

**EAST COAST RAILWAY  
SAMBALPUR DIVISION**

Sl. No. SWR/ARN/19

**STATION WORKING RULES OF ARAND STATION (CODE: ARN)**

BG/MG/NG : BROAD GAUGE  
Date of issue :12.11.2010  
Date brought into force: 25.01.2011.

**NOTE:** - The Station Working Rule (SWR) must be read in conjunction with General and Subsidiary Rules and Block Working Manual. These rules do not in any way supersede any rule in the above books.

2) **STATION WORKING RULE:** -

1.1 **STATION WORKING RULE DIAGRAM NO.** SI-VSKP /19, ALT-A.

1.2 **SIGNAL INTERLOCKING PLAN NO: -** SI – VSKP /19, ALT-H.

The Station Working Rule diagram and Signal Interlocking Plan shows the complete lay out of the yard, siding, normal position of points, the Signalling and Interlocking arrangements, Gradients and Level Crossings within the station limits. This must be referred to for giving details of the point's number and signals when reporting accidents.

2. **DESCRIPTION OF STATION:** -

**ARAND** (ARN) is a three-line station situated in Titilagarh–Raipur single line section at KM. 61.600 from Raipur. It is Standard – III interlocked, 'B' Class station with end cabins.

2.1 **GENERAL LOCATION:** -

- 2.1.1 **NAME OF STATION:** - ARAND
- 2.1.2 **CLASSIFICATION OF STATION:** - 'B' class
- 2.1.3 **NAME OF THE SECTION:** - Titilagarh-Raipur, BG Single Line, Non-RE section
- 2.1.4 **ROUTE:** - 'D' Spl.
- 2.1.5 **LOCATION:** - 61.600 km from Raipur.
- 2.1.6 **NO OF CABINS:** - 2 Nos (East Cabin & West Cabin)

2.2 **BLOCK STATIONS, IBH, IBS ON EITHER SIDE AND THEIR DISTANCE AND OUTLYING SIDINGS:** -

- i) Titilagarh end :- BHIMKHOJ (Code: BMKJ) inter distance 11.569 K.M.
- ii) Raipur end :- MAHASAMUND (Code: MSMD) inter distance 8.156 K.M.
- iii) Passenger Halt :- Nil
- iv) Flag station :- Nil
- v) Outlying siding :- Nil
- vi) D.K. station :- Nil.
- vii) IBH :- Nil
- viii) IBS :- Nil

**2.3 BLOCK SECTION LIMITS: -**

Between stations	The point from which 'Block section' commences.	The point at which 'Block section' ends.
ARN – MSMD	DN Advanced starter signal No. 7 of ARN	UP Advanced starter signal of MSMD Station.
ARN- BMKJ	UP Advanced starter signal No. 7 of ARN	DN Advanced Starter of Signal of BMKJ Station.

2.3.1 **STATION SECTION:** The portion between UP & DN Adv. Starters is the station section.

2.3.2 **STATION LIMIT:** The portion between UP & DN Outer signals is the station limit of this station.

**2.4: GRADIENTS: -**

i) Station section towards Titlagarh end.

From	To	Inter distance	Gradient
CSB	514.70 M.	514.70 M.	1 in 400 F
514.70 M.	529.70 M.	25.00 M.	Level
529.70 M.	To Block Section	---	1 in 500 F

ii) Station section towards Raipur end.

From	To	Inter distance	Gradient
CSB	565.25 M	565.25 M.	1 in 400 R
565.25 M	622.70 M.	57.45 M.	1 in 200 F
622.70 M.	742.00 M.	119.30 M.	Level
742.00 M	To Block Section	---	1 in 300 R

**2.5 LAY OUT: -**

- i) No. of Running lines: - 3 (Three)
- ii) No. of Sidings: - 1 (One), Hot Axle siding.
- iii) No. of Passenger Platform: - 2 (Two), One Rail level Pass Platform beside Line No-1, (365 M x 14.750 M) and One Rail level Pass Platform beside Line No-3, (350 M x 5.50 M)
- iv) No. of Goods Platform: - Nil

**2.5.1 RUNNING LINES, DIRECTION OF MOVEMENTS AND HOLDING CAPACITY IN CSL:-**

(i)

Sl.No	Line No.	Description	CSL	Isolation provided	
				BMKJ end	MSMD end
1.	Line No.1	1 <sup>st</sup> Loop	686.00 M (Str-Str)	Sand Hump	ORL
2.	Line No.2	Main line	727.31 M (Str-Str)	-	-
3.	Line No.3	2 <sup>nd</sup> Loop	686.00 M (Str-Str)	ORL	Sand Hump

(II) **DIRECTION OF MOVEMENTS: -**

Trains arriving from MSMD end are UP trains.

Trains arriving from BMKJ end are DN trains.

**2.5.2) NON-RUNNING LINES AND CAL:-**

Srl No.	Description	CAL	Takes off line No.	Exit	Operation
1.	Hot Axle Siding	60M	2 <sup>nd</sup> Loop	Both way	Key extracted from lever No. 9 of East Cabin

**2.5.3 ANY SPECIAL FEATURES IN THE LAYOUT: - NIL**

**2.6. i) Level Crossings :- ( Station Section): -**

Sl. No.	Location	Km.	Normal position	Class	Type	Operation	Communication
1.	UP Home signal and DN Starter signals.	61.043	Open	C	Interlocked	By winch from cabin	Magneto phone with West/cabin.
2.	DN Home signal and UP Starter signals.	62.106	Open	C	Interlocked	By winch from cabin	Magneto phone with East/cabin.

**ii) Level crossing: - (In block section):**

Sl. No	Between	Km.	Class	Normal position	Type	Operation	Communication
1.	ARN-BMKJ	66/3-4 (No. RV-42)	'Spl'	Open	Interlocked	Winch Operated Lifting barrier	Magneto Telephone connection from gate lodge to SM office/ARN
2.	ARN-BMKJ	70/1-2 (No. RV-45)	'C'	Closed	Non-Interlocked	Winch Operated Lifting barrier	Magneto Telephone connection from gate lodge to SM office/BMKJ
3.	ARN-MSMD	59/9-10 (No. RV-38)	'C'	Closed	Non-Interlocked	Winch Operated Lifting barrier	Magneto Telephone connection from gate lodge to SM office/ARN

Train Actuated Warning Device has not been provided at the above Level Crossing Gates.  
**(Working of level crossing Gate is detailed in Appendix-'A'.)**

**3. SYSTEM AND MEANS OF WORKING: -**

*(Rule No., Chapter - xiv of GR & SR, Chapter -III & IV of BWM) Absolute Block System No.8.01 (1)(A&C) 8.01(2)(a) 8.03 (2).*

- i) **System of working:** - Absolute block working on single line.
- ii) **Type of block instruments:** - Token-less block instruments connected with adjacent stations.
- iii) **Instrument:** - Non-cooperative.
- iv) **Block Telephone:** - Provided with block instrument of ARN-MSMD & ARN-BMKJ sections.
- iv) **Staff responsible for their operation:** - SM on duty.
- v) **Custodian of keys:** - SM on duty.

**4. SYSTEM OF SIGNALLING AND INTERLOCKING: -**

**4.1 STANDARD OF INTERLOCKING AND TYPE OF SIGNALLING: –**

- i) **Interlocking:** - The station is provided with Standard-III interlocking. All the points and signals are operated from end cabins. Advanced Starters are interlocked with respective Tokenless Block Instruments. Digital Axle counter is provided as LVCD in the section ARN-MSMD.
- ii) **SM’s Control:** - A slide control machine with 12 Nos. of slides is provided in station master’s office to control UP and DN Home signals ,Warner signals and last stop signals. The slide control machine is provided with SMs lock up key, which shall be in the personal custody of the SM on duty. The slide control machine can be locked with either all the slides in normal position or one or more slides in operated position. But in emergency SM on duty can put back the slide to normal without unlocking the slide control machine vide SR 3.36.03 (a).
- iii) **Type of Signalling:** - Two Aspect Lower Quadrant Semaphore signals with end cabin operation.
- iv) **Maximum equipment of Signal:** - Outer, Home, Starter, Adv. Starter and Warner below outer in either direction.

**4.1.1 TRACK CIRCUIT –**

The station is provided with track circuit on main line between UP & DN main line starters i.e. MLT1 & MLT2 and in advance of UP & DN main line starters i.e. 4 T (W&E) at either end on main line. Track circuits are also provided from last trailing point to Advanced Starter on both side of the yard i.e. 7T, 7AT, 15T1 & 15T (either end) of the yard. Starter signals and Advanced Starter signals of both ends are replaced to ‘ON’ through the respective track circuits on both sides. Track circuits are provided on each loop line i.e.L1T1 & L1T2 on loop line No-1 & L3T1, L3T2 & L3T3 on loop line No-2 & 11T, 14T on either side point zones. Starter signals, Advanced starter signals & Outer signals at both ends are replaced to “ON” through the respective track circuits on both sides

**4.1.2 POSITION AND OPERATION OF POINTS: -**

All points, Lock Bars & Signals are operated through levers from end cabins.

- 4.1.3 **IBS:-** :- NIL
- 4.1.4 **Point & Trap Indicator** :- NIL
- 4.1.5 **Repeater (Banner Type)** :- NIL
- 4.1.6 **CALLING ON SIGNALS** :- NIL
- 4.1.7 **SHUNT SIGNALS** :- NIL
- 4.1.8 **ANTI COLLISION DEVICE** :- NIL

NOTE: Details of signalling and interlocking are given in Appendix ‘B’ of the SWR.

**4.2 CUSTODY OF CABIN BASEMENT KEY AND PROCEDURE FOR ITS HANDING OVER AND TAKING OVER BETWEEN STATION MASTER AND S&T MAINTENANCE STAFF: -**

The cabin basement room should be kept locked with two separate locks; the arrangement should be such that one is kept with the on duty stationmaster and the other key with signal maintainer. Whenever required, the key in the custody of Station Master shall be handed over to the maintainer with proper acknowledgement in the basement room register. The maintainer on receipt of key from the stationmaster may use the same and the key in his custody to open

the basement room by inserting the keys one after another separately in to the earmarked locks. After completion of work, the basement room is to be locked using both the keys separately & the designated key should be handed over to the stationmaster. The details of the transaction should be properly recorded in the basement room key register at the Station duly signed by SS/SM on duty and the signal staff concerned according to SR 3.51.05. If the basement room key is handed over to the Signal staff regarding the interference in safety gears the train shall be piloted in and piloted out.

4.2 **POWER SUPPLY: -**

Normally for signalling and interlocking installation, power supply is drawn from State Electricity Board (230V, 50Hz). The electro – mechanical signal installations at this station work with banks of primary / secondary cells installed at several places.

The secondary cells are charged from the local power supply source at 230 V – single phase. The batteries once charged will normally last for about three days. There is no standby power supply at this station.

The Station Master must however, maintain the record of the power failures and must promptly report the failure immediately to the controller and to the concerned Elect and S & T staff.

5.0 **TELECOMMUNICATION FACILITIES: -**

- i) Telephone attached with single line token less Block Instruments for either side Block Section.
- ii) Station to Station fixed telephone (hot line) is provided
- iii) Station is provided with Auto telephone connected with Railway Exchange
- iv) BSNL telephone is provided.
- v) The station is connected to Raipur-Titlagarh control circuit by a control telephone.
- vi) Station to station 25 Watt VHF communication is provided.
- vii) Magneto Telephone connection is provided with Station & Cabin.
- viii) Magneto Telephone connection is provided with Station & L.C Gates at KM 66/4 & KM 59/9-10.

**Note-**

- (i) For obtaining line clear, VHF should be used as a last alternative and not as a sole means of communication.
- (ii) VHF and Walkie Talkie sets should not be used for unnecessary discussions with Drivers, Guards or any other staff.
- (iii) The on duty SM shall use the above electrical communication instruments stated in Para-5.0 from item No. (i) to (vi) strictly in order of preference for obtaining/granting line clear vide SR 14.01.01. In case of failure of any of the above means of communication the SM on duty shall work vide SR 6.02.06

(Details are mentioned in Appendix 'B' of the SWR.)

6.0 **SYSTEM OF TRAIN WORKING: -**

The movement of trains is controlled by Section Controller on duty whose orders shall be complied with, provided they do not contravene any General Rules, Subsidiary Rules, Station Working Rules, Block Working Manual and other safe working instructions issued from time to time. In the event of suspension of control working, the Station Master on duty shall work independently in conjunction with the Station Master of adjoining block stations and shall be responsible to ensure that there is no undue delay to train operation in general.

6.1 **DUTIES OF TRAIN WORKING STAFF: -**

Details of duties of operating staff are mentioned in Appendix 'D' of the SWR.

**6.1.1 TRAIN WORKING STAFF: -**

The following are the complement of train working and operating staff provided at this station to work in each shift.

SL No.	Designation	Roster	No. of staff in each shift	Hrs. of Duty
1	SS	Continuous	1	09 hrs
2	SM/ASM	Continuous	1	08 hrs
3	CLM/LM 'A' / TPM-A in the Cabin.	Continuous	2	08 hrs
4	TPM-A/TPM-B / Sr. TP/ TP	Continuous	1	08 hrs

The above staff shall work as per the rosters issued by DPO/SBP from time to time and these rosters shall be displayed in the SM office.

**6.1.2 RESPONSIBILITY OF ASCERTAINING CLEARANCE OF THE LINE AND ZONE OF RESPONSIBILITY: -**

- |    | <u>Staff Responsible</u>   | <u>Clearance of Zone</u>  |
|----|--|---|
| a) | SM on duty   | Between outermost fouling mark of concerned nominated line.   |
| b) | Cabin Man  | Between the fouling mark and Advanced Starter / Home signal as the case may be at the respective end. |
| c) | Occupation/clearance of track circuit from Fouling Mark to Fouling Mark on Main line can be ascertained by indications provided in Station Masters' room. In case of failure of the said track circuit, SM on duty is responsible to ascertain clearance or otherwise of the Main line, Point zones & Loop lines by physical verification. |   |

(The PN Book should be under the personal custody of on duty train passing staff.)

**6.1.3 ASSURANCE OF STAFF IN ASSURANCE REGISTER: -**

All staff before taking up independent charge of their duties at this station, shall make a written declaration in the assurance register that they have read and thoroughly understood the working system in force and must sign in Assurance Register.

No Railway servant shall be entrusted with any duty involving safety of the public unless the station in-charge is satisfied that the concerned staff is competent for the post. No Railway servant unless duly examined and certified shall be allowed to work the points and signals.

The SS is responsible to see that all the staff are conversant with the Station Working Rules and their signature obtained in the Assurance register in Form 'A' after he is satisfied that they have thoroughly understood the working rules of the station. In case of Group 'D' staff, their signature/thumb impression in Form 'B' must be obtained after explaining fully about their duties and responsibilities.

The station superintendent is responsible personally for maintaining the Assurance Register and for obtaining declaration of the staff working under him. The Assurance Register must be maintained in two parts, one for Group 'C' and the other for Group 'D' staff. A duplicate copy of the Assurance Register must be maintained and kept in personal custody of the Station Superintendent.

The declaration shall be renewed in the following cases: -

- (i) Whenever there is a change in the Station Working Rules.
- (ii) For any staff who have not worked at the station or were away from the station for a period of 15 days or more.

6.2 (a) **CONDITIONS FOR GRANTING LINE CLEAR:** -

The conditions laid down in GR 8.01 (1) (a) & (c), 8.01 (2) (a), 8.03 (2) (a) (b) (c) (l), BWM 2.07 (3) & (4) shall be complied with and as under: -

- i) The whole of last preceding train has arrived complete clearing the fouling mark concerned.
- ii) All necessary signals are put back to 'ON' behind the said train.
- iii) Block section is clear of trains running in the direction towards the block station to which such line clear is being given.
- iv) The line is clear upto Advanced Starter Signal of the station nearest to expected train i.e. UP Adv. starter signal No 7 for a DN train and DN Adv starter signal No.7 for an UP train).
- v) LVCD of section ARN-MSMD should show clear.

(b) **OUTLYING SIDING:** - Nil.

6.2.1 **ANY SPECIAL CONDITION TO BE OBSERVED WHILE RECEIVING OR DESPATCHING A TRAIN:** - Nil

6.2.1.1 **SETTING OF POINTS AGAINST BLOCKED LINE:** -

All Points shall normally be set for the straight except when otherwise authorized by special instruction. When a running line is blocked by stabled load/wagon/vehicle or by a train which is to cross or give precedence to another train or immediately after arrival of a train at the station, the points at either end should immediately be set against the blocked line except when shunting or for any other movement towards the blocked line is required to be done vide 3.51.06(a). If all the lines at the station happen to be blocked then SR.3.51.06(b) will be followed. During crossing of passenger and goods trains, the rules laid down in SR 3.47.01, 3.47.02 & 3.51.06 shall be followed.

6.2.1.2 **RECEPTION OF TRAIN ON BLOCKED LINE:** -

In case reception of a train on an obstructed line to the SMs shall follow GR 5.09 & SR 5.09.01.

6.2.1.3 **RECEPTION OF TRAIN ON NON-SIGNAL LINE:** -

In case reception of a train on a non-signal line, the SMs shall follow GR 5.10 & SR thereto.

6.2.1.4 **DESPATCH OF TRAINS ON NON-SIGNAL LINE:** -

In case despatch of a train on a non-signal line, the SMs shall follow GR 5.11 & SR thereto.

6.2.1.5 **DESPATCH OF TRAINS FROM LINE PROVIDED WITH COMMON STARTER SIGNAL:-** N/A

6.2.1.6 **SPECIAL RESTRICTIONS** -

- i) Shunting in the face of an approaching train is prohibited
- ii) Hand shunting & Fly shunting is prohibited at both ends of the yard.
- iii) The ORL/Sand Hump must not be used for stabling of vehicles or harbouring an Engine with or without vehicles.

**6.3 CONDITIONS FOR TAKING 'OFF' APPROACH SIGNALS : -**  
 (Rule No. GR 3.40 & SRs, SR 3.38.01,3.38.03 to be followed).

At this station approach signals cannot be taken 'OFF' unless: -

- i) The nominated line is clear of all obstructions for an adequate distance beyond starter upto the end of sand hump / Over-run line/Advanced Starter as the case may be.
- ii) To take off the Home signal for admission of a train ,the adequate distance (signal overlap) as mentioned below shall be kept clear vide GR 3.40 (1) (b): -

Sl. No	Line No.	UP Train		DN Train	
		From	To	From	To
1.	Line No.1	Up Starter No.5	End of Sand Hump or UP Adv. Starter No.7	DN Starter No.5	End of ORL / DN Adv. Starter signal No. 7
2.	Line No.2	Up Starter No.4	Up Adv. Starter No.7	Dn Starter No. 4	DN Adv .Starter Signal No 7
3.	Line No.3	Up Starter Signal No.6	End of Over-run line or UP Adv. Starter No.7	Dn Starter Signal No.6	DN Adv. Starter Signal No. 7 / End of Sand Hump.

**Note**-CRS Dispensation obtained vide CRS No. 986 dated 21.3.91 for reckoning signal over lap from the concerned starter instead of trailing points.

**6.3.1 RESPONSIBILITY OF SM FOR RESTORATION OF SIGNALS TO ON: -**

For replacing signals to on, the SM on duty shall follow Rule No. SR 3.36.02.

**6.4 SIMULTANEOUS RECEPTION, DESPATCH, CROSSING & PRECEDENCE OF TRAINS:**

According to the existing interlocking at this station, the simultaneous reception and despatch of trains are permitted as stipulated below: -

Reception of a DN train on Line No.1 by setting Over run line	AND	Reception of an UP train on line No.3 by setting Over run line or despatch of another DN train from Main line or Line No.3.
Reception of an UP train on line No.1 by setting Sand Hump.	AND	Reception of a DN train on line No.3 by setting Sand Hump or despatch of another UP train from line No.2/3
Reception of an UP train on line No.3 by setting Over run line	AND	Reception of a DN train on line No.1 by setting Over run line or despatch of another UP train from line No.1/2
Reception of a DN train on Line No.3 by setting Sand Hump	AND	Reception of an UP train on line No.1 by setting Sand Hump & despatch of another DN train from Line No.1/2.

**6.5 COMPLETE ARRIVAL OF TRAINS : -**

(Rule No. GR 4.16 & SR 4.17.01 GR 14.10)

- a) i) *Staff responsible to verify complete arrival-* For stopping train Cabin Man at the facing end is responsible.
- ii) *Mode of verification-* The facing end Cabin Man shall see that the train arrived complete within fouling mark at the facing end with tail lamp / tail board / last vehicle indicator.



Cabin Man of facing end cabin concerned will give intact private number to SM on duty as a token of complete arrival after physical verification of last vehicle indicator and setting route against the occupied line.

- b) For through passing trains, both SM on duty and the Cabin Man shall see that the last vehicle of every train passing through the station, is provided with a tail board or tail lamp or such other device in accordance with the provisions of rule G.R. 4.16.
- c) In case of trains arriving with last vehicle number, the last vehicle number shall be repeated vide BWM 2.07 (b).

#### 6.6 **DESPATCH OF TRAINS:** -

Despatch of trains is governed by GR 3.36 to 3.39, 3.42, 3.43, 5.11, 8.01(a), SRs 3.36.01,3.36.02(a)(b), 3.36.03,3.36.04(b), 3.42.01(b), 3.42.02(a)(i), 3.42.04, 5.11.01 and other provisions of GR & SR, BWM and Operating Manual, SWR.

#### 6.7 **TRAINS RUNNING THROUGH :** -

- a) In addition to the rules laid down for reception and despatch of trains, the rules laid down in GR 4.17, 4.42 with relevant SRs thereto and SRs 3.36.04 (b)(i), 3.42.02 (a) (i) shall be followed.
- b) In every case in which trains are permitted to run through on a non-isolated line, all shunting shall be stopped and no vehicle un-attached to an engine or not properly secured in accordance with GR 5.23 may be kept standing on a connected line which is not isolated from the through line as per GR 4.11(2).

For through passing train on main line the concerned Warner signal shall be taken off. For all through passing trains SM on duty shall exchange all right signal with driver and guard of the train and observe the last vehicle indicator of the train as well as look out for any dangerous conditions on the train. For this purpose, he shall depute a station TP/TPM at the other side of the station to exchange all right signal.

#### 6.8 **WORKING IN CASE OF FAILURE:** -

In case of failure of S&T equipments, on duty Station Master shall work in accordance to GR 3.68, 3.69 and 3.70 and SRs thereto.

#### 6.8.1 **PROCEDURE TO BE FOLLOWED IN CASE OF FAILURE OF A SIGNAL & INTERLOCKING INSTALLATIONS:** -

Whenever there is a failure of points, signals, track circuits or any other interlocking gear at the station that includes level crossing gate (s) if any etc., the SM on duty shall follow the procedure detailed in GR 3.68, 3.72, 3.74 and SRs thereto. In case of defective approach signals, the trains will be piloted in vide SR 3.69.02, 3.69.03 & 3.69.05. In case of defective departure signals, trains will be piloted out vide GR 3.70 & SR 3.70.01. & 3.70.02.

#### 6.8.2 **TRACK CIRCUIT**

In the event of failure of track circuit in the yard concerned signal shall be suspended and trains shall be piloting 'IN' or 'OUT'. Before piloting a train in to the yard the clearance of the track must be ensured by physical verification

#### 6.8.3 **AXLE COUNTER-**

In the event of failure of axle counter between ARN-MSMD, concerned Block instrument of monitored block section will be suspended and trains will be worked on PLCT.

**6.8.4 DEFECTIVE SIGNALS:**

When signals become defective, the procedure laid down in GR & SR shall be followed. A signal in the OFF position is the final indication that the points are correctly set for the route for which it applies. If it is found impossible to take OFF a signal, the setting of points on the route to which it applies shall be inspected by the Station Master on duty before the signal is declared as defective irrespective of what is indicated by the position of the route, [Refer GR 3.68 to 3.46, 3.52 to 3.56, 3.71, 3.80 and SR 3.68.01 (c)].

If the semaphore motor operated signal getting stuck up in "off" position, it should be treated as defective and SM shall follow the procedure vide SR 3.68.02 and 3.68.04.

In case of disconnection of signal and interlocking for repair and maintenance, procedure laid down in GR and relevant SRs shall be followed.

In the event of signal showing no lights, Station Master on duty shall before giving line clear, initiate action in accordance with the procedure prescribed in GR and the relevant SRs. [Refer GR 3.51, 3.69, 3.49 (4), 3.68 to 3.77]

**6.8.5 BLOCK INSTRUMENT**

In the event of partial / total failure of token less Block instrument the concerned block instrument shall be suspended till its rectification, trains shall be worked as per GR 14.01, 14.08 & SRs there to and SR 6.02.06 & BMW Rule No. 4.04, 4.02 & 4.43.

Both UP and DN advanced starters are electrically interlocked with respective Tokenless block instruments so that the same cannot be taken off unless the concerned block instrument is in line clear position (TGT). When the block instrument is suspended in 'Line Clear' position, the concerned advanced starter must also be treated as suspended. When the block instrument is under suspension, the authority to proceed will be paper line clear ticket.

UP and DN Home signals are electrically interlocked with respective block instruments. Block instrument can be normalized from 'TRAIN ON LINE' to 'LINE CLOSED' position, when the corresponding home signals are in the ON position. However, the Home signals can be taken off in case of failure of the block instruments.

**6.8.6 DEFECTIVE INTERLOCKING**

In the event of interlocking becoming defective, the points will be treated as defective. The SM on duty on receipt of this information will immediately introduce non-interlocking system of working at the station. Trains will be Piloted In or Out as the case may be. The SM on duty shall be responsible for correct setting, clamping and padlocking of points for admission of train.

**6.8.7 DEFECTIVE/DAMAGED POINTS**

When any point fails to operate normally by the route setting operation through panel it is inevitable to operate the points with crank handle. The SM on duty shall personally ensure clamping and padlocking of all facing and trailing points on the route. Crank handles are interlocked with signals and interlocking system. When points become defective, the signals controlling these points shall be considered defective and vice-versa and the procedure for use of crank handle for motor operated points shall be followed as per operating manual para-20.06. The responsibility of correct setting of points, clamping and padlocking the points for reception and despatch of trains at the station, rests with SM on duty himself.

**6.8.8 RECEPTION OF A TRAIN ON BLOCKED LINE**

Whenever trains are to be admitted on an obstructed line the SM on duty shall authorize the on duty TPM with form T/509 indicating the reason for such admission the line number and the nature of obstruction on that line.

Before handing over the authority the SM on duty shall ensure the correct setting clamping and padlocking of both facing and trailing end of the concerned route vide SR 3.69.03.

A stop hand signal shall be exhibited by the SM on duty at a distance of not less 45mts. from the point of obstruction to indicate to the Driver as to where the train shall be brought to a stand.

**6.8.9 INSPECTION OF POINTS BEFORE DECLARING THEM DEFECTIVE:**

However, before declaring a signal is defective, the setting of the point on the route to which it applies shall be inspected by the Station Superintendent/Station Master irrespective of the position of the switches point laid down in GR with relevant SRs shall be followed. [Refer GR 3.68, 3.70 & SR 3.77.01(b)]. Initiate action in accordance with the procedure prescribed in GR and relevant Subsidiary Rules there to. [Refer GR 3.49(4) and 3.68, 3.77]

- 6.8.10. **ISSUE OF CAUTION ORDER:** - Whenever in consequence of the line being under repair or for any other reason special precautions are necessary, a caution order detailing the kilometers and speed at which a train shall travel and the reasons for taking such precautions shall be handed over to the driver in terms of GR 4.09 and SR thereto.

**6.9 WORKING OF MOTOR TROLLEY, MATERIAL LORRIES ETC: -**

(a) Motor Trolleys are run in accordance with Subsidiary Rules 15.25.03 to 15.25.07.

(b) Material Trolleys will work in accordance with Subsidiary Rules 15.27.05 to 15.27.08

(c) Rail Dolleys will work in accordance with Subsidiary Rules 15.27.10.

The following precaution must be taken:

In all other respects, the working of a light Motor trolley shall conform to the rules laid down for ordinary trolleys while running without block protection and to those laid down for motor trolleys while running under block protection or following another light motor trolley or a motor trolley.

**6.8.2 INSPECTION OF POINTS BEFORE DECLARING THEM DEFECTIVE: -**

However, before declaring a signal as defective, the setting of the point on the route to which it applies, shall be inspected by the Station Master/ Cabin Man irrespective of the position of the point levers and lock levers in terms of SR 3.68.01(c).

- 6.8.3 In the event of failure / suspension of tokenless Block instrument, procedure vide SR 6.02.06 to be followed.

**6.8.4 RECEPTION OF TRAINS ON OBSTRUCTED LINE: -**

In case of reception on an obstructed line, the SM shall act in accordance with GR 5.09 & SR thereto.

**6.8.5 RECEPTION OF TRAINS ON NON-SIGNALLED LINE: -**

To receive a train on a non-signalled line the SM shall act in accordance with the procedure detailed in GR 5.10 & SR thereto.

**6.9 WORKING OF TROLLEYS /MOTOR TROLLEYS, MATERIAL LORRIES ETC: -**

- (a) Motor Trolley are run in accordance with Subsidiary Rules 15.25.03 to 15.25.07 & BWM 4.39
- (b) Material Trolleys will work in accordance with Subsidiary Rules 15.27.05 to 15.27.08 & BWM 4.40

The following precaution must be taken:

In all other respects the working of a light Motor trolley shall conform to the rules laid down for ordinary trolleys while running without block protection and to those laid down for motor trolleys while running under block protection or following another light motor trolley or a motor trolley.

**7.0 BLOCKING OF LINES: -**

- a) Whenever a running line is blocked either by loose vehicles or by stabling train or by a train which is to cross or give precedence to another train, the points at either end should immediately be set against the blocked line except during shunting movement. Whenever a running line is blocked a clear remark in 'RED' ink shall be made immediately in Train Signal register.
- b) **Use of slide / lever collars:** - Slide collars and lever collars must be placed on the concerned SM's slides and levers in the cabin respectively controlling the blocked line vide SR 3.36.03 and 5.04.01 (a). Points of the blocked line shall be set against vide Rule no. SR 3.51.06.
- c) Register indicating times and number of running line on which vehicles are stabled. A record thereof shall be made in the Station Diary vide SR 5.23.01 (a) (c) & (d).

**NOTE:** - Care shall be taken to secure special type vehicles fitted with roller bearings while standing in siding or on running lines. A stabled load register to be maintained shift-wise as per format given below:

Date	Name of SM on duty	Duty		Line No. on which Id. Stabled	Total No. of Wagons	Time Line Blocked
		From	To			
1	2	3(a)	3(b)	4	5	6
No. of Hand brakes pinned down	No. of wagons on which wooden wedges used	No. of chains used	Safety pad locks	Clamps and pad locks used to set the line against the blocked line	Lever/Slide Nos. on which lever Collars applied	Private Numbers Exchanged with cabins (SM PN & CM PN to be recorded)
7(a)	7(b)	7(c)		7(d)	7(e)	7(f)
Time line Cleared	Signature of SM on duty	Signature of SM Taken Over		REMARKS		
8	9	10		11		

**7.1 SECURING OF VEHICLES: -** As far as practicable loose vehicles shall not be allowed to stand on the running line. However, under unavoidable circumstances, if it is necessary to detach vehicles from a train or to stable a train and leave them standing on running line, SS/SM on duty shall be responsible to secure vehicles/stable loads in accordance with GR 5.23, SR 5.23.01 and OM 7.08 to prevent rolling down of vehicles and arrest obstruction of fouling.

**7.1.1 ALTERING OF POINTS TO A CLEAR LINE WHEN RUNNING LINE IS BLOCKED:-**

- a) When a running line is blocked by a stable load e.g., wagons, vehicles or by a train which is to cross or give precedence to another train or immediately after arrival of a train at the station etc. the points at either end should immediately be set against the blocked line except when shunting or another movement is required to be performed in that direction on the same line.
- b) If all the lines at a station happens to be blocked when line clear has been granted to a train, the points should be set for the line occupied by a stable load or a goods train in that order so that, in a case of mishap, the chances of casualties are minimized.
- c) In case all the lines are occupied by passenger carrying trains points should be set for a loop line, to negotiate which the speed of the incoming train would be reduced, which in turn would minimize the consequences of casualties. While doing so, points shall be set for a loop, occupied by a train, if any, whose engine is facing the direction of approach of the incoming train rather than for a loop line, occupied by a train where a passenger coach will, in case of collision, receive the impact.

**7.1.2 LOADING AND UNLOADING OF VEHICLES ON RUNNING LINE:-**

Loading and unloading from vehicles on running line is prohibited unless permitted by Sr. DOM / SBP vide SR 5.19.01. At stations where loading and unloading of goods is permitted whether full rake or part thereof, the station master shall ensure that no goods are left fouling any line before and after clearance of the rake from the line. The railway servant supervising loading and unloading shall also ensure that consignment does not foul any line vide SR 5.19.001: (a).

If the stations are on gradients, the rake should be properly secured as detailed in SR 5.23.01.

During the time of loading / unloading, the station master shall ensure isolation of the lines(s) as detailed in SR 3.51.06.

**8.0 SHUNTING: -**

**8.1 GENERAL PRECAUTIONS: -**

Shunting shall be performed in terms of General Rules 3.46, 3.52 to 3.56, 5.13, 5.14, 5.16, 5.17, 5.19, 5.20 to 5.23, 8.09, 8.10, 8.12, 8.13, 8.14, 8.15 and Subsidiary Rules thereto. The Guard/Asst. Guard/SS/SM/TPM on duty is authorized to supervise shunting operation. The staff supervising shunting shall ensure correct setting of points, clamping and pad locking of points, if necessary.

**8.2 PROHIBITION OF SHUNTING AND ANY SPECIAL FEATURE: -**

- a) Hand shunting/Fly shunting is prohibited at both end of the station.
- b) Shunting in face of an approaching train is prohibited.
- c) Shunting shall not be permitted at either end of the yard until the engine is leading towards falling gradient.

**8.3**

<b>SHUNTING ZONE</b>	<b>BLOCK SECTION IS CLEAR</b>	<b>BLOCK SECTION IS OCCUPIED</b>
Shunting outside Home Signals i.e. up to Adv. starter	Permitted.	Permitted provided the provisions of GR 8.09 are complied with.
Shunting within Home Signals.	Permitted vide GR 8.11 (a).	Permitted as per GR 8.11 (b)
Shunting outside station section upto outer signal.	The concerned section shall be blocked back vide GR 8.13	Not permitted.

8.5 During failure of block instrument on single line, the SM on duty shall ensure that there is no train in the block section and the last train has arrived complete clearing the fouling mark while conducting shunting at that end of the block section of which block instrument has been suspended and all necessary precautions have been taken as per rules laid down in GR.

8.6 **SHUNTING IN THE SIDING TAKING OFF FROM STATION YARD:**

When shunting in the station yard / Hot Axle siding, proper shunting authority on form T/806 to be issued to the train staff with clear instruction and limit upto which shunting is to be performed. While performing shunting in the siding, relevant GR 5.14 and SRs thereto to be followed

9.0 **ABNORMAL CONDITIONS:** -

(a) **THE RULES TO BE OBSERVED IN THE EVENT OF ABNORMAL CONDITION:** -

[I] **PARTIAL FAILURE OF COMMUNICATION:** -

In the event of suspension of single line token less Block Instrument and during partial failure of other available means of communications, trains will be worked in terms of Subsidiary Rule 6.02.06 and Chapter-III Part-I of Block Working Manual.

[II] **DESPATCHING OF TRAINS ON THE AUTHORITY OF BLOCK TICKET:** -

In case, it is necessary to allow a train into an obstructed block section due to engine failure, obstruction or accident, a block ticket shall be issued in terms of SR 6.02.05. Absolute Block System on the affected block section shall be suspended and concurrence of the SS/SM at other end shall be obtained and recorded in caution order register and train signal register.

On the block ticket (T/A 602) it shall be mentioned in detail the place of obstruction i.e. Engine Km., B/Van Km., whether the train is to return or to wait at the place of obstruction for the arrival of another following train(s) or to proceed to next station.

A caution order shall be issued restricting the speed to 15 KMPH. in day light hours when the visibility is good and 10 KMPH at night or whenever clear view for 800 Mtrs. is not available.

On arrival at the station the block ticket shall be collected with necessary endorsement from Driver/Guard and cancelled and pasted to its record foil or shall be sent to the issuing station for cancellation.

In case of accident/engineering block , an assurance from SE/P.WAY concerned shall be obtained that the line is safe for movement of trains before resumption of normal working. When the obstruction is removed and assurance in writing is obtained from SE/P.WAY concerned or Guard/Driver the SS/SM on duty may resume normal working after exchanging proper messages supported by Private Number.

[III] **TRAINS DELAYED IN BLOCK SECTION:** - In case of train delayed in the block section the station master will take action as per GR 6.04 and SRs thereto.

[IV] **FAILURE / PASSING OF INTERMEDIATE BLOCK STOP SIGNAL AT ON:** - NIL

[V] **FAILURE OF LV AXLE COUNTER:** - Details of operation are given in Appendix 'B' of SWR.

- (b) **PROCEDURE FOR EMERGENCY OPERATION OF POINTS BY CRANK HANDLE: - Nil -**
- (c) **CERTIFICATION OF CLEARANCE OF TRACK BEFORE CALLING-ON SIGNAL IS OPERATED: Nil**
- (d) **REPORTING FAILURE OF POINTS, TRACK CIRCUIT/AXLE COUNTER AND INTERLOCKING: -**

In case of failure of any interlocking gear at the station, the failure report should be communicated by the SS/SM on duty to the sectional Maintainer, the JE/SE/SSE (SIG) of the Section and others through a memo as per SR 3.68.04 and document all such transactions. It is only after receipt of this information the JE/SE/SSE (SIG) shall attend to the failure after giving disconnection memo. After rectification of the fault, the JE/SE/SSE (SIG) shall give a reconnection memo detailing the rectification and it is only after the Station Master on duty who has personally checked this defective gear and is satisfied that it is in good and proper working order, he shall resume the normal working of the said defective gear in terms of SR 3.68.04 (c) and (d). The SM shall inform all concerned officials as soon as defects are remedied vide GR 3.76.

9.1 **TOTAL FAILURE OF COMMUNICATION: -**

In the event of total interruption of communication occurring between ARN-MSMD or ARN-BMKJ stations, i.e when line clear can not be obtained by one of the following means stated in order of preference viz

- a. Block Instruments, Track Circuits or Axle Counters
- b. Telephone attached to the Block Instruments
- c. Station to Station fixed telephone (Hot Line).
- d. Fixed telephone such as Railway auto telephone & BSNL phone
- e. Control telephone
- f. VHF sets

and actions shall be taken as per SR 6.02.04. The train which is to be despatched to the affected section will be stopped and the Driver and Guard of the train shall be informed about the fact.

Before dispatching the light engine /main engine/motor trolley /Tower wagon/Trolley /Cycle trolley/Moped trolley/Diesel car/rail motor car/EMU rake, the SM on duty shall hand over a Authority for opening of communication during total interruption of communication on Single Line Section to the driver /motorman/Guard/SM who is being sent to open communication, which includes.

- (i) An authority to proceed without "Line Clear" in the prescribed form (T/B 602).
- (ii) A Caution Order restricting to speed of the train to 15 Kmph by day when the view ahead is clear and 10 Kmph during night or when view ahead is obstructed in addition to other speed restrictions in force (T/409).
- (iii) Paper Line Clear Ticket to pass the Last Stop Signal at 'ON' position.
- (iv) A "Line Clear" enquiry message (T/E602) asking "Line Clear" for the awaiting train.
- (v) A conditional "Line Clear" message for the light engine to return with or without a train attached, supported by a Private Number (T/F602).

On arrival of the engine at the next station the conditional line clear message and enquiry message shall be collected by the SM on duty who shall prepare a conditional line clear ticket (T/G602 (UP) or T/H602 (DN) for engine to return either light or with train attached and conditional line clear reply message for the enquiry message giving line clear for the train waiting at other station shall be handed over to the Driver of light engine. On return trip the Driver will come on booked speed subject to speed and other restrictions in force.

-16-

If there be an even flow of trains in both directions, Enquiry and Conditional line clear message for each succeeding train may be sent through the Guard of the preceding train. If the Station Master at one end has more than one train to despatch in the same direction he may ask line clear not only for one train but also for the following trains. It must be stated that these later trains will be despatched after the first train at an interval of 30 minutes.

When despatching the second and subsequent train, particulars of last preceding train along with its departure time will be endorsed and a caution order restricting the speed to 25 Kmph. over straight when view ahead is clear and 10 Kmph. when the view ahead is not clear is to be issued. While adopting this procedure the Guard and Driver should be instructed to keep a 'sharp' lookout and be prepared to stop short of any obstruction. Trains must continue to work on this system until any one of the means of communication is restored.

As soon as any one of the means of communication has been restored, the conditional line clear working of trains shall be cancelled when there is no train in the affected block section and message shall be exchanged supported by Private Number keeping Section Controller informed.

**9.2 TEMPORARY SINGLE LINE WORKING ON A DOUBLE LINE SECTION: - N.A.**

**9.3 DESPATCH OF TRAIN UNDER AUTHORITY TO PROCEED WITHOUT LINE CLEAR OR TO ASSIST THE CRIPPLED TRAIN: - Rules laid down in SR .6.02.05 shall be followed.**

**10.0 VISIBILITY TEST OBJECTS: -**

- i) V.T.O. post / authorised substitutes earmarked to work as V.T.O. Post. - The arms of UP Starter signal No.4 & the arms of DN Starter signal No.4 of line No.2 during day & its light during night are earmarked to serve as visibility test objects vide GR 3.61 (2) (b) (ii).
- ii) Distance between CSB and V. T. O. post: - 180 Mts.
- iii) Station Master on duty will test the visibility during thick and foggy weather and if visibility is impaired, he will work as per GR 3.61 and SRs thereto.

**11.0 ESSENTIAL EQUIPMENTS AT THE STATION: -**

Essential equipment shall be kept ready on hand in good condition with necessary relief stock.  
(This is mentioned in Appendix – "E")

**12.0 FOG SIGNAL MEN NOMINATED TO BE CALLED IN CASE OF FOG: -**

In order to indicate to the Drivers of approaching trains the location of signal during thick, foggy and tempestuous weather or during dust storm, the SM on duty shall arrange for fog signalling in terms of General Rule 3.61 and Subsidiary Rules thereto. Assurance of the staff shall be taken in the Fog Signal Register in the month of October every year as token of their having knowledge of Fog Signalling Rules and their use.

Fog signalmen shall be detailed for duty at stations being recruited partly from the station traffic staff and partly from Engineering Gang man and must not be substitutes or casual labour but regular employees of the railway.

**STATION DETONATOR REGISTER (OPT/124)**

A Register regarding detonator is maintained at the station.



(a) **INSTRUCTIONS:**

This register contains the following parts.

Part. - I: Particulars of fog signalmen posted at the station from time to time.

Part – II: Particulars of receipt and stock of detonating (fog) signals at the station to be filled in whenever detonators are used or received.

Part – III: Periods of fogs, fog signalmen on duty and details of detonators used.

Part – IV: Particulars of issue and testing of fog signals at the station.

(b) In charge of the station shall ensure that the information maintained in the register is kept upto date and is accurate in all respects.

Transportation inspectors shall check the registers and also the stock of detonators on hand each time they visit the station and initial with date as an indication having done so.

**CERTIFICATE:-** NOTHING IN THIS RULES SHALL BE READ AS CANCELLING, AMENDING AND MODIFYING ANY OF THE GENERAL RULES, SUBSIDIARY RULES, BLOCK WORKING MANUAL AND OPERATING MANUAL. THESE RULES HENCEFORTH CANCEL ALL PREVIOUS STATION WORKING RULES OF ARAND STATION.

### APPENDICES

APPENDIX 'A'	--	WORKING OF L.C. GATE.
APPENDIX 'B'	--	SYSTEM OF SIGNALLING AND INTERLOCKING AND COMMUNICATION ARRANGEMENTS AT THE STATION.
APPENDIX 'C'	--	ANTI COLLISION DEVICE (RAKSHA KAVACH).
APPENDIX 'D'	--	DUTIES OF TRAIN PASSING STAFF AND STAFF IN EACH SHIFT.
APPENDIX 'E'	--	ESSENTIAL EQUIPMENT OF STATION.
APPENDIX 'F'	--	RULES FOR WORKING OF DK STATIONS, HALTS, IBH, IBS AND OUTLYING SIDINGS.
APPENDIX 'G'	--	WORKING OF TRAINS IN ELECTRIFIED SECTIONS.

**APPENDIX - 'A'**

**DETAILS OF LEVEL CROSSING GATES TOGETHER WITH INSTRUCTIONS TO OPERATING STAFF INCLUDING LEVEL CROSSING GATEMAN ABOUT THEIR NORMAL WORKING, THEIR MAINTENANCE AND THEIR WORKING IN CASE OF FAILURE / EMERGENCIES WITH SPECIAL PROVISIONS IF ANY.**

**1. WORKING INSTRUCTIONS OF 'C' CLASS CABIN OPERATED TRAFFIC LC GATE (NO.RV-39) AT KM. 61 /1-2 AT MSMD END OF THE YARD.**

**1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:**

1.	Number of Level Crossing Gate: -	RV-39	
2.	Engineering or Traffic Gate: -	Traffic	
3.	Under control of Station Master/PWI:	SM/ARN	
4.	Location KM	61 /1-2	
5.	At. Station: -	ARN	
6.	In between Stations: -	ARN-MSMD.	
7.	BG/MG/NG: -	BG.	
8.	Single line/Double line/Multiple line: -	Single Line.	
9.	Normal Position: -	Open to road traffic.	
10.	Interlocked/Non Interlocked: -	Interlocked.	
11.	Means of interlocking: -	Lever No.8 (cabin operated)	
12.	Provision of Gate signal at Kms.	(i) UP line Nil	
		(ii) DN line Nil	
13.	Signalling arrangement: -	NIL.	
14.	Means of Communication:	Magneto Telephone Connection between Cabin and SM/ARN.	
15.	Width of level crossing Gate: -	5.5 Meters.	
16.	Type of road. (NH/SH/Others): -	Others	
17.	Name of Road: -	ARN Village Road.	
18.	Metaled/Non Metaled	Non-Metaled	
19.	Approach Road: -	Non-Metaled	
20.	Width of the road: -	5.5 m.	
21.	Angle of road crossing (In case of the skew Gates)	----	
22.	Road gradient (If any)	(i) North/East side. ----	
		(ii) South/West side ----	
23.	Road alignment (Straight/Curve): -	(i) North/East side Straight	
		(ii) South/West side Straight	
24.	Provision of height gauges: -	Not provided.	
25.	Type of Barriers: -	Lifting barriers.	
26.	Length of checkrails: -	7.5 Meter.	
27.	Road surface in between Level Xings Gates: -	Hexagonal Block	
28.	Length of speed breakers: -	5.5 Meters.	
29.	Road signs: -	Available.	
30.	Speed breaker indication board: -	Provided.	
31.	TVU: -	249 on 01/2010	
32.	Census next due on: -	01/2013.	
33.	Demarcation for placement of Detonators: -	Provided.	
34.	Number of the Gateman working: -	CLM of Cabin.	
35.	Nearest Railway Medical Assistance: -	MSMD	
36.	Nearest Private Medical Assistance available (if any):	ARN	
37.	List of equipment available Yes/No: -	Yes.	

1.2. **This cabin-operated gate is provided with equipments registers as per SR 16.02.04 as follows:**

- i) One red and one green hand signal flag.
- ii) 2 hand signal lamps/ Tricolour Torch.
- iii) 2 red banner flags with side props.
- iv) 10 detonators in a case.
- v) 2 gate lamps.
- vi) 2 chains with pad locks for locking of the gates.
- vii) 2 Small size chains with padlocks to be used in case failure of boom lock.
- viii) 2 pad locks for the gate lamps.
- ix) 2 staves for fixing hand signal lamps.
- x) Gate working rules.
- xi) Level crossing inspection book.
- xii) Complaint book.

- (b) The Supervisory officials in charge of the cabin shall be held responsible for the similar action as contained in SR 16.02.01 (b).

1.2 **MODE OF OPERATION:**

This is a 'C' class cabin operated interlocked traffic L.C.Gate situated at Km 61/1-2 near West cabin of ARN. This gate is interlocked with all UP & DN reception & DN despatch signals. This gate is provided with coupled lifting barriers and the on duty CLM of West cabin can close the gate by operating the gate winch provided inside the cabin. After closing the gate the key is extracted from the winch and the same is inserted in Gate Lever No.8, which when reversed shall release the UP reception signal, DN despatch signal and slot lever of line No.2. When DN train is to be received on 1<sup>st</sup> loop or 2<sup>nd</sup> loop other than through train, this can be received by setting sand hump/ORL keeping the gate in open condition.

For opening the gate, gate lever No. 8 has to be normalized first and then the key thus released will be inserted in gate winch for opening the LC gate.

In the event of failure of UP Home & Outer signal or DN Starter signal or during Non Interlocking working, the CLM shall be informed and the Train shall be passed in terms of SR 3.69.02, 3.69.03 and 3.70.01 after ensuring correct closing and locking of L.C Gate. During this period the L.C Gate shall be opened only when necessary and safe to do so

1.5 **INTIMATION TO GATEMAN:**

- i) Before taking off reception/departure signals Station Master/ARN shall inform the Cabinman, the number, description, and direction of the train.
- ii) The Cabinman shall close the gate.
- iii) The reception/departure signals will then be taken 'OFF'
- iv) In order to ensure that road traffic is not held up for a long time, the Cabin man must ensure that the train is ready for departure in all respects.
- v) Cabin man shall ensure that the gate is closed against road traffic, before taking 'OFF' reception/departure signals.
- vi) When a train has to be piloted to and from the station yard or any shunting movement is to be done, the staff deputed to pilot the train to perform the shunting across the gate shall be personally responsible to ensure that the gate is closed against road traffic before allowing any movement across the gate.

**1.6 FAILURE OF TELEPHONIC COMMUNICATIONS:**

When Telephonic Communication fails or it does not get any response from the Gateman despite 2 or 3 attempts, the following procedure should be adopted:

- i) Station Master on duty ARN shall send written advise to the Cabin man through the porter with full details of number, description and direction of the train.
- ii) Cabin man on receipt of such advice shall close the gate and take 'OFF' Reception/Departure signals.
- iii) In addition Station Master/ ARN shall also issue a caution order advising the driver to whistle continuously and approach the gate cautiously.
- iv) The train driver shall be instructed to pass the gate cautiously, on before signaled by the Cabin man. If hand signal is not seen, driver should be prepared to stop short of the gate and ensure that gate is closed following GR.3.73 (2)(b).
- v) In case of an approaching train, the Station Master/ ARN shall advise the Station Master /MSMD, under exchange of private number that the telephone at the gate has failed.
- vi) The station Master/MSMD shall then issue a caution order to the driver before dispatching a train into the block section from his end.
- vii) He should also advise S&T staff responsible for maintenance of the telephone rectify the defect at the earliest.
- viii) Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection /fit memo for the same

**1.7 FAILURE OF LIFTING BARRIERS:**

- i) When the gate cannot be closed due to failure of lifting barriers, the Cabin man will immediately inform, the Station Master on duty, under exchange private number, and ensure the lifting barriers of gates do not foul the track.
- ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.
- iii) Cabin man shall secure the gate against road traffic by means of safety chains and padlocks.
- iv) After securing the gate against road traffic, Cabin man shall show green hand signal flag by day and green light by night to the driver of the approaching train.
- v) Station Master on duty/ ARN shall issue a caution order to the driver of a departing train.
- vi) He shall also advise the SM/MSMD, under exchange of private number, to similarly issue a caution order to the driver before despatching a train into the block section from his end.
- vii) Station Master/ ARN will advise maintenance staff responsible for maintenance of lifting barriers to repair the defect at the earliest.
- viii) Normal working will be resumed only after maintenance staff repair the barrier and issue reconnection/fit memo for the same.

**Note:**

- (a) In case of failure of lifting barriers Station Master will send station porter to secure the gate against road traffic by safety chains and padlocks.
- (b) Authority to pass signals at 'ON' position as per rules shall also be issued to the drivers of both departing and arriving trains.

**1.8 FAILURE OF THE GATE KEY WITH THE GATE IN CLOSED POSITION WHEN GATE KEY CANNOT BE EXTRACTED FOR OPENING THE GATE.**

- i) If the gate key cannot be extracted from the gate winch or the key transmitter, then Cabin man must immediately inform the SM/ARN on duty on telephone, under exchange of private number.
- ii) Thereafter, the gate must be treated as non – interlocked and procedure for reception/ despatch of trains as prescribed for non – interlocked gate should be adopted.
- iii) Station Master on duty / ARN shall issue a caution order to the driver of a departing train.
- iv) He shall also advise the station Master/MSMD at the despatching end, under exchange of private number, to similarly issue a caution order to the driver before despatching a train into the block section from his end.
- v) Station Master / ARN will advise S&T staff responsible for maintenance of winch/key transmitter to rectify the defect at the earliest.
- vi) Normal working will resumed only after S&T staff repairs the winch/key transmitter and issue reconnection/fit memo for the same

**1.9 FAILURE OF THE GATE KEY WITH THE GATE IN OPEN CONDITION:**

- i) If the gate key cannot be extracted from the winch, gate lever or key transmitter then gateman must immediately inform the SM on duty/ ARN on telephone, under exchange of private number.
- ii) Thereafter, the gate must be treated as non-interlocked and procedure for reception/despatch of trains as prescribed for non-interlocked gates should be adopted.
- iii) Cabin man shall secure the gate against road traffic by means of chains and padlocks and pass the trains on hand signals.
- iv) Station Master on duty/ ARN shall issue caution order to the driver of a departing train.
- v) He shall also advise the station Master /MSMD at the despatching end, under exchange of private number, to similarly issue a caution order to the driver before despatching a train into the block section from his end.
- vi) Station Master/ ARN will advise S&T staff responsible for maintenance of winch//key transmitter to rectify the defect at the earliest.
- vii) Normal working will resumed only after S&T staff repairs the winch/key transmitter and issue reconnection/fit memo for the same.

**1.10 OBSTRUCTION AT THE GATE:**

- i) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the Cabin man shall Immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the gate, for this purpose.
- ii) Immediately after this, the Cabin man shall advise the Station Master/ ARN on duty, regarding the defects/obstruction at the gate, under exchange of private number.
- iii) He shall put the reception/departure signals back to 'ON' position, if taken 'OFF' for a train.
- iv) If there is no response from the Station Master / ARN after two or three attempts, he shall first protect the gate and then inform on phone.
- v) Cabin man shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in G R 16.07.

R.Das.  
DSTE/SBP

Pradeep Nagar  
Sr.DEN(West)/SBP

D.Nayak.  
DOM(G)/SBP

- vi) Thereafter he shall protect the gate from the other direction also.
- vii) He shall note down the particulars of the road vehicle, name of the driver, owner and reply these details to the station Master who shall not start the trains unless he has been assured by the Cabin man that the road vehicle or the lifting barriers are not fouling the track.
- viii) The Station Master/ ARN shall also inform the station Master /MSMD at the despatching end, under exchange of private number, asking him not to despatch any train into the block section from his end, until the track has been clear of all obstruction.
- ix) After the track has been cleared of all obstructions the Cabin man shall inform the Station Master accordingly, under exchange of private number.
- x) Station Master/ ARN shall then issue a caution order to drivers of all trains to proceed cautiously, and pass the signal at 'ON' position on green hand signal of the Cabin man, if the gate is broken, but is clear of any obstruction.
- xi) Cabin man shall secure the gate against road traffic by means of safety chains and padlocks and they're after exhibit green hand signal, if the gate is not obstructed.
- xii) Station Master/ ARN shall advise maintenance staff responsible for maintaining the lifting barriers to repair the same at the earliest.
- xii) Normal working will be resumed only after maintenance staffs rectify the defective lifting barriers and issue reconnection/fit memo for the same.

1.11 **OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:**

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment, which is visible to the gateman, the Cabin man and SM/ ARN will adopt the procedure given under item No.1.10 above. If the obstruction fouls the level Crossing Gate, Cabin man must keep the gates closed against road traffic till the track is cleared of the obstruction.

Note- All duties of Gate Man devolve on the on duty cabinman.

**2.0 GATE WORKING INSTRUCTIONS OF “C” CLASS TRAFFIC CABIN OPERATED LEVEL CROSSING GATE 9NO.RV-39A) AT KM 62 /3-4 IN ARN YARD AT BMKJ END..**

**2.1 DESCRIPTION OF THE LEVEL CROSSING GATE:**

1.	Number of Level Crossing Gate: -	RV-39A
2.	Engineering or Traffic Gate: -	Traffic.
3.	Under control of Station Master/PWI:	SM/ARN
4.	Location KM	62 /3-4
5.	At. Station: -	ARN.
6.	In between stations: -	ARN-BMKJ
7.	BG/MG/NG: -	BG.
8.	Single line/Double line/Multiple line: -	Single Line.
9.	Normal Position: -	Open to road traffic.
10.	Interlocked/Non Interlocked: -	Interlocked.
11.	Means of interlocking: -	The interlocking is achieved by lever No. 8 of East Cabin.
12.	Provision of Gate signal at Kms.	(i) UP line Nil (ii) DN line Nil
13.	Signalling arrangement: -	NIL.
14.	Means of Communication:	Magneto Telephone Connection between East/Cabin and Station.
15.	Width of level crossing Gate: -	5.5 Meters.
16.	Type of road. (NH/SH/Others): -	Others
17.	Name of Road: -	ARN Village Road
18.	Metaled/Non Metaled	Non-Metalled
19.	Approach Road: -	Non-Metalled
20.	Width of the road: -	5.5 M.
21.	Angle of road crossing (In case of the skew Gates)	-----
22.	Road gradient (If any)	(i) East side ----- (ii) West side -----
23.	Road alignment (Straight/Curve): -	(i) East side Straight (ii) West side Straight
24.	Provision of height gauges: -	Not Provided.
25.	Type of Barriers: -	Winch operated lifting barriers.
26.	Length of checkrails: -	7.5 Meter.
27.	Road surface in between Level Xings Gates: -	Hexagonal Block
28.	Length of speed breakers: -	5.5 M.
29.	Road signs: -	Available.
30.	Speed breaker indication board: -	Provided.
31.	TVU: -	1066 on 01/2010
32.	Census next due on: -	01/2013.
33.	Demarcation for placement of Detonators: -	Displayed.
34.	Name of the Gateman working: -	Operated by Cabinman.
35.	Nearest Railway Medical Assistance: -	MSMD
36.	Nearest Private Medical Assistance available (if any):	MSMD
37.	List of equipment available Yes//No: -	Yes.

- 2.2. (a) **This cabin-operated gate is provided with equipments and registers as per SR 16.02.04 as follows:**
- i) One red and one green hand signal flag.
  - ii) 2 hand signal lamps/Tricolour Torch.
  - iii) 2 red banner flags with side props.
  - iv) 10 detonators in a case.
  - v) 2 gate lamps.
  - vi) 2 chains with pad locks for locking of the gates.
  - vii) 2 Small size chains with padlocks to be used in case failure of boom lock.
  - viii) 2 pad locks for the gate lamps.
  - ix) 2 staves for fixing hand signal lamps.
  - x) Gate working rules.
  - xi) Level crossing inspection book.
  - xii) Complaint book.
- (b) The Supervisory officials in charge of the cabin shall be held responsible for the similar action as contained in SR 16.02.01 (b).

2.3 **MODE OF OPERATION:**

This is a 'C' class cabin operated interlocked traffic L.C.Gate situated at Km 62/3-4 near East cabin of ARN. This gate is interlocked with all UP & DN reception & UP despatch signals. This gate is provided with coupled lifting barriers and the on duty CLM of East cabin can close the gate by operating the gate winch provided inside the cabin. After closing the gate the key is extracted from the winch and the same is inserted in Gate Lever No.8, which when reversed shall release the DN reception signal, UP despatch signal and slot lever of line No.2. When UP train is to be received on 1<sup>st</sup> loop or 2<sup>nd</sup> loop other than through train, this can be received by setting sand hump/ORL keeping the gate in open condition.

For opening the gate, gate lever No. 8 has to be normalized first and then the key thus released will be inserted in gate winch for opening the LC gate.

In the event of failure of DN Home & Outer signal or UP Starter signal or during Non Interlocking working, the CLM shall be informed and the Train shall be passed in terms of SR 3.69.02, 3.69.03 and 3.70.01 after ensuring correct closing and locking of L.C Gate. During this period the L.C Gate shall be opened only when necessary and safe to do so.

2.4 **INTIMATION TO GATEMAN:**

- i) Before taking off reception/departure signals Station Master/ARN shall inform the Cabinman, the number, description, and direction of the train.
- ii) The Cabinman shall close the gate.
- iii) The reception/departure signals will then be taken 'OFF'
- iv) In order to ensure that road traffic is not held up for a long time, the Cabin man must ensure that the train is ready for departure in all respects.
- v) Cabin man shall ensure that the gate is closed against road traffic, before taking 'OFF' reception/departure signals.
- vi) When a train has to be piloted to and from the station yard or any shunting movement is to be done, the staff deputed to pilot the train to perform the shunting across the gate shall be personally responsible to ensure that the gate is closed against road traffic before allowing any movement across the gate.



**2.5 FAILURE OF TELEPHONIC COMMUNICATIONS:**

When Telephonic Communication fails or it does not get any response from the Gateman despite 2 or 3 attempts, the following procedure should be adopted:

- i) Station Master on duty / ARN shall send written advice to the Cabin man through the porter with full details of number, description and direction of the train.
- ii) Cabin man on receipt of such advice shall close the gate and take 'OFF' Reception/Departure signals.
- iii) In addition Station Master/ ARN shall also issue a caution order advising the driver to whistle continuously and approach the gate cautiously.
- iv) The train driver shall be instructed to pass the gate cautiously, on before signaled by the Cabin man. If hand signal is not seen, driver should be prepared to stop short of the gate and ensure that gate is closed following GR.3.73 (2)(b).
- v) In case of an approaching train, the Station Master/ ARN shall advise the Station Master /BMKJ, under exchange of private number that the telephone at the gate has failed.
- vi) The station Master/BMKJ shall then issue a caution order to the driver before dispatching a train into the block section from his end.
- vii) He should also advise S&T staff responsible for maintenance of the telephone to rectify the defect at the earliest.
- viii) Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection /fit memo for the same

**2.6 FAILURE OF LIFTING BARRIERS:**

- i) When the gate cannot be closed due to failure of lifting barriers, the Cabin man will immediately inform, the Station Master on duty, under exchange private number, and ensure the lifting barriers of gates do not foul the track.
- ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.
- iii) Cabin man shall secure the gate against road traffic by means of safety chains and padlocks.
- iv) After securing the gate against road traffic, Cabin man shall show green hand signal flag by day and green light by night to the driver of the approaching train.
- v) Station Master on duty/ ARN shall issue a caution order to the driver of a departing train.
- vi) He shall also advise the station Master /BMKJ, under exchange of private number, to similarly issue a caution order to the driver before despatching a train into the block section from his end.
- vii) Station Master/ ARN will advise maintenance staff responsible for maintenance of lifting barriers to repair the defect at the earliest.
- viii) Normal working will be resumed only after maintenance staff repair the barrier and issue reconnection/fit memo for the same.

**Note:**

- (a) In case of failure of lifting barriers, Station Master will send station porter to secure the gate against road traffic by safety chains and padlocks.
- (b) Authority to pass signals at 'ON' position as per rules shall also be issued to the drivers of both departing and arriving trains.

**2.7 FAILURE OF THE GATE KEY WITH THE GATE IN CLOSED POSITION WHEN GATE KEY CANNOT BE EXTRACTED FOR OPENING THE GATE.**

- i) If the gate key cannot be extracted from the gate winch or the key transmitter, then Cabin man must immediately inform the Stationmaster / ARN on duty on telephone, under exchange of private number.
- ii) Thereafter, the gate must be treated as non – interlocked and procedure for reception/ despatch of trains as prescribed for non – interlocked gates, should be adopted.
- iii) Station Master on duty / ARN shall issue a caution order to the driver of a departing train.
- iv) He shall also advise the station Master/BMKJ at the despatching end, under exchange of private number, to similarly issue a caution order to the driver before despatching a train into the block section from his end.
- v) Station Master / ARN will advise S&T staff responsible for maintenance of winch/key transmitter to rectify the defect at the earliest.
- vi) Normal working will resumed only after S&T staff repairs the winch/key transmitter and issue reconnection/fit memo for the same

**2.8 FAILURE OF THE GATE KEY WITH THE GATE IN OPEN CONDITION:**

- i) If the gate key cannot be extracted from the winch, gate lever or key transmitter then gateman must immediately inform the Station Master on duty/ ARN on telephone, under exchange of private number.
- ii) Thereafter, the gate must be treated as non-interlocked and procedure for reception/despatch of trains as prescribed for non-interlocked gates should be adopted.
- iii) Cabin man shall secure the gate against road traffic by means of chains and padlocks and pass the trains on hand signals.
- iv) Station Master on duty/ ARN shall issue caution order to the driver of a departing train.
- v) He shall also advise the station Master /BMKJ at the despatching end, under exchange of private number, to similarly issue a caution order to the driver before despatching a train into the block section from his end.
- vi) Station Master/ ARN will advise S&T staff responsible for maintenance of winch//key transmitter to rectify the defect at the earliest.
- vii) Normal working will resumed only after S&T staff repairs the winch/key transmitter and issue reconnection/fit memo for the same.

**2.9 OBSTRUCTION AT THE GATE:**

- i) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the Cabin man shall Immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the gate, for this purpose.
- ii) Immediately after this, the Cabin man shall advise the Station Master/ ARN on duty, regarding the defects/obstruction at the gate, under exchange of private number.
- iii) He shall put the reception/departure signals back to 'ON' position, if taken 'OFF' for a train.
- iv) If there is no response from the Station Master / ARN after two or three attempts, he shall first protect the gate and then inform on phone.

- v) Cabin man shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in G R 16.07.
- vi) Thereafter he shall protect the gate from the other direction also.
- vii) He shall note down the particulars of the road vehicle, name of the driver, owner and reply these details to the station Master who shall not start the trains unless he has been assured by the Cabin man that the road vehicle or the lifting barriers are not fouling the track.
- viii) The Station Master/ ARN shall also inform the station Master /BMKJ at the despatching end, under exchange of private number, asking him not to despatch any train into the block section from his end, until the track has been clear of all obstruction.
- ix) After the track has been cleared of all obstructions the Cabin man shall inform the Station Master accordingly, under exchange of private number.
- x) Station Master/ ARN shall then issue a caution order to drivers of all trains to proceed cautiously, and pass the signal at 'ON' position on green hand signal of the Cabin man, if the gate is broken, but is clear of any obstruction.
- xi) Cabin man shall secure the gate against road traffic by means of safety chains and padlocks and they're after exhibit green hand signal, if the gate is not obstructed.
- xii) Station Master/ ARN shall advise maintenance staff responsible for maintaining the lifting barriers to repair the same at the earliest.
- xii) Normal working will be resumed only after maintenance staffs rectify the defective lifting barriers and issue reconnection/fit memo for the same.

**2.10 OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:**

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment, which is visible to the gateman, the Cabin man and SM/ ARN will adopt the procedure given under item No.2.9 above. If the obstruction fouls the level Crossing Gate, Cabin man must keep the gates closed against road traffic till the track is cleared of the obstruction.

Note- All duties of Gate Man devolve on duty cabinman.

### **3.0 WORKING INSTRUCTIONS OF 'SpI' CLASS INTERLOCKED LEVEL CROSSING GATE AT KM 66.170 (66/3-4) No.RV-71 BETWEEN ARAND AND BHIMKHOJ STATIONS.**

#### **3.1 GENERAL INSTRUCTIONS: -**

##### **3.1.1 DESCRIPTION OF THE LEVEL CROSSING GATE**

1.	Number of Level Crossing Gate: -	RV-71
2.	Engineering or Traffic Gate: -	Engineering.
3.	Under control of SM/PWI:	PWI
4.	Location KM	66.170 (66/3-4)
5.	At. Station: -	-----
6.	In between stations: -	ARN-BMKJ
7.	BG/MG/NG: -	BG.
8.	Single line/Double line/Multiple line: -	Single Line.
9.	Normal Position: -	Open to road traffic.
10.	Interlocked/Non Interlocked: -	Interlocked.
11.	Means of interlocking: -	Gate Signal.
12.	Provision of Gate signal at KMs	(i) Up -KM 67.350 (ii) Dn -KM 65.99
13.	Signalling arrangement: -	MACLS.
14.	Means of Communication:	Telephone Communication from Gate Goomty with SM/ARN
15.	Width of level crossing Gate: -	11 Meters.
16.	Type of road. (NH/SH/Others): -	NH
17.	Name of Road: -	Bagbahara-Mahasamund Road
18.	Metaled/Non:	Metaled
19.	Approach Road: -	Metaled.
20.	Width of the road: -	10.5m
21.	Angle of road crossing (In case of the skew Gates)	60 Degree.
22.	Road gradient (If any)	(i) North/East side -- Level (ii) South/West side- Level
23.	Road alignment (Straight/Curve): -	(i) North/ East side - Curve (ii) South/West side-Curve
24.	Provision of height gauges: -	Not Provided.
25.	Type of Barriers: -	Winch operated Lifting Barriers
26.	Length of check rails: -	13 Meters.
27.	Road surface in between Level: -	Concrete Blocks.
28.	Length of speed breakers: -	11M
29.	Road signs: -	Available
30.	Speed breaker indication board: -	Provided
31.	TVU: -	78035 on 01/2010
32.	Census next due on: -	01/2013.
33.	Demarcation for placement of Detonators: -	Provided.
34.	No. of Gateman working: -	03
35.	Nearest Railway Medical Assistance: -	MSMD
36.	Nearest Private Medical Assistance available (if any):	MSMD.
37.	List of equipment available Yes//No: -	Yes.

### 3.2 **EQUIPMENT:** **ITEMS**

	<b>QUANTITY/NUMBERS</b>
1. Hand signal Lamp Tri Colour Torch	3 (5 on Quadruple/Line or twin single line)
2. Hand signal Flag Green	1 mounted on sticks
3. Hand Signal Flag Red.	3 (6 on Quadruple/line or Twin single line and 7 in case Hexable section mounted on sticks)
4. Banner Flag Red	3 (5 on Quadruple/Line or twin single line)
5. Posts for exhibiting red banner flag	2 (4 on Q/Twin single line and 5 on Hexable section.
6. Spares chains with padlocks	2 with stop mark
7. Detonators	10 in tin case
8. Gate Lamps	2
9.. Tommy Bar	1
10. Motor Pan	1
11. Spade/Fowrah	1
12. Rammer	1 (in case of asphalted road this may not be provided)
13. Pick Axe	1 (in case of asphalted road this may not be provided)
14. Tin case for flags	1
15. Can for oil	1
16. Water pot/Bucket	1
17. Canister for Muster Roll	1
18. Set of spare spectacles of Gateman Wearing glasses.	1
19. Board demarcating protection of level crossing Gate diagram in case of obstruction on Gate .	1
20. Basket	1
21. Whistle	1
22. Wall clock	1
23. Small size chain with padlocks to be used in case failure of gate boom lock.	2

### 3.3 **THE GATEMAN SHALL BE PROVIDED WITH FOLLOWING REGISTERS: -**

- i) Gate working instructions in Hindi / English.
- ii) Gate working instructions in local vernacular language.
- iii) General Rules Book in Local vernacular language.
- iv) List for tools and books.
- v) Duty Roster.
- vi) Certificate for working as gateman.
- vii) Bio–Data particulars of Gateman, including date of passing vision test, initial/refresher course, safety camp etc.
- viii) Accident Register.
- ix) Records of last census of road traffic at level crossing gate.
- x) Public complaint Book.
- xi) Inspection Book.
- xii) S&T Register.

### 3.4 **DUTIES OF GATEMAN:**

#### 1. **ALERTNESS:**

The Gateman on duty shall be alert. He should be prepared to take immediate action, when danger is apprehended. Keys of the Gate shall be in his personal custody.

#### 2. **POSITION OF GATE KEEPER DURING PASSAGE OF TRAINS:**

During passage of trains, Gateman will stand in the manner indicated below:

- i) Gateman will stand attentively in front of the Gate – lodge facing the approaching train.
- ii) In daytime, Gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.
- iii) In nighttime, Gateman shall hold lighted hand signal lamp with white light facing the track.
- iv) He shall keep the whistle slung around his neck from a cord and blow the whistle to draw the attention of Driver & Guard of the passing train.

#### 3. **ROUTINE DUTIES OF GATEMAN:**

- i) Gateman shall ensure that red banner flag by day and red lamp by night is placed across the track whenever the Gate is kept in open condition during emergencies or obstruction on track.
- ii) Gateman shall ensure that gate lamps and lamps of all gate signals are lighted and kept burning continuously from sunset to sunrise.
- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless reliever arrives and takes charge of it. However, if it is necessary to leave the gate in & emergency, he must close and lock the gates against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under special instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp like out for any unusual like hot axle, hanging chains, hanging battery, any vehicle/wagons /trains/battery/box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also be prepared to repeat any signal which guard may give to driver on walkie – talkie or in any other way.
- vii) If lifting barriers get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- viii) Gateman shall report to the nearest station Master, Gangmate or Permanent Way Inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) In the event of gate signal becoming defective the gateman shall maintain the signal in the 'ON' position even by disconnecting the signal or the wire if necessary.
- x) At the gate whose signal have become defective, the gateman shall close and lock the lifting barriers on sighting a train and hand signal or pilot the past the defective signal. In such case he should inform the driver to report the defect at the next station.
- xi) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- xii) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- xiii) Gateman shall work the gate as per gate working instructions and remain well conversant with these instructions.
- xiv) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- xv) Gateman shall see that the channel for the flange of the wheel is kept clear.

- xvi) Gateman must keep the road surface well-watered and rammed in case of unmetalled roads.
- xvii) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- xviii) Gateman on electrified section shall watch that road vehicles/animals passing from gate are within the height-loading gauge provided on either side of the level crossing gate.
- xix) Gateman shall prevent trespassing by persons or cattle to the maximum extent.

**4. ACTION IN CASE OF UNUSUAL OCCURRENCE OF TRAIN:**

In case Gateman observes anything unusual with a passing train, he shall take following action:

- i) He shall take prompt action to warn the driver/guard of the passing train by showing red flag by day and red light by night.
- ii) He shall simultaneously try to draw the attention of the driver/guard by whistling continuously, shouting, gesticulating, and throwing ballast on the brake van or by any other means.
- iii) If driver/guard fails to take notice, Gateman shall immediately inform the SM on duty to take appropriate action, under exchange of private number.
- iv) In case of train parting, Gateman shall not show stop hand signal but shall show prescribed signal for train parting.
- v) He shall endeavor to attract the attention of the Driver/Guard by whistling continuously, shouting, gesticulating, and by raising both hands vertically above, quickly parting them and bringing them together in repeated Up and Down motion as high and as low as possible.
- vi) In case the train does not stop, Gateman shall immediately inform the SM to take appropriate action, under exchange of private number.

**5. ACTION IN EMERGENCY AT THE LEVEL CROSSING:**

- i) In case of an obstruction at the level crossing gate, gateman shall maintain the gate signals, if at, in the 'ON' position.
- ii) Therefore, if he is unable to remove the obstruction, gateman shall immediately advise the Station Master on duty, regarding the defects/obstructions at the gate, under exchange of private number.
- iii) If there is no response from the Station Master after or three attempts he shall first protect the gate and then inform on phone.

The gateman shall protect the line as under: -

**a) ON SINGLE LINE SECTION:**

- i) Gateman shall plant a red banner flag by day and a red light by night 5 meters away on posts duly provided for the purpose. He shall first protect the direction from which a train is expected to arrive first.
- ii) Then he will similarly plant the other red banner flag by day and red light by night towards the other direction 5 meters away from the site of obstruction.
- iii) Gateman shall then proceed to protect the gate along with detonators and red flag by day and red hand signal lamp by night.
- iv) Gateman shall proceed exhibiting red flag by day and red hand signal lamp by night towards the direction, which a train is expected to arrive first, to a point 600 meters and place one detonator on the line. Thereafter he shall proceed to a distance 1200 meters from the level crossing gate and place 3 detonators on the track in 10 meters apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back.

- v) Thereafter, he shall proceed towards the other direction, showing red hand signal, similarly place detonators as described in (iv) above and return to the site of obstruction, picking up the intermediate detonator on his way back.
  - vi) Having returned to the gate, he must then take steps to remove the obstruction and warn the driver of the approaching train.
  - vii) In case the gateman observes or hears a train approaching when he is still on his way to protect and before he reaches the stipulated distance to place detonators, he shall place detonators on the line at a distance as far away as he can go.
  - viii) Thereafter, he shall stop the approaching train by waving his red flag by day, red hand signal lamp by night repeatedly.
- (a) **Other actions to be taken by Gateman:**
- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.
  - ii) If the Gate is broken by a road vehicle, which is fouling the track or if lifting barriers or any other part of the Gate foul the track or if there is any other obstruction at the Gate, the Gateman shall take immediate action.
  - iii) He shall note down the particulars of the road vehicle, vehicle number, name of the driver, owner and relay these details to the SM/ARN regarding the particulars and obstructions at the level crossing Gate, through messenger or other means available.

### 3.5 **SPECIAL INSTRUCTIONS:**

#### 1 **MODE OF OPERATION :-**

This is a Engineering interlocked L.C. Gate situated in between ARN-BMKJ at Km 66.170 (66/3-4) This gate is interlocked with Gate stop signals. Telephone communication is provided between the L C. gate lodge with SM on duty of ARN Station. The level crossing gate is of lifting barrier type operated by means of winch provided at the gate lodge. The normal position of the gate is open to road traffic. A Four-lever ground frame is provided at the gate lodge. The key of the LC remains in the winch when the gate is in open condition. When it is necessary to close the gate, for passing of trains, the SM/ARN on duty shall inform the gate man to close and lock the gate. The gate man on duty shall then close the barriers of the LC gate by operating the winch. Then key 'P' is to be extracted from the winch, which will be inserted in the lever of GF-2. When GF-2 is reversed it locks the booms of the gate and releases GF-3 and GF-4. Then after the gateman can reverse the GF-3 or GF-4 for taking "OFF" concerned UP or DN Gate stop signal. GF-1 is spare lever.

After passage of the Train the gateman shall normalise the concerned GF-3 or GF-4 lever to put back the gate signal. The gate man after normalizing the GF-2 lever shall extract the key 'P' from GF-2. Thereafter he will open the gate by inserting the Key 'P' in the winch for normal passage of road traffic. The LC gate shall be so worked as to cause least possible inconvenience to the vehicular traffic consistence with safety as per subsidiary rule 16.03.01 (a).

Once the LC gate is closed should not be opened by the gateman till such time the train for which the gate was closed has passed the LC gate completely. In case of emergency the LC gate may be opened for road traffic with the specific permission of the SM/ARN under exchange of PN if there is no train in the section.



**2. INTIMATION TO GATE MAN:**

- (i) Immediately after departure of the train, Station Master/ARN shall advise the gateman through telephone connected at his end, the number, description, direction and expected time of passage of the train at the gate.
- (ii) This advice shall be given by the Station Master/ARN to the gateman, as soon as he receives train entering section advice from the BMKJ station.
- (iii) If the actual running time of the train from either end of the section is less than 10 minutes, Station Master/ARN will convey this advice to the gateman before obtaining/granting line clear.
- (iv) It should be the duty of the gateman to ensure that the gate is closed in time, so that there is no detention to the train of excessive detention to road traffic.

**3. FAILURE OF TELEPHONIC COMMUNICATION:**

When Telephonic Communication fails or it does not get any response from the Gateman despite 2 or 3 attempts, the following procedure should be adopted:

- (i) If the telephone fails at the gate connected with the station at the dispatching end, Station Master/ARN shall issue a caution order to the driver of the departing train.
- (ii) Station Master shall advise the driver to whistle continuously and proceed cautiously while approaching the gate.
- (iii) In case the gate signal is 'ON' he should stop at the gate signal and follow the procedure laid down under GR 3.73.
- (iv) In case of an approaching train, the Station Master/ARN shall advise the SM/BMKJ at the dispatching end, under exchange of private number that the telephone at the gate has failed.
- (v) The Station Master/BMKJ at the dispatching end shall then issue a caution order to the driver before dispatching a train into the block section from his end.
- (vi) Station Master/ARN will also advise the gateman through Gangman /Patrolman /Driver of the first train that the telephone has become defective.
- (vii) Station Master/ARN should also advise S&T staff responsible for maintenance of the telephone to rectify the same at the earliest.
- (viii) Normal working will be resumed only after S&T staff rectifies the telephone and issue reconnection/fit memo for the same.

**4. FAILURE OF LIFTING BARRIERS OF GATES:**

- (i) When the gate cannot be closed due to failure of lifting barriers, the gateman shall immediately inform the Station Master/ARN on duty under exchange of private number, and ensure that lifting barriers of gate do not foul the track.
- (ii) He shall immediately fix red banner flag by day and red light by night on the post that end first from which the train is approaching and then at the other end.
- (iii) Gateman shall secure the gate against road traffic by means of safety chains and padlocks.
- (iv) After securing the gate against road traffic, gateman shall show green hand signal flag by day and green light to the driver of the approaching train.
- (v) Station Master/ARN on duty shall issue caution order to the driver of a departing train.
- (vi) He shall also advise the SM/BMKJ at the dispatching end, under exchange of private number; to similarly issue a caution order to the driver before dispatching a train into the block section.
- (vii) Station Master/ARN shall advise maintenance staff responsible for maintaining the lifting barrier to rectify the same at the earliest.
- (viii) Normal working will be resumed only after maintenance staff repairs the lifting barrier of gate and issue reconnection/fit memo for the same.

R.Das.  
DSTE/SBP

Pradeep Nagar  
Sr.DEN(West)/SBP

D.Nayak.  
DOM(G)/SBP

**5. FAILURE OF THE GATE KEY WITH THE GATE IN CLOSED POSITION WHEN GATE KEY CANNOT BE EXTRACTED FOR OPENING THE GATE.**

- (i) If the gate key cannot be extracted from the winch, gate signal lever or key transmitter then gateman must immediately inform the Station Master/ARN on duty on telephone, under exchange of private number.
- (ii) Thereafter, the gate must be treated as non-interlocked and procedure for reception/dispatch of trains as prescribed for non-interlocked gates should be adopted.
- (iii) Station Master/ARN on duty shall issue caution order to the driver of a departing train.
- (iv) He shall also advise the Station Master/BMKJ at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before dispatching a train into the block section from his end.
- (v) Station Master/ARN shall advise S&T staff responsible for maintaining the key transmitter to repair the same at the earliest.
- (vi) Normal working will be resumed only after S&T staff repairs the key transmitter and issue reconnection/fit memo for the same.

**6. FAILURE OF THE GATE KEY, WITH THE GATE IN OPEN CONDITION:**

- (i) If the gate key cannot be extracted from the winch, gate signal lever or key transmitter then gateman must immediately inform the Station Master/ARN on duty on telephone, under exchange of private number.
- (ii) Thereafter, the gate must be treated as non-interlocked and procedure for reception/dispatch of trains as prescribed for non-interlocked gates, should be adopted.
- (iii) The gateman shall secure the gate against road traffic by means of chains and padlocks and pass trains on hand signals.
- (iv) Station Master/ARN on duty shall issue a caution order to the driver of a departing train.
- (v) He shall also advise the Station Master/BMKJ at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before dispatching a train into the block section from his end.
- (vi) Station Master/ARN shall advise S&T staff responsible for maintaining the key transmitter to repair the same at the earliest.
- (vii) Normal working will be resumed only after S&T staff repairs the key transmitter and issue reconnection/fit memo for the same.

**7. DEFECTIVE GATE SIGNAL:**

- (i) The gateman shall treat the gate signal as defective and must not take off them under following circumstances:
  - (a) If gate signals can be taken 'OFF' without closing the gate, or
  - (b) The key can be extracted from the operating winch when the gate is in open condition.
- (ii) If the Gate or the Gate Signal or Distant Signal becomes defective in 'OFF' position, the gateman will make all efforts to put it at 'ON' position.
- (iii) The gateman will immediately advise the Station Master/ARN on duty, under exchange of private number, regarding defective gate signals.
- (iv) Thereafter, the gate must be treated as non – interlocked and procedure for reception/dispatch as prescribed for non-interlocked gates should be adopted.
- (v) He shall show green hand signal flag by day and green light by night to the passing train after closing the gate.
- (vi) Station Master/ARN on duty will issue a caution order to the driver of departing train.

- (viii) He shall also advise the Station Master/BMKJ at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before despatching train into the block section from his end.
- (ix) Station Master/ARN shall advise S&T staff responsible for maintaining the gate signal to repair the same at the earliest.
- (x) Normal working will be resumed only after S&T staff rectifies the defective gate signal and issue reconnection/fit memo for the same.

**8. OBSTRUCTION AT THE GATE:-**

- (i) If the gate is broken by a road vehicle, which is fouling the track, or if lifting barrier gates or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately put back gate signals to 'ON' position.
- (ii) He shall fix red banner flag by day and red lamp by night on posts provided at both ends of the gate.
- (iii) Immediately after this, the gateman shall advise the station Master/ARN on duty regarding the defects /obstructions at the gate, under exchange of private number.
- (iv) If there is no response from the Station Master /ARN after two or three attempts, he shall first protect the gate and then inform on phone.
- (v) Gateman shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in General Instruction for duties of gateman under item No.3.4 (5).
- (vi) Thereafter he shall protect the gate from the other direction also.
- (vii) He shall note down the particulars of the road vehicle, name of the driver, owner and reply these details to the SM/ARN who shall not start the trains unless he has been assured by the gateman that the road vehicle or the lifting barriers of gate are not fouling the track.
- (viii) The Station Master/ ARN shall also inform the Station Master/BMKJ at the dispatching end, under exchange of private number, asking him not to despatch any train into the block section from his end, until the track has been cleared of all obstruction.
- (ix) After the track has been cleared of all obstructions the gateman shall inform the Station Master/ ARN accordingly, under exchange of private number.
- (x) Station Master/ ARN shall then issue a caution order to drivers of all trains to proceed cautiously, and pass the gate signal at 'ON' position on green hand signal of the gateman, if the gate is broken, but is clear of any obstruction.
- (xi) Gateman shall secure the gate against road traffic by means of safety chains and padlocks and thereafter exhibit green hand signal, if the gate is not obstructed.
- (xii) Station Master/ ARN shall advise maintenance staff responsible for maintaining the lifting barrier of gate to repair the same at the earliest.
- (xiii) Normally working will be resumed only after maintenance staff rectifies the defective lifting barrier and issue reconnection/fit memo for the same.

**9. OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:**

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment, which is visible to the gateman, the gateman and Station Master/ ARN will adopt the procedure given under item No.8 above. If the obstruction fouls the level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

R.Das.  
DSTE/SBP

Pradeep Nagar  
Sr.DEN(West)/SBP

D.Nayak.  
DOM(G)/SBP

**4.0 GATE WORKING INSTRUCTIONS OF “C”CLASS, ENGG. NON-INTERLOCKED LEVEL CROSSING GATE (NO.RV-45) AT KM 69/15-70/1 (No.RV-45) BETWEEN BMKJ-ARN STATIONS.**

**4.1 GENERAL INSTRUCTIONS: -**

**4.1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:**

1.	Number of Level Crossing Gate: -	RV-45.
2.	Engineering or Traffic Gate: -	Engineering.
3.	Under control of Station Master/PWI:-	PWI.
4.	Location KM	69/15-70/1
5.	At. Station	-----
6.	In between stations:	BMKJ-ARN.
7.	BG/MG/NG	BG.
8.	Single line/Double line/Multiple line	Single Line
9.	Normal Position	Closed to the road traffic
10.	Interlocked/Non Interlocked	Non-interlocked
11.	Means of interlocking	NIL
12.	Provision of Gate signal at Kms	i) Up line- NIL ii) Dn line- NIL
13.	Signalling arrangement	NIL.
14.	Means of Communication – Telephone/Bell etc	Magneto Telephone Connection from Gate Goomty with SM/ BMKJ.
15.	Width of level crossing Gate	7.5 Meters
16.	Type of road. (NH/SH/Others)	Others
17.	Name of Road:	Onkarbandh road
18.	Metaled/Non Metaled	Metaled
19.	Approach Road:	Metaled
20.	Width of the road:	5.5 m
21.	Angle of road crossing (In case of the skew Gates)	Nil.
22.	Road gradient (If any)	i) North/East side:- Straight ii) South/West side:- Straight
23.	Road alignment (Straight/Curve): -	i) North/East side. Straight ii) South/West side. Straight
24.	Provision of height gauges	Not Provided
25.	Type of Barriers	Winch Operated Lifting barriers
26.	Length of check rails	9.50 Meter
27.	Road surface in between Level X-ings Gates	CCB.
28.	Length of speed breakers: -	7.5 Meters
29.	Road signs:	Provided
30.	Speed breaker indication board	Provided
31.	TVU:	6158 on 01/2010
32.	Census next due on	01/2013
33.	Demarcation for placement of Detonators	Displayed.
34.	No. of Gateman working	02.
35.	Nearest Railway Medical Assistance	Mahasamund
36.	Nearest Private Medical Assistance available (if any)	Bhimkhoj
37.	List of equipment available Yes//No	Yes.

4.2. **EQUIPMENT:**

<b>ITEMS</b>	<b>QUANTITY/NUMBERS</b>
1. Hand signal Lamp (Tri Colour Torch)	3(5 on Quadruple/Line or twin single line)
2. Hand signal Flag Green	1 mounted on sticks
3. Hand Signal Flag Red.	3 (6 on Quadruple/line or Twin single line and 7 in case Hexable section mounted on sticks)
4. Banner Flag Red	3 (5 on Quadruple/Line or twin single line)
5. Posts for exhibiting red banner flag	2 (4 on Q/Twin single line and 5 on Hexable section)
6. Spare chains with padlocks	2 with stop mark
7. Detonators	10 in tin case
8. Gate Lamps	2
9. Tommy Bar	1
10. Motor Pan	1
11. Spade/Fowrah	1
12. Rammer	1 (in case of asphalted road this may not be provided)
13. Pick Axe	1 (in case of asphalted road this may not be provided)
14. Tin case for flags	1
15. Can for oil	1
16. Water pot/Bucket	1
17. Canister for Muster Roll	1
18. Set of spare spectacles of Gateman wearing glasses.	1
19. Board demarcating protection of level crossing Gate diagram in case of obstruction on Gate .	1
20. Basket	1
21. Whistle	1
22. Wall clock	1
23. Small size chain with padlocks to be used in case failure of Gate boom lock.	2

4.3 **The gateman shall be provided with following registers: -**

- i) Gate working instructions in Hindi / English.
- ii) Gate working instructions in local vernacular language.
- iii) General Rules Book in Local vernacular language.
- iv) List for tools and books.
- v) Duty Roster.
- vi) Certificate for working as gateman.
- vii) Bio–Data particulars of Gateman, including date of passing vision test, initial/refresher course, safety camp etc.
- viii) Accident Register.
- ix) Records of last census of road traffic at level crossing gate.
- x) Public complaint Book.
- xi) Inspection Book.

4.4 **DUTIES OF GATEMAN:**

1. **ALERTNESS:**

The gateman on duty shall be alert. He should be prepared to take immediate action, when danger is apprehended. Keys of the gate shall be in his personal custody.

2. **POSITION OF GATE KEEPER DURING PASSAGE OF TRAINS:**

During passage of trains, gateman will stand in the manner indicated below:

- i) Gateman will stand attentively in front of the gate – lodge facing the approaching train.
- ii) In daytime, gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.
- iii) In nighttime, gateman shall hold lighted hand signal lamp with white light facing the track.
- iv) He shall keep the whistle slung around his neck from a cord and blow the whistle to draw the attention of Driver & Guard of the passing train.

3. **ROUTINE DUTIES OF GATEMAN:**

- i) Gateman shall ensure that red banner flag by day and red lamp by night is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- ii) Gateman shall ensure that all gate lamps and hand signal lamps are lighted and kept burning continuously from sunset to sunrise.
- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless his reliever arrives and takes over charge from him. However, if it is necessary to leave the gate in an emergency, he must close and lock the gates against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under special instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, any vehicle/wagons /trains/battery/box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also be prepared to repeat any signal which guard may give to driver on walkie – talkie or in any other way.
- vii) If lifting barriers get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- viii) Gateman shall report to the nearest Station Master, Gangmate or Permanent Way Inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- x) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- xi) Gateman shall work the gate as per gate working instructions and remain well conversant with these instructions.
- xii) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- xiii) Gateman shall see that the channel for the flange of the wheel is kept clear.
- xiv) Gateman must keep the road surface well-watered and rammed in case of unmetalled roads.
- xv) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- xvi) Gateman shall prevent tress passing by persons or cattle to the maximum extent.

4. **ACTION IN CASE OF UNUSUAL OCCURENCE OF TRAIN.**

In case gateman observes anything unusual with a passing train, he shall take following action:

- i) He shall take prompt action to warn the driver/guard of the passing train by showing red flag by day and red light by night.
- ii) He shall simultaneously try to draw the attention of the driver/guard by whistling continuously, shouting, gesticulating, and throwing ballast on the brake van or by any other means.
- iii) If driver/guard fails to take notice, gateman shall immediately inform the station Master, to take appropriate action, under exchange of private number.
- iv) In case of train parting, gateman shall not show stop hand signal but shall show prescribed signal for train parting.
- v) He shall endeavor to attract the attention of the Driver/Guard by whistling continuously, shouting, gesticulating, and by raising both hands vertically above, quickly parting them and bringing them together in repeated Up and Down motion as high and as low as possible.

vi) In case the train does not stop, gateman shall immediately inform the Station Master to take appropriate action, under exchange of private number.

**5. ACTION IN EMERGENCY AT THE LEVEL CROSSING:**

- i) In case of an obstruction at the level crossing gate, he shall place banner flag/red light lamps on the stave on track at 5 m. away from the edge of the road at Level Crossing.
- ii) Thereafter, if he is unable to remove the obstruction, gateman shall immediately advise the SM/BMKJ on duty, regarding the defects/obstructions at the gate, under exchange of PN.
- iii) If there is no response from the Station Master/BMKJ after three attempts, he shall first protect the gate and then inform on phone.

**A) THE GATEMAN SHALL PROTECT THE LINE AS UNDER: -**

- i) Gateman shall plant a red banner flag by day & a red light by night 5 m away on posts duly provided for the purpose. He shall first protect the direction from which a train is expected to arrive first.
- ii) Then he will similarly plant the other red banner flag by day and red light by night towards the other direction 5 meters away from the site of obstruction.
- iii) Gateman shall then proceed to protect the gate along with detonators and red flag by day and red hand signal lamp by night.
- iv) Gateman shall proceed exhibiting red flag by day and red hand signal lamp by night towards the direction, which a train is expected to arrive first, to a point 600 meters and place one detonator on the line. Thereafter he shall proceed to a distance 1200 meters from the level crossing gate and place 3 detonators on the track in 10 meters apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back, which was placed at boom.
- v) Thereafter, he shall proceed towards the other direction, showing red hand signal, similarly place detonators as described in (iv) above and return to the site of obstruction, picking up the intermediate detonator on his way back.
- vi) Having returned to the gate, he must then take steps to remove the obstruction and warn the driver of the approaching train.
- vii) In case the gateman observes or hears a train approaching when he is still on his way to protect and before he reaches the stipulated distance to place detonators, he shall place detonators on the line at a distance as far away as he can go.
- viii) Thereafter, he shall warn the driver and stop the approaching train by waving his red flag by day, red hand signal lamp by night repeatedly.

**(B) OTHER ACTIONS TO BE TAKEN BY GATEMAN:**

- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.
- ii) If the gate is broken by a road vehicle, which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.
- iii) He shall note down the particulars of the road vehicle, vehicle number, name of the driver, owner and relay these details to the Station Master/BMKJ and Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.

4.5 **SPECIAL INSTRUCTIONS:**

1. **MODE OF OPERATION:**

This is a Manned & Non-interlocked Engineering L.C.Gate situated at Km 69/15-70/1 in between ARN-BMKJ Stations. This gate is provided with winch operated coupled lifting barriers and the gate is closed/opened by the gateman manually by winch operation. Telephone communication is provided between the L C. gate lodge with SM office of BMKJ station. The level crossing gate is normally kept closed and locked against road traffic. The Station Master/ BMKJ shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of private number. When the gateman desires to open the gate for passage of road traffic he should ensure that no PN has been exchanged with the Station Master/ BMKJ for the passage of train or the whole of the train with last vehicle indicator has passed over the level crossing gate for which the gateman has exchanged private number with the SM/ BMKJ. Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate.

2. **EXCHANGE OF PRIVATE NUMBERS:**

- (i) The normal position of level crossing gate being "Closed to Road Traffic" it should always be in closed condition against road traffic, except when, it is opened for passage of road traffic over the level crossing, subject to conditions prescribed below.
- (ii) The Station Master / BMKJ before permitting each train to enter into the block section, shall ask Gateman on the telephone by giving a Private Number whether, gate is closed against road traffic for the passage of train. The Gateman only after ensuring that the gate is actually closed and locked against road traffic shall give a Private Number to the Station Master / BMKJ in assurance of gate being closed and locked against road traffic.
- (iii) The Station Master / BMKJ shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of private number.
- (iv) When the gateman desires to open the gate for passage of road traffic he should ensure that:
  - (a) He has not exchanged any private number with the SM / BMKJ as per (ii) above.
  - (b) If he has exchanged private number with the Station Master / BMKJ, the whole of the train with last vehicle indicator has passed over the level crossing gate and Station Master / BMKJ has not exchanged private number with him for any other movement immediately in rear of the train.

Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate. Then he shall open the gate for passing the road traffic, keeping a red flag / red hand signal lamp ready in his hand to stop approaching train if any.
- (v) In case the Gateman is not responding on the telephone or in case the telephone becomes defective or private number is not received from the Gateman, the Station Master/ BMKJ shall adhere to the procedure prescribed in SR 16.03.04.
- (vi) In the event of failure of telephone, if the gate is required to be opened for the passage of road traffic, the gateman shall look out in both directions before opening the gate to ensure that no train is approaching from either end. He shall then plant a banner flag during day and a hand signal lamp with the red light during night, 5 meters away from the gate on the track on either side. He will thereafter, open the gate for passing the road traffic keeping a red flag / red hand signal lamp ready in his hand to stop approaching train if any.



**3. FAILURE OF TELEPHONIC COMMUNICATION:**

When Telephonic Communication fails or SM/ BMKJ does not get any response from the Gateman despite 2 or 3 attempts, the following procedure shall be adopted:

- i) SM/ BMKJ shall serve a caution order to the Loco pilot and the Guard of every train proceeding into the affected section giving the number and kilometreage of the level crossing and directing the loco pilot:-
  - a) To whistle frequently to attract the attention of the gateman,
  - b) To proceed cautiously, and stop 30M short of the level crossing & be guided by hand signal.
- ii) (a) The Loco Pilot after stopping, if the gateman is available and apparently in a fit condition to continue his duty and the gates are closed, shall arrange to advise the station master / BMKJ as the case may be of the fact using the telephone provided at the gate. The Station Master/ BMKJ on receipt of such an advice from the Loco Pilot shall discontinue issue of caution order to the following trains provided the acknowledgement of the gateman is available over the telephone.  
(b) In the above circumstance, the Loco Pilot should not stop his train at the next station to advise the SM.
- iii) (a) If the loco Pilot does not find the gateman at the level crossing or if the gateman is apparently unfit for duty and the gates are not closed, he shall depute his Assistant, the Loco Pilot shall seek assistance of the Assistant Guard or Guard of the train. The same should be informed to the Station Master/ BMKJ on gate telephone.  
(b) The Loco Pilot, after being hand signaled, shall pass the level crossing and stop clear of it by at least 2 bogie lengths to pick up the Assistant or Assistant Guard / Guard, as the case may be. The Railway servant deputed for closing the gate shall reopen it for road traffic after the passage of the last vehicle of the train.  
(c) If, however, the telephone is out of order or the gateman is not available or is apparently unfit to continue his duty and intimation of the fact could not be given to the station/ BMKJ from the gate, the Loco Pilot shall stop his train at the next station (even if it is through passing station) and give a memo to the Station Master indicating the condition of the gateman, gate and telephone.  
(d) The Station Master/ BMKJ on receipt of the Loco Pilot's report regarding absence or unfitness of the gateman, shall advise the station Master/ ARN, the Notice Station, the Section Controller, JE/SE/SSE (P.Way) and AEN concerned and the Gangmate of the nearest gang for immediate posting of a gateman. He shall also inform the maintenance staff to attend and repair the telephone, if required. Issue of caution order should continue till normal working condition is restored.
- iv) Before giving line clear to a train, the Station Master/ BMKJ shall advise the Station Master/ ARN of the facts by message supported by a Private Number, and obtain his acknowledgement with a Private Number. The latter shall issue a caution order to the Loco Pilot as detailed in Para (i).
- v) Necessary entries shall be made in the Caution Order Register, Station Diary or Signal Failure Register as the case may be by Station Masters at either end of the affected station. The Section Controller shall also keep a note in his chart indicating the action taken by him.

**4. FAILURE OF LIFTING BARRIERS:**

- i) When the Gate cannot be closed due to failure of lifting barriers, The Gateman will immediately inform the Station Master on duty/ BMKJ, under exchange of Private number, and ensure that lifting barriers do not foul the track.
- ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.
- iii) Gateman shall secure the Gate against road traffic by means of safety chains & padlocks.

- iv) After securing the Gate against road traffic, he shall show green hand signal flag by day and green light by night to the driver of an approaching train.
- v) Station Master on duty/ BMKJ shall issue caution order to the driver of departing train.
- vi) SM/BMKJ shall also advise the Station Master/ARN at the despatching end, under exchange of private number, to similarly issue a caution order to the driver before despatching a train in the block section from his end.
- vii) SM/BMKJ should also advise maintenance staff responsible for maintenance of the lifting barriers to rectify the defect at the earliest.
- viii) Normal working will be resumed only after maintenance staff rectify the lifting barriers and issue reconnection/fit memo for the same.

**5. OBSTRUCTION AT THE GATE:**

- i) If the Gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the Gate foul the track, or if there is any other obstruction at the Gate, the Gateman shall Immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the Gate for this purpose.
- ii) Immediately after this, the Gateman shall advise the Station Master/BMKJ on duty regarding the defects/obstruction at the Gate under exchange of private number.
- iii) Stationmaster at BMKJ on duty shall be advised to put the departure signals back to 'ON' position, if taken 'OFF' for a train.
- iv) If there is no response from the Station Master /BMKJ after two or three attempts, he shall first protect the Gate and then inform him on phone.
- v) Gateman shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the Gate as stipulated in General Instruction for duties of Gateman under item No.4.4 (5).
- vi) Thereafter he shall protect the Gate from the other direction also.
- vii) He shall note down the particulars of the road vehicle, name of the driver, owner and relay these details to the Station Master/BMKJ who shall not allow the trains unless he has been assured by the Gateman that the road vehicle or the lifting barriers are not fouling the track.
- viii) The Station Master/BMKJ shall also inform the station Master/ARN, under exchange of private number, asking him not to despatch any train into the block section from his end, until the track has been cleared of all obstruction.
- ix) After the track has been cleared of all obstructions the Gateman shall inform the Station Master/BMKJ accordingly under exchange of private number.
- x) Gateman shall secure the Gate against road traffic by means of safety chains and padlocks and thereafter exhibit green hand signal, if the Gate is not obstructed.
- xi) Station Master/BMKJ shall advise maintenance staff responsible for maintaining the lifting barriers of Gate to repair the same at the earliest.
- xii) Normal working will be resumed only after maintenance staff rectify the defective lifting barriers and issue reconnection/fit memo for the same.

**6. OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:**

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment, which is visible to the Gateman, the Gateman and Station Master/BMKJ will adopt the procedure given under item No.5 above. If the obstruction fouls the level Crossing Gate, Gateman must keep the Gate closed against road traffic till the track is cleared of obstruction.

5.0 **GATE WORKING INSTRUCTIONS OF "C" CLASS ENGG. NON-INTERLOCKED LEVEL CROSSING GATE (NO-RV-38) AT KM 59/9-10 BETWEEN ARN & MSMD STATIONS.**

5.1 **GENERAL INSTRUCTIONS:**

5.1.1 **DESCRIPTION OF THE LEVEL CROSSING GATE:**

- |     |  |   |
|-----|--|---|
| 1.  | Number of Level Crossing Gate: -                       | RV-38.  |
| 2.  | Engineering or Traffic Gate: -                         | Engineering.  |
| 3.  | Under control of Station Master/PWI: PWI.              |   |
| 4.  | Location KM  | 59/9-10   |
| 5.  | At. Station: -   | ---   |
| 6.  | In between stations: -                                 | MSMD-ARN.   |
| 7.  | BG/MG/NG: -  | BG.   |
| 8.  | Single line/Double line/Multiple line: -               | Single Line.  |
| 9.  | Normal Position: -                                     | Closed to road traffic.   |
| 10. | Interlocked/Non Interlocked: -                         | Non-interlocked.  |
| 11. | Means of interlocking: -                               | NIL.  |
| 12. | Provision of Gate signal at Kms.                       | (I) Up line - NIL<br>(II) DN line - NIL                           |
| 13. | Signalling arrangement: -                              | NIL.  |
| 14. | Means of Communication:                                | Telephone Communication from Gate Goomty with SM office/ARN.      |
| 15. | Width of level crossing Gate: -                        | 7.5 Meters.   |
| 16. | Type of road. (NH/SH/Others): -                        | Others  |
| 17. | Name of Road: -  | Umarda-Gaurkheda Road.  |
| 18. | Metaled/Non Metaled:                                   | WDM.  |
| 19. | Approach Road: -                                       | C.C.Block   |
| 20. | Width of the road: -                                   | 5.50 M.   |
| 21. | MSMDe of road crossing (In case of the skew Gates) --. |   |
| 22. | Road gradient (If any)                                 | (I) North/East side- 1 in 150.<br>(II) South/West side- 1 in 150. |
| 23. | Road alignment (Straight/Curve): -                     | (I) North/East side.- Curve.<br>(II) South/West side. -Curve.     |
| 24. | Provision of height gauges: -                          | Not provided  |
| 25. | Type of Barriers: -                                    | Winch operated Lifting barriers.                                  |
| 26. | Length of checkrails: -                                | 9.5 Meter.  |
| 27. | Road surface in between Level Xings Gates              | C.C.Block   |
| 28. | Length of speed breakers: -                            | 7.5 Meters.   |
| 29. | Road signs: -  | Provided  |
| 30. | Speed breaker indication board: -                      | Available   |
| 31. | TVU: -   | 6173 on 01/2010.  |
| 32. | Census next due on: -                                  | 01/2013.  |
| 33. | Demarcation for placement of Detonators: -             | Provided.   |
| 34. | No. of Gateman working: -                              | 02.   |
| 35. | Nearest Railway Medical Assistance: -                  | MSMD.   |
| 36. | Nearest Private Medical Assistance available (if any)  | MSMD.   |
| 37. | List of equipment available Yes/No: -                  | Yes.  |

**5.2. EQUIPMENT:**

	<b>ITEMS</b>	<b>QUANTITY/NUMBERS</b>
1.	Hand signal Lamp /Tri Colour:Torch	3 (5 on Quadruple/Line or twin single line)
2.	Hand signal Flag Green:	1 mounted on sticks
3.	Hand Signal Flag Red:	3 (6 on Quadruple/line or Twin single line and 7 in case Hexaple section mounted on sticks)
4.	Banner Flag Red:	3 (5 on Quadruple/Line or twin single line)
5.	Posts for exhibiting red banner flag:	2 (4 on Q/Twin single line and 5 on Hexaple section).
6.	Spare chains with padlocks:	2 with stop mark
7.	Detonators:	10 in tin case
8.	Gate Lamps:	2
9.	Tommy Bar:	1
10.	Motor Pan:	1
11.	Spade/Fowrah:	1
12.	Rammer:	1 (in case of asphalted road this may not be provided)
13.	Pick Axe:	1 (in case of asphalted road this may not be provided)
14.	Tin case for flags:	1
15.	Can for oil:	1
16.	Water pot/Bucket:	1
17.	Canister for Muster Roll:	1
18.	Set of spare spectacles of Gateman wearing glasses.	1
19.	Board demarcating protection of level crossing Gate diagram in case of obstruction on Gate:	1
20.	Basket :	1
21.	Whistle :	1
22.	Wall clock :	1
23.	Small size chains with padlocks to be used in case of failure of boom lock.	2

**5.3 THE GATEMAN SHALL BE PROVIDED WITH FOLLOWING REGISTERS:**

- i) Gate working instructions in Hindi / English.
- ii) Gate working instructions in local vernacular language.
- iii) Gateman Rule Book in Local vernacular language.
- iv) List for tools and books.
- v) Duty Roster.
- vi) Certificate for working as gateman.
- vii) Bio-Data particulars of Gateman, including date of passing vision test, initial/refresher course, safety camp etc.
- viii) Accident Register.
- ix) Records of last census of road traffic at level crossing gate.
- x) Public complaint Book.
- xi) Inspection Book.

5.4 **DUTIES OF GATEMAN:**

1. **ALERTNESS:**

The gateman on duty shall be alert. He should be prepared to take immediate action, when danger is apprehended. Keys of the gate shall be in his personal custody.

2. **POSITION OF GATE KEEPER DURING PASSAGE OF TRAINS:**

During passage of trains, gateman will stand in the manner indicated below:

- i) Gateman will stand attentively in front of the gate – lodge facing the approaching train.
- ii) In daytime, gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.
- iii) In nighttime, gateman shall hold lighted hand signal lamp with white light facing the track.
- iv) He shall keep the whistle slung around his neck from a cord.

3. **ROUTINE DUTIES OF GATEMAN:**

- i) Gateman shall ensure that red banner flag by day and red light by night is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- ii) Gateman shall ensure that all gate lamps and hand signal lamps are lighted and kept burning continuously from sunset to sunrise.
- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless his reliever arrives and takes over charge from him. However, if it is necessary to leave the gate in an emergency, he must close and lock the gates against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under special instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, any vehicle/wagons /trains/battery/box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also be prepared to repeat any signal which guard may give to driver on walkie – talkie or in any other way.
- vii) If lifting barriers get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- viii) Gateman shall report to the nearest Station Master, Gangmate or Permanent Way Inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- x) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- xi) Gateman shall work the gate as per gate working instructions and remain well conversant with these instructions.
- xii) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- xiii) Gateman shall see that the channel for the flange of the wheel is kept clear.
- xiv) Gateman must keep the road surface well-watered and rammed in case of unmetalled roads.
- xv) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- xvi) Gateman shall prevent tress passing by persons or cattle to the maximum extent.

**4. ACTION IN CASE OF UNUSUAL OCCURRENCE OF TRAIN:**

In case gateman observes anything unusual with a passing train, he shall take following action:

- i) He shall take prompt action to warn the driver/guard of the passing train by showing red flag by day and red light by night.
- ii) He shall simultaneously try to draw the attention of the driver/guard by whistling continuously, shouting, gesticulating, and throwing ballast on the brake van or by any other means.
- iii) If driver/guard fails to take notice, gateman shall immediately inform the station Master to take appropriate action, under exchange of private number.
- iv) In case of train parting, gateman shall not show stop hand signal but shall show prescribed signal for train parting.
- v) He shall endeavor to attract the attention of the Driver/Guard by whistling continuously, shouting, gesticulating, and by raising both hands vertically above, quickly parting them and bringing them together in repeated Up and Down motion as high and as low as possible.
- vi) In case the train does not stop, gateman shall immediately inform the Station Master/ARN, to take appropriate action, under exchange of private number.

**5. ACTION IN EMERGENCY AT THE LEVEL CROSSING:**

- i) In case of an obstruction at the level crossing gate, he shall place banner flag/red light lamps on the stave on track at 5 m. away from the edge of the road at Level Crossing.
- ii) Thereafter, if he is unable to remove the obstruction, gateman shall immediately advise the Station Master/ARN on duty, regarding the defects/obstructions at the gate, under exchange of private number.
- iii) If there is no response from the Station Master/ARN after three attempts, he shall first protect the gate and then inform on phone.

**A) THE GATEMAN SHALL PROTECT THE LINE AS UNDER:**

- i) Gateman shall plant a red banner flag by day and a red light by night 5 meters away on posts duly provided for the purpose. He shall first protect the direction from which a train is expected to arrive first.
- ii) Then he will similarly plant the other red banner flag by day and red light by night towards the other direction 5 meters away from the site of obstruction.
- iii) Gateman shall then proceed to protect the gate along with detonators, red flag by day and red hand signal lamp by night.
- iv) Gateman shall proceed exhibiting red flag by day and red hand signal lamp by night towards the direction, which a train is expected to arrive first, to a point 600 meters and place one detonator on the line. Thereafter he shall proceed to a distance 1200 meters from the level crossing gate and place 3 detonators on the track in 10 meters apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back, which was placed at boom.
- v) Thereafter, he shall proceed towards the other direction, showing red hand signal, similarly place detonators as described in (iv) above and return to the site of obstruction, picking up the intermediate detonator on his way back.
- vi) Having returned to the gate, he must then take steps to remove the obstruction and warn the driver of the approaching train.
- vii) In case the gateman observes or hears a train approaching when he is still on his way to protect and before he reaches the stipulated distance to place detonators, he shall place detonators on the line at a distance as far away as he can go.
- viii) Thereafter, he shall stop the approaching train by waving his red flag by day, red hand signal lamp by night repeatedly.

**B) OTHER ACTIONS TO BE TAKEN BY GATEMAN:**

- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.
- ii) If the gate is broken by a road vehicle, which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.
- iii) He shall note down the particulars of the road vehicle, vehicle number, name of the driver, owner and relay these details to the Station Master/ARN and sectional Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.

**5.5 SPECIAL INSTRUCTIONS:**

**1. MODE OF OPERATION:**

This is a Manned & Non-interlocked Engineering L.C.Gate situated at Km 59/9-10 in between ARN-MSMD Stations. This gate is provided with winch operated coupled lifting barriers and the gate is closed/opened by the gateman manually by winch operation. Telephone communication is provided between the L C. gate lodge with SM office of ARN station. The level crossing gate is normally kept closed and locked against road traffic. The Station Master/ BMKJ shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of private number. When the gateman desires to open the gate for passage of road traffic he should ensure that no PN has been exchanged with the Station Master/ BMKJ for the passage of train or the whole of the train with last vehicle indicator has passed over the level crossing gate for which the gateman has exchanged private number with the SM/ BMKJ. Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate.

**2. EXCHANGE OF PRIVATE NUMBERS:**

- (i) The normal position of level crossing gate being "Closed to Road Traffic" it should always be in closed condition against road traffic, except when, it is opened for passage of road traffic over the level crossing, subject to conditions prescribed below.
- (ii) The Station Master / BMKJ before permitting each train to enter into the block section, shall ask Gateman on the telephone by giving a Private Number whether, gate is closed against road traffic for the passage of train. The Gateman only after ensuring that the gate is actually closed and locked against road traffic shall give a Private Number to the Station Master / BMKJ in assurance of gate being closed and locked against road traffic.
- (iii) The Station Master / BMKJ shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of private number.
- (iv) When the gateman desires to open the gate for passage of road traffic he should ensure that:
  - (a) He has not exchanged any private number with the SM / BMKJ as per (ii) above.
  - (b) If he has exchanged private number with the Station Master / BMKJ, the whole of the train with last vehicle indicator has passed over the level crossing gate and Station Master / BMKJ has not exchanged private number with him for any other movement immediately in rear of the train.  
Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate. Then he shall open the gate for passing the road traffic, keeping a red flag / red hand signal lamp ready in his hand to stop approaching train if any.
- (v) In case the Gateman is not responding on the telephone or in case the telephone becomes defective or private number is not received from the Gateman, the Station Master/ BMKJ shall adhere to the procedure prescribed in SR 16.03.04.

- (vi) In the event of failure of telephone, if the gate is required to be opened for the passage of road traffic, the gateman shall look out in both directions before opening the gate to ensure that no train is approaching from either end. He shall then plant a banner flag during day and a hand signal lamp with the red light during night, 5 meters away from the gate on the track on either side. He will thereafter, open the gate for passing the road traffic keeping a red flag / red hand signal lamp ready in his hand to stop approaching train if any.

**3. FAILURE OF TELEPHONIC COMMUNICATION:**

When Telephonic Communication fails or SM/ BMKJ does not get any response from the Gateman despite 2 or 3 attempts, the following procedure shall be adopted:

- i) SM/ BMKJ shall serve a caution order to the Loco pilot and the Guard of every train proceeding into the affected section giving the number and kilometreage of the level crossing and directing the loco pilot:-
- a) To whistle frequently to attract the attention of the gateman,  
b) To proceed cautiously, and stop 30M short of the level crossing & be guided by hand signal.
- ii) (a) The Loco Pilot after stopping, if the gateman is available and apparently in a fit condition to continue his duty and the gates are closed, shall arrange to advise the station master / BMKJ as the case may be of the fact using the telephone provided at the gate. The Station Master/ BMKJ on receipt of such an advice from the Loco Pilot shall discontinue issue of caution order to the following trains provided the acknowledgement of the gateman is available over the telephone.  
(b) In the above circumstance, the Loco Pilot should not stop his train at the next station to advise the SM.
- iii) (a) If the loco Pilot does not find the gateman at the level crossing or if the gateman is apparently unfit for duty and the gates are not closed, he shall depute his Assistant, the Loco Pilot shall seek assistance of the Assistant Guard or Guard of the train. The same should be informed to the Station Master/ BMKJ on gate telephone.  
(b) The Loco Pilot, after being hand signaled, shall pass the level crossing and stop clear of it by at least 2 bogie lengths to pick up the Assistant or Assistant Guard / Guard, as the case may be. The Railway servant deputed for closing the gate shall reopen it for road traffic after the passage of the last vehicle of the train.  
(c) If, however, the telephone is out of order or the gateman is not available or is apparently unfit to continue his duty and intimation of the fact could not be given to the station/ BMKJ from the gate, the Loco Pilot shall stop his train at the next station (even if it is through passing station) and give a memo to the Station Master indicating the condition of the gateman, gate and telephone.  
(d) The Station Master/ BMKJ on receipt of the Loco Pilot's report regarding absence or unfitness of the gateman, shall advise the station Master/ ARN, the Notice Station, the Section Controller, JE/SE/SSE (P.Way) and AEN concerned and the Gangmate of the nearest gang for immediate posting of a gateman. He shall also inform the maintenance staff to attend and repair the telephone, if required. Issue of caution order should continue till normal working condition is restored.
- iv) Before giving line clear to a train, the Station Master/ BMKJ shall advise the Station Master/ ARN of the facts by message supported by a Private Number, and obtain his acknowledgement with a Private Number. The latter shall issue a caution order to the Loco Pilot as detailed in Para (i).
- v) Necessary entries shall be made in the Caution Order Register, Station Diary or Signal Failure Register as the case may be by Station Masters at either end of the affected station. The Section Controller shall also keep a note in his chart indicating the action taken by him.

**4. FAILURE OF LIFTING BARRIERS:**

- i) When the Gate cannot be closed due to failure of lifting barriers, The Gateman will immediately inform the Station Master on duty/ ARN, under exchange of Private number, and ensure that lifting barriers do not foul the track.

R.Das.  
DSTE/SBP

Pradeep Nagar  
Sr.DEN(West)/SBP

D.Nayak.  
DOM(G)/SBP



-42-G-

- ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.
- iii) Gateman shall secure the Gate against road traffic by means of safety chains and padlocks.
- iv) After securing the Gate against road traffic, he shall show green hand signal flag by day and green light by night to the driver of an approaching train.
- v) Station Master on duty/ARN shall issue caution order to the driver of departing train.
- vi) SM/ARN shall also advise the Station Master/MSMD at the despatching end, under exchange of private number, to similarly issue a caution order to the driver before despatching an UP train in to the block section from his end.
- vii) SM/ARN should also advise maintenance staff responsible for maintenance of the lifting barriers to rectify the defect at the earliest.
- viii) Normal working will be resumed only after maintenance staff rectify the lifting barriers and issue reconnection/fit memo for the same.

5. **OBSTRUCTION AT THE GATE:**

- i) If the Gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the Gate foul the track, or if there is any other obstruction at the Gate, the Gateman shall Immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the Gate for this purpose.
- ii) Immediately after this, the Gateman shall advise the Station Master/ARN on duty regarding the defects/obstruction at the Gate under exchange of private number.
- iii) Stationmaster at ARN on duty shall be advised to put the departure signals back to 'ON' position, if taken 'OFF' for a train.
- iv) If there is no response from the Station Master /ARN after two or three attempts, he shall first protect the Gate and then inform him on phone.
- v) Gateman shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the Gate as stipulated in General Instruction for duties of Gateman under item No.5.4. (5).
- vi) Thereafter he shall protect the Gate from the other direction also.
- vii) He shall note down the particulars of the road vehicle, name of the driver, owner and relay these details to the Station Master/ARN who shall not allow the trains unless he has been assured by the Gateman that the road vehicle or the lifting barriers are not fouling the track.
- viii) The Station Master/ARN shall also inform the station Master/MSMD, under exchange of private number, asking him not to despatch any train into the block section from his end, until the track has been cleared of all obstructions.
- ix) After the track has been cleared of all obstructions the Gateman shall inform the Station Master/ARN accordingly under exchange of private number.
- x) Gateman shall secure the Gate against road traffic by means of safety chains and padlocks and thereafter exhibit green hand signal, if the Gate is not obstructed.
- xi) Station Master/ARN shall advise maintenance staff responsible for maintaining the lifting barriers Gates to repair the same at the earliest.
- xii) Normal working will be resumed only after maintenance staff rectify the defective lifting barriers and issue reconnection/fit memo for the same.

6. **OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:**

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment, which is visible to the Gateman, the Gateman and Station Master/ARN will adopt the procedure given under item No.5 above. If the obstruction fouls the level Crossing Gate, Gateman must keep the Gates closed against road traffic till the track is cleared of obstructions

**APPENDIX - 'B'****DETAILS OF SIGNALLING AND INTERLOCKING INSTALLATIONS, INSTRUCTIONS FOR WORKING THEM NORMALLY AND IN EMERGENCIES ETC. INCLUDING THE POWER SUPPLY ARRANGEMENT.****1.1 BRIEF DESCRIPTION OF THE SIGNALLING AND INTERLOCKING INSTALLATIONS:-**

This is a 'B' class station with standard – III interlocking (with isolation). There are two end cabins for operating points and signals at either end of the yard and the station is equipped with manually operated Two Aspect Lower Quadrant semaphore signalling with relevant SMS controls.

- 1.2 IRS catch handle type lever machines with rod worked points and locks are installed at East cabin (21 levers) and West cabin (21 levers). These levers shall operate points, point locks, slots, key control, gate and signals etc.

**2.0 POINTS AND LOCKS AND INTERLOCKING BETWEEN BLOCK INSTRUMENTS AND SIGNALS:**

Facing points are fitted with plunger type locks with lock bars and electrically / mechanically detected by the relevant signals. The Home signals, Adv. Starter signal, slide control governing block section must be in the normal position while handling the block instrument of the section concerned. The Advanced starter signals are controlled by the block instruments and Home Signals are also interlocked with block instruments of respective section as per BWM 4.32 .LVCD is provided between section ARN-MSMD .Digital Axle counter is placed in Advanced starter replacement track circuit .It controls the lowering of DN Advanced starter and also controls Block handle release of ARN-MSMD sectional block.

**3.0 INDICATIONS IN THE CABIN: -**

Miniature indicators are provided in the cabin for electrically slotted signals i.e. Home and Adv. Starters Signals to indicate the cabinman when the signals are to be taken off. Every signal also has got an indicator to show whether it is burning or not in the form of backlight. Indications are also provided for the track circuits between last trailing point & advanced starter (excluding lock bar portion) and Adv. Starter replacement track circuit. Indicators are also provided for fouling mark to fouling mark track circuit on main line in SM's room.

**4.0 SLOT CONTROL: -**

Each cabin is provided with slot levers to control the home signals operated by the other end cabin. The cabin man at the other end can put back the home signals in case of emergency by normalising the slot lever.

**5.0 TRACK CIRCUITS: -**

The station is provided with track circuit on main line between UP & DN main line starters i.e. MLT1 & MLT2 and in advance of UP & DN main line starters i.e. 4 T (W&E) at either end on main line. Track circuits are also provided from last trailing point to Advanced Starter on both side of the yard i.e. 7T, 7AT, 15T1 & 15T (Either end) of the yard. Starter signals and Advanced Starter signals of both ends are replaced to 'ON' through the respective track circuits on both sides. Track circuits are provided on each loop line i.e. L1T1 & L1T2 on loop line No-1 & L3T1, L3T2 & L3T3 on loop line No-2 & 11T, 14T on either side point zones. Starter signals, Advanced starter signals & Outer signals at both ends are replaced to "ON" through the respective track circuits on both sides.

6.0 UP and DN Starter signals are controlled through track circuits No. 15T, 15 T1 & 7T ,7 AT and are replaced automatically to 'ON' position on occupation of 7 T ,7 AT & 15T, 15 T1 at respective end .UP and DN Advanced Starter signal No.7 are controlled through track circuit No.7 T and are replaced automatically to 'ON' position on occupation of 7T on either side . UP & DN main line starter signals are replaced automatically to 'ON' position on occupation of 4T on either side. UP & DN Home signals are replaced automatically to 'ON' position on occupation of 15T, 15T1, MLT1,MLT2 L1T1, L1T 2, L3T 1,L3T2,L3T3 or 4T from either side .

7.0 **SM'S SLIDE CONTROL MACHINE: -**

In the SM's Office, there is an electrical slide control machine (with 12 slides) to control all Up and Dn. Home signals and advance Starters, with a locking arrangement. The SM on duty can put back the home signal or advanced Starter and Warner signals in case of emergency by normalising the concerned slide. The key of the slide control machine must be in personal custody of the SM on duty.

8.0 **INTERLOCKING WITH BLOCK INSTRUMENTS AND SIGNALS:-**

UP and DN reception and despatch signals are provided with track circuits in rear of the signals to replace the signals to ON position after the passage of the train past the signal.

9.0 **SIDING:-**

A Hot Axle siding of 60 M (CAL) is connected to line no.3 at east end of yard with both side entrances. The entrance points and corresponding derailing switches are coupled and operated by the levers at site. The entrance points are provided with hand plunger locks. These locks are released by keys extracted from Lever No. 9 of East Cabin in its reversed position when lever No.9 of East cabin is reversed, down reception signal Up starter and slot levers and slot levers for line No.3 at East cabin are held locked in their normal position.

10.0 **DESCRIPTION OF LEVERS IN WEST CABIN:-**

There are 21 levers in the West cabin (IRS direct type) and their individual functions are detailed below:-

<b>Lever No.</b>	<b>Function of Levers</b>
1.	Slot for DN Main Home
2.	Slot for DN loop home for line No .1.
3.	Slot for Dn 2 <sup>nd</sup> loop Home
4.	DN Main Starter
5.	DN 1 <sup>st</sup> Loop Starter
6.	DN 2 <sup>nd</sup> Loop Starter
7.	DN Adv. Starter
8.	Level crossing Gate Control Key
9.	Spare
10.	Lock bar on cross over point No.11 of East end
11.	Cross over point between main line & 1 <sup>st</sup> loop
12.	Spare.
13.	Lock bar for cross over point No. 14 (East end)
14.	Cross over point between main line & 2 <sup>nd</sup> loop
15.	Lock bar on cross over point No .11 and .14 West ead
16.	Spare.
17.	UP second loop home signal.
18.	UP first loop home signal
19.	UP main home Signal.
20.	UP outer signal.
21.	UP Warner Signal

**11.0 DESCRIPTION OF LEVERS IN EAST CABIN :**

There are 21 levers in East Cabin (IRS Catch handle type) and their individual function is detailed below: -

Lever No. -	Function of Levers
1	Slot for UP main home
2	Slot for UP 1 <sup>st</sup> loop Home
3	Slot for UP 2 <sup>nd</sup> loop Home
4	UP main Starter
5	UP loop starter for line No .1.
6	UP loop starter for line No .3.
7	UP Advanced. Starter
8	LC gate control key.
9	Hot axle siding control key.
10	Lock bar on cross over point No. 11 (west end)
11	Cross over point between main to 2 <sup>nd</sup> loop
12	Spare
13	Lock bar on cross over point No. 14 (west end )
14	Cross over point between the main and 1 <sup>st</sup> loop)
15	Lock bar on cross over points No. 11 & 14 . East end
16	Spare
17	Down 1 <sup>st</sup> loop home signal
18	Down 2 <sup>nd</sup> loop home signal
19	DN main home signal.
20	DN Outer signal (Motor operated )
21	DN Warner signal (Motor operated )

**12.0. STATION MASTER’S CONTROL SLIDE: -**

There are 12 slides in SM’s slide control machine and the individual function is detailed below: -

Slide No.-	Function
1.	UP Warner
2.	UP Main Home
3.	UP 2 <sup>nd</sup> loop Home
4.	UP 1 <sup>st</sup> loop Home
5.	UP Adv. Starter
6.	Spare
7.	Spare
8.	DN Adv. Starter
9.	DN 2 <sup>nd</sup> Loop Home
10.	DN 1 <sup>st</sup> Loop Home
11.	DN Main Home
12.	DN Warner

**13.0 PLACING OF LEVER COLLARS AND SLIDE COLLARS: -** Lever collars and slide collars are to be placed on the respective levers and slides, whenever running lines are other wise blocked vide SR 5.04.01 and SR 3.36.03

Line No.	East Cabin			West Cabin			Slide collars to be placed on SM’s slide.
	Home signal	Point lever	Slot lever	Home signal	Point lever	Slot lever	
1	17	14N	2	18	11N	2	4 & 10
2	19	14R	1	19	14R	1	11& 2
3	18	11N	3	17	14N	3	3 & 9

The above chart shall be exhibited in both the cabins and SM’s office vide OM 20.04(1).

R.Das.  
DSTE/SBP

Pradeep Nagar  
Sr.DEN(West)/SBP

D.Nayak.  
DOM(G)/SBP

**14.0 MAINTENANCE OF S&T INSTALLATION AND ADHERENCE TO MAINTENANCE SCHEDULES:-**

- (a) The regular maintenance of the S & T installations and adherence to the schedules of maintenance as also to the mandatory schedules of testing of points, signals, lever machines, level crossing gates, the associated interlocking apparatus, i.e cables and finally the interlocking function tests is a must for the safe and satisfactory working of the installations at this station.
- (b) The tests, checks and replacement etc. including overhauling shall confirm to the schedules of maintenance as indicated in the signal engineering manual as also in the current and extant instructions / circulars on the subject.

**15.0 PROCEDURE TO BE FOLLOWED INCASE OF FAILURE OF A SIGNAL & INTERLOCKING INSTALLATION: -**

Whenever there is a failure of points, track circuits, signals or any other interlocking gear at the station which includes level crossing gate (s) if any etc. the failure report should be communicated by the SM on duty through a memo to the sectional maintainer and the signal inspector of the section along with others as per SR 3.51.04 and 3.68.04 and document all such transactions.

**16.0 INSPECTION OF POINTS BEFORE DECLARING THEM DEFECTIVE: -**

However, before declaring a point as defective, the setting of the point on the route to which it applies, shall be inspected by the station master/ cabinman irrespective of the position of the point levers and lock levers in terms of SR 3.68.01 ( c ).

**17.0 RECTIFICATION AND CHECK BEFORE RESUMING NORMAL WORKING: -**

It is only after receipt of this information the sectional maintainer (Elect. or Mech.) shall attend to the failure after giving disconnection memo. After rectification of the fault, the sectional maintainer shall give a reconnection memo detailing the rectification and it is only after the station master on duty who has personally checked this defective gear and is satisfied that it is in good and proper working order, he shall resume the normal working of the said defective gear in terms of SR 3.68.04 (c) and (d).

**(a) PROCEDURE FOR CARRYING OUT PLANNED MAINTENANCE WORK :-**

Whenever any normal maintenance or special works for heavy renewals etc. are involved, these works should be pre-planned by the Signal and Telecom field staff and the inspector of the section should give to the station master in writing advance intimation about this planned work in terms of SR 15.08.01.

**(b) EMERGENCIES: -**

When a gear is found to be defective and unsafe for passage of trains, Signal & Telecom staff must at once suspend the working of that gear and the associated installations and issue suspension memo explaining the seriousness of the defect/ damage to the interlocking installation to the station master and take station master's acknowledgement. After this the usual practice of exchange of disconnection memo and reconnection memo can follow and the station master must promptly act on such messages and take adequate precaution treating the S&T installation as defective and pass trains over the affected interlocking gears according to extant instructions as contained in GR 3.77.

**18. LIGHTING OF SIGNAL LAMPS AND THEIR MAINTENANCE:-**

The station master on duty must ensure that all signal lights including stop boards, level crossing gate(s), if any are lighted and extinguished according to timings given in the G & SR vide para 3.42 and SRs thereto.

The station master on duty at 0.00 hrs. (2<sup>nd</sup> night shift) must also ensure that all the signal lights are burning properly. This fact must be recorded in the diary under separate entry and confirm to the section controller on duty as per the instructions contained in Divisional Safety circular No. 82/82 dtd. 3.5.82.

**19. CORRECTING TIME IN STATION CLOCK: -**

The station master shall set the time on his clock according to the time signal given by the section controller on duty at 16.00 hrs. every day according to SR 4.01.01 and 4.01.02.

**20. BASEMENT / RELAY ROOM KEY: -** Mentioned in main SWR.

**21. NORMAL POWER SUPPLY: -**

The Electro – mechanical signal installations at this station work with banks of primary / secondary cells installed at several places.

The secondary cells are charged from the local power supply source at 230 V – single phase. The batteries once charged will normally last for about three days. There is no standby power supply at this station.

**22. POWER FAILURES AND REPORTING SUCH FAILURES: -**

The station master must however, maintain the record of the power failures and must promptly report the failure immediately to the controller and to the concerned Elect. and S & T staff.

**23. INTERLOCKING WITH BLOCK INSTRUMENTS AND SIGNALS:-** UP and DN reception and despatch signals are fitted with electric motors and will be replaced to 'ON' automatically after the passage of a train through track circuits ahead of the signals.

The Home and advanced Starter signals are interlocked with the respective block instruments as indicated below:

- a) UP and DN Home signals are electrically interlocked with respective block instruments. For operating the block instruments from 'TRAIN ON LINE' to 'LINE CLOSED' position, the corresponding Home signals must be in the 'ON position, and the corresponding Home signals thumb switch should be in 'normal' position. However, the Home signals can be taken off in case of failure of the block instruments.
- b) Both UP and DN advanced Starters are electrically interlocked with respective block instruments so that the same cannot be taken off unless the concerned block instrument is in line clear position (TGT).
- c) When the block instrument is suspended in 'Line clear' position, the concerned advanced Starter must also be treated as suspended and the train shall be piloted out on form T/369 (3b)
- d) When the block instrument is under suspension, the authority to proceed will be paper line clear ticket.
- e) Signal once taken off may be put back to danger in case of emergency by turning the concerned signal switch to the center position but the route shall not be altered till the driver is informed in writing and his acknowledgement is obtained.

**24. LAST VEHICLE VERIFICATION THROUGH AXLE COUNTER:**

Entire block section ARN-MSMD is monitored by axle counter system and position of block section whether clear or occupied is indicated in the SM room. As soon as a train enters into the block section, the 'RED' indication appears in the axle counter indication panel. After the whole trains clears the block section, "GREEN" indication appears on the axle counter indication. This confirms the complete arrival of train and the SS/SM on duty shall give train out of section report on seeing the section clear (GREEN) indication at the panel.

25. **LAST VEHICLE VERIFICATION WHEN AXLE COUNTER FAILS:**

In case of failure of axle counter, the Station Master on duty shall obtain complete arrival certificate from the Guard of the train in the complete arrival register (T/1410) maintained at the station for stopping train. For through passing train, the Station Master on duty shall satisfy himself about complete arrival of train by verification of the last vehicle indicator vide Subsidiary Rule 4.16.05 that the train is complete. In case a train arrives / passes incomplete, action shall be taken as per Subsidiary Rules 4.17.02. 'The Train out of block section' signal shall be withheld to the station in rear until complete arrival certificate is received from the station in advance supported by a Private Number.

26. **LV VERIFICATION WHEN MOTOR TROLLEY FOLLOWING:**

On Occasions when motor trolley follows a train, the points shall not be altered until the following motor trolley is admitted on the same line. In the event of motor trolley is delayed in the section, the SM on duty shall take action in terms of Subsidiary Rule 15.25.03 (b) (vi).

27. **AXLE COUNTER AS LAST VEHICLE CHECKING DEVICE (LVCD):-**

- (a) Axle Counter as LVCD has been provided for the section ARN-MSMD as last vehicle checking device. The axle counter will also have control over the UP/DN last stop signals and block instrument of respective direction of ARN-MSMD section.
- (b) The occupation and clearance of the axle counter section is indicated by RED and GREEN indication respectively provided on the panel.
- (c) UP last stop signal of MSMD cannot be taken OFF if axle counter of block section ARN-MSMD fails. On the other hand ,on arrival of a train at station if the axle counter continues to show occupied the block instruments of concerned block section cannot be turned to line closed position

28. **NORMALISATION OF AXLE COUNTER & BLOCK WORKING BY RESETTING OF AXLE COUNTER :**

- (A) After the train has been received by the receiving station or after a block back operation or when no train has entered into the block section and the axle counter displays RED, then the following procedure shall be adopted to reset the axle counter. Resetting operation of the axle counter is co-operative and SS/SM at the other end of the concerned block section shall extend co-operation to the SS/SM on duty at the resetting end.
- (B) **VERIFY THE BLOCK SECTION IS CLEAR OF ANY VEHICLES :**
  - (i) Procedure laid down in GR 4.17 & relevant SRs thereto shall be followed for the purpose.
  - (ii) By checking the train signal register, the detail of the train passed through the block section and finding out from the station at other end of the concerned block section or from Controller that last train has passed and arrived complete. SS/SM on duty shall exchange private number with the SS/SM at other end of the concerned block section or with the Controller or from whom the complete arrival has been confirmed.
  - (iii) If the failure has occurred after arrival of a train, SS/SM on duty shall also obtain intact position from the guard of stopping train or by exchanging all right signal with the guard of through train, so that he can ensure that the train has arrived completely before resorting the reset of LVCD axle counter.
- (C) **RESETTING PROCEDURE:-**  
After complete arrival of train, if the axle counter of the section does not clear or Axle counter section free indication (Green) does not appear in the panel, The receiving station SM shall call the attention of the station in rear through telephone for resetting and shall establish communication with the said station if resetting of equipment is considered necessary giving details of last train that has arrived complete at his station and the block section is clear.

The receiving station shall inform the sending station as to whether the last train that entered into the section has arrived or not. And, if arrived fully shall so intimate authenticated by exchanging Private number with the sending station.

As digital Axle counters are provided as LVCD in Block section, resetting is to be done by both of sending end and receiving end individually.

The status of the section LVCD i.e. Clear (GREEN), occupied (RED), preparatory reset (miniature GREEN) and power on indications (YELLOW) are provided in the reset box.

The procedure to be followed for re-setting by both of sending end and receiving end individually is as follows: -

- a. Insert SM's LV reset key, turn right and keep pressed.
- b. Press LV reset button provided on the reset box.
- c. Release SM's LV reset key and reset button.
- d. Turn left the SM's LV reset key and remove it.
- e. The system obtains preparatory reset state & preparatory reset indication (Green) glows on the reset box.
- f. The counter reading increases by one count after a gap of 5 seconds approximately.
- g. The counter reading should be recorded.
- h. One train is to be piloted to the section to make the system normal.

The SM shall record in his Train Register the resetting operation giving details of train number, time, Private Number exchanged with SM in rear, giving reasons for the resetting operation.

If the axle counters functioning properly, then Block Section clear indication 'GREEN' will appear on the axle counter reset box and the concerned Block instrument will be normalised.

If the axle counter section indication does not appear 'Green' and continues to show 'RED', the concerned Block instrument shall remain suspended and failure intimation to be given to sectional signal Maintainer/JE/SE (Signal) for early rectification.

**29. TELECOMMUNICATION FACILITIES: -**

- i) Telephone with single line token less Block Instrument for either side Block Section.
- ii) Station to Station fixed telephone (hot line) is provided
- iii) Station is provided with Auto telephone connected with Railway Exchange
- iv) BSNL telephone is provided.
- v) The station is connected to Raipur-Titlagarh control circuit by a control telephone.
- vi) Station to station 25 Watt VHF communication is provided.
- vii) Magneto Telephone connection is provided with Station & both end Cabins.
- viii) Magneto Telephone connection is provided with Station & L.C Gates at KM 66/4 & KM 59/9-10.

**Note-**

- i) For obtaining line clear, VHF should be used as a last alternative and not as a sole means of communication.
- ii) VHF and Walkie Talkie sets should not be used for unnecessary discussions with Drivers, Guards or any other staff.
- iii) The on duty SM shall use the above electrical communication instruments stated in Para-29 from item No. (i) to (vi) strictly in order of preference for obtaining/granting line clear vide SR 14.01.01. In case of failure of any of the above means of communication the SM on duty shall work vide SR 6.02.06.



**30. FAILURE OF COMMUNICATION / FAILURE OF BLOCK INSTRUMENTS:**

- 1) In the event of failure/suspension of block instrument,  
'Line Clear' shall be obtained over telephone attached to the block instrument or station to station telephone by exchanging identification number and supported by private number as per SR 6.02.06 (a) and Chapter-III Part-I of Block Working Manual.
  - 2) In the event of failure/suspension of block instrument and block telephone attached to the block instrument, or the Station to station fixed telephone  
'Line Clear' shall be obtained on Railway auto phone or BSNL phone, by exchanging identification number supported by private number vide SR 6.02.06 (1)(b) and Chapter-III Part-I of Block Working Manual.
  - 3) In the event of failure/suspension of block instrument, block telephone and station to station fixed telephone or Railway auto phone or BSNL phone,  
'Line Clear' shall be obtained over the control phone exchanging identification number and supported by 'Private Number' vide SR 6.02.06(1) © and Chapter-III Part-I of Block Working Manual.
  - 4) In the event of failure / suspension of block instrument or block telephone attached to the block instrument, or station to station fixed telephone or Railway auto telephone or BSNL phone or control telephone  
'Line clear shall be obtained on the VHF sets exchanging ID number supported by Private Number provided that the instructions contained in SR 14.01.02 are followed vide SR 6.02.06 (1) (d) Chapter-III Part-I of Block Working Manual.
  - 5) In the event of total failure of all communications trains shall be worked vide SR 6.02.04.
- 31. FAILURE OF TELEPHONE COMMUNICATION BETWEEN SM'S OFFICE AND THE CABINS:**  
- In the event of failure of telephone communication between SM's office and the cabins, manuscript messages shall be sent in duplicate. The receiving Cabin Man shall retain one copy for his record and return the other copy duly acknowledged as an assurance that all the necessary points in favour of the train and for the line nominated by the Station Master on duty have been correctly set and facing points locked, the over run line / sand hump and the line nominated is clear and free from all obstructions. These instructions shall be supported by a private number. For obtaining intact arrival of a stopping train also these manuscript messages shall be used. A specimen form is given in Operating Manual vide OM 20.04 (9) (G).

**APPENDIX - 'C'**

**ANTI COLLISION DEVICE (RAKSHA KAVACH)**

**NIL**

**APPENDIX - 'D'****1. STATION SUPERINTENDENT (INCHARGE):**

The Station superintendent is the chief Supervisor of the station and is responsible for the general satisfactory working of the station and the efficient discharge of duties by all the staff under him. He is responsible for the efficient discharge of duties devolving upon all the staff employed at the station whether permanently or temporarily according to rules, safe working instructions and Station Working Rules. He shall see that all signals, points, level crossings, sidings and the whole machinery at the station are in perfect working order. He shall report all defects to the concerned officials. It is his personal responsibility to maintain the Station Working Rule, all rulebooks and Assurance Registers. He shall see that all operating and commercial records separately be maintained and due statements and returns are up to date. He shall submit the coaching return/statements in time with the help of his assistant. He shall conduct surprise night inspections, safety meetings and fire drills. He shall maintain good public relation as well as look after passenger's amenities and be helpful to travelling public.

His special attention is drawn to chapter No.II of G & SR 2000 and GR 5.01 to 5.08 with relevant SRs. He shall follow the instruction laid down in SR 3.68.01(c) & (d) and SR 14.07.01 and BWM 2.09 (e). In addition to his normal day shift he will promptly attend to accidents and report them. In addition to his normal day shift he will supervise the work of staff and conduct night inspections and report lapses of staff under him.

**2. ASSURANCE REGISTER:**

All staff before taking up independent charge of their duties at this station, shall make a written declaration in the assurance register that they have read and thoroughly understood the system in force and must sign such declaration.

No Railway servant shall be entrusted with any duty involving safety of the public unless the station in-charge is satisfied that the concerned staff is competent for the post. No Railway servant unless duly examined and certified shall be allowed to work the points and signals. The SS is responsible to see that all the staff are conversant with the Station Working Rules and their signatures are obtained in the Assurance register after he is satisfied that they have thoroughly understood the working rules of the station. In case of Group 'D' staff, their signature/thumb impression must be obtained after explaining fully about their duties and responsibilities.

3. The Station Manager is responsible personally for maintaining the Assurance Register and for obtaining declaration of the staff working under him. The Assurance Register must be maintained in two parts, one for Group 'C' and the other for Group 'D' staff. A duplicate copy of the Assurance Register must be maintained and kept in personal custody of the Station Manager.

4. The declaration shall be renewed in the following cases:-

- (i) Whenever there is a change in the Station Working Rules.
- (ii) For any staff who have not worked at the station or were away from the station for a period of 15 days or more.

**7. USE OF PRIVATE NUMBER BOOKS / IDENTIFICATION NUMBER SHEET: -**

Sufficient Private Number books and I.D number sheets in sealed covers shall be kept always in the stock by Station Manager under lock and key. He shall maintain a register for this purpose.

6. **ACCIDENTS:**

Accidents shall be reported and immediate action shall be taken by the Station Manager in charge in accordance with the instruction laid down in the Accident Manual. Whenever the Station Manager receives report of an accident, he shall take all necessary precautionary measures to protect the traffic and shall arrange earliest possible assistance as required at the site of accident. He shall frame the accident message/reports and follow up all safety principles without delay.

7. **TESTING OF POINTS AND SIGNALS :**

The Station Manager shall test the working of the reception signals daily during the day when there is no train due to arrive/leave the station. He shall also test the working of points, crossings etc. and record the result in the Station Master's diary.

8. **Dy.SS/STATION MASTER/ASSISTANT STATION MASTER:**

He shall work in 8 hrs. shift for train passing and booking of traffic, coaching returns and other statements shall be prepared and submitted by him in time under the direction of the SM in charge. He shall assist the SM in charge for the up keep of the station in all aspects.

SM on duty who makes an entry in the train signal register must continue on duty till all the entries pertaining to the trains are completed vide Subsidiary Rule 14.07.01.

He is responsible for working beyond this period when called upon to do so in the exigencies of services. He will follow SR 3.68.01(c) & (d), SR 14.07.01. Their special attention is drawn to Chapter II of G & SR 2000 and GR 5.01 to 5.08 with relevant SRs. As an Assistant to the Station Manager, he shall follow the instructions given to him by the Station Manager.

9. **HANDING OVER AND TAKING OVER CHARGE:**

The SM in charge/SM/ASM on duty shall record in the diary the condition of all the running lines, the caution orders in force at the time of handing over charge. These entries must be counter signed by SM/ASM coming on duty while taking over charge. This will not, however, relieve any one of the SS/SM of his responsibility to ensure by physical check that the nominated line is clear of all obstructions before admission of any train on it.

10. **CABIN LEVERMAN: -**

The on duty CLM/ LMA will observe all General rules, Subsidiary rules, Rules of Operating Manual, Block working Manual, Accident Manual, station working rules, other instructions and circulars issued from time to time and concerned to him. He shall have to keep a close contact with the SM on duty and take his permission in all train movement and obey his orders. He shall operate the levers of points, locks, slots and signals correctly and in proper sequence for safe and quick running of trains without detention at the stations and outside signals and for safe and early movement of shunting. He has to look into good maintenance of cabin and cleanliness of levers and correct maintenance of safe working transportation records which are concerned to him and provided in the cabin. He shall not allow any unauthorized person in the cabin and interfere with any signalling and interlocking gears and other apparatus. He shall report for duty in time & not to leave the cabin until properly relieved by a reliever or by a competent railway servant and report any defect, damage or deficiency of the Rly. property to the SM on duty immediately. He shall not block a running line without the permission of the SM on duty supported by PN. He shall set a clear line & put lever collars on the concerned levers vide GR 5.23, when a line is blocked.

He must be thoroughly conversant with the GR 3.38, 3.46, 3.77(I), 5.09, 3.52 to 3.60, 3.62, 5.13, 5.15, 5.16, 5.21, 5.23 & SRs there to. And clear his doubts regarding safe working rules from SM/ASM.

**11. TRAFFIC POINTSMAN / TOKEN PORTER IS RESPONSIBLE: -**

The on duty TPM/Sr.TP/TP shall deliver line clear papers and caution orders etc. to the train staff concerned correctly. He shall set, lock and unlock points correctly under the supervision of SM/ ASM / Guard or as specially instructed in the SWR. And couple and uncouple the vehicles under the supervision of SM/ ASM / Guard as the case may be whenever required. He must have knowledge of hand signals and their use properly and correctly and pilot the trains IN or OUT whenever necessary. He shall do the duties of loading and unloading of parcels, luggages and smalls from and to the train and watching packages or other property lying on the station premises. He shall protect the line in emergency and do the duties of supervising points man or waterman or others in absence of such staff .He shall clean, oil yard points when ever necessary and dusting of station offices etc. He shall remain at the station office or cabin and ready to receive orders from the Station Master on duty when otherwise not engaged and do any other work entrusted to him by SM/ ASM from time to time. He shall supervise shunting as per the provisions of SR 5.13.03 and couple and uncouple vehicles / Engines whenever required. In the absence of Sweeper –Cum-lampman, the cleaning, oiling and burning of lamps if any will devolve upon the TP as well as on the TPM. He shall clear his doubts from SS/SM regarding safe working rules.

**12. SAFAIWALA-CUM-LAMPMAN: -**

He is responsible to attend to the sanitation of the Railway premises including Station Master's Office, Passenger's Waiting room, Platform and platform latrines, cleaning of night soil and clearing of drainages. He shall remove night soil from the staff quarters and dump in and also for clearing of drains attached to staff quarters. He has to clean all lamps, fill them with oil and light it. He shall incase of emergency do any other duty entrusted to him by the Station Master.

**APPENDIX – 'E'****ESSENTIAL EQUIPMENTS OF THE STATION: -**

The station is provided with the following essential equipments, which must always be kept properly and in good working condition for immediate use.

<b>Srl No</b>	<b>Equipment</b>	<b>Station</b>	<b>East Cabin</b>	<b>West Cabin</b>
1.	Detonator	10	-	-
2.	Hand Signal Lamps/Tri-Colour torch	4	1	1
3.	Hand signal flags	2 Set	1 set	1 set
4.	Sprags / wedges	6	-	-
5.	Clamps with pad locks	2	2	2
6.	Safety chains with pad locks	6	-	-
7.	Fire buckets	5	-	-
8.	First Aid Box	1	-	-
9.	Stretcher	1	-	-
10.	Blanket	1	-	-
11.	Fire extinguisher	1	-	-
12.	Lever Collars	Nil	06	06
13.	Slide Collars	06	-	-

**NOTE:** In addition to above, both the cabins have been provided with equipments and registers for LC Gates operated from cabin vide SR 16.02.04.

**APPENDIX – 'F'****RULES FOR WORKING OF DK STATIONS , HALTS, IBH, IBS AND OUTLYING SIDINGS**

NIL.

**APPENDIX – 'G'****RULES FOR WORKING OF TRAINS IN ELECTRIFIED SECTION**

NIL