



JAPAN INTERNATIONAL
COOPERATION AGENCY



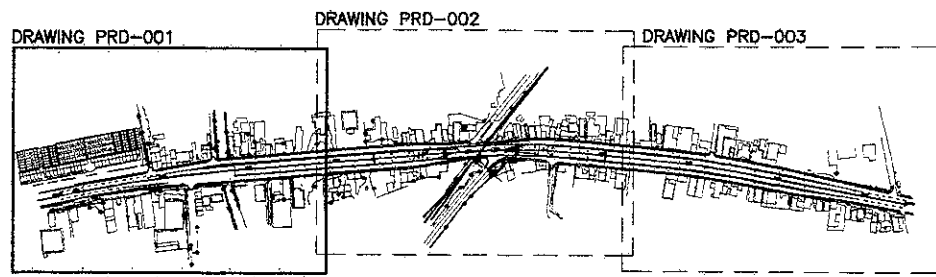
DIRECTORATE GENERAL OF HIGHWAY
MINISTRY OF PUBLIC WORKS
REPUBLIC OF INDONESIA

ROADS

KEI KATAHIRA & ENGINEERS INTERNATIONAL

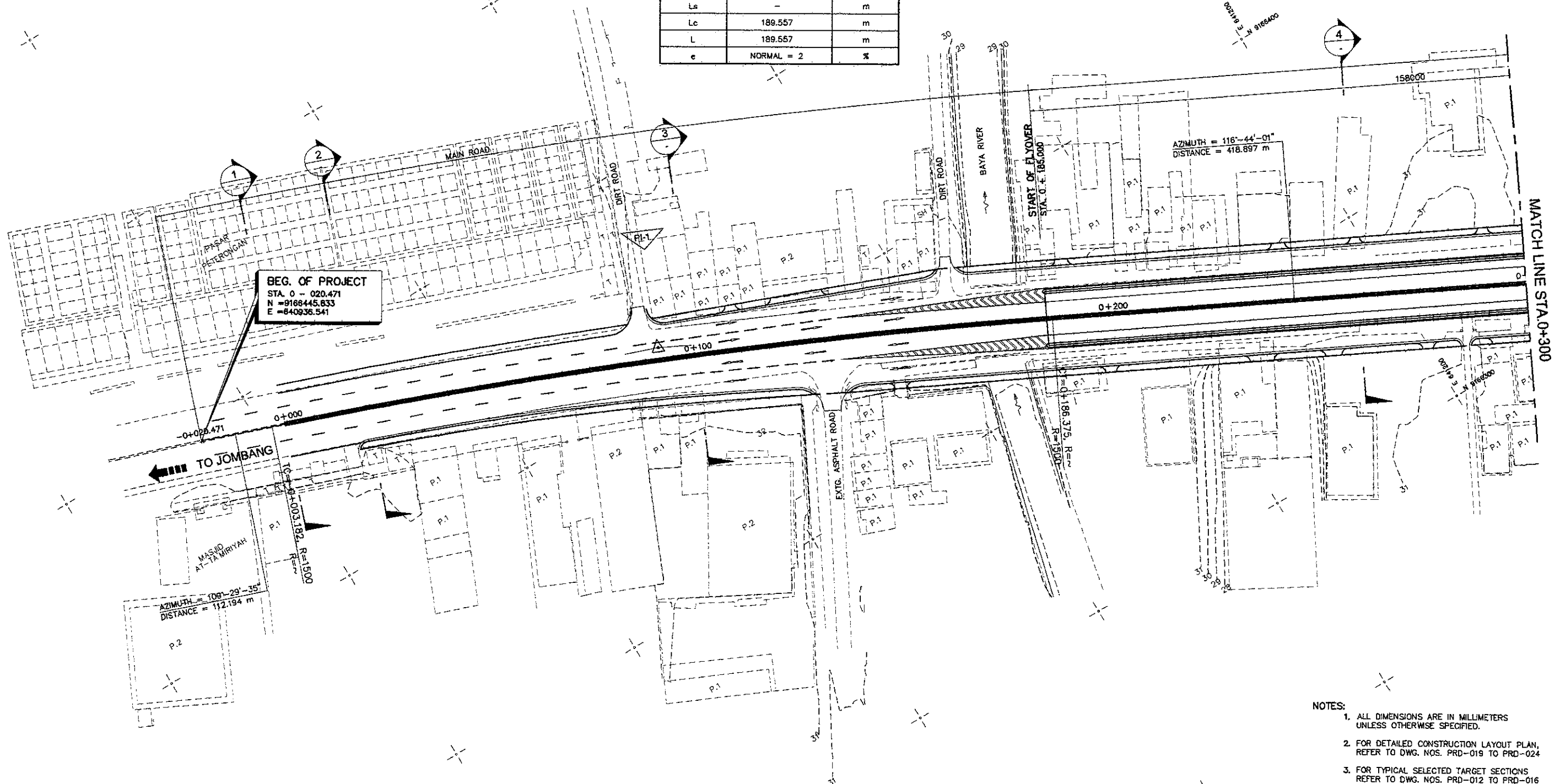
DESIGNED BY	CHECKED BY	SUBMITTED BY
Name: R. UENO	Name: T. OKUMURA	Name: M. KIUCHI
Sign: _____	Sign: _____	Sign: _____
Date: _____	Date: _____	Date: _____

APPROVED BY	NAME	DATE
Ir. HERRY VAZA M.Eng.Sc		
NIP. : 110038400		

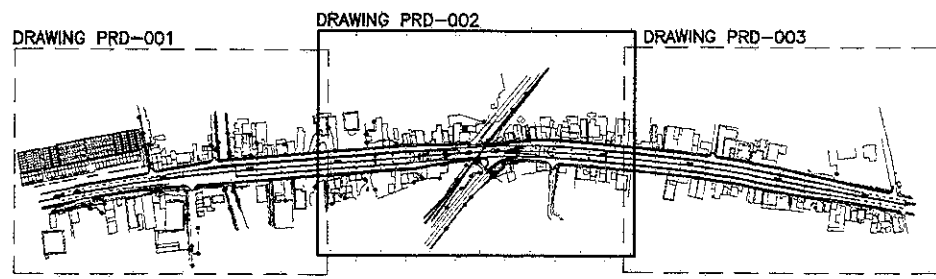


KEY PLAN

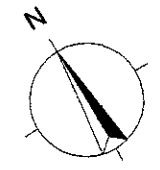
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PI STA.	STA. 0 + 091.723	
N	9166408.554	m
E	641041.861	m
V	40	km/h
Δ	7-14-26	"
Θ_{as}	-	"
R	1500	m
A	-	m
Ts	-	m
Es	2.999	m
Tc	94.905	m
Ls	-	m
Lc	189.557	m
L	189.557	m
e	NORMAL = 2	%



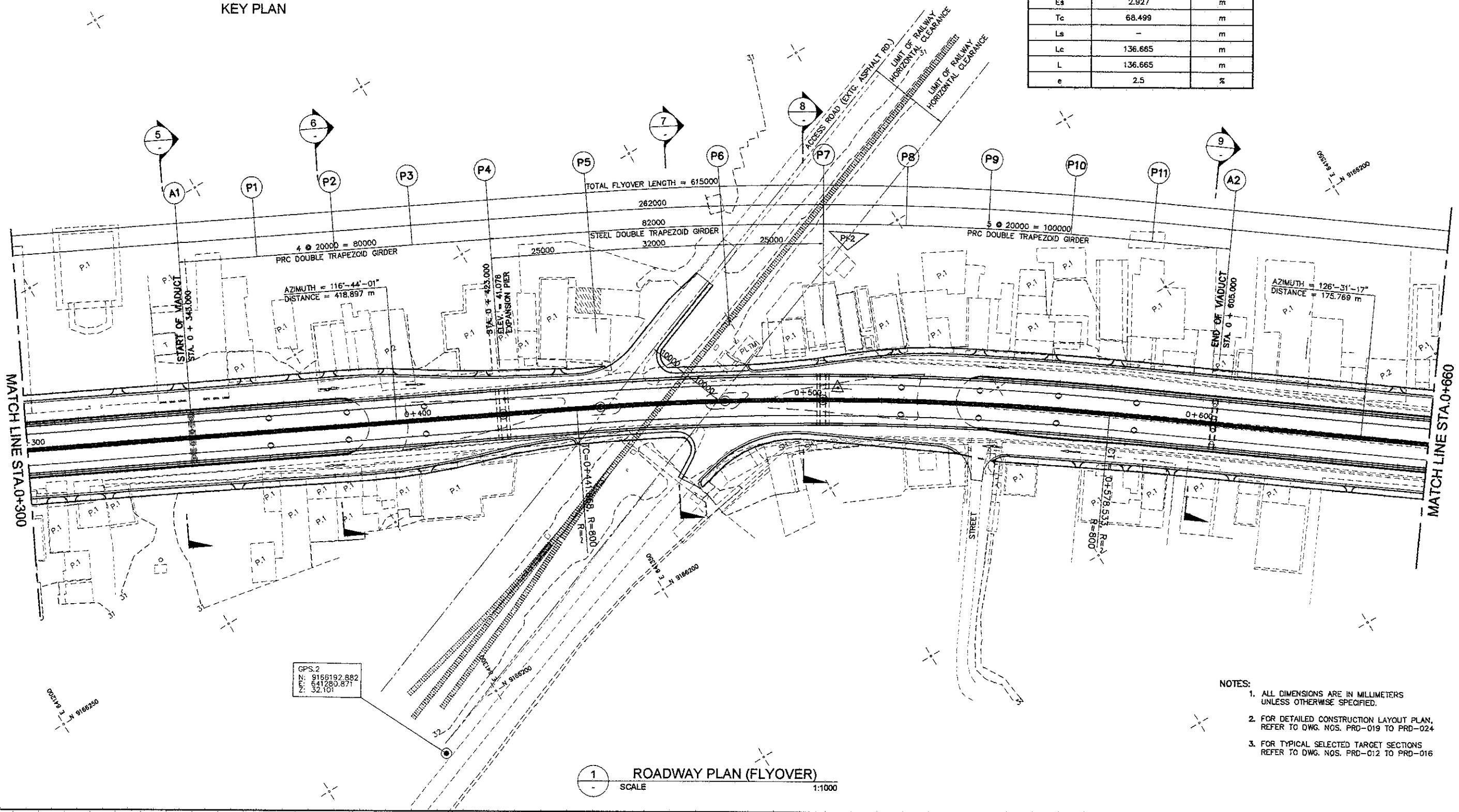
- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 2. FOR DETAILED CONSTRUCTION LAYOUT PLAN, REFER TO DWG. NOS. PRD-019 TO PRD-024
 3. FOR TYPICAL SELECTED TARGET SECTIONS REFER TO DWG. NOS. PRD-012 TO PRD-016



DATA	PI NO. - 2	UNITS
PI STA.	STA. 0 + 510.367	
N	9166220.117	m
E	641415.981	m
V	60	km/h
Δ	9-47-16	"
Gs	-	"
R	800	m
A	-	m
Ts	-	m
Es	2.927	m
Tc	68.499	m
Ls	-	m
Lc	136.665	m
L	136.665	m
e	2.5	%

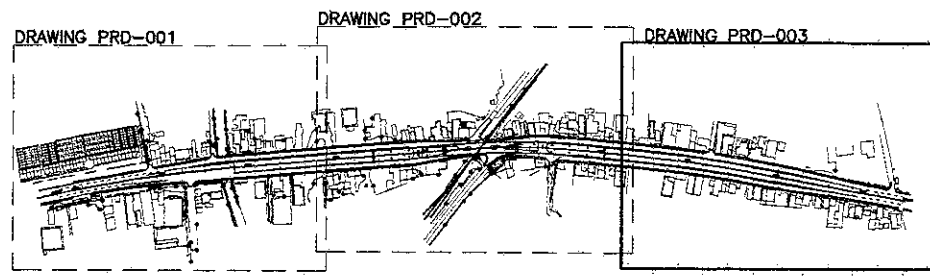


KEY PLAN



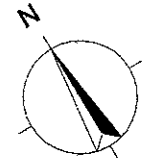
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1 ROADWAY PLAN (FLYOVER)
 SCALE 1:1000



KEY PLAN

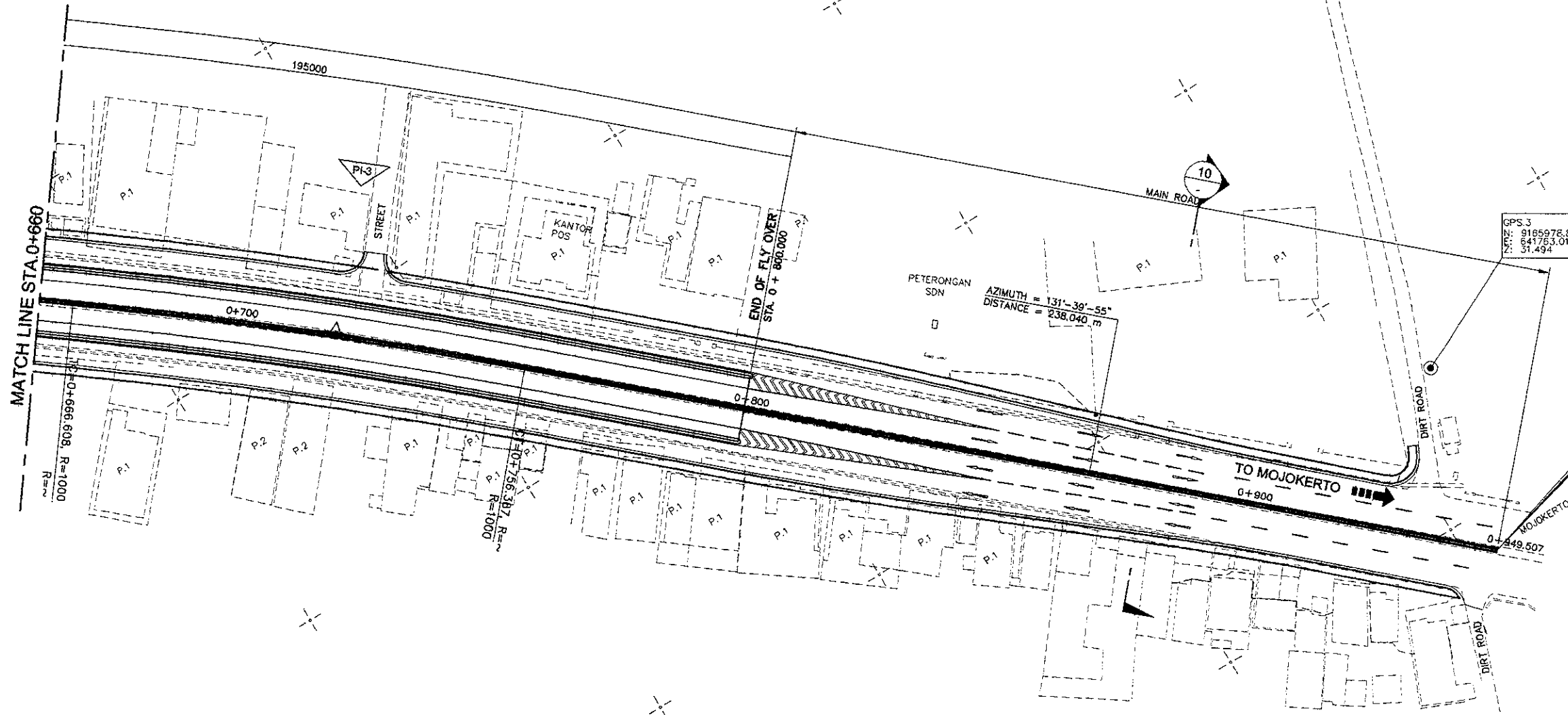
DATA	PI NO. - 3	UNITS
PI STA.	STA. 0 + 711.528	
N	9166100.203	m
E	841577.909	m
V	60	km/h
Δ	5-08-38	"
Θ_s	-	"
R	1000	m
A	-	m
Ts	-	m
Es	1.008	m
Tc	44.920	m
La	-	m
Lc	89.779	m
L	89.779	m
e	2.1	%



GPS 3A
 N: 9166053.916
 E: 641789.214
 Z: 31.784

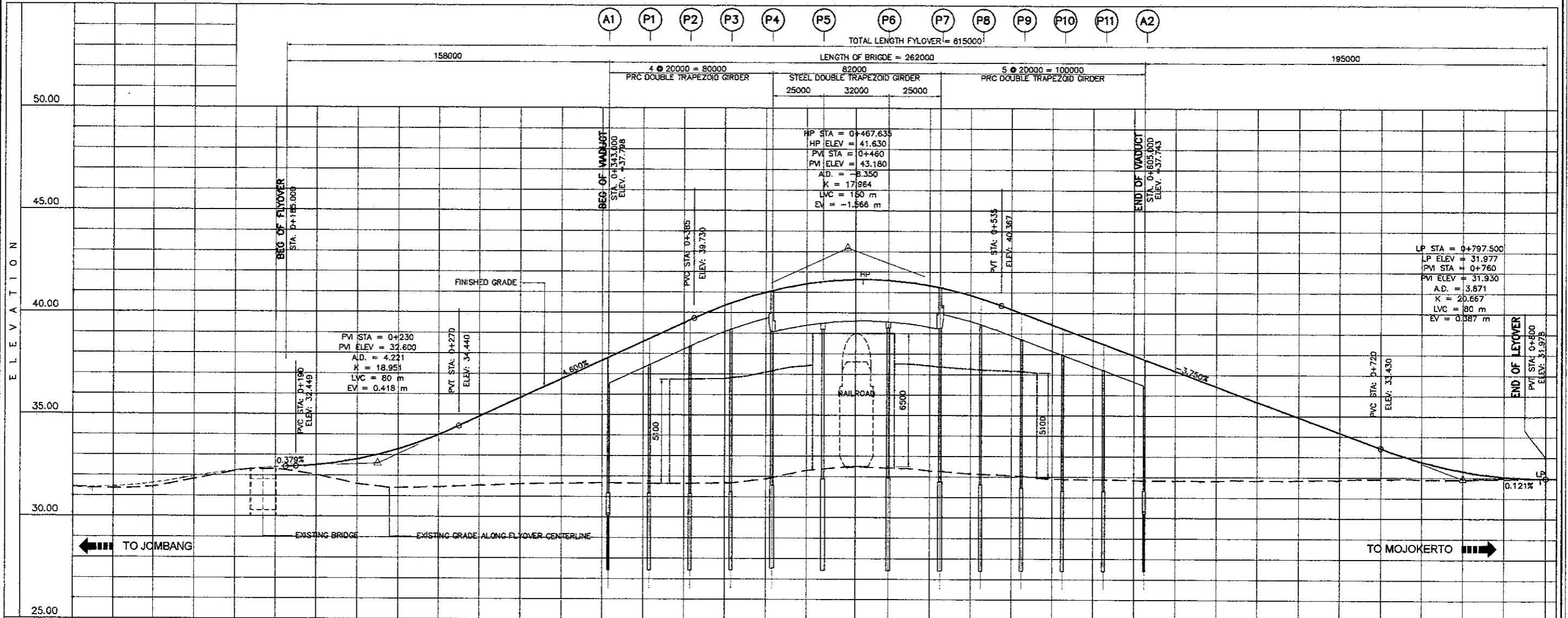
GPS 3
 N: 9185976.898
 E: 641763.013
 Z: 31.494

END OF PROJECT
 STA. 0 + 849.507
 N = 9185841.957
 E = 641755.737



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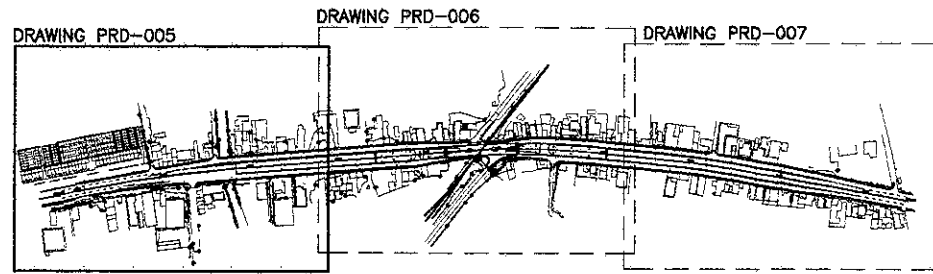
ELEVATION	PIER AND ABUTMENT	A1	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	A2
	FINISHED GRADE	31.872	31.849	31.854	31.885	31.954	32.376	32.431	32.263	32.136	32.035	31.889	31.882	31.838
	EXISTING GRADE	31.872	31.849	31.854	31.885	31.954	32.376	32.431	32.263	32.136	32.035	31.889	31.882	31.838



STATION	0+100	0+200	0+300	0+400	0+500	0+600	0+700	0+800
FINISHED GRADE		32.513	32.800	33.297	34.118	34.930	35.742	36.554
EXISTING GRADE	31.366	31.449	31.824	32.221	32.281	32.029	32.513	32.800
HORIZONTAL CURVATURE	R=1500							
VERTICAL CURVATURE		g=0.379% L=5.000 m		g=4.600% L=115.00 m		g=-3.750% L=185.00 m		g=0.121% L=19.329 m
SUPER ELEVATION			L=R=-2%		L+2.5% R-2.5%	L+2.0% R-2.0%	L+2.1% R-2.1%	L+2% LR=-2%

1 PROFILE OF FLYOVER
 SCALE H=1 : 2000 V=1 : 200

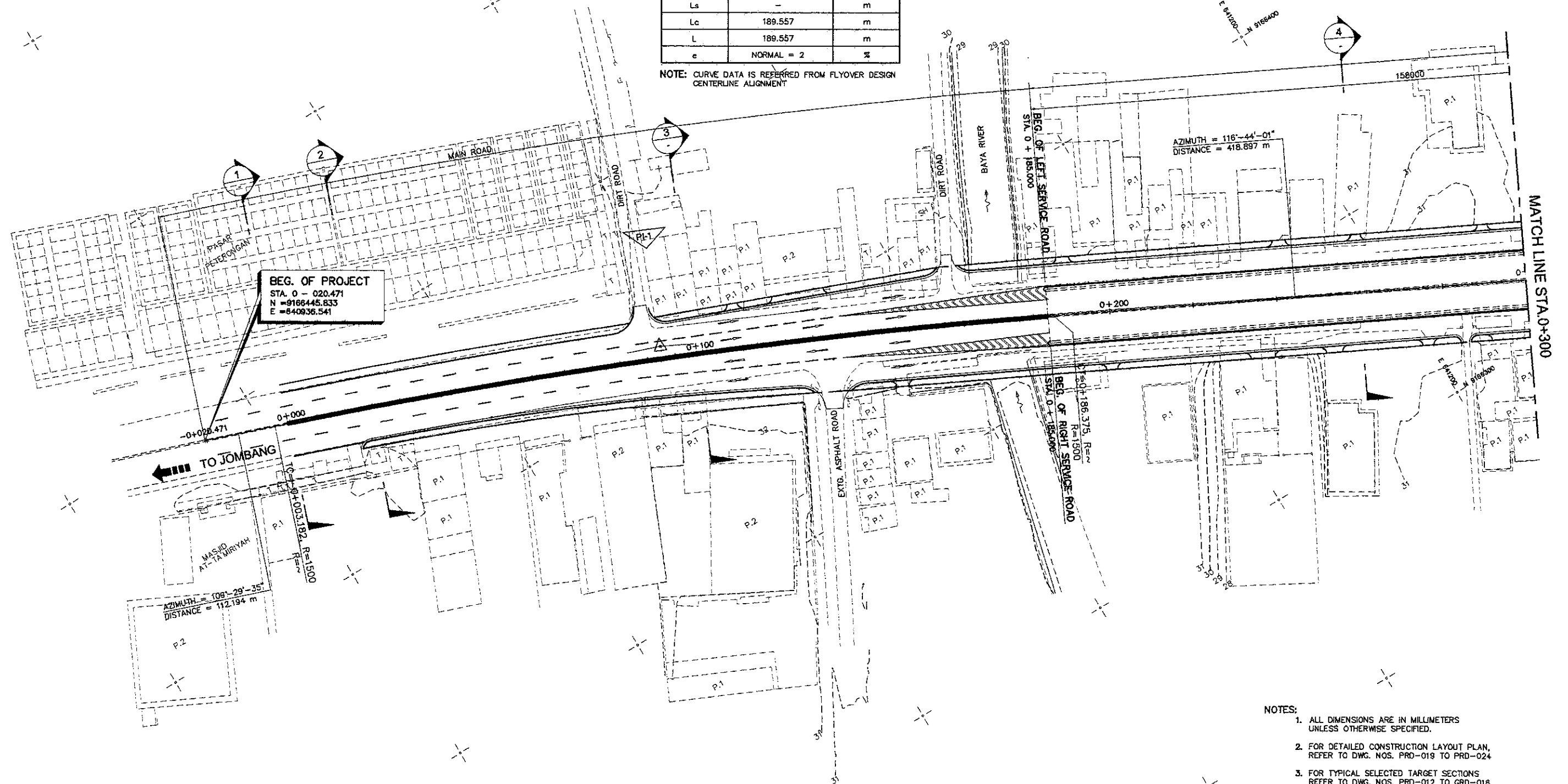
NOTE:
 EXISTING GRADE ELEVATIONS ARE TAKEN FROM
 CENTERLINE OF FLYOVER.



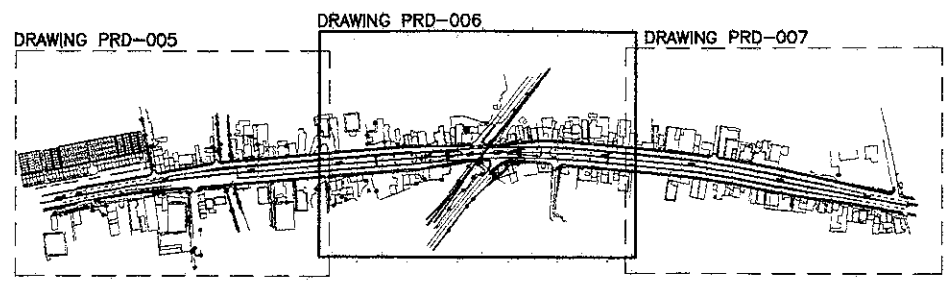
KEY PLAN

DATA	PI NO. - 1	UNITS
PI STA.	STA. 0 + 091.723	
N	9166408.554	m
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R	1500	m
A	-	m
Ts	-	m
Es	2.989	m
Tc	94.905	m
Ls	-	m
Lc	189.557	m
L	189.557	m
e	NORMAL = 2	%

NOTE: CURVE DATA IS REFERRED FROM FLYOVER DESIGN CENTERLINE ALIGNMENT



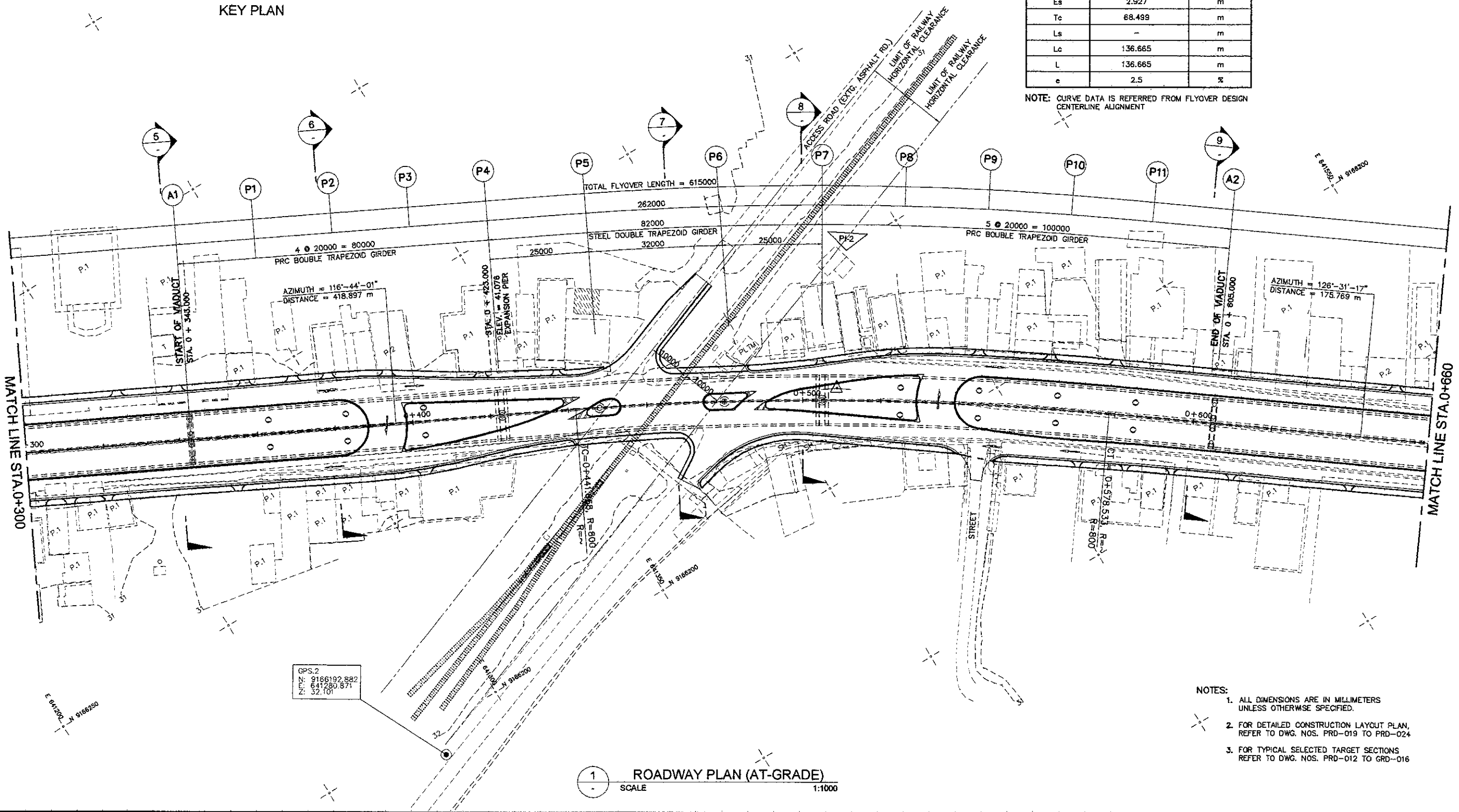
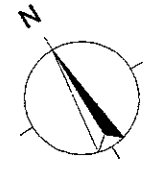
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KEY PLAN

DATA	PI NO. - 2	UNITS
PI STA.	STA. 0 + 510.367	
N	9166220.117	m
E	641415.981	m
V	60	km/h
Δ	9-47-16	° ' "
Θs	-	° ' "
R	800	m
A	-	m
Ts	-	m
Es	2.927	m
Tc	68.499	m
Ls	-	m
Lc	136.665	m
L	136.665	m
e	2.5	%

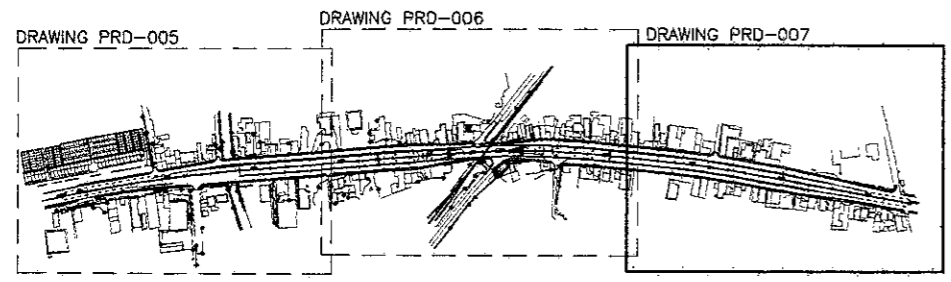
NOTE: CURVE DATA IS REFERRED FROM FLYOVER DESIGN CENTERLINE ALIGNMENT



1 ROADWAY PLAN (AT-GRADE)
 SCALE 1:1000

- NOTES:
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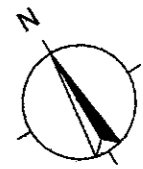
DESIGNED BY	CHECKED BY	SUBMITTED BY
Name: R. UENO	Name: T. OKUMURA	Name: M. KIUCHI
Sign	Sign	Sign
Date	Date	Date



KEY PLAN

DATA	PI NO. - 3	UNITS
PI STA.	STA. 0 + 711.528	
N	9166100.203	m
E	641577.909	m
V	60	km/h
Δ	5-08-38	"
ϕ_s	-	"
R	1000	m
A	-	m
Ts	-	m
Es	1.008	m
Tc	44.920	m
Ls	-	m
Lc	89.779	m
L	89.779	m
e	2.1	%

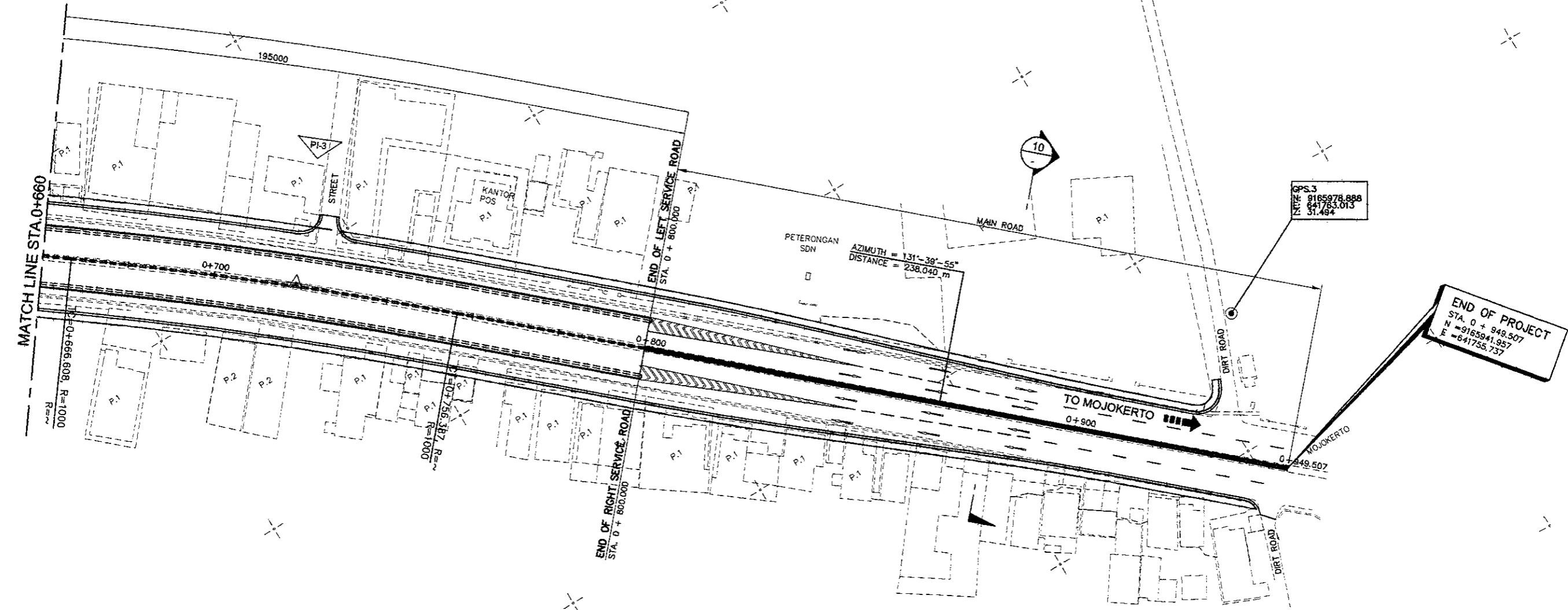
NOTE: CURVE DATA IS REFERRED FROM FLYOVER DESIGN CENTERLINE ALIGNMENT



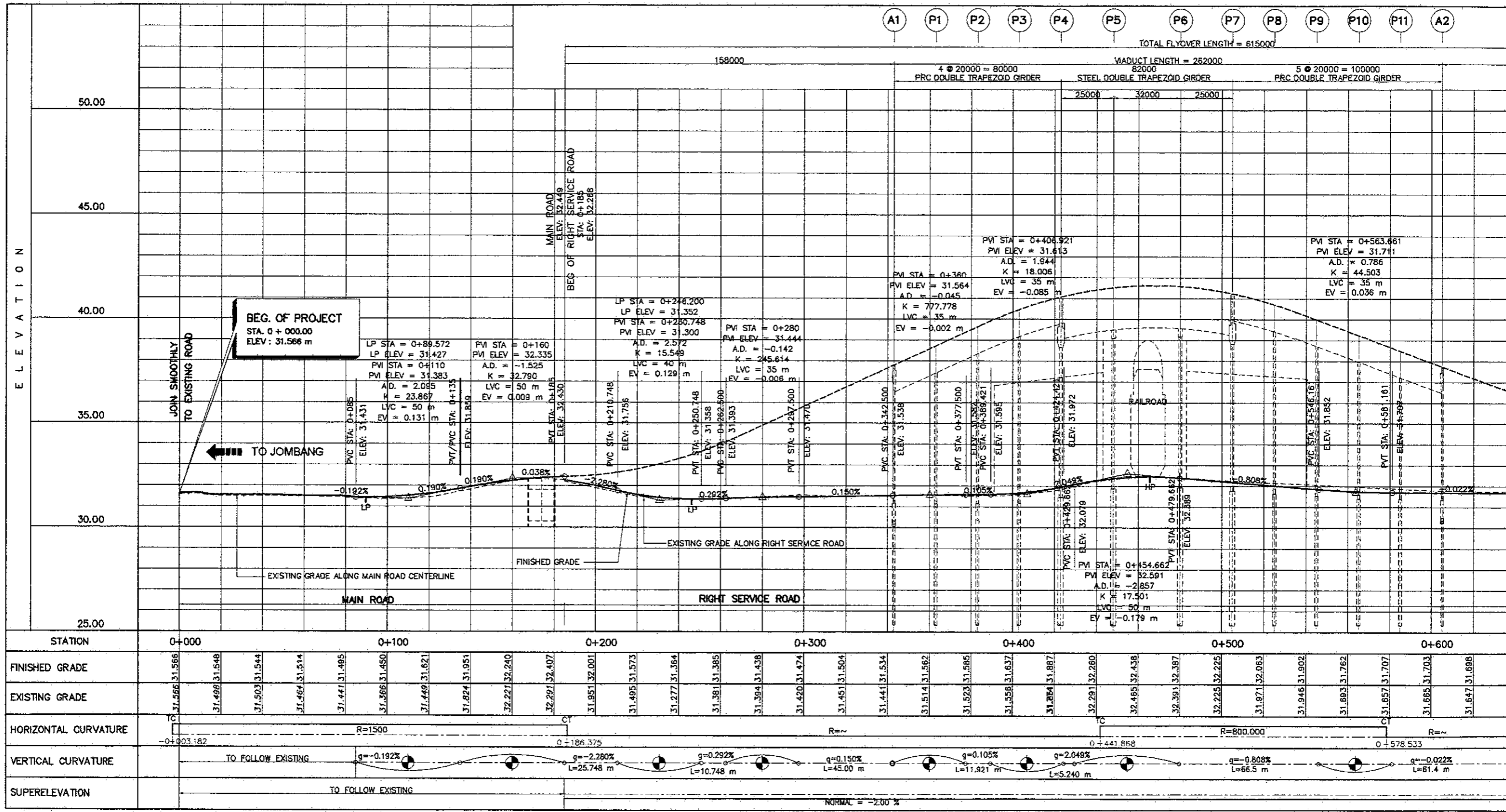
GPS.3A
 N: 9166053.916
 E: 641789.214
 Z: 31.784

GPS.3
 N: 9165978.888
 E: 641763.013
 Z: 31.484

END OF PROJECT
 STA. 0 + 949.507
 N = 9165941.957
 E = 641755.737

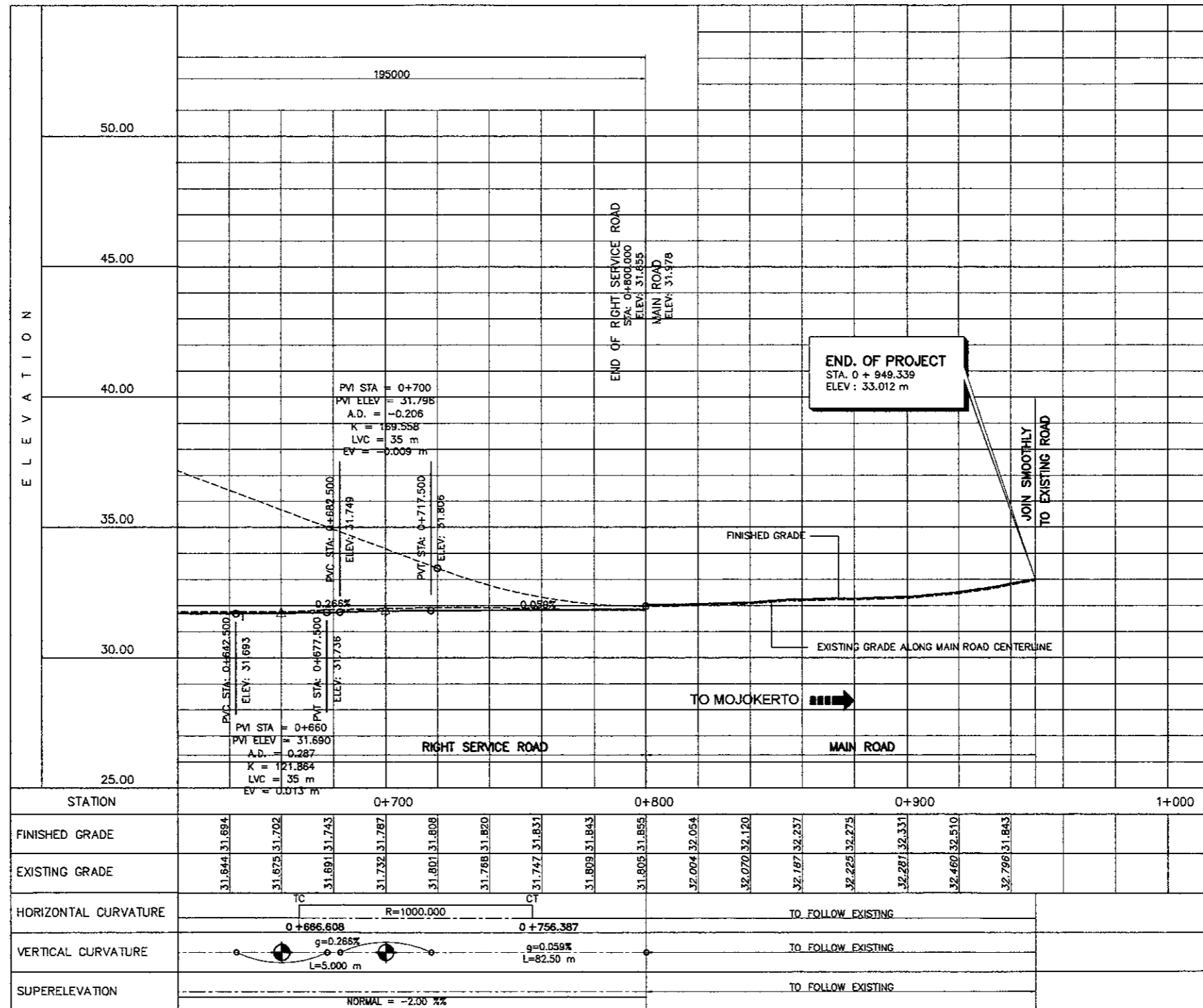


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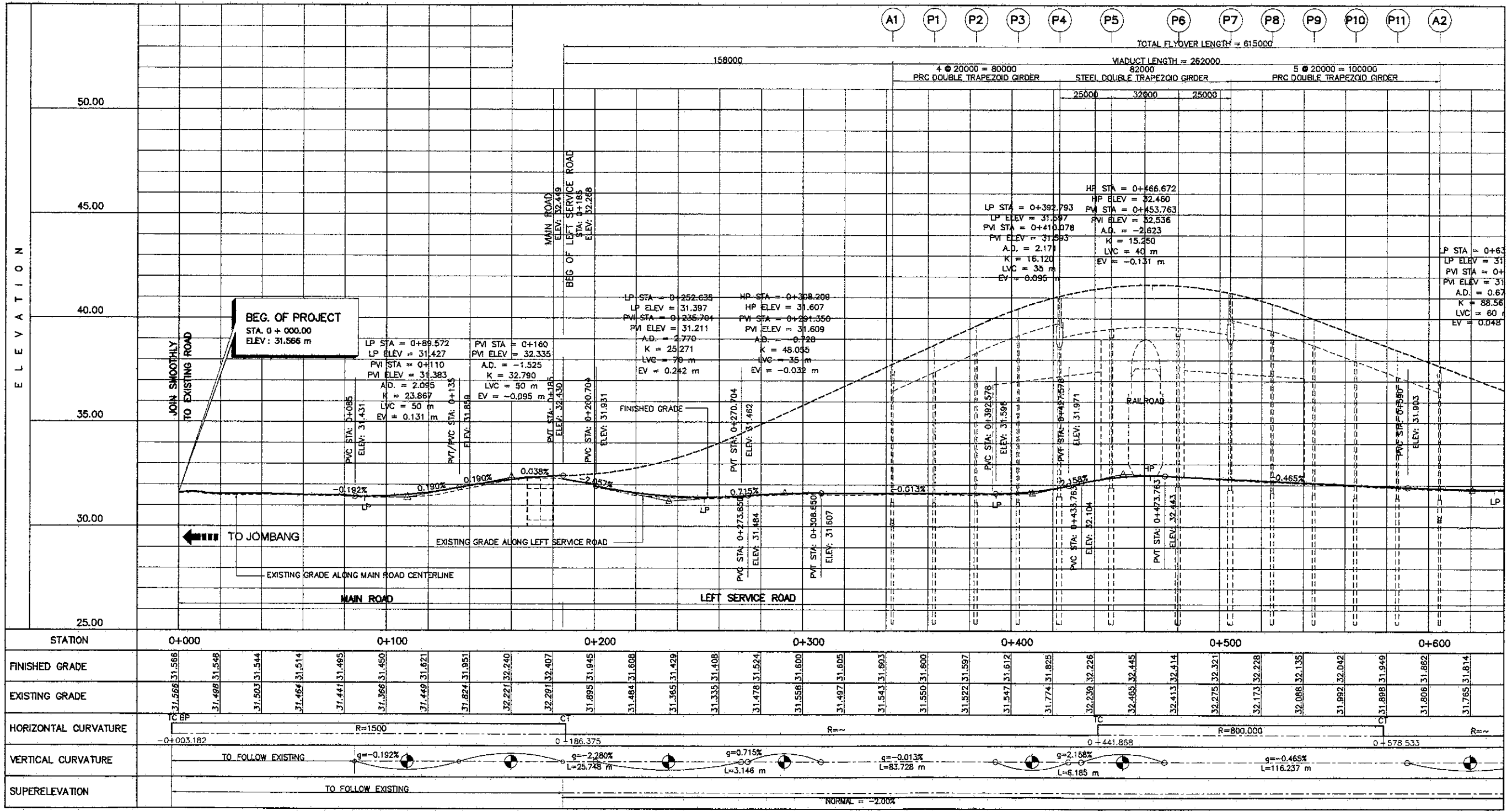
1 PROFILE OF MAIN ROAD & RIGHT SERVICE ROAD (1 OF 2)
 SCALE H=1 : 2000 V=1 : 200

- NOTES:
- EXISTING GRADE ELEVATIONS ALONG MAIN ROAD ARE TAKEN FROM CENTERLINE OF FLYOVER OR INNER EDGE OF ROAD.
 - EXISTING/FINISHED GRADE ELEVATIONS ALONG RIGHT SERVICE ROAD ARE TAKEN FROM INNER EDGE OF NEW ROADWAY.
 - HORIZONTAL CURVATURE DIAGRAM IS REFERRED FROM FLYOVER CENTERLINE ALIGNMENT.
 - SUPERELEVATION AT SERVICE ROAD SHALL BE 2.0% AT NEW PAVEMENT OTHERWISE TO FOLLOW EXISTING CROSS SLOPE.



1 PROFILE OF MAIN ROAD & RIGHT SERVICE ROAD (2 OF 2)
 SCALE H = 1 : 2000 V = 1 : 200

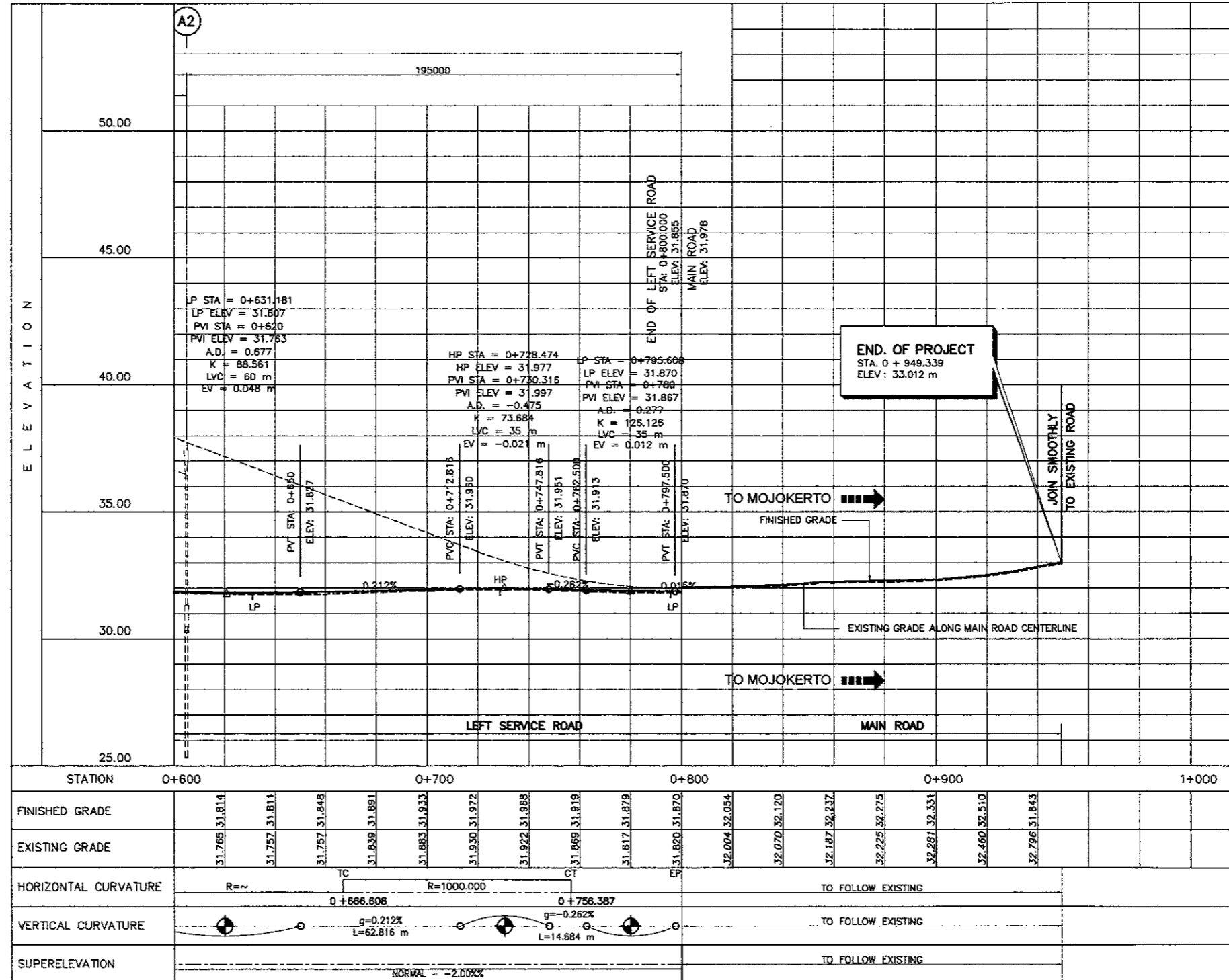
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 - SUPERELEVATION AT SERVICE ROAD SHALL BE 2.0% AT NEW PAVEMENT OTHERWISE TO FOLLOW EXISTING CROSS SLOPE.



1 PROFILE OF MAIN ROAD & LEFT SERVICE ROAD (1 OF 2)
 SCALE H=1 : 2000 V=1 : 200

- NOTES:
- EXISTING GRADE ELEVATIONS ALONG MAIN ROAD ARE TAKEN FROM CENTERLINE OF FLYOVER OR INNER EDGE OF ROAD.
 - EXISTING/FINISHED GRADE ELEVATIONS ALONG RIGHT SERVICE ROAD ARE TAKEN FROM INNER EDGE OF NEW ROADWAY.
 - HORIZONTAL CURVATURE DIAGRAM IS REFERRED FROM FLYOVER CENTERLINE ALIGNMENT.
 - SUPERELEVATION AT SERVICE ROAD SHALL BE 2.0% AT NEW PAVEMENT OTHERWISE TO FOLLOW EXISTING CROSS SLOPE.

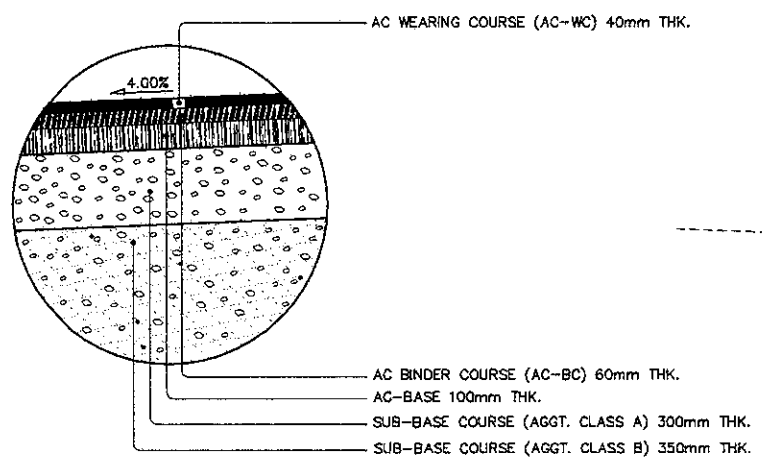
DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	S. GOSE	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



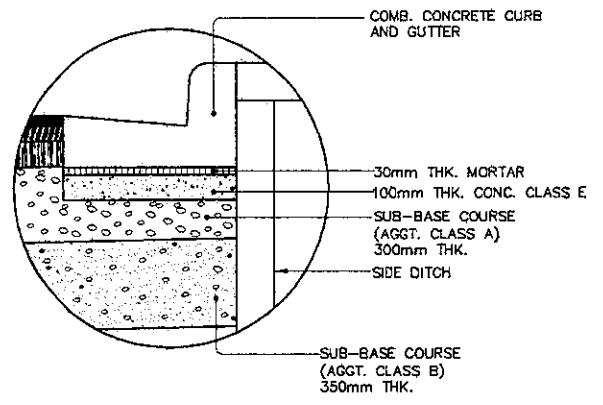
1 PROFILE OF MAIN ROAD & LEFT SERVICE ROAD (2 OF 2)
 SCALE H = 1 : 2000 V = 1 : 200

- NOTES:**
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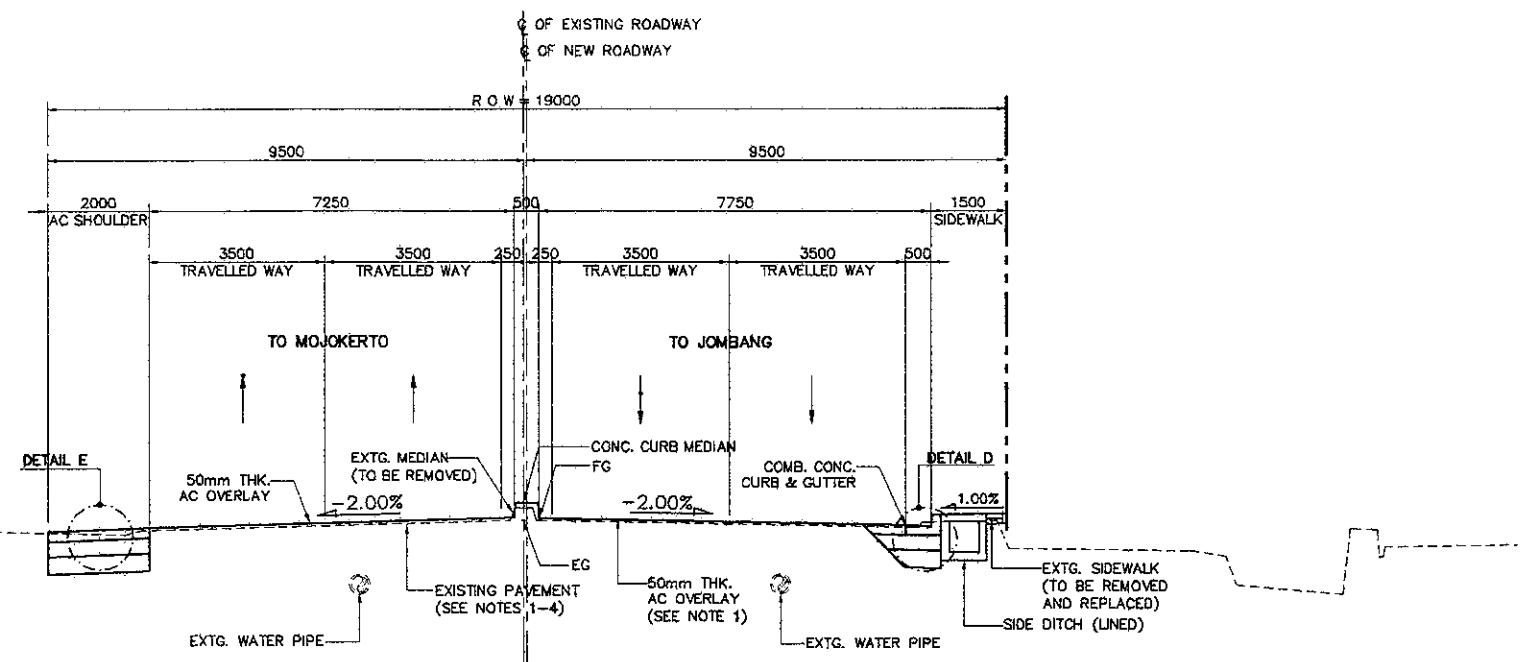
DESIGNED BY	CHECKED BY	SUBMITTED BY
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Sign: _____	Sign: _____	Sign: _____
Date: _____	Date: _____	Date: _____



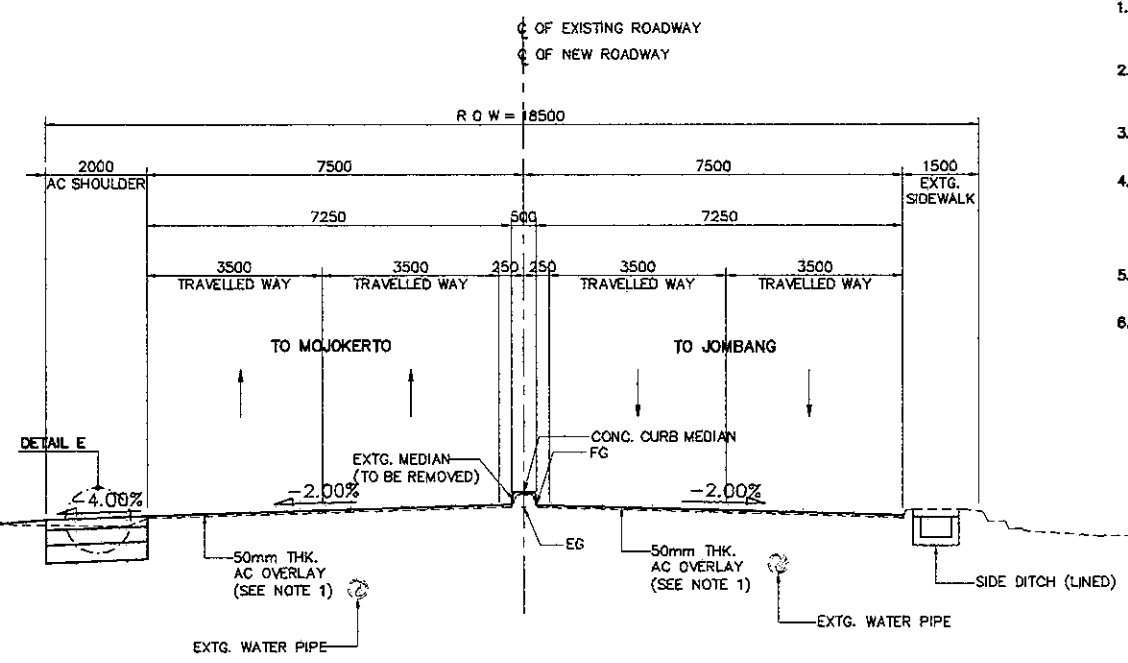
DETAIL E
 SCALE 1:30



DETAIL D
 SCALE 1:30



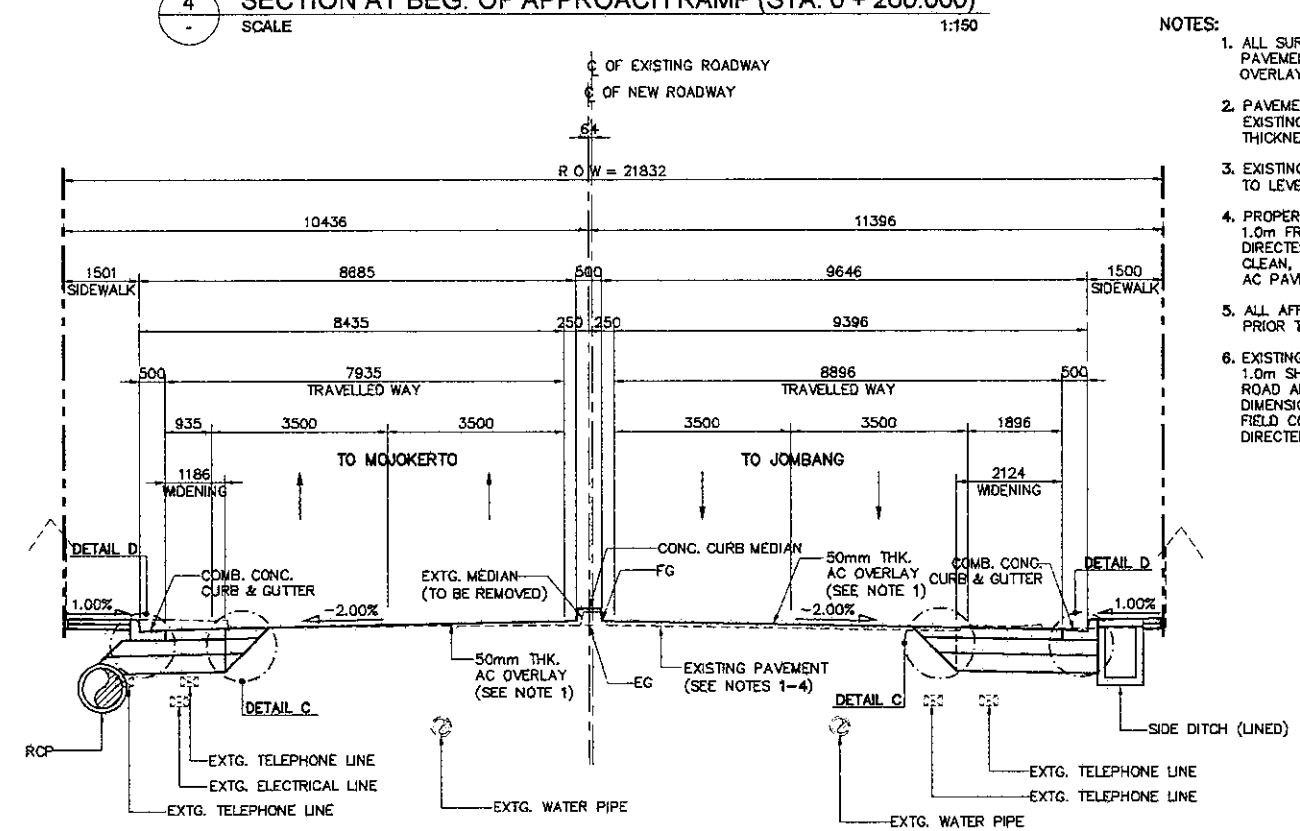
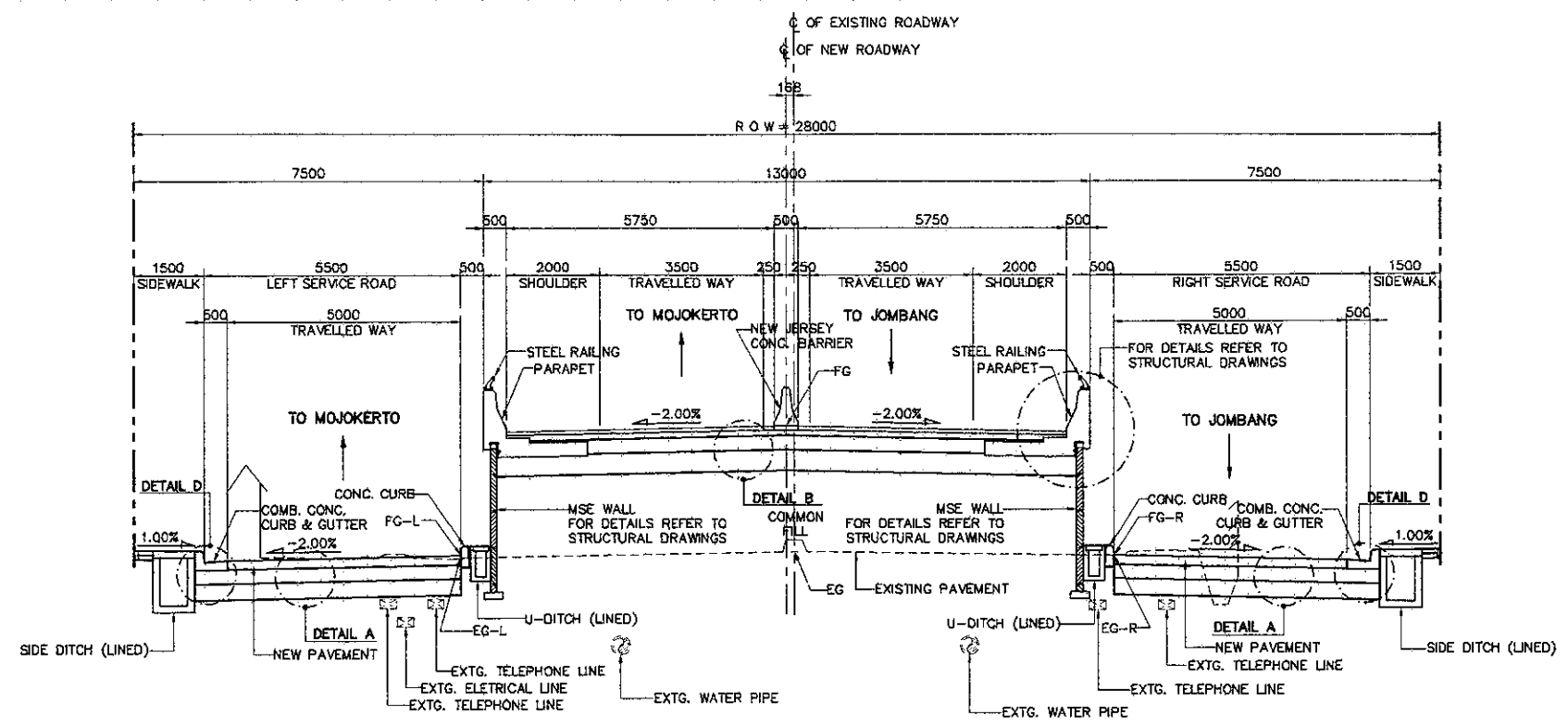
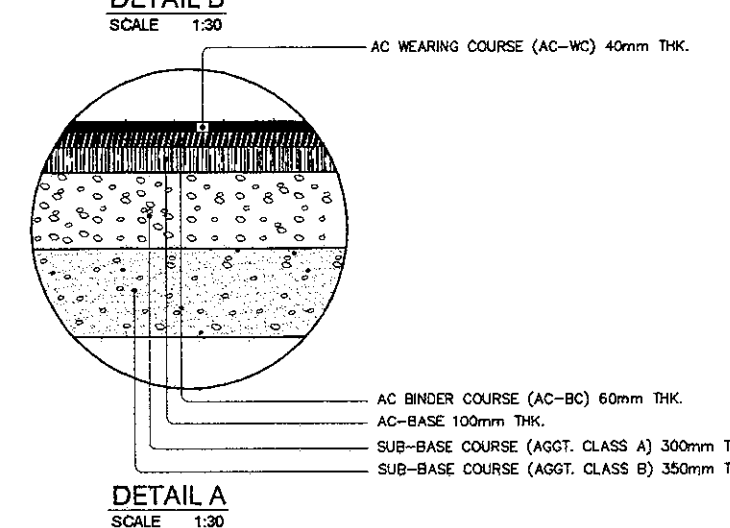
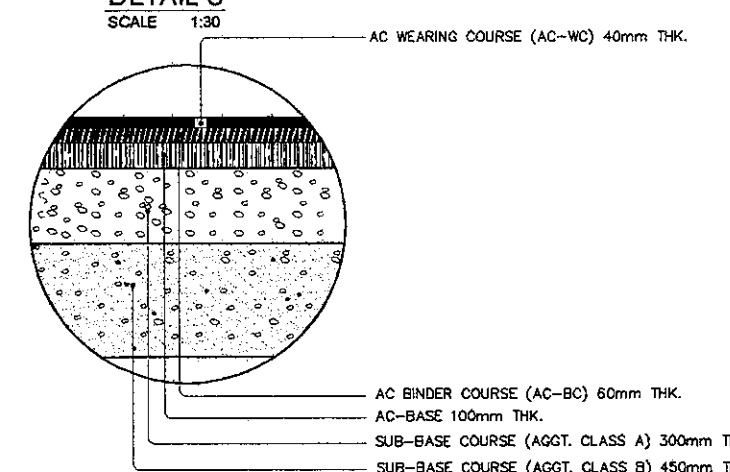
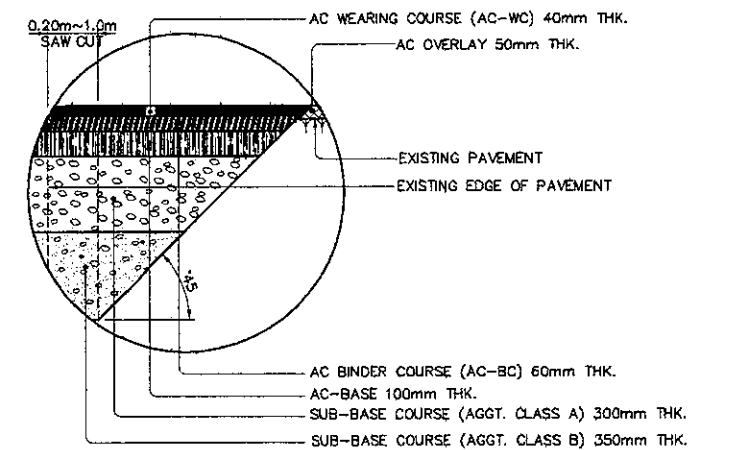
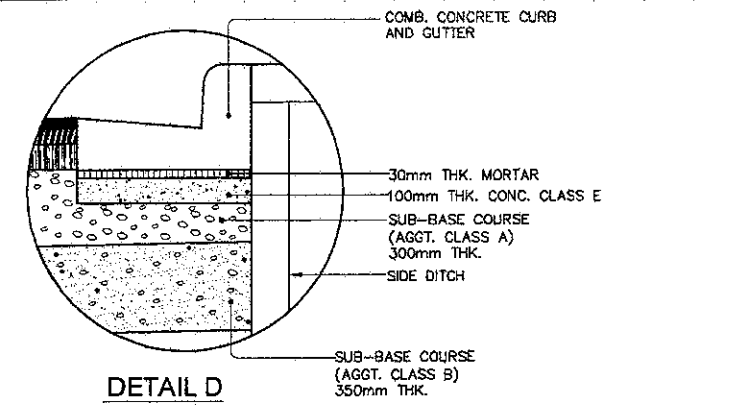
2 SECTION NEAR START OF APPROACH RAMP (STA. 0 + 020.000)
 SCALE 1:150



1 SECTION AT BEGINNING OF PROJECT (STA. 0 + 000.000)
 SCALE 1:150

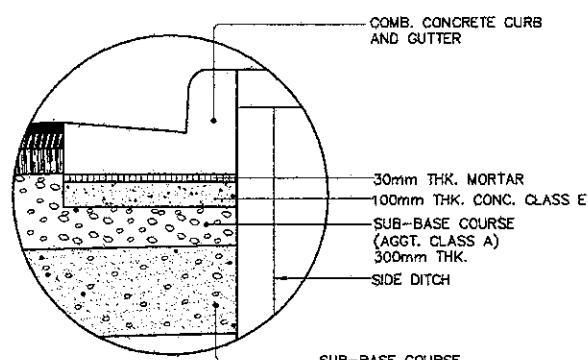
- NOTES:**
1. ALL SURFICIAL DAMAGE/DISTRESS OF EXISTING PAVEMENT TO BE REPAIRED FIRST PRIOR TO OVERLAYING.
 2. PAVEMENT GRADE LEVELING IS REQUIRED AT EXISTING PAVEMENT FOR UNIFORM OVERLAY THICKNESS AND CROSS SLOPE ADJUSTMENTS.
 3. EXISTING PAVEMENT SHALL BE SCARIFIED PRIOR TO LEVELING AND OVERLAYING.
 4. PROPERLY SAW-CUT EXISTING ROAD 0.20m TO 1.0m FROM EDGE OF AC PAVEMENT OR AS DIRECTED BY THE ENGINEER TO PROVIDE CLEAN, VERTICAL EDGE FOR JOINING TO NEW AC PAVEMENT.
 5. ALL AFFECTED UTILITIES SHALL BE RELOCATED PRIOR TO ACTUAL CONSTRUCTION.
 6. EXISTING USABLE PAVEMENT GREATER THAN 1.0m SHALL BE OVERLAID AS PART OF SERVICE ROAD AND MAIN ROAD. ALL ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED TO SUIT ACTUAL FIELD CONDITIONS. ADJUSTMENTS SHALL BE AS DIRECTED BY THE ENGINEER.

DESIGNED BY	CHECKED BY	SUBMITTED BY
Name: R. UENO	Name: T. OKUMURA	Name: M. KIUCHI
Sign: _____	Sign: _____	Sign: _____
Date: _____	Date: _____	Date: _____

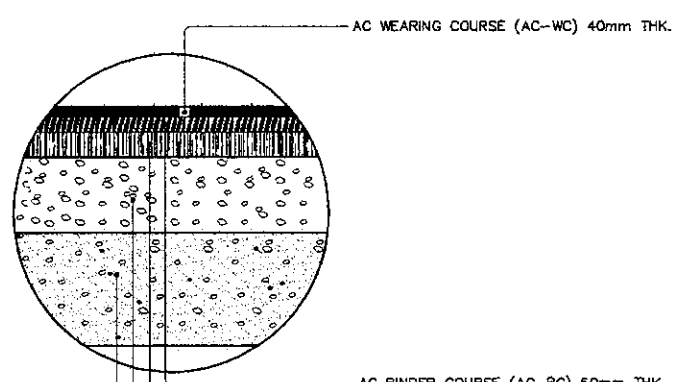


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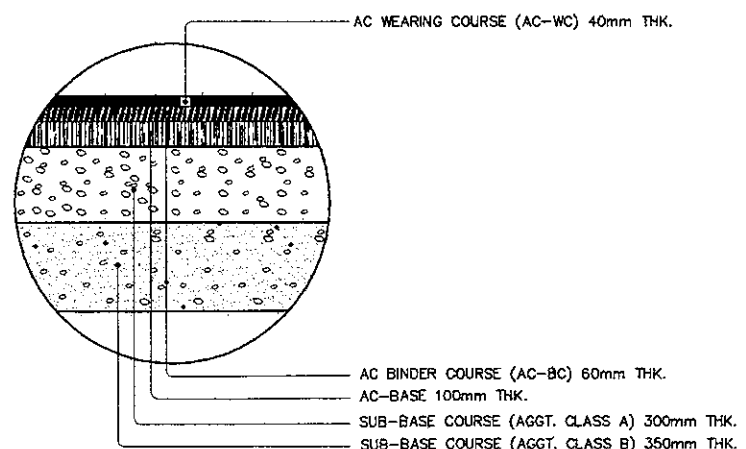
DESIGNED BY	CHECKED BY	SUBMITTED BY
Name: R. UENO	Name: T. OKUMURA	Name: M. KIUCHI
Sign:	Sign:	Sign:
Date:	Date:	Date:



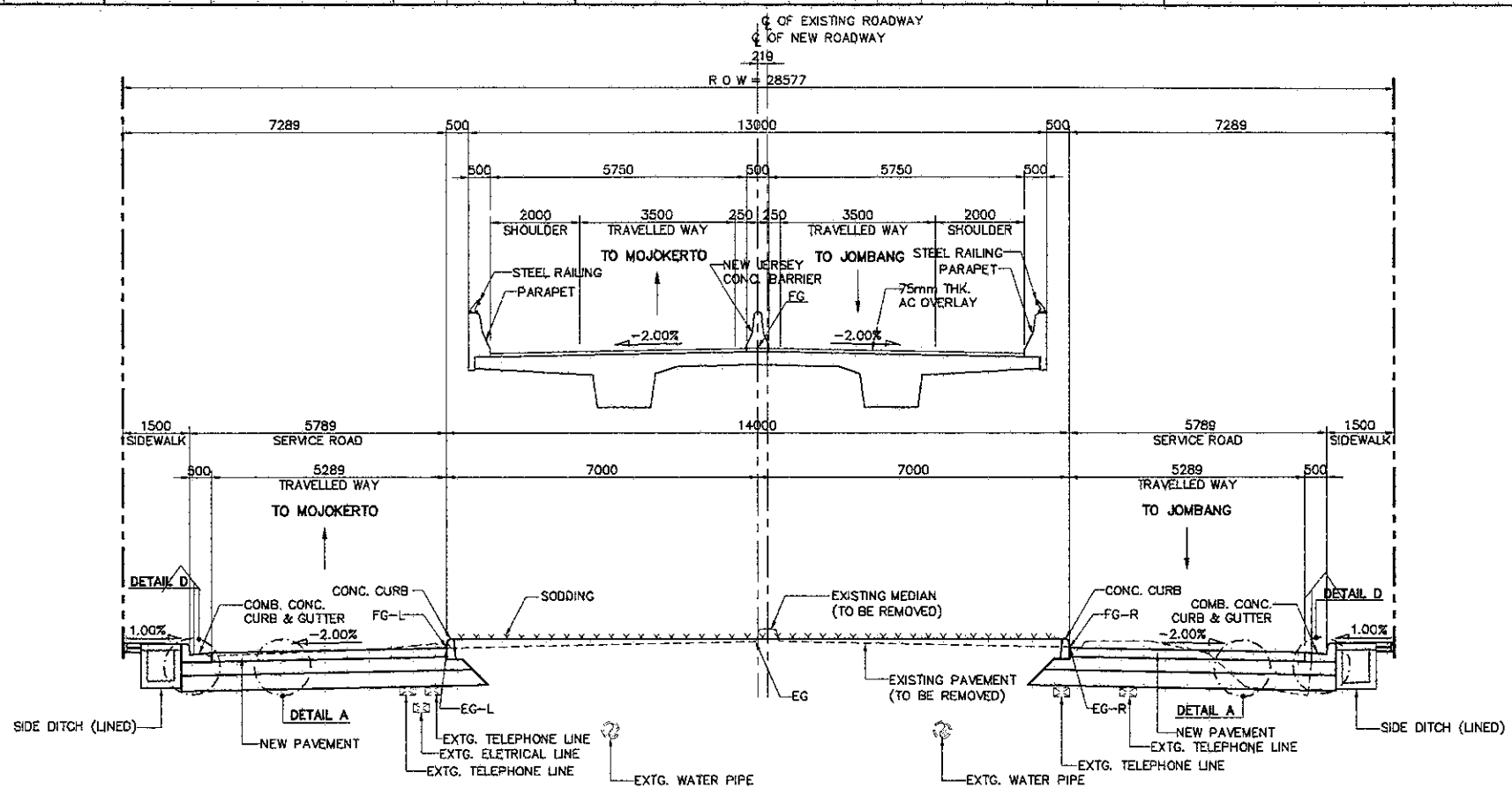
DETAIL D
 SCALE 1:30



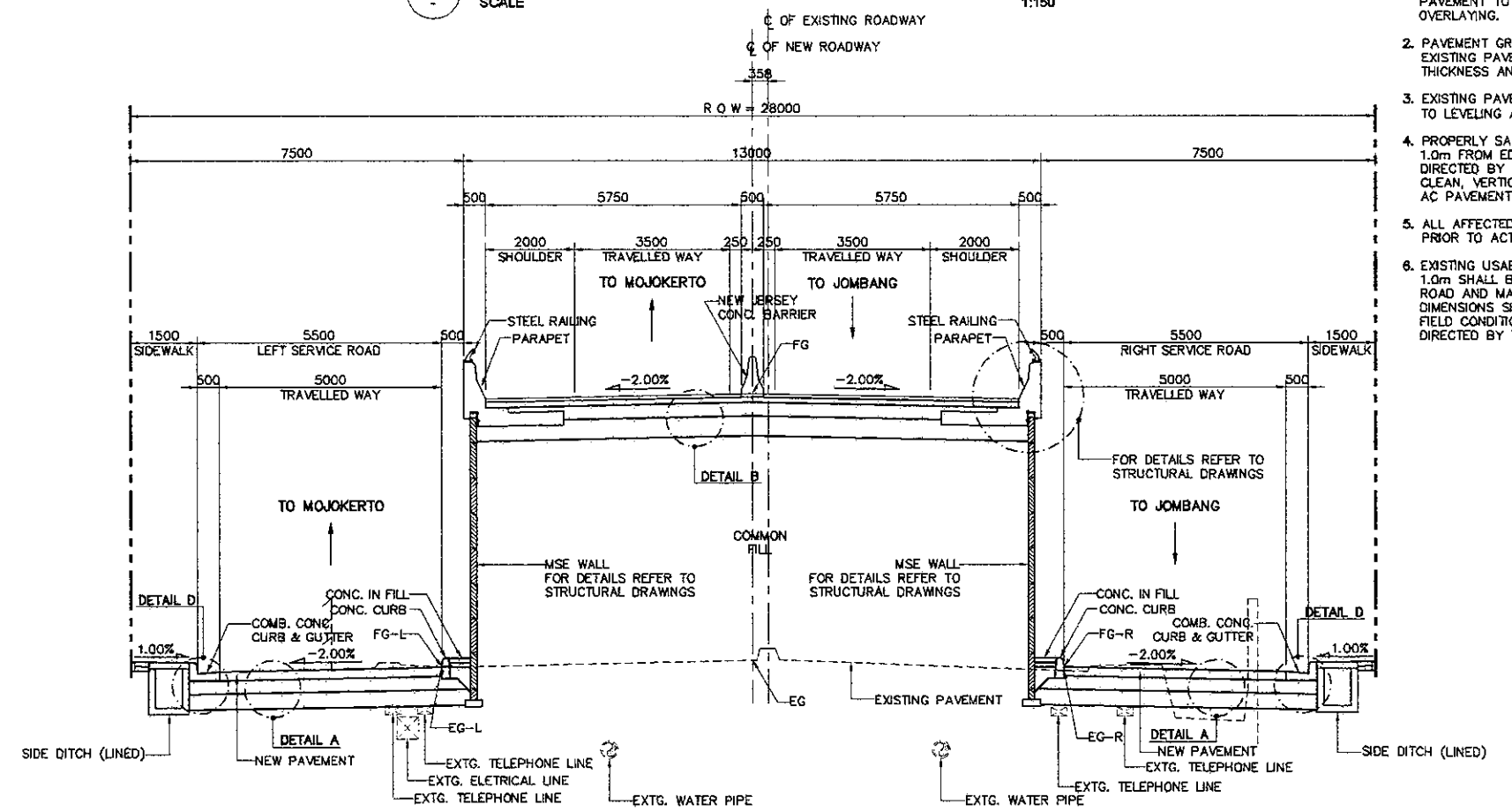
DETAIL B
 SCALE 1:30



DETAIL A
 SCALE 1:30



6 SECTION APPROACHING U-TURN (STA. 0 + 380.000)
 SCALE 1:150



5 SECTION NEAR ABUTMENT (STA. 0 + 340.000)
 SCALE 1:150

- NOTES:
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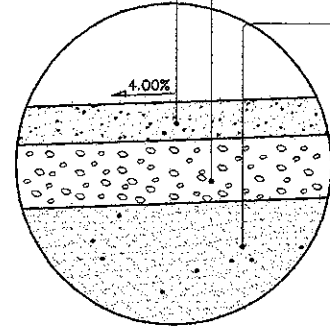
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Sign		Sign		Sign	
Date		Date		Date	

APPROVED BY	
Name	Ir. HERRY VAZA M.Eng.Sc
Sign	
Date	

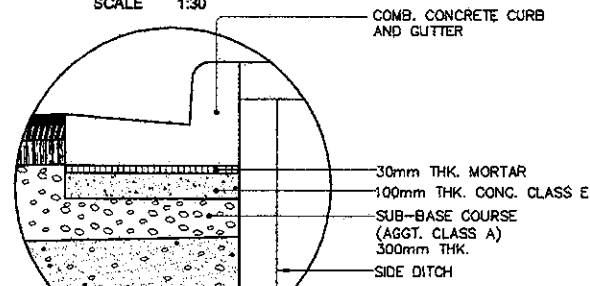
PROJECT AND LOCATION :	SCALE :	DRAWING TITLE :
DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	1 : 150 FULL SIZE A3	TYPICAL ROAD CROSS SECTION (4 OF 5)

DRAWING NO :
PRD-015
SHEET NO :
15 / 60

PCC SHOULDER 150mm THK.
 BASE COURSE (AGGT. CLASS A) 250mm THK.
 SUB-GRADE

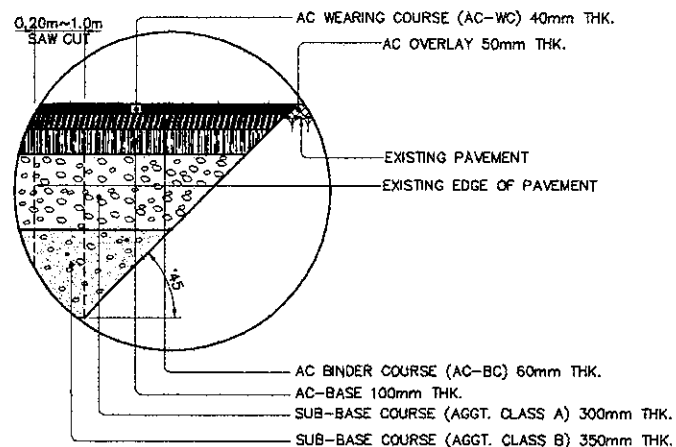


DETAIL E
SCALE 1:30

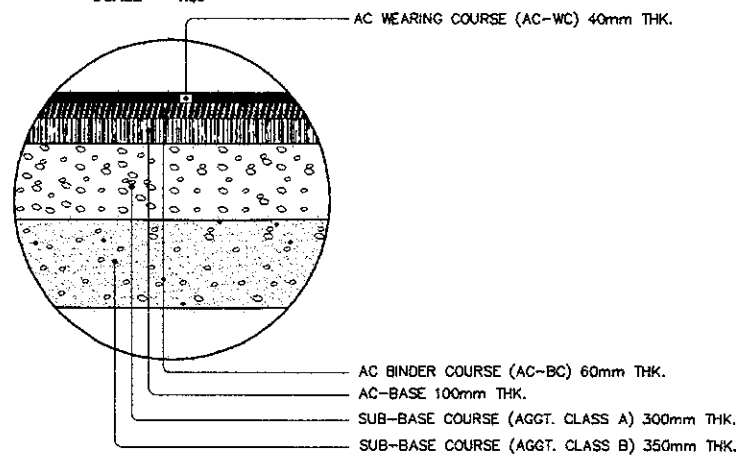


DETAIL D
SCALE 1:30

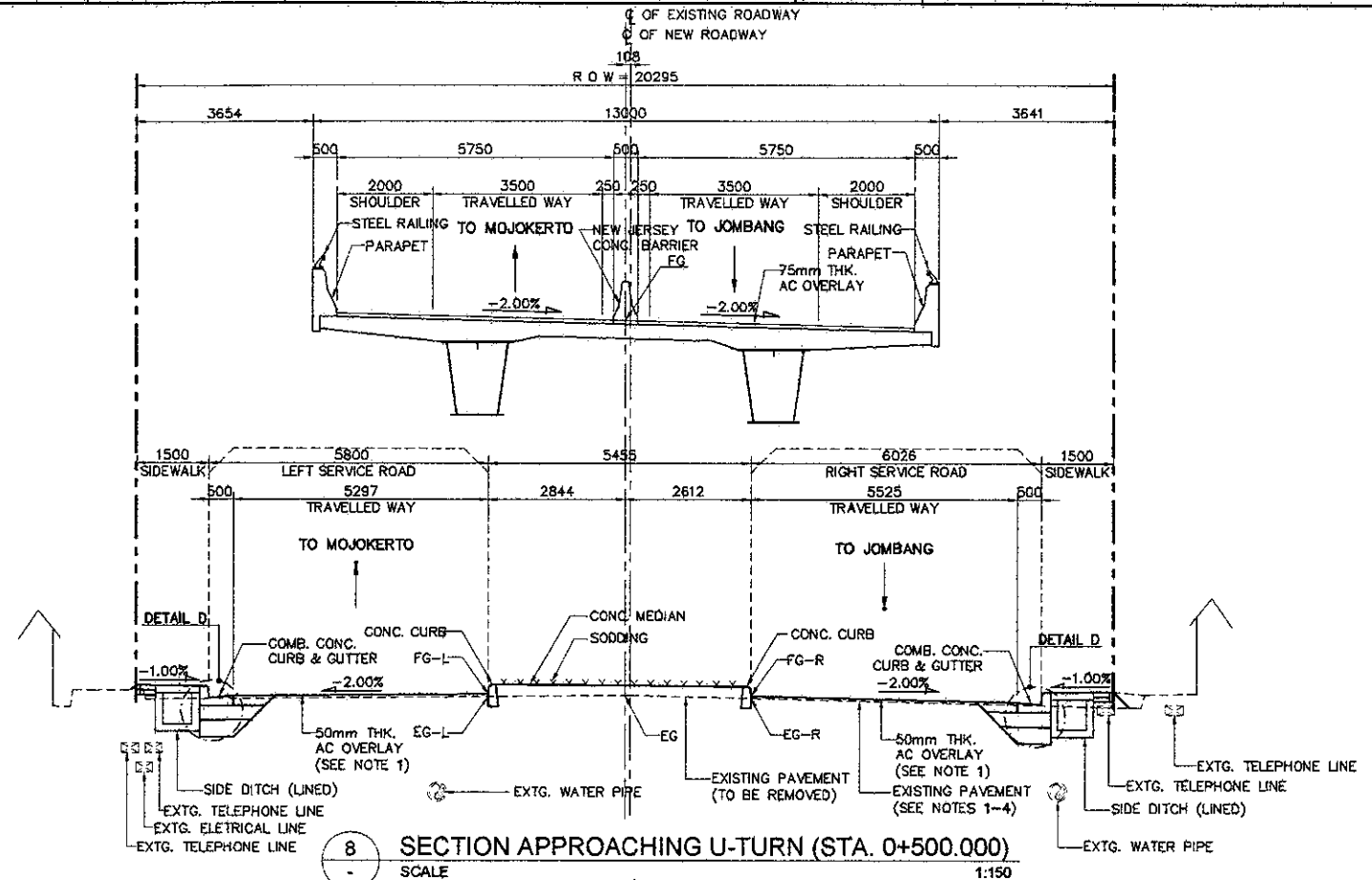
COMB. CONCRETE CURB AND GUTTER
 30mm THK. MORTAR
 100mm THK. CONC. CLASS E
 SUB-BASE COURSE (AGGT. CLASS A) 300mm THK.
 SIDE DITCH
 SUB-BASE COURSE (AGGT. CLASS B) 350mm THK.



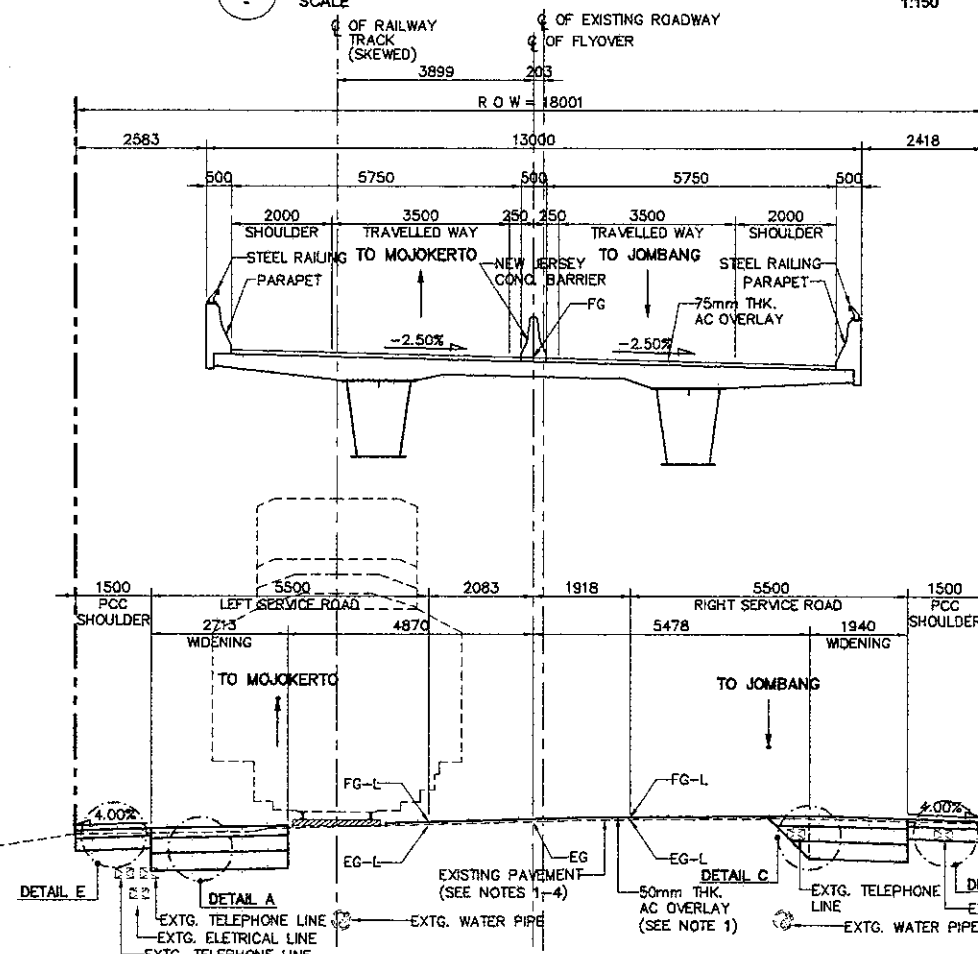
DETAIL C
SCALE 1:30



DETAIL A
SCALE 1:30



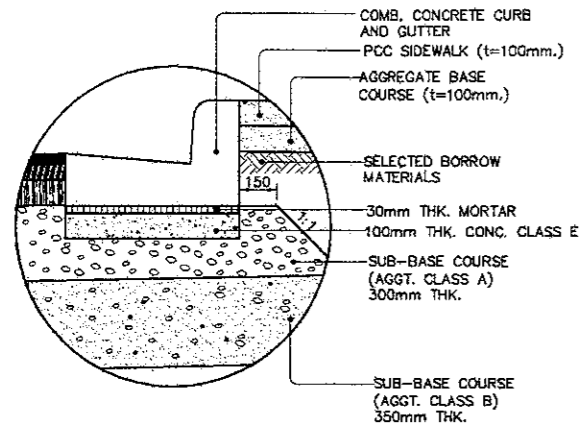
8 SECTION APPROACHING U-TURN (STA. 0+500.000)
SCALE 1:150



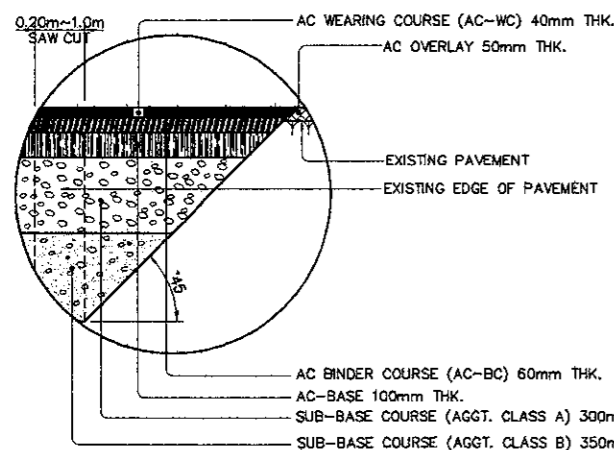
7 SECTION AT RAILWAY CROSSING (STA. 0+467.405)
SCALE 1:150

- NOTES:**
1. ALL SURFICIAL DAMAGE/DISTRESS OF EXISTING PAVEMENT TO BE REPAIRED FIRST PRIOR TO OVERLAYING.
 2. PAVEMENT GRADE LEVELING IS REQUIRED AT EXISTING PAVEMENT FOR UNIFORM OVERLAY THICKNESS AND CROSS SLOPE ADJUSTMENTS.
 3. EXISTING PAVEMENT SHALL BE SCARIFIED PRIOR TO LEVELING AND OVERLAYING.
 4. PROPERLY SAW-CUT EXISTING ROAD 0.20m TO 1.0m FROM EDGE OF AC PAVEMENT OR AS DIRECTED BY THE ENGINEER TO PROVIDE CLEAN, VERTICAL EDGE FOR JOINING TO NEW AC PAVEMENT.
 5. ALL AFFECTED UTILITIES SHALL BE RELOCATED PRIOR TO ACTUAL CONSTRUCTION.
 6. EXISTING USABLE PAVEMENT GREATER THAN 1.0m SHALL BE OVERLAID AS PART OF SERVICE ROAD AND MAIN ROAD. ALL ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED TO SUIT ACTUAL FIELD CONDITIONS. ADJUSTMENTS SHALL BE AS DIRECTED BY THE ENGINEER.

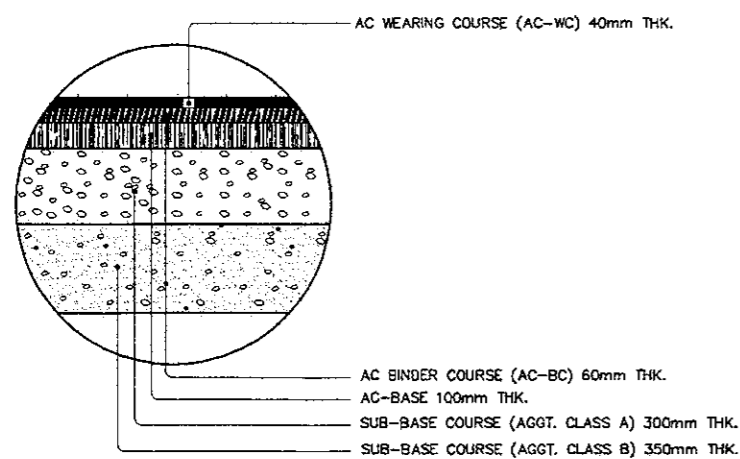
DESIGNED BY	CHECKED BY	SUBMITTED BY
Name R. UENO	Name T. OKUMURA	Name M. KIUCHI
Sign	Sign	Sign
Date	Date	Date



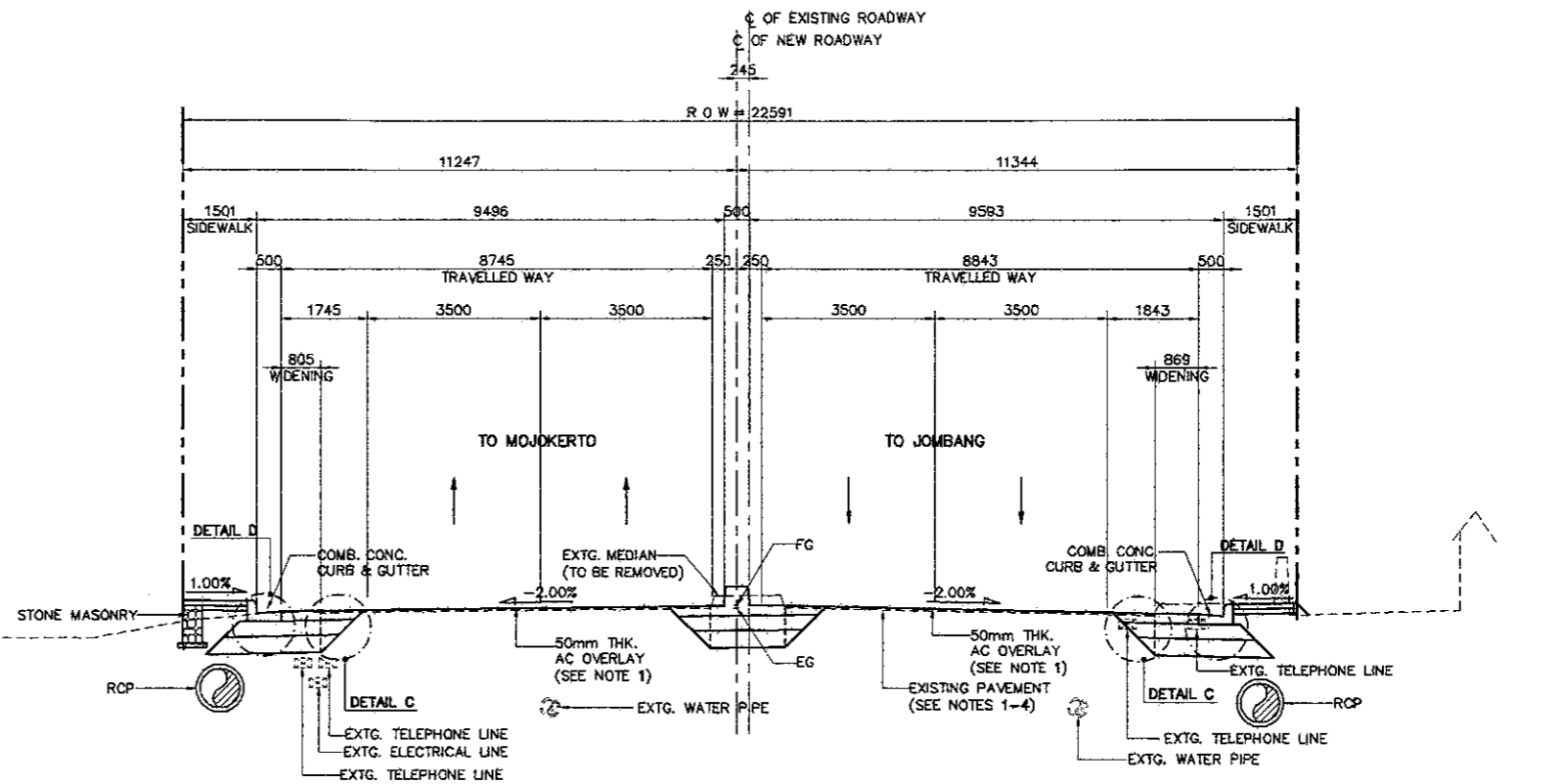
DETAIL D
 SCALE 1:30



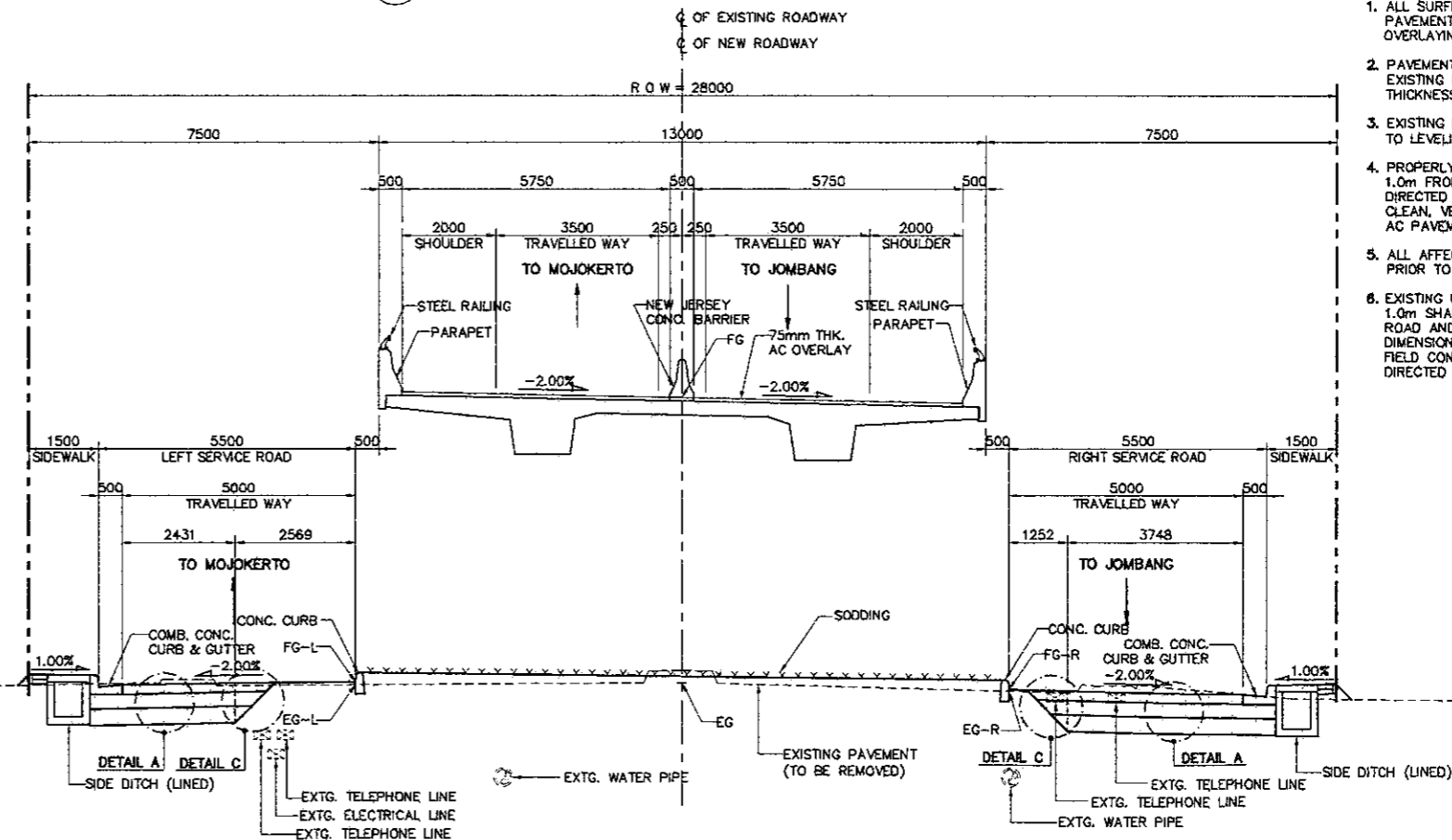
DETAIL C
 SCALE 1:30



DETAIL A
 SCALE 1:30

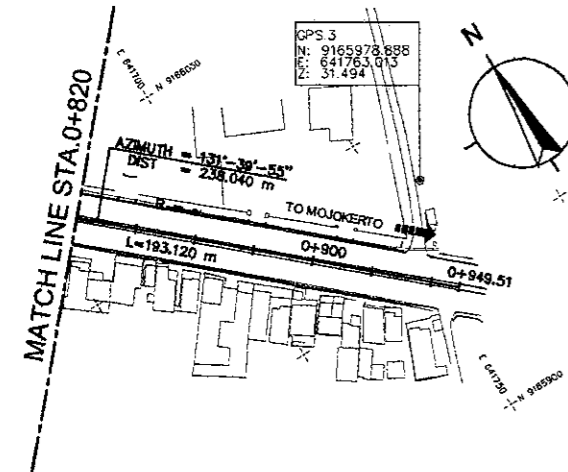
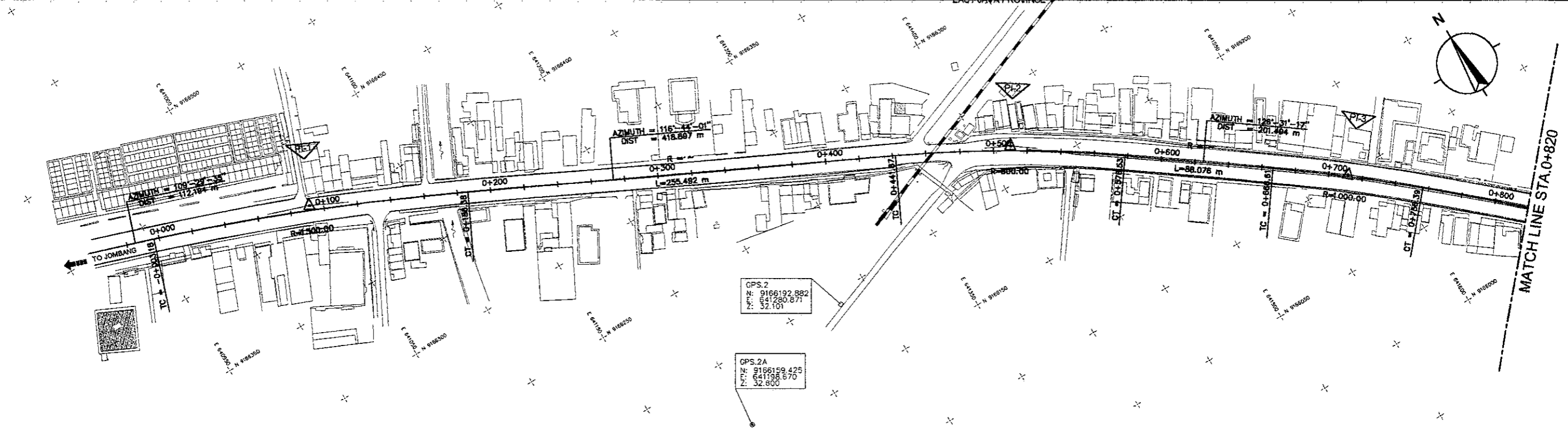


10 SECTION NEAR END OF PROJECT (STA. 0 + 880.000)
 SCALE 1:150



9 SECTION NEAR ABUTMENT A2 (STA. 0 + 600.000)
 SCALE 1:150

- NOTES:
1. ALL SURFICIAL DAMAGE/DISTRESS OF EXISTING PAVEMENT TO BE REPAIRED FIRST PRIOR TO OVERLAYING.
 2. PAVEMENT GRADE LEVELING IS REQUIRED AT EXISTING PAVEMENT FOR UNIFORM OVERLAY THICKNESS AND CROSS SLOPE ADJUSTMENTS.
 3. EXISTING PAVEMENT SHALL BE SCARIFIED PRIOR TO LEVELING AND OVERLAYING.
 4. PROPERLY SAW-CUT EXISTING ROAD 0.20m TO 1.0m FROM EDGE OF AC PAVEMENT OR AS DIRECTED BY THE ENGINEER TO PROVIDE CLEAN, VERTICAL EDGE FOR JOINING TO NEW AC PAVEMENT.
 5. ALL AFFECTED UTILITIES SHALL BE RELOCATED PRIOR TO ACTUAL CONSTRUCTION.
 6. EXISTING USABLE PAVEMENT GREATER THAN 1.0m SHALL BE OVERLAID AS PART OF SERVICE ROAD AND MAIN ROAD. ALL ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED TO SUIT ACTUAL FIELD CONDITIONS. ADJUSTMENTS SHALL BE AS DIRECTED BY THE ENGINEER.



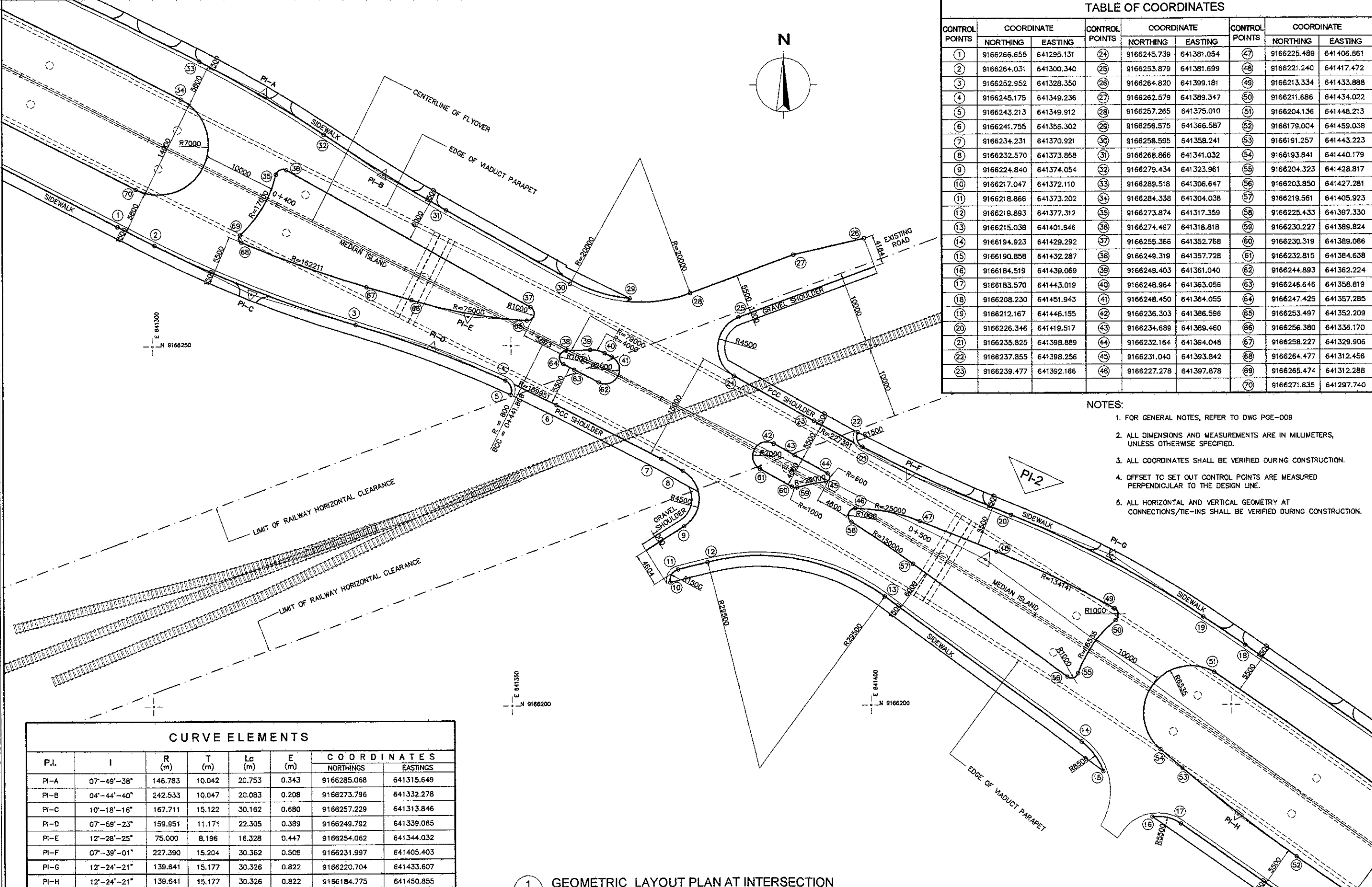
	GPS.1A	GPS.05-1	GPS.2	GPS.2A	GPS.3A	GPS.3
N	9166487.909	9166482.237	9166192.882	9166159.425	9166053.916	9165978.888
E	640845.860	640796.702	641280.871	641198.870	641789.214	641763.013
Z	31.735	32.578	32.101	32.600	31.784	31.494

BP		PI-1	PI-2	PI-3	EP			
STA	0+000.00	V (Km/Hours)	60	60	60	V (Km/Hours)	STA	0+848.507
N	9166439.158	TYPE	RIGHT	RIGHT	RIGHT	TYPE	N	9165941.958
E	640955.394	Δ	7-14-26	9-47-16	5-08-38	Δ	E	641755.734
		R (m)	1500	800	1000	R (m)		
		A (m)				A (m)		
		TS / TC (m)	94.805	68.499	44.920	TS / TC (m)		
		LC (m)	189.557	136.685	89.779	LC (m)		
		LS (m)				LS (m)		
		L (m)	189.557	136.685	89.779	L (m)		
		e max (%)	Normal = 2	2.5	2.1	e max (%)		
		PI	STA	0+091.723	0+510.367	0+711.528	STA	
			N	9166408.554	9166220.117	9166100.203	N	PI
			E	641041.861	641415.981	641577.909	E	
		TS/SS	STA				STA	
			N				N	TS/SS
			E				E	
		SC/TC	STA	-0+003.182	0+441.868	0+886.608	STA	SC/TC
		/CC	N	9166440.223	9166250.931	9166126.936	N	/CC
			E	640852.396	641354.804	641541.810	E	
		CS/CT	STA	0+186.375	0+578.533	0+756.387	STA	CS/CT
		/CC	N	9166385.862	9166178.352	9166070.342	N	/CC
			E	641126.821	641471.029	641611.465	E	
		ST/SS	STA				STA	
			N				N	ST/SS
			E				E	
170-22-32	AZIMUTH		116-44-01	126-31-17	131-39-55	AZIMUTH		131-39-55

DESIGNED BY	CHECKED BY	SUBMITTED BY
Name: R. UENO	Name: T. OKUMURA	Name: M. KIUCHI
Sign	Sign	Sign
Date	Date	Date

CONTROL POINTS	COORDINATE		CONTROL POINTS	COORDINATE		CONTROL POINTS	COORDINATE	
	NORTHING	EASTING		NORTHING	EASTING		NORTHING	EASTING
1	9166266.655	641295.131	24	9166245.739	641381.054	47	9166225.489	641406.661
2	9166264.031	641300.340	25	9166253.879	641381.699	48	9166221.240	641417.472
3	9166252.952	641328.350	26	9166264.820	641399.181	49	9166213.334	641433.888
4	9166245.175	641349.236	27	9166262.579	641389.347	50	9166211.686	641434.022
5	9166243.213	641349.912	28	9166257.265	641375.010	51	9166204.136	641448.213
6	9166241.755	641356.302	29	9166256.575	641366.587	52	9166179.004	641459.038
7	9166234.231	641370.921	30	9166258.595	641358.241	53	9166191.257	641443.223
8	9166232.570	641373.868	31	9166268.866	641341.032	54	9166193.841	641440.179
9	9166224.840	641374.054	32	9166279.434	641323.961	55	9166204.323	641428.817
10	9166217.047	641372.110	33	9166289.518	641306.647	56	9166203.850	641427.281
11	9166218.866	641373.202	34	9166284.338	641304.038	57	9166219.561	641405.923
12	9166219.893	641377.312	35	9166273.874	641317.359	58	9166225.433	641397.330
13	9166215.038	641401.946	36	9166274.497	641318.818	59	9166230.227	641389.824
14	9166194.923	641429.292	37	9166255.366	641352.768	60	9166230.319	641389.066
15	9166190.858	641432.287	38	9166249.319	641357.728	61	9166232.815	641384.638
16	9166184.519	641439.069	39	9166248.403	641361.040	62	9166244.893	641362.224
17	9166183.570	641443.019	40	9166248.964	641363.056	63	9166246.646	641358.819
18	9166208.230	641451.943	41	9166248.450	641364.055	64	9166247.425	641357.285
19	9166212.167	641446.155	42	9166236.303	641386.596	65	9166253.497	641352.209
20	9166226.346	641419.517	43	9166234.689	641389.460	66	9166256.380	641336.170
21	9166235.825	641398.889	44	9166232.164	641394.048	67	9166258.227	641329.906
22	9166237.855	641398.256	45	9166231.040	641393.842	68	9166264.477	641312.456
23	9166239.477	641392.166	46	9166227.278	641397.878	69	9166265.474	641312.288
						70	9166271.835	641297.740

- NOTES:
- FOR GENERAL NOTES, REFER TO DWG PGE-009
 - ALL DIMENSIONS AND MEASUREMENTS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.
 - ALL COORDINATES SHALL BE VERIFIED DURING CONSTRUCTION.
 - OFFSET TO SET OUT CONTROL POINTS ARE MEASURED PERPENDICULAR TO THE DESIGN LINE.
 - ALL HORIZONTAL AND VERTICAL GEOMETRY AT CONNECTIONS/TIE-INS SHALL BE VERIFIED DURING CONSTRUCTION.

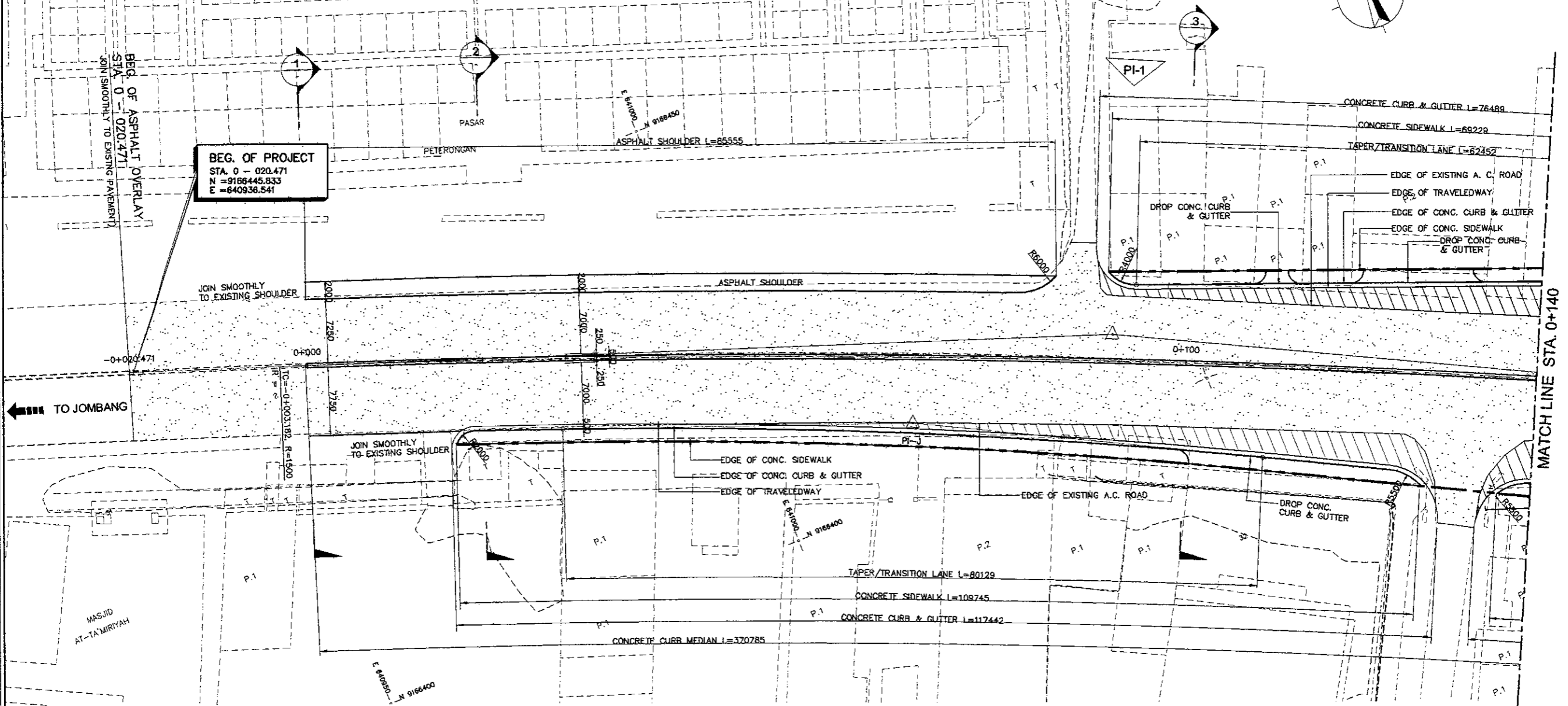


P.I.	I	R (m)	T (m)	Lc (m)	E (m)	COORDINATES	
						NORTHINGS	EASTINGS
PI-A	07°-49'-38"	146.783	10.042	20.753	0.343	9166285.068	641315.649
PI-B	04°-44'-40"	242.533	10.047	20.083	0.208	9166273.796	641332.278
PI-C	10°-18'-16"	167.711	15.122	30.162	0.680	9166257.229	641313.846
PI-D	07°-59'-23"	159.951	11.171	22.305	0.389	9166249.782	641339.065
PI-E	12°-28'-25"	75.000	8.196	16.328	0.447	9166254.062	641344.032
PI-F	07°-39'-01"	227.390	15.204	30.362	0.508	9166231.997	641405.403
PI-G	12°-24'-21"	139.841	15.177	30.326	0.822	9166220.704	641433.607
PI-H	12°-24'-21"	139.841	15.177	30.326	0.822	9166184.775	641450.855

NOTE: FOR CURVE ELEMENTS AT CENTERLINE OF FLYOVER, REFER TO DWG. PRD-017

TAPER/TRANSITION CURVE ELEMENTS

P.I.	COORDINATES		I	R (m)	T (m)	Lc (m)	E (m)	PC		PT	
	NORTHINGS	EASTINGS						NORTHINGS	EASTINGS	NORTHINGS	EASTINGS
PI-J	9166407.577	641017.059	06°-31'-44"	699.500	39.900	79.707	1.137	9166421.683	640979.743	9166389.309	641052.529



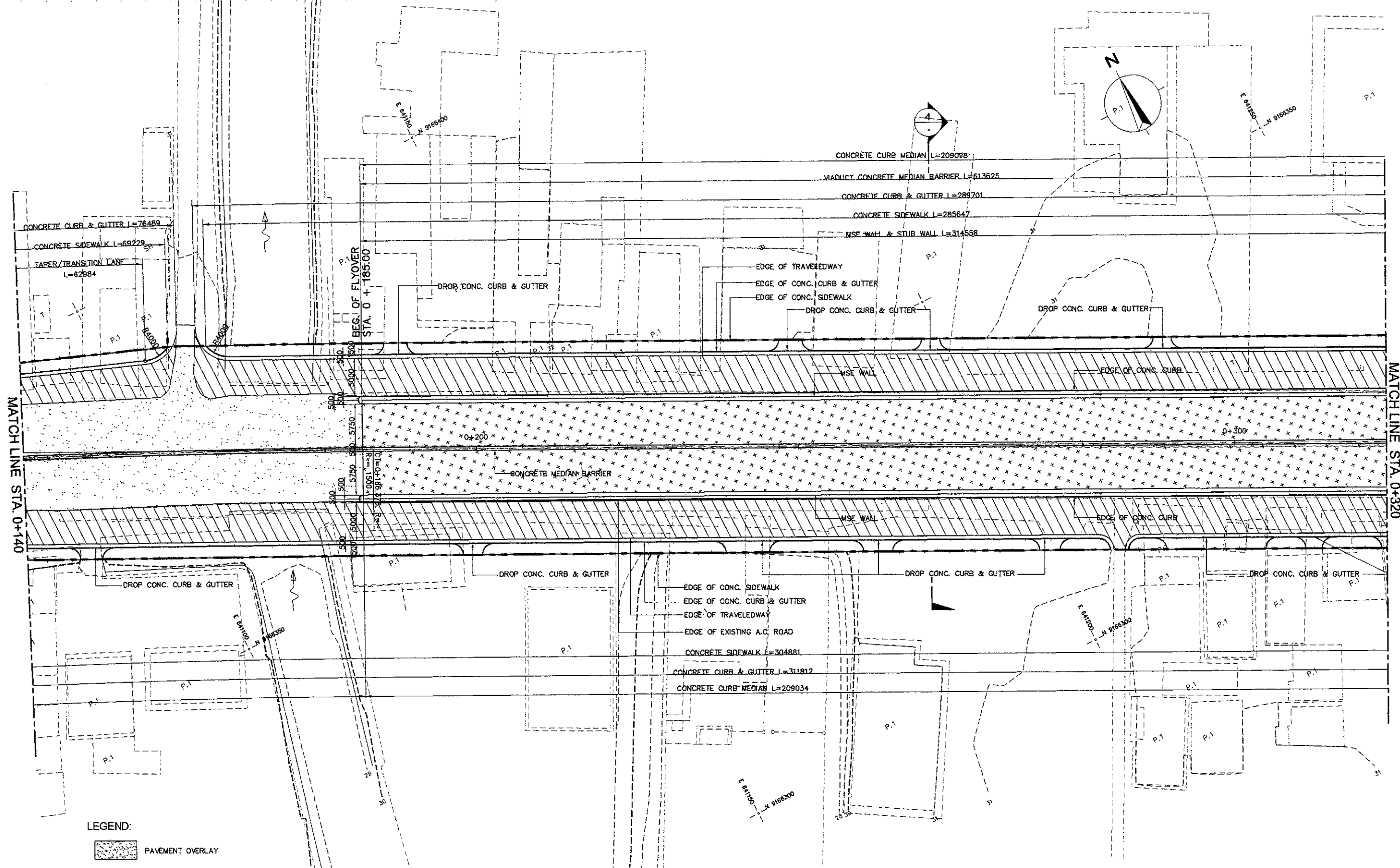
BEG. OF PROJECT
 STA. 0 - 020.471
 N = 9166445.833
 E = 640936.541

- LEGEND:**
- PAVEMENT OVERLAY
 - PAVEMENT WIDENING - NEW PAVEMENT
 - PAVEMENT AT APPROACH RAMP

1 DETAILED CONSTRUCTION LAYOUT PLAN
 SCALE 1:500

- NOTES:**
- FOR GENERAL NOTES, REFER TO DWG. PGE-009
 - ALL WORKS SHALL JOIN SMOOTHLY WITH EXISTING FORMATION.
 - ALL DIMENSIONS AND MEASUREMENTS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.
 - FOR CURB AND GUTTER DETAILS, REFER TO DWG. PRD-054
 - FOR DRAINAGE LAYOUT, REFER TO DWGS. PDG-002 TO PDG-004
 - FOR STANDARD ASPHALT PAVEMENT DETAILS, REFER TO DWG. PRD-052
 - MOUNTABLE (DROP) CONC. CURB AND MOUNTABLE (DROP) COMBINATION CONC. CURB & GUTTER SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER AT ALL DRIVEWAYS AND ENTRANCES AFFECTED BY WIDENING AND/OR AT-GRADE IMPROVEMENT OR AS SPECIFIED IN THIS DRAWING.
 - FOR CURVE ELEMENTS OF FLYOVER CENTERLINE ALIGNMENT, REFER TO DWG. PRD-017
 - ALL HORIZONTAL AND VERTICAL GEOMETRY AT CONNECTIONS/TIE-INS SHALL BE VERIFIED ON SITE BEFORE CONSTRUCTION.
 - FOR GEOMETRIC LAYOUT AT INTERSECTION, REFER TO DWG. PRD-018

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

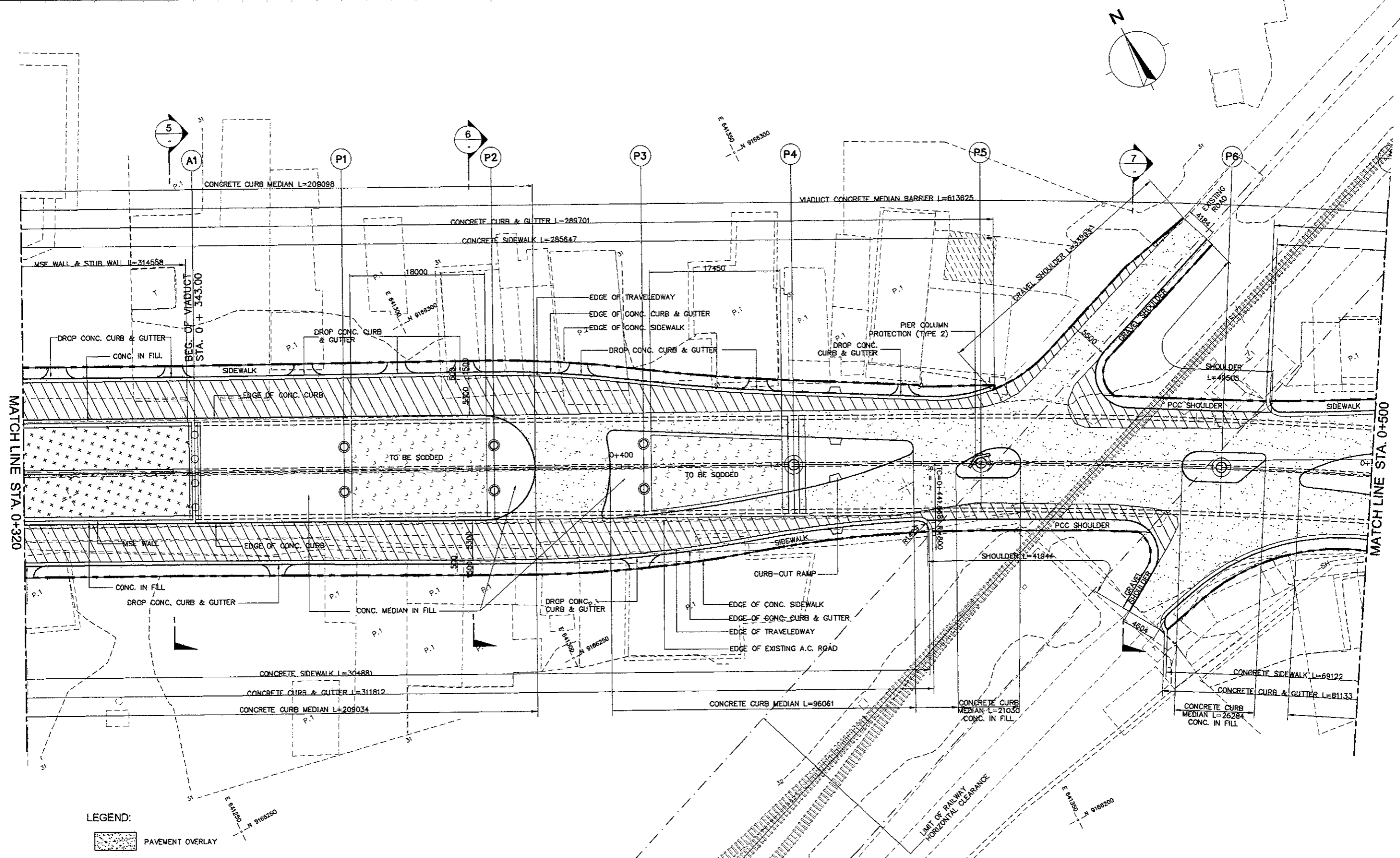


- LEGEND:**
- PAVEMENT OVERLAY
 - PAVEMENT WIDENING - NEW PAVEMENT
 - PAVEMENT AT APPROACH RAMPs

1 DETAILED CONSTRUCTION LAYOUT PLAN
 SCALE 1:500

NOTE:
 1. FOR SPECIFIC NOTES, REFER TO DWG. PRD-019

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

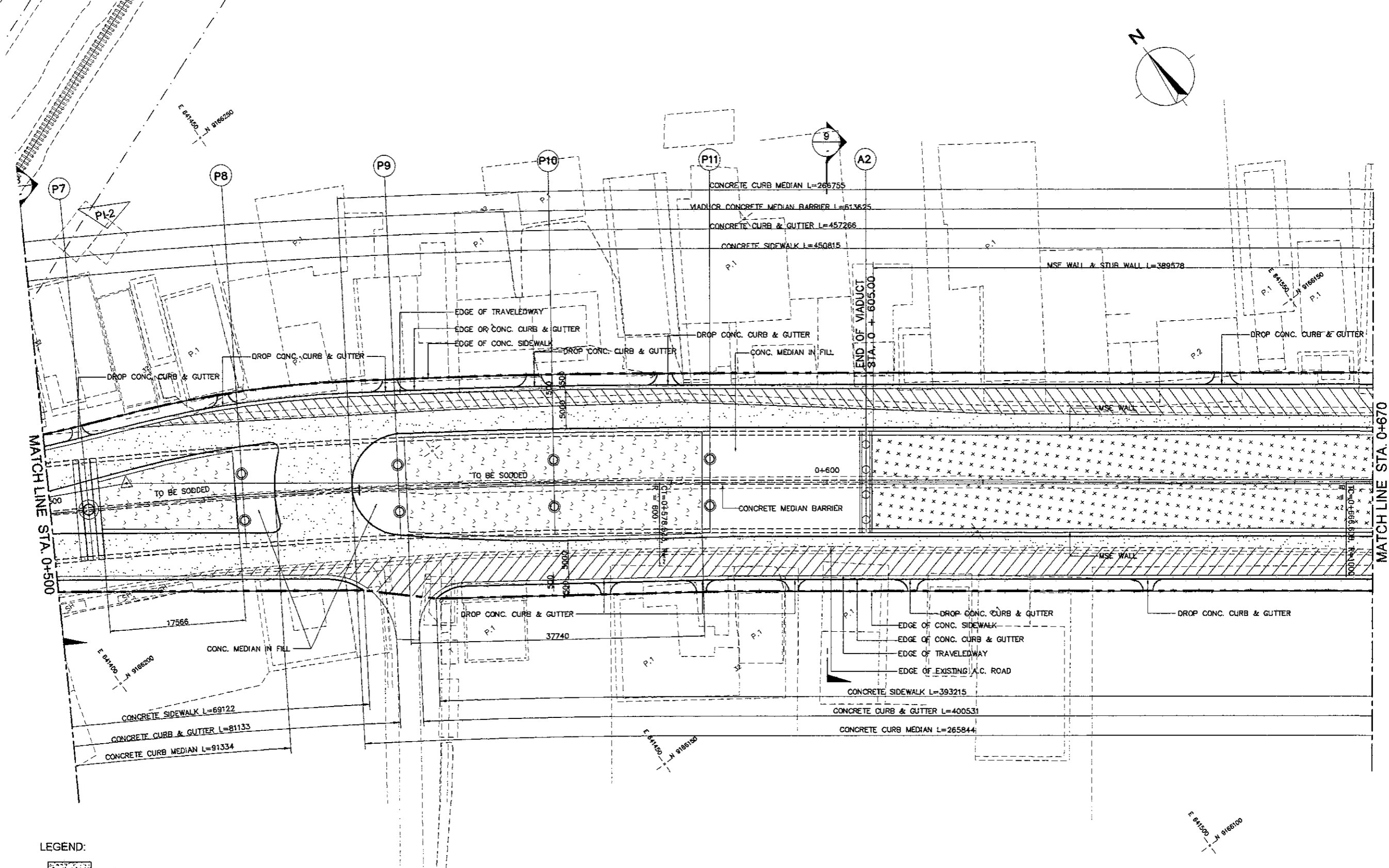
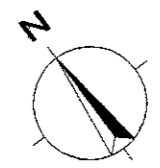


- LEGEND:
- PAVEMENT OVERLAY
 - PAVEMENT WIDENING - NEW PAVEMENT
 - PAVEMENT AT APPROACH RAMP

1 DETAILED CONSTRUCTION LAYOUT PLAN
 SCALE 1:500

NOTE:
 1. FOR SPECIFIC NOTES, REFER TO DWG. PRD-019

DESIGNED BY	CHECKED BY	SUBMITTED BY
Name: R. UENO	Name: T. OKUMURA	Name: M. KIUCHI
Sign: _____	Sign: _____	Sign: _____
Date: _____	Date: _____	Date: _____



MATCH LINE STA. 0+500

MATCH LINE STA. 0+670

LEGEND:

	PAVEMENT OVERLAY
	PAVEMENT WIDENING -NEW PAVEMENT
	PAVEMENT AT APPROACH RAMP

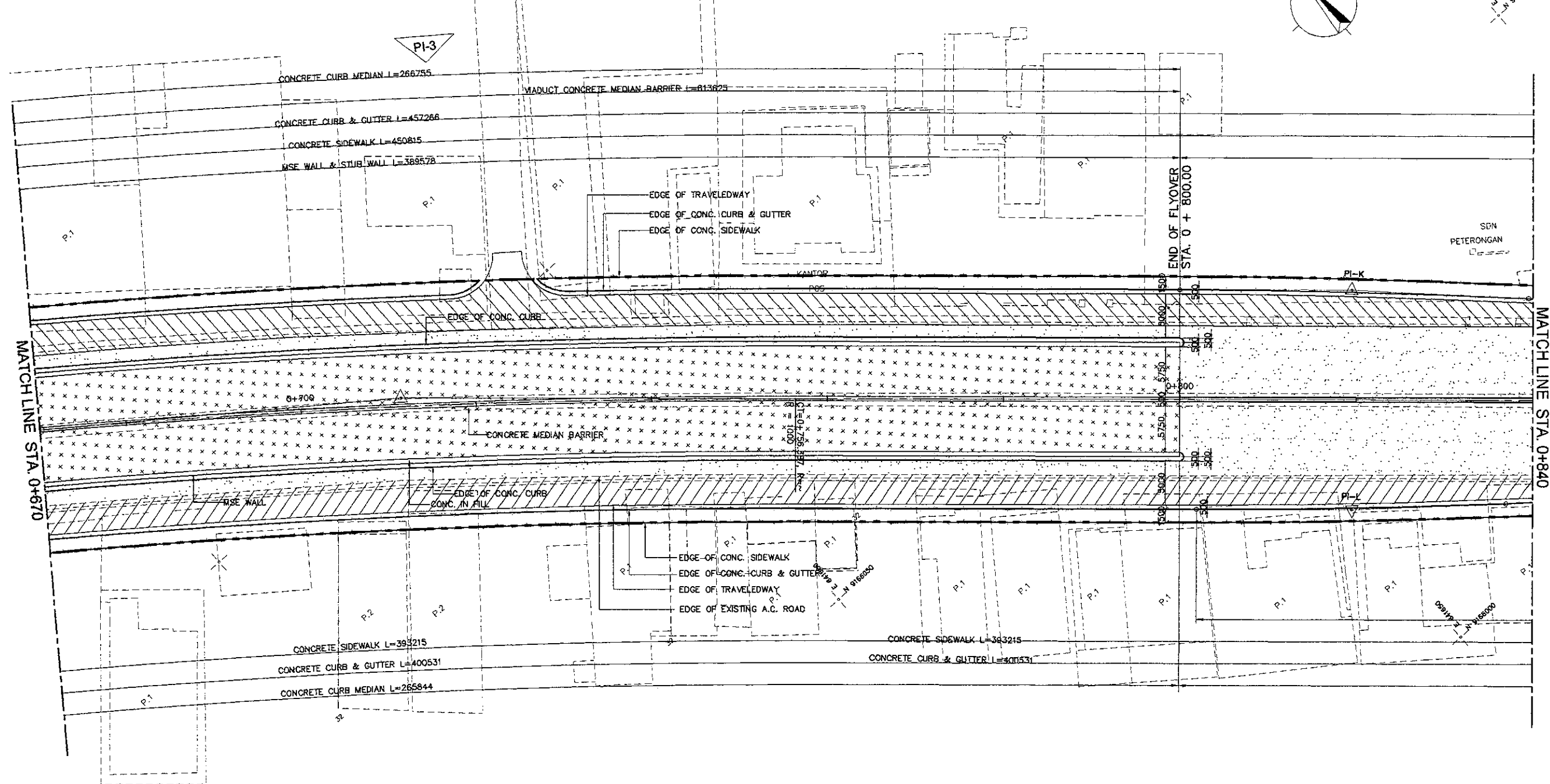
1 DETAILED CONSTRUCTION LAYOUT PLAN
 SCALE 1:500

NOTE:
 1. FOR SPECIFIC NOTES, REFER TO DWG. PRD-019

DESIGNED BY	CHECKED BY	SUBMITTED BY
Name: R. UENO	Name: T. OKUMURA	Name: M. KIUCHI
Sign:	Sign:	Sign:
Date:	Date:	Date:

TAPER/TRANSITION CURVE ELEMENTS

P.I.	COORDINATES		I	R (m)	T (m)	Lc (m)	E (m)	PC		PT	
	NORTHINGS	EASTINGS						NORTHINGS	EASTINGS	NORTHINGS	EASTINGS
PI-K	9166037.718	641666.930	02°-36'-36"	877.826	19.997	39.987	0.228	9166051.011	641651.991	9166023.758	641681.247
PI-L	9166019.040	641650.313	02°-30'-55"	800.000	17.562	35.118	0.193	9166007.952	641663.932	9166030.714	641637.193



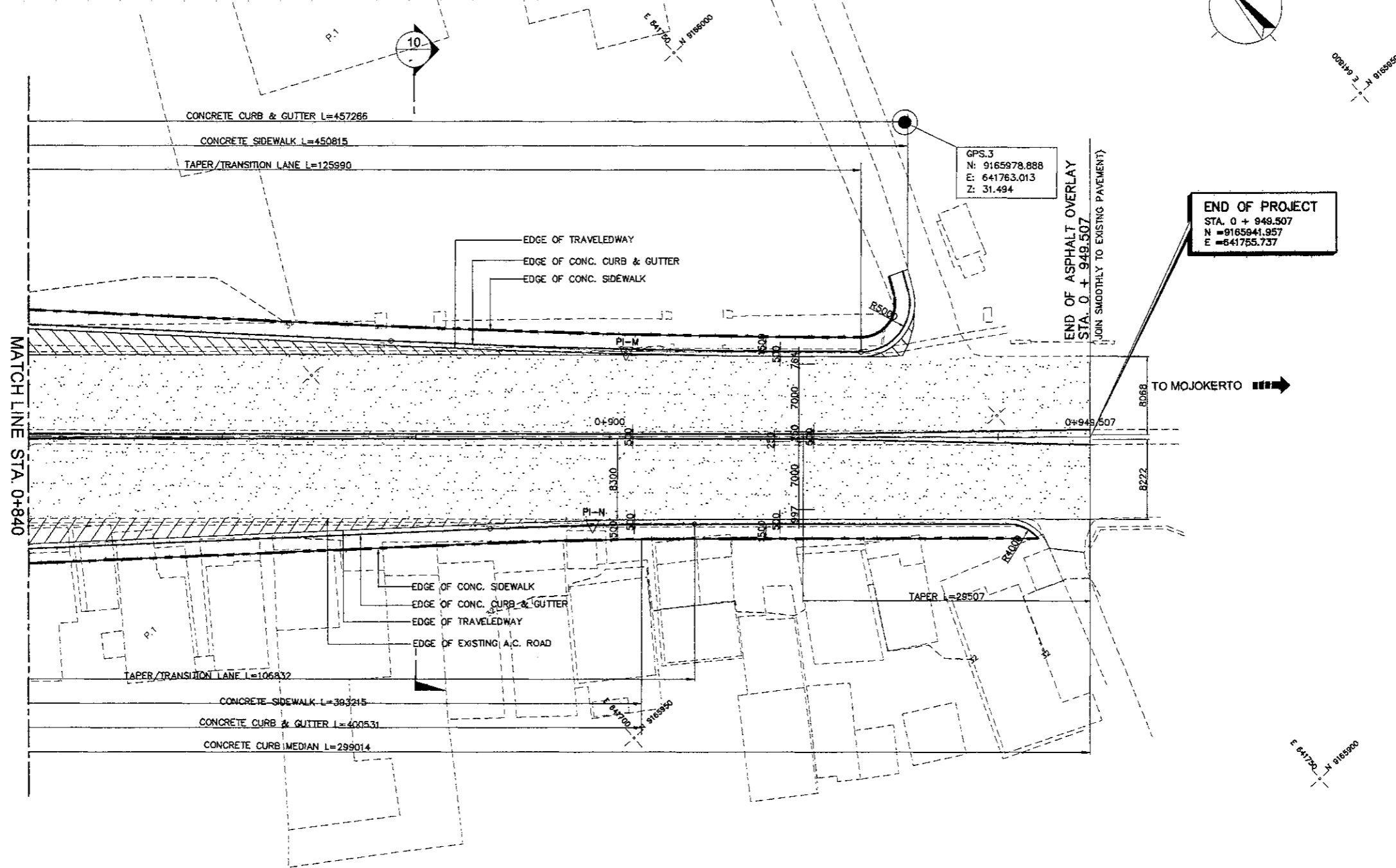
- LEGEND:**
- PAVEMENT OVERLAY
 - PAVEMENT WIDENING - NEW PAVEMENT
 - PAVEMENT AT APPROACH RAMP

1
DETAILED CONSTRUCTION LAYOUT PLAN
 SCALE 1:500

NOTE:
 1. FOR SPECIFIC NOTES, REFER TO DWG. PRD-019

TAPER/TRANSITION CURVE ELEMENTS

P.I.	COORDINATES		I	R (m)	T (m)	Lc (m)	E (m)	PC		PT	
	NORTHINGS	EASTINGS						NORTHINGS	EASTINGS	NORTHINGS	EASTINGS
PI-M	9165980.292	641725.827	02°-37'-55"	1055.101	24.238	48.467	0.278	9165997.213	641708.473	9165964.186	641743.939
PI-N	9165969.294	641711.415	02°-25'-15"	499.500	10.554	21.105	0.111	9165962.291	641719.311	9165975.957	641703.231

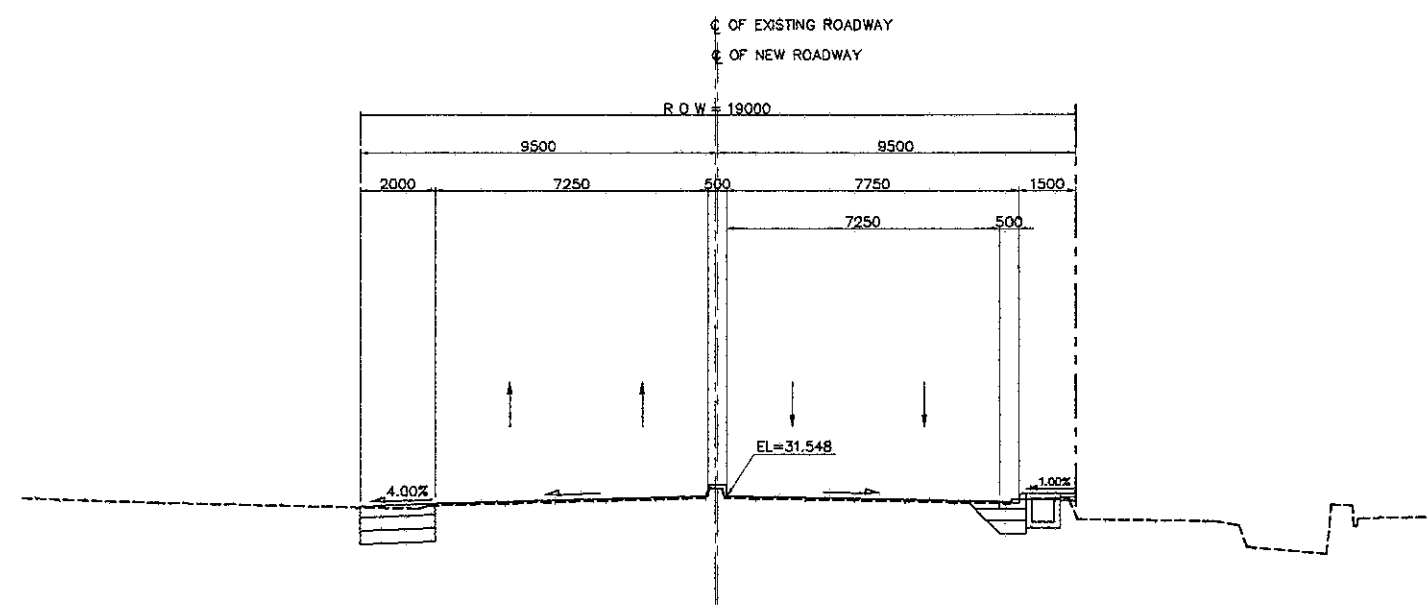


- LEGEND:**
- PAVEMENT OVERLAY
 - PAVEMENT WIDENING - NEW PAVEMENT
 - PAVEMENT AT APPROACH RAMP

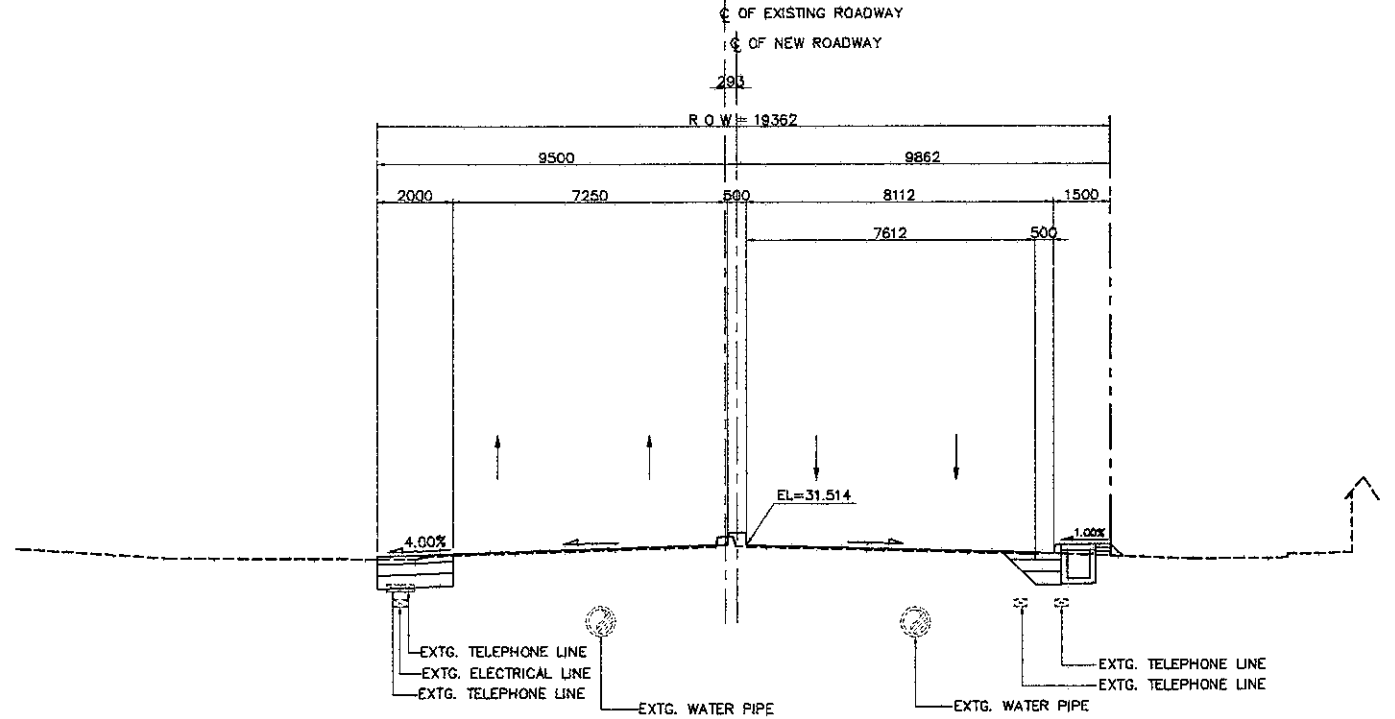
1 DETAILED CONSTRUCTION LAYOUT PLAN
 SCALE 1:500

NOTE:
 1. FOR SPECIFIC NOTES, REFER TO DWG. PRD-019

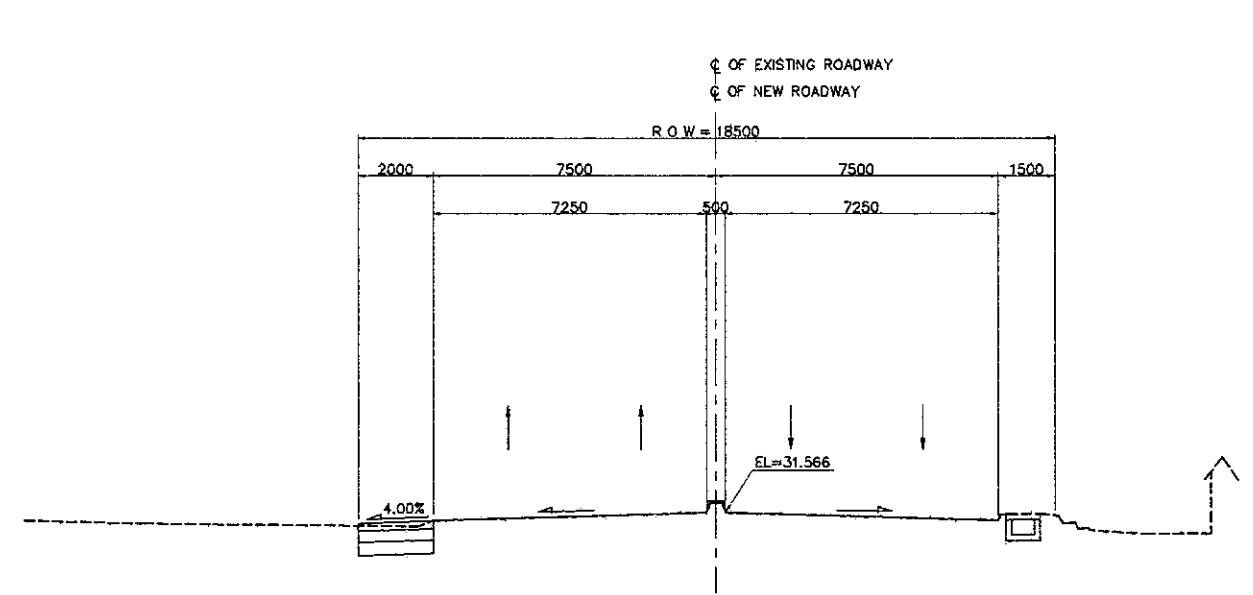
DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



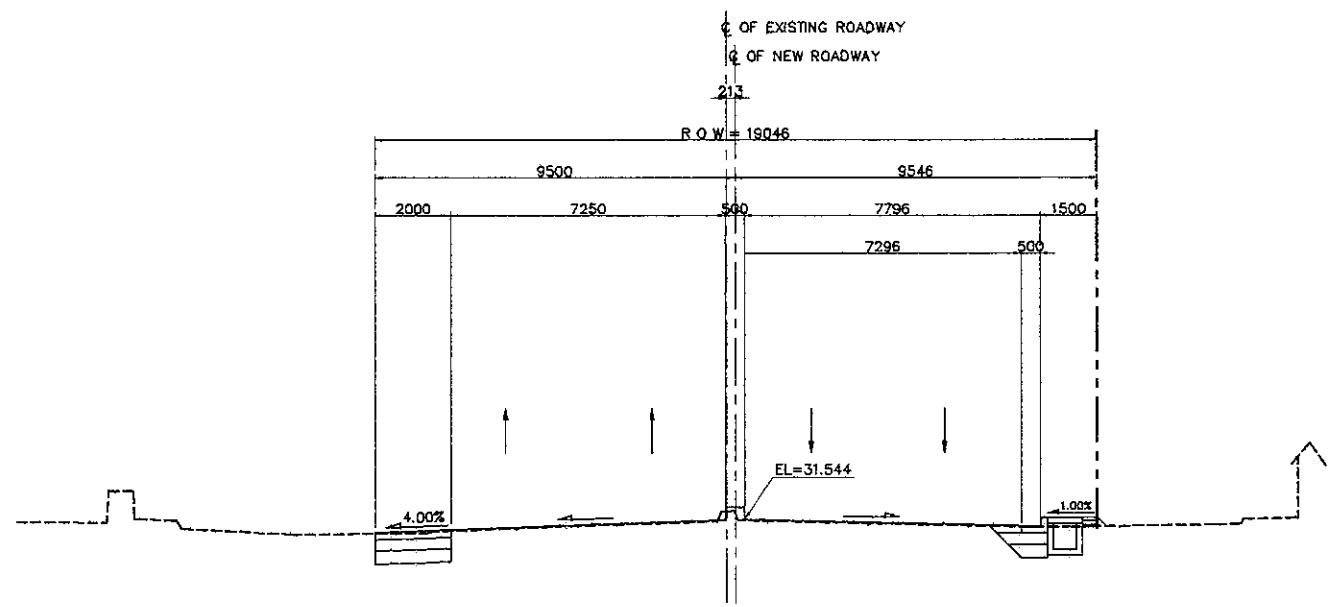
2 SECTION (STA. 0 + 020.000)
 SCALE 1:200



4 SECTION (STA. 0 + 060.000)
 SCALE 1:200



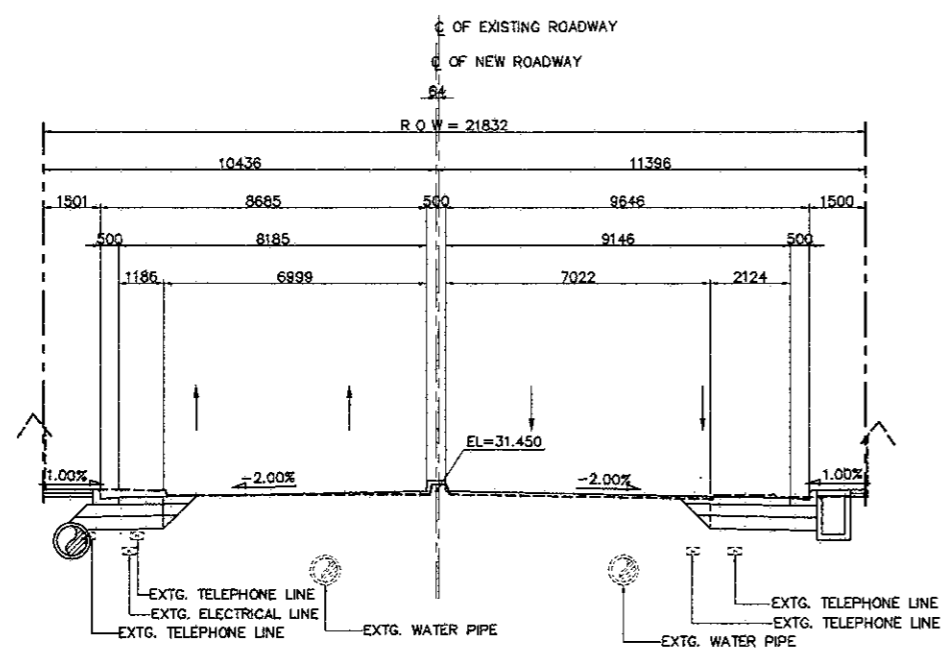
1 SECTION (STA. 0 + 000.000)
 SCALE 1:200



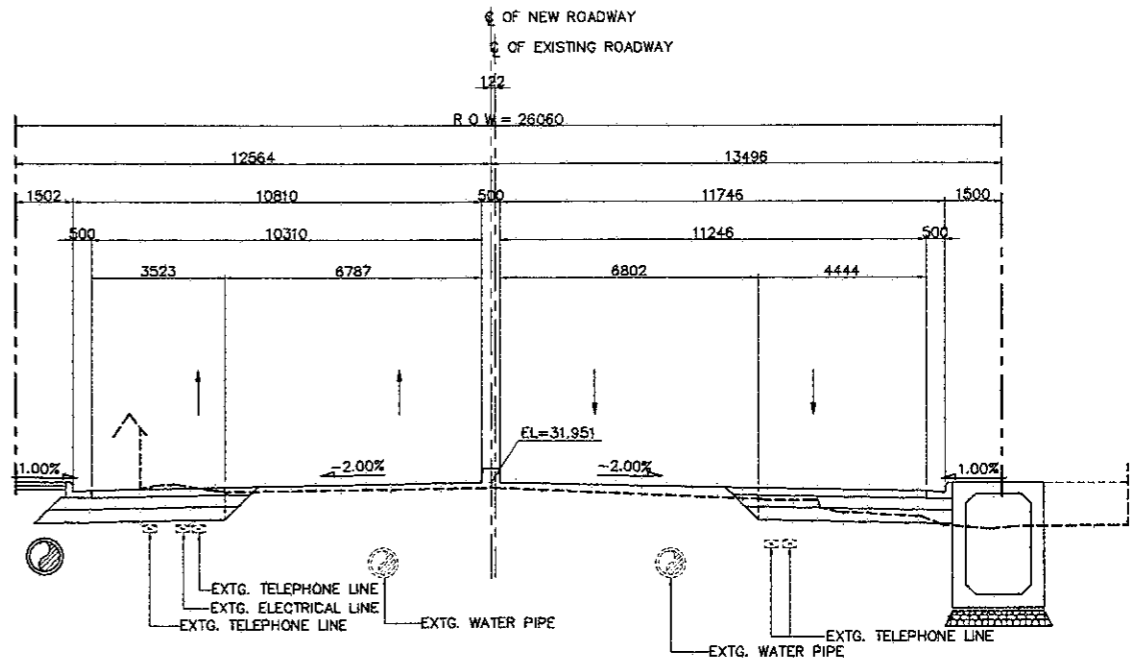
3 SECTION (STA. 0 + 040.000)
 SCALE 1:200

- NOTES:
1. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED DURING CONSTRUCTION.
 2. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO CONSTRUCTION.
 3. FOR LOCATION AND INVERT ELEVATIONS OF DRAINAGE SYSTEM (DITCH AND RCP) REFER TO DRAINAGE DRAWINGS.

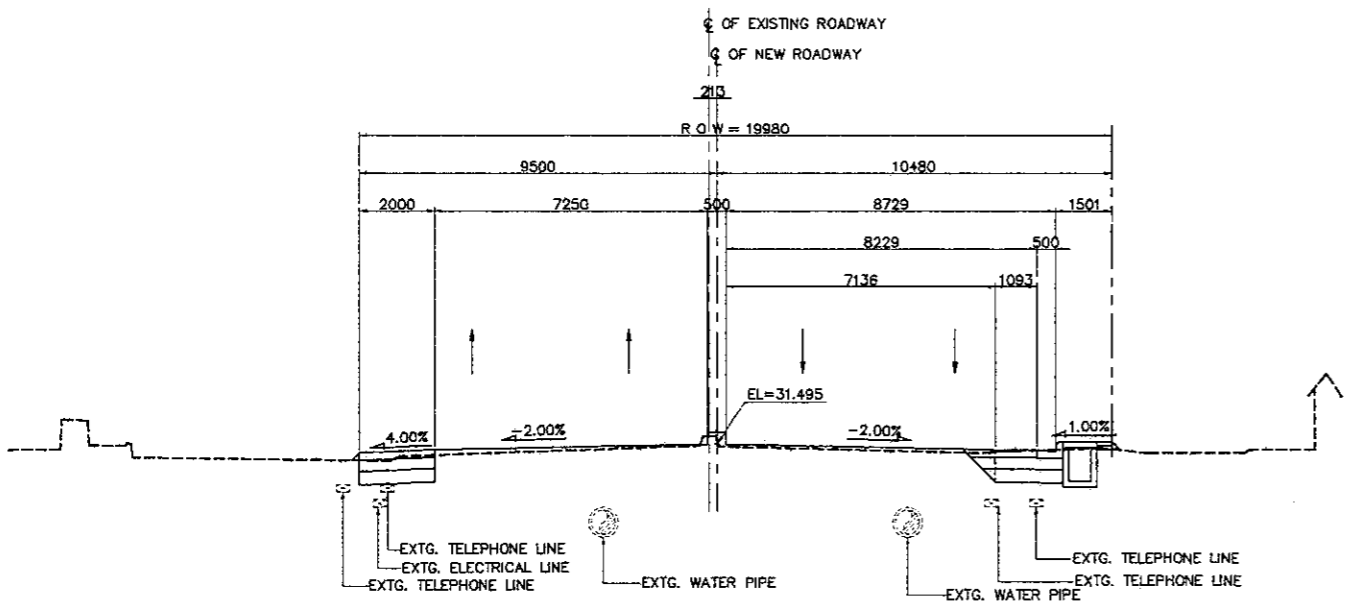
DESIGNED BY	CHECKED BY	SUBMITTED BY
Name: R. UENO	Name: T. OKUMURA	Name: M. KIUCHI
Sign: _____	Sign: _____	Sign: _____
Date: _____	Date: _____	Date: _____



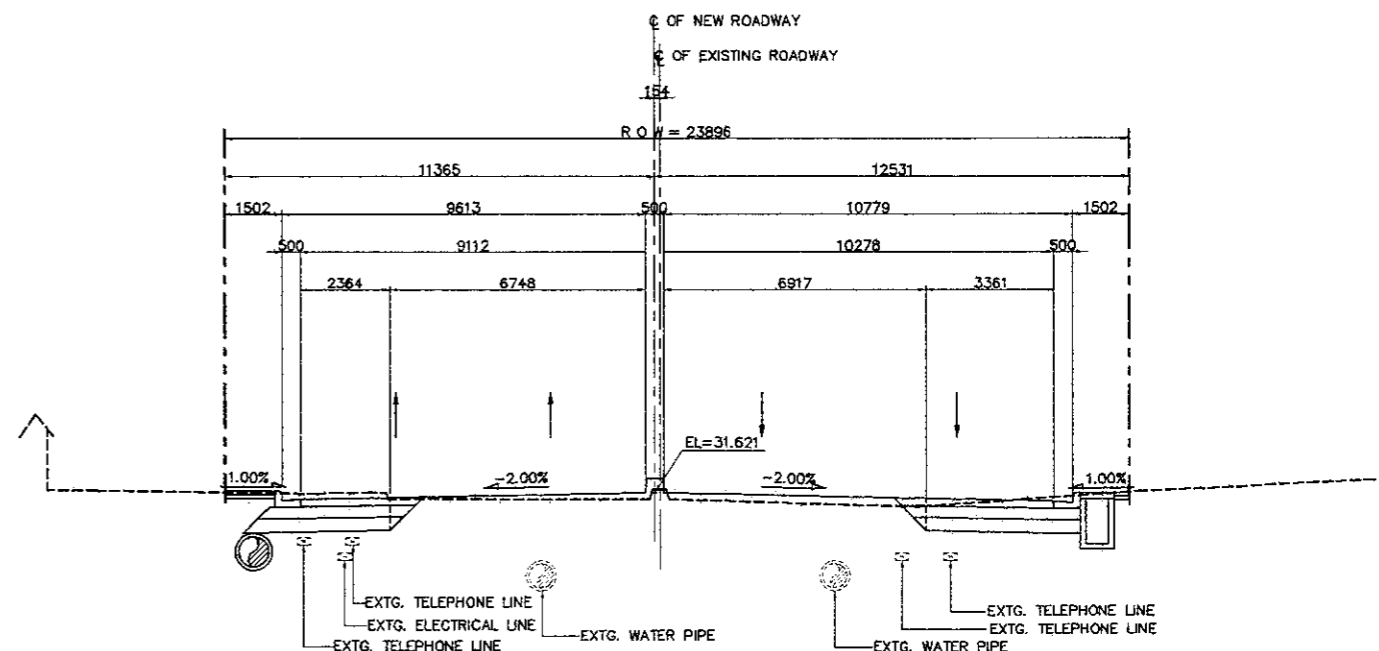
2 SECTION (STA. 0 + 100.000)
 SCALE 1:200



4 SECTION (STA. 0 + 140.000)
 SCALE 1:200



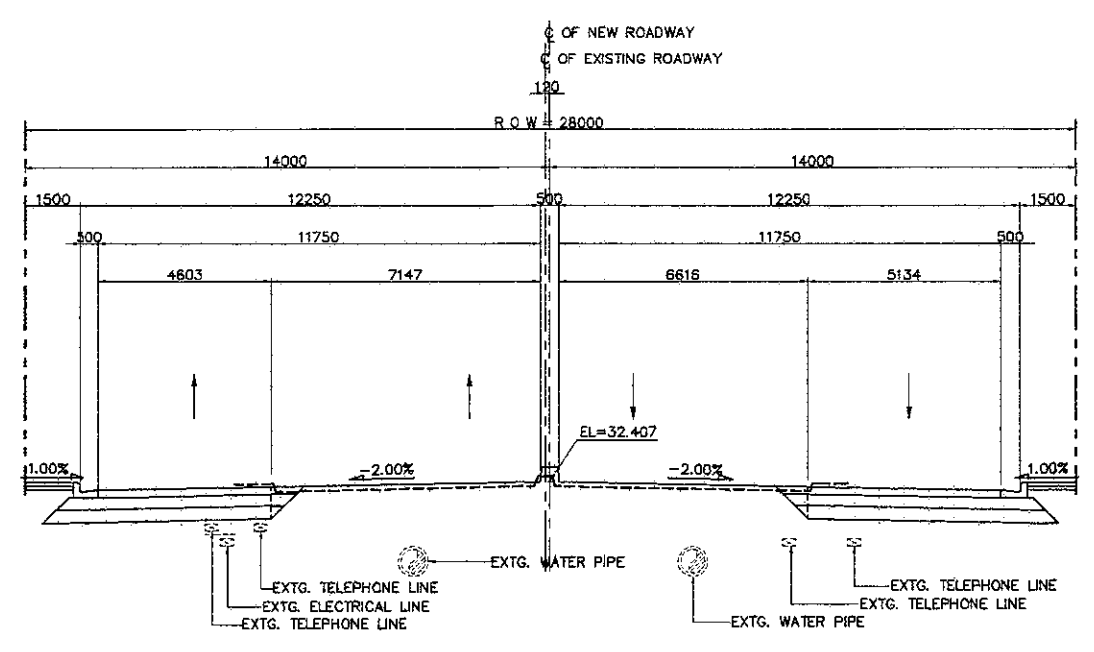
1 SECTION (STA. 0 + 080.000)
 SCALE 1:200



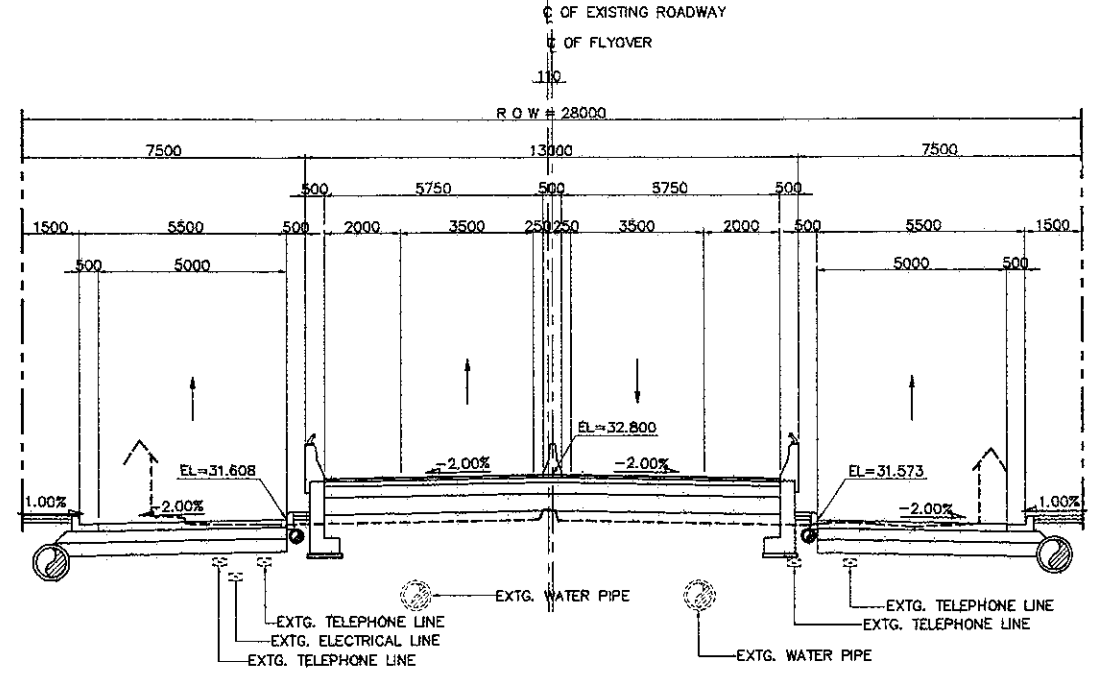
3 SECTION (STA. 0 + 120.000)
 SCALE 1:200

- NOTES:
1. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED DURING CONSTRUCTION.
 2. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO CONSTRUCTION.
 3. FOR LOCATION AND INVERT ELEVATIONS OF DRAINAGE SYSTEM (DITCH AND ROP) REFER TO DRAINAGE DRAWINGS.

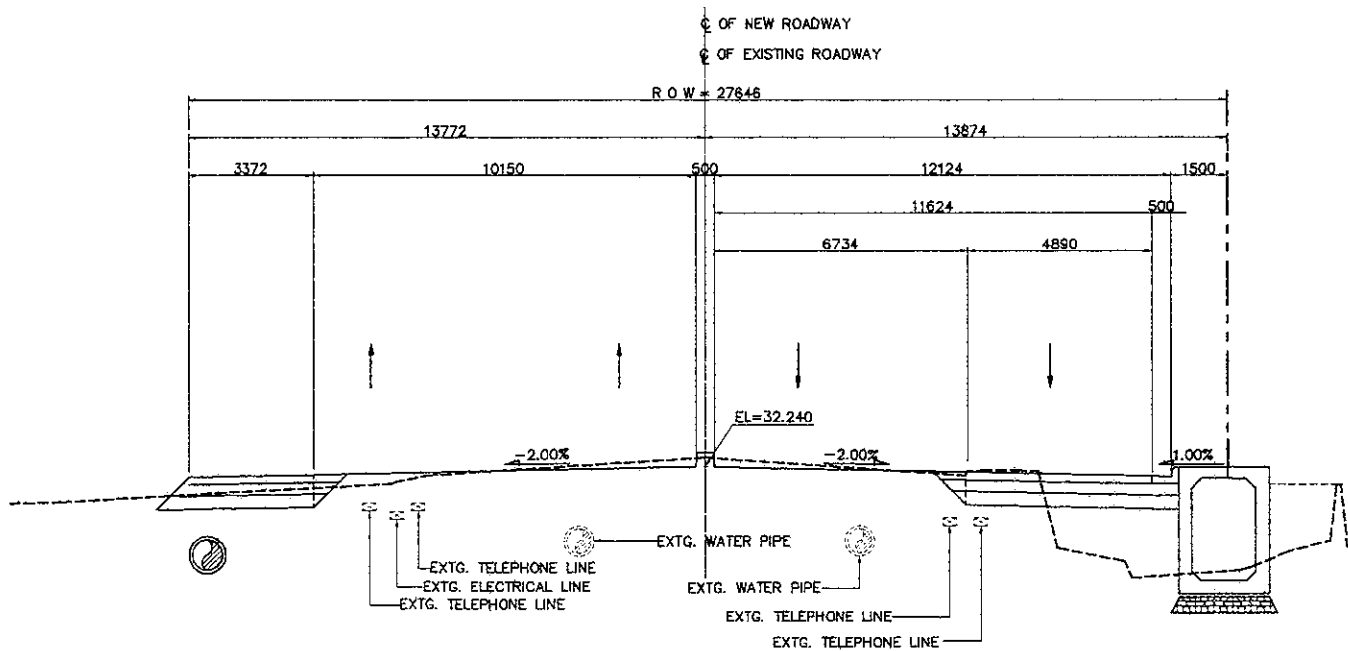
DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



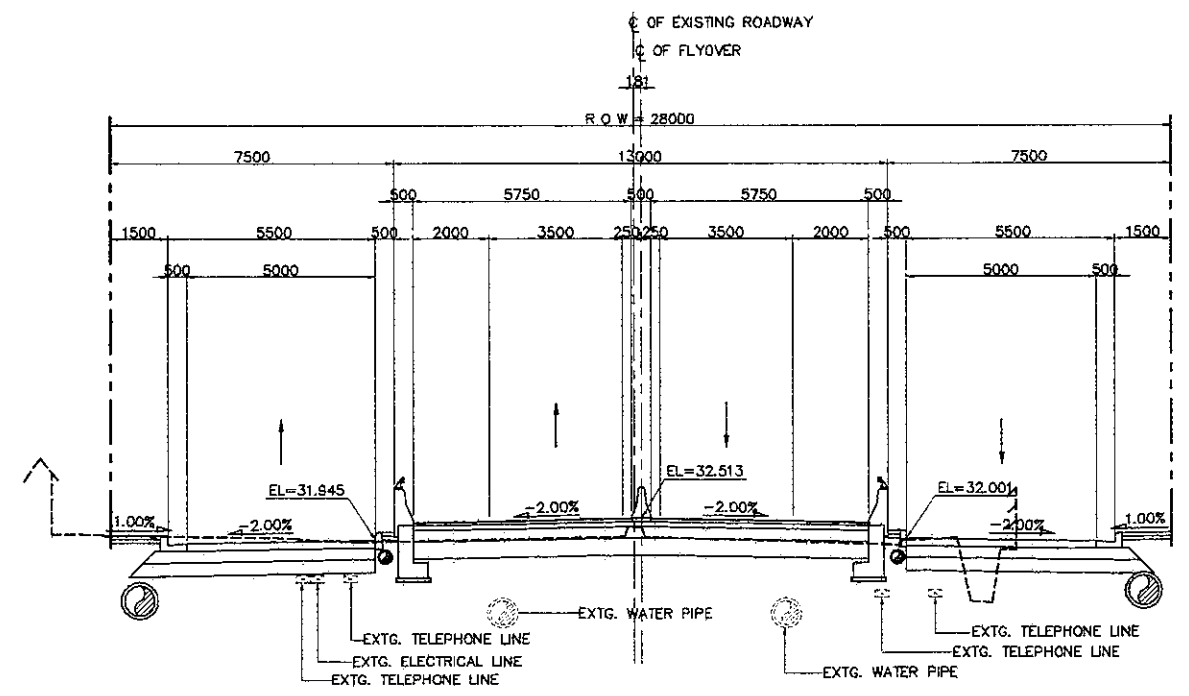
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4 SECTION (STA. 0 + 220.000)
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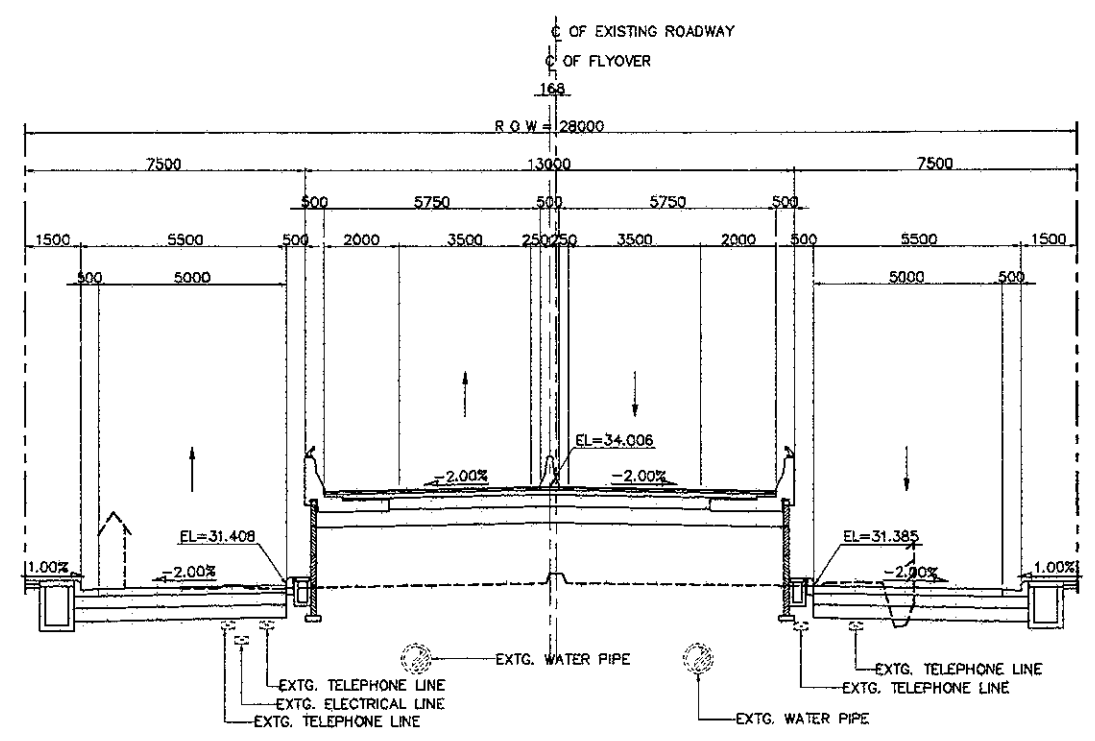
1 SECTION (STA. 0 + 160.000)
 SCALE 1:200



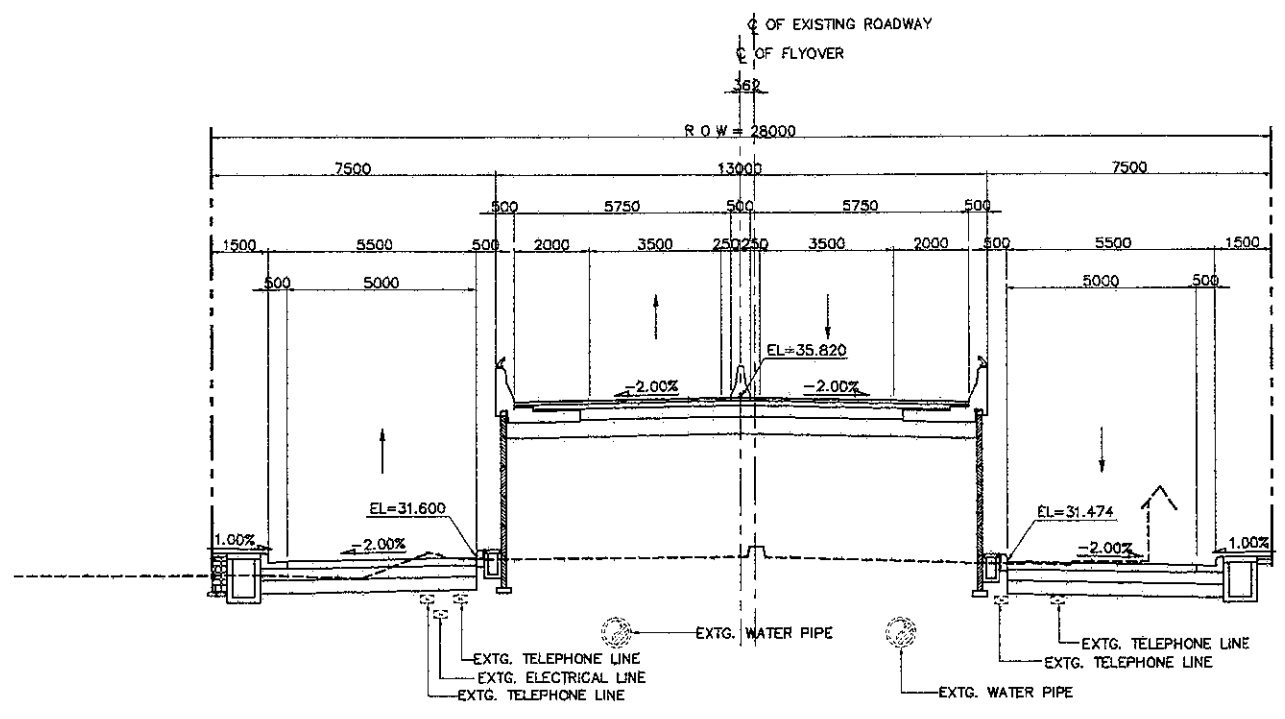
3 SECTION (STA. 0 + 200.000)
 SCALE 1:200

- NOTES:
1. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED DURING CONSTRUCTION.
 2. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO CONSTRUCTION.
 3. FOR LOCATION AND INVERT ELEVATIONS OF DRAINAGE SYSTEM (DITCH AND RCP) REFER TO DRAINAGE DRAWINGS.

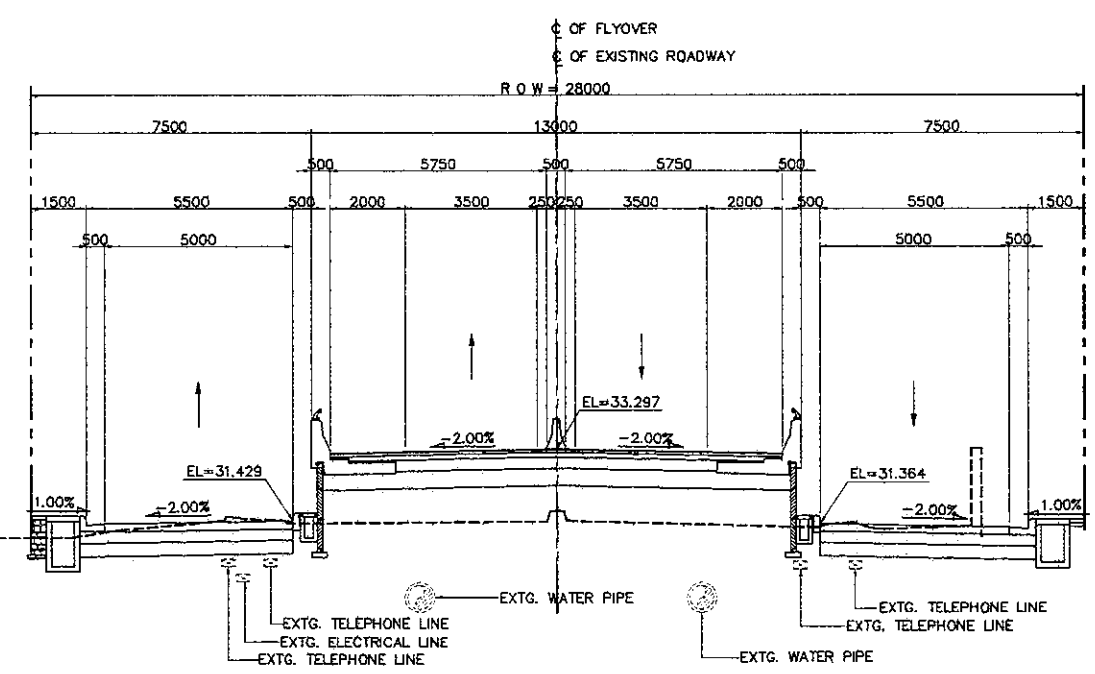
DESIGNED BY	CHECKED BY	SUBMITTED BY
Name: R. UENO	Name: T. OKUMURA	Name: M. KIUCHI
Sign: _____	Sign: _____	Sign: _____
Date: _____	Date: _____	Date: _____



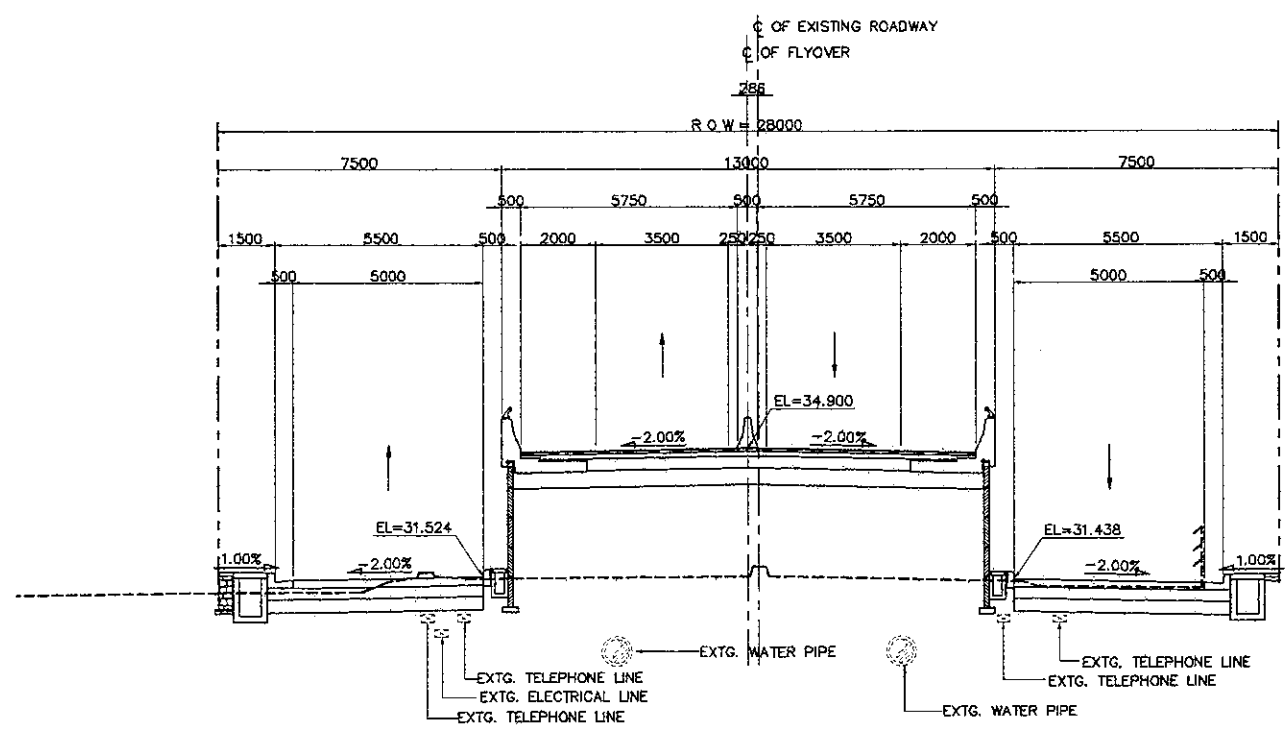
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4 SECTION (STA. 0 + 300.000)
 SCALE 1:200



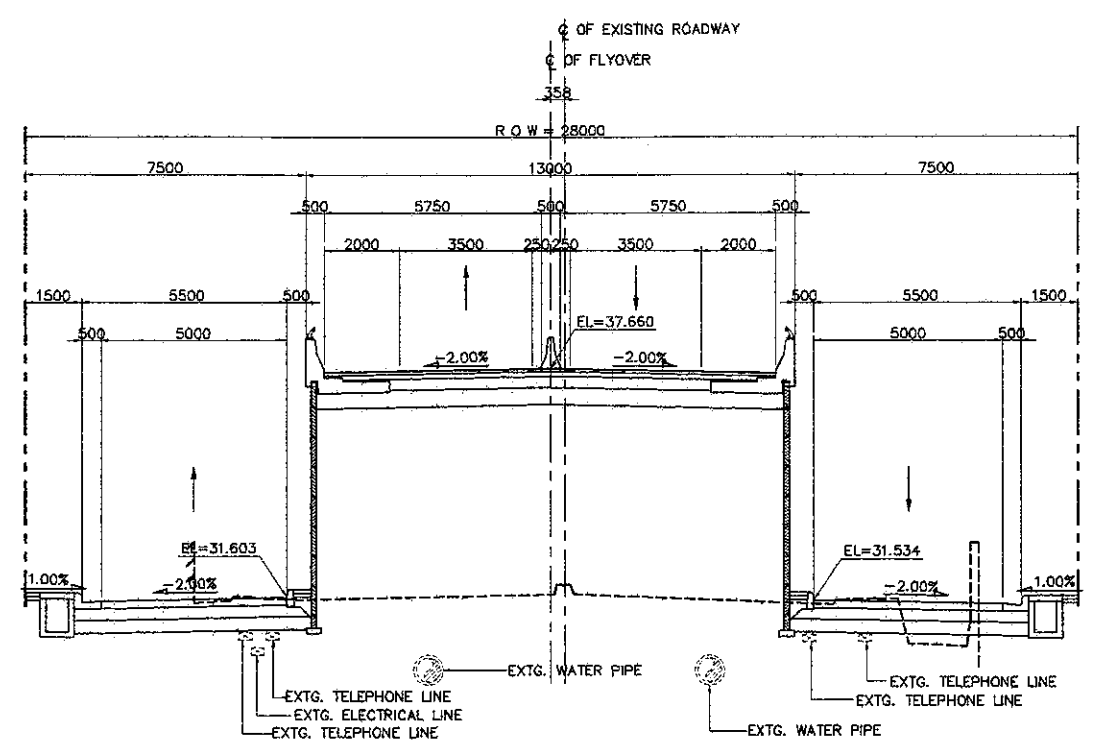
1 SECTION (STA. 0 + 240.000)
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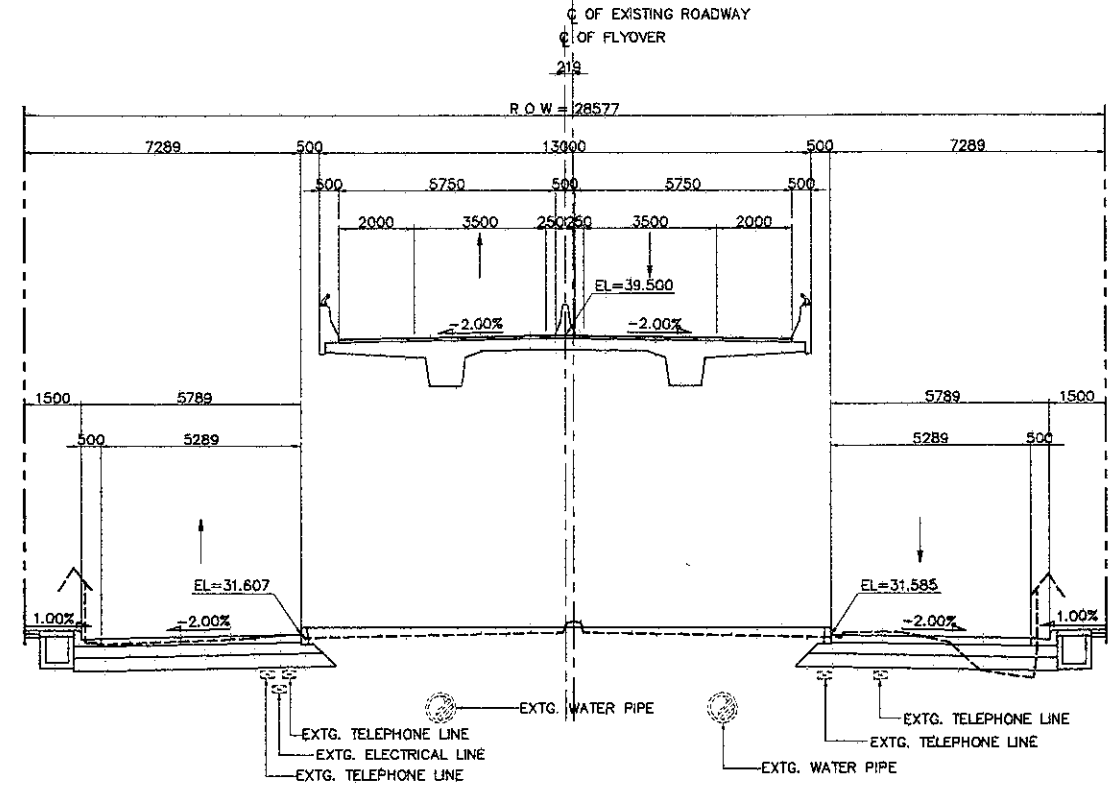
3 SECTION (STA. 0 + 280.000)
 SCALE 1:200

- NOTES:
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 - FOR LOCATION AND INVERT ELEVATIONS OF DRAINAGE SYSTEM (DITCH AND RCP) REFER TO DRAINAGE DRAWINGS.

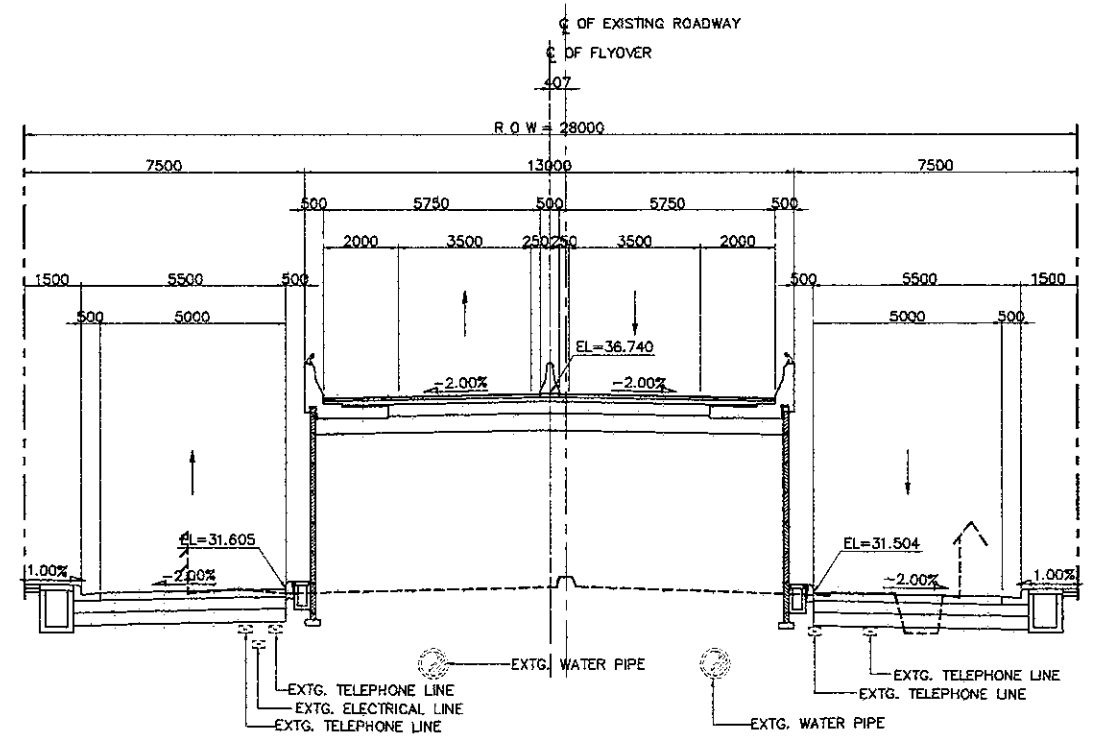
DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



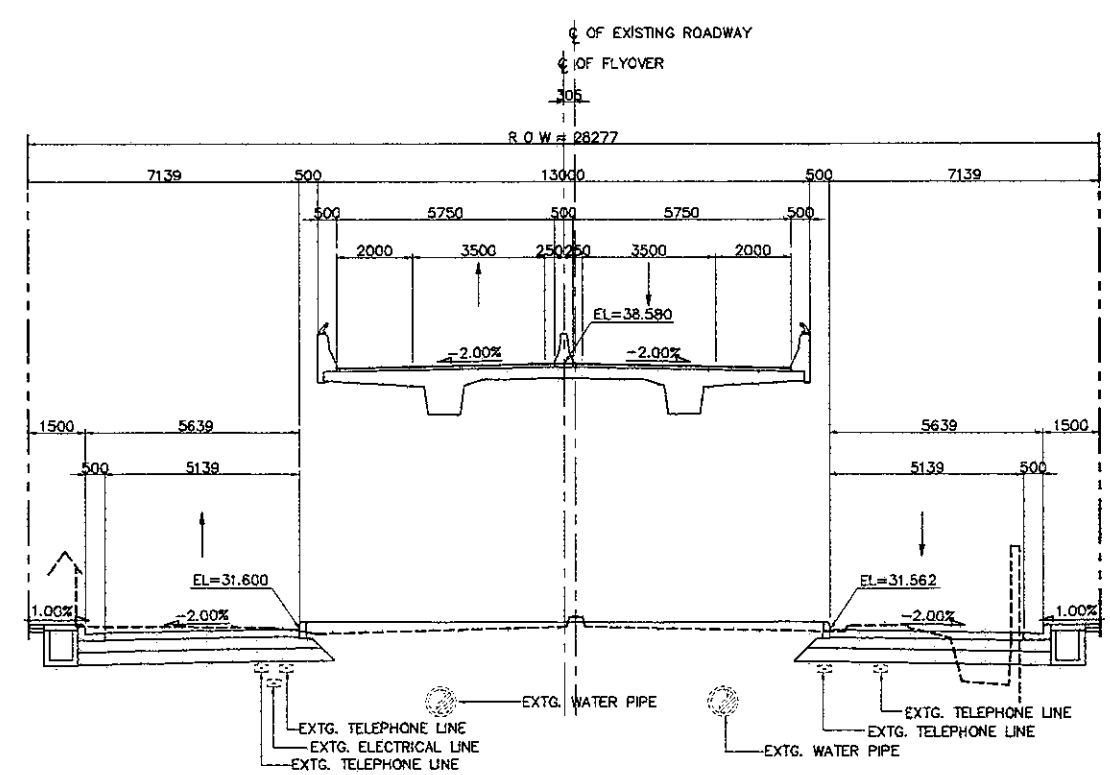
2 SECTION (STA. 0 + 340.000)
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4 SECTION (STA. 0 + 380.000)
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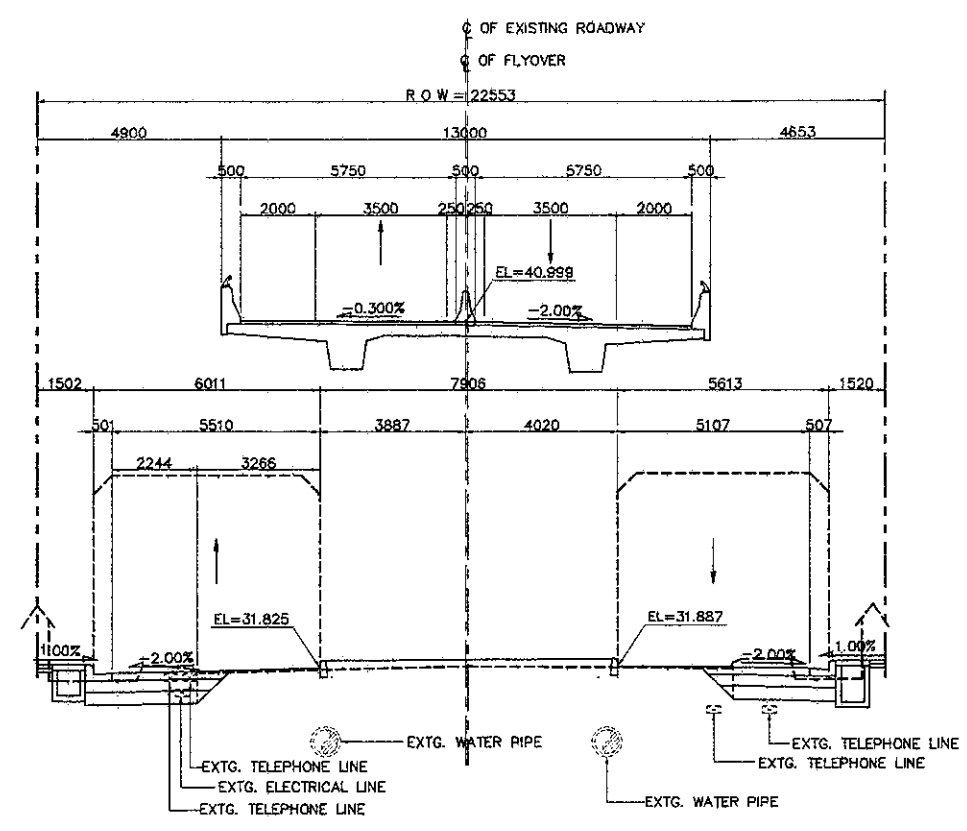
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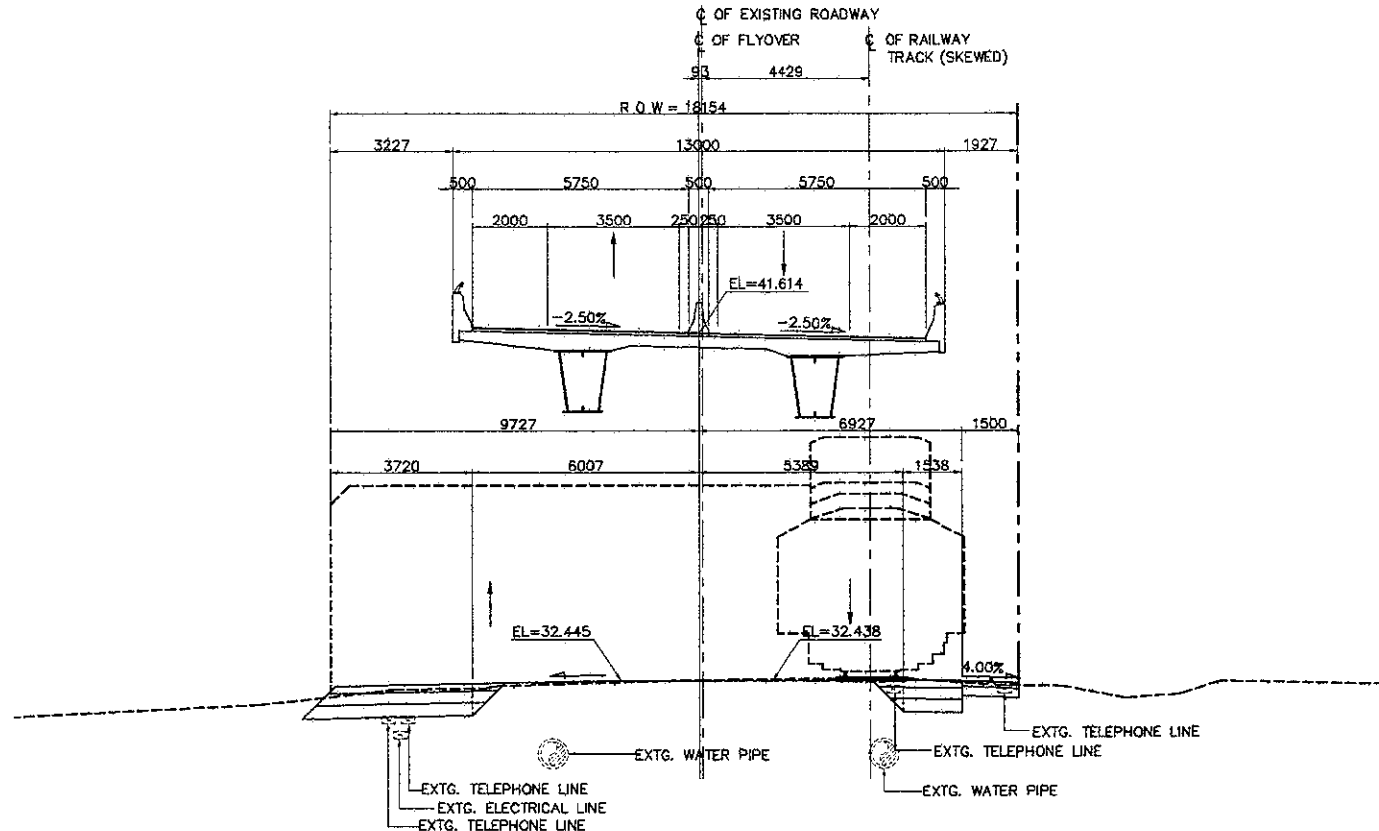
3 SECTION (STA. 0 + 360.000)
 SCALE 1:200

- NOTES:
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 2. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO CONSTRUCTION.
 3. FOR LOCATION AND INVERT ELEVATIONS OF DRAINAGE SYSTEM (DITCH AND RCP) REFER TO DRAINAGE DRAWINGS.

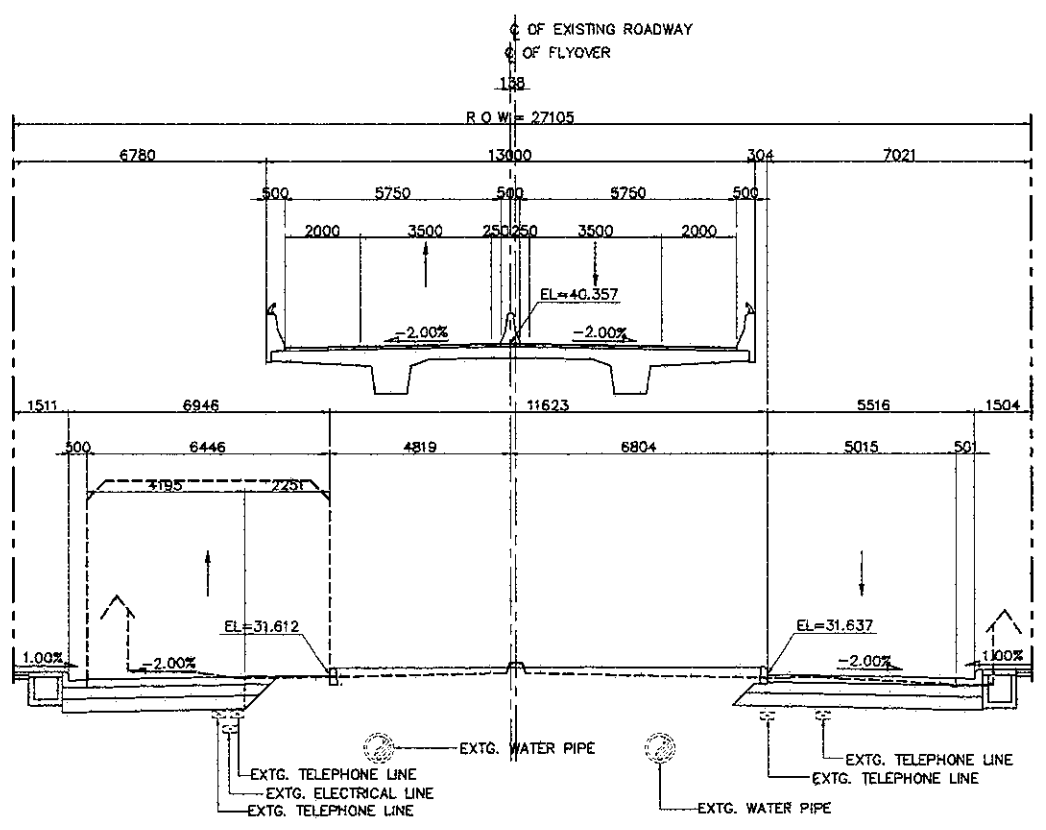
DESIGNED BY	CHECKED BY	SUBMITTED BY
Name: R. UENO	Name: T. OKUMURA	Name: M. KIUCHI
Sign	Sign	Sign
Date	Date	Date



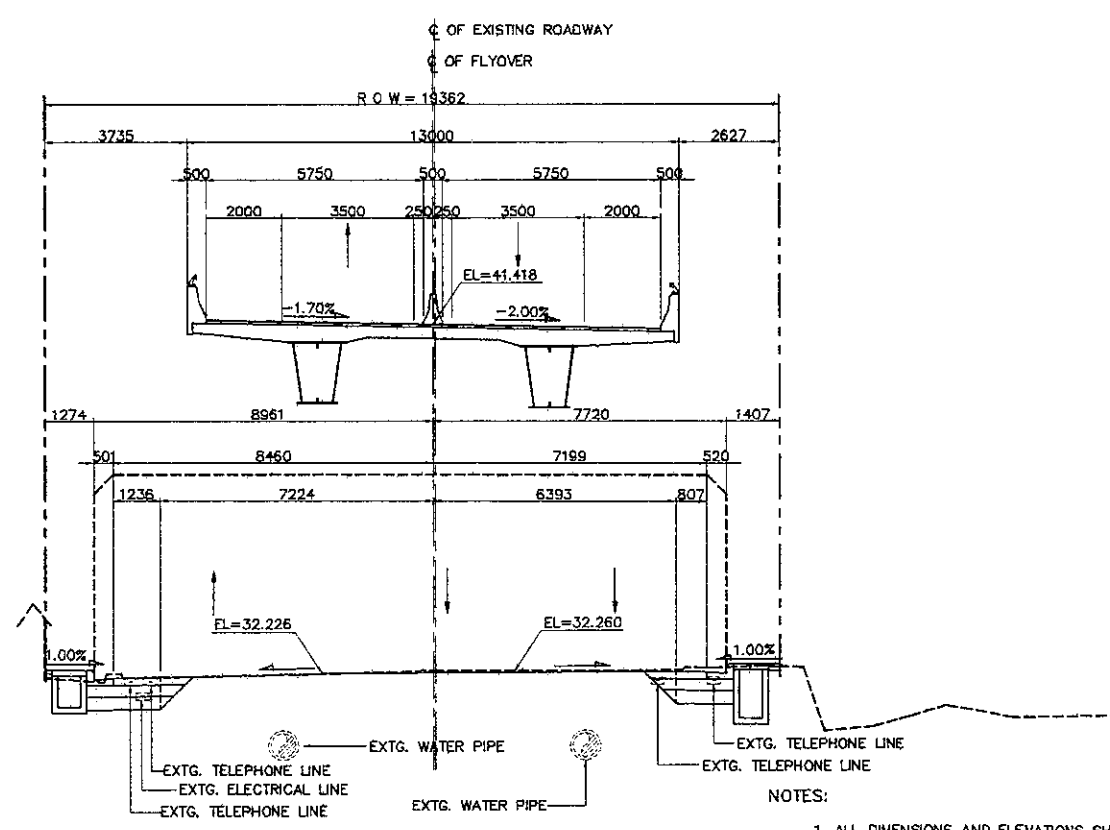
2 SECTION (STA. 0 + 420.000)
 SCALE 1:200



4 SECTION (STA. 0 + 460.000)
 SCALE 1:200



1 SECTION (STA. 0 + 400.000)
 SCALE 1:200



3 SECTION (STA. 0 + 440.000)
 SCALE 1:200

- NOTES:
1. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED DURING CONSTRUCTION.
 2. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO CONSTRUCTION.
 3. FOR LOCATION AND INVERT ELEVATIONS OF DRAINAGE SYSTEM (DITCH AND RCP) REFER TO DRAINAGE DRAWINGS.