

**North Eastern Railway**

**(Engineering Department)**

## **C.E. Circular No. 96 ( P.Way)**

### **Sub: - Laying and Maintenance of CMS Crossings.**

As per the provisions of the IRPWM and as per the manual for Reconditioning of points & crossings, record of laying and maintenance of CMS crossings are to be maintained by the field officials in their respective units. Following instructions are being issued in this regard for strict adherence by the field officials in their respective units.

- 1 A Permanent Unique Identification Nos. viz BTT/12/52/45 be allotted to each CMS Crossing in which BTT stands for name of the Section Engineer/PW ( Incharge) unit, 12 stands for Angle of Xings, 52 stands for section of rails & 45 stands for Serial number of the crossing of the Section Engineer/PW ( Incharge) unit.
- 2 The Permanent Unique Identification No. allotted as above shall be painted in block colour on yellow background on outer web of the Xing.
- 3 One vertical line shall be made with welding electrode on inner web of the Xing on each occasion of its reconditioning to enable to know that xing has been reclaimed for how many times.
- 4 A proper record will be maintained in a printed register with serially numbered page as per the proforma enclosed herewith as Annexure-I duly endorsing the Permanent Unique Identification No. of the crossing in the topmost row of the proforma. Sample entries have been made in the Annexure-II for illustration. One page shall be allotted for each Xing of the section and all the relevant and subsequent entries pertaining to that xing shall be recorded by SE/PW (Incharge) on that page.
- 5 Last numeric no. of the Unique Identification No. of the same type of Xing i.e. 1 in 8 ½ or 1 in 12 of any S.E. ( P.Way) unit shall not be repeated in his jurisdiction and whenever a new Xing is put on line, the next no. of series shall be allotted and its entry shall be made on next page in the register as mentioned above.
- 6 Generally no. Xing body of a unit having Permanent Unique Identification No. shall be sent for use from one Unit to another unit. But, in case of emergency or surplus, if it is unavoidable, such xing shall be sent by the sending unit with photo copy of the full record of the Xing (i.e. copy of the pertaining page of the register) to the receiving unit. The receiving unit shall make the entries in his register as per the details received and continue to maintain the further details in his register.

DA( Annexure-I & II)

CE/NER/Track/Circular/2007/275/Pt-III-4A dated: 18 .9.2009

Sd/  
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Principal Chief Engineer

**Proforma for recording details regarding reconditioning of built-up /CMS crossings**

Railway..... Divisions ..... Section..... SSE/SE(P.Way).....

| Description |                                                                                                             | New Crossing | After Ist reconditioning | After IInd reconditioning | After IIIrd reconditioning | After IVth reconditioning |
|-------------|-------------------------------------------------------------------------------------------------------------|--------------|--------------------------|---------------------------|----------------------------|---------------------------|
| 1-          | Permanent Unique identification No. of Crossing                                                             |              |                          |                           |                            |                           |
| 2-          | Make&Year of Manufacturing                                                                                  |              |                          |                           |                            |                           |
| 3-          | Angle/Gauge/Section                                                                                         |              |                          |                           |                            |                           |
| 4-          | Station                                                                                                     |              |                          |                           |                            |                           |
| 5-          | Sleeper Type                                                                                                |              |                          |                           |                            |                           |
| 6-          | Point No.                                                                                                   |              |                          |                           |                            |                           |
| 7-          | Line (Up/Down/Yard line/Main Line)                                                                          |              |                          |                           |                            |                           |
| 8-          | Direction of traffic(Facing/Trailing)                                                                       |              |                          |                           |                            |                           |
| 9-          | Location (Curve/Straight)                                                                                   |              |                          |                           |                            |                           |
| 10-         | (a) Date of Laying whether New Xing /in situ Reconditioning/Relaying after Reconditioning in shop.(N/IR/SR) |              |                          |                           |                            |                           |
|             | (b) Date of Removal in cases of other than in situ reconditioning                                           |              |                          |                           |                            |                           |
| 11-         | Reasons for removal (wear/chipped off/crack)                                                                |              |                          |                           |                            |                           |

|     |                                                            |                          |                            |                            |                           |  |
|-----|------------------------------------------------------------|--------------------------|----------------------------|----------------------------|---------------------------|--|
| 12- | Traffic density of section (GMT)                           |                          |                            |                            |                           |  |
| 13- | GMT Carried since last Reconditioning/Laying               |                          |                            |                            |                           |  |
| 14- | j)Cumulative GMT carried                                   |                          |                            |                            |                           |  |
| 15- | <b>Wear and welding particulars of Reconditioning</b>      | After Ist reconditioning | After IIInd reconditioning | After IIIrd reconditioning | After IVth reconditioning |  |
|     | a) Wear on nose when released from track (100mm from ANC)  |                          |                            |                            |                           |  |
|     | b) Wear on nose after surface preparation (100mm from ANC) |                          |                            |                            |                           |  |
|     | c) Date of reconditioning                                  |                          |                            |                            |                           |  |
|     | d) Technique of reconditioning                             |                          |                            |                            |                           |  |
|     | i)Whether single electrode or continuous wire process      |                          |                            |                            |                           |  |
|     | ii)Whether depot or in situ                                |                          |                            |                            |                           |  |
|     | e) Reconditioning agency/departmental                      |                          |                            |                            |                           |  |
|     | f) Brands of electrodes used                               |                          |                            |                            |                           |  |
|     | g) Qty. of electrodes consumed (Nos./kg)                   |                          |                            |                            |                           |  |
| 16- | Remarks                                                    |                          |                            |                            |                           |  |

Note: - For yard line/loop line 10% of GMT of main line may be taken.

Signature of SSE/SE(P.Way)

## Sample Entries

Annexure-II

Page No.....

### Proforma for recording details regarding reconditioning of built-up /CMS crossings

Railway.....**NER**..... Divisions ...**BSB**..... Section.....**GKP-CPR**... SSE/SE(P.Way)...**BTT**.....

| Description |                                                 | New Crossing        | After Ist reconditioning | After IInd reconditioning | After IIIrd reconditioning | After IVth reconditioning |
|-------------|-------------------------------------------------|---------------------|--------------------------|---------------------------|----------------------------|---------------------------|
| 1-          | Permanent Unique identification No. of Crossing | BTT/12/52/45        |                          |                           |                            |                           |
| 2-          | Make&Year of Manufacturing                      | HDC- 2006           |                          |                           |                            |                           |
| 3-          | Angle/Gauge/Section                             | 1 IN 12 , BG, 52 Kg |                          |                           |                            |                           |
| 4-          | Station                                         | BTT                 | BTT                      | DEOS                      | DEOS                       |                           |
| 5-          | Sleeper Type                                    | PSC                 | PSC                      | PSC                       | PSC                        |                           |
| 6-          | Point No.                                       | 103A                | 104A                     | 105A                      | 105A                       |                           |
| 7-          | Line (Up/Down/Yard line/Main Line)              | Main Line           | Main Line                | Main Line                 | Main Line                  |                           |
| 8-          | Direction of traffic(Facing/Trailing)           | Facing              | Facing                   | Facing                    | Facing                     |                           |
| 9-          | Location (Curve/Straight)                       | Straight            | Straight                 | Straight                  | Straight                   |                           |

|     |                                                                                                             |               |                          |                           |                            |                           |
|-----|-------------------------------------------------------------------------------------------------------------|---------------|--------------------------|---------------------------|----------------------------|---------------------------|
| 10- | (a) Date of Laying whether New Xing /in situ Reconditioning/Relaying after Reconditioning in shop.(N/IR/SR) | N<br>04-03-06 | SR<br>14-03-07           | SR<br>25-01-08            | IR<br>25-01-09             |                           |
|     | (b) Date of Removal in cases of other than in situ reconditioning                                           | 08-02-07      | 05-01-08                 | ---                       |                            |                           |
| 11- | Reasons for removal (wear/chipped off/crack)                                                                | Wear          | Wear                     | Wear                      |                            |                           |
| 12- | Traffic density of section (GMT)                                                                            | 27.68         | 27.68                    | 27.045                    | 27.045                     |                           |
| 13- | GMT Carried since last Reconditioning/Laying                                                                | 25.37         | 23.066                   | 29.3                      |                            |                           |
| 14- | j)Cumulative GMT carried                                                                                    | 25.37         | 48.436                   | 77.736                    |                            |                           |
| 15- | <b>Wear and welding particulars of Reconditioning</b>                                                       |               | After Ist reconditioning | After IInd reconditioning | After IIIrd reconditioning | After IVth reconditioning |
|     | a) Wear on nose when released from track (100mm from ANC)                                                   |               | 10mm                     | 11mm                      | 11mm                       |                           |
|     | b) Wear on nose after surface preparation (100mm from ANC)                                                  |               | 12mm                     | 13mm                      | 14mm                       |                           |
|     | c) Date of reconditioning                                                                                   |               | 14-02-07                 | 20-01-08                  | 25-01-09                   |                           |
|     | d) Technique of reconditioning :-                                                                           |               |                          |                           |                            |                           |
|     | i)Whether single electrode or continuous wire process                                                       |               | Single electrode         | Single electrode          | Single electrode           |                           |
|     | ii)Whether depot or in situ                                                                                 |               | Depot                    | Depot                     | in situ                    |                           |
|     | e) Reconditioning agency/departmental                                                                       |               | Departmental             | Departmental              | M/s Hindustan              |                           |

|     |                                          |                            |                            |                            |  |
|-----|------------------------------------------|----------------------------|----------------------------|----------------------------|--|
|     | f) Brands of electrodes used             | H3B - E 714<br>MC M/s Ador | H3B - E 714<br>MC M/s Ador | H3B - E 714<br>MC M/s Ador |  |
|     | g) Qty. of electrodes consumed (Nos./kg) | 36/2 Kg                    | 36/2 Kg                    | 45/2.5 Kg                  |  |
| 16- | Remarks                                  | Satisfactory               | Satisfactory               | Satisfactory               |  |

Note:- For yard line/loop line 20% of GMT of main line may be taken.

Signature of SSE/SE(P.Way)