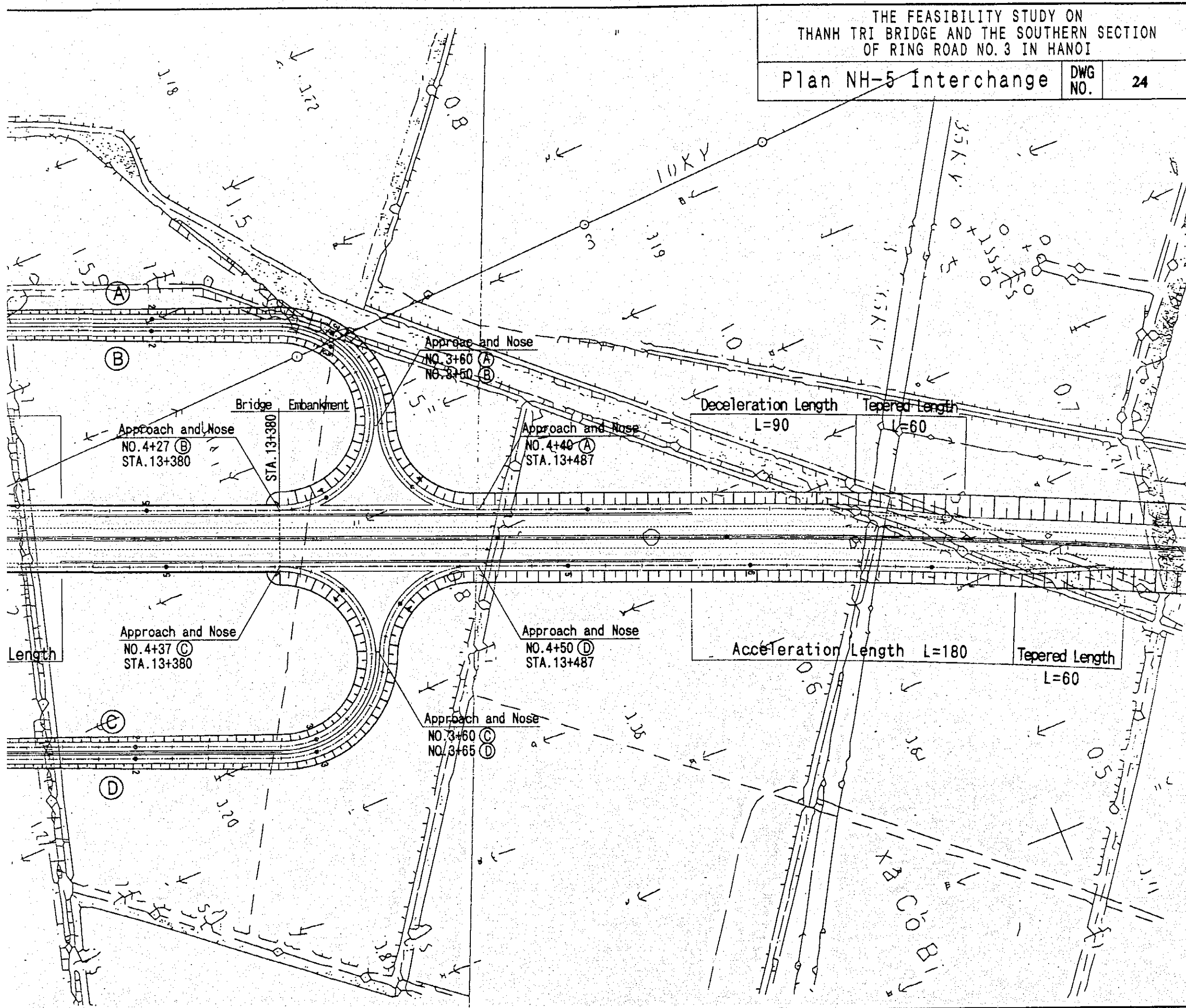


THE FEASIBILITY STUDY ON
 THANH TRI BRIDGE AND THE SOUTHERN SECTION
 OF RING ROAD NO. 3 IN HANOI

Plan NH-5 Interchange

DWG
 NO.

24

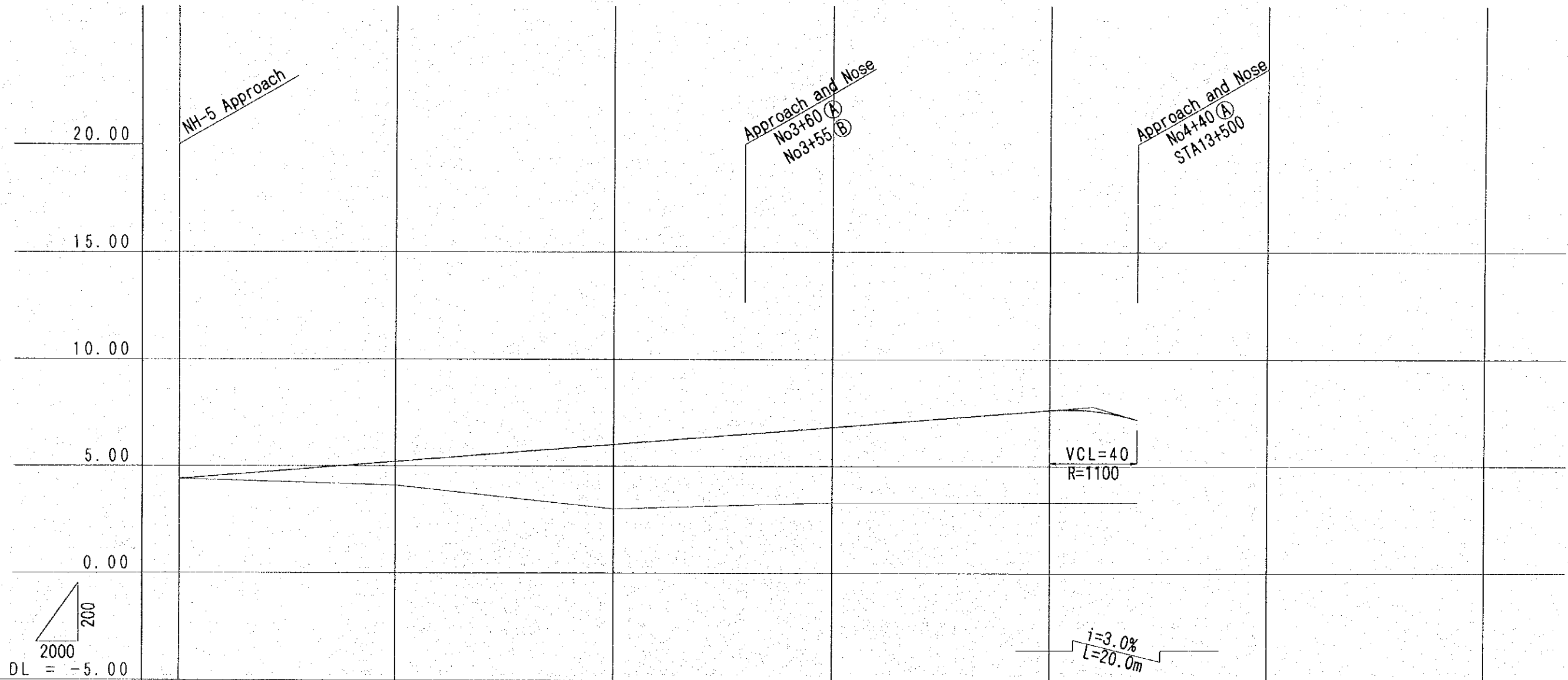


THE FEASIBILITY STUDY ON
THANH TRI BRIDGE AND THE SOUTHERN SECTION
OF RING ROAD NO. 3 IN HANOI

Profile NH-5 Interchange (A) Ramp

DWG
NO.

25



200
2000
DL = -5.00

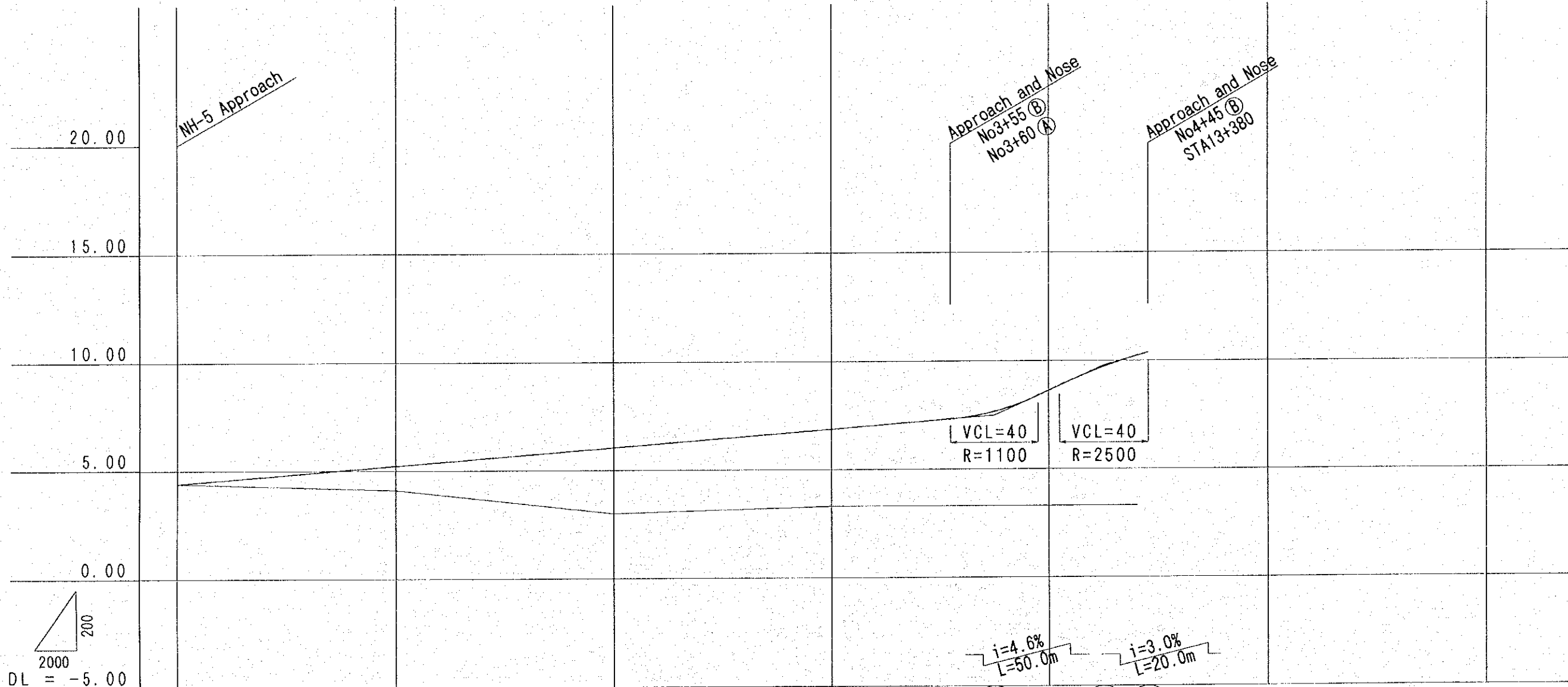
GRADE	4.40	$i = 0.81\%$ $L = 420m$		7.79	7.19	
GROUND LEVEL	4.4	4.1	3.0	3.1	3.3	3.3
STATION	NO. 0	NO. 1	NO. 2	NO. 3	NO. 4 + 20 + 40	NO. 5 NO. 6

THE FEASIBILITY STUDY ON
THANH TRI BRIDGE AND THE SOUTHERN SECTION
OF RING ROAD NO. 3 IN HANOI

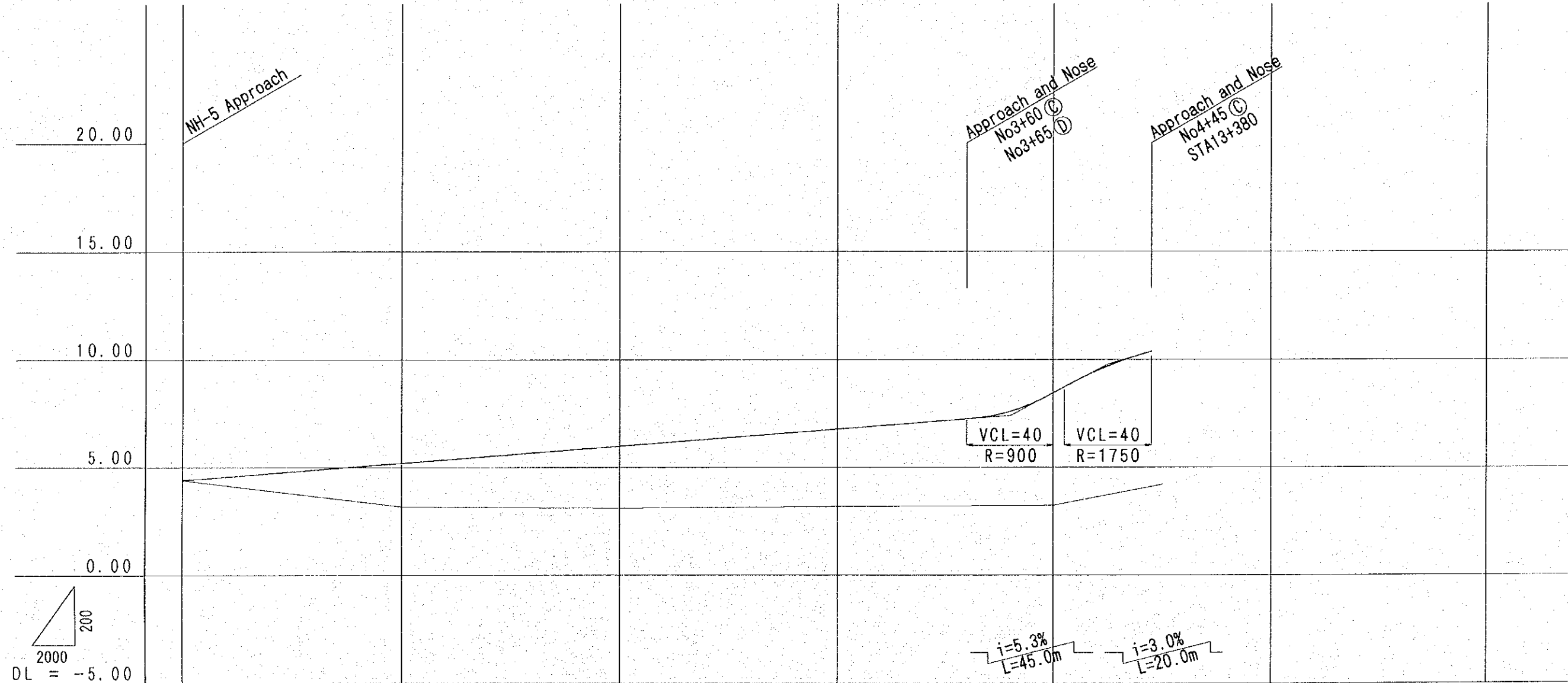
Profile NH-5 Interchange (B) Ramp

DWG
NO.

26



GRADE	4.40	$i = 0.82\%$ $L = 375m$		7.48	9.77	10.37	
GROUND LEVEL	4.4	4.1	3.0	3.1	3.3	3.3	
STATION	NO. 0	NO. 1	NO. 2	NO. 3	+ 75 NO. 4	+ 25 + 45	NO. 5 NO. 6



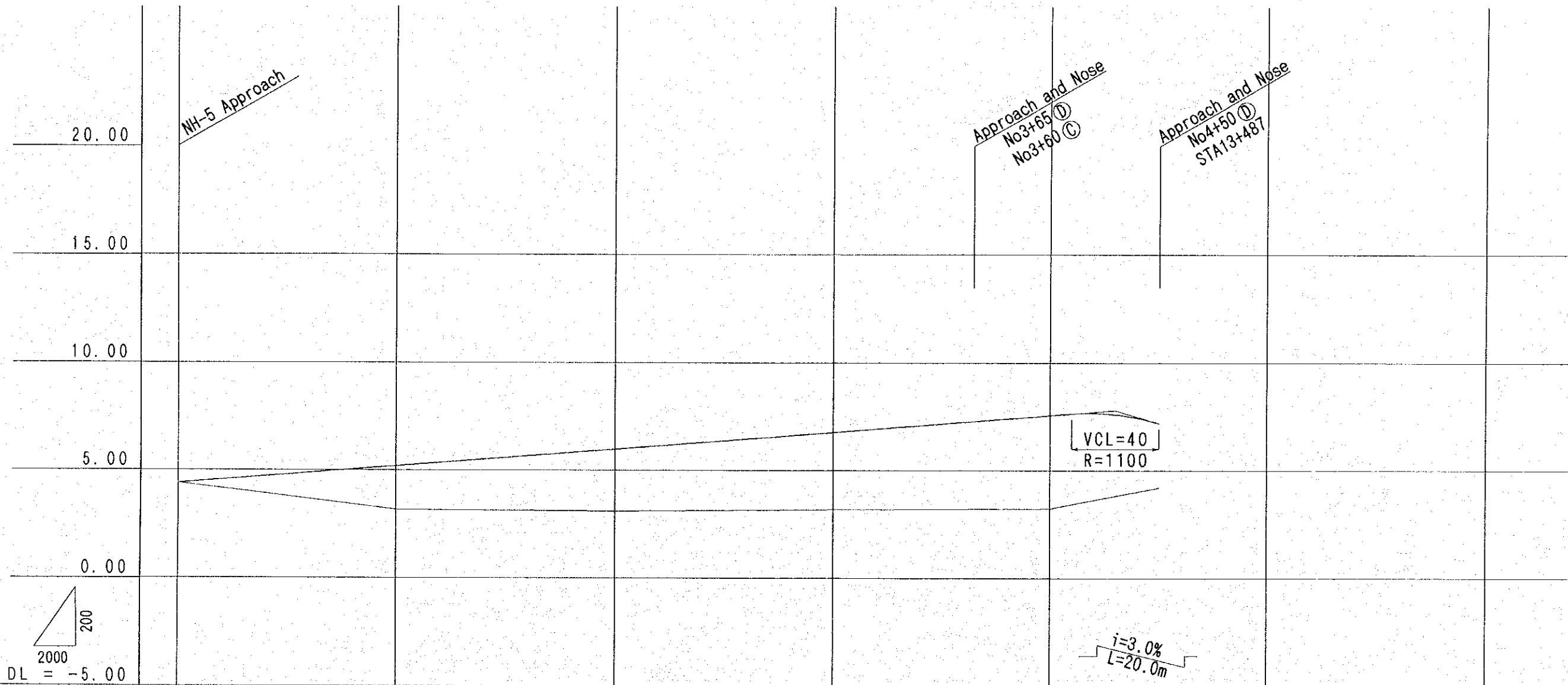
GRADE	4.40					7.40	9.77	10.37		
GROUND LEVEL	4.4	3.17	3.1	3.18	3.23	4.20				
STATION	NO. 0	NO. 1	NO. 2	NO. 3	+ 80 NO. 4	+ 25 NO. 5	+ 45 NO. 6			

THE FEASIBILITY STUDY ON
THANH TRI BRIDGE AND THE SOUTHERN SECTION
OF RING ROAD NO. 3 IN HANOI

Profile NH-5 Interchange (D) Ramp)

DWG
NO.

28



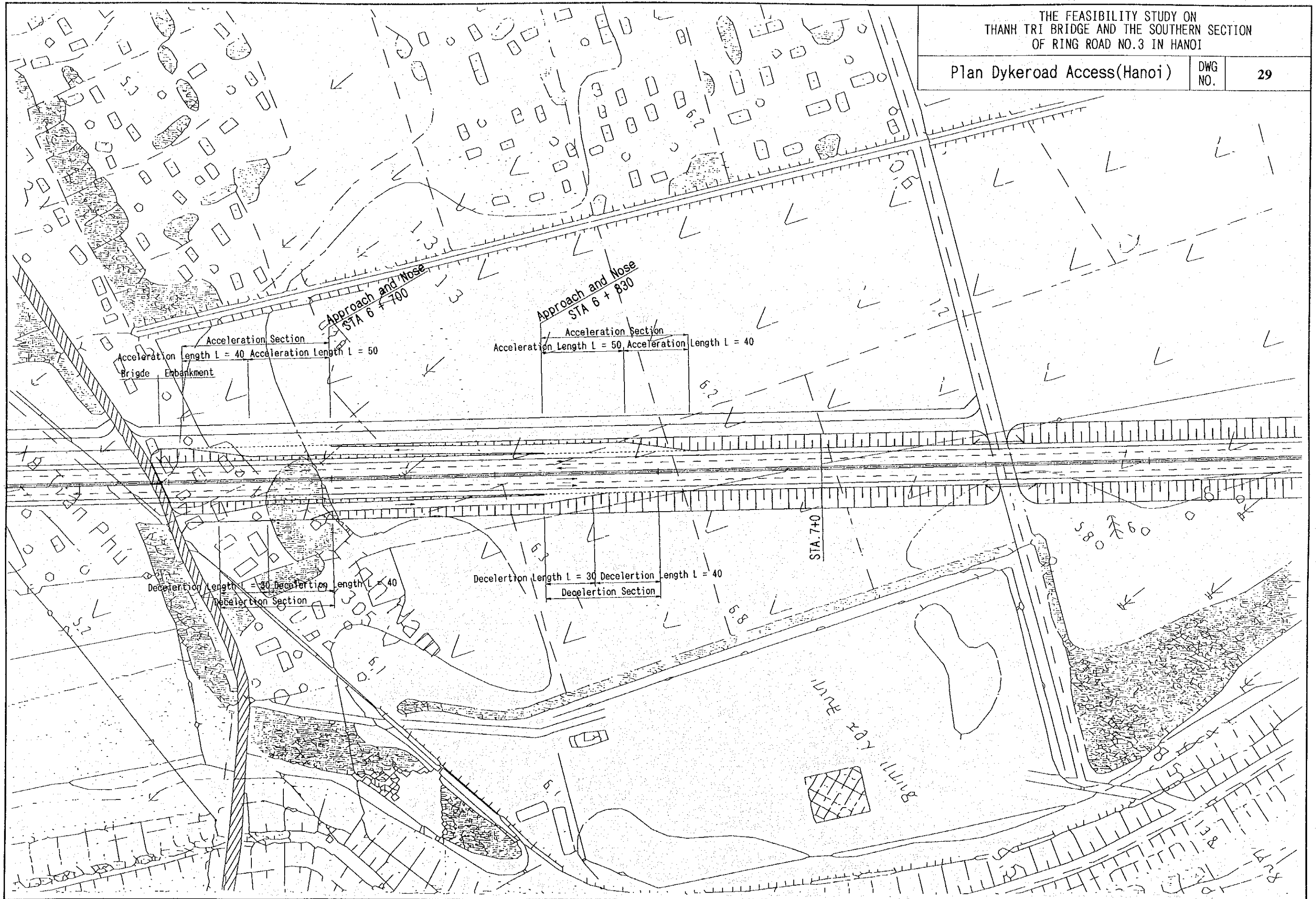
GRADE	4.40	$i = 0.79\%$ $L = 430m$		7.79	7.19					
GROUND LEVEL	4.4	3.17	3.1	3.18	3.23	4.20				
STATION	NO. 0	NO. 1	NO. 2	NO. 3	+ 65	NO. 4	+ 30	+ 50	NO. 5	NO. 6

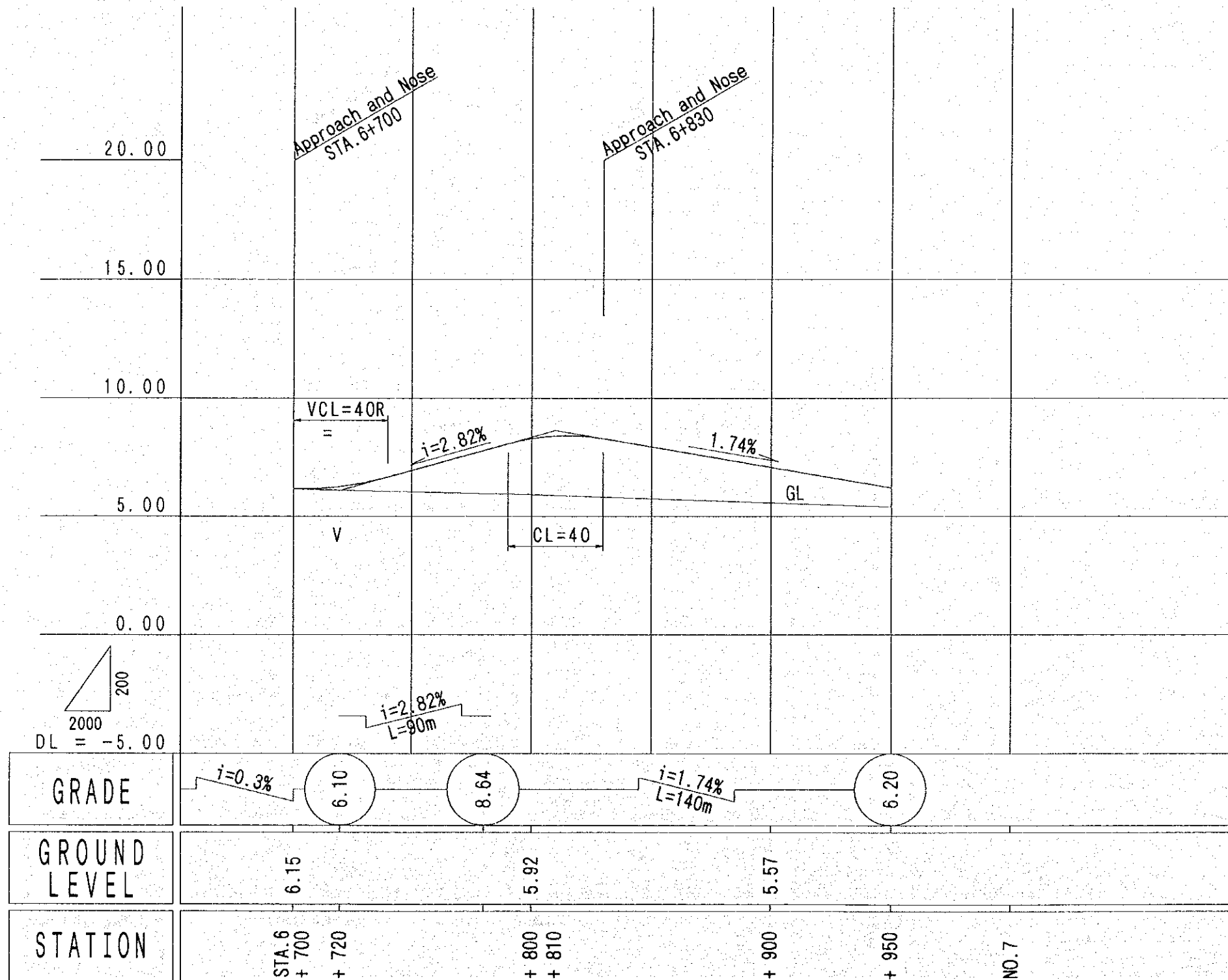
THE FEASIBILITY STUDY ON
THANH TRI BRIDGE AND THE SOUTHERN SECTION
OF RING ROAD NO.3 IN HANOI

Plan Dykeroad Access(Hanoi)

DWG
NO.

29



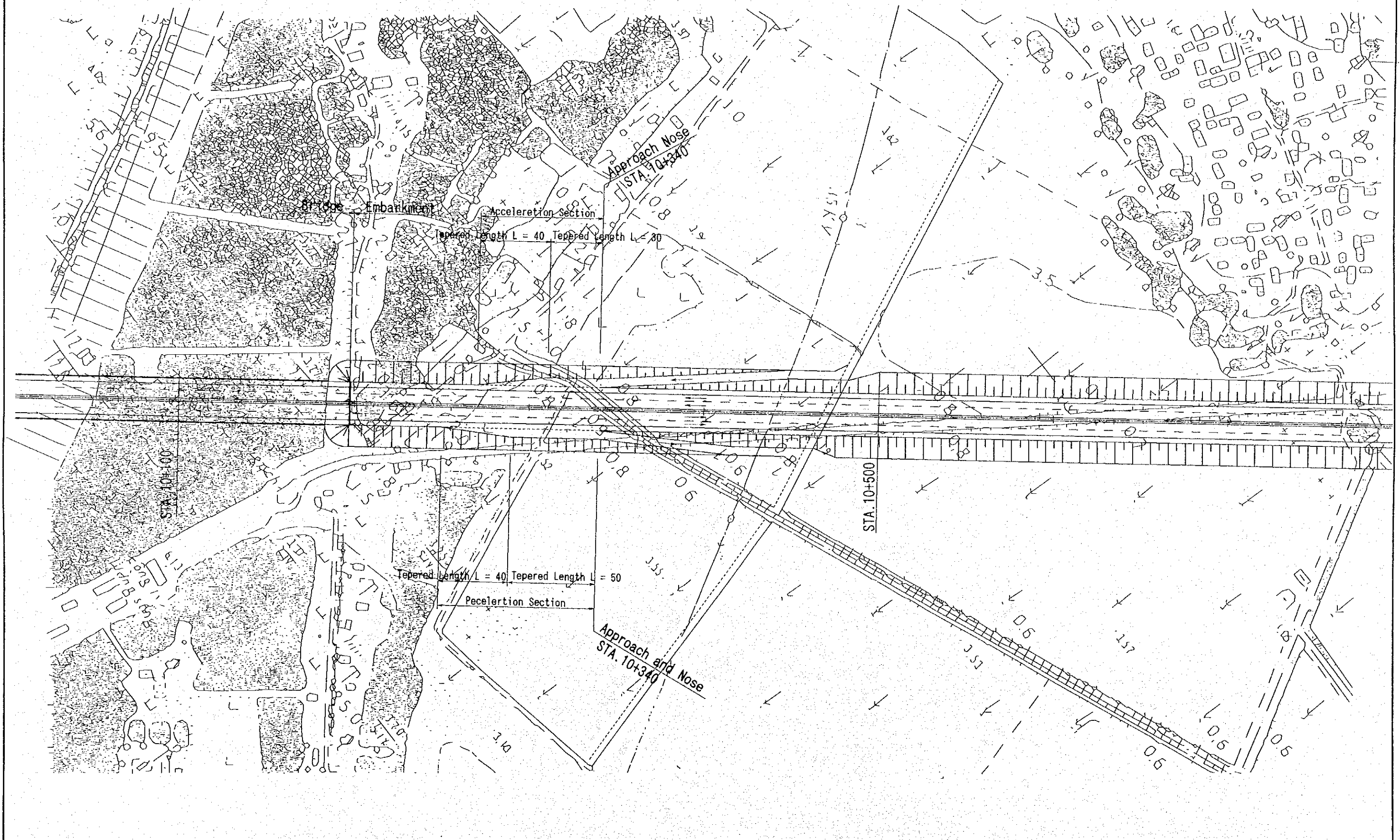


THE FEASIBILITY STUDY ON
THANH TRI BRIDGE AND THE SOUTHERN SECTION
OF RING ROAD NO.3 IN HANOI

Plan Dykeroad Access(Gia Lam)

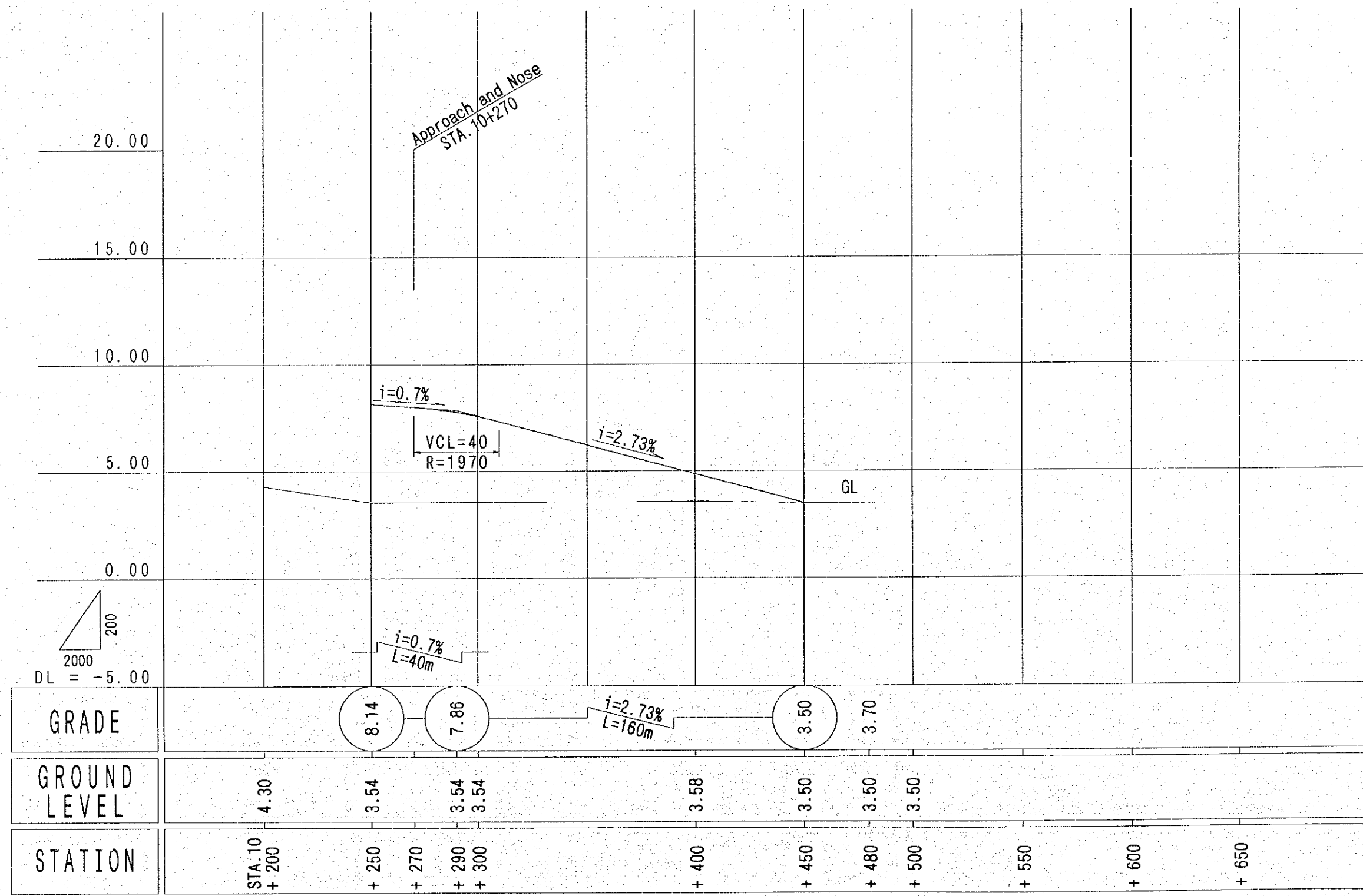
DWG
NO.

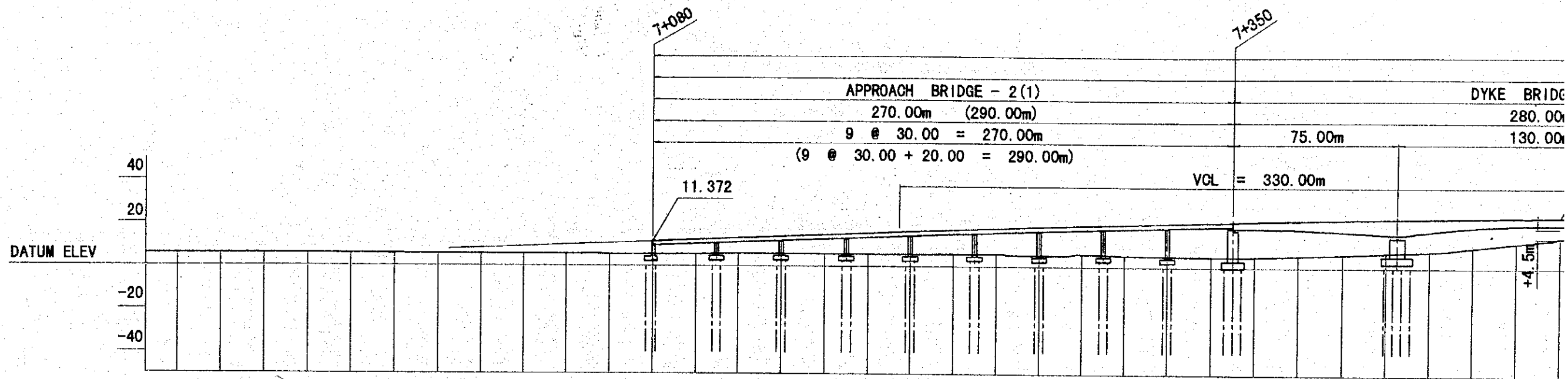
31



THE FEASIBILITY STUDY ON
THANH TRI BRIDGE AND THE SOUTHERN SECTION
OF RING ROAD NO. 3 IN HANOI

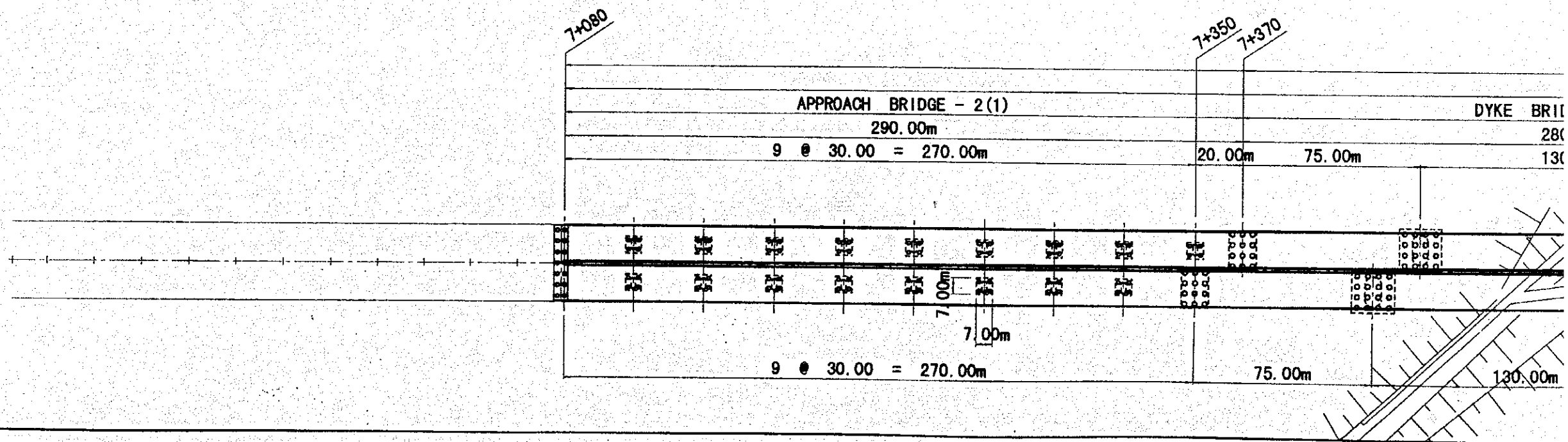
Profile Dykeroad Access(Gia Lam) DWG NO. 32

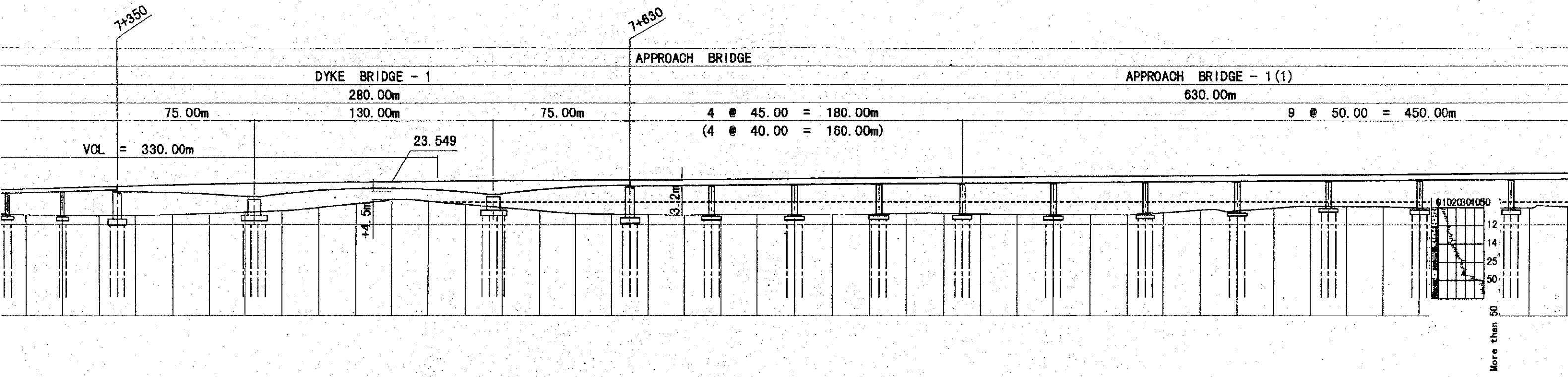




STATION	GROUND HEIGHT	ELEVATION	GRADE
6+860	5.55		
6+880	5.53		
6+900	5.50		
6+920	5.52		
6+940	5.52		
6+960	5.47		
6+980	5.42		
7+000	5.40		
7+020	5.34		
7+040	5.42		
7+060	5.23		
7+080	5.19	11.372	11.372
7+100	5.30	12.172	
7+120	5.71	12.972	
7+140	5.70	13.772	
7+160	5.65	14.572	
7+180	5.59	15.372	
7+200	5.50	16.171	
7+220	5.57	16.941	
7+240	5.63	17.672	
7+260	5.12	18.362	
7+280	5.68	19.013	
7+300	5.20	19.624	
7+320	5.00	20.196	
7+340	4.79	20.727	
7+360	4.91	21.219	22.572
7+380	5.45	21.671	
7+400	6.00	22.064	
7+420	6.79	22.456	
7+440	7.57	22.789	
7+460	9.39	23.082	
7+480	11.55	23.335	
7+500	14.01	23.549	

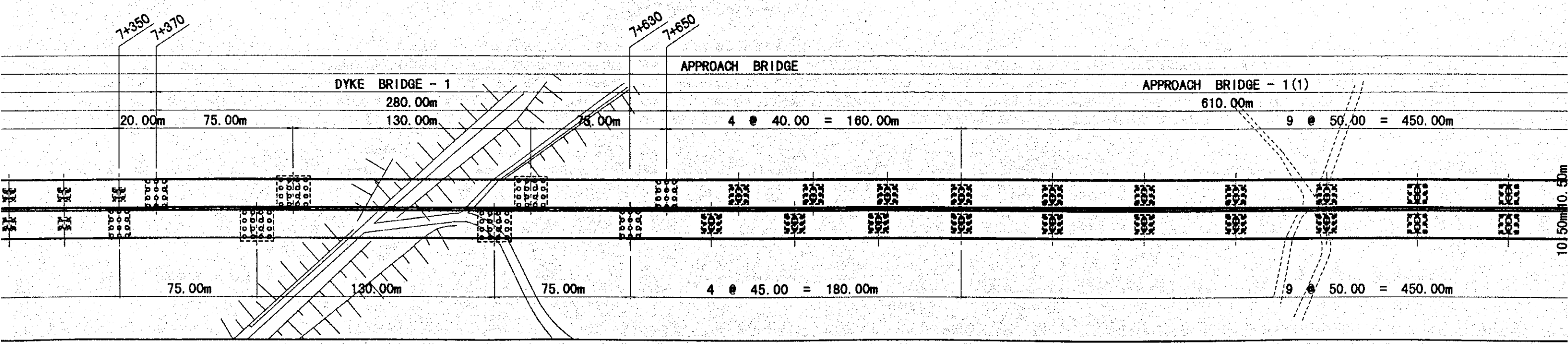
Additional data from diagram:
 i = 4.00%
 L = 280.00m



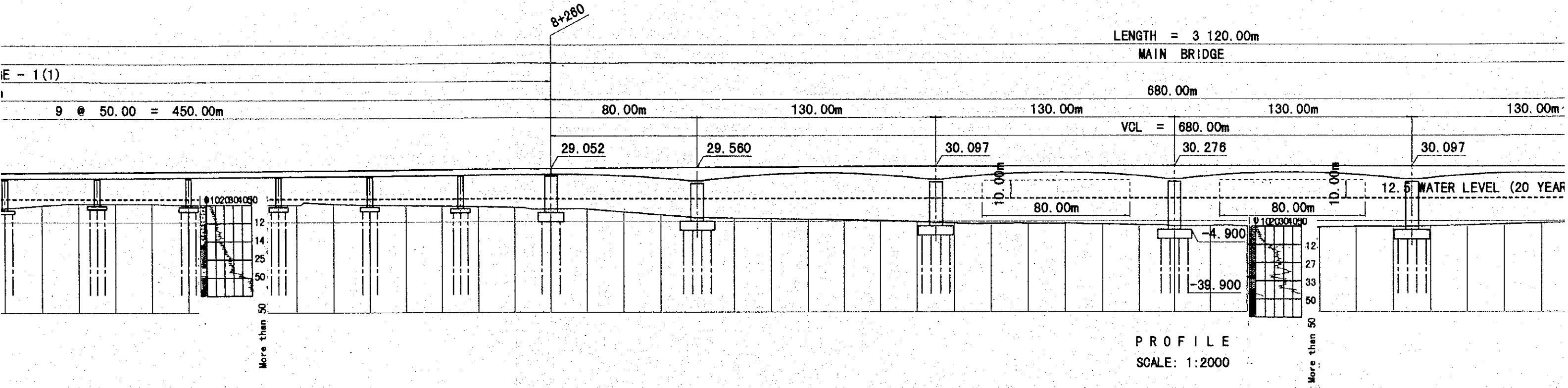


7+300	19.624	7+320	20.196	7+340	20.727	7+360	21.219	7+380	21.671	7+400	22.084	7+420	22.456	7+440	22.789	7+460	23.082	7+480	23.335	7+500	23.549	7+520	23.723	7+540	23.868	7+560	24.012	7+580	24.156	7+600	24.300	7+620	24.444	7+640	24.588	7+660	24.733	7+680	24.876	7+700	25.020	7+720	25.164	7+740	25.308	7+760	25.452	7+780	25.596	7+800	25.740	7+820	25.884	7+840	26.028	7+860	26.172	7+880	26.316	7+900	26.460	7+920	26.604	7+940	26.748	7+960	26.892	7+980	27.036	8+000	27.180	8+020	27.324	8+040	27.468	8+060	27.612	8+080	27.756	8+100	27.900	8+120	28.044	8+140	28.188
-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------

i=0.72%
L=1 240.00m



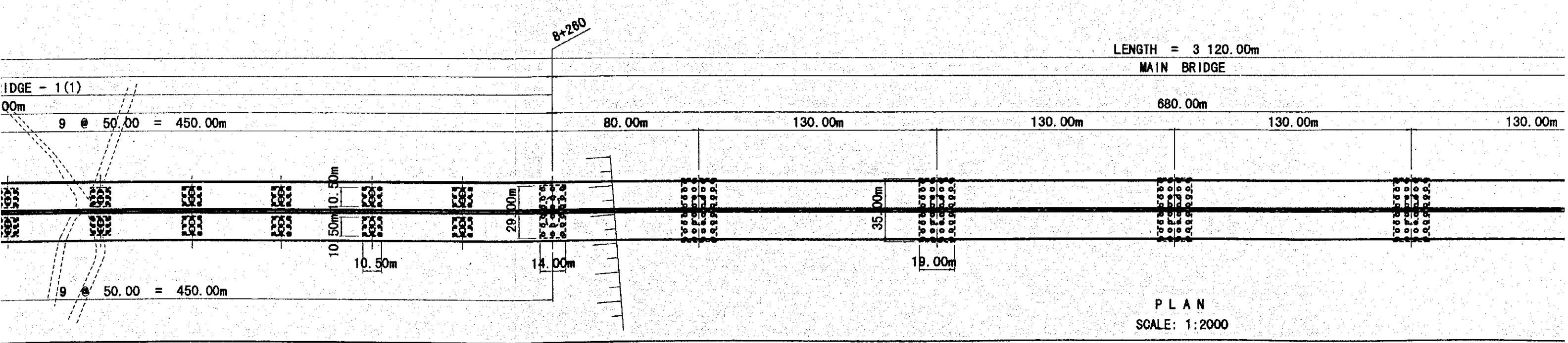
GENERAL VIEW



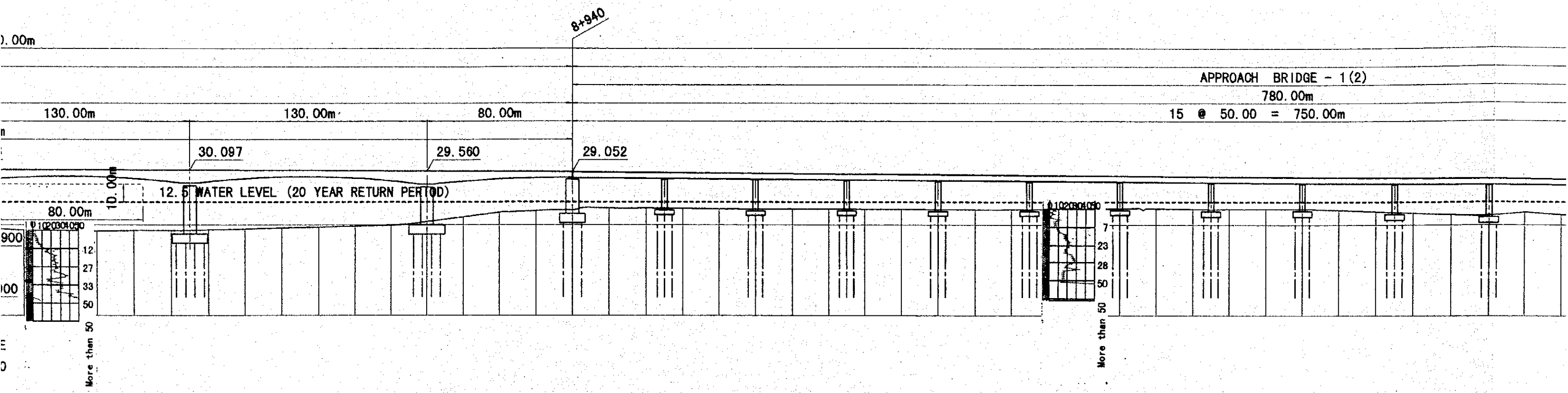
1=0.72%
L=1 240.00m

7+960	7+980	8+000	8+020	8+040	8+060	8+080	8+100	8+120	8+140	8+160	8+180	8+200	8+220	8+240	8+260	8+280	8+300	8+320	8+340	8+360	8+380	8+400	8+420	8+440	8+460	8+480	8+500	8+520	8+540	8+560	8+580	8+600	8+620	8+640	8+660	8+680	8+700	8+720	8+740	8+760	8+780	8+800																																									
8.94	10.00	10.00	10.00	9.27	9.29	9.30	9.27	9.87	9.32	8.91	8.50	8.08	7.63	6.96	6.74	5.14	3.55	1.95	1.65	1.29	0.91	0.54	0.17	-0.45	-1.15	-1.40	-1.35	-1.42	-1.76	-2.14	-2.90	-2.66	-3.01	-2.93	-3.56	-3.20	-3.31	-2.89	-2.35	-1.85	-1.34	27.036	27.180	27.324	27.468	27.612	27.756	27.900	28.044	28.188	28.332	28.476	28.620	28.764	28.908	29.052	29.192	29.323	29.446	29.560	29.666	29.764	29.852	29.933	30.005	30.068	30.124	30.170	30.208	30.236	30.259	30.272	30.276	30.272	30.259	30.238	30.208	30.170	30.124	30.068	30.005	29.933	29.852

31.500

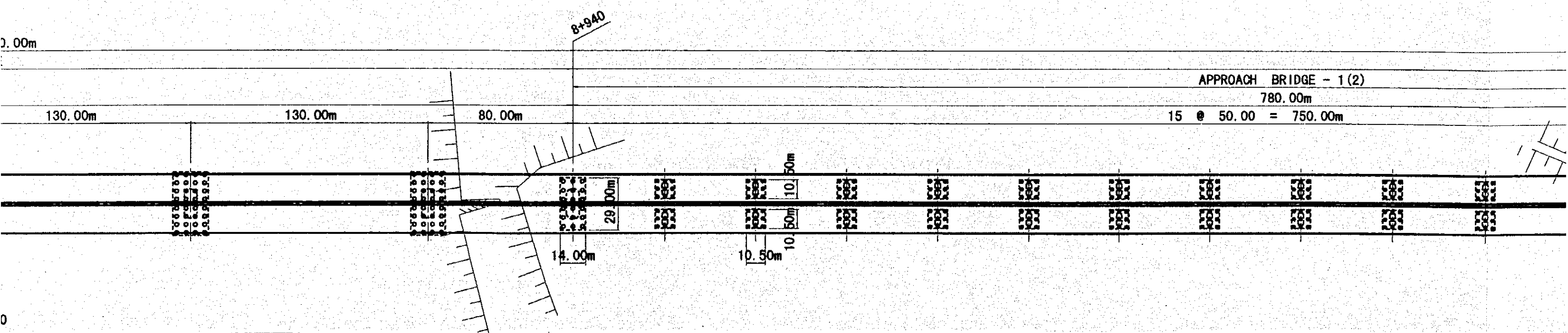


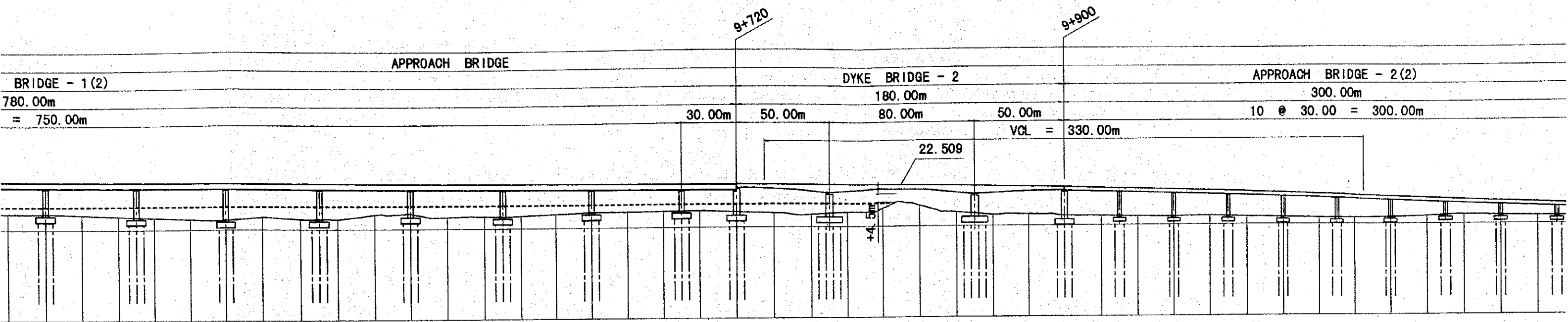
VIEW



$i = -0.72\%$
 $L = 1\ 300.00m$

8+640	30.259	-3.01	30.238	30.208	30.170	30.124	30.068	30.005	29.933	29.852	29.764	29.666	29.560	29.446	29.323	29.192	29.052	28.908	28.764	28.620	28.476	28.332	28.188	28.044	27.900	27.756	27.612	27.468	27.324	27.180	27.036	26.892	26.748	26.604	26.460	26.316	26.172	26.028	25.884	25.740	25.596	25.452	25.308	25.164
-------	--------	-------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

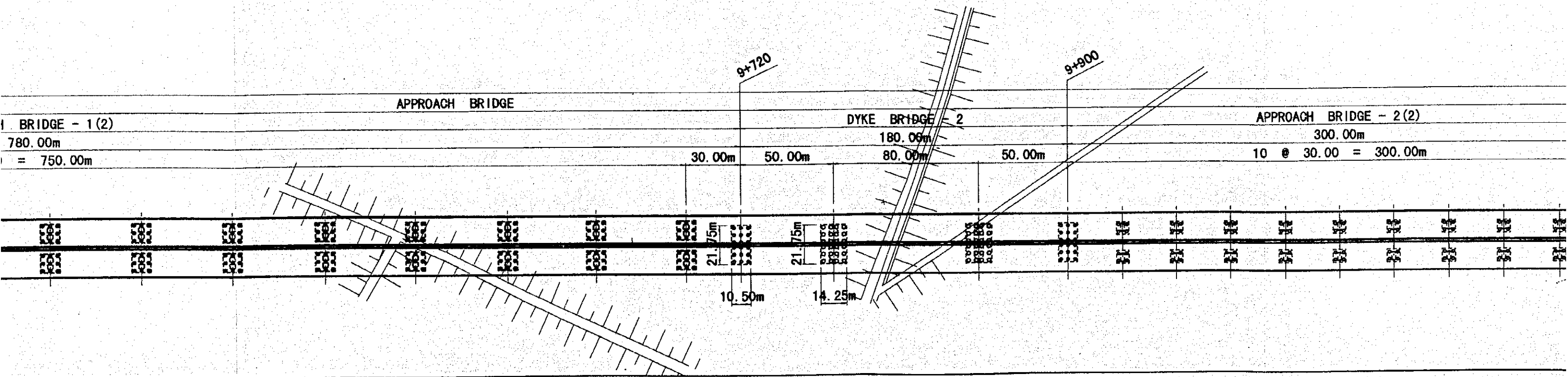


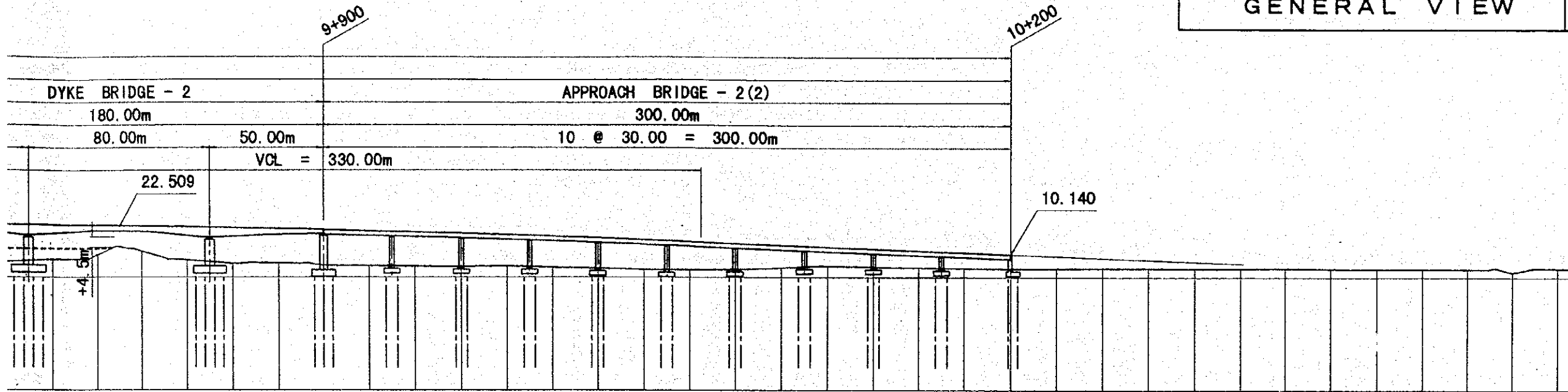


9+320	8.53	20.310	9+340	8.52	20.172	9+360	7.90	20.028	9+380	7.10	25.884	9+400	6.30	25.740	9+420	5.54	25.596	9+440	5.29	25.452	9+460	6.73	25.308	9+480	5.54	25.164	9+500	5.40	25.020	9+520	7.75	24.876	9+540	8.41	24.732	9+560	6.32	24.588	9+580	6.60	24.444	9+600	6.70	24.300	9+620	7.55	24.156	9+640	8.30	24.012	9+660	8.49	23.868	9+680	8.70	23.724	9+700	8.90	23.580	9+720	8.29	23.436	9+740	7.60	23.291	9+760	6.57	23.147	9+780	7.75	22.903	9+800	9.56	22.650	9+820	11.28	22.357	9+840	7.51	22.024	9+860	5.81	21.652	9+880	6.00	21.239	9+900	5.00	20.787	9+920	4.82	20.295	9+940	4.62	19.764	9+960	4.41	19.192	9+980	4.60	18.581	10+000	4.10	17.930	10+020	3.68	17.239	10+040	3.22	16.509	10+060	3.11	15.739	10+080	3.43	14.940	10+100	4.00	14.140	10+120	4.84	13.340	10+140	4.41	12.540	10+160	4.12	11.740
-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	-------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	-------	------	--------	--------	------	--------	--------	------	--------	--------	------	--------	--------	------	--------	--------	------	--------	--------	------	--------	--------	------	--------	--------	------	--------	--------	------	--------

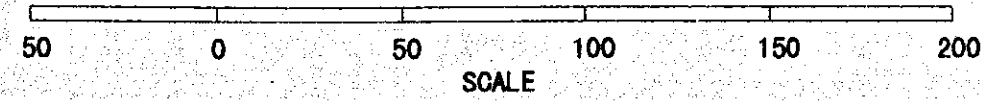
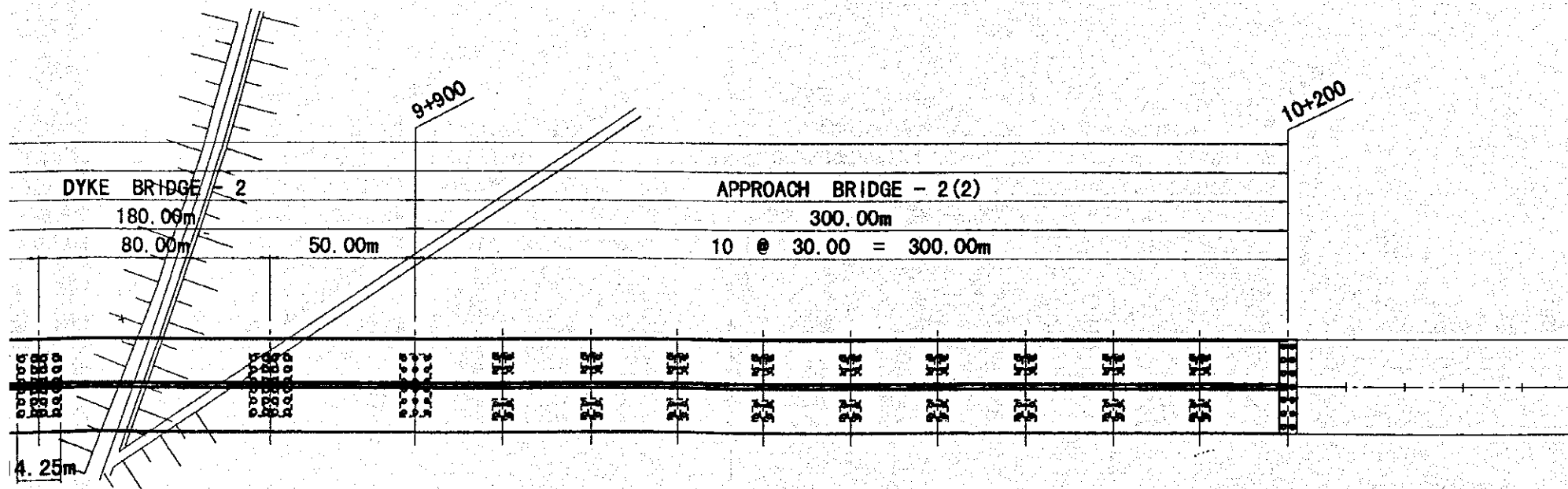
22.140

i=4.00%
L=300.00m





22.140		i=4.00%		L=300.00m		10.140	
9+780	22.903	9+800	22.650	9+820	22.357	9+840	22.024
9+860	21.652	9+880	21.239	9+900	20.787	9+920	20.295
9+940	19.764	9+960	19.192	9+980	18.581	10+000	17.930
10+020	17.239	10+040	16.509	10+060	15.739	10+080	14.940
10+100	14.140	10+120	13.340	10+140	12.540	10+160	11.740
10+180	10.940	10+200	10.140	10+220	3.70	10+240	3.77
10+260	3.79	10+280	3.86	10+300	3.70	10+320	3.80
10+340	3.61	10+360	3.55	10+380	3.54	10+400	3.50
10+420	2.11	10+440	3.87				



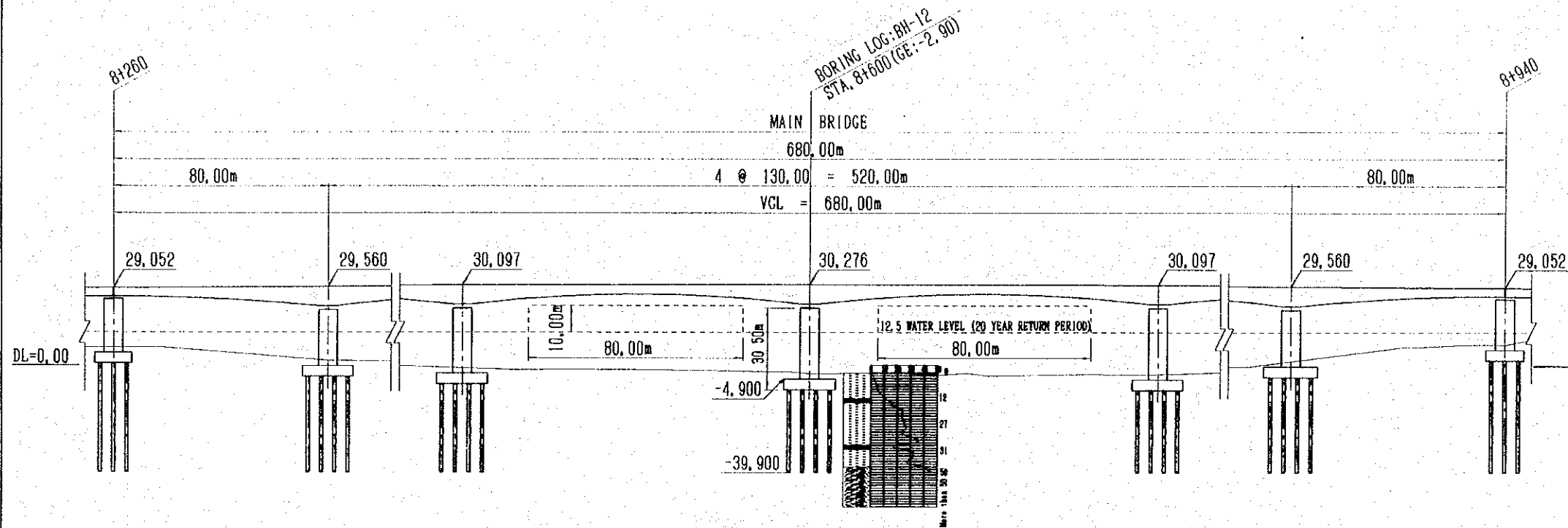
THE FEASIBILITY STUDY ON
THANH TRI BRIDGE AND THE SOUTHERN SECTION
OF RING ROAD NO.3 IN HANOI

Main Bridge Superstructure

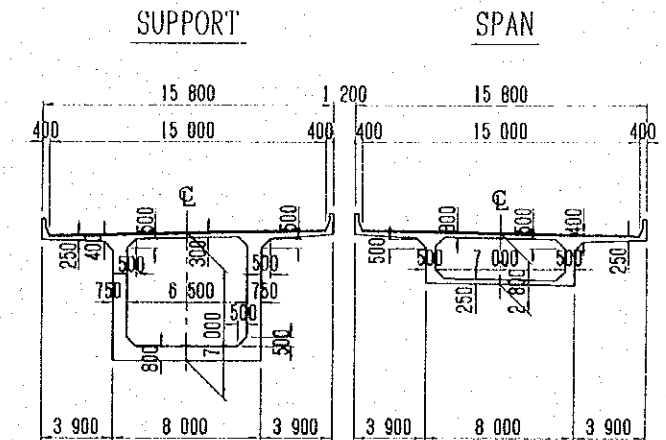
DWG
NO.

34

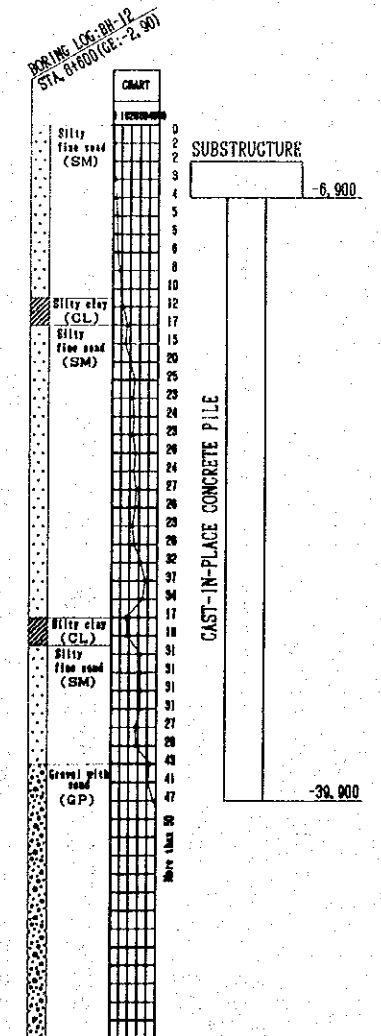
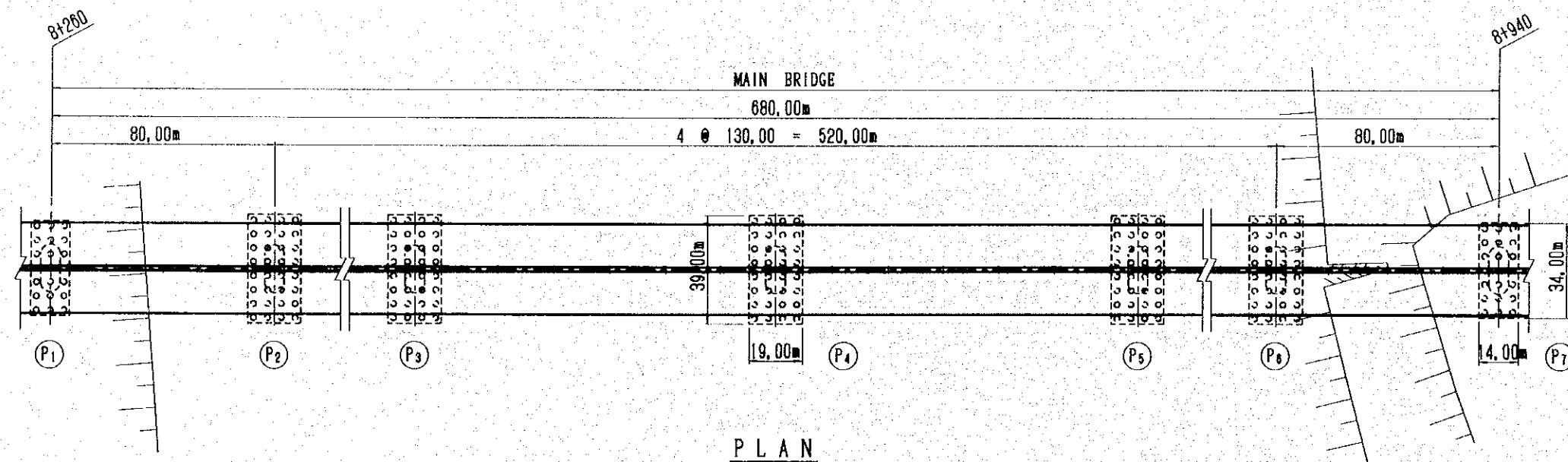
SCALE: 1:2000



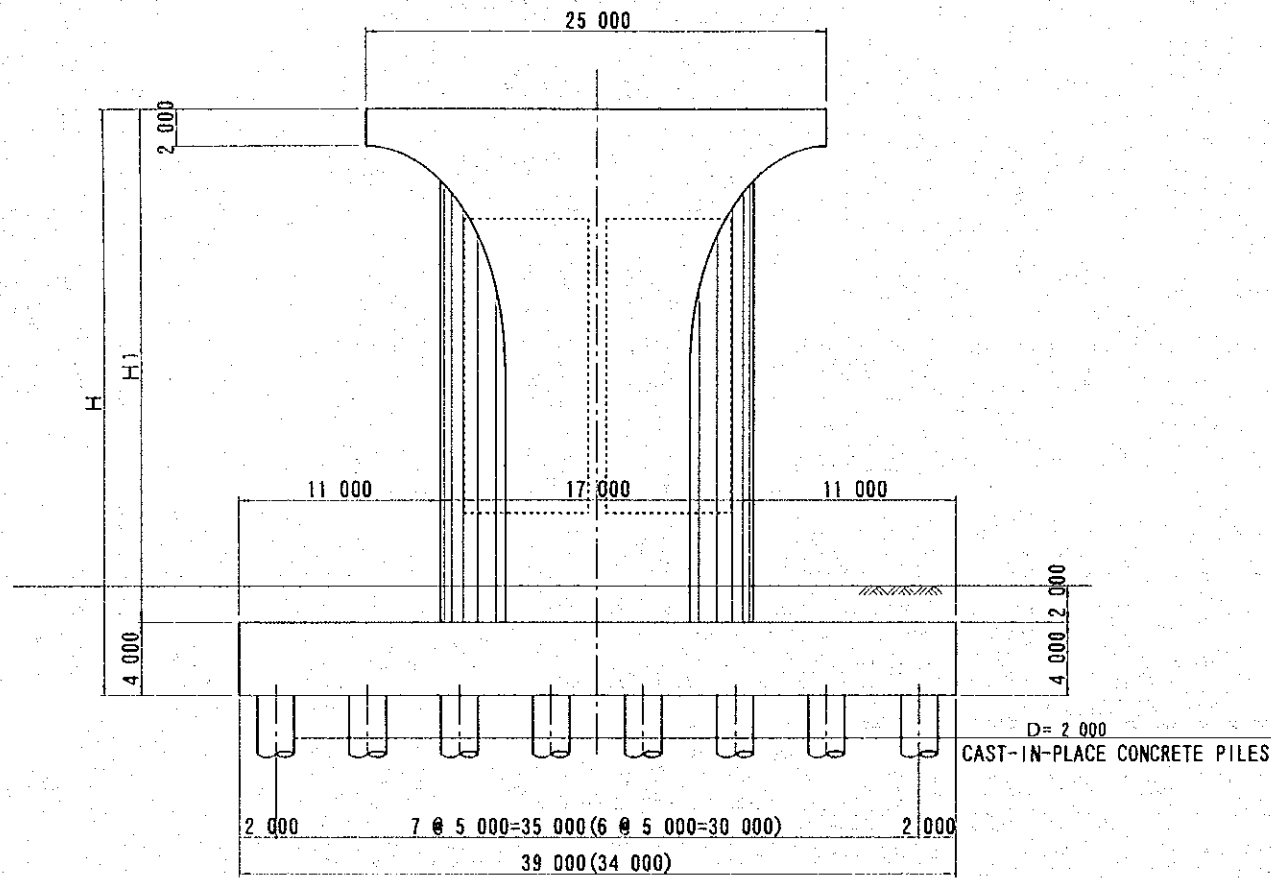
CROSS SECTION SCALE: 1:400



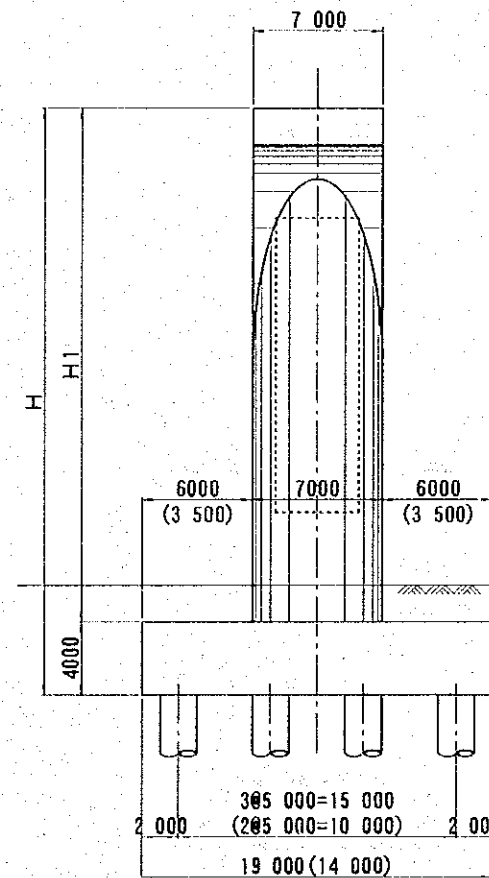
BORING LOG: BH-12
Scale: 1/400



SCALE: 1:400



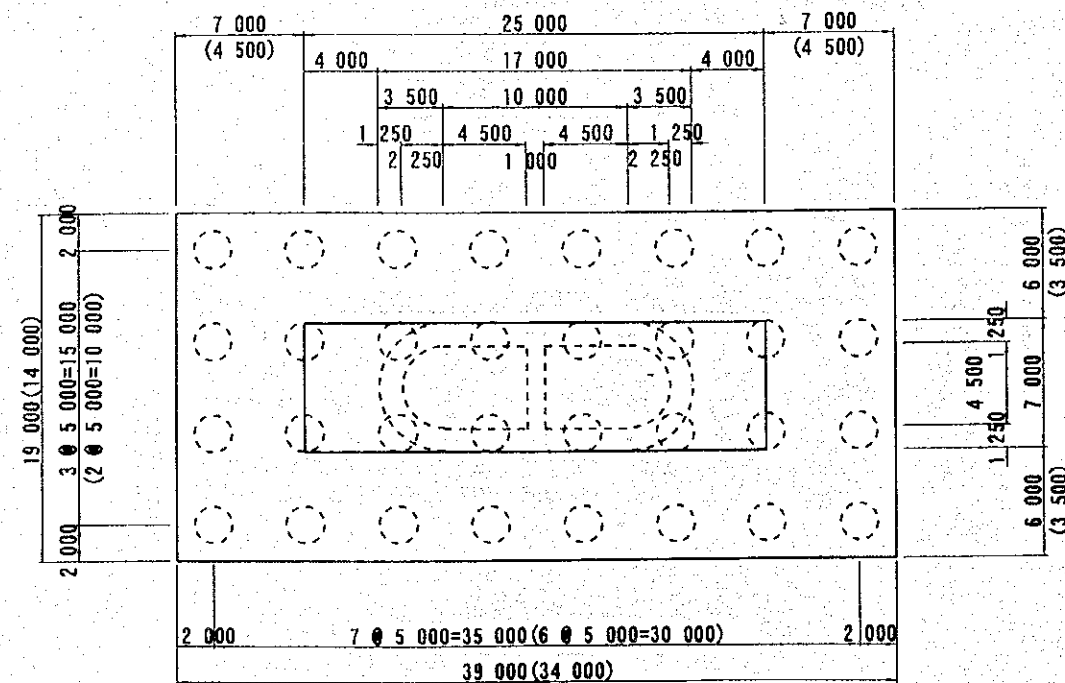
CROSS SECTION



PROFILE

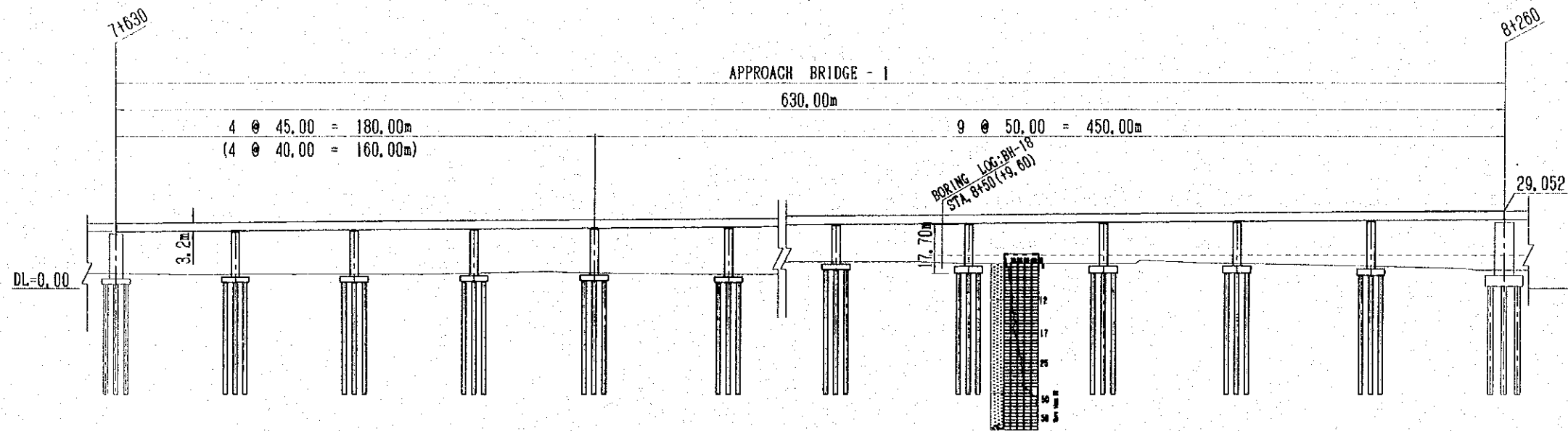
() P₁ AND P₇

	H	H1
P 1	24,100	20,100
P 2	25,000	21,000
P 3	28,200	24,200
P 4	30,500	26,500
P 5	30,500	26,500
P 6	25,200	21,200
P 7	23,000	19,000

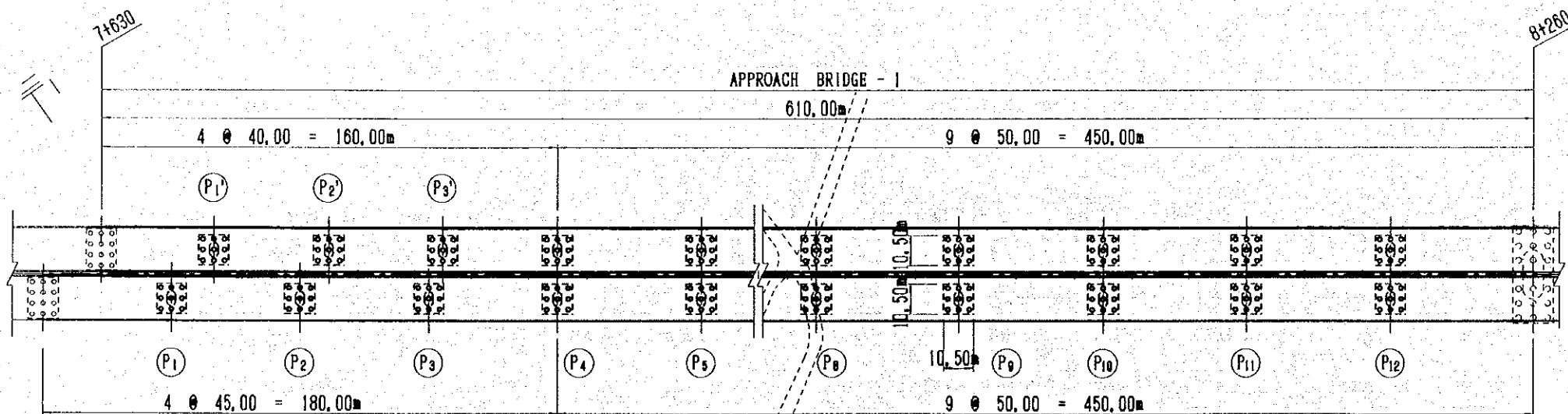
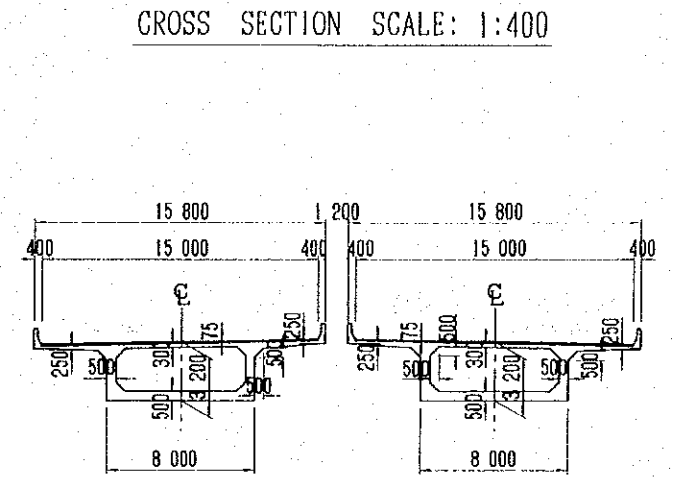


PLAN

SCALE: 1:2000

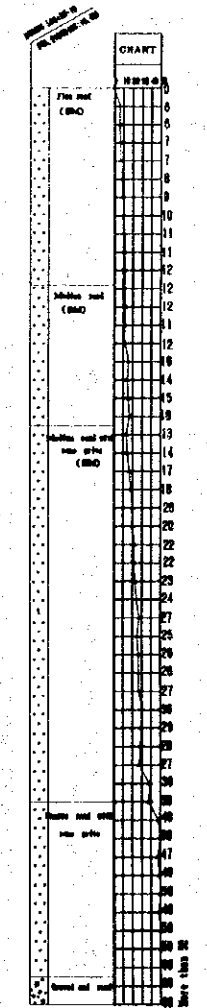


PROFILE



PLAN

BORING LOG: BH-1B
Scale: 1/400

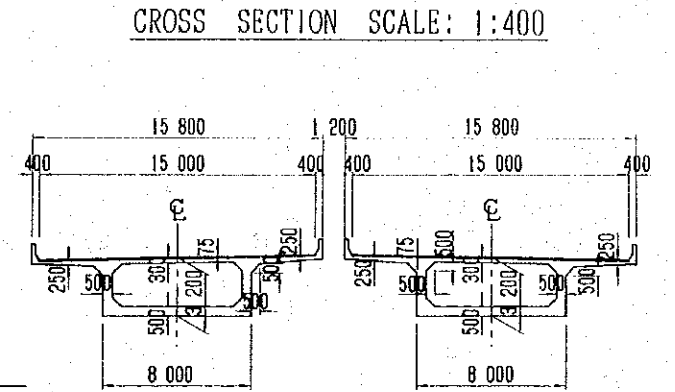
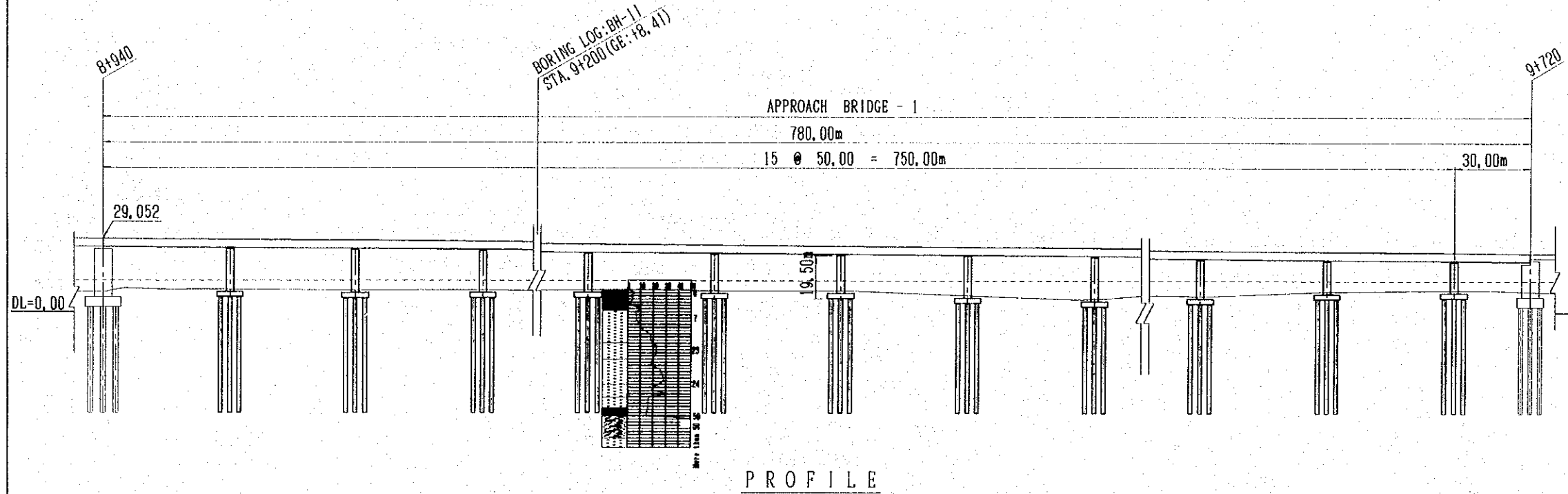


**GIR LAM - SIDE
APPROACH BRIDGE - 1
SUPERSTRUCTURE SCALE: 1:2000**

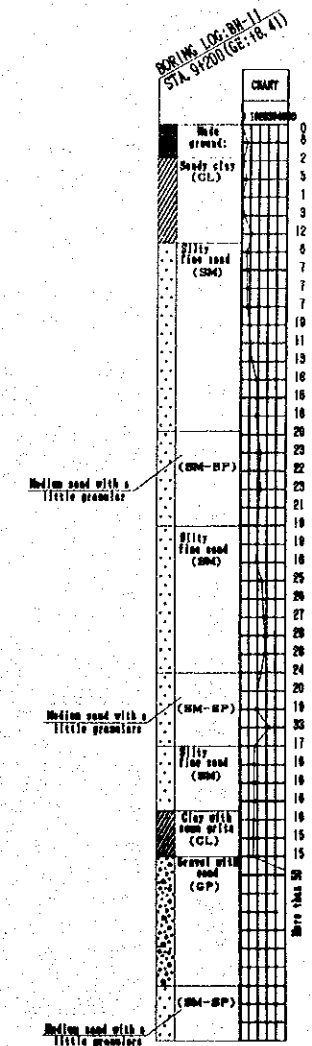
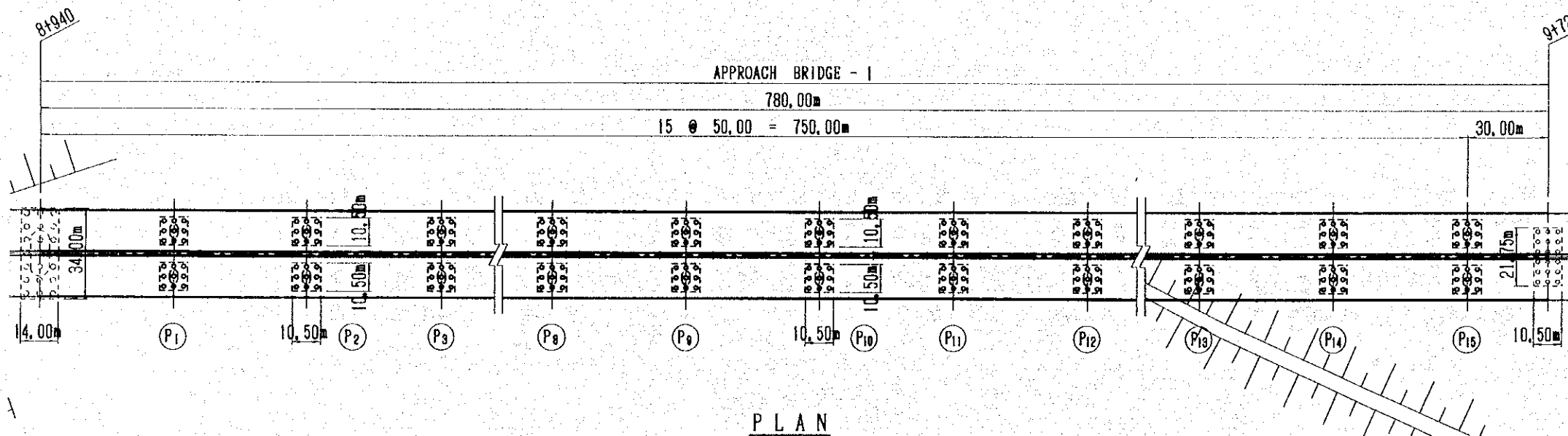
THE FEASIBILITY STUDY ON
THANH TRI BRIDGE AND THE SOUTHERN SECTION
OF RING ROAD NO.3 IN HANOI

Approach Bridge-1 Gia Lam-Side Superstructure	DWG NO.	37
--	------------	----

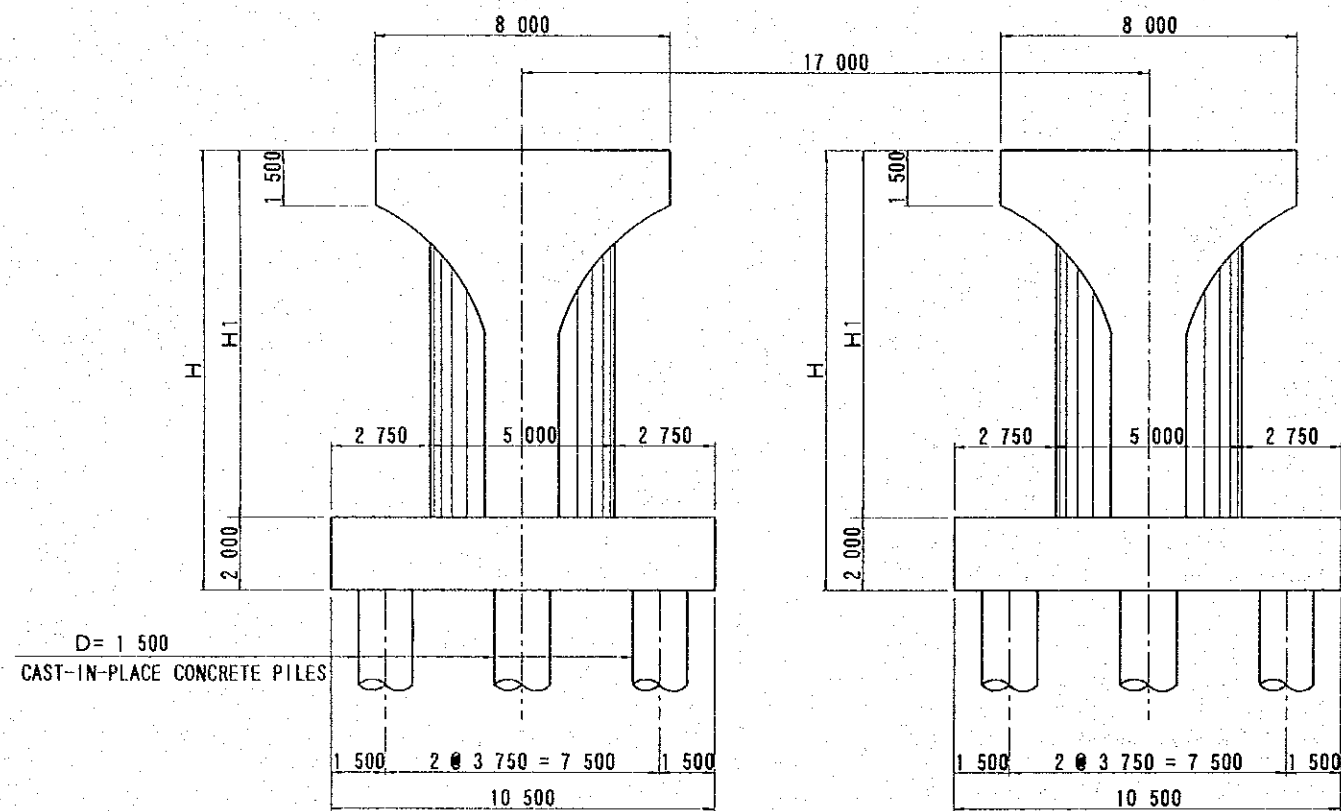
SCALE: 1:2000



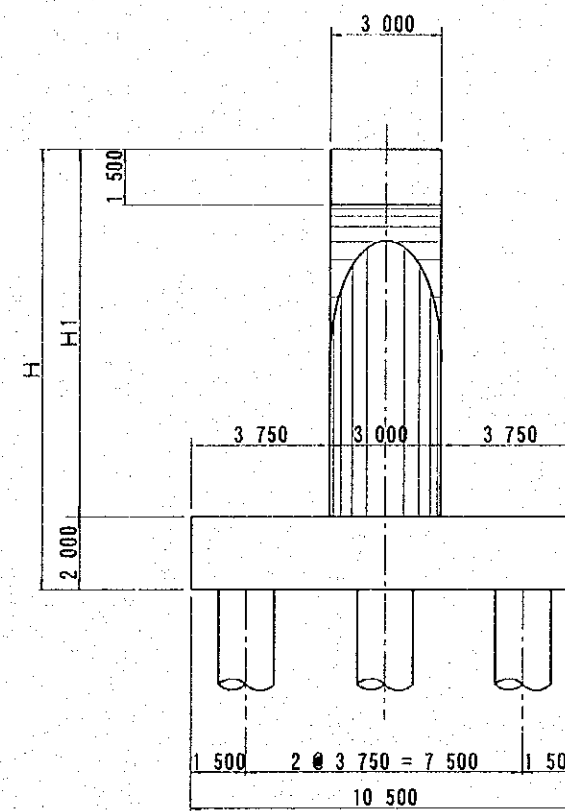
BORING LOG: BH-11
Scale: 1/400



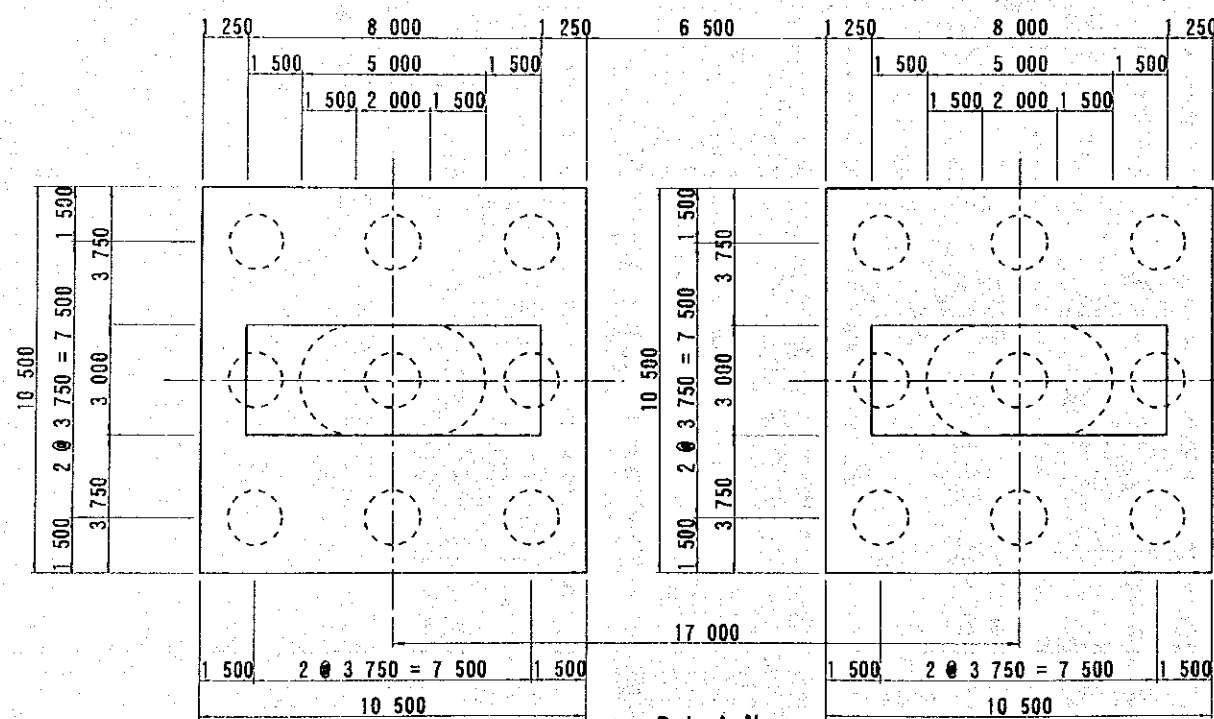
SCALE: 1:200



CROSS SECTION



PROFILE



PLAN

HA NOI --SIDE

	H	H 1
P 1	18,900	16,900
P 1'	19,000	17,000
P 2	19,200	17,200
P 2'	19,200	17,200
P 3	19,400	17,400
P 3'	19,600	17,600
P 4	19,300	17,300
P 5	20,200	18,200
P 6	20,100	18,100
P 7	18,800	16,800
P 8	16,600	14,600
P 9	17,700	15,700
P 10	18,000	16,000
P 11	18,400	16,400
P 12	19,800	17,800

GIR LAM --SIDE

	H	H 1
P 1	19,000	17,000
P 2	19,100	17,100
P 3	18,600	16,600
P 4	18,600	16,600
P 5	18,200	16,200
P 6	17,400	15,400
P 7	17,300	15,300
P 8	17,000	15,000
P 9	18,500	16,500
P 10	19,500	17,500
P 11	19,000	17,000
P 12	15,700	13,700
P 13	17,100	15,100
P 14	15,100	13,100
P 15	14,200	12,200

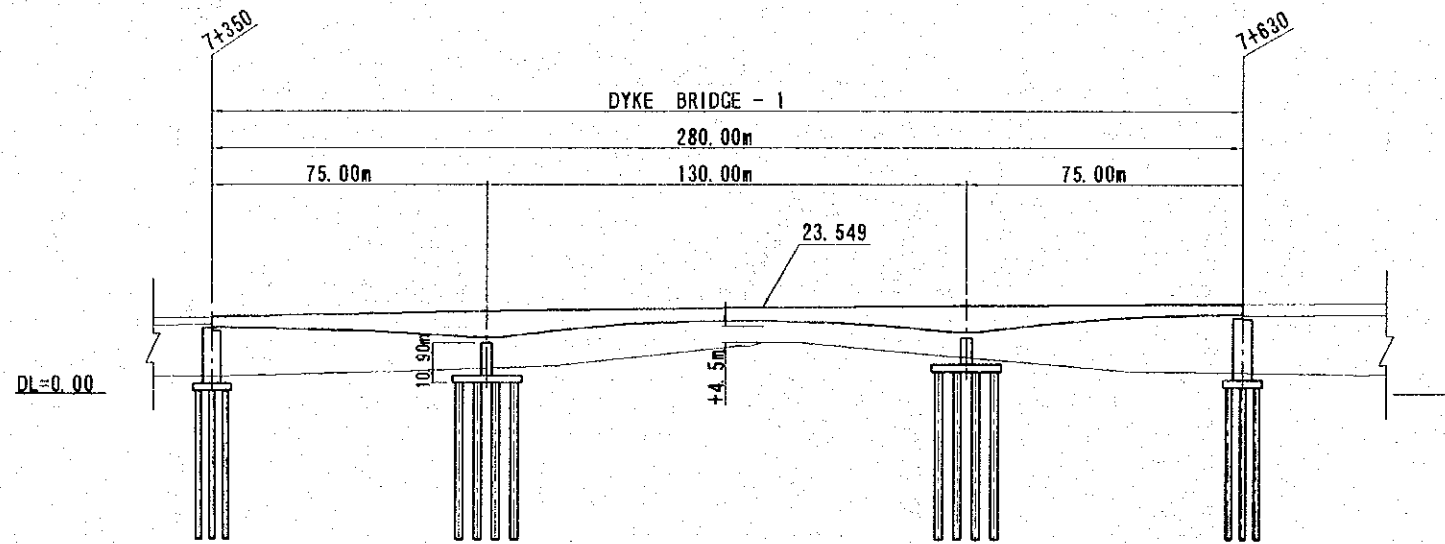
THE FEASIBILITY STUDY ON
 THANH TRI BRIDGE AND THE SOUTHERN SECTION
 OF RING ROAD NO. 3 IN HANOI

Dyke Bridge-1 : Superstructure

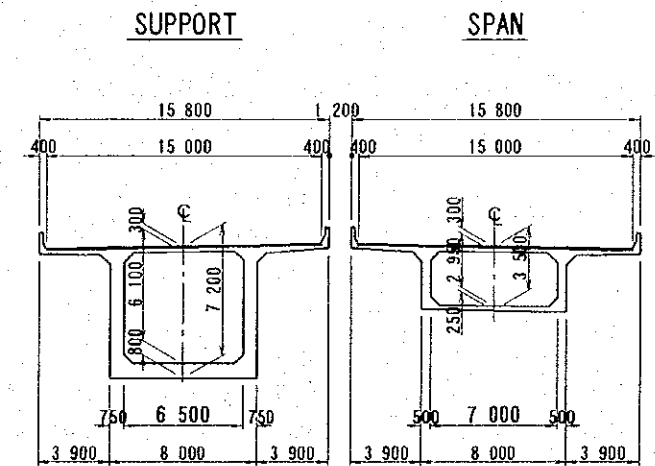
DRW
 NO.

39

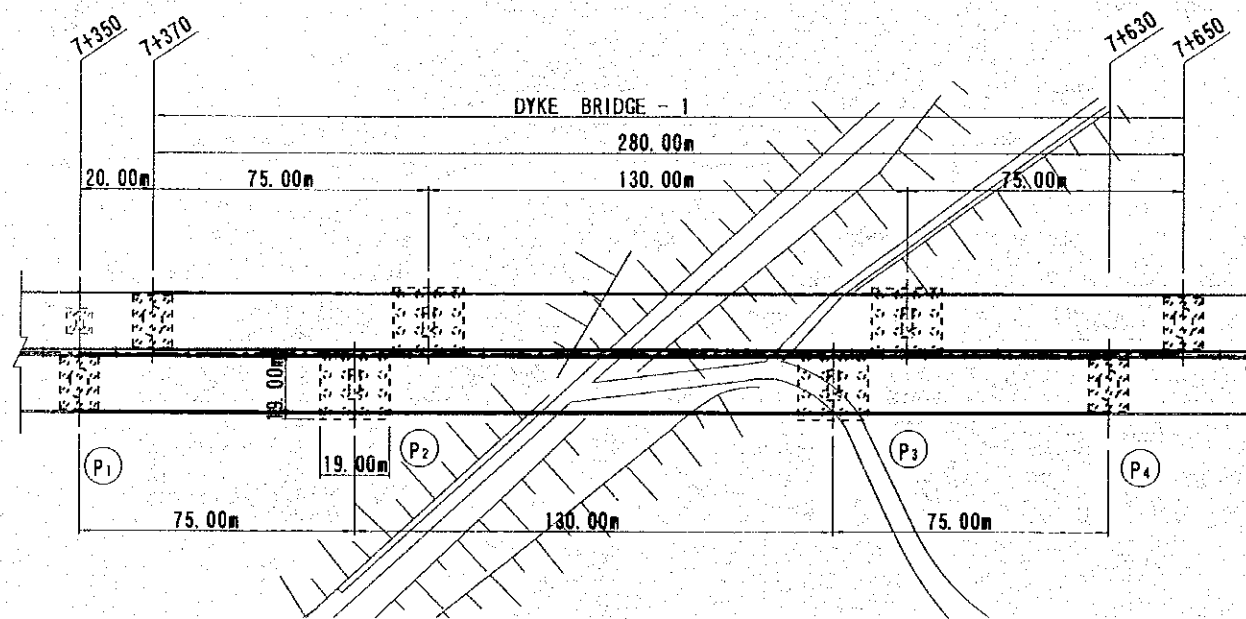
SCALE: 1:2000



PROFILE

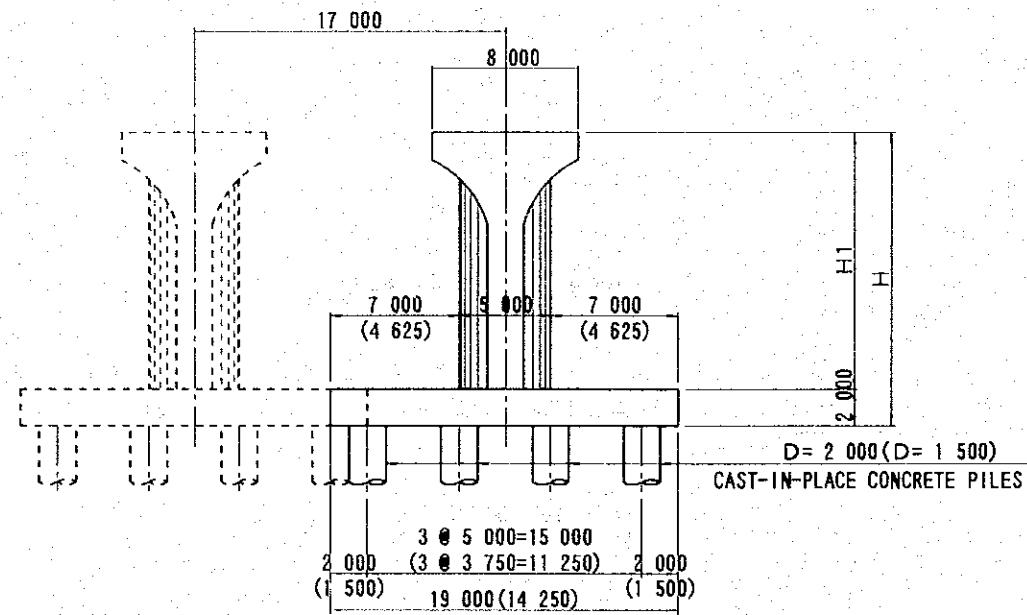


CROSS SECTION SCALE: 1:400

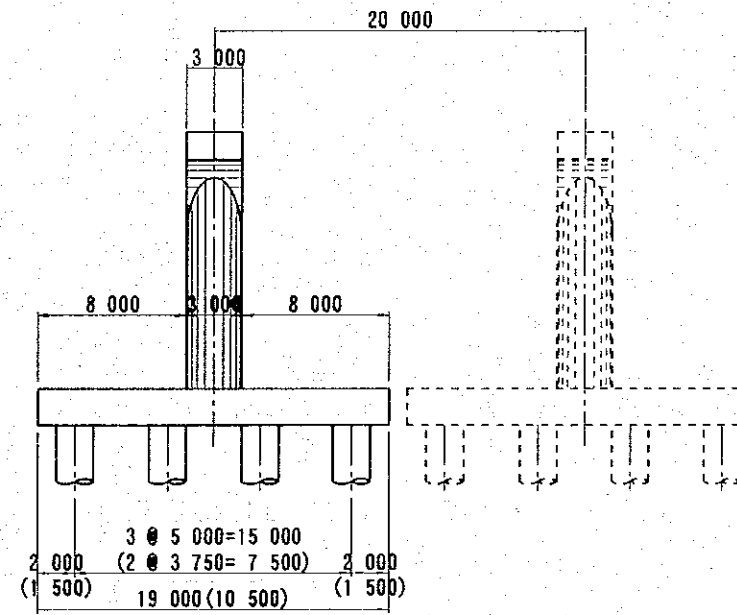


PLAN

SCALE: 1:400



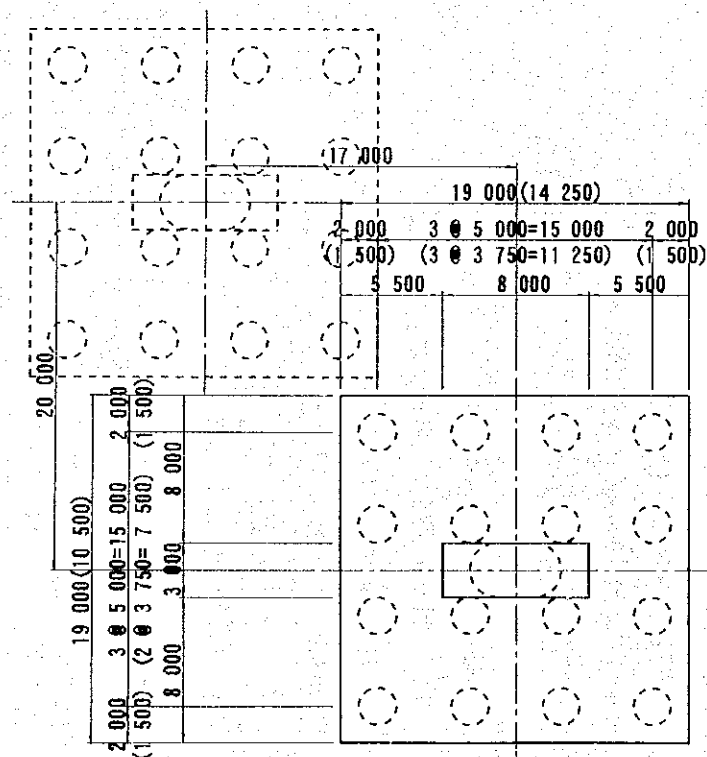
CROSS SECTION



PROFILE

() P₁ AND P₄

	H	H 1
P 1	16,300	14,300
P 2	10,900	8,900
P 3	9,400	7,400
P 4	19,000	17,000



PLAN

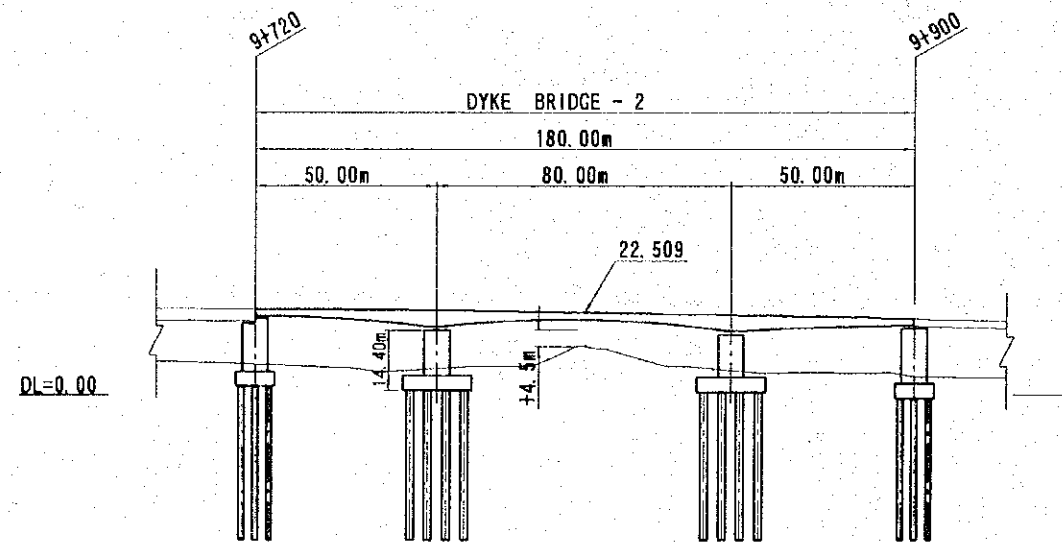
THE FEASIBILITY STUDY ON
 THANH TRI BRIDGE AND THE SOUTHERN SECTION
 OF RING ROAD NO. 3 IN HANOI

Dyke Bridge-2 Superstructure

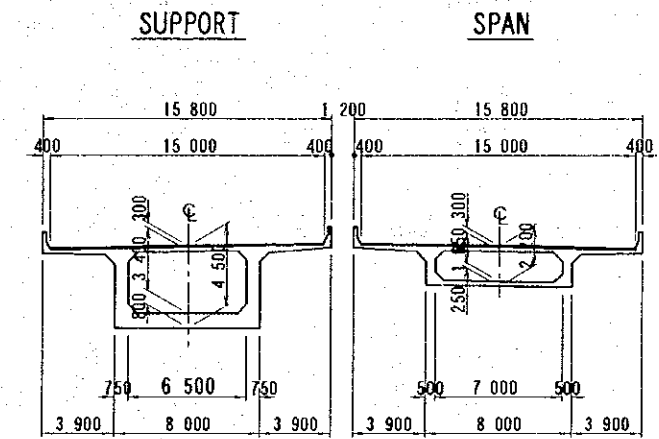
DRW
 NO.

41

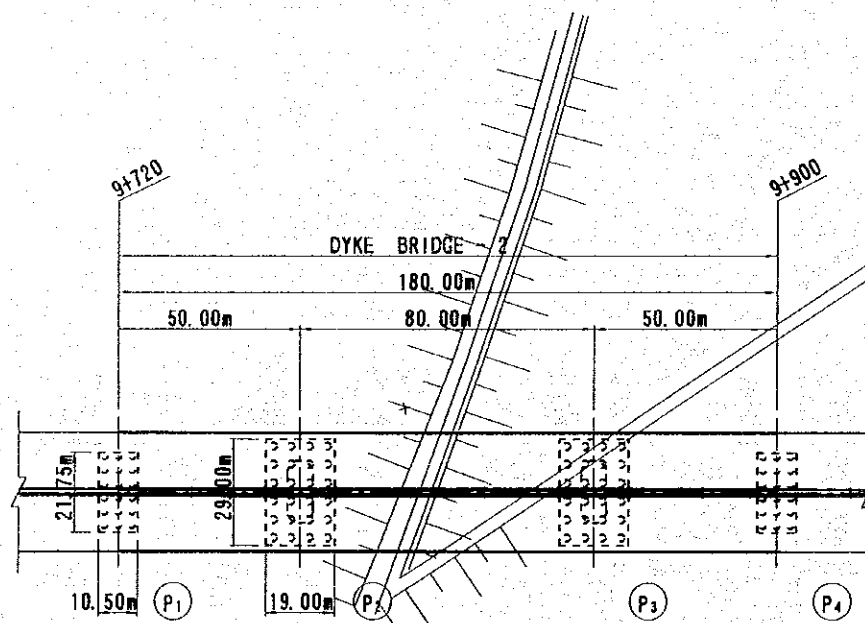
SCALE: 1:2000



PROFILE

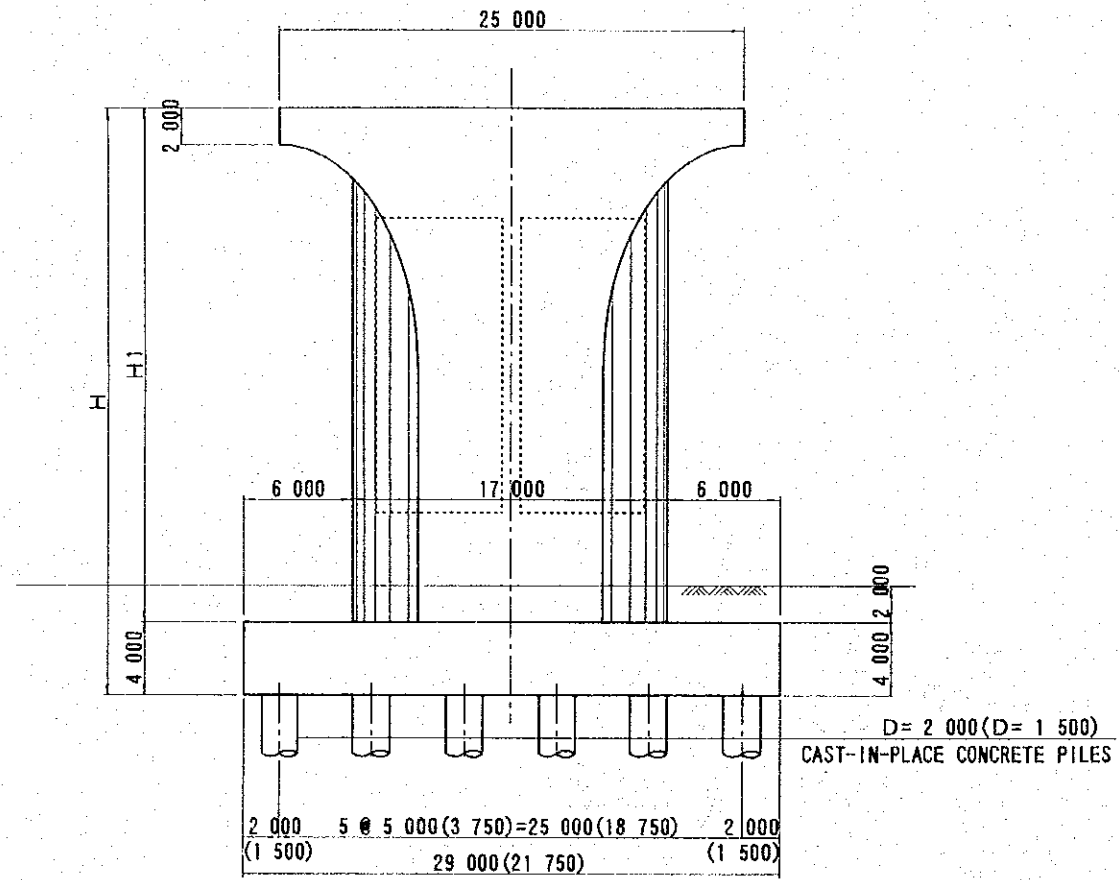


CROSS SECTION SCALE: 1:400

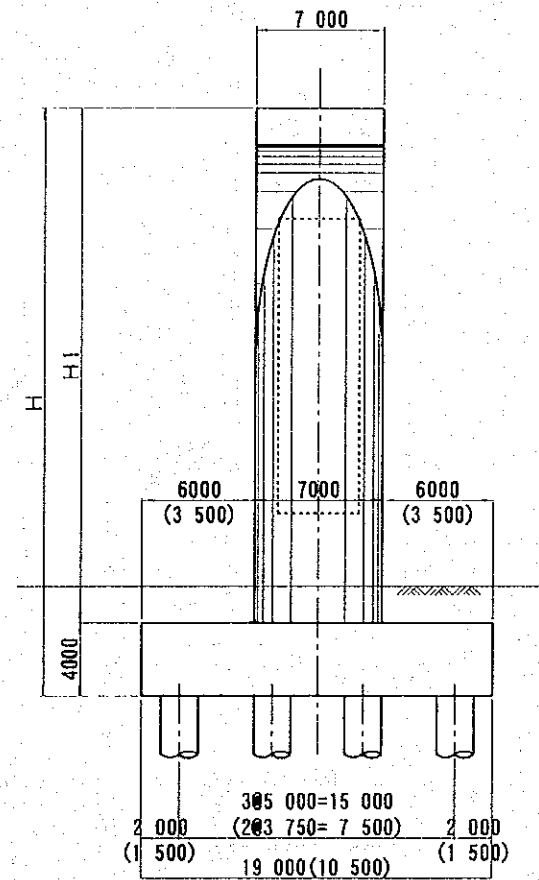


PLAN

SCALE: 1:400

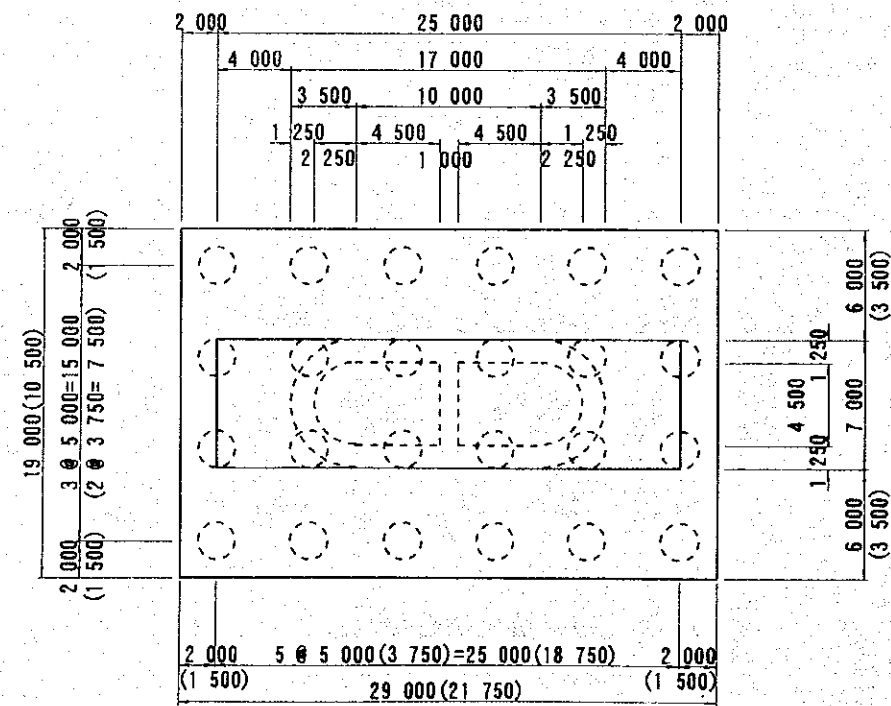


CROSS SECTION



PROFILE

	H	H 1
P 1	16,500	14,500
P 2	14,400	12,400
P 3	13,700	11,700
P 4	17,100	15,100



PLAN

() P1 AND P4