M-N) 2. Laying of 0.100 KM 11 KV 3C, 120 sq.mm. cable with 1 Run Spare in HDD method (Refer SLD: K-L)	23,91,164.92
4	PART-D: 1. Installation of DP with AB Switch- 3 Nos. (Refer SLD: A, F, J)	7,75,142.89
5	PART-E: 1. Construction of 2 Nos. 100 KVA, 11/0.4 KV pole mounted DSS (Existing DT will be installed)	4,99,330.99
6	PART-F: 1. Laying of 200 Mtr. 4Cx 300 Sq.mm. 1.1 KV XLPE U/G Cable (armoured) with 1 no. of LT Feeder pillar (Ref. SLD- N-O)	18,06,526.89
7	PART-G: Dismantling Portion	82,924.61
8	Inspection Charges	9,725.00
9	18% GST on Inspection Charges	1,750.50
10	Total Estimated Cost	2,56,36,010.71
Total Estimated Cost to be deposited by party Rs. 2,56,36,010.71 (Rupees Two Crore Fifty Six Lakhs Thirty Six Thousand Ten and Seventy One Paisa only.)		
<p>Note:</p> <p>1. In case the scope of work changes, the estimate may change and the difference amount to be payable by party after reconciliation.</p> <p>2. Party has to resolve all RoW issues if arises while construction and after charging also.</p> <p>3. Rate taken in the estimate are from Cost Data Book(CDB) released from DoE(GoO) and may be on lower or higher than the actual procurement cost.</p> <p>4. The estimated time required for materials' procurement is 60 days and execution along with Testing &amp; Commissioning of the above stated scope of work is approx. 45 days after payment of demand note amount from consumer.</p> <p>5. As discussed in site, OB &amp; CC will provide 1 No. of 11 KV 3 Way RMU &amp; 2 Nos. of 11 KV 4 Way RMU in free of cost to TPCODL for erection. Only erection &amp; Transportation cost are taken for RMUs in the estimate.</p>		

PREPARED BY  
LEAD ENGG.-NEGCHECKED BY  
TEAM LEAD NEGAPPROVED BY  
HOG-NEGAPPROVED BY  
HEAD - (E & Q)

Estimate No. 24/22-23 Date.....02.06.2022

of Rs. 2,56,36,010.71 (G)

Rs.....(N)

Under T&amp;D (Deposit/MR/other work)

Chief (Operation Services)

TP CENTRAL ODISHA DISTRIBUTION LIMITED

**PART-A:**

1. Laying of 0.620 KM 11 KV 3C, 400 sq.mm. cable with 1 Run Spare in open trench method (Refer SLD: A-B, C-D, I-J)
2. Laying of 0.640 KM 11 KV 3C, 400 sq.mm. cable with 1 Run Spare in HDD method (Refer SLD: E-F, G-H)

Supply Portion					
Sl. No.	Description of items	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1	Supply of materials for 11kV, 3Core, 400sqmm, XLPE insulation armoured UG cable with accessories				
a	Length of 11kV 3C, 400sqmm cable (open trench)	km	0.62		
b	Length of 11kV 3C, 400sqmm cable (HDD)	km	0.64		
1.1	Supply of 11kV, 3Core, 400sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 37.7kA and SC rating of Armour in kA- 15kA)	km	2.52	17,70,000.00	44,60,400.00
1.2	Supply of Straight through jointing kits Heat Shrinkable type suitable for 11kV, 3Core, 400 sqmm, Aluminium UG cable for 3Core (Set)	Set	4	29,874.06	1,19,496.24
1.3	Supply of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 400 sqmm, HT UG cable for 3Core (Set)	Set	14	11,306.76	1,58,294.64
1.4	Supply of Outdoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 400 sqmm, HT UG cable for 3Core (Set)	Set	6	16,406.72	98,440.32
1.5	Supply of HDPE PE 80-PN8 pipe of 160mm diameter (for 400sqmm HT cable laying)	km	1.19	6,94,910.00	8,28,332.72
2	Supply of 11kV RMU				
a	No. of 11kV 3Way RMU (LLV)	nos.	1		
b	No. of 11kV 4Way RMU (LLVV)	nos.	2		
2.1	Supply of 11kV RMU 3 Way, 2 Iso & 1 Brk 630A (L.L.V)	Nos.	0	3,99,034.00	-
2.2	Supply of 11kV RMU 4 Way, 2 Iso & 2 Brk 630A (LLVV)	Nos.	0	5,57,710.00	-
3	Earthing				
3.1	Earthing Conductor: 50X6 mm (2.4kg./mtr,) GI Flat for equipment, structure etc.)	kg	39.60	88.50	3,504.60
3.2	Pipe Earthing 40mm. GI Pipe	Nos.	6	1,239.00	7,434.00
Sub Total (Supply Portion) (in Rs.)					56,75,902.52

## Erection Portion

Sl. No.	Description of items	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1	Laying, Commissioning, Testing of 11kV, 3core, 400sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method and HDD method				
1.1	Laying, Commissioning, Testing of 11kV, 3core, 400sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method.	km	1.24	94,500.00	1,17,180.00
1.2	Erection of Straight through jointing kits Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, aluminium UG cable kits for 3core (set)	Set	4	2,400.00	9,600.00
1.3	Erection of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, aluminium UG cable kits for 3core (set)	Set	14	1,900.80	26,611.20
1.4	Erection of Outdoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, aluminium UG cable kits for 3core (set)	Set	6	1,900.80	11,404.80
1.5	Laying, Commissioning, Testing of 11kV, 3core, 400sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable in HDD method with HDPE pipe.	km	1.28	28,00,000.00	35,84,000.00

01/01/2022

Net  
01.06.22

1.6	Laying of 160mm dia PE 80-PN8, HDPE pipe inside open trench.	km	1.19	1,04,114.67	1,24,104.69
2	<b>Erection, Commissioning, Wiring and Testing of 11kV RMU</b>				
2.1	Erection of 11kV RMU 3 Way, 2 Iso & 1 Brk 630A (LLV)	Nos.	1	15,000.00	15,000.00
2.2	Erection of 11kV RMU 4 Way, 2 Iso & 2 Brk 630A (LLVV)	Nos.	2	15,000.00	30,000.00
<b>Sub Total (Erection Portion) (in Rs.)</b>					<b>39,17,900.69</b>

#### Civil Portion

Sl. No.	Description of items	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1	Civil works with supply of all materials like cement, MS tor rod, brick, coarse & fine aggregates and labour, T&P, etc for UG Cable Trench		0.604		
1.1	Earth work excavation of soil (1mtr. width X 1mtr. depth)				
1.1.a	Earth work excavation of soil	Cum	422.8	700.00	2,95,960.00
1.1.b	Earth work excavation of hard rock	Cum	181.2	1,720.00	3,11,664.00
1.2	Shifting of excavated soil to a lead distance of 10km	Cum	362.4	171.55	62,169.72
1.3	Filling with fine river sand after laying of cable inside the trench	Cum	241.6	283.10 2,500.00	6,04,000.00
1.4	Back filling with excavated soil outside and above the trench	Cum	362.4	202.00	73,204.80
2	<b>Civil works for Prefabricated RCC foundation with supply of all materials</b>				
2.1	Prefabricated RCC foundation of 11kV RMU	Nos.	3	23,145.30	69,435.90
3	Supply of GI Fencing with Gate around each RMU	sqmtr	60	3,600.00	2,16,000.00
4	Installation of Earth Pit, Charcoal, Salt etc. including construction of earthing chamber (Size: 2'X2') and RCC slab cover	Set	6	2,407.00	14,442.00
5	Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.)	Mtr	48	1,463.40	70,243.20
6	Supply and Erection of Cable Route Marker along the cable route at an interval of 30mtrs with civil works	Nos.	42	1,012.00	42,504.00
7	Cable loop chamber for Jointing	Nos.	2	20,000.00	40,000.00
<b>Sub Total (Civil Portion) (in Rs.)</b>					<b>17,99,623.62</b>

68396-91

12,64,020.5

A1	<b>Sub Total (Supply Portion)</b>	<b>56,75,902.52</b>
A2	Applicable Taxes to make it Landed Cost @18%	10,21,662.45
A	Total Landed Cost (A=A1 + A2)	5675902.52 66,97,664.97
B	Stock, Storage & Insurance @ 3 % of A	2,00,926.95
C	<b>Sub Total (A+B)</b>	<b>68,98,491.92</b>
D	Contingency @ 3 % of C	2,06,954.76
E	Tools & Plants Charges @ 2% of C (considered for earthing items)	225.34
F	Transportation @ 7.5% of C	6,55,436.95
G	Erection Charges @ 10% of earthing items	1,329.48
H	<b>Total (C+D+E+F+G)</b>	<b>77,62,438.44</b>
I1	Sub Total (Erection Portion + Civil Portion)	5181921.27 57,17,524.31
I2	Applicable Taxes to make it Landed Cost @18%	10,29,154.38
I	<b>Total landed Cost (I=I1+ I2)</b>	<b>5181921.27</b> <b>67,46,678.68</b>

5675902.52

170277.0

5846179.1

175385.30

218 - 77

438463.41

1093.86

6461341.01

01/01/22

Mr. Niranjan  
01/06/22

J1	Total Cost (H+I)	1,45,09,117.12	11643262
J2	Salvage value deduction @ 8%	34,708.00	
J	Total Cost (J1-J2)	1,44,74,409.12	11608554
K	Other Overhead /(including Supervision Charges) @ 6 % of J	8,68,464.55	696513.2
L	Total Estimated Capital Cost i.e. (J+K)	1,53,42,873.67	12339775
M	GST @ 18% of L	222159.61	27,61,717.26
N	CESS 1% of L	123397.76	1,53,428.74
O	Grand Total (L+M)	1,82,58,019.67	14684332
P	Inspection Fee of UG Line (HT) - Rs. 250/ km.	250.00	
Q	Inspection Fee of UG Line (HT) - Rs. 100/ Additional Km		
R	Inspection Fee of RMU - Rs. 2000/ RMU	6000	
S	Inspection Fee of Drawing Checking and Approval	400.00	
T	Final decision by electrical Inspector	500.00	
U	Gross Total Material, Services and Inspection Fees (O+P+Q+R+S+T)	1,82,65,169.67	14691482.9

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**PART-B:**

**1. Laying of 0.200 KM 11 kV 3C, 150 sq.mm. cable with 1 Run Spare in open trench method (Refer SLD: P-Q)**

**Supply Portion**

Sl. No.	Description of items	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1	<b>Supply of materials for 11kV, 3Core, 150sqmm, XLPE insulation armoured UG cable with accessories</b>				
a	<b>Length of 11kV 3C, 150sqmm cable (open trench)</b>	km	0.2		
1.1	Supply of 11kV, 3Core, 150sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 14.1kA)	km	0.40	8,67,300.00	3,46,920.00
1.2	Supply of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 150 sqmm, HT UG cable for 3Core (Set)	Set	4	10,035.90	40,143.60
1.3	Supply of HDPE PE 80-PN8 pipe of 110mm diameter (for 150sqmm HT cable laying)	km	0.40	5,20,436.00	2,08,174.40
<b>Sub Total (Supply Portion) (in Rs.)</b>					<b>5,95,238.00</b>

**Erection Portion**

Sl. No.	Description of items	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1	<b>Laying, Commissioning, Testing of 11kV, 3core, 150sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method and HDD method</b>				
1.1	Laying, Commissioning, Testing of 11kV, 3core, 150sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method.	km	0.40	94,500.00	37,800.00
1.2	Erection of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 150sqmm, aluminium UG cable kits for 3core (set)	Set	4	1,740.00	6,960.00
1.3	Laying of 110mm dia PE 80-PN8, HDPE pipe inside open trench.	km	0.40	1,04,114.67	41,645.87
<b>Sub Total (Erection Portion) (in Rs.)</b>					<b>86,405.87</b>

**Civil Portion**

Sl. No.	Description of items	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1	<b>Civil works with supply of all materials like cement, MS tor rod, brick, coarse &amp; fine aggregates and labour, T&amp;P, etc for UG Cable Trench</b>				
1.1	Earth work excavation of soil (1mtr. width X 1mtr. depth)				
1.1.a	Earth work excavation of soil	Cum	140	700.00	98,000.00
1.1.b	Earth work excavation of hard rock	Cum	60	1,720.00	1,03,200.00
1.2	Shifting of excavated soil to a lead distance of 10km	Cum	120	171.55	20,586.00
1.3	Filling with fine river sand after laying of cable inside the trench	Cum	80	2,500.00	2,00,000.00
1.4	Back filling with excavated soil outside and above the trench	Cum	120	202.00	24,240.00
2	Supply and Erection of Cable Route Marker along the cable route at an interval of 30mtrs with civil works	Nos.	7	1,012.00	7,084.00
<b>Sub Total (Civil Portion) (in Rs.)</b>					<b>4,53,110.00</b>
A	<b>Sub Total (Supply Portion)</b>				<b>5,95,238.00</b>
A2	<b>Applicable Taxes to make it Landed Cost @18%</b>				<b>1,07,142.84</b>

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A	Total Landed Cost (A=A1 + A2)	595238.00
B	Stock, Storage & Insurance @ 3 % of A	7,02,380.84
C	Sub Total (A+B)	21,071.43
D	Contingency @ 3 % of C	7,23,452.27
E	Tools & Plants Charges @ 2% of C (considered for earthing items)	21,703.57
F	Transportation @ 7.5% of C	
G	Erection Charges @ 10% of earthing items	54,258.92
H	Total (C+D+E+F+G)	45982.11
I1	Sub Total (Erection Portion + Civil Portion)	677470.13 7,99,414.75
I2	Applicable Taxes to make it Landed Cost @18%	362163.87 5,39,515.87
I	Total landed Cost (I=I1+ I2)	97,112.86
J	Total Cost (H+I)	362163.87 6,38,628.72
K	Other Overhead /(including Supervision Charges) @ 6 % of J	1039631.60 14,36,043.48
L	Total Estimated Capital Cost i.e. (J+K)	62378.09 86,162.61
M	GST @ 18% of L	1102012.04 15,22,206.09
N	CESS 1% of L	196362.17 2,73,997.10
O	Grand Total (L+M+N)	1102012 15,222.06
P	Inspection Fee of UG Line (HT) - Rs. 250/ km.	1311394.33 18,11,425.24
Q	Inspection Fee of UG Line (HT) - Rs. 100/ Additional Km	250.00
R	Inspection Fee of RMU - Rs. 2000/ RMU	
S	Inspection Fee of Drawing Checking and Approval	0
T	Final decision by electrical Inspector	400.00
U	Gross Total Material, Services and Inspection Fees (O+P+Q+R+S+T)	18,12,075.24

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**PART-C:**

1. Laying of 0.150 KM 11 kV 3C, 120 sq.mm. cable with 1 Run Spare in open trench method (Refer SLD: M-N)  
 2. Laying of 0.100 KM 11 kV 3C, 120 sq.mm. cable with 1 Run Spare in HDD method (Refer SLD: K-L)

**Supply Portion**

Sl. No.	Description of items	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1	Supply of materials for 11kV, 3Core, 120sqmm, XLPE insulation armoured UG cable with accessories				
a	Length of 11kV 3C, 120sqmm cable (open trench)	km	0.15		
b	Length of 11kV 3C, 120sqmm cable (HDD)	km	0.1		
1.1	Supply of 11kV, 3Core, 120sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 11.3kA and SC rating of Armour in kA- 12kA)	km	0.50	7,77,620.00	3,88,810.00
1.2	Supply of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 120 sqmm, HT UG cable for 3Core (Set)	Set	4	10,035.90	40,143.60
1.3	Supply of Outdoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 120 sqmm, HT UG cable for 3Core (Set)	Set	4	13,872.08	55,488.32
1.4	Supply of HDPE PE 80-PN8 pipe of 110mm diameter (for 120sqmm HT cable laying)	km	0.28	5,20,436.00	1,47,803.82
<b>Sub Total (Supply Portion) (in Rs.)</b>					<b>6,32,245.74</b>

**Erection Portion**

Sl. No.	Description of items	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1	Laying, Commissioning, Testing of 11kV, 3core, 120sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method and HDD method				
1.1	Laying, Commissioning, Testing of 11kV, 3core, 120sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method.	km	0.30	94,500.00	28,350.00
1.3	Erection of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 120sqmm, aluminium UG cable kits for 3core (set)	Set	4	1,900.80	7,603.20
1.4	Erection of Outdoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 120sqmm, aluminium UG cable kits for 3core (set)	Set	4	1,900.80	7,603.20
1.5	Laying, Commissioning, Testing of 11kV, 3core, 120sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable in HDD method with HDPE pipe.	km	0.2	23,00,000.00	4,60,000.00
1.6	Laying of 110mm dia PE 80-PN8, HDPE pipe inside open trench.	km	0.28	1,04,114.67	29,568.57
<b>Sub Total (Erection Portion) (in Rs.)</b>					<b>5,33,124.97</b>

**Civil Portion**

Sl. No.	Description of items	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1	Civil works with supply of all materials like cement, MS tor rod, brick, coarse & fine aggregates and labour, T&P, etc for UG Cable Trench		0.134		
1.1	Earth work excavation of soil (1mtr. width X 1mtr. depth)				
1.1.a	Earth work excavation of soil	Cum	93.8	700.00	65,660.00
1.1.b	Earth work excavation of hard rock	Cum	40.2	1,720.00	69,144.00
1.2	Shifting of excavated soil to a lead distance of 10km	Cum	80.4	171.55	13,792.62

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1.3	Filling with fine river sand after laying of cable inside the trench	Cum	53.6	2,500.00	1,34,000.00
1.4	Back filling with excavated soil outside and above the trench	Cum	80.4	202.00	1L. 40.80
2	Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.)	Mtr	32	1,463.40	46,828.80
3	Supply and Erection of Cable Route Marker along the cable route at an interval of 30mtrs with civil works	Nos.	8	1,012.00	8,096.00
<b>Sub Total (Civil Portion) (in Rs.)</b>					<b>234936.38</b>
					<b>(3,53,762.22)</b>
A1	<b>Sub Total (Supply Portion)</b>				6,32,245.74
A2	<b>Applicable Taxes to make it Landed Cost @18%</b>				1,13,804.23
A	<b>Total Landed Cost (A=A1 + A2)</b>			<b>632245.47</b>	<b>(7,46,049.98)</b>
B	Stock, Storage & Insurance @ 3 % of A			<b>18967.36</b>	<b>(22,381.50)</b>
C	<b>Sub Total (A+B)</b>			<b>651212.83</b>	<b>(7,68,431.48)</b>
D	Contingency @ 3 % of C			<b>19536.39</b>	<b>(23,052.94)</b>
E	Tools & Plants Charges @ 2% of C (considered for earthing items)				
F	Transportation @ 7.5% of C			<b>48840.96</b>	<b>57,632.36</b>
G	Erection Charges @ 10% of earthing items				
H	<b>Total (C+D+E+F+G)</b>			<b>719590.18</b>	<b>(8,49,116.78)</b>
I1	<b>Sub Total (Erection Portion + Civil Portion)</b>			<b>768061.35</b>	<b>(8,86,887.19)</b>
I2	<b>Applicable Taxes to make it Landed Cost @18%</b>				<b>-4,59,639.69</b>
I	<b>Total landed Cost (I=I1+ I2)</b>			<b>768061.35</b>	<b>(10,46,526.88)</b>
J	<b>Total Cost (H+I)</b>			<b>1487651.53</b>	<b>(18,95,643.66)</b>
K	Other Overhead /(including Supervision Charges) @ 6 % of J			<b>89259.09</b>	<b>(1,13,738.62)</b>
L	<b>Total Estimated Capital Cost i.e. (J+K)</b>			<b>1576910.62</b>	<b>(20,09,382.28)</b>
M	GST @ 18% of L			<b>283843.91</b>	<b>(3,61,688.81)</b>
N	CESS 1% of L			<b>15769</b>	<b>(20,093.82)</b>
O	<b>Grand Total (L+M)</b>			<b>1876523.61</b>	<b>(23,91,164.92)</b>
P	Inspection Fee of UG Line (HT) - Rs. 250/ km.				250.00
Q	Inspection Fee of UG Line (HT) - Rs. 100/ Additional Km				
R	Inspection Fee of RMU - Rs. 2000/ RMU				0
S	Inspection Fee of Drawing Checking and Approval				400.00
T	Final decision by electrical Inspector				
U	<b>Gross Total Material, Services and Inspection Fees (O+P+Q+R+S+T)</b>				<b>23,91,814.92</b>

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## PART-D:

1. Installation of DP with AB Switch- 3 Nos. (Refer SLD: A, F, J)

No. of DP required With AB Switch (Ref. Drawing No.- TPCODL-MVD-0001)		3			
MATERIALS OF DP With AB Switch					
Sl. No.	Description of Materials	Unit	Unit Rate	Total Quantity	Total Amount
1	WPB 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No	26,516.95	6	159,101.70
2	Top Channel 100X50X6mm, 9.56 KG/Mtr., each channel length 3 mtr, 2 no's channel required = (2x9.56x3)	KG	88.50	172.08	15,229.08
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 6 no's required = (6x2.36x0.280)	KG	88.50	11.8944	1,052.65
4	AB switch Mounting Channel 75X40X4.8mm, 7.14KG/Mtr, each channel length 3 Mtr., 2 no's channel required = (7.14x3x2)	KG	88.50	128.52	11,374.02
5	AB Switch Side Support Channel 100X50X6mm, 9.56 KG/Mtr., each channel length 0.35 mtr, 2 no's channel required = (9.56x2x0.35)	KG	88.50	20.076	1,776.73
6	Channel Support for down Pipe 75X40X 4.8mm., 7.14KG/Mtr., each channel length 0.8 Mtr, 1 no's channel required = (7.14x0.8x1)	KG	88.50	17.136	1,516.54
7	Double Pole Belting Channel 75X40X 4.8mm., 7.14KG/Mtr, each channel length 3.0 Mtr., 4 no's channel required = (7.14x3x4)	KG	88.50	257.04	22,748.04
8	50x50x6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 3.512 mtr., 4 nos angle required = (4.5x3.512x4)	KG	88.50	189.648	16,783.85
9	Danger Plate, 2 no's.	No.	94.40	6	566.40
10	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 2 no's = (2x0.59x0.510)	KG	88.50	1.8054	159.78
11	H.T. Stay clamp, 50x8 mm. flat, 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required ( 1 Pair)	Pair	147.50	6	885.00
12	H.T. Stay set (Complete)	Set	1,239.00	6	7,434.00
13	H.T. Stay Insulator Type-C	No.	59.00	6	354.00
14	7/10 SWG Stay Wire 15kg /stay	K.g.	88.50	90	7,965.00
15	GI Pipe Earthing 40mm. 3 Mtr. Long	No.	1,239.00	6	7,434.00
16	50x6mm GI Flat for earthing, 2.36kg/mtr., (12.5 Mtr. For L.A, 3 Mtr for AB Switch Body, 2.5 mtr. For mesh formation and 2.5 mtr. For raising)= 20.5x2.36	KG	88.50	145.14	12,844.89
17	GI barbed wire anticalching device 3 Kg. Per support, 2 no's qty. required =(2x3kg)	Kg	94.40	18	1,699.20
18	Back Clamp for anticalching device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 8 no's = (8x0.59x0.510)	KG	88.50	7 2216	639.11
19	Lightning Arrester(12KV.10KA) (Station Class.class-2)	EA	4,189.00	9	37,701.00
20	AB Switch (11KV,400A,3pole,50Hz)	Set	13,983.00	3	41,949.00
21	11 KV pin insulator polymer	No.	236.00	9	2,124.00
22	H W fitting(B&S) 70KN, 3Bolt	No.	413.00	9	3,717.00
23	Disc insulator (B&S) 70 KN polymer	No.	1,357.00	9	12,213.00
24	PG Clamp for 80 sq.mm AAA conductor	NO.	625.40	18	11,257.20
25	GI Nut , Bolt & Washer of different sizes (13.718 Kg each DP with AB Switch)	K.g.	92.04	41.154	3,787.81
26	Black Paint	Ltr	259.60	3	778.80
27	Yellow Colour Paint for Background	Ltr	259.60	6	1,557.60
A1	Total Cost of materials				3,84,649.40
A2	Applicable Taxes to make it Landed Cost @18%				69,236.88
A	Total Landed Cost (A=A1+A2)				4,53,886.29
B	Stock, Storage & Insurance i.e 3% of A				13,616.59
C	Sub Total (A+B)				4,67,502.88
D	Contingency @ 3% of C				14,025.09
E	Tools & Plants @ 2% of C				9,350.06
F	Transportation @ 7.5% of C				35,062.72
G	Erection Charges @ 5% on Tri/Breaker/Joint				8,193.70
H	Erection Charges @ 10% of C (except Tri/Breaker/WPB/ H-Pole/HT stay set/PSC pole)				21,517.70
I	Erection Charges @ 20% of PSC pole- Not to be used for 33kv				
J	Sum of (C to I)				5,55,652.17
Civil & Services					
Sl. No.	Description of Materials	Unit	Unit Rate	Total Quantity	Total Amount
1	Fixing of complete 11KV line Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5)Stay clamps with Nuts & bolts BA will do the excavation including excavation, supply of 0.5Cum cement concrete foundation 1:2:4 size ( 500mmx500mmx800mm) using 20mm BHG metal with all labour and material as per TPCODL Drawing & Standard.	No.	2,250.00	6	13,500.00
2	Concreting ratio 1:1.5:3 (500mmX500mmX1800mm) = 0.45Cu.mtr	Cu.mtr	6,500.00	2.70	17,550.00
3	Coupling ratio 1:1.5:3 with dimension ( 500X500X450)= 0.1125 Cu mtr	Cu.mtr	6,500.00	0.68	4,387.50
4	Installation of Earth Pit, Charcoal, Salt etc. including construction of earthing chamber (Size: 2'x2')	No.	2,407.00	6	14,442.00
K1	Total Civil & Services				49,879.50
K2	Applicable Taxes to make it Landed Cost @18%				8,976.31
K	Total landed Cost (K=K1+ K2)				58,857.81

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L		Total (J+K)	6,14,508.8	52610
M	Other overheads ( Including 6% supervision charges) of L (for DP With AB Switch)	36,870.6	31566.1	
N	Sub Total (L+M)	6,51,380.5	55766.1	
O	Total GST @ 18% of (N)	1,17,245.5	100,580.5	
P	CESS 1% of (N)	6,513.8	5576.6	
Q	Gross Total Material +Services (N+O) for DP With AB Switch	7,75,142.8	66362.8	
1	6% Supervision Charges Summary			
	Other overheads ( Including 6% supervision charges) of L (for DP With AB Switch)	36,870.6	36,870.6	
	Total (6% supervision charges)	36,870.6	36,870.6	
1	Gross Total Summary			
R	Gross Total Material +Services (N+O) for DP With AB Switch	7,75,142.8	66362.8	
S	Inspection Fee of Over Head Line (HT) - Rs. 200 for 1st 5 km.	200.0		
T	Inspection Fee of Over Head Line (HT) - Rs. 30/ Additional Km			
U	Inspection Fee of Drawing Checking and Approval	400.0		
V	Final decision by electrical Inspector			
	Gross Total Material, Services and Inspection Fees (Q+R+S+T+U)	7,75,742.8	66422.8	

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**PART-E:**

1. Construction of 1 Nos. 100 KVA, 11/0.4 KV pole mounted DSS (Existing DT will be installed)

Sl. No.	Description of Materials  SUPPLY OF FOLLOWING EQUIPMENT & MATERIALS	MATERIALS FOR DP Mounted DSS			
		Unit	Unit Rate	Total Quantity	Total Amount
1	WPB 160x152 (11Mtr. Long, 30.44KG/Mtr.)	Nos.	26,516.95	2	53,033.90
2	Top Channel GI 100 X 50 X 6 MM (3000 mm long) (9.56Kg./Mtr, 2 No's.) (Each 2x3.000x9.56= 57.36 Kg)	Kg	88.50	57.36	5,076.36
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 6 no's required = (6x2.36x0.280)	KG	88.50	3,964.8	350.88
4	AB Switch Mounting Channel 75x40x4.8 mm GI Channel (3000 mm long)(7.14Kg./Mtr., 2 No's.) (Each 2x3.000x7.14= 42.84 Kg)	Kg	88.50	42.84	3,791.34
5	AB Switch Side Support Channel 100X50X6mm,9.56 KG/Mtr., each channel length 0.35 mtr., 2 no's channel required =( 9.56x2x0.35)	Kg	88.50	6.69	592.24
6	Channel Support for down Pipe 75X40X 4.8mm., 7.14KG/Mtr., each channel length 0.8 Mtr., 1 no's channel required =( 7.14x0.8x1)	Kg	88.50	5.71	505.51
7	HG/ DO Fuse Mounting Channel 75x40x4.8 mm GI Channel (3000 mm long)(7.14Kg./Mtr., 2 No's.) (Each 2x3.000x7.14= 42.84 Kg)	Kg	88.50	42.84	3,791.34
8	Cantilever Support Channel 75x40x4.8 mm GI Channel (810 mm long,2 No's.) (7.14Kg./Mtr., 2 No's.) (Each 2x0.810x7.14= 11.57 Kg)	Kg	88.50	11.57	1,023.66
9	Cantilever Support Angle 50 X 50 X 6MM GI (1282 mm long) (4.5Kg./Mtr, 2 No's.) (Each 2x1.282x4.5= 11.54Kg)	Kg	88.50	11.54	1,021.11
10	Transformer Base GI Channel 100 X 50 X 6 MM (3000 mm long) (9.56Kg./Mtr, 2 No's.) (Each 2x3.000x9.56= 57.36 Kg)	Kg	88.50	57.36	5,076.36
11	Transformer Base Support GI Channel 100 X 50 X 6 MM (515 mm long) (9.56Kg./Mtr, 2 No's) (Each 2x0.515x9.56= 9.85Kg)	Kg	88.50	9.85	871.44
12	Transformer Belting Angle 50 X 50 X 6MM GI (3000 mm long)(4.5Kg./Mtr, 2 No's) (Each 2x3.0x4.5 Kg)	Kg	88.50	27.00	2,389.50
13	Transformer Belting Support Angle 50 X 50 X 6MM GI (580 mm long)(4.5Kg./Mtr,2 No's) (Each 2x0.580x4.5= Kg)	Kg	88.50	5.22	461.97
14	LTDB Mounting Angle 50 X 50 X 6MM GI (1000 mm long)(4.5Kg./Mtr, 2 No's) (Each 2x1x4.5 Kg)	Kg	88.50	9.00	786.50
15	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 2 no's (Each 2x0.59x0.510)	Kg	88.50	0.60	53.26
16	50x6mm GI Flat for earthing, 2.36kg/mtr., (2.5x7 mtr. For mesh formation, 12 Mtr. For LA and 2.5 mtr. For raising, 11 mtr for AB switch, 2.8 mtr for HG Fuse, 5x2 mtr. for DTR Nutral, (1.3+4.5) mtr. For DTR Body, 0.500 mtr for LTDB & AB Switch operating handle, 3 mtr. for Fencing) ( Each 65.6x 2.36= 154.81 Kg)	KG	88.50	154.82	13,701.22
17	100 KVA , 11/ 0.4 KV (AL) Transformer BIS Energy level II	Nos.	1,38,060.00	0	-
18	LT Distribution Box with MCCB, Aluminium Busbar of single Bay with kit kat fuse for 100 KVA S/S	Nos.	28,814.42	1	28,814.42
19	55mm2 All Alloy Aluminum Conductor (AAAC) - PVC Insulated (50 Mtr. Each Dtr.)	Km	56,000.00	0.05	2,800.00
20	4 Cx 150 mm <sup>2</sup> 2LT XLPE Cable(Armoured) - FOR 100 KVA Trf.	Mtr.	732.12	15	10,981.80
21	AB Switch(11KV,200A,3pole,50Hz)	Set	8,673.00	1	8,673.00
22	H.G.Fuse( 11KV,200A,3Pole)	Set	7,221.60	1	7,221.60
23	PG Clamp for 55 sq.mm AAA conductor	No	586.40	6	3,398.40
24	Lightning Arrester(12KV,10KA) Station Class 2	Nos.	4,189.00	3	12,567.00
25	11KV pin insulator polymer	No	236.00	3	708.00
26	HT stay set complete	Set	1,239.00	2	2,478.00
27	HT stay Clamp (1.9Kg/pair)	Pair	147.50	2	295.00
28	HT stay insulator TYPE-C	No	59.00	2	118.00
29	7/10 SWG GI stay wire, Grade -2 (15Kg./ Set)	Kg	88.50	30	2,655.00
30	40 mm Nominal bore GI pipe (medium gauge) earthing device with 3 mtr .Long	No	1,239.00	7	8,673.00
31	GI Nuts & Bolts of Assorted size (25 Kg/ DSS DP)	Kg	92.04	25	2,301.00
32	GI Barbed wire/Anticlimbing device (3Kg /Pole)	Kg	94.40	6	566.40
33	Danger plate 11kv	No	94.40	2	188.80
34	Name plate	No	94.40	1	94.40
35	<b>Structure Numbering and Marking</b>				
35.i	Yellow Colour Paint for Background	Ltr	259.60	2	519.20
35.ii	Black Colour Paint for numbering	Ltr	259.60	1	259.60
A1				Total Cost of materials	1,85,849.22
A2				Applicable Taxes to make it Landed Cost @18%	32,452.88
A				Total Landed Cost (A=A1 + A2)	2,19,302.00
B				Stock, Storage & Insurance i.e 3% of A	6,579.06
C				Sub Total (A+B)	2,25,881.14
D				Contingency @ 3% of C	6,776.43
E				Tools & Plants @ 2% of C	4,517.62
F				Transportation @ 7.5% of C	16,941.09
G				Erection Charges @ 5% on Trf/Breaker/WPB/ H-Pole	9,841.34
H				Erection Charges @ 10% of C (except Trf/Breaker/WPB/ H-Pole/HT stay set/PSC Pole)	13,108.74
I				Erection Charges @ 20% of PSC pole- Not to be used for 33kv	
J				Sum of (C to I)	2,77,066.36

*05/07/2022*

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185849.22  
5575.18  
191424.7  
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9571.23  
13839.08

Civil and Services Works						
1	Concreting ratio 1:1.5:3 (500mmX500mmX1800mm) = 0.450Cu.mtr	Cu.mtr	6,500.00	0.9	5,850.0	
2	Coupling ratio 1:1.5:3 (500mmX500mmX450mm) = 0.113Cu.mtr	Cu.mtr	6,500.00	0.226	1,469.0	
3	Fixing of stay set with 0.5Cum cement concrete foundation 1:3:6 size ( 900mmx600mmx900mm) using 40mm BHG metal with all labor and material except stay set , stay wire , stay insulator	No.	2,250.00	2	4,500.0	
4	Installation of Earth Pit, Charcoal, Salt etc. including construction of earthing chamber (Size: 2'x2') and RCC slab cover	No.	2,407.00	7	16,849.0	
5	Supply and Erection of GI Fencing with Gate	Sqmtr.	3,600.00	20	72,000.0	
K1			Total Civil & Services	1,00,668.00		
K2			Applicable Taxes to make it Landed Cost @18%	18,120.2		
K			Total landed Cost (K=K1+ K2)	118,788.20	100668.0	
L			Total (J+K)	118,788.20	339131	
M			Other overheads ( Including 6% supervision charges) of L	18,854.60	20365.8	
N			Sub Total (L+M)	137,642.80	359796	
O			Total GST @ 18% of (N)	25,529.08	69763.4	
P			CESS 1% of (N)	4,196.08	359796	
Q			Gross Total Material +Services (N+O+P)	149,330.96	128158	
R			Inspection Fee of Transformer (50kVA to 250kVA)	350.00	428833	
S			Inspection Fee of LV Cable	125.00		
T			Inspection Fee of Drawing Checking and Approval	200.00		
U			Final decision by electrical Inspector			
V			Gross Total Material, Services and Inspection Fees (Q+R+S+T+U)	5,00,005.99		

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## PART-F:

Laying of 200 Mtr. 4Cx 300 Sq.mm. 1.1 KV XLPE U/G Cable (armoured) with 1 no. of LT Feeder pillar (Ref. SLD- N-O)

Sl. No.	Name of the Materials	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
	<b>Supply Portion</b>				
1	Supply of 4Cx 300 sqmm 1.1 KV XLPE Cable (armoured) for LT	KM	0.2	13,78,620.00	2,75,724.00
2	Supply of Heat shrinkable jointing kit for 4Cx 300 sqmm 1.1 KV XLPE Cable (Indoor type)	Set	2	2,520.00	5,040.00
3	Supply of LT Feeder pillar(I/N-830A MCCB-2 Nos., O/G-32A-24 Nos, 63A-8 Nos.)	No	1	2,34,278.00	2,34,278.00
4	Supply of High Density Polyethylene (HDPE) pipe 110 mm diameter.	mtr	200	520.44	1,04,087.20
A1				<b>Total Cost of materials</b>	6,19,129.20
A2				<b>Applicable Taxes to make it Landed Cost @18%</b>	1,11,443.26
A				<b>Total Landed Cost (A=A1 + A2)</b>	7,30,572.46
B				<b>Stock, Storage &amp; Insurance i.e 3% of A</b>	21,917.17
C				<b>Sub Total (A+B)</b>	7,52,489.63
D				<b>Contingency @ 3% of "C"</b>	22,574.69
E				<b>Tools &amp; Plants @ 2% of "C"</b>	
F				<b>Transportation @ 7.5% of "C"</b>	56,436.72
G				<b>Erection Charges @ 5% on Trf/Breaker/Joint</b>	
H				<b>Erection Charges @ 10% of other items</b>	
I				<b>Total Supply Portion (C+D+E+F)</b>	8,31,501.04
	<b>Erection Portion</b>				
1	Laying of 4Cx 300 sqmm 1.1 KV XLPE Cable (armoured) for LT	KM	0.20	54,000.00	10,800.00
2	Erection of High Density Polyelhelene (HDPE) pipe 110mm diameter, PE 80- PN8	mtr	200	104.11	20,822.93
3	Erection of Heat shrinkable jointing kit for 4Cx 300 sqmm 1.1 KV XLPE Cable (Indoor type)	Set	2	612.54	1,225.08
4	Erection of LT Feeder pillar	No	1	2,572.25	2,572.25
5	Prefabricated RCC Foundation for Feeder Piller	No	1	5,102.93	5,102.93
6	Fencing around the Feeder piller box	sqmtr	4	3,600.00	14,400.00
J				<b>Total Erection Portion</b>	55,923.18
	<b>Civil Portion</b>				
1	Civil works with supply of all materials like cement, MS tor rod, brick, coarse & fine aggregates and labour, T&P, etc for 11 KV Cable Trench				
1.1	Earth work excavation of soil (1mtr. width X 1mtr. depth)				
1.1.a	Earth work excavation of soil	Cum	140	700.00	98,000.00
1.1.b	Earth work excavation of hard rock	Cum	60	1,720.00	1,03,200.00
1.2	Shifting of excavated soil to a lead distance of 10km	Cum	120	171.55	20,586.00
1.3	Filling with fine river sand after laying of cable inside the trench	Cum	80	2,500.00	2,00,000.00
1.4	Back filling with excavated soil outside and above the trench	Cum	120	202.00	24,240.00
2	Cable Route Marker along the 11KV/LT cable route at an interval of 30mtrs.	Nos.	7	1,012.00	7,084.00
K1				<b>Total Civil Portion</b>	4,53,110.00
K2				<b>Total Erection + Civil Portion</b>	5,09,033.19
K3				<b>Applicable Taxes to make it Landed Cost @18%</b>	91,625.97
K				<b>Total landed Cost (K=K2+ K3)</b>	6,00,659.17
L				<b>Sub Total (I+J+K)</b>	14,32,160.21
M				<b>Other Overhead /including Supervision Charges) @ 6 % of L</b>	85,929.61
N				<b>Total Estimated Capital Cost i.e. (L+M)</b>	15,18,089.82
O				<b>GST @ 18% of N</b>	2,73,256.17
P				<b>CESS @ 1% of N</b>	15,180.90
Q				<b>Grand Total (N+O+P)</b>	18,06,526.89

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**PART-G: Dismantling portion**

<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Rate</b>	<b>Qty.</b>	<b>Amount</b>
1	Dismantling of RS Joist pole	No	1,350.00	18	24,300.00
2	Dismantling of 11KV 'V' Cross arm	No	41.40	14	579.60
3	Dismantling of 11KV GI pin with insulator	No	8.10	54	437.40
4	Dismantling of 11KV Disc insulator with HW Fitting	No	8.10	12	97.20
5	Dismantling of MS Channel from 11KV Pole / DP	Kg	7.92	704	5,575.68
6	Dismantling of 80/100mm <sup>2</sup> AAA Conductor	KM	9,000.00	1.08	9,720.00
7	Dismantling of LT Pole	No.	900.00	7	6,300.00
8	Dismantling of LT Line	Mtr	22.50	245	5,512.50
9	Dismantling of 100KVA Transformer	No.	3,189.60	1	3,189.60
A1				TOTAL	55,711.98
A2				Applicable Taxes to make it Landed Cost @18%	10,928.16
A				Total with landed Cost (A=A1 + A2)	65,740.14
B				Other Overhead /(including Supervision Charges) @ 6 % of A	3,944.41
C				Total Estimated Capital Cost i.e. (A+B)	69,684.54
D				GST @ 18% of C	12,543.22
E				CESS @ 1% of C	696.85
				Grand Total (C+D+E)	82,924.61

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*N Mani*  
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HOG - NEG

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55711.98  
3342.72  
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590.55

**PART-H: Salvage Value of Dismantled Material**

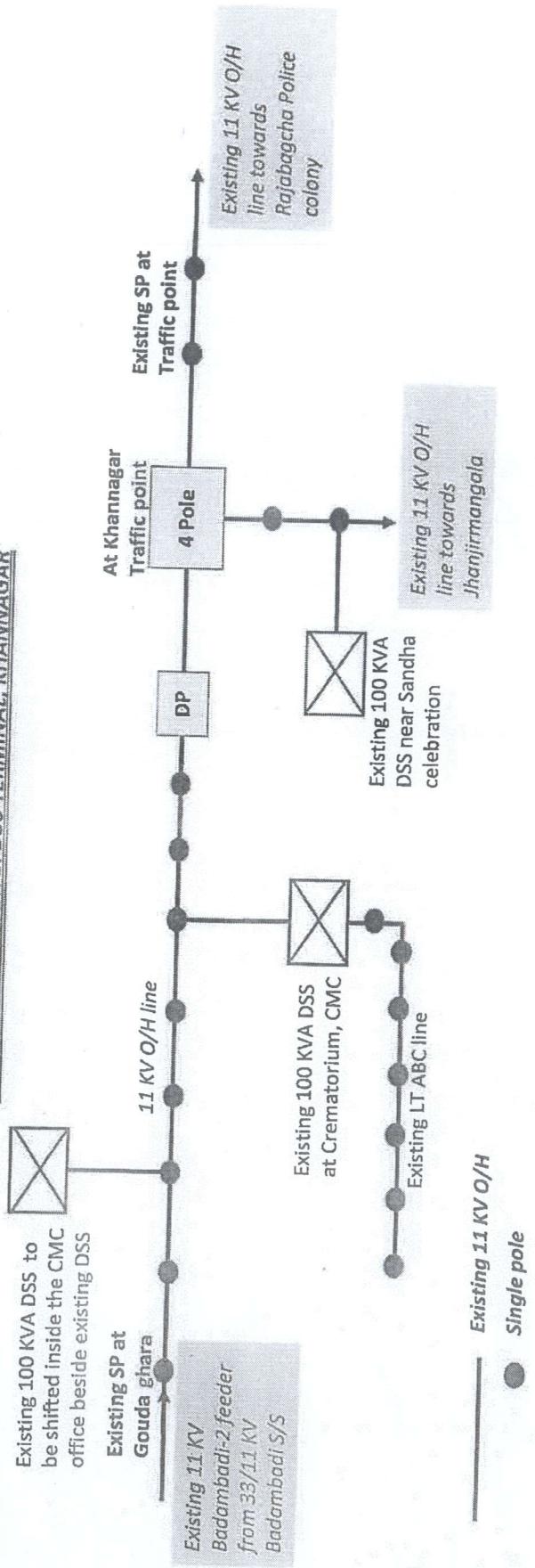
Sl. No.	Particulars	Unit	Rate	Qty.	Amount
1	116X100mm RS joist ( 11 Mtr long)(23.0kg Per meter) (Each 253kg)	No	16445.00	18	2,96,010.00
2	11 KV V cross arm( 10.2 Kg each)	No	810.00	14	11,340.00
3	MS Channel from 11KV Pole / DP	Kg	65.00	704	45,760.00
4	80/100mm <sup>2</sup> AAA Conductor	KM	43,000.00	1.08	46,440.00
5	LT Line(3X50 + 1X35 + 1X16mm <sup>2</sup> ABC)	Mtr	140.00	245	34,300.00
A				<b>TOTAL</b>	<b>4,33,850.00</b>
B				Salvage Value of Material(8% of A)	34,708.00

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**TEAM LEAD - NEG**

*N. M. S.*  
**APPROVED BY**  
**HOG - NEG**

EXISTING SLD AT NETAJI BUS TERMINAL, KHANNAGAR

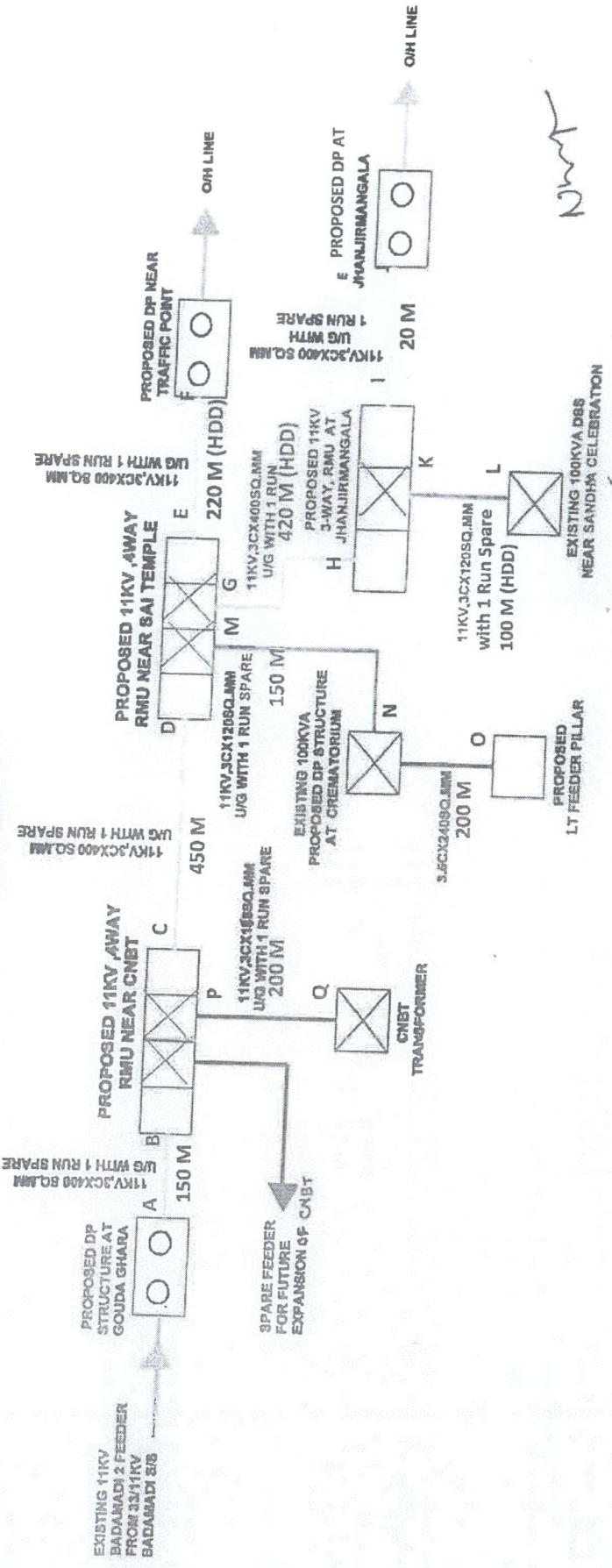


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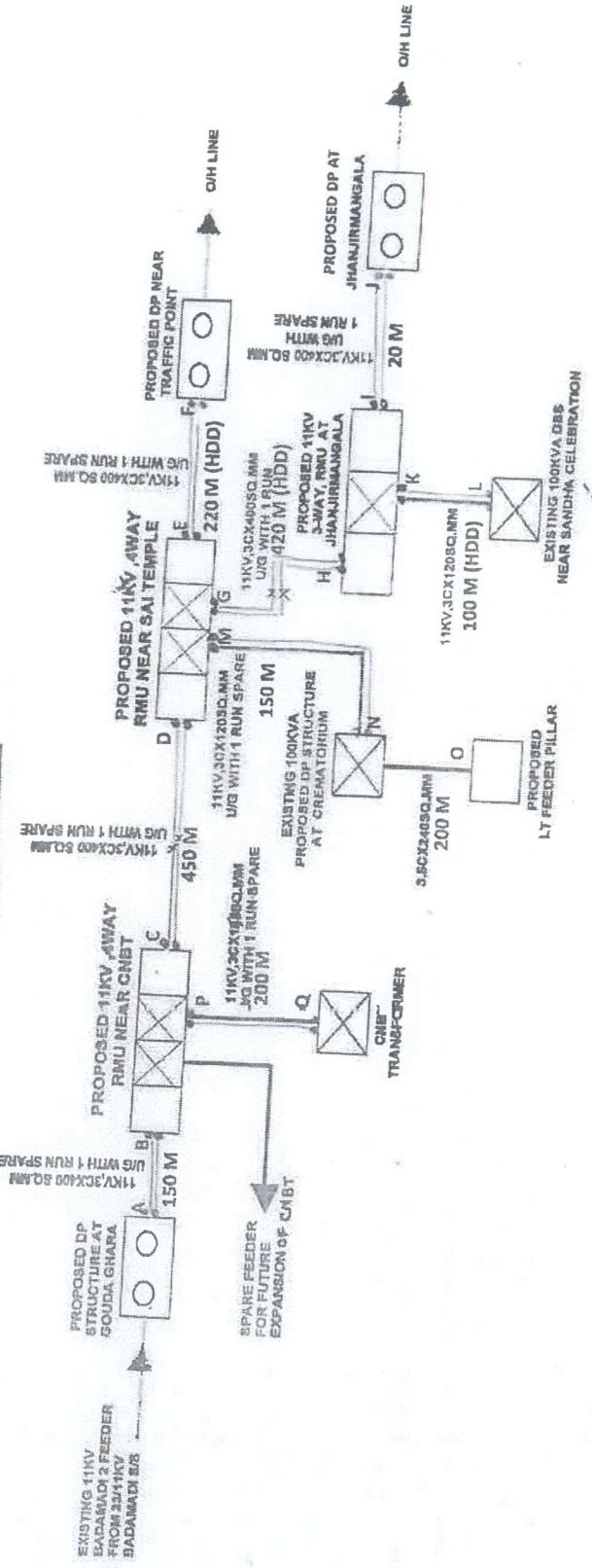
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HOG - NEG

PROPOSED SLD



PROPOSED SLO



11 KV	Outdoor Termination Kit.	(For 30 x 4 m <sup>2</sup> sq.m.)	= 6 Nos.
11 KV	Straight Through Joint Kit.	(For 30 x 4 m <sup>2</sup> sq.m.)	= 4 Nos.
11 KV	Indoor Termination Kit	(For 30 x 4 m <sup>2</sup> sq.m.)	= 14 Nos
11 KV	Indoor Termination Kit	(For 30 x 150 sqmm)	= 4 Nos.
11 KV	Straight Termination Kit	(For 30 x 120 sqmm)	= 4 Nos.
11 KV	Indoor Termination Kit	(For 30 x 120 sqmm)	= 4 Nos.

