

Measurement for Protection works at Tower location no 49 of 400 kV S/C Jalandhar-Ludhiana Transmission line.

Sl. No.	DSR 2023 Item No.	Description	Unit	No.	Length (M)	Width (M)	Height (M)	Quantity	Remarks
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and for all lift, as directed by Engineer-in charge.							
a	2.6.1	All kinds of soil.	cum						
		Wall along leg D-A & B-C	cum	2	36.500	2.400	0.500	87.600	
		Wall along leg A-B & C-D	cum	2	32.500	2.400	0.500	78.000	
								Total Quantity	165.600
2	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lift.							
		Wall along leg D-A & B-C	cum	2	36.500	0.400	0.500	14.600	
		Wall along leg A-B & C-D	cum	2	32.500	0.400	0.500	13.000	
								Total Quantity	27.600
3	16.94	Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012, MORTH Clause 2500, of required size, Mesh Type 10x12 (D=100 mm with tolerance of $\pm 2\%$) Zinc coated, Mesh wire diameter 3.0 mm, mechanically edged/selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2 mm, supplied @ 3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per direction of Engineer-in-charge.	cum						
		Wall along leg D-A & B-C	cum	2	36.500	2.000	1.000	146.000	
			cum	2	37.100	2.000	1.000	148.400	
			cum	2	37.700	2.000	1.000	150.800	
			cum	2	38.300	2.000	1.000	153.200	
		Wall along leg A-B & C-D	cum	2	32.500	2.000	1.000	130.000	
			cum	2	33.100	2.000	1.000	132.400	
			cum	2	33.700	2.000	1.000	134.800	
			cum	2	34.300	2.000	1.000	137.200	
								Total	1132.800
								Deduct for voids	-169.920
								Total Quantity	962.880


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 Power Grid Corporation of India Ltd, Jalandhar

Measurement for Protection works at Tower location no 76 of 400 kV S/C Jalandhar-Ludhiana Transmission line.

Sl. No.	DSR 2023 Item No.	Description	Unit	No.	Length (M)	Width (M)	Height (M)	Quantity	Remarks
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and for all lift, as directed by Engineer-in charge.							
a	2.6.1	All kinds of soil.	cum						
		Wall along leg D-A & B-C	cum	2	24.500	2.400	0.500	58.800	
		Wall along leg A-B & C-D	cum	2	20.500	2.400	0.500	49.200	
								Total Quantity	108.000
2	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lift.							
		Wall along leg D-A & B-C	cum	2	24.500	0.400	0.500	9.800	
		Wall along leg A-B & C-D	cum	2	20.500	0.400	0.500	8.200	
								Total Quantity	18.000
3	16.94	Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012, MORTH Clause 2500, of required size, Mesh Type 10x12 (D=100 mm with tolerance of $\pm 2\%$) Zinc coated, Mesh wire diameter 3.0 mm, mechanically edged/selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2 mm, supplied @ 3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per direction of Engineer-in-charge.	cum						
		Wall along leg D-A & B-C	cum	2	24.500	2.000	1.000	98.000	
			cum	2	25.100	2.000	1.000	100.400	
			cum	2	25.700	2.000	1.000	102.800	
			cum	2	26.300	2.000	1.000	105.200	
		Wall along leg A-B & C-D	cum	2	20.500	2.000	1.000	82.000	
			cum	2	21.100	2.000	1.000	84.400	
			cum	2	21.700	2.000	1.000	86.800	
			cum	2	22.300	2.000	1.000	89.200	
								Total	748.800
								Deduct for voids	-112.320
								Total Quantity	636.480


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 Power Grid Corporation of India Ltd, Jalandhar

Measurement for Protection works at Tower location no 101 of 400 kV S/C Jalandhar-Ludhiana Transmission line.

Sl. No.	DSR 2023 Item No.	Description	Unit	No.	Length (M)	Width (M)	Height (M)	Quantity	Remarks
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and for all lift, as directed by Engineer-in charge.							
a	2.6.1	All kinds of soil.	cum						
		Wall along legs B-C	cum	1	12.000	2.400	0.500	14.400	
			cum	1	12.000	0.300	1.000	3.600	
		Wall along legs D-C	cum	1	27.000	2.400	0.500	32.400	
			cum	1	27.000	0.300	1.000	8.100	
								Total Quantity	58.500
2	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lift.							
		Wall along legs B-C	cum	1	12.000	0.400	0.500	2.400	
			cum	1	12.000	0.200	1.000	2.400	
		Wall along legs D-C	cum	1	27.000	0.400	0.500	5.400	
			cum	1	27.000	0.200	1.000	5.400	
								Total Quantity	15.600
3	16.94	Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012,MORTH Clause 2500, of required size, Mesh Type 10x12 (D=100 mm with tolerance of $\pm 2\%$) Zinc coated, Mesh wire diameter 3.0 mm, mechanically edged/selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2 mm, supplied @ 3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per direction of Engineer-in-charge.	cum						
		Wall along legs B-C	cum	1	12.000	2.000	1.000	24.000	
			cum	1	12.000	2.000	1.000	24.000	
			cum	1	12.000	1.000	1.000	12.000	
		Wall along legs D-C	cum	1	27.000	2.000	1.000	54.000	
			cum	1	27.000	2.000	1.000	54.000	
			cum	1	27.000	1.000	1.000	27.000	
								Total	195.000
								Deduct for voids	-29.250
								Total Quantity	165.750


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 पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड, जलंधर
 Power Grid Corporation of India Ltd, Jalandhar

Measurement for Protection works at Tower location no 436 of 400 kV D/C Chamba-Jalandhar Transmission Line.

Sl. No.	DSR 2023 Item No.	Description	Unit	No.	Length (M)	Width (M)	Height (M)	Quantity	Remarks
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and for all lift, as directed by Engineer-in charge.							
a	2.6.1	All kinds of soil.	cum						
		Wall along leg A	cum	1	10.000	2.400	0.500	12.000	
								Total Quantity	12.000
2	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lift.							
		Wall along leg A	cum	1	10.000	0.400	0.500	2.000	
			cum	1	10.000	0.400	3.000	12.000	
								Total Quantity	14.000
3	16.94	Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012, MORTH Clause 2500, of required size, Mesh Type 10x12 (D=100 mm with tolerance of $\pm 2\%$) Zinc coated, Mesh wire diameter 3.0 mm, mechanically edged/selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2 mm, supplied @ 3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per direction of Engineer-in-charge.	cum						
		Wall along leg A	cum	1	10.000	2.000	1.000	20.000	
			cum	1	10.000	2.000	1.000	20.000	
			cum	1	10.000	1.000	1.000	10.000	
								Total	50.000
								Deduct for voids	-7.500
								Total Quantity	42.500


 PARAMJIT SINGH
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Measurement for Protection works at Tower location no 520 of 765 kV S/C Kishenpur- Moga Ckt-II Transmission line.

Sl. No.	DSR 2023 Item No.	Description	Unit	No.	Length (M)	Width (M)	Height (M)	Quantity	Remarks
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and for all lift, as directed by Engineer-in charge.							
a	2.6.1	All kinds of soil.	cum						
		Wall along leg D-A & B-C	cum	2	22.700	2.400	0.500	54.480	
		Wall along leg A-B & C-D	cum	2	15.700	2.400	0.500	37.680	
								Total Quantity	92.160
2	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lift.							
		Wall along leg D-A & B-C	cum	2	22.700	0.400	0.500	9.080	
		Wall along leg A-B & C-D	cum	2	15.700	0.400	0.500	6.280	
								Total Quantity	15.360
3	16.94	Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012, MORTH Clause 2500, of required size, Mesh Type 10x12 (D=100 mm with tolerance of $\pm 2\%$) Zinc coated, Mesh wire diameter 3.0 mm, mechanically edged/selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2 mm, supplied @ 3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per direction of Engineer-in-charge.	cum						
		Wall along leg D-A & B-C	cum	2	22.700	2.000	1.000	90.800	
			cum	2	22.700	2.000	1.000	90.800	
			cum	2	20.700	1.000	1.000	41.400	
		Wall along leg A-B & C-D	cum	2	15.700	3.000	1.000	94.200	
			cum	2	15.700	2.000	1.000	62.800	
			cum	2	15.700	1.000	1.000	31.400	
								Total	411.400
								Deduct for voids	-61.710
								Total Quantity	349.690


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Measurement for Protection works at Tower location no 521 of 765 kV S/C Kishenpur- Moga Ckt-I & II Transmission line.

Sl. No.	DSR 2023 Item No.	Description	Unit	No.	Length (M)	Width (M)	Height (M)	Quantity	Remarks
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and for all lift, as directed by Engineer-in charge.							
a	2.6.1	All kinds of soil.	cum						
		Wall along leg D-A & B-C	cum	2	27.200	2.400	0.500	65.280	
		Wall along leg A-B & C-D	cum	2	20.200	2.400	0.500	48.480	
								Total Quantity	113.760
2	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lift.							
		Wall along leg D-A & B-C	cum	2	27.200	0.400	0.500	10.880	
		Wall along leg A-B & C-D	cum	2	20.200	0.400	0.500	8.080	
		around legs	cum	1	23.200	20.200	0.500	234.320	
			cum	-4	4.500	4.500	0.500	-40.500	
								Total Quantity	212.780
3	16.94	Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012,MORTH Clause 2500, of required size, Mesh Type 10x12 (D=100 mm with tolerance of $\pm 2\%$) Zinc coated, Mesh wire diameter 3.0 mm, mechanically edged/selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2 mm, supplied @ 3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per direction of Engineer-in-charge.	cum						
		Wall along leg D-A & B-C	cum	2	27.200	2.000	1.000	108.800	
			cum	2	27.800	2.000	1.000	111.200	
			cum	2	28.400	2.000	1.000	113.600	
			cum	2	29.000	2.000	1.000	116.000	
			cum	2	29.600	2.000	1.000	118.400	
		Wall along leg A-B & C-D	cum	2	20.200	2.000	1.000	80.800	
			cum	2	20.800	2.000	1.000	83.200	
			cum	2	21.400	2.000	1.000	85.600	
			cum	2	22.000	2.000	1.000	88.000	
			cum	2	22.600	2.000	1.000	90.400	
								Total	905.600
								Deduct for voids	-135.840
								Total Quantity	769.760


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Measurement for Protection works at Tower location no 544 of 765 kV S/C Kishenpur- Moga Ckt-II Transmission line.

Sl. No.	DSR 2023 Item No.	Description	Unit	No.	Length (M)	Width (M)	Height (M)	Quantity	Remarks
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and for all lift, as directed by Engineer-in charge.							
a	2.6.1	All kinds of soil.	cum						
		Wall along leg D-A & B-C	cum	2	24.700	2.400	0.500	59.280	
		Wall along leg A-B & C-D	cum	2	17.700	2.400	0.500	42.480	
		Total Quantity						101.760	
2	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lift.							
		Wall along leg D-A & B-C	cum	2	24.700	0.400	0.500	9.880	
		Wall along leg A-B & C-D	cum	2	17.700	0.400	0.500	7.080	
		Total Quantity						16.960	
3	16.94	Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012,MORTH Clause 2500, of required size, Mesh Type 10x12 (D=100 mm with tolerance of $\pm 2\%$) Zinc coated, Mesh wire diameter 3.0 mm, mechanically edged/selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2 mm, supplied @ 3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per direction of Engineer-in-charge.	cum						
		Wall along leg D-A & B-C	cum	2	24.700	2.000	1.000	98.800	
			cum	2	24.700	2.000	1.000	98.800	
			cum	2	22.700	1.000	1.000	45.400	
		Wall along leg A-B & C-D	cum	2	17.700	3.000	1.000	106.200	
			cum	2	17.700	2.000	1.000	70.800	
			cum	2	17.700	1.000	1.000	35.400	
		Total						455.400	
		Deduct for voids						-68.310	
		Total Quantity						387.090	


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