



NORTH BIHAR POWER DISTRIBUTION CO. LTD.

[Office of Chief Engineer, Project-I/Urban]
(Regd. Office: Vidyut Bhawan, Bailey Road, Patna)
CIN No: U40109BR2012SGC018920

Letter No: 623

[File No:-N-XIII/RDSS/V.A/Chapra Circle-3070/2023-

Dated: 20-06-2023

E-mail: cerdssnbpdc@gmail.com

From,

Shriram Singh
Chief Engineer, Project-I (Urban)

To,

M/s NCC Ltd
NCC House, Survey no. 64, Madhapur,
Hyderabad, 500081
Email: elec.tenders@nccld.in

Sub:- **Regarding approval of GTP & Drawing of 8 Mtr. 200 Kg PSC Pole of make M/s Narayani Industries, Sitamarhi for Loss Reduction Component works under "Revamped Reforms-Based and Results-Linked Distribution Sector Scheme."**

Ref:- (i) NOA No.-244 & 245 dated 06.03.2023
(ii) Your letter no.-NCCL/RDSS/NBPDCL/PATNA/078 dated 19.06.2023

Sir,

With reference to the above, please find the copy of approved GTP & Drawing of following item for Loss Reduction Component works under "Revamped Reforms-Based and Results-Linked Distribution Sector Scheme":-

S.N.	Material Description	Vendor Name & Address
1	8 Mtr. 200 Kg PSC Pole	M/s Narayani Industries, Tandaspur Bathnaha, Sitamarhi, Bihar-843302

Correction where required in GTP & Drawing submitted by you has been done. However, these drawings shall be subject to correctness as per technical specifications of the tender document and the entire responsibility of correctness of the drawing as per the specifications as well as supply of material according to the technical specifications of the contract agreement shall be that of the contractor.

In case of any conflict or contradiction between GTP/Drawing & Technical Specifications, the decision of Chief Engineer, Project-I (Urban) shall be final and binding on both parties. Contractor shall have to replace the material to the entire satisfaction of the purchaser in case the material is found unsuitable for use in the project, at any stage.

Please carry out the works immediately under the conditions stated above.

Encl:- As above

Yours faithfully

(Shriram Singh)

Chief Engineer, Project-I (Urban)

Memo No.- 623

Dated- 20-06-2023

Copy forwarded M/s Vindhya Telelinks Limited, Club 125, 6th floor, Tower A, Plot No- 3, 4 & 5, Sector 125, Noida, UP-201301 / M/s Polycab India Ltd., Polycab House, 771, Pandit Satwalekar Marg, Mumbai / M/s Ashoka Buildcon Ltd, S.No.-861, Ashoka House, Ashoka Marg, Vadala, Nashik-422011 / for information and necessary action.

Encl:-As above

(Shriram Singh)

Chief Engineer, Project-I (Urban)

Memo No.- 623

Date- 20-06-2023

Copy forwarded to Chief Engineer, Project-II, NBPDCL for information and necessary action.

Encl:-As above

(Shriram Singh)

Chief Engineer, Project-I (Urban)

Guarantee Technical Particulars 8 mtr./200Kg. PSC Pole

SL.No.	Description	Unit	Guaranteed Value
1.	Over All Length of Pole	Mtrs.	8 ✓
2.	Depth of Plantation	Mtrs.	1.5 ✓
3.	Minimum Ultimate Transverse Load	Kgs.	500 ✓
4.	Weight of Pole in Kgs.	Kgs.	380 Approx. ✓
5.	Factor of Safety		2.5 ✓
6.	Concrete Grade		M-40 M-42
7.	Working Load Applied at 600 MM fro, Top	Kgs.	500 ✓
8.	Volume of Pole in Cube Meters	Cubic Meters	0.157 ✓
9.	DIMENSIONS of the POLES		
a	Top Dimension	mm	90x145 ✓
b	Bottom Dimension	mm	90x290 ✓
10.	ACTUAL CONSUMPTION/QUALITY OF MATERIAL USED IN MANUFACTURE OF EACH PSC POLE		
c	Cement (Exclusive of wastage)	Kgs	87 Approx. ✓
d	Aggregate	CFT	5.50 ✓
	Sand	CFT	3.5 ✓
f	H.T. Steel Wire		
(i)	Dia of Wire	mm	4mm/12 Nos.wire full & 2 Nos. Half ✓
(ii)	No.of wire	Nos.	12 Nos. Tensioned wire & 2 Nos. untensioned ✓
(iii)	Weight of Wire	Kgs.	11.50 Approx. ✓
g	Other M.S Reinforcement		
(i)	HT Wire Rings	mm	4mm HT Wire of 12 Nos. ✓
(ii)	Weight of Steel	Kgs.	0.6 ✓
(iii)	HT Wire Hook	Nos.	2 ✓
11.	EARTHING ARRANGEMENT IN EACH PSC POLES		
a	Length of GI Wire & SWG	Mtrs.	7.5 mtr 7.25 Mtrs. & 8 SWG
b	Weight of GI Wire	Kgs.	800Gms
12.	CONCRETE MIX & CUBE STRENGTH		
a	After 72 Hours	Kgs/cum2	210 Cm ✓
b	After 28 days	Kgs/cum2	420 Cm ✓
13.	Method of Pre-Stressing		By Tensioning of HT Wires through Hydraulic Tensioning Machine
14.	Ultimate Tensile Strength of Pre-Stress Wire	Kg/cm2	17500 175 Kg ps sqmm
15.	Pole Marking	i) ii) iii) iv) v)	Project Name SBPDEL NBPDCCL Month & Year of Manufacturer Transverse Strength of Pole in Kg Makers Serial No. & Marks Engraving height-30M from Bottom

APPROVED
Subject to the condition that you are not absolved to the responsibility of correctness of materials

CE (Project-1), Urban NBPDCCL

Checked
AEE(P-1) EEE(P-1) ESE(P-1)

Title Block for Bihar NBPDCCL-RDSS-Chapra

Scheme	Revamped Reforms- Based and Result- Linked, Distribution Sector Scheme (RDSS)-Bihar
Project	Development of Distribution Infrastructure for Electric Supply Circle Chapra of Bihar State on Turnkey Basis.
Customer	North Bihar Power Distribution Co. Ltd.
Contractor	M/s NCC Limited,- Hyderabad
LOA. No.	107-Patna,-5-XIII/Project-I/RDSS/Tender/2060/2022, Dt:- 03.03.2023
Manufacturer	M/s Narayani Industries
Item description	8M/200kg PSC Pole

Applicable Standards:-
Cement - IS 269-1976
Aggregate - IS 383 1970
Marking on Pole (Engraved):-
NBPDCCL(RDSS-LR), Ser. No →
Manufacturers name, Month/year

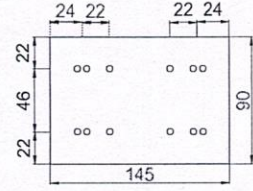
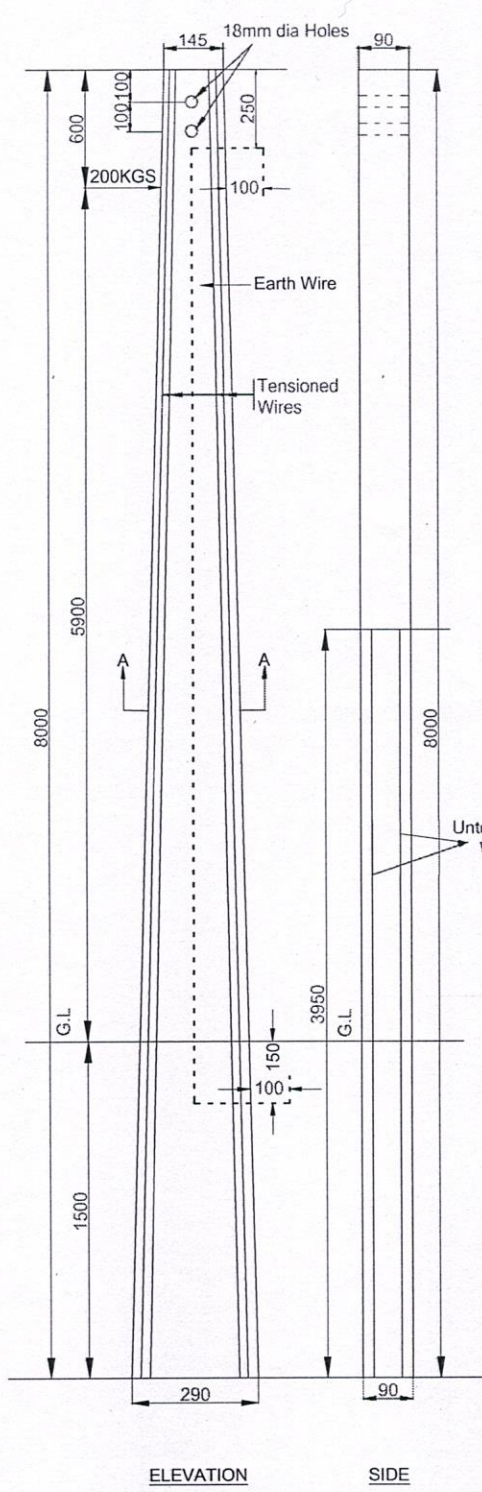


* Top 3 feet of Pole to be painted with IS-5 shade

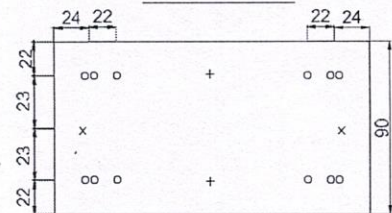
541 in all four faces.
Depth marked at 1.5 Meters from Bottom.

151

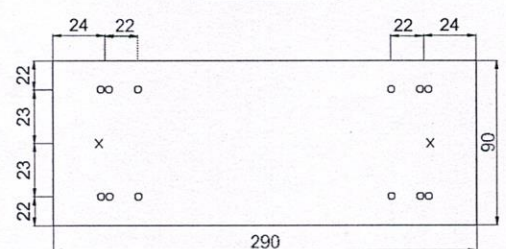
REINFORCEMENT DETAILS OF 8M/200KG PRESTRESSED CEMENT CONCRETE POLES (FACTOR OF SAFETY = 2.5)



PLAN AT TOP



PLAN AT A-A



PLAN AT BOTTOM

Location of holes as per REC Standards
 O Denotes Tensioned Wire
 x Denotes Untensioned Wire
 + Possible Position of Earth Wire

TECHNICAL GUARANTEE PARTICULARS 8.0mtr/200KG WORKING LOAD
 SECTION:

A) TOP	: 145 X 90 mm
B) BOTTOM	: 290 X 90 mm
QUANTITY OF CONCRETE	: 0.157 m ³
CONCRETE GRADE	: M-42
OVERALL LENGTH SUPPORT	: 8.0 m
PLANTING DEPTH	: 1.5 m
DIAMETER OF PRESTRESSING WIRE	: 4 mm
NUMBER TENSIONED WIRES	: 12 no's
NUMBER UNTENSIONED WIRES	: 2 no's
MINIMUM CUBE STRENGTH OF CONCRETE AT 28 DAYS	: 420 kg/cm ²
CLEAR COVER	: 20 mm
FACTORY OF SAFETY	: 2.5
WORKING LOAD	: 200 kg
ULTIMATE LOAD	: 500 kg
WEIGHT OF POLE (THEORETICAL)	: 395 kg
LOAD APPLICATION AT A POINT FROM THE TOP	: 600 mm
ULTIMATE TENSION STRENGTH FOR 4MM WIRE	: 17500 kg/cm ²
G.I. EARTH WIRE 8SWG	: 1 no
ALL DIMENSIONS ARE IN mm	NOT TO SCALE

Checked
 AEE(P-1) ESE(P-1)
APPROVED
 Subject to the condition that you are not absolved to the responsibility of correctness of materials
 CE (Project-1), Urban
 NRPDCL

