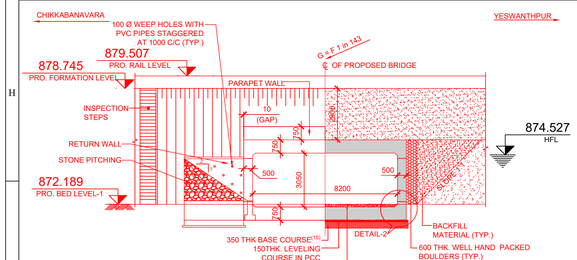
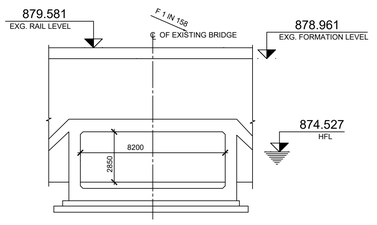
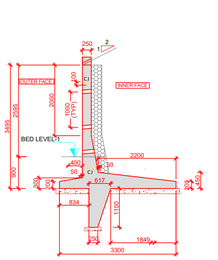


HALF ELEVATION HALF SECTION



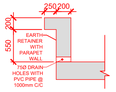
EXISTING BRIDGE ELEVATION



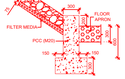
RCC RETURN WALL SECTION A-A (U/S) ON BSRP SIDE

STRATA DESCRIPTION	DEPTH IN METERS	REMARKS (BLOW COUNTS) (N-VALUE)	REMARKS (SBC) (KN/SQM)
BORE LOG TOP/ GROUND LEVEL 873.911	0.00		
LOOSE CLAYEY SAND	0.50 – 3.00	N = 10 (3/4/6)	
BED LEVEL 872.189			191.21 (BOX) 145.82 (RW)
PROPOSED BOX/RW FOUNDATION LEVEL 871.289			
VERY STIFF TO HARD CLAY OF MEDIUM PLASTICITY	3.00 – 5.50	N = 26 (8/10/16)	
	6.00 – 8.50	N = 62 (14/37/25)	
VERY DENSE SILTY SAND WITH TRACES OF MICA	9.00 – 12.00	N = R	
COMPLETELY WEATHERED TO HIGHLY WEATHERED, ANGULARLY FRACTURED, FINE TO MEDIUM GRAINED, WHITISH QUARTZITE	12.50 – 13.50	N = R	
HIGHLY WEATHERED, BEDDING PLANE FRACTURED, MEDIUM TO COARSE GRAINED, WAVY BANDED SHINY MICACEOUS GRANITIC GNEISS	14.00 – 15.00	N = R	
COMPLETELY WEATHERED TO HIGHLY WEATHERED, ANGULARLY FRACTURED, FINE TO MEDIUM GRAINED, GRANITIC GNEISS	15.50 – 16.00	N = R	
MODERATELY WEATHERED, MASSIVE/ PLANE FRACTURED, MEDIUM TO COARSE GRAINED, WAVY BANDED SHINY MICACEOUS GRANITIC GNEISS	16.50 – 17.00	N = R	
END OF BOREHOLE AT 17.00m			

BOREHOLE ID : 404(BH-233)

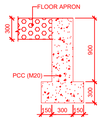


DETAIL '2'



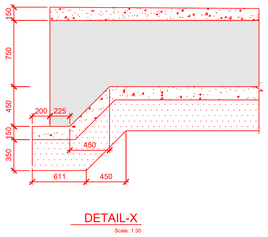
TOE WALL DETAILS ON BSRP SIDE

Scale: 1:30



SECTION OF PCC CURTAIN WALL ON IR SIDE

Scale: 1:30



DETAIL-X

Scale: 1:30

BRIDGE DETAILS

DESCRIPTION	EXISTING IR BRIDGE : 404	PROPOSED BSRP BRIDGE : 404
CHAINAGE AT CENTER OF BRIDGE (km)	12+661.151	23+666.376
RAIL LEVEL AT CENTRE OF BRIDGE (m)	879.581	879.507
FORMATION LEVEL AT CENTRE OF BRIDGE (m)	878.961	878.745
DIMENSIONS (Nos x SPAN(m) x HEIGHT(m))	1 x 8.2 x 2.85 ##	1 x 8.20 X 3.05
STRUCTURE CONFIGURATION	RCC BOX	RCC BOX

BASE PRESSURE AT FOUNDATION LEVEL

STRUCTURE	MAX	MIN
RCC BOX (kN/m²)	190.314	——
RETURN WALL (kN/m²)	121.54	——

HFL	FREE BOARD (mm)	BED LEVEL-1	BED LEVEL-2
874.527	4218	872.189	872.114

WATERWAY PARTICULARS

CATCHMENT AREA	:	1.081 SQKM
LATITUDE	:	13° 4' 10.807" N
LONGITUDE	:	77° 30' 39.739" E
TOPOSHEET NO	:	D43 L-11
Q50 DISCHARGE	:	15.94 CUM/SEC
VELOCITY	:	1.79 M/S
DEPTH OF FLOW	:	1.08 M
OHFL	:	874.527 M
Q50HFL (DESIGN HFL)	:	874.527 M

	REQUIRED	PROVIDED
WATERWAY AREA, Sqm	8.89	23.78
FREE BOARD, m	1.00	4.218
VERTICAL CLEARANCE, m	-	0.562
SCOUR DEPTH		
From ℄ HFL, m		2.973
Scour Level		871.554
From B.L, m		0.635

EXISTING WATERWAY PARTICULARS

	PROVIDED
WATERWAY AREA, Sqm	16.193
FREE BOARD, m	4.434
VERTICAL CLEARANCE, m	0.538

DETAILS OF EXISTING STRUCTURE SHOWN ARE AS PER JSVR

* THE GAP TO BE FILLED WITH SUITABLE SEALANT MATERIAL

TRACK DETAILS (EXG.BRIDGE)

LOADING	:	MBG-1987
ALIGNMENT	:	STRAIGHT
GRADE	:	FALL 1 IN 158
RAIL LEVEL	:	879.581 m
FORMATION LEVEL	:	878.961 m

DEPTH OF CONSTRUCTION FOR 1 x 8.20 X 3.05 m RCC BOX

RAIL 60 kg	:	172 mm
GR PAD	:	6 mm
PSC SLEEPER	:	210 mm
BALLAST CUSHION	:	350 mm
EARTH CUSHION	:	2906 mm
TOP SLAB	:	750 mm
TOTAL	=	4394 mm

GRADE OF CONCRETE

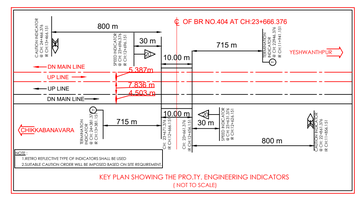
	GRADE	
i.	RCC BOX	M35
ii.	WEARING COURSE	M25
iii.	LEVELLING COURSE (PCC)	M20
iv.	RETAINING/RETURN WALL	M35

TRACK DETAILS (PRO.BRIDGE)

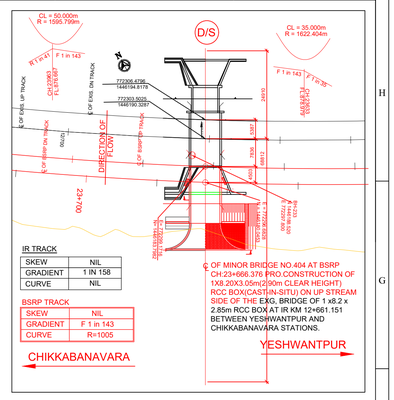
LOADING	:	25 T-AXLE LOAD 2008-STD
ALIGNMENT	:	CURVE
GRADE	:	G = F 1 in 143
RAIL LEVEL	:	879.507 m
FORMATION LEVEL	:	878.745 m

ABBREVIATIONS :

℄	-	CENTER LINE
TYP	-	TYPICAL
THK.	-	THICKNESS
U/S	-	UP STREAM SIDE
D/S	-	DOWN STREAM SIDE
DN	-	DOWN
BR	-	BRIDGE
FRL	-	FORMATION LEVEL



KEY PLAN SHOWING THE PRO.TY. ENGINEERING INDICATORS
(NOT TO SCALE)


CL = 50.000m
R = 1095.798m
CL = 35.000m
R = 1622.404m
D/S
R1:41
F 1 in 143
F 1 in 143
F 1 in 158
CH:23+963 FL:878.897
772305.4796 1440194.8178
772393.9005 1440190.3267
℄ OF RAIL UP TRACK
℄ OF RAIL DN TRACK
℄ OF BSRP DN TRACK
℄ OF BSRP UP TRACK
DIRECTION OF FLOW
2500
2400
2400
2500
2500
2500