C/L OF McCLUSKIEGANJ STATION (MGME) AT KM:163.23 (FROM GMO)

DN UP
GRADIENT POST FOR NORTH AND SOUTH SIDING LINE
GRADIENT POST FOR NORTH AND SOUTH PIPARWAR SIDING LINE
F 200 L F 404 CH:613.00M CH:587.00M
F 404 F 800 CH:153.50M
F 800 F 584 CH:732.00M
R239 R 200 CH:3980m
R 200 R 217 CH:2930m
R 217 R 200 CH:2230m
R 200 F 200 CH:1430m
R190 R200 KM:159.240 CH:3990.0M F/CSB
R200 R275 KM:159.520 CH:3710M F/CSB
R275 R175 KM:159.860 CH:3370M F/CSB
R175 R230 KM:160.260 CH:2970M F/CSB
R230 R172 KM:160.580 CH:2650M F/CSB
R172 R225 KM:160.840 CH:2390M F/CSB
R225 R175 KM:161.340 CH:1890M F/CSB
R175 F250 KM:161.820 CH:1410M F/CSB
F250 F200 KM:162.030 CH:1200M F/CSB
F 584 F 1080 KM:164.680 CH:1450M F/CSB
F 1080 R260 KM:165.780 CH:2550M F/CSB
R260 R175 KM:166.000 CH:2770M F/CSB
R175 R500 KM:166.360 CH:3130M F/CSB
R500 R200 KM:166.420 CH:3190M F/CSB
R200 R300 KM:166.520 CH:3290M F/CSB
R300 R200 KM:166.780 CH:3550M F/CSB
R200 R275 KM:167.160 CH:3930M F/CSB
R275 R175 KM:167.560 CH:4330.0 F/CSB
F 584 F 426 CH:1512.00 M
F 426 L R 200 CH:1820M CH:2070M
R 200 R 260 CH:2270M
R 260 R 358 CH:2520M
R 358 R 200 CH:3820M
R 200 R 238 CH:4020M
R 238 R 200 CH:4270M
TO PATRATU (KM:120.83)
NEXT BLOCK STN. KHALARI (KLRE) KM:156.88(6.35Kms)
GARHWA ROAD (KM:319.04)
NEXT BLOCK STN. NINDRA STATION KM:170.074 (6.844Kms)
PIPARWAR SIDING LINE
UP MAIN LINE
REVERSIBLE LINE
DN MAIN LINE
PRIVATE PORTION SIDING
ASSISTED PORTION SIDING
E.C RAILWAY BOUNDARY
E.C RLY LAND BOUNDARY
ROAD
3.5 M WIDE ROAD
STN. BUILDING
STN BLDG TO BE DISMANTLED
RAIL LEVEL PASSENGER PLATFORM 244M LONG AND 12M WIDE
HIGH LEVEL PASSENGER PLATFORM 400M LONG AND 10.5M WIDE
RAIL LEVEL PASSENGER PLATFORM 244M LONG AND 10.324M WIDE
UP LOOP LINE
UP MAIN LINE
REVERSIBLE LINE
DN MAIN LINE
COMMON LOOP LINE
2ND COMMON GOODS LOOP LINE
2ND DOWN GOODS LOOP LINE
LINE NO. 1
LINE NO. 2
LINE NO. 3
LINE NO. 4
LINE NO. 5
LINE NO. 6
CAL = 814.00m (PT TO PT) CSL = 806.0 m (STR TO PT)
CAL = 863.0m (FM TO FM) CSL = 855.00m (STR TO FM)
CAL = 873.00m (FM TO FM) CSL = 850.0M (STR TO FM)
CAL = 964.575M (SRJ TO SRJ) CSL = 951.575 M (SRJ TO STR)
CAL = 991.208 M(FM TO FM) CSL = 951.575 M (FM TO STR)
CAL = 1673.98 M(FM TO FM) CSL = 1634.50 M (STR TO STR)
CAL = 769.50m (TS TO FM) CSL = 761.0 m (SRJ TO TS)
CAL = 733.00m (SRJ TO SRJ) CSL = 725.0 m (SRJ TO TS)
CAL = 760.5 m (TS TO FM) CSL = 740.0 M (STR TO STR) 745.50 M
CAL = 733.00m (SRJ TO SRJ) CSL 718.5 M (STR TO STR) 724.00 M
OH TANK CAP 25000 GALL
FOB AT CH:125.00M F/CSB
BR NO 129 AT CH:128.00M SPAN,1X0.91 RC PIPE/FC SLAB KM:163.102
BR NO 130 AT CH:353.00M SPAN,1X0.72 ARCH KM:163.583
BR NO 128 AT CH:602.60M SPAN,1X12.20 STEEL GIRDER KM:162.627
BR No. 127 CH:942.0 m F/CSB 1x 1.83 m ARCH
C/L EXG.BR NO.132, KM 164.585, 1X1.83M ARCH TO BE EXTD.AS 1X2.00M RCC BOX CH:1353.0 m F/CSB
C/L OF EXIST STATION BUILDING KM: 163.230 (CH:0.00M)F/CSB CH: 0.00 M
C/L OF NEW STATION BUILDING KM: 163.230 (CH:0.00M)F/CSB
PF STARTS(CH:150.00M)F/CSB
PF END(CH:20.00M)F/CSB
PF ENDS(CH:194.00M)F/CSB
PF END(CH:93.00M)F/CSB
PF ENDS(CH:151.00M)F/CSB
PF END (CH:380.00M)F/CSB
WEIGH BRIDGE (CH:216.00M)F/CSB TO BE SHIFTED
EAST CABIN
EAST RELAY HUT
WEST RELAY HUT
EXIST. GANTRY TO BE DISMANTLED
GANTRY
SSP
PWR HOUSE
SAND HUMP
NON-STABLING O/R LNE 176.50M
300m LONG ENGG. SIDING
OVERRUN LINE 120M NO STABLING
PROPOSED GATE LODGE AND S&T COMPLEX
TO BE DISMANTLED
FLOW
1 IN 12 (CS)
1 IN 8.5 (CS)
C/C 5.30m
C/C 4.72m
C/C 6.30m
C/C 10.80m
C/C 13.676m
N

Curve (UP MAIN) (Reverse Curve)
Curve No 13B
Deflection Angle = 01°33'55"
Radius(R)=2500m
Degree of Curve(D)=0.7°
Tangent length(T.L)=34.151m
Length of Curve(C.L)=118.298m
Length of transition
Curve(LTC)=50m
Length of Straight Portion=70.2m
Actual cant(Ca)=NIL
Cant Deficiency(Cd)=66.39mm
Versine(V)=20mm
Speed Potential=110kmph

Curve (UP LOOP)(Reverse Curve)
Curve No-13A
Deflection Angle = 02°59'38"
Radius(R)=1750m
Degree of Curve(D)=1.0°
Tangent length(T.L)=45.73m
Length of Curve(C.L)=141.443m
Length of transition
Curve(LTC)=50m
Length of Straight Portion=50m
Actual cant(Ca)=45.73mm
Cant Deficiency(Cd)=75mm
Versine(V)=28.57mm
Speed Potential=110kmph

UP MAIN LINE
Curve ~~(UP LOOP)~~
Deflection Angle =10°42'47"
Radius(R)=938m
Degree of Curve(D)=1.86°
Tangent length(T.L)=87.5m
Length of Curve(C.L)=205.0m
Length of transition
Curve(LTC)=30m
Actual cant(Ca)=60mm
Cant Deficiency(Cd)=75mm
Versine(V)=53.30mm
Speed Potential=95kmph

REVERSIBLE LINE
Curve ~~(UP MAIN)~~ Curve No-14
Deflection Angle =11°47'11.62"
Radius(R)=875m
Degree of Curve(D)=2.0°
Tangent length(T.L)=81.236m
Length of Curve(C.L)=300.0m
Length of transition
Curve(LTC)=120m
Actual cant(Ca)=114mm
Cant Deficiency(Cd)=59mm
Versine(V)=57.14mm
Speed Potential=105kmph

Curve (UP LOOP) Curve No-14A
Deflection Angle =10°50'47"
Radius(R)=875m
Degree of Curve(D)=2.0°
Tangent length(T.L)=83.066m
Length of Curve(C.L)=245.642m
Length of transition
Curve(LTC)=80m
Actual cant(Ca)=60mm
Cant Deficiency(Cd)=75mm
Versine(V)=57.14mm
Speed Potential=95kmph

Curve (UP MAIN) Curve No-15
Deflection Angle =14°0'40"
Radius(R)=875m
Degree of Curve(D)=2.0°
Tangent length(T.L)=107.519m
Length of Curve(C.L)=333.973m
Length of transition
Curve(LTC)=120m
Actual cant(Ca)=114mm
Cant Deficiency(Cd)=59mm
Versine(V)=57.14mm
Speed Potential=105kmph

Curve (UP LOOP) Curve No 15A
Deflection Angle =14°0'40"
Radius(R)=1250m
Degree of Curve(D)=1.4°
Tangent length(T.L)=153.599m
Length of Curve(C.L)=385.675m
Length of transition
Curve(LTC)=80m
Actual cant(Ca)=57.78mm
Cant Deficiency(Cd)=75mm
Versine(V)=40mm
Speed Potential=110kmph

Curve (DN MAIN) Curve No-14
Deflection Angle =11°47'11.62"
Radius(R)=875m
Degree of Curve(D)=2.0°
Tangent length(T.L)=81.236m
Length of Curve(C.L)=300.0m
Length of transition
Curve(LTC)=60m
Actual cant(Ca)=114mm
Cant Deficiency(Cd)=59mm
Versine(V)=57.14mm
Speed Potential=105kmph

Extg. Curve No-15 (UP LINE)
Deflection Angle =15°42'55.49"
Radius(R)=875m
Degree of Curve(D)=2.0°
Tangent length(T.L)=122.041m
Length of Curve(C.L)=340.0m
Length of Transition
Curve(LTC)=100m
Actual cant(Ca)=114mm
Cant Deficiency(Cd)=59mm
Versine(V)=57.14mm
Speed Potential=105kmph

Extg. Curve No-15 (DN LINE)
Deflection Angle =15°42'55.49"
Radius(R)=875m
Degree of Curve(D)=2.0°
Tangent length(T.L)=122.041m
Length of Curve(C.L)=327.0m
Length of transition
Curve(LTC)=60m
Actual cant(Ca)=114mm
Cant Deficiency(Cd)=59mm
Versine(V)=57.14mm
Speed Potential=105kmph

LC NO. 8 CLASS- ~~A~~ SPL TRAFFIC MANNED INTERLOCKED
TVU=337343 (DEC 2018) AT KM:162.204 CH:1026.0M F/CSB
ROAD WIDTH=9.0M GATE WIDTH=11.0M
TO BE EXTENDED AS PER 3RD LINE STANDARDS

DETAILS OF LEVEL CROSSING

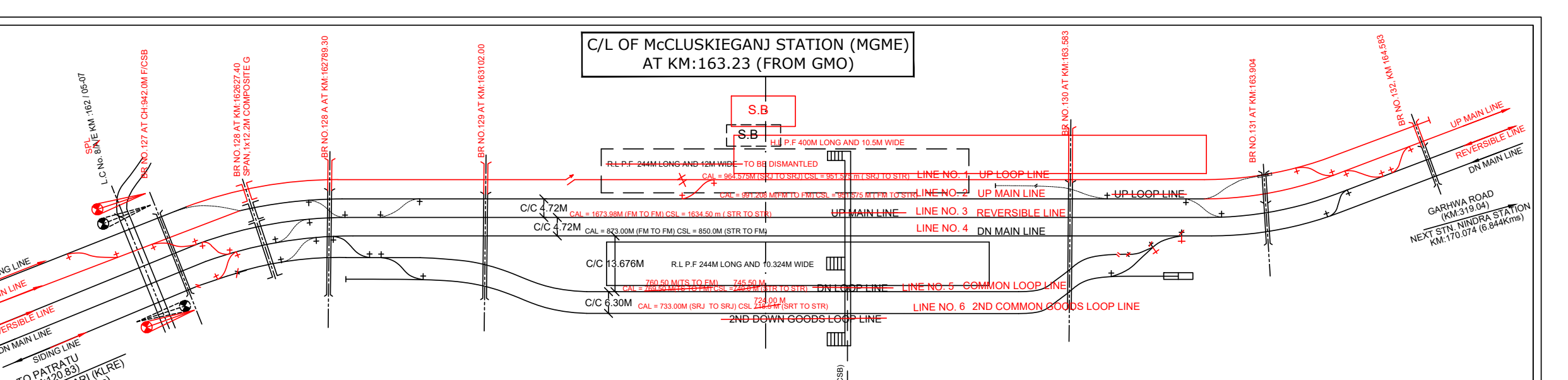
MGME-KLRE

SL NO.	L.C. NO	CLASS	E/T	KM	TVU	M/UM	BLOCK SEC.	TEL CONNECTION	INTERLOCKED
1	8	~~A~~ SPL	T	162.204	337343 DEC/2018	M	KLRE-MGME	SM/MGME	YES

DETAILS OF LEVEL CROSSING

MGME-NINDRA

SL NO.	L.C. NO	KM	TVU	M/UM	CLASS	BLOCK SEC.	TEL CONNECTION	INTERLOCKED
-	-	-	-	-	-	-	-	-


C/L OF McCLUSKIEGANJ STATION (MGME) AT KM:163.23 (FROM GMO)
S.B
UP LOOP LINE
UP MAIN LINE
REVERSIBLE LINE
DN MAIN LINE
COMMON LOOP LINE
2ND COMMON GOODS LOOP LINE
2ND DOWN GOODS LOOP LINE
SIDING LINE
TO PATRATU
NEXT STN. KHALARI
GARHWA ROAD
NEXT STN. NINDRA STATION

NOTE:-

1. ALL DIMENSIONS ARE SHOWN IN MM UNLESS OTHERWISE STATED.
2. CH:0.00 IS RECKONED FOR C.L OF STATION BUILDING.
3. EXISTING WORK SHOWN IN BLACK.
4. PROPOSED WORK SHOWN IN RED.
5. EXISTING WORK TO BE DISMANTLED SHOWN IN BLACK DOTTED.
6. STATION IS IN "NSG-6" CATEGORY.
7. LINES HAVE BEEN NUMBERED AND NAMED
8. ELECTRIFICATION OF 3RD LINE WILL BE DONE BY RVNL.ANY MODIFICATION REQUIRED IN EXISTING OHE WILL BE DONE BY RVNL.
9. PASSENGER AMENITIES SHOULD BE PROVIDED AS PER RAILWAY BOARDS GUIDE LINES.
10. AUTHORITY OF PIPARWAR SIDING IS CENTRAL COALFIELD LIMITED.
11. THIS DRAWING IS PREPARED BASED ON CE'S DRG. NO - Y - 87 -2017 AND SITE SURVEY.
12. FOB SHOWN IS AS PER SITE SURVEY.
13. SHIFTING OF WEIGH BRIDGE TO NINDRA STATION WILL BE DONE BY RVNL.
14. SAND HUMP IS AS PER E. RLY CE'S DRG NO 281-91.
15. TRACK MACHINE SIDING IS AVAILABLE AT RAY STATION(FOR DUAL USE) AND MAHUAMILAN.
16. GRADIENT OF EXISTING YARD ARE STEEPER THAN 1 IN 1200 AND ACCORDINGLY SIMILAR GRADIENT HAS BEEN KEPT FOR PROPOSED LINE TO MATCH THE LEVELS OF EXISTING LINE AND PROPOSED LINE.
17. REQUIRED CONDONATION WILL BE PROCESSED ON APPROVAL OF ESP.
18. NECESSARY PROTECTION ARRANGEMENT BETWEEN TRACK AND PARALLEL ROAD DURING CONSTRUCTION OF WORK IN THE YARD.

FORM -XVII GAUGE:-1676MM

INFRINGEMENT AND MAXIMUM & MINIMUM DIMENSION (GRADIENT WITH STATION LIMITS)

SL. NO.	LOCATION			NAME OF STRUCTURE WHICH INFRINGE	PRESCRIBED MAXIMUM		EXISTING ACTUAL DIMENSION	AMOUNT OF IMFRINGEMENT	PARTICULAR OF OF SCANSIONS OF INFRINGEMENT AND REMARKS.
	DIVISION	SECTION	KILOMETERAGE		CHAPTER ITEMS	MAXIMUM			
1.	DHANBAD	BRKA-GHD	1. CH: 613.00M F/CSB (PTRU END) TO CH:1191.0M F/CSB (PTRU END)	1 IN 200 (0.50%) (GRADIENT WITHIN STATION LIMITS)	IRSOD 1676MM GAUGE (BG) REVISE 2004 CH-II NOTE PART-2(d)-I&II	1 IN 400 (0.25%)	1 IN 200 (0.50%) CH: 613.00M F/CSB TO 1059.00M F/CSB (PTRU END)	(50%)	THE PROPOSED GRADIENT IN STN. YARD OF MGME IS STEEPER THAN 1 IN 400 BETWEEN CH:613.00 M F/CSB TO 1191.00 M F/CSB (PTRU END) AS INDICATED IN TABLE. AS SUCH, CONDONATION FOR INFRINGEMENT OF GRADE WITHIN STATION LIMIT IS REQUIRED FROM CRS/EC/KKK.

LENGTH TABLE

LINE. No.	CAL	CSR	AUTHORITY AS PER
1	964.575M SRJ TO SRJ	951.575 m SRJ TO STR	AS PER PROPOSED
2	991.208M FM TO FM	951.575 m FM TO STR	AS PER PROPOSED
3	1673.98M FM TO FM	1634.50 m STR TO STR	AS PER PROPOSED
4	873.00M FM TO FM	850.0M STR TO FM	AS PER APPROVED DRG. NO. Y - 87 - 2017
5	~~769.50 M TS TO FM~~ 760.50 M TS TO FM	~~761.0 M STR TO TS~~ ~~740.0 M STR TO STR~~ 745.50 M	
6	733.00M SRJ TO SRJ	~~725 M SRJ TO STR~~ ~~718.5 M STR TO STR~~ 724.00 M	

LEGEND:

1. FENCE, COMPOUND WALL WITH GATE
2. RAILWAY LAND BOUNDARY
3. EXISTING RAILWAY TRACK
4. DISMANTLED WORK
5. PROPOSED RAILWAY TRACK

ALTERATION TABLE

ALTERATION NO.	DESCRIPTION
ALT 1	a. LOCATION OF TS AT PTRU END CH 123.50M IS CHANGED TO CH 183.50M. b. OPENING POINT OF EXISTING SRJ AT CH 557.00M AND 600.00M GHD END IS CORRECTED. c. IN GRADIENT INFRINGEMENT TABLE NAME OF YARD IS CORRECTED AS MGME. d. CLASS OF LC NO. 8 IS CHANGED FROM A TO SPL. e. GRADIENT POST FOR SIDING LINE INCORPORATED. f. DIRECTION OF NORTH AND SOUTH PIPARWAR SIDING LINE IS CHANGED FROM UNIDIRECTIONAL TO BI-DIRECTIONAL. g. LOCATION OF TS AT CH 500.00M GHD END IS CHANGED TO CH 491.00M GHD END. h. STARTER SIGNAL OF LINE NO. 5 AT CH: 479.00 IS SHIFTED TO 484.50M GHD END TO INCREASE CSL OF LINE NO 5 FROM 740M TO 745.50M. i. STARTER SIGNAL OF LINE NO. 6 AT CH: 246.00 IS SHIFTED TO 251.50M PTRU END TO INCREASE CSL OF LINE NO 6 FROM 718.50M TO 724.00M.

SIGNATURE COLUMN (ALT-1)

DESIGNATION	SIGNATURE
CPDE/HQ	BRIJESH KUMAR SINGH Date: 2022.02.08 16:27:54 +05'30'
CTPM/HQ	NEERAJ AMBASTHA 2022.02.09 16:39:29+05'30'
CPM/RVNL/RNC	VISHAL ANAND Digitally signed by VISHAL ANAND Date:2022.01.24 12:32:31 +05'30'
GM/S&T/RVNL/RNC	KAILASH CHAND SHARMA Digitally signed by KAILASH CHAND SHARMA Date:2022.01.21 06:02:21 +05'30'
AGM/S&T/EXPERT/RVNL/RNC	ANJANI KUMAR AMBASTHA Digitally signed by ANJANI KUMAR AMBASTHA Date:2022.01.21 04:17:07 +05'30'
SR.DGM/CIVIL/RVNL	ASHWINI KUMAR Digitally signed by ASHWINI KUMAR Date:2022.01.21 04:59:58 +05'30'

THIS PLAN SUPERSEDES EARLIER APPROVED CE'S DRG. NO - Y - 87 - 2017

Signature block

CPDE	BRIJESH KUMAR SINGH Digitally signed by BRIJESH KUMAR SINGH Date:2021.06.30 12:50:39 +05'30'
CTPM/ECR	ANUJ BHARGAVA Digitally signed by ANUJ BHARGAVA Date:2021.07.19 04:13:53 +05'30'
DRM/DHN	ASHISH BANSAL Digitally signed by ASHISH BANSAL Date:2021.05.10 02:13:00 +05'30'
Sr.DEN/Co/DHN	AMIT KUMAR Digitally signed by AMIT KUMAR Date:2021.04.19 01:16:07 +05'30'
Sr.DOM/DHN	PANKAJ KUMAR Digitally signed by PANKAJ KUMAR Date:2021.04.16 05:47:40 +05'30'
Sr.DSTE/DHN	GAUTAM KUMAR Digitally signed by GAUTAM GUPTA Date:2021.04.17 05:35:27 +05'30'
Sr.DEE/TRD/DHN	BHAJAN LAL Digitally signed by BHAJAN LAL Date:2021.04.16 05:30:28 +05'30'
SDCMDHN	AKHILESH KUMAR PANDEY Digitally signed by AKHILESH KUMAR PANDEY Date:2021.04.22 11:15:01 +05'30'
Sr.DEE/G/DHN	Anand Pandit Digitally signed by Anand Pandit Date:2021.04.21 04:45:08 +05'30'
DEN/1/DHN	HANSRAJ MEENA Digitally signed by HANSRAJ MEENA Date:2021.04.18 09:30:57 +05'30'
SSE/Drg/DHN	Dushyant Kumar Digitally signed by Dushyant Kumar Date:2021.05.10 04:22:10 +05'30'
CPM/RVNL/RNC	VISHAL ANAND Digitally signed by VISHAL ANAND Date:2020.08.04 05:33:59 +05'30'
GM/ELEC/RVNL/RNC	ATUL KUMAR Digitally signed by ATUL KUMAR Date:2020.08.04 05:27:59 +05'30'
SRDGM/CIVIL/RVNL/RNC	ASHWINI KUMAR Digitally signed by ASHWINI KUMAR Date:2020.12.23 06:12:43 +05'30'
AGM/S&T/EXPERT/RVNL/RNC	ANJANI KUMAR AMBASTHA Digitally signed by ANJANI KUMAR AMBASTHA Date:2020.08.04 04:16:44 +05'30'
AGM/ELEC/EXPERT/RVNL/RNC	DIPAK KUMAR KUNDU Digitally signed by DIPAK KUMAR KUNDU Date:2020.07.27 11:48:36 +05'30'
Manager/Civil/RVNL	RAUSHAN KUMAR Digitally signed by RAUSHAN KUMAR Date:2020.07.27 01:44:44 +05'30'

SCALE:- 1:1000

पूर्व मध्य रेल
धनबाद मंडल
EAST CENTRAL RAILWAY
DHANBAD DIVISION

PROJECT EXECUTED BY:-
RAIL VIKAS NIGAM LIMITED

PROJECT: पतरातु से सोन नगर के बीच तीसरी लाईन परियोजना (291.0 कि. मी.)
CONSTRUCTION OF 3rd LINE BETWEEN PATRATU - SON NAGAR

TITLE:-
McCLUSKIEGANJ(मैकलुस्कीगंज)STATION YARD PLAN AT Km.163.23

CE's/HJP/ DRG No :- Y-78-2021 (ALT - 1)

DRM/DHN'S DRG.NO.- 118/2021

AUTHORITY OF WORK :-Pink Book Item No.50/2021-22

RVNL'S .DRG.NO.- RVNL/RNC/2020/93