

REF:-
 EXISTING WORK SHOWN THUS
 PROPOSED WORK SHOWN THUS
 CRS SANCTION REQUIRE.

- NOTE:-**
- 1) NORTH SIDE AND SOUTH SIDE LAND ACQUISITION WILL BE DONE BY DFCC. NORTH SIDE CONSTRUCTION WILL BE DONE BY DFCC & SOUTH SIDE CONSTRUCTION WILL BE DONE BY INDIAN RAILWAY.
 - 2) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED.
 - 3) ALL DIMENSIONS SHOULD BE VERIFIED AND RECONCILED BEFORE EXECUTION.
 - 4) BED SLOPE SHOULD BE KEPT A MINIMUM OF 1 IN 100.
 - 5) CONSTRUCTION JOINTS SHALL BE PROVIDED AS PER APPENDIX A OF IRS CONCRETE BRIDGE CODE.
 - 6) BALLAST CUSHION SHALL BE PROVIDED AS 300MM AND MAXIMUM OF 400MM.
 - 7) CLEAR COVER FOR REINFORCING BARS SHOULD BE 50MM.
 - 8) THE ENGINEER AT SITE SHOULD ENSURE THAT BEARING CAPACITY OF SOIL IS MORE THAN THE MAXIMUM FOUNDATION PRESSURE UNDER BOX SPECIFIED 14T/50 MTR.
 - 9) DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
 - 10) ALL R.C.C. SURFACE COMING IN CONTACT WITH SOIL SHOULD BE PAINTED WITH BITUMEN OR COAL TAR OF APPROVED QUALITY @ 1.4KG/M².
 - 11) 80MM THICK BOULDER FILLING SHOULD BE WELL HAND PACKED BOULDERS AND COBBLES BEHIND VERTICAL WALLS OF BOX AND RCC WALLS SHOULD BE PROVIDED.
 - 12) BACK FILL MATERIAL SHOULD BE AS PER CLAUSE 7.5 OF THE IRS BRIDGE SUB-STRUCTURE & FOUNDATION CODE.
 - 13) LEVELS SHOULD BE PROVIDED AS PER EXISTING ROAD LEVEL.
 - 14) THE DRAWING OF R.C.C. BOX IS BASED ON R.S.O. DRG. NO. 4000/04 AND FOR REINFORCEMENT DETAILS REFER R.S.O. DRG. NO. 1010/11 OF SIZE 400x400 MM.
 - 15) NOT MORE THAN TWO BOX JOINTS SHOULD COME UNDER ONE SLEEPER LENGTH PREPAREABLY.
 - 16) LIFTING HOOKS SHOULD BE CUT AFTER THE PLACEMENT OF THE BASE SLAB UNITS & BOX UNITS.
 - 17) A MINIMUM SAND LAYER OF 200MM TH. TO BE PROVIDED BELOW THE BASE SLAB.
 - 18) THE JOINT FOR R.C.C. SEGMENTAL BOXES & JOINT OF R.C.C. BASE SLAB UNITS SHOULD BE STAGGERED WITH THE LENGTH OF SEGMENTAL BOXES.
 - 19) AFTER ERECTION OF BOXES IN ALIGNMENT AND AFTER ALLOWING INITIAL SETTLEMENT OF BOXES THE GAP BETWEEN THE BOX UNITS ARE TO BE SEALED WITH THE PRESSURE GROUTED WITH CEMENT EPOXY MORTAR.
 - 20) SITE ENGINEER SHOULD CHECK THE FEASIBILITY AT SITE FOR HANDLING, LIFTING AND PLACING OF PRECAST BOX UNITS BY CRANE OR ANY OTHER MEANS.
 - 21) ALL R.C.C. WORKS TO BE DONE AS PER IRS CONCRETE BRIDGE CODE.
 - 22) REINFORCEMENT BARS SHALL BE HSD/TMT OF 75-80 GRADE CONFORMING TO IS: 1786-2008 WITH PROTECTIVE COATING OF APPROVED QUALITY.
 - 23) REINFORCEMENT SHALL BE CLEAN AND FREE FROM OIL, MIL SCALE ETC.
 - 24) COLD JOINT SHOULD BE AVOIDED DURING CONCRETING WORK.
 - 25) LAPPING OF BARS SHOULD BE MINIMIZED AND STAGGERED WHERE NECESSARY. MINIMUM LENGTH OF LAP SHALL BE 25 TIMES OF THE SMALLER BAR SIZE PLUS 150MM IN TENSION AND 30 TIMES OF THE SMALLER BAR SIZE PLUS 150MM IN COMPRESSION.
 - 26) THE GRADE OF CONCRETE TO BE USED ARE AS FOLLOWS:-
 (i) FOR R.C.C. BOX (M-35) (ii) FOR C.C. WEARING COURSE M25 (iii) FOR R.C.C. BASE SLAB M25 (iv) LEVELING COURSE M-10.
 - 27) TOLERANCE SHALL BE FOLLOWED AS PER IRS CONCRETION BRIDGE CODE.
 - 28) THE CONCRETE SHALL INvariably BE VIBRATED BY MECHANICAL MEANS.
 - 29) FULL CURING TIME TO BE ALLOWED 14 DAYS MINIMUM.
 - 30) EXISTING DETAILS OF SITE ARE SHOWN BY DFCC.
 - 31) FOR REINFORCEMENT DETAILS OF RCC WALL, RCC ROOF ETC. SEE SEPARATE APPROVED DRAWINGS.
 - 32) HEIGHT GAUGES SHOULD BE PROVIDED AS PER ROAD DRG. NO. M-80/1.
 - 33) AFTER CONSTRUCTION OF LIMITED HEIGHT SUBWAY, LEVEL CROSSING WILL BE CLOSED WITH THE APPROVAL OF THE COMPETENT AUTHORITY.
 - 34) IN ORDER TO STOP WATER IN FILTRATION AT JUNCTION AND ALL ALONG, PRECAST BOX SHOULD BE WRAPPED WITH THE PVC WATER PROOFING MEMBRANE (PVC) HAVING MINIMUM THICKNESS OF 2MM OF STANDARD DRG.5070, PROTECTED BY PROTECTIVE LAYER OF GEO TEXTILE WORKS OF UNIT WEIGHT 800 GRAM /M² AND MINIMUM THICKNESS 3.5MM HAVING TENSILE STRENGTH 1600 N/CM².
 - 35) EACH SUMP SHOULD BE CONNECTED TO PIT OF SIZE 1.5M X 1.5M PROVIDED WITH DRAINAGE FILTER AND DEEP SUMPING TO DRAIN THE WATER TO DRAINAGE WATER ADJUTER.
 - 36) BEFORE START THE WORK, APPROVAL OF THE COMPETENT AUTHORITY AT THE STATE LEVEL, I.E. PROJECT ENGINEER'S MUST BE OBTAINED FOR WORKING UNDER IR TRACK.

OPERATION SCHEDULE:- (ONLY FOR WORKING UNDER IR TRACK)

- 1) CONSTRUCT THE PROPOSED PRE-CAST RCC BOX AND BASE SLAB UNITS AS PER DRAWING OVER A HARD CONCRETE BASE NEAR THE BRIDGE SITE.
- 2) IMPOSE 20 KMPH RUN THROUGH RESTRICTED SPEED AS PER TEMPORARY SIGNAL AND SPEED RESTRICTION DIAGRAM.
- 3) REQUIRED AMOUNT OF ADDITIONAL BALLAST FOR PROP. BP AND THE APPROACHES SHALL BE KEPT READY ON CESS.
- 4) IN SUITABLE BLOCK DISCONNECT THE TRACK AND EXCAVATE THE EARTH TO THE EXTENT REQUIRED AND FILL 200% SAND.
- 5) PLACE THE PRE-CAST RCC BOX UNITS OVER PRE-CAST BASE SLAB UNITS BY ROAD CRANE OPERATION.
- 6) GAP BETWEEN THE PROPOSED PRE-CAST UNITS SHALL BE SEALED AS PER NOTE NO. 19.
- 7) FALL UP THE BALLAST OVER PROPOSED PRE-CAST UNITS AND RESTORE THE TRACK & ALLOW TRAFFIC AS PER TEMPORARY SIGNALS DIAGRAM.
- 8) UNDER BR CONSTRUCT THE PROPOSED BRIDGE AS PER SHOWN IN THE DRAWINGS.
- 9) AFTER GAIN SUFFICIENT STRENGTH OF ALL PROPOSED WORKS, RAISE THE SPEED GRADUALLY TO NORMAL SECTIONAL SPEED WITH CONSOLIDATION OF TRACK AS PER PARA 23 (g) OF IRPMW BY SECTIONAL AENDEN.

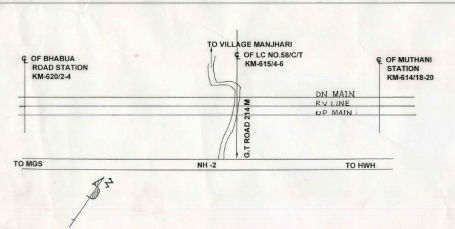
C.E. Dey No. ECR/MGS/2012-13/8/92
 LOADING STANDARD:- DFC (32-5.1) AXLE LOAD

DRM/MGS PLAN NO.153-2012

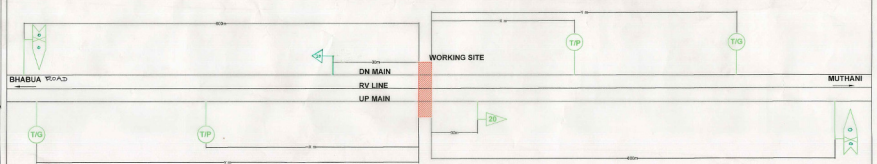
GENERAL ARRANGEMENT DRAWING FOR PROPOSED ROAD UNDER BRIDGE AT LEVEL CROSSING NO 58/C KM 61/05-07 BETWEEN MUTHANI - BHABUA ROAD STATION IN MUGHALSARAI-SONNAGAR SECTION GAD OF LIMITED HEIGHT SUBWAY (2X4.0M) PRE CAST RCC BOX IN LIEU OF LEVEL CROSSING.

DFCC OFFICIALS		INDIAN RAILWAY OFFICIALS			
DRM/MGS PLAN NO.153-2012	DRM/MGS PLAN NO.153-2012	DRM/MGS PLAN NO.153-2012	DRM/MGS PLAN NO.153-2012	DRM/MGS PLAN NO.153-2012	DRM/MGS PLAN NO.153-2012
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KEY PLAN (NTS)



SPEED INDICATOR DIAGRAM FOR 20KMPH SPEED RESTRICTION (NTS) (ONLY FOR WORKING UNDER IR TRACK)



NOTE: X = TO BE LOCATED AT A DISTANCE EQUAL TO THE LENGTH OF LOBBIES PASSENGER TRAIN OPERATING ON THE SECTION CONCERNED
 Y = TO BE LOCATED AT A DISTANCE EQUAL TO THE LENGTH OF LOBBIES GOODS TRAIN OPERATING ON THE SECTION CONCERNED