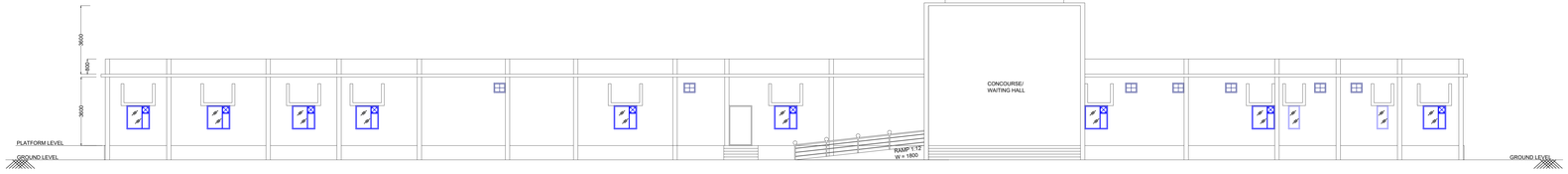
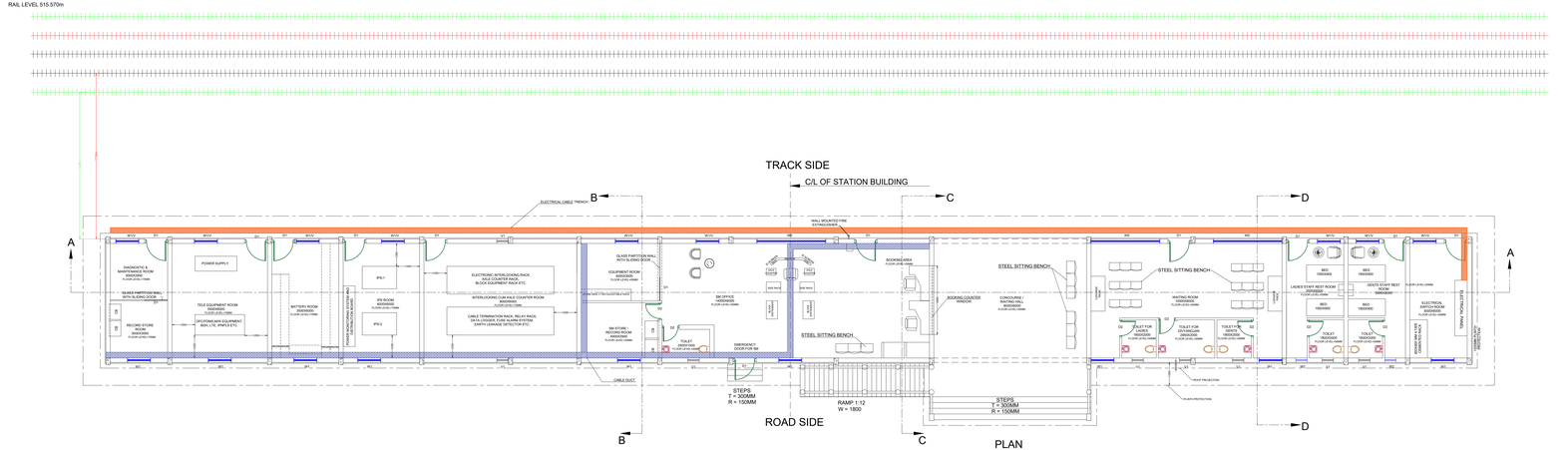
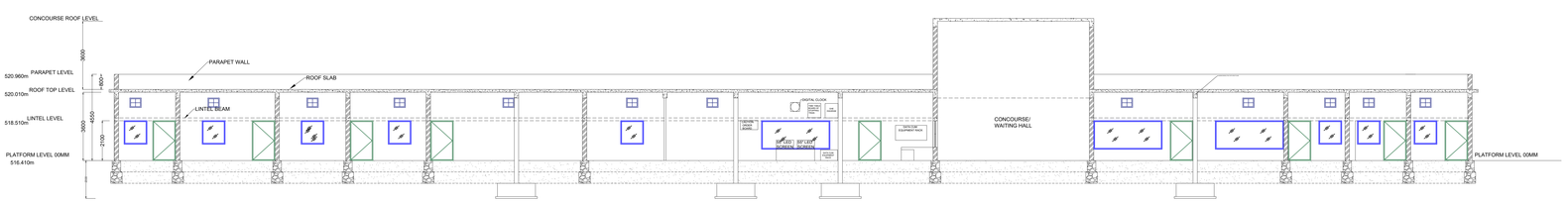
OBULAPURAM



ELEVATION



PLAN



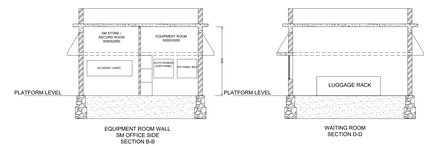
SECTION A-A

NOTE :

1) ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED & LEVELS IN METRES WITH RESPECT TO M.S.L.
2) DO NOT SCALE THE DRAWING FOLLOW WRITTEN DIMENSIONS.
3) EXPOSURE CONDITION IS MODERATE.
4) ONLY TYPE 1 FLY ASH BRICKS SHALL BE TO BE USED TO AVOID WATER SPILLING INTO ROOM.
5) ALL CONCRETE AND MASONRY WORKS ARE AS PER RELEVANT CODE OF PRACTICE SHALL BE USED.
6) THE BUILDING IS PROPOSED FOR GROUND FLOOR AND STRUCTURE IS DESIGNED FOR G+2.
7) THE ENTIRE WORK SHALL BE EXECUTED AS PER THE INSTRUCTIONS AND SATISFACTION OF ENGINEER IN CHARGE.
8) TYPE & DEPTH OF FOUNDATION WILL BE DECIDED BY STRUCTURAL ENGINEER BASED ON ACTUAL SOIL ENCOUNTERED AT SITE.
9) FLOORING OF THE STATION BUILDING IS AS PER RDSO LETTER No. WKS/WS/05/FS Dtd 22-9-2009.
10) ACID PROOF FLOORING TILES TO BE PROVIDE IN BATTERY ROOM.
11) DOORS ARE TO BE PROVIDE WOODEN FLUSH TYPE.
12) WINDOWS SHALL BE UPVC FRAME GLAZED GLASS WITH MS GRILL WITH LOCKING ARRANGEMENT.
13) BUILDING SHOULD HAVE BETTER DRAINAGE SLOPE IN FLAT ROOF(1:20)
14) RAINWATER HARVESTING PLANT TO BE PROVIDED AS PER GUIDELINES OF RAINWATER HARVESTING AT SUITABLE LOCATION IN THE COMPOUND OF SM OFFICE BUILDING.
15) IN ASMPANEL OFFICE THE CENTRE DUCT ACROSS THE BUILDING BE PROVIDED WITH A-12 PIPE OR DUCT WITH SLAB ARE TO BE COVERED AND FLOORING TO BE DONE TO AVOID GAP IN CENTRE.
16). FOR ASM ROOM FLAP/HALF DOOR AS PER SKETCH NO.SWR/BLDNG/19-2010 TO BE PROVIDED.
17). METHODOLOGY OF SAFETY PRECAUTIONS ARE TO BE APPROVED BY THE ENGINEER IN CHARGE.
19). GLAZED TILES FOR RELAY ROOM TO BE PROVIDED.
20). THE PLINTH LEVEL AND ROAD LEVEL SHOULD BE MORE THAN MAXIMUM CALCULATED FOUNDATION PRESSURE DUE TO DESIGNFLOOD, TO ENSURE THE SAME.
21). PASSENGER AMENITIES SHALL BE PROVIDED AS PER RAILWAY BOARD LETTER No.2018/LM/PA/03/6 DATED-09-04-2018 (RBS,&AA/001/2018) OR THE LATEST GUIDELINES.
22). SPECIFICATION OF FLOORING, ROOFING MATERIAL FOR PLATFORM COVERING IN STATION PREMISES RDSO GUIDE LINE AS PER RDSO LETTER NO.WKS/WS/05/FS DATED 22.09.2009 & RDSO LETTER NO.CE/S13 /GL/1 DATED 12.10.2021.
23). SPECIFICATION FOR MATERIAL & WORKS TO BE AS PER CSTS 13 REV DSR 2021 (VOL.-1 & VOL.-2) and USSOR-2022.
25). AMENITIES FOR PHYSICALLY CHALLENGED AS PER LATEST RAILWAY BOARD GUIDELINES TO BE FOLLOWED.
26). STRUCTURAL DIMENSIONS, SHOWN ARE TENTATIVE. ACTUAL DETAILED DIMENSIONS WILL BE SHOWN IN SEPARATE STRUCTURAL DESIGN & DRAWING.
27). FLOORING/MASONRY STEPS UPTO 45 Cm ABOVE THE MASONRY STEPS ON THE MASONRY STEPS ON THE WALL IN THE BATTERY ROOM ARE TO BE PROVIDED WITH ACID PROOF FLOOR FOR PLACING BATTERIES IN BATTERY ROOM.
29). THE STANDARDISATION OF BUILDING SHALL BE AS PER RDSO/PROCEEDINGS WITH LETTER NO.CE/S13/GL/1 DATED 12.10.2021 & DT.29/NOVEMBER/2023.
29). SUITABLE NETWORK OF DRAINAGE ARRANGEMENT TO SUIT SITE CONDITIONS TO BE PROVIDED, DULY PROVIDING SUITABLE OUTLETS.
30). ALIGNMENTS AND ARRANGEMENTS OF DRAINS ARE TO BE PROPERLY DONE. SUITABLE OUTLETS FOR DRAINS ARE TO BE DECIDED AS PER SITE CONDITION AS DECIDED BY ENGINEER INCHARGE.
32). SOAK PITS SHALL BE PROVIDED FOR DRAINAGE OF WATER AT SUITABLE LOCATIONS AS PER CONDITIONS.
33). BORE WELL SHOULD BE LOCATED AWAY FROM SEPTIC TANK.
33); BUILDING SHOULD BE GENERALLY OF BRICK MASONRY.
34). THE LOCATIONS OF COLUMNS SHOWN IN THIS GAD ARE TENTATIVE THE EXACT LOCATIONS OF COLUMNS WLL BE DECIDED AS PER THE APPROVED STRUCTURAL DESIGN.
35). ELECTRICAL PANEL ROOM FOR MAINTENANCE ACTIVITIES IS PROVIDED.
36). IMPLEMENTED GUIDELINES OF STANDARDS OF ACCEPTABILITY & PROVISION OF FACILITIES FOR PERSONS WITH DISABILITIES AT RAILWAY STATIONS & ON TRAINS VDE RAILWAY BOARD LETTER No.2019/STN.DEV/103/05/POLICY/PWDs DATED 12-02-2020 (R-BULA&D/012/2020) SHALL BE STRICTLY FOLLOWED.
37). DURING CONSTRUCTION DUCT TO BE PROVIDED BETWEEN PANEL-RELAY-IPS ROOM.
38). HEIGHT OF FLOOR PROPOSED IS 600m ABOVE RAILWAY BOARD.
39). THE STANDARDISATION OF SERVICE BUILDING FOR S&T SHALL BE PROVIDED AS PER RAILWAY BOARD LETTER No.2019/CE/S13/GL/1 DATED 12.10.2021.
40). THE EXISTING GROUND LEVEL SHOWN IS AS VERIFIED AT SITE.
41). PROPER DRAINAGE ARRANGEMENT BETWEEN TRACKS SHALL BE ENSURED.
42). ARRANGEMENT FOR FIXING LIGHTNING DISCHARGE ROD AND VHF ANTENNA PIPE SHALL BE PROVIDED ON THE ROOF.
43). TOILET & DIVYANGAN TOILET AS PER SWR/HqPF-TOILETS/001-2014.

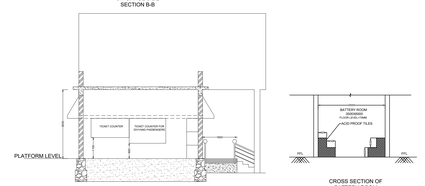
NOTE II: FOR STRUCTURE AND TECHNICAL RECRUITMENT:

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SHOWN.
2. SPACE FOR TERMINATION OF CABLES FROM EQUIPMENT ROOM AND KEEPING SMALL ACCESSORIES LIKE POWER SUPPLY FOR VHF/PHONES/OCU, PA SYSTEM ETC. SHALL BE PROVIDED IN THE CUSTOMISED SM TABLE WITH BACKSIDE OPENING FOR MAINTENANCE.
3. THE INTERLOCKING CUM AXLE COUNTER ROOM DOOR SHOULD HAVE DOUBLE LOCKING ARRANGEMENT. (DOOR SWEEP/BOTTOM SEALING STRIPS SHALL BE PROVIDED TO PROTECT RATE ENTRY).
4. CABLE DUCT AND ENTRY: CABLE DUCT (INTER ROOM CONNECTING) OF 300 MM (WIDTH) X 600 MM (DEPTH) SHALL BE PROVIDED ALONG THE BACKWARD AS SHOWN IN THE DRAWING. STANDARD OPENING ON THE BACK WALL PREFERABLY 450 X 450 SQ. MM OPENING AT TWO PLACES SHALL BE PROVIDED FOR CABLE ENTRY.
5. ALL CABLES TO BE LAID IN THE CABLE DUCT BELOW FLOOR LEVEL. DUCT FOR ELECTRICAL AND S&T CABLES SHALL BE PHYSICALLY SEPARATE.
6. INTER ROOM OPENING THROUGH LADDER: THERE SHALL BE INTER ROOM OPENING (BOTH SIDES WITH COVERING FACILITIES IF KEPT OPENED FOR FUTURE EXTENSIONS) OF 300 X 300 SQ.MM BLOW THE CEILING FOR RUNNING LADDER FROM TELE/OFC ROOM TO PANEL ROOM THROUGH DIAGNOSTICS & MAINTENANCE ROOM.
7. THE S&T SERVICE BUILDING AREA SALARY NOTIFIED AS RESTRICTED AREA.
8. SECURITY FENCING FOR EARTHING AND DIESEL GENERATORS: THE FENCING ARRANGEMENT SHALL BE PROVIDED AROUND THE PERIMETER EARTHING AND DIESEL GENERATORS FOR CLEAR DEMARCATION.
9. MINIMUM SPACE BETWEEN RACK EDGE TO WALL IS TO BE KEPT AS 1300 M IN INTERLOCKING CUM AXLE COUNTER AND IPS ROOMS, ELECTRICAL BLOCK PROOF INSULATING 3 MM THICK LINOLEUM SHEET TO BE PROVIDED BETWEEN RELAY RACKS. AXLE COUNTERS AND IPS RACKS IN THE ROOMS. THE BUILDING SHALL BE PILLARED STRUCTURE. FIRST FLOOR CAN BE CONSTRUCTED AS AND WHEN REQUIRED FOR THE PLACEMENT OF SIGNALLING ASSETS AFTER EXPIRY OF THEIR USEFUL LIFE. THE FOUNDATION SHALL CATTER FOR G + 2 DESIGN.
10. AIR CONDITIONING TO THE INTERLOCKING ROOM, SM OFFICE ROOM AND TELECOM EQUIPMENT ROOM SHALL BE PROVIDED. PROVISION TO BE MADE IN SUCH A WAY THAT SPILL OF WATER OUTLET FROM AIR CONDITIONING UNIT PROVIDED IN INTERLOCKING CUM AXLE COUNTER ROOM, SM OFFICE ROOM AND TELECOM EQUIPMENT ROOM SHOULD BE OUTSIDE THE ROOM I.E. VERANDAH/BACKSIDE OF BUILDING SO THAT IT SHALL NOT AFFECT THE FUNCTIONING OF SIGNALLING AND TELECOM SYSTEM. THE LOCATION OF ELECTRICAL FITTING SHALL CATER FOR INSTALLATION OF THE DETECTION SYSTEM. ATGENERATOR LIGHTING SHALL BE PROVIDED AS PER THE LATEST GUIDELINES ISSUED BY RAILWAY BOARD. THE ELECTRICAL AND SIGNALLING WIRING SHALL NOT BE ON THE SAME CONDUIT.
11. LOCATION OF BUILDING SHALL BE CLOSE TO THE CENTRE OF THE YARD AS POSSIBLE ALONG WITH THE ROAD APPROACH.
12. THE CEILING HEIGHT OF THE STATION BUILDING SHALL BE 3600 M ABOVE THE LEVEL OF STATION PLATFORM (HIGH LEVEL).
13. FOUNDATION OF THE BUILDING TO BE KEPT AS PER SOIL CONDITION OF THE STATION.
14. BEAMS AND SLABS OF THE BUILDING TO BE STRUCTURALLY DESIGNED SUITABLE TO THE LOCAL CONDITION. LINTEL BEAM AT HEIGHT OF 2100 MM WILL CONTINUE THROUGH OUT THE LENGTH OF THE BUILDING AS SHOWN IN LAYOUT PLAN.
15. ALL THE COLUMNS SHALL BE EXTENDED UP TO PARAPET HEIGHT FOR FUTURE EXPANSION.
16. PROPER DRAINAGE OF THE ROOF, FLOOR, URINALS AND TOILETS TO BE ENSURED.
17. FLOORING OF THE ROOMS TO BE DESIGNED WITH CONSULTATION OF THE USER DEPARTMENT. THE FLOOR SHALL BE PROVIDED WITH ANTI SKID TILES OF GOOD QUALITY IN ALL ROOMS. IN TOILETS, THE FLOORING OF GOOD QUALITY ACID PROOF ANTI SKID TILES SHALL BE PROVIDED.
18. INSTALLATION OF WATER WORKS TO BE DECIDED AS PER THE WATER SUPPLY PLAN OF THE STATION.
19. GLASSES USED FOR PARTITIONS, WINDOWS AND SLIDING DOORS IN THE OFFICE SHALL BE SHATTER PROOF. PROTECTION TO DOORS, WINDOWS, VENTILATORS ETC. TO BE ENSURED AND PLANNED AS PER ARCHITECTURAL LOOK OF THE BUILDING DECIDED BY THE RAILWAYS.
20. VERTICAL SHAFT TYPE EXHAUST BACK (SIZE 6 ")SHOULD BE PROVIDED IN THE TOILETS TO ELIMINATE BAD SMELL IN THE PASSENGER AREA. SANITARY FITTINGS TO BE REGULAR PRACTICE AND EASILY MAINTAINABLE AS WELL AS STURDY IN NATURE.
21. S&T CABLE DUCT OF 3000 X 600 MM WIDE SHALL BE PROVIDED IN RECORD/STORE ROOM
22. FURNITURE OF THE ROOMS TO BE AS PER THE PLAN AND DIMENSIONED ACCORDING TO THE SPACE AVAILABLE IN THE PLAN.
23. ONLY ONE WINDOW TO BE KEPT IN THE INTERLOCKING CUM AXLE COUNTER ROOM TO MINIMIZE DUST INGRESS. THIS WINDOW SHOULD NORMALLY BE ON OPPOSITE WALL FROM THE TRACK SIDE. THE WINDOW SHALL BE PROTECTED BY IRON GRILL. THE WINDOW DOOR SHALL BE PROVIDED SUCH THAT THEY ARE OPENED OUTSIDE. THE WINDOW SHALL WE COVERED WITH DETACHABLE NETLAN MESH FROM INSIDE TO AVOID ENTRY OF INSECTS INTO THE EQUIPMENT ROOM.
24. ALL DOORS SHALL HAVE LOCK FACILITY TO OPEN FROM INSIDE EVEN THOUGH THEY ARE LOCKED FROM OUTSIDE. 2 HOUR FIRE RATED DOORS AND WINDOWS ARE TO BE PROVIDED FOR THE INSTALLATION.
25. THE FLOOR, SHELF AND WALL (UP TO 2500 MM) SHALL BE PROVIDED WITH ACID PROOF TILES IN THE BATTERY ROOM. THE SHELVES IN THE BATTERY ROOM SHALL BE PROVIDED WITH TWO TIER STEPS OF 450 MM WIDTH AND 450 MM HEIGHT.
26. GOOD QUALITY GRANITE STONE AS WALL CLADDING SHALL BE PROVIDED IN ALL AROUND THE WALLS UP TO SILL LEVEL OF WINDOW IN WAITING ROOM. GRANITE STONE SHALL ALSO BE PROVIDED AT WINDOW SELF.
27. THE INTERIOR WALLS AND CEILING SHALL BE COATED WITH PREMIUM ENAMEL PAINT WITH GLOSSY, DURABLE AND WASHABLE FINISH OR THEY SHALL BE TILED.
28. ROOF DESIGN: THE HEIGHT OF THE ROOF SHALL BE KEPT MINIMUM 12° THE ROOF SLOPE SHALL BE AT MINIMUM 3 DEGREES, WITH THE HIGH POINT BEING ON THE FRONT SIDE OF THE BUILDING. RCC ROOF SHOULD BE PROJECTED 300 MM OUTSIDE THE BUILDING ALL AROUND EXCEPT ON THE SIDE OF VERANDAH TO WORK AS SUNRAIN GUARD. HEAT RETARDANT INCLINED ROOF SHEET SHALL BE PROVIDED OVER THE ROOF AT HEIGHT OF MINIMUM 400MM ABOVE THE ROOF. VERANDAH CAN BE DISPENSED WITH, IN CASE OF SPACE CONSTRAINT, UNDER EXCEPTIONAL CIRCUMSTANCES. THE ROOF OF RELAY ROOM AND PANEL ROOM SHALL HAVE SUITABLE PROVISIONS FOR FIXING 'A' TYPE PROTECTION AND VHF ANTENNA RESPECTIVELY.
29. FRONT ELEVATION AND FACADE MAY BE DEVELOPED SEPARATELY BY RAILWAY IN CONSULTATION WITH LOCAL ARCHITECT.
30. ANTI TERMITE TREATMENT SHOULD BE DONE FROM FOUNDATION STAGE.
31. PLINTH PROTECTION OF ATLEAST 1200 MM SHALL BE PROVIDED IN THREE SIDES OF BUILDING FOR SERVICE AND MAINTENANCE OF WALL HANG AC OUTDOOR UNIT AND OTHERS EQUIPMENT/ASSETS AS SHOWN IN GROUND FLOOR PLAN.
32. THE BUILDING SHOULD BE DESIGNED KEEPING IN VIEW THE SEISMIC ZONE AND MAKING THE BUILDING EARTHQUAKE RESISTANT IN ACCORDANCE WITH IS CODES/SPECIFICATIONS/MANUALS ETC. WITH LATEST AMENDMENTS.
33). THIS DRAWING IS GENERAL LAYOUT PLAN OF THE STATION BUILDING. STRUCTURAL PLAN SHALL BE DEVELOPED SEPARATELY BY THE RAILWAY ON THE BASIS OF THIS PLAN OF STATION BUILDING.
34. FOR ELECTRICAL DETAILS REFER APPROVED DRAWING NUMBER TFC/420/STANDARD LAYOUT OF STATION BUILDING/ELECTRICAL/VER.-1



EQUIPMENT ROOM WALL SM ROOM SIDE
SECTION B-B

WAITING ROOM
SECTION D-D



BOOKING WINDOW WALL
SM ROOM SIDE
SECTION C-C

CROSS SECTION OF
BATTERY ROOM

PLINTH AREA CALCULATION

TOTAL STATION BUILDING : 71.49X6.46 = 461.825SQM (APPROX)

STRUCTURAL NOTES:

1. GRADE OF CONCRETE SHOULD BE M25 FOR FOUNDATION, COLUMNS, BEAMS AND SLABS.
2. THE BUILDING SHOULD BE DESIGNED FOR G+2.
3. MINIMUM DEPTH OF FOUNDATION SHOULD BE 2.00M BELOW GROUND LEVEL.

BORE LOG DETAILS AT KM 15.235

		N VALUE	ALLOWABLE BEARING PRESSURE (TSF)
BLACK COTTON SOIL	0.00 – 1.80		
WHITISH BROWN CLAYEY SAND	1.80 – 3.30	21	17 (@2m)
BROWNISH RED SANDY GRAVEL	3.30 – 3.50	REFUSAL	32 (@5m)
REDDISH WHITE HARD WEATHERED ROCK	3.50 –		

DOOR WINDOW SHEDULE

NO.	WIDTH	CILL LVL	HEIGHT	LINTEL LVL
DOORS				
D1	1200	+0.00	2100	2100
D2	900	+0.00	2100	2100
WINDOWS				
W0	3600	900	1235	2100
W1	1200	900	1235	2100
W2	600	900	1235	2100
V1	600	2800	500	-

Signature block	
RAE.ORG-A-DSG-URL	HARITHA.B (Typing signed by HARITHA.B.P Date: 2024.12.19 15:02:12 +05'30')
RAE.WORKS.I.DSG-URL	MANOJ KUMAR MEENA (Typing signed by MANOJ KUMAR MEENA Date: 2024.12.19 15:08:32 +05'30')
ASEN-1.DSG-URL	VILAS RUNDLA (Typing signed by VILAS RUNDLA Date: 2024.12.19 15:09:54 +05'30')
SWTE.DSG-URL	V SOMASHEKAR (Typing signed by V SOMASHEKAR Date: 2024.12.19 15:11:47 +05'30')
DYCPO.RDY.DSG-URL	PUTTAMALLAPPA (Typing signed by PUTTAMALLAPPA Date: 2024.12.19 15:13:38 +05'30')
DYCE.DSG-URL	B RAMESH CHANDRA (Typing signed by B RAMESH CHANDRA Date: 2024.12.19 15:15:28 +05'30')
CPM-DSG-URL	SANJAY KUMAR (Typing signed by SANJAY KUMAR Date: 2024.12.19 15:17:19 +05'30')
SADM.DSG-URL	T RAMESHWAR KHIMA (Typing signed by T RAMESHWAR KHIMA Date: 2024.12.19 15:19:10 +05'30')
SADM.ALL.I.DSG-URL	(Typing signed by Date: 2024.12.19 15:20:52 +05'30')
SADM.DSG-URL	(Typing signed by Date: 2024.12.19 15:22:33 +05'30')
SADM.TRG.DSG-URL	MANISH AGARWAL (Typing signed by MANISH AGARWAL Date: 2024.12.19 15:24:15 +05'30')
SADM.TR.DSG-URL	PAWAN GADEWAD (Typing signed by PAWAN GADEWAD Date: 2024.12.19 15:25:56 +05'30')
SADM.DSG-URL	ARAVINDA HEBLE (Typing signed by ARAVINDA HEBLE Date: 2024.12.19 15:27:37 +05'30')
SADM.DSG-URL	ANANDA HALE (Typing signed by ANANDA HALE Date: 2024.12.19 15:29:18 +05'30')
DRM.DSG-URL	BELA MEENA (Typing signed by BELA MEENA Date: 2024.12.19 15:31:00 +05'30')

SOUTH WESTERN RAILWAY

GATI SHAKTI UNIT/HUBBALLI

PROJECT ID : 14.02.16.22.1.54.002

PINK BOOK NO : SWR #59 OF 2024-25 (PBM125/NR/2022-23)

TRAFFIC FACILITIES WORKS (PH-16)

BALLARI-RAYDURG SECTION

PROPOSED CONSTRUCTION OF NEW STATION BUILDING AT

OBULAPURAM AT KM 15.189

OSU DRG NO. SWR/SSU/UBL/BAY-ROG/OBULAPURAM STN BLDG/16/2024

REFERENCE DRAWING: RDSO DRG NO.:

TFC/420/STANDARD LAYOUT OF STATION BUILDING/Ver.-I

SCALE : 1:1000

Signature Not Verified
Digitally signed by B RAMESH CHANDRA
Date: 2024.12.19 15:00:46 IST
Reason: Working CRS
Location: Delhi