



RAILTEL CORPORATION OF INDIA LIMITED
2nd Floor, B-Block, Rail Nilayam, Secunderabad – 500 071.

TENDER DOCUMENT

TENDER NOS: RailTel/Tender/OT/SR/Wi-Fi/2017-18/65 to 70
Dt. 04.01.2018
(for 6 Tenders)

(Cost of each Tender Document: Rs.5600/-only and by Post: Rs.6100/- only)

Name of Work:

Supply, Installation and Commissioning of Wi-Fi at Category "A" Railway Stations over Southern Region of RailTel
(for 6 Tenders)

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RailTel/Tender/OT/SR/Wi-Fi/2017-18/65-70

RailTel Corporation of India Limited

A Government of India (Ministry of Railways) Undertaking

RailTel Corporation of India Limited, Southern Region, 2nd Floor, B-Block, Rail Nilayam, Secunderabad-500 071. Tel: 040-27788000 Fax: 27820682 visit www.RailTelIndia.com

OPEN TENDER NOTICE

No.RailTel/Tender/OT/SR/Wi-Fi/2017-18/65 to 70

Date:04.01.2018

RailTel Corporation of India Ltd., Secunderabad invites sealed tenders from established contractors with proven experience for the work of " **Supply, Installation and Commissioning of Wi-Fi at Category "A" Railway Stations over Southern Region of RailTel** as per scope of work schedule of requirement and specification in the tender documents (Total 6 tenders)

S No	Tender No RailTel/ Tender/OT/ SR/Wi-Fi/	Railway Stations where Wi-Fi Services are to be provided	State	No of locati ons	Tender Estimate Cost in Rs.	EMD* (rounded off to nearest 10) in Rs.
1	2017-18/65	Cuddapah, Renigunta, Guntakal Jn., Anantapur	AP	4	48,86,291	97,730
2	2017-18/66	Nanded, Parbhani Jn., Jalna, Nagarsol	Maharash tra	4	43,72,678	87,450
3	2017-18/67	Raichur, Yadgir, Nizamabad	Karnataka & Telangana	3	33,40,318	66,810
4	2017-18/68	Shoranur Jn., Palakkad Jn., Thalassery, Kannur, Kasargod, Poyannur	Kerla	6	69,51,012	1,39,020
5	2017-18/69	Alappuzha, Aluva, Vadakara, Kayankulam Jn, Tiruppur	Kerla	5	55,97,790	1,11,960
6	2017-18/70	Ernakulam Town, Kottayam, Tiruvalla, Chengannur, Kanhangad	Kerla	5	53,12,096	1,06,240

a)	Sale of Tender Document	From 06.01.2018
b)	Closing of sale of Tender Document	up to 12.00 Hrs 29.01.2018(by hand) 27.01.2018 (by post)
c)	Receipt of tender documents	up to 15.00 Hrs 29.01.2018
d)	Opening of tender documents	At 15.30 Hrs 29.01.2018
e)	Validity of offer	180 days from the date of opening of tender.
f)	Completion period for each Tender/Reach	30 Days from the date of issue of LOA/PO/Permission from Railway/clearance from RailTel (site wise)
g)	Address for availability of tender document	Regional General Manager, RailTel Corporation of India Limited, Southern Region, 2nd Floor, B-Block, Rail Nilayam, Secunderabad-500 071.
h)	Web address for availability of tender	www.railtelindia.com

	document	
i)	Cost of Tender document by hand (or) through net	Rs. 5600/-inclusive of GST@12% (In the form of Bank Draft in Favour of Railtel corporation of India Ltd. Payable at Secunderabad)
j)	Cost of Tender document if required by post	Rs. 6100 /-(In the form of Bank Draft in Favour of Railtel corporation of India Ltd. Payable at Secunderabad) j
k)	The rates mentioned are inclusive of all taxes. But the tenderer has to quote the all inclusive percentage quote and submit the break up of all taxes as per Form no. 16 annexed with the Tender Document. Instructions given below to SOR must be followed. The tenderer has also to indicate their GST Regd. No with State wise address, TIN No. & PAN No., together with complete address of tenderer.	

Eligibility Criteria Per Tender:

Tenderer must have completed successfully and satisfactorily at least one single similar work costing not less than 35 % of the advertised tender value of work during the preceding three years (i.e. current financial year and three previous financial years) executed for Govt. /PSUs/ reputed private Telecom Service providers/reputed infrastructure providers.

The total contract amount received by the tenderer during the last three years as per Audited balance sheet should be a minimum of 150% of advertised Tender Value of work. Offers not accompanied by Audited balance sheet will not be considered.

For detailed qualifying criteria, please refer Para 3.16 of chapter III of tender document.

*** Note:**

1. Tenderer can quote for one/ all Tenders separately as per format given in schedule of requirement. Each Tender shall be treated as independent tender and evaluated accordingly. If tenderer quotes for more than one tender, tenderer should submit that as many no of EMDs and supporting documents as mentioned above against tender. (Multiplication of eligibility)
2. **This project requires simultaneous mobilization of resources in all the tenders. Hence, not more than 2-tenders/reach will be awarded to any bidder even if the bidder is lowest eligible in more than 2-tenders/all tenders. In such cases, the tenderers for which tenders will be awarded or not awarding of any tender is at sole discretion of RailTel**
3. It may please be noted that Locations/Stations mentioned above are indicative and can be vary at the time of execution of contract. However, the location/station will be in the same section or adjacent section
4. Firms registered with NSIC or any other body specified by Ministry of MSME for the tendered supply/work/service is exempted from submission of cost of tender & EMD. However, postage charges of Rs. 500/- would have to be paid by them, in case they need tender document by post.
5. These exemptions shall be applicable provided firms are registered with NSIC/MSME for tendered item/work and registration is current and valid. Firms claiming these exemptions are required to submit along with their offer, a copy of their current and valid NSIC/MSME registration certificate for the tendered item/work, otherwise their offer would not be considered. However, exception for SD & PBG under NSIC/MSME is not permitted

The offers shall be opened on above said date in the presence of those bidders who choose to be present. In case the date of opening happens to be a holiday, the tender will be received and opened at the same time on the next working day.

Further information including corrigendum to the Tender notice is available at RailTel's website www.railtelindia.com or from the office of Regional General Manager - RailTel /Secunderabad.

Tender document can be purchased and the Bid have to be sent at the following address – Office of Regional General Manager, RailTel Corporation of India Limited, Southern Region, 2nd Floor, B-Block, Rail Nilayam, Secunderabad-500071. Also tender documents can be downloaded from the web site www.railtelindia.com. Documents downloaded from web site shall accompany the payment for the cost of the document in the form of D.D as mentioned above during the submission of Tender document. Documents received without the cost of tender will summarily be rejected. **The tender document should be sealed in a cover duly superscripted Reah No, Tender No., and Name of the work.** RailTel is not responsible for delay or loss in transit. The bids will be opened at the above said address. Late/delayed/ incomplete tenders and tenders with insufficient EMD will be summarily rejected.

Earnest Money (EMD) as specified above will be payable by Bank Draft/Demand Draft in favour of **RailTel Corporation of India Limited, Secunderabad, Payable at Secunderabad.** Bank guarantees are not accepted as EMD.

For detailed qualifying criteria, please refer Para 3.16 of tender document. Corrigendum, if any issued, will be uploaded only on RailTel's website www.RailTelindia.com.

Sd/-
GM/Projects,
RailTel Corporation of India Ltd,
Southern Region, Secunderabad.



Chapter-1

Preamble

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Preamble

Tender No.: RailTel/Tender/OT/SR/Wi-Fi/2017-18/65 to 70

Dt: 04.01.2018

1.0 Name of work: Supply, Installation and Commissioning of Wi-Fi at Category "A" Railway Stations over Southern Region of RailTel

1.1 Scope of work:
As mentioned in Schedule of Requirement.

1.2 Tender Bid:
Tenderer will have to bid on percentage basis.
The tender bid shall be submitted in **sealed covers** at following address:-

Regional General Manager, RailTel Corporation of India Limited, Southern Region, 2nd Floor, B-Block, Rail Nilayam, Secunderabad-500 071.

Last date & time of submission of queries/clarifications: at 15:00 hrs. on 29.01.2018.

It is solicited that any queries/clarifications regarding the tender may be sent to the RailTel's office latest by 10 days before the opening date schedule through e-mail to srajasekhar@railtelindia.com with copy to ravi.verma@railtelindia.com (in word format) & hard copy by post. All relevant clarifications sought will be addressed before the tender opening date & time.

1.3 Qualifying Criteria: As mentioned in the Para 3.16

1.4 Last date of Submission
The tender shall be received up to **15.00 hrs on 29.01.2018** at the office of Regional General Manager, RailTel Corporation of India Limited, Southern Region, 2nd Floor, B-Block, Rail Nilayam, Secunderabad-500 071. Phone: 91 (40) 27788000, 91 (40) 27821134, Fax 91 (40) 27820682.

1.5 Date of Opening of Tender
The tenders will be opened at **15.30 hrs on 29.01.2018** at the same address as mentioned in Para 1.4.

1.6 RailTel reserves the right:-
a) To verify, if so desired, the correctness of documentary evidence furnished by the tenderer.
b) RailTel shall not be responsible for any delay in the receipt of tenders and reserves the right to accept/reject any or all tenders.
c) To add/delete station or change of station from the existing list of stations.
d) **Tenderer can quote for one or all tender/reaches but awarding contract for one reach or more than one reach is sole dicrection of RailTel. Maximum no of tenders that can be awarded to any tenderer is limited to 2-Reaches as mentioned in tender notice.**

1.7 Work Load: NA

1.8 Validity of Offer
The tenderer shall keep the offer open for **180 days** from the date of opening of tender. Within that period the tenderer, cannot withdraw his offer. This period can be extended further, if required, by mutual agreement from time to time. Any contravention of the above condition will make the tenderer liable for forfeiture of his Earnest Money.

1.9 Completion Period of Work for each Tender/Reach:

The work is to be executed and completed within **30 days (site wise)** from the date of issue of Letter of Acceptance /PO/Permission from Railway/clearance from RailTel of the tender.

1.10 The List of Address to which correspondence and documents relating to the Contract should be sent:

As mentioned in para 1.4.

1.11 Earnest Money

The tenderer shall be required to deposit earnest money as mentioned below to keep the offer open till such date as specified in the tender, under the conditions of tender. This earnest money shall be applicable for all modes of tendering. EMD particulars are as follows:

<i>S.No</i>	<i>Territory</i>	<i>Reach</i>	<i>No. of Stations</i>	<i>Station Names</i>	<i>Tender value (in Rs.)</i>	EMD @2% of tender cost rounded to nearest 10
1	SC	Reach-1	4	Cuddapah, Renigunta, Guntakal Jn., Anantapur	48,86,291	97,730
2	SC	Reach-2	4	Nanded, Parbhani Jn., Jalna, Nagarsol	43,72,678	87,450
3	SC	Reach-3	3	Raichur, Yadgir, Nizamabad	33,40,318	66,810
4	SBC	Reach-4	6	Shoranur Jn., Palakkad Jn., Thalassery, Kannur, Kasargod, Poyannur	69,51,012	1,39,020
5	ERS	Reach-5	5	Alappuzha, Aluva, Vadakara, Kayankulam Jn, Tiruppur	55,97,790	1,11,960
6	ERS	Reach-6	5	Ernakulam Town, Kottayam, Tiruvalla, Chengannur, Kanhangad	53,12,096	1,06,240

1.12 Security Deposit

Security deposit shall be 5% of the contract value of tender document. The amount of EMD of the successful tenderer shall be adjusted against Security deposit and the balance amount shall be recovered from the running bills of the contract and no other mode of collecting SD shall be accepted.

1.13 Performance Bank Guarantee

The successful bidder is required to give a Performance Bank Guarantee in the form of an irrevocable Bank Guarantee amounting to 5% of the contract value for schedule for successful completion of the work.

1.14 Specifications

Reference of specifications of the important equipments and materials required for execution of the contract is given in the Schedule of requirement. The work shall be executed in compliance with all the technical requirements given there in. Drawings are indicative. In case of any mismatch or confusion, the decision of EIC shall be final.

1.15 Schedule of Requirement

The various items to be supplied and execution of the work by the tenderer for the section are indicated in Schedule of Requirement of this tender document. **Payment of supplied items shall be done along with the payment of execution after the measurement.** The tenderer is advised to quote percentage rate **Above/Below/At Par** the RailTel's total estimated cost of schedule.

1.16 Materials to be supplied/Arranged by RailTel

i) Access Switches, ii) Fiber Switches, iii) Aggregator Router, iv) SFPs Bi-Di single fiber single mode with LC connector v) HDPE Duct vi) Rack and UPS.

Contractor shall keep the account of materials provided by RailTel for execution of work. Contractor shall return unused balanced quantity to nominated store of RailTel in good condition at his own cost. The materials which are unusable (small pieces of Ducts/Pipe & OFCs etc.) shall not be required to be returned, however, account of such unusable materials shall be given by the contractor & certified by the Engineer/Section Incharge of RailTel. Decision of Engineer/Section Incharge-In-Charge shall be binding on the contractor. Reconciliation of materials shall be signed jointly by the contractor and RailTel's Engineer/Section Incharge.

1.17 Materials to be supplied by Contractor

As per **Schedule of Requirement (Refer Chapter – 2).**

1.18 Submission

The tenderer shall submit all the required information in the relevant forms attached to this document and suitably numbering each page of the bid documents with a content list indicating availability of various documents with their serial numbers. In the absence of numbering of pages and the content list, there is a likelihood of any important document going unnoticed for which the tenderer shall be solely responsible.

1.19 Warranty Support

All material supplied & works executed should be covered under warranty as per Para 5.29 and 5.15 of tender document.



TENDERER DATA SHEET**For**

Supply, Installation and Commissioning of Wi-Fi at Category "A" Railway Stations over Southern Region of RailTel as per scope of work, Schedule of Requirement and Specifications (Tender Nos: RailTel/Tender/OT/SR/Wi-Fi/2017-18/65 to 70 dt.04.01.2018)

1	Name of the Organization	:
2	Name of the Authorized Person Submitting the Tender Documents (Submit the proof of authorizing the person to sign the tenders by the company on its behalf)	
3	Main line of Business	
4	Years of Experience	
5	Location (indicate address, tel.no., fax and the year from which they are operating in that location)	
6	Contact person	
7	Address	
8	Tel. No.	
9	Fax No.	
10	E-mail ID	
11	Tender bids: Whether Downloaded: Yes/ No (No changes/ additions/ deletions/ alterations to the tender document are permitted under any circumstances)	

Cost of Tender document in the form of DD (Rs _____, payable to RailTel Corporation of India Ltd, Secunderabad): DD No: _____ Date: _____

Eligibility Criteria for each Tender/Reach:

S. no					Conditions		Enclosed (Yes/No)		Page No	
1		(a)		Tenderer must have completed successfully and satisfactorily at least one single similar work as per cl.no.3.16 instructions to tenderers, during the preceding Three years (i.e. current financial year and Three previous financial years) and cost of work being not less than 35 % of the advertised tender value						
1		(b)		The total contract amount received by the tenderer during the last three years as per Audited balance sheet should be a minimum of 150% of advertised Tender Value of work. Offers not accompanied by Audited balance sheet will not be considered.						
				Please indicate the Annual Turnover for the last preceding Three years duly enclosing the chartered Accountant /Auditor /Authorized certified documentary evidence:						
				Year		Annual Turnover		Documentary support at page		
				2016-17						
				2015-16						
				2014-15						
1		(c)		solvency certificate ---deleted						
2		(a)		The tenderer should produce copy of PAN Number & GST registration no.						
2		(b)		The tenderer should produce Audited Balance Sheet and Income statement/profit and Loss account of all the Preceding Three financial years.						
3				The tenderer should enclose EMD as per item 1.11 of preamble of Tender document						

Place
Date

(Signature of the Tenderer with Seal)

RAILTEL

Chapter 2

SCHEDULE

OF

REQUIREMENTS



SCHEDULE OF WORK for 6 reaches**Tender Nos. RailTel/Tender/OT/SR/Wi-Fi/2017-18/65 to 70, Dt. 04.01.2018**

Name of work: Supply, Installation and Commissioning of Wi-Fi at Category "A" Railway Stations (31 Nos.)
 Viz., for Southern Region, RailTel (SAC Code 9954 & GST@12% is inclusive in Total tender value)

Sl no	Terri tory	Reach	Tender No RailTel /OT/S R/Wi-Fi/	Num ber of Stati on	Site (Railway Stations name)	Total tender value (as per SOR) In Rs.	Contra ctor Percent age at Par /Below /Above	Grand Total : after Contractor Percentage:(R s. in figures & words):
1	SC	Reach-1	65	4	Cuddapah, Renigunta, Guntakal Jn., Anantapur	48,86,291		
2	SC	Reach-2	66	4	Nanded, Parbhani Jn., Jalna, Nagarsol	43,72,678		
3	SC & SBC	Reach-3	67	3	Raichur, Yadgir, Nizamabad	33,40,318		
4	Keral a	Reach-4	68	6	Shoranur Jn., Palakkad Jn., Thalassery, Kannur, Kasargod, Poyannur	69,51,012		
5	Keral a	Reach-5	69	5	Alappuzha, Aluva, Vadakara, Kayankulam Jn, Tiruppur	55,97,790		
6	Keral a	Reach-6	70	5	Ernakulam Town, Kottayam, Tiruvalla, Chengannur, Kanhangad	53,12,096		

i.	I/we undertake to execute the schedule of work as per percentage quoted above on the RailTel's total estimated tender cost of schedule of work mentioned above and as per applicable SOR at page nos. 15 to 32
ii.	It is certified that I/we have inspected the site of work and acquainted myself or ourselves with local conditions.
iii.	I/we have carefully gone through the specifications. special conditions etc Attached with the tender document.
iv.	I/we undertake to keep this offer valid for period indicated in Tender from the date of opening of Tender and further not to revoke the same before the expiry of such period.

Signature and Seal of the Tenderer

Note for Guidance	[i] Tenderer should quote his single percentage rate in row (i) above only, At par Above/Below the RailTel's estimated tender cost of work.
	[ii] The percentage rate to be quoted both in figures and words.
	[iii] Tenderer shall quote all inclusive rates, but there should be break up of basic price and all type of applicable taxes. Since it is percentage basis tender, each SOR item applicable the same percentage quoted by the contractor for concluding base rates..
	[iv] If none of the above/below/at par is ticked by the tenderer, the quoted single percent will be treated below the RailTel's estimated rate.
	[v] Any discrepancy in percentage rate quoted in figure and words, percentage rate quoted in words will prevail. Calculation mistake, if any, will be corrected and evaluated accordingly.
	[vi] All prices shall be inclusive of all taxes/duties as applicable at present. RailTel will deduct income tax at source as per rates in vogue and GST liability shall be discharged as per GST rule.
	Tenderer can quote for one or all tender/reaches but awarding contract for one tender/ reache or more than one tender/ reach is sole dicrection of RailTel.
	This project requires simultaneous mobilization of resources in all the tenders. Hence, not more than 2-tenders/reach will be awarded to any bidder even if the bidder is lowest eligible in more than 2-tenders/all tenders. In such cases, the tenderers for which tenders will be awarded or not awarding of any tender is at sole discretion of RailTel"

Signature and Seal of the Tenderer

Schdele of Requiremnt - SOR for Reach-1 (Caddapah, Renigunta, Gutntakal, Anantapur)							
S No	Description (SAC code for all line items is 9954)	Unit	Base Price	GST @12%	All incl. Unit Rate (Rs)	Qty	Amount (Rs)
B	Supply - Optical Cables / Connectors						
1	Supply of 24F core metal free strengthened outdoor unarmored OFC	Mtrs	37.74	4.53	42.27	4800	2,02,890.24
2	Supply of 12 F armored OFC (for over head laying from POP to Station in ring	Mtrs	17.63	2.12	19.75	400	7,898.24
3	Supply of 12F core metal free strengthened outdoor unarmored OFC	Mtrs	13.69	1.64	15.33	8900	1,36,461.92
4	Supply of 48 Fibre (2*12 , 6*4) (SC type) FMS with all accessories	Nos	6271.88	752.63	7,024.51	22	1,54,539.12
5	Supply of 24 Fibre (2*12 , (SC type) FMS with all accessories	Nos	3538.58	424.63	3,963.21	77	3,05,167.14
6	Supply of LC - LC Patch Cord (5 Mtr.)	Nos	97.04	1.64	108.68	32	3,477.91
7	Supply of SC - LC Patch Cord (3 Mtr.) (3M, TE Connectivity, R&M make only)	Nos	97.04	1.64	108.68	258	28,040.68
8	Supply of SC - SC Patch Cord (1 Mtr.), (3M, TE Connectivity, R&M make only)	Nos	97.04	1.64	108.68	110	11,955.33
9	Supply of HDPE Duct 40/33 mm with Accessories and laying of the same in Trenches and through all types of protections viz HDPE/GI/RCC Pipes etc. as the case may be. Work also includes supply & pulling of Nylon Rope through it.	Mtrs	46.98	5.64	52.62	800	42,094.08
C	Supply - Copper Cables / Switches						
1	Supply of PVC insulated 3 Core 6 Sqmm , grade outdoor strengthened Copper cable for UPS supply distribution	Mtrs	112.96	13.56	126.52	9410	11,90,508.03
2	Supply & Installation of 6Amp/10Amp/25Amp MCB protected 3pin socket as per ISI Standard in suitable PVC/Metallic Box	nos	636.69	76.40	713.09	90	64,178.35
3	Supply and installation of 63Amps 4 pole MCBs	Nos	1296.88	155.63	1,452.51	5	7,262.53
4	Supply and installation of 32 Amps 2 pole MCBs	Nos	684.61	82.15	766.76	11	8,434.40
5	Supply and Installation of 3-phase 10KVA energy meter	Nos	8557.63	1,026.92	9,584.55	5	47,922.73

6	Supply and installation of metallic box with lock and key arrangement for housing energy meter and MCBs	Nos	5134.58	616.15	5,750.73	5	28,753.65
7	Supply and installation of surge arrester	Nos	22249.83	2,669.98	24,919.81	5	1,24,599.05
E Services - Installation & Cabling							
1	Providing Earthing arrangement for Datacom equipment	nos	12836.44	1,540.37	14,376.81	6	86,260.88
2a	Supply of 25 mm PVC Conduit Pipe ISI Mark	mtr	23.24	2.79	26.03	24265.5	6,31,601.85
2b	Fixing of 25mm PVC Conduit on walls/ structures duly providing suitable GI clamps .Necessary drilling and provision of screws,clamps etc... to be arranged by contractor.Railtel Shall supply only 25mm PVC conduit.	mtr	8.56	1.03	9.59	4855	46,545.86
3	Fixing/laying of conduit on already available cable ladder/tray/channels duly tying with proper material. All the required material shall be arranged by contractor. Railtel Shall supply only 25mm PVC conduit.	mtr	3.42	0.41	3.83	19414	74,363.39
4	Blowing & Drawing of OFC Cable 24F/12F/6F, Power cable and CAT cable through PVC Conduit already installed.	mtr	3.14	0.38	3.52	25478.78	89,603.76
5	Supply and laying of Flexible pipe. Colour of flexi pipe shall match with the colour of conduit	mtr	45.78	5.49	51.27	2440	1,25,107.58
6	Splicing of 24 F in FDMS	nos	5632.63	675.92	6,308.55	46	2,90,193.10
7	Splicing of 12 F in FDMS / termination Box	nos	2816.31	337.96	3,154.27	115	3,62,740.73
8	Fixing or mounting of UPS in 9U size Rack or outside on wall /pole . All sorts of Angles, Nuts, Bolts, Clamps and other accessories required for installation to be supplied by contractor (UPS will be supplied by RCIL)	nos	2567.29	308.07	2,875.36	11	31,629.01
9	Configuration, testing and commissioning of entire WiFi network of station,submission of fiber loss reports duly tested with power meter in the presence of Railtel representative. The contractor shall arrange for drawing of the entire WiFi system duly showing the path of OFC,power cables, Fiber Switches,	Ls	12836.44	1,540.37	14,376.81	4	57,507.25

	access switches, access points etc in soft copy(in AUTOCAD) and hard copy						
F	Services - Excavation of Trenches & associated works						
1	Supply & Installation of Optical Fibre Joint Enclosure (TE Connectivity / R&M / 3-M / TVS make) and Splicing of 24 Fibre Cable Testing	nos	1584.36	190.12	1,774.48	4	7,097.93
2	Supply & Fixing of Cable Route Marker as per Drawings	nos	357.62	42.91	400.53	8	3,204.28
3	Supply & Installation of RCC Chambers as per Railtel site incharge specification	nos	5633.14	675.98	6,309.12	4	25,236.47
4	Supply and installation of GI Pipe 40 / 50 / 75 mm as per site requirements	mtr	411.54	49.38	460.92	400	1,84,369.92
5	Trenching, laying of OFC	mtr	61.61	7.39	69.00	800	55,202.56
6	Trenching by HDD Machine at depth 1.65 Mtr. for Road/ Track crossing	mtr	622.14	74.66	696.80	40	27,871.87
7	Concreting in Rocky areas for OFC protection and to keep the route marker in position	mtr	166.79	20.01	186.80	200	37,360.96
8	Breaking of pucca road/CC/platform cutting, Laying of OFC in Trenches and through all types of protections viz HDPE/GI/RCC Pipes etc. as the case may be	mtr	242.61	29.11	271.72	1000	2,71,723.20
9	Laying of over head OFC laying	mtr	6.42	0.77	7.19	400	2,876.16
G	Additional items						
1	Supply of 12 ft jindal make or equivalent ladder of thickness 3mm	Nos	7348.86	881.86	8,230.72	8	65,845.79
2	Supply and fixing of PVC trough 50*50mm with cover of 2mm thickness	Mtr	204.31	24.52	228.83	200	45,765.44
	TOTAL						48,86,291

Schdele of Requiremnt - SOR for Reach-2 (Nanded,Prabhani,Jalna,Nagarsol)							
S No	Description (SAC code for all line items is 9954)	Unit	Base Price	GST @12%	All incl. Unit Rate (Rs)	Qty	Amount (Rs)
B	Supply - Optical Cables / Connectors						
1	Supply of 24F core metal free strengthened outdoor unarmored OFC	Mtrs	37.74	4.53	42.27	4800	2,02,890.24
2	Supply of 12 F armored OFC (for over head laying from POP to Station in ring	Mtrs	17.63	2.12	19.75	400	7,898.24
3	Supply of 12F core metal free strengthened outdoor unarmored OFC	Mtrs	13.69	1.64	15.33	7500	1,14,996.00
4	Supply of 48 Fibre (2*12 , 6*4) (SC type) FMS with all accessories	Nos	6271.88	752.63	7,024.51	18	1,26,441.10
5	Supply of 24 Fibre (2*12 , (SC type) FMS with all accessories	Nos	3538.58	424.63	3,963.21	63	2,49,682.20
6	Supply of LC - LC Patch Cord (5 Mtr.)	Nos	97.04	1.64	108.68	32	3,477.91
7	Supply of SC - LC Patch Cord (3 Mtr.) (3M, TE Connectivity, R&M make only)	Nos	97.04	1.64	108.68	214	23,258.55
8	Supply of SC - SC Patch Cord (1 Mtr.), (3M, TE Connectivity, R&M make only)	Nos	97.04	1.64	108.68	90	9,781.63
9	Supply of HDPE Duct 40/33 mm with Accessories and laying of the same in Trenches and through all types of protections viz HDPE/GI/RCC Pipes etc. as the case may be. Work also includes supply & pulling of Nylon Rope through it.	Mtrs	46.98	5.64	52.62	800	42,094.08
C	Supply - Copper Cables / Switches						
1	Supply of PVC insulated 3 Core 6 Sqmm , grade outdoor strengthened Copper cable for UPS supply distribution	Mtrs	112.96	13.56	126.52	8310	10,51,341.31
2	Supply & Installation of 6Amp/10Amp/25Amp MCB protected 3pin socket as per ISI Standard in suitable PVC/Metallic Box	nos	636.69	76.40	713.09	73	52,055.77
3	Supply and installation of 63Amps 4 pole MCBs	Nos	1296.88	155.63	1,452.51	4	5,810.02
4	Supply and installation of 32 Amps 2 pole MCBs	Nos	684.61	82.15	766.76	9	6,900.87

5	Supply and Installation of 3-phase 10KVA energy meter	Nos	8557.63	1,026.92	9,584.55	4	38,338.18
6	Supply and installation of metallic box with lock and key arrangement for housing energy meter and MCBs	Nos	5134.58	616.15	5,750.73	4	23,002.92
7	Supply and installation of surge arrester	Nos	22249.83	2,669.98	24,919.81	4	99,679.24
E Services - Installation & Cabling							
1	Providing Earthing arrangement for Datacom equipment	nos	12836.44	1,540.37	14,376.81	5	71,884.06
2a	Supply of 25 mm PVC Conduit Pipe ISI Mark	mtr	23.24	2.79	26.03	21640.5	5,63,276.25
2b	Fixing of 25mm PVC Conduit on walls/ structures duly providing suitable GI clamps .Necessary drilling and provision of screws,clamps etc... to be arranged by contractor.Railtel Shall supply only 25mm PVC conduit.	mtr	8.56	1.03	9.59	4330	41,512.58
3	Fixing/laying of conduit on already available cable ladder/tray/channels duly tying with proper material. All the required material shall be arranged by contractor. Railtel Shall supply only 25mm PVC conduit.	mtr	3.42	0.41	3.83	17314	66,319.55
4	Blowing & Drawing of OFC Cable 24F/12F/6F, Power cable and CAT cable through PVC Conduit already installed.	mtr	3.14	0.38	3.52	22722.53	79,910.58
5	Supply and laying of Flexible pipe. Colour of flexi pipe shall match with the colour of conduit	mtr	45.78	5.49	51.27	2170	1,11,263.71
6	Splicing of 24 F in FDMS	nos	5632.63	675.92	6,308.55	42	2,64,958.92
7	Splicing of 12 F in FDMS / termination Box	nos	2816.31	337.96	3,154.27	97	3,05,963.92
8	Fixing or mounting of UPS in 9U size Rack or outside on wall /pole . All sorts of Angles, Nuts, Bolts, Clamps and other accessories required for installation to be supplied by contractor (UPS will be supplied by RCIL)	nos	2567.29	308.07	2,875.36	9	25,878.28
9	Configuration, testing and commissioning of entire WiFi network of station,submission of fiber loss reports duly tested with power meter in the presence of Railtel representative. The contractor shall arrange for drawing of the entire WiFi system	Ls	12836.44	1,540.37	14,376.81	4	57,507.25

	duly showing the path of OFC, power cables, Fiber Switches, access switches, access points etc in soft copy(in AUTOCAD) and hard copy						
F	Services - Excavation of Trenches & associated works						
1	Supply & Installation of Optical Fibre Joint Enclosure (TE Connectivity / R&M / 3-M / TVS make) and Splicing of 24 Fibre Cable Testing	nos	1584.36	190.12	1,774.48	4	7,097.93
2	Supply & Fixing of Cable Route Marker as per Drawings	nos	357.62	42.91	400.53	8	3,204.28
3	Supply & Installation of RCC Chambers as per Railtel site incharge specification	nos	5633.14	675.98	6,309.12	4	25,236.47
4	Supply and installation of GI Pipe 40 / 50 / 75 mm as per site requirements	mtr	411.54	49.38	460.92	400	1,84,369.92
5	Trenching, laying of OFC	mtr	61.61	7.39	69.00	800	55,202.56
6	Trenching by HDD Machine at depth 1.65 Mtr. for Road/ Track crossing	mtr	622.14	74.66	696.80	40	27,871.87
7	Concreting in Rocky areas for OFC protection and to keep the route marker in position	mtr	166.79	20.01	186.80	200	37,360.96
8	Breaking of pucca road/CC/platform cutting, Laying of OFC in Trenches and through all types of protections viz HDPE/GI/RCC Pipes etc. as the case may be	mtr	242.61	29.11	271.72	1000	2,71,723.20
9	Laying of over head OFC laying	mtr	6.42	0.77	7.19	400	2,876.16
G	Additional items						
1	Supply of 12 ft jindal make or equivalent ladder of thickness 3mm	Nos	7348.86	881.86	8,230.72	8	65,845.79
2	Supply and fixing of PVC trough 50*50mm with cover of 2mm thickness	Mtr	204.31	24.52	228.83	200	45,765.44
	TOTAL						43,72,678

Schdele of Requiremnt - SOR for Reach-3 (Raichur, Yadgir, Nizamabad)							
S No	Description (SAC code for all line items is 9954)	Unit	Base Price	GST @12%	All incl. Unit Rate (Rs)	Qty	Amount (Rs)
B Supply - Optical Cables / Connectors							
1	Supply of 24F core metal free strengthened outdoor unarmored OFC	Mtrs	37.74	4.53	42.27	3600	1,52,167.68
2	Supply of 12 F armored OFC (for over head laying from POP to Station in ring	Mtrs	17.63	2.12	19.75	300	5,923.68
3	Supply of 12F core metal free strengthened outdoor unarmored OFC	Mtrs	13.69	1.64	15.33	5800	88,930.24
4	Supply of 48 Fibre (2*12 , 6*4) (SC type) FMS with all accessories	Nos	6271.88	752.63	7,024.51	14	98,343.08
5	Supply of 24 Fibre (2*12 , (SC type) FMS with all accessories	Nos	3538.58	424.63	3,963.21	49	1,94,197.27
6	Supply of LC - LC Patch Cord (5 Mtr.)	Nos	97.04	1.64	108.68	24	2,608.44
7	Supply of SC - LC Patch Cord (3 Mtr.) (3M, TE Connectivity, R&M make only)	Nos	97.04	1.64	108.68	166	18,041.68
8	Supply of SC - SC Patch Cord (1 Mtr.), (3M, TE Connectivity, R&M make only)	Nos	97.04	1.64	108.68	70	7,607.94
9	Supply of HDPE Duct 40/33 mm with Accessories and laying of the same in Trenches and through all types of protections viz HDPE/GI/RCC Pipes etc. as the case may be. Work also includes supply & pulling of Nylon Rope through it.	Mtrs	46.98	5.64	52.62	600	31,570.56
C Supply - Copper Cables / Switches							
1	Supply of PVC insulated 3 Core 6 Sqmm , grade outdoor strengthened Copper cable for UPS supply distribution	Mtrs	112.96	13.56	126.52	6370	8,05,901.82
2	Supply & Installation of 6Amp/10Amp/25Amp MCB protected 3pin socket as per ISI Standard in suitable PVC/Metallic Box	nos	636.69	76.40	713.09	57	40,646.29
3	Supply and installation of 63Amps 4 pole MCBs	Nos	1296.88	155.63	1,452.51	3	4,357.52
4	Supply and installation of 32 Amps 2 pole MCBs	Nos	684.61	82.15	766.76	7	5,367.34

5	Supply and Installation of 3-phase 10KVA energy meter	Nos	8557.63	1,026.92	9,584.55	3	28,753.64
6	Supply and installation of metallic box with lock and key arrangement for housing energy meter and MCBs	Nos	5134.58	616.15	5,750.73	3	17,252.19
7	Supply and installation of surge arrester	Nos	22249.83	2,669.98	24,919.81	3	74,759.43
E Services - Installation & Cabling							
1	Providing Earthing arrangement for Datacom equipment	nos	12836.44	1,540.37	14,376.81	4	57,507.25
2a	Supply of 25 mm PVC Conduit Pipe ISI Mark	mtr	23.24	2.79	26.03	16558.5	4,30,997.88
2b	Fixing of 25mm PVC Conduit on walls/ structures duly providing suitable GI clamps .Necessary drilling and provision of screws,clamps etc... to be arranged by contractor.Railtel Shall supply only 25mm PVC conduit.	mtr	8.56	1.03	9.59	3313	31,762.39
3	Fixing/laying of conduit on already available cable ladder/tray/channels duly tying with proper material. All the required material shall be arranged by contractor. Railtel Shall supply only 25mm PVC conduit.	mtr	3.42	0.41	3.83	13248	50,745.14
4	Blowing & Drawing of OFC Cable 24F/12F/6F, Power cable and CAT cable through PVC Conduit already installed.	mtr	3.14	0.38	3.52	17386.43	61,144.58
5	Supply and laying of Flexible pipe. Colour of flexi pipe shall match with the colour of conduit	mtr	45.78	5.49	51.27	1660	85,114.18
6	Splicing of 24 F in FDMS	nos	5632.63	675.92	6,308.55	32	2,01,873.46
7	Splicing of 12 F in FDMS / termination Box	nos	2816.31	337.96	3,154.27	75	2,36,570.04
8	Fixing or mounting of UPS in 9U size Rack or outside on wall /pole . All sorts of Angles, Nuts, Bolts, Clamps and other accessories required for installation to be supplied by contractor (UPS will be supplied by RCIL)	nos	2567.29	308.07	2,875.36	7	20,127.55

9	Configuration, testing and commissioning of entire WiFi network of station, submission of fiber loss reports duly tested with power meter in the presence of Railtel representative. The contractor shall arrange for drawing of the entire WiFi system duly showing the path of OFC, power cables, Fiber Switches, access switches, access points etc in soft copy(in AUTOCAD) and hard copy	Ls	12836.44	1,540.37	14,376.81	3	43,130.44
F	Services - Excavation of Trenches & associated works						
1	Supply & Installation of Optical Fibre Joint Enclosure (TE Connectivity / R&M / 3-M / TVS make) and Splicing of 24 Fibre Cable Testing	nos	1584.36	190.12	1,774.48	3	5,323.45
2	Supply & Fixing of Cable Route Marker as per Drawings	nos	357.62	42.91	400.53	6	2,403.21
3	Supply & Installation of RCC Chambers as per Railtel site incharge specification	nos	5633.14	675.98	6,309.12	3	18,927.35
4	Supply and installation of of GI Pipe 40 / 50 / 75 mm as per site requirements	mtr	411.54	49.38	460.92	300	1,38,277.44
5	Trenching, laying of OFC	mtr	61.61	7.39	69.00	600	41,401.92
6	Trenching by HDD Machine at depth 1.65 Mtr. for Road/ Track crossing	mtr	622.14	74.66	696.80	30	20,903.90
7	Concreting in Rocky areas for OFC protection and to keep the route marker in position	mtr	166.79	20.01	186.80	150	28,020.72
8	Breaking of pucca road/CC/platform cutting, Laying of OFC in Trenches and through all types of protections viz HDPE/GI/RCC Pipes etc. as the case may be	mtr	242.61	29.11	271.72	750	2,03,792.40
9	Laying of over head OFC laying	mtr	6.42	0.77	7.19	300	2,157.12
G	Additional items						
1	Supply of 12 ft jindal make or equivalent ladder of thickness 3mm	Nos	7348.86	881.86	8,230.72	6	49,384.34
2	Supply and fixing of PVC trough 50*50mm with cover of 2mm thickness	Mtr	204.31	24.52	228.83	150	34,324.08
	TOTAL						33,40,318

Schdele of Requiremnt - SOR for Reach-4 (Shoranur Jn., Palakkad Jn., Thalassery, Kannur, Kasargod, Payannur)							
S No	Description (SAC code for all line items is 9954)	Unit	Base Price	GST @12%	All incl. Unit Rate (Rs)	Qty	Amount (Rs)
B	Supply - Optical Cables / Connectors						
1	Supply of 24F core metal free strengthened outdoor unarmored OFC	Mtrs	37.74	4.53	42.27	7200	3,04,335.36
2	Supply of 12 F armored OFC (for over head laying from POP to Station in ring	Mtrs	17.63	2.12	19.75	600	11,847.36
3	Supply of 12F core metal free strengthened outdoor unarmored OFC	Mtrs	13.69	1.64	15.33	12300	1,88,593.44
4	Supply of 48 Fibre (2*12 , 6*4) (SC type) FMS with all accessories	Nos	6271.88	752.63	7,024.51	30	2,10,735.17
5	Supply of 24 Fibre (2*12 , (SC type) FMS with all accessories	Nos	3538.58	424.63	3,963.21	105	4,16,137.01
6	Supply of LC - LC Patch Cord (5 Mtr.)	Nos	97.04	1.64	108.68	48	5,216.87
7	Supply of SC - LC Patch Cord (3 Mtr.) (3M, TE Connectivity, R&M make only)	Nos	97.04	1.64	108.68	354	38,474.42
8	Supply of SC - SC Patch Cord (1 Mtr.), (3M, TE Connectivity, R&M make only)	Nos	97.04	1.64	108.68	150	16,302.72
9	Supply of HDPE Duct 40/33 mm with Accessories and laying of the same in Trenches and through all types of protections viz HDPE/GI/RCC Pipes etc. as the case may be. Work also includes supply & pulling of Nylon Rope through it.	Mtrs	46.98	5.64	52.62	1,200	63,141.12
C	Supply - Copper Cables / Switches						
1	Supply of PVC insulated 3 Core 6 Sqmm , grade outdoor strengthened Copper cable for UPS supply distribution	Mtrs	112.96	13.56	126.52	13290	16,81,387.01
2	Supply & Installation of 6Amp/10Amp/25Amp MCB protected 3pin socket as per ISI Standard in suitable PVC/Metallic Box	nos	636.69	76.40	713.09	122	86,997.32
3	Supply and installation of 63Amps 4 pole MCBs	Nos	1296.88	155.63	1,452.51	7	10,167.54
4	Supply and installation of 32 Amps 2 pole MCBs	Nos	684.61	82.15	766.76	15	11,501.45

5	Supply and Installation of 3-phase 10KVA energy meter	Nos	8557.63	1,026.92	9,584.55	7	67,091.82
6	Supply and installation of metallic box with lock and key arrangement for housing energy meter and MCBs	Nos	5134.58	616.15	5,750.73	7	40,255.11
7	Supply and installation of surge arrester	Nos	22249.83	2,669.98	24,919.81	7	1,74,438.67
E Services - Installation & Cabling							
1	Providing Earthing arrangement for Datacom equipment	nos	12836.44	1,540.37	14,376.81	8	1,15,014.50
2a	Supply of 25 mm PVC Conduit Pipe ISI Mark	mtr	23.24	2.79	26.03	34429.5	8,96,158.57
2b	Fixing of 25mm PVC Conduit on walls/ structures duly providing suitable GI clamps .Necessary drilling and provision of screws,clamps etc... to be arranged by contractor.Railtel Shall supply only 25mm PVC conduit.	mtr	8.56	1.03	9.59	6889	66,046.22
3	Fixing/laying of conduit on already available cable ladder/tray/channels duly tying with proper material. All the required material shall be arranged by contractor. Railtel Shall supply only 25mm PVC conduit.	mtr	3.42	0.41	3.83	27546	1,05,512.20
4	Blowing & Drawing of OFC Cable 24F/12F/6F, Power cable and CAT cable through PVC Conduit already installed.	mtr	3.14	0.38	3.52	36150.98	1,27,135.75
5	Supply and laying of Flexible pipe. Colour of flexi pipe shall match with the colour of conduit	mtr	45.78	5.49	51.27	3460	1,77,406.66
6	Splicing of 24 F in FDMS	nos	5632.63	675.92	6,308.55	66	4,16,364.01
7	Splicing of 12 F in FDMS / termination Box	nos	2816.31	337.96	3,154.27	159	5,01,528.48
8	Fixing or mounting of UPS in 9U size Rack or outside on wall /pole . All sorts of Angles, Nuts, Bolts, Clamps and other accessories required for installation to be supplied by contractor (UPS will be supplied by RCIL)	nos	2567.29	308.07	2,875.36	15	43,130.47

9	Configuration, testing and commissioning of entire WiFi network of station, submission of fiber loss reports duly tested with power meter in the presence of Railtel representative. The contractor shall arrange for drawing of the entire WiFi system duly showing the path of OFC, power cables, Fiber Switches, access switches, access points etc in soft copy (in AUTOCAD) and hard copy	Ls	12836.44	1,540.37	14,376.81	6	86,260.88
F	Services - Excavation of Trenches & associated works						
1	Supply & Installation of Optical Fibre Joint Enclosure (TE Connectivity / R&M / 3-M / TVS make) and Splicing of 24 Fibre Cable Testing	nos	1584.36	190.12	1,774.48	6	10,646.90
2	Supply & Fixing of Cable Route Marker as per Drawings	nos	357.62	42.91	400.53	12	4,806.41
3	Supply & Installation of RCC Chambers as per Railtel site incharge specification	nos	5633.14	675.98	6,309.12	6	37,854.70
4	Supply and installation of of GI Pipe 40 / 50 / 75 mm as per site requirements	mtr	411.54	49.38	460.92	600	2,76,554.88
5	Trenching, laying of OFC	mtr	61.61	7.39	69.00	1200	82,803.84
6	Trenching by HDD Machine at depth 1.65 Mtr. for Road/ Track crossing	mtr	622.14	74.66	696.80	60	41,807.81
7	Concreting in Rocky areas for OFC protection and to keep the route marker in position	mtr	166.79	20.01	186.80	300	56,041.44
8	Breaking of pucca road/CC/platform cutting, Laying of OFC in Trenches and through all types of protections viz HDPE/GI/RCC Pipes etc. as the case may be	mtr	242.61	29.11	271.72	1500	4,07,584.80
9	Laying of over head OFC laying	mtr	6.42	0.77	7.19	600	4,314.24
G	Additional items						
1	Supply of 12 ft jindal make or equivalent ladder of thickness 3mm	Nos	7348.86	881.86	8,230.72	12	98,768.68
2	Supply and fixing of PVC trough 50*50mm with cover of 2mm thickness	Mtr	204.31	24.52	228.83	300	68,648.16
	TOTAL						69,51,012

Schdele of Requiremnt - SOR for Reach-5 (Alappuzha, Aluva, Vadakara, Kayankulam Jn, Tiruppur)							
S No	Description (SAC code for all line items is 9954)	Unit	Base Price	GST @12%	All incl. Unit Rate (Rs)	Qty	Amount (Rs)
B	Supply - Optical Cables / Connectors						
1	Supply of 24F core metal free strengthened outdoor unarmored OFC	Mtrs	37.74	4.53	42.27	6000	2,53,612.80
2	Supply of 12 F armored OFC (for over head laying from POP to Station in ring	Mtrs	17.63	2.12	19.75	500	9,872.80
3	Supply of 12F core metal free strengthened outdoor unarmored OFC	Mtrs	13.69	1.64	15.33	9200	1,41,061.76
4	Supply of 48 Fibre (2*12 , 6*4) (SC type) FMS with all accessories	Nos	6271.88	752.63	7,024.51	22	1,54,539.12
5	Supply of 24 Fibre (2*12 , (SC type) FMS with all accessories	Nos	3538.58	424.63	3,963.21	77	3,05,167.14
6	Supply of LC - LC Patch Cord (5 Mtr.)	Nos	97.04	1.64	108.68	40	4,347.39
7	Supply of SC - LC Patch Cord (3 Mtr.) (3M, TE Connectivity, R&M make only)	Nos	97.04	1.64	108.68	262	28,475.42
8	Supply of SC - SC Patch Cord (1 Mtr.), (3M, TE Connectivity, R&M make only)	Nos	97.04	1.64	108.68	110	11,955.33
9	Supply of HDPE Duct 40/33 mm with Accessories and laying of the same in Trenches and through all types of protections viz HDPE/GI/RCC Pipes etc. as the case may be. Work also includes supply & pulling of Nylon Rope through it.	Mtrs	46.98	5.64	52.62	1,000	52,617.60
C	Supply - Copper Cables / Switches						
1	Supply of PVC insulated 3 Core 6 Sqmm , grade outdoor strengthened Copper cable for UPS supply distribution	Mtrs	112.96	13.56	126.52	10250	2,96,780.80
2	Supply & Installation of 6Amp/10Amp/25Amp MCB protected 3pin socket as per ISI Standard in suitable PVC/Metallic Box	nos	636.69	76.40	713.09	89	63,465.26
3	Supply and installation of 63Amps 4 pole MCBs	Nos	1296.88	155.63	1,452.51	5	7,262.53
4	Supply and installation of 32 Amps 2 pole MCBs	Nos	684.61	82.15	766.76	11	8,434.40

5	Supply and Installation of 3-phase 10KVA energy meter	Nos	8557.63	1,026.92	9,584.55	5	47,922.73
6	Supply and installation of metallic box with lock and key arrangement for housing energy meter and MCBs	Nos	5134.58	616.15	5,750.73	5	28,753.65
7	Supply and installation of surge arrester	Nos	22249.83	2,669.98	24,919.81	5	1,24,599.05
E Services - Installation & Cabling							
1	Providing Earthing arrangement for Datacom equipment	nos	12836.44	1,540.37	14,376.81	6	86,260.88
2a	Supply of 25 mm PVC Conduit Pipe ISI Mark	mtr	23.24	2.79	26.03	26722.5	6,95,554.61
2b	Fixing of 25mm PVC Conduit on walls/ structures duly providing suitable GI clamps .Necessary drilling and provision of screws,clamps etc... to be arranged by contractor.Railtel Shall supply only 25mm PVC conduit.	mtr	8.56	1.03	9.59	5347	51,262.76
3	Fixing/laying of conduit on already available cable ladder/tray/channels duly tying with proper material. All the required material shall be arranged by contractor. Railtel Shall supply only 25mm PVC conduit.	mtr	3.42	0.41	3.83	21380	81,893.95
4	Blowing & Drawing of OFC Cable 24F/12F/6F, Power cable and CAT cable through PVC Conduit already installed.	mtr	3.14	0.38	3.52	28058.63	98,676.57
5	Supply and laying of Flexible pipe. Colour of flexi pipe shall match with the colour of conduit	mtr	45.78	5.49	51.27	2680	1,37,413.25
6	Splicing of 24 F in FDMS	nos	5632.63	675.92	6,308.55	52	3,28,044.37
7	Splicing of 12 F in FDMS / termination Box	nos	2816.31	337.96	3,154.27	119	3,75,357.80
8	Fixing or mounting of UPS in 9U size Rack or outside on wall /pole . All sorts of Angles, Nuts, Bolts, Clamps and other accessories required for installation to be supplied by contractor (UPS will be supplied by RCIL)	nos	2567.29	308.07	2,875.36	11	31,629.01

9	Configuration, testing and commissioning of entire WiFi network of station, submission of fiber loss reports duly tested with power meter in the presence of Railtel representative. The contractor shall arrange for drawing of the entire WiFi system duly showing the path of OFC, power cables, Fiber Switches, access switches, access points etc in soft copy(in AUTOCAD) and hard copy	Ls	12836.44	1,540.37	14,376.81	5	71,884.06
F	Services - Excavation of Trenches & associated works						
1	Supply & Installation of Optical Fibre Joint Enclosure (TE Connectivity / R&M / 3-M / TVS make) and Splicing of 24 Fibre Cable Testing	nos	1584.36	190.12	1,774.48	5	8,872.42
2	Supply & Fixing of Cable Route Marker as per Drawings	nos	357.62	42.91	400.53	10	4,005.34
3	Supply & Installation of RCC Chambers as per Railtel site incharge specification	nos	5633.14	675.98	6,309.12	5	31,545.58
4	Supply and installation of of GI Pipe 40 / 50 / 75 mm as per site requirements	mtr	411.54	49.38	460.92	500	2,30,462.40
5	Trenching, laying of OFC	mtr	61.61	7.39	69.00	1000	69,003.20
6	Trenching by HDD Machine at depth 1.65 Mtr. for Road/ Track crossing	mtr	622.14	74.66	696.80	50	34,839.84
7	Concreting in Rocky areas for OFC protection and to keep the route marker in position	mtr	166.79	20.01	186.80	700	1,30,763.36
8	Breaking of pucca road/CC/platform cutting, Laying of OFC in Trenches and through all types of protections viz HDPE/GI/RCC Pipes etc. as the case may be	mtr	242.61	29.11	271.72	1650	4,48,343.28
9	Laying of over head OFC laying	mtr	6.42	0.77	7.19	500	3,595.20
G	Additional items						
1	Supply of 12 ft jindal make or equivalent ladder of thickness 3mm	Nos	7348.86	881.86	8,230.72	10	82,307.23
2	Supply and fixing of PVC trough 50*50mm with cover of 2mm thickness	Mtr	204.31	24.52	228.83	250	57,206.80
	TOTAL						55,97,790

Schdele of Requiremnt - SOR for Reach-6 (Ernakulam Town, Kottayam, Tiruvalla, Chengannur, Kanhangad)							
S No	Description (SAC code for all line items is 9954)	Unit	Base Price	GST @12%	All incl. Unit Rate (Rs)	Qty	Amount (Rs)
B Supply - Optical Cables / Connectors							
1	Supply of 24F core metal free strengthened outdoor unarmored OFC	Mtrs	37.74	4.53	42.27	6000	2,53,612.80
2	Supply of 12 F armored OFC (for over head laying from POP to Station in ring	Mtrs	17.63	2.12	19.75	500	9,872.80
3	Supply of 12F core metal free strengthened outdoor unarmored OFC	Mtrs	13.69	1.64	15.33	8500	1,30,328.80
4	Supply of 48 Fibre (2*12 , 6*4) (SC type) FMS with all accessories	Nos	6271.88	752.63	7,024.51	20	1,40,490.11
5	Supply of 24 Fibre (2*12 , (SC type) FMS with all accessories	Nos	3538.58	424.63	3,963.21	70	2,77,424.67
6	Supply of LC - LC Patch Cord (5 Mtr.)	Nos	97.04	1.64	108.68	40	4,347.39
7	Supply of SC - LC Patch Cord (3 Mtr.) (3M, TE Connectivity, R&M make only)	Nos	97.04	1.64	108.68	240	26,084.35
8	Supply of SC - SC Patch Cord (1 Mtr.), (3M, TE Connectivity, R&M make only)	Nos	97.04	1.64	108.68	100	10,868.48
9	Supply of HDPE Duct 40/33 mm with Accessories and laying of the same in Trenches and through all types of protections viz HDPE/GI/RCC Pipes etc. as the case may be. Work also includes supply & pulling of Nylon Rope through it.	Mtrs	46.98	5.64	52.62	1,000	52,617.60
C Supply - Copper Cables / Switches							
1	Supply of PVC insulated 3 Core 6 Sqmm , grade outdoor strengthened Copper cable for UPS supply distribution	Mtrs	112.96	13.56	126.52	9700	12,27,197.44
2	Supply & Installation of 6Amp/10Amp/25Amp MCB protected 3pin socket as per ISI Standard in suitable PVC/Metallic Box	nos	636.69	76.40	713.09	80	57,047.42
3	Supply and installation of 63Amps 4 pole MCBs	Nos	1296.88	155.63	1,452.51	5	7,262.53
4	Supply and installation of 32 Amps 2 pole MCBs	Nos	684.61	82.15	766.76	10	7,667.63

5	Supply and Installation of 3-phase 10KVA energy meter	Nos	8557.63	1,026.92	9,584.55	5	47,922.73
6	Supply and installation of metallic box with lock and key arrangement for housing energy meter and MCBs	Nos	5134.58	616.15	5,750.73	5	28,753.65
7	Supply and installation of surge arrester	Nos	22249.83	2,669.98	24,919.81	5	1,24,599.05
E Services - Installation & Cabling							
1	Providing Earthing arrangement for Datacom equipment	nos	12836.44	1,540.37	14,376.81	5	71,884.06
2a	Supply of 25 mm PVC Conduit Pipe ISI Mark	mtr	23.24	2.79	26.03	25410	6,61,391.81
2b	Fixing of 25mm PVC Conduit on walls/ structures duly providing suitable GI clamps .Necessary drilling and provision of screws,clamps etc... to be arranged by contractor.Railtel Shall supply only 25mm PVC conduit.	mtr	8.56	1.03	9.59	5085	48,750.91
3	Fixing/laying of conduit on already available cable ladder/tray/channels duly tying with proper material. All the required material shall be arranged by contractor. Railtel Shall supply only 25mm PVC conduit.	mtr	3.42	0.41	3.83	20330	77,872.03
4	Blowing & Drawing of OFC Cable 24F/12F/6F, Power cable and CAT cable through PVC Conduit already installed.	mtr	3.14	0.38	3.52	26680.5	93,829.98
5	Supply and laying of Flexible pipe. Colour of flexi pipe shall match with the colour of conduit	mtr	45.78	5.49	51.27	2550	1,30,747.68
6	Splicing of 24 F in FDMS	nos	5632.63	675.92	6,308.55	50	3,15,427.28
7	Splicing of 12 F in FDMS / termination Box	nos	2816.31	337.96	3,154.27	110	3,46,969.39
8	Fixing or mounting of UPS in 9U size Rack or outside on wall /pole . All sorts of Angles, Nuts, Bolts, Clamps and other accessories required for installation to be supplied by contractor (UPS will be supplied by RCIL)	nos	2567.29	308.07	2,875.36	10	28,753.65

9	Configuration, testing and commissioning of entire WiFi network of station, submission of fiber loss reports duly tested with power meter in the presence of Railtel representative. The contractor shall arrange for drawing of the entire WiFi system duly showing the path of OFC, power cables, Fiber Switches, access switches, access points etc in soft copy (in AUTOCAD) and hard copy	Ls	12836.44	1,540.37	14,376.81	5	71,884.06
F	Services - Excavation of Trenches & associated works						
1	Supply & Installation of Optical Fibre Joint Enclosure (TE Connectivity / R&M / 3-M / TVS make) and Splicing of 24 Fibre Cable Testing	nos	1584.36	190.12	1,774.48	5	8,872.42
2	Supply & Fixing of Cable Route Marker as per Drawings	nos	357.62	42.91	400.53	10	4,005.34
3	Supply & Installation of RCC Chambers as per Railtel site incharge specification	nos	5633.14	675.98	6,309.12	5	31,545.58
4	Supply and installation of of GI Pipe 40 / 50 / 75 mm as per site requirements	mtr	411.54	49.38	460.92	500	2,30,462.40
5	Trenching, laying of OFC	mtr	61.61	7.39	69.00	1000	69,003.20
6	Trenching by HDD Machine at depth 1.65 Mtr. for Road/ Track crossing	mtr	622.14	74.66	696.80	50	34,839.84
7	Concreting in Rocky areas for OFC protection and to keep the route marker in position	mtr	166.79	20.01	186.80	800	1,49,443.84
8	Breaking of pucca road/CC/platform cutting, Laying of OFC in Trenches and through all types of protections viz HDPE/GI/RCC Pipes etc. as the case may be	mtr	242.61	29.11	271.72	1425	3,87,205.56
9	Laying of over head OFC laying	mtr	6.42	0.77	7.19	500	3,595.20
G	Additional items						
1	Supply of 12 ft jindal make or equivalent ladder of thickness 3mm	Nos	7348.86	881.86	8,230.72	10	82,307.23
2	Supply and fixing of PVC trough 50*50mm with cover of 2mm thickness	Mtr	204.31	24.52	228.83	250	57,206.80
	TOTAL						53,12,096

CHAPTER - 3
INSTRUCTIONS TO THE TENDERERS
AND
CONDITIONS OF TENDERING

INSTRUCTIONS TO TENDERERS AND CONDITIONS OF TENDERING

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CHAPTER-3

INSTRUCTIONS TO TENDERERS AND CONDITIONS OF TENDERING

3.1 GENERAL INSTRUCTIONS

- 3.1.1 Tender is invited by RailTel, Southern Region Secunderabad, from established and reliable contractors for the work detailed in chapter 1.
- 3.1.2 The Special Conditions of Contract, Instructions to Tenderers and Conditions of Tendering, Technical Specifications & Supplement, Preamble including Schedule of Requirements and all Annexure & Forms etc. shall, hereafter, be collectively referred to as the "**Tender documents**". These regulations for Tender and Contracts shall be read in conjunction with the General Conditions of contract and shall be subject to modifications, additions or suppression, overwrite by Special conditions of contract and/or special specifications, if any, annexed to the tender document.

3.2 INTERPRETATIONS

The following terms wherever occurring in the tender document and wherever used throughout the execution of the work, shall, unless excluded by or repugnant to the context, have the meaning attributed thereto as follows:

- a) "**CONTRACT**" Means the Contract resulting from the acceptance by the Purchaser of this Tender whether in whole or in part.
- b) "**CONTRACTOR**" Means the successful Tenderer, i.e., the tenderer whose tender has been accepted either in whole or in part.
- c) "**CONTRACTOR'S REPRESENTATIVE**" Shall mean a person in supervisory capacity who shall be so declared by the Contractor and who shall be authorized under a duly executed power of attorney to receive materials issued by the Purchaser to the Contractor for the works. He shall be responsible for proper execution of works at each or all places and shall take orders from Purchaser's Engineer/Section Inchargers and carry out the same.
- d) "**ENGINEER/SECTION INCHAGER / ENGINEER/SECTION INCHAGER-IN-CHARGE**" Shall mean an executive of RailTel in charge of works and shall include the superior executives of RailTel. He is responsible for ensuring that all field works covered by the contract are carried out in accordance with approved designs, drawings & specifications and conditions of contract as agreed to.
- e) "**ENGINEER/SECTION INCHAGER'S REPRESENTATIVE**" Shall mean the supervisor of RailTel in direct charge of the works.
- f) "**EQUIPMENT**" Means all or any equipment considered necessary by the Purchaser's Engineer/Section Inchargers for satisfactory operation, as a whole, of the installations.
- g) "**MONTH**" Means any consecutive period of thirty days.
- h) "**MATERIALS**" Means all equipments, components, fittings and other materials including raw materials required to complete the work..
- i) "**PURCHASER**" Means Regional General Manager, RailTel Corporation of India Limited, Southern Region, 2nd Floor, B-Block, Rail Nilayam, Secunderabad-500 071

- j) **"PURCHASER'S ENGINEER/SECTION INCHAGER"** Means the Executive Director of RailTel or successor who will decide all matters relating to design, manufacture, and installation and commissioning of the plant and equipment at site.
- k) **"SUB-CONTRACTOR"** Means an individual or a firm of Contractor or a Company registered under Indian Company Act or an approved supplier of materials to whom the Contractor sublets portions of the contract.
- l) **"CONSIGNEE"** Means the person specified in the Acceptance of Tender to whom Stores are to be delivered at the destination.
- m) **"INSPECTING OFFICER"** Means the person, or organization specified in the contract for the purpose of inspection of stores of work under the contract and includes his/their authorized representative.
- n) **"RailTel"** Means RailTel Corporation of India Limited, Southern Region, 2nd Floor, B-Block, Rail Nilayam, Secunderabad-500 071.
- o) **"SITE"** Means the areas to be taken up by the permanent works, together with any other area or areas as shall be determined by the Purchaser's Engineer/Section Inchager, which may be placed at the disposal of the Contractor for the purpose of the contract and also such area or areas used for store yards, works yards or workshop in proximity of the works as the Purchaser's Engineer/Section Inchager may have authorized as an extension of the site, irrespective of the terms and conditions under which they are occupied by the Contractor.
- p) **"TENDERER"** Means and includes any firm of Engineer/Section Inchagers or Contractors or any company or body, corporate or otherwise, who submit the Tender which has been invited.
- q) **"WORK OR WORKS"** Means all or any of the items of the work for which the Tenderer /Contractor has Tendered/contracted according to the specifications, drawings and Annexure hereto annexed or to be implied there from, or incidental thereto or to be hereafter specified or required in such explanatory instructions and drawings, being in conformity with the original specifications, drawings, Annexure and schedules and also such instructions and drawings additional to the aforementioned as may from time to time be issued by the Purchaser's Engineer/Section Inchager during the progress of the contracted work.
- r) **"Near Relative":**
The near relatives of all RailTel Employees either directly recruited or on deputation are prohibited from participation in tenders and execution of works in the different units of RailTel. The detailed guidelines in this regard are given in the following paragraphs: -
- i) The near relatives for this purpose are defined as:
* Members of a Hindu Undivided family,
* They are husband and wife,
* The one is related to the other in the manner as father, mother, son (s) & son's wife (daughter-in-law), Daughter(s), & daughter's husband (son-in-law), brother(s) & brother's wife, sister(s) & sister's husband (brother-in-law).
- ii) As per Government of India's CCS Conduct rule 4, no Government servant shall in the discharge of his official duties deal with any matter or sanction any contract to any company or for any other person if any member of his family is employed in that company or firm or under that person or if he or any member of his family is interested in such matter or contract in any other manner and the Govt. Servant shall refer every such matter or contract to his official superior.

This clause is applicable to all RailTel employees in view of this as soon as any RailTel employee becomes aware of the above aspect, he must intimate this to the prescribed authority.

- iii) The Company or firm or any other person is not permitted to tender for works in RailTel Unit in which his near relative(s) is (are) posted. The tender/work will be cancelled and earnest money/security deposit will be forfeited at any stage whenever it is so noticed. The department will not pay any damages to the company or firm or the concerned person. The company or firm or the person will also be debarred for further participation in the concerned unit.

* The format of the certificate to be given is

"IS/o.....r/o..... hereby certify that none of my relative(s) as defined in the tender document is/ are employed in RailTel unit. In case at any stage, it is found that the information given by me is false/ incorrect, RailTel shall have the absolute right to take any action as deemed fit/without any prior intimation to me".

s) **"WRITING"** Includes all matters written, typewritten or printed either in whole or in part.

t) **"Constructional Plant"** shall mean all appliances or things of whatsoever nature required for the execution, completion or maintenance of the works or the temporary works (as hereinafter defined) but do not include materials or other things intended to form or forming part of the permanent work. (i) "Temporary Works" shall mean all temporary works of every kind required for the execution, completion and/or maintenance of the works. (ii) "Period of maintenance" shall mean the specified period of the maintenance from the date of completion of the work as certified by the Engineer/Section Incharge.

u) Singular and Plural: Works importing the singular number shall also include the plural and vice versa where the context requires.

v) Headings & marginal headings: The headings and marginal headings in these general conditions are solely for the purpose of facilitating reference and shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof or the contract.

w) **Sub section:** Distance in between two long haul Railway stations.

3.3 LOCAL CONDITIONS

3.3.1 It will be imperative on each tenderer to fully acquaint oneself with all the local conditions and factors which would have any effect on the performance of the contract and cost of the stores. The purchaser shall not entertain any request for clarifications from the tenderer regarding such local conditions. No request for the change of price or time schedule of delivery of stores shall be entertained after the offer is accepted on account of any local condition or factor.

3.3.2 The intending tenderer is advised to study the tender document carefully. Any submission of a quotation by the tenderer shall be deemed to have been done after a careful study and examination of these documents with full understanding of the implication thereof. These conditions and specifications shall be deemed to have been accepted unless otherwise, specifically commented upon by the Tenderer in his quotation. Failure to adhere to anyone or all these instructions may render his offer liable to be ignored without any reference.

3.3.3 Should a tenderer find discrepancies in, or omission from, the drawings or any of the Tender documents or he has any doubt to their meaning, he should at once notify RailTel, who may send a written clarification to all Tenderers.

3.4 COMPLIANCE TO TENDER CONDITIONS, SPECIFICATIONS & DRAWINGS

- 3.4.1 The tenderer shall indicate Paragraph by Paragraph for each section of the tender document that either his tender complies in every respect with the requirements of each clause and sub clause or if not, precisely how they differ from the requirements of the tender. In later case, the tenderer shall enclose a separate statement as per proforma given, indicating only the deviations for any clause or sub clause of Special Conditions of Contract, Instructions to Tenderers and Conditions of Tendering, Technical Specifications, Preamble etc. which he proposes with justifications for deviations proposed. The purchaser reserves the right to accept or reject these deviations and his decision thereon shall be final (see Form 5).
- 3.4.2 The equipment offered and execution of work shall be in accordance with the drawings and specifications. Details of variation from the drawings and specifications, if any, should be clearly indicated separately for each annexure with justification for deviations proposed. The Purchaser reserves the right to accept or reject these deviations and his decision thereon shall be final.
- 3.4.3 Firms should give details of similar works carried out giving details of the name of the project, date of award, length of the section, value of the contract, the original execution period and the actual execution time taken.
- 3.4.4 The tenderer should serially number all the pages of tender submitted.
- 3.5 EARNEST MONEY**
- 3.5.1 The tenderer shall furnish an amount given in "Para-1.11 of tender document" as earnest money in favour of RailTel Corporation of India Limited payable at Secunderabad.
- 3.5.2 **The Earnest Money should be in any of the following forms**
Pay orders, Demand Drafts, Bankers Cheque. These forms of earnest money should be issued from any of the nationalized banks/ Schedule banks. The demand draft/Pay order should be in favour of RailTel Corporation of India Ltd. payable at Secunderabad.
- 3.5.3 The tenderers shall hold the offer open till such date as specified in Para 1.8 of the tender document. It being understood that the tender documents have been sold/issued to the tenderer and the tenderer has been permitted to tender in consideration of the stipulation on his part that after submitting his tender he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to RailTel. If the tenderer fails to observe or comply with the foregoing stipulation, the aforesaid amount deposited as Earnest Money shall be liable to be forfeited by RailTel.
- 3.5.4 **The Earnest Money may be forfeited**
- a) If tenderer withdraws its tender during the period of tender validity specified in Para 1.8 of tender document.
 - b) In the case of successful tenderer, If the tenderer fails to sign the contract in accordance with Para 5.2 of Special Conditions of Contract and to furnish Performance Bank Guarantee in accordance with Para 1.13 of tender document.
- 3.5.5 The Earnest money of unsuccessful tenderer will save as herein before provided, be returned within reasonable time to the unsuccessful tenderer but RailTel shall not be responsible for any loss or depreciation that may happen to the security for the due performance of the above stipulation to keep offer open for the period specified in the tender documents or to the Earnest Money while in their possession nor be liable to pay interest thereon.

- 3.5.6 If the tender is accepted, the amount of Earnest Money will be held as security deposit for due and faithful fulfillment of contract.
- 3.5.7 The tender not accompanied by Earnest Money as mentioned in Para 3.5.1 of the tender document will be **summarily rejected**.
- 3.5.8 The firm registered with National Small Industries Corporation (NSIC) under its Single point registration scheme or registered as Micro, Small and Medium Enterprises under MSMED Act 2006 with District Industries Centers or Khadi & Village Industries Commission or Khadi & Village Industries Board or Coir Board or Directorate of Handicrafts & Handloom or any other body specified by Ministry of Micro, Small & Medium Enterprise will be **exempted from the payment of cost of tender document and EMD** provided they are registered for the same scope of work as NIT. The documents submitted by the firm shall be duly certified/attested. However, postage charges of Rs.500/- would have to be paid by them, in case they need tender document by post.

3.6 SUBMISSION OF OFFERS

- 3.6.1 All offers in the prescribed forms should be submitted before the time and date fixed for the receipt of the offers. Offers received after the stipulated time and date will be summarily rejected.
- 3.6.2 In case the date of opening happens to be a holiday, the tender will be received and opened at the same time on the next working day.
- 3.6.3 All offers shall be either type written or written neatly in indelible ink in English. Each page of the offer must be numbered consecutively. A reference to total number of pages comprising the offer must be made at the top right hand corner of the top page. The supporting documents should be submitted either in original or duly signed by the authorized signatory of the tenderer. The original documents shall be produced for verification when called for.
- 3.6.4 **Quote in Figures and Words**
The tenderer is advised to quote percentage rate **above/below/at Par** of the RailTel's total estimated cost for schedule. If none of the **above/below/At Par** is ticked by the tenderer, the quoted percent rate will be treated as '**below**' the RailTel's total estimated cost of schedule. In case of difference in words and figures the amount written in words will be taken into consideration. In the event of any discrepancy between percentage rate and total cost, the value shown in percentage rate will be taken for evaluation purpose. In case the schedule of requirement quoted by tenderer is incomplete with reference to tender document, the offer is liable to be rejected.
- 3.6.5 **Attestation of alterations**
No scribbling is permissible in the tender documents. Tender containing erasures and alterations in the tender documents are liable to be rejected. Any correction made by the tenderer/ tenderers in his/their entries must be signed (not initial) by him/them.
- 3.6.6 The tenderer shall submit his tender in sealed cover with the tender number & its description and date of closing/ opening on envelope. The original tender paper purchased from this office shall be returned duly signed along with the original offer. The offer shall consist of the following:-

The original tender documents purchased from this office/ down loaded from web site shall be submitted with each page duly signed and stamped along with the original offer

- i) Offer letter complete. (Form No.1) (i.e., Schedule of Requirements without rate quote)
- ii) Earnest Money in prescribed form. (Para 3.5 of tender document)
- iii) Clause wise compliance to tender conditions by signing of each page of tender document & statement of deviations (Form No.5).
- iv) Any other information desired to be submitted by the tenderer.
- v) Copy of registration/exemption certificate for EPF.

- vi) Registration with labour commissioner.
- vii) Service tax registration.
- viii) GST registration

Note: The offer letter and duly filled quote on schedule of requirement (Chapter-II) (percentage **above/below/at par**) should be submitted. The rate quoted in the offer by the contractor shall be inclusive of all the relevant factors taken into consideration and these should be firm and without any variation clauses. The envelope shall be clearly super scribed the tender number and its description in bold letters & sealed.

3.7 CONSTITUTION OF FIRM AND POWER OF ATTORNEY

3.7.1 Any individual(s) signing the tender or other documents connected therewith should specify whether he is signing:-

- (a) As sole proprietor of the concern or as attorney of the sole proprietor;
- (b) As a partner or partners of the firm;
- (c) As a Director, Manager or Secretary in the case of Limited Company duly authorized by a resolution passed by the Board of Directors or in pursuance of the authority conferred by Memorandum of Association.

3.7.2 In the case of a firm not registered under the Indian Partnership Act, all the partners or the attorney duly authorized by all of them should sign the tender and all other connected documents. The original Power of Attorney or other documents empowering the individual or individuals to sign should be furnished to the Purchaser for verification, if required.

3.7.3 The RailTel will not be bound by Power of Attorney granted by the tenderer or by the changes in the composition of the firm made subsequent to the execution of the contract agreement.

3.7.4 In case where the Power of Attorney partnership deed has not been executed in English, the true and authenticated copies of the translation of the same by Advocate, authorized translators of Courts and Licensed Petition Writers should be supplied by the Contractor(s) while tendering for the work.

3.7.5 The duly notarized Power of Attorney, Partnership Deed, Memorandum of Joint Venture as the case may be in original or duly signed.

3.8 VALIDITY OF OFFER

The tenderer should keep the offers valid for the period as mentioned in **Para 1.8** of tender document.

3.9 RATES DURING NEGOTIATION

The tenderer/s shall not increase his/their quoted rates in case the RailTel Administration negotiates for reduction of rates. Such negotiations shall not amount to cancellation or withdrawal of the original offer and the rates originally quoted will be binding on the tenderer/s.

3.10 PERIOD OF COMPLETION AND TIME PROGRESS GRAPH

The works/work are/is to be completed within a period as mentioned in Para 1.9 of the tender document from the date of issue of Letter of Acceptance of the tender.

3.11 OPENING OF TENDER:

The tender will be opened at the time & date of the tender given in the Para 1.5, in the presence of such Tenderers/Authorized Representatives who choose to be present

3.12 NON-TRANSFERABILITY AND NON-REFUNDABILITY

The tender documents are not transferable. The cost of tender document is not refundable.

3.13 ERRORS, OMISSIONS & DISCREPANCIES

The Contractor(s) shall not take any advantage of any mis-interpretation of the conditions due to typing or any other error and if in doubt, shall bring it to the notice of the Engineer/Section Incharge without delay. In case of any contradiction only the printed rules, and books should be followed and no claim for the misinterpretation shall be entertained.

3.14 WRONG INFORMATION BY TENDERER

If the tenderer/s deliberately gives/give wrong information in his/their tender which creates/create circumstances for the acceptance of his/their tender the RailTel reserves the right to reject such tender at any stage.

3.15 AMENDMENT OF BID DOCUMENTS:

3.15.1 At any time, prior to the date for submission of bids, the RailTel may, for any reason whether suo motto or in response to clarification requested by a prospective Bidder, modify the bid documents by amendments.

3.15.2 The amendments shall be posted on website of RailTel and all bidders should download from website. These amendments will be binding on all bidders. RailTel shall make efforts to inform in writing or Fax to all prospective bidders on the address intimated at the time of purchase of bid documents from the RailTel.

3.15.3 In order to afford prospective bidders reasonable time to take the amendments into account in preparing their bids, the RailTel may, at its discretion, extend the deadline for the submission/opening of bids suitably.

3.16 Qualifying Criteria:

3.16.1 General

The tenderer should submit the details of experience of similar works or services in the projects executed / under execution which should clearly bring out expertise in the work as per Form no. 13.

The tenderer/s must submit along with his/their tender, certificates from the original user for whom the project was undertaken, certifying the date of award of contract, date of completion, date of commissioning and the present working state of the system so established and contractual payments received till the date of submission of the tender. The tenderer shall submit these certificates for all the projects that he has executed which only satisfy the minimum requirements in each case. The certificates are to be submitted in original or their true copies duly signed by the tenderer. The certificates are to be submitted in original or their true copies duly signed by the tenderer to contain the information as per form no. 2

3.16.2 Technical Capability and meaning of similar single work:

3.16.2.1 Tenderer must have completed at the time of tender opening successfully and satisfactorily at least one single similar work costing not less than 35 % of the advertised tender value of work during the preceding three years (i.e. current financial year and three previous financial years)

3.16.2.2 Definition of similar single work is as under-

Works similar to the scope of work as contained in this tender shall mean as under:

The bidder should have executed any of the following works

- i) Supply and installation of LAN wiring
- ii) Provision of Wi-Fi connectivity
- iii) Supply and installation of RF Equipments.
- iv) Supply and installation of Telecom equipment
- v) OF Cable laying works
- vi) OF Cable maintenance works

The work should have been executed for Govt/Public sector/reputed telecom service providers/Infrastructure providers.

3.16.1 Financial:

Total contract amount received during the last 3 financial years i.e., 2014-15, 2015-16 & 2016-17 and in the current financial year should be a minimum of 150% of advertised tender value. The certified copy of three years Audited Balance Sheet and Income statement /P&L a/c of just concluded year should be submitted as evidence. Offers not accompanied by Audited balance sheets will not be considered

3.16.4 Deleted

3.16.5 Construction and Maintenance Machinery

The tenderer should furnish the details of the machinery and plants to be deployed, in case the tenderer plans to use mechanized trenching.

3.17 Performance Bank Guarantee: As per para 4.12.2

3.18 EVALUATION OF OFFER.

3.18.1 The authority for the acceptance of the tender rests with the Purchaser. The tenders received will be evaluated by the Purchaser to ascertain the best acceptable tender in the interest of the Purchaser.

3.18.2 However, the purchaser shall not be bound to accept the lowest or any tender. The purchaser reserves the right to accept any tender in respect of the whole or any portion of the work specified in the tender or to accept any tender for less than the tendered quantities.

3.19 AGREEMENT

The successful tenderer/s shall be required to execute an agreement with RailTel for carrying out the work as per the tender document.

3.20 TENDERER'S ADDRESS

Tenderer shall state in the tender his postal address with PIN, telephone No., Fax No., email id if any, fully and clearly. Any communication sent to the tenderers by post at his said address shall be deemed to have reached the tenderer duly & timely, notwithstanding the fact that the communication could not reach the tenderer at all or in time for whatever reason. Important documents shall be sent by Registered Post/Courier.

CHAPTER – 4
GENERAL CONDITIONS
OF
CONTRACT

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Chapter - 4
GENERAL CONDITIONS OF CONTRACT
DEFINITIONS AND INTERPRETATION

4.1. Definitions:

- 4.1.1 The meaning of terms/interpretations shall be taken as defined in Chapter- 3, (INSTRUCTIONS TO THE TENDERERS AND CONDITIONS OF TENDERING).

4.2. General Obligations

- 4.2.1 Execution Co-relation and intent of contract documents: The contract documents shall be signed in triplicate by the RailTel and the Contractor. The contract documents are complementary, and what is called for by any one shall be as binding as if called of try all; the intention of the documents is to include all labour and materials, equipments and transportation necessary for the proper execution of work. Materials or work not covered by or properly inferable from any heading or class of the specifications shall not be supplied by the RailTel to the contractors unless distinctly specified in the contract documents. Materials or works described in words, which so applied, have a well-known technical or trade meaning shall be held to refer to such recognized standards.

4.3. Law governing the contract

- 4.3.1 The Contract shall be governed by the law for the time being in force in the Republic of India.
- 4.3.2 Compliance to regulations and by-laws – The Contractor shall conform to the provision of any statute relating to the works and regulations and bye-laws of any local authority and of any water and lighting companies or undertakings, with whose system the work is proposed to be connected and shall before making any variation from the drawings or the specifications that may be necessitated by so confirming give to the Engineer/Section Incharge notice specifying the variation proposed to be made and the reason for making the variation and shall not carry out such variation until he has received instructions from the Engineer/Section Incharge in respect thereof. The Contractor shall be bound to give all notices required by statute, regulations or by-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.

- 4.4. **Communications to be in writing** – All notices, communications, references and complaints made by the RailTel or the Engineer/Section Incharge or the Engineer/Section Incharge's representative or the Contractor interest concerning the works shall be in writing and no notice, communication, references or complaint not in writing shall be recognized.

- 4.5. **Service of Notices on Contractors** – The Contractor shall furnish to the Executive Director/RailTel the name, designation and address of his authorized agent and all complaints, notices, communications and references shall be deemed to have been duly given to the contract if delivered to the Contractor or his authorized agent or left at or posted to the address so given and shall be deemed to have been so given in the case of posting on day on which they would have reached such address in the ordinary course of post or on the day on which they were so delivered or left. In the case of contract by partners, any change in the constitution of the firm shall be forthwith notified by contractor to the Executive Director /RailTel.

- 4.6. **Assignment or subletting of contract:** - The Contractor shall not assign or sublet the contract or any part thereof or allow any person to become interested therein in any manner whatsoever without the special permission in writing of the RailTel. Any breach of this condition shall entitle the RailTel to rescind the contract under Para 4.51 of these conditions and also render the contractor liable for payment to the RailTel in respect of any loss or damage arising or ensuring from such cancellation. Provided always that execution of the details of the work by petty contractor under the direct and personal supervision of the contractor or his agent shall not be deemed to be sub-letting under this

clause. The permitted subletting of work by the contractor shall not establish any contractual relationship between the sub-contractor and the RailTel and shall not relieve the Contractor of any responsibility under the Contract.

- 4.7. Force Majeure Clause** -If at any time, during the continuance of this Contract, the performance, in whole or part, by either party, of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, act of the public enemy, Civil Commotion, Sabotage, Fires, Floods, Earth quakes, explosions, strikes, epidemics, quarantine restrictions, lockouts, any statute, statutory rules/regulations, order of requisitions issued by any Government Department or Competent Authority of acts of God (here-in-after referred to as event) then provided notice of the happening of any such event is given by either party to the other within twenty one days from the date of occurrence thereof, neither party shall, by reason of such event, be entitled to terminate this Contract nor shall either party have any claim for damage against the other in respect of such non- performance or delay in performance, and the obligations under the Contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, provided further that if the performance in whole or part of any obligation under this Contract is prevented or delayed by reason of any such event beyond a period as mutually agreed to by the RailTel and the Contractor after any event or 60 days in the absence of such an agreement whichever is more, either party may at its option terminate the Contract provided also that if the contract is so terminated under this clause the RailTel may at the time of such termination take over from the Contractor at prices as provided for in the contract, all works executed or works under execution.
- 4.8. Representation on Works** – The Contractor shall, when he is not personally present on the site of the works place, keep a responsible agent at the works during working hours who shall, on receiving reasonable notice, present himself to the Executive Director/RailTel and orders given by the Engineer/Section Incharge or the Engineer/Section Incharge's Representative to the agent shall be deemed to have the same force as if they had been given to the Contractor. Before absenting himself, the Contractor shall furnish the name and address of his agent for the purpose of this clause and failure on the part of the Contractor to comply with this provision at any time will entitle the RailTel to rescind the contract under Para 4.51 of these conditions.
- 4.9. Relics and Treasures** – All gold, silver, oil and other minerals of any description and all precious stones, coins, treasures, relics, antiquities and other similar things which shall be found in or upon the site shall be property of the RailTel and the Contractor shall duly preserve the same to the satisfaction of the RailTel and shall from time to time deliver the same to such person or persons as the RailTel may appoint to receive the same.
- 4.10. Excavated material** – The Contractor shall not sell or otherwise dispose of or remove except for the purpose of this contract, the sand, stone, clay ballast, earth, rock or other substances or materials which may be obtained from any excavation made for the purpose of the works or any building or produced upon the site at the time of delivery of the possession thereof but all the substances, materials, buildings, and produce shall be the property of the RailTel provided that the Contractor may, with the permission of the Executive Director/RailTel, use the same for the purpose of the works either free of cost or pay the cost of the same at such rates as may be determined by the Engineer/Section Incharge.
- 4.11. Indemnity by Contractors** – The Contract shall indemnify and save harmless the RailTel from and against all actions, suit proceedings, losses, costs, damages, charges, claims, and demands of every nature and description brought or recovered against the RailTel by reason of any act or omission of the Contractor, his agents or employees, in the execution of the works or in his guarding of the same. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the actual loss or damage sustained, and whether or not any damage shall have been sustained.

4.12 Security Deposit

4.12.1 The Earnest Money deposited by the Contractor with his tender will be retained by the RailTel as part of security for the due and faithful fulfillment of the contract by the contractor. The balance to make up the security deposit, the rates for which are given below, shall be recovered by percentage deduction from the Contractor's "on account" bills.

(a) Unless otherwise specified in the special conditions, if any, the Security Deposit/rate of recovery/mode of recovery shall be as under:-

(i) Security Deposit for each work should be 5% of the contract value.

(ii) The rate of recovery should be at the rate of 10% of the bill amount till the full security deposit is recovered.

(iii) Security Deposits will be recovered only from the running bills of the contract and no other mode of collecting SD such as SD in the form of instruments like BG, FD etc. shall be accepted towards Security Deposit.

(b) Refund of SD –The Security Deposit for execution of work shall be released after a period of 12 months commencing immediately after commissioning of the project and issue of last Provisional Acceptance Certificate, which will be enforceable by RailTel, and issue of the certificate of final acceptance of entire system specified in the tender and submission of PBG for the maintenance obligations, provided that all the stipulations of the clause have been fulfilled by the Contractor and all claim and demands made against the RailTel for and in respect of damage or loss by, from or in consequence of the works have been finally satisfied, provided further that in the event of different maintenance periods having become applicable to different parts of the works pursuant to Para 4.38.1 of these condition, the expression "expiration of the period of warranty" shall for the purpose of this clause, be deemed to mean the expiry of the latest of such periods. The security deposit shall be released only after the expiry of the maintenance period and after passing the final bill based on "No Claim Certificate".

It has now been decided that:

i) After the work is physically completed, security deposit recovered from the running bills of a contractor can be returned to him if he so desires, in lieu of irrevocable Bank Guarantee for equivalent amount to be submitted by him.

ii) After completion of maintenance period and issue of FAC, SD can be released

(c) No interest will be payable upon the Earnest Money and Security Deposit or amount payable to the Contractor under the Contract.

(d) Should the tenderer fail to observe or comply with the foregoing stipulation the amount deposited as security for the due performance of the above stipulation shall be forfeited by the RailTel.

4.12.2 PERFORMANCE GUARANTEES (P.G.):

The procedure for obtaining Performance Guarantee is outlined below:-

(a) The successful tenderer shall give a performance guarantee amounting to 5% of contract value within 21 days from the date of issue of LOA. Extension of time for submission of PBG beyond 21 days and upto 60 days from the date of issue of LOA may be granted subject to the conditions that a penal interest of 15% per annum of the amount of BG shall be charged for the period of delay beyond 21 days i.e., 22nd day after date of issue of LOA. In case the successful tenderer is not able to submit PBG, the tenderer will have options to submit this amount in the form of Demand Draft/FDR. In case the contractor fails to submit the requisite PBG even after 60 days from the date of issue of LOA, the contract shall be terminated duly forfeiting EMD and other dues, if any payable against that contract. The failed contractor shall be debarred from participating in re-tender for that work. PBG (DD in lieu)

shall be released after Physical completion of work based on "Completion Certificate" issued by Competent Authority.

- (b) The successful bidder shall submit the Performance Guarantee amounting to 5% of the contract value in the form of Irrevocable Bank Guarantee.
- (c) The Performance Guarantee should be submitted by the successful bidder after the Letter of Acceptance (LOA) has been issued, but before signing of the contract agreement. The PBG shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case, the time for completion of work gets extended, the contractor shall get the validity of Performance Guarantee extended to cover such extended time, for completion of work plus 60 days.
- (d) The value of PBG to be submitted by the contractor will not change for variation up to 25% (either increase or decrease). In case during the course of execution, value of the contract increases by more than 25% of the original contract value, an additional Performance Guarantee amounting to 5% (Five percent) for excess value over the original contract value shall be deposited by the contractor.
- (e) The Performance Bank Guarantee (PBG) shall be released after the physical completion of the work based on the Last Provisional Acceptance Certificate issued by the competent authority stating that the contractor has completed the work in all respects satisfactorily.
- (f) Whenever the contract is rescinded, the security deposit shall be forfeited and the Performance Bank Guarantee shall be en-cashed the balance work shall be got done independently without risk and cost of the failed contractor. The failed contractor shall be debarred from participating in the tender for executing the balance work. If the failed contractor is a JV or partnership firm, then every member or partner of such a firm shall be debarred from participating in the tender for the balance work either in his/her individual capacity or as a partner of any other JV/Partnership firm.
- (g) The Engineer/Section Incharge shall not make a claim under the Performance Bank Guarantee except for amounts to which the RailTel is entitled under the contract (Notwithstanding, and /or without prejudice to any other provisions in the contract agreement) in the event of:
 - (i) Failure by the contractor to extend the validity of the Performance Bank Guarantee as described herein above, in which event the Engineer/Section Incharge may claim the full amount of the Performance Bank Guarantee.
 - (ii) Failure by the contractor to pay RailTel any amount due either as agreed by the contractor or determined under any of the clauses/conditions of the agreement, within thirty days of the service of the notice to this effect by Engineer/Section Incharge.
 - (iii) The contract being determined or rescinded, the Performance Bank Guarantee shall be forfeited in full and shall be absolutely at the disposal of the RailTel Corporation of India Ltd.

4.13. Completion Period

4.13.1 Subject to any requirement in the contract as to completion of any portion or portions of the works before completion of the whole, the contractor shall fully and finally complete the whole of the works comprised in the contract (with such modifications as may be directed under conditions of this contract) by the date entered in the contract or extended date in terms of the following clauses:

- 4.13.1.1 If any modifications have been ordered which in the opinion of the Engineer/Section Incharge have materially increased the magnitude of the work, then such extension of the contracted date of completion may be granted as shall appear to the Engineer/Section Incharge to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the clause thereof shall arise and in any case not less than one month before the expiry of the date fixed for completion of the works.
- 4.13.1.2 If in the opinion of the Engineer/Section Incharge the progress of work has any time been delayed by any act or neglect of RailTel's employees or by other contractor employed by the RailTel under Para 4.16.4 of these conditions or in executing the work not forming part of the contract but on which contractor's performance necessarily depends or by reason of proceeding taken or threat-

tended by or dispute with adjoining or neighboring owners or public authority arising otherwise through the Contractor's own default etc. or by the delay authorized by the Engineer/Section Inchager pending arbitration or in consequences of the contractor not having received in due time necessary instructions from the RailTel for which he shall have specially applied in writing to the Engineer/Section Inchager or his authorized representative then, upon happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the Engineer/Section Inchager within 15 days of such happening but shall nevertheless make constantly his best endeavors to bring down or make good the delay and shall do all that may be reasonably required of him to the satisfaction of the Engineer/Section Inchager to proceed with the works. The contractor may also indicate the period for which the work is likely to be delayed and shall be bound to ask for necessary extension of time. The Engineer/Section Inchager on receipt of such request from the contractor shall consider the same and shall grant such extension of time as in his opinion is reasonable having regard to the nature and period of delay and the type and quantum of work affected thereby. No other compensation shall be payable for works so carried forwarded to the extended period of time, the same rates, terms and conditions of contract being applicable as if such extended period of time was originally in the original contract itself.

4.13.1.3 In the event of any failure or delay by the RailTel to hand over the Contractor possession of the lands necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the RailTel due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the contractor to damages or compensation therefore but in any such case, the RailTel may grant such extension or extensions of the completion date as may be considered reasonable.

4.13.2 Extension of time for delay due to contractor – The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract. If the contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in clause 4.7 and 4.13.1 above, the RailTel may, if satisfied that the works can be completed by the contractor within reasonable short time thereafter, allow the contractor further extension of time as the Engineer/Section Inchager may decide. On such extension the RailTel will be entitled without prejudice to any other right and remedy available on that behalf, to recover from the contractor as agreed damages and not by way of penalty as mentioned in para 5.35.1 of special conditions of contract.

4.13.2.1 For the purpose of this clause, the contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued. Provided also, that the total amount of liquidated damages under this condition shall be as per para 5.35.1 of special conditions of contract. Provided further, that if the RailTel is not satisfied that the works can be completed by the Contractor and in the event of failure on the part of the contractor to complete the work within further extension of time allowed as aforesaid, the RailTel shall be entitled, without prejudice to any other right or remedy available in that behalf, to appropriate the contractor's security deposit and rescind the contract under clause 4.51 of these conditions, whether or not actual damage is caused by such default..

4.14. Illegal Gratification

4.14.1 Any bribe, commission, gift or advantage given, promised or offered by or on behalf to the Contractor or his partner, agent or servant or anyone on his behalf, to any officer or employees of the RailTel, or to any person on his behalf in relation to obtaining or the execution of this or any other contract with the RailTel shall, in addition to any criminal liability which he may incur, subject the contractor to the rescission of the contract and all other contracts with the RailTel and to the payment of any loss or damage resulting from such decision and the RailTel shall be entitled to deduct the amounts so payable from any moneys due to the Contractor (s) under this contract or any other contracts with the RailTel.

- 4.14.2 The Contractor shall not lend or borrow from or have or enter into any monetary dealings or transactions either directly or indirectly with any employee of the RailTel and if he shall do so, the RailTel shall be entitled forthwith to rescind the contract and all other contracts with the RailTel. Any question or dispute as to the commission or any offence or compensation payable to the RailTel under this clause shall be settled by the Executive Director of RailTel, in such a manner as shall consider fit and sufficient and his decision shall be final and conclusive. In the event of rescission of the contract under this clause, the Contractor will not be paid any compensation whatsoever except payments for the work done up-to-date of rescission.
- 4.15. Execution of Works/Provision for Wi-Fi Internet services: Deleted**
- 4.15.2 Commencement of works – The Contractor shall commence the works within 7 days after the receipt by him of an order in writing to this effect from the RailTel and shall proceed with the same with due expedition and without delay. The work should be started with due intimation to RailTel.
- 4.15.3 Accepted programme of work
The Contractor who has been awarded the work shall as soon as possible but not later than 7 days from the date of receipt of the acceptance letter in respect of contracts with initial not later than 15 days for other contracts have to submit the detailed programme of work indicating the time schedule of various items of works in the form of Bar Chart/PERT/CPM. He shall also submit the details of organization (in terms of labour and supervisors) plant and machinery that he intends to utilize (from time to time) for execution of the work within stipulated date of completion. The programme of work amended as necessary by discussions with the Engineer/Section Incharge, shall be treated as the agreed programme of the work for the purpose of this contract and the contractor shall endeavor to fulfill this programme of work. The progress of work will be watched accordingly and the liquidated damages will be with reference to the overall completion date. Nothing stated herein shall preclude the contractor in achieving earlier completion of item or whole of the works than indicated in the programme.
- 4.15.4 **Setting out of works**
The Contractor shall be responsible for the correct setting out of all works in relation to original reference at his cost. The Contractor shall execute the work true to specifications, drawings, plans and dimensions as mentioned in the contract document and as directed by the Engineer/Section Incharge's representative and shall check these at frequent intervals. The Contractor shall provide all facilities like labour and instruments and shall cooperate with the Engineer/Section Incharge's representative at all time, during the progress of the works. Any error shall appear or arise in any part of the work, the Contractor, on being required so to do by the Engineer/Section Incharge's representative shall, at his own rectify such errors, to the satisfaction of the Engineer/Section Incharge's representative. Such checking shall not absolve the Contractor of his own responsibility of maintaining accuracy in the work.
- 4.16. Compliance to Engineer/Section Incharge's Instructions**
- 4.16.1 The Engineer/Section Incharge shall direct the order in which the several parts of the works shall be executed and the Contractor shall execute without delay all orders given by the Engineer/Section Incharge from time to time but the Contractor shall not be relieved thereby from responsibility for the due performance of the works in all respects.
- 4.16.2 **Alterations to be authorized** – No alterations in or additions to or omissions or abandonment of any part of the works shall be deemed authorized, except under instructions from the Engineer/Section Incharge, and the Contractor shall be responsible to obtain such instructions in each and every case in writing from the Engineer/Section Incharge.
- 4.16.3 **Extra Works**
Should works over and above those included in the contract require to be executed at the site, the contractor shall have no right to be entrusted with the execution of such works, which may be

carried out by another contractor or contractors or by other means at the sole discretion of the RailTel.

4.16.4 Separate Contracts in connection with works

The RailTel shall reserve the right to let other contracts in connection with the works. The Contractor shall afford other contractors reasonable opportunity for the storage of their materials and the execution of their works and shall properly connect and coordinate his work with theirs. If any part of the Contractor's work depends for proper execution or result upon the work of another contractor(s), the Contractor shall inspect and promptly report to the Engineer/Section Incharger any defects in such works that render it unsuitable for such proper execution and results. The Contractor's failure so to inspect and report shall constitute as acceptance of the other contractor's work as fit and proper for the reception of his work, except as to defects which may develop in the other contractor's work after the execution of his work.

4.17. Instructions of Engineer/Section Incharger's Representative

Any instructions or approval given by the Engineer/Section Incharger's representative to Contractor in connection with the works shall bind the Contractor as though it had been given by the Engineer/Section Incharger provided always as follows: -

4.17.1 Failure of the Engineer/Section Incharger's representative to disapprove any work or materials shall not prejudice the power of the Engineer/Section Incharger thereafter to disapprove such work or material and to order the removal or breaking up thereof.

4.17.2 If the Contractor shall be dissatisfied by reason of any decision of the Engineer/Section Incharger's representative he shall be entitled to refer the matter to the Engineer/Section Incharger who shall there upon confirm or vary such decision.

4.18. Adherence to specifications and drawings

4.18.1 The whole of the works shall be executed in perfect conformity with the specifications and drawings of the contract. If the Contractor performs any works in a manner contrary to the specifications or drawings or any of them and without such reference to the Engineer/Section Incharger, he shall bear all the costs arising or ensuring there- from and shall be responsible for all loss to the RailTel.

4.18.2 Drawings and specifications on the works:

4.18.2.1 The contractor shall keep one copy of Drawings and specifications at the site, in good order, and such contract documents as may be necessary, available to the Engineer/Section Incharger or the Engineer/Section Incharger's Representative.

4.18.2.2 The supply of equipment and materials shall include supply of one set of printed documents from original equipment manufacturers with each equipment as given in technical supplement.

4.18.3 Ownership of Drawings and Specifications – All drawings and Specifications and copies thereof furnished by the RailTel to the Contractor are deemed to be the property of the RailTel. They shall not be used in another works and with the exception of the signed contract set, shall be returned by the Contractor to the RailTel on completion of the work or termination of the Contract.

4.18.4 Compliance with Contractor's request for details – The Engineer/Section Incharger shall furnish with reasonable promptness, after receipt by him of the Contractor's request for the same, additional instructions by means of drawings of otherwise, necessary for the proper execution of the works or any part thereof. All such drawings and instructions shall be consistent with the Contract Documents and reasonably inferable there from.

4.18.5 Meaning and Intent of specification and drawings

If any ambiguity arises as to the meaning and intent of any portion of the Specifications and Drawings or as to execution or quality of any work or material, or as to the measurements of the works, the decision of the Engineer/Section Incharge thereon shall be final subject to the appeal (within 7 days of such decision being intimated to the Contractor) to the competent authority in RailTel who shall have the power correct any errors, omissions, or discrepancies in aforementioned items and whose decision in the matter in dispute or doubt shall be final and conclusive.

4.19. Damage to Govt. /RailTel property or private life and property

The Contractor shall be responsible for all risk to the works and for trespass and shall make good at his own expense all loss or damage whether to the works themselves or any other property of the Railways/RailTel or the lives, persons or property of others from whatsoever cause in connection with the works until they are taken over by the RailTel and this although all reasonable and proper precautions may have been taken by the Contractor, and in case the RailTel shall be called upon to make good any costs, loss or damages, or to pay any compensation, including that payable under the provisions of the Workmen's Compensation Act or any statutory amendments thereof to any person or persons sustaining damages as aforesaid by reason of any act, or any negligence or omissions on the part of the Contractor the amount of any costs or charges including costs and charges in connection with legal proceedings, which the RailTel may incur in reference thereto, shall be charged to the Contractor. The RailTel shall have the power and right to pay or to defend or compromise any claim of threatened legal proceedings or in anticipation of legal proceedings being instituted consequent on the action or default of the Contractor, to take such steps as may be considered necessary or desirable to ward off or mitigate the effect of such proceedings, charging to Contractor, as aforesaid, any sum or sums of money which may be paid and any expenses whether for reinstatement or otherwise which may be incurred and the propriety of any such payment, defense or compromise, and the incurring of any such expenses shall not be called in question by the Contractor.

4.20. Workmanship and Testing

4.20.1 The whole of the works and/or supply of materials specified and provided in the contract or that may be necessary to be done in order to form and complete any part thereof shall be executed in the best and most substantial workman like manner with materials of the best and most approved quality of their respective kinds, agreeable to the particulars contained in or implied by the specifications and as referred to in and represented by the drawings or in such other additional particulars. Instructions and drawings may be found requisite to be given during the carrying on of the works and to the entire satisfaction of the Engineer/Section Incharge according to the instructions and directions, which the Contractors may from time to time receive from the Engineer/Section Incharge. The materials may be subjected to tests by Mean of such machines, instruments and appliances as the Engineer/Section Incharge may direct and wholly at the expense of the Contractor.

4.20.2 Removal of Improper work and materials – The Engineer/Section Incharge or the Engineer/Section Incharge's representative shall be entitled to order from time to time:

4.20.2.1 The removal from the site within the time specified in the order of any materials, which in his opinion are not in accordance with the specifications or drawings.

4.20.2.2 The substitution of proper and suitable materials, and

4.20.2.3 The removal and proper re-execution, notwithstanding any previous tests thereof or "on account" payments therefore, of any work which in respect of materials or workmanship is not in his opinion in accordance with the specifications and in case of default on the part of the Contractor in carrying out such order the RailTel shall be entitled to rescind the contract under Para 4.51 of tender document of these conditions.

4.21. Facilities for Inspection

The Contractor shall afford the Engineer/Section Inchager and the Engineer/Section Inchager's Representative every facility for entering in and upon every portion of the work at all hours for the purpose of inspection or otherwise and shall provide all labour, materials, instruments, appliances and things of every kinds required for the purpose and the Engineer/Section Inchager and the Engineer/Section Inchager's representative shall at all time have free access to every part of the works and to all places at which materials for the work are stored or being prepared.

4.22. Examination of work before covering up

The Contractor shall give two days notice to the Engineer/Section Inchager or the Engineer/Section Inchager's Representative whenever any work or materials are intended to be covered up in the earth, in bodies or walls or otherwise to be placed beyond the Reach of Measurements in order that the work may be inspected or that correct dimension may be taken before being so covered, placed beyond the reach of measurement in default whereof, the same shall at the option of the Engineer/Section Inchager or the Engineer/Section Inchager's Representative be uncovered and measured at the contractor's expense or no allowance shall be made for such work or materials.

4.23. Temporary works

All Temporary works necessary for the proper execution of the works shall be provided and maintained by the Contractor and subject to the consent of the Engineer/Section Inchager, shall be removed by him at his expenses when they are no longer required and in such manner as the Engineer/Section Inchager shall direct. In the event of failure on the part of the Contractor to remove the temporary works, the Engineer/Section Inchager will cause them to be removed and cost as increased by supervision and other incidental charge shall be recovered from the Contractor. If temporary huts are provided by the Contractor on the RailTel/Railway land for labour engaged by him and the work is completed but the contractor's labour refused to vacate and have to be removed by the RailTel, necessary expenses incurred by the RailTel in connection therewith shall be borne by the Contractor.

4.24. Contractor to supply water for works

4.24.1 Deleted

4.24.2 Contractor to arrange supply of Electric power for works.

4.24.3 Electric supply from the Railway system: NA

4.25 Property in material and Plants: Deleted

4.26. Tools, Plant and Materials Supplied by the RailTel

4.26.1 The Contractor shall take all responsible care of all tools, plants and materials or other property whether of a like description or not belonging to the RailTel and committed to his charge for the purpose of the works and shall be responsible for all damage or loss caused by him, his agents permitted petty/sub-contractor or his workmen or others while they are in his charge. The Contractor shall sign accountable receipts for tools, plants and materials made over to him by the Engineer/Section Inchager and on completion of the works shall handover the unused balance of the same to the Engineer/Section Inchager in good order and repair, fair wear and tear excepted and shall be responsible for any failure to account for the same or any damage done thereto.

4.27. Precaution during progress of work

4.27.1 During the execution of works, unless otherwise specified the Contractor shall at his own cost provide the materials for and execute all shoring, timbering and strutting works as is necessary for

the stability and safety of all structures, excavations and works and shall ensure that no damage, injury, loss is caused or likely to be caused to any person or property.

4.27.2 Deleted

4.27.3 Provision of access to premises: During progress of work in any street or thoroughfare, the Contractor shall make adequate provision of the passage of traffic, for securing safe access to all premises approached from such street or thoroughfare and for any drainage, water supply or meant for lightning which may be interrupted by reason of the execution of the works and shall react and maintain at his own cost barriers, lights and other safeguards as prescribed by the Engineer/Section Inchager, for the regulation of the traffic, and provide watchmen necessary to prevent accidents. The works shall in such cases be executed night and day if so ordered by the Engineer/Section Inchager and with such vigour so that the traffic way be impeded for as short a time as possible.

4.27.4 Safety of Public/Passengers: The Contractor shall be responsible to take all precautions to ensure the safety of the public/Passanger or Railway/RailTel's property and shall post such look out men as may in the opinion of the Engineer/Section Inchager be required to comply with regulations pertaining to the work.

4.28 Suspension of works

4.28.1 The Contractor shall on the order of Engineer/Section Inchager suspend the progress of the works or any part thereof for such time or times and in such manner as the Engineer/Section Inchager may consider necessary and shall during such suspension properly protect and secure the work so far as is necessary in the opinion of the Engineer/Section Inchager. If such suspension is: -

- (a) Provided for in the contract, or
- (b) Necessary for the proper execution of the works or by the reason of act of God or by some default on the part of the Contractor, and or
- (c) Necessary for the safety of the works or any part thereof.

4.28.2 The Contractor shall not be entitled to the extra costs, if any, incurred by him during the period of suspension of the works; but in the event of any suspension ordered by the Engineer/Section Inchager for reasons other than aforementioned and when each such period of suspension exceeds 14 days, the Contractor shall be entitled to such extension of time for completion of the works as the Engineer/Section Inchager may consider proper having regard to the period or periods of such suspensions and to such compensations as the Engineer/Section Inchager may consider reasonable in respect of salaries or wages paid by the Contractor to his employees during the periods of such suspensions.

4.28.3 Suspension lasting more than 3 month – If the progress of the works or any part thereof is suspended on the order of the Engineer/Section Inchager for more than three months at a time, the Contractor may serve a written notice on the Engineer/Section Inchager requiring permission within 15 days from the receipt thereof to proceed with the works or that part thereof in regard to which progress is suspended and if such permission is not granted within that time the Contractor by further written notice so served may, but is not bound to, elect to treat the suspension where it affects part only of the works as an omission of such part or where it affects the whole of the works, as an abandonment of the contract by the RailTel.

4.29 Rates for items of works

The rates entered in the accepted Schedule Of Requirements of the Contract are intended to provided for works duly and properly completed in accordance with the general and special conditions of the contract and the specifications and drawings together with such enlargements, extensions, diminutions, reductions, alterations or additions as may be ordered in terms of Para 4.33 of these conditions and without prejudice to the generality thereof and shall be deemed to include and cover superintendence and labour, supply including full freight of materials, stores, tools and all apparatus and plant required on the works, except such tools, plant or materials as

may be specified in the contract to be supplied to the Contractor by the RailTel, the erection, maintenance and removal of all temporary works and buildings, all arrangements for the safety of the public or of employees during the execution of works, all sanitary and medical arrangements for labour camps as may be prescribed by the RailTel, the setting of all work and of the construction, repair and upkeep of all center lines, bench marks and level pegs thereon, site clearance, all fees, duties, royalties, rent and compensation to owners for surface damage or taxes and impositions payable to local authorities in respect of land, structures and all material supplied for the work or other duties or expenses for which the Contractor may become liable or may be put to under any provision of law for the purpose of or in connection with the execution of the contract, and all such other incidental charges or contingencies as may have been specially provided for in the specifications.

4.30 Rates for extra items of works

4.30.1 Any item of work carried out by the Contractor on the instructions of the Engineer/Section Inchager which is not included in the accepted schedule of rates shall be executed at the rates set forth in the "Schedule Of Requirements" modified by the tender percentage and such items are not contained in the latter, at the rate agreed upon between the Engineer/Section Inchager and the Contractor before the execution of such items of work and the contractors shall be bound to notify the Engineer/Section Inchager at least seven days before the necessity arises for the execution of such items of works that the accepted Schedule of Requirements does not include rate or rates for the extra work involved. The rates payable for such items shall be decided at the meeting to be held between the Engineer/Section Inchager and Contractor, in as short a period as possible after the need for the special item has come to the notice. In case the Contractor fails to attend the meeting after being notified to do so or in the event of no settlement being arrived at, the RailTel shall be entitled to execute the extra works by other means and the contractor shall have no claim for loss or damage that may result from such procedure.

4.30.2 Provided that if the Contractor commences work or incurs any expenditure in regard thereto before the rates as determined and agreed upon as lastly hereunto fore mentioned, then and in such a case the Contractor shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of determination of the rates as aforesaid according to the rates as shall be fixed by the Engineer/Section Inchager. However if the contractor is not satisfied with the decision of the Engineer/Section Inchager in this respect he may appeal to the competent authority of RailTel within 30 days of getting the decision of the Engineer/Section Inchager, supported by analysis of the rates claimed. The competent authority of RailTel's decision after hearing both the parties in the matter would be final and binding on the Contractor.

4.31 Handing over of works

4.31.1 The Contractor shall be bound to hand over the works executed under the contract to the RailTel complete in all respect to the satisfaction of the Engineer/Section Inchager. The Engineer/Section Inchager shall determine the date on which the work is considered to have been completed, in support of which his certificate shall be regarded as sufficient evidence for all purposes. The Engineer/Section Inchager shall determine from time to time, the date on which any particular section of the work shall have been completed, and the contractor shall be bound to observe any such determination of the Engineer/Section Inchager.

4.31.2 Clearance of Site on Completion: On completion of the works the contractor shall clear away and remove from the site all constructional plant, surplus material, rubbish and temporary works of every kind and leave whole of the site and works clean and in a workman like condition to the satisfaction of the Engineer/Section Inchager. No final payment in settlement of the accounts for the work shall be paid, held to be due or shall be made to the contractor till, in addition to any other condition necessary for such final payment, site clearance shall have been affected by him, and such clearance may be made by the Engineer/Section Inchager at the expense of the Contractor in the event of his failure to comply with this provision within 7 days after receiving notice to that effect. It Should become necessary for the Engineer/Section Inchager to have the site

cleared at the expense of the Contractor, the RailTel shall not be held liable for any loss or damage to such of the Contractor's property as may be on the site and due to such removal there from which removal may be affected by means of public sales of such materials and property or in such a way as deemed for and convenient to the Engineer/Section Incharge.

4.32 Variations in Extent of Contract

4.32.1 Modification to Contract to be in writing – In the event of any of the provisions of the Contract requiring to be modified after the contract documents have been signed, the modifications shall be made in writing and signed by the RailTel and the Contractor, and no work shall proceed under such modifications until this has been done. Any verbal or written arrangement abandoning, modifying, extending, reducing or supplementing the Contract or any of the terms thereof shall be deemed conditional and shall not be binding on the RailTel unless and until the same is incorporated in a formal instrument and signed by the RailTel and the Contractor and till then the RailTel shall have the right to repudiate such arrangement.

4.33 Powers of Modification to Contract

4.33.1 The Engineer/Section Incharge on behalf of the RailTel shall be entitled by order in writing to enlarge or extend, diminish or reduce the works or make any alterations in their design, character, position, site quantities, dimensions or in the method of their execution or in the combination and use of materials for the execution thereof or to order any additional work to be done or any works not to be done and the Contractor will not be entitled to any compensation for any increase / reduction in the quantities of work but will be paid only for the actual amount of work done and for approved materials supplied against a specific order.

4.33.2 Unless otherwise **specified in the special conditions of the contract**, the accepted variation in quantity for each individual item of the contract would be up to $\pm 25\%$ of the quantity originally contracted. The contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation, whatsoever upto the limit of $\pm 25\%$ variation in quantity of individual items of works.

4.33.3 **Valuation of Variations** – The enlargements, extensions, diminution, reduction, alterations or additions referred to in sub-clause (2) of this clause shall in no degree affect the validity of the contract but shall be performed by the Contractor as provided therein and be subject to the same conditions, stipulations and obligations as if they had been originally and expressly included and provided for in the specifications and drawings and the amounts to be paid therefore shall be calculated in accordance with the accepted schedule of rates. Any extra items/quantities of work falling outside the purview of the provisions of sub-clause (2) above shall be paid for at the rates determined under clause 4.30 of these conditions.

4.33.4 **Signing of "No Claim" Certificate** – The Contractor shall not be entitled to make any claim whatsoever against the RailTel under or by virtue of or arising out of this contract, nor shall the RailTel entertain or consider any such claim, if made by the Contractor, after he shall have signed a 'No Claim' certificate in favour of the RailTel, in such form as shall be required by the RailTel, after the works are finally measured up. The Contractor shall be debarred from disputing the correctness of the items covered by "No Claim Certificate" or demanding a preference to arbitration in respect thereof.

4.34. MEASUREMENTS, CERTIFICATES AND PAYMENTS

Quantities in schedule annexed to Contract - The quantities set out in the accepted Schedule of Requirements with items of works quantified are the estimated quantities of the works and they shall not be taken as the actual and correct quantities of the works to be executed by the Contractor in fulfillments of his obligations under the contract.

4.35. Measurements of Works: The Contractor shall be paid for the works at the rates in the accepted Schedule of Requirements and for extra works at rates determined under Para 4.30 of these conditions on the measurements taken by the Engineer/Section Incharge or the Engineer/Section Incharge's representative in accordance with the rules prescribed for the purpose by the RailTel. The quantities for items the unit of which in the accepted Schedule Of Requirements is 100 or 1000 shall be calculated to the nearest whole number, any fraction below half being dropped and half and above being taken as one; for item the unit of which in the accepted Schedule Of Requirements is single, the quantities shall be calculated to places of decimals. Such measurements will be taken of the work in progress from time to time and at such intervals as in the opinion of the Engineer/Section Incharge shall be proper having regard to the progress of works. The date and time on which "on account" or final measurements are to be made shall be communicated to the Contractor who shall represent at the site and shall sign the results of the measurements (which shall also be signed by the Engineer/Section Incharge or the Engineer/Section Incharge's representative) recorded in the official measurements book as an acknowledgement of his acceptance of the accuracy of the measurements. Failing the Contractor's attendance the work may be measured up in his absence and such measurements shall, notwithstanding such absence, be binding upon the Contractor whether or not he shall have signed the measurement book provided always that any objection made by him to measurement shall be duly investigated and considered in the manner set out below:

(a) It shall be open to the Contractor to take specific objection to any recorded measurements or Classification on any ground within seven days of the date of such measurements. Any re-measurement taken by the Engineer/Section Incharge or the Engineer/Section Incharge's representative in the presence of the Contractor or in his absence after due notice has been given to him in consequences of objection made by the contractor shall be final and binding on the Contractor and no claim whatsoever shall thereafter be entertained regarding the accuracy and classification of the measurement. (b) If an objection raised by the Contractor is found by the Engineer/Section Incharge to be incorrect, the Contractor shall be liable to pay the actual expenses incurred in measurements.

4.36 "On-Account" Payments

4.36.1 The Contractor shall be entitled to be paid from time to time by way of "On-Account" payment only for such works as in the opinion of the Engineer/Section Incharge he has executed in terms of the contract. All payments due on the Engineer/Section Incharge's or the Engineer/Section Incharge's Representative's certificates of measurements shall be subject to any deductions which may be made under these presents and shall further be subject to, unless otherwise required by Para 4.12 of these conditions, a retention of ten percent by way of security deposits, until the amount of security deposit by way of retained earnest money and such retentions shall amount to 5% of the total value of the contract provided always that the Engineer/Section Incharge may by any certificate make any correction or modification in any previous certificate which shall have been issued by him and that the Engineer/Section Incharge may withhold any certificate if the works or any part thereof are not being carried out to his satisfaction.

4.36.2 Rounding off amounts: The total amount due shall be rounded off to the nearest rupee i.e. sums less than 50 paise shall be omitted and sums of 50 paise and more upto Rs. 1/- will be reckoned as Rs. 1/-.

4.36.3 On-Account Payments not prejudicial to final settlements: "On Account" payments made to the Contractor shall be without prejudice to the final making up of the accounts (except where measurement are specifically noted in the Measurement Book as "Final Measurements" and as such have been signed by the Contractor) and shall in no respect be considered or used as evidence of any facts stated in or to be inferred from such account not of any particular quantity of work having been executed not of the manner of its execution being satisfactory.

- 4.36.4 Manner of payment: Unless otherwise specified payments to the Contractor will be made through RTGS.
- 4.36.5 90% (Ninety percent) of the progress payment for each item of Schedule of Works/Services shall be made after successful completion of work at various locations, joint measurement and testing to the satisfaction of Engineer/Section Incharge.
- 4.36.6 10% (Ten percent) value of the works/services completed shall be made after the issue of Provisional Acceptance Certificate

4.37. Maintenance of works:

The contractor shall at all times during the progress and continuance of the works and also for the period of warranty specified in the tender form after the date of passing of the certificate of completion by the Engineer/Section Incharge or any earlier date subsequent to the completion of the works that may be fixed by the Engineer/Section Incharge be responsible for and effectively maintain and uphold in good substantial sound and perfect conditions all and every part of the work and shall make good from time to time and at all times as often as the Engineer/Section Incharge shall require. Any damage or defect that may during the above period arise in or be discovered or be in any way connected with the works, provided that such damage or defect is not directly caused by errors in the contract documents, act of providence or insurrection or civil riot, and the Contractor shall be liable for and make good to the RailTel or other persons legally entitled thereto whenever required by the Engineer/Section Incharge so to do, all losses, damage, costs and expenses they or any of them may incur or be put or be liable, by reason or in consequence of the operations of the contractor or of his failure in any respect. For this purpose the tenderer will submit their strategy for providing maintenance support including the staff that will be available along with the set of spares for attending to various faults/problems during maintenance period.

4.38 Certificate of Completion of works

- 4.38.1 As soon as in the opinion of the Engineer/Section Incharge the works shall have been substantially completed of a Block and has satisfactorily passed any final test or tests that may be prescribed, the Engineer/Section Incharge shall issue a Provisional Acceptance Certificate in respect of the works and period of warranty shall commence from the date of issue of Last Provisional Acceptance Certificate for last completed sub-section (block) and completion of the work of whole section of District. Minor defects pointed out while issuing PACs shall be attended by the contractor within reasonable period of time to the satisfaction of Engineer/Section Incharge.
- 4.38.2 Contractor not absolved by Provisional completion Certificate (PAC): The Certificate of completion in respect of the works referred to in Para 4.38 of this clause shall not absolve the Contractor from his liability to make good any defect, imperfection, shrinkages or faults which may appear during the period of maintenance specified in the tender arising in the opinion of the Engineer/Section Incharge from materials or workmanship not in accordance with the drawing or specifications or instructions of the Engineer/Section Incharge, which defect, imperfections, shrinkages or faults shall upon the direction in writing of the Engineer/Section Incharge, be amended and made good by the Contractor at his own cost; and in case of default on the part of Contractor the Engineer/Section Incharge may employ, labour and material or appoint another Contractor to amend and make good such defect, imperfections, shrinkages and faults and all expenses consequent thereon and incidental thereto shall be borne by the Contractor and shall be recoverable from any moneys due to him under the contract.

4.39. Approval only by Final Acceptance Certificate (FAC)

No certificate other than Final Acceptance Certificate referred to in Para 4.40 of the conditions shall be deemed to constitute approval of any work or other matter in respect of which it is issued or shall be taken as an admission of the due performance of the contract or any part thereof or of the

accuracy of any demand made by the Contractor or of additional varied work having been ordered by the Engineer/Section Incharger nor shall any other certificate conclude or prejudice any of the powers of the Engineer/Section Inchargers.

4.40. Final Acceptance Certificate:

4.40.1 The contract shall not be considered as completed until a maintenance Certificate shall have been signed by the Engineer/Section Incharger stating that the works have been completed and maintained to this satisfaction. The maintenance certificate shall be given by the Engineer/Section Incharger upon the expiration of the period of or as soon thereafter as any work ordered during such period pursuant to Para 4.38.2 of these conditions shall have been completed to the satisfaction of the Engineer/Section Incharger and full effect shall be given to this Clause notwithstanding the taking possession of or using the works or any part thereof by the RailTel.

4.40.2 **Cessation of RailTel's Liability:** The RailTel shall not be liable to the Contractor for any matter arising of or in connection with the contract of the execution of the works unless the Contractor shall have made a claim in writing in respect thereof before the issue of the Maintenance Certificate (FAC) under this clause.

4.40.3 **Unfulfilled obligations** - Notwithstanding the issue of the Maintenance Certificate the Contractor and (subject to Para 4.40.2) RailTel shall remain liable for the fulfillment of any obligation incurred under the provision of the contract prior to the issue of the maintenance Certificate which remains unperformed at the time such certificate is issued and for the purposes of determining the nature and extent of any such obligations the contract shall be deemed to remain in force between the parties thereto.

4.41. Final payment

4.41.1 On the Engineer/Section Incharger's certificate of completion in respect of the works an adjustment shall be made and the balance of account based on the Engineer/Section Incharger or the Engineer/Section Incharger's representative's on the accepted schedule or rates and for extra works on rates determined under Para 4.30 of these conditions shall be paid to the Contractor subject always to any deduction which may be made under these presents and further subject to the Contractor having delivered to the Engineer/Section Incharger either a full account in detail of all claims he may have on the RailTel in respect of the works or having delivered "No Claim" Certificate and the Engineer/Section Incharger having after the receipt of such account given a certificate in writing that such claim are correct, that the whole of the works to be done under the provisions of the Contracts have been completed, that they have been inspected by him since their completion and found to be in good and substantial order, that all properties, works and things removed, disturbed or injured in consequence of the works have been properly replaced and made good and all expenses and demands incurred by or made upon the RailTel for or in the respect of damage or good and all expenses and demands incurred by or made upon the RailTel for or in the respect of damage or good and all expenses and demands incurred by or made upon the RailTel for or in the respect of damage or loss by from kin consequence of the works, have been satisfied agreeably and in conformity with the contract.

4.41.2 **Post payment Audit** – It is an agreed term of contract that the RailTel reserves to itself the right to carry out a post-payment audit and or technical examination of the works and the final bill including all supporting vouchers, abstracts, etc., and to make a claim on the contractor for the refund any excess amount paid to him if as a result of such examination any over-payment to him is discovered to have been made in respect of any work done or alleged to have been done by him under the contract.

4.41.3 Production of vouchers etc. by the Contractor

(i) For a contract of more than one crore of rupees, the contractor shall, whenever required, produce for examination by the Engineer/Section Incharger any quotation, invoice, cost or

other account, book of accounts, voucher, receipt letter, memorandum, paper of writing or any copy of or extract from any such document and also furnish information and returns verified in such manner as may be required in any way relating to the execution of this contract or relevant for verifying or ascertaining cost of execution of this contract (the decision of the Engineer/Section Incharge on the question of relevancy of any documents, information or return being final and binding on the parties). The contractor shall similarly produce vouchers, etc., if required to prove to the Engineer/Section Incharge, that materials supplied by him, are in accordance with the specifications laid down in the contract.

- (ii) If any portion of the work in a contract of value more than one crore of rupees be carried out by the a sub -contractor or any subsidiary or allied firm or company (as per Para 4.6 of the General Conditions of Contract), the Engineer/Section Incharge shall have power to secure the book of such sub-contract or any subsidiary or allied firm or company, through the contractor, and such book shall be open to his inspection.
- (iii) The obligations imposed by Para 4.41.3 (i) and (ii) above is without prejudice to the obligations of the contractor under any statute rules or orders binding on the contractor.

4.41.4 Withholding and lien in respect of sums claimed

Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the contractor, the RailTel shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any, deposited by the contractor and for the purpose aforesaid, the RailTel shall be entitled to withhold the said security deposit or the security if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the RailTel shall be entitled to withhold and have a lien to the extent of the such claimed amount or amounts referred to supra from any sum or sums found payable or which at any time thereafter may become payable to the contractor under the same contract or any other contract with this or any other RailTel or any Department of the Central Government pending finalization or adjudication of any such claim. It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above, by the RailTel's will be kept withheld or retained as such by the RailTel till the claim arising out of or under the contract is determined by the arbitrator (if the Contract is covered by the arbitration clause) or by the competent court as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to supra and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the RailTel shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company, as the case may be whether in his individual capacity or otherwise.

- 4.41.4.1 Lien in respect of claims in Other Contracts** – Any sum of money due and payable to the contractor (Including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the RailTel, against any claim of this or any other RailTel or any other Department of the Central Government in respect of payment of a sum of money arising out of or under any other contract made by the contractor with this or any other Department of Central Government. It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the RailTel will be kept withheld or retained as such by the RailTel till the Claim arising out of or under any other contract is either mutually settled or determined by arbitration, if the other contract is governed by arbitration clause or by the competent court as the case may be and contractor shall have no claim for interest of money withheld or retained under this clause and duly notified as such to the contractor.

4.42. Signature on Receipts for Amounts

Every receipt which may become payable or for any security which may become transferable to the Contractors under these presents, shall, if signed in the partnership name by any one of the partners of a Contractors firm be a good and sufficient discharge to the RailTel in respect of the moneys or security purported to be acknowledged thereby and in the event of death of any of the Contractor partners during the pendency of the contract it is hereby expressly agreed that every receipt by any one of the surviving Contractor partners shall if so signed as aforesaid be good and sufficient discharge as aforesaid provided that nothing in this clause contained shall be deemed to prejudice or effect any claim which the RailTel may hereafter have against the legal representative of any contractor partner so dying, for or in respect of any breach of any of the conditions of the contract, provided also, that nothing in this clause contained shall be deemed to prejudice or effect the respective rights or obligations of the Contractor partners and of the legal representative of any deceased Contractor partners interest.

4.43. LABOUR

4.43.1 Wages to Labour – The Contractor shall be responsible to ensure compliance with the provisions of the Minimum Wages Act, 1948 (hereinafter referred to as the "said Act") and the Rules made there-under in respect of any employees directly or through petty contractors or sub-contractors employed by him on road construction or in building operations or in stone breaking or stone crushing for the purpose of carrying out this contract. If in compliance with the terms of the contract, the contractor supplied any labour to be used wholly or partly under the direct orders and control of the RailTel whether in connection with any work being executed by the contractor or otherwise for the purpose of the RailTel such labour shall, for the purpose of this clause, still be deemed to be persons employed by the Contractor. If any moneys shall as a result of any claim or any claim or application made under the said Act be directed to be paid by the RailTel's, such moneys shall be deemed to be moneys payable to the RailTel by the Contractor and on failure by the Contractor to repay any moneys paid by it as aforesaid within seven days after the same shall have been demanded, the RailTel's shall be entitled to recover the same form any moneys due or accruing to the contractor under this or any other Contractor with the RailTel's.

4.43.2 Apprentices Act – The Contractor shall be responsible to ensure compliance with the provisions of the Apprentices Act 1961 and the Rules and Orders issued there- under from time to time in respect of apprentices directly through petty contractors or sub-contractors employed by him for purpose of carrying out the contract. If the Contractor directly or through petty contractor or sub-contractors fails to do so, his failure will be a breach of the contract and the RailTel may, in its discretion, rescind the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation of the provisions of the Act.

4.44. Provisions of Payments of Wages Act

The Contractor shall comply with the provisions of the Payment of Wages Act, 1936 and the rules made there under in respect of all employees directly or through petty contractors or sub-contractors employed by him in the works. If in compliance with the terms of the contract, the contractor directly or through petty contractors or sub -contractors shall supply any labour to be used wholly or partly under the direct orders and control of the Engineer/Section Inchager whether in connection with the works to be executed hereunder or otherwise for the purpose of the Engineer/Section Inchager such labour shall nevertheless be deemed to comprise persons employed by the contractor, and any moneys which may be ordered to be paid by the Engineer/Section Inchager shall be deemed to be moneys payable by the Engineer/Section Inchager on moneys due to the contractor in terms of the contract. The RailTel shall be entitled to deduct from any moneys due to the contractor (Whether under this contract or any other contract all moneys paid or payable by the RailTel by way of compensation of aforesaid or for costs of expenses in connection with any claim thereto and the decision of the Engineer/Section Inchager upon any question arising out of the effect or force of this clause shall be final and binding upon the contractor.

4.44.1 Provision of Contract Labour (Regulation and Abolition) Act, 1970

- (1) The Contractor shall comply with the provision of the Contract Labour (Regulation and Abolition) Act, 1970 and the Contract Labour (Regulation and Abolition) Act, Central Rules, 1971 as modified from time to time, whenever applicable and shall also indemnify the RailTel from and against any claims under the aforesaid Act and the Rules
- (2) The Contractor shall obtain a valid license under the aforesaid Act as modified from time to time before the commencement of the work and continue to have a valid license until the completion of the work. Any failure to fulfill this requirement shall attract the penal provision of the Contract arising out of the resultant non- execution of the work.
- (3) The Contractor shall pay to the labour employed by him directly or through sub- contractors the wages as per provisions of the aforesaid Act and the Rules wherever applicable. The Contractor shall notwithstanding the provisions of the contract to the contrary, because to be paid the wages to labour indirectly engaged on the work including any engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- (4) In respect of all labour directly or indirectly employed in the work for performance of the contractor's part of the contract the contractor shall comply with or cause to be complied with the provisions of the aforesaid Act and the Rules wherever applicable.
- (5) In every case in which, by virtue of the provisions of the aforesaid Act or the Rules, the RailTel is obliged to pay any amount of wages to a workmen employed by the contractor or his sub-contractor in execution of the work or to incur any expenditure in providing welfare and health amenities required to be provided under the aforesaid Act and the Rules or to incur any expenditure in providing welfare and health amenities required to be provided under the aforesaid Act the Rules or to incur any expenditure on account of the contingent liability of the RailTel due to contractor's failure to fulfill his statutory obligations under the aforesaid Act or the Rules the RailTel will recover from the contractor, the amount of wages so paid or the amount of expenditure so incurred, and without prejudice to the rights of the RailTel under section 20, sub-section (2) and section 2 sub - section (4) of the aforesaid Act, the RailTel shall be at liberty to recover such amount or part thereof by deducting it from the security deposit and/or from any sum due by the RailTel to the contractor whether under the contract or otherwise. The RailTel shall not be bound to contest any claim made against it under sub-section (1) of section 20 and sub-section (4) of section 21 of the aforesaid Act except on the written request of the contractor and upon his giving to the RailTel full security for all costs for which the RailTel might become liable in contesting such claim. The decision of the RailTel regarding the amount actually recoverable from the contractor as stated above shall be final and binding on the contractor.

4.45. Reporting of Accidents to Labour

The Contractor shall be responsible for the safety of all employees directly or through petty contractors or sub-contractors employed by him on the works and shall report serious accidents to any of them however and wherever occurring on the works to the Engineer/Section Incharge or the Engineer/Section Incharge's Representative and shall make every arrangement to render all possible assistance.

4.46. Provisions of Workmen's Compensation Act

In every case in which by virtue of the provision of Section 12 sub-section (1) of the Workmen's Compensation Act, 1923, RailTel is obliged to pay compensation to a workman directly or through the petty Contractor employed by the Contractor or sub- contractor in executing the work, RailTel will recover from the contractor the amount of the compensation so paid, and, without prejudice to the right of RailTel under Section 12 sub-section (2) of the said Act. RailTel shall be at liberty to

recover such amount or any part thereof by deducting it from the security deposit or from any sum due by RailTel to the Contractor whether under these conditions or otherwise, RailTel shall not be bound to contest any claim made against it under Section 12, sub-section (1) of the said Act except on the written request of the Contractor and upon his giving to RailTel full security for all costs for which RailTel might become liable in consequence of contesting such claim.

4.47. RailTel not to provide quarters for Contractor

No quarters shall be provided by the RailTel for the accommodation of the contractor or any of his staff employed on the work.

4.48. Labour camps

(1) The Contractor shall at his own expense make adequate arrangements for the housing, supply of drinking water and provision of latrines and urinals for his staff and workman directly or through the petty contractors or sub-contractors and for temporary crèche (Bal-Mandir) where 50 or more women are employed at a time. Suitable sites on Railway/RailTel land, if available, may be allotted to the Contractor for the erection of labour camps either free of charge or on such terms and conditions that may be prescribed by the RailTel. All camp sites shall be maintained in clean and sanitary conditions by the Contractor at his own cost.

(2) Compliance to Rules for Employment of Labour

The Contractor(s) shall conform to all laws, bye-laws, rules and regulations for the time being in force pertaining to the employment of local or imported labour and shall take all necessary precautions to ensure and preserve the health and safety of all staff employed directly or through petty Contractors or sub -contractors on the works.

(3) Preservation of Peace – The Contractor shall take requisite precautions and use his best endeavors to prevent any riotous or unlawful behavior by or amongst his workmen and others employed directly or through petty contractor or sub- contractors on the works and preserve the health and safety of all staff employed directly or through petty Contractors or sub -contractors on the works.

(4) Sanitary Arrangement – The contractor shall obey all sanitary rules and carry out all sanitary measures that may time to time be prescribed by the RailTel Medical Authority and permit inspection of all sanitary arrangements at all times by the Engineer/Section Inchager, the Engineer/Section Inchager's Representative or the Medical Staff of the RailTel. Should the Contractor fail to make adequate sanitary arrangements, these will be provided by the RailTel and the cost therefore recovered from the contractor.

(5) Outbreak of Infectious Disease – The Contractor shall remove from his camp such labour and their families as refuse protective inoculation and vaccination when called upon to do so by the Engineer/Section Inchager or the Engineer/Section Inchager's Representative on the advice of the Railway/RailTel Medical Authority. Should Cholera, Plague or other infectious disease break out, the Contractor shall burn the huts, beddings, clothes and other belongings of or used by the infected parties and promptly erect new huts on healthy sites as required by the Engineer/Section Inchager, failing which within the time specified in the Engineer/Section Inchager's requisition, the work may be done by the RailTel and the cost therefore recovered from the Contractor.

(6) Treatment of Contractor's staff in Railway Hospitals – Deleted

(7) Medical facilities at site – The contractor shall provide medical facilities at the site as may be prescribed by the Engineer/Section Inchager on the advice of the medical authority in relation to the strength of the contractor's resident staff, and workmen.

- (8) **Use of Intoxicants** – The sale of ardent spirits or other intoxicating beverages upon the work or in any of the buildings, encampments or tenements owned, occupied by or within the control of the Contractor or any of his employees shall be forbidden and the Contractor shall exercise his influence and authority to the utmost extent to secure strict compliance with this condition.
- (9) **Non-employment of Female Labour** – The contractor shall see that the employment of female labour in cantonment areas, particularly in the neighborhood of soldier's barracks, should be avoided as far as possible.
- (10) **Restrictions on the employment of retired Engineer/Section Inchagers of Railway/Govt. services within two years of their Retirement**– The contractor shall not, if he is a retired government Engineer/Section Inchager of Gazetted rank, who has not completed two years from the date of retirement, in connection with his contract in any manner whatsoever without obtaining prior permission of the President and if the contractor is found to have contravened this provision, it will constitute a breach of contract Administration will be entitled to terminate the contract at the risk and cost of the contractor and forfeit his security deposit.

4.49. Non-Employment of Labourers below the age of 15

- (1) The Contractor shall not employ children below the age of 15 as labourers directly or through petty contractors or sub-contractors for the execution of work.
- (2) **Medical Certificate of Fitness for Labour** – It is agreed that the contractor shall not employ a person above 15 and below 19 years of age for the purpose of execution of work under this contract unless a medical certificate of fitness in the prescribed form granted to him by a certifying surgeon certifying that he is fit to work as an adult is obtained and kept in the custody of the contractor or a person nominated by him in this behalf and the person carries with him, while at work, a token giving a reference to such certificate. It is further agreed that the responsibility for having the adolescent examined medically at the time of appointment or periodically till he attains the age of 19 years shall devolve entirely on the contractor and all the expense to be incurred on this account shall be borne by him and no fee shall be charged from the adolescent or his parent for such medical examination.
- (3) **Period of Validity of Medical Fitness Certificate** - A certificate of fitness granted or renewed for the above said purposes shall be valid only for a period of one year at a time. The certifying surgeon shall revoke a certificate granted or renewed if in his opinion the holder of it is, no longer fit for work in the capacity stated therein. Where a certifying surgeon refuses to grant or renew a certificate or revoke a certificate, he shall, if so required by the person concerned, stated his reasons in writing for doing so.
- (4) **Medical Re-examination of Labourer** - Where any official appointed in this behalf by the Ministry of Labour is of the opinion that any person employed in connection with the execution of any work under this contract in the age group 15- 19 years is without a certificate of fitness or is having a certificate of fitness but no longer fit to work in the capacity stated in the certificate, he may serve on the Contractor, or on the person nominated by him in this regard, a notice requiring that such person shall be examined by a certifying surgeon and such person shall not, if the concerned official so directs, be employed or permitted to do any work under this contract unless he has been medically examined and certified that he has been granted a certificate of fitness or a fresh certificate or a fresh certificate of fitness, as the case may be.

4.50. Determination of Contract

- 4.50.1 **Right of RailTel to determine the contract:** The RailTel shall be entitled to determine and terminate the contract at any time, should in the RailTel's opinion, the cessation of work becomes necessary owing to paucity of funds or from any other cause whatever, in which case the value of

approved materials at site and of work done to date by the Contractor will be paid for in full at the rate specified in the contract. Notice in writing from the RailTel of such determination and the reasons therefore shall be conclusive evidence thereof.

4.50.2 **Payment on determination of contract:** Should the contract be determined under Para 4.51.1 and the Contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the work, the RailTel shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfaction of the Engineer/Section Incharge. The RailTel's decision on the necessity and propriety of such expenditure shall be final and conclusive.

4.50.3 The contractor shall have no claim to any payment of compensation or otherwise, howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of determination of contract.

4.51. **TERMINATION OF CONTRACT OWING TO DEFAULT OF CONTRACTOR:**

4.51.1 (A) If the Contractor:

- (i) becomes bankrupt or insolvent, or
- (ii) make an arrangement with or assignment in favour of his creditors, or
- (iii) being a Company or Corporation, go into liquidation (other than voluntary), liquidation for the purpose of amalgamation or reconstruction, or
- (iv) have an execution levied on his goods or property on the works, or assign the contract or any part thereof otherwise than as provided in Para 5.21 of SCC, or
- (v) have an execution levied on his goods or property on the works, or assign the contract or any part thereof otherwise than as provided in Para 5.21 of SCC, or
- (vi) persistently disregard the instructions of the RailTel's Engineer/Section Incharge with regard to work quality or progress during execution of work or contravene any provision of the contract, or
- (viii) fail to adhere to the agreed programme of work by a margin of 10% of the Stipulated period, or fail to remove materials from the site or to pull down and replace the work after receiving from the Engineer/Section Incharge's notice to the effect that the said materials or works have been condemned or rejected, or
- (ix) fail to take steps to employ competent or additional staff and labour as required under Para 4.26 of tender document.
- (x) fail to afford the Engineer/Section Incharge or Engineer/Section Incharge's representative proper facilities for inspecting the works or any part thereof as required under Para 4.21 of tender document, or
- (xi) Promise offer or give any bribe, commission, gift or advantage either himself or through his partner, agent or servant to any officer or employee of RailTel or any person on his or on their behalf in relation to the execution of this or any other contract with the RailTel,
- (xii) At any time after the tender relating to the contract has been signed and submitted by the contractor, being a partnership firm admit as one of its partners or employ under it or being an incorporated company elect or nominate or allow to act as one of its directors or employ under it in any capacity whatsoever any retired Engineer/Section Incharge of the gazetted rank or any other retired gazetted officer working before his retirement, whether in the executive or administrative capacity, or whether holding any pensionable post or not, in the Engineer/Section Incharging Department of the Railways for the time being owned and administered by the President of India before the expiry of two years from the date of retirement from the said service of such Engineer/Section Incharge or Officer unless such Engineer/Section Incharge or Officer has obtained permission from the President of India or any officer duly authorized by him in this behalf to become a partner or a director or to take employment under the contract as the case may be, or

(B) Fail to give at time of submitting the said tender:

- (a) The correct information as to the date of retirement of such retired Engineer/Section Incharge or retired officer from the said service, or as to whether any such retired Engineer/Section Incharge or

- retired officer was under the employment of the contractor at the time of submitting the said tender, or
- (b) the correct information as to such Engineer/Section Inchagers or officers obtaining permission to take employment under the contractor, or
 - (c) being a partnership firm the correct information as to, whether any of its partners was such a retired Engineer/Section Inchager or retired officer, or
 - (d) being an incorporated company, the correct information as to, whether any of its directors was such a retired Engineer/Section Inchager or retired officer, or
 - (e) being such a retired Engineer/Section Inchager or retired officer suppress and not disclose at the time of submitting the said tender the fact of his being such a retired Engineer/Section Inchager or a retired officer or make at the time of submitting the said tender a wrong statement in relation to his obtaining permission to take the contract or if the contractor be a partnership firm or an incorporated company to be a partner or director of such firm or company as the case may be or to seek employment under the contractor. Then and in any of these said clauses, the Engineer/Section Inchager on behalf of the RailTel may serve the Contractor with a notice in writing to that effect and if the Contractor does not, within 7 days after the delivery to him of such notice, proceed to make good his default in so far as the same is capable of being made good and carry on the work or comply with such directions as aforesaid to the entire satisfaction of the Engineer/Section Inchager, the RailTel shall be entitled after giving 48 hours notice in writing under the hand of the Engineer/Section Inchager to rescind the contract as a whole or in part or parts (as may be specified in such notice) and adopt either or both the following courses: A final termination notice will be issued by RailTel after expiry of 48 hrs notice.

4.51.2 RIGHT OF RAILTEL AFTER TERMINATION OF CONTRACT OWING TO DEFAULT OF CONTRACTOR:

In the event of any or several of the courses, referred in Para 4.51.1 of tender document above, being adopted:

- (a) The Contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance of the contract and Contractor shall not be entitled to recover or be paid any sum for any works thereto not actually performed under the contract, unless or until the Engineer/Section Inchager shall have certified the performance of such work and the value payable in respect thereof and the Contractor shall only be entitled to be paid the value so certified.
- (b) The Engineer/Section Inchager or Engineer/Section Inchager's Representative shall be entitled to take possession of any materials, tools, implements, machinery or buildings on the works or on the property on which these are being or ought to have been executed, and to retain the (employ the same) in the further execution of the works or any part thereof until the completion of the works without the Contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.
- (c) The Engineer/Section Inchager shall, as soon as may be practicable after removal of the Contractor fix and determine expert or by or after reference to the parties or after such investigation or enquiries as he may consider fit to make or institute and shall certify what amount (if any) has at the time of termination of the contract been reasonably earned by or would reasonably accrue to the Contractor in respect of the work then actually done by him under the contract what was the value of any unused or partially used materials, any constructional plants and any temporary works upon the site. The legitimate amount due to the contractor after making necessary deductions and certified by the Engineer/Section Inchager should be released expeditiously.

4.52. Matters finally determined by the RailTel: All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of the work or after its completion and whether before or after the determination of the contract shall be referred by

the contractor to the RailTel and the RailTel shall within 120 days receipt of the Contractor's representation make and notify decisions on all matters referred to by the contractor in writing provided that matters for which provision has been made in Para 4.14, 4.18.5, 4.22, 4.35(a), 4.44, 4.44.1(5), 4.46, 4.50.1, 4.50.2 and 4.51.1(A) of General Condition of Contract or in any clause of the Special Conditions of the Contract shall be deemed as 'excepted matters' and decisions of the RailTel's authority, thereon shall be final and binding on the contractor provided further that 'excepted matters' shall stand specifically excluded from the purview of the arbitration clause and not be referred to arbitration.

4.53. SETTLEMENT OF DISPUTE AND ARBITRATION

4.53.1 Any dispute or difference whatsoever arising between the parties out of or relating to the construction, meaning, scope, operation or effect of this contract or the validity or the breach thereof shall be settled by a sole arbitrator in accordance with provisions contained in Arbitration and Conciliation Act, 1996 as amended and the award made in pursuance thereof shall be binding on the parties. The venue of such arbitration or proceedings thereof shall be New Delhi.

4.53.2 All arbitration proceedings shall be conducted in English. Resources against any Arbitral award so rendered may be entered into court having jurisdiction or application may be made to such court for the order of enforcement as the case may be.

4.53.3 The Arbitral Tribunal shall consist of the sole Arbitrator if the value of claim is upto Rs. 10 Lakhs. The arbitrator will be appointed by the Managing Director of RailTel Corporation of India Ltd. If the value of claim or amount under dispute is more than Rs. 10 Lakhs, the matter shall be referred to the adjudication of arbitral council. Chairman cum Managing Director/RailTel shall furnish a panel of three names to the contractor, out of which the contractor will recommend one name to be his nominee and then Chairman cum Managing Director/RailTel shall appoint out of the panel, one name as RailTel's nominee and these two arbitrators with mutual consent appoint a third arbitrator who shall act as deciding. The award of the sole arbitrator or the Arbitral council, as the case may be, shall be final and binding on both the parties, i.e. Contractor and RailTel Corporation of India Ltd.

4.53.4 Each of the parties agree that no withstanding that the matter may be referred to Arbitrator as provided therein, the parties shall nevertheless pending the resolution of the controversy or disagreement continue to fulfill their obligation under this Agreement so far as they are reasonably able to do so.

4.54. INSURANCE & RISK

The Contractor shall take Insurance Policy to cover third party liability (claims arising out of injury and / or property damage) for LOA, value (per event / aggregate limit i.e. 1:1) including cross liability. Where such property is insured by the Contractor against loss or fire at the request of the Purchaser such insurance shall be deemed to be effected by way of additional Precaution and shall not prejudice the liability of the Contractor as aforesaid. The validity of this insurance shall be till the completion of warranty Period.

4.55. Taxes, Duties, Octroi, Levies etc.

The quoted rate shall be inclusive of all taxes, duties, service tax, octroi, levies, work contract tax, VAT if any etc. till the completion of the contract and the CONTRACTOR shall not be eligible for any compensation on this account. Any change in statutory duties/taxes, in position / removal of any duty/taxes shall be to RailTel's account.

CHAPTER – 5
SPECIAL CONDITIONS
OF
CONTRACT
I N D E X

Para	Subject
5.1.	Tender Document
5.2.	Agreement
5.3.	Security Deposit
5.4.	Contractor's Office & Stores depot
5.5	Use of Railway land
5.6.	Program of work.
5.7	Competent Supervisors
5.8	Stores to be supplied by RailTel
5.9	Engagement of Qualified Engineer/Section Incharge
5.10	Test & Measuring Instruments, Special tools & Installation material
5.11	Stores to be supplied by contractor
5.12	Supply of Technical Literatures, Documentation Drawings & Completion Plan etc.
5.13	Spares
5.14	Long term availability of spares & System support
5.15	Quality assurance
5.16	Not used
5.17	Inspection of materials
5.18	Inspection of works
5.19	Quantum of work and variation in Quantities
5.20	Not used
5.21	Subletting and assignment

- 5.22 Execution of works
- 5.23 Not used
- 5.24. Maintenance of works
- 5.25. Clearance of site
- 5.26. Provisional Acceptance
- 5.27. Maintenance of work till issue of Last PAC
- 5.28. Final Acceptance
- 5.29. Warranty
- 5.30. Training-NA
- 5.31. Infringement of Patents
- 5.32. License as per Govt. of India Contract Labour Act
- 5.33. Defaults and Delays
- 5.34. Loss Sustained Due to Default and Delay
- 5.35. Penalty for Delay in Completion
- 5.36. Adherence of time schedule
- 5.37. Contractors liabilities for Costs and Damages
- 5.38. Prices
- 5.39. Measurement of works
- 5.40. Terms of Payments
- 5.41. Final Payment
- 5.42. Final Settlement
- 5.43. Certificate for CENVAT BENEFITS on bills
- 5.44. Deductions from On Account Payment Bills
- 5.45. Taxes
- 5.46. Mobilization Advance
- 5.47. Force Majeure Clause
- 5.48. Settlement of dispute and Arbitration.

CHAPTER - 5

SPECIAL CONDITIONS OF CONTRACT

5.1. TENDER DOCUMENTS

5.1.1 The goods and services required, bidding procedure and contract terms are prescribed in the tender documents. The set of tender documents issued for the purpose of bidding includes following together with any addendum and corrigendum thereto.

5.1.2 If the Tender submitted by a Tenderer is accepted and the contract awarded to the Tenderer, the various works coming under the purview of the contract shall be governed by tender documents mentioned above.

5.1.3 Any special conditions stated by the Tenderer in the covering letter submitted along with the tender shall be deemed to be a part of the Contract to such extent only as have been explicitly accepted by the RailTel.

5.2. AGREEMENT

5.2.1 The successful Tenderer shall within 15 days after having been called upon by notice to do so be bound to execute an agreement based on accepted rates and conditions, in such form as the RailTel may prescribe, and lodge the same with the RailTel together with the conditions of contract, specifications and Schedule Of Requirements referred to therein duly completed. The form for agreement is included in, Chapter - 6 (Form No.3).

5.2.2 In the event of any tenderer whose tender is accepted, refused to execute the Contract documents as herein before provided RailTel may determine that such tenderer has abandoned the contract and thereupon his tender and the acceptance thereof shall be treated and RailTel shall be entitled to forfeit the full amount of the earnest money and to recover the liquidated damage for such default.

5.3 SECURITY DEPOSIT

Refer para 4.12 of chapter-4.

5.6. PROGRAMME OF WORK

5.6.2. The contractor will program his work in such a manner so as not to interfere in the working and movement of traffic.

5.10. TEST & MEASURING INSTRUMENTS AND SPECIAL TOOLS ETC.

5.10.1 Special tools & instruments required for installation and commissioning of the work as detailed in preamble shall be arranged by contractor at his own cost.

5.10.2 All tests and measuring instruments and other arrangements required for carrying out all the acceptance tests etc shall be provided by the contractor at his own cost.

5.12 SUPPLY OF TECHNICAL LITERATURES, DOCUMENTATION DRAWINGS, INSTRUCTION BOOK & COMPLETION PLANS ETC.

5.12.1 The contractor shall supply complete documentation in Electronic form and Hard Copies. One set of tracings with 3 sets of prints for cable route plans drawn in CAD giving complete details. Necessary corrections as desired shall be done and final tracings should get approved. After completion of work, the As Built Drawings shall be made indicating OFF sets from nearest Landmark. The offsets, route markers, joint & coupler's locations shall also be pointed out on the drawing & any other landmark as per EIC.

- 5.12.2 The contractor shall also submit the drawings of protective works like bridges/HDD/track, or Road crossing , LC gate, ROB, RUB , joint pits etc. proposed and being executed at site for approval of RailTel /Railways.

The cable route plan should also contain information regarding important chainages from relevant land mark, location of jointing chambers, pull through chambers, culverts bridges etc RCC and GI Locations, locations of road crossing/track crossings preferably from two independent reference points.

- 5.13 **SPARES Deleted.**

- 5.14 **LONG TERM AVAILABILITY OF SPARES AND SYSTEM SUPPORT Deleted.**

- 5.15. **QUALITY ASSURANCE**

All the materials supplied are technically inspected and accepted by purchase's representatives. In the event of RailTel waving off the inspection, the quality assurance department of the manufacturer shall carry out all the tests as per the specification and issue a certificate indicating clearly the test results and the adherence to the technical specifications. This is without prejudice to the purchaser's right to accept or reject the supplies if not found in conformity to its requirement.

- 5.16. **Not used.**

- 5.17 **INSPECTION OF MATERIALS: Consignee only**

- 5.18. **INSPECTION OF WORKS**

Method of measurements:

The measurement of the work shall be done for activity wise as and when the item of work is ready for measurement. The methods of measurements of various items are enumerated as under:

Measurement of depth of trenches:

Measurement of depth of trenches & payment details on prorata basis:

The EIC has to approve such exceptions with reasons for non achieving the desired depth.

Measurement of Lengths and profiles of strata and protection: - The measurements of length of trenches are on running meter basis, irrespective of type of soil encountered while digging. The type of protection provided (item code-wise) in a segment shall be recorded in the site register in the sheet provided for this purpose.

Measurement of length of cable: - The length of cables laid in trenches, through pipes and through ducts shall be measured by use of RODO Meter/Measuring Tape. The length should be cross verified with the marking of lengths on the cables. The lengths shall be recorded in sheet provided in the site register.

Measurement of other items: - The measurement/numerical details of other items shall be recorded in the sheets provided for respective items viz.

- Digging of joint pit and preparation of joint chambers along with its Pre Cast RCC type.
- Fixing, Painting and sign writing of route/joint marker.
- Termination of Cable in equipment room and no. of joints.

The contractor shall sign all the measurement recorded in the site register. The final measurement recorded in the Measurement Book, and signed by the contractor which will consider this as an

acceptance. In case contractor fails to attend at the measurements or fails to countersign or to record the difference within a week, than in any such events the measurements taken by Engineer/Section Incharge-In-Charge or by the subordinate as the case may be shall be final and binding on the contractor and the contractor shall have no right to dispute the same.

The Engineer/Section Incharge-in-charge before passing the bill for sections covered by each set of measurement may carry out test check by re-opening trench at as many locations as necessary as specified in document 'procedures for underground cable construction' and bills will be passed only when he is personally satisfied of the correctness of entries in the "Measurement Book" and also when he is satisfied of other aspects of the work as per the terms of the contract. The contractor shall provide the necessary assistance of labour for reopening of trench for test check. Separate payment shall not be made to the contractor for excavation of such test checks; however such test pits shall not be more than 10% of the cable laying work. Measurement of the work of cable pulling through pipe/duct will be taken equal to the length of the pipe/duct through which the cable has been pulled and not the total length of the cable pulled through pipe/duct.

5.19. QUANTUM OF WORK AND VARIATION IN QUANTITIES

5.19.1. **Modification to contract to be in writing:** In the event of any of the provisions of the contract requiring to be modified after the contract documents have been signed, the modifications shall be made in writing and signed by the RailTel and the Contractor and no work shall proceed under such modifications until this has been done. Any verbal or written arrangement abandoning, modifying, extending, reducing or supplementing the contract or any of the terms thereof shall be deemed conditional and shall not be binding on the RailTel unless and until the same is incorporated in a formal instrument and signed by the RailTel and the Contractor, and till then the RailTel shall have the right to repudiate such arrangements.

5.19.2. **Powers of modification to contract :** The Engineer/Section Incharge on behalf of the RailTel shall be entitled by order in writing to enlarge or extend, diminish or reduce the works or make any alterations in their design, character position, site, quantities, dimensions or in the method of their execution or in the combination and use of materials for the execution thereof or to order any additional work to be done or any works not to be done and the contractor will not be entitled to any compensation for any increase/reduction in the quantities of work but will be paid only for the actual amount of work done and for approved materials supplied against a specific order.

- (i) Unless otherwise specified in the special conditions of the contract, the accepted variation in quantity of each individual item of the contract would be up to 25% of the quantity originally contracted, except in case of foundation work. The contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation whatsoever up to the limit of 25% variation in quantity of individual item of works.
- (ii) Quantities operated in excess of 125% but up to 140% of the agreement quantity of the concerned item shall be paid 98% of the rate awarded for that item in this tender.
- (iii) Quantities operated in excess of 140% of but up to 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in this tender.
- (iv) Variation in quantities of individual items beyond 150% will be executed through fresh tenders or by negotiating with the existing contractor with finance concurrence and approval of competent authority.

5.19.3 **Valuation of variations :-** The enlargements, extensions, diminution, reduction, alterations or additions referred to in sub-clause (5.19.2) of this clause shall in no degree affect the validity of the contract but shall be performed by the Contractor as provided therein and be subject to the same conditions,

stipulations and obligations as if they had been originally and expressly included and provided for in the specifications and drawings and the amounts to be paid therefore shall be calculated in accordance with the accepted schedule of rates.

5.20. Not used.

5.21. SUBLETTING AND ASSIGNMENT

5.21.1 The contractor may sublet a part of the work under this contract and enter into contract with suppliers for supply of materials. The credentials of subcontractors shall be subjected to scrutiny and approval of RailTel.

5.21.2 The contractor shall arrange for effective supervision of sub contractor's work and remain solely responsible for materials supplied and for works carried out on his behalf by the sub-contractor.

5.22. EXECUTION OF WORK

All the works shall be executed in strict conformity to the provisions of the contract document and with such explanatory detailed drawings, specifications and instructions as may be approved from time to time based on detailed design and Engineer/Section Incharge carried out by contractor in line with requirements as per contract document. The contractor shall be responsible for ensuring that the work throughout are executed in the most substantial, proper and workman like manner with the quality of material and workmanship in strict accordance with the specifications and as per sound industrial practices and to the entire satisfaction of the RailTel. Electric installation to be done as per IS 732 & IS 3043 by trained electricians familiar with Indian Govt. codes & Standards.

5.23. Not used.

5.24. MAINTENANCE OF WORKS

The contractor shall at all times during the progress and continuance of the works and also for the period of maintenance specified in the tender form and after the date of passing of the certificate of completion by the RailTel 's representative or any other earlier date subsequent to the completion of the works that may be fixed by RailTel 's representative be responsible for and effectively maintain and uphold in good, substantial, sound and perfect condition all and every part of the works and shall make good from time to time and at all times, as often as the RailTel 's representative shall require, any damage or defect that may, during the above period, arise in or be discovered or be in any way connected with the works provided that such damage or defect is not directly caused by errors in the contract documents, act of providence or insurrection or civil riot and the contractor shall be liable for and shall pay and make good to the RailTel or other persons legally entitled thereto whenever required by the RailTel 's representative so to do, all losses, damages, costs and expenses they or any of them may incur or be put or be liable to, by reason or inconsequence of the operations of the contractor or his failure in any respect.

5.25. CLEARANCE OF SITE

At the end of the work at each location the Contractor shall as a part of his Contractual obligation leave the area completely neat and clean.

5.26. PROVISIONAL ACCEPTANCE CERTIFICATE (PAC)

5.26.1 Immediately after the completion of the work the contractor shall certify and advise the RCIL in writing that the installation is (i) complete (ii) ready for satisfactory commercial service and (iii) ready to be handed over.

- 5.26.2** The test or tests specified in Technical supplement (chapter 7) will be conducted jointly by RCIL and contractor as soon as possible after receipt of advice of completion of one sub - section by RCIL from the contractor. The test schedule shall be finalized by mutual discussion between the contractor and M/S RailTel Corporation of India Limited, Secunderabad. Any component, modules, sub assemblies or equipment, losses in OFC failing during the commissioning test shall be replaced/repaired free of cost by tenderer.
- 5.26.3** Purchaser's Engineer/Section Incharge shall issue a Provisional Acceptance Certificate (PAC) for successful commissioning of each sub section covering all materials and services included in the Schedule of works after the final acceptance test as per the approved test procedures have been completed and the performance has been found to meet the specifications. PAC shall not be held up for want of minor deficiency which shall be attended by the contractor within reasonable time to the satisfaction of Engineer/Section Incharge. RailTel's decision in this respect shall be final. The Provisional Acceptance Certificate shall be signed by both the parties.
- 5.27 MAINTENANCE OF WORK TILL ISSUE OF LAST PAC**
- 5.27.1** After the work has been completed & placed in service and Provisional Acceptance certificate issued by Purchaser's Engineer/Section Incharge, the contractor shall be responsible for proper maintenance supervision of the work for a period of three months from the date of PAC.
- 5.27.3** During this period of maintenance supervision if any lacuna is noticed in the functioning, as a result of any work, the contractor free of cost will rectify the same. During such rectification if any faulty equipment/modules need replacement or repair, they shall be provided by the contractor from the set of equipment or modules that the contractor should bring to the site of installation in addition to all the materials to be supplied against this contract. Use of spare modules covered under the Schedule of material of this tender shall not be permitted to be used during installation, commissioning and period of maintenance supervision.
- 5.27.4** The contractor shall be responsible for proper maintenance of the work at his own cost until Last PAC for last completed sub-section is issued and work of whole section is completed. During this period, the tenderer shall have to attend any fiber cut etc. which takes place.
- 5.28. FINAL ACCEPTANCE CERTIFICATE (FAC)**
- 5.28.1** The final acceptance of the works completed in the whole section shall take effect from the date of expiry of the period of warranty as defined in Para 5.29 i.e. on expiry of the warranty period from the date of issue of last Provisional Acceptance Certificates or brought into commercial operation, provided in any case that the contractor has complied fully with his obligations in respect of each item under the contract.
- 5.28.2** Notwithstanding the issue of Final Acceptance Certificate the contractor and the purchaser (subject to Sub Clause as above) shall remain liable for fulfillment of any obligation incurred under the provision of the contract prior to the issue of Final Acceptance Certificate which remains unperformed at the time such certificate is issued and for determining the nature and extent of such obligation the contract shall be deemed to remain in force between the parties hereto.
- 5.29. WARRANTY**
- 5.29.1** All equipment /material supplied by the Contractor shall be guaranteed against the defects for a period of 12 months from the date of issue of Provisional Acceptance Certificate for last completed sub section/site (issue of last PAC). The contractor shall provide comprehensive warranty maintenance for all the items supplied by him against this tender.

5.29.2 Contractor will ensure availability of adequate spares for providing replacement of faulty material, items during the warranty period.

5.29.3 If any equipment/material supplied by the contractor becomes defective during the warranty, the same shall be replaced by the contractor and total cost of such replacement shall be born by the contractor. The replaced material will also be guaranteed for the remaining period of original warranty.

5.31. INFRINGEMENT OF PATENTS:

(a) The Contractor is forbidden to use any patents or registered drawings, processes or patterns in fulfilling his contract without prior consent in writing of the owner of such patents, drawings, patterns or trademarks except where these are specified by the Purchaser himself. Royalties where payable for the use of such patented processes, registered drawings or patterns shall be borne exclusively by the Contractor. The Contractor shall advise the Purchaser of any proprietary rights that may exist on such processes, drawings or patterns which he may use of his own accord.

(b) In the case of patents taken out by the Contractor of the drawings or patterns registered by him or of those patents, drawings or patterns for which he holds a license, the signing of the contract automatically gives the Purchaser the right to repair by himself the purchased articles covered by the patent or by any person or body chosen by him and to obtain from any sources he desires the component parts required by him for carrying out the repair work. In the event of infringement of any patent rights due to above action of the Purchaser he shall be entitled to claim damages from the Contractor on the grounds of any loss of any nature which he may suffer e.g. in the case of attachment because of counterfeiting.

5.32. LICENSE AS PER GOVT. OF INDIA CONTRACT LABOUR ACT

The Contractors are required to produce license as enjoined in the Government of India Contract Labour (Regulation and Abolition) Act, 1978 with latest amendments, if any. They shall not be allowed to undertake or execute any work through contract Labour except under and in accordance with a license issued under the said Act in that behalf by the authorized licensing Officer.

5.33. DEFAULTS AND DELAYS

The Contractor shall execute the work with due diligence and expedition, keeping to the approved time schedule. Should he refuse or neglect to comply with any reasonable orders given to him in writing by the Purchaser's Engineer/Section Inchargers in connection with the work or contravene the provision of the Contract or the progress of work lags persistently behind the time schedule due to his neglect, the Purchaser shall be at liberty to give seven days notice in writing to the Contractor requiring him to make good the neglect or contravention complained of and should the Contractor fail to comply with the requisitions made in the notice within seven days from the receipt thereof, it shall be lawful for the purchaser to take the work wholly or in part out of the Contractor's hands without any further reference and get the work or any part thereof, as the case may be, completed by other agencies at the expense of the Contractor without prejudice to any other right or remedy of the Purchaser.

5.34. LOSS SUSTAINED DUE TO DEFAULTS AND DELAYS

In the event of any loss to the purchaser on account of execution and/or completion of the work or any part thereof by agencies other than the contractor, in terms of Para 5.33 of the tender document, the contractor shall be liable to reimburse the loss to purchaser without prejudice to the other rights and remedies of the purchaser and the reimbursement in full or in

part, as the case may be, shall be met at the option of the purchaser from out of all or any of the following sources via :

- (a) i) Any amount due and payable to the contractor by the purchaser on any account whatsoever;
- ii) The Contractor's security deposit in the hands of the purchaser as far as available, and;
- iii) Any other assets whatsoever of the contractor;
- (b) In the event of re-imbursement from out of sources (I) and/or (ii) above mentioned, the purchaser shall have the right of appropriation sue motto.

5.35. PENALTY FOR DELAY IN COMPLETION

5.35.1 The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed not later than the date(s) as specified in the contract. If the contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in clause 5.48, the RailTel may, if satisfied that the works can be completed by the contractor within reasonable short time thereafter, allow the contractor for further extension of time (Performa Annex. II) as the Engineer/Section Incharge may decide. On such extension the RailTel will be entitled without prejudice to any other right and remedy available on that behalf, to recover from the contractor as agreed damages and not by way of penalty a sum equivalent to 0.5% of the contract value of the works for each week or part of the week , maximum of 10% of the contract value of the works.

5.35.2 Penalty for cutting/damaging the existing cables of RAILTEL and the existing underground facilities of third parties: -

- (a) Contractor shall either pay to third parties all expenditure incurred for restoring services which are damaged by Contractor while carrying out the work or the same amount will be deducted from his bills. Such expenditure shall be intimated to Contractor either by Engineer/Section Incharge-In-Charge or concerned third parties in writing. The amount deducted by the Contractor from his bill shall be paid to concerned third parties by Engineer/Section Incharge-in-charge.
- (b) Engineer/Section Incharge-in-charge at his absolute discretion shall reserve the right to reject any bill submitted by the Contractor prior to making payment by him to third parties for the damages caused or to deduct same amount from his bill.
- (c) Penalty to damage stores/materials supplied by the RAILTEL while laying:
The contractor while taking delivery of materials supplied by the RAILTEL at the designated place shall thoroughly inspect all items before taking them over. In case of execution of the work, if any material is found damaged/working unsatisfactorily, then a penalty equivalent to the cost of material + 10% as penalty shall be recovered from the contractor's payments/securities.
- (e) However, contractor will not be penalized for any defect in workmanship of the materials, which are directly supplied by RailTel.

5.36 ADHERENCE OF TIME SCHEDULE

5.36.1 Timely completion of the work is the essence of the contract. While delay in execution will attract penalty.

5.36.2 If any delay as aforesaid in Para 5.35 of tender document shall have arisen from any cause which the Purchaser may agree as being a reasonable ground for extension of time the purchaser's Engineer/Section Incharge or his representative may allow such additional time as

he may in his absolute discretion consider to be reasonably justified by the circumstances of the case. Such extensions shall be granted, on request from contractor, with liquidated damages in the Form No.11.

5.37 CONTRACTOR'S LIABILITIES FOR COSTS AND DAMAGES

Refer Para 4.41.4 of the tender document.

5.38 PRICES/RATES, TAXES & DUTIES

5.38.1 This tender consists of a percentage bidding system. The estimated prices of each and every item of the schedule are indicated in the Schedule of Requirements (SOR). The tenderer is expected to quote the %age above(+) / below(-) /at PAR the RailTel's total estimated cost indicated in the schedule.

The percentage above/below/at par finalized for the entire schedule shall be firm and on all-inclusive basis (inclusive all incidental charges for transport, loading/unloading and handling of materials, commission for arranging dispatch by rail direct from manufacturer's factory and completing all necessary formalities in this respect, such as submission of forwarding notes, arranging placement of Wagon, collection of banker's charges for Bank guarantee, Indemnity Bonds inclusive of cost of Stamp etc., if any, levied by the RailTel).

- i. The price quoted in the offer should be firm, fixed indicating the breakup and inclusive of all taxes & duties like import, custom, Anti Dumping, CGST,SGST, IGST, UTGST etc. The offer should be inclusive of packing, forwarding, freight up to destination, insurance charges.
- ii. Bidder shall issue a valid tax invoice to RailTel for availing proper credit of CGST,SGST, IGST, UTGST in case of award of contract. GST will not be reimbursed in the absence of valid tax invoice.
- iii. For all the taxable supplies made by the vendor, the vendor shall furnish all the details of such taxable supplies in the relevant returns to be filed under GST Act.
- iv. If the vendor fails to comply with any of the above, the vendor shall pay to purchaser any expense, interest, penalty as applicable under the GST Act.
- v. In case of incorrect reporting of the supply made by the vendor in the relevant return, leading to disallowance of input credit to purchaser, the vendor shall be liable to pay applicable interest under the GST Act to the credit of purchaser. The same provisions shall be applicable in case of debit/credit notes.
- vi. Tenderer shall quote all inclusive rates, but there shall be break up of basic price and all type of applicable taxes such as SGST,CGST, IGST, UT GST along with respective HSN/SAC code under GST Law (including tax under reverse charges payable by the recipient)
- vii. Wherever the law makes it Statutory for the purchaser to deduct any amount towards GST at sources, the same will be deducted and remitted to the concerned authority.
- viii. In regards to works contract, the tenderer should have registration no for GST in respective State where work is to be executed and shall furnish GST registration certificate along with Tender.
- ix. The imposition of any new tax and /or increase in the aforesaid taxes, duties levies after the last stipulated date for the receipt of tender including extensions if any and the bidder thereupon necessarily and properly pays such taxes/ levies / cess, the bidder shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of RailTel attributable to delay in execution of work within the control of bidder. The bidder shall, within a period of 30 days of the imposition of any such tax or levy or cess, give a written notice thereof to RailTel that the same is given pursuant to this condition, together with all necessary information including details of input credit relating thereto. In the event of non-payment/ default in payment of any of the above taxes, RailTel reserves the right to with-hold the dues / payments of bidder and make payment to State / Central Government authorities as may be applicable. However, if the rates are reduced after the last stipulated date of tender, bidder has to pass on the benefits to RailTel.
- x. In case of imported equipment: Anti dumping duty if applicable on the equipment proposed to be supplied by OEM/Tenderer as per extant instructions of Ministry of Commerce/Finance Government of

- India has to be borne by the tenderer and shall be deducted from the amount payable to the bidder at the time of making payment to the firm, if this duty amount is paid to Custom Authority by RailTel.
- xi. Evaluation Criteria: inter se position of the offers will be determined on total unit rate on CIP destination basis which will include basic rate, custom duty GSST, SGST, IGST, GST, freight, insurance and any other charge or cost quoted by the tenderer, including GST payable.
On reverse charge by RailTel, wherever applicable.

Note: "In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/SGST Act, the RailTel shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned tax authority."

- 5.38.7 Arrangement for permits/license for materials will not be made by the RailTel or any assistance given. The Contractor will have to make his own arrangement.

5.39. MEASUREMENT OF WORKS

- 5.39.1 Refer Para 5.18 of tender document.

5.39.2 MEANING AND INTERPRETATION BY RAILTEL TO BE FINAL

All measurement, method of measurement, meaning an intent of specifications provided by purchaser's Engineer/Section Incharge shall be final and binding.

5.40. TERMS OF PAYMENT

- 5.40.1.1 On Account Payment:-Ref para 4.36.

- 5.40.1.2 Rounding off amounts:-Ref para 4.36.

- 5.40.1.3 On account payments not prejudicial to final settlement: - Refer para 4.36.

- 5.40.1.4 The tenderer should have Registration No. for WCT/Service Tax in respective state where work is to be executed.

- 5.40.2 Manner of payment: - Ref para 4.36.

5.40.3 DELETED

5.40.4 PROGRESS PAYMENT FOR EXECUTION OF WORK (SCHEDULE OF SERVICES)

- 5.40.4.1 90% (Ninety percent) of the progress payment for each item of Schedule of Works/Services shall be made after successful completion of work at various locations, joint measurement and testing to the satisfaction of Engineer/Section Incharge.

- 5.40.4.2 10% (Ten percent) value of the works/services completed shall be made after the issue of Provisional Acceptance Certificate.

5.41 FINAL PAYMENT 5.41.1 Deleted.

- 5.41.2 **Post Payment Audit:** Refer clause 4.41.2.

5.42 FINAL SETTLEMENT

On expiry of the warranty period and issue of the Final Acceptance Certificate of the entire installations, the security deposit will be refunded to the Contractor after adjustment of any dues payable by the contractor

5.43 CERTIFICATE FOR CENVAT BENEFITS ON BILLS : DELETED

5.44 DEDUCTION FROM ON ACCOUNT PAYMENT BILLS

- (i) All costs, damages or expenses, which RailTel may have been paid or incurred which under the provisions of contract are Contractor's obligations will be deducted by RailTel from progress payment Bills/Invoice of Contractor, as and when it is understood that such an expense has been incurred or paid for.
- (ii) All such claims of RailTel shall, however, be duly supported by appropriate and certified vouchers, receipts or explanations as are available to enable the Contractor to identify such claims.

5.45 TAXES

- 5.45.1 The Contractor and all personnel employed by him shall pay such taxes like Income Tax as are payable under statutory laws of India and the Purchaser **WILL NOT ACCEPT** any liability for the same.
- 5.45.2 Deduction of Income Tax at source as per provisions of Finance Act and Income Tax in force shall be made from the Contractor/Sub-Contractor and the amount so deducted may be credited to the Central Government.
- 5.45.3 Wherever the law makes it statutory for the Purchaser to deduct any amount towards Sales Tax on Works Contract, the same will be deducted and remitted to the concerned authority.

5.46 MOBILIZATION ADVANCE

No mobilization advance will be given to the contractor.

5.47. FORCE MAJEURE CLAUSE

- 5.47.1 Refer Para 4.7 of chapter -4.
- 5.47.2 Refer Para 4.7 of chapter-4.

5.48 SETTLEMENT OF DISPUTE AND ARBITRATION

- (1) **Right of RailTel to determine the contract:** - The RailTel shall be entitled to determine and terminate the contract at any time should, in the RailTel's opinion, the cessation of work becomes necessary owing to paucity of funds or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the Contractor will be paid for in full at the rate specified in the contract. Notice in writing from the RailTel of such determination and the reasons therefore shall be conclusive evidence thereof.
- (2) **Payment on determination of contract:** - Should the contract be determined under sub Para 5.49(1) of tender document of this clause and the Contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the work, the RailTel shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfaction of the Engineer/Section Incharge. The RailTel's decision on the necessity and propriety of such expenditure shall be final and conclusive.
- (3) The Contractor shall have no claim to any payment of compensation or otherwise .Howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of determination of contract.

CHAPTER – 6

FORMS

OF

TENDER

FORMS OF TENDER

Form No. 1	:	Offer Letter
Form No. 2	:	User's Certificate
Form No. 3	:	Agreement
Form No. 4	:	Proforma for Performance Guarantee Bond Deposit
Form No. 5	:	Statement of Deviations
Form No. 6	:	Standing Indemnity Bond for on Accounts Payments and Stores Supplied by RailTel
Form No. 7	:	System performance guarantee.
Form No. 8	:	Not used
Form No. 9	:	Deleted
Form No. 10	:	Acknowledgement of receipt of materials from RailTel
Form No. 11	:	Extension of period of completion of work
Form No. 12	:	Not used
Form No. 13	:	Qualification & Experience
Form No. 14	:	Deleted
Form No. 15	:	RTGS format.
Form No.16	:	Tax Breakup Format

Form No.1

OFFER LETTER

From:

Date:

To:

Executive Director,
RailTel Corporation of India Limited,
Southern Region,
Secunderabad.

Sub: Supply installation and Commissioning of Wi-Fi at **Category "C" Railwa Stations -- Nos** over Southern Region of RailTel.

Ref: Tender Notice No.dated

I/We the undersigned hereby offer to execute the agreement for the above work within fifteen days from the date of issue of letter of acceptance of the tender in strict compliance within the provision detailed in the tender paper attached.

I/We agree that this tender shall not be restricted or withdrawn and shall remain opened for acceptance for and during the period of ninety days from the date of opening of the tender.

I/We fully understand the terms and conditions as contained in the tender paper and we agree that the same shall apply to My/Our tender and I/We shall be bound by them.

Earnest money deposit Demand Draft/Pay Order/Banker's Cheque No.....Dated for
'.....(Rupees only) drawn on
..... (bank) in favour of "RailTel Corporation of India Ltd.", payable at
..... is enclosed.

The full value of the earnest money shall be forfeited without prejudice to any other right or remedies if:

- (i) If we do not submit the Performance Bank Guarantee/Security Deposit in the event the LOA for any section is awarded to us, within stipulated time.
- (ii) I/We do not execute the contract document within 2 days after the receipt of notice by the RailTel Corporation that such documents are ready.
- (iii) I/We do not commence work within 7 Days from the date of issue of letter of acceptance or as per Clause 4.19 of the contract document.
- (iv) If we withdraw our offer after opening of the tender.
- (v) If we do not accept the order in the event the same is awarded to us.

Until a formal agreement is prepared and executed, submission of this offer letter shall constitute a binding contract between us subject to modification as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer.

I/We hereby agree to execute the OFC laying work and place our teams as required in the section ----- within the scheduled date mentioned above. In the event of shortcomings in the provision of equipment / placement of team within the stipulated date, RailTel shall be at liberty to impose penalty, if any, as has been stipulated in the tender document.

Yours Sincerely,

Signature & Seal of the Tenderer

Place: -

Date: -

Witnessed by:

1. Signature:

Name:

Address:

2. Signature:

Name:

Address:

RAILTEL

QUALIFYING CRITERIA USER's CERTIFICATE

Name of the Firm Contract No. & date

Scope of Work

Contract Amount (in Indian Rupees)

Completion Period as per contract Data of Commencement

Actual date of Successful Completion

Quality of work

: Satisfactory / unsatisfactory
(Please specify)

Name:

Dated:

Designation:

Signature of the User with Company Seal

राज्य
RAILTEL

[83]

Signed and delivered by Shri. _____ for and on behalf of _____, the contractor within named in the presence of :

1. Signature :
Date :
Name in Block Capitals :
Address :

2. Signature :
Date :
Name in Block Capitals :
Address :

Annexure – A : Tender Paper No. _____ with corrigendum, if any.
Annexure – B : Firm's offer.
Annexure – C : Letter of Acceptance No. _____ with all enclosures.
Annexure – D : Copy of Contract Performance Guarantee.

RAILTEL

CONTRACT PERFORMANCE GUARANTEE BOND

(On Stamp Paper of Rs. one hundred)

(To be used by approved Scheduled Banks)

In consideration of the RailTel Corporation of India Limited, 6th Floor, IIIrd Block, Delhi Technology Park, Shastri Park, Delhi-110053 with Southern Regional office at, 2nd Floor, B-Block, Rail Nilayam, Secunderabad-500 071 (Herein after called the RailTel) having agreed to exempt (Hereinafter called "the said Contractor(s)") from the demand, under the terms and conditions of an Agreement No. dated made between RailTel Corporation of India Limited and for (hereinafter called "the said Agreement") of security deposit for the due fulfillment by the said Contractor(s) of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for ` (Rs. only). We, (indicate the name of the Bank) hereinafter referred to as "the Bank") at the request of Contractor(s) do hereby undertake to pay the RailTel an amount not exceeding ` against any loss or damage caused to or suffered or would be caused to or suffered by the RailTel by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said Agreement.

We,(name of Bank) do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on demand from the RailTel stating that the amount as claimed is due by way of loss or damage caused to or would be caused to or suffered by the RailTel by reason of breach by the said Contractor(s) of any of terms or conditions contained in the said Agreement or by reason of the Contractor(s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding `only.

We,(name of bank) undertake to pay to the RailTel any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) / Supplier(s) in any suit or proceedings pending before any court or Tribunal relating thereto our liability under this present being, absolute and unequivocal.

The payment so made by us under this Bond shall be a valid discharge of our liability for payment there under and the Contractor(s) / Supplier(s) shall have no claim against us for making such payment.

We,(name of bank) further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the RailTel under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till RailTel certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this Guarantee. Unless a demand or claim under the Guarantee is made on us in writing on or before the We shall be discharged from all liability under this Guarantee thereafter. We,.....(name of bank) further agree with the RailTel that the RailTel shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the Agreement or to extend time or to postpone for any time or from time to time any of the powers exercisable by the RailTel against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension to the said Contractor(s) or for any forbearance, act or omission on the part of RailTel or any indulgence by the RailTel to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have affect of so relieving us.

This Guarantee will not be discharged due to the change in the Constitution of the Bank or the Contractor(s)/ Supplier(s).

We (the name of Bank) lastly undertake not to revoke this Guarantee during its currency except with

the previous consent of the RailTel in writing.

NOT WITH STANDING ANYTHING CONTAINED HEREIN ABOVE

- (i) The liability of the surety under his Bank Guarantee shall not exceed `..... (Rupees only).
- (ii) This Bank guarantee shall be valid upto
- (iii) We are liable to pay the guaranteed amount or nay part thereof under this Bank Guarantee only and only if you serves upon the bank, written claim or demand on or before

Dated theday of 2018

for
(Indicate the name of the Bank)

Witness :

Signature :
Name :

Signature :
Name :

NOTE: The Guarantee shall be valid for a period of 60 days after the expiry of the warranty period of the work as per Clause 3.17 of chapter 3.

RAILTEL

STATEMENT OF DEVIATIONS

PROFORMA FOR STATEMENT OF DEVIATIONS

1. The following are the particulars of deviations from Preamble, requirement of the Instructions to Tenderers and Conditions of Tendering and Special conditions of Contract.

Preamble (Chapter 1)

<u>Clause</u>	<u>Deviation</u>	<u>Remarks (including justification)</u>
---------------	------------------	--

Instructions to Tenderers and Conditions of Tendering (Chapter 3)

<u>Clause</u>	<u>Deviation</u>	<u>Remarks (including justification)</u>
---------------	------------------	--

Special Conditions of Contract (Chapter 5)

<u>Clause</u>	<u>Deviation</u>	<u>Remarks (including justification)</u>
---------------	------------------	--

2. The following are the particulars of deviations from requirement of the **Technical specifications (Chapter 7)**

<u>Clause</u>	<u>Deviation</u>	<u>Remarks (including justification)</u>
---------------	------------------	--

Note: Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "no deviations".

SIGNATURE AND SEAL
OF TENDERER



STANDING INDEMNITY BOND

(For on Account Payments and Stores supplied by RailTel)

(On Stamp paper of Requisite Value)

We, M/s _____ hereby undertake that we hold at our Stores Depot/s at _____ for and on behalf of RailTel Corporation of India Limited in the premises through Executive Director or his successor hereinafter referred to as "the Purchaser" all materials for which 'On Account' payments have been made to us against the Contract for ----- vide letter of Acceptance of Tender No. _____ and the materials handed over to us by the Purchaser for all purpose of execution of the said Contract, until such time the materials are duly erected or otherwise handed over to him.

We shall be entirely responsible for the safe custody and protection of said materials against all risk till they are duly delivered as erected equipment to the purchaser or as he may direct otherwise and shall indemnify the Purchaser against any loss, damage or deterioration whatsoever in respect of the said materials while in our possession and against disposal of surplus materials. The said materials shall at all times be open to inspection by any Engineer/Section Incharge authorized by the Director / Projects (whose address will be intimated in due course).

Should any loss, damage or deterioration of materials occur or surplus materials disposed off and refund becomes due, the purchaser shall be entitled to recover from us the full cost as per prices included in the Contract (as applicable) and also compensation for such loss or damage, if any, along with the amount to be refunded without prejudice to any other remedies available to his by deduction from any sum due or any sum which at any time hereafter becomes due to us under the said or any other Contract.

Dated this _____ day of _____ 2018

for and on behalf of
M/s _____ (Contractor)

Signature of witness

Name and witness in Block letters

Address

RAILTEL

SYSTEM PERFORMANCE GUARANTEE

PROFORMA FOR THE SYSTEM PERFORMANCE GUARANTEE

To

The Executive Director/RCIL, Secunderabad

I / We hereby guarantee that the design on the basis of which we have submitted our tender no. has been carefully made to conform to the end objectives in the tender documents and to technical specification therein. We further guarantee that in the event of the performance of the system, when installed, not complying with the end objectives or with the specifications contained in the tender documents, we shall provide further inputs to enable the RailTel to realize the end objectives contained in these documents without any additional payment for any additional equipment which may be required in this regard. We further guarantee that all the expenses for providing the additional inputs under the System Guarantee will be borne by us. We further guarantee that these additional inputs will be provided by us to make the system workable within 1 month from the date on which this guarantee is invoked by the Purchaser. The guarantee is valid for a period of one year from the date of commissioning of the system.

(Signature of Firm's Authorized Officer)
Seal

Signature of witness:

1.

2.



FORM – 10

**ACKNOWLEDGMENT
FOR RECEIVING MATERIALS FROM RAILTEL**

Station:

Date:

Sub: Receipt of Material from RailTel

It is hereby acknowledged that the following materials have been received in full and good condition by me on _____ at _____ for the work under the Agreement no. dated

Sr. No.	Description of Material (Meter/No.)	Quantity	Remarks if any
---------	--	----------	-------------------

Witnessed by:

(Signature of Engineer/Section Incharge's
Representative with
Designation)

(Signature of Contractor
or Contractor's
Representative)



**EXTENSION OF PERIOD OF COMPLETION OF WORK
ON CONTRACTOR'S ACCOUNT**

No.

Date:

To,

.....
.....

Sub: (i) (Name of Work)
(ii) Acceptance Letter No.
(iii) Undertaking / Agreement No.

Ref:(Quote specific application of the Contractor for extension to date, if received).

Dear Sir,

The stipulated date for completion of the work mentioned above isfrom the progress made so far and the present rate of progress, it is unlikely that the work will be completed by the above date (or However, the work was not completed on this date)

Expecting that you may be able to complete the work if some time is given the Executive Director, RailTel Corporation of India Limited, Secunderabad although not bound to do so, hereby extends the time for completion from to

Please note that an amount equal to 0.5% of the total value of the contract per week or part thereof (rounded off to the nearest whole number) subject to a maximum of 10% of the total contract value of the works as a recovery for delay in the completion of the work after the expiry of (1) will be recovered from as mentioned in Para 5.35 of the special conditions of contract for the extended period notwithstanding the grant of this extension. You may proceed with the work accordingly.

The above extension of the completion date will also be subject to the further condition that no increase in rates on any account will be payable to you.

Please intimate within a week of the receipt of this letter your acceptance of the extension on the conditions stated above.

Please note that in the event of declining to accept the extension on the above said conditions or, in the event of your failure after accepting or acting up to this extension to complete the work by (2)here mention the extended date), further action will be taken in terms of relevant Para of special conditions of contract.

Yours faithfully,
For& on behalf of RailTel Corporation of India Limited

Note:

1. Give here the stipulated date for completion without any penalty fixed earlier.
2. Here mention the extended date.

Form No. 13**QUALIFICATION & EXPERIENCE**

Details of works executed and under execution by Tenderer should be furnished in the following format.

SI No	Name of Project & Description of work	Party's name & address for whom the work was done	Total Value of the Contract (in Rs)	Date of award of work and schedule period of execution (in months)	Date of completion and actual period of execution (in months)	Remarks

Note : A certificate from the organization for whom the work was executed should be submitted to indicate that the contract was satisfactorily executed.

(Signature and Seal of the Manufacturer / Contractor)

The General Manager (Finance)
 RailTel Corporation of India Ltd. (Regional Office)
 2nd floor, B block
 Rail Nilayam, Secunderabad – 500 071.

Form -15

Sub. : Option for Payment through RTGS/NEFT

Sir,

You are requested to remit the payment due to us through RTGS/NEFT into our Current Account.

The detail required duly verified by our bank for Online payment is provided here under for needful please.

DETAIL REQUIRED FOR PAYMENT THROUGH RTGS/NEFT

1.	Beneficiary Name :	M/s
2.	Beneficiary Address :	
3.	PAN No.	
4.	Bank A/c No. :	
5.	Name of Bank :	
6.	Bank Branch Address:	
7.	Branch Id Code :	
8.	Current Account No. :	
9.	RTGS / IFSC Code :	
10.	NEFT/ IFSC Code :	
11.	MICR no.	

I do hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, RailTel will not be held responsible. Further, I undertake that till we request a change, paying authority may kindly continue to make the payments in our account as per above detail.

For
 Online payments

Authorised Signatory

Verified above Bank Particulars for

Bank's Authorised Signatory

Form -16**TAX BREAKUP FORMAT FOR SOR**

S N	Item	Unit of Measure	Qty	Unit Price (Excl d Tax)	Tax Details										Total Value of Tax (e+f +g+h)	Unit Price (Incl uding Tax) (d+i)	Total Cost (c X j)		
					Tax Name	%	Value	Tax Name	%	Value	Tax Name	%	Value	Tax Name				%	Value
	a	b	c	d			e			f			g			h	i	j	k
1																			
2																			
3																			
4																			
																	Total Cost of Schedule		

TIN No.

PAN No.


GST No with State and Address

CHAPTER 7

DRAWINGS AND SPECIFICATIONS



Specification of Work/Material

- 1) Conduit pipe : 25 mm diameter and 2 mm thickness of reputed make
- 2) 24F FDMS, SC type, telescopic FDMS single mode with 24 Nos. of SC/PC 0 (zero) db connector and 1.5 M length pigtails and two no of splice tray (each try can hold 12 splices), suitable for mounting on 19" rack, 1 U size. The FDMS should be rodent proof with all accessories for rack fixing hardware, splice, protection, sleeves, routing, clamps, cable ties, hose clamps for cable, buffer tubes, IPA etc
- 3) GI pipe : B Class 50 mm dia
- 4) **Plateform cutting** : Plate form cutting of for laying of OFC and Power cable to done with minimum depth of 8-12 inches and with proper protection and concreting .
- 5) **RCC chamber**:The contractor has to arrange for Casting of circular **RCC chamber**, top covers and bottom plate (1:2:4 concrete mix) with reinforcement, two hooks in each half cover, provision of duct holes as shown in the drawing. Excavation of circular pit to a depth of 1300 mm, dia of 1500 mm, positioning of bottom plates, chamber and top covers (two halves). Chamber to be filled with river sand to the brim of the chamber after cable blowing and splicing, top covers placed, refilled with excavated soil and rammed etc., complete to the finished item of work as directed by the RailTel Engineer/Section Inchager-in-Charge
- 6) **ROUTE MARKERS**: The contractor has to provide route markers as detailed below:
Casting, transporting and fixing of RCC Route Markers at a distance of 200 Meter apart on the cable route/at places where the route of the cable changes/ on either sides of the culverts/bridges/LC gates/road cuttings etc. They should be of standard letters "RailTel", "OFC", with RailTel logo  on top. They shall be painted with green when placed at joint chambers, yellow placed at loop chambers and orange at all other places. The length is 900mm,as shown in the drawing, complete to the finished item of work as directed by the RailTel Engineer/Section Inchager-in-Charge
- 7) Power cable: 3 core 6 Sq mm of finolex, Finacab or reputed make .
- 8) Power socket: should have 2 nos three pin socket, two nos of switches with MCB/Fuse protection of reputed make with ISI certification/ or as directed by RailTel Engineer/Section Inchager-in-Charge at site.
- 9) SC-LC patch cord : 1-3 mtr length of reputed make
- 10) **Concreting with CC of 1:2:4** The contractor has to do the protective works of concreting as per requirement. The OFC has to be protected with Concreting 0.3 x 0.3 to the approaches of bridges and culverts in the ratio (PCC 1:2:4 mix) wherever necessary as per the technical specification and as directed by RailTel Engineer/Section Inchager-in-Charge at site.
- 11) Specification of 24 F and 12 F as per attached construction sheet.
- 12) Earthing arrangement inside the rack to be made by earthing cable and suitable luxes as per requirement.
- 13) Transportation of material (if any)from RailTel Store to Site is in scope of contarctor.



Rack Installation as per site condition.

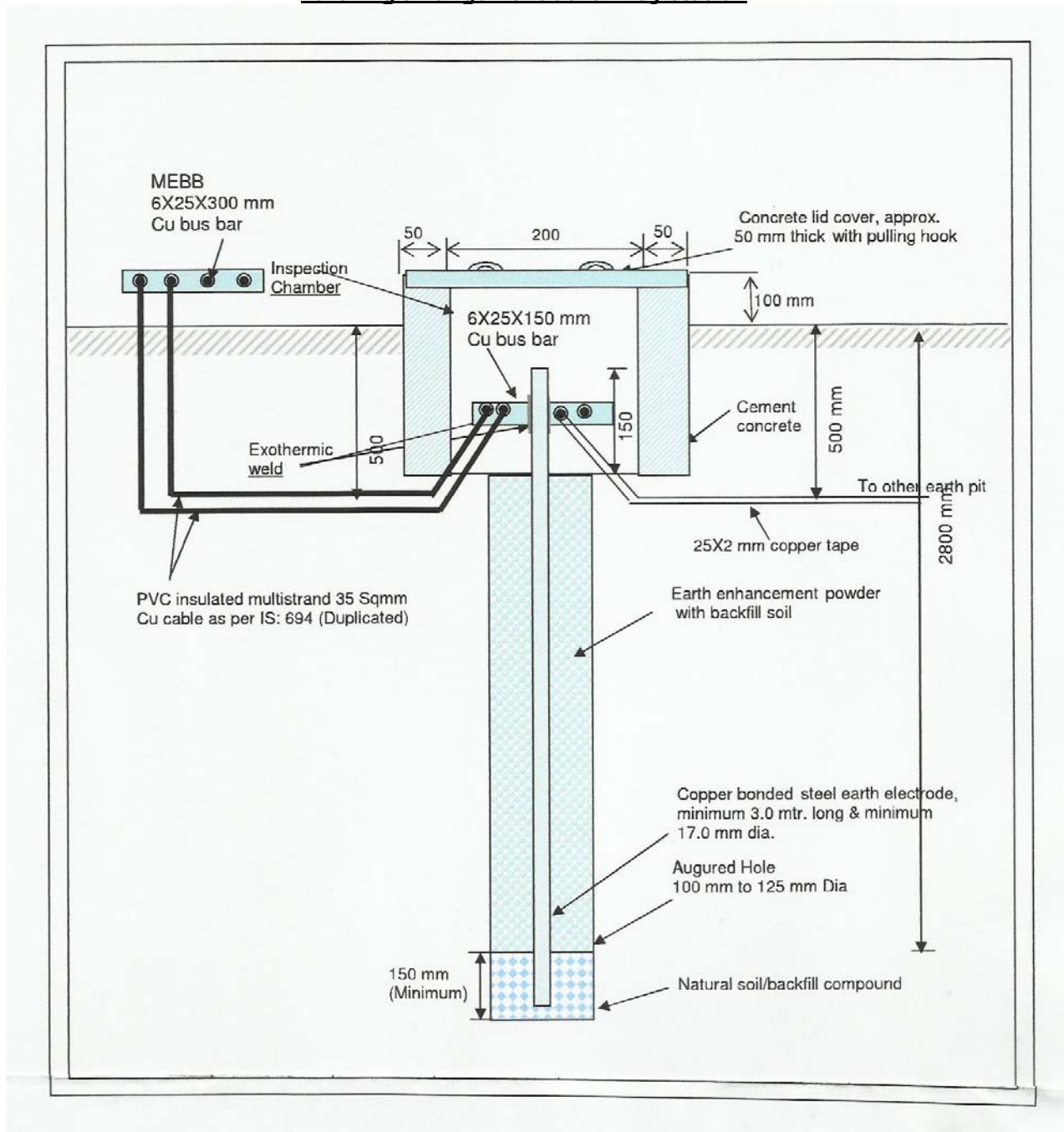


Photograph of Rack(installation)at Railway station FOB/Platform shed as per site condition and as per Instruction of section/site in charge.

Installation includes supply of material and proper fixture required for installation as per Railway standard.

RAILTEL

Earthing arrangement at railway station



Construction of OFC 12E

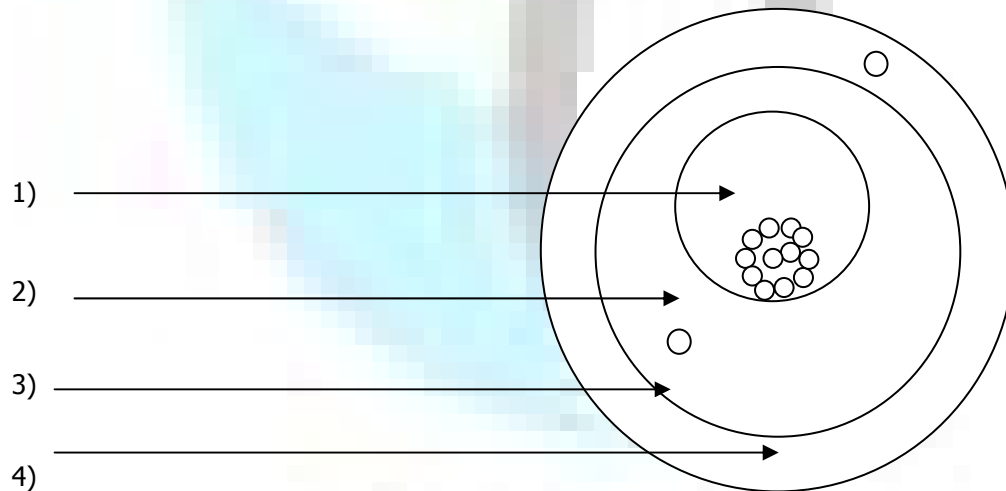
TYPICAL CROSS SECTION OF 12F UNARMoured OPTICAL CABLE

- 1 Primary Coated Fiber
- 2 Tube filling Compound

Single mode (As per G.652D)
Polybutylene Teraphthalate (PBT) filled with
Thixotropic Gel

- 3 Strength Member(D=1.0mm)
- 4 Jacket(thickness=1.80mm MIN)

Embedded FRP – 1 mm , 2 nos
Black HDPEwith Antitermite



Cable Weight : 40Kg/Km(Nominal)

Cable Diameter : 7.5 +- 0,5 mm

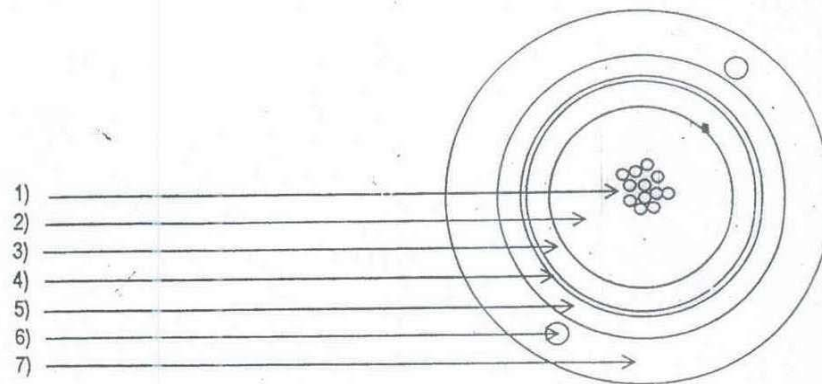
Nos of Fibers : 12 nos

Outer Sheath : HDPE

TYPICAL CROSS SECTION OF 12 F ARMoured OPTICAL FIBRE CABLE

- 1) PRIMARY COATED FIBRE
- 2) TUBE FILLING COMPOUND
- 3) LOOSE TUBE
- 4) MOISTURE BARRIER
- 5) ARMOUR (T for steel = $0.15 \pm 0.015\text{mm}$)
(Copolymer Coating thickness $50 \pm 10\mu\text{m}$)
- 6) STRENGTH MEMBER (D=1.0 mm)
- 7) JACKET (thickness = 1.80mm MIN)

SINGLE MODE (AS PER G-652)
THIXOTROPIC GEL
PBTP
WATER SWELLABLE TAPE/POWDER
CORRUGATED, COPOLYMER COATED,
CHROME PLATED STEEL TAPE
STEEL ROD OF MUSIC SPRING GRADE (2 Nos.)
BLACK HDPE WITH ANTITERMITE



CABLE WEIGHT
CABLE DIAMETER

95 Kg/Km (Nominal)
9.0 mm (Nominal)

Shailendra Dusa
SHAIENDRA DUSA
Assistant Manager/Telecom
RailTel Corporation of India Ltd
(Southern Region)
SECUNDERABAD-500 071

[Signature]

CHAPTER V (1/2)

Specification for 12F Fiber (G-652 D) Armored Fiber Optic Cable

Delivery Information:

- i) Cable Weight : 95Kg/KM (Nominal)
- ii) Cable Diameter : 9.0mm (Nominal)

Attenuation of Cabled Fiber:

- At 1310nm : ≤ 0.40 dB/KM
- At 1550nm : ≤ 0.25 dB/KM

Construction:

- Primary Coated Fiber : Single Mode (As per G-652)
- Type : Uni-tube
- Tube filling compound : Thixotropic Gel
- Loose Tube : PBTP
- Moisture Barrier : Water Swell able Tape/Powder
- Armour (T for steel = 0.15 ± 0.015 mm) : Corrugated, Copolymer coated,
(Copolymer coating thickness $50 \pm 10\mu\text{m}$) Chrome plated steel tape
- Strength Member (D=1.0mm) : Steel rod of music spring grade (2 nos)
- Jacket (thickness = 1.80mm Min) : Black HDPE with Anti termite

Drum Length

- (a) Drum Length: 2 KMs +/- 10%.
- (i) Tolerance
 - (a) Total Quantity: 5% of order quantity.
 - (b) OFC length in Drum: 5% of the total order quantity may vary with drum length of 2 KMs +/- 25%.

Testing:

The above 12 F armored fiber optical cable shall be tested for all other parameter to RDSO no IRS TC-55/2746 Rev-1 for 24 F OFC and construction of 12F OFC as per details given in page -47

Construction of OFC 24F

	UNIT	VALUE
ATTENUATION @ 1310 nm	dB/km	≤ 0.38 Max & ≤ 0.35 Average
@ 1550 nm		≤ 0.25 Max & ≤ 0.22 Average
CHROMATIC DISPERSION 1285-1330 nm	ps/nm.km	≤ 3.5
At 1550 nm		≤ 18.0
ZERO DISPERSION WAVELENGTH	nm	1300 to 1324
ZERO DISPERSION SLOPE	ps/nm ² .km	≤ 0.092
CABLE CUT OFF WAVELENGTH	nm	≤ 1260
POLARISATION MODE DISPERSION	ps/root km	≤ 0.2
MODE FIELD DIAMETER at 1310 nm	um	9.3 ± 0.5
CORE- CLAD CONCENTRICITY ERROR	um	≤ 0.6
CLADDING NON CIRCULARITY	%	≤ 1.0
CLADDING DIAMETER	um	125 ± 1.0
COATING DIAMETER	um	245 ± 10

2. MECHANICAL & ENVIRONMENTAL PROPERTIES

A. MAX. TENSILE STRENGTH	:	9.81x2.5xW Newton
B. CRUSH RESISTANCE	:	2000 Newton/100 mm
C. MINIMUM BENDING RADIUS	:	20xD (260 mm)
D. MAX. OPERATING/ INSTALLATION TEMPERATURE	:	- 30 °C to + 70 °C

3. PHYSICAL & DIMENSIONS PROPERTIES

NO. OF FIBRES	24F
NO OF TUBES/NO OF FILLER	6/0
TYPE OF FIBRE	SM G652 D
FRP ROD EAA COATED	2.0 +/- 0.1
LOOSE TUBE DIAMETER	1.9 +/- 0.1 mm
STRENGTH MEMBER	FRP ROD & GLASS YARN REINFORCEMENT
SEQUENCE OF TUBE	BLUE, ORANGE, GREEN, BROWN, SLATE & WHITE
COLOUR OF FIBRE	BLUE, ORANGE, GREEN & NATURAL
SHEATH MATERIAL	HDPE
INNER SHEATH THICKNESS	1.2 mm NOMINAL
OUTER SHEATH THICKNESS	1.6 mm NOMINAL
OUTER CABLE DIAMETER	13.2 ± 1.0 mm
CABLE WEIGHT	140 ± 15 Kg/Km
PRINTING ON CABLE	AS PER CUSTOMER REQUIREMENTS
STANDARD LENGTH	$3 \pm 20\%$ KMS
OVERALL QUANTITY	$\pm 10\%$ KMS
TOLERANCE	

CABLE CROSS SECTION:

OUTER SHEATH (H.D.P.E.)

INNER SHEATH (H.D.P.E.)

POLYESTER TAPE

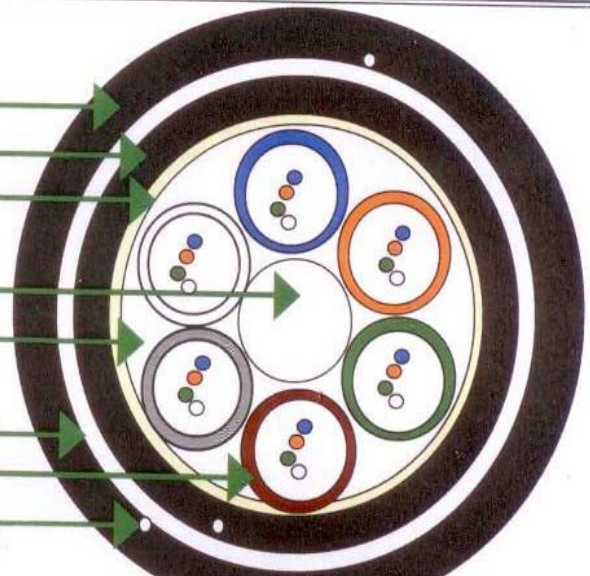
F.R.P.

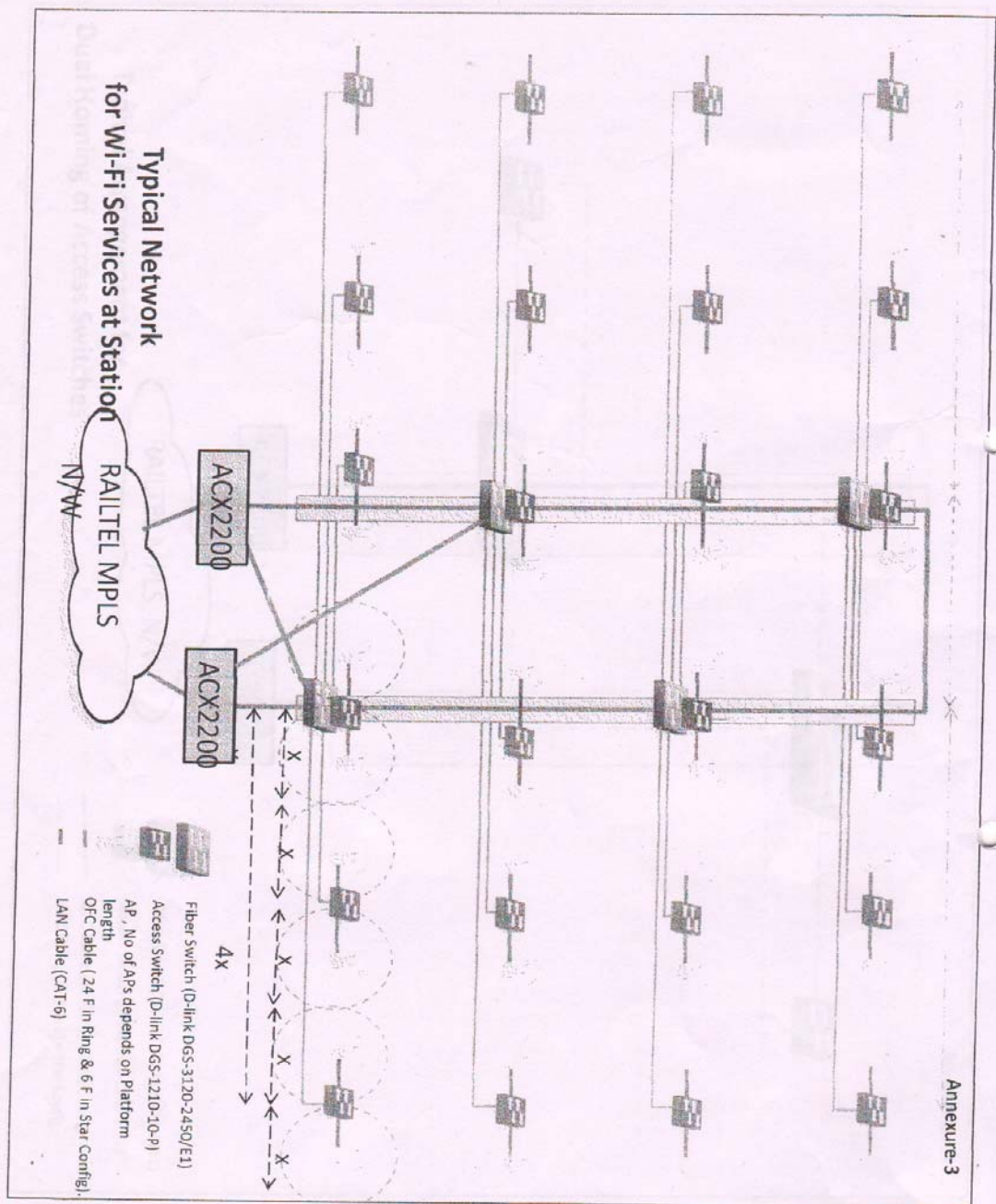
FLOODING JELLY

GLASS YARN REINFORCEMENT

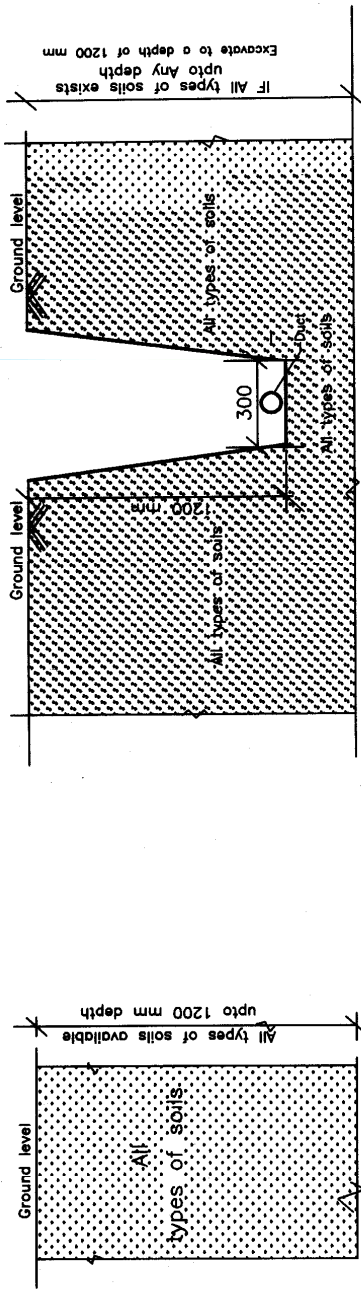
LOOSE TUBE WITH FIBRES

RIP CORD

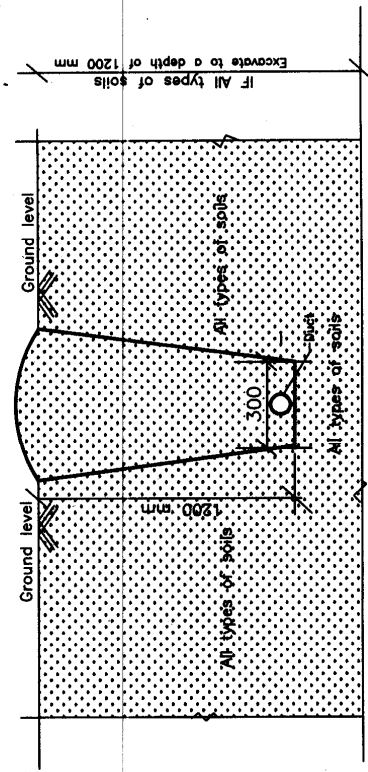




Typical setup at station for Laying of 12F /24 F OFC, Power cable, installation of Fiber switches, Access Switches.

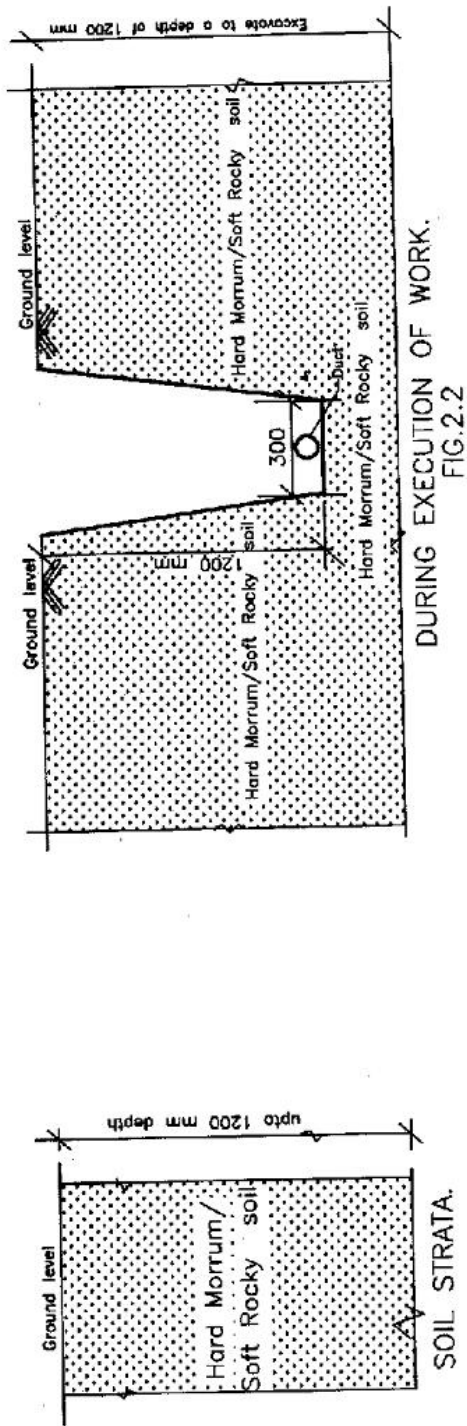


DURING EXECUTION OF WORK.
FIG.1.2



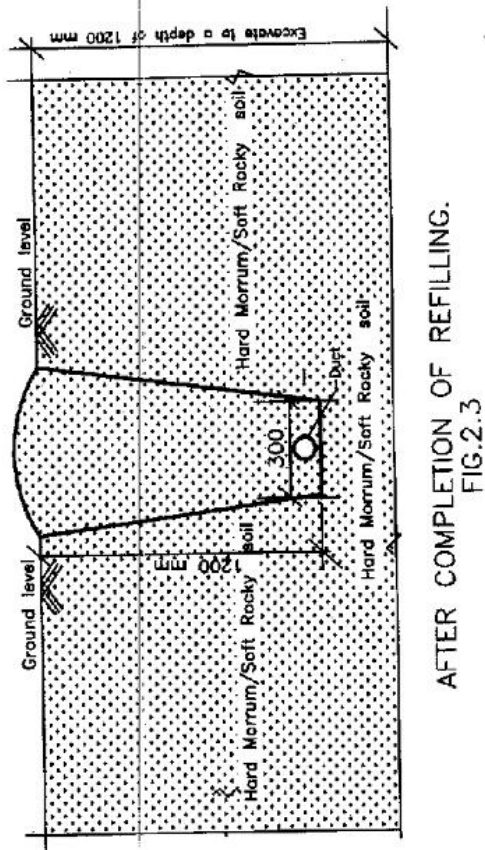
Note: All dimensions are in millimetres.

RAILTEL CORPORATION OF INDIA Ltd..	
RGM/SR/SC.	DRG No.RAILTEL/SR/OFC/2008/1.
SKETCH SHOWING THE PROCEDURE FOR EXCAVATION OF CABLE TRENCH IN ALL TYPES OF SOILS (Normal soil/Soft soil/Sandy soil)	
NOT TO SCALE	
CONSULTANT.	(G VEERASWAMY)
MANAGER/PROJ	(M MURALI KRISHNA)
AGM/SC.	(P V MURALI KRISHNA)

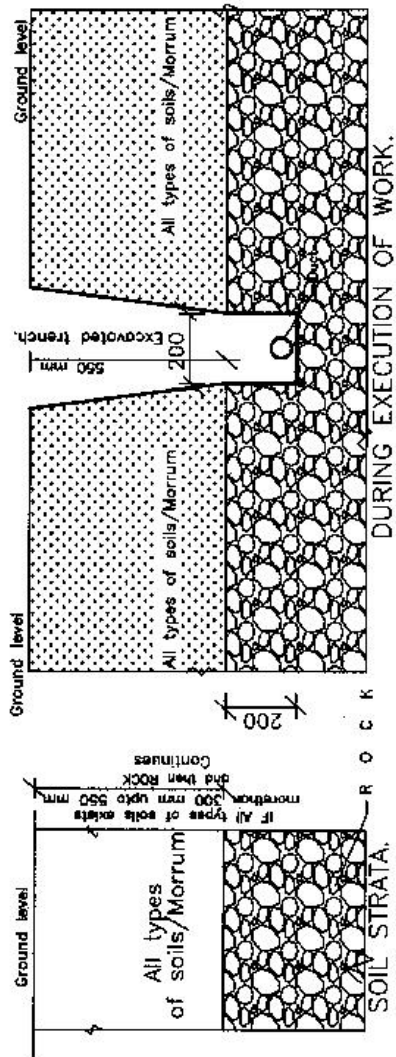


Note: All dimensions are in millimetres.

RAILTEL CORPORATION OF INDIA Ltd.	
RGM/SR/SC.	DRG No.RAILTEL/SR/OFC/2008/2.
SKETCH SHOWING THE PROCEDURE FOR EXCAVATION OF CABLE TRENCH IN Hard Morrum/Soft Rocky soil	
NOT TO SCALE	
CONSULTANT.	(G VEERASWAMY)
MANAGER/PROJ	(M MURALI KRISHNA)
AGM/SC.	(P V MURALI KRISHNA)

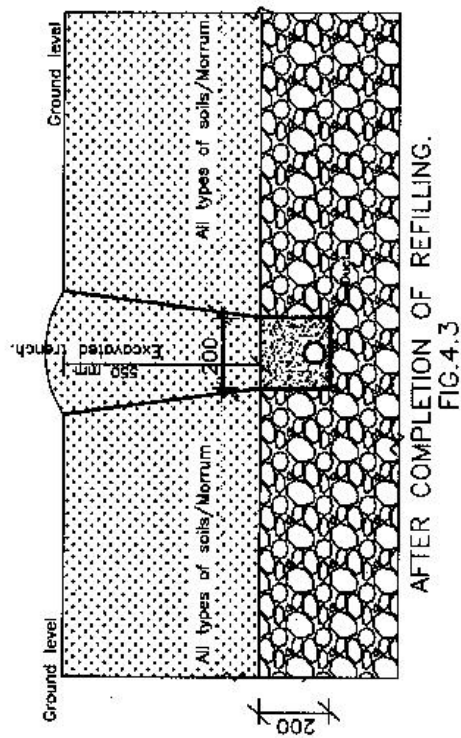


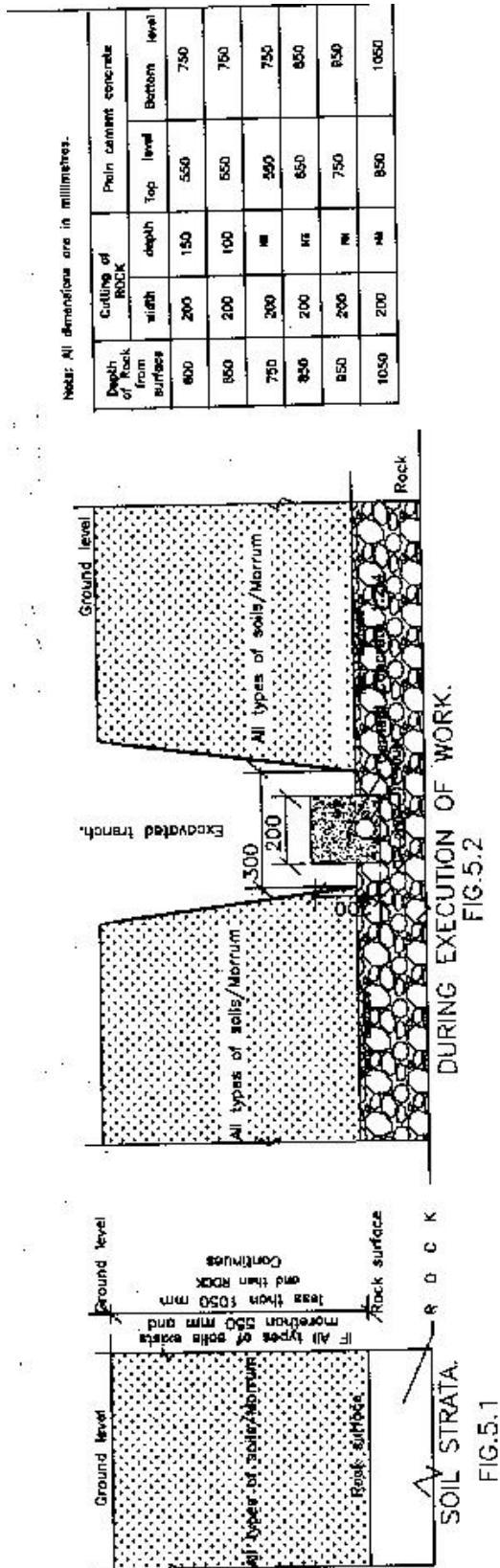
Depth of Rock from surface	Cutting of ROCK		Plain cement concrete	
	width	depth	Top level	Bottom level
300	200	200	300	500
350	200	200	350	550
450	200	200	450	650
550	200	200	550	750



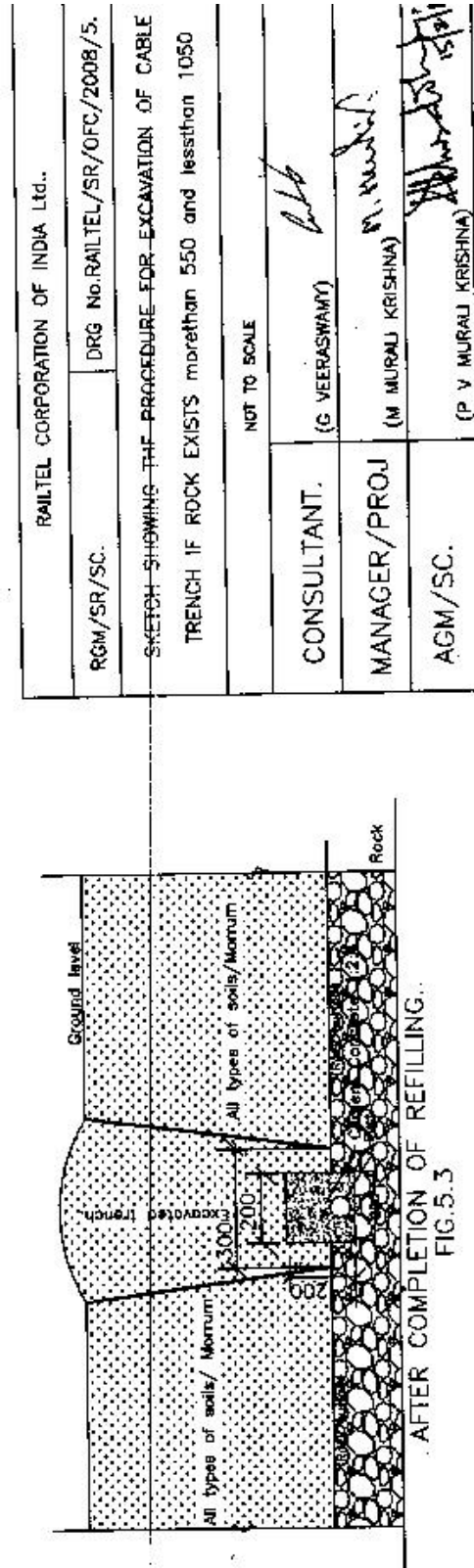
NOTE:
1.All dimensions are in millimetres.

RAILTEL CORPORATION OF INDIA Ltd.	
RGM/SR/SC.	DRG No.RAILTEL/SR/OFC/2008/4.
SKETCH SHOWING THE PROCEEDURE FOR EXCAVATION OF CABLE TRENCH IF ROCK EXISTS morethan 300 to 550 mm FROM G.L.	
NOT TO SCALE	
CONSULTANT.	(G VEERASWAMY)
MANAGER/PROJ	(M MURALI KRISHNA)
AGM/SC.	(D V MURALI KRISHNA)

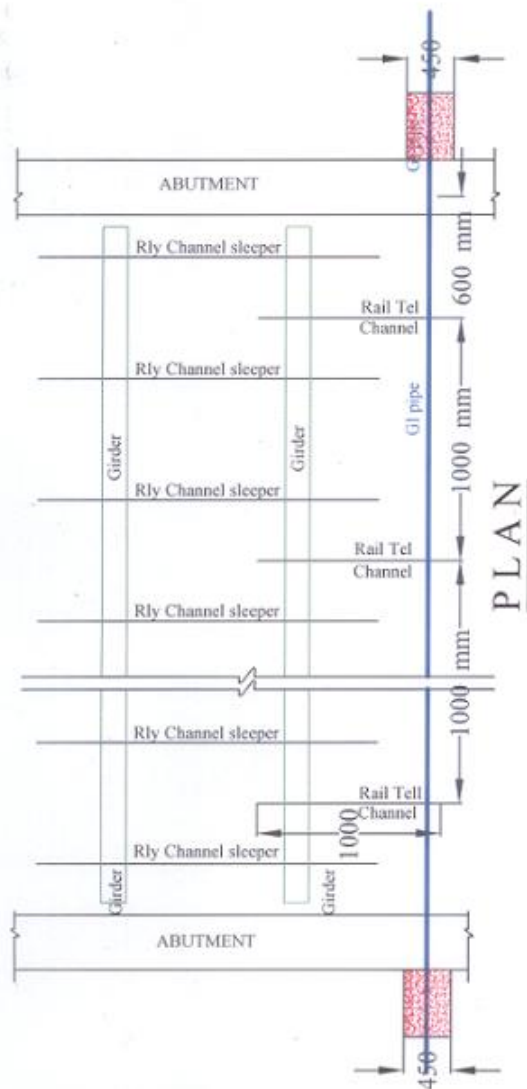




NOTE:
1.All dimensions are in millimetres.

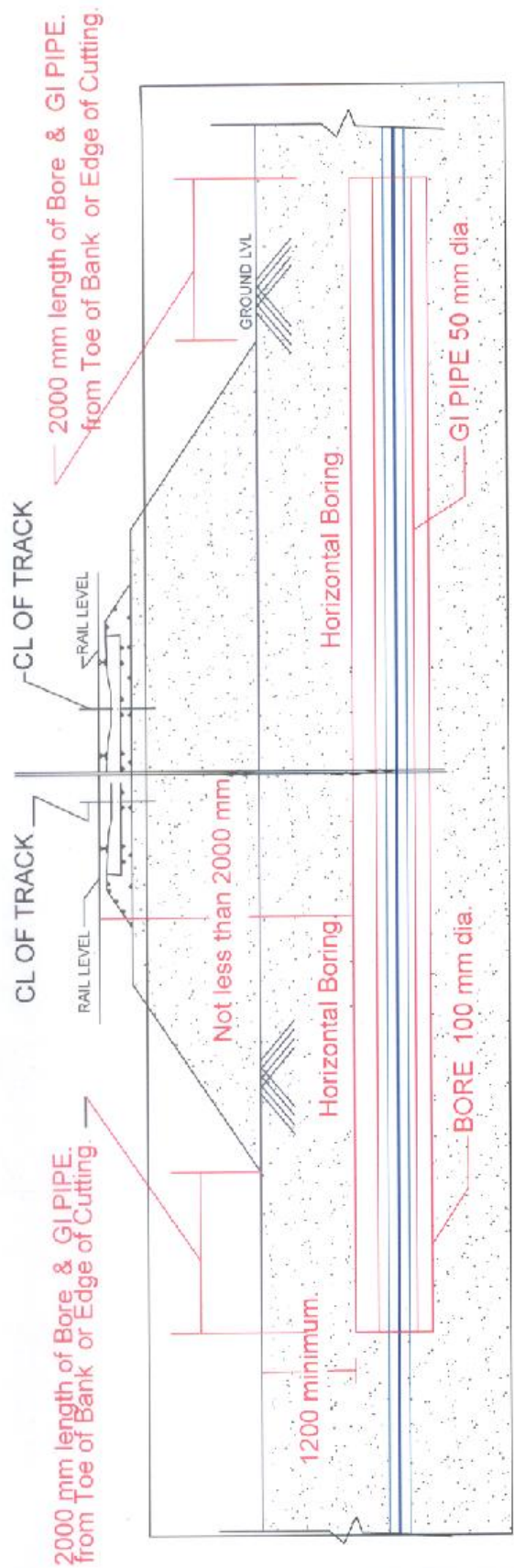


RAILTEL CORPORATION OF INDIA Ltd.,	
RGM/SR/SC.	DRG No.RAILTEL/SR/OFC/2008/5.
SKETCH SHOWING THE PROCEDURE FOR EXCAVATION OF CABLE TRENCH IF ROCK EXISTS morethan 550 and less than 1050	
NOT TO SCALE	
CONSULTANT.	(G VEERASWAMY)
MANAGER/PROJ	(M MURALI KRISHNA)
AGM/SC.	(P V MURALI KRISHNA)



Note:
1. All dimensions are in millimetres.
2. Proposals are shown in colour.

Sheet No.1 of 2	
RAILTEL CORPORATION OF INDIA.	
RGM/SR/SC.	DRG No.RAIL.TEL/SR/2008/6.
SKETCH SHOWING THE FIXING OF 50MMØ GI PIPE ON TOP OF GIRDER BRIDGE	
NOT TO SCALE	
CONSULTANT.	(G.VEERASWAMY)
MANAGER/PROJ	(M.MURALI KRISHNA)
AGM/SC.	(P.U.MURALI KRISHNA)



CROSS SECTION OF RAILWAY EMBANKMENT.

- Note:
1. All dimensions are in millimetres.
 2. PROPOSALS ARE SHOWN IN RED
 3. Depth 2000 mm from ROAD LEVEL or 1200 mm from GROUND LEVEL whichever is more deeper.

Sheet No. 1 of 2	
RAILTEL CORPORATION OF INDIA Ltd	
RGM/SR/SC	Drg.No.RAIL TEL/SR/OFC/2008/10
DRILLING OF 100MMØ HORIZONTAL BORE ACROSS THE RAILWAY TRACK	
NOT TO SCALE	
CONSULTANT	(G.Veeraswamy)
MANAGER/PROJ	(M Murali krishna)
AGM/SC	(P V Murali krishna)

RAILCL

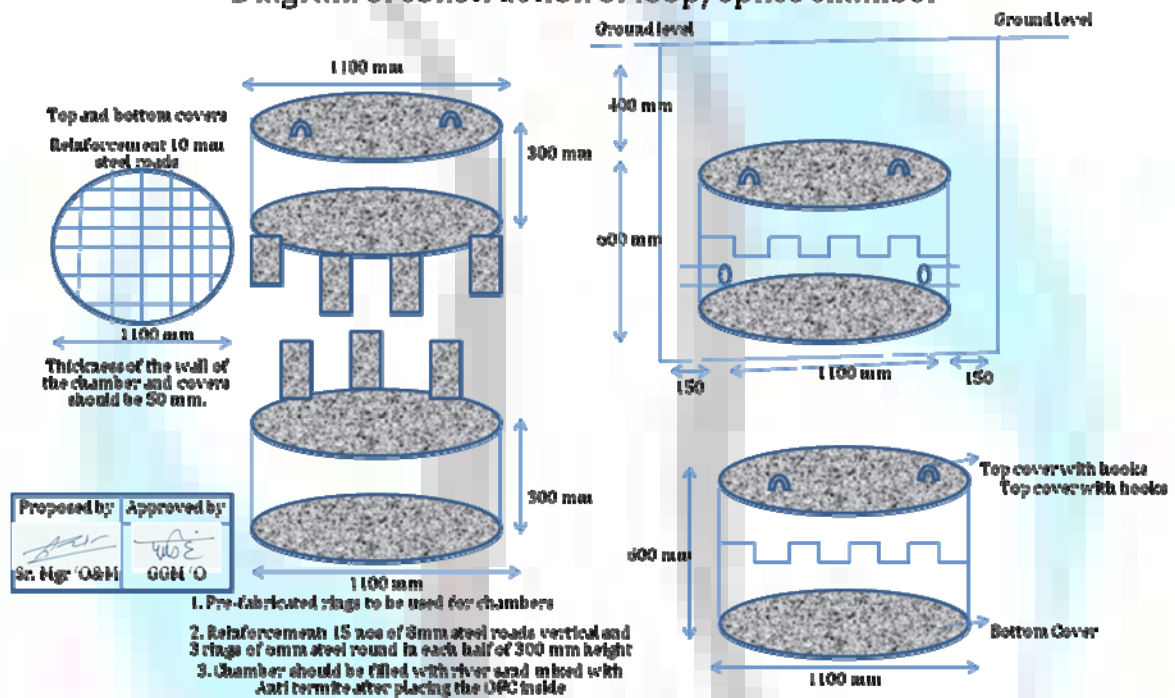


RAILCL

RAILCL

RailTel

Diagram of construction of loop/splice chamber



CODE OF PRACTICE FOR EARTHING AND BONDING SYSTEM FOR SIGNALLING EQUIPMENTS

1. Scope

This document covers earthing & bonding system to be adopted for signaling equipments with solid state components which are more susceptible to damage due to surges, transients and over voltages being encountered in the system due to lightning, sub-station switching etc. These signaling equipments include Electronic Interlocking, Integrated Power supply equipment, Digital Axle counter, Data logger etc.

2. References

IS 3043	<i>Code of practice for earthing.</i>
ANSI/UL 467	<i>Grounding & bonding equipment.</i>
IEEE 80	<i>IEEE guide for Safety in AC sub-station grounding.</i>
IEEE 837	<i>Standard for qualifying permanent connections used in sub-station grounding.</i>
IEC 62305	<i>Protection against lightning.</i>

3. Importance of Earthing

The installation and maintenance of an effective low resistance earthing system is essential due to the following -

- Efficiently dissipate heavy fault currents and electrical surges, both in magnitude and duration, to protect equipment being damaged so as to minimize down time, service interruption and replacement cost.
- Provide a stable reference for electrical and RF circuits at the installation to minimize noise during normal operation.
- Protection of personnel who work within the area from dangerous electric shock caused due to "step potential" or "touch potential".

4. Characteristics of good Earthing system

- Excellent electrical conductivity
 - Low resistance and electrical impedance.
 - Conductors of sufficient dimensions capable of withstanding high fault currents with no evidence of fusing or mechanical deterioration.
 - Lower earth resistance ensures that energy is dissipated into the ground in the safest possible manner.
 - Lower the earth circuit impedance, the more likely that high frequency lightning impulses will flow through the ground electrode path, in preference to any other path.
- High corrosion resistance
The choice of the material for grounding conductors, electrodes and connections is vital as most of the grounding system will be buried in the earth mass for many years. Copper is by far the most common material used. In addition to its inherent high conductivity, copper is usually cathodic with respect to other metals in association with grounding sites, which means that it is less likely to corrode in most environments.

- Mechanically robust and reliable.
5. **Location for Earth**
- Low lying areas close to the building or equipment are good for locating Earth Electrodes.
 - The location can be close to any existing water bodies or water points but not naturally well-drained.
 - Dry sand, lime stone, granite and any stony ground should be avoided.
 - Earthing electrode should not be installed on high bank or made-up soil.
6. **Acceptable Earth Resistance value**
The acceptable Earth Resistance at earth bus bar shall not be more than 1 ohm. This may require provision of multiple earth pits depending on site condition.
7. **Components of Earthing & Bonding system**
The components of Earthing & Bonding system are-
- Earth electrode, Earth enhancement material, Earth pit, Equi-potential earth busbar, connecting cable & tape/strip and all other associated accessories.
8. **Design of Earthing & Bonding system**
- 8.1 **Earth Electrode**
- The earth electrode shall be made of high tensile low carbon steel circular rods, molecularly bonded with copper on outer surface to meet the requirements of Underwriters Laboratories (UL) 467-2007 or latest. Such copper bonded steel cord rod is preferred due to its overall combination of strength, corrosion resistance, low resistance path to earth and cost effectiveness.
 - The earth electrode shall be UL listed and of minimum 17.0mm diameter and minimum 3.0mtrs long.
 - The minimum copper bonding thickness shall be of 250 microns.
 - Marking: UL marking, Manufacturer's name or trade name, length, diameter, catalogue number must be punched on every earth electrode.
 - Earth electrode can be visually inspected, checked for dimensions and thickness of copper coating using micron gauge. The supplier shall arrange for such inspection at the time of supply, if so desired.
- 8.2 **Earth Enhancement material**
Earth enhancement material is a superior conductive material that improves earthing effectiveness, especially in areas of poor conductivity (rocky ground, areas of moisture variation, sandy soils etc.). It improves conductivity of the earth electrode and ground contact area. It shall have following characteristics-
- Shall mainly consist of Graphite and Portland cement. Bentonite content shall be negligible.
 - Shall have high conductivity, improves earth's absorbing power and humidity retention capability.
 - Shall be non-corrosive in nature having low water solubility but highly hygroscopic.
 - Shall have resistivity of less than 0.2 ohms-meters. Resistivity shall be tested by making a 20cm. cube of the material and checking resistance of the cube at the ends. The supplier shall arrange for such testing at the time of supply, if so desired. Necessary certificate from National/ International lab for the resistivity shall also be submitted.
 - Shall be suitable for installation in dry form or in a slurry form.
 - Shall not depend on the continuous presence of water to maintain its conductivity.
 - Shall be permanent & maintenance free and in its "set form", maintains constant earth resistance with time.
 - Shall be thermally stable between -10 °C to + 60 °C ambient temperatures.
 - Shall not dissolve, decompose or leach out with time.

- shall not require periodic charging treatment nor replacement and maintenance.
- Shall be suitable for any kind of electrode and all kinds of soils of different resistivity.
- Shall not pollute the soil or local water table and meets environmental friendly requirements for landfill.
- Shall not be explosive.
- Shall not cause burns, irritation to eye, skin etc.
- Marking: The Earth enhancement material shall be supplied in sealed, moisture proof bags. These bags shall be marked with Manufacturer's name or trade name, quantity etc.

8.3 Backfill material

The excavated soil is suitable as a backfill but should be sieved to remove any large stones and placed around the electrode taking care to ensure that it is well compacted. Material like sand, salt, coke breeze, cinders and ash shall not be used because of its acidic and corrosive nature.

8.4 Earth Pit

8.4.1 Construction of unit earth pit: Refer typical installation drawing.

- A hole of 100mm to 125mm dia shall be augured /dug to a depth of about 2.8 meters.
- The earth electrode shall be placed into this hole.
- It will be penetrated into the soil by gently driving on the top of the rod. Here natural soil is assumed to be available at the bottom of the electrode so that min. 150 mm of the electrode shall be inserted in the natural soil.
- Earth enhancement material (minimum approx. 30-35 kg) shall be filled into the augured/dug hole in slurry form and allowed to set. After the material gets set, the diameter of the composite structure (earth electrode + earth enhancement material) shall be of minimum 100mm dia covering entire length of the hole.
- Remaining portion of the hole shall be covered by backfill soil, which is taken out during auguring /digging.
- A copper strip of 150mmX25mmX6mm shall be exothermically welded to main earth electrode for taking the connection to the main equipotential earth bus bar in the equipment room and to other earth pits, if any.
- Exothermic weld material shall be UL listed and tested as per provisions of IEEE 837 by NABL/ILAC member labs.
- The main earth pit shall be located as near to the main equi-potential earth bus bar in the equipment room as possible.

8.4.2 Construction of loop Earth by providing multiple earth pits

- At certain locations, it may not be possible to achieve earth resistance of $\leq 10\Omega$ with three earth electrodes /pits due to higher soil resistivity. In such cases, provision of loop earth consisting of more than one earth pit shall be done. The number of pits required shall be decided based on the resistance achieved for the earth pits already installed. The procedure mentioned above for one earth pit shall be repeated for other earth pits.
- The distance between two successive earth electrodes shall be min. 3mtrs and max. upto twice the length of the earth electrode i.e. 6 mtrs. approx.
- These earth pits shall then be inter linked using 25X2 mm. copper tape to form a loop using exothermic welding technique.
- The interconnecting tape shall be buried at depth not less than 500mm below the ground level. This interconnecting tape shall also be covered with earth enhancing compound.

- Main Equip-potential Earth Busbar (MEEB) of size 300X25X6 mm copper strip shall be installed to the wall of prefab/room on suitable insulators.
- For connecting earth pit and Main Equip-potential Earth Busbar (MEEB) 16 Sq.mm dia multi-strand single core PVC insulated copper cable with suitable copper lugs and stainless steel nuts and bolts shall be used. This cable shall be protected with GI pipe with clamping while entering into the prefab.
- The MEEBs shall have pre-drilled holes of suitable size for termination of bonding conductors. The MEEBs shall be insulated from the building walls. Each MEEB shall be installed on the wall with low voltage insulator spacers of height 60mm. The insulators used shall have suitable insulating and fire resistant properties for this application. The MEEBs shall be installed at the height of 0.5m from the room floor surface for ease of installation & maintenance. All terminations on the MEEBs shall be by using copper lugs with spring washers.

1.4.3 Measurement of Earth resistance

The earth resistance shall be measured at the Main Equip-potential Earth Busbar (MEEB) with all the earth pits interconnected using Fall of Potential method as per Para 37 of IS: 3043.

1.4.4 Inspection Chamber

- A 300X300X300 mm (inside dimension) concrete box with smooth cement plaster finish shall be provided on the top of the pit. A concrete lid, painted black, approx. 50 mm. thick with pulling hooks, shall be provided to cover the earth pit.
- Care shall be taken regarding level of the floor surrounding the earth so that the connector is not too deep in the masonry or projecting out of it.
- On backside of the cover, date of the testing and average resistance value shall be written with yellow paint on black background.

8.5 Equipotential Earth Busbar and its connection to equipments & Surge protection devices in the Equipment room: Refer typical bonding connections drawing no.SDO/RDSO/E&B/002.

8.5.1 Equip-potential earth busbars

There shall be one equip-potential earth busbar for each of the equipment room i.e. IPS/Battery charger room and EI/Relay room. The equip-potential earth busbars located in individual rooms shall be termed as Sub equip-potential busbars (SEEB). The equip-potential earth busbar located in the IPS /Battery charger room and directly connected to Class 'B' SPDs and the main earth pit shall be termed as Main equip-potential earth busbar (MEEB).

The EEBs shall have pre-drilled holes of suitable size for termination of bonding conductors. The EEBs shall be insulated from the building walls. Each EEB shall be installed on the wall with low voltage insulator spacers of height 60mm. The insulators used shall have suitable insulating and fire resistant properties for this application. The EEBs shall be installed at the height of 0.5m from the room floor surface for ease of installation & maintenance. All terminations on the EEBs shall be by using copper lugs with spring washers.

8.5.2 Bonding Connections

To minimize the effect of circulating earth loops and to provide equip-potential bonding, "star type" bonding connection is required. As such, each of the SEEBs installed in the rooms shall be directly connected to MEEB using bonding conductors. Also, equipment/racks in the room shall be directly

connected to its SEEB. The bonding conductors shall be bonded to their respective lugs by exothermic welding.

- 8.5.3** All connections i.e. routing of bonding conductors from equipments to SEEB & from SEEBs to MEEB shall be as short and as direct as possible with min. bends and separated from other wiring. However, connection from SPD to MEEB shall be as short as possible and preferably without any bend.
- 8.5.4** Materials and dimensions of bonding components for connection of individual equipments with equipotential bus bar and earth electrode shall be as given below.

Component/Bonding	Material	Size
Main equipotential earth busbar (MEEB).	Copper	300X25X6 mm (min.)
Sub equipotential earth busbar (SEEB).	Copper	150X25X6 mm (min.)
Individual equipments to SEEB using copper lugs with stainless steel nut and bolts.	Multi-strand single core PVC insulated copper cable as per IS:694	10 Sq.mm
SEEB to MEEB using copper lugs with stainless steel nut and bolts.	Multi-strand single core PVC insulated copper cable as per IS:694	16 Sq.mm
Surge protection devices (SPD) to MEEB using copper lugs with stainless steel nut and bolts.	Multi-strand single core PVC insulated copper cable as per IS:694	16 Sq.mm
MEEB to main earth electrode.	Multi-strand single core PVC insulated copper cable as per IS:694 (Duplicated)	35 Sq.mm
Main earth pit to other earth pit in case of loop earth.	Copper tape	25X2 mm

9. Drawing of earthing & bonding system

The complete layout with dimensions of the earthing & bonding system shall be submitted by the supplier after commissioning.

10. Warranty

The supplier shall be responsible for complete supply, installation & commissioning of the earthing & bonding system. The warranty of such system shall be 12 months from date of commissioning. During this period, any failure of earthing system due to improper materials & bad workmanship shall be attended free of cost by the supplier.

11. Maintenance of earthing & bonding system

The maintenance schedule should cover verification of earthing system conductors and components, verification of electrical continuity, measurement of earth resistance, re-fastening of components and conductors etc.

Check List for tenderer before submission of tender

S.No	Check list	Complied
1	Each page of the tender document shall be signed and rubber stamped	
3	Experience certificate – 35% of tender value as eligibility criteria vide para 3.16.	
4	Turnover - 150% of tender value as per Audited balance sheet vide para 3.16.	
5	Submission of DD for cost of EMD (Refer EMD clause)	
6	Submission of DD for cost of the tender document	
7	Offer letter complete. (Form No.1)	
8	The offer quoted will be with percentage rate in figures and words (refer: Schedule of Requirement)	
9	Statement of deviations as per Form No.5	
10	Bank details RTGS/IFSC code etc., as per Form -15	
11	Company registration number, Pan Card details, GST number etc.,	
12	Constitution of firm & Power of attorney	
13	Break –up of Taxes as per Form -16	

The above checklist is indicative and does not purport to be the entire requirement. Tenderers are advised to go through the entire tender document carefully before submitting their offers.

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