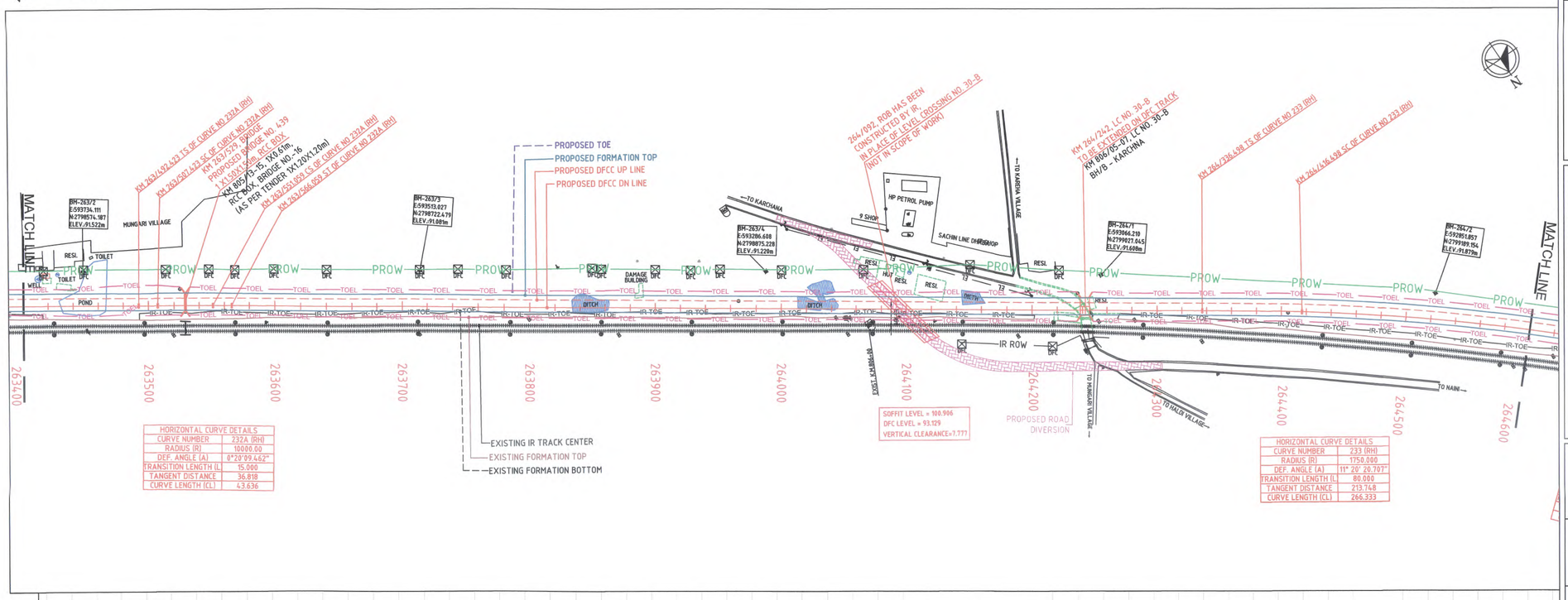
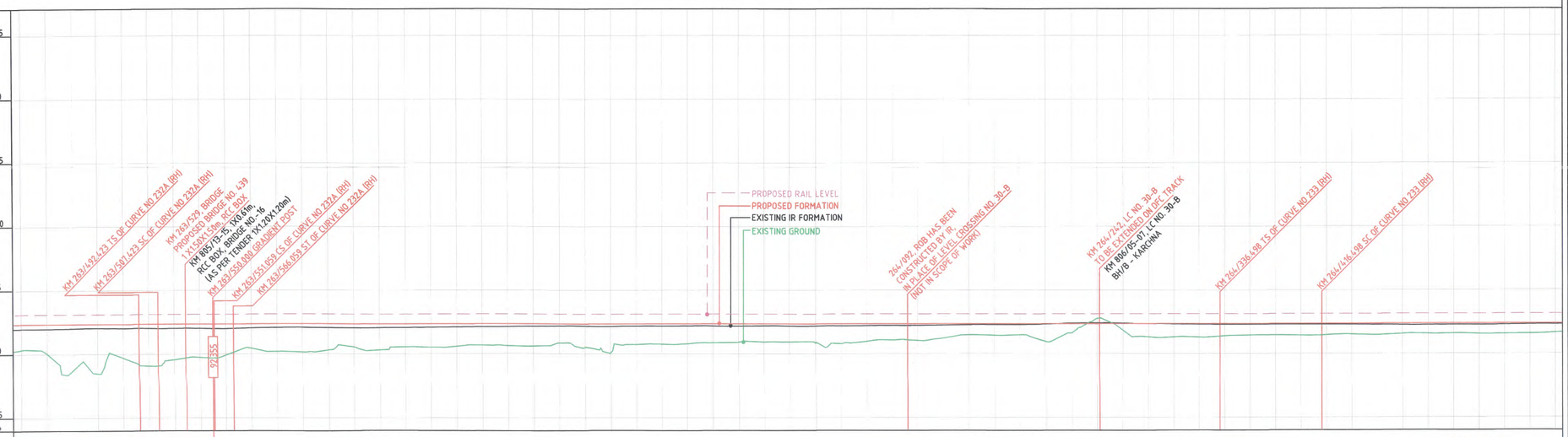
Chainage CH- 263400 CH-264600

SECTION-CP-201



HORIZONTAL CURVE DETAILS	
CURVE NUMBER	232A (RH)
RADIUS (R)	10000.00
DEF. ANGLE (A)	0°20'09.462"
TRANSITION LENGTH (L)	15.000
TANGENT DISTANCE	36.818
CURVE LENGTH (CL)	43.636

HORIZONTAL CURVE DETAILS	
CURVE NUMBER	233 (RH)
RADIUS (R)	1750.000
DEF. ANGLE (A)	11° 20' 20.707"
TRANSITION LENGTH (L)	80.000
TANGENT DISTANCE	213.748
CURVE LENGTH (CL)	266.333

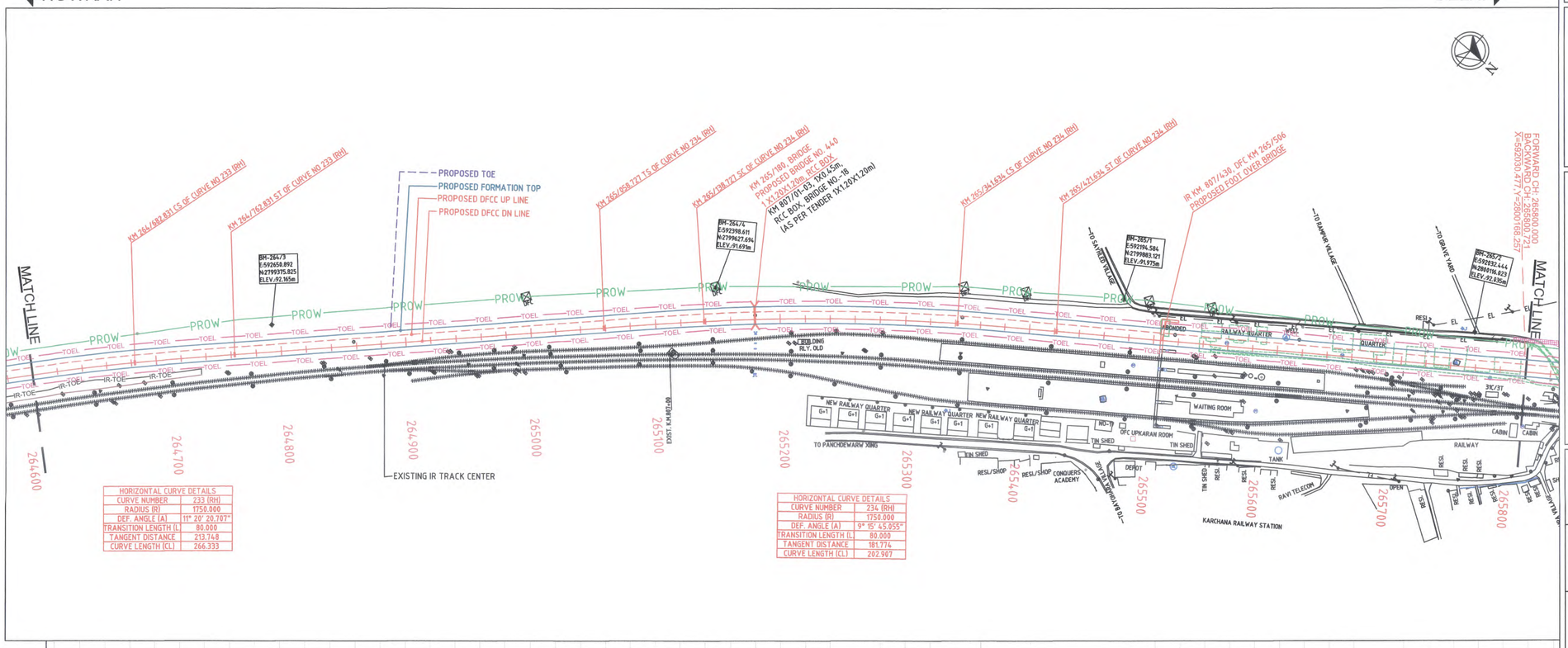


| | | |

Chainage CH-264600 CH-265800

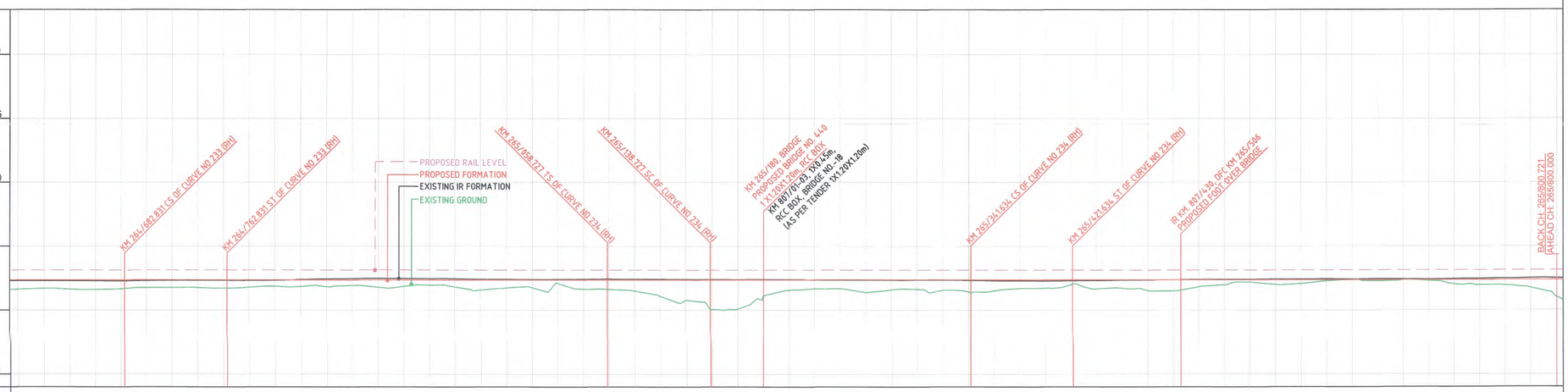
SECTION-CP-201

HOWRAH ← → DELHI



HORIZONTAL CURVE DETAILS	
CURVE NUMBER	233 (RH)
RADIUS (R)	1750.000
DEF. ANGLE (A)	11° 20' 20.707"
TRANSITION LENGTH (L)	80.000
TANGENT DISTANCE	213.748
CURVE LENGTH (CL)	266.333

HORIZONTAL CURVE DETAILS	
CURVE NUMBER	234 (RH)
RADIUS (R)	1750.000
DEF. ANGLE (A)	9° 15' 45.055"
TRANSITION LENGTH (L)	80.000
TANGENT DISTANCE	181.774
CURVE LENGTH (CL)	202.907



VERTICAL ALIGNMENT: G=0.000 (LEVEL) L=2270.721m; G=0.000 (LEVEL) L=2270.721m; G=0.000 (LEVEL) L=2270.721m

HORIZONTAL ALIGNMENT: R=1750.000m L=266.333m; L=80.000m; L=295.897m; L=80.000m; R=1750.000m L=202.907m; L=80.000m; L=1016.203m; L=1016.203m

CHAINAGE	DIST. BETWEEN EX. IR MAIN TRACK & PROPOSED DFC TRACK AS PER TENDER DOCUMENT	DIST. BETWEEN EX. IR MAIN TRACK & PROPOSED DFC TRACK AS PER DESIGN	FILL (+)/ CUT (-)	PROPOSED FORMATION LEVELS	EXIST. IR FORMATION LEVELS	GROUND LEVELS
264600	19.807	23.774	0.737	92.359	92.290	91.622
264620	18.992	23.574	0.669	92.359	92.292	91.689
264640	18.177	23.256	0.734	92.359	92.292	91.625
264660	17.310	22.829	0.759	92.359	92.282	91.600
264680	16.392	22.283	0.702	92.359	92.276	91.657
264700	15.474	21.601	0.609	92.359	92.290	91.750
264720	14.869	20.859	0.600	92.359	92.315	91.759
264740	14.264	20.120	0.608	92.359	92.322	91.752
264760	13.790	19.414	0.651	92.359	92.319	91.708
264780	13.447	18.761	0.579	92.359	92.308	91.781
264800	13.104	18.200	0.506	92.359	92.321	91.853
264820	13.014	17.749	0.522	92.359	92.380	91.838
264840	12.923	17.471	0.534	92.360	92.437	91.825
264860	12.958	17.350	0.438	92.360	92.462	91.922
264880	13.119	17.318	0.586	92.360	92.472	91.773
264900	13.279	17.332	0.514	92.360	92.458	91.845
264920	14.184	17.577	0.413	92.360	92.462	91.947
264940	15.089	17.966	0.544	92.360	92.460	91.815
264960	15.741	18.405	0.796	92.360	92.418	91.564
264980	16.140	18.995	0.629	92.360	92.399	91.732
265000	16.539	19.636	0.616	92.360	92.392	91.744
265020	17.651	20.442	0.276	92.360	92.395	92.084
265040	18.762	21.275	0.725	92.360	92.415	91.635
265060	19.946	22.278	0.746	92.360	92.430	91.615
265080	21.203	23.326	0.866	92.360	92.413	91.495
265100	22.459	24.342	1.273	92.360	92.418	91.087
265120	23.483	25.428	1.599	92.361	92.397	90.762
265140	24.506	26.362	2.304	92.361	92.392	90.056
265160	25.355	26.362	2.273	92.361	92.382	90.087
265180	26.030	27.281	1.241	92.361	92.391	91.119
265200	26.704	28.003	0.814	92.361	92.383	91.547
265220	27.172	28.702	0.691	92.361	92.357	91.670
265240	27.641	29.445	0.688	92.361	92.346	91.672
265260	28.064	30.094	0.983	92.361	92.342	91.378
265280	28.441	30.636	0.785	92.361	92.336	91.577
265300	28.819	31.152	0.745	92.361	92.345	91.616
265320	29.066	31.599	0.808	92.361	92.339	91.553
265340	29.313	32.279	0.962	92.361	92.325	91.400
265360	29.426	32.654	0.863	92.361	92.295	91.499
265380	29.495	32.739	0.673	92.361	92.292	91.689
265400	29.384	32.685	0.653	92.362	92.266	91.708
265420	29.333	32.469	0.391	92.362	92.289	91.970
265440	29.282	32.247	0.711	92.362	92.302	91.651
265460	29.250	32.206	0.653	92.362	92.342	91.709
265480	29.237	32.050	0.824	92.362	92.356	91.538
265500	29.224	31.844	0.863	92.362	92.369	91.498
265520	29.210	31.802	0.546	92.362	92.387	91.815
265540	29.195	31.644	0.391	92.362	92.400	91.972
265560	29.176	31.419	0.170	92.362	92.410	92.193
265580	29.153	31.303	0.366	92.362	92.421	91.996
265600	29.130	31.089	0.301	92.362	92.413	92.061
265620	28.805	30.931	0.086	92.362	92.431	92.276
265640	28.480	30.768	-0.011	92.362	92.413	92.374
265660	27.900	30.587	0.076	92.362	92.437	92.286
265680	27.065	30.421	-0.008	92.363	92.424	92.370
265700	26.230	30.246	0.056	92.363	92.404	92.306
265720	25.252	30.069	0.344	92.363	92.441	92.018
265740	24.275	29.820	0.399	92.363	92.458	91.964
265760	23.290	29.660	0.423	92.363	92.478	91.939
265780	22.298	29.529	0.626	92.363	92.499	91.736
265800.721 / 265800.000	21.306	29.464	1.331	92.363	92.502	91.031

THROUGH CHAINAGE

LEGEND:-

- EXISTING IR TRACK
- PROPOSED DFCC TRACK
- PROW — DFCC ROW LINE
- IR-TOE — EXISTING IR TOE LINE
- TOEL — DFCC TOE LINE

NOTES:-

1. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
2. ALL COORDINATES ARE BASED ON WGS 84 PROJECTION IN UTM ZONE 44.
3. TOP WIDTH OF FORMATION IS 13.5M FOR DOUBLE LINE IN STRAIGHT SECTION.
4. CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE.
5. EQUILIBRIUM SPEED HAS BEEN TAKEN 85 KMPH.
6. TRACK CENTER BETWEEN MAIN LINES OF DFC HAS BEEN KEPT AS MIN. 6.0M AT STRAIGHT SECTION.
7. DRAIN SHALL BE PROVIDED BETWEEN IR AND DFC TRACKS TO DRAIN OUT RAINWATER.
8. PUBLIC UTILITIES,HT/LT LINES,ETC. INTERFERING DFC TRACKS SHALL BE RELOCATED
9. AT THE LOCATIONS WHERE FORMATION HEIGHT IS <1.75m, IT IS PROPOSED TO MAKE THE FORMATION HEIGHT TO 1.750m BY CUTTING THE EARTH
10. FOR LEGEND AND ABBREVIATION REFER RELEVANT DRAWING.

EMPLOYER : DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

PROJECT : EASTERN DEDICATED FREIGHT CORRIDOR (PACKAGE - 201)

TITLE : ALIGNMENT PLAN & PROFILE FROM KM. 264/600 TO KM. 265/800

DRAWING NO.	SIZE	REV	SCALE
D 2 AL 0 1 2 2	A1	0	HOR:- 1 : 2000, VER:- 1 : 200

REVIEWS

REV	DATE	REMARKS
0	26/07/2018	DEFINITIVE

DRAWING STAGE

- [ ] FOR APPROVAL
- [x] GOOD FOR CONSTRUCTION

PMC : SYSTRA - Mott MacDonald JV

CONTRACTOR : GIL - SIL JV

DESIGN CONSULTANT: STUP Consultants Pvt. Ltd.
REGISTERED OFFICE : 1004-5 RAHEJA CHAMBERS, NARIMAN POINT, MUMBAI 400 021.
OFFICE OF ORIGIN KOLKATA

	DATE	NAME	SIGN.
DRAWN	26/07/2018	TC	
CHKD.	26/07/2018		
APPD.	26/07/2018	S. MITRA	

SUBMITTED BY GIL-SIL JV

	DATE	NAME	SIGN.
CHKD.	24/10/2018	Deepak Gautam	
APPD.	24/10/2018	NISHEETH K. SINGH	

NOC BY SYSTRA - Mott MacDonald JV

	DATE	NAME	SIGN.
CHKD.	29/10/2018	ANURANJAN PRASAD	
NOC	29/10/2018	P. AMERI KANOS	

APPROVAL BY DFCC

	DATE	NAME	SIGN.
CHKD.			
APPD.			

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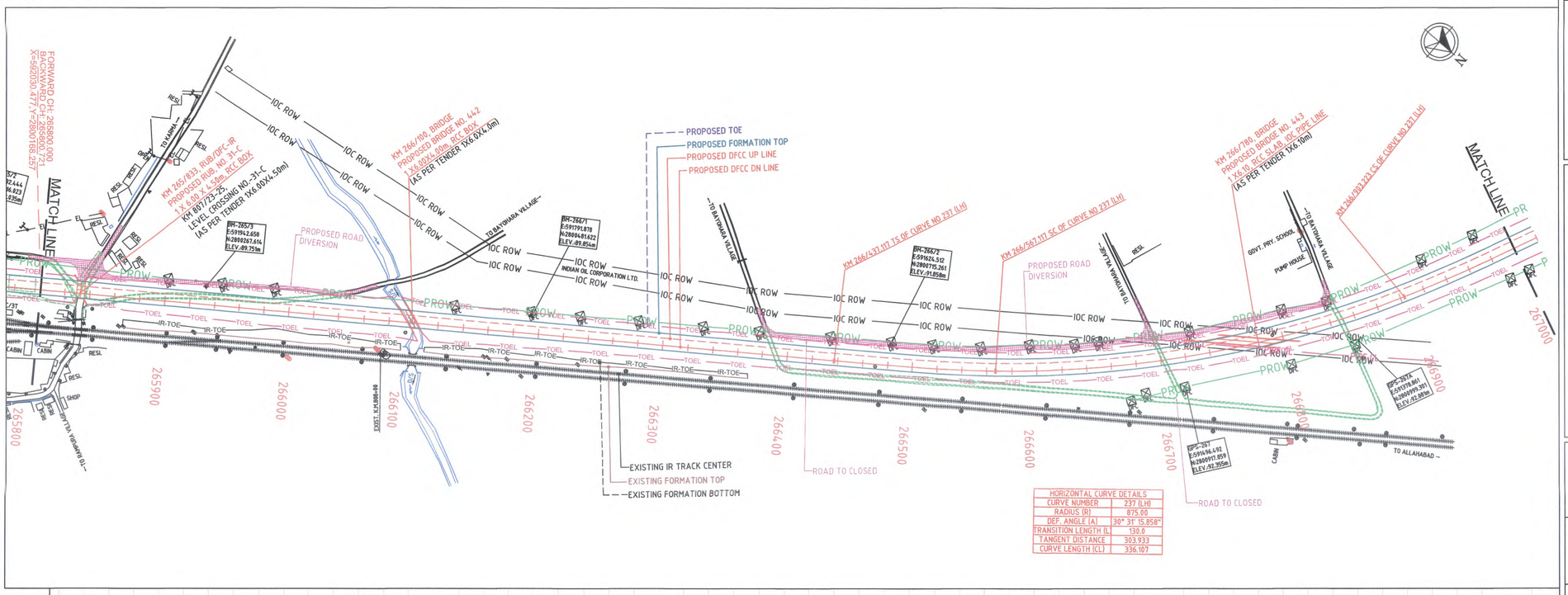
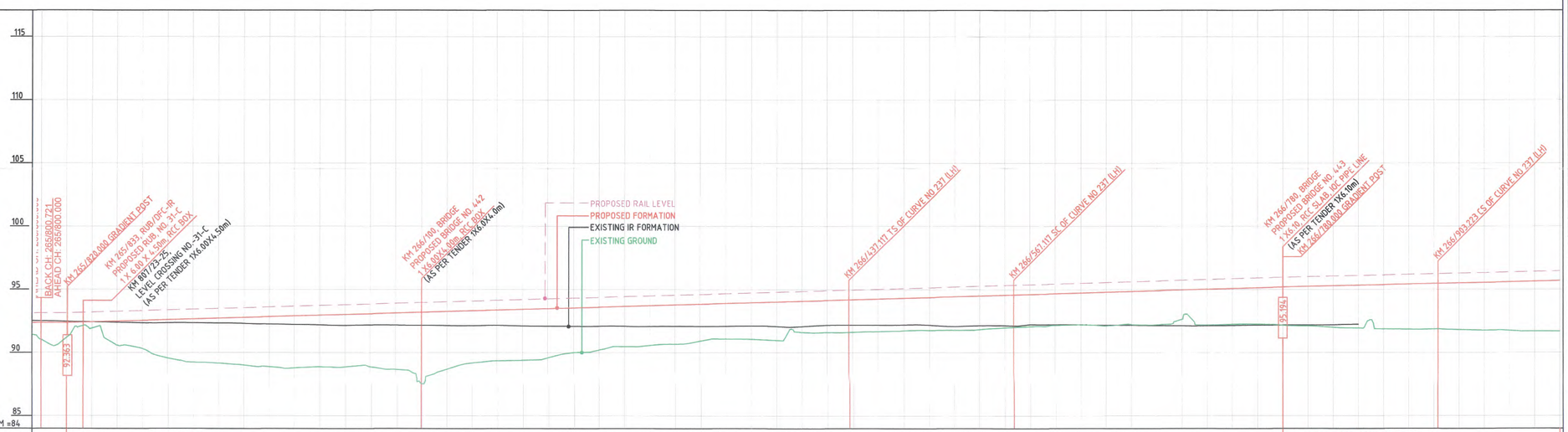
Chainage CH- 265800 CH-267000

HOWRAH ← → DELHI



HORIZONTAL CURVE DETAILS	
CURVE NUMBER	237 (LH)
RADIUS (R)	875.00
DEF. ANGLE (A)	30° 31' 15.858"
TRANSITION LENGTH (L)	130.0
TANGENT DISTANCE	303.933
CURVE LENGTH (CL)	336.107



VERTICAL ALIGNMENT	G=0.295% (1 IN 339.103) L=960.000m; G=0.295% (1 IN 339.103) L=960.000m; G=0.295% (1 IN 339.103) L=960.000m; G=0.221% (1 IN 452.543) L=444.000m; G=0.221% (1 IN 452.543) L=444.000m
HORIZONTAL ALIGNMENT	L=1016.203m; L=1016.203m; L=130.000m; R=-875.000m L=336.107m; L=130.000m

THROUGH CHAINAGE	DIST. BETWEEN EX. IR MAIN TRACK & PROPOSED DFC TRACK AS PER TENDER DOCUMENT	DIST. BETWEEN EX. IR MAIN TRACK & PROPOSED DFC TRACK AS PER DESIGN	FILL (+)/ CUT (-)	PROPOSED FORMATION LEVELS	EXIST. IR FORMATION LEVELS	GROUND LEVELS	CHAINAGE
265800.721							265800.721
265800	21.306	29.049	1.331	92.363	92.502	91.031	265800
265820	20.350	29.028	1.195	92.363	92.452	91.168	265820
265840	19.394	28.860	0.503	92.422	92.418	91.918	265840
265860	18.421	28.748	1.902	92.481	92.381	90.579	265860
265880	17.431	28.563	2.225	92.540	92.333	90.315	265880
265900	16.441	28.405	3.044	92.599	92.344	89.554	265900
265920	15.865	28.233	3.426	92.658	92.346	89.232	265920
265940	15.288	28.191	3.563	92.717	92.332	89.154	265940
265960	15.000	27.965	3.777	92.776	92.297	88.999	265960
265980	15.000	27.777	3.968	92.835	92.241	88.867	265980
266000	15.000	27.621	4.119	92.894	92.213	88.774	266000
266020	15.000	27.536	4.093	92.953	92.187	88.860	266020
266040	15.000	27.482	4.155	93.012	92.141	88.856	266040
266060	15.000	27.324	4.199	93.071	92.179	88.872	266060
266080	15.000	27.214	4.465	93.130	92.165	88.664	266080
266100	15.000	27.075	5.637	93.189	92.152	87.551	266100
266120	15.000	26.918	4.573	93.248	92.134	88.674	266120
266140	15.000	26.834	4.131	93.307	92.124	89.176	266140
266160	15.000	26.697	4.028	93.366	92.147	89.338	266160
266180	15.000	26.488	4.042	93.425	92.101	89.382	266180
266200	15.000	26.398	3.906	93.484	92.092	89.578	266200
266220		26.275	3.539	93.543	92.087	90.003	266220
266240		26.132	3.402	93.602	92.083	90.199	266240
266260		25.978	3.193	93.661	92.079	90.467	266260
266280		25.849	3.158	93.720	92.068	90.561	266280
266300		25.690	3.107	93.778	92.082	90.672	266300
266320		25.565	2.924	93.837	92.077	90.914	266320
266340		25.457	2.817	93.896	92.084	91.079	266340
266360		25.303	2.900	93.955	92.106	91.055	266360
266380		25.083	3.050	94.014	92.068	90.964	266380
266400		24.924	2.486	94.073	92.057	91.588	266400
266420		24.923	2.550	94.132	92.163	91.582	266420
266440		24.806	2.583	94.191	92.178	91.609	266440
266460		24.669	2.581	94.250	92.175	91.669	266460
266480		24.603	2.579	94.309	92.191	91.730	266480
266500		24.734	2.604	94.368	92.174	91.764	266500
266520		24.878	2.657	94.427	92.059	91.770	266520
266540		25.401	2.670	94.486	92.126	91.816	266540
266560		26.512	2.592	94.545	92.130	91.954	266560
266580		28.055	2.552	94.604	92.210	92.053	266580
266600		30.137	2.512	94.663	92.196	92.152	266600
266620		32.508	2.527	94.722	92.201	92.196	266620
266640		35.432	2.666	94.781	92.165	92.115	266640
266660		38.842	2.620	94.840	92.166	92.221	266660
266680		42.755	2.701	94.899	92.144	92.198	266680
266700		47.165	2.331	94.958	92.114	92.628	266700
266720		51.972	2.844	95.017	92.118	92.174	266720
266740		57.543	2.842	95.076	92.146	92.235	266740
266760		63.684	2.887	95.135	92.169	92.249	266760
266780		70.417	3.031	95.194	92.164	92.162	266780
266800		77.560	3.140	95.238	92.178	92.098	266800
266820		85.446	3.296	95.282	92.184	91.986	266820
266840		93.954	3.399	95.327	92.227	91.927	266840
266860			3.508	95.371		91.862	266860
266880			3.579	95.415		91.836	266880
266900			3.603	95.459		91.857	266900
266920			3.702	95.503		91.801	266920
266940			3.788	95.548		91.759	266940
266960			3.851	95.592		91.740	266960
266980			3.950	95.636		91.685	266980
267000			4.004	95.680		91.677	267000

SECTION-CP-201

LEGEND:-

- EXISTING IR TRACK
- PROPOSED DFCC TRACK
- PROW — PROW — DFCC ROW LINE
- IR-TOE — IR-TOE — EXISTING IR TOE LINE
- TOEL — TOEL — DFCC TOE LINE

NOTES:-

1. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
2. ALL COORDINATES ARE BASED ON WGS 84 PROJECTION IN UTM ZONE 44.
3. TOP WIDTH OF FORMATION IS 13.5M FOR DOUBLE LINE IN STRAIGHT SECTION.
4. CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE
5. EQUILIBRIUM SPEED HAS BEEN TAKEN 85 KMPH.
6. TRACK CENTER BETWEEN MAIN LINES OF DFC HAS BEEN KEPT AS MIN. 6.0M AT STRAIGHT SECTION.
7. DRAIN SHALL BE PROVIDED BETWEEN IR AND DFC TRACKS TO DRAIN OUT RAINWATER.
8. PUBLIC UTILITIES,HT/LT LINES,ETC. INTERFERING DFC TRACKS SHALL BE RELOCATED
9. AT THE LOCATIONS WHERE FORMATION HEIGHT IS <1.75m, IT IS PROPOSED TO MAKE THE FORMATION HEIGHT TO 1.750m BY CUTTING THE EARTH
10. FOR LEGEND AND ABBREVIATION REFER RELEVANT DRAWING.

EMPLOYER : DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

PROJECT : EASTERN DEDICATED FREIGHT CORRIDOR (PACKAGE - 201)

TITLE : ALIGNMENT PLAN & PROFILE FROM KM. 265/800 TO KM. 267/000

DRAWING NO.	SIZE	REV	SCALE
D 2 AL 0 1 2 3	A1	0	HOR:- 1 : 2000, VER:- 1 : 200

REVIEWS

REV	DATE	REMARKS
0	26/07/2018	DEFINITIVE

DRAWING STAGE

- [ ] FOR APPROVAL
- [x] GOOD FOR CONSTRUCTION

PMC : SYSTRA - Mott MacDonald JV

CONTRACTOR : GIL - SIL JV

DESIGN CONSULTANT: STUP Consultants Pvt. Ltd.

REGISTERED OFFICE : 1004-5 RAHEJA CHAMBERS, NARIMAN POINT, MUMBAI 400 021.

OFFICE OF ORIGIN KOLKATA

	DATE	NAME	SIGN.
DRAWN	26/07/2018	T.C	
CHKD.	26/07/2018		
APPD.	26/07/2018	S. MIRZA	

SUBMITTED BY GIL-SIL JV

	DATE	NAME	SIGN.
CHKD.	24/10/2018	Deepali Gaikwad	
APPD.	24/10/2018	NISHEETH K. SINGH	

NOC BY SYSTRA - Mott MacDonald JV

	DATE	NAME	SIGN.
CHKD.	29/10/2018	ANURANJAN PRASAD	
NOC	23/10/2018	P. AMERI KANOS	

APPROVAL BY DFCC

	DATE	NAME	SIGN.
CHKD.			
APPD.			

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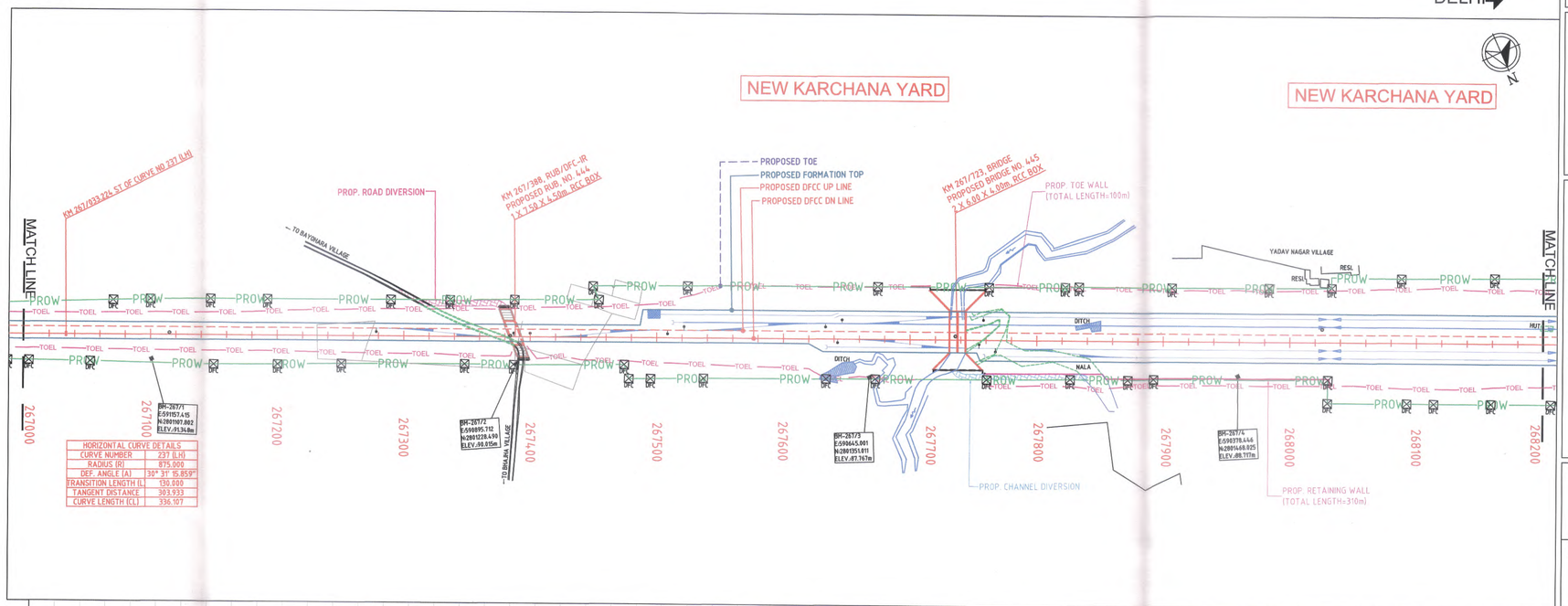
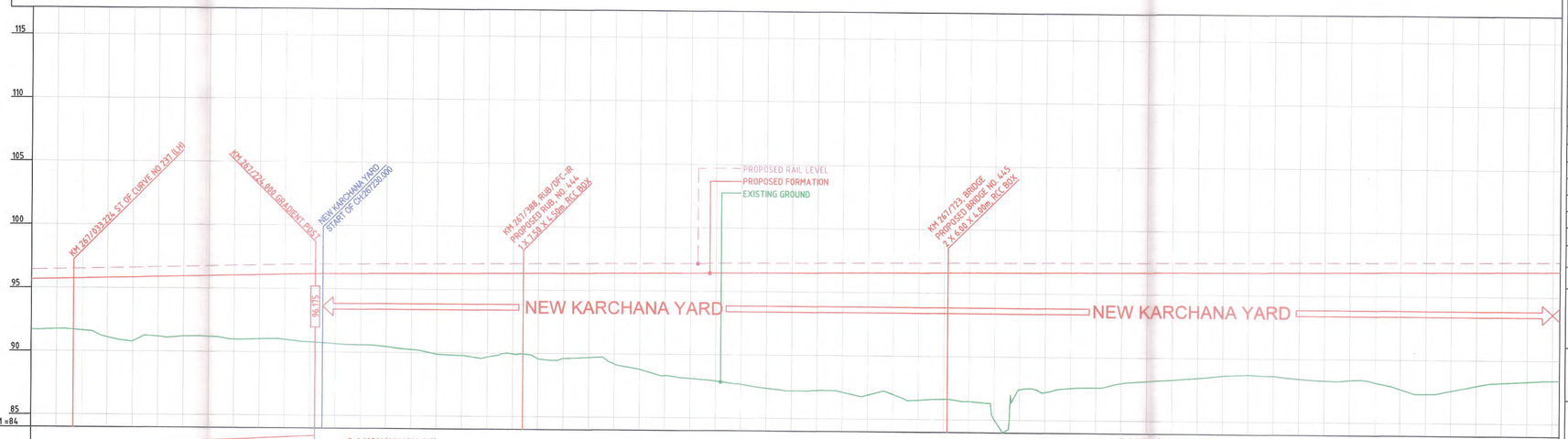
Chainage CH- 267000 CH-268200

HOWRAH ← → DELHI



HORIZONTAL CURVE DETAILS	
CURVE NUMBER	237 (LH)
RADIUS (R)	875.000
DEF. ANGLE (A)	30° 31' 15.859"
TRANSITION LENGTH (L)	130.000
TANGENT DISTANCE	303.933
CURVE LENGTH (CL)	336.107



VERTICAL ALIGNMENT	G=0.234% (1 IN 426.965) L=654.000m; G=0.083% (1 IN 1204.915) L=3524.000m; G=0.083% (1 IN 1204.915) L=3524.000m
HORIZONTAL ALIGNMENT	L=130.000m; L=2992.111m; L=2992.111m

CHAINAGE	LHS R.O.W DISTANCE FROM DOWN LINE TRACK	RHS R.O.W. DISTANCE FROM DOWN TRACK	FILL (+)/ CUT (-)	PROPOSED FORMATION LEVELS	EXIST. IR FORMATION LEVELS	GROUND LEVELS
267000	25.237	20.309	3.975	95.650	DETOUR PORTION	91.616
267020	25.845	20.520	3.971	95.697		91.726
267040	26.409	20.803	4.117	95.744		91.627
267060	26.970	21.147	4.692	95.791		91.100
267080	27.534	21.590	5.050	95.838		90.788
267100	28.097	22.032	4.720	95.885		91.165
267120	28.292	22.474	4.741	95.932		91.190
267140	28.486	22.916	4.802	95.978		91.176
267160	28.544	23.079	5.050	96.025		90.975
267180	28.523	22.967	5.065	96.072		91.008
267200	28.524	22.855	5.143	96.119		90.975
267220	28.560	22.520	5.375	96.166		90.790
267240	28.595	22.179	5.520	96.188		90.669
267260	28.630	21.955	5.614	96.265		90.591
267280	28.665	21.869	5.763	96.222		90.458
267300	28.722	21.783	5.996	96.238		90.243
267320	28.799	21.697	6.368	96.255		89.887
267340	28.893	21.612	6.467	96.271		89.804
267360	29.063	21.731	6.595	96.288		89.693
267380	29.234	21.995	6.365	96.305		89.940
267400	29.380	21.980	6.751	96.321		89.570
267420	29.511	21.815	6.716	96.338		89.621
267440	29.643	21.649	6.650	96.354		89.704
267460	40.620	21.483	7.158	96.371		89.212
267480	40.749	32.385	7.593	96.388		88.795
267500	40.879	32.223	8.089	96.404		88.315
267520	41.008	31.984	8.320	96.421		88.100
267540	41.091	31.768	8.529	96.437		87.909
267560	41.162	31.697	8.795	96.454		87.658
267580	41.232	31.625	9.102	96.471		87.369
267600	41.303	31.554	9.303	96.487		87.184
267620	41.373	31.482	9.273	96.504		87.231
267640	41.444	31.404	9.424	96.520		87.096
267660	41.514	31.372	9.648	96.537		86.889
267680	41.576	31.247	9.592	96.554		86.962
267700	41.635	31.228	10.042	96.570		86.529
267720	41.654	31.210	9.973	96.587		86.613
267740	41.693	31.191	10.153	96.603		86.450
267760	41.732	31.173	11.571	96.620		85.048
267780	41.852	30.974	9.210	96.637		87.426
267800	41.982	30.767	9.436	96.653		87.217
267820	42.112	30.561	9.128	96.670		87.542
267840	42.236	30.543	9.080	96.686		87.606
267860	42.474	30.620	8.726	96.703		87.976
267880	42.613	30.430	8.571	96.720		88.149
267900	42.352	30.026	8.477	96.736		88.260
267920	42.369	29.985	8.339	96.753		88.414
267940	42.425	29.944	8.150	96.769		88.620
267960	42.481	29.903	8.071	96.786		88.714
267980	42.538	29.862	8.169	96.803		88.634
268000	42.647	29.821	8.391	96.819		88.429
268020	42.767	29.780	8.530	96.836		88.305
268040	51.151	47.965	8.499	96.852		88.354
268060	50.912	47.911	8.686	96.869		88.183
268080	50.673	47.857	9.217	96.886		87.668
268100	50.716	47.883	9.592	96.902		87.310
268120	50.952	47.970	9.348	96.919		87.570
268140	51.189	47.886	8.958	96.935		87.978
268160	51.426	47.808	8.739	96.952		88.213
268180	51.568	47.828	8.648	96.969		88.320
268200	51.702	47.849	8.567	96.985		88.418

THROUGH CHAINAGE

SECTION-CP-201

LEGEND:-

- EXISTING IR TRACK
- PROPOSED DFCC TRACK
- PROW — PROW: DFCC ROW LINE
- IR-TOE — IR-TOE: EXISTING IR TOE LINE
- TOEL — TOEL: DFCC TOE LINE

NOTES:-

1. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
2. ALL COORDINATES ARE BASED ON WGS 84 PROJECTION IN UTM ZONE 44.
3. TOP WIDTH OF FORMATION IS 13.5M FOR DOUBLE LINE IN STRAIGHT SECTION.
4. CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE
5. EQUILIBRIUM SPEED HAS BEEN TAKEN 85 KMPH.
6. TRACK CENTER BETWEEN MAIN LINES OF DFC HAS BEEN KEPT AS MIN. 6.0M AT STRAIGHT SECTION.
7. DRAIN SHALL BE PROVIDED BETWEEN IR AND DFC TRACKS TO DRAIN OUT RAINWATER.
8. PUBLIC UTILITIES,HT/LT LINES,ETC. INTERFERING DFC TRACKS SHALL BE RELOCATED
9. AT THE LOCATIONS WHERE FORMATION HEIGHT IS <1.75m, IT IS PROPOSED TO MAKE THE FORMATION HEIGHT TO 1.750m BY CUTTING THE EARTH
10. FOR LEGEND AND ABBREVIATION REFER RELEVANT DRAWING.

EMPLOYER : DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

PROJECT : EASTERN DEDICATED FREIGHT CORRIDOR (PACKAGE - 201)

TITLE : ALIGNMENT PLAN & PROFILE FROM KM. 267/000 TO KM. 268/200

DRAWING NO.	SIZE	REV	SCALE
D 2 AL 0 1 2 4	A1	0	HOR:- 1 : 2000, VER:- 1 : 200

REVIEWS

REV	DATE	REMARKS
0	02/08/2018	DEFINITIVE

DRAWING STAGE

- [ ] FOR APPROVAL
- [x] GOOD FOR CONSTRUCTION

PMC : SYSTRA - Mott MacDonald JV

CONTRACTOR : GIL - SIL JV

DESIGN CONSULTANT: STUP Consultants Pvt. Ltd.

REGISTERED OFFICE : 1004-5 RAHEJA CHAMBERS, NARIMAN POINT, MUMBAI 400 021.

OFFICE OF ORIGIN KOLKATA

	DATE	NAME	SIGN.
DRAWN	02/08/2018	ZC	
CHKD.	02/08/2018		
APPD.	02/08/2018	S. MITRA	

SUBMITTED BY GIL-SIL JV

	DATE	NAME	SIGN.
CHKD.	18/10/2018	Roopkalk Gangulee	
APPD.	19/10/2018	NISHEETH K. SINGH	

NOC BY SYSTRA - Mott MacDonald JV

	DATE	NAME	SIGN.
CHKD.	29-10-2018	ANURANJAN PRASAD	
NOC	29-10-2018	KAMAL SHARMA	

APPROVAL BY DFCC

	DATE	NAME	SIGN.
CHKD.			
APPD.			

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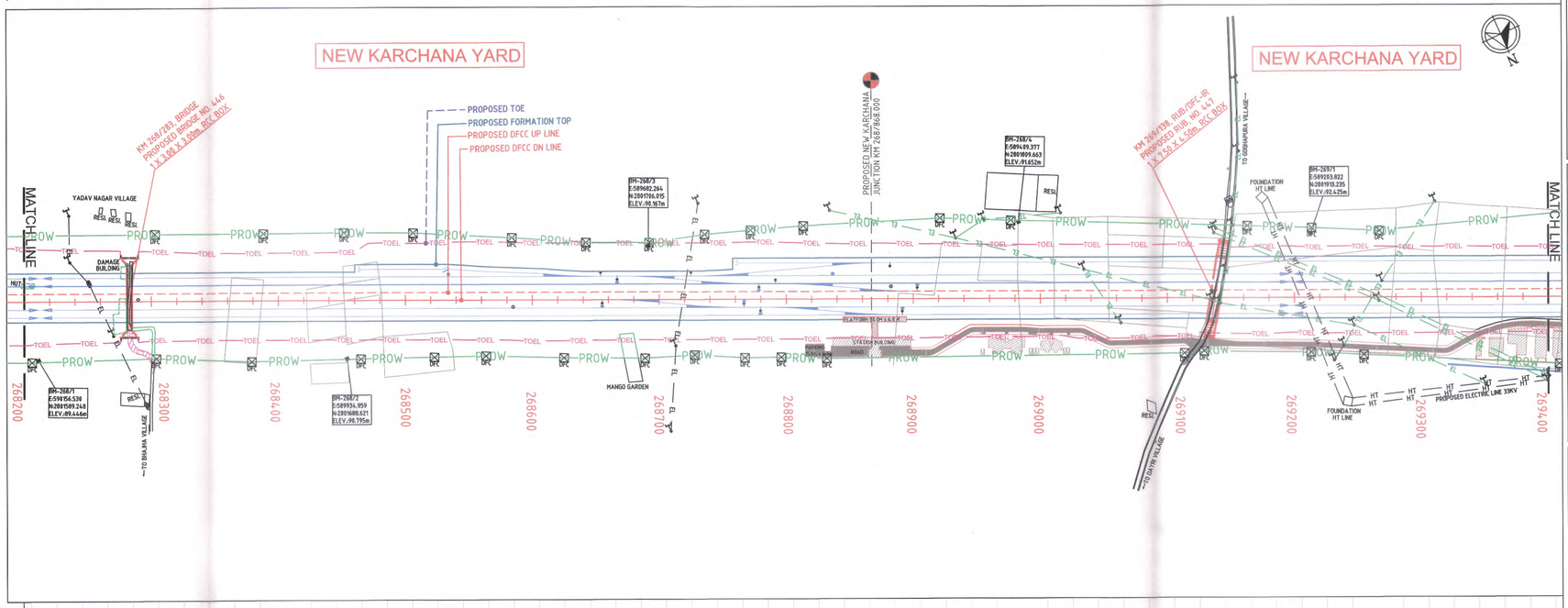
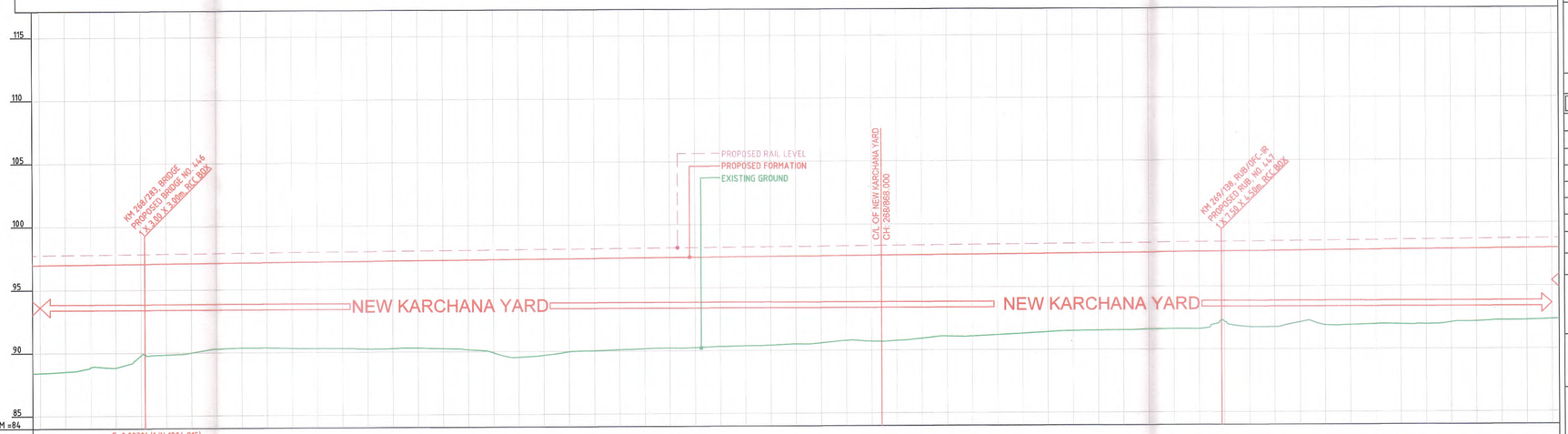
Chainage CH- 268200 CH-269400

HOWRAH ← → DELHI





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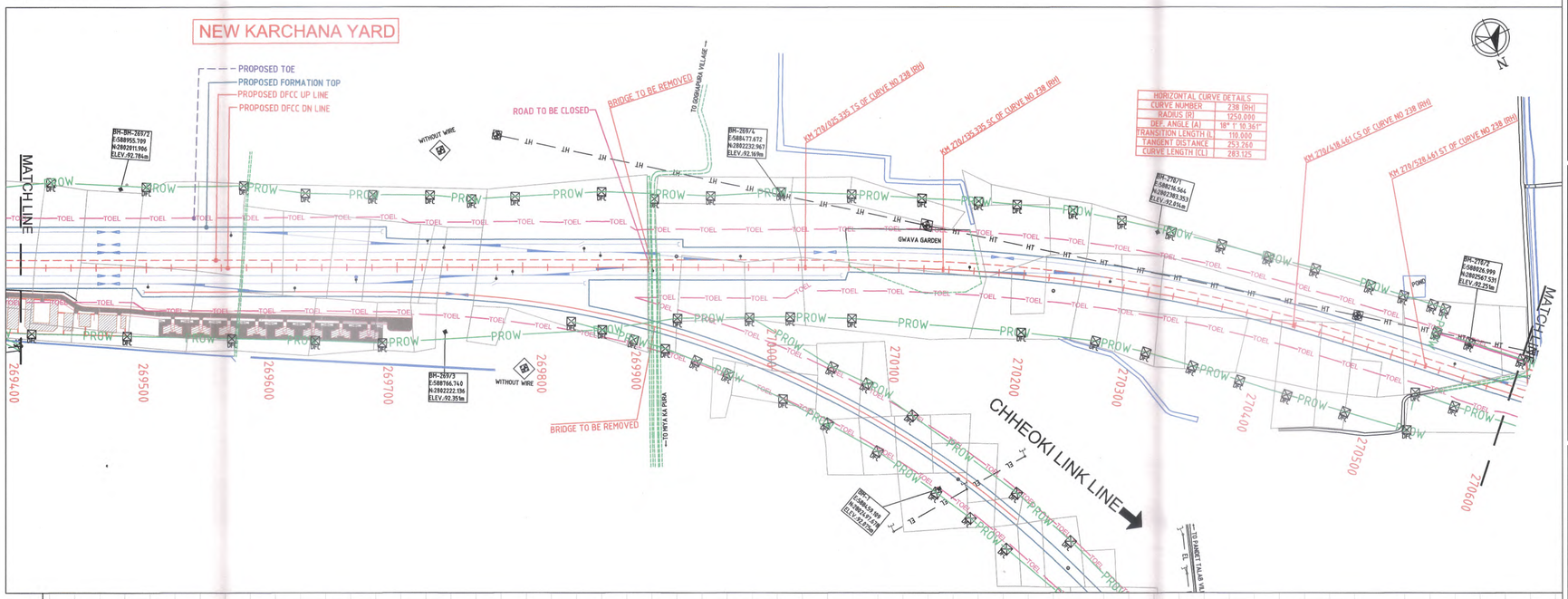
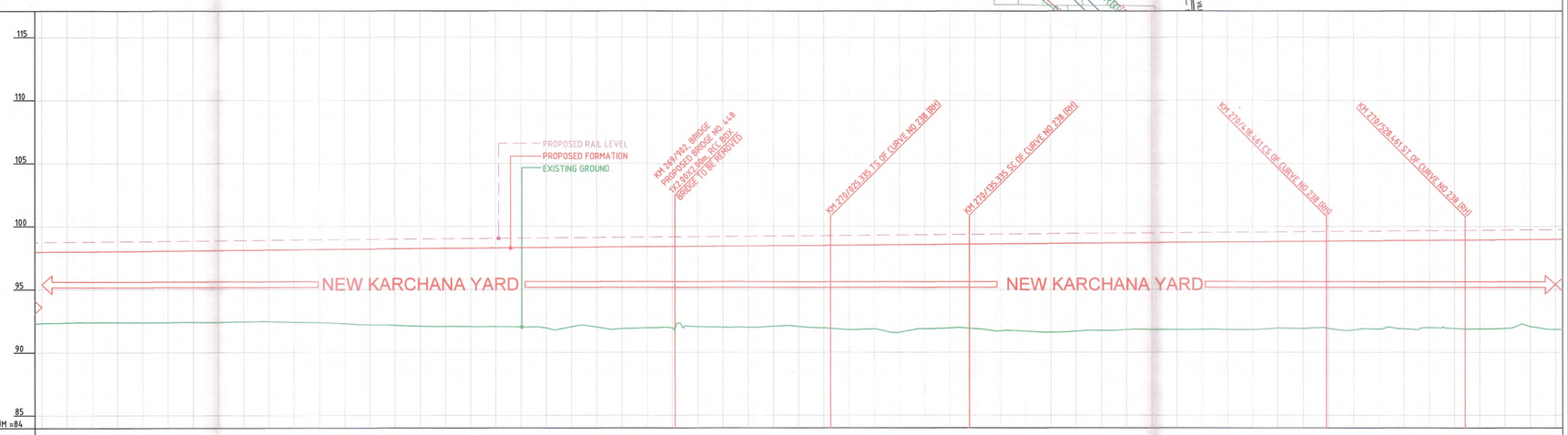
Chainage CH-269400 CH-270600

SECTION-CP-201

HOWRAH ← → DELHI



HORIZONTAL CURVE DETAILS	
CURVE NUMBER	238 (RH)
RADIUS (R)	1250.000
DEF. ANGLE (A)	18° 1' 10.367"
TRANSITION LENGTH (L)	110.000
TANGENT DISTANCE	253.260
CURVE LENGTH (CL)	283.125



VERTICAL ALIGNMENT: G=0.083% (1 IN 1204.915) L=3524.000m; G=0.083% (1 IN 1204.915) L=3524.000m

HORIZONTAL ALIGNMENT: L=2992.111m; L=2992.111m; L=110.000m; R=1250.000m L=283.125m; L=110.000m; L=733.385m

CHAINAGE	LHS R.O.W DISTANCE FROM DOWN LINE TRACK	RHS R.O.W. DISTANCE FROM DOWN TRACK	FILL (+)/ CUT (-)	PROPOSED FORMATION LEVELS	EXIST. IR FORMATION LEVELS	GROUND LEVELS
269400	65.482	52.169	5.652	97.981		92.330
269420	67.423	52.882	5.628	97.998		92.370
269440	67.046	53.370	5.626	98.014		92.388
269460	66.081	53.858	5.634	98.031		92.397
269480	65.117	54.346	5.656	98.047		92.391
269500	64.152	54.832	5.675	98.064		92.389
269520	64.367	55.317	5.678	98.081		92.402
269540	64.589	55.802	5.697	98.097		92.400
269560	64.811	56.287	5.673	98.114		92.440
269580	64.752	56.754	5.685	98.130		92.446
269600	62.301	57.208	5.749	98.147		92.398
269620	59.849	57.661	5.797	98.164		92.357
269640	58.730	58.193	5.905	98.180		92.275
269660	58.328	58.951	6.007	98.197		92.190
269680	57.926	59.708	6.073	98.213		92.140
269700	57.789	59.318	6.158	98.230		92.072
269720	57.658	58.125	6.194	98.247		92.053
269740	56.336	56.931	6.226	98.263		92.037
269760	54.557	55.738	6.245	98.280		92.035
269780	55.569	54.544	6.289	98.296		92.008
269800	56.617	53.350	6.389	98.313		91.924
269820	57.753	52.157	6.305	98.330		92.025
269840	58.890	50.963	6.343	98.346		92.004
269860	60.026	49.770	6.476	98.363		91.886
269880	59.557	47.661	6.444	98.379		91.936
269900	58.809	44.033	6.471	98.396		91.926
269920	58.060	41.005	6.371	98.413		92.042
269940	57.312	40.225	6.429	98.429		92.000
269960	57.555	39.920	6.457	98.446		91.988
269980	58.758	39.615	6.401	98.462		92.062
270000	59.961	39.300	6.420	98.479		92.059
270020	59.845	39.282	6.551	98.496		91.944
270040	59.171	39.844	6.712	98.512	DETOUR PORTION	91.801
270060	58.535	40.360	6.668	98.529		91.861
270080	57.548	41.691	6.964	98.545		91.581
270100	56.666	43.001	6.693	98.562		91.870
270120	56.075	44.089	6.644	98.579		91.934
270140	55.712	44.902	6.714	98.595		91.882
270160	55.739	45.410	6.908	98.612		91.704
270180	55.470	45.608	6.953	98.628		91.676
270200	55.360	45.498	7.060	98.645		91.586
270220	55.425	45.672	6.993	98.662		91.669
270240	55.023	45.609	6.935	98.678		91.743
270260	53.638	45.237	6.891	98.695		91.804
270280	52.387	46.060	6.894	98.711		91.818
270300	51.253	46.936	6.929	98.728		91.799
270320	50.089	48.598	6.933	98.745		91.811
270340	48.955	50.495	6.953	98.761		91.889
270360	48.198	51.943	6.973	98.778		91.805
270380	47.810	53.009	6.876	98.794		91.918
270400	47.751	53.900	6.912	98.811		91.899
270420	48.023	54.563	6.932	98.828		91.895
270440	47.955	54.795	7.066	98.844		91.778
270460	48.034	54.674	7.010	98.861		91.851
270480	48.045	54.352	7.016	98.877		91.862
270500	48.083	53.830	6.937	98.894		91.957
270520	48.330	53.221	7.016	98.911		91.895
270540	28.797	22.747	7.063	98.927		91.864
270560	29.007	23.224	7.042	98.944		91.902
270580	28.939	23.165	6.921	98.960		92.039
270600	28.870	23.088	7.157	98.977		91.820

DETOUR PORTION

THROUGH CHAINAGE

LEGEND:-

- EXISTING IR TRACK
- PROPOSED DFCC TRACK
- PROW — DFCC ROW LINE
- IR-TOE — EXISTING IR TOE LINE
- TOEL — DFCC TOE LINE

NOTES:-

1. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
2. ALL COORDINATES ARE BASED ON WGS 84 PROJECTION IN UTM ZONE 44.
3. TOP WIDTH OF FORMATION IS 13.5M FOR DOUBLE LINE IN STRAIGHT SECTION.
4. CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE
5. EQUILIBRIUM SPEED HAS BEEN TAKEN 85 KMPH.
6. TRACK CENTER BETWEEN MAIN LINES OF DFC HAS BEEN KEPT AS MIN. 6.0M AT STRAIGHT SECTION.
7. DRAIN SHALL BE PROVIDED BETWEEN IR AND DFC TRACKS TO DRAIN OUT RAINWATER.
8. PUBLIC UTILITIES,HT/LT LINES,ETC. INTERFERING DFC TRACKS SHALL BE RELOCATED
9. AT THE LOCATIONS WHERE FORMATION HEIGHT IS <1.75m, IT IS PROPOSED TO MAKE THE FORMATION HEIGHT TO 1.750m BY CUTTING THE EARTH
10. FOR LEGEND AND ABBREVIATION REFER RELEVANT DRAWING.

EMPLOYER : DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

PROJECT : EASTERN DEDICATED FREIGHT CORRIDOR (PACKAGE - 201)

TITLE : ALIGNMENT PLAN & PROFILE FROM KM. 269/400 TO KM. 270/600

DRAWING NO.	SIZE	REV	SCALE
D 2 AL 0 1 2 6	A1	0	HOR:- 1 : 2000, VER:- 1 : 200

REVIEWS

REV	DATE	REMARKS
0	02/08/2018	DEFINITIVE

DRAWING STAGE

☐ FOR APPROVAL

☑ GOOD FOR CONSTRUCTION

PMC : SYSTRA - Mott MacDonald JV

CONTRACTOR : GIL - SIL JV

DESIGN CONSULTANT: STUP Consultants Pvt. Ltd.

REGISTERED OFFICE : 1004-5 RAHEJA CHAMBERS, NARIMAN POINT, MUMBAI 400 021.

OFFICE OF ORIGIN KOLKATA

	DATE	NAME	SIGN.
DRAWN	02/08/2018	TC	
CHKD.	02/08/2018		
APPD.	02/08/2018	S. MITRA	

SUBMITTED BY GIL-SIL JV

	DATE	NAME	SIGN.
CHKD.	18/10/2018	Deepak Gupta	
APPD.	18/10/2018	MUKEETH K. SINGH	

NOC BY SYSTRA - Mott MacDonald JV

	DATE	NAME	SIGN.
CHKD.	29-10-2018	ANURATHAN PRASAD	
NOC	29-10-2018	KAMAL SHARMA	

APPROVAL BY DFCC

	DATE	NAME	SIGN.
CHKD.			
APPD.			

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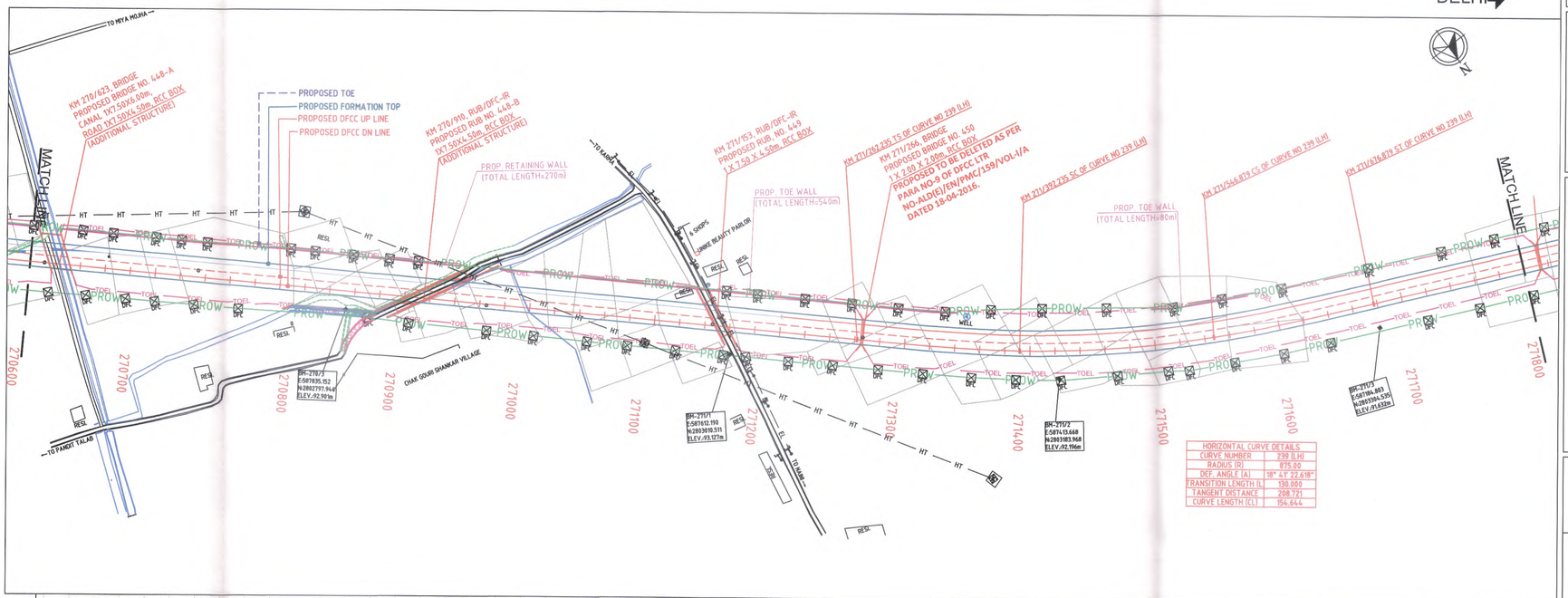
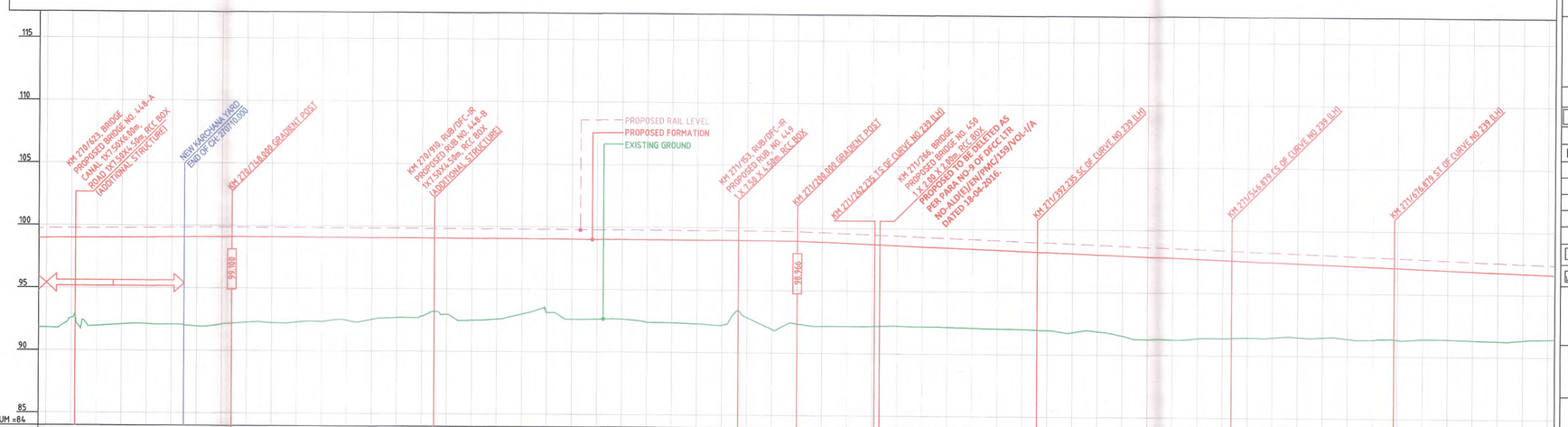
Chainage CH- 270600 CH- 271800

HOWRAH ← → DELHI



HORIZONTAL CURVE DETAILS	
CURVE NUMBER	239 (LH)
RADIUS (R)	875.00
DEF. ANGLE (A)	18° 41' 22.618"
TRANSITION LENGTH (L)	130.000
TANGENT DISTANCE	208.721
CURVE LENGTH (CL)	154.644



VERTICAL ALIGNMENT: G=0.083% (1 IN 1204.915) L=3524.000m; L=452.000m G=-0.030% (1 IN 3377.924); L=452.000m G=-0.030% (1 IN 3377.924); L=672.500m G=-0.394% (1 IN 253.957); L=672.500m G=-0.394% (1 IN 253.957)

HORIZONTAL ALIGNMENT: L=733.385m; L=733.385m; L=130.000m; R=-875.000m L=155.421m; L=130.000m; L=2534.933m

LHS R.O.W DISTANCE FROM DOWN LINE TRACK	RHS R.O.W. DISTANCE FROM DOWN TRACK	FILL (+)/ CUT (-)	PROPOSED FORMATION LEVELS	EXIST. IR FORMATION LEVELS	GROUND LEVELS	CHAINAGE
28.870	23.988	7.157	98.977	DETOUR PORTION	91.820	270600
28.807	22.972	6.395	98.994		92.599	270620
28.746	22.674	7.061	99.010		91.950	270640
28.767	22.452	6.945	99.027		92.082	270660
28.790	22.281	6.923	99.043		92.121	270680
28.785	22.256	6.986	99.060		92.073	270700
28.508	22.075	7.136	99.077		91.940	270720
28.594	21.906	6.977	99.093		92.117	270740
29.022	21.785	6.829	99.096		92.268	270760
29.449	21.463	6.853	99.090		92.237	270780
29.877	20.995	6.787	99.084		92.298	270800
29.669	20.528	6.730	99.078		92.349	270820
29.566	20.060	6.627	99.073		92.446	270840
29.530	19.592	6.533	99.067		92.533	270860
29.149	19.647	6.380	99.061		92.680	270880
29.191	20.383	6.239	99.055		92.815	270900
29.244	20.631	6.088	99.049		92.961	270920
29.209	20.722	6.536	99.043		92.506	270940
29.174	20.813	6.451	99.037		92.587	270960
29.139	21.097	6.031	99.031		93.000	270980
29.104	21.491	5.904	99.025		93.121	271000
29.069	21.739	6.422	99.019		92.597	271020
29.034	21.939	6.388	99.013		92.626	271040
28.999	22.126	6.379	99.007		92.629	271060
28.964	22.305	6.604	99.002		92.398	271080
28.929	22.337	6.629	98.996		92.367	271100
28.895	22.369	6.686	98.990		92.303	271120
28.860	22.402	6.790	98.984		92.193	271140
28.791	22.410	6.175	98.978		92.802	271160
28.628	22.359	7.094	98.972		91.877	271180
28.589	22.511	6.628	98.966		92.338	271200
28.543	22.530	6.726	98.887	DETOUR PORTION	92.162	271220
28.442	22.445	6.649	98.808		92.160	271240
28.347	22.361	6.556	98.730		92.174	271260
28.256	22.286	6.441	98.651		92.210	271280
28.240	22.284	6.398	98.572		92.174	271300
28.317	22.377	6.349	98.493		92.145	271320
29.352	22.493	6.324	98.415		92.090	271340
31.400	22.699	6.295	98.336		92.040	271360
32.847	22.750	6.243	98.257		92.014	271380
33.735	22.978	6.237	98.178		91.941	271400
34.021	23.451	6.317	98.100		91.783	271420
33.710	22.683	6.147	98.021		91.874	271440
32.959	21.914	6.400	97.942		91.542	271460
31.740	21.587	6.590	97.863		91.274	271480
30.072	21.707	6.551	97.785		91.233	271500
28.250	23.009	6.359	97.706		91.347	271520
28.900	22.873	6.258	97.627		91.369	271540
29.113	22.493	6.109	97.548		91.440	271560
28.967	22.555	6.021	97.470		91.448	271580
28.486	22.937	5.904	97.391		91.487	271600
28.631	22.677	5.834	97.312		91.478	271620
28.667	22.495	5.842	97.233		91.391	271640
28.774	22.456	5.834	97.155		91.321	271660
28.815	22.479	5.758	97.076		91.317	271680
28.617	22.510	5.606	96.997		91.391	271700
28.419	22.535	5.528	96.918		91.390	271720
28.233	22.537	5.510	96.840		91.330	271740
28.339	22.537	5.491	96.761		91.269	271760
28.446	22.475	5.327	96.682		91.356	271780
28.497	22.413	5.174	96.603		91.429	271800

THROUGH CHAINAGE

SECTION-CP-201

LEGEND:-

- EXISTING IR TRACK
- PROPOSED DFCC TRACK
- PROW — PROW — DFCC ROW LINE
- IR-TOE — IR-TOE — EXISTING IR TOE LINE
- TOEL — TOEL — DFCC TOE LINE

NOTES:-

1. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
2. ALL COORDINATES ARE BASED ON WGS 84 PROJECTION IN UTM ZONE 44.
3. TOP WIDTH OF FORMATION IS 13.5M FOR DOUBLE LINE IN STRAIGHT SECTION.
4. CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE
5. EQUILIBRIUM SPEED HAS BEEN TAKEN 85 KMPH.
6. TRACK CENTER BETWEEN MAIN LINES OF DFC HAS BEEN KEPT AS MIN. 6.0M AT STRAIGHT SECTION.
7. DRAIN SHALL BE PROVIDED BETWEEN IR AND DFC TRACKS TO DRAIN OUT RAINWATER.
8. PUBLIC UTILITIES,HT/LT LINES,ETC. INTERFERING DFC TRACKS SHALL BE RELOCATED
9. AT THE LOCATIONS WHERE FORMATION HEIGHT IS <1.75m, IT IS PROPOSED TO MAKE THE FORMATION HEIGHT TO 1.750m BY CUTTING THE EARTH
10. FOR LEGEND AND ABBREVIATION REFER RELEVANT DRAWING.

EMPLOYER : DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

PROJECT : EASTERN DEDICATED FREIGHT CORRIDOR (PACKAGE - 201)

TITLE : ALIGNMENT PLAN & PROFILE FROM KM. 270/600 TO KM. 271/800

DRAWING NO.	SIZE	REV	SCALE
D 2 AL 0 1 2 7	A1	0	HOR:- 1 : 2000, VER:- 1 : 200

REVIEWS

REV	DATE	REMARKS
0	02/08/2018	DEFINITIVE

DRAWING STAGE

- [ ] FOR APPROVAL
- [x] GOOD FOR CONSTRUCTION

PMC : SYSTRA - Mott MacDonald JV

CONTRACTOR : GIL - SIL JV

DESIGN CONSULTANT: STUP Consultants Pvt. Ltd.

REGISTERED OFFICE : 1004-5 RAHEJA CHAMBERS, NARIMAN POINT, MUMBAI 400 021. | OFFICE OF ORIGIN KOLKATA

	DATE	NAME	SIGN.
DRAWN	02/08/2018	TC	
CHKD.	02/08/2018		
APPD.	02/08/2018	S. MITRA	

SUBMITTED BY GIL-SIL JV

	DATE	NAME	SIGN.
CHKD.	18/10/2018	Roopkalli Gaurkatel	
APPD.	18/10/2018	NISHEETH K. SINGH	

NOC BY SYSTRA - Mott MacDonald JV

	DATE	NAME	SIGN.
CHKD.	29-10-2018	ANURAKHAN PRASAD	
NOC	29.10.2018	KAMAL SHARMA	

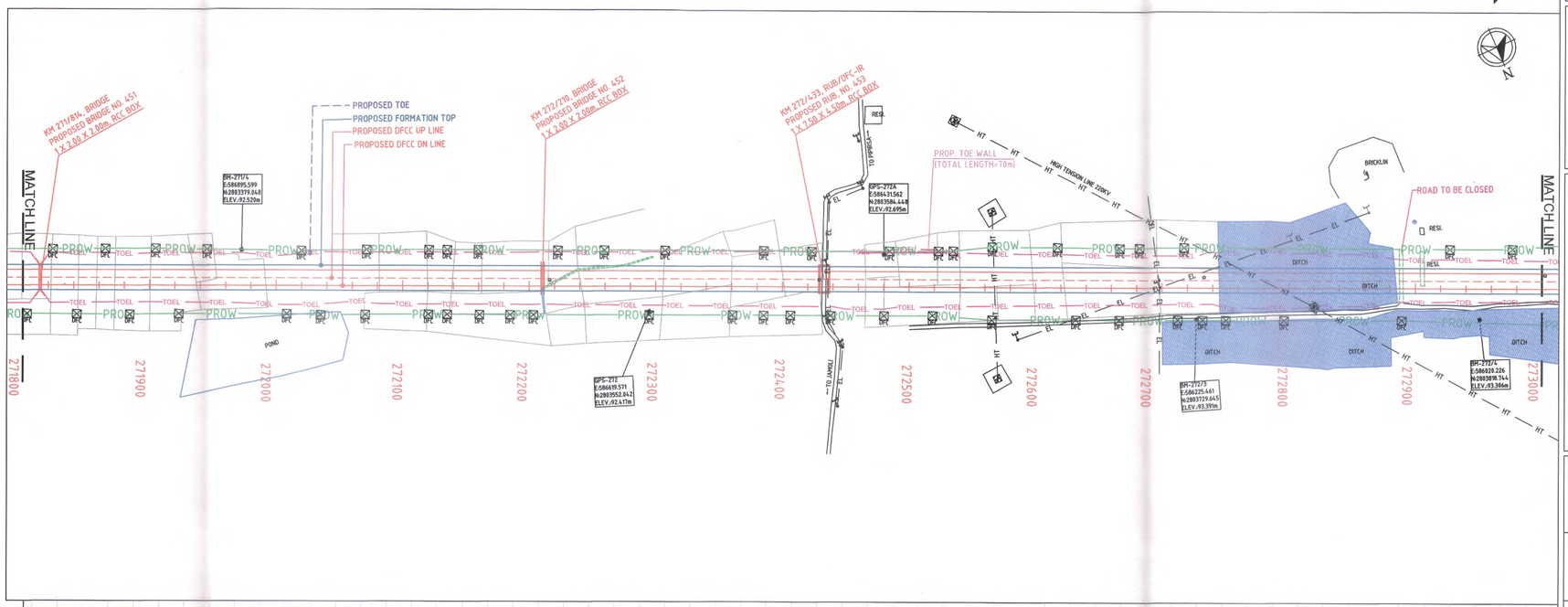
APPROVAL BY DFCC

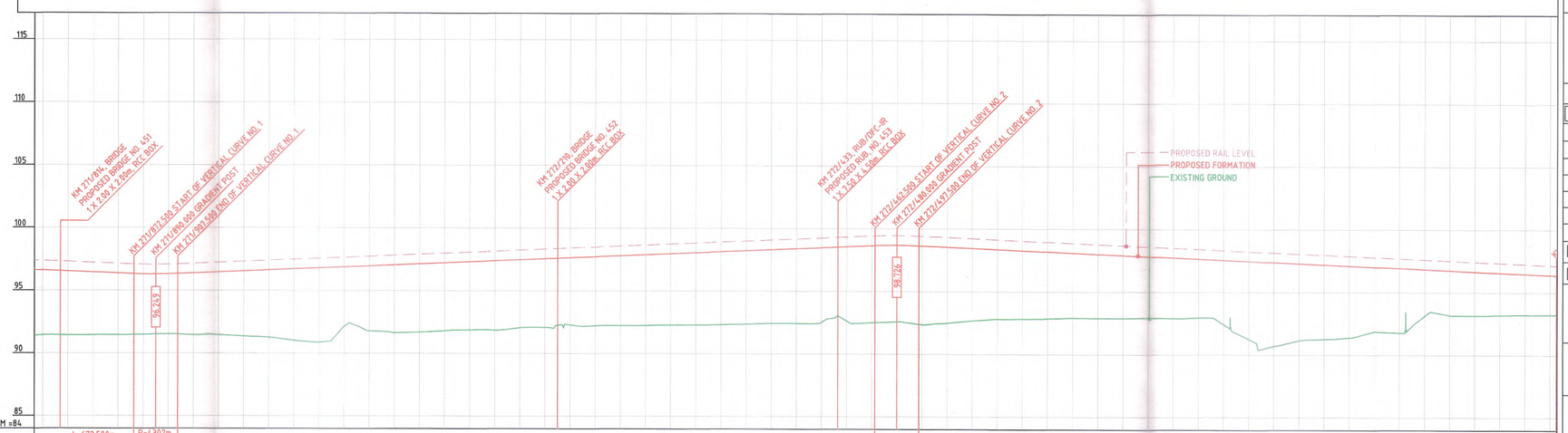
	DATE	NAME	SIGN.
CHKD.			
APPD.			

THIS DRAWING IS THE PROPERTY OF **GIL - SIL JV** IT SHOULD NOT BE USED, COPIED OR REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

Chainage CH- 271800 CH-273000

HOWRAH ⟵ ⟶ DELHI





VERTICAL ALIGNMENT	L=672.500m Gs=-0.394% (1 IN 253.957); R=4302m L=35.000m; G=0.420% (1 IN 238.191) L=555.000m; G=0.420% (1 IN 238.191) L=555.000m; L=35.000m R=-4023m; L=507.500m Gs=-0.450% (1 IN 222.086); L=507.500m Gs=-0.450% (1 IN 222.086)
HORIZONTAL ALIGNMENT	L=2534.933m; L=2534.933m; L=2534.933m; L=2534.933m
LHS R.O.W DISTANCE FROM DOWN LINE TRACK	28.497, 28.539, 28.682, 28.847, 28.967, 29.071, 28.803, 28.550, 28.372, 28.059, 27.747, 27.440, 27.839, 28.238, 28.464, 28.464, 28.463, 28.496, 28.561, 28.460, 28.360, 28.259, 28.284, 28.325, 28.313, 28.300, 28.286, 28.271, 28.256, 28.294, 28.223, 28.011, 28.022, 28.075, 28.128, 28.385, 28.460, 29.117, 31.255, 31.800, 31.700, 31.585, 31.362, 31.139, 31.225, 31.435, 31.607, 31.538, 31.468, 31.399, 31.329, 31.260, 31.190, 31.121, 31.051, 30.982, 30.912, 30.932, 31.003, 31.332, 32.939
RHS R.O.W. DISTANCE FROM DOWN TRACK	22.413, 22.543, 22.709, 22.782, 22.842, 22.666, 22.424, 22.365, 22.346, 22.316, 22.291, 22.591, 22.943, 22.737, 22.569, 22.445, 22.321, 22.351, 22.478, 22.561, 22.558, 22.546, 22.536, 22.527, 22.558, 22.497, 22.442, 22.386, 22.331, 22.527, 22.443, 22.467, 22.579, 22.598, 22.677, 22.527, 22.538, 23.913, 25.288, 25.641, 25.602, 25.562, 25.551, 25.584, 25.594, 25.593, 25.582, 25.505, 25.462, 25.533, 25.583, 25.535, 25.488, 25.441, 25.394, 25.622, 26.093, 26.564, 27.034, 27.505, 27.976
FILL (+)/ CUT (-)	5.174, 5.699, 5.007, 4.921, 4.814, 4.790, 4.927, 5.000, 5.190, 5.367, 5.691, 5.926, 4.742, 5.172, 5.410, 5.444, 5.418, 5.429, 5.530, 5.418, 5.479, 5.352, 5.500, 5.567, 5.635, 5.691, 5.758, 5.815, 5.860, 5.885, 5.961, 5.946, 5.926, 6.140, 6.107, 6.268, 6.061, 5.784, 5.558, 5.444, 5.331, 5.183, 5.108, 5.017, 4.898, 4.832, 4.693, 5.116, 6.215, 6.690, 6.143, 5.935, 5.722, 5.140, 5.146, 3.722, 3.569, 3.498, 3.376, 3.259, 3.160
PROPOSED FORMATION LEVELS	96.603, 96.525, 96.446, 96.367, 96.295, 96.298, 96.375, 96.459, 96.543, 96.627, 96.711, 96.795, 96.879, 96.963, 97.047, 97.131, 97.215, 97.299, 97.383, 97.467, 97.550, 97.634, 97.718, 97.802, 97.886, 97.970, 98.054, 98.138, 98.222, 98.306, 98.390, 98.474, 98.558, 98.642, 98.688, 98.636, 98.546, 98.456, 98.366, 98.276, 98.186, 98.096, 98.006, 97.916, 97.825, 97.735, 97.645, 97.555, 97.465, 97.375, 97.285, 97.195, 97.105, 97.015, 96.925, 96.835, 96.745, 96.655, 96.565, 96.475, 96.385
EXIST. IR FORMATION LEVELS	DETOUR PORTION; DETOUR PORTION; DETOUR PORTION
GROUND LEVELS	91.429, 91.425, 91.438, 91.446, 91.481, 91.508, 91.447, 91.459, 91.353, 91.260, 91.019, 90.870, 92.136, 91.791, 91.637, 91.686, 91.797, 91.869, 91.853, 92.048, 92.071, 92.283, 92.218, 92.236, 92.251, 92.279, 92.297, 92.323, 92.363, 92.422, 92.430, 92.529, 92.633, 92.502, 92.580, 92.367, 92.484, 92.672, 92.807, 92.831, 92.855, 92.912, 92.898, 92.899, 92.928, 92.903, 92.952, 92.439, 91.251, 90.685, 91.143, 91.260, 91.383, 91.875, 91.779, 93.112, 93.175, 93.157, 93.188, 93.215, 93.225
CHAINAGE	271800, 271820, 271840, 271860, 271880, 271900, 271920, 271940, 271960, 271980, 272000, 272020, 272040, 272060, 272080, 272100, 272120, 272140, 272160, 272180, 272200, 272220, 272240, 272260, 272280, 272300, 272320, 272340, 272360, 272380, 272400, 272420, 272440, 272460, 272480, 272500, 272520, 272540, 272560, 272580, 272600, 272620, 272640, 272660, 272680, 272700, 272720, 272740, 272760, 272780, 272800, 272820, 272840, 272860, 272880, 272900, 272920, 272940, 272960, 272980, 273000
THROUGH CHAINAGE	

SECTION–CP–201

LEGEND:-

- EXISTING IR TRACK
- PROPOSED DFCC TRACK
- PROW — PROW — DFCC ROW LINE
- IR-TOE — IR-TOE — EXISTING IR TOE LINE
- TOEL — TOEL — DFCC TOE LINE

NOTES:-

1. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
2. ALL COORDINATES ARE BASED ON WGS 84 PROJECTION IN UTM ZONE 44.
3. TOP WIDTH OF FORMATION IS 13.5M FOR DOUBLE LINE IN STRAIGHT SECTION.
4. CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE
5. EQUILIBRIUM SPEED HAS BEEN TAKEN 85 KMPH.
6. TRACK CENTER BETWEEN MAIN LINES OF DFC HAS BEEN KEPT AS MIN. 6.0M AT STRAIGHT SECTION.
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8. PUBLIC UTILITIES,HT/LT LINES,ETC. INTERFERING DFC TRACKS SHALL BE RELOCATED
9. AT THE LOCATIONS WHERE FORMATION HEIGHT IS <1.75m, IT IS PROPOSED TO MAKE THE FORMATION HEIGHT TO 1.750m BY CUTTING THE EARTH
10. FOR LEGEND AND ABBREVIATION REFER RELEVANT DRAWING.

EMPLOYER : DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

PROJECT : EASTERN DEDICATED FREIGHT CORRIDOR (PACKAGE - 201)

TITLE : ALIGNMENT PLAN & PROFILE FROM KM. 271/800 TO KM. 273/000

DRAWING NO.	SIZE	REV	SCALE
D 2 AL 0 1 2 8	A1	0	HOR:- 1 : 2000, VER:- 1 : 200

REVIEWS

REV	DATE	REMARKS
0	02/08/2018	DEFINITIVE

DRAWING STAGE

- [ ] FOR APPROVAL
- [x] GOOD FOR CONSTRUCTION

PMC : SYSTRA - Mott MacDonald JV

CONTRACTOR : GIL - SIL JV

DESIGN CONSULTANT: STUP Consultants Pvt. Ltd.
REGISTERED OFFICE : 1004-5 RAHEJA CHAMBERS, NARIMAN POINT, MUMBAI 400 021.
OFFICE OF ORIGIN KOLKATA

	DATE	NAME	SIGN.
DRAWN	02/08/2018	TC	
CHKD.	02/08/2018		
APPD.	02/08/2018	S. KUMAR	

SUBMITTED BY GIL-SIL JV

	DATE	NAME	SIGN.
CHKD.	12/10/2018	Roopbeck Goyalia	
APPD.	12/10/2018	NISHEETH K. SINGH	

NOC BY SYSTRA - Mott MacDonald JV

	DATE	NAME	SIGN.
CHKD.	29-10-2018	ANURANJAN PRASAD	
NOC	29.10.2018	KAMAL SHARMA	

APPROVAL BY DFCC

	DATE	NAME	SIGN.
CHKD.			
APPD.			

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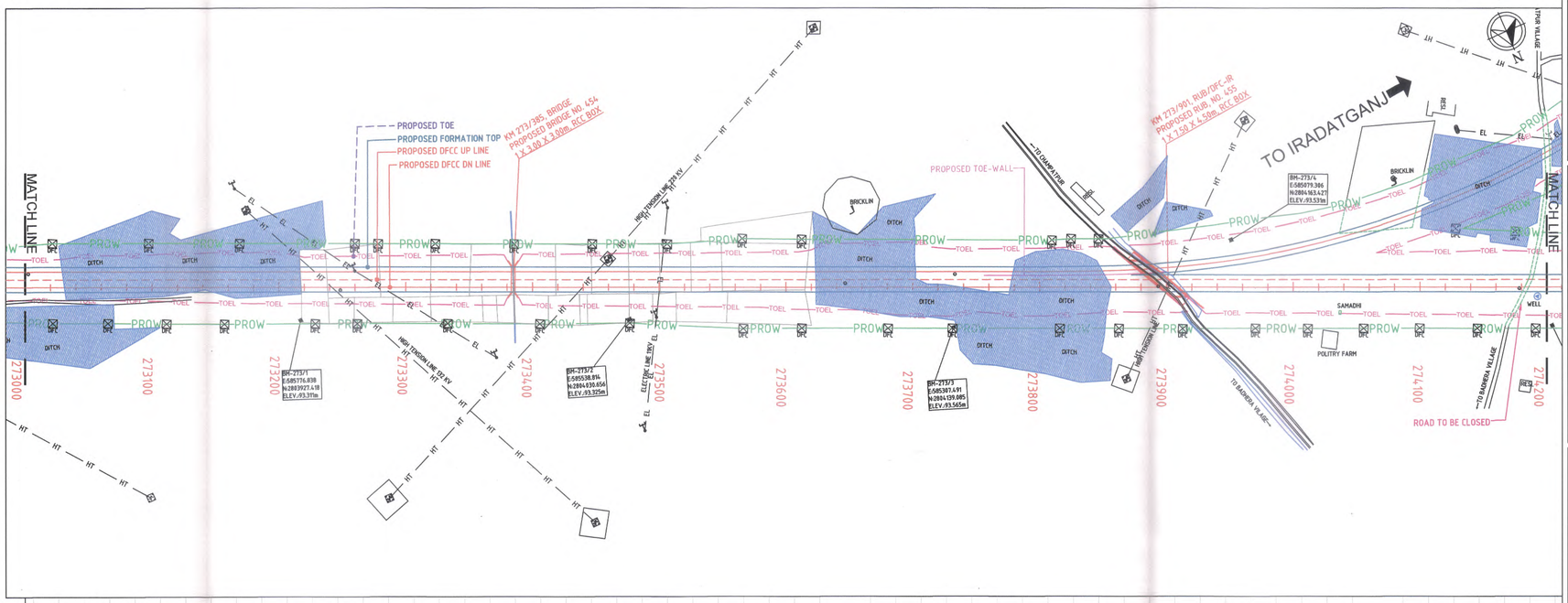
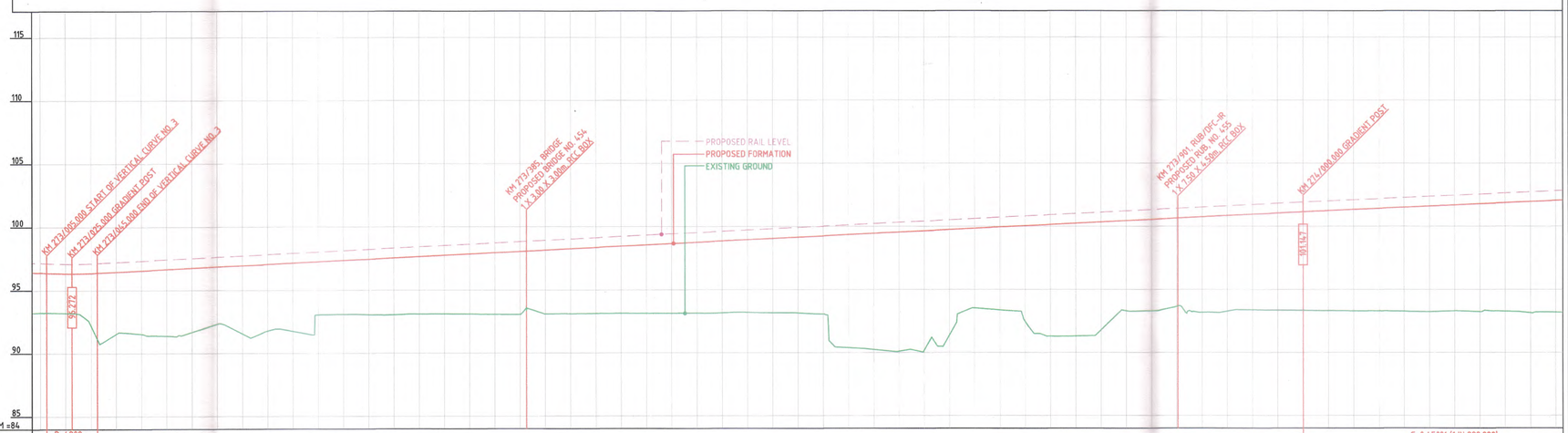
Chainage CH- 273000 CH-274200

HOWRAH ⬅ ➡ DELHI

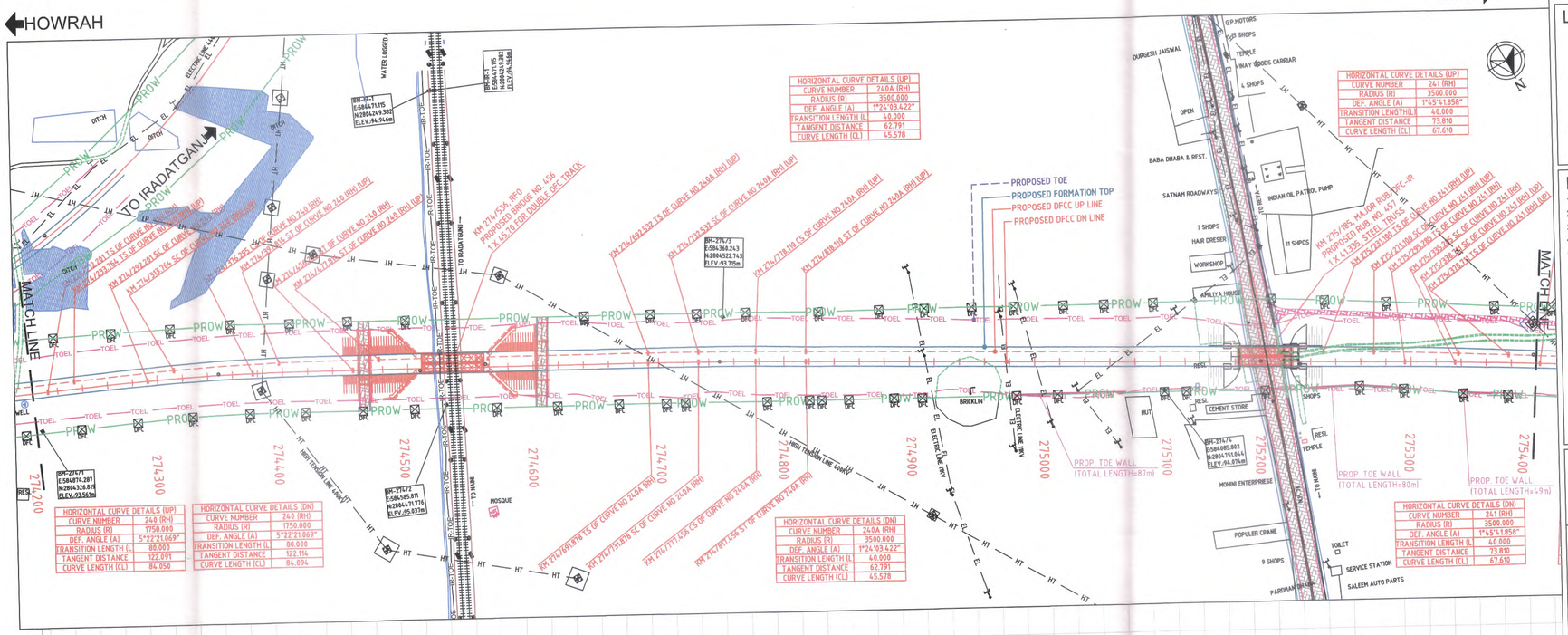




| | | |

Chainage CH-274200 CH-275400

HOWRAH ← → DELHI



HORIZONTAL CURVE DETAILS (UP)	
CURVE NUMBER	24.0A (RH)
RADIUS (R)	3500.000
DEF. ANGLE (A)	1°24'03.422"
TRANSITION LENGTH (L)	40.000
TANGENT DISTANCE	62.791
CURVE LENGTH (CL)	45.578

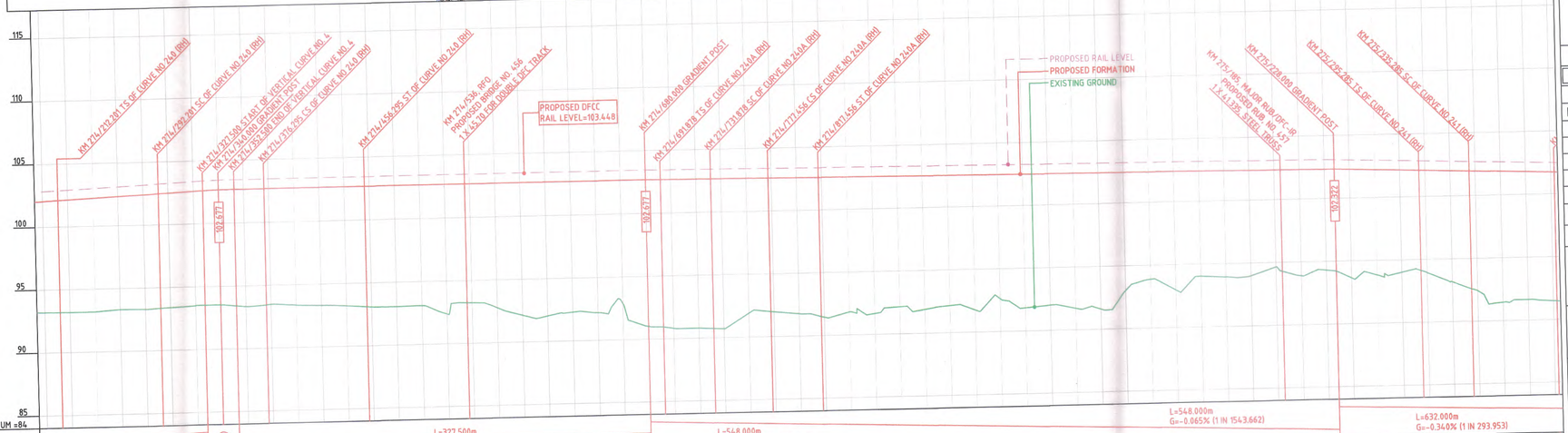
HORIZONTAL CURVE DETAILS (UP)	
CURVE NUMBER	24.1 (RH)
RADIUS (R)	3500.000
DEF. ANGLE (A)	1°45'41.858"
TRANSITION LENGTH (L)	40.000
TANGENT DISTANCE	73.810
CURVE LENGTH (CL)	67.610

HORIZONTAL CURVE DETAILS (UP)	
CURVE NUMBER	24.9 (RH)
RADIUS (R)	1750.000
DEF. ANGLE (A)	5°22'21.069"
TRANSITION LENGTH (L)	80.000
TANGENT DISTANCE	122.091
CURVE LENGTH (CL)	84.050

HORIZONTAL CURVE DETAILS (DN)	
CURVE NUMBER	24.9 (RH)
RADIUS (R)	1750.000
DEF. ANGLE (A)	5°22'21.069"
TRANSITION LENGTH (L)	80.000
TANGENT DISTANCE	122.114
CURVE LENGTH (CL)	84.094

HORIZONTAL CURVE DETAILS (DN)	
CURVE NUMBER	24.0A (RH)
RADIUS (R)	3500.000
DEF. ANGLE (A)	1°24'03.422"
TRANSITION LENGTH (L)	40.000
TANGENT DISTANCE	62.791
CURVE LENGTH (CL)	45.578

HORIZONTAL CURVE DETAILS (DN)	
CURVE NUMBER	24.1 (RH)
RADIUS (R)	3500.000
DEF. ANGLE (A)	1°45'41.858"
TRANSITION LENGTH (L)	40.000
TANGENT DISTANCE	73.810
CURVE LENGTH (CL)	67.610



VERTICAL ALIGNMENT: G=0.450% (1 IN 222.222) L=327.500m; R=-5550m L=625.000m; L=327.500m G=0.000 (LEVEL); L=548.000m G=-0.065% (1 IN 1543.662); L=548.000m G=-0.065% (1 IN 1543.662); L=632.000m G=-0.340% (1 IN 293.953)

HORIZONTAL ALIGNMENT: L=80.000m; R=1750.000m L=84.094m; L=80.000m; L=235.582m; L=40.000m; R=3500.000m L=45.579m; L=40.000m; L=477.828m; L=477.828m; L=40.000m; R=3500.000m L=67.610m

CHAINAGE	LHS R.O.W DISTANCE FROM DOWN LINE TRACK	RHS R.O.W. DISTANCE FROM DOWN TRACK	FILL (+)/ CUT (-)	PROPOSED FORMATION LEVELS	EXIST. IR FORMATION LEVELS	GROUND LEVELS
274200	43.019	32.513	8.857	102.147	93.190	93.190
274220	42.230	32.602	8.968	102.137	93.169	93.169
274240	41.521	32.642	9.043	102.227	93.184	93.184
274260	40.898	32.507	9.002	102.317	93.315	93.315
274280	40.280	32.234	9.195	102.407	93.302	93.302
274300	39.775	32.071	9.114	102.497	93.383	93.383
274320	39.515	31.721	9.094	102.587	93.493	93.493
274340	39.516	31.775	9.143	102.663	93.520	93.520
274360	39.751	31.783	9.326	102.677	93.351	93.351
274380	39.130	31.844	9.221	102.677	93.656	93.656
274400	38.674	32.127	9.317	102.677	93.360	93.360
274420	38.673	32.249	9.382	102.677	93.295	93.295
274440	38.947	32.314	9.465	102.677	93.212	93.212
274460	39.122	32.325	9.600	102.677	93.077	93.077
274480	39.011	32.141	9.636	102.677	93.041	93.041
274500	38.905	31.905	9.598	102.677	93.079	93.079
274520	38.956	31.867	10.304	102.677	92.373	92.373
274540	39.007	31.909	9.457	102.677	93.220	93.220
274560	39.058	31.951	9.900	102.677	92.777	92.777
274580	39.110	31.971	10.547	102.677	92.130	92.130
274600	39.161	31.962	10.650	102.677	92.027	92.027
274620	39.212	31.951	10.385	102.677	92.292	92.292
274640	39.263	31.788	10.470	102.677	92.207	92.207
274660	39.351	31.626	9.802	102.677	92.875	92.875
274680	39.444	31.525	11.669	102.677	91.008	91.008
274700	39.518	31.472	11.849	102.664	90.815	90.815
274720	39.538	31.314	11.860	102.651	90.791	90.791
274740	39.559	31.395	11.950	102.638	90.688	90.688
274760	39.587	31.494	10.739	102.625	91.886	91.886
274780	39.564	31.539	10.652	102.612	91.960	91.960
274800	39.525	31.231	10.827	102.599	91.772	91.772
274820	39.601	30.677	11.137	102.586	91.449	91.449
274840	40.023	30.585	10.754	102.573	91.819	91.819
274860	40.668	30.116	10.918	102.560	91.642	91.642
274880	41.323	29.351	10.406	102.547	92.141	92.141
274900	41.998	28.934	10.643	102.534	91.891	91.891
274920	42.630	28.643	10.381	102.522	92.141	92.141
274940	43.188	28.167	10.756	102.509	91.753	91.753
274960	43.640	27.690	9.877	102.496	92.619	92.619
274980	43.977	27.214	10.646	102.483	91.837	91.837
275000	44.427	26.648	10.473	102.470	91.997	91.997
275020	44.903	26.044	10.756	102.457	91.701	91.701
275040	45.380	25.554	10.844	102.444	91.600	91.600
275060	45.873	25.064	9.406	102.431	93.025	93.025
275080	46.423	24.575	8.524	102.418	93.894	93.894
275100	47.009	24.085	9.419	102.405	92.986	92.986
275120	47.708	23.619	8.359	102.392	94.033	94.033
275140	48.407	23.348	8.439	102.379	93.940	93.940
275160	49.105	23.096	8.375	102.366	93.991	93.991
275180	49.804	22.843	7.718	102.353	94.635	94.635
275200	49.845	22.659	8.439	102.340	93.901	93.901
275220	49.351	21.114	8.029	102.327	94.298	94.298
275240	48.845	20.169	8.626	102.281	93.655	93.655
275260	48.321	19.256	8.359	102.213	93.854	93.854
275280	47.798	20.464	8.145	102.145	94.000	94.000
275300	47.131	21.728	8.129	102.077	93.948	93.948
275320	46.471	23.139	8.831	102.009	93.178	93.178
275340	45.877	24.477	9.506	101.941	92.435	92.435
275360	45.392	24.941	10.427	101.873	91.446	91.446
275380	45.117	25.205	10.183	101.805	91.622	91.622
275400	45.004	25.797	10.250	101.737	91.487	91.487

DETOUR PORTION

THROUGH CHAINAGE

LEGEND:-

- EXISTING IR TRACK
- PROPOSED DFCC TRACK
- PROW — DFCC ROW LINE
- IR-TOE — EXISTING IR TOE LINE
- TOEL — DFCC TOE LINE

NOTES:-

1. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
2. ALL COORDINATES ARE BASED ON WGS 84 PROJECTION IN UTM ZONE 44.
3. TOP WIDTH OF FORMATION IS 13.5M FOR DOUBLE LINE IN STRAIGHT SECTION.
4. CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE
5. EQUILIBRIUM SPEED HAS BEEN TAKEN 85 KMPH.
6. TRACK CENTER BETWEEN MAIN LINES OF DFC HAS BEEN KEPT AS MIN. 6.0M AT STRAIGHT SECTION.
7. DRAIN SHALL BE PROVIDED BETWEEN IR AND DFC TRACKS TO DRAIN OUT RAINWATER.
8. PUBLIC UTILITIES,HT/LT LINES,ETC. INTERFERING DFC TRACKS SHALL BE RELOCATED
9. AT THE LOCATIONS WHERE FORMATION HEIGHT IS <1.75m, IT IS PROPOSED TO MAKE THE FORMATION HEIGHT TO 1.750m BY CUTTING THE EARTH
10. FOR LEGEND AND ABBREVIATION REFER RELEVANT DRAWING.

EMPLOYER : DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

PROJECT : EASTERN DEDICATED FREIGHT CORRIDOR (PACKAGE - 201)

TITLE : ALIGNMENT PLAN & PROFILE FROM KM. 274/200 TO KM. 275/400

DRAWING NO.	SIZE	REV	SCALE
D 2 AL 0 1 3 0	A1	0	HOR:- 1 : 2000, VER:- 1 : 200

REVIEWS

REV	DATE	REMARKS
0	02/08/2018	DEFINITIVE

DRAWING STAGE

☐ FOR APPROVAL
☑ GOOD FOR CONSTRUCTION

PMC : SYSTRA - Mott MacDonald JV

CONTRACTOR : GIL - SIL JV

DESIGN CONSULTANT: STUP Consultants Pvt. Ltd.

REGISTERED OFFICE : 1004-5 RAHEJA CHAMBERS, NARIMAN POINT, MUMBAI 400 021.

OFFICE OF ORIGIN KOLKATA

	DATE	NAME	SIGN.
DRAWN	02/08/2018	T.C	
CHKD.	02/08/2018		
APPD.	02/08/2018	S. MITRA	

SUBMITTED BY GIL-SIL JV

	DATE	NAME	SIGN.
CHKD.	18/10/2018	Prodipta Ghosh	
APPD.	18/10/2018	NISHEETH K. SINGH	

NOC BY SYSTRA - Mott MacDonald JV

	DATE	NAME	SIGN.
CHKD.	29-10-2018	ANURANJAN PRASAD	
NOC	29.10.2018	KAMAL SHARMA	

APPROVAL BY DFCC

	DATE	NAME	SIGN.
CHKD.			
APPD.			

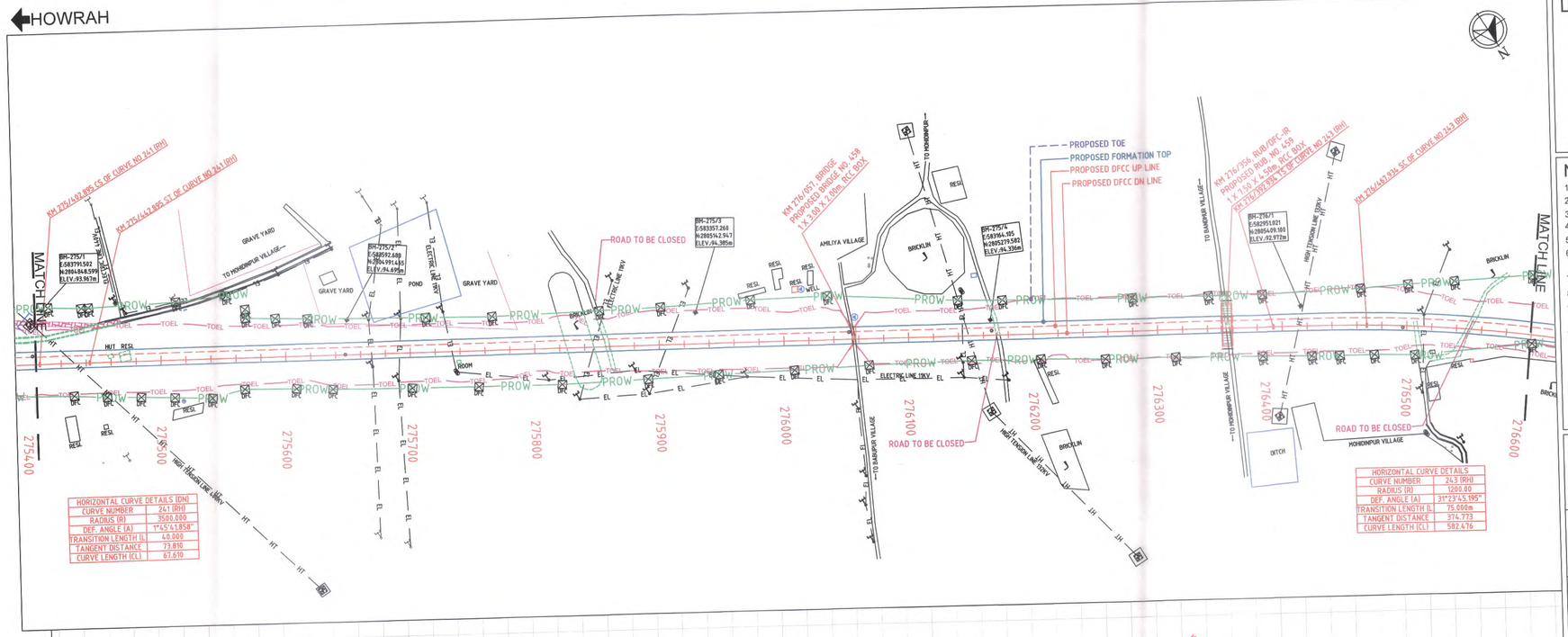
THIS DRAWING IS THE PROPERTY OF GIL - SIL JV IT SHOULD NOT BE USED, COPIED OR REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

Chainage CH-275400 CH-276600

SECTION-GP-201

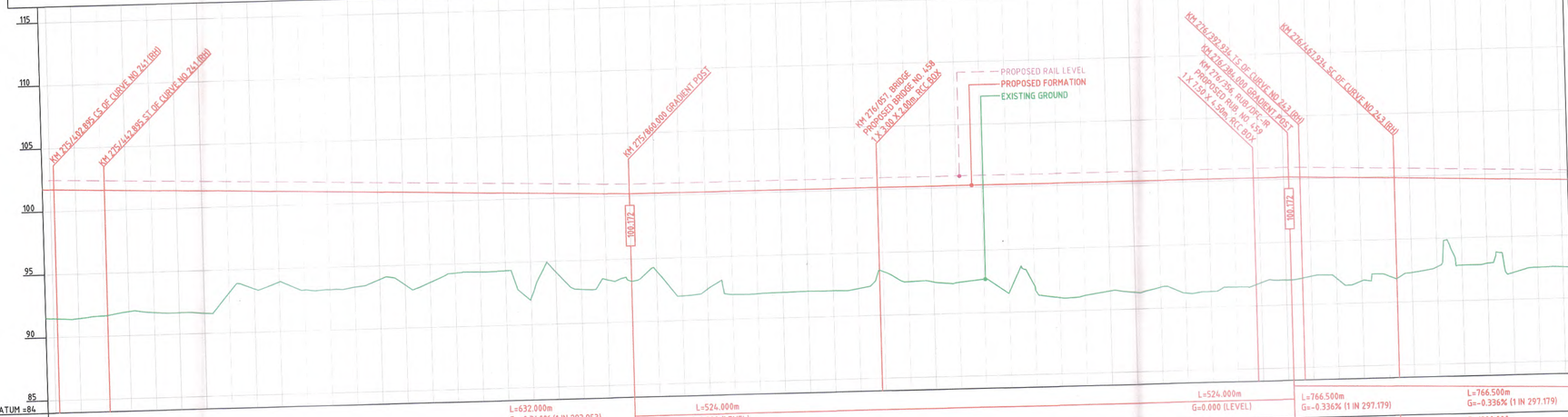
Sheet No. 131

HOWRAH ← → DELHI



HORIZONTAL CURVE DETAILS (DN)	
CURVE NUMBER	241 (RH)
RADIUS (R)	3500.000
DEF. ANGLE (A)	1°45'41.858"
TRANSITION LENGTH (L)	40.000
TANGENT DISTANCE	73.810
CURVE LENGTH (CL)	67.610

HORIZONTAL CURVE DETAILS	
CURVE NUMBER	243 (RH)
RADIUS (R)	1200.00
DEF. ANGLE (A)	31°22'45.195"
TRANSITION LENGTH (L)	75.000m
TANGENT DISTANCE	374.773
CURVE LENGTH (CL)	582.476



VERTICAL ALIGNMENT	L=632.000m G=-0.340% (1 IN 293.953)
	L=524.000m G=0.000 (LEVEL)
	L=524.000m G=0.000 (LEVEL)
	L=766.500m G=-0.336% (1 IN 297.179)
	L=766.500m G=-0.336% (1 IN 297.179)
HORIZONTAL ALIGNMENT	L=40.000m
	L=950.038m
	L=950.038m
	L=75.000m
	R=1200.000m
	L=582.476m

CHAINAGE	LHS R.O.W DISTANCE FROM DOWN LINE TRACK	RHS R.O.W. DISTANCE FROM DOWN TRACK	FILL (+)/ CUT (-)	PROPOSED FORMATION LEVELS	EXIST. IR FORMATION LEVELS	GROUND LEVELS
275400	45.004	25.797	10.250	101.737	DETOUR PORTION	91.487
275420	44.552	26.280	10.220	101.669		91.449
275440	43.745	27.101	9.989	101.601		91.612
275460	44.447	28.253	9.630	101.533		91.903
275480	45.136	28.850	9.688	101.465		91.777
275500	45.825	29.463	9.698	101.397		91.699
275520	46.906	30.672	9.724	101.329		91.605
275540	48.895	31.523	8.081	101.261		93.380
275560	45.803	26.995	7.754	101.193		93.439
275580	31.381	25.435	7.199	101.125		93.926
275600	30.550	25.852	7.821	101.056		93.235
275620	29.634	26.533	7.787	100.988		93.201
275640	29.243	27.368	7.552	100.920		93.368
275660	28.851	27.695	6.926	100.852		93.926
275680	28.460	28.023	7.353	100.784		93.431
275700	28.068	28.351	7.145	100.716		93.571
275720	27.705	28.542	6.384	100.648		94.264
275740	27.404	28.720	6.275	100.580		94.305
275760	27.104	28.880	6.177	100.512		94.335
275780	27.270	28.984	8.317	100.444		92.127
275800	27.697	29.088	6.247	100.376		94.129
275820	28.125	29.192	7.616	100.308		92.692
275840	28.552	28.670	6.823	100.240		93.417
275860	29.020	28.077	6.959	100.172		93.213
275880	29.582	27.468	6.188	100.172		93.984
275900	30.131	26.822	8.220	100.172		91.952
275920	31.075	26.114	7.731	100.172		92.441
275940	32.665	25.407	8.209	100.172		91.963
275960	33.056	24.788	8.210	100.172		91.962
275980	33.900	24.223	8.149	100.172		92.023
276000	34.389	23.658	8.107	100.172		92.065
276020	34.878	23.054	8.119	100.172		92.053
276040	35.010	22.424	8.006	100.172		92.166
276060	33.753	21.793	6.699	100.172		93.473
276080	32.496	20.945	7.556	100.172		92.616
276100	31.240	20.594	7.618	100.172		92.554
276120	29.983	20.242	7.700	100.172		92.472
276140	28.726	19.891	7.489	100.172		92.683
276160	28.249	19.793	8.572	100.172		91.600
276180	27.836	19.971	8.085	100.172		92.087
276200	27.613	20.149	9.116	100.172		91.056
276220	27.389	20.590	8.987	100.172		91.185
276240	27.166	21.143	8.687	100.172		91.485
276260	26.943	21.647	8.841	100.172		91.331
276280	26.719	21.757	8.498	100.172		91.674
276300	26.562	21.867	9.027	100.172		91.145
276320	26.407	22.049	8.955	100.172		91.217
276340	26.252	22.416	8.637	100.172		91.535
276360	26.265	22.719	8.350	100.172		91.822
276380	26.294	23.144	8.182	100.172		91.990
276400	26.816	23.575	7.882	100.118		92.236
276420	27.530	23.980	8.020	100.051		92.031
276440	28.371	24.132	8.223	99.984		91.761
276460	29.432	23.882	7.746	99.916		92.170
276480	31.245	23.448	7.530	99.849		92.319
276500	33.485	23.119	7.061	99.782		92.721
276520	35.745	21.201	6.888	99.714		92.826
276540	38.373	18.242	6.717	99.647		92.930
276560	41.430	14.938	7.465	99.580		92.115
276580	44.850	11.285	7.011	99.513		92.502
276600	47.411	7.277	6.947	99.445		92.498

THROUGH CHAINAGE

LEGEND:-

- EXISTING IR TRACK
- PROPOSED DFCC TRACK
- PROW — PROW — DFCC ROW LINE
- IR-TOE — IR-TOE — EXISTING IR TOE LINE
- TOEL — TOEL — DFCC TOE LINE

NOTES:-

1. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
2. ALL COORDINATES ARE BASED ON WGS 84 PROJECTION IN UTM ZONE 44.
3. TOP WIDTH OF FORMATION IS 13.5M FOR DOUBLE LINE IN STRAIGHT SECTION.
4. CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE.
5. EQUILIBRIUM SPEED HAS BEEN TAKEN 85 KMPH.
6. TRACK CENTER BETWEEN MAIN LINES OF DFC HAS BEEN KEPT AS MIN. 6.0M AT STRAIGHT SECTION.
7. DRAIN SHALL BE PROVIDED BETWEEN IR AND DFC TRACKS TO DRAIN OUT RAINWATER.
8. PUBLIC UTILITIES,HT/LT LINES,ETC. INTERFERING DFC TRACKS SHALL BE RELOCATED
9. AT THE LOCATIONS WHERE FORMATION HEIGHT IS <1.75m, IT IS PROPOSED TO MAKE THE FORMATION HEIGHT TO 1.750m BY CUTTING THE EARTH
10. FOR LEGEND AND ABBREVIATION REFER RELEVANT DRAWING.

EMPLOYER : DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

PROJECT : EASTERN DEDICATED FREIGHT CORRIDOR (PACKAGE - 201)

TITLE : ALIGNMENT PLAN & PROFILE FROM KM. 275/400 TO KM. 276/600

DRAWING NO.	SIZE	REV	SCALE
D 2 AL 0 1 3 1	A1	0	HOR:- 1 : 2000, VER:- 1 : 200

REVIEWS

REV	DATE	REMARKS
0	02/08/2018	DEFINITIVE

DRAWING STAGE

☐ FOR APPROVAL

☑ GOOD FOR CONSTRUCTION

PMC : SYSTRA - Mott MacDonald JV

CONTRACTOR : GIL - SIL JV

DESIGN CONSULTANT: STUP Consultants Pvt. Ltd.

REGISTERED OFFICE : 1004-5 RAHEJA CHAMBERS, NARIMAN POINT, MUMBAI 400 021.

OFFICE OF ORIGIN KOLKATA

	DATE	NAME	SIGN.
DRAWN	02/08/2018	TC	
CHKD.	02/08/2018		
APPD.	02/08/2018	S. MITRA	

SUBMITTED BY GIL-SIL JV

	DATE	NAME	SIGN.
CHKD.	19/10/2018	Roopesh Gupta	
APPD.	19/10/2018	NISHEETH K. SINGH	

NOC BY SYSTRA - Mott MacDonald JV

	DATE	NAME	SIGN.
CHKD.	29-10-2018	ANURANJAN PRASAD	
NOC	29.10.2018	NAMAL SHARMA	

APPROVAL BY DFCC

	DATE	NAME	SIGN.
CHKD.			
APPD.			

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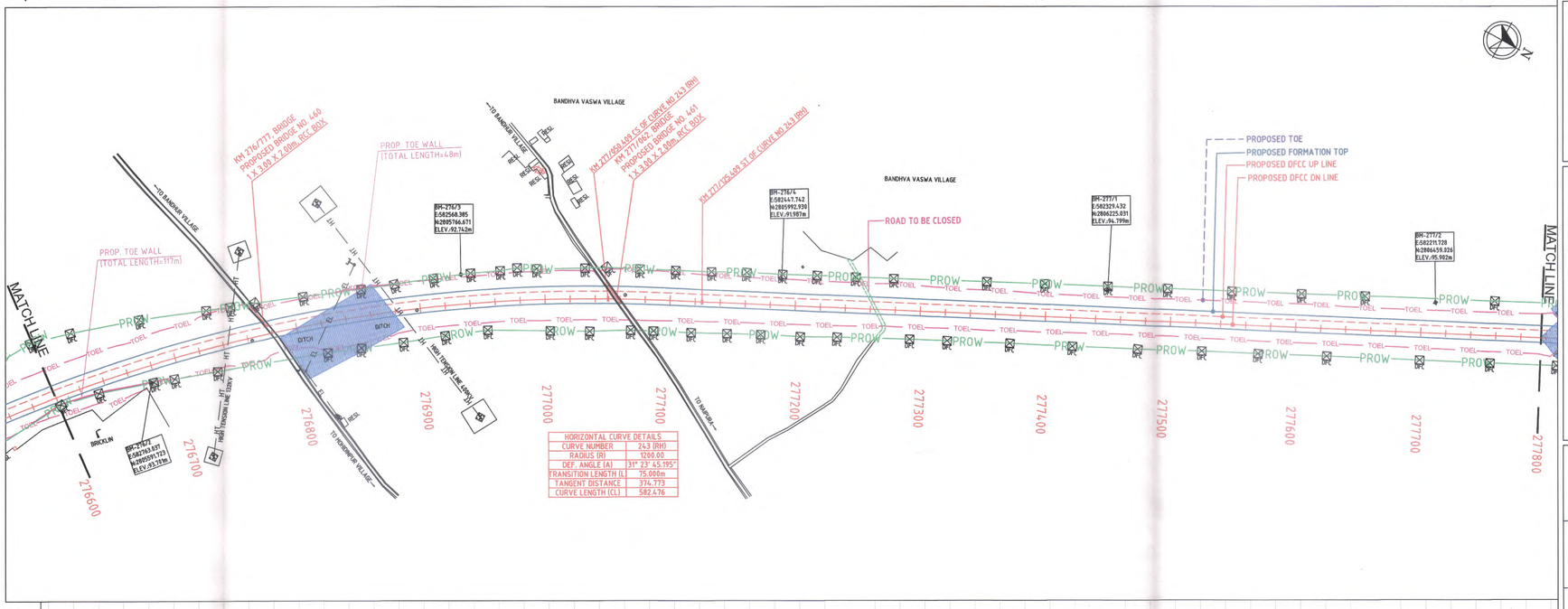
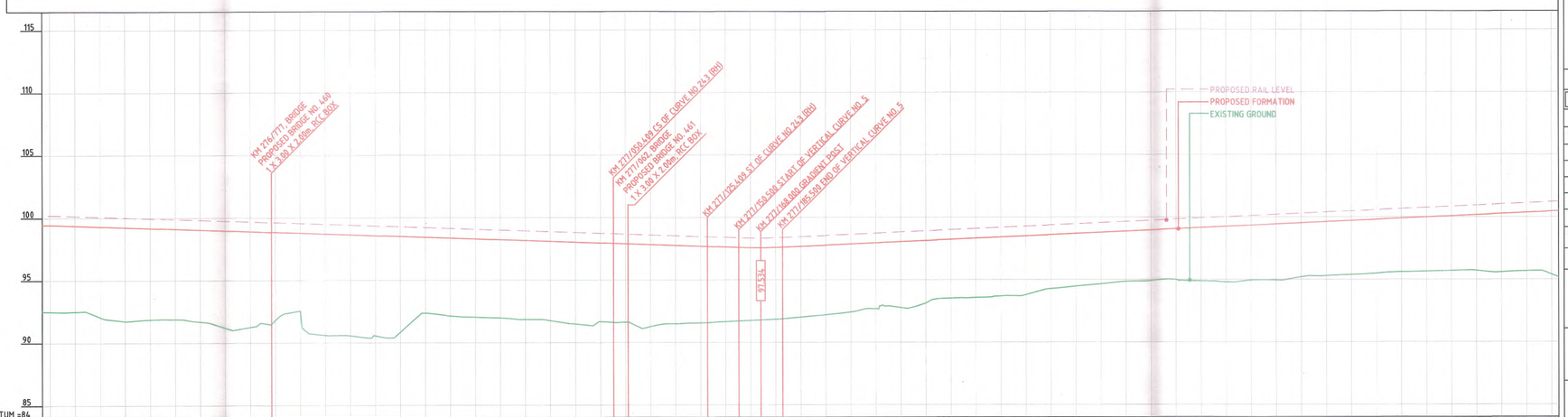
Chainage CH- 276600 CH-277800

SECTION-CP-201

HOWRAH ← → DELHI



HORIZONTAL CURVE DETAILS	
CURVE NUMBER	243 (RH)
RADIUS (R)	1200.00
DEF. ANGLE (A)	31° 23' 45.195"
TRANSITION LENGTH (L)	75.000m
TANGENT DISTANCE	374.773
CURVE LENGTH (CL)	582.476



VERTICAL ALIGNMENT: L=766.500m G=-0.336% (1 IN 297.179); L=766.500m G=-0.336% (1 IN 297.179); L=35.00m R=-4.398m; L=844.500m G=0.459% (1 IN 217.716); L=844.500m G=0.459% (1 IN 217.716)

HORIZONTAL ALIGNMENT: R=1200.000m L=582.476m; R=1200.000m L=582.476m; L=75.000m; L=1436.743m; L=1436.743m

CHAINAGE	LHS R.O.W DISTANCE FROM DOWN LINE TRACK	RHS R.O.W. DISTANCE FROM DOWN TRACK	FILL (+)/ CUT (-)	PROPOSED FORMATION LEVELS	EXIST. IR FORMATION LEVELS	GROUND LEVELS
276600	47.411	7.277	6.947	99.445	DETOUR PORTION	92.498
276620	44.981	8.069	6.880	99.378		92.498
276640	42.316	9.536	7.244	99.311		92.067
276660	39.657	12.018	7.498	99.243		91.745
276680	37.352	14.245	7.301	99.176		91.875
276700	34.220	16.797	7.220	99.109		91.889
276720	31.363	18.698	7.356	99.041		91.685
276740	28.916	20.382	7.776	98.974		91.198
276760	27.086	21.857	7.653	98.907		91.254
276780	25.555	23.022	7.045	98.840		91.795
276800	23.994	23.818	6.252	98.772		92.520
276820	22.751	24.306	8.108	98.705		90.597
276840	21.827	24.929	8.075	98.638		90.563
276860	21.340	25.322	8.001	98.570		90.569
276880	21.532	25.443	7.675	98.503		90.828
276900	22.064	24.763	6.072	98.436		92.364
276920	22.887	23.766	6.237	98.368		92.131
276940	23.960	22.935	6.264	98.301		92.037
276960	24.309	22.780	6.267	98.234		91.967
276980	25.893	24.045	6.325	98.167		91.842
277000	24.375	24.980	6.350	98.099		91.749
277020	24.372	25.599	6.548	98.032		91.484
277040	24.735	25.750	6.288	97.965		91.677
277060	24.695	25.071	6.284	97.897		91.613
277080	24.344	24.753	6.569	97.830		91.261
277100	24.292	24.852	6.271	97.763		91.492
277120	24.309	24.844	6.133	97.696		91.563
277140	24.520	24.459	5.971	97.628		91.657
277160	24.991	24.151	5.820	97.571		91.751
277180	24.845	24.019	5.751	97.593		91.842
277200	24.916	24.168	5.659	97.681		92.022
277220	25.109	23.801	5.565	97.773		92.208
277240	25.039	23.330	5.443	97.865		92.422
277260	25.078	23.027	5.269	97.957		92.688
277280	25.190	22.725	5.280	98.048		92.768
277300	25.381	22.532	5.013	98.140		93.127
277320	25.571	22.514	4.716	98.232		93.516
277340	25.762	22.471	4.752	98.324		93.572
277360	25.937	22.425	4.725	98.416		93.691
277380	26.089	22.436	4.710	98.508		93.798
277400	26.233	22.544	4.331	98.600		94.269
277420	26.276	22.652	4.229	98.691		94.462
277440	26.339	22.641	4.136	98.783		94.647
277460	26.382	22.613	4.019	98.875		94.856
277480	26.642	22.558	4.042	98.967		94.925
277500	26.539	22.386	4.064	99.059		94.995
277520	26.599	22.223	4.270	99.151		94.881
277540	26.660	22.177	4.445	99.243		94.798
277560	26.738	22.180	4.381	99.334		94.953
277580	26.827	22.122	4.478	99.426		94.948
277600	26.915	21.989	4.313	99.518		95.205
277620	27.077	21.856	4.314	99.610		95.296
277640	27.254	21.842	4.312	99.702		95.390
277660	27.403	21.875	4.297	99.794		95.497
277680	27.478	21.907	4.288	99.886		95.598
277700	27.553	21.940	4.337	99.977		95.640
277720	27.628	21.901	4.375	100.069		95.694
277740	27.703	21.862	4.443	100.161		95.718
277760	27.781	21.824	4.672	100.253		95.581
277780	27.890	21.787	4.675	100.345		95.670
277800	27.999	21.750	5.034	100.437		95.493

THROUGH CHAINAGE

LEGEND:-

- EXISTING IR TRACK
- PROPOSED DFCC TRACK
- PROW — DFCC ROW LINE
- IR-TOE — EXISTING IR TOE LINE
- TOEL — DFCC TOE LINE

NOTES:-

1. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
2. ALL COORDINATES ARE BASED ON WGS 84 PROJECTION IN UTM ZONE 44.
3. TOP WIDTH OF FORMATION IS 13.5M FOR DOUBLE LINE IN STRAIGHT SECTION.
4. CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE
5. EQUILIBRIUM SPEED HAS BEEN TAKEN 85 KMPH.
6. TRACK CENTER BETWEEN MAIN LINES OF DFC HAS BEEN KEPT AS MIN. 6.0M AT STRAIGHT SECTION.
7. DRAIN SHALL BE PROVIDED BETWEEN IR AND DFC TRACKS TO DRAIN OUT RAINWATER.
8. PUBLIC UTILITIES,HT/LT LINES,ETC. INTERFERING DFC TRACKS SHALL BE RELOCATED
9. AT THE LOCATIONS WHERE FORMATION HEIGHT IS <1.75m, IT IS PROPOSED TO MAKE THE FORMATION HEIGHT TO 1.750m BY CUTTING THE EARTH
10. FOR LEGEND AND ABBREVIATION REFER RELEVANT DRAWING.

EMPLOYER : DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

PROJECT : EASTERN DEDICATED FREIGHT CORRIDOR (PACKAGE - 201)

TITLE : ALIGNMENT PLAN & PROFILE FROM KM. 276/600 TO KM. 277/800

DRAWING NO.	SIZE	REV	SCALE
D 2 AL 0 1 3 2	A1	0	HOR:- 1 : 2000, VER:- 1 : 200

REVIEWS

REV	DATE	REMARKS
0	02/08/2018	DEFINITIVE

DRAWING STAGE

- [ ] FOR APPROVAL
- [x] GOOD FOR CONSTRUCTION

PMC : SYSTRA - Mott MacDonald JV

CONTRACTOR : GIL - SIL JV

DESIGN CONSULTANT: STUP Consultants Pvt. Ltd.

REGISTERED OFFICE : 1004-5 RAHEJA CHAMBERS, NARIMAN POINT, MUMBAI 400 021.

OFFICE OF ORIGIN KOLKATA

	DATE	NAME	SIGN.
DRAWN	02/08/2018	TC	
CHKD.	02/08/2018		
APPD.	02/08/2018	S. MITRA	

SUBMITTED BY GIL-SIL JV

	DATE	NAME	SIGN.
CHKD.	12/10/2018	Deepak Gupta	
APPD.	12/10/2018	NISHEETH K. SINGH	

NOC BY SYSTRA - Mott MacDonald JV

	DATE	NAME	SIGN.
CHKD.	29-10-2018	ANURANJAN PRASAD	
NOC	29-10-2018	KAMAL SHARMA	

APPROVAL BY DFCC

	DATE	NAME	SIGN.
CHKD.			
APPD.			

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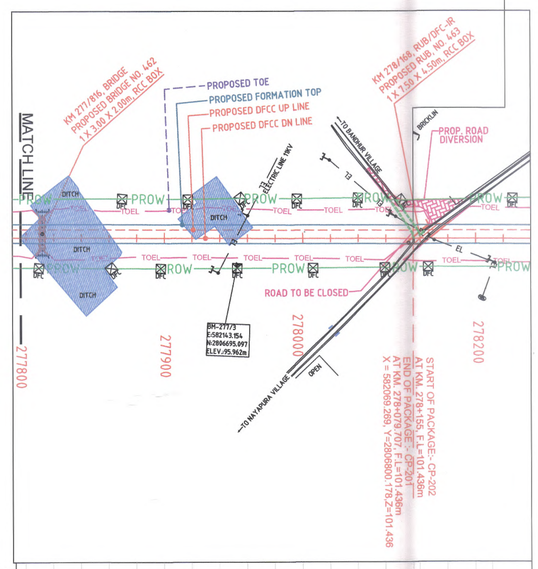
Chainage CH- 277800 CH- 278160

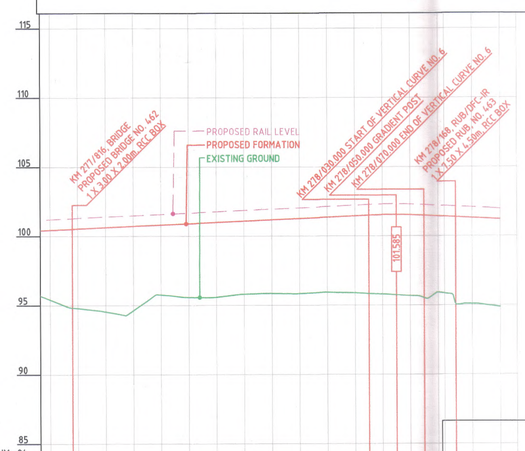
HOWRAH

DELHI

END OF PACKAGE CP-201
AT KM. 278+079.707

START OF PACKAGE CP-202
AT KM. 278+155





END OF PACKAGE CP-201
AT KM. 278+079.707, F.L=101.436m
START OF PACKAGE CP-202
AT KM. 278+155, F.L=101.436m

VERTICAL ALIGNMENT	L=844.500m G=0.459% (1 IN 217.716)																L=40.00m R=4169m			L=864.965m G=-0.500 (1 IN 199.947)			
HORIZONTAL ALIGNMENT	L=1436.743m																			L=1436.743m			
LHS R.O.W DISTANCE FROM DOWN LINE TRACK	27.999	28.169	28.218	28.327	28.297	28.142	28.070	28.489	28.785	28.734	28.764	29.082	29.385	28.255	27.952			28.368	28.781				
RHS R.O.W. DISTANCE FROM DOWN TRACK	21.750	21.793	21.908	22.023	22.001	21.957	21.839	21.721	21.604	21.486	21.368	21.188	20.911	20.751	20.348			20.271	20.297				
FILL (+)/ CUT (-)	5.034	5.748	6.091	6.092	5.051	5.318	5.409	5.281	5.323	5.421	5.430	5.564	5.740	5.847	5.525	5.550		6.233	6.337				
PROPOSED FORMATION LEVELS	100.437	100.529	100.620	100.712	100.804	100.896	100.988	101.080	101.172	101.263	101.355	101.447	101.527	101.523	101.428	101.417		101.311	101.211				
EXIST. IR FORMATION LEVELS				DETOUR PORTION																			
GROUND LEVELS	95.403	94.781	94.529	94.620	95.753	95.578	95.579	95.799	95.849	95.842	95.925	95.883	95.787	95.676	95.921	95.853		95.078	94.874				
CHAINAGE	277800	277820	277840	277860	277880	277900	277920	277940	277960	277980	278000	278020	278040	278060	278155	278160		278180	278200				
THROUGH CHAINAGE																							

SECTION-CP-201

LEGEND:-

- EXISTING IR TRACK
- PROPOSED DFCC TRACK
- PROW — PROW — DFCC ROW LINE
- IR-TOE — IR-TOE — EXISTING IR TOE LINE
- TOEL — TOEL — DFCC TOE LINE

NOTES:-

1. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
2. ALL COORDINATES ARE BASED ON WGS 84 PROJECTION IN UTM ZONE 44.
3. TOP WIDTH OF FORMATION IS 13.5M FOR DOUBLE LINE IN STRAIGHT SECTION.
4. CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE
5. EQUILIBRIUM SPEED HAS BEEN TAKEN 85 KMPH.
6. TRACK CENTER BETWEEN MAIN LINES OF DFC HAS BEEN KEPT AS MIN. 6.0M AT STRAIGHT SECTION.
7. DRAIN SHALL BE PROVIDED BETWEEN IR AND DFC TRACKS TO DRAIN OUT RAINWATER.
8. PUBLIC UTILITIES,HT/LT LINES,ETC. INTERFERING DFC TRACKS SHALL BE RELOCATED
9. AT THE LOCATIONS WHERE FORMATION HEIGHT IS <1.75m, IT IS PROPOSED TO MAKE THE FORMATION HEIGHT TO 1.750m BY CUTTING THE EARTH
10. FOR LEGEND AND ABBREVIATION REFER RELEVANT DRAWING.

EMPLOYER : DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

PROJECT : EASTERN DEDICATED FREIGHT CORRIDOR (PACKAGE - 201)

TITLE : ALIGNMENT PLAN & PROFILE
FROM KM. 277/800 TO KM. 278/160

DRAWING NO.	SIZE	REV	SCALE
D 2 AL 0 1 3 3	A1	0	HOR:- 1 : 2000, VER:- 1 : 200

REVIEWS

REV	DATE	REMARKS
0	02/08/2018	DEFINITIVE

DRAWING STAGE

- [ ] FOR APPROVAL
- [x] GOOD FOR CONSTRUCTION

PMC : SYSTRA - Mott MacDonald JV

CONTRACTOR : GIL - SIL JV

DESIGN CONSULTANT: STUP Consultants Pvt. Ltd.
REGISTERED OFFICE : 1004-5 RAHEJA CHAMBERS, NARIMAN POINT, MUMBAI 400 021.
OFFICE OF ORIGIN KOLKATA

	DATE	NAME	SIGN.
DRAWN	02/08/2018	T.C	
CHKD.	02/08/2018		
APPD.	02/08/2018	S. MITRA	

SUBMITTED BY GIL-SIL JV

	DATE	NAME	SIGN.
CHKD.	12/10/2018	Reesabh Gupta	
APPD.	12/10/2018	NISHEETH K. SINGH	

NOC BY SYSTRA - Mott MacDonald JV

	DATE	NAME	SIGN.
CHKD.	29-10-2018	ANURAG/AN PRASAD	
NOC	29.10.2018	KAMAL SHARMA	

APPROVAL BY DFCC

	DATE	NAME	SIGN.
CHKD.			
APPD.			

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