Preparatory Survey
on
Transit Oriented Development
in Binh Duong Province
and

BRT Development Project (PPP Infrastructure Project)

Final Report

Appendix-B: Drawings of BRT Facilities

February 2016

Japan International Cooperation Agency (JICA)

Tokyu Corporation Nippon Koei Co,. Ltd. NIKKEN SEKKEI Research Institute Koei Research Institute International

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JR(先) 16-002 Preparatory Survey
on
Transit Oriented Development
in Binh Duong Province
and
BRT Development Project

Final Report

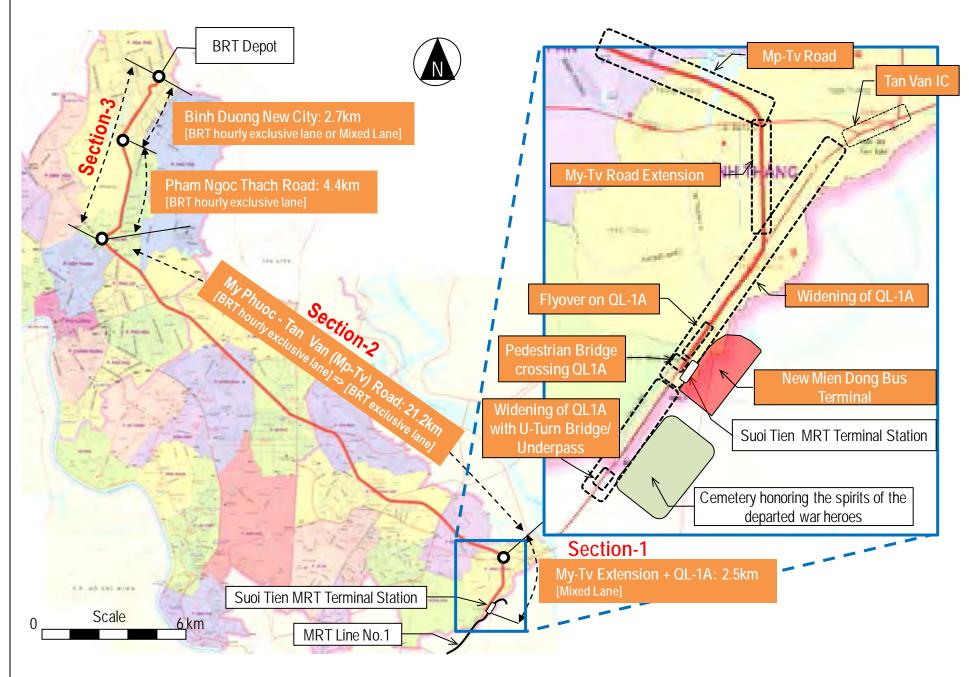
(PPP Infrastructure Project)

Appendix-B: Drawings of BRT Facilities

February 2016

Japan International Cooperation Agency (JICA)

Tokyu Corporation Nippon Koei Co,. Ltd. NIKKEN SEKKEI Research Institute Koei Research Institute International



LOCATION MAP

Note:

- i. Road infrastructures related to BRT operation shown as Infrastructure Projects in above Location Map are out of scope of the Project. These infrastructure shall be developed by another project before start BRT operation.
- ii. BRT route of Section-1 has each route in two phases depending on the progress of development of related road infrastructures. In phase-1 (temporary operation of BRT), New Mien Dong Bus Terminal, U-Turn Bridge/Underpass, Extension of Mp-Tv Road and Tan Van Interchange should be completed in 2018. In phase-2, other infrastructures such as flyover on QL1A, pedestrian bridge and widening of QL1A should be completed in 2020 so that BRT can operate in full-scale business.

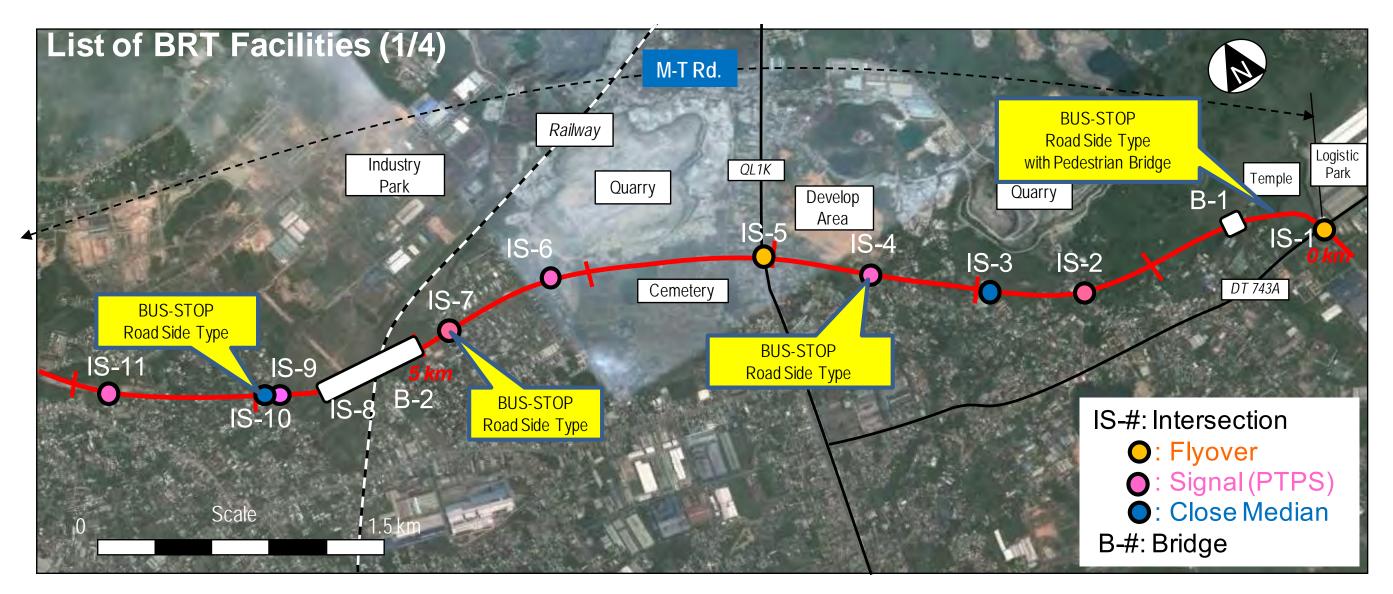
CONTENTS OF PRELIMINARY DESIGN OF

BRT FACILITIES

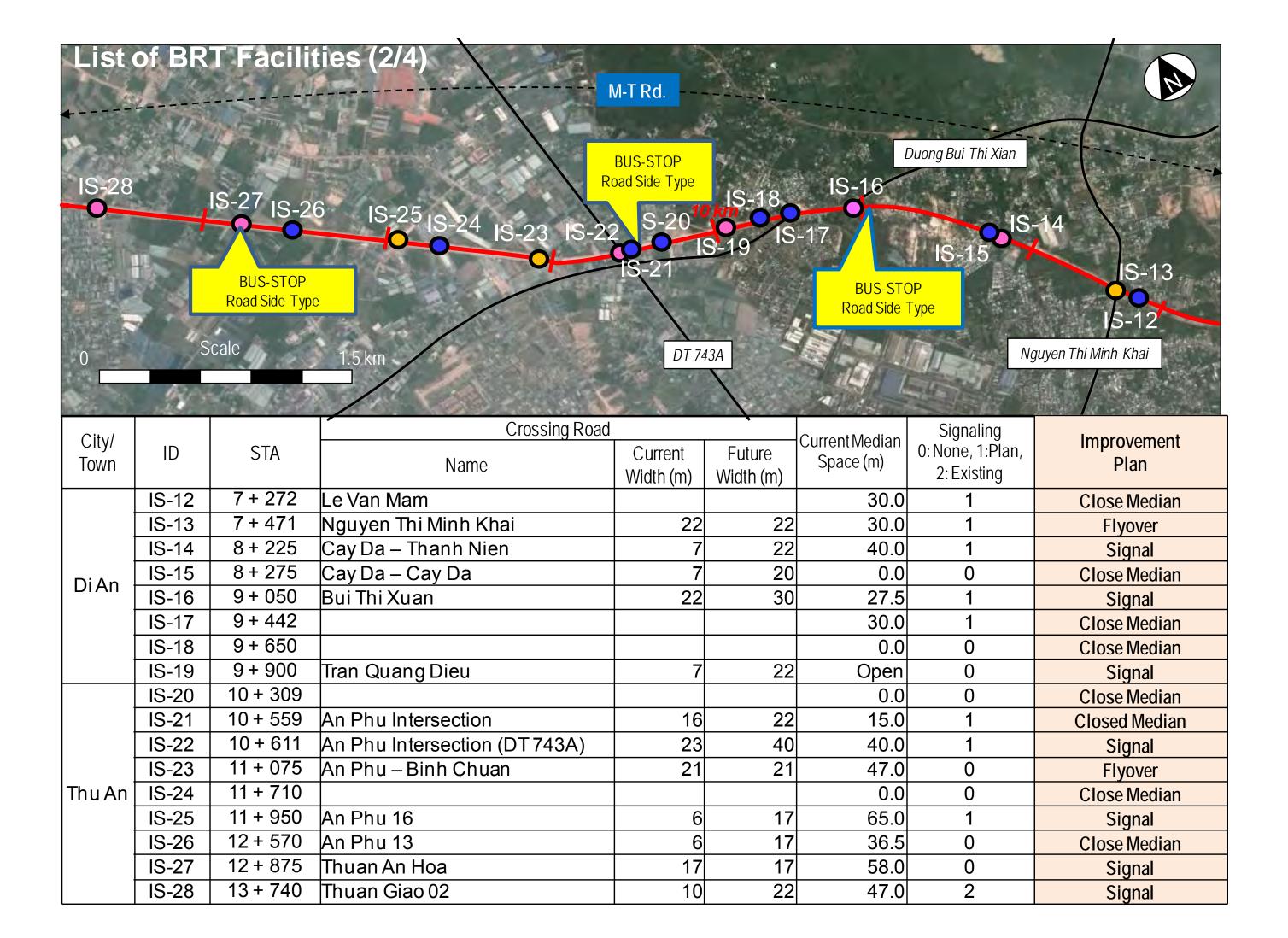
LOCATION MAP LIST OF BRT FACILITIES LIST OF DRAWINGS

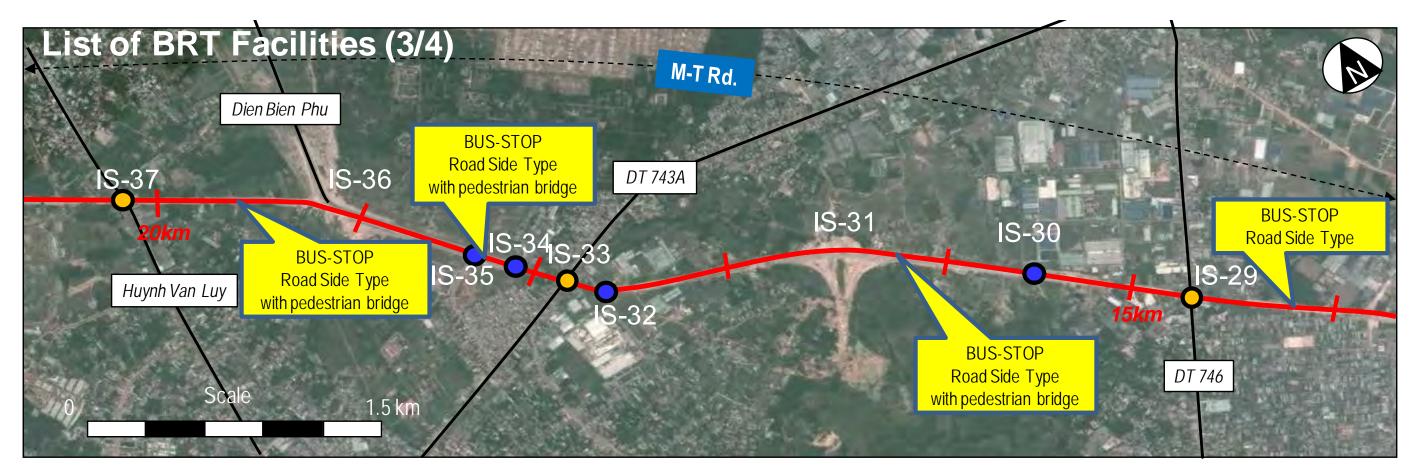
DRAWINGS

- 1. SECTION-1
- 1.1 PHASE-1
 - PLAN
 - TYPICAL CROSS SECTION
 - GENERAL VIEW OF TEMPORARY PEDESTRIAN BRIDGE
- 1.2 PHASE-2
 - PLAN
- TYPICAL CROSS SECTION
- GENERAL VIEW OF PEDESTRIAN BRIDGE
- GENERAL VIEW OF FLYOVER ON NH1A
- 2. SECTION-2
 - PLAN AND PROFILE
 - TYPICAL CROSS SECTION
 - TYPICAL PLAN OF FACILITIES
 - GENERAL VIEW OF FLYOVERS
 - GENERAL VIEW OF PEDESTRIAN BRIDGE
 - CONSTRUCTION PLAN OF FLYOVER
- 3. SECTION-3
 - PLAN
 - TYPICAL CROSS SECTION

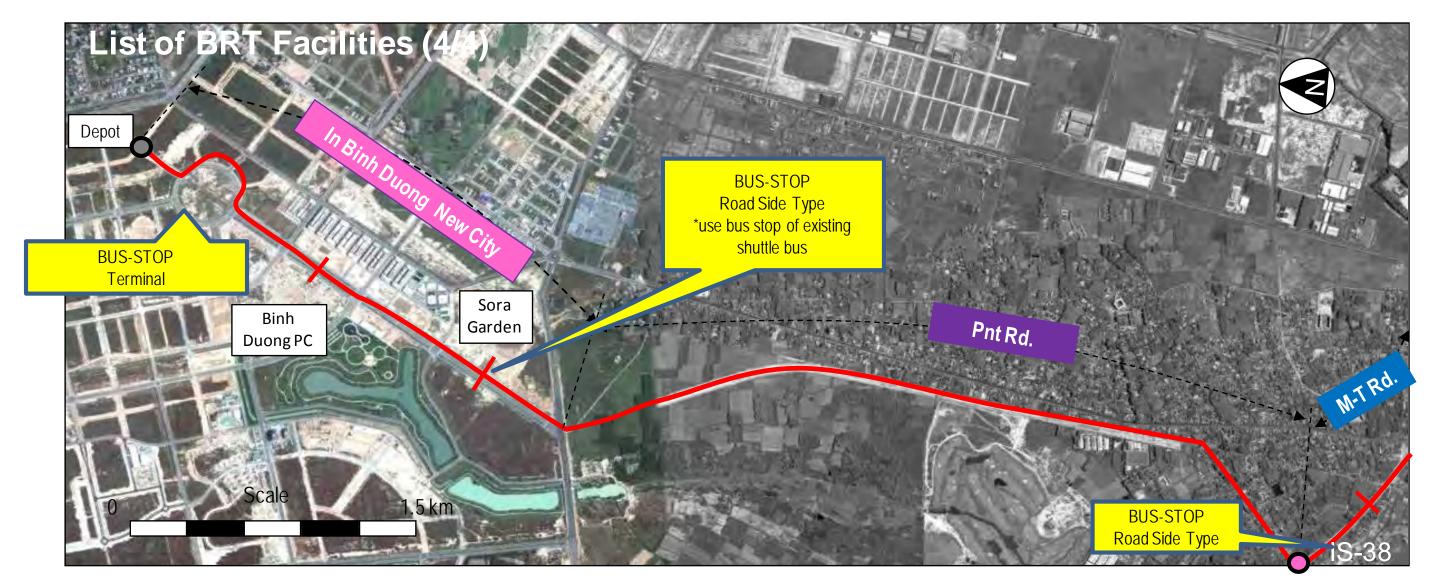


011/			Crossing Road				Signaling	1
City/ Town	ID	STA	Name	Current Width	Future Width	Median	0: None, 1:Plan,	Improvement Plan
TOWIT			Ivallie	(m)	(m)	Space (m)	2: Existing	Fidii
	IS-1	0 + 000	DT743A				1	Flyover
	IS-2	1 + 437	Vam Suoi	3	22	40.0	0	Signal
	IS-3	1 + 970	Chau Thoi	6	6	40.0	0	Close Median
	IS-4	2 + 500	Road to Xom Moi	6	17	40.0	0	Signal
	IS-5	3 + 078	National Highway 1K			80.5	1	Flyover
DiAn	IS-6	4 + 250	Road 5 Tan Dong Hiep Industrial zone	28	28	30.0	1	Signal
	IS-7	4 + 850	Dong Thanh	7	19	30.0	1	Signal
	IS-8	5 + 450				0.0	0	-
	IS-9	5 + 800	North South 6 planning Road	0	30	0.0	1	Close Median
	IS-10	5 + 925		7	17	25.0	1	Signal
	IS-11	6 + 800				33.0	0	Close Median





C:tv./			Crossing Ro	Current	Signaling	Improvement			
City/ Town	ID	STA	Name	Current Width (m)	Future Width (m)	Median Space (m)	0:None, 1:Plan, 2: Existing	Improvement Plan	
Thu An	IS-29	14 + 647	Thu Khoa Huan	15.5	32	30.0	2	Flyover	
IIIu AII	IS-30	15 + 525				Open	0	Close Median	
	IS-31	16 + 450	Vanh Dai 3 (Ring Road 3)	0	N/A	50.0	0	Interchange	
	IS-32	17 + 700	Nguyen Thai Binh	15	28	35.0	1	Close Median	
Thu	IS-33	17 + 874	Phu Loi (DT743)	22	22	46.0	2	Flyover	
Dau	IS-34	18 + 050				Open	0	Close Median	
Mot	IS-35	18 + 375				38.5	0	Close Median	
	IS-36	19 + 143	Tao Luc 1	N/A	N/A	Open	2	Interchange	
	IS-37	20 + 225	Huynh Van Luy	24	24	40.0	2	Flyover	



City/	ID	STA	Crossing Ro	Current	Signaling	Improvement		
City/ Town			Name	Current Width (m)	Future Width (m)	Median Space (m)	0. None, 1:Plan, 2: Existing	Improvement Plan
Thu Dau Mot	IS-38	21 + 210	Phạm Ngọc Thach	7	51.5	58.5	2	Signal

Total Number of Intersection Improvement Facilities developed in the Project

Flyover	Signal with PTPS	Close Median
7	13 + 1 at intersection with QL1A	15

Total Number of Bus Stop

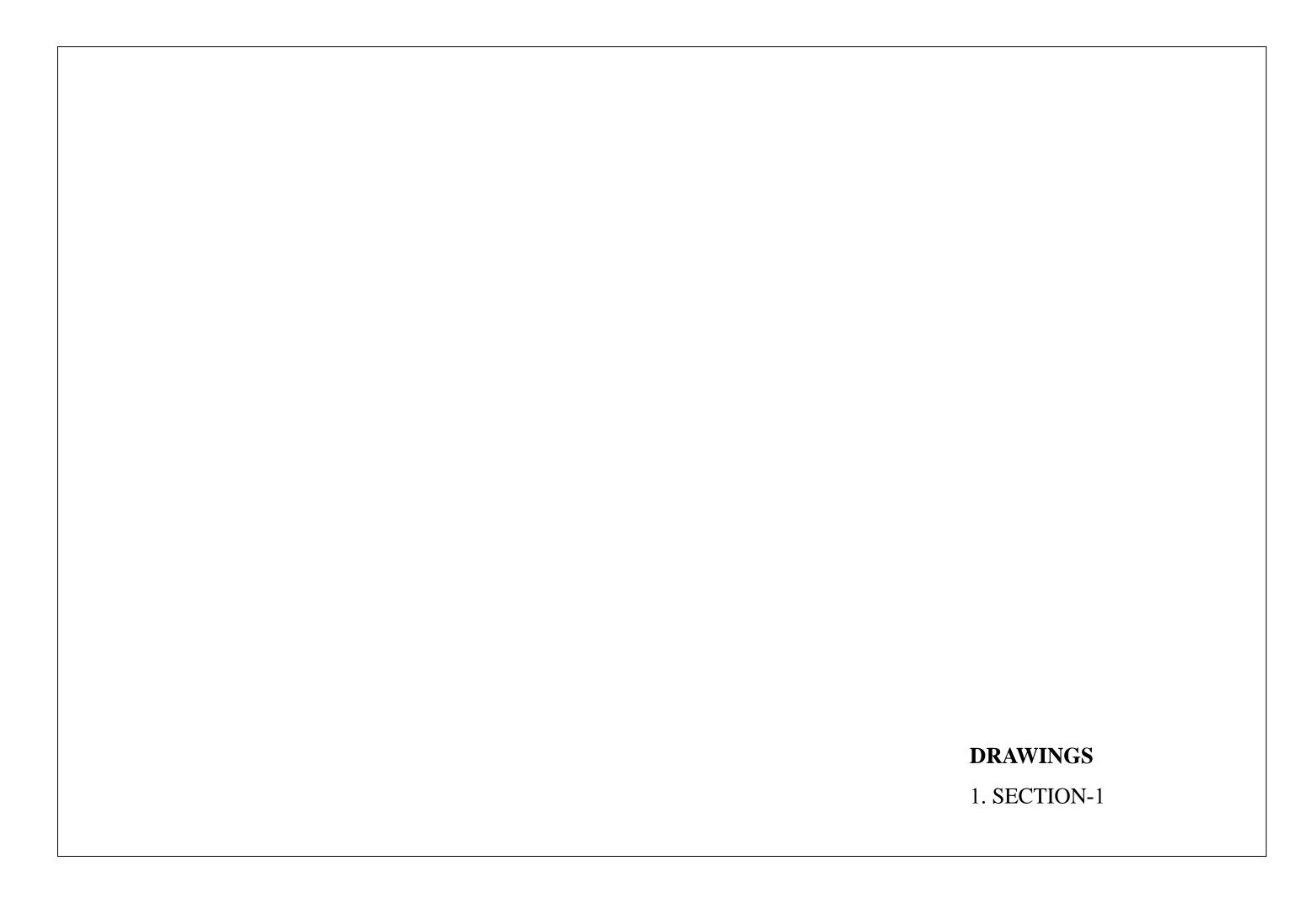
Road Side Type	Road Side Type with Pedestrian bridge	BUS Terminal
8	4	To be considered

List of Drawings (1/2)

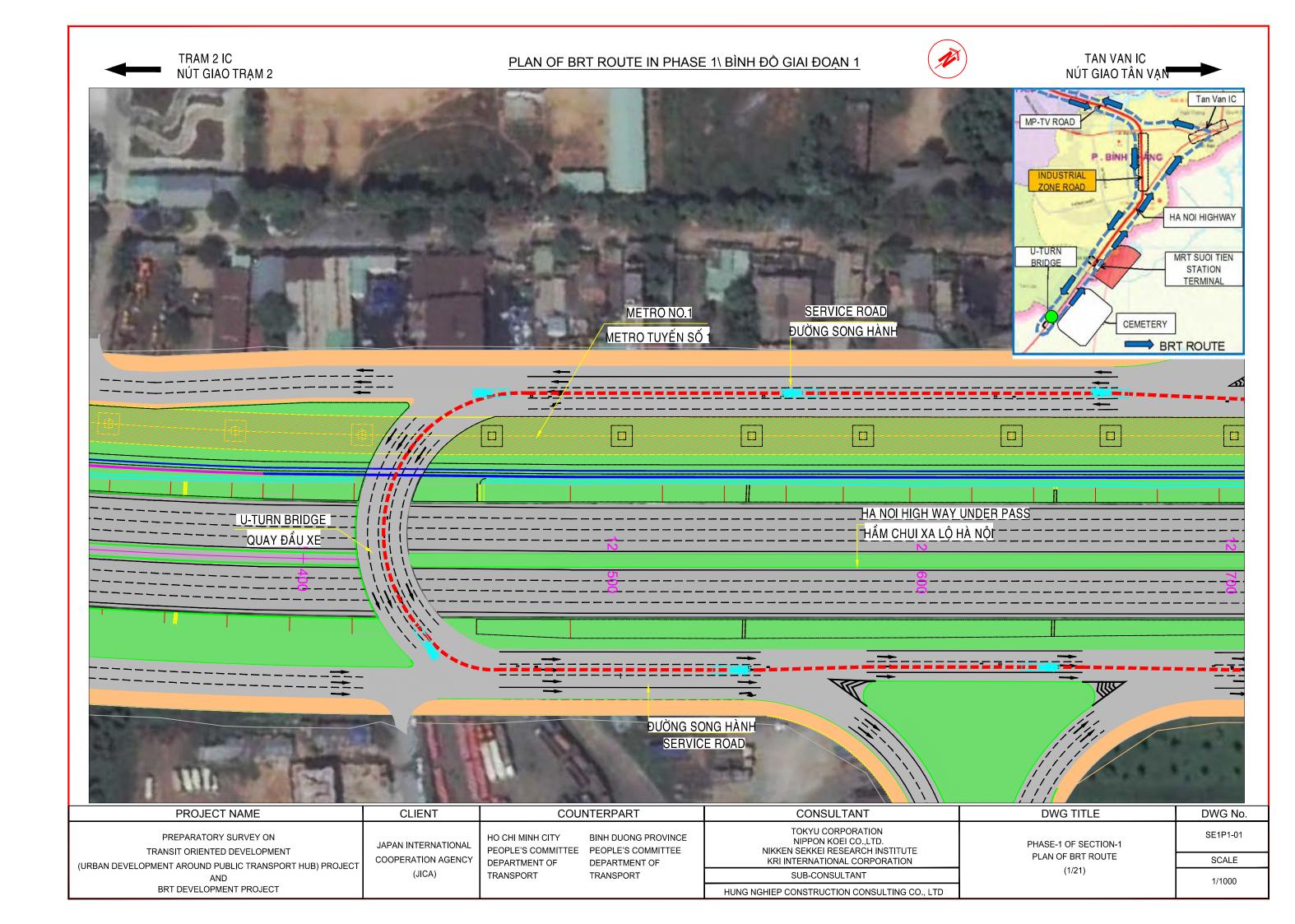
NO.	DRAWING TITLE	QUANTITY	DRAWING NO.
	DRAWINGS		
1	SECTION-1		
1.1	PHASE-1 OF SECTION-1	27	
1	PLAN OF BRT ROUTE (1/21~ 19/21)	19	SE1P1-01 ~ SE1P1-19
2	PLAN OF BRT ROUTE - BRT ALIGHTING AND BOARDING (20/21)	1	SE1P1-20
3	PLAN OF BRT ROUTE - DETAIL OF BRT ROUTE AT U-TURN BRIDGE OF NATIONAL UNIVERSITY IC (21/21)	1	SE1P1-21
4	TYPICAL CROSS SECTION (1/3 ~ 2/3)	3	SE1P1-22 ~ SE1P1-24
5	TEMPORARY PEDESTRIAN BRIDGE (1/3 ~ 3/3)	3	SE1P1-25 ~ SE1P1-27
1.2	PHASE-2 OF SECTION-1	20	
1	PLAN OF BRT ROUTE (1/11 ~ 10/11)	10	SE1P2-01 ~ SE1P2-10
2	PLAN OF BRT ROUTE - BRT ALIGHTING AND BOARDING (11/11)	1	SE1P2-11
3	TYPICAL CROSS SECTION (1/2 ~ 2/2)	2	SE1P2-12 ~ SE1P2-13
4	GENERAL VIEW OF PEDESTRIAN BRIDGE (1/3)	1	SE1P2-14
5	GENERAL VIEW OF PEDESTRIAN BRIDGE - CROSS SECTION (2/3)	1	SE1P2-15
6	GENERAL VIEW OF PEDESTRIAN BRIDGE - DETAIL OF CROSS SECTION (3/3)	1	SE1P2-16
	GENERAL VIEW OF FLYOVER AT SUOI TIEN TERMINAL STATION - SIDE & PLAN VIEW (1/4 ~ 3/4)	3	SE1P2-17 ~ SE1P2-19
7	GENERAL VIEW OF FLYOVER AT SUOI TIEN TERMINAL STATION - CROSS SECTION VIEW (4/4)	1	SE1P2-20
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2.1	PLAN AND PROFILE, CROSS SECTION, ROAD FACILITIES	52	
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2	PLAN AND PROFILE OF MY PHUOC - TAN VAN ROAD (1/35 ~35/35)	35	SE2-02 ~ SE2-36
3	TYPICAL CROSS SECTION OF MY PHUOC - TAN VAN ROAD (1/11 ~ 11/11)	11	SE2-37 ~ SE2-47
4	DETAIL OF BUS STATION	1	SE2-48
5	TYPICAL OF ELECTRIC SIGN BOARD (1/2 ~ 2/2)	2	SE2-49 ~ SE2-50
6	TYPICAL OF TRAFFIC SIGN (1/2 ~ 2/2)	2	SE2-51 ~ SE2-52
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	FLYOVER IS1		
1	CROSS SECTION OF FLYOVER IS1 (1/5)	1	SE2-53
2	PLAN AND PROFILE OF FLYOVER IS1 (2/5 ~ 5/5)	4	SE2-54 ~ SE2-57
	FLYOVER IS5		
1	CROSS SECTION OF FLYOVER IS5 (1/6)	1	SE2-58
2	PLAN AND PROFILE OF FLYOVER IS5 (2/6 ~ 5/6)	5	SE2-59 ~ SE2-63
	FLYOVER IS13		
1	CROSS SECTION OF FLYOVER IS13 (1/5)	1	SE2-64
2	PLAN AND PROFILE OF FLYOVER IS13 (2/5 ~ 5/5)	4	SE2-65 ~ SE2-68
	FLYOVER IS23		
1	CROSS SECTION OF FLYOVER IS23 (1/5)	1	SE2-69
2	PLAN AND PROFILE OF FLYOVER IS23 (2/5 ~ 5/5)	4	SE2-70 ~ SE2-73

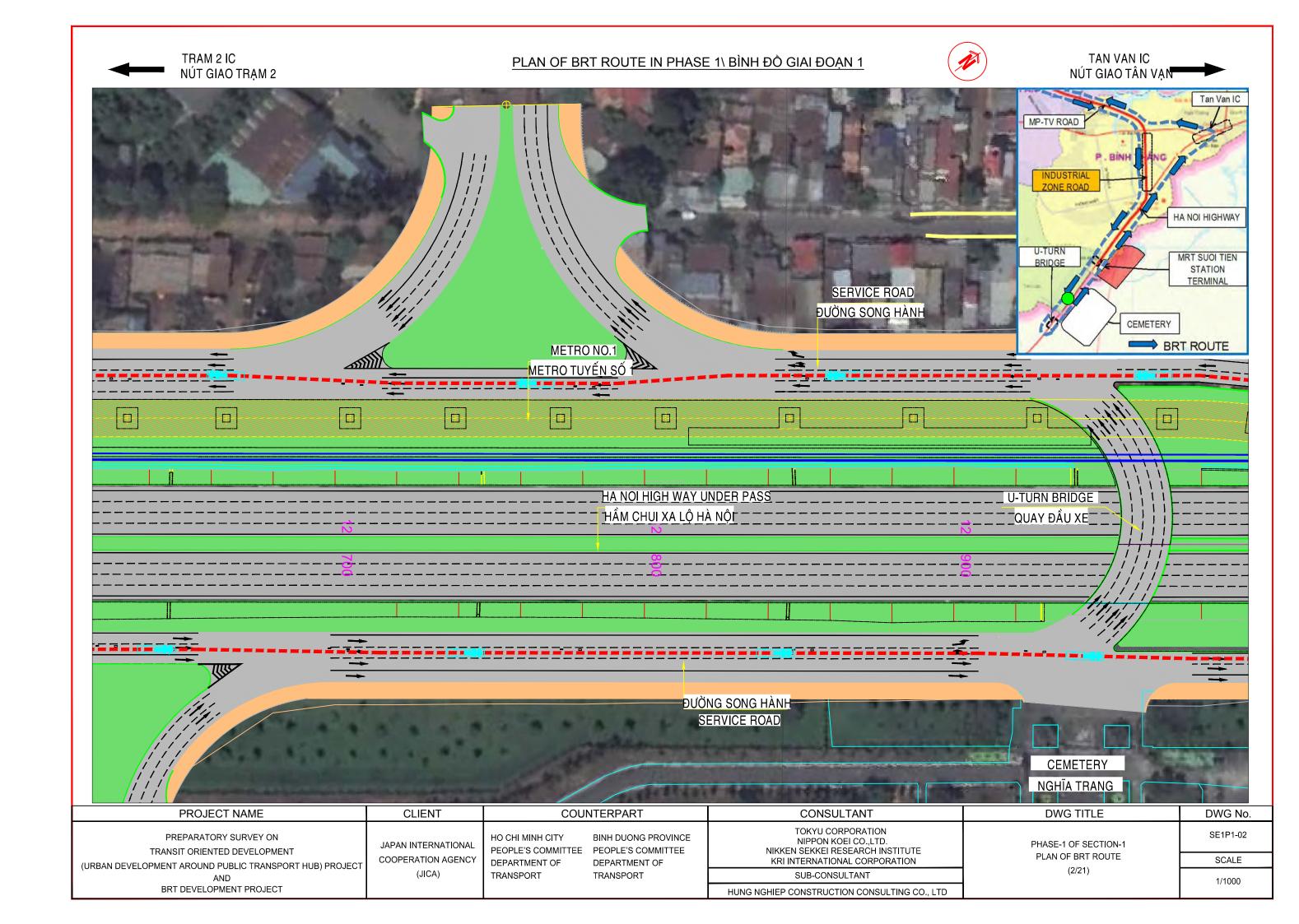
List of Drawings (2/2)

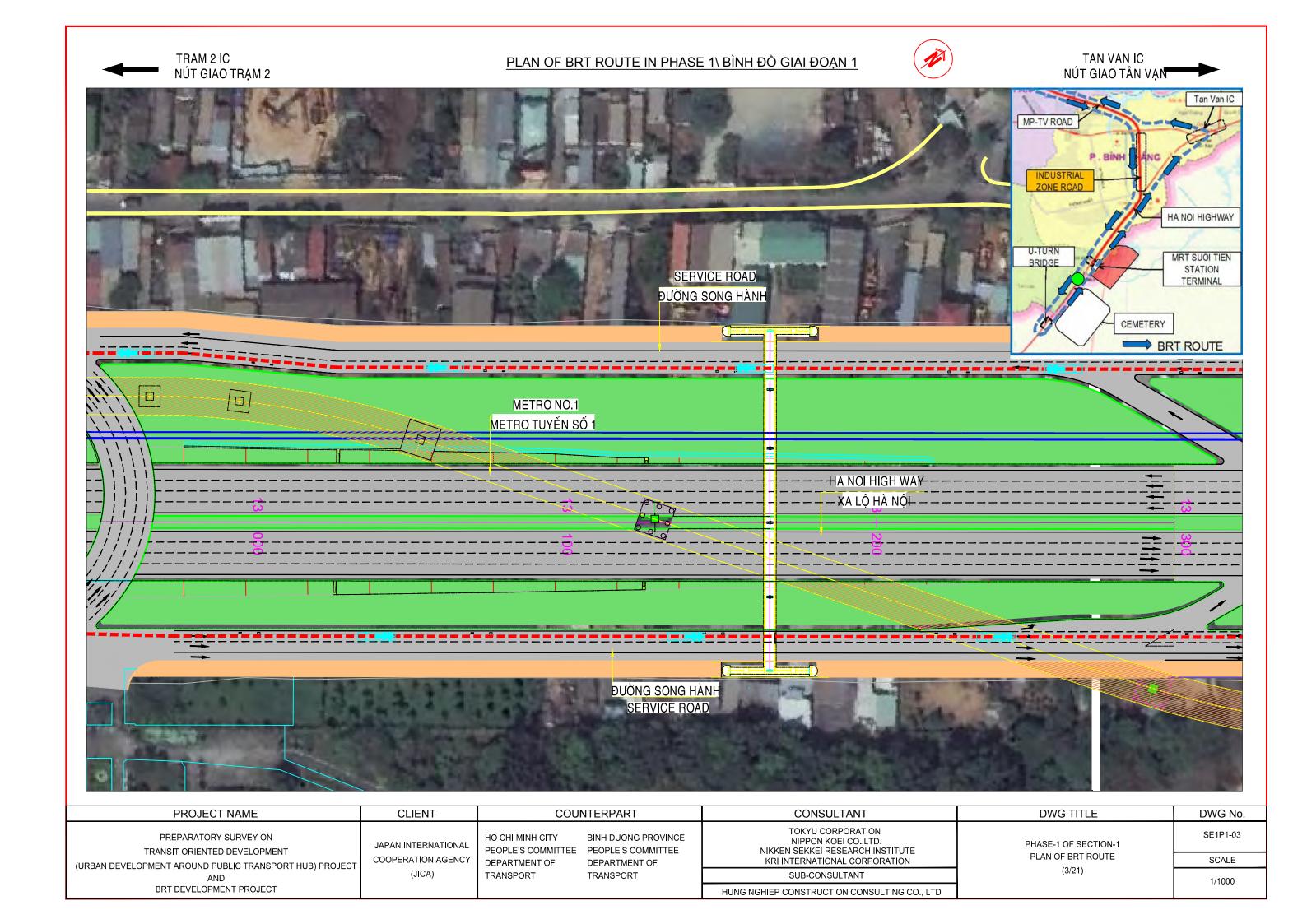
NO.	DRAWING TITLE	QUANTITY	DRAWING NO.
	FLYOVER IS29		
1	CROSS SECTION OF FLYOVER IS29 (1/5)	1	SE2-74
2	PLAN AND PROFILE OF FLYOVER IS29 (2/5 ~ 5/5)	4	SE2-75 ~ SE2-78
	FLYOVER IS32-33		
1	CROSS SECTION OF FLYOVER IS32 (1/5)	1	SE2-79
2	PLAN AND PROFILE OF FLYOVER IS32 (2/5 ~ 5/5)	4	SE2-80 ~ SE2-83
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1	CROSS SECTION OF FLYOVER IS37 (1/5)	1	SE2-84
2	PLAN AND PROFILE OF FLYOVER IS37 (2/5 ~ 5/5)	4	SE2-85 ~ SE2-88
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1	TYPICAL OF MSE WALL (1/3 ~ 3/3)	3	SE2-89 ~ SE2-91
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1	GENERAL VIEW OF PEDESTRIAN BRIDGE AT STATION 0+425 (1/3)	1	SE2-92
2	GENERAL VIEW OF PEDESTRIAN BRIDGE AT STATION 0+425 - CROSS SECTION (2/3)	1	SE2-93
3	GENERAL VIEW OF PEDESTRIAN BRIDGE AT STATION 0+425 - DETAIL OF CROSS SECTION (3/3)	1	SE2-94
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1	GENERAL VIEW OF PEDESTRIAN BRIDGE AT STATION 15+925 (1/3)	1	SE2-95
2	GENERAL VIEW OF PEDESTRIAN BRIDGE AT STATION 15+925 - CROSS SECTION (2/3)	1	SE2-96
3	GENERAL VIEW OF PEDESTRIAN BRIDGE AT STATION 15+925 - DETAIL OF CROSS SECTION (3/3)	1	SE2-97
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1	GENERAL VIEW OF PEDESTRIAN BRIDGE AT STATION 18+235 (1/3)	1	SE2-98
2	GENERAL VIEW OF PEDESTRIAN BRIDGE AT STATION 18+235 - CROSS SECTION (2/3)	1	SE2-99
3	GENERAL VIEW OF PEDESTRIAN BRIDGE AT STATION 18+235 - DETAIL OF CROSS SECTION (3/3)	1	SE2-100
	PEDESTRIAN BRIDGE AT STATION 19+675		
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1	PLAN VIEW OF CONSTRUCTION SITE	1	SE2-104
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5	TYPICAL METHOD OF CONSTRUCTION ABUTMENT	1	SE2-109
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2	TYPICAL CROSS SECTION ROAD TO BINH DUONG NEW CITY	1	SE3-08

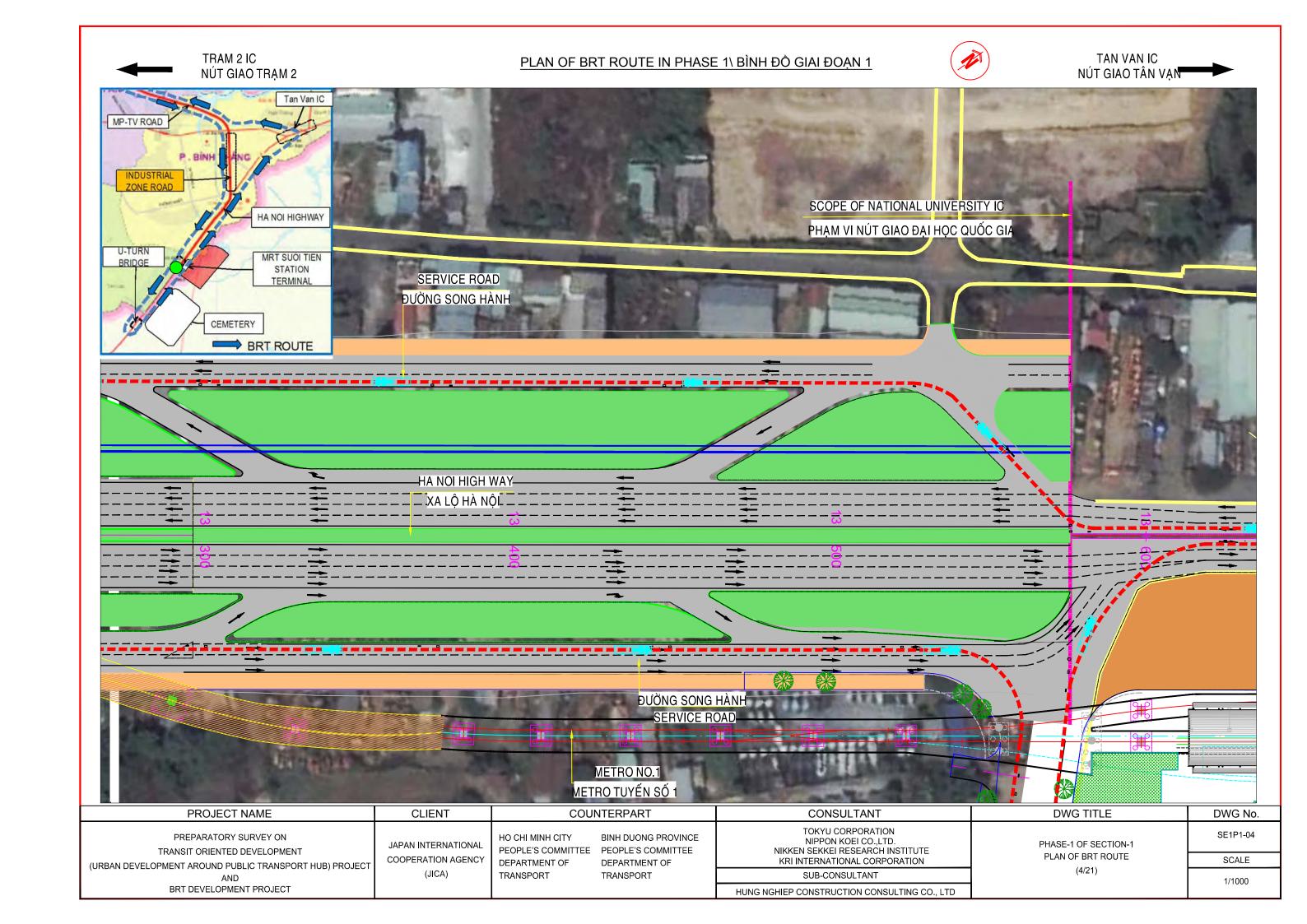


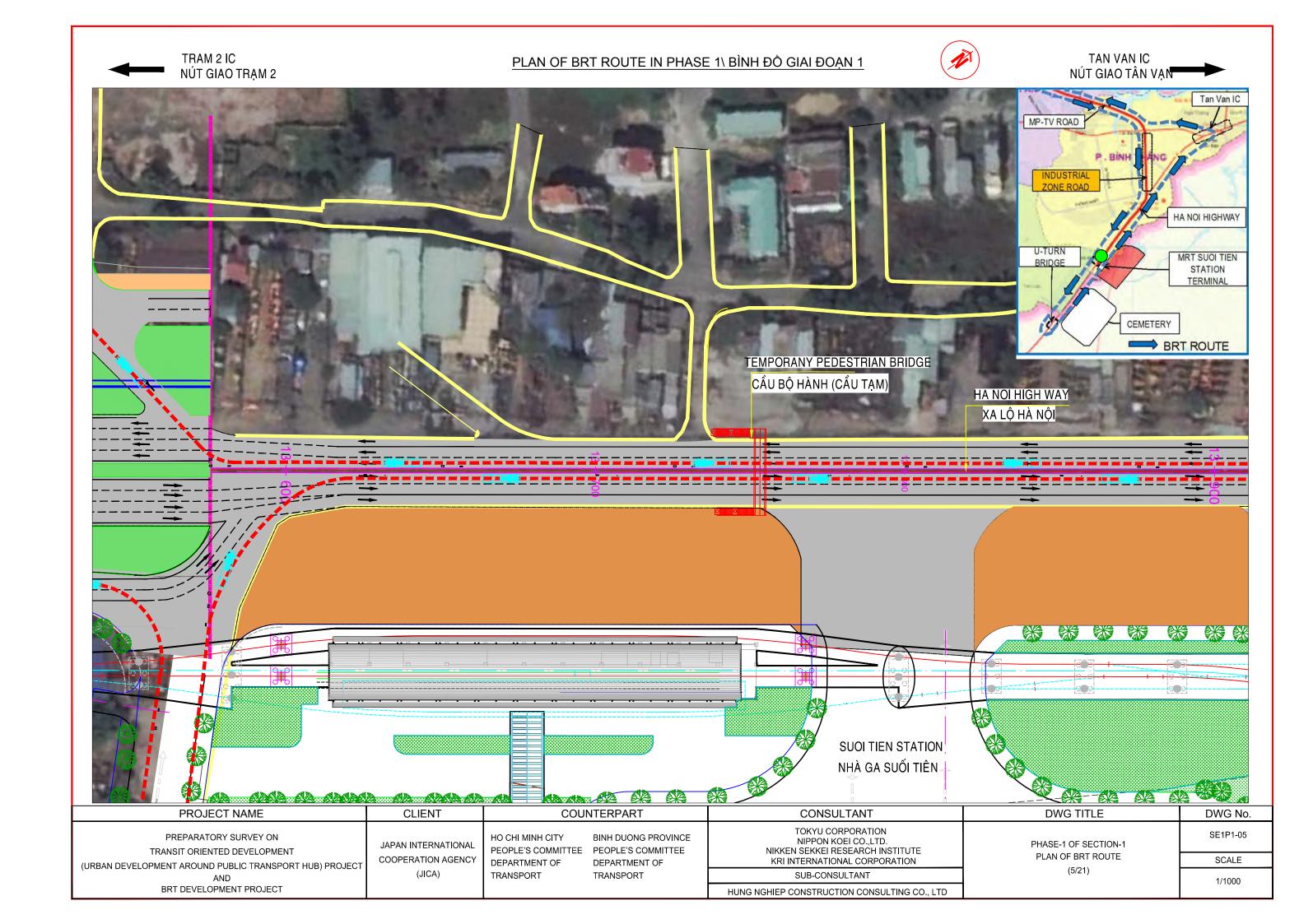






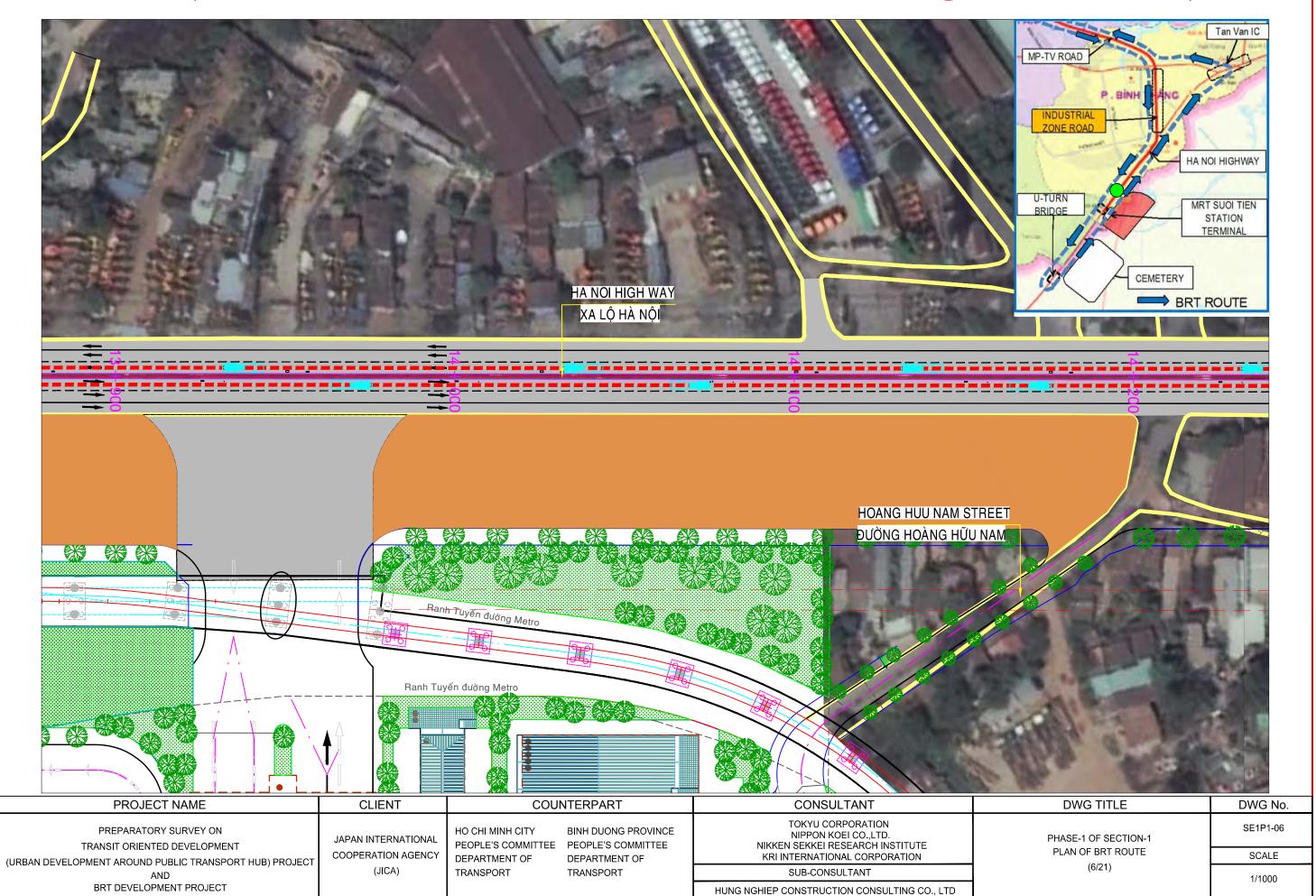








TAN VAN IC NÚT GIAO TÂN VẠN



(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT

BRT DEVELOPMENT PROJECT



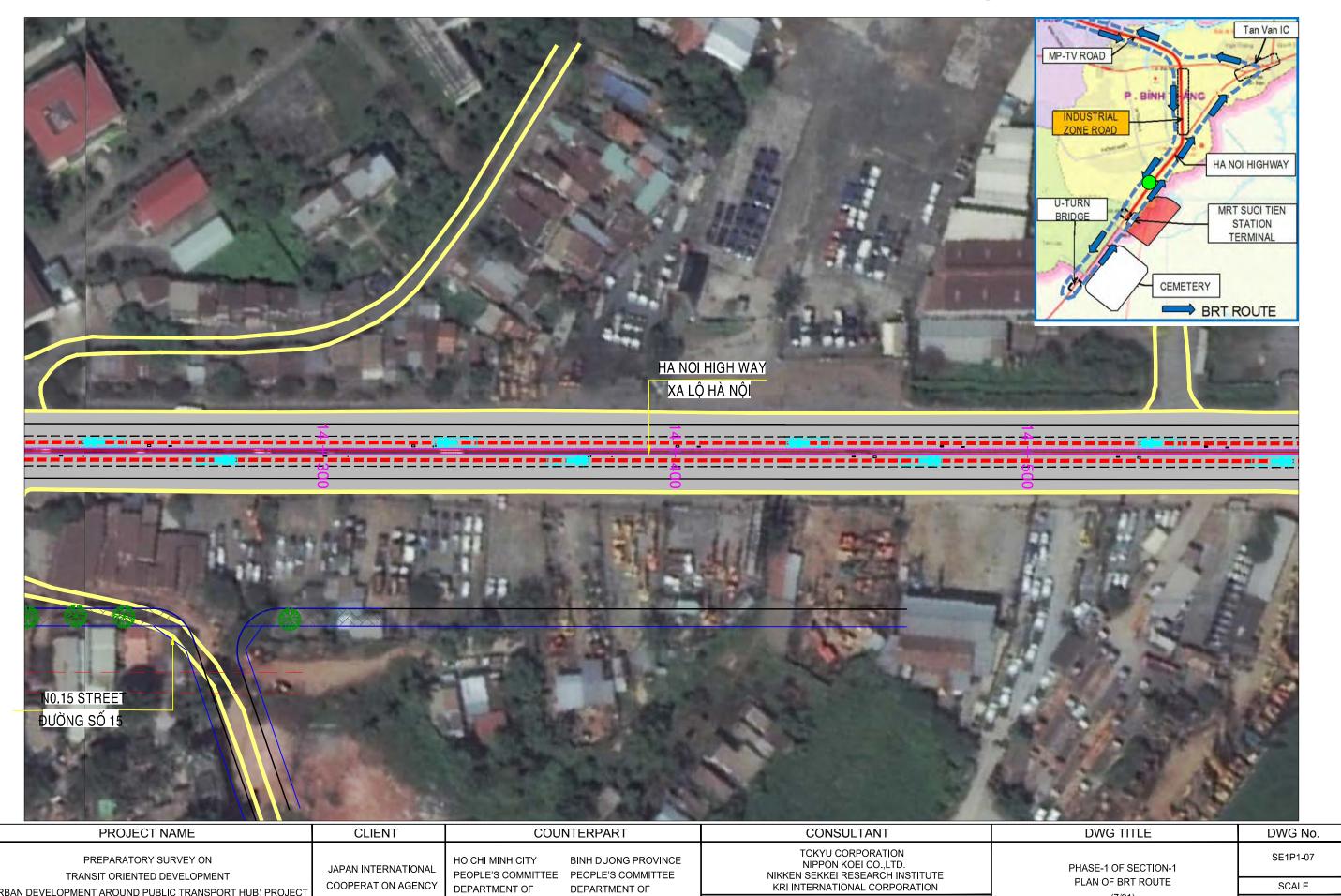
TAN VAN IC NÚT GIAO TÂN VẠN

PLAN OF BRT ROUTE

(7/21)

SCALE

1/1000



COOPERATION AGENCY

(JICA)

DEPARTMENT OF

TRANSPORT

DEPARTMENT OF

TRANSPORT

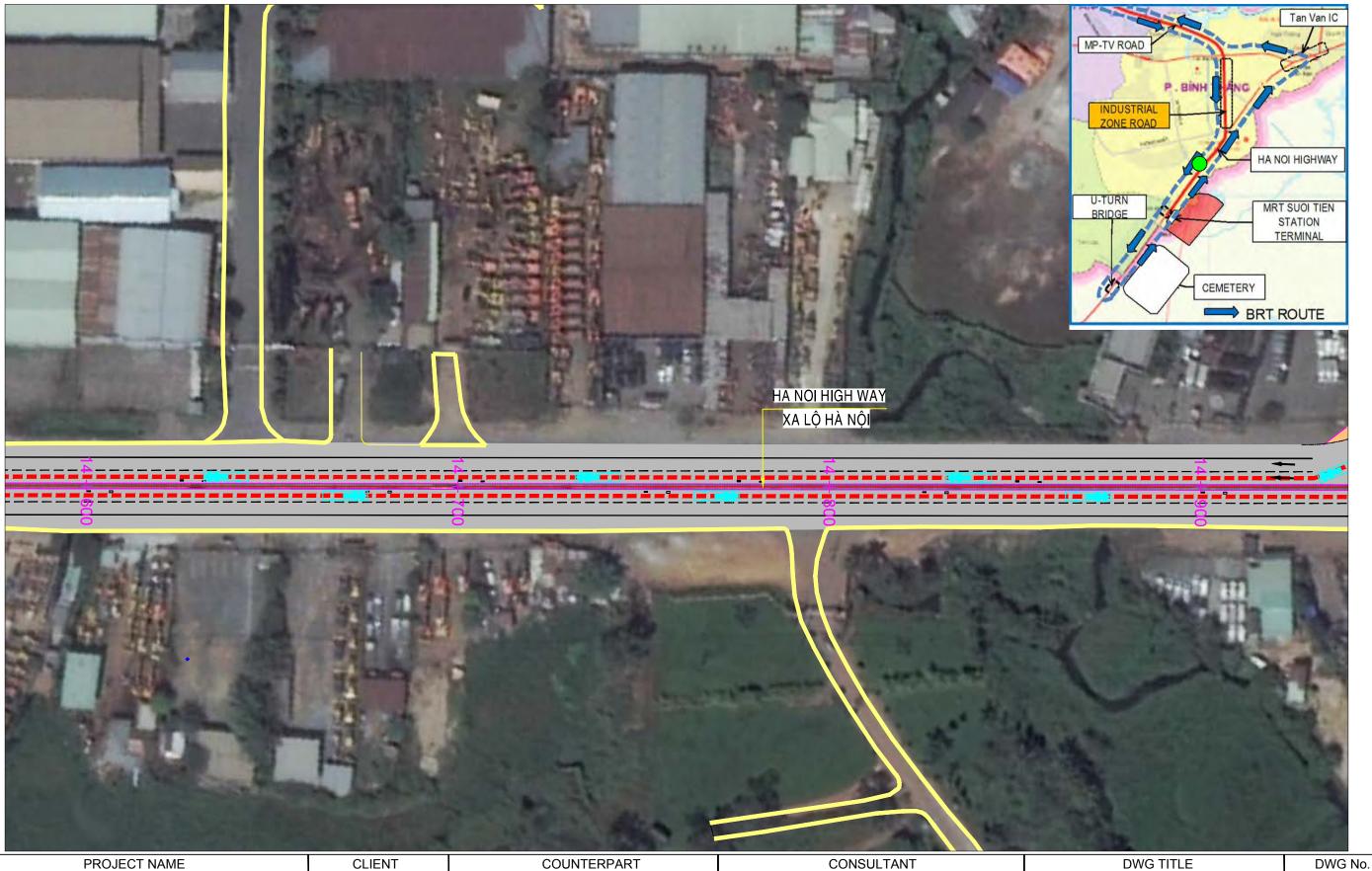
SUB-CONSULTANT

HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD



TAN VAN IC NÚT GIAO TÂN VẠN





PREPARATORY SURVEY ON	
TRANSIT ORIENTED DEVELOPMENT	l
(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT	l
AND	l
BRT DEVELOPMENT PROJECT	l

JAPAN INTERNATIONAL **COOPERATION AGENCY** (JICA)

HO CHI MINH CITY DEPARTMENT OF TRANSPORT

BINH DUONG PROVINCE PEOPLE'S COMMITTEE PEOPLE'S COMMITTEE DEPARTMENT OF TRANSPORT

TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE KRI INTERNATIONAL CORPORATION SUB-CONSULTANT HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD

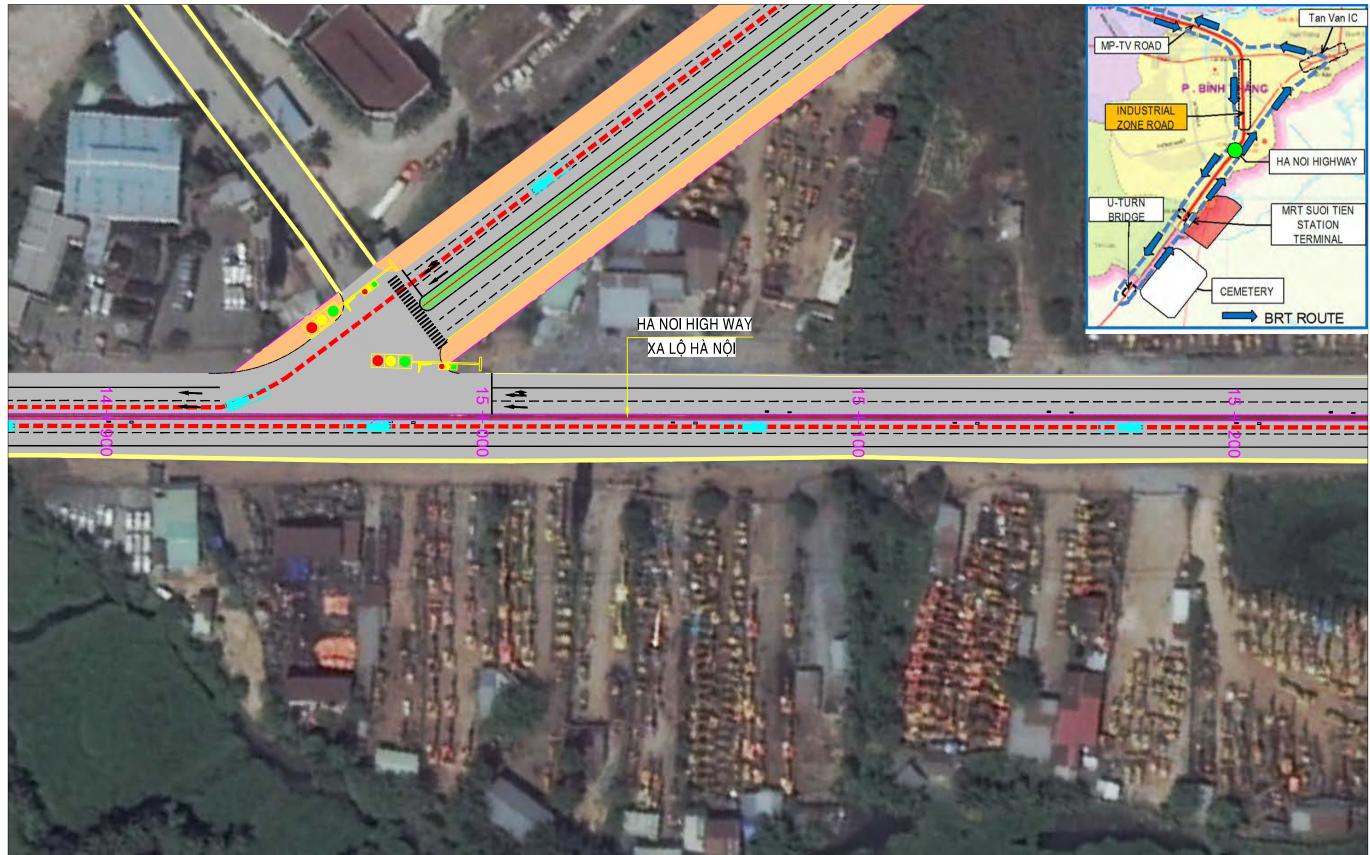
PHASE-1 OF SECTION-1 PLAN OF BRT ROUTE (8/21)

SE1P1-08 SCALE 1/1000

PLAN OF BRT ROUTE IN PHASE 1\ BÌNH ĐÔ GIAI ĐOẠN 1



TAN VAN IC NÚT GIAO TÂN VẠN



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PROJECT NAME	CLIENT	COUNTERPART	CONSULTANT	DWG TITLE	DWG No.
PREPARATORY SURVEY ON TRANSIT ORIENTED DEVELOPMENT	JAPAN INTERNATIONAL	HO CHI MINH CITY BINH DUONG PROVINCE PEOPLE'S COMMITTEE PEOPLE'S COMMITTEE	TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE	PHASE-1 OF SECTION-1	SE1P1-09
(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT	COOPERATION AGENCY	DEPARTMENT OF DEPARTMENT OF	KRI INTERNATIONAL CORPORATION	PLAN OF BRT ROUTE	SCALE
AND	(JICA)	TRANSPORT TRANSPORT	SUB-CONSULTANT	(9/21)	1/1000
BRT DEVELOPMENT PROJECT			HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD		., .000



PREPARATORY SURVEY ON

TRANSIT ORIENTED DEVELOPMENT

(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT

BRT DEVELOPMENT PROJECT

PLAN OF BRT ROUTE IN PHASE 1\ BÌNH ĐỒ GIAI ĐOẠN 1

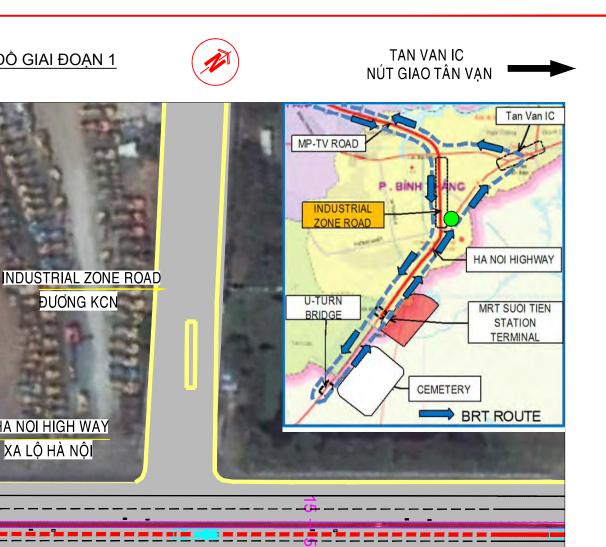
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TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE KRI INTERNATIONAL CORPORATION

SUB-CONSULTANT

HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD

HA NOI HIGH WAY XA LỘ HÀ NỘI



PHASE-1 OF SECTION-1

PLAN OF BRT ROUTE

(10/21)

SE1P1-10

SCALE

1/1000



BINH DUONG PROVINCE

DEPARTMENT OF

TRANSPORT

PEOPLE'S COMMITTEE PEOPLE'S COMMITTEE

HO CHI MINH CITY

DEPARTMENT OF

TRANSPORT

JAPAN INTERNATIONAL

COOPERATION AGENCY

(JICA)

PLAN OF BRT ROUTE IN PHASE 1\ BÌNH ĐỔ GIAI ĐOẠN 1



TAN VAN IC NÚT GIAO TÂN VẠN

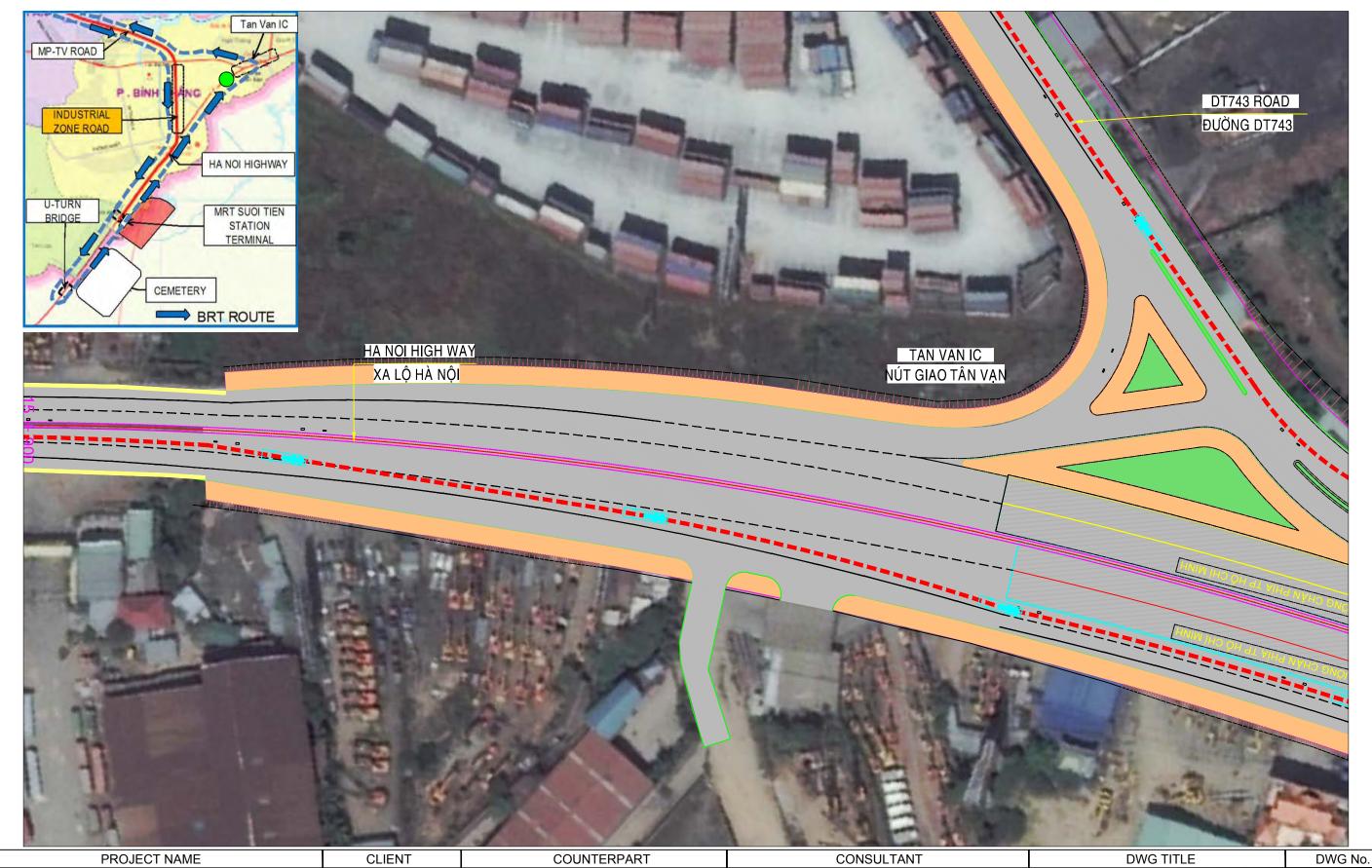


PROJECT NAME	CLIENT	COUNTERPART	CONSULTANT	DWG TITLE	DWG No.
PREPARATORY SURVEY ON TRANSIT ORIENTED DEVELOPMENT	JAPAN INTERNATIONAL	HO CHI MINH CITY BINH DUONG PROVINCE PEOPLE'S COMMITTEE PEOPLE'S COMMITTEE	NIPPON KOEI CO.,LTD.	PHASE-1 OF SECTION-1	SE1P1-11
(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT	COOPERATION AGENCY		KRI INTERNATIONAL CORPORATION	PLAN OF BRT ROUTE	SCALE
AND	(JICA)	TRANSPORT TRANSPORT	SUB-CONSULTANT	(11/21)	1/1000
BRT DEVELOPMENT PROJECT			HUNG NGHIEP CONSTRUCTION CONSULTING CO. LTD.	1	17 1000

PLAN OF BRT ROUTE IN PHASE 1\ BÌNH ĐỒ GIAI ĐOẠN 1







PREPARATORY SURVEY ON
TRANSIT ORIENTED DEVELOPMENT
(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT
AND
BRT DEVELOPMENT PROJECT

JAPAN INTERNATIONAL **COOPERATION AGENCY** (JICA)

HO CHI MINH CITY DEPARTMENT OF TRANSPORT

BINH DUONG PROVINCE PEOPLE'S COMMITTEE PEOPLE'S COMMITTEE DEPARTMENT OF TRANSPORT

TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE KRI INTERNATIONAL CORPORATION SUB-CONSULTANT

HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD

PHASE-1 OF SECTION-1 PLAN OF BRT ROUTE (12/21)

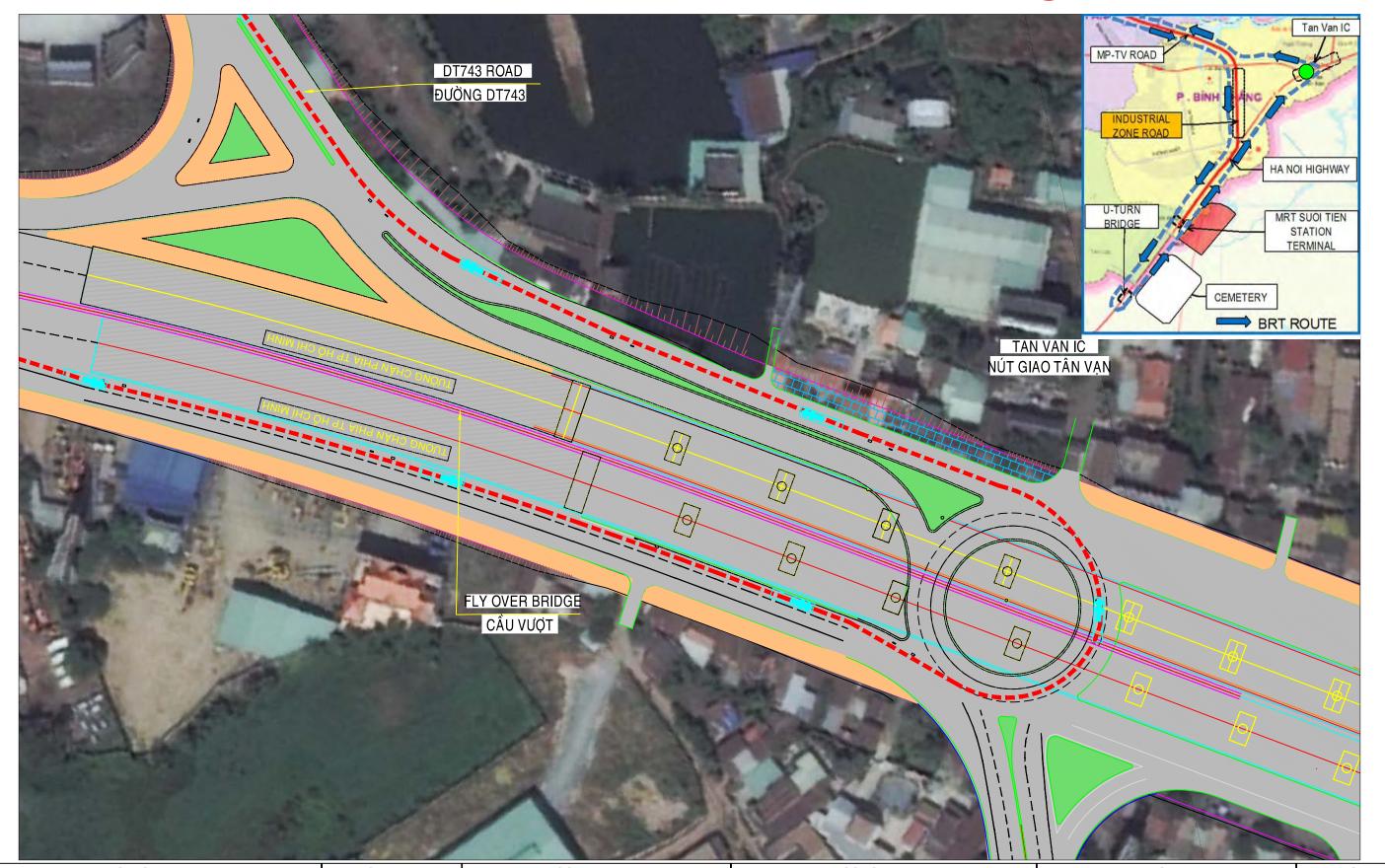
SE1P1-12 SCALE

1/1000

PLAN OF BRT ROUTE IN PHASE 1\ BÌNH ĐỒ GIAI ĐOẠN 1



TAN VAN IC NÚT GIAO TÂN VẠN

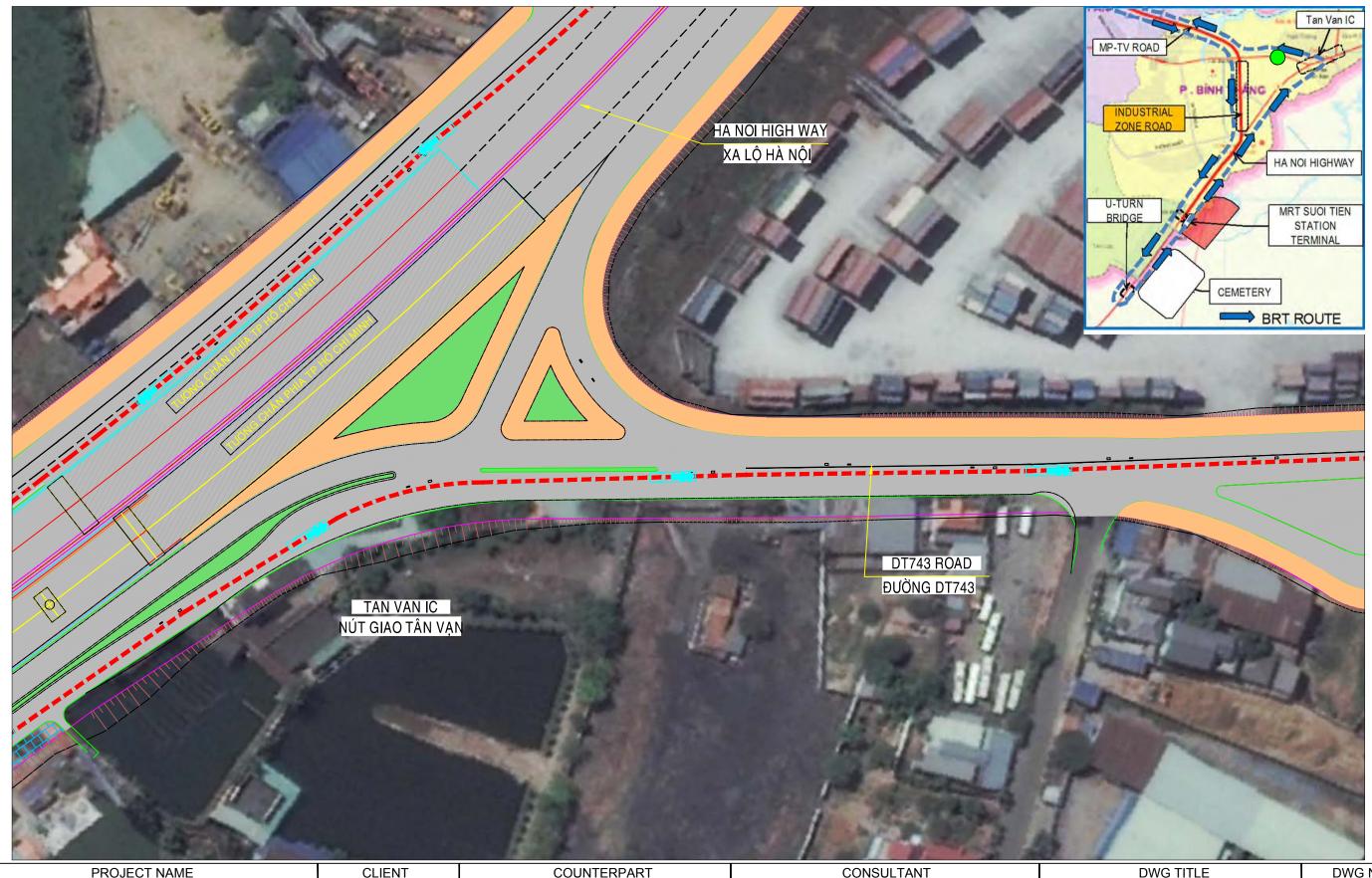


PROJECT NAME	CLIENT	COUNTERPART	CONSULTANT	DWG IIILE	DWG No.
PREPARATORY SURVEY ON TRANSIT ORIENTED DEVELOPMENT	JAPAN INTERNATIONAL	HO CHI MINH CITY BINH DUONG PROVINCE PEOPLE'S COMMITTEE PEOPLE'S COMMITTEE	TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE	PHASE-1 OF SECTION-1 PLAN OF BRT ROUTE	SE1P1-13
(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT	COOPERATION AGENCY	DEPARTMENT OF DEPARTMENT OF	KRI INTERNATIONAL CORPORATION		SCALE
AND	(JICA)	TRANSPORT TRANSPORT	SUB-CONSULTANT	(13/21)	1/1000
BRT DEVELOPMENT PROJECT			HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD		17 1000

PLAN OF BRT ROUTE IN PHASE 1\ BÌNH ĐÔ GIAI ĐOẠN 1

BEGINNING POINT OF MY PHUOC -TAN VAN ROAD ĐIỂM BẮT ĐẦU ĐƯỜNG MỸ PHƯỚC - TÂN VẠN





PROJECT NAME	CLIENT	COUNTERPART	CONSULTANT	DWG TITLE	DWG No.
PREPARATORY SURVEY ON TRANSIT ORIENTED DEVELOPMENT	JAPAN INTERNATIONAL	HO CHI MINH CITY BINH DUONG PROVINCE PEOPLE'S COMMITTEE PEOPLE'S COMMITTEE	TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE	PHASE-1 OF SECTION-1	SE1P1-14
(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT	COOPERATION AGENCY	DEPARTMENT OF DEPARTMENT OF	KRI INTERNATIONAL CORPORATION	PLAN OF BRT ROUTE	SCALE
AND	(JICA)	TRANSPORT TRANSPORT	SUB-CONSULTANT	(14/21)	1/1000
BRT DEVELOPMENT PROJECT			HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD		., 7000





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PROJECT NAME	CLIENT	COUN	NTERPART	CONSULTANT	DWG TITLE	DWG No
PREPARATORY SURVEY ON TRANSIT ORIENTED DEVELOPMENT	JAPAN INTERNATIONAL	HO CHI MINH CITY PEOPLE'S COMMITTEE	BINH DUONG PROVINCE	TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE	PHASE-1 OF SECTION-1	SE1P1-15
(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT	COOPERATION AGENCY		DEPARTMENT OF	KRI INTERNATIONAL CORPORATION	PLAN OF BRT ROUTE	SCALE
AND	(JICA)	TRANSPORT	TRANSPORT	SUB-CONSULTANT	(15/21)	1/1000
BRT DEVELOPMENT PROJECT				HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD		1, 1000

TRANSIT ORIENTED DEVELOPMENT

(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT

BRT DEVELOPMENT PROJECT

PHASE-1 OF SECTION-1

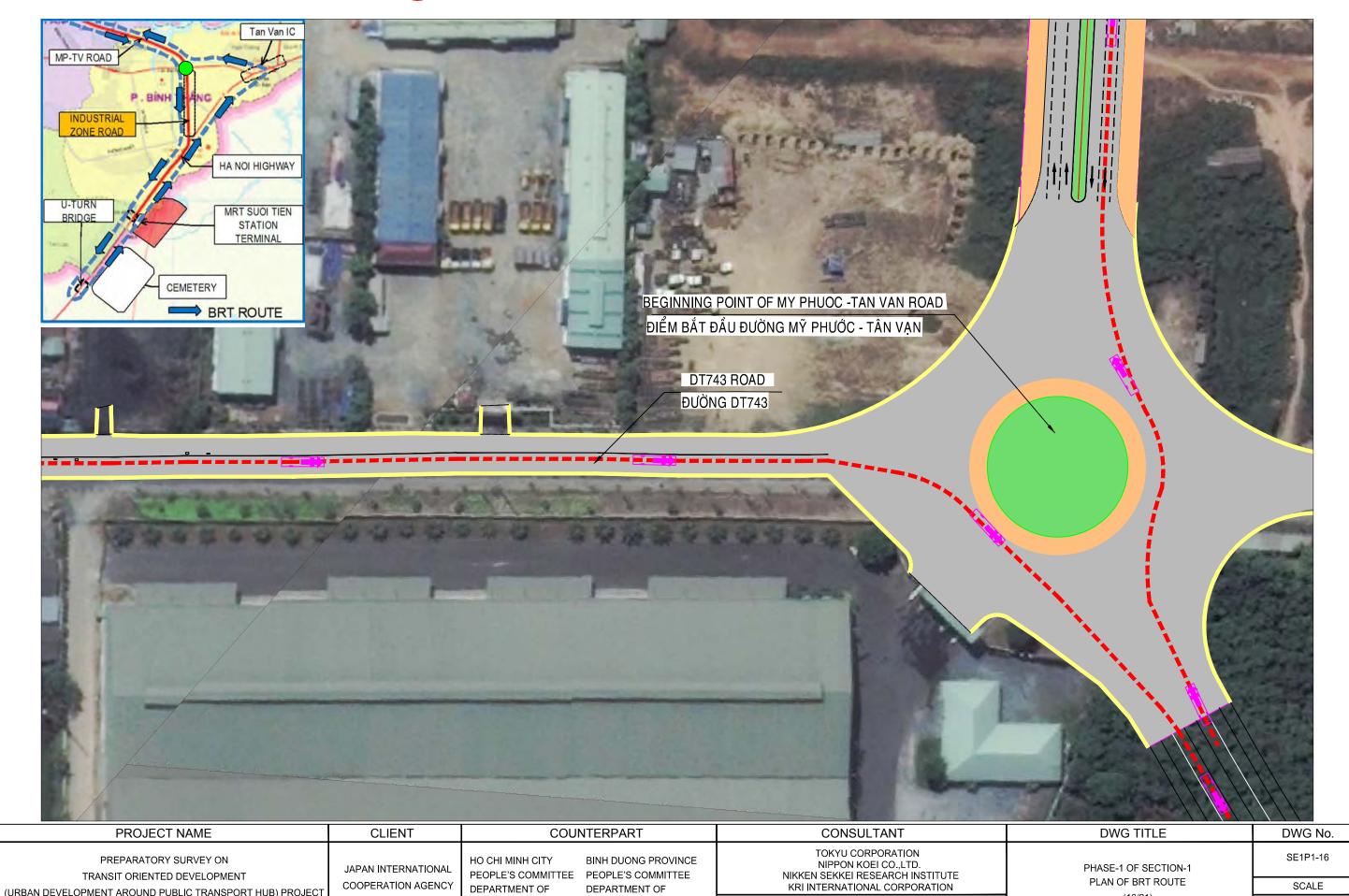
PLAN OF BRT ROUTE

(16/21)

SCALE

1/1000





PEOPLE'S COMMITTEE PEOPLE'S COMMITTEE

DEPARTMENT OF

TRANSPORT

SUB-CONSULTANT

HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD

DEPARTMENT OF

TRANSPORT

JAPAN INTERNATIONAL

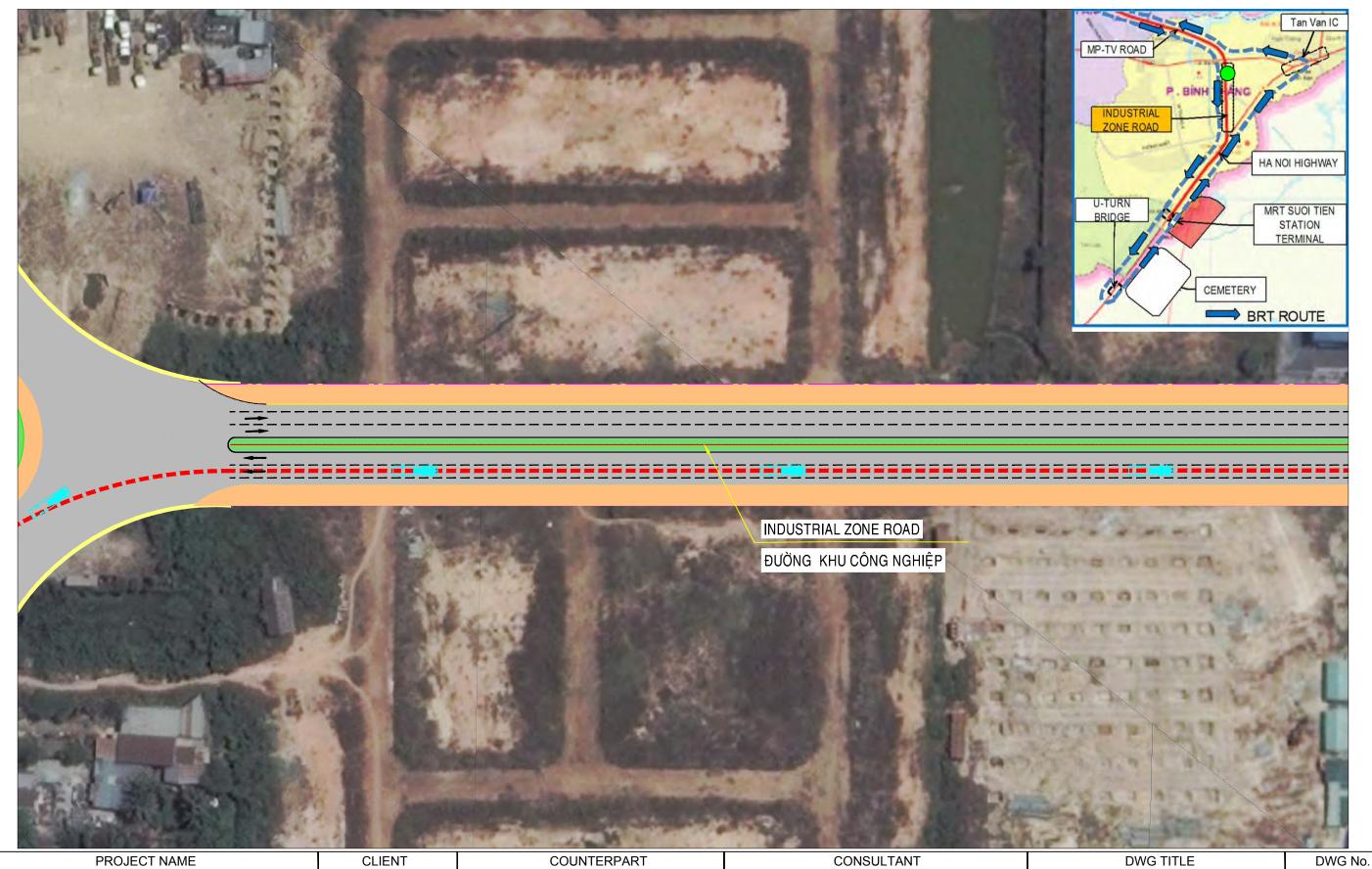
COOPERATION AGENCY

(JICA)



TRAM 2 IC NÚT GIAO TRAM 2





	1
PREPARATORY SURVEY ON	
TRANSIT ORIENTED DEVELOPMENT	
(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT	
AND	
BRT DEVELOPMENT PROJECT	

JAPAN INTERNATIONAL **COOPERATION AGENCY** (JICA)

HO CHI MINH CITY PEOPLE'S COMMITTEE PEOPLE'S COMMITTEE DEPARTMENT OF TRANSPORT

BINH DUONG PROVINCE DEPARTMENT OF TRANSPORT

TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE KRI INTERNATIONAL CORPORATION SUB-CONSULTANT

HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD

PHASE-1 OF SECTION-1 PLAN OF BRT ROUTE (17/21)

SE1P1-17 SCALE

1/1000



TRAM 2 IC NÚT GIAO TRAM 2





PREPARATORY SURVEY ON	
TRANSIT ORIENTED DEVELOPMENT	
(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT	
AND	
BRT DEVELOPMENT PROJECT	

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HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD

PHASE-1 OF SECTION-1 PLAN OF BRT ROUTE (18/21)

SE1P1-18 SCALE 1/1000



TRAM 2 IC

PHASE-1 OF SECTION-1

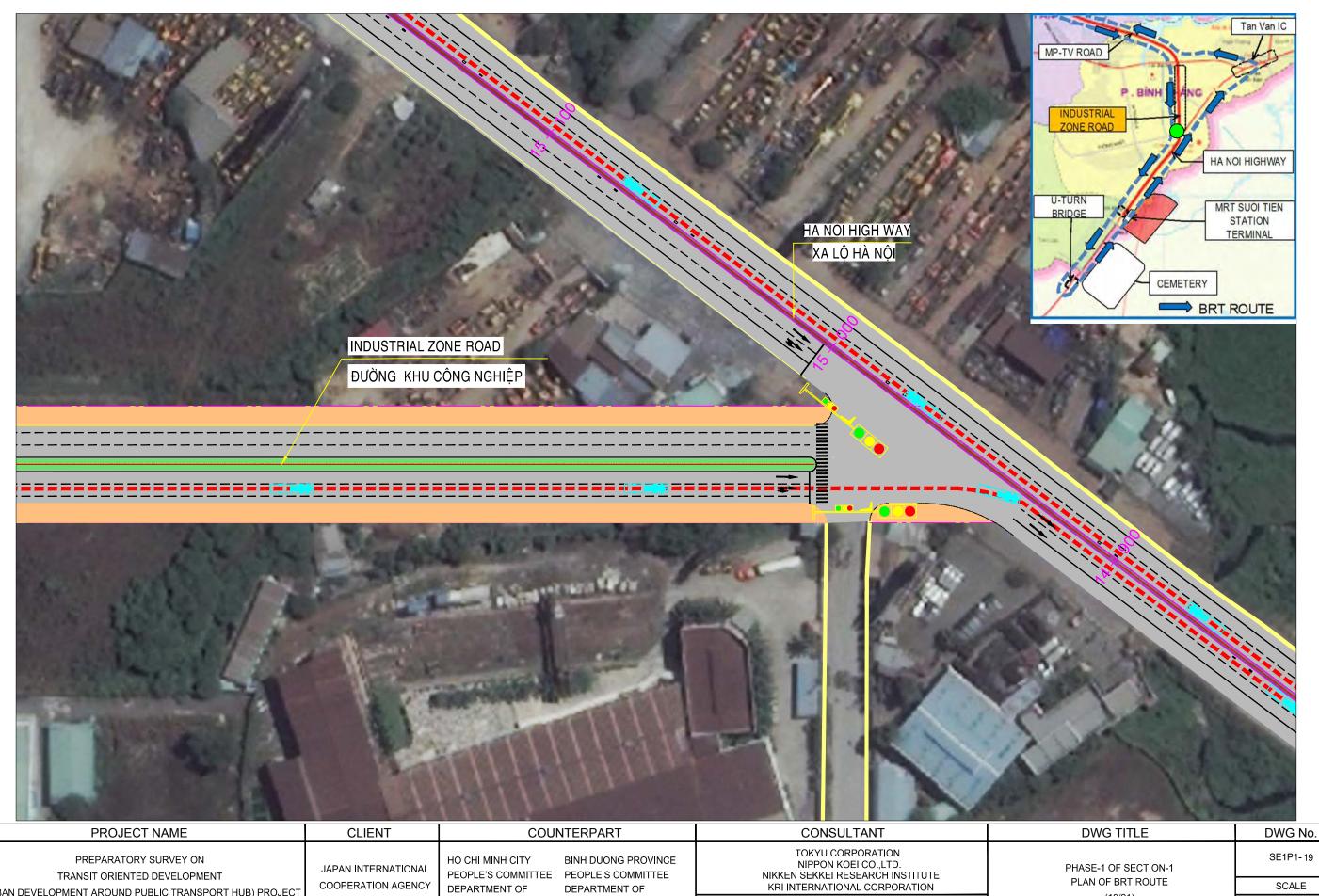
PLAN OF BRT ROUTE

(19/21)

SCALE

1/1000





HO CHI MINH CITY

DEPARTMENT OF

TRANSPORT

PEOPLE'S COMMITTEE PEOPLE'S COMMITTEE

DEPARTMENT OF

TRANSPORT

SUB-CONSULTANT

HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD

JAPAN INTERNATIONAL

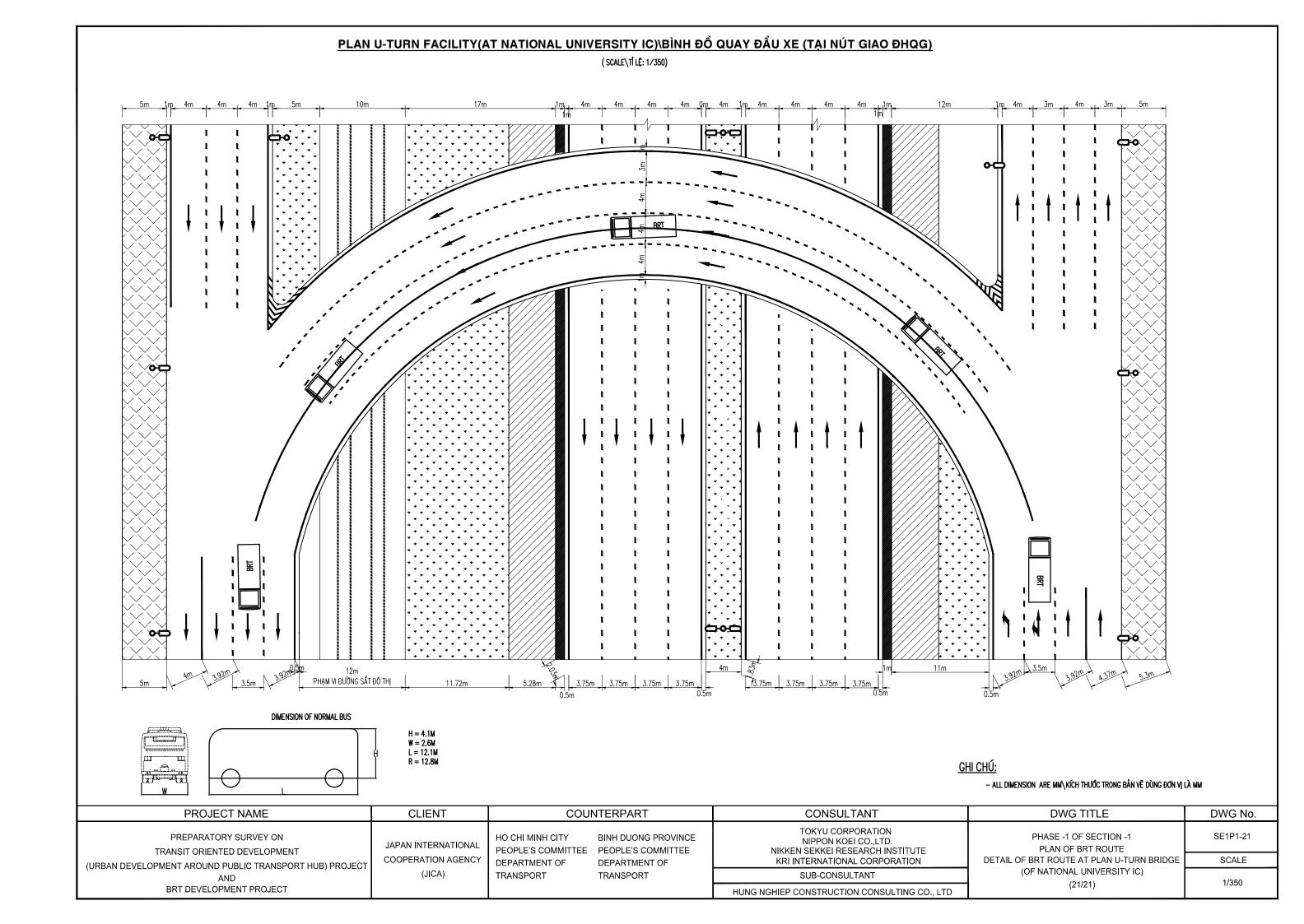
COOPERATION AGENCY

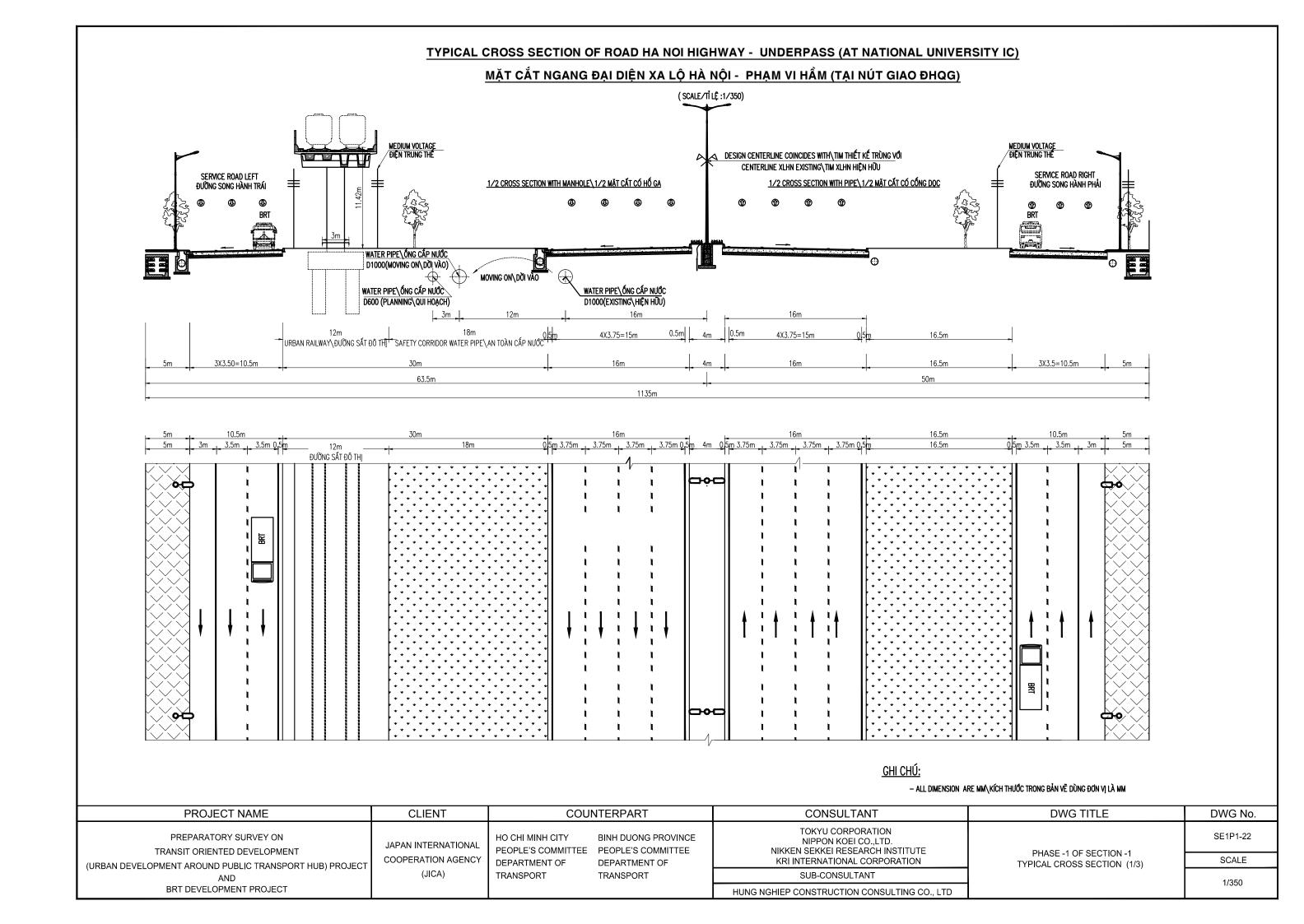
(JICA)

TRANSIT ORIENTED DEVELOPMENT

(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT

BRT DEVELOPMENT PROJECT





TYPICAL CROSS SECTION OF ROAD HA NOI HIGHWAY - UNDERPASS(AT NATIONAL UNIVERSITY IC) MẶT CẮT NGANG ĐẠI DIỆN XA LỘ HÀ NỘI - PHẠM VI HẦM(TẠI NÚT GIAO ĐHQG) (SCALE\Ti LE: 1/350) MEDIUM VOLTAGE DIỆN TRUNG THÊ MEDIUM VOLTAGE DIỆN TRUNG THE B = 16m H = 4.75m MAIN PAVEMENT\MÅT ÐUÖNG CHÍNH $\begin{array}{l} B=16m\\ H=4.75m\\ \text{MAIN PAVEMENT}\backslash\text{MÅT ĐƯỜNG CHÍNH} \end{array}$ SERVICE ROAD RIGHT ĐƯỜNG SONG HÀNH PHẢI SERVICE ROAD LEFT ĐƯỜNG SONG HÀNH TRÁI DESIGN CENTERLINE COINCIDES WITH\TIM THIẾT KẾ TRÙNG VỚI CENTERLINE XLHN EXISTING\TIM XLHN HIỆN HỮU 16m Φ CỐNG TN KHU VỰC RÃNH DỌC 11.5m SCOPE ROAD EXISTING\PHAM VI ĐƯỜNG HIỆN HỮU

17m

16m

19m

118m

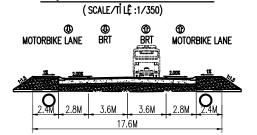
_CHANGE\THAY ĐỔI__ CHANGE\THAY <u>ĐỔI</u>

0~6m

19~12m

TYPICAL CROSS SECTION DT743 ROAD MĂT CẮT NGANG ĐT743

. URBAN RAILWAY∖ÐƯỜNG SẮT ĐÔ TH



TYPICAL CROSS SECTION EXISTING HA NOI HIGHWAY(KM13+600~KM15+900) MĂT CẮT NGANG XA LỘ HÀ NỘI HIỆN HỮU (KM 13+600~KM15+900)

CHANGE\THAY ĐỔI CHANGE\THAY ĐỘ

13∼7m

0~6m

MOTORBIKE LANE

BRT
BRT
MOTORBIKE LANE

0 SM CHANGE\THAY ĐổI
10M~11M CHANGE\THAY ĐổI
23M~24M

(SCALE/Tİ LE:1/350)

16m

19m

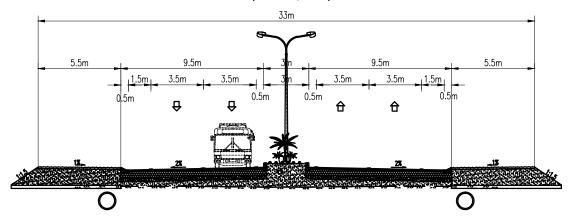
GHI CHÚ:

– ALL DIMENSION ARE MM\KÍCH THƯỚC TRONG BẢN VỀ DÙNG ĐƠN VỊ LÀ MM

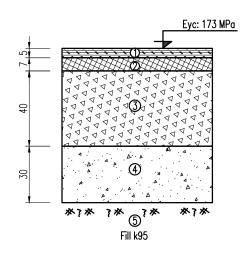
PROJECT NAME	CLIENT	COUNTERPART	CONSULTANT	DWG TITLE	DWG No.
PREPARATORY SURVEY ON TRANSIT ORIENTED DEVELOPMENT	JAPAN INTERNATIONAL	HO CHI MINH CITY BINH DUONG PROVINCE PEOPLE'S COMMITTEE PEOPLE'S COMMITTEE	TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE	PHASE -1 OF SECTION -1	SE1P1-23
(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT	COOPERATION AGENCY		KRI INTERNATIONAL CORPORATION	TYPICAL CROSS SECTION (2/3)	SCALE
AND	(JICA)	TRANSPORT TRANSPORT	SUB-CONSULTANT	` ,	1/350
BRT DEVELOPMENT PROJECT			HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD		1/550

TYPICAL CROSS SECTION INDUSTRIAL ZONE ROAD MĂT CẮT NGANG KHU CÔNG NGHIỆP

(SCALE/Tİ LE:1/200)



PAVEMENT STRUCTURE



- ① Asphalt surface concrete 5cm thickness ② Asphalt binder concrete 7cm thickness
- ③Graded crushed aggregate class I, 40 cm thickness
- 4 Subbase 30cm thickness
- 5 Fill K98 30cm thickness

SIDEWALK STRUCTURE

TÎ LỆ: 1−20

Concrete stone 1x2 M200 10cm thickness

Motar M100 2cm thickness

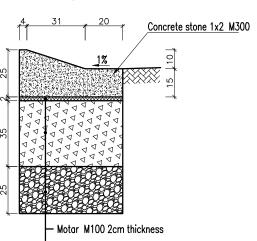
DETAIL MEDIAN CURB

Concrete stone 1x2 M200

Concrete stone 1x2 M2

<u>DETAIL CURB</u>

TÎ LỆ: 1−20



— Graded crushed aggregate class I, 40 cm thickness

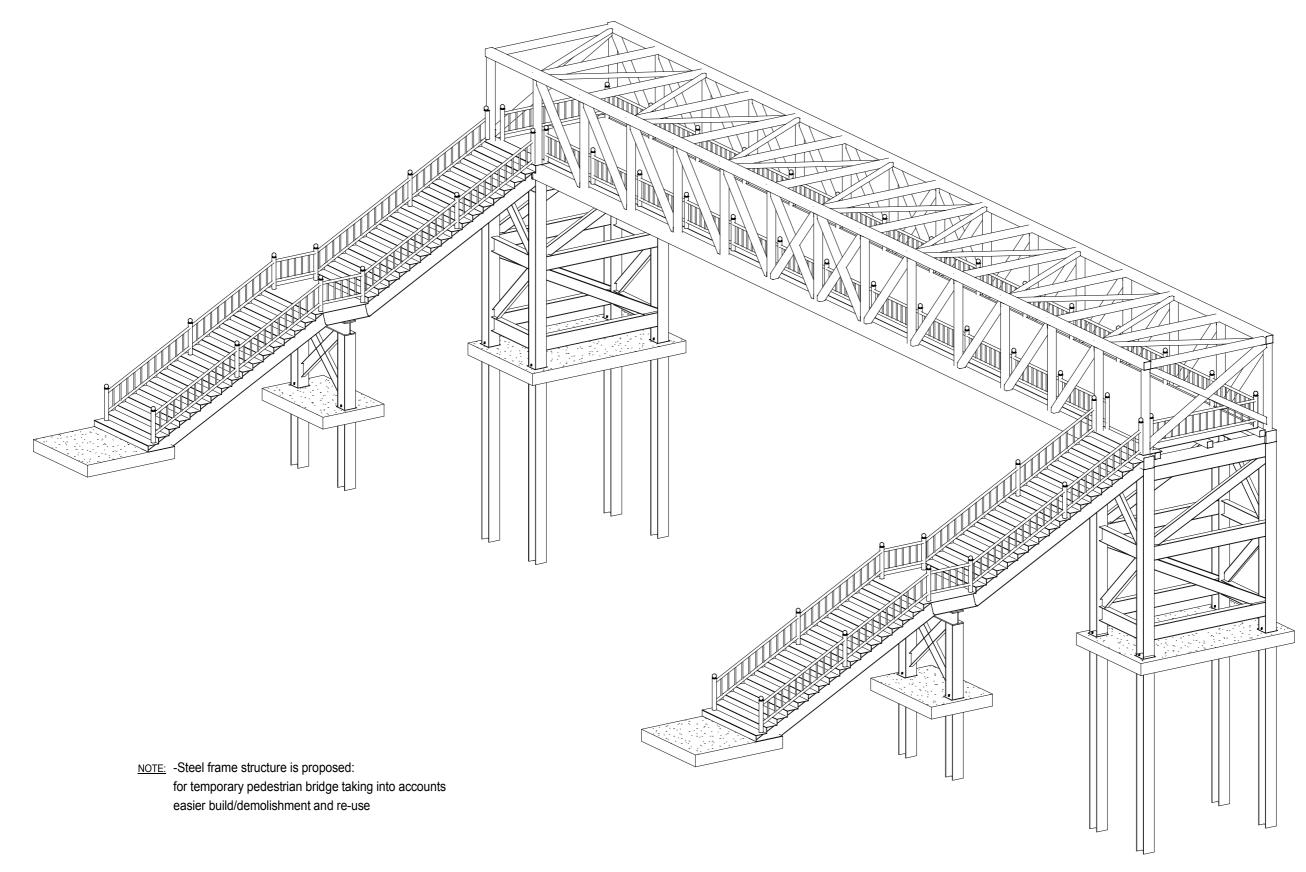
└ Subbase 25cm thickness

NOTE/GHI CHÚ:

- ALL DIMENSION ARE MM\KÍCH THƯỚC TRONG BẢN VỄ DÙNG ĐƠN VỊ LÀ MM

PR	ROJECT NAME	CLIENT	COU	NTERPART	CONSULTANT	DWG TITLE	DWG No.
	ARATORY SURVEY ON ORIENTED DEVELOPMENT	JAPAN INTERNATIONAL	HO CHI MINH CITY	BINH DUONG PROVINCE PEOPLE'S COMMITTEE	TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE	PHASE -1 OF SECTION -1	SE1P1-24
	ROUND PUBLIC TRANSPORT HUB) PROJECT	COOPERATION AGENCY	DEPARTMENT OF	DEPARTMENT OF	KRI INTERNATIONAL CORPORATION	TYPICAL CROSS SECTION (3/3)	SCALE
(OND) WE VEED WE WE VIT	AND	(JICA)	TRANSPORT	TRANSPORT	SUB-CONSULTANT	,	AS SHOW
BRT DE	EVELOPMENT PROJECT				HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD		A3 3110W

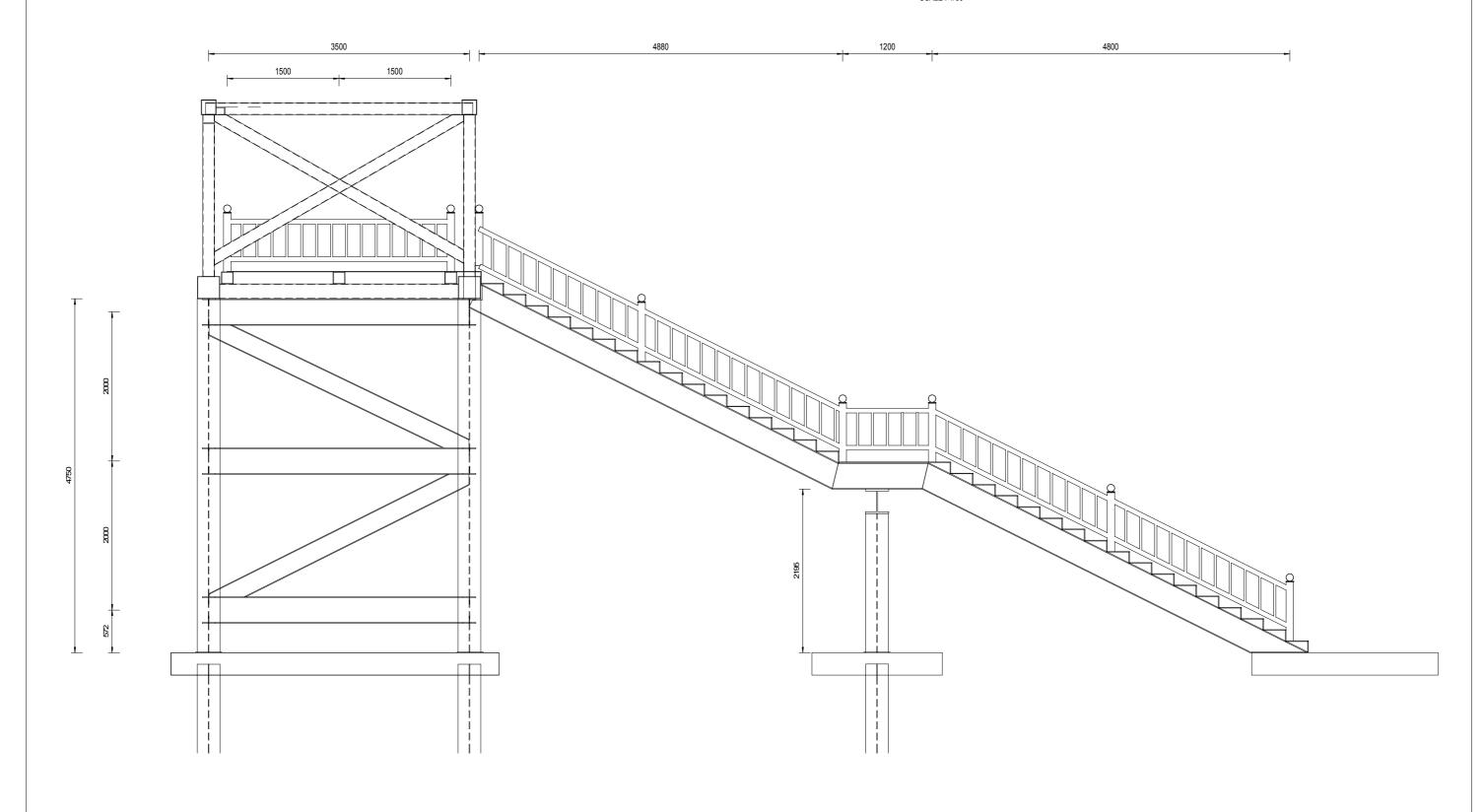
GENERAL VIEW OF TEMPORARY PEDESTRIAN BRIDGE AT PHASE -1



PROJECT NAME	CLIENT	COU	NTERPART	CONSULTANT	DWG TITLE	DWG No.
PREPARATORY SURVEY ON TRANSIT ORIENTED DEVELOPMENT	JAPAN INTERNATIONAL	HO CHI MINH CITY	BINH DUONG PROVINCE PEOPLE'S COMMITTEE	TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE	PHASE -1 OF SECTION -1	SE1P1 -25
(URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT	COOPERATION AGENCY	DEPARTMENT OF	DEPARTMENT OF	KRI INTERNATIONAL CORPORATION	TEMPORARY PEDESTRIAN BRIDGE (1/3)	SCALE
AND	(JICA)	TRANSPORT	TRANSPORT	SUB-CONSULTANT		1/100
BRT DEVELOPMENT PROJECT				HUNG NGHIEP CONSTRUCTION CONSULTING CO. LTD.		1/100

CROSS SECTION

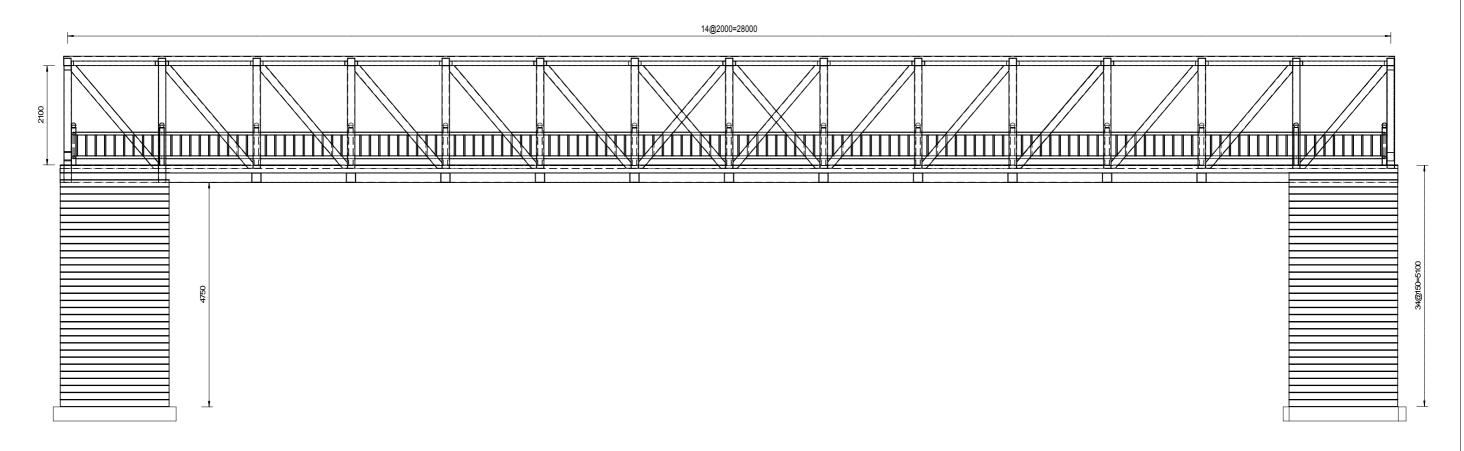
SCALE: 1/80



PROJECT NAME	CLIENT	COUNTERPART		CONSULTANT	DWG TITLE	DWG No.
PREPARATORY SURVEY ON TRANSIT ORIENTED DEVELOPMENT (URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	HO CHI MINH CITY PEOPLE'S COMMITTEE DEPARTMENT OF	BINH DUONG PROVINCE PEOPLE'S COMMITTEE DEPARTMENT OF	TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE KRI INTERNATIONAL CORPORATION	PHASE -1 OF SECTION -1 TEMPORARY PEDESTRIAN BRIDGE (2/3)	SE1P1-26
AND	(JICA)	TRANSPORT	TRANSPORT	SUB-CONSULTANT		SCALE
BRT DEVELOPMENT PROJECT				HUNG NGHIEP CONSTRUCTION CONSULTING CO., LTD		1/80

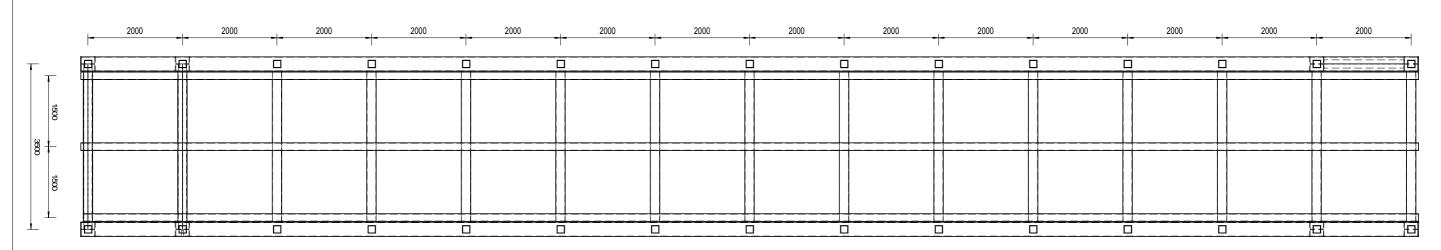
SIDE VIEW

SCALE: 1/80



PLAN VIEW

SCALE: 1/80



PROJECT NAME	CLIENT	COU	INTERPART	CONSULTANT	DWG TITLE	DWG No.
PREPARATORY SURVEY ON TRANSIT ORIENTED DEVELOPMENT (URBAN DEVELOPMENT AROUND PUBLIC TRANSPORT HUB) PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	HO CHI MINH CITY PEOPLE'S COMMITTEE DEPARTMENT OF	BINH DUONG PROVINCE PEOPLE'S COMMITTEE DEPARTMENT OF	TOKYU CORPORATION NIPPON KOEI CO.,LTD. NIKKEN SEKKEI RESEARCH INSTITUTE KRI INTERNATIONAL CORPORATION	PHASE -1 OF SECTION -1 TEMPORARY PEDESTRIAN BRIDGE (3/3)	SE1P1-27 SCALE
AND	(JICA)	TRANSPORT	TRANSPORT	SUB-CONSULTANT		
BRT DEVELOPMENT PROJECT				HUNG NGHIEP CONSTRUCTION CONSULTING CO. LTD.		1/80