#### **IMPROVEMENTS AND INNOVATIONS**

#### PROVISION OF AIRPORT STANDARD LIGHTING:

Provision of Airport standard lighting carried out in 9 stations (Mangalore Junction, Mangalore Central, Kasaragod, Thalassery, Kanuur, Vadakara, Kozhikkode, Shoranur & Palakkad).



**Palakkad station** 



**Kannur Station** 



**Shoranur Station** 

**Thalassery Station** 

### • PASSENGER AMENITIES PROVIDED

# Lifts & Escalators already commissioned

LIFT	r'S					ESCAI	LATORS			
SN	Stn.	LOCATION	QTY	Date of commissioning	Under Warranty/ AMC	Stn.	LOCATI ON	QTY	Date of commissio ning	Under Warranty/ AMC
		PF1	1	13.12.2019	AMC	БОТ	22.4	1	07.9.20	AMC
		PF 2&3	1	16.102015	AMC	PGT	PF 1	1	12.02.16	AMC
	D.CIT	PF 4&5	1	16.10.2015	AMC					
1	PGT	PF1	1	28.02.2023	Warranty					
		PF 2&3	1	28.02.2023	Warranty					
		PF 4&5	1	28.02.2023	Warranty					
		PF 1	1	25.05.2019	AMC					
2	SRR	PF 1 new FOB	1	11.06.2025	Warranty					
		PF 4&5	1	25.05.2019	AMC					
		PF 1	1	13.10.2013	AMC	CLT	PF 1	2	13.10.13	AMC
3	CLT	PF 2&3	1	13.10.2013	AMC	CLT	PF 4	2	28.03.22	Warranty
		PF 4	1	13.10.2013	AMC					
4	BDI	PF 1	1	13.01.2018	AMC	BDJ	PF 2&3	1	08.02.25	Warranty
	,	PF 2&3	1	13.01.2018	AMC	BDJ	PF 2&3	1	21.06.19	AMC
		PF 2&3	1	19.08.2017	AMC	CAN	PF 1	2	26.12.16	AMC
5	CAN	2nd Entry	1	19.08.2017	AMC	CAN	2 <sup>nd</sup> Entry	1	28.03.22	AMC
		PF 1	1	15.07.2023	Warranty	CAN	2 <sup>nd</sup> Entry	1	28.09.24	Warranty
		PF 1	1	02.09.2020	AMC	TLY	PF 1	1	07.09.20	AMC
6	TLY	PF 2	1	02.09.2020	AMC	TLY	PF 1	1	21.10.24	Warranty
_		PF 1	1	24.01.2020	AMC					
7	KZE	PF 2&3	1	24.01.2020	AMC					
_	1700	PF 1	1	07.01.2020	AMC					
8	KGQ	PF 2&3	1	07.01.2020	AMC					
_	NAATNI	PF 1	1	24.01.2020	AMC					
9	MAJN	PF 2&3	1	24.01.2020	AMC					
		PF 1	1	07.11.2015	AMC		PF 1	1	08.07.16	AMC
10	MAQ	PF 2&3	1	07.11.2015	AMC	MAQ	PF 2&3	1	08.07.16	AMC
11	OTP	PF1	1	26.02.2022	AMC					
		PF-2	1	26.02.2022	AMC					
12	KTU	PF1	1	14.12.2023	Warranty					
		PF-2	1	14.12.2023	Warranty					
13	TIR	PF 2&3	1	20.09.2024	Warranty	TIR	2 <sup>nd</sup> Entry	2	07.06.25	Warranty
		PF 1	1	20.05.2025	Warranty					
		2nd entry								
14	PUM	PF 1	1	13.03.2025	Warranty					
		PF 2	1	13.03.2025	Warranty					
15	TA	PF 1	1	19.03.2025	Warranty					
		PF 2	1	19.03.2025	Warranty					
16	QLD	PF 2&3	1	04.04.2025	Warranty					
		PF 1								
17	PGTN	PF 1	1	05.04.2025	Warranty					
		PF 2&3	1	05.04.2025	Warranty		<u> </u>			

LIFT	ΓS	1		1		ESCA	LATORS		1	1
SN	Stn.	LOCATION	QTY	Date of commissioning	Under Warranty/ AMC	Stn.	LOCATI ON	QTY	Date of commissio ning	Under Warranty/ AMC
18	PAZ	PF 1	1	28.03.2025	Warranty					
		PF 2	1	28.03.2025	Warranty					
19	PGI	PF 1	1	13.04.2025	Warranty					
		PF 2	1	13.04.2025	Warranty					
20	NLE	PF 1	1	29.03.2025	Warranty					
		PF 2	1	29.03.2025	Warranty					
21	PTB	PF 1	1	16.04.2025	Warranty					
		PF 2	1	16.04.2025	Warranty					
22	CHV	PF 1	1	24.04.2025	Warranty					
		PF 2	1	24.04.2025	Warranty					
23	MAH E	PF 1	1	28.04.2025	Warranty					
		PF 2	1	28.04.2025	Warranty					
24	FK	PF 1	1	07.06.2025	Warranty					
		PF 2	1	07.06.2025	Warranty					
		Total	55				Total	18		

# Lift Commissioned at NLE Railway station on 29.03.2025



### **ON GOING PASSENGER AMENITY WORKS**

#### > LIFTS

Station	Quantity		Status
	Nos.	Engineering Portion	Electrical portion
QLD	1	completed	Completed
SRR	4	PF1 completed, others under progress	PF1 completed, for others, LOA issued, GAD approved and waiting for the completion of engineering work.
TIR	1	completed	Completed
KMQ	2	Under progress	LOA issued, GAD approved and waiting for the completion of engineering work.
PAY	2	Under progress	LOA issued, GAD approved and waiting for the completion of engineering work.
KGQ	2	Under progress	Indent under process
NIL	2	Under progress	Material supplied

### > ESCALATORS

Station	Quantity	Status		
	Nos.	Engineering Portion	Electrical portion	
PGT	2	Completed	Completed	

# ABSS station financial progress and percentage of work

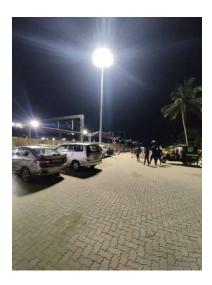
SI No	Stations	LOA Amount	Bill Passed	Percentage
1	OTP	1,61,60,600	1,40,39,000	86.87
2	KGQ	88,00,950	82,73,237	94.00
3	KTU	1,13,12,590	1,00,85,162	89.15
4	MAJN	1,68,00,897	1,53,32,866	91.26
5	SRR		1,86,67,086	
6	AAM	4,99,00,936	36,99,737	73.52
7	NIL	4,99,00,930	1,05,38,115	75.52
8	POY		37,82,088	
9	TIR	1,07,64,000	88,65,475	82.36
10	BDJ	2,16,58,110	1,27,53,490	95.63
11	MHE	2,10,56,110	79,57,355	95.05
12	FK	96,68,692	1,06,83,471	110.50
13	PGI	1,02,84,540	1,02,64,502	99.81
14	TLY	2.02.27.927	1,02,96,010	72.13
15	PAY	2,93,27,837	1,08,58,424	/2.13
	TOTAL	18,46,79,152	15,60,96,018	84.52
	STORES BILLS PASSED		1,19,77,536	
	TOTAL		16,80,73,554	

# > PUBLIC AMINITY WORK

# **High mast Commissioned PGI Station**



High mast Commissioned at KTU Station Parking area





# 1 No.High mast & 2Nos of Mini mast Commissioned at SRR Parking area





**High mast Commissioned at OTP Station** 





**High mast Commissioned at BDJ Station** 

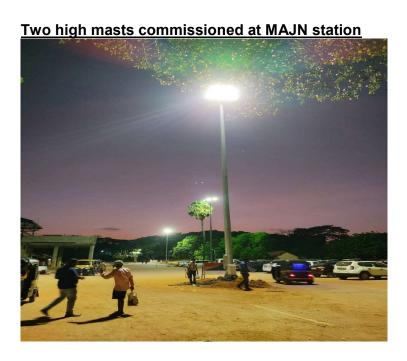




### Two high masts commissioned at Pollachi station







# High masts near SRR -B Cabin





# **Amruth Bharath Station Scheme**

SI. No.	Station	Major works proposed	Present Status
1	Pollachi Junction	Re wiring of existing PF shelters, High masts at Parking area, Façade lighting for station building, Electrification/re-wiring of Toilet, concourse and waiting hall, New wall mounting fans, New water coolers, LED signage boards, DG set.	Contract awarded on 9/6/23 Work under progress.
2	Ottappalam	Re wiring of existing PF shelters, New mini shelter wiring, High masts at Parking area, Roof top solar panel- 70kWp, Façade lighting for station building, Electrification/rewiring of new Toilet,, concourse and waiting hall, New wall mounting fans, New water coolers, LED signage boards, DG set.	Contract awarded on 07.06.2023. Work under progress.
3	Shoranur	Re wiring of existing PF shelters , High masts and mini masts at Parking area, Façade lighting for station building, Electrification/re-wiring of new Toilet, concourse and waiting hall, New wall mounting fans, New water coolers,LED signage boards	Contract awarded on 9/6/23. Work under progress.
4	Angadippuram	Re wiring of existing PF shelters, Mini masts at Parking area, Façade lighting for station building, Electrification/re-wiring of new Toilet, concourse and waiting hall, New wall mounting fans, New water coolers, LED signage boards	Contract awarded on 9/6/23. Work under progress.

SI. No.	Station	Major works proposed	Present Status
5	Nilambur Road	Re wiring of existing PF shelters, Mini masts at Parking area, Façade lighting for station building, Electrification/re-wiring of new Toilet, concourse and waiting hall, New wall mounting fans, New water coolers, LED signage boards	Contract awarded on 9/6/23. Work under progress.
6	Kuttippuram	Re wiring of existing PF shelters, New mini shelter wiring, High mast at Parking area, Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall, New wall mounting fans, New water coolers LED signage boards, DG set	Contract awarded on 07.06.2023. Work under progress.
7	Tirur	Re wiring of existing PF shelters, High mast at Parking area, Façade lighting for station building, Electrification/re-wiring of new Toilet, concourse and waiting hall, New wall mounting fans, New water coolers, LED signage boards DG set,11 KV substation	Contract awarded on 12.06.2023. Work under progress.
8	Parapangadi	Re wiring of existing PF shelters, High mast at Parking area, Façade lighting for station building, Electrification/re-wiring of new Toilet, concourse and waiting hall, New wall mounting fans, New water coolers, LED signage boards	Contract awarded on 11.08.2023. Work under progress.
9	Ferok	Re wiring of existing PF shelters, Façade lighting for station building, Electrification/rewiring of new Toilet, concourse and waiting hall, New wall mounting fans, New water coolers, LED signage boards, Inverter/DG set	Contract awarded on 03.08.2023. Work under progress.
10	Vadakara	Re wiring of existing PF shelters, High masts at Parking area, Façade lighting for station building, Electrification/re-wiring of new Toilet, concourse and waiting hall, New wall mounting fans, New water coolers, LED signage boards, DG set 11 KV substation	Contract awarded on 25.07.2023. Work under progress.
11	Mahe	Re wiring of existing PF shelters, Mini masts at Parking area, Façade lighting for station building, Electrification/re-wiring of new Toilet, concourse and waiting hall, New wall mounting fans, New water coolers, LED signage boards Inverter/DG set	Contract awarded on 25.07.2023. Work under progress.
12	Talassery	Re wiring of existing PF shelters, Mini masts at Parking area, Façade lighting for station building, Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans, New water coolers, LED signage boards, DG set, 11 KV substation	Contract awarded on 03.08.2023. Work under progress.

SI. No.	Station	Major works proposed	Present Status
13	Payyanur	Re wiring of existing PF shelters, Mini masts at Parking area, Façade lighting for station building, Electrification/re-wiring of new Toilet, concourse and waiting hall, New wall mounting fans, New water coolers, LED signage boards, DG set, 11 KV substation	awarded on 03.08.2023. Work under
14	Kasaragod	Re wiring of existing PF shelters ,High mast at Parking area, Façade lighting for station building, Electrification/re-wiring of new Toilet, concourse and waiting hall, New water coolers, LED signage boards, DG set, 11 KV substation	awarded on 12.06.2023. Work under
15	Mangalore Junction	Re wiring of existing PF shelters, High masts at Parking area, Façade lighting for station building, Electrification/re-wiring of new Toilet, concourse and waiting hall, New wall mounting fans, LED signage boards	12.07.2023. Work under

POY SRR





AAM NIL





KTU TIR





PGI FK





BDJ MAHE





TLY KGQ





#### **MAJN**



#### **ENERGY CONSERVATION MEASURES**

#### **ENERGY AUDIT:**

Energy Audit at 14 Stations have been completed by outside agencies and their suggestion to reduce the consumption has been implemented. (PGT,OTP,SRR,KTU,TIR,QLD,BKJ,CAN,TLY,PAY,MAQ,MAJN,KGQ & KZE).

The following energy efficient electrical equipment are provided in PGT Division to achieve the energy conservation target.

- ➤ Replacement of 100% LED lamps in stations, service buildings and Railway quarters.
- > Replacement of ordinary fans with BLDC fans in stations and service buildings.
- ➤ Provision of energy efficient inverter AC plants in service buildings, running rooms, ORH, etc.
- Replacement of pumps with energy efficient star rated submersible pumps.
- Automation of pumps provided in all high capacity pumps
- All stations provided with 70% & 30% Platform light control
- All street lights and high mast lights provided with timers

#### Roof top solar plants (through Revenue funds)

S No	Location	Capacity in KWP	Date of commissioning
1	TLY stn.	3	10.12.16
2	Div./O/PGT	10/ 95	02.03.17/26.6.19
3	Rly. Hsptl. /PGT	20	02.03.17
4	MDDTI/PGT	50	05.06.21
5	PLL	5.2	05.06.2022
6	LDY	5.2	05.06.2022
7	CAN	70	18.10.2023
8	TIR	70	22.04.2024
		328.4 KWP	

# Provided by REMCL

Sl.no	Location	Capacity in KWP	Date of commissioning
1	CLT stn	100	10.07.19
2	PGT stn	50	25.09.19
3	SRR stn	50	25.10.19
4	CAN stn	50	31.10.19
5	TLY stn	50	28.10.19
	Total	300 KWP	

# 70 KWp solar plant commissioned at TIR on 22.04.2024





#### **WORKS RELATED TO SAFETY**

#### LIGHTING ARRANGEMENTS INSIDE TUNNEL

> At MAJN-KULS tunnel, lighting works has been completed on both right and left sides and the same has been put into service. (Total 120 nos of 14 watts LED bulbs provided with protection cover).





### Improvement in yard lighting at KANNUR

Two high mast provided at Kannur yard to improve lighting/safety of stabled racks.





### DG set at Nilambur Road Running Room

DG set installed at Nilambur Road running room to ensure uninterrupted power supply and thus proper rest to the Train working Crews to ensure safety



### 250 KVA DG set installed, tested and commissioned @ SRR





### **IMPROVEMENT IN PIT LINE LIGHTING AT MAQ**

Portal lights at MAQ yard covering 3 pit lines and a sick line of 600 mtrs length. Total 6 portals, average span of portal 25 mtrs.

Each portal controlling by separate timer.

9 nos of 5 mtrs height octagonal poles with 2 nos of 200 w light also provided in between the portals in new L type and T type catwalk.

Total lights 152 nos of 200 watts LED flood light.

Total load 30.4 KW.

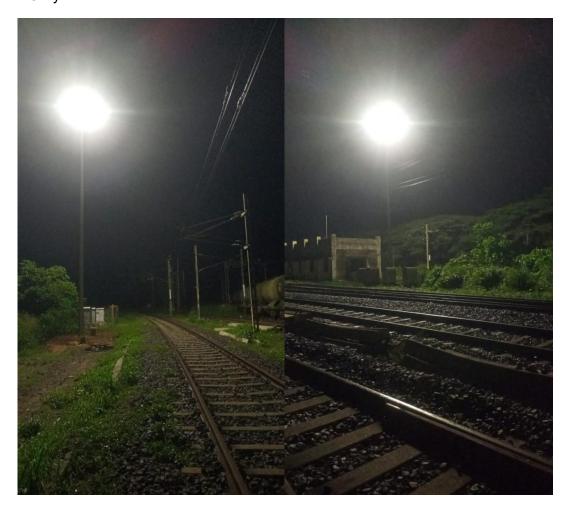
Cost of work 48 Lakhs approx.





### Improvements to yard lighting at PGT

Four numbers of high masts with 6 x 200W LED flood light fittings each are installed at PGT yard.



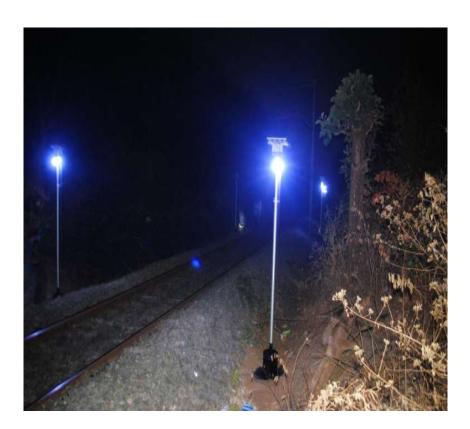
Octagonal pole (30 nos poles) and flood light provided at KUL goods unloading Platform.





#### **ELEPHANT WARNING LIGHTS**

1. A total of 20 nos. of LED lights with Solar system mounted on GI posts has been provided inside the forest area between WRA-KJKD stations in B line for preventing entry of elephants into the railway track at critical cuttings @ KM 511/9 to 510/39 and KM 512/19 to 512/11



1. 25 Nos of 7W 2in 1 Solar Street Light has been commissioned between ETMD-WRA stations in view of wild elephant crossing the Railway track.

Km	Qty
504- A line	4 nos
506- A line	12 nos
507- A line	4 nos
506 A- B line	1 no
507 – B line	2 nos
515 B line	2 nos





### **Provision of hanging Solar fencing**

- 1. PGT Division has provided hanging solar around and nearby the IBH building between WRA-KJKD stations @ km 515/300- 515/900 for a length of total 1300m at a total cost of Rs. 9.56 Lakhs. (600 m along the track both sides and around IBH)
- 2. Solar fencing for a length of 1500m at a total cost of Rs.9.64 Lakhs @ Railway Km 507/2 to 508/2 left side towards MAS & 508/2 to 508/7 right side along the track on B line of WRA-ETMD is completed.
- 2. Solar fencing for 6 Km

A line - between KJKD-KTKU km 522/900- 527/900 - 5 km

B line - 515/900 to 516/900 - 1km





1. Solar fencing for a length of 1500m at a total cost of Rs. 9.64 Lakhs @ Railway track on B line of WRA-KJKD completed.









Bogie level illumination work at MAJN yard has been completed and commissioned on 14.11.23.

- \* Total no. of Dwarf poles 40 nos.
- \* Total Light fittings- 80 nos.
- \* Type of light: 25W/24V DC flood light fitting.
- \* Power supply 4 nos of 230 v/24 v DC power supply each having 4 nos. SMPS.









Street lights provided at WRA, KJKD, KTKU, MDKI and ULL











ULL KTKU