

NORTH CENTRAL RAILWAY

Headquarters' Office
Engineering Department,
Allahabad.

N0 355-W/Raising of sectional speed/KID-MKP/NCR,

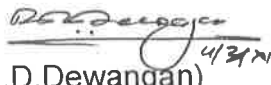
Dated: 04.03.2011

Chief Operations Manager, North Central Railway, Allahabad.
Chief Mechanical Engineer, North Central Railway, Allahabad.
Chief Electrical Engineer, North Central Railway, Allahabad.
Chief Signal & Telecom Engineer, North Central Railway, Allahabad.
Chief Safety Officer, North Central Railway, Allahabad.
Chief Track Engineer, North Central Railway, Allahabad.
Divisional Railway Manager, North Central Railway, Jhansi.

Sub:- Raising of maximum permissible speed of Khairar (KID) – Manikpur (MKP) non electrified section (km 1308.470 to km 1419.220) from 100 kmph to 110 kmph in JHS division of North Central Railway.

Based on Joint Safety Certificate signed by all concerned and having inspected Khairar - Manikpur non electrified section of Jhansi division on 04.03.2011 at maximum permissible speed of 110 kmph and having satisfied myself about track, bridges, signals etc in satisfactory condition, I, under the power delegated to me in accordance with para 6.1 (a) (iii) of revised Policy Circular No.6 as amended vide Railway Board's letter No. 52/CEDO/SR/4/O/Pt-1, dated 09/12.07.2010, hereby sanction raising of maximum permissible speed of Khairar - Manikpur (km 1308.470 to km 1419.220) non electrified section from 100 kmph to 110 kmph, subject to the following conditions/stipulations:-

1. Observance of all temporary and permanent speed restrictions in force or those which may be imposed from time to time due to track, bridges and signaling and interlocking etc.
2. All BG diesel locomotives (single and in multiple unit) and rolling stocks presently plying on the section are permitted to run at their respective permissible speed or the maximum permissible speed now permitted whichever is less.
3. Designed S.Es. for various curves as per approved calculations be entered in curve register. The designed S.Es. should also be painted on rail web at respective stations of the various curves in the field and should be ensured during maintenance.


(D.D.Dewangan)
Principal Chief Engineer

Copy to - (i) CRS/N.E. Circle, Lucknow for kind information
(ii) Secretary to GM for kind information to GM.

North Central Railway

DRM(W)'s Office
Jhansi

No. JHS/W/TP/Speed 110 KMPH /KID-MKP

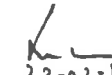
23.2.2011


**Dy.CE/TM
NCR ALD**

Sub: Increasing Speed from 100 kmph to 110 kmph on KID-MKP SECTION

In reference to above the below mentioned certificates for increasing the existing speed from 100 kmph to 110 kmph for running of passenger carrying trains when hauled by single headed diesel locomotives which are presently in operation on KID-MKP section SL line 'D' route is sent herewith for perusal and further order please.

1. Track Certificate.
2. Bridge Certificate.
3. Joint Safety Certificate.
4. Relevant Sectional details.
5. CTR/TGI Value of TRC run.
6. Approved curve calculation


23-02-11
Sr. DEN/Co. JHS

Recd on 26/2/11
at 1.57 pm

S. S. S. / CS

**NORTH CENTRAL RAILWAY
JOINT SAFETY CERTIFICATE**

Certified that it is safe to raise maximum sectional speed of KHAIRAR (KID) to MANIKPUR (MKP) non electrified section (1308/470 to Km 1419/220) of JHS division from 100 kmph to 110 kmph for all BG Diesel locomotives (single and in multiple unit) and rolling stocks presently plying on the section subject of observance of stipulation given in track , bridge and safety certificate etc submitted by JHS division and all permanent and temporary speed restrictions already in force and /or those that may be imposed from time to time due to track, bridges, signaling, rolling stock and interlocking etc.


Section	Line	Km		Existing sectional speed (Kmph)	Proposed sectional speed (Kmph)
		From	To		
KID-MKP	SL	1308.470	1419/220	100	110


23.02.11
Sr. DEN/Co. JHS


18.2.11
Sr. DSTE JHS



18/2/11
DEN/E/ JHS


18-2-11
Sr. DME(C&W) JHS

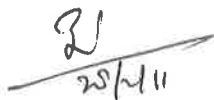

18/2/2011
Sr. DME(O&F) JHS



23/2/11
Sr. DOM JHS

COUNTERSIGNED BY


28/2/11
CTE/NCR/ALD


11/3/11
CME/NCR/ALD


25/2/11
COM/NCR/ALD


3/3/11
CSTE/NCR/ALD

NORTH CENTRAL RAILWAY

TRACK CERTIFICATE

It is certified that Track on single line of section Khairar to Manikpur from 1308/470 to Km 1419/220 is maintained to the standards recommended by RDSO's report No. C&M-I, Vol.I and weakest portion of which having details as under, is safe for regular operation of Broad gauge S/L (WDM2) upto 19 Tones axle load at a maximum speed of 110 kmph. Subject to observance of all temporary and permanent speed restrictions in force or that can be imposed from time to time.

Details of Weakest portion							Ballast cushion (mm.)
Section	Line	Rails			Sleepers		
		Section	Length	Max. wear (%)	Type	Density	
KID-MKP	SL	52Kg/72 UTS	0.204 Km	1%	PSC6	1540	150 mm clean & 100 mm Cacked up

(Vinay Tak)
DEN/E/JHS

(S. K. SRIVASTAVA)
Dy.CE/TP/ALD

(Naveen Babu)
Sr. DEN/Co./JHS


Countersigned

(M. K. GARG)
Chief Track Engineer/ALD

BRIDGE CERTIFICATE

Certified that the bridges on KHAIRAR-MANIKPUR Single line section are having minimum strength of superstructure as 100% BGML as per revised Bridge Rules-1964 and are safe for raising the sectional speed from 100 kmph to 110 kmph for running of passenger carrying trains when hauled by single headed diesel locomotives which are presently in operation on the section, subject to all the temporary & permanent speed restriction already in force and those that may be imposed from time to time.


Sub structure of all the bridges on the section given above are in satisfactory condition and safe for raising the sectional speed from 100 kmph to 110 kmph for running of passenger carrying trains when hauled by single headed diesel locomotives which are presently in operation on the section conforming to the provisions of revised IRS Bridge Sub structure and Foundation code-1985.


23.02.11

Sr. DEN/Co. JHS


DEN/E/ JHS

COUNTERSIGNED BY


25/04/2011

CBE/NCR/ALD


25.2.11

Dy.CE(Br.)NCR/ALD

Relevant Sectional details

Sectional details of KID-MKP Section are as under:-

1. FORMATION.

Out of 110.75 km Track in KID-MKP section from Km. 1308.470 to 1419/220 , track is on good soil. However there is no formation problem and the formation is fit for the speed of 110 kmph.

2.RAILS

A) KHAIRAR-MANIKPUR SL LINE SECTION Details of rails are as under on M/L :-

S. No.	Locations		Rail Section.	Year of Laid
	From	To		
1	1308.470	1316.680	52 Kg / 90 UTS	1995
2	1316.680	1317.180	52 Kg / 90 UTS	1999
3	1317.180	1320.000	52 Kg / 90 UTS	1995
4	1320.000	1328.820	52 Kg / 90 UTS	1993
5	1328.820	1328.873	52 Kg / 90 UTS	2009
6	1328.873	1329.850	52 Kg / 90 UTS	1993
7	1329.850	1329.890	52 Kg / 90 UTS	2009
8	1329.890	1337.700	52 Kg / 90 UTS	1993
9	1337.700	1337.800	52 Kg / 90 UTS	2009
10	1337.800	1338.600	52 Kg / 90 UTS	1993
11	1338.600	1338.700	52 Kg / 90 UTS	2009
12	1338.700	1350.450	52 Kg / 90 UTS	1993
13	1350.450	1350.600	52 Kg / 90 UTS	2009
14	1350.600	1351.400	52 Kg / 90 UTS	1993
15	1351.400	1351.580	52 Kg / 90 UTS	2009
16	1351.580	1359.380	52 Kg / 90 UTS	1993
17	1359.380	1359.440	52 Kg / 90 UTS	2009
18	1359.440	1360.300	52 Kg / 90 UTS	1993
19	1360.300	1360.400	52 Kg / 90 UTS	2009
20	1360.400	1371.950	52 Kg / 90 UTS	1993
21	1371.950	1372.140	52 Kg / 90 UTS	2009
22	1372.140	1372.875	60 Kg / 90 UTS	2010
23	1372.875	1373.050	52 Kg / 90 UTS	2009
24	1373.050	1374.800	60 Kg / 90 UTS	2010
25	1374.800	1376.208	60 Kg / 90 UTS	2009
26	1376.208	1376.248	52 Kg / 72 UTS	1988
27	1376.248	1378.961	60 Kg / 90 UTS	2009
28	1378.961	1379.125	52 Kg / 72 UTS	1988

29	1379.125	1379.234	52 Kg / 90 UTS	2009
30	1379.234	1379.872	60 Kg / 90 UTS	2009
31	1379.872	1379.945	52 Kg / 90 UTS	2010
32	1379.945	1380.000	52 Kg / 90 UTS	2009
33	1380.000	1386.710	60 Kg / 90 UTS	2009
34	1386.710	1386.942	60 Kg / 90 UTS	2010
35	1386.942	1387.678	60 Kg / 90 UTS	2009
36	1387.678	1387.950	52 Kg / 90 UTS	1988
37	1387.950	1388.715	60 Kg / 90 UTS	2009
38	1388.715	1404.100	52 Kg / 90 UTS	2006
39	1404.100	1404.200	52 Kg / 90 UTS	2009
40	1404.200	1411.800	52 Kg / 90 UTS	2006
41	1411.800	1418.100	52 Kg / 90 UTS	2000

3.SLEEPERS:-

KID-MKP section are PSC Sleepers (1540km and 1660km) except girder bridge.

S. No.	Locations		Sleeper	Year of Laid
	From	To		
1	1308.470	1316.680	PSC5/1540	1995
2	1316.680	1317.180	CH	2007
3	1317.180	1320.000	PSC5/1540	1994
4	1320.000	1337.740	PSC5/1540	1993
5	1337.740	1337.793	PSC6/1540	2009
6	1337.793	1338.632	PSC5/1540	1993
7	1338.632	1338.732	PSC6/1540	2009
8	1338.732	1361.050	PSC5/1540	1993
9	1361.050	1361.300	CH	1988
10	1361.300	1367.000	PSC5/1540	1992
11	1367.000	1372.000	PSC5/1540	1995
12	1372.000	1373.050	PSC6/1660	2000
13	1373.050	1373.100	PSC6/1660	2007
14	1373.100	1379.125	PSC6/1660	2008
15	1379.125	1379.945	PSC6/1660	2007
16	1379.945	1386.893	PSC6/1660	2008
17	1386.893	1391.000	PSC6/1660	2007
18	1391.000	1392.000	PSC6/1660	2008
19	1392.000	1393.000	PSC6/1660	2007
20	1393.000	1394.100	PSC6/1540	2000
21	1394.100	1398.500	PSC6/1660	2006
22	1398.500	1399.300	PSC6/1660	2008
23	1399.300	1401.500	PSC6/1540	2005
24	1401.500	1404.200	PSC6/1660	2005
25	1404.200	1405.030	PSC6/1540	2000

26	1405.030	1407.700	PSC6/1660	2005
27	1407.700	1410.00	PSC6/1540	2004
28	1410.000	1417.800	PSC5/1540	1995
29	1417.800	1418.100	PSC6/1660	2008

4. BALLAST CUSHION:

KID-MKP section detail of ballast cushion are as under:-

S. No.	Locations		Ballast Cushion in MM
	From	To	
1	1308.470	1320.000	200/50
2	1320.000	1346.000	250/100
3	1346.000	1347.000	200/100
4	1347.000	1372.000	250/100
5	1372.000	1373.000	150/100
6	1373.000	1379.000	300/0
7	1379.000	1380.000	150/100
8	1380.000	1387.800	300/0
9	1387.800	1388.800	200/100
10	1388.800	1392.000	300/0
11	1392.000	1393.000	250/50
12	1393.000	1394.000	200/100
13	1394.000	1398.500	250/50
14	1398.500	1399.300	250/0
15	1399.300	1404.100	250/50
16	1404.100	1405.100	150/100
17	1405.100	1409.900	250/50
18	1409.900	1412.500	150/100
19	1412.500	1417.800	150/100
20	1417.800	1418.100	300/0

5. TURNOUTS :

T/Out on main line between KID-MKP section are 52/60 Kg on PSC sleeper.

6. GRADIENT

Maximum Gradient of above is 1 in 150 (Km 1403.500-1404.080, 1404.750-1405.350, 1406.080-1407.400, 1408.250-1408.400, 1409.550-1409.800).


DEN/E/JHS