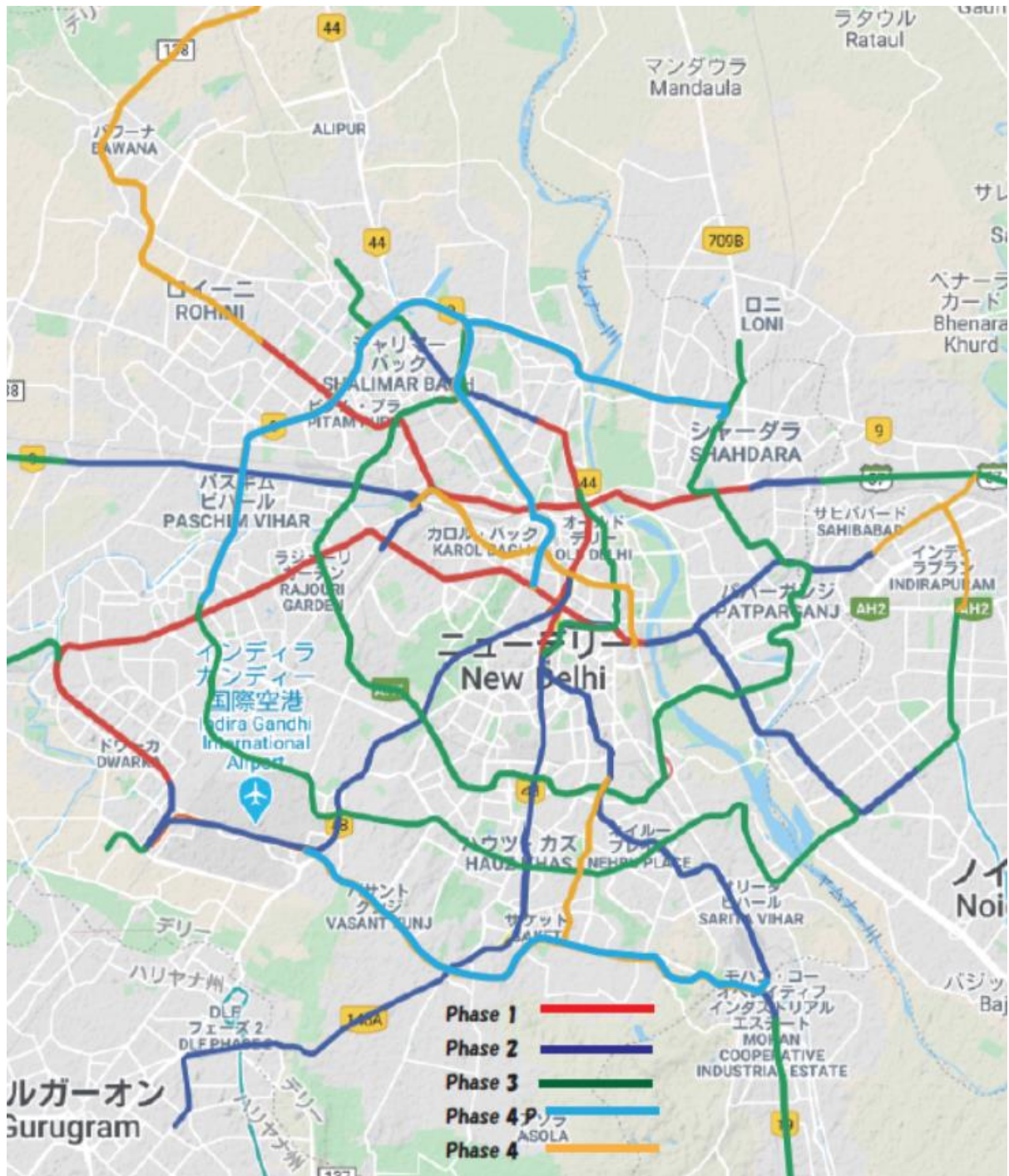


デリーメトロ路線図 (Phase I-IV)



出典：Web 上の図面をもとに作成、水色の Phase 4P が円借款支援予定事業の範囲。

No.11 代替案説明図につきまして

PDF2 ページ目・3 ページ目：Mukundpur – Maujpur 間

2 ページ目が検討の結果選定された線形、3 ページ目が元の線形です。

2 ページ目のピンクが Mukundpur – Maujpur 間の路線です。

PDF4 ページ目・5 ページ目：Aerocity – Tughlakabad 間

4 ページ目が検討の結果選定された線形、5 ページ目が元の線形です。

4 ページ目の水色が Aerocity – Tughlakabad 間の路線です。

PDF6 ページ目・7 ページ目：Janakpuri West – R K Ashram 間

6 ページ目が検討の結果選定された線形、7 ページ目が元の線形です。

6 ページ目のマゼンタが Janakpuri West – R K Ashram 間の路線です。

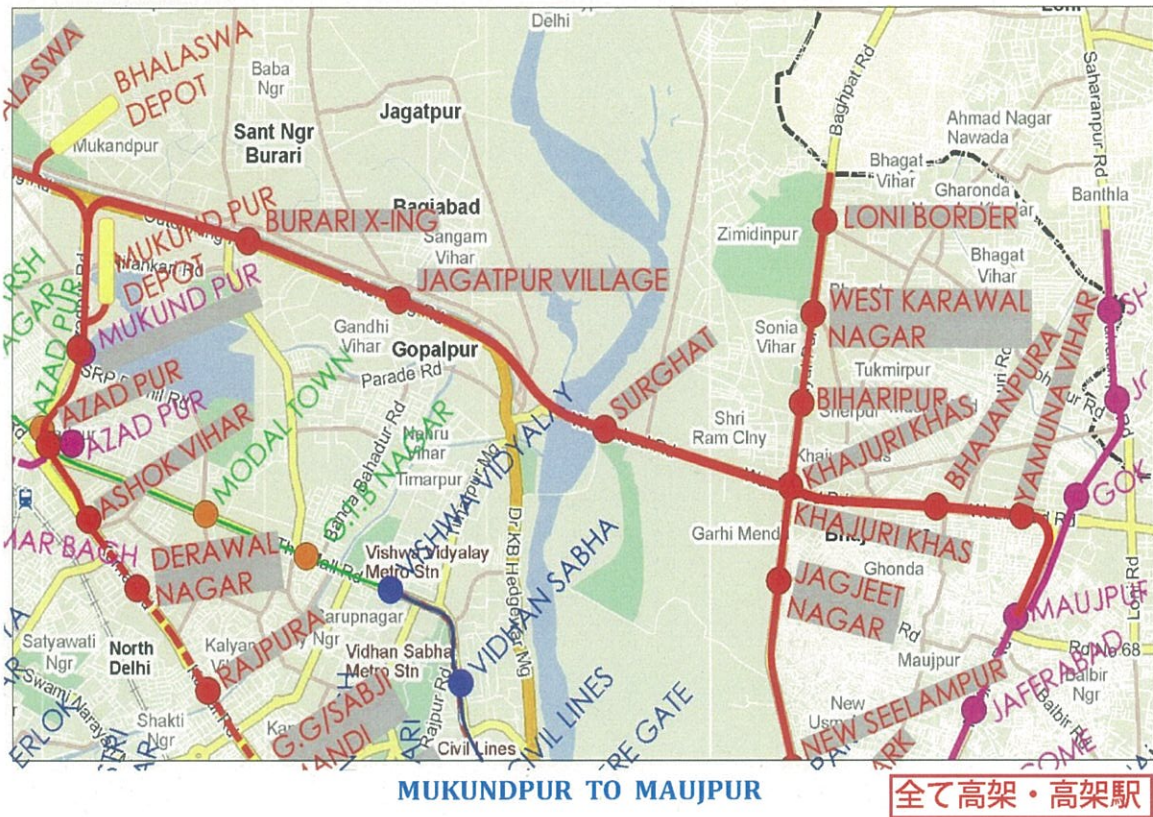
EIA Addendum 2.2.2 Alternative Scenarios for Mukundpur – Maujpur Corridor
Alternative 1 (Right side of the road between Soorghat to Burrai)
Alternative 2 (Left side of the road between Soorghat to Burrai)



Map data ©2020 500 m

全て高架・高架駅

**EIA Addendum 2.2.2 Alternative Scenarios for Mukundpur – Maujpur Corridor
Alternative 3**



EIA Addendum 2.2.3 Alternative Scenarios for Aerocity–Tughlakabad Corridor Alternative 1

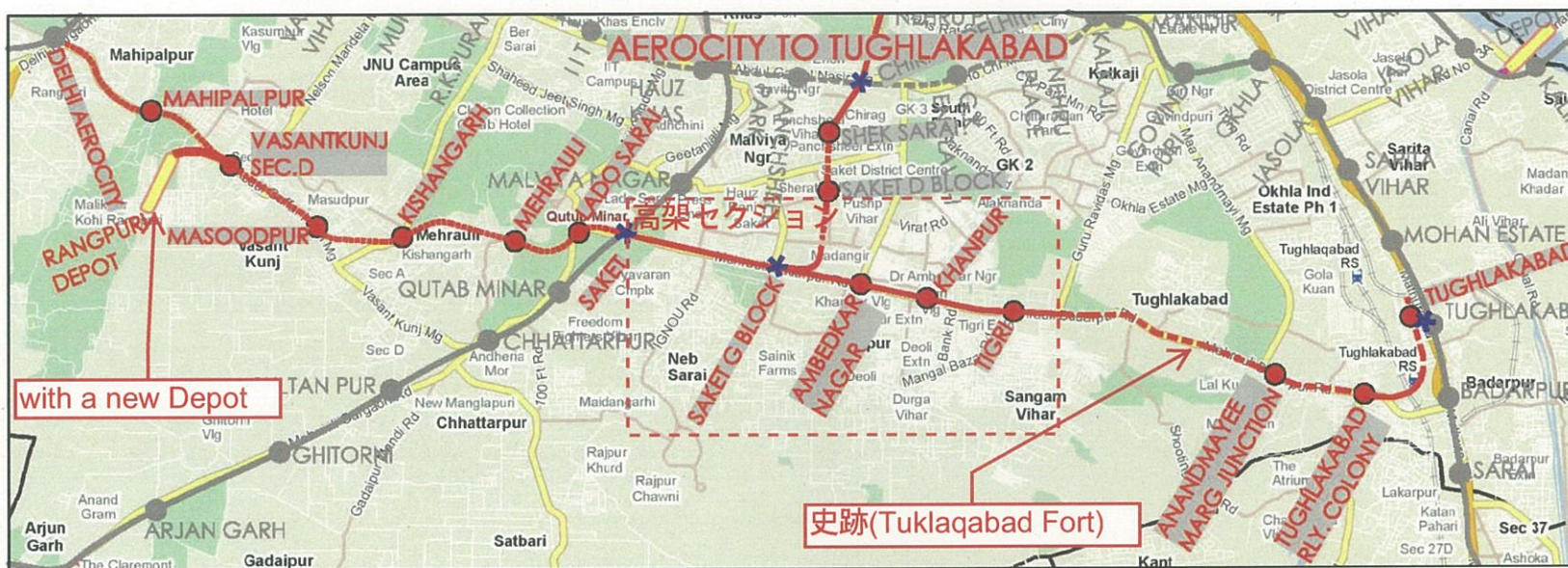
2020/08/26 9:30



https://www.google.com/maps/@28.5239439,77.2066863,13.31z/data=!4m2!6m1!1s1_n_aLiJfLrnPryAUsUEONO1p8VzBRj4B

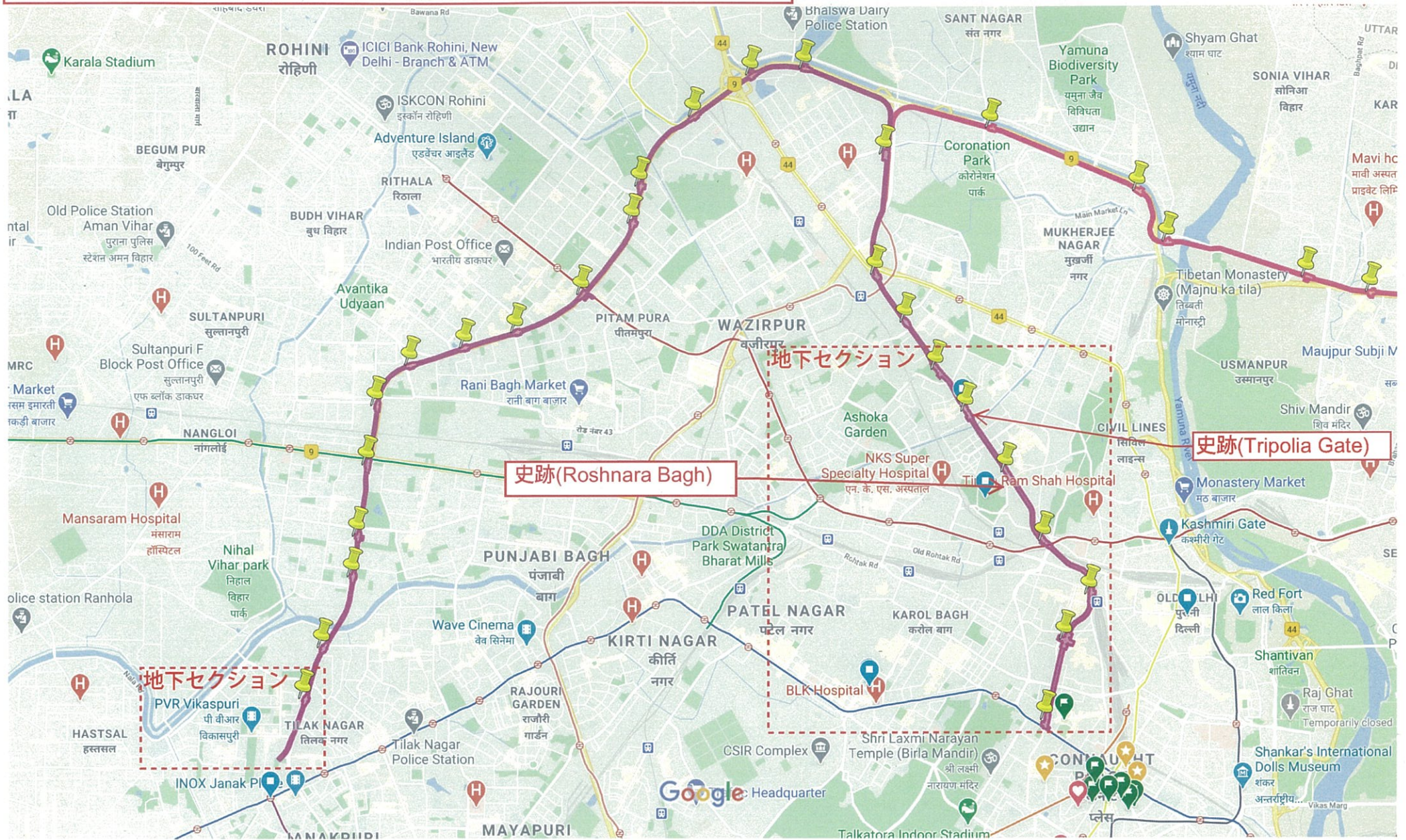
破線内の高架セクションを除き全て地下駅・トンネル

EIA Addendum 2.2.3 Alternative Scenarios for Aerocity–Tughlakabad Corridor
 Alternative 2 (without Depot) & Alternative 3 (with Depot)



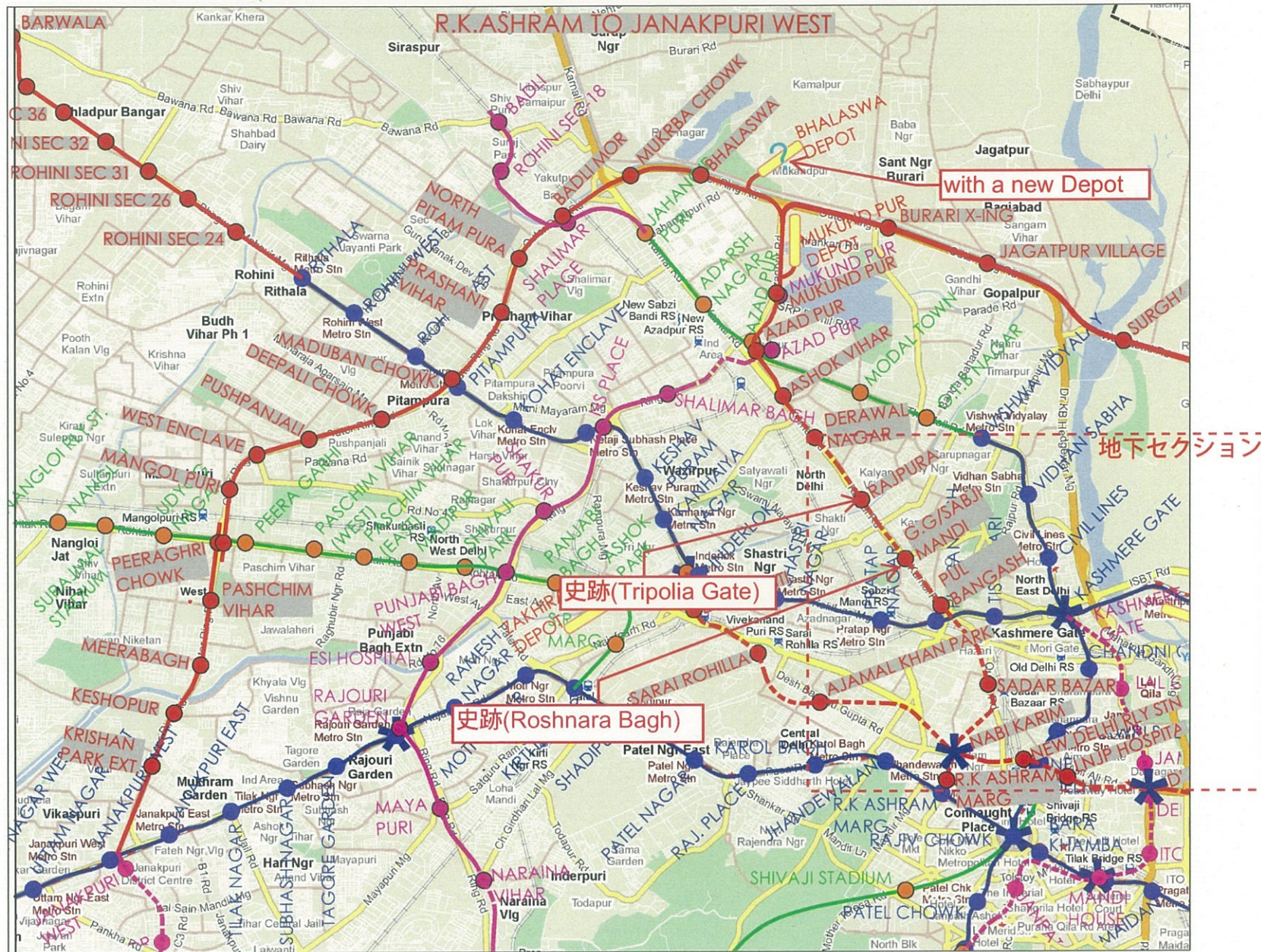
破線内の高架セクションを除き全て地下駅・トンネル

EIA Addendum 2.2.4 Alternative Scenarios for Janakpuri West - R K Ashram Corridor
Alternative 1



破線内の地下セクションを除き全て高架

EIA Addendum 2.2.4 Alternative Scenarios for Janakpuri West - R K Ashram Corridor
Alternative 2 (without Depot) & Alternative 3 (with Depot)



破線内の地下セクションを除き全て高架

DETAILS OF SENSITIVE RECEPTORS

AEROCITY(UG) TO TUGHLAKABAD(UG)

S. No.	Sensitive Receptor	Location (Chainage)	RHS/ LHS	Section (U/g-EI)	Distance from Edge of viaduct *(m)
1	Temple	10820.108M TO 10834.643M	LHS	U/g	NA
2	School	10955.315 TO 11008.259M	RHS	U/g	NA
3	School	12465.504M TO 13189.884M	RHS	EI	29
4	Gurudwara	13189.884M TO 14063.014M	RHS	EI	14
5	Temple	13189.884M TO 14063.014M	RHS	EI	32
6	Church	14063.014M TO 17639.304M	LHS	EI	52
7	Hospital	14063.014M TO 17639.304M	LHS	EI	98
8	Hospital	14063.014M TO 17639.304M	LHS	EI	46
9	School	14063.014M TO 17639.304M	LHS	U/g	NA
10	Temple	17639.304M TO 18927.934M	LHS	U/g	NA
11	School	17639.304M TO 18927.934M	LHS	U/g	NA
12	Hospital	17639.304M TO 18927.934M	RHS	U/g	NA
13	Temple	18927.934M TO 20002.184M	LHS	U/g	NA

*NA-Receptors at Underground stretch will not have impact of noise during operation

JANAKPURI WEST TO R.K. ASHRAM

S. No.	Sensitive Receptor	Location (Chainage)	Remark (RHS/ LHS)	Section (U/g-EI)	Distance from Edge of viaduct *(m)
1	School	(-)488.27M TO 987.0M	LHS	U/g	NA
2	Hospital	(-)488.27M TO 987.0M	LHS	U/g	NA
3	Temple	(-)488.27M TO 987.0M	RHS	U/g	NA
4	Temple	987.0M TO 1836.60M	LHS	U/g	NA
5	Temple	987.0M TO 1836.60M	LHS	U/g	NA
6	Temple	1836.60M TO 3076.2M	LHS	U/g	NA
7	Temple	3076.2M TO 4400.00M	CENTER	U/g	NA
8	Temple	3076.2M TO 4400.00M	CENTER	U/g	NA
9	Mosque	3076.2M TO 4400.00M	RHS	U/g	NA
10	Temple	3076.2M TO 4400.00M	RHS	U/g	NA
11	Temple	3076.2M TO 4400.00M	RHS	U/g	NA

S. No.	Sensitive Receptor	Location (Chainage)	Remark (RHS/ LHS)	Section (U/g-EI)	Distance from Edge of viaduct *(m)
12	Temple	3076.2M TO 4400.00M	RHS	U/g	NA
13	Temple	3076.2M TO 4400.00M	RHS	U/g	NA
14	Temple	3076.2M TO 4400.00M	RHS	U/g	NA
15	School	3076.2M TO 4400.00M	RHS	U/g	NA
16	Temple	4400.00M TO 5592.30M	LHS	U/g	NA
17	Hospital	4400.00M TO 5592.30M	LHS	U/g	NA
18	Temple	4400.00M TO 5592.30M	RHS	U/g	NA
19	Temple	5592.30M TO 6450.90M	LHS	U/g	NA
20	Temple	5592.30M TO 6450.90M	LHS	U/g	NA
21	Temple	5592.30M TO 6450.90M	RHS	U/g	NA
22	College	5592.30M TO 6450.90M	RHS	U/g	NA
23	Institute	5592.30M TO 6450.90M	RHS	U/g	NA
24	College	6450.90M TO 7372.90M	RHS	U/g	NA
25	Temple	6450.90M TO 7372.90M	RHS	U/g	NA
26	Temple	7372.90M TO 8291.80M	LHS	EI	8
27	Mosque	7372.90M TO 8291.80M	LHS	EI	42
28	Institute	7372.90M TO 8291.80M	LHS	EI	74
29	Temple	7372.90M TO 8291.80M	RHS	EI	11
30	Temple	14699.70M TO 16227.50M	LHS	EI	30
31	Institute	14699.70M TO 16227.50M	LHS	EI	43
32	Temple	14699.70M TO 16227.50M	RHS	EI	3
33	Institute	18301.90M TO 19545.70M	LHS	EI	43
34	School	20445.50M TO 21358.70M	LHS	EI	43
35	Hospital	20445.50M TO 21358.70M	LHS	EI	45
36	School	20445.50M TO 21358.70M	RHS	EI	45
37	Institute	22304.30M TO 23271.60M	RHS	EI	8
38	Hospital	24463.90M TO 25136.80M	LHS	EI	49
39	School	24463.90M TO 25136.80M	LHS	EI	45
40	School	26403.30M TO 27311.50M	RHS	EI	15
41	School	27311.50M TO 28432.580M	LHS	EI	40
42	Hospital	27311.50M TO 28432.580M	LHS	EI	104
43	Gurudwara	27311.50M TO 28432.580M	LHS	EI	196
44	Temple	27311.50M TO 28432.580M	RHS	EI	26
45	School	27311.50M TO 28432.580M	RHS	EI	31

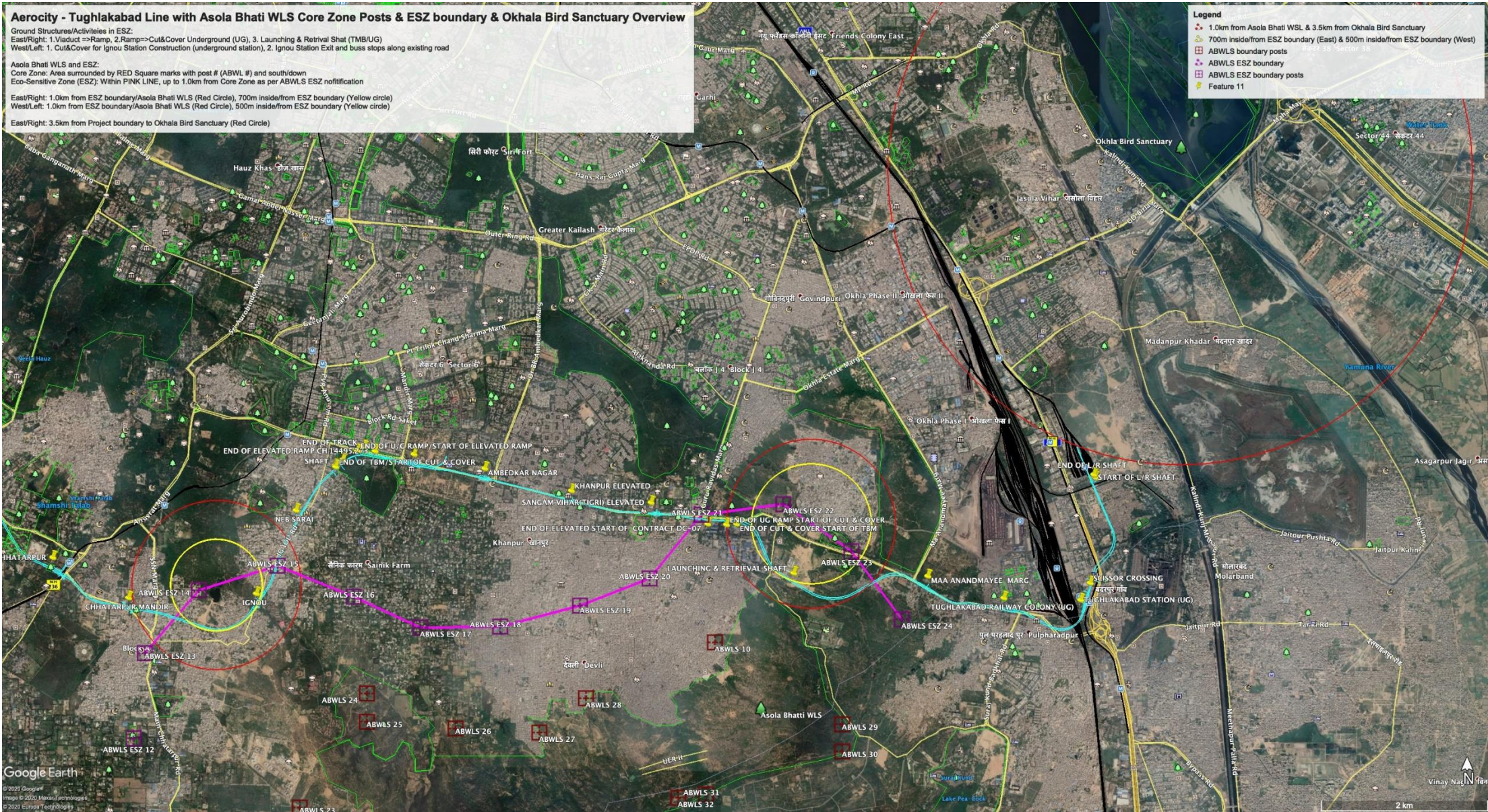
*NA-Receptors at Underground stretch will not have impact of noise during operation

MUJUNDPUR TO MAUJPUR

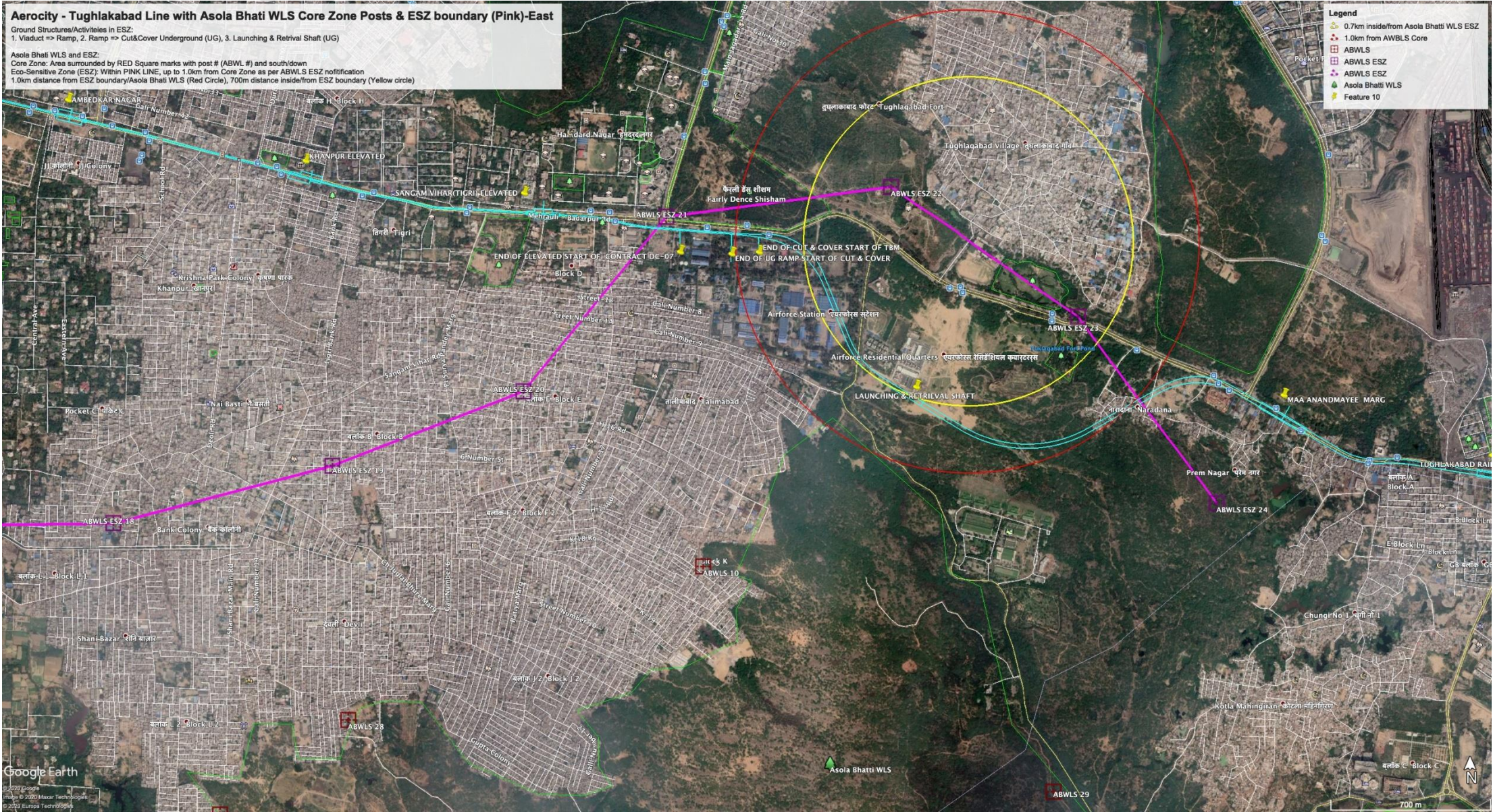
S. No.	Sensitive Receptor	Location (Chainage)	Remark (RHS/LHS)	Section (U/g-EI)	Distance from Edge of viaduct* (m)
1	Temple	53680.040M TO 55166.20M	LHS	EI	5
2	SCHOOL	53680.040M TO 55166.20M	LHS	EI	56
3	School	53680.040M TO 55166.20M	LHS	EI	60
4	Hospital	53680.040M TO 55166.20M	LHS	EI	64
5	Hospital	53680.040M TO 55166.20M	LHS	EI	61
6	Hospital	53680.040M TO 55166.20M	LHS	EI	61
7	Hospital	53680.040M TO 55166.20M	LHS	EI	61
8	Hospital	53680.040M TO 55166.20M	LHS	EI	60
9	Temple	53680.040M TO 55166.20M	RHS	EI	14
10	Temple	55166.20M TO 56621.80M	LHS	EI	53
11	School	55166.20M TO 56621.80M	LHS	EI	53
12	Institute	55166.20M TO 56621.80M	LHS	EI	59
13	Institute	55166.20M TO 56621.80M	RHS	EI	8
14	School	55166.20M TO 56621.80M	RHS	EI	7
15	School	55166.20M TO 56621.80M	RHS	EI	7
16	Temple	55166.20M TO 56621.80M	RHS	EI	7
17	Temple	56621.80M TO 57714.70M	LHS	EI	45
18	School	56621.80M TO 57714.70M	LHS	EI	47
19	School	56621.80M TO 57714.70M	RHS	EI	16
20	Church	63883.20M TO ABOVE	LHS	EI	31

*NA-Receptors at Underground stretch will not have impact of noise during operation

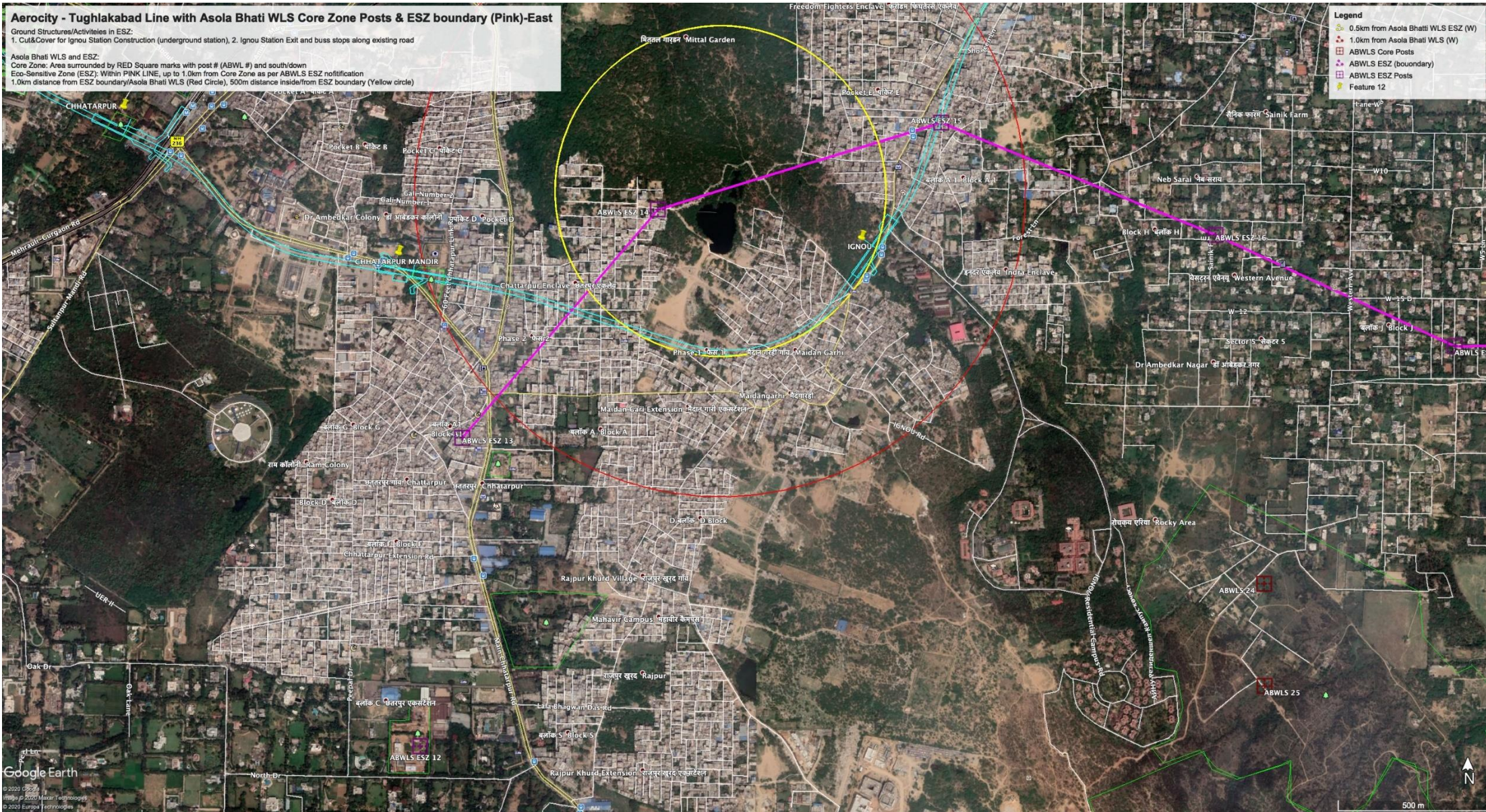
No.29 説明資料-1_Aerocity - Tughlakabad Line with Asola Bhati WLS and Okhala Bird Sanctuary



No.29 説明資料-2_Aerocity - Tughlakabad Line with Asola Bhati WLS Core Zone(Red) and ESZ(Pink) Right



No.29 説明資料-3_Aerocity - Tughlakabad Line with Asola Bhati WLS Core Zone(Red) and ESZ(Pink) Left.



Threatened birds in Okhla Bird Sanctuary

IUCN Red List (1994)	IUCN Red List (2001)
1. CR: Critically Endangered (2)	1. CR: (4)
2. VU: Vulnerable (9)	2. EN: Endangered (2)
3. NT: Near Threatened (7)	3. VU: (5)
4. Conservation Dependent (1)	

Note: Threatened categories (2001) (CR/EN/VU), The others (NT/LC: Least Concern)

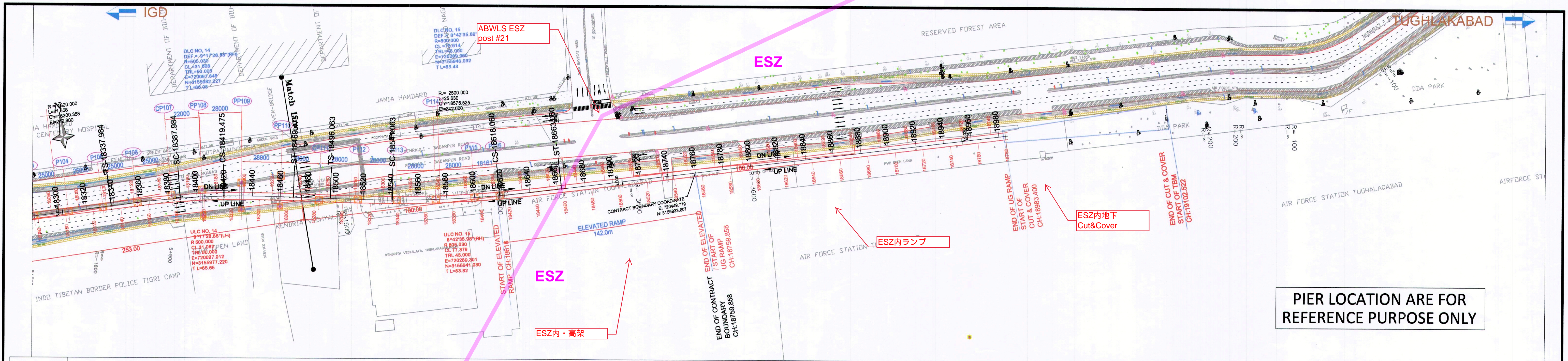
Names of the Threatened birds in Okhla Bird Sanctuary²

Based on the official website of the Okhla bird sanctuary <https://obs-up.com>, there are eleven threatened category birds as per the IUCN Red List 2001, namely four Critically Endangered (CR: White-rumped Vulture, Indian Vulture, Baer's pochard and Sociable lapwing), two Endangered (EN: Pallas's fish eagle and black-bellied tern), five Vulnerable (VU) (Sarus Crane, Indian Skimmer, Lesser Adjutant, Bristled Grassbird and Finn's Weaver). List of selected birds' common and scientific names are shown below with the Red List categories. The full list of the birds are available at the official website < <https://obs-up.com/assets/obs.pdf> >.

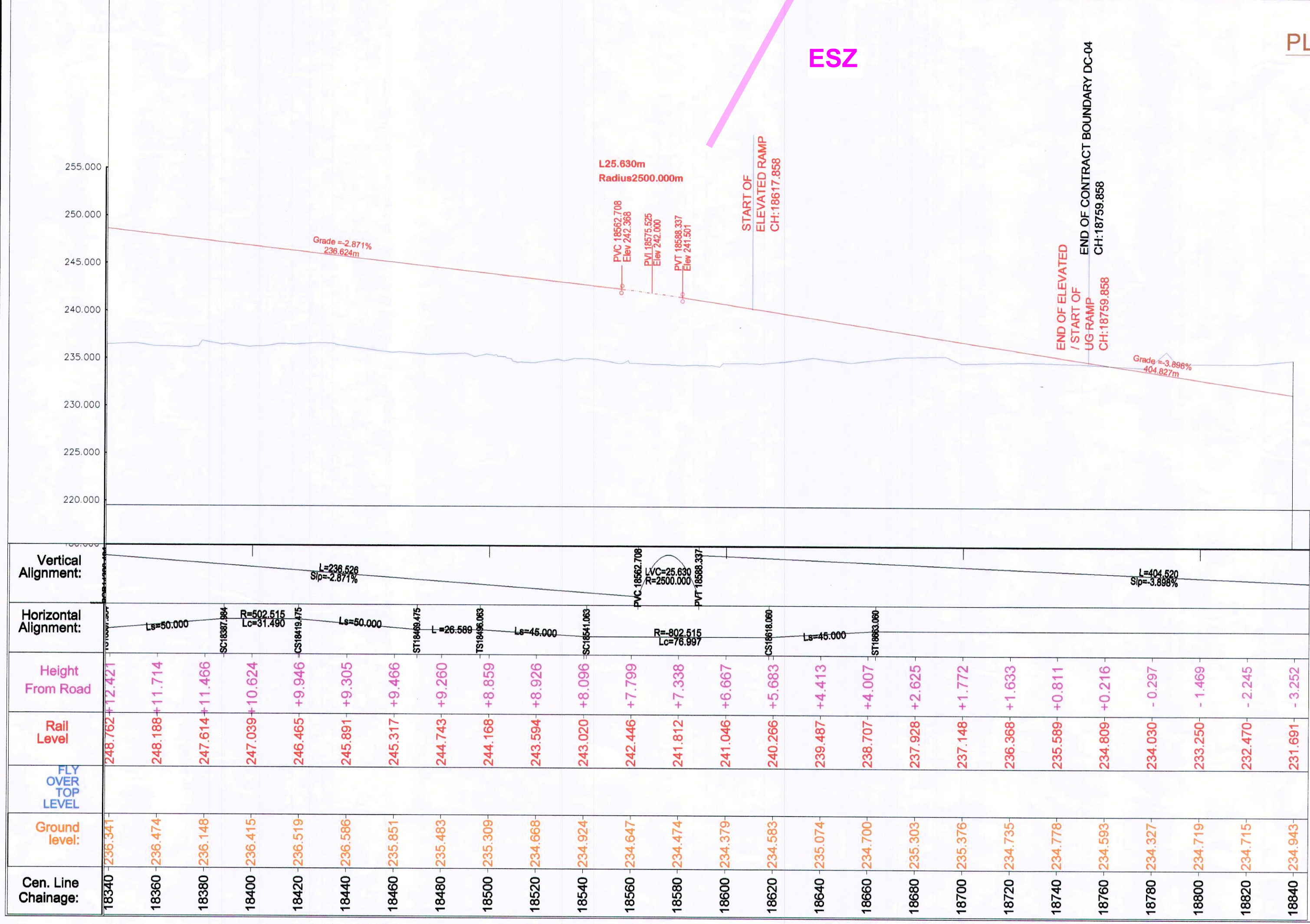
Red List Category		#	Name of the species	Scientific Name of the species
1994	2001			
CR: Critically Endangered	CR	1	white-rumped vulture	<i>Gyps bengalensis</i>
	CR	2	Indian vulture	<i>Gyps indicus</i>
VU: Vulnerable	LC	1	Baikal teal	<i>Sibirionetta formosa</i>
	CR	2	Baer's pochard	<i>Aythya baeri</i>
	VU	3	Sarus crane	<i>Antigone antigone</i>
	CR	4	Sociable lapwing	<i>Vanellus gregarius</i>
	VU	5	Indian skimmer	<i>Rynchops albicollis</i>
	EN	6	Pallas's fish eagle	<i>Haliaeetus leucoryphus</i>
	VU	7	Lesser adjutant	<i>Leptoptilos javanicus</i>
	VU	8	Bristled grassbird	<i>Schoenicola striatus</i> < <i>Chaetornis striata</i> >
NT: Near Threatened	VU	9	Finn's weaver	<i>Ploceus megarhynchus</i>
	NT	1	Ferruginous pochard	<i>Aythya nyroca</i>
	EN	2	black-bellied tern	<i>Sterna acuticauda</i>
	NT	3	Grey-headed Fish eagle	<i>Haliaeetus ichthyaetus</i> < <i>Ichthyophaga ichthyaetus</i> >
	NT	4	Darter	<i>Anhinga melanogaster</i>
	NT	5	Black-headed Ibis	<i>Threskiornis melanocephalus</i>
	NT	6	Painted Stork	<i>Mycteria leucocephala</i>
Conservation Dependent	NT	7	Blacknecked Stork	<i>Ephippiorhynchus asiaticus</i>
	NT	1	Dalmatian Pelican	<i>Pelecanus crispus</i>

Note: Threatened categories (2001) (CR/EN/VU), The others (NT/LC: Least Concern)

² Revised based on IUCN(2001) category on AUG25, 2020



PIER LOCATION ARE FOR REFERENCE PURPOSE ONLY



PLAN

TENDER DRAWING

This drawing must not be loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior written permission of DMRC.

CLIENT: DELHI METRO RAIL CORPORATION LTD.
Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi - 110001, India
Board No. - 23417910/12
Fax No. - 23417921

PROJECT: CONTRACT DC-04
DESIGN AND CONSTRUCTION OF SANGAM VIHAR, KHANPUR, AMBEDKAR NAGAR AND SAKET G BLOCK INTERCHANGE STATION (04 ELEVATED STATIONS)
(TOTAL LENGTH 4.30 KM AND VIADUCT LENGTH 3.56 KM)

CONSULTANT:
AECOM SINGAPORE PTE LTD
800 BEACH ROAD #08-00,
THE CONCOURSE, SINGAPORE-199655
AECOM INDIA PRIVATE LIMITED
9TH FLOOR, INFINITY TOWER C,
DLF CYBER CITY, DLF PHASE-II,
GURGAON-122002, (HR), INDIA.
TANDON CONSULTANTS PRIVATE LIMITED
STRUCTURAL ENGINEERING SPECIALISTS
17, LINK ROAD, JANGPURA EXTENSION, NEW DELHI-110014, INDIA

NOTICE OF NO OBJECTIONS FROM EMPLOYERS REPRESENTATIVE

Notice of no objection from employer is being accorded for design principles only.

DESIGNATION	REMARKS	DATE	SIGNATURE
J.E. (DESIGN)	REVIEWED		
A.M. (DESIGN)	REVIEWED		
DY.CE. (DESIGN)	REVIEWED		
GM. / (TECHNICAL)	REVIEWED		
PM	REVIEWED	23.10.19	[Signature]
CRE/CPM	REVIEWED	23.10.19	[Signature]

ELEVATION

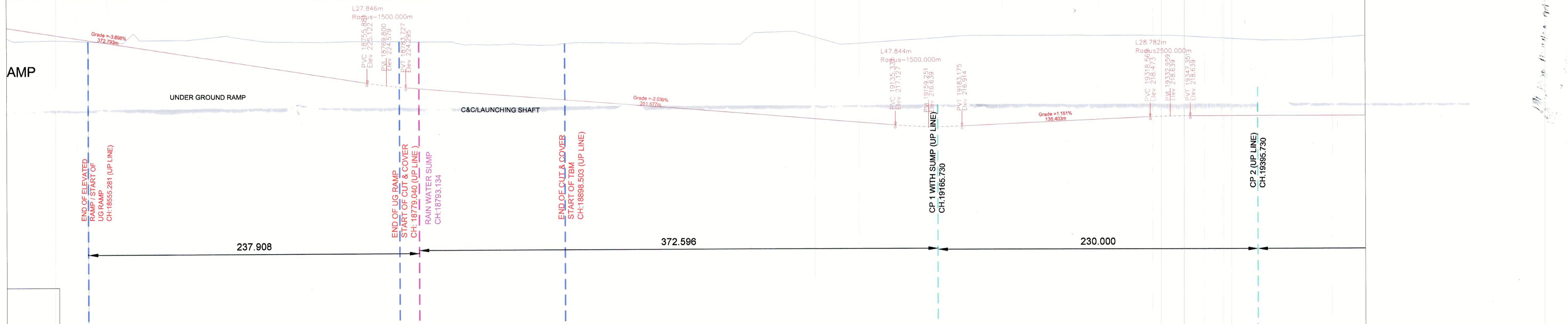
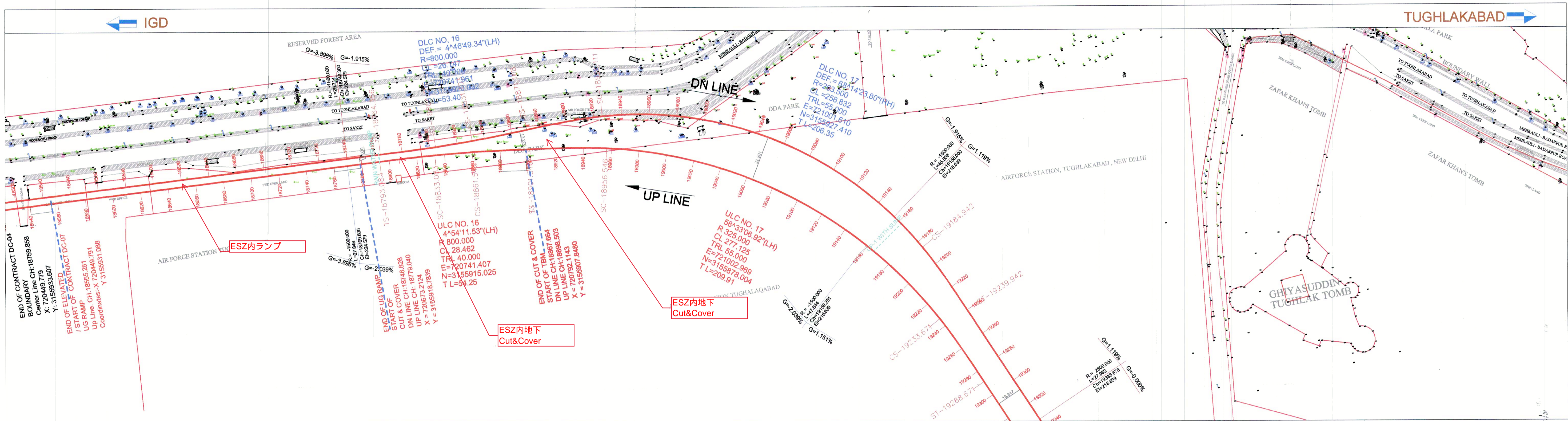
Certified that this document has been checked in accordance with DDC quality assurance plan.

NO.	DESCRIPTION OF REVISIONS	DATE	BY
R2	ALIGNMENT REVISED BETWEEN AMBEDKAR NAGAR AND KHANPUR	21.10.19	
R1	ALL PIERS INCLUDING PORTAL & CANTILEVER PIER LOCATIONS ARE INDICATIVE ONLY	26.09.19	SJ
R0	INITIAL SUBMISSION	14.08.19	SJ

NOTE:- FOUNDATION DETAILS ARE INDICATIVE

	NAME	SIGNATURE	DATE
APPROVED	SUMANT GUPTA	[Signature]	21.10.19
TEAM LEADER			
CHECKED	SUMIT JINDAL	[Signature]	21.10.19
STRUCTURE LEAD			
DESIGNED	MAYANK SHARMA	[Signature]	21.10.19
STR. ENGINEER			
DRAWN	HARNAIK SINGH	[Signature]	21.10.19

DELHI METRO RAIL CORPORATION		SCALE AS SHOWN
TITLE:	GENERAL ARRANGEMENT DRAWING OF VIADUCT, FLYOVER & RAMP SAKET G TO SANGAM VIHAR TIGRI	DATE: 21.10.19
DRG. NO.:	AECOM-DMRC-TD-DC04-VD-GN-GAD	REV. R2
		SHEET 5 OF 5



Vertical Alignment:	Horizontal Alignment:	Height:	Rail Level:	Ground level:	Chainage:
L27.846m Roads=1500.000m	L=334.951				18540
L47.844m Roads=1500.000m					18560
L28.782m Roads=2500.000m					18580
					18600
					18620
					18640
					18660
					18680
					18700
					18720
					18740
					18760
					18780
					18800
					18820
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					19040
					19060
					19080
					19100
					19120
					19140
					19160
					19180
					19200
					19220
					19240
					19260
					19280
					19300
					19320

1. CURVE NO.	2. COORDINATE OF APEX NORTHING (Y)	3. DEFLECTION ANGLE DEG	4. RADIUS m	5. TANGENT LENGTH INCLUDING TRANSITION LENGTH m	6. TRANSITION LENGTH m	7. CIRCULAR CURVE LENGTH m	8. CURVE LENGTH INCLUDING TRANSITION LENGTH m	9. SHIFT m	10. PROPOSED CANT mm	11. CANT DEFICIENCY mm	12. SPEED kmph
ULC-16	720741.407	4° 54' 11.53"	800.000	54.285	40.000	28.462	108.462	0.083	80	47	85
ULC-17	721002.989	58° 33' 06.92"	3155915.025	209.913	55.000	277.125	387.125	0.352	110	22	80
ULC-18	721229.305	36° 29' 30.64"	3155354.773	145.738	55.000	173.215	283.215	0.228	100	63	70
ULC-19	721963.422	60° 14' 05.69"	3154628.945	351.503	55.000	531.96	641.96	0.228	85	69	85
ULC-20	722717.166	59° 16' 08.29"	3155396.206	221.122	55.000	296.709	406.709	0.371	110	81	70
ULC-21	723417.449	31° 45' 26.30"	3154984.312	112.980	45.000	131.163	163.163	0.285	90	68	85
ULC-22	723608.121	10° 32' 47.31"	3154694.920	77.890	45.000	65.442	112.442	0.140	85	62	80
ULC-23	724246.319	18° 33' 36"	3154894.920	340.000	45.000	42.183	382.183	0.096	110	84	70
ULC-24	724888.7796	101° 52' 34.45"	3155414.7608	345.305	25.000	458.080	538.080	0.096	110	84	70
ULC-25	725107.6047	29° 08' 07.39"	3155715.3023	95.260	50.000	87.297	142.557	0.386	110	84	70
ULC-26	725395.4016	68° 17' 13.48"	3155715.3023	231.225	55.000	302.550	412.550	0.420	110	84	70

TC= TANGENT CURVE
 CS= CURVE SPIRAL
 SC= SPIRAL CURVE
 SS= SPIRAL SPIRAL
 CT= CURVE TANGENT
 PVC= POINT OF VERTICAL CURVE
 PVI= POINT OF INTER SECTION
 PVT= POINT OF TANGENT

CE/PLANNING	Dy.CE/PLANNING
ED/Ops	DGM/Ops
GM/Tech	Dy.CE/DESIGN
CA	Dy.CA
CSTE-P-I	Dy.CSTE
GM/UG-II	Dy.CEE/UG
ED/UG/TR	Dy.CEE/TR
CE/TRACK	Dy.CE/TRACK
ED/CIVIL/P-II	PM/6A

NO	DATE	REVNO	DESCRIPTION	APP.

DELHI METRO RAIL CORPORATION LTD.
 Metro Bhawan, Fire Brigade Lane, Banakhamba Road, New Delhi-110001

Contract: **MRTS PH-IV - AEROCITY TO TUGHLAKABAD**

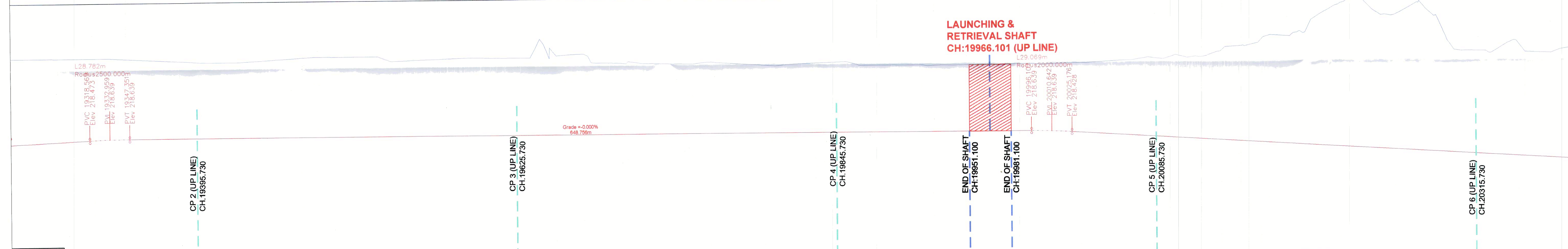
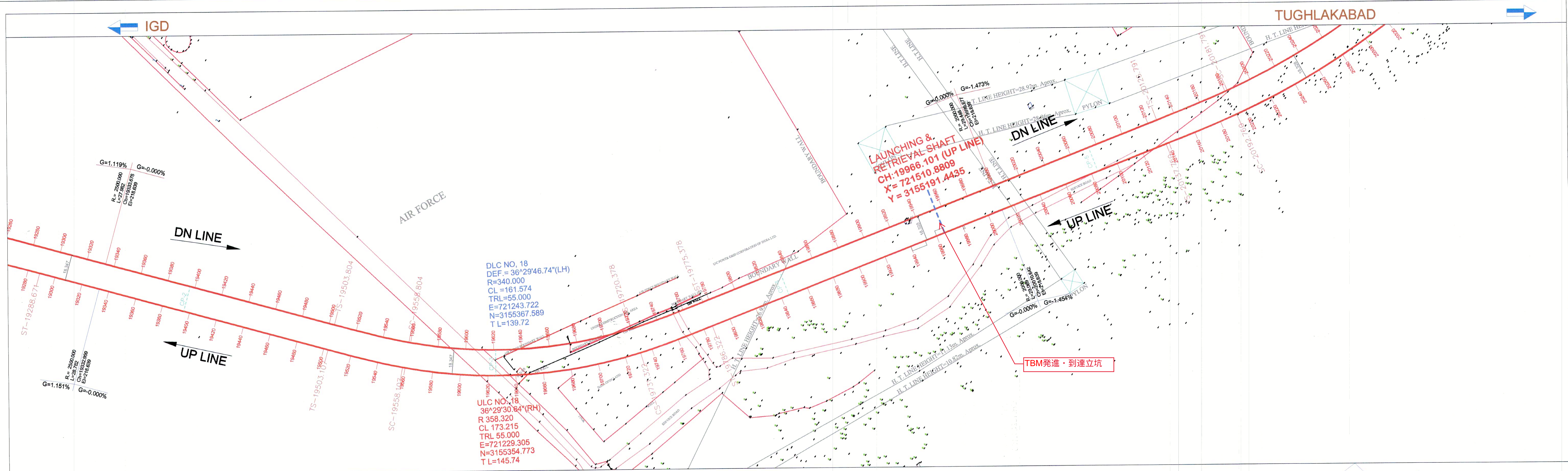
Section: **SANGAM VIHAR UG/RAMP TO SARITA VIHAR DEPOT, LAUNCHING SHAFT (CONTRACT DC-07)**

Title: **GENERAL ALIGNMENT DRAWING (GAD) KM-18.540 TO 19.300 (UP LINE)**

Drawn by: Manoj Kumar
 Checked by: A.K. Gupta
 Approved by: S.M. Yadav

Date: 18.02.2020
 Revision: RO
 Scale: 1:1000

Sheet No: 1 OF 7
 Sheet Size: A1



Station	230.000	230.000	230.000	230.000	230.000
Vertical Alignment:	[Profile view details]				
Horizontal Alignment:	[Profile view details]				
Height:	[Profile view details]				
Rail Level:	[Profile view details]				
Ground level:	[Profile view details]				
Chainage:	19300	19320	19340	19360	19380

UP LINE CURVE TABLE	CURVE NO.	UNIT	ULC-16 to ULC-26										
			ULC-16	ULC-17	ULC-18	ULC-19	ULC-20	ULC-21	ULC-22	ULC-23	ULC-24	ULC-25	ULC-26
1.	CURVE NO.		720741.407	721002.969	721229.305	721963.422	722717.166	723417.449	723608.121	724249.319	724888.7796	725107.8047	725395.4016
2.	COORDINATE OF APEX		3155915.025	3155978.004	3156354.773	3154928.945	3155396.208	3154975.630	3154984.312	3154576.098	3155414.7609	3155715.3023	
3.	DEFLECTION ANGLE	DEG.	4° 54' 11.53"	58° 33' 06.92"	36° 29' 30.64"	63° 14' 05.69"	59° 16' 08.29"	31° 45' 26.30"	10° 32' 47.31"	18° 33' 38"	101° 52' 34.45"	29° 08' 07.39"	68° 17' 13.48"
4.	RADIUS	m	800.00	325.00	358.32	558.32	340.00	317.83	600.00	270.00	270.00	300.00	
5.	TANGENT LENGTH INCLUDING TRANSITION LENGTH	m	54.255	209.913	145.738	351.503	221.122	112.980	77.890	72.804	345.305	95.280	231.225
6.	TRANSITION LENGTH	m	40.00	55.00	55.00	55.00	45.00	45.00	55.00	25.00	50.00	55.00	
7.	CIRCULAR CURVE LENGTH	m	28.462	277.125	173.215	531.96	296.709	131.163	85.442	42.183	455.080	87.297	302.550
8.	CURVE LENGTH INCLUDING TRANSITION LENGTH	m	108.462	387.125	283.215	641.96	406.709	221.163	155.442	152.183	535.080	187.297	412.550
9.	SHIFT	m	0.083	0.388	0.352	0.226	0.371	0.285	0.140	0.298	0.398	0.420	
10.	PROPOSED CANT	mm	60	110	100	85	110	90	65	110	110	110	
11.	CANT DEFICIENCY	mm	47	22	63	69	61	68	62	84	59	84	
12.	SPEED	kmph	85	60	70	85	70	85	80	70	82	70	

DMRC APPROVAL	
CE/PLANNING	Dy.CE/PLANNING
ED/Ops.	DGM/Ops.
GM/Tech.	Dy.CE/DESIGN
CA	Dy.CA
CSTE-P-1	Dy.CSTE
GME/UG-II	Dy.CEE/UG
ED/UG/TR	Dy.CEE/TR
CE/TRACK	Dy.CE/TRACK
ED/CIVIL/II	PM/SA

REVISIONS				
NO.	DATE	REV. NO.	DESCRIPTION	APP.

DELHI METRO RAIL CORPORATION LTD.
 Metro Bhawan - Fire Brigade Lane, Barakhamba Road, New Delhi-110001

Corridor: **MRTS Ph-IV - AEROCITY TO TUGHLAKABAD**

Station: **SANGAM VIHAR UG/RAMP TO SARITA VIHAR DEPOT, LAUNCHING SHAFT (CONTRACT DC-07)**

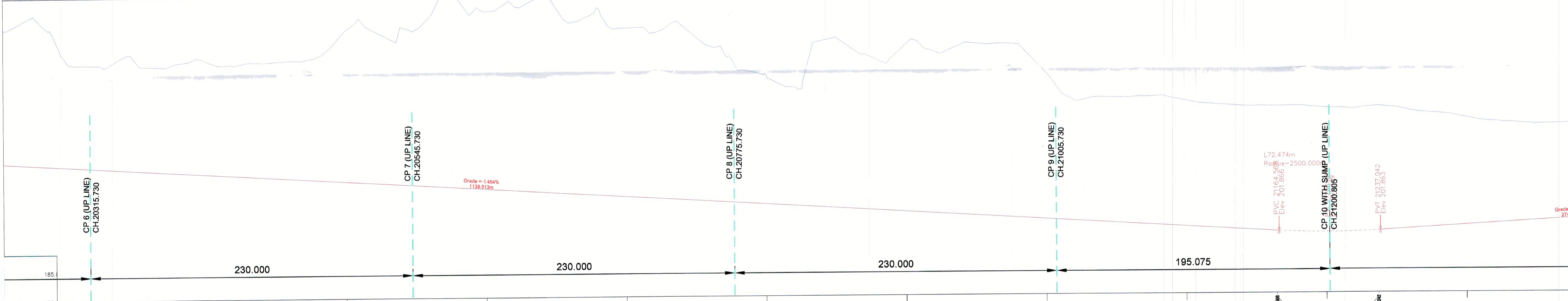
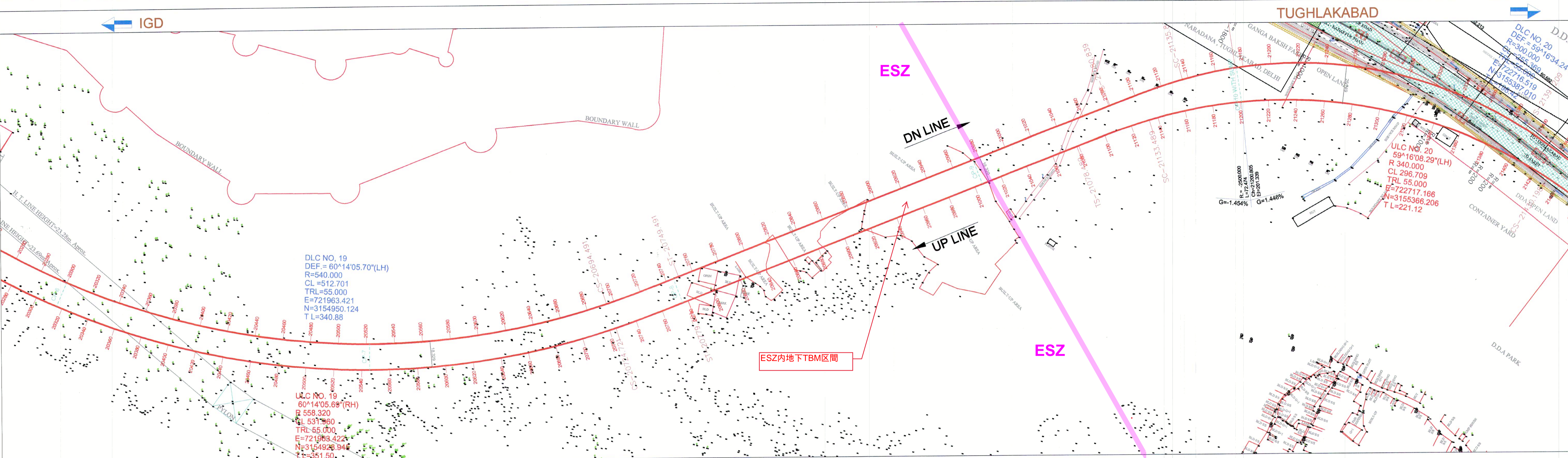
Title: **GENERAL ALIGNMENT DRAWING (GAD) KM-19.300 TO 20.300 (UP LINE)**

Drawn by: Manoj Kumar
 Checked by: A.K. Gupta
 Approved by: S.M. Yadav

Date: 18.02.2020
 Revision: RO
 Scale: 1:1000

Drawing No: DMRC/PH-IV/CPM-6/SVR-TKD/GAD/2020

Sheet: 2 OF 7
 Sheet Size: A1



Vertical Alignment:	L=1398.913 Sp=7.62%																																																																																																																																																											
Horizontal Alignment:	L=296.700																																																																																																																																																											
Height:	185.1	189.0	193.0	197.0	201.0	205.0	209.0	213.0	217.0	221.0	225.0	229.0	233.0	237.0	241.0	245.0	249.0	253.0	257.0	261.0	265.0	269.0	273.0																																																																																																																																					
Rail Level:	185.1	189.0	193.0	197.0	201.0	205.0	209.0	213.0	217.0	221.0	225.0	229.0	233.0	237.0	241.0	245.0	249.0	253.0	257.0	261.0	265.0	269.0	273.0																																																																																																																																					
Ground level:	232.795	232.510	234.025	232.852	231.561	232.147	233.561	231.856	232.633	233.270	231.563	232.990	232.979	232.011	232.398	232.689	231.709	232.792	232.398	230.994	232.084	232.107	231.114	233.930	231.816	231.526	231.191	238.717	211.235	235.874	238.766	210.944	27.822	241.140	210.654	30.486	243.385	210.363	33.022	241.639	210.072	31.567	242.317	209.781	32.536	244.504	209.491	35.013	239.536	209.200	30.336	241.485	208.909	32.576	238.471	208.619	29.852	237.666	208.328	29.338	238.579	208.037	30.542	235.057	207.748	27.311	230.717	207.458	23.261	229.222	207.165	22.057	227.600	206.874	20.726	236.101	206.584	29.517	234.577	206.293	29.284	232.346	206.002	25.344	235.569	205.711	29.858	233.872	205.421	28.451	235.471	205.130	30.341	235.284	204.839	30.445	235.015	204.549	30.466	249.644	204.258	25.388	224.977	203.967	21.010	225.620	203.676	21.944	225.572	203.386	22.186	225.772	203.095	22.677	224.849	202.804	22.045	224.244	202.514	21.730	223.923	202.223	21.700	223.861	201.932	21.929	223.870	201.689	22.181	223.481	201.602	21.879	223.357	201.675	21.882	223.672	201.906	21.766	222.838	202.195	20.743	222.417	202.484	19.933	221.621	202.773	18.848	220.997	203.062	17.935	220.630	203.351	17.279	220.529	203.640	16.889
Chainage:	20300	20320	20340	20360	20380	20400	20420	20440	20460	20480	20500	20520	20540	20560	20580	20600	20620	20640	20660	20680	20700	20720	20740	20760	20780	20800	20820	20840	20860	20880	20900	20920	20940	20960	20980	21000	21020	21040	21060	21080	21100	21120	21140	21160	21180	21200	21220	21240	21260	21280	21300	21320	21340	21360																																																																																																						

UP LINE CURVE TABLE	CURVE NO	COORDINATE OF APEX		DEFLECTION ANGLE	RADIUS	TANGENT LENGTH INCLUDING TRANSITION LENGTH	TRANSITION LENGTH	CIRCULAR CURVE LENGTH	CURVE LENGTH INCLUDING TRANSITION LENGTH	SHIFT	PROPOSED CANT	CANT DEFICIENCY	SPEED
		EASTING (X)	NORTHING (Y)										
1	ULC-16	720741.407	721002.989	4° 54' 11.53"	800.00	54.255	40.00	28.462	108.462	0.083	60	47	85
2	ULC-17	721002.989	721229.305	58° 33' 08.92"	525.00	209.913	55.00	277.125	387.125	0.388	110	22	80
3	ULC-18	721229.305	721963.422	36° 29' 30.64"	358.32	145.738	55.00	173.215	283.215	0.352	100	63	70
4	ULC-19	721963.422	722717.166	60° 14' 05.69"	558.32	351.503	55.00	531.96	841.96	0.228	85	61	85
5	ULC-20	722717.166	723417.449	59° 16' 08.29"	340.00	221.122	45.00	298.709	406.709	0.371	90	61	70
6	ULC-21	723417.449	723608.121	31° 45' 28.30"	317.83	112.980	45.00	131.163	221.163	0.285	85	61	85
7	ULC-22	723608.121	724249.319	10° 32' 47.31"	600.00	77.890	55.00	65.442	155.442	0.140	110	84	80
8	ULC-23	724249.319	724888.7796	18° 33' 38"	270.00	72.804	25.00	45.080	152.183	0.098	110	59	70
9	ULC-24	724888.7796	725107.8047	101° 52' 34.45"	345.305	95.280	50.00	87.287	187.287	0.420	110	59	82
10	ULC-25	725107.8047	725395.4016	29° 08' 07.38"	270.00	95.280	50.00	87.287	187.287	0.420	110	59	82
11	ULC-26	725395.4016	725683.0000	68° 17' 13.48"	300.00	231.225	55.00	302.550	412.550	0.420	110	59	82

TC= TANGENT CURVE
 CS= CURVE SPIRAL
 SC= SPIRAL CURVE
 SS= SPIRAL SPIRAL
 CT= CURVE TANGENT
 PVC= POINT OF VERTICAL CURVE
 PVI= POINT OF INTER SECTION
 PVT= POINT OF TANGENT

DMRC APPROVAL	
CE/PLANNING	Dy.CE/PLANNING
ED/Ops	DGM/Ops.
GM/Tech	Dy.CE/DESIGN
CA	Dy.CA
CSTE-P-1	Dy.CSTE
GM/EUG-II	Dy.CEE/UG
ED/UG/TR	Dy.CEE/TR
CE/TRACK	Dy.CE/TRACK
ED/CIVIL-II	PM/6A

REVISIONS			
NO.	DATE	REVNO.	DESCRIPTION

DELHI METRO RAIL CORPORATION LTD.
 Metro Bhawan, Fire Brigade Lane, Barakhamba Road New Delhi-110001

Corridor: **MRTS Ph-IV - AEROCITY TO TUGHLAKABAD**

Station: **SANGAM VIHAR UGRAMP TO SARITA VIHAR DEPOT, LAUNCHING SHAFT (CONTRACT DC-07)**

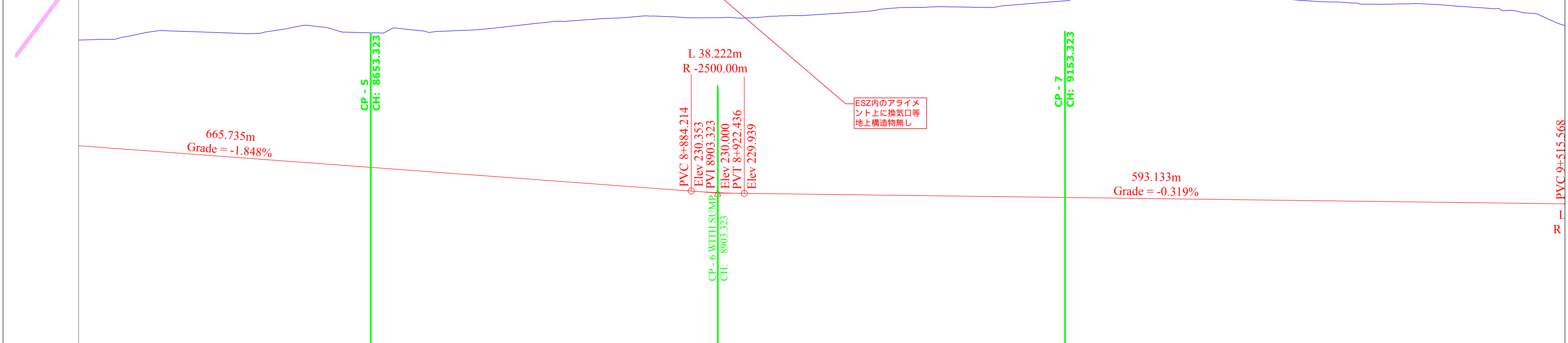
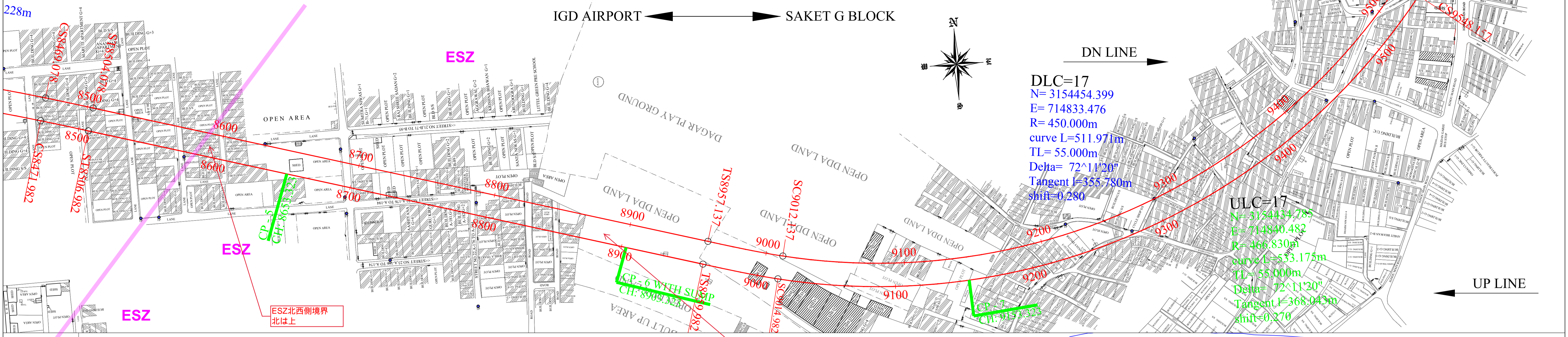
Title: **GENERAL ALIGNMENT DRAWING (GAD) KM-20.300 TO 21.380 (UP LINE)**

Drawn by: **Mianji Kumar**
 Checked by: **A.K. Gupta**
 Approved by: **S.M. Yadav**

Date: 18.02.2020
 Revision: RO
 Scale: 1:1000

Drawing No: **DMRC/PH-IV/CPM-6/SVR-TKD/GAD/2020**

Sheet: **3 OF 7**
 Sheet Size: **A1**



Stationing	ULC1	ULC2	ULC3	ULC4	ULC5	ULC6	ULC7	ULC8	ULC9	ULC10	ULC11	ULC12	ULC13	ULC14	ULC15	ULC16	ULC17	ULC18	ULC19	ULC20	ULC21
70526.300	70793.050	70791.145	708145.451	708477.619	708513.355	70874.918	70996.611	71044.748	71098.848	711045.535	71181.824	712282.226	71287.864	713105.883	713286.722	714840.482	715263.189	715451.916	715798.074	716227.927	716522.927
316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453	316000.453
134'46'51"	05'55'02"	19'14'51"	20'57'59"	53'22'50"	41'55'41"	14'34'55"	04'02'12"	06'54'39"	13'33'18"	02'23'31"	14'18'32"	34'30'53"	24'34'08"	40'35'08"	07'45'14"	72'11'20"	15'47'10"	10'56'44"	17'13'00"	53'32'52"	
316.830	1010.000	300.000	700.000	401.830	500.000	616.830	1500.000	1516.830	600.000	516.830	435.000	466.830	1500.000	466.830	516.830	800.000	600.000	600.000	300.000		
789.225	67.202	78.433	147.039	229.667	216.650	103.939	67.862	106.589	96.325	62.542	77.744	185.614	122.281	200.216	119.155	368.043	96.678	94.153	115.855	179.074	
55	30	55	35	55	50	50	30	30	50	50	55	50	55	35	55	50	35	50	55	55	
690.301	74.308	45.780	221.154	319.372	315.892	106.985	75.678	152.952	91.947	85.069	44.895	261.336	131.531	275.680	167.996	533.175	92.396	117.827	130.291	225.376	
800.301	134.308	155.780	291.154	429.372	415.892	206.985	135.678	212.952	191.947	125.069	154.895	271.336	241.531	385.680	237.996	643.175	192.396	187.827	230.291	335.376	
0.398	0.037	0.420	0.073	0.314	0.208	0.169	0.025	0.025	0.174	0.007	0.315	0.202	0.290	0.034	0.270	0.202	0.064	0.174	0.420		
105	0	110	110	100	80	35	35	80	20	110	95	100	105	35	110	95	60	80	110		
79	76	84	53	79	72	59	22	22	63	14	80	71	75	79	22	74	71	47	63	84	
70	75	70	85	80	85	85	85	85	85	85	80	85	80	85	85	85	85	85	85	70	

LEGEND

ROAD: HP ○

BOUNDARY: /

PARK / GREEN LAND: /

FENCING: /

SHEDS / BUILT UP AREA / COVERED STRUCTURE: /

NALLAH: LP ○

LAMP POST: TP ○

ELECTRIC LINE: EM □

ELECTRIC MAST: SP ○

JUNCTION BOX: JB □

BORE HOLE: BH ○

HAND PUMP: HP ○

TRIS/4/S/5 ETC: /

HT, T, L LINE: /

DRAIN: /

SINGLE STORED BUILDING: S/S

MULTI STORED BUILDING: S/S

RAILING: /

TRANSLOCATION STATION: /

DRAIN HOLE: /

MAN HOLE: /

RAILWAY LINE: /

TRACK CENTRE LINE: /

PLATFORM LINE: /

1. CURVE NO. (UP LINE)

2. COORDINATE OF EASTING

3. DELTA

4. RADIUS (m)

5. TANGENT LENGTH INCLUDING TRANSITION CURVE (m)

6. TRANSITION LENGTH (m)

7. CIRCULAR CURVE LENGTH (m)

8. CURVE LENGTH INCLUDING TRANSITION CURVE (m)

9. SHIPT (m)

10. PROPOSED GANT (mm)

11. GANT DEFICIENCY (mm) (Max 110 mm)

12. GANT DEFICIENCY (mm) (Max 85 mm)

13. PERMISSIBLE SECTIONAL SPEED

APPROVED BY DMRC

ED / O

GM/PLANNING

GM/TECHNICAL

CE/TRACK

GM/E-UG/II

CA

CPM/S

CEE/PLG.

SR.DGM / O

DY. CE/PLANNING

DY. CE/DESIGN - I

DY. CE/TRACK

JGM/C&S

DY. CA

PM-SB

DY. CEE/PLG.

DELHI METRO RAIL CORPORATION LTD.

13 Moh. Tower, 130 Durgam Chauraha, New Delhi - 110029

TITLE: GENERAL ALIGNMENT DRAWING (UP LINE) For AEROCITY TO SAKET G Block

CHECKED BY: KAUSHAL KUMAR GAUTAM

DESIGN BY: MUKESH PRASHAD

DRAWN BY: DIVYA BEHL

DATE: 25.05.2020

REV: R1

SCALE: Ver = 1:400
Hor = 1:1000

DRAWING NO.: DMRC/CPM-S/PH-IV/2003/ALIGN/2020/GAD/R1

SHEET NO.: 10 OF 13

SHEET SIZE: A0

Yamuna川横断橋周辺の状況

ピンク・Influence Zone (Maujpur - Majlis Park線) : 事業境界から外側に11mの範囲を示しており、同範囲内で建設工事等を行う場合はDMRCから許可を得る必要がある。

60-80m上流(上)に取水関および関上に片側2車線道路

510-520m下流(下)に幹線道路橋(片側3車線)

+東西(右左)を渡す船渡しは無い

+上流の取水関と下流の幹線道路間、約600mの区間での漁業利用等の河川利用は無い

+橋脚の間隔、太さは下流の幹線道路と同様なものが計画され、水理模型実験により、流況、河川敷への影響は想定されない事が確認されている

