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| BANGLADESH RAILWAY  AGREEMENT /MEMO OF TERMS FOR THE CROSSING OF RAILWAY  TRACKS AND/ OR LAND BY ELECTRIC OVERHEAD TRANSMISSION/  DISTRIBUTION LINES UP-TO 2,30,000 VOLTS .  Agreement / Memo of terms made this -----------day of-------------------201... between the President of The People’s Republic of Bangladesh as represented by the Bangladesh Railway Administration (hereinafter called “The Railway”) and-----------------------------------------of ------------------------------------------------------(hereinafter referred to as “The Owner”).  Where as the owner is desirous of erecting KV .......................... overhead electric line/ wires across Railway land and/ or tracks at mile-----------------on------------------the---------------------  *IT IS HEREBY AGREED AS FOLLOWS:-*  That The Owner shall comply with the conditions and specifications in connection with the erection of poles, standards, electric overhead transmission/ distribution lines etc. as set out in Appendix `A` and also with the following general conditions:-  I) PROTECTION OF COMMUNICATION LINES:-  The crossing and /or electric transmission/ distribution lines shall in no way interfere with or endanger any Railway communication lines, and sanction given by the Railway to the placing of a crossing and/ or transmission/ distribution lines shall not be constructed as affecting in any way the Bangladesh Railway communication lines.    Further the Railway reserves the right of asking the owner to transpose his transmission lines, wires, or to adopt such other precautions as the Railway may consider necessary to prevent interference with the Railway Telephone train control or Telegraph wires.  ( II ) APPROVAL OF WORKS BY THE RAILWAY.  The approval of works by the Railway in writing shall be obtained by the owner:-  a) before any work on Railway land is commenced;  b) before the works are taken into use; and  c) notice shall be given to the Railway at least seven days before any work on Railway land is commenced and 48 hours before any crossing is put into service for the first time.  ( III ) CERTIFICATE OF COMPLIANCE WITH REGULATIONS.    Before the Railway’s written approval to place the crossing in commission is granted, a certificate certifying that the works have been constructed in full compliance with these regulations shall be submitted to the Railway by the Owner responsible for its construction.    ( IV ) WORK TO BE EXECUTED BY THE RAILWAY.  The disturbance of any Railway road, or ground or any attachment to any Railway structure which may be necessary in the placing or maintenance of the crossing shall be effected by, or under the supervision of the Railway and any conduit culvert or similar work passing under Railway tracks or premises shall be constructed by the Railway in such a manner and of such materials as it may approve of, **the cost of such work being borne by the Owner.**  **1** |

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| V) MAINTENANCE :    No work involving the removal, alternation or maintenance of any crossing shall be undertaken without the written approval of the Railway.  VI) INDEMNIFICATION OF RAILWAY AGAINST DAMAGES.  The Owner shall hold the Railway indemnified for all damages and compensation that the Railway may have to suffer or to pay for any accident or loss to any person or to any property whether of the Railway or of any outside party or person arising from or due to and caused by the said overhead electric wires or through any negligence of the Owner in respect thereto.  VII) RIGHT OF RAILWAY TO REFUSE CROSSINGS.  The Railway may refuse the owner permission to cross the Railway tracks or Railway land if the point of crossing is considered to be unsatisfactory from the Railway’s point of view, but such permission to cross the Railway land and / or tracks shall not be unreasonably withheld. The Railway however reserves, the right of refusing permission to erect transmission lines and crossing on Railway land when the Owner has not to transmit energy from one side of the track to the other, the permission to erect transmission lines and crossing in the Railway land does not create a tenancy in favour of the Owner.  VIII ) ALTERATION OR REALIGNMENT OF OVERHEAD CROSSING AS DESIRED  BY THE RAILWAY .  The Railway may call upon the Owner to alter or realign any overhead crossing structure on or above Railway property on account of anticipated Railway’s Developments, the cost of such alteration realignment shall be met by the Owner.    (IX) All inspections and test both initial or periodic as required by the Indian Electricity Act, 1910, and the Indian Electricity Rules of 1937 as adopted in Bangladesh, made there under shall be arranged for by the Owner and any necessary fees to be paid to the Electrical Inspector of the Local Government for such inspections or tests shall be paid by the Owner.  (X) The transmission/ distribution lines shall not be assigned mortgaged, sublet, or transferred in any way except with the express written consent of the Railway to be obtained in advance which will not be unreasonably withheld.    (XI) On breach, non-observance and non-performance by the owner of any of the terms and conditions herein contained, it shall be lawful for the Railway at any time there after to determine this Agreement/ Memo of Terms by notices in writing to the Owner and on such determination the dismantling of the transmission/ distribution lines shall be executed by and at the expense of the Owner and The Railway land shall be vacated within a reasonable period to be prescribed in the notice without any compensation from the Railway.  (XII) The Railway reserves to itself the right to alter the terms and conditions herein contained and to add new terms and conditions in accordance with any law, by-law, rule, regulation, standard dimension or safety precaution now or thereafter binding on the Railway and such alteration or addition shall be notified in writing to the owner and shall be binding on the owner forthwith subject to a reasonable period for its introduction to be prescribed in the notice according to the merit of the case.  2 |

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| XIII) TERMINATION OF AGREEMENT/ MEMO OF TERMS  Either party may determine this Agreement/ Memo of Terms by giving to the other party six months’ notice in writing expiring at any time, of there intention to do so, and at the expiration of such notice the owner shall remove the said posts and overhead electric wires and other apparatus belonging to the owner and restore the premises of the Railway to their former condition and in default thereof the Railway shall be at liberty to do so at the cost the Owner who shall pay such costs to the Railway on demand before terminating this Agreement/ Memo of terms.  XIV) CORRESPONDENCE :  All correspondence such as applications for permission to commence work bringing the overhead transmission/ distribution lines into use and notice etc, in connection with maintenance called for by this Agreement/ Memo of terms shall be addressed by the owner to the Chief Electrical Engineer, Bangladesh Railway, CRB, Chittagong representing the Railway and by the Railway to the Owner at----------------------------As far as possible applications should be made in standard forms attached here to.  XV) COST OF EXECUTING THIS AGREEMENT/ MEMO OF TERMS.  The owner shall pay all the cost and incidentals to the preparation stamping and executing of this Agreement / Memo of Terms.    IN WITNESS WHEREOF the parties here to have hereinto set their hands the day and year mentioned below :-  Singed by .------------------------------------  Chief Electrical Engineer  Bangladesh Railway, Chittagong for &  on behalf of the President of Peoples  Republic of Bangladesh  on the---------------- day of----------201.... .  Signed by ----------------------------------------  Chief Electrical Engineer/ East  Bangladesh Railway,  Chittagong  on behalf of the said Owner  on this -----------------day of 201.... .  In the presence of :-  1. Witness--------------------------------------  Address--------------------------------------  -------------------------------------  2. Witness---------------------------------------  Address---------------------------------------  SIGNED BY. ------------------.  (Owner)  3 |

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| APPENDIX ‘A’  CONDITIONS AND SPECIFICATIONS IN CONNECTION WITH THE  ERECTION OF POLES/ TOWERS, STANDARDS, OVERHEAD  ELECTRIC TRANSMISSION/ DISTRIBUTION LINES ETC.  **NOTE: These requirements do not apply to crossings where provision has to be made for Electric Traction.**  I. DRAWINGS :  The Owner shall prepare tracing /drawings (scale for site plan not less than 100 feet equal to 1 inch and for detail plan not less than 1/4” inch to a foot) a copy of traching / six copies of drawings which shall be attached to this Agreement /Memo of terms as a schedule the drawing shall show:-  (a) exact location of transmission /distribution lines and crossing, the crossing span shall be shown in elevations, giving dimensions of pole/ Tower, centres from track or tracks clearances allowed for sag and full details of guard netting and shown in a tabulated form;  (b) type and size of poles/ Towers with their bearing loads and factor of safety allowed for;  (c) size of conductors, Shield wires, guard wires, Guys, straining screws, cross arms etc., with factor of safety allowed ;  (d) the heading to the drawing shall give particulars of voltage and transmission/ distribution system and the nearest Railway station and mile number .  II. ELECTRIC OVERHEAD LINES CROSSING RAILWAY TRACK  As far as possible the overhead lines crossing Railway tracks should be at a right angle to the tracks . A deviation up-to 300 from the right angle may be allowed in special cases, at the discretion of the Railway Administration.  III. ELECTRIC OVERHEAD LINES SUPPORTED ON STEEL TOWERS  AND CROSSING RAILWAY TRACKS.  (a) The supporting towers shall be of approved design and capable of withstanding, the following forces:-  i) Weight of conductors, fittings and steel work.  ii) Wind pressure on the conductors and on the structure, in accordance  with the provisions of the steel structure code issued by the Railway division.  iii) Where crossing are situated in localities subject to frost and snow, provision shall be made for ice or snow loading. The safe working load of conductors and ground wires shall be calculated on the assumption that the conductors have a covering of ice to a thickness of half of an inch all round them and that they are all simultaneously subjected to a wind pressure of 8 lbs. per square foot on the whole of the projected area at a minimum temperature of 200 F. the weight of ice to be taken at 57 Inch. per cubic foot provided that the loading under these conditions shall not be less than loading under clause IV(b) (i) below.  iv) Unbalanced pull due to breakage of 25% of the conductors in one span.  v) Resultant pull of conductors in the case of angle structures.  vi) Tension of all conductors in the case of terminal structures.  4 |
| (b) i) The permissible stresses in steel shall be in accordance with the relevant clauses of the steel structure code issued by the Railway Division .  ii) The pressure on the foundation under all the forces detailed in (a) above, shall not exceed two tons per square foot for soils with average mixture of sand and clay. For other soils the permissible pressure shall be determined by actual tests.  iii) When independent foundations are provided for legs of towers, the weight of the masonry and concrete in the foundation shall be such as to give a factor of safety of two against uplift of the leg.  (c) INSULATORS.  All wires crossing the track shall be supported at each end and each line conductor shall be supported by means of insulator units. The insulator may be of the suspension, tension or pin type as required. All insulator units and their attachments to the conductors shall be capable of supporting the transmission /distribution lines with the factor of safety of not less than three, when any conductor affecting the transmission /distribution lines is broken.  Where the transmission /distribution lines is supported by multiple strings of tension or suspension insulators by a common yoke or straddle wires, each insulator unit with its connection shall consist of not less than two separate strings and each strings shall be of such strength that, with one string broken the remaining string or strings shall be capable of withstanding the maximum loads with a factor of safety of three under the worst loading conditions.  Where the transmission /distribution lines is supported by pin type insulators in duplicate with a bridle wire, each insulator unit with its connection to the conductor shall have a factor of safety of three under the worst loading condition and with the other unit broken.  The use of duplicate conductors bound together across the crossings span shall not be permitted.  (d) PROTECTIVE ARRANGEMENTS.  i) The protective arrangements adopted shall ensure the isolation of any section  of transmission line, which, in the opinion of the Railway, is not unduly  delayed in the event of any breakage or other fault occurring in that section  of the said line and shall be of a type approved by the Railway.  ii) A written certificate is required to be endorsed on the drawing (detail plan) of the crossing by the Owner in accordance with clause II of the Agreement /Memo of terms.  iii) Where no protective arrangements are provided for the isolation of the transmission line as specified in (d) (i) above the crossing shall be constructed as specified in III (a) , (b) and (c) above and the crossing spans shall be adequately  guarded as specified under clause VII below.  iv) Up to 33,000 Volts transmission /distribution electric over head lines guard netting arrangement must be provided.  IV: ELECTRIC OVERHEAD LINES SUPPORTED ON POLE CROSSING RAILWAY TRACKS   1. (i)The supporting structure shall be capable of withstanding in connection with guys specified in IV (d) below the forces (iv), (v) and (vi) mentioned in clauses III(a) and the wind pressure specified in IV(b) (iv).   5 |

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| (ii) In localities subject to snowfall, the provision of III (a) (iii) shall apply when ice loading and wind pressure are being considered simultaneously.  (b) (i) WIND PRESSURE.  The maximum wind pressure on the structure shall be taken as acting horizontally in accordance with the following table, except in cases where a higher wind pressure is prescribed local authorities administering the  Electricity Act :-  Height of structure above Wind pressure in 1bs.   |  |  | | --- | --- | | ground level in foot. | per square foot. | | 20 | 15 | | 30 | 18 | | 40 | 20 |     ii) In the case of tubular steel poles it shall be taken as acting on 2/3rd of the projected area of the poles.  iii) In the case of conductors, it shall be taken as acting on 2/3rd of the projected area and acting horizontally and a right angles to the crossing.  iv) In calculating the strength of guys and their anchorages, the wind pressure should be taken as specified in clause III(a) (ii) or alternatively in a direction parallel to the resultant pull of the conductor and the maximum effect allowed for in the design.  (c) i) The factor of safety for permissible tresses in steel tubular poles shall not be less than three based on the crippling load. i.e., the crippling load of any pole applied at 6” from the top when the pole is rigidly supported as a cantilever between the butt-end and the ground level must not be less than three times the sum of the equivalent transverse load due to the wind pressure both on the pole and the wires.  ii) The factor of safety in case of non-metallic poles shall not be less than four.  iii) The foundation pressure shall be in accordance with clause III (b) (ii).  (d) The poles on either side of the crossing shall be guyed back in three  directions . One guy shall be so placed as to withstanding the resultant pull  due to the conductors and the other two shall be at an angle of about 750 on  either side of it. Intermediate poles of the crossing, if any shall be guyed in  two directions parallel to the Railway tracks.  V. CONDUCTORS, GUARDS, GUY WIRES AND EARTH / SHIELD WIRES.  The factor of safety of all conductors, earth wires and guard wires in the crossing shall not be less than 3, calculated on the ultimate breaking strength under maximum loading conditions and subject to the following:-  No conductor in the crossing span shall have a less breaking stress than 1,237 lbs. in the case of copper wires, this being equivalent to a minimum of 8 SWG. All guard wires shall be of galvanised steel of not less than the following sizes.  6 |

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| For bearer wires , . . . . . . . . . No. 4 SWG.  For crossing wires . . . . . .. . .No. 10 SWG.  All guy wires shall be of galvanised steel of not less than 7/8 SWG.  All guy wires shall be connected to their anchor above ground level.  All earth wires shall be galvanised steel of not less than No. 4 SWG.  VI. MINIMUM CLEARANCE BETWEEN OVERHEAD LINES AND RAILWAY TRACKS.  a) CONDUCTORS:-  The minimum height above rail level of the lowest portion of any conductors under conditions of maximum sag shall be.................... feet....................inches.  (b) GUARD WIRES .  The minimum height above rail level to the lowest wire of any portion of a guard or guard cradle under condition of maximum sag shall be ..................feet ....................inches.  (c) MINIMUM CLEARANCE BETWEEN RAILWAY TRACKS AND SUPPORTING STRUCTURES.  The minimum clearance between any supporting structure forming part of a crossing or its foundation measured horizontally and at right angles to the track from the centre of the nearest track shall be ......................feet ..........................inch.  (d) MINIMUM CLEARANCE BETWEEN CONDUCTOR AND ANY RAILWAY STRUCTURES.  The minimum clearance between any conductor and any Railway structure under most adverse conditions shall be ....................feet .....................inches.  VII. GUARDING,  (i) The Conductors within the crossing span shall be protected by means of a case or box type guard of such design as to affectively earthed any broken conductor and prevent its falling below the guard cradle. Specially wide cradle guards may be permitted as an alternative in special cases.  (ii) Where the power line crosses the main Railway tracks, the lacing must be spaced not more than 4’-0” apart extending across all tracks and at least two further lacings shall be provided beyond the outside Rails. Further on the cross lacing shall be provided at a distance of not more than 10 feet apart throughout the span subject to the last lacing being 4’ feet away from either pole terminating the crossing over Railway tracks.  iii) Where the power line the lacings must be 3 feet apart and at least two lacings shall be provided beyond the outermost telegraph wires. Further on the cross lacings shall be provided in accordance with the clause VII (ii) depending upon the site conditions.  VIII) TEMPERATURE:  The minimum temperature for the conductors and earth wires under maximum wind age shall be determined by the Railway ; but in no case shall it be higher than that prescribed by the authority administering the Electricity Act.  7 |

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| IX) INACCESSIBILITY OF CONDUCTORS:  The supporting structure on Railway land shall be provided with approved anti-climbing devices and warning notices shall be created in approved situations in such languages as may be considered necessary.  X) EARTHING  The supporting structures including of all guard wires and all guy wires shall be efficiently earthed and separate earthed shall be provided at each pole or tower. The earth resistance of all structures and guy wires shall not be more than 5 ohms.  XI) COMPLIANCE WITH B.S. SPECIFICATION :  The material used in the construction of the transmission/ distribution line shall comply with the relative B.S. specification.  XII) ELECTRIC OVERHEAD LINE ADJACENT TO RAILWAY TRACKS :  Where electric overhead lines are run adjacent to Railway tracks at a distance less than the height of the supporting structure plus overhang of the longest arm plus 7' - 0” they shall conform in every respect to the conditions specified above.  XIII) ELECTRIC OVER HEAD LINES ERECTED ON OR OVER RAILWAY LAND BUT NOT  CROSSING OR ADJACENT TO RAILWAY TRACK.  Where the electric overhead line runs on or over railway land but does not cross the track, or is not adjacent to the track as specified under clause XII, all constructions shall be in accordance with the provisions of the Indian Electricity Act of 1910 (as amended up-to date an adopted in Bangladesh) and the rules their under but the general terms and conditions of this Agreement / Memo of terms shall be applicable.  SCHEDULE OF MINIMUM PERMISSIBLE DIMENSIONS . *SCHEDULE ‘ A’*  CONDUCTORS  (REFERENCE PARA VI (a) APPENDIX ‘A’ )  The minimum height above rail level of the lowest portion of any conductor under conditions of maximum sag shall be as follows:   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Voltage  ( Place of crossing) | Up-to and including 650 volts | Above 650 up-to and including 11000 volts | Above 11,000 up-to and including 33.000 volts | Above 33,000 up-to and including 66,000 volts | Above 66,000 up-to and including  1, 65,000 volts | Above 1,65,000  volts | | Outside Station limits | 23’ - 6” | 25’ - 0” | 25’ - 0” | 26’ -0” | 28” - 0” | 29” - 0” | | Inside Station limits | 31’ - 6” | 33’ - 0” | 33’ - 0” | 34’ - 0” | 36’ - 0” | 37’ - 0” | | Where 25 KV A.C. Elwc. traction is likely to be used inside and outside station limits. | 23’ - 6” | 33’ - 0” | 35’ - 0” | 35’ - 0” | 37’ - 0” | 38’ - 0” |   8 |

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| SCHEDULE ‘B’ ( REFERENCE PARA - VI ( b) APPENDIX- ‘A’ )  Schedule regarding minimum height above rail level to be lowest wire of any portion of a guard cradle under conditions of maximum sag.  Clearance under condition of  maximum sag. --------------- 22’ - 6”  SCHEDULE ‘C’ ( REFERENCE PARA VI ( C) APPENDIX - ‘A’)    Schedule regarding minimum clearance between any supporting structure forming part of a crossing or its foundation measured horizontally and at right angles to the track from the centre of the nearest track.  Minimum horizon Ted and right angle distances from the centre nearest track .........7’-9”    Note:- Extra clearance over and above the clearances mentioned above will be required if the track at the point of crossing is on a curve. Such extra clearance shall be fixed by the Chief Electrical Engineer . Bangladesh Railway , CRB, Chittagong.  SCHEDULE ‘D’ ( REFERENCE PARA VI (d) APPENDIX - ‘A’)    i) Schedule regarding minimum clearness between any conductor not adequately insulated and any Railway structure under most adverse conditions.    up to and including 650 volts......................... 8’ - 0”  Above 650 Volts up-to and  including 33,000 volts................................ 9’ - 6”  Above 33,000 Volts up-to and  including 66,000 volts................................. 10'-6"  Above 66,000 volts up-to and  including 1,65,000 volts................................ 12'-6"  Above 1,65,000 volts ................................. 13'-6"  ii) Minimum clearance between any conductor not adequately insulated crossing the track and any Electric traction overhead line structure under the most adverse conditions:-    Up to and including 650 volts......................... 8’ - 0”  Above 650 Volts up-to and  including 11,000 volts................................ 9’ - 6”  Above 11,000 Volts up-to and  including 66,000 volts................................. 10'-6"  Above 66,000 volts up-to and  including 1,65,000 volts................................ 12'-6"  Above 1,65,000 volts ................................. 13'-6"  9 |

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| FORM-‘A’  From: ............................................................. To: The Chief Electrical Engineer/East  Bangladesh Railway  CRB, Chittagong  Ref: No ......................................................... Dated ..............................................  Application for crossing as provided for in Agreement/Memo of terms for the crossing of Railway tracks and land by..................................................................volts electric overhead transmission lines.  Dear Sir,  Application is hereby made under the provision of the above Agreement /Memo of Terms for permission to cross the Railway land /track/land and track at mile..................on...............section in the position and in the manner shown on Drawing (s) No. (s)...................... attached. The crossing will comply with the above agreement /Memo of terms.  Yours faithfully  Full signature of Owner.  Designation.  Address.  FORM-‘B’  From: The Chief Electrical Engineer/East, To The. .......................................................  Bangladesh, Railway, Chittagong. ........................................................    Ref No : ............................................................... Dated : .................................  Crossing of Railway land and track by......................volt electric overhead transmission/ distribution line at Mile .............. ..on. .............. section  Dear Sir,  Permission is hereby accorded to the construction of the above crossing applied as per your application No ............................................................. dated ...................... in accordance with the Agreement/ Memo of terms referred to your attention is drawn to clause II (c) of the Agreement / Memo of terms where by you are required to give at least seven days notice before any works is commenced on Railway land.  The work will be supervised by SSAE/ WORKS, SSAE / WAY Please intimate.  Yours faithfully,  Chief Electrical Engineer/East  Bangladesh Railway, Chittagong .  Copy to Government Inspector of Bangladesh Railway, Dhaka .  Copy to Chief Engineer/ East, Bangladesh Railway, CRB.  Chief Electrical Engineer/East  Bangladesh Railway, Chittagong .  10 |

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| FORM-‘C’  From : The Chief Electrical Engineer/East, To : ..............................................  Bangladesh Railway, Chittagong ...................................  Ref. No ..................................................................... . Dated .....................................  Reference your letter No .........................................of ...........................Crossing of Railway land and track by ..............volts electric overhead transmission/ distribution line at Mile ................on ..........section.  Dear Sir,  It is regretted that as provided in clause VII of the above Agreement /Memo of terms permission to the above crossing cannot be granted in the following reasons :-  yours faithfully  Chief Electrical Engineer /East  Bangladesh Railway,  Chittagong.  FROM-‘D’  From :- .................................................... To, The Chief Electrical Engineer/East  ................................................... Bangladesh Railway, Chittagong.  Ref : .................................................................... Dated : ...................................  Reference your letter No.......................................................of. ...............Application to take overhead lines into use as provided for in Agreement/ Memo of terms for the crossing of Railway tracks and land by ....................volt electric overhead transmission/ distribution lines.  Dear Sir,    With reference to the electric crossing of the Railway land/ track, land & track at mile ............... on ................. section . I request your approval to put the overhead lines into use .  I hereby certify that the crossing has been constructed in conformity with the above Agreement /Memo of terms.  your faithfully,      Signature of Owner  Designation ........  Address ...  11 |

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| BANGLADESH RAILWAY  AGREEMENT /MEMO OF TERMS FOR THE CROSSING UNDER RAILWAY TRACKS AND LAND BY ELECTRIC UNDERGROUND CABLES.  Agreement / Memo of terms made this -----------day of-------------------201... between the President of The Peoples Republic of Bangladesh as represented by the Bangladesh Railway Administration (hereinafter called “The Railway”) and-----------------------------------------of ------------------------------------------------------(hereinafter referred to as “The Owner”).  Where as the owner is desirous of laying underground cables under Railway land/or tracks at mile-----------------on------------------the---------------------  *IT IS HEREBY AGREED AS FOLLOWS:-*  That The Owner shall comply with the conditions and specifications in connection with the laying of underground cables as set out in Appendix `A` and also with the following general conditions:-  I) PROTECTION OF COMMUNICATION LINES:-  The cables shall in no way interfere with or endanger any Railway communication lines, and sanction given by the Railway to the placing of cables shall not be constructed as affecting in any way the Bangladesh Railway communication lines.    Further the Railway reserves the right of asking the owner to adopt such other precautions as the Railway may consider necessary to prevent interference with the Railway Telephone train control or Telegraph wires.  ( II ) APPROVAL OF WORKS BY THE RAILWAY.  The approval of works by the Railway in writing shall be obtained by the owner:-  a) before any work on Railway land is commenced;  b) before the works are taken into use; and  c) notice shall be given to the Railway at least seven days before any work on Railway land is commenced and 48 hours before any crossing is put into service for the first time.  ( III ) CERTIFICATE OF COMPLIANCE WITH REGULATIONS.    Before the Railway’s written approval to place the crossing in commission is granted, a certificate certifying that the works have been constructed in full compliance with these regulations shall be submitted to the Railway by the Owner responsible for its construction.    ( IV ) WORK TO BE EXECUTED BY THE RAILWAY.  The disturbance of any Railway road, or ground or any attachment to any Railway structure which may be necessary in the placing or maintenance of the cable shall be effected by, or under the supervision of the Railway and any conduit, culvert or similar work passing under Railway tracks or premises shall be constructed by the Railway in such a manner and of such materials as it may approve of, **the cost of such work being borne by the Owner.**  **1** |

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| V) MAINTENANCE :    No work involving the removal, alternation or maintenance of any cable shall be undertaken without the written approval of the Railway.  VI) INDEMNIFICATION OF RAILWAY AGAINST DAMAGES.  The Owner shall hold the Railway indemnified for all damages and compensation that the Railway may have to suffer or to pay for any accident or loss to any person or to any property whether of the Railway or of any outside party or person arising from or due to and caused by the said underground cables or electric wires or through any negligence of the Owner in respect thereto.  VII) RIGHT OF RAILWAY TO REFUSE CROSSINGS.  The Railway may refuse the owner permission to cross the Railway tracks or Railway land if the point of crossing is considered to be unsatisfactory from the Railway’s point of view, but such permission to cross the Railway land and / or tracks shall not be unreasonably withheld. The Railway, however reserves, the right of refusing permission to lay underground cables under Railway land when the Owner has not to transmit energy from one side of the track to the other, the permission to lay underground cables in the Railway land does not create a tenancy in favour of the Owner.  VIII ) ALTERATION OR REALIGNMENT OF UNDERGROUND CROSSING AS  DESIRED BY THE RAILWAY .  The Railway may call upon the Owner to alter or realign any underground crossing on or under Railway property as required by the Railway and  (a)The cost of such alteration shall be met by the Railway.  (b) Provided that should the Railway under clause VII refuse permission on the ground that it may require, the crossing to be altered or realigned on account of anticipated Railway’s developments and the Owner may at his description have agreed in writing prior to the construction of the crossing to meet the cost of any such alteration realignment that may be required subsequently by the Railway then the cost of alterations to such crossings shall be met by the Owner.    (IX) All inspections and test both initial or periodic as required by the Indian Electricity Act, 1910, and the Indian Electricity Rules of 1937 as adopted in Bangladesh, made there under shall be arranged for by the Owner and any necessary fees to be paid to the Electrical Inspector of the Local Government for such inspections or tests shall be paid by the Owner.  (X) The transmission lines shall not be assigned mortgaged, sublet, or transferred in any way except with the express written consent of the Railway to be obtained in advance which will not be unreasonably withheld.  (XI) On breach, non-observance and non-performance by the owner of any of the terms and conditions herein contained, it shall be lawful for the Railway at any time there after to determine this Agreement/ Memo of Terms by notices in writing to the Owner and on such determination the dismantling of the transmission lines shall be executed by and at the expense of the Owner and The Railway land shall be vacated within a reasonable period to be prescribed in the notice without any compensation from the Railway.  XII) The Railway reserves to itself the right to alter the terms and conditions herein contained and to add new terms and conditions in accordance with any law, by-law, rule, regulation, standard dimension or safety precaution now or hereafter binding on the Railway and such alteration or addition shall be notified in writing to the owner and shall be binding on the owner forthwith subject to a reasonable period for its introduction to be prescribed in the notice according to the merit of the case.  2 |
| XIII) TERMINATION OF AGREEMENT/ MEMO OF TERMS  Either party may determine this Agreement/ Memo of Terms by giving to the other party six month’s notice in writing expiring at any time, of their intention to do so, and at the expiration of such notice the owner shall remove the said underground cables and other apparatus belonging to former condition and in default thereof the Railway shall be at liberty to do so at the cost of the Owner who shall pay such costs to the Railway on demand provided that the Railway shall afford the Owner alternative site of crossing and shall bear the cost of such detraction as per Clause VIII before terminating this Agreement/ Memo of terms.  XIV) CORRESPONDENCE :  All correspondence such as application for permission to commence work bringing the cables into use and notices, etc. in connection with maintenance called for by this Agreement/ Memo of terms shall be addressed by the owner to the Chief Electrical Engineer, Bangladesh Railway, CRB, Chittagong representing the Railway and by the Railway to the Owner at----------------------------As far as possible applications should be made the in standard forms attached here to.   1. COST OF EXECUTING THIS AGREEMENT/ MEMO OF TERMS.   The owner shall pay all the cost and incidentals to the preparation stamping and executing of this Agreement / Memo of Terms.    IN WITNESS WHEREOF the parties here to have hereinto set their hands the day and year mentioned below :-  Singed by .------------------------------------  Chief Electrical Engineer ,  Bangladesh Railway, Chittagong for &  on behalf of the President of Peoples  Republic of Bangladesh  on the---------------- day of----------201.... .  Signed by ----------------------------------------  Chief Electrical Engineer /East  Bangladesh Railway,Chittagong.  on behalf of the said Owner  on this -----------------day of 201.... .    In the presence of :-  1. Witness--------------------------------------  Address--------------------------------------  2.  . Witness---------------------------------------  Address---------------------------------------  SIGNED BY. ------------------.  (Owner)  3 |

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| APPENDIX ‘A’  CONDITIONS AND SPECIFICATIONS IN CONNECTION WITH THE LAYING OF  UNDERGROUND CABLES.   1. DRAWINGS :   The Owner shall prepare tracing /drawings (scale for site plan not less than 100 feet equal to 1 inch and for detail plan not less than ½” inch to a foot) a copy of tracing / six copies of drawings which shall be attached to this Agreement /Memo of terms as a schedule the drawing shall be fully dimensioned and show:-  (a) exact location of cables under Railway land and track and shall show in elevation depth of cables below track and ground level also between the toe of bank and the Railway fencing .  (b) type and size of cables and the size of conduit or piping through which the cable is to be carried.  (c) full particulars and method of laying conduit or cast iron pipes under the Railway track and the proposed precautions to be taken for proper drainage.  (d) the heading to the drawing shall give particulars of voltage and transmission/ distribution system and the nearest Railway station and mile number .   1. TYPE OF CABLES AND METHOD OF LAYING :-   The cables shall be of the steel tape or wire armoured type suitable for the proposed voltage of transmission and the cables shall be carried through a suitable cast iron pipe or conduit at all crossings where culverts are not suitably situated. The pipes or conduits shall be laid not less than 3 feet below the surface of the ground on which the ballast is placed. It shall be possible to withdraw the cable for repairs without disturbing the Railway track and suitable arrangements shall be made for draining the pipes or conduits.  Within station limits, conduit or pipes to be laid to Railway boundary or to a point to be decided by the Railway.  Outside station limits, cable to be laid continuously in conduit or pipes below track to a distance not less than 1 feet away from the centre of the nearest track on either side.   1. THE RAILWAY TO CARRY OUT OR SUPERVISE WORK :-   The work under the track shall be constructed under the supervision of the Railway or at the cost of the Owner by the Railway.   1. CONNECTION OF UNDERGROUND CABLES TO OVERHEAD TRANSMISSION LINES :-   Should it be required to connect a cable passing through a conduit pipe or otherwise to and overhead transmission line and on Railway land the terminal tower of the latter and such other portion of the overhead transmission lines as may be on Railway land, shall confirm to the provisions of the Agreement/Memo of terms for the crossing of Railway tracks and land by electric overhead transmission lines.  4 |

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| 1. MARKING OF CROSSING UNDER TRACK :-   A cast iron plate shall be fixed at either and of the underground crossing a height of approximately 4 feet from ground level and shall be painted in red and the following information shall be given thereon :-  Electric cable .............................................................volts.    No..............................................................................cables.  Danger.......................................................................(in English and the  vernacular of the  district).  Depth of cable ..........................................................Below ground level,  between the toe of  bank and the Railway  fencing.  Depth of cable ..........................................................Below track level.  VI.. MARKING OF CROSSING (UNDER RAILWAY LAND) :-  Where the run of underground cable is long and where these run parallel to the track or under Railway land, cast iron plates giving information as per clause V shall be fixed on brick pillars slightly raised above ground level at intervals of 50 feet on straight runs at points where the cables change direction.  VII. COMPLIANCE WITH B.S.SPECIFICATION :-  The materials used in the construction of the transmission lines shall comply with the relative B.S. Specification.  **5** |

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| FORM-‘A’  From: ............................................................. To: The Chief Electrical Engineer /East  Bangladesh Railway,Chittagong.  Ref: No ......................................................... Dated ..............................................  Application for crossing as provided for in Agreement/Memo of terms for the crossing of Railway tracks and land by..................................................................volts electric underground cable lines.  Dear Sir,  Application is hereby made under the provision of the above Agreement /Memo of Terms for permission to cross the Railway land /track/land and track at mile..................on...............section in the position and in the manner shown on Drawing (s) No. ..................... attached. The crossing will comply with the above agreement /Memo of terms .  Yours faithfully  Full signature of Owner.  Designation.  Address.  FORM-‘B’  From: The Chief Electrical Engineer /East  Bangladesh Railway,Chittagong.  To The. .......................................................  ........................................................    Ref No : ............................................................... Dated : .................................  Crossing of Railway land and track by......................volt electric underground cable line at Mile .............. ..on. .............. section  Dear Sir,  Permission is hereby accorded to the construction of the above crossing applied as per your application No ............................................................. dated ...................... in accordance with the Agreement/ Memo of terms referred to your attention is drawn to clause II (c) of the Agreement / Memo of terms where by you are required to give at least seven days notice before any works is commenced on Railway land.  The work will be supervised by SSAE/ WORKS, SSAE / WAY Please intimate.  Yours faithfully,  Chief Electrical Engineer /East  Bangladesh Railway,Chittagong.  Copy to Government Inspector of Bangladesh Railway, Dhaka .  Copy to Chief Engineer/ East, Bangladesh Railway,Chittagong.  Chief Electrical Engineer /East  Bangladesh Railway,Chittagong.  **6** |

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| FORM-‘C’  From : Chief Electrical Engineer /East  Bangladesh Railway,Chittagong.  , To : ..............................................    Ref. No .................................................................... Dated .....................................  Reference your letter No .........................................of ...........................Crossing of Railway land and track by ..............volts electric underground cable line at Mile ................on ..........section.  Dear Sir,  It is regretted that as provided in clause VII of the above Agreement /Memo of terms permission to the above crossing can not be granted in the following reasons :    yours faithfully  Chief Electrical Engineer /East  Bangladesh Railway,Chittagong.  FROM-‘D’  From :- .........................................................To, The Chief Electrical Engineer/ East  .......................................................... Bangladesh Railway, Chittagong.  Ref : ................................................................. Dated : ...................................  Reference your letter No.......................................................of.............Application to take underground cable into use as provided for in Agreement/ Memo of terms for the crossing of Railway tracks and land by ....................volt electric underground cable lines.  Dear Sir,    With reference to the electric crossing of the Railway land/ track, land & track at mile ............... on ................. section . I request your approval to put the underground cable lines into use .  I hereby certify that the crossing has been constructed in conformity with the above Agreement /Memo of terms .  your faithfully,    Signature of Owner  Designation .  Address  **7** |

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| FROM-‘E’  From :- The Chief Electrical Engineer/ East To:-.............................................. Bangladesh Railway, Chittagong. ...................................  Ref No : .................................................................... Dated : .........................  Reference your letter No.......................................................of. ............... crossing of Railway land and tracks by ....................volt underground cables line at mile....................................... on Section..  Dear Sir,    I approve of the taking of the above crossing into use subject to the terms above Agreement/Memo of terms. Your attention is drawn to Clause II (C) of the Agreement/Memo of terms whereby you are required to give the Railway at least 48 hours notice before the crossing is put into service for the first time.  Yours faithfully,  Chief Electrical Engineer /East  Bangladesh Railway,  Chittagong.  8 |