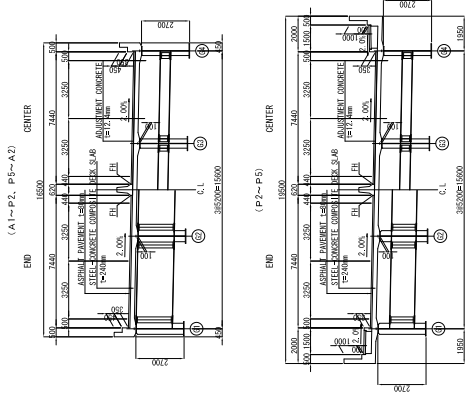


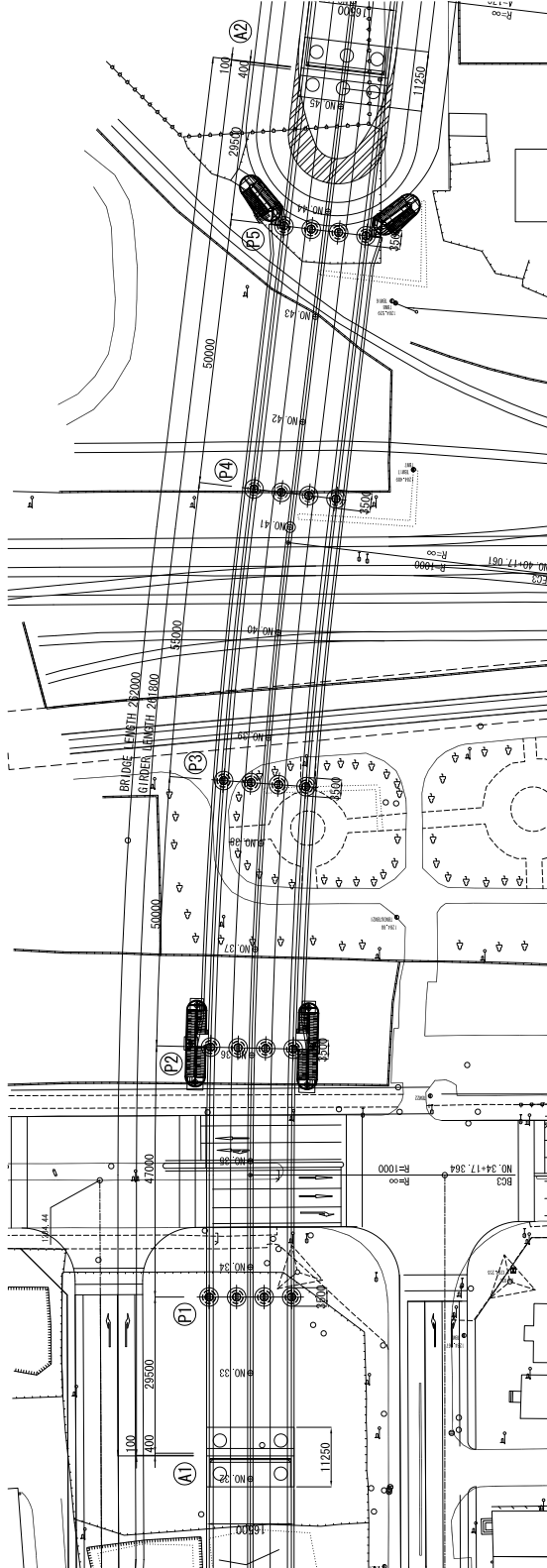
GENERAL LAYOUT OF BRIDGE



PROFILE
(SCALE: 1/1000)

TYPICAL CROSS SECTION OF SUPER
STRUCTURE (SCALE: 1/300)

P1, P2, P3, P5



PLAN
(SCALE: 1/1000)

TYPICAL CROSS SECTION OF PIER
(SCALE: 1/300)

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CTI Engineering International Co., Ltd.

TITLE:
GENERAL LAYOUT OF BRIDGE

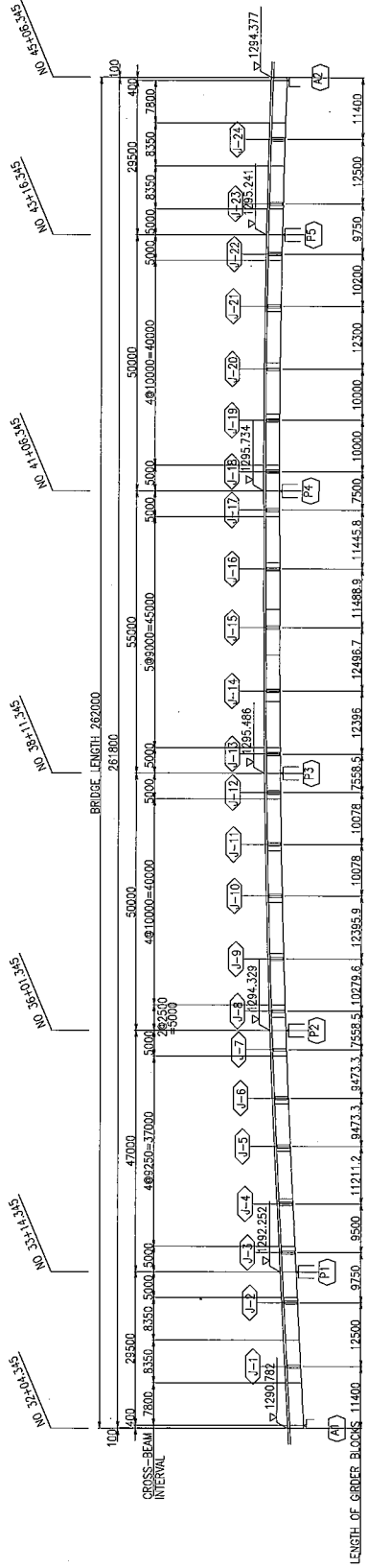
SCALE
AS SHOWN

Drawing No.

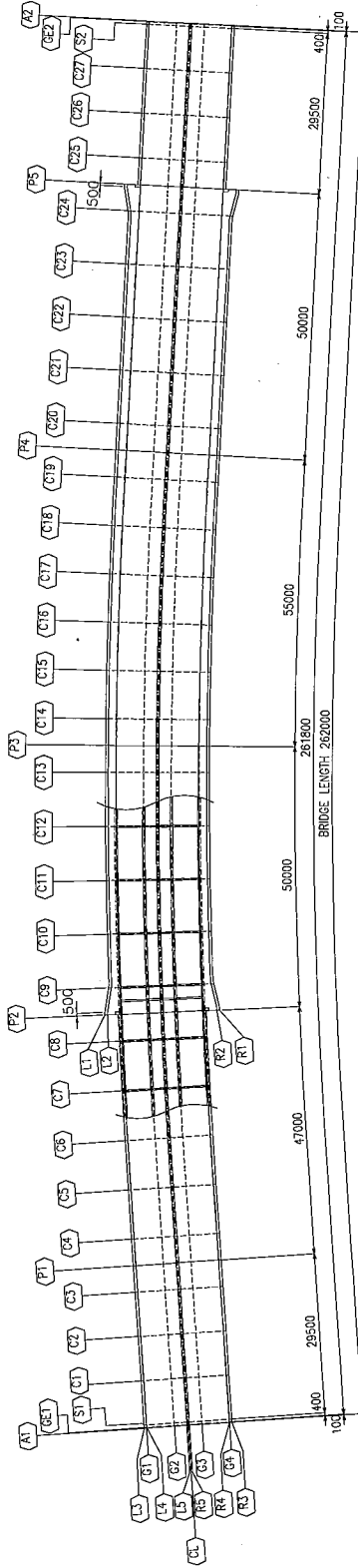
BD-1

DETAIL OF SUPER STRUCTURE

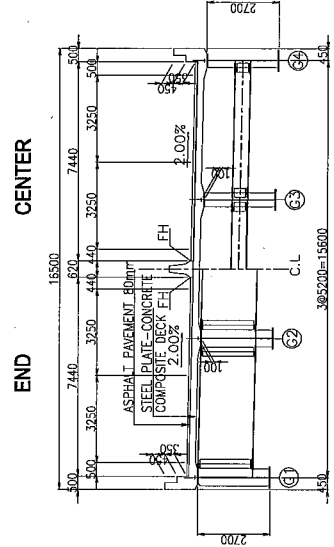
PROFILE (SCALE: 1/1000)



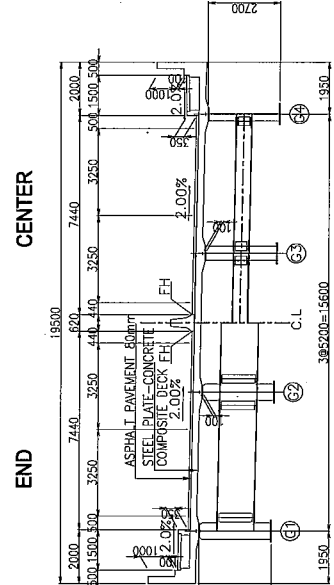
PLAN (SCALE: 1/1000)



CROSS-SECTION (A1-P2,P5-A2)
(SCALE: 1/200)



CROSS-SECTION (P2-P5)
(SCALE: 1/200)



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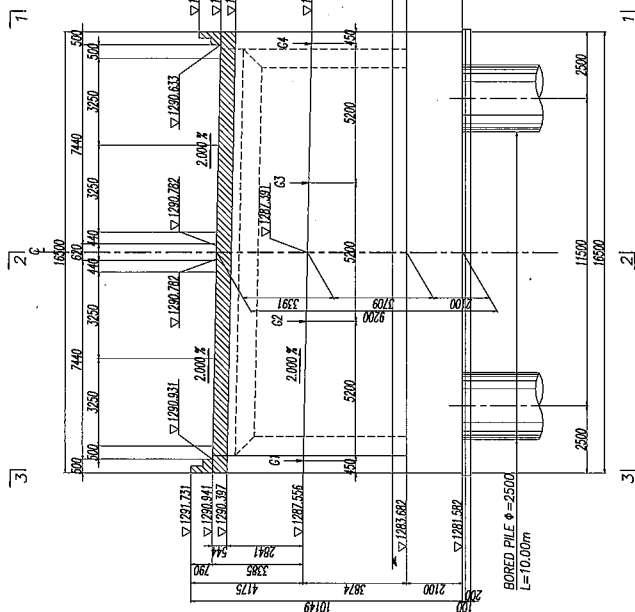
TITLE:
DETAIL OF SUPER STRUCTURE

SCALE
AS SHOWN

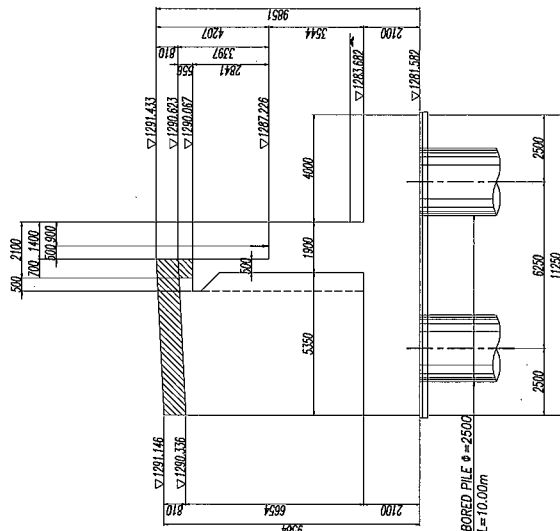
Drawing No.
BD 2

DETAIL OF ABUTMENT (A1)

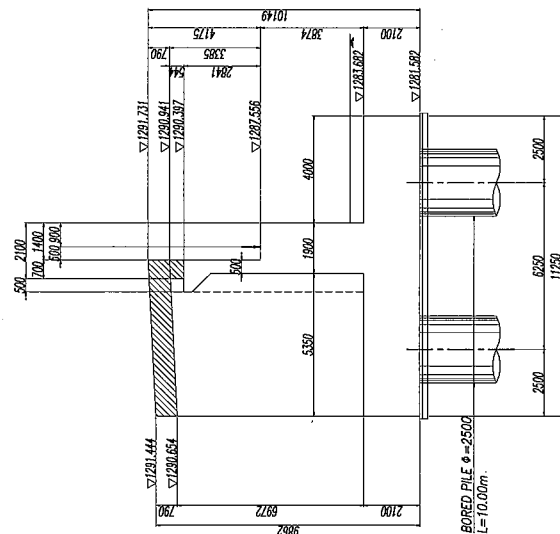
ELEVATION



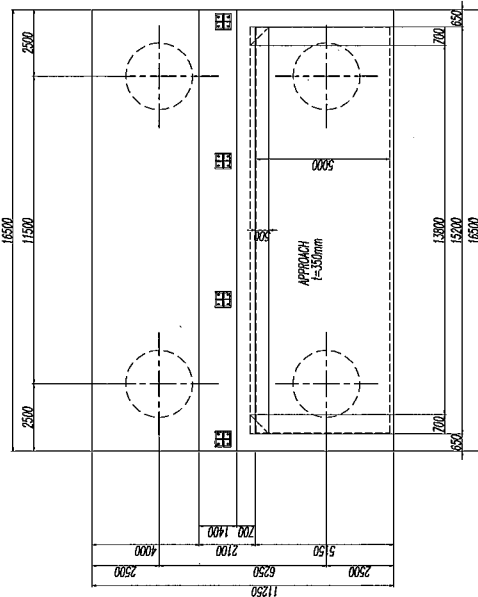
SECTION 1-1



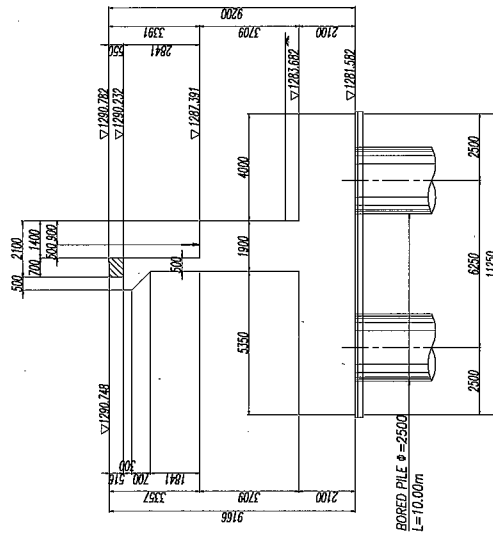
SECTION 3-3



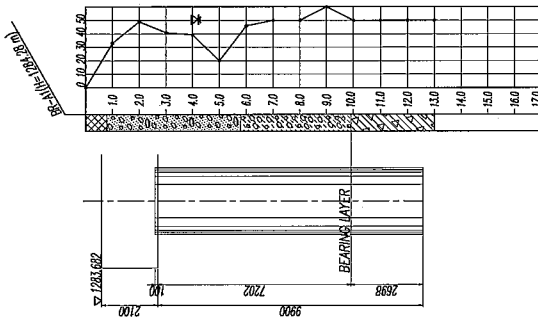
PLAN



SECTION 2-2

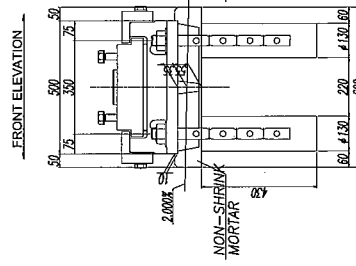


BORING LOG

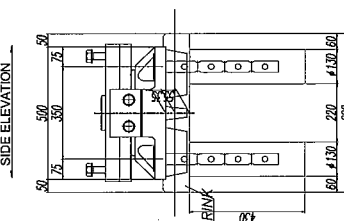


DETAILS OF BEARING

FRONT ELEVATION



SIDE ELEVATION



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TITLE:
DETAIL OF ABUTMENT(A1)

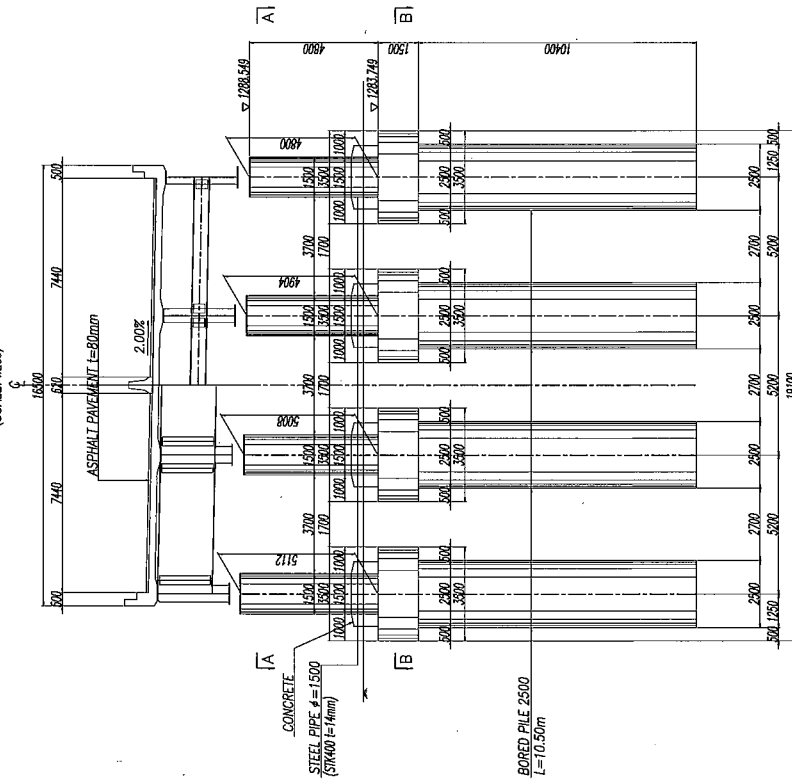
SCALE
S=1:200

Drawing No.

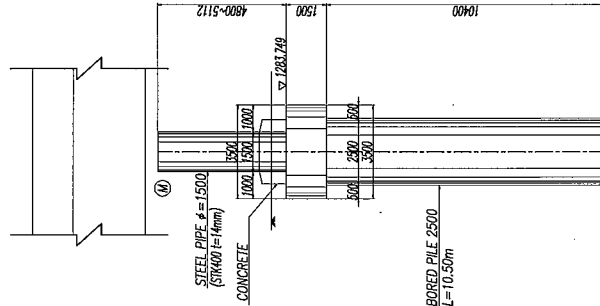
BD-3

DETAIL OF PIER (P1)

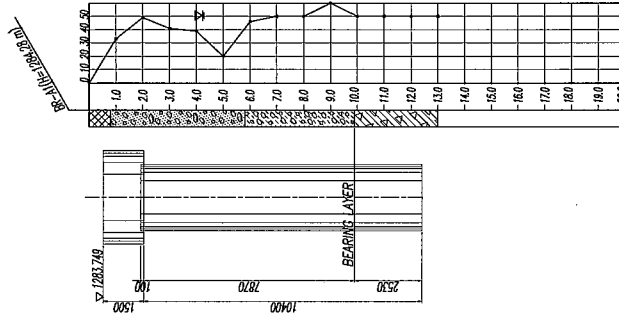
ELEVATION
(SCALE: 1:260)



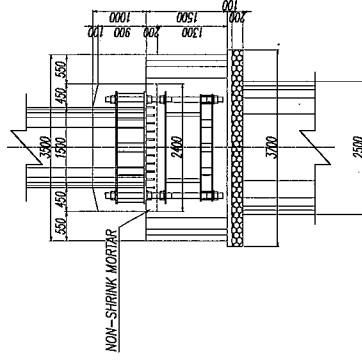
SECTION
(SCALE: 1:200)



BORING LOG

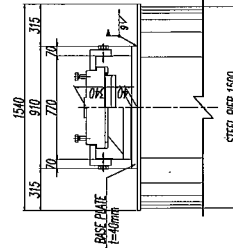


DETAIL OF ANCHOR
(SCALE: 1:100)

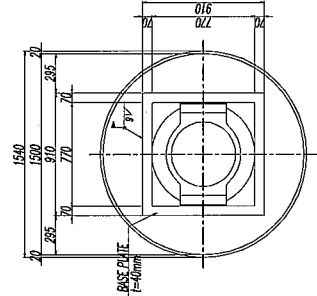


DETAILS OF BEARING
(SCALE: 1/40)

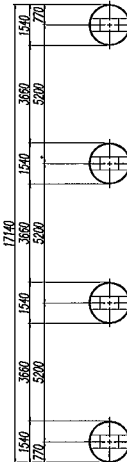
CROSS-SECTION



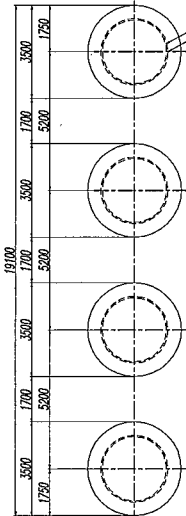
PLAN



SECTION A-A
(SCALE: 1:260)



SECTION B-B
(SCALE: 1:260)



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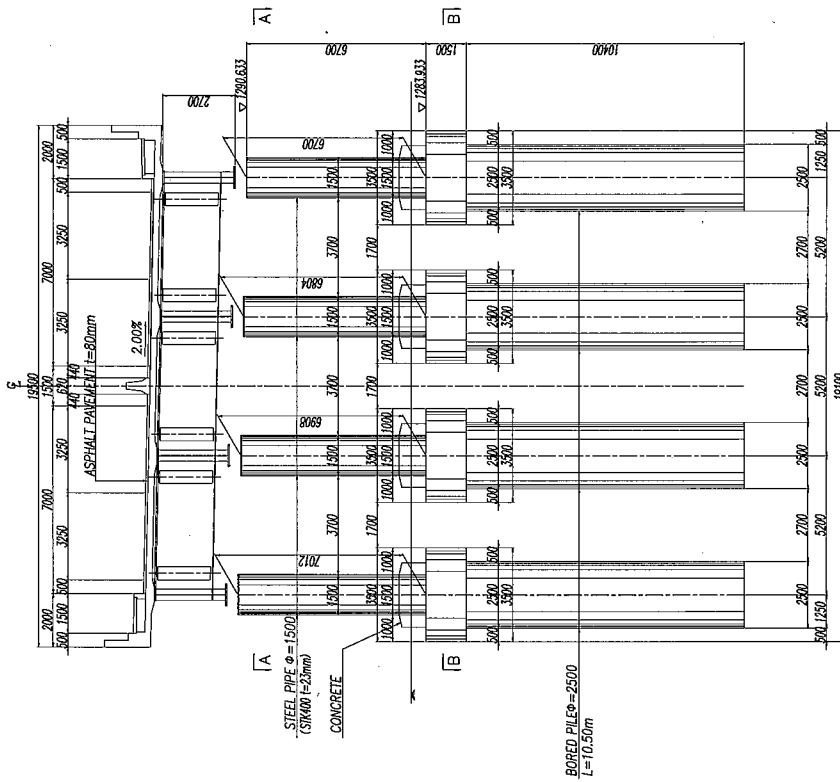
TITLE:
DETAIL OF PIER (P1)

SCALE
AS SHOWN

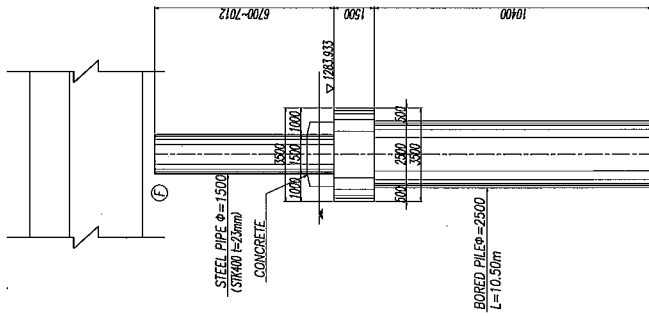
Drawing No.
BD-4

DETAIL OF PIER (P2)

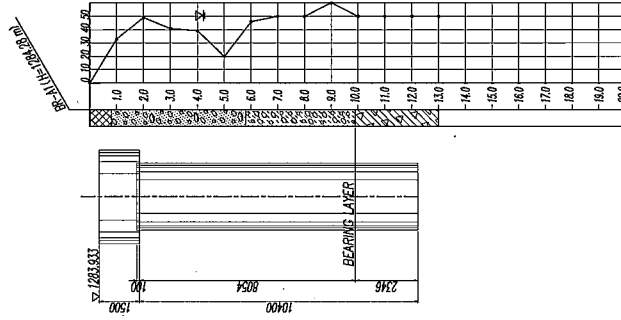
ELEVATION
(SCALE: 1/200)



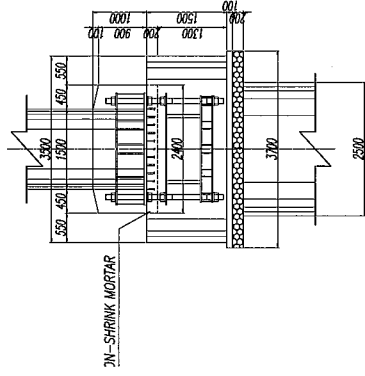
SECTION
(SCALE: 1/200)



BORING LOG

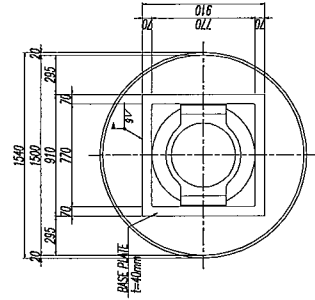


DETAIL OF ANCHOR
(SCALE: 1/100)

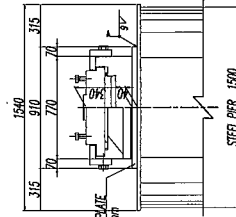


DETAILS OF BORING
(SCALE: 1/100)

PLAN



CROSS-SECTION



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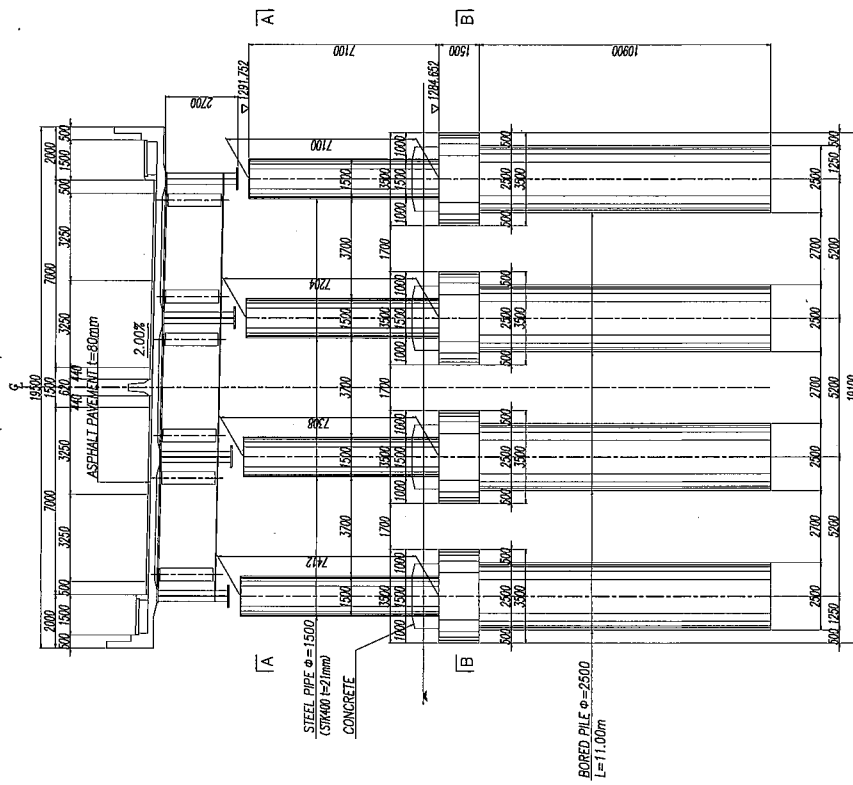
TITLE:
DETAIL OF PIER (P2)

SCALE
AS SHOWN

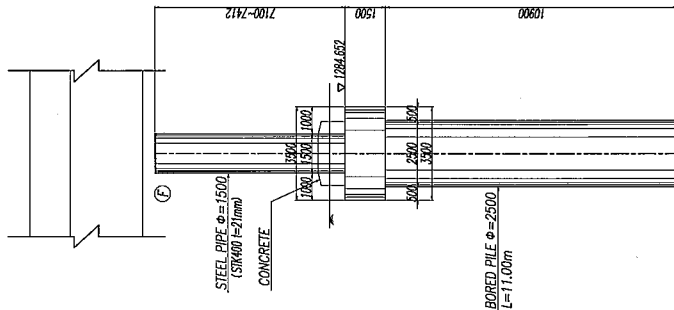
Drawing No.
BD-5

DETAIL OF PIER (P3)

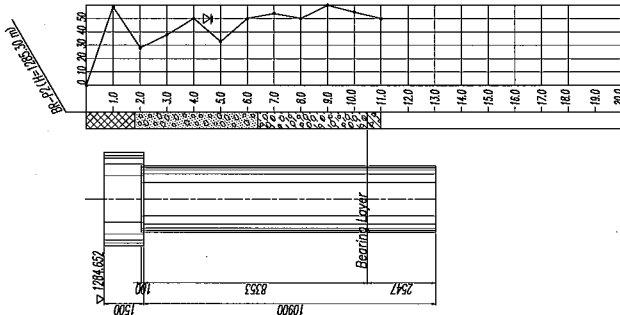
ELEVATION (SCALE: 1/2000)



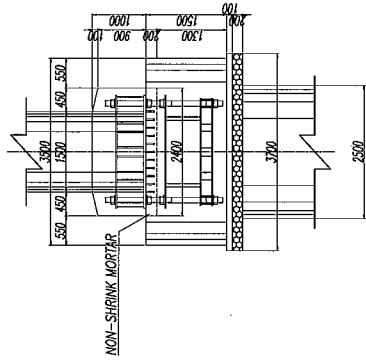
SECTION (SCALE: 1/2000)



BORING LOG

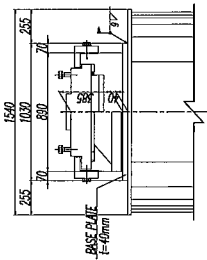


DETAIL OF ANCHOR (SCALE: 1/100)

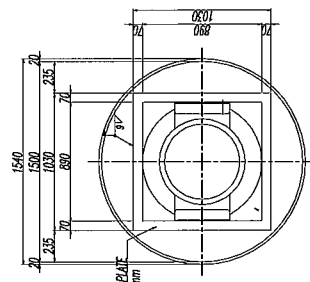


DETAILS OF BEARING (SCALE: 1/400)

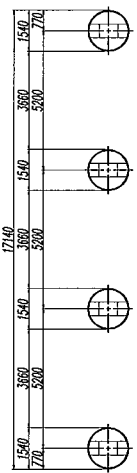
CROSS-SECTION



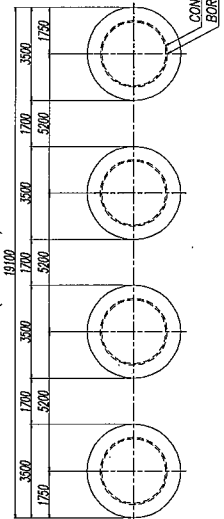
PLAN



SECTION A-A (SCALE: 1/2000)



SECTION B-B (SCALE: 1/2000)



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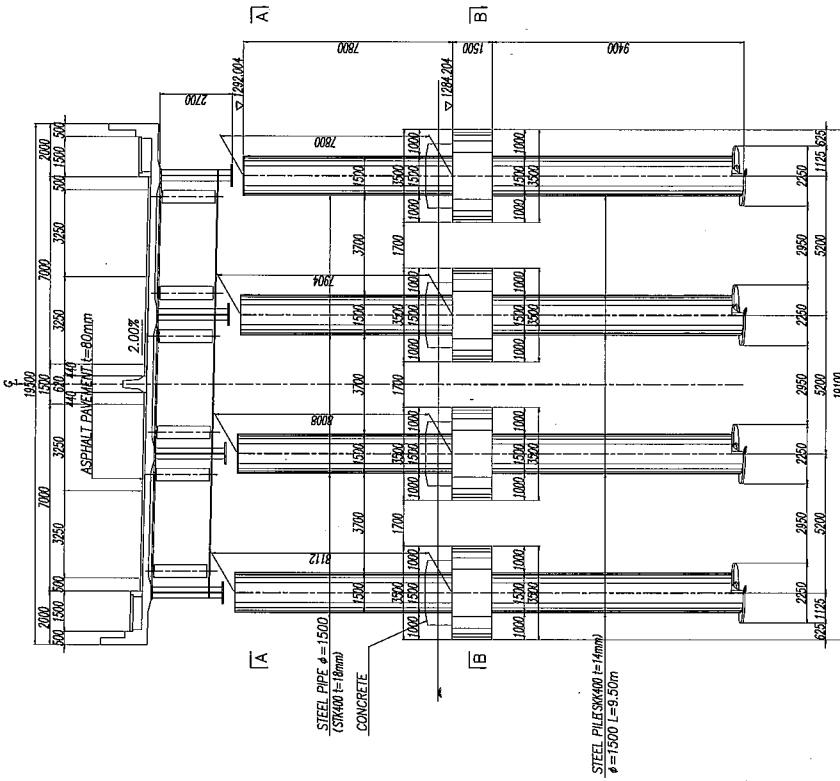
TITLE:
DETAIL OF PIER P3

SCALE
AS SHOWN

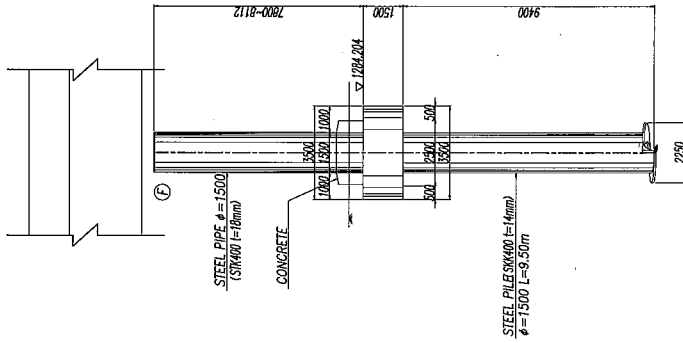
Drawing No.
BD-6

DETAIL OF PIER (P4)

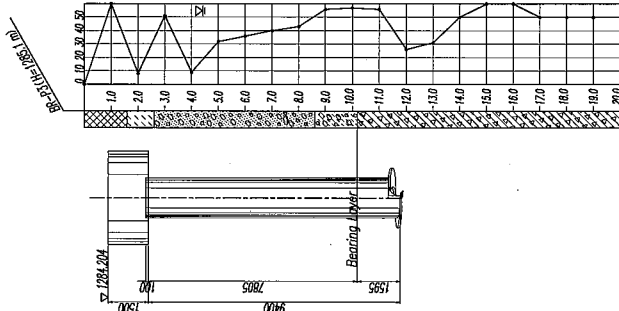
ELEVATION
(SCALE: 1/200)



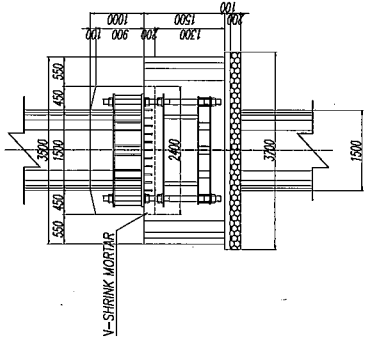
SECTION
(SCALE: 1/200)



BORING LOG

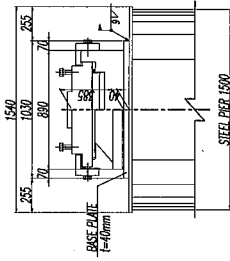


DETAIL OF ANCHOR
(SCALE: 1/100)

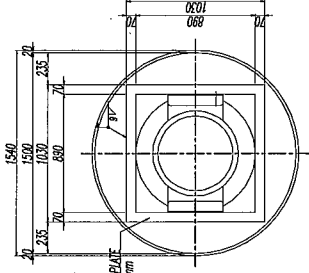


DETAILS OF BEARING
(SCALE: 1/40)

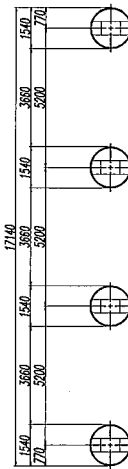
CROSS-SECTION



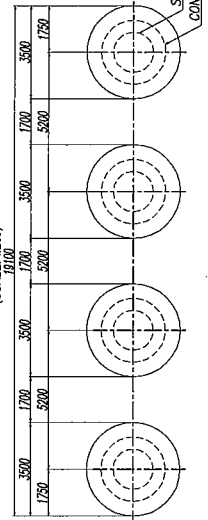
PLAN



SECTION A-A
(SCALE: 1/200)



SECTION B-B
(SCALE: 1/200)



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TITLE:
DETAIL OF PIER (P4)

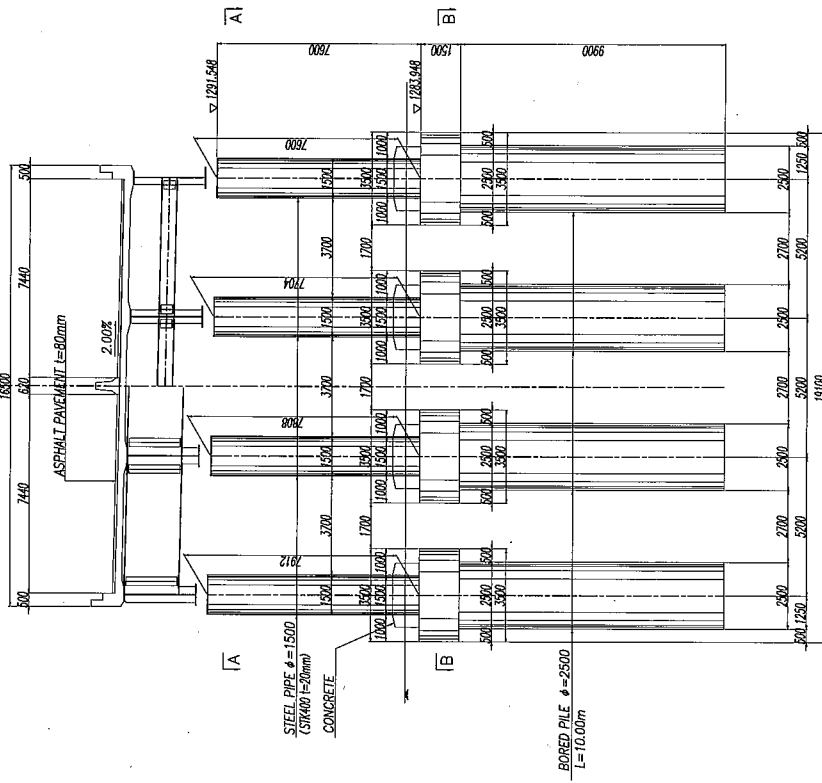
SCALE
AS SHOWN

Drawing No.
BD-7

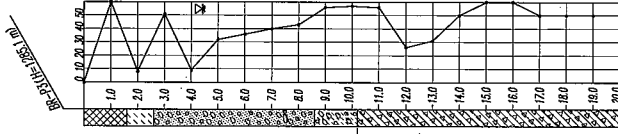
DETAIL OF PIER (P5)

ELEVATION
(SCALE: 1/200)

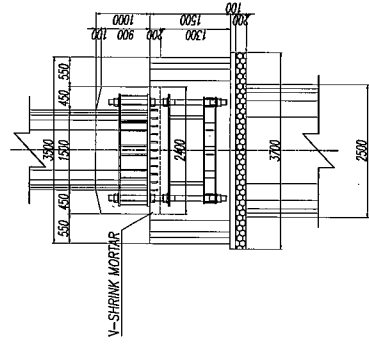
SECTION
(SCALE: 1/200)



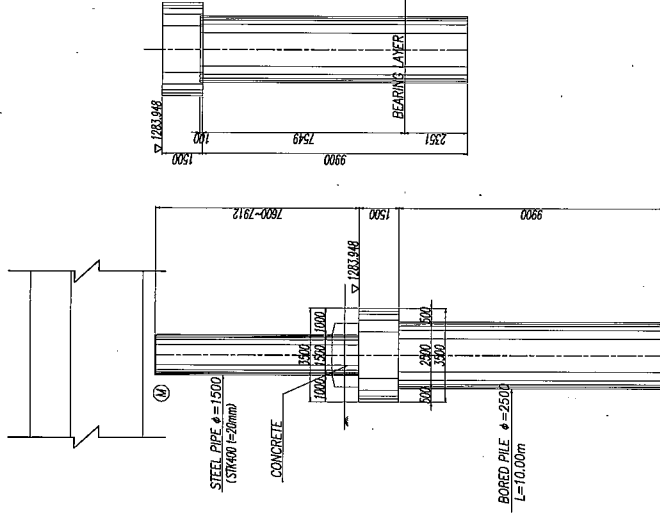
BORING LOG



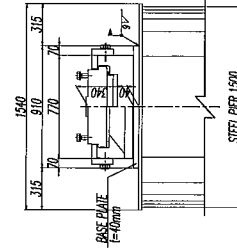
DETAIL OF ANCHOR
(SCALE: 1/100)



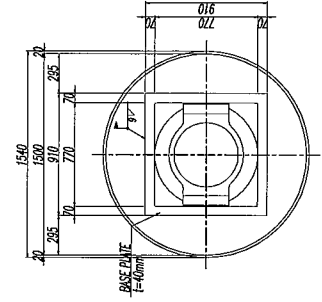
DETAILS OF BEARING
(SCALE: 1/40)



CROSS-SECTION



PLAN



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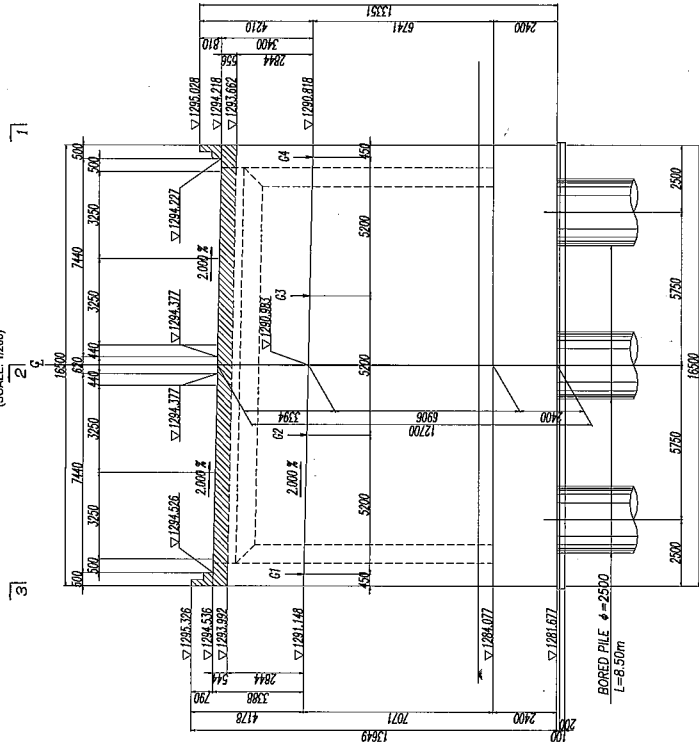
TITLE:
Detail of Pier P5

SCALE
AS SHOWN

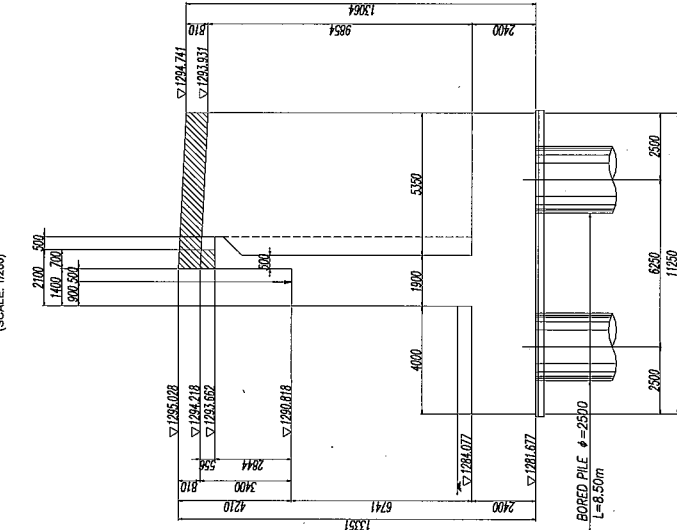
Drawing No.
BD-8

DETAIL OF ABUTMENT (A2)

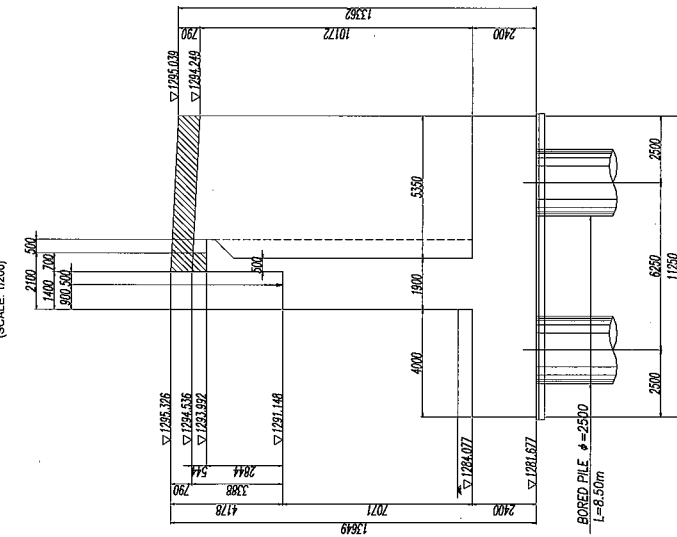
ELEVATION
(SCALE: 1:200)



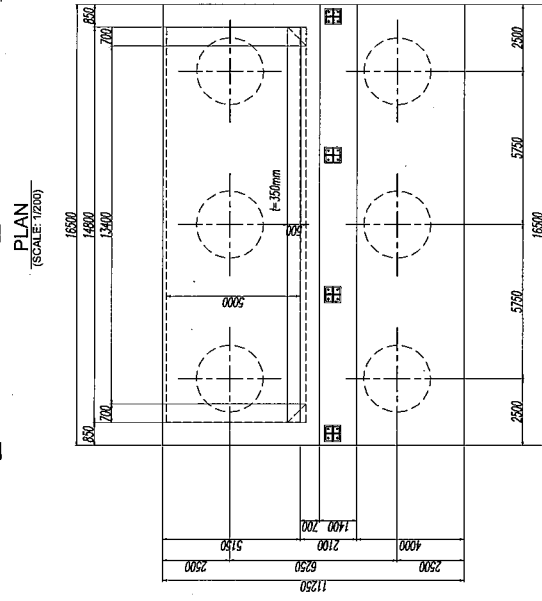
SECTION 1-1
(SCALE: 1:200)



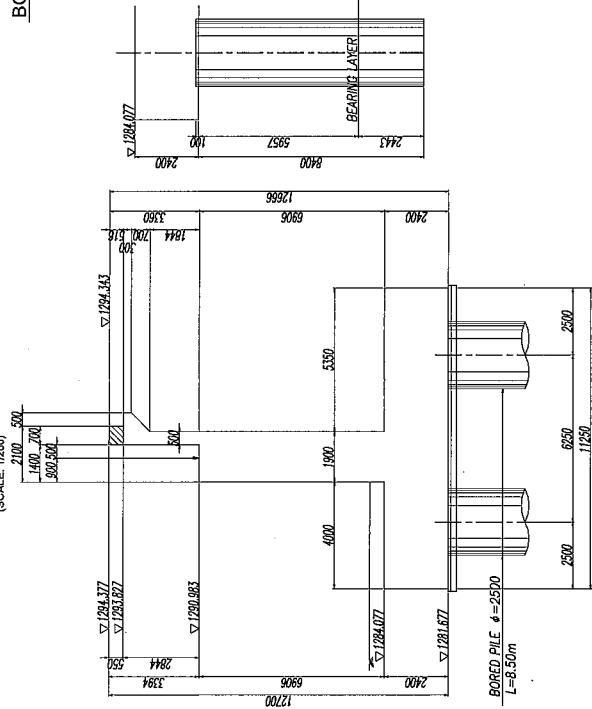
SECTION 3-3
(SCALE: 1:200)



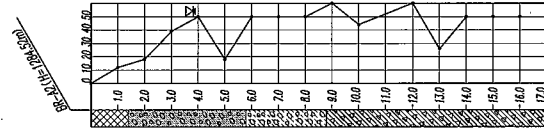
PLAN
(SCALE: 1:200)



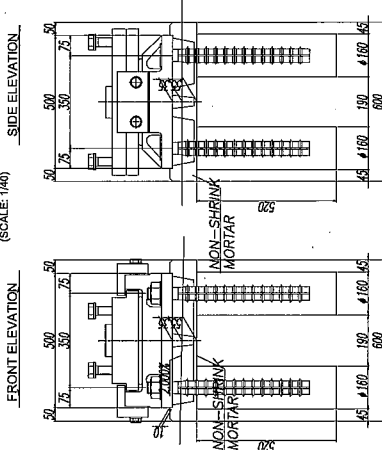
SECTION 2-2
(SCALE: 1:200)



BORING LOG



DETAILS OF BEARING



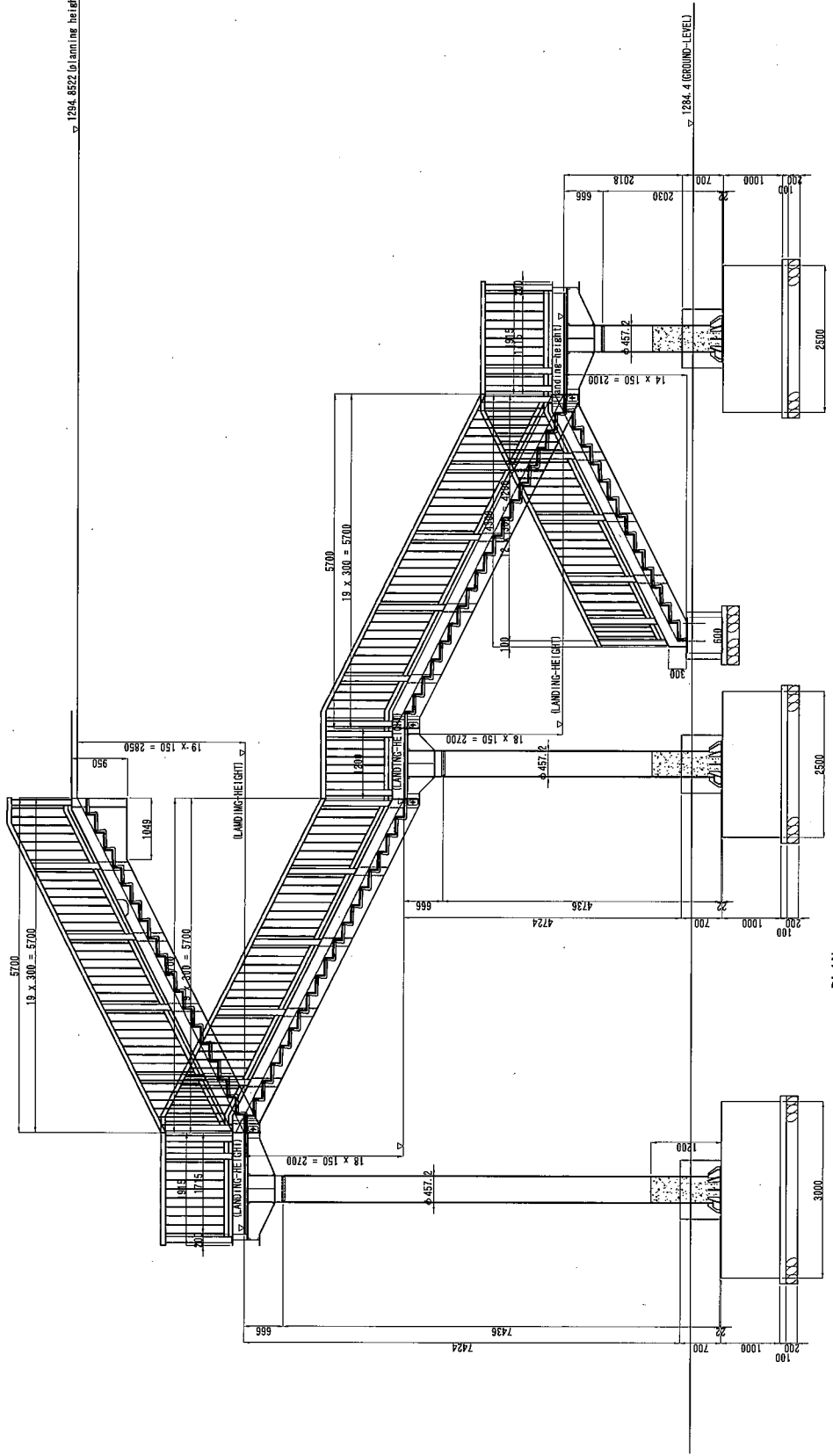
<p>BASIC DESIGN STUDY ON THE PROJECT FOR CONSTRUCTION OF RAILWAY FLY-OVER IN ULAANBAATAR CITY</p>	<p>MINISTRY OF ROAD, TRANSPORT AND TOURISM, MONGOLIA</p>	<p>JAPAN INTERNATIONAL COOPERATION AGENCY CTI Engineering International Co., Ltd.</p>	<p>TITLE: DETAIL OF ABUTMENT (A2)</p>	<p>SCALE S=1:200 S=1:40</p>	<p>Drawing No. BD-9</p>
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DETAIL OF STAIRCASE (1)

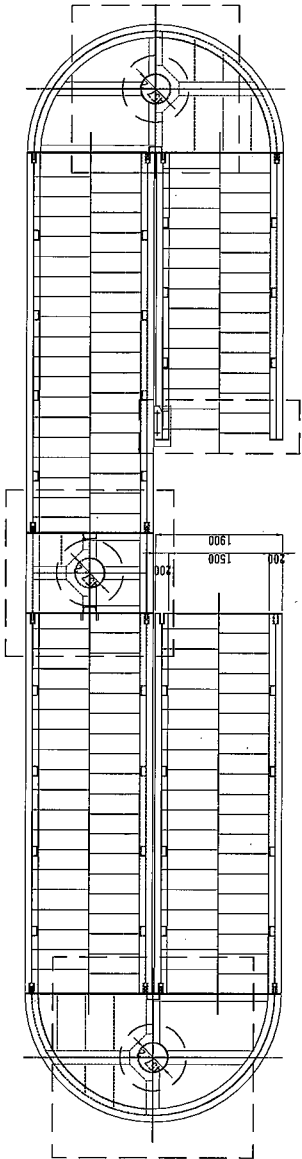
P2 NORTH-SIDE

PROFILE

A



PLAN



1284.8522 (to laminae the left)

1284.4 (GROUND-LEVEL)

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TITLE:
DETAIL OF STAIRCASE (1)

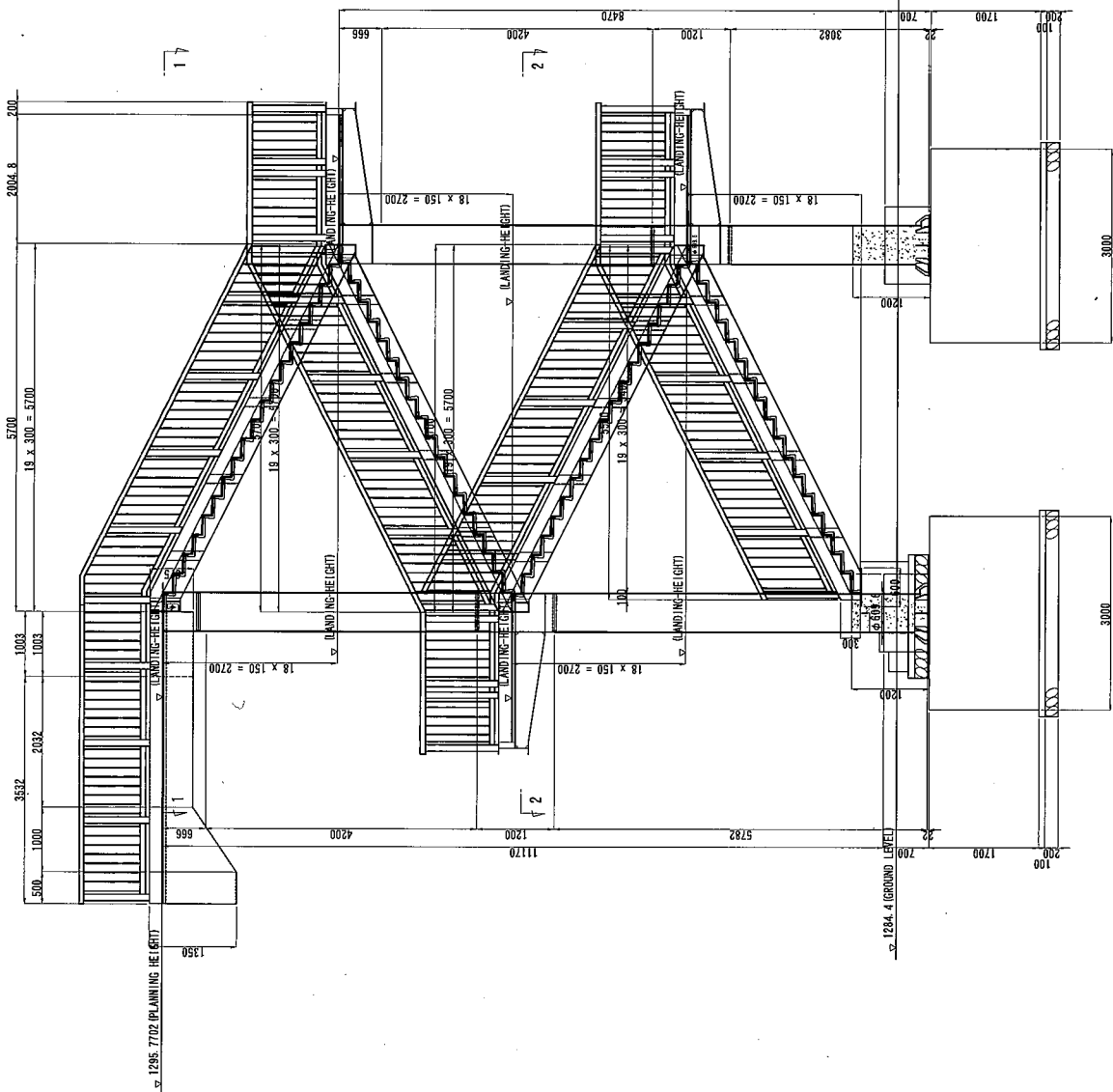
SCALE
S=1:80

Drawing No.
BD-10

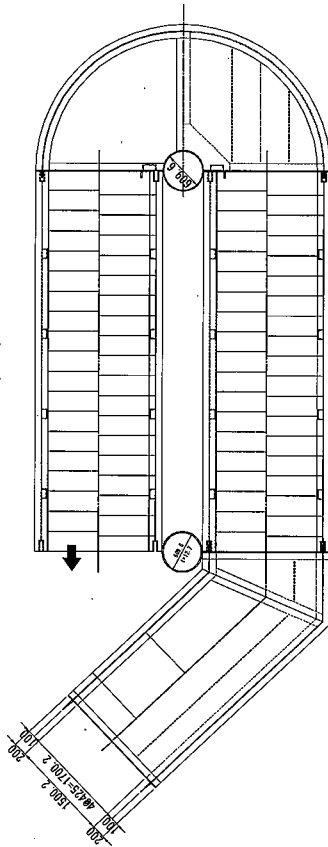
DETAIL OF STAIRCASE (2)

P5 (SOUTH-SIDE)
C

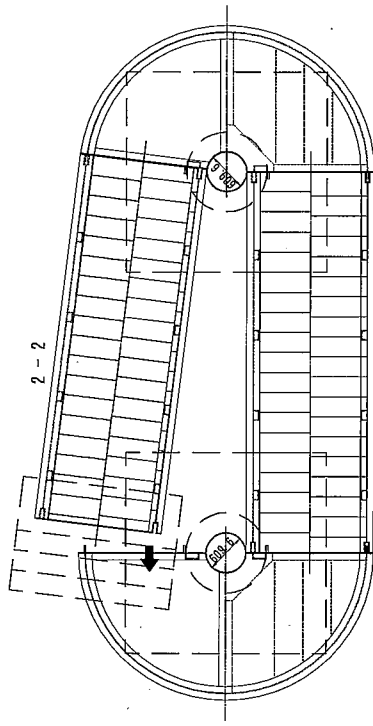
PROFILE



PLAN
1-1



2-2



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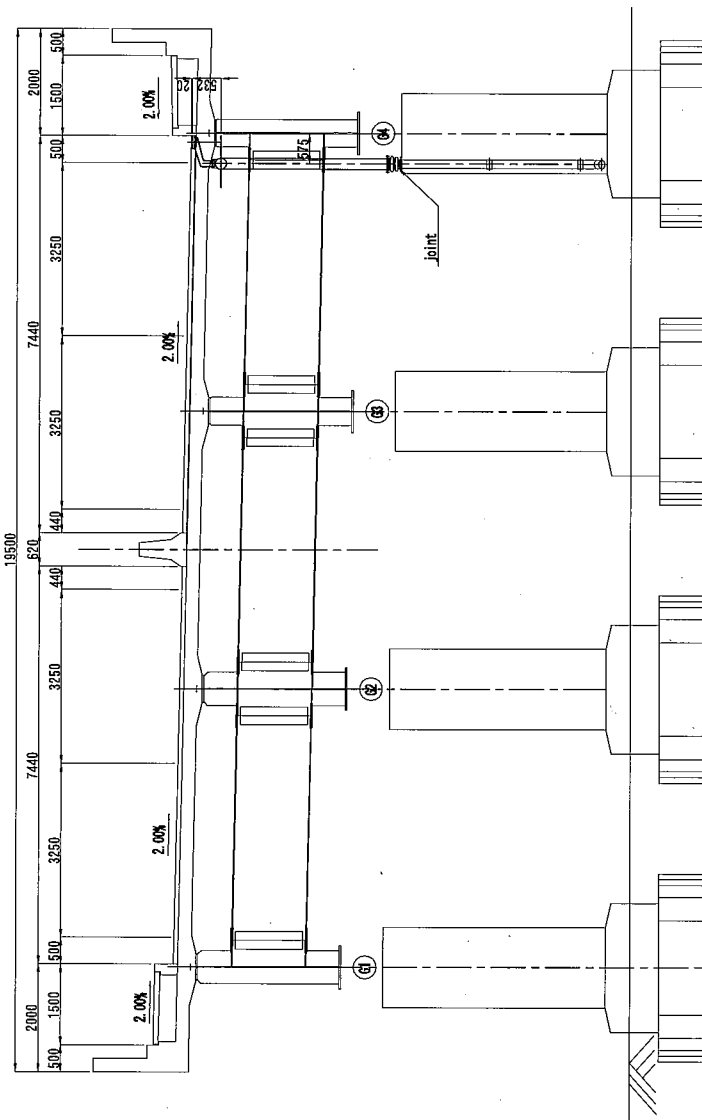
TITLE:
DETAIL OF STAIRCASE (2)

SCALE
S=1:80

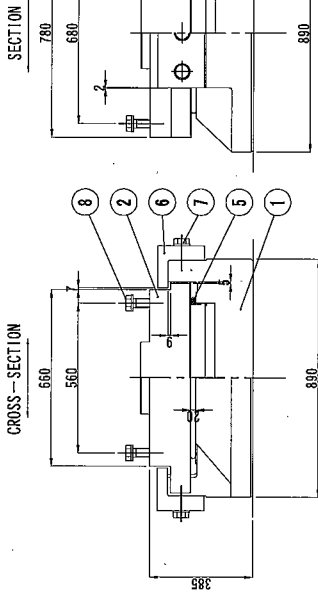
Drawing No.
BD-11

ACCESSORY OF BRIDGE

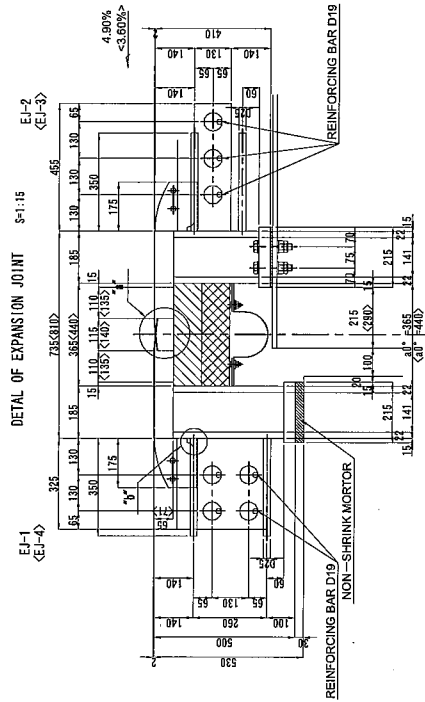
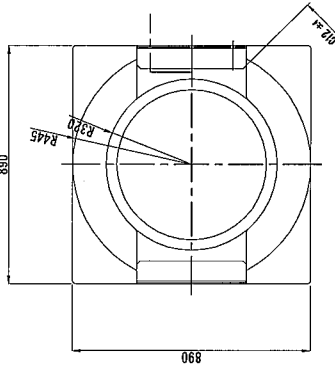
DETAIL OF DRAIN DRAWING (S=1/100)



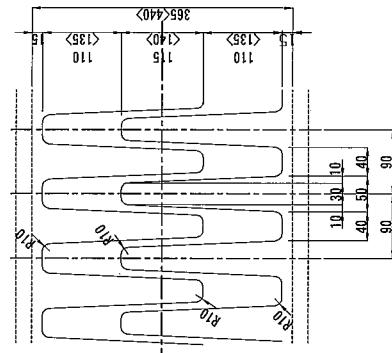
DETAIL OF BEARING (S=1:20)



PLAN



DETAIL OF FACE-PLATE (S=1:10)



TITLE:
ACCESSORY OF BRIDGE

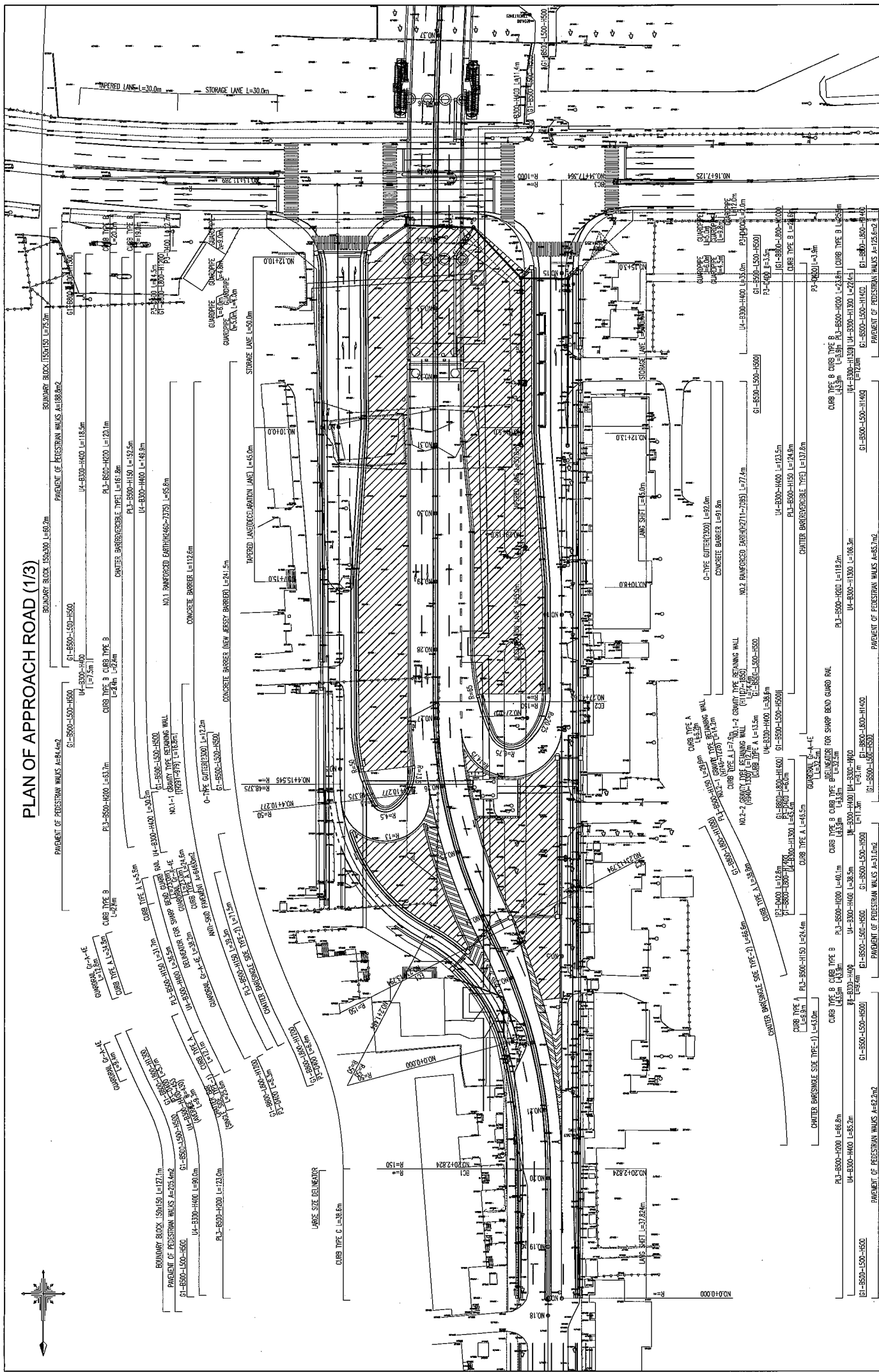
JAPAN INTERNATIONAL COOPERATION AGENCY
CTI Engineering International Co., Ltd.

BASIC DESIGN STUDY
ON THE PROJECT FOR CONSTRUCTION OF
RAILWAY FLY-OVER IN ULAANBAATAR CITY

SCALE
AS SHOWN

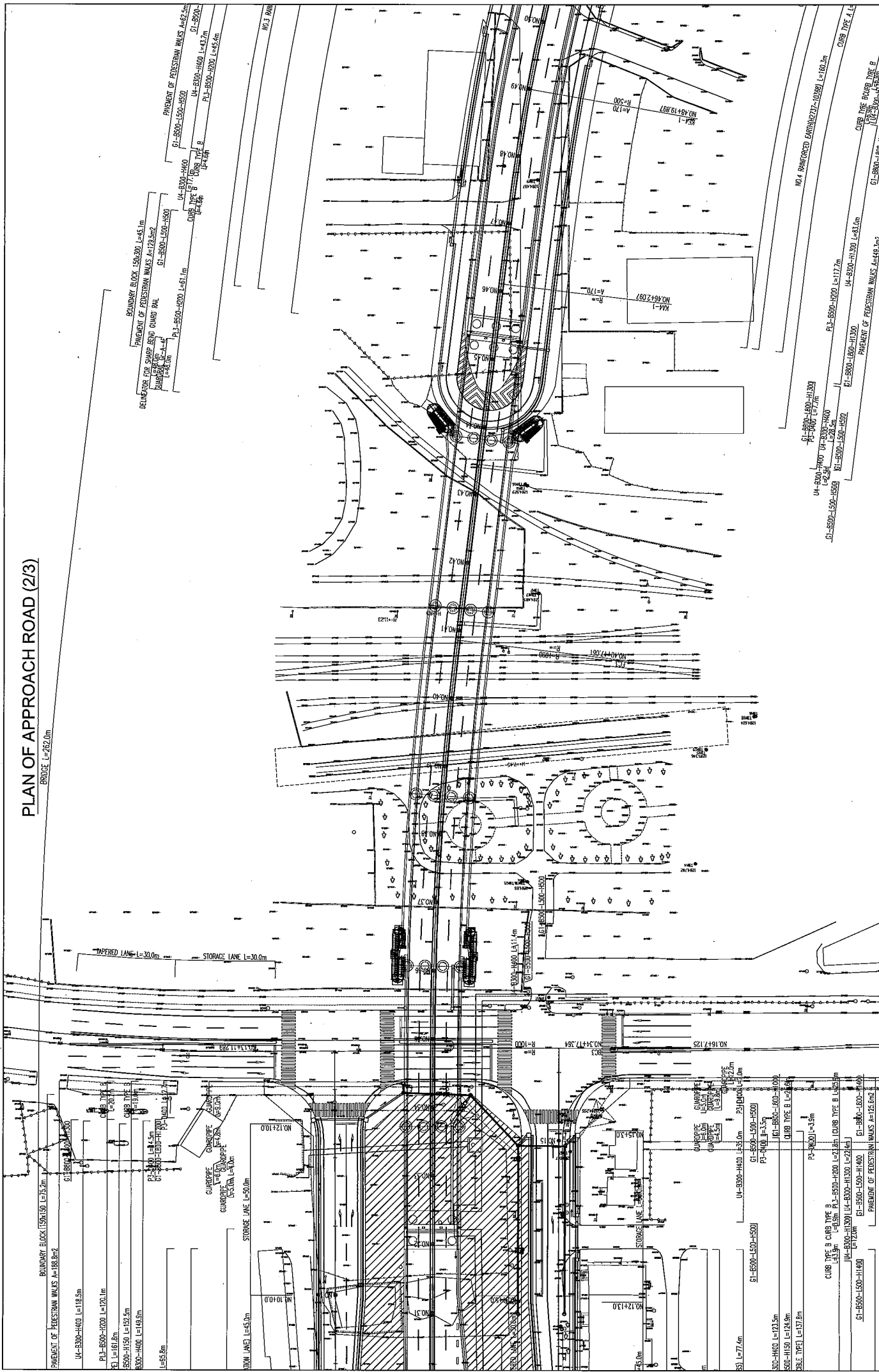
Drawing No.
BD-12

PLAN OF APPROACH ROAD (1/3)



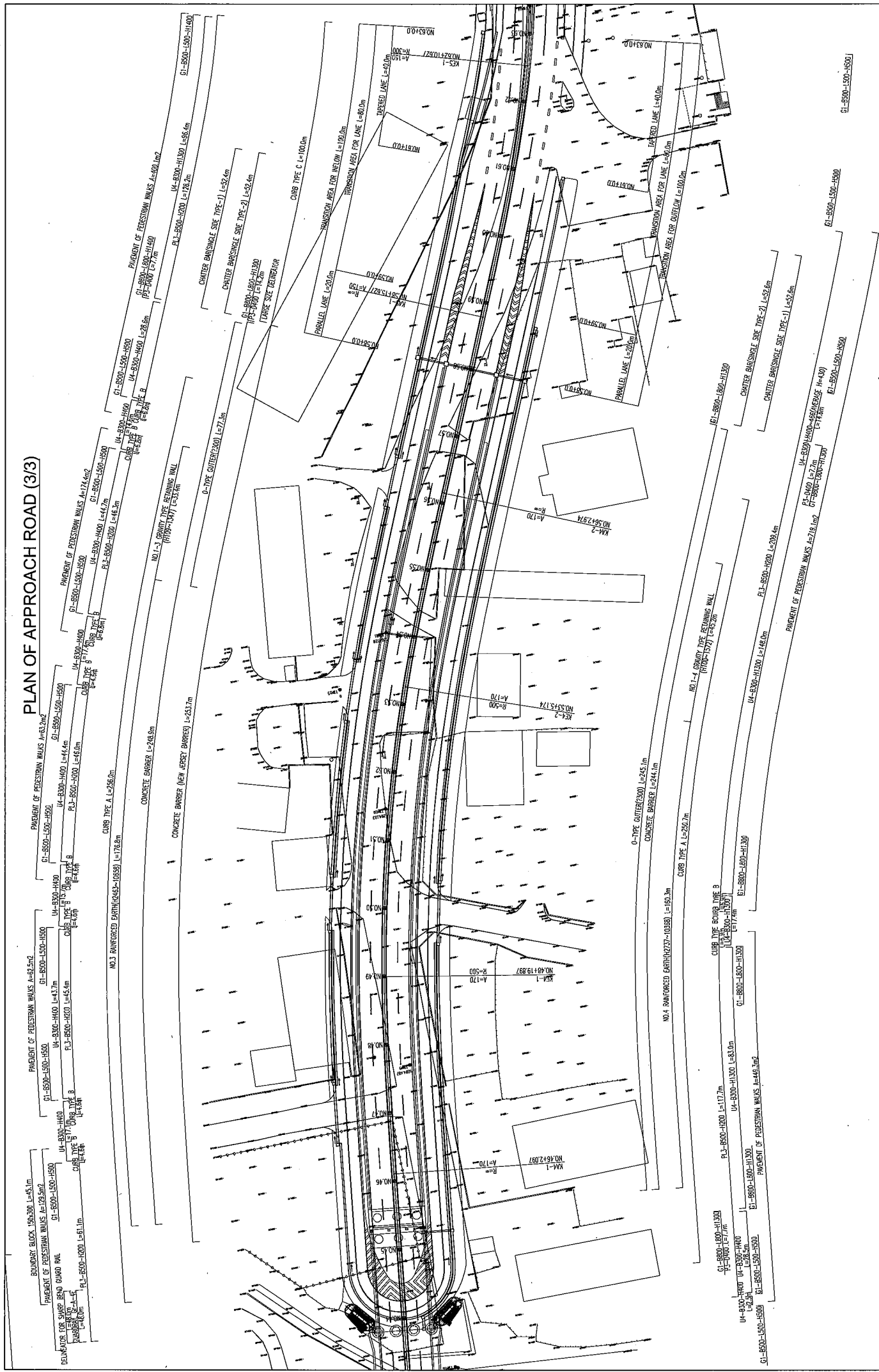
<p>BASIC DESIGN STUDY ON THE PROJECT FOR CONSTRUCTION OF RAILWAY FLY-OVER IN ULAANBAATAR CITY</p>	<p>MINISTRY OF ROAD, TRANSPORT AND TOURISM, MONGOLIA</p>	<p>JAPAN INTERNATIONAL COOPERATION AGENCY CTI Engineering International Co., Ltd.</p>	<p>TITLE: PLAN OF APPROACH ROAD (1/3)</p>	<p>SCALE S=1:1000</p>	<p>Drawing No. BD-13</p>
			<p>PAVEMENT OF PEDESTRIAN WALKS A=62.2m²</p>	<p>PAVEMENT OF PEDESTRIAN WALKS A=108.3m</p>	<p>PAVEMENT OF PEDESTRIAN WALKS A=125.6m²</p>

PLAN OF APPROACH ROAD (2/3)



<p>TITLE:</p> <p>PLAN OF APPROACH ROAD (2/3)</p>	<p>SCALE</p> <p>S=1:1000</p>	<p>Drawing No.</p> <p>BD-14</p>
<p>BASIC DESIGN STUDY</p> <p>ON THE PROJECT FOR CONSTRUCTION OF</p> <p>RAILWAY FLY-OVER IN ULAANBAATAR CITY</p>	<p>JAPAN INTERNATIONAL COOPERATION AGENCY</p> <p>CTI Engineering International Co., Ltd.</p>	<p>MINISTRY OF ROAD, TRANSPORT AND</p> <p>TOURISM, MONGOLIA</p>

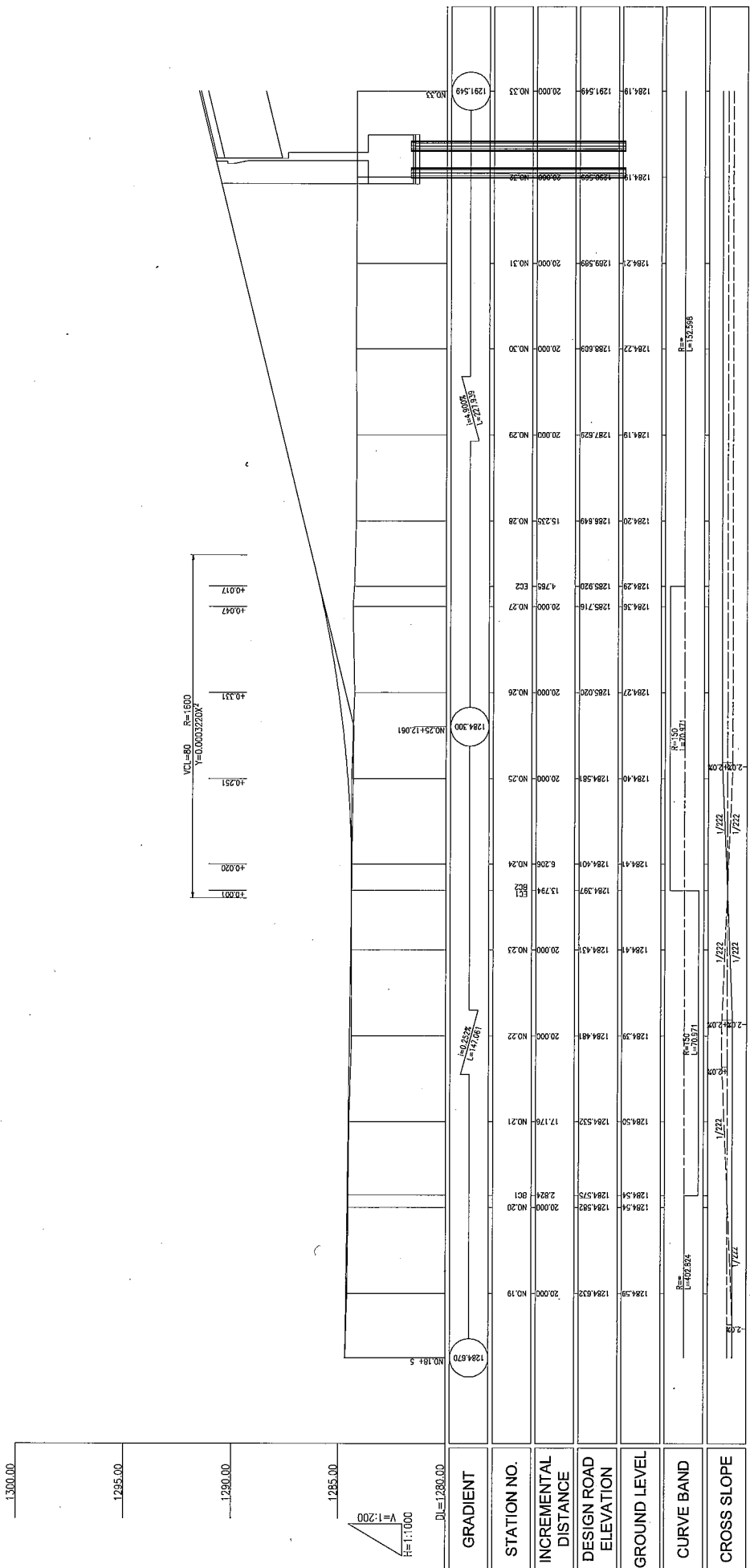
PLAN OF APPROACH ROAD (3/3)



Drawing No.	BD-15
SCALE	S=1:1000
TITLE:	PLAN OF APPROACH ROAD (3/3)
JAPAN INTERNATIONAL COOPERATION AGENCY	CTI Engineering International Co., Ltd.
MINISTRY OF ROAD, TRANSPORT AND TOURISM, MONGOLIA	BASIC DESIGN STUDY ON THE PROJECT FOR CONSTRUCTION OF RAILWAY FLY-OVER IN ULAANBAATAR CITY

PROFILE OF MAIN ROAD (1/3)

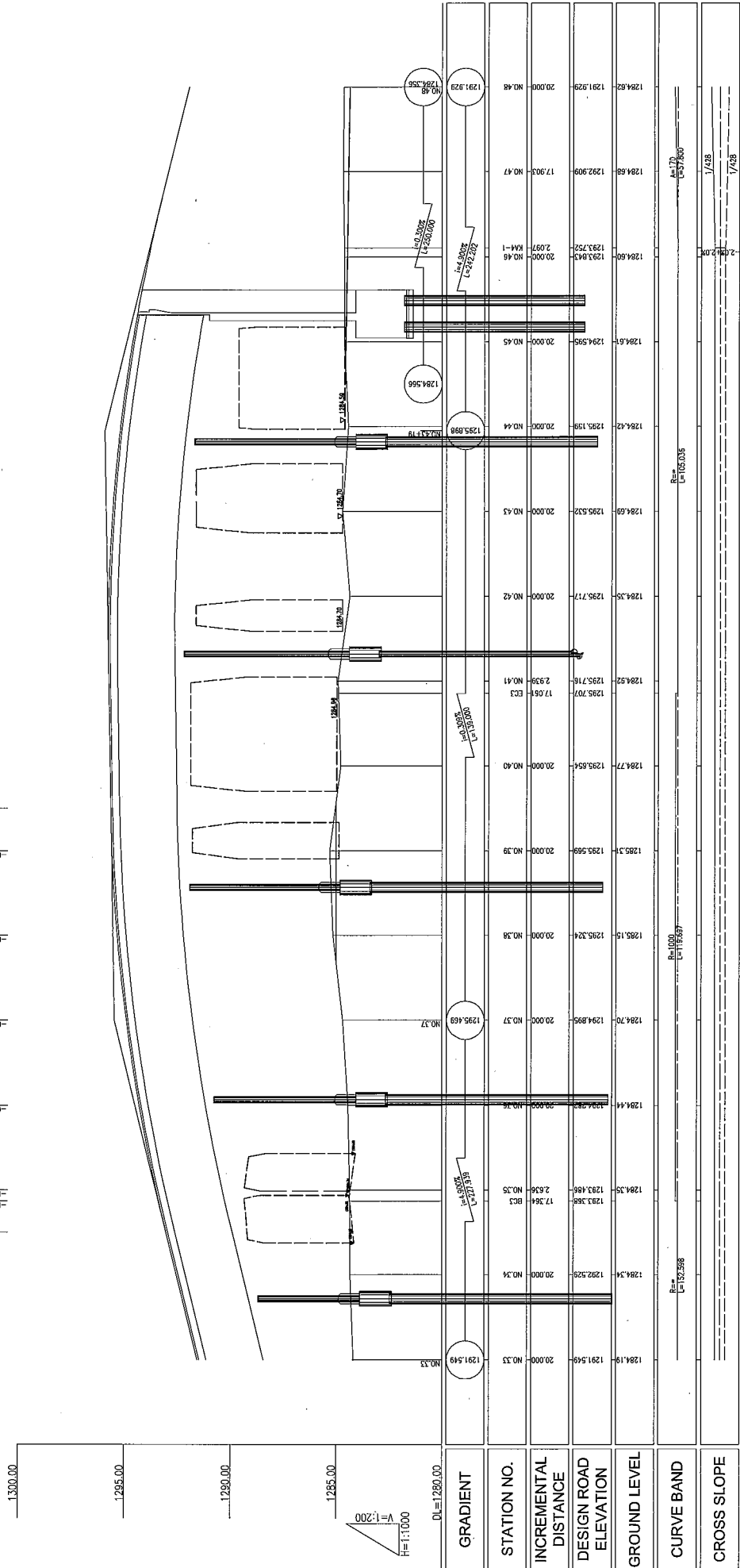
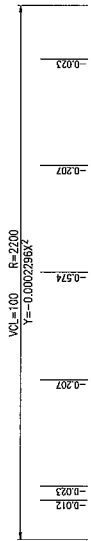
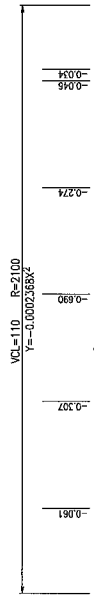
S,V=1:200,H=1:1000



BASIC DESIGN STUDY ON THE PROJECT FOR CONSTRUCTION OF RAILWAY FLY-OVER IN ULAANBAATAR CITY	MINISTRY OF ROAD, TRANSPORT AND TOURISM, MONGOLIA	JAPAN INTERNATIONAL COOPERATION AGENCY CTI Engineering International Co., Ltd.	TITLE: PROFILE OF MAIN ROAD (1/3)
	SCALE	DRAWING No.	BD-16
	V=1:200 H=1:1000		

PROFILE OF MAIN ROAD (2/3)

S:V=1:200, H=1:1000

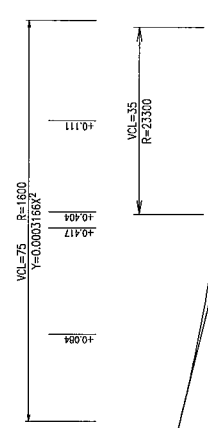
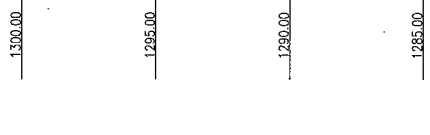


GRADIENT	STATION NO.	INCREMENTAL DISTANCE	DESIGN ROAD ELEVATION	GROUND LEVEL	CURVE BAND	CROSS SLOPE
1:200	1284.18	20.000	1291.549	1284.18	R=163.936	1/28
1:200	1284.38	20.000	1292.529	1284.38	R=163.937	1/28
1:200	1284.58	20.000	1293.489	1284.58	R=163.937	1/28
1:200	1284.78	20.000	1294.389	1284.78	R=163.937	1/28
1:200	1284.98	20.000	1295.229	1284.98	R=163.937	1/28
1:200	1285.18	20.000	1295.929	1285.18	R=163.937	1/28
1:200	1285.38	20.000	1296.489	1285.38	R=163.937	1/28
1:200	1285.58	20.000	1296.929	1285.58	R=163.937	1/28
1:200	1285.78	20.000	1297.229	1285.78	R=163.937	1/28
1:200	1285.98	20.000	1297.489	1285.98	R=163.937	1/28
1:200	1286.18	20.000	1297.689	1286.18	R=163.937	1/28
1:200	1286.38	20.000	1297.829	1286.38	R=163.937	1/28
1:200	1286.58	20.000	1297.929	1286.58	R=163.937	1/28
1:200	1286.78	20.000	1297.989	1286.78	R=163.937	1/28
1:200	1286.98	20.000	1298.029	1286.98	R=163.937	1/28
1:200	1287.18	20.000	1298.049	1287.18	R=163.937	1/28
1:200	1287.38	20.000	1298.049	1287.38	R=163.937	1/28
1:200	1287.58	20.000	1298.029	1287.58	R=163.937	1/28
1:200	1287.78	20.000	1297.989	1287.78	R=163.937	1/28
1:200	1287.98	20.000	1297.929	1287.98	R=163.937	1/28
1:200	1288.18	20.000	1297.829	1288.18	R=163.937	1/28
1:200	1288.38	20.000	1297.689	1288.38	R=163.937	1/28
1:200	1288.58	20.000	1297.529	1288.58	R=163.937	1/28
1:200	1288.78	20.000	1297.329	1288.78	R=163.937	1/28
1:200	1288.98	20.000	1297.089	1288.98	R=163.937	1/28
1:200	1289.18	20.000	1296.829	1289.18	R=163.937	1/28
1:200	1289.38	20.000	1296.529	1289.38	R=163.937	1/28
1:200	1289.58	20.000	1296.229	1289.58	R=163.937	1/28
1:200	1289.78	20.000	1295.929	1289.78	R=163.937	1/28
1:200	1289.98	20.000	1295.589	1289.98	R=163.937	1/28
1:200	1290.18	20.000	1295.229	1290.18	R=163.937	1/28
1:200	1290.38	20.000	1294.829	1290.38	R=163.937	1/28
1:200	1290.58	20.000	1294.429	1290.58	R=163.937	1/28
1:200	1290.78	20.000	1294.029	1290.78	R=163.937	1/28
1:200	1290.98	20.000	1293.629	1290.98	R=163.937	1/28
1:200	1291.18	20.000	1293.229	1291.18	R=163.937	1/28
1:200	1291.38	20.000	1292.829	1291.38	R=163.937	1/28
1:200	1291.58	20.000	1292.429	1291.58	R=163.937	1/28
1:200	1291.78	20.000	1292.029	1291.78	R=163.937	1/28
1:200	1291.929	20.000	1291.629	1291.929	R=163.937	1/28

BASIC DESIGN STUDY ON THE PROJECT FOR CONSTRUCTION OF RAILWAY FLY-OVER IN ULAANBAATAR CITY	JAPAN INTERNATIONAL COOPERATION AGENCY CTI Engineering International Co., Ltd.	TITLE: PROFILE OF MAIN ROAD (2/3)	SCALE V=1:200 H=1:1000	Drawing No. BD-17
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PROFILE OF MAIN ROAD (3/3)

S:V=1:200, H=1:1000



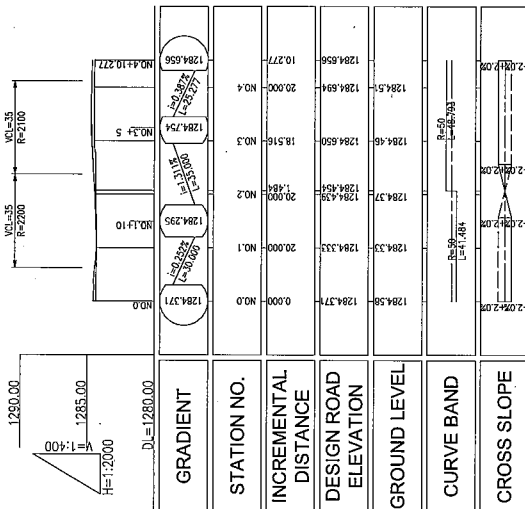
GRADIENT	STATION NO.	INCREMENTAL DISTANCE	DESIGN ROAD ELEVATION	GROUND LEVEL	CURVE BAND	CROSS SLOPE
NO.48	1291.928	20.000	NO.48	1284.82	A=1/11, L=243.88	1/498
NO.49	1291.928	20.000	NO.49	1284.4	A=1/11, L=243.88	1/498
NO.50	1291.928	20.000	NO.50	1284.38	A=1/11, L=243.88	1/498
NO.51	1291.928	20.000	NO.51	1284.30	A=1/11, L=243.88	1/498
NO.52	1291.928	20.000	NO.52	1284.35	A=1/11, L=243.88	1/498
NO.53	1291.928	20.000	NO.53	1284.35	A=1/11, L=243.88	1/498
K4-2	1291.928	5.174	K4-2	1285.75	A=1/11, L=243.88	1/498
NO.54	1291.928	14.826	NO.54	1284.42	A=1/11, L=243.88	1/498
NO.55	1291.928	20.000	NO.55	1284.32	A=1/11, L=243.88	1/498
NO.56	1291.928	20.000	NO.56	1284.12	A=1/11, L=243.88	1/498
K4-2	1291.928	2.974	K4-2	1284.31	A=1/11, L=243.88	1/498
NO.57	1291.928	17.026	NO.57	1284.13	A=1/11, L=243.88	1/498
NO.58	1291.928	20.000	NO.58	1283.83	A=1/11, L=243.88	1/498
NO.59	1291.928	4.373	NO.59	1283.84	A=1/11, L=243.88	1/498
K45-1	1291.928	15.627	K45-1	1283.946	A=1/11, L=243.88	1/498
NO.60	1291.928	20.000	NO.60	1283.74	A=1/11, L=243.88	1/498
NO.61	1291.928	20.000	NO.61	1283.70	A=1/11, L=243.88	1/498
NO.62	1291.928	20.000	NO.62	1283.68	A=1/11, L=243.88	1/498
K45-1	1291.928	10.627	K45-1	1283.834	A=1/11, L=243.88	1/498
NO.63	1291.928	9.373	NO.63	1283.82	A=1/11, L=243.88	1/498

BASIC DESIGN STUDY ON THE PROJECT FOR CONSTRUCTION OF RAILWAY FLY-OVER IN ULAANBAATAR CITY	MINISTRY OF ROAD, TRANSPORT AND TOURISM, MONGOLIA	JAPAN INTERNATIONAL COOPERATION AGENCY CTI Engineering International Co., Ltd.	TITLE: PROFILE OF MAIN ROAD (3/3)	SCALE V=1:200 H=1:1000	Drawing No. BD-18
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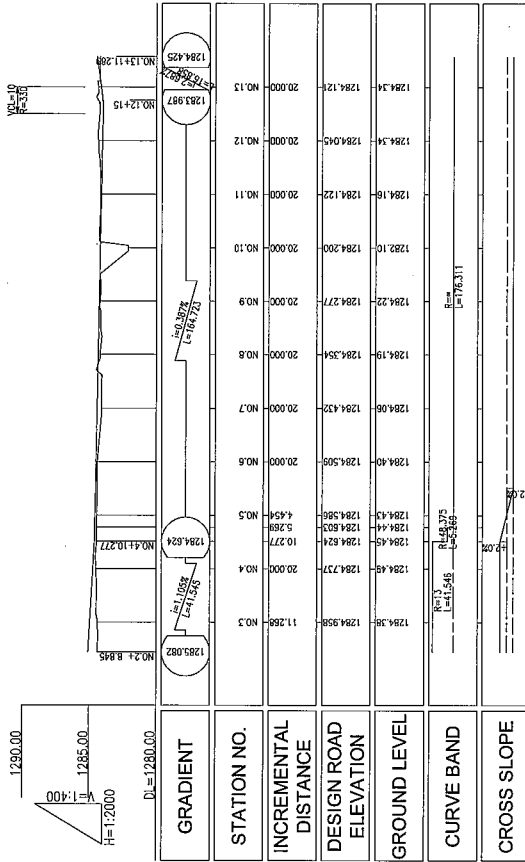
PROFILE OF APPROACH ROAD (NORTH)

S:V=1:400, H=1:2000

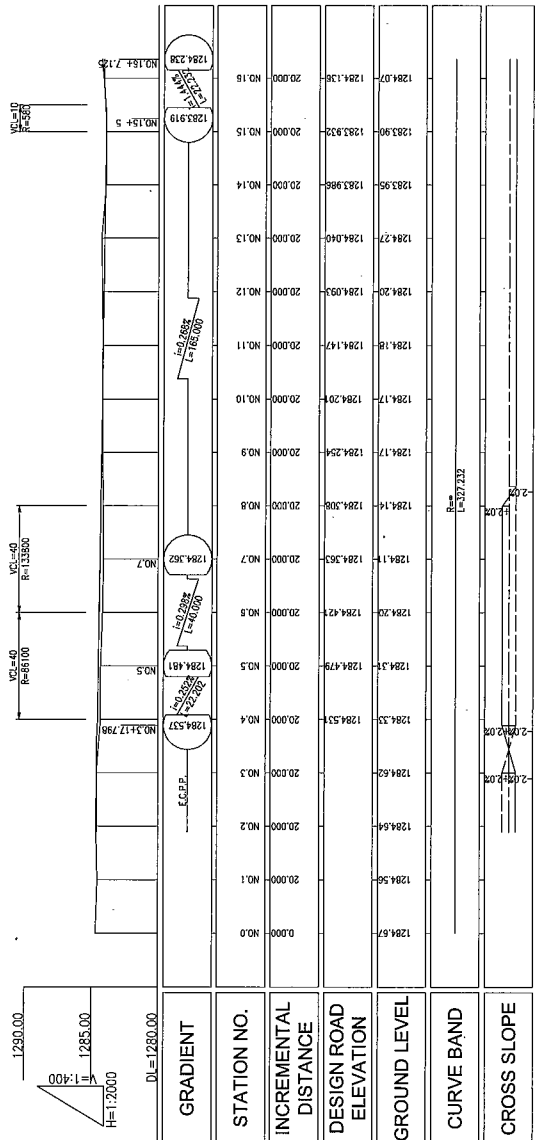
EAST SIDE JUNCTION 1



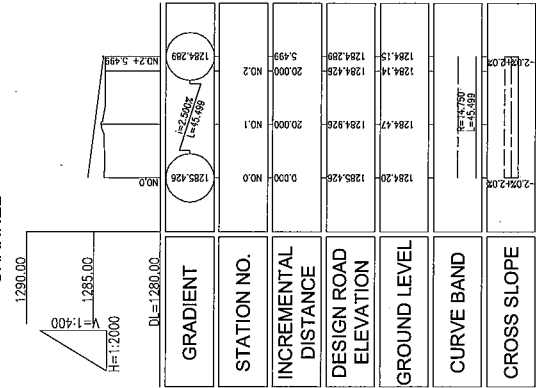
EAST SIDE JUNCTION 2 CHANNEL



WEST SIDE JUNCTION 1



WEST SIDE JUNCTION 2 CHANNEL



BASIC DESIGN STUDY
ON THE PROJECT FOR CONSTRUCTION OF
RAILWAY FLY-OVER IN ULAANBAATAR CITY

MINISTRY OF ROAD, TRANSPORT AND
TOURISM, MONGOLIA

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI Engineering International Co., Ltd.

TITLE:
PROFILE OF APPROACH ROAD (NORTH)

SCALE
V=1:400
H=1:2000

Drawing No.
BD-19

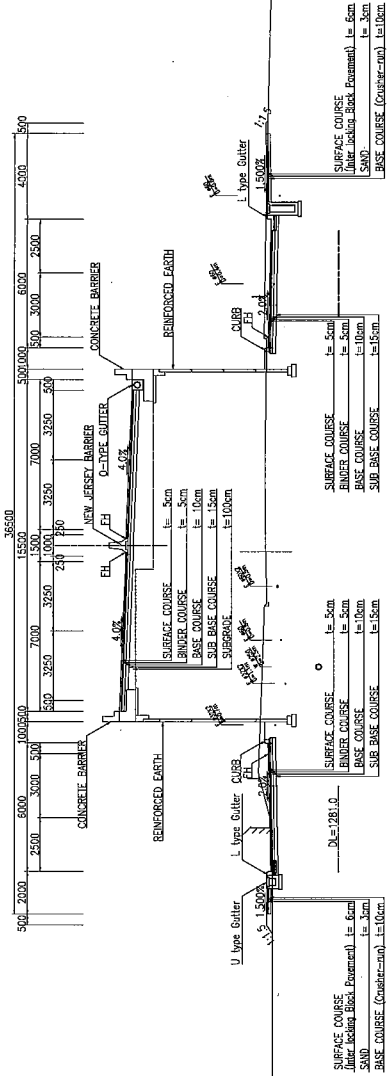
TYPICAL CROSS SECTION (1/3)

S=1:250

SOUTH SIDE

South Approach

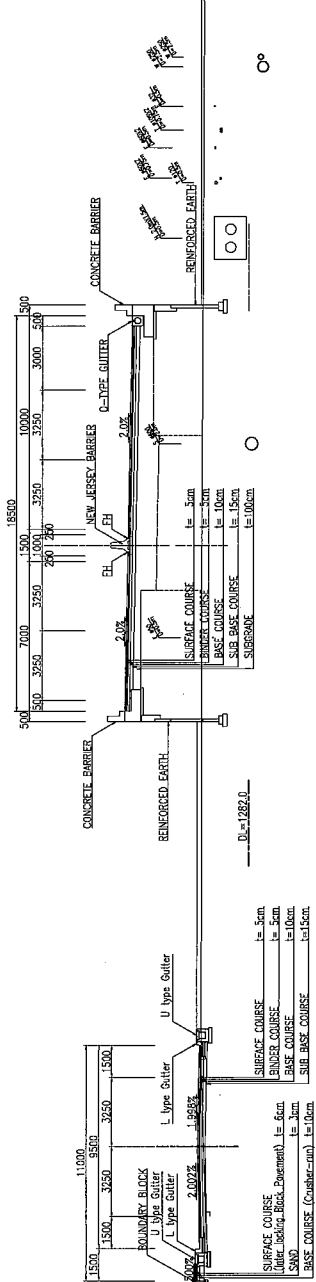
NO. 49
 GH=7284.41
 FH=1250.949



NORTH SIDE

North Approach

NO. 29
 GH=7284.19
 FH=1287.629



BASIC DESIGN STUDY
 ON THE PROJECT FOR CONSTRUCTION OF
 RAILWAY FLY-OVER IN ULAANBAATAR CITY

MINISTRY OF ROAD, TRANSPORT AND
 TOURISM, MONGOLIA

JAPAN INTERNATIONAL COOPERATION AGENCY
 CTI Engineering International Co., Ltd.

TITLE:
 TYPICAL CROSS SECTION (1/3)

SCALE
 S=1:250

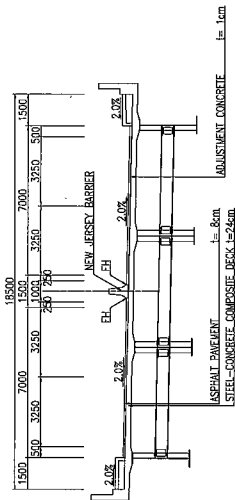
Drawing No.
 BD-20

TYPICAL CROSS SECTION (2/3)

S=1:250

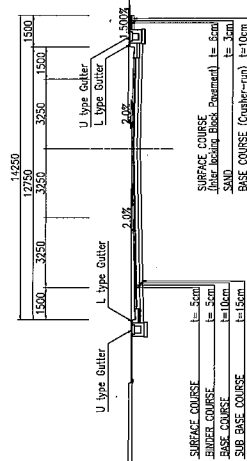
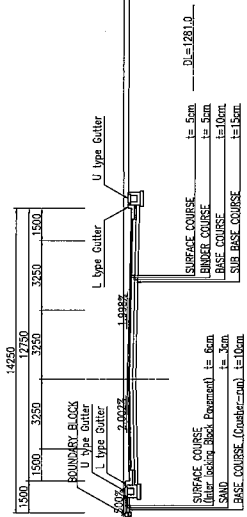
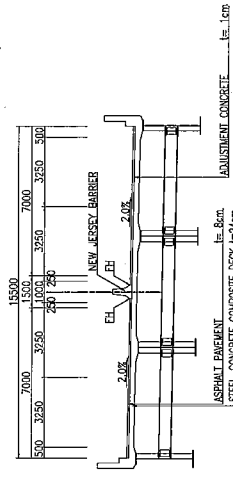
BRIDGE SECTION WITH SIDEWALK

NO. 37
 G=1284.70
 F=1294.995



BRIDGE SECTION WITHOUT SIDEWALK

NO. 33
 G=1284.19
 F=1291.548



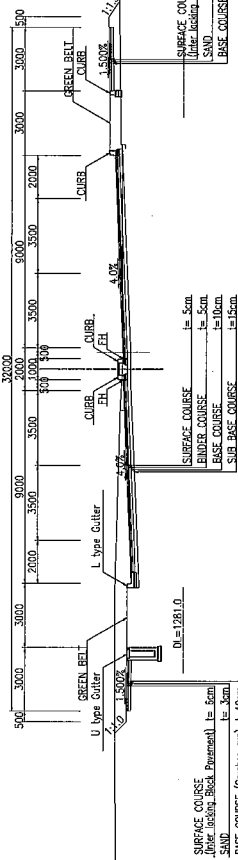
BASIC DESIGN STUDY ON THE PROJECT FOR CONSTRUCTION OF RAILWAY FLY-OVER IN ULAANBAATAR CITY	MINISTRY OF ROAD, TRANSPORT AND TOURISM, MONGOLIA	JAPAN INTERNATIONAL COOPERATION AGENCY CTI Engineering International Co., Ltd.	TITLE: TYPICAL CROSS SECTION (2/3)	SCALE S=1:250	Drawing No. BD-21
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TYPICAL CROSS SECTION (3/3)
S=1:250

ENDING POINT OF THE PROJECT

NO. 63

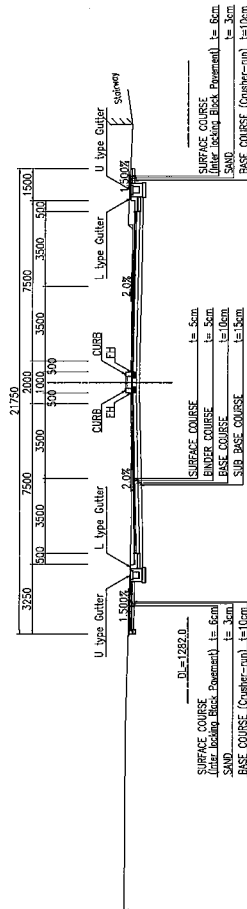
GM=1283.82
RM=1283.620



STARTING POINT OF THE PROJECT

NO. 18+5

GM=724.67
RM=724.670



BASIC DESIGN STUDY
ON THE PROJECT FOR CONSTRUCTION OF
RAILWAY FLY-OVER IN ULAANBAATAR CITY

MINISTRY OF ROAD, TRANSPORT AND
TOURISM, MONGOLIA

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI Engineering International Co., Ltd.

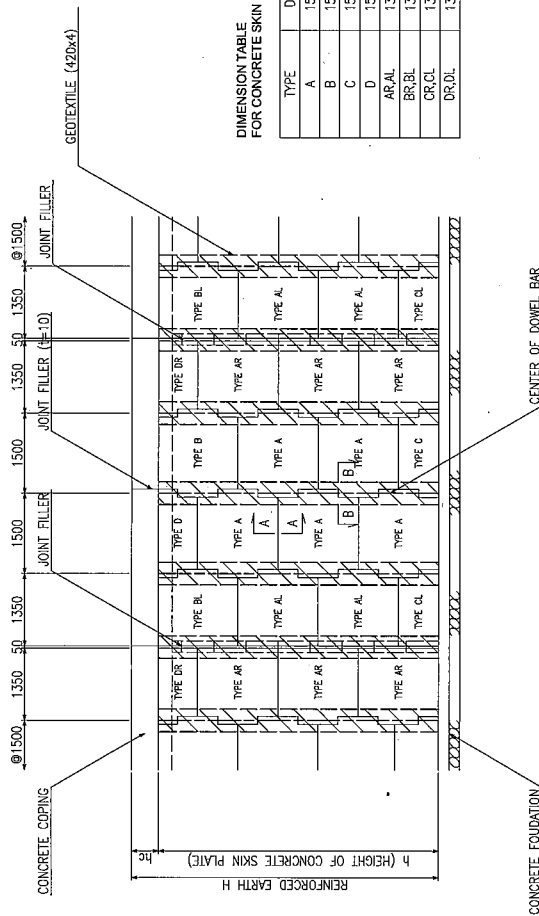
TITLE:
TYPICAL CROSS SECTION (3/3)

SCALE
S=1:250

Drawing No.
BD-22

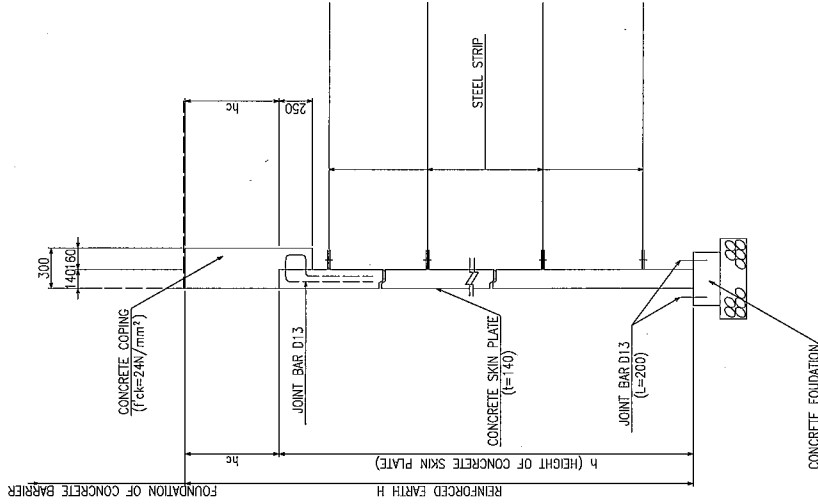
DETAIL OF REINFORCED EARTH

CONCRETE SKIN PLATE ERECTION DIAGRAM S=1:100

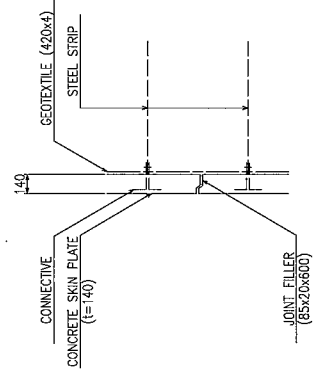


DIMENSION TABLE FOR CONCRETE SKIN PLATE

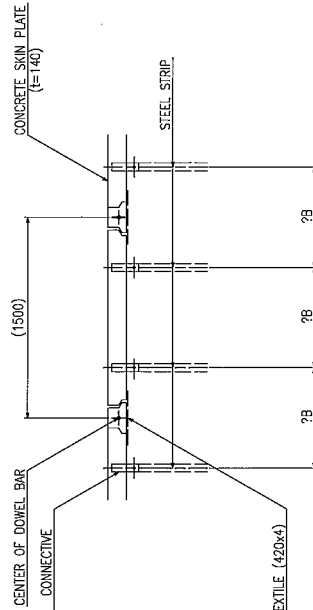
TYPE	DIMENSION	UNIT:mm
A	1500 x 1500	
B	1500 x 1480	
C	1500 x 750	
D	1500 x 730	
AR,AL	1350 x 1500	
BR,BL	1350 x 1480	
CR,CL	1350 x 750	
DR,DL	1350 x 730	



A-A S=1:40



B-B S=1:40



BASIC DESIGN STUDY
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MINISTRY OF ROAD, TRANSPORT AND
TOURISM, MONGOLIA

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI Engineering International Co., Ltd.

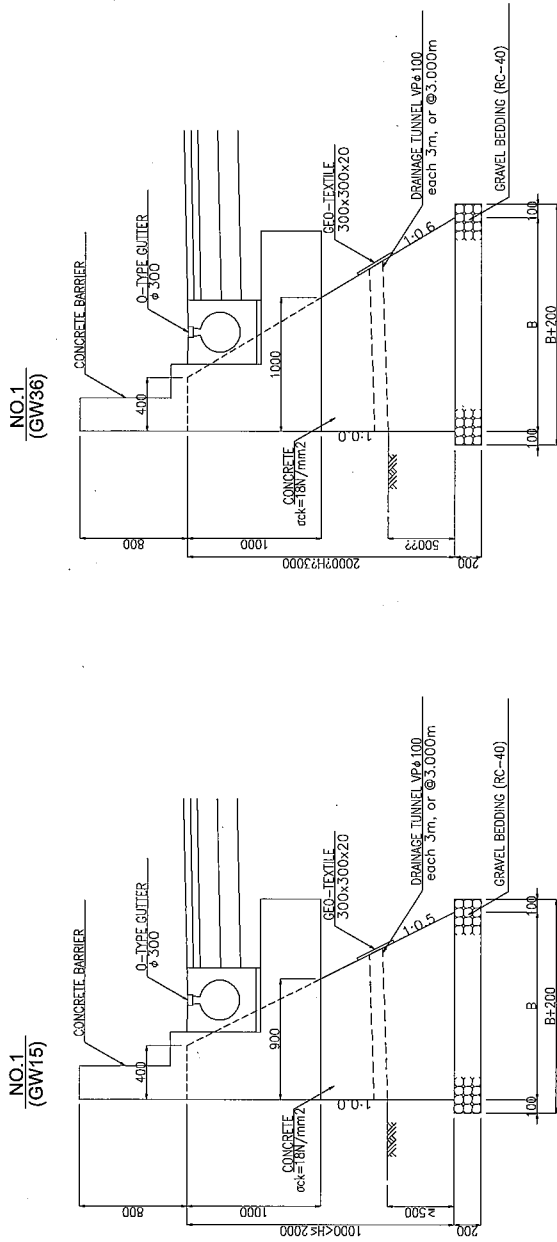
TITLE:
DETAIL OF REINFORCED EARTH

SCALE
S=1:100,40

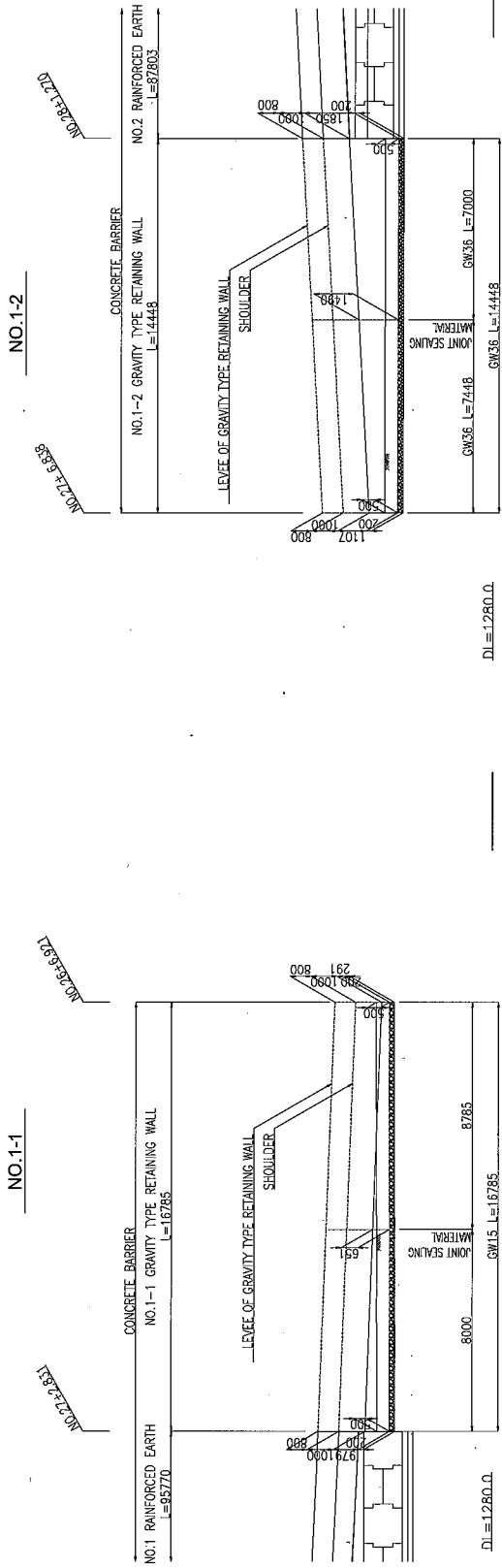
Drawing No.
BD-23

DETAIL OF GRAVITY TYPE RETAINING WALL (TYPE-1) (1/2)

CROSS SECTION OF GRAVITY TYPE RETAINING WALL
S=1:40



DEVELOPMENT OF GRAVITY TYPE RETAINING WALL
S=1:200



BASIC DESIGN STUDY
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MINISTRY OF ROAD, TRANSPORT AND
TOURISM, MONGOLIA

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI Engineering International Co., Ltd.

TITLE:
DETAIL OF GRAVITY TYPE
RETAINING WALL (TYPE-1) (1/2)

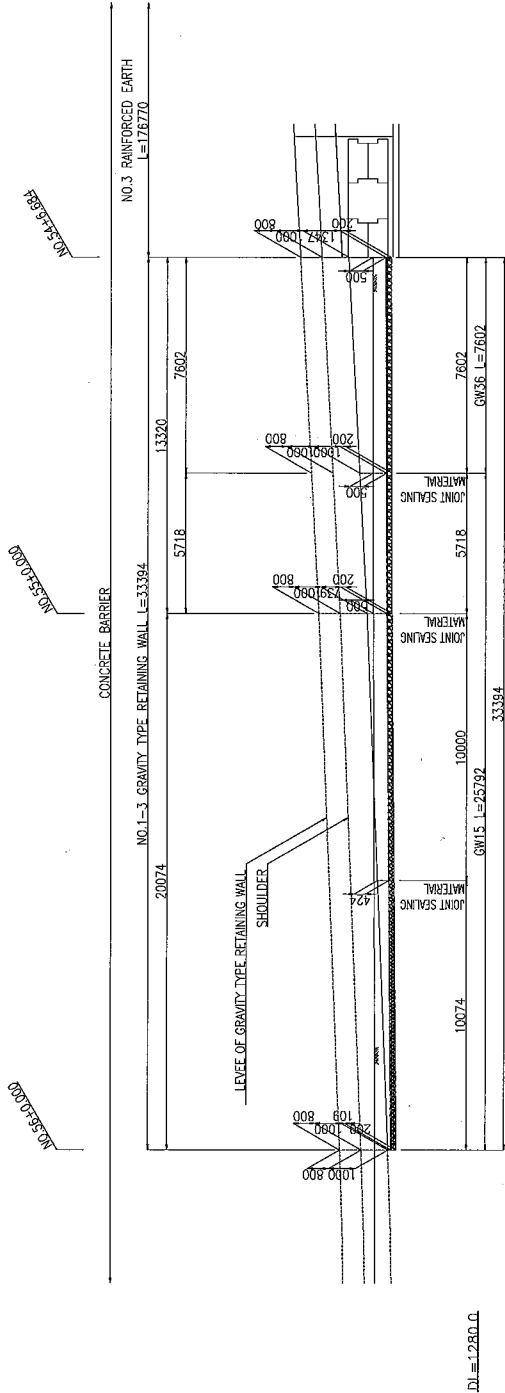
SCALE
AS SHOWN

Drawing No.
BD-24

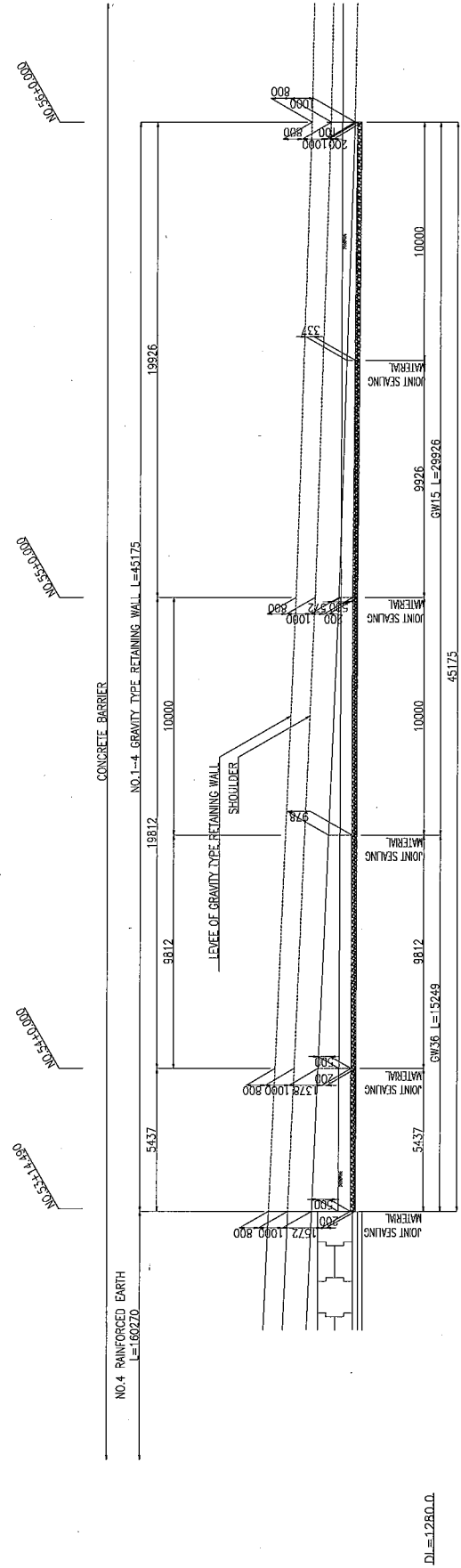
DETAIL OF GRAVITY TYPE RETAINING WALL (TYPE-1) (2/2)

DEVELOPMENT OF GRAVITY TYPE RETAINING WALL
S=1:200

NO.1-3



NO.1-4



BASIC DESIGN STUDY
ON THE PROJECT FOR CONSTRUCTION OF
RAILWAY FLY-OVER IN ULAANBAATAR CITY

MINISTRY OF ROAD, TRANSPORT AND
TOURISM, MONGOLIA

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI Engineering International Co., Ltd.

TITLE:
DETAIL OF GRAVITY TYPE
RETAINING WALL (TYPE-1) (2/2)

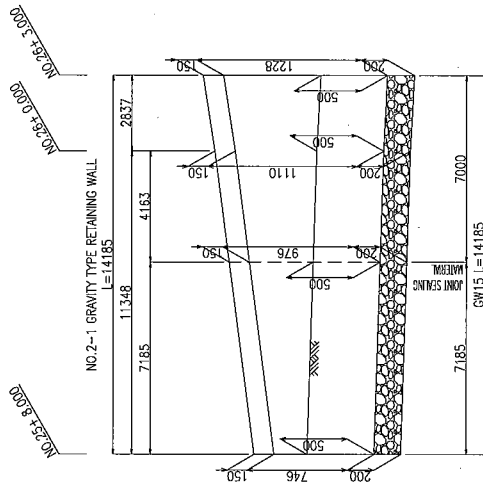
SCALE
AS SHOWN

Drawing No.
BD-25

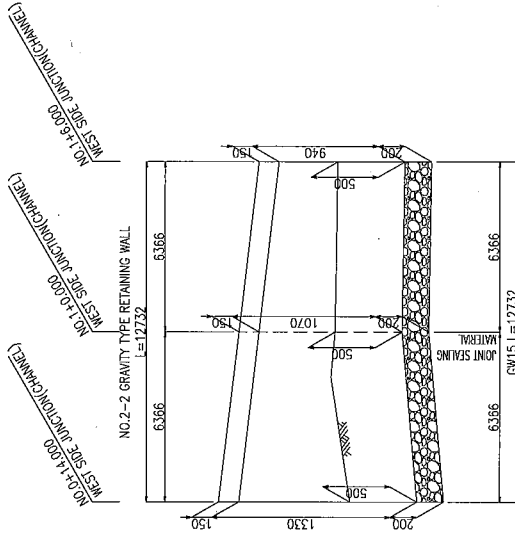
DETAIL OF GRAVITY TYPE RETAINING WALL (TYPE-2)

DEVELOPMENT OF GRAVITY TYPE RETAINING WALL
V=1:40
H=1:200

NO.2-1

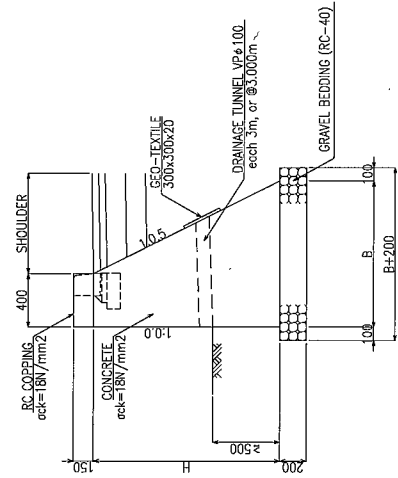


NO.2-2



CROSS SECTION OF GRAVITY TYPE RETAINING WALL
S=1:40

NO.2
(GW15)



BASIC DESIGN STUDY
ON THE PROJECT FOR CONSTRUCTION OF
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MINISTRY OF ROAD, TRANSPORT AND
TOURISM, MONGOLIA

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI Engineering International Co., Ltd.

TITLE:
DETAIL OF GRAVITY TYPE
RETAINING WALL (TYPE-2)

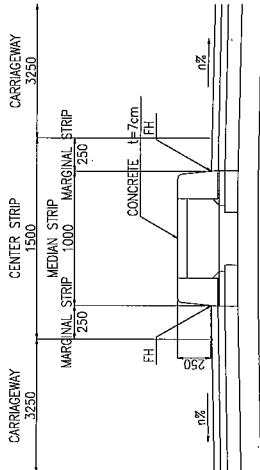
SCALE
AS SHOWN

Drawing No.
BD-26

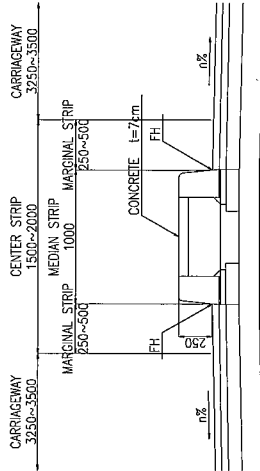
CENTER STRIP

CURB

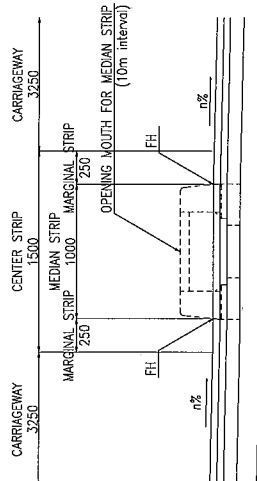
**W=1.5m
(STANDARD)**



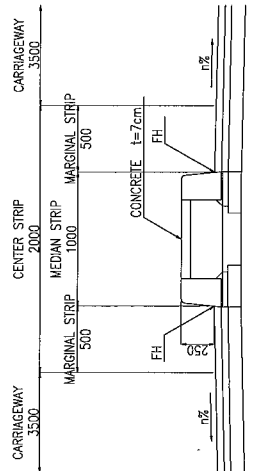
RUN-OFF



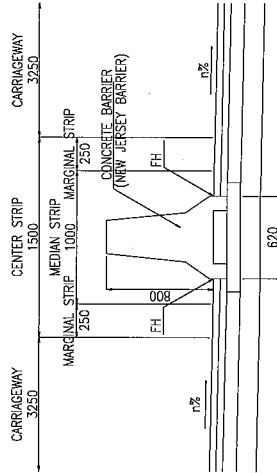
**W=1.5m
(OPENING MOUTH FOR MEDIAN STRIP)**



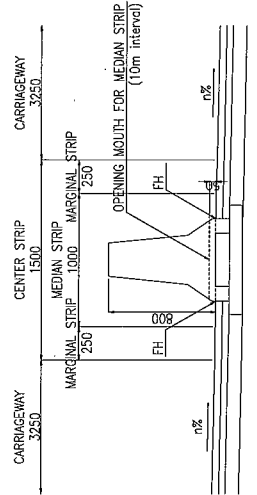
W=2.0m



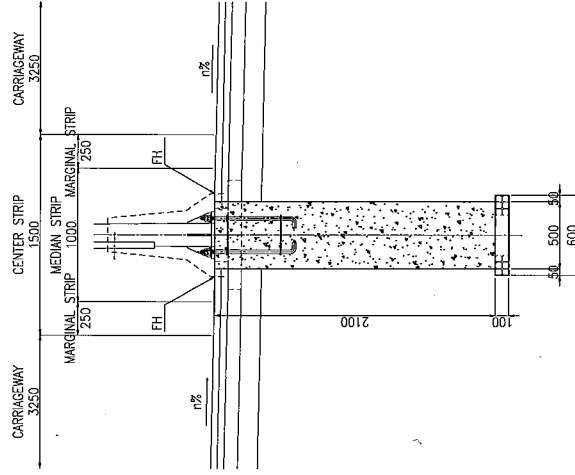
**W=1.5m
(STANDARD)**



**W=1.5m
(OPENING MOUTH FOR MEDIAN STRIP)**



**W=1.5m
(DETAIL OF LIGHTING POLE INSTALLATION)**



※ Opening Mouth shall be set every 10m.

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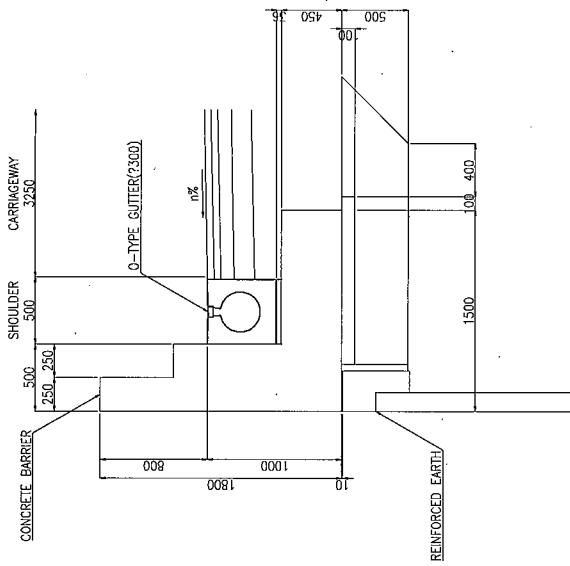
TITLE:
DETAIL OF MEDIAN STRIP

SCALE
S=1:40

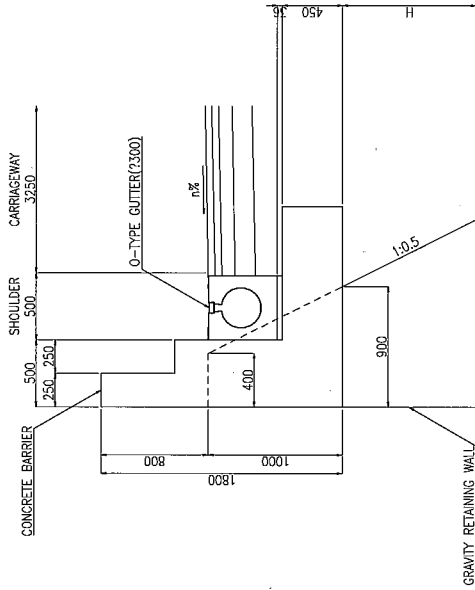
Drawing No.
BD-27

DETAIL OF SHOULDER (1/2)

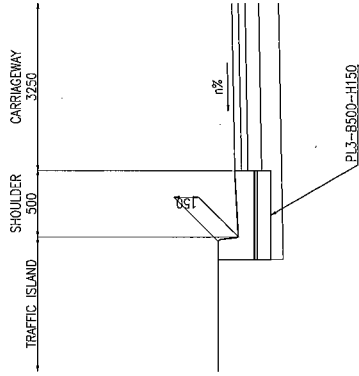
REINFORCED EARTH



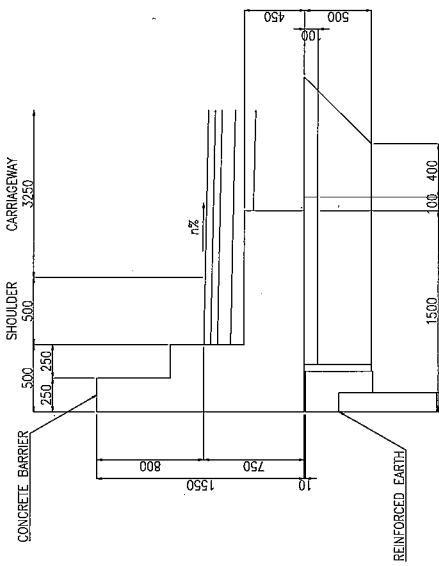
GRAVITY TYPE RETAINING WALL



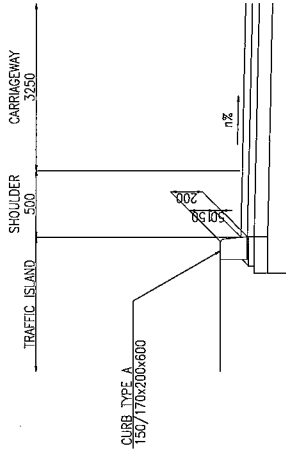
TRAFFIC ISLAND



REINFORCED EARTH (INVERTED GRADIENT)



TRAFFIC ISLAND (INVERTED GRADIENT)



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TITLE:
DETAIL OF SHOULDER (1/2)

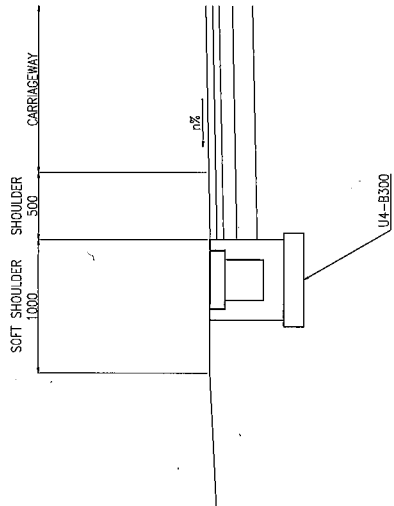
SCALE
S=1:40

Drawing No.
BD-28

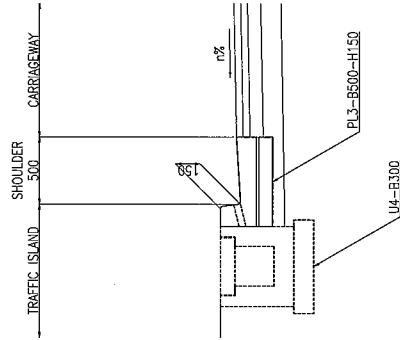
DETAIL OF SHOULDER (2/2)

FRONTAGE ROAD

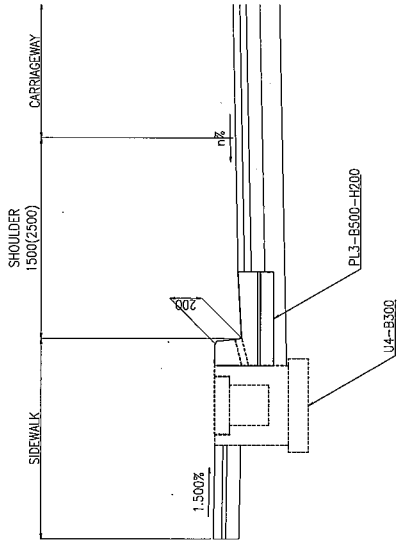
CHANNEL



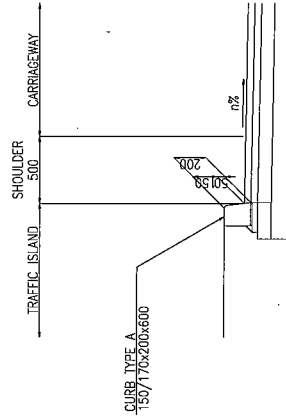
TRAFFIC ISLAND



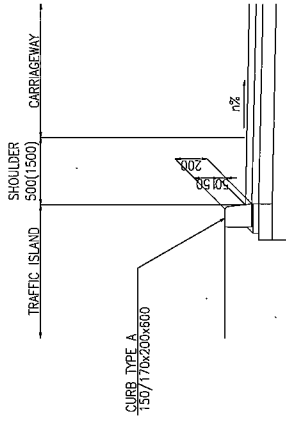
SIDEWALK



CHANNEL (INVERTED GRADIENT)



TRAFFIC ISLAND (INVERTED GRADIENT)



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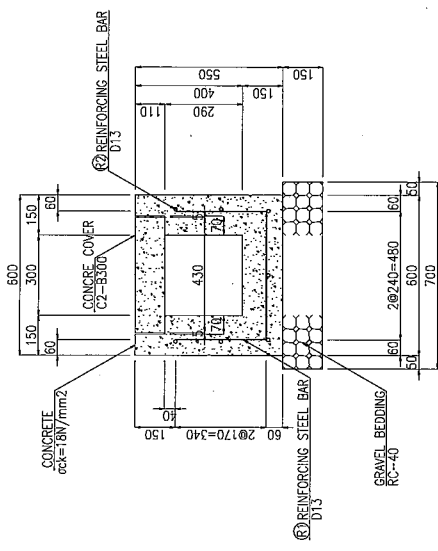
TITLE:
DETAIL OF SHOULDER (2/2)

SCALE
S=1:40

Drawing No.
BD-29

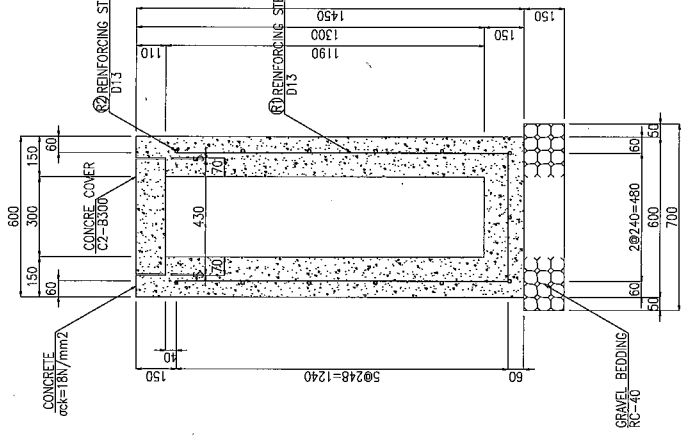
DETAIL OF DRAINAGE STRUCTURE (1/2)

U4-B300-H400
S=1:20



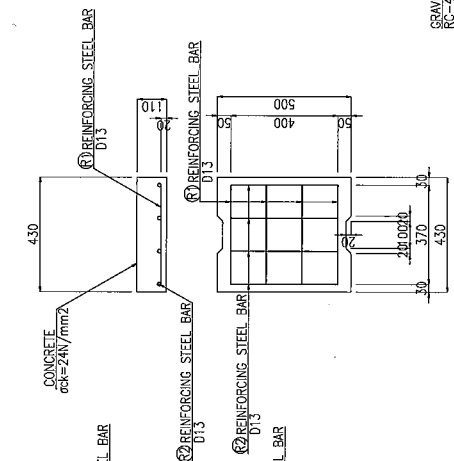
U-TYPE GUTTER

U4-B300-H1300
S=1:20

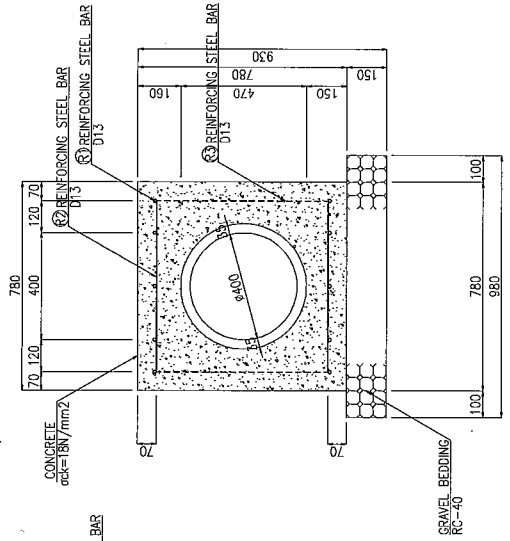


CONCRETE COVER

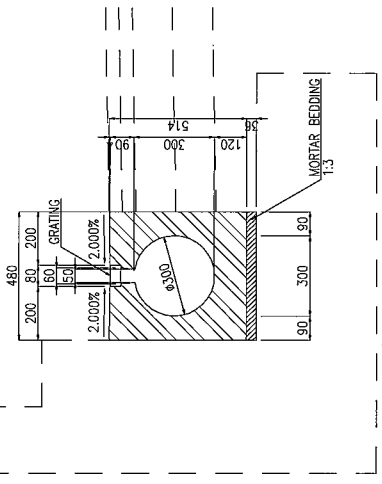
C2-B300
S=1:20



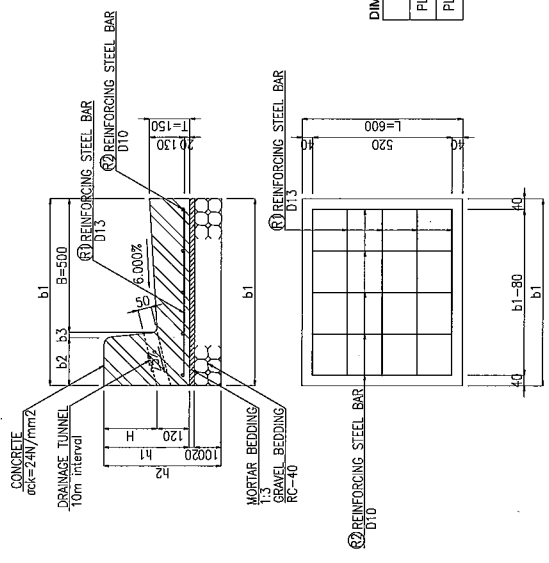
PIPE CULVERT
P3-D400
S=1:20



O-TYPE GUTTER
φ300
S=1:20



L-TYPE GUTTER
PL3
S=1:20



DIMENSION TABLE

MARK	B	H	b1	b2	b3	h1	h2	L
PL3-B500-H150	500	150	665	150	15	270	390	600
PL3-B500-H200	500	200	700	180	20	320	440	600

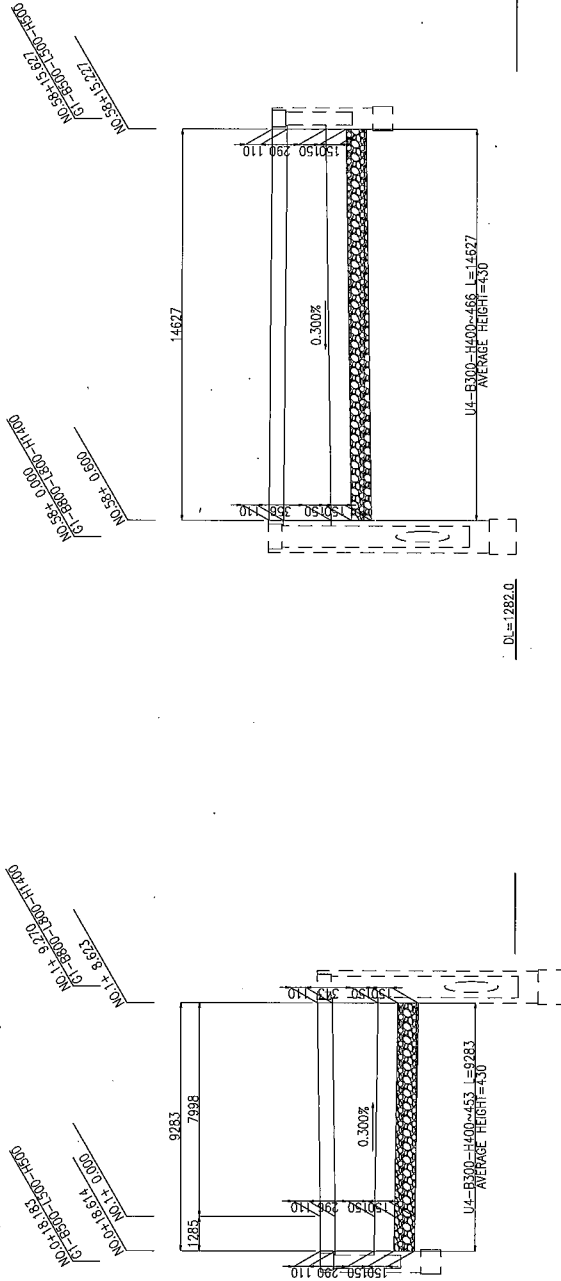
DETAIL OF OF DRAINAGE STRUCTURE (2/2)

DEVELOPMENT OF VARIABLE U-TYPE GUTTER

V=1:40
H=1:200

NO.1
(EAST SIDE JUNCTION)

NO.2

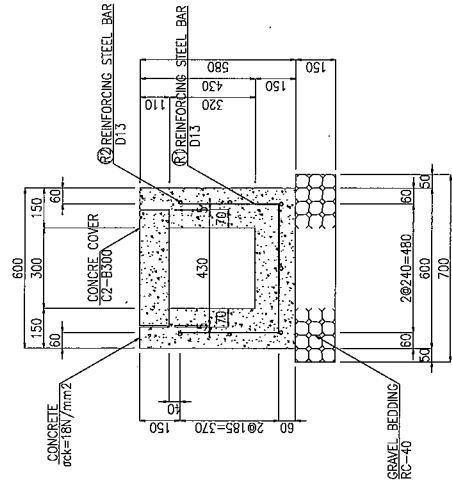


DL=1283.0

DL=1282.0

DETAIL OF VARIABLE U-TYPE GUTTER
S=1:20

U4-B300-H430



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TITLE:
DETAIL OF DRAINAGE STRUCTURE (2/2)

SCALE
AS SHOWN

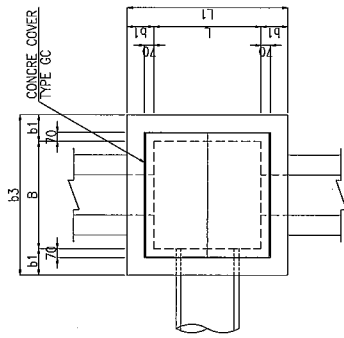
Drawing No.
BD-31

DETAIL OF CATCH BASIN

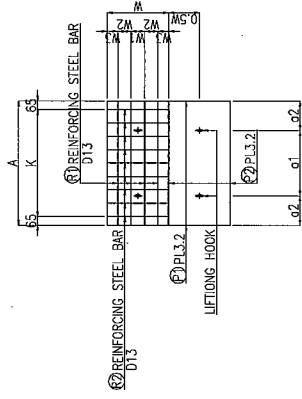
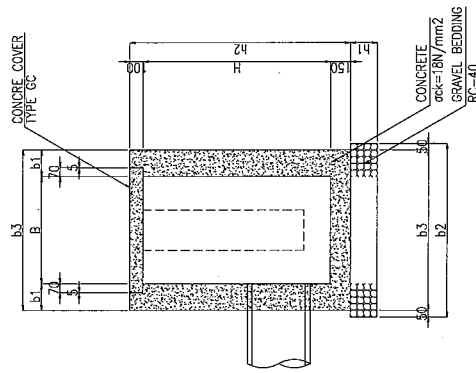
GULLEY
G1-BxLxH
S=1:40

CONCRE COVER
TYPE GC
S=1:40

PLAN



SIDE ELEVATION



DIMENSION TABLE

MARK	A	W	K	W1	W2	W3	a1	a2
GC-B500-L500	630	310	500	80	60	55	410	110
GC-B600-L800	930	460	800	100	100	80	490	220

DIMENSION TABLE

MARK	B	L	H	H1	b1	b2	b3	L1	h1	h2
G1-B500-L500-H500	500	500	500	150	900	800	800	150	750	
G1-B500-L500-H1400	500	500	1400	200	1000	900	900	200	1650	
G1-B800-L800-H1000	800	800	1000	150	1200	1100	1100	150	1250	
G1-B800-L800-H1200	800	800	1200	200	1300	1200	1200	200	1450	
G1-B800-L800-H1300	800	800	1300	200	1300	1200	1200	200	1550	
G1-B800-L800-H1400	800	800	1400	200	1300	1200	1200	200	1650	

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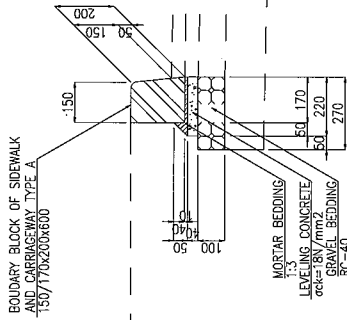
TITLE:
DETAIL OF CATCH BASIN

SCALE
S=1:40

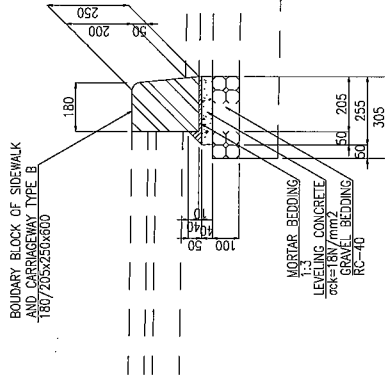
Drawing No.
BD-32

DETAIL OF CURB

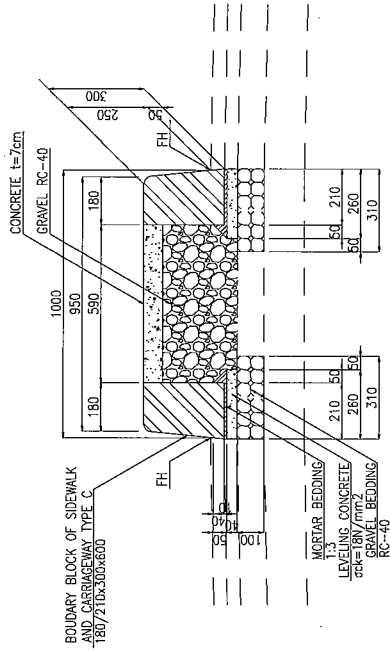
CURB TYPE A
S=1:20



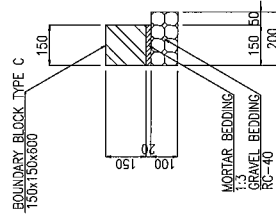
CURB TYPE B
S=1:20



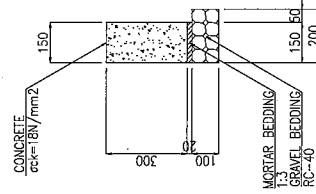
CURB TYPE C
S=1:20



BOUNDARY BLOCK
150x150 S=1:20



BOUNDARY BLOCK
150x300 S=1:20



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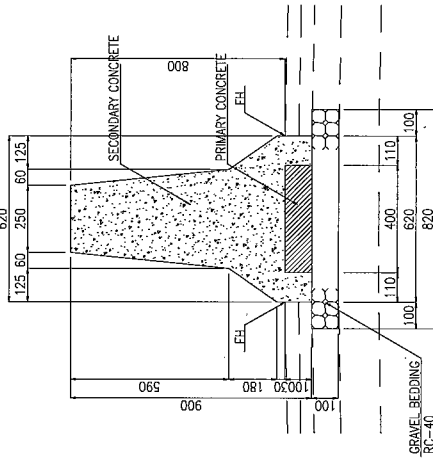
TITLE:
DETAIL OF CURB

SCALE
S=1:20

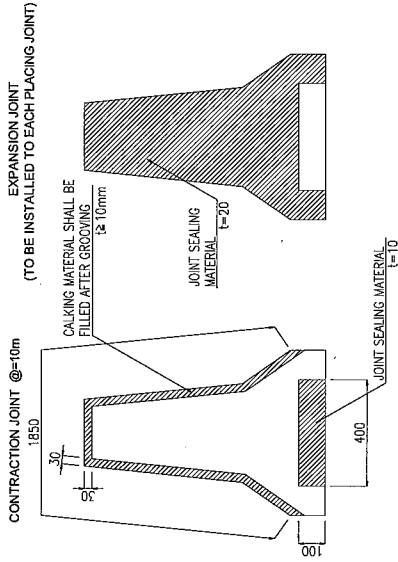
Drawing No.
BD-33

DETAILED OF CONCRETE BARRIER FOR MEDIAN STRIP

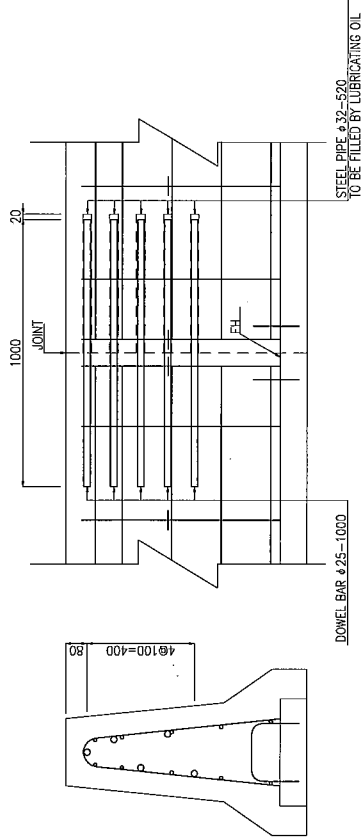
SECTION
S=1:20



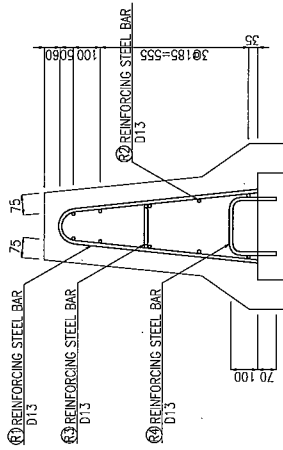
DETAIL OF JOINT
S=1:20



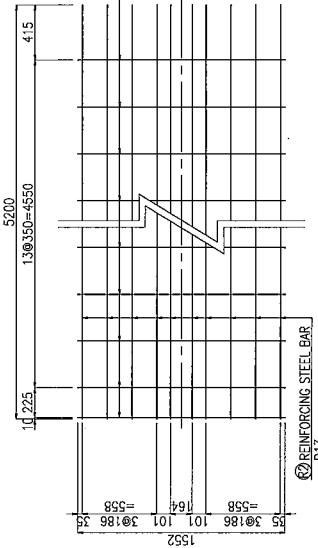
DETAIL OF DOWEL BAR
(DETAIL OF "A") S=1:20



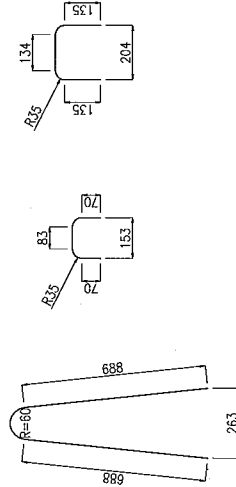
BAR ERECTION DIAGRAM
S=1:20



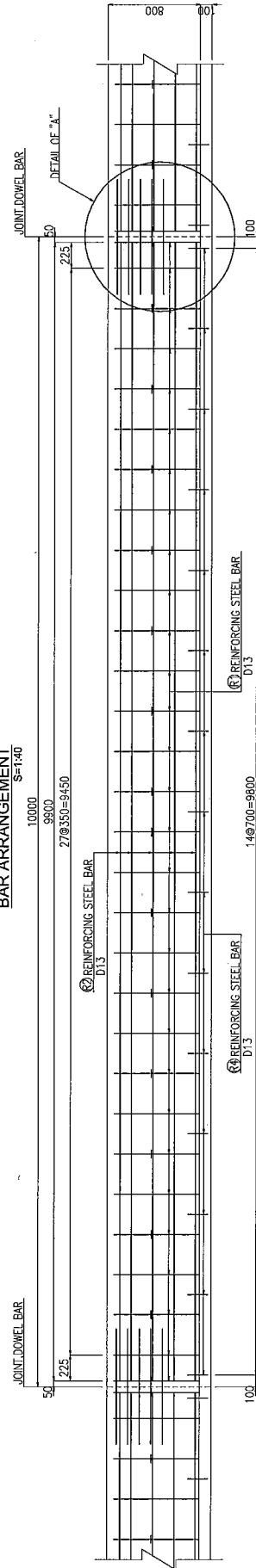
DEVELOPMENT OF REINFORCING STEEL BAR
S=1:40



BENDING DIAGRAM OF REINFORCING STEEL BAR
S=1:20



BAR ARRANGEMENT
S=1:40



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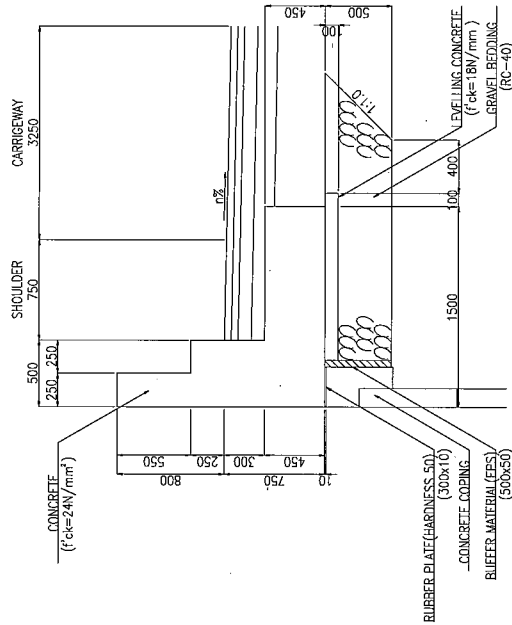
TITLE:
DETAIL OF CONCRETE BARRIER
FOR MEDIAN STRIP

SCALE
AS SHOWN

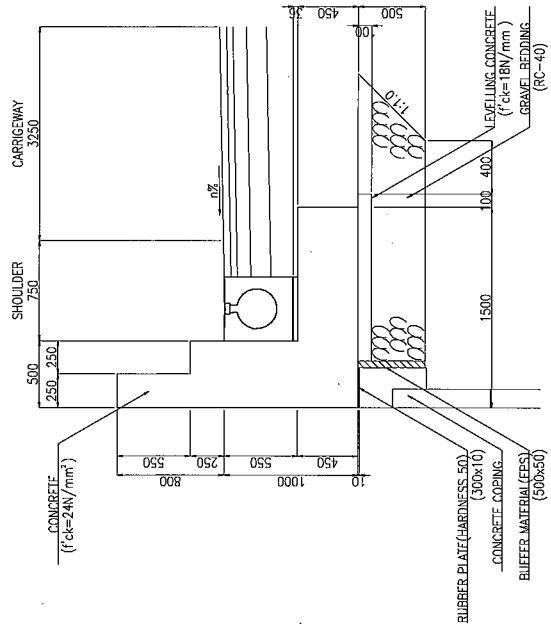
Drawing No.
BD-34

DETAIL OF ROAD SIDE CONCRETE BARRIER

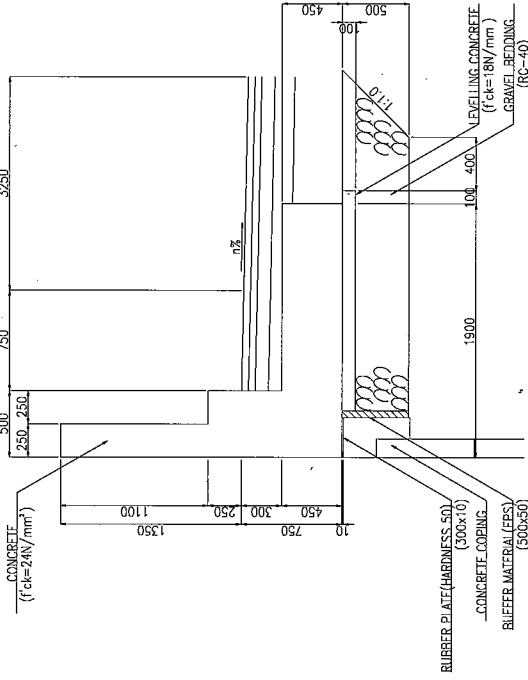
TYPE 1-1 S=1:40
(INVERTED GRADIENT)



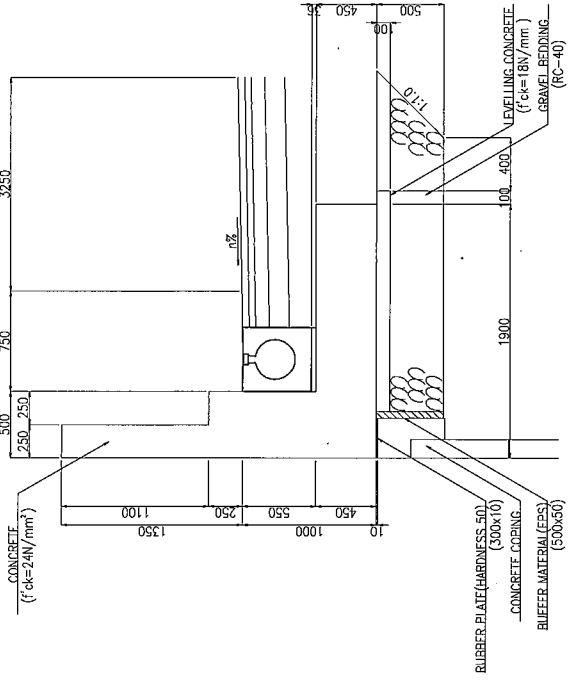
TYPE 2-1 S=1:40



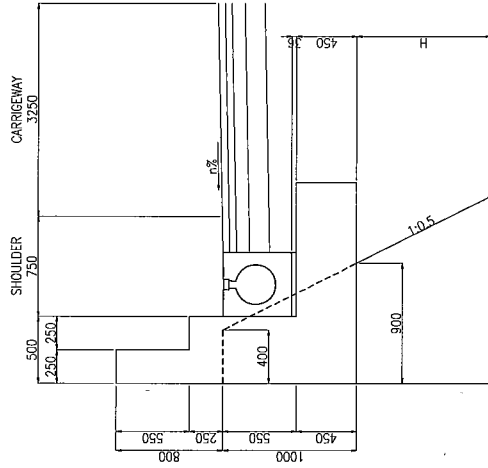
TYPE 1-2 S=1:40
(INVERTED GRADIENT)



TYPE 2-2 S=1:40



TYPE 3 S=1:40



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TITLE:
DETAIL OF ROAD SIDE CONCRETE
BARRIER

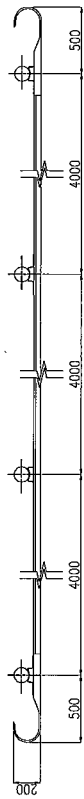
SCALE
S=1:40

Drawing No.
BD-35

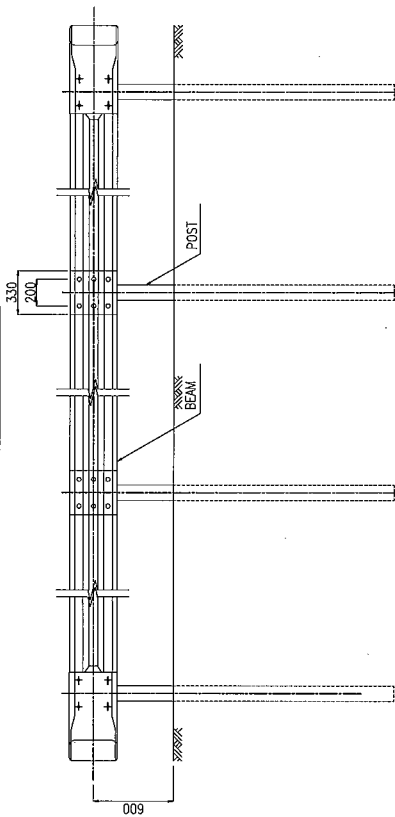
DETAIL OF GUARD RAIL AND GUARD PIPE

GUARD RAIL

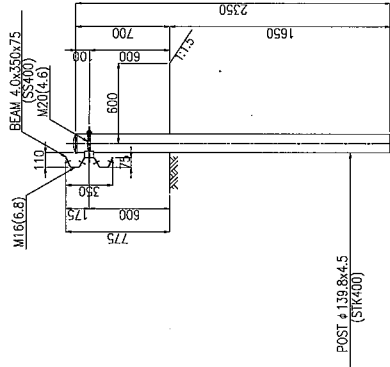
PLAN



FRONT ELEVATION



Gr-A-4E

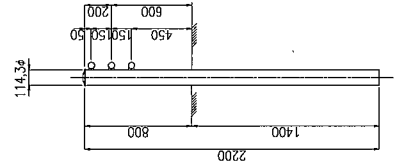
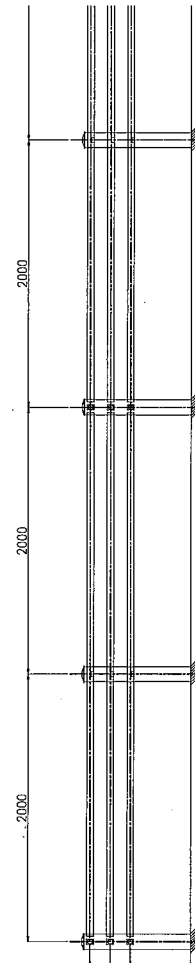


GUARD PIPE

PLAN



FRONT ELEVATION



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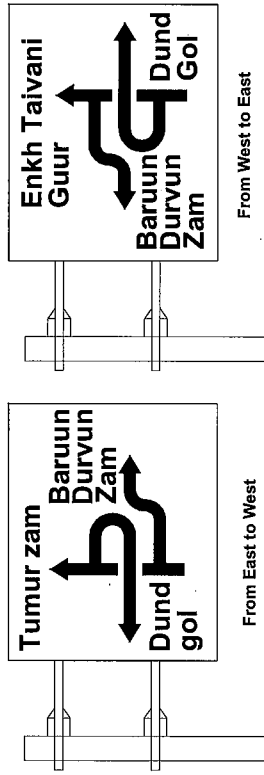
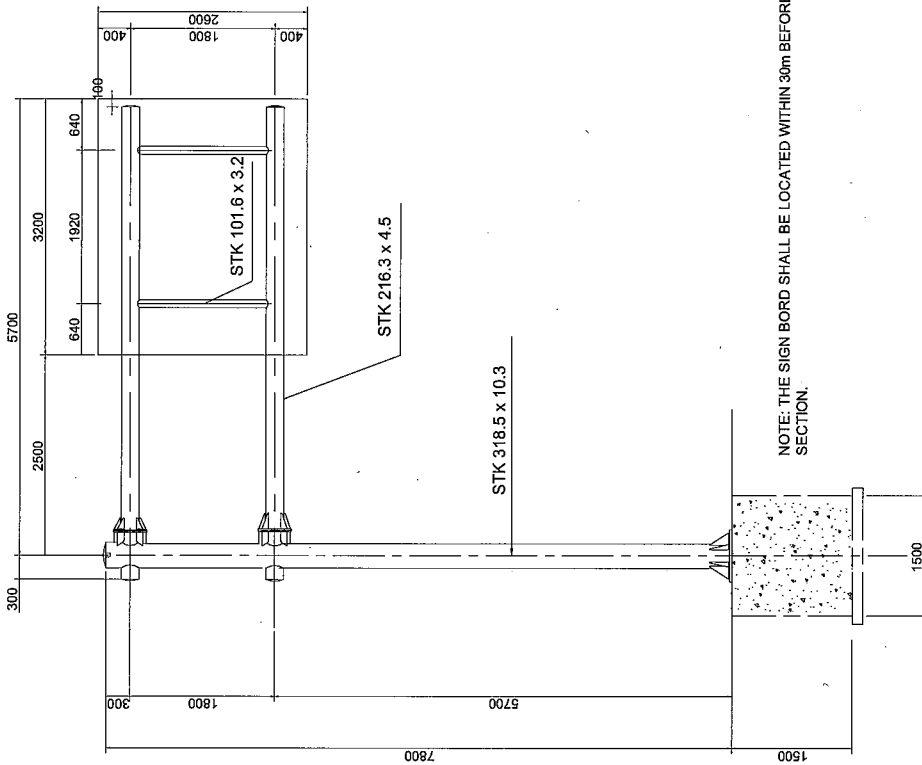
MINISTRY OF ROAD, TRANSPORT AND
TOURISM, MONGOLIA

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TITLE:
DETAIL OF STEEL GUARD RAIL
AND GUARD PIPE

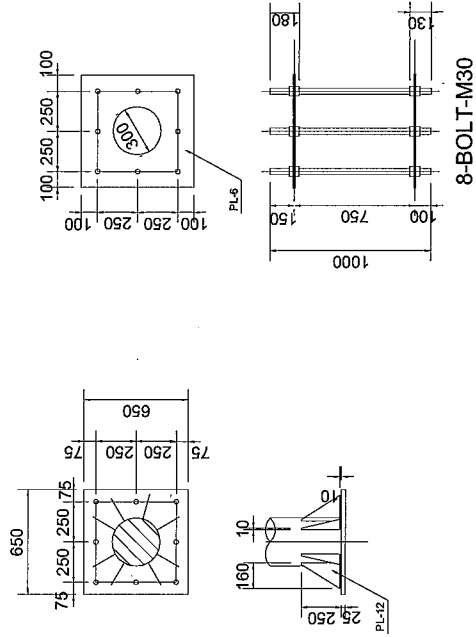
SCALE
S=1:40

Drawing No.
BD-36



NOTE: THE CHARACTER SIZE SHALL BE MORE THAN 200mm IN HEIGHT AND WIDTH. THE NUMBER OF CHARACTERS IN A LINE SHALL BE LESS THAN TEN(10).

INDICATION LAYOUT



DETAIL OF PIER STUD

BASIC DESIGN STUDY
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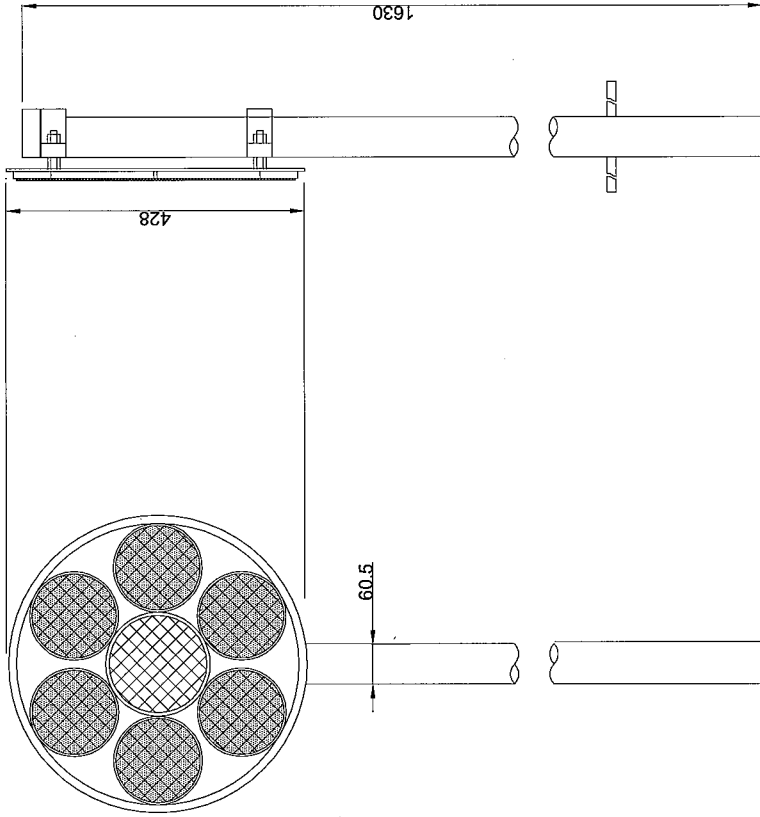
MINISTRY OF ROAD, TRANSPORT AND
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TITLE:
TRAFFIC SIGN BORD

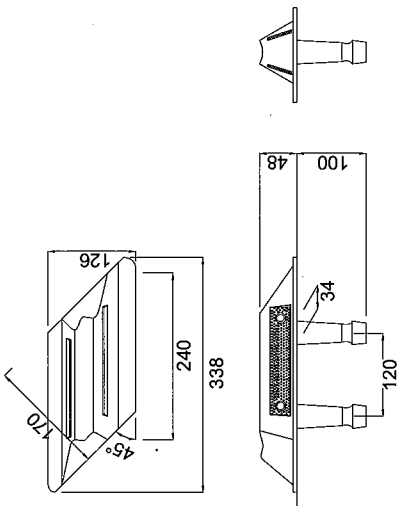
SCALE
AS SHOWN

Drawing No.
BD-37



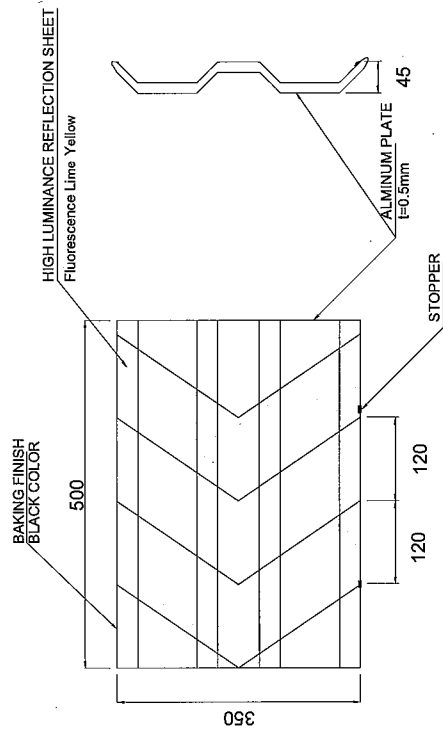
LARGE SIZED DELINEATOR

NOTE: THE DELINEATOR SHALL BE INSTALLED AT THE END OF CONCRETE BARRIER OF CENTER LINE.



CHATTER BAR

NOTE: DOUBLE-SIDE REFLECTOR TYPE SHALL BE APPLIED AT CENTER LINE.



DELINEATOR FOR SHARP BEND GUARD RAIL

BASIC DESIGN STUDY
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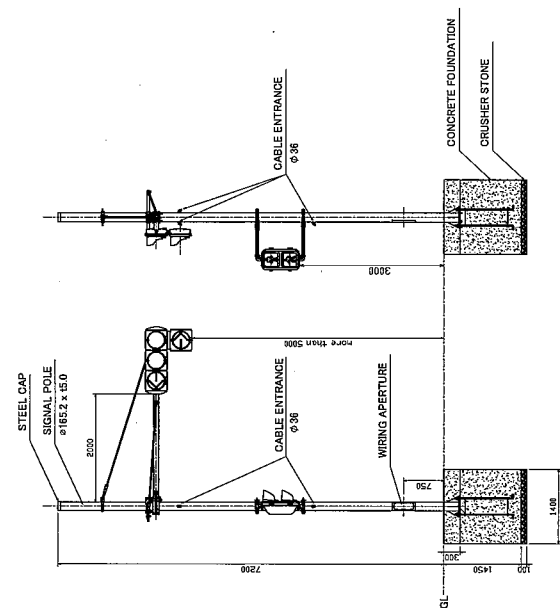
MINISTRY OF ROAD, TRANSPORT AND
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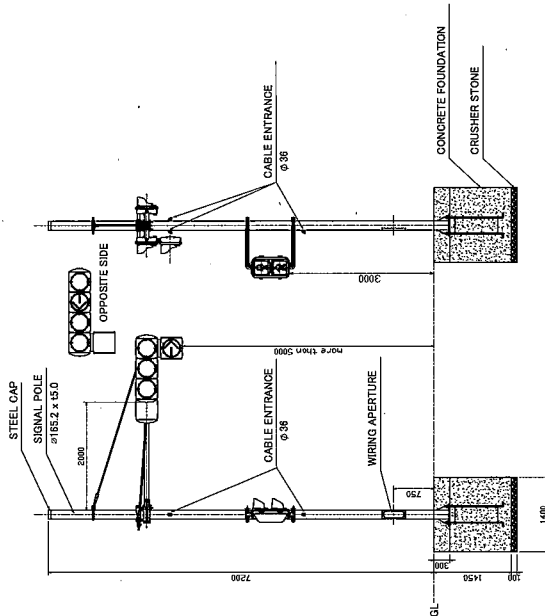
TITLE:
DELINEATOR AND CHATTER BAR

SCALE
AS SHOWN

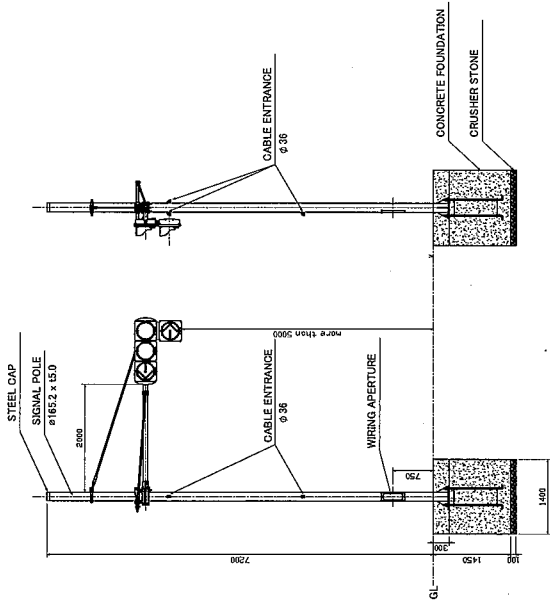
Drawing No.
BD-38



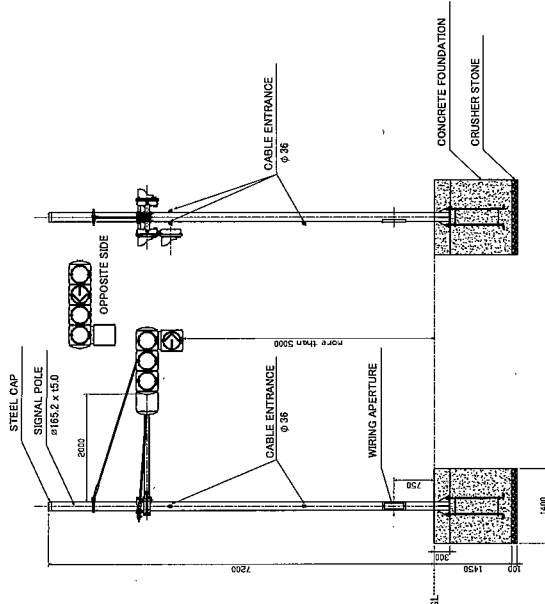
VEHICLE SIGNAL LIGHT (TYPE-1)
(SCALE: 1/100)



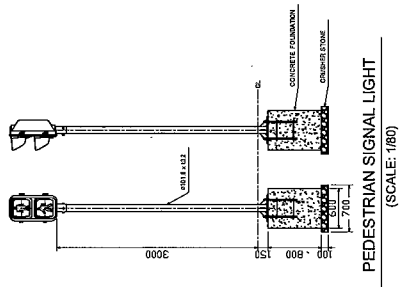
VEHICLE SIGNAL LIGHT (TYPE-3)
(SCALE: 1/100)



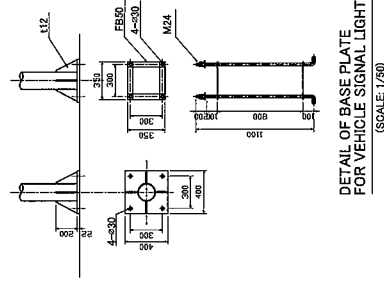
VEHICLE SIGNAL LIGHT (TYPE-2)
(SCALE: 1/100)



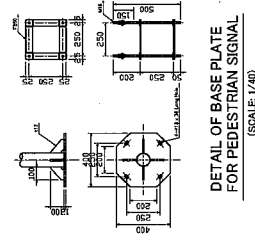
VEHICLE SIGNAL LIGHT (TYPE-4)
(SCALE: 1/100)



PEDESTRIAN SIGNAL LIGHT
(SCALE: 1/80)

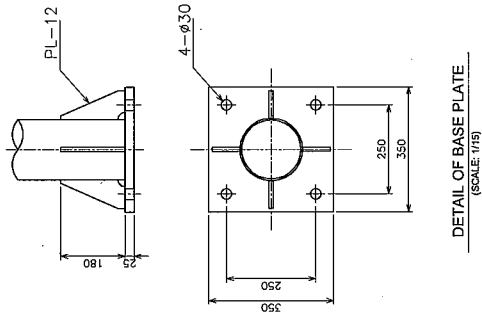


DETAIL OF BASE PLATE
FOR VEHICLE SIGNAL LIGHT
(SCALE: 1/50)

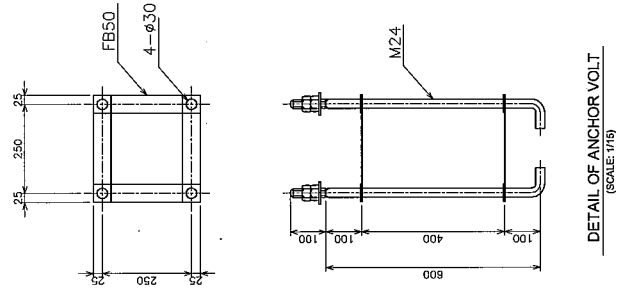


DETAIL OF BASE PLATE
FOR PEDESTRIAN SIGNAL
(SCALE: 1/40)

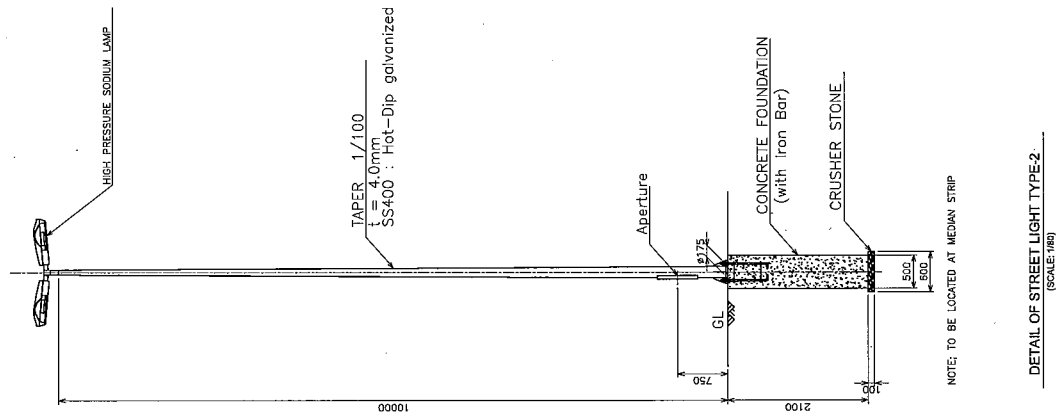
<p>BASIC DESIGN STUDY ON THE PROJECT FOR CONSTRUCTION OF RAILWAY FLY-OVER IN ULAANBAATAR CITY</p>	<p>MINISTRY OF ROAD, TRANSPORT AND TOURISM, MONGOLIA</p>	<p>JAPAN INTERNATIONAL COOPERATION AGENCY CTI Engineering International Co., Ltd</p>	<p>TITLE : TRAFFIC SIGNALS</p>	<p>SCALE AS SHOWN</p>	<p>Drawing No. BD-39</p>
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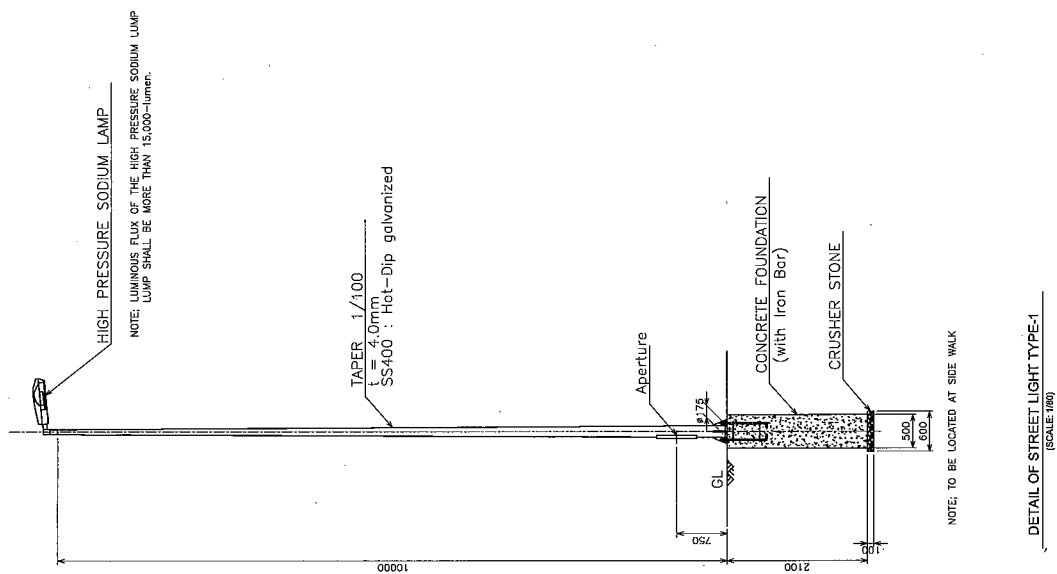
DETAIL OF BASE PLATE
(SCALE: 1/15)



DETAIL OF ANCHOR BOLT
(SCALE: 1/15)



DETAIL OF STREET LIGHT TYPE-2
(SCALE: 1/80)



DETAIL OF STREET LIGHT TYPE-1
(SCALE: 1/80)

BASIC DESIGN STUDY
ON THE PROJECT FOR CONSTRUCTION OF
RAILWAY FLY-OVER IN ULAANBAATAR CITY

MINISTRY OF ROAD, TRANSPORT AND
TOURISM, MONGOLIA

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI Engineering International Co., Ltd

TITLE :
STREET LIGHT

SCALE
AS SHOWN

Drawing No.
BD-40