

HIMACHAL PRADESH
PUBLIC WORKS DEPARTMENT

NO.PW.ED.II.TA.TENDER/25-26-1403-05

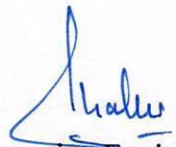
DATED:- 18-09-2025

To

✓ The Executive Engineer (IT)
Nirman Bhawan HPPWD
Shimla-2


Subject: - Publication of tender notice.

Please find herewith the tender notice for the works as given in the notice inviting tender for uploading on department website as per Secretary (PW) to the Govt. of Himachal Pradesh notification No.PWD:-A0(3)/1/2024-241828 dated 17-07-2025 and further Engineer-in-Chief office letter No. PW.CTR/32-20/Genl Inst/GCC/2025-6396-6490 dated 25-07-2025 as the works mentioned in the tender notice is/are urgent in nature and in public interest.


Executive Engineer,
Electrical Division No.II
HPPWD, US Club, Shimla-1

Copy forwarded to:-

1. The Superintending Engineer, Electrical Circle, HP PWD, Shimla-9 for information please.
2. Computer Cell O/O the Executive Engineer (IT Cell), Nirman Bhawan, Nigam Vihar, Shimla-2 for further necessary action.


Executive Engineer,
Electrical Division No.II
HPPWD, US Club, Shimla-1



HIMACHAL PRADESH PUBLIC WORKS DEPARTMENT
Office of the Executive Engineer, Electrical Division No.II, HPPWD, Shimla-1
E-mail: ee-eled2-hp@nic.in Phone/Fax No.0177- 2990187

NOTICE INVITING TENDER

Sealed percentage rate tenders are hereby invited by the Executive Engineer, Electrical Division No. II HPPWD Shimla-1 in form No. 6 on behalf of Governor of H.P. for the following works from the contractors of appropriate class enlisted with HPPWD (Electrical). The tenders shall be opened in the presence of contractors/firms or their authorized representative who wish to be present.

TIME SCHEDULE OF TENDER

- | | | |
|--|------------|----------------------|
| (i) Last date of receipt of application: | 26.09.2025 | Upto 1.00 P.M |
| (ii) Date of sale of tenders | 26.09.2025 | Upto 2 PM to 5.00 PM |
| (iii) Last date of receipt of bids: - | 27.09.2025 | Upto 10.30 A.M |
| (iv) Date of bid opening: - | 27.09.2025 | at 11.30 A.M |

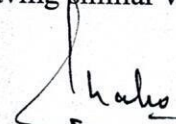
The tender form will be issued to only those contractors who qualify the criteria after the scrutiny of application forms by the committee constituted for the purpose.

S. N.	Name of work	Estimated cost	Earnest money	Time	Eligible class of registration
1.	Providing electrical Staff for attending complaints in Electrical Sub-Division HPPWD Reckong-Peo (Kaza Section) District Kinnaur under Electrical Division No.II HPPWD (U.S. Club) Shimla-01 w.e.f. 01-08-2025 to 31-07-2026	Rs.2,50,025/-	Rs.5000/-	One year	D & C
2.	Construction of Store at District Ayurvedic Hospital Reckong-Peo in Distt.Kinnaur (H.P.) (SH:-Providing Electrical Installation of First Floor & Second Floor therein)	Rs.4,49,439/-	Rs.9000/-	Two years	C & B
3.	Replacement of Damaged SOP cable & damaged LED Fittings in CJM court Building Kinnaur at Reckong Peo (H.P.)	Rs.1,70,144/-	Rs.3500/-	Three months	D & C
4.	Construction of Type-IV Qtrs. Set No.06 Second Floor in District Hospital Reckong-Peo in Distt.Kinnaur (H.P.) (SH:-Providing Electrical Installation therein)	Rs.2,21,405/-	Rs.4500/-	Two years	D & C
5.	Construction of Type-IV Qtrs. Set No.05 Second Floor in District Hospital Reckong-Peo in Distt.Kinnaur (H.P.) (SH:-Providing Electrical Installation therein)	Rs.2,21,405/-	Rs.4500/-	Two years	D & C
6.	Construction of 4 No's Type-II residential accommodations at Police Station Pooh District Kinnaur (H.P.) (SH:- Providing Electrical Installation therein)	Rs.5,03,992/-	Rs.10,100/-	Two years	C & B
7.	Construction of Play-Ground (Mini-Stadium) at Malling in District Kinnaur (H.P.) (SH:- Providing Electrical Installation in Pavillion)	Rs.1,65,989/-	Rs.3400/-	Two years	D & C

8.	C/O Veterinary Hospital at Kalpa in Distt. Kinnaur (H.P.) [SH:- Providing balance work of LED Panels & Geyser therein]	Rs.3,61,607/-	Rs.7200/-	One month	One month
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TERMS AND CONDITIONS:-

1. The earnest money in the shape of National Saving certificate. Time deposit account in any of the post office in HP/FDR or any Bank duly pledged in favor of Executive Engineer, Electrical Division No. II HPPWD Shimla-1 accompanied with the application for receipt of tender form along with cost of form.
2. The contractor/firm should possess the following documents (photo copy to be self attested with application for obtaining the tenders documents.
 - a) Latest enlistment/renewal orders with application for electrical works.
 - b) GST Number issued by the Sale Tax Department.
 - c) PAN (Permanent Account Number) issued by the Income Tax Department and copy of EPF issued from competent authority.
3. The Executive Engineer, Electrical Division No.II, HPPWD Shimla-1 reserves the right to reject any tender without assigning any reason(s)
4. The Cess charges @ 1% will be deducted from the gross amount of work done of the contractor.
5. The work will be completed by the contractor within the stipulated period.
6. The tender shall be issued to only those contractor/firms who are eligible suitable and competent.
7. The tender forms shall be issued to eligible contractors depending upon their past performance and work experience which shall be duly evaluated by the technical evaluation committee.
8. The contractor /firm having necessary documents and past adequate experience shall be preferred.
9. The contractor who has failed to start/complete the work already allotted in his favor within stipulated period shall not be issued tender forms.
10. A contractor enlisted in a particular class be eligible to tender for his own class and one step below
11. Only two number tender forms will be issued to the eligible contractor.
12. If any kind of holiday to be happened, the tender shall be opened on the next working day at 11.30 a.m.
13. GST will be deducted as per rates fixed by the Government.
14. Work appearing at Sr. No.1 will be issued to the contractors / firm having similar work done for the job.


Executive Engineer,
Electrical Division No.II,
HPPWD, US Club, Shimla-1

Dated:- 18-09-2025

No.PW.ED.II.TA.Tender/2025-2026-1406-16

Copy forwarded to the following for information :-

1. The Superintending Engineer, 1st Electrical Circle, HPPWD, Shimla-9.
2. All the Assistant Engineers working under this Division.
3. The Superintendent Grade-II, Head Draughtsman, Sr. Divisional Accounts officer in this division for information and necessary action.
4. Himachal Electrical Contractors Welfare Association (South Zone), Saraswati Bhawan, Kasumpti, Shimla-171009.
5. Notice Board.

Executive Engineer,
Electrical Division No.II,
HPPWD, US Club, Shimla-1

DRAFT SCHEDULE OF QUANTITY

Estimated Cost:- 2,50,025/-
 Earnest Money:- 5000 /-
 Time Limit:- 12 month

Name of Work :- Providing electrical Staff for attending complaints in Electrical Sub-Division HPPWD Reckong-Peo (Kaza Section) District Kinnaur under Electrical Division No.II HPPWD (U.S. Club) Shimla-01 w.e.f. 01-08-2025 to 31-07-2026

S.No.	Description of Items	Qty.	Unit	Rate In Fig.	Rate in Words	Amount
1.00	Providing & engagement of electrical staff for attending complaints in Electrical Sub-Division HPPWD Reckong-Peo District Kinnaur under Electrical Division No.II HPPWD (U.S.Club) Shimla-01 complete as required & approved by Engineer-in-charge for the period 01-04-2024 to 31-03-2025)					
1.01	T-Mate (Electrical) in Kaza Section	365	Per Day	685	Rupees Six Hundred EightyFive Only	250025
					Total	250025

*Draft schedule of quantity approved for Rs. 2,50,025/-
 CRD Two lacs, fifty thousand & twenty five only)*

KINNAUR

Verdus
 Executive Engineer,
 Electrical Division No.-II,
 HPPWD (U.S. Club) Shimla-1

DRAFT SCHEDULE OF QUANTITY

Estimated Cost:- Rs.4,49,439/- only

Earnest Money:- Rs. 9000/- only

Time:- Two Years



Name of work:- Construction of Store at District Ayurvedic Hospital Reckong-Peo in Distt.Kinnaur (H.P.) (SH:-Providing Electrical Installation of First Floor & Second Floor therein)

S.No.	Description of Items	Qty.	Unit	Rate		Amount
				In Figures	In words	
1.00	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.					
1.01	Group C	32	Point	1,418	Rupees One Thousand Four Hundred Eighteen Only	45376
2.00	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	10	Point	1,518	Rupees One Thousand Five Hundred Eighteen Only	15180
3.00	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.					
3.01	Group C	3	Point	840	Rupees Eight Hundred Fourty Only	2520
4.00	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	15	Each	468	Rupees Four Hundred SixtyEight Only	7020

5.00	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	7	Each	582	Rupees Five Hundred EightyTwo Only	4074
6.00	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 A modular socket outlet and 2 nos. 5/6 A modular switch, connections etc. as required. (For light plugs to be used in non residential buildings).	6	Each	676	Rupees Six Hundred SeventySix Only	4056
7.00	Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	4	Each	730	Rupees Seven Hundred Thirty Only	2920
8.00	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	102	Meter	334	Rupees Three Hundred ThirtyFour Only	34068
9.00	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	70	Meter	544	Rupees Five Hundred FortyFour Only	38080
10.00	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.					
10.01	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	100	Meter	228	Rupees Two Hundred TwentyEight Only	22800
10.02	4 X 1.5 sq. mm + 2 X 1.5 sq. mm earth wire	30	Meter	307	Rupees Three Hundred Seven Only	9210
10.03	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	25	Meter	443	Rupees Four Hundred FortyThree Only	11075
10.04	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	25	Meter	578	Rupees Five Hundred SeventyEight Only	14450
10.05	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	3	Meter	1,372	Rupees One Thousand Three Hundred SeventyTwo Only	4116

<p>11.00 Providing & Laying of one number aluminum conductor, PVC insulated and PVC sheathed armored/ XLPE power cable, 1.1 KV grade of following sizes on wall surface as required.</p>					
<p>11.01 Armored cable 35 sq. mm (3.5 core)</p>	60	Meter	572	Rupees Five Hundred SeventyTwo Only	34320
<p>11.00 Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal/ coke and salt as required.</p>	2	Set	7,473	Rupees Seven Thousand Four Hundred SeventyThree Only	14946
<p>12.00 Supplying and laying 6 SW/G G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.</p>	48	Meter	52	Rupees FiftyTwo Only	2496
<p>13.00 S/E of LED Batten with polycarbonate body and diffuser. The fitting should be installed on existing surface/recess. The job includes carriage, erection, making connections testing and commissioning of the fittings. Specification of LED fittings: Wattage of LED fittings - As per following parameter. Total lumens of the fittings - as per wattage Diffuser - Polycarbonate diffuser/PMMA Operating voltage - 140 V to 270 V, AC supply or better. Input frequency - 50 Hz + 1 Hz Power factor - Minimum 0.90 Luminaire efficacy - >100 lm/w Color rendering index - CRI shall be greater than 80 Working/ operating temperature - 00 to + 450c or better Color temperature - 60000K + 10% Electronic Driver Drive current (LED) - As per OEM. Operating voltage - 140 V to 270 V, AC supply or better. Type of driver - Constant current output driver THD - Less than 10% Surge Protection - 2.5 KV minimum Efficiency Driver - >85%</p>					

	Protection - Shall have under voltage and over voltage protection.					
	Guarantee of LED fittings including LED driver - 2 years against manufacturing defect.					
	Fixture - Should comply with LM 79 test from UL/NABL lab.					
	LED Type/ Make/ Model - Power CREE/ OSRAM/ NICHIA/ Philips LUMILED with life more than 25,000 burning hours @70% lumen maintenance complying with LM 80 test report from the manufacturer.					
	Life of LED - 25000 burning hours at 70% lumen maintenance					
	Lumen output of the fitting					
13.01	LED Batten Light >1000Lumens.	5	Each	581	Rupees Five Hundred EightyOne Only	2905
13.02	LED Batten Light >2000Lumens.	4	Each	665	Rupees Six Hundred SixtyFive Only	2660
14.00	Supplying and fixing of FANCY DECORATIVE HANGING SMOKY GLASS WITH CROME FINISH SINGLE PENDANT suitable for E-27 base lamp holder(s) complete with all accessories but excluding LED lamp including making connections, testing etc. as required. Make- Jaquar, Usha, Havells or any other approved by Engineer-in-Charge.					
14.01	FANCY DECORATIVE HANGING SMOKY GLASS WITH CROME FINISH SINGLE PENDANT	2	Each	5,738	Rupees Five Thousand Seven Hundred ThirtyEight Only	11476
15.00	Providing and installation of Decorative wall light fixture SPARKLER WL 1LS E27 BRS BL PC Minimalistic design of wall lights without shade in different finish and design in E27 base. Recommended to use with energy saving filament lamps for indoor applications, complete with all accessories, including making connections, testing and commissioning etc and excluding LED Lamp. as required. Make: Havells or any other approved by Engineer-in-Charge					
15.01	Decorative wall light fixture SPARKLER WL 1LS E27 BRS BL PC	2	Each	1,975	Rupees One Thousand Nine Hundred SeventyFive Only	3950

16.00	Providing and installation of LED FLOOD LIGHT, energy saving, environmental friendly, long life, exclusive innovative die-cast aluminum flood light with high power leds as light source, suitable for highlighting architectural features or area lighting, also suitable to rough services/installations with IP66 protection suitable for input voltage: 220-240 V, 50/60 Hz, complete with all accessories, including mounting clips & loop in loop out wire, connections, testing and commissioning etc. as required, Make:- Panasonic, Philips, Havells, Wipro, or any other approved by Engineer-in-Charge.					
16.01	LED Flood Light 50 Watt.	2	Each	1,821	Rupees One Thousand Eight Hundred TwentyOne Only	3642
17.00	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required	2	Each	97	Rupees NinetySeven Only	194
18.00	Providing and installation of following type of LED Filament Lamp ST64 type AMBER E-27 holder base and aluminum heat sink; suitable for input voltage: AC 220-240 V, 50/60Hz, including mounting in existing fixture, testing etc. as required complete in all respects. Make: Havells, Philips, Bajaj, Panasonic, Wipro, or any other approved by Engineer-in-Charge.					
18.01	LED Filament Lamp ST64 type AMBER 8-Watt (E-27)	4	Each	419	Rupees Four Hundred Nineteen Only	1676
19.00	S/E of LED Downlighter surface type square with CRCA/PPDC body and diffuser The fitting should be installed on existing surface The job includes carriage, erection, making connections testing and commissioning of the fittings. Specification of LED fittings: Wattage of LED fittings - As per following parameter. Total lumens of the fittings - as per wattage Diffuser - Polycarbonate diffuser/PMMA Operating voltage - 140 V to 270 V, AC supply or better. Input frequency - 50 Hz + 1 Hz Power factor - Minimum 0.90 Luminaire efficacy - >85 lm/w Color rendering index - CRI shall be greater than 80					



	Working/ operating temperature - 00 to + 450c or better					
	Color temperature - 60000K + 10%					
	Electronic Driver					
	Drive current (LED) - As per OEM.					
	Operating voltage - 140 V to 270 V, AC supply or better.					
	Type of driver - Constant current output driver					
	THD - Less than 10%					
	Surge Protection - 2.5 KV minimum					
	Efficiency Driver - >85%					
	Protection - Shall have under voltage and over voltage protection.					
	Guarantee of LED fittings including LED driver - 2 years against manufacturing defect.					
	Fixture - Should comply with LM 79 test from UL/NABL lab.					
	LED Type/ Make/ Model - Power CREE/ OSRAM/ NICHIA/ Philips LUMILED with life more than 50,000 burning hours @70% lumen maintenance complying with LM 80 test report from the manufacturer.					
	Life of LED - 50000 burning hours at 70% lumen maintenance					
	Lumen output of the fitting					
19.01	LED Down Light >1000Lumens.	4	Each	1617	Rupees One Thousand Six Hundred Seventeen Only	6468
19.02	LED Down Light >1500Lumens.	10	Each	1,769	Rupees One Thousand Seven Hundred SixtyNine Only	17690
19.03	LED Down Light >2400Lumens.	9	Each	1,921	Rupees One Thousand Nine Hundred TwentyOne Only	17289

20.00	Installation of ventilating /exhaust fan in the existing opening, including making good BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor the damage, connection, testing, commissioning etc. as required. Supply & Erection of Ventilating Fan) following size complete with motor,, with minimum power consumption, rigid frame with rubber mounting for silent operation, in the existing opening including cost of making the hole to suit the size of above fan making good the damage, Carriage Charges connection, testing, commissioning etc. as required to complete the job to the entire satisfaction of EIC.					
20.01	Ventilating/Exhaust Fan, 250 mm sweep	6	Each	2,978	Rupees Two Thousand Nine Hundred SeventyEight Only	17868
21.00	Providing and installation of stationary storage type Electric water heater (Geyser) of various sizes with 8 bar pressure rating Five star BEE rating and safety valve installation by means of expansion-bolts with nuts and washers, including embedding of expansion-bolts in the wall, making good the damages, electrical connections, testing etc. complete as required:-					
21.01	25 Liter capacity water heater (Cat-A)	2	Each	14,871	Rupees Fourteen Thousand Eight Hundred SeventyOne Only	29742
22.00	Providing and installation of instant Electric water heater (Geyser) of various sizes with 8 bar pressure rating 3kw element and safety valve installation by means of expansion-bolts with nuts and washers, including embedding of expansion-bolts in the wall, making good the damages, electrical connections, testing etc. complete as required:-					
22.01	3 Liter capacity water heater (Cat-A)	2	Each	5,371	Rupees Five Thousand Three Hundred SeventyOne Only	10742
23.00	Supplying and fixing 6 A to 32 A rating, 240/415 V, 10 KA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
23.01	Single pole 6 Amp.	8	Each	255	Rupees Two Hundred FiftyFive Only	2040

23.02	Single pole 16 Amp.	7	Each	255	Rupees Two Hundred FiftyFive Only	1785
23.03	Single pole 25 Amp.	4	Each	255	Rupees Two Hundred FiftyFive Only	1020
24.00	Supplying and fixing following rating, followings poles 10ka 240/415v 'C' curves miniature circuit braker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
24.01	40 A DP	2	Each	1,343	Rupees One Thousand Three Hundred FourtyThree Only	2686
24.02	63 A DP	2	Each	1,493	Rupees One Thousand Four Hundred NinetyThree Only	2986
25.00	Supplying and fixing following rating, following pole, (single phase and neutral), 240/415 V(four pole), residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
25.01	40 A DP	2	Each	2,746	Rupees Two Thousand Seven Hundred FourtySix Only	5492
25.02	63 A DP	2	Each	2,829	Rupees Two Thousand Eight Hundred TwentyNine Only	5658
26.00	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/isolator)					
26.01	8 way , Double door	2	Each	2,638	Rupees Two Thousand Six Hundred ThirtyEight Only	5276
26.02	12 way , Double door	2	Each	2,368	Rupees Two Thousand Three Hundred SixtyEight Only	4736
27.00	S/E of MCCB 4 Pole 415 Volt. with Thermal Magnetic Release for overload and short circuit protection breaking Capacity (Ics=100% Icu with positive isolation) with/ without Spreader/ Rotary Handle.					

27.01	MCCB 100 Amp. 36 ka 4 Pole Release without rotary handle	1	Each	13,768	Rupees Thirteen Thousand Seven Hundred SixtyEight Only	13768
28.00	Providing, fixing and installation of MCCB Enclosure, suitable for 3-pole or 4-pole MCCB, on surface / recess, complete with tinned neutral link, earth bar, din-bar, detachable gland plate, identification labels interconnections, phosphatized and powder painted, including earthing etc. Conforms to IS/IEC:60947-2 etc. as required, Make:- L&T, Havells, ABB, Schneider or any other approved by Engineer-in-Charge.					
29.01	SS Enclosure For 4-Pole MCCB	1	Each	2,242	Rupees Two Thousand Two Hundred FourtyTwo Only	2242
30.00	Supplying and fixing TP&N copper bus-bar chamber suitable for 415 volts capacity with 4 No. copper strip bus-bars each of length and x-section suitable for following current carrying capacities, enclosure made of sheet steel having thickness of 1.6mm, dust protected, duly powder painted with detachable gland plate and other accessories including drilling holes on the board, making connections, earthing etc. as required.					
30.01	63 A Copper Busbar Chambers 15" (SS Enclosure)	1	Each	7,838	Rupees Seven Thousand Eight Hundred ThirtyEight Only	7838
31.00	Providing and installation of 3 No's LED RED, YELLOW & BLUE Indicator sets suitable for indoor applications, complete with all accessories, including drilling the existing panel, connection etc. as required with Two year warranty. Make: Havells, L&T, C&S or any other approved by Engineer-in-Charge.					
31.01	RED, YELLOW & BLUE LED Indicator sets	1	Set	595	Rupees Five Hundred NinetyFive Only	595

32.00	Supplying & fixing wooden boxes of following sizes (nominal size) on surface or in recess suitable for fixing phenolic laminated sheet cover in front including painting etc. as required:-					
32.01	203mm.x 254mm.x60mm. Deep	2	Each	154	Rupees One Hundred FiftyFour Only	308
					Total Amount :-	₹ 449,439

*Draft schedule of quantity approved for Rs. 4,99,439/-
 (Rs Four Lakh, forty Nine Thousand, four hundred &
 thirty Nine only.)*

Value

**Executive Engineer,
 Electrical Division No-II,
 Shimla-1**

XIV/19

DRAFT SCHEDULE OF QUANTITY

Estimated Cost:- Rs.1,70,144/- only
 Earnest Money:- Rs. 3500/- only
 Time:- Three months

EE

Name of work:- Replacement of Damaged SOP cable & damaged LED Fittings in CJM court Building Kinnaur at Reekong Peo (H.P.)

S.No.	Description of Items	Qty.	Unit	Rate		Amount
				In Figures	In words	
1.00	Providing & Laying of one number aluminium conductor, PVC insulated and PVC sheathed armoured/ XLPE power cable, 1.1 KV grade of following sizes on wall surface as required.					
1.01	Armoured cable 50 sq. mm (3.5 core)	50	Meter	831	Rupees Eight Hundred ThirtyOne Only	41,550
2.00	S/E of LED Downlighter surface type square with CRCA/PDC body and diffuser The fitting should be installed on existing surface The job includes carriage, erection, making connections testing and commissioning of the fittings.					
	Specification of LED fittings:					
	Wattage of LED fittings As per following parameter.					
	Lumen output of the fitting 2400					
	Diffuser Polycarbonate diffuser/pmma					
	Operating voltage 140 V to 270 V, AC supply or better.					
	Input frequency 50 Hz + 1 Hz					
	Power factor Minimum 0.90					
	Luminaire efficacy >85 lm/w					
	Color rendering index CRI shall be greater than 80					
	Working/ operating temperature 00 to + 450c or better					
	Color temperature 60000K + 10%					
	Electronic Driver					
	Drive current (LED) As per OEM.					
	Operating voltage 140 V to 270 V AC supply or better					
	Type of driver Constant current output driver					
	THD Less than 10%					
	Surge Protection 2.5 KV minimum					

	Efficiency Driver > 85%						
	Protection shall have under voltage and over voltage protection.						
	Guarantee of LED fittings including LED driver 2 years against manufacturing defect.						
	Fixture should comply with LM 79 test from UL/NABL lab.						
	LED Type/ Make/ Model Power CREE/ OSRAM/ NICHIA/ Philips LUMILED with life more than 50,000 burning hours @70% lumen maintenance complying with LM 80 test report from the manufacturer.						
	Life of LED 50000 burning hours at 70% lumen maintenance						
	Lumen output of the fitting						
2.02	LED Down Light > 2400 Lumens.	4	Each	1921.00	Rupees One Thousand Nine Hundred Twenty One Only		7,684
	S/E of LED Panel with PDC body and prismatic diffuser to be mounted in recess. The job includes carriage, erection, making connections testing and commissioning of the fittings. 2 * 2 feet						
	Specification of LED fittings:						
	Wattage of LED fittings As per following parameter.						
	Total lumens of the fittings. as below						
	Diffuser Prismatic multilayer diffuser UGR < 19						
	Operating voltage 140 V to 270 V, AC supply or better.						
	Input frequency 50 Hz + 1 Hz						
	Power factor Minimum 0.90						
	Luminaire efficacy > 120 lm/w						
	Color rendering index CRI shall be greater than 80						
	Working/ operating temperature 00 to + 450c or better						
	Color temperature 60000K + 10%						
	Electronic Driver						
	Drive current (LED) As per OEM.						
	Operating voltage 140 V to 270 V AC supply or better						
	Type of driver Constant current output driver						
	THD Less than 10%						
	Surge Protection 2.5 KV minimum						
3.00							

EE

	Efficiency Driver>85%						
	Protection Shall have under voltage and over voltage protection.						
	Guarantee of LED fittings including LED driver 2 years against manufacturing defect.						
	Fixture Should comply with LM 79 test from UL/NABL lab.						
	LED Type/ Make/ Model Power CREE/ OSRAM/ NICHIA/ Philips LUMILED with life more than 50,000 burning hours @70% lumen maintenance complying with LM 80 test report from the manufacturer.						
	Life of LED 50000 burning hours at 70% lumen maintenance						
	Lumen output of the fitting						
3.01	LED Panel Light 2'x2' >3600Lumens.	6	Each	6,399	Rupees Six Thousand Three Hundred Ninety/Nine Only		38,394
	S/E of LED Panel with PDC body and prismatic diffuser to be mounted in recess The job includes carriage, erection, making connections testing and commissioning of the fittings. 1 * 4 feet						
	Specification of LED fittings:						
	Wattage of LED fittings As per following parameter.						
	Total lumens of the fittings. as below						
	Diffuser Prismatic multilayer diffuser UGR <19						
	Operating voltage 140 V to 270 V, AC supply or better.						
	Input frequency 50 Hz + 1 Hz						
	Power factor Minimum 0.90						
	Luminaire efficacy >120 lm/w						
	Color rendering index CRI shall be greater than 80						
	Working/ operating temperature 00 to + 450c or better						
	Color temperature 60000K + 10%						
	Electronic Driver						
	Drive current (LED)As per OEM.						
	Operating voltage 140 V to 270 V AC supply or better						
	Type of driver Constant current output driver						
	THD Less than 10%						
	Surge Protection 2.5 KV minimum						
	Efficiency Driver>85%						
4.00							

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	<p>Protection Shall have under voltage and over voltage protection. Guarantee of LED fittings including LED driver 2 years against manufacturing defect. Fixture Should comply with LM 79 test from UL/NABL lab. LED Type/ Make/ Model Power CREE/ OSRAM/ NICHIA/ Philips LUMILED with life more than 50,000 burning hours @70% lumen maintenance complying with LM 80 test report from the manufacturer. Life of LED 50000 burning hours at 70% lumen maintenance Lumen output of the fitting</p>					
4.01	<p>LED Panel Light 1'x4' >3600Lumens.</p>	8	Each	7,749	Rupees Seven Thousand Seven Hundred Fourty/Nine Only	61,992
5.00	<p>S/E of LED Batten with aluminium extrusion housing The fitting should be installed on existing surface The job includes carriage, erection, making connections testing and commissioning of the fittings. Specification of LED fittings: Wattage of LED fittings As per following parameter. Total lumens of the fittings. as below Diffuser Polycarbonate diffuser/PMMA Operating voltage 140 V to 270 V, AC supply or better. Input frequency 50 Hz + 1 Hz Power factor Minimum 0.90 Luminaire efficacy >110 lm/w Color rendering index CRI shall be greater than 80 Working/ operating temperature 00 to + 450c or better Color temperature 60000K + 10% Electronic Driver Drive current (LED) As per OEM. Operating voltage 140 V to 270 V AC supply or better Type of driver Constant current output driver THD Less than 10% Surge Protection 2.5 KV minimum Efficiency Driver>85% Protection Shall have under voltage and over voltage protection.</p>					

	Guarantee of LED fittings including LED driver 2 years against manufacturing defect.						
	Fixture Should comply with LM 79 test from UL/NABL lab.						
	LED Type/ Make/ Model Power CREE/ OSRAM/ NICHIA/ Philips LUMILED with life more than 50,000 burning hours @70% lumen maintenance complying with LM 80 test report from the manufacturer.						
	Life of LED 50000 burning hours at 70% lumen maintenance						
5.01	Lumen output of the fitting : LED Batten Light >3960Lumens.	8	Each	1,122	Rupees One Thousand One Hundred TwentyTwo Only	8,976	
6.00	Providing and installation exhaust fan of following sizes in the existing opening, Double ball bearing type metal frame including making the hole to suit the size of the above fan, making good the damages, connections, testing and commissioning etc. as required: of Approved Make Heavy Duty type.						
6.01	Exhaust Fan, Heavy duty, 300 mm sweep (900/1400rpm)	1	Each	3,571	Rupees Three Thousand Five Hundred SeventyOne Only	3,571	
7.00	Rewiring for light point/ fan point/exhaust fan point/call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/ recessed steel conduit including dismantling as required						
7.01	Group C	2	Point	841	Rupees Eight Hundred FourtyOne Only	1,682	
8.00	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.						
8.01	Single pole 16 Amp.	4	Each	255	Rupees Two Hundred FiftyFive Only	1,020	
9.00	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.						
9.01	3 x 4 sq. mm	25	Meter	211	Rupees Two Hundred Eleven Only	5,275	
					Total Amount :-	₹ 170,144	

*Draft Schedules of Quantity approved for Rs 1,70,144/- only.
 (Rs. one lakh, seventy Two hundred one hundred & forty four only.)*

**Executive Engineer,
 Electrical Division No.-II,
 HP PWD Shimla-1**

DRAFT SCHEDULE OF QUANTITY

Estimated Cost:- Rs.2,21,405 /- only
 Earnest Money:- Rs. 4,500/- only
 Time:- Two Years.


EE

Name of Work :- Construction of Type-IV Qtrs. Set No.06 Second Floor in District Hospital Reckong-Peo in Distt.Kinnaur (H.P.)
 (SH:-Providing Electrical Installation therein)

S.No.	Description of Items	Qty.	Unit	Rate		Amount
				In Figures	In words	
1.00	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC Insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.					
1.01	Group B	25	Point	1,089	Rupees One Thousand EightyNine Only	27,225
2.00	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	8	Point	1,394	Rupees One Thousand Three Hundred NinetyFour Only	11,152
3.00	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	14	Each	444	Rupees Four Hundred FourtyFour Only	6,216
4.00	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	8	Each	660	Rupees Six Hundred Sixty Only	5,280
5.00	Supplying and fixing PVC batten/ angle holder including connections etc. as required.	4	Each	116	Rupees One Hundred Sixteen Only	464
6.00	Supplying and fixing Ding-Dong / Electronic musical bell, suitable for D.C./A.C. single phase, 230 volts complete as required. Make Havells, Anchor or any other approved by Engineer-in-Charge.	1	Each	307	Rupees Three Hundred Seven Only	307

7.00	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	50	Metre	354	Rupees Three Hundred FiftyFour Only	17,700
8.00	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	45	Metre	604	Rupees Six Hundred Four Only	27,180
10.00	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC Insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.					
10.01	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	55	Metre	223	Rupees Two Hundred TwentyThree Only	12,265
10.02	4 X 1.5 sq. mm + 2 X 1.5 sq. mm earth wire	20	Metre	341	Rupees Three Hundred FortyOne Only	6,820
10.03	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	5	Metre	695	Rupees Six Hundred NinetyFive Only	3,475
11.00	Providing & Laying of one number aluminium conductor, PVC insulated and PVC sheathed armoured/ XLPE power cable, 1.1 KV grade of following sizes on wall surface as required.					
11.01	Armoured cable 16 sq. mm (twin core)	50	Metre	318	Rupees Three Hundred Eighteen Only	15,900
12.00	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.					
12.01	25 mm	5	Metre	110	Rupees One Hundred Ten Only	550
13.00	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	5	Metre	52	Rupees FiftyTwo Only	260
14.00	Providing and installation of following type of LED Batten with polycarbonate housing ,anti glare polycarbonate diffuser,surge protection 2.5 KV luminaire efficacy > 100lm/Watt with minimum 25000 burning hours,THD<15% in white finish and separated energy efficient constant current, non-integral, electronic driver,relevant LM 79/80 compliance fromUN/NABL Lab suitable for input voltage: AC 140-270 V, 50/60Hz, complete with all accessories, connections, testing etc. as required: of Approved Make					
14.01	LED Mirror/Batten Light 10W	2	Each	597	Rupees Five Hundred NinetySeven Only	1,194

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14.02	LED Batten Light 20W	6	Each	684	Rupees Six Hundred EightyFour Only	4,104
15.00	Providing and installation of LED retrofit lamp 9-Watt. B-22 holder base with polycarbonate body and aluminium heat sink; suitable for input voltage: AC 220-240 V, 50/60Hz, including mounting in existing fixture, testing etc. as required complete in all respects. Make:-Havells or any other approved by Engineer-in-Charge.					
15.01	LED retrofit lamp 9 Watt.	9	Each	132	Rupees One Hundred ThirtyTwo Only	1,188
16.00	Providing and installation of following type of Surface mounting round type LED Downlight with polycarbonate housing ,anti glare polycarbonate diffuser, surge protection 2.5 KV luminaire efficacy > 85lm/Watt with minimum 25000 burning hours, THD<15% in white finish and separated energy efficient constant current, non-integral, electronic driver relevant LM 79/80 compliance from UN/NABL Lab; suitable for input voltage: AC 140-270 V, 50/60Hz, complete with all accessories, connections, testing etc. as required: of Approved Make					
16.01	Round LED Down Light 18W Surface	4	Each	1,036	Rupees One Thousand ThirtySix Only	4,144
17.00	Providing and installation of following type of LED Bulk Head with PDC/CRCA housing (aluminium extrusion), anti glare polycarbonate diffuser, surge protection 2 KV luminaire efficacy > 85lm/Watt with minimum 50000 burning hours, THD<15% in white finish industrial grade IP 65 rated and separated energy efficient constant current, non-integral, electronic driver; relevant LM 79/80 compliance from UN/NABL Lab suitable for input voltage: AC 140-270 V, 50/60Hz, complete with all accessories, connections, testing etc. as required: of Approved Make					
17.01	LED Bulk Head 10W	4	Each	1,192	Rupees One Thousand One Hundred NinetyTwo Only	4,768
18.00	Providing and installation of Globe Type wall bracket made up of Polycarbonate, suitable for 9W LED lamp B22 base. for indoor applications, complete with all accessories, including making connections, testing and commissioning etc and excluding LED Lamp. as required. Make: Havells or any other approved by Engineer-in-Charge.					
18.01	Fancy wall Bracket.	5	Each	672	Rupees Six Hundred SeventyTwo Only	3,360

EE

19.00	Providing and installation exhaust fan of following sizes in the existing opening, Double ball bearing type metal frame including making the hole to suit the size of the above fan, making good the damages, connections, testing and commissioning etc. as required: of Approved Make Domestic type.						
19.01	Exhaust Fan, Light duty, (Domestic) 225/230 mm sweep	3	Each	2,286	Rupees Two Thousand Two Hundred EightySix Only	6,858	
20.00	Providing and fixing of Iron shutter for all sizes exhaust fans in the existing opening, including installation at site etc. as required to the best satisfaction of Engineer-in-Charge.	3	Each	606	Rupees Six Hundred Six Only	1,818	
21.00	Providing and installation of stationary storage type Electric water heater (Geyser) of various sizes with 8 bar pressure rating Five star BEE rating and safety valve installation by means of expansion-bolts with nuts and washers, including embedding of expansion-bolts in the wall, making good the damages, electrical connections, testing etc. complete as required:-						
21.01	10 Liter capacity water heater (Cat-A)	1	Each	12,478	Rupees Twelve Thousand Four Hundred SeventyEight Only	12,478	
21.02	25 Liter capacity water heater (Cat-A)	2	Each	15,283	Rupees Fifteen Thousand Two Hundred EightyThree Only	30,566	
22.00	Supplying and fixing 6 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.						
22.01	Single pole 6 Amp.	5	Each	329	Only	1,645	
22.02	Single pole 16 Amp.	8	Each	329	Only	2,632	
23.00	Supplying and fixing following rating, followings poles 10kA 240/415v 'C' curves miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.						
23.01	63 A DP	1	Each	1,563	Rupees One Thousand Five Hundred SixtyThree Only	1,563	

24.00	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
24.01	63 A	1	Each	4,266	Rupees Four Thousand Two Hundred SixtySix Only	4,266
25.00	Providing and installation of Over Voltage Protection Device for Protection against voltage parameters changes that trips the attached circuit breaker during Over Voltage fault greater than 270 Volt, so that the equipments are protected from over voltage complete including making connections, testing and commissioning etc. as required, Make: L&T, Havells, ABB, Schenider or any other approved by Engineer-in-Charge.					
25.01	SP Over Voltage Protection.	1	Each	1,652	Rupees One Thousand Six Hundred FiftyTwo Only	1,652
26.00	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)					
26.01	18 way, Double door	1	Each	4,221	Rupees Four Thousand Two Hundred TwentyOne Only	4,221
27.00	Supplying & fixing wooden boxes of following sizes (nominal size) on surface or in recess suitable for fixing phenolic laminated sheet cover in front including painting etc. as required:-					
27.01	203mm.x 254mm.x60mm. Deep	1	Each	154	Rupees One Hundred FiftyFour Only	154
					Total	221,405

*Draft schedule of quantity approved for RS 221,405/-
CRS two lakhs, Twenty one Thousand, four hundred,
\$ five only.)*

*Executive Engineer,
Electrical Division No.-II,
HP PWD (U.S. Club) Shimla-1*

DRAFT SCHEDULE OF QUANTITY

Estimated Cost:- Rs.2,21,405 /- only

Earnest Money:- Rs. 4,500/- only

Time:- Two Years.

EE

Name of Work : - Construction of Type-IV Qtrs. Set No.05 Second Floor in District Hospital Reckong-Peo in Distt.Kinnaur (H.P.) (SH:-Providing Electrical Installation therein)

S.No.	Description of Items	Qty.	Unit	Rate		Amount
				In Figures	In words	
1.00	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.					
1.01	Group B	25	Point	1,089	Rupees One Thousand EightyNine Only	27,225
2.00	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	8	Point	1,394	Rupees One Thousand Three Hundred NinetyFour Only	11,152
3.00	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	14	Each	444	Rupees Four Hundred FortyFour Only	6,216
4.00	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	8	Each	660	Rupees Six Hundred Sixty Only	5,280
5.00	Supplying and fixing PVC batten/ angle holder including connections etc. as required.	4	Each	116	Rupees One Hundred Sixteen Only	464

6.00	Supplying and fixing Ding-Dong / Electronic musical bell, suitable for D.C./A.C. single phase. 230 volts complete as required. Make Havells, Anchor or any other approved by Engineer-in-Charge.	1	Each	307	Rupees Three Hundred Seven Only	307
7.00	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	50	Metre	354	Rupees Three Hundred FiftyFour Only	17,700
8.00	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	45	Metre	604	Rupees Six Hundred Four Only	27,180
10.00	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.					
10.01	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	55	Metre	223	Rupees Two Hundred TwentyThree Only	12,265
10.02	4 X 1.5 sq. mm + 2 X 1.5 sq. mm earth wire	20	Metre	341	Rupees Three Hundred FourtyOne Only	6,820
10.03	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	5	Metre	695	Rupees Six Hundred NinetyFive Only	3,475
11.00	Providing & Laying of one number aluminium conductor, PVC insulated and PVC sheathed armoured/ XLPE power cable, 1.1 KV grade of following sizes on wall surface as required.					
11.01	Armoured cable 16 sq. mm (twin core)	50	Metre	318	Rupees Three Hundred Eighteen Only	15,900
12.00	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.					
12.01	25 mm	5	Metre	110	Rupees One Hundred Ten Only	550

13.00	Supplying and laying 6 SWG G.1. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	5	Metre	52	Rupees FiftyTwo Only	260
14.00	Providing and installation of following type of LED Batten with polycarbonate housing ,anti glare polycarbonate diffuser,surge protection 2.5 KV luminaire efficacy > 100lm/Watt with minimum 25000 burning hours,THD<15% in white finish and separated energy efficient constant current, non-integral, electronic driver;relevant LM 79/80 compliance fromUN/NABL Lab suitable for input voltage: AC 140-270 V, 50/60Hz, complete with all accessories, connections, testing etc. as required: of Approved Make					
14.01	LED Mirror/Batten Light 10W	2	Each	597	Rupees Five Hundred NinetySeven Only	1,194
14.02	LED Batten Light 20W	6	Each	684	Rupees Six Hundred EightyFour Only	4,104
15.00	Providing and installation of LED retrofit lamp 9-Watt. B-22 holder base with polycarbonate body and aluminium heat sink; suitable for input voltage: AC 220-240 V, 50/60Hz, including mounting in existing fixture, testing etc. as required complete in all respects. Make:-Havells or any other approved by Engineer-in-Charge.					
15.01	LED retrofit lamp 9 Watt.	9	Each	132	Rupees One Hundred ThirtyTwo Only	1,188
16.00	Providing and installation of following type of Surface mounting round type LED Downlight with polycarbonate housing ,anti glare polycarbonate diffuser,surge protection 2.5 KV luminaire efficacy > 85lm/Watt with minimum 25000 burning hours,THD<15% in white finish and separated energy efficient constant current, non-integral, electronic driver relevant LM 79/80 compliance from UN/NABL Lab; suitable for input voltage: AC 140-270 V, 50/60Hz, complete with all accessories, connections, testing etc. as required: of Approved Make					
16.01	Round LED Down Light 18W Surface	4	Each	1,036	Rupees One Thousand ThirtySix Only	4,144

17.00	Providing and installation of following type of LED Bulk Head with PDC/CRCA housing (aluminium extrusion), anti glare polycarbonate diffuser, surge protection 2 KV luminaire efficacy > 85lm/Watt with minimum 50000 burning hours, THD<15% in white finish industrial grade IP 65 rated and separated energy efficient constant current, non-integral, electronic driver, relevant LM 79/80 compliance from UN/NABL Lab suitable for input voltage: AC 140-270 V, 50/60Hz, complete with all accessories, connections, testing etc. as required: of Approved Make					
17.01	LED Bulk Head 10W	4	Each	1,192	Rupees One Thousand One Hundred NinetyTwo Only	4,768
18.00	Providing and installation of Globe Type wall bracket made up of Polycarbonate, suitable for 9W LED lamp B22 base. for indoor applications, complete with all accessories, including making connections, testing and commissioning etc and excluding LED Lamp. as required. Make: Havells or any other approved by Engineer-in-Charge.					
18.01	Fancy wall Bracket.	5	Each	672	Rupees Six Hundred SeventyTwo Only	3,360
19.00	Providing and installation exhaust fan of following sizes in the existing opening, Double ball bearing type metal frame including making the hole to suit the size of the above fan, making good the damages, connections, testing and commissioning etc. as required: of Approved Make Domestic type.					
19.01	Exhaust Fan, Light duty, (Domestic) 225/230 mm sweep	3	Each	2,286	Rupees Two Thousand Two Hundred EightySix Only	6,858
20.00	Providing and fixing of Iron shutter for all sizes exhaust fans in the existing opening, including installation at site etc. as required to the best satisfaction of Engineer-in-Charge.	3	Each	606	Rupees Six Hundred Six Only	1,818

21.00	Providing and installation of stationary storage type Electric water heater (Geyser) of various sizes with 8 bar pressure rating Five star BEE rating and safety valve installation by means of expansion-bolts with nuts and washers, including embedding of expansion-bolts in the wall, making good the damages, electrical connections, testing etc. complete as required:-					
21.01	10 Liter capacity water heater (Cat-A)	1	Each	12,478	Rupees Twelve Thousand Four Hundred SeventyEight Only	12,478
21.02	25 Liter capacity water heater (Cat-A)	2	Each	15,283	Rupees Fifteen Thousand Two Hundred EightyThree Only	30,566
22.00	Supplying and fixing 6 A to 32 A rating, 240/415 V, 10 KA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
22.01	Single pole 6 Amp.	5	Each	329	Rupees Three Hundred TwentyNine Only	1,645
22.02	Single pole 16 Amp.	8	Each	329	Rupees Three Hundred TwentyNine Only	2,632
23.00	Supplying and fixing following rating, followings poles 10ka 240/415v 'C' curves miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
23.01	63 A DP	1	Each	1,563	Rupees One Thousand Five Hundred SixtyThree Only	1,563
24.00	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
24.01	63 A	1	Each	4,266	Rupees Four Thousand Two Hundred SixtySix Only	4,266

25.00	Providing and installation of Over Voltage Protection Device for Protection against voltage parameters changes that trips the attached circuit breaker during Over Voltage fault greater than 270 Volt, so that the equipments are protected from over voltage complete including making connections, testing and commissioning etc. as required, Make: L&T, Havells, ABB, Schenider or any other approved by Engineer-in-Charge.						
25.01	SP Over Voltage Protection.	1	Each	1,652	Rupees One Thousand Six Hundred FiftyTwo Only	1,652	
26.00	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)						
26.01	18 way , Double door	1	Each	4,221	Rupees Four Thousand Two Hundred TwentyOne Only	4,221	
27.00	Supplying & fixing wooden boxes of following sizes (nominal size) on surface or in recess suitable for fixing phenolic laminated sheet cover in front including painting etc. as required:-						
27.01	203mm x 254mm x 60mm. Deep	1	Each	154	Rupees One Hundred FiftyFour Only	154	
					Total	221,405	

*Draft schedule of quantity approved for Rs. 2,21,405/-
(RS Two Lakh, Twenty one Thousand, four hundred,
 & five only.)*

Help
Executive Engineer,
Electrical Division No.-II,
HP PWD (U.S. Club) Shimla-1

DRAFT SCHEDULE OF QUANTITY

Estimated Cost:- Rs.5,03,992/- only
Earnest Money:- Rs. 10100/- only
Time:- Two Years

EE

Name of work:- Construction of 4 No's Type-II residential accommodations at Police Station Pooch District Kinnaur (H.P.) (SH:- Providing Electrical Installation therein)

S.No.	Description of Items	Qty.	Unit	Rate		Amount
				In Figures	In words	
1.00	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.					
1.01	Group A.	68	Point	978	Rupees Nine Hundred SeventyEight Only	66,504
2.00	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	8	Point	1,518	Rupees One Thousand Five Hundred Eighteen Only	12,144
3.00	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	28	each	468	Rupees Four Hundred SixtyEight Only	13,104
4.00	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	20	each	582	Rupees Five Hundred EightyTwo Only	11,640
5.00	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	80	Meter	334	Rupees Three Hundred ThirtyFour Only	26,720

6.00	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	60	Meter	544	Rupees Five Hundred FortyFour Only	32,640
7.00	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.					
7.01	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	96	Meter	228	Rupees Two Hundred TwentyEight Only	21,888
7.02	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	8	Meter	578	Rupees Five Hundred SeventyEight Only	4,624
7.03	4 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	36	Meter	307	Rupees Three Hundred Seven Only	11,052
8.00	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.					
8.01	25 mm. dia	20	Meter	139	Rupees One Hundred ThirtyNine Only	2,780
9.00	Providing & Laying of one number aluminium conductor, PVC insulated and PVC sheathed armoured/ XLPE power cable, 1.1 KV grade of following sizes on wall surface as required.					
9.01	Armoured cable 10 sq. mm (twin core)	200	Meter	277	Rupees Two Hundred SeventySeven Only	55,400
10.00	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	4	each	97	Rupees NinetySeven Only	388
11.00	Providing and installation exhaust fan of following sizes in the existing opening, Double ball bearing type metal frame including making the hole to suit the size of the above fan, making good the damages, connections, testing and commissioning etc. as required: of Approved Make Domestic type.					
11.01	Exhaust Fan, Light duty, (Domestic) 225/230 mm sweep	12	each	2,224	Rupees Two Thousand Two Hundred TwentyFour Only	26,688

FE

12.00	Providing and fixing of Iron shutter for all sizes exhaust fans in the existing opening, including installation at site etc. as required to the best satisfaction of Engineer-In-Charge.	12	each	594	Rupees Five Hundred NinetyFour Only	7,128
13.00	S/E of LED Batten with polycarbonate body and diffuser The fitting should be installed on existing surface/recess The job includes carriage, erection, making connections testing and commissioning of the fittings.					
	Specification of LED fittings:					
A.	Wattage of LED fittings - As per following parameter.					
B.	Total lumens of the fittings - as per wattage					
C	Diffuser - Polycarbonate diffuser/PMMA					
D	Operating voltage - 140 V to 270 V, AC supply or better.					
E	Input frequency - 50 Hz + 1 Hz					
F	Power factor - Minimum 0.90					
G	Luminaire efficacy - >100 lm/w					
H	Color rendering index - CRI shall be greater than 80					
I	Working/ operating temperature - 00 to + 450c or better					
J	Color temperature - 60000K + 10%					
K	Electronic Driver					
i)	Drive current (LED) - As per OEM.					
ii)	Operating voltage - 140 V to 270 V, AC supply or better.					
iii)	Type of driver - Constant current output driver					
iv)	THD - Less than 10%					
v)	Surge Protection - 2.5 KV minimum					
vi)	Efficiency Driver - >85%					
vi)	Protection - Shall have under voltage and over voltage protection.					
L	Guarantee of LED fittings including LED driver - 2 years against manufacturing defect.					
M	Fixture - Should comply with LM 79 test from UL/NABL lab.					
N	LED Type/ Make/ Model - Power CREE/ OSRAM/ NICHIA/ Philips LUMILED with life more than 25,000 burning hours @70% lumen maintenance complying with LM 80 test report from the manufacturer.					
O	Life of LED - 25000 burning hours at 70% lumen maintenance					

	Lumen output of the fitting						
13.01	LED Batten Light >2000Lumens.	16	each	665	Rupees Six Hundred SixtyFive Only	10,640	
14.00	Supplying and fixing PVC batten/ angle holder including connections etc. as required.	40	each	102	Rupees One Hundred Two Only	4,080	
15.00	Providing and installation of following type of LED retrofit lamp B-22 holder base with polycarbonate body and aluminium heat sink; suitable for input voltage: AC 220-240 V, 50/60Hz, including mounting in existing fixture, testing etc. as required complete in all respects. Make:-Havells or any other approved by Engineer-in-Charge.						
15.01	LED retrofit lamp 9/10 Watt.	40	each	132	Rupees One Hundred ThirtyTwo Only	5,280	
16.00	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 KA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.						
16.01	Single pole 6 Amp.	12	each	255	Rupees Two Hundred FiftyFive Only	3,060	
16.02	Single pole 16 Amp.	20	each	255	Rupees Two Hundred FiftyFive Only	5,100	
17.00	Supplying and fixing following rating, followings poles 10ka 240/415v 'C' curves miniature circuit braker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.						
17.01	63 A DP	4	each	1,493	Rupees One Thousand Four Hundred NinetyThree Only	5,972	
18.00	Supplying and fixing following rating, following pole, (single phase and neutral), 240/415 V(four pole), residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.						
18.01	63 A DP	4	each	2,829	Rupees Two Thousand Eight Hundred TwentyNine Only	11,316	

19.00	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)						
19.01	12 way, Double door	4	each	2,368	Rupees Two Thousand Three Hundred SixtyEight Only	9,472	
20.00	Supplying & fixing wooden boxes of following sizes (nominal size) on surface or in recess suitable for fixing phenolic laminated sheet cover in front including painting etc. as required:-						
20.01	203mm.x 254mm.x60mm. Deep	4	each	154	Rupees One Hundred FiftyFour Only	616	
21.00	Providing and installation of stationary storage type Electric water heater (Geyser) of various sizes with 8 bar pressure rating Five star BEE rating and safety valve installation by means of expansion-bolts with nuts and washers, including embedding of expansion-bolts in the wall, making good the damages, electrical connections, testing etc. complete as required:-						
21.01	25 Liter capacity water heater (Cat-A)	4	each	14,871	Rupees Fourteen Thousand Eight Hundred SeventyOne Only	59,484	
22.00	S/E of IP 66 Rated All-in-One Solar LED street light with 130lm/w, high-efficiency solar panel, inbuilt lithium battery, motion sensor, and polycarbonate lens optics for better distribution with aluminium body/PDC using. The job includes carriage, erection, making connections testing and commissioning of the fittings. The Specification of the Fittings is as under :-						
	Specification of LED fittings:						
A.	Wattage of LED fittings - As per following parameter.						
B.	Total lumens of the LED fittings						
C	Body of fitting :-Pressure dia cast aluminium body with Extruded Aluminium heat sink						
D	Operating voltage- 12 V/ 24 V, DC supply or better.						
E	Battery Capacity >16Ah						

F	Luminaire efficacy :->130 lm/w					
G	Color rendering index:-CRI shall be greater than 80					
H	Working/ operating temperature :- negative 10 to + 55 degree Celsius or better					
I	Color temperature :-6000°K to 6500°K					
J	PIR Sensor : Yes					
K	Drive current (LED) :-As per OEM.					
I)	LED Power : >20W					
ii)	Solar Panel: Mono Crystalline Solar PV Module to be >38w					
iii)	THD :-Less than 10%					
iv)	Charge Controller MPPT					
v)	Efficiency :- >95%					
vi)	Protection:-IP66					
vi)	Guarantee of LED fittings including LED driver :-2 years against manufacturing defect.					
L	Fixture :-Should comply with LM 79 test from UL/NABL lab.					
M	LED Type/Make/Model:-Havells/Bajaj/Wipro/Polycab with life more than 50,000 burning hours @70% lumen maintenance complying with LM 80 test report from the manufacturer.					
N	Life of LED:-50000 burning hours at 70% lumen maintenance					
	Lumen output of the fitting					
22.01	LED All-in-One Solar Street Light 20 Watt					
		2	each	33,294	Rupees ThirtyThree Thousand Two Hundred NinetyFour Only	66,588
23.00	Suppling, Laying or Fixing of following dia G I Pipe (Medium B-Class) For Cable laying & Fixing of light fixture including all accessories as require complete in all respect .					
23.01	40 MM Dia Medium Class G I Pipe	10	Meter	983	Rupees Nine Hundred EightyThree Only	9,830
24.00	Erection of metallic pole of following length in cement concrete 1:3:6 (1 coarse : 3 coarse : sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required. Above 4.5 meter and upto 6.5 meter.					
		2	Job	5,524	Rupees Five Thousand Five Hundred TwentyFour Only	11,048

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25.00	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	1	Set	6,856	Rupees Six Thousand Eight Hundred Fifty Six Only	6,856
26.00	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	50	Meter	39	Rupees Thirty Nine Only	1,950
Total Amount :-						₹ 503,992

*Draft Schedule of Quantity approved for Rs. 5,03,992/- only.
 (Rs. Five Lakh, Three Thousand, Nine hundred &
 Ninety Two only)*

Healy
 Executive Engineer,
 Electrical Division No.-II,
 HP PWD (U.S. Club) Shimla

2011/18

DRAFT SCHEDULE OF QUANTITY

Estimated Cost:- Rs.1,65,989/- only

Earnest Money:- Rs. 3400/- only

Time:- Two Years

EE

Name of work:- Construction of Play-Ground (Mini-Stadium) at Malling in District Kinnaur (H.P.) (SH:- Providing Electrical Installation in Pavillion)

S.No.	Description of Items	Qty.	Unit	Rate		Amount
				In Figures	In words	
1.00	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.					
1.01	Group C	26	Point	1,418	Rupees One Thousand Four Hundred Eighteen Only	36,868
2.00	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	8	each	468	Rupees Four Hundred SixtyEight Only	3,744
3.00	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	5	each	582	Rupees Five Hundred EightyTwo Only	2,910
4.00	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	40	Meter	334	Rupees Three Hundred ThirtyFour Only	13,360
5.00	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	30	Meter	544	Rupees Five Hundred FortyFour Only	16,320
6.00	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.					

6.01	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	48	Meter	228	Rupees Two Hundred TwentyEight Only	10,944
6.02	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	5	Meter	578	Rupees Five Hundred SeventyEight Only	2,890
6.03	4 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	16	Meter	307	Rupees Three Hundred Seven Only	4,912
7.00	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.					
7.01	25 mm. dia	5	Meter	139	Rupees One Hundred ThirtyNine Only	695
8.00	Providing & Laying of one number aluminium conductor, PVC insulated and PVC sheathed armoured/ XLPE power cable, 1.1 KV grade of following sizes on wall surface as required.					
8.01	Armoured cable 10 sq. mm (twin core)	50	Meter	277	Rupees Two Hundred SeventySeven Only	13,850
9.00	Installation of ventilating /exhaust fan in the existing opening, including making good BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor the damage, connection, testing, commissioning etc. as required. Supply & Erection of Ventilating Fan) following size complete with motor,, with minimum power consumption, rigid frame with rubber mounting for silent operation, in the existing opening including cost of making the hole to suit the size of above fan making good the damage, Carriage Charges connection, testing, commissioning etc. as required to complete the job to the entire satisfaction of EIC.					
9.01	Exhaust Fan, 150 mm sweep	3	each	2,183	Rupees Two Thousand One Hundred EightyThree Only	6,549
10.00	S/E of LED Batten with polycarbonate body and diffuser The fitting should be installed on existing surface/recess The job includes carriage, erection, making connections testing and commissioning of the fittings. Specification of LED fittings: Wattage of LED fittings - As per following parameter. Total lumens of the fittings - as per wattage Diffuser - Polycarbonate diffuser/PMMA Operating voltage - 140 V to 270 V, AC supply or better.					



	<p>Input frequency - 50 Hz + 1 Hz</p> <p>Power factor - Minimum 0.90</p> <p>Luminaire efficacy - >100 lm/w</p> <p>Color rendering index - CRI shall be greater than 80</p> <p>Working/ operating temperature - 00 to + 450c or better</p> <p>Color temperature - 60000K + 10%</p> <p>Electronic Driver</p> <p>Drive current (LED) - As per OEM.</p> <p>Operating voltage - 140 V to 270 V, AC supply or better.</p> <p>Type of driver - Constant current output driver</p> <p>THD - Less than 10%</p> <p>Surge Protection - 2.5 KV minimum</p> <p>Efficiency Driver - >85%</p> <p>Protection - Shall have under voltage and over voltage protection.</p> <p>Guarantee of LED fittings including LED driver - 2 years against manufacturing defect.</p> <p>Fixture - Should comply with LM 79 test from UL/NABL lab.</p> <p>LED Type/ Make/ Model - Power CREE/ OSRAM/ NICHIA/ Philips</p> <p>LUMILED with life more than 25,000 burning hours @70% lumen maintenance complying with LM 80 test report from the manufacturer.</p> <p>Life of LED - 25000 burning hours at 70% lumen maintenance</p> <p>Lumen output of the fitting</p>					
10.01	LED Batten Light >1000Lumens.	3	each	581	Rupees Five Hundred EightyOne Only	1,743
10.02	LED Batten Light >2000Lumens.	7	each	665	Rupees Six Hundred SixtyFive Only	4,655
11.00	<p>S/E of LED bulk head IP 66 rated with aluminium body/PDC housing The fitting should be installed on existing surface The job includes carriage, erection, making connections testing and commissioning of the fittings.</p> <p>Specification of LED fittings:</p> <p>Wattage of LED fittings - As per following parameter.</p> <p>Total lumens of the fittings - as per wattage</p> <p>Diffuser - Polycarbonate diffuser/PMMA</p> <p>Operating voltage - 140 V to 270 V, AC supply or better.</p>					

<p>Input frequency - 50 Hz + 1 Hz</p> <p>Power factor - Minimum 0.90</p> <p>Luminaire efficacy - >80 lm/w</p> <p>Color rendering index - CRI shall be greater than 80</p> <p>Working/ operating temperature - 00 to + 450c or better</p> <p>Color temperature - 60000K + 10%</p> <p>Electronic Driver</p> <p>Drive current (LED) - As per OEM.</p> <p>Operating voltage - 140 V to 270 V, AC supply or better.</p> <p>Type of driver - Constant current output driver</p> <p>THD - Less than 10%</p> <p>Surge Protection - 2 KV minimum</p> <p>Efficiency Driver - >85%</p> <p>Protection - Shall have under voltage and over voltage protection.</p> <p>Guarantee of LED fittings including LED driver - 2 years against manufacturing defect.</p> <p>Fixture - Should comply with LM 79 test from UL/NABL lab.</p> <p>LED Type/ Make/ Model - Power CREE/ OSRAM/ NICHIA/ Philips</p> <p>LUMILED with life more than 50,000 burning hours @70% lumen maintenance complying with LM 80 test report from the manufacturer.</p> <p>Life of LED - 50000 burning hours at 70% lumen maintenance</p> <p>Lumen output of the fitting</p>				<p>Rupees One Thousand One Hundred Sixty Only</p>	<p>5,800</p>
<p>11.01</p> <p>LED Bulk Head >800Lumens.</p>	<p>5</p>	<p>each</p>	<p>1160</p>	<p>Rupees One Thousand One Hundred Sixty Only</p>	<p>5,800</p>
<p>12.00</p> <p>S/E of LED Flood Light IP 66 rated with aluminium body/PDC housing having IP Lens optics, The job includes carriage, erection, making connections testing and commissioning of the fittings. The Specification of the Fittings is as under :-</p> <p>Specification of LED fittings:</p> <p>Wattage of LED fittings - As per following parameter.</p> <p>Total lumens of the LED fittings</p> <p>Body of fitting :-Pressure dia cast aluminium body with Extruded Aluminium heat sink</p> <p>Input frequency :-50 Hz + 1 Hz</p> <p>Operating voltage- 140 V to 270 V, AC supply or better.</p>					

	<p>Power factor :-Minimum 0.90</p> <p>Luminaire efficacy :->120 lm/w</p> <p>Color rendering index:-CRI shall be greater than 70</p> <p>Working/ operating temperature :-00 to + 450c or better</p> <p>Color temperature :-5700°K to 6500°K</p> <p>Electronic Driver :-</p> <p>Drive current (LED) :-As per OEM.</p> <p>Operating voltage :-140 V to 270 V AC supply or better</p> <p>Type of driver :-Constant current output driver</p> <p>THD :-Less than 10%</p> <p>Surge Protection :- (10 KV minimum External) (4 KV Internal)</p> <p>Efficiency Driver :->85%</p> <p>Protection:-Shall have under voltage and over voltage protection.</p> <p>Guaranteee of LED fittings including LED driver :-2 years against manufacturing defect.</p> <p>Fixture :-Should comply with LM 79 test from UL/NABL lab.</p> <p>LED Type/ Make/ Model:-Havells/Bajaj/Panasonic/Polycab with life more than 50,000 burning hours @70% lumen maintenance complying with LM 80 test report from the manufacturer.</p> <p>Life of LED:-50000 burning hours at 70% lumen maintenance</p> <p>Lumen output of the fitting</p>					
12.01	LED Flood Light 60 Watt IP-66.	8	each	2948	Rupees Two Thousand Nine Hundred FourtyEight Only	23,584
13.00	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
13.01	Single pole 6 Amp.	4	each	255	Rupees Two Hundred FiftyFive Only	1,020
13.02	Single pole 16 Amp.	5	each	255	Rupees Two Hundred FiftyFive Only	1,275
14.00	Supplying and fixing following rating, followings poles 10kA 240/415v 'C' curves miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.					

14.01	63 A DP	1	each	1,493	Rupees One Thousand Four Hundred Ninety/Three Only	1,493
15.00	Supplying and fixing following rating, following pole, (single phase and neutral), 240/415 V (four pole), residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
15.01	63 A DP	1	each	2,829	Rupees Two Thousand Eight Hundred Twenty/Nine Only	2,829
16.00	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)					
16.01	12 way, Double door	1	each	2,368	Rupees Two Thousand Three Hundred Sixty/Eight Only	2,368
17.00	Supplying & fixing wooden boxes of following sizes (nominal size) on surface or in recess suitable for fixing phenolic laminated sheet cover in front including painting etc. as required:-					
17.01	203mm.x 254mm.x60mm. Deep	1	each	154	Rupees One Hundred Fifty/Four Only	154
18.00	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	1	Set	6,856	Rupees Six Thousand Eight Hundred Fifty/Six Only	6,856
19.00	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	30	Meter	39	Rupees Thirty/Nine Only	1,170
				Total Amount :-		₹ 165,989

*Draft schedule of quantity approved for Rs 1,65,989/-
(Rs one lakh, sixty five thousand, nine hundred,
& eighty nine only) lakhs*

*Executive Engineer,
Electrical Division No.-II,
HP PWD (U.S. Club) Shimla-1*

DRAFT SCHEDULE OF QUANTITY

Estimated Cost:- Rs. 3,61,607 /- only
 Earnest Money:- Rs. 7,300/- only
 Time:- One Month

EE

Name of Work :- C/O Veterinary Hospital at Kalpa in Distt. Kinnaur (H.P.) [SH:- Providing balance work of LED Panels & Geyser therein]

S.No.	Description of Items	Qty.	Unit	Rate		Amount
				In Figures	In words	
1.00	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.					
1.01	Group C	5	Point	1929	Rupees One Thousand Nine Hundred Twenty/Nine Only	9645
2.00	Providing and installation of following type of recess mounting 2 feet by 2 feet type LED Panel with PDC/CRCA housing, anti glare prismatic multilayer diffuser, surge protection 2.5 KV luminaire efficacy > 120 lm/Watt with UGR<19 minimum 50000 burning hours, THD<10% in white finish and separated energy efficient constant current, non-integral, electronic driver, relevant LM 79/80 compliance from UNNABL Lab suitable for input voltage: AC 140-270 V, 50/60Hz, complete with all accessories, connections, testing etc. as required: of Approved Make					
2.01	LED Panel 2x2 36 watt	13	each	6790	Rupees Six Thousand Seven Hundred Ninety Only	88270
3.00	Providing and installation of following type of Surface mounting round type LED Downlight with polycarbonate housing, anti glare polycarbonate diffuser, surge protection 2.5 KV luminaire efficacy > 85lm/Watt with minimum 25000 burning hours, THD<15% in white finish and separated energy efficient constant current, non-integral, electronic driver relevant LM 79/80 compliance from UNNABL Lab; suitable for input voltage: AC 140-270 V, 50/60Hz, complete with all accessories, connections, testing etc. as required: of Approved Make					

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3.01	Round LED Down Light 6W Surface	9	each	547	Rupees Five Hundred FourtySeven Only	4923
3.02	Round LED Down Light 18W Surface	23	each	1036	Rupees One Thousand ThirtySix Only	23828
4.00	Providing and installation of following type of LED Batten with polycarbonate housing ,anti glare polycarbonate diffuser,surge protection 2.5 KV luminaire efficacy > 100lm/Watt with minimum 25000 burning hours, THD<15% in white finish and separated energy efficient constant current, non-integral, electronic driver:relevant LM 79/80 compliance fromUN/NABL Lab suitable for input voltage: AC 140-270 V, 50/60Hz, complete with all accessories, connections, testing etc. as required: of Approved Make					
4.01	LED Batten Light 20W	16	each	684	Rupees Six Hundred EightyFour Only	10944
5.00	Providing and installation of following type of LED Street light fitting made of pressure die cast aluminium housing powder coated with weather proof gasket ensuring IP-66 protection, Heat resistant toughened glass,High Efficiency Street Lighting Lenses, Inbuilt 4KV Surge protection, complete with all accessories including making connections, testing etc. as required with two years warranty. Make:- Panasonic, Havells, Philips, Wipro or any other approved by Engineer-in-Charge.					
5.01	LED Street Light 45 Watt.	5	each	3975	Rupees Three Thousand Nine Hundred SeventyFive Only	19875
6.00	Supplying and erection of street light bracket made of G.I. pipe 'A' class of suitable length and dia. the pipe bended to give an angle of 100 to 110 degree fitted with bolt & nuts at the top of existing pole or wall including painting the pipe with two coats of approved paint over priming coat complete in all respects as required.					
6.01	street light bracket 40 mm dia. G.I. pipe, heavy class	5	each	1006	Rupees One Thousand Six Only	5030
7.00	Providing and installation of stationary storage type Electric water heater (Geyser) of various sizes with 8 bar pressure rating Five star BEE rating and safety valve installation by means of expansion-bolts with nuts and washers, including embedding of expansion-bolts in the wall, making good the damages, electrical connections, testing etc. complete as required:-					
7.01	15 Liter capacity water heater (Cat-A)	5	each	13624	Rupees Thirteen Thousand Six Hundred TwentyFour Only	68120
7.02	25 Liter capacity water heater (Cat-A)	4	each	15283	Rupees Fifteen Thousand Two Hundred EightyThree Only	61132

EEI

8.00	Installation of ventilating/exhaust fan in the existing opening, including making good BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor the damage, connection, testing, commissioning etc. as required. Supply & Erection of Ventilating Fan) following size complete with motor,, with minimum power consumption, rigid frame with rubber mounting for silent operation, in the existing opening including cost of making the hole to suit the size of above fan making good the damage, Carriage Charges connection, testing, commissioning etc. as required to complete the job to the entire satisfaction of E.I.C.				Ruppes Three Thousand Sixty Only	3060
8.01	Exhaust Fan, 250 mm sweep	1	each	3060	Ruppes Three Hundred Eighteen Only	66780
9.00	Providing & Laying of one number aluminium conductor, PVC insulated and PVC sheathed armoured/ XLPE power cable, 1.1 KV grade of following sizes on wall surface as required.					
9.01	Armoured cable 16 sq. mm (twin core)	210	Meter	318	Total	361607

*Draft schedule of quantity approved for Rs. 3,61,607/-
CRS Three Lakh, Sixty one Thousand, six hundred,
& seven only.)*

Rs. 3,61,607/-

*Executive Engineer,
Electrical Division No.-II,
HP PWD (U.S. Club) Shimla-*