

**EAST COAST RAILWAY
SAMBALPUR DIVISION**

Sl. No. SWR/LKNA/39

STATION WORKING RULES OF LAKHNA STATION (CODE: LKNA)

BG/MG/NG: BROAD GAUGE
Date of issue:- 04.04.2013
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/ WRD –9760 (ALT-J)

1.2 **SIGNAL INTERLOCKING PLAN NO.:** - S .I – 9760 (ALT-J)

The Station Working Rule diagram and Signal Interlocking Plan shows the complete lay out of the yard, siding, normal position of points, the Signaling 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: -

LAKHNA is a three-line station situated in Titlagarh - Raipur section at KM. 130.382 from Raipur. It is Standard – III interlocked station with central panel and having semaphore motor operated lower quadrant signals.

2.1 GENERAL LOCATION:-

2.1.1 **NAME OF STATION:-** LAKHNA (LKNA)

2.1.2 **CLASSIFICATION OF STATION: -** 'B' class

2.1.3 **NAME OF THE SECTION: -** Titlagarh – Raipur, Single Line, Non-RE, BG section

2.1.4 **ROUTE: -** D Spl.

2.1.5 **LOCATION: -** 130.382 km from Raipur.

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

- i) Raipur end - NAWAPARA ROAD (Code: NPD) inter distance 13.752 K.M.
- ii) Titlagarh end - HARISHANKAR ROAD (Code: HSK) inter distance 15.738 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

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2.3 BLOCK SECTION LIMITS: -

Sl. No	Between Stations	The point from which "Block Section" commences	The point at which "Block Section" ends
1.	LKNA- NPD	DN advanced starter signal No. 10 of LKNA	UP advanced starter signal No.9 of NPD
2.	LKNA- HSK	UP advanced starter signal No.20 of LKNA	DN advanced starter signal No. 5 of HSK.

2.3.1 **STATION SECTION:** The portion between UP & DN Advanced starter signals of LAKHNA station.

2.3.2 **STATION LIMIT:** The portion of railway between UP and DN outer signals of LAKHNA Station.

2.4 GRADIENT: -

(ii) Station section towards Titlagarh end.

From	To	Inter distance	Gradient
CSB	163.00 M	163.00 M	1 in 1000 R
163.00 M	401.650 M	238.650 M	1 in 2841 F
401.650 M	658.00 M	256.35 M	1 in 1361 F
658.0 M	1422.00 M	764.00 M	1 in 150 F
1422.00 M	1556.00 M	134.00	Level
1556.00 M	2556.00 M	1000.00 M	1 in 150 F
2556.00 M	2618.00 M	62.00 M	Level
2618.00 M	3355.00 M	737.00 M	1 in 150 R
3355.00 M	Block Section	----	Level

(ii) Station section towards Raipur end.

From	To	Inter distance	Gradient
CSB	582.0 M	582.0 M	1 in 1000 F
582.0 M	1511.0 M	929.0 M	1 in 150 R
1511.0 M	1779.0 M	268.0 M	Level
1779.0 M	3913.0 M	2134.0 M	1 in 150 F
3913.0 M	Block Section	----	Level

2.5 LAY OUT: -

- i) No. of running lines :- 3 (Three)
- ii) No. of sidings :- 1 (One Ballast Siding)
- iii) No. of Passenger platform :- 1 (One) High level Platform beside Line no.-1 (343 x 15.24 M)
- iv) No. of goods shed platform: - Nil.

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

(i)

Sl. No	Line No.	Description	CSL	Isolation at NPD End	Isolation at HSK End
1.	Line No.1	1 st Loop line	687 M (STR-STR)	D.S Point	ORL
2.	Line No.2	Main line	687 M (STR-STR)	-	-
3.	Line No.3	2 nd Loop line	687 M (STR-STR)	ORL	D.S Point

- (ii) **DIRECTION OF MOVEMENTS: -**
Trains arriving from NPD end are UP trains.
Trains arriving from HSK end are DN trains.

2.5.2 **NON-RUNNING LINES AND CSL: -**

Sl.No	Description	CAL	Takes off	Exit	Operation
1.	Ballast siding	200 M	Line No.3 (2 nd Loop)	One side (NPD end)	Locally by Arc lever releasing key from HKT in SM's office. Control No-16.

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

2.6 **LEVEL CROSSINGS: -**

2.6.1 i) **LEVEL CROSSINGS: - (STATION SECTION)**

Sl. No	Location	Km./No.	Normal position	Class	Type	Operation	Communication
1	Between UP Starter & DN Home Signals	130/13-14 RV-92	Un-manned	'C'	-	-	-

(ii) **LEVEL CROSSING: - (IN BLOCK SECTION):**

Srl. No.	Location	Km. & No.	Normal position	Class	Type	Operation	Communication
1.	Between LKNA & HSK	133/11-12, RV-94	Closed to road traffic	'C'	Non-Interlocked	Winch operated lifting barrier	Telephone connection with SM of LKNA station.
2.	Between LKNA & HSK	142/14-15, RV-105	Open to road traffic	'C'	Non-Interlocked	Winch operated lifting barrier	Telephone connection with SM of HSK station.
3.	Between LKNA & NPD	128/12-13, RV-90	Closed to road traffic	'C'	Non-Interlocked	Winch operated lifting barrier	Telephone connection with SM of LKNA station.
4.	Between LKNA & HSK	139/8-9, RV-100	Closed to road traffic	'C'	Non-Interlocked	Winch operated lifting barrier	Telephone connection with SM of HSK station.

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

3.0 **SYSTEM AND MEANS OF WORKING :-**

(Rule No.: - Chapter XIV of G&SR, Chapter III & V (Part-II) of BWM)

- i) **System of working :** Absolute Block system of working on single line.
- ii) **Type of block instrument:** Token Less Block Instrument with adjacent stations.
- iii) **Instrument:** Non Co-operative type token less.
- iv) **Block Telephone:** Attached with block Instruments of LKNA-NPD and LKNA-HSK sections.
- v) **Staff responsible for their operations:** S.M. on duty.
- vi) **Custodian of keys:** S.M. on duty.

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4.0 **SYSTEM OF SIGNALLING AND INTERLOCKING:**

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

(i) **INTERLOCKING:**

The station is provided with two aspect lower quadrant semaphore signals and Standard-III interlocking. All the points and signals are operated from Panel at the Station. Home and Advanced Starter signals are interlocked with respective Token less Instruments.

The panel board, provided in the SM's office is directly operated by SM on duty. This panel is provided with locking arrangement so that the same can be locked either in normal or operated position by the removal of lock up key. In case of emergency, the signal taken off for a train can be put back to danger position by the SM on duty by operating the concern signal switch to normal position even if the panel board is in locked condition.

(ii) **MAXIMUM EQUIPMENT OF SIGNAL-**

Outer, Warner below Outer, Home, Starter and Advanced starter in either direction.

(iii) **AXLE COUNTER:** Not Applicable.

(iv) **TRACK CIRCUIT:-**

Track circuits are provided at different places in the yard as shown in the panel. The different track circuits for signal replacement are namely: 2T, 20T, 3AT, 3T, 12BT, 28T, 10T, 27AT, 27T. The point zone track circuits are 13AT, 13BT, 14AT, 14BT, 18AT, 18BT, 19AT, 19BT. The berthing track circuits are MLT1, MLT2 on main line, L1T1, and L1T2 on line No. 1 and L2T1, L2T2 on line No. 3.

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

The position of all points are shown in station Working Rule Diagram and also in operating panel. All points are power operated through Station Master's control panel apparatus. All cross over points on running line are independently worked by electric point machine and have built in locking and detection arrangement.

4.1.3 **ROTARY KEY TRANSMITTER: -**

There is one RKT provided in the SM's room for Cripple siding key and the key is locked in the RKT normally. The key can be released only when the concerned siding point push button No 16 is pressed with common trans button. Once the key is out from the RKT the reception and despatch signals for Line No.3 are held locked in their normal position. RKTs with crank handle keys are provided in SM's office for the operation of points in case of failure of motors. The crank handle keys are mechanically riveted to the keys of RKTs. When the point operation from panel has failed, point numbers 13 & 14 and 18 & 19 should be crank handled with the crank handles CH-1 & CH-2 respectively provided in SM's office. The crank handle key is released by pressing the CH push button with common trans button provided. CH-1 is released by push button No-31 & CH-2 is released by push button No-30 provided in the panel board.

(Details are given in Appendix 'B' of the SWR)

4.1.4 **IBS:-** NIL

4.1.5 **POINT AND TRAP INDICATOR: -** NIL

4.1.6 **REPEATER (BANNER TYPE):-** NIL

4.1.7 **CALLING ON SIGNALS:-** NIL

4.1.8 **SHUNT SIGNALS: -** NIL

4.1.9 **ANTI COLLISION DEVICE: -** NIL

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4.2 CUSTODY OF RELAY ROOM 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:-

The Relay room 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 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 by the Signal Maintainer/ Signal Supervisor of the Station /Section. Names of the S&T staff authorized for opening of Relay Room is to be entered in the first page of Relay Room 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, he must inform DSTE through Signal Fault Control. Signal Fault Control shall convey the permission of DSTE to SS/SM by giving Signal Fault Control order number.

Whenever relay room 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 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 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 and also with Red Ink in TSR. Relay Room key 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 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 register.

When the key of Operating Lock is returned by S& T staff to SM on duty, he shall first verify the Relay Room for proper locking and then keep the key in safe custody and acknowledge it on the Relay-Room key register. If the relay room 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 Rooms, 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 Key for attending failures and open the Relay Room 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 key register to be made by S& T staff before obtaining Station Master's key. Relay Room key for Schedule maintenance shall be taken once in a calendar Month during monthly inspection by Sectional Supervisor. Relay room 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 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. Section Engineer Signal HQ at Divisional Control Office and Section controller shall be advised respectively. In case of communication failure during such emergencies,

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Open Line Signal Maintainers/ Supervisors and SS/SM on duty shall jointly decide the need for opening the Relay Room 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 SM on duty comes to know of relay Room 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 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:** -

Normal power supply to the signalling and interlocking installations at this station is drawn from SEB power supply source (AC 230 Volt / 50 Hz). In SM's Office there is ASM power panel, which represents the voltage of the integrated power supply system.

1. In case voltage drops 105.9V an audible buzzer appears for starting Generator.
2. In case voltage drops 105.1V an audible buzzer appears for emergency start of Generator.
3. In case voltage drops 104.3V an audible buzzer appears for system shut down.

The SM now has to start the diesel generator for standby (Auxiliary) power supply. After stable run of the Diesel generator, the SM on duty has to operate the change over switch for connecting the auxiliary supply to the signalling installation. On resumption of power supply, the Diesel generator shall be stopped by SM on duty after isolating Diesel generator by change over switch. Each time the power supply goes OFF or ON SM on duty shall acknowledge. In case of any audible buzzer in SM's power panel, SM on duty should acknowledge the buzzer by pressing 'buzzer' stop button.

Secondary cell back up through integrated power supply system are provided to prevent possibility of blank signals in case of SEB power supply failure. Whenever SEB power supply fails Secondary cell back up through integrated power supply system will immediately extend power supply to signals thereby preventing blank signals.

Based on the indication shown in the SM's Power Panel SM on duty should start DG for avoiding any case of shut down of power sub system of integrated Power Supply system. Solar Power supply has been provided in the station as standby power supply. If there is any indication on SM's power panel regarding deviation in IPS system call S&T staff.

The SM must, however, maintain the record of the power failures and promptly report the failures to the Section Controller and to the concerned Electrical and S&T maintenance staff.

5.0 **TELECOMMUNICATION FACILITIES:** -

- (i) Telephones 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) Telephone connection with L C Gates at Km 133/11-12 and KM128/12-13 has been provided.

Note: (i) For obtaining line clear, VHF should be used as a last alternative and not as a sole means of communication.

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- (ii) VHF and Walkie Talkie sets should not be used for unnecessary discussions with Loco Pilots, 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.

(For details refer Appendix 'B')

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 Masters of adjoining block station 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 is 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	Sr. TP/TPM-A/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.

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

The SM on duty is responsible to ascertain the clearance of the nominated line between outer most facing points of concerned line as per GR 14.10.

Note : The clearance of the running line for the reception of the train is to be verified by the SM on duty personally by verifying the luminous indication for occupation / clearance of track from panel board. For stopping trains, SM on duty with further obtain complete arrival certificate of train from the Guard before normalizing the block instrument.

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 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 signature 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.

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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 General Rules 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 by the Station Master on duty before granting line clear. He shall ensure: -

- 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.
- iv) The line is clear upto Advanced Starter at that end of station nearest to the expected train. (Up advanced starter signal No. 20 for a DN train and DN advanced starter signal No.10 for an UP train).

(B) OUTLYING SIDING: - NIL.

6.2.1 ANY SPECIAL CONDITIONS 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 authorised by special instruction. When a running line is blocked by a stable 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.

6.2.1.2 RECEPTION OF TRAIN ON BLOCKED LINE: -

In case 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: - Not Applicable.

6.2.1.4 DESPATCH OF TRAINS ON NON-SIGNALLED LINE: - Not Applicable.

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 face of an approaching train is prohibited.
- (ii) Hand/Fly shunting is not permitted.
- (iii) Shunting shall not be permitted at TIG end of the yard unless the engine is leading towards the falling gradient.
- (iv) GR 4.48, SR 4.48.01 and SR 5.20.01(a) & (b) shall also apply to this station.

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6.2.1.7 SPECIAL INSTRUCTIONS:

- i) After any non-signal movement has taken place over point (s) operated by an electric point machine, whether in the facing or trailing direction, the SM on duty shall operate point(s) to normal and reverse setting for the purpose of testing the point. After the SM has ensured that indication regarding the normal and reverse setting is correctly available on the Panel, further movement may be permitted over such point(s).
- ii) Up Outer, Warner and UP Home signals have been placed at the right hand side of the track.
- iii) Material train shall not be allowed to be pushed into the block section LKNA-HSK.

6.3 CONDITIONS FOR TAKING 'OFF' APPROACH SIGNAL: -

(Rule No. GR 3.40 & SRs, GR 3.36, SR 3.36.01 & SR 3.36.02, GR 3.38, GR 3.40 & SR 3.41.01 are 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 up to the end of ORL/Adv.Starter as the case may be.
- ii) To take off the Home signal for admission of a train the adequate distance (Signal over lap) as mentioned below shall be kept clear :-

Sl. No.	Line No.	UP Train		DN Train	
		From	To	From	To
1.	1 st Loop line (Line No.1)	UP Starter Signal No.22	End of ORL or UP Adv. Starter Signal No.20	DN Starter Signal No.8	DN Adv. Starter Signal No.10
2.	Main Line (Line No.2)	UP Starter Signal No.23	UP Adv. Starter Signal No.20	DN Starter Signal No.7	DN Adv. Starter Signal No.10
3.	2 nd Loop line (Line No.3)	UP Starter Signal No.21	UP Adv. Starter Signal No.20	DN Starter Signal No.9	End of ORL or DN Adv. Starter Signal No.10

- ii) **Reception of Trains** - For receiving a train, the SM on duty shall take the following actions serially – He shall: -
 - a) Set the concerned points both facing and trailing to the desired position and observe as per strip indication that the points are set correctly.
 - b) Press the relevant route push button R1/R2/R3 and turn the relevant Home signal thumb switch 3/4/5 or 25/26/27 to the direction of the movement of the Train.
 - c) Turn the relevant Outer signal thumb switch 2 or 28 to the direction of the movement of the train along with the respective route buttons.
 - d) Turn the relevant Warner signal thumb switch 1 or 29 to the direction of the movement of the train along with the respective route buttons for trains running through on main line
- 2) Verify by the arm / back light of reception signals and also the indications for off aspect of Home, outer & Warner signals, that they have been correctly lowered. Since the UP outer and Warner signals are not visible to the SM on duty, arm and light repeaters are provided in the panel for these signals. The SM should verify from the arm and light repeater that these signals have been correctly lowered.
- 3) As soon as the signals are taken off white strip light will appear over the route. As the train occupies the track these strips will turn to red. After the passage of the train as the track is cleared, then red light will turn to white again. When the signal switch is put back to normal position, these lights will get extinguished.

6.3.1 RESPONSIBILITY OF STATION MASTER FOR RESTORATION OF SIGNALS TO 'ON':

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

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

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

Reception of UP train on Line No.1 by setting towards ORL.	AND	Reception of a DN train on line No.3 by setting towards ORL or despatch of another UP train from Line No.2 or 3.
Reception of a DN train on line No.3 by setting towards ORL.	AND	Reception of an UP train on line No.1 by setting towards ORL or despatch of another DN train from line No.1 or 2.

6.4.1 Setting of points during crossing of trains shall be done as per relevant provisions in SR 3.47.01 & 3.51.06. 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 TRAIN:** - (Rule no. GR 4.16 & SR 4.17.01, GR 4.17.02, GR 14.10)
SM on duty shall obtain Complete Arrival Certificate from the guard of the train in the Complete Arrival Register (T/1410) maintained at the station for stopping train. For through passing train the SM on duty shall satisfy himself the complete arrival of the train by verification of the Last Vehicle Indicator vide SR 4.16.05 that the train has arrived complete clearing the fouling mark at both ends.

In case a train passes incomplete, action shall be taken as per SR.4.17.02, the "Train out of Block Section" report shall be withheld to the station in rear until complete arrival Certificate is received from the station in advance supported by a private number. He shall obtain confirmation under exchange of private number about the complete arrival of the train with its last vehicle from the station in advance and subsequent trains may be dispatched. On occasions when motor trolley follows a train the points shall not be operated until the following motor trolley is admitted on the same line. In the event of motor trolley is delayed in the section the SM on duty shall take action in terms of SR.15.25.03 (b) (vi).

a) (i) **STAFF RESPONSIBLE TO VERIFY COMPLETE ARRIVAL:** - SM on duty.

(ii) **MODE OF VERIFICATION:**

When the train has arrived intact and completely within the station yard clearing the fouling marks and the ENTRANCE / EXIT tracks at each end of the crossovers at the reception end, the SM on duty must ensure complete arrival of a stopping train by sending the Train intact arrival Register to the Guard of stopping train, who will certify this fact, with his clear signature in the Register. As soon as the Guard of the Train certifies that the Train has arrived intact and the train is berthed in the station yard clearing the fouling mark at both ends, the SM on duty shall close the Block section in terms of SR 4.17.01 (e) (iii) and BWM 2.07 (6).

b) For through passing trains, both SM&TP on duty shall ascertain the complete arrival of the trains.

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

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

6.5.2 **L.V. VERIFICATION WHEN AXLE COUNTERS FAILS – NA**

6.5.3 **L.V. VERIFICATION WHEN MOTOR TROLLEY FOLLOWING:** -

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

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6.5.4 RECEPTION OF TRAIN ON BLOCKED LINE: -

For admission of a train on a blocked line the SM on duty shall comply with the instruction laid down in GR 5.09 and SRs thereto.

6.6 DESPATCH OF TRAINS: -

Despatch of trains is governed by GR 3.36, 3.38, 3.39, 3.42, 3.43, 5.11, 8.01(a), SRs 3.36.01, 3.36.02(a)(b), 3.36.03, 3.36.04(b), 3.42.02(a)(i) 3.42.04, 5.11.01 and other provisions of G&SR, BWM and Operating Manual.

To despatch a train, the SM on duty, having obtained line clear for that train, shall set the route for the outgoing train correctly and satisfy himself by observing the visual indication on the panel board. He shall suspend all non-isolated shunting, ensure closure of L.C.gates i.e. at KM 128/12-13 for dispatching trains to LKNA-NPD block section and L.C.gates at KM133/11-12, KM 139/8-9 & KM 142/14-15 for dispatching trains to LKNA-HSK block section and then shall take off the concerned route starter and advanced starter signal by operating concerned signal switch and pressing the concerned route button D1 or D2. After observing the 'OFF' aspect of the concerned route starter and advanced starter signal, the Loco Pilot shall start his train.

The Station Master on duty shall watch the safe passage of the train with its last vehicle indicator. When the train passes the Advanced starter signal completely, he shall send the train entering block section signal to the station in advance. If a train worked without Guard or Brake Van, the instructions laid down in Subsidiary Rules 4.23.02 and 4.25.02 shall be followed.

6.6.1 ISSUE OF CAUTION ORDER: -

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

6.6.2 PUTTING BACK SIGNALS TO 'ON' IN CASE OF EMERGENCY: -

If a signal once taken 'Off' for reception/despatch of a train has to be, in an emergency, put back to 'ON', the procedure laid down in General Rules 3.36.02 shall be followed. In case of reception of train, route shall not be altered until the train has come to a stand outside Home signal. In case of departure signal before changing route, the line clear authority is to be withdrawn from the Loco Pilot with a memo, taking his acknowledgement thereof.

6.7 TRAINS RUNNING THROUGH: -

The procedure detailed in Para 6.3, 6.6 above and General Rules 4.17, 4.42 and Subsidiary Rules 3.36.04(b) (i) 3.42.02(a) (i) shall be observed.

The SM is responsible to observe/watch the condition of the vehicles on a train and shall wave green hand signal horizontally as per Subsidiary Rule 4.42.02 until anything wrong is noticed on train. For this purpose the SM on duty shall stand in such a position that a clear view of the passing train is seen by him and that his hand signals can clearly be seen by the Loco Pilot and Guard of the train. He shall depute his points man with hand signal to the other side of the passing train who shall exhibit hand danger signal to draw the attention of the guard/driver of the train in case of observing any unsafe condition/abnormalities in the train. He shall also report to the SM on duty for taking further suitable action in terms of SR 4.42.02(d).

The Station Master on duty is responsible to see that a train passes complete with its last vehicle indicator. If a train passes without last vehicle indicator or its authorized substitute, action shall be taken as per General Rules 4.17 and Subsidiary Rules 4.17.02.

6.8 WORKING IN CASE OF FAILURE: -

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

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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, the SM on duty shall follow the procedure detailed in GR 3.68, 3.72, 3.74 and SRs thereto. In case of defective approach signals, the trains will be piloted in vide SR 3.69.02, 3.69.03 & 3.69.05. In case of defective departure signals, trains will be piloted out vide GR 3.70 & SR 3.70.01 & 3.70.02.
- (ii) The responsibility of correct setting of points, clamping and padlocking of the facing and trailing points for reception and despatch of trains rests with SM on duty himself.
- (iii) When the points, crossings or guard rails are defective/damaged, the Station Master will take action immediately vide GR 3.77, SR 3.77.01 & 3.39.01 (c).
- (v) Irrespective of what is indicated by the position of the switches, route and point whether point indication is available or not available in the panel, 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. In case signal is defective or ceased to work properly, SM shall take action vide GR 3.68 & SRs thereto.
- (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 interlocking becoming defective, the points will be treated as defective. The SM on duty on receipt of this information will immediately introduce non-interlocking system of working at the station. Trains will be Piloted In or Out as the case may be.
- (vii) 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 as per SR 3.51.04 and 3.68.04 and 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 applies, shall be inspected by the Station Master irrespective of the position of the switches in terms of SR 3.68.01(c).

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

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

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

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 reminder collars shall be placed on the concerned point button and route button(s) for the blocked lines vide SR 3.36.03(b). A clear remark in 'RED' ink shall be made immediately in the train signal register 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 REMINDER COLLARS:-

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 even for a short while or during shunting operations, the reminder collars must be placed on concerned point, signal and route switches for the blocked lines on the operating panel by SM on duty.

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, SS/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 in siding or on running lines a stabled load register to be maintained shift wise.

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

7.4 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, 8.13, 8.14, 8.15 and Subsidiary Rules thereto. The Guard/Asst. Guard/SS/SM/TPM on duty is authorized to supervise shunting operation. The staff supervising shunting shall ensure correct setting of points, clamping and pad locking of points.

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: -**

Hand Fly & Loose shunting is not permitted at both ends of the yard.

8.4 **SHUNTING ON SINGLE LINE:-**

SHUNTING ZONE	BLOCK SECTION IS CLEAR	BLOCK SECTION IS OCCUPIED
Shunting within Station section	Permitted.	Not permitted.
Between Last Stop Signal and opposite First Stop Signal	Permitted vide GR 8.11 (a).	Permitted as per GR 8.11 (b)
Beyond opposite First Stop Signal	The concerned section shall be blocked back vide GR 8.13	Not permitted.

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: -**

When shunting is performed in the station yard, shunting authority on prescribed form T/806 shall be issued to the Loco Pilot through the person in charge conducting the shunting with clear instruction and limit up to which shunting is to be performed. While performing shunting relevant provisions of GR 5.14 and SRs thereto are to be followed.

The Ballast siding takes off from 2nd loop line at NPD end and is isolated by D.S at NPD end. The points are operated by arc lever at site. For shunting in Ballast siding, Hand plunger lock fitted at the entrance point is unlocked by the key released from the HKT at the station when switch No. 16 is pressed on the panel. All the reception and despatch signals for 2nd loop cannot be taken off while ballast siding key is released.

9.0 **ABNORMAL CONDITIONS: -**

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

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

In the event of suspension of single line tokenless 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 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 Loco Pilot /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, 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/ Loco Pilot, the SM on duty may resume normal working after exchanging proper messages 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:- NIL

[V] FAILURE OF AXLE COUNTER BLOCK / BPAC: - NA

[VI] FAILURE OF MTRC: - N/A

- (B) **PROCEDURE FOR EMERGENCY OPERATION OF POINTS BY CRANK HANDLE:** - Details of the operation are given in Appendix 'B' of SWR.
- (C) **CERTIFICATION OF CLEARANCE OF TRACK BEFORE CALLING-ON SIGNAL OPERATION IS INITIATED:** - N/A
- (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 concerned signal Maintainer, the JE/SSE (SIG) of the Section and others through a memo as per SR 3.68.04 and document all such transactions.

9.1 TOTAL FAILURE OF COMMUNICATION:-

In the event of total interruption of communication occurring between LKNA-HSK or LKNA-NPD 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 actions shall be taken as per SR 6.02.04. The train which is to be despatched to the affected section will be stopped and the Loco Pilot 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 Loco Pilot /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 SM on duty who shall prepare conditional "Line Clear" ticket (T/G602 or T/H602) for engine to return either light or a train attached to it and conditional "Line Clear" reply message for the enquiry message, giving "Line Clear" for the train waiting at the other end shall be handed over to the Loco Pilot of the light engine. On return trip, the Loco Pilot will come on booked speed subject to any other speed restriction in force.

As soon as any one of the means of communication has been restored the conditional "Line Clear" working of train shall be cancelled when there is no train in the affected block section and messages shall be exchanged supported by Private Number. The section controller shall be informed.

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

9.3 **DESPATCH OF TRAINS UNDER AUTHORITY TO PROCEED WITHOUT LINE CLEAR OR TO ASSIST THE CRIPPLED TRAIN: -**

The Station Master will take action as per SR 6.02.04 for despatch of trains under authority to proceed without line clear. Actions shall be taken to assist the crippled train as per SR 6.02.05.

10 **VISIBILITY TEST OBJECT: -**

The arms of DN Starter signal No.7 and UP Starter signal No. 23 of Main line during day and their lights during night are earmarked to serve as "visibility test object" vide GR. 3.61 (2) (b) (ii).

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

This is mentioned in the Appendix 'E' of the SWR. Essential equipment shall be kept ready on hand in good condition with necessary relief stock.

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

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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 LAKHNA 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 EQUIPMENT OF STATION.
APPENDIX 'F'	--	RULES FOR WORKING OF DK STATIONS, HALTS, IBH, IBS AND OUTLYING SIDINGS.
APPENDIX 'G'	--	WORKING OF TRAINS IN ELECTRIFIED SECTIONS.

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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 INSTRUCTIONS FOR "C" CLASS, ENGG. NON-INTERLOCKED LEVELCROSSING GATE AT KM 133/11-12 (No.RV-94) BETWEEN LKNA-HSK STATIONS.

1. GENERAL INSTRUCTIONS: -

1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:

1.	Number of Level Crossing Gate: -	RV-94.
2.	Engineering or Traffic Gate: -	Engineering.
3.	Under control of Station Master/Permanent Way Inspector:-	PWI.
4.	Location KM	133.746 (133/11-12)
5.	At. Station
6.	In between stations:	LKNA-HSK.
7.	BG/MG/NG	BG.
8.	Single line/Double line/Multiple line	Single Line
9.	Normal Position	Closed to the road traffic
10.	Interlocked/Non Interlocked	Non-interlocked
11.	Means of interlocking	NIL
12.	Provision of Gate signal at Kms	i) Up line NIL ii) Dn line NIL
13.	Signalling arrangement	NIL.
14.	Means of Communication – Telephone/Bell etc	Magneto Telephone Communication from Gate Goomty with SM/ LKNA.
15.	Width of level crossing Gate	7.5 Meters
16.	Type of road. (NH/SH/Others)	Others (Village.)
17.	Name of Road:	LKNA-Kumna Road
18.	Metaled/Non Metaled	Metaled
19.	Approach Road:	Metaled
20.	Width of the road:	5.5 m
21.	Angle of road crossing (In case of the skew Gates)	Nil.
22.	Road gradient (If any)	i) North/East side:- 1 in 30 ii) South/West side:- 1 in 50.
23.	Road alignment (Straight/Curve): -	i) North/East side. Straight ii) South/West side. Straight
24.	Provision of height gauges	Not Provided
25.	Type of Barriers	Winch Operated Lifting barriers
26.	Length of check rails	9.50 Meter
27.	Road surface in between Level X-ings Gates	CCB.
28.	Length of speed breakers: -	5.5 Meters
29.	Road signs:	Provided
30.	Speed breaker indication board	Provided
31.	TVU:	9520 on 03/2013
32.	Census next due on	03/2016
33.	Demarcation for placement of Detonators	Displayed.
34.	No. of Gateman working	02.

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35. Nearest Railway Medical Assistance Mahasamund
36. Nearest Private Medical Assistance available (if any) Lakhna
37. List of equipment available Yes//No Yes.

1.2. **EQUIPMENT:**
ITEMS

QUANTITY/NUMBERS

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

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.

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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 nighttime, gateman shall hold lighted hand signal lamp with white light facing the track.
- iv) He shall keep the whistle slung around his neck from a cord.

3. **ROUTINE DUTIES OF GATEMAN:**

- i) Gateman shall ensure that red banner flag by day and red light by night is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- ii) Gateman shall ensure that all gate lamps and hand signal lamps are lighted and kept burning continuously from sunset to sunrise.
- iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless his reliever arrives and takes over charge from him. However, if it is necessary to leave the gate in an emergency, he must close and lock the gates against road traffic, before leaving the gate.
- iv) Except where otherwise prescribed under special instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, any vehicle/wagons /trains/battery/box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- vi) Gateman shall also be prepared to repeat any signal which guard may give to 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 Station Master, Gangmate or Permanent Way Inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- ix) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- x) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- xi) Gateman shall work the gate as per gate working instructions and remain well conversant with these instructions.
- xii) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.

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- xiii) Gateman shall see that the channel for the flange of the wheel is kept clear.
- xiv) Gateman must keep the road surface well-watered and rammed in case of unmetalled roads.
- xv) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- xvi) Gateman shall prevent tress passing by persons or cattle to the maximum extent.

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

In case gateman observes 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 station Master, to take appropriate action, under exchange of private number.
- iv) In case of train parting, gateman shall not show stop hand signal but shall show prescribed signal for train parting.
- v) He shall endeavor to attract the attention of the 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 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/LKNA on duty, regarding the defects/obstructions at the gate, under exchange of private number.
- iii) If there is no response from the Station Master/LKNA after three attempts, he shall first protect the gate and then inform on phone.

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

- i) Gateman shall plant a red banner flag by day and a red light by night 5 meters away on posts duly provided for the purpose. He shall first protect the direction from which a train is expected to arrive first.
- ii) Then he will similarly plant the other red banner flag by day and red light by night towards the other direction 5 meters away from the site of obstruction.
- iii) Gateman shall then proceed to protect the gate along with detonators 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 Station Master/LKNA and Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.

1.5 **ENGINEERING ITEMS** : Visibility :-

Direction	Side	Visibility Distance
UP	Right	900 m.
	Left	900 m.
DN	Right	1000m
	Left	1000m

- i) Speed Breaker: - Speed Breakers of approved design are provided on either side of this Level Crossing gate.
- ii) Periodical Census of traffic has been taken and the latest TVU is 9520 on 03/2013.

1.6 **SPECIAL INSTRUCTIONS:**

- 1. **MODE OF OPERATION:** This is a Manned & Non-interlocked Engineering L.C.Gate situated at Km 133/11-12 in between LKNA-HSK Stations. This gate is provided with winch operated coupled lifting barriers and the gate is closed/opened by the gateman manually by winch operation. Telephone communication is provided between the L C. gate lodge with SM office of LKNA station. The level crossing gate is normally kept closed and locked against road traffic. The Station Master/ LKNA shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of

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private number. When the gateman desires to open the gate for passage of road traffic he should ensure that no PN has been exchanged with the Station Master/ LKNA for the passage of train or the whole of the train with last vehicle indicator has passed over the level crossing gate for which the gateman has exchanged private number with the SM/ LKNA. Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate.

2. **EXCHANGE OF PRIVATE NUMBERS.**

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

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

3. **FAILURE OF TELEPHONIC COMMUNICATION:**

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

1. SM/ LKNA shall serve a caution order to the Loco pilot and the Guard of every train proceeding into the affected section giving the number and kilometreage of the level crossing and directing the loco pilot:-

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- (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.
2. (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 / LKNA as the case may be of the fact using the telephone provided at the gate. The Station Master/ LKNA 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.
3. (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/ LKNA 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/ LKNA 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/HSK indicating the condition of the gateman, gate and telephone.
- (iv) The Station Master/ LKNA on receipt of the Loco Pilot's report regarding absence or unfitness of the gateman, shall advise the station Master/HSK, 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.
4. Before giving line clear to a train, the Station Master/ LKNA shall advise the Station Master/HSK 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 (1).
5. 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/ LKNA, 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) SM on duty/LKNA shall issue caution order to the Loco Pilot of departing train.
- vi) SM/LKNA shall also advise the Station Master/HSK at the despatching end, under exchange of private number, to similarly issue a caution order to the Loco Pilot before despatching a train in the block section from his end.
- vii) SM/LKNA 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/LKNA on duty regarding the defects/obstruction at the Gate under exchange of private number.
- iii) Stationmaster at LKNA 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 /LKNA after two or three attempts, he shall first protect the Gate and then inform him on phone.
- v) Gateman shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the Gate as stipulated in General Instruction for duties of Gateman under item No.1.4. (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/LKNA 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/LKNA shall also inform the station Master/HSK, under exchange of private number, asking him not to despatch any train into the block section from his end, until the track has been cleared of all obstruction.
- ix) After the track has been cleared of all obstructions the Gateman shall inform the Station Master/LKNA 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/LKNA 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/LKNA will adopt the procedure given under item No.5 above. If the obstruction fouls the level Crossing Gate, Gateman must keep the Gates closed against road traffic till the track is cleared of obstructions.

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2.0 GATE WORKING INSTRUCTIONS FOR "B-1" CLASS ENGG. NON-INTERLOCKED LEVEL CROSSING GATE AT KM 142/14-15 (No.RV-105) BETWEEN LKNA-HSK STATIONS.**2.1 GENERAL INSTRUCTIONS: -****2.1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:**

1.	Number of Level Crossing Gate: -	RV-105.
2.	Engineering or Traffic Gate: -	Engineering.
3.	Under control of Station Master/PWI:	PWI.
4.	Location KM	142/14-15
5.	At. Station: -	-----
6.	In between stations: -	LKNA-HSK.
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.	Signalling arrangement: -	NIL.
14.	Means of Communication:-	Telephone Communication from Gate Goomty with SM/ HSK.
15.	Width of level crossing Gate: -	5.5 Meters.
16.	Type of road. (NH/SH/Others): -	others (Village.)
17.	Name of Road: -	NPD-BLGR 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)	90° .
22.	Road gradient (If any)	(i) North/East side. - . (ii) South/West side. -
23.	Road alignment (Straight/Curve): -	(ii) North/East side- Straight. (ii) South/West side- Straight.
24.	Provision of height gauges: -	Not Provided
25.	Type of Barriers: -	winch Operated Lifting barriers.
26.	Length of check rails: -	9.5 Meter.
27.	Road surface in between Level Xings Gates: -	CCB.
28.	Length of speed breakers: -	7.5 Meters.
29.	Road signs: -	Available
30.	Speed breaker indication board: -	provided
31.	TVU: -	24444 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: -	Titlagarh.
36.	Nearest Private Medical Assistance available (if any)HSK.	
37.	List of equipment available Yes//No: -	yes.

2.2. **EQUIPMENT:**
ITEMS

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

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

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

- i) He shall take prompt action to warn the driver/guard of the passing train by showing red flag by day and red light by night.
- ii) He shall simultaneously try to draw the attention of the Loco Pilot /guard by whistling continuously, shouting, gesticulating, and throwing ballast on the brake van or by any other means.
- iii) If driver/guard fails to take notice, Gateman shall immediately inform the SM on duty to take appropriate action, under exchange of private number.
- iv) In case of train parting, Gateman shall not show stop hand signal but shall show prescribed signal for train parting.
- v) He shall endeavor to attract the attention of the 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 after three attempts, he shall first protect the Gate and then inform on phone.
- a) The Gateman shall protect the line as under :-**
- i) Gateman shall plant a red banner flag by day and a red light by night 5 meters away on posts duly provided for the purpose. He shall first protect the direction from which a train is expected to arrive first.
 - ii) Then he will similarly plant the other red banner flag by day and red light by night towards the other direction 5 meters away from the site of obstruction.
 - iii) Gateman shall then proceed to protect the Gate along with detonators 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 from which a train is expected to arrive first, to a point 600m. 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 L.C. 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/HSK & PWI regarding the particulars & obstructions at the level crossing Gate, through messenger or other means available.

2.5 SPECIAL INSTRUCTIONS:

1. MODE OF OPERATION:

This is a Non-interlocked 'C' Class Engineering L.C.Gate situated at Km 142/14-15 between HSK-LKNA 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 communication is provided between the L C. gate lodge and SM's office of HSK station. The level crossing gate is normally kept open to road traffic and closed against road traffic for passage of trains. The gateman shall be authorized 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 /HSK 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 driver.

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- 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 /HSK will take off the departure signals after getting the private number of the gateman.
 - v) The gateman shall be authorized 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 /LKNA at the despatching end shall advise the Station Master /HSK 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 /HSK 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 /HSK.
 - v) Only then shall the Station Master /HSK at the receiving end grant line clear to the Station Master /LKNA at the despatching end.
 - vi) The gateman shall be authorized 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 TELEPHONE COMMUNICATION:**

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

- i) The station Master at the dispatching end shall then issue a caution order to the Loco Pilot before dispatching a train in the block section from his end.
- ii) The caution order should advise the Loco Pilot to whistle continuously and approach the gate cautiously.
- iii) The Loco Pilot should be instructed to pass the gate cautiously, on being hand signaled by the gateman. If hand signal is not seen, Loco Pilot should be prepared to stop short of the gate and depute his Assistant Loco Pilot will give the all right signal and if the gate is not closed the Assistant Loco Pilot must close the gate and then give the all right signal. In the absence of the Assistant Loco Pilot, the driver may take the assistance of the Assistant Guard/Guard and shall stop clear of the level crossing to pick up the Assistant Loco Pilot who will reopen the gate for passage of the road traffic.
- iv) In case of an approaching train, the Station Master/HSK shall advise the Station Master/LKNA dispatching end, under exchange of private number that the telephone at the gate has failed.

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- v) The Station Master at the despatching end shall then issue a caution order to the Loco Pilot before despatching a train in the block section from his end.
- vi) Station Master/HSK shall also advise to the gateman through Gangman/Patrolman or driver of the first train that the telephone has become defective.
- vii) He should also advise S&T staff responsible for maintenance of the telephone rectify the defect at the earliest.
- viii) Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection /fit memo for the same.

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/HSK, 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 at that end first from which the train is approaching and then at the other end.
- (iii) Gateman shall secure the gate against road traffic by means of safety chains and padlocks.
- (iv) After securing the gate against road traffic, he shall show green hand signal flag by day and green light by night to the driver of an approaching train.
- (v) Station Master on duty/HSK shall issue caution order to the Loco Pilot of departing train.
- (vi) He shall also advise the Station master/LKNA at the despatching end, under exchange of private number, to similarly issue a caution order to the Loco Pilot before despatching a train in the block section from his end.
- (vii) He 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/ on duty/HSK, regarding the defects/obstruction at the gate, under exchange of private number.
- iii) Stationmaster on duty shall be advised to put the reception/departure signals back to 'ON' position, if taken 'OFF' for a train.
- iv) If there is no response from the Station Master /HSK after two or three attempts, he shall first protect the gate and then inform on phone.
- v) Gateman shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in General Instruction for duties of gateman under item No.2.4. (5).

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- 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 Loco Pilot, owner and reply these details to the station Master/HSK who shall not start 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/HSK shall also inform the station Master/LKNA at the despatching end, under exchange of private number, asking him not to despatch any train in the block section from his end, until the track has been clear of all obstruction.
- ix) After the track has been cleared of all obstructions the gateman shall inform the Station Master/HSK accordingly, under exchange of private number.
- x) Station Master/HSK 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 they're after exhibit green hand signal, if the gate is not obstructed.
- xii) Station Master/HSK shall advise maintenance staff responsible for maintaining the lifting barriers to repair the same at the earliest.
- xiii) Normal working will be resumed only after maintenance staffs 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/HSK will adopt the procedure given under item No.5 above. If the obstruction fouls the level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstructions.

3.0 GATE WORKING INSTRUCTIONS OF "C" CLASS ENGG. NON-INTERLOCKED LEVEL CROSSING GATE (NO.-RV-90) AT KM 128/12-13 BETWEEN LKNA & NPD STATIONS.

The gate working rules is to be read in conjunction with GR and SR Rules & P. Way Manual. These rules do not in any way supersede any rule in the above books.

3.1 GENERAL INSTRUCTIONS: -

3.1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:

1. Number of Level Crossing Gate: -	RV-90.
2. Engineering or Traffic Gate: -	Engineering.
3. Under control of Station Master/Permanent Way Inspector:-	PWI.
4. Location KM	128/12-13
5. At. Station
6. In between stations:	LKNA-NPD
7. BG/MG/NG	BG.
8. Single line/Double line/Multiple line	Single Line
9. Normal Position	Closed to the road traffic
10. Interlocked/Non Interlocked	Non-interlocked
11. Means of interlocking	NIL
12. Provision of Gate signal at Kms	i)Up line NIL ii)Dn line NIL
13. Signalling arrangement	NIL.
14. Means of Communication – Telephone/Bell etc	Magneto Telephone Communication from Gate Goomty with SM/ LKNA.
15. Width of level crossing Gate	7.5 Meters
16. Type of road. (NH/SH/Others)	Others (Village.)
17. Name of Road:	Village Road
18. Metaled/Non Metaled	Concrete Blocks
19. Approach Road:	Non-Metaled
20. Width of the road:	5.50 m
21. Angle of road crossing (In case of the skew Gates)	Nil.
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 check rails	9.50 Meter
27. Road surface in between Level X-ings Gates	CC Blocks.
28. Length of speed breakers: -	7.5 Meters
29. Road signs:	Provided
30. Speed breaker indication board	Provided
31. TVU:	8920 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	Kantabanji
36. Nearest Private Medical Assistance available (if any)	Lakhna
37. List of equipment available Yes//No	Yes.

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3.2. **EQUIPMENT:**
ITEMS

QUANTITY/NUMBERS

1.	Hand signal Lamp /Tri Colour Torch	3(5 on Quadruple/Line or twin single line)
2.	Hand signal Flag Green	1 mounted on sticks
3.	Hand Signal Flag Red.	3 (6 on Quadruple/line or Twin single line and 7 in case Hexable section mounted on sticks)
4.	Banner Flag Red	3 (5 on Quadruple/Line or twin single line)
5.	Posts for exhibiting red banner flag	2 (4 on Q/Twin single line and 5 on Hexable section)
6.	Spare chains with padlocks	2 with stop mark
7.	Detonators	10 in tin case
8.	Gate Lamps	2
9.	Tommy Bar	1
10.	Motor Pan	1
11.	Spade/Fowrah	1
12.	Rammer	1 (in case of asphalted road this may not be provided)
13.	Pick Axe	1 (in case of asphalted road this may not be provided)
14.	Tin case for flags	1
15.	Can for oil	1
16.	Water pot/Bucket	1
17.	Canister for Muster Roll	1
19	Set of spare spectacles of Gateman Wearing glasses.	1
20.	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 Gate boom lock.	2

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

- i) Gate working instructions in Hindi / English.
- ii) Gate working instructions in local vernacular language.
- iii) 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.

3.4 **DUTIES OF GATEMAN:**

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

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

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

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

3. **ROUTINE DUTIES OF GATEMAN:**

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

4. ACTION IN CASE OF UNUSUAL OCCURRENCE OF TRAIN.

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

- i) He shall take prompt action to warn the 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, 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 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/LKNA on duty, regarding the defects/obstructions at the gate, under exchange of private number.
- iii) If there is no response from the Station Master/LKNA after three attempts, he shall first protect the gate and then inform on phone.

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

- i) Gateman shall plant a red banner flag by day and a red light by night 5 meters away on posts duly provided for the purpose. He shall first protect the direction from which a train is expected to arrive first.
- ii) Then he will similarly plant the other red banner flag by day and red light by night towards the other direction 5 meters away from the site of obstruction.
- iii) Gateman shall then proceed to protect the gate along with detonators 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.

- ix) 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 Station Master/LKNA and Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.

3.5 ENGINEERING ITEMS : Visibility :-

Direction	Side	Visibility Distance
UP	Right	280 m.
	Left	280 m.
DN	Right	600m
	Left	600m

- iii) Speed Breaker: - Speed Breakers of approved design are provided on either side of this Level Crossing gate.
- iv) Periodical Census of traffic has been taken and the latest TVU is 8920 on 03/2013.

3.6 SPECIAL INSTRUCTIONS:

1. **MODE OF OPERATION:** This is a Manned & Non-interlocked Engineering L.C.Gate situated at Km 128/12-13 in between LKNA-NPD Stations. This gate is provided with winch operated coupled lifting barriers and the gate is closed/opened by the gateman manually by winch operation. Telephone communication is provided between the L C. gate lodge with SM office of LKNA station. The level crossing gate is normally kept closed and locked against road traffic. The Station Master/ LKNA shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of private number. When the gateman desires to open the gate for passage of road traffic he should ensure that no PN has been exchanged with the Station Master/ LKNA for the passage of train or the whole of the train with last vehicle indicator has passed over the level crossing gate for which the gateman has exchanged private number with the SM/ LKNA. Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate.

2. **EXCHANGE OF PRIVATE NUMBERS.**

- (i) The normal position of level crossing gate being "Closed to Road Traffic" it should always be in closed condition against road traffic, except when, it is opened for passage of road traffic over the level crossing, subject to conditions prescribed below.
- (ii) The Station Master LKNA before permitting each train to enter into the block section, shall ask Gateman on the telephone by giving a Private Number whether, gate is closed against road traffic for the passage of train. The Gateman only after ensuring that the gate is actually closed and locked against road traffic shall give a Private Number to the Station Master / LKNA in assurance of gate being closed and locked against road traffic.
- (iii) The Station Master / LKNA shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of private number.

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- (v) When the gateman desires to open the gate for passage of road traffic he should ensure that:
- (1) He has not exchanged any private number with the SM / LKNA as per (ii) above.
 - (2) If he has exchanged private number with the Station Master / LKNA, the whole of the train with last vehicle indicator has passed over the level crossing gate and Station Master / LKNA has not exchanged private number with him for any other movement immediately in rear of the train.
Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate. Then he shall open the gate for passing the road traffic, keeping a red flag / red hand signal lamp ready in his hand to stop approaching train if any.
- (vi) In case the Gateman is not responding on the telephone or in case the telephone becomes defective or private number is not received from the Gateman, the Station Master/ LKNA shall adhere to the procedure prescribed in SR 16.03.04.
- (vii) In the event of failure of telephone, if the gate is required to be opened for the passage of road traffic, the gateman shall look out in both directions before opening the gate to ensure that no train is approaching from either end. He shall then plant a banner flag during day and a hand signal lamp with the red light during night, 5 meters away from the gate on the track on either side. He will thereafter, open the gate for passing the road traffic keeping a red flag / red hand signal lamp ready in his hand to stop approaching train if any.

3. **FAILURE OF TELEPHONIC COMMUNICATION:**

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

1. SM/ LKNA shall serve a caution order to the Loco pilot and the Guard of every train proceeding into the affected section giving the number and kilometreage of the level crossing and directing the loco pilot:-
 - (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.
2. (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 / LKNA as the case may be of the fact using the telephone provided at the gate. The Station Master/ LKNA 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.
3. (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/ LKNA 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/ LKNA 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/NPD indicating the condition of the gateman, gate and telephone.
 - (iv) The Station Master/ LKNA on receipt of the Loco Pilot's report regarding absence or unfitness of the gateman, shall advise the station Master/NPD, 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.
 4. Before giving line clear to a train, the Station Master/ LKNA shall advise the Station Master/NPD 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).
 5. 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/ LKNA, 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) SM on duty/LKNA shall issue caution order to the Loco Pilot of departing train.
 - vi) SM/LKNA shall also advise the Station Master/NPD at the despatching end, under exchange of private number, to similarly issue a caution order to the Loco Pilot before despatching a train in the block section from his end.
 - vii) SM/LKNA 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/LKNA on duty regarding the defects/obstruction at the Gate under exchange of private number.
 - iii) Stationmaster at LKNA 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 /LKNA after two or three attempts, he shall first protect the Gate and then inform him on phone.
 - v) Gateman shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the Gate as stipulated in General Instruction for duties of Gateman under item No.3.4. (5).

- vi) Thereafter he shall protect the Gate from the other direction also.
 - vii) He shall note down the particulars of the road vehicle, name of the Driver, owner and relay these details to the Station Master/LKNA 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/LKNA shall also inform the station Master/NPD, under exchange of private number, asking him not to despatch any train into the block section from his end, until the track has been cleared of all obstruction.
 - ix) After the track has been cleared of all obstructions the Gateman shall inform the Station Master/LKNA 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/LKNA 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/LKNA will adopt the procedure given under item No.5 above. If the obstruction fouls the level Crossing Gate, Gateman must keep the Gates closed against road traffic till the track is cleared of obstructions.

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

A panel board has been installed in the SM's Office. The panel depicts the station yard layout .It is provided with point buttons, point indications, signal switches etc., as detailed below:

1.2 POINT PUSH BUTTONS:-

Two types of push buttons are provided (i) Common, (ii) Individual for operation of any point. The concerned individual point and the concerned common push buttons are to be pressed simultaneously.

i) **COMMON PUSH BUTTONS:** 2 Nos. One for NORMAL and the other for REVERSE operation of points.

ii) Common Trans and Release button for operation of Crank Handle & Ballast siding.

iii) **INDIVIDUAL POINT PUSH BUTTONS:** 5 Nos., No. 13 & 14 for operating facing point No. 13 & 14 at TIG end. No.18 &19 for operating facing point No-18 &19 at Raipur end and No.16 for controlling entry /exit to the Ballast siding. When the push button No. 16 is pressed along with common trans button, it releases the Keys from RKT for Ballast siding point.

1.3 Signal switches & the operation of the signals are controlled by two position thumb switches. In order to take off any signal, the concerned thumb switch shall be turned towards the direction of the movement of the trains and simultaneously the relevant route push button should be pressed.

No. of switches	Description
1.	DN Warner
2.	DN Outer
3.	DN Main Home
4.	DN 1st Loop Home
5	DN 2nd Loop Home
7	DN Main Starter
8	DN 1 st Loop Starter
9.	DN 2 nd Loop Starter
10	DN Advanced Starter
20	UP Advanced Starter
21	UP 2 nd Loop Starter
22	UP 1st Loop Starter
23	UP Main Starter
25	UP 2 nd Loop Home
26	UP 1 st Loop Home
27	UP Main Home
28	UP Outer
29	UP Warner

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1.4 ROUTE PUSH BUTTONS: -

There are 5 (FIVE) route push buttons on the panel which are to be operated as below for operation & despatch of trains:--

1. R-1 for receiving trains on 1st loop line.
2. R-2 for receiving trains on main line.
3. R-3 for receiving trains on 2nd loop line.
4. D-1 at VZM end of the panel, for despatch of trains towards VZM.
5. D-2 at R end of panel, for despatch of trains towards Raipur.

1.5 INDICATIONS: Indications are provided by strip / dot lights.**i) POINT INDICATIONS: -**

The setting of the point is indicated on the panel by the lighting up of strip light. Individual lights are provided for normal and reverse setting of the points. When the points are locked and cannot be operated, a red light appears over the point push button on the panel.

ii) SIGNAL INDICATORS: -

Indications have been provided on the panel to show the aspects of Outers and Warner signals and Off aspect of Home signal. After operation of signal switches, the SM on duty shall physically verify the lowering of the concerned signal by the 'off' aspect of signal arm during day and back light during night and also the arm and light repeater for the Home, Outer and Warner.

iii) TRACK INDICATIONS: -

No indication is provided in normal condition of the panel. When the points are set and the concerned route button is operated white strip lights appear on the panel illuminating the route set. As the train occupies the route, red strip lights appear on the occupied route and turn to white once again as the track is cleared. The route lights extinguish only when the signal switch is normalised. Overlap route indication also disappears after lapse of 120 seconds of complete arrival of train on berthing track

1.6 SM'S KEY: -

It is provided on the control panel for locking up the panel in the last operated position. This is to prevent unauthorized operation of the panel. The key shall be in the personal custody of the SM on duty. Provision, however, exists for putting back a signal to danger, in case of emergency, even if the panel is locked.

1.7 BALLAST SIDING:-

The Ballast siding takes off from 2nd loop line at NPD end and is isolated by D.S at NPD end. The points are operated by arc lever at site. Hand plunger lock fitted at the entrance point is unlocked by the key released from the RKT at the station when switch No. 16 is pressed along with trans button. All the reception and despatch signals for 2nd loop line cannot be taken off when cripple siding key has been released.

2.0 RKT FOR SIDING OPERATION: -

There is one RKT provided in the SM's room for Ballast siding key and the key is locked in the RKT normally. The key can be released only when the concerned siding point push button No 16 and common trans button is pressed. Once the key is out from the RKT, the reception and despatch signals for Line No.3 are held locked in their normal position.

3.0 **CRANK HANDLE:** -

All facing points are fitted with electric point machines. When the point operation from panel has failed, points numbers 13 & 14 and 18 & 19 should be crank handled with the crank handles CH-1 & CH-2 respectively provided in SM's office. The crank handle is released by pressing the push button provided for its use; CH-1 is released by push button No-31 & CH-2 is released by push button No-30 provided in the panel board. The working procedure is detailed in para-7.0.

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

UP and DN reception and despatch signals are fitted with electric motors and will be replaced to 'ON' automatically after the passage of a train through track circuits ahead of the signals.

- a) The Home and advanced Starter signals are interlocked with the respective block instruments as indicated below:
- b) UP and down Home signals are electrically interlocked with respective block instruments so that before the train on line to LINE CLOSED position of the block instrument is operated, the corresponding Home signals must be in ON position and their thumb switches should be normal position. However, the Home signals can be taken off in case of failure of the block instruments.
- c) Both UP and down advanced Starters are electrically interlocked with respective block instruments so that the same cannot be taken off unless the concerned block instrument is in line clear position (TGT).
- d) When the block instrument is under suspension, the authority to proceed will be paper line clear ticket.
- e) Signal once taken off may be put back to danger in case of emergency by turning the concerned signal switch to the center position but the route shall not be altered till the driver is informed in writing and his acknowledgement is obtained.

4.1 **PANEL BOARD INDICATION:** -

- a) Unless the indication on the panel board shows that main/loop is clear even with other conditions satisfied the operation of the thumb switch for the UP and Down Home signals by the SM on duty will not permit the UP and DN Home signals to be taken off.
- b) UP and down Warner, Outer, Home, Starter & Adv. Starter signals are fitted with electrical motors and will be replaced to 'ON' automatically after passage of a train through track circuits provided in rear of the signals.

5.0 **AXLE COUNTER:** -Not applicable

5.1 **FAILURE OF AXLE COUNTER:** - Not applicable

- ### 6.0 **TRACK CIRCUIT:-** Track circuits are provided at different places in the yard as shown in the panel. The different track circuits for signal replacement are namely: 2T, 20T, 3AT, 3T, 12BT, 28T, 10T, 27AT, 27T. The point zone track circuits are 13AT, 13BT, 14AT, 14BT, 18AT, 18BT, 19AT, 19BT. The berthing track circuits are MLT1, MLT2 on main line, L1T1, and L1T2 on line No. 1 and L2T1, L2T2 on line No. 3.

UP and DN Warner, Outer, Home, Starter & Adv. Starter signals are fitted with electrical motors and will be replaced to 'ON' automatically after passage of a train through track circuits provided in rear of the signals

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6.1 **EMERGENCY ROUTE RELEASE OPERATION:**

This panel interlocking is based on the principle of 'DEAD APPROACH LOCKING'. As such, when a route is set and signal is taken 'OFF' on the route, the route gets locked. Normally the route is released by the passage of the train over the route.

When it becomes necessary to alter the route after the signal has been taken 'OFF' vide SR 3.36.02(a) or route is not released after arrival of a train, the concerned signal must be put back to danger by normalising the concerned signal switch. Then, the emergency route release button positioned on the top of the panel to be pressed. A white light will be lit indicating that the timer is working. After a lapse of 120 seconds the white light along with the white strip of light will disappear suggesting that the route has been released. In case the route illumination (white strip lights) does not disappear, it suggests that the route is not released/cancelled. In such case the concerned S&T staff should be advised immediately to release the route by rectifying the fault.

A veeder counter has been provided to register the number of operations made for emergency cancellation of route. The counter number will register the next higher number after each emergency route cancellation operation. All such operations & the new number should be recorded in the station diary, counter register & in the train signal register. The Station Master must record the last number registered on the counter while taking over/handing over duty.

NB:- Route cannot be released through emergency route release operation when a track circuit on the route is in occupied condition.

6.2 **EMERGENCY CRANK HANDLE OPERATION:**

When a route is not released after passage of a train or the Crank handle is in locked condition due to any failure, the "CH key" can also be extracted from the RKT by applying emergency Crank Handle operation. The procedure is same for transmitting the CH key as in normal CH key transmission. In key "in" and lock condition, the CH button and group trans button are pressed simultaneously. After 120 seconds the lock indication disappears and the needle of the RKT deflects indicating that the key is free to extract. At this position the key can be extracted from the RKT in SM office. The procedure for receiving the CH key is same like the normal operation of Crank handle.

7.0 **PROCEDURE TO BE FOLLOWED IN CASE OF FAILURE OF POINTS AND USE OF CRANK HANDLE.**

- a) Whenever a point becomes defective any movements over the point on the running lines should be made after clamping and padlocking both the facing and trailing points by SM on duty personally for all trains at this station.

In case of failure of a point and if the point cannot be operated from the panel, the crank handle key which is interlocked with the system is to be extracted and the following procedure has to be observed.

Two emergency crank handle keys are provided in SM's office for motor operated points 18, 19 (UP side) and 13, 14 (DN side) respectively. These are mechanically reverted to the keys of RKTs provided in the SMs office. The SM on duty in case of point motor failure shall press the control push buttons 30/31 along with common trans button which will release keys 30/31 from RKTs provided in SM's room. Key 30 shall be carried to UP side points and key 31 shall be carried to DN side points and get the point set to desired position by inserting crank handle on the motor. All the signals will be locked in the normal position as soon as any one key is released from the RKT provided in the SM's office. After the work is over, the key will be carried back to SM office. The SM on duty should verify from the visual indication available on the panel that the points are set to the desired position (Normal or Reverse) and there after return the crank handle received by him in the appropriate RKT and release the same by pressing CH button and common release button. The SM on duty after ensuring personally, the correct setting of defective points and also after verifying the correct visual indications available on the panel, can take off the concerned signals for movement of the train over the said points. If even after complying with the instructions contained in the above paras by the SM on duty, the correct setting of the defective points to the desired position is not indicated in the visual indication on panel, the train shall be piloted in or out in terms of SRs 3.69.01, 3.69.02, 3.69.03, 3.70.01 and 3.70.02.

When the crank handle is removed from RKT for operation of the defective motor operated points, the responsibility for its safe custody rests with the SM on duty till it is replaced back in RKT.

The cases of failure of motor operated points should be promptly reported to the concerned ESM/Signal Inspector for immediate rectification.

Whenever an emergency crank handle is required to be used by a signal official for maintenance work or attending to failure, the signal official will give a disconnection memo to the SM on duty and after making necessary entries in the emergency crank handle register, the SM on duty will obtain the acknowledgement of the signal official in the Emergency crank handle register and then hand over to him the emergency crank handle for the points concerned. The concerned points will be treated as defective till the emergency crank handle is returned back to SM on duty.

Before parting with the emergency crank handle either for attending failures or for maintenance work by Signal maintenance officials, the SM on duty will ensure that the reception and departure signals put back to 'ON' position. The points for the affected lines should be treated as non-interlocked and the SM on duty is responsible for introduction of non-interlocked working and the trains will be piloted 'IN' & 'OUT' duly clamping and padlocking the points over which the train is to pass, as per GR 3.69 and 3.70 with relevant SRs. The SM on duty will be personally responsible for setting and locking of points for reception or despatch of all trains.

The emergency crank handle register is to be maintained in the following proforma by

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the SM on duty where in the particulars of the use of the emergency crank handle must be recorded.

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(b) EMERGENCY CRANK HANDLE REGISTER

1. Date.
2. Point No. which failed or required to be tested.
3. Time of failure.
4. Disconnection memo No. received from S&T staff
5. Signature of SS/SM/Signal Official to whom the emergency crank handle is handed over.
6. Time emergency crank handle is sent out.
7. Individual point Nos. and line No. nominated for admission.
8. Train No. to be admitted or despatched.
9. Signature of the SM to ensure correct setting, clamping and padlocking of the points.
10. Date and time of fault rectified.
11. Time emergency crank handle received back by SM on duty.
12. Signature and designation of the Signal Official who rectified the fault.

8.0 LIGHTING OF SIGNALS AND THEIR MAINTENANCE: -

- 8.1 The SM on duty must ensure that all the signal lights are lighted and extinguished according to the timings given in the GR 3.49 and SRs thereto.
- 8.2 If any signal bulb fused, the SM on duty should immediately intimate the sectional ESM for the rectification and record the fact in the failure register.
- 8.3 The SM on duty at 00 hrs (second night) must also ensure that all signal lights are burning properly. This fact must be recorded in the 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 Dt.3.5.82.

9.0 CORRECTING TIME IN STATION CLOCK:-

The SM shall set the time in 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.

10.0 POWER SUPPLY:

Normal power supply given to the station is local power supply (230 volts – 50 Hz) and the standby power supply is given to the station by the diesel generator.

- 10.1 Maintenance of power supply, power failures – Reporting such failures: - The signalling and interlocking installations works on normal local power supply whenever power supply fails, the SM on duty has to operate the change over switch (provided in the SM's office) connecting the power supply from the healthy source to the installations i.e. diesel generator.
- 10.2 Whenever the diesel generator is working, it should be ensured that the diesel generator is not used for more than eight hours at a stretch and as far as possible when there are no trains, the generator should not be run. This will not only conserve fuel but also avoid strain on the generator.
- 10.3 Unless the generator has attained the full speed and steady voltage not less than 210V indicating on the voltmeter fixed on the generator, the SM on duty should not operate the change-over switch to feed the installations. The signal Inspector should be advised to keep a

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watch on the adequacy of fuel supply to the station.

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- 10.4 The SM must, however, maintain the record of the power failures in the power failure register and promptly report the failures to the Section Controller and to the concerned Electrical and S&T maintenance staff.

11.0 **LOCKING OF RELAY ROOM: -**

The Relay room should be kept locked with two separate locks, the arrangement should be such that one key is kept with the SM on duty and the other with the signal maintainer. Whenever required, the key in the custody of Station Master shall be given to the signal staff with proper acknowledgement in the Relay room key register. After completion of work, the signal staff shall return the key to SM on duty. The details of the transaction should be properly recorded in the Relay room key register at the Station duly signed by SM on duty and the signal staff concerned according to Operating Manual 1.14 & SR 3.51.05. If the Relay room key is handed over to the Signal staff regarding the interference in safety gears, the train shall be piloted in and piloted out.

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

Regular maintenance of the S&T installations, adherence to schedules of maintenance, testing of points, track circuits, ground frames, level crossing gates, associated interlocking apparatus, cables and the interlocking functional tests is must for safe and satisfactory working of these installations at this station.

The tests, checks and replacements etc. including overhauling shall conform to the schedules of Maintenance as indicated in the Signal Engineering Manual as also as per the current and extant instructions/circulars on the subject. During checking/ testing or during day to day as well as regular maintenance of S&T gears, SM on duty shall co-operate with S&T staff for safe and satisfactory maintenance.

13.0 **PROCEDURE TO BE FOLLOWED IN CASE OF FAILURE OF A SIGNAL INTERLOCKING INSTALLATION: -**

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 SRs 3.51.04 and 3.68.04 and document all such transactions.

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

However, before declaring a signal or any other S&T gear as defective, the SM on duty shall verify them and the setting of points on the route and overlap for a signal to which it applies shall be inspected by the SM on duty irrespective of the position of buttons and indications on the panel and will work vide GR 3.68.

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

After receipt of this information, the signal Maintainer shall attend to the failure after giving a Disconnection Memo. After rectification of the fault, the Signal Maintainer shall give a Reconnection Memo detailing the rectification. Thereafter, the SM on duty shall personally check the defective apparatus. After satisfying himself that the gear is in good and proper working order, he shall resume the normal working of the said defective apparatus in terms of

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SR 3.68.04 (c), (d) , (e) & (f).

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16.0 PROCEDURE FOR CARRYING OUT PLANNED MAINTENANCE WORK: -

Whenever any normal maintenance or special works for major renewals etc., are involved, the signal & Telecom should pre plan these works. Field staff and the JE/SE/SSE(SIG) should give 'Advance Intimation' to the SM in writing about this work in terms of SR 15.08.01.

17.0 EMERGENCIES: -

Notwithstanding anything contained in the aforesaid paras when equipment is found to be defective and unsafe for passage of trains, the Signal & telecom. Staff must at once suspend the working of the equipment and associated installations and issue 'Suspension Memo' explaining the seriousness of defect or damage to the interlocking installation to the SM on duty and take the Station Master's acknowledgement. After this, the usual practice of exchange of disconnection memo and reconnection memo can follow. The SM on duty must act promptly on such messages and take adequate precaution treating the S&T installation as defective and pass trains over the affected interlocking equipment according to extant instructions as contained in GR 3.77 & SRs thereto.

18.0 A. TELECOMMUNICATIONS: -

- (i) Telephone attached to 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) Telephone connection with Engineering L C Gate at KM 133/11-12 & KM 128/12-13 is provided.

- 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 Loco Pilots, Guards or any other staff.
 - (iii) The SM on duty shall use the above electrical communication instruments stated in para 18.0 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.

B. 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 the telephone attached to the Block instrument or station to station telephone by exchanging Identification number and supported by Private number as per SR 6.02.06(1) (a) and Chapter-III Part-I of Block Working Manual.

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- 2) In the event of failure/suspension of Block instrument or Track circuit or Axle counter 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 a 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 instruments or station to station fixed telephone or Railway auto phone or BSNL phone –
- “Line Clear” shall be obtained on the control phone by exchanging Identification number and supported by ‘Private Number’ vide GR 6.02.06(1) (c) and Chapter-III Part-I of Block Working Manual.
- 4) In the event of failure / suspension of Block instrument or track circuit or axle counter or telephone attached to block instruments 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 SR14.01.02 are followed vide GR 6.02.06 (1)(d) Chapter-III Part-I of Block Working Manual.
- 5) In the event of total failure of all communications trains shall be worked vide SR 6.02.04.

APPENDIX - ‘C’**ANTI COLLISION DEVICE (RAKSHA KAVACH)****NIL**

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APPENDIX - 'D'**1.0 STATION SUPERINTENDENT (IN-CHARGE) :**

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

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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.

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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.

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.

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.

3.0 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.

2.0 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.

3.0 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.

4.0 Dy.SS/STATION MASTER/ASSISTANT STATION MASTER:

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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.

7.0 **TRAFFIC POINTSMAN:**

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 Loco Pilot 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 Loco Pilot 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 SS/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.

10.0 **GENERAL**

- i. A set of Red and Green flags and Tricolor hand signal lamps will be part of the essential equipments of staff while on duty. They shall not leave the station except when required by the SM on duty or with his permission. They shall comply with SR 4.42.02 (b) & (c).
- ii. Staff working at the Station must be able to distinguish between Up and Down Line Clear Tickets and also to recognize other Operational forms and documents delivered to Guard and

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Loco Pilots. They must also know how and when to ring the Station Bell and to call out the Station's name on arrival of Passenger carrying train.

N.B: - All staff while on duty should be in proper uniform.

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APPENDIX - 'E'

ESSENTIAL EQUIPMENTS OF THE STATION

Below is the list of essential safety equipment, which shall be readily available in good working order with necessary relief stock.

1.	Detonators	10 in tin case
2.	Hand signal lamps/Tri colour torch	04 Nos.
3.	Hand signal flags	04 sets.
4.	Safety chains with pad locks	05 Nos.
5.	Wedges/Sprags	05 Nos.
6.	Fire buckets (with sand and water)	05 Nos.
7.	Clamps with padlocks	05 Nos.
8.	Reminder collars	03 Nos.
9.	"Motor Trolley on Line" boards	02 Nos.
10.	First aid Box	01 No.
11.	Stretcher	01Nos.
12.	Fire extinguisher	01 No.
13.	Blanket	01 No

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-

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