

**EAST COAST RAILWAY
SAMBALPUR DIVISION**

No. LCG/Traffic/ST-59

**GATE WORKING RULE FOR “C” CLASS TRAFFIC INTERLOCKED LEVEL CROSSING GATE AT
KM 97.034(97/0-1) (NO. ST-59) SITUATED BETWEEN THE OUTERMOST FACING POINT AND
UP ADV. STARTER SIGNAL OF SRGP STATION.**

Date of issue: 08.03.2022

Date brought into force:

1.1 GENERAL INSTRUCTIONS: -

1.1.1 DESCRIPTION OF THE LEVEL CROSSING GATE:

- | | | |
|-----|--|---------------------------------------|
| 1. | Number of Level Crossing Gate: - | ST-59. |
| 2. | Engineering or Traffic Gate: - | Traffic. |
| 3. | Under control of SM/Permanent Way Inspector: | SM/SRGP. |
| 4. | Location KM | 97.034 |
| 5. | At. Station: - | SRGP |
| 6. | In between Stations: - | SRGP-HNPA |
| 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: - | Interlocked. |
| 11. | Means of interlocking: - | Control by-46 in VDU |
| 12. | Provision of Gate signal at Kms. | |
| | | 1. Up line NIL |
| | | 2. Dn line NIL |
| 13. | Signalling arrangement: - | Interlocked with station Stop Signal. |
| 14. | Means of Communication: | Telephone Communication |
| | | with SM/SRGP. |
| 15. | Width of level crossing Gate: - | 7.5 m. |
| 16. | Type of road. (NH/SH/Others): - | Others |
| 17. | Name of Road: - | SARAGIPALI Road. |
| 18. | Metalled/Non -Metalled: | WBC |
| 19. | Approach Road: - | WBC |
| 20. | Width of the road: - | 5.5 M. |
| 21. | Angle of road crossing (In case of the skew Gates) 90° | |
| 22. | Road gradient (If any) | |
| | | i) East/North side- 1 in 54 |
| | | ii) West/South side -1 in 54 |
| 23. | Road alignment (Straight/Curve): - | |
| | | North/East side -Straight. |
| | | South/East side -Straight. |
| 24. | Provision of height gauges: - | Provided. |
| 25. | Type of Barriers: - | Winch operated Lifting barriers. |
| 26. | Length of checkrails: - | 9.5 Meter. |
| 27. | Road surface in between Level Xings Gates | CC Block. |
| 28. | Length of speed breakers: - | 7.5 Meters. |
| 29. | Road signs: - | Available |
| 30. | Speed breaker indication board: - | Provided. |
| 31. | TVU: - | 7244 on 09/2024 |
| 32. | Census next due on: - | 09/2027 |
| 33. | Demarcation for placement of Detonators: - | Provided. |
| 34. | No. of the Gateman working: - | 02. |

35. Nearest Railway Medical Assistance: - Sambalpur.
 36. Nearest Private Medical Assistance available (if any) HNPA.
 37. List of equipment available yes//No: - Yes.

1.2. EQUIPMENTS TO BE AVAILABLE AT THE GATE:-:

Sl. No.	Description	Requirement	To be used as
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.	Single Line-2	In case of obstruction, it is to be displayed 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 with stands.	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 (10) in a tin case.	For use in case of obstruction of track.
9.	Tommy Bar	One	For levelling 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/ Guard to call their attention.
12.	Wall Clock	One	To note down the timings in PN/Log book.
13.	A small size chain for use in case of failure of gate boom lock.	Two	For securing boom in closed condition in case of failure of boom lock.

1.3 The gateman shall be provided with following registers: -

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

1.4 DUTIES OF GATEMAN:

1. ALERTNESS:

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

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

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

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

3. **ROUTINE DUTIES OF GATEMAN:**

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

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

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

- i) He shall take prompt action to warn the driver/guard of the passing train by showing red flag by day and red light by night.

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

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

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

The gateman shall protect the line as under: -

2. Electrified Section:

- (i) On noticing that, the whole or part of the OHE or a feeder or a cable falling down, the gate keeper shall ensure that, as far as possible, human beings, animals or vehicles etc are kept away in order to avoid any contact with the live equipment.
- (ii) 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.
- (iii) Any damage to the track or structures of the OHE comes to the notice of on duty GK, he shall immediately inform SM on duty and take all necessary measure for protection of the line 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 line on which a train is expected to arrive first.
- II. The he will similarly plant the other red banner flag by day and red light by night on the other line 5 meters away from the site of obstruction.
- III. Gateman shall then proceed to protect the gate along with detonators and red flag by day and red hand signal lamp by night.
- IV. Gateman shall proceed exhibiting red flag by day and red hand signal lamp by night on the line on which a train is expected to arrive first, to a point 600 meters on BG and place one detonator on the line. Thereafter he shall proceed to a distance 1200 on BG from the level crossing gate and place 3 detonators on the track in 10 meters apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back.
- V. Thereafter, he shall proceed on the other line, showing red hand signal, similarly place detonators as described in para (iv) above and return to the site of obstruction, picking up the intermediate 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.

Thereafter, he shall warn the driver and stop the approaching train by waving his red flag by day red hand signal lamp by night repeatedly

(B) OTHER ACTIONS TO BE TAKEN BY GATEMAN:

- i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.

- ii) If the gate is broken by a road vehicle, which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.
- iii) He shall note down the particulars of the road vehicle, vehicle number, name of the driver, owner and relay these details to the Station Master and Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.

1.5 SPECIAL INSTRUCTIONS-

1. MODE OF OPERATION:

This is a Manned, interlocked traffic L.C.Gate situated at the HNPA end of the yard in between outermost facing point and UP Adv. Starter at Km 96.532. This gate is interlocked with Station stop signals. Telephone communication is provided between the L C. gate lodge and SM on duty of SRGP Station. The L.C gate is operated by Gatekeeper of Operating department under the control of SM/SRGP. The level crossing gate is of lifting barrier type operated by means of winch provided at the gate lodge. The normal position of the gate is open to road traffic.

A two-lever ground frame is provided at the gate lodge. The key of the LC remains in the winch when the gate is opened condition. When it is necessary to close the gate for taking off signals or for shunting operations, the SM on duty shall inform the gate man to close and lock the gate. The gate man on duty shall then close the barriers of the LC gate by operating winch. Then key 'G' is to be extracted from the winch, which will be inserted in the lever of GF-2. When GF-2 is reversed it locks the booms of the gates and releases GF-1. GF -1 when reversed, Key 'P' is extracted. This Key 'P' will be inserted in the EKT and turned, L.C Gate closed indication will appear on the VDU and DN reception and UP despatch signals automatically get released. GF1 is provided to put back the concerned signals to ON in case of emergency.

After passage of the Train or completion of shunting, the SM on duty shall inform the gateman and press LC gate controlling button No.46 and keep it pressed till such time the gate man extracts the control key 'P' from the EKT instrument. After getting the Key 'P', the gate man will open the L.C gate by normalising the levers. 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).

One emergency key mechanically free & electrically proved is provided in a red sealed glass box for emergency opening of the gate incase of failure in extracting key-P from EKT. Concerned signals will be put back to "ON" position when emergency key is extracted. The date and time of breaking the sealed cover of Emergency Key Box shall be recorded and signed with reasons by the gateman.

Working of emergency key

Normally, crank handle welded with EKT key remains inside the EKT-2 (provided in the sealed red box). When the normal operation (closing/opening) of boom fails from the gate panel, the gate man on duty will inform the SM on duty regarding the failure and seek his permission to use emergency key. After obtaining the permission from SM on duty, the gate man on duty will break the seal of the red box open it and take out the EKT key welded with crank handle from the EKT-2. By using crank handle closing/opening of the booms are to be done. After completing

Correction Slip No.01
Date of Issue: 16.01.2024

the operation the EKT key welded with crank handle is to be inserted in EKT-2 and the box is to be closed and S&T staff is to be advised to seal the red box.

In the event of failure of DN reception signal or UP dispatch signal 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.

WORKING OF SLIDING BOOM BARRIER IN CASE OF FAILURE/DEFECTIVENESS LIFTING BARRIERS.

- (i) Key'S' when extracted from lock free EKT-5, Makes road signals danger & actuates road hooter key'S' unlocks the siding barrier-1.
- (ii) Sliding barrier-1 to be rolled across the road up to the lock post key(Chained with barrier) Releases the lock plunger & Key'SB-1'. Key'SB1' when extracted lock the sliding boom barrier-1.
- (iii) Similar sliding barrier-2 after unlocking the padlocks, to be rolled across the road up to the lock post (Key chained within the barrier) along with key-SB-1 inserted releases the road up to be lock post & key-SB-2 when extracted lock the sliding barrier-2 & key-SB-1.
- (iv) Finally released key-SB2 is to be transmitted electrically to SM through EKT-4 in conjunction with slot switch '50GS' reversed for taking OFF concerned signals.

2. INTIMATION TO GATEMAN:

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

3. FAILURE OF TELEPHONIC COMMUNICATIONS:

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

- i) SM/SRGP on duty shall send written advice to the gateman through the porter with full details of number, description and direction of the Train.
- ii) Gateman on receipt of such advice shall close the gate and transmit the key to the SM/SRGP, which will enable him to take 'OFF' reception/Departure signals.
- iii) When sufficient time is not available because of greater frequency of Train service, SM/SRGP will issue written authority to the Train Loco Pilot to pass the signal at 'ON' position.
- iv) In addition SM/SRGP shall also issue a caution order advising the Loco Pilot to whistle continuously and approach the gate cautiously.
- v) The Train Loco Pilot shall be instructed to pass the gate cautiously, on signaled by the gateman. If hand signal is not seen, Driver should be prepared stop short of the gate and ensure that gate is closed following GR.3.73 (2)(b).
- vi) In case of an approaching train, the SM/SRGP shall advise the SM/HNPA, under exchange of private number that the telephone at the gate has failed.
- vii) The SM/HNPA at the other end shall then issue a caution order to the Loco Pilot before dispatching a Train in to the block section from his end.
- viii) SM/SRGP should also advice S&T staff responsible for maintenance of the telephone to rectify the defect at the earliest.
- ix) Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection /fit memo for the same.

4. FAILURE OF LIFTING BARRIERS:

(S.Saini)
DSTE/SBP

(L.B Jena)
DEN (East)/SBP

(Lingaraj Gartia)
DOM (G)/SBP

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

Note:

- (a) Authority to pass signals at 'ON' position as per rules shall also be issued to the Loco Pilots of both departing and arriving trains.

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

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

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

- i) If the gate key cannot be extracted from the winch, gate lever or key transmitter then gateman must immediately inform the SM/SRGP on duty on telephone, under exchange of private number.
- ii) Thereafter, the gate must be treated as non-interlocked and procedure for reception/despatch of Trains as prescribed for non-interlocked gates should be adopted.
- iii) Gateman shall secure the gate against road traffic by means of chains and padlocks and pass the Trains on hand signals.
- iv) SM/SRGP on duty shall issue caution order to the Loco Pilot of a departing Train.
- v) He shall also advise the SM/HNPA at the despatching end, under exchange of private number, to similarly issue a caution order to the Loco Pilot before despatching a Train in to the block section from his end.
- vi) SM/SRGP will advise S&T staff responsible for maintenance of winch/key transmitter to rectify the defect at the earliest.

- vii) Normal working will resumed only after S&T staff repairs the winch/ key transmitter and issue reconnection/fit memo for the same.

7. OBSTRUCTION AT THE GATE:

- i) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall Immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the gate, for this purpose.
- ii) Immediately after this, the gateman shall advise the SM/SRGP on duty, regarding the defects/obstruction at the gate, under exchange of private number.
- iii) SM/SRGP on duty shall be advised to put the reception/departure signals back to 'ON' position, if taken 'OFF' for a Train.
- iv) If there is no response from the SM/SRGP after two or three attempts, he shall first protect the gate and then inform on phone.
- v) Gateman shall then rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching Train and protect the gate as stipulated in General Instruction for duties of gateman under item No.1.4. (5).
- vi) Thereafter he shall protect the gate from the other direction also.
- vii) He shall note down the particulars of the road vehicle, name of the Driver, owner and reply these details to the SM/SRGP who shall not start the Trains unless he has been assured by the gateman that the road vehicle or the lifting barriers are not fouling the track.
- viii) The SM/SRGP shall also inform the SM/HNPA at the despatching end, under exchange of private number, asking him not to despatch any Train in to the block section from his end, until the track has been clear of all obstruction.
- ix) After the track has been cleared of all obstructions the gateman shall inform the SM/SRGP accordingly, under exchange of private number.
- x) SM/SRGP shall then issue a caution order to Loco Pilots of all Trains to proceed cautiously, and pass the gate on green hand signal of the gateman, if the gate is broken, but is clear of any obstruction.
- xi) Gateman shall secure the gate against road traffic by means of safety chains and padlocks and they're after exhibit green hand signal, if the gate is not obstructed.
- xii) SM/SRGP shall advise maintenance staff responsible for maintaining the lifting barriers to repair the same at the earliest.
- xiii) Normal working will be resumed only after maintenance staffs rectify the defective lifting barriers and issue reconnection/fit memo for the same.

8. OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and SM/SRGP will adopt the procedure given under item No.7 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.

9. DUTIES OF GATEMAN IN CASE OF ACCIDENTAL ROLLING DOWN OF TRAIN:

When the Gateman seen that a train is rolling down or immediately after receipt of the information about accidental rolling down of the train the Gateman shall:

- (i) First close the gate against the road traffic.
- (ii) Then immediately inform the SM on Duty.
- (iii) He shall not open the gate till he ensured that the train has completely stopped.