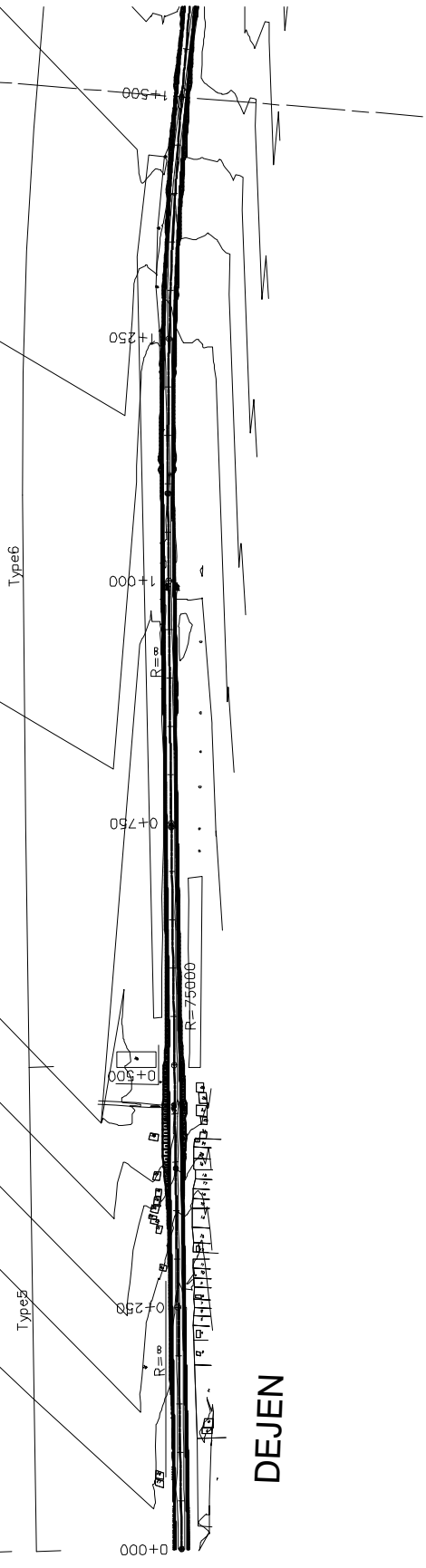


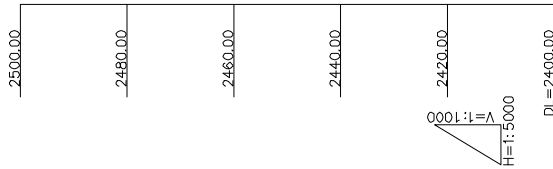
5 Outline Design Drawings

DRAWINGS		PK	SCALE	Page
Plan and Profile	(1 / 45)	0+000 - 1+500	1:5,000	A - 5 - 2
Plan and Profile	(2 / 45)	1+500 - 3+000	1:5,000	A - 5 - 3
Plan and Profile	(3 / 45)	3+000 - 4+500	1:5,000	A - 5 - 4
Plan and Profile	(4 / 45)	4+500 - 6+000	1:5,000	A - 5 - 5
Plan and Profile	(5 / 45)	6+000 - 7+500	1:5,000	A - 5 - 6
Plan and Profile	(6 / 45)	7+500 - 9+000	1:5,000	A - 5 - 7
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Plan and Profile	(33 / 45)	47+000 - 48+500	1:5,000	A - 5 - 34
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Plan and Profile	(35 / 45)	50+000 - 51+500	1:5,000	A - 5 - 36
Plan and Profile	(36 / 45)	51+500 - 53+000	1:5,000	A - 5 - 37
Plan and Profile	(37 / 45)	53+000 - 54+500	1:5,000	A - 5 - 38
Plan and Profile	(38 / 45)	54+500 - 56+000	1:5,000	A - 5 - 39
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Plan and Profile	(41 / 45)	59+000 - 60+500	1:5,000	A - 5 - 42
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MINT KAT Bridge	(7 / 13)		1:100	A - 5 - 59
ZIBA Bridge	(8 / 13)		1:100	A - 5 - 60
YEDA-A Box Culvert	(9 / 13)		1:100	A - 5 - 61
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YEDA-C Box Culvert	(11 / 13)		1:100	A - 5 - 63
AMBESH Box Culvert	(12 / 13)		1:100	A - 5 - 64
WISETA Bridge	(13 / 13)		1:100	A - 5 - 65

Bridge Point
Quant 000



DEJEN



V=1:1000
H=1:5000

Kilometer	Ground Height	Proposition Height	Gradient
0+0	2439.42	2439.405	439.405
+50	2439.28	2439.255	2439.255
+100	2439.17	2439.105	2439.105
+150	2439.00	2438.955	2438.955
+200	2438.53	2438.704	2438.704
+250	2438.07	2438.43	438.029
+300	2437.17	2437.265	2437.265
+350	2435.79	2436.072	2436.072
+400	2433.24	2434.688	2434.688
+450	2432.00	2433.558	2433.558
+497.96	2431.32	2433.033	2432.401
+500	2431.00	2432.745	2432.401
+550	2431.00	2432.248	2432.248
+600	2431.00	2432.04	2432.04
+650	2431.00	2431.89	2431.89
+700	2431.00	2431.74	2431.74
+750	2431.00	2431.59	2431.59
+800	2431.00	2431.44	2431.44
+850	2430.95	2431.277	2431.277
+900	2430.44	2431.164	2431.195
+950	2430.00	2430.905	2430.905
+1000	2429.99	2430.274	2430.274
+1500	2429.07	2430.036	2429.07
+2000	2429.00	2429.648	2429.648
+221.984	2428.72	2429.424	2429.758
+250	2428.12	2429.093	2428.37
+300	2427.49	2428.37	2427.49
+350	2426.86	2427.508	2427.508
+400	2425.82	2426.630	2427.512
+450	2424.88	2425.75	2427.512
+500	2424.00	2424.873	2424.873

REMARKS:

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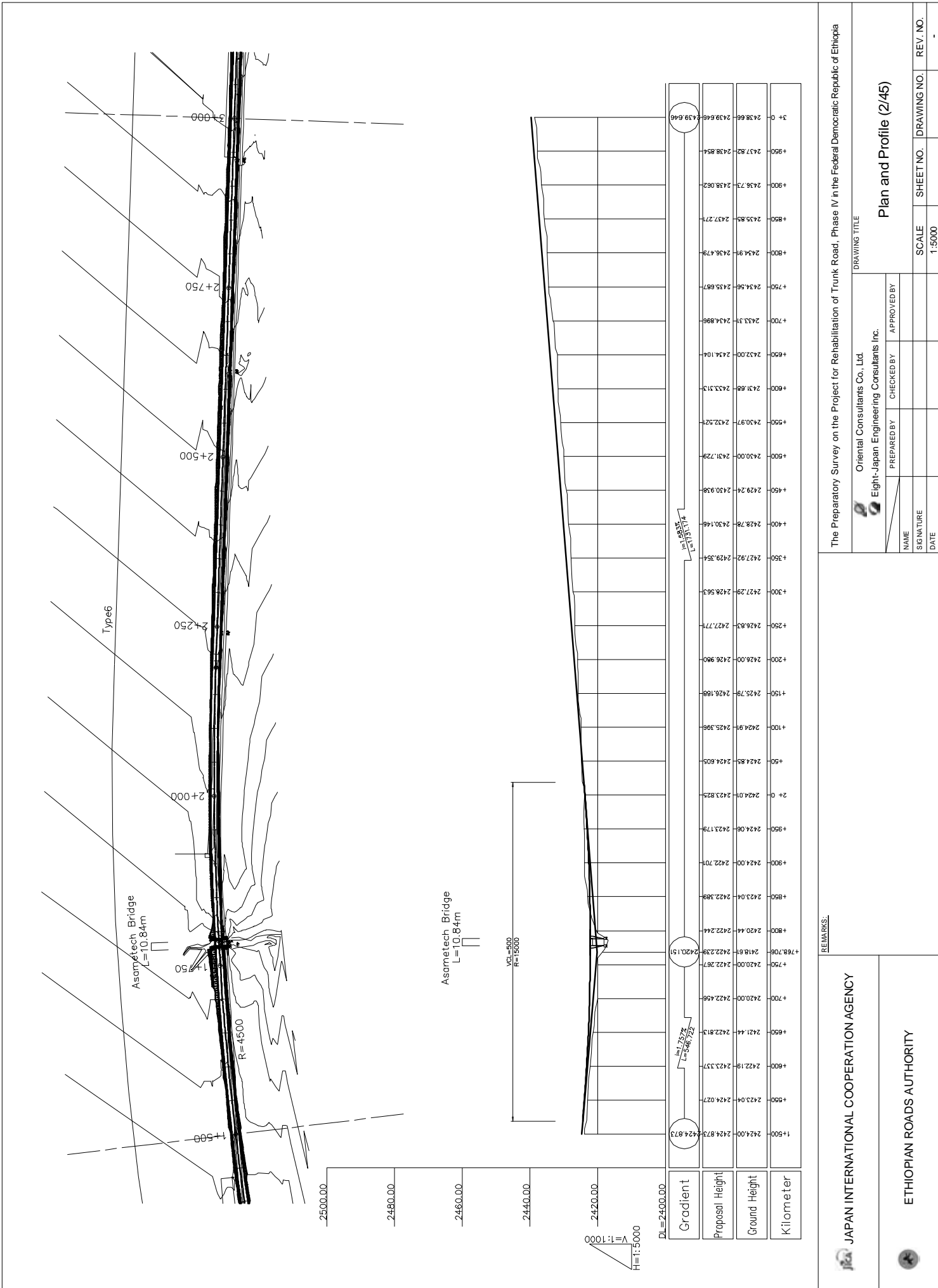
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Plan and Profile (1/45)

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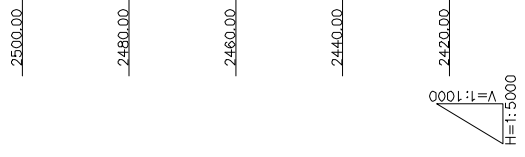
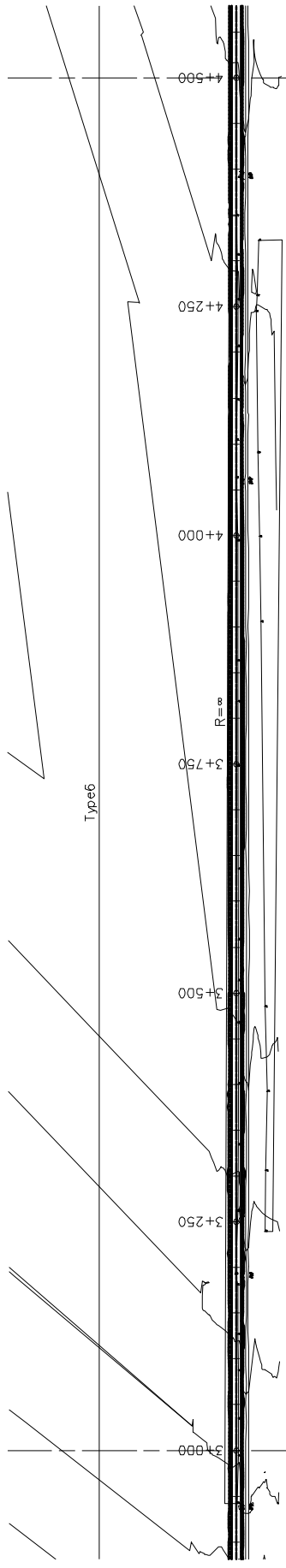
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Plan and Profile (2/45)



Station	Proposed Height	Ground Height	Kilometer
3+000	2438.66	2439.646	3+000
3+100	2439.88	2441.229	3+100
3+200	2441.35	2442.694	3+200
3+300	2443.33	2444.339	3+300
3+400	2444.45	2444.919	3+400
3+500	2445.327	2445.327	3+500
3+600	2446.202	2446.202	3+600
3+700	2446.490	2446.490	3+700
3+800	2446.543	2446.543	3+800
3+900	2446.481	2446.481	3+900
4+000	2446.210	2446.210	4+000
4+100	2445.00	2446.060	4+100
4+200	2445.00	2445.936	4+200
4+300	2445.00	2445.936	4+300
4+400	2445.00	2445.936	4+400
4+500	2445.00	2445.936	4+500

REMARKS:

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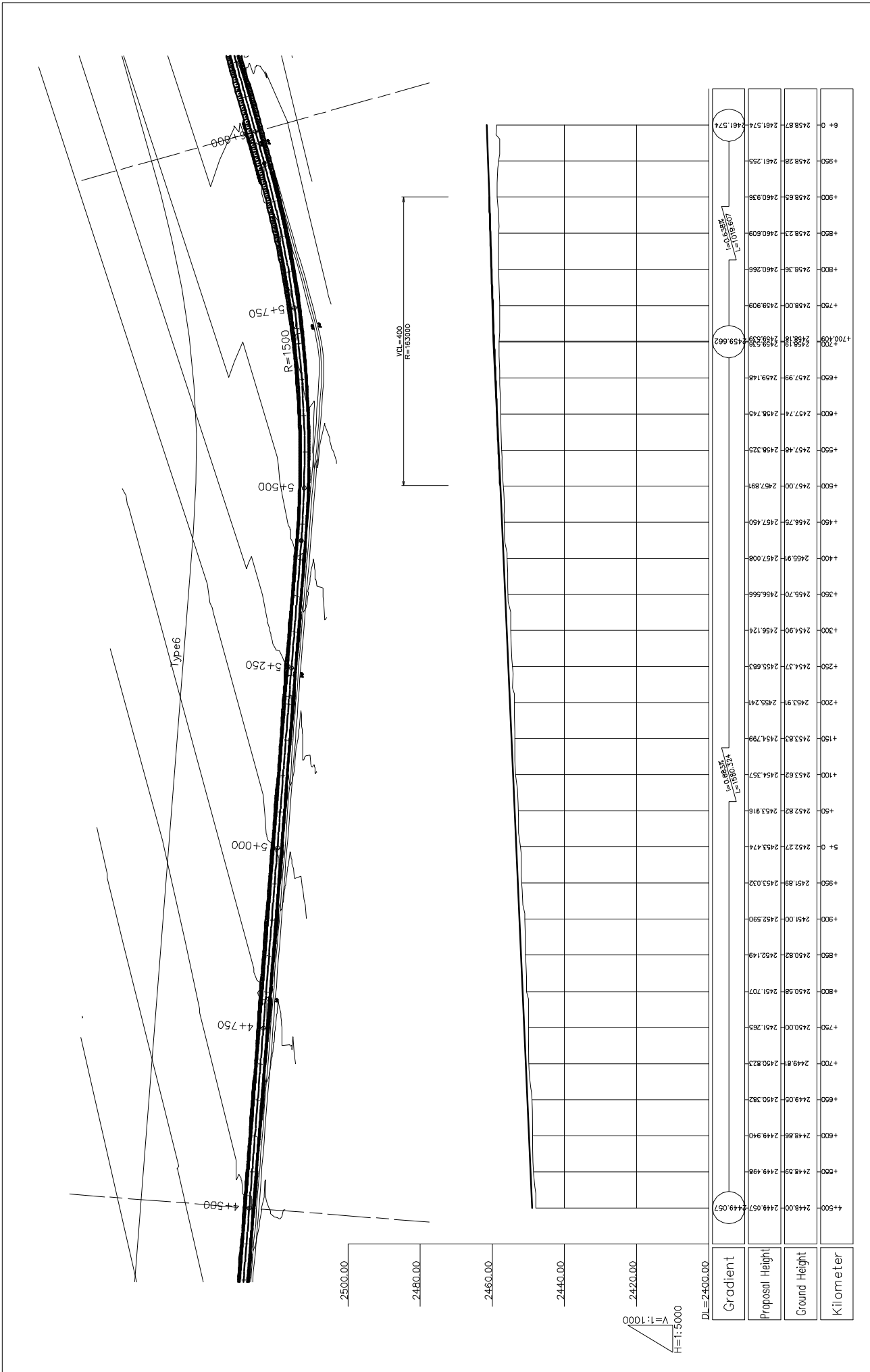
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DRAWING TITLE: **Plan and Profile (3/45)**

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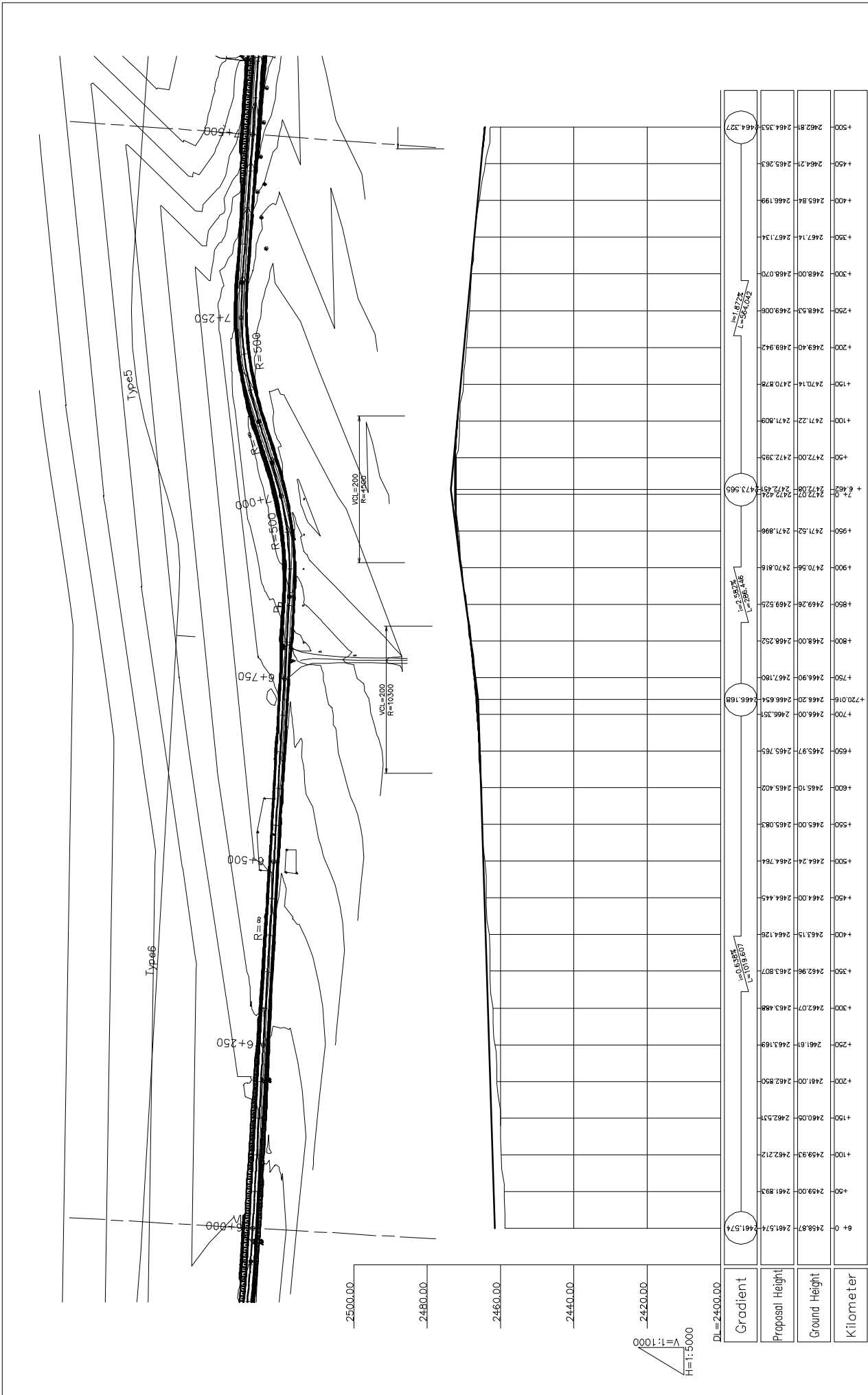
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Scale: 1:5000

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Sheet No. _____ Drawing No. _____ Rev. No. _____



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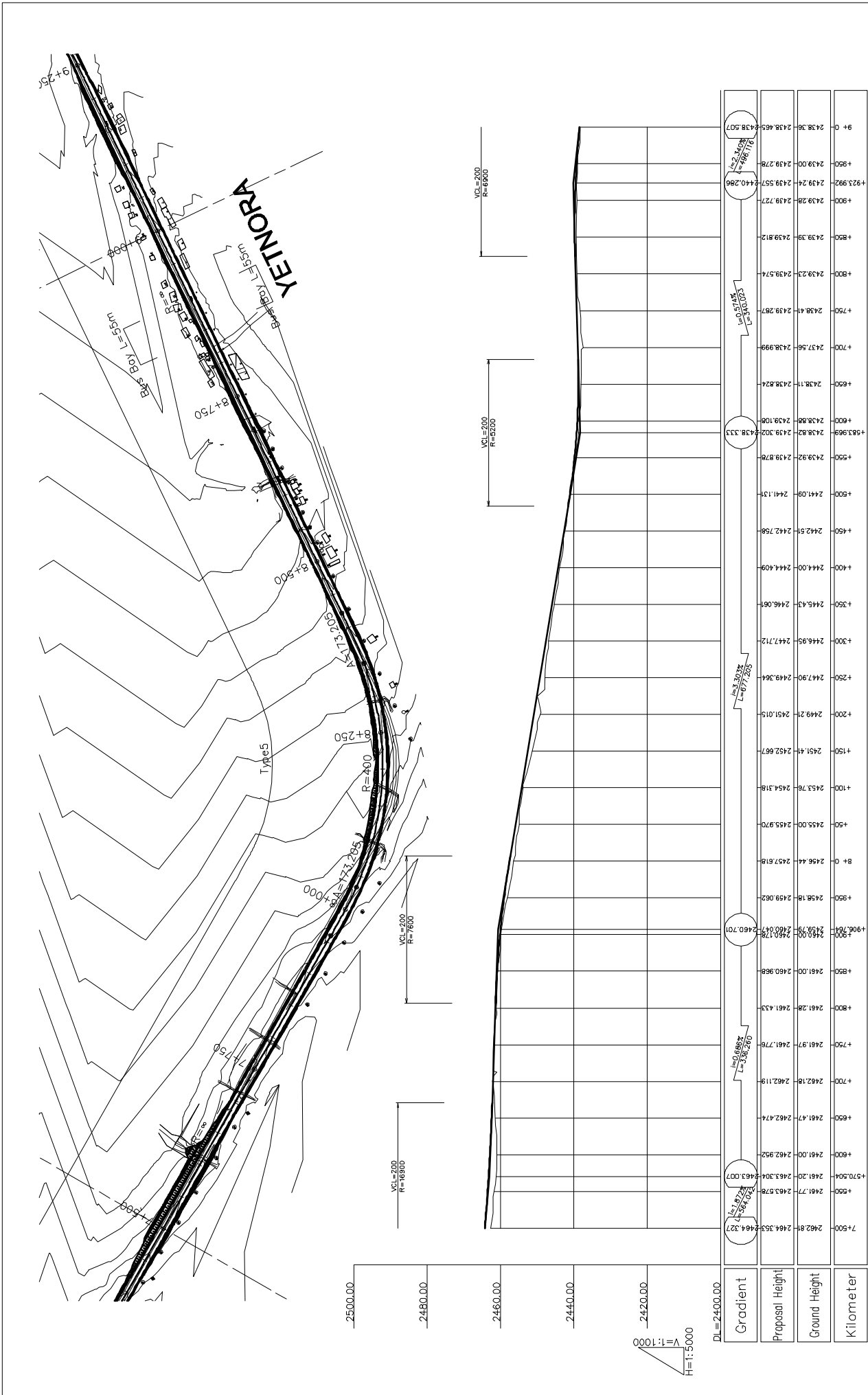
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SCALE: 1:5000 SHEET NO. _____ DRAWING NO. _____ REV. NO. _____

Plan and Profile (5/45)



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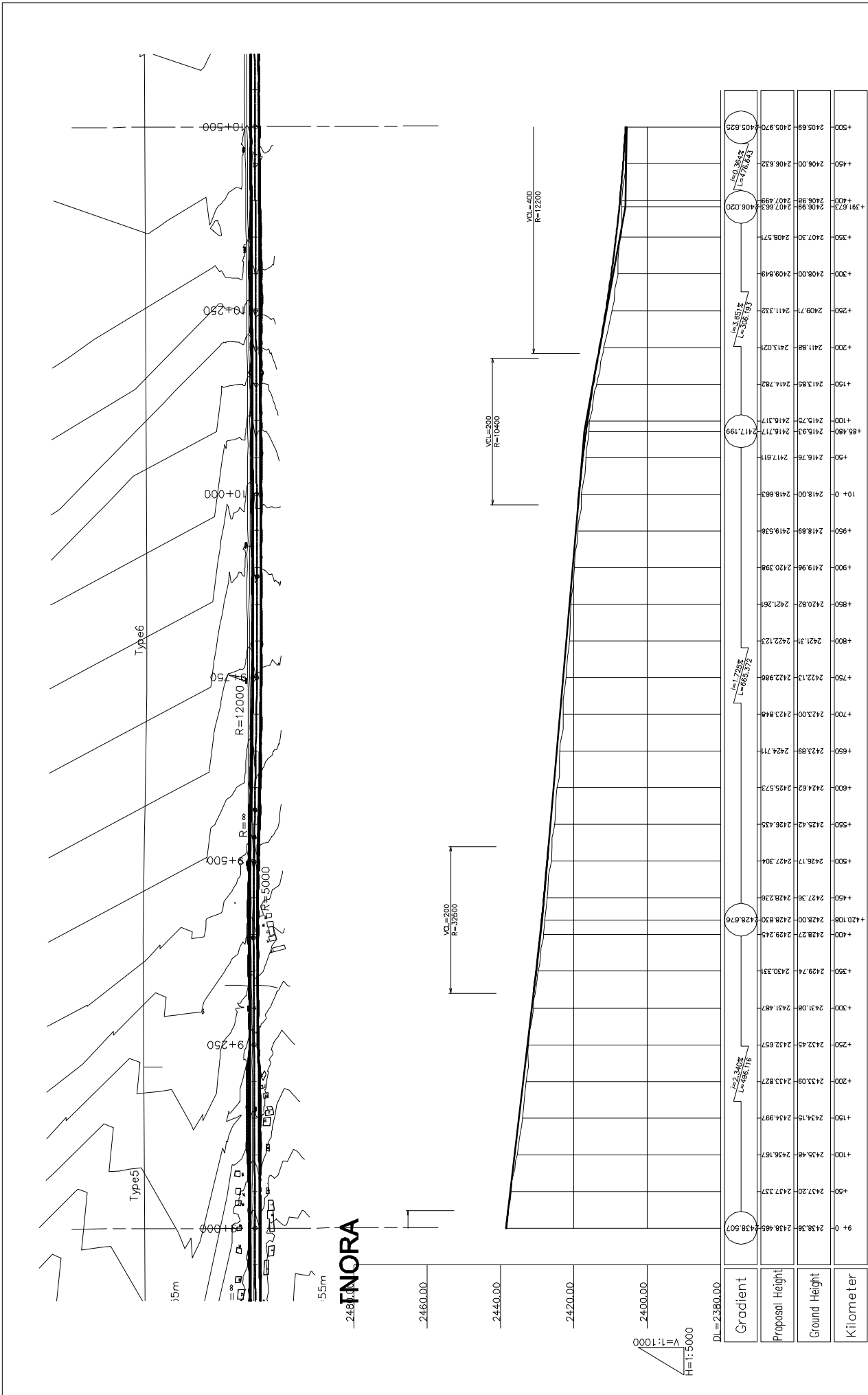
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Plan and Profile (6/45)

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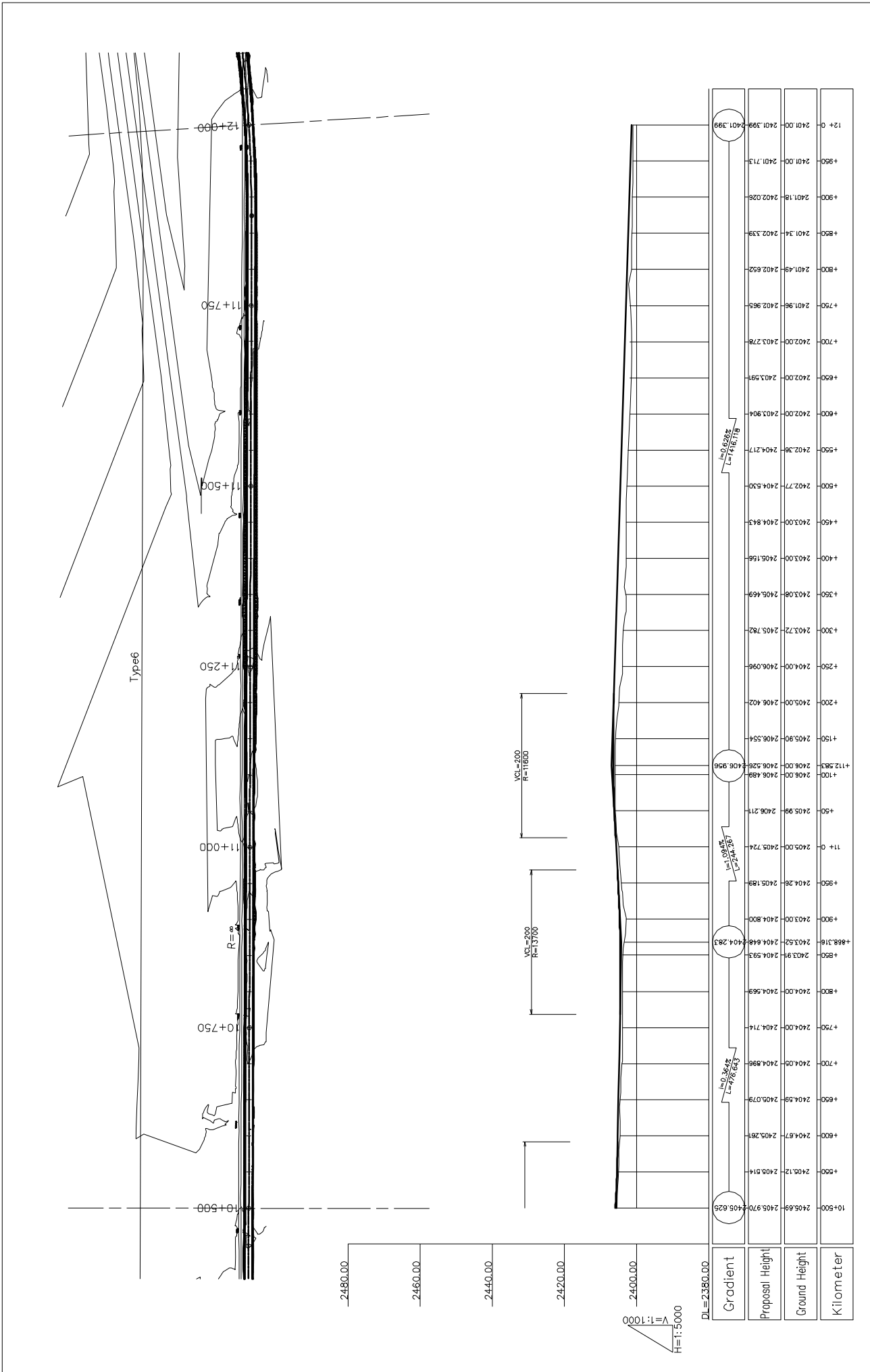
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Plan and Profile (7/45)



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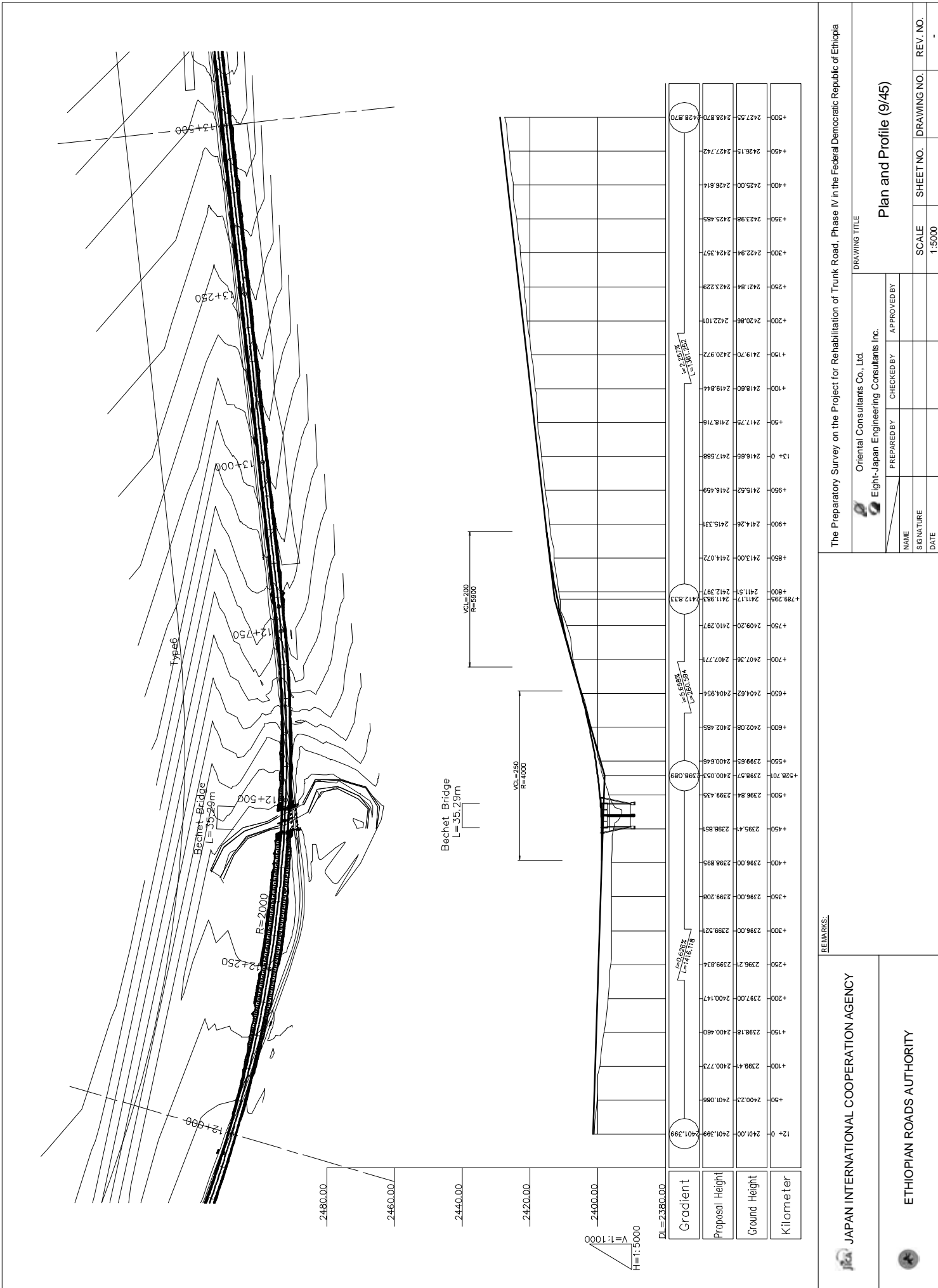
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Plan and Profile (8/45)



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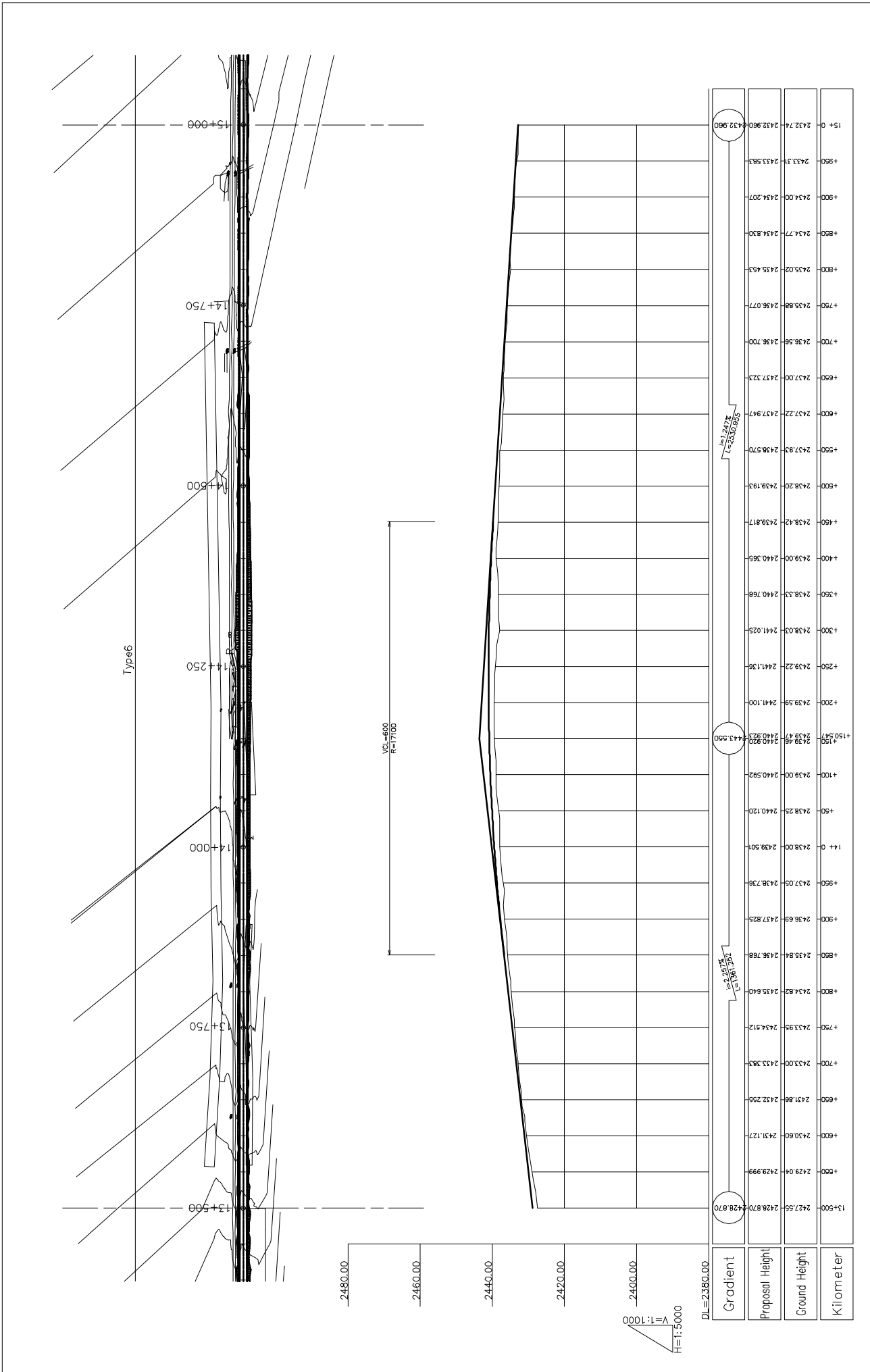
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DATE			

DRAWING TITLE

Plan and Profile (9/45)

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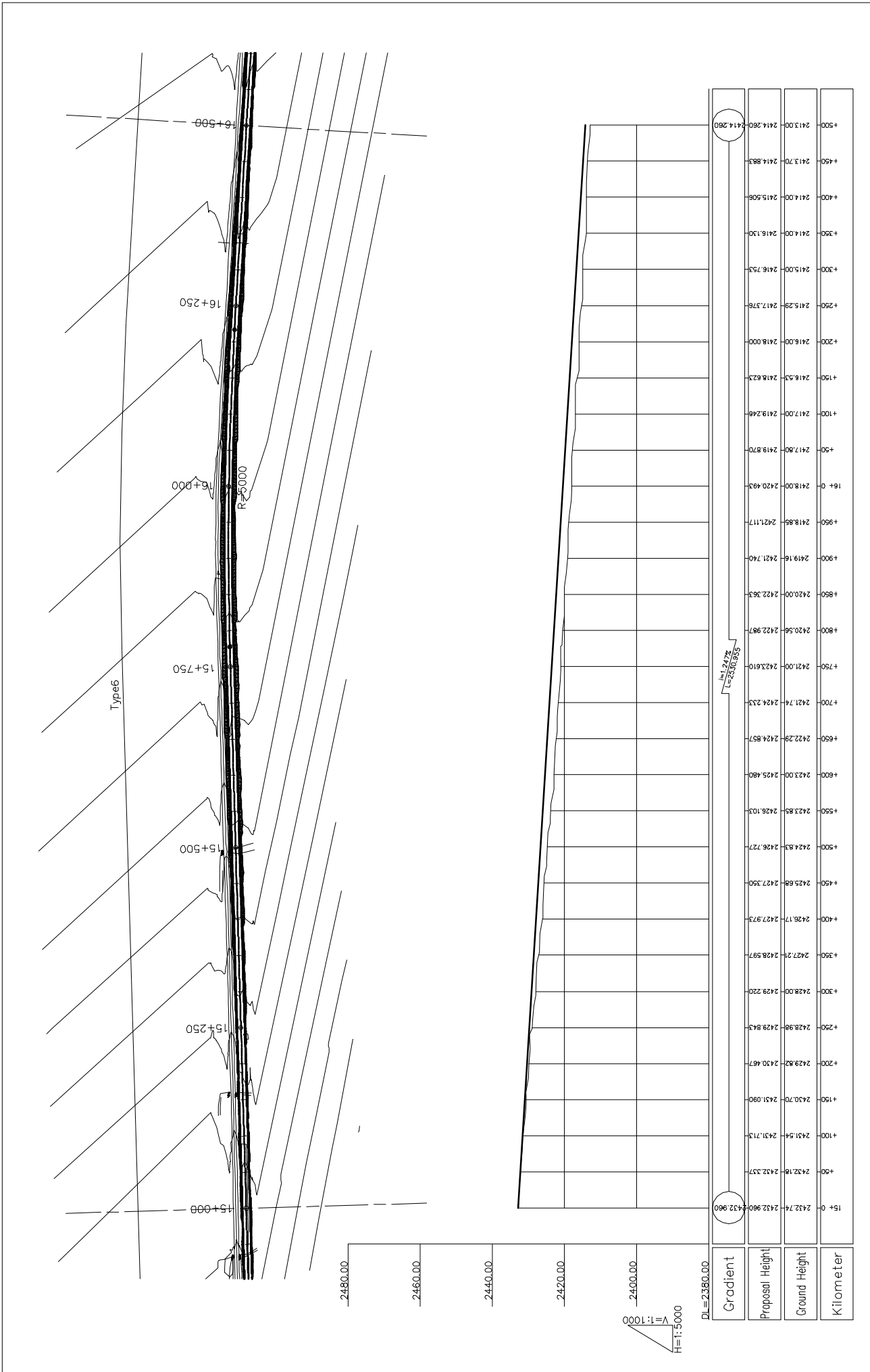
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Plan and Profile (10/45)



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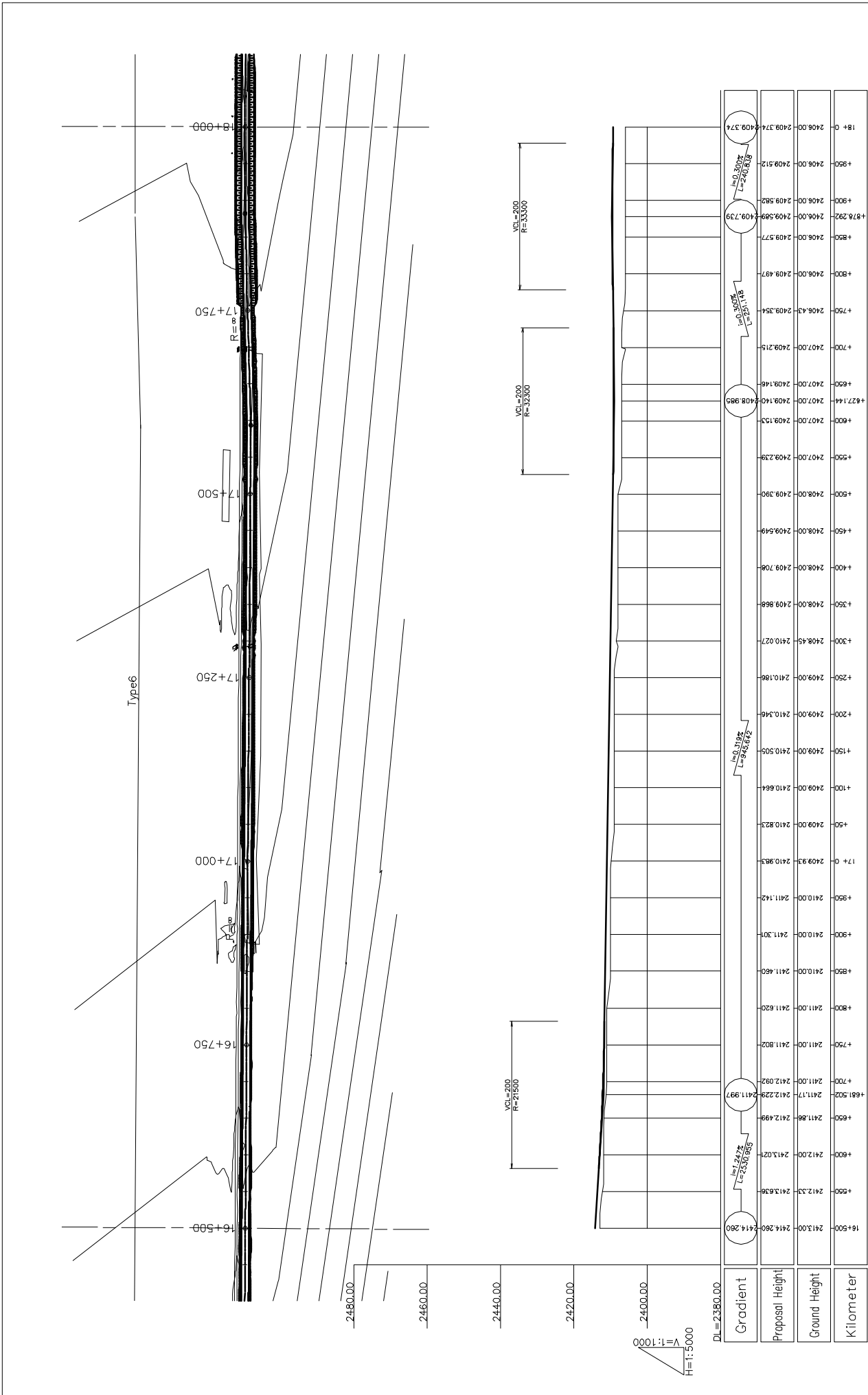
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Plan and Profile (1/45)

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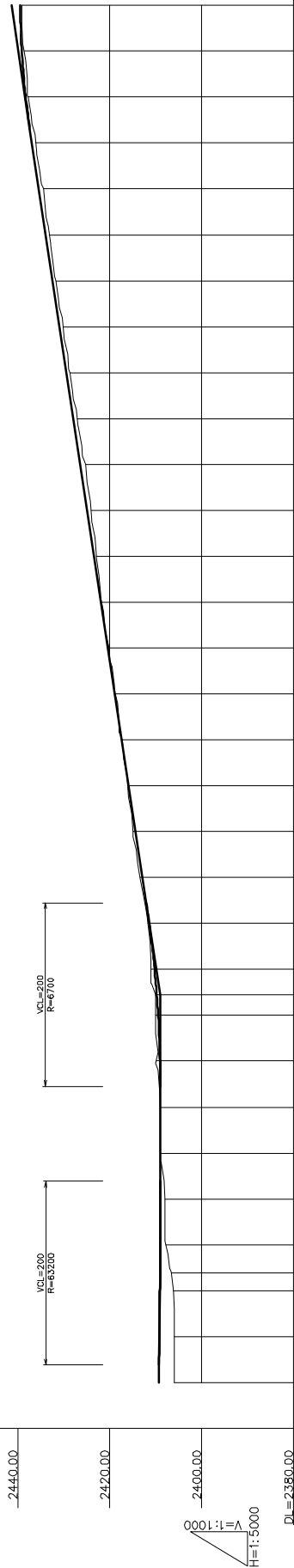
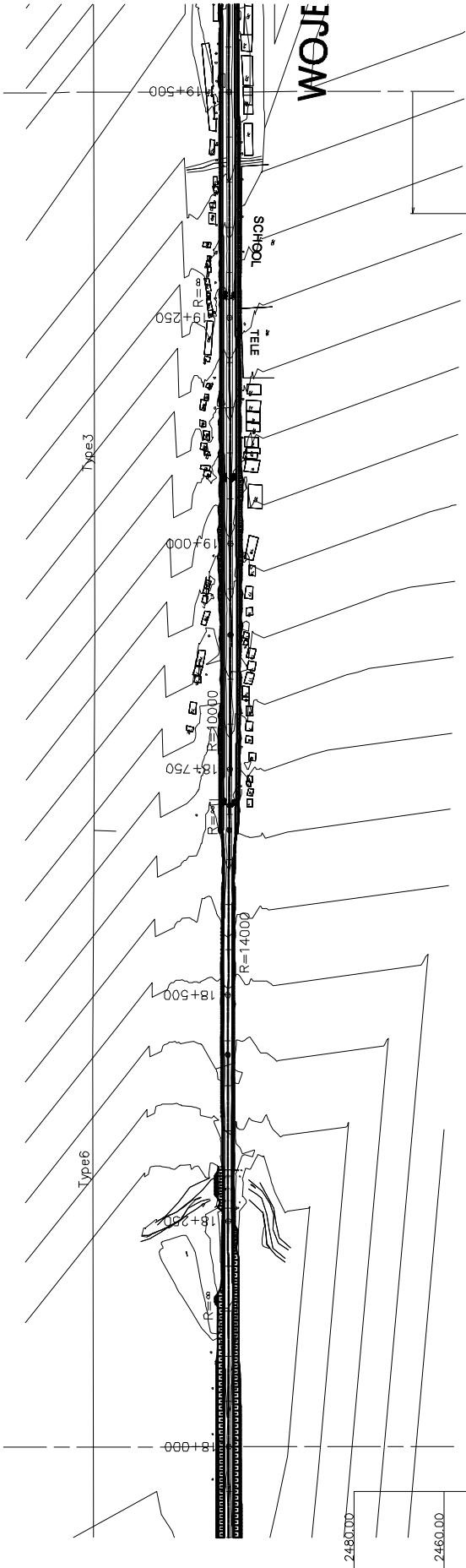
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Plan and Profile (12/45)



Station	Proposed Height	Ground Height	Kilometer
18+000	2406.00	2409.374	18.000
18+100	2408.00	2409.232	18.100
18+200	2406.20	2409.126	18.200
18+300	2406.66	2409.055	18.300
18+400	2407.81	2409.059	18.400
18+500	2408.00	2409.032	18.500
18+600	2408.00	2409.037	18.600
18+700	2409.00	2409.045	18.700
18+800	2409.91	2409.109	18.800
18+900	2410.00	2409.508	18.900
19+000	2410.00	2409.812	19.000
19+100	2411.00	2410.283	19.100
19+200	2411.58	2411.432	19.200
19+300	2413.39	2412.887	19.300
19+400	2414.00	2414.400	19.400
19+500	2415.00	2415.903	19.500
19+600	2416.13	2417.406	19.600
19+700	2417.40	2418.909	19.700
19+800	2418.83	2420.412	19.800
19+900	2420.19	2421.915	19.900
20+000	2421.71	2423.418	20.000
20+100	2423.20	2424.921	20.100
20+200	2424.53	2426.424	20.200
20+300	2425.44	2427.927	20.300
20+400	2426.69	2429.430	20.400
20+500	2428.19	2430.933	20.500
20+600	2429.89	2432.436	20.600
20+700	2431.71	2433.940	20.700
20+800	2433.20	2435.443	20.800
20+900	2434.89	2436.946	20.900
21+000	2437.89	2438.449	21.000
21+100	2438.69	2439.952	21.100
21+200	2439.53	2441.455	21.200

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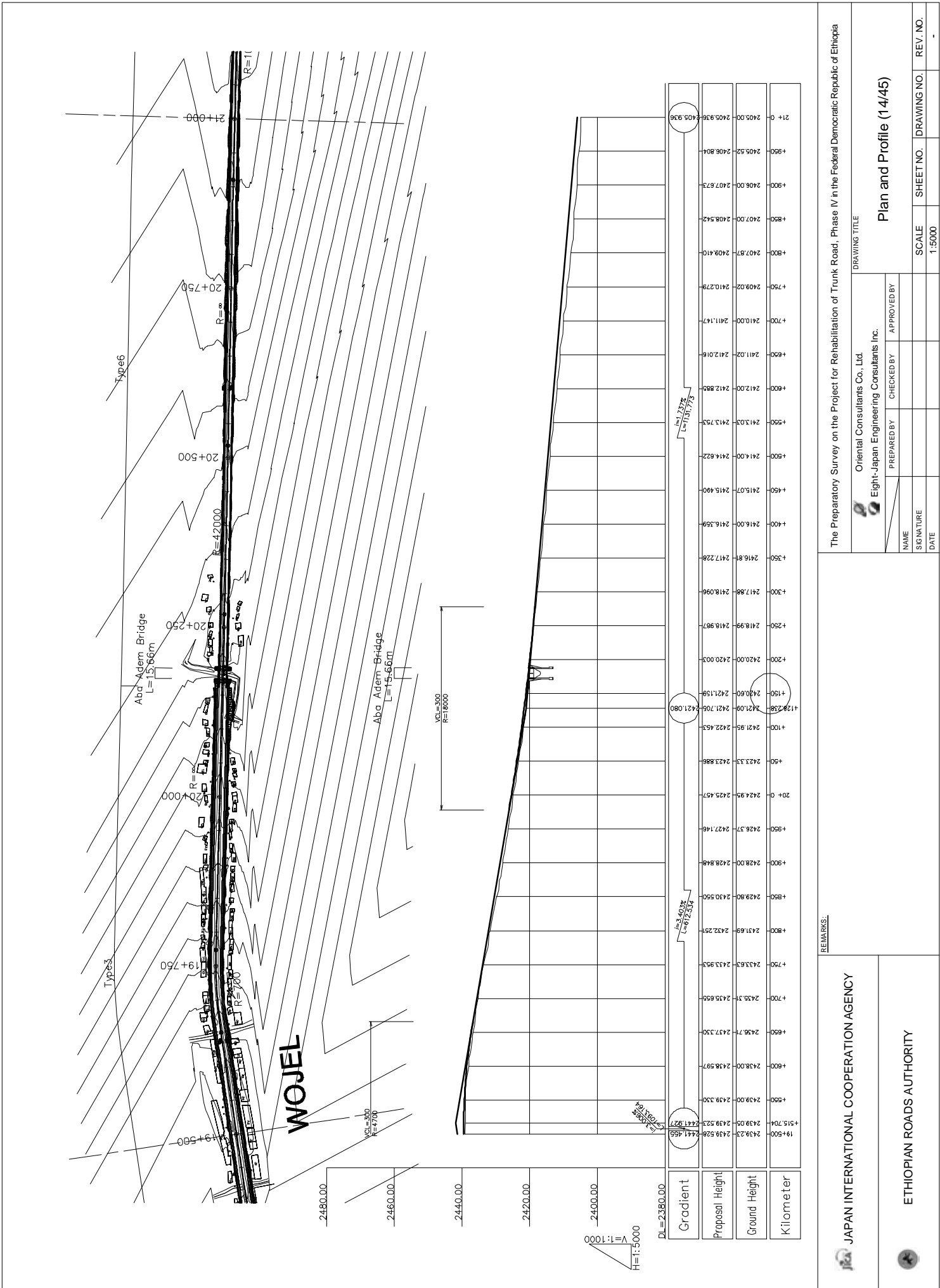
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DRAWING TITLE: **Plan and Profile (13/45)**

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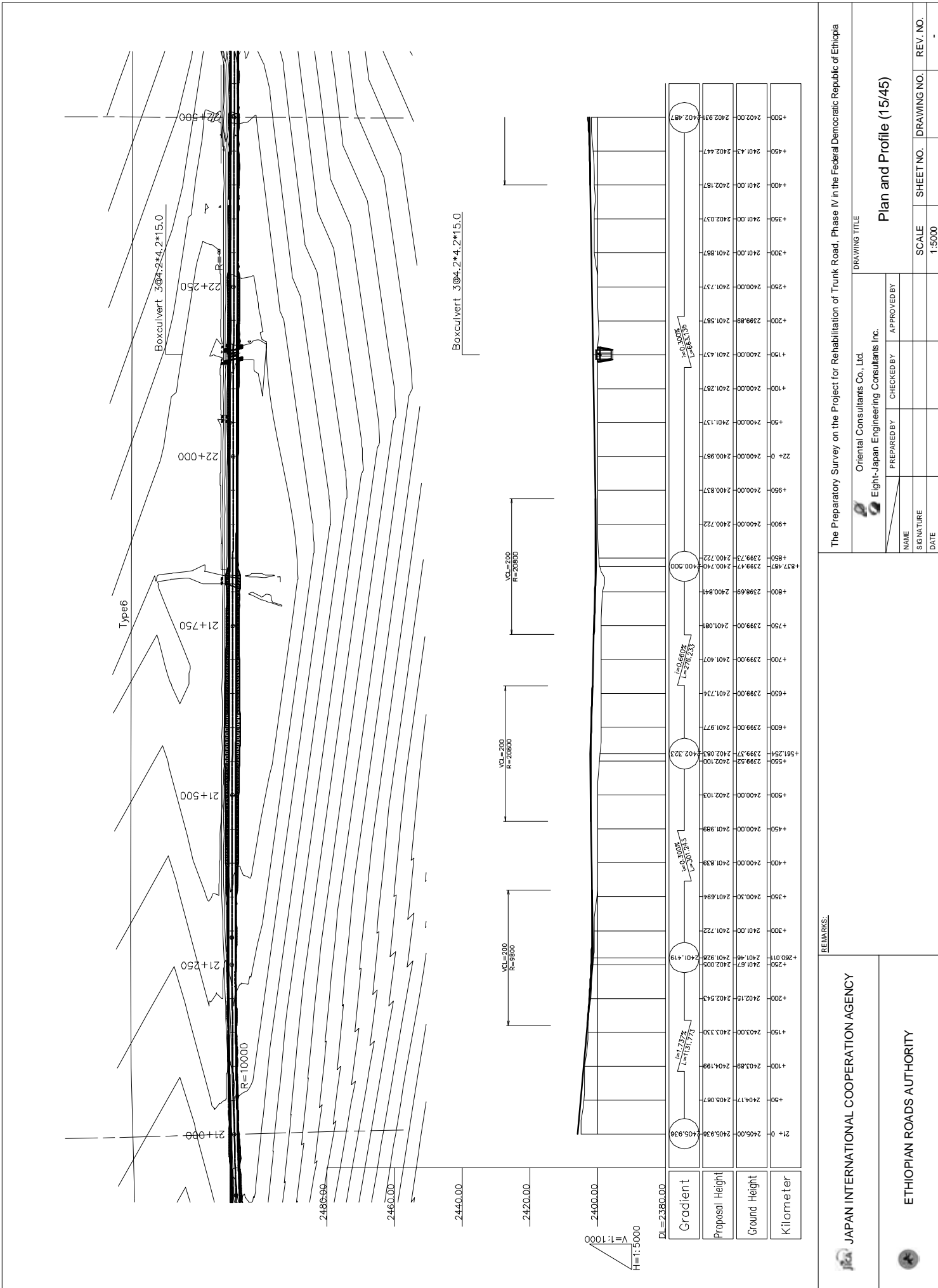
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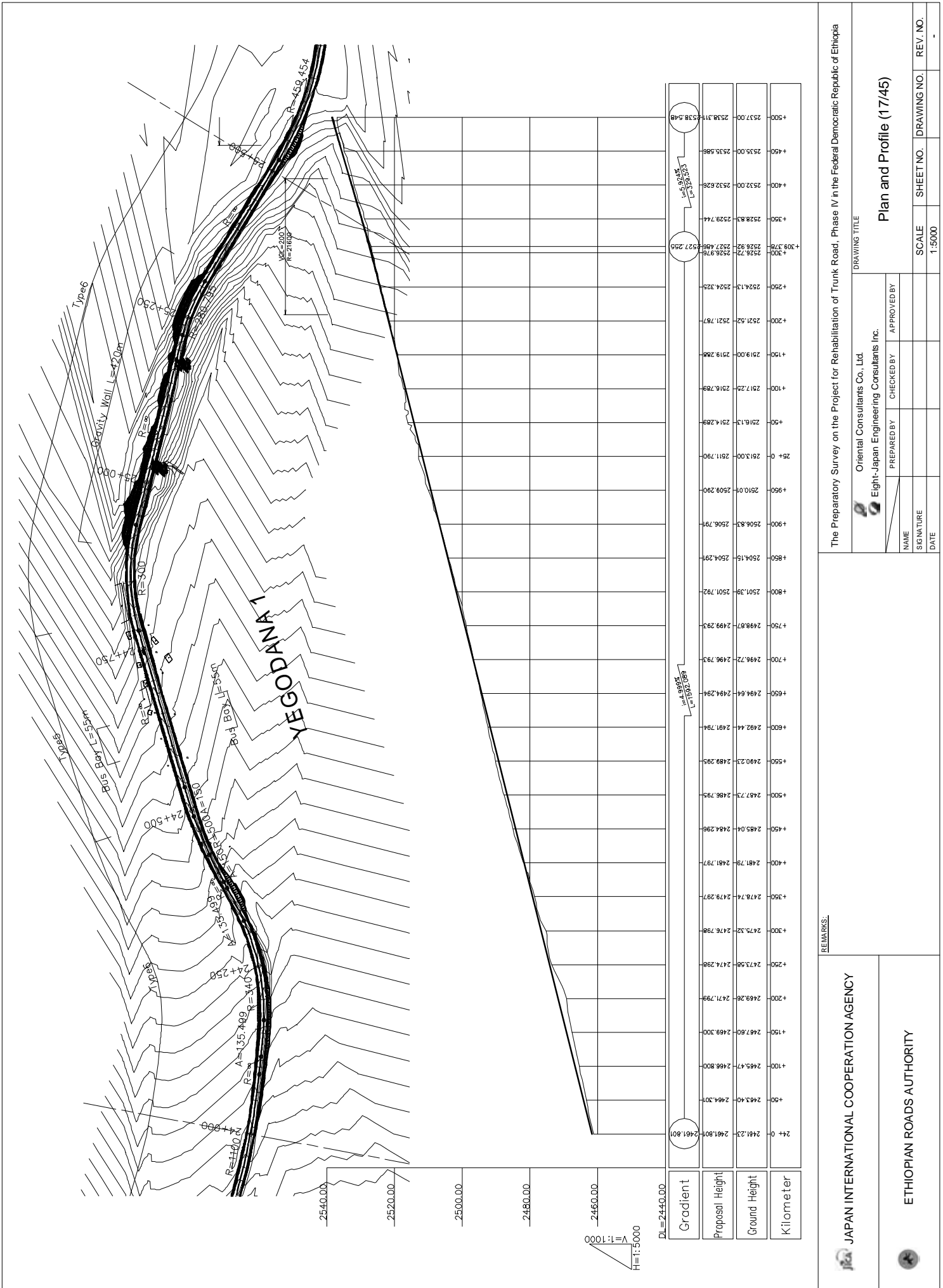
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Plan and Profile (14/45)





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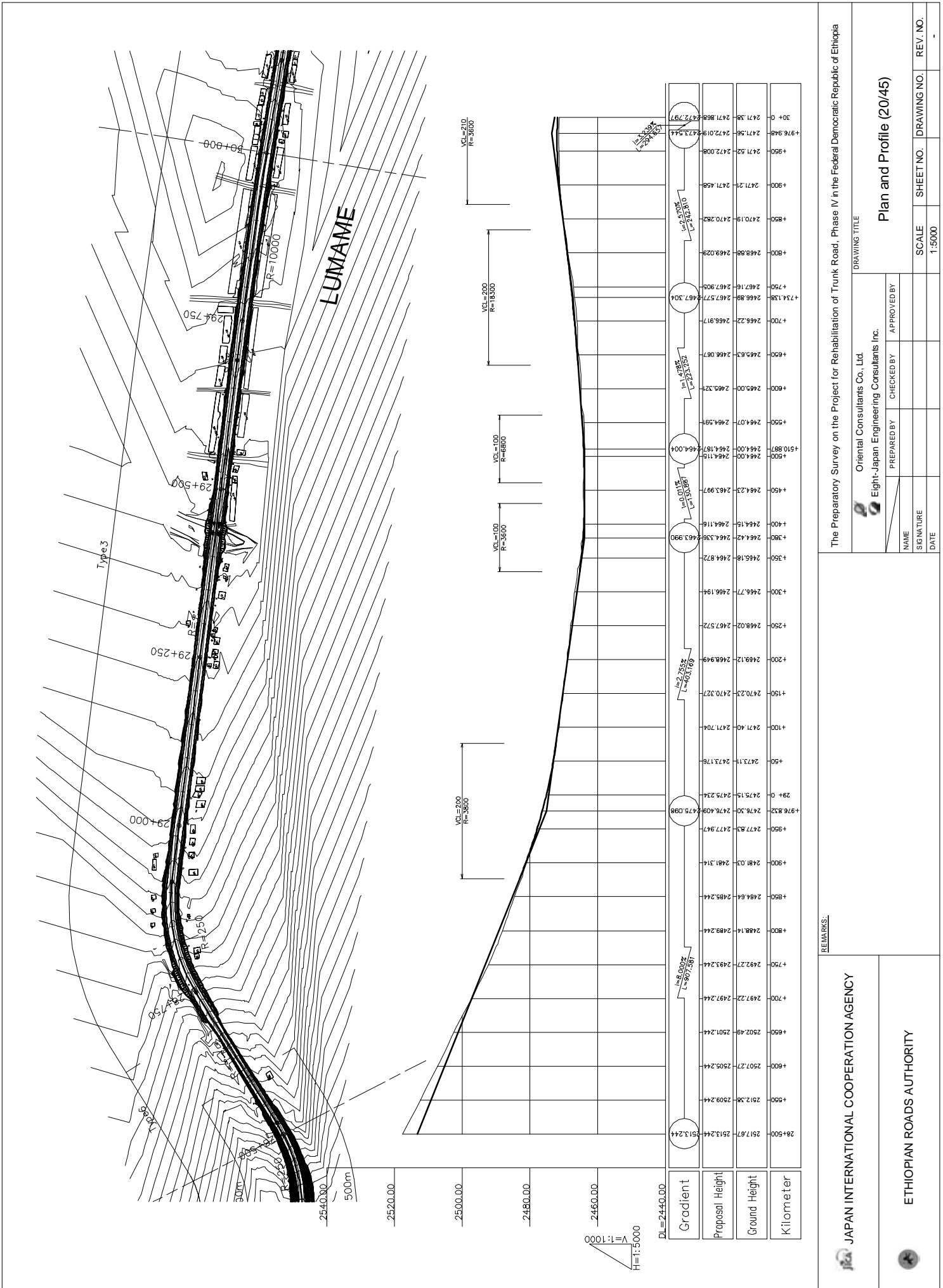
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NAME: _____ SIG NATURE: _____ DATE: _____

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Plan and Profile (1745)



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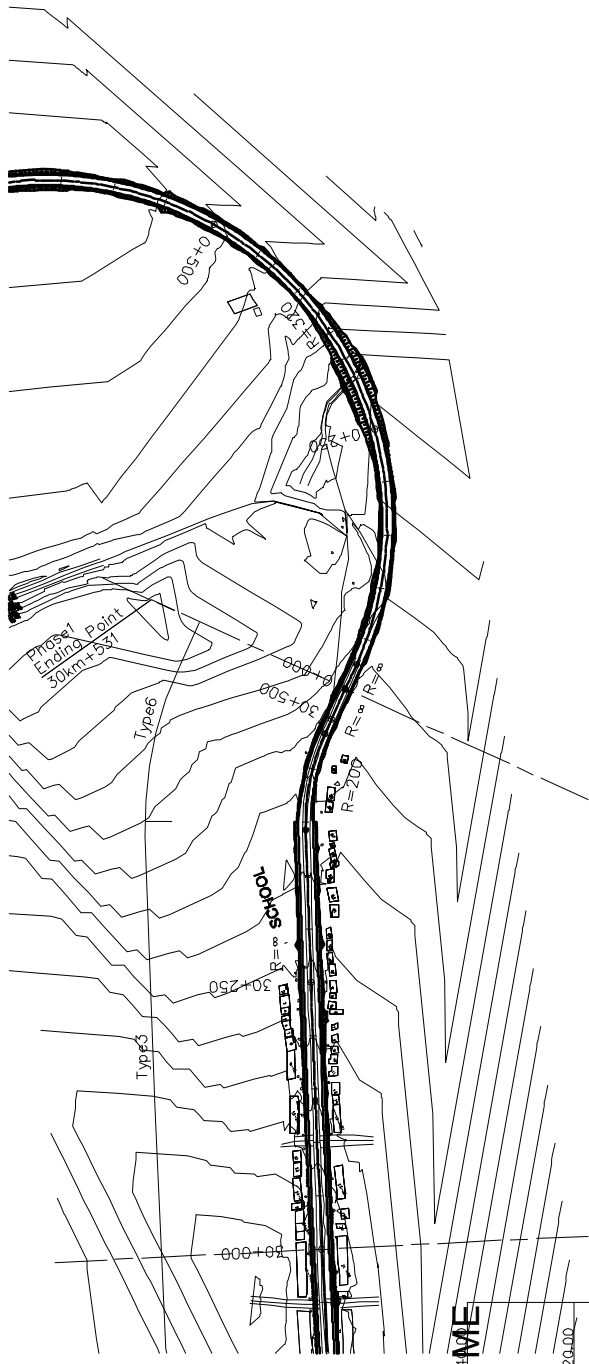
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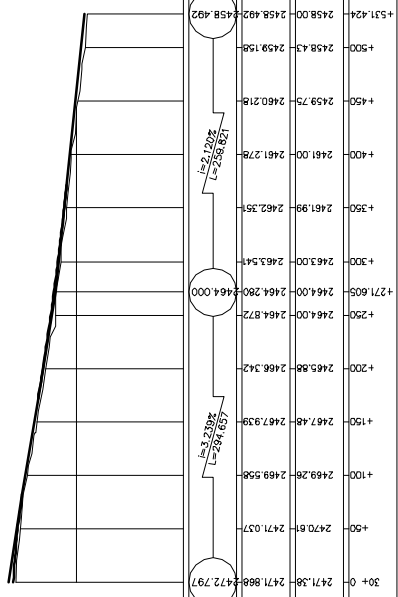
2520.00

2500.00

2480.00

2460.00

V=1:1000
H=1:5000



Station	Proposed Height	Ground Height	Kilometer
30+000	2471.38	2471.88	472.797
35+000	2469.28	2469.58	472.797
40+000	2461.00	2461.27	472.797
45+000	2459.75	2460.21	472.797
50+000	2458.43	2459.15	472.797
51+424	2458.00	2458.49	472.797

REMARKS:

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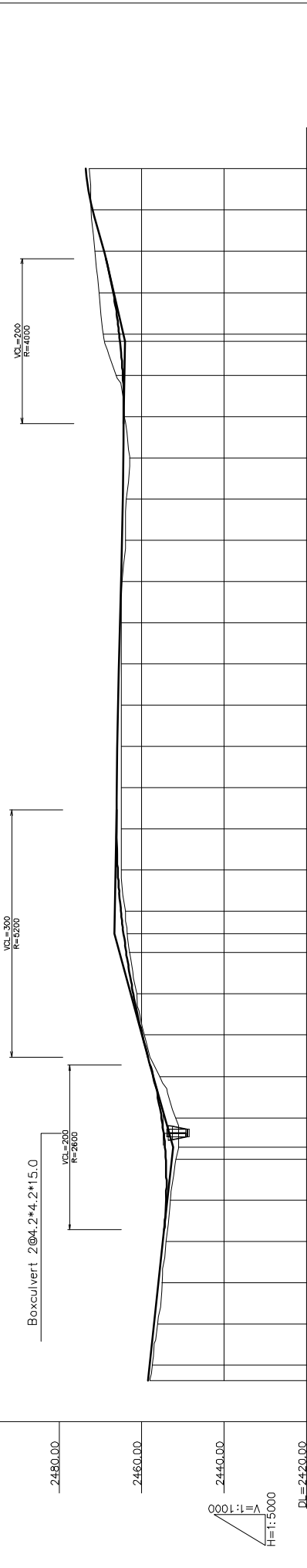
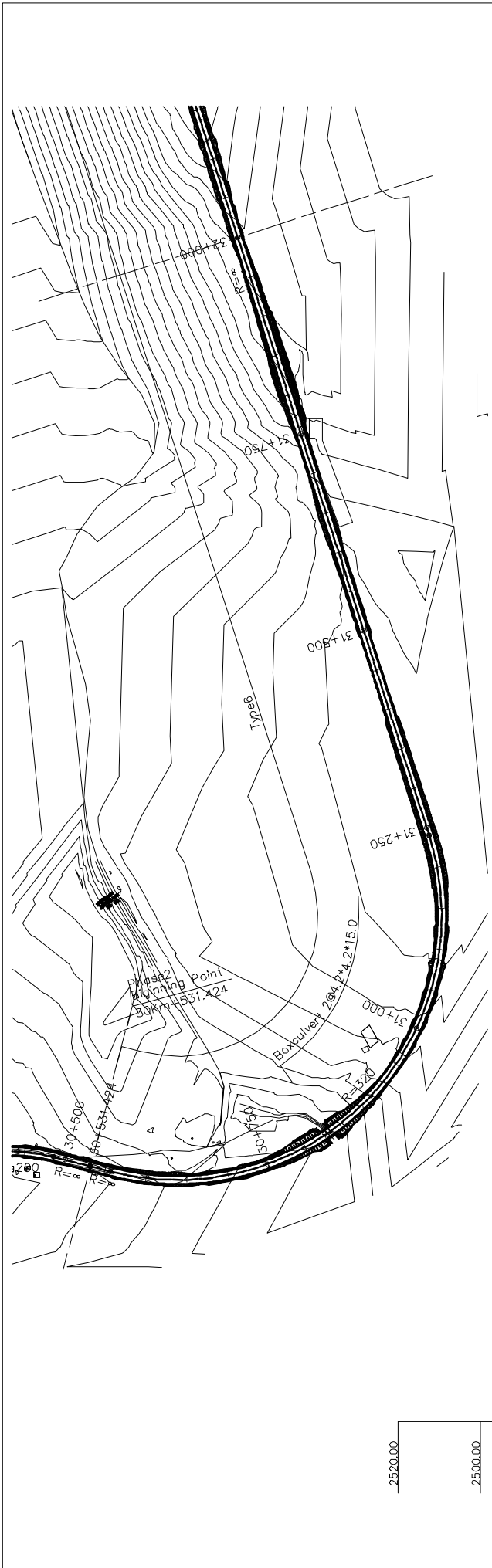
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DATE			

Plan and Profile (21/45)

SCALE	SHEET NO.	DRAWING NO.	REV. NO.
1:5000			



Station	Ground Height	Proposed Height	Gradient
32+000	2472.80	2473.637	-0.37%
31+950	2472.52	2471.343	-0.93%
31+900	2471.36	2469.048	-0.93%
31+850	2470.39	2466.965	-0.85%
31+800	2469.45	2465.201	-0.73%
31+750	2468.27	2464.636	-0.37%
31+700	2464.25	2464.401	0.09%
31+650	2462.99	2464.571	0.71%
31+600	2463.63	2464.750	0.75%
31+550	2464.00	2464.929	0.75%
31+500	2464.73	2465.108	0.75%
31+450	2465.00	2465.288	0.75%
31+400	2465.00	2465.467	0.75%
31+350	2465.00	2465.646	0.75%
31+300	2465.00	2465.825	0.75%
31+250	2465.00	2466.004	0.75%
31+200	2465.00	2466.183	0.75%
31+150	2465.00	2466.362	0.75%
31+100	2464.00	2464.541	-0.75%
31+050	2463.53	2464.458	-0.33%
31+000	2463.02	2463.815	-0.21%
30+950	2461.32	2462.074	-0.71%
30+900	2459.33	2459.849	-0.71%
30+850	2455.71	2457.229	-1.05%
30+800	2451.78	2454.241	-1.24%
30+750	2451.00	2454.395	-0.06%
30+700	2454.18	2454.918	0.21%
30+650	2455.08	2455.978	0.43%
30+600	2456.16	2457.038	0.43%
30+550	2457.43	2458.098	0.43%
30+500	2458.00	2458.492	0.16%

REMARKS:

JAPAN INTERNATIONAL COOPERATION AGENCY

ETHIOPIAN ROADS AUTHORITY

The Preparatory Survey on the Project for Rehabilitation of Trunk Road, Phase IV in the Federal Democratic Republic of Ethiopia

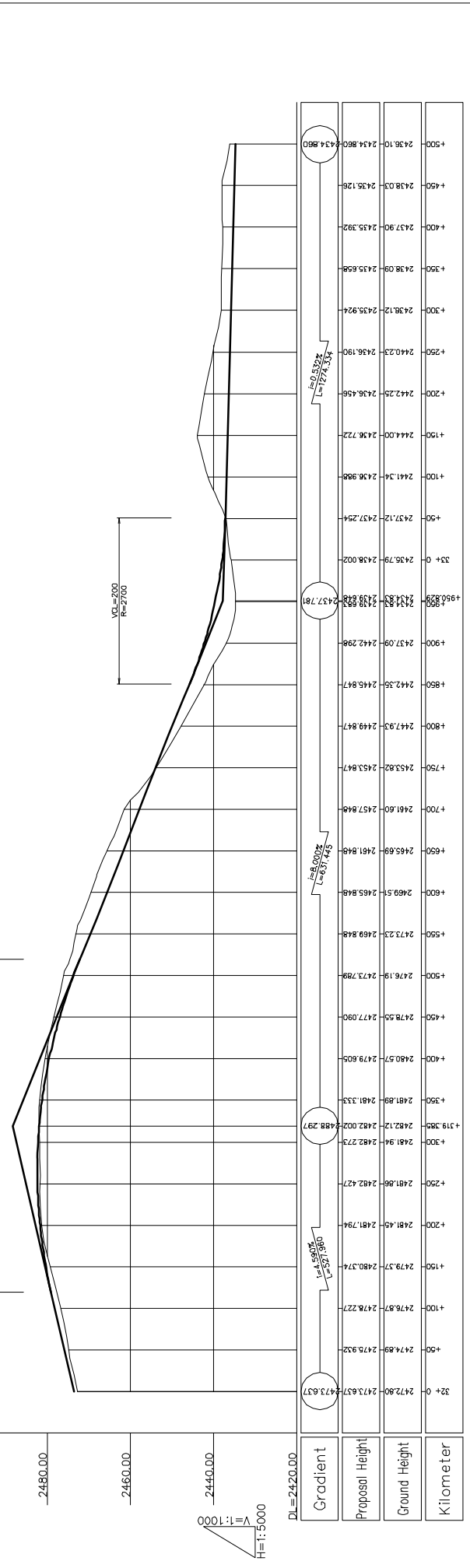
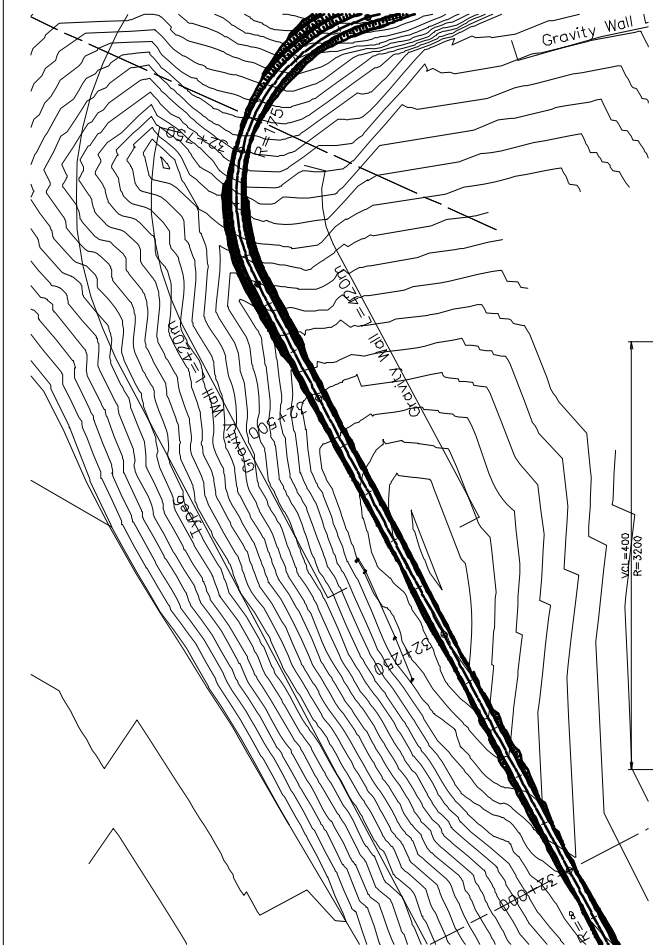
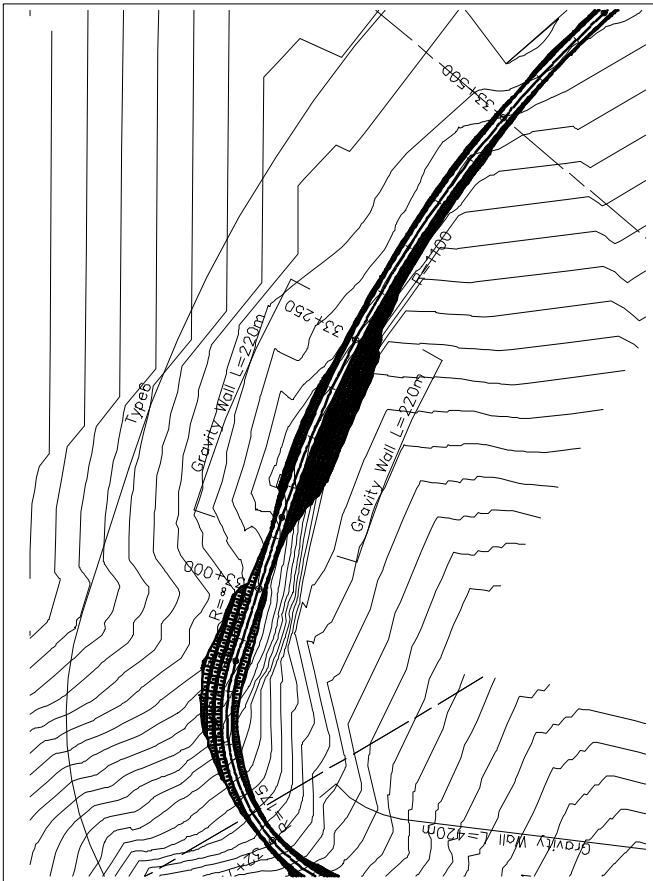
DRAWING TITLE: Oriental Consultants Co., Ltd. Eight-Japan Engineering Consultants Inc.

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Plan and Profile (22/45)



REMARKS:

JAPAN INTERNATIONAL COOPERATION AGENCY

ETHIOPIAN ROADS AUTHORITY

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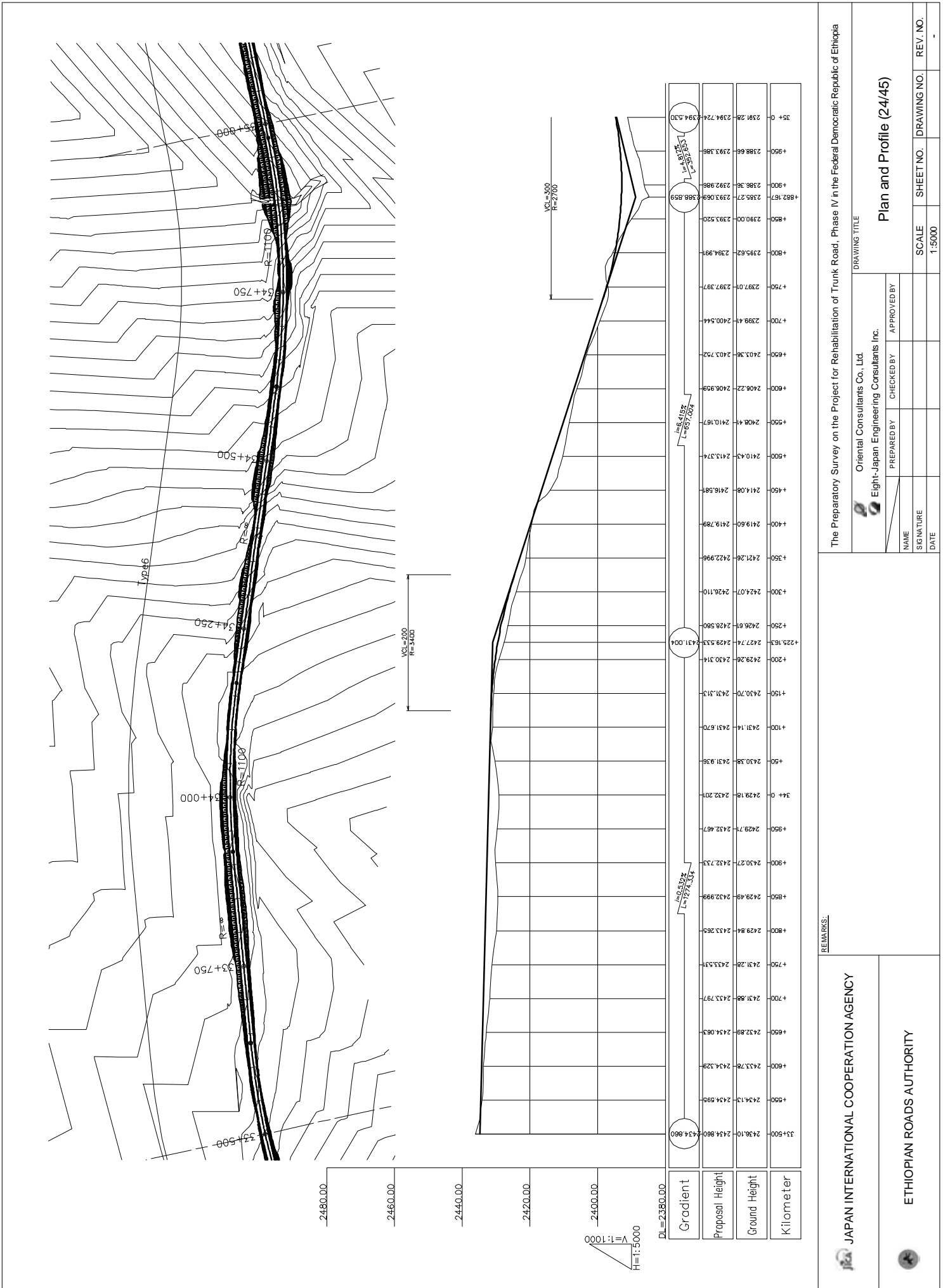
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Plan and Profile (23/45)



REMARKS:

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

ETHIOPIAN ROADS AUTHORITY

The Preparatory Survey on the Project for Rehabilitation of Trunk Road, Phase IV in the Federal Democratic Republic of Ethiopia

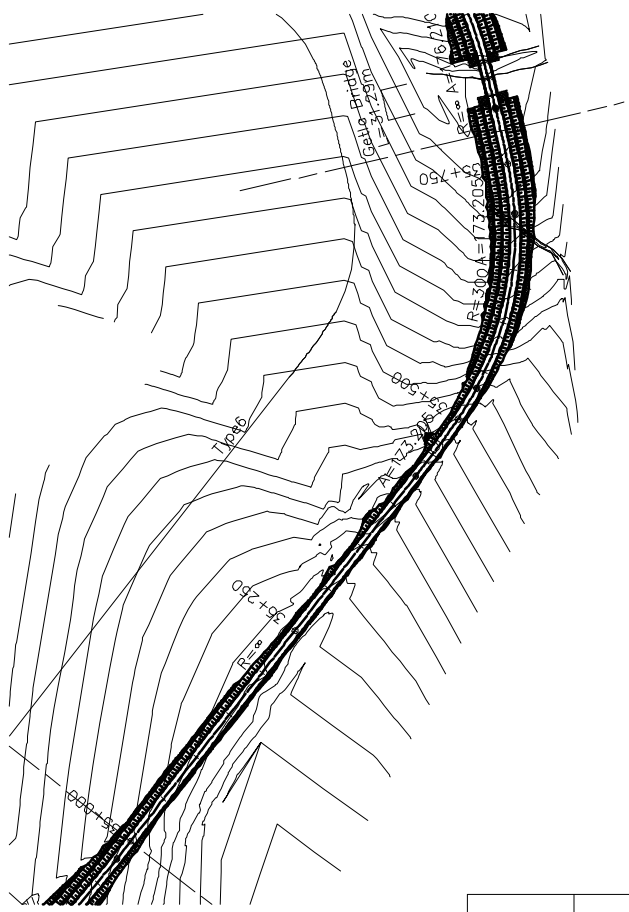
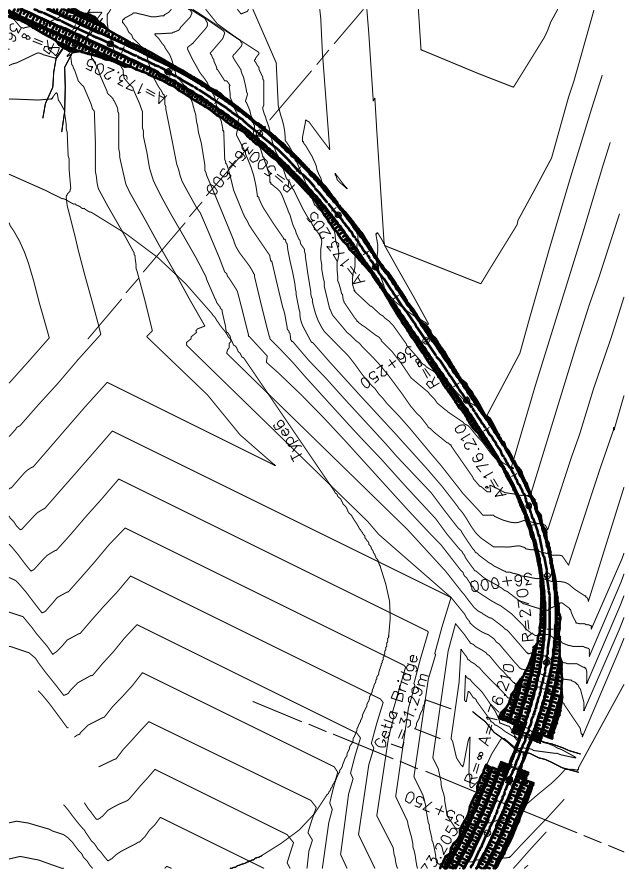
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NAME: _____ SIGNATURE: _____ DATE: _____

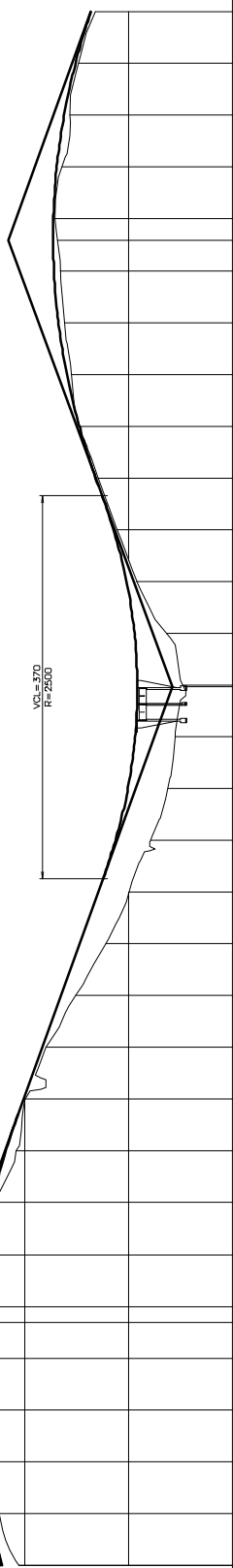
SCALE: 1:5000 SHEET NO. DRAWING NO. REV. NO.

Plan and Profile (24/45)



Getla Bridge
L=31.29m

VC=275
R=3300



Station	Ground Height	Proposed Height	Gradient
35+00	2391.28	2394.724	394.530
+50	2394.96	2398.90	
+100	2396.63	2398.704	
+150	2397.73	2398.756	
+200	2397.74	2400.050	
+250	2398.90	2399.82	405.830
+300	2398.02	2398.404	
+350	2398.05	2398.450	
+400	2391.69	2393.746	
+450	2389.98	2390.328	
+500	2385.94	2386.723	
+550	2380.26	2383.120	
+600	2374.42	2379.518	
+650	2369.98	2375.915	
+700	2365.81	2372.582	
+750	2362.47	2370.196	
+800	2361.07	2368.792	
+850	2359.29	2368.368	
+900	2352.83	2358.928	
+950	2348.45	2370.468	
+1000	2379.49	2379.577	
+1500	2381.12	2381.969	
+2000	2382.57	2383.597	
+2500	2383.22	2384.465	
+3000	2384.26	2384.618	393.218
+3500	2382.86	2383.91	
+4000	2381.37	2382.492	
+4500	2379.79	2380.308	
+5000	2376.50	2377.364	377.407

REMARKS:

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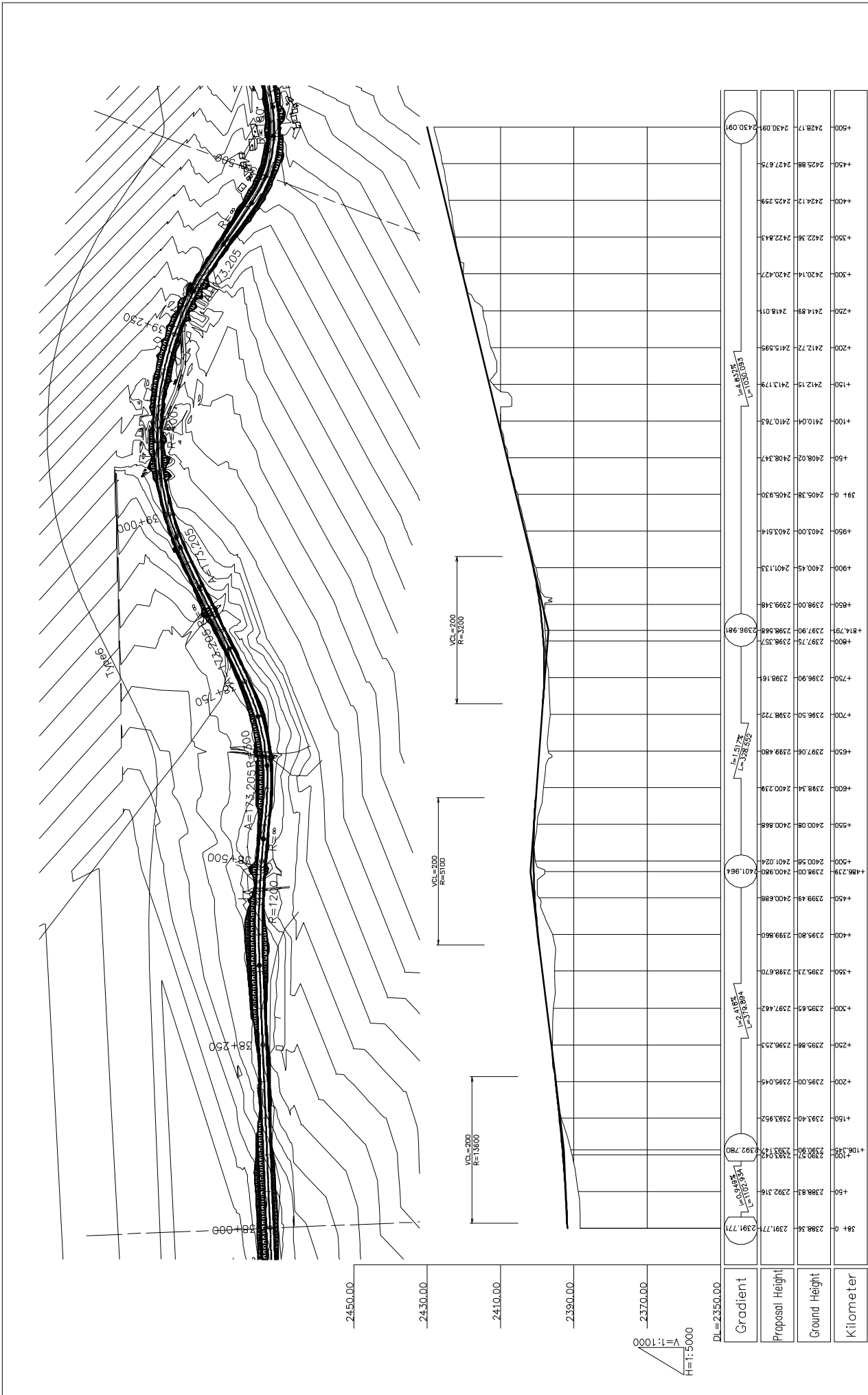
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Plan and Profile (25/45)



REMARKS:

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The Preparatory Survey on the Project for Rehabilitation of Trunk Road, Phase IV in the Federal Democratic Republic of Ethiopia

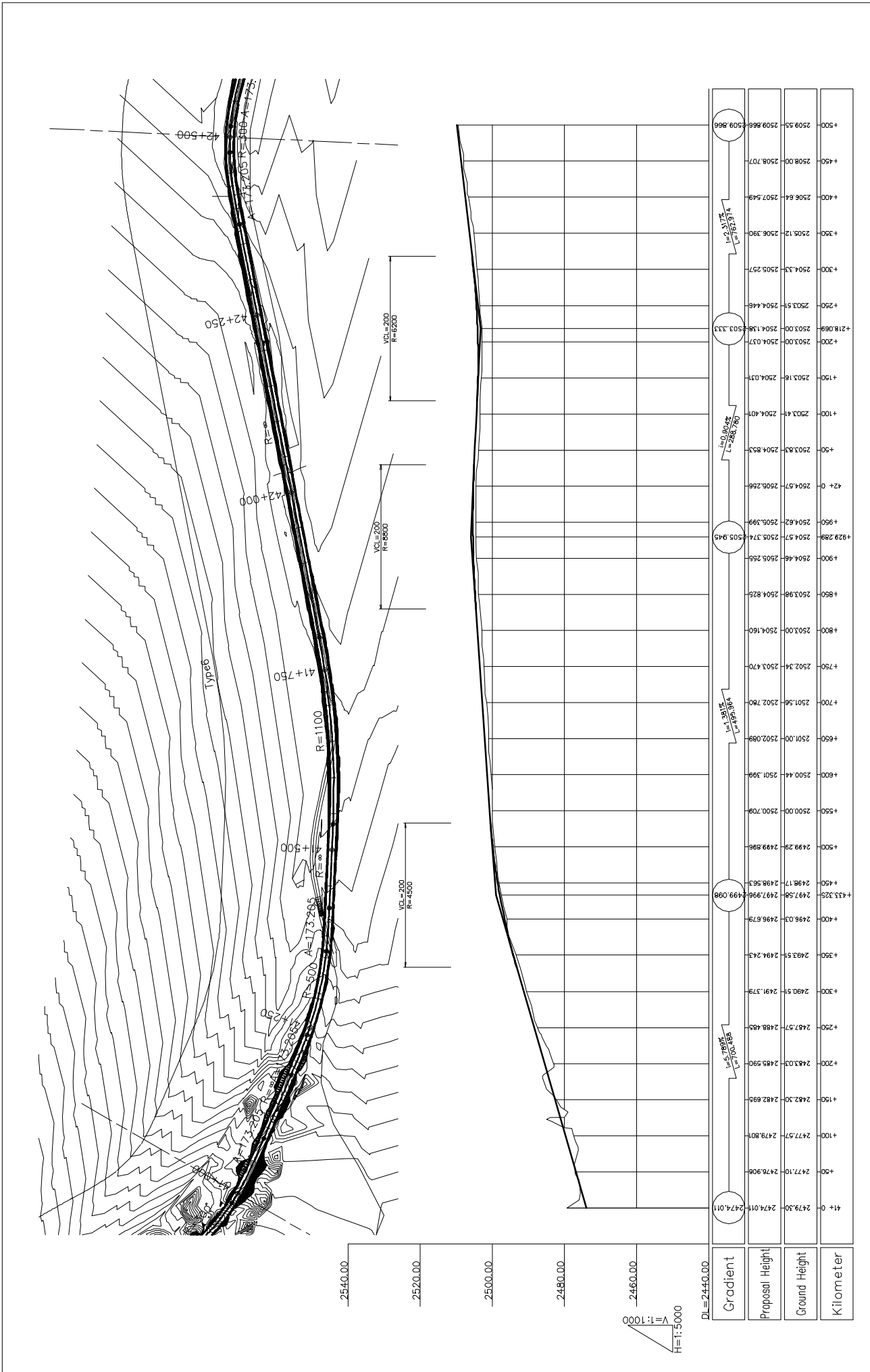
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Plan and Profile (27/45)



REMARKS:

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ETHIOPIAN ROADS AUTHORITY

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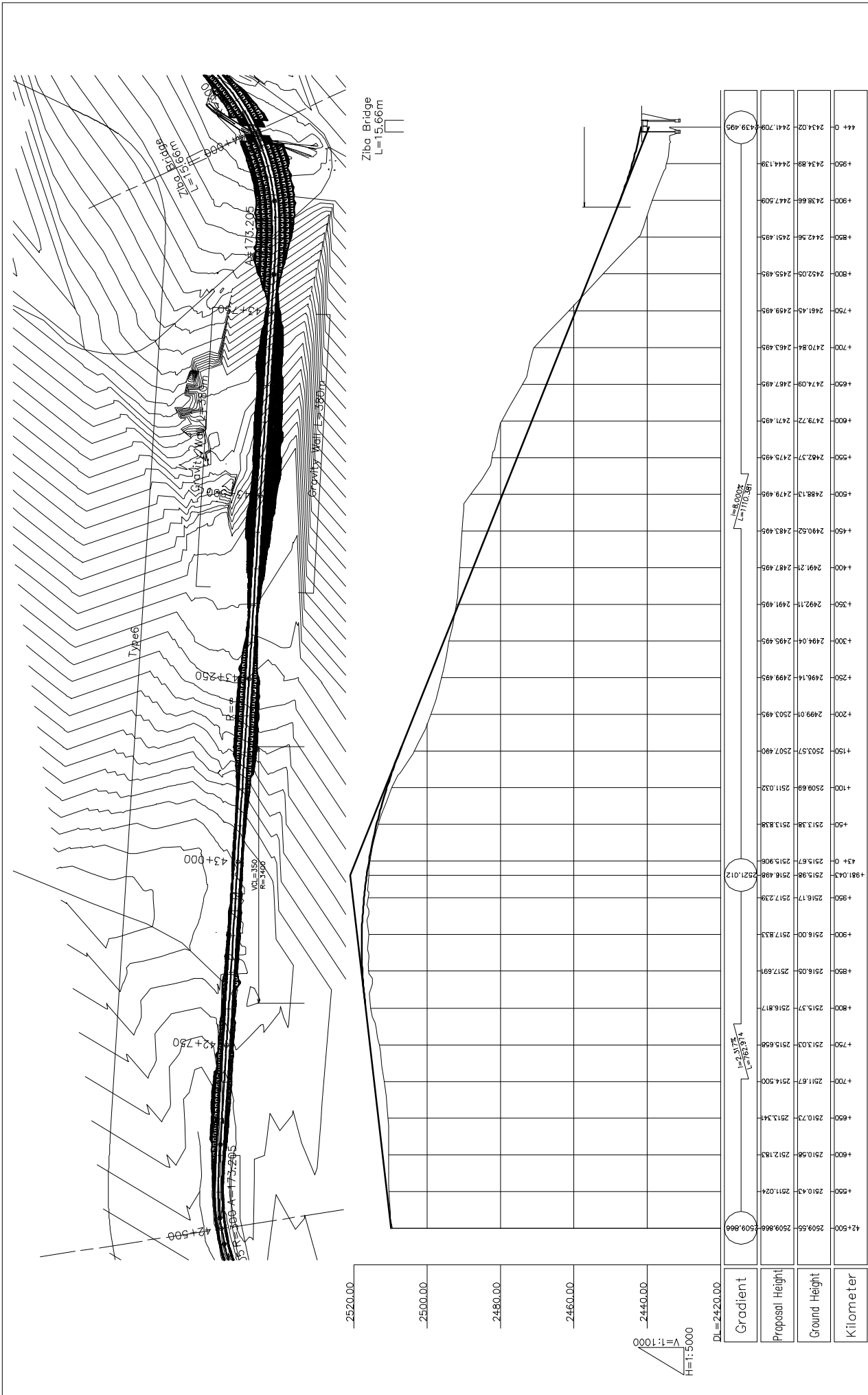
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Plan and Profile (29/45)



REMARKS:

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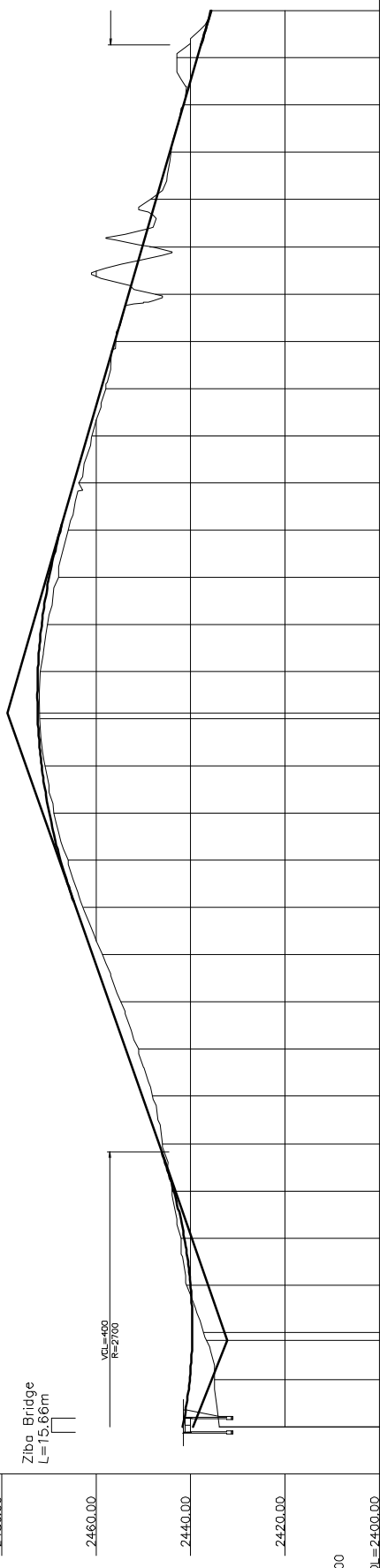
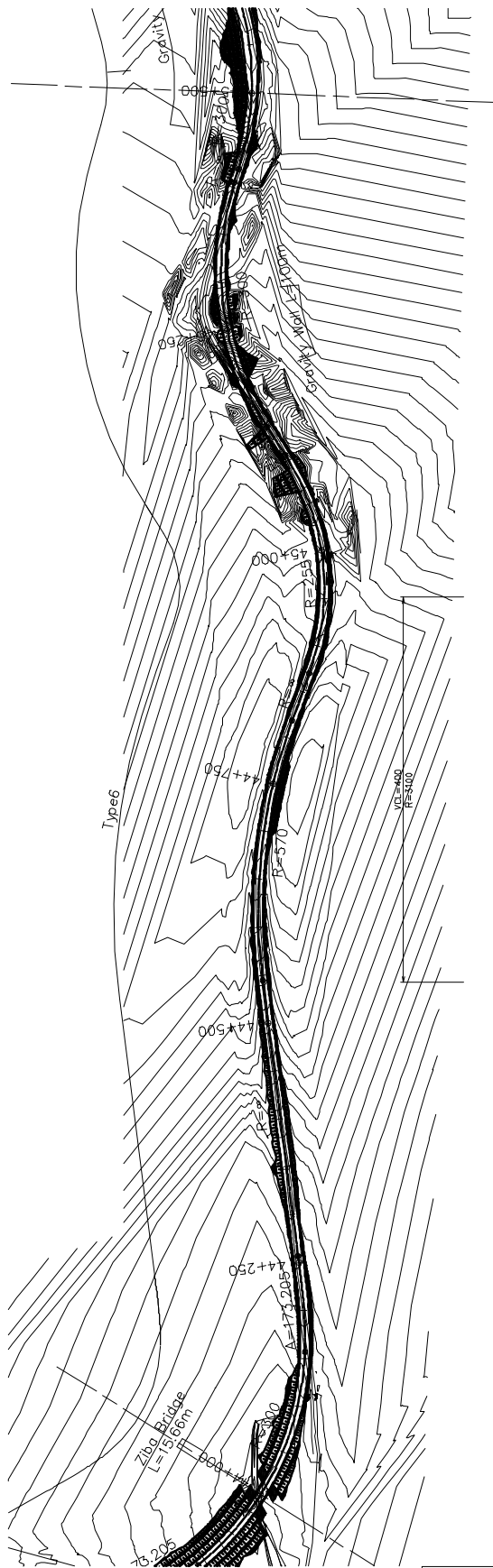
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DATE			

DRAWING TITLE

Plan and Profile (30/45)

SCALE	SHEET NO.	DRAWING NO.	REV. NO.
1:5000			



Station	Proposition Height	Ground Height	Kilometer
44+000	2434.02	2441.709	439.495
44+100	2435.00	2440.217	
44+200	2436.66	2438.693	2432.181
44+300	2437.30	2438.664	
44+400	2438.00	2438.852	
44+500	2438.78	2439.364	
44+600	2439.58	2440.095	
44+700	2440.33	2440.978	
44+800	2441.82	2442.396	
44+900	2443.33	2443.596	
45+000	2444.00	2443.640	
45+100	2444.22	2443.578	
45+200	2444.43	2443.378	
45+300	2444.57	2443.098	
45+400	2444.67	2442.739	
45+500	2444.74	2442.310	
45+600	2444.78	2441.827	
45+700	2444.80	2441.296	
45+800	2444.81	2440.716	
45+900	2444.80	2440.098	
46+000	2444.78	2439.442	
46+100	2444.74	2438.664	
46+200	2444.67	2437.778	
46+300	2444.57	2436.793	
46+400	2444.43	2435.717	
46+500	2444.22	2434.550	
46+600	2443.95	2433.293	
46+700	2443.61	2431.946	
46+800	2443.22	2430.519	
46+900	2442.79	2428.912	
47+000	2442.33	2427.135	
47+100	2441.82	2425.198	
47+200	2441.27	2423.111	
47+300	2440.69	2420.874	
47+400	2440.08	2418.487	
47+500	2439.45	2415.959	
47+600	2438.79	2413.291	
47+700	2438.10	2410.484	
47+800	2437.38	2407.538	
47+900	2436.64	2404.453	
48+000	2435.88	2401.229	
48+100	2435.09	2397.866	
48+200	2434.27	2394.364	
48+300	2433.42	2390.723	
48+400	2432.54	2386.943	
48+500	2431.63	2382.924	
48+600	2430.69	2378.666	
48+700	2429.72	2374.170	
48+800	2428.72	2369.436	
48+900	2427.69	2364.464	
49+000	2426.63	2359.254	
49+100	2425.54	2353.805	
49+200	2424.42	2348.118	
49+300	2423.27	2342.193	
49+400	2422.09	2336.030	
49+500	2420.98	2329.729	
49+600	2419.84	2323.290	
49+700	2418.67	2316.713	
49+800	2417.47	2310.000	
49+900	2416.24	2303.151	
50+000	2414.98	2296.166	

REMARKS:

JAPAN INTERNATIONAL COOPERATION AGENCY

ETHIOPIAN ROADS AUTHORITY

The Preparatory Survey on the Project for Rehabilitation of Trunk Road, Phase IV in the Federal Democratic Republic of Ethiopia

DRAWING TITLE

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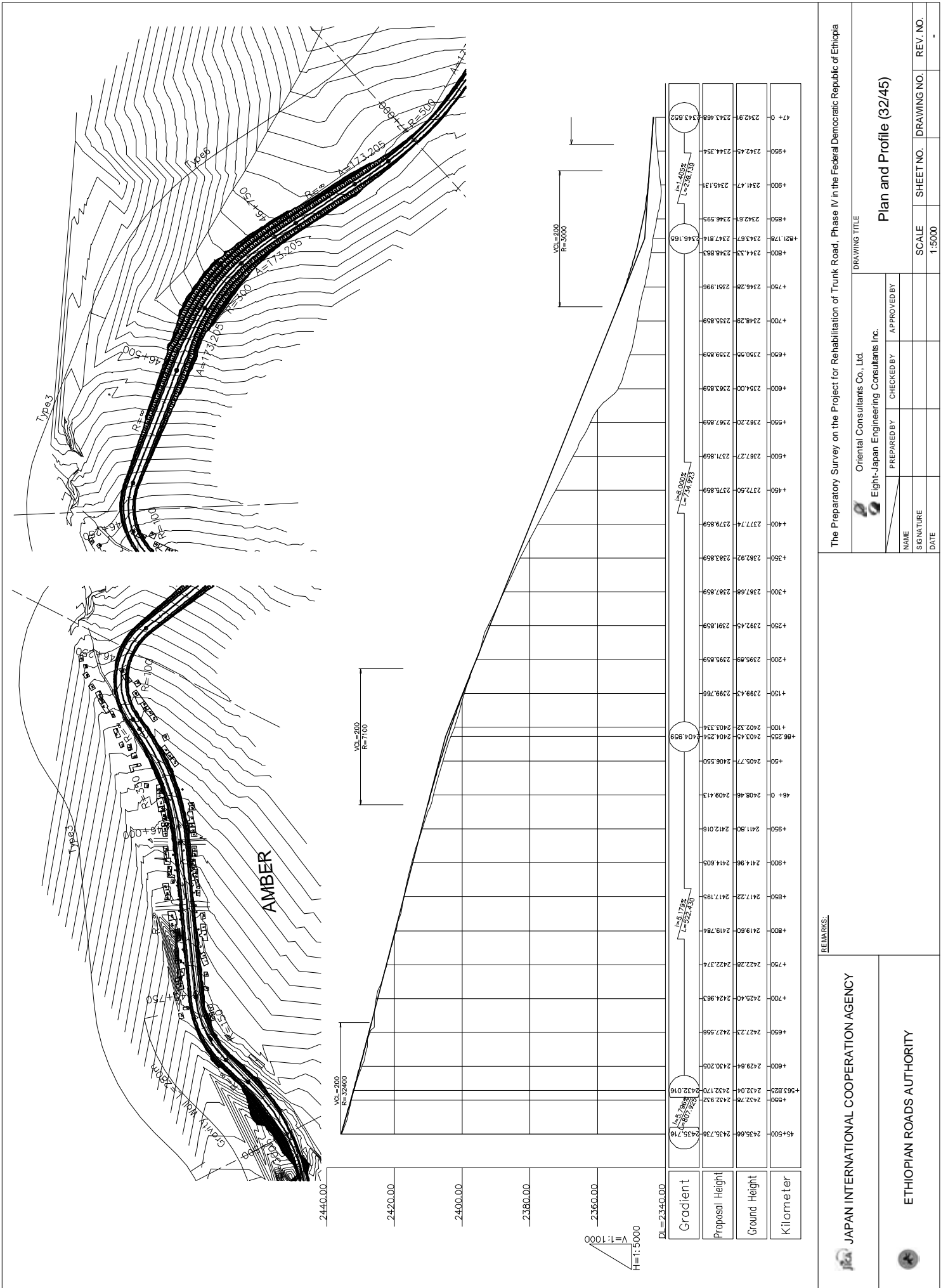
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SCALE: 1:5000

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Plan and Profile (31/45)



REMARKS:

JAPAN INTERNATIONAL COOPERATION AGENCY

ETHIOPIAN ROADS AUTHORITY

The Preparatory Survey on the Project for Rehabilitation of Trunk Road, Phase IV in the Federal Democratic Republic of Ethiopia

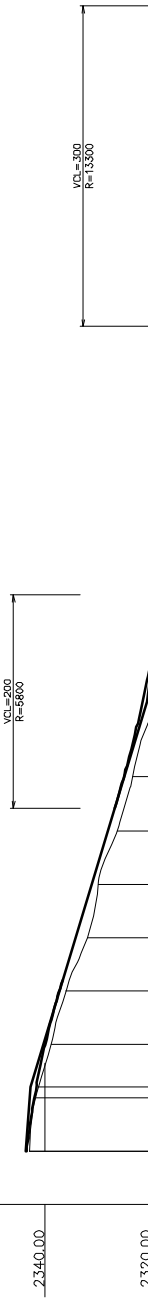
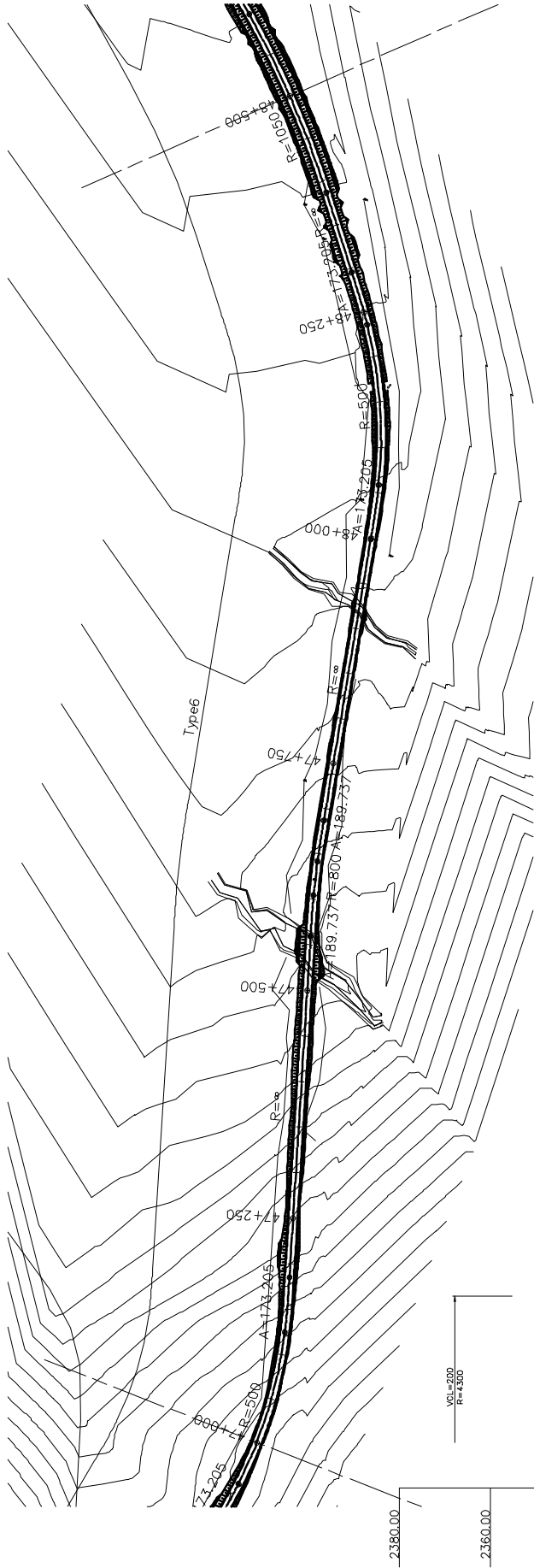
DRAWING TITLE: Plan and Profile (32/45)

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SCALE: 1:5000 SHEET NO. _____ DRAWING NO. _____ REV. NO. _____



V=1:1000
H=1:5000

Station	Proposed Height	Ground Height	Kilometer
2342.91	2343.468	2343.652	47+0
2341.68	2342.016	2341.838	47+50
2340.15	2340.576	2340.461	48+0
2338.94	2339.988	2339.988	48+100
2338.11	2337.343	2337.343	48+150
2332.04	2334.318	2331.278	48+200
2330.05	2331.278	2328.240	48+250
2328.49	2328.240	2325.278	48+300
2323.64	2325.278	2322.708	48+350
2320.76	2322.708	2321.769	48+400
2319.37	2321.769	2320.575	48+450
2318.29	2320.575	2318.878	48+500
2316.93	2318.878	2317.537	48+550
2315.29	2318.238	2316.238	48+600
2314.29	2314.934	2313.632	48+650
2312.92	2313.632	2312.333	48+700
2311.54	2312.333	2311.059	48+750
2310.32	2311.059	2309.856	48+800
2309.53	2309.958	2309.043	48+850
2308.50	2309.043	2308.703	48+900
2307.00	2308.317	2308.317	48+950
2307.00	2307.777	2307.426	49+0
2306.14	2307.426	2307.232	49+100
2305.38	2307.232	2307.056	49+150
2304.81	2307.056	2306.880	49+200
2304.42	2306.880	2306.704	49+250
2304.00	2306.704	2306.528	49+300
2303.30	2306.528	2306.352	49+350
2302.70	2306.352	2306.178	49+400
2302.00	2306.178	2306.000	49+450
2301.00	2305.824	2305.824	49+500

REMARKS:

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ETHIOPIAN ROADS AUTHORITY

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SIGNATURE			
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Plan and Profile (33/45)

SCALE	SHEET NO.	DRAWING NO.	REV. NO.
1:5000			