

SPECIAL CONDITION OF CONTRACT (SCC)

These special conditions of contract shall be read in conjunction with Airports Authority of India General conditions of contract, if there are any provisions in the special conditions of contract which are at variance with the provisions of general conditions of contract, the provision in these special conditions shall take precedence.

1. General Scope of Work: - The Scope of work covers the following items:-

- a) Providing operational services for Baggage handling system at arrival side as well as departure side.
- b) Supply of GLF Spares as per BOQ as and when required.
- c) Providing and fixing decorative lighting of Terminal building, Main Gate, Poles, trees etc complete as required.
- d) Other miscellaneous electrical work.

2. Period of Contract: - The service contract shall be for a period of **Twenty Four (24) Months** from the date of handing over of site. The contract period can be extended for further period of 06 months on the same terms and conditions of the agreement. AAI reserves the right to terminate the contract fully or partially by giving 30 days' notice in writing to the contractor. If in the opinion of the Engineer-in-Charge, it is observed that the contractor is not doing the works satisfactorily as per the terms and conditions of contract, then the contract can be terminated with immediate effect without giving any reasons thereof.

3. Entry Pass:- The work site lies in restricted area, The contractor shall apply in writing in advance for issue of necessary entry passes of workmen engaged by him, The office/airport premises is an essential service covered under the maintenance of essential service Act and hence disruption of services rendered will be a statutory offence. The necessary police verification etc. as required for entry passes will be the responsibility of the contractor. All expenditure towards arranging security passes shall be borne by the Agency.

4. Security:- The contractor and his employees shall abide by security regulation framed by AAI/ BCAS or Police Authorities. Any worker of the contractor, whose presence is found undesirable in AAI premises, shall not be allowed to work. The Contractor shall be fully responsible for the satisfactorily working of his staff.

"If Contractor or his authorized representative or his employed workers are found violating any of security regulations, suitable action shall be taken by AAI as per prevailing rules".

All men and vehicles shall be permitted to enter the restricted / office area only on possession of the security passes. The contractor shall apply in writing in advance before commencement of work for issue of security passes and shall submit a list of personnel concerned with their addresses. The contractor shall ensure that his men are deployed only in those area where the security passes issued is valid for. Passes shall be deposited back with Engineer-in-Charge on demand and in any case immediately after completion of work. The contractor or his staff/workmen shall observe all the rules promulgated from time to time by the concerned authorities. Any person found violating the security rules laid down by the authority will be expelled from the area without assigning any reason whatsoever and contractor shall have no claim on this account. The necessary police verification etc.

as required for entry passes will be responsibility of contractor. All expenditure towards arranging security passes shall be borne by the Agency.

5. Statutory & Regulatory Clauses: -

The contractor has to discharge all the obligations as provided under various statutory enactment including the EPF/ ESI/ Contract Labour (Regulation and abolition)/ Minimum Wages / Payment of Wages / Payment of Bonus /Payment of Gratuity / Workmen's compensation / Works Contract and other relevant Acts, Rules and Regulations in force and as amended from time to time in the State, as applicable.

The engagement and employment of workers and payment of wages to them as per existing provisions of various labour laws and regulations is the sole responsibility of the contractor and any breach of such laws or regulations shall be deemed to be violation of this contract. AAI may ask the contractor to produce documents to verify that these provisions/laws are complied by the contractor.

The contractor has to follow the local security/safety rules & regulations and such instructions on restricted hours of work as may be imposed on him by the department / local authorities, while working in security restricted zones and no claim whatsoever on account of this, will be entertained.

The contractor has to deploy their staff to run the system on all days (365 days) including Sundays and Gazetted holidays in shift as per BOQ for which nothing extra shall be paid.

Contractor has to submit the details of staff such as, qualification documents and experience letters of the staff, the CV and passport size coloured photograph along with copy of police verification (not older than six months on the date of start of work) before engaging them on work. All the documents should be self attested by each worker and signed and stamped by contractor/ agency. The decision of Engineer-in-charge, to accept or reject any candidate on the basis of lack of experience, qualification, lack of skills required for job, will be final and binding on the Agency.

- 6. Uniform:-** The contractor/ agency has to provide every year during the currency of the contract, 2 sets of uniform (pant and shirt), 1 pair of shoes & 3 pair of socks and a sweater to his staff of approved colour during the contract period, (within one month from the date of award) failing which AAI will recover an amount of Rs.200/- per person per week till the compliance of the same from the contractors running/final bill, in the event of non-compliance of wearing uniform & shoes by workers on daily basis a recovery of Rs. 50/-per day per person shall be made from running bills. The workers should wear a badge on the left pocket of the shirt mentioning company's name.
7. No accommodation shall be arranged by the AAI for the staff / workers of the contractor. It is the responsibility of contractor to make his own arrangements for the facilities.
- 8. Rates: -** The prices quoted shall be inclusive of all taxes inclusive GST, but excluding PF, ESI & Bonus. PF & ESI amount paid to the statutory authorities by the contractor shall be reimbursed on actual basis throughout the contract period on submission of the documentary evidence in next bill or after the final bill.

Bonus amount as per latest Govt. rules or 8.33% of annual salary whichever is higher will be paid to the deployed manpower by the contractor and the same shall be reimbursed on actual basis throughout the contract period on submission of the documentary evidence in next bill or after the final bill. In case of non-payment of bonus necessary recovery/withheld against bonus from their RA Bill / Final bill shall be made as decided by EIC and appropriate action will be

initiated by AAI against the contractor. The decision of EIC in this regard will be final and binding on the Agency.

9. PF & ESIC Contribution:-

- (i) The contractor shall register himself with Labour Licensing Authority and obtain Labour License Number in this regard.
- (ii) The contractor shall have to register with PF & ESIC (where ever applicable) for workmen engaged for the work & challans / deposit receipts of PF & ESI contribution shall be submitted in AAI office for verification/ reimbursement, at the time of submission of bill.
- (iii) The PF dues (including EDLI and administrative charges) in respect of workers engaged by the contractor for AAI works to be deposited by the contractor every month by a challan and the documentary evidence in support of such payments along-with employee wise details of the PF contribution (both Employee's share and the employer's contribution) needs to be submitted to the Engineer in charge for the work/ contract.
- (iv) ESI (where ever applicable) & EPF amount (contractor's contribution & administrative charges) paid to the statutory authorities by the contractor shall be reimbursed on actual basis on submission of documentary evidence.
- ~~(v) If ESI not applicable, the agency shall provide Rs. 2.0 lacs Medielaim policy to each person engaged at the site.~~
- (vi) The contractor has to deposit PF & ESI as applicable, failing which recovery/ withheld @ 26 % and 6 % against PF and ESI respectively from their R.A bills/ Final Bill shall be made.

10. Labour Wages:

- (i) The contractor has to pay the prevailing minimum wages issued by the office of Regional Labour Commissioner/ Chief Labour Commissioner (whichever is higher), from time to time. However, the difference in minimum wages based on actual payment made to the labour and wages applicable at the time of submission of tender will be reimbursed including difference in EPF and ESI payment to the contractor on revision of minimum wages and no additional amount such as contractor's overhead & profit will be paid on this account.

In this regard the successful bidder shall submit an affidavit on non-judicial stamp paper of Rs.100 as per **Performa-IV** before award of the work.

- (ii) For the purpose of admitting the claim for reimbursement of statutory increase in wages paid by him, the contractor has to produce the required documentary evidence to the satisfaction of Engineer-In-Charge.
- (iii) **The payment to the workmen's engaged by the contractor is to be paid through NEFT/ RTGS on or before 7th of every month irrespective of Saturday, Sunday and bank holidays. If any violation with respect to payment of wages for any two months in a contract period, necessary action for cancellation of contract, debarring of the agency for participating in future contracts in AAI shall be initiated.** The agency will not be allowed to participate in any of the tendering process in AAI till finalization of the decision.

11. During the contract period if any new installations are added / replaced or modified the existing ones in these areas, which do not warrant any additional manpower, the maintenance services for these installations are also to be provided by the contractor without any extra cost.

12. **Qualification & Wages of Staff:** - The contractor should depute the persons as per the qualification given below for Operation, maintenance works. Each shift should be covered with highly skilled, skilled, Semi-skilled, Un- skilled persons as required as per BOQ.

- (i) ~~Highly skilled manpower (Sr. Supervisor)~~ shall be Diploma holders with 04 year experience (Preferable) or Graduate engineer with min. 02 years of similar experience for overall supervision and administration of the contract and ~~shall be paid extra allowance of Rs.4000/- per month in addition to the minimum wages.~~
- (ii) ~~Highly skilled manpower (Supervisor)~~ shall be Diploma holders with 02 years experience /Graduate with 01year experience (Preferable) or ITI Holder in Electrician/wireman/refrigeration/fitter trade with 10 years' experience for supervision of manpower & works and ~~shall be paid extra allowance of Rs.2000/- per month in addition to the minimum wages,~~
- (iii) ~~Highly skilled manpower (Computer Operator)~~ Shall have Graduation with min. 2 years of work experienced with sound computer skills and ~~shall be paid extra allowance of Rs. 2000/- per month in addition to the minimum wages.~~
- (iv) **Skilled manpower** - Shall be I.T.I. holder in Electrician/ Wireman/fitter with minimum 1 year experience in similar works or wireman trade license with minimum 2 years experience in similar works / field and shall be paid as per minimum wages.
- (v) **Skilled manpower (Data Entry)** - Shall be 3-year Diploma holder with minimum 1 year experience in Computer course and shall be paid as per minimum wages
- (vi) **Semi-Skilled manpower** - Shall have ITI/ wireman license in similar works or 10th pass with five year experience of similar works and shall be paid as per minimum wages.
- (vii) **Unskilled manpower-** Shall be min. VIIIth Class pass with good physique & shall have basic knowledge of similar electrical works and shall be paid as per minimum wages.

The EIC has full rights to instruct the agency to expel/ replace the person with the regular habit of taking unauthorized leaves frequently/continuously absent / bad behavior/creating nuisance at work place without proper justification, which may impact the morale of coworkers.

13. In case of absence of staff from duty recovery will be made by the department at the following rates, which shall be binding on the contractor.

- | | | |
|-------------------|---|--------------------|
| i. Highly Skilled | : | As per daily wages |
| ii. Skilled | : | As per daily wages |
| iii. Semi Skilled | : | As per daily wages |
| iv. Un Skilled | : | As per daily wages |

(v) **But apart from daily wages, an amount of Rs.100/- will be recovered from the agency per person per shift for absenteeism of any worker as a penalty.**

The EIC has full rights to instruct the agency of expel/ replace the person with the regular habit of taking unauthorized leaves frequently or continuously absent without proper justification, which may impact the morale of co-workers.

14. The complete details of the installation under the scope of work are attached in Annexure-A and Preventive Maintenance Schedule of Tender document.

15. It is the responsibility of the contractor to maintain and ensure 100% serviceability of the equipment's / installations under this contract, except for the reasons beyond the control of the contractor. The decision of engineer-in-charge is final and binding on the contractor in respect of establishment & "the reason beyond the control of the contractor'. If the failure to maintain the serviceability of installations attributed to the contractors / agency, penalty to be imposed on the contractor as deemed fit by the Engineer in Charge.
16. In case the agency is not able to attend/ rectify fault in the system within the stipulated time period, AAI reserves the rights to engage outside agency to check / inspect the faulty system. If the system is rectified by the outside agency or third party, the amount of checking, rectification along with suitable penalty towards delay in attending breakdown shall be recovered from the agency. Who otherwise is responsible for the up keeping of this equipments.
17. There shall be no liability on the part of the AAI to pay any compensation arising out of the labour dispute, accident etc. at site. The contractor will be fully responsible for safety, security and coordination of the workers deployed at AAI site. Noting extra will be paid to the Agency on this account.
18. Contractor or his authorized representative shall visit the site at least once in one month and as and when called by the Engineer-in-Charge or his representative and will report about satisfactory working of all equipment.
19. Any material taken out for the purpose of repair/ rectification/ replacement from the building or work premises shall have necessary permission from the EIC and security personnel/ competent authority in the form of a Gate pass.
20. The timings of operation & maintenance/ upkeep work etc. shall be as decided by Engineer-In-charge from time to time depending upon operational & technical requirement.
21. If agency is doing any maintenance work as per schedule then they have to take prior approval for the same from EIC and also have coordination with other entities/ wings (ATC/CNS/Airlines etc.) as required.
22. **Handing/ Taking over of the Equipment Machines after contract:-**

(i) For AMC Contract :

All the equipments / installations/ systems with accessories complete in all respect shall be checked by agency before taking over the site and the same has to be handed over AAI contractor in good running condition at the end of the contract. ~~List of defects, If any notified during contract period shall be rectified by the agency before the closure of the contract. If the agency failed to rectify the defects, notified to him (during contract period) the EIC shall rectified the defects at the contractors risk & cost. The decision of EIC in this regard will be final& binding on the agency.~~

(ii) For CMC Contract

~~For items under Comprehensive Maintenance Contract (if any), the agency will check the installations thoroughly at the time of taking over and any defect found will be intimated to AAI in writing.~~

~~List of defects, if any, notified during contract period shall be rectified by the agency before the closure of the contact. If the agency failed to rectify the defects, notified to him (during contract~~

~~period) the EIC shall rectified the defects at the contractors risk & cost. The decision of EIC in this regard will be final & binding on the agency.~~

23. For delay in attending maintenance schedules:- All the applicable daily preventive maintenance works shall be done as per schedule and complete records in those regards has to be prepared and submitted to AAI engineers, failing which recovery of Rs.500.00 per day per equipment shall be made from the bills for each set/system of installations, subject to the shutdown provided by AAI, which shall be Co- ordinate by the agency.

24. The contractor has to deploy their staff to run the system on all days as per BOQ. If there are some labour under a court case that need to be deployed by the agency as directed by E-I-C.

25. The work shall be carried out as per specifications and relevant applicable standard including ISI/CPWD specification.

26. Safety & Availability of Material :-

(i) The firm / Agency shall submit test certificates, wherever applicable as per CPWD/IS/Manufacturers practice and the department reserves the right to get them independently checked for the material supplied by Contractor as required.

(ii) All debris due to works shall be removed and site shall be cleared by the contractor as soon as the task is completed. Non-removal of debris from site will attract a penalty of Rs.500/- per day from the running bill/ final bill.

(iii) Issue of materials stipulated in the tender will be regulated to the actual needs from time to time. Unused materials shall be returned to the department failing which the recovery will be made at the penal rate i.e. double the market rate. Any damage caused to the materials during transit or under storage will be to the contractor's account.

(iv) If there is any requirement of material at site which is not available in AAI store then contractor has to procure from market as per approved makes with EIC permission and close the complaint as soon as possible. Contractor will provide the tax invoice / bill for the same and the payment for such material will be given along with 15% OH & CP in running / final bill as an extra item.

27. Guarantee:-In case of supply of any material, the tender shall guarantee the equipment/ material against all defects as per manufacturer. Any defects arising during the guarantee period shall be rectified by the Tenderer at his own expenses to the satisfaction of the E-I-C.

28. Water, Electricity and Enquiry Room :

The AAI will provide water & Electricity for operation , daily maintenance purpose, free of cost.

29. Make of Items :

The Contractor shall use/supply the material as per approved make of AAI or as per schedule of quantities or exact replacement of existing material suitable to site after taking permission from EIC/ authorized representative in writing in case makes are not defined for particular material and the department reserves the right to accept or reject any other makes offered by the contractor.

The contractor has to supply the material as and when required/ordered by the Engineer-In-Charge or his representative during the currency of contract.

30. Terms of payment :

The Running payments for the work done shall be released **Quarterly** by AAI only after salary payments to all workers and submitting the proof of disbursement and deducting the applicable taxes. The Security Deposit @ 10% shall be deducted from the running bills, which shall be released after successful completion of Defects Liability Period.

The following documents as applicable shall be produced and self-attested photo copy shall be submitted by the Contractor in hard copy during each running bills:-

- (i) Delivery challan / copy of invoice of all the material supplied, Warranty/guarantee Certificate (which applicable) for the supplied materials.
- (ii) Test Certificate to confirm that the materials meet the contract specification and relevant standard in all respects.
- (iii) Monthly Challans of E.P.F. and E.S.I. deposits upto previous month.
- (iv) Wages register signed by workers of each month.
- (v) Bonus details received and signed by workers.
- (vi) Bank statement /copy of passbook of individual manpower engaged under the contract as proof of payment of minimum wages , Bonus etc.
- (vii) Log books & attendance register.

Final Bill Payment:- The total amount of final bill worked out at the accepted tender rates, if found to be more than the amount worked out at the quoted rate of second lowest, the contractor shall be paid lower of the two.

The agency shall submit final bill along with all the documents related with PF, ESIC & Bonus to AAI in addition to all maintenance schedule registers, documents etc. related to the work. The agency also formally hand over the list of equipments in good working condition, without any damage as handed over to them by AAI.

31. The contractor shall be responsible for any damage caused to any equipment's /building of AAI due to the negligence of the staff. The same shall be made good by the contractor at his cost.
- ~~32. Agency has to submit the Preventive Maintenance Activity Plan within 15 days of award of work in line with the Preventive Maintenance Schedule, considering site requirement for approval of Engineer In-Charge or his authorized representative.~~
33. **The agency shall provide minimum 01 no. mobile phone with active SIM to the site in charge /authorized representative for official use during the currency of the contract, nothing extra will be paid on this account.**
34. **Dismantled materials :**
 - (i) The contractor shall make entry of all the materials issued for the work, time to time in the material issue register (to be separately maintained by the contractor).
 - (ii) After completion of the work necessary entries shall also be made in the register indicating the location where the materials are installed and the balance materials left out need to deposited to AAI store after completion of work.
 - (iii) The dismantled materials shall be duly handed over to Engineer in charge or his authorized representative and necessary endorsement shall be obtained in both material issue register and also the dismantled material register.

35. Equipment's For Night Working :

In case, it appears, at any stage that the work may not be completed within the stipulated period due to restricted working hours in the day in view of any reasons, the contractor shall execute the work during the night as and when required. Nothing extra shall be payable to contractor for working in night time.

36. Consumables: - All the consumables such as insulation tape, Test Lamps, cotton waste, soap, dusters, hack-saw blade, etc. will be provided by the contractor, Stationeries such as log books, work diaries to workmen, printed maintenance records, logbook of various installations, various registers, preventive maintenance schedules as per AAI format and as per the instructions of Engineer-in-charge will be provided within the 15 days of award of contract and maintained by the contractor at the site. Reserve Stock quantity to be decided by the EIC & nothing extra payment will be made in this regard and the agency has to keep minimum quantity of consumables for one month in stock depending on the actual requirement failing which the material will be arranged by the AAI and the expenditure will be recovered from the agency with 15% over head.

37. Tools And Tackles:

The contractor shall provide all the tools and tackles for the works including Measuring instruments and safety gadgets for attending any fault of equipments. Cost of transportation of labour and material to Airport/ office premises shall have to be borne by the contractor.

(i) Each Skilled manpower will be provided with the following minimum tools of reputed brand (Make:- Taparia or equivalent) along with carrying bag for routine operation ,daily maintenance works:-

•	Cutting pliers	01 No.
•	Screw Drivers (Big & Small)	01 No.
•	Wire strippers	01 No.
•	Line Testers	01 No.
•	Test Lamps with holder	01 No.

(ii)The following minimum tools of reputed brand (Make:- Taparia or equivalent) shall be provided by the agency at AAI store for use of operation/routine works: -

•	Screw Driver Set of different sizes.	01Set
•	Nose pliers.	01 Set
•	Wire Cutters/Cutting pliers	01 No.
•	Multi-meter (VAO Meter)	01 Nos.
•	Raincoat	02 Nos.
•	Gum boot	02 Nos.
•	Safety Gloves	02 Nos.
•	Rechargeable torch light	01 Nos.

In addition to above tools, if any extra tools are required for operation/required works, Contractor will have to provide tools without any cost. No request for any payment in this regard shall be entertained.

38. Guidance To Tenderer :

The contractor shall quote the tender based on the expenditure towards providing of manpower (based on minimum wages) Tool & Plants, Uniform to workers, Statutory items, PIC Charges ,Cost of consumables, miscellaneous expenses, taxes & duties etc.

39. Penalty Clause:

~~No total Breakdown is acceptable, In case of total Breakdown due to negligence of the contractor or his workmen, suitable recovery proposed by Engineer In Charge will be final and binding on the contractor. Special care is required in attending the faults for the equipments where no standby is available. However, following penalty will be imposed in break down condition.~~

- ~~1. Rs. 500.00 per day in case of break down non providing special tools to determine the fault.~~
- ~~2. Rs. 1000.00 per day for rectification of fault in case of unserviceable of Conveyor belt OR its accessories/related parts OR any fault in Panel of conveyor belt/related Power cable/ related Signal cable etc. after 24 Hrs..~~
- ~~3. Rs. 2000.00 per day for non finding and rectification of fault in case of unserviceable of Conveyor belt OR its accessories/related parts OR any fault in Panel of conveyor belt/related Power cable/related signal cable etc. after 24 Hrs.~~
- ~~4. Rs. 3000.00 per day in case of break down which are not covered on point 2 & 3 where special repair are required after 24 Hrs.~~

~~Note: -- In any case the total penalty at any point of time on account of any or all the categories put together shall not exceed 15 % of the total contract value per month.~~

If any equipments damaged due to the negligence of the manpower, the agency shall repair the same and nothing extra shall be paid on this account by the AAI.

~~Once the total penalty reaches this limit, the contract shall be liable for review / rescind as per the provisions of the contract agreement and the decision of Engineer in Charge in this regard shall be final and binding on the contractor.~~

The EIC has full rights to relax the agency from any penalty, if found that agency used full efforts in all aspect to rectify the fault within time limit, but conditions were beyond the control of agency.

- ~~40. Preventive and break down maintenance of Baggage handling system at Arrival side as well as departure side (Miscellaneous / Newly) which are not mentioning in this tender document, will be carried out by agency without any cost. No request for any payment in this regard shall be entertained.~~

TECHNICAL SPECIFICATIONS

405

ISOLATING TRANSFORMER FOR 5KV SERIES CIRCUIT

1. General

The design of Isolating transformer shall be according to AGL fitting requirement. This specification covers completely enclosed rubber covered isolating transformer for use of 6.6 and 20 amps series airport lighting circuits having nominal voltage rating of 5KV. The transformer shall be water tight and shall be designed for direct burial in the earth or installation in a base. The isolating transformer shall conform to IS specifications 12290 (latest edition)

2. Rating

The transformer shall be rated for 50Hz.

3. Operating conditions

The transformer shall be constructed for continuous outdoor service at any ambient temperature from minimum of (-) 20 degree C to a maximum of 55 degree C. They shall operate properly when buried in the ground with 5KV on the primary winding. The transformer shall be designed to operate satisfactorily at rated 50 Hz. Frequency.

4. Insulation

The transformer shall be insulated for operation on a 5000 volt primary circuit.

5. Core and coil

The windings shall be completely insulated from each other and the core. Sharp corners and edges of the core and coil assembly shall be eliminated so that they shall not cut the housing, if transformer is dropped or handled roughly.

6. Housing

The housing shall completely enclose the core and coil assembly with lead sealed into the housing in such a way as to produce a completely watertight unit. All exposed parts of the transformer assembly shall be capable of withstanding outdoor exposure, immersion in water, exposure to gas line and direct burial in earth containing large concentrations of oils, acids or alkalis.

The housing material shall consist of rubber, synthetic rubber or rubber like compound. Other compounds may be used for the housing. The minimum strength requirements of housing material shall not be less than the following:

- i) Tensile strength = 84 Kg/cm²
- ii) Tensile strength after 96 hours oxygen bomb test = 70 Kg/cm²
- iii) Tensile strength after 168 hrs. in an oven test at 80 ± 1° C = 70 Kg/cm²

In the housing no portion of the case shall be less than 0.64 cm thick and it shall be free of cracks, blisters, holes etc. which would be detrimental to transformer service life. Internal air pockets or voids, if any, shall be very minimum and the assembly shall sufficiently be rugged to withstand rough handling. The shape of the transformer may be either rectangular or circular. The overall dimensions of the transformer shall be such that



it can fit easily inside a space defined as a cylinder of 20.3 cm. diameter by 25.4 cm. in height, inside dimensions. The case shall be designed so that transformer may be installed upright or lying on any side.

7. Marking

The following information shall be moulded on the surface of the transformer:

Transformer rating: Primary amperesSecondary amperesWatts
 Volts 5000Transformer series to series/Year of manufacture
 Manufacturer's name or trade name

8. Transformer lead

The transformer shall be provided with a two conductor secondary lead and two single conductor primary leads. Lead connections may be of the solder or of the solder-less type. If solder less connections are used in jointing leads to the transformer windings, these shall be of a type designed for the application and properly applied. Care shall be exercised during moulding to ensure the proper clearance exists between these connections after the moulding operation has been completed. All three leads shall emerge from one end of the transformer. Spacing and arrangements are optional, provided all other requirements are complied with. The leads shall be securely fastened to the transformer in such a manner that carrying by a single lead will not loosen the electrical connections or effect the water seal. The length of all transformer leads shall be measured from the connector face to the junction of the transformer case.

One primary lead shall be equipped with a plug type connector; the other primary lead shall be equipped with receptacle. The cable for the primary leads shall be 19/0.75mm single core cable, annealed tinned copper conductor insulated with composite insulation of HR-VIR and PCP sheathed suitable for 5000V operating voltage. Each primary lead shall extend not less than 60 cm, plus or minus 7.5cms beyond the housing including the cable connector.

The secondary lead shall be equipped with a receptacle. The cable for secondary lead shall be at least 37/0.30mm twin core cable, annealed tinned and filled and sheathed with special type of PCP suitable for 600 volt operating voltage. The cable shall extend 120cms plus or minus 7.5cm, beyond the housing, including the cable connector. An approved watertight cap or plug shall be furnished on each mating part of each plug or receptacle for protection during shipment and installation from moisture and dirt.

9. Testing

Each transformer shall be examined visually for good workmanship. Following testes shall be carried out.

- i) Insulation resistance tests
- ii) Characteristics tests
- iii) Impact Test
- iv) Acceptance tests



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 संयुक्त महापालिका (सि.वि.)