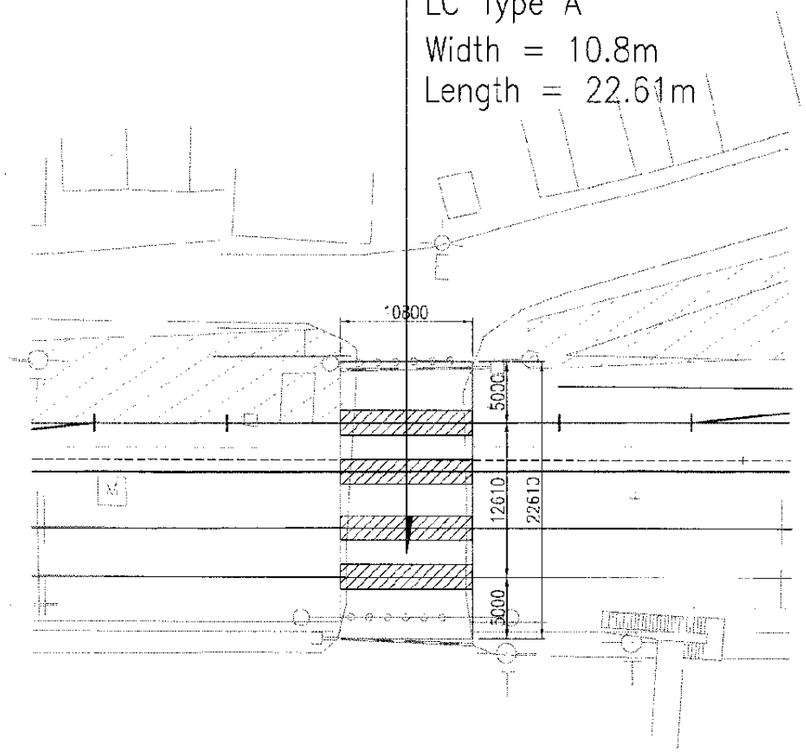
Km 12+564.51

(Km 12+569.39)
LC No. 52
LC Type A
Width = 10.8m
Length = 22.61m



LEVEL CROSSING NO. 52

SCALE 1 : 500

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Merdeka Barat no.8, Gedung Karya lt.11 Telp.021-3509508-3505557
JAKARTA

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TRACK

TRACK WORKS

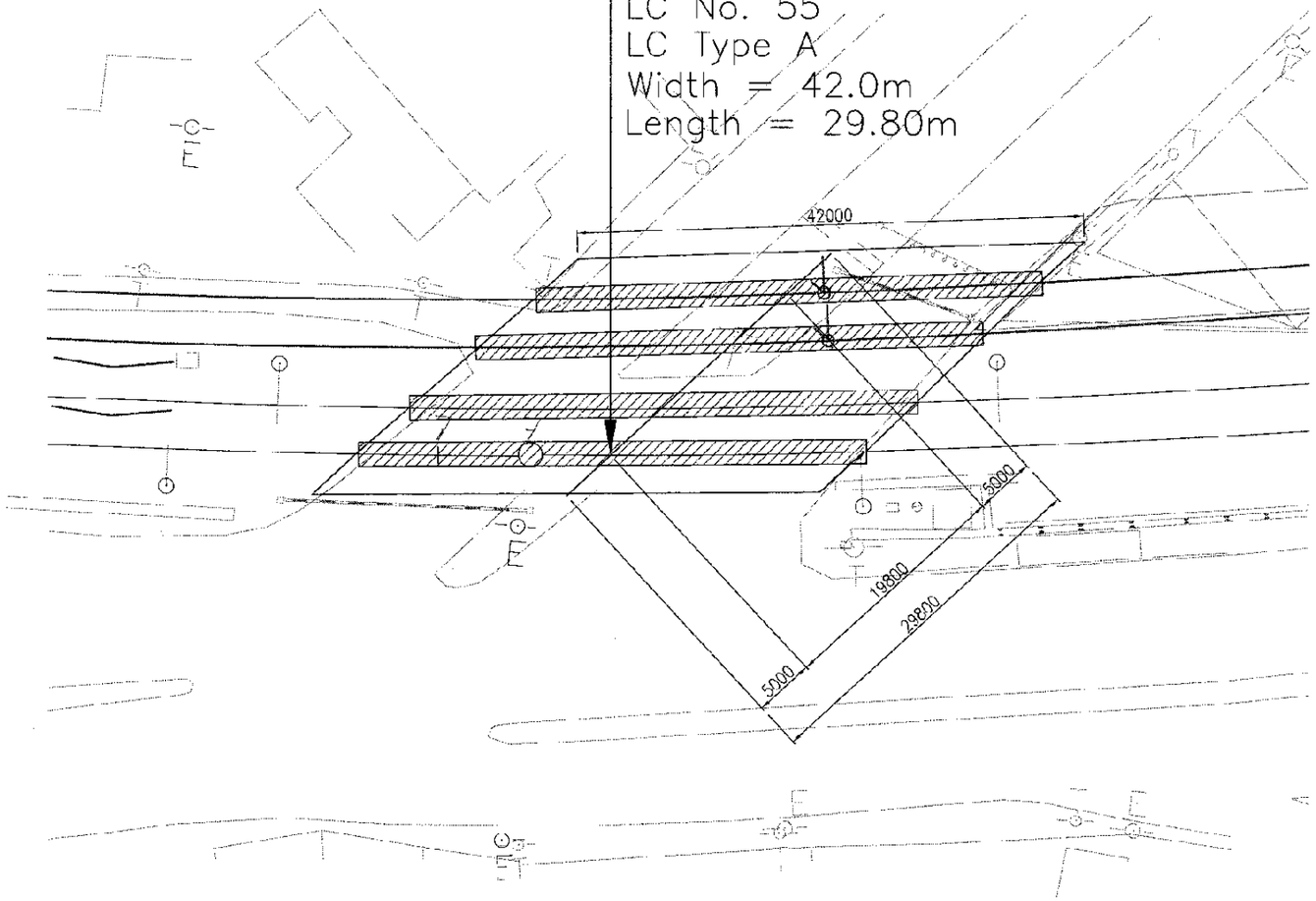
DATE	-

Drawing Title :

Level Crossing No. 52

Scale:	Drawing No:
1 : 500	TR - 03 - 001

Km 13+707.6
(Km 13+707)
LC No. 55
LC Type A
Width = 42.0m
Length = 29.80m



LEVEL CROSSING NO. 55

SCALE 1 : 500

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya Lt.11 tlp.021-3506326-3503307
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TRACK

TRACK WORKS

DATE	-

Drawing Title :

LEVEL CROSSING NO. 55

Scale:	Drawing No:
1 : 500	TR - 03 - 002

Km 14+785.84

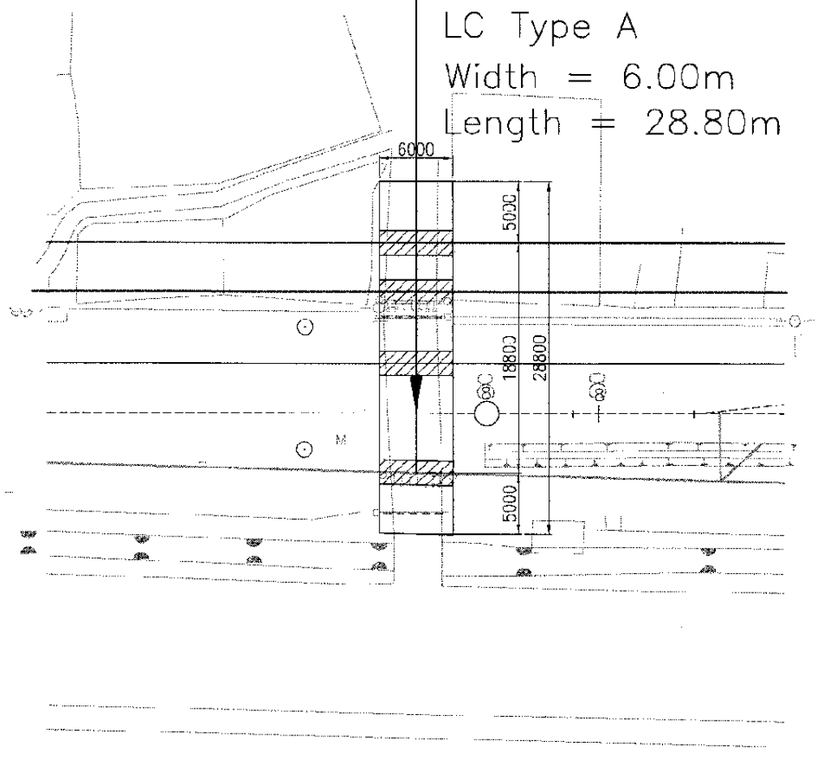
(Km 14+786)

LC No. 56

LC Type A

Width = 6.00m

Length = 28.80m



LEVEL CROSSING NO. 56

SCALE 1 : 500

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Merdeka Barat No.8 Gedung Karya Lt. 10 Telp.021-3506538-3505557
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TRACK

TRACK WORKS

DATE	-

Drawing Title :

LEVEL CROSSING NO. 56

Scale:	Drawing No:
1 : 500	TR - 03- 003

Km 20+799.31

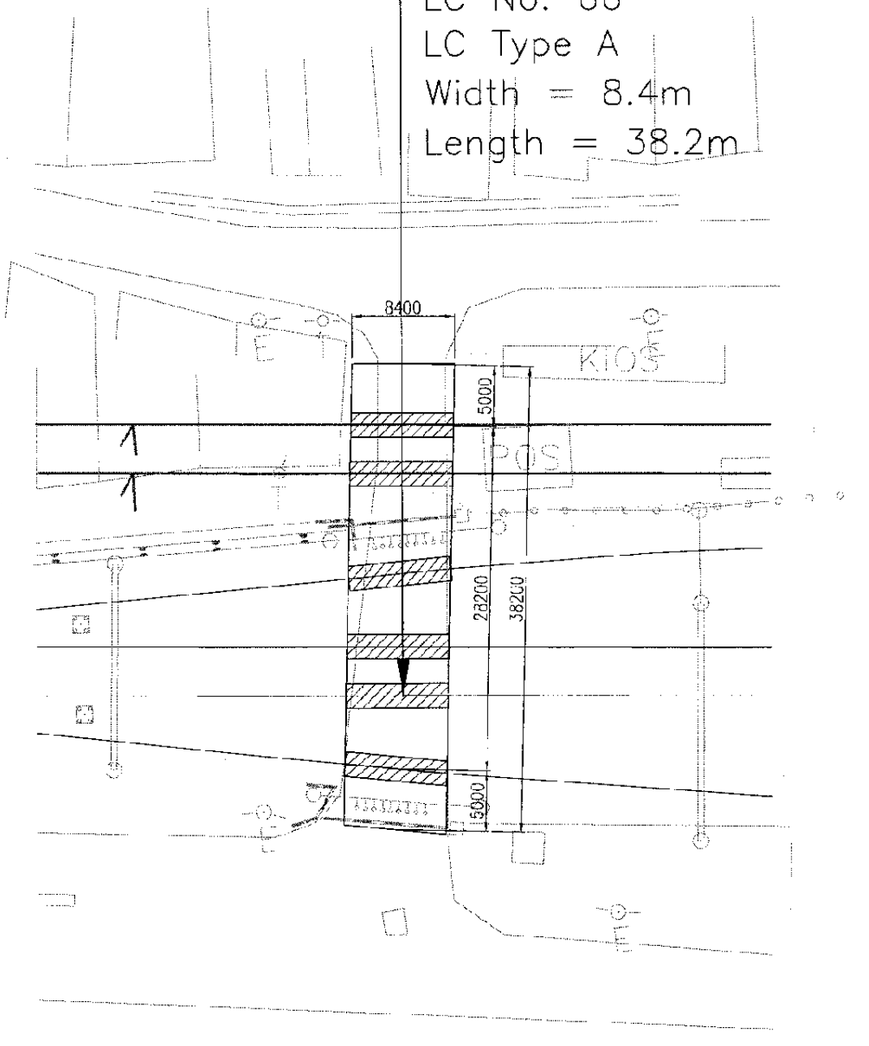
(Km 20+834)

LC No. 66

LC Type A

Width = 8.4m

Length = 38.2m



LEVEL CROSSING NO. 66

SCALE 1 : 500

Km 26+677.50

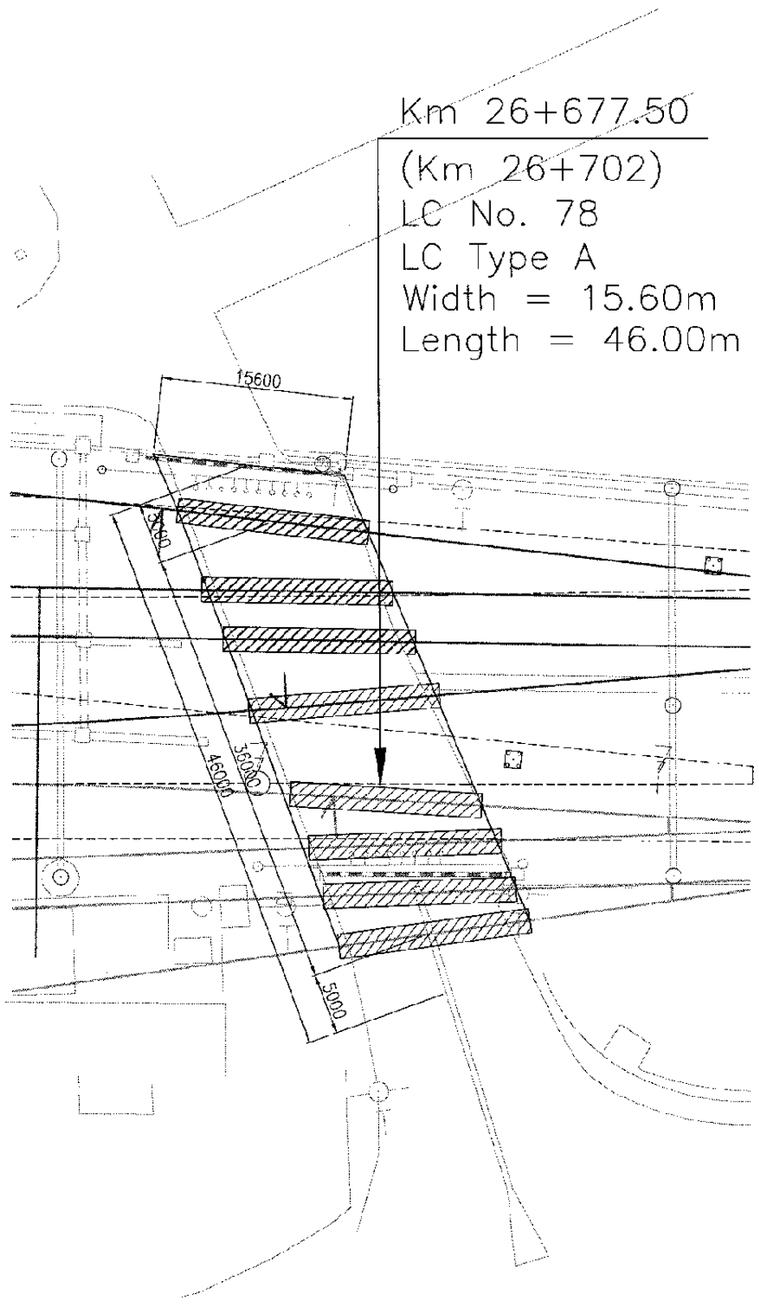
(Km 26+702)

LC No. 78

LC Type A

Width = 15.60m

Length = 46.00m



LEVEL CROSSING NO. 78

SCALE 1 : 500

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Tp.021-3508585-3505551
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TRACK

TRACK WORKS

DATE -

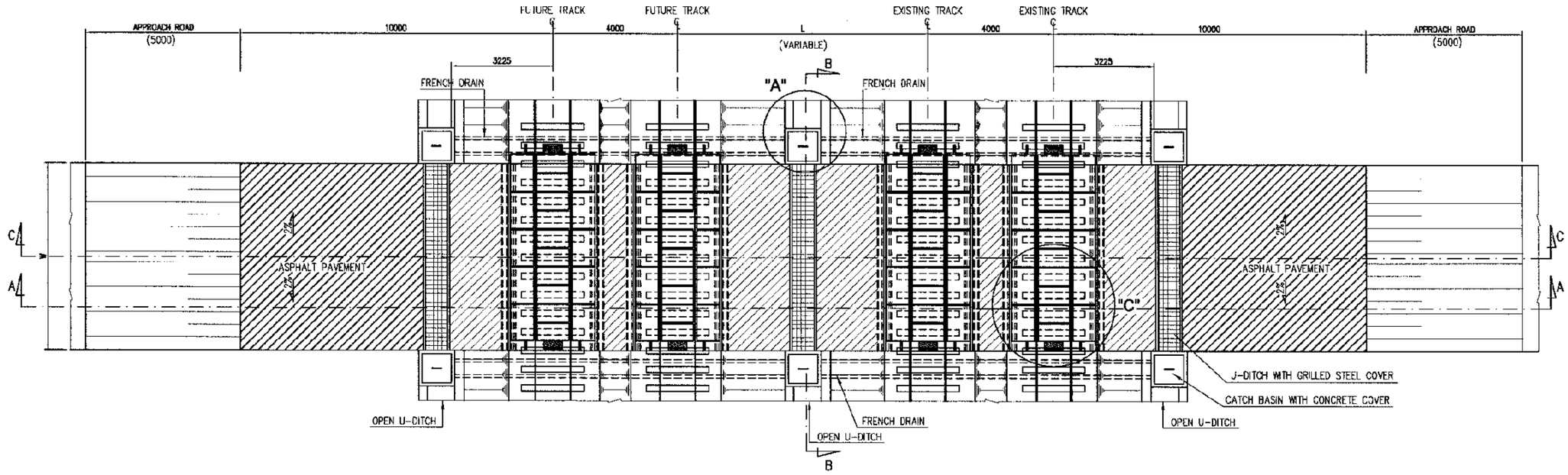
Drawing Title :

LEVEL CROSSING NO. 66 & 78

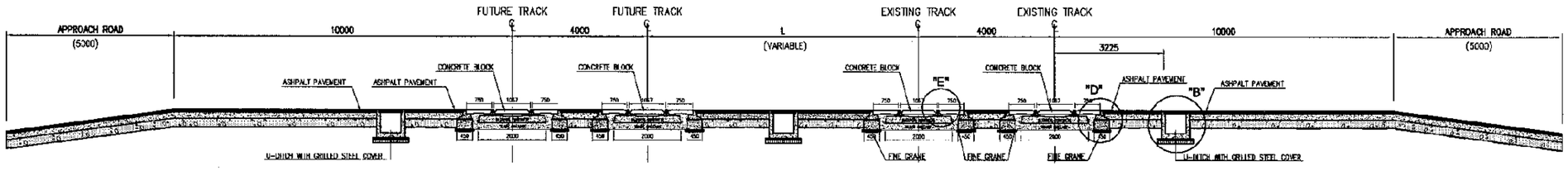
Scale: 1 : 500

Drawing No: TR - 03 - 004

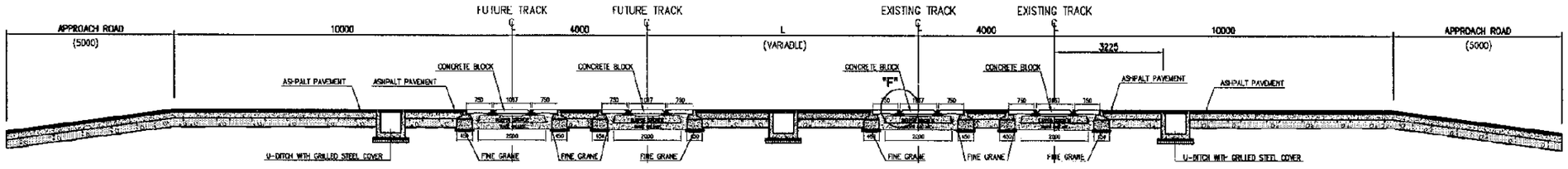
LEVEL CROSSING



P L A N
SCALE 1:75



SECTION A–A
SCALE 1:75



SECTION C–C
SCALE 1:75

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 tlp.021–3505526–3505557
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TRACK

LEVEL CROSSINGS

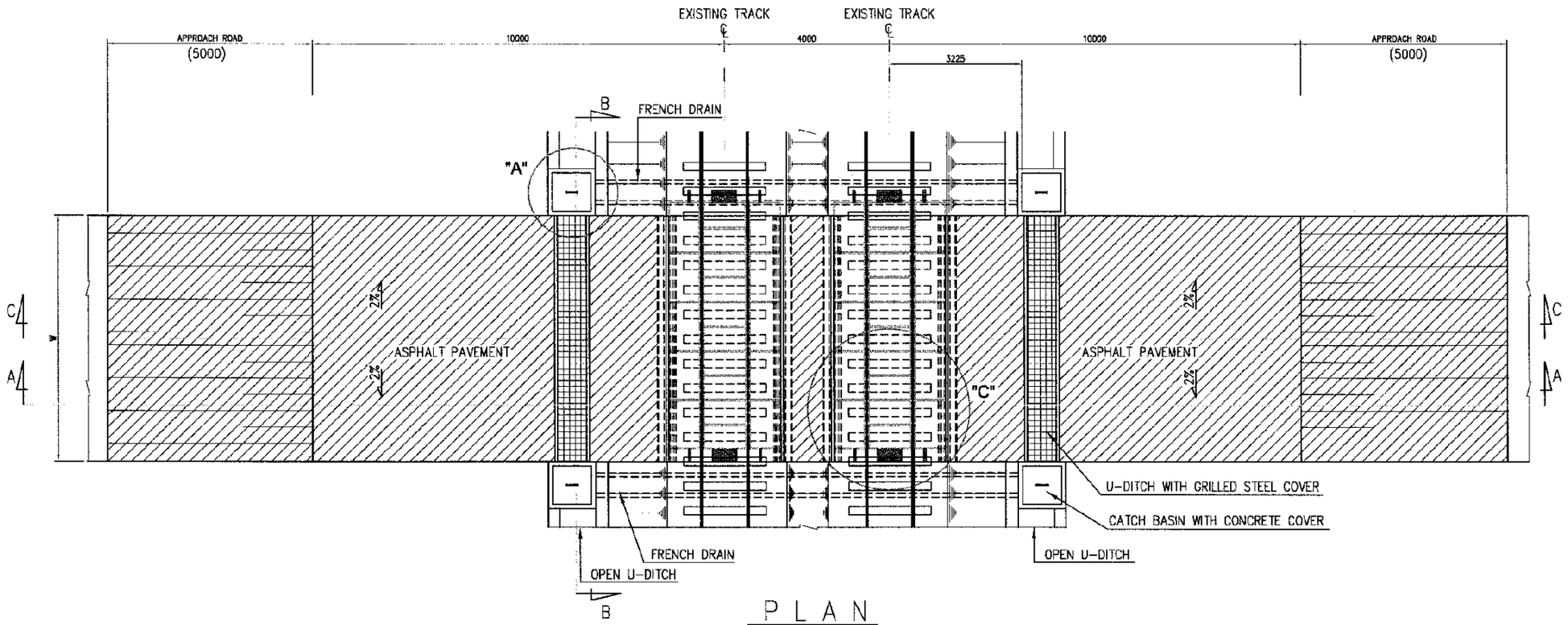
DATE	-

Drawing Title :

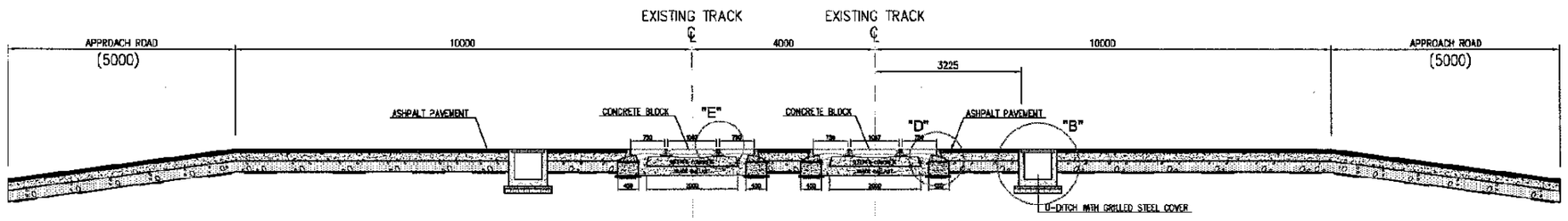
TYPICAL DRAWING OF LEVEL CROSSING
TYPE A (CONCRETE PANEL TYPE)
FOR DOUBLE – DOUBLE TRACK

Scale:	Drawing No.
1 : 75	TR - 03 - 005

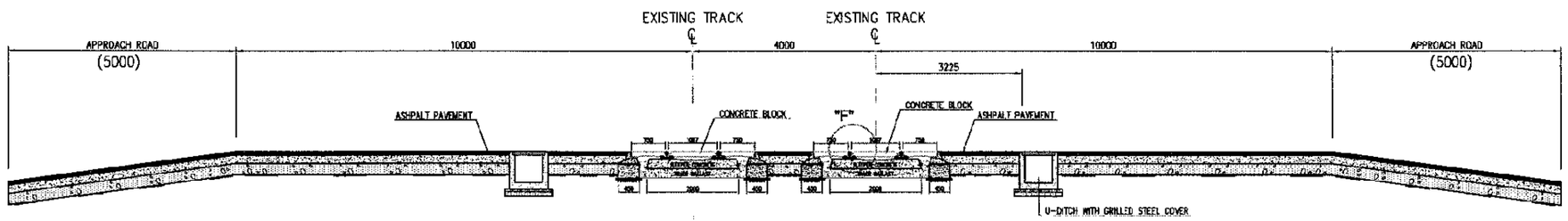
LEVEL CROSSING



PLAN
SCALE 1:60



SECTION A-A
SCALE 1:60



SECTION C-C
SCALE 1:60

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
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TRACK

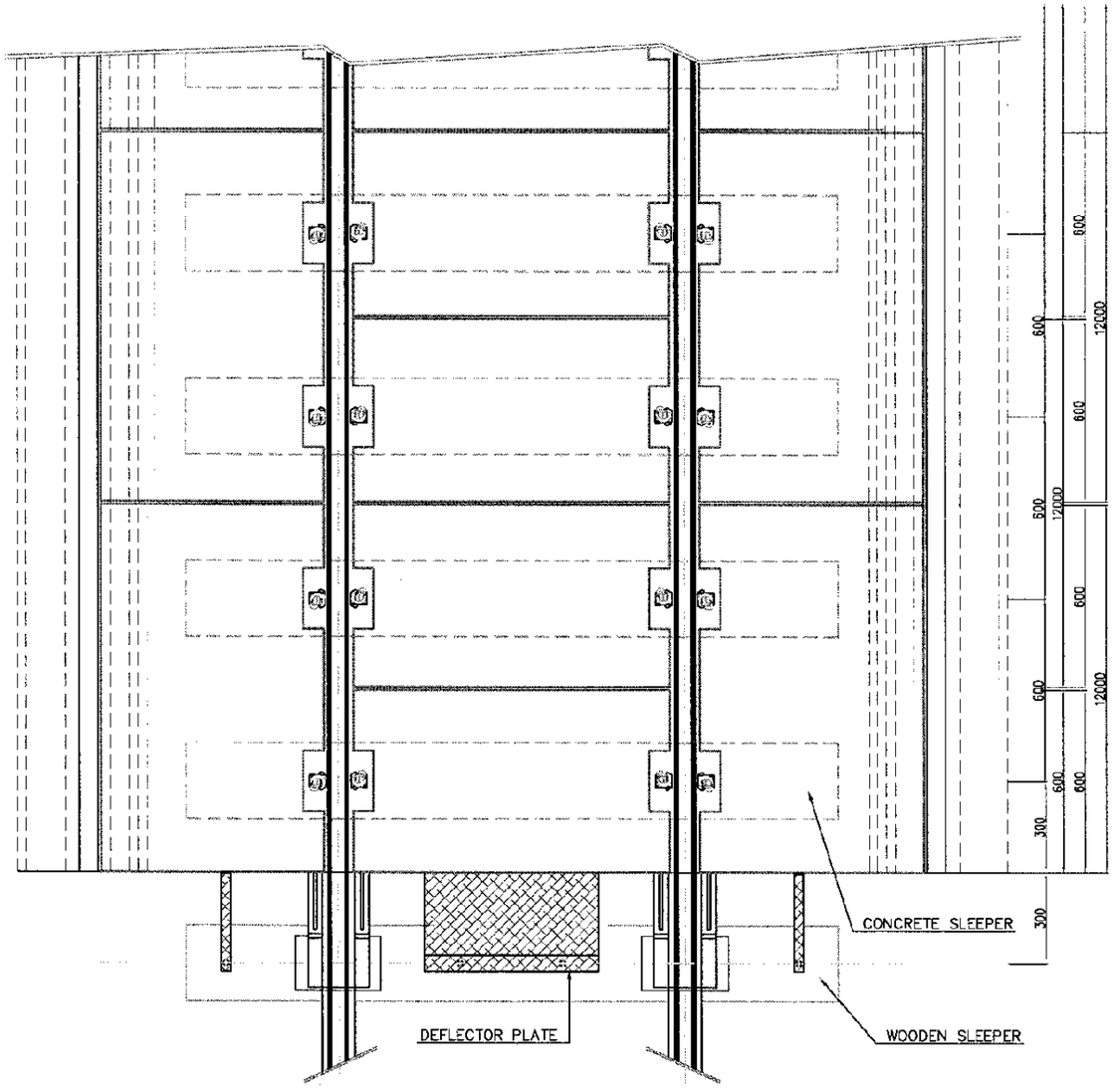
LEVEL CROSSINGS

DATE	-

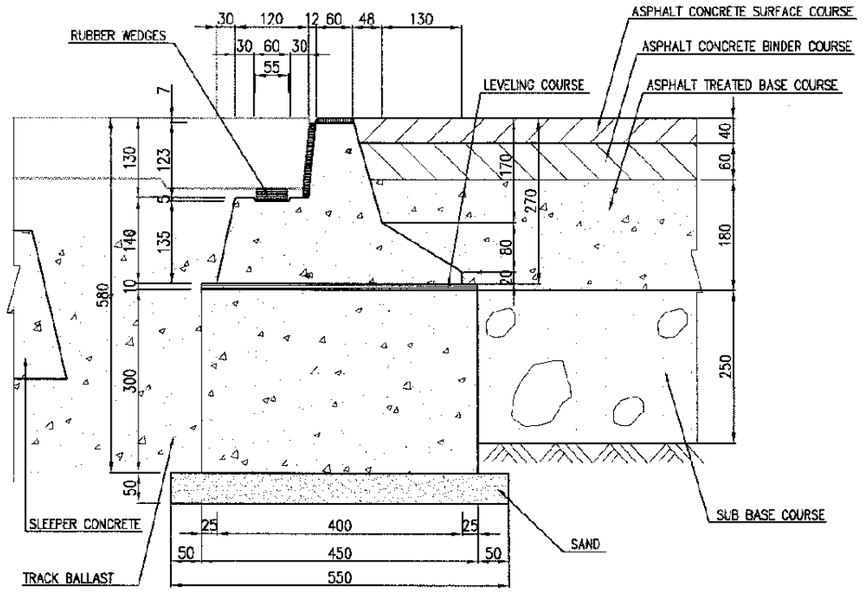
Drawing Title :

TYPICAL DRAWING OF LEVEL CROSSING
TYPE A (CONCRETE PANEL TYPE)
FOR DOUBLE TRACK

Scale:	Drawing No.:
1 : 60	TR - 03 - 006



DETAIL C
SCALE 1:10

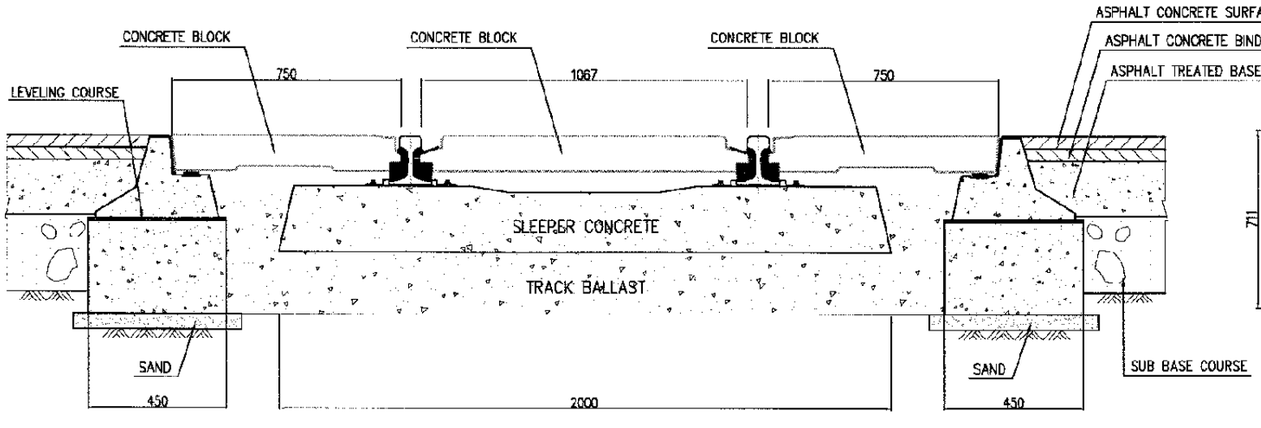


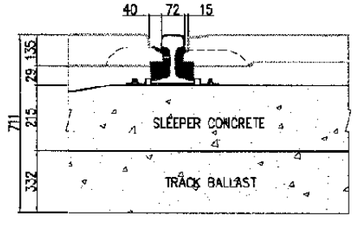
DETAIL D
SCALE 1:5

BALLAST STOPPER

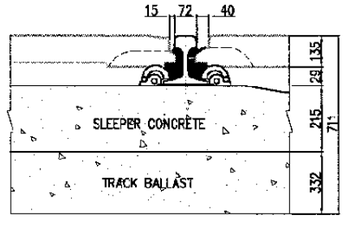
Location of Execution

No.	No. Of Level Crossing	Location	Km	Width (W) m	Length (L) m	Pavement		Remarks
						Concrete m²	Asphalt m²	
1	52	Pisangan Lama	Km 12+659.99	10.80	22.67	117.12	127.07	Main Track and Commuter Track
2	55	Bekasi Timur Raya	Km 13+707.6	42.00	29.80	485.45	796.15	Main Track and Commuter Track
3	58	Pendidikan	Km 14+785.14	6.00	28.80	65.03	107.71	Main Track and Commuter Track
4	66	Station Cakung	Km 20+799.51	8.40	38.20	136.63	184.25	Main Track and Commuter Track
5	78	Perjuangan	Km 26+877.60	15.60	46.00	338.33	378.27	Main Track and Commuter Track





DETAIL E
SCALE 1:10



DETAIL F
SCALE 1:10

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
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TRACK

LEVEL CROSSINGS

DATE -

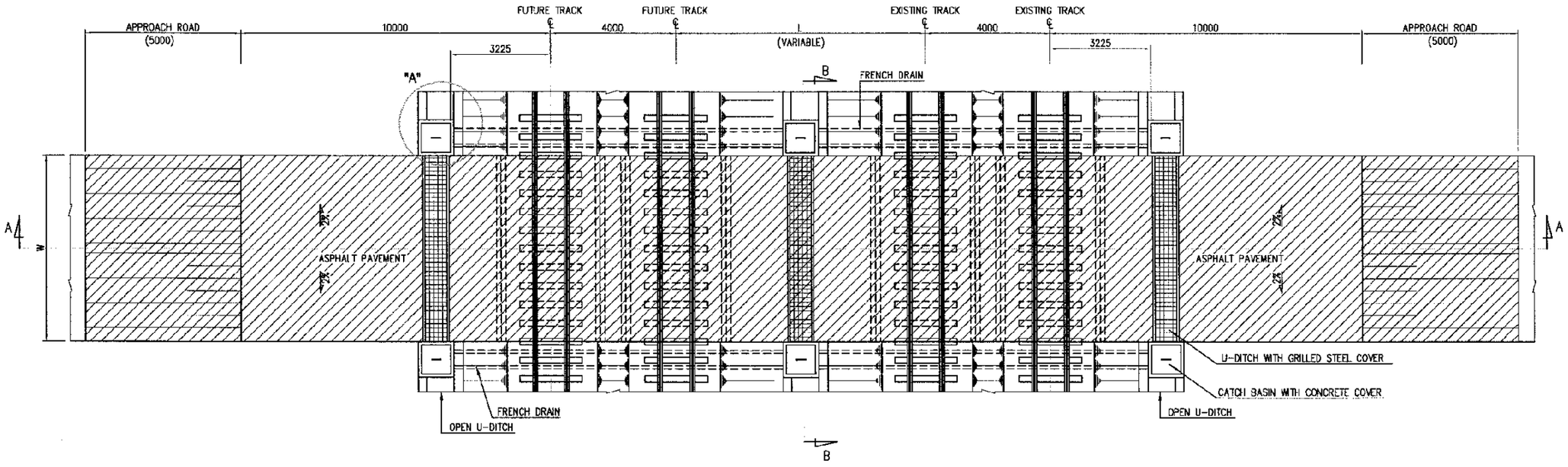
Drawing Title :

DETAIL OF LEVEL CROSSING
CONCRETE PANEL

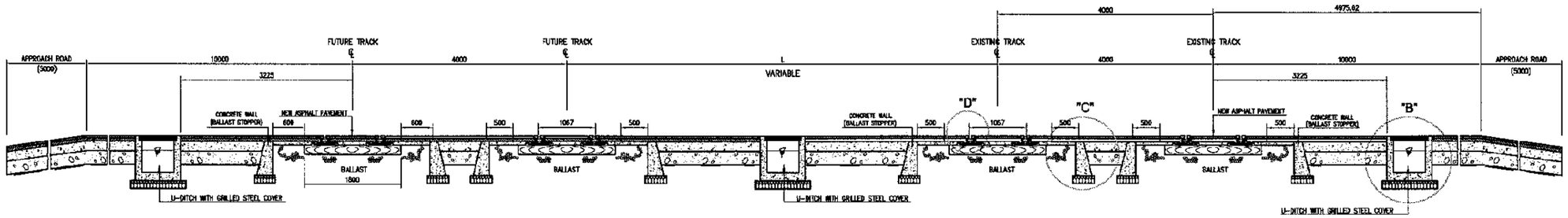
Scale:
1 : 10
1 : 5

Drawing No.:
TR - 03 - 007

LEVEL CROSSING



P L A N
SCALE 1:75



SECTION A–A
SCALE 1:45

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTMENT PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 tlp.021-3506529-3505557
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TRACK

LEVEL CROSSINGS

DATE -

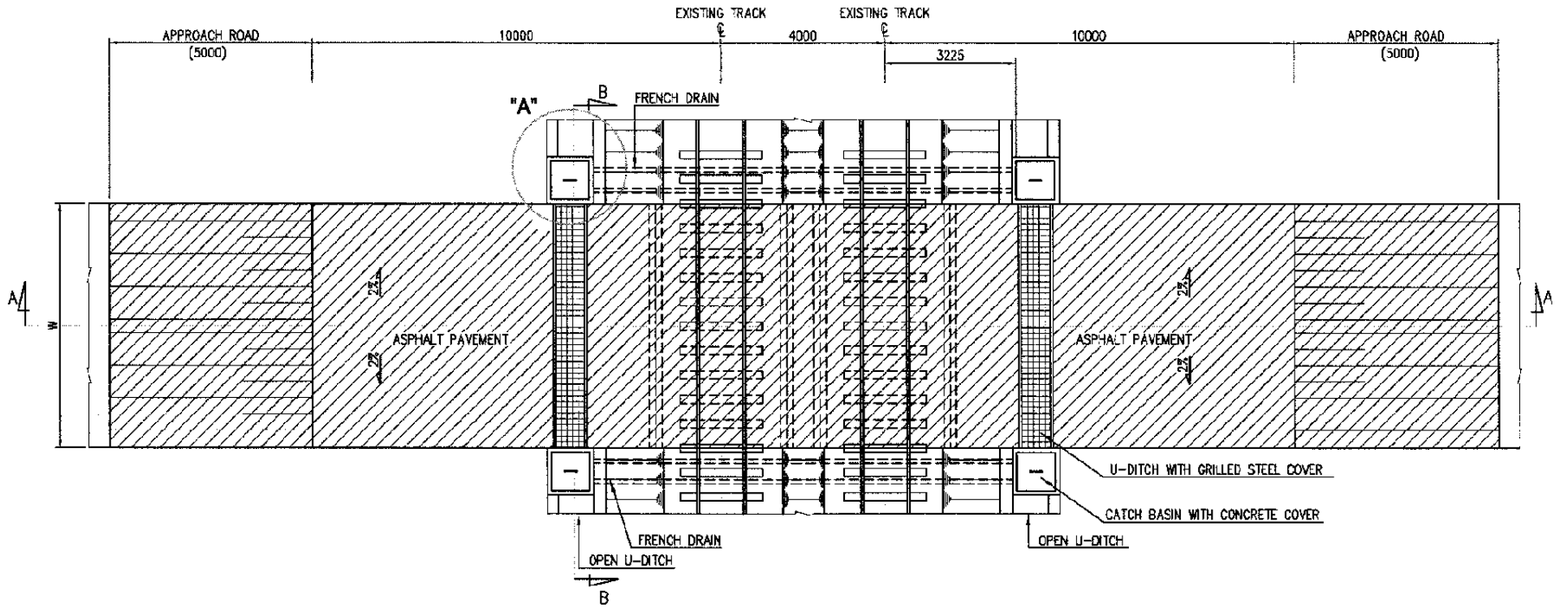
Drawing Title :

TYPICAL DRAWING OF LEVEL CROSSING
TYPE B (ASPHALT PAVEMENT)
FOR DOUBLE-DOUBLE TRACK

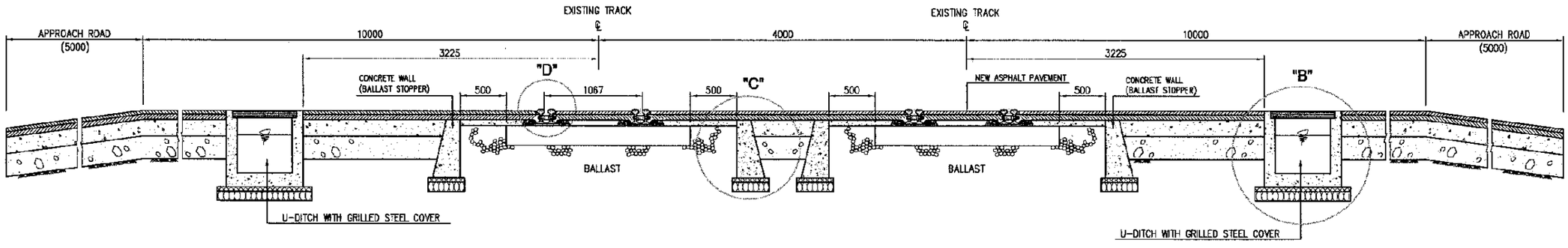
Scale: 1 : 75, 1 : 45

Drawing No.: TR - 03 - 008

LEVEL CROSSING



P L A N
SCALE 1:75



SECTION A–A
SCALE 1:25

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya Lt.11 tlp.021-3506526-3505557
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TRACK

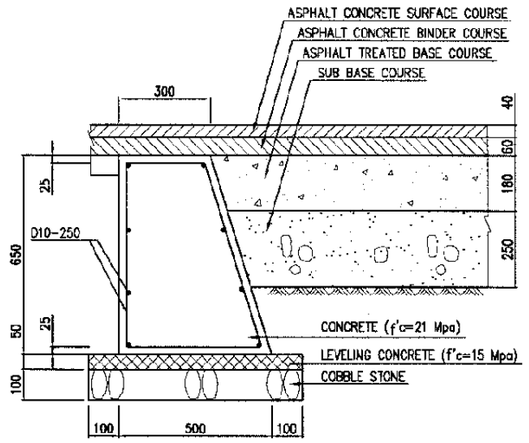
LEVEL CROSSINGS

DATE	-

Drawing Title :

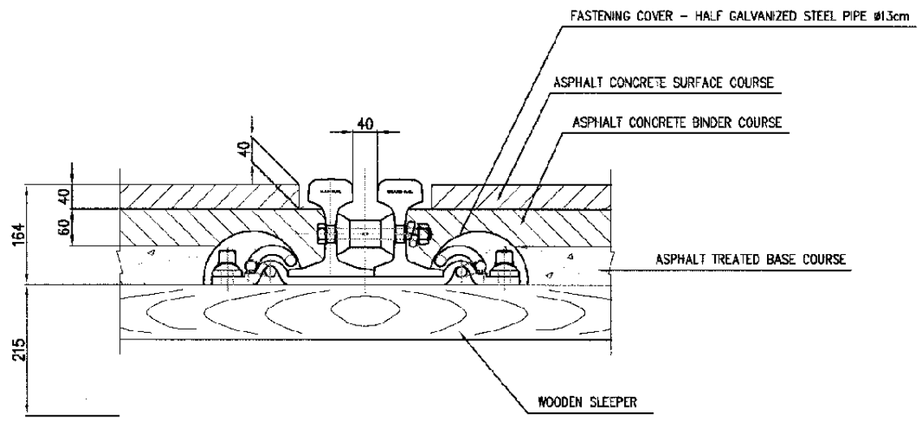
TYPICAL DRAWING OF LEVEL CROSSING
TYPE B (ASPHALT PAVEMENT)
FOR DOUBLE TRACK

Scale:	Drawing No :
1 : 75 1 : 25	TR - 03 - 009



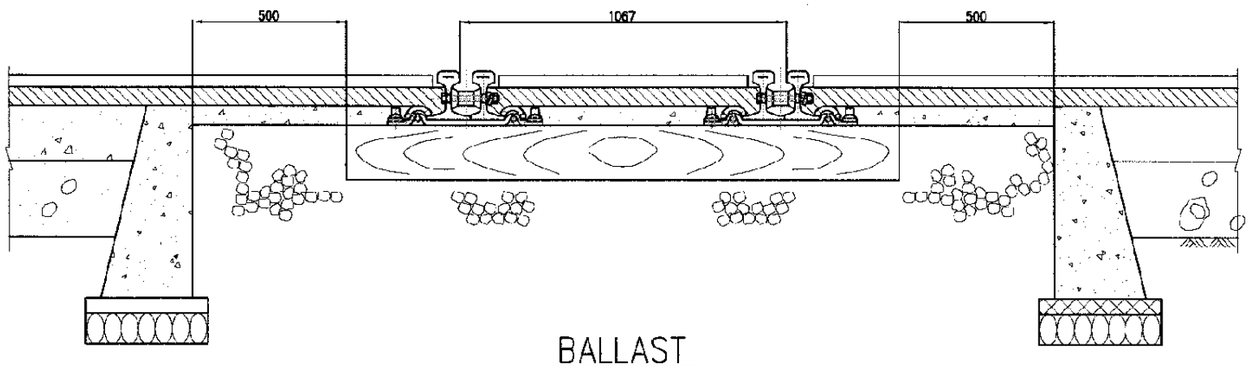
DETAIL C
SCALE 1:10

BALLAST STOPPER



DETAIL D
SCALE 1:5

PAVEMENT ON RAIL



BALLAST
SCALE 1:10

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
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Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Telp.021-3506526-3505557
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TRACK

LEVEL CROSSINGS

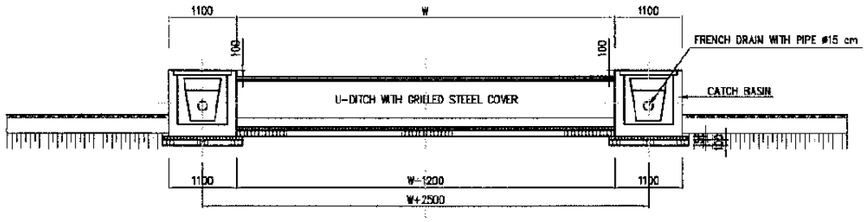
DATE

Drawing Title :

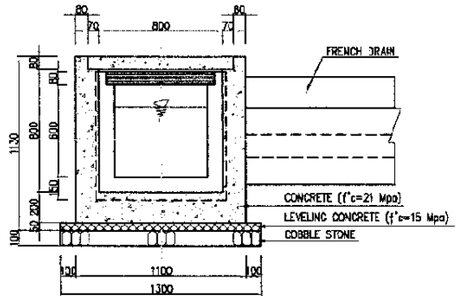
DETAIL OF LEVEL CROSSING
ASPHALT PAVEMENT TYPE

Scale:
1 : 10
1 : 5

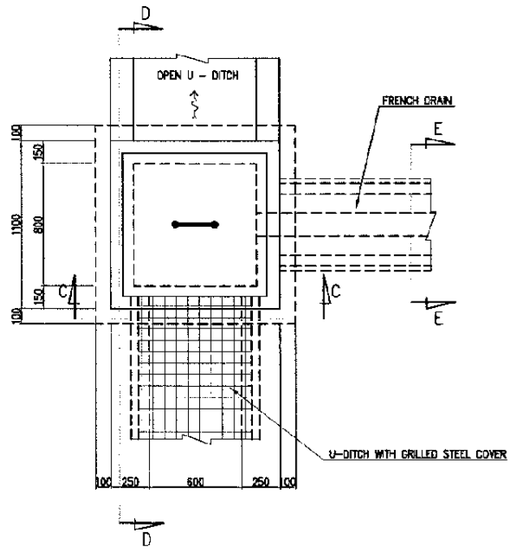
Drawing No.:
TR - 03 - 010



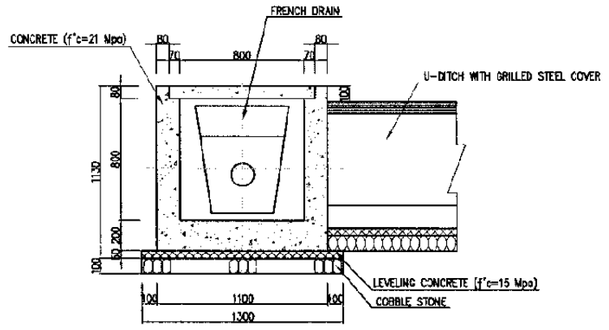
SECTION B–B
SCALE 1:50



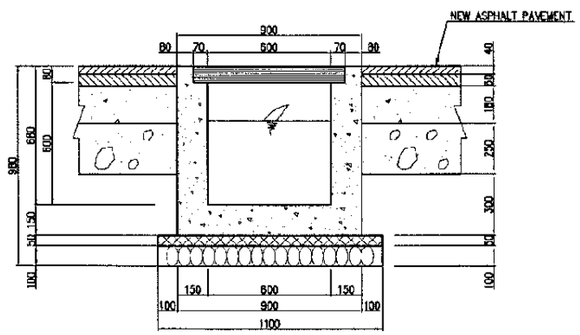
SECTION C–C
SCALE 1:20



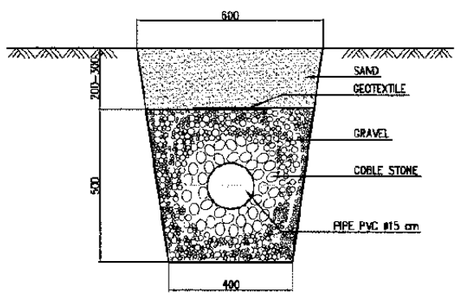
DETAIL A
SCALE 1:20
CATCH BASIN



SECTION D–D
SCALE 1:20



DETAIL B
SCALE 1:15
U–DITCH WITH GRILLED STEEL COVER



SECTION E–E
SCALE 1:10
FRENCH DRAIN

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
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DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya Lt.11 Telp.021-3505626-3505657
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TRACK

LEVEL CROSSINGS

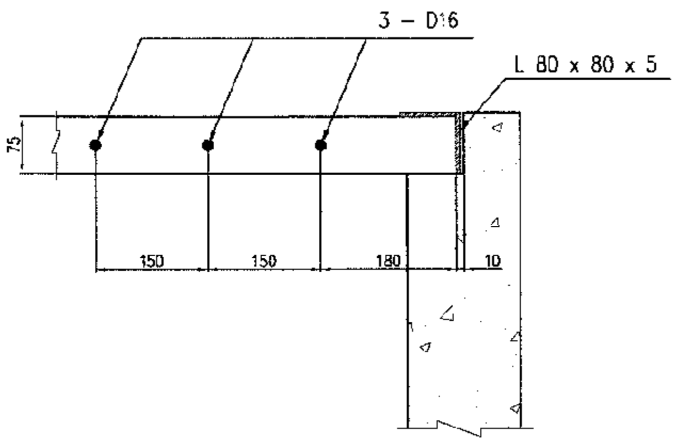
DATE -

Drawing Title :

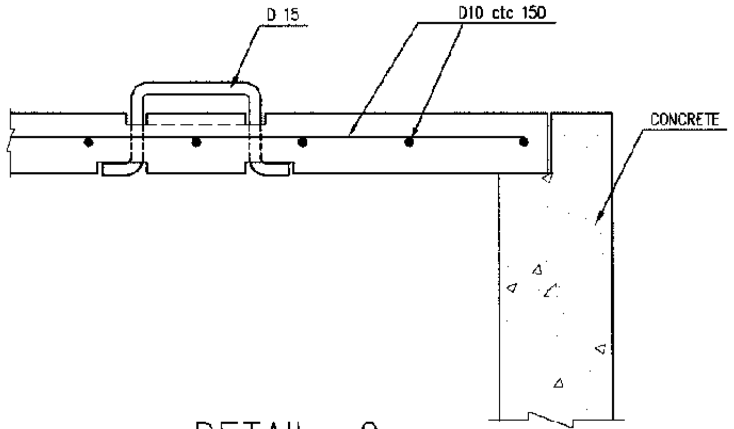
DETAIL OF
LEVEL CROSSING DRAINAGE

Scale:
1 : 50 / 1 : 20
1 : 15 / 1 : 10

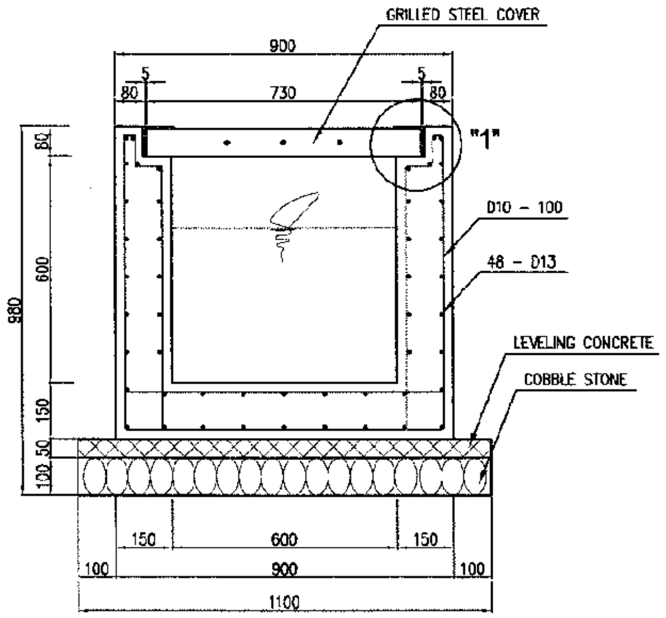
Drawing No.:
TR - 03 - 011



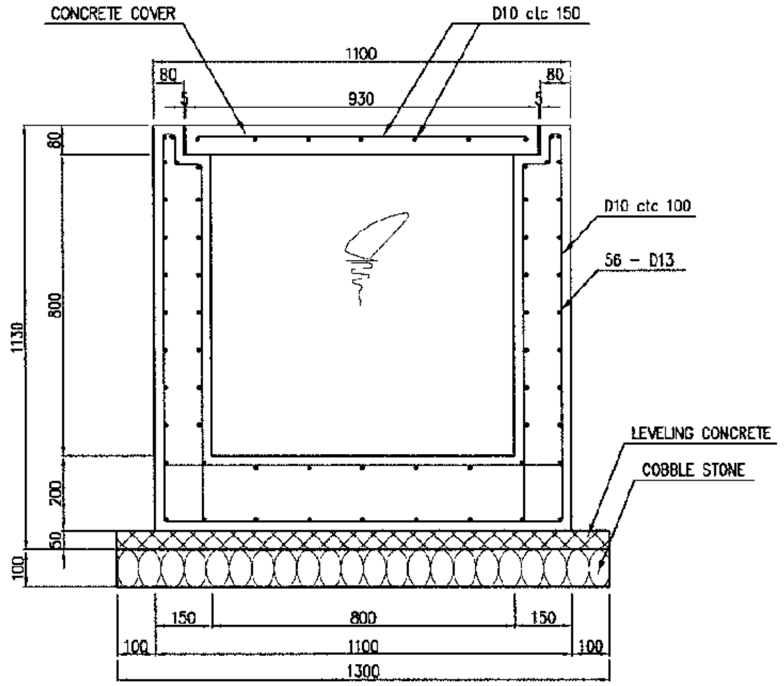
DETAIL 1
SCALE 1:5



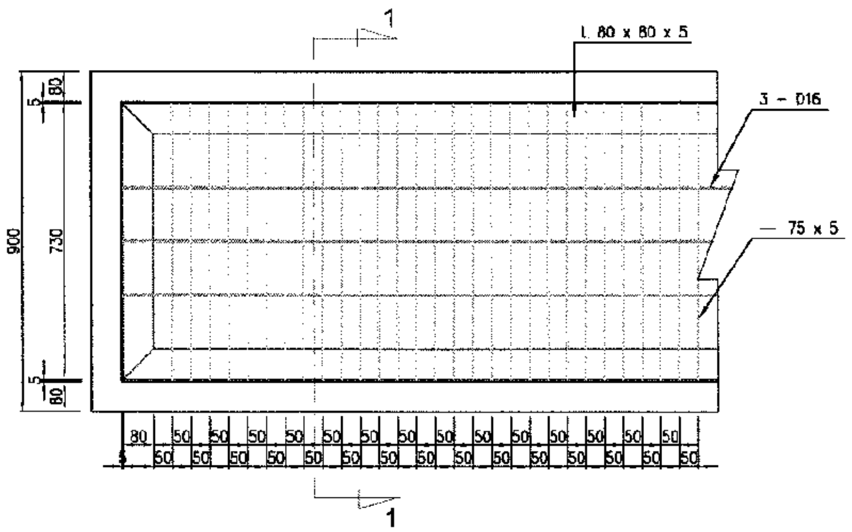
DETAIL 2
SCALE 1:5



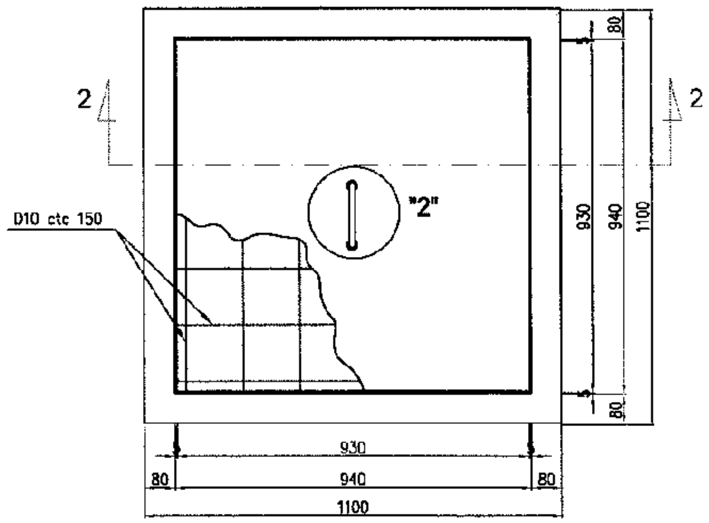
SECTION 1–1
SCALE 1:10



SECTION 2–2
SCALE 1:10



P L A N
SCALE 1:10
U–DITCH WITH GRILLED STEEL COVER



P L A N
SCALE 1:10
CATCH BASIN

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 tlp.021-3506528-3505557
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

TRACK

LEVEL CROSSINGS

DATE	-

Drawing Title :

DETAIL OF CATCH BASIN
AND U–DITCH

Scale:	Drawing No.:
1 : 10 1 : 5	TR - 03 - 012

GENERAL / TRACK LAYOUT

GENERAL PLAN

NO	TITLE	DRAWING NO	SCALE
01	GENERAL PLAN Km 25+100 – 25+700	GE – 01 – 001	H=1:1000 V=1:100
02	GENERAL PLAN Km 25+700 – 26+300	GE – 01 – 002	H=1:1000 V=1:100
03	GENERAL PLAN Km 26+300 – 26+900	GE – 01 – 003	H=1:1000 V=1:100
04	GENERAL PLAN Km 26+900 – 27+500	GE – 01 – 004	H=1:1000 V=1:100
05	GENERAL PLAN Km 27+500 – 28+100	GE – 01 – 005	H=1:1000 V=1:100
06	GENERAL PLAN Km 28+100 – 28+700	GE – 01 – 006	H=1:1000 V=1:100
07	GENERAL PLAN Km 28+700 – 29+300	GE – 01 – 007	H=1:1000 V=1:100
08	GENERAL PLAN Km 29+300 – 29+900	GE – 01 – 008	H=1:1000 V=1:100
09	GENERAL PLAN Km 29+900 – 30+500	GE – 01 – 009	H=1:1000 V=1:100
10	GENERAL PLAN Km 30+500 – 31+100	GE – 01 – 010	H=1:1000 V=1:100
11	GENERAL PLAN Km 31+100 – 31+700	GE – 01 – 011	H=1:1000 V=1:100
12	GENERAL PLAN Km 31+700 – 32+300	GE – 01 – 012	H=1:1000 V=1:100
13	GENERAL PLAN Km 32+300 – 32+900	GE – 01 – 013	H=1:1000 V=1:100
14	GENERAL PLAN Km 32+900 – 33+500	GE – 01 – 014	H=1:1000 V=1:100
15	GENERAL PLAN Km 33+500 – 34+100	GE – 01 – 015	H=1:1000 V=1:100
16	GENERAL PLAN Km 34+100 – 34+700	GE – 01 – 016	H=1:1000 V=1:100
17	GENERAL PLAN Km 34+700 – 35+300	GE – 01 – 017	H=1:1000 V=1:100
18	GENERAL PLAN Km 35+300 – 35+900	GE – 01 – 018	H=1:1000 V=1:100
19	GENERAL PLAN Km 35+900 – 36+500	GE – 01 – 019	H=1:1000 V=1:100
20	GENERAL PLAN Km 36+500 – 37+100	GE – 01 – 020	H=1:1000 V=1:100
21	GENERAL PLAN Km 37+100 – 37+700	GE – 01 – 021	H=1:1000 V=1:100
22	GENERAL PLAN Km 37+700 – 38+300	GE – 01 – 022	H=1:1000 V=1:100
23	GENERAL PLAN Km 38+300 – 38+900	GE – 01 – 023	H=1:1000 V=1:100
24	GENERAL PLAN Km 38+900 – 39+500	GE – 01 – 024	H=1:1000 V=1:100
25	GENERAL PLAN Km 39+500 – 40+100	GE – 01 – 025	H=1:1000 V=1:100
26	GENERAL PLAN Km 40+100 – 40+700	GE – 01 – 026	H=1:1000 V=1:100
27	GENERAL PLAN Km 40+700 – 41+300	GE – 01 – 027	H=1:1000 V=1:100
28	GENERAL PLAN Km 41+300 – 41+900	GE – 01 – 028	H=1:1000 V=1:100
29	GENERAL PLAN Km 41+900 – 42+500	GE – 01 – 029	H=1:1000 V=1:100
30	GENERAL PLAN Km 42+500 – 43+100	GE – 01 – 030	H=1:1000 V=1:100
31	GENERAL PLAN Km 43+100 – 43+700	GE – 01 – 031	H=1:1000 V=1:100
32	GENERAL PLAN Km 43+700 – 44+300	GE – 01 – 032	H=1:1000 V=1:100
33	GENERAL PLAN Km 44+300 – 44+600	GE – 01 – 033	H=1:1000 V=1:100

TRACK LAYOUT

NO	TITLE	DRAWING NO	SCALE
01	TRACK LAYOUT BETWEEN St. BEKASI AND St. CIKARANG (1)	RA – 01 – 001	N T S
02	TRACK LAYOUT BETWEEN St. BEKASI AND St. CIKARANG (2)	RA – 01 – 002	N T S
03	BEKASI STATION	RA – 01 – 003	1:1000
04	BEKASI TIMUR STATION	RA – 01 – 004	1:1000
05	TAMBUN STATION	RA – 01 – 005	1:1000
06	CIBITUNG STATION	RA – 01 – 006	1:1000
07	CIKARANG STATION	RA – 01 – 007	1:1000

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya Lt.11 Up.021-3506326-3543557
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL PLAN
TRACK LAYOUT

DATE: 10 / MARCH / 2003

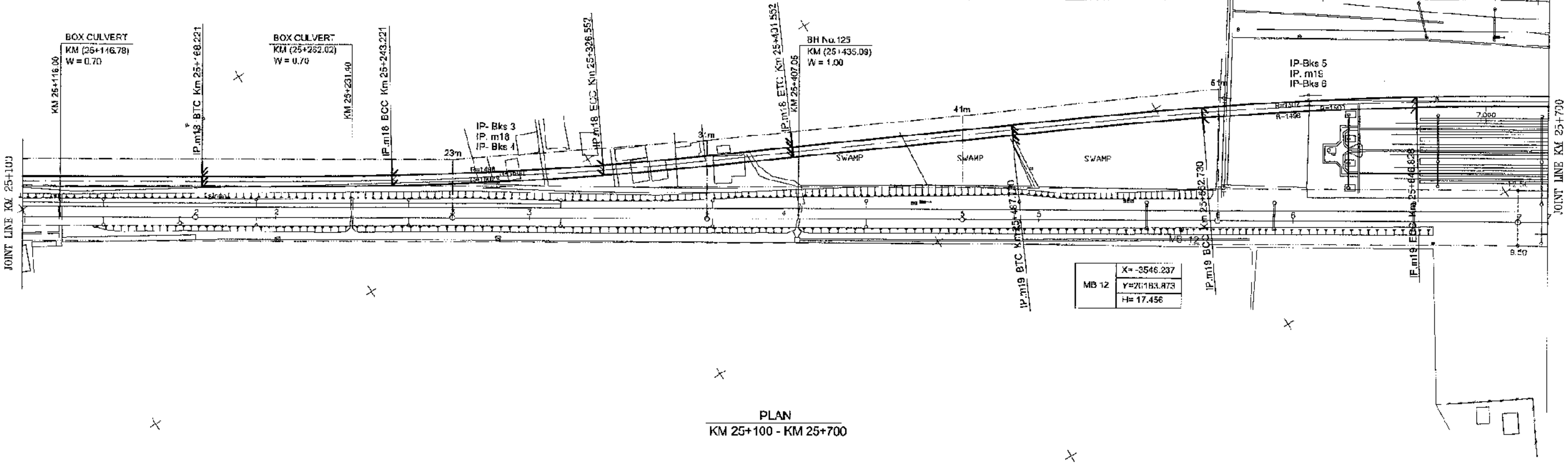
Drawing Title :

DRAWING LIST

Scale:

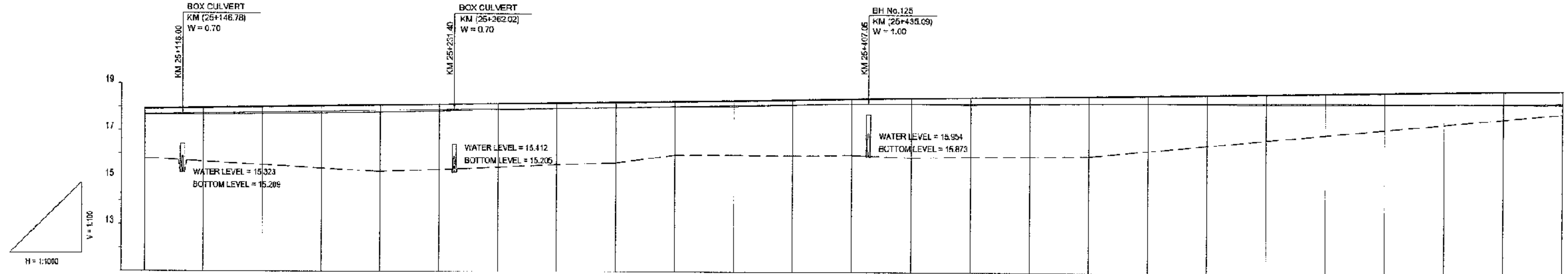
Drawing No.:

	IP-Bks 3	IP. m18	IP-Bks 4	IP-Bks 5	IP. m19	IP-Bks 6
X	- 3387.046	- 3389.401	- 3391.155	- 3527.045	- 3528.799	- 3530.553
Y	19966.132	19965.166	19964.199	20254.237	20253.270	20252.303
R	1498 M	1500 M	1502 M	1502 M	1500 M	1498 M
IA	6° 02' 40"	6° 02' 49"	6° 02' 49"	6° 04' 35"	6° 04' 35"	6° 04' 35"
θ	1° 26' 02"	1° 25' 55"	1° 25' 48"	1° 25' 48"	1° 25' 55"	1° 26' 02"
TL	116 M 641	116 M 747	116 M 852	117 M 237	117 M 131	117 M 025
CL	233 M 120	233 M 332	233 M 542	234 M 310	234 M 099	233 M 885
TCL	75 M	75 M	75 M	75 M	75 M	75 M
F	0 M 157	0 M 156	0 M 156	0 M 156	0 M 156	0 M 157



MB 12	
	X= -3546.237
	Y=20183.873
	H= 17.456

PLAN
KM 25+100 - KM 25+700



	KILOMETERAGE	25+100		25+150		25+200		25+250		25+300		25+350		25+400		25+450		25+500		25+550		25+600		25+650		25+700
EXISTING TRACK	UP RAIL ELEVATION	17.669	17.673	17.700	17.732	17.760	17.832	17.886	17.967	18.010	18.065	18.113	18.154	18.201	18.202	18.209	18.218	18.243	18.259	18.274	18.275	18.294	18.296	18.291	18.288	18.299
EXISTING TRACK	DOWN RAIL ELEVATION	17.692	17.722	17.761	17.799	17.860	17.902	17.941	17.965	18.010	18.054	18.077	18.134	18.191	18.189	18.171	18.211	18.235	18.250	18.247	18.239	18.247	18.267	18.289	18.315	18.355
EXISTING TRACK	GRADIENT	17.700					i = 1.73 ‰ L = 300 m							18.220			i = 0.40 ‰ L = 200 m					18.300		i = 1.25 ‰ L = 100 m		18.425
EXISTING TRACK	STRAIGHT/CURVE	1			BTC	2		BCC	R = 1500	3	ECC			4	ETC			5 BTC			BCC	6	R = 1500	ECC		7
NEW TRACK	RAIL ELEVATION	17.957	17.997	18.037	18.077	18.117	18.157	18.197	18.237	18.277	18.317	18.357	18.397	18.437	18.477	18.517	18.557	18.597	18.637	18.677	18.717	18.757	18.797	18.837	18.877	18.917
NEW TRACK	GRADIENT													i = 1.60 ‰ L = 983 m												
NEW TRACK	STRAIGHT/CURVE	1			BTC	2	TCL = 75	BCC	IA = 6° 02' 49" R = 1500	3	ECC		TCL = 75	4	ETC			5 BTC	TCL = 75		BCC	6	IA = 6° 04' 35" R = 1500	ECC	TCL = 75	7
NEW TRACK	GROUND HEIGHT	15.81				15.25				15.66	16.00	16.00	15.98	16.01	15.91	15.96	15.96	16.00		15.90		17.83		17.80		17.90
NEW TRACK	FORMATION LEVEL	17.278	17.318	17.358	17.398	17.438	17.478	17.518	17.558	17.598	17.638	17.678	17.718	17.758	17.798	17.838	17.875	17.913	17.958	17.998	18.038	18.078	18.118	18.158	18.198	18.238
NEW TRACK	DIFFER. HEIGHT(mm)	265	275	276	278	257	255	256	270	267	252	238	243	236	275	308	339	354	378	403	412	462	502	546	562	562

PROFILE
KM 25+100 - KM 25+700

LEGEND :
- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- L.C. GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 tlp.021-3506526 3505557
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 25+100 - 25+700

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 001

IP-Bks 7	
X	- 3692.307
Y	20813.298
R	2998 M
I A	1° 08' 14"
θ	0° 22' 54"
TL	49 M 757
CL	99 M 511
TCL	40 M
F	0 M 022

IP. m20	
X	- 3693.715
Y	20818.258
R	3000 M
I A	1° 08' 14"
θ	0° 22' 54"
TL	49 M 777
CL	99 M 551
TCL	40 M
F	0 M 022

IP-Bks 8	
X	- 3695.424
Y	20817.218
R	3002 M
I A	1° 08' 14"
θ	0° 22' 54"
TL	49 M 797
CL	99 M 591
TCL	40 M
F	0 M 022

IP-Bks 9	
X	- 3696.683
Y	20760.391
R	3002 M
I A	1° 08' 14"
θ	0° 22' 54"
TL	49 M 797
CL	99 M 591
TCL	40 M
F	0 M 022

IP. m21	
X	- 3698.391
Y	20761.351
R	3000 M
I A	1° 08' 14"
θ	0° 22' 55"
TL	49 M 776
CL	99 M 549
TCL	40 M
F	0 M 022

IP-Bks 10	
X	- 3840.100
Y	20760.311
R	2990 M
I A	1° 08' 14"
θ	0° 22' 55"
TL	40 M 757
CL	99 M 512
TCL	40 M
F	0 M 022

IP-Bks 11	
X	- 3858.022
Y	20785.820
R	600 M
I A	10° 39' 42"
θ	0° 28' 39"
TL	66 M 194
CL	120 M 077
TCL	10 M
F	0 M 007

IP-Bks 12	
X	- 3866.225
Y	20781.092
R	600 M
I A	4° 34' 24"
θ	0° 28' 39"
TL	28 M 859
CL	57 M 891
TCL	10 M
F	0 M 007

BH No.129
KM (25+800.00)
W = 1.00
KM 25+790.80

BH No.129A
KM (26+266.80)
W = 10.10
KM 26+243.35

ST. BEKASI

P-Bks 1	
X	-3792.163
Y	20687.595

P-Bks 2	
X	-3796.605
Y	20685.549

MB 13	
	X= -3706.321
	Y= 20445.705
	H= 18.203

P28	
	X= -3911.648
	Y= 20804.263
	H= 18.891

P48	
	X= -3901.208
	Y= 20809.782
	H= 19.841

PLAN
KM 25+700 - KM 26+300

BH No.129
KM (25+800.00)
W = 1.00
KM 25+790.80

BH No.129A
KM (26+266.80)
W = 10.10
KM 26+243.35

PLAT FORM
H=19.836

WATER LEVEL = 15.837
BOTTOM LEVEL = 15.501

WATER LEVEL = 17.497
BOTTOM LEVEL = 16.048

V=1:100
H=1:1000

	KILOMETERAGE	25+700	25+750	25+800	25+850	25+900	25+950	26+000	26+050	26+080	26+100	26+150	26+200	26+250	26+300
EXISTING TRACK	UP RAIL ELEVATION	18.359	18.344	18.334	18.352	18.392	18.424	18.455	18.483	18.515	18.533	18.545	18.578	18.625	18.653	18.767	18.829	18.853	18.880	19.011	19.050	19.061	19.048	19.058	19.028	19.305
	DOWN RAIL ELEVATION	18.355	18.394	18.434	18.448	18.438	18.423	18.413	18.420	18.446	18.488	18.549	18.567	18.593	18.667	18.755	18.775	18.856	18.886	18.932	18.981	19.000	19.070	19.067	18.965	18.981
	GRADIENT	18.425	i = 0.30 ‰ L = 150 m			18.470	i = 1.43 ‰ L = 160 m			18.665	i = 2.050 ‰ L = 100 m			18.830	i = 1.80 ‰ L = 100 m			19.070	i = - 0.55 ‰ L = 200 m							
	STRAIGHT/CURVE	7	ETC	8		BTC 9	R = 3000	BCC ECC	ETC 26			1	RTC			2	BCC ECC R = 3000		ETC							3
NEW TRACK	RAIL ELEVATION	18.917	18.597	18.697	19.037	19.077	19.117	19.157	19.197	19.237	19.277	19.317	19.357	19.397	19.437	19.477	19.517	19.525	19.525	19.525	19.525	19.525	19.525	19.525	19.525	19.525
	GRADIENT						i = 1.60 ‰ L = 980 m					19.525					LEVEL L = 224.5 m									
	STRAIGHT/CURVE	7	TCL = 75	ETC	8		BTC	9	IA = 1° 08' 14.4" R = 3000		ETC 26			1		BTC	TCL = 40	2	BCC ECC IA = 1° 08' 14.2" R = 3000	TCL = 40	ETC					3
	GROUND HEIGHT	17.30		17.77				18.21		18.21		18.25		18.32		18.45		18.45				18.23				17.20
	FORMATION LEVEL	18.236	18.270	18.318	18.358	18.398	18.438	18.478	18.518	18.558	18.598	18.638	18.678	18.718	18.758	18.798	18.838	18.846	18.846	18.846	18.846	18.846	18.846	18.846	18.846	18.846
	DIFFER. HEIGHT(mm)	582	353	583	589	639	683	702	714	722	747	768	781	772	744	680	688	642	545	514	475	484	476	467	497	520

PROFILE
KM 25+700 - KM 26+300

LEGEND

- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- WELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- I.C. GATE

SURVEY KM (PT. KAI -ve)

The Railway Electrification and Double - double Tracking of Java Main Line Project

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MINISTRY OF COMMUNICATION
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DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Merdeka Barat no.8 Gedung Karya lt.11 Ilp.021 - 3506525 - 3505557
JAKARTA

Note:

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JICA Study Team:

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Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	IC / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 25+700 - 26+300

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 002

IP-Bks 13	
X	- 3961.238
Y	20983.724
R	600 M
I A	11° 06' 22"
θ	0° 28' 38"
TL	63 M 336
CL	126 M 335
TCL	10 M
F	0 M 367

IP-Bks 14	
X	- 3971.310
Y	20979.515
R	1200 M
I A	5° 42' 38"
θ	1° 25' 47"
TL	89 M 964
CL	179 M 818
TCL	60 M
F	0 M 125

IP. m22	
X	- 3972.455
Y	20978.573
R	1200 M
I A	5° 42' 38"
θ	1° 25' 55"
TL	89 M 966
CL	179 M 822
TCL	60 M
F	0 M 125

IP-Bks 15	
X	- 3975.101
Y	20977.232
R	1190 M
I A	5° 42' 38"
θ	1° 26' 04"
TL	89 M 765
CL	179 M 419
TCL	60 M
F	0 M 125

IP-Bks 16	
X	- 4068.077
Y	21093.128
R	800 M
I A	7° 36' 14"
θ	1° 47' 23"
TL	76 M 161
CL	156 M 180
TCL	60 M
F	0 M 130

IP-Bks 17	
X	- 4074.755
Y	21093.884
R	2000 M
I A	1° 41' 32"
θ	0° 25' 47"
TL	44 M 538
CL	89 M 074
TCL	30 M
F	0 M 019

IP-Bks 18	
X	- 4106.453
Y	21130.601
R	800 M
I A	1° 53' 35"
θ	0° 21' 29"
TL	18 M 217
CL	36 M 432
TCL	10 M
F	0 M 009

IP-Bks 19	
X	- 4128.965
Y	21148.755
R	1000 M
I A	1° 41' 33"
θ	0° 17' 11"
TL	19 M 772
CL	39 M 541
TCL	10 M
F	0 M 004

IP-Bks 21	
X	- 4191.211
Y	21257.787
R	1000 M
I A	5° 44' 45"
θ	1° 43' 06"
TL	80 M 201
CL	160 M 305
TCL	60 M
F	0 M 150

IP-Bks 22	
X	- 4169.090
Y	21236.297
R	800 M
I A	7° 36' 20"
θ	1° 47' 23"
TL	79 M 477
CL	156 M 579
TCL	50 M
F	0 M 130

IP-Bks 23	
X	- 4226.745
Y	21282.756
R	2000 M
I A	1° 40' 39"
θ	0° 25' 47"
TL	45 M 153
CL	90 M 311
TCL	30 M
F	0 M 019

IP-Bks 20	
X	- 4151.348
Y	21212.598
R	1000 M
I A	5° 44' 45"
θ	1° 43' 06"
TL	80 M 201
CL	160 M 305
TCL	60 M
F	0 M 150

IP. m23	
X	- 4171.279
Y	21235.485
R	1000 M
I A	5° 44' 45"
θ	-
TL	50 M 134
CL	100 M 284
TCL	-
F	-

P-Bks 3	
X	-4040.630
Y	21068.843

P-Bks 5	
X	4058.742
Y	21068.774

P-Bks 4	
X	-4043.788
Y	21066.402

P-Bks 6	
X	-4059.911
Y	21067.333

P-Bks 7	
X	-4081.162
Y	21121.463

P-Bks 9	
X	-4126.995
Y	21165.836

P-Bks 8	
X	-4084.320
Y	21119.022

P-Bks 10	
X	-4174.651
Y	21204.315

P4D	
X= -3901.208	
Y= 20909.762	
H= 19.841	

MB 14	
X= -4188.307	
Y= 21230.622	
H= 19.258	

P-Bks 17 Km 26+730.983	
X= -4188.307	
Y= 21230.622	
H= 19.258	

ST. BEKASI

PLAN
KM 26+300 - KM 26+900

PROFILE
KM 26+300 - KM 26+900

	KILOMETERAGE	26+300	26+350	26+400	26+450	26+500	26+550	26+600	26+650	26+700	26+750	26+800	26+850	26+900
EXISTING TRACK	UP RAIL ELEVATION	19.006	18.956	18.363	18.377	18.363	18.941	18.952	18.957	18.953	18.957	18.978	19.005	19.027	19.110	19.192	19.274	19.338	19.389	19.408	19.459	19.594	19.609	19.788	19.746	19.727
	DOWN RAIL ELEVATION	18.961	13.952	18.364	18.943	18.965	18.952	18.914	18.910	16.920	18.933	16.971	19.043	16.101	16.159	19.212	19.294	19.335	18.392	19.456	19.523	19.594	19.638	19.706	19.744	19.726
	GRADIENT		i = - 0.55 ‰ L = 200 m		18.960		i = 0.13 ‰ L = 150 m		18.980				i = 2.63 ‰ L = 300 m											19.770		
	STRAIGHT/CURVE	3	BTC	4	BCC	R= 1000	ECC	5	CTC	6			BTC	7	TCL = 60		R = 1000		8	BCC	ECC			ETC		9
NEW TRACK	RAIL ELEVATION	18.525	18.524	18.509	18.469	18.488	18.440	18.429	18.409	18.383	18.369	18.349	18.329	18.309	18.289	18.269	18.249	18.248	18.279	18.329	18.379	18.429	18.478	18.528	18.579	18.629	18.679	18.727
	GRADIENT	19.525					i = - 0.80 ‰ L = 352.5 m							19.243									i = 2.00 ‰ L = 243 m					19.729
	STRAIGHT/CURVE	3	BTC	4	TCL = 60	BCC	IA = 5° 42' 38.9" R = 1000	ECC	5	TCL = 60	ETC	6			BTC	7	TCL = 60				BCC	IA = 5° 44' 45.1" R = 1000	ECC	8	TCL = 60	ETC		9
	GROUND HEIGHT	17.20		16.10		17.23		17.92		18.35		18.98		18.72		18.76		18.69		18.68		19.01		19.55		19.40		
	FORMATION LEVEL	18.046	18.030	18.010	18.790	18.770	18.750	18.730	18.710	18.690	18.670	18.650	18.630	18.610	18.590	18.570	18.550	18.600	18.650	18.700	18.750	18.800	18.850	18.900	18.950	19.000	19.050	
	DIFFER. HEIGHT(mm)	520	511	506	452	464	477	457	432	416	382	351	280	188	110	37	-5	-7	-13	-27	-44	-65	-90	-137	-67	1		

LEGEND :
- EXISTING TRACK
- SIMULATION EXISTING TRACK
- ST. MANGGARA - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BEL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST FOOT SLOT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya Lt.11 Tlp.021-3505526-3505551
JAKARTA

Note:
This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 26+300 - 26+900

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 003

IP-Bks 24	
X	- 4159.269
Y	21514.033
R	800 M
IA	7° 52' 52"
θ	2° 41' 00"
TL	92 M 68'
CL	185 M 113
TCL	75 M
F	0 M 294

IP-Bks 25	
X	- 4360.952
Y	21530.941
R	800 M
IA	7° 52' 52"
θ	2° 41' 00"
TL	92 M 661
CL	185 M 113
TCL	75 M
F	0 M 294

IP-Bks 26	
X	- 4360.401
Y	21549.955
R	800 M
IA	13° 35' 31"
θ	2° 41' 00"
TL	132 M 304
CL	264 M 849
TCL	75 M
F	0 M 294

IP. m24	
X	- 4371.131
Y	21556.752
R	800 M
IA	13° 35' 32"
θ	-
TL	95 M 337
CL	189 M 778
TCL	-
F	-

IP-Bks 27	
X	- 4381.802
Y	21564.449
R	800 M
IA	13° 36' 30"
θ	2° 06' 59"
TL	125 M 375
CL	249 M 843
TCL	60 M
F	0 M 188

P-Bks 11	
X	-4404.440
Y	21666.485

P-Bks 13	
X	-4530.780
Y	21711.391

P-Bks 12	
X	-4503.276
Y	21684.018

P-Bks 14	
X	-4528.977
Y	21714.009

MB 15	
	X= -4317.782
	Y= 21453.603
	H= 19.679

PLAN
KM 26+900 - KM 27+500

PROFILE
KM 26+900 - KM 27+500

KM/OMETRAGE	26+900	26+950	27+000	27+050	27+100	27+150	27+200	27+250	27+300	27+350	27+400	27+450	27+482	27+500
EXISTING TRACK: UP RAIL ELEVATION	19.723	19.701	19.724	19.685	19.674	19.698	19.650	19.688	19.669	19.653	19.634	19.610	19.616	19.656
EXISTING TRACK: DOWN RAIL ELEVATION	19.726	19.705	19.752	19.701	19.685	19.738	19.765	19.786	19.787	19.758	19.729	19.712	19.720	19.758
EXISTING TRACK: GRADIENT			i = 0.13 ‰ L = 250 m		19.800		i = -0.17 ‰ L = 150 m		19.775		i = -4.45 ‰ L = 100 m		18.330	
EXISTING TRACK: STRAIGHT/CURVE	9	27 BTC			BCC	2	ECC		3		ETC	4 BTC		5 BCC
NEW TRACK: RAIL ELEVATION	19.727	19.729	19.729	19.729	19.729	19.729	19.729	19.729	19.729	19.725	19.717	19.702	19.687	19.672
NEW TRACK: GRADIENT	19.729			LEVEL L = 230 m		19.729								
NEW TRACK: STRAIGHT/CURVE	9	27 BTC	TCL = 75		TBCC	2	ECC	TCL = 75	3		ETC	4 BTC	TCL = 75	5 BCC
NEW TRACK: GROUND HEIGHT	18.40				18.40		18.40		17.55		18.18		18.41	
NEW TRACK: FORMATION LEVEL	19.050	19.050	19.050	19.050	19.050	19.050	19.050	19.050	19.050	19.050	19.039	19.023	19.008	18.995
NEW TRACK: DIFFER. HEIGHT(mm)	-1	21	-23	28	44	-9	-36	-38	-58	-37	-39	-10	-33	-84

KM/OMETRAGE	27+500	27+550	27+600	27+650	27+700	27+750	27+800	27+850	27+900	27+950	28+000
EXISTING TRACK: UP RAIL ELEVATION	19.842	19.667	19.492	19.317	19.142	18.967	18.792	18.617	18.442	18.267	18.092
EXISTING TRACK: DOWN RAIL ELEVATION	19.667	19.492	19.317	19.142	18.967	18.792	18.617	18.442	18.267	18.092	17.917
EXISTING TRACK: GRADIENT	i = -2.40 ‰ L = 100 m										
EXISTING TRACK: STRAIGHT/CURVE											
NEW TRACK: RAIL ELEVATION	19.484	19.299	19.114	18.929	18.744	18.559	18.374	18.189	18.004	17.819	17.634
NEW TRACK: GRADIENT	19.518										
NEW TRACK: STRAIGHT/CURVE											
NEW TRACK: GROUND HEIGHT	17.12										
NEW TRACK: FORMATION LEVEL	18.785	18.600	18.415	18.230	18.045	17.860	17.675	17.490	17.305	17.120	16.935
NEW TRACK: DIFFER. HEIGHT(mm)	737	699	699	685	699	699	699	699	699	699	699

LEGEND:
- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI KM POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
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- CABLE MARKER
- PLATFORM
- POINT MACHINE
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- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.:1 Tlp.021-3506526-3535557
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing title :

GENERAL PLAN
Km 26+900 - 27+500

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 004

IP-Bks 28	
X	- 4657.796
Y	21841.726
R	798 M
I A	18° 38' 17"
θ	2° 41' 24"
TL	186 M 531
CL	334 M 658
TCL	75 M
F	0 M 295

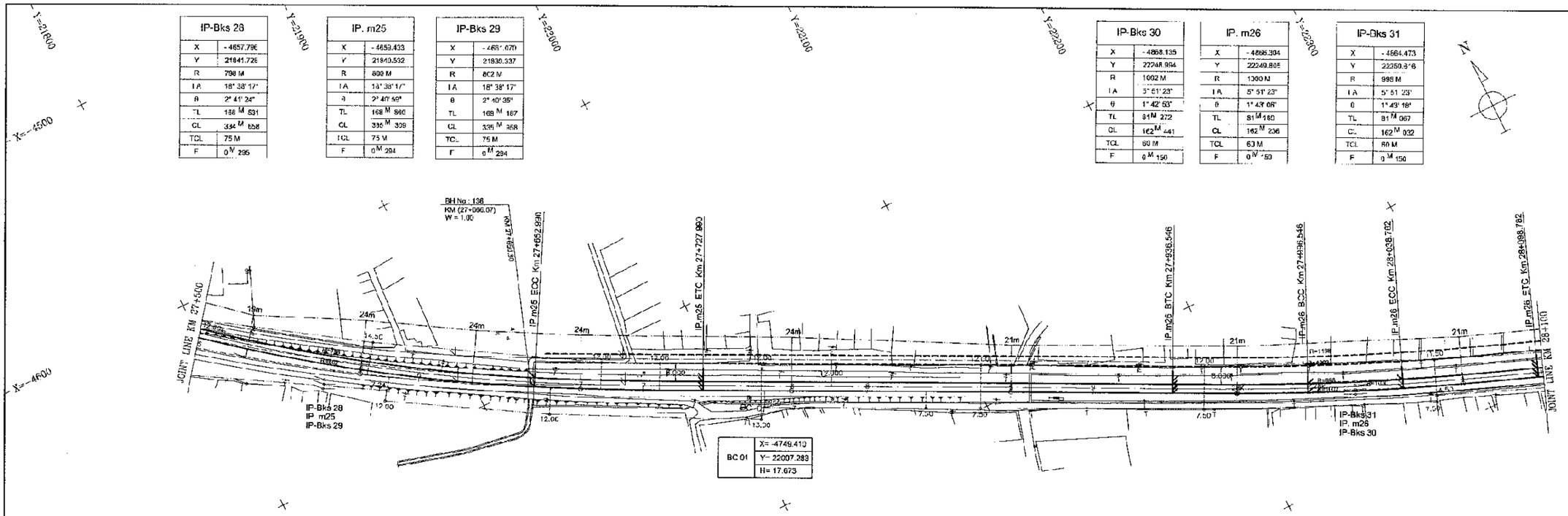
IP. m25	
X	- 4653.433
Y	21840.532
R	800 M
I A	18° 38' 17"
θ	2° 40' 59"
TL	186 M 860
CL	335 M 309
TCL	75 M
F	0 M 294

IP-Bks 29	
X	- 4651.670
Y	21838.337
R	802 M
I A	18° 38' 17"
θ	2° 40' 35"
TL	186 M 167
CL	335 M 958
TCL	75 M
F	0 M 294

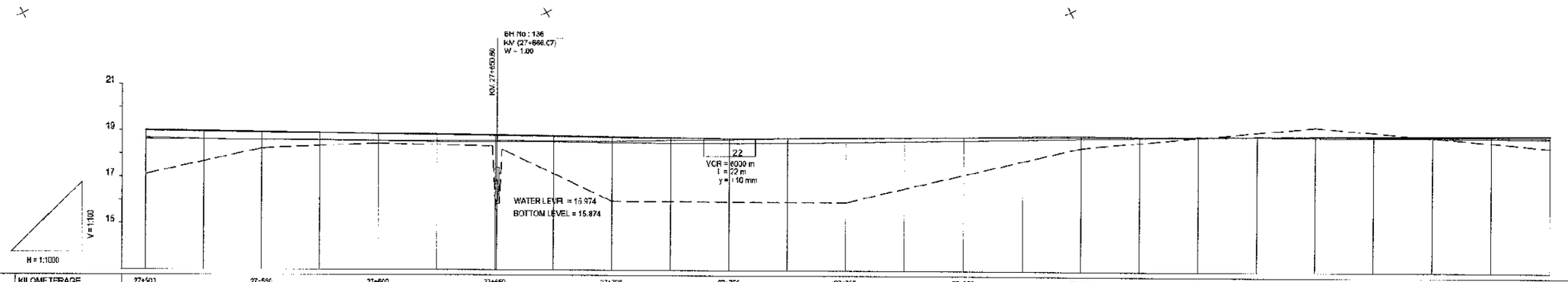
IP-Bks 30	
X	- 4868.135
Y	22248.994
R	1002 M
I A	5° 51' 23"
θ	1° 42' 53"
TL	81 M 272
CL	162 M 441
TCL	60 M
F	0 M 150

IP. m26	
X	- 4866.394
Y	22249.805
R	1000 M
I A	5° 51' 23"
θ	1° 43' 08"
TL	81 M 160
CL	162 M 236
TCL	60 M
F	0 M 150

IP-Bks 31	
X	- 4864.473
Y	22250.316
R	998 M
I A	5° 51' 23"
θ	1° 43' 18"
TL	81 M 067
CL	162 M 032
TCL	60 M
F	0 M 150



PLAN
KM 27+500 - KM 28+100



	KILOMETERAGE	27+500		27+550		27+600		27+650		27+700		27+750		27+800		27+850		27+900		27+950		28+000		28+050		28+100
EXISTING TRACK	UP RAIL ELEVATION	16.642	16.611	16.595	16.582	16.569	16.542	16.543	16.551	16.537	16.520	16.506	16.51	16.523	16.556	16.603	16.637	16.668	13.796	13.775	13.811	13.833	16.822	16.825	16.817	16.621	16.606
	DOWN RAIL ELEVATION	16.697	16.643	16.607	16.597	16.579	16.582	16.595	16.615	16.577	16.575	16.624	16.645	16.666	16.731	16.784	16.784	16.819	16.874	16.858	16.868	16.859	16.865	16.850	16.850	16.861	16.866
	GRADIENT			i = -2.40 ‰ L = 100 m	16.610		i = -0.07 ‰ L = 150 m				16.600				i = 1.42 ‰ L = 200 m				16.885		i = 0.15 ‰ L = 100 m		16.900		i = -0.33 ‰ L = 150 m	
	STRAIGHT/CURVE	5		R = 800		6				7	ETC			8				9		BTC		28	R = 1000			1	
								ECC														BCC		ECC			
NEW TRACK	RAIL ELEVATION	19.464	19.389	19.314	19.239	19.164	19.089	19.014	18.939	18.864	18.789	18.724	18.732	18.749	18.767	18.784	18.802	18.819	18.837	18.854	18.872	18.889	18.907	18.924	18.942	18.959	
	GRADIENT					i = -3.00 ‰ L = 269 m						18.714					i = 0.700 ‰ L = 650 m										
	STRAIGHT/CURVE	5		IA = 18° 38' 17.0" R = 800		6				7	TCL = 75 ETC			8				9		BTC	TCL = 60	28	IA = 6° 51' 22.9" R = 1000		TCL = 60	1	
								ECC														BCC		ECC			
	GROUND HEIGHT	17.12		16.24		16.47		16.35		15.69				15.97				16.35				16.85				16.42	
	FORMATION LEVEL	18.785	18.710	18.635	18.560	18.485	18.410	18.335	18.260	18.185	18.110	18.045	18.053	18.070	18.088	18.105	18.123	18.140	18.158	18.175	18.193	18.210	18.228	18.245	18.263	18.280	
	DIFFER. HEIGHT(mm)	797	716	707	641	595	507	428	362	289	165	75	33	18	3	-10	-47	-55	-21	-12	13	24	57	74	81	103	

PROFILE
KM 27+500 - KM 28+100

LEGEND :
- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
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- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- RAIL AST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Doub e - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.9 Gedung Karya lt.11 Up.C21 -3506526-3505357
J A K A R T A

Note:
this detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultan's International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 27+500 - 28+100

Scale:	Drawing No..
H 1 : 1000 V 1 : 100	GE - 01 - 005

IP-Bks T1	
X	- 5089.795
Y	22853.803
R	2500 M
I A	1° 46' 35"
δ	0° 17' 11"
TL	61 M 260
CL	102 M 513
TCL	25 M
F	0 M 310

BC 02	
X= -4921.408	
Y= 22378.911	
H= 18.655	

BC 03	
X= -5080.796	
Y= 22795.118	
H= 18.601	

BH No.139
KM (28+386.52)
W = 2.00

LC No. 65
KM (28+729.14)
W = 8.94

JOINT LINE KM 28+100

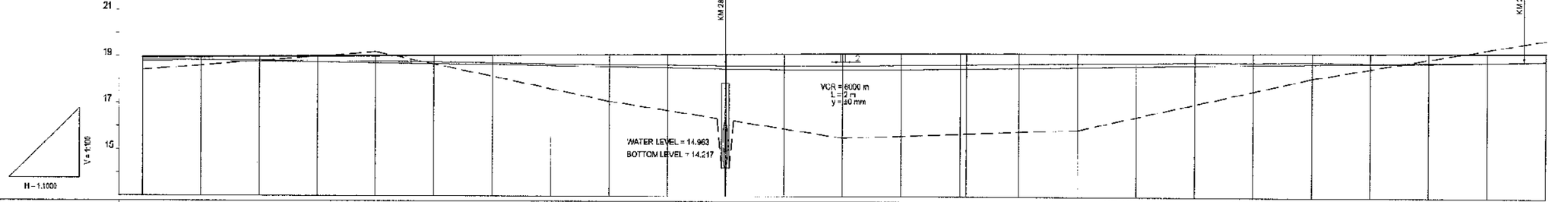
JOINT LINE KM 28+700

IP-Bks T1

SHOP

SHOP

PLAN
KM 28+100 - KM 28+700



KILOMETERAGE	28+100	28+150	28+200	28+250	28+300	28+350	28+400	28+450	28+500	28+550	28+600	28+650	28+700
EXISTING TRACK — UP RAIL ELEVATION	18.806	18.780	18.775	18.753	18.719	18.691	18.669	18.618	18.568	18.545	18.497 / 18.495	18.478	18.474
EXISTING TRACK — DOWN RAIL ELEVATION	18.556	18.346	18.828	18.829	18.788	18.764	18.733	18.688	18.674	18.667	18.657 / 18.641	18.634	18.640
EXISTING TRACK — GRADIENT		i = -0.53 ‰ L = 120 m	18.850		i = -0.60 ‰ L = 250 m								18.700
EXISTING TRACK — STRAIGHT/CURVE	1 ETC		2		3								4
NEW TRACK — RAIL ELEVATION	18.969	18.977	18.984	19.012	19.029	19.047	19.064	19.082	19.099	19.117	19.134	19.152	19.169
NEW TRACK — GRADIENT					i = 0.700 ‰ L = 650 m								19.100
NEW TRACK — STRAIGHT/CURVE	1 ETC		2		3								4
NEW TRACK — GROUND HEIGHT	18.42				19.21				17.09				16.63
NEW TRACK — FORMATION LEVEL	18.280	18.299	18.315	18.333	18.350	18.368	18.385	18.403	18.420	18.438	18.455	18.473	13.490
NEW TRACK — DIFFER. HEIGHT(mm)	103	131	158	203	221	259	321	364	425	459	498	518	523

KILOMETERAGE	28+700	28+750	28+800	28+850	28+900	28+950	29+000	29+050	29+100	29+150	29+200	29+250	29+300
EXISTING TRACK — UP RAIL ELEVATION	18.920	18.905	18.889	18.864	18.844	18.818	18.793	18.775	18.738	18.687	18.648	18.618	18.596
EXISTING TRACK — DOWN RAIL ELEVATION	18.965	18.950	18.869	18.845	18.822	18.854	18.775	18.831	18.828	18.774	18.745	18.707	18.675
EXISTING TRACK — GRADIENT	18.990				i = 0.75 ‰ L = 150 m				18.631		i = 0.87 ‰ L = 150 m		
EXISTING TRACK — STRAIGHT/CURVE	7				6				5				
NEW TRACK — RAIL ELEVATION	19.259	19.252	19.244	19.237	19.229	19.222	19.214	19.207	19.199	19.192	19.184	19.177	
NEW TRACK — GRADIENT			i = 0.30 ‰ L = 300 m										
NEW TRACK — STRAIGHT/CURVE	7				6				5				
NEW TRACK — GROUND HEIGHT	19.04				18.15				15.80				
NEW TRACK — FORMATION LEVEL	18.580	18.573	18.565	18.558	18.543	18.535	18.528	18.520	18.513	18.505	18.490	18.483	
NEW TRACK — DIFFER. HEIGHT(mm)	369	380	388	395	415	378	392	396	447	477	523	502	

PROFILE
KM 28+100 - KM 28+700

LEGEND :

- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. DUKUH NEW MAIN TRACK /NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
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- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Telp.021-3508526-3539557
JAKARTA

Note:

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Designed by:

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Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

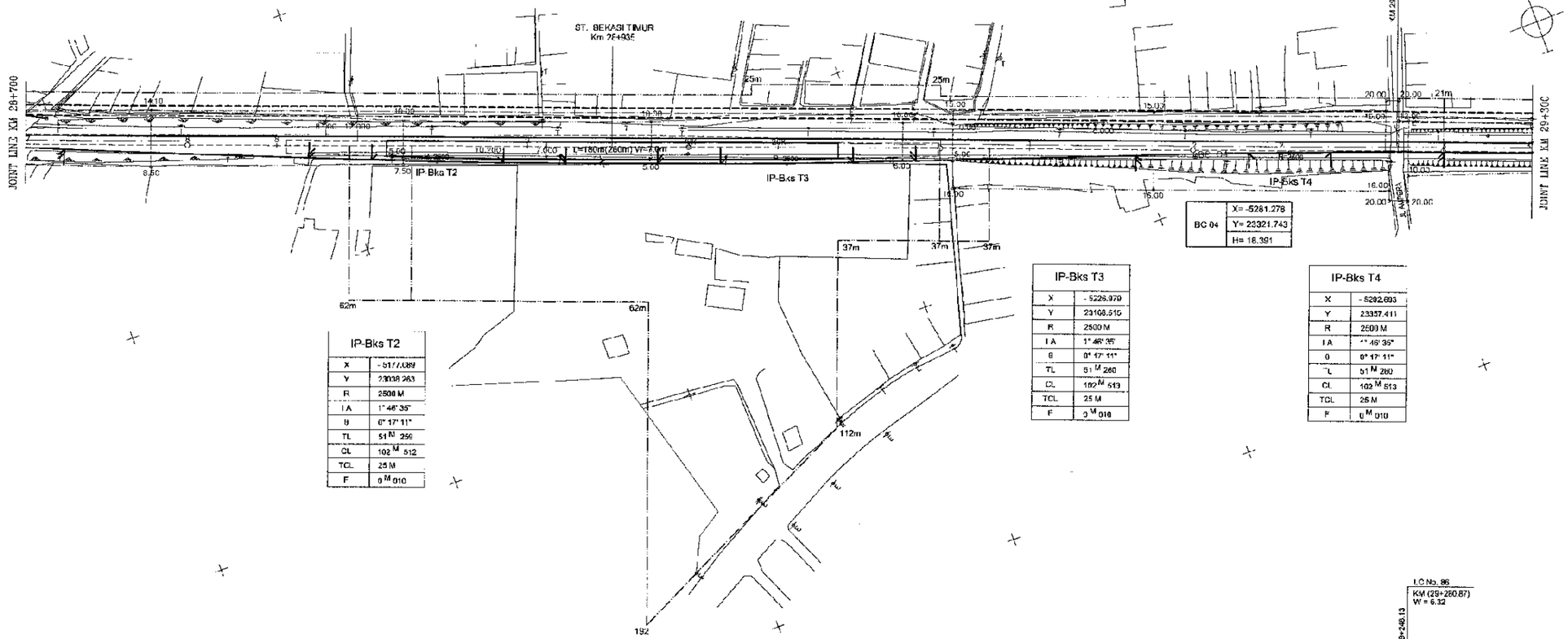
DATE	10 / MARCH / 2003

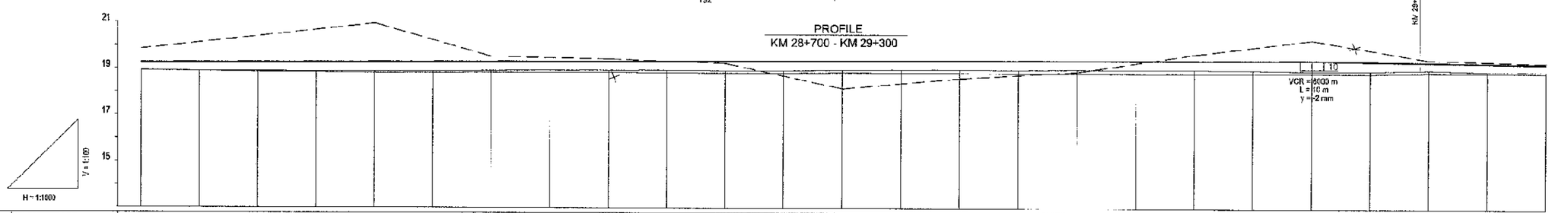
Drawing title :

GENERAL PLAN
Km 28+100 - 28+700

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 006

ST. BEKASI TIMUR





	KILOMETERAGE	28+700	28+750	28+800	28+850	28+900	28+950	29+000	29+050	29+100	29+150	29+200	29+250	29+300
EXISTING TRACK	UP RAIL ELEVATION	18.826	18.860	18.851	18.839	18.819	18.821	18.832	18.835	18.818	18.834	18.826	18.826	18.844
	DOWN RAIL ELEVATION	18.876	18.832	18.887	18.875	18.872	18.884	18.913	18.928	18.937	18.941	18.923	18.928	18.953
	GRADIENT	18.950	i = -0.55 % L = 100 m			18.895				i = 0.48 % L = 300 m				
	STRAIGHT/CURVE	7				8				9				29
NEW TRACK	RAIL ELEVATION	19.266	19.267	19.274	19.282	19.289	19.297	19.304	19.312	19.319	19.327	19.334	19.342	19.349
	GRADIENT										i = 0.30 % L = 800 m			
	STRAIGHT/CURVE	7				8				9				29
	GROUND HEIGHT	19.84				20.95		10.62		19.43		19.25		18.16
	FORMATION LEVEL	18.580	18.588	18.595	18.603	18.613	18.613	18.625	18.633	18.640	18.648	18.655	18.663	18.670
	DIFFER. HEIGHT(mm)	386	385	387	423	417	413	391	385	382	386	411	414	396

	KILOMETERAGE	29+300	29+350	29+400	29+450	29+500	29+550	29+600	29+650	29+700	29+750	29+800	29+850	29+900
EXISTING TRACK	UP RAIL ELEVATION	18.868	18.891	18.884	18.897	18.868	18.851	18.832	18.811	18.832	18.826	18.831	18.845	18.841
	DOWN RAIL ELEVATION	18.951	18.955	19.006	18.955	18.983	18.983	18.956	18.941	19.003	19.003	19.002	18.983	18.956
	GRADIENT			19.010	i = -0.37 % L = 150 m					19.040		i = -0.20 % L = 150 m		
	STRAIGHT/CURVE	3						2		1				29
NEW TRACK	RAIL ELEVATION	19.268	19.304	19.339	19.374	19.407	19.402	19.407	19.384	19.379	19.387	19.394	19.372	19.349
	GRADIENT				i = -1.40 % L = 300 m			19.409						
	STRAIGHT/CURVE	3						2		1				29
	GROUND HEIGHT	16.63		16.45				20.29		19.90		19.67		19.16
	FORMATION LEVEL	18.580	18.588	18.663	18.655	18.655	18.663	18.700	18.695	18.700	18.708	18.715	18.723	18.670
	DIFFER. HEIGHT(mm)	308	353	331	411	456	419	451	419	385	392	391	419	396

.EGEND .

- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TUNNOL
- SURVEY Km POST
- PT. KAI Km POST
- BENCHMARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALUSST PROTECT
- SLOPE
- ROCKSI CPF
- CONCRETE SLOPE
- LC GATE

SURVEY Km (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 tlp.021-3505526-3505557
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

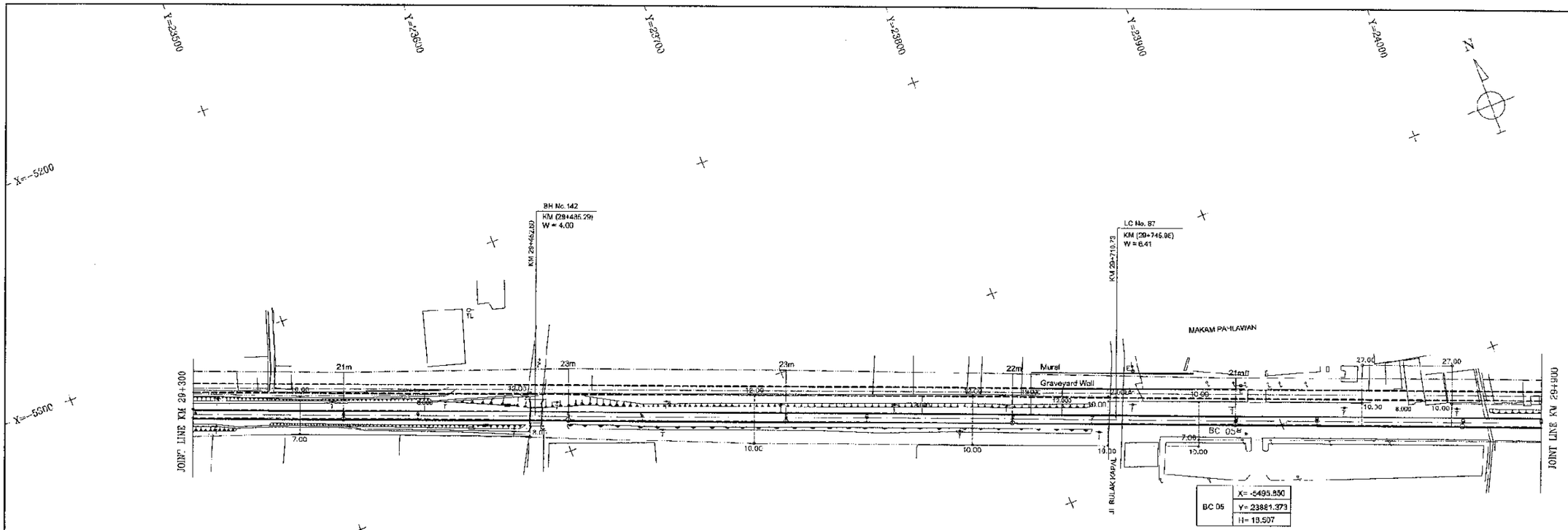
GENERAL PLAN

DATE	10 / MARCH / 2003

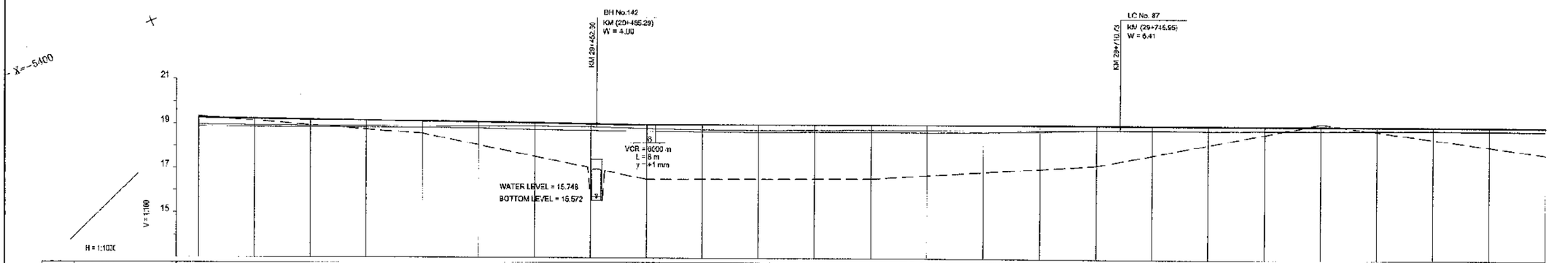
Drawing Title :

GENERAL PLAN
Km 28+700 - 29+300

Scale:	Drawing No :
H 1 : 1000 V 1 : 100	GE - 01 - 007



PLAN
KM 29+300 - KM 29+900



	KILOMETERAGE	29+300	29+350	29+400	29+450	29+500	29+550	29+600	29+650	29+700	29+750	29+800	29+850	29+900
EXISTING TRACK	UP RAIL ELEVATION	18.898	18.841	18.838	18.832	18.825	18.812	18.798	18.728	18.693	18.663	18.654	18.624	18.620
	DOWN RAIL ELEVATION	18.961	18.934	18.922	18.920	18.908	18.891	18.885	18.876	18.823	18.791	18.764	18.762	18.761
	GRADIENT	i = -0.37 ‰ L = 150 m		19.000		i = -1.03 ‰ L = 150 m		18.800		LEVEL L = 150 m		18.800	i = 0.30 ‰ L = 200 m	18.860
	STRAIGHT/CURVE	3		4		5			6		7		8	9
NEW TRACK	RAIL ELEVATION	19.269	19.234	19.199	19.164	19.129	19.094	19.059	19.024	18.990	18.959	18.928	18.899	18.869
	GRADIENT			i = -1.40 ‰ L = 300 m		18.989				LEVEL L = 700 m				
	STRAIGHT/CURVE	3		4		5			6		7		8	9
	GROUND HEIGHT	19.03		18.67		18.54			18.58		17.20		19.12	17.78
	FORMATION LEVEL	18.590	18.555	18.520	18.485	18.450	18.415	18.380	18.345	18.310	18.310	18.310	18.310	18.310
	DIFFER. HEIGHT(mm)	308	303	277	244	223	203	164	143	167	208	225	221	208

PROFILE
KM 29+300 - KM 29+900

LEGEND :

- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY KM POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE
- SURVEY KM (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERKUDUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Telp.021-3508628-3505557
J A K A R T A

Note:

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Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

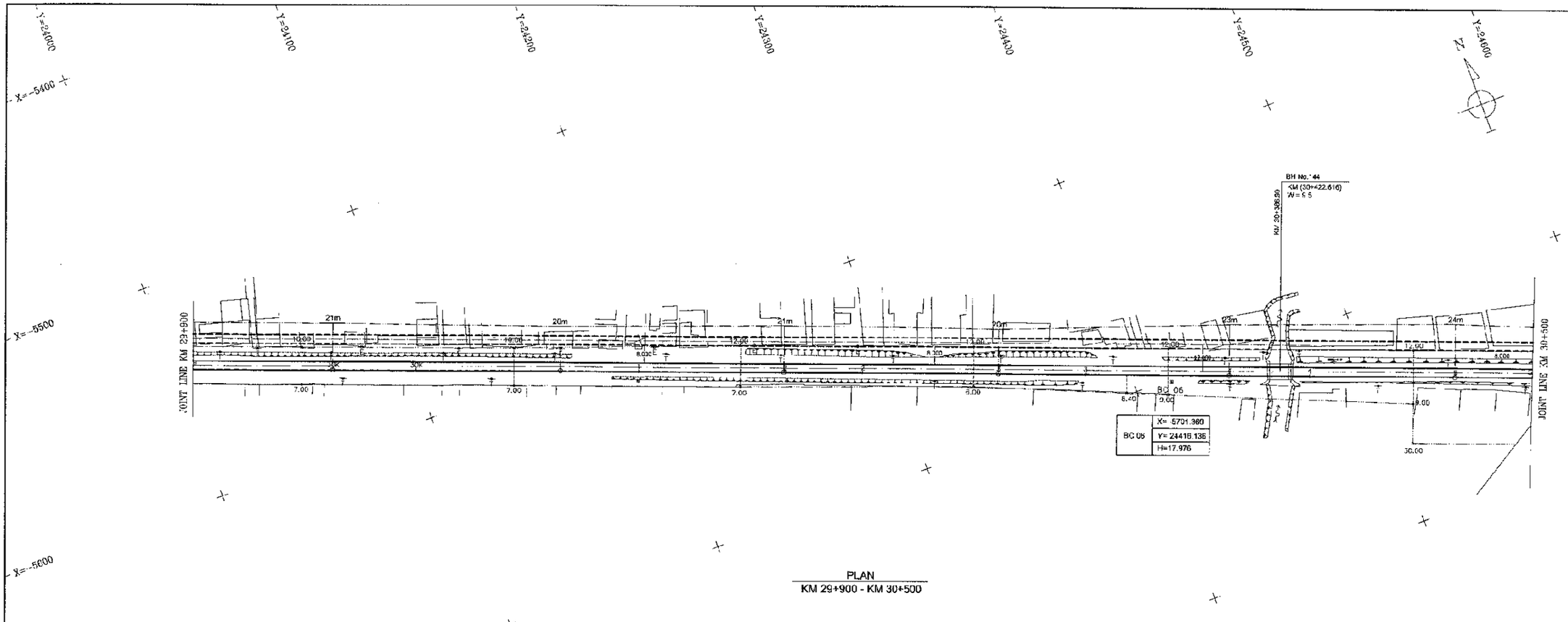
GENERAL PLAN

DATE	10 / MARCH / 2003

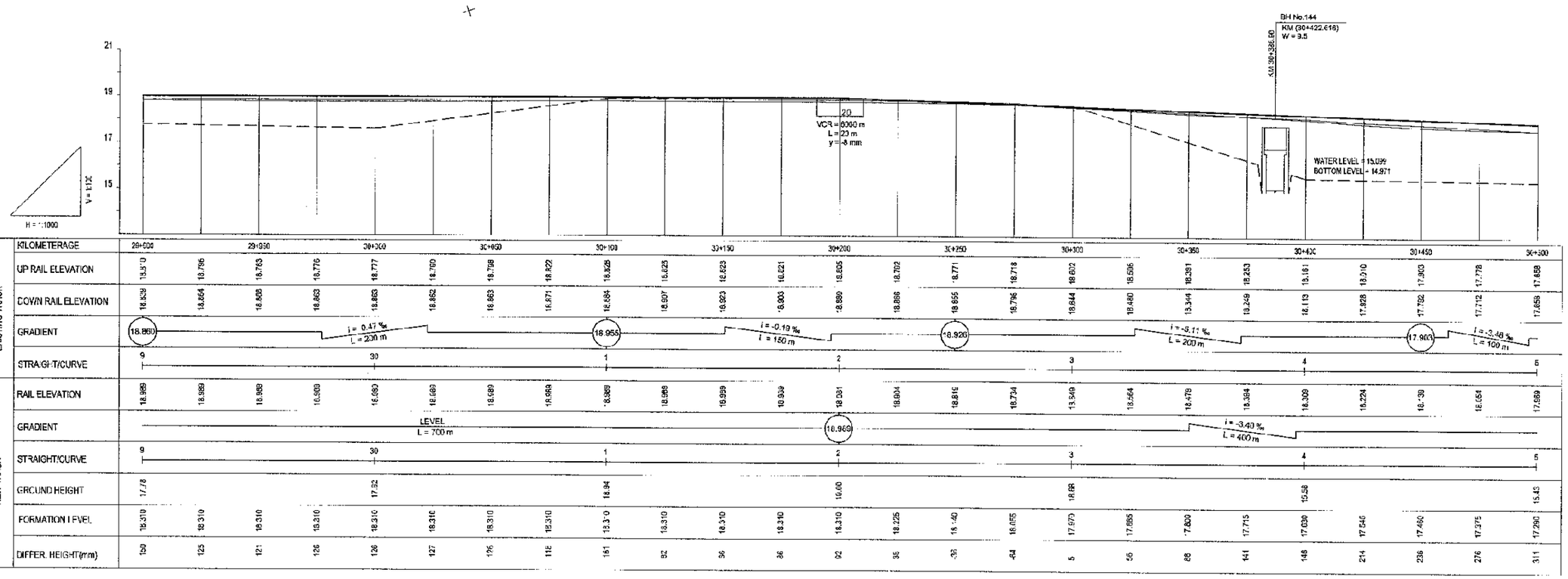
Drawing Title :

GENERAL PLAN
Km 29+300 - 29+900

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 008



PLAN
KM 29+900 - KM 30+500



PROFILE
KM 29+900 - KM 30+500

LEGEND :

- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / MRN COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- L.C. GATE

SURVEY Km (PT KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Up.021- 3505526 - 3505557
JAKARTA

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GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

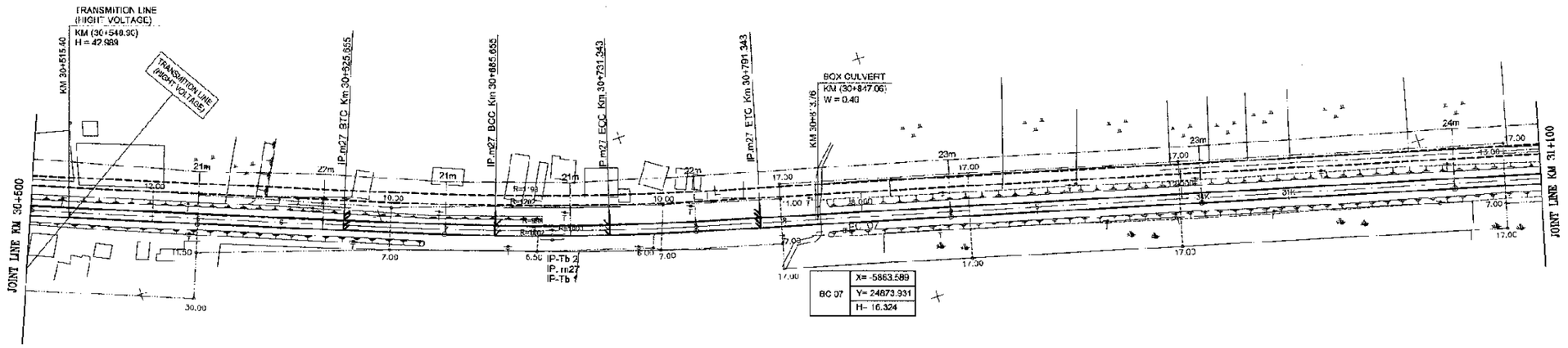
GENERAL PLAN
Km 29+900 - 30+500

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 009

IP-Tb 1	
X	- 5830.732
Y	24782.099
R	1002 M
IA	6° 03' 15"
θ	1° 43' 58"
TL	93 M 006
CL	185 M 999
TCL	60 M
F	0 M 150

IP. m27	
X	- 5828.827
Y	24762.716
R	1000 M
IA	6° 03' 15"
θ	1° 43' 58"
TL	92 M 990
CL	185 M 688
TCL	60 M
F	0 M 150

IP-Tb 2	
X	- 5826.921
Y	24763.332
R	998 M
IA	6° 03' 15"
θ	1° 43' 58"
TL	92 M 794
CL	185 M 477
TCL	60 M
F	0 M 150



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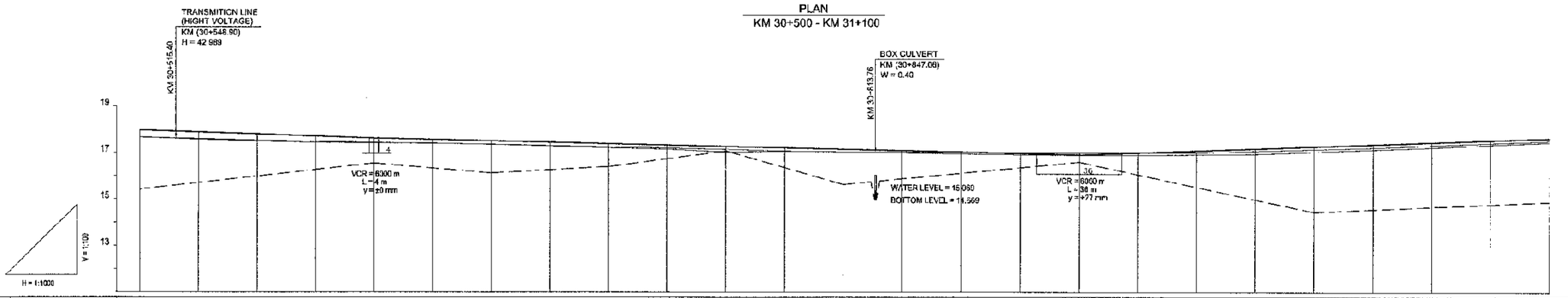
PLAN
KM 30+500 - KM 31+100



	KILOMETERAGE	30+500	30+550	30+600	30+650	30+700	30+750	30+800	30+850	30+900	30+950	31+000	31+050	31+100
EXISTING TRACK	UP RAIL ELEVATION	17.658	17.593	17.498	17.436	17.417	17.401	17.354	17.294	17.234	17.196	17.137	17.093	17.027
	DOWN RAIL ELEVATION	17.658	17.598	17.526	17.476	17.436	17.402	17.347	17.275	17.206	17.143	17.021	17.049	17.027
	GRADIENT	i = -3.48 ‰ L = 100 m	17.558	i = -2.02 ‰ L = 200 m				17.150		i = -1.12 ‰ L = 150 m				
	STRAIGHT/CURVE	5		6	BTC		7	R = 1000		8	ETC		9	
						ECC			ECC					
NEW TRACK	RAIL ELEVATION	17.969	17.884	17.799	17.714	17.629	17.569	17.509	17.449	17.389	17.329	17.269	17.209	17.149
	GRADIENT	i = -3.40 ‰ L = 400 m			17.625					i = -2.40 ‰ L = 300 m				
	STRAIGHT/CURVE	5		6	BTC	TCL = 60	7	IA = 6° 03' 14.9" R = 1000	TCL = 60	8	ETC		9	
						ECC			ECC					
	GROUND HEIGHT	15.43			16.55		16.12		16.40		17.07		15.63	
	FORMATION LEVEL	17.280	17.205	17.123	17.035	16.950	16.900	16.830	16.770	16.710	16.650	16.590	16.530	16.470
	DIFFER. HEIGHT(mm)	311	286	271	236	193	167	155	155	155	133	132	148	122

	KILOMETERAGE	31+150	31+200	31+250	31+300	31+350	31+400	31+450	31+500	31+550	31+600	31+650	31+700	31+750
EXISTING TRACK	UP RAIL ELEVATION	16.982	16.941	16.905	16.869	16.946	17.032	17.127	17.223	17.339	17.449	17.558	17.658	17.758
	DOWN RAIL ELEVATION	16.982	16.941	17.305	17.069	17.158	17.216	17.312	17.416	17.606	17.555	17.658	17.758	17.858
	GRADIENT		i = 1.58 ‰ L = 100 m				17.140	i = 4.15 ‰ L = 100 m		17.555				
	STRAIGHT/CURVE						31			1				
NEW TRACK	RAIL ELEVATION	17.179	16.969	17.089	17.179	17.269	17.359	17.449	17.539	17.629	17.719	17.809	17.899	17.989
	GRADIENT	16.909					i = 3.60 ‰ L = 300 m							
	STRAIGHT/CURVE						31			1				
	GROUND HEIGHT	16.59					14.45			14.89				
	FORMATION LEVEL	16.230	16.320	16.410	16.500	16.590	16.680	16.770	16.860	16.950	17.040	17.130	17.220	17.310
	DIFFER. HEIGHT(mm)	197	18	84	110	131	143	137	123	123	123	123	123	123

PROFILE
KM 30+500 - KM 31+100

LEGEND :
- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KM LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KM Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- RAILAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE

SURVEY Km (PT. KM Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Up.021 - 3505526 - 3505557
JAKARTA

Note:

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Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
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GENERAL

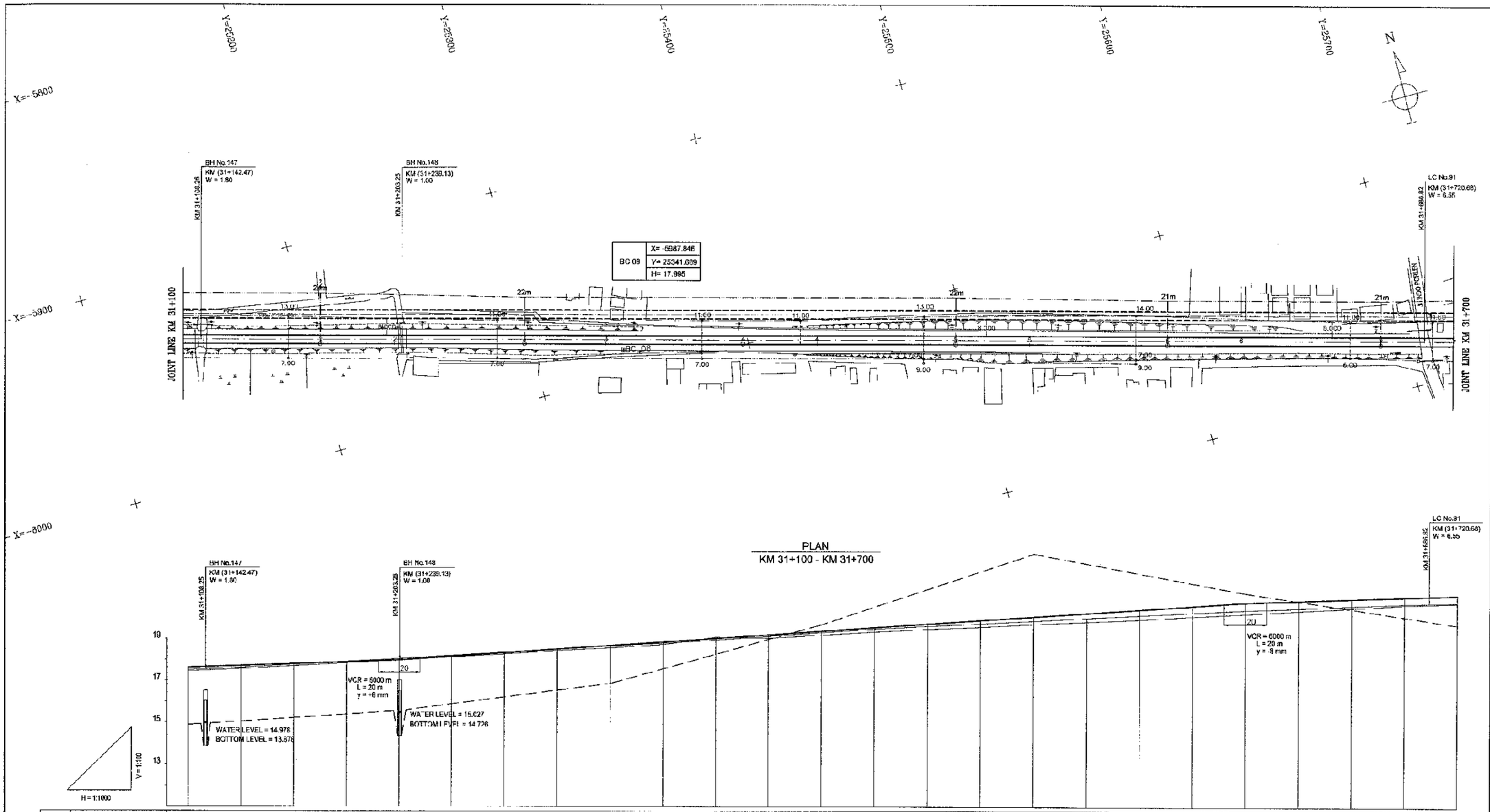
GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 30+500 - 31+100

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 010



	KILOMETERAGE	31+100	31+150	31+200	31+250	31+300	31+350	31+400	31+450	31+500	31+550	31+600	31+650	31+700
EXSTING TRACK	UP RAIL ELEVATION	17.449	17.661	17.763	17.844	17.962	18.123	18.271	18.435	18.578	18.732	18.888	19.050	19.198	19.352	19.473	19.584	19.731	19.844	19.964	20.119	20.245	20.386	20.525	20.671	20.758
	DOWN RAIL ELEVATION	17.505	17.619	17.773	17.923	18.048	18.208	18.362	18.522	18.653	18.789	18.554	19.141	19.316	19.486	19.632	19.754	19.891	20.035	20.170	20.296	20.417	20.515	20.677	20.723	20.791
	GRADIENT	17.555	i = 5.96 ‰ L = 350 m							19.640	i = 5.40 ‰ L = 150 m			20.450	i = 3.91 ‰ L = 350 m											
	STRAIGHT/CURVE	1		2			3			4				5				6								7
NEW TRACK	RAIL ELEVATION	17.629	17.719	17.803	17.859	17.987	18.164	18.339	18.514	18.689	18.864	19.039	19.214	19.389	19.564	19.739	19.914	20.089	20.264	20.439	20.614	20.757	20.877	20.964	21.052	21.139
	GRADIENT		i = 3.60 ‰ L = 300 m			17.989									i = 7.00 ‰ L = 400 m							20.789		i = 3.50 ‰ L = 500 m		
	STRAIGHT/CURVE	1				2				3				4				5				6				7
	GROUND HEIGHT	14.89				15.37				16.88				19.10				20.10				21.24				19.72
	FORMATION LEVEL	10.650	17.040	17.130	17.220	17.310	17.485	17.680	17.835	18.010	18.185	18.360	18.535	18.710	18.885	19.060	19.235	19.410	19.585	19.760	19.935	20.110	20.193	20.285	20.373	20.460
	DIFFER. HEIGHT(mm)	123	130	38	-24	-51	-44	-23	-6	31	68	-57	73	73	78	107	160	198	229	280	319	502	585	531	329	348

PROFILE
KM 31+100 - KM 31+700

LEGEND :

- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KM/ LAND BOUNDARY
- LAND PREPARATION AREA
- TOWN OUT
- SURVEY KM POST
- PT. KM KM POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELEDOMINICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- .C GATE
- SURVEY Km (PT. KM Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.III Telp.021-3505126-3500000 / JAKARTA

Note:

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Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

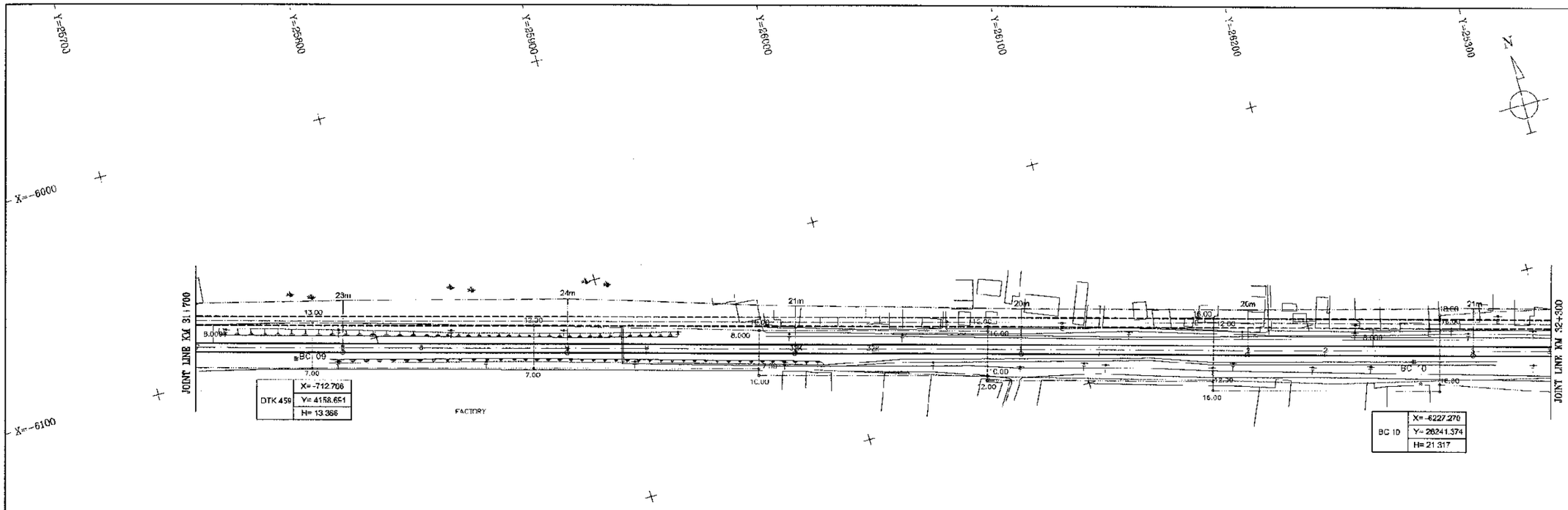
GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 31+100 - 31+700

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 011



PLAN
KM 31+700 - KM 32+300

PROFILE
KM 31+700 - KM 32+300

LEGEND :

- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (BRUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- L.C. GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Merdeka Barat no.8 Gedung Karya lt.11 Telp.021-3506526-3505657
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

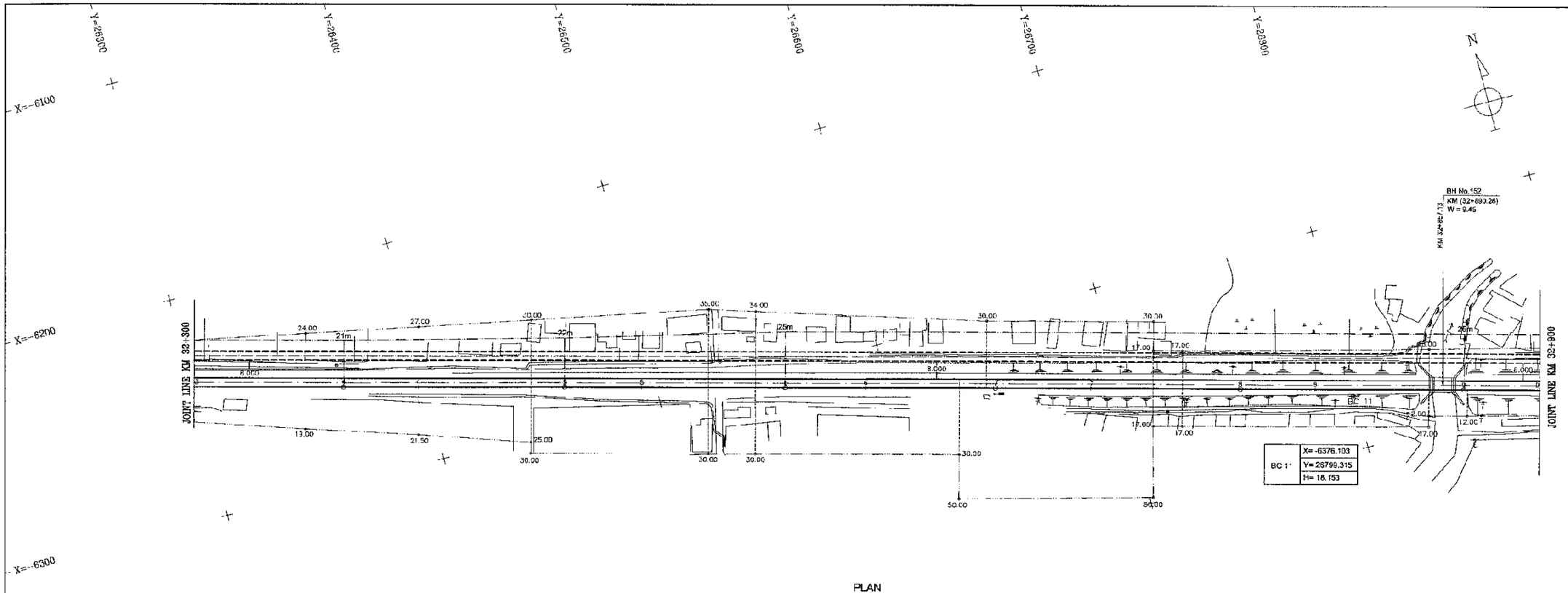
GENERAL PLAN

DATE	10 / MARCH / 2003

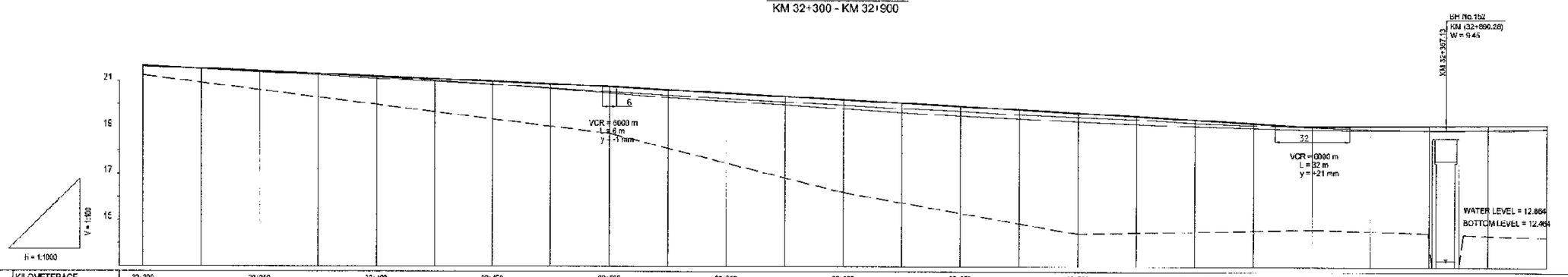
Drawing Title :

GENERAL PLAN
Km 31+700 - 32+300

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 012



PLAN
KM 32+300 - KM 32+900



	KILOMETERAGE	32+300	32+350	32+400	32+450	32+500	32+550	32+600	32+650	32+700	32+750	32+800	32+850	32+900
EXISTING TRACK	UP RAIL ELEVATION	21.649	21.513	21.384	21.268	21.113	20.983	20.855	20.679	20.489	20.293	20.140	19.961	19.820
	DOWN RAIL ELEVATION	21.686	21.558	21.443	21.312	21.177	21.025	20.857	20.708	20.542	20.404	20.250	20.115	19.980
	GRADIENT	21.755	i = -5.78 ‰ L = 250 m				20.310	i = -5.40 ‰ L = 150 m			19.500	i = -4.00 ‰ L = 160 m		19.100
	STRAIGHT/CURVE	3	4			5		6		7		8		9
NEW TRACK	RAIL ELEVATION	21.559	21.549	21.439	21.329	21.249	21.109	20.959	20.829	20.778	20.639	20.489	20.350	20.219
	GRADIENT		i = -4.40 ‰ L = 400 m				20.779			i = -5.60 ‰ L = 300 m			19.090	
	STRAIGHT/CURVE	3	4			5		6		7		8		9
	GROUND HEIGHT	21.25				18.74		18.20		14.45		14.65		14.32
	FORMATION LEVEL	20.980	20.870	20.760	20.650	20.540	20.430	20.320	20.210	20.099	19.990	19.880	19.770	19.660
	DIFFER. HEIGHT(mm)	-27	-9	-4	17	42	64	142	181	230	232	240	244	239

	KILOMETERAGE	32+300	32+350	32+400	32+450	32+500	32+550	32+600	32+650	32+700	32+750	32+800	32+850	32+900
EXISTING TRACK	UP RAIL ELEVATION	21.649	21.513	21.384	21.268	21.113	20.983	20.855	20.679	20.489	20.293	20.140	19.961	19.820
	DOWN RAIL ELEVATION	21.686	21.558	21.443	21.312	21.177	21.025	20.857	20.708	20.542	20.404	20.250	20.115	19.980
	GRADIENT	21.755	i = -5.78 ‰ L = 250 m				20.310	i = -5.40 ‰ L = 150 m			19.500	i = -4.00 ‰ L = 160 m		19.100
	STRAIGHT/CURVE	3	4			5		6		7		8		9
NEW TRACK	RAIL ELEVATION	21.559	21.549	21.439	21.329	21.249	21.109	20.959	20.829	20.778	20.639	20.489	20.350	20.219
	GRADIENT		i = -4.40 ‰ L = 400 m				20.779			i = -5.60 ‰ L = 300 m			19.090	
	STRAIGHT/CURVE	3	4			5		6		7		8		9
	GROUND HEIGHT	21.25				18.74		18.20		14.45		14.65		14.32
	FORMATION LEVEL	20.980	20.870	20.760	20.650	20.540	20.430	20.320	20.210	20.099	19.990	19.880	19.770	19.660
	DIFFER. HEIGHT(mm)	-27	-9	-4	17	42	64	142	181	230	232	240	244	239

	KILOMETERAGE	32+900	32+950	33+000
EXISTING TRACK	UP RAIL ELEVATION	19.612	19.471	19.324
	DOWN RAIL ELEVATION	19.024	18.907	18.784
	GRADIENT	19.085		
	STRAIGHT/CURVE	9		
NEW TRACK	RAIL ELEVATION	19.099	19.099	19.099
	GRADIENT	LEVEL L = 103.2 m		
	STRAIGHT/CURVE	9		
	GROUND HEIGHT	14.32		
	FORMATION LEVEL	19.660	19.520	19.420
	DIFFER. HEIGHT(mm)	75	125	155

PROFILE
KM 32+300 - KM 32+900

LEGEND

- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- SH. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KA LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KA Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- KAWAT FENCE
- STEEL FENCE
- RAILFAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC. GATE
- SERVICE ROAD (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 tlp.021-3506626-3505557
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 32+300 - 32+900

Scale	Drawing No.
H 1 : 1000 V 1 . 100	GE - 01 - 013

IP-Tb 3	
X	- 6412.039
Y	26946.156
R	1200 M
I A	3° 44' 40"
θ	1° 18' 46"
TL	66 M 735
CL	133 M 436
TCL	55 M
F	0 M 105

IP-Tb 4	
X	- 6449.472
Y	27036.580
R	600 M
I A	1° 57' 58"
θ	0° 28' 39"
TL	16 M 296
CL	30 M 589
TCL	10 M
F	0 M 007

IP-Tb 4-1	
X	- 6456.784
Y	27160.924
R	600 M
I A	5° 42' 38"
θ	0° 28' 39"
TL	34 M 926
CL	69 M 801
TCL	10 M
F	0 M 007

P-Tb 1	
X	-6425.978
Y	27014.076

P-Tb 2	
X	6442.632
Y	27036.607

P-Tb 2-1	
X	-6443.938
Y	27081.558

P-Tb 3	
X	-6468.531
Y	27100.615

IP-Tb 5	
X	- 6482.547
Y	27135.070
R	1200 M
I A	3° 44' 24"
θ	1° 18' 46"
TL	66 M 689
CL	133 M 345
TCL	55 M
F	0 M 105

IP-Tb 6	
X	- 6534.950
Y	27201.902
R	1200 M
I A	3° 44' 47"
θ	1° 18' 46"
TL	66 M 735
CL	133 M 437
TCL	55 M
F	0 M 105

IP-Tb 6-1	
X	- 6606.005
Y	27245.654
R	600 M
I A	5° 42' 38"
θ	0° 28' 39"
TL	34 M 926
CL	69 M 801
TCL	10 M
F	0 M 007

P-Tb 4	
X	-6541.185
Y	27411.158

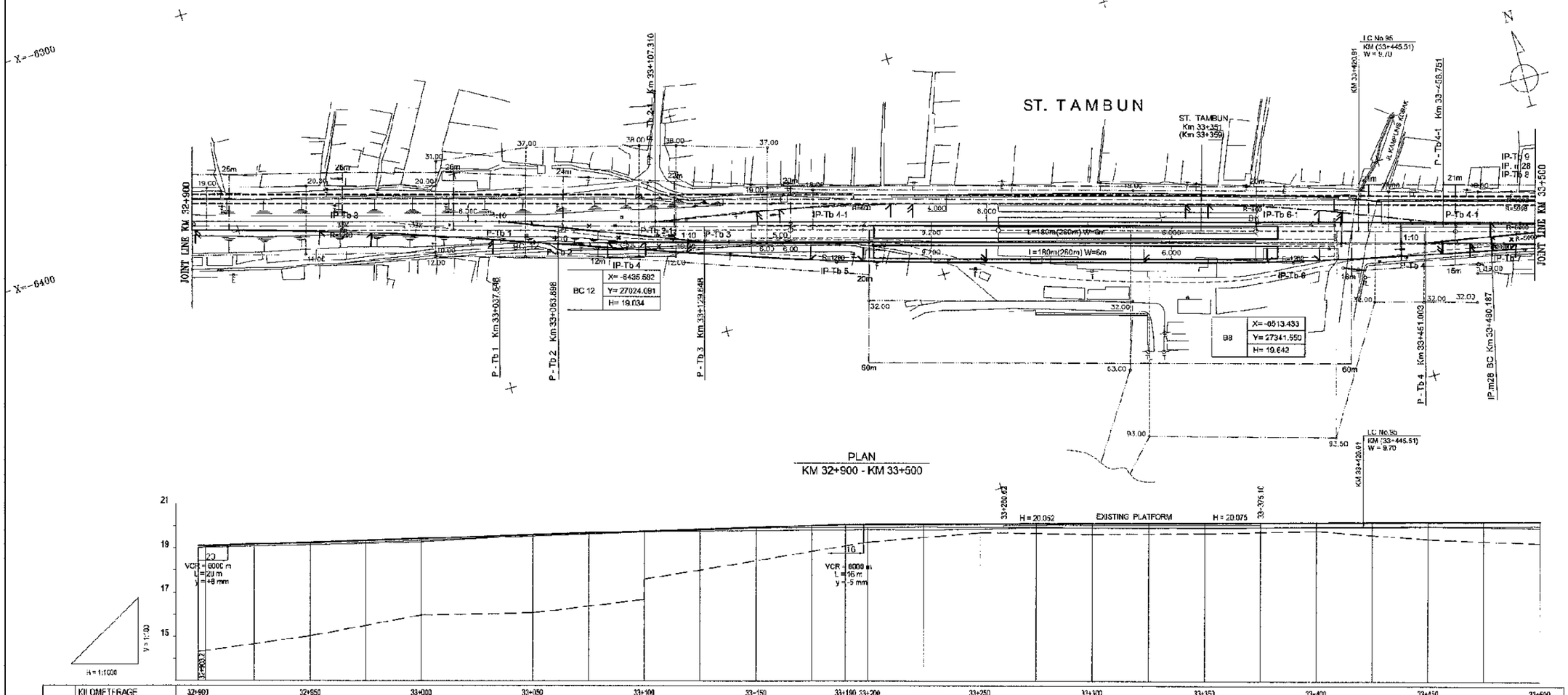
P-Tb 4-1	
X	-6534.312
Y	27421.105

IP-Tb 7	
X	6660.243
Y	27445.192
R	600 M
I A	1° 57' 58"
θ	0° 28' 39"
TL	16 M 296
CL	30 M 589
TCL	10 M
F	0 M 007

IP-Tb 8	
X	- 6543.245
Y	27454.567
R	6000 M
I A	0° 15' 20"
θ	-
TL	13 M 387
CL	26 M 774
TCL	-
F	-

IP. m28	
X	- 6545.176
Y	27454.148
R	6000 M
I A	0° 15' 21"
θ	-
TL	13 M 389
CL	26 M 777
TCL	-
F	-

IP-Tb 9	
X	- 6547.720
Y	27451.634
R	5000 M
I A	0° 15' 21"
θ	-
TL	11 M 166
CL	22 M 311
TCL	-
F	-



PLAN
KM 32+900 - KM 33+500

	KILOMETRAGE	32+900	32+950	33+000	33+050	33+100	33+150	33+190	33+200	33+250	33+300	33+350	33+400	33+450	33+500
EXISTING TRACK	UP RAIL ELEVATION	19.012	19.079	19.132	19.184	19.232	19.440	19.637	19.627	19.721	19.817	19.909	19.923	19.829	19.947
	DOWN RAIL ELEVATION	19.024	19.149	19.187	19.249	19.342	19.439	19.637	19.617	19.714	19.795	19.892	19.822	19.844	19.835
	GRADIENT	19.085	i = 2.65 ‰ L = 100 m			19.350	i = 4.00 ‰ L = 100 m			19.750	i = 2.00 ‰ L = 100 m			19.950	
	STRAIGHT/CURVE	0			33			1				2			
NEW TRACK	RAIL ELEVATION	19.096	19.107	19.172	19.258	19.343	19.428	19.513	19.598	19.683	19.768	19.853	19.938	20.023	20.069
	GRADIENT	19.099					i = 3.40 ‰ L = 286.6 m							20.074	
	STRAIGHT/CURVE	0			33			1				2			
	GROUND HEIGHT	14.22		15.03		15.88		16.07		16.68		19.08		19.70	
	FORMATION LEVEL	18.420	18.494	18.579	18.664	18.749	18.834	18.919	19.004	19.089	19.174	19.259	19.344	19.400	19.413
	DIFFER. HEIGHT(mm)	75	24	71	94	89	74	81	59	47	36	29	100	150	145

	KILOMETRAGE	33+400	33+450	33+500
EXISTING TRACK	UP RAIL ELEVATION	19.862	19.864	19.968
	DOWN RAIL ELEVATION	19.972	19.962	19.967
	GRADIENT	i=0.20 ‰ L = 300 m		20.010
	STRAIGHT/CURVE	4		5
NEW TRACK	RAIL ELEVATION	20.179	20.192	20.204
	GRADIENT	i = 0.50 ‰ L = 410 m		
	STRAIGHT/CURVE	4		BC 5
	GROUND HEIGHT	19.79		19.43
	FORMATION LEVEL	19.500	19.513	19.525
	DIFFER. HEIGHT(mm)	207	200	207

PROFILE
KM 32+900 - KM 33+500

LEGEND

- EXISTING TRACK
- DEMOLITION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- TEMPORARY TRACK
- GROUND HEIGHT
- PT. KM LAND BOUNDARY
- LAND PREPARATION AREA
- TUNNEL
- SURVEY KM POST
- PT. KM Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE
- SURVEY Km (PT. KM Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIRECTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 tlp.021-3506586-3505557
JAKARTA

Note:

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Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
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GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 32+900 - 33+500

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 014

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X	-6599.109
Y	27474.427

P-Tb 6	
X	-6586.108
Y	27503.474

IP-Tb 10	
X	-6576.157
Y	27560.845
R	1200 M
IA	4° 00' 01"
θ	1° 18' 46"
TL	69 M 416
CL	139 M 79
TCL	66 M
F	0 M 165

BC 13	
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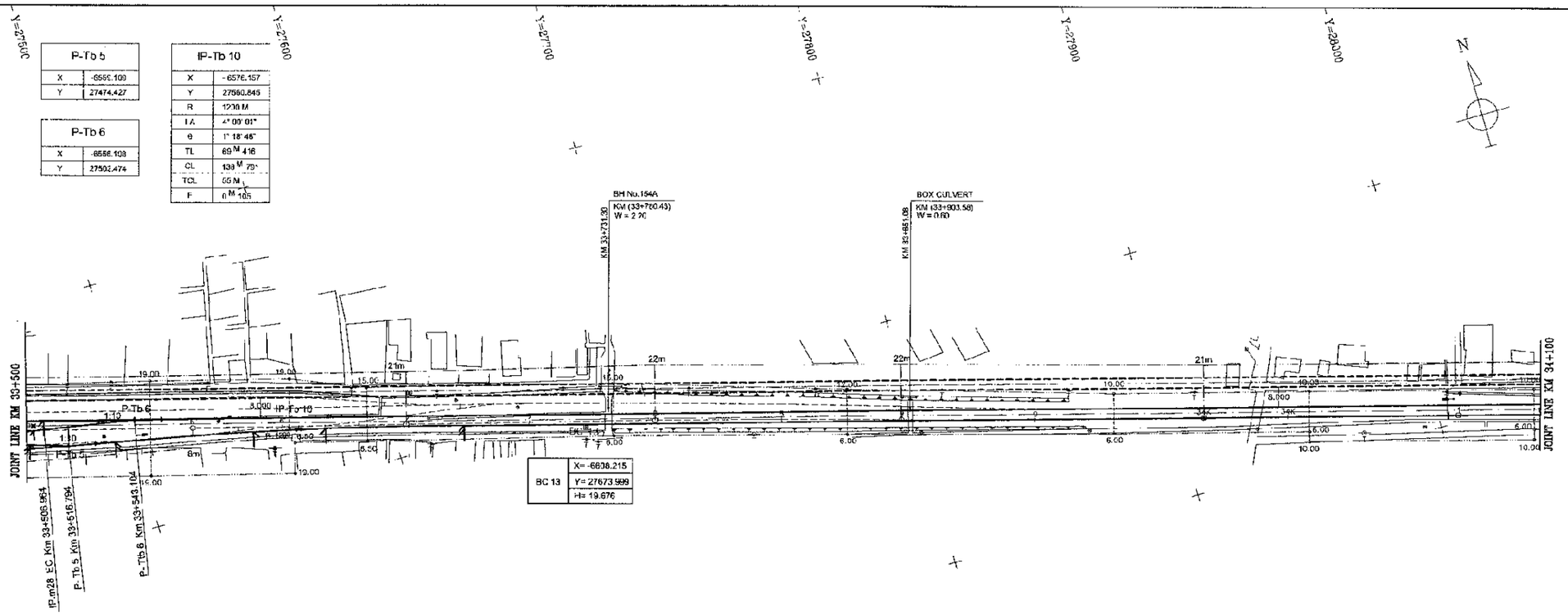
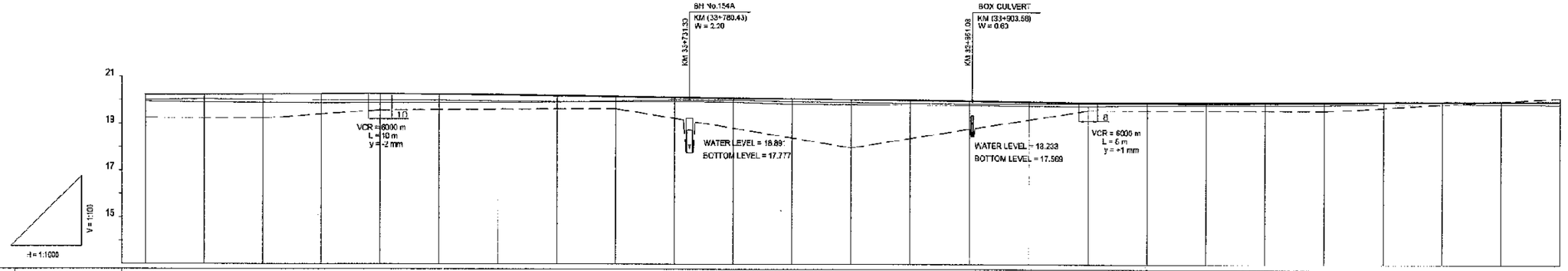
Y=	27673.999
H=	19.676



PLAN
KM 33+500 - KM 34+100



	KILOMETERAGE	33+500	33+550	33+600	33+650	33+700	33+750	33+800	33+850	33+900	33+950	34+000	34+050	34+100
EXISTING TRACK	UP RAIL ELEVATION	19.936	19.931	19.894	19.872	19.831	19.831	19.886	19.912	19.964	20.005	19.998	19.938	19.914
	DOWN RAIL ELEVATION	20.017	20.056	20.027	19.998	20.006	19.883	19.950	19.932	19.977	19.941	19.975	19.944	19.934
	GRADIENT	20.075	i = -0.63 ‰ L = 100 m			20.010				i = -0.47 ‰ L = 300 m				
	STRAIGHT/CURVE	5		6			7			8				
NEW TRACK	RAIL ELEVATION	20.228	20.242	20.254	20.267	20.277	20.249	20.219	20.189	20.159	20.129	20.099	20.069	20.039
	GRADIENT		i = 0.50 ‰ L = 400 m			20.278					i = -1.20 ‰ L = 300 m			
	STRAIGHT/CURVE	EC IA = 0° 15' 20.5" R = 6000		6			7			8				
	GROUND HEIGHT	19.24		19.22		19.58				19.64				17.98
	FORMATION LEVEL	19.550	19.563	19.575	19.588	19.600	19.570	19.540	19.510	19.480	19.450	19.420	19.390	19.360
	DIFFER. HEIGHT(mm)	212	186	227	265	274	266	260	257	195	126	100	130	125

	KILOMETERAGE	34+100	34+150	34+200	34+250	34+300	34+350	34+400	34+450	34+500	34+550	34+600	34+650	34+700
EXISTING TRACK	UP RAIL ELEVATION	20.005	19.981	19.952	19.923	19.882	19.852	19.803	19.659	19.620	19.644	19.977	19.989	20.005
	DOWN RAIL ELEVATION	19.981	19.957	19.928	19.899	19.758	19.800	19.411	19.604	19.627	19.653	19.973	19.974	19.981
	GRADIENT					19.882	i = 0.48 ‰ L = 100 m			19.930			i = 0.47 ‰ L = 150 m	
	STRAIGHT/CURVE	5				8				34				5
NEW TRACK	RAIL ELEVATION	20.009	19.979	19.949	19.920	19.920	19.939	19.543	19.559	19.669	19.679	19.689	19.699	
	GRADIENT					19.919			i = 0.40 ‰ L = 600 m					
	STRAIGHT/CURVE	8				8			34				5	
	GROUND HEIGHT					19.68			19.58				20.15	
	FORMATION LEVEL	19.360	19.330	19.300	19.270	19.210	19.250	19.240	19.260	19.280	19.290	19.300	19.310	19.320
	DIFFER. HEIGHT(mm)	125	103	121	82	38	37	56	50	39	25	2	-10	-5

PROFILE
KM 33+500 - KM 34+100

LEGEND :

- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (S-UNIT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Hp.021 - 3808626 3505557
JAKARTA

Note:

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Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

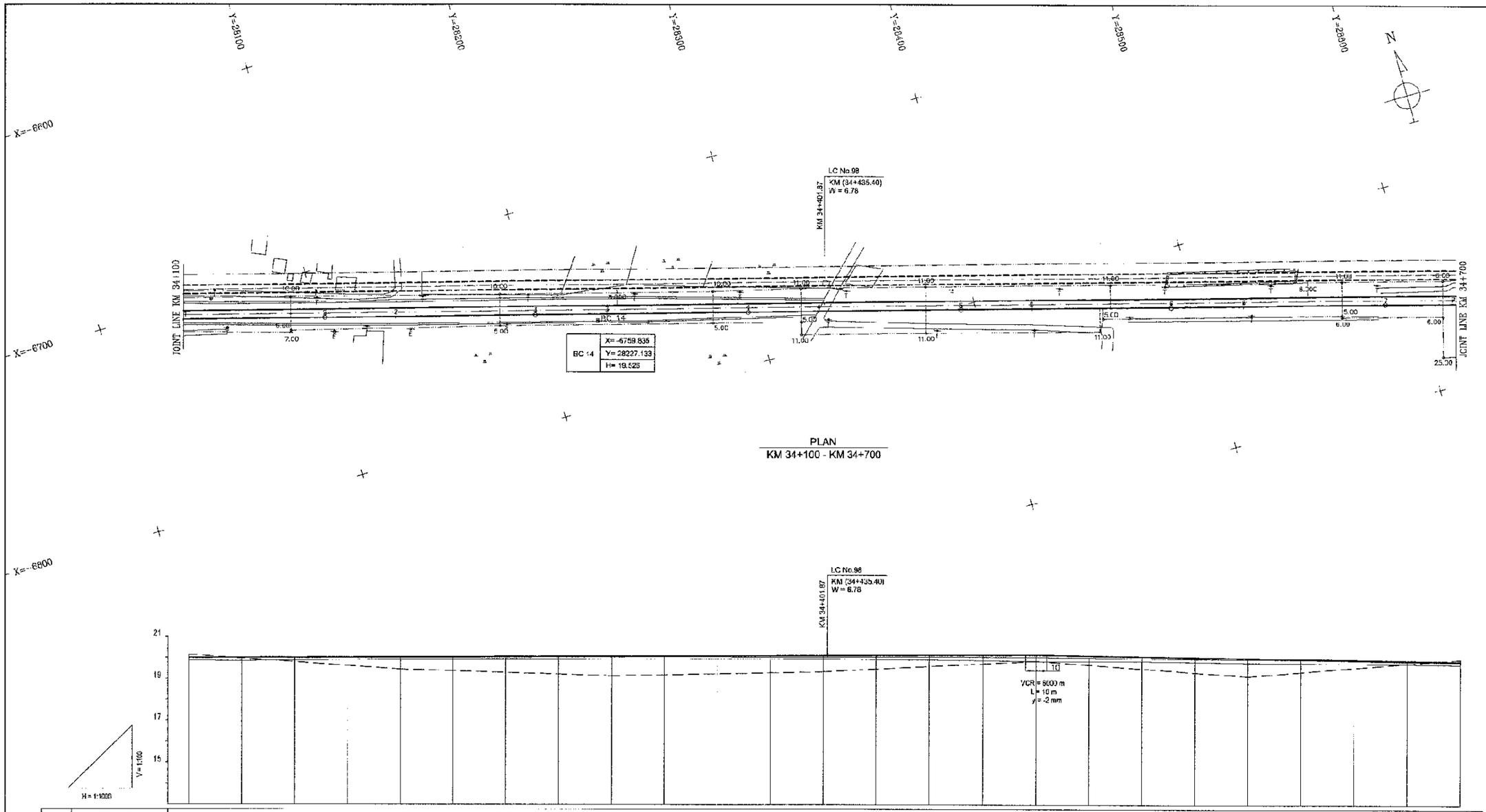
GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 33+500 - 34+100

Scale:	
H 1 : 1000	GE - 01 - 015
V 1 : 100	



PROFILE
KM 34+100 - KM 34+700

LEGEND

- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MARUNGAN - ST. BEKASI NEW MAIN TRACK, NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI' LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY km POST
- PT. KAI km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE
- SURVEY Km (PT. KM hm)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Ph.021-3505526 - 3505557
JAKARTA

Note:

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Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

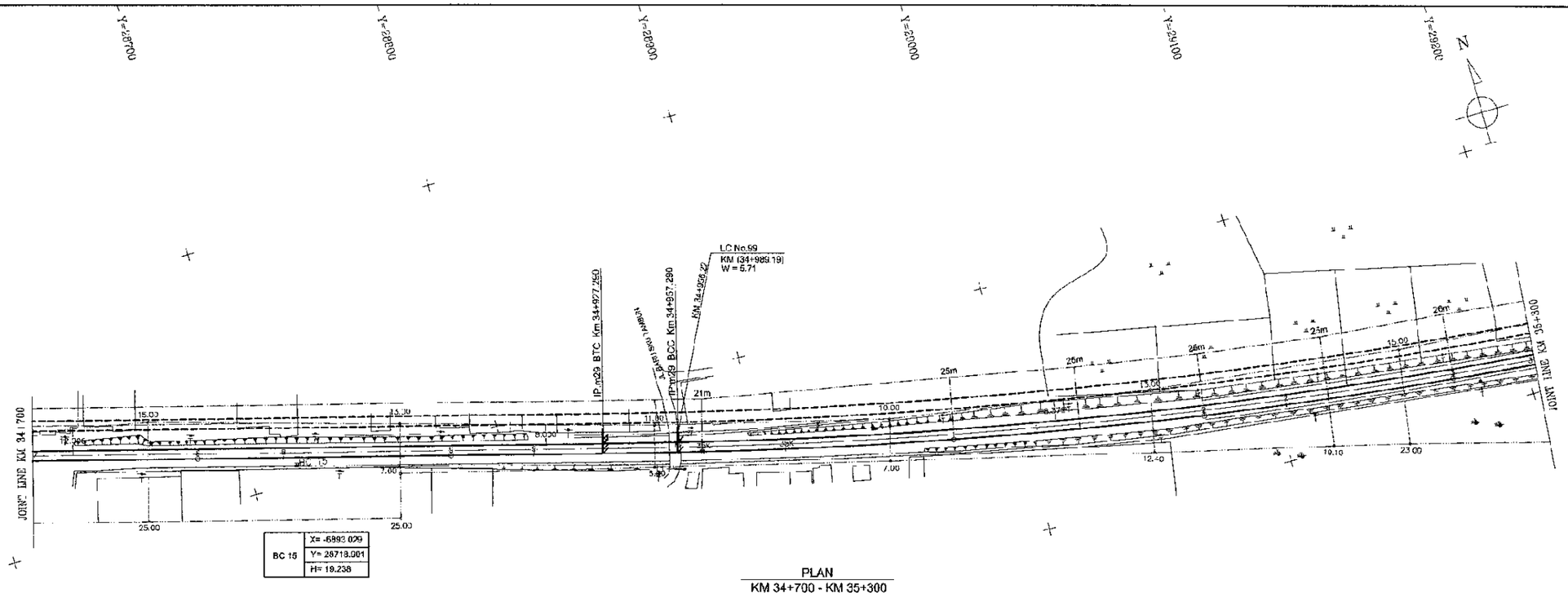
GENERAL PLAN

DATE	10 / MARCH / 2003

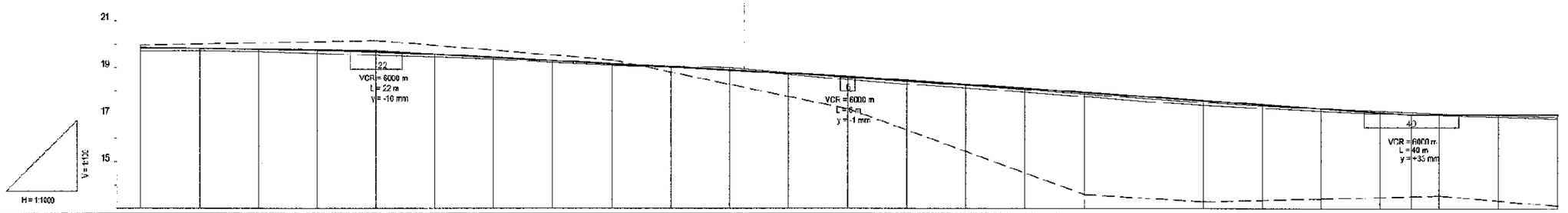
Drawing Title :

GENERAL PLAN
Km 34+100 - 34+700

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 016



PLAN
KM 34+700 - KM 35+300



	KILOMETERAGE	34+700	34+750	34+800	34+850	34+900	34+950	35+000	35+050	35+100	35+150	35+200	35+238.2	35+250	35+300
EXISTING TRACK	UP RAIL ELEVATION	19.828	19.817	19.800	19.736	19.651	19.589	19.442	19.315	19.177	19.072	18.990	18.886	18.570	18.406
	DOWN RAIL ELEVATION	19.709	19.718	19.674	19.609	19.521	19.459	19.362	19.221	19.166	18.998	18.901	18.701	18.461	18.262
	GRADIENT	i = -1.80 ‰ L = 150 m				19.680	i = -4.10 ‰ L = 100 m			19.250	i = -6.50 ‰ L = 100 m			18.800	i = -7.25 ‰ L = 100 m
	STRAIGHT/CURVE	7				8				9	BTC			35	
NEW TRACK	RAIL ELEVATION	19.859	19.822	19.784	19.747	19.699	19.574	19.439	19.304	19.169	19.034	18.899	18.764	18.629	18.494
	GRADIENT	i = -1.50 ‰ L = 300 m				19.709	i = -5.40 ‰ L = 200 m			18.629					
	STRAIGHT/CURVE	7				8				9	BTC TCL =30			35	
	GROUND HEIGHT	19.98				20.16				19.23				17.45	
	FORMATION LEVEL	19.189	19.143	19.105	19.068	19.030	18.895	18.760	18.625	18.490	18.355	18.220	18.085	17.949	17.780
	DIFFR. HEIGHT (mm)	21	5	-16	11	48	15	-3	-11	-8	38	-31	-22	58	53

	KILOMETERAGE	35+300	35+350	35+400	35+450	35+500	35+550	35+600	35+650	35+700	35+750	35+800	35+850	35+900	35+950
EXISTING TRACK	UP RAIL ELEVATION	18.494	18.358	18.222	18.086	17.950	17.814	17.678	17.542	17.406	17.270	17.134	16.998	16.862	16.726
	DOWN RAIL ELEVATION	18.294	18.158	18.022	17.886	17.750	17.614	17.478	17.342	17.206	17.070	16.934	16.798	16.662	16.526
	GRADIENT														
	STRAIGHT/CURVE														
NEW TRACK	RAIL ELEVATION	17.009	17.009	17.009	17.009	17.009	17.009	17.009	17.009	17.009	17.009	17.009	17.009	17.009	17.009
	GRADIENT														
	STRAIGHT/CURVE														
	GROUND HEIGHT	13.13													
	FORMATION LEVEL	16.336	16.200	16.064	15.928	15.792	15.656	15.520	15.384	15.248	15.112	14.976	14.840	14.704	14.568
	DIFFR. HEIGHT (mm)	86	86	86	86	86	86	86	86	86	86	86	86	86	86

PROFILE
KM 34+700 - KM 35+300

LEGEND:
- EXISTING TRACK
- REVOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE
- SURVEY Km (PT KA Km)

The Railway Electrification and Double - double tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya Lt.11 Up.021-3505636-3505627
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

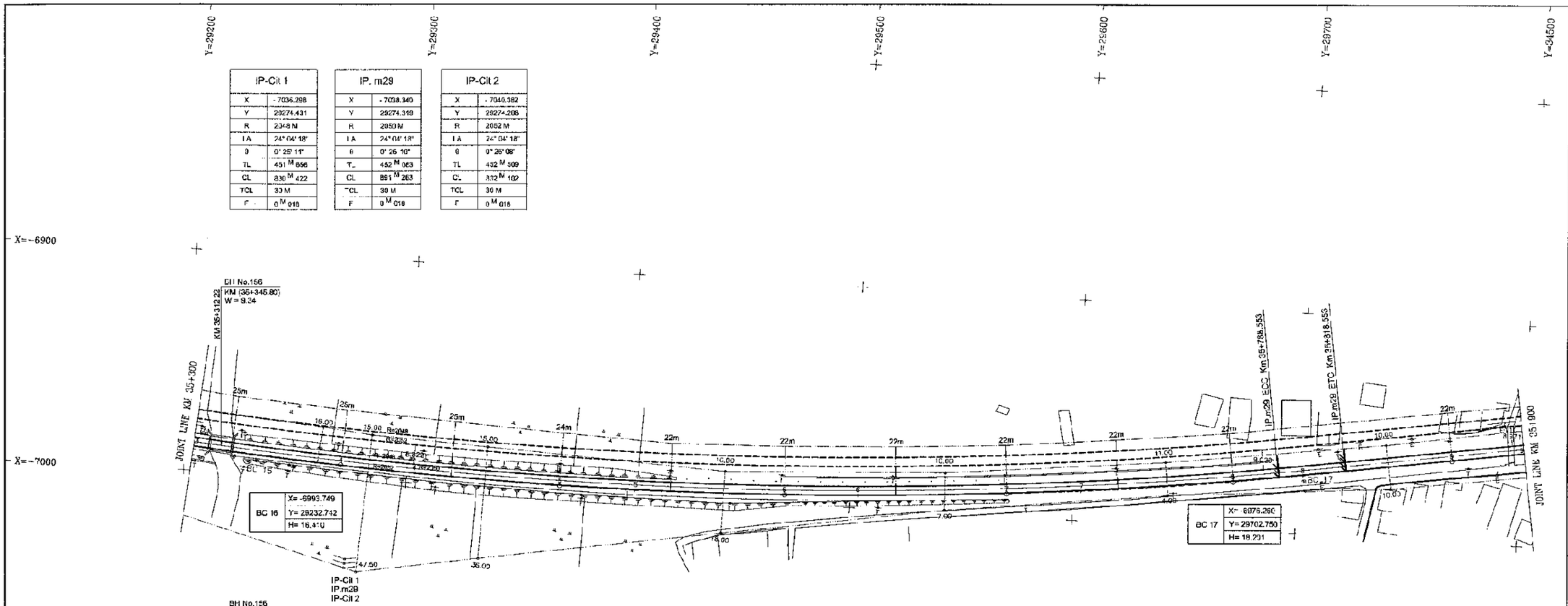
GENERAL PLAN
Km 34+700 - 35+300

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 017

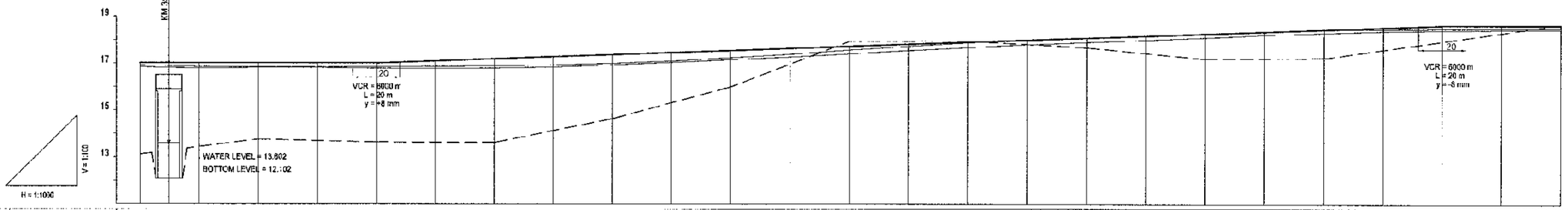
IP-Cit 1	
X	- 7036.298
Y	29274.431
R	2048 M
I A	24° 04' 18"
θ	0° 25' 11"
TL	451 M 856
CL	830 M 422
TCL	30 M
f	0 M 016

IP. m29	
X	- 7038.340
Y	29274.319
R	2050 M
I A	24° 04' 18"
θ	0° 25' 10"
T_	452 M 063
CL	881 M 263
TCL	30 M
F	0 M 016

IP-Cit 2	
X	- 7040.382
Y	29274.206
R	2052 M
I A	24° 04' 18"
θ	0° 25' 08"
TL	452 M 509
CL	832 M 102
TCL	30 M
f	0 M 016



PLAN
KM 35+300 - KM 35+900



	KILOMETERAGE	35+300		35+350		35+400		35+450		35+500		35+550		35+600		35+650		35+700		35+750		35+800		35+850		35+900
EXISTING TRACK	UP RAIL ELEVATION	16.611	16.615	16.663	16.638	16.643	16.647	16.684	16.675	16.715	16.689	17.088	17.230	17.281	17.685	17.725	17.672	17.678	18.056	18.159	18.269	18.363	18.481	18.454	18.451	18.438	18.508
	DOWN RAIL ELEVATION	16.639	16.698	16.794	16.815	16.817	16.791	16.777	16.798	16.836	16.822	17.036	17.154	17.262	17.402	17.543	17.674	17.798	17.902	17.998	18.105	18.220	18.301	18.376	18.416	18.444	18.456
	GRADIENT	i = -2.75 ‰ L = 150 m			16.840		i = 1.07 ‰ L = 150 m				17.000						i = 4.90 ‰ L = 300 m						18.470		i = 0.33 ‰ L = 150 m		
	STRAIGHT/CURVE	3			4		R = 2050 m			5				6				7				8	ETC			9
																						ECC				
NEW TRACK	RAIL ELEVATION	17.009	17.009	17.009	17.009	17.009	17.017	17.088	17.189	17.279	17.369	17.459	17.549	17.639	17.729	17.819	17.909	17.999	18.089	18.179	18.269	18.359	18.449	18.539	18.629	18.629	18.629
	GRADIENT	LEVEL L = 161.8 m					17.000										i = 3.60 ‰ L = 450 m								18.629	LEVEL L = 350 m	
	STRAIGHT/CURVE	3			4		IA = 24° 03' 12.8" R = 2050 m			5				6				7				8	TCL =30 ETC			9
																						ECC				
	GROUND HEIGHT	13.13		13.77		13.64		13.62		14.64		16.00		17.04		17.95		17.68		17.20		17.23				18.87
	FORMATION LEVEL	16.330	16.330	16.330	16.330	16.338	16.420	16.510	16.800	16.890	16.780	16.870	16.860	17.060	17.140	17.230	17.320	17.410	17.500	17.590	17.680	17.770	17.862	17.942	17.952	17.952	17.952
	DIFFER. HEIGHT(mm)	98	49	71	86	70	236	314	383	380	381	313	259	164	64	37	23	33	20	09	-04	-12	75	140	141	121	

PROFILE
KM 35+300 - KM 35+900

LEGEND :
- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KM LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km-POST
- PT. KM Km-POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- L.C. GATE
- (PT. KM Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 tlp.021-3505526-3505557
J A K A R T A

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 35+300 - 35+900

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 018

IP-Cir 3	
X	6900.874
Y	30163.995
R	2500 M
IA	1° 46' 36"
θ	0° 17' 11"
TL	51 M 259
CL	102 M 512
TCL	25 M
F	0 M 010

IP-Cir 4	
X	- 6876.052
Y	30362.357
R	2500 M
IA	1° 46' 36"
θ	3° 17' 11"
TL	51 M 259
CL	102 M 512
TCL	25 M
F	3 M 010

BC 18	
X= -6902.935	
Y= 30167.998	
H= 18.021	

PLAN
KM 35+900 - KM 36+500

PROFILE
KM 35+900 - KM 36+500

	KILOMETERAGE	35+900		35+950		36+000		36+050		36+100		36+150		36+200		36+250		36+300		36+350		36+400		36+450		36+500
EXISTING TRACK	UP RAIL ELEVATION	18.508	18.518	18.519	18.505	18.528	18.538	18.551	18.560	18.571	18.566	18.553	18.536	18.534	18.537	18.552	18.565	18.585	18.600	18.653	18.696	18.741	13.696	18.656 / 13.683	18.520	18.503 / 18.321
	DOWN RAIL ELEVATION	18.488	18.471	18.511	18.480	18.486	18.505	18.488	18.478	18.474	18.464	18.451	18.439	18.448	18.460	18.459	18.487	18.524	18.573	18.644	18.669	18.758	18.695	18.663	18.503	18.434
	GRADIENT	i = 0.33 ‰ L = 150 m	18.520			i = 0.37 ‰ L = 150 m				18.575	i = -0.36 ‰ L = 100 m			18.540	i = 0.90 ‰ L = 100 m			18.590	i = 1.70 ‰ L = 100 m			18.790	i = -1.47 ‰ L = 150 m			
	STRAIGHT/CURVE	9		36						1				2				3				4				5
NEW TRACK	RAIL ELEVATION	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629
	GRADIENT	LEVEL L = 950 m																								
	STRAIGHT/CURVE	9		36						1				2				3				4				5
	GROUND HEIGHT	18.67				18.62				18.45				18.67				18.09				18.34		18.46		18.55
	FORMATION LEVEL	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950
	DIFFER. HEIGHT(mm)	12	11	11	12	17	01	79	69	95	83	75	93	95	92	77	64	44	29	-24	-67	-129	-67	-27	9	36

LEGEND :
- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY KM POST
- PT. KAI Km POST
- BENCH MARK
- FI POTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat, no.8 Gedung Karya lt.1 Telp.021-3505526-3505537
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 35+900 - 36+500

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 019

IP-Cit 5	
X	- 6854.435
Y	30500.095
R	2500 M
I A	1° 46' 35"
θ	0° 17' 11"
TL	51 M 259
CL	102 M 512
TCL	25 M
F	0 M 010

IP-Cit 6	
X	-6817.342
Y	30696.625
R	2500 M
I A	" " 46' 35"
θ	0° 17' 11"
TL	51 M 280
CL	102 M 512
TCL	25 M
F	0 M 010

Y=30400 Y=30500 Y=30600 Y=30700 Y=30800 Y=30900

X=-1600

X=-1600

X=-1600

N

ST. CIBITUNG

ST. CIBITUNG
Km 36+537

BH No.
KM (36+714.75)
W = 0.80

KM 36+0696.52

BH No.162
KM (37+093.01)
W = 315

KM 37+037.05

KM 36+500 EXIST. LINE

JOINT LINE KM 37+100

IP-Cit 5

Rc=2500

IP-Cit 6

RICE FIELD

BC 19	
	X= -6795.266
	Y= 31789.787
	H= 18.231

PLAN
KM 36+500 - KM 37+100

BH No.
KM (36+714.75)
W = 0.80

KM 36+0696.52

BH No.162
KM (37+093.01)
W = 315

KM 37+037.05

WATER LEVEL = 15.499
BOTTOM LEVEL = 15.440

VCR = 3000 m
L = 6 m
y = 1 mm

WATER LEVEL = 17.481
BOTTOM LEVEL = 17.290

H = 1:1000
V = 1:100

PROFILE
KM 36+500 - KM 37+100

	KILOMETERAGE	36+500	36+550	36+600	36+650	36+700	36+750	36+800	36+850	36+900	36+950	37+000	37+050	37+100
EXISTING TRACK	UP RAIL ELEVATION	18.583	18.538	18.540	18.490	18.459	18.455	18.451	18.469	18.501	18.553	18.559	18.547	18.524	18.501	18.505	18.497	18.490	18.488	18.442	18.394	18.353	18.315	18.273	18.230	18.236
	DOWN RAIL ELEVATION	18.434	18.492	18.356	18.298	18.241	18.223	18.218	18.237	18.284	18.331	18.361	18.525	18.456	18.136	18.507	18.495	18.482	18.478	18.470	18.467	18.432	18.375	18.316	18.282	18.259
	GRADIENT		i = -1.47 ‰ L = 150 m	18.540		i = -0.70 ‰ L = 100 m		18.470		i = 0.90 ‰ L = 100 m		18.560		i = -0.33 ‰ L = 150 m				18.510				i = -1.05 ‰ L = 200 m				18.300
	STRAIGHT/CURVE	5				6				7				8				9				37				1
NEW TRACK	RAIL ELEVATION	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.629	18.600	18.569	18.539	18.509	18.479	18.449	18.419	18.389	18.359	18.329	18.299	18.269
	GRADIENT													LEVEL L = 950 m	18.629					i = -1.20 ‰ L = 450 m						
	STRAIGHT/CURVE	5				6				7				8				9				37				1
	GROUND HEIGHT	18.65		18.70				18.71						17.35				18.25				17.65				17.70
	FORMATION LEVEL	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.950	17.670	17.970	17.990	17.990	17.890	17.893	17.773	17.743	17.713	17.663	17.653	17.629	17.599
	DIFFER. HEIGHT(mm)	98	71	95	109	170	174	169	140	126	76	65	82	104	96	62	42	19	6	21	-43	-49	-19	11	17	01

LEGEND :

- EXISTING TRACK
- DENDATION EXISTING TRACK
- ST. MANGGARAI - ST. REKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY KM POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- L.C. GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERKERETAPIAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Merdeka Timur Gedung Karya R.11 Jp.021-3505326-3505057
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 36+500 - 37+100

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 020

IP-Cit 7	
X	- 6753.387
Y	31073.573
R	3000 M
I A	0° 49' 51"
θ	0° 11' 20"
TL	31 M 749
CL	63 M 498
TCL	29 M
F	0 M 005

IP-Cit 8	
X	- 6790.045
Y	31214.627
R	3000 M
I A	0° 49' 51"
θ	0° 11' 20"
TL	31 M 749
CL	63 M 498
TCL	29 M
F	0 M 005

IP-Cit 9	
X	- 6704.274
Y	31378.979
R	5000 M
I A	0° 19' 48"
θ	-
TL	14 M 403
CL	28 M 806
TCL	-
F	-

BG 20	
	X= -6743.009
	Y= 31189.787
	H= 17.289

PLAN
KM 37+100 - KM 37+700

PROFILE
KM 37+100 - KM 37+700

KILOMETERAGE	37+100	37+150	37+200	37+250	37+300	37+350	37+400	37+450	37+500	37+550	37+600	37+650	37+700
EXISTING TRACK: UP RAIL ELEVATION	18.268	18.290	18.291	18.211	18.118	18.019	17.944	17.894	17.785	17.679	17.600	17.477	17.450
EXISTING TRACK: DOWN RAIL ELEVATION	18.253	18.213	18.175	18.115	18.043	17.943	17.863	17.797	17.695	17.582	17.493	17.441	17.423
EXISTING TRACK: GRADIENT	18.300	i = -1.55 ‰ L = 100 m			18.145		i = -3.47 ‰ L = 700 m				17.460		
EXISTING TRACK: STRAIGHT/CURVE	1				2		3				4		
NEW TRACK: RAIL ELEVATION	18.269	18.239	18.209	18.179	18.140	18.110	18.087	18.012	17.934	17.857	17.779	17.702	17.624
NEW TRACK: GRADIENT	i = -1.20 ‰ L = 450 m						18.090		i = -3.10 ‰ L = 200 m				17.469
NEW TRACK: STRAIGHT/CURVE	1						3						4
NEW TRACK: GROUND HEIGHT	17.70				17.13				14.95				
NEW TRACK: FORMATION LEVEL	17.590	17.580	17.530	17.500	17.470	17.410	17.408	17.333	17.255	17.178	17.100	17.023	16.946
NEW TRACK: DIFFER. HEIGHT(mm)	01	-51	-62	-02	31	100	145	126	166	178	175	235	174

KILOMETERAGE	37+700	37+750	37+800	37+850	37+900	37+950	38+000	38+050	38+100	38+150	38+200	38+250	38+300
EXISTING TRACK: UP RAIL ELEVATION	17.450	17.423	17.421	17.431	17.453	17.483	17.487	17.509	17.542	17.558	17.607	17.636	17.656
EXISTING TRACK: DOWN RAIL ELEVATION	17.423	17.384	17.340	17.304	17.332	17.366	17.385	17.418	17.452	17.478	17.515	17.624	17.630
EXISTING TRACK: GRADIENT			i = 0.20 ‰ L = 100 m		17.470	i = 0.80 ‰ L = 100 m			17.550		i = 0.75 ‰ L = 200 m		
EXISTING TRACK: STRAIGHT/CURVE			4		5				6				7
NEW TRACK: RAIL ELEVATION	17.624	17.547	17.481	17.494	17.519	17.544	17.569	17.594	17.619	17.644	17.669	17.695	17.695
NEW TRACK: GRADIENT			17.469			i = 1.00 ‰ L = 200 m					17.669	LEVEL L= 619.6 m	
NEW TRACK: STRAIGHT/CURVE			4		5				6				7
NEW TRACK: GROUND HEIGHT					13.65				14.77				14.45
NEW TRACK: FORMATION LEVEL	16.946	16.869	16.820	16.815	16.849	16.885	16.920	16.915	16.940	16.965	16.990	16.990	16.990
NEW TRACK: DIFFER. HEIGHT(mm)	124	60	63	69	56	82	95	77	70	52	33	33	

LEGEND :
- EXISTING TRACK
- DONGLIAN EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK (NFM) COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- I.C. GATE
- SLOPE (PT. KM KI I)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 tlp.021-3506526-3505557
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

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Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

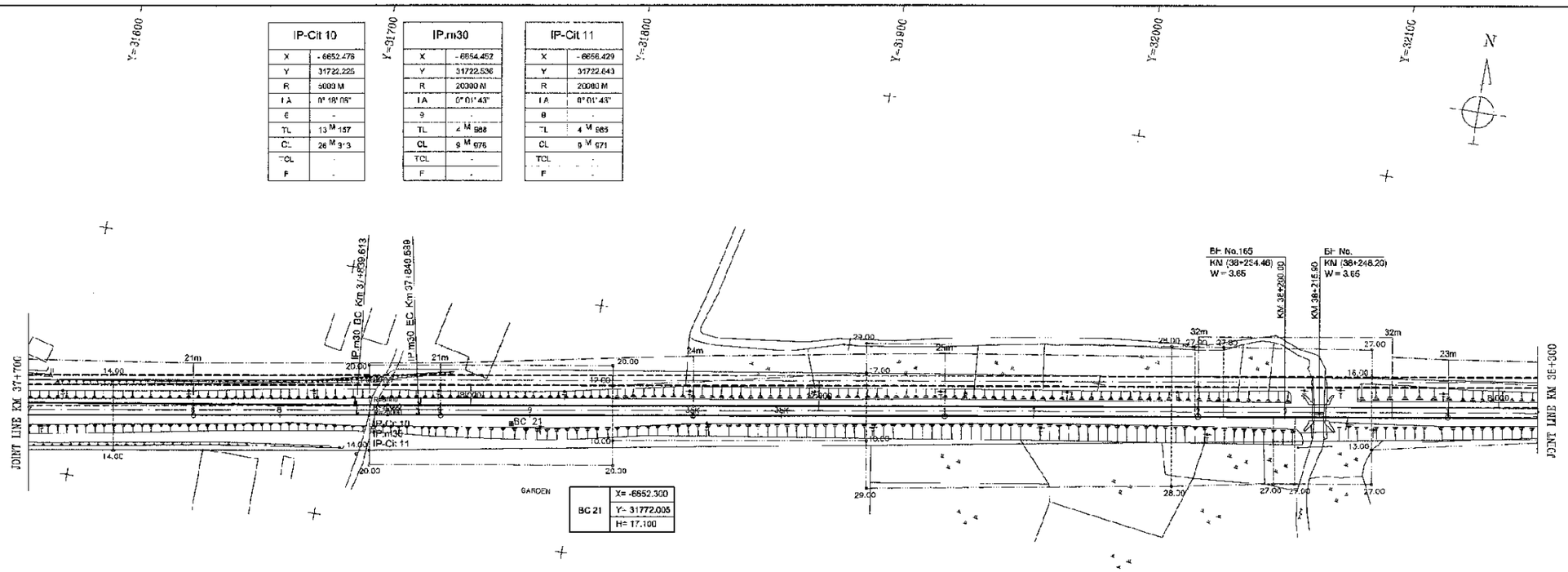
GENERAL PLAN
Km 37+100 - 37+700

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 021

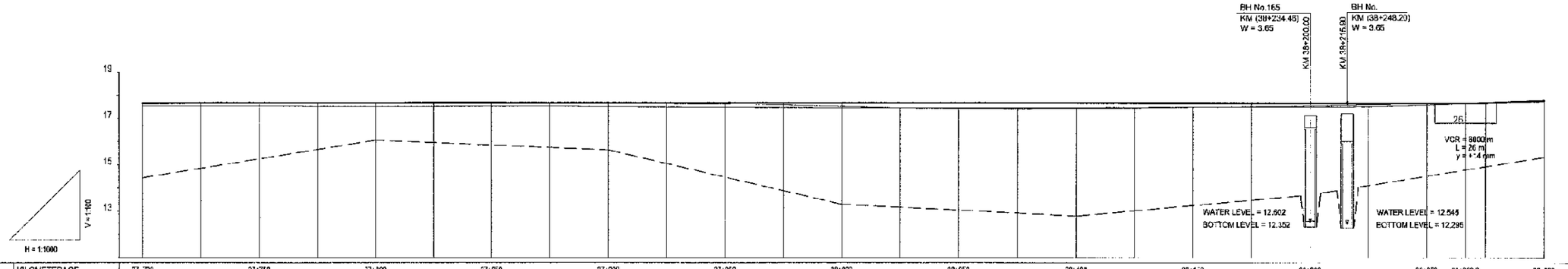
IP-Cit 10	
X	- 6652.478
Y	31722.225
R	5000 M
I A	0° 18' 08"
ℓ	-
TL	13 M 157
CL	26 M 313
TCL	-
F	-

IP.m30	
X	- 6654.452
Y	31722.536
R	20000 M
I A	0° 01' 43"
ℓ	-
TL	2 M 988
CL	9 M 976
TCL	-
F	-

IP-Cit 11	
X	- 6656.429
Y	31722.843
R	20000 M
I A	0° 01' 43"
ℓ	-
TL	4 M 665
CL	9 M 671
TCL	-
F	-



PLAN
KM 37+700 - KM 38+300



	KILOMETERAGE	37+700	37+750	37+800	37+850	37+900	37+950	38+000	38+050	38+100	38+150	38+200	38+250	38+269.8	38+300
EXISTING TRACK	UP RAIL ELEVATION	17.638	17.654	17.668	17.675	17.695	17.708	17.704	17.690	17.693	17.668	17.625	17.580	17.517	17.462
		17.439	17.417	17.432	17.461	17.492	17.503	17.511	17.521	17.601	17.684	17.766			
	DOWN RAIL ELEVATION	17.530	17.540	17.555	17.623	17.619	17.521	17.525	17.526	17.505	17.459	17.481	17.469	17.460	17.452
		17.451	17.452	17.466	17.482	17.497	17.522	17.555	17.613	17.651	17.697	17.749			
	GRADIENT	i = 0.75 ‰ L = 200 m		17.700		i = -0.50 ‰ L = 150 m		17.825		i = -1.03 ‰ L = 150 m		17.470		i = 1.51 ‰ L = 200 m	17.772
	STRAIGHT/CURVE	7		8		9		38		1		2			3
NEW TRACK	RAIL ELEVATION	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689
		17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689	17.689
	GRADIENT	LEVEL L = 619.8 m												17.689	i = 4.60 ‰ L = 330.4 m
	STRAIGHT/CURVE	7		8		9		38		1		2			3
	GROUND HEIGHT	14.45		16.07		15.64		13.30		12.80		13.70			15.15
	FORMATION LEVEL	16.990	16.990	16.990	16.990	16.990	16.990	16.990	16.990	16.990	16.990	16.990	16.990	16.990	17.110
	DIFFER. HEIGHT(mm)	33	15	-	-6	-28	-39	-35	-21	-24	11	44	80	152	217
		218	217	203	187	172	147	114	56	18	-03	-43			

PROFILE
KM 37+700 - KM 38+300

LEGEND :
- EXISTING TRACK
- DEMOLITION EXISTING TRACK
- GT. MANGGARAI - ST. BEKASI NEW MAIN TRACK /NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC. GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Tlp.021-3506525-3505557
JAKARTA

Note:

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Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
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GENERAL

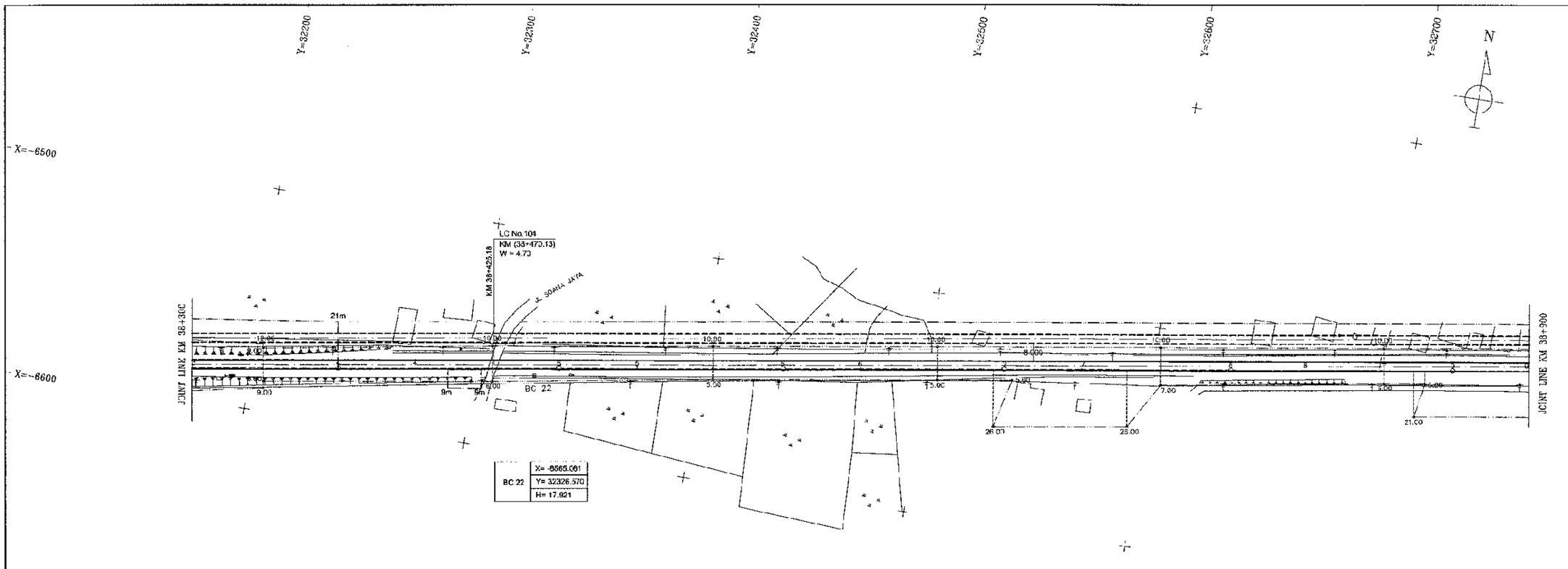
GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 37+700 - 38+300

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 022



	KILOMETERAGE	38+300	38+350	38+400	38+450	38+500	38+550	38+600	38+650	38+700	38+750	38+800	38+850	38+900
EXISTING TRACK	UP RAIL ELEVATION	17.788	17.864	17.929	18.046	18.140	18.218	18.322	18.384	18.501	18.560	18.642	18.723	18.787
	DOWN RAIL ELEVATION	17.748	17.810	17.865	17.976	18.079	18.256	18.294	18.408	18.502	18.568	18.654	18.740	18.805
	GRADIENT	17.772		i = 3.69 % L = 200 m		18.510		i = 3.30 % L = 100 m		18.840		i = 2.35 % L = 100 m		19.075
	STRAIGHT/CURVE	3		4		5		6		7				
NEW TRACK	RAIL ELEVATION	17.809	17.924	18.039	18.154	18.269	18.304	18.459	18.614	18.769	18.844	18.959	19.074	19.175
	GRADIENT					i = 4.60 % L = 330.4 m				19.189				
	STRAIGHT/CURVE	3		4		5		6		7				
	GROUND HEIGHT	16.36			17.66			17.71					17.72	
	FORMATION LEVEL	17.130	17.245	17.360	17.475	17.590	17.705	17.820	17.935	18.050	18.135	18.250	18.365	18.480
	DIFFER. HEIGHT(mm)	43	80	110	105	129	160	177	206	277	266	305	334	370

	KILOMETERAGE	38+300	38+350	38+400	38+450	38+500	38+550	38+600	38+650	38+700	38+750	38+800	38+850	38+900
EXISTING TRACK	UP RAIL ELEVATION	17.788	17.864	17.929	18.046	18.140	18.218	18.322	18.384	18.501	18.560	18.642	18.723	18.787
	DOWN RAIL ELEVATION	17.748	17.810	17.865	17.976	18.079	18.256	18.294	18.408	18.502	18.568	18.654	18.740	18.805
	GRADIENT	17.772		i = 3.69 % L = 200 m		18.510		i = 3.30 % L = 100 m		18.840		i = 2.35 % L = 100 m		19.075
	STRAIGHT/CURVE	3		4		5		6		7				
NEW TRACK	RAIL ELEVATION	17.809	17.924	18.039	18.154	18.269	18.304	18.459	18.614	18.769	18.844	18.959	19.074	19.175
	GRADIENT					i = 4.60 % L = 330.4 m				19.189				
	STRAIGHT/CURVE	3		4		5		6		7				
	GROUND HEIGHT	16.36			17.66			17.71					17.72	
	FORMATION LEVEL	17.130	17.245	17.360	17.475	17.590	17.705	17.820	17.935	18.050	18.135	18.250	18.365	18.480
	DIFFER. HEIGHT(mm)	43	80	110	105	129	160	177	206	277	266	305	334	370

	KILOMETERAGE	38+900
EXISTING TRACK	UP RAIL ELEVATION	18.977
	DOWN RAIL ELEVATION	18.955
	GRADIENT	19.025
	STRAIGHT/CURVE	9
NEW TRACK	RAIL ELEVATION	19.189
	GRADIENT	19.189
	STRAIGHT/CURVE	9
	GROUND HEIGHT	17.36
	FORMATION LEVEL	18.510
	DIFFER. HEIGHT(mm)	153

i = -1.75 %
L = 100 m
19.200
LEVEL
L = 500 m

PROFILE
KM 38+300 - KM 38+900

LEGEND :
- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK ; NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KA LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY 1km POST
- PT. KA 1km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE
- SURVEY (PT. KA1Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Tlp.021-3508526-3505557
JAKARTA

Note:

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Japan International Cooperation Agency (JICA)

JICA Study Team:

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GENERAL

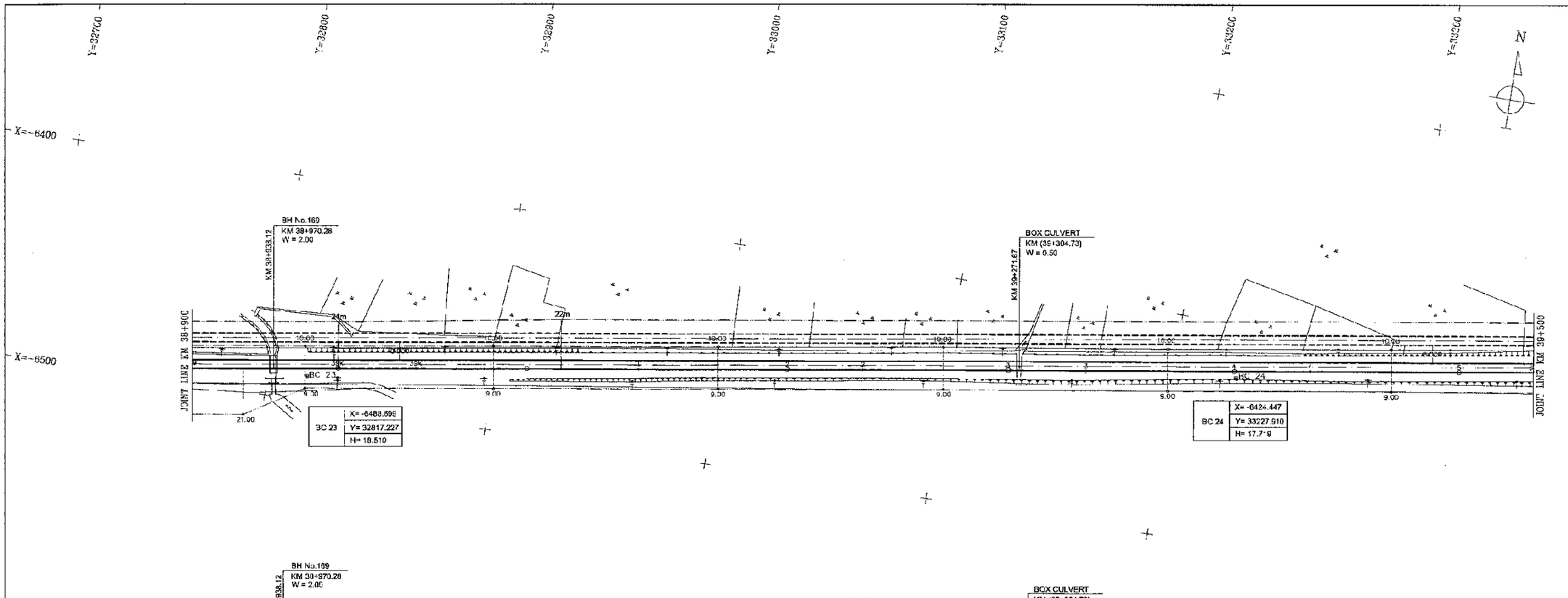
GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 38+300 - 38+900

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 023



PLAN
KM 38+900 - KM 39+500

	KILOMETERAGE	38+900	38+950	39+000	39+050	39+100	39+150	39+200	39+250	39+300	39+350	39+400	39+450	39+500
EXISTING TRACK	UP RAIL ELEVATION	18.977	18.955	18.880	18.848	18.793	18.734	18.672	18.601	18.529	18.469	18.411	18.361	18.322
	DOWN RAIL ELEVATION	18.963	18.939	18.881	18.835	18.779	18.720	18.624	18.554	18.492	18.435	18.390	18.347	18.308
	GRADIENT	19.025		i = -2.27 ‰ L = 200 m				18.570	i = -2.20 ‰ L = 100 m			18.353	i = -0.80 ‰ L = 100 m	
	STRAIGHT/CURVE	9		39				1		2				
NEW TRACK	RAIL ELEVATION	19.185	19.134	19.079	19.024	18.969	18.914	18.859	18.804	18.749	18.694	18.639	18.584	18.529
	GRADIENT	19.139				i = -2.20 ‰ L = 400 m								
	STRAIGHT/CURVE	9		39						2				
	GROUND HEIGHT	17.36		17.35		16.74				16.40				
	FORMATION LEVEL	18.510	18.455	18.400	18.345	18.290	18.235	18.180	18.125	18.070	18.015	17.960	17.905	17.850
	DIFFER. HEIGHT(mm)	163	179	169	176	176	193	187	223	220	235	228	223	217

	KILOMETERAGE	39+500	39+550	39+600	39+650	39+700	39+750	39+800	39+850	39+900
EXISTING TRACK	UP RAIL ELEVATION	18.169	18.212	18.216	18.156	18.197	18.184	18.170	18.209	18.187
	DOWN RAIL ELEVATION	18.212	18.256	18.258	18.198	18.241	18.227	18.212	18.251	18.229
	GRADIENT	18.230	i = -0.20 ‰ L = 200 m							
	STRAIGHT/CURVE	5	4							
NEW TRACK	RAIL ELEVATION	18.305	18.305	18.305	18.305	18.305	18.305	18.305	18.305	18.305
	GRADIENT	18.300	LEVEL L = 700 m							
	STRAIGHT/CURVE	5	4							
	GROUND HEIGHT	16.65	16.60							
	FORMATION LEVEL	17.830	17.830	17.830	17.830	17.830	17.830	17.830	17.830	17.830
	DIFFER. HEIGHT(mm)	97	125	103	69	64	47	47	66	86

PROFILE
KM 38+900 - KM 39+500

LEGEND :
- EXISTING TRACK
- SIMULATION EXISTING TRACK
- ST. MANGGARAI - ST. SEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
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- BUILDING
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- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PRASARANA DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 tlp.021-3505526-3505557
JAKARTA

Note:

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JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

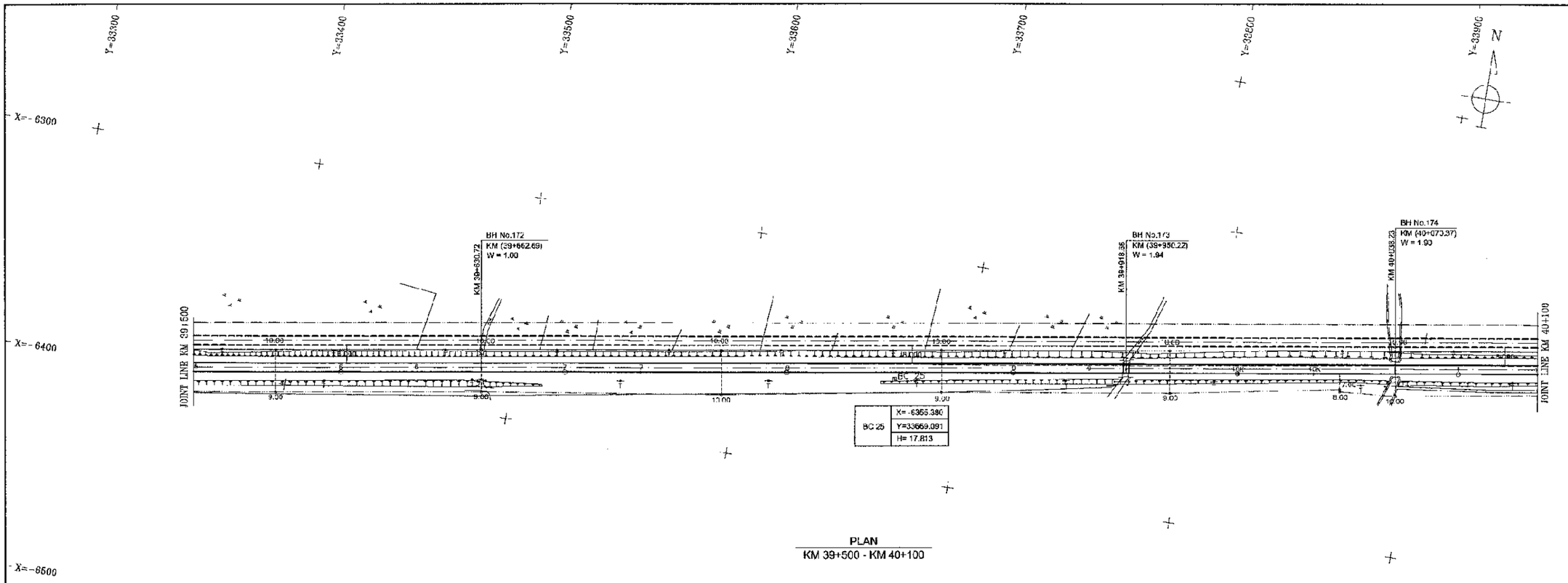
DATE: 10 / MARCH / 2003

Drawing Title :

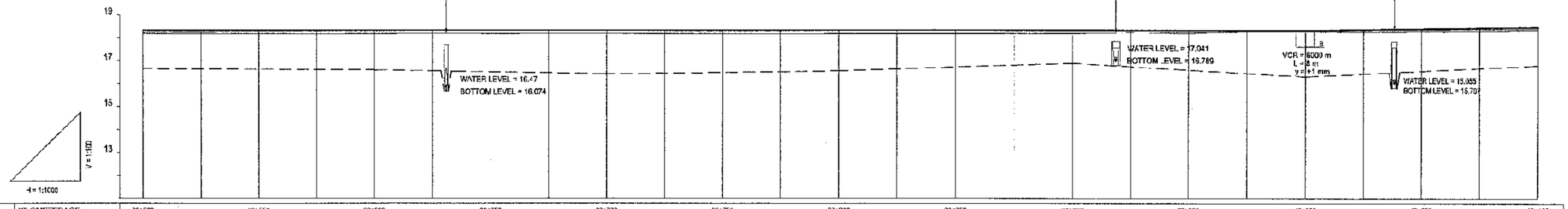
GENERAL PLAN
Km 38+900 - 39+500

Scale:
H 1 : 1000
V 1 : 100

Drawing No.:
GE - 01 - 024



PLAN
KM 39+500 - KM 40+100



KILOMETERAGE		39+500	39+550	39+600	39+650	39+700	39+750	39+800	39+850	39+900	39+950	40+000	40+050	40+100
EXISTING TRACK	UP RAIL ELEVATION	18.166	18.159	18.165	18.160	18.153	18.179	18.159	18.167	18.173	18.165	18.166	18.159	18.159	18.153	18.146	18.171	18.170	18.233	18.169	18.324	18.332	18.319	18.342	18.351	18.373
	DOWN RAIL ELEVATION	18.212	18.221	18.208	18.199	18.168	18.182	18.194	18.182	18.172	18.156	18.153	18.153	18.165	18.179	18.163	18.171	18.169	18.215	18.242	18.271	18.274	18.252	18.277	18.290	18.333
	GRADIENT	18.230	i = -0.30 ‰ L = 100 m			18.200				i = -0.15 ‰ L = 200 m				18.170			i = 0.61‰ L = 200 m					18.303		i = 0.67 ‰ L = 250 m		
	STRAIGHT/CURVE	5				6				7				8			9					40				1
NEW TRACK	RAIL ELEVATION	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.339	18.310	18.344	18.378	18.414	18.449
	GRADIENT	LEVEL L = 700 m																				18.303		i = 1.40 ‰ L = 700 m		
	STRAIGHT/CURVE	5				6				7				8			9					40				1
	GROUND HEIGHT	16.66				16.60				16.42				16.55			16.68					16.30				16.78
	FORMATION LEVEL	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.630	17.685	17.700	17.735	17.770
	DIFFER. HEIGHT(mm)	97	88	101	110	121	127	125	127	136	144	143	150	144	130	126	138	133	76	67	45	22	25	37	63	78

PROFILE
KM 39+500 - KM 40+100

LEGEND:
- EXISTING TRACK
- IRRIGATION EXISTING TRACK
- ST. MANGGARAI - ST. BC 1401 (NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- DCLL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC. GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Double double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Up.02' -3508526-3505557
JAKARTA

Note:

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Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

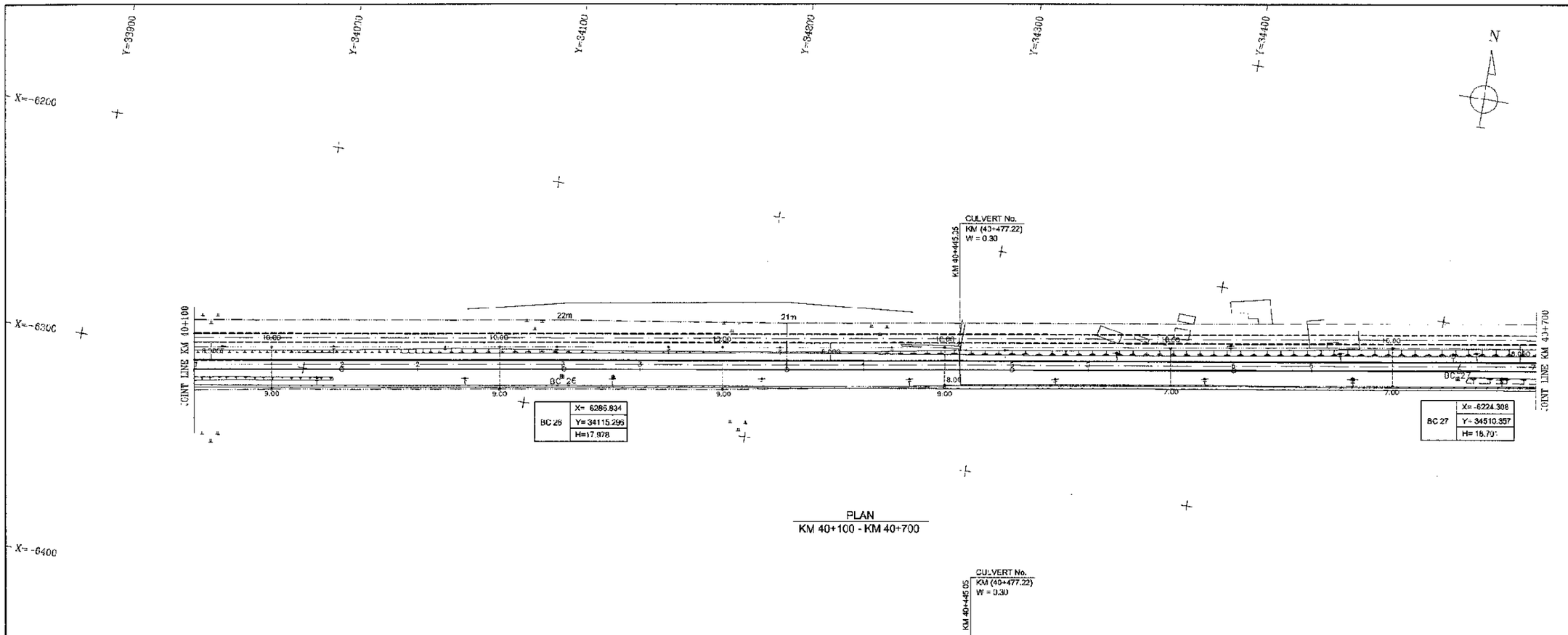
DATE: 10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 39+500 - 40+100

Scale:
H 1 : 1000
V 1 : 100

Drawing No.:
GE - 01 - 025



	KILOMETERAGE	40+100	40+150	40+200	40+250	40+300	40+350	40+400	40+450	40+500	40+550	40+600	40+650	40+700
EXISTING TRACK	UP RAIL ELEVATION	18.373	18.388	18.405	18.406	18.420	18.450	18.474	18.513	18.549	18.584	18.634	18.670	18.733	18.770	18.823	18.876	18.928	18.982	19.029	19.074	19.092	19.098	19.111	19.114	19.104
	DOWN RAIL ELEVATION	18.333	18.335	18.334	18.361	18.378	18.388	18.428	18.465	18.513	18.557	18.588	18.642	18.696	18.736	18.778	18.822	18.864	18.903	18.953	18.924	18.886	19.003	19.056	19.045	19.046
	GRADIENT		i = 0.67 ‰ L = 250 m					18.500				i = 1.72 ‰ L = 250 m						18.930	i = 1.70 ‰ L = 100 m			19.100		i = 0.20 ‰ L = 100 m		19.120
	STRAIGHT/CURVE	1		2			3				4						5					6				7
NEW TRACK	RAIL ELEVATION	18.449	18.464	18.519	18.554	18.589	18.624	18.659	18.694	18.729	18.764	18.799	18.834	18.869	18.904	18.939	18.974	19.009	19.044	19.079	19.114	19.149	19.184	19.219	19.254	19.290
	GRADIENT													i = 1.40 ‰ L = 100 m												19.289
	STRAIGHT/CURVE	1		2			3				4						5					6				7
	GROUND HEIGHT	18.78			18.80			18.87				17.29					18.23					17.99				17.80
	FORMATION LEVEL	17.770	17.805	17.840	17.875	17.910	17.945	17.980	18.015	18.050	18.085	18.120	18.155	18.190	18.225	18.260	18.295	18.330	18.365	18.400	18.435	18.470	18.505	18.540	18.575	18.610
	DIFFER. HEIGHT(mm)	76	95	114	148	100	174	165	181	190	170	155	158	136	125	116	98	81	52	53	40	57	65	108	140	186

PROFILE
KM 40+100 - KM 40+700

LEGEND :
- EXISTING TRACK
- DEMOLITION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KA Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- I.C. GATE

SURVEY Km (PT. KA Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Up.021-3508526-3505557
J A K A R T A

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

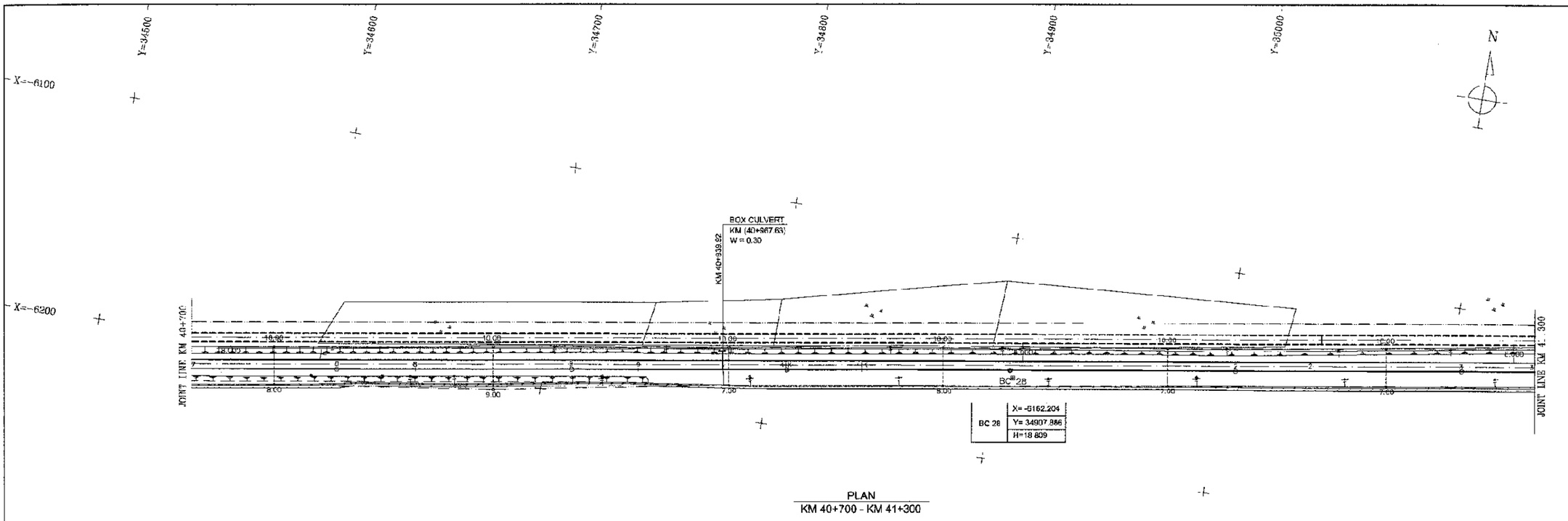
DATE: 10 / MARCH / 2003

Drawing Title :

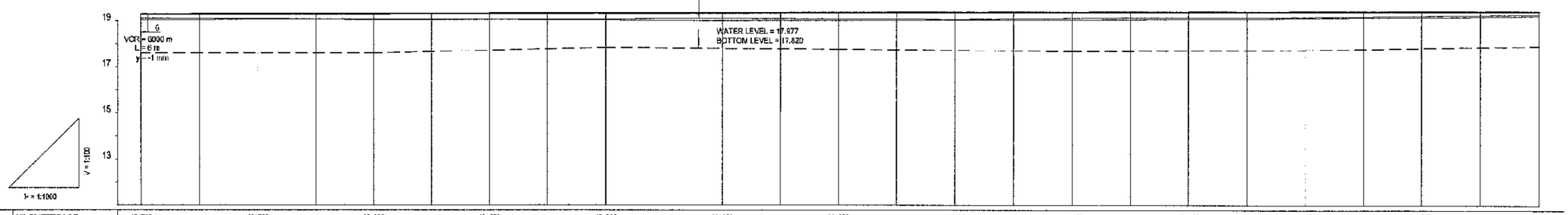
GENERAL PLAN
Km 40+100 - 40+700

Scale:
H 1 : 1000
V 1 : 100

Drawing No.:
GE - 01 - 026



PLAN
KM 40+700 - KM 41+300



	KILOMETERAGE	40+700	40+750	40+800	40+850	40+900	40+950	41+000	41+050	41+100	41+150	41+200	41+250	41+300
EXISTING TRACK	UP RAIL ELEVATION	19.104	19.089	19.089	19.079	19.081	19.071	19.071	19.058	19.074	19.094	19.100	19.088	19.075
	DOWN RAIL ELEVATION	19.049	19.049	19.050	19.062	19.056	19.063	19.057	19.044	19.042	19.058	19.009	19.013	19.011
	GRADIENT	19.120	i = -0.13 ‰ L = 390 m											19.680
	STRAIGHT/CURVE	7		8		9								41
	RAIL ELEVATION	19.239	19.234	19.239	19.304	19.306	19.314	19.319	19.324	19.329	19.334	19.339	19.344	19.349
NEW TRACK	GRADIENT	19.239												
	STRAIGHT/CURVE	7		8		9								41
	GROUND HEIGHT	17.60				17.60				17.64				17.76
	FORMATION LEVEL	18.610	18.615	18.620	18.625	18.630	18.635	18.640	18.645	18.650	18.655	18.660	18.665	18.670
	DIFFER. HEIGHT(mm)	139	139	219	225	228	243	248	256	255	240	239	258	274

	KILOMETERAGE	41+000	41+050	41+100	41+150	41+200	41+250	41+300
EXISTING TRACK	UP RAIL ELEVATION	19.075	19.055	19.082	19.103	19.131	19.133	19.136
	DOWN RAIL ELEVATION	19.011	19.023	19.037	19.039	19.045	19.059	19.074
	GRADIENT	19.680	i = 0.40 ‰ L = 100 m		19.120			i = 0.09 ‰ L = 200 m
	STRAIGHT/CURVE	41			1			2
	RAIL ELEVATION	19.349	19.354	19.359	19.364	19.369	19.374	19.379
NEW TRACK	GRADIENT			i = 0.20 ‰ L = 350 m				
	STRAIGHT/CURVE	41			1			2
	GROUND HEIGHT	17.76			17.67			17.75
	FORMATION LEVEL	18.670	18.675	18.680	18.685	18.690	18.695	18.700
	DIFFER. HEIGHT(mm)	274	283	294	282	286	242	246

	KILOMETERAGE	41+250	41+300
EXISTING TRACK	UP RAIL ELEVATION	19.197	19.234
	DOWN RAIL ELEVATION	19.145	19.184
	GRADIENT		19.259
	STRAIGHT/CURVE		3
	RAIL ELEVATION	19.394	19.409
NEW TRACK	GRADIENT		
	STRAIGHT/CURVE		3
	GROUND HEIGHT		17.80
	FORMATION LEVEL	18.715	18.725
	DIFFER. HEIGHT(mm)	223	202

	KILOMETERAGE	41+000	41+050	41+100	41+150	41+200	41+250	41+300
	DIFFER. HEIGHT(mm)	274	283	294	282	286	242	246

	KILOMETERAGE	41+250	41+300
	DIFFER. HEIGHT(mm)	223	202

PROFILE
KM 40+700 - KM 41+300

LEGEND :

- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KM/ LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY/Km POST
- PT. KM/Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- J.C. GATE
- SURVEY Km (PT. KM/Km)

The Railway Electrification and Double double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Merdeka Barat No.8 Gedung Karya Lt.11 Telp.021 - 3505525 - 3505557
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

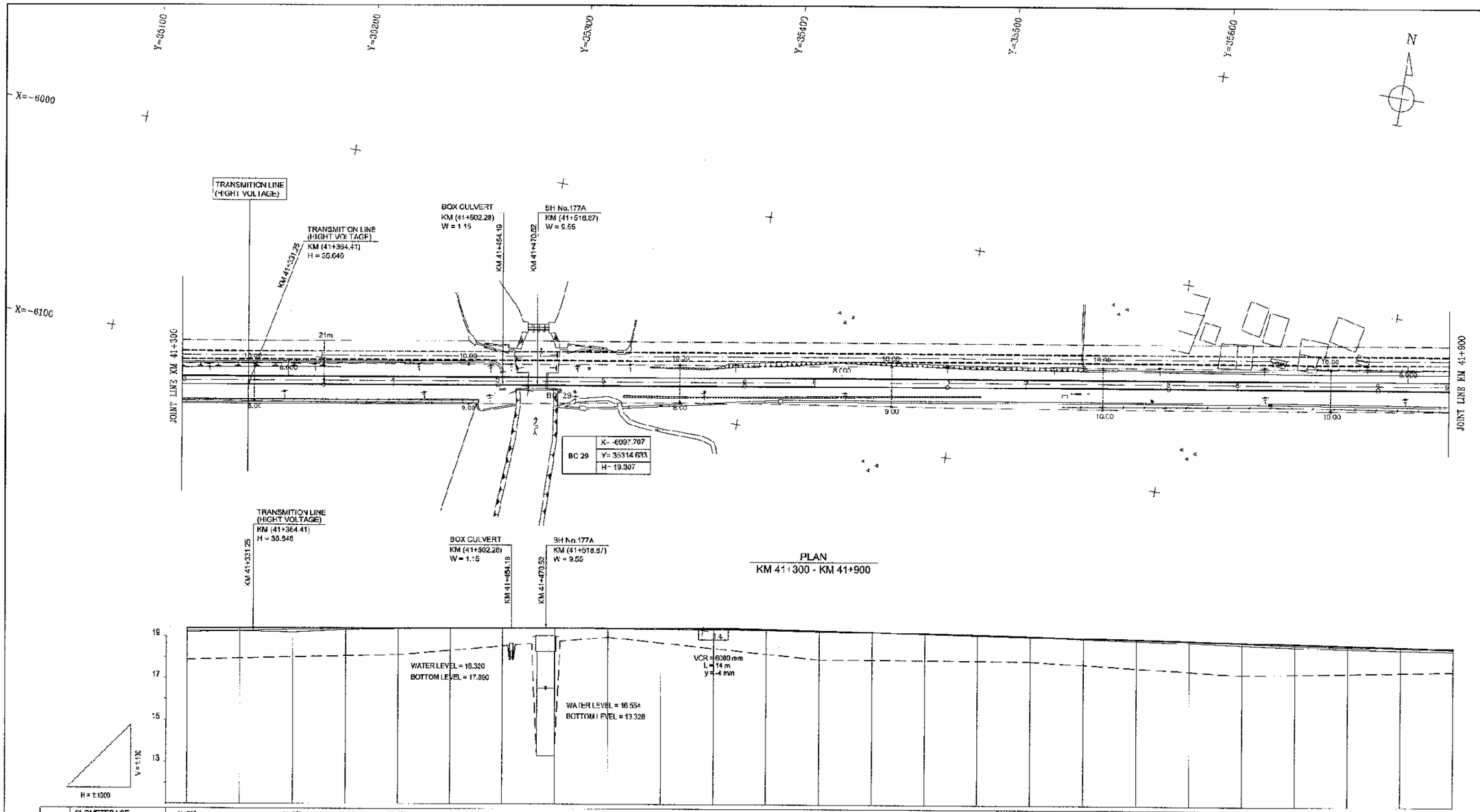
GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 40+700 - 41+300

Scale:	Drawing No.
H 1 : 1000 V 1 : 100	GE - 01 - 027



PLAN
KM 41+300 - KM 41+900

	KILOMETERAGE	41+300	41+350	41+400	41+450	41+500	41+550	41+600	41+650	41+700	41+750	41+800	41+850	41+900
EXISTING TRACK	UP RAIL ELEVATION	19.259	19.267	19.325	19.372	19.382	19.394	19.416	19.442	19.442	19.429	19.397	19.353	19.328
	DOWN RAIL ELEVATION	19.211	19.268	19.207	19.331	19.374	19.389	19.410	19.421	19.402	19.381	19.379	19.359	19.330
	GRADIENT	19.259	i = 1.31 ‰ L = 100 m			19.390	i = 0.80 ‰ L = 100 m			19.470	i = -1.40 ‰ L = 160 m			19.330
	STRAIGHT/CURVE	3		4			5			6				
NEW TRACK	RAIL ELEVATION	19.409	19.414	19.419	19.424	19.429	19.434	19.439	19.444	19.449	19.454	19.455	19.398	19.338
	GRADIENT					i = 0.20 ‰ L = 850 m						19.455		
	STRAIGHT/CURVE	3		4			5			6				
	GROUND HEIGHT	17.90				18.14				19.01				17.56
	FORMATION LEVEL	18.730	18.736	18.740	18.745	18.750	18.755	18.760	18.765	18.770	18.775	18.780	18.720	18.660
	DIFFER. HEIGHT (mm)	150	147	94	52	47	40	20	2	7	25	58	36	11

	KILOMETERAGE	41+900	41+950	42+000	42+050	42+100	42+150	42+200	42+250	42+300	42+350	42+400	42+450	42+500
EXISTING TRACK	UP RAIL ELEVATION	19.259	19.267	19.325	19.372	19.382	19.394	19.416	19.442	19.442	19.429	19.397	19.353	19.328
	DOWN RAIL ELEVATION	19.211	19.268	19.207	19.331	19.374	19.389	19.410	19.421	19.402	19.381	19.379	19.359	19.330
	GRADIENT	19.259	i = 1.31 ‰ L = 100 m			19.390	i = 0.80 ‰ L = 100 m			19.470	i = -1.40 ‰ L = 160 m			19.330
	STRAIGHT/CURVE	3		4			5			6				
NEW TRACK	RAIL ELEVATION	19.409	19.414	19.419	19.424	19.429	19.434	19.439	19.444	19.449	19.454	19.455	19.398	19.338
	GRADIENT					i = 0.20 ‰ L = 850 m						19.455		
	STRAIGHT/CURVE	3		4			5			6				
	GROUND HEIGHT	17.90				18.14				19.01				17.56
	FORMATION LEVEL	18.730	18.736	18.740	18.745	18.750	18.755	18.760	18.765	18.770	18.775	18.780	18.720	18.660
	DIFFER. HEIGHT (mm)	150	147	94	52	47	40	20	2	7	25	58	36	11

PROFILE
KM 41+300 - KM 41+900

LEGEND
- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KA LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KA Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC. GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 tlp.021 - 3508526 - 3505557
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 41+300 - 41+900

Scale:	Drawing No...
H 1 : 1000 V 1 : 100	GE - 01 - 028

IP-Ckr 1	
X	- 6005.586
Y	35887.111
R	5002 M
I A	0° 19' 22"
θ	
TL	14 M 084
CL	28 M 167
TCL	-
F	-

IP. m31	
X	- 6003.611
Y	35886.797
R	5000 M
I A	0° 19' 22"
θ	-
TL	14 M 079
CL	28 M 157
TCL	-
F	-

IP-Ckr 2	
X	- 6001.636
Y	35886.482
R	4998 M
I A	0° 19' 22"
θ	-
TL	14 M 073
CL	28 M 146
TCL	-
F	-

P-Ckr 1	
X	- 5946.654
Y	36212.163

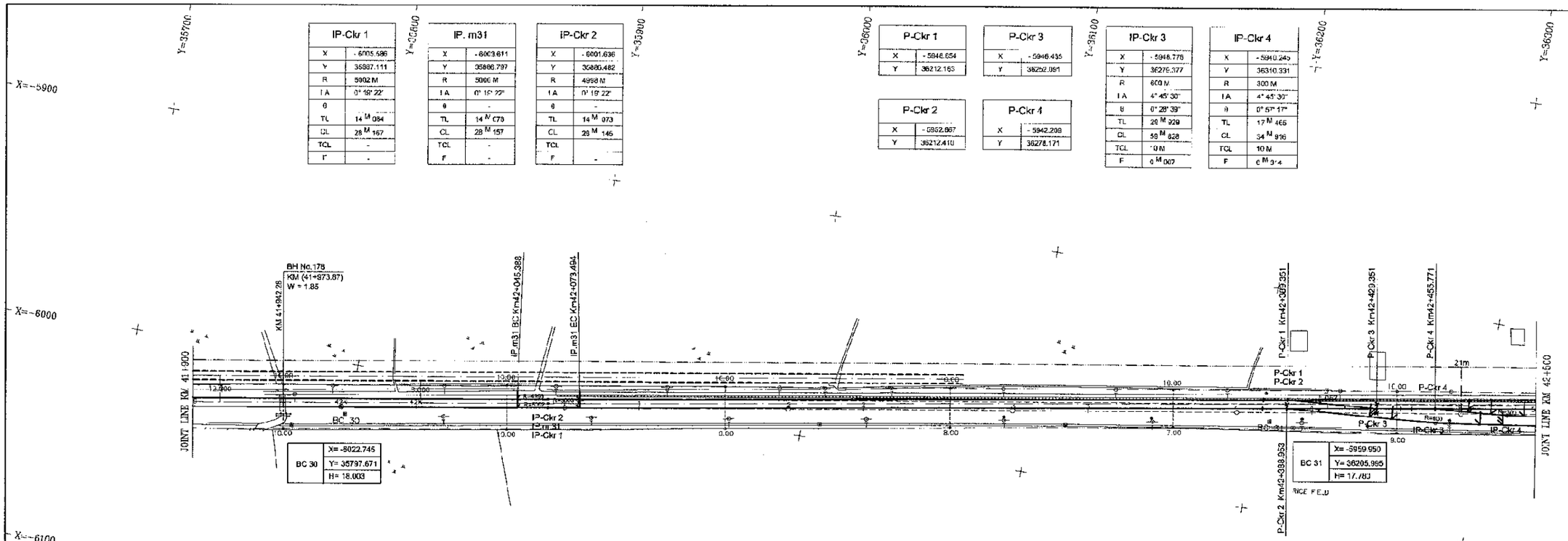
P-Ckr 3	
X	- 5946.435
Y	36262.091

P-Ckr 2	
X	- 5962.667
Y	36212.410

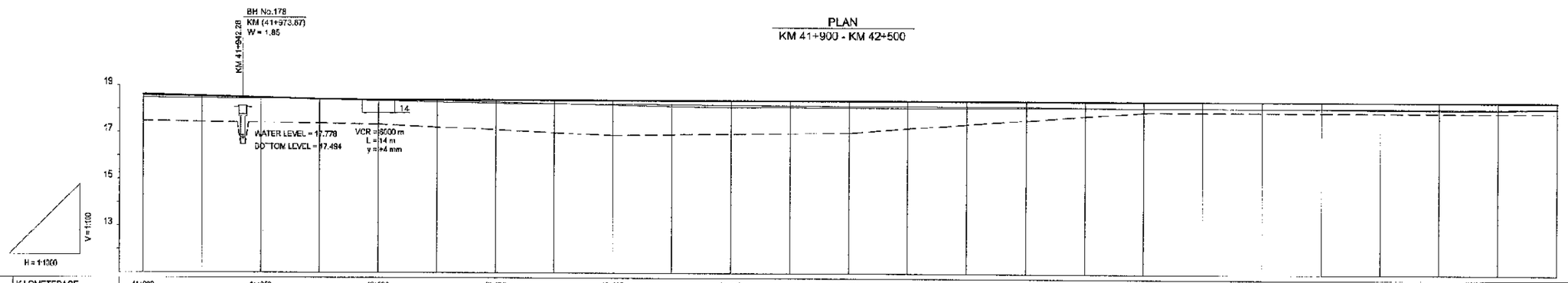
P-Ckr 4	
X	- 5942.208
Y	36278.171

IP-Ckr 3	
X	- 5946.776
Y	36276.377
R	600 M
I A	4° 45' 30"
θ	0° 28' 39"
TL	29 M 929
CL	59 M 828
TCL	10 M
F	0 M 007

IP-Ckr 4	
X	- 5940.245
Y	36310.331
R	300 M
I A	4° 45' 30"
θ	0° 57' 17"
TL	17 M 465
CL	34 M 916
TCL	10 M
F	0 M 014



PLAN
KM 41+900 - KM 42+500



KILOMETERAGE	41+900	41+950	42+000	42+050	42+100	42+150	42+200	42+250	42+300	42+350	42+400	42+450	42+500
EXISTING TRACK – UP RAIL ELEVATION	18.505	18.533	18.487	18.454	18.403	18.361	18.314	18.247	18.230	18.214	18.187	18.175	18.154
EXISTING TRACK – DOWN RAIL ELEVATION	18.489	18.479	18.454	18.388	18.361	18.302	18.254	18.226	18.183	18.136	18.100	18.108	18.086
EXISTING TRACK – GRADIENT	18.600	i = -2.00 ‰ L = 100 m			18.400		i = -1.40 ‰ L = 150 m				18.190		i = -0.16 ‰ L = 250 m
EXISTING TRACK – STRAIGHT/CURVE	S		42	BTC		R = 2500		1	ETC			2	
				BCC			ECC						
NEW TRACK – RAIL ELEVATION	18.619	18.559	18.498	18.439	18.383	18.379	18.379	18.379	18.379	18.379	18.379	18.379	18.379
NEW TRACK – GRADIENT		i = -2.40 ‰ L = 450 m			18.379						LEVEL L = 1949 m		
NEW TRACK – STRAIGHT/CURVE	S		42	BTC TCL = 25		IA = 1° 29' 17.7" R = 2500		1 TCL = 25	ETC			2	
				BCC			ECC						
NEW TRACK – GROUND HEIGHT	17.50			17.35			16.80			17.03			17.54
NEW TRACK – FORMATION LEVEL	17.940	17.880	17.820	17.760	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700
NEW TRACK – DIFFER. HEIGHT(mm)	54	26	12	-15	-17	19	85	132	146	135	192	204	225

KILOMETERAGE	42+500	42+550	42+600	42+650	42+700	42+750	42+800	42+850	42+900	42+950	43+000
EXISTING TRACK – UP RAIL ELEVATION	18.122	18.136	18.116	18.078	18.089	18.107	18.078	18.113	18.097	18.109	18.113
EXISTING TRACK – DOWN RAIL ELEVATION	18.136	18.116	18.078	18.113	18.078	18.110	18.121	18.123	18.140	18.109	18.113
EXISTING TRACK – GRADIENT					18.150						
EXISTING TRACK – STRAIGHT/CURVE					4	BTC			3		
NEW TRACK – RAIL ELEVATION	18.379	18.379	18.379	18.379	18.379	18.379	18.379	18.379	18.379	18.379	18.379
NEW TRACK – GRADIENT											
NEW TRACK – STRAIGHT/CURVE					4	BTC TCL = 60			3		
NEW TRACK – GROUND HEIGHT	16.85				16.84				17.54		
NEW TRACK – FORMATION LEVEL	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700
NEW TRACK – DIFFER. HEIGHT(mm)	243	263	272	288	289	280	259	286	259	227	225

PROFILE
KM 41+900 - KM 42+500

LEGEND :
- EXISTING TRACK
- CONSOLATION EXISTING TRACK
- ST. MANGGARAI - St. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
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- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- I.C. GATE
- SURVEY KM (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 tlp.021-3506329 3505567
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 41+900 - 42+500

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 029

IP-Ckr 5	
X	- 5903.468
Y	36501.736
R	698 M
I A	30° 49' 43"
θ	3° 28' 50"
TL	235 M 131
CL	460 M 773
TCL	85 M
F	0 M 434

IP-Ckr 6	
X	- 5899.351
Y	36502.252
R	702 M
I A	30° 49' 43"
θ	3° 27' 43"
TL	236 M 233
CL	462 M 953
TCL	85 M
F	0 M 432

IP-Ckr 7	
X	- 5389.482
Y	36503.633
R	800 M
I A	31° 48' 51"
θ	2° 40' 58"
TL	265 M 358
CL	518 M 816
TCL	75 M
F	0 M 254

IP. m32	
X	- 5886.911
Y	36606.874
R	800 M
I A	31° 48' 51"
θ	-
TL	227 M 742
CL	449 M 745
TCL	-
F	-

IP-Ckr 8	
X	5884.360
Y	36610.115
R	800 M
I A	31° 48' 51"
θ	2° 40' 58"
TL	266 M 356
CL	518 M 816
TCL	75 M
F	0 M 294

BC 32	
X= -5939.435	
Y= 36664.816	
H= 17.634	

BC 33	
X= -5972.766	
Y= 36606.414	
H= 18.275	

BH No.180
KM (42+660.30)
W = 1.70
KM 42+633.34

BH No.182
KM (43+116.11)
W = 27.60
KM 43+056.70

IP-Ckr 8
IP.m 32
IP-Ckr 7
IP-Ckr 6

JAVA LINE KM 42+500

JAVA LINE KM 43+100

m32 EC Km43+009.032

PLAN
KM 42+500 - KM 43+100

BOTTOM LEVEL = 16.846

WATER LEVEL = 11.227

BOTTOM LEVEL = -0.616

H = 1:1000
V = 1:100

PROFILE
KM 42+500 - KM 43+100

KILOMETERAGE	42+500	42+550	42+600	42+650	42+700	42+750	42+800	42+850	42+900	42+950	43+000	43+050	43+100
EXISTING TRACK: UP RAIL ELEVATION	18.122	18.133	18.135	18.151	18.126	18.102	18.128	18.092	18.103	18.118	18.151	18.186	18.205
EXISTING TRACK: DOWN RAIL ELEVATION	18.136	18.164	18.170	18.136	18.224	18.220	18.251	18.234	18.279	18.307	18.350	18.385	18.346
EXISTING TRACK: GRADIENT			i = 0.01 % L = 350 m				18.365		i = 0.03 % L = 150 m		18.370		i = -0.04 % L = 250 m
EXISTING TRACK: STRAIGHT/CURVE	BCC						R = 1000						ECC
NEW TRACK: RAIL ELEVATION	18.379	18.379	18.379	18.379	18.379	18.379	18.379	18.379	18.379	18.379	18.379	18.379	18.379
NEW TRACK: GRADIENT							LEVEL L = 545 m						
NEW TRACK: STRAIGHT/CURVE	BCC						IA = 32° 57' 26.5" R = 1000						ECC TCL = 60 ETC
NEW TRACK: GROUND HEIGHT	16.65	16.65	17.12	18.21	18.24	18.20	18.17	17.87	17.75	17.82	17.83	18.11	18.17
NEW TRACK: FORMATION LEVEL	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700
NEW TRACK: DIFFER HEIGHT(mm)	243	215	209	213	175	159	128	126	100	72	20	14	33

18.336	18.338	18.352	18.359	18.348	18.329	18.343	18.344						
18.379	18.379	18.379	18.379	18.379	18.379	18.379	18.379						
26	33	50	36	35									

LEGEND :

- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- ST. AVANGGARA - ST. BEKASI (NEW MAIN TRACK / NEW COMMUTER TRACK)
- FUTURE TRACK
- GROUND HEIGHT
- P.T. KM LAND BOUNDARY
- LAND PREPARATION AREA
- TRAY OUT
- SURVEY Km POST
- PT. KM Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- L.C. GATE
- SURVEY Km (PT. KM Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Merdeka Timur No.5 Gedung Karya Lt.11 Telp.021-3508526-3505667
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE	10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 42+500 - 43+100

Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 030

ST. CIKARANG

P-Ckr 5	
X	- 6043.598
Y	36939.206

P-Ckr 7	
X	- 6056.954
Y	36976.141

P-Ckr 9	
X	- 6066.090
Y	37000.537

P-Ckr 11	
X	- 6063.151
Y	37020.253

P-Ckr 13	
X	- 6239.135
Y	37424.087

P-Ckr 6	
X	- 6047.201
Y	36937.670

P-Ckr 8	
X	- 6062.647
Y	36974.605

P-Ckr 10	
X	- 6054.003
Y	37024.852

P-Ckr 12	
X	- 6224.201
Y	37386.764

CKR 6	
X=	-6123.790
Y=	37192.070
H=	18.370

CKR 1	
X=	-6134.746
Y=	37187.678
H=	10.299

P-Ckr 14	
X	- 6214.819
Y	37409.461

P-Ckr 15	
X	- 6224.775
Y	37401.320

BH No.184
KM (43+553.13)
W = 0.70

ST. CIKARANG
Km 42+338.8
(Km 43+269)

JOINT LINE KM 43+100

JOINT LINE KM 43+700

Future Track

Tower

IP-Ckr 9	
X	- 6080.996
Y	36962.815
R	1500 M
I A	2° 09' 44"
θ	0° 42' 56"
TL	53 M 195
CL	100 M 381
TCL	40 M
F	0 M 042

IP-Ckr 10	
X	- 6037.844
Y	36960.051
R	1800 M
I A	1° 58' 56"
θ	0° 38' 12"
TL	51 M 141
CL	102 M 274
TCL	40 M
F	0 M 037

IP-Ckr 11	
X	- 6073.996
Y	37065.456
R	300 M
I A	5° 42' 38"
θ	0° 57' 17"
TL	19 M 064
CL	39 M 901
TCL	10 M
F	0 M 014

IP-Ckr 15-1	
X	- 6082.126
Y	37043.516
R	300 M
I A	6° 00' 10"
θ	0° 57' 17"
TL	23 M 731
CL	41 M 432
TCL	10 M
F	0 M 014

IP-Ckr 15-2	
X	- 6097.930
Y	37045.837
R	602 M
I A	3° 42' 52"
θ	0° 57' 06"
TL	26 M 523
CL	58 M 301
TCL	20 M
F	0 M 028

IP-Ckr 12	
X	- 6079.760
Y	37063.050
R	300 M
I A	5° 42' 38"
θ	0° 57' 17"
TL	19 M 964
CL	39 M 902
TCL	10 M
F	0 M 014

IP-Ckr 13	
X	- 6086.464
Y	37111.961
R	1800 M
I A	2° 09' 44"
θ	0° 38' 12"
TL	53 M 970
CL	107 M 030
TCL	40 M
F	0 M 037

IP-Ckr 14	
X	- 6103.731
Y	37104.582
R	1300 M
I A	1° 50' 56"
θ	0° 38' 12"
TL	51 M 139
CL	102 M 272
TCL	40 M
F	0 M 037

IP-Ckr 15-3	
X	- 6091.574
Y	37044.182
R	595 M
I A	3° 42' 53"
θ	0° 57' 29"
TL	29 M 334
CL	58 M 775
TCL	20 M
F	0 M 028

IP-Ckr 15-4	
X	- 6117.603
Y	37126.259
R	5000 M
I A	0° 17' 32"
θ	-
TL	12 M 760
CL	25 M 509
TCL	-
F	-

IP-Ckr 15-5	
X	- 6133.734
Y	37138.556
R	598 M
I A	3° 42' 52"
θ	0° 57' 29"
TL	29 M 392
CL	58 M 772
TCL	20 M
F	0 M 028

IP-Ckr 15-6	
X	- 6137.378
Y	37139.901
R	602 M
I A	3° 42' 53"
θ	0° 57' 06"
TL	29 M 624
CL	59 M 032
TCL	20 M
F	0 M 028

EXISTING PLATFORM

IP-Ckr 16	
X	- 6095.774
Y	37122.633
R	1000 M
I A	2° 09' 44"
θ	0° 17' 11"
TL	23 M 570
CL	47 M 139
TCL	10 M
F	0 M 004

IP-Ckr 17	
X	- 6105.614
Y	37119.638
R	1000 M
I A	1° 51' 31"
θ	0° 17' 11"
TL	21 M 221
CL	42 M 440
TCL	10 M
F	0 M 004

IP-Ckr 18	
X	- 6106.060
Y	37313.934
R	2500 M
I A	0° 46' 04"
θ	-
TL	16 M 751
CL	33 M 592
TCL	-
F	-

IP-Ckr 19	
X	- 6196.324
Y	37286.697
R	598 M
I A	6° 28' 42"
θ	0° 57' 29"
TL	43 M 846
CL	87 M 612
TCL	20 M
F	0 M 028

IP-Ckr 20	
X	- 6199.104
Y	37285.370
R	602 M
I A	6° 28' 42"
θ	0° 57' 06"
TL	42 M 073
CL	88 M 070
TCL	20 M
F	0 M 028

IP-Ckr 21	
X	- 6179.840
Y	37311.664
R	1000 M
I A	2° 48' 36"
θ	0° 17' 11"
TL	29 M 527
CL	59 M 044
TCL	10 M
F	0 M 004

IP-Ckr 22	
X	- 6182.052
Y	37303.464
R	1000 M
I A	2° 28' 41"
θ	0° 17' 11"
TL	26 M 628
CL	58 M 248
TCL	10 M
F	0 M 004

IP-Ckr 23	
X	- 6174.099
Y	37322.648
R	1800 M
I A	2° 48' 36"
θ	0° 38' 12"
TL	84 M 150
CL	123 M 282
TCL	40 M
F	0 M 037

IP.m33	
X	- 6192.686
Y	37342.351
R	2500 M
I A	3° 33' 55"
θ	-
TL	12 M 335
CL	24 M 669
TCL	-
F	-

IP-Ckr 24	
X	- 6191.366
Y	37315.406
R	1800 M
I A	1° 57' 59"
θ	0° 57' 17"
TL	53 M 891
CL	101 M 775
TCL	40 M
F	0 M 037

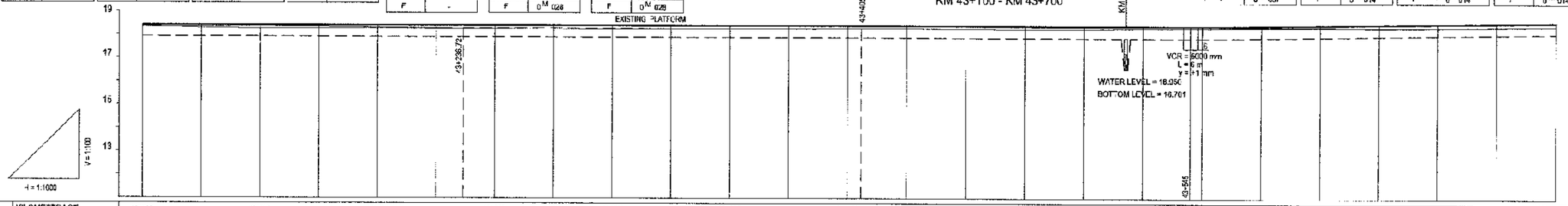
IP-Ckr 25	
X	6199.633
Y	37365.676
R	300 M
I A	5° 42' 38"
θ	0° 57' 17"
TL	19 M 964
CL	39 M 902
TCL	10 M
F	0 M 014

IP-Ckr 26	
X	- 6204.728
Y	37363.783
R	300 M
I A	6° 05' 53"
θ	0° 57' 17"
TL	20 M 955
CL	41 M 938
TCL	10 M
F	0 M 014

IP-Ckr 27	
X	- 6231.639
Y	37455.337
R	300 M
I A	4° 56' 34"
θ	0° 57' 17"
TL	17 M 949
CL	35 M 882
TCL	10 M
F	0 M 014

BH No.184
KM (43+553.13)
W = 3.70

PLAN
KM 43+100 - KM 43+700



	KILOMETERAGE	43+100	43+150	43+200	43+250	43+300	43+350	43+400	43+450	43+500	43+550	43+600	43+650	43+700
EXISTING TRACK	UP RAIL ELEVATION	18.321	18.326	18.350	18.335	18.309	18.283	18.267	18.242	18.233	18.224	18.229	18.236	18.236
	DOWN RAIL ELEVATION	18.344	18.281	18.247	18.294	18.234	18.256	18.252	18.236	18.246	18.246	18.254	18.270	18.281
	GRADIENT	i = -0.04 ‰ L = 250 m	18.360	i = -0.73 ‰ L = 150 m		18.250	i = 0.60 ‰ L = 200 m		18.370	i = 0.15 ‰ L = 200 m		18.400		
	STRAIGHT/CURVE	1		2		3		4		5		6		7
NEW TRACK	RAIL ELEVATION	18.379	18.379	18.379	18.375	18.375	18.378	18.378	18.379	18.379	18.378	18.379	18.379	18.379
	GRADIENT	LEVEL L = 1545 m										18.379	i = -.20 ‰ L = 255 m	
	STRAIGHT/CURVE	1		2		3		4		5		BC θ EC IA = 0° 42' 10.7" R = 1000		7
	GROUND HEIGHT	18.17	18.15	18.34	18.32	18.38	18.37	18.30	17.60	18.03	17.91	18.09	17.97	18.39
	FORMATION LEVEL	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700
	DIFFER. HEIGHT(mm)	35	53	29	44	70	86	127	140	103	133	125	101	38

18.321	18.326	18.350	18.335	18.309	18.283	18.267	18.242	18.233	18.224	18.229	18.236	18.236	18.245	18.262
18.344	18.281	18.247	18.294	18.234	18.256	18.252	18.236	18.246	18.246	18.254	18.270	18.281	18.294	18.308
18.379	18.379	18.379	18.375	18.375	18.378	18.378	18.379	18.379	18.378	18.379	18.379	18.379	18.370	18.379
18.17	18.15	18.34	18.32	18.38	18.37	18.30	17.60	18.03	17.91	18.09	17.97	18.39	18.17	18.15
17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700	17.700
35	53	29	44	70	86	127	140	103	133	125	101	38	35	71

18.123	18.361	18.352	18.341	18.336	18.345	18.324	18.344	18.360	18.393					
18.379	18.379	18.379	18.379	18.385	18.416	18.445	18.476	18.506	18.535	18.565				
18.03	17.91	17.96	18.09	17.97	18.39									
17.700	17.700	17.700	17.700	17.700	17.700	17.736	17.766	17.796	17.826	17.856				
58	18	27	44	77	99	151	161	165	172					

PROFILE
KM 43+100 - KM 43+700

LEGEND :
- EXISTING TRACK
- DEMOLITION EXISTING TRACK
- ST. MANGGARAI - SI. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- TAMEH PREPARATION AREA
- TURNOUT
- SURVEY Km POST
- PT. KAI Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE
- SURVEY Km (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERKERETAPIAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Medan Merdeka Barat no.8 Gedung Karya lt.11 Tlp.021-3506526-3505557
JAKARTA

Note:
This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

DATE: 10 / MARCH / 2003

Drawing Title :

GENERAL PLAN
Km 43+100 - 43+700

Scale:
H 1 : 1000
V 1 : 100

Drawing No.:
GE - 01 - 031

IP-Ckr 28	
X	- 6247.795
Y	37465.522
R	1800 M
IA	1° 57' 58"
θ	0° 33' 25"
TL	49 M 397
CL	98 M 787
TCL	35 M
F	0 M 023

P-Ckr 16	
X	- 6273.386
Y	37527.076

P-Ckr 17	
X	- 6254.816
Y	37578.622

P-Ckr 18	
X	- 6306.451
Y	37617.104

IP.m34	
X	- 6256.398
Y	37491.424
R	2500 M
- A	0° 33' 56"
θ	-
TL	12 M 338
CL	24 M 675
TCL	-
F	-

IP-Ckr 29	
X	- 6264.551
Y	37492.192
R	1800 M
IA	2° 49' 22"
θ	0° 57' 17"
TL	74 M 358
CL	148 M 685
TCL	60 M
F	0 M 993

IP-Ckr 30	
X	- 6344.428
Y	37697.951
R	1398 M
IA	3° 18' 25"
θ	1° 13' 45"
TL	70 M 367
CL	140 M 707
TCL	60 M
F	0 M 107

IP.m35	
X	- 6342.693
Y	37698.772
R	1400 M
IA	3° 18' 27"
θ	1° 13' 39"
TL	73 M 430
CL	140 M 392
TCL	60 M
F	0 M 107

IP-Ckr 31	
X	- 6340.779
Y	37699.593
R	1402 M
IA	3° 17' 17"
θ	1° 13' 33"
TL	70 M 240
CL	140 M 468
TCL	60 M
F	0 M 107

BC 34	
X=	-6267.698
Y=	37506.366
H=	18.115

BC 35	
X=	-6306.925
Y=	37698.335
H=	17.364

PLAN
KM 43+700 - KM 44+300

PROFILE
KM 43+700 - KM 44+300

	KILOMETERAGE	43+700	43+750	43+800	43+850	43+900	43+950	44+000	44+050	44+100	44+150	44+200	44+250	44+300
EXISTING TRACK	UP RAIL ELEVATION	18.393	18.445	18.633	18.586	18.624	18.552	18.446	18.398	18.362	18.297	18.243	18.237	18.152	18.057	17.995	17.929	17.851	17.771	17.708	17.663	17.622	17.586	17.563	17.474	17.483
	DOWN RAIL ELEVATION	18.393	18.439	18.472	18.517	18.638	18.574	18.502	18.417	18.344	18.252	18.176	18.111	18.051	17.984	17.925	17.872	17.815	17.759	17.701	17.655	17.636	17.580	17.550	17.521	17.504
	GRADIENT	18.400	i = 2.40 ‰ L = 100 m			18.640			i = -1.93 ‰ L = 150 m			18.350														
	STRAIGHT/CURVE	7				8				9				44												
NEW TRACK	RAIL ELEVATION	18.565	18.595	18.625	18.655	18.676	18.618	18.550	18.483	18.415	18.348	18.280	18.213	18.145												
	GRADIENT		i = 1.20 ‰ L = 255 m			18.685			i = -2.20 ‰ L = 150 m																	
	STRAIGHT/CURVE	7	IA = 0° 42' 18.6" R = 1000 BC EC			8				9		BC		EC 44 IA = 2° 40' 07.7" R = 1000												
	GROUND HEIGHT	18.38		18.11		18.68			17.95	17.95																
	FORMATION LEVEL	17.886	17.916	17.946	17.976	17.996	17.939	17.871	17.804	17.736	17.869	17.601	17.534	17.466												
	DIFFER. HEIGHT(mm)	172	149	92	06	37	44	46	66	63	51	34	24	37												

LEGEND
- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- SL. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KA' LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KA' Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- WAL FENCE
- STEEL FENCE
- BALLAST PROTFCT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- LC GATE (PT. KAI Km)

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Merdeka Barat no 8 Gedung Karya lt.11 tlp.021-3506526 3505557
JAKARTA

Note:
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Designed by:
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JICA Study Team:
Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

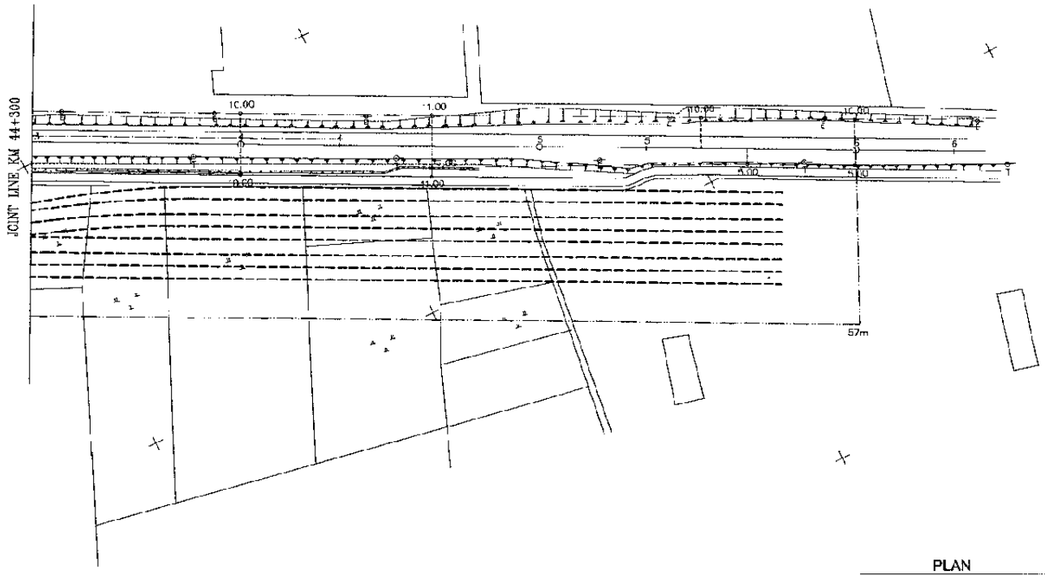
GENERAL PLAN

DATE: 10 / MARCH / 2003

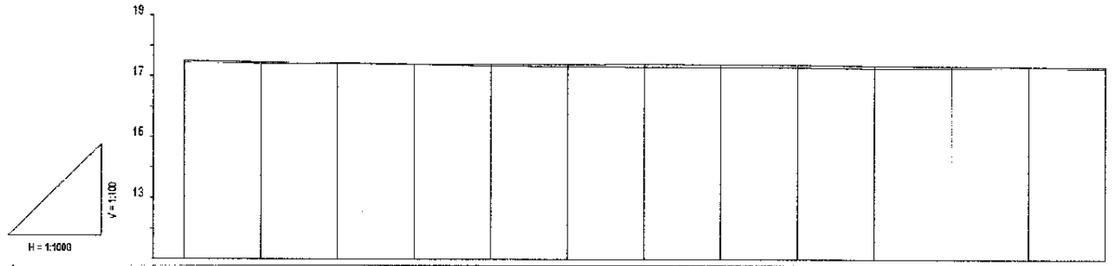
Drawing Title :
GENERAL PLAN
Km 43+700 - 44+300

Scale:
H 1 : 1000
V 1 : 100

Drawing No.:
GE - 01 - 032



PLAN
KM 44+300 - KM 44+600



		44+300		44+350		44+400		44+450		44+500		44+550		44+600
EXISTING TRACK	KILOMETERAGE													
	UP RAIL ELEVATION	17.413	17.403	17.396	17.385	17.383	17.389	17.391	17.389	17.373	17.364	17.345	17.321	17.311
	DOWN RAIL ELEVATION	17.364	17.405	17.430	17.381	17.397	17.329	17.307	17.303	17.305	17.275	17.274	17.284	17.259
	GRADIENT													
	STRAIGHT/CURVE													
NEW TRACK	RAIL ELEVATION													
	GRADIENT													
	STRAIGHT/CURVE													
	GROUND HEIGHT													
	FORMATION LEVEL													
	DIFFER HEIGHT(mm)													

PROFILE
KM 44+300 - KM 44+600

LEGEND :
- EXISTING TRACK
- DEMOLATION EXISTING TRACK
- GT. MANGGARAI - ST. BEKASI NEW MAIN TRACK / NEW COMMUTER TRACK
- FUTURE TRACK
- GROUND HEIGHT
- PT. KAI LAND BOUNDARY
- LAND PREPARATION AREA
- TURN OUT
- SURVEY Km POST
- PT. KA Km POST
- BENCH MARK
- ELECTRIC SIGNAL
- ELECTRIC SIGNAL (SHUNT)
- ELECTRIC POLE
- LAMP POLE
- TELECOMMUNICATION POLE
- BUILDING
- BELL
- CABLE MARKER
- PLATFORM
- POINT MACHINE
- RIVER
- DRAINAGE
- BRIDGE
- CONCRETE FENCE
- RAIL FENCE
- STEEL FENCE
- BALLAST PROTECT
- SLOPE
- ROCK SLOPE
- CONCRETE SLOPE
- L.C. GATE
- SURVEY Km [PT. KAI Km]

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Merdeka Barat no.8 Gedung Karya lt.11 Ph.(62)-(21)-3505557
JAKARTA

Note:
This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:
Japan International Cooperation Agency (JICA)

JICA Study Team:
Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

GENERAL

GENERAL PLAN

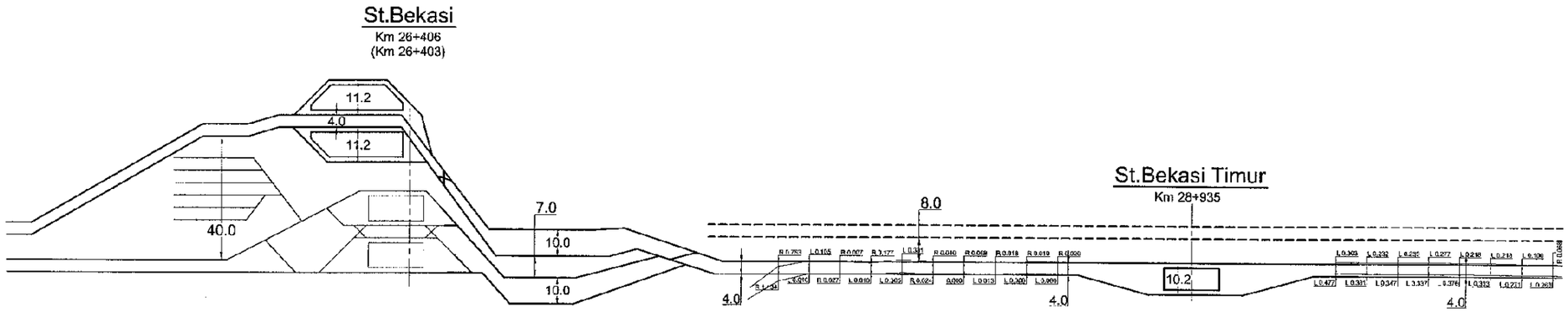
DATE	10 / MARCH / 2003

Drawing Title :
GENERAL PLAN
Km 44+300 - 44+600

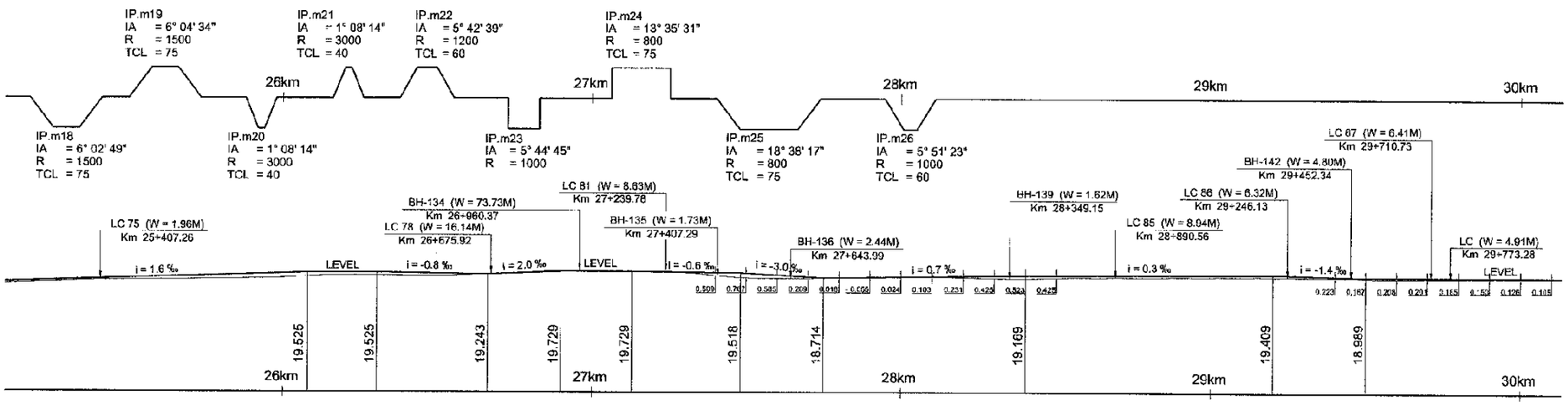
Scale:	Drawing No.:
H 1 : 1000 V 1 : 100	GE - 01 - 033

Track Layout Between St. Bekasi and St. Cikarang (1)

Track Layout

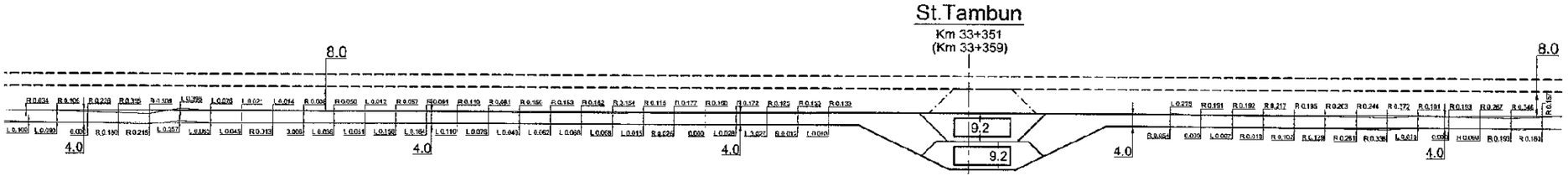


Horizontal/ Alignment

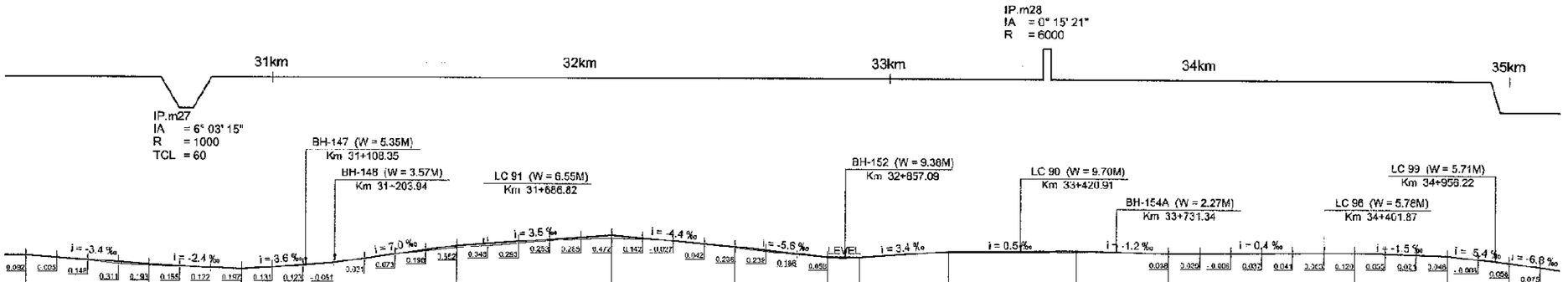


Vertical/ Alignment

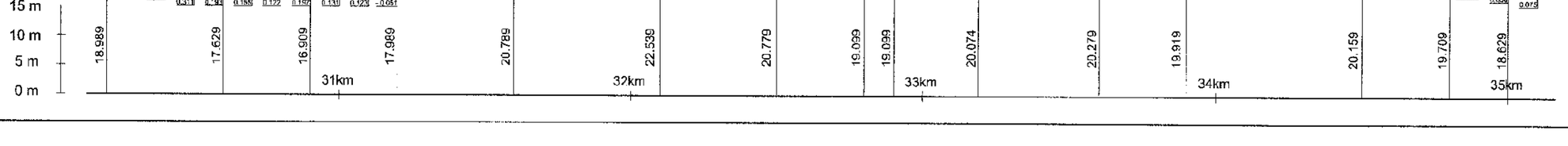
Track Layout



Horizontal/ Alignment



Vertical/ Alignment



Legend :

- : New Line
- : Existing Line (Track Improvement)
- : New Main Line (Future Project)
- : Temporary Track
- : Track Shifting
- : Track Raising

The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
DIREKTORAT JENDERAL PERHUBUNGAN DARAT
DIRECTORATE GENERAL OF LAND COMMUNICATION
Jalan Merdeka Barat no.8 Gedung Karya lt.1 Jp.021-3505328-3505557
JAKARTA

Note:

This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:

Japan International Cooperation Agency (JICA)

JICA Study Team:

Joint Venture of
Pacific Consultants International and
Japan Railway Technical Service

RAILWAY ALIGNMENT

TRACK LAYOUT

DATE	10 / MARCH / 2003

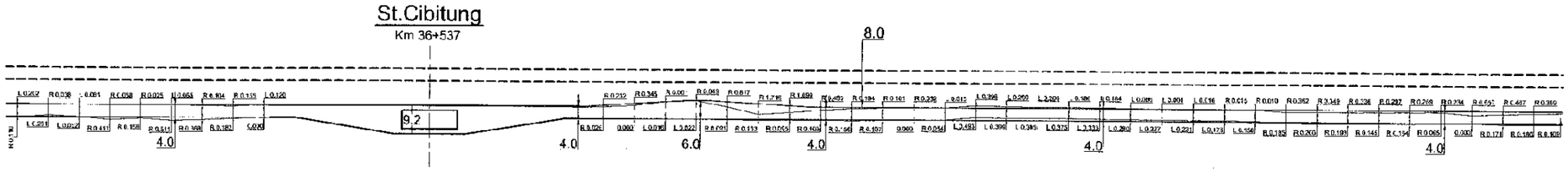
Drawing Title :

Track Layout Between St. Bekasi and St. Cikarang (1)

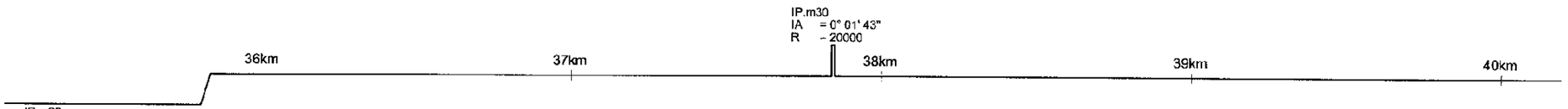
Scale:	Drawing No.:
H=1:1000 V=1:100	RA - 01 - 001

Track Layout Between St. Bekasi and St. Cikarang (2)

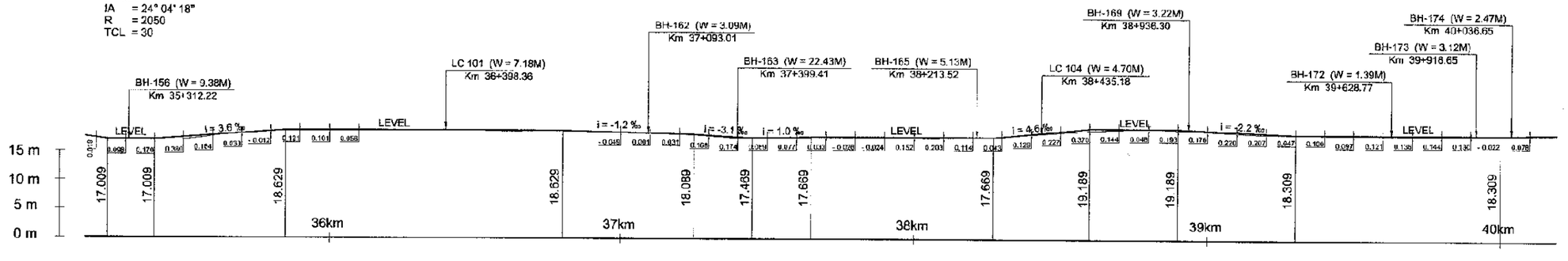
Track Layout



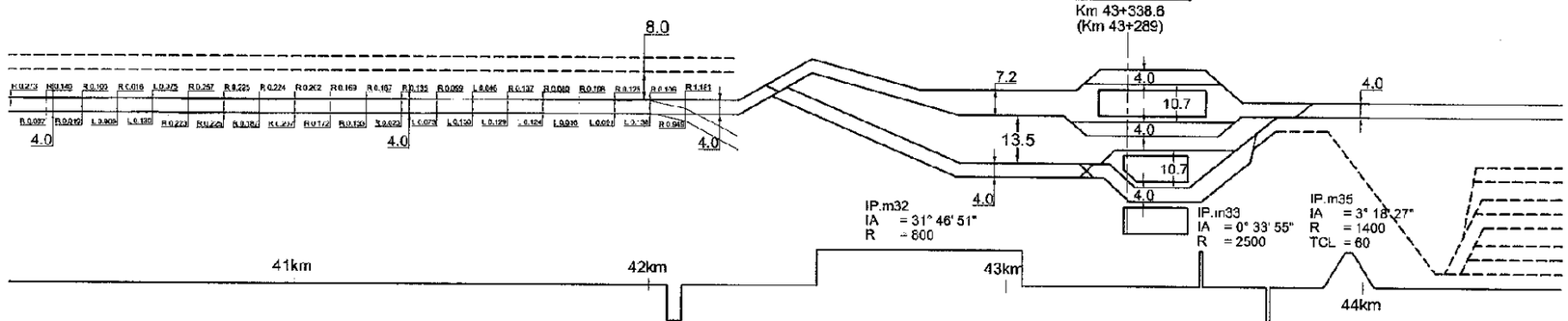
Horizontal/ Alignment



Vertical/ Alignment

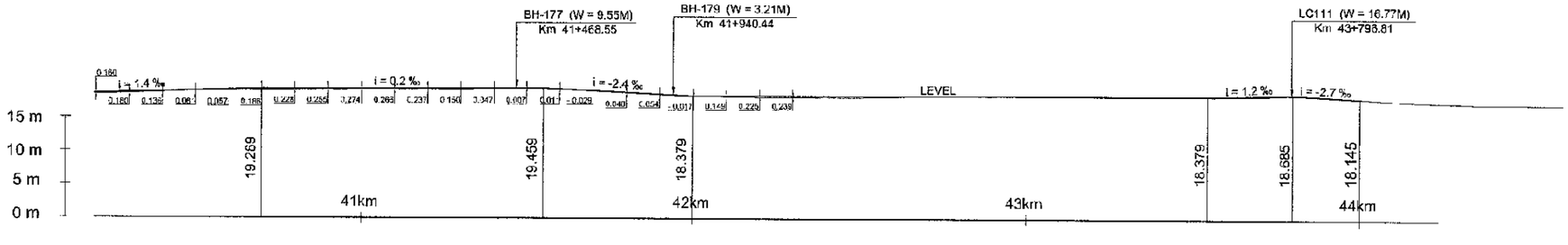


Track Layout



Horizontal/ Alignment

Vertical/ Alignment



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The Railway Electrification and Double - double Tracking of Java Main Line Project

DEPARTEMEN PERHUBUNGAN
MINISTRY OF COMMUNICATION
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JAKARTA

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Japan Railway Technical Service

RAILWAY ALIGNMENT

TRACK LAYOUT

DATE	10 / MARCH / 2003

Drawing Title :

Track Layout Between St. Bekasi and St. Cikarang (2)

Scale:	Drawing No.:
H=1:1000 V=1:100	RA - 01 - 002