

**EAST COAST RAILWAY  
SAMBALPUR DIVISION**

Sl. No. SWR/TRKR/45

**STATION WORKING RULES OF TUREKELA ROAD STATION (CODE: TRKR)**

BG/MG/NG : BROAD GAUGE

Date of issue : 05.01.2012

Date brought into force: .

**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.

**1. STATION WORKING RULE: -**

1.1 **STATION WORKING RULE DIAGRAM NO.** SI-VSKP /10 ALT-'H'

1.2 **SIGNAL INTERLOCKING PLAN NO: -** SI - VSKP /10 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 numbers and signals when reporting accidents.

**2. DESCRIPTION OF STATION: -**

**TUREKELA ROAD (TRKR)** is a three-line station situated in Titlagarh – Raipur Non RE single line section at KM. 155.478 from Raipur. It is Standard – III interlocked, 'B' Class station with end cabins.

**2.1 GENERAL LOCATION: -**

2.1.1 **NAME OF STATION: -** TUREKELA ROAD

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: -** KM 155.478 from Raipur.

2.1.6 **NO OF CABINS: -** 2 Nos (East Cabin & West Cabin)

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

i) Titlagarh end – KANTABANJI (Code: KBJ) inter distance 13.915 K.M.

ii) Raipur end – HARISHANKAR ROAD (Code: HSK) inter distance 9.358 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: -**

Sl. No	Between Stations	The point from which "Block Section" commences	The point at which "Block Section" ends
1.	TRKR-KBJ	UP advanced starter signal No. 15E of TRKR	DN advanced starter signal of KBJ
2.	TRKR-HSK	DN advanced starter signal No.15W of TRKR	UP advanced starter signal of HSK

2.3.1 **STATION SECTION:** The portion between UP & DN Advanced 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	147.0M	147.0M	1 in 400 R
147.0M	492.74 M.	345.74 M.	Level
492.74 M	1522.00M	1029.26 M.	1 in 150 F
1522.00M	2122.00 M	600.00 M	Level
2122.00 M	3256.00M	1134.00M	1 in 150 R
3256.00M	Block Section	-----	Level

ii) Station section towards Raipur end.

From	To	Inter distance	Gradient
CSB	790.50 M	790.50 M	1 in 400 F
790.50 M	896.68 M.	106.18 M.	Level
896.68 M.	4011 M	3204.32 M	1 in 150 R
4011 M	Block Section	-----	Level

2.5 **LAY OUT:** -

- i) No. of Running lines: - 3 (Three)
- ii) No. of Sidings: - NIL.
- iii) No. of Passenger Platform: - 1 (One) High Level Platform (320.20m x 6.50m) beside Line No-1.
- 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	
				KBJ end	HSK end
1.	Line No.1	1 <sup>st</sup> Loop	710.00 M (STR-STR)	ORL	Sand Hump
2.	Line No.2	Main line	689.00 M (STR-STR)	-	-
3.	Line No.3	2 <sup>nd</sup> Loop	710.00 M (STR-STR)	Sand Hump	Sand Hump

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

Trains arriving from HSK end are UP trains.

Trains arriving from KBJ end are DN trains.

- 2.5.2) **NON-RUNNING LINES AND CAL** :- NIL  
 2.5.3) **ANY SPECIAL FEATURES IN THE LAYOUT** :- NIL  
 2.6. i) **LEVEL CROSSINGS :- ( STATION SECTION)** :-NIL  
 ii) **LEVEL CROSSING: - (IN BLOCK SECTION):**

Sl. No.	Location Between	Km & No.	Normal position	Class	Type	Operation	Communication
1	TRKR-KBJ	156/8-9 (RV-111)	--	C class, Unmanned	--	-	-
2	TRKR-HSK	154/4 (RV-110)	--	C class, Unmanned	--	-	-
3	TRKR-KBJ	161/1-2 (RV-115)	Open to road traffic	C	Interlocked	Winch operated Lifting barrier	Telephone connection with SM/TRKR.
4.	TRKR-KBJ	163/ 12-13 (RV-118)	Open to road traffic	C	Non Interlocked	Winch operated Lifting barrier	Telephone connection with SM/KBJ.

All the above gates have not been provided with Train Actuated Warning Device (TAWD).  
(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 & V (Part-II) of BWM)

Absolute Block System GR 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 KBJ & HSK.  
 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 Token less Block Instruments.  
 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 SM's 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 Signaling:** - 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 two rail length (maximum) in advance of UP & DN main line starters i.e. 18T (W&E) at either end on Main line. Track circuits are also provided from last trailing point (excluding Lock Bar portion) to Advanced Starter on both sides of the yard i.e. 7T, 7T1, 15AT, 15T. 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 also on each loop line i.e. L1T1, L1T2 & L1T3 on loop line No-1 & L3T1, L3T2 & L3T3 on loop line No-2. Track circuits, 8T & 11T on point zones at East end and Track circuits 8T & 11T on point zones at west end have been provided. Starter signals, Advanced starter signals & Outer signals at both end 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 signaling and interlocking are given in Appendix 'B' of the SWR.

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

As per JPO/02/2012 of 29.08.2012, the following procedure shall be adopted for opening of Relay Room/Cabin basement:-

The Relay Room/Cabin basement of station shall have double locking system of operating and S&T Locks. One Godrej Lock shall be provided on the door of Relay Room /Cabin basement by the Station Master. This lock is named as operating lock. The key shall be kept in the safe custody in the key- box with the SM on duty. Likewise, one Godrej lock shall be provided on the door of Relay Room /Cabin basement by the Signal Maintainer/ Signal Supervisor of the Station /Section. Names of the S&T staff authorized for opening of Relay Room/ Cabin basement is to be entered in the first page of Relay Room Cabin /basement Key Register and jointly certified by SSE /Signal In-Charge and TI In- Charge of the Section. In emergency, if any S&T staff other than authorized wants to open Relay Room Cabin /basement, he must inform DSTE through Signal Fault Control. Signal Fault Control shall convey the permission of DSTE to Dy SS/SM by giving Signal Fault Control order number.

Whenever Relay Room /Cabin basement is to be opened either for scheduled maintenance or during failures or for other maintenance activities/construction works: The concerned Maintainer/Signal Supervisor will inform SM on duty for opening of Relay Room /Cabin basement with reason. SM on duty will verify his identity from the list of authorized S & T Staff recorded in the first page of Relay Room/ Cabin basement Key register or as advised by Signal Fault Control in emergency. SM shall give the key of operating lock to S&T staff, after the entry is made in the Relay Room /Cabin basement key Register and also with Red Ink in TSR. Relay Room key/Cabin basement shall not be handed over by SM on duty to any Group D staff of S&T department. On completion of work, the concerned Signal Maintainer/ Signal Supervisor shall properly close Relay Room/Cabin basement door and lock it with both the locks and then return the key of operating lock to the SM on duty making the entry in the Relay Room Cabin/ basement register.

When the key of Operating Lock is returned by S& T staff to SM on duty, he shall first verify the Relay Room/Cabin Basement for proper locking and then keep the key in safe custody and acknowledge it on the Relay Room/ Cabin basement key register. If the Relay Room/ Cabin basement key is handed over to the Signal staff regarding the interference in safety gears the train shall be piloted in and out.

For attending Failures of S& T gears within Relay Room /Cabin basement, the following steps shall be taken:

Entry to be made in S& T failure register by SM on duty and failure Memo has to be issued to S& T staff. S& T staff shall not take the Relay Room /Cabin basement Key for attending failures and open the Relay Room Cabin/ basement unless the failure is recorded in Signal failure register. If disconnection is required, Disconnection Memo has to be given by S& T staff to SM on duty. Failure Memo should be acknowledged and entry in Relay Room /Cabin basement key register to be made by S& T staff before obtaining Station Master's key. Relay Room /Cabin basement key for Schedule maintenance shall be taken once in a calendar Month during monthly inspection by Sectional Supervisor. Relay Room/ Cabin basement can be opened by following above procedure for special maintenance activities like cable insulation testing, block/ disconnection memos, selection/ locking table testing, maintenance work inside Relay Room Cabin/ basement by Electrical and Engineering staff, during failures, data logger resetting and inspection by Divisional and Headquarter officials, Track Circuit adjustments & voltage monitoring during monsoon and whenever required during rains. Works required by S& T Construction & open line staff for preparatory works and during commissioning. In each such case, the Construction Staff Shall follow the detailed guidelines issued regarding working on signaling gears under the charge of open line.

In case of emergencies such as fire, flood, earthquake etc., Open Line Section Engineer (Signal) / Signal Maintainer & SS/SM shall jointly decide the need for opening the Relay Room /Cabin basement. Section Engineer Signal HQ at Divisional Control Office and Section controller shall be advised respectively. In case of communication failure during such emergencies, Open Line Signal Maintainers/ Supervisors and SS/SM on duty shall jointly decide the need for opening the Relay Room/ Cabin basement and communicate later on to respective controls. In case key is lost /misplaced, it shall be reported to S&T control as well as section control for either lock. In normal course the spare key with respective custodians shall be used. In emergency situation lock may be broken under advice to Section Control as well as S&T control. New lock shall be procured and provided.

In case SS/SM on duty comes to know of Relay Room /Cabin basement opening by unauthorized means or by unauthorized person or by any Group-D' Staff, the signaling system shall be suspended by him and matter immediately reported to Section Controller for necessary action. Senior section Engineer/ Signal & TI of the respective section will check the station records of Relay Room /Cabin basement opening during their inspections and cross check it with data logger/counter reading if provided. Discrepancy, if any, shall be immediately inquired into and advised to Sr DSTE & Sr DOM by numbered control message from the station immediately for further action.

**4.3 POWER SUPPLY: -**

Normally for signalling and interlocking installation, power supply is drawn from WESCO (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 Electrical and S & T staff.

**5.0 TELECOMMUNICATION FACILITIES: -**

- i) Telephone attached 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 & end Cabin.
- viii) Magneto Telephone connection is provided with Station & Engg. LC Gate at KM 161/1-2.

- 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 SM on duty 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 IN EACH SHIFT: -** 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 (In-charge)----- Dy. SS/SM/ASM----	Continuous	01	---09 hrs. ---08 hrs.
2.	CLM /LM 'A'/ TPM 'A'	Continuous	01	08 hrs
3.	TP/Sr. TP/TPM-B	Continuous	01	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.

R.Das  
DSTE/SBP

D.Nayak.  
DOM(G)/SBP

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

- |    | <u>Staff Responsible</u> | <u>Clearance of Zone</u>   |
|----|--------------------------|--|
| a) | SM on duty               | Between outermost fouling marks of concerned nominated line.         |
| b) | Cabin Man                | Between the fouling mark and Advanced Starter at the respective end. |

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

- c) Occupation/Clearance of track circuit from Fouling Mark to Fouling Mark on Main line and loop lines 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 lines by physical verification.

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) (I), BWM 2.07 (3) & (4) shall be complied with and as under: -

- i) The whole of last preceding train has arrived complete.
- 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.
- (i). The line is clear up to the advanced starter at the end of the station nearest to expected train. (Up advanced starter signal No.15E for a DN train and DN advanced starter signal No. 15W for an UP train)

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**NG: - 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 of reception of a train on an obstructed line, the SMs shall follow GR 5.09 & SR 5.09.01.

**6.2.1.3 RECEPTION OF TRAIN ON NON-SIGNALLED LINE: - NA**

**6.2.1.4 DESPATCH OF TRAINS ON NON-SIGNALLED LINE: - NA**

**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 or Sand Hump must not be used for stabling of vehicles or harbouring an Engine with or without vehicles.
- iv) Shunting shall not be permitted at both ends of the yard unless the engine is leading towards the falling gradient.

**6.2.1.7 SPECIAL INSTRUCTIONS -**

UP Repeater signal and DN Starter signal of Line No-3 have been placed on right hand side of track vide CRS dispensation Letter No.ECoR/SFy/COM.CRS/Disp/10/2012, Dtd 16.05.2012.

**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.	1 <sup>st</sup> . loop	Up Starter No.17 E	UP Adv. Starter No.15E or End of Over run line	DN Starter No. 17 W	DN Adv. tarter No.15 W or End of sand hump
2.	Main line	Up Starter No.18 E	UP Adv. Starter No.15 E	DN Starter No. 18 W	Down Adv. Starter No. 15 W
3.	2 <sup>nd</sup> loop	Up starter No. 16 E	UP Adv. starter No.15E or End of sand hump	DN Starter No. 16 W	DN Adv starter No. 15W or End of Sand hump

**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:**

- (I) According to the existing interlocking at this station, the simultaneous reception and despatch of trains are permitted as stipulated below (GR 3.47): -

Reception of an UP train on 1 <sup>st</sup> Loop by setting Over run line	AND	Reception of a DN train on 2 <sup>nd</sup> Loop by setting Sand Hump OR Despatch of another UP train from Main line or 2 <sup>nd</sup> Loop.
Reception of an UP train on 2 <sup>nd</sup> Loop by setting Sand Hump.	AND	Reception of a DN train on 1 <sup>st</sup> Loop by setting Sand Hump OR Despatch of another UP train from Main line or 1 <sup>st</sup> Loop
Reception of a DN train on 1 <sup>st</sup> Loop by setting Sand Hump	AND	Reception of an UP train on 2 <sup>nd</sup> Loop by setting Sand Hump OR Despatching of another DN train from Main line or 2 <sup>nd</sup> Loop
Reception of a DN train on 2 <sup>nd</sup> Loop by setting Sand Hump	AND	Reception of an UP train on 1 <sup>st</sup> Loop by setting ORL OR Despatching of another DN train from Main line or 1 <sup>st</sup> Loop.

- (ii) Setting of points during crossing of trains shall be done as per relevant provisions in SR 3.47.01 (a, b, c & e). Rules laid down in SR 3.47.02 shall be followed for berthing and crossing of passenger and goods trains.

#### 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 GR. 4.16.
- c) In case of trains arriving with last vehicle number, the last vehicle number shall be repeated vide BWM 2.07 (6)(b).

#### 6.5.1 **L.V. VERIFICATION THROUGH AXLE COUNTER**: -

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

#### 6.5.2 **L.V. VERIFICATION WHEN AXLE COUNTER FAILS**:-



In case of failure of axle counter, the Station Master on duty shall obtain in tact private No from Cabinman 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. (For resetting operation of axle counter refer appendix-B)

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

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

**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(b), 3.36.03,3.36.04(b), 3.42.01(b), 3.42.02(a)(i), 3.42.04, 5.11.01 and BWM 2.07(5) (b) (e) (f) & (g) and other provisions of GR & SR, BWM and Operating Manual, SWR.

**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 driver in terms of GR 4.09 and SRs thereto.

**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, the on duty SM shall work in accordance with GR 3.68, 3.69, 3.70 and SR thereto.

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

- (i) 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 SR 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.

- (ii) Irrespective of what is indicated by the position of the switches and route lever, point lever or lock lever or whether point indication is available or not available in the cabin, the SM/CM/Cabin man shall inspect the setting of points on the route to which it applies vide SR 3.51.02, before signal is declared as defective.
- (iii) The responsibility of correct setting, locking (by lock bar where possible), clamping, padlocking the facing point and clearance of the nominated route for admission and despatch of a goods train rests with the Cabin man. After complying with the procedure stated above, the Cabin man shall give a private number to the station master as an assurance of having done so.
- (iv) The responsibility of correct setting of points, clamping and padlocking the facing point for reception and despatch of trains carrying passengers and also for reception of goods train when a train carrying passenger is standing on an adjacent line at the station, rests with SM on duty himself.
- (v) 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.
- (vi) In the event of failure of track circuit in the yard trains shall be admitted in to yard after piloting 'IN' before piloting a train in to the yard the clearance of the track must be ensured by physical verification.
- (vii) Both UP and DN advanced Starter signals 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). 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 instrument can be normalised from 'TRAIN ON LINE' to 'LINE CLOSED' position, when the corresponding Home signals are in the 'ON position. However, the Home & Outer signals can be taken off in case of failure of the block instruments.
- (viii) When the points, crossings or guard rails are defective/damaged, the Cabin Master will inform the SM on duty who will take action immediately vide GR 3.77, SR 3.77.01 & 3.39.01 (c).
- (ix) 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 shall be Piloted In or Out as the case may be.
- (x) The failure report should be communicated by the SM on duty through a memo to the signal maintainer and the signal inspector of the section along with others as per SR 3.51.04 and 3.68.04 and the SM shall document all such transactions.

#### 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 is applied, 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 **RECEPTION OF TRAINS ON OBSTRUCTED LINE:** -

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

#### 6.8.4 **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.

**6.8 WORKING OF TROLLEYS /MOTOR TROLLEYS, 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 precautions must be taken:

- i) The section where axle counters are provided in lieu of track circuits, trolleys, motor trolleys, lorries etc, which are not insulated, shall not be allowed to run except on line clear.
- ii) Motor trolleys / tower wagons / material Lorries are not likely to actuate the axle counter correctly. When they are to run over the sections split by axle counters, the whole section to be treated as one and next train to be started after the first train has arrived complete.

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:-**

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 and slide collars must be placed on the slides concerned of the SM's electric slide frame for a line on which a train, an engine or vehicle is standing or if the line is otherwise obstructed vide SR 3.36.03(b). Whenever a running line is blocked, a clear remark in 'RED' ink shall be made immediately in Train Signal register indicating time and number of running line and a record shall be made in the Station Master's diary vide SR 5.23.01 (a) (c) & (d). Stable load register is also to be maintained. The stable loads/ vehicles are to be secured as per General Rules 5.23 and Subsidiary Rules 5.23.01 to prevent rolling down of vehicles.

**7.1 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.

**7.2 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, SM on duty shall be responsible to secure vehicles/stable loads in accordance with GR 5.23 and SR 5.23.01 to prevent rolling down of vehicles and arrest obstruction of fouling.

**NOTE:** Special care shall be taken to secure special type vehicles fitted with roller bearings while standing on running lines. A stabled load register to be maintained shift wise as per FORMAT given in operating manual.

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

- a) When a running line is blocked by 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 any other movement is required to be performed in that direction on the same line.

- b) If all the lines at a station happen 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 case of a mishap, the chances of casualties are minimized.
- c) In case all the lines are occupied by passenger carrying train, 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 a loop line occupied by a train whose passenger coach will receive the impact in case of a collision.

#### 7.1.1 **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 authority for shunting is a shunting order (T-806) to be issued by the SM on duty, which shall be withdrawn after completion of shunting, or in need when train movement is involved to receive/despatch trains on the adjacent line. The same shall be cancelled and pasted to its record foil. The staff supervising shunting shall ensure correct setting of points, clamping and pad locking of points, if necessary.

8.2 **SHUNTING IN THE FACE OF APPROACHING TRAIN: -** Shunting in the face of an approaching train is prohibited

##### 8.3 **PROHIBITION OF SHUNTING, SPECIAL FEATURES IF ANY: -**

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

##### 8.4 **SHUNTING ON SINGLE LINE:-**

SHUNTING ZONE	BLOCK SECTION IS CLEAR	BLOCK SECTION IS OCCUPIED
Shunting within Station section	Permitted.	Permitted provided the conditions of SR 8.09.02

		have been complied with.
Between Last Stop Signal and opposite First Stop Signal	Permitted vide GR 8.11 (a).	Permitted provided the conditions of GR 8.11 have been complied with.
Beyond opposite First Stop Signal	The concerned section shall be blocked back vide GR 8.13	Not permitted in face of an approaching train

**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.

**8.5 SHUNTING ON DOUBLE LINE:-N/A**

**8.6 SHUNTING IN THE SIDING TAKING OFF FROM STATION YARD/GOODS YARD :-** When shunting in the station yard / goods siding, proper shunting authority on 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. ABNORMAL CONDITIONS: -**

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

Procedure to be followed for working of trains during abnormal working.

[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] THE AUTHORITY TO PROCEED IN THE OCCUPIED BLOCK SECTION IN CASE OF OBSTRUCTION OF LINE OR ACCIDENT ETC: -**

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 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 and return of another following train(s) or to proceed to the 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 if the Block ticket is issued from the same station or shall be sent to the issuing station for cancellation and record.

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 an assurance in writing is obtained from SE (P.WAY) concerned or Guard/Driver, the SM on duty may resume normal working after exchanging proper messages with the Station Master at the other end, supported by Private Number.

- [III] **TRAINS DELAYED IN BLOCK SECTION:** - In case of trains delayed in the block section, the Station master shall take action as per GR 6.04 and SRs thereto.
- [IV] **FAILURE/PASSING OF INTERMEDIATE BLOCK STOP SIGNAL AT 'ON':** - NA
- [V] **FAILURE OF AXLE COUNTERS BLOCK / BPAC:** - NA
- [VI] **FAILURE OF MTRC:** - N/A
- (B) **PROCEDURE FOR EMERGENCY OPERATION OF POINTS BY CRANK HANDLE:** - NA
- (C) **CERTIFICATION OF CLEARANCE OF TRACK BEFORE CALLING-ON SIGNAL OPERATION IS INITIATED:** - Not Applicable
- (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 SM on duty to the signal Maintainer, the JE/SE/SSE (SIG) of the Section and others through a memo as per SR 3.68.04 and the SM shall document all such transactions.

9.1 **TOTAL FAILURE OF COMMUNICATION:-**

In the event of total interruption of all communications occurring between TRKR-KBJ & TRKR-HSK stations, i.e when line clear cannot 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 telephones whenever available
- d. Fixed telephone such as Railway auto telephone & BSNL phone
- e. Control telephone
- f. VHF sets

and action 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 failure 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 15Kmph 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/B409).
- (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 (T/F602).
- (v) A conditional "Line Clear" message for the light engine to return with or without a train attached, supported by a Private Number.

On arrival of the engine at the next station the conditional line clear message and enquiry message shall be collected by the Station Master on duty who shall prepare a conditional line clear ticket 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.

If there be an even flow of 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

**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. 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.17 E & DN Starter signal No.17W of line No.1 during day and 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 from the nominated place during thick and foggy weather and if visibility is impaired, he will work as per GR 3.61 and SRs thereto.

**11. 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. 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 & 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 TUREKELA ROAD 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' -- LIST OF ESSENTIAL EQUIPMENTS PROVIDED AT THE STATION.
- APPENDIX 'F' -- RULES FOR WORKING OF DK STATIONS, HALTS, IBH, IBS AND OUTLYING SIDINGS.
- APPENDIX 'G' -- RULES FOR WORKING OF TRAINS IN ELECTRIFIED SECTIONS.



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## 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.**

### **1.0 GATE WORKING RULES OF "C" CLASS ENGG. INTERLOCKED LEVEL CROSSING GATE AT KM 161/1-2 (No.RV-115) BETWEEN TRKR-KBJ STATIONS.**

#### **1.1 GENERAL INSTRUCTIONS: -**

##### **1.1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:**

1.	Number of Level Crossing Gate: -	RV-115
2.	Engineering or Traffic Gate: -	Engg.
3.	Under control of SM/Permanent Way Inspector:	PWI
4.	Location KM	161/1-2
5.	At. Station: -	-----.
6.	In between Stations: -	KBJ-TRKR.
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.(MACL)
12.	Provision of Gate signal at KMs.	Up line-KM 160.930 (approx) Dn line-KM 161.290 (approx)
13.	Signaling arrangement: -	MACLS.
14.	Means of Communication: Gate	Telephone Communication from  Goomty with SM office/TRKR.
15.	Width of level crossing Gate: -	7.5 Meters.
16.	Type of road. (NH/SH/Others): -	Others
17.	Name of Road: -	Jherene-Moulbahli Road
18.	Metaled/Non Metaled	WBM Road
19.	Approach Road: -	WBM Road
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. -Level
		ii) South/West side -Level
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 checkrails: -	9.5 Meter.
27.	Road surface in between Level Xings Gates: -	Hexagonal Concrete Blocks
28.	Length of speed breakers: -	7.5 M.
29.	Road signs: -	Available.
30.	Speed breaker indication board: -	Provided.

R.Das  
DSTE/SBP

D.Nayak.  
DOM(G)/SBP

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31.	TVU: -	13480 on 03/2013.
32.	Census next due on: -	03/2016.
33.	Demarcation for placement of Detonators: -	Provided.
34.	No. of Gateman working: -	02.
35.	Nearest Railway Medical Assistance: -	KBJ
36.	Nearest Private Medical Assistance available (if any)	KBJ
37.	List of equipment available Yes//No: -	Yes.

1.2 **EQUIPMENT:**  
**ITEMS**

	<b>QUANTITY/NUMBERS</b>
1. 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

R.Das  
DSTE/SBP

D.Nayak.  
DOM(G)/SBP

1.3 **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.

1.4 **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 night time, 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 in case of emergency or obstruction on the track.
- 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 Loco Pilot 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 SM Gang mate or the 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 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 barrier on sighting a train and hand signal or pilot the train past the defective signal. In such case he should inform the Loco Pilot 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 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 any thing unusual with a passing train, he shall take following action:

- i) He shall take prompt action to warn the Loco Pilot/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 Loco Pilot/guard by whistling continuously, shouting, gesticulating, and throwing ballast on the brake van or by any other means.
- iii) If Loco Pilot/guard fails to take notice, Gateman shall immediately inform the SM on duty TRKR 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 Loco Pilot/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, 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 on duty regarding the defects/obstructions at the Gate, under exchange of private number.
- iii) If there is no response from the SM on duty/TRKR after 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 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 Loco Pilot 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 Loco Pilot 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 SM /TRKR and Permanent Way Inspector regarding the particulars and obstructions at the level crossing Gate, through messenger or other means available.

## 1.5 **SPECIAL RESTRICTIONS:**

### 1. **MODE OF OPERATION:**

This is a Manned, Engineering interlocked L.C. Gate situated in between KBJ-TRKR at Km - 161/1-2. This gate is interlocked with Gate stop signals. Telephone communication is provided between the L C. gate lodge with SM on duty of TRKR 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 off trains, the SM/ TRKR 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 'Q' is to be extracted from the winch, which will be inserted in the lever of GF-1. When GF-1 is reversed it locks the booms of the gate and releases GF-2 and GF-3. Then after, the gateman can reverse the GF-2 or GF-3 for taking OFF concerned UP or DN Gate stop signals. GF-4 is spare lever.

After passage of the train, the gateman shall normalise the concerned GF-2 or GF-3 lever to put back the gate signal. The gate man after normalizing the GF-1 lever shall extract the key 'Q' from GF-1. Thereafter, he will open the gate by inserting the Key 'Q' 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/TRKR 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/TRKR 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/ TRKR to the gateman, as soon as he receives train entering section advice from the KBJ station.
- (iii) If the actual running time of the train from either end of the section is less than 10 minutes, Station Master/ TRKR 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.

Correction Slip No. 02  
Date of Issue: 29.11.2012

**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/ TRKR shall issue a caution order to the Loco Pilot of the departing train.
- (ii) Station Master shall advise the Loco Pilot 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/ TRKR shall advise the Station Master/KBJ at the dispatching end, under exchange of private number that the telephone at the gate has failed.
- (v) The Station Master/ TRKR at the dispatching end shall then issue a caution order to the Loco Pilot before dispatching a train into the block section from his end.
- (vi) Station Master/ TRKR will also advise the gateman through Gangman /Patrolman /Loco Pilot of the first train that the telephone has become defective.
- (vii) Station Master/ TRKR 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/ TRKR 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 Loco Pilot of the approaching train.
- (v) Station Master/ TRKR on duty shall issue caution order to the Loco Pilot of a departing train.
- (vi) He shall also advise the Station Master/KBJ at the dispatching end, under exchange of private number; to similarly issue a caution order to the Loco Pilot before dispatching a train into the block section.
- (vii) Station Master/ TRKR 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.

**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/ TRKR on duty on telephone, under exchange of private number.
- (ii) Thereafter, the gate must be treated as non-interlocked and procedure for movement of trains as prescribed for non-interlocked gate should be adopted.

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- (iii) Station Master/ TRKR on duty shall issue caution order to the Loco Pilot of a departing train.
- (iv) He shall also advise the Station Master/KBJ at the dispatching end, under exchange of private number, to similarly issue a caution order to the Loco Pilot before dispatching a train into the block section from his end.
- (v) Station Master/ TRKR 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/ TRKR 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 gate 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/ TRKR on duty shall issue a caution order to the Loco Pilot of a departing train.
- (v) He shall also advise the Station Master/TRKR at the dispatching end, under exchange of private number, to similarly issue a caution order to the Loco Pilot before dispatching a train into the block section from his end.
- (vi) Station Master/ TRKR 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/ TRKR 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/ TRKR on duty will issue a caution order to the Loco Pilot of departing train.
- (vii) He shall also advise the Station Master/KBJ at the dispatching end, under exchange of private number, to similarly issue a caution order to the Loco Pilot before despatching train into the block section from his end.

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TRKR shall advise S&T staff responsible for maintaining the gate signal  
ne at the earliest.



- (ix) 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 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 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/ TRKR on duty regarding the defects /obstructions at the gate, under exchange of private number.
- (iv) If there is no response from the Station Master / TRKR 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 Instructions for duties of gateman under item No.1.5 (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 Station Master/ TRKR 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/ TRKR shall also inform the Station Master/KBJ 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 cleared of all obstructions.
- (ix) After the track has been cleared of all obstructions the gateman shall inform the Station Master/ TRKR accordingly, under exchange of private number.
- (x) Station Master/ TRKR shall then issue a caution order to Loco Pilots 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/ TRKR shall advise maintenance staff responsible for maintaining the lifting barrier of gate to repair the same at the earliest.
- (xiii) Normal 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/ TRKR 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 obstructions.

**2.0 GATE WORKING INSTRUCTIONS OF 'C' CLASS ENGG. NON INTERLOCKED LEVEL CROSSING GATE AT KM- 163/12-13 (NO.RV-118) BET TRKR – KBJ STATIONS.**

**2.1 GENERAL INSTRUCTIONS: -**

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

1.	Number of Level Crossing Gate: -	RV-118.
2.	Engineering or Traffic Gate: -	Engineering.
3.	Under control of Station Master/PWI:	PWI.
4.	Location KM	163/12-13
5.	At. Station: -	----
6.	In between stations: -	KBJ-TRKR.
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: -	Non-interlocked.
11.	Means of interlocking: -	NIL.
12.	Provision of Gate signal at Kms.	
		i) Up line NIL
		ii) Dn line NIL
13.	Signaling arrangement: -	NIL.
14.	Means of Communication:- Telephone Communication from Gate Goomty with SM/ KBJ.	
15.	Width of level crossing Gate: -	5.5 Meters.
16.	Type of road. (NH/SH/Others): -	Others (Village.)
17.	Name of Road: -	Phulkani 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)	40° .
22.	Road gradient (If any)	
		iii) North/East side. - .
		iv) South/West side. -
23.	Road alignment (Straight/Curve): -	
		iii) North/East side. Straight.
		iv) South/West side. Straight.
24.	Provision of height gauges: -	Not Provided
25.	Type of Barriers: -	winch Operated Lifting barriers.
26.	Length of check rails: -	7.5 Meter.
27.	Road surface in between Level Xings Gates: -	CCB.
28.	Length of speed breakers: -	5.5 Meters.
29.	Road signs: -	Available
30.	Speed breaker indication board: -	provided
31.	TVU: -	3880 on 03/2013.
32.	Census next due on: -	03/2016.
33.	Demarcation for placement of Detonators: -	Displayed.
34.	No. of Gateman working: -	02.
35.	Nearest Railway Medical Assistance: -	KBJ.
36.	Nearest Private Medical Assistance available (if any)	KBJ.
37.	List of equipment available Yes//No: -	yes.

1.2. **EQUIPMENT:**  
**ITEMS**

**QUANTITY/NUMBERS**

1. 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

2.3 **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.

2.4 **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 gate 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) 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.
- vii) 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.
- viii) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- ix) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- x) Gateman shall work the gate as per gate working instructions and remain well conversant with these instructions.
- xi) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- xii) Gateman shall see that the channel for the flange of the wheel is kept clear.
- xiii) Gateman must keep the road surface well watered and rammed in case of unmetalled roads.
- xiv) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- xv) 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 Loco pilot/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 Loco pilot/guard by whistling continuously, shouting, gesticulating, and throwing ballast on the brake van or by any other means.
- iii) If Loco pilot/guard fails to take notice, gateman shall immediately inform the station Master/ KBJ, 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 Loco pilot/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/ KBJ, 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/ KBJ on duty, regarding the defects/obstructions at the gate, under exchange of private number.
- iii) If there is no response from the Station Master/ KBJ after three attempts, he shall first protect the gate and then inform on phone.

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

- i) If both lines are obstructed the Gateman shall plant a red banner flag by day and a red light by night 5 meters away from the line on which train is expected to arrive first.
- ii) Then he will similarly plant the other red banner flag by day and red light by night on the other line 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 on the line on which a train is expected to arrive first, to a point 600 meters on BG and place one detonator on the line. Thereafter he shall proceed to a distance 1200 meters on BG 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 on the other line, showing red hand signal, similarly place detonators as described in para (iv) above and return to the site of obstruction, picking up the intermediate detonators 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/ KBJ and Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.

2.5 **ENGINEERING ITEMS:**

i) **Visibility :-**

Direction	Side	Visibility Distance
UP	Right	600m.
	Left	600 m.
DN	Right	600m
	Left	600m

- ii) Speed Breaker: - Speed Breakers of approved design are provided on either side of this Level Crossing gate.  
iii) Periodical Census of traffic has been taken and the latest TVU is 3880 on 03/2013.

2.6 **SPECIAL INSTRUCTIONS:**

1. **MODE OF OPERATION:**

This is a Non-interlocked 'C' Class Engineering L.C.Gate situated at Km 163/12-13 between KBJ-TRKR stations. This gate is provided with winch operated coupled lifting barriers. The gateman closes and opens the lifting barriers of gate manually by operating the winch. Telephone connection is provided between the L C. gate lodge and SM's office of KBJ station. The level crossing gate is normally open to road traffic and closed against road traffic for passage of trains. Station Master / KBJ authorises the gateman to open the L.C.Gate after complete passage of train from the gate by observing tail board/ tail lamp. The gateman before opening the gate shall ensure that SM has not advised him to keep the gate closed for any other train from the same direction or from other direction. He shall display a banner flag across the track while the gate is in open condition.

2. **EXCHANGE OF PRIVATE NUMBERS.**

- (a) When Gate is connected with the station at the dispatching end:
- i) Station Master / KBJ at the dispatching end shall advise the gateman the number, description, direction and expected time of the passage of the train at the gate, under exchange of private number.
  - ii) Such advice shall be given before taking 'OFF' departure signal or giving an authority to proceed to the Loco pilot.
  - iii) The gateman on receipt of the advice shall close the gate well in time and confirm the same, under exchange of private number.
  - iv) Station Master / KBJ will take off the departure signals after getting the private number of the gateman.
  - v) The gateman shall be authorized by the Station Master / KBJ to open the L.C.Gate after complete passage of train from the gate by observing tail board/ tail lamp. The gateman before opening the gate shall ensure that SM has not advised him to keep the gate closed for any other train from the same direction or from other direction. He shall display a banner flag across the track while the gate is in open condition.
- (b) When Gate is connected with the station at the receiving end:
- i) Station Master / TRKR at the dispatching end shall advise the Station Master / KBJ at the other end the number, description, direction and expected time of passage of the train at the gate, under exchange of private number.
  - ii) Such advice shall be given before obtaining line clear.
  - iii) Station Master / KBJ at the receiving end shall in turn convey the same advice to the gateman, under exchange of private number.
  - iv) Gateman shall close the gate and thereafter give his private number to the Station Master / KBJ.
  - v) Only then shall the Station Master / KBJ at the receiving end grant line clear to the Station Master / TRKR at the dispatching end.

- vi) The gateman shall be authorized by the Station Master / KBJ to open the L.C.Gate after complete passage of train from the gate by observing tail board/ tail lamp. The gateman before opening the gate shall ensure that SM has not advised him to keep the gate closed for any other train from the same direction or from other direction. He shall display a banner flag across the track while the gate is in open condition.

### **3. FAILURE OF TELEPHONIC COMMUNICATION:**

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

- a) SM/ KBJ shall serve a caution order to the Loco pilot and the Guard of every train proceeding into the affected section giving the number and kilometrage of the level crossing and directing the loco pilot:-
- (i) To whistle frequently to attract the attention of the gateman,
- (ii) To proceed cautiously, and stop 30M. short of the level crossing and be guided by hand signal.
- b) (i) 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 / KBJ as the case may be of the fact using the telephone provided at the gate. The Station Master/ KBJ 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.
- (ii) In the above circumstance, the Loco Pilot should not stop his train at the next station to advise the Station Master.
- c) (i) 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/ KBJ on gate telephone.
- (ii) 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.
- (iii) 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/ KBJ 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/TRKR indicating the condition of the gateman, gate and telephone.
- (iv) The Station Master/ KBJ on receipt of the Loco Pilot's report regarding absence or unfitness of the gateman, shall advise the station Master/ TRKR, 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.
- d) Before giving line clear to a train, the Station Master/ KBJ shall advise the Station Master/ TRKR 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 (a).
- e) 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/ KBJ, 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 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 Loco pilot of an approaching train.
- v) Station Master on duty/ KBJ shall issue caution order to the Loco pilot of departing DN train.
- vi) SM/ KBJ shall also advise the Station Master/ TRKR at the dispatching end, under exchange of private number, to similarly issue a caution order to the Loco pilot before dispatching a train into the block section from his end.
- vii) SM/ KBJ 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 / KBJ on duty regarding the defects/obstruction at the Gate under exchange of private number.
- iii) Stationmaster at KBJ 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 / KBJ after two or three attempts, he shall first protect the Gate and then inform him on phone.
- v) Gateman shall then rush with detonator 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.2.4. (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/ KBJ 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/ KBJ shall also inform the station Master/ TRKR, under exchange of private number, asking him not to dispatch 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/ KBJ 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/ KBJ 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/ KBJ 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 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 SM's controls.
- 1.2 IRS direct 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 and signals etc.
- 2.0 **POINTS & LOCKS AND INTERLOCKING BETWEEN BLOCK INSTRUMENTS & 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 Adv. starter signal is controlled by the respective Block instrument & Home Signals are also interlocked with block instrument of respective section as per BWM 4.32.
- 4.0 **INDICATIONS IN THE CABIN:** -  
Miniature indicators are provided in the cabins 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.
- 5.0 **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 circuits on Main line between UP & DN Main line starters i.e. MLT1 & MLT2 and in advance of UP & DN main line starters i.e. 18T (W&E) at either end on Main line. Track circuits are also provided from last trailing point to Advanced Starter on both sides of the yard i.e. 7T, 7T1, 15AT, 15T. Starter signals and Advanced Starter signals of both ends are replaced to 'ON' through the respective track circuits on both sides of the yard. Track circuits are provided on each loop line i.e. L1T1, L1T2 & L1T3 on loop line No-1 & L2T1, L2T2 & L2T3 on loop line No-2 & 8T, 11T on either side point zones. Starter signals, Adv. starter signals & Outer signals at both ends are replaced to "ON" through the respective track circuits on both sides.
- 6.0 UP & DN Starter signals are controlled through track circuits No. 7T, 7T1 & 15AT & are replaced automatically to ON position. on occupation of 7T, 7T1 & 15AT at respective end. UP & DN Adv. Starter signals. No. 15 is controlled through track No. 15T & is replaced automatically to ON position on occupation of 15T on either side. UP & DN main line starter signal are replaced automatically to ON position on occupation of 18T on either side. UP & DN

Main Line Home signals are replaced automatically to ON position on occupation of 7T, 7T1, MLT1, MLT2 L1T1, L1T2, L1T3, L2T1, L2T2, L2T3 & 18T 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, Advance Starters & Warners 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.

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

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

8.1 **HOME SIGNALS:-**

UP and DN home signals are electrically interlocked with the respective Token less block instrument so that before the block instrument is operated to line closed position from train on line position the corresponding Home signal and its control must be in their normal position. However, the Home signal can be taken off in case of failure of block instruments.

9.0 **ADVANCED STARTERS: -**

UP and DN Adv. 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' i.e. in (TGT) position.

When the Block instrument is suspended in 'LINE CLEAR' position, the concerned Adv. Starter must also be treated as suspended and the trains shall be "P/OUT" past the Adv. Starter (in ON). When the block instrument is under suspension, the Authority to proceed shall be PAPER LINE CLEAR TICKET.

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

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

<b><u>Lever No.</u></b>	<b><u>Functions of levers</u></b>
1	DN Warner (DWM)
2	DN Outer (DWM)
3	DN Main Home.
4	DN 1 <sup>st</sup> loop Home.
5	DN 2 <sup>nd</sup> loop Home.
6	Spare.
7	Lock bar on point No.8 & 11 at East end.
8	Cross over point from Main line to 1 <sup>st</sup> loop.
9	Lock bar on cross over point No.8 west end.

10	Spare.
11	Cross over point from Main line to 2 <sup>nd</sup> loop.
12	Lock bar on cross over point No.11 West End.
13	Spare.
14	Spare.
15	UP Adv. Starter (DWM).
16	UP 2 <sup>nd</sup> loop Starter signal.
17	UP 1 <sup>st</sup> . loop Starter signal.
18	UP Main starter signal.
19	Slot for UP 2 <sup>nd</sup> loop Home.
20	Slot for UP 1 <sup>st</sup> loop Home.
21	Slot for UP Main Home.

#### 11.0 DESCRIPTION OF LEVERS IN WEST CABIN:

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

<u>Lever No.</u>	<u>Function of Levers</u>
1	UP Warner (DWM)
2	UP Outer (DWM)
3	UP Main Home.
4	UP 2 <sup>nd</sup> loop Home.
5	UP 1 <sup>st</sup> loop Home.
6	Spare.
7	Lock bar on points No.8 & 11 at west end.
8	Cross over point from Main line to 2 <sup>nd</sup> loop.
9	Lock bar on point No. 8 of East End.
10	Spare.
11	Cross over point from Main line to first loop line.
12	Lock bar on cross over point No.11 East End.
13	Spare.
14	Spare.
15	DN Adv. Starter.
16	DN 2 <sup>nd</sup> loop Starter.
17	DN 1 <sup>st</sup> loop starter.
18	DN Main Line Starter.
19	Slot for DN 2 <sup>nd</sup> loop Home.
20	Slot for DN 1 <sup>st</sup> loop Home.
21	Slot for DN Main Home.

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

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

Lever No.	Function.
1.	UP Warner.
2.	UP Main line home.
3.	UP second loop home.
4.	UP first loop home.
5.	UP Advance starter.
6.	Spare.
7.	Spare.
8.	DN Advance starter.
9.	DN second loop home.
10.	DN first loop home.
11.	DN Main line 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 otherwise 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 <sup>st</sup> Loop	4	8N	20	5	11N	20	4 & 10
Main Line	3	11R	21	3	8R	21	2 & 11
2 <sup>nd</sup> Loop	5	11N	19	4	8N	19	3 & 9

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

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

- The regular maintenance of the S & T installations and adherence to the schedules of maintenance as also 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.
- The tests, checks and replacement etc. including overhauling shall conform 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 IN CASE 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 Signal maintainer and the Signal inspector of the section along with others as per SR 3.51.04 and 3.68.04 and the SM shall 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 failure information, the Signal maintainer (Elect. or Mech.) shall attend to the failure after giving disconnection memo. After rectification of the fault, the Signal maintainer shall give a reconnection memo detailing the rectification and the station master on duty before acknowledging such memo shall test the signal and satisfy himself that the signal is in proper working order. Thereafter, the SM shall resume the normal working of the said defective gear in terms of SR 3.68.04 (c) and (d).
- 18.0 **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.
- 19.0 **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 Signal & Telecom staff shall issue disconnection memo and carry out the work. The station master must promptly act on such messages and take adequate precaution treating the concerned S&T installation as defective and pass trains over the affected interlocking gears according to the procedure contained in GR 3.68 & 3.77. When the defect is rectified, the official of the signal department shall issue a reconnection memo as a certification for rectification of the defect.
- 20.0 **LIGHTING OF SIGNAL LAMPS AND THEIR MAINTENANCE:-**  
 (a) The Station Master on duty must ensure that all signal lights including stop boards, level crossing gate(s), if any are lighted according to timings given in the GR & SR vide para 3.49 and SRs thereto.  
 (b) The Station Master on duty at 00.00 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 SM's diary under a 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.
- 21.0 **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.
- 22.0 **BASEMENT / RELAY ROOM KEY: -** Mentioned in main SWR.
- 23.0 **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.

**23.1 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.

**24.0 SUSPENSION OF LAST STOP SIGNAL:-**

When the Block instrument is suspended in 'TRAIN GOING TO' position for whatever reasons, the concerned last stop signal controlled by the Block instrument must be treated as suspended and trains shall be worked on PAPER LINE CLEAR TICKET.

**24.1 AXLE COUNTER:**

TRKR-KBJ block section is monitored by axle counter system, electronic axle counter is provided at the end of the station just ahead of UP advanced starter. A pair of electronic axle counter is provided between KANTABANJI and TUREKELA ROAD, one just ahead of UP advanced starter signal of TUREKELA ROAD and the other just beyond the DN advanced starter signal of KANTABANJI station for counting the axles 'OUT' to indicate whether the block section is clear of trains as well as to verify the last vehicle of the incoming train.

The position of block section i.e. clear/occupied is reflected on the axle counter reset box provided in the Station Master's office which shows 'GREEN' when the block section is clear and 'RED' when the block section is occupied.

A reset BOX consisting of a counter and one resetting key with a push switch and three indications i.e. 'RED' and 'GREEN', miniature 'YELLOW' and miniature 'GREEN' with locking arrangement for each pair of axle counter is kept at the station masters office 'RED' and 'GREEN' indicates occupations and clearance of Block section respectively, miniature 'YELLOW' indications glows for power supply & miniature 'GREEN' during resetting operation.

Whenever a train enters into the block section, block section clear indication 'GREEN' disappears and occupied indication 'RED' appears. If after the complete arrival of the train, 'RED' indication does not change to 'GREEN', it should be assumed as block instrument failure and necessary action as per GR 14.13 to be followed. The axle counter is interlocked with the block instrument.

**24.2 L.V. VERIFICATION WHEN AXLE COUNTER FAILS:-**

In case of failure of axle counter, the Station Master on duty shall obtain intact private No from Cabinman 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.

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

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

#### 24.4 **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.

#### (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 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. SM on duty shall exchange private number with the 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, SM on duty shall also obtain intact position from the Cabinman or 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 Axle counter 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 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 panel.
- 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 and preparatory reset indication (miniature green) glows on the panel.
- f. The counter reading increases by one count after a gap of 5 seconds approximately.
- g. The counter reading should be recorded.
- h. The first train is to be piloted into 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 now, then Block Section cleared indication 'GREEN' will appear on the panel and the concerned Block working will be normalised. If the axle counter section indication does not appear 'Green' and continues to show 'RED' indication, the concerned Block section shall remain suspended and failure intimation to be given to sectional signal Maintainer/JE/SE (Signal) for early rectification.

#### **25.0 TELECOMMUNICATION FACILITIES: -**

- i) Telephone attached 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 VHF communication is provided.
- vii) Magneto Telephone connection is provided with Station & end Cabin.
- viii) Magneto Telephone connection is provided with Station & LC Gate at KM 161/1-2.

- 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 SM on duty shall use the above electrical communication instruments stated in para .25.0 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.

#### **26.0 FAILURE OF COMMUNICATION / FAILURE OF BLOCK INSTRUMENTS:**



- 1) In the event of failure/suspension of Block instrument or Track circuit or Axle counters-  
'Line Clear' shall be obtained on telephone attached to the Block instrument or station to station telephone by exchanging Identification number and supported by private number as per GR 6.02.06 (a) and Chapter-III Part-I of Block Working Manual.
- 2) In the event of failure/suspension of Block instrument or Track circuit or Axle counters or 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 GR 6.02.06 (1)(b) and Chapter-III Part-I of Block Working Manual.
- 3) In the event of failure/suspension of Block instrument or Track circuit or Axle counters or telephone attached to the Block instrument or station to station fixed telephone or Railway auto phone or BSNL phone-  
'Line Clear' shall be obtained on the control phone exchanging Identification number and supported by a PN vide GR 6.02.06(1)(c) & Chapter-III Part-I of Block Working Manual.
- 4) In the event of failure / suspension of Block instrument or Track circuit or Axle counters or telephone attached to the Block instrument or station to station fixed telephone or Railway auto phone or BSNL phone or Control telephone  
'Line Clear' shall be obtained on the VHF sets exchanging ID number supported by PN provided that the instructions contained in SR 14.01.02 are followed vide GR 6.02.06 (1) (d), Chapter-IV, Part-II of Block Working Manual.
- 5) In the event of total failure of all communications trains shall be worked vide SR 6.02.04.

**27.0 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 overrun 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, these manuscript messages shall also 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 MANAGER (IN-CHARGE) :**

R.Das  
DSTE/SBP

D.Nayak.  
DOM(G)/SBP

He is the over all In-charge of the station; He is responsible for the efficient discharge of duties devolving upon all the Staff employed at the station whether permanent or temporary according to Station Working Rules, Manuals & safe working Instructions. He shall get himself well conversant with the detailed working of Station and panel, points and signals etc.,

He is responsible for maintaining the Assurance Register up-to-date. He shall conduct surprise night inspection and safety meetings/fire drills etc. as per instructions issued from time to time. He shall see that all the staff under his control working safely according to the rules in force.

He shall see that all signals, points, level crossing gates and the whole machinery at the station are in proper working order. He shall report all the defects to the concerned officials.

He shall satisfy himself that the staff employed under him are well conversant with Station Working Rules and perform their duties correctly. He is responsible for maintaining SWR, other Rule books and Assurance Register up to date.

He shall see that all safety records are maintained properly and all rules prescribed in G & SR, Block Working Manual, Operating Manual and other relevant directions issued from time to time by competent authorities are followed rigidly by all concerned and any irregularities if noticed are reported promptly to the authorities concerned.

He shall see that all accidents are promptly reported, attended to and GA-3 along with accident message is submitted to the concerned officers in time. He shall see that the staff is civil and helpful to all users of railway.

He shall frequently visit the platform, Panel Room, etc. in order to maintain an effective supervision over the said staff and their working. He shall see that station premises are kept neat & clean.

He is responsible for booking all staffs working under him for PME and Refresher Course / Safety camp in their due time. His Special attention is drawn out to chapter II of General and Subsidiary Rules and GR 5.01 to 5.08 with relevant Subsidiary Rules, Chapter – XXII of Operating Manual.

He shall see that all equipment, apparatus and instruments including signal and interlocking gears are in proper working order and all failures are promptly reported to officials concerned for repairs/rectifications.

He shall pay special attention towards passenger amenities & coaching trains punctuality and yard feasibility. He shall endeavor for minimizing detention to freight trains by judicious planning of trains staff. He shall pay attention to smooth functioning of goods train to eliminate detentions. He shall attend to all compliance by traveling/trading public.

He shall see that the law and order in the station area is taken care of with the help of G.R.P. and R.P.F and civil authorities as per need.

He shall ensure compliances of all Operating, Safety and Commercial records maintained at the station. He is responsible for overall supervision of the station.

His special attention is drawn to chapter No.II of G & SR (Amendment) 2000 and GR 5.01 to 5.08 with relevant SRs. He shall follow the instruction laid down in SR 3.68.01© & (d) and SR 14.07.01 and BWM 2.09 (e). He shall conduct surprise night inspection, 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.

## 2.0 **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.

- 3.0 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.
- 4.0 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.
- 5.0 **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.
- 6.0 **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.
- 7.0 **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 vide SR 5.01.03. He shall also test the working of points, crossings etc. and record the result in the Station Master's diary. If any defect is noticed during the test the SM shall report at once to the concerned S&T and PW officials for immediate rectification.
- 8.0 **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 Station Manager in charge. He shall assist the Station Manager in charge for the up keep of the station in all aspects.

Station Master 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. Their special attention is drawn to Chapter II of GR (Amendment) & 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.

9.0 **HANDING OVER AND TAKING OVER CHARGE:**

The Station Manager in charge/Station Master/Assistant Station Master 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 Station Master/Assistant Station Master 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.

10.0 **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 Station Master 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 and 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 Railway property to the Station Master on duty immediately.

He shall not block a running line without the permission of the Station Master on duty supported by private number.

He shall operate the interlocked L. C. gate and protect the line during emergency and obstruction on the track. The duties of gateman shall devolve on the cabinman.

He must be thoroughly conversant with the GR 3.38, 3.46, 3.77(I), 5.04,5.09, 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.

11.0 **TRAFFIC POINTSMAN IS RESPONSIBLE: -**

He shall work under the instructions of SM on duty and follow the GR 02.05 to 2.11 and other relevant rules laid down in GR and SR. He shall remain responsible for:

- (i) Delivery of authority to proceed and caution order etc. to the driver of train.
- (ii) Correct setting and locking and crank handling of points for reception/dispatch and shunting operation under the supervision of Station Master/Guard.
- (iii) To couple and uncouple vehicles under the supervision of Station Master/Guard when shunting operation is in progress.
- (iv) Piloting and hand signalling of trains when necessary.
- (v) Knowledge of hand signals, detonators and their use.
- (vi) Protection of line in emergency and fog signalling.
- (vii) Exchange of signals with the Driver and Guard of passing trains as directed by the Station Master.
- (viii) Cleaning, Oiling and lighting of lamps.
- (ix) Loading/unloading of parcels, luggage, Guard boxes and packages to and from the train and watching the packages and other materials by properly stacking in the station premises.
- (x) Dusting of station office, filling up the fire buckets with sand/water and getting train interact arrival register (T/1410) signed by the Guard as and when required.
- (xi) Serving messages and any other duties entrusted to them by the SMR/SM from time to time.
- (xii) Uses of emergency crank handle for setting of points.
- (xiii) To supervise shunting as per SR 5.13.03.
- (xiv) They 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 their special attention is drawn to chapter No.II of G & SR (Amendment) 2000 also.

**NOTE:** All staff should be in uniform while on duty and follow the rosters issued by DPO/SBP from time to time.

### **GENERAL**

- i) A set of flags and tri colour hand signal lamps will be part of the essential equipment of the staff while on duty. He shall not leave the station except when required by the SM on duty or with his permission and shall comply with subsidiary rules 4.42.02(b) (i) and (d).
- ii) Staff working at the station must be able to distinguish Up and Down line clear tickets and educated in distinguishing other operational forms and documents, delivered to Loco pilots & Guards and must also know how and when to ring the station bell.

## **APPENDIX – ‘E’**

**LIST OF ESSENTIAL EQUIPMENTS PROVIDED AT 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>Quantity</b>
1.	Detonator	10
2.	Hand Signal Lamps/Tri-Colour torch	2
3.	Hand signal flags	4 Sets
4.	Sprags / wedges	6
5.	Clamps with pad locks	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
13.	Slide Collars	06

**ESSENTIAL EQUIPMENTS OF THE CABINS:-**

<b>Srl. No</b>	<b>Equipment</b>	<b>Quantity</b>	
		<b>East Cabin</b>	<b>West Cabin</b>
1	Detonators	-	-
2	Hand signal lamp/Tricolour Torch	01	01
3	Hand signal flags	1 set	1 set
4	Clamps and padlocks	02	02
5	Lever collars	08	08

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

NIL.

**APPENDIX – ‘G’****RULES FOR WORKING OF TRAINS IN ELECTRIFIED SECTIONS**

NIL