



EAST COAST RAILWAY

WALTAIR DIVISION

**STATION WORKING RULES
OF**

JIMIDIPETA STATION

I N D E X

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WALTAIR DIVISION

STATION WORKING RULES OF JIMIDIPETA [JMPT][BROAD GAUGE]

No.WTP/5/SWR/JMPT

Date of Issue:

Date brought in force:

NOTE: -The Station Working Rules must be read in conjunction with General & Subsidiary rules, Block Working Manual and Operating Manual. These rules do not in any way supersede any rule in the above books.

(1) STATION WORKING RULE DIAGRAM:

- Station Working Rule Diagram No:- SI/WRD/23016 'Alt-J'
- CSTE/E.Co.Rly/DRG No:-SI-23016 'Alt-J'
- Date up to which corrected:

(2) DESCRIPTION OF STATION:**2.1. GENERAL LOCATION:**

a)	Name of the station	JIMIDIPETA (JMPT)
b)	Class of station	'B' class
c)	Section	Vizianagaram-Raipur
d)	Double Line/Single Line / Multiple Line	Double line.
e)	Electrified/Non Electrified	Electrified
f)	Gauge BG/MG/NG	BG
g)	Railway	East Coast Railway
h)	Route	'D'
i)	Situated at	Km 357.268
j)	Reckoned from	Raipur
k)	Operation	Domino type Panel
l)	Type of Interlocking	Standard II (R)

2.2. BLOCK STATIONS, IBH, IBS ON EITHER SIDE AND THEIR DISTANCE AND OUT LYING SIDINGS:

S.No	Adjacent BlockStation	Distance	Direction
1.	LADDA	6.9km	Raipur end
2.	KUNERU	9.3km	VZM end
3.	Provision of IBS	Nil	
4.	Automatic signal	Nil	
5.	DK station/Outlying sidings	Nil	
6.	Passenger halt	Nil	

2.3. BLOCK SECTION LIMITS ON EITHER SIDE OF THE STATION ON DIFFERENT DIRECTIONS:

Between Stations	The Point from which the Block section commences	The Point at which the 'Block Section' ends
JMPT-KNRT DN Direction	The rear block section commences at DN advanced	Ends at LC Gate No.RV-260 of JMPT on Down line.

	starter signal No.28 of KNRT.	
JMPT-KNRT UP Direction	The Advance block section commences at UP Advanced starter signal No. 11 of JMPT.	Ends at Facing point No.31A of KNRT on UP line.
JMPT-LDX UP Direction	The Rear block section commences at UP Advanced starter signal No.13 of LDX.	Ends at BSLB of JMPT on UP line.
JMPT-LDX DN Direction	The advance block section commences at DN Advanced starter signal No.12 of JMPT.	Ends at BSLB of LDX on DN line.

2.4. GRADIENTS:

Station towards	Chainage		Inter distance	Gradient	
	From	To			
JMPT-LDX	UP	0.000 F/CSB	125.00M	125.00M	1 in 800 Raising
		125.00M	694.816M	569.816M	1 in 400 Raising
		694.816 M	1099.8M	404.984M	1 in 100 Raising
		1099.8 M	Into section	---	1 in 125 Raising
	DN	Chainage		Inter distance	Gradient
		From	To		
		0.000 F/CSB	125.00M	125.00M	1 in 800 Raising
		125.00M	694.816M	569.816M	1 in 400 Raising
694.816M	1460.00M	765.184M	1 in 150 (C) Raising		
1460.00M	Into section	---	LEVEL		
JMPT-KNRT	UP	Chainage		Inter Distance	Gradient
		From	To		
		0.000 F/CSB	200.00M	200.00M	1 in 800 Falling
		200.00M	500.00M	300.00M	1 in 400 Falling
	500.00M	800.00M	300.00M	1 in 108 Falling	
	800.00M	Into section	--	1 in 100 Falling	
	DN	Chainage		Inter Distance	Gradient
		From	To		
		0.000 F/CSB	200.00M	200.00M	1 in 800 Falling
		200.00M	563.166M	363.166M	1 in 400 Falling
563.166M	Into section	--	1 in 150 (C) Falling		

2.5. LAY OUT:

A) RUNNING LINES IN THE MAIN YARD:

S No	Name of the Line	Electrified/Non Electrified	Platforms with Length
1.	Line No.1(Common Loop)	Electrified	High Level(427.4Mx 12.0M) on KNRT end and (427.4Mx 6.1M) on LDX end
2.	Line No.2 (UP Main)	Electrified	--
3.	Line No.3 (DN Main)	Electrified	
4.	Line No.4 (DN Loop)	Electrified	High Level(420.0M x 6.10M)

B) SIDINGS:

S. No	Name of the Siding	Electrified/ Non	Platform with	Isolation from	Operation of Siding Points

		Electrified	Length	Running line	
1.	Hot Axle Siding	Electrified	--	Provided on Line No.4 with CSL of 54M (BJ-BJ) towards LDX end with both side entry. Normal position of points detected by EPD.	The hand operated points are operated individually by arc levers in succession. When control No. 27 is transmitted from panel a key R1 & R2 will be released. Key R1 will be inserted in point and releases key R3, this R3 will be inserted in the other end of the point and point will be operated to reverse. Then key R2 will be inserted on other side of siding point and releases R4 and R4 will be inserted on the other end of point, then the point is operated to reverse and set to goods siding. After the movement is completed with key R4 point will be normalized and Key R4 will be inserted in the other end and releases Key R2. This R2 will be transferred back to SM with control 27. The same process will be followed on the other end of the siding to make points normal.
2.	Goods Siding	Electrified	--	Provided on Line No.1 with CSL of 89.30 M (BJ-BJ) towards KNRT end with both side entry. Normal position of points detected by EPD.	The hand operated points are operated individually by arc levers in succession. When control No. 24 is transmitted from panel a key Q1 & Q2 will be released. Key Q1 will be inserted in point and releases key Q3, this Q3 will be inserted in the other end of the point and point will be operated to reverse. Then key Q2 will be inserted on other side of siding point and releases Q4 and Q4 will be inserted on the other end of point, then the point is operated to reverse and set to goods siding. After the movement is completed with key Q4 point will be normalized and Key Q4 will be inserted in the other end and releases Key Q2. This Q2 will be transferred back to SM with control 24. The same process will be followed on the other end of the siding to make points normal.

3.	Ballast Siding	Non-Electrified	--	Provided to the extended portion of goods siding having CSL 233 M (DE-BJ)	The hand operated points are operated individually by arc levers in succession. When control No.24 & 26 are transmitted from panel keys Q1/ Q2 and P will be released. Key Q1 will be inserted in point and releases key Q3, this Q3 will be inserted in the other end of the point and point will be operated to reverse. Then key Q2 will be inserted on other side of siding point and releases Q4 and Q4 will be inserted on the other end of point, then the point is operated to reverse and set to goods siding. For admission /Dispatch trains into /from Ballast siding Key-P will be inserted in Hand Point lever point and point will be operated to reverse. After the movement is completed Hand point P with key will be normalized and key-P will be withdrawn. After that key Q4 point will be normalized and Key Q4 will be inserted in the other end and releases Key Q2. Key Q3 will be normalized and Q3 will be inserted to withdrawn key Q1. Q1, Q2 & P will be transferred back to SM with control 24 & 26.
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2.5.1. RUNNING LINES, DIRECTION OF MOVEMENT& HOLDING CAPACITY IN CSL:

S.No	Name of the Line	Holding Capacity in CSL	Direction of movements
1.	Line No.1 (Common Loop)	728. 20M (STR to STR)	a) Trains coming from KNRT end proceeding towards LDX are DN trains. b) Trains coming from LDX and proceeding towards KNRT are UP trains.
2.	Line No.2 (UP Main)	768M (STR TO SB)	
3.	Line No.3 (DN Main)	779.20M (STR TO SB)	
4.	Line No.4(DN Loop)	740.5 M (STR TO SB)	

2.5.2. NON-RUNNING LINES AND THEIR CAPACITY IN CSL:

S.No	Name of the Line	Holding Capacity in CSL	Whether Electrified/Non-Electrified
1.	Hot Axle Siding	54M (AC TO AC)	Electrified
2.	Goods Siding	89.30 M (BJ-BJ)	Electrified
3.	Ballast Siding	233 M (DE-BJ)	Non-Electrified

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2.5.3. ANY SPECIAL FEATURES IN THE LAYOUT:

--Nil--

2.6. LEVEL CROSSINGS:

Details of LC Gate are provided in Appendix-'A' portion of this SWR.

(3) SYSTEM AND MEANS OF WORKING:-

System of Working in force	Absolute Block System of Working.
Double Line/Single Line/ Multiple Line	Double Line.
Block Instruments	a) JMPT-KNRT Section: SGE type Double line Lock and Block Instrument. b) JMPT-LDX section: SGE type Double line Lock and Block Instrument.
Co-operative/Non-Co-operative	a) JMPT-KNRT Section: Non-Co-operative. b) JMPT-LDX Section: Non-Co-operative.
Block Telephones	Attached with Block Instruments.
Custody of Keys of Block Instruments	SM is responsible for operation of the Block Instruments. The SM on duty is only the authorized person to operate the instruments and then keys shall be in the personal custody, vide G&SR 5.08 & 14.12 (a). Block Instruments is provided with double locking one key will be with SM on duty and other key will be with S&T maintainer.
Telephone provided at IBS	Nil

(4) SYSTEM OF SIGNALLING AND INTERLOCKING:**4.1.**

1.	Standard of Interlocking	Standard-II (R).
2.	Type of signaling	MACLS
3.	Mode of operating the signals	Centrally operated Panel board.
4.	Provision of Calling-On signals	Calling-on signals are provided below Home signals (in both UP and DN Directions) as per GR.3.13 (1)(b), (2)(3)(4) & (6) (b).
5.	Provision of shunt signals	Shunt back signals SH3 (A/B/C/D) & SH4 (A/B) are provided towards LDX end and towards KNRT end of the yard respectively.
6.	Emergency Cross over	Nil.
7.	Track circuits	Track circuits are provided in the entire yard 1AT,1T,1T1,2AT,2T,2T1,11AT,11T,12AT,12T,17AT,17BT,18AT,18BT,19AT,19BT,20T,L1T1,L1T2,L1T3,UMT1,UMT2,UMT3,DMT1,DMT2,DMT3,L4T1,L4T2,L4T3
8.	Axle counters	High Availability Single Section Digital Axle counter (HASSDAC) for last vehicle verification between JMPT-KNRT as "UAXT" on UP Line and "DAXT" on DN Line. For Section JMPT-LDX provided HASSDAC as "UAXT" for UP Line and "DAXT" for DN Line.
9.	Crank Handles	When any point fails to operate normally by the Route Setting operation through VDU, it is inevitable to operate the points with crank handle. The SM on duty shall personally ensure clamping and

		<p>padlocking of all facing and trailing points on the route. Crank handles are interlocked with signals and interlocking system. When points become defective, the signals controlling these points shall be considered defective and vice-versa and the procedure for use of crank handle for motor operated points shall be followed as per operating manual chapter-2, para-2.18 & 2.19 and Para No.6.2 of Appendix-B.</p> <p>CH1 : 19A/B & 20 A/B. CH2 : 21A/B & 22A/B. CH3 : 17A/B. CH4 : 18A/B.</p>
10.	<i>Emergency Point operation</i>	Emergency point operation facility is provided to operate the point from the Panel in case of failure of point controlling track section. Before resorting to this operation SM on duty must be ensured no vehicle is standing on the point zone which is require to be altered. Each operation of emergency point operation shall be recorded in the station diary and in the register meant for this purpose.
11.	<i>Block Instruments</i>	<p>a) SGE type Double line Lock & Block Instruments are provided for block section JMPT-KNRT & JMPT-LDX for Double line.</p> <p>b) Telephone attached to Block instruments connecting the adjoining block stations concerned.</p> <p>c) 'ON' aspect of UP/DN Home & UP/DN Adv.str signals are proved in respective block instruments.</p> <p>d) Custody of block instrument keys: One key will be with SM on duty and the other with S&T maintainer.</p>
12.	<i>Emergency Route Release operation</i>	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), the concerned signal must be put back to danger by pressing the signal cancellation button and concerned signal button, the signal will immediately go to ON aspect.The precondition for route release is, the route should have been set and the signal has been put back to danger. Press the button on concerned Signal and " Route Release " button at a time. A white light will flash (UP or DN) indicating that the timer is working. After 120 seconds, the white light along with the white strip of light will disappear suggesting the route has been released. In case the route illumination (a white strip of lights) does not disappear, it suggests that the route is not released/cancelled. In such case the concerned S&T staff should be advised for rectification of fault. Each operation of emergency cancellation of route is recorded in the emergency route release counter by registering the next higher number. All such operations and the new number should be recorded in the station diary, train signal register and in the register meant for this purpose.
13.	<i>Emergency Crank</i>	Emergency crank handle release operation facility is

	<i>Handle Release operation.</i>	provided to operate the point by using the crank handle in case of Route locked condition. For Emergency crank handle operation the procedure laid down in para No.6.2 of Appendix-'B' shall be followed. Each operation of emergency crank handle operation shall be recorded in the station diary, train signal register and in the register meant for this purpose.
14.	<i>Emergency Gate Release operation.</i>	Emergency Gate release operation facility is provided to operate the Gate in case of Route locked condition. For Emergency Gate release operation the procedure laid down in para No.9.1 of Appendix-'B' shall be followed. Each operation of emergency Gate release operation shall be recorded in the station diary, train signal register and in the register meant for this purpose.

4.2. CUSTODY OF RELAY ROOM KEY AND PROCEDURE FOR ITS HANDING OVER AND TAKING OVER BETWEEN STATION MASTER AND S&T MAINTENANCE STAFF:

Custody of Relay room key and procedure for its handover and taking over between SM and S&T staff has to follow the procedure as per JPO issued by COM and CSTE vide No. JPO/02/2012 dated 29.08.2012. Relay room is provided with two independent locks. The key of one lock shall be in the personnel custody of Station Master on duty and the key of other lock shall be in the custody of S&T Maintainer. In the event of necessity such as for attending failure, or regular maintenance, on being requisitioned by S&T maintainer, SM shall hand over the key to the Maintainer. On completion of the work, maintainer shall lock the relay room and shall return the key to SM. The particulars of such transactions shall be entered by the SM in the relay room key register vide OM 2015 para No.13.16.

4.3. POWER SUPPLY:

The power supply arrangement for this station is described in detailed in the Para No. 19.0 of APPENDIX-B.

(5) TELECOMMUNICATIONS:

- a) The station is connected to VZM-Tie Line 'B' Cabin control Circuit.
- b) The station is connected to VZM-Tie Line 'B' Cabin traction power control circuit.
- c) Railway Auto Telephone provided at the station is connected to Divisional Exchange at WAT through Exchange at RGDA.
- d) Telephones attached to Double line lock and block Instruments are connected to adjacent stations on either side.
- e) Hot Line Telephone communication is provided between JMPT-LDX and JMPT-KNRT stations.
- f) Telephone communication is provided between Station Master on duty to UP CH locations and to DN CH Locations
- g) Telephone communication is provided between Station Master on duty and LC Gate No. RV-258 at Km No.354/29-31 & RV-260 at Km No.357/13-14.
- h) 25w VHF set is provided at the station for emergency communication.
- i) The Station is provided with CUG telephone.

5.1. FAILURE OF COMMUNICATION:

- a) In the event of total failure of communications between the adjacent block stations SR 6.02.03 shall be observed for double line section for working the train.

b) In the event of partial interruption/failure of communications between the adjacent block stations SR 6.02.06 shall be observed for working the train.

(6) SYSTEM OF TRAIN WORKING:

6.1. DUTIES OF TRAIN WORKING STAFF:

The duties of Train working operational staff are detailed in Appendix-'D' of this SWR.

6.1.1. TRAIN WORKING STAFF IN EACH SHIFT:

COMPLEMENT OF STAFF	STAFF IN EACH SHIFT
Station Superintendent/Station Master	1
Traffic Points Man	1
Traffic Gate Man	1

The above staff shall work as per roster issued from time to time by Divisional Railway Manager (P) and these rosters shall be conspicuously displayed in the Station Master's office.

6.1.2. RESPONSIBILITY FOR ASCERTAINING CLEARANCE OF LINES AND ZONES OF RESPONSIBILITY:

Station Master is solely responsible to ascertain clearance of line from Home up to Adv. Starter on concerned lines by indication on Panel Board.

Sufficient Private Number books and identification number sheets in sealed covers shall always be kept in stock by SM under lock and key by maintaining register for this purpose.

6.1.3. ASSURANCE OF THE STAFF IN THE ASSURANCE REGISTER:

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

No Railway servant shall be entrusted with any duty involving the safety of the public unless the SS/SM (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/SM (In-Charge) is responsible to see that all the staff are well conversant with the Station Working Rules of the Station 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 Class-IV staff, their signature/thumb impression must be obtained after explaining full about their duties and responsibility.

The SS/SM (In-Charge) is personally responsible for maintaining the Assurance Register and for obtaining declaration from the staff working under him. The Assurance Register must be maintained in two parts one for Group-'C' staff and other for Group-'D' staff & duplicate copy of the Assurance Register must be maintained and kept in the personal custody by the SS/SM (In-Charge).

Fresh assurance shall be obtained in the Assurance Register when:

1. He joins at the station as a new member.

2. There is any change in the Station Working Rules.
3. He resumes duty at the station after an absence of 15 consecutive days or more.

6.2. CONDITIONS FOR GRANTING LINE CLEAR:

- a) The trains are worked under Absolute block system of working with Double line between JMPT-LDX & JMPT-KNRT and MACLS signaling vide GR 8.03.
- b) Adequate distances for reception of trains in this station as follows.

Line No.	UP Trains		DN trains	
	From	To	From	To
Line No.1 (Common Loop)	UP Starter Signal No.5.	UP to the end of overrun line OR UP Advanced Starter Signal No.11.	DN Starter Signal No. 8.	UP to the end of Overrun line OR DN Advanced Starter Signal No.12.
Line No.2 (UP Main)	UP Main Starter Signal No. 9	UP Advanced Starter Signal No.11.	----	----
Line No.3 (DN Main)	----	----	DN Main Starter Signal No.10.	DN Advanced Starter Signal No.12.
Line No.4 (DN Loop)	----	----	DN Starter Signal No.6.	Up to the end of Overrun line OR DN Advanced Starter Signal No.12.

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:

When a running line is blocked by stabled load wagon, vehicle or by a train which is to cross or give precedence to another train or immediately after the arrival of a train at the station etc., the points in rear end should immediately be set against the blocked line except when shunting or any other movement is required to be done on that line [Refer SR.3.51.06 (a)].

Safety Point Alarm Unit (SPAU):

A safety Point Alarm is provided on the Panel Board table with different indications:

1. On complete arrival of a train at the station, the SM has to set the Points immediately against the occupied line.
2. In case the SM forgets to alter the points, after a time lag of 02 minutes, an audible buzzer will be heard from this instrument along with the 'RED' indication of the line on which the train has arrived.

3. The SM shall then press 'ACK' button to mute the buzzer, and immediately set the required points against the line on which the train has arrived.
4. On setting the points against the occupied line, the RED indication will disappear.
5. In case SM fails to set the required points against the occupied line a fault message will be triggered SMS will be sent to concerned station mobile and all concerned staff to take necessary action.

If all the lines of a station happen to be blocked, when line clear has been granted to a train, the points should be set for the line occupied by a stabled load or a goods train in that order so that, in case of mishap, the chance of causalities are minimized [Refer SR.3.51.06 (b)]. In case of all the lines are occupied by Coaching train, points should be set for a loop line to negotiate with the speed of incoming train would be reduced which in turn, would minimize the consequences/causalities.

The above precautions shall be taken in addition to the observance of other precautions [Refer SR 5.04.01 & SR 5.23.01].

6.2.1.2. RECEPTION OF A TRAIN ON BLOCKED LINE:

Trains are to be admitted on a blocked line, by taking off calling-on signal as per GR 5.09(2) (a) or if calling signal cannot be taken off, trains are to be piloted in on a written authority on Form T/509 given by SM on duty and delivered by a competent railway servant to the Loco Pilot of the train as per GR 5.09 (2)(C)(3)(4)(5) and SR 5.09.01.

6.2.1.3. RECEPTION OF TRAIN ON NON-SIGNALLED LINE:

--NIL--

6.2.1.4. DESPATCH OF TRAIN FROM NON-SIGNALLED LINE:

--NIL--

6.2.1.5. DESPATCH OF TRAIN FROM LINE PROVIDED WITH COMMON STARTER SIGNAL:

--NIL--

6.2.1.6. ANY SPECIAL CONDITIONS:

a) SPECIAL RESTRICTIONS:

--Nil--

b) SPECIAL INSTRUCTIONS:

While shunting on gradient towards UP & DN Adv starter signal No.11 & 12, an engine to be attached towards the falling side of the gradient.

6.3. CONDITIONS FOR TAKING "OFF" APPROACH SIGNALS: -

The SM on duty shall nominate a Clear line not only up to the Starter Signal but also for an adequate distance beyond it for reception of trains. (Refer GR. 3.36, 3.40, 4.17 and SR 3.36.01, 3.36.02, 3.36.04, 3.40.01, 3.40.02, 3.47.01, 4.17.02 and Block Working manual)

6.3.1. RESPONSIBILITY OF STATION MASTER FOR RESTORATION OF SIGNALS TO "ON":

Station master should ensure that signal is put back to 'ON' after passage of the train as per GR 3.36 (2) (b).

6.4. SIMULTANEOUS RECEPTION/DESPACTH, CROSSING AND PRECEDANCE OF TRAINS:

The following simultaneous reception and dispatch facilities are provided at this station.

1.	Reception of an UP train on Line No.1 setting overlap to Overrun Line (Common Loop).	AND	Dispatch of another UP train from Line No.2.
2.	Reception of a DN train on Line No.1 setting overlap to overrun line (Common Loop).	AND	Dispatch of another DN train either from Line No.3 or 4.
3.	Reception of a DN train on Line No.4 setting overlap to overrun line (DN Loop).	AND	Dispatch of another DN train either from Line No.1 or 3.

6.5. COMPLETE ARRIVAL OF TRAINS:

The entire block section between JMPT-LDX & JMPT-KNRT on both UP & DN lines are provided with High Availability Single Section Digital Axle Counter.

For Section JMPT-LDX:

A Pair of High Availability Single section Digital axle counter is provided between JMPT-LDX one at just beyond DN advanced starter signal no.12 of JMPT and another on 2T2 track section of LDX and another pair of High Availability Single Section Digital Axle Counter is provided between LDX-JMPT one at just beyond UP Advanced Starter signal No.13 of LDX and another on 1T1 Track section of JMPT for last vehicle verification.

For Section JMPT-KNRT:

A Pair of High Availability Single section Digital axle counter is provided between JMPT-KNRT one at just beyond UP advanced starter signal no.11 of JMPT and another on 1T2 track circuit of KNRT and another pair of High Availability Single Section Digital Axle Counter is provided between KNRT-JMPT one at just beyond DN Advanced Starter signal No. 12 of KNRT and another on 2T1 Track section of JMPT for last vehicle verification.

The position of the Block section whether cleared or occupied is reflected in the axle counter reset box and Panel board provided in the Station Master's office which shows 'GREEN' when the Block Section is clear and 'RED' when occupied. Whenever a train enters in to the Block Section, "Block Section Clear" indication 'GREEN' for the particular block section disappears and 'RED' indication appears.

After complete arrival of the train the 'RED' indication will disappear and 'GREEN' indication will appear. If after the complete arrival of the train the 'RED' indication does not change to 'GREEN' it should be assumed as Block Instrument failure for the particular section and necessary action as per GR.14.13 is to be followed. The axle counters are interlocked with the respective block instruments for that section. If axle counter fails, Advanced Starter signal cannot be taken off for next train and the concerned instrument shall remain locked in last operated position.

A resetting arrangement is provided in the SM office to reset the system to normal position in case of failure of Axle counter for SSDAC. The resetting to be initiated by the SM at the receiving station only after physical verification of complete arrival of train by exchanging private number. The resetting can be accomplished only with the co-operation of SMs at either end of the block section. Details of resetting procedure is given in Appendix-'B'

Note:

Before taking off reception and dispatch signals for UP or down directions the SM on duty should ensure that the entire route including overlap and berthing portion is clear of all obstructions by observing the Track indication/Axle counter indication.

6.6. DESPATCH OF TRAINS:

a) Dispatch of trains is governed by the provisions of General Rules 3.36, 3.38, 3.42, 5.11, 14.08& 8.01, SR 3.36.04(b), 3.42.04, BWM 2.07(5)(a)(b) and other relevant provisions of G & SR, BWM and SWR.

b) **DESPATCH OF TRAINS FROM NON-SIGNALLED LINE:**

Dispatch of trains from non-signalled line is governed by the provision of GR 5.11 and SR 5.11.01.

c) **ISSUE OF CAUTION ORDERS:**

Whenever in consequence of the line being under repairs or for any other reasons special precautions are necessary a Caution Order detailing the Kilometers and Speed at which train should run with reasons for taking such precautions shall be handed over to the Train Manager and Loco Pilot in terms of GR 4.09 and SR thereto.

6.7. TRAINS RUNNING THROUGH:

In addition to the procedure detailed in paras "Reception and Dispatch of trains" rules laid down in GR 3.40, 4.17, 4.42 with relevant SRs 3.42.02 (a) (iii) and other relevant provisions of G&SR, BWM, OM shall be followed. (Refer GR 4.1, 4.11(2)).

6.8. WORKING IN CASE OF FAILURE:

Track Circuits	Track circuits are provided in the entire yard. 1AT,1T,1T1,2AT,2T,2T1,11AT,11T,12AT,12T,17AT,17BT,18AT,18BT,19AT,19BT,20T,L1T1,L1T2,L1T3,UMT1,UMT2,UMT3,DMT1,DMT2,DMT3,L4T1,L4T2,L4T3
Axle Counters	If the axle counter fails between the block sections, resetting procedure should be adopted as per Para No.6.0 of APPENDIX-B. If the axle counter indication does not

		appear 'GREEN & continues to show 'RED' condition after resetting, the concerned block section shall be suspended & failure intimation to be given to sectional signal Maintainer /JE/SE (signal) for their rectification.
Block Instruments		In the event of failure of block instrument, the concerned block instrument shall be suspended till its rectification and trains shall work as per GR (Refer SR 6.02.03 & 6.02.06) and BWM 6.22.
Reception of a train on obstructed line		Trains are to be admitted on a blocked line, by taking off calling-on signal as per GR 5.09(2)(a) or if calling signal cannot be taken off, trains are to be piloted as per GR 5.09(2)(C)(3)(4) (5) and SR 5.09.01.
Reception of a train on non-signaled line		Nil
<i>Defective Signals</i>		Whenever signals become defective, the procedure laid down in GR 3.68 to 3.71, 3.80 and SR 3.68.01 (c) shall be followed. In case of disconnection of signal and interlocking for repairs and maintenance procedure laid down in GR and relevant SRs shall be followed. In the event of signal showing no lights, station master on duty shall before giving line clear initiate action in accordance with the procedure laid down in GR and the relevant SRs (Refer 3.57, 3.69, 3.49 (4), 3.68 to 3.77).
<i>Defective Interlocking</i>		When interlocking becomes defective the SS/SM on duty shall be responsible and personally supervise the setting, clamping and pad locking of all required facing and trailing points for admission or dispatch of trains and procedure laid in GR 3.68 to 3.71 and SRs there to shall be followed.
<i>Defective/Damaged Points</i>		When any point fails to operate normally by the route setting operation or individually through Panel it is inevitable to operate the points with crank handle. The SM on duty shall personally ensure clamping and padlocking of all facing and trailing points on the Route. Crank handles are interlocked with signals and interlocking system. When points become defective, the signals controlling these points shall be considered defective and vice-versa and the procedure for the use of crank handle shall be followed. Procedure prescribed in GR 3.68.01(e) and relevant SR shall be followed.
<i>Defective signal</i>	IBS	Nil

6.9. PROVISIONS FOR WORKING OF TROLLIES/ MOTOR TROLLIES / MATERIAL LORRIES ETC”:

- a) 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.
- b) Motor trolleys shall be worked as per GR 15.25 and SR thereto, BWM 5.39, 5.40, 5.41, 6.11(1)(2), 6.12, 6.13, 6.14(2)(a) and circulars and orders issued from time to time.

- c) Material Lorries shall be worked as per GR 15.27 and SRs thereto and in accordance with the provisions of Block Working Manual.
- d) Tower Wagon/OHE cars shall be worked as per GR 17.08 and SR thereto and BWM 6.11.

(7) BLOCKING OF THE 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. Whenever a running line is blocked, the 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 also. Stable load register is also to be maintained. The stable load or loose vehicles are to be secured to prevent rolling down of vehicles. [Refer SR 3.36.3(b), GR 5.23 and SR 5.23.01]. SS/SM on duty shall place reminder collar on concerned route buttons in the event of a running line is blocked vide SR 3.36.03(b).

Loading / unloading of goods from the vehicles on running lines is prohibited unless specially permitted by DOM vide SR 5.19.01 Securing of vehicles is governed by GR 5.23, SR 5.23.01 and OM 7.08 shall be followed.

Note: Special care shall be taken to secure special type vehicles fitted with roller bearings while standing in siding on running lines vide SR 5.23.01(b). Whenever any vehicle is to be detached on running line under unavoidable circumstances, it is to be secured properly as per G & SR 5.23 and 5.19.

(8) SHUNTING:

8.1. GENERAL PRECAUTIONS:

The rules laid down in GR 3.46, 3.52 to 3.56, 5.13,5.14,5.16 to 5.23, 8.05, 8.06, 8.14 and 8.15 with relevant SR's and BWM 6.15 shall be followed.

All shunt movements shall be supervised by train Manager/SM on duty or by a competent Railway servant deputed by SM on duty as the case may be. The authority for shunting shall be the taken off of shunt Signal or on line where Signals are not provided/failure of signals, form T/806 to be issued. The limit up to which shunting is permitted and the line involved must write on the shunting authority.

8.2. SHUNTING IN FACE OF AN APPROACHING TRAIN:

Shunting in face of an approaching train is prohibited on both ends vide GR 8.09.02 (ii) (a).

8.3. PROHIBITION OF SHUNTING, SPECIAL FEATURES IF ANY:

- i) Hand shunting is prohibited at both ends of the yard vide GR 5.20.
- ii) Fly shunting is prohibited at both ends of the yard vide SR 5.21.01 (c).
- iii) While Shunting on gradients towards UP Advanced Starter Signal No.11, an engine to be attached towards the falling side of the gradient G.R.5.20 to be followed strictly.

8.4. SHUNTING ON SINGLE LINE:

Not Applicable

8.5. SHUNTING ON DOUBLE LINE:

a)	Block back	The procedure of Block Back given in BWM 3.21 & 6.15 shall be followed
b)	Block Forward	G&SR 8.05 and BWM 3.21 & 6.15 there to shall be followed.
c)	During failure of Block Instrument	Shunting in the block section in advance/in rear shall not be preformed unless the section is clear of all obstructions and the block section is Blocked back/Blocked forward as the case may be. SM shall fix the line block collars on respective Block Instrument.

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

While performing shunting in the Hot Axle/Goods Siding/Ballast siding it should be authorized by issuing T/806 clearly mentioning the limits up to which shunting is permitted as also the lines occupied in shunting. The relevant provisions of GR 5.14 and SR thereto shall be meticulously followed.

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

- i) During partial interruption/failure of electrical communication instruments SR 6.02.06 shall be followed.
- ii) The authority to proceed in the occupied block section in case of obstruction of line or accident etc is T/A-602 and SR 6.02.05 shall be followed.
- iii) Trains delayed in the block section: GR 6.04 and relevant SRs shall be followed.
- iv) Failure/ passing of IBS signed in ON position: Not Applicable.
- v) Failure of Axle Counter Block/BPAC: As per Appendix-'B'.
- vi) Failure of MTRC: Not applicable.

b) PROCEDURE FOR EMERGENCY OPERATION OF POINTS BY CRANK HANDLE:-

- (i) The detailed Procedure for emergency operation of points by Crank Handle of motor operated points is mentioned in Para No.6.2 of Appendix-'B' of this SWR.

On account of the doubtful operation of any track section by a light vehicle including self-propelled vehicle such as Motor trolley or light Diesel/electrical engine or tower wagon, indicating the occupancy of the track. It is necessary that SM on duty satisfies himself that the said vehicle has cleared point zone track sections by observing the track indications of the track on either side of the cross over by positively checking the entrance and exit track sections are showing occupancy and clearance in accordance with the train movement.

(ii) PROCEDURE FOR EMERGENCY OPERATION OF POINTS WITH POINT ZONE TRACK CIRCUIT/AXLE COUNTER FAILURE AND EMERGENCY ROUTE RELEASE:

The detailed Procedure for emergency operation of points in case of failure of Point Zone track section is mentioned in Para No.9.0 of Appendix-'B' of this SWR.

Rules regarding locking of points and damaged points vide GR 3.39 and GR 3.77 to be followed.

c) CERTIFICATION OF CLEARANCE OF TRACK BEFORE CALLING-ON SIGNAL OPERATION IS INITIATED:-

Before taking off Calling-on signal during failure of track section, the route and the clearance of the track over which train would pass including fouling track showing Red shall also be verified by SM on duty.

d) REPORTING OF FAILURE OF POINTS, TRACK CIRCUITS/AXLE COUNTER AND INTERLOCKING: -

- (i) Whenever there is a failure of points, Track circuits/axle counter or any interlocking gear at station, the failure should be reported by SM on duty to the concerned Signaling Maintenance Staff on duty responsible for attending to the failure and only after receipt of the written memo from the Signaling Maintainer for rectification of the fault, SM should restore the normal working.
- (ii) The entries in failure register to be done with message to the section controller.

9.1. TOTAL FAILURE OF COMMUNICATION:

- a) In the event of total failure of communication on double line, trains shall run on the authority to proceed without line clear in terms of SR 6.02.03.
- b) During partial interruption of communication, the rules laid in SR 6.02.06 shall be followed.

9.2. TEMPORARY SINGLE LINE WORKING ON DOUBLE LINE SECTION:

In the event Single line working on double line section when one line is obstructed the trains shall work as per the provision laid down in SR 6.02.01.

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

- i). In the event of total failure of communication, trains shall run on the authority to proceed without line clear in terms of SR 6.02.03 on Double line section.
- ii). In the event of necessity to send a train to assist the crippled trains, SR 6.02.05 shall be followed.

(10) VISIBILITY TEST OBJECT:

The signals lights of DN Starter Signal No.10 and UP Starter Signal No.5 of Main line are earmarked to serve as visibility test object during day and night vide GR 3.61 (2) (b) (iii).

(11) ESSENTIAL EQUIPMENT AT THE STATION:

Details are given in Appendix-E.

(12) FOG SIGNAL MEN NOMINATED TO BE CALLED IN CASE OF FOG:

This Station is provided with double distant signal, placing of detonators shall be dispensed with in G&SR 3.61.01.

LIST OF APPENDICES:

- APPENDIX-A : WORKING OF LEVEL CROSSING GATES
- 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 PROVIDED AT THE STATION.
- APPENDIX-F : RULES FOR WORKING OF DK STATIONS, HALTS, IBH, IBS AND OUTLYING SIDINGS.
- APPENDIX-G : RULES FOR WORKING OF TRAINS IN ELECTRIFIED SECTIONS.

APPENDIX 'A'

WORKING OF LEVEL CROSSING GATES AT JIMIDIPETA STATION

1. GENERAL:

1.1. DESCRIPTION OF THE LEVEL CROSSING GATE:

Following details shall be maintained at all manned level crossing gates:

1.	Number of Level Crossing Gate :	RV-258
2.	Engineering or Traffic Gate :	Engineering gate ('C' class)
3.	Under control of Station Master / Permanent Way Inspector:	SSE [P.Way]/PVP
4.	Location at KM:	354/13-14 (354.863)
5.	At Station:	JIMIDIPETA
6.	In between stations:	JMPT-LDX
7.	BG/MG/NG:	BG
8.	Single line/Double line/Multiple line:	DoubleLine
9.	Normal Position:	Closed to Road Traffic.
10.	Interlocked / Non-Interlocked:	Non-Inter locked.
11.	Means of Interlocking	Non-Inter locked.
12.	Provision of Gate signal at Kms.	Not Applicable.
13.	Signaling arrangements:	Not Applicable.
14.	Means of Communication - Telephone / Bell etc	Telephone connection with SM/JMPT.
15.	Width of level crossing gate:	5.5 M.
16.	Type of road (NH / SH / Others) :	Others.
17.	Name of Road :	Village Road
18.	Metalled / non-metalled :	CC Block
19.	Approach road :	Metalled.
20.	Width of the road :	5.5 M
21.	Angle of road crossing (in case of the skew gates):	7°
22.	Road gradient (if any)	(i) North /East side: 1 in 30 (ii)South/West side: 1 in 30
23.	Road alignment (straight/curve)	i) North/East side: Curve ii)South/West side: Straight
24.	Provision of height gauges:	Provided
25.	Type of Barriers:	Lifting Barrier.
26.	Length of Check rails :	7.50 M
27.	Road surface in between L-Xing gates:	Level
28.	Length of Rumble strip / speed breakers:	5.5 M
29.	Road signs:	Provided
30.	Speed breaker indication board:	Provided
31.	TVU:	5246 of 02/09/2022
32.	Census next due on :	09/2025
33.	Demarcation for placement of Detonators:	Provided
34.	No. of Gatemen working:	2 (Two)
35.	Nearest Railway Medical Assistance	RGDA
36.	Nearest Private Medical Assistance available (if any):	PVP
37.	List of equipment available Yes / No:	Yes

1.2. EQUIPMENTS:

S N	Items	Quantity / Numbers
1.	LED based Flashing Tri Colour Hand Signal Lamp.	3Nos
2.	Hand Signal Flag Green	1 No with mounted stick
3.	Hand Signal Flag Red	3 Nos
4.	Banner Flag Red	3 Nos
5.	Posts for exhibiting red banner flag	2 Nos
6.	Spare chains with padlocks	2 with stop marker
7.	Detonators	10 in each case
8.	Gate lamps	2Nos
9.	Tommy Bar	1 No
10.	Mortar Pan	1 No
11.	Spade / Fowrah	1 No
12.	Rammer	1 No [in case of asphalted road this may not be provided.]
13.	Pick Axe	1 No [in case of asphalted rod this may not be provided]
14.	Tin case for flags	1No
15.	Can for oil	1No
16.	Water port / Bucket	1No
17.	Canister for Muster Roll	1No
18.	Set of spare spectacles of gateman wearing glasses	1No
19.	Board demarcating protection of level crossing gate diagram in case of obstruction on gate	1No
20.	Basket	1No
21.	Whistle	1No
22.	Wall Clock	1No
23.	A Small size chain for use in case of failure of gate boom lock	2Nos

1.3. RECORDS TO BE KEPT AT GATE LODGE:

In addition to the above equipment, following records shall also be kept at the gate lodge.

1. Gate Working Instructions in Hindi/English.
2. Gate Working Instructions in Local vernacular language
3. Gateman Rule Book in Local vernacular language.
4. List for tools and books.
5. Duty registers.
6. Certificate of Competency for working as gateman.
7. Bio-data particulars of Gateman, including date of passing vision test, Initial/refresher course, safety camp etc.
8. Accident Register.
9. Records of last census of road traffic at level crossing gate.
10. Public Complaint Book.
11. Inspection Book.

1.4. MODE OF OPERATION:

Gate shall normally be kept Closed to the road traffic. Whenever it is required to open the gate, on duty Gateman shall take permission the SM on duty and inform the purpose of opening of LC gate with description of road traffic intended to clear by opening the LC Gate. He shall ensure clearance of road traffic close and lock the gate. Thereafter shall inform to the Station Master on duty.

1.5. DUTIES OF GATEMEN:

1. **COMPETENCY:** Gatemen working at the gate should have competency certificate applicable to perform duty at this gate issued by the Section JE/SSE(P.Way).

2. **ALERTNESS:**The gate man shall be alert and be prepared to take immediate action, should danger be apprehended. Keys of the gate shall be in his personal custody.

3. POSITION DURING PASSAGE OF TRAINS:

During passage of trains, gate man will stand in the manner indicated below: -

i) Gate man will stand attentively in front of the gate-lodge facing the approaching train.

ii) In daytime, gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.

iii) In night time, gateman shall hold lighted hand signal lamp with white light facing the track.

iv) He shall keep the whistle slung around his neck from a cord.

4. ROUTINE DUTIES OF GATEMAN:

a) Gateman shall ensure that gate lamps and lamps of all gate signals are lighted and kept burning continuously.

b) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless reliever arrive and takes charge of it. 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.

c) He shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.

d) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.

e) Gateman shall also be prepared to repeat any signal which Train Manager may give to Loco pilot on walkie-talkie or in any other way.

- f) If lifting barriers get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlock for securing the gate against road traffic. Gate man shall report to the station master, gang mate or permanent way inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- g) Gateman shall wear badge and prescribed uniform while on duty at level Crossing gate.
- h) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- i) Gateman shall work the gate as per gate working instructions and remain well conversant with this instruction.
- j) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- k) Gateman shall see that the channel for the flange of the wheel is kept clean.
- l) Gateman shall keep the road surface well-watered and rammed in case of unmetalled roads.
- m) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- n) Gateman on electrified section shall watch that road vehicles/animals passing from gate are within the height loading gauge provided on either side of the level crossing gate.
- o) Gateman shall prevent tress passing by persons or cattle to the maximum extent.
- p) He should note down the registration number of the vehicle which damage the gate.
- q) Locking arrangement of gate should be checked daily.

5. ACTION IN CASE OF UNUSUAL OCCURANCE ON 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 / Train Manager 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 / Train Manager by whistling continuously, shouting, gesticulating, throwing ballast on the brake van or by any other means.
- iii) If Loco pilot / Train Manager fail to take notice, gateman shall immediately inform the Station Master, if connected on telephone, 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 / Train Manager 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, if connected on telephone, to take appropriate action, under exchange of private number.

6. ACTION IN AN EMERGENCY AT THE LEVEL CROSSING:

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

iv) ACCIDENTAL ROLLING DOWN OF TRAINS:

When the gateman sees that a train is rolling down or immediately after receipt of the information about accidental rolling down of the train the GK shall:

- a. First close the gate against the road traffic.
- b. Then immediately inform the SM on duty.
- c. He shall not open the gate till he ensured that the train has completely cleared the LC gate.

ON ELECTRIFIED SECTION :

On noticing that, the whole or part of the OHE or feeder or a cable facing down, the GK shall ensure that as far as possible, human beings, animals or vehicles etc. are kept in order to avoid any contact with live equipment.

As soon as it is noticed that, pantograph of an electric rolling stock getting damaged and/or entanglement of the same with the OHE, he shall make every possible effort to stop the train and immediately inform SM on duty and take all necessary measures for the portion of lines as under.

The gateman shall protect the line as under:-

A. On Double line section:

- i) If both lines are obstructed the Gateman shall plant a red banner flag by day and a red light by night 5 meters away 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 to 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 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 10 meters apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back.

- v) Thereafter, he shall proceed on the other line, showing red hand signal, similarly place detonators as described in para (iv) above and return to the site of obstruction, picking up the intermediate 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 stop the approaching train by waving his red flag by day red hand signal lamp by night repeatedly.

B. Other action 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 nearest Station Master or Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or through means available.

7. ENGINEERING ITEMS:

Please see para 916, 918, 919 of IRPWM for visibility requirements at level crossings, provision of speed breakers on the approaching roads of level crossings and census of traffic at level crossings.

8. EXCHANGE OF PRIVATE NUMBER:

The normal position of the 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 condition prescribed below:

- a) The station master before permitting each train to enter into the block section shall ask gateman on the telephone by giving private number whether the gate is closed against road traffic for the passage of the 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 in assurance of gate being closed and locked against road traffic.

- b) The station master shall not permit any train to enter into the block section unless he is assured of the closure/locking of the gate by gateman supported by a private number.
- c) When the gateman desires to open the gate for passage of road traffic, he should ensure that:-
 - i) He has not exchanged any private number with the station as per (b) above or
 - ii) If he has exchanged private number with the station master, the whole of the train with the last vehicle indicator has passed over the level crossing gate and the station master has not exchanged private number with him for any other movement with immediately in rear of the train or on adjacent line(s).
- d) Before open the gate for road traffic, he shall display a 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.
- e) In case gateman is not responding on telephone or in case the telephone becomes defective or private number is not received from the gateman, the station master shall adhere to the procedure prescribed in SR 16.03.04.
- f) In the event of failure, if the gate is required to be opened for the passage of road traffic approaching from either end. He shall then plant a banner flag during day and hand signal lamp with red light during night, 5meters 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, stopping approaching train, if any.

9. FAILURE OF TELEPHONIC COMMUNICATION:

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

- a) Station Master at the dispatching end shall issue a caution order to the Loco pilot before dispatching a train in the block section from his end.
- b) The caution order should advise the Loco Pilot to whistle continuously and approach the gate cautiously.
- c) The Loco pilot should be instructed to pass the gate cautiously, on being hand signal 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 to see the condition of the gate. If the gate is closed the Assistant Loco pilot give the all right signal, if the gate is not closed the Assistant Loco pilot must close the gate and then give the all right signal. The Loco pilot shall stop clear of the level crossing to pick up the Assistant Loco pilot who will reopen the gate for passage of road traffic. In the absence of the Assistant Loco pilot, the Loco pilot may take the assistance of the Assistant Train Manager / Train Manager.
- d) In case of an approaching train, the Station Master shall advise the Station Master at the dispatching end, under exchange of private number that the telephone at the gate has failed.

- e) 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.
- f) Station Master shall also advise the gateman through gang man / patrolman or Loco pilot of the first train that the telephone has become defective.
- g) He should also advise S&T staff responsible for maintenance of the telephone to rectify the defective Telephone at the earliest.
- h) Normal working will be resumed only after S&T staff rectify the telephone and issue fit memo for the same.

10. FAILURE OF LIFTING BARRIERS:

- a) When the gate cannot be closed due to failure of lifting barriers, the gateman will immediately inform the Station Master man on duty, under exchange of private number, and ensure that lifting barriers do not foul the track.
- b) 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.
- c) Gateman shall secure the gate against road traffic by means of safety chains and padlocks.
- d) 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 the approaching train.
- e) Station Master on duty shall issue caution order to the Loco pilot of a departing train.
- f) He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the Loco pilot before dispatching a train in to the block section from his end.
- g) He should also advise maintenance staff responsible for maintenance of the lifting barriers to rectify the defect at the earliest.
- h) Normal working will be resumed only after maintenance staff rectifies the lifting barriers and issue fit memo for the same.

11. OBSTRUCTION AT THE GATE:

- a) 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.
- b) Immediately after this, the gateman shall advise the Station Master on duty, regarding the defect / obstruction at the gate, under exchange of private number.
- c) Station Master on duty shall be advised to put the reception / departure signals back to 'ON' position, if taken 'OFF' for a train.

- d) If there is no response from the Station Master after three attempts, he shall first protect the gate and then inform on phone.
- e) 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.1.5(6).
- f) Thereafter he shall protect the gate from the other direction also.
- g) He shall note down the particulars of the road vehicle, name of the Driver, owner and relay these details to the Station Master who shall not start the train unless he has been ensured by the gateman that the road vehicle or the lifting barriers are not fouling the track.
- h) The Station Master shall also inform the Station Master at the dispatching end, under exchange of private number, asking him not to dispatch any train in the block section from his end, until the track has been cleared of all obstruction.
- i) After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.
- j) Station Master shall then issue a caution order to Loco pilot of the gateman, if the gate is broken, but is clear of any obstruction.
- k) Gateman shall secure the gate against road traffic by means of safety chains and padlocks and there after exhibit green hand signal if the gate is not obstructed.
- l) Station Master shall advise maintenance staff responsible for maintaining the lifting barriers to repair the same at the earliest.
- m) Normal working will be resumed only after maintenance staff rectifies the defective lifting barriers and issue fit memo for the same.

12. OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING:

If there is a rail fracture or obstruction on the track due to falling of tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master will adopt the procedure given under item no.11 above. If the obstruction fouls the Level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

2. GENERAL:

2.1. DESCRIPTION OF THE LEVEL CROSSING GATE:

Following details shall be maintained at all manned level crossing gates:

1.	Number of Level Crossing Gate :	RV-260
2.	Engineering or Traffic Gate :	Traffic gate ('B2' class)
3.	Under control of Station Master / Permanent Way Inspector:	SM/JMPT
4.	Location at KM:	357/13-14
5.	At Station:	JMPT
6.	In between stations:	JMPT-KNRT

7.	BG / MG / NG :	BG
8.	Single line / Double line / Multiple line:	Double Line
9.	Normal Position:	Open to Road Traffic.
10.	Interlocked / Non-Interlocked:	Inter locked.
11.	Means of Interlocking	Interlocked with station signals.
12.	Provision of Gate signal at Kms.	Station Signals
13.	Signaling arrangements:	MACLS
14.	Means of Communication - Telephone / Bell etc	Telephone connection with SM/JMPT.
15.	Width of level crossing gate:	5.5 M.
16.	Type of road (NH / SH / Others) :	Others.
17.	Name of Road :	Panchayat Road
18.	Metalled / non-metalled :	Metalled.
19.	Approach road :	Metalled.
20.	Width of the road :	5.5 M
21.	Angle of road crossing (in case of the skew gates):	Straight
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:	Provided
25.	Type of Barriers:	Lifting Barrier/Sliding Boom Barriers.
26.	Length of Check rails :	7.50 M
27.	Road surface in between L-Xing gates:	Provided with CC Blocks.
28.	Length of Rumble strip / speed breakers:	5.0 M
29.	Road signs:	Provided
30.	Speed breaker indication board:	Provided
31.	TVU:	4892 of 12/2020.
32.	Census next due on :	12/2024.
33.	Demarcation for placement of Detonators:	Provided
34.	No. of Gatemen working:	2 (Two)
35.	Nearest Railway Medical Assistance	RGDA
36.	Nearest Private Medical Assistance available (if any):	PVP
37.	List of equipment available Yes / No:	Yes

2.2. EQUIPMENTS:

<u>S N</u>	<u>DESCRIPTION</u>	<u>REQUIREMENT</u>	<u>TO BE USED AS</u>
1.	LED Tri colour hand signal lamps	Two	One for use and another for spare.
2.	Green hand signal flag	One flag mounted on sticks	To hold in furled condition while passing train.
3.	Red hand signal flag	Two flags mounted on sticks	One to hold in furled condition and another for spare.

4.	Red banner flag mounted with sticks	Double Line-2	In case of obstruction, one flag is to be displayed on each line except on single line it is to be placed on either side of the line.
5.	Spare chains with padlocks	2 chains with 2 padlocks	For securing gate against road traffic in case of gate boom cannot be closed.
6.	Stop boards	2 retro reflective stop boards	To display towards road traffic when gate is secured by gate chains due to failure of booms.
7.	Padlock	One	To lock the door of the gate lodge in case of necessity.
8.	Detonators	Ten in a tin case	For use in case of obstruction of track.
9.	Tommy bar	One	For leveling the soil surface or to clean the channels of rails.
10.	Bucket	One	To keep water.
11.	Whistle	One	For alerting road users on approach of train and LP/Train Manager to call their attention.
12.	Wall clock	One	To note down the timings in PN/Log book
13.	A small chain for use in case of	Two	For securing boom in closed condition in case of failure of boom lock.

2.3. RECORDS TO BE KEPT AT GATE LODGE:

In addition to the above equipment, following records shall also be kept at the gate lodge.

1. Gate Working Instructions in Hindi/English.
2. Gate Working Instructions in Local vernacular language
3. Gateman Rule Book in Local vernacular language.
4. List for tools and books.
5. Duty registers.
6. Certificate of Competency for working as gateman.
7. Bio-data particulars of Gateman, including date of passing vision test, Initial/refresher course, safety camp etc.
8. Accident Register.
9. Records of last census of road traffic at level crossing gate.
10. Public Complaint Book.
11. Inspection Book.

2.4. DUTIES OF GATEMEN:

1. **COMPETENCY:** Gatemen working at the gate should have competency certificate applicable to perform duty at this gate issued by the Section TI.

2. **ALERTNESS:**The gate man shall be alert and be prepared to take immediate action, should danger be apprehended. Keys of the gate shall be in his personal custody.

3. **POSITION DURING PASSAGE OF TRAINS:**

During passage of trains, gate man will stand in the manner indicated below: -

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

4. **ROUTINE DUTIES OF GATEMAN:**

- a) Gateman shall ensure that red banner flag is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- b) Gateman shall ensure that gate lamps and lamps of all gate signals are lighted and kept burning continuously from sunset to sunrise.
- c) Gateman shall perform his duties strictly according to the duty roaster and shall not leave the gate unless reliever arrives and takes charge of it. 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.
- d) 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.
- e) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, and vehicle/wagon/train/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.
- f) Gateman shall also be prepared to repeat any signal which Train Manager may give to loco pilot on Walkie-talkie or in other way.
- g) If lifting barrier 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.
- h) Gateman shall report to the nearest Station Master, Gang mate or Permanent Way Inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- i) In the event of gate signal becoming defective the Gateman shall maintain the signal in the 'ON' position even by disconnecting the signal or the wire if necessary.
- j) At the gate whose signal have become defective, the Gateman shall close and lock the lifting barriers on sighting a train and hand signal or pilot the train past the defective signal. In such case he should inform the Loco pilot to report the defect at the next station.
- k) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- l) Gateman shall ensure that his having competency certificate in his possession while on duty.
- m) Gateman shall work the gate as per Gate Working Instructions and remain well conversant with these instructions.

- n) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- o) Gateman shall see that the channel for the flange of the wheel is kept clear.
- p) Gateman shall keep the road surface well-watered and rammed in case of unhealed roads.
- q) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- r) Gateman on electrified section shall watch that road vehicles/animals passing from gate are within the height-loading gauge provided on either side of the level crossing gate.
- s) Gateman shall prevent trespassing by persons or cattle to the maximum extent.

5. ACTION IN CASE OF UNUSUAL OCCURANCE ON TRAIN:

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

- a) He shall take prompt action to warn the Loco pilot / Train Manager of the passing train by showing red flag by day and red light by night.
- b) He shall simultaneously try to draw the attention of the Loco pilot / Train Manager by whistling continuously, shouting, gesticulating, throwing ballast on the brake van or by any other means.
- c) If Loco pilot / Train Manager fails to take notice, gateman shall immediately inform the Station Master, if connected on telephone, to take appropriate action, under exchange of private number.
- d) In case of train parting, gateman shall not show stop hand signal but shall show prescribed signal for train parting.
- e) He shall endeavor to attract the attention of the Loco pilot / Train Manager 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.
- f) In case the train does not stop, gateman shall immediately inform the Station Master, if connected on telephone, to take appropriate action, under exchange of private number.

6. ACTION IN AN EMERGENCY AT THE LEVEL CROSSING:

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

A. On DoubleLineSection:

- i) If both lines are obstructed the Gateman shall plant a red banner flag by day and a red light by night 5 meters away 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 to 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 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 10 meters apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back.

- v) Thereafter, he shall proceed on the other line, showing red hand signal, similarly place detonators as described in para (iv) above and return to the site of obstruction, picking up the intermediate 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 stop the approaching train by waving his red flag by day red hand signal lamp by night repeatedly.

B. Other action to be taken by Gateman:

- a) 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.
- b) 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.
- c) He shall note down the particulars of the road vehicle, vehicle number, name of the Driver, owner and relay these details to the nearest Station Master or Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or through means available.

C. ACCIDENTAL ROLLING DOWN OF TRAINS:

When the gateman sees that a train is rolling down or immediately after receipt of the information about accidental rolling down of the train the GK shall:

- a. First close the gate against the road traffic.
- b. Then immediately inform the SM on duty.
- c. He shall not open the gate till he ensured that the train has completely cleared the LC gate.

D. ON ELECTRIFIED SECTION :

On noticing that, the whole or part of the OHE or feeder or a cable facing down, the GK shall ensure that as far as possible, human beings, animals or vehicles etc. are kept in order to avoid any contact with live equipment.

As soon as it is noticed that, pantograph of an electric rolling stock getting damaged and/or entanglement of the same with the OHE, he shall make every possible effort to stop the train and immediately inform SM on duty and take all necessary measures for the portion of lines as under.

7. ENGINEERING ITEMS:

Please see para 916, 918, 919 of IRPWM for visibility requirements at level crossings, provision of speed breakers on the approaching roads of level crossings and census of traffic at level crossings.

8. MODE OF OPERATION:

This interlocked L.C. Gate is situated at the KNRT end of the yard in between UP Advanced starter signal and UP starter signals at Km 357/13-14. This gate is interlocked with station stop signals. Telephone communication is provided

between the L.C. Gate Lodge and SM on duty of JMPT Station. The level crossing gate is of Electrical lifting barrier type and motor operated by means of HAND GENERATOR/MOTOR from the panel provided at the gate lodge. The normal position of the gate is open to road traffic.

- a) The gate man, after satisfying himself that the level crossing is clear of all obstructions shall sound the hooter and close the barriers of the LC gate.
- b) The Key 'X' is obtained from the winch after closing the level crossing gate releases GF-2.
- c) GF-2, when reversed locks the level crossing and releases GF-1 and Key 'Y'.
- d) Key 'Y' is transmitted electrically to SMs panel in conjunction with GF-1 reversed, control concerned UP & DN Signals.
- e) GF-1 is provided in the gate lodge to put back the concerned signals to 'ON' in case of emergency.
- f) Once the LC gate is closed and locked and key-'Y' is transmitted electrically to SM, gate control-28 can be released after passage of train through sequential occupation and clearance of track circuit 2T & 2T1 in DN direction and 11AT & 18 BT in UP direction.
- g) In case of emergency, gate man will inform SM and obtained permission from SM, then emergency key 'P' is to be extracted from EKT-4 (electro mechanical free) provided at gate lodge (in a locked & sealed red box with glass cover) for opening of the gate.
- h) Sliding boom arrangement is provided as standby option during failure of normal working of LC gate.

A. EMERGENCY GATE RELEASE OPERATION FOR PANEL:

Gate is locked when a signal is taken off. Locking of the gate is released only when the train movement for which signals are taken off is completed. For emergency opening of the LC Gate before completion of train movement or if the route given for a train has not been released, then emergency gate release operation has to be initiated in the following manner.

1. Cancel the concerned Signal by pressing signal cancel button and the concerned Signal button.
 2. Then long press LC gate control '28' button and gate trains button simultaneously which will enable the Emergency Gate Release control.
 3. A flashing red indication will appear on the gate release indication. After laps of 120 seconds the flashing indication will disappears then the Gate key can be transmitted for opening the gate.
- 9. Working of Sliding Boom Barrier in case of Failure/Defectiveness of Lifting Barrier:**

In the event of Lifting Barrier is failed to operate by any means or damage of Lifting Barrier the Gate man shall inform the SM on duty and seek the permission to operate the Sliding Barrier. This emergency Sliding boom can be used as auxiliary gate without piloting IN and OUT of train. This emergency sliding boom cannot be used during normal working condition of main boom. The Gate man shall adopt the following procedure for closing the Sliding Barrier.

- a. Key 'S' when extracted from lock free EKT-3, makes road signal danger and activate road hooter key 'S' unlocking the sliding barrier-1.

- b. Sliding boom-1 to be rolled across the road up to the lock post. Key (Chained with barrier) Releases the lock plunger and key SB-1. Key SB-1 when extracted lock the barrier-1.
- c. Similarly, Sliding barrier-2 after unlocking the pad lock sliding barrier-2 to be rolled across road up to the lock post, key (chained with barrier) along with key SB-1 inserted releases the lock plunger and key SB-2 when extracted locks the sliding barrier and key SB-1.
- d. Finally released key SB-2 is transmitted electrically through EKT-2 to clear UP/DN signals after operation of concerned signals switches for UP &DN directions respectively.

In the event of failure of reception and dispatch signals or during non-Interlocking working the Traffic Gateman shall be informed and the Train shall be passed in terms of SR 3.69.02, 3.69.03 and 3.70.01 after ensuring correct closing and locking of L.C Gate. During this period the L.C Gate shall be opened only when necessary and safe to do so.

The LC gate shall be so worked as to cause least possible inconvenience to the vehicular traffic consistence with safety as per subsidiary rule 16.03.01 (a)

10. Failure of Telephonic Communication:

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

- a) Station Master at the dispatching end shall issue a caution order to the Loco pilot before dispatching a train in the block section from his end.
- b) The caution order should advise the Loco Pilot to whistle continuously and approach the gate cautiously.
- c) 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 to see the condition of the gate. If the gate is closed the Assistant Loco pilot give the all right signal, if the gate is not closed the Assistant Loco pilot must close the gate and then give the all right signal. The Loco pilot shall stop clear of the level crossing to pick up the Assistant Loco pilot who will reopen the gate for passage of road traffic. In the absence of the Assistant Loco pilot, the Loco pilot may take the assistance of the Assistant Train Manager / Train Manager.
- d) In case of an approaching train, the Station Master shall advise the Station Master at the dispatching end, under exchange of private number that the telephone at the gate has failed.
- e) 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.
- f) Station Master shall also advise the gateman through gang man / patrolman or Loco pilot of the first train that the telephone has become defective.
- g) He should also advise S&T staff responsible for maintenance of the telephone to rectify the defective Telephone at the earliest.
- h) Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection / fit memo for the same.

11. Failure of Gate Key with the Gate in closed position when Gate key cannot be extracted for opening the Gate:

- a) If the gate key cannot be extracted from the RKT, the gate lever or the key transmitter, then Gateman must immediately inform the Station Master on duty on telephone, under exchange or private number.

- b) Then the emergency key 'L' (in the Sealed Red Box with glass cover) which is available at the gate lodge, will take it out from the sealed box by breaking the seal and open the gate for road traffic.
- c) The record of the data and time of breaking the sealed cover of Emergency key box shall be recorded and signed with reasons.
- d) Thereafter, the gate must be treated as non-interlocked and procedure for reception/dispatch of trains as prescribed for non-interlocked gates, should be adopted.
- e) Station Master on duty shall issue a caution order to the loco pilot of a departing train.
- f) He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the loco pilot before dispatching the train in the block section from his end.
- g) Station Master will advise S&T staff responsible for maintenance of winch/gate levers/key transmitter to rectify the defect at the earliest.
- h) Normal working will resume only after S&T staff repairs the winch/gate lever/key transmitter and issue reconnection/fit memo for the same.
- i) After rectification, the Emergency key shall be replaced in the Emergency Key Box and resealed by the S&T maintainer.

12. Failure of Gate Key with the Gate in open position:

- a) If the gate key cannot be extracted from the key transmitter, then Gateman must immediately inform the Station Master on duty on telephone, under exchange or private number.
- b) Thereafter, the gateman shall use the Sliding boom Barriers to secure the gate as mentioned in para No.8 above.

13. Obstruction at the Gate:

- a) 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.
- b) Immediately after this, the gateman shall advise the Station Master on duty, regarding the defect / obstruction at the gate, under exchange of private number.
- c) Station Master on duty shall be advised to put the reception / departure signals back to 'ON' position, if taken 'OFF' for a train.
- d) If there is no response from the Station Master after three attempts, he shall first protect the gate and then inform on phone.
- e) 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.1.5(6).
- f) Thereafter he shall protect the gate from the other direction also.
- g) He shall note down the particulars of the road vehicle, name of the Driver, owner and relay these details to the Station Master who shall not start the train unless he has been ensured by the gateman that the road vehicle or the lifting barriers are not fouling the track.
- h) The Station Master shall also inform the Station Master at the dispatching end, under exchange of private number, asking him not to dispatch any train in the block section from his end, until the track has been cleared of all obstruction.
- i) After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.

- j) Station Master shall then issue a caution order to Loco pilot of the gateman, if the gate is broken, but is clear of any obstruction.
- k) Gateman shall secure the gate against road traffic by means of safety chains and padlocks and there after exhibit green hand signal if the gate is not obstructed.
- l) Station Master shall advise maintenance staff responsible for maintaining the lifting barriers to repair the same at the earliest.
- m) Normal working will be resumed only after maintenance staff rectifies the defective lifting barriers and issue reconnection / fit memo for the same.

14. Obstruction on the Track near Level Crossing:

If there is a rail fracture or obstruction on the track due to falling of tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master will adopt the procedure given under item no.13 above. If the obstruction fouls the Level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

APPENDIX 'B'
SYSTEM OF SIGNALLING & INTERLOCKING AND COMMUNICATION
ARRANGEMENTS AT THE STATION

APPENDIX - B TO STATION WORKING RULES OF JIMIDIPETA STATION.

DETAILS OF SIGNALLING AND INTERLOCKING INSTALLATIONS, INSTRUCTIONS FOR WORKING THEM NORMALLY AND IN EMERGENCIES ETC, INCLUDING POWER SUPPLY ARRANGEMENTS.

1.1 BRIEF DESCRIPTION OF THE SIGNALLING AND INTERLOCKING INSTALLATIONS:

This is a "B" Class Station with standard-IIR interlocking (with isolation). The points and signals are power operated from a composite 'DOMINO TYPE' - panel installed in the SS/SM office. This station is equipped with panel operated MACLS. The SGE type double Line lock and Block Instruments are provided in the SS/SM panel room for section JMPT-LDX and JMPT-KNRT adjacent to the panel.

1.2 DESCRIPTION OF PANEL:

The yard layout is depicted in the panel board and is fixed parallel to the track so that when the SM on duty faces, the Yard drawing on the panel corresponds to the actual field lay out in either direction.

1.3 POINT BUTTONS:

Each point is provided with Push buttons (Black in color) for individual operation of Points. For operation of point to normal/reverse position, Point group push buttons (black with red dot) are provided. Point button and Point Group button normal/reverse shall be pressed at the same time for operation of point to required position. To indicate the position of point, a white steady strip on Normal direction to indicate normal position of point, and a white steady strip on Reverse direction to indicate Reverse position of point.

1.4 When a point is set and locked correctly in normal position, a white steady strip indication on normal point zone appears suggesting that the point is in normal position and locked in its position.

1.5 When a point is set and locked correctly in Reverse position, a white steady strip indication on reverse point zone appears suggesting that the point is in Reverse position and locked in its position.

1.6 When the point is operated from reverse to normal position, a white strip indication on normal point zone will start flashing till the concerned point is set and locked in normal position. When the point is operated from normal to reverse, a white strip indication on reverse point zone will start flashing till the concerned point is set and locked in reverse position.

1.7 OPERATION OF POINTS:

1.8 Points are operated to normal or Reverse by pressing individual point button in conjunction with the point group button there by the white strip indication on normal point zone or reverse point zone will start flashing as the case may be till the points are set to normal or reverse position and locked. Then the white steady strip indication

on normal point zone and white steady strip indication on reverse point zone will appear as the case may be. During the automatic route setting of the train operation, the same indication will glow.

- 1.9 All running line points are operated by Electric point machine.
- 2.0 The course for non-setting of the point in the desired position has to be checked up by the SS/SM on duty according to G & SR 3.68.01(c) and if there is a defect other than obstruction the point has to be considered as defective and action shall be taken. The course for non-setting of the point in the desired position has to be checked for clamping and pad locking these points in the desired position by the SS/SM on duty himself for all trains according to SR 3.69.03(c).

2.1 **DESCRIPTION OF POINTS:**

Sl. No.	Point Button No.	Color	Description
1	17	Black	Cross over point between UP & DN main line at Raipur end.
2	19	Black	Cross over point between DN main & ON Loop line at Raipur end.
3	21	Black	Cross over point between UP main & Common loop line at Raipur end.
4	18	Black	Cross over point between UP & DN main line at VZM end.
5	20	Black	Cross over point between DN main & DN loop line at VZM end
6	22	Black	Cross over point between UP main & common loop line at VZM end
7	Point group button (Normal)	Black with red dot	Common button for normal operation of points.
8	Point Group Button (Reverse)	Black with red dot.	Common button for Reverse operation of points.

3.0

SIGNAL BUTTONS:

SI. No	Point Button No.	Color	Description
1	C1	Red with white dot	UP Calling 'ON' signal for Line no. 1, & 2 .

2	S1	Red	UP Home signal for line no.1,& 2.
3	C2	Red with white dot	DN calling 'ON' signal for line no.1,3& 4.
4	S2	Red	DN Home signal for line no.1, 3 & 4.
5	S5	Red	UP loop starter for line no.1
6	S6	Red	DN Starter signal for line no.4
7	S9	Red	UP main Line starter for line no. 2.
8	S10	Red	DN main Line starter for line no. 3
9	S11	Red	UP adv. Starter.
10	S12	Red	DN Advance starter
11	SH3	Yellow	Shunt signal for line no.1,2, 3 & 4.
12	SH4	Yellow	Shunt signal for line no.1&2.

3.1 **SIGNAL INDICATION:**

The aspect of signal as obtained at any time is shown on the panel on the Signal indication (along side of the track).

4.0 **ROUTE BUTTONS:**

Route buttons are provided separately on each running line on the panel for indication of route (viz L1UN, L1UN1, L2UN, L3UN, L4UN, and L4UN1). Common route buttons are also provided for taking off starters 11 AT UN, 12 AT UN. An individual route button is provided for taking off advance starter 12 UN, 11 UN. For clearing the signal, it is necessary to operate the signal button and the concerned route button concurrently.

4.1 **DESCRIPTIONS OF ROUTE BUTTONS:**

<i>S.NO</i>	<i>Button No.</i>	<i>Color</i>	<i>Description</i>
1	L1 UN	White	Common route button for UP Home signal and UP Calling-On signal for line no.1 setting overlap on UP main line.
2	L1 UN1	White with black dot	Common route button for UP & DN Home signal and UP & DN Calling-On signal for line no.1 setting overlap to over-run line and route button for UP & DN. Shunt signal no. 3 & 4 for line no. 2.
3	L2 UN	White	Common route button for UP Home signal and Calling-On signal for line no.2 setting overlap on UP Main line and route button for UP & DN shunt signal no. 3 & 4 for line no. 2.

4	L3 UN	White	Common route button for On Home signal and Calling On signal for line no.3 setting over lap on DN main line and common route button for UP shunt signal no. 3 for line no. 3.
5	L4 UN	White	Common route button for On Home signal and DN Calling On signal for line no.4 setting overlap on DN main line respectively.
6	L4 UN1	White with black dot	Common route button for DN Home signal and DN Calling-On signal for line no. 4 setting overlap on over run line and common route button for UP signal no 3 for line no 4
7	12 UN	White	Route button for DN advance starter.
8	11UN	White	Route button for UP advance starter.
9	12ATUN	White	Route button for DN starters 6,8 and 10.
10	11ATUN	White	Route button for UP starters 5, & 9.
11	Group (Trans)	White with black dot	Common Trans button for crank handle and siding control.
12	Group Released	White with black dot.	Common release button for crank handle and siding control.
13	CH-1	Blue	Points no. 19 & 20
14	CH-2	Blue	Points no. 21 & 22
15	CH-3	Blue	Points no. 17
16	CH-4	Blue	Points no. 18
18	Siding control Button	Black	For releasing of key from RKT of siding points. For Goods Sdg 24, for Ballast Sdg 26 & for Hot axle Sdg. 27.
19	Button held Ack	White with Red dot	To be pressed to stop. The buzzer in case of any Button held.
20	Signal lamp failure Ack.	Red with white dot	For acknowledge the signal lamp failure/ point failure to stop the buzzer.
21	Signal cancellation	Red	For cancellation of signal this is a common button to be pressed in conjunction with the intended signal button for which cancellation is required
22	Emergency of Point operation button	Black with red dot	For operation of points in the event of failure of point zone Track circuit/Axle counter.

5.0 (A) POWER SUPPLY ARRANGEMENT FOR THE SIGNALLING INSTALLATION

Power signaling and interlocking installations and the ancillary field units are fed from the following sources of power supply.

- i) Normally supply from UP AT/DN AT connected to OHE Traction distribution [230 V 50 Hz]
- ii) Stand by supply from Andhra Pradesh State Electricity Board (APSEB) [Single phase 230V-50Hz].
- iii) Normal power supply [Single phase 230V-50Hz] to the Signaling & Interlocking installation at the station is drawn from the traction power sources. Whenever traction power supply fails SS/SM on duty shall operate the Auto change over switch provided in the CLS power panel at SM's room connecting the power supply from the healthy sources to the installation.

The SS/SM on duty however maintain the record of power failures either of the traction supply or local supply and he must promptly report the failure of any one or both the power sources immediately through the section controller and to the concerned Electrical Staff and S&T maintenance staff.

- a) Auto change over switch is provided in the SM's room with the three power supplies viz UP AT, DN AT and local power supply for changing the switch to the required supply position. The availability of the supply is indicated by luminous indicator above the circuit breaker for each supply.
- b) Normally the switch will be kept towards UP AT or DN AT position. Whenever the power block is to be given on the line, on duty SS/SM must ascertain the power is available on the other AT and change over the switch to desired position e.g if power block is to be given on the UP line, DN AT must be available and vice versa.
- c) In case of failure of one of the AT supply without any power block, on duty SS/SM has to check whether the Miniature Circuit Breaker has tripped. (Three Miniature Circuit Breakers are provided in the changeover switch board, one for each supply and their normal position is UP and when tripped, it goes to DN). In case of failure of both AT supplies without any power block, the local supplies shall be utilized by operating the change over switch. If the Miniature Circuit Breaker is tripping, even after resetting, no attempts shall be made to hold it by any other means and a message shall be given to the AEE/GEN and CTFO/GEN for prompt rectification.
- d) Whenever there is a failure of power supply in one AT, the on duty SS/SM shall take prompt action to inform to all concerned for the rectification, The on duty SS/SM himself, during his daily checks, shall test the availability of power supplies on both AT's and make entry in station dairy duly initiating action for rectification of failure, if any.

5.1 (B) WORKING OF INTEGRATED POWER SUPPLY [IPS], INDICATIONS & ACTION TO BE TAKEN BY SS/SM ON DUTY

- i) Power supply to the signaling installation is fed through IPS installed in the S&T power supply room. The IPS is normally fed through UP AT/DN AT traction power selected by SS/SM on duty. Standby power supply is through APSEB local supply. Auto Change over Switch is provided in the SM's room for selection of output of either of the traction power supplies or local power supply. The available traction/local supply is fed to the IPS.
- ii) Auto Change over Switch [which can be operated manually also keeping it in Manual mode] which has been provided in SM/SS's room will automatically switch over to the other power supply mode in the absence of any power supply i.e UP AT/DN AT /Local Power Supply.
- iii) The IPS system is connected with Battery as a back-up power source for safe working during transition of power, in case when there is no power supply of 230v AC supply due to any reason.
- iv) In the event of failure of all the sources of 230V, 50 Hz AC supply, the signaling system shall be fed by power generated by back-up battery Bank connected to IPS. The health of battery bank is monitored through IPS monitoring Panel provided in the SM's room which shall display the voltage 110V DC [Battery bank provided as back-up for power supply]. Depending upon the health of the Battery Bank and the system, the following indication/alarm will appear on the Remote Monitoring Panel, their implications and action to be taken by SS/SM on duty is tabulated below.

SN	Instruction	Healthy of Battery Bank /Equipment	Visual Indication	Audio Indication	Action to be taken by SS/Dy.SS on duty
A	-	50% DOD (Depth of Discharge)	Red	Alarm	Alarm shall be acknowledged by SS/ SM on duty. Then inform to S&T Staff.
B	-	60% DOD	Red	Alarm	-Do-
C	System Shut down	70% DOD	Red	Alarm	Signal feed cut off and all DC-DC converters to work. Audio alarm will continue till power supply is restored. Then inform to S&T Staff.
D	Call S&T Staff.	Equipment fault	Red	Alarm	Failure of any module will give the alarm in SM's panel. Alarm shall be acknowledged by SS/SM on duty for audio cut-off. Then inform to S&T Staff.

On duty SS/SM in each shift shall check and record the readings, indications, etc in the station diary duly informing to ESM/SM on duty for rectification of failures of IPS system, if any.

In the event of failure of remote monitoring ASM console due to any reason or when both traction power and local power failed, the SS/SM on duty shall inform concerned Electrical staff immediately. In case 'Call S&T staff' or 'System Shut Down' indication appear on the remote monitoring panel of IPS and/or mal-functioning of the remote monitoring panel SS/SM on duty shall inform the same to concerned S&T staff

immediately.

NOTE: In case of failure of all AC supply sources IPS Battery Bank can provide power supply, before system shut down indication of IPS

5.2 SIGNAL (LED)/POINT FAILURE INDICATION (RED SIGNAL LAMP BUTTON RED WITH WHITE DOT)

Whenever LED signals becomes blank, as point failure, on flashing Red light indication appears along with an audible buzzer indicates signal (LED), as point failure. The station master on duty shall press the signal lamp/point failure ACK. Button there by the buzzer stops but the red indication lamp becomes steady which continues till either the LED signal is replaced/ rectification of point failure.

5.3 BUTTON FAILURE INDICATION WHITE/BUTTON HELD BUZZER WHITE WITH RED DOT:

Whenever any button remains held up in pressed condition 'Button Held' white. Indication starts flashing along with an audible buzzer. The SM on duty then acknowledge it by pressing the "Button Held" push button (white with red dot) the buzzer stop but the white indication continues to flash till the same is rectified.

6.0 TRACK CIRCUIT/AXLE COUNTER:

At this station all the berthing lines i.e. loop lines and main lines and point zones are provided with track circuits to indicate the occupation/ clearance of berthing/point zone portion. Starters will automatically be replaced by the point zone track circuits. Track circuits are provided near Home and advance starter signals for their automatic replacement and release of block instruments. In addition 7RL/100 Mtrs rail length track circuits are provided in advance of UP and DN home signals for control of calling on signals. The occupation/ clearance of track circuits indication is provided on the indication cum operating panel installed at station.

6.1 When a train is to be dispatched from the station yard on signals the SS/SM on Duty must ensure that the route between the starter signal and the block section limits demarcated by the Advance Starter is clear of any obstruction (which includes point zones track circuits) before he takes off departure signals.

6.2 CRANK HANDLE FOR EMERGENCY OPERATION OF POINTS :

Crank handle is inter locked with the signaling and inter locking system at this station and the crank handle which is normally locked up in the RKT instrument in the goomties at the both End of the yards can be taken out when the signals on the connected route are in normal position and the route is not locked for any reason.

Even when the route is locked the crank handle key can be extracted from the RKT through emergency operation by pressing the concerned crank handle button along with group Trans button concurrently. When this operation is resorted, the crank handle 'Key in' indication(white) and locked indication (Red) both start flashing. After 120 Second of flashing of both, the locked indication (Red) disappears. Similarly such red indication appears at the crank handle location at site near corresponding RKT and now the crank handle key can be taken out from the RKT at site, After key extracted at site from the RKT, the key in indication (white) on panel, board will extinguish. After completion of work, crank handle key shall be restored to RKT which will be indicated by flashing key in (white) indication on panel board, which comes steady only after pressing of concerned crank handle button along with group release button

concurrently.

- 6.3** On account of the doubtful operation of any track circuit by light vehicle/ vehicle including self propelled vehicles such as motor trolley or a diesel shunting engine or a tower wagon, in indication of the occupancy of the track it is necessary that the SS/SM on duty satisfied himself that the said vehicle/ vehicles has/have cleared the point zone' track circuits by observing the track indication of the tracks on either side of the cross over by positively checking of the ENTRANCE and EXIT track circuit are showing occupancy and clearance in accordance with the train movement.

7.0 STATION MASTER'S KEY:

The panel is also fitted with SS/SM'S lock up key to prevent unauthorized operation of this panel but with the arrangement to put back the signal to the ON position in the case of emergency without altering the route when the panel is locked position.

8.0 EMERGENCY OPERATIONS:

The following are the instructions for Emergency operations.

8.1 ROUTE CANCELLATION

For the purpose of the emergency operations there is an emergency Route cancellation/Release and also there is a veeder counter for counting emergency operations involving the concurrent operation of the emergency route cancellation button. The following procedure is to be adopted. After ensuring complete arrival of the train SS/SM on duty must press the emergency route button along with concerned signal button for which emergency route release is required. An yellow indication will appear below the signal indicating that the timer has started operation and after lapse of 120 seconds. The desired route will be released provided all other conditions are favorable for the route release.

8.2 SIGNAL CANCELLATION

For the purpose of throwing the signal to danger in case of emergency, press concerned signal button along with common signal cancellation button. Then the signal will fly back to on position.

- 8.2.1** The numbers on the veeder counter register the number of operations performed for such emergency cancellation and the SS/SM on duty should specify the cause for such usage giving the particulars of cause and the time of operation as related to a particular train etc in the train signal register. The detailed operation instructions are as follows:

8.3 CANCELLATION OF UNINTENDED LOCK ING OF POINTS.

Whenever there is an intended locking of any points (indicated by RED indication lamp near the concerned point) such a locking has to be released (after the concerned signal are in the normal position) by concurrently pressing the Emergency Group cancellation button (provided at the counter of the panel) and the concerned signal button provided the track circuits are dear and are in working condition. This operation is counted on the veeder counter/counter as already pointed out.

8.4 CANCELLATION OF LOCKING OF ROUTE AND POINTS AFTER THE SIGNAL HAS BEEN PUT BACK TO 'ON'

OR

THE SIGNAL HAS GONE BACK TO ON EITHER AFTER THE MOVEMENT OF THE TRAIN IS CANCELLED

OR

THE TRAIN HAS COME TO A STOP OUT SIDE THE STOP SIGNAL

In case the route is set and the signal is taken off and if it is warranted that the signal has to be put back to ON and cancel the route.

- a) Firstly the signal has to be put back to the ON position
- b) Emergency route cancellation operation must tie initiated as detailed in Para 8.1.

8.5 EMERGENCY OPERATIONS:

Cancellation of the locking of points not released after the passage of the train for any reason. If the locking of the route does not get released for one reason on the other after passage of the train, it is necessary to take recourse to the following emergency operation.

- a) Firstly it must be ensured that the signal and signal buttons are in the normal position.
- b) Operation as details in Para 8.1 to be followed

9.0 EMERGENCY OPERATION OF POINTS (IN CASE OF POINT ZONE TRACK CIRCUIT FAILURE

The SS/SM on duty can operate points from panel; in case of point zone track circuit fails. The Station Master on duty after physical verification insert the SS/SM's emergency point key and turn into get the key. 'N' position keeping the Emergency point key in that position the SS/SM on duty must press the individual point button along with emergency point operation button (Black with Red dot). He shall then release the emergency point operation button only and press the point group Normal or Reverse button as per requirement keeping the individual point button is pressed condition. Points will be set to Normal or Reverse position as per operation. During the initiation on RED indication will appear above the emergency operation button. This operation will be registered in and emergency point operation counter placed about the emergency point operation button will increase in number by one.

9.1 EMERGENCY GATE RELEASE OPERATIONS:

L.C. Gate control can be released and the gate can be opened by this operation when LC gate control remains in locked condition due to setting of any of the signal routes over it or otherwise. For releasing the gate by the Emergency operation, the SM on duty has to cancel the signal by signal cancellation control of the relevant signal. Then he has to operate the Emergency Gate release control. Now the 'LOCKED' (Red) indication will flash for 120 seconds & after the time has elapsed the 'LOCKED' (Red) indication will vanish. Now the SM on duty shall transmit the 'GATE CONTROL' in this condition and 'KEY IN' indication starts flashing. Now the KEY can be extracted from the RKT at Gate Lodge and gate can be opened. This action will be recorded in a counter. The counter will increment the number for each and every such action and also, this number should be recorded by the SM manually in a register.

The counter will increment the number for each and every such action and also, this number should be recorded by the SM on duty who shall record the details of the Emergency Gate Operation along with the latest counter no. in a register.

CALLING-ON SIGNALS:

- 9.2 Calling-on signals are provided below Home signal (i.e. in both UP & DN lines) as per GR.3.13 (1) (b), (2) (3) (4) & (6) (b).
To take off Calling-on signal the train must come to stop at the foot of the home signal, occupying the track circuit (1AT, 2AT as the case may be) in rear of the Home signal. When a train occupies the track circuit, a RED light strip will appear on the Panel. The particular route on which the train is intended to be received shall be set through Panel by pressing calling-on signal button with concerned route button simultaneously by SS/SM on duty. After a lapse of 60 seconds, the Calling-on signal clears i.e. white light glows at the concerned Calling-on signal on the Panel.
NOTE: SS/SM on duty to ensure that no through signals are given while receiving a train on Calling-on.
- 10.0 **INTER LOCKING OF SIGNALS:**
- 10.1 All running line points are fitted with point machine and all are electrically detected by the relevant Home signals and starters.
- 10.2 Advance starters are interlocked with respective double line block instrument in LINE CLEAR position.
- 10.3 Home signals are interlocked with respective Double Line block instrument. The Block instruments cannot be made to normal unless the respective Home signals are in Normal position.
- 10.4 Signals once taken OFF can be put back to Danger in case of emergency by pressing the concerned signal button in conjunction with signal cancellation button even when the panel is locked up with SS/SM.
- 11.0 **LOCKING OF RELAY ROOM:**
- Relay room at this station is provided with double locks (Two independent locks) as necessary vide OM 1.14 one key shall be kept with the Signal Maintainer of the section and the other with Station Master on duty. The relay room cannot be opened unless both keys are used.
- The SS/SM shall ensure that the Relay Room key is given to S&T maintenance staff under clear signature as and when required for their normal maintenance and special works and that the key should be returned by the S&T staff immediately after completion of their work and the documentation should be made in the Relay Room key register maintained at the Station according to SR 3.51.05 and OM 13.16.
- 12.0 **MAINTENANCE OF S&T INSTALLATION AND ADHERENCE TO MAINTENANCE SCHEDULES:**
- 12.1 The regular maintenance of the S&T installation and adherence to the schedules of Maintenance as also to the mandatory schedules of testing of Points, Track Circuits, Signals, Ground Frames, Level Crossing Gates, the associated inter locking apparatus i.e. Cables and finally the interlocking functional tests is a must for the safe and satisfactory working these installations at the Station.
- 12.2 The tests, checks and re-placement etc., including overhauling shall conform to the Schedules of the maintenance as indicated in the Signal Engineering Manual as also in the current and extent instructions/Circulars on the subject.
- 13.0 **PROCEDURE TO BE FOLLOWED IN CASE OF FAILURE OF SIGNAL INTERLOCKING INSTALLATION:**

Whenever there is failure of Points, Track Circuits, Signals, Axle-counters Or any other interlocking gear at the Station, the failure report should be communicated by the SS/SM on duty through a Memo to the sectional Maintainer and the Signal Inspector of the section along with others as per G & SR 3.51.04 and 3.68.04 and document all such transactions.

14.0 INSPECTION OF POINTS BEFORE DECLARING THEM DEFECTIVE:

However, before declaring as Signal defective the setting of the Point on the route to which it applies shall be inspected by the Station Master on duty irrespective of the position of the Switches on the Panel in terms of SR 3.68.04(c).

14.1 RECTIFICATION AND CHECK BEFORE RESUMING NORMAL WORKING:

It is only after receipt of this information the sectional Maintainer [Electrical Or Mechanical] shall attend to the failure after giving a disconnection Memo. After rectification of the fault, the sectional maintainer shall give a re-connection Memo Detailing the rectification and it is only after the Station Master on duty has personally checked this defective gear and is satisfied that it is in good and proper working order. He shall resume the normal working of the said defective gear in terms of SR 3.68.04[c] and [d].

15.0 PROCEDURE FOR CARRYING OUT PLANNED MAINTENANCE WORKS:

However any normal maintenance or special works for heavy renewals etc., are involved, These works should be pre-planned by the Signal and Telecom filed staff and the Inspector of the section should give to the Station Master in writing "Advance intimation" about this planned work in terms of G & SR 15.08.01.

16.0 EMERGENCIES:

Notwithstanding anything contained in the afore-said Para Nos. 14.1, 14.2 and 14.3 when a Gear is found to be defective and un-safe for passage of trains, the Signal & Telecom staff must at once suspend the working of that gear and the associated installations and issue a "Suspense Memo" explaining the seriousness of the defect Or Damage to the interlocking installation to the SS/SM and take SS/SM acknowledgment. After this, the usual practice of exchange of disconnection memo and re-connection Memo can follow and the SS/SM must promptly act on such messages and take adequate precautions treating the S&T installation as defective and pass trains over the effected interlocking gears according to extent instructions as contained in G R 3.77 and SR thereon.

17.0 SIGNAL LIGHTS:

The SS/SM on duty at every shift must also ensure from Panel Board that all the Signal lights are Burning properly and brightly. 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, Dated 2.5.82 and GR 3.49(3).

18.0 CORRECTING TIME IN THE STATION CLOCKS:

The SS/SM shall set the time on his Clock according to the time Signal given by the section Controller on duty at 16.00 hours every day according to G & SR 4.01.01 and 4.01.02

19.0 NORMAL POWER SUPPLY:

The Station works on Three phase power supply. The normal power supply is from the AT supply

19.1 STANDBY POWER SUPPLY:

ODISHA GRIDCO is available at the station as stand by with change over switch arrangement.

19.2 NORMAL POWER SUPPLY-MAINTENANCE OF POWER SUPPLY, POWER FAILURE AND REPORTING SUCH FAILURES:

Normal power supply to the Signaling and Interlocking installations at this station Is drawn from the AT [230-V-50HZ]. The SS/SM must however, maintain the record of the power failure of the local supply and he must promptly report the failure immediately to the Section Controller and to the concerned Electrical and S&T maintenance Staff.

20.0 WORKING OF POINTS — POSITION OF POINTS:

The normal position of all points shown in the Station Working Rule Diagram No. SI/WRD 23016 and also in the mimic indication panel provided in the Station Masters office.

20.1 All cross over points and independent points on the running lines are worked by Electric Point Machines. The point machines have in-built locking and detection arrangements. These points are remotely controlled from the panel situated in the SS/SM's office.

20.2 The operation and indication on the points and their route locking over them is already explained in earlier pares of Appendix-B.

20.3 All siding entrance points (on the running lines) and the corresponding derailing switches on the siding are coupled and locally operated by hand levers provided at site. The entrance points are provided with hand plunger locks with key locking arrangements, the key being released from the RKT instruments. The siding entrance points controlling key is inter locked with the interlocking and signaling system through the RKT as explained in 2.5 B of General portion of SWR.

21.0 PROCEDURE TO BE FOLLOWED IN CASE OF FAILURE OF SIGNAL POINTS AND USE OF EMERGENCY CRANK HANDLE:

21.1 Whenever a Signal or a Point becomes defective any movements over the Points on the running lines should be made after clamping and padlocking both the facing and trailing Points by SS/SM on duty personally for all trains at the Station.

21.2 In case of failure of Signal or a Point and in case the Point cannot be operated from the Panel, the emergency Crank Handle which is Interlocked with the system has to be extracted and the following procedure has to be observed.

21.3 In case of failure of any point, Crank Handles are provided for setting of the points manually. For this operation procedure mentioned in Para No.6.2 shall be followed.

21.4 The case of failure of Motor Operated Points should be promptly reported to the concerned Signal Inspector/ESM for immediate rectification.

- 21.5 Whenever an emergency Crank Handle is required to be used by a Signal Official for maintenance of work attending to failure, the Signal Official will give a disconnection memo to the SS/SM on duty and after making necessary entries in the emergency Crank Handle register, the Station Master on duty will obtain acknowledgement of the Signal Official in the emergency Crank Handle Register and then handover to him the emergency Crank Handle for the Points concerned. All the Points will be treated as defective till the Emergency Crank Handle is returned back to Station Master on duty.
- 21.6 Before parting with the Emergency Crank Handle either for attending failure or for Maintenance work by Signal Maintenance Officials, the SS/SM on duty will ensure that the reception and departure Signals are put back to 'ON' position. The Points of all the lines should be treated as Non-interlocked and the Station Master on duty is responsible for introduction of Non-interlocked working and the trains will piloted IN and OUT duly clamping and Padlocking the Points, both in facing and trailing directions over which the train is to pass, as per GR 3.69 and 3.70 with relevant SR's. The SS/SM on duty will be personally responsible for setting and locking of Points, for reception and dispatch of all trains.
- 21.6.1 The Emergency Crank Handle Register is to be maintained in the following pro-forma by the SS/SM on duty wherein the particulars of usage of the Emergency Crank Handle must be recorded:
1. Date.
 2. Point Number which failed or required to be tested.
 3. Time failure.
 4. Disconnection memo number received from S&T Staff.
 5. Signature of SM/Signal Official to whom the Emergency Crank Handle is handed over.
 6. Time Emergency Crank Handle is sent out.
 7. Individual Point numbers and Line number nominated for admission of dispatch for which Points are set, Clamped and Padlocked.
 8. Train number to be admitted or dispatched.
 9. Signature of the SS/SM on duty to ensure correct setting, Clamping and Padlocking of the Points.
 10. Date and Time fault rectified.
 11. Time of Emergency Crank Handle received back by SS/SM on duty.
 12. Signature and Designation of the Signal Official who rectified the fault

IMPORTANT NOTE:

When performing shunting operations in the sidings it must be clearly noted that the siding Points are interlocked with the system in the NORMAL position of the Points and in REVERSED position they are not interlocked. The Official responsible for shunting operation must clamp the Points at the both ends before permitting any movement.

22.0 INTERLOCKING OF SIGNALS WITH BLOCK INSTRUMENTS:

22.1 INTERLOCKING WITH HOME SIGNALS:

All the UP and DN Home signals are electrically interlocked with the respective DLBI so that before the handle of the DLBI instrument can be turned from train coming from position to line closed position, all the buttons controlling the Home signals of UP & DN direction as the case may be must be in normal position.

22.2 The UP and DN Advanced Starter Signals are Electrically interlocked with

respective DLBI so that these Signals can't be taken OFF until the Handle of the concerned Block Instrument is in TRAIN GOING TO position.

22.3 SUSPENSION OF LAST STOP SIGNALS:

When the Double line block instrument is suspended with its handle in any position for whatever reason the concerned Last Stop Signals controlled by the DLBI must be treated as suspended and trains shall be Piloted Out.

23.0 BURNING OF SIGNAL LIGHTS:

The SS/SM on duty shall not grant LINE CLEAR UN-less he has ensured that the Lamps of fixed Signals that apply to the train are burning brightly. If the Signal Lights cannot Keep burning the Station Master on duty shall before giving LINE CLEAR initiate action in accordance with the procedure prescribed in GR 3.68 To 3.72 and relevant SR's vide GR 3.49 (4).

24. LAST VEHICLE CHECKING DEVICE:

Axle counters are provided on UP and DN lines between **JMPT-KNRT** and **JMPT-LDX** Double line section for block proving of Last Vehicle Checking device.

The occupation and clearance of the axle counter section are indicated on panel by 'Red' and 'Green' lights.

If any Block proving Axle counter section fails, the Last stop signal at the rear station cannot be taken 'OFF' and Block Instrument at advance station cannot be turned to "Line Closed" position after arrival of a train and in such case, resetting of last vehicle checking device is to be resorted to in both the station's.

Even after completion of reset operation, LVCD Axle counter will show clear only if next train is passed. The next train is to be piloted.

No train should be allowed on signal to leave a station in any particular direction unless:-

Track clear indication is available for the relevant axle counter track circuited portion and Last stop signal is not taken 'OFF'.

A resetting arrangement for the resumption of the track circuit by means of axle counter under failure condition at either end station of the Block section is provided, which should only be resorted to after the train that was lastly sent, arrives fully at the receiving station and is certified in this respect by the SM at the receiving station through exchange of Private Number.

Reset arrangements are provided in the SM's room for sections **JMPT-KNRT** and **JMPT-LDX**. The key for the Reset Box should normally be kept with SM and for every such operation of the resetting the Axle Counter, the SM on duty shall record giving details of the date of use, train number, time, number registered on the counter and reasons for resetting and initial each such entry.

24.1 High Availability Single Section Digital Axle Counter (HASSDAC) provided for KNRT-JMPT & KNRT-GMDA Sections for both UP & DN lines. These two LVCDs are named as SSDAC-1 and SSDAC-2. The status of both systems is provided as indications beside of the operating panel.

SL. NO	indication	Automatic action taken by Equipment.	Action by SM
1	Only SSDAC-1 fails after arrival of the train	System resets automatically.	NIL
2	Only SSDAC-2 fails after arrival of the train	System resets automatically.	NIL

3	Both SSDAC-1 & 2 Fails after arrival of the train (or)for any reason	No automatic action.	SM to reset by taking permission From adjacent station and reset the system as procedure laid down and make an entry in the axle counter register.
4	Both SSDAC-1 & 2 Fails even after reset by SMs of both the end	No automatic action.	Enter in Signal Failure Register issue failure memo to signal technician. Procedure to be adopted is same as laid down.
5	Either SSDAC-1 or SSDAC-2 fails continuously for long time	-----	Report to signal staff without entering in signal failure

24.2. FAILURE OF COMMUNICATIONS-FAILURE OF BLOCK INSTRUMENTS:

In the event of suspension/failure of SGE lock and block instruments for sections JMPT-KNRT or JMPT-LDX, the SS/SM on duty shall endorse.

Block instrument suspended at _____ for _____ (cause) in the train signal register and draw a RED line below the entry. When the Block instrument is resumed, the SM on duty will make suitable endorsement showing the time when the normal working is restored and thereafter will maintain the train Signal Register as usual.

In the event of failure/suspension of SGE type double line lock and Block instruments, line clear must be obtained on Block phones exchanging identification number and supported by a private number as per the provisions of SR 6.02.05(1)(a)

In the event of failure/suspension of SGE type double line lock and Block instruments and Block telephone, line clear must be obtained from Station to Station on magneto phone by exchanging identification number and supported by a private number vide SR 6.02.06(i)(c)

In the event of failure of SGE double line lock and block instruments, Magneto phone and Block telephone and line clear must be obtained over Train Control Telephone vide SR 6.02.06(1)(c).

In the event of total failure of communications train shall be worked in terms of SR 6.02.03.

In the event of failure of communication between SM'S office and LC Gate SM shall advise the Gateman about the description of the train, direction of the train etc. through a memo advising to clear the road traffic and transmit the gate key? Such memo shall be sent in duplicate to the Gateman. Gateman shall retain one copy and send back the other copy to SM with signature thereon.

APPENDIX 'C'

ANTI COLLISION DEVICE [RAKSHA KAVACH]:

-NIL-

APPENDIX 'D'**DUTIES OF TRAIN PASSING STAFF AND STAFF IN EACH SHIFT**

The following staffs are concerned with the movement of the trains whose duties are given below:

COMPLEMENT OF STAFF	STAFF IN EACH SHIFT
SS/SM	01
TRAFFIC POINT MAN	01
TRAFFIC GATE MAN	01

1. STATION SUPERINTENDENT/STATION MASTER (IN CHARGE):

- i) He is responsible for trains passing during his shift.
- ii) He is responsible for the general and satisfactory working of the station and for the efficient discharge of duties by staff working under him.
- iii) He shall keep all Rule books, Registers, Files and documents neat and up to date.
- iv) He shall ensure that all equipment, apparatus, and instruments including signaling and interlocking gears and fittings are kept clean and oiled by S&T officials.
- v) His special attention is drawn to Chapter-II of G&SR and GR 5.01 to 5.08 with relevant SRs and O.M. Chapter-2.
- vi) He shall follow the instructions laid down in SR.3.68.01 (c) and (d) and SR 14.07.01 and B.W.M.2.09 (e).
- vii) He shall promptly attend to accidents and report them.
- viii) He shall ensure that firefighting equipment at the station such as fire extinguisher, fire buckets etc. are in good fettle and ready for use.
- ix) He must ensure that the essential safety equipment at his station is the same complete and in good condition. If there is any deficiency it should be made good without delay.
- x) He shall see that TSR, SM's Diary, Inspection Note Book, Reference Books and other station record is properly maintained and preserved for a minimum period as prescribed in the Operating Manual.
- xi) He shall ensure that all correction slips of Manuals and SWR are posted and changes are made in respective pages.
- xii) He shall supervise the work of safe working staff and conduct night inspections and report lapses of staff working under him.

2. STATION MASTER:

- a) He is responsible for trains passing during his shift.

- b) He shall promptly bring to the notice of SM in-charge all irregularities and accidents in course of his shift duties.
- c) During the absence of SM, I/C, the duties of the Station Master will devolve on him.
- d) He shall follow SR 3.68.01(c) and (d) SR 14.07.1 and OM Chapter-2.
- e) His special attention is drawn to Chapter-2 of G&SR 1976 and GR 5.01 to 5.08 with relevant SRs.
- f) He shall not consider himself relieved of duty unless he has completed transactions of trains for which he has given/obtained line clear till the complete arrival of such trains.
- g) He shall always obey the lawful orders of his superiors so long as they do not contravene any of the extant rules in force.
- h) He shall keep the Station Master's control keys of Block Instruments/Control Panel in his personal custody whenever, he is required to leave his office even for a short duration.
- i) He shall be responsible for correct issuance of caution order, whenever required.
- j) As an assistant to SM, I/C, he shall carry out all lawful instructions given from time to time.

3. TRAFFIC POINTSMAN:

- i) He shall work under the orders SM on duty.
- ii) He shall be in proper neat and clean uniform while on duty.
- iii) He shall always commence his duty equipped with hand signal lamps during night and flags during day.
- iv) He shall couple and uncouple vehicles under the supervision of SM.
- v) He shall watch and Train Manager the packages and other Railway property lying in the Station premises.
- vi) He shall report any irregularities coming to his notice.
- vii) He shall do loading and unloading of parcels, smalls and Train Manager's boxes. He shall do piloting IN and OUT.
- viii) He shall deliver any official message to the proper person/office. He shall carry out any other duties entrusted to him by the SM on duty.
- ix) He shall not leave his duty unless properly relieved or authorized by his superiors.
- x) He shall follow OM Chapter-2.

4.

5. **GATEMAN:**

- a) He shall be responsible for proper operation of the gate as per GWR/SWR for the passage of trains.
- b) He shall ensure that no train suffers any detention on account of late closing of the gate.
- c) He shall keep the channels of check-rails clean and shall clean the road within the railway limits and water the area regularly.
- d) He shall clean the gate lamps and hand signal lamps daily. He shall ensure that the wicks of the burners are trimmed so that these are lighted properly and kept burning continuously from sun set to sunrise.
- e) He shall keep the surroundings of his gate lodge clean tidy and neatly planted with shrubs, plants etc.
- f) He shall remain alert on duty till properly relieved. If he is required to leave the gate in an emergency he shall close and lock the gate booms against the road traffic before leaving the gate.
- g) He shall ensure that the equipment at L-xing are complete and in working orders.
- h) He shall produce the public complaint book when required by public for lodging complaint and to the railway officials for inspection.
- i) He shall ensure that road traffic is not unnecessarily held up at the gate.
- j) He shall stand in attention near the gate lodge facing the track and be prepared to repeat any signal which the Train Manager may intend to convey to the loco pilot or show caution or danger signal should anything appear to be wrong with the train itself as it passes.

NB: - All staff should be in uniform while on duty and follow their rosters issued by DPO/WAT from time to time.

APPENDIX 'E'**LIST OF ESSENTIAL EQUIPMENT PROVIDED AT THE STATION:**

A list of essential equipment's is given below which shall be maintained in good Working order.

Sl. No	Description	Quantity
(i)	Detonators	20
(ii)	LED based Tri Colour flashing torch.	3(1 Spare)
(iii)	Hand Signal Flags	3(1 Spare)
(iv)	Safety chains with Pad locks	6
(v)	Clamps with Padlocks	8
(vi)	Skids	6
(vii)	Wedges	4
(viii)	Fire & Sand buckets	6
(ix)	Fire Extinguishers	2
(x)	Line blocking collars & Power Block button Collars	6+6
(xi)	Motor trolley on line board	2
(xii)	Block suspension board	2
(xiii)	First Aid Box	1
(xiv)	Blanket	1
(xv)	Stretcher	1

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:

DETAILS OF WORKING RULES OF 25KV AC TRACTION.