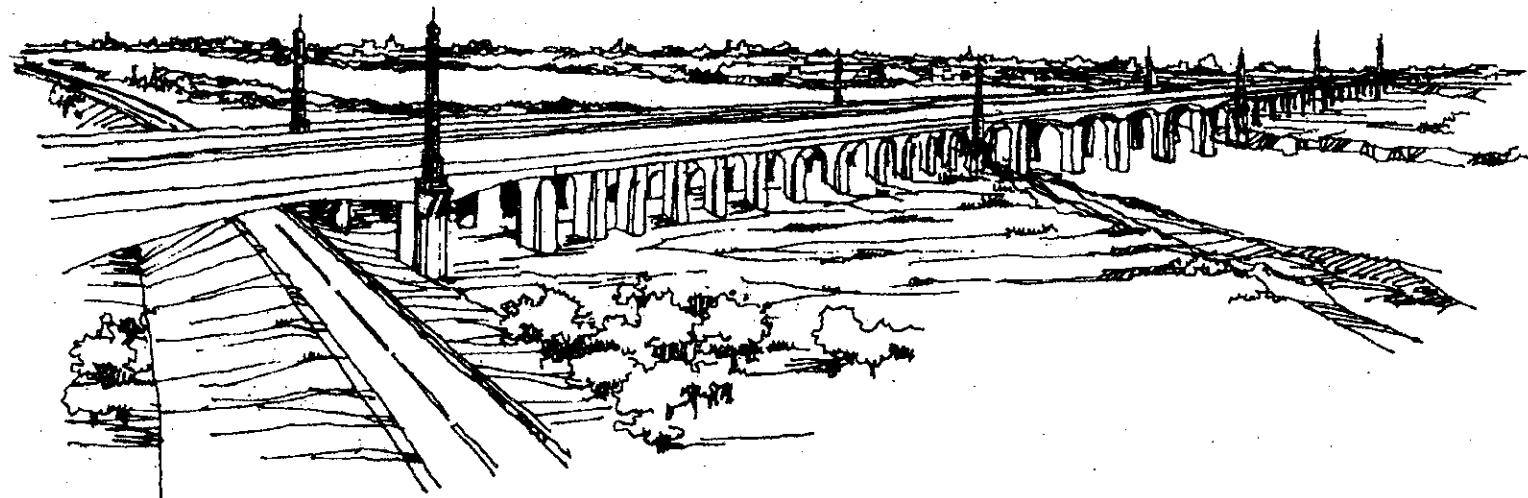


JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
PROJECT MANAGEMENT UNIT THANG LONG
MINISTRY OF TRANSPORT
THE SOCIALIST REPUBLIC OF VIET NAM

THE DETAILED DESIGN OF THE RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM

FINAL REPORT

VOLUME IX : DRAWINGS
〈 PACKAGE - 3 〉
(1 of 2)



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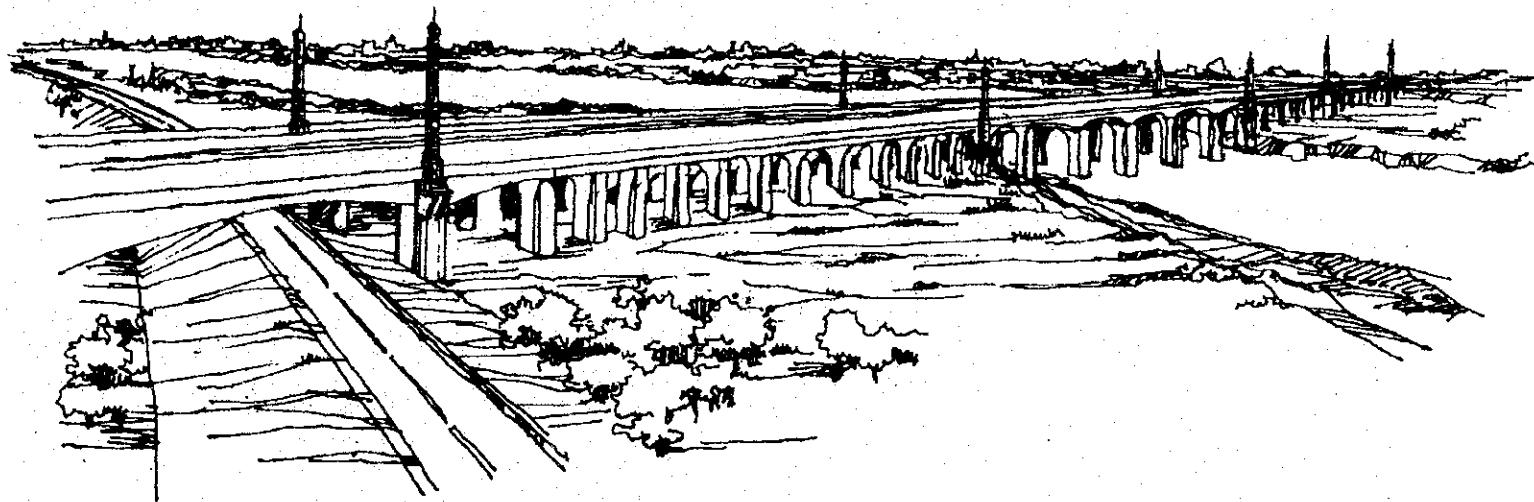
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PROJECT MANAGEMENT UNIT THANG LONG
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**THE DETAILED DESIGN OF
THE RED RIVER BRIDGE (THANH TRI BRIDGE)
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1158664 [1]

A. GENERAL

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.6.1
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

DRAWING SCHEDULE (1)

PACKAGE 3	SCALE	DRAWING No. A-1	SHEET No.
DRAWING SCHEDULE (1)			

A. GENERAL

- A-1 DRAWING SCHEDULE (1)
- A-2 DRAWING SCHEDULE (2)
- A-3 DRAWING SCHEDULE (3)
- A-4 DRAWING SCHEDULE (4)
- A-5 PROJECT LOCATION MAP
- A-6 ABBREVIATION AND SYMBOLS
- A-7 LEGEND
- A-8 GENERAL NOTES

B. HIGHWAY

B-1 TYPICAL CROSS SECTION

- B-1-1 TYPICAL CROSS SECTION (STA 0+100)
- B-1-2 TYPICAL CROSS SECTION (STA 1+080)
- B-1-3 TYPICAL CROSS SECTION (STA 2+600)
- B-1-4 TYPICAL CROSS SECTION (STA 3+340)
- B-1-5 TYPICAL CROSS SECTION (STA 5+420)
- B-1-6 TYPICAL CROSS SECTION (STA 5+800)
- B-1-7 TYPICAL CROSS SECTION (STA 6+060)
- B-1-8 TYPICAL CROSS SECTION (TYPE F1 & F2)
- B-1-9 TYPICAL CROSS SECTION (TYPE F5 & 6)
- B-1-10 TYPICAL CROSS SECTION (TYPE R1 & R3)
- B-1-11 TYPICAL CROSS SECTION (TYPE R4 & R8)
- B-1-12 TYPICAL CROSS SECTION (TYPE R6 & R7)
- B-1-13 TYPICAL CROSS SECTION (TYPE R8 & R9)
- B-1-14 PAVEMENT DETAIL

B-2 ALIGNMENT LAYOUT

- B-2-1 ALIGNMENT LAYOUT (STA 0+000 - STA 0+200)
- B-2-2 ALIGNMENT LAYOUT (STA 0+200 - STA 0+900)
- B-2-3 ALIGNMENT LAYOUT (STA 0+900 - STA 1+600)
- B-2-4 ALIGNMENT LAYOUT (STA 1+600 - STA 2+300)
- B-2-5 ALIGNMENT LAYOUT (STA 2+300 - STA 3+000)
- B-2-6 ALIGNMENT LAYOUT (STA 3+000 - STA 3+700)
- B-2-7 ALIGNMENT LAYOUT (STA 3+700 - STA 4+400)
- B-2-8 ALIGNMENT LAYOUT (STA 4+400 - STA 5+100)
- B-2-9 ALIGNMENT LAYOUT (STA 5+100 - STA 5+800)
- B-2-10 ALIGNMENT LAYOUT (STA 5+800 - STA 6+218.50)
- B-2-11 ALIGNMENT LAYOUT (PHAP VAN CAU GIE I.C 1)
- B-2-12 ALIGNMENT LAYOUT (PHAP VAN CAU GIE I.C 2)
- B-2-13 ALIGNMENT LAYOUT (PHAP VAN CAU GIE I.C 3)
- B-2-14 ALIGNMENT LAYOUT (NGUYEN TAM TRINH I.C)
- B-2-15 ALIGNMENT LAYOUT (LINH NAM I.C)

B-3 PLAN AND PROFILE

- B-3-1 THROUGH WAY (STA 0-500 - STA 0+200)
- B-3-2 THROUGH WAY (STA 0+200 - STA 0+900)
- B-3-3 THROUGH WAY (STA 0+900 - STA 1+600)
- B-3-4 THROUGH WAY (STA 1+600 - STA 2+300)
- B-3-5 THROUGH WAY (STA 2+300 - STA 3+000)
- B-3-6 THROUGH WAY (STA 3+000 - STA 3+700)
- B-3-7 THROUGH WAY (STA 3+700 - STA 4+400)
- B-3-8 THROUGH WAY (STA 4+400 - STA 5+100)
- B-3-9 THROUGH WAY (STA 5+100 - STA 5+800)
- B-3-10 THROUGH WAY (STA 5+800 - STA 6+500)
- B-3-11 PHAP VAN CAU GIE INTERCHANGE PLAN (1/2)
- B-3-12 PHAP VAN CAU GIE INTERCHANGE PLAN (2/2)
- B-3-13 PHAP VAN CAU GIE INTERCHANGE PROFILE (1/3)
- B-3-14 PHAP VAN CAU GIE INTERCHANGE PROFILE (2/3)
- B-3-15 PHAP VAN CAU GIE INTERCHANGE PROFILE (3/3)

- B-3-16 PHAP VAN CAU GIE ROAD PROFILE
- B-3-17 NGUYEN TAM TRINH INTERCHANGE PROFILE
- B-3-18 LINH NAM INTERCHANGE PROFILE (1/2)
- B-3-19 LINH NAM INTERCHANGE PROFILE (2/2)
- B-3-20 FRONTAGE ROAD PROFILE (LEFT SIDE) (1/5)
- B-3-21 FRONTAGE ROAD PROFILE (LEFT SIDE) (2/5)
- B-3-22 FRONTAGE ROAD PROFILE (LEFT SIDE) (3/5)
- B-3-23 FRONTAGE ROAD PROFILE (LEFT SIDE) (4/5)
- B-3-24 FRONTAGE ROAD PROFILE (LEFT SIDE) (5/5)
- B-3-25 FRONTAGE ROAD PROFILE (RIGHT SIDE) (1/5)
- B-3-26 FRONTAGE ROAD PROFILE (RIGHT SIDE) (2/5)
- B-3-27 FRONTAGE ROAD PROFILE (RIGHT SIDE) (3/5)
- B-3-28 FRONTAGE ROAD PROFILE (RIGHT SIDE) (4/5)
- B-3-29 FRONTAGE ROAD PROFILE (RIGHT SIDE) (5/5)

B-4 INTERCHANGE PLAN (SCALE 1/1000)

- B-4-1 PHAP VAN CAU GIE INTERCHANGE (1/8)
- B-4-2 PHAP VAN CAU GIE INTERCHANGE (2/8)
- B-4-3 PHAP VAN CAU GIE INTERCHANGE (3/8)
- B-4-4 PHAP VAN CAU GIE INTERCHANGE (4/8)
- B-4-5 PHAP VAN CAU GIE INTERCHANGE (5/8)
- B-4-6 PHAP VAN CAU GIE INTERCHANGE (6/8)
- B-4-7 PHAP VAN CAU GIE INTERCHANGE (7/8)
- B-4-8 PHAP VAN CAU GIE INTERCHANGE (8/8)
- B-4-9 NGUYEN TAM TRINH INTERCHANGE (1/2)
- B-4-10 NGUYEN TAM TRINH INTERCHANGE (2/2)
- B-4-11 LINH NAM INTERCHANGE (1/3)
- B-4-12 LINH NAM INTERCHANGE (2/3)
- B-4-13 LINH NAM INTERCHANGE (3/3)

B-5 INTERSECTION

- B-5-1 NH No.1 INTERSECTION (1/2)
- B-5-2 NH No.1 INTERSECTION (2/2)
- B-5-3 PHAP VAN CAU GIE ROAD INTERSECTION

B-6 SOFT GROUND TREATMENT

- B-6-1 SOFT GROUND TREATMENT (TYPE A)
- B-6-2 SOFT GROUND TREATMENT (TYPE B)
- B-6-3 SOFT GROUND TREATMENT (TYPE EF, TYPE G)
- B-6-4 SOFT GROUND TREATMENT (TYPE H, TYPE I)

B-7 LAYOUT OF TRAFFIC SIGNS

- B-7-1 LAYOUT OF TRAFFIC SIGNS (KM. 0+000 - KM. 0+900)
- B-7-2 LAYOUT OF TRAFFIC SIGNS (KM. 0+900 - KM. 2+300)
- B-7-3 LAYOUT OF TRAFFIC SIGNS (KM. 2+300 - KM. 3+700)
- B-7-4 LAYOUT OF TRAFFIC SIGNS (KM. 3+700 - KM. 5+100)
- B-7-5 LAYOUT OF TRAFFIC SIGNS (KM. 5+100 - KM. 6+218.50)
- B-7-6 LAYOUT OF TRAFFIC SIGNS FOR PHAP VAN - CAU GIE INTERCHANGE (1)
- B-7-7 LAYOUT OF TRAFFIC SIGNS FOR PHAP VAN - CAU GIE INTERCHANGE (2)
- B-7-8 LAYOUT OF TRAFFIC SIGNS FOR NH No.1 INTERSECTION
- B-7-9 LAYOUT OF TRAFFIC SIGNS FOR PHAP VAN - CAU GIE INTERSECTION

C. BRIDGE

C-1 THROUGHWAY

C-1-1 GENERAL VIEW

- C-1-1-1 GENERAL VIEW OF NGUYEN TAM TRINH BRIDGE
- C-1-1-2 GENERAL VIEW OF LINH NAM ROAD BRIDGE
- C-1-1-3 GENERAL VIEW OF PHAP VAN VIADUCT BRIDGE
- C-1-1-4 GENERAL VIEW OF KIM NGUU RIVER BRIDGE

C-1-2 SUPERSTRUCTURE (BOX GIRDER AND PC I GIRDER)

C-1-2a BOX GIRDER

- C-1-2a-1 BOX GIRDER BRIDGE GENERAL ARRANGEMENT
- C-1-2a-2 NGUYEN TAM TRINH BRIDGE, STRUCTURAL DIMENSIONS (1/2)
- C-1-2a-3 NGUYEN TAM TRINH BRIDGE, STRUCTURAL DIMENSIONS (2/2)
- C-1-2a-4 NGUYEN TAM TRINH BRIDGE, TENDON ARRANGEMENT (1/2)
- C-1-2a-5 NGUYEN TAM TRINH BRIDGE, TENDON ARRANGEMENT (2/2)
- C-1-2a-6 NGUYEN TAM TRINH BRIDGE, REINFORCEMENT ARRANGEMENT (1/3)
- C-1-2a-7 NGUYEN TAM TRINH BRIDGE, REINFORCEMENT ARRANGEMENT (2/3)
- C-1-2a-8 NGUYEN TAM TRINH BRIDGE, REINFORCEMENT ARRANGEMENT (3/3)
- C-1-2a-9 NGUYEN TAM TRINH BRIDGE, REBAR BENDING SCHEDULE (1/3)
- C-1-2a-10 NGUYEN TAM TRINH BRIDGE, REBAR BENDING SCHEDULE (2/3)
- C-1-2a-11 NGUYEN TAM TRINH BRIDGE, REBAR BENDING SCHEDULE (3/3)
- C-1-2a-12 LINH NAM BRIDGE, STRUCTURAL DIMENSIONS (1/2)
- C-1-2a-13 LINH NAM BRIDGE, STRUCTURAL DIMENSIONS (2/2)
- C-1-2a-14 LINH NAM BRIDGE, TENDON ARRANGEMENT (1/2)
- C-1-2a-15 LINH NAM BRIDGE, TENDON ARRANGEMENT (2/2)
- C-1-2a-16 LINH NAM BRIDGE, REINFORCEMENT ARRANGEMENT (1/3)
- C-1-2a-17 LINH NAM BRIDGE, REINFORCEMENT ARRANGEMENT (2/3)
- C-1-2a-18 LINH NAM BRIDGE, REINFORCEMENT ARRANGEMENT (3/3)
- C-1-2a-19 LINH NAM BRIDGE, REBAR BENDING SCHEDULE (1/3)
- C-1-2a-20 LINH NAM BRIDGE, REBAR BENDING SCHEDULE (2/3)
- C-1-2a-21 LINH NAM BRIDGE, REBAR BENDING SCHEDULE (3/3)

C-1-2b PC I GIRDER

- C-1-2b-1 DETAIL OF PHAP VAN VIADUCT (1)
- C-1-2b-2 DETAIL OF PHAP VAN VIADUCT (2)
- C-1-2b-3 DETAIL OF PHAP VAN VIADUCT (3)
- C-1-2b-4 DETAIL OF PHAP VAN VIADUCT (4)
- C-1-2b-5 DETAIL OF PHAP VAN VIADUCT (5)
- C-1-2b-6 DETAIL OF PHAP VAN VIADUCT (6)
- C-1-2b-7 DETAIL OF PHAP VAN VIADUCT (7)
- C-1-2b-8 DETAIL OF PHAP VAN VIADUCT (8)
- C-1-2b-9 DETAIL OF PHAP VAN VIADUCT (9)
- C-1-2b-10 DETAIL OF PHAP VAN VIADUCT (10)
- C-1-2b-11 DETAIL OF PHAP VAN VIADUCT (11)
- C-1-2b-12 DETAIL OF PHAP VAN VIADUCT (12)
- C-1-2b-13 DETAIL OF PHAP VAN VIADUCT (13)
- C-1-2b-14 DETAIL OF PHAP VAN VIADUCT (14)
- C-1-2b-15 DETAIL OF PHAP VAN VIADUCT (15-1)
- C-1-2b-16 DETAIL OF PHAP VAN VIADUCT (15-2)
- C-1-2b-17 DETAIL OF PHAP VAN VIADUCT (16)
- C-1-2b-18 DETAIL OF PHAP VAN VIADUCT (17)
- C-1-2b-19 DETAIL OF PHAP VAN VIADUCT (18)
- C-1-2b-20 DETAIL OF PHAP VAN VIADUCT (19)
- C-1-2b-21 DETAIL OF PHAP VAN VIADUCT (20)
- C-1-2b-22 DETAIL OF PHAP VAN VIADUCT (21)
- C-1-2b-23 DETAIL OF KIM NGUU RIVER BRIDGE (1)
- C-1-2b-24 DETAIL OF KIM NGUU RIVER BRIDGE (2)
- C-1-2b-25 GENERAL VIEW GIRDER
- C-1-2b-26 RE-BAR ARRANGEMENT OF GIRDER (1)
- C-1-2b-27 RE-BAR ARRANGEMENT OF GIRDER (2)

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE

DRAWING SCHEDULE (2)

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		A-2	
DRAWING SCHEDULE (2)			

- C-1-2b-28 RE-BAR ARRANGEMENT OF GIRDER (3)
- C-1-2b-29 RE-BAR BENDING SCHEDULE OF GIRDER (1)
- C-1-2b-30 RE-BAR BENDING SCHEDULE OF GIRDER (2)
- C-1-2b-31 RE-BAR BENDING SCHEDULE OF GIRDER (3)
- C-1-2b-32 PC CABLE ARRANGEMENT OF GIRDER (1)
- C-1-2b-33 PC CABLE ARRANGEMENT OF GIRDER (2)
- C-1-2b-34 PC CABLE ARRANGEMENT OF GIRDER (3)
- C-1-2b-35 RE-BAR ARRANGEMENT OF DIAPHRAGM (1-1)
- C-1-2b-36 RE-BAR ARRANGEMENT OF DIAPHRAGM (1-2)
- C-1-2b-37 RE-BAR ARRANGEMENT OF DIAPHRAGM (2)
- C-1-2b-38 RE-BAR ARRANGEMENT OF DIAPHRAGM (3)
- C-1-2b-39 RE-BAR ARRANGEMENT OF DIAPHRAGM (4-1)
- C-1-2b-40 RE-BAR ARRANGEMENT OF DIAPHRAGM (4-2)
- C-1-2b-41 RE-BAR ARRANGEMENT OF DIAPHRAGM (5)
- C-1-2b-42 RE-BAR ARRANGEMENT OF DIAPHRAGM (6)
- C-1-2b-43 RE-BAR ARRANGEMENT OF DIAPHRAGM (7)
- C-1-2b-44 RE-BAR ARRANGEMENT OF DIAPHRAGM (8)
- C-1-2b-45 RE-BAR ARRANGEMENT OF DIAPHRAGM (9)
- C-1-2b-46 RE-BAR ARRANGEMENT OF DECK SLAB (1-1)
- C-1-2b-47 RE-BAR ARRANGEMENT OF DECK SLAB (1-2)
- C-1-2b-48 RE-BAR ARRANGEMENT OF DECK SLAB (1-3)
- C-1-2b-49 RE-BAR ARRANGEMENT OF DECK SLAB (1-4)
- C-1-2b-50 RE-BAR ARRANGEMENT OF DECK SLAB (1-5)
- C-1-2b-51 RE-BAR ARRANGEMENT OF DECK SLAB (1-6)
- C-1-2b-52 RE-BAR ARRANGEMENT OF DECK SLAB (1-7)
- C-1-2b-53 RE-BAR ARRANGEMENT OF DECK SLAB (2-1)
- C-1-2b-54 RE-BAR ARRANGEMENT OF DECK SLAB (2-2)
- C-1-2b-55 RE-BAR ARRANGEMENT OF DECK SLAB (2-3)
- C-1-2b-56 RE-BAR ARRANGEMENT OF DECK SLAB (2-4)
- C-1-2b-57 RE-BAR ARRANGEMENT OF DECK SLAB (2-5)
- C-1-2b-58 RE-BAR ARRANGEMENT OF DECK SLAB (2-6)
- C-1-2b-59 RE-BAR ARRANGEMENT OF DECK SLAB (2-7)
- C-1-2b-60 RE-BAR ARRANGEMENT OF DECK SLAB (2-8)
- C-1-2b-61 RE-BAR ARRANGEMENT OF DECK SLAB (2-9)
- C-1-2b-62 RE-BAR ARRANGEMENT OF DECK SLAB (2-10)
- C-1-2b-63 RE-BAR ARRANGEMENT OF DECK SLAB (2-11)
- C-1-2b-64 RE-BAR ARRANGEMENT OF DECK SLAB (2-12)
- C-1-2b-65 RE-BAR ARRANGEMENT OF DECK SLAB (2-13)
- C-1-2b-66 RE-BAR ARRANGEMENT OF DECK SLAB (2-14)
- C-1-2b-67 RE-BAR ARRANGEMENT OF DECK SLAB (2-15)
- C-1-2b-68 RE-BAR ARRANGEMENT OF DECK SLAB (2-16)
- C-1-2b-69 RE-BAR ARRANGEMENT OF DECK SLAB (2-17)

C-1-3 SUBSTRUCTURE

C-1-3a PHAP VAN VIADUCT

- C-1-3a-1 DETAIL OF ABUTMENT A1
- C-1-3a-2 BAR ARRANGEMENT OF ABUTMENT A1(1)
- C-1-3a-3 BAR ARRANGEMENT OF ABUTMENT A1(2)
- C-1-3a-4 BAR ARRANGEMENT OF ABUTMENT A1(3)
- C-1-3a-5 DETAIL OF PIER P1R,P12L-P14L,P12R-P18R(1)
- C-1-3a-6 DETAIL OF PIER P1R,P12L-P14L,P12R-P18R(2)
- C-1-3a-7 BAR ARRANGEMENT OF PIER P1R,P12L-P14L,P12R-P18R(1)
- C-1-3a-8 BAR ARRANGEMENT OF PIER P1R,P12L-P14L,P12R-P18R(2)
- C-1-3a-9 BAR ARRANGEMENT OF PIER P1R,P12L-P14L,P12R-P18R(3)
- C-1-3a-10 BAR ARRANGEMENT OF PIER P1R,P12L-P14L,P12R-P18R(4)
- C-1-3a-11 BAR ARRANGEMENT OF PIER P1R,P12L-P14L,P12R-P18R(5)
- C-1-3a-12 DETAIL OF PIER P1L
- C-1-3a-13 DETAIL OF PIER P2L,P3L
- C-1-3a-14 BAR ARRANGEMENT OF PIER P1L(1)
- C-1-3a-15 BAR ARRANGEMENT OF PIER P1L(2)
- C-1-3a-16 BAR ARRANGEMENT OF PIER P1L(3)
- C-1-3a-17 BAR ARRANGEMENT OF PIER P1L(4)
- C-1-3a-18 DETAIL OF PIER P2R,P17L,P18L(1)
- C-1-3a-19 DETAIL OF PIER P2R,P17L,P18L(2)
- C-1-3a-20 DETAIL OF PIER P3R

- C-1-3a-21 DETAIL OF PIER P4R
- C-1-3a-22 DETAIL OF PIER P5R,P6R,P7R(1)
- C-1-3a-23 DETAIL OF PIER P5R,P6R,P7R(2)
- C-1-3a-24 BAR ARRANGEMENT OF PIER P2R-P7R,P17R,P18L(1)
- C-1-3a-25 BAR ARRANGEMENT OF PIER P2R-P7R,P17R,P18L(2)
- C-1-3a-26 BAR ARRANGEMENT OF PIER P2R-P7R,P17R,P18L(3)
- C-1-3a-27 BAR ARRANGEMENT OF PIER P2R-P7R,P17R,P18L(4)
- C-1-3a-28 BAR ARRANGEMENT OF PIER P2R-P7R,P17R,P18L(5)
- C-1-3a-29 DETAIL OF PIER P4L
- C-1-3a-30 DETAIL OF PIER P5L
- C-1-3a-31 BAR ARRANGEMENT OF PIER P4L,P5L(1)
- C-1-3a-32 BAR ARRANGEMENT OF PIER P4L,P5L(2)
- C-1-3a-33 BAR ARRANGEMENT OF PIER P4L,P5L(3)
- C-1-3a-34 BAR ARRANGEMENT OF PIER P4L,P5L(4)
- C-1-3a-35 DETAIL OF PIER P6L
- C-1-3a-36 BAR ARRANGEMENT OF PIER P6L(1)
- C-1-3a-37 BAR ARRANGEMENT OF PIER P6L(2)
- C-1-3a-38 BAR ARRANGEMENT OF PIER P6L(3)
- C-1-3a-39 BAR ARRANGEMENT OF PIER P6L(4)
- C-1-3a-40 DETAIL OF PIER P7L
- C-1-3a-41 BAR ARRANGEMENT OF PIER P7L(1)
- C-1-3a-42 BAR ARRANGEMENT OF PIER P7L(2)
- C-1-3a-43 BAR ARRANGEMENT OF PIER P7L(3)
- C-1-3a-44 BAR ARRANGEMENT OF PIER P7L(4)
- C-1-3a-45 DETAIL OF PIER P8L
- C-1-3a-46 BAR ARRANGEMENT OF PIER P8L(1)
- C-1-3a-47 BAR ARRANGEMENT OF PIER P8L(2)
- C-1-3a-48 BAR ARRANGEMENT OF PIER P8L(3)
- C-1-3a-49 BAR ARRANGEMENT OF PIER P8L(4)
- C-1-3a-50 DETAIL OF PIER P8R
- C-1-3a-51 BAR ARRANGEMENT OF PIER P8R(1)
- C-1-3a-52 BAR ARRANGEMENT OF PIER P8R(2)
- C-1-3a-53 BAR ARRANGEMENT OF PIER P8R(3)
- C-1-3a-54 BAR ARRANGEMENT OF PIER P8R(4)
- C-1-3a-55 DETAIL OF PIER P9L
- C-1-3a-56 DETAIL OF PIER P9R
- C-1-3a-57 DETAIL OF PIER P10L
- C-1-3a-58 BAR ARRANGEMENT OF PIER P9L, P9R, P11L (1)
- C-1-3a-59 BAR ARRANGEMENT OF PIER P9L, P9R, P11L (2)
- C-1-3a-60 BAR ARRANGEMENT OF PIER P9L, P9R, P11L (3)
- C-1-3a-61 BAR ARRANGEMENT OF PIER P9L, P9R, P11L (4)
- C-1-3a-62 BAR ARRANGEMENT OF PIER P9L, P9R, P11L (5)
- C-1-3a-63 DETAIL OF PIER P10L
- C-1-3a-64 DETAIL OF PIER P11L
- C-1-3a-65 BAR ARRANGEMENT OF PIER P10L, P11L (1)
- C-1-3a-66 BAR ARRANGEMENT OF PIER P10L, P11L (2)
- C-1-3a-67 BAR ARRANGEMENT OF PIER P10L, P11L (3)
- C-1-3a-68 BAR ARRANGEMENT OF PIER P10L, P11L (4)
- C-1-3a-69 DETAIL OF PIER P10R
- C-1-3a-70 DETAIL OF PIER P11R
- C-1-3a-71 BAR ARRANGEMENT OF PIER P10R, P11R (1)
- C-1-3a-72 BAR ARRANGEMENT OF PIER P10R, P11R (2)
- C-1-3a-73 BAR ARRANGEMENT OF PIER P10R, P11R (3)
- C-1-3a-74 BAR ARRANGEMENT OF PIER P10R, P11R (4)
- C-1-3a-75 DETAIL OF PIER P15L
- C-1-3a-76 BAR ARRANGEMENT OF PIER P15L(1)
- C-1-3a-77 BAR ARRANGEMENT OF PIER P15L(2)
- C-1-3a-78 BAR ARRANGEMENT OF PIER P15L(3)
- C-1-3a-79 BAR ARRANGEMENT OF PIER P15L(4)
- C-1-3a-80 DETAIL OF D=150CM CAST-IN PLACE CONCRETE PILE
- C-1-3a-81 DETAIL OF D=100CM CAST-IN PLACE CONCRETE PILE(1)
- C-1-3a-82 DETAIL OF D=100CM CAST-IN PLACE CONCRETE PILE(2)
- C-1-3a-83 DETAIL OF D=100CM CAST-IN PLACE CONCRETE PILE(3)
- C-1-3a-84 DETAIL OF D=100CM CAST-IN PLACE CONCRETE PILE(4)
- C-1-3a-85 DETAIL OF D=100CM CAST-IN PLACE CONCRETE PILE(5)

C-1-3b KIM NGUU RIVER BRIDGE

- C-1-3b-1 DETAIL OF ABUTMENT A1C,A2C
- C-1-3b-2 BAR ARRANGEMENT OF ABUTMENT A1C,A2C(1)
- C-1-3b-3 BAR ARRANGEMENT OF ABUTMENT A1C,A2C(2)
- C-1-3b-4 BAR ARRANGEMENT OF ABUTMENT A1C,A2C(3)
- C-1-3b-5 DETAIL OF ABUTMENT A1FL,A2FL,A1FR,A2FR
- C-1-3b-6 BAR ARRANGEMENT OF ABUTMENT A1FL,A2FL (1)
- C-1-3b-7 BAR ARRANGEMENT OF ABUTMENT A1FL,A2FL (2)
- C-1-3b-8 BAR ARRANGEMENT OF ABUTMENT A1FL,A2FL (3)
- C-1-3b-9 BAR ARRANGEMENT OF ABUTMENT A1FR,A2FR(1)
- C-1-3b-10 BAR ARRANGEMENT OF ABUTMENT A1FR,A2FR(2)
- C-1-3b-11 BAR ARRANGEMENT OF ABUTMENT A1FR,A2FR(3)
- C-1-3b-12 DETAIL OF PIER P1,P2
- C-1-3b-13 BAR ARRANGEMENT OF PIER P1,P2(1)
- C-1-3b-14 BAR ARRANGEMENT OF PIER P1,P2(2)
- C-1-3b-15 BAR ARRANGEMENT OF PIER P1,P2(3)
- C-1-3b-16 BAR ARRANGEMENT OF PIER P1,P2(4)
- C-1-3b-17 DETAIL OF PIER P1F,P2F
- C-1-3b-18 BAR ARRANGEMENT OF PIER P1F,P2F(1)
- C-1-3b-19 BAR ARRANGEMENT OF PIER P1F,P2F(2)
- C-1-3b-20 BAR ARRANGEMENT OF PIER P1F,P2F(3)
- C-1-3b-21 BAR ARRANGEMENT OF PIER P1F,P2F(4)
- C-1-3b-22 DETAIL OF D=100CM CAST-IN PLACE CONCRETE PILE
- C-1-3b-23 DETAIL OF D=150CM CAST-IN PLACE CONCRETE PILE
- C-1-3b-24 BAR ARRANGEMENT OF D=100,150CM CAST-IN PLACE CONCRETE PILE

C-1-3c NGUYEN TAM TRINH BRIDGE

- C-1-3c-1 DETAIL OF ABUTMENT A1,A2
- C-1-3c-2 BAR ARRANGEMENT OF ABUTMENT A1,A2(1)
- C-1-3c-3 BAR ARRANGEMENT OF ABUTMENT A1,A2(2)
- C-1-3c-4 BAR ARRANGEMENT OF ABUTMENT A1,A2(3)
- C-1-3c-5 DETAIL OF D=150CM CAST-IN PLACE CONCRETE PILE

C-1-3d LINH NAM BRIDGE

- C-1-3d-1 DETAIL OF ABUTMENT A1 (1)
- C-1-3d-2 DETAIL OF ABUTMENT A1 (2)
- C-1-3d-3 BAR ARRANGEMENT OF ABUTMENT A1,A2(1)
- C-1-3d-4 BAR ARRANGEMENT OF ABUTMENT A1,A2(2)
- C-1-3d-5 BAR ARRANGEMENT OF ABUTMENT A1,A2(3)
- C-1-3d-6 BAR ARRANGEMENT OF ABUTMENT A1,A2(4)
- C-1-3d-7 DETAIL OF ABUTMENT A2 (1)
- C-1-3d-8 DETAIL OF ABUTMENT A2 (2)
- C-1-3d-9 BAR ARRANGEMENT A2 (1)
- C-1-3d-10 BAR ARRANGEMENT A2 (2)
- C-1-3d-11 BAR ARRANGEMENT A2 (3)
- C-1-3d-12 BAR ARRANGEMENT A2 (4)
- C-1-3d-13 DETAIL OF D=150CM CAST-IN PLACE CONCRETE PILE (1)
- C-1-3d-14 DETAIL OF D=150CM CAST-IN PLACE CONCRETE PILE (2)

C-2 RAMP BRIDGE

C-2-1 GENERAL VIEW

- C-2-1-1 GENERAL VIEW OF A-RAMP BRIDGE
- C-2-1-2 GENERAL VIEW OF B-RAMP BRIDGE
- C-2-1-3 GENERAL VIEW OF C-RAMP BRIDGE

C-2-2 SUPERSTRUCTURE

- C-2-2-1 DETAIL OF PHAP VAN VIADUCT A-RAMP BRIDGE1
- C-2-2-2 DETAIL OF PHAP VAN VIADUCT A-RAMP BRIDGE2
- C-2-2-3 DETAIL OF PHAP VAN VIADUCT B-RAMP BRIDGE1
- C-2-2-4 DETAIL OF PHAP VAN VIADUCT B-RAMP BRIDGE2

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. WATABE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 11. 14

DRAWING SCHEDULE (3)

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		A-3	
DRAWING SCHEDULE (3)			

- C-2-2-5 DETAIL OF PHAP VAN VIADUCT C-RAMP BRIDGE1
- C-2-2-6 DETAIL OF PHAP VAN VIADUCT C-RAMP BRIDGE2
- C-2-2-7 RE-BAR ARRANGEMENT OF A-RAMP BRIDGE
- C-2-2-8 RE-BAR ARRANGEMENT OF B-RAMP BRIDGE
- C-2-2-9 RE-BAR ARRANGEMENT OF C-RAMP BRIDGE

C-2-3 SUBSTRUCTURE

- C-2-3-1 DETAIL OF ABUTMENT AAB1
- C-2-3-2 BAR ARRANGEMENT OF ABUTMENT AAB1(1)
- C-2-3-3 BAR ARRANGEMENT OF ABUTMENT AAB1(2)
- C-2-3-4 BAR ARRANGEMENT OF ABUTMENT AAB1(3)
- C-2-3-5 BAR ARRANGEMENT OF ABUTMENT AAB1(4)
- C-2-3-6 DETAIL OF D=1.5M CAST-IN PLACE CONCRETE PILE
- C-2-3-7 DETAIL OF PIER PA1-PA5
- C-2-3-8 BAR ARRANGEMENT OF PIER PA1-PA5(1)
- C-2-3-9 BAR ARRANGEMENT OF PIER PA1-PA5(2)
- C-2-3-10 BAR ARRANGEMENT OF PIER PA1-PA5(3)
- C-2-3-11 BAR ARRANGEMENT OF PIER PA1-PA5(4)
- C-2-3-12 BAR ARRANGEMENT OF PIER PA1-PA5(5)
- C-2-3-13 DETAIL OF D=100CM CAST-IN PLACE CONCRETE PILE
- C-2-3-14 DETAIL OF PIER PB1-PB6
- C-2-3-15 BAR ARRANGEMENT OF PIER PB1-PB6(1)
- C-2-3-16 BAR ARRANGEMENT OF PIER PB1-PB6(2)
- C-2-3-17 BAR ARRANGEMENT OF PIER PB1-PB6(3)
- C-2-3-18 BAR ARRANGEMENT OF PIER PB1-PB6(4)
- C-2-3-19 BAR ARRANGEMENT OF PIER PB1-PB6(5)
- C-2-3-20 DETAIL OF D=100CM CAST-IN PLACE CONCRETE PILE
- C-2-3-21 DETAIL OF ABUTMENT AC1
- C-2-3-22 BAR ARRANGEMENT OF ABUTMENT AC1(1)
- C-2-3-23 BAR ARRANGEMENT OF ABUTMENT AC1(2)
- C-2-3-24 BAR ARRANGEMENT OF ABUTMENT AC1(3)
- C-2-3-25 DETAIL OF PIER PC1-PC5
- C-2-3-26 DETAIL OF PIER PC6
- C-2-3-27 BAR ARRANGEMENT OF PIER PC1-PC6(1)
- C-2-3-28 BAR ARRANGEMENT OF PIER PC1-PC6(2)
- C-2-3-29 BAR ARRANGEMENT OF PIER PC1-PC6(3)
- C-2-3-30 BAR ARRANGEMENT OF PIER PC1-PC6(4)
- C-2-3-31 BAR ARRANGEMENT OF PIER PC1-PC6(5)
- C-2-3-32 DETAIL OF PIER PC7
- C-2-3-33 BAR ARRANGEMENT OF PIER PC7(1)
- C-2-3-34 BAR ARRANGEMENT OF PIER PC7(2)
- C-2-3-35 BAR ARRANGEMENT OF PIER PC7(3)
- C-2-3-36 BAR ARRANGEMENT OF PIER PC7(4)
- C-2-3-37 DETAIL OF D=1.50M CAST-IN PLACE CONCRETE PILE
- C-2-3-38 DETAIL OF D=1.00M CAST-IN PLACE CONCRETE PILE(1)
- C-2-3-39 DETAIL OF D=1.00M CAST-IN PLACE CONCRETE PILE(2)
- C-2-3-40 DETAIL OF D=1.00M CAST-IN PLACE CONCRETE PILE(3)

C-3 MISCELLANEOUS

C-3-1 LIGHT POLE BASE, EXP. JT, PARAPET, SHOE, DRAINAGE ARRANGEMENT

- C-3-1-1 LIGHT POLE BASE
- C-3-1-2 BRIDGE ACCESSORY OF NGUYEN TAM TRINH BRIDGE
- C-3-1-3 BRIDGE ACCESSORY OF LINH NAM BRIDGE
- C-3-1-4 BRIDGE ACCESSORY OF KIM NGUU RIVER BRIDGE
- C-3-1-5 BRIDGE ACCESSORY OF PHAP VAN VIADUCT
- C-3-1-6 BRIDGE ACCESSORY OF RAMP A
- C-3-1-7 BRIDGE ACCESSORY OF RAMP B
- C-3-1-8 BRIDGE ACCESSORY OF RAMP C
- C-3-1-9 SD-40 EXPANSION JOINT (A) (1)
- C-3-1-10 SD-40 EXPANSION JOINT (A) (2)
- C-3-1-11 DETAIL OF POT BEARING SHOE (MOVE)
- C-3-1-12 DETAIL OF POT BEARING SHOE (FIX)

- C-3-1-13 DETAIL OF ELASTOMERIC BEARING
- C-3-1-14 DRAINAGE ARRANGEMENT OF NGUYEN TAM TRINH BRIDGE
- C-3-1-15 DRAINAGE ARRANGEMENT OF LINH NAM BRIDGE
- C-3-1-16 DRAINAGE ARRANGEMENT OF KIM NGUU RIVER BRIDGE
- C-3-1-17 DRAINAGE ARRANGEMENT OF PHAP VAN VIADUCT
- C-3-1-18 DRAINAGE ARRANGEMENT OF RAMP A
- C-3-1-19 DRAINAGE ARRANGEMENT OF RAMP B
- C-3-1-20 DRAINAGE ARRANGEMENT OF RAMP C
- C-3-1-21 DETAIL OF DRAINAGE ON BRIDGE (1)
- C-3-1-22 DETAIL OF DRAINAGE ON BRIDGE (2)

C-3-2 APPROACH SLAB, SLOPE PROTECTION

- C-3-2-1 DETAIL OF APPROACH SLAB(1)
- C-3-2-2 DETAIL OF APPROACH SLAB(2)
- C-3-2-3 DETAIL OF APPROACH SLAB(3)
- C-3-2-4 DETAIL OF APPROACH SLAB(4)
- C-3-2-5 DETAIL OF SLOPE PROTECTION(1)
- C-3-2-6 DETAIL OF SLOPE PROTECTION(2)
- C-3-2-7 DETAIL OF SLOPE PROTECTION(3)
- C-3-2-8 DETAIL OF SLOPE PROTECTION(4)

D. OTHER STRUCTURES

D-1 BOX CULVERT

- D-1-1 V - BOX CULVERT (STA. 1+190)
- D-1-2 P - BOX CULVERT (STA. 2+310)
- D-1-3 V - BOX CULVERT (STA. 3+439.300)
- D-1-4 V - BOX CULVERT (STA. 3+965.690)
- D-1-5 P - BOX CULVERT (STA. 4+503.455)
- D-1-6 V - BOX CULVERT (STA. 4+820)
- D-1-7 V - BOX CULVERT (STA. 5+120)
- D-1-8 V - BOX CULVERT (STA. 6+164.890)
- D-1-9 V - BOX CULVERT (FRONTAGE ROAD (L) STA. 0+555.852)
- D-1-10 V - BOX CULVERT (FRONTAGE ROAD (R) STA. 0+550.080)

D-2 RETAINING WALL

- D-2-1 DETAILS OF RETAINING WALL & STONE MASONRY

E. DRAINAGE

E-1 DRAINAGE SYSTEM

- E-1-1 THROUGH WAY AND FRONTAGE ROAD (1)
- E-1-2 THROUGH WAY AND FRONTAGE ROAD (2)
- E-1-3 THROUGH WAY AND FRONTAGE ROAD (3)
- E-1-4 THROUGH WAY AND FRONTAGE ROAD (4)
- E-1-5 THROUGH WAY AND FRONTAGE ROAD (5)
- E-1-6 THROUGH WAY AND FRONTAGE ROAD (6)
- E-1-7 THROUGH WAY AND FRONTAGE ROAD (7)
- E-1-8 THROUGH WAY AND FRONTAGE ROAD (8)
- E-1-9 THROUGH WAY AND FRONTAGE ROAD (9)
- E-1-10 THROUGH WAY AND FRONTAGE ROAD (10)
- E-1-11 PHAP VAN CAU GIE INTERCHANGE (1/2)
- E-1-12 PHAP VAN CAU GIE INTERCHANGE (2/2)

E-2 BOX / PIPE CULVERT

- E-2-1 LIST OF BOX / PIPE CULVERT
- E-2-2 BOX CULVERT (LEFT SIDE FRONTAGE ROAD STA. 0+510)
- E-2-3 BOX CULVERT (RIGHT SIDE FRONTAGE ROAD STA. 0+517)
- E-2-4 BOX CULVERT (STA. 2+397.481)

- E-2-5 BOX CULVERT (STA. 4+890.300)
- E-2-6 PIPE CULVERT (LEFT SIDE FRONTAGE ROAD STA. 0+680, RIGHT SIDE FRONTAGE ROAD STA. 0+640, A B RAMP STA. 0+080)
- E-2-7 PIPE CULVERT (E F RAMP STA. 0+060, H RAMP STA. 0+360)
- E-2-8 PIPE CULVERT (STA. 3+089, STA. 3+656.3, STA. 3+973.5)
- E-2-9 PIPE CULVERT (STA. 4+553, STA. 5+262)
- E-2-10 HEAD WALL OF PIPE CULVERT F 1.25
- E-2-11 HEAD WALL OF PIPE CULVERT 2xF1.25
- E-2-12 HEAD WALL OF PIPE CULVERT F1.50
- E-2-13 HEAD WALL OF PIPE CULVERT 2xF1.50
- E-2-14 DETAIL OF PIPE CULVERT OUTLET / INLET (AT STA. 4+553)
- E-2-15 DETAIL OF PIPE FOUNDATION (F1.25)
- E-2-16 DETAIL OF PIPE FOUNDATION (2xF1.25)
- E-2-17 DETAIL OF PIPE FOUNDATION (F1.50)
- E-2-18 DETAIL OF PIPE FOUNDATION (2xF1.50)
- E-2-19 REINFORCEMENT DETAILS (FOR PIPE F1.25)
- E-2-20 REINFORCEMENT DETAILS (FOR PIPE F1.50)

E-3 RELOCATION OF EXISTING DRAINAGE CHANNEL

- E-3-1 PLAN, PROFILE
- E-3-2 CHANNEL DETAILS

E-4 DETAILS OF CHANNEL, PIPE, BASIN

- E-4-1 DRAINAGE CHANNEL DETAILS (1/2)
- E-4-2 DRAINAGE CHANNEL DETAILS (2/2)
- E-4-3 DETAIL OF DRAINAGE PIPE F 600
- E-4-4 DETAIL OF DRAINAGE PIPE F 750
- E-4-5 CATCH BASIN TYPE CB-R1 (1/2)
- E-4-6 CATCH BASIN TYPE CB-R1 (2/2)
- E-4-7 CATCH BASIN TYPE CB-R2 (1/2)
- E-4-8 CATCH BASIN TYPE CB-R2 (2/2)
- E-4-9 CATCH BASIN TYPE CB-R3
- E-4-10 CATCH BASIN TYPE CB-R4 (1/2)
- E-4-11 CATCH BASIN TYPE CB-R4 (2/2)
- E-4-12 CATCH BASIN TYPE CB-F (1/2)
- E-4-13 CATCH BASIN TYPE CB-F (2/2)
- E-4-14 CATCH BASIN TYPE CB-S1
- E-4-15 CATCH BASIN TYPE CB-S2
- E-4-16 CATCH BASIN TYPE CB-S3
- E-4-17 DRAINAGE FACILITIES SURROUNDING TOLL PLA ZA (1/3)
- E-4-18 DRAINAGE FACILITIES SURROUNDING TOLL PLA ZA (2/3)
- E-4-19 DRAINAGE FACILITIES SURROUNDING TOLL PLA ZA (3/3)

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY NAME S. WATAKE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.6.1	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

DRAWING SCHEDULE (4)

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		A-4	
DRAWING SCHEDULE (4)			

F. ROAD LIGHTING AND TRAFFIC SIGNAL

F-1	ABBREVIATIONS AND GENERAL NOTES
F-2	GENERAL PLAN - 1
F-3	GENERAL PLAN - 2
F-4	TRAFFIC SIGNAL DIAGRAM
F-5	PROFILE OF ROAD LIGHTING - 1
F-6	PROFILE OF ROAD LIGHTING - 2
F-7	PROFILE OF ROAD LIGHTING - 3
F-8	PROFILE OF ROAD LIGHTING - 4
F-9	PROFILE OF ROAD LIGHTING - 5
F-10	PROFILE OF ROAD LIGHTING - 6
F-11	PROFILE OF ROAD LIGHTING - 7
F-12	PROFILE OF ROAD LIGHTING - 8
F-13	PROFILE OF ROAD LIGHTING - 9
F-14	PROFILE OF ROAD LIGHTING - 10
F-15	PROFILE OF ROAD LIGHTING - 11
F-16	PROFILE OF ROAD LIGHTING - 12
F-17	SUBSTATION TYPE IA
F-18	SUBSTATION TYPE IIA
F-19	DIAGRAM OF MDP
F-20	PANEL DETAIL
F-21	LIGHTING DETAIL - 1
F-22	LIGHTING DETAIL - 2
F-23	TRAFFIC SIGNAL
F-24	NAVIGATION SYSTEM DIAGRAM
F-25	INSTALLATION DETAIL - 1
F-26	INSTALLATION DETAIL 2A
F-27	INSTALLATION DETAIL 3
F-28	INSTALLATION DETAIL 4
F-29	FOUNDATION DETAIL 1A

G. TOLL PLAZA AND TOLL FACILITIES

G-1	GENERAL NOTES
G-2	SITE LOCATION - 2
G-3	TOLL PLAZA - 2
G-4	TOLL PLAZA PROFILE - 2
G-5	TOLL ISLAND - 2
G-6	TOLL GATE SECTION - 2
G-7	CANOPY DETAIL - 2
G-8	TOLL ISLAND DETAIL - 3
G-9	TOLL ISLAND DETAIL - 4
G-10	MANHOLE LAYOUT - 2
G-11	MANHOLE SECTION - 2
G-12	TOLL PLAZA FUTURE PLAN - 5
G-13	TOLL PLAZA FUTURE PLAN - 6
G-14	TOLL PLAZA FUTURE PLAN - 7
G-15	TOLL PLAZA FUTURE PLAN - 8
G-16	TOLL BUILDING PLAN - 2
G-17	FIRST FLOOR PLAN - 2
G-18	SECOND FLOOR PLAN - 2
G-19	TOLL BUILDING PROFILE - 5
G-20	TOLL BUILDING PROFILE - 6
G-21	TOLL BUILDING PROFILE - 7
G-22	TOLL BUILDING PROFILE - 8
G-23	DIMENSION SCHEDULE
G-24	FINISHED SCHEDULE
G-25	SECTION DETAIL - 4
G-26	SECTION DETAIL - 5
G-27	SECTION DETAIL - 6
G-28	GENERAL NOTES - 2
G-29	DIAGRAM OF WATER SUPPLY SYSTEM - 1B
G-30	GENERAL NOTES - 1B
G-31	ABBREVIATIONS
G-32	POWER DISTRIBUTION DIAGRAM - 2

G-33	POWER DISTRIBUTION DIAGRAM - 2B
G-34	ABBREVIATION AND GENERAL NOTES - 1B
G-35	TOLL COLLECTION SYSTEM DIAGRAM - 1A
G-36	POWER DISTRIBUTION DIAGRAM - 1A
G-37	TOLL EQUIPMENT - 4
G-38	TOLL EQUIPMENT - 3A
G-39	TOLL GATE SECTION PROFILE - 2
G-40	LIGHTING LAYOUT - 2
G-41	LIGHTNING PROTECTION SYSTEM - 4
G-42	LIGHTNING PROTECTION SYSTEM - 5
G-43	LIGHTNING PROTECTION SYSTEM - 6
G-44	TOLL BOOTH EQUIPMENT LAYOUT - 3
G-45	TOLL BOOTH EQUIPMENT LAYOUT - 4
G-46	TOLL BOOTH DETAILS - 2
G-47	LIGHT DETAILS - 2
G-48	INSTALLATION DETAILS - 3
G-49	INSTALLATION DETAILS - 4
G-50	FOUNDATION PLAN - 1

H. EMPLOYERS AND ENGINEERS SITE OFFICE

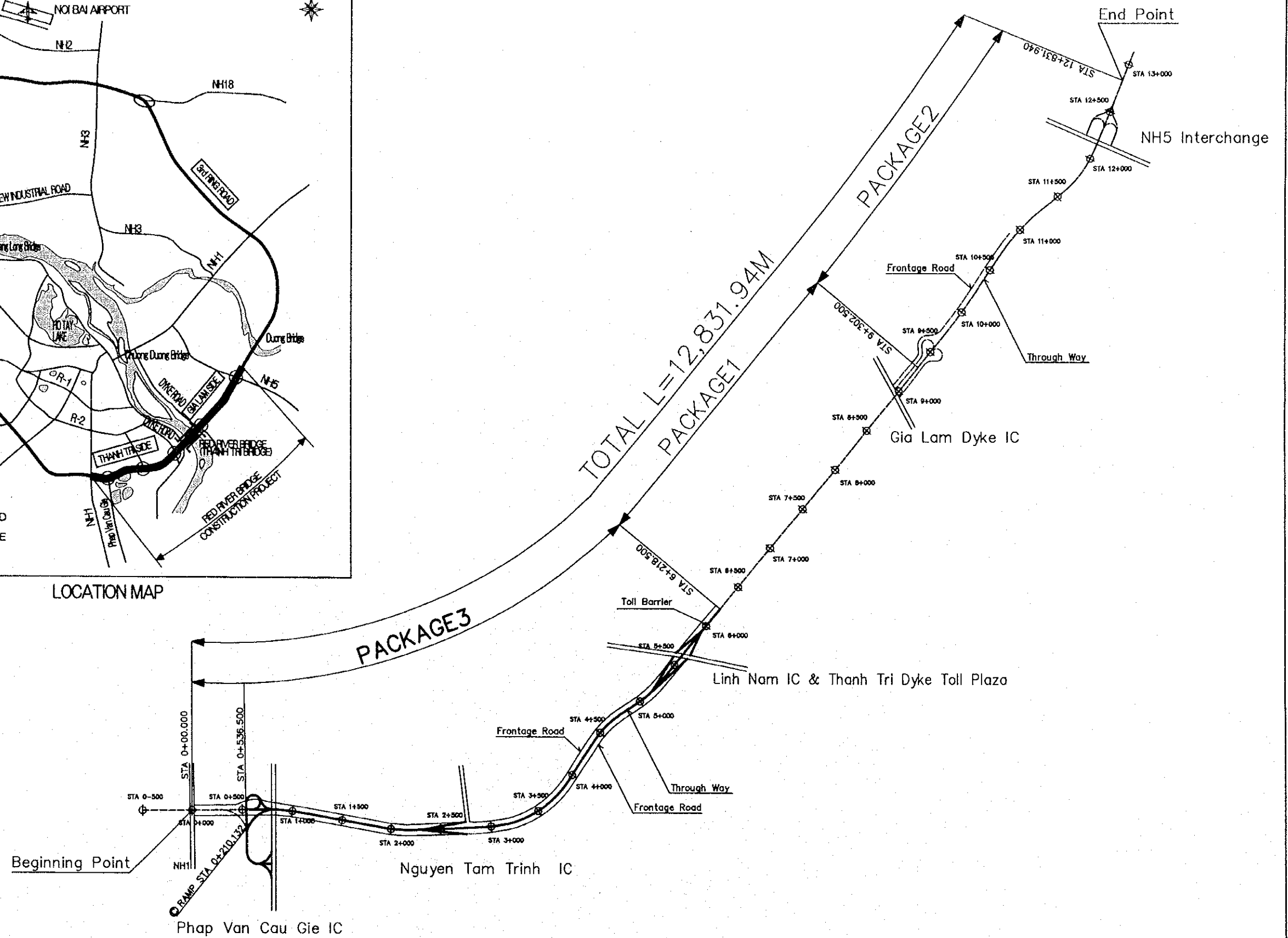
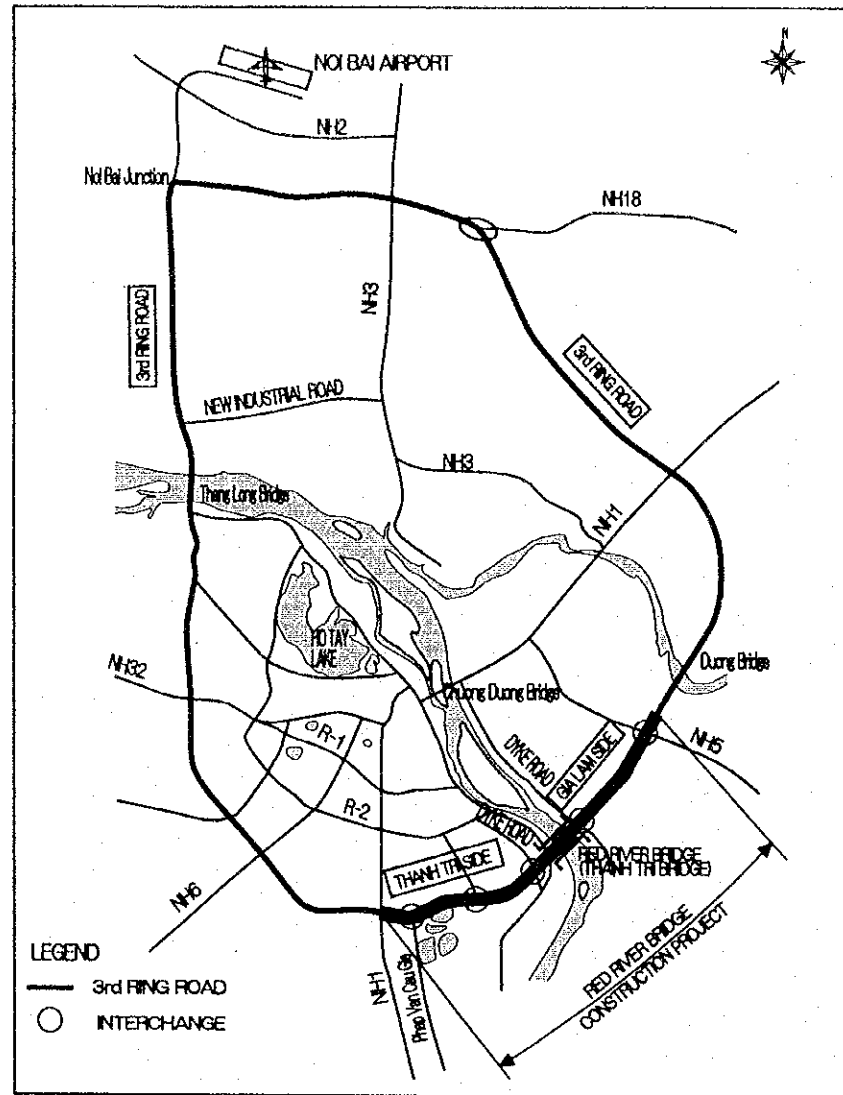
H-1	EMPLOYERS AND ENGINEERS SITE OFFICE (WITH ACCOMMODATION)
H-2	EMPLOYERS AND ENGINEERS SITE OFFICE (WITH OUT ACCOMMODATION)


I. MISCELLANEOUS WORKS

I-1	SUPERELEVATION DIAGRAMS
I-2	STEEL BEAM GUARDRAIL GR-A (1)
I-3	STEEL BEAM GUARDRAIL GR-A (2)
I-4	REMOVABLE GUARDRAIL GR-B
I-5	TYPICAL ROAD MARKING
I-6	KILOMETER POST
I-7	TRAFFIC POST
I-8	STANDARD OF TRAFFIC SIGNS (1)
I-9	STANDARD OF TRAFFIC SIGNS (2)
I-10	INSTALLATION OF TRAFFIC SIGNS
I-11	SUMMARY TABLES OF TRAFFIC SIGNS
I-12	SLOPE PROTECTION IN POND
I-13	DETAIL OF MEDIAN OPEN FOR DRAINAGE
I-14	NOSE DETAILS
I-15	GENERAL VIEW OF MONUMENT

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATANE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	CONTRACT NO.	SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2022. 3. 14	

PACKAGE 3	SCALE	DRAWING No. A-5	SHEET No.
PROJECT LOCATION MAP			



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. MATSUDA
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE 	
COMMISSIONER PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.13.17	

ABBREVIATIONS AND SYMBOLS

PACKAGE 3	SCALE	DRAWING No. A-6	SHEET No.
ABBREVIATIONS AND SYMBOLS			

A	PARAMETER OF CLOTHOID CURVE	LC	LENGTH OF CIRCULAR CURVE
@	AT	LS	LENGTH OF SPIRAL CURVE
Ai	LOCATION OF ABUTMENT	LVC	LENGTH OF VERTICAL CURVE
&	AND	LIN.M	LINEAR METER
A > B	A IS LARGER THAN B	m	METER
BOR	BORING	m ²	SQUARE METER
BVCC	BEGINNING VERTICAL CURVER STATION	m ³	CUBIC METER
BVCE	BEGINNING VERTICAL CURVE ELEVATION	MAX	MAXIMUM
CTC	CENTER TO CENTER	MIN	MINIMUM
Ⓞ	CENTERLINE	M	MOVABLE
ST	SPIRAL CURVE TO TANGENT	OV	OVER BRIDGE
TS	TANGENT TO SPIRAL CURVE	%	PERCENT
CS	CIRCULAR CURVE TO SPIRAL CURVE	P	PIPE CULVERT
SC	SPIRAL CURVE TO CIRCULAR CURVE	PC	BEGINNING POINT OF SIMPLE CURVE
DIA or ⌀	DIAMETER	P.W.	PARAPET WALL
DC	DRAINAGE CATCH BASIN	P.C	PRE STRESSED CONCRETE
DEL	DELINEATOR	PVC	POLYVINYL CHLORIDE
DH	HEAD WALL	PVI	POINT OF VERTICAL INTERSECTION
DI	DRAINAGE INLET	PH	PLAN HEIGHT
DL	DATUM LINE	PI	POINT OF INTERSECTION FOR HORIZONTAL ALIGNMENT
DO	DRAINAGE OUTLET	PT	END OF POINT OF SIMPLE CURVE
DS	DRAINAGE SIDE DITCH	PC	BEGINNING OF POINT OF SIMPLE CURVE
D.S.W	DRAF STONE WALL	R.	RADIUS OF CIRCULAR CURVE
DW	MORTARED RUBBLE PAVED WATERWAY	R.C	REINFORCED CONCRETE
EP	END POINT	R.O.W	RIGHT OF WAY
EV	MIDDLE ORDINATE VERTICAL CURVE	RW	RETAINING WALL
ELEV (EL)	ELEVATION	S	SCALE
EQ	EQUAL	SC	SPIRAL CURVE TO CIRCULAR CURVE
EVCS	END VERTICAL CURVE STATION	SP	SLOPE PROTECTION
EVCE	END VERTICAL CURVE ELEVATION	SQ	SQUARE
F	FIXED	ST	SPIRAL CURVE TO TANGENT
FR	FRONTAGE ROAD	STA	STATION
FS	SEPARATOR FENCE	SM	STONE MASONRY
FTOF	FACE TO FACE	STAIR	STAIR CASE
GF	GUARD FENCE	T	THICKNESS
GR	GUARD RAIL	TS	TANGENT TO SPIRAL
GIR	GIRDER	TL	TANGENT LENGTH OF CIRCULAR CURVE
GWL	GROUND WATER LEVEL	Ta	TANGENT LENGTH OF SPIRAL
H	HEIGHT	V	DESIGN SPEED IN kph
H1%	FLOOD WATER LEVEL	W	WIDTH
I	GRADIENT	X	EASTING COORDINATE IN METERS
IP	POINT OF INTERSECTION	Y	NORTHING COORDINATE IN METERS
kg	KILOGRAM		
km	KILOMETER		
kph	KILOMETER PER HOUR		
L	LENGTH OF CURVE WITH SPIRAL		

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. NAITABE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 9. 14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		A-7	
LEGEND			

LEGEND

- | | | |
|---|--|---|
| <p> : CONCRETE HOUSE (1 STOREY)</p> <p> : CONCRETE HOUSE (2.. - STOREY)</p> <p> : TILE-ROOFED BRICK-WALLED HOUSE</p> <p> : THATCHED-ROOF TEMPORARY HOUSE</p> <p> : METAL-ROOFED HOUSE</p> <p> : CHURCH</p> <p> : PAGODA, TEMPLE</p> <p> : POST-OFFICE</p> <p> : SWIMMING POOL</p> <p> : WATER TANK</p> <p> : WELL</p> <p> : WATER TOWER</p> <p> : MONUMENT</p> <p> : PORCH (GATE)</p> <p> : FENCE</p> <p> : CEMETERY, GRAVE YARD</p> <p> : RAILWAY</p> <p> : STATION</p> <p> : SEMAPHORE, SIGNAL LIGHT</p> <p> : LIGHT POLE</p> | <p> : LATERITE ROAD</p> <p> : EMBANKMENT (FILL)</p> <p> : SIDE DITCH</p> <p> : CANAL, DRAINAGE CHANNEL</p> <p> : CONCRETE BRIDGE</p> <p> : STEEL BRIDGE</p> <p> : SLAB CULVERT</p> <p> : PIPE CULVERT</p> <p> : ASPHALT (CONCRETE) PAVED ROAD</p> <p> : BRICK WALL</p> <p> : WATER PIPE</p> <p> : OIL, PETROL PIPE</p> <p> : GAS PIPE</p> <p> : PROVINCIAL BOUNDARY</p> <p> : DISTRICT BOUNDARY</p> <p> : * TELECOM LINE (DENSE HOUSE AREA)</p> <p> : TELECOM LINE (SPARSE HOUSE AREA)</p> <p> : * ELECTRIC LINE (DENSE HOUSE AREA)</p> <p> : ELECTRIC LINE (SPARSE HOUSE AREA)</p> <p> : HIGH VOLTAGE ELECTRIC LINE (6 kV - 35 kV)</p> <p> : HIGH VOLTAGE ELECTRIC LINE (110kV - 220kV)</p> | <p> : EXCAVATION</p> <p> : SLOPE PROTECTION (STONE)</p> <p> : DIKES, LEVEES</p> <p> : RIVER, STREAM</p> <p> : POND, LAKE</p> <p> : ROCK MOUNTAIN</p> <p> : COCONUT TREE</p> <p> : RICE FIELD</p> <p> : CROP FIELD (PEANUT, SUGAR CANE, SESAME...)</p> <p> : FOREST</p> <p> : GPS : GLOBAL POSITIONING SYSTEM</p> <p> : TP : TRAVERSE POINT</p> <p> : BM : BENCH MARK</p> <p> : DMC : DEMARCATION (R.O.W)</p> <p> : KP : km POST</p> <p> : GIA1 : BOREHOLE</p> <p> : INTERVIEWED POINT FOR FLOOD WATERLEVEL</p> <p style="margin-left: 20px;">H_{max}: Maximum flood water level recorded</p> <p style="margin-left: 20px;">H_{avg}: Average water level Recorded</p> <p style="margin-left: 20px;">H_{min}: Minimum water level recorded</p> |
|---|--|---|

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. WATANE
PROJECT RED RIVER BRIDGE (THANH THI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE	2001.6.1

GENERAL NOTES

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		A-8	
GENERAL NOTES			

I. DESIGN SPECIFICATIONS

AASHTO Standard Specifications for Highway Bridges, 16th edition, 1996 (hereinafter called as AASHTO) shall be adopted in conjunction with Vietnamese Bridge Design Codes 22TCN 018-79 and Japanese Specifications for Highway Bridges, the 1996 edition.

II. LOADS

1. Dead Load

- a) Reinforced/ Prestressed Concrete : 2,500 kgf/m³
- b) Plain Concrete : 2,350 kgf/m³
- c) Steel and Cast Steel : 7,850 kgf/m³
- d) Cast Iron : 7,250 kgf/m³
- e) Asphalt Pavement : 2,300 kgf/m³
- f) Rolling : 50 kgf/m

2. Live Load

HS20-44 x 125%

- Note: 1. Application of live loading and reduction in loading intensity for multiple lanes shall follow Articles 3.11 and 3.12 of AASHTO.
2. Live loads H30 and XB80 specified in Vietnamese Bridge Design Codes 22TCN 018-79 are also considered.

3. Impact

$$I = 15.24 / (L + 38)$$

- in which, I = impact fraction (maximum 30 percent)
L = length in meter of the portion of the span that is loaded to produce the maximum stress in the member

4. Wind Load

The requirements of AASHTO Article 3.15 with a base wind velocity of 160 km/hr shall be adopted to the design.

5. Longitudinal Force

5% of the lane load in all lanes carrying traffic headed in the same direction (AASHTO Article 3.9)

6. Centrifugal Force (AASHTO Article 3.10)

$$C = 0.79 \times S^2 / R$$

- In which, C = the centrifugal force in percent of the live load, without impact
S = the design speed in km per hour
R = the radius of the curve in meters

7. Shaking Force

0.4 tf/m (without impact) irrespective of the number of traffic lanes (Vietnamese Bridge Design Codes 22TCN 019-79, Article 2.19)

8. Effect of Temperature

Range of Air Temperature : 5C to 45C

9. Earthquake Load

Seismic Acceleration Coefficient : 0.17

10. Vessel Collision Force

In Direction Parallel to the Navigation Channel : 631 tf

In Direction Normal to the Navigation Channel : 316 tf

Note: The vessel collision force shall be calculated in accordance with Article 3.14 of AASHTO LRFD Bridge Design Specifications, 2nd edition, 1998.

11. River Flow Force

$$P = 52.5 \times K \times V^2 \text{ (AASHTO Article 3.18.1)}$$

- in which, P = pressure in kgf per square meter
V = velocity of water in meters per second
K = a constant, being 1.4 for all piers subjected to drift build-up and square-ended piers, 0.7 for circular piers, and 0.5 for angle ended piers where the angle is 30 degrees or less.

12. Earth Pressure

Earth pressure shall be calculated by Coulomb's equation.

13. Combinations of Loads and Load Factors

Combinations of loads and load factors shall be in accordance with Section 3, Part B of AASHTO.

III. MATERIALS

1. Concrete

Design strengths f'c (by cylinder specimen) of concrete are as follows:

Class	Strength f'c (kgf/cm ²)	Description
A-1	400	cast-in-place prestressed concrete box girders for cantilever erection
A-2	400	cast-in-place prestressed concrete box girders (H=2.75m)
A-3	400	precast prestressed concrete I-girders (PC I-girder)
B-1	350	(not applicable)
C-1	290	reinforced concrete (RC) deck slabs, diaphragms of PC I-girder, parapet and foundation of lighting poles excluding those for RC hollow slab
C-2	290	precast RC panels
C-3	290	precast RC piles
C-4	290	RC piers (including cantilevered pier heads, pier columns and footings), RC abutments (including wing walls), RC retaining walls, box culverts
C-5	290	RC hollow slab, parapet and foundation of lighting poles for RC hollow slab
D-1	240	(not applicable)
E-1	210	approach slabs
E-2	210	pipe culverts
E-3	210	slab for foundation (piled) below pipe and box culverts
E-4	210	precast concrete curbs
G	-	lean concrete, leveling concrete
P	-	concrete pavement
Y	290	cast-in-place reinforced concrete piles

2. Reinforcing Steel

Reinforcing steel for concrete shall conform to the followings or equivalent:

Type	JIS G3112	
	Designation	Yield Strength (kgf/cm ²)
Round Bar	SR 235	2,400
Deformed Bar	SD 295A	3,000

3. Prestressing Steel

Prestressing steel shall conform to the followings or equivalent:

Type	Designation	Yield Strength (kgf/cm ²)	Tensile Strength (kgf/cm ²)
A	JIS G3536, SWPR7BL	12T15.2	16,000
B	JIS G3536, SWPR7BL	4T15.2	16,000
C	JIS G3536, SWPR7BL	3T15.2	16,000
D	JIS G3536, SWPR7BL	12T12.7	16,000
E	JIS G3536, SWPR7BL	7T12.7	16,000
F	JIS G3112, SBPR930/1180	Φ32	9,500

IV. ALLOWABLE STRESSES

1. Concrete

1-1 Prestressed Concrete Structures : unit in kgf/cm²

Description	Class of Concrete
	A-1, A-2 and A-3
(1) Compressive Stress	
- Temporary stress before losses due to creep and shrinkage	0.55f'ci
- Stress at service load after losses have occurred	160 (=0.4f'c)
(2) Tensile Stress	
- Temporary stress before losses due to creep and shrinkage	0.794(f'ci) ^{1/2}
- Stress at service load after losses have occurred except slab	31.8 (=1.59(f'ci) ^{1/2})
- Stress at service load after losses have occurred slab	15.8 (=0.79(f'ci) ^{1/2})
(3) Anchorage Bearing Stress	210 but not to exceed 0.9f'ci

[Note] f'ci: compressive strength at time of initial prestress (kgf/cm², by cylinder specimen)
f'ci shall be not less than 360kgf/cm²

1-2 Reinforced Concrete Structures and Plain Concrete Structures : unit in kgf/cm²

Description	all classes except Class Y	Class Y
(1) Compressive Stress	0.40f'c	96.0
(2) Shear Stress	0.25(f'c) ^{1/2}	3.9

2. Reinforcing Steel : unit in kgf/cm²

Allowable Tensile Stress	Designation	
	Round Bar (SR 235)	Deformed Bar (SD295A)
- general members	1,400	1,800
- reinforced concrete slab	1,400	1,400

3. Prestressing Steel : unit in kgf/cm²

Allowable Tensile Stress	Designation	
	7 wire strands (JIS G3536)	bars (JIS G3112)
- during prestressing work	14,400	8,350
- immediately after prestressing	13,280	8,070
- at service load	12,800	7,120

V. CONSTRUCTION

- The formwork shall provide a 2cm x 2cm smooth and straight chamfer on all exposed faces of structures unless otherwise specified.
- Minimum concrete cover to a reinforcing bar in substructures shall be 50mm unless otherwise specified.
- Minimum concrete cover to a reinforcing bar in superstructures shall conform to Article 9.26.1 of the AASHTO.
- Prior to prestressing of the slab transverse tendons, temporary load on the slab during construction of PC box girder bridge including cantilever erection bridge shall not exceed 250kgf/m², but less than 1tf per meter in the longitudinal direction.
- Grouting of tendons shall be subject to Engineer's approval.
- Removal of staging shall be subject to Engineer's approval.

VI. OTHER DESIGN CONDITIONS

- Hooks, development and splices of reinforcing steel shall conform to Articles 8.23 through 8.32 of the AASHTO.
- Minimum N-value of standard penetration test for bearing stratum shall be 50.
- Safety factor for foundation design shall be in accordance with Article 4.5.6.2 of the AASHTO.
- Allowable horizontal displacement at the top of pile:
 - a) except earthquake force 15mm
 - b) for earthquake force 50mm

VI. OTHERS

- Elevations, stations and coordinates are shown in meters. Other dimensions are shown in millimeters unless otherwise specified.
- In the pedestrian box culverts, suitable lighting and drainage system shall be designed and installed.

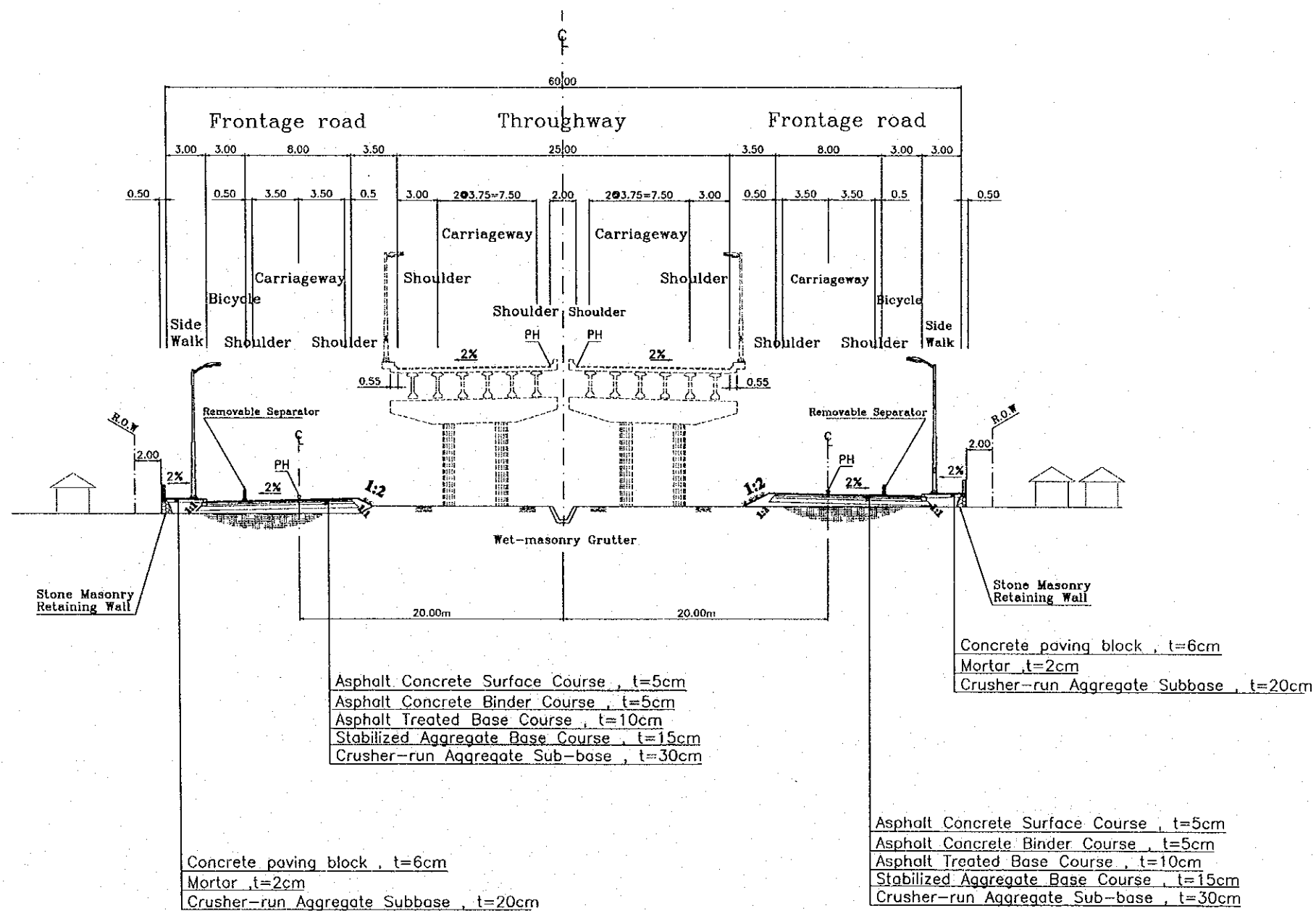
B. HIGHWAY

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.19

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/400	B-1-1	

TYPICAL CROSS SECTION (STA 0+100)

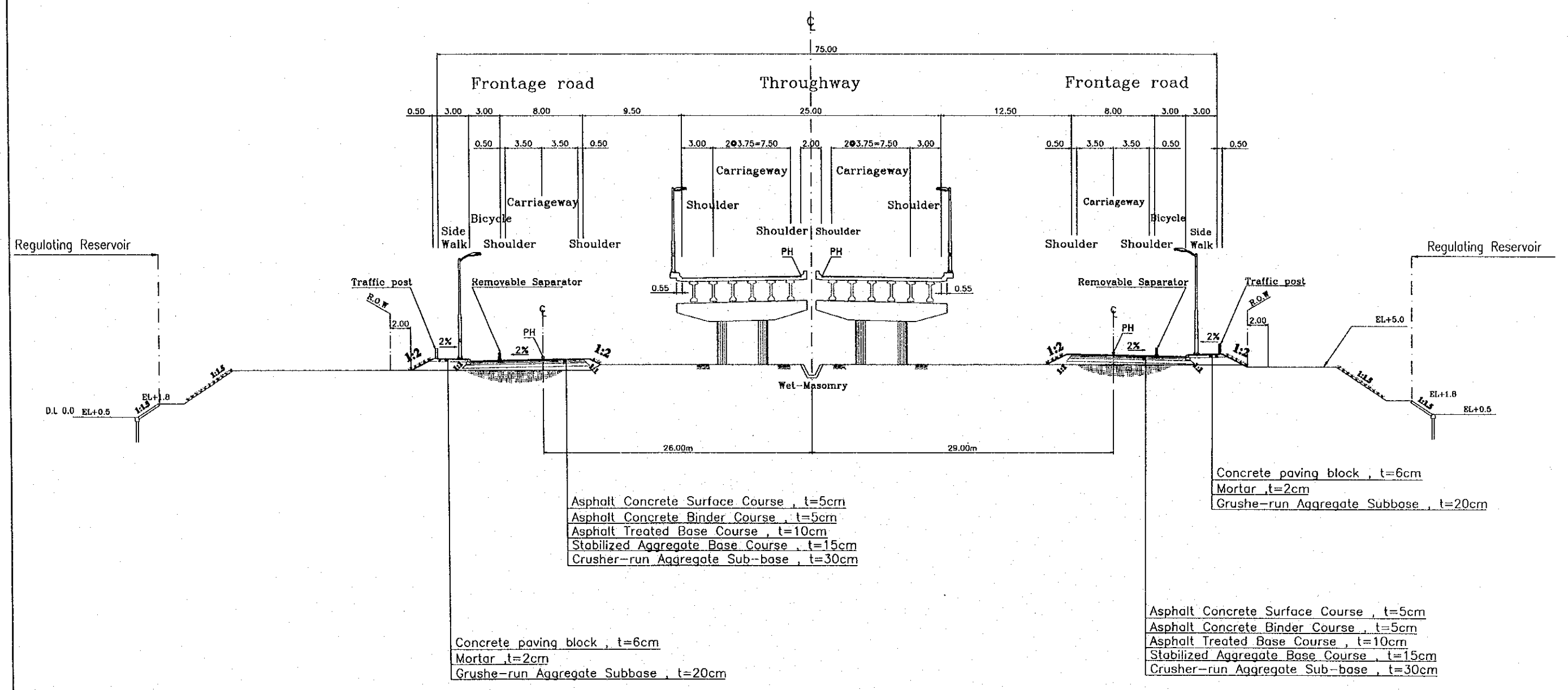
TYPICAL CROSS SECTION STA0+100 (PHAP VAN VIADUCT)



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.12.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/400	DRAWING No. B-1-2	SHEET No.
TYPICAL CROSS SECTION (STA 1+060)			

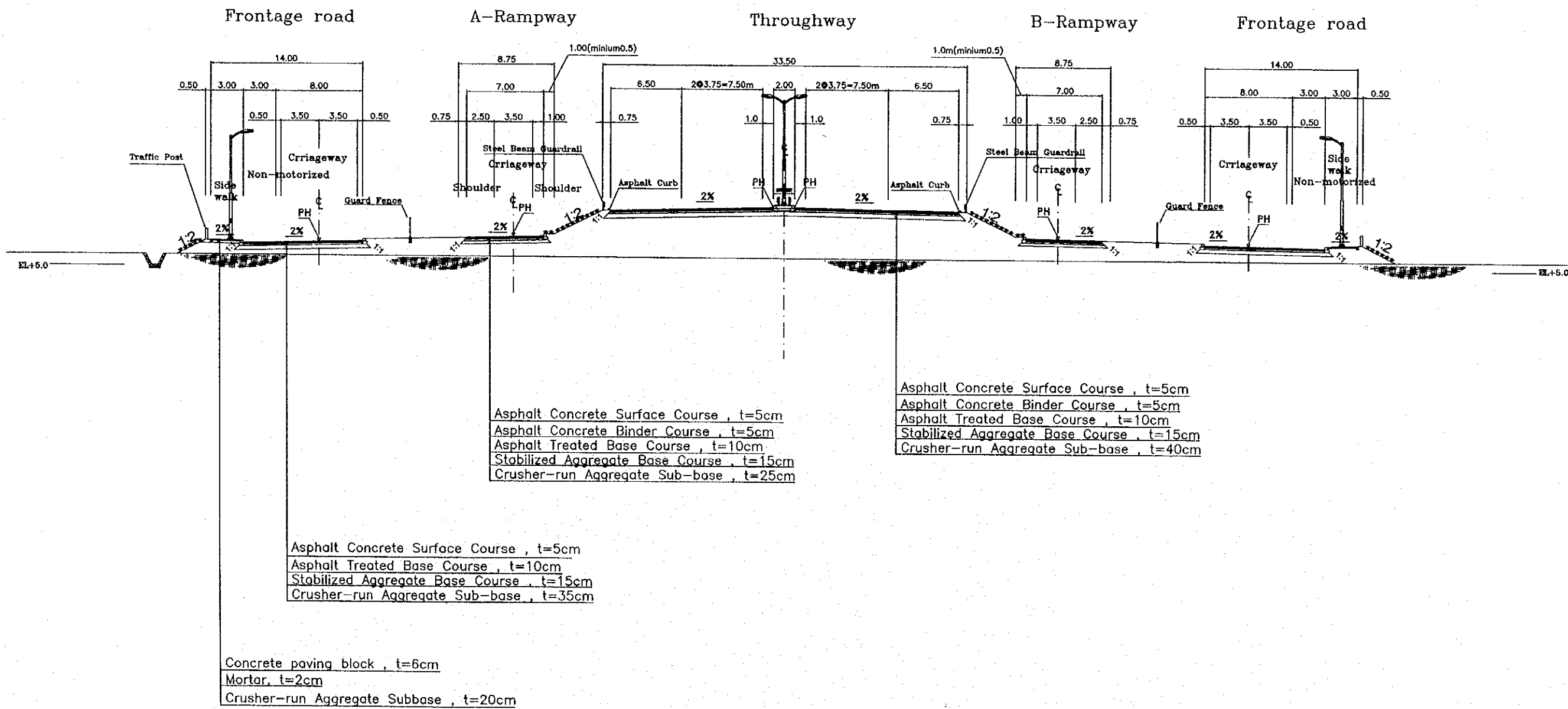
TYPICAL CROSS SECTION STA1+060 (PHAP VAN VIADUCT)



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. KATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2002.6.1
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/400	DRAWING No. B-1-3	SHEET No.
TYPICAL CROSS SECTION (STA2+600) (NGUYEN TAM TRINH INTERCHANGE)			

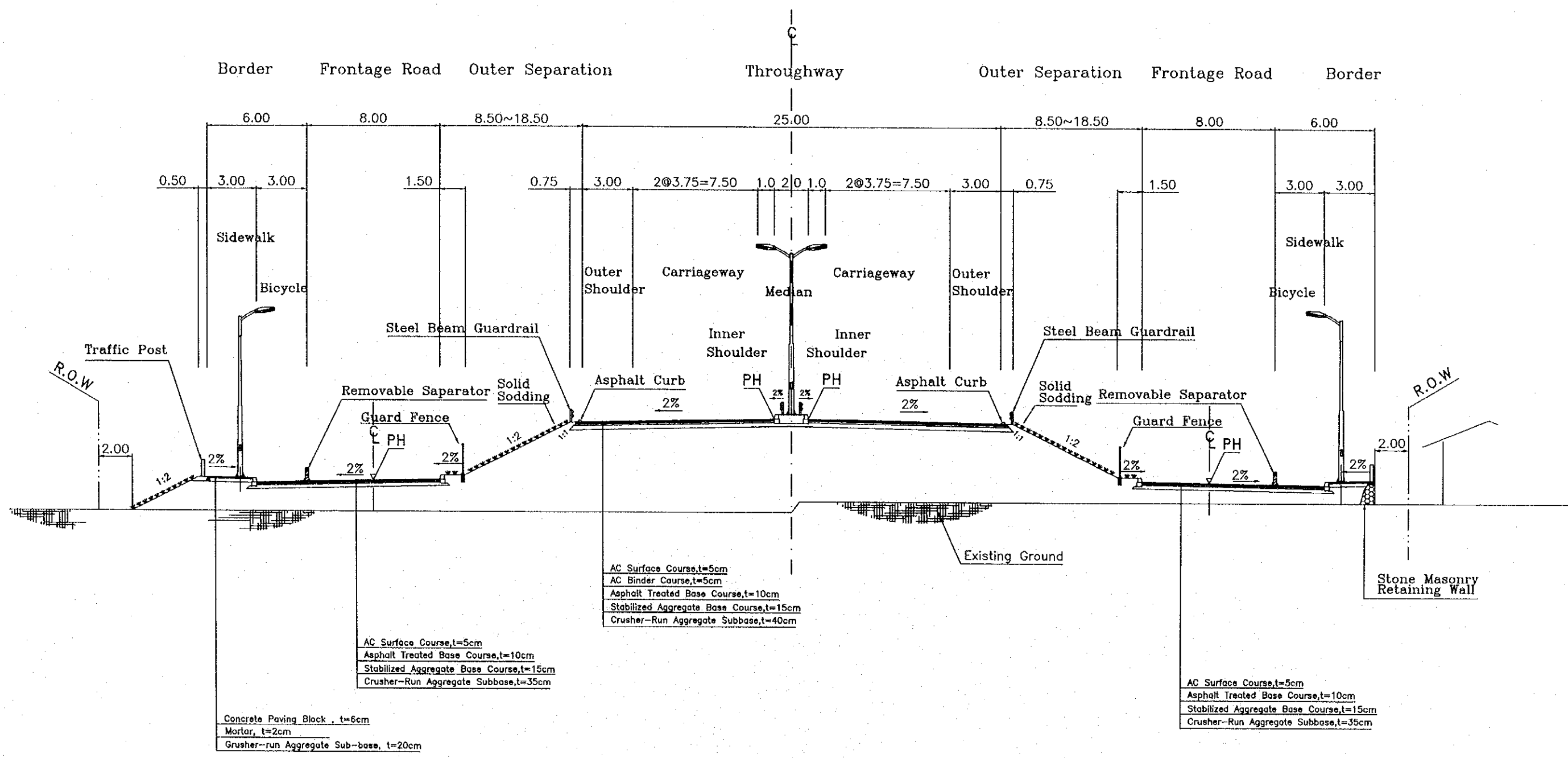
TYPICAL CROSS SECTION STA2+600 (NGUYEN TAM TRINH INTERCHANGE)



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. YATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. YATABE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2002.6.1

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/250	B-1-4	
TYPICAL CROSS SECTION (STA3+340) (THOUGHWAY WITH BOTH SIDE FRONTAGE ROAD)			

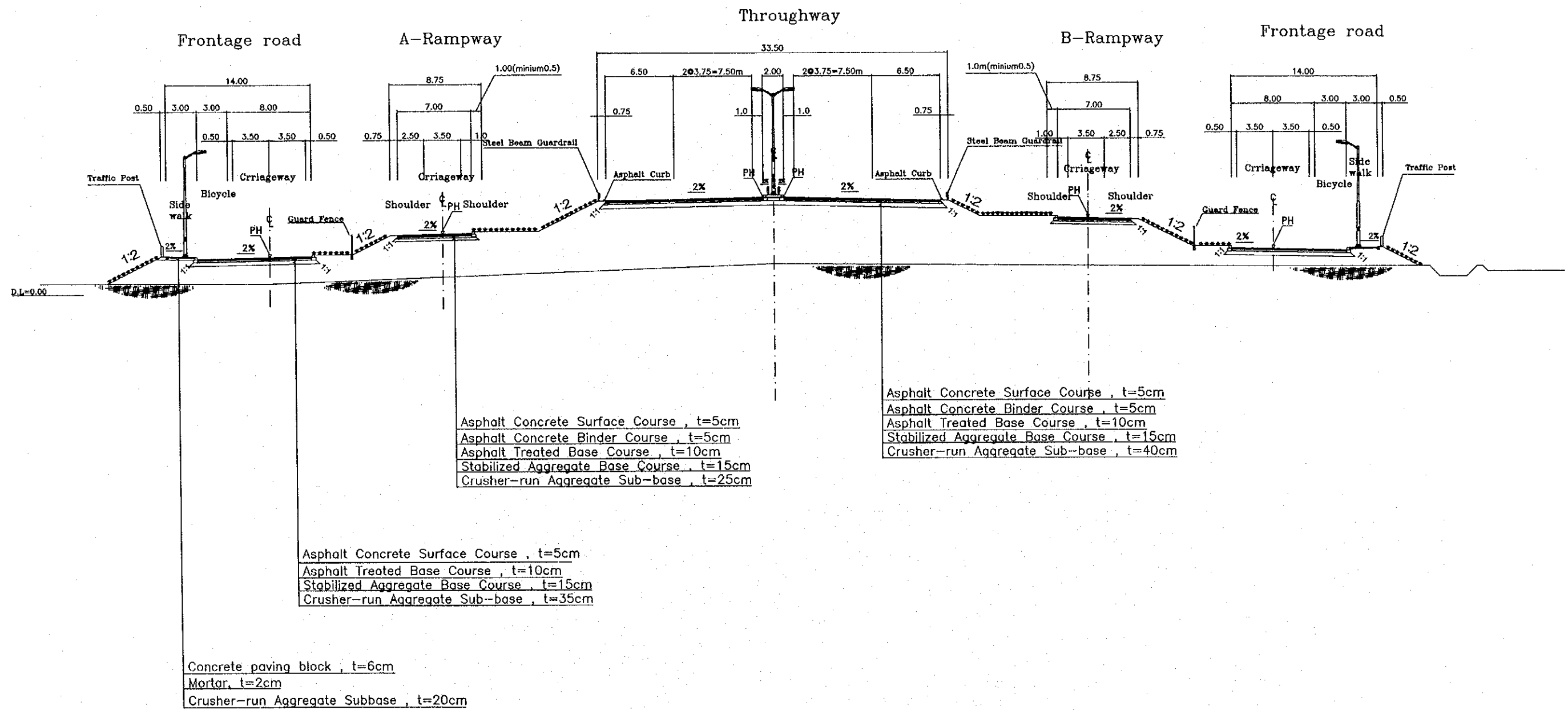
TYPICAL CROSS SECTION STA3+340 (THOUGHWAY WITH BOTH SIDE FRONTAGE ROAD)



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DATE 2000.6.1
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	

PACKAGE 3	SCALE 1/400	DRAWING No. B-1-5	SHEET No.
TYPICAL CROSS SECTION (STA5+420) (LINH NAM INTERCHANGE)			

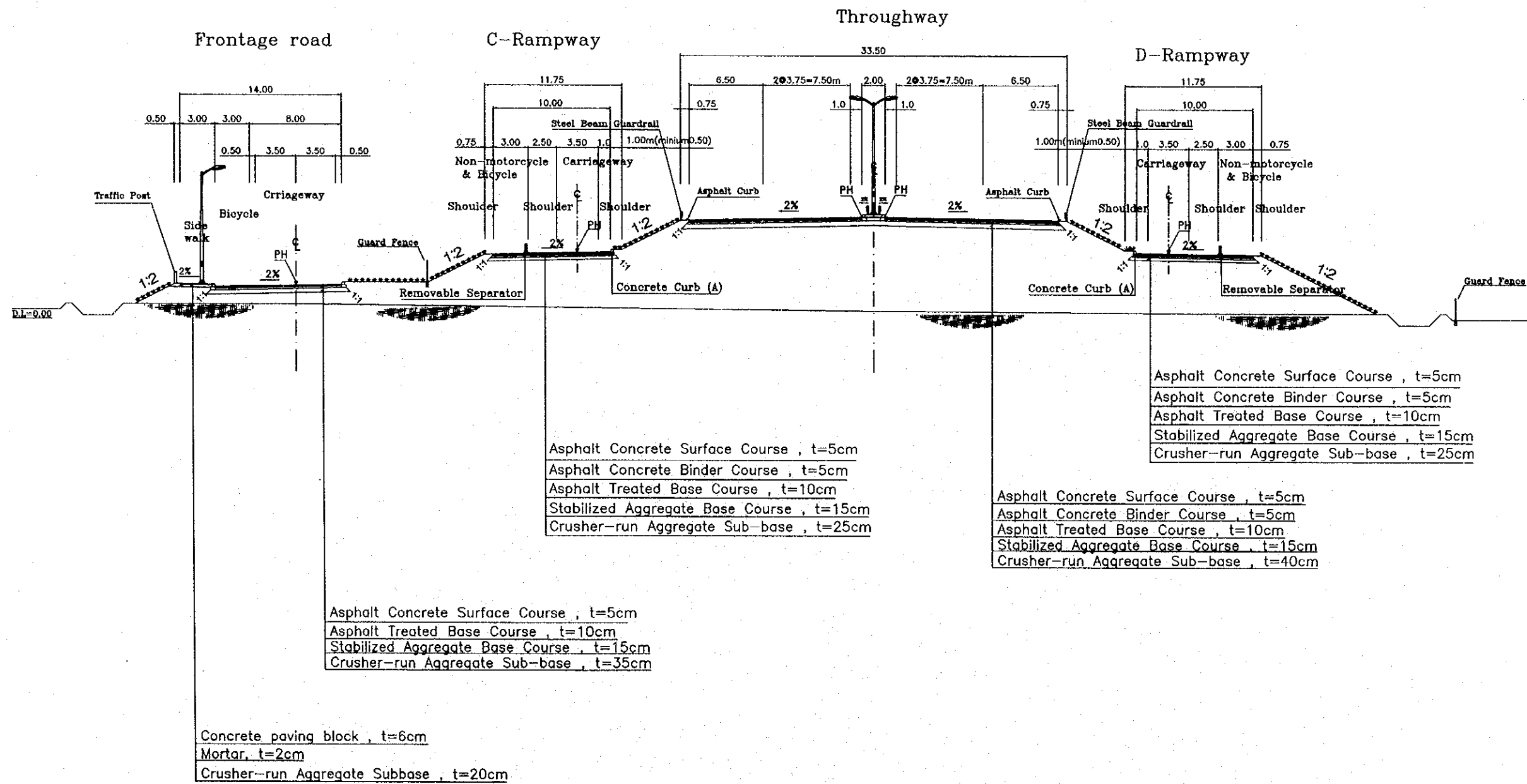
TYPICAL CROSS SECTION STA5+420 (LINH NAM INTERCHANGE)



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2011.6.1
COMMISSIONING PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/400	DRAWING No. B-1-6	SHEET No.
TYPICAL CROSS SECTION (STA5+800) (LINH NAM INTERCHANGE)			

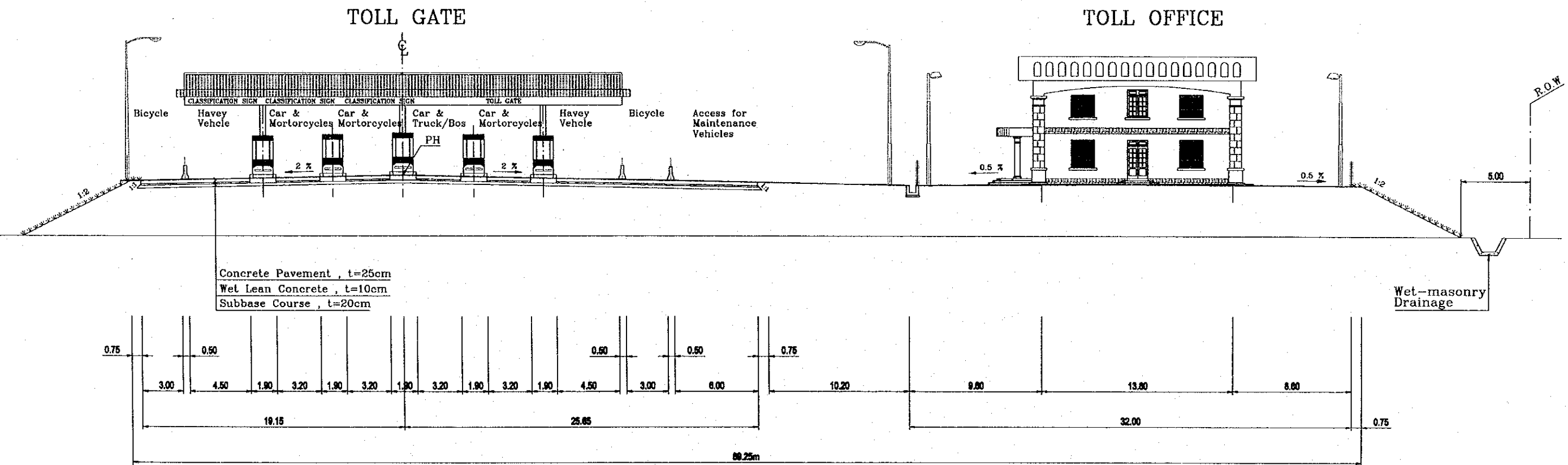
TYPICAL CROSS SECTION STA5+800 (LINH NAM INTERCHANGE)



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NAYABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.0.17

PACKAGE 3	SCALE 1/300	DRAWING No. B-1-7	SHEET No.
TYPICAL CROSS SECTION (STA 6+060)			

TYPICAL CROSS SECTION STA6+060 (THANH TRI DYKE TOLL PLAZA)



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.11.17

PACKAGE 3	SCALE 1/100	DRAWING No. B-1-8	SHEET No.
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TYPICAL CROSS SECTION
(Type F1&F2)

TYPICAL CROSS SECTION

FRONTAGE ROAD (TYPE F-1)

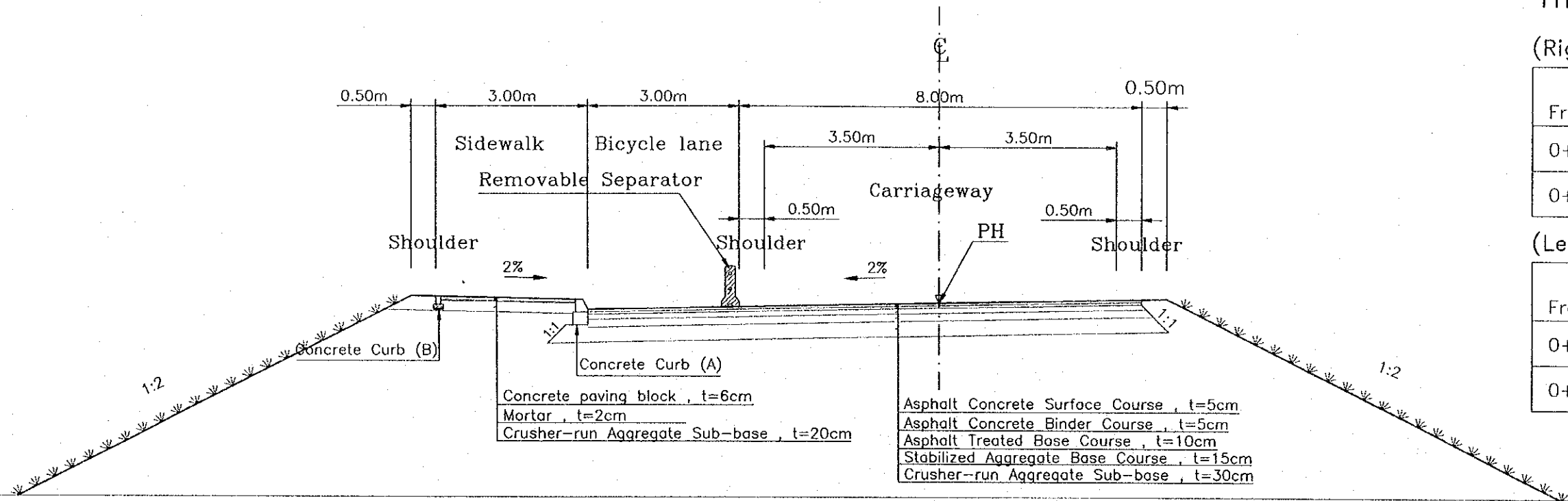
Thanh Tri Section

(Right Side)

Station	
From Km	To Km
0+020.000	~ 0+540.280
0+559.880	~ 1+106.646

(Left Side)

Station	
From Km	To Km
0+020.000	~ 0+546.052
0+565.652	~ 1+127.144



FRONTAGE ROAD (TYPE F-2)

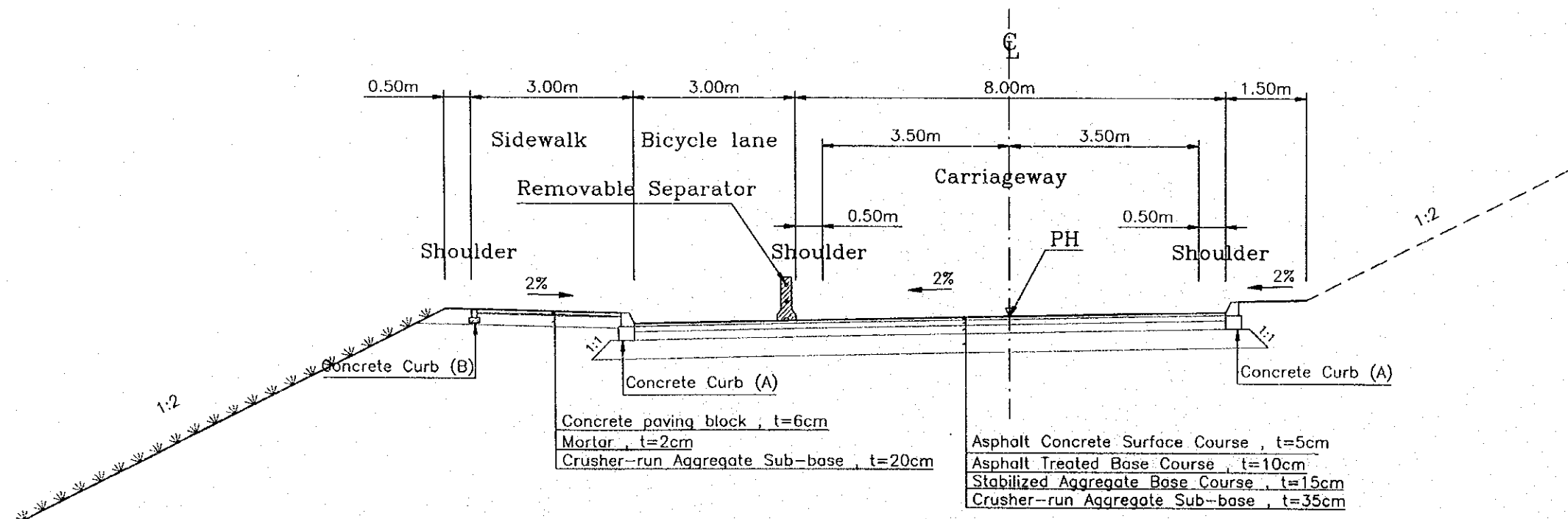
Thanh Tri Section

(Right Side)

Station	
From Km	To Km
1+106.646	~ 1+642.150
1+741.150	~ 5+668.167

(Left Side)

Station	
From Km	To Km
1+127.144	~ 1+662.640
1+761.640	~ 5+670.059

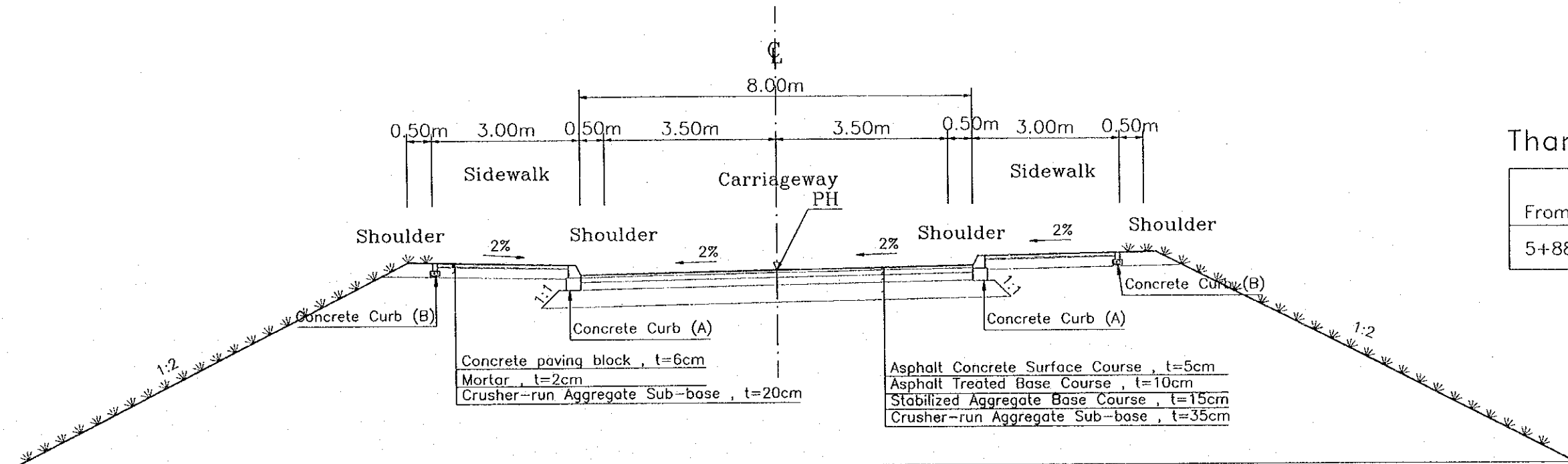


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. WATABE
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CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 4. 17	

PACKAGE 3	SCALE 1/100	DRAWING No. B-1-9	SHEET No.
TYPICAL CROSS SECTION (Type - F5&F6)			

TYPICAL CROSS SECTION

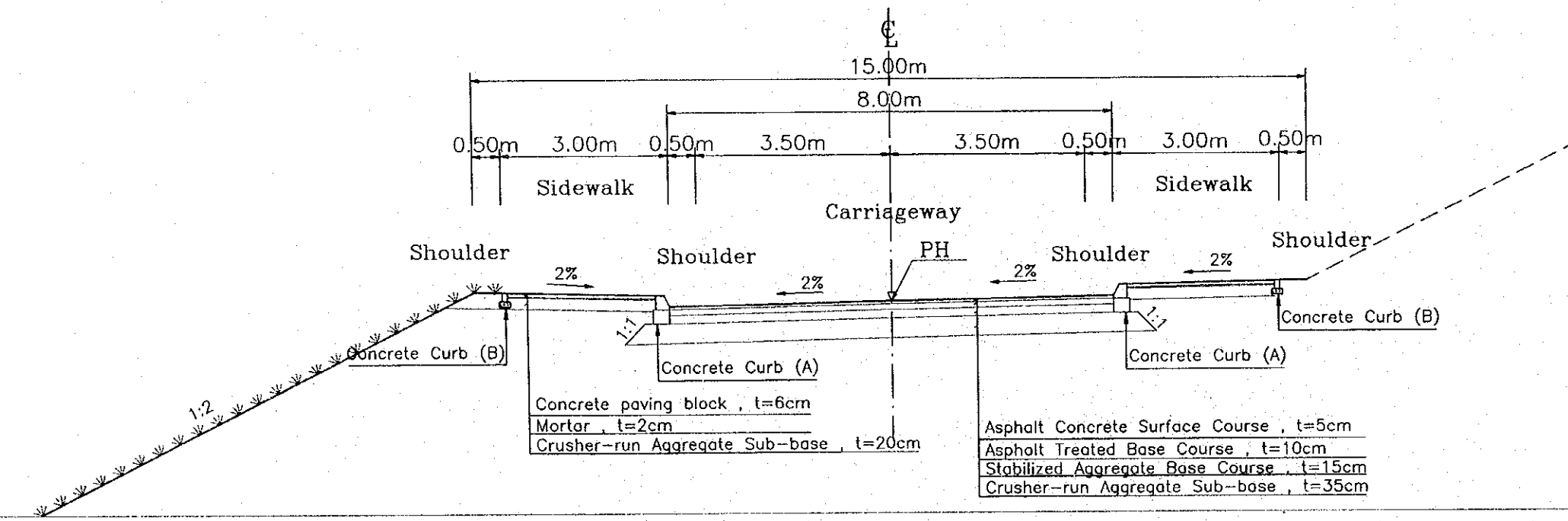
FRONTAGE ROAD (TYPE F-5)



Thanh Tri Section

Station
From Km To Km
5+880.000 ~ 6+142.627

FRONTAGE ROAD (TYPE F-6)



Thanh Tri Section

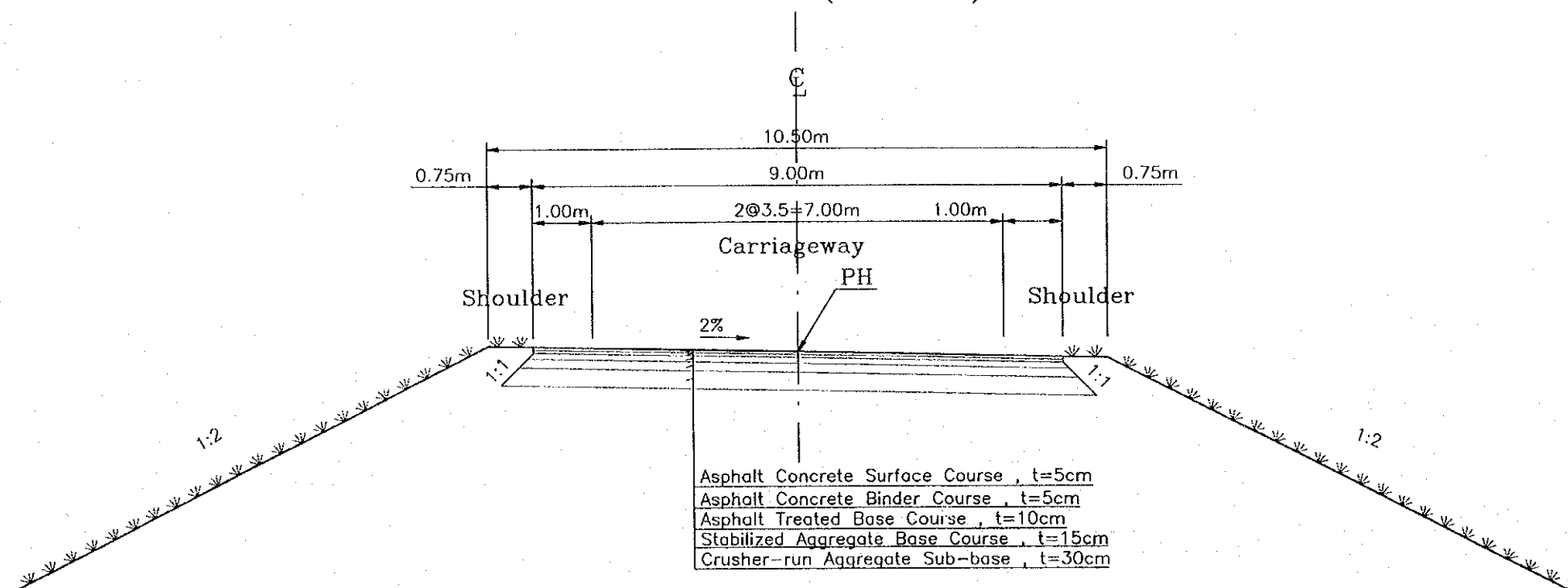
Station
From Km To Km
5+670.059 ~ 5+880.000

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM HANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
COORDINATOR PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.17

PACKAGE 3	SCALE 1/100	DRAWING No. B-1-10	SHEET No.
TYPICAL CROSS SECTION (Type - R1&R3)			

TYPICAL CROSS SECTION

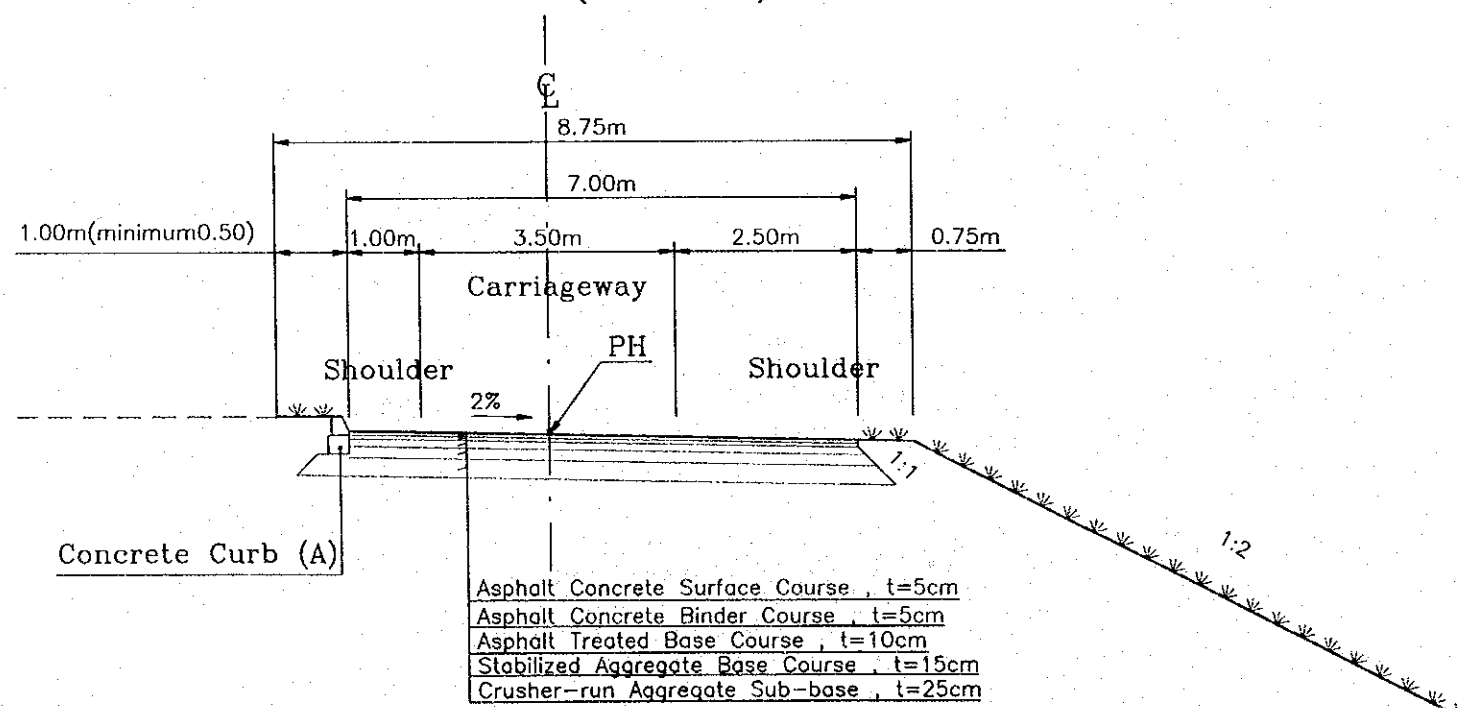
RAMPWAY (TYPE R-1)



Phap Van Cau Gie Interchange

Ramp	Station	
	From Km	To Km
C	0+131.211 ~	0+202.000
D	0+111.743 ~	0+232.000
E	0+584.129 ~	0+697.588
F	0+584.129 ~	0+731.355
G	0+224.961 ~	0+386.577
H	0+281.357 ~	0+433.069

RAMPWAY (TYPE R-3)



Nguyen Tam Trinh Interchange

Ramp	Station	
	From Km	To Km
A	0+069.675 ~	0+200.997
B	0+089.631 ~	0+200.986

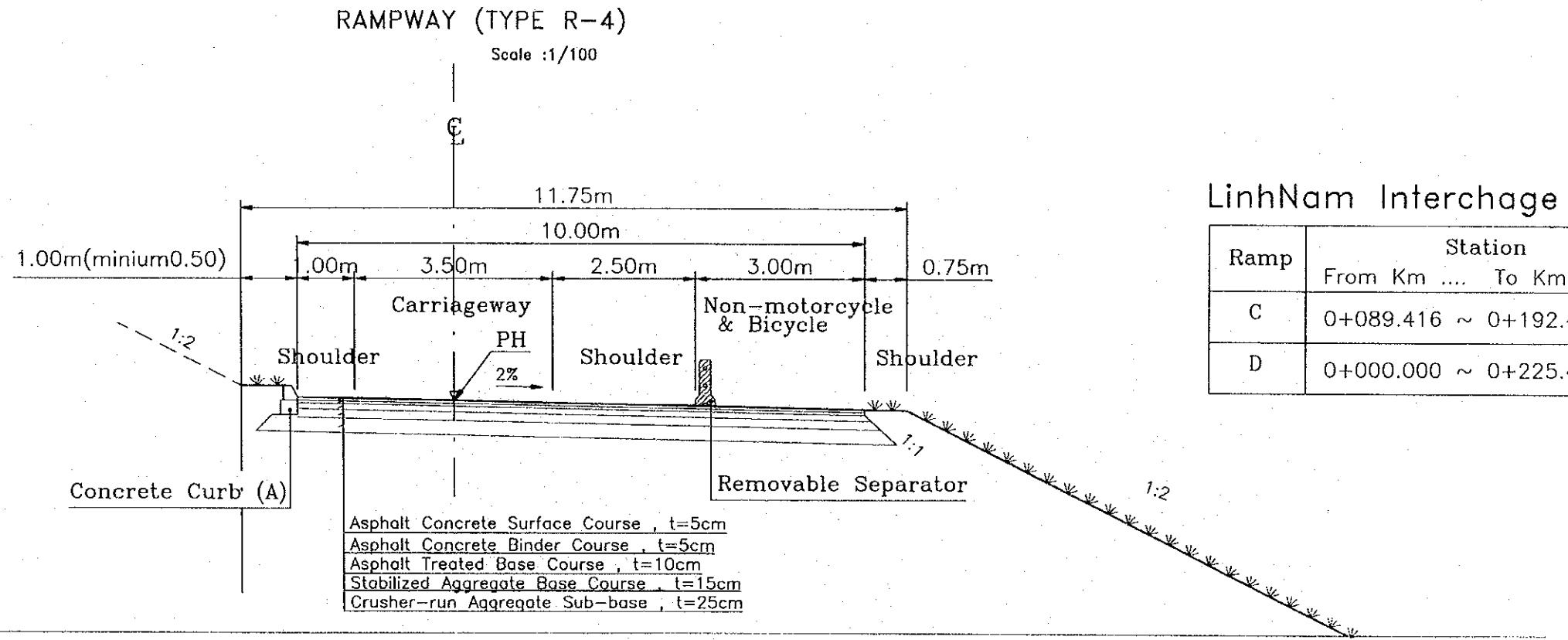
Linh Nam Interchange

Ramp	Station	
	From Km	To Km
A	0+069.603 ~	6+174.001
B	0+087.166 ~	0+173.942

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 03. 17

PACKAGE 3	SCALE As shown	DRAWING No. B-1-11	SHEET No.
TYPICAL CROSS SECTION (Type - R4&R6)			

TYPICAL CROSS SECTION

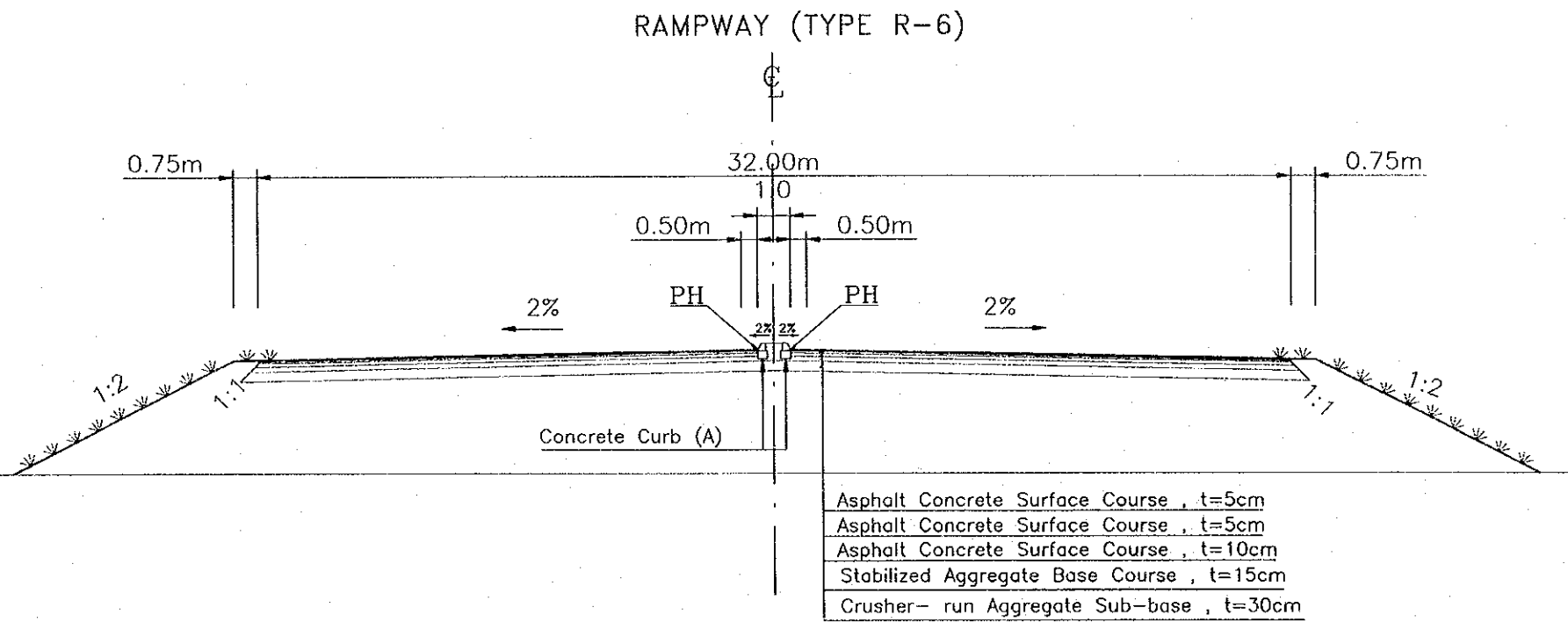


22

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.03.14

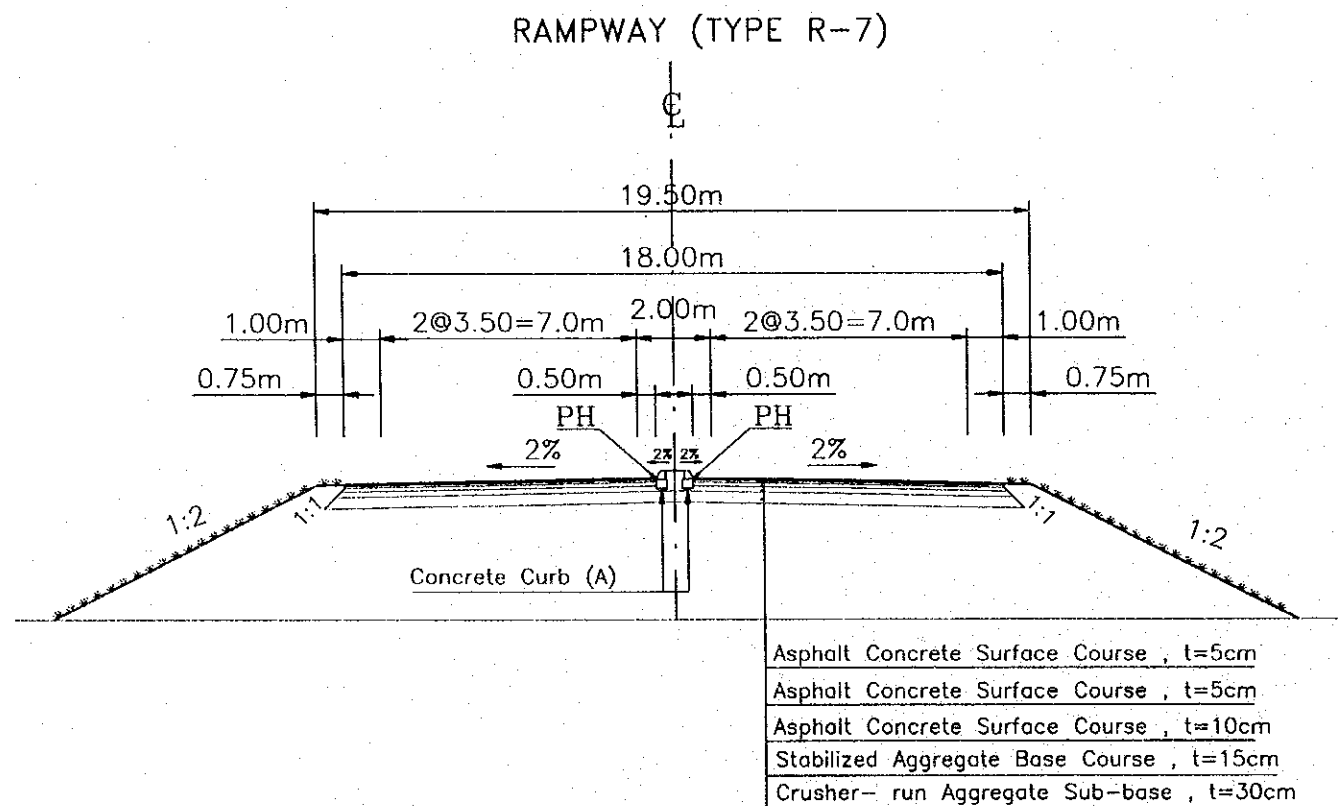
PACKAGE 3	SCALE 1/200	DRAWING No. B-1-12	SHEET No.
TYPICAL CROSS SECTION (Type - R6&R7)			

TYPICAL CROSS SECTION



PhapVan-CauGie Interchange

Ramp	Station	
	From Km ...	To Km ...
A	0+000.000	~ 0+132.848
E	0+000.000	~ 0+097.000



PhapVan-CauGie Interchange

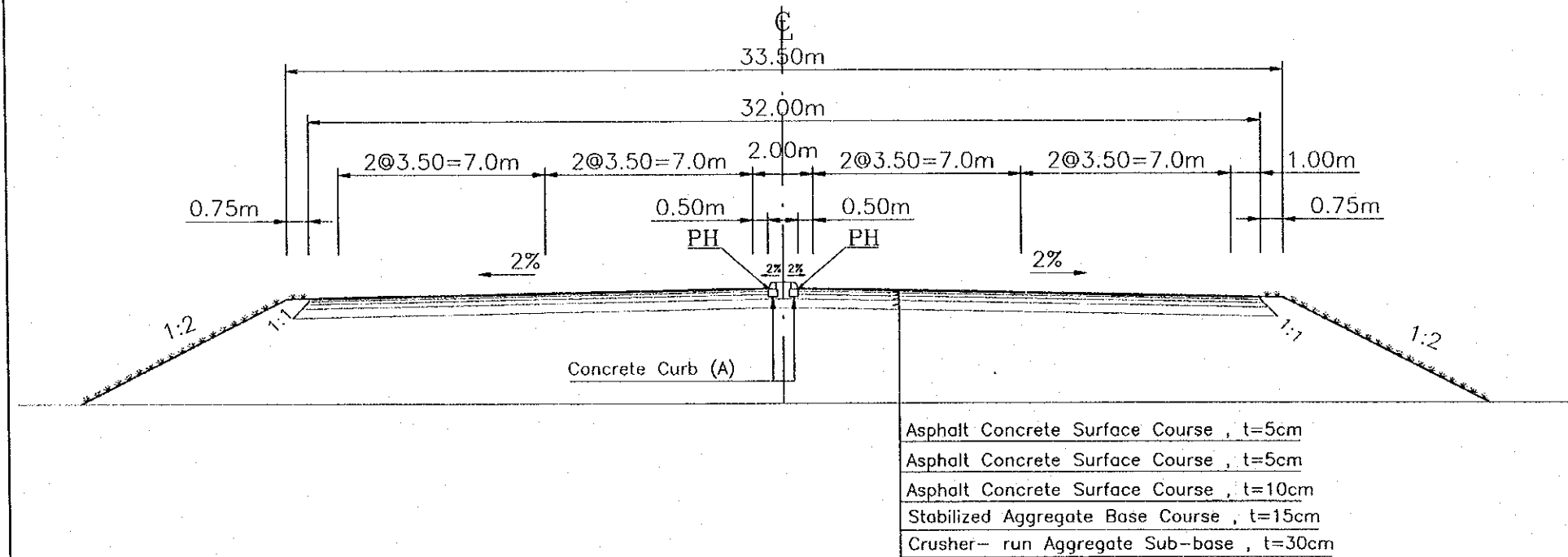
Ramp	Station	
	From Km ...	To Km ...
A	0+132.848	~ 0+520.022
E	0+264.882	~ 0+355.813
	0+405.813	~ 0+584.129

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATARE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.17

PACKAGE 3	SCALE 1/200	DRAWING No. B-1-13	SHEET No.
TYPICAL CROSS SECTION (Type R8&R9)			

TYPICAL CROSS SECTION

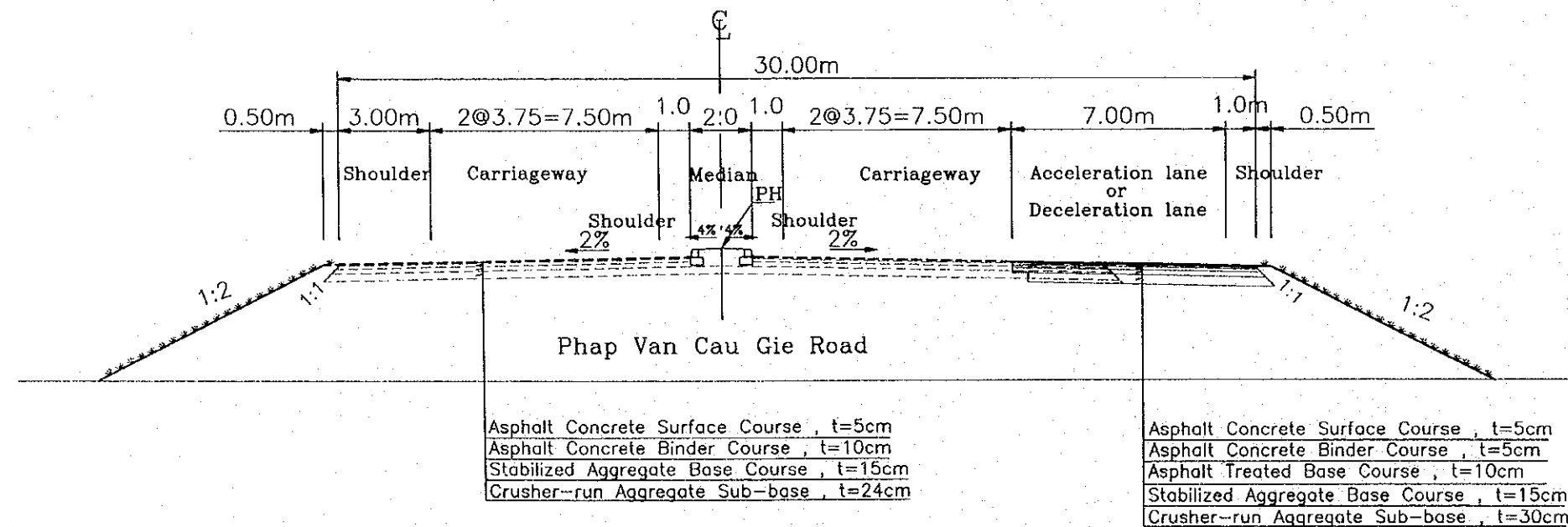
RAMPWAY (TYPE R-8)



PhapVan-CauGie Interchange

Ramp	Station	
	From Km	To Km
E	0+097.000	~ 0+264.882

RAMPWAY (TYPE R-9)



PhapVan-CauGie Interchange

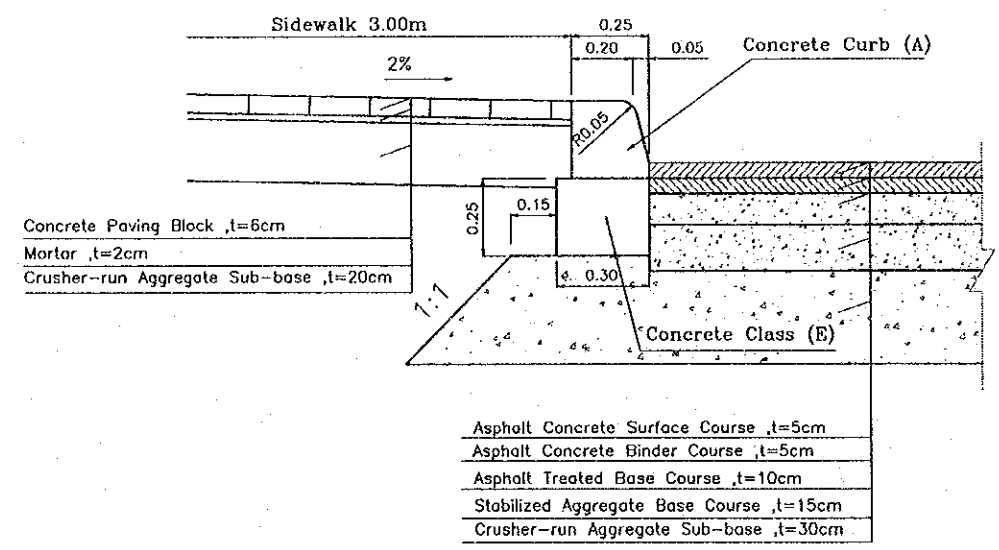
Ramp	Station	
	From Km	To Km
E	0+697.588	~ 0+717.588
F	0+731.355	~ 0+861.355
G	0+386.578	~ 0+576.578
H	0+433.069	~ 0+753.069

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 8. 17

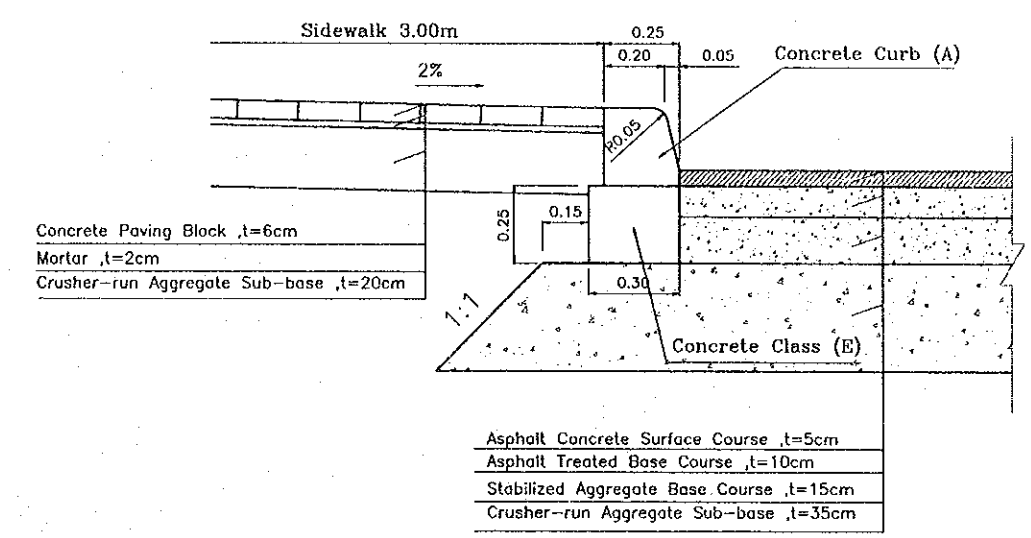
PACKAGE 3	SCALE 1/600	DRAWING No. B-1-14	SHEET No.
PAVEMENT DETAIL			

PAVEMENT DETAIL

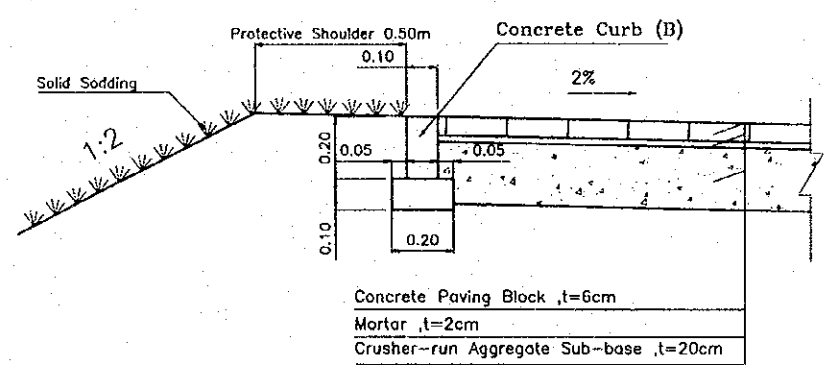
Frontage Road (Type F-1)



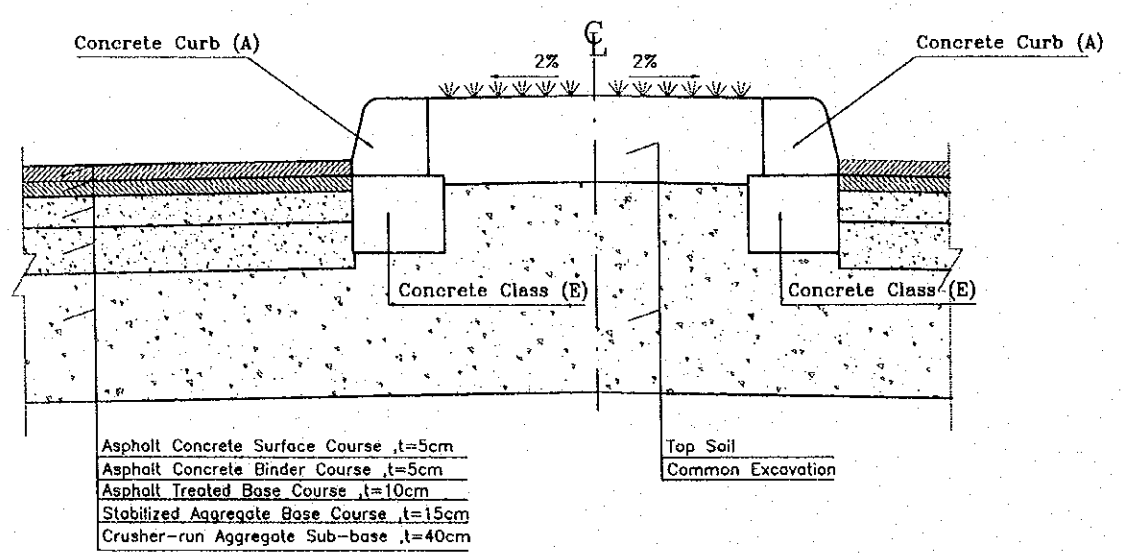
Frontage Road (Type F-2~F-6)



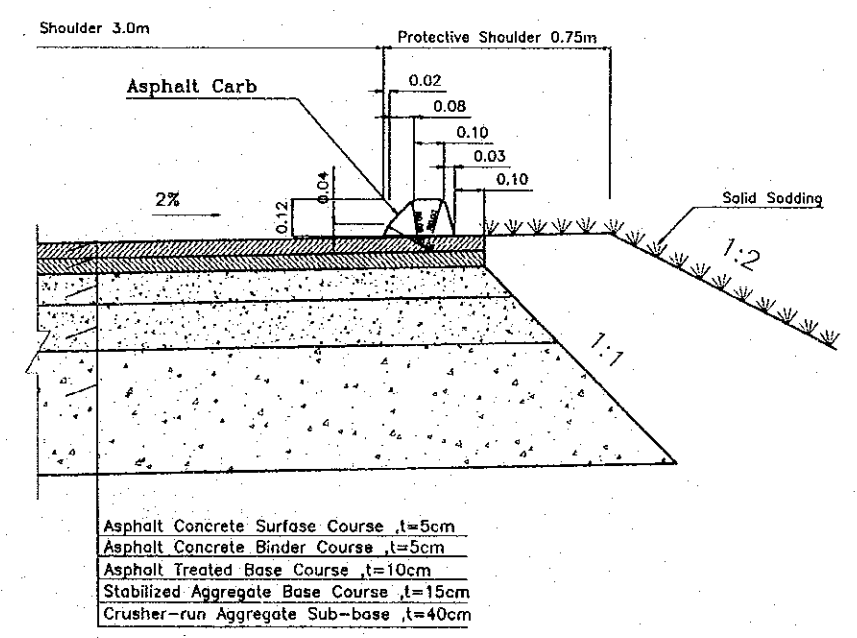
Side Walk



Median



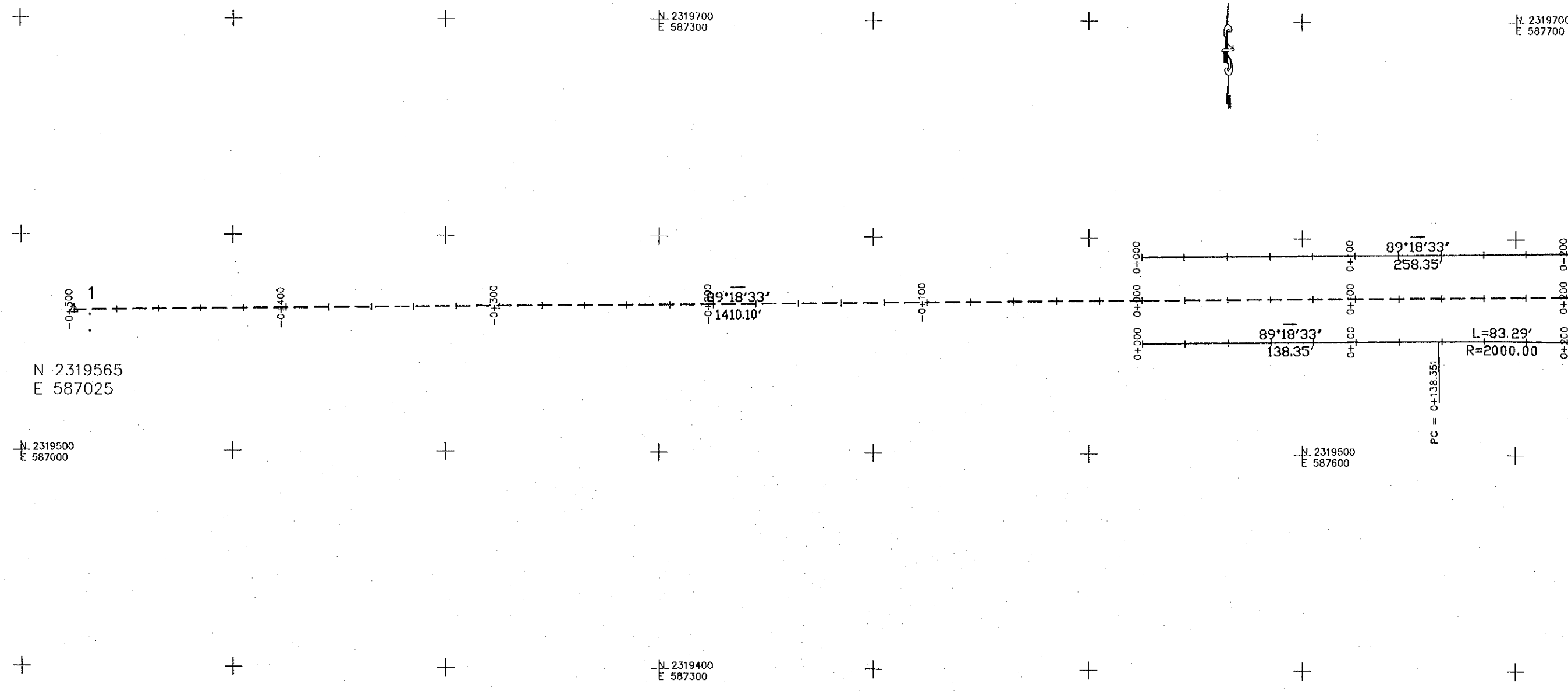
Throughway



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.08.17	

PACKAGE 3	SCALE 1/2000	DRAWING No. B-2-1	SHEET No.
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ALIGNMENT LAYOUT (Km 0+000 TO Km 0+200)



EXPRESSWAY

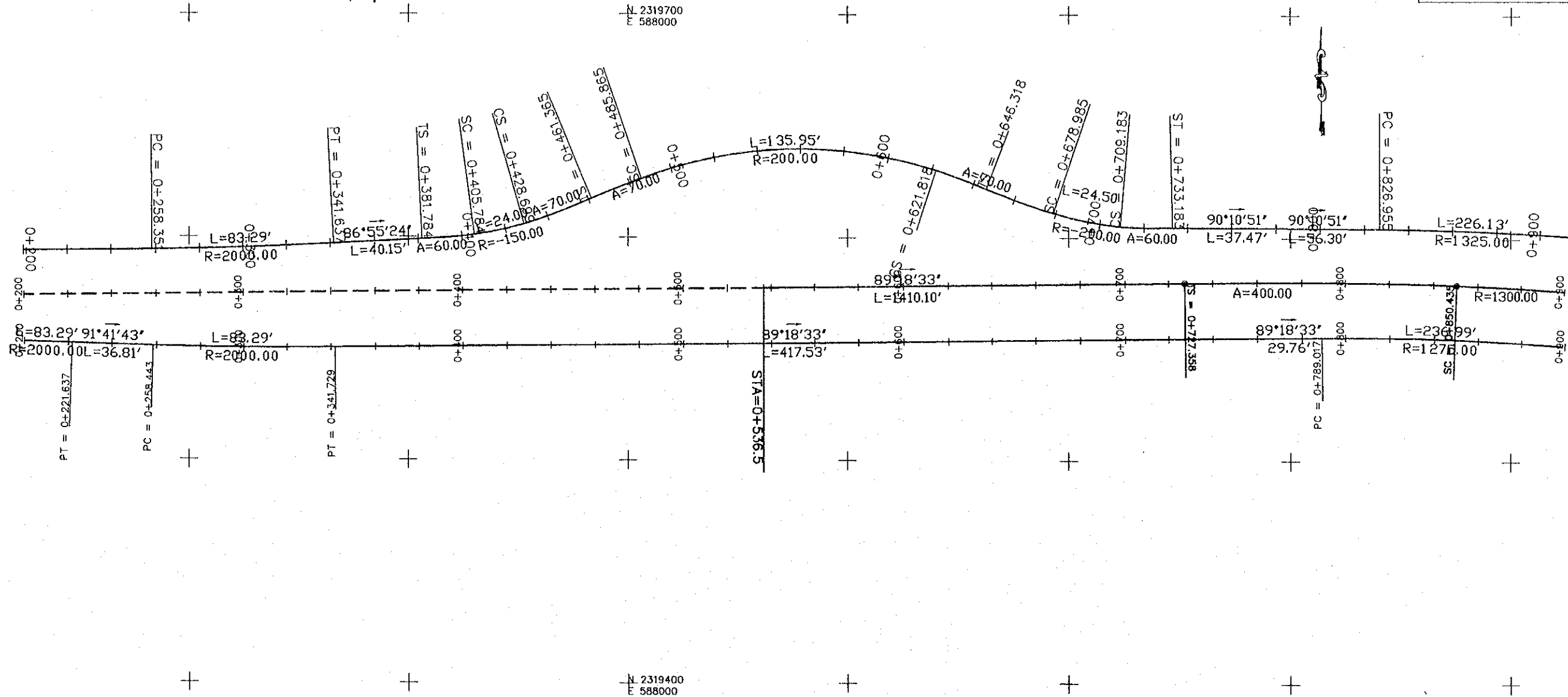
	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	-0+500	2319565.000	587025.000

FRONTAGE ROAD (LEFT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+000	2319591.026	587524.723

FRONTAGE ROAD (RIGHT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+000	2319551.029	587525.205
IP1	0+180.00	2319553.199	587705.192
PC	0+138.351	2319552.697	587663.546



EXPRESS WAY

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
TS	0+727.358	2319579.797	588252.269
SC	0+850.435	2319579.339	588375.333
STA	0+536.500	2319577.496	588061.425

FRONTAGE ROAD (RIGHT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
PT	0+221.637	2319551.967	587746.822
IP2	0+300.092	2319549.647	587825.243
PC	0+258.443	2319550.879	587783.613
PT	0+341.729	2319550.149	587866.889
PC	0+789.017	2319555.541	588314.145

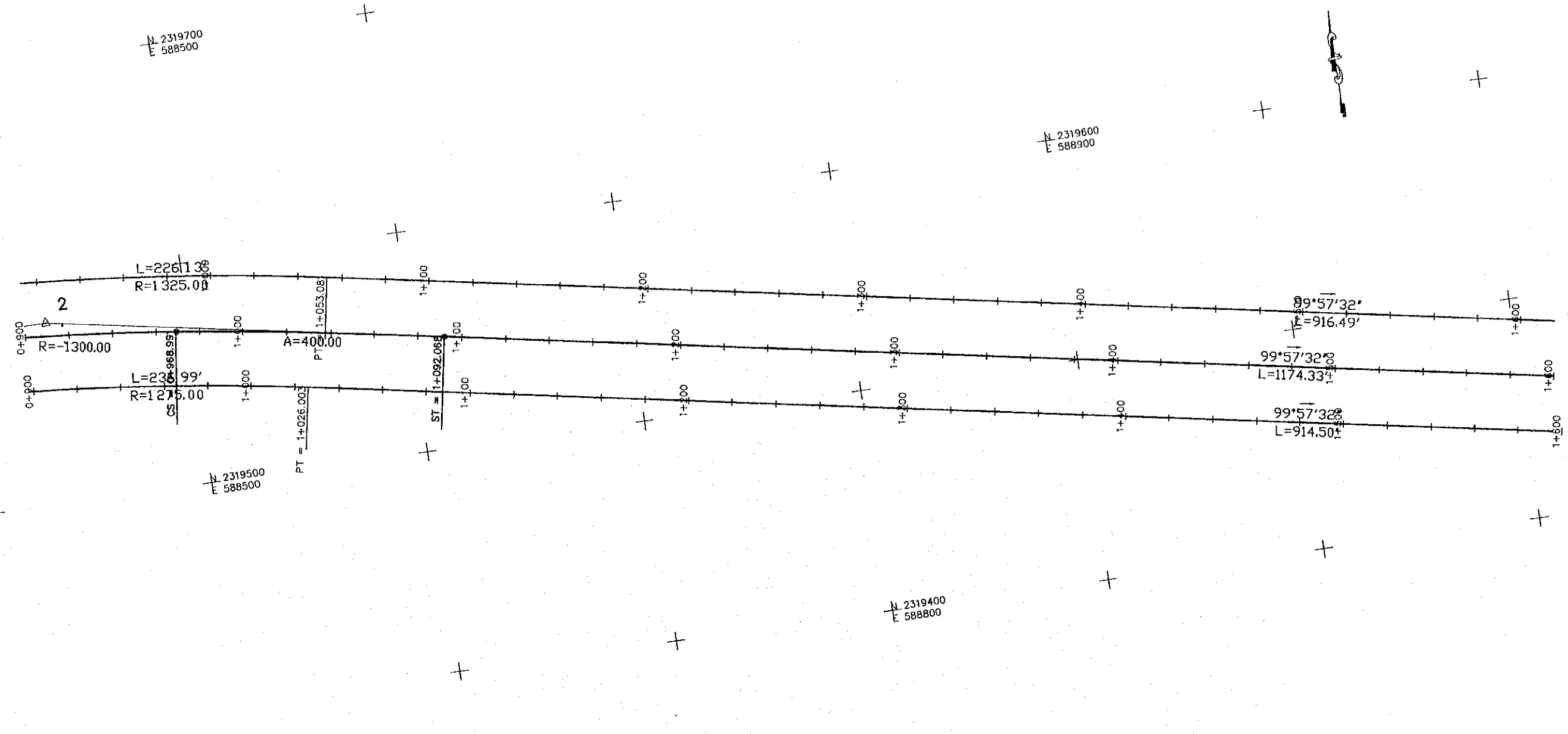
FRONTAGE ROAD (LEFT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP1	0+300.00	2319594.643	587824.701
PC	0+258.351	2319594.141	587783.055
PT	0+341.637	2319596.879	587866.289
IP2	0+420.092	2319601.09	587944.632
TS	0+381.784	2319599.033	587906.379
SC	0+405.784	2319600.96	587930.295
CS	0+428.699	2319605.734	587952.684
SC	0+428.699	2319605.734	587952.684
ST	0+461.365	2319617.206	587983.251
IP3	0+556.586	2319651.781	588071.968
TS	0+461.365	2319617.206	587983.251
SC	0+485.865	2319626.177	588006.045

CS	0+621.818	2319626.177	588006.045
ST	0+646.318	2319621.851	588162.343
PI4	0+694.135	2319606.620	588207.645
TS	0+646.318	2319621.851	588162.343
SC	0+678.985	2319611.140	588193.185
CS	0+709.183	2319605.082	588222.718
ST	0+733.183	2319604.732	588246.708
PC	0+826.955	2319604.436	588340.479

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
COMMISSIONER PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 3. 17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/2000	B-2-3	
ALIGNMENT LAYOUT (Km 0+800 TO Km 1+600)			



EXPRESSWAY

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP1	0+910.102	2319582.000	588435.000
CS	0+968.991	2319569.764	588493.460
ST	1+092.068	2319550.396	588614.991

FRONTAGE ROAD (LEFT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP5	0+940.293	2319604.078	588453.817
PT	1+053.081	2319584.478	588565.448

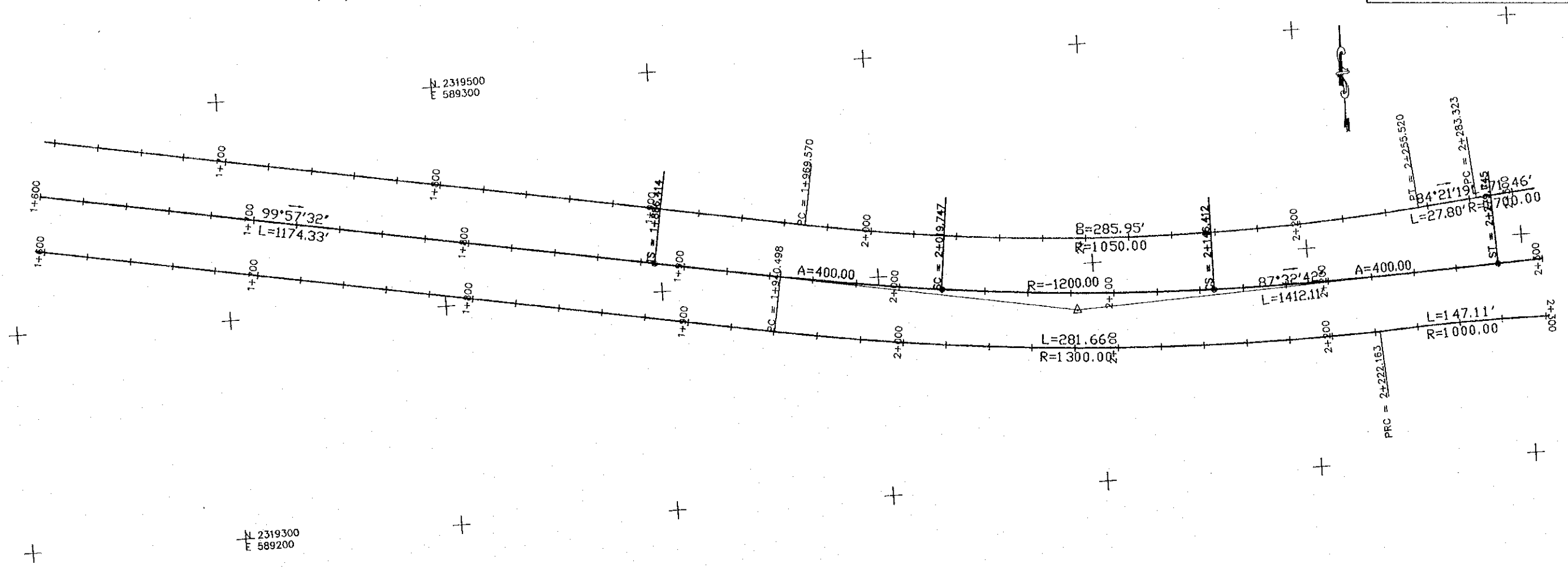
FRONTAGE ROAD (RIGHT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP3	0+907.852	2319556.974	588432.971
PT	1+026.003	2319536.422	588550.016

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.01.14	

PACKAGE 3	SCALE 1/2000	DRAWING No. B-2-4	SHEET No.
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ALIGNMENT LAYOUT (Km 1+600 TO Km 2+300)



EXPRESSWAY

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP2	2+083.651	2319378.911	589591.633
TS	1+886.414	2319413.021	589397.368
SC	2+019.747	2319392.401	589529.079
CS	2+146.412	2319384.116	589655.413
ST	2+279.745	2319387.359	589788.689

FRONTAGE ROAD (LEFT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
PC	1+969.570	2319425.979	589468.127
IP6	2+113.435	2319401.099	589609.825
PT	2+255.520	2319415.249	589752.993
PC	2+283.323	2319417.984	589780.661

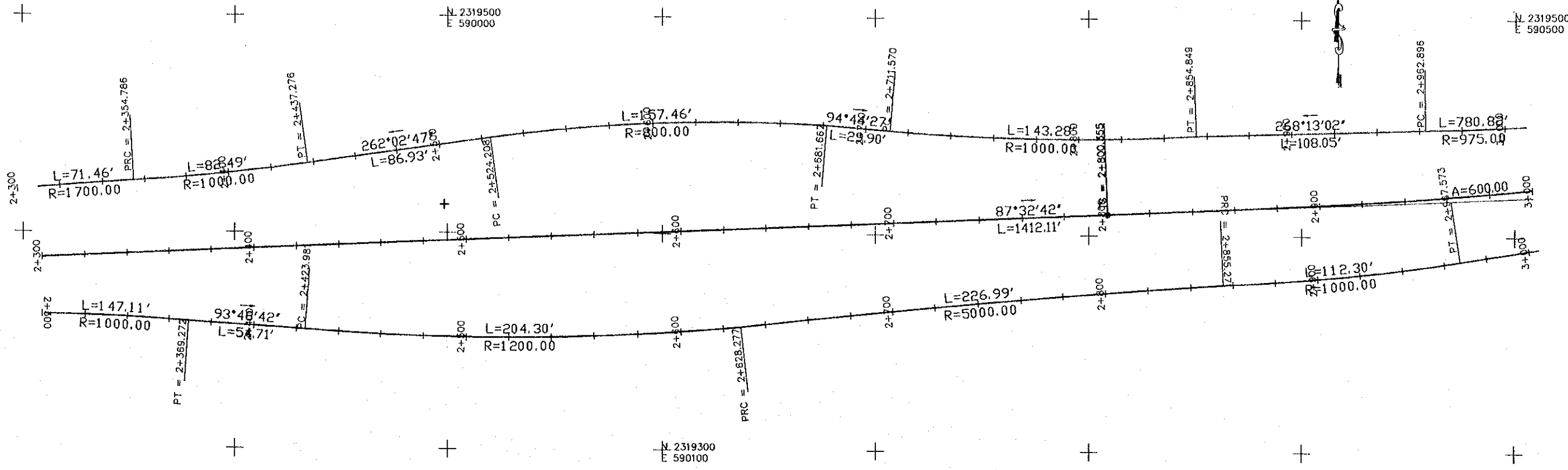
FRONTAGE ROAD (RIGHT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP4	2+081.884	2319353.817	589589.987
PC	1+940.498	2319378.268	589450.732
PT	2+222.163	2319359.873	589731.243

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE 2000.05.17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/2000	B-2-5	

ALIGNMENT LAYOUT (Km 2+300 TO Km 3+000)



EXPRESSWAY

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
TS	2+800.355	2319409.661	590308.821

FRONTAGE ROAD (LEFT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
PT	2+354.786	2319423.565	589851.901
IP7	2+319.060	2319421.523	589816.222
PC	2+354.786	2319423.565	589851.901
PT	2+437.276	2319431.725	589933.962
IP8	2+396.055	2319425.951	589893.100
PC	2+524.208	2319443.754	590020.058
PT	2+681.667	2319450.183	590177.131
IP9	2+603.193	2319454.722	590098.227
PT	2+854.849	2319445.952	590350.077
PC	2+962.896	2319449.313	590458.072
IP10	2+783.332	2319441.695	590278.442

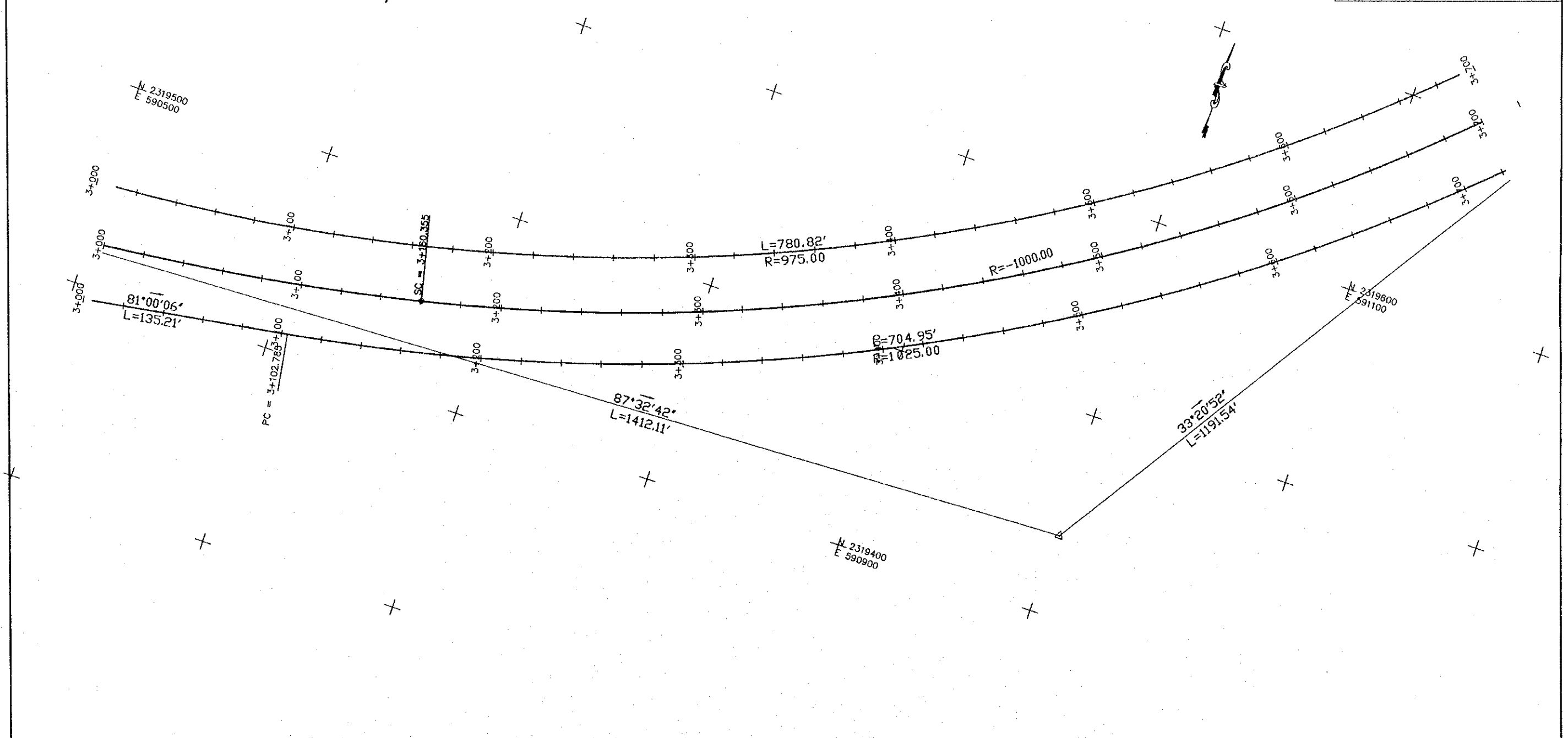
FRONTAGE ROAD (RIGHT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP5	2+295.850	2319364.704	589804.773
PC	2+222.163	2319359.873	589731.243
PT	2+369.272	2319358.705	589878.216
IP6	2+526.377	2319347.285	590034.903
PC	2+423.891	2319355.086	589932.803
PT	2+628.277	2319356.912	590136.845
IP7	2+741.794	2319369.724	590249.636
PC	2+628.277	2319356.912	590136.845
PT	2+855.271	2319377.403	590362.892
IP8	2+911.481	2319379.861	590419.048
PC	2+855.271	2319377.403	590362.892
PT	2+967.573	2319388.595	590474.575

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THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. MATSUDA
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	<i>[Signature]</i>
COMMISSIONER PACIFIC CONSULTANTS INTERNATIONAL		DATE	2000. 03. 17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/2000	B--2--6	
ALIGNMENT LAYOUT (Km 3+000 TO Km 3+700)			



EXPRESSWAY

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP3	3+494.615	2319439.400	591002.444
SC	3+160.355	2319446.562	590666.404

FRONTAGE ROAD (LEFT SIDE)

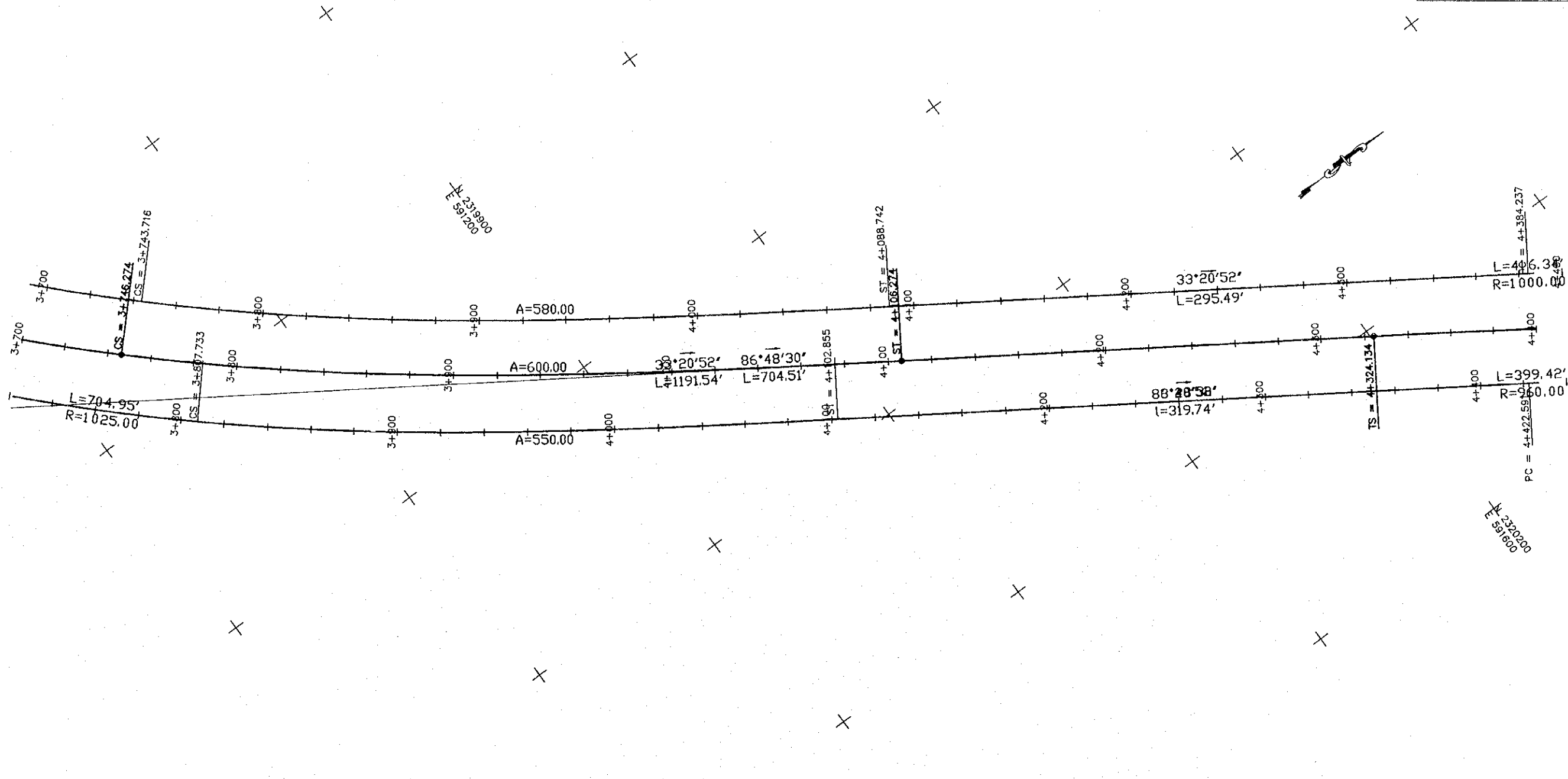
	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP14	3+487.682	2319455.079	590982.831

FRONTAGE ROAD (RIGHT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP9	3+560.226	2319481.289	591059.934
PC	3+102.785	2319409.743	590608.123

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 11. 17	

PACKAGE 3	SCALE 1/2000	DRAWING No. B-2-7	SHEET No.
ALIGNMENT LAYOUT (Km 3+700 TO Km 4+400)			



EXPRESSWAY

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP4	4+603.558	2320434.756	591657.458
CS	3+746.274	2319731.444	591168.832
ST	4+106.274	2320019.350	591384.092
TS	4+324.134	2320201.340	591503.854

FRONTAGE ROAD (LEFT SIDE)

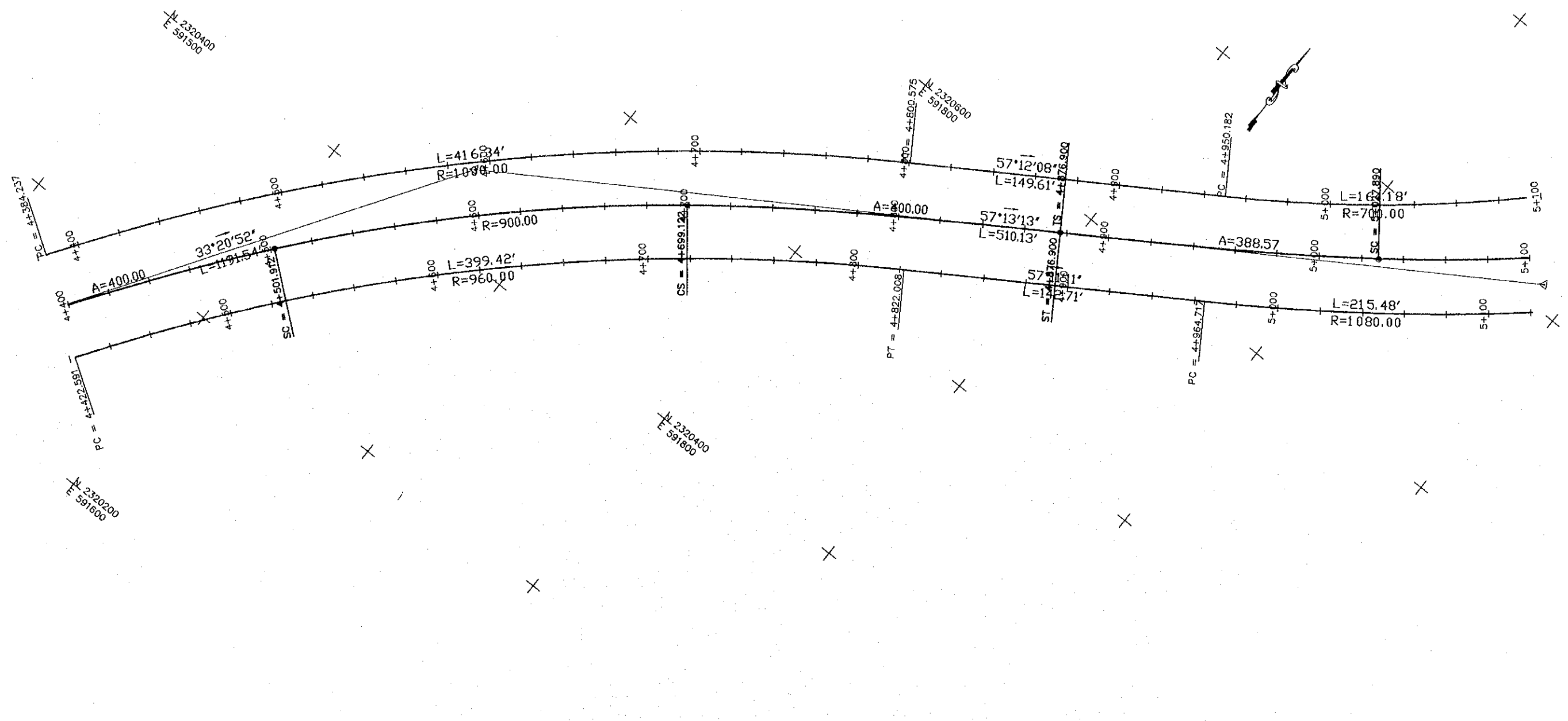
	STA	X(N)-COORDINATE	Y(E)-COORDINATE
CS	3+743.716	2319753.286	591154.768
SC	3+743.716	2319753.286	591154.768
ST	4+088.742	2320029.440	591360.803
PC	4+384.237	2320276.281	591523.243

FRONTAGE ROAD (RIGHT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
CS	3+807.733	2319741.654	591214.345
SC	3+807.733	2319741.654	591214.345
ST	4+102.855	2319979.899	591388.057

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
COMMISSIONER PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 8. 19

PACKAGE 3	SCALE 1/2000	DRAWING No. B-2-8	SHEET No.
ALIGNMENT LAYOUT (Km 4+400 TO Km 5+100)			



EXPRESSWAY

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
SC	4+501.912	2320346.486	591606.372
CS	4+699.122	2320484.965	591746.230
ST	4+876.900	2320586.039	591892.386
TS	4+876.900	2320586.039	591892.386
SC	5+027.890	2320670.934	592017.204

FRONTAGE ROAD (LEFT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP15	4+595.466	2320452.731	591639.361
PT	4+800.575	2320567.148	591816.917
IP16	5+032.650	2320692.858	592011.997
PC	4+950.182	2320648.187	591942.675

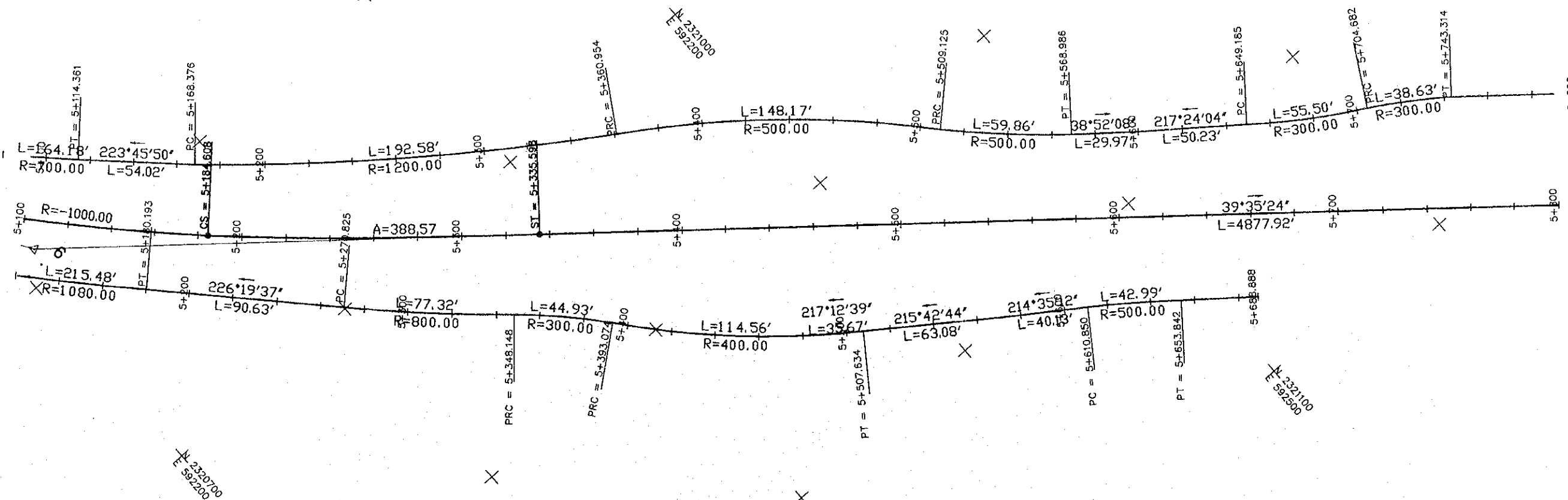
FRONTAGE ROAD (RIGHT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP10	4+625.231	2320416.265	591675.218
PC	4+422.591	2320246.990	591563.823
PT	4+822.008	2320526.077	591845.525
IP11	5+072.814	2320661.991	592056.312
PC	4+964.717	2320603.412	591965.463

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 5. 17

PACKAGE 3	SCALE 1/2000	DRAWING No. B-2-9	SHEET No.
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ALIGNMENT LAYOUT (Km 5+100 TO Km 5+800)



EXPRESSWAY

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
IP5	5+107.608	2320710.947	592086.355
CS	5+184.608	2320774.866	592134.286
ST	5+335.598	2320888.736	592233.382

FRONTAGE ROAD (LEFT SIDE)

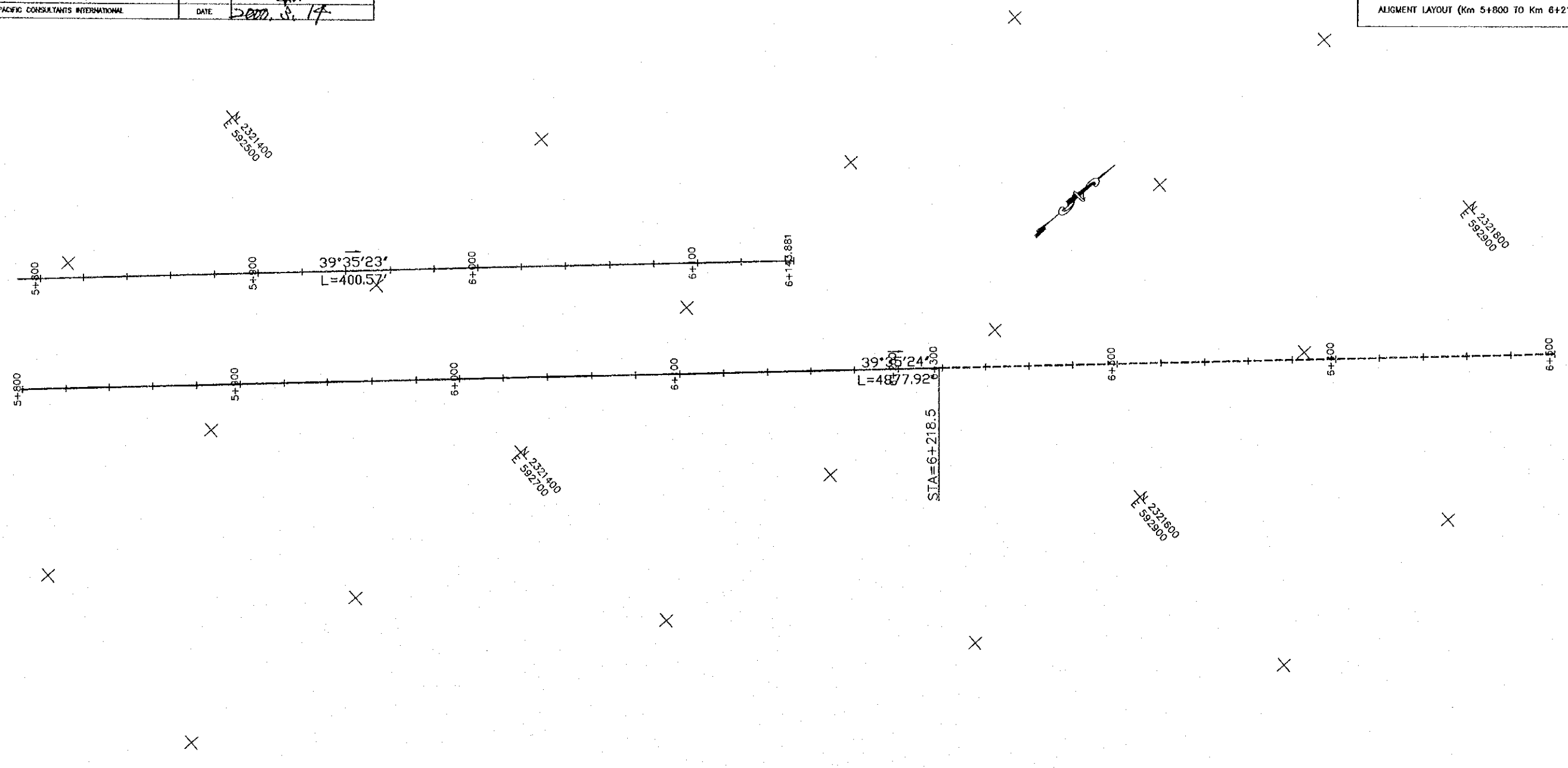
	STA	X(N)-COORDINATE	Y(E)-COORDINATE
PT	5+114.361	2320752.416	592069.039
IP14	5+264.872	2320863.416	592170.657
PC	5+168.376	2320791.425	592106.401
PT	5+360.954	2320944.749	592222.583
IP15	5+435.586	2321008.117	592262.009
PC	5+360.954	2320944.749	592222.583
PT	5+509.125	2321057.211	592318.222
IP16	5+539.091	2321077.692	592340.097
PC	5+509.125	2321057.211	592318.222
PT	5+568.986	2321100.639	592359.369
IP17	5+598.954	2321123.972	592378.175
IP18	5+677.013	2321185.502	592426.198
PC	5+649.185	2321163.876	592408.685
PT	5+704.682	2321209.98	592439.434
IP19	5+724.025	2321226.755	592449.065
PC	5+704.682	2321209.98	592439.434
PT	5+743.314	2321242.154	592460.77

FRONTAGE ROAD (RIGHT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
PT	5+180.193	2320737.413	592133.748
IP12	5+309.516	2320826.716	592227.287
PC	5+270.825	2320799.998	592199.302
PT	5+348.148	2320856.01	592252.563
IP13	5+370.653	2320872.83	592267.517
PC	5+348.148	2320856.01	592252.563
PT	5+393.074	2320887.23	592284.812
IP14	5+450.749	2320923.312	592329.805
PC	5+393.074	2320887.23	592284.812
PT	5+507.634	2320970.636	592362.772
IP15	5+570.718	2321021.858	592399.596
PC	5+610.850	2321054.897	592422.377
IP16	5+632.360	2321072.561	592434.65
PT	5+653.842	2321089.106	592448.395
EP	5+688.888	2321116.567	592470.168

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 05. 17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/2000	B-2-10	
ALIGNMENT LAYOUT (Km 5+800 TO Km 6+218.5)			



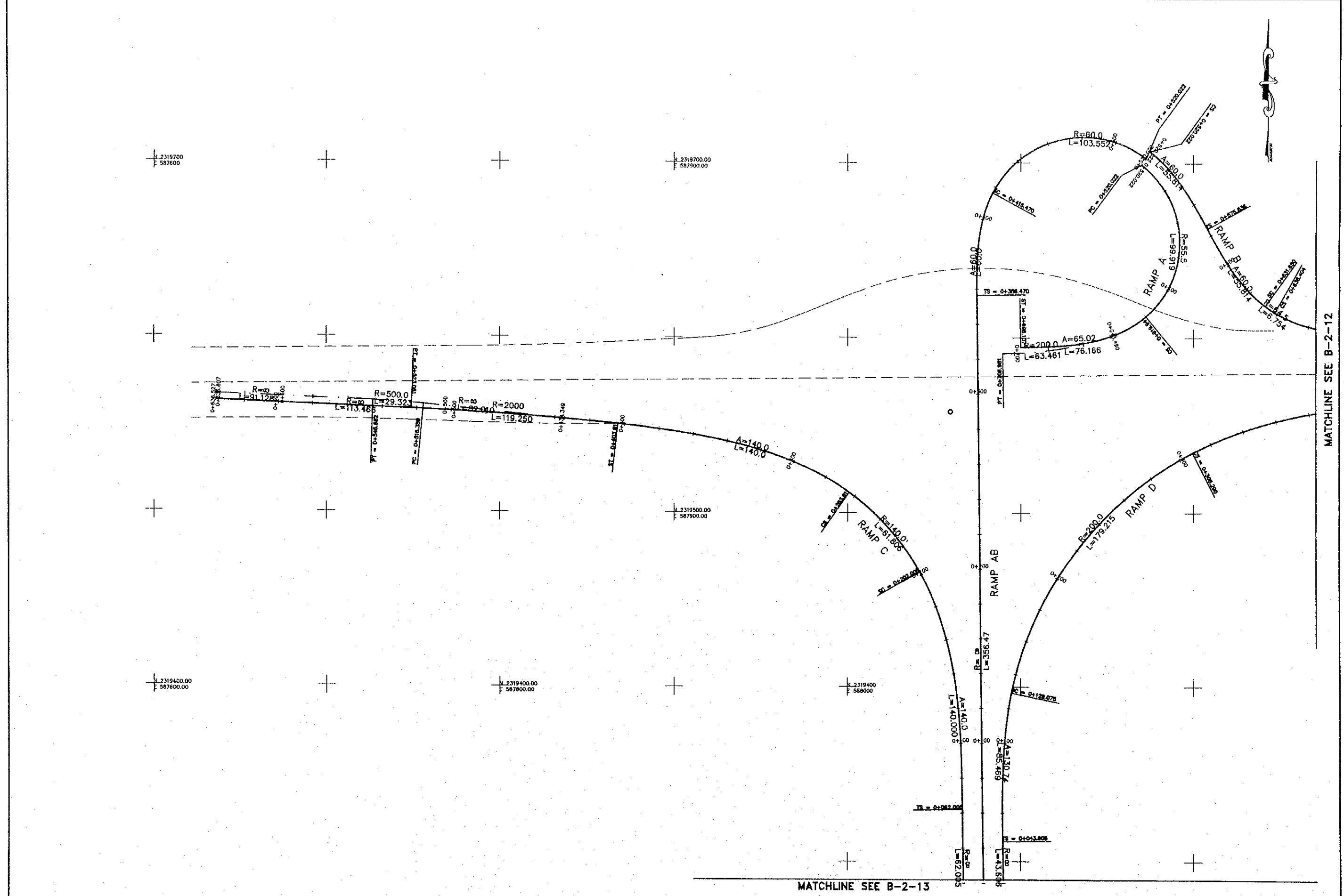
FRONTAGE ROAD (LEFT SIDE)

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
EP	6+143.881	2321550.841	592716.045
STA	6+218.500	2321569.123	592796.046

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THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.02.17	

PACKAGE 3	SCALE 1/2000	DRAWING No. B-2-11	SHEET No.
ALIGNMENT LAYOUT (Phap Van Cau Gio I.C1)			



MATCHLINE SEE B-2-12

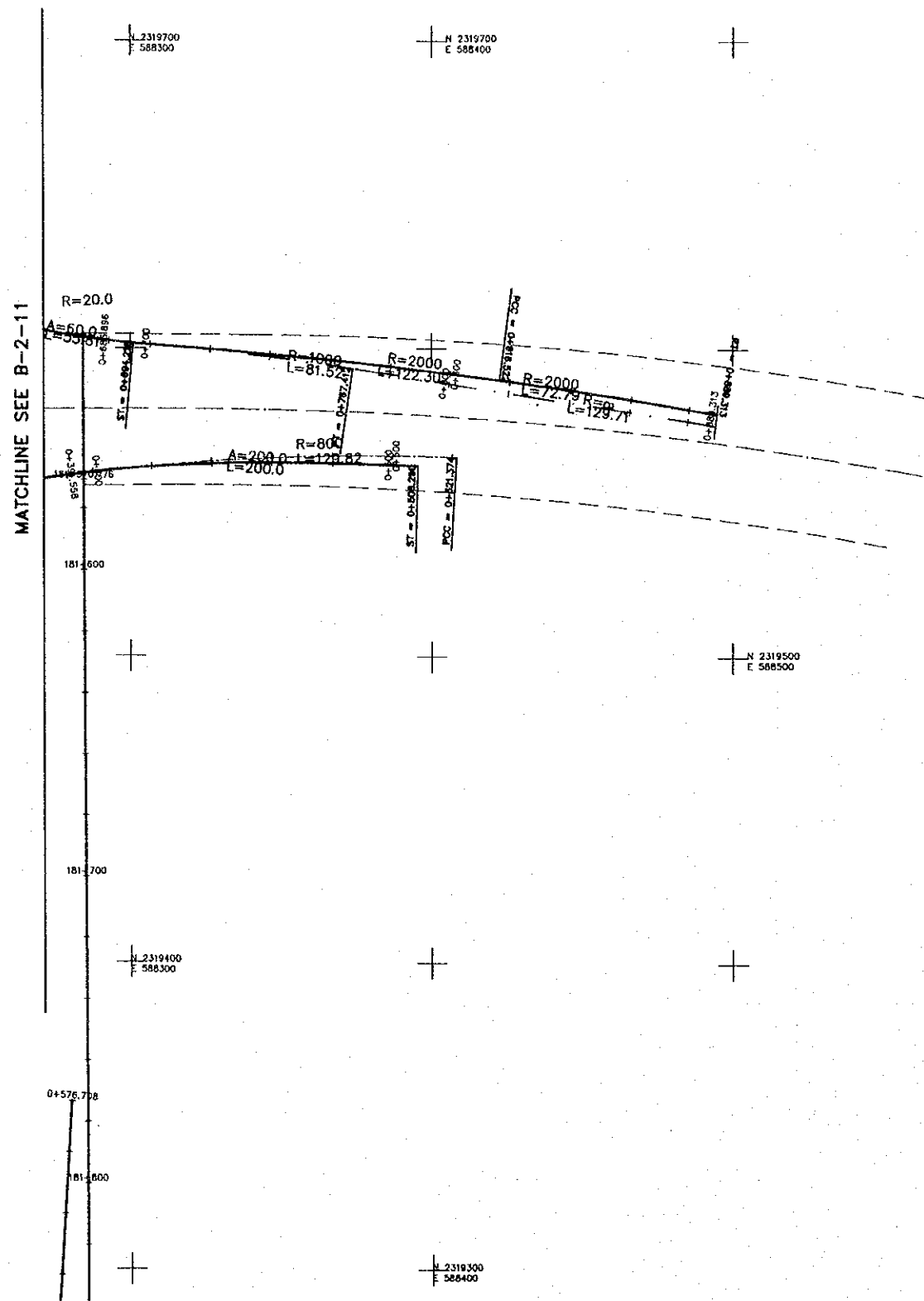
MATCHLINE SEE B-2-13

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.WATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 11. 17

PACKAGE 3	SCALE 1/2000	DRAWING No. B-2-12	SHEET No.
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ALIGNMENT LAYOUT (Phap Van Cau Gio I.C 2)

STAGE 1



RAMP A

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP=PC	0+643.490	2319600.786	588151.690
IP1	0+675.489	2319590.817	588121.283
PT=IP2=EP	0+706.951	2319590.833	588089.283

RAMP B

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP=PC	0+685.896	2319602.416	588292.660
IP1	0+726.676	2319602.416	588333.342
PT=IP2	0+767.412	2319593.455	588373.659
EP	0+889.121	2319575.240	588493.997

RAMP C

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+434.349	2319553.094	587837.506
IP1	0+531.025	2319562.623	587741.301
PC	0+516.359	2319561.177	587755.895
PT	0+545.682	2319563.210	587726.647
EP	0+636.807	2319566.861	587635.595

RAMP D

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP=PC	0+391.558	2319558.471	588278.839
IP1	0+456.609	2319566.865	588343.346
PT=IP2=EP	0+521.374	2319564.278	588408.361

RAMP E

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP=PC	0+373.136	2319133.054	588263.459
IP1	0+411.458	2319169.974	588273.733
PT=IP2	0+449.368	2319208.290	588279.397
EP	0+643.737	2319402.588	588279.659

RAMP F

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP=PC	0+417.617	2318950.007	588263.459
IP1	0+488.266	2318920.693	588272.403
PT=IP2	0+478.441	2318890.045	588272.159
EP	0+478.479	2318890.007	588272.159

RAMP EF

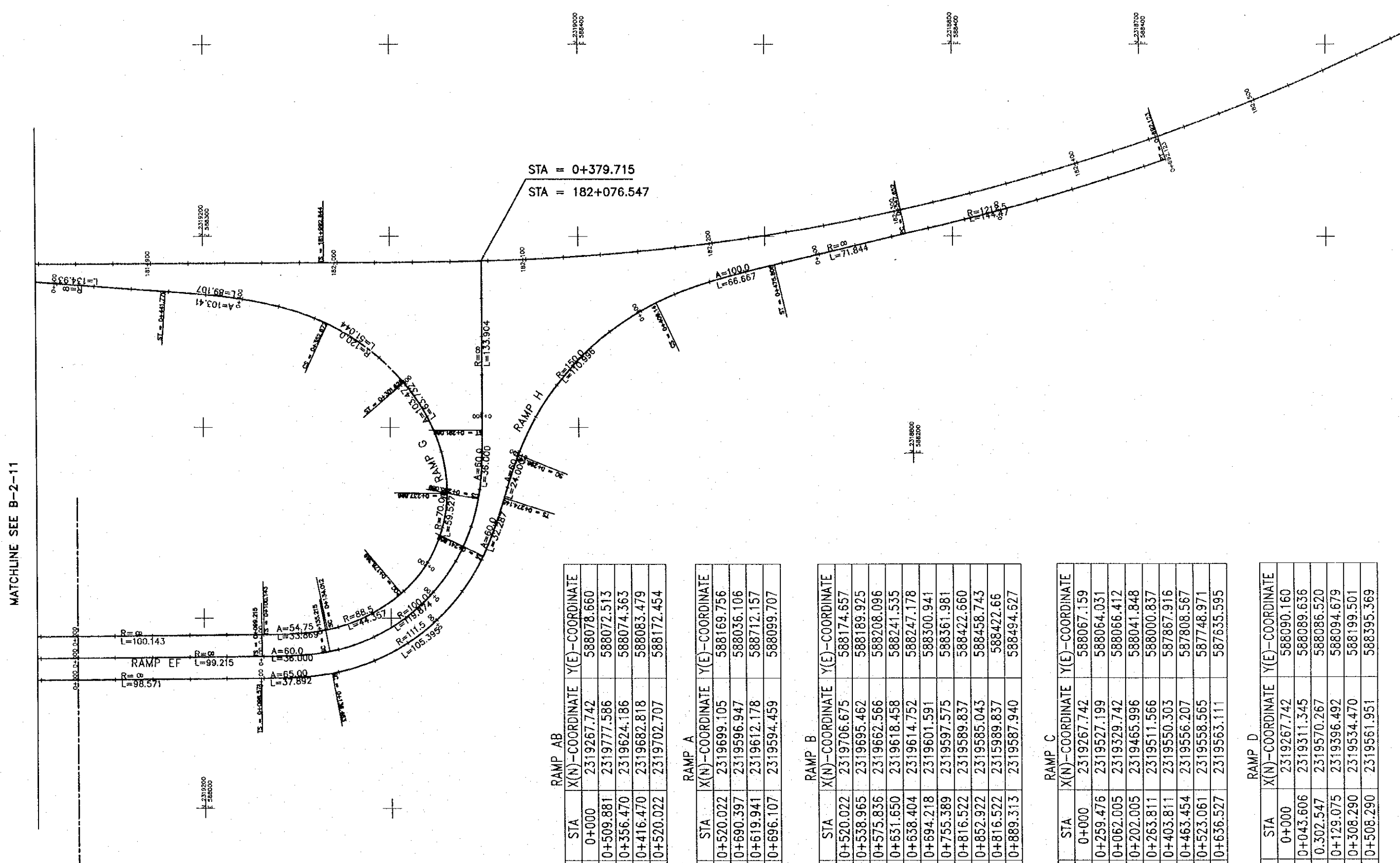
	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+000	2319267.742	588075.660
IP1	0+216.530	2319051.288	588081.271
TS	0+099.215	2319168.534	588079.856
SC	0+135.215	2319132.679	588082.444
CS	0+255.089	2319053.383	588162.702
ST	0+291.089	2319051.228	588198.586
EP	0+379.715	2319051.230	588278.230

RAMP G

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+000	2319267.742	588090.161
IP1	0+148.339	2319119.414	588091.949
TS	0+100.143	2319167.607	588091.368
SC	0+134.012	2319133.889	588093.930
PT=PC	0+178.369	2319094.442	588113.181
CS	0+237.896	2319096.793	588165.406
IP2	0+251.102	2319039.029	588160.293
ST	0+301.628	2319092.718	588223.393
IP3	0+355.963	2319127.928	588264.776
CS	0+352.672	2319132.951	588254.178
CS	0+441.779	2319219.873	588271.146
EP	0+516.606	2319294.509	588276.496

RAMP H

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+000	2319267.742	588067.159
IP1	0+199.028	2319068.729	588069.559
TS	0+98.571	2319169.178	588068.348
SC=SC	0+136.463	2319131.424	588070.945
CS=SC	0+241.858	2319050.893	588132.752
ST=TS	0+274.145	2319039.922	588163.085
SC	0+298.145	2319032.250	588185.819
IP2	0+373.580	2319010.652	588258.114
CS=SC	0+409.141	2318958.403	588265.284
ST	0+475.808	2318894.930	588285.187
IP3=PC=EP	0+547.652	2318824.975	588301.553



MATCHLINE SEE B-2-11

STAGE 2

RAMP AB

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+000	2319267.742	588078.660
IP1	0+509.881	2319777.586	588072.513
TS	0+356.470	2319624.186	588074.363
SC	0+416.470	2319682.818	588083.479
EP	0+520.022	2319702.707	588172.454

RAMP A

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+520.022	2319699.105	588169.756
IP1	0+690.397	2319596.947	588036.106
CS	0+619.941	2319612.178	588712.157
ST=EP	0+696.107	2319594.459	588099.707

RAMP B

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+520.022	2319706.675	588174.657
IP1	0+538.965	2319695.462	588189.925
ST=ST	0+575.836	2319662.566	588208.096
SC	0+631.650	2319618.458	588241.535
CS	0+638.404	2319614.752	588247.178
IP3=PC	0+694.218	2319601.591	588300.941
IP4	0+755.389	2319597.575	588361.981
PT=IP5	0+816.522	2319589.837	588422.660
IP6	0+852.922	2319585.043	588458.743
PC	0+816.522	2319589.837	588422.66
PT=EP	0+889.313	2319587.940	588494.627

RAMP C

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+000	2319267.742	588067.159
IP1	0+259.476	2319527.199	588064.031
TS	0+062.005	2319329.742	588066.412
SC	0+202.005	2319465.996	588041.848
CS	0+263.811	2319511.566	588000.837
ST=IP2=PC	0+403.811	2319550.303	587867.916
IP3	0+463.454	2319556.207	587808.567
PT=IP4	0+523.061	2319558.565	587748.971
EP	0+636.527	2319563.111	587635.595

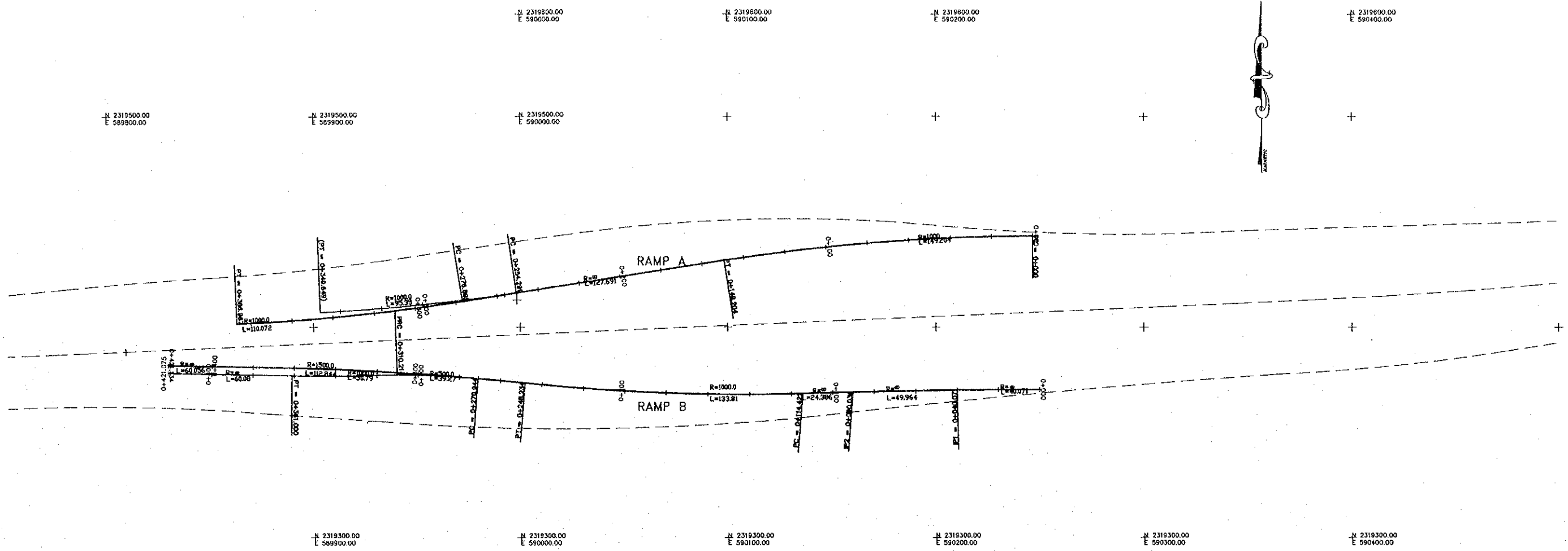
RAMP D

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+000	2319267.742	588090.160
TS=IP1	0+043.606	2319311.345	588089.636
IP2	0.302.547	2319570.267	588086.520
SC	0+129.075	2319396.492	588094.679
CS	0+308.290	2319534.470	588199.501
ST=EP	0+508.290	2319561.951	588395.369

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.17

PACKAGE 3	SCALE 1/2000	DRAWING No. B-2-14	SHEET No.
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ALIGNMENT LAYOUT (Nguyen Tam Trinh 1.C)



STAGE 1

RAMP A

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+000.000	2319443.404	590246.895
IP1	0+074.741	2319443.126	590172.155
PC	0+000.000	2319443.404	590246.895
PT	0+149.204	2319431.741	590098.287
IP2	0+331.986	2319403.898	589917.637
PC	0+276.895	2319412.290	589972.086
PT=EP	0+386.967	2319401.538	589862.596

RAMP B

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP	0+000.000	2319370.233	590250.145
IP1	0+040.071	2319369.960	590210.074
IP2	0+090.036	2319368.954	590160.120
IP3	0+181.428	2319366.408	590068.763
PC	0+114.422	2319368.355	590135.742
PT	0+248.234	2319373.433	590002.126
IP4	0+304.682	2319379.170	589945.970
PC	0+248.234	2319373.433	590002.126
PT	0+361.078	2319380.671	589889.542
EP	0+421.134	2319381.727	589829.495

STAGE 2

RAMP A

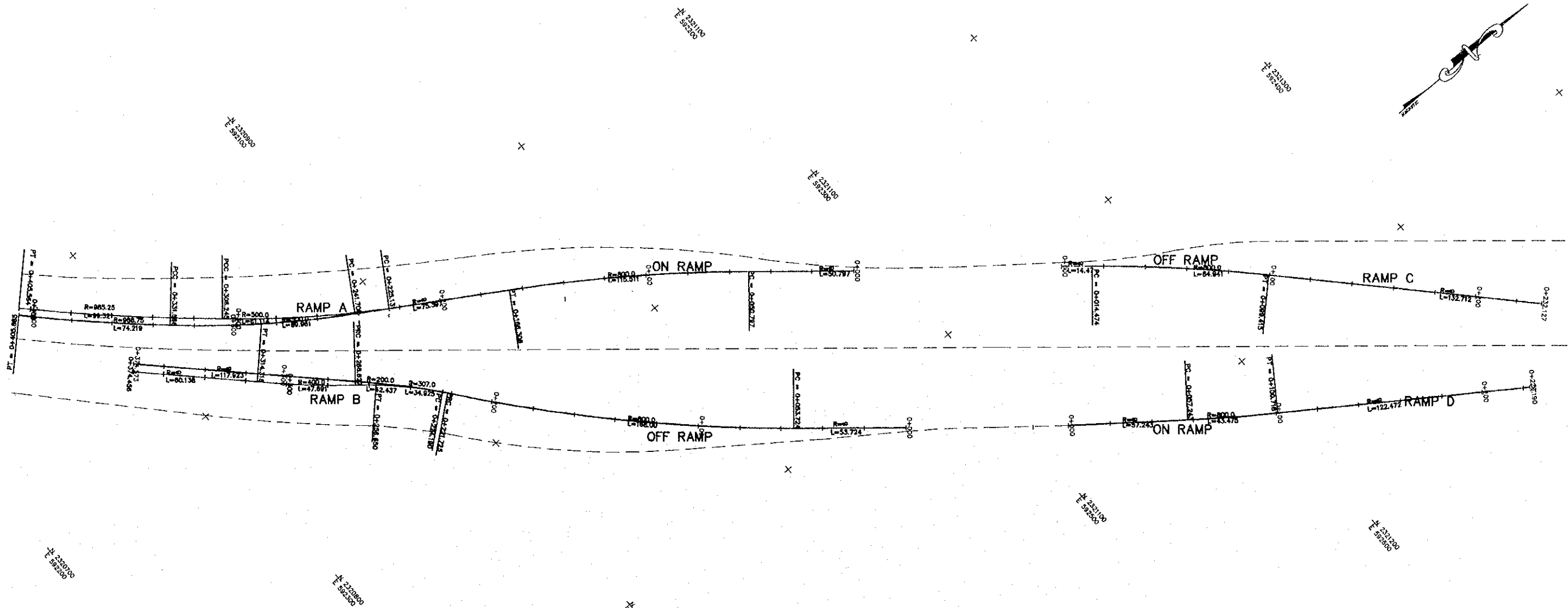
	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP=PC	0+254.299	2319416.309	589998.162
IP1	0+302.010	2319409.410	589950.952
PT=EP	0+349.649	2319407.037	589903.300

RAMP B

	STA	X(N)-COORDINATE	Y(E)-COORDINATE
BP=PC	0+270.944	2319375.572	589979.495
IP1	0+290.589	2319377.215	589959.919
PT=IP2=PC	0+310.214	2319377.317	589940.274
IP3	0+335.613	2319376.474	589914.890
PT	0+361.000	2319376.921	589889.495
EP	0+421.075	2319377.978	589829.429

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.8.17

PACKAGE 3	SCALE 1/2000	DRAWING No. B-2-15	SHEET No.
ALIGNMENT LAYOUT (LINH NAM I.C.)			



STAGE 1

RAMP A			
	STA	X-COORDINATE	Y-COORDINATE
BP	0+000.000	2321084.770	592347.825
IP1	0+108.653	2321001.039	592278.582
PC	0+050.797	2321045.624	592315.453
PT	0+166.308	2320951.612	592248.510
IP2	0+286.807	2320848.669	592185.877
PC	0+241.705	2320887.200	592209.320
PT	0+331.666	2320814.956	592155.918
IP3	0+368.793	2320787.094	592131.379
PC	0+331.666	2320814.956	592155.918
PT	0+405.885	2320761.151	592104.819
EP	0+405.885	2320761.151	592104.819

RAMP B			
	STA	X-COORDINATE	Y-COORDINATE
BP	0+000.000	2321056.013	592421.028
IP1	0+138.035	2320949.640	592333.060
PC	0+053.724	2321014.611	592386.790
PT	0+221.725	2320897.296	592266.966
IP2	0+239.206	2320886.276	592253.396
PC	0+221.725	2320897.296	592266.966
PT	0+256.650	2320873.787	592241.163
EP	0+374.573	2320789.498	592158.695

RAMP C			
	STA	X-COORDINATE	Y-COORDINATE
BP	0+000.000	2321162.721	592410.003
IP1	0+056.985	2321206.634	592446.318
PC	0+014.474	2321173.875	592419.227
PT	0+099.415	2321236.339	592476.729
EP	0+232.127	2321329.070	592571.667

RAMP D			
	STA	X-COORDINATE	Y-COORDINATE
BP	0+000.000	2321116.567	592470.168
IP1	0+078.986	2321179.529	592517.861
PC	0+057.243	2321162.197	592504.733
PT	0+100.718	2321197.548	592530.029
EP	0+223.190	2321299.046	592598.568

STAGE 2

RAMP A			
	STA	X-COORDINATE	Y-COORDINATE
BP=PC	0+225.131	2320901.360	592217.935
IP1	0+265.777	2320866.870	592196.458
PT=IP2=PC	0+306.245	2320836.306	592169.632
IP3	0+355.947	2320798.184	592137.743
PT=EP	0.405.564	2320763.465	592102.179

RAMP B			
	STA	X-COORDINATE	Y-COORDINATE
EP=PC	0+224.190	2320895.735	592265.059
IP1	0+245.488	2320895.167	592248.642
PT=IP2=PC	0+266.627	2320865.446	592235.45
IP3	0+290.501	2320846.776	592220.571
PT=IP4	0+314.318	2320830.008	592203.576
EP	0+374.456	2320787.023	592161.519

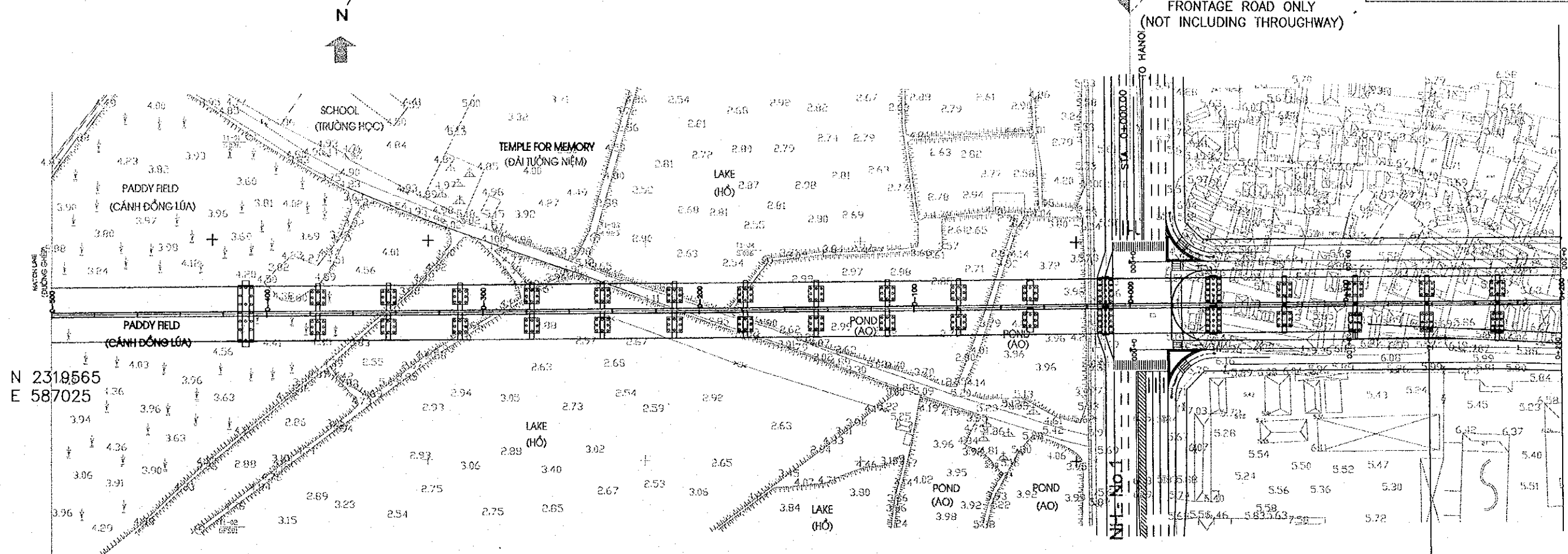
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.01.17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/2000	B-3-1	

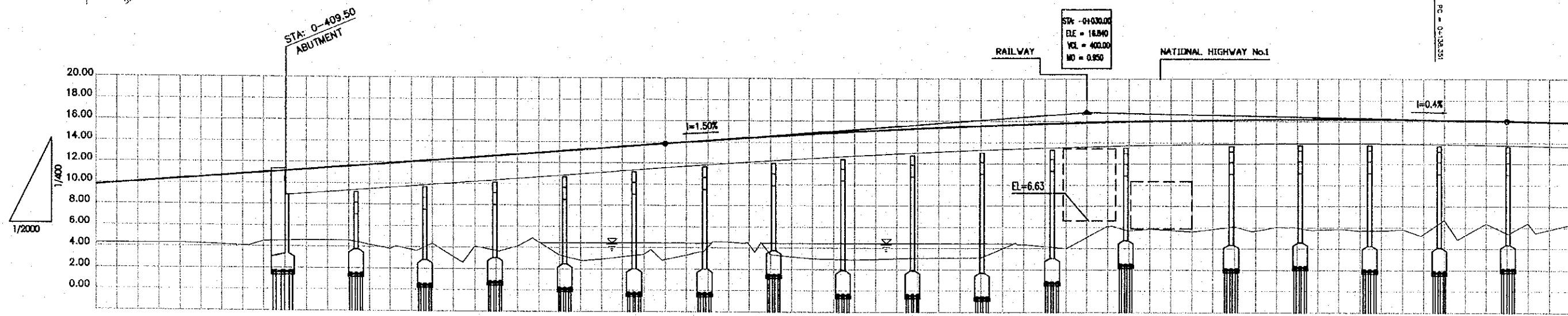
PLAN AND PROFILE (KM 0+500 - KM 0+200)

BEGINNING OF PACKAGE 3

FRONTAGE ROAD ONLY
(NOT INCLUDING THROUGHWAY)



N 2319565
E 587025



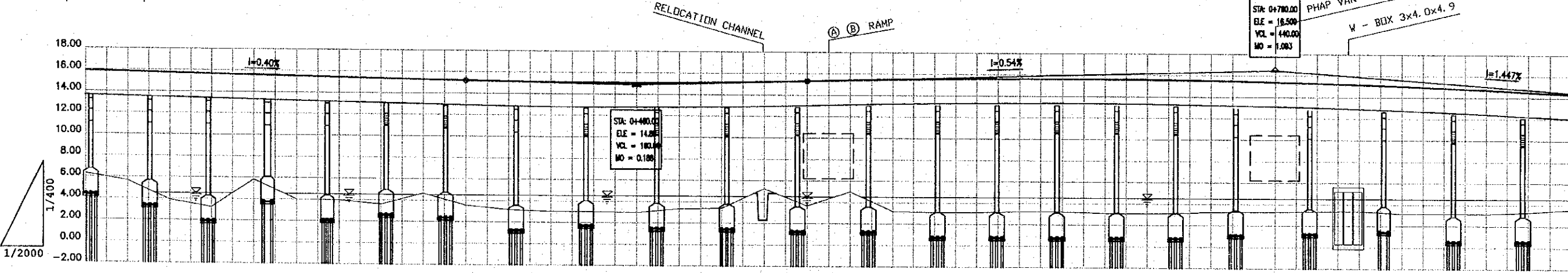
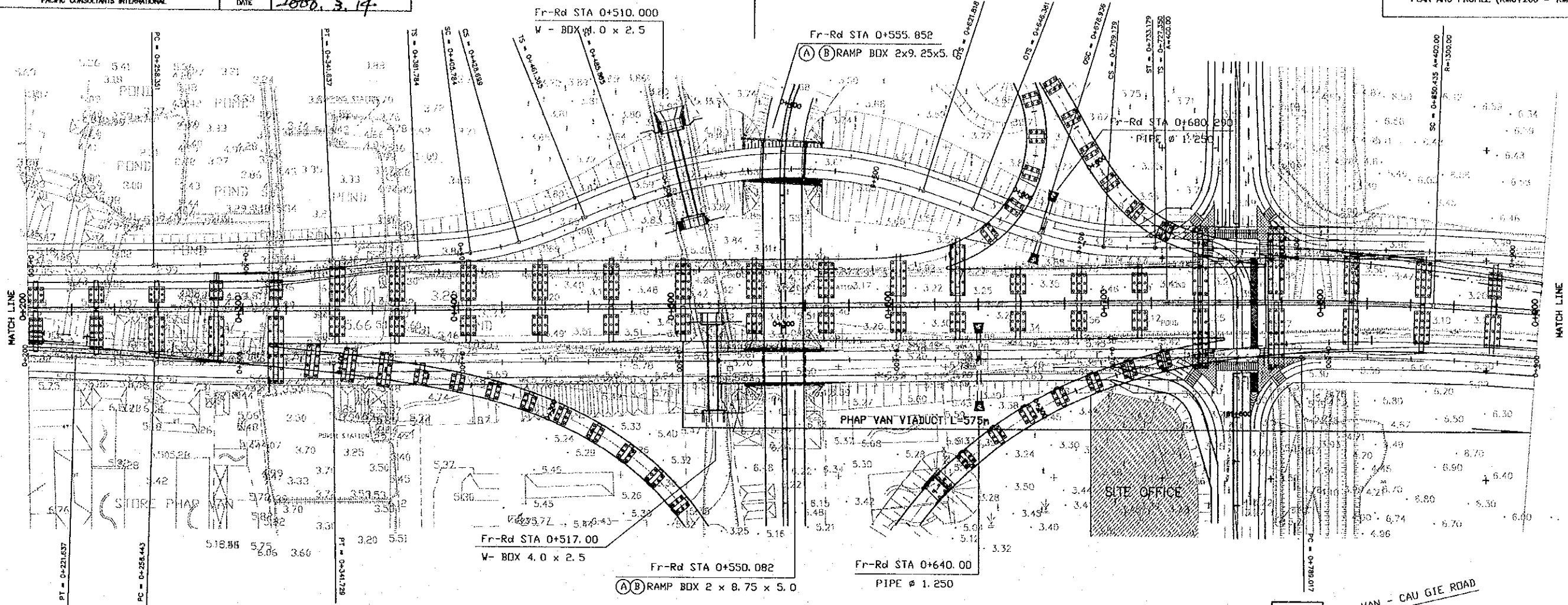
PROPOSED HEIGHT CAO ĐỘ THẾ KẾ	9.790	10.090	10.390	10.690	10.990	11.290	11.590	11.890	12.190	12.491	12.790	13.090	13.390	13.690	13.988	14.289	14.532	14.774	14.998	15.203	15.389	15.556	15.704	15.833	15.942	16.034	16.106	16.159	16.193	16.208	16.204	16.181	16.139	16.078	15.988	15.920		
GROUND LEVEL CAO ĐỘ TỰ NHIÊN	4.30	4.30	4.33	4.19	4.52	4.61	4.60	3.83	4.34	4.10	4.13	3.29	2.92	3.38	3.32	4.57	3.39	3.01	2.90	3.03	3.09	3.13	4.39	4.01	6.09	5.87	5.60	6.09	6.07	5.82	5.68	5.84	6.72	6.40	6.42	6.29		
SUPERELEVATION SIÊU CAO	-																																					
CURVE BAND ĐOẠN THẲNG - ĐOẠN CONG	R = 8																																					
STATION LÝ TRÌNH	0+500	480	460	440	420	0+400	380	360	340	320	0+300	280	260	240	220	0+200	180	160	140	120	0+100	80	60	40	20	0+000	20	40	60	80	0+100	120	140	160	180	0+200		

41

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.14	

FRONTAGE ROAD ONLY
(NOT INCLUDING THROUGHWAY)

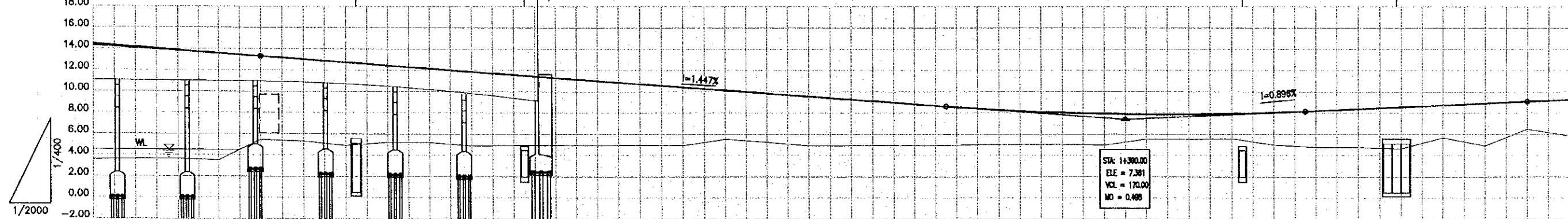
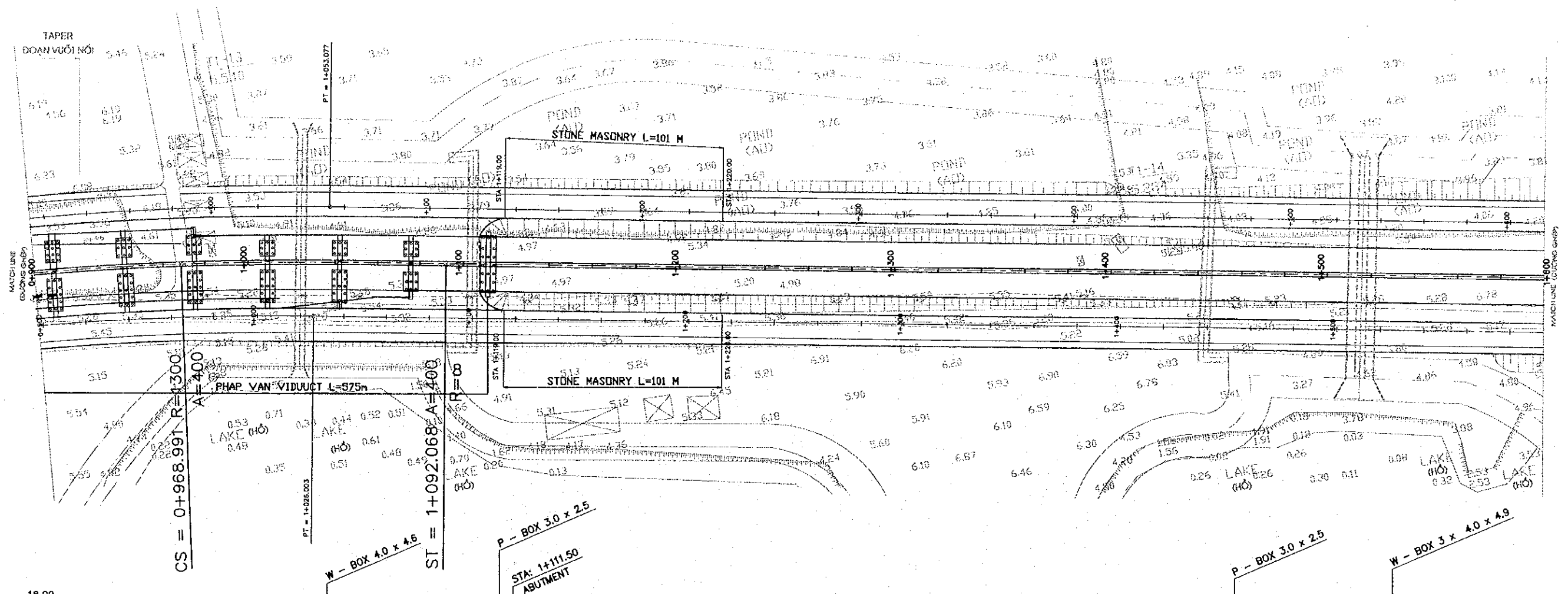
PACKAGE 3	SCALE 1/2000	DRAWING No. B-3-2	SHEET No.
PLAN AND PROFILE (KM+200 - KM 0+900)			



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	15.920	15.840	15.760	15.680	15.600	15.520	15.440	15.360	15.280	15.200	15.132	15.087	15.066	15.068	15.094	15.143	15.216	15.312	15.411	15.492	15.555	15.599	15.626	15.635	15.625	15.598	15.552	15.489	15.407	15.307	15.189	15.053	14.899	14.727	14.537	14.329		
GROUND LEVEL CAO ĐỘ TỰ NHIÊN	6.29	5.65	3.90	3.23	5.82	4.02	3.95	3.60	4.64	3.55	3.17	3.02	3.02	2.95	3.34	3.41	5.25	3.67	4.99	3.17	3.10	3.12	3.22	3.21	3.09	3.07	3.16	3.26	3.28	3.34	3.36	3.14	3.19	3.15	3.29	3.56		
SUPERELEVATION SIÊU CAO																																						
CURVE BAND ĐOẠN THẲNG - ĐOẠN THƯỜNG																																						
STATION LY TRÌNH	0+200	+220	+240	+260	+280	0+300	+320	+340	+360	+380	0+400	+420	+440	+460	+480	0+500	+520	+540	+560	+580	0+600	+620	+640	+660	+680	0+700	+720	+740	+760	+780	0+800	+820	+840	+860	+880	0+900		

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.3.17
CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/2000	DRAWING No. B-3-3	SHEET No.
PLAN AND PROFILE (KM 0+900 - KM 1+600)			

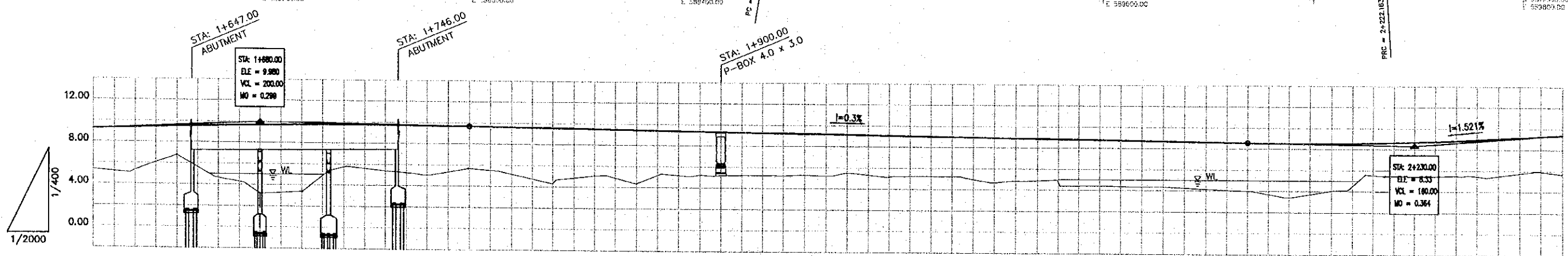
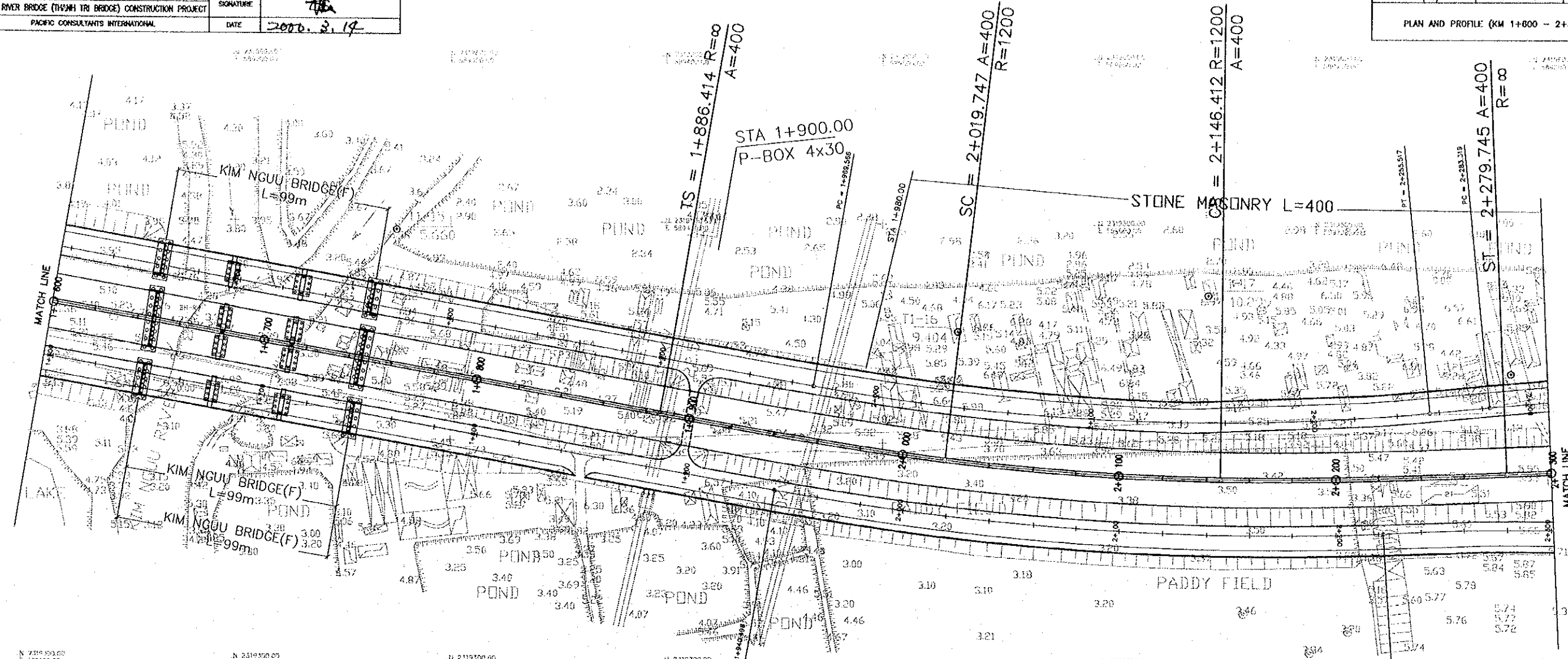


PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	14.329	14.103	13.858	13.596	13.316	13.026	12.737	12.447	12.158	11.868	11.579	11.289	11.000	10.710	10.421	10.131	9.842	9.552	9.263	8.973	8.684	8.410	8.189	8.024	7.913	7.858	7.858	7.914	8.024	8.188	8.367	8.546	8.725	8.905	9.084	9.251								
GROUND LEVEL CAO ĐỘ TỰ NHIÊN	3.56	3.66	3.65	3.53	5.46	5.33	4.92	5.23	5.21	4.91	4.93	4.95	4.93	4.97	4.94	5.53	5.25	4.92	4.93	4.97	4.93	5.02	5.05	5.04	4.97	5.54	5.53	5.58	5.00	4.79	4.76	4.65	5.68	4.92	6.50	5.86								
SUPERELEVATION SẼU CAO	-																				+4%		-4%		-																			
CURVE BAND ĐOẠN THẲNG - ĐOẠN CỒNG	R=1300				A2 = 400.00				R=8																																			
STATION LÝ TRÌNH	0+900	+920	+940	+960	+980	1+000	+020	+040	+060	+080	1+100	+120	+140	+160	+180	1+200	+220	+240	+260	+280	1+300	+320	+340	+360	+380	1+400	+420	+440	+460	+480	1+500	+520	+540	+560	+580	1+600								

43

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.MITAKE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

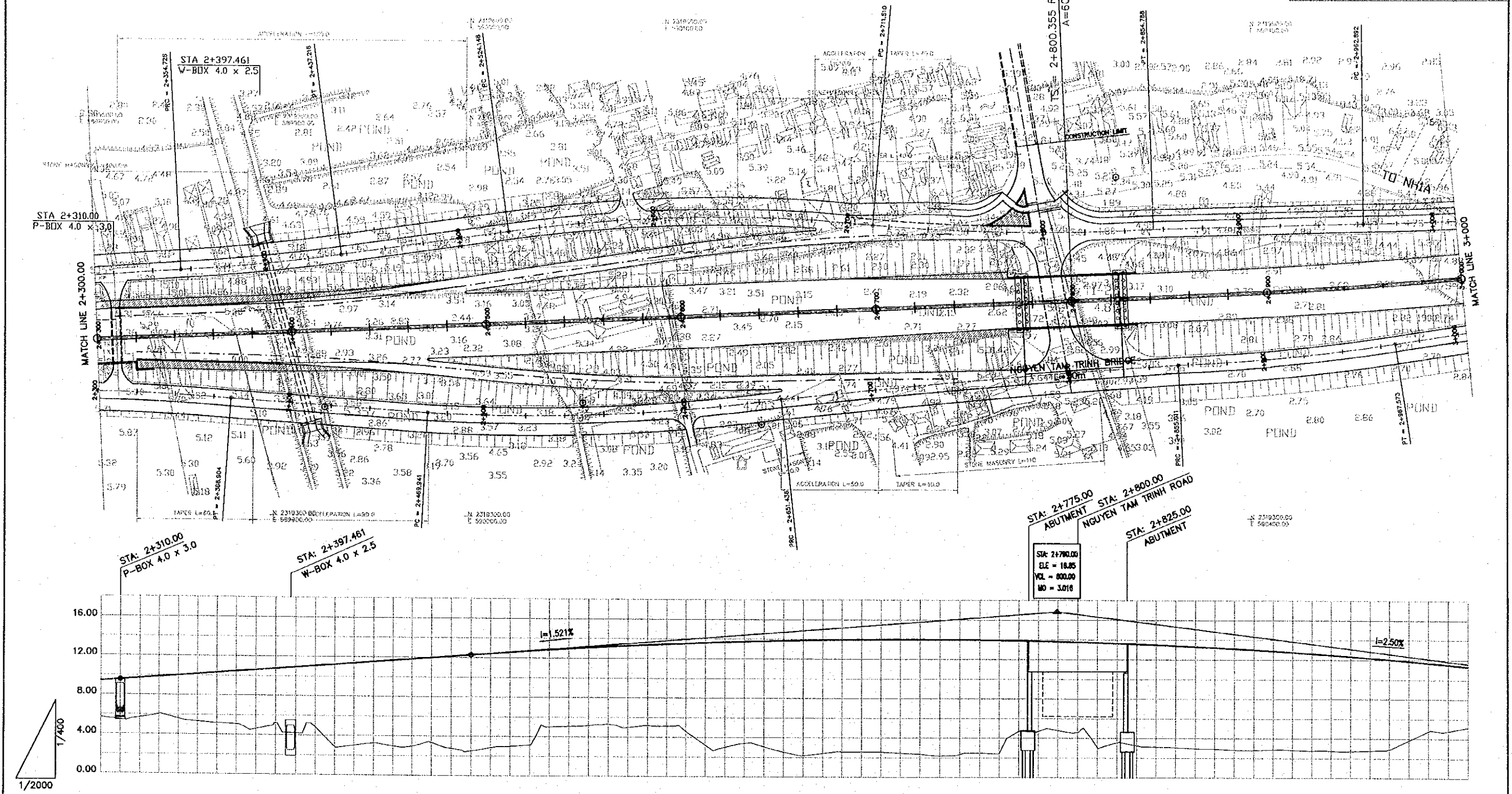
PACKAGE 3	SCALE 1/2000	DRAWING No. B-3-4	SHEET No.
PLAN AND PROFILE (KM 1+600 - 2+300)			



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	9.251	9.394	9.514	9.609	9.681	9.729	9.752	9.752	9.728	9.680	9.639	9.620	9.560	9.500	9.440	9.380	9.320	9.260	9.240	9.200	9.140	9.080	9.020	8.960	8.900	8.860	8.840	8.780	8.720	8.660	8.600	8.546	8.531	8.537	8.562	8.639	8.761	8.929	9.142	9.401		
GROUND LEVEL CAO ĐỘ TỰ NHIÊN	5.36	5.34	6.76	4.65	3.18	3.40	5.49	5.40	5.05	5.67	5.18	4.29	4.15	4.39	5.18	5.21	5.24	5.30	5.48	5.17	5.24	4.97	4.78	4.51	4.45	4.36	4.27	4.08	3.71	3.71	4.50	5.46	5.45	5.46	5.76	5.70						
SUPERELEVATION SIÊU CAO	-																																									
CURVE BAND ĐOẠN THẲNG - ĐOẠN CỎNG	R=∞																		A=400						R=1200						A=400											
STATION LÝ TRÌNH	1+600	+620	+640	+660	+680	1+700	+720	+740	+760	+780	1+800	+820	+840	+860	+880	1+900	+920	+940	+960	+980	2+000	+020	+040	+060	+080	2+100	+120	+140	+160	+180	2+200	+220	+240	+260	+280	2+300						

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. NAITAKE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. NAITAKE
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	<i>[Signature]</i>
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE	2002.3.14

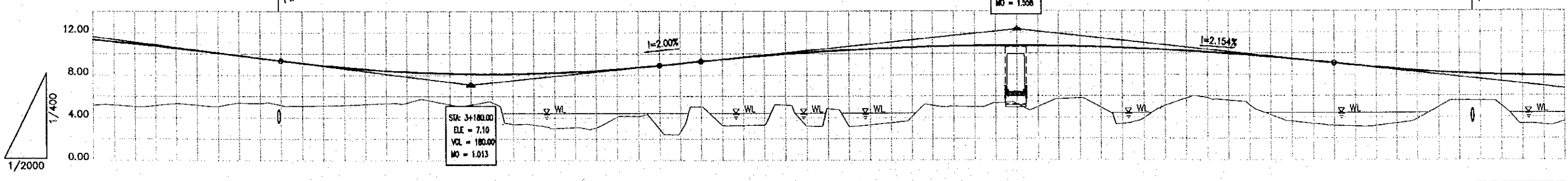
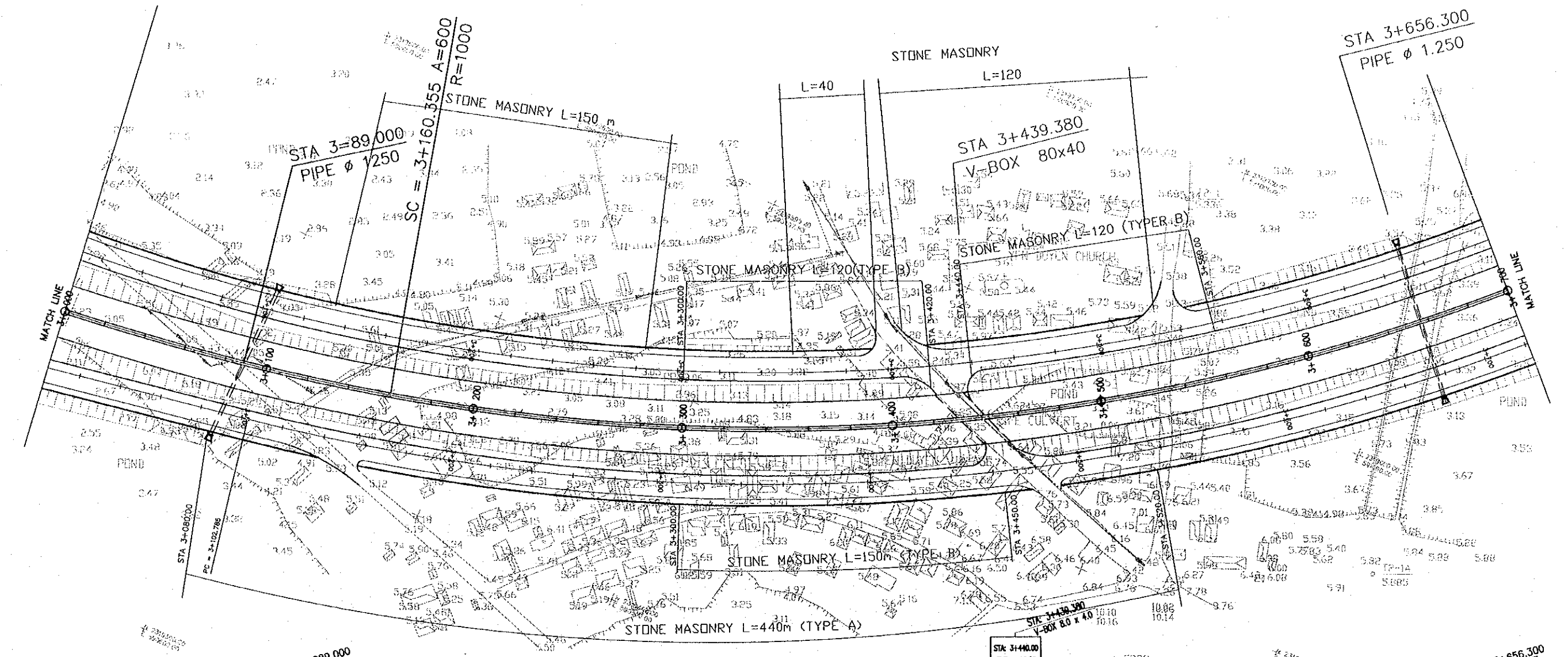
PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/2000	B-3-5	
PLAN AND PROFILE (KM 2+300 - KM 3+000)			



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	9.401	9.699	10.004	10.308	10.612	10.916	11.221	11.525	11.829	12.134	12.435	12.712	12.963	13.187	13.384	13.554	13.697	13.814	13.904	13.967	14.003	14.012	13.995	13.951	13.880	13.782	13.657	13.506	13.327	13.122	12.890	12.632	12.346	12.034	11.695	11.329		
GROUND LEVEL CAO ĐỘ TỰ NHIÊN	5.70	5.70	5.62	5.19	4.63	4.67	2.85	3.25	2.98	2.78	2.86	3.16	5.07	5.31	5.18	4.60	3.00	3.07	2.16	2.57	2.57	2.35	2.35	2.40	4.70	4.55	3.56	3.13	2.97	2.84	2.87	2.74	2.71	2.94	4.77	5.14		
SUPERELEVATION SẼU CAO	-																																					
CURVE BAND ĐOẠN THẲNG - ĐOẠN CỎNG	R=0																																					
STATION LÝ TRÌNH	2+300	+320	+340	+360	+380	2+400	+420	+440	+460	+480	2+500	+520	+540	+560	+580	2+600	+620	+640	+660	+680	2+700	+720	+740	+760	+780	2+800	+820	+840	+860	+880	2+900	+920	+940	+960	+980	3+000		

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.3.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

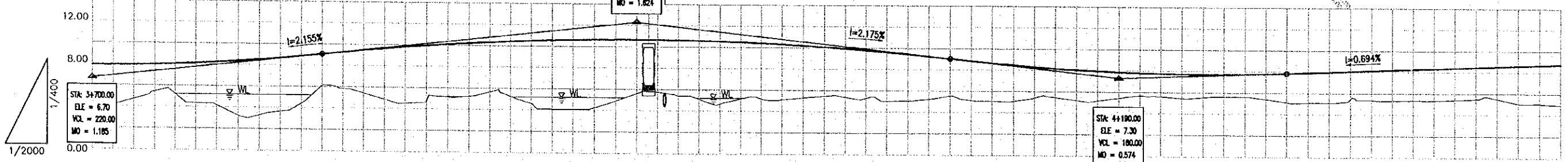
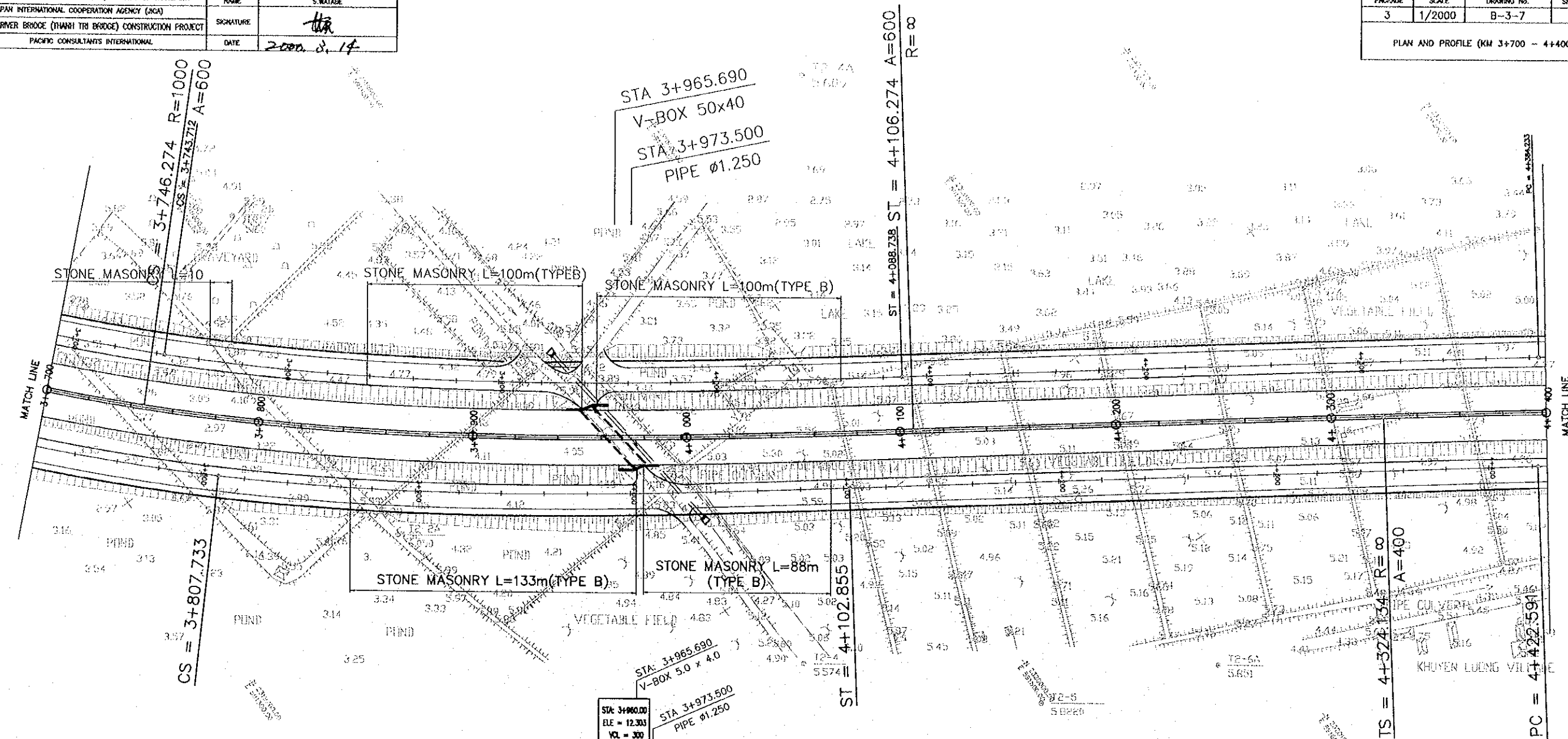
PAGE 3	SCALE 1/2000	DRAWING No. B-3-6	SHEET No.
PLAN AND PROFILE (KM 3+000 - KM 3+700)			



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	11.329	10.936	10.516	10.070	9.597	9.113	8.713	8.413	8.213	8.113	8.113	8.113	8.213	8.413	8.713	9.100	9.493	9.838	10.127	10.361	10.539	10.662	10.730	10.742	10.699	10.601	10.447	10.238	9.973	9.653	9.278	8.864	8.511	8.237	8.041	7.924	7.885
GROUND LEVEL CAO ĐỘ TỰ NHIÊN	5.14	5.05	5.33	5.07	5.35	5.12	5.19	5.35	5.64	4.55	4.07	3.01	3.08	4.13	3.55	3.33	3.26	3.3	3.15	3.85	5.14	5.00	5.25	5.73	4.93	3.93	5.79	5.58	4.21	3.39	3.15	3.41	4.94	5.54	5.37	7.924	3.59
SUPERELEVATION SIÊU CAO																					R=1000																
CURVE BAND ĐOẠN THẲNG - ĐOẠN CỒNG	A=600																				R=1000																
STATION LÝ TRÌNH	3+000	+020	+040	+060	+080	3+100	+120	+140	+160	+180	3+200	+220	+240	+260	+280	3+300	+320	+340	+360	+380	3+400	+420	+440	+460	+480	3+500	+520	+540	+560	+580	3+600	+620	+640	+660	+680	3+700	

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.8.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

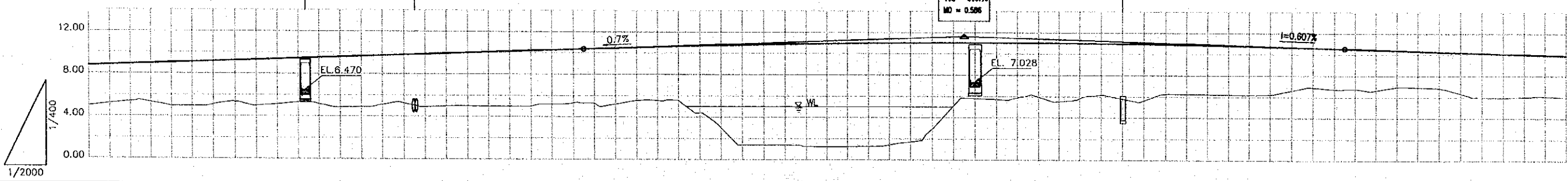
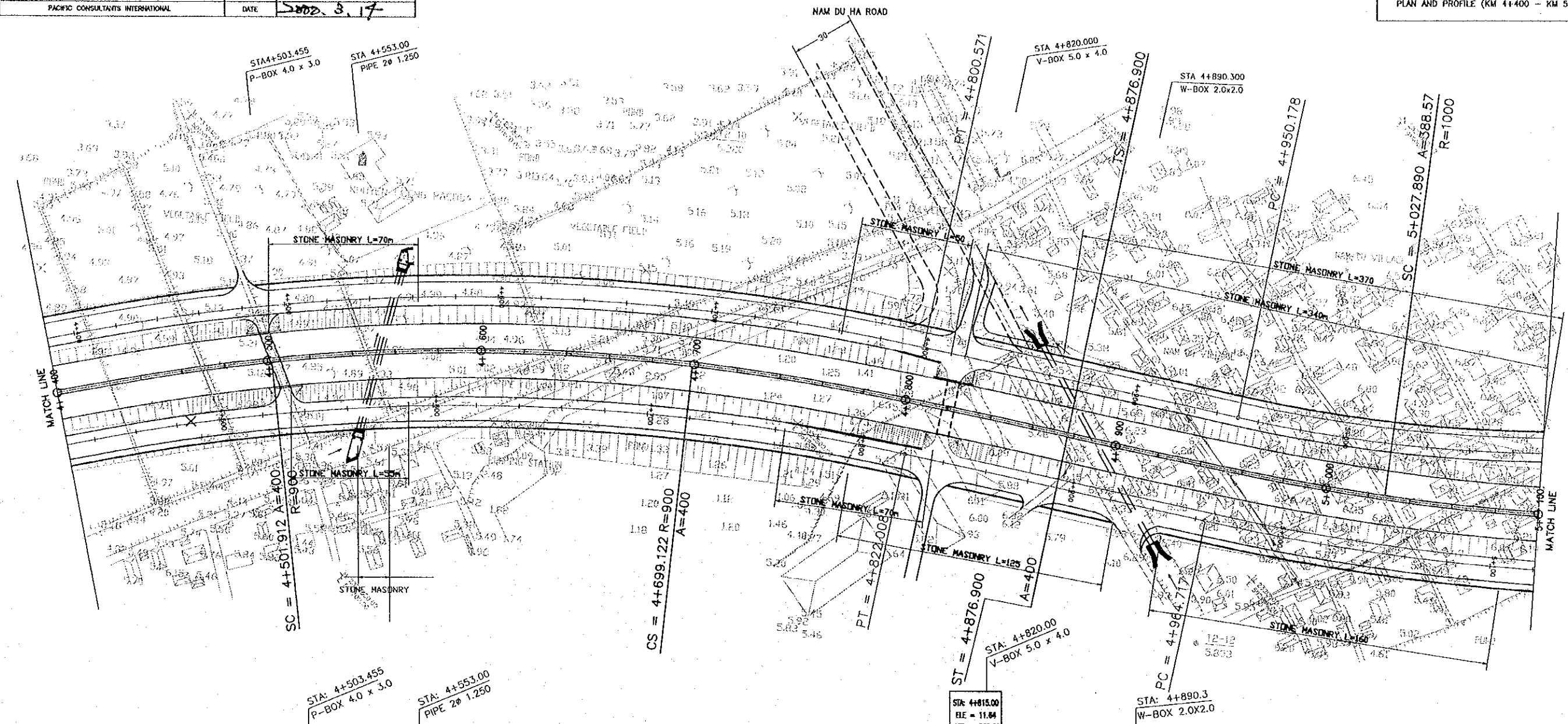
PACKAGE 3	SCALE 1/2000	DRAWING No. B-3-7	SHEET No.
PLAN AND PROFILE (KM 3+700 - 4+400)			



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	7.865	7.924	8.042	8.238	8.512	8.665	9.279	9.652	9.968	10.225	10.425	10.568	10.652	10.679	10.648	10.56	10.413	10.209	9.947	9.628	9.250	8.832	8.468	8.177	7.957	7.609	7.733	7.728	7.795	7.925	8.064	8.203	8.342	8.480	8.619	8.756			
GROUND LEVEL CAO ĐỘ TỰ NHIÊN	3.59	4.72	5.23	4.20	3.30	4.44	5.85	4.98	4.75	5.25	5.27	4.09	4.24	5.60	5.42	4.68	5.18	5.30	5.39	5.03	5.22	5.14	5.08	5.45	5.17	5.70	5.46	5.63	5.42	5.10	5.49	5.33	5.35	5.49	5.08	4.97			
SUPERELEVATION SIÊU CAO	-3%			-3%																																			
CURVE BAND ĐOẠN THANG- ĐOẠN CÔNG				STA 3+746.274																																			
STATION LÝ TRÌNH	3+700	+720	+740	+760	+780	3+800	+820	+840	+860	+880	3+900	+920	+940	+960	+980	4+000	+020	+040	+060	+080	4+100	+120	+140	+160	+180	4+200	+220	+240	+260	+280	4+300	+320	+340	+360	+380	4+400			

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. WATABE
PROJECT	RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2002. 3. 17

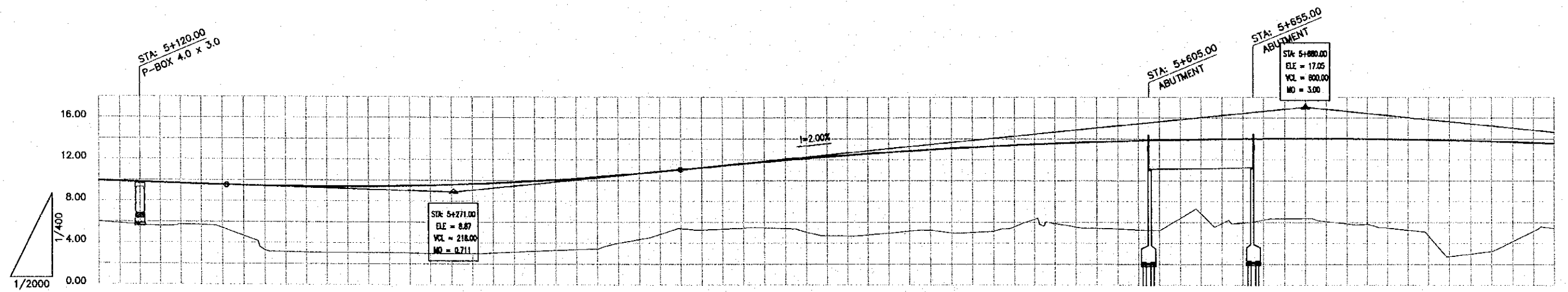
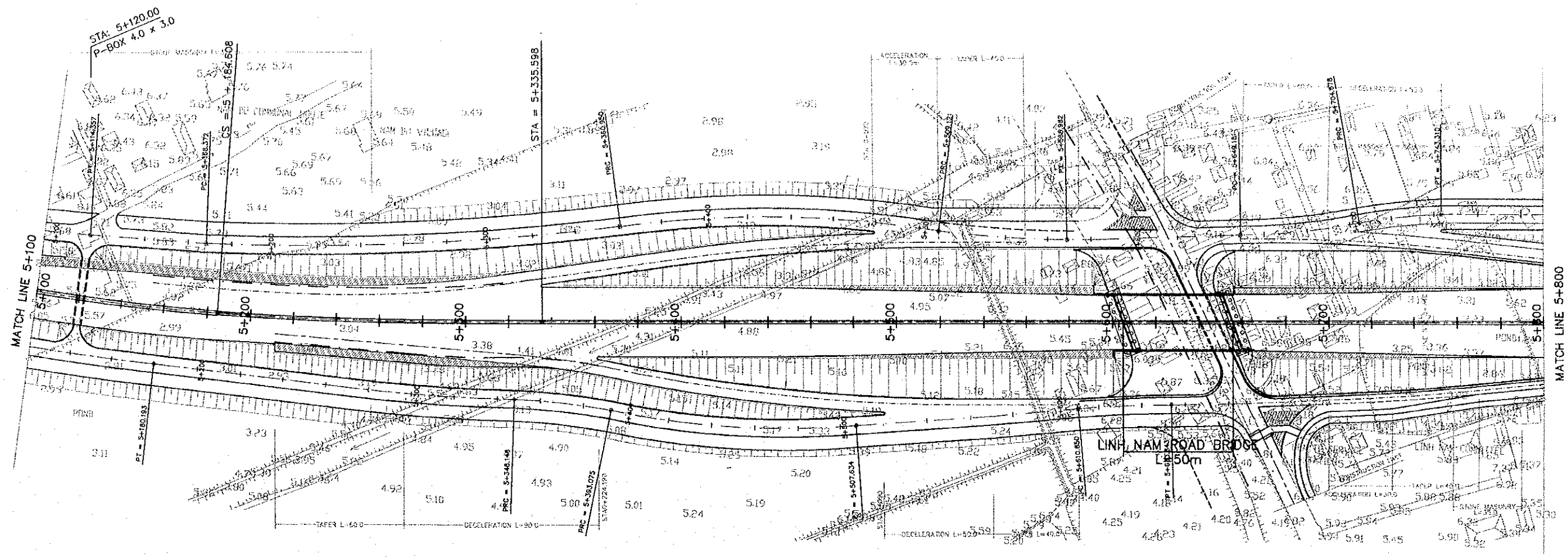
PACKAGE	SCALE	DRAWING No.	SHEET No.
3		B-3-8	
PLAN AND PROFILE (KM 4+400 - KM 5+100)			



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	8.758	8.897	9.036	9.175	9.314	9.453	9.592	9.730	9.869	10.008	10.147	10.286	10.424	10.562	10.666	10.765	10.860	10.920	10.976	11.017	11.044	11.056	11.054	11.037	11.006	10.960	10.900	10.826	10.737	10.634	10.516	10.395	10.273	10.152	10.030	9.909		
GROUND LEVEL CAO ĐỘ TỰ NHIÊN	4.97	5.38	4.95	5.10	4.98	5.33	4.86	5.11	4.91	5.00	4.96	5.19	5.29	5.55	5.56	3.01	1.38	1.26	1.26	1.42	2.93	5.79	5.88	5.52	6.15	5.63	6.24	6.21	6.23	6.88	6.75	6.94	6.87	6.00	6.03	5.99		
SUPERELEVATION SIÊU CAO	-																																					
CURVE BAND ĐOẠN THẲNG- ĐOẠN CỒNG	A=400										A=400										A=388.57										R=1000							
STATION LY TRÌNH	4+400	4+420	4+440	4+460	4+480	4+500	4+520	4+540	4+560	4+580	4+600	4+620	4+640	4+660	4+680	4+700	4+720	4+740	4+760	4+780	4+800	4+820	4+840	4+860	4+880	4+900	4+920	4+940	4+960	4+980	5+000	5+020	5+040	5+060	5+080	5+100		

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE 2011.3.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

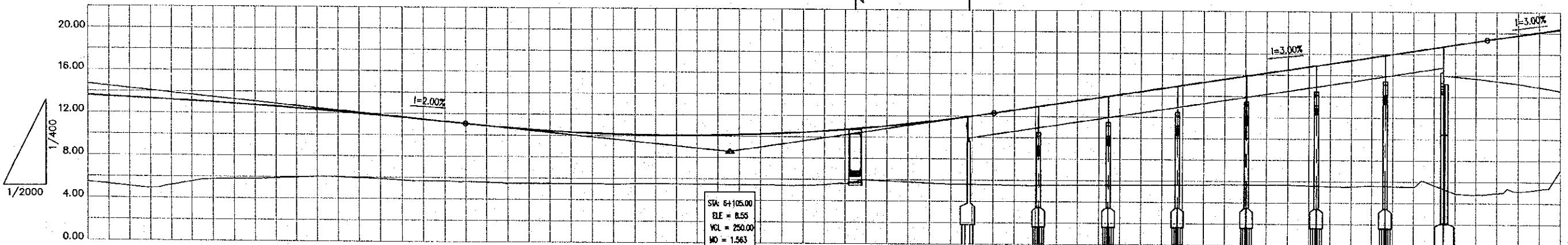
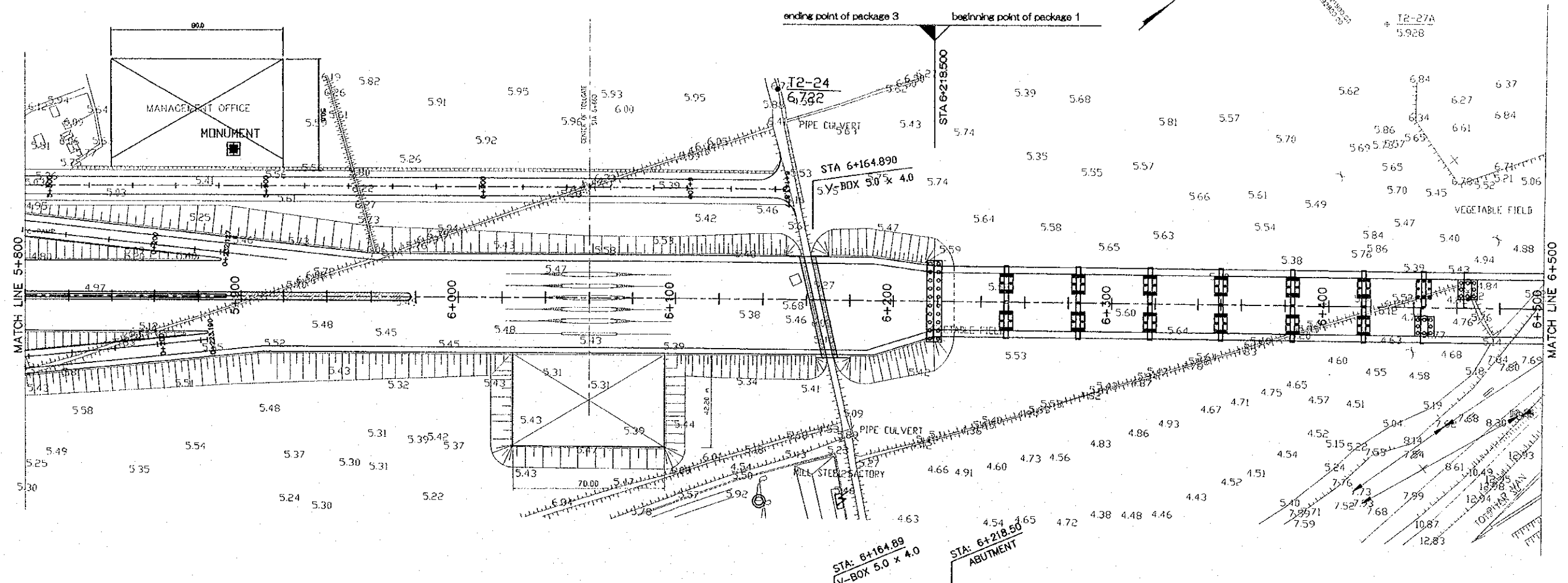
PACKAGE 3	SCALE 1/2000	DRAWING No. B-3-9	SHEET No.
PLAN AND PROFILE (KM 5+100 - KM 5+800)			



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	9.909	9.787	9.666	9.544	9.442	9.388	9.381	9.422	9.511	9.648	9.833	10.065	10.346	10.674	11.050	11.437	11.797	12.130	12.437	12.717	12.970	13.197	13.397	13.570	13.717	13.837	13.930	13.997	14.037	14.050	14.037	13.997	13.930	13.837	13.717	13.570						
GROUND LEVEL CAO ĐỘ TỰ NHIÊN	5.99	5.68	5.75	5.43	3.33	3.11	3.06	3.06	3.00	3.00	3.15	3.31	3.48	4.36	5.40	5.36	5.48	5.07	4.70	4.97	5.26	5.04	5.59	5.88	5.45	5.28	6.39	5.92	6.24	6.40	5.88	5.47	3.89	2.99	4.19	5.46						
SUPERELEVATION SIÊU CAO																					R=1000																					
CURVE BAND ĐOẠN THẲNG - ĐOẠN CỎNG																					STA 5+184.608																					
STATION LY TRÌNH	5+100	+120	+140	+160	+180	5+200	+220	+240	+260	+280	5+300	+320	+340	+360	+380	5+400	+420	+440	+460	+480	5+500	+520	+540	+560	+580	5+600	+620	+640	+660	+680	5+700	+720	+740	+760	+780	5+800						

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	CHECKED BY	APPROVED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME		
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE		
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE	01.6.1	

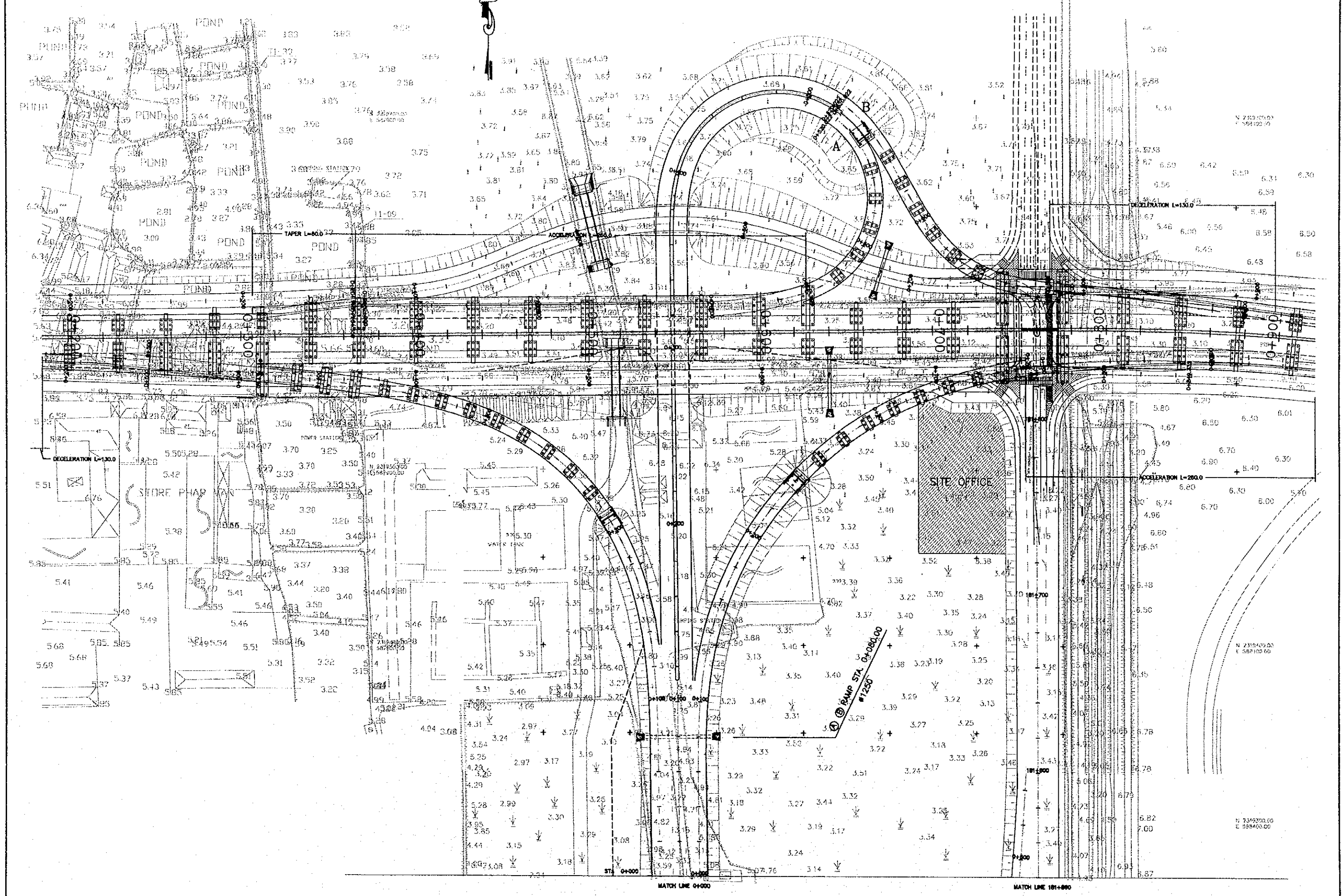
PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/2000	B-3-10	
PLAN AND PROFILE (KM 5+800 - KM 6+500)			



PROPOSED HEIGHT cao 3' thi ki	13.570	13.397	13.197	12.970	12.717	12.437	12.130	11.797	11.437	11.050	10.690	10.410	10.210	10.090	10.050	10.090	10.210	10.410	10.690	11.050	11.490	12.010	12.600	13.200	13.800	14.400	15.000	15.600	16.200	16.800	17.400	18.000	18.600	19.200	19.792	20.359
GROUND LEVEL cao 3' thi th	5.46	5.08	5.19	5.75	5.81	5.95	6.01	5.85	5.69	5.62	5.48	5.48	5.47	5.48	5.50	5.46	5.43	5.43	5.61	5.87	5.68	5.58	5.52	5.53	5.56	5.60	5.62	5.66	5.67	5.60	5.51	5.55	5.68	4.81	5.10	7.06
SUPERELEVATION siu cao																																				
CURVE BAND so/n thi nh - so/n CONG	R=18																																			
STATION 1' thi nh	5+800	+820	+840	+860	+880	+900	+920	+940	+960	+980	6+000	+020	+040	+060	+080	6+100	+120	+140	+160	+180	6+200	+220	+240	+260	+280	6+300	+320	+340	+360	+380	6+400	+420	+440	+460	+480	6+500

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.9.14

PACKAGE 3	SCALE 1/2000	DRAWING No. B-3-11	SHEET No.
PIAP VAN - CAU GIE INTERCHANGE (1/2)			



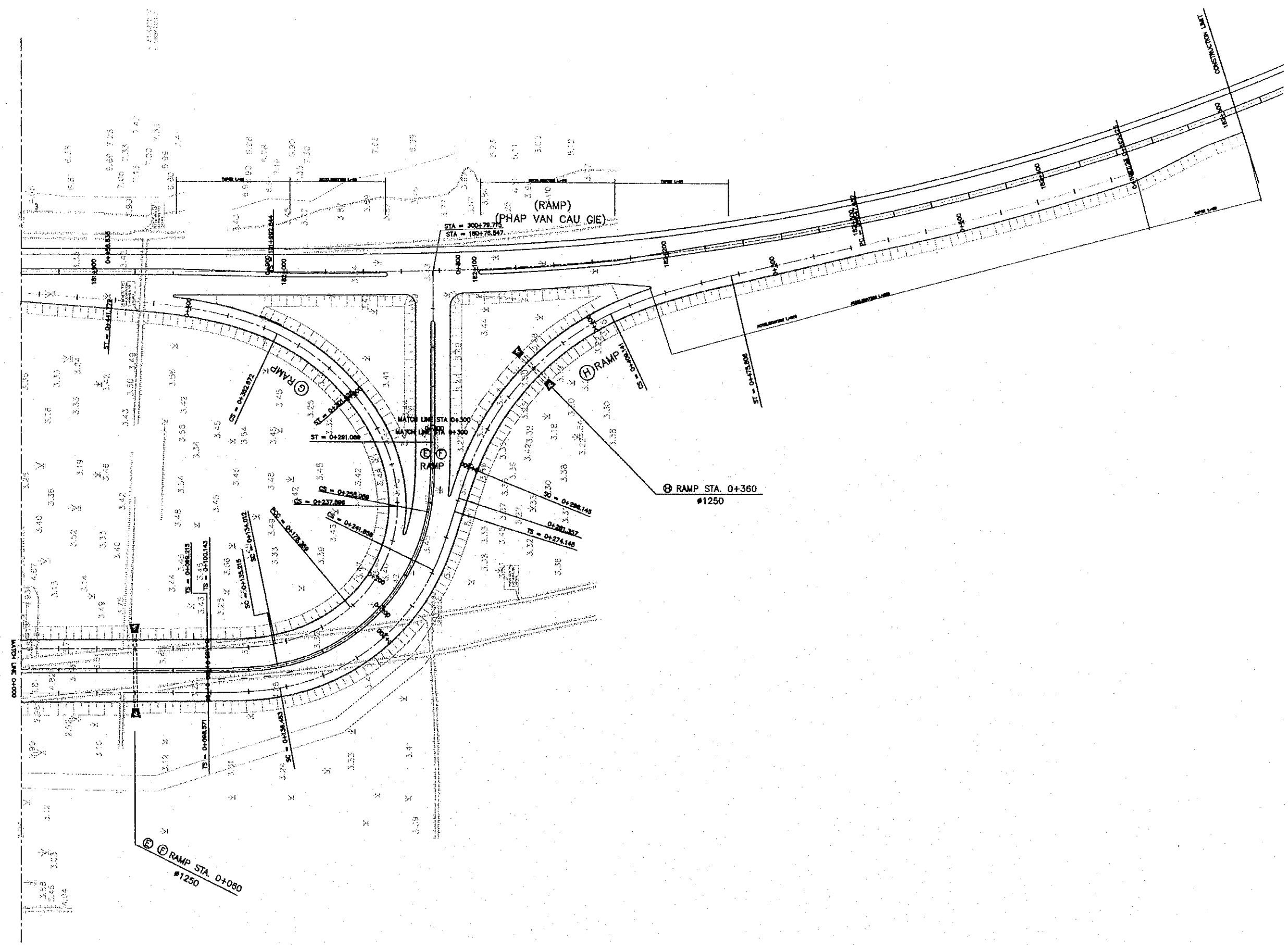
51

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM
 THANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT
 CONSULTING PACIFIC CONSULTANTS INTERNATIONAL

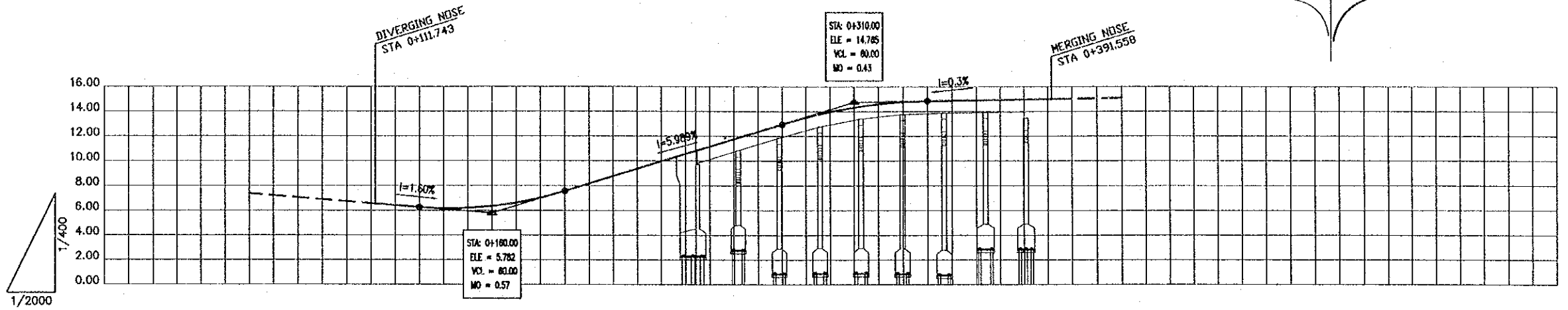
DESIGNED BY
 NAME S. MATSUDA
 SIGNATURE *[Signature]*
 DATE 2002.3.17

PACKAGE	SCALE	DRAWING No.	SHEET No.
4	1/2000	B-3-12	

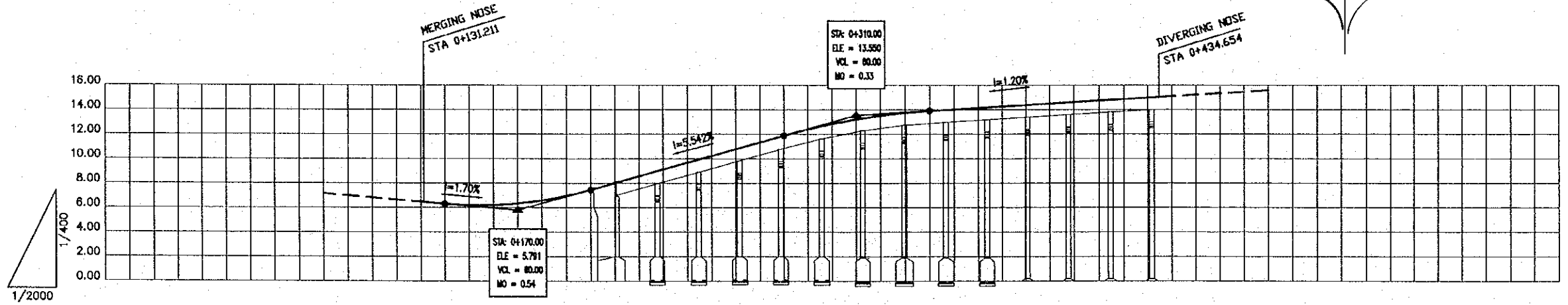
PHAP VAN - CAU GIE INTERCHANGE (2/2)



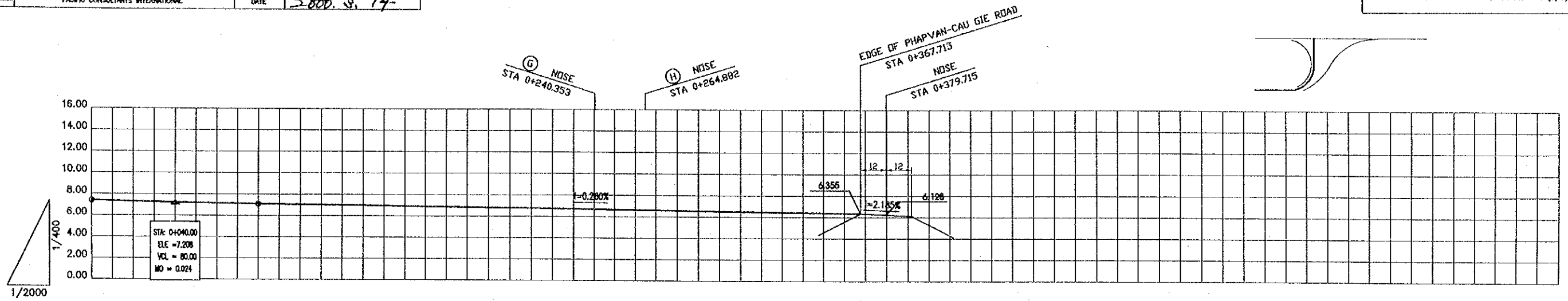
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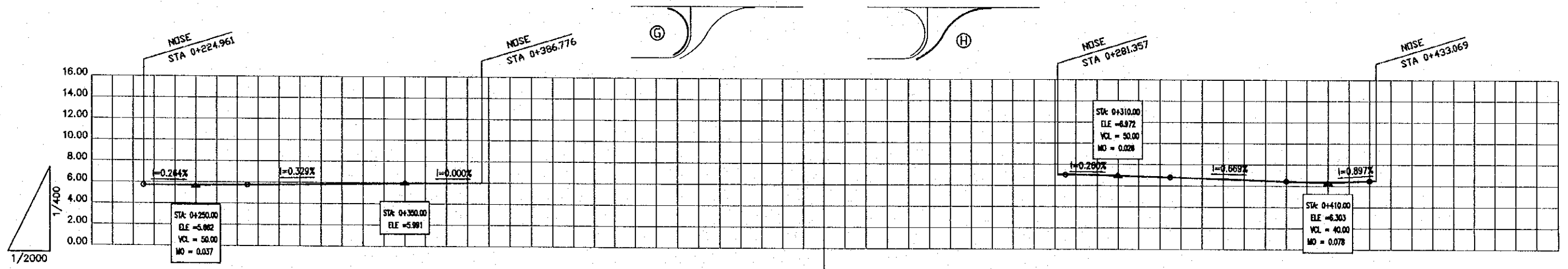
PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ		6.584	6.422	6.282	6.165	6.195	6.351	6.634	7.043	7.579	8.177	8.776	9.375	9.974	10.573	11.172	11.771	12.37	12.968	13.52	13.977	14.339	14.606	14.778	14.856	14.887	14.917	14.947	14.978	15.093	
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																															
SUPERELEVATION SẼU CAO		[Super-elevation diagram showing curves and transition points]																													
CURVE BAND ĐOẠN THẲNG ĐOẠN CONG		[Curve data: R=∞, A=130.74, R=200.00, A=200.00, R=1283.50]																													
STATION LÝ TRÌNH	0+000	+020	+040	+060	+080	0+100	+120	+140	+160	+180	0+200	+220	+240	+260	+280	0+300	+320	+340	+360	+380	0+400	+420	+440	+460	+480	0+500	+520	+540	+560	+580	0+600



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ		6.45	6.301	6.191	6.202	6.334	6.587	6.96	7.454	8.008	8.562	9.116	9.67	10.225	10.779	11.333	11.887	12.405	12.851	13.224	13.525	13.754	13.91	14.03	14.15	14.27	14.39	14.51	14.63	14.75	14.87	14.99	15.046
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																	
SUPERELEVATION SẼU CAO		[Super-elevation diagram showing curves and transition points]																															
CURVE BAND ĐOẠN THẲNG ĐOẠN CONG		[Curve data: R=∞, A=140.00, R=140.00, A=140.00, R=2000]																															
STATION LÝ TRÌNH	0+000	+020	+040	+060	+080	0+100	+120	+140	+160	+180	0+200	+220	+240	+260	+280	0+300	+320	+340	+360	+380	0+400	+420	+440	+460	+480	0+500	+520	+540	+560	+580	0+600		



PROPOSED HEIGHT CAO ĐỘ THIỆT KẾ	7.408	7.359	7.314	7.271	7.232	7.195	7.162	7.131	7.104	7.078	7.052	7.026	7.000	6.974	6.948	6.922	6.896	6.870	6.844	6.818	6.792	6.766	6.739	6.713	6.687	6.661	6.635	6.609	6.583	6.557	6.531	6.505	6.479	6.453	6.427	6.401	6.375	6.355														
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																																				
SUPERELEVATION SIÊU CAO																																																				
CURVE BAND ĐOẠN THẮNG																																																				
ĐOẠN CÔNG																																																				
STATION LÝ TRÌNH	0+000	+020	+040	+060	+080	+100	+120	+140	+160	+180	+200	+220	+240	+260	+280	+300	+320	+340	+360	+380	+400	+420	+440	+460	+480	+500	+520	+540	+560	+580	+600	+620	+640	+660	+680	+700																

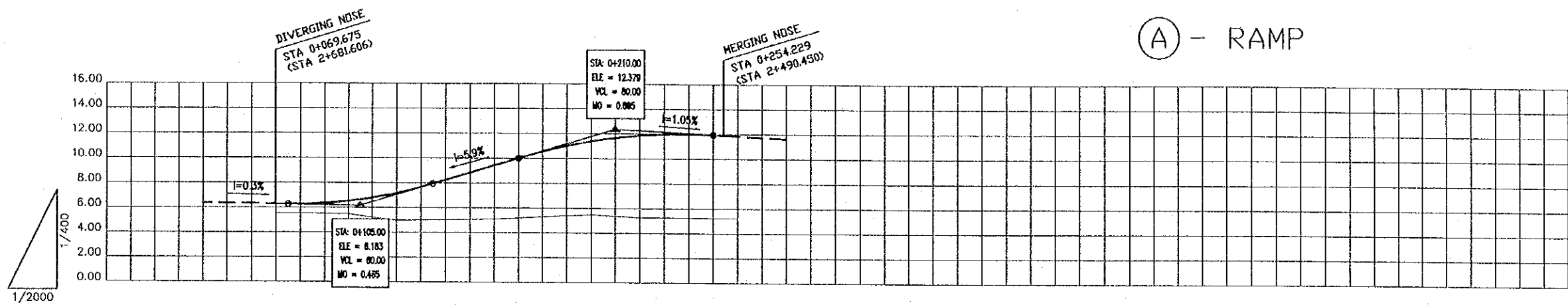


PROPOSED HEIGHT CAO ĐỘ THIỆT KẾ	5.728	5.716	5.702	5.699	5.708	5.729	5.755	5.777	5.799	5.822	5.844	5.866	5.888	5.910	5.932	5.954	5.976	5.991	7.046	7.023	6.989	6.946	6.896	6.837	6.771	6.704	6.637	6.57	6.504	6.437	6.389	6.381	6.412	6.483	6.510																			
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																																						
SUPERELEVATION SIÊU CAO																																																						
CURVE BAND ĐOẠN THẮNG																																																						
ĐOẠN CÔNG																																																						
STATION LÝ TRÌNH	0+200	+220	+240	+260	+280	+300	+320	+340	+360	+380	+400	+420	+440	+460	+480	+500	0+200	+220	+240	+260	+280	+300	+320	+340	+360	+380	+400	+420	+440	+460	+480	+500																						

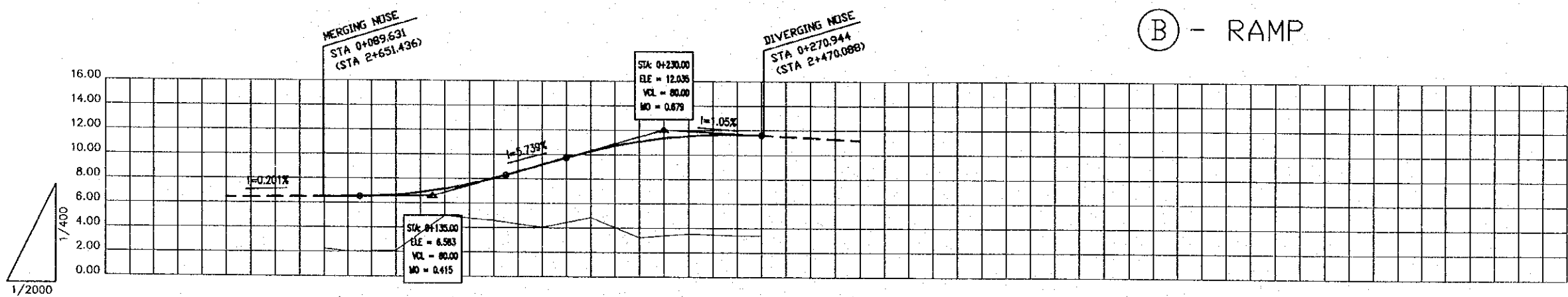
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATASE	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	2000.3.14		

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	AS SHOWN	B-3-17	

A/B RAMP OF NGUYEN TAM TRINH INTERCHANGE



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ			6.288	6.271	6.344	6.521	6.901	7.184	7.671	8.248	8.838	9.429	10.019	10.555	11.025	11.398	11.684	11.883	11.995	12.021	11.959	11.915									
GROUND LEVEL CAO ĐỘ TỰ NHIÊN			5.54	5.54	5.48	4.98	5.03	5.09	5.30	5.48	5.26	5.27	5.23																		
SUPERELEVATION SẴU CAO	STA 0+069.675		-2%																		STA 0+254.229										
CURVE BAND ĐOẠN THẲNG ĐOẠN CONG	STA 0+069.675		R=1000.00										R=∞										STA 0+254.229								
STATION LÝ TRÌNH	0+000	+020	+040	+060	+080	0+100	+120	+140	+160	+180	0+200	+220	+240	+260	+280	0+300	+320	+340	+360	+380	0+400	+420	+440	+460	+480	0+500	+520	+540	+560	+580	0+600

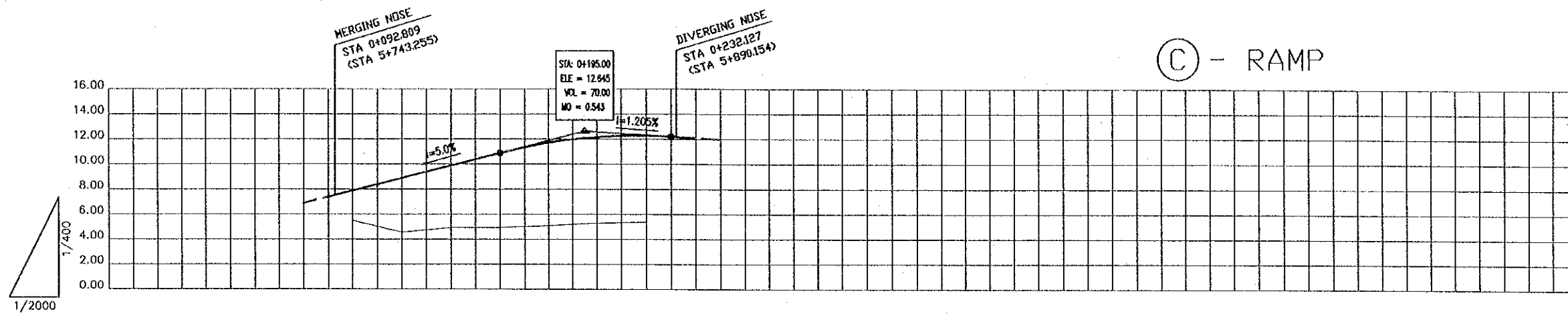


PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ			2.26	2.05	2.12	2.657	6.861	7.158	7.548	8.029	8.592	9.166	9.739	10.271	10.717	11.079	11.356	11.548	11.655	11.678	11.615										
GROUND LEVEL CAO ĐỘ TỰ NHIÊN			2.26	2.05	2.12	2.657	6.861	7.158	7.548	8.029	8.592	9.166	9.739	10.271	10.717	11.079	11.356	11.548	11.655	11.678	11.615										
SUPERELEVATION SẴU CAO	STA 0+089.631		-2%																		STA 0+270.944										
CURVE BAND ĐOẠN THẲNG ĐOẠN CONG	STA 0+089.631		R=∞										R=1000.00										STA 0+270.944								
STATION LÝ TRÌNH	0+000	+020	+040	+060	+080	0+100	+120	+140	+160	+180	0+200	+220	+240	+260	+280	0+300	+320	+340	+360	+380	0+400	+420	+440	+460	+480	0+500	+520	+540	+560	+580	0+600

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NAYABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.17	

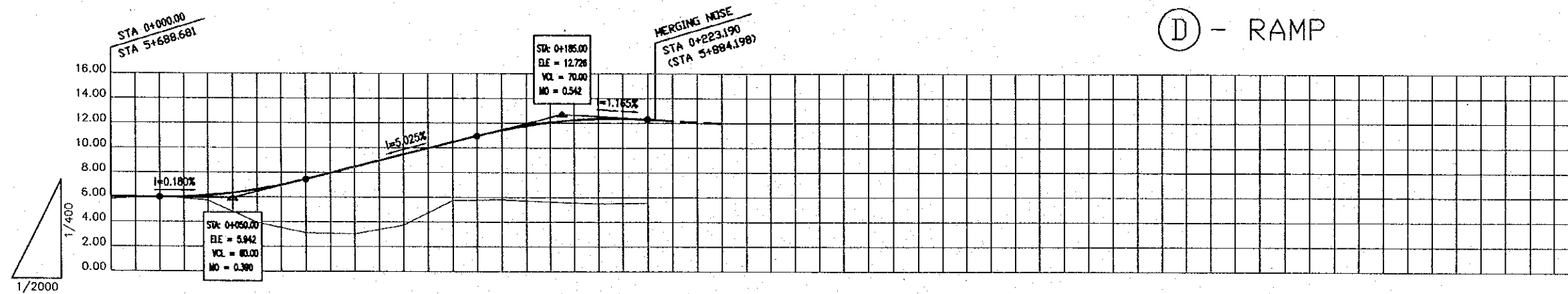
PACKAGE 3	SCALE AS SHOWN	DRAWING No. B-3-10	SHEET No.
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C/D RAMPS OF LINH NAM INTERCHANGE(2/2)



Ⓒ - RAMP

PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ					7.535	7.895	8.395	8.895	9.395	9.895	10.395	10.895	11.351	11.718	11.996	12.186	12.287	12.299	12.223	12.199
GROUND LEVEL CAO ĐỘ TỰ NHIÊN					5.50		4.55		4.93		4.95		5.10		5.30		5.40			
SUPERELEVATION SẼU CAO																				
CURVE BAND ĐOẠN THẲNG ĐOẠN CỒNG																				
STATION LÝ TRÌNH	0+000	+020	+040	+060	+080	0+100	+120	+140	+160	+180	+200	+220	+240	+260						



Ⓓ - RAMP

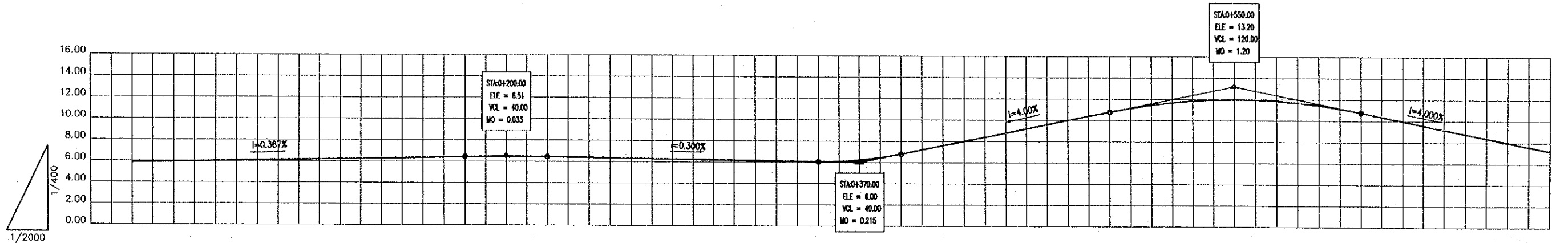
PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.032	6.014	5.996	6.021	6.134	6.332	6.618	6.990	7.450	7.952	8.455	8.957	9.460	9.962	10.465	10.967	11.425	11.795	12.077	12.270	12.374	12.390	12.318	12.287	
GROUND LEVEL CAO ĐỘ TỰ NHIÊN	5.85	6.07	5.72	5.72	3.95	3.12	3.03	3.75	5.75	5.81	5.63	5.51	5.55												
SUPERELEVATION SẼU CAO																									
CURVE BAND ĐOẠN THẲNG ĐOẠN CỒNG																									
STATION LÝ TRÌNH	0+000	+020	+040	+060	+080	0+100	+120	+140	+160	+180	+200	+220	+240												

55

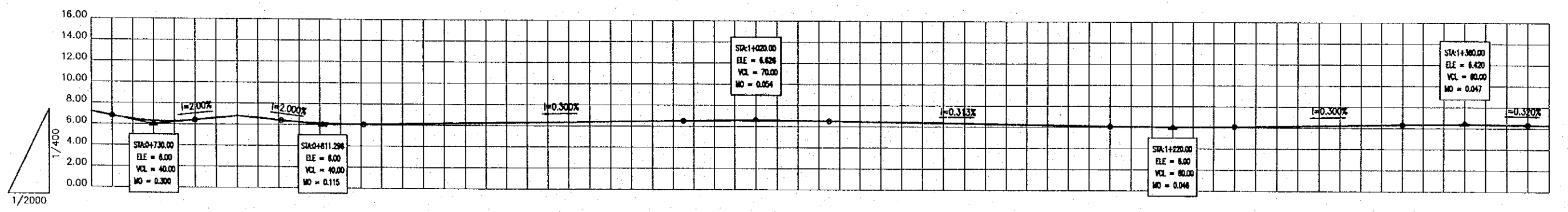
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.14	

PACKAGE 3	SCALE AS SHOWN	DRAWING No. B-3-20	SHEET No.
FRONTAGE ROAD PROFILE (LEFT SIDE) 1/5			

LEFT SIDE

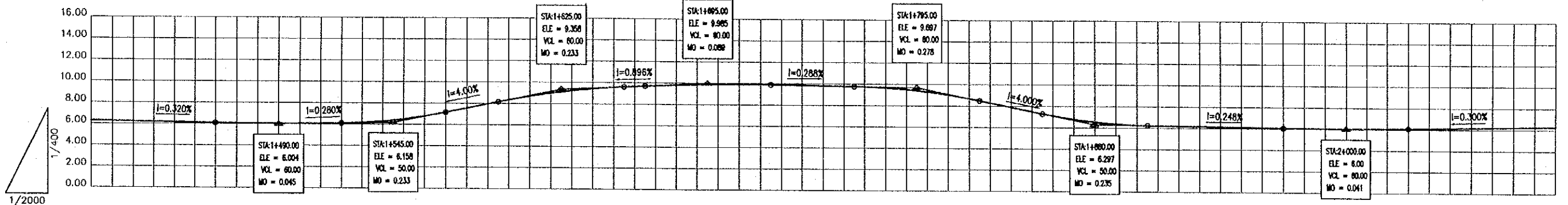


PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	5.850	5.923	5.997	6.070	6.143	6.217	6.290	6.363	6.437	6.477	6.450	6.390	6.330	6.270	6.210	6.150	6.090	6.084	6.454	7.200	8.000	8.800	9.600	10.400	11.157	11.700	11.967	11.967	11.700	11.167	10.400	9.600	8.800	8.000	7.200					
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																								
SUPERELEVATION SẼU CAO																																								
CURVE BAND ĐOẠN THẲNG ĐOẠN CỒNG																																								
STATION LÝ TRÌNH	0+000	+020	+040	+060	+080	0+100	+120	+140	+160	+180	0+200	+220	+240	+260	+280	0+300	+320	+340	+360	+380	0+400	+420	+440	+460	+480	0+500	+520	+540	+560	+580	0+600	+620	+640	+660	+680	0+700				

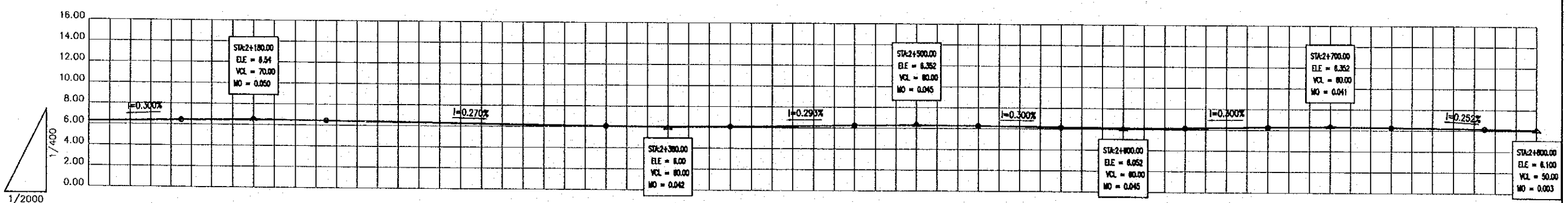


PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	7.200	6.475	6.275	6.600	6.813	6.526	6.248	6.063	6.086	6.146	6.206	6.266	6.326	6.386	6.446	6.506	6.556	6.572	6.554	6.501	6.438	6.376	6.313	6.250	6.188	6.125	6.068	6.046	6.065	6.120	6.180	6.240	6.300	6.355	6.374	6.351	6.292				
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																									
SUPERELEVATION SẼU CAO																																									
CURVE BAND ĐOẠN THẲNG ĐOẠN CỒNG																																									
STATION LÝ TRÌNH	0+700	+720	+740	+760	+780	0+800	+820	+840	+860	+880	0+900	+920	+940	+960	+980	1+000	+020	+040	+060	+080	1+100	+120	+140	+160	+180	1+200	+220	+240	+260	+280	1+300	+320	+340	+360	+380	1+400					

LEFT SIDE



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.292	6.228	6.164	6.100	6.056	6.052	6.088	6.293	6.795	7.558	6.352	6.996	9.734	9.671	9.828	9.909	9.911	9.855	9.798	9.671	9.304	8.689	7.897	7.106	6.532	6.257	6.198	6.149	6.099	6.054	6.041	6.065	6.120	6.180	6.240	6.300			
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																							
SUPERELEVATION SẼU CAO																																							
CURVE BAND ĐOẠN THẲNG ĐOẠN CONG																																							
STATION LÝ TRÌNH	1+400	+420	+440	+460	+480	1+500	+520	+540	+560	+580	1+600	+620	+640	+660	+680	1+700	+720	+740	+760	+780	1+800	+820	+840	+860	+880	1+900	+920	+940	+960	+980	2+000	+020	+040	+060	+080	2+100			



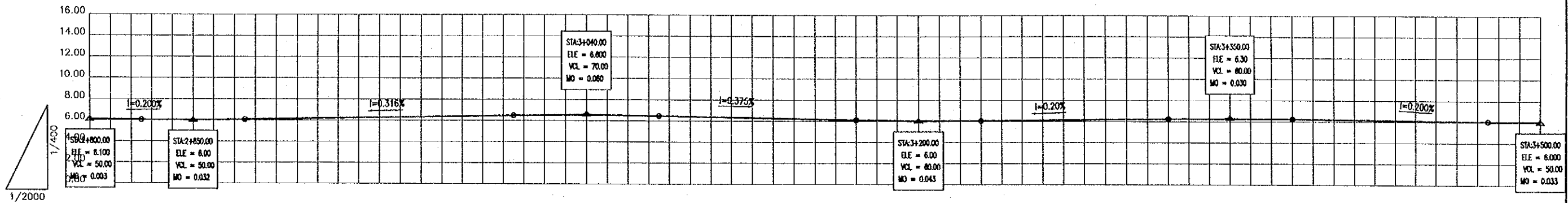
PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.300	6.360	6.420	6.471	6.490	6.477	6.432	6.378	6.324	6.270	6.216	6.162	6.108	6.059	6.042	6.063	6.117	6.176	6.235	6.288	6.307	6.287	6.232	6.172	6.117	6.097	6.117	6.172	6.232	6.287	6.311	6.297	6.251	6.201	6.151	6.103			
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																							
SUPERELEVATION SẼU CAO																																							
CURVE BAND ĐOẠN THẲNG ĐOẠN CONG																																							
STATION LÝ TRÌNH	2+100	+120	+140	+160	+180	2+200	+220	+240	+260	+280	2+300	+320	+340	+360	+380	2+400	+420	+440	+460	+480	2+500	+520	+540	+560	+580	2+600	+620	+640	+660	+680	2+700	+720	+740	+760	+780	2+800			

T 9

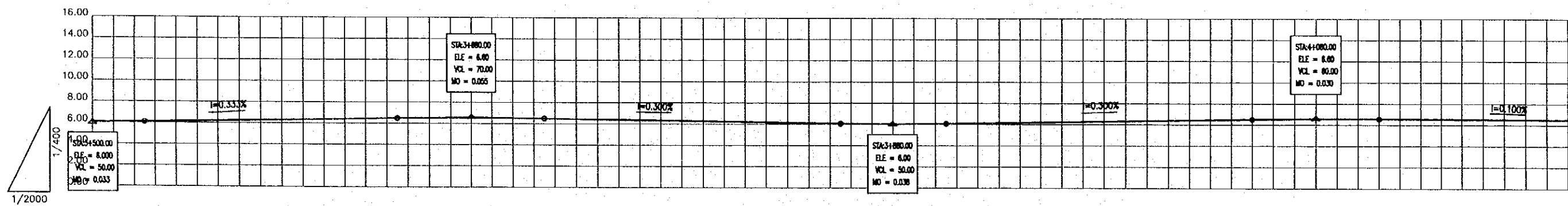
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2002.3.17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE AS SHOWN	DRAWING No. B-3-22	SHEET No. 3/5
FRONTAGE ROAD PROFILE(LEFT SIDE) 3/5			

LEFT SIDE



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.103	6.060	6.032	6.043	6.095	6.158	6.221	6.284	6.347	6.411	6.474	6.526	6.540	6.514	6.450	6.375	6.300	6.225	6.150	6.080	6.043	6.045	6.080	6.120	6.160	6.200	6.240	6.267	6.267	6.240	6.200	6.160	6.120	6.080	6.041	6.033			
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																							
SUPERELEVATION SẼU CAO																																							
CURVE BAND ĐOẠN THẲNG ĐOẠN CONG																																							
STATION LÝ TRÌNH	2+800	+820	+840	+860	+880	2+900	+920	+940	+960	+980	3+000	+020	+040	+060	+080	3+100	+120	+140	+160	+180	3+200	+220	+240	+260	+280	3+300	+320	+340	+360	+380	3+400	+420	+440	+460	+480	3+500			

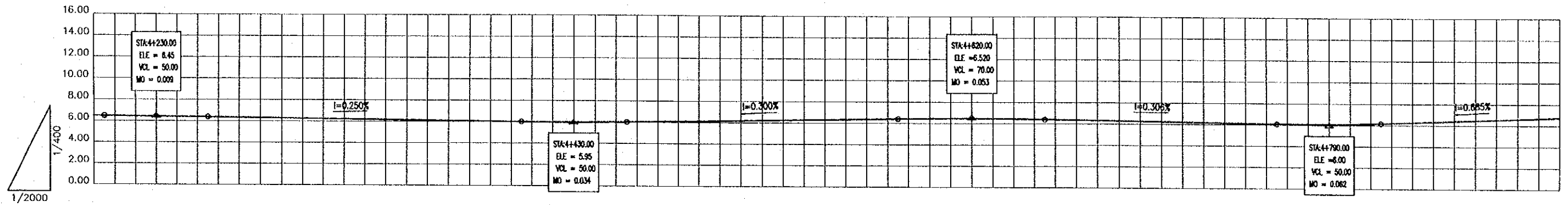


PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.033	6.068	6.133	6.200	6.267	6.333	6.400	6.467	6.523	6.545	6.530	6.480	6.420	6.360	6.300	6.240	6.180	6.120	6.061	6.037	6.061	6.120	6.180	6.240	6.300	6.360	6.420	6.480	6.537	6.570	6.577	6.560	6.540	6.520	6.500	6.480				
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																								
SUPERELEVATION SẼU CAO																																								
CURVE BAND ĐOẠN THẲNG ĐOẠN CONG																																								
STATION LÝ TRÌNH	3+500	+520	+540	+560	+580	3+600	+620	+640	+660	+680	3+700	+720	+740	+760	+780	3+800	+820	+840	+860	+880	3+900	+920	+940	+960	+980	4+000	+020	+040	+060	+080	4+100	+120	+140	+160	+180	4+200				

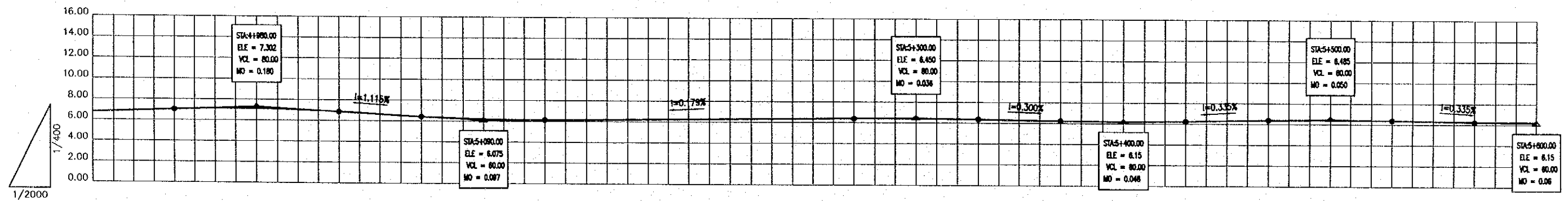
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. KATATE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.5.17	

PACKAGE 3	SCALE AS SHOWN	DRAWING No. B-3-23	SHEET No.
FRONTAGE ROAD PROFILE (LEFT SIDE) 4/5			

LEFT SIDE



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.480	6.457	6.422	6.375	6.325	6.275	6.225	6.175	6.125	6.075	6.025	5.987	5.992	6.040	6.100	6.160	6.220	6.280	6.340	6.400	6.450	6.487	6.449	6.398	6.336	6.275	6.214	6.153	6.092	6.053	6.081	6.206	6.343	6.480	6.617	6.754		
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																						
SUPERELEVATION SÉU CAO																																						
CURVE BAND ĐOẠN THẲNG ĐOẠN CONG																																						
STATION LÝ TRÌNH	4+200	+220	+240	+260	+280	4+300	+320	+340	+360	+380	4+400	+420	+440	+460	+480	4+500	+520	+540	+560	+580	4+600	+620	+640	+660	+680	4+700	+720	+740	+760	+780	4+800	+820	+840	+860	+880	4+900		

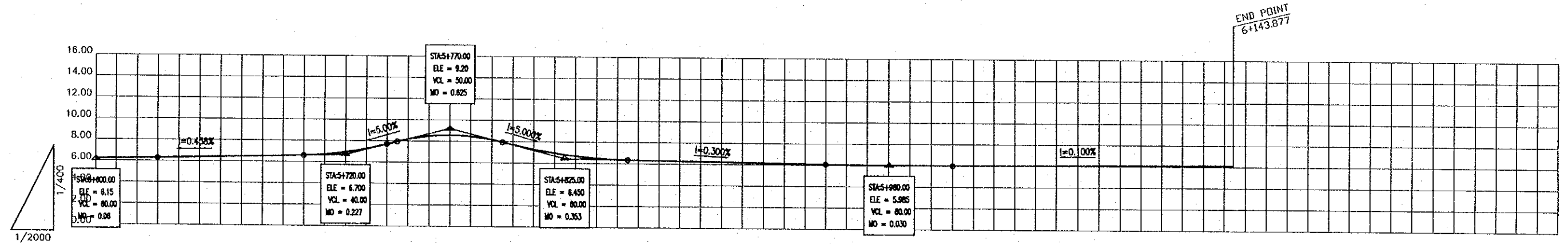


PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.754	6.891	7.028	7.120	7.122	7.034	6.856	6.633	6.410	6.230	6.136	6.129	6.164	6.200	6.236	6.271	6.307	6.343	6.379	6.410	6.414	6.386	6.330	6.270	6.215	6.198	6.222	6.284	6.351	6.412	6.435	6.412	6.351	6.284	6.224	6.209			
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																							
SUPERELEVATION SÉU CAO																																							
CURVE BAND ĐOẠN THẲNG ĐOẠN CONG																																							
STATION LÝ TRÌNH	4+900	+920	+940	+960	+980	5+000	+020	+040	+060	+080	5+100	+120	+140	+160	+180	5+200	+220	+240	+260	+280	5+300	+320	+340	+360	+380	5+400	+420	+440	+460	+480	5+500	+520	+540	+560	+580	5+600			

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. NATAGE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2008.3.19

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	AS SHOWN	B-3-24	
FRONTAGE ROAD PROFILE(LEFT SIDE) 5/5			

LEFT SIDE



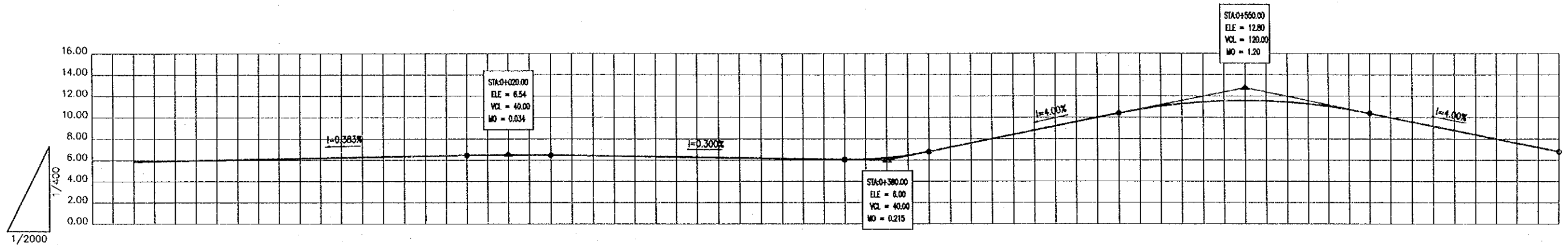
PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.209	6.248	6.333	6.425	6.517	6.608	6.927	7.700	8.475	8.475	7.710	6.945	6.493	6.345	6.285	6.225	6.165	6.105	6.048	6.015	6.008	6.025	6.045	6.065	6.085	6.106	6.126	6.146	6.150							
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																				
SUPERELEVATION SẼU CAO																																				
CURVE BAND ĐOẠN THANG																																				
DOẠN CÔNG																																				
STATION LÝ TRÌNH	5+600	+620	+640	+660	+680	5+700	+720	+740	+760	+780	5+800	+820	+840	+860	+880	5+900	+920	+940	+960	+980	6+000	+020	+040	+060	+080	6+100	+120	+140	+160	+180	6+200	+220	+240	+260	+280	6+300

39

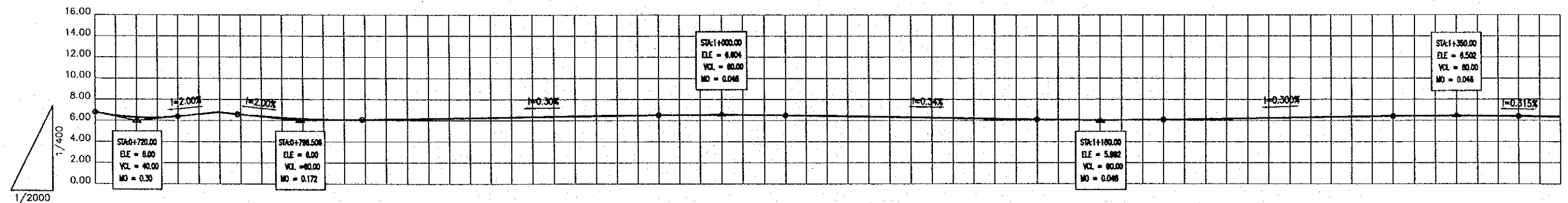
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. KATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		DATE 2000.3.17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE AS SHOWN	DRAWING No. B-3-25	SHEET No.
FRONTAGE ROAD PROFILE (RIGHT SIDE) 1/5			

RIGHT SIDE



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	5.850	5.927	6.003	6.080	6.157	6.233	6.310	6.387	6.463	6.506	6.480	6.420	6.360	6.300	6.240	6.180	6.120	6.060	6.215	6.800	7.600	8.400	9.200	10.000	10.767	11.300	11.567	11.567	11.300	10.767	10.000	9.200	8.400	7.600	6.800					
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																								
SUPERELEVATION SÉU CAO																																								
CURVE BAND ĐOẠN THẲNG																																								
DOẠN CỎNG																																								
STATION LÝ TRÌNH	0+000	+020	+040	+060	+080	0+100	+120	+140	+160	+180	0+200	+220	+240	+260	+280	+300	+320	+340	+360	+380	0+400	+420	+440	+460	+480	0+500	+520	+540	+560	+580	0+600	+620	+640	+660	+680	0+700				

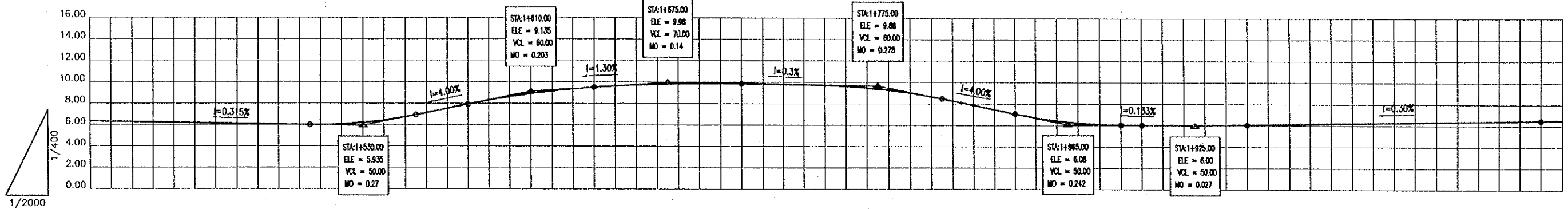


PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.800	6.300	6.400	6.785	6.776	6.395	6.160	6.078	6.124	6.184	6.244	6.304	6.364	6.424	6.484	6.539	6.556	6.531	6.468	6.400	6.332	6.264	6.196	6.128	6.065	6.040	6.057	6.112	6.172	6.232	6.292	6.352	6.412	6.451	6.450	6.408	6.345				
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																									
SUPERELEVATION SÉU CAO																																									
CURVE BAND ĐOẠN THẲNG																																									
DOẠN CỎNG																																									
STATION LÝ TRÌNH	0+700	+720	+740	+760	+780	0+800	+820	+840	+860	+880	0+900	+920	+940	+960	+980	1+000	+020	+040	+060	+080	1+100	+120	+140	+160	+180	1+200	+220	+240	+260	+280	1+300	+320	+340	+360	+380	1+400					

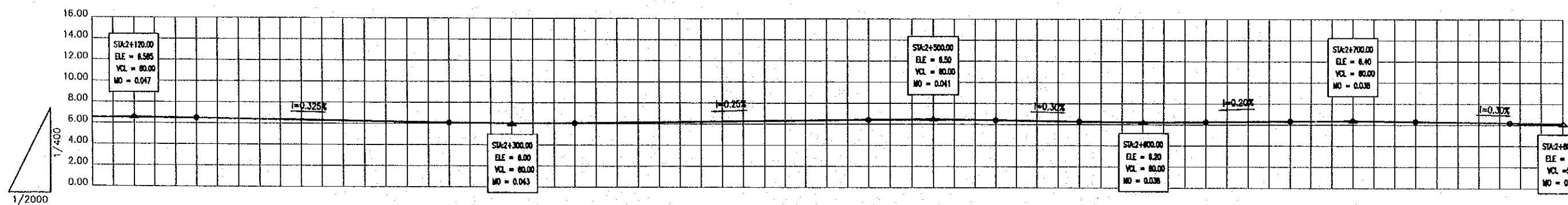
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.9.17	

PACKAGE 3	SCALE AS SHOWN	DRAWING No. R-3-26	SHEET No.
FRONTAGE ROAD PROFILE(RIGHT SIDE) 2/5			

RIGHT SIDE



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.345	6.282	6.219	6.156	6.093	6.030	6.064	6.432	7.135	7.935	8.645	9.175	9.525	9.739	9.862	9.894	9.845	9.785	9.656	9.287	8.672	7.880	7.080	6.435	6.099	6.033	6.024	6.049	6.105	6.165	6.225	6.285	6.345	6.405	6.465	6.520				
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																								
SUPERELEVATION SẼU CAO																																								
CURVE BAND ĐOẠN THẲNG ĐOẠN CỒNG																																								
STATION LÝ TRÌNH	1+400	+420	+440	+460	+480	1+500	+520	+540	+560	+580	1+600	+620	+640	+660	+680	1+700	+720	+740	+760	+780	1+800	+820	+840	+860	+880	1+900	+920	+940	+960	+980	2+000	+020	+040	+060	+080	2+100				



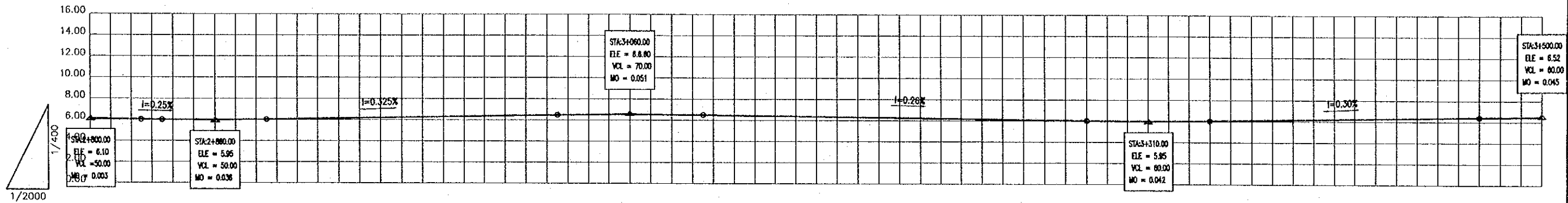
PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.52	6.535	6.515	6.455	6.39	6.325	6.26	6.195	6.13	6.07	6.043	6.055	6.1	6.15	6.2	6.25	6.3	6.35	6.4	6.445	6.459	6.435	6.38	6.32	6.264	6.238	6.244	6.28	6.32	6.356	6.363	6.336	6.28	6.22	6.16	6.103				
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																								
SUPERELEVATION SẼU CAO																																								
CURVE BAND ĐOẠN THẲNG ĐOẠN CỒNG																																								
STATION LÝ TRÌNH	2+100	+120	+140	+160	+180	2+200	+220	+240	+260	+280	2+300	+320	+340	+360	+380	2+400	+420	+440	+460	+480	2+500	+520	+540	+560	+580	2+600	+620	+640	+660	+680	2+700	+720	+740	+760	+780	2+800				

9.9

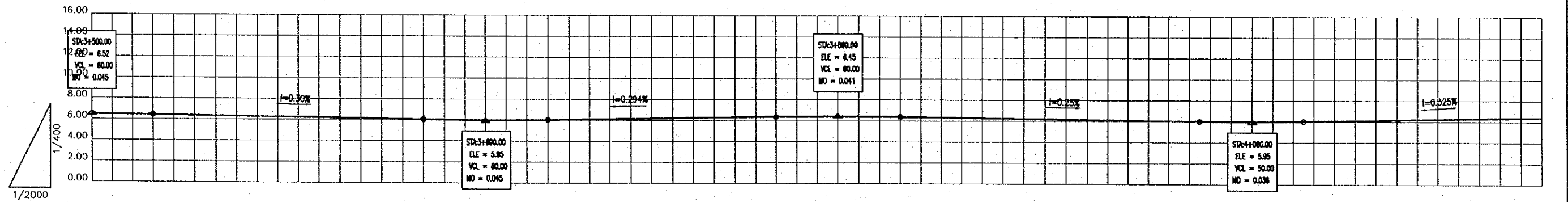
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (HANG THI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.5.17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	AS SHOWN	B-3-27	
FRONTAGE ROAD PROFILE(RIGHT SIDE) 3/5			

RIGHT SIDE



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.103	6.050	6.001	5.965	6.016	6.080	6.145	6.210	6.275	6.340	6.405	6.470	6.526	6.549	6.539	6.496	6.444	6.392	6.340	6.288	6.236	6.184	6.132	6.080	6.028	5.995	5.999	6.040	6.100	6.160	6.220	6.280	6.340	6.400	6.455	6.475				
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																								
SUPERELEVATION SẼU CAO	-																																							
CURVE BAND ĐOẠN THẲNG	R=5000.00			R=∞															R=1025.00																					
ĐOẠN CỎNG				STA 2+853.271															STA 3+027.573																					
STATION LÝ TRÌNH	2+800	+820	+840	+860	+880	2+900	+920	+940	+960	+980	3+000	+020	+040	+060	+080	3+100	+120	+140	+160	+180	3+200	+220	+240	+260	+280	3+300	+320	+340	+360	+380	3+400	+420	+440	+460	+480	3+500				



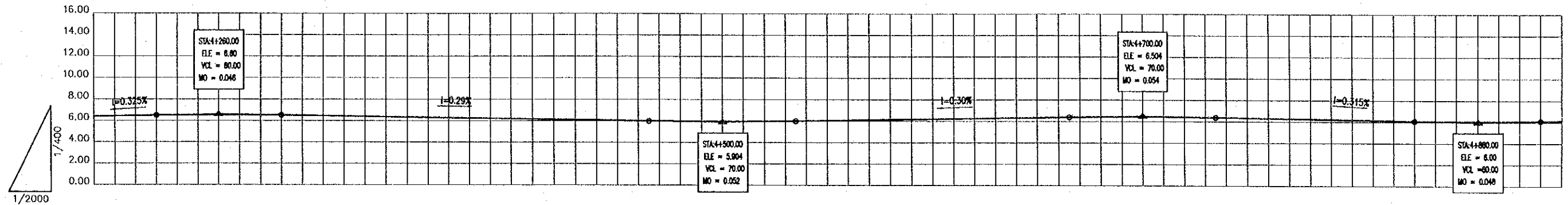
PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.475	6.455	6.400	6.340	6.280	6.220	6.160	6.100	6.040	6.000	5.999	6.038	6.097	6.156	6.215	6.274	6.332	6.387	6.409	6.395	6.350	6.300	6.250	6.200	6.150	6.100	6.050	6.001	5.966	6.016	6.080	6.145	6.210	6.275	6.340	6.405				
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																								
SUPERELEVATION SẼU CAO	-																																							
CURVE BAND ĐOẠN THẲNG	R=1025.00															R=∞										R=∞														
ĐOẠN CỎNG																STA 3+807.733										STA 4+102.853														
STATION LÝ TRÌNH	3+500	+520	+540	+560	+580	3+600	+620	+640	+660	+680	3+700	+720	+740	+760	+780	3+800	+820	+840	+860	+880	3+900	+920	+940	+960	+980	4+000	+020	+040	+060	+080	4+100	+120	+140	+160	+180	4+200				

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NAYABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.17	

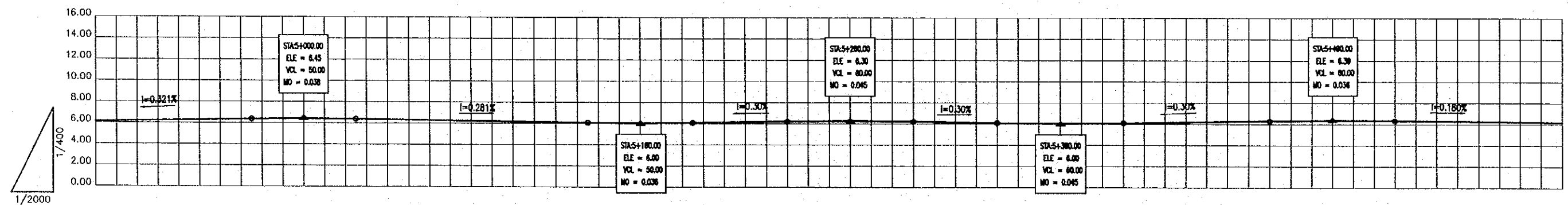
PACKAGE 3	SCALE AS SHOWN	DRAWING No. B-3-28	SHEET No.
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FRONTAGE ROAD PROFILE(RIGHT SIDE) 4/5


RIGHT SIDE



PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.405	6.470	6.530	6.554	6.537	6.484	6.426	6.368	6.310	6.252	6.194	6.136	6.078	6.020	5.971	5.956	5.973	6.024	6.084	6.144	6.204	6.264	6.324	6.384	6.434	6.450	6.431	6.378	6.315	6.252	6.189	6.126	6.068	6.048	6.070	6.129			
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																							
SUPERELEVATION SẼU CAO																																							
CURVE BAND ĐOẠN THẲNG ĐOẠN CÔNG																																							
STATION LÝ TRÌNH	4+200	+220	+240	+260	+280	4+300	+320	+340	+360	+380	4+400	+420	+440	+460	+480	4+500	+520	+540	+560	+580	4+600	+620	+640	+660	+680	4+700	+720	+740	+760	+780	4+800	+820	+840	+860	+880	4+900			

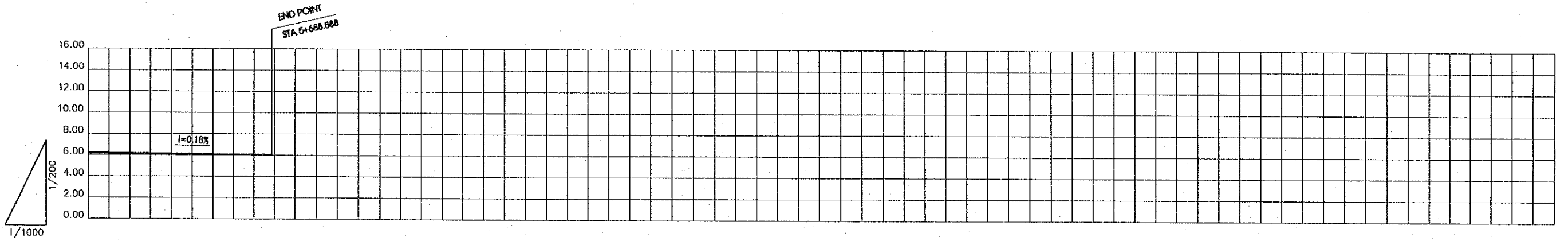


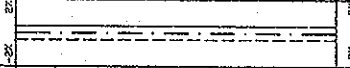
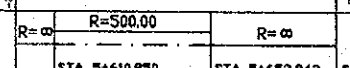
PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.129	6.193	6.257	6.321	6.384	6.412	6.392	6.337	6.281	6.225	6.169	6.112	6.058	6.036	6.061	6.120	6.180	6.235	6.255	6.235	6.180	6.120	6.065	6.045	6.065	6.120	6.180	6.240	6.300	6.344	6.356	6.336	6.300	6.264	6.228	6.192				
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																								
SUPERELEVATION SẼU CAO																																								
CURVE BAND ĐOẠN THẲNG ĐOẠN CÔNG																																								
STATION LÝ TRÌNH	4+900	+920	+940	+960	+980	5+000	+020	+040	+060	+080	5+100	+120	+140	+160	+180	5+200	+220	+240	+260	+280	5+300	+320	+340	+360	+380	5+400	+420	+440	+460	+480	5+500	+520	+540	+560	+580	5+600				

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT		NAME
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE 
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 9. 17	

PACKAGE 3	SCALE AS SHOWN	DRAWING No. B-3-20	SHEET No. 5/5
FRONTAGE ROAD PROFILE(RIGHT SIDE) 5/5			

RIGHT SIDE

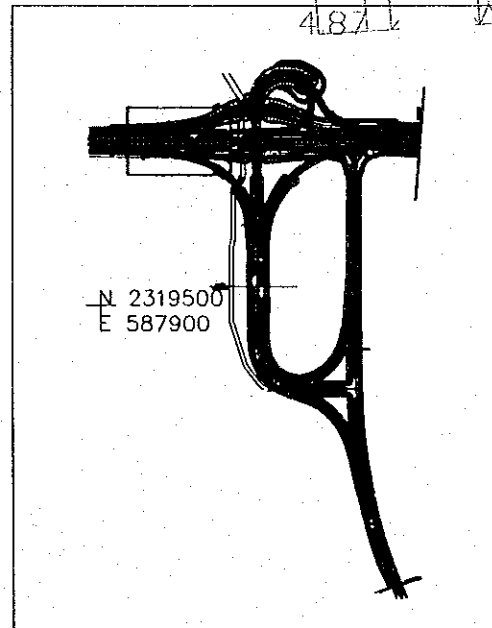
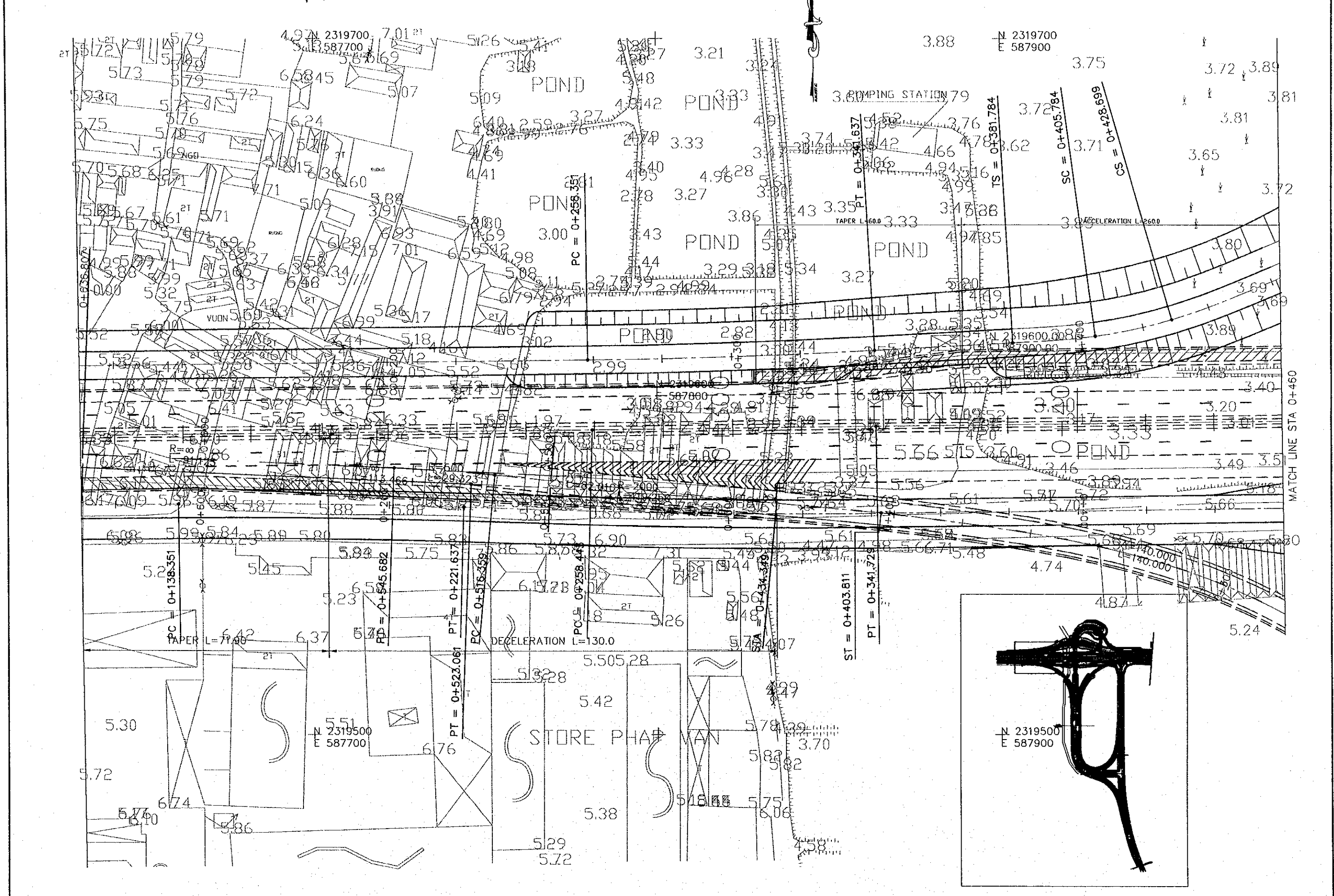


PROPOSED HEIGHT CAO ĐỘ THIẾT KẾ	6.192	6.156	6.12	6.084	6.048	6.032																														
GROUND LEVEL CAO ĐỘ TỰ NHIÊN																																				
SUPERELEVATION SẼU CAO																																				
CURVE BAND ĐOẠN THANG ĐOẠN CONG																																				
STATION LÝ TRÌNH	5+600	+620	+640	+660	+680	5+700	+720	+740	+760	+780	5+800	+820	+840	+860	+880	5+900	+920	+940	+960	+980	6+000	+020	+040	+060	+080	6+100	+120	+140	+160	+180	6+200	+220	+240	+260	+280	6+300

C9

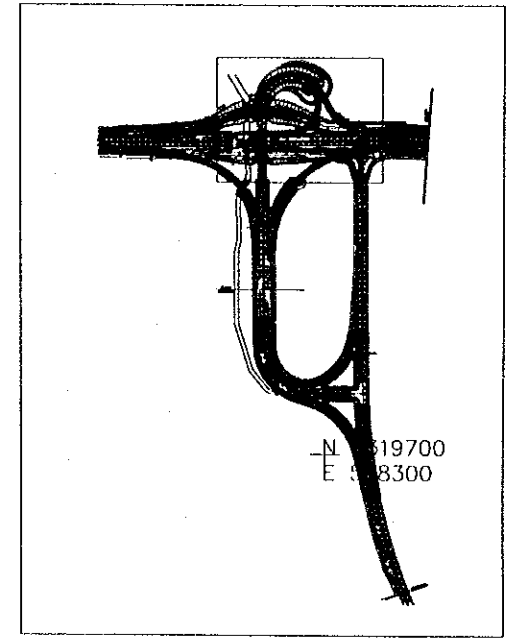
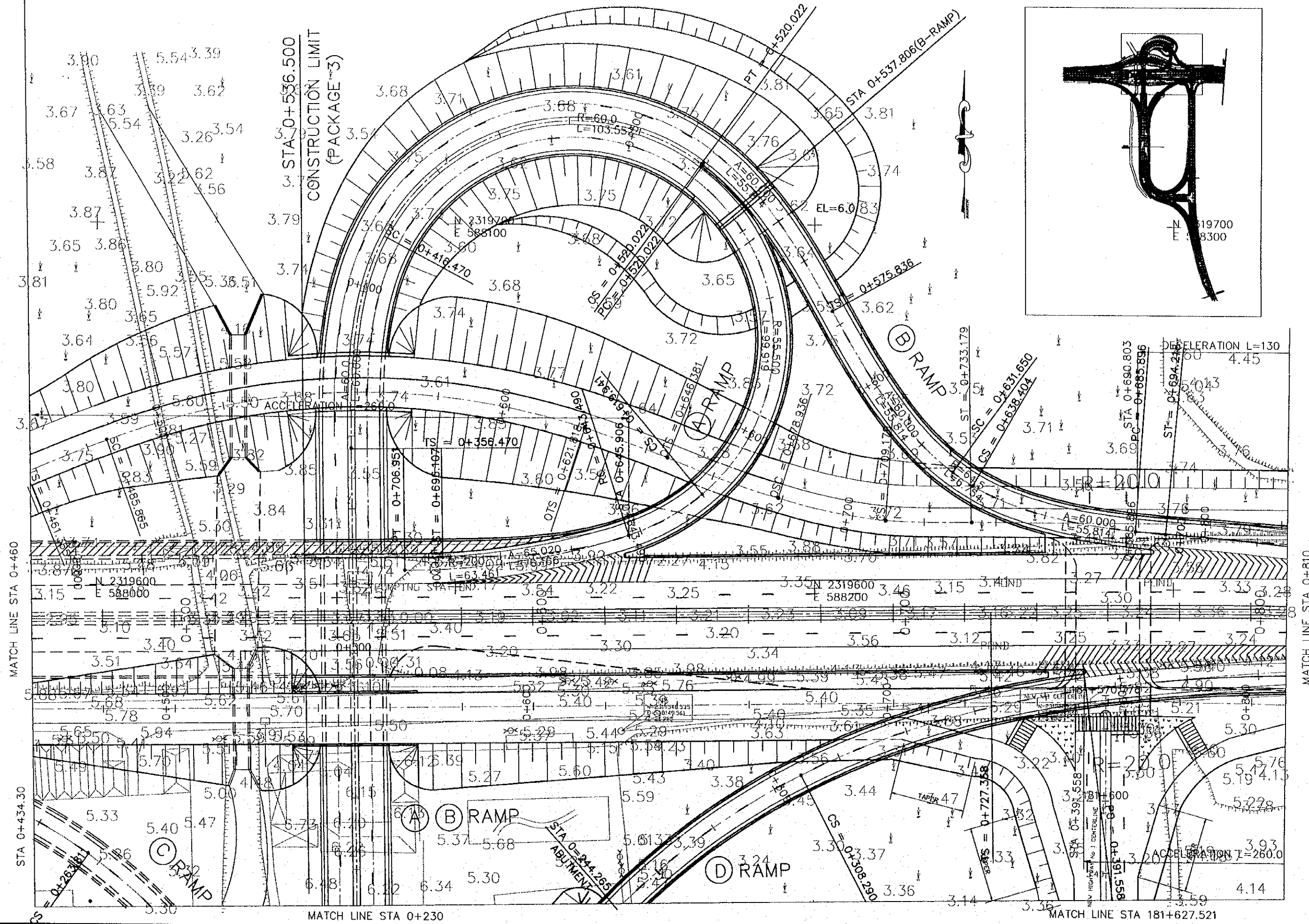
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.17

PACKAGE 3	SCALE 1/1000	DRAWING No. B-4-1	SHEET No.
PHAP VAN - CAU GIE INTERCHANGE 1/8			



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.8.14	

PACKAGE 3	SCALE 1/1000	DRAWING No. B-4-2	SHEET No.
PHAP VAN - CAU GIE INTERCHANGE 2/B			



MATCH LINE STA 0+460

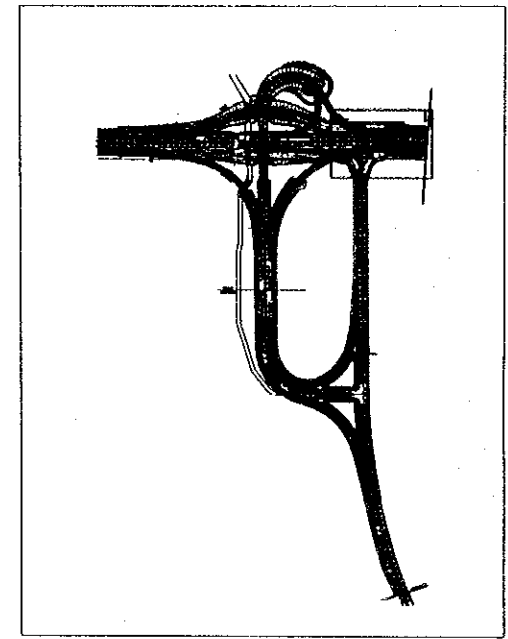
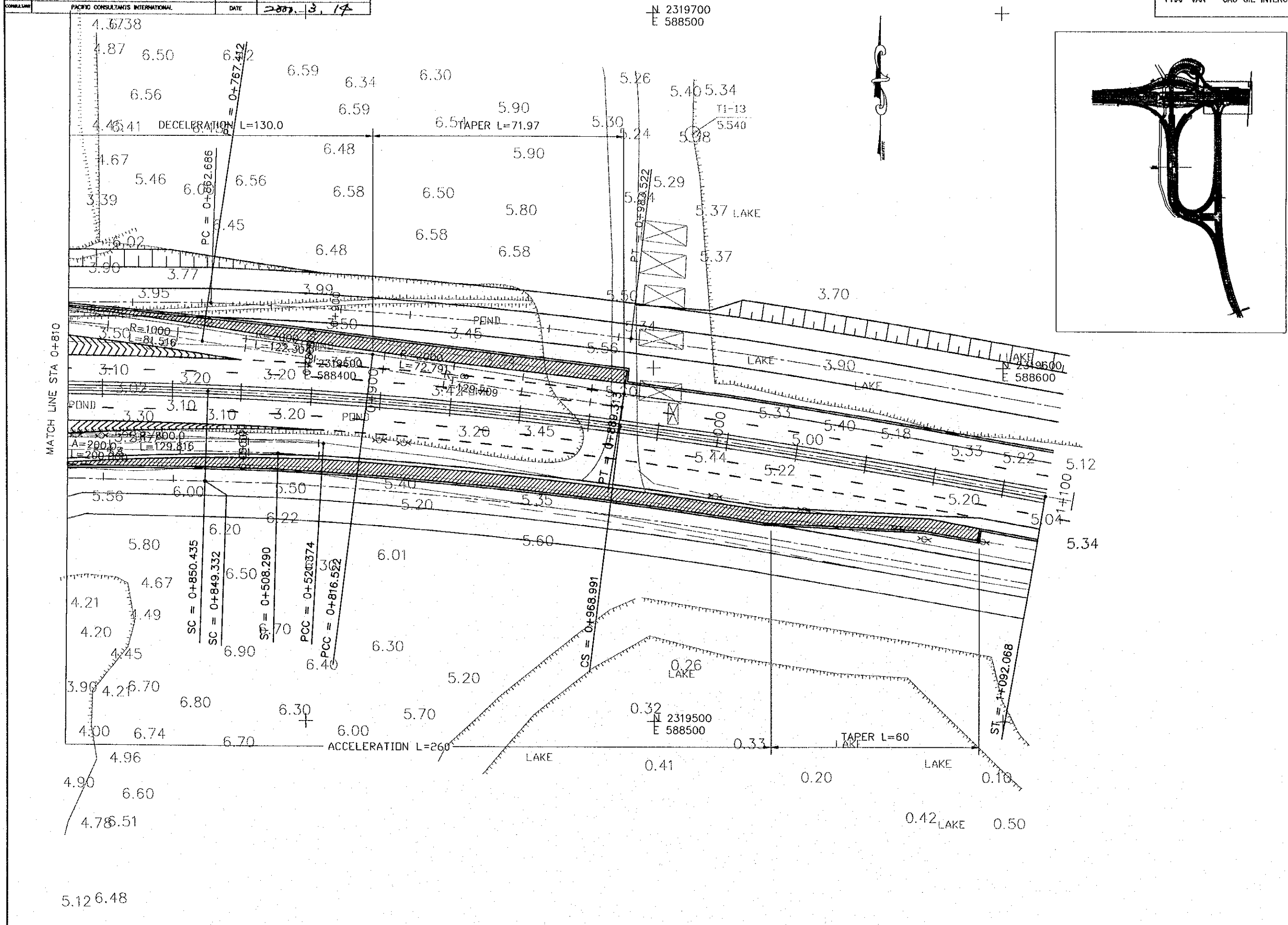
MATCH LINE STA 0+810

MATCH LINE STA 0+230

MATCH LINE STA 181+627.521

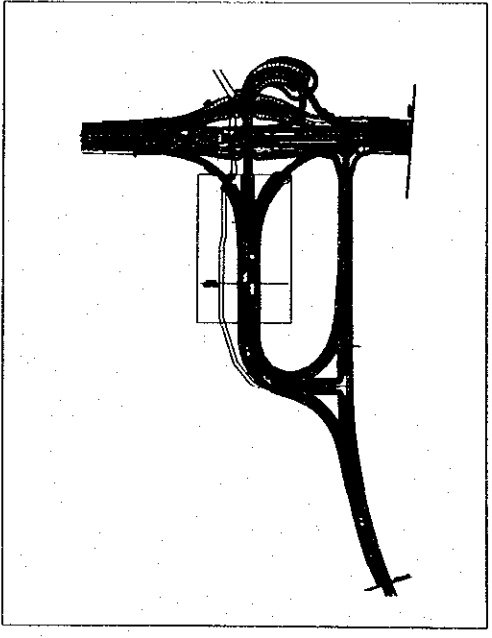
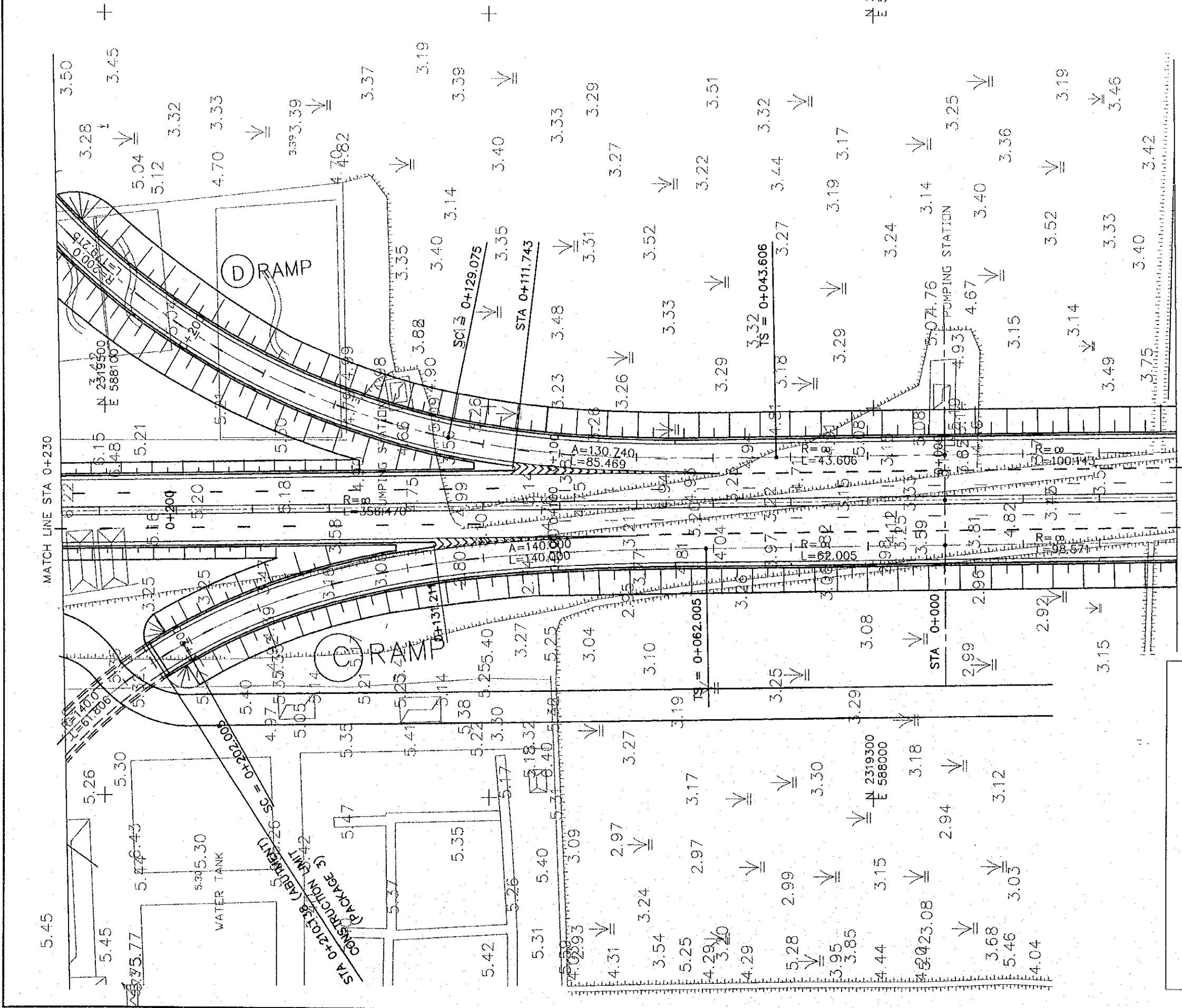
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THAMO LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (HAMH THI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2007. 3. 17


PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/1000	B-4-3	
PHAP VAN - CAU GIE INTERCHANGE (3/8)			



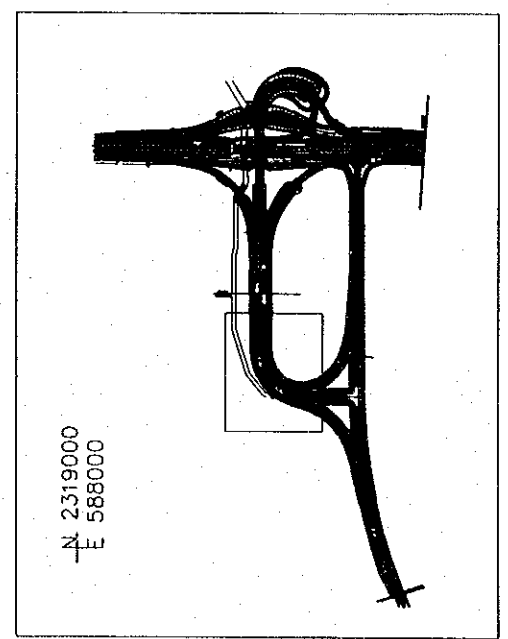
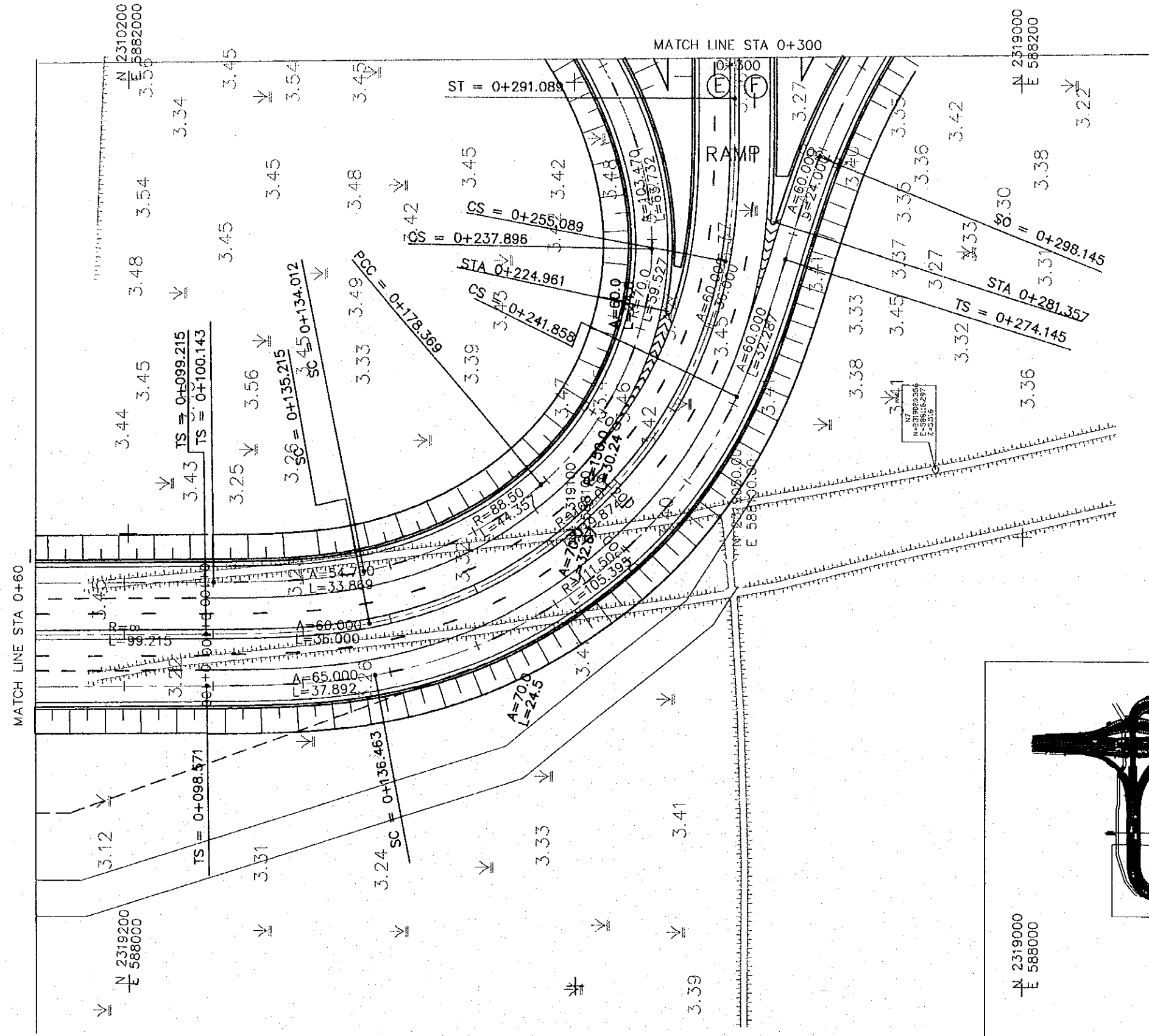
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. MATSUDA
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 8. 14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/1000	B-4-4	
PHAP VAN - CAU GIE INTERCHANGE (4/8)			



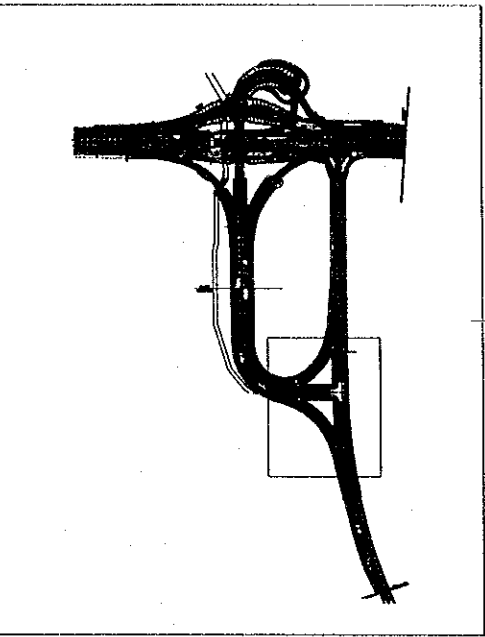
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S.WITABE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.8.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/1000	B-4-5	
PHAP VAN -- CAU GIE INTERCHANGE (5/8)			

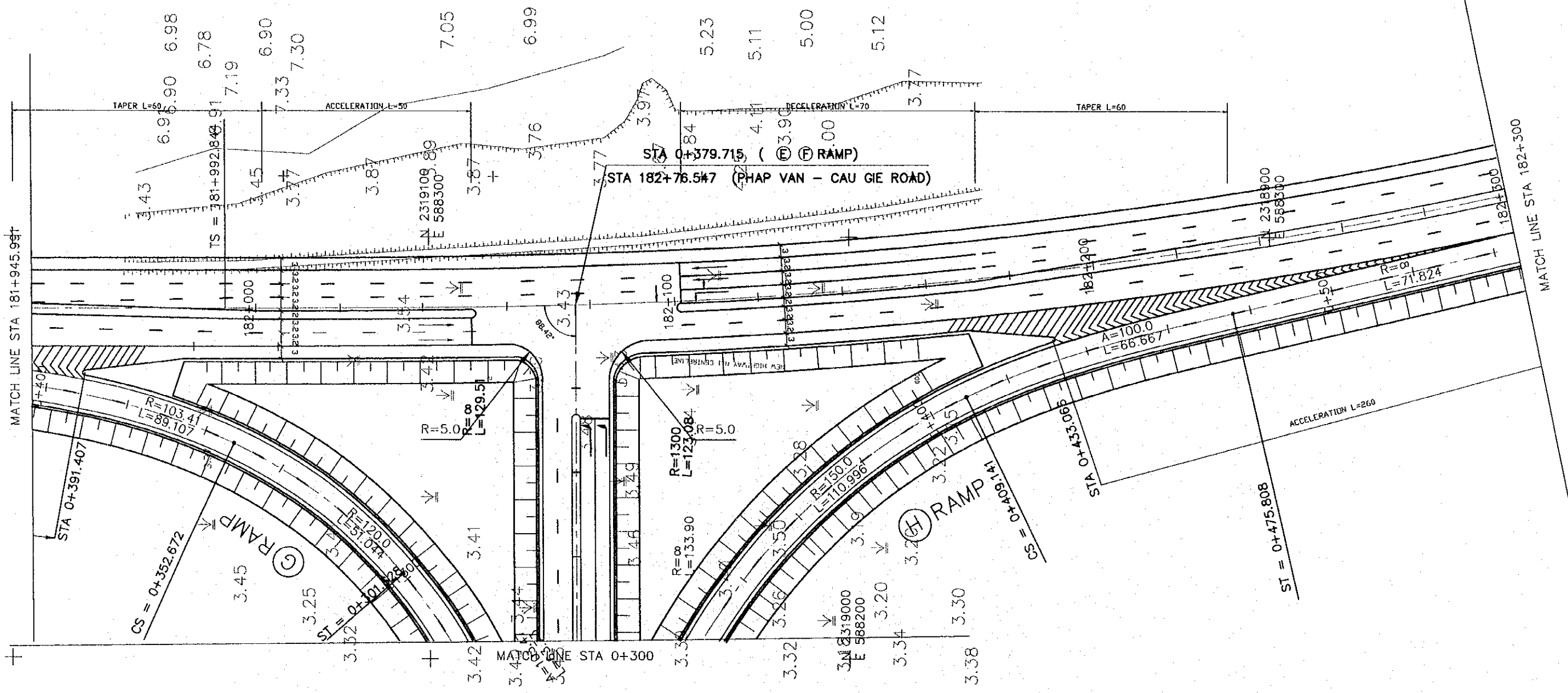


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THUHO LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.14

PACKAGE 3	SCALE 1/1000	DRAWING No. B-4-6	SHEET No.
PHAP VAN - CAU GIE INTERCHANGE (6/8)			

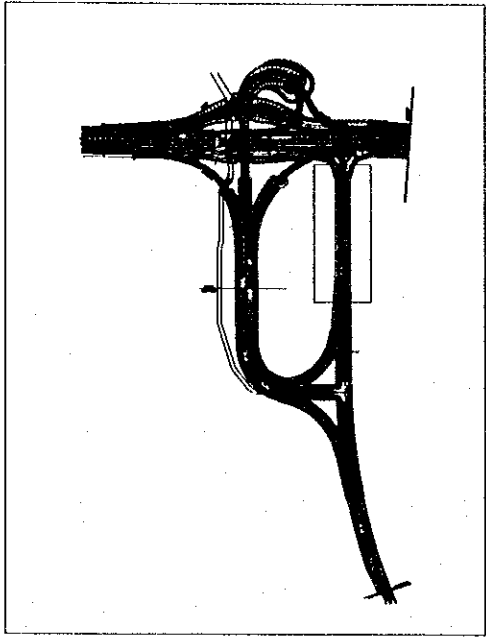
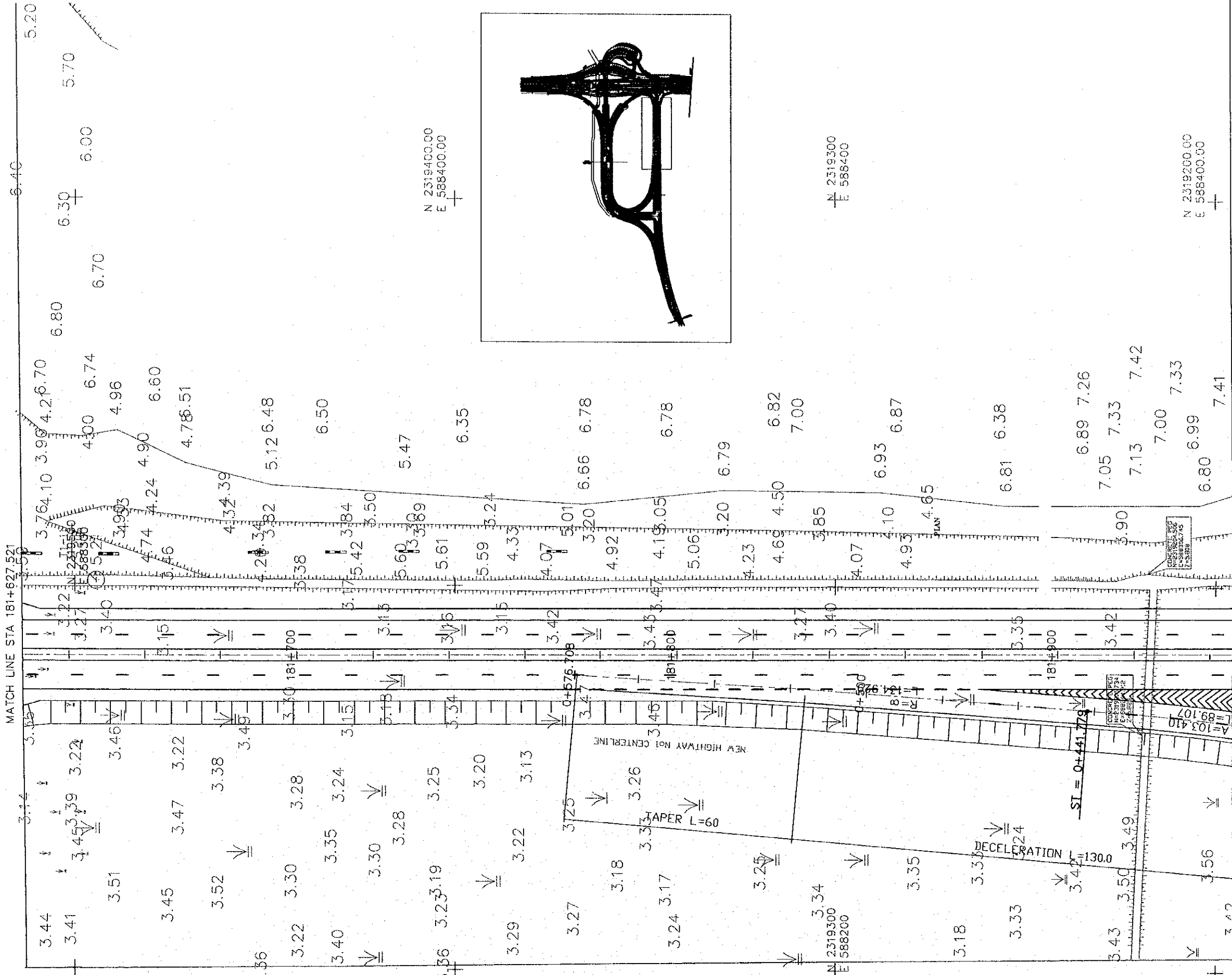


N 2319000
E 588400



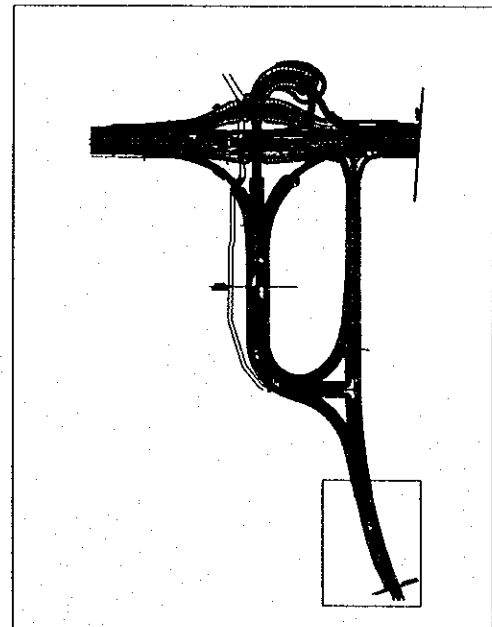
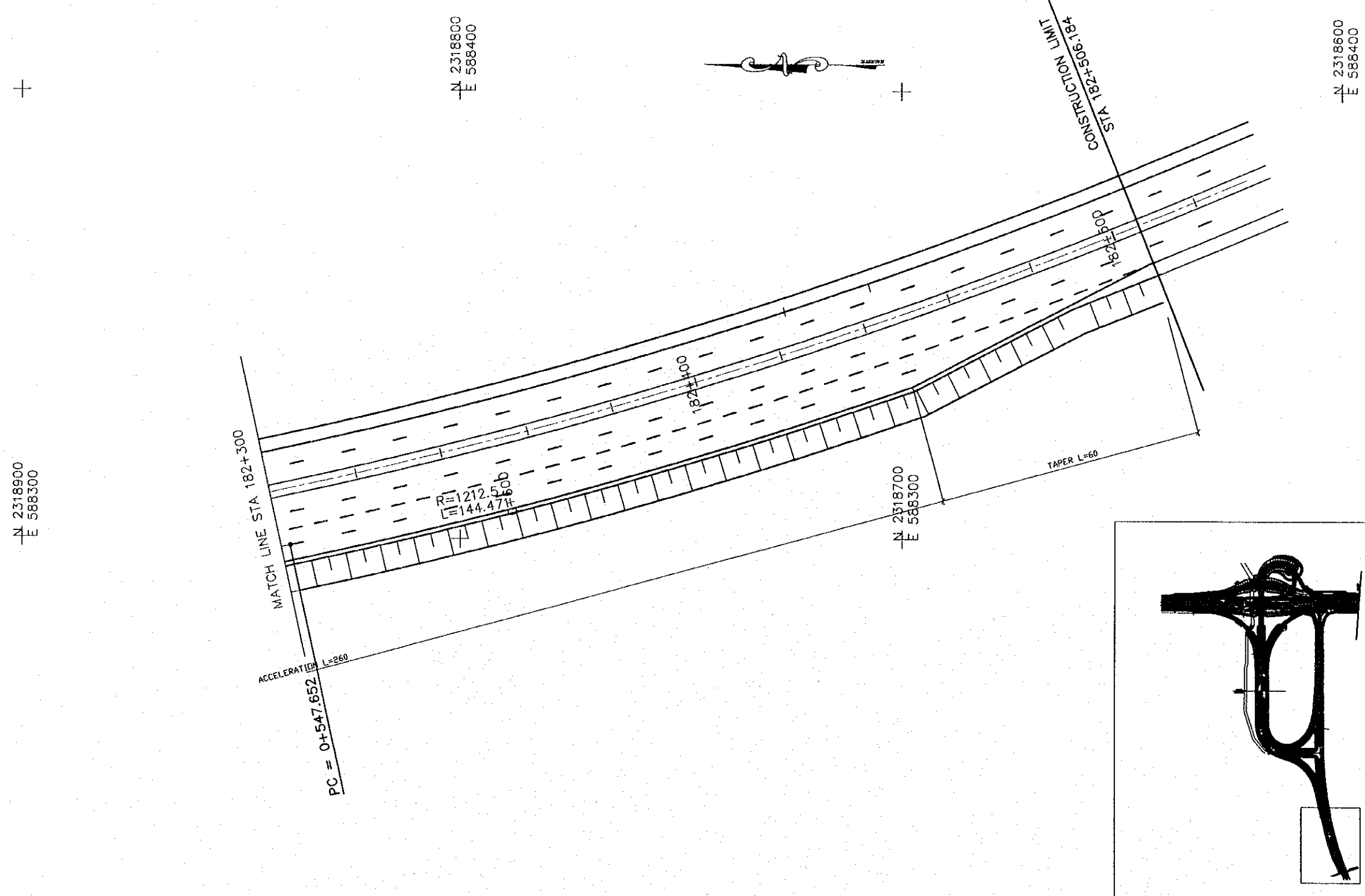
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NAITABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
COMMITTEE PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 8. 14

PACKAGE 3	SCALE 1/1000	DRAWING No. B-4-7	SHEET No.
PHAP VAN - CAU GIE INTERCHANGE (7/8)			



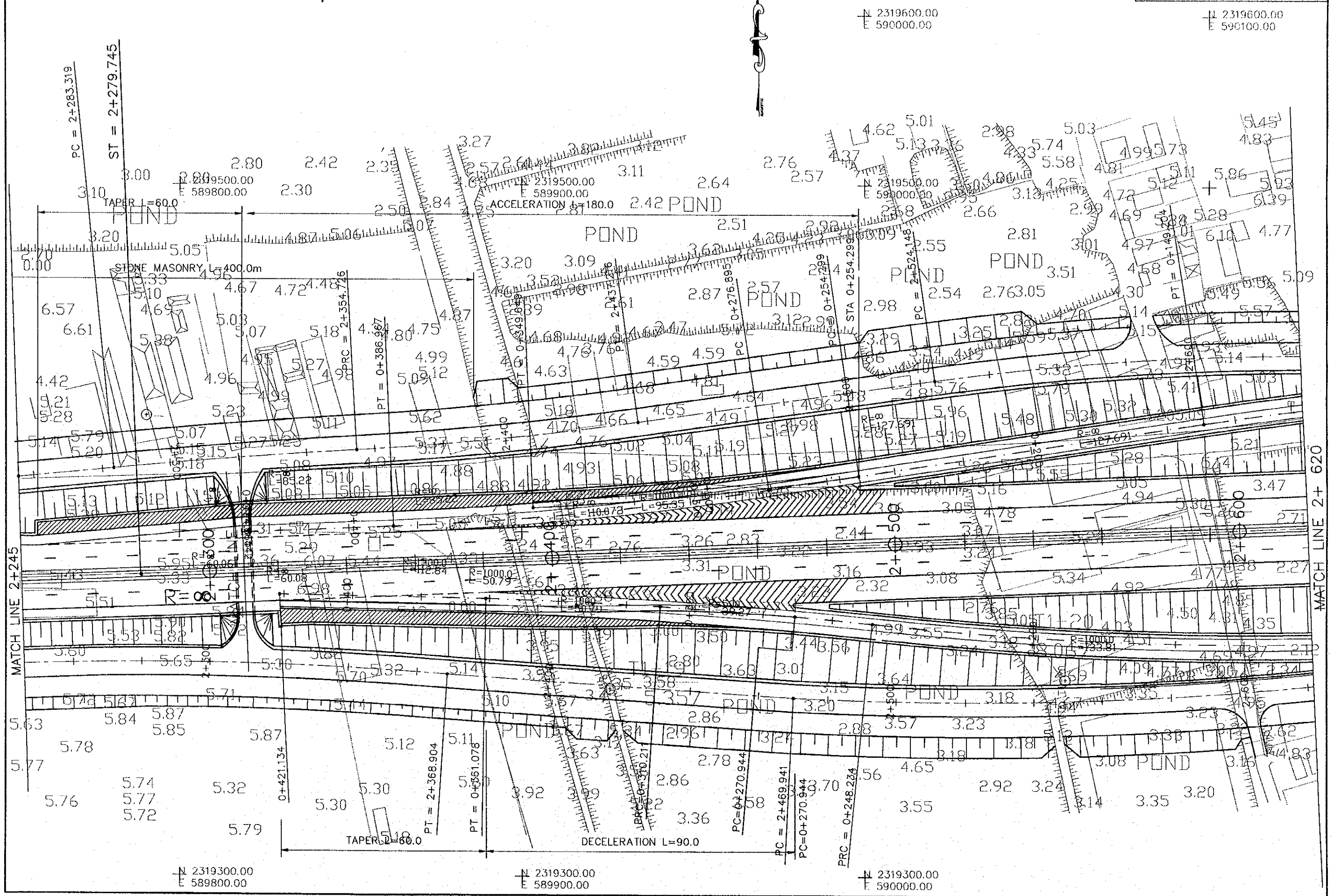
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.5.17

PACKAGE 3	SCALE 1/1000	DRAWING No. B-4-B	SHEET No.
PHAP VAN - CAU GIE INTERCHANGE (8/8)			



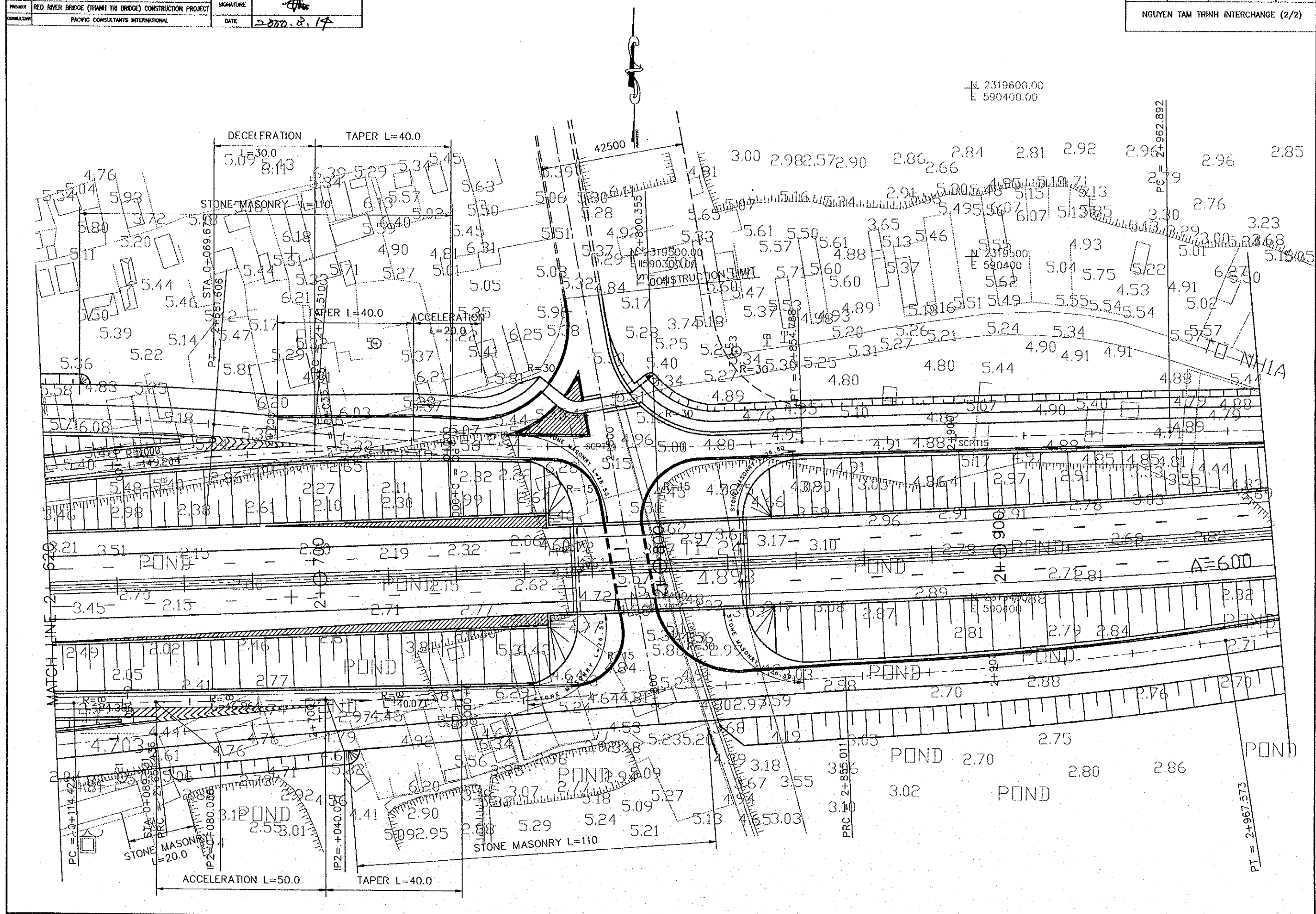
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NAITAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.3.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/1000	DRAWING No. B-4-9	SHEET No.
NGUYEN TAM TRINH INTERCHANGE (1/2)			



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.8.17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

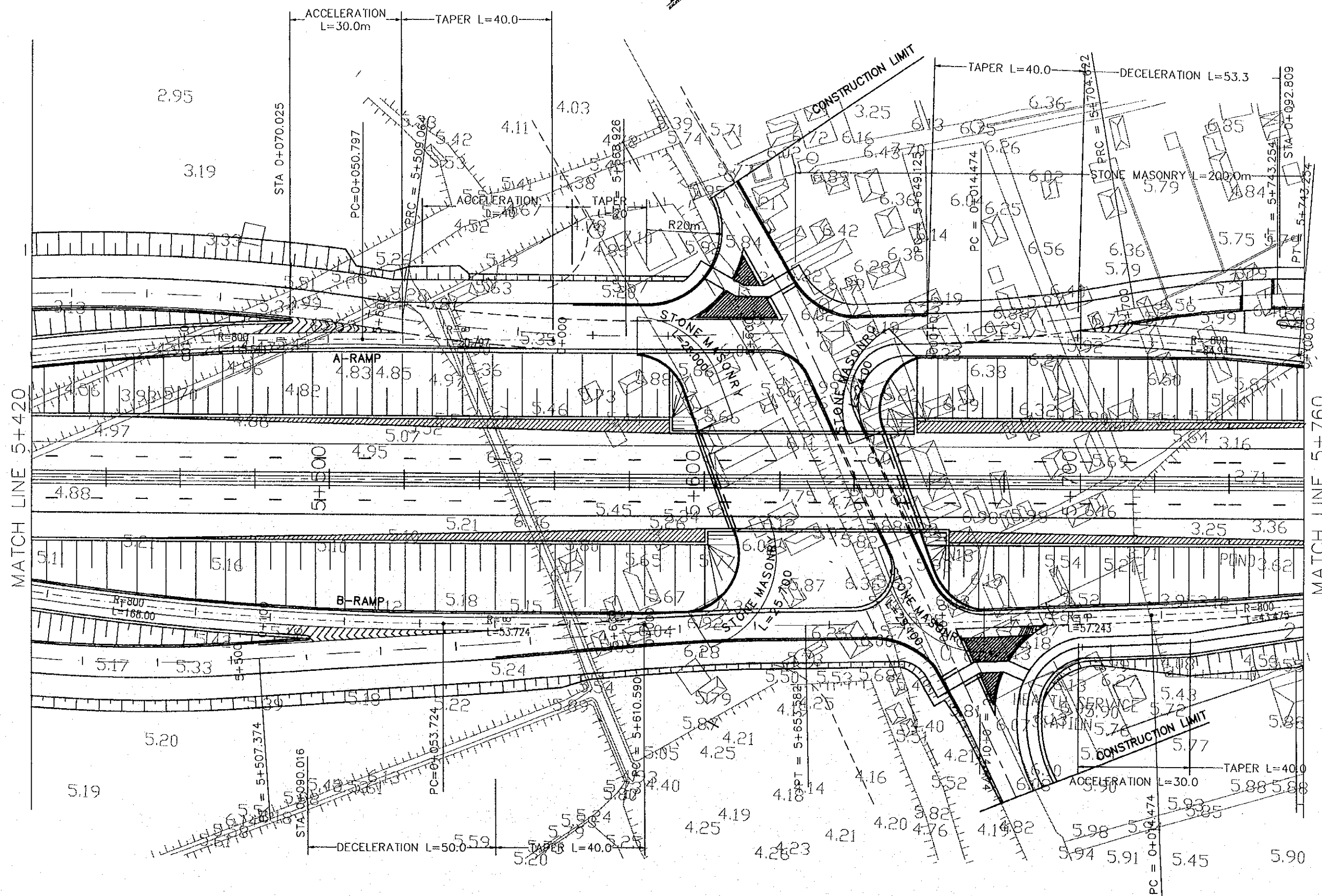
PACKAGE 3	SCALE 1/1000	DWG No. B-4-10	SHEET No. NGUYEN TAM TRINH INTERCHANGE (2/2)
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THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2088.2.14

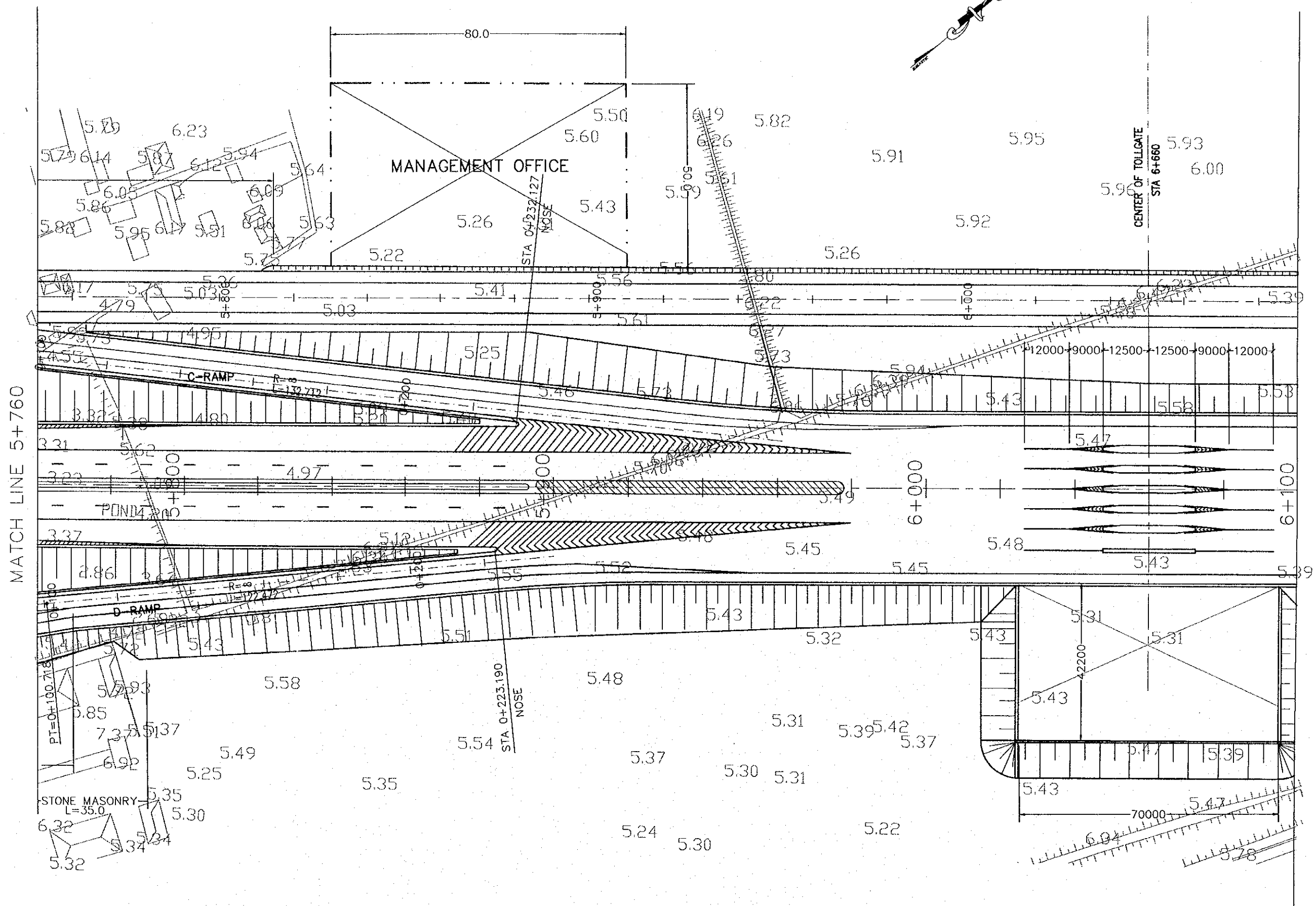
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LINH NAM INTERCHANGE (2/3)



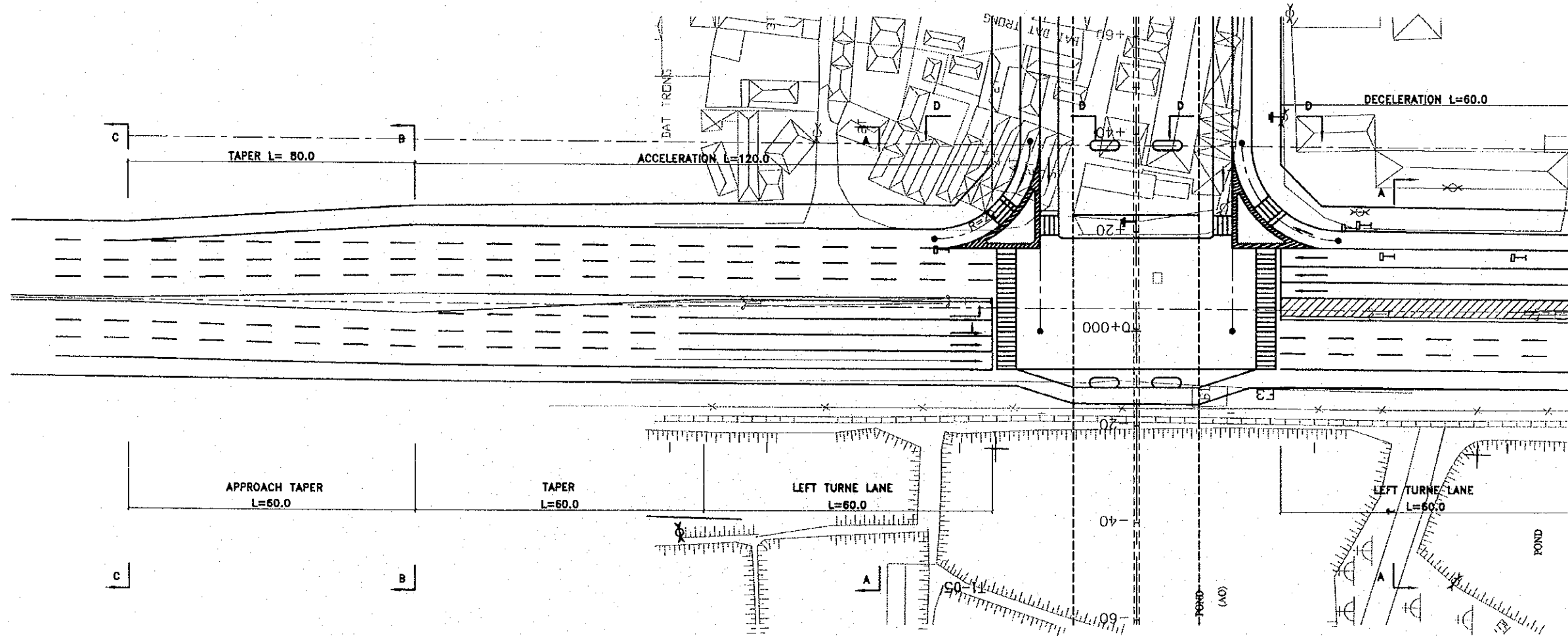
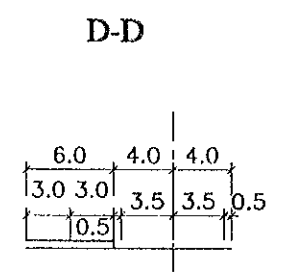
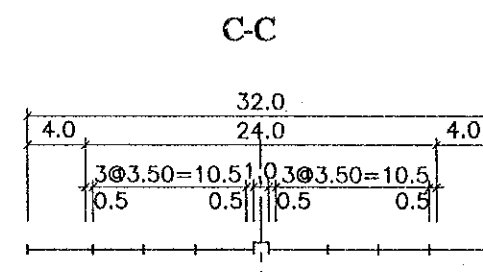
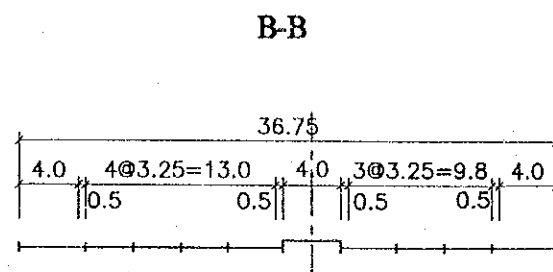
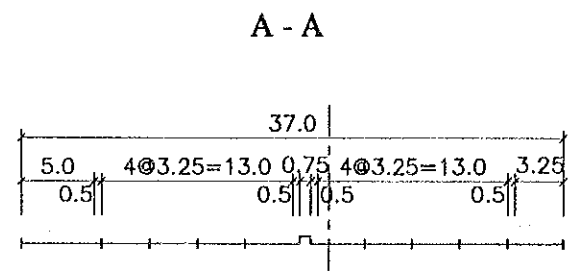
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT: RED RIVER BRIDGE (HANG TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE: 2000.11.17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/1000	B-4-13	
LINH NAM INTERCHANGE 3/3			



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TIN BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE

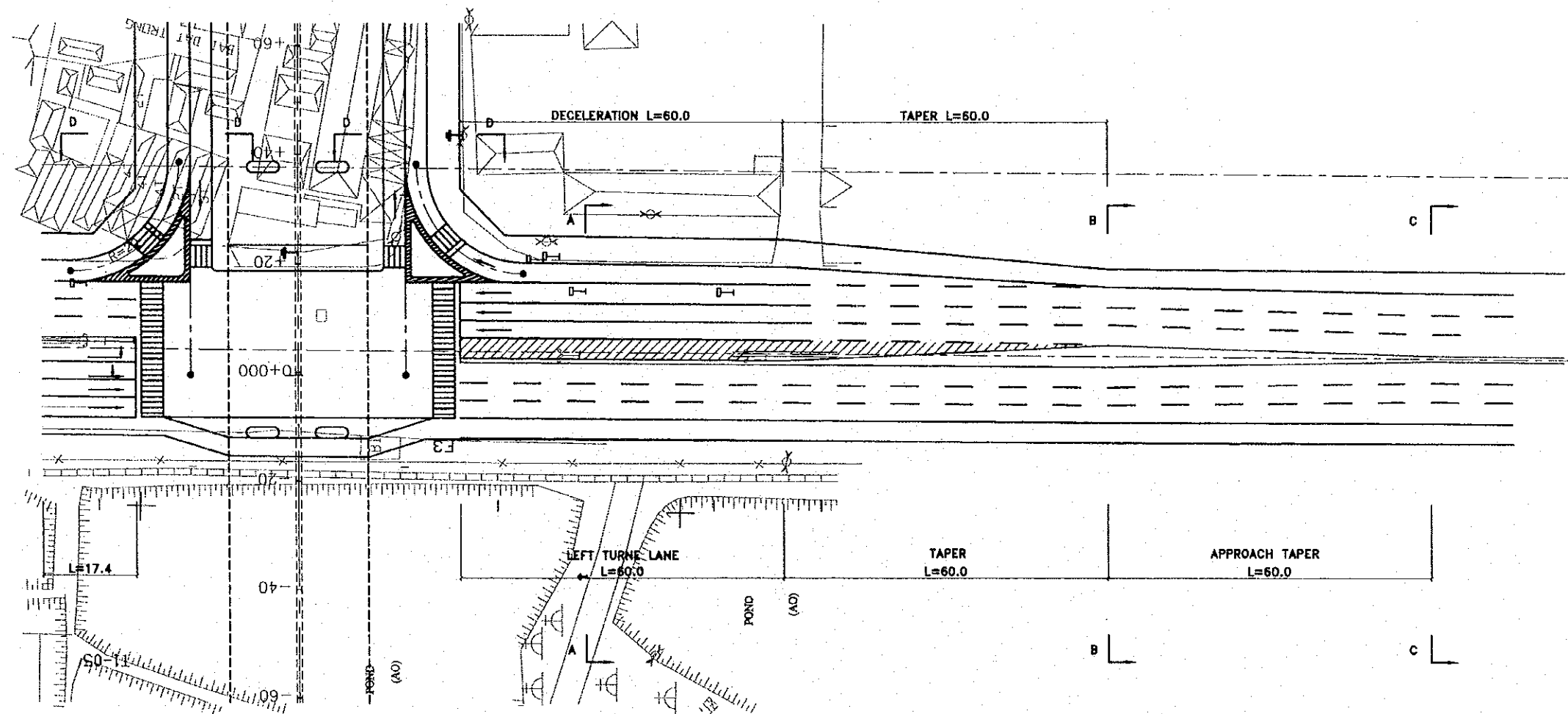
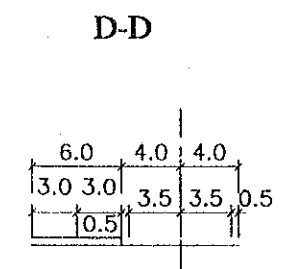
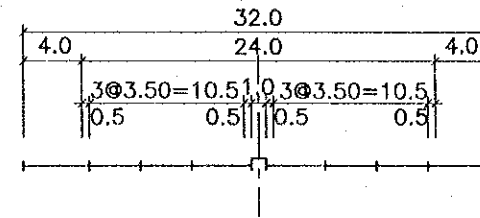
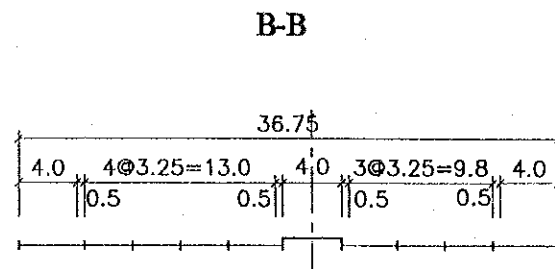
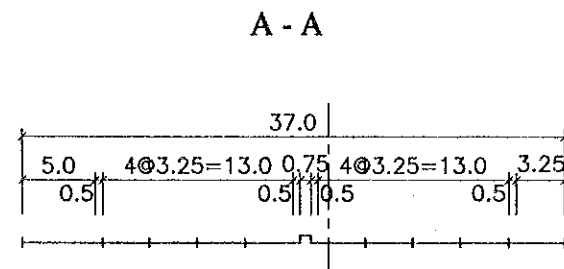
PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/1000	B-5-1	
NH No1 INTERSECTION (1/2)			



83

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.02.17

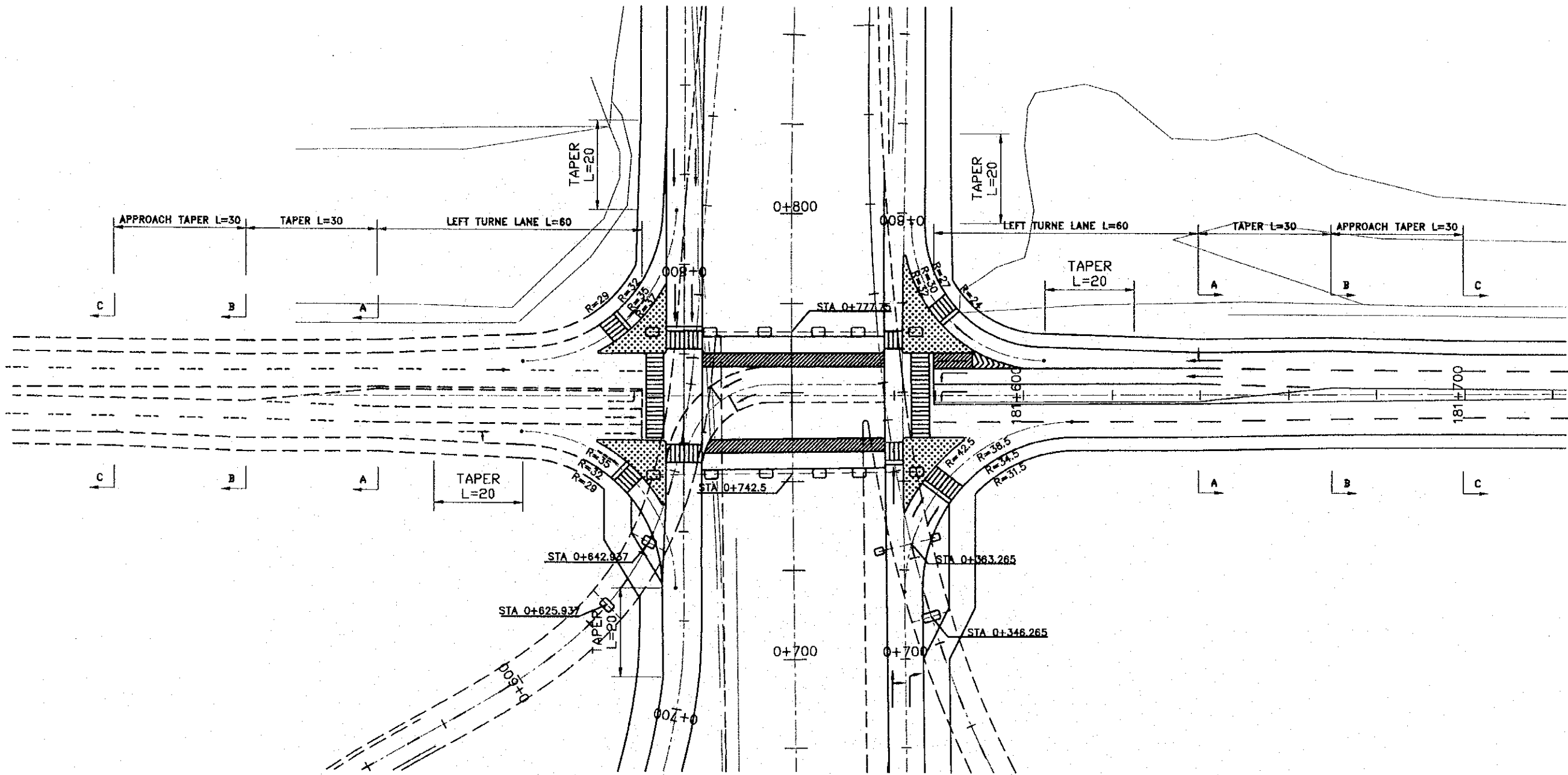
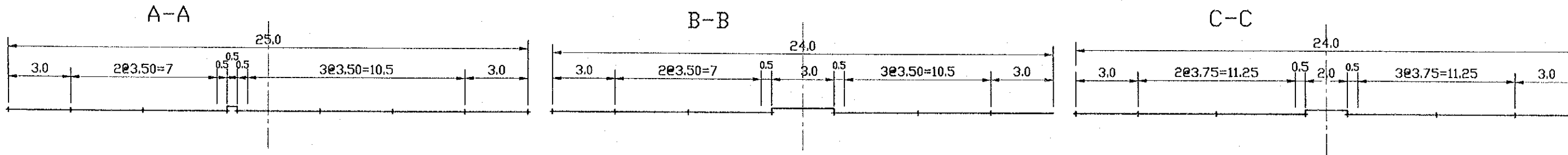
PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/1000	B-5-2	
NH No1 INTERSECTION (2/2)			



8.2

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. V. N. H. A. R. E.
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE	2000. 01. 17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/1000	B-5-3	
PHAP VAN - CAU GIE ROAD INTERSECTION (STAGE 1)			

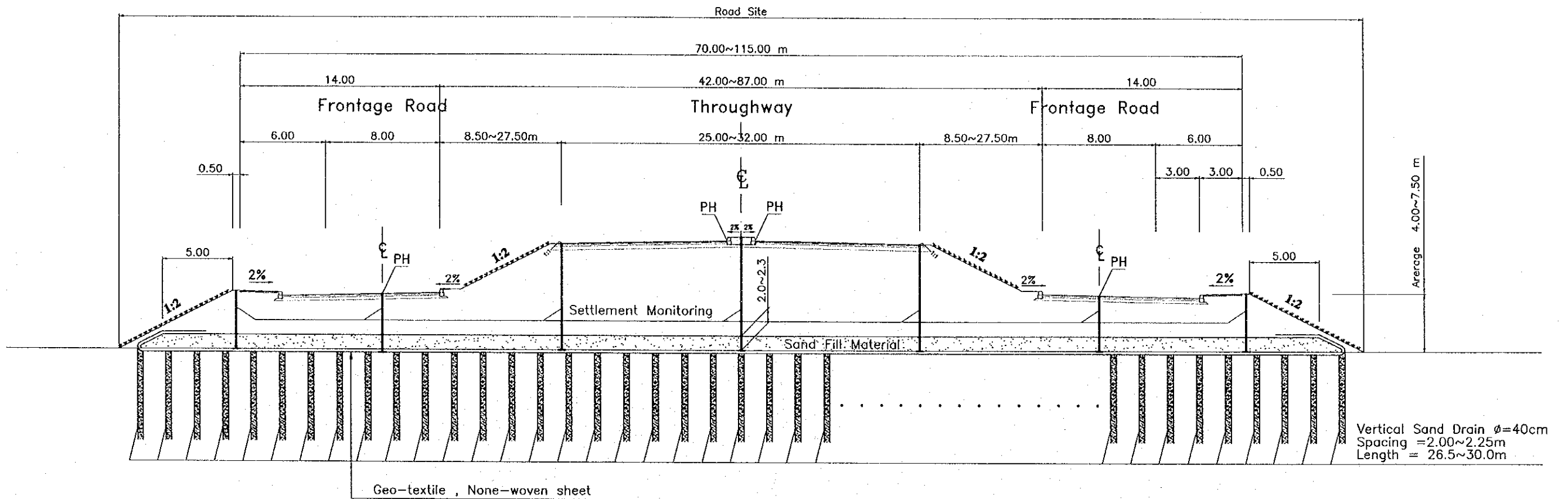


33

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.17	

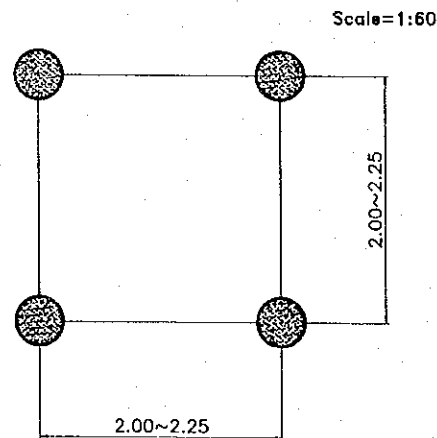
PACKAGE 3	SCALE As shown	DRAWING No. B-6-1	SHEET No.
SOFT GROUND TREATMENT (Type - A)			

Soft Ground Treatment (Type - A)

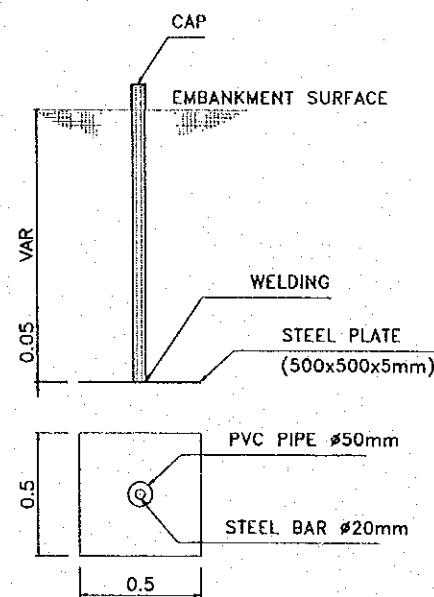


THROUGHWAY & FRONTAGE ROAD (THANH TRI SIDE)

ARRANGEMENT OF SAND DRAIN



SETTLEMENT MONITORING AND MEASURING DEVICES



Location	Diameter(φ) of Vertical Sand Drain (cm)	Spacing (m)	Length (m)	Sand Fill Depth at the Center Line (m)
1+111 ~ 1+647	40	2.25	30	2.0
1+746 ~ 2+100	40	2.25	30	2.0
2+100 ~ 2+400	40	2.25	30	2.0
2+400 ~ 2+560	40	2.00	26.5	2.3
2+560 ~ 2+775	40	2.00	26.5	2.3
2+825 ~ 3+100	40	2.00	26.5	2.3
3+100 ~ 3+300	40	2.00	26.5	2.3

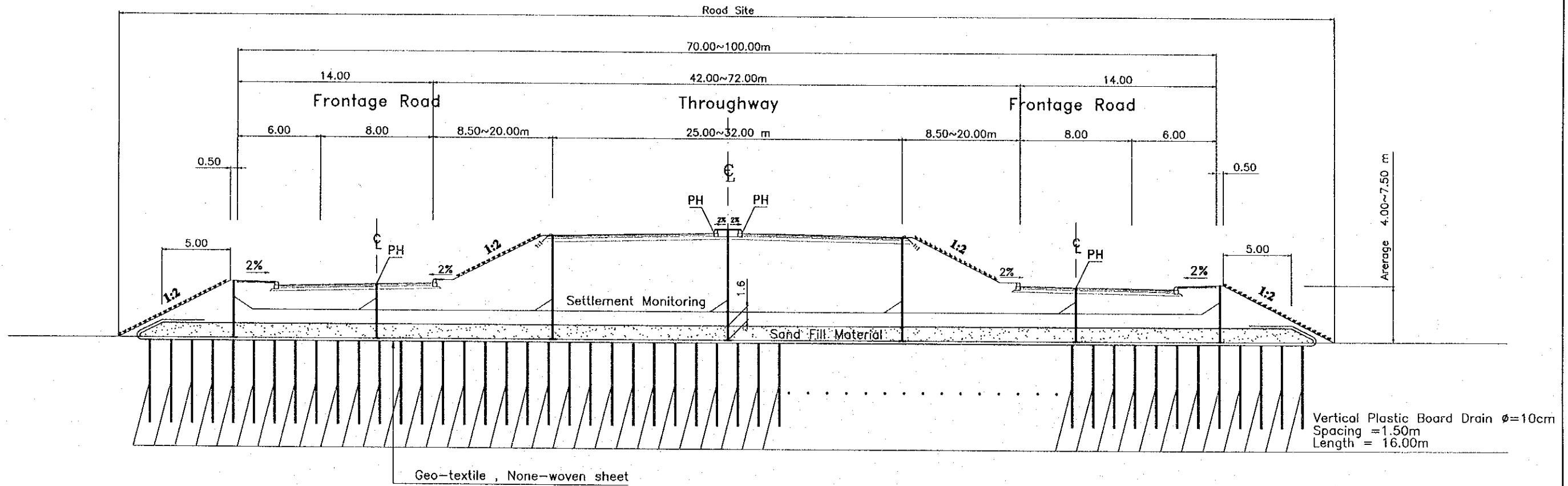
NOTES :

- (1) Settlement monitoring devices shall be installed at intervals of 100m.
- (2) Settlement shall be monitored during construction, and abutment piling and pavement construction shall not proceed until consolidation has reached 90%.
- (3) The above location includes the rampways of the Nguyen Tam Trinh interchange

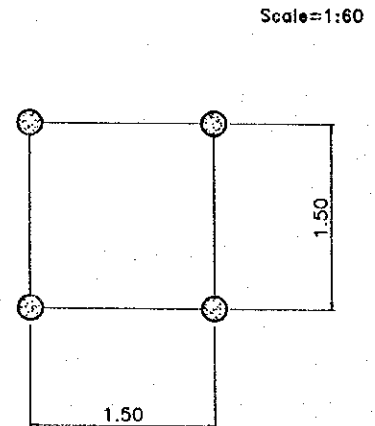
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	As shown	B-6-2	
SOFT GROUND TREATMENT (Type - B)			

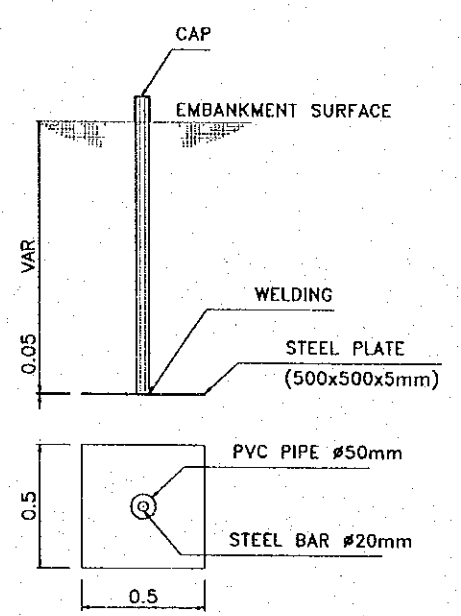
Soft Ground Treatment (Type - B)



ARRANGEMENT OF PLASTIC BOARD DRAIN



SETTLEMENT MONITORING AND MEASURING DEVICES



THROUGHWAY & FRONTAGE ROAD (THANH TRI SIDE)

Location	Diameter(φ) of Vertical Sand Drain (cm)	Spacing (m)	Length (m)	Sand Fill Depth at the Center Line (m)
3+300 ~ 5+100	10	1.5	16.0	1.6
5+100 ~ 5+605	10	1.5	16.0	1.6
5+655 ~ 5+920	10	1.5	16.0	1.6
5+920 ~ 6+214	10	1.5	16.0	1.6

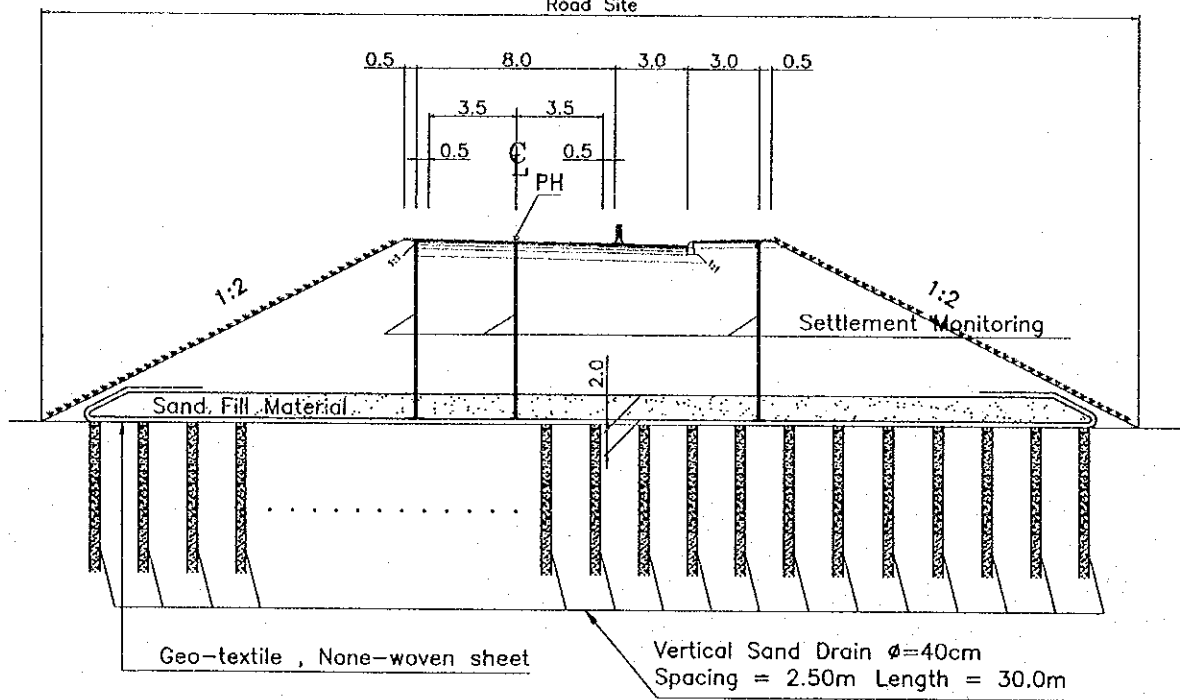
- NOTES :
- (1) Settlement monitoring devices shall be installed at intervals of 100m.
 - (2) Settlement shall be monitored during construction, and abutment piling and pavement construction shall not proceed until consolidation has reached 90%.
 - (3) The above location includes the rampways of the Linh Nam interchange

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S.WATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.01.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	As Shown	B-6-3	
SOFT GROUND TREATMENT (Type - F&G)			

Soft Ground Treatment (Type - F)

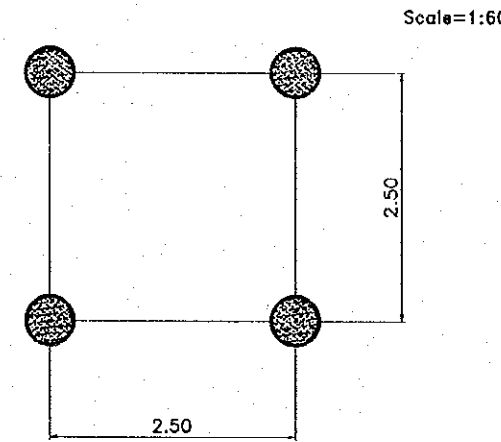
Right Side Frontage Road (Thanh Tri Side)



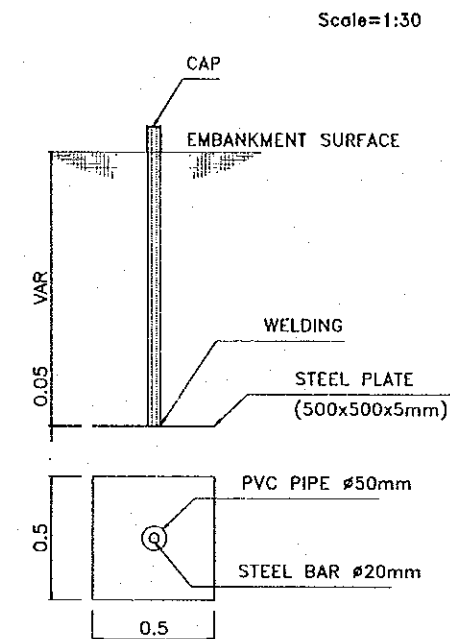
RIGHT SIDE FRONTAGE ROAD (THANH TRI SIDE)

Frontage Location	Diameter(ϕ) of Sand Drain (cm)	Spacing (m)	Length (m)	Sand Fill Depth at the Center Line (m)
0+020 ~ 0+420	40	2.5	30	2.0
0+420 ~ 0+540	40	2.5	30	2.0
0+560 ~ 0+700	40	2.5	30	2.0
0+700 ~ 1+107	40	2.5	30	2.0

ARRANGEMENT OF SAND DRAIN

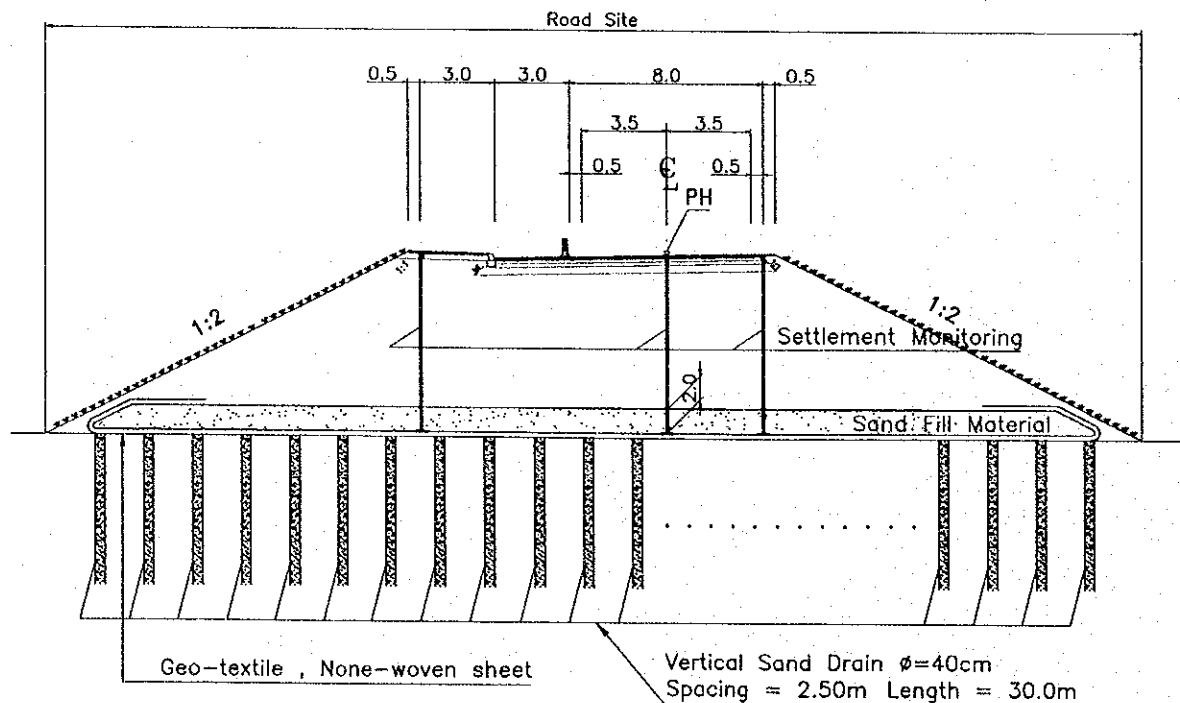


SETTLEMENT MONITORING AND MEASURING DEVICES



Soft Ground Treatment (Type - G)

Left Side Frontage Road (Thanh Tri Side)



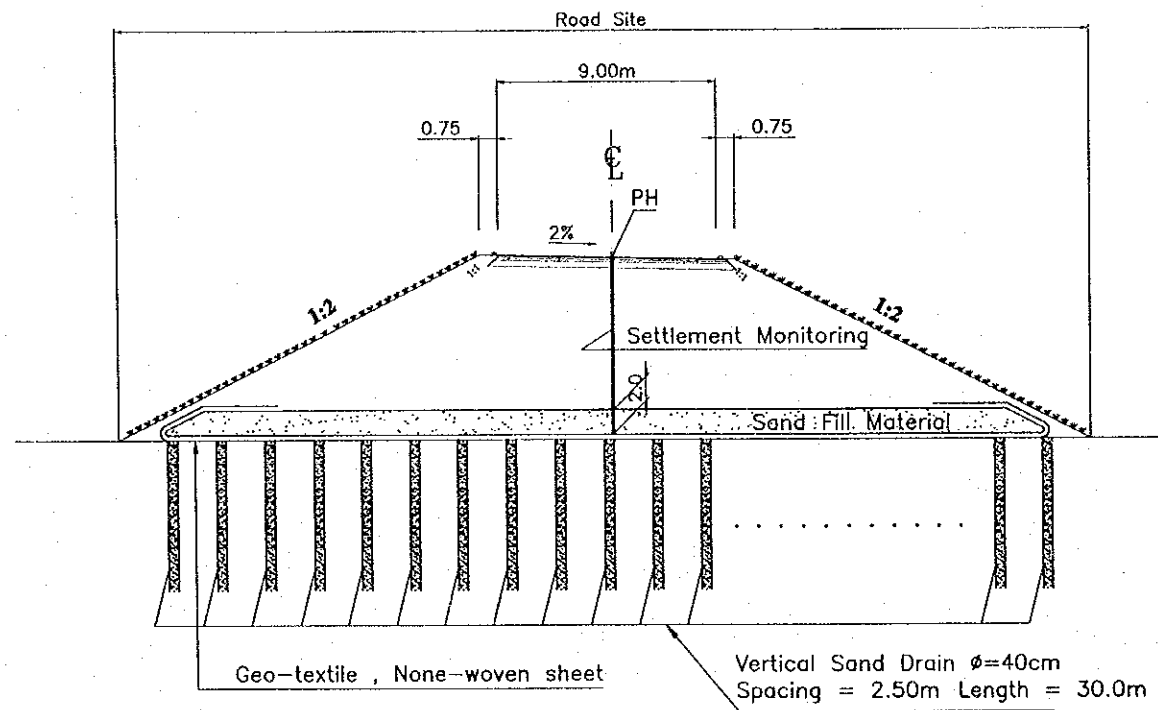
LEFT SIDE FRONTAGE ROAD (THANH TRI SIDE)

Frontage Location	Diameter(ϕ) of Sand Drain (cm)	Spacing (m)	Length (m)	Sand Fill Depth at the Center Line (m)
0+020 ~ 0+300	40	2.25	30	2.0
0+300 ~ 0+546	40	2.25	30	2.0
0+565 ~ 0+700	40	2.25	30	2.0
0+700 ~ 1+127	40	2.25	30	2.0

NOTES :

- (1) Settlement monitoring devices shall be installed at intervals of 100m.
- (2) Settlement shall be monitored during construction, and abutment piling and pavement construction shall not proceed until consolidation has reached 90%.

Soft Ground Treatment (Type - H)

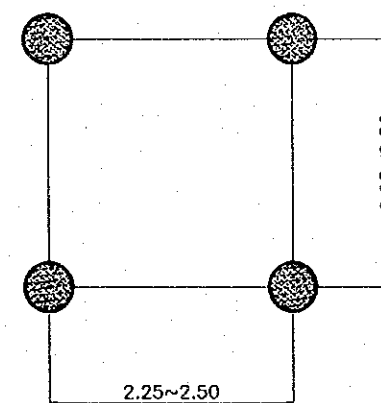


PHAP VAN CAU GIE INTERCHANGE

Ramp	Location	Diameter(ϕ) of Vertical Sand Drain (cm)	Spacing (m)	Length (m)	Sand Fill Depth at the Center Line (m)
C	0+131 ~ 0+202	40	2.5	30	2.0
E	0+584 ~ 1+019	40	2.5	30	2.0
F	0+584 ~ 0+924	40	2.5	30	2.0
G	0+224 ~ 0+387	40	2.5	30	2.0
H	0+281 ~ 0+433	40	2.5	30	2.0

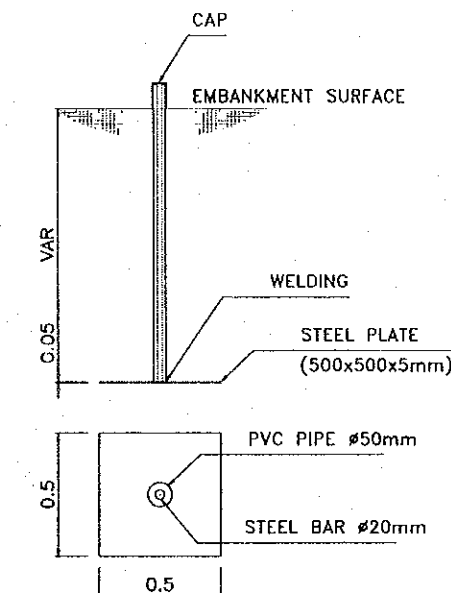
ARRANGEMENT OF SAND DRAIN

Scale=1:60

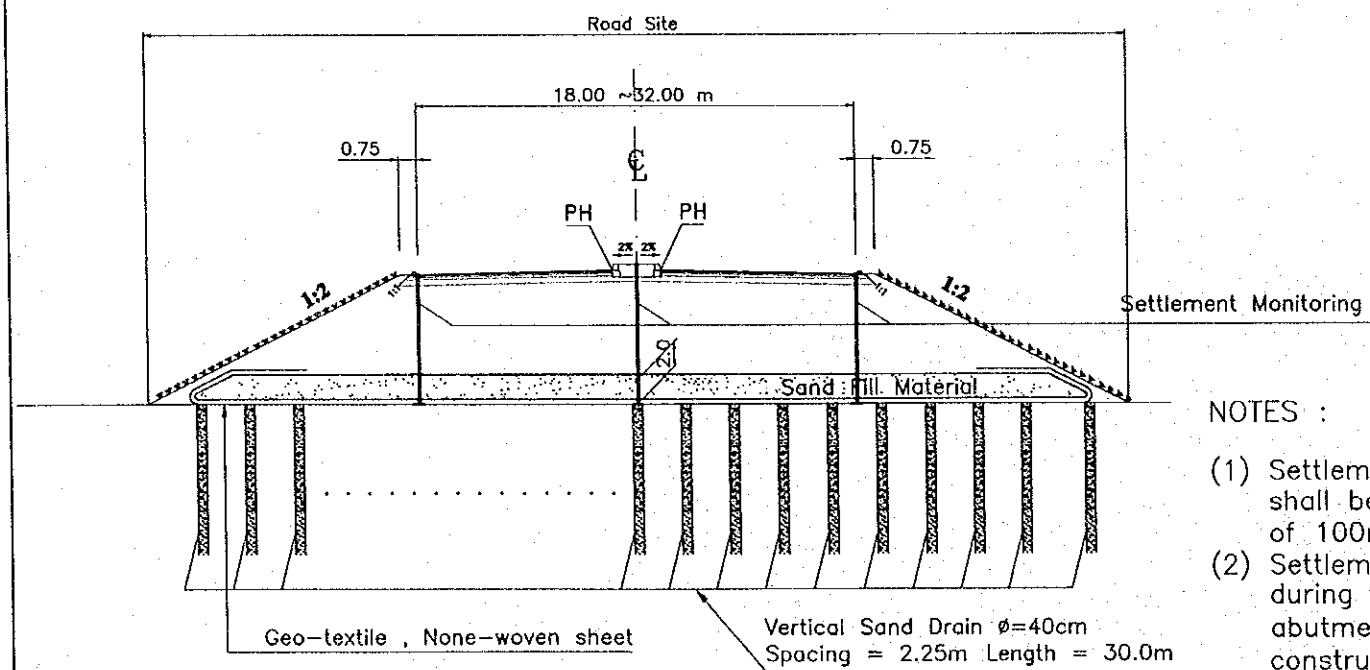


SETTLEMENT MONITORING AND MEASURING DEVICES

Scale=1:30



Soft Ground Treatment (Type - I)



NOTES :

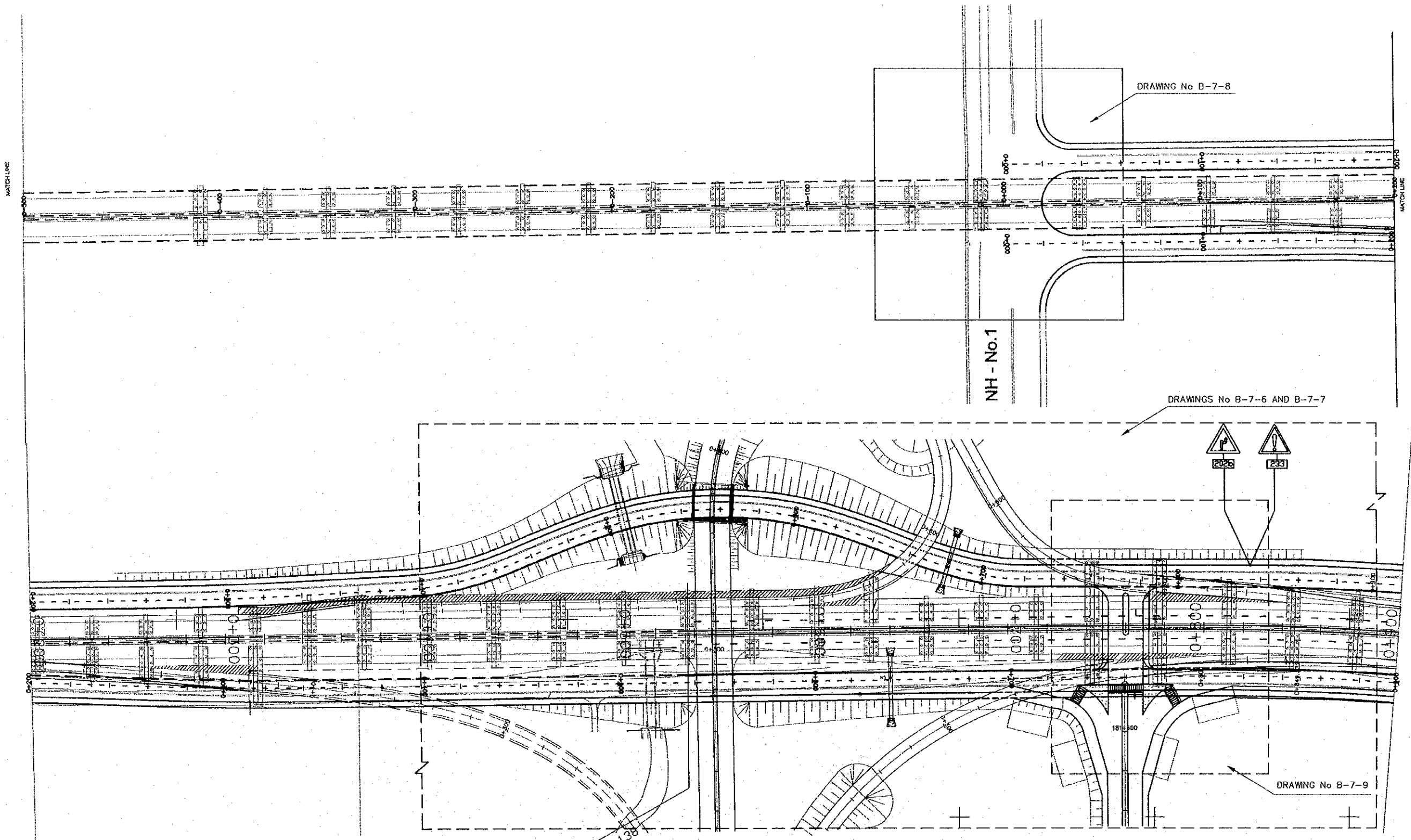
- (1) Settlement monitoring devices shall be installed at intervals of 100m.
- (2) Settlement shall be monitored during construction, and abutment piling and pavement construction shall not proceed until consolidation has reached 90%

PHAP VAN CAU GIE INTERCHANGE

Ramp	Location	Diameter(ϕ) of Vertical Sand Drain (cm)	Spacing (m)	Length (m)	Sand Fill Depth at the Center Line (m)
A,B	0+000 ~ 0+133	40	2.25	30	2.0
	0+133 ~ 0+270	40	2.25	30	2.0
	0+330 ~ 0+360	40	2.25	30	2.0
	0+380 ~ 0+570	40	2.25	30	2.0
E,F	0+000 ~ 0+240	40	2.25	30	2.0
	0+240 ~ 0+350	40	2.25	30	2.0
	0+406 ~ 0+584	40	2.25	30	2.0

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TIHANO LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.12.14	

PACKAGE 3	SCALE 1/2000	DRAWING No. B-7-1	SHEET No.
LAYOUT OF TRAFFIC SIGNS (KM 0+000 - KM 0+900)			

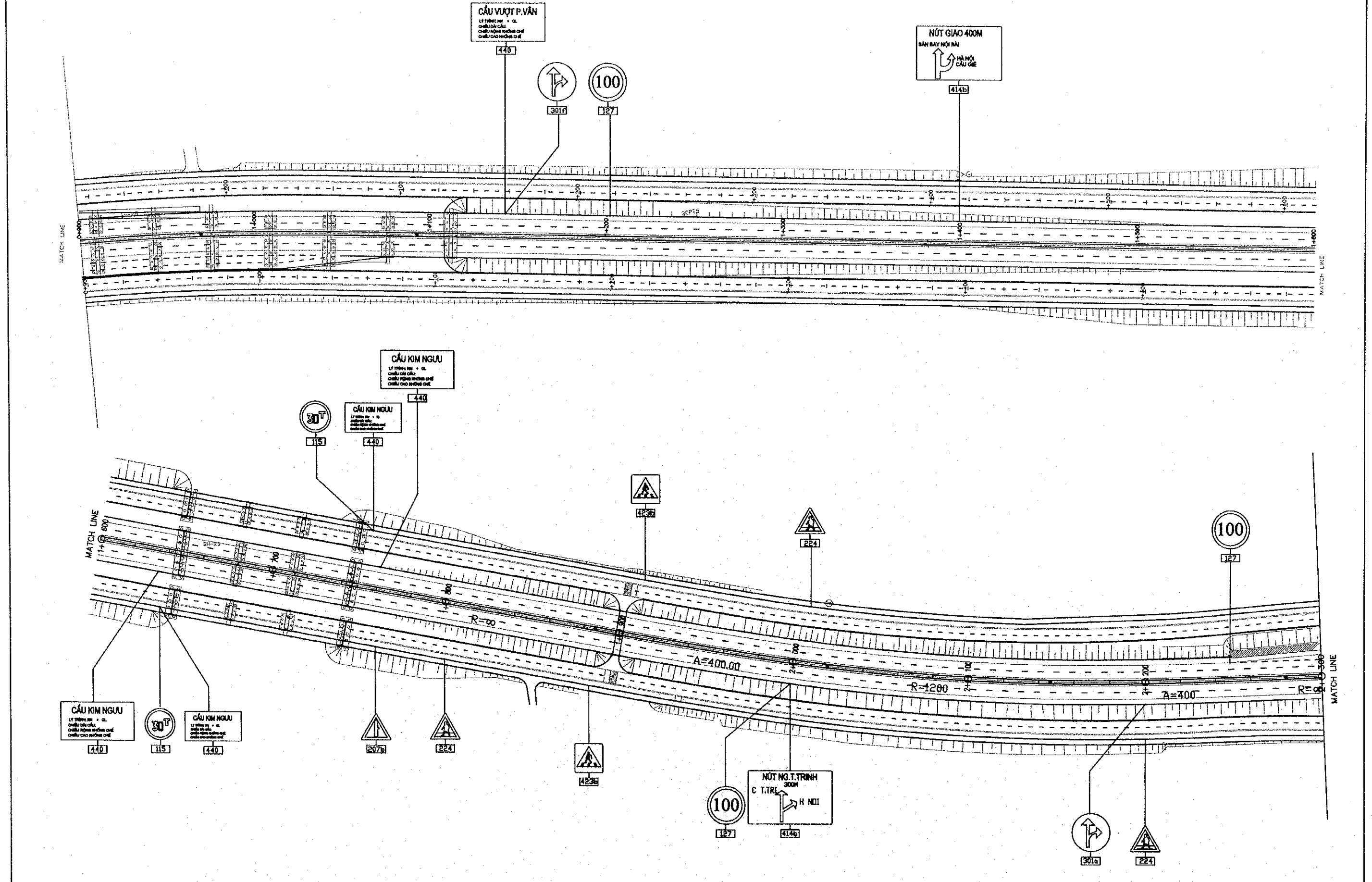


CONSTRUCTION LIMIT
THROUGHWAY STA: 0+536.5, RAMPWAY STA: 0+210.138

- NOTE:
1. LAYOUT OF TRAFFIC SIGNS FOR NH1 No.1 AT -GRADE INTERSECTION IS SHOWN IN DRAWING No B-7-8
 2. LAYOUT OF TRAFFIC SIGNS FOR PHAP VAN-CAU GIE INTERCHANGE IS SHOWN IN DRAWINGS No B-7-6 AND B-7-7
 3. LAYOUT OF TRAFFIC SIGNS FOR PHAP VAN-CAUGIE AT GRADE INTERSECTION IS SHOWN IN DRAWING No B-7-9

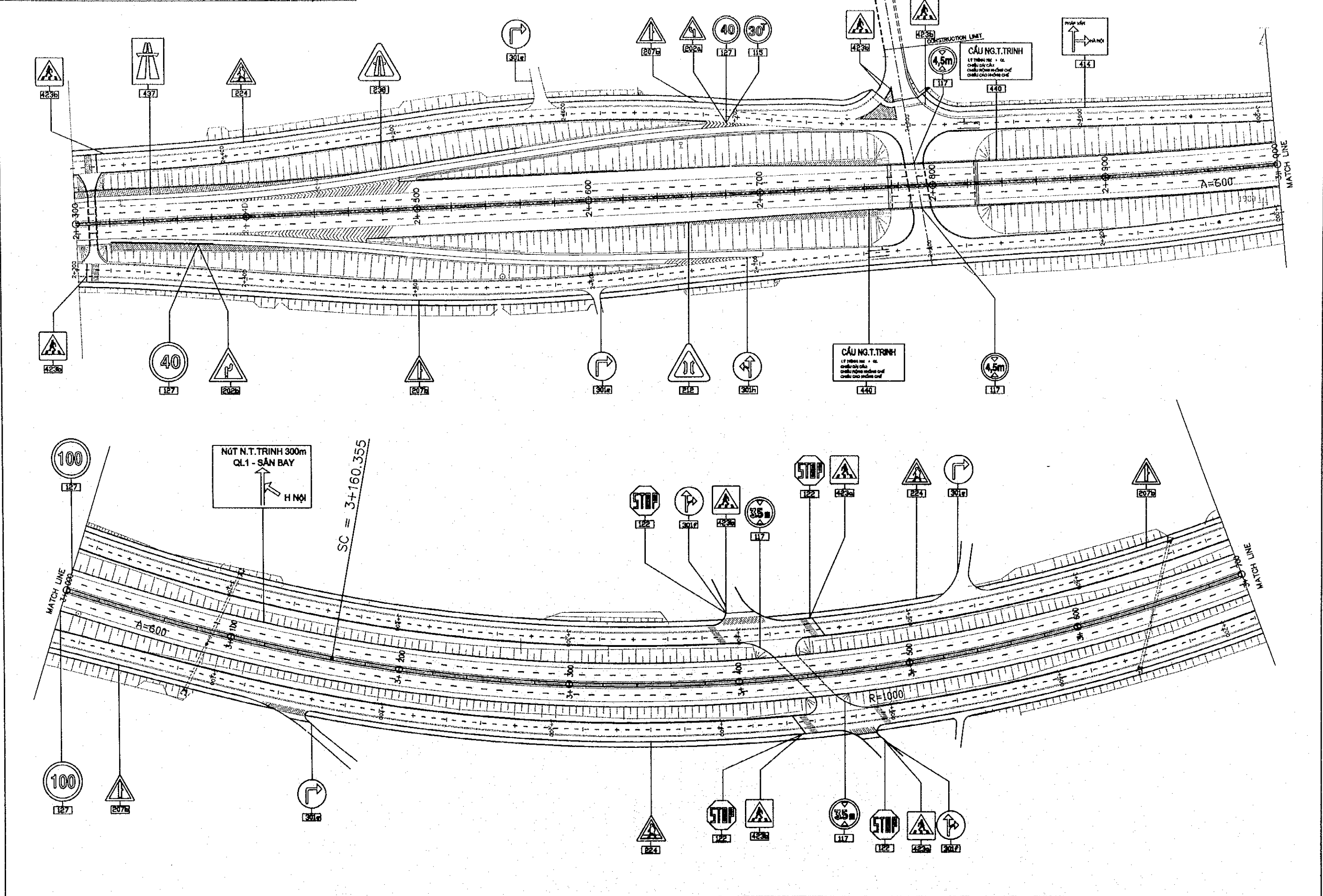
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. WATADA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 03. 19

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		B-7-2	
LAYOUT OF TRAFFIC SIGNS (KM 0+800 ~ KM 2+300)			



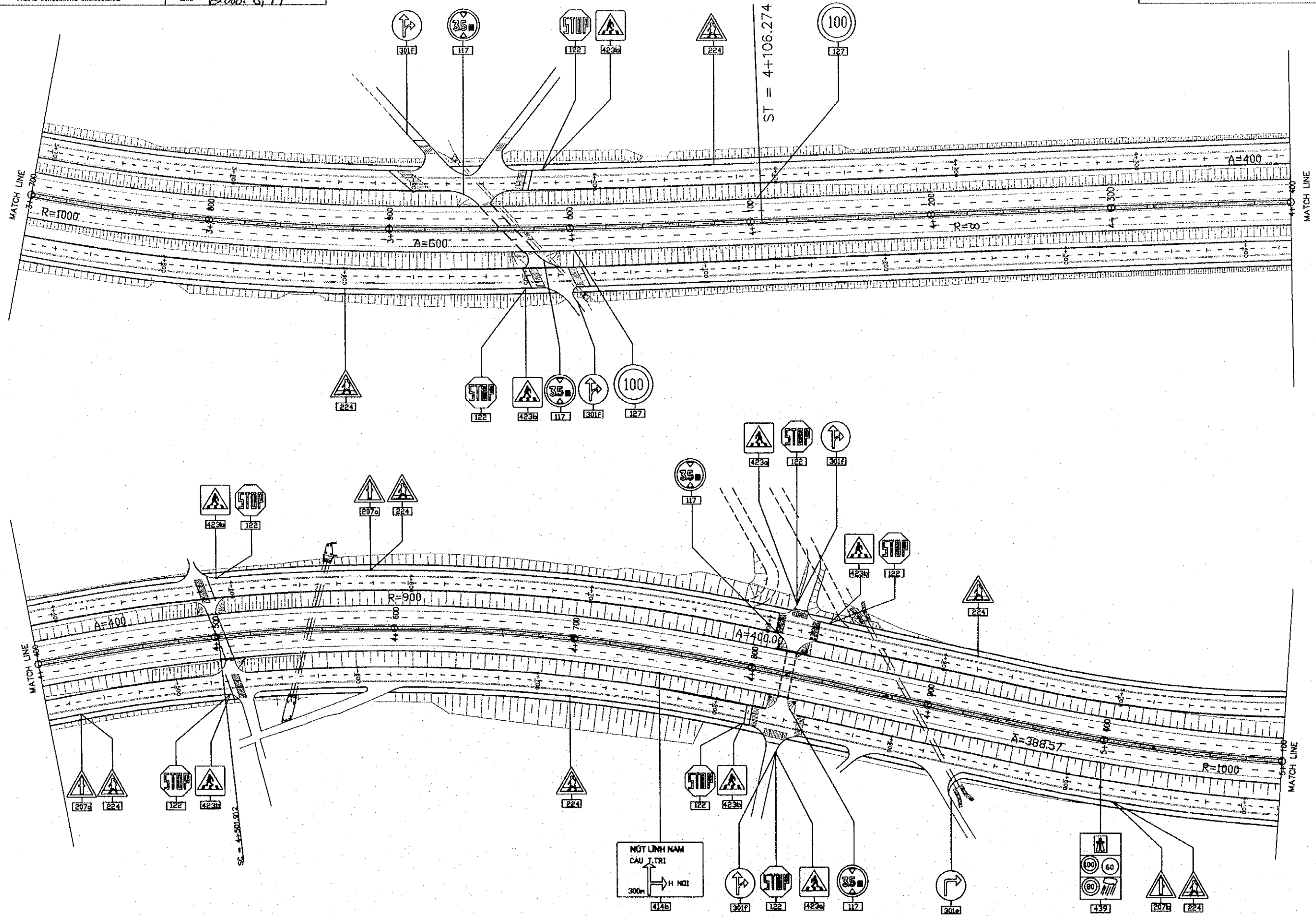
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATAKE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
DATE 2000.11.17		DATE

PACKAGE 3	SCALE	DRAWING No. B-7-3	SHEET No.
LAYOUT OF TRAFFIC SIGNS (KM 2+300 - 3+700)			



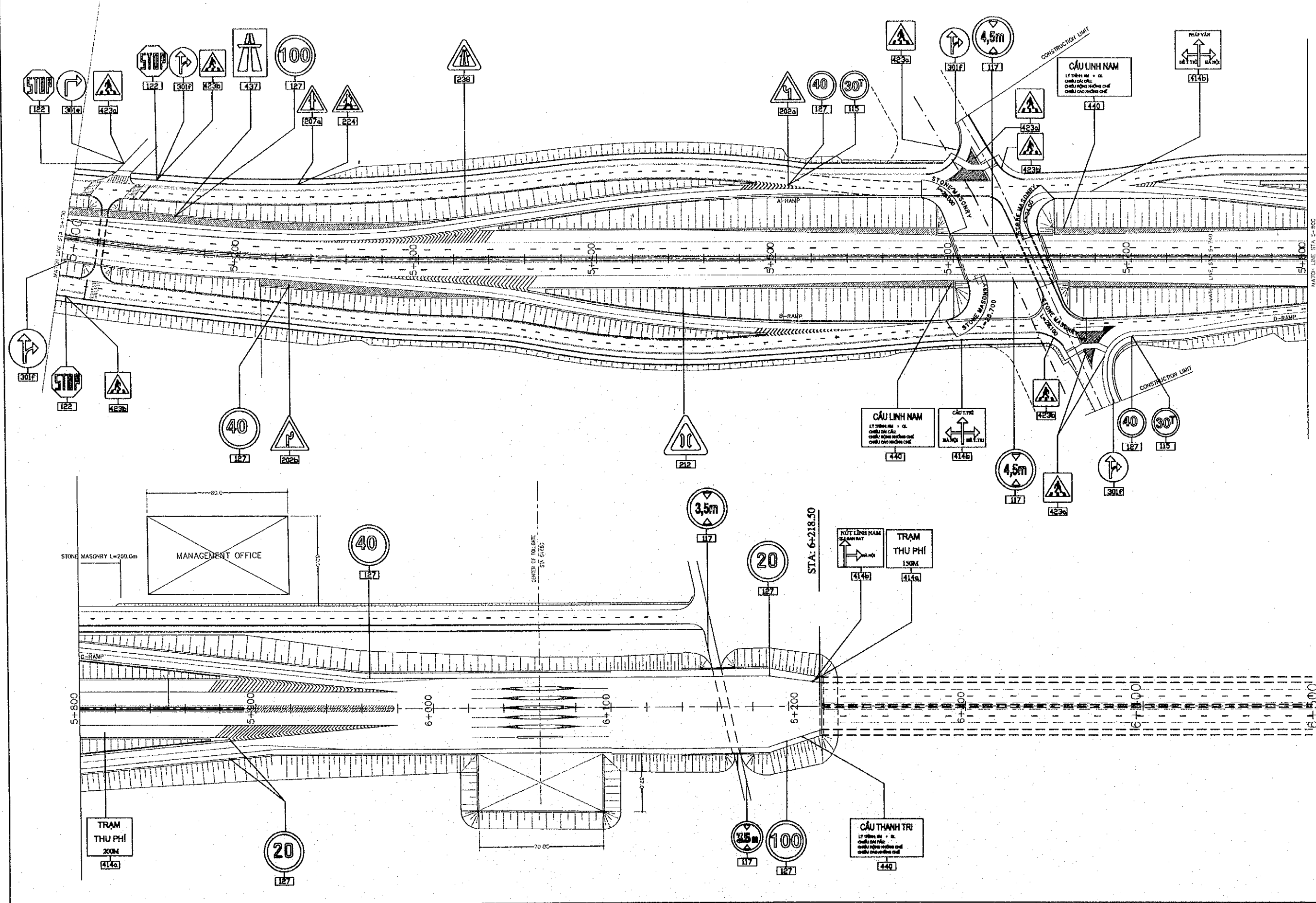
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. KATADA
PROJECT RED RIVER BRIDGE (BANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
COMMISSIONER PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000. 8. 17

PACKAGE 3	SCALE	DRAWING No. B-7-4	SHEET No.
LAYOUT OF TRAFFIC SIGNS (KM 3+700 - 5+100)			



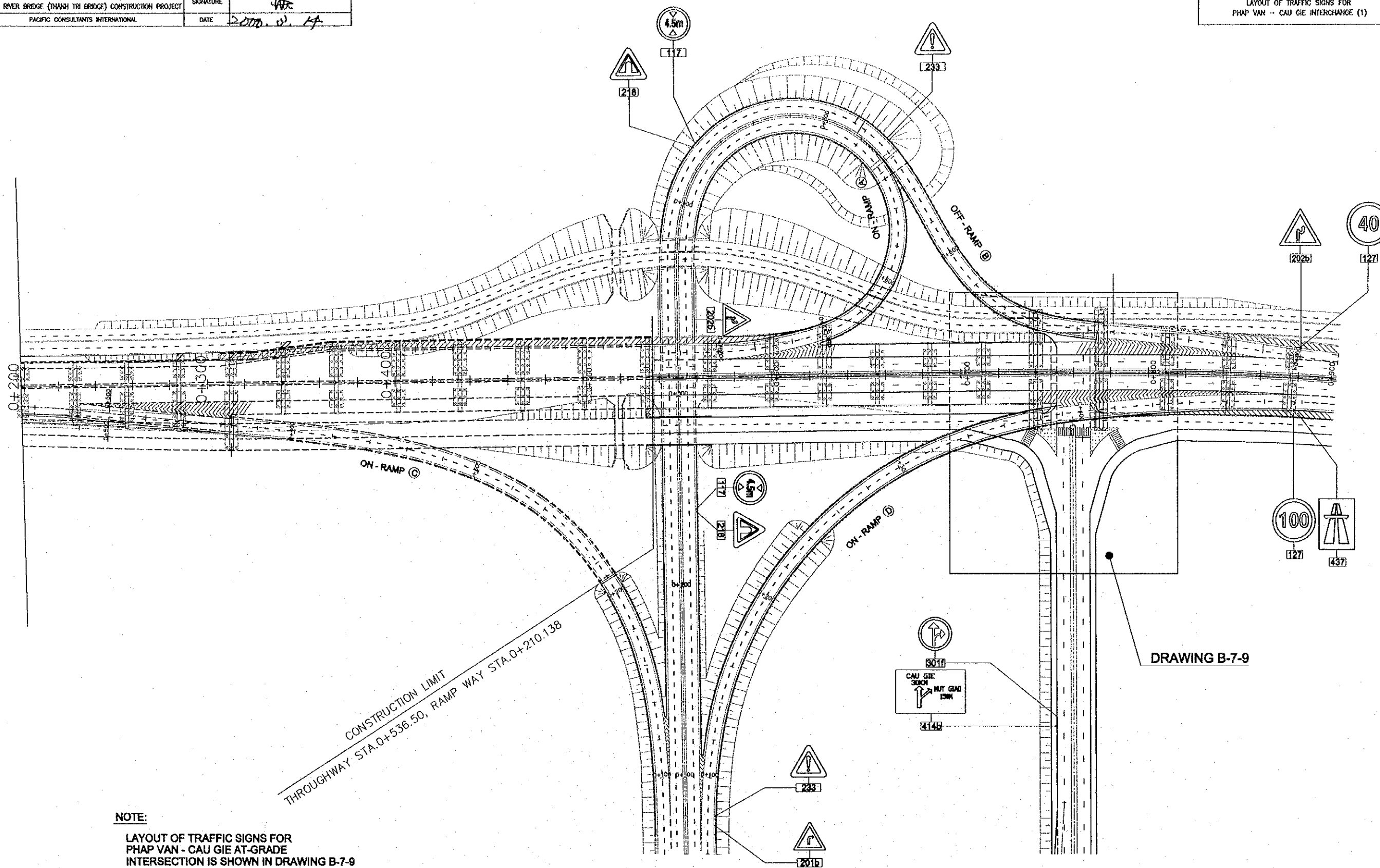
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.11.14	

PACKAGE 3	SCALE	DRAWING No. B-7-5	SHEET No.
LAYOUT OF TRAFFIC SIGNS (KM 5+100 - KM 6+218.50)			



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.01.14	

PACKAGE 3	SCALE	DRAWING No. B-7-6	SHEET No.
LAYOUT OF TRAFFIC SIGNS FOR PHAP VAN - CAU GIE INTERCHANGE (1)			

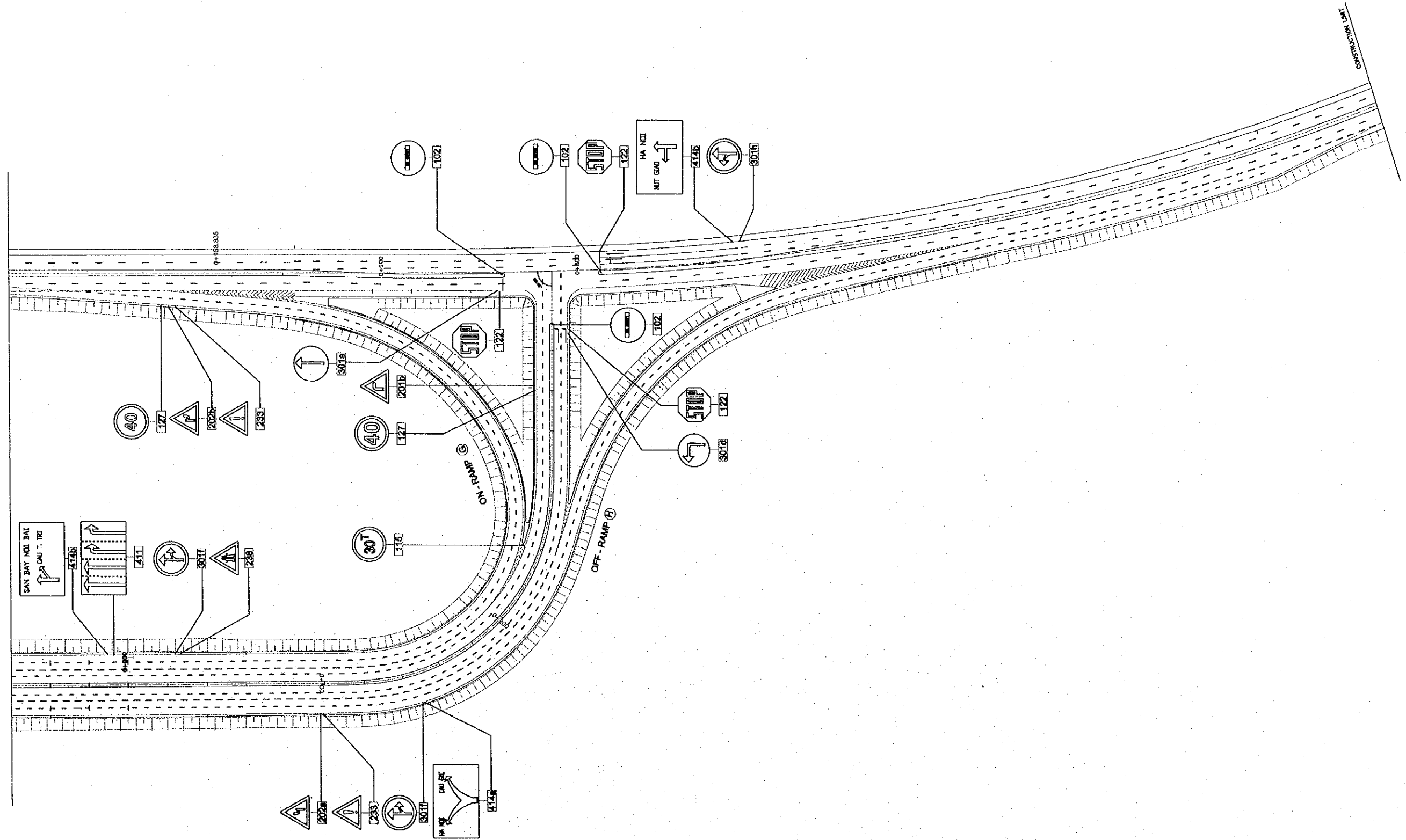


NOTE:
LAYOUT OF TRAFFIC SIGNS FOR
PHAP VAN - CAU GIE AT-GRADE
INTERSECTION IS SHOWN IN DRAWING B-7-9

DRAWING B-7-9

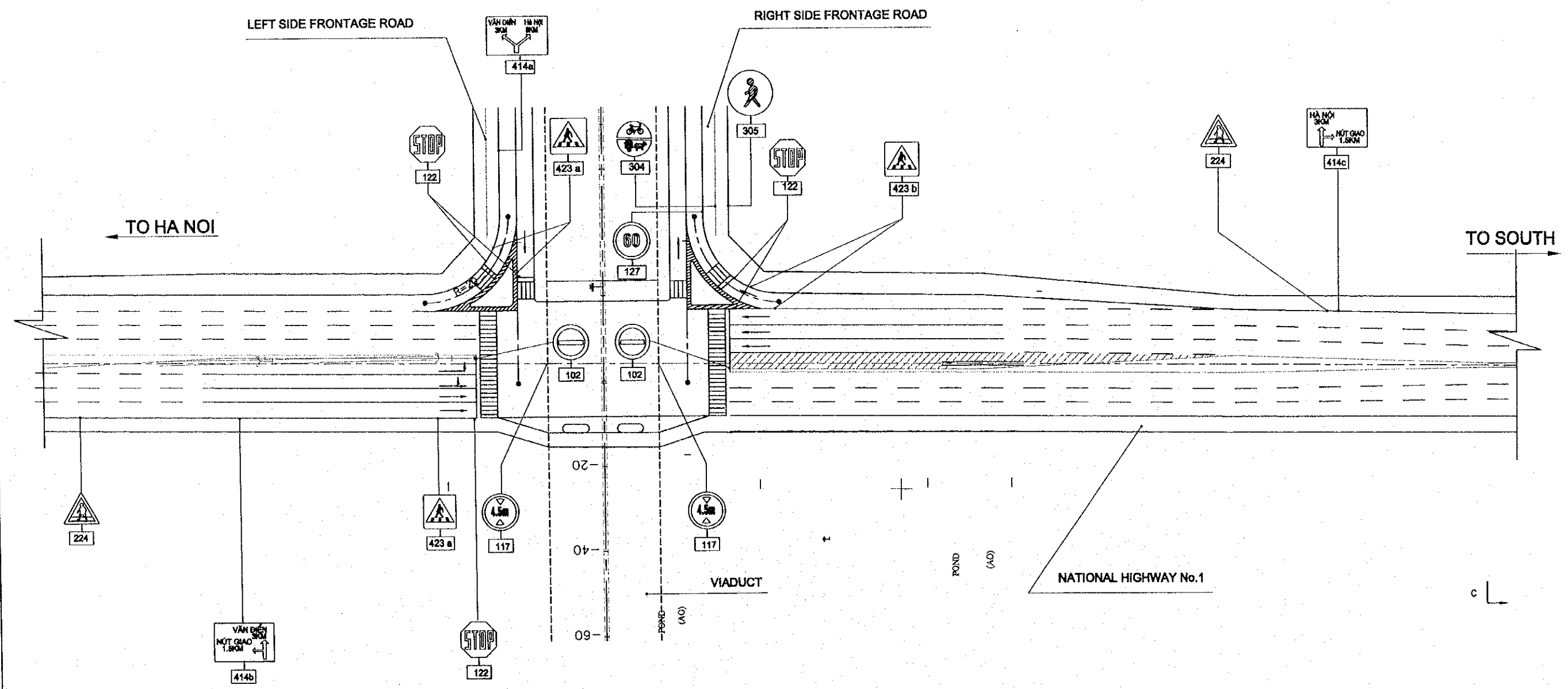
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATUBE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 01. 19

PACKAGE 3	SCALE	DRAWING No. B-7-7	SHEET No.
LAYOUT OF TRAFFIC SIGNS FOR PHAP VAN - CAU GE INTERCHANGE (2)			



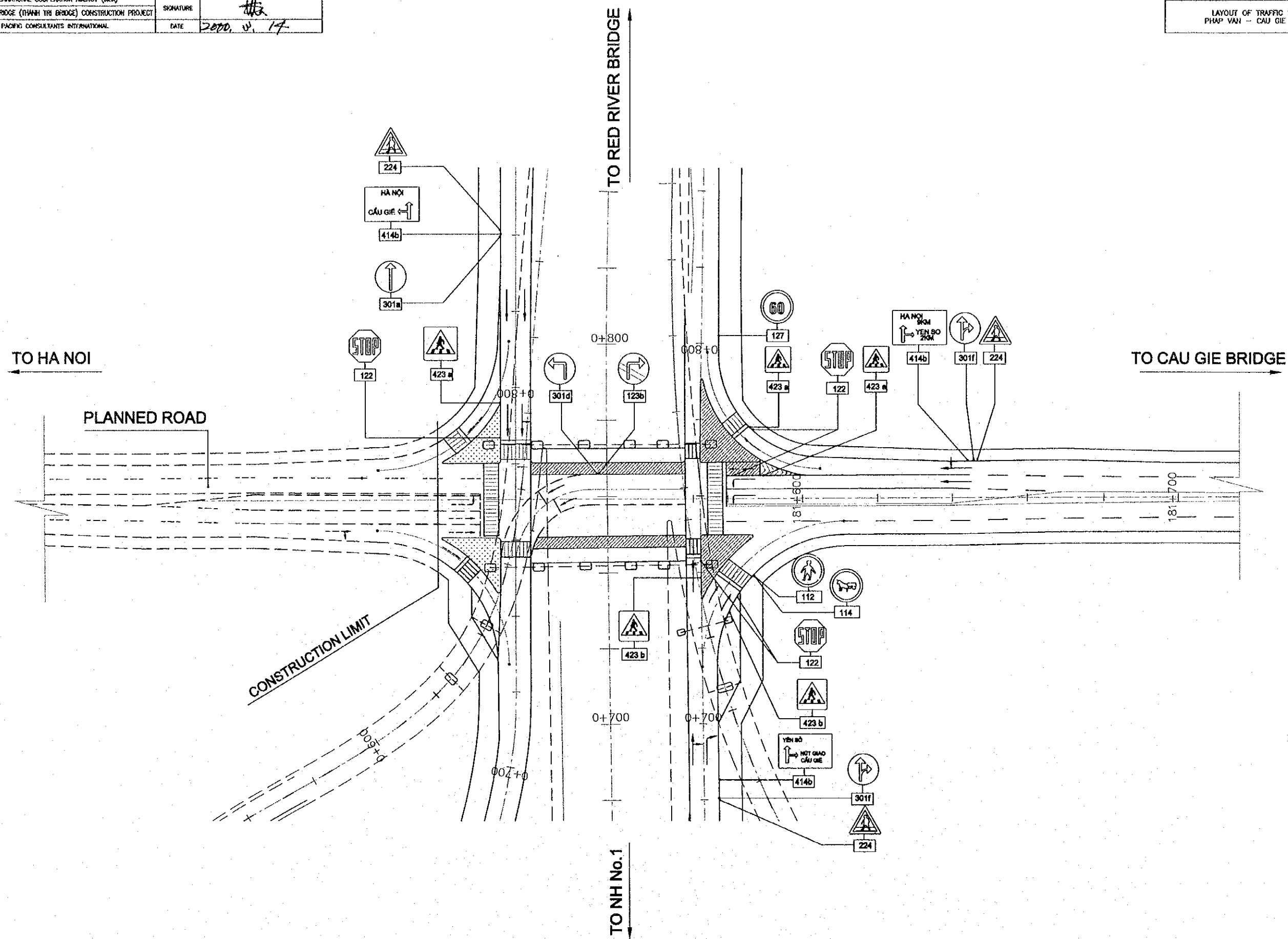
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (HANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000. 8. 14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. B-7-8	SHEET No.
LAYOUT OF TRAFFIC SIGNS FOR NH No.1 INTERSECTION			



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (PHAN THI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 01. 17	

PACKAGE 3	SCALE 1/1000	DRAWING No. B-7-9	SHEET No.
LAYOUT OF TRAFFIC SIGNS FOR PHAP VAN - CAU GIE INTERSECTION			



C. BRIDGE

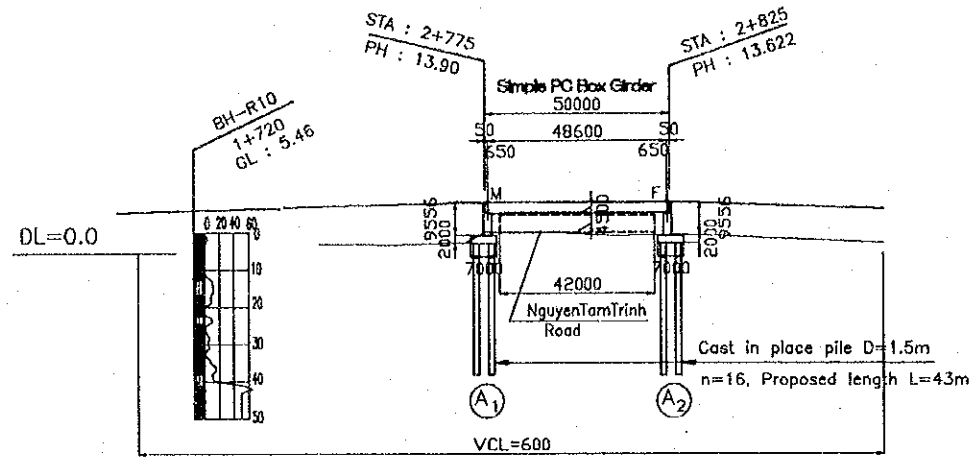
C-1 THROUGHWAY

C-1-1 GENERAL VIEW

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LOANG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. MATSUDA
PROJECT: RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE	2007.6.1

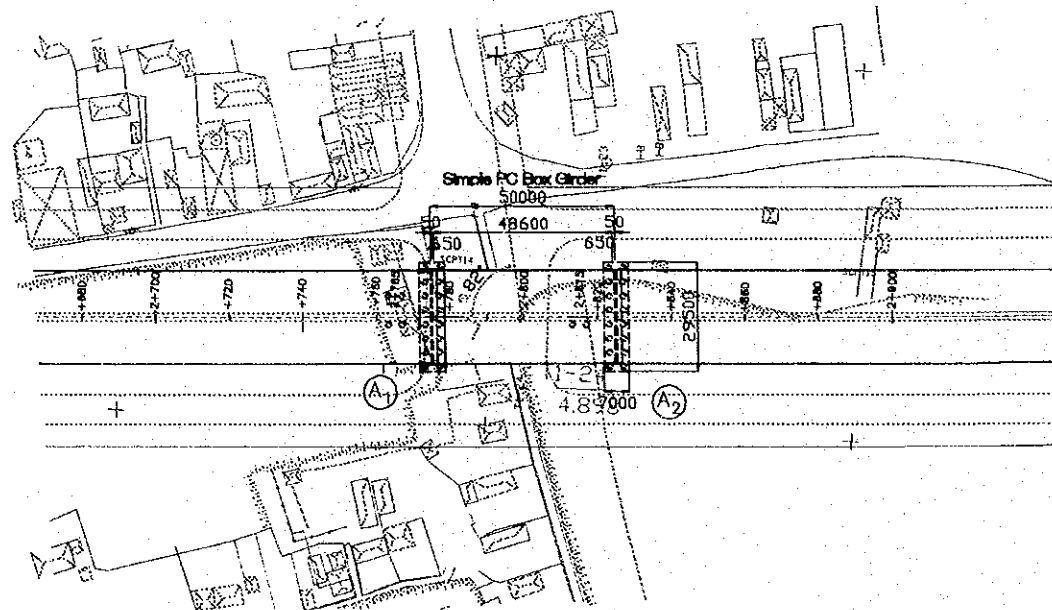
PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/2000	C-1-1-1	
GENERAL VIEW OF NGUYEN TAM TRINH BRIDGE			

LONGITUDINAL OF BRIDGE



GRADE	1=1.521% L=560.00m		16.85	2.5% L=390.00m	
ELEVATION (PH)	13.90	13.83		13.622	
GROUND HEIGHT	4.70	4.55		3.56	
STATION	2+775	2+790		2+825	

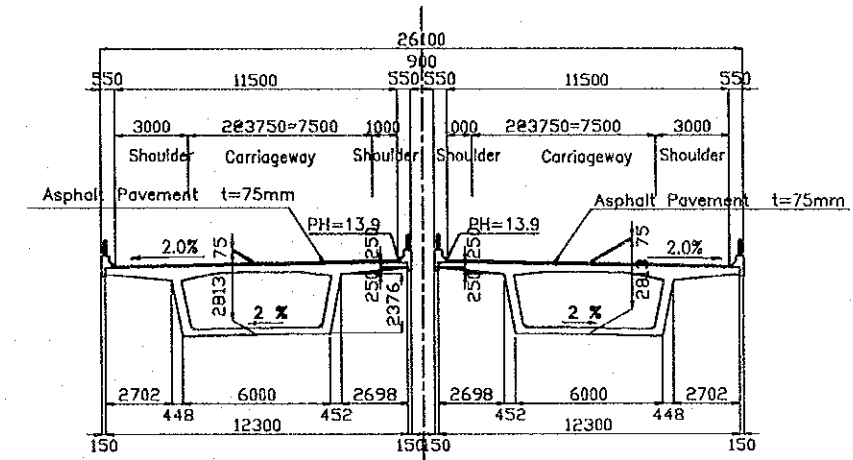
PLAN OF BRIDGE



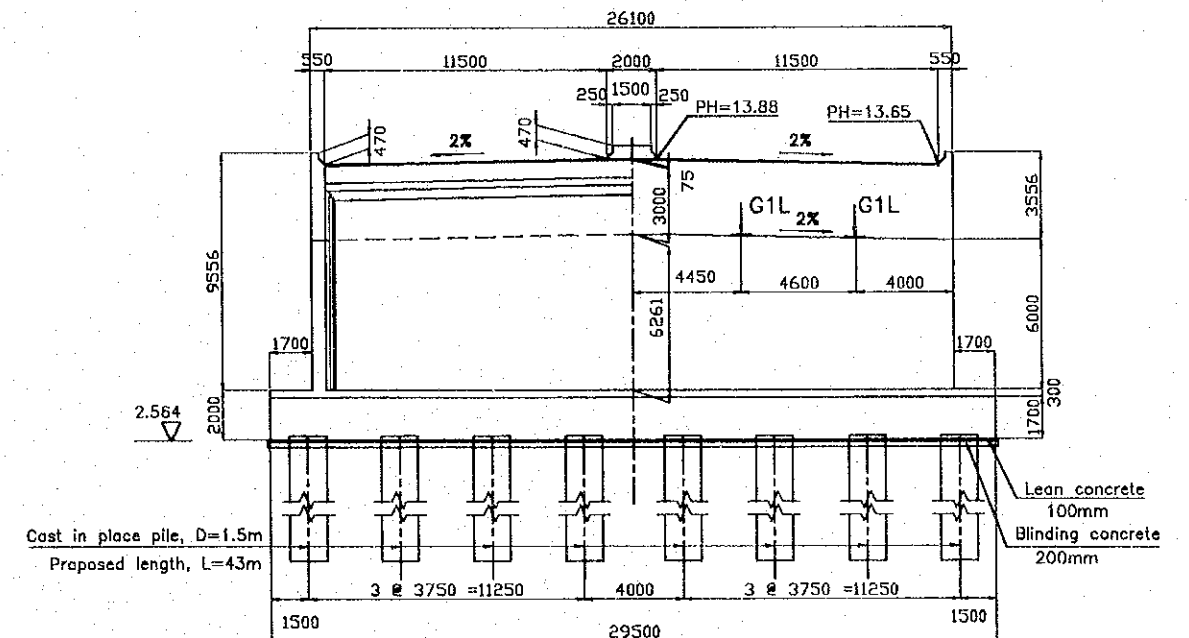
TYPICAL CROSS SECTION OF BRIDGE

(S=1/300)

TYPICAL CROSS SECTION OF SUPERSTRUCTURE



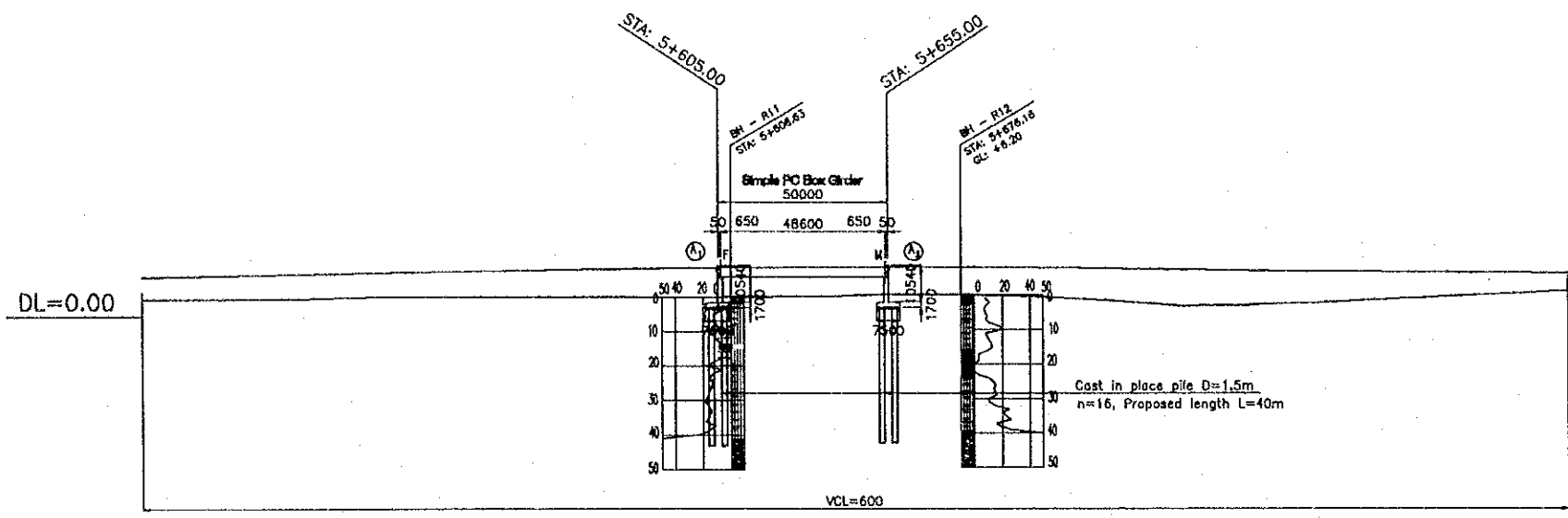
TYPICAL CROSS SECTION OF SUBSTRUCTURE



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. NATAJBE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
COMMISSIONER PACIFIC CONSULTANTS INTERNATIONAL	DATE 2020.12.

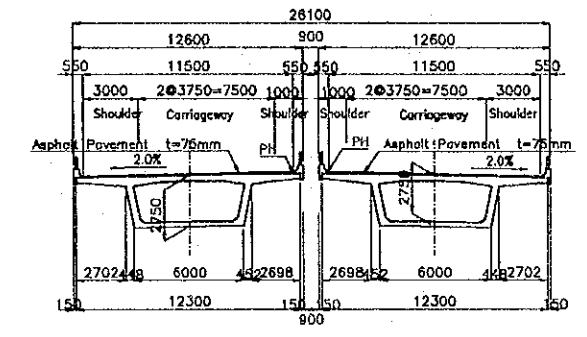
PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/2000	C-1-1-2	
GENERAL VIEW OF LINH NAM ROAD BRIDGE			

LONGITUDINAL OF BRIDGE



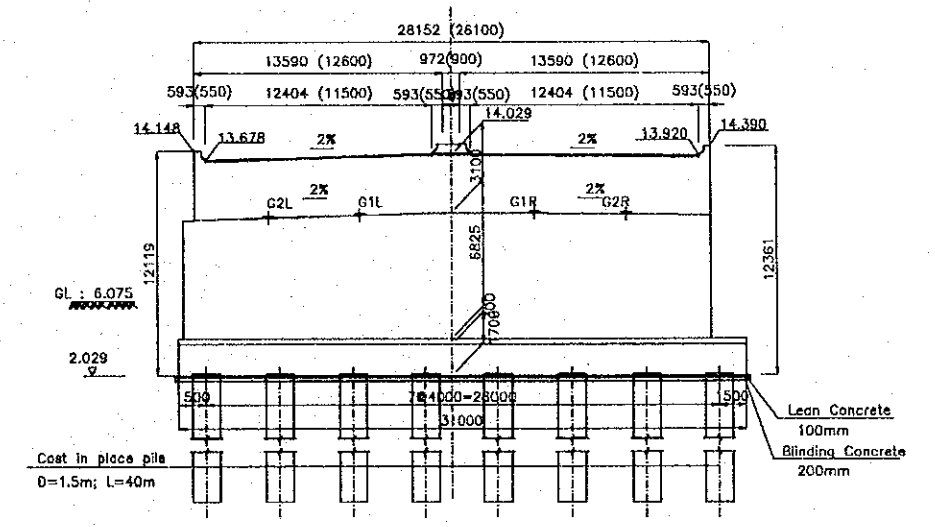
TYPICAL CROSS SECTION OF BRIDGE (SCALE=1/400)

TYPICAL CROSS SECTION OF SUPERSTRUCTURE

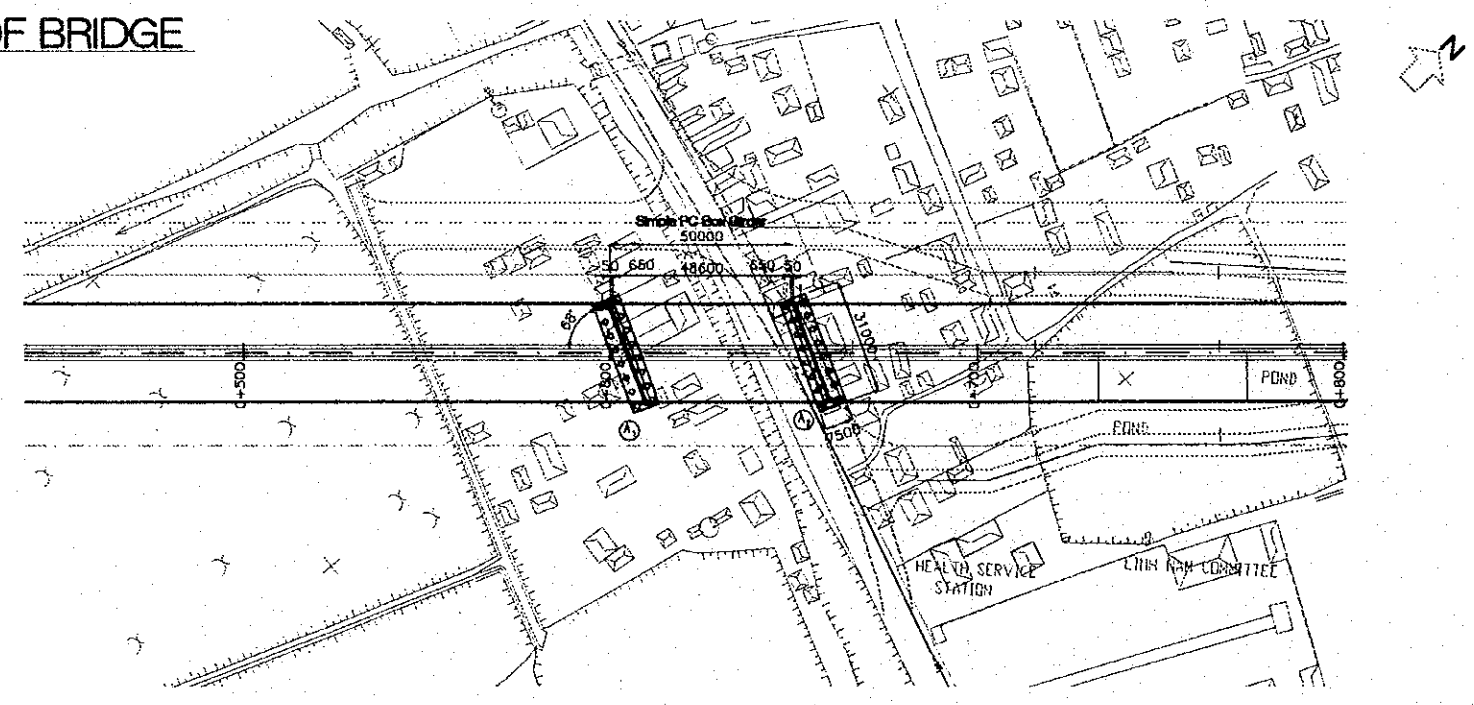


GRADE	i=2.00% L=409.00m			i=2.00% L=425.00m		
ELEVATION		17.05				
GROUND HEIGHT	5.277	6.075	6.058	13.862	14.029	14.050
STATION	5+605.00	5+655.00	5+680.00	5+605.00	5+655.00	5+680.00

TYPICAL CROSS SECTION OF SUBSTRUCTURE

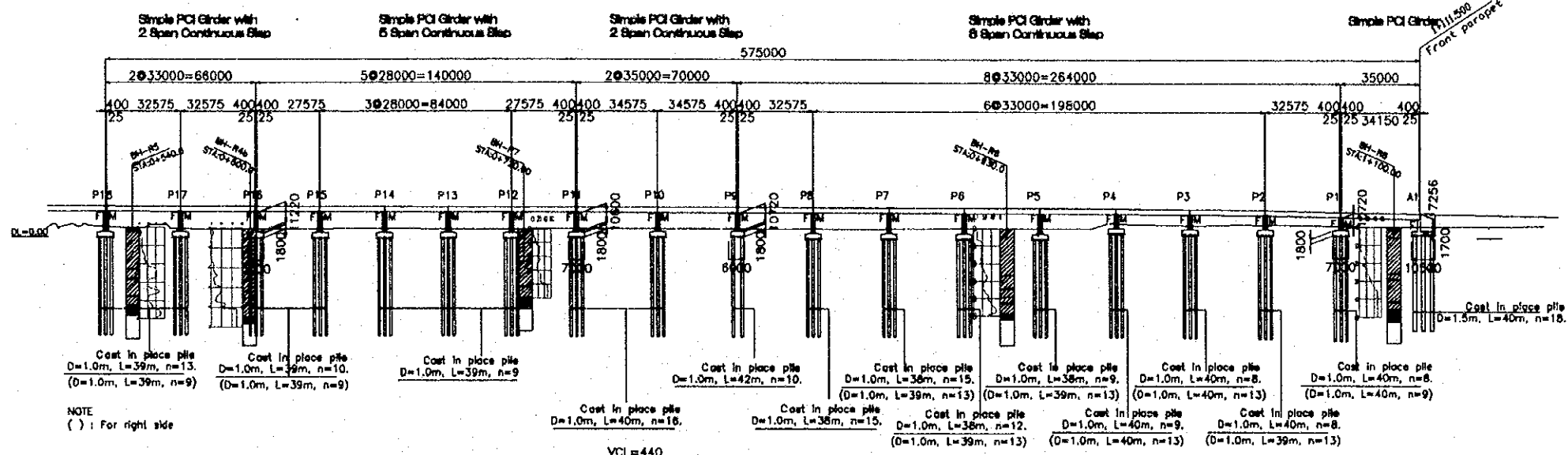


PLAN OF BRIDGE



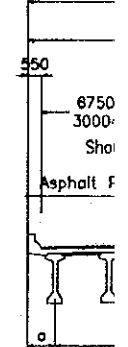
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. NAITABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2/20/06

PROFILE - SOUTH BOUND BRIDGE

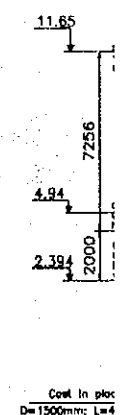
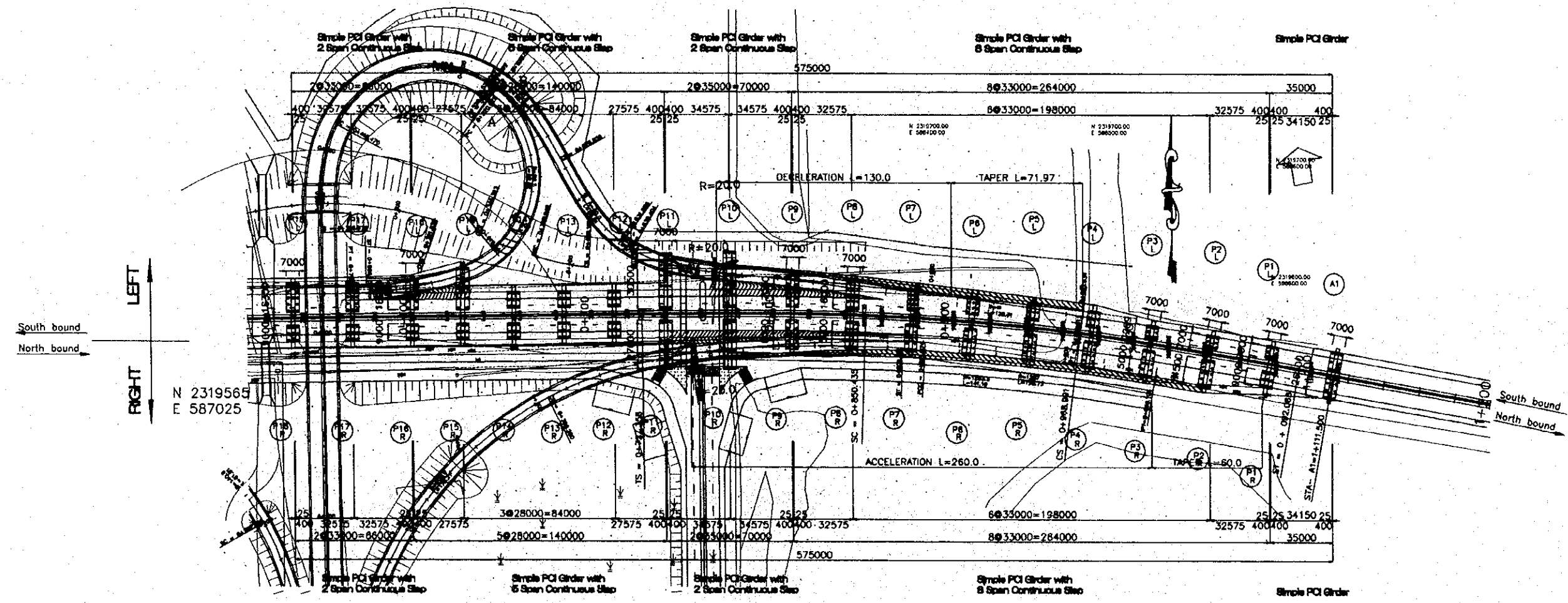


NOTE
() : For right side

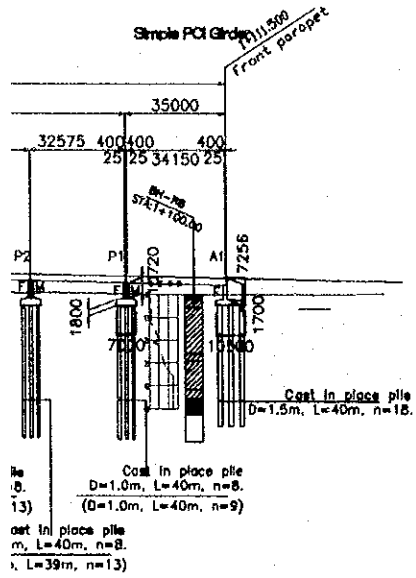
GRADE	VCL=440																				
ELEVATION	15.30	15.46	15.56	15.62	15.64	15.62	15.57	15.48	15.32	15.11	14.86	14.56	14.21	13.81	13.36	12.87	12.40	11.92	11.41		
GROUND HEIGHT	3.67	3.37	3.10	3.20	3.21	3.08	3.16	3.26	3.34	3.14	3.19	3.029	3.65	3.65	5.46	5.20	5.23	5.33	794.94		
STATION	0+538.5	0+540	0+569.5	0+602.5	0+630.5	0+658.5	0+686.5	0+714.5	0+742.5	0+760	0+777.5	0+812.5	0+845.5	0+878.5	0+911.5	0+944.5	0+977.5	1+000.0	1+040.5	1+076.5	1+111.50



100

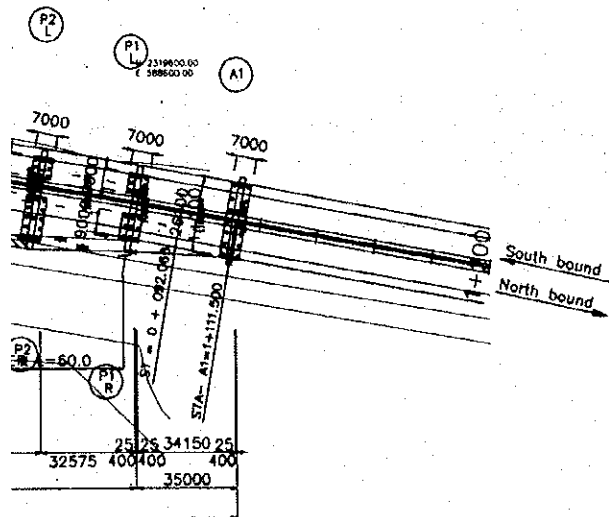
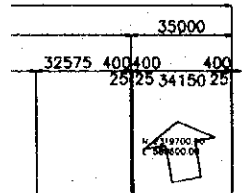


Cast in place
D=1500mm; L=4



1404.5	1407.5	1411.5
5.23	5.33	284.94
12.40	11.92	11.41

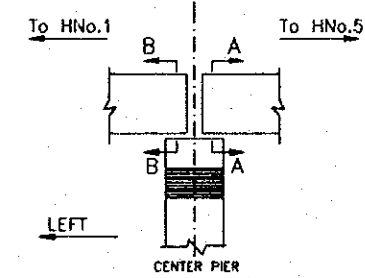
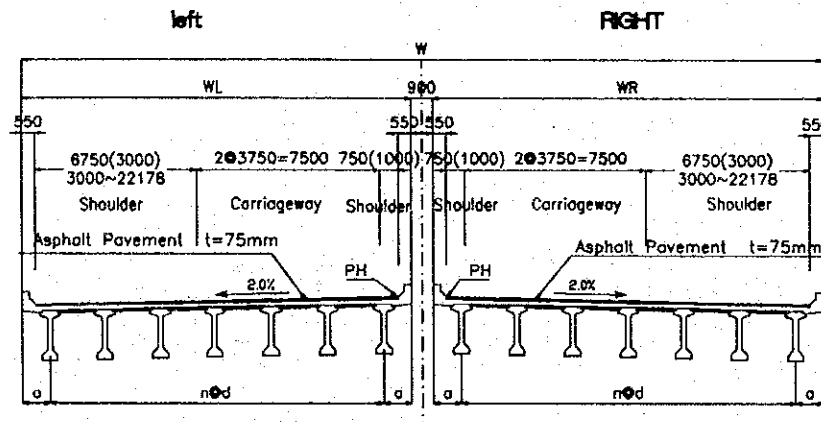
Simple PCI Girder



Simple PCI Girder

TYPICAL CROSS SECTION OF bridge
(scale = 1/300)

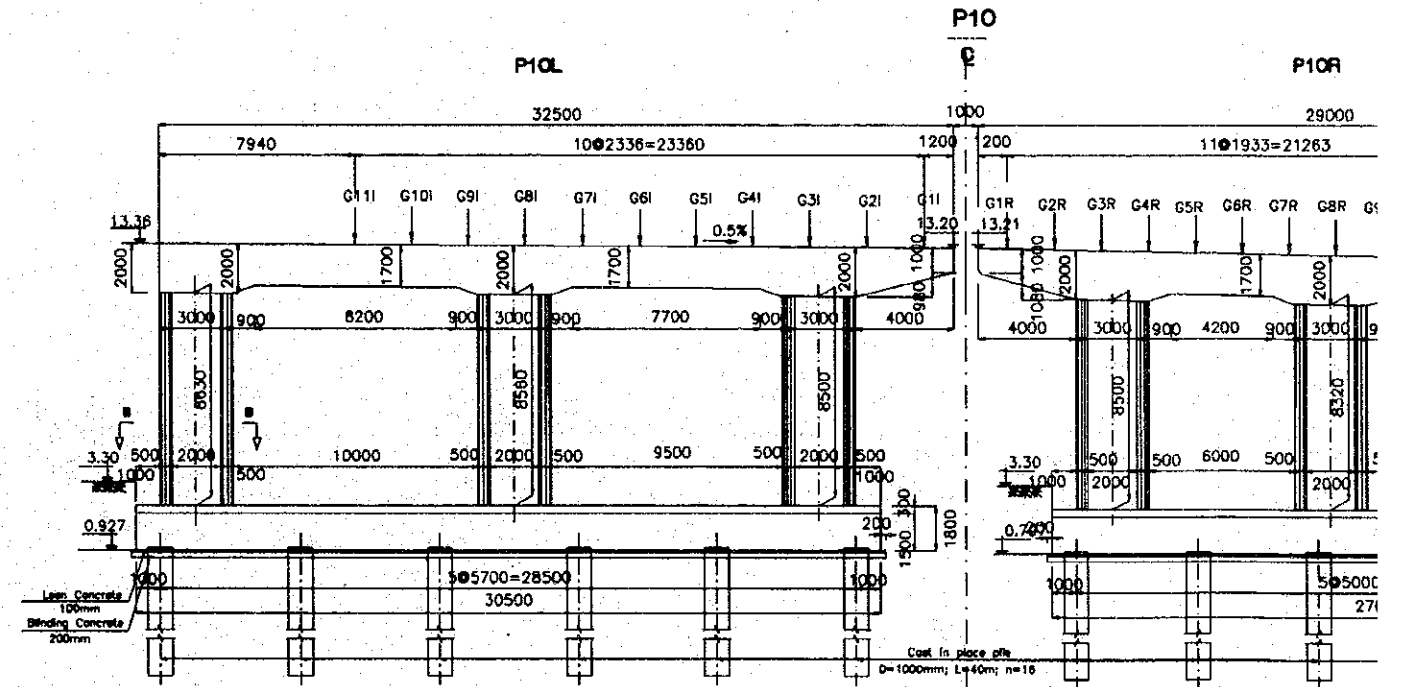
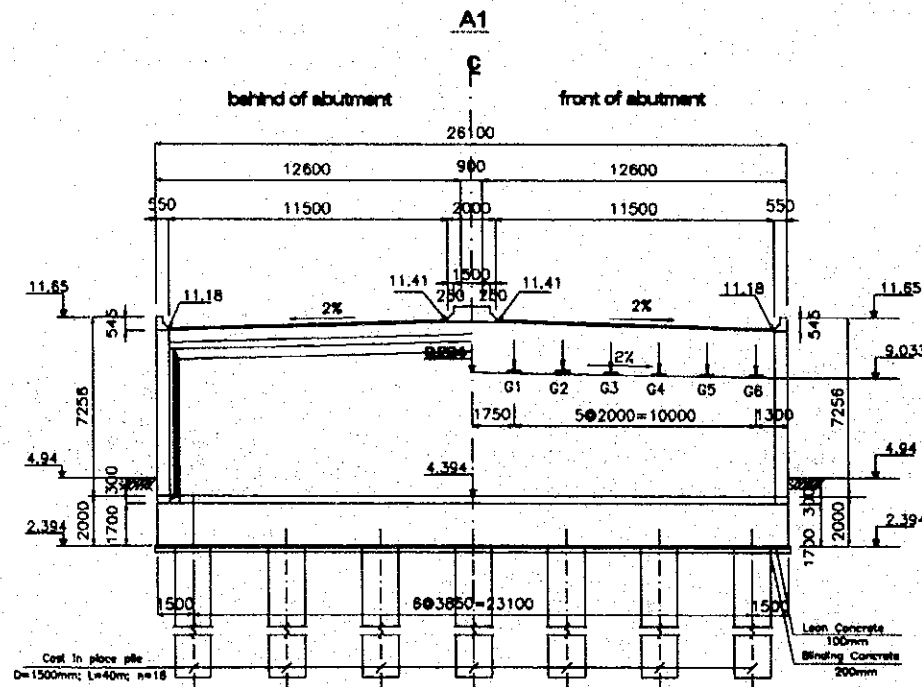
TYPICAL CROSS SECTION OF SUPERSTRUCTURE



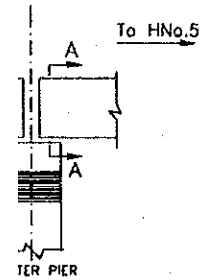
DIMENSION OF SUPERSTRUCTURE

LOCATION	SECTION A				Numb gird
	n	d (mm)	a (mm)	WR (mm)	
A1				12600	6
P1	5	2000	1300	21600	9
P2~P7	8	2325	1250	21541	9
P8	8	2448	1250	22080	9
P9	9	2362	1250	23760	10
P11	11	2318	1250	27972	12
P2~P8	6	2250	1300	16100	7

TYPICAL CROSS SECTION OF SUBSTRUCTURE



TYPICAL CROSS SECTION OF bridge
(scale = 1/300)



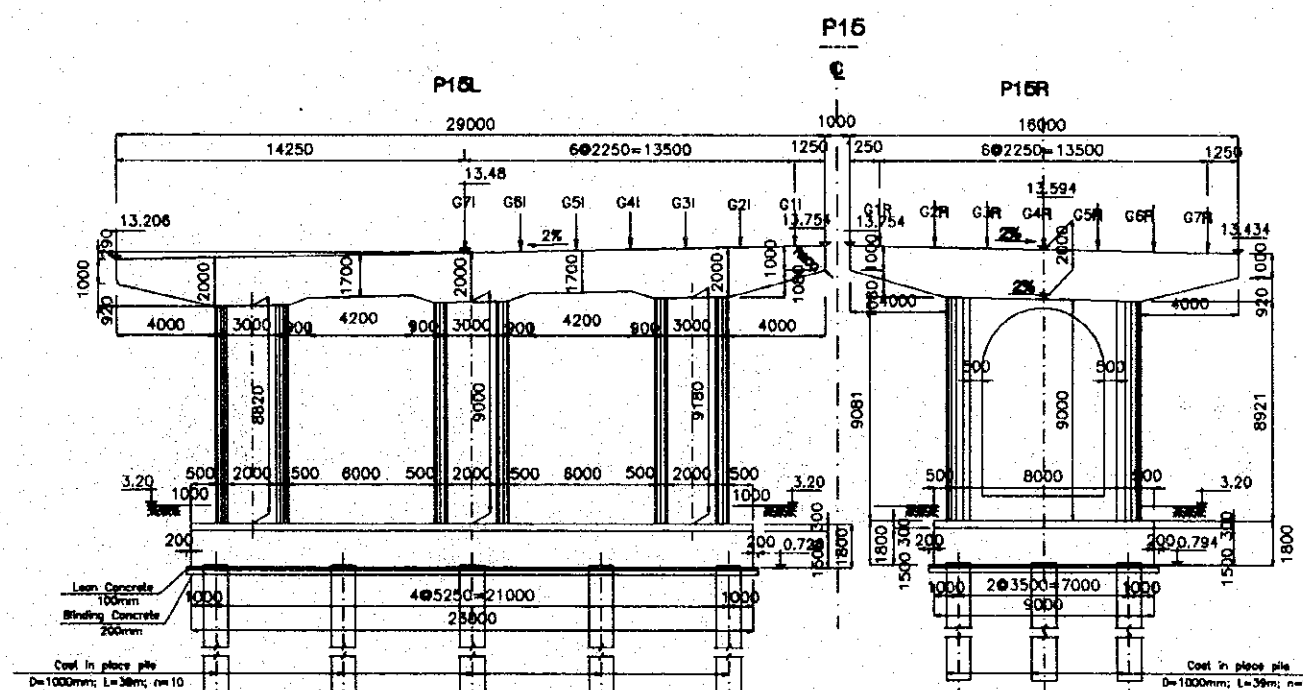
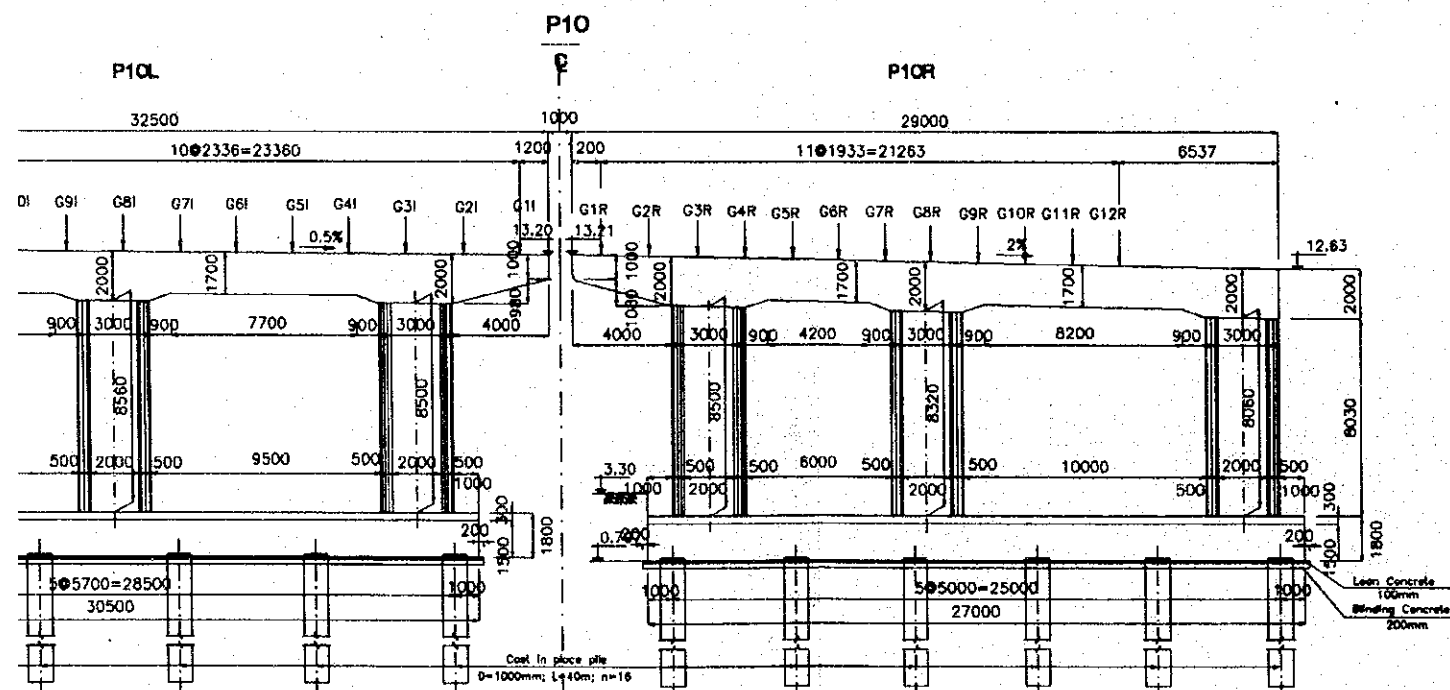
DIMENSION OF SUPERSTRUCTURE CROSS SECTIONS OF THE RIGHT BRIDGE

LOCATION	SECTION A					SECTION B				
	n	d (mm)	a (mm)	WR (mm)	Number of girder	n	d (mm)	a (mm)	WR (mm)	Number of girder
A1						5	2000	1300	12600	6
P1	5	2000	1300	12600	6	8	1700	1250	16100	9
P2~P7	8	2325	1250	21100	9	8	2325	1250	21100	9
P8	8	2380	1250	21541	9	8	2380	1250	21541	9
P9	8	2448	1250	22080	9	9	2176	1250	22080	10
P10	9	2362	1250	23760	10	11	1933	1250	23762	12
P11	11	2316	1250	27972	12	6	2250	1300	16100	7
P12~P18	6	2250	1300	16100	7	6	2413	1300	16100	7

DIMENSION OF SUPERSTRUCTURE CROSS SECTIONS OF THE left BRIDGE

LOCATION	SECTION A					SECTION B				
	n	d (mm)	a (mm)	WL (mm)	Number of girder	n	d (mm)	WL (mm)	Number of girder	
A1						5	2000	12600	6	
P1~P3	5	2000	1300	12600	6	5	2000	12600	6	
P4	5	2000	1300	12600	6	6	2267	16100	7	
P5	6	2276	1250	16158	7	6	2276	16158	7	
P6	6	2413	1250	16976	7	7	2068	16976	8	
P7	7	2318	1250	18727	8	8	2028	18727	9	
P8	8	2297	1250	20878	9	9	2042	20878	10	
P9	9	2313	1250	23317	10	10	2082	23317	11	
P10	10	2336	1250	25856	11	12	1946	25856	13	
P11	12	2419	1250	31528	13	6	2250	16100	7	
P12~P14	6	2250	1300	16100	7	6	2250	16100	7	
P15	6	2250	1300	16100	7	11	2434	29272	12	
P16	11	1787	1250	22160	12	8	2458	22160	9	
P17~P18	8	2325	1250	21100	9	8	2325	21100	9	

TYPICAL CROSS SECTION OF SUBSTRUCTURE

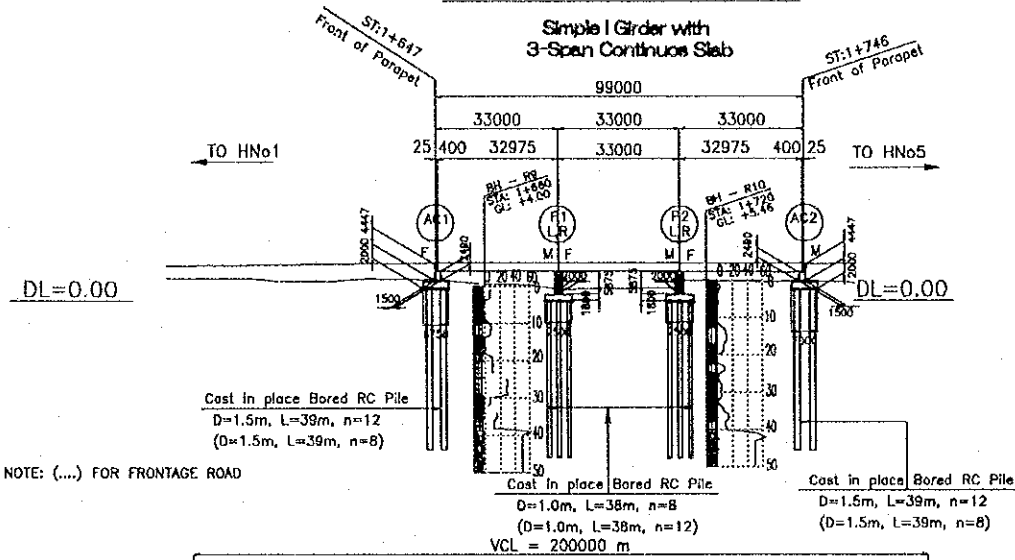


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY NAME: S. WATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE: <i>[Signature]</i>
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		DATE: 2002.6
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/2000	DRAWING No. C-1-1-4	SHEET No.
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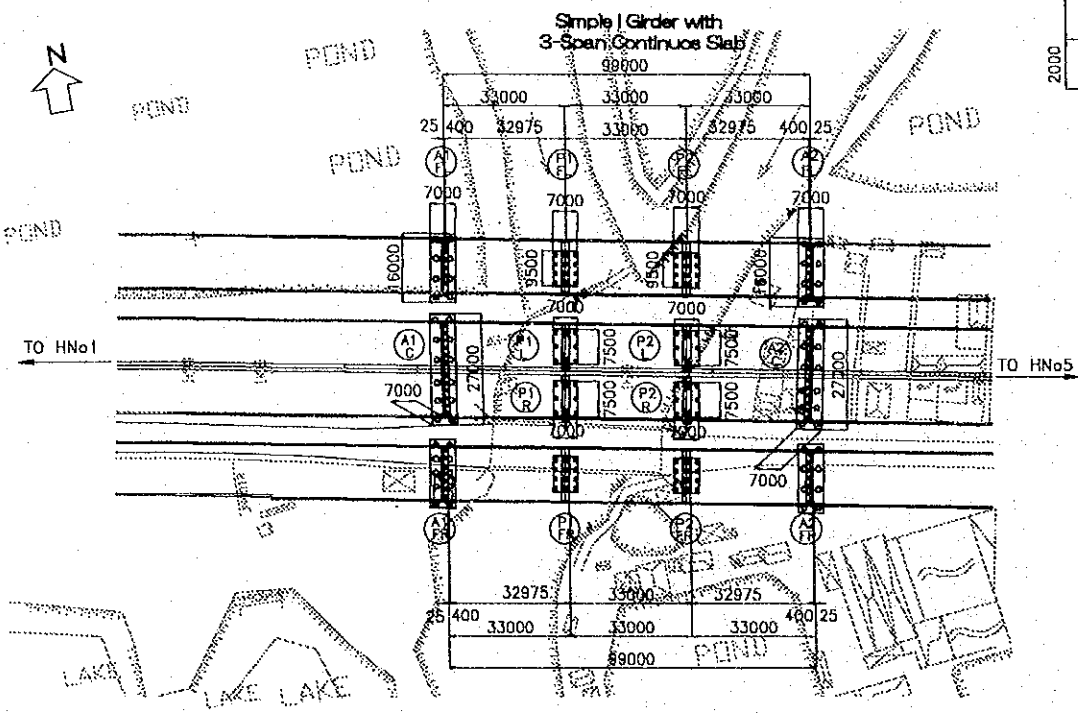
GENERAL VIEW OF KIM NGUU RIVER BRIDGE

PROFILE (TRAVELED WAY)

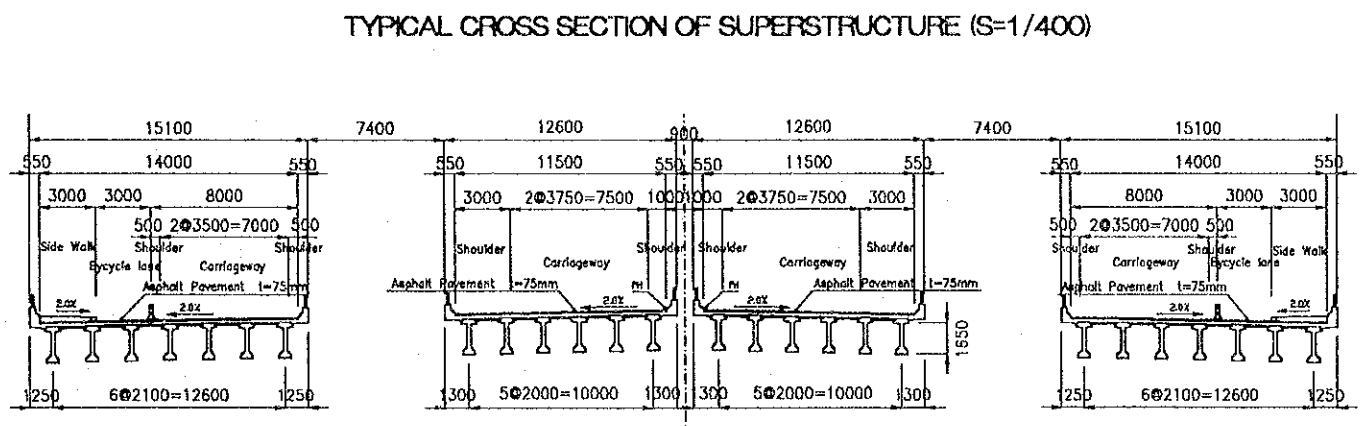


GRADE	$i = 0.896\%$ $L = 290.00m$		9.98		$i = 0.3\%$ $L = 550.00m$	
ELEVATION	9.08	9.55	9.68	9.747	9.747	9.68
GROUND HEIGHT	6.50	25.20	4.00	23.18	25.44	5.68
STATION	1+580	1+647	1+660	1+680	1+713	1+780

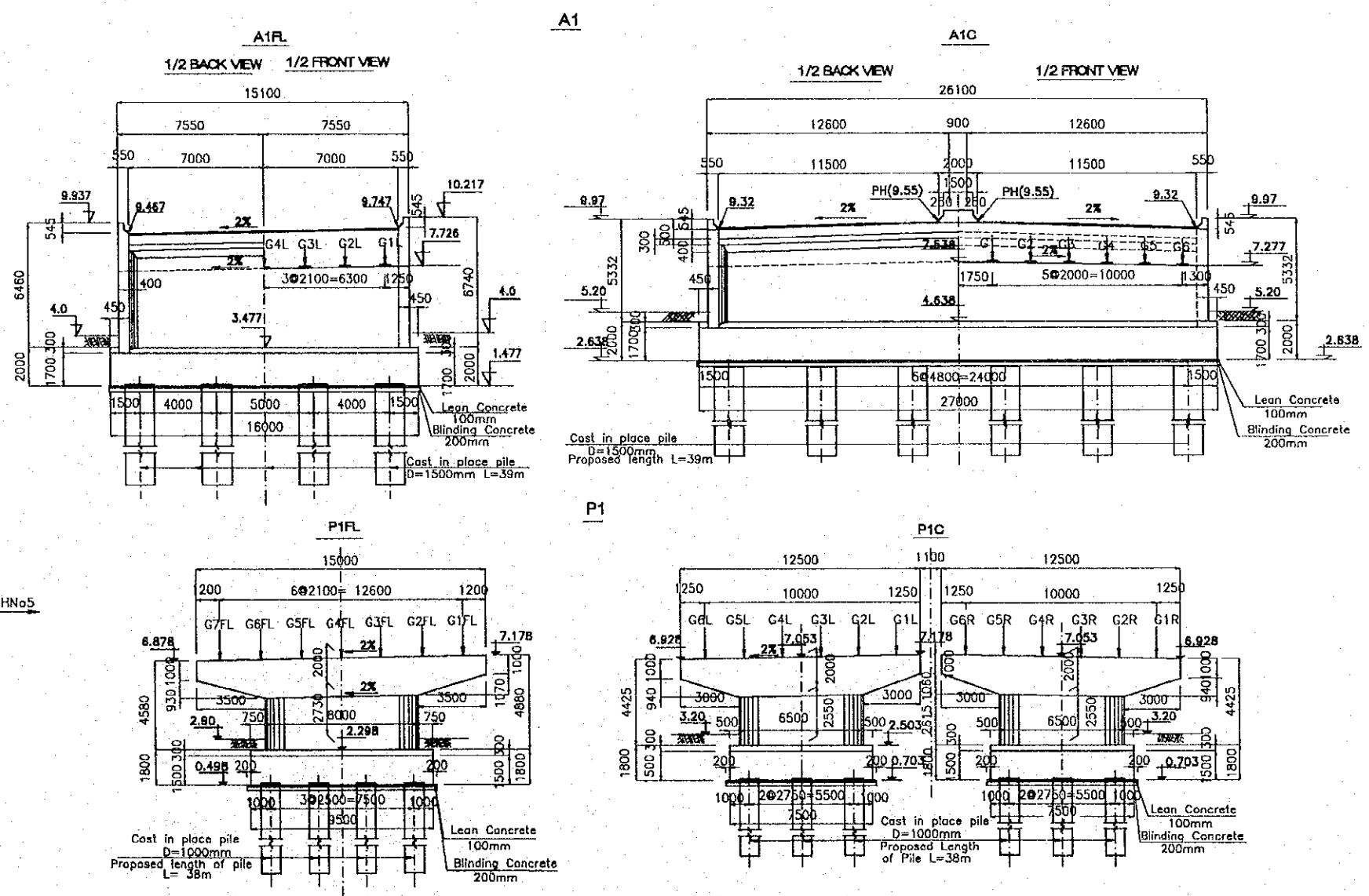
PLAN



TYPICAL CROSS SECTION OF BRIDGE



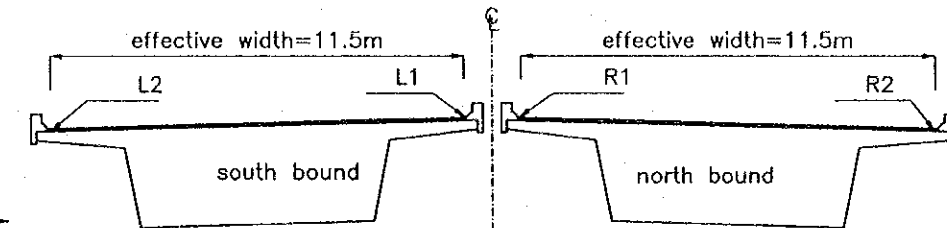
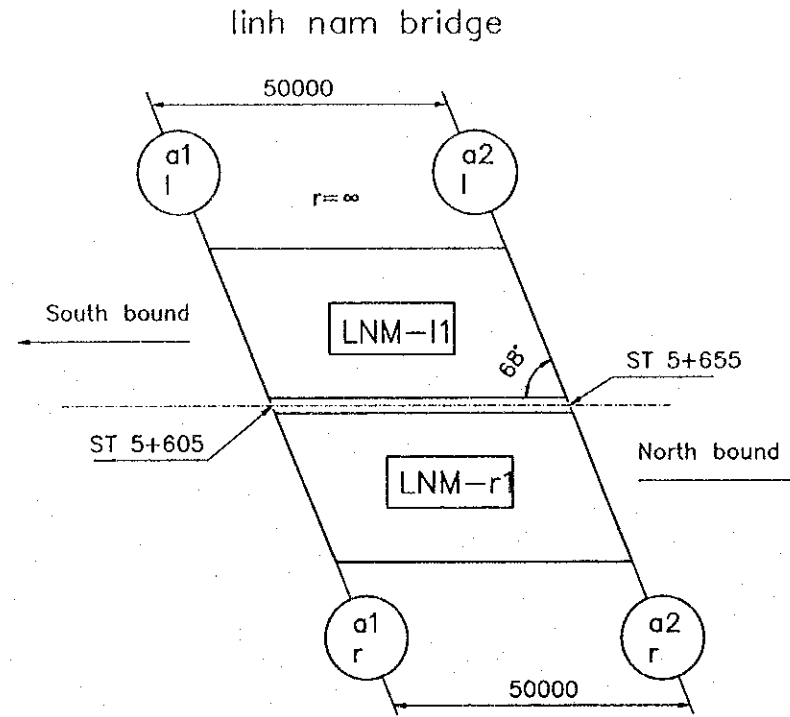
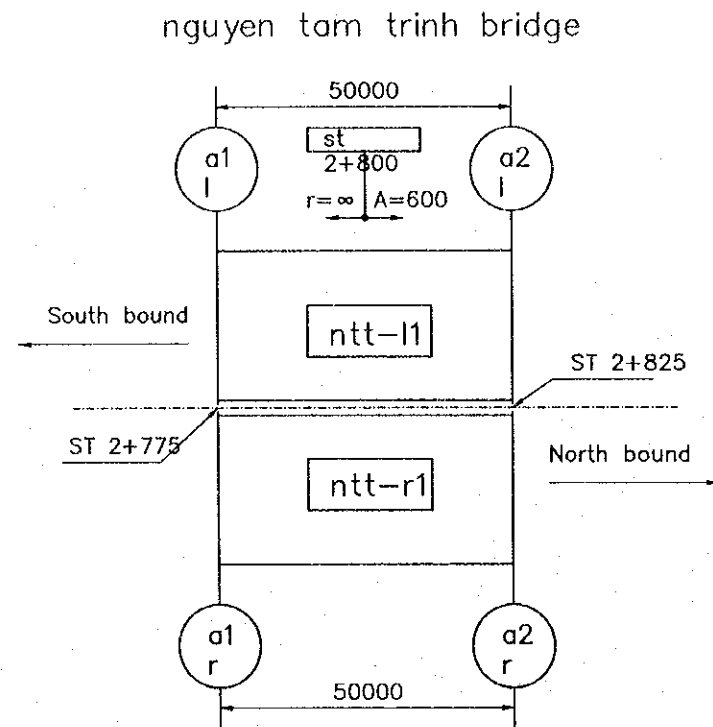
TYPICAL CROSS SECTION OF SUBSTRUCTURE (S=1/300)



C-1 THROUGHWAY

C-1-2 SUPERSTRUCTURE (BOX GIRDER AND PC I GIRDER)

C-1-2a BOX GIRDER



bridge LIST

Designation	Bridge length (m)	Station		Span Length	Number of Span	Bridge Width (m)	
		Start	End			Total	Effective
NTT-R1	50.0	2+775	2+825	48.6	1	12.6	11.5
NTT-L1	50.0	2+775	2+825	48.6	1	12.6	11.5
LNM-R1	50.0	5+603	5+653	48.6	1	12.6	11.5
LNM-L1	50.0	5+603	5+653	48.6	1	12.6	11.5

geometric data

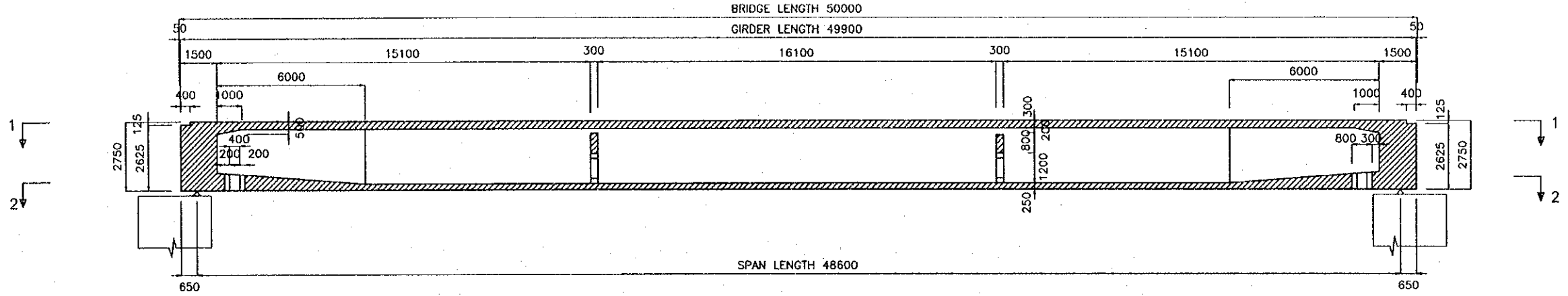
BRIDGE NAME		NGUYEN TAM TRINH BRIDGE		LINH NAM BRIDGE		
PIER NO.		A1R A1L	A2R A2L	A1R A1L	A2R A2L	
STATION		2+775	2+825	5+605	5+655	
ELEVATION		CL	13.900	13.622	13.863	14.029
		R1	13.900	13.622	13.865	14.030
		L1	13.900	13.622	13.861	14.029
		R2	13.670	13.392	13.657	13.807
		L2	13.670	13.584	13.607	13.790
COORDINATES		CL	N			
			E			
		R1	N			
			E			
		L1	N			
			E			
		R2	N			
			E			
		L2	N			
			E			

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.19

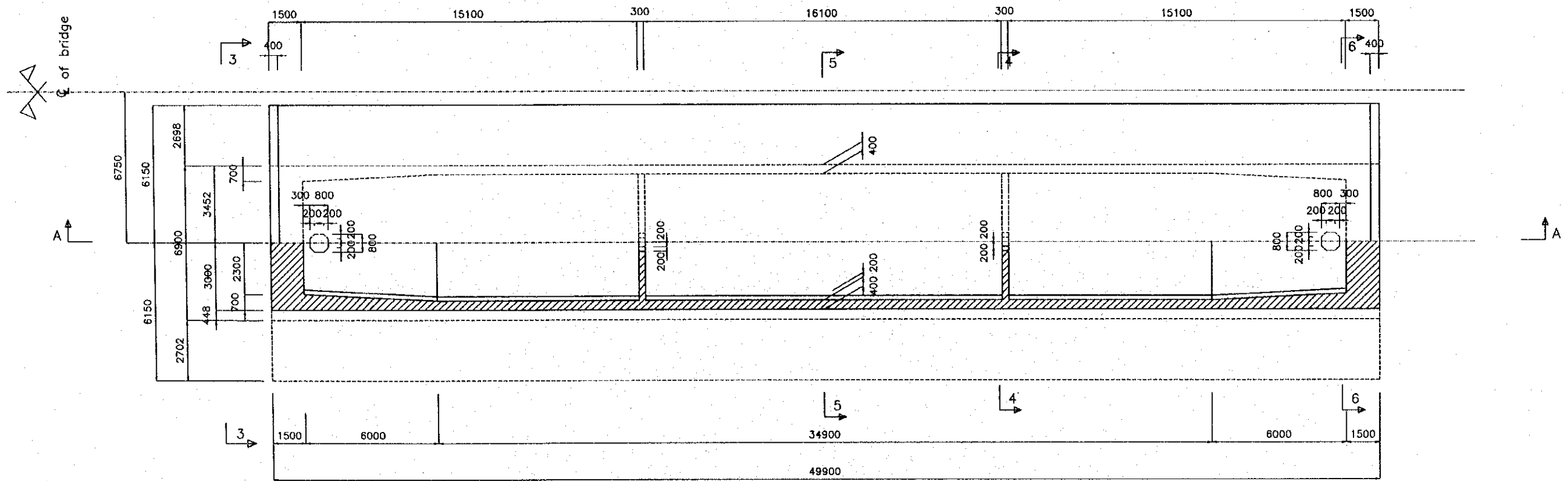
PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/200	C-1-2a-2	

NGUYEN TAM TRINH BRIDGE,
STRUCTURAL DIMENSIONS(1/2)

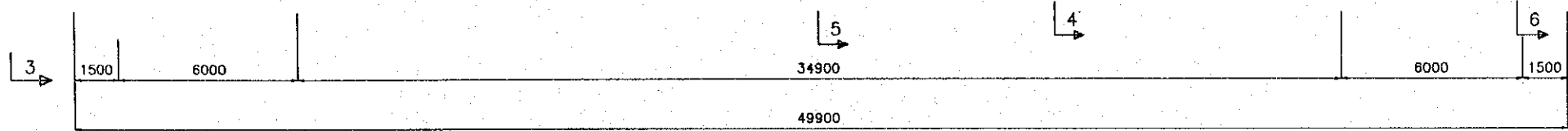
SECTION A--A
(S=1:200)



HALF SECTION 1-1
(S=1:200)



HALF SECTION 2-2
(S=1:200)

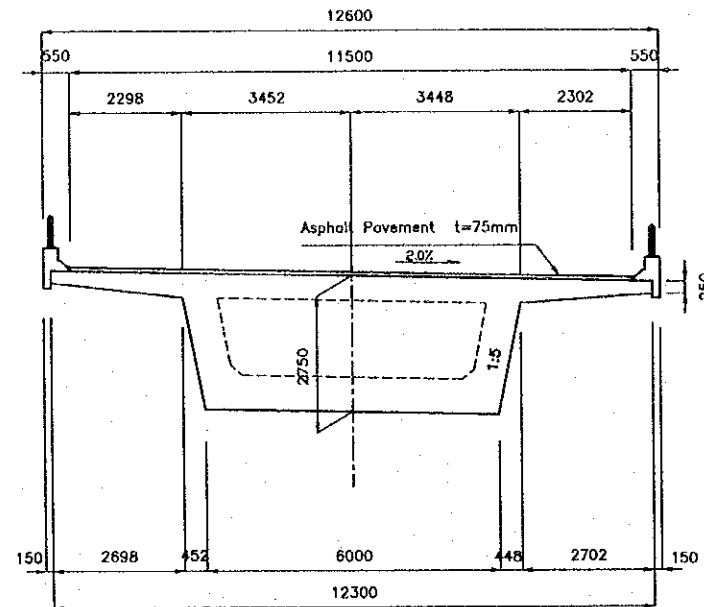


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.03.14

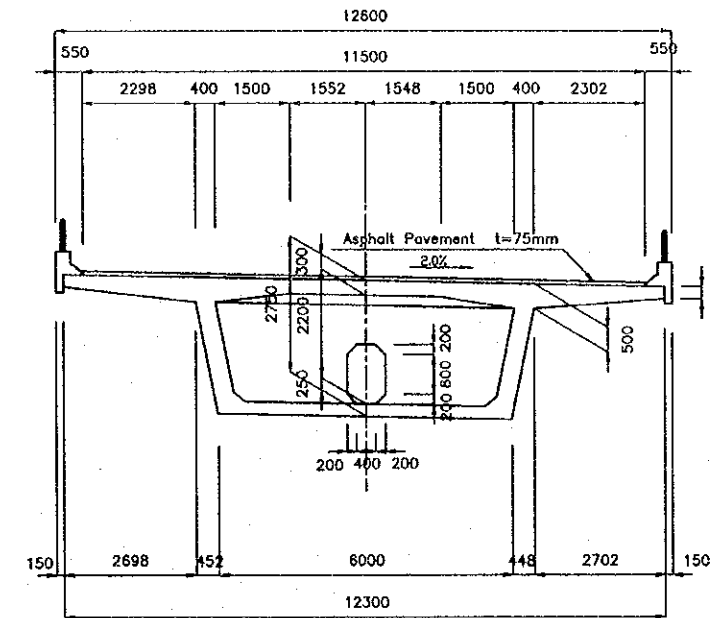
PACKAGE 3	SCALE 1/150	DRAWING No. C-1-2a-3	SHEET No.
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NGUYEN TAM TRINH BRIDGE,
STRUCTURAL DIMENSIONS(2/2)

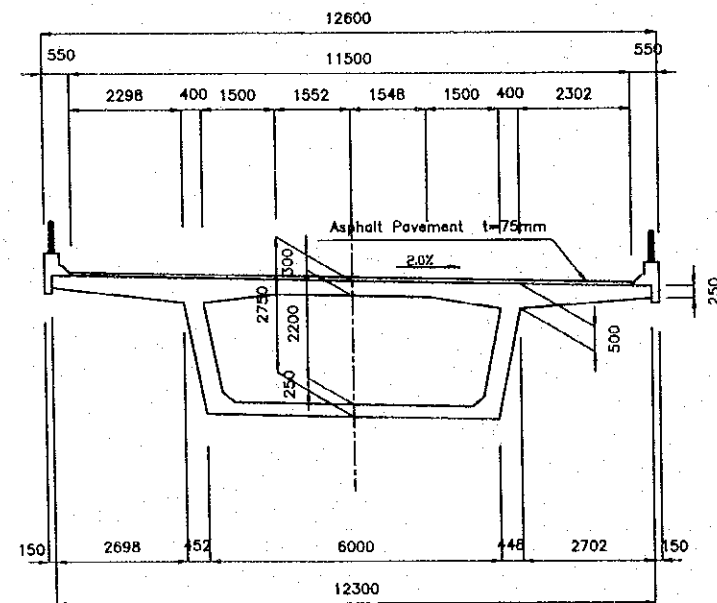
3-3



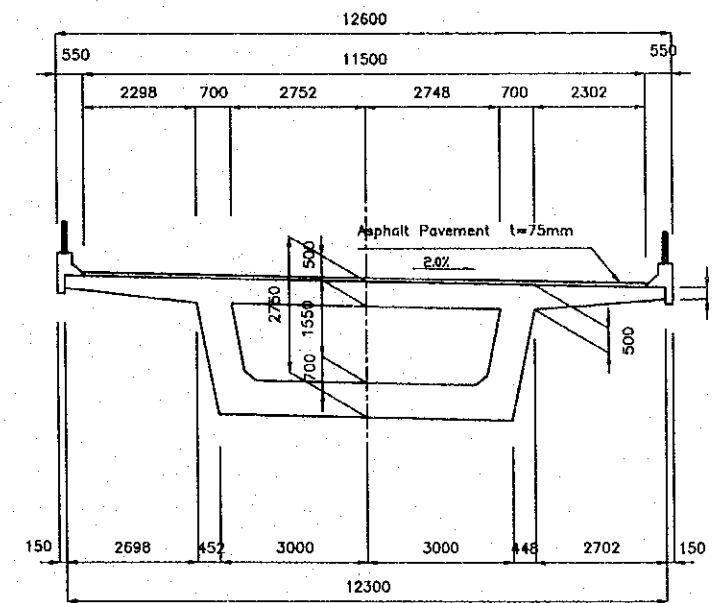
4-4



5-5



6-6

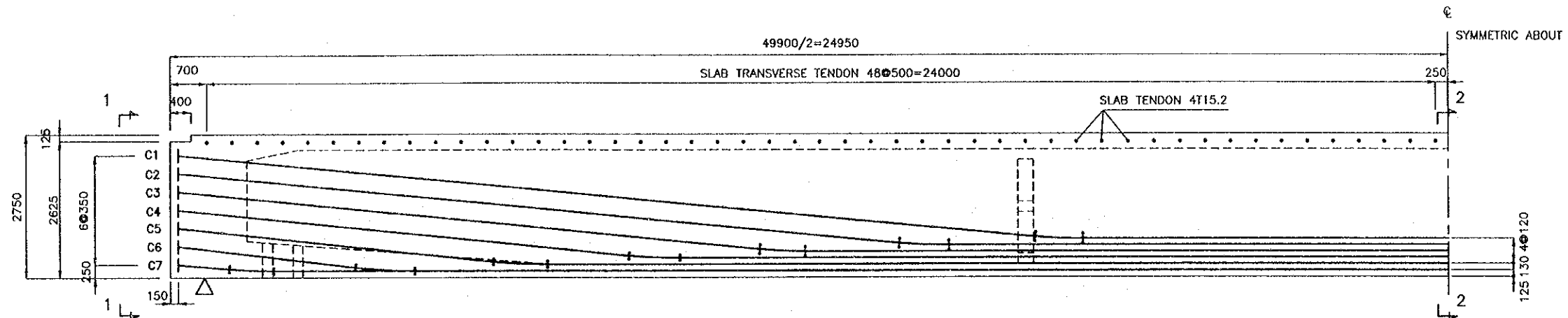


100

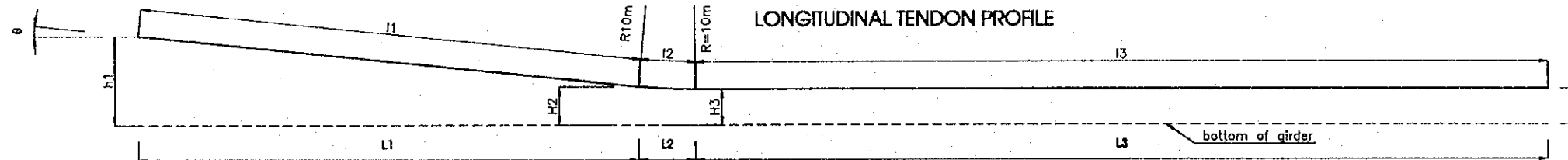
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. KATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.14

PACKAGE 3	SCALE AS SHOWN	DRAWING No. C-1-2a-4	SHEET No.
NGUYEN TAM TRINH BRIDGE, TENDON ARRANGEMENT(1/2)			

ELEVATION (S=1/100)

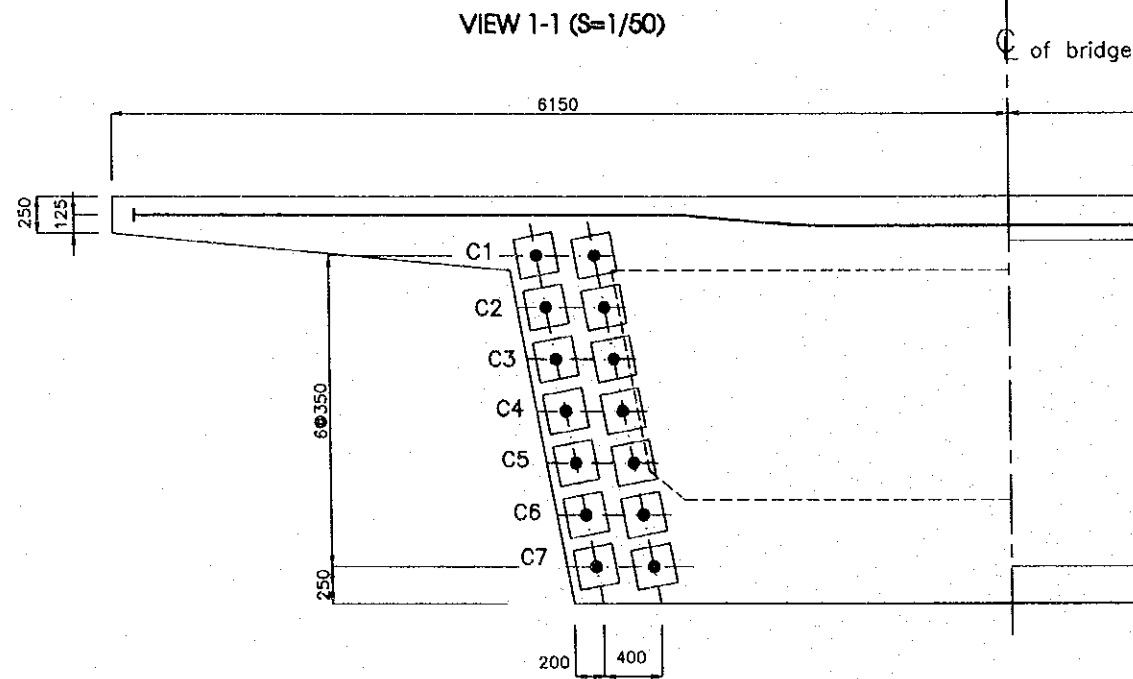


LONGITUDINAL TENDON PROFILE

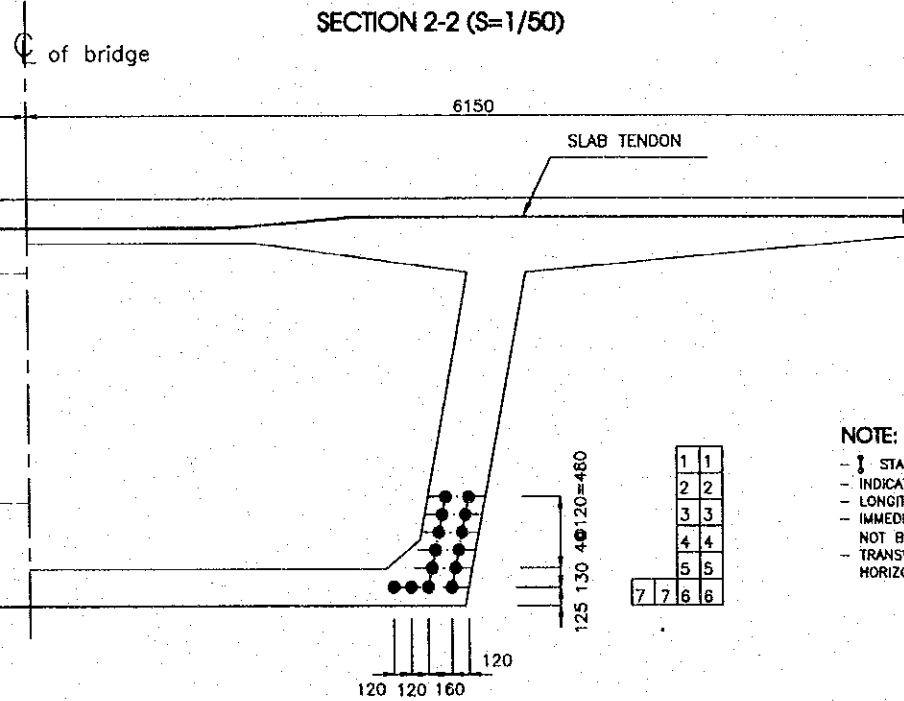


CABLE No	θ	H1 (mm)	H2 (mm)	H3 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	l_1 (mm)	l_2 (mm)	l_3 (mm)	$2 \sum l_i$ (mm)
C1	5'23"	2350	769	735	16733	940	7127	16807	942	7127	50012
C2	5'27"	2000	650	615	14098	953	9749	14162	954	9749	49990
C3	5'33"	1650	532	495	11460	971	12369	11514	971	12369	49970
C4	5'44"	1300	415	375	8817	999	14984	8862	1000	14984	49852
C5	6'01"	950	300	255	6164	1049	17587	6198	1050	17587	49930
C6	6'42"	600	193	125	3478	1163	20159	3501	1165	20159	49910
C7	5'00"	250	163	125	994	872	22934	998	873	22934	49870

VIEW 1-1 (S=1/50)



SECTION 2-2 (S=1/50)



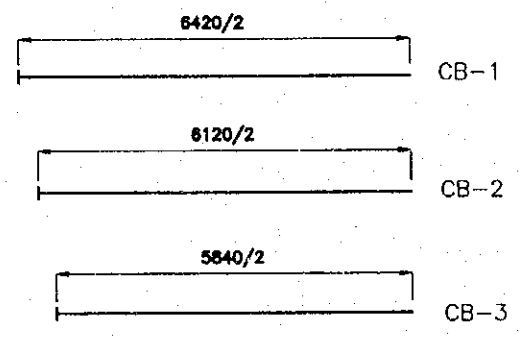
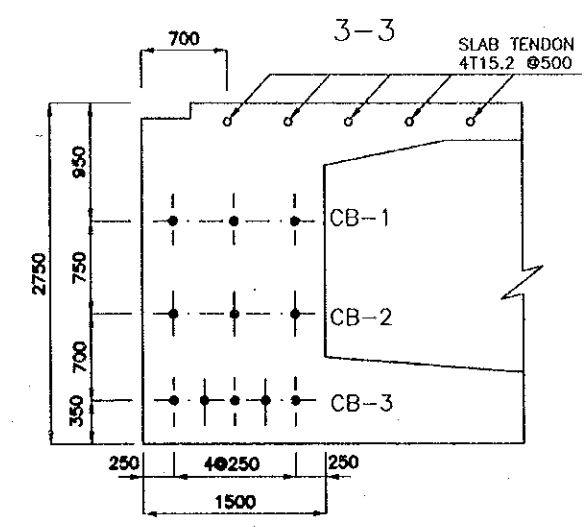
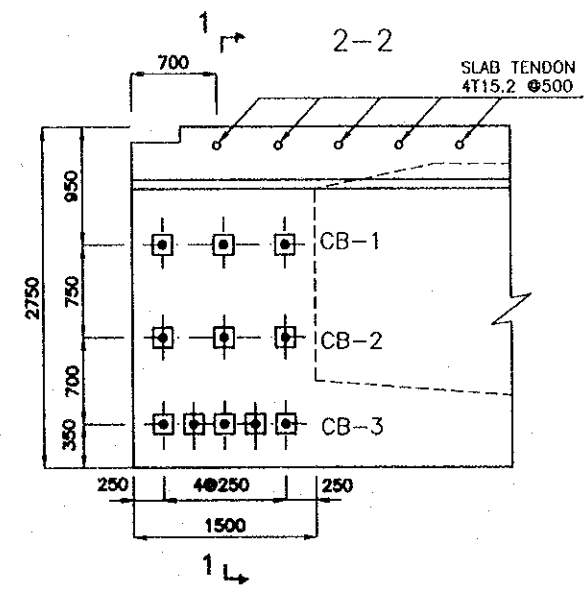
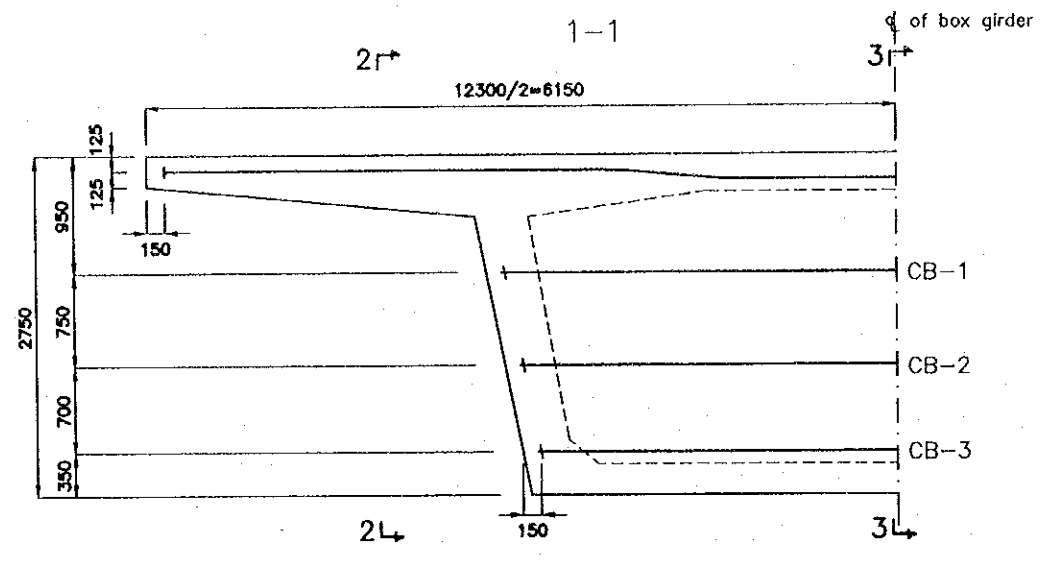
QUANTITIES OF PC STEEL

TYPE	CABLE No	LENGTH (mm)	NUMBER	TOTAL LENGTH (m)
PC CABLE 12T-15.2	C1	50012	4	200.048
	C2	49990	4	199.960
	C3	49970	4	199.880
	C4	49952	4	199.808
	C5	49930	4	199.720
	C6	49910	4	199.640
	C7	49870	4	199.480
TOTAL			28	1398.536
WEIGHT = 1398.5x13.212 kg/m = 18477.5 kg				

NOTE:

- START AND END POINTS OF CURVED SEGMENT OF TENDON.
- INDICATED LENGTHS DO NOT INCLUDE OPERATING ALLOWANCE.
- LONGITUDINAL PRESTRESSING TENDONS SHALL BE STRESSED FROM THE BOTH SIDES SIMULTANEOUSLY.
- IMMEDIATELY AFTER PRESTRESSING, AVERAGE PRESTRESS FORCE OF LONGITUDINAL TENDONS SHALL NOT BE LESS THAN 190 TF/TENSON RESPECTIVELY AT THE CENTER OF THE SPAN.
- TRANSVERSE CROSS-SECTIONS SHOW IN THIS DRAWING ARE THOSE PERPENDICULAR TO THE HORIZONTAL ROAD ALIGNMENT.

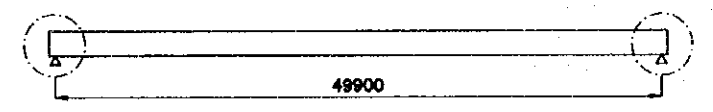
CROSSBEAM (S=1/60)



QUANTITIES OF PC STEEL

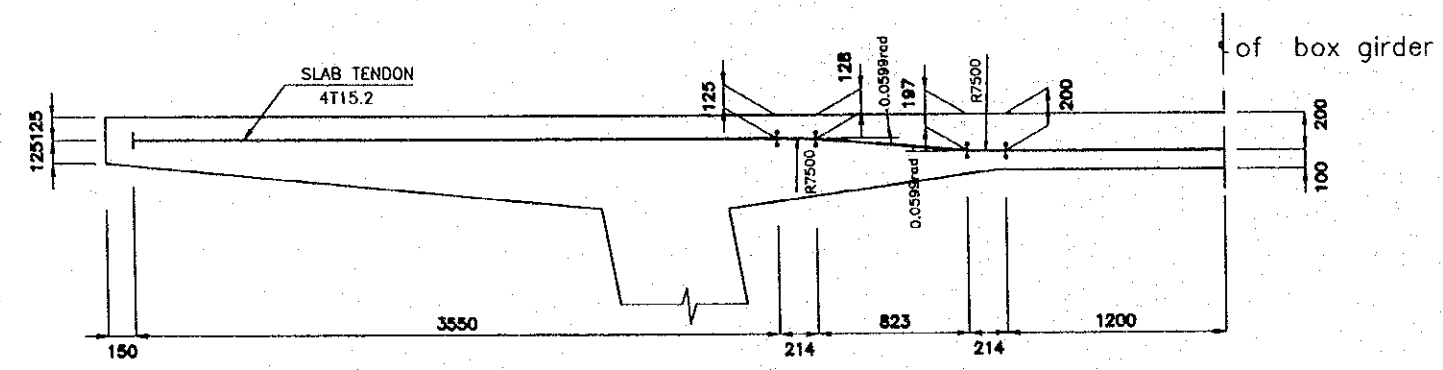
TYPE	CABLE No	LENGTH (mm)	NUMBER	TOTAL LENGTH (m)
PC CABLE 4T 15.2	CB-1	6,420	6	38.52
	CB-2	6,120	6	36.72
	CB-3	5,840	10	58.4
WEIGHT = 133.64m x 4.4kgf/m = 588.016 kgf				

KEY PLAN



SLAB TRANSVERSE TENDON

TENDON PROFILE (S=1/40)



QUANTITIES OF PC STEEL

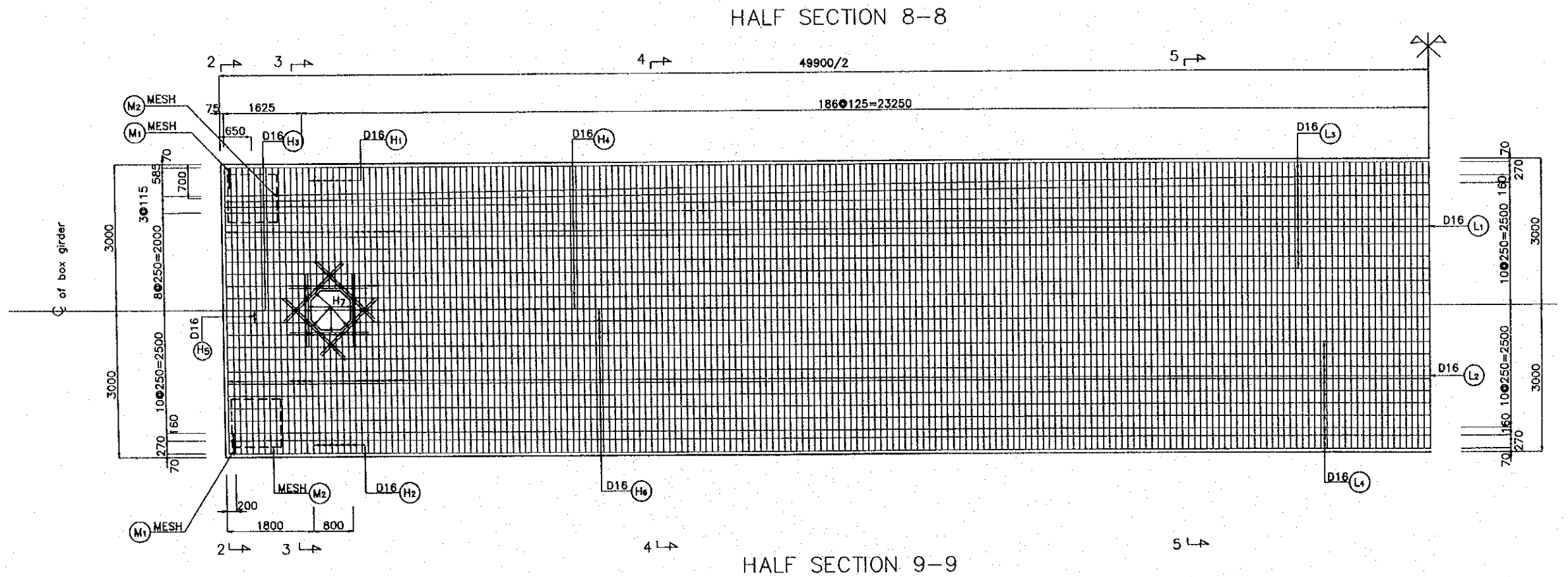
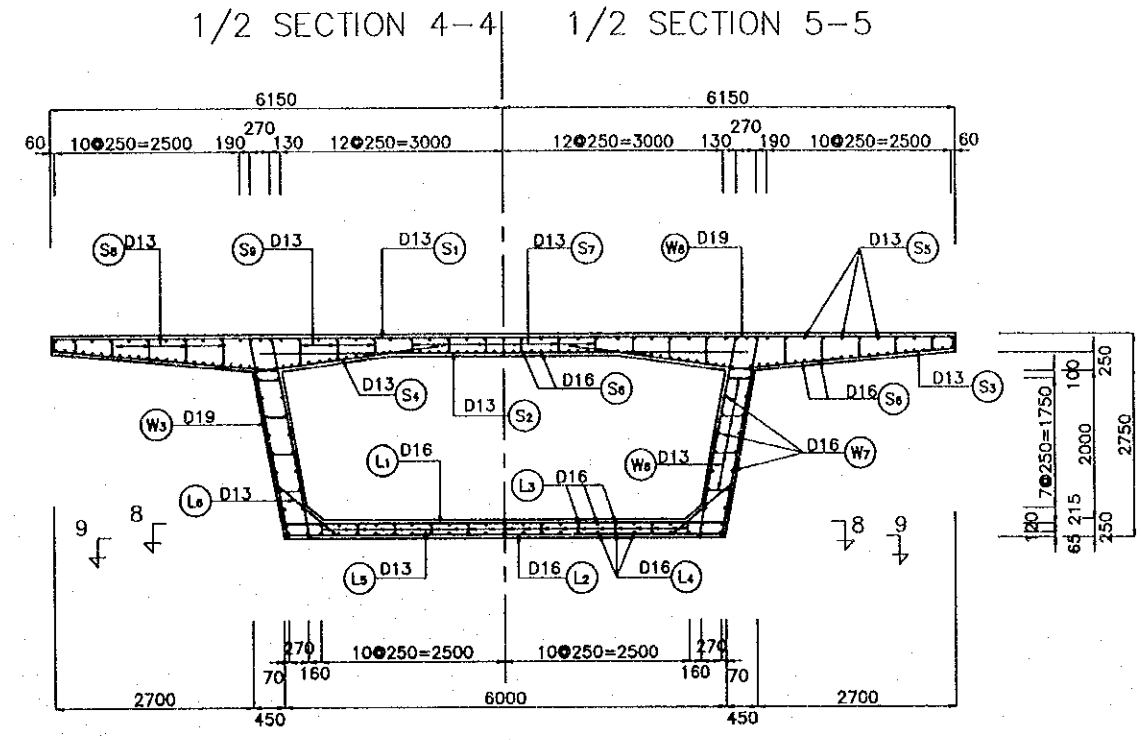
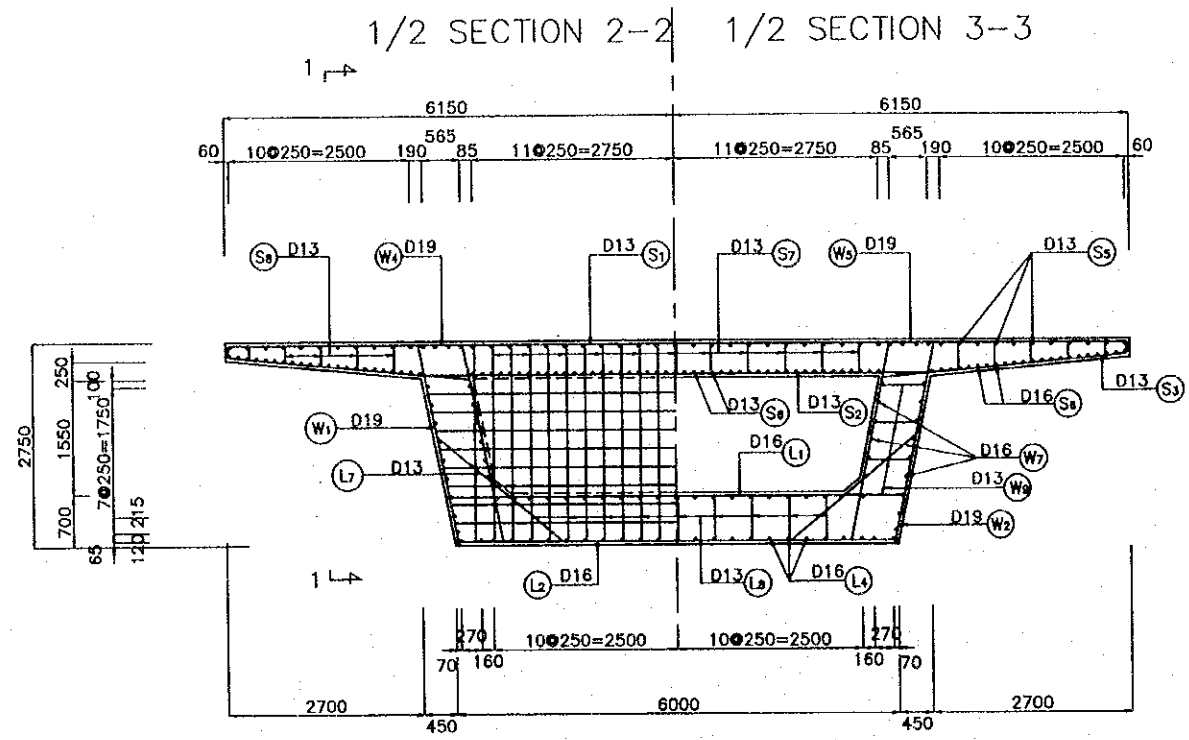
TYPE	CABLE No	LENGTH (mm)	NUMBER	TOTAL LENGTH (m)
PC CABLE 4T15.2		12006	98	1176.588
WEIGHT = 1176.588m x 4.4 kgf/m = 5176.99 kgf				

Note:

- INDICATED LENGTHS DO NOT INCLUDE OPERATING ALLOWANCE.
- PRESTRESSING TENDONS IN SLAB AND CROSSBEAM SHALL BE STRESSED ALTERNATELY FROM THE RIGHT SIDE AND THE LEFT SIDE.
- IMMEDIATELY AFTER PRESTRESSING, PRESTRESS FORCE OF THE TENDONS IN SLAB AND CROSSBEAM SHALL NOT BE LESS THAN 85.0 TF/TENDON RESPECTIVELY AT THE CENTER OF THE TENDON.
- FOR ARRANGEMENT OF SLAB TENDONS, REFER TO DWG. NO.C-1-2a-4.

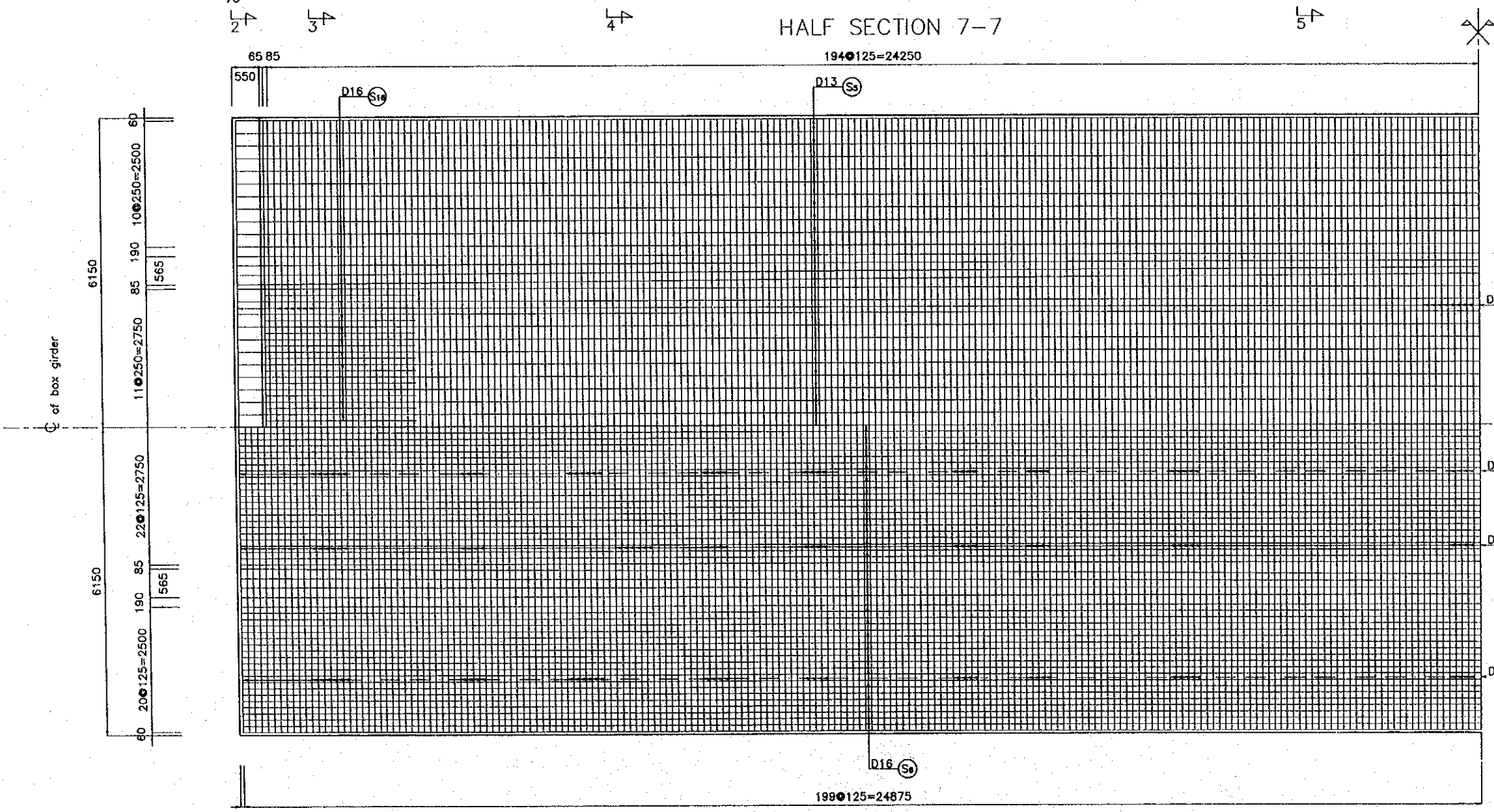
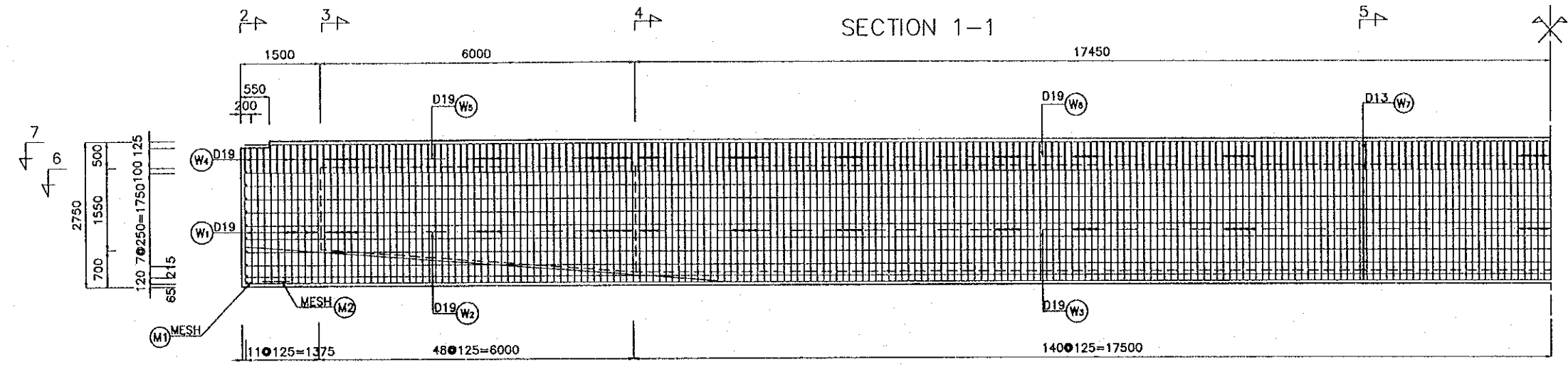
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TIANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-2a-6	
NGUYEN TAM TRINH BRIDGE, REINFORCEMENT ARRANGEMENT (1/3)			



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.17

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-2a-7	SHEET No.
NGUYEN TAM TRINH BRIDGE, REINFORCEMENT ARRANGEMENT (2/3)			

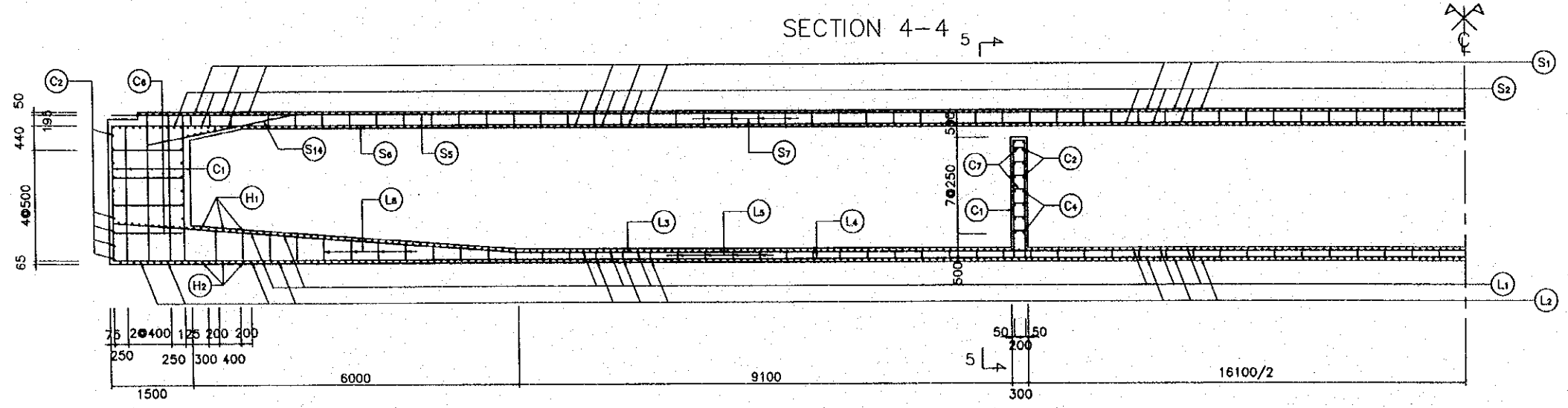
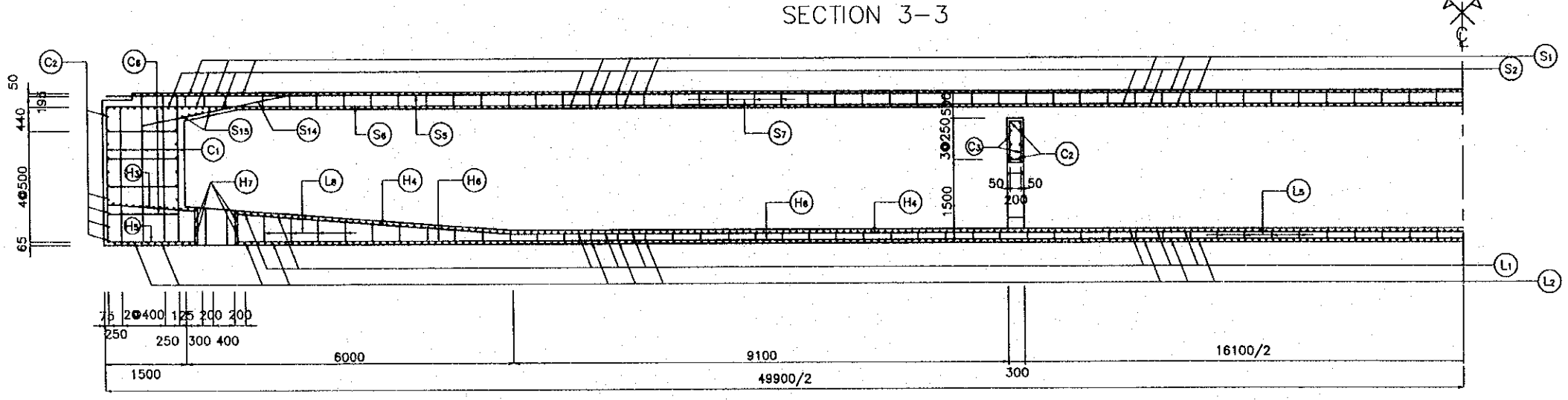
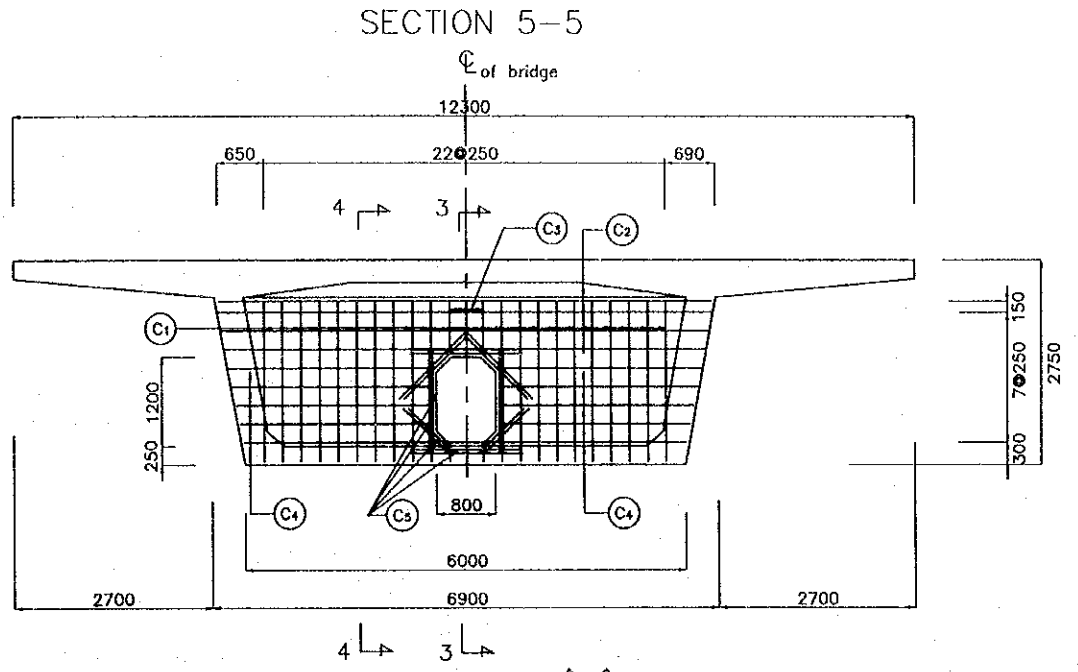
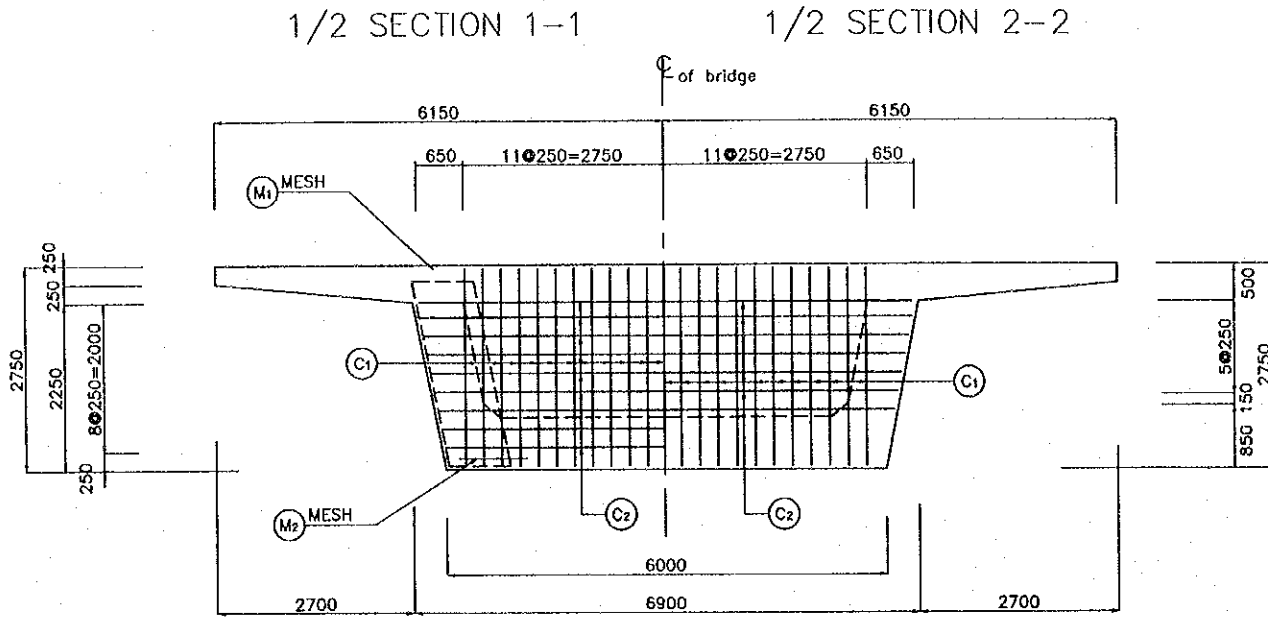


111

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WAIABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. WAIABE
PROJECT RED RIVER BRIDGE (NHANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE 	DATE 2000. 3. 14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

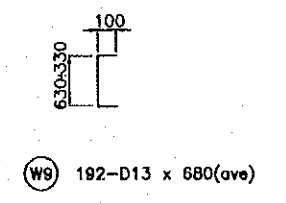
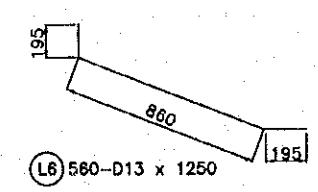
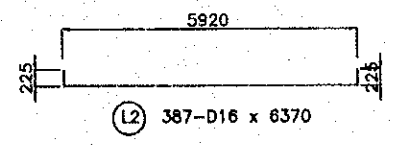
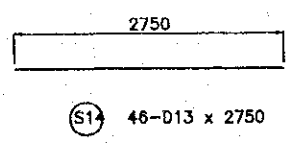
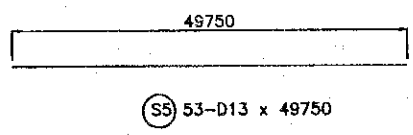
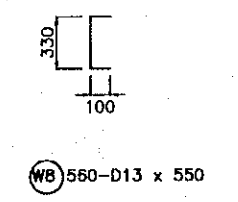
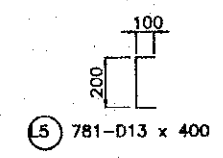
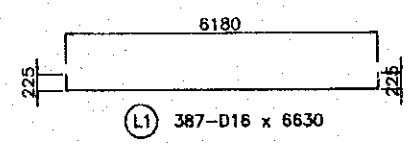
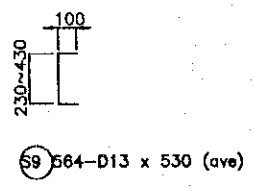
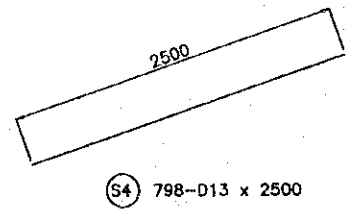
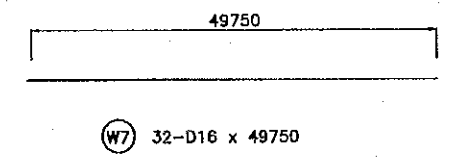
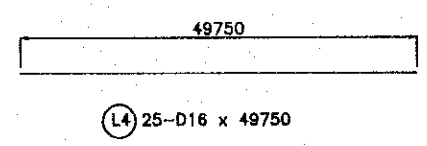
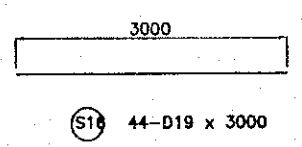
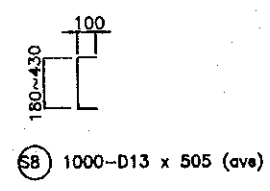
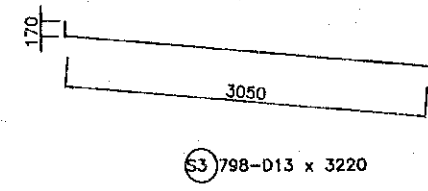
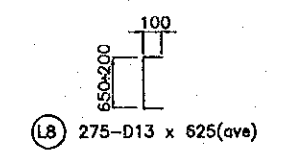
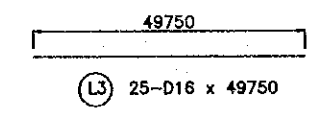
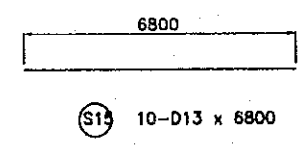
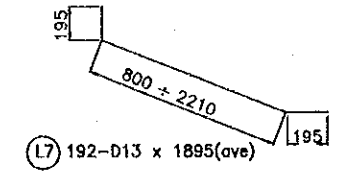
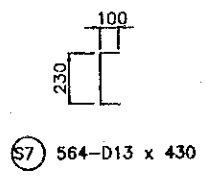
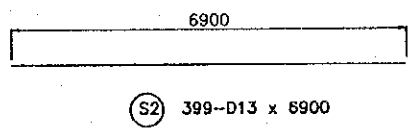
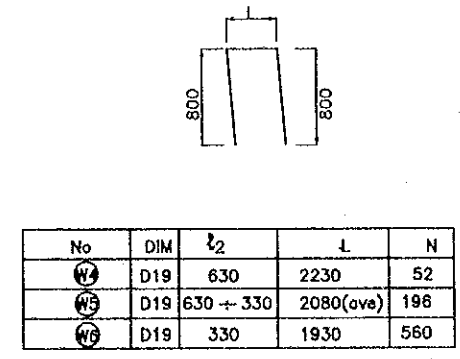
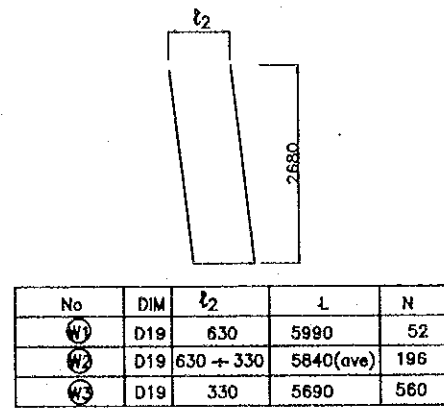
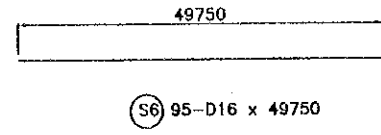
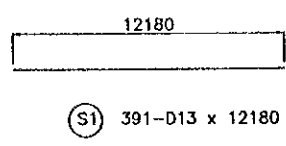
PACKAGE 3	SCALE 1/100	DRAWING No. C-1-2a-8	SHEET No.
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NGUYEN TAM TRINH BRIDGE,
REINFORCEMENT ARRANGEMENT (3/3)



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE 	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 11. 14	

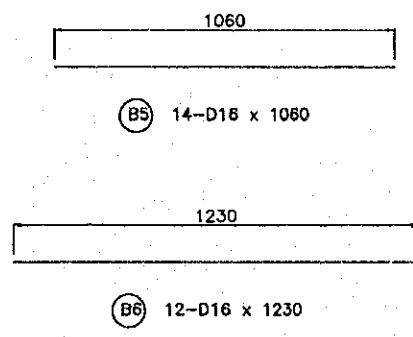
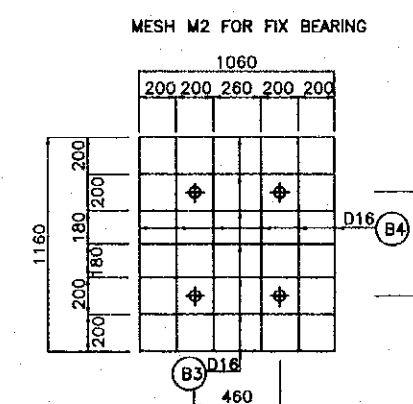
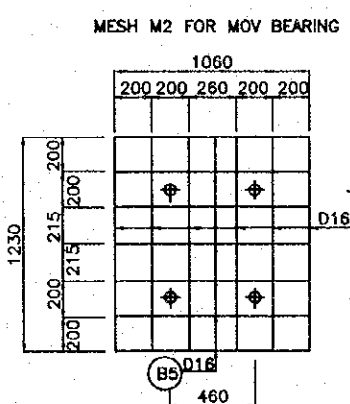
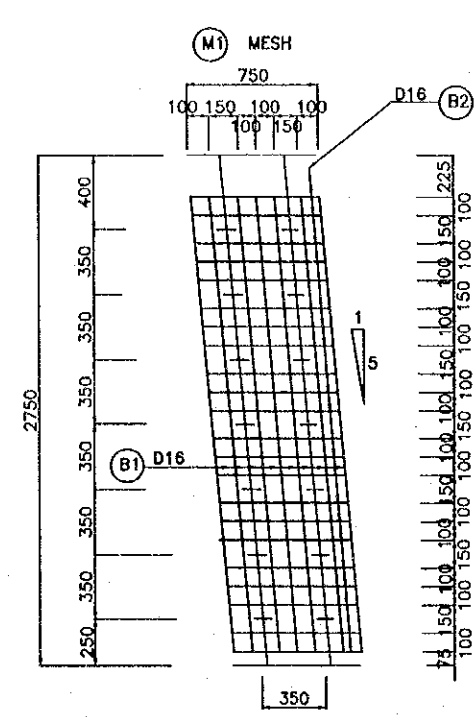
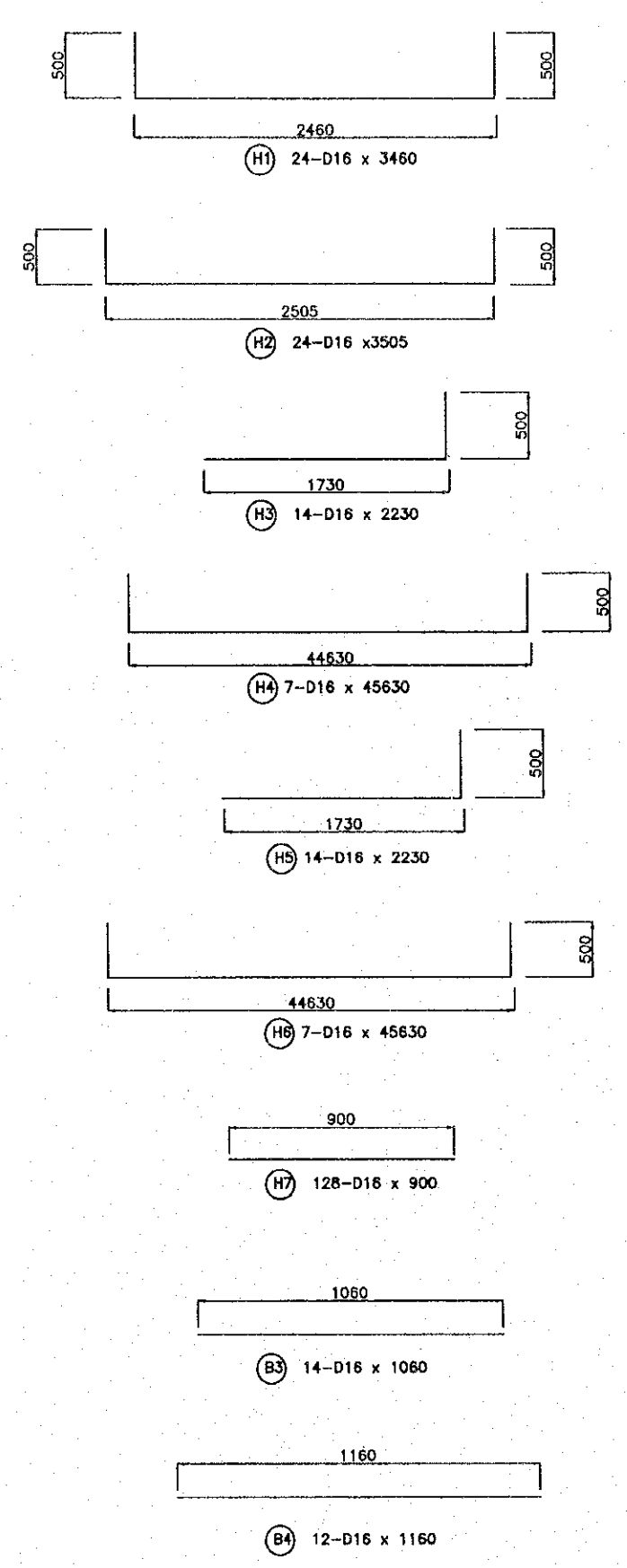
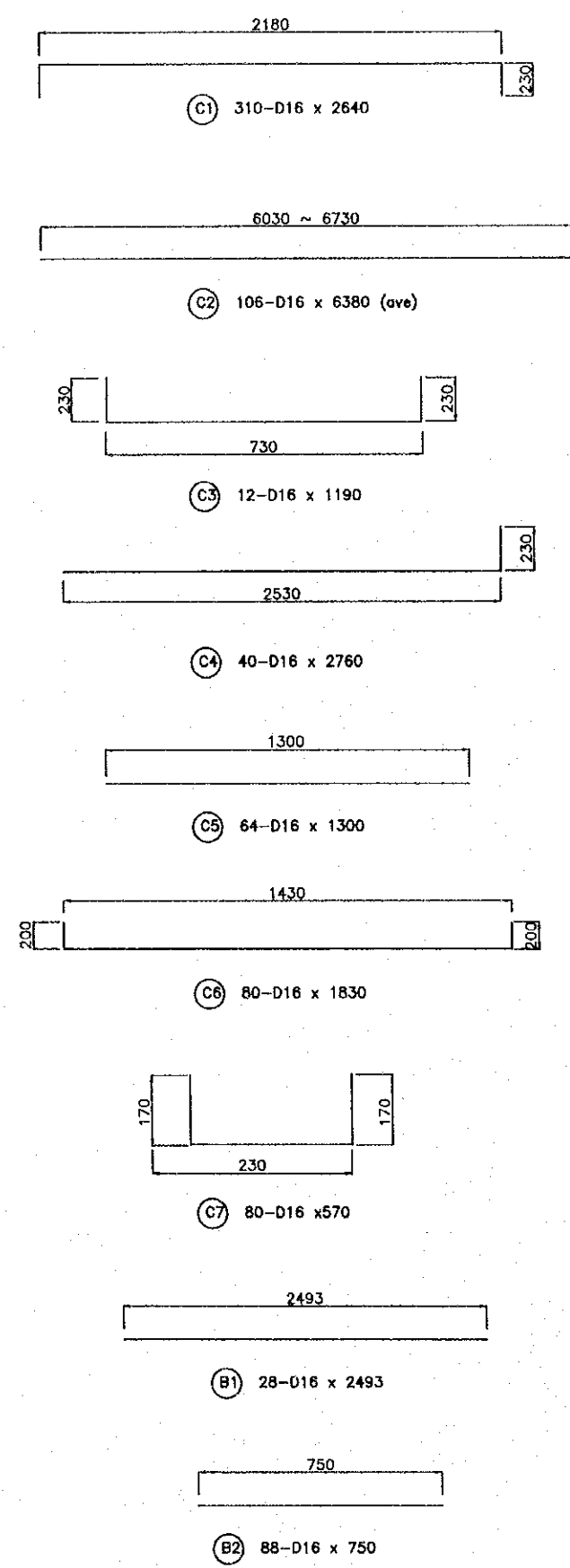
PACKAGE 3	SCALE	DRAWING No. C-1-2a-9	SHEET No.
NGUYEN TAM TRINH BRIDGE, REBAR BENDING SCHEDULE (1/3)			



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-2a-10	

NGUYEN TAM TRINH BRIDGE,
REBAR BENDING SCHEDULE (2/3)



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.03.17	

PACKAGE 3	SCALE	DRAWING No. C-1-2a-11	SHEET No.
NGUYEN TAM TRINH BRIDGE, REBAR BENDING SCHEDULE (3/3)			

List of Reinforcing Bars

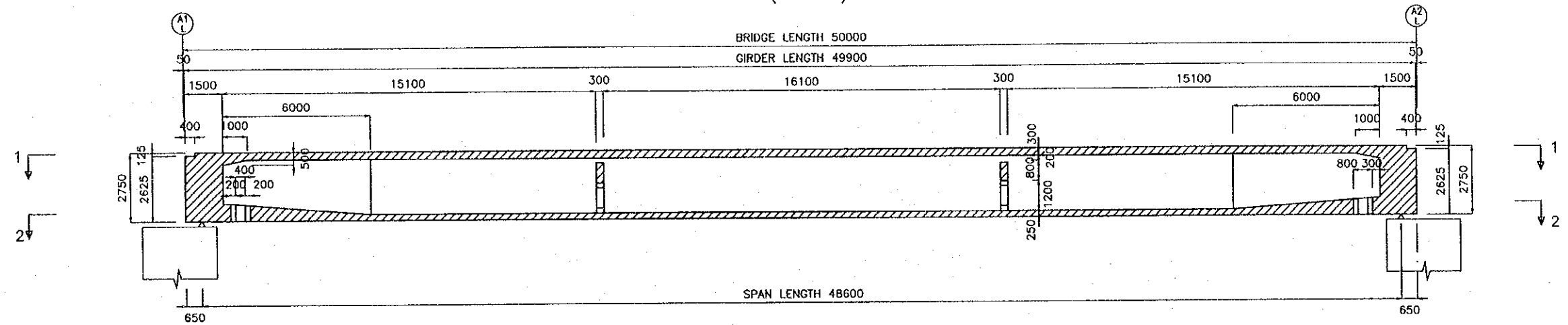
Shape	Diameter	Length (mm)	Number	Unit Weight (kgf/m)	Weight (kgf)	Remark
S1	D13	12180	391	0.955	4548	
S2	D13	6900	399	0.955	2629	
S3	D13	3220	798	0.955	2454	
S4	D13	2500	798	0.955	1905	
S5	D13	49750	53	0.955	2518	
S6	D16	49750	95	1.560	7373	
S7	D13	430	564	0.955	232	
S8	D13	505	1000	0.955	482	AVE
S9	D13	530	564	0.955	285	AVE
S14	D13	2750	46	0.955	121	
S15	D13	6800	10	0.955	65	
S16	D19	3000	44	2.250	297	
L1	D16	6630	387	1.560	4003	
L2	D16	6370	387	1.560	3846	
L3	D16	49750	25	1.560	1940	
L4	D16	49750	25	1.560	1940	
L5	D13	400	781	0.955	298	
L6	D13	1250	560	0.955	669	
L7	D13	1895	192	0.955	347	
L8	D13	625	275	0.955	164	AVE
W1	D19	5990	52	2.250	701	
W2	D19	5840	196	2.250	2575	
W3	D19	5690	560	2.250	7169	
W4	D19	2230	52	2.250	261	
W5	D19	2080	196	2.250	917	
W6	D19	1930	560	2.250	2432	
W7	D16	49750	32	1.560	2484	
W8	D13	550	560	0.955	294	
W9	D13	680	192	0.955	125	AVE

Shape	Diameter	Length	Number	Unit Weight (kgf/m)	Weight (kgf)	Remark
C1	D16	2640	310	1.560	1277	
C2	D16	6380	106	1.560	1055	AVE
C3	D16	1190	12	1.560	22	
C4	D16	2760	40	1.560	172	
C5	D16	1300	64	1.560	130	
C6	D16	1830	80	1.560	228	
C7	D16	570	80	1.560	71	
B1	D16	2493	28	1.560	109	
B2	D16	750	88	1.560	103	
B3	D16	1060	14	1.560	23	
B4	D16	1160	12	1.560	22	
B5	D16	1060	14	1.560	23	
B6	D16	1230	12	1.560	23	
H1	D16	3460	24	1.560	130	
H2	D16	3505	24	1.560	131	
H3	D16	2230	14	1.560	49	
H4	D16	45630	7	1.560	498	
H5	D16	2230	14	1.560	49	
H6	D16	45630	7	1.560	498	
H7	D13	900	128	0.955	110	
Total+5% (Lap length)					60688	kg

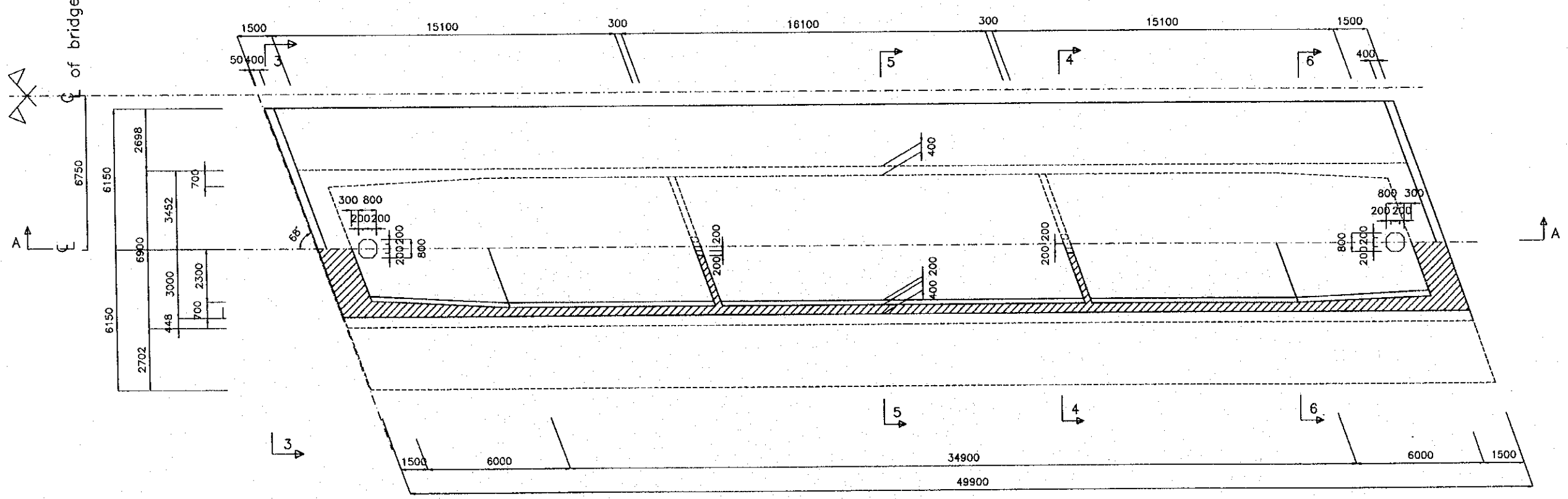
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000. 8. 17

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-2a-12	SHEET No.
LINH NAM BRIDGE, STRUCTURAL DIMENSIONS (1/2)			

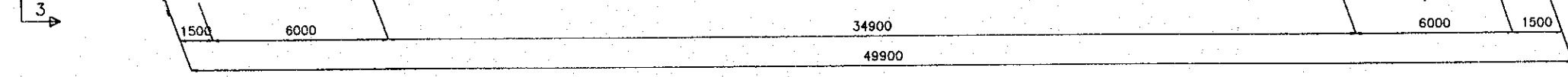
SECTION A-A
(S=1:200)



HALF SECTION 1-1
(S=1:200)



HALF SECTION 2-2
(S=1:200)

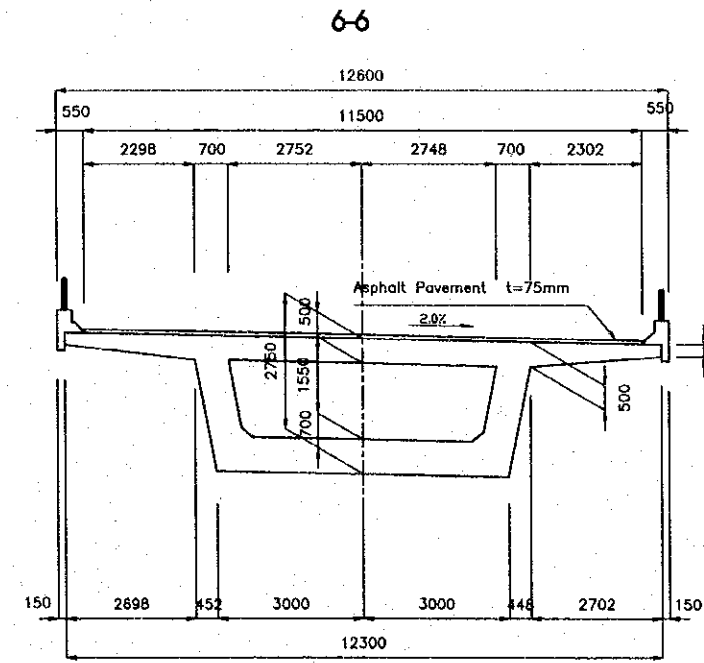
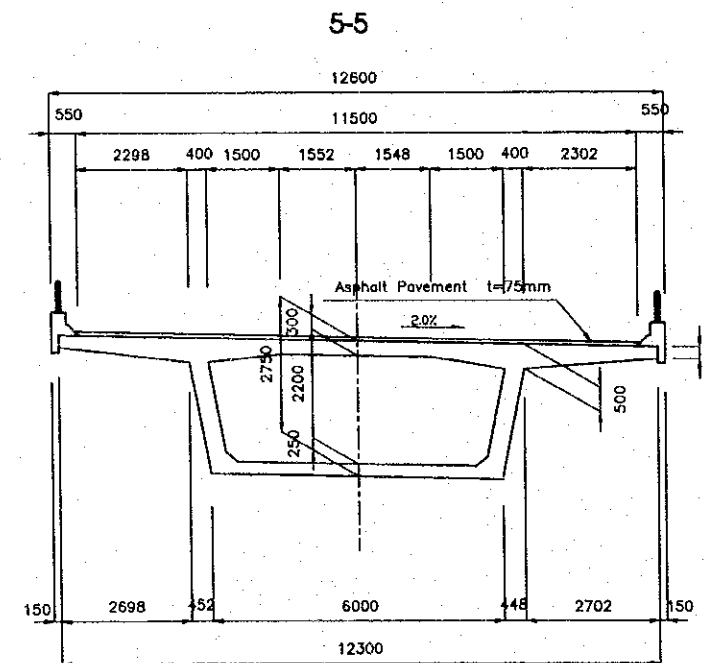
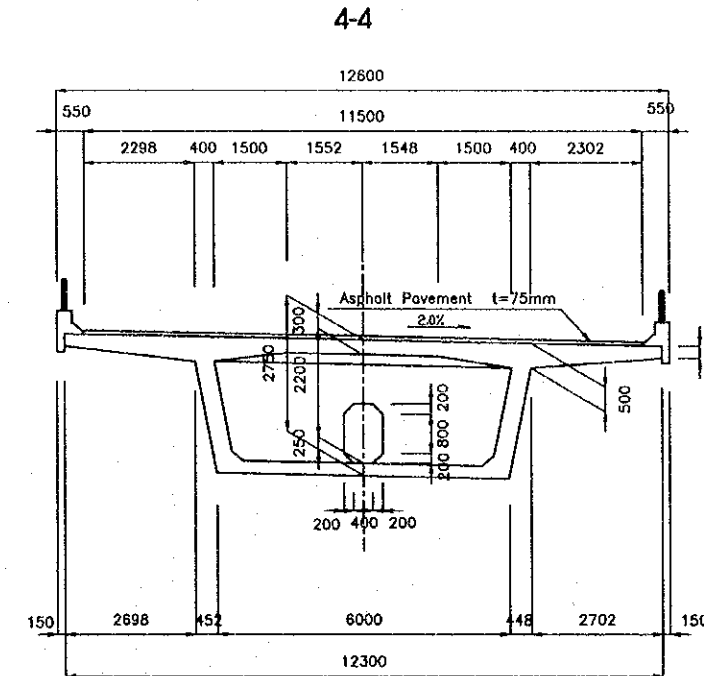
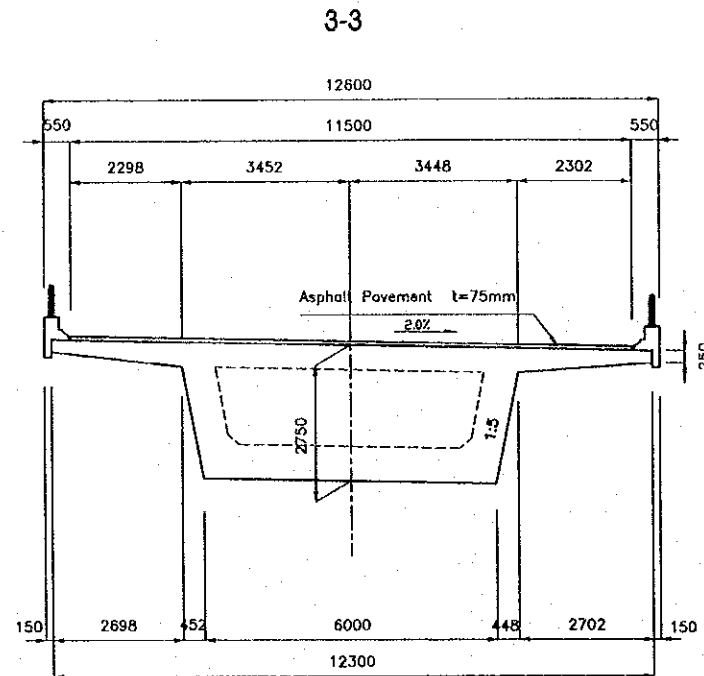


211

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THAI HO LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/150	C-1-2a-13	
LINH NAM BRIDGE, STRUCTURAL DIMENSIONS (2/2)			

HALF OF CROSS-SECTION



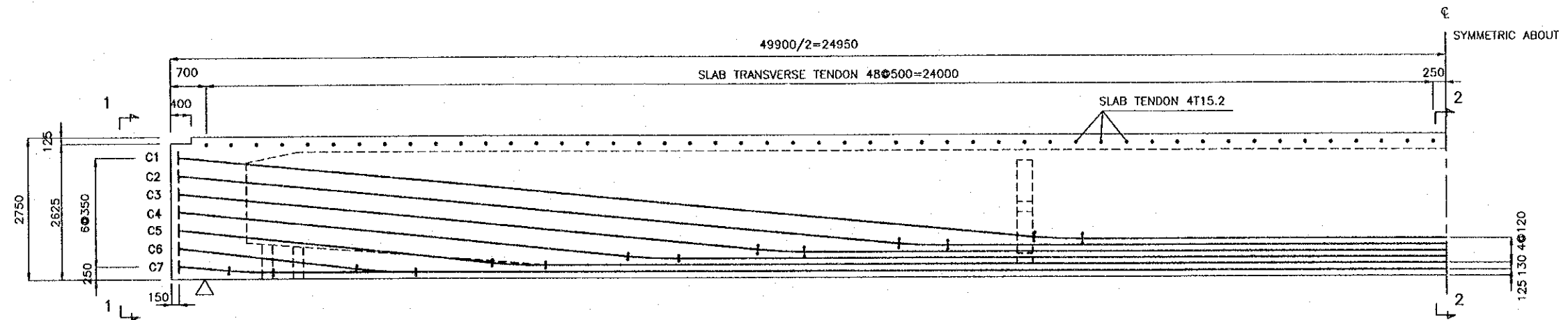
NOTE:

— TRANSVERSE CROSS-SECTIONS SHOWN IN THIS DRAWING ARE THOSE PERPENDICULAR TO THE HORIZONTAL ROAD ALIGNMENT

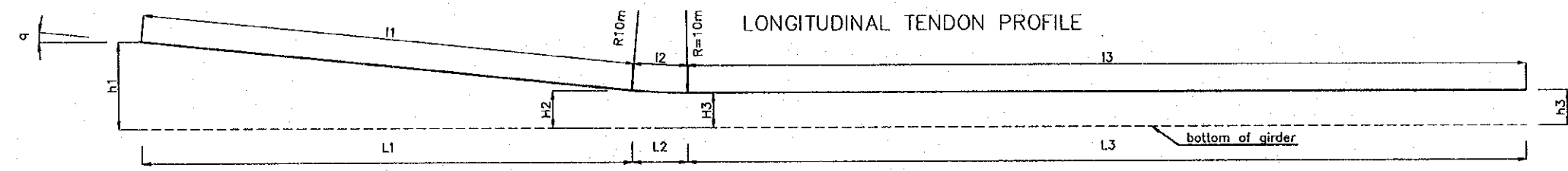
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.14	

PACKAGE 3	SCALE AS SHOWN	DRAWING No. C-1-2a-14	SHEET No.
SIMPLE SPAN BRIDGE, TENDON ARRANGEMENT (1/2)			

ELEVATION (S=1/100)

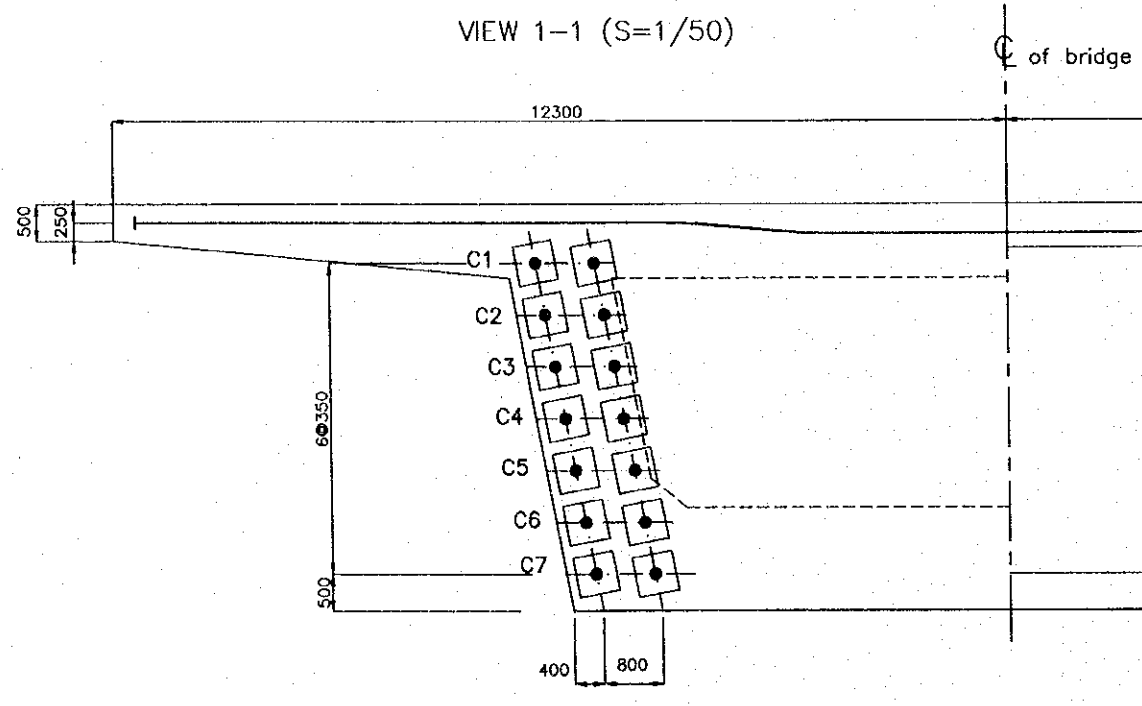


LONGITUDINAL TENDON PROFILE

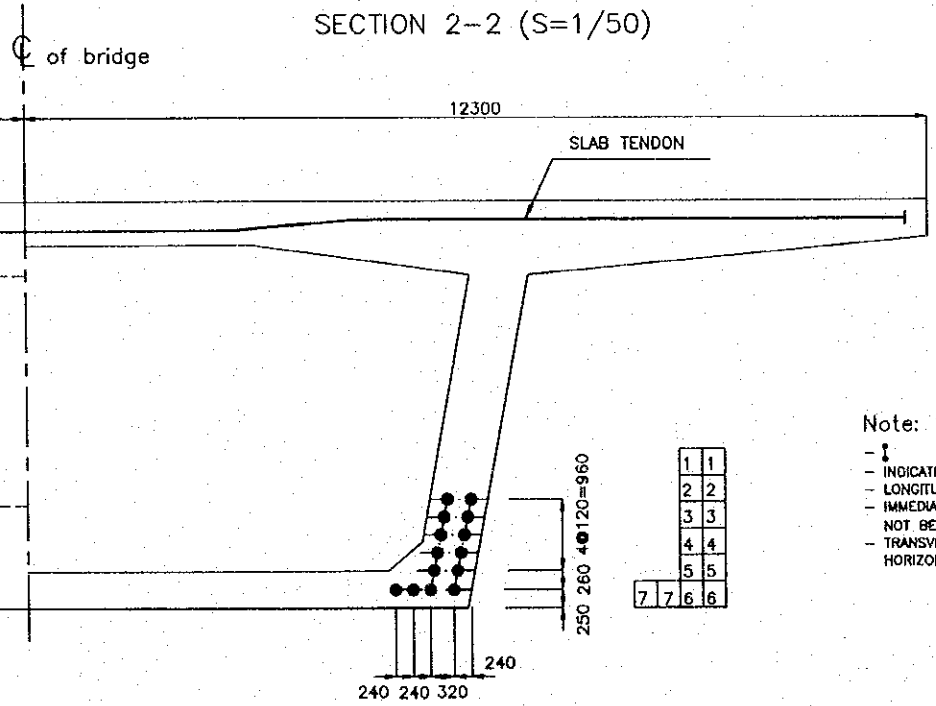


CABLE No	θ	H1 (mm)	H2 (mm)	H3 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	l1 (mm)	l2 (mm)	l3 (mm)	2Σli (mm)
C1	5°23'	2350	769	735	16733	940	7127	16807	942	7127	50012
C2	5°27'	2000	650	615	14098	853	9749	14162	954	9749	49990
C3	5°33'	1650	532	495	11460	971	12369	11514	971	12369	49970
C4	5°44'	1300	415	375	8817	999	14984	8862	1000	14984	49952
C5	6°01'	950	300	255	6164	1049	17587	6198	1050	17587	49930
C6	6°42'	600	193	125	3478	1183	20159	3501	1165	20159	49910
C7	5°00'	250	163	125	994	872	22934	998	873	22934	49870

VIEW 1-1 (S=1/50)



SECTION 2-2 (S=1/50)



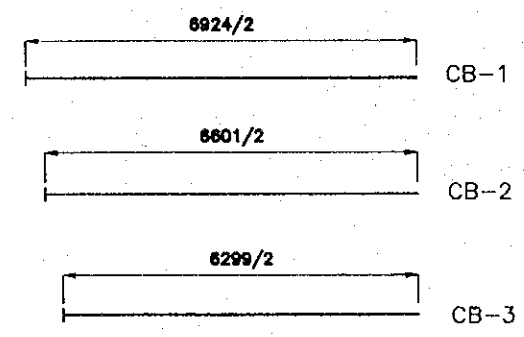
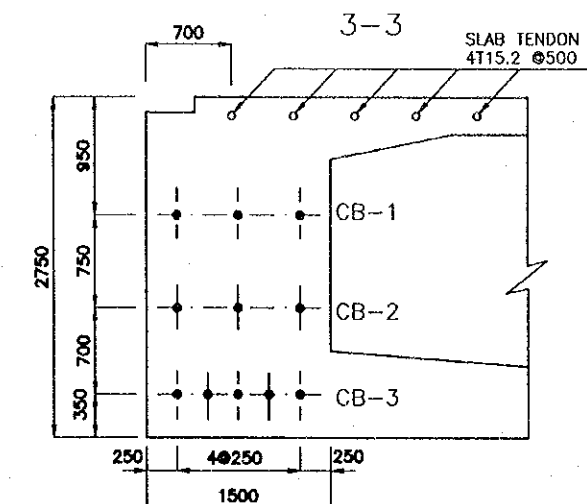
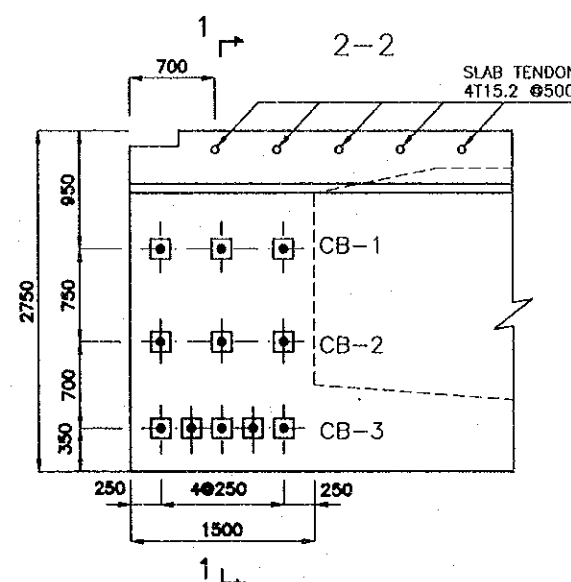
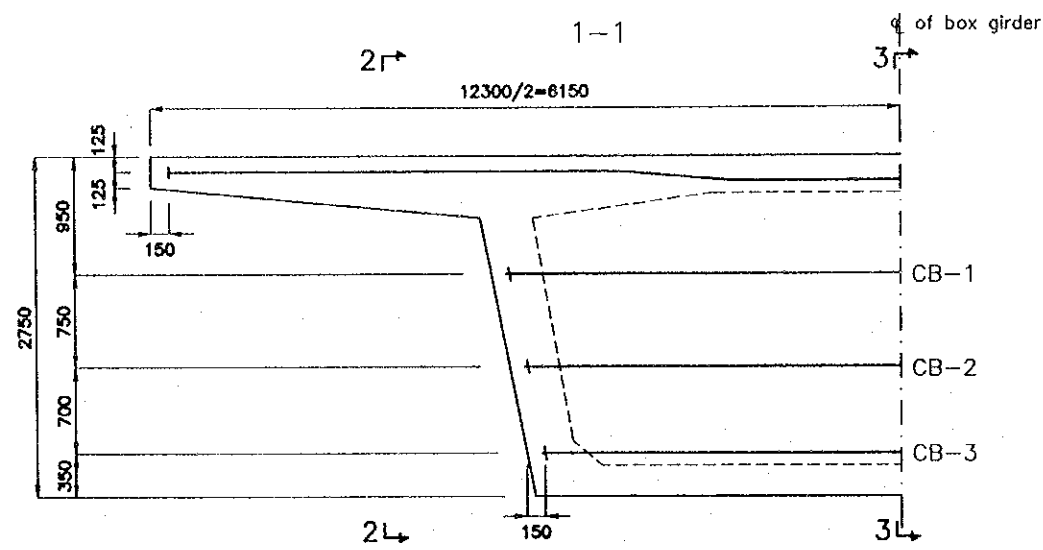
QUANTITIES OF PC STEEL

TYPE	CABLE No	LENGTH (mm)	NUMBER	TOTAL LENGTH (m)
PC CABLE 12T15.2	C1	50012	4	200.048
	C2	49990	4	199.960
	C3	49970	4	199.880
	C4	49952	4	199.808
	C5	49930	4	199.720
	C6	49910	4	199.640
	C7	49870	4	199.480
TOTAL			28	1398.536
WEIGHT = 1398.5x13.212 kg/m = 18477.5 kg				

Note:

- START AND END POINTS OF CURVED SEGMENT OF TENDON.
- INDICATED LENGTHS DO NOT INCLUDE OPERATING ALLOWANCE.
- LONGITUDINAL PRESTRESSING TENDONS SHALL BE STRESSED FROM THE BOTH SIDES SIMULTANEOUSLY.
- IMMEDIATELY AFTER PRESTRESSING, AVERAGE PRESTRESS FORCE OF LONGITUDINAL TENDONS SHALL NOT BE LESS THAN 190 TF/TENSION RESPECTIVELY AT THE CENTER OF THE SPAN.
- TRANSVERSE CROSS-SECTIONS SHOW IN THIS DRAWING ARE THOSE PERPENDICULAR TO THE HORIZONTAL ROAD ALIGNMENT.

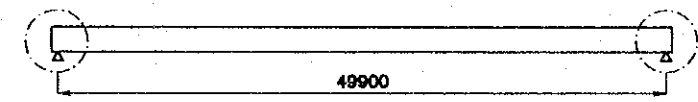
CROSSBEAM (S=1/60)



QUANTITIES OF PC STEEL

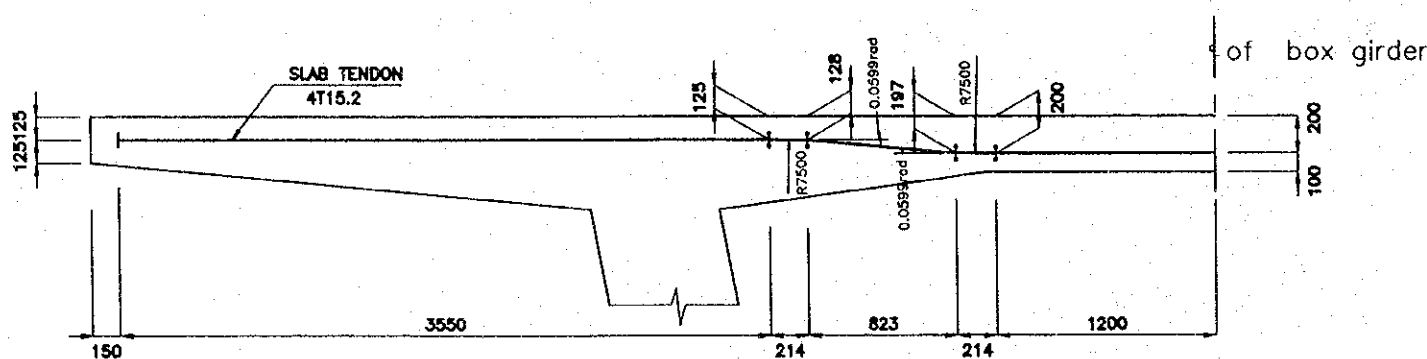
TYPE	CABLE No	LENGTH (mm)	NUMBER	TOTAL LENGTH (m)
PC CABLE 4T15.2	CB-1	6,924	6	41.54
	CB-2	6,601	6	39.61
	CB-3	6,299	10	62.99
WEIGHT = 144.14m x 4.4kgf/m = 634.22 kgf				

KEY PLAN



SLAB TRANSVERSE TENDON

TENDON PROFILE (S=1/40)



QUANTITIES OF PC STEEL

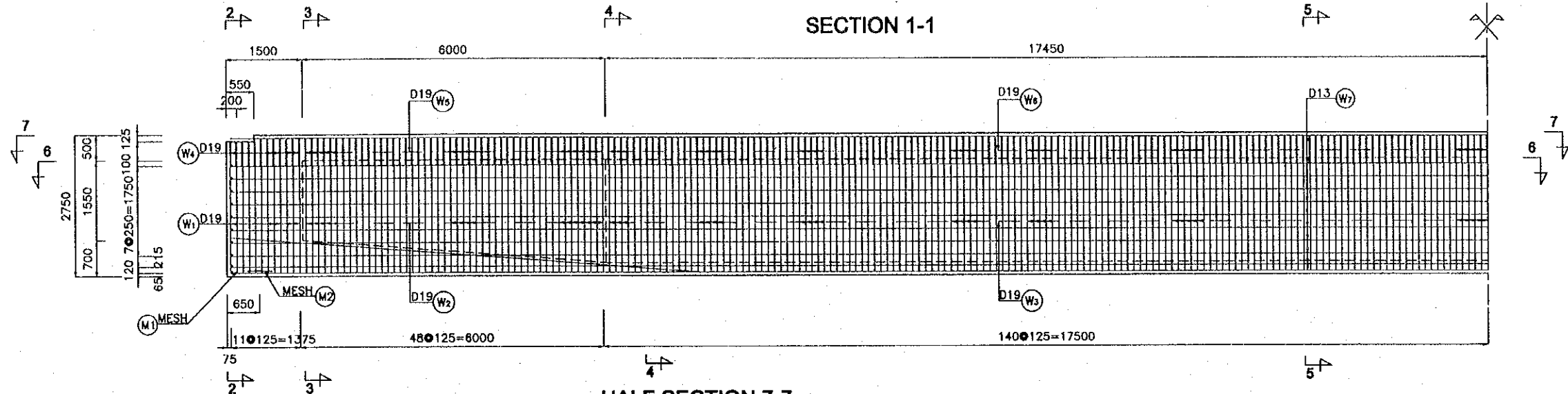
TYPE	CABLE No	LENGTH (mm)	NUMBER	TOTAL LENGTH (m)
PC CABLE 4T15.2		12949	98	1269.0
WEIGHT = 1269.0m x 4.4 kgf/m = 5583.56 kgf				

Note:

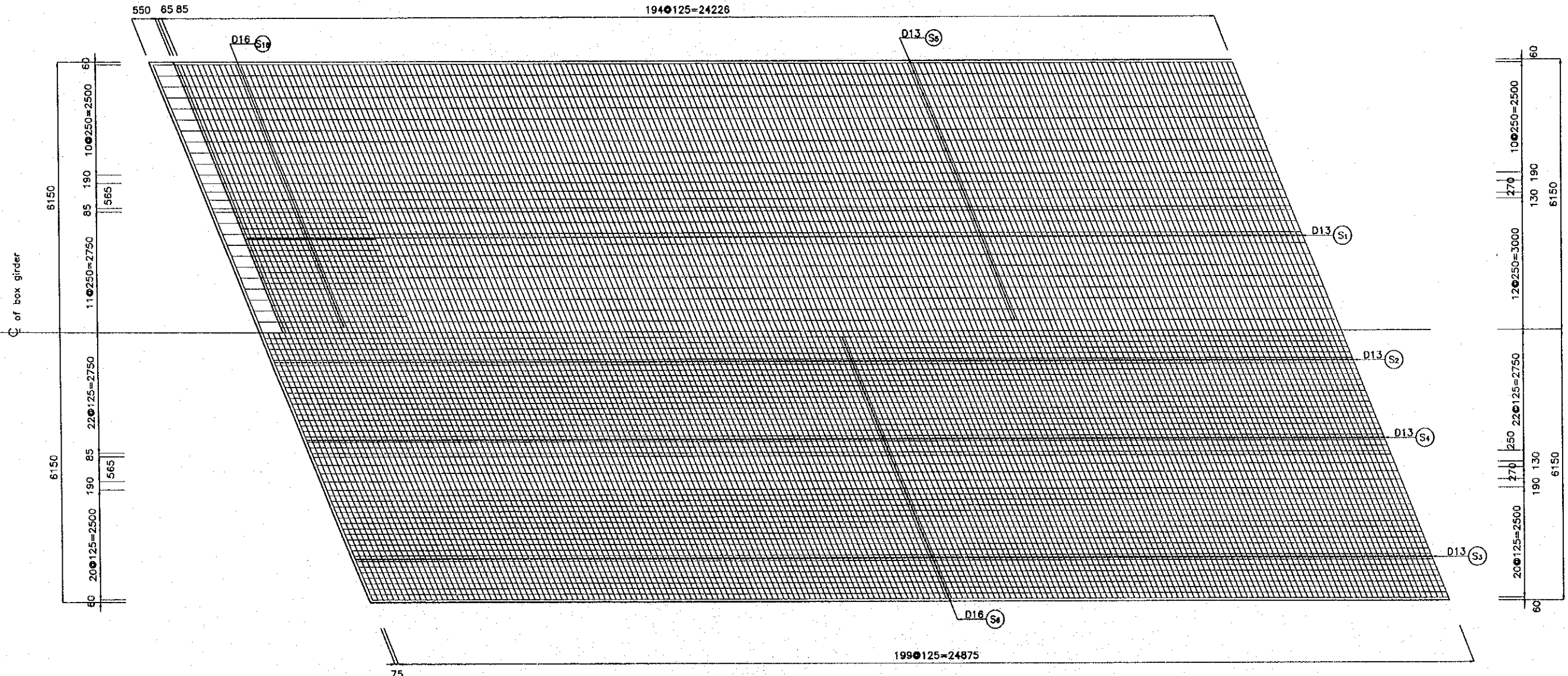
- INDICATED LENGTHS DO NOT INCLUDE OPERATING ALLOWANCE.
- PRESTRESSING TENDONS IN SLAB AND CROSSBEAM SHALL BE STRESSED ALTERNATELY FROM THE RIGHT SIDE AND THE LEFT SIDE.
- IMMEDIATELY AFTER PRESTRESSING, PRESTRESS FORCE OF THE TENDONS IN SLAB AND CROSSBEAM SHALL NOT BE LESS THAN 65.0 TF/TENSION AT THE CENTER OF THE TENDON.
- FOR ARRANGEMENT OF SLAB TENDONS, REFER TO DWG. NO.C-1-2a-4.
- TRANSVERSE CROSS-SECTIONS SHOW IN THIS DRAWING ARE THOSE PERPENDICULAR TO THE HORIZONTAL ROAD ALIGNMENT.

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY NAME S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000. 3. 14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-2a-17	SHEET No.
LINH NAM BRIDGE, REINFORCEMENT ARRANGEMENT (2/3)			



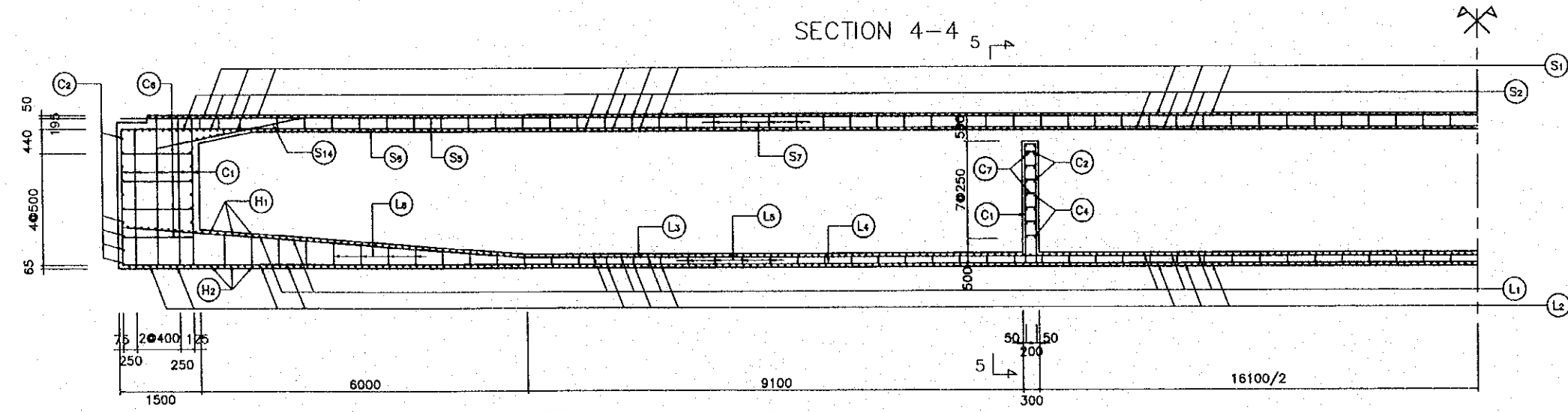
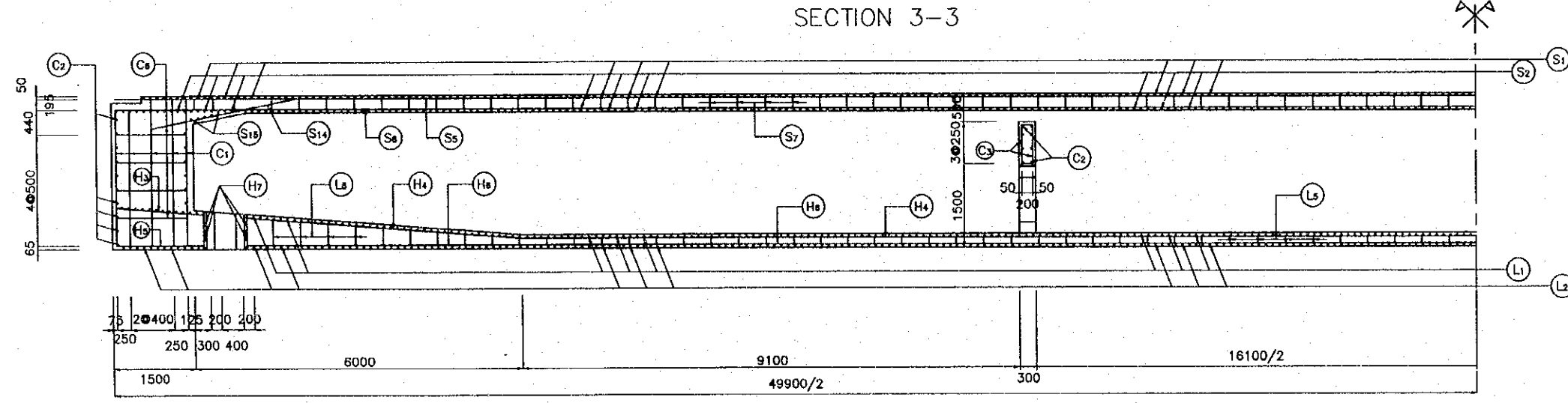
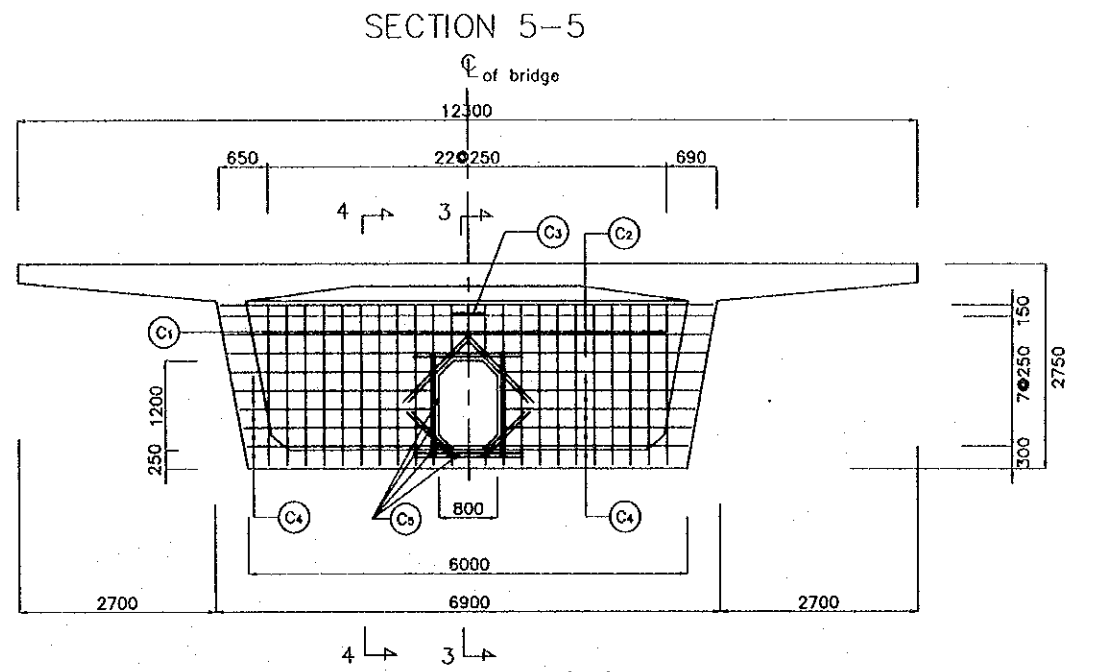
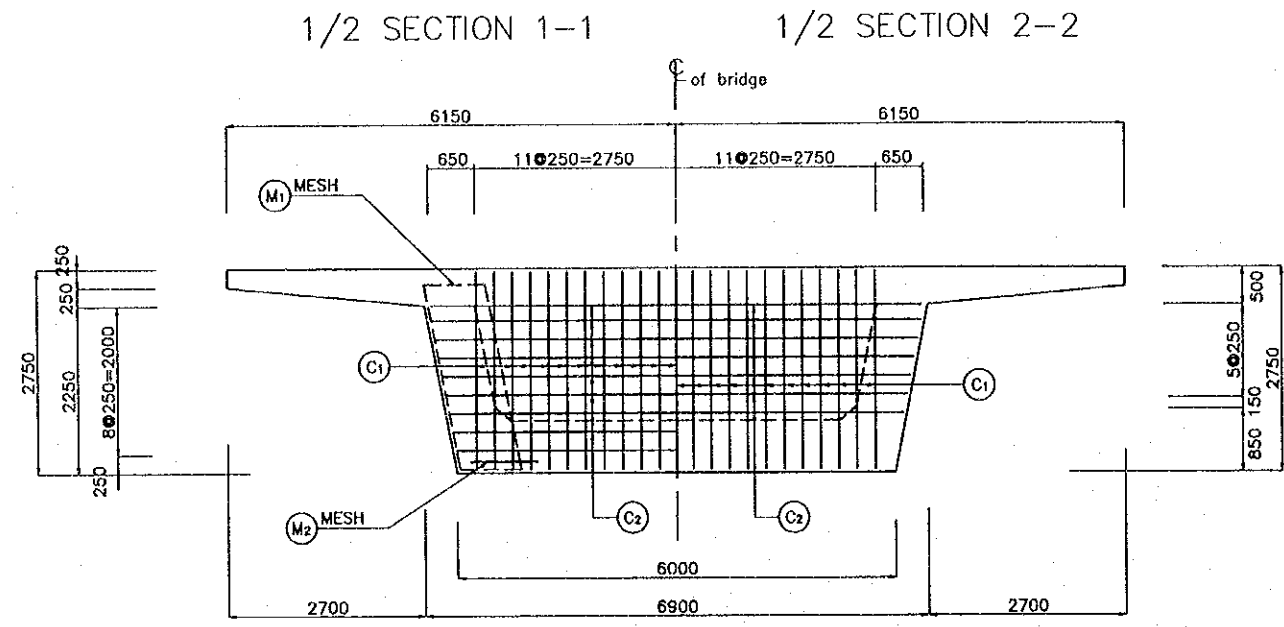
HALF SECTION 7-7
194 @ 125 = 24226



HALF SECTION 6-6
199 @ 125 = 24875

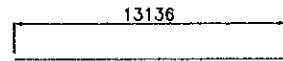
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (DANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.03.17

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-2a-18	SHEET No.
LINH NAM BRIDGE, REINFORCEMENT ARRANGEMENT (3/3)			

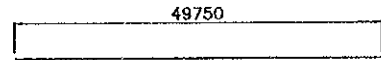


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.11.17	

PACKAGE 3	SCALE	DRAWING No. C-1-2a-19	SHEET No.
LINH NAM BRIDGE, REBAR BENDING SCHEDULE (1/3)			



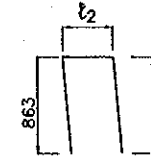
(S1) 391-D13 x 13136



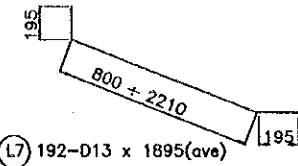
(S6) 95-D16 x 49750



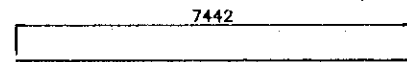
No	DIM	t ₂	L	N
(W1)	D19	680	6460	52
(W2)	D19	680 + 356	6298(ave)	196
(W3)	D19	356	6136	560



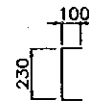
No	DIM	t ₂	L	N
(W4)	D19	680	2406	52
(W5)	D19	680 + 356	2244(ave)	196
(W6)	D19	356	2082	560



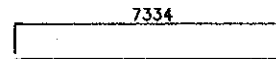
(L7) 192-D13 x 1895(ave)



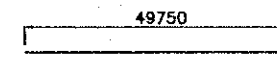
(S2) 399-D13 x 7442



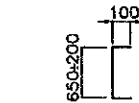
(S7) 564-D13 x 430



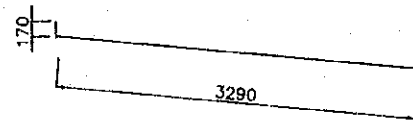
(S13) 10-D13 x 7334



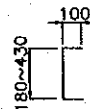
(L3) 25-D16 x 49750



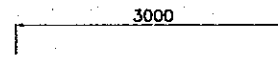
(L8) 275-D13 x 625(ave)



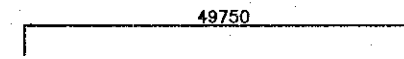
(S3) 798-D13 x 3460



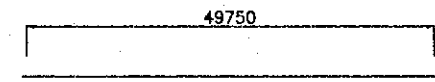
(S8) 1000-D13 x 505 (ave)



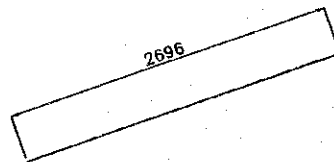
(S18) 44-D19 x 3000



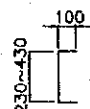
(L4) 25-D16 x 49750



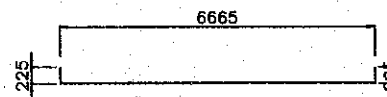
(W7) 32-D16 x 49750



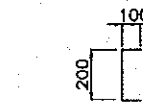
(S4) 798-D13 x 2696



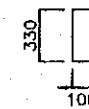
(S9) 564-D13 x 530 (ave)



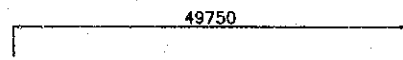
(L1) 387-D16 x 7115



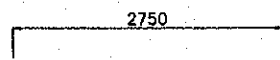
(L5) 781-D13 x 400



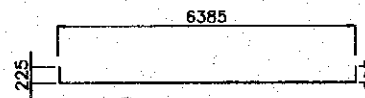
(W8) 560-D13 x 550



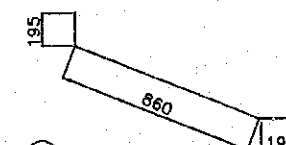
(S5) 53-D13 x 49750



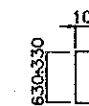
(S14) 46-D13 x 2750



(L2) 387-D16 x 8835



(L6) 560-D13 x 1250



(W9) 192-D13 x 680(ave)

18

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		NAME S. WATABE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		SIGNATURE <i>[Signature]</i>
		DATE 2000.3.17

PACKAGE 3	SCALE	DRAWING No. C-1-2a-21	SHEET No.
LINH NAM BRIDGE, REBAR BENDING SCHEDULE (3/3)			

LIST OF REINFORCING BARS

Shape	Diameter	Length (mm)	Number	Unit Weight (kgf/m)	Weight (kgf)	Remark
S1	D13	13136	391	0.955	4905	
S2	D13	7442	399	0.955	2836	
S3	D13	3460	798	0.955	2637	
S4	D13	2696	798	0.955	2055	
S5	D13	49750	53	0.955	2518	
S6	D16	49750	95	1.560	7373	
S7	D13	430	564	0.955	232	
S8	D13	505	1000	0.955	482	AVE
S9	D13	530	564	0.955	285	AVE
S14	D13	2750	46	0.955	121	
S15	D13	7334	10	0.955	70	
S16	D19	3000	44	2.250	297	
L1	D16	7115	387	1.560	4295	
L2	D16	6835	387	1.560	4126	
L3	D16	49750	25	1.560	1940	
L4	D16	49750	25	1.560	1940	
L5	D13	400	781	0.955	298	
L6	D13	1250	560	0.955	669	
L7	D13	1895	192	0.955	347	
L8	D13	625	275	0.955	164	AVE

Shape	Diameter	Length (mm)	Number	Unit Weight (kgf/m)	Weight (kgf)	Remark
W1	D19	6460	52	2.250	756	
W2	D19	6298	196	2.250	2777	
W3	D19	6136	560	2.250	7731	
W4	D19	2406	52	2.250	282	
W5	D19	2244	196	2.250	990	
W6	D19	2082	560	2.250	2623	
W7	D16	49750	32	1.560	2484	
W8	D13	550	560	0.955	294	
W9	D13	680	192	0.955	125	AVE
C1	D16	2640	310	1.560	1277	
C2	D16	6880	106	1.560	1138	AVE
C3	D16	1190	12	1.560	22	
C4	D16	2960	40	1.560	185	
C5	D16	1300	64	1.560	130	
C6	D16	1942	80	1.560	242	
C7	D16	570	80	1.560	71	
B1	D16	2493	28	1.560	109	
B2	D16	750	88	1.560	103	
B3	D16	1060	14	1.560	23	
B4	D16	1160	12	1.560	22	
B5	D16	1080	14	1.560	23	
B6	D16	1230	12	1.560	23	
H1	D16	3653	24	1.560	137	
H2	D16	3700	24	1.560	139	
H3	D16	2230	14	1.560	49	AVE
H4	D16	45630	7	1.560	498	
H5	D16	2230	14	1.560	49	AVE
H6	D16	45630	7	1.560	498	
H7	D13	900	128	0.955	110	
TOTAL + 5% (LAP LENGTH)					63524 kgf	

C-1 THROUGHWAY

C-1-2 SUPERSTRUCTURE (BOX GIRDER AND PC I GIRDER)

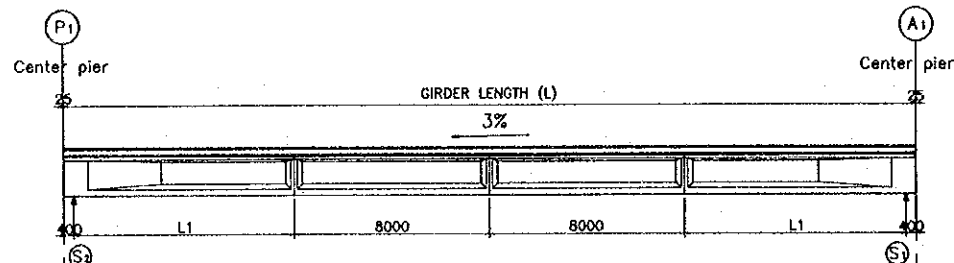
C-1-2b PC I GIRDER

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.11.17

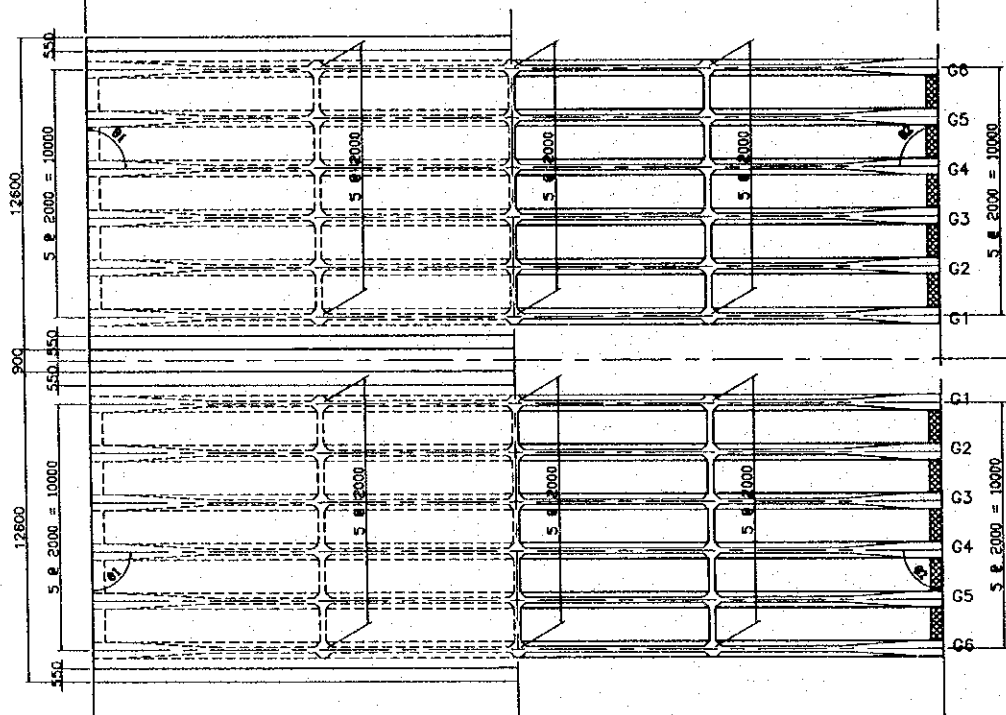
PACKAGE 3	SCALE	DRAWING No. C-1-2b-1	SHEET No.
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DETAIL OF PHAP VAN VIADUCT (1)

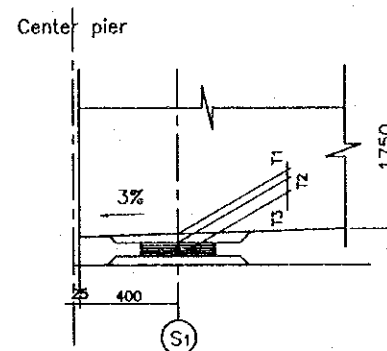
SIDE VIEW
S = 1:300



PLAN
S = 1:300



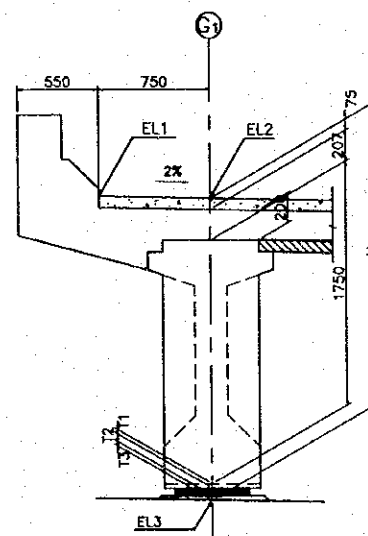
DETAIL OF SHOES
S = 1:30



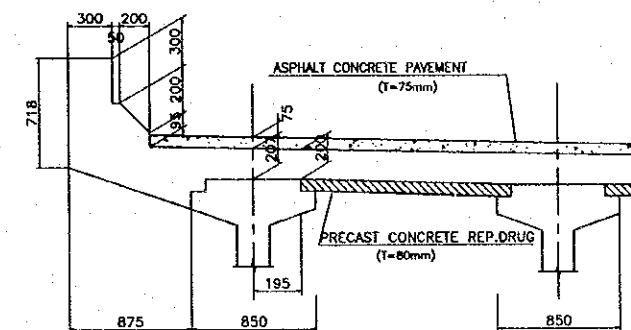
GIRDER	L (mm)	L1 (mm)	θ1 (degree)	θ2 (degree)
G1-L	34951	9475.5	90.20	90.00
G2-L	34953	9476.5	90.20	90.00
G3-L	34954	9477	90.20	90.00
G4-L	34956	9478	90.20	90.00
G5-L	34958	9479	90.20	90.00
G6-L	34959	9479.5	90.20	90.00
G1-R	34949	9474.5	89.58	90.00
G2-R	34947	9473.5	89.58	90.00
G3-R	34946	9473	89.58	90.00
G4-R	34944	9472	89.58	90.00
G5-R	34943	9471.5	89.58	90.00
G6-R	34941	9470.5	89.58	90.00

	A1	P1	REMARKS
	S1	S2	
SHOES CONDITION	MOVE	FIX	
SHOES TYPE	B	A	
EL1 (m)	11.418	11.913	
EL2 (m)	11.403	11.907	
PAVEMENT(mm)	75	75	
SLAB (mm)	207	203	
GIRDER (mm)	1750	1750	
T1 (mm)	20	20	
T2 (mm)	54	36	
T3 (mm)	30	20	
H (mm)	2136	2104	
EL3 (m)	9.268	9.803	

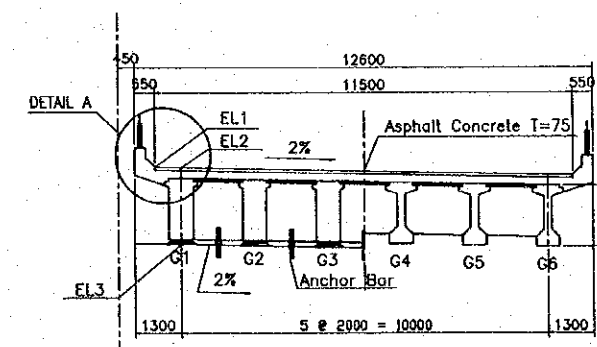
DETAIL (G1)
S = 1:50



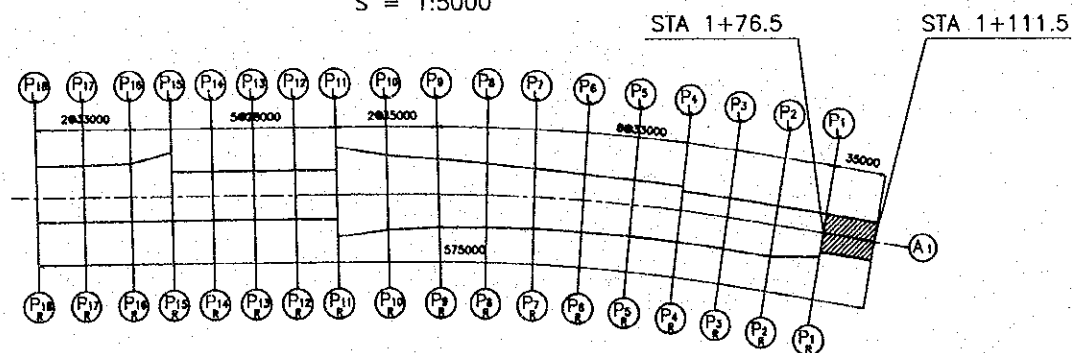
DETAIL (A)
S = 1:50



TYPICAL CROSS SECTION OF SPAN
S = 1:200



KEY PLAN
S = 1:5000



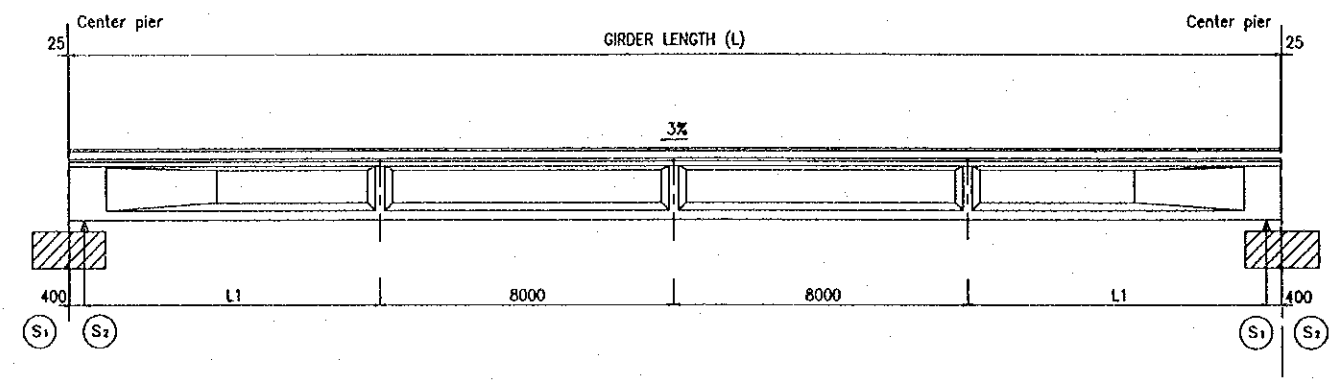
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (MANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 3. 19

PACKAGE 3	SCALE	DRAWING No. C-1-2b-2	SHEET No.
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DETAIL OF PHAP VAN VIADUCT (2)

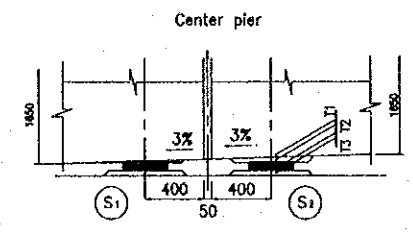
SIDE VIEW

S = 1:200



DETAIL OF SHOES

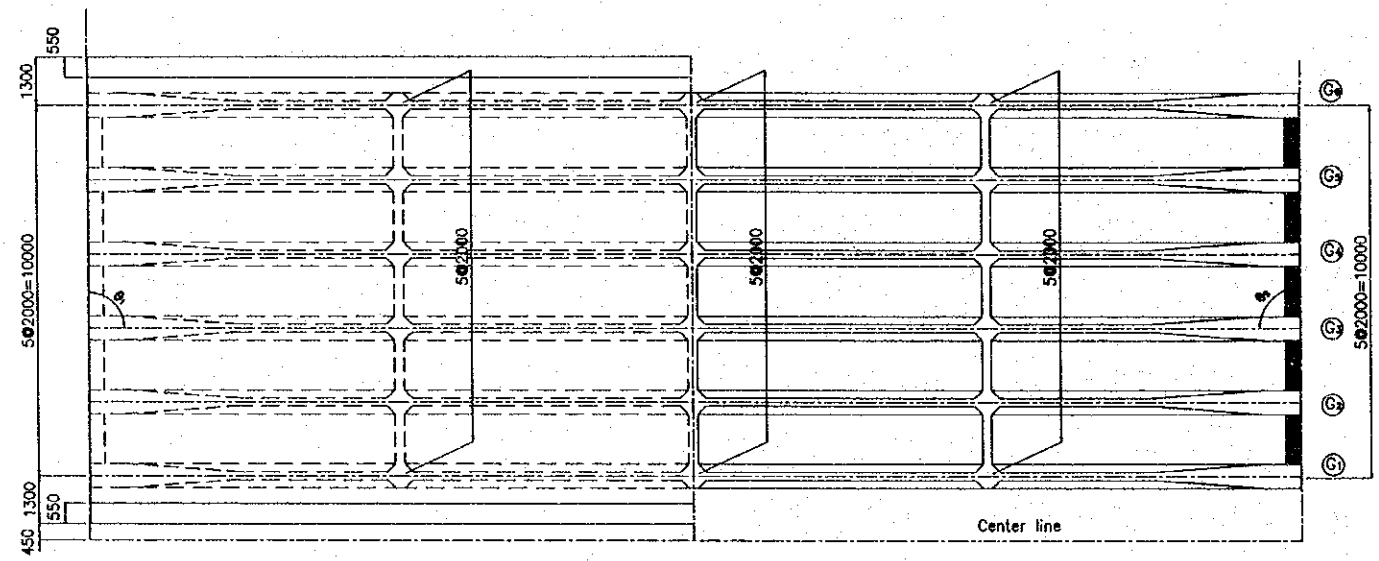
S = 1:50



	P1 L		P2 L		P3 L		P4 L		REMARKS
	S1	S2	S1	S2	S1	S2	S1	S2	
SHOES CONDITION	MOVE	FIX	MOVE	FIX	MOVE	FIX	MOVE	FIX	
SHOES TYPE	B	A	B	A	B	A	B	A	
EL1 (m)	11.925	12.390	12.403	12.868	12.880	13.346			
EL2 (m)	11.919	12.401	12.414	12.889	12.901	13.374			
PAVEMENT (mm)	75								
SLAB (mm)	202	205	205	209	209	212			
GIRDER (mm)	1650								
T1 (mm)	20	20	20	20	20	20			
T2 (mm)	54	36	54	36	54	36			
T3 (mm)	115	35	30	36	30	36			
H (mm)	2116	2021	2034	2026	2038	2029			
EL3 (m)	9.803	10.380	10.380	10.863	10.863	11.345			

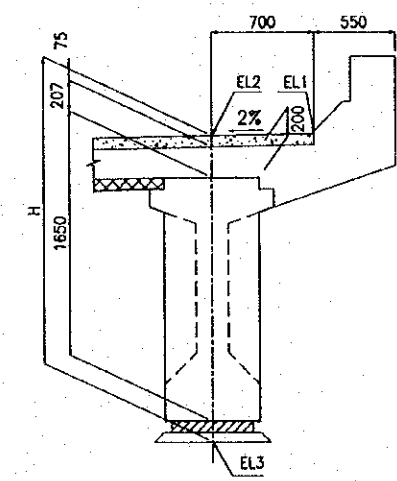
PLAN VIEW

S = 1:200



DETAIL G

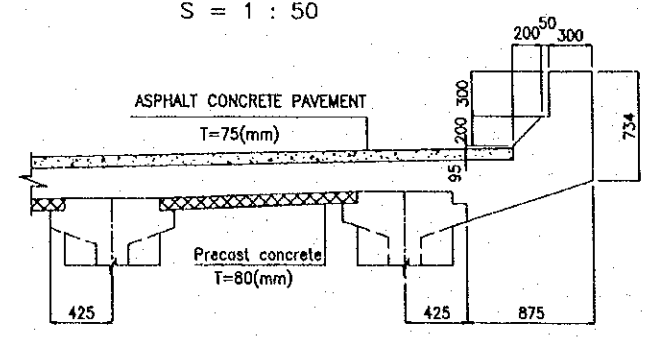
S = 1:50



	GIRDER	P1L-P2L	P2L-P3L	P3L-P4L
L (mm)	G1	32961	32973	32985
	G2	32975	33000	33025
	G3	32988	33027	33066
	G4	33001	33054	33106
	G5	33014	33082	33146
	G6	33027	33109	33187
L1 (mm)	G1	8081	8087	8092
	G2	8087	8100	8113
	G3	8094	8114	8133
	G4	8100	8127	8153
	G5	8107	8141	8173
	G6	8113	8154	8193
θ ₁ (degree)	G1-G6	90.2	90.4	90.6
θ ₂ (degree)	G1-G6	90.2	90.4	90.5

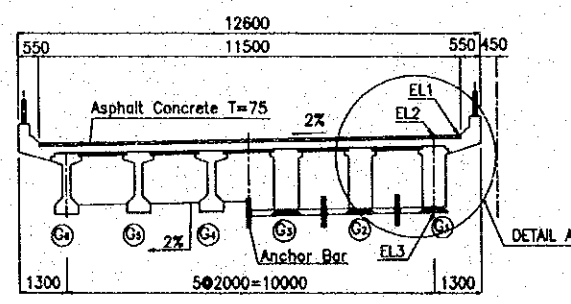
DETAIL OF A

S = 1:50



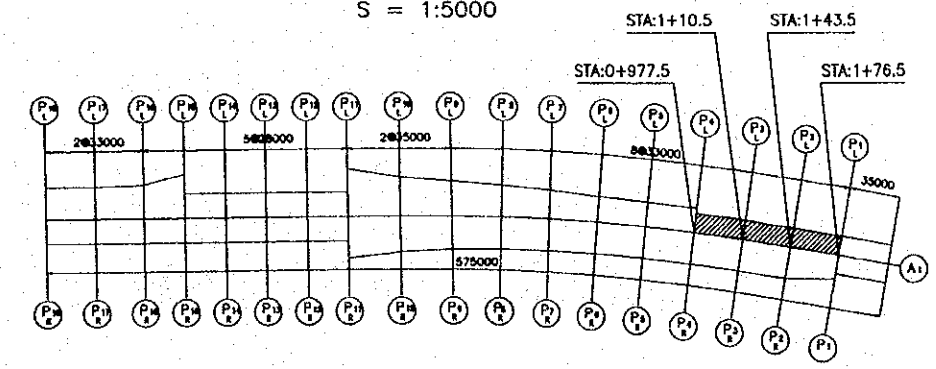
TYPICAL CROSS SECTION OF SPAN

S = 1:200



KEY PLAN

S = 1:5000

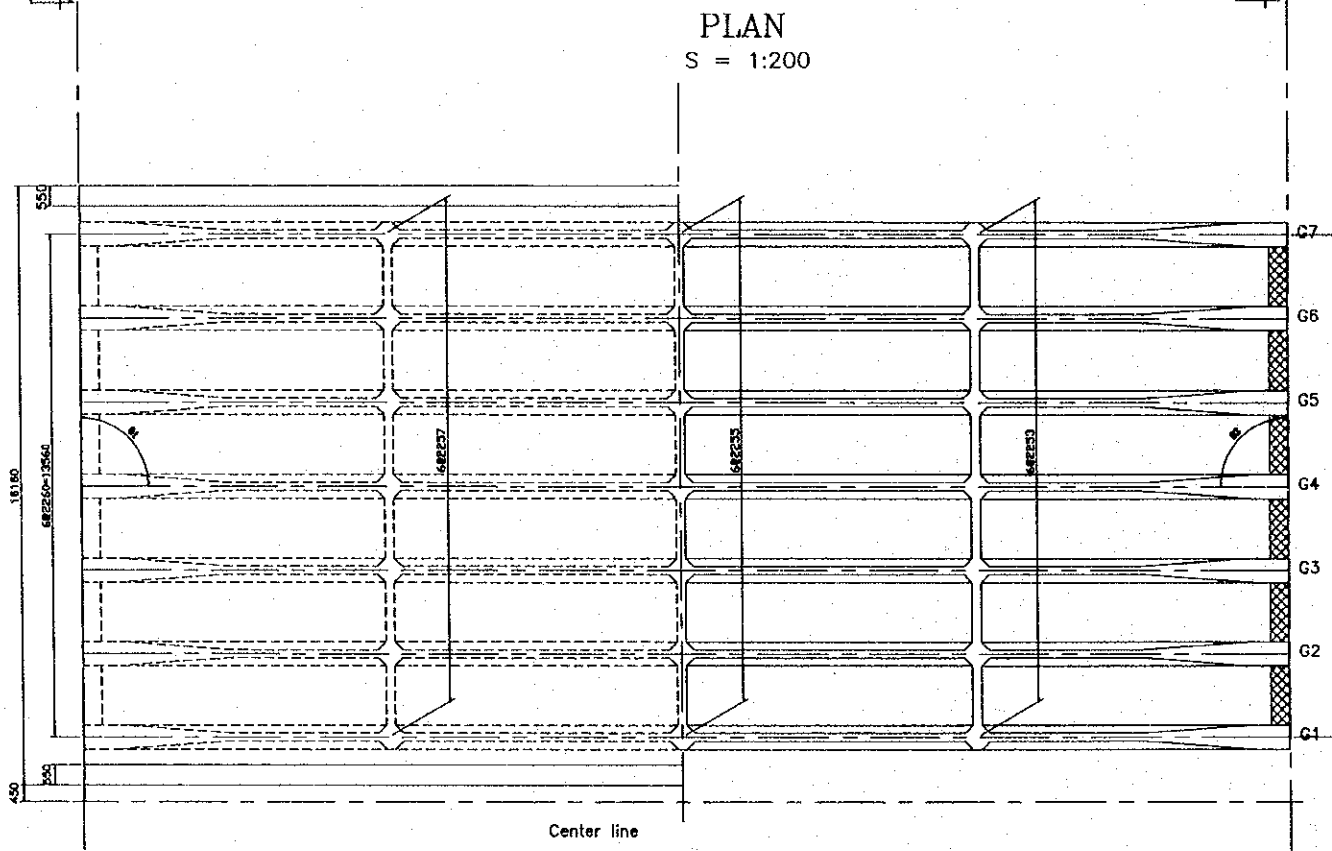
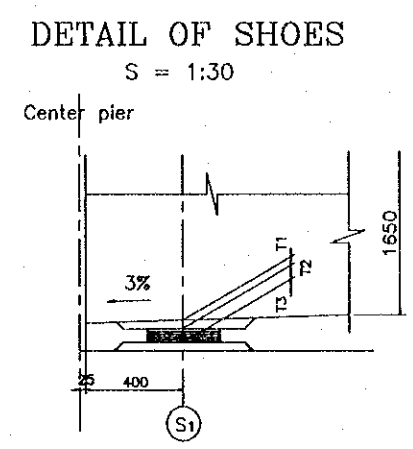
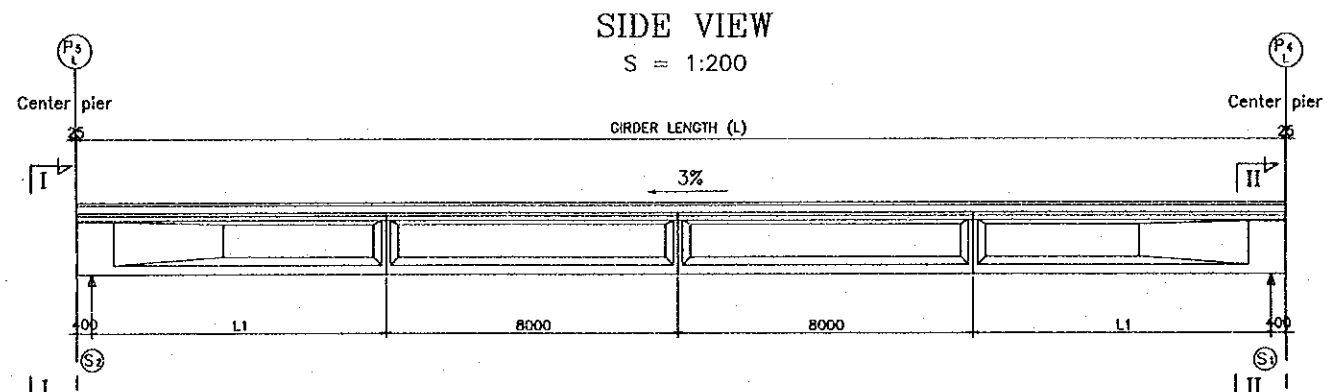


123

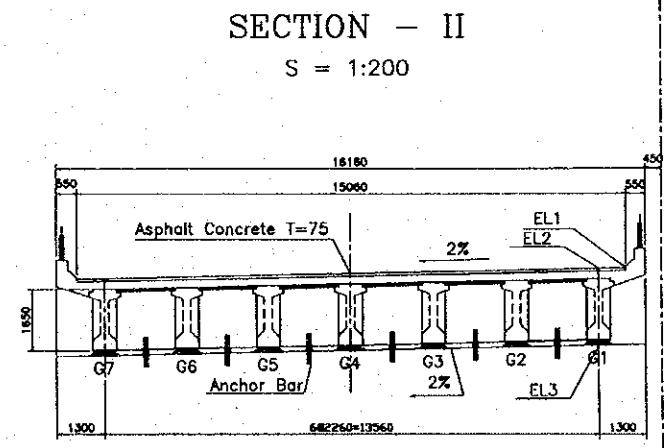
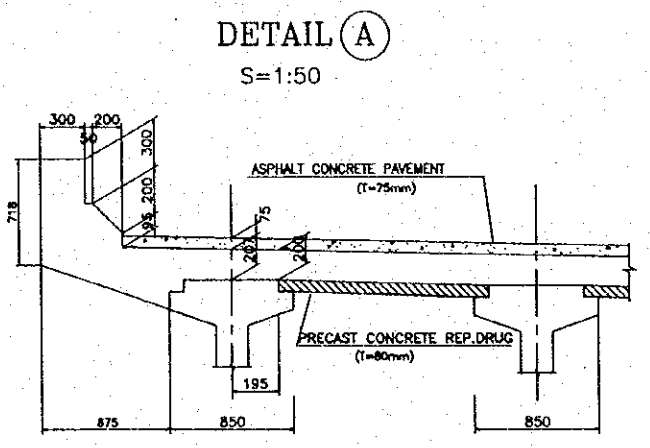
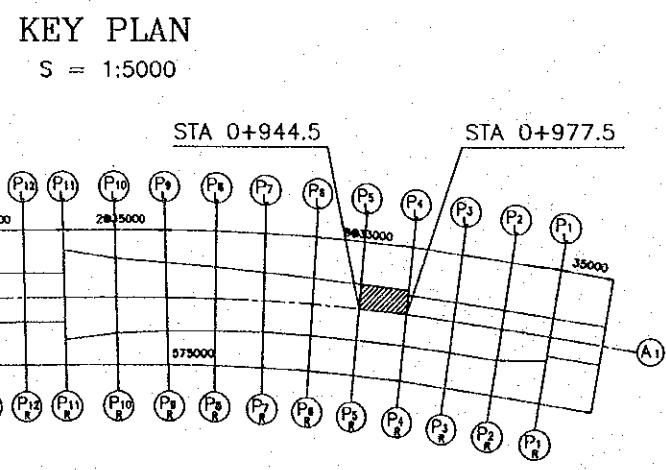
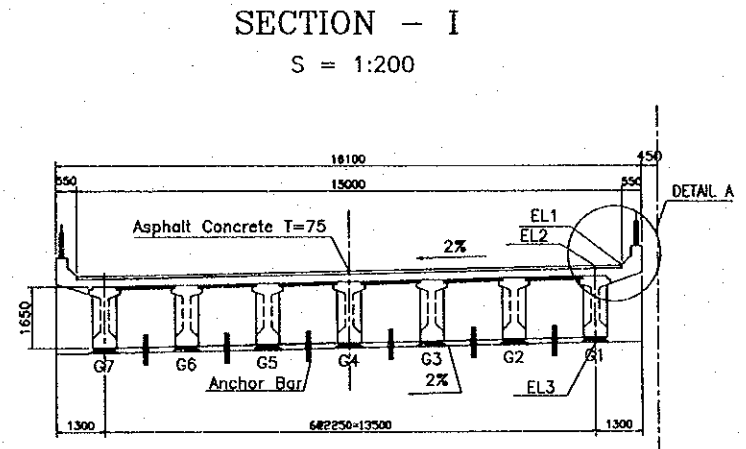
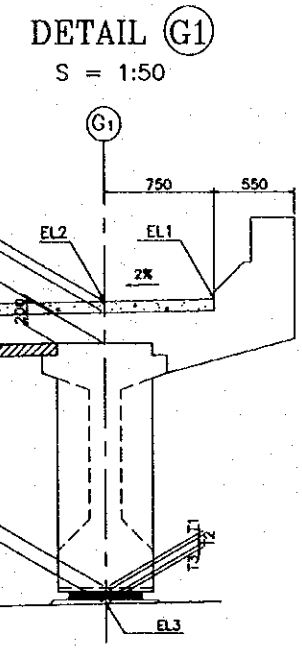
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. WATABE
PROJECT RED RIVER BRIDGE (HANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.17

PACKAGE 3	SCALE	DRAWING No. C-1-2b-3	SHEET No.
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DETAIL OF PHAP VAN VIADUCT (3)

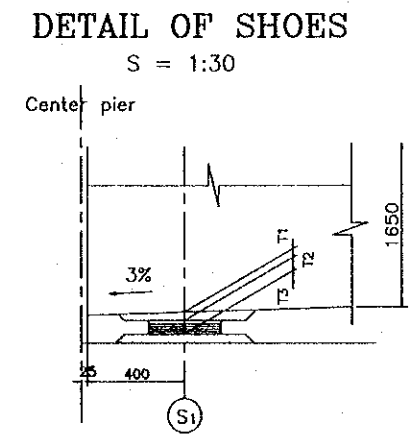
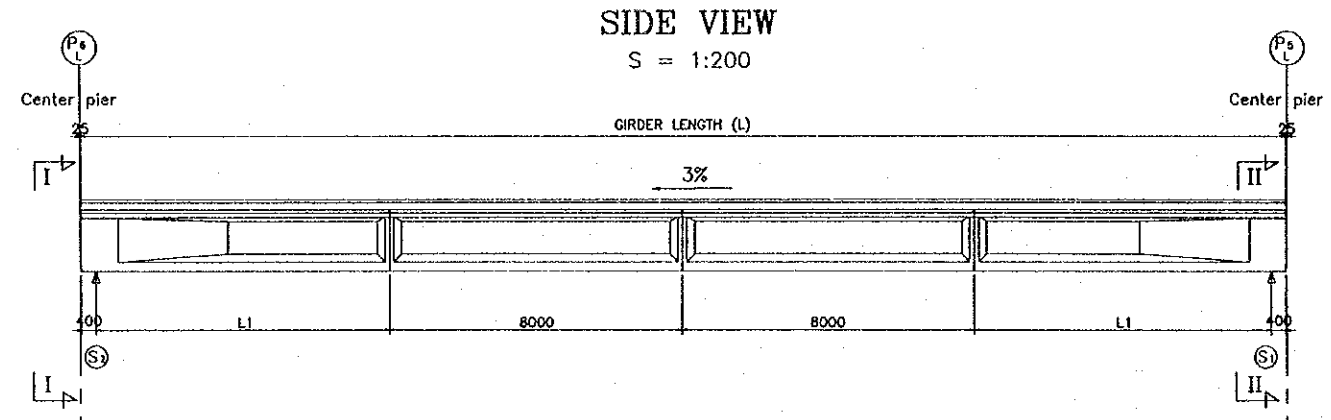


GIRDER	L (mm)	L1 (mm)	θ1 (degree)	θ2 (degree)	SHOES CONDITION		REMARKS
					P4 L S1	P5 L S2	
					MOVE	FIX	
					B	A	
					EL1 (m)	13.358	13.795
					EL2 (m)	13.386	13.825
					PAVEMENT(mm)	75	75
					SLAB (mm)	212	213
					GIRDER (mm)	1650	1650
G1	32993	8496.5	90.7	90.7	T1 (mm)	20	20
G2	33050	8525	90.7	90.7	T2 (mm)	54	36
G3	33107	8553.5	90.8	90.7	T3 (mm)	30	39
G4	33164	8582	90.8	90.7	H (mm)	2041	2033
G5	33220	8610	90.8	90.6	EL3 (m)	11.345	11.792
G6	33277	8638.5	90.8	90.6			
G7	33334	8667	90.8	90.6			



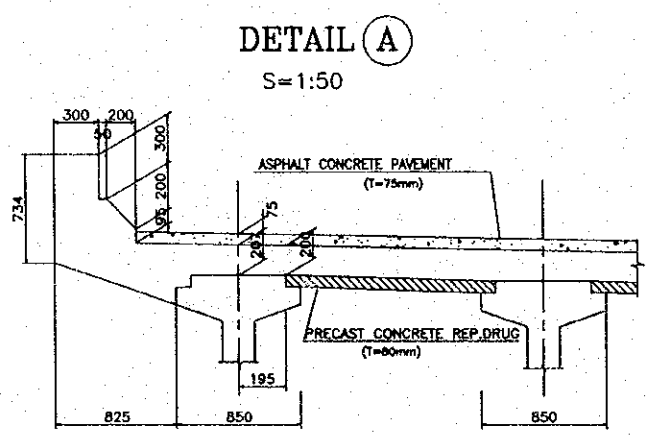
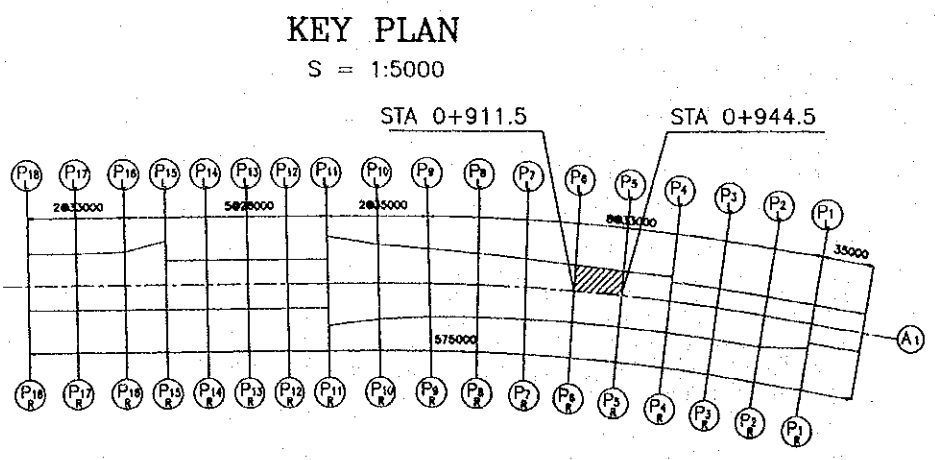
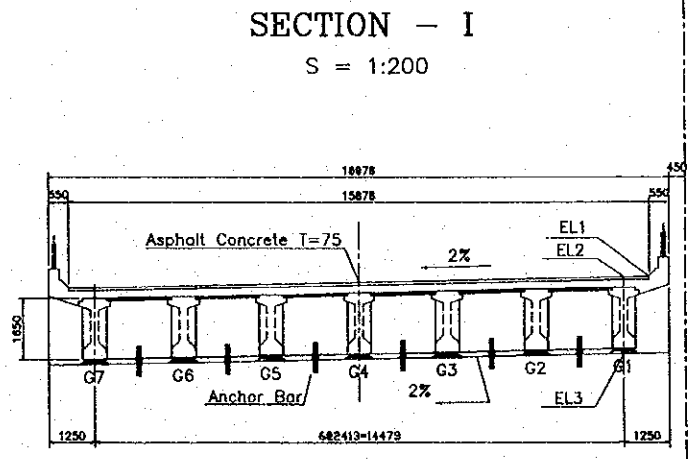
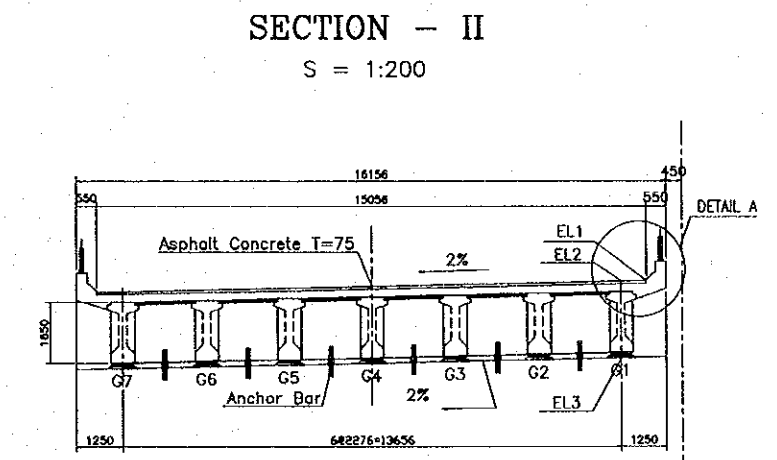
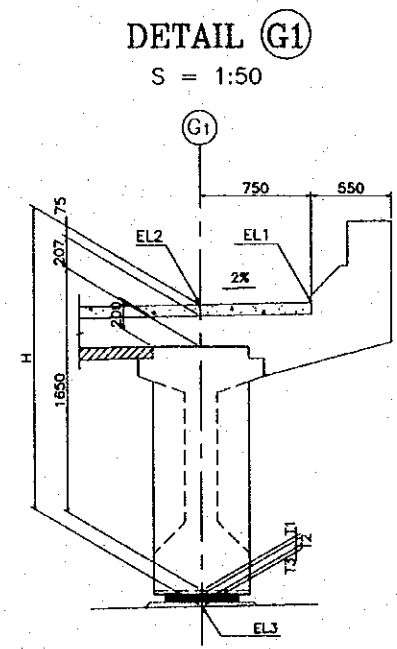
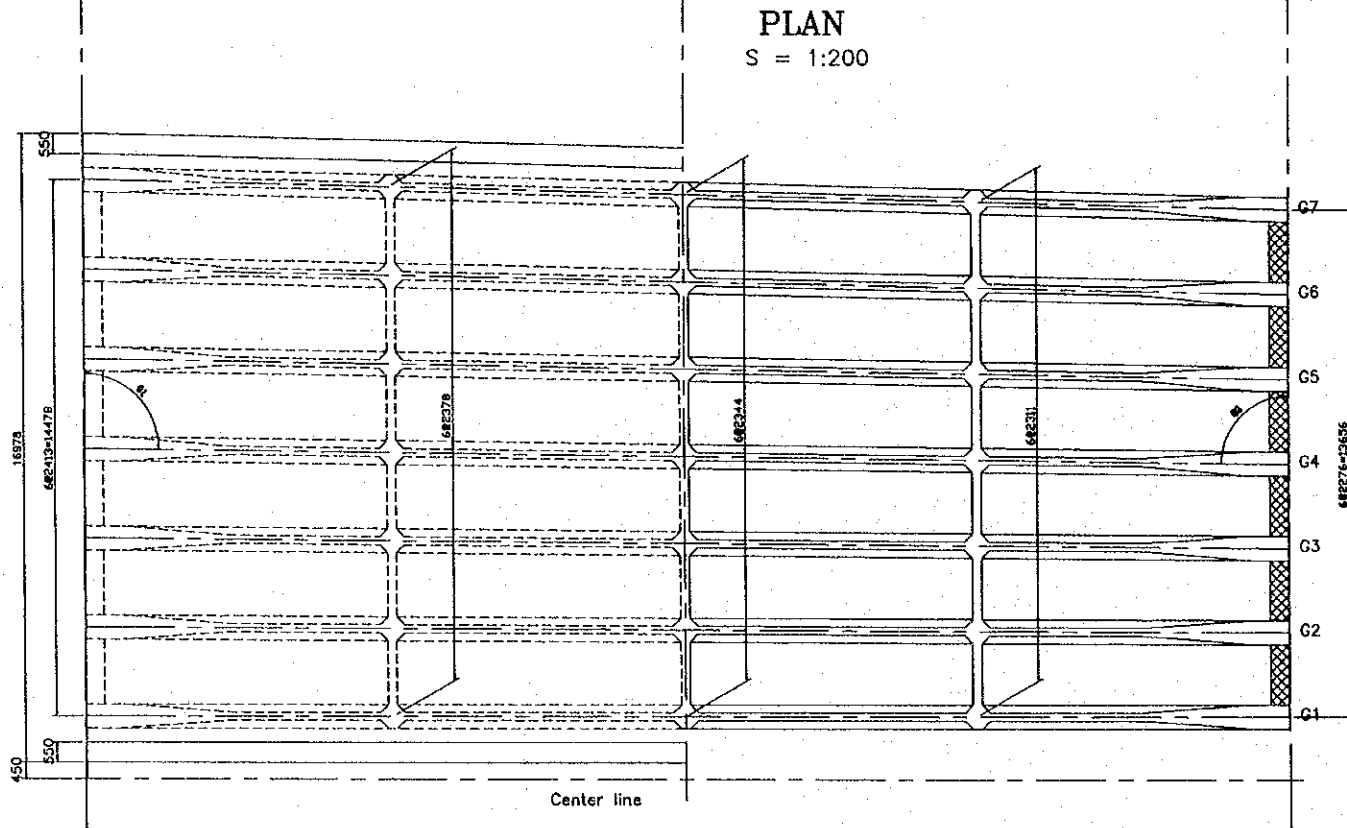
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE: 2000.3.14

PACKAGE 3	SCALE C-1-2b-4	DRAWING No. C-1-2b-4	SHEET No.
DETAIL OF PHAP VAN VIADUCT (4)			



GIRDER	L (mm)	L1 (mm)	θ1 (degree)	θ2 (degree)
G1	32992	8496	90.7	90.7
G2	33052	8526	91.0	90.5
G3	33113	8556.5	91.2	90.2
G4	33173	8586.5	91.4	90.0
G5	33235	8617.5	91.7	89.8
G6	33297	8648.5	91.9	89.5
G7	33360	8680	92.2	89.3

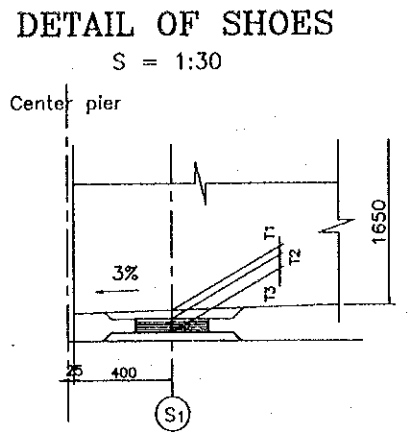
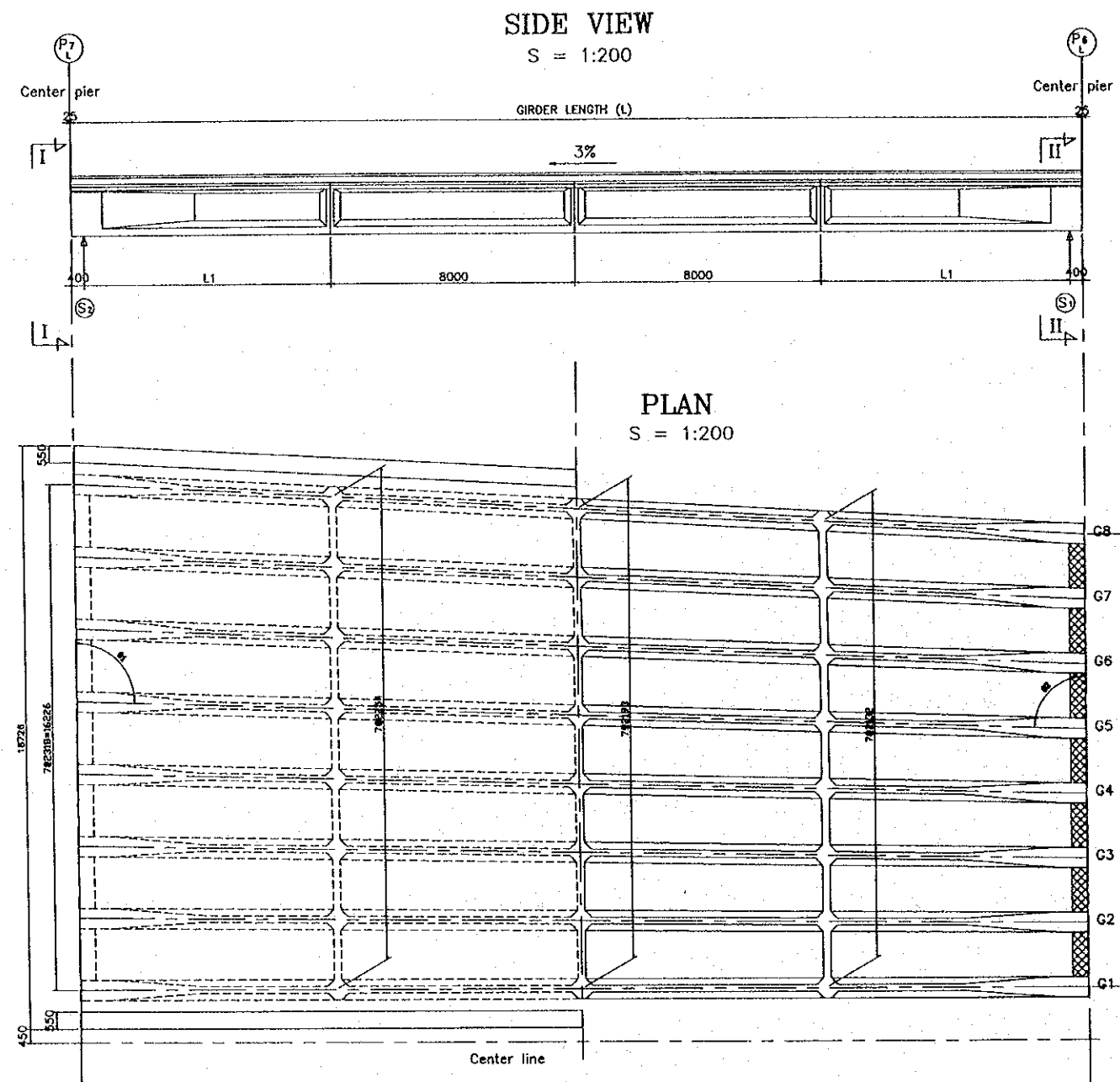
SHOES CONDITION	P5 L	P6 L	REMARKS
	S1	S2	
SHOES TYPE	B	A	
EL1 (m)	13.806	14.196	
EL2 (m)	13.834	14.224	
PAVEMENT(mm)	75	75	
SLAB (mm)	213	213	
GIRDER (mm)	1650	1650	
T1 (mm)	20	20	
T2 (mm)	54	36	
T3 (mm)	30	38	
H (mm)	2042	2032	
EL3 (m)	11.792	12.192	



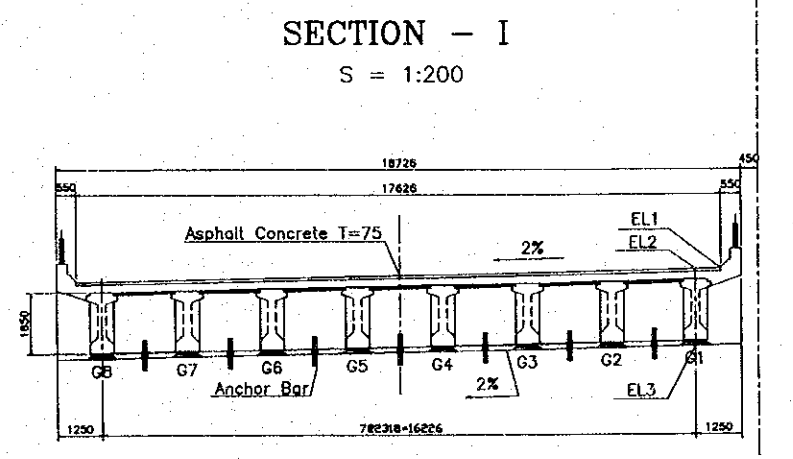
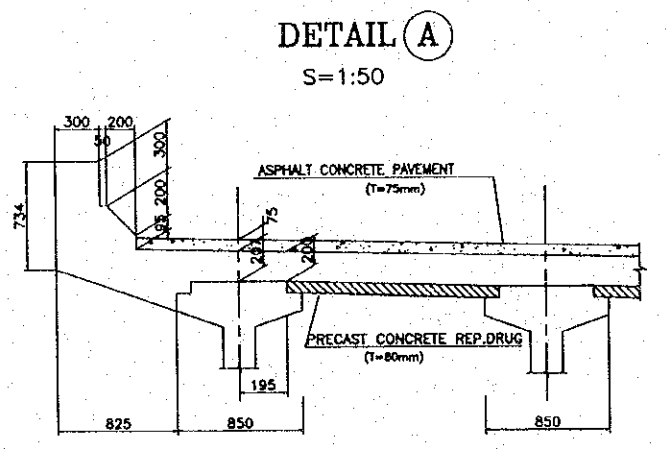
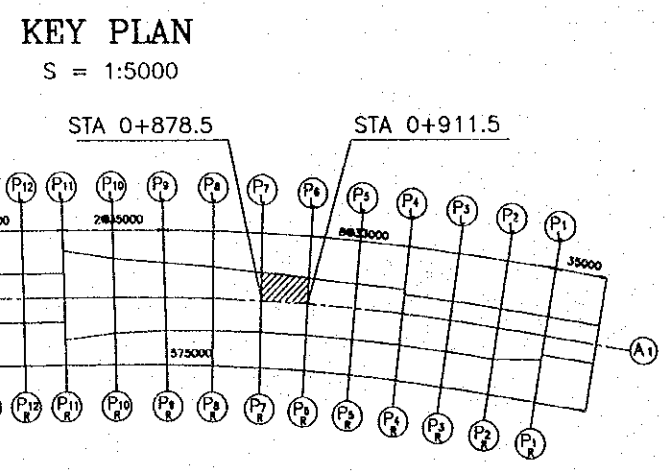
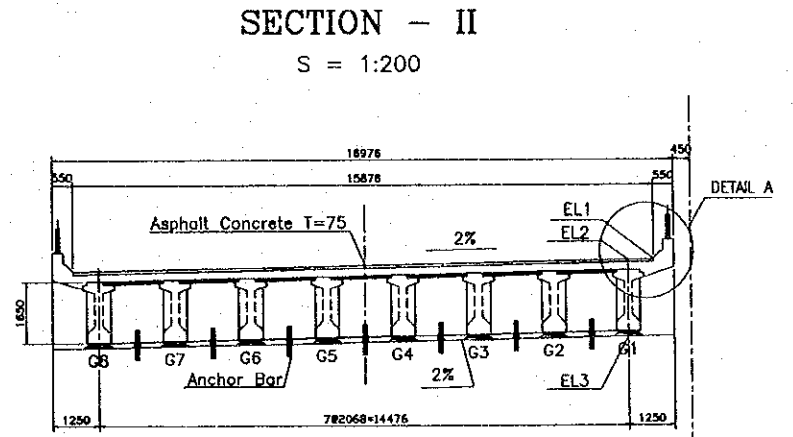
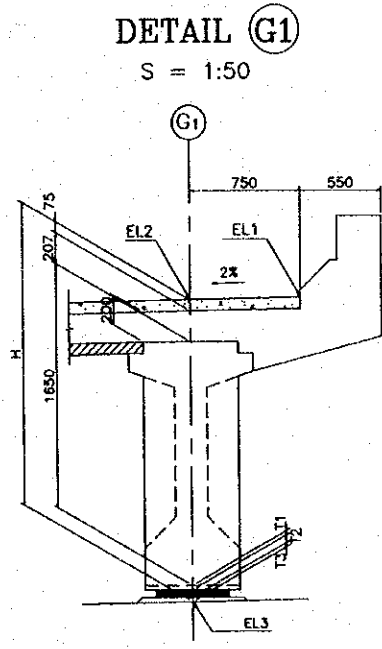
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE 2000.3.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-2b-5	SHEET No.
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DETAIL OF PHAP VAN VIADUCT (5)



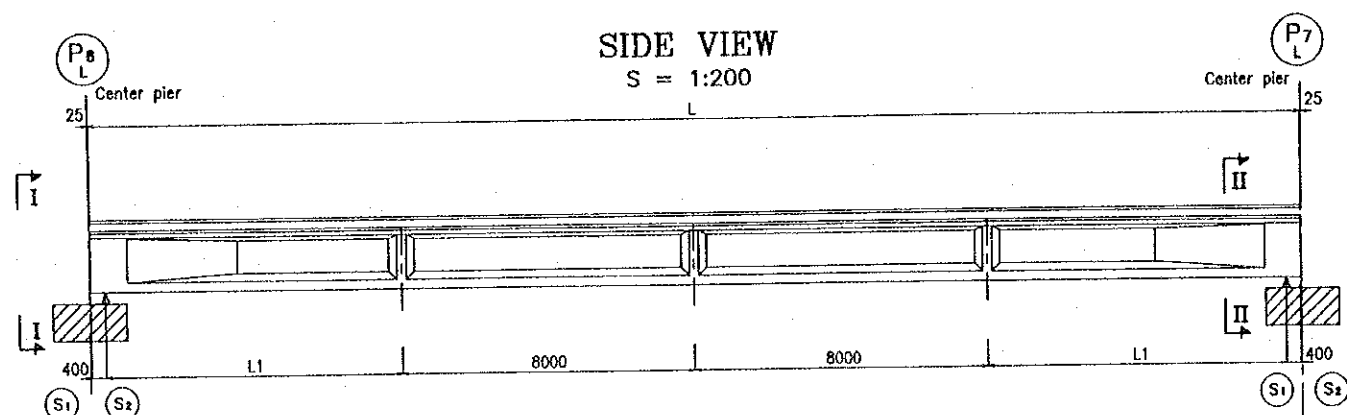
GIRDER	L (mm)	L1 (mm)	θ1 (degree)	θ2 (degree)	SHOES		REMARKS
					P6	P7	
					MOVE	FIX	
G1	32992	8496	90.7	90.7	B	A	
G2	33049	8524.5	91.2	90.3			
G3	33108	8554	91.6	89.9			
G4	33168	8584	92.0	89.4			
G5	33230	8615	92.5	89.0			
G6	33294	8647	92.9	88.5			
G7	33361	8680.5	93.3	88.1			
G8	33428	8714	93.8	87.7			
SHOES CONDITION							
SHOES TYPE					B	A	
EL1 (m)					14.206	14.548	
EL2 (m)					14.234	14.576	
PAVEMENT (mm)					75		
SLAB (mm)					213		
GIRDER (mm)					1650		
T1 (mm)					20	20	
T2 (mm)					54	36	
T3 (mm)					30	30	
H (mm)					2042	2024	
EL3 (m)					12.192	12.552	



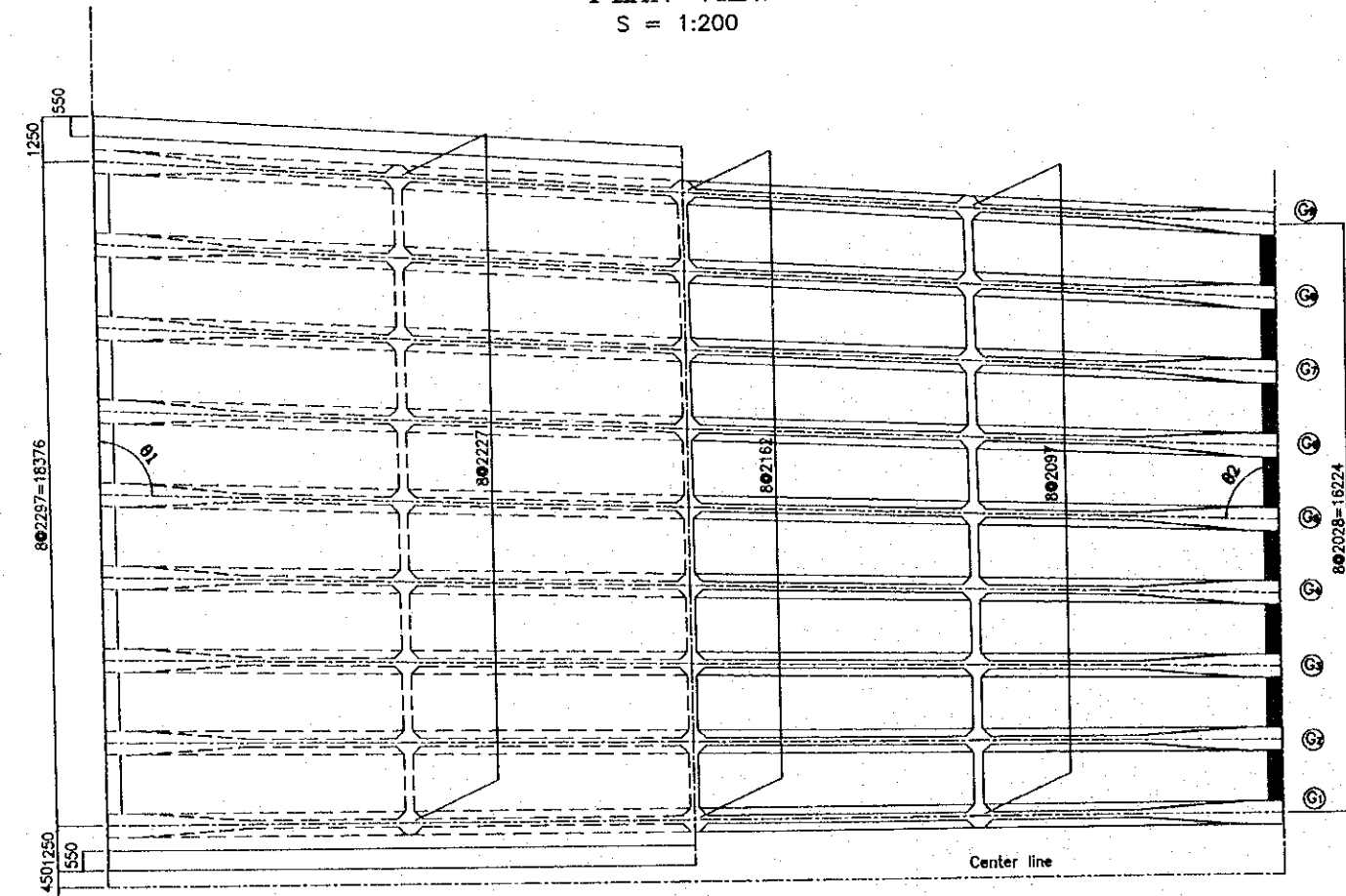
132

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATARE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

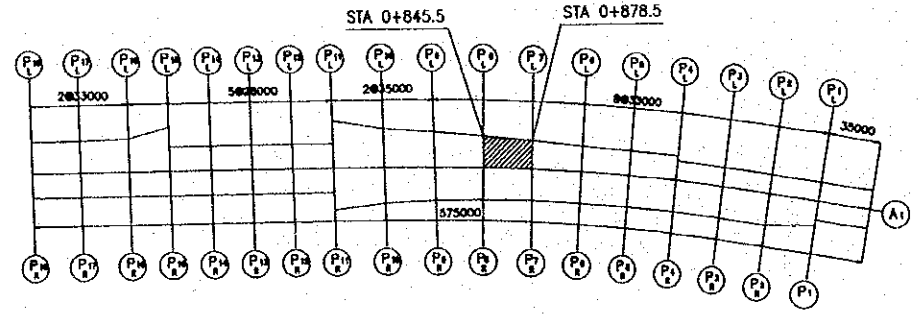
PACKAGE 3	SCALE	DRAWING No. C-1-2b-6	SHEET No.
DETAIL OF PHAP VAN VIADUCT (6)			



PLAN VIEW
S = 1:200



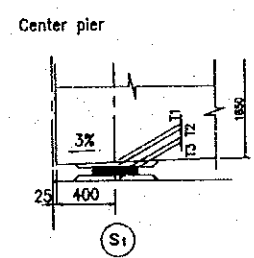
KEY PLAN
S = 1:5000



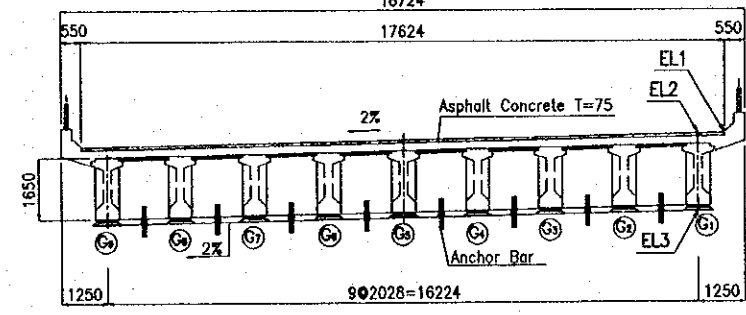
GIRDER	L (mm)	L1 (mm)	θ_1 (degree)	θ_2 (degree)
G1	32950	8075	90.7	90.7
G2	32951	8076	91.2	90.3
G3	32954	8077	91.7	89.8
G4	32960	8080	92.1	89.3
G5	32968	8084	92.6	88.8
G6	32977	8089	93.1	88.4
G7	32990	8095	93.5	87.9
G8	33004	8102	94.0	87.5
G9	33020	8110	94.5	87.0

	P6 L		P7 L		REMARKS
	S1	S2	S1	S2	
SHOES CONDITION	FIX	MOVE	FIX	MOVE	
SHOES TYPE	A	B	A	B	
EL1 (m)	14.196	14.206	14.548	14.556	
EL2 (m)	14.224	14.234	14.576	14.548	
PAVEMENT (mm)	75				
SLAB (mm)	213				
GIRDER (mm)	1650				
T1 (mm)	20	20	20	20	
T2 (mm)	36	54	36	54	
T3 (mm)	38	30	30	20	
H (mm)	2032	2042	2024	2032	
EL3 (m)	12.192	12.192	12.552	12.552	

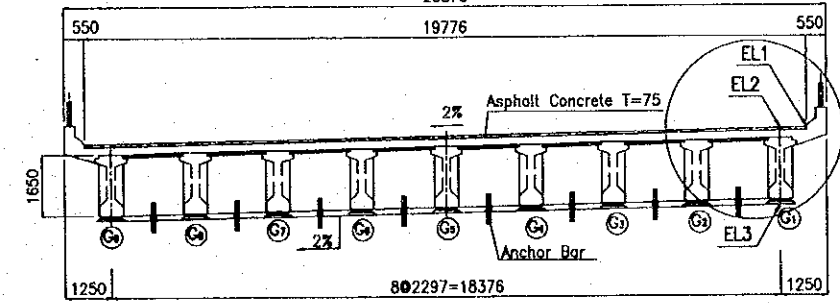
DETAIL OF SHOES
S = 1:50



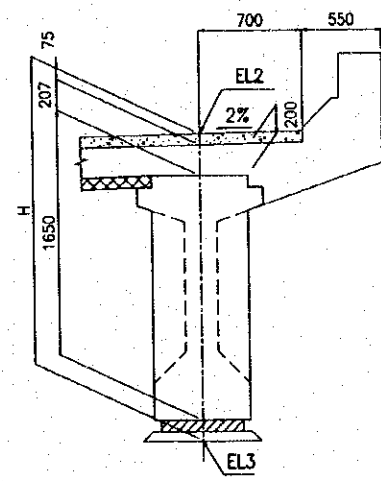
SECTION II-II
S = 1:200



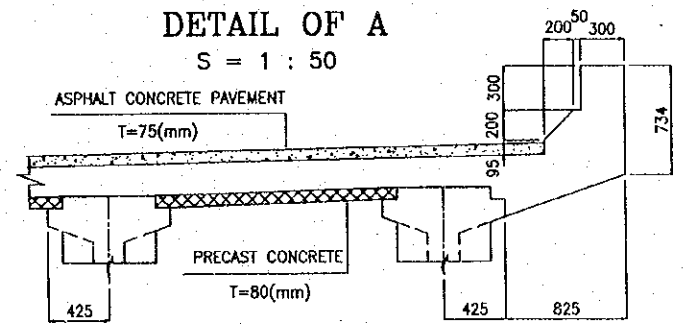
SECTION I-I
S = 1:200



DETAIL G
S = 1:50

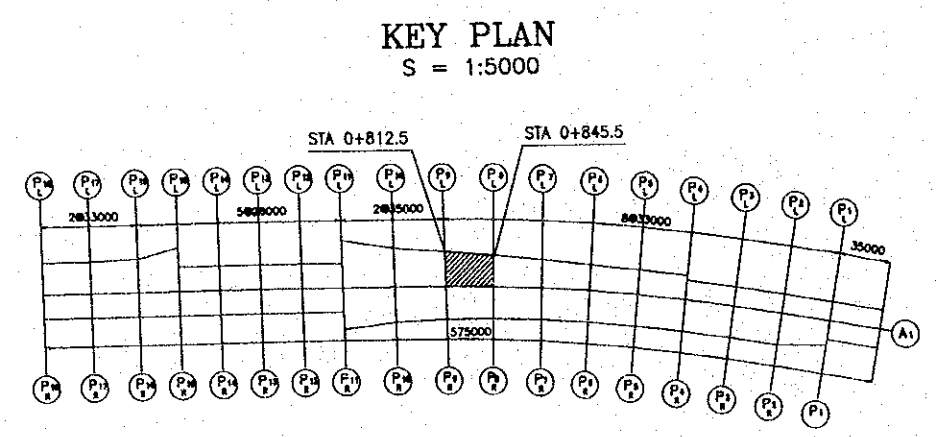
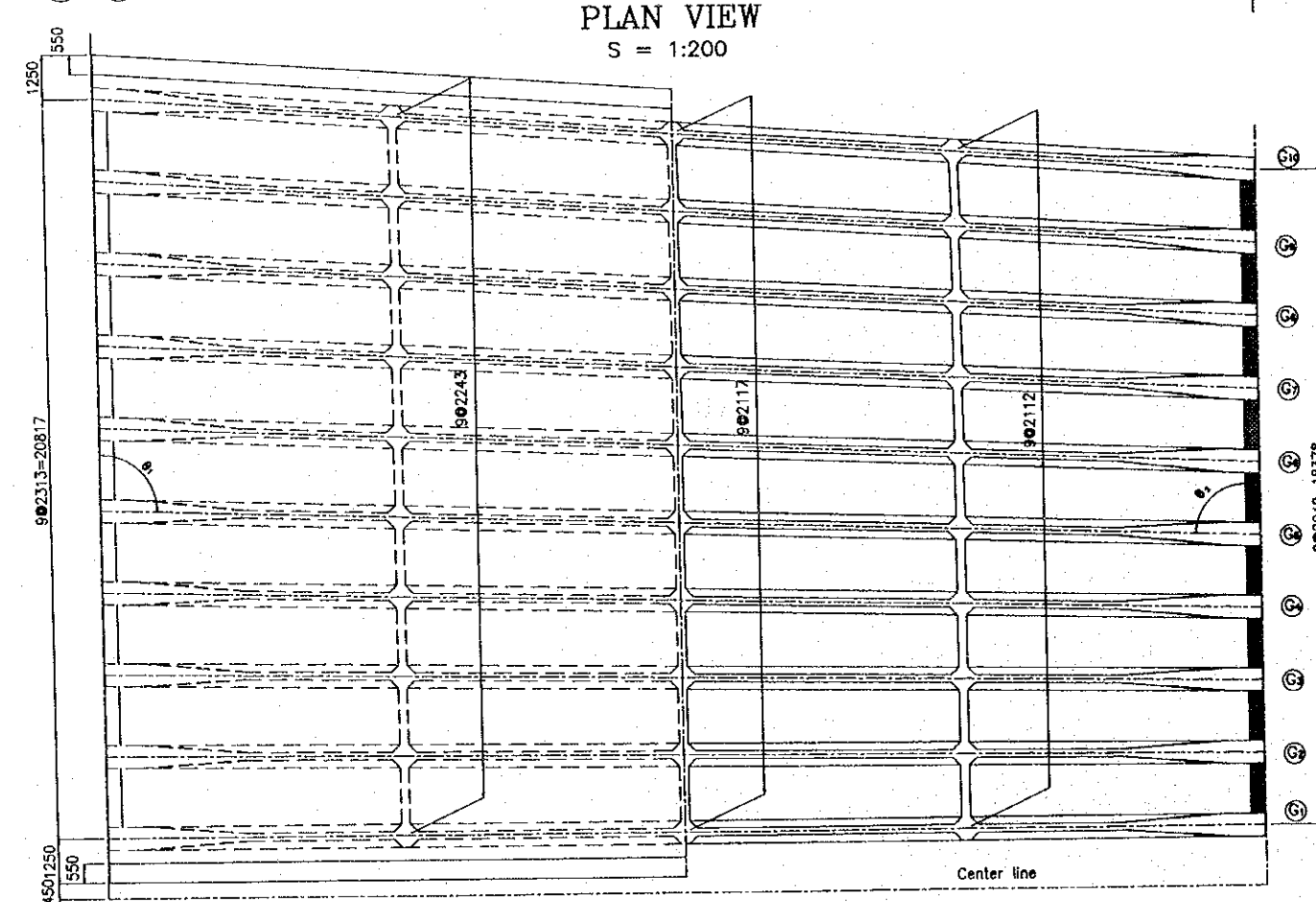
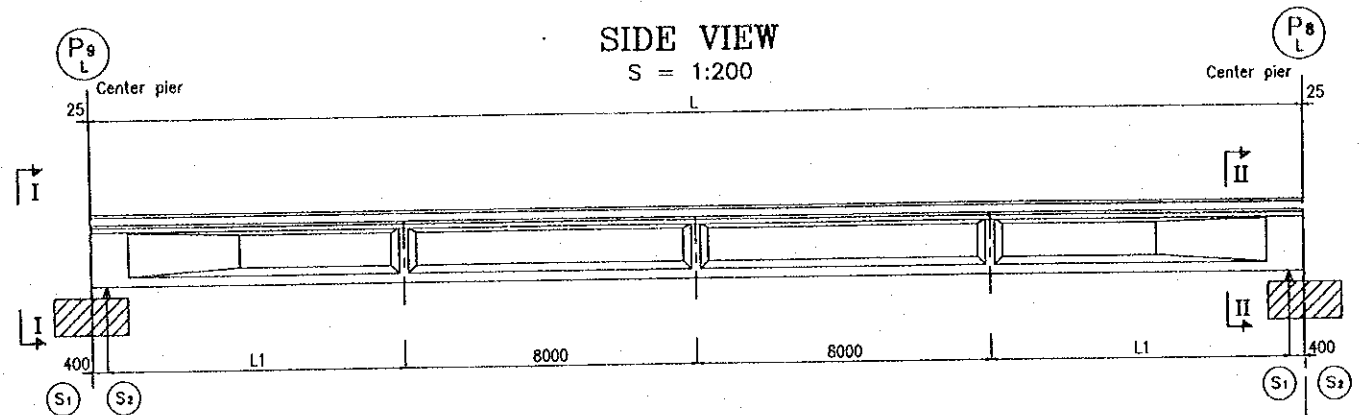


DETAIL OF A
S = 1:50

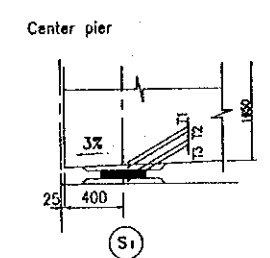


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.0.17

PACKAGE 3	SCALE	DRAWING No. C-1-2b-7	SHEET No.
DETAIL OF PHAP VAN VIADUCT (7)			



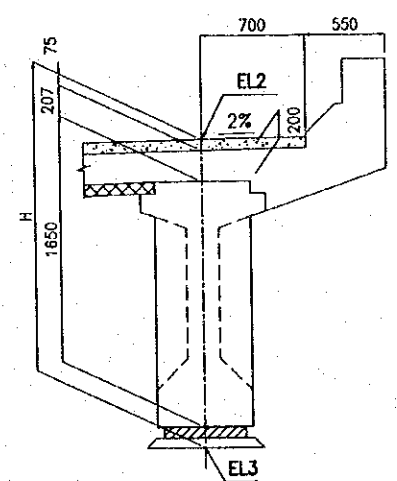
DETAIL OF SHOES
S = 1:50



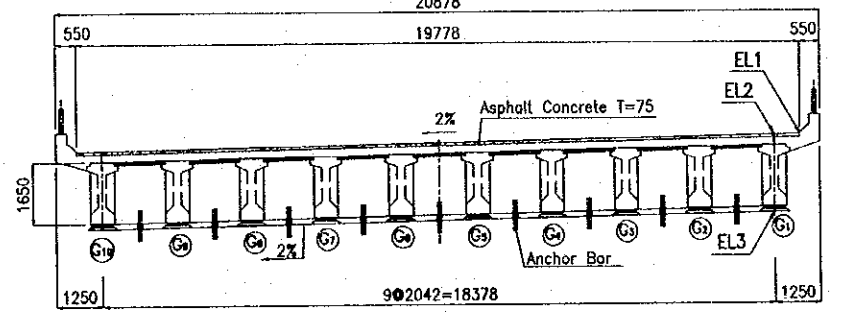
GIRDER	L (mm)	L1 (mm)	θ ₁ (degree)	θ ₂ (degree)
G1	32950	8075	90.6	90.6
G2	32951	8076	91.0	90.2
G3	32955	8077	91.5	89.7
G4	32960	8080	92.0	89.2
G5	32968	8084	92.5	88.7
G6	32978	8089	92.9	88.3
G7	32990	8095	93.4	87.8
G8	33005	8102	93.9	87.3
G9	33021	8110	94.3	86.9
G10	33040	8119	94.8	86.4

	P8 L		P9 L		REMARKS
	S1	S2	S1	S2	
SHOES	FIX	MOVE	FIX	MOVE	
CONDITION	A	B	A	B	
SHOES TYPE	A	B	A	B	
EL1 (m)	14.850	14.875	15.103	15.109	
EL2 (m)	14.877	14.884	15.121	15.126	
PAVEMENT (mm)	75	75	75	75	
SLAB (mm)	212	212	208	208	
GIRDER (mm)	1650	1650	1650	1750	
T1 (mm)	20	20	20	20	
T2 (mm)	36	54	36	54	
T3 (mm)	31	20	132	20	
H (mm)	2024	2031	2121	2127	
EL3 (m)	12.852	12.852	12.999	12.999	

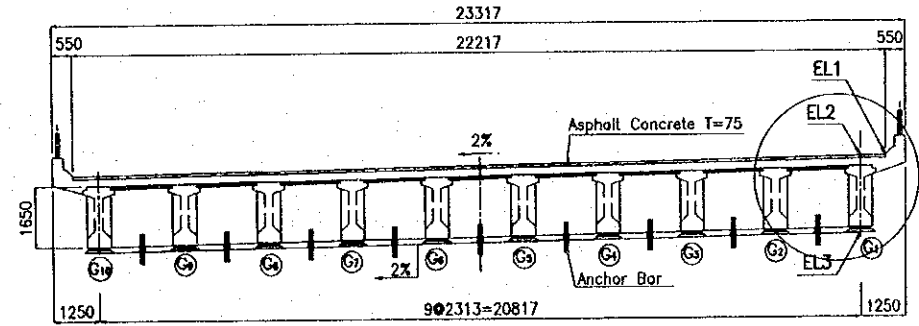
DETAIL G₁
S = 1:50



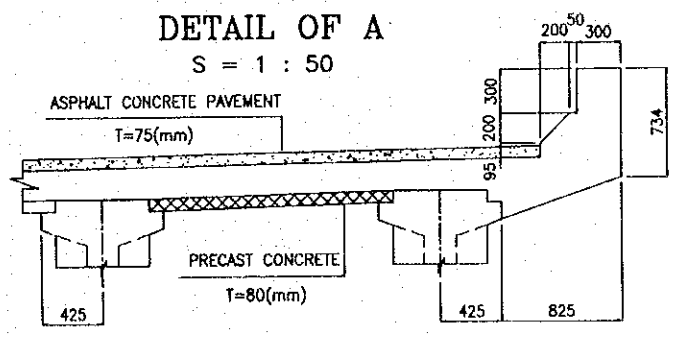
SECTION II-II
S = 1:200



SECTION I-I
S = 1:200

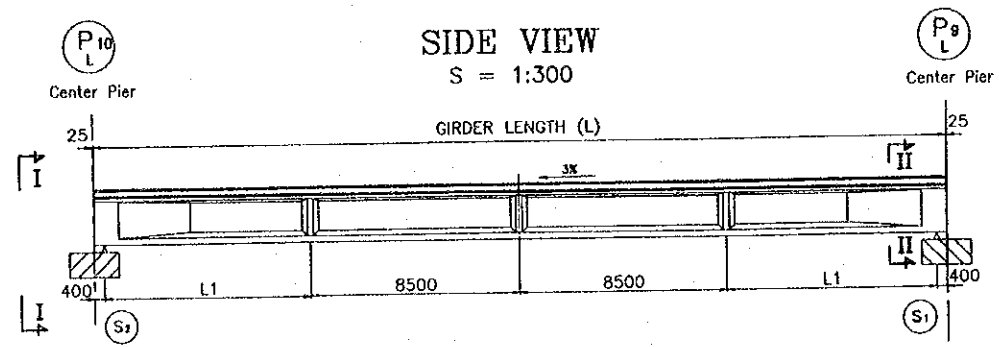


DETAIL OF A
S = 1:50

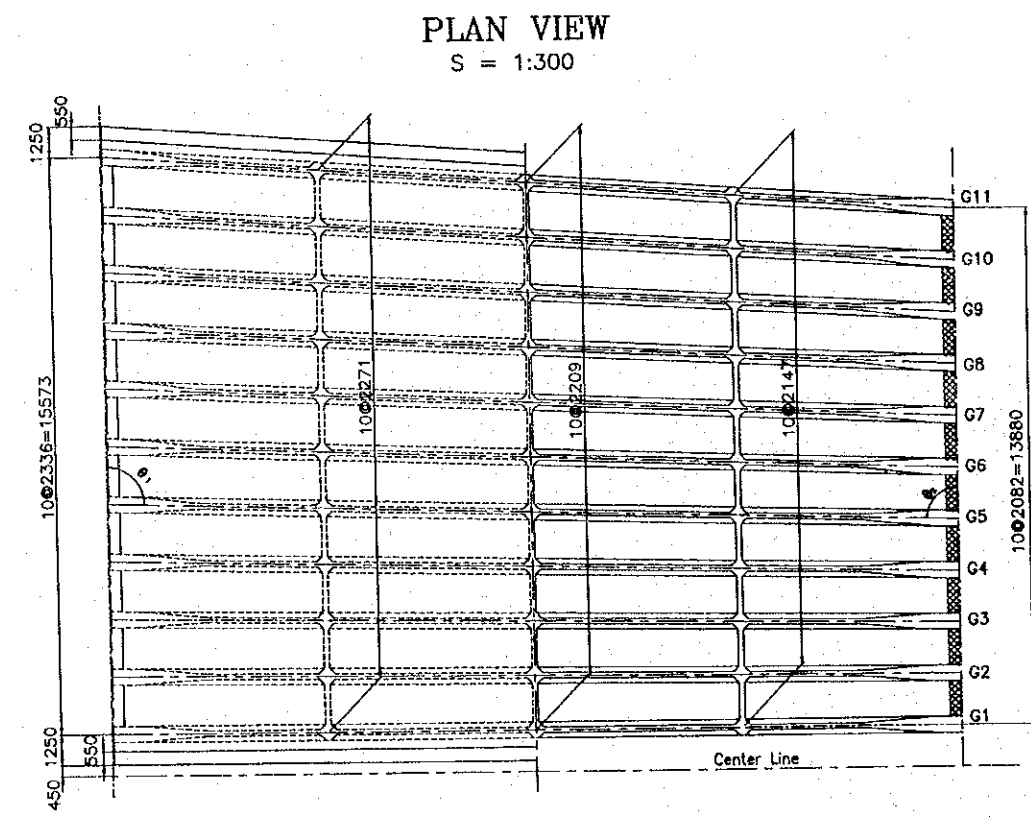


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.08.14

PACKAGE 3	SCALE	DRAWING No. C-1-2b-8	SHEET No.
DETAIL OF PHAP VAN VIADUCT (B)			

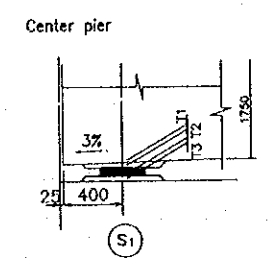


SIDE VIEW
S = 1:300

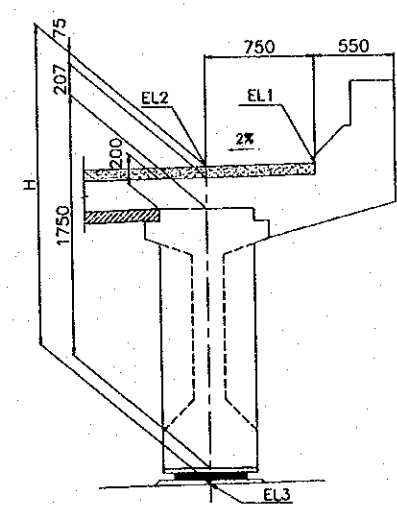


PLAN VIEW
S = 1:300

DETAIL OF SHOES
S = 1:50



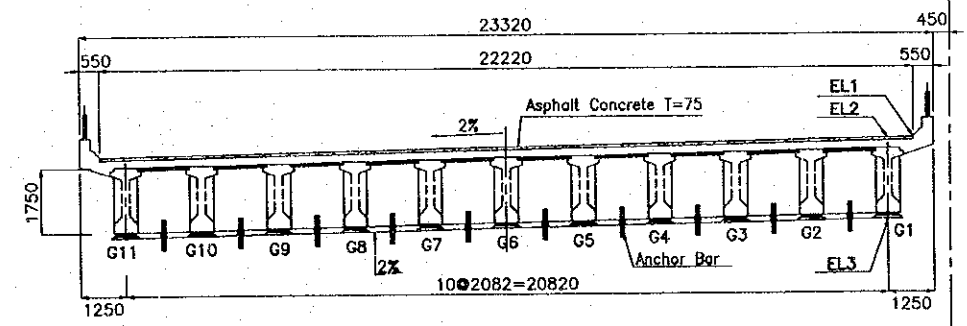
DETAIL G
S = 1:50



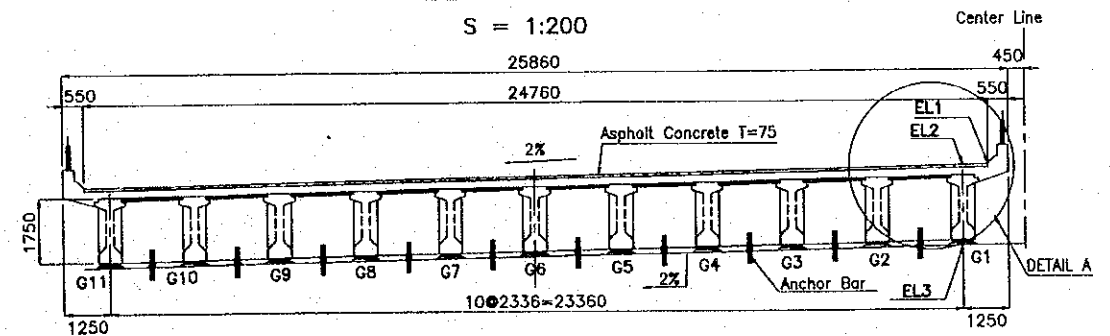
GIRDER	L (mm)	L1 (mm)	θ1 (degree)	θ2 (degree)
G1	34975.1	8587.6	90.4	90.5
G2	35008.3	8604.2	90.8	90.0
G3	35043.7	8621.9	91.2	89.6
G4	35080.9	8640.5	91.7	89.2
G5	35119.9	8660	92.1	88.8
G6	35160.8	8680.4	92.5	88.4
G7	35203.5	8701.8	92.9	87.9
G8	35248.1	8724.1	93.3	87.5
G9	35294.5	8747.3	93.7	87.1
G10	35342.7	8771.4	94.1	86.7
G11	35392.7	8796.4	94.6	86.3

	P9L	P10L	REMARKS
	S1	S2	
SHOES CONDITION	MOVE	FIX	
SHOES TYPE	B	A	
EL1 (m)	15.109	15.318	
EL2 (m)	15.126	15.322	
PAVEMENT (mm)	75	75	
SLAB (mm)	208	202	
GIRDER (mm)	1750	1750	
T1 (mm)	20	20	
T2 (mm)	54	36	
T3 (mm)	20	33	
H (m)	2127	2116	
EL3 (m)	12.999	13.206	

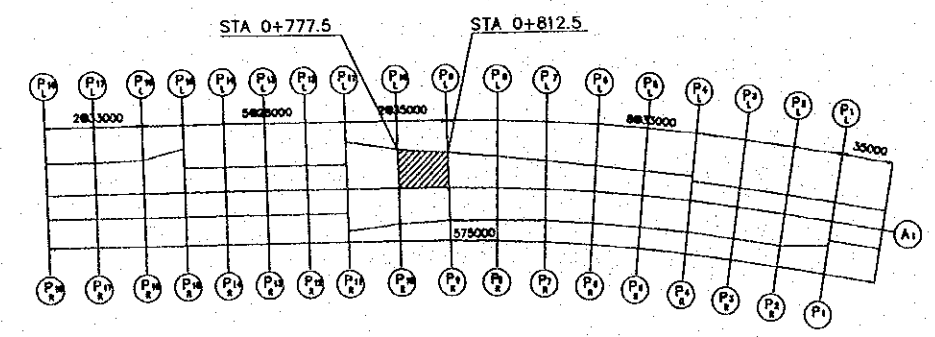
SECTION II-II
S = 1 : 200



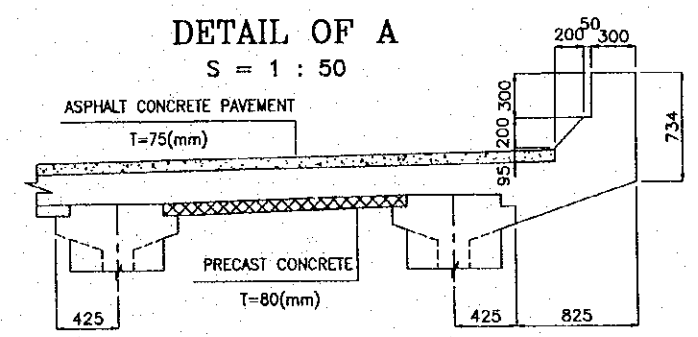
SECTION I-I
S = 1:200



KEY PLAN
S = 1:5000



DETAIL OF A
S = 1 : 50

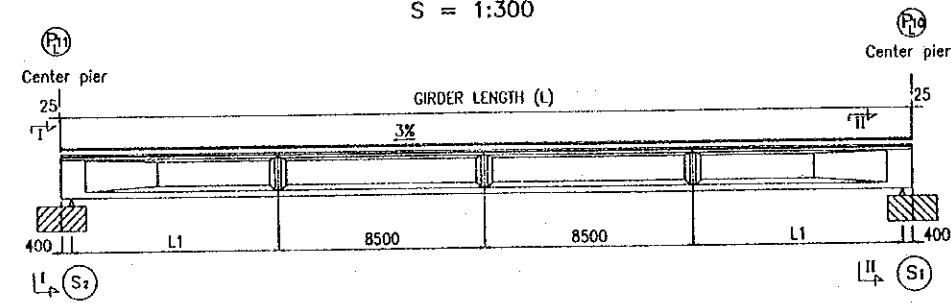


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000. 01. 17	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-2b-9	SHEET No.
DETAIL OF PHAP VAN VIADUCT (9)			

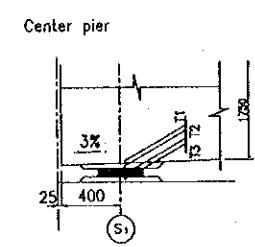
SIDE VIEW

S = 1:300



DETAIL OF SHOES

S = 1:50

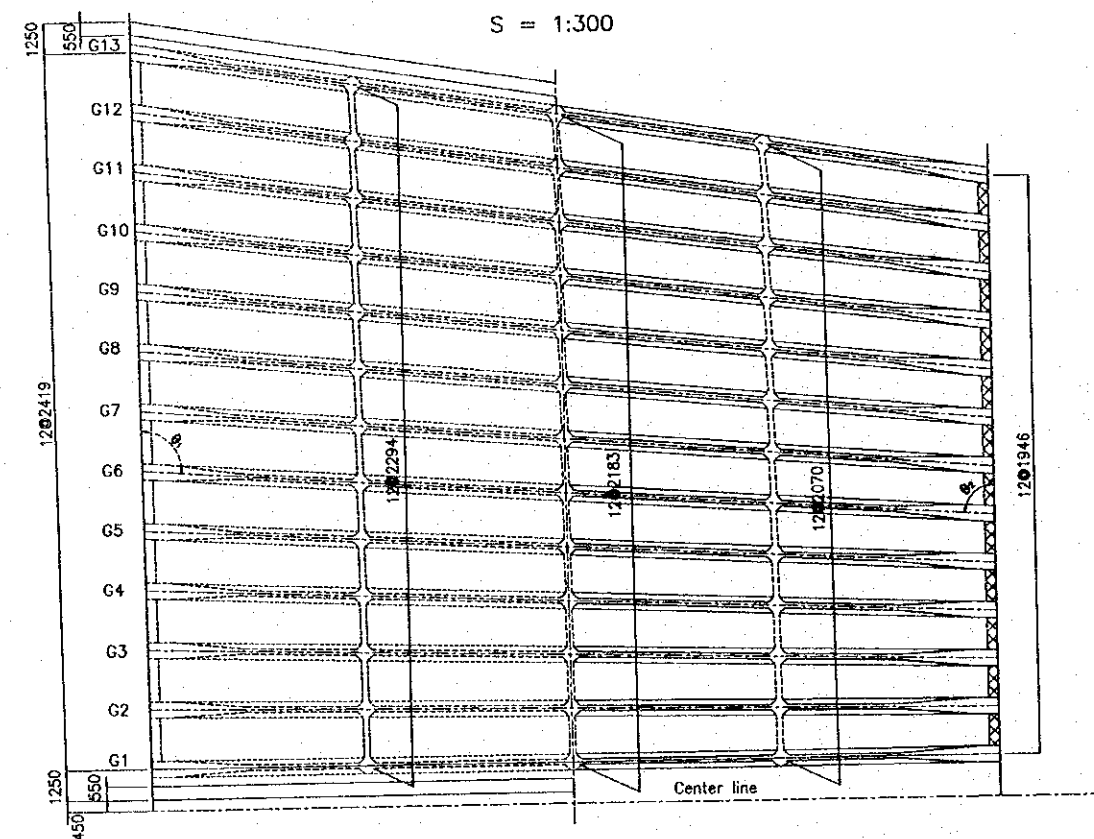


GIRDER	L (mm)	L1 (mm)	θ ₁ (degree)	θ ₂ (degree)
G1	34962	8581	90.2	89.2
G2	34980	8590	91.0	89.5
G3	35005	8603	91.7	88.7
G4	35037	8618	92.5	87.9
G5	27988	8637	93.3	87.1
G6	35074	8659	94.1	86.3
G7	35119	8684	94.9	85.6
G8	35169	8712	95.6	84.8
G9	35226	8743	96.4	84
G10	35290	8778	97.2	83.2
G11	35359	8816	97.9	82.5
G12	35435	8856	98.7	81.7
G13	35517	8900	99.5	80.9

	P10 L	P11 L	REMARKS
	S1	S2	
SHOES CONDITION	MOVE	FIX	
SHOES TYPE	B	A	
EL1 (m)	15.323	15.478	
EL2 (m)	15.326	15.465	
PAVEMENT (mm)	75	75	
SLAB (mm)	202	206	
GIRDER (mm)	1750	1750	
T1 (mm)	20	20	
T2 (mm)	54	36	
T3 (mm)	20	20	
H (mm)	2121	2107	
EL3 (m)	13.206	13.358	

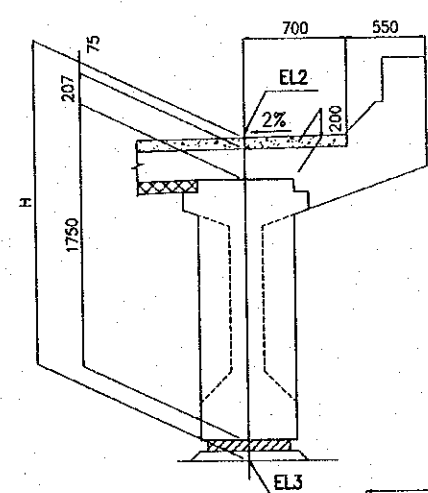
PLAN VIEW

S = 1:300



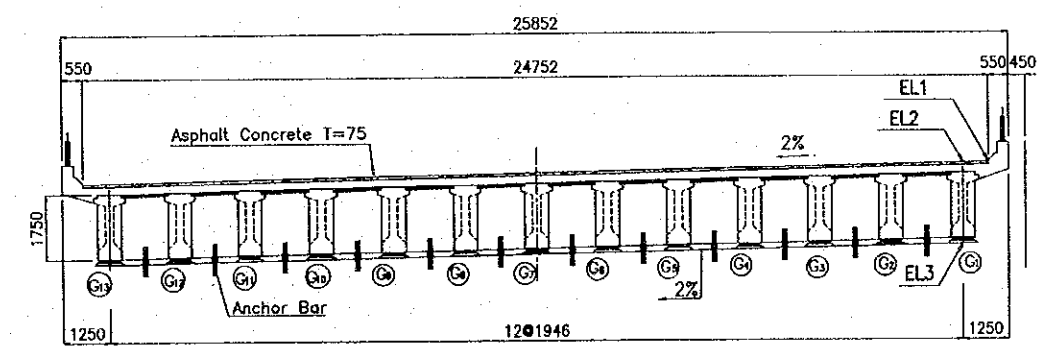
DETAIL G1

S = 1:50



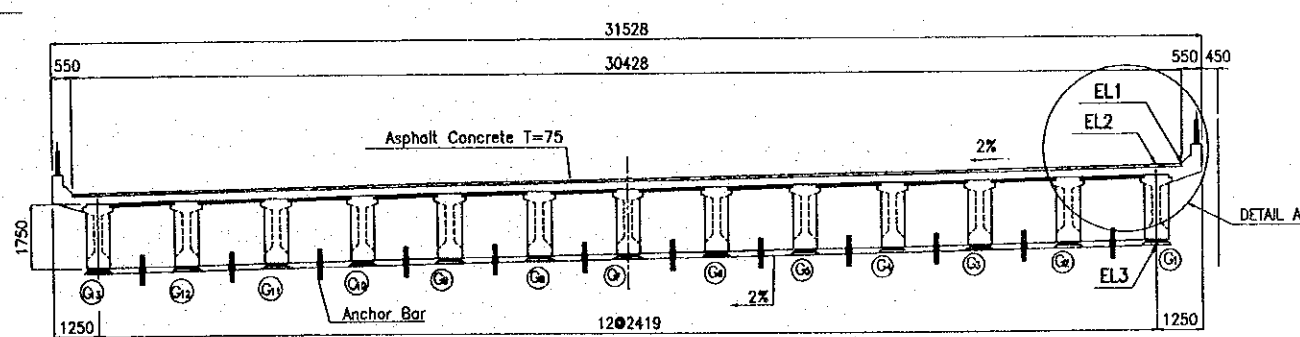
SECTION II-II

S = 1:200



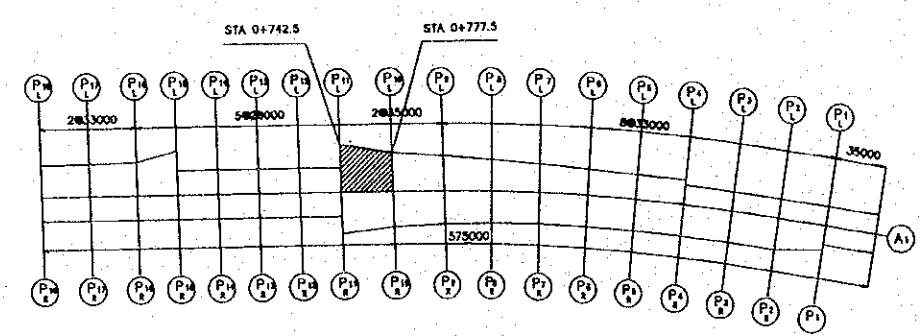
SECTION I-I

S = 1:200



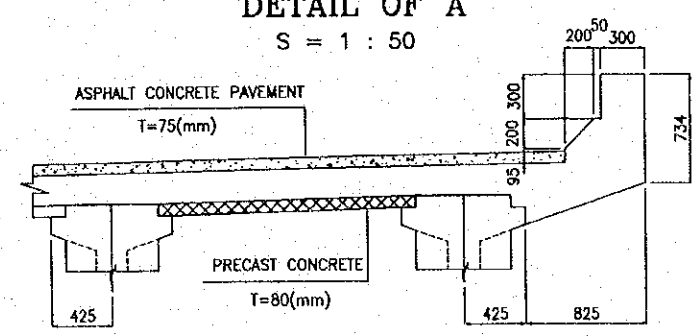
KEY PLAN

S = 1:5000



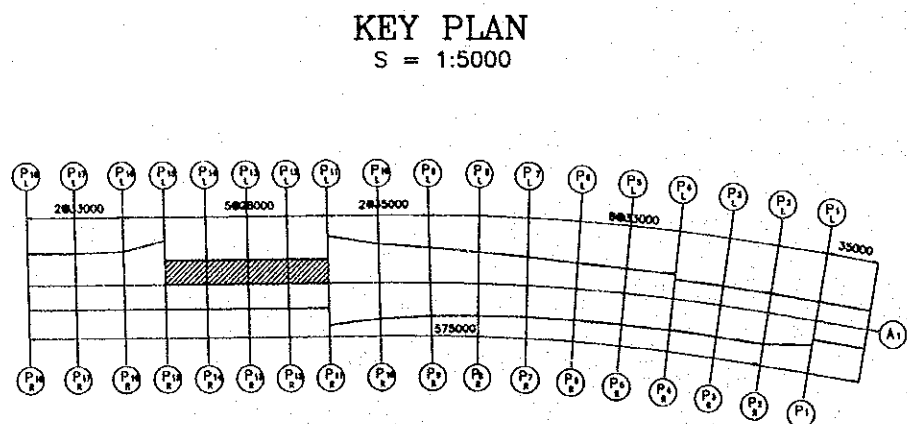
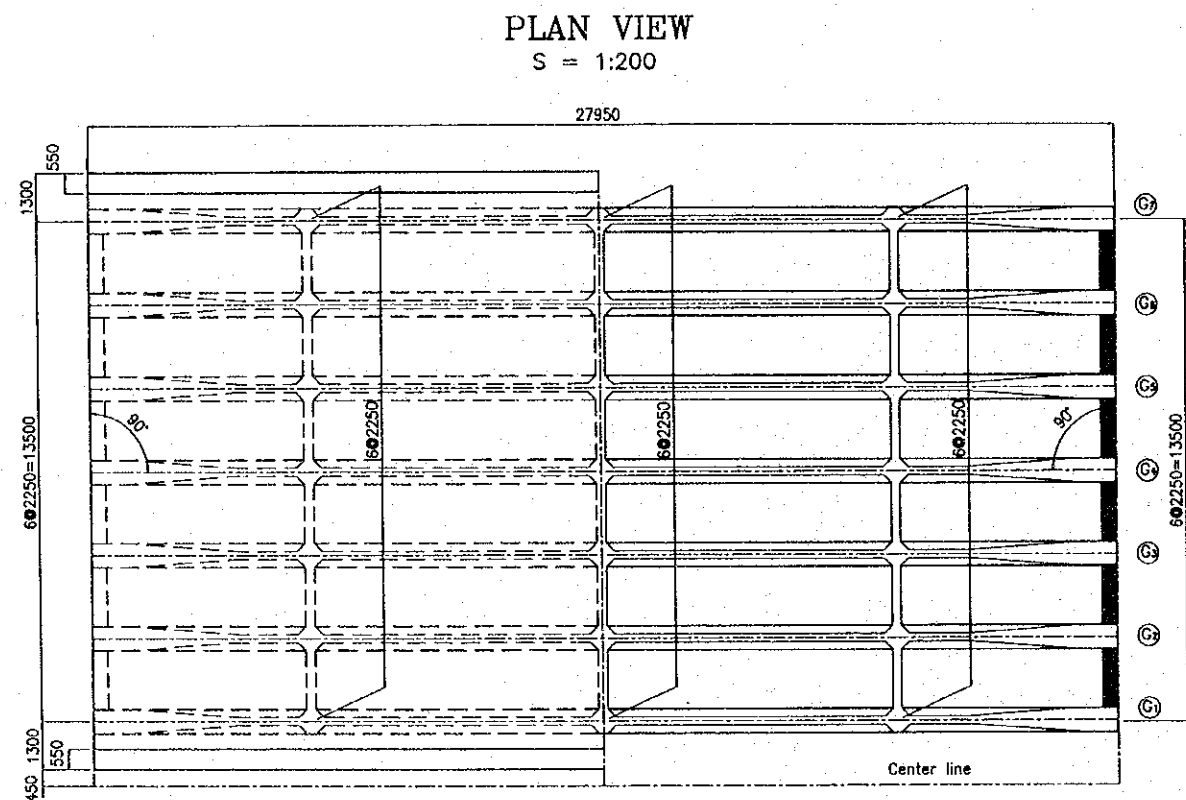
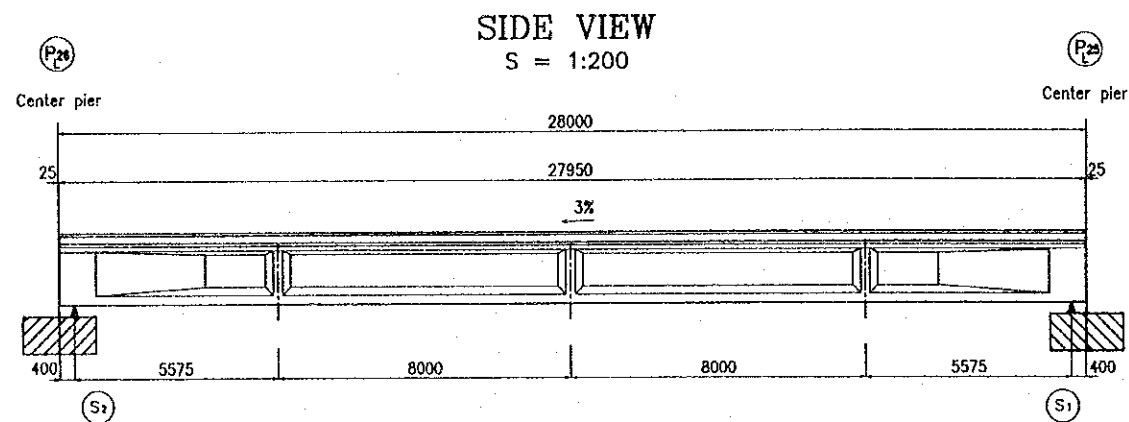
DETAIL OF A

S = 1:50



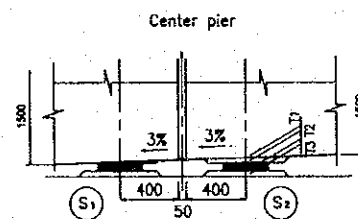
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TUANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (HUANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i>
DATE 2002.11.17		

PACKAGE 3	SCALE	DRAWING No. C-1-2b-10	SHEET No.
DETAIL OF PHAP VAN VIADUCT (10)			

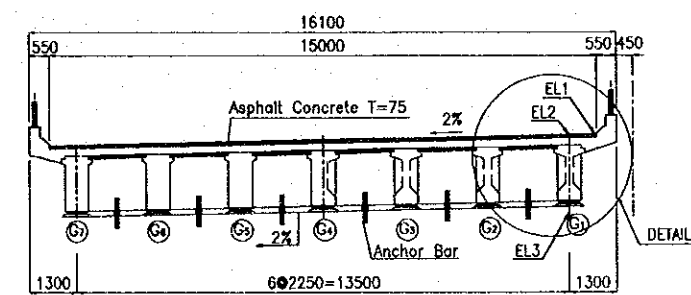


	P11L		P12L		P13L		P14L		P15L	REMARKS
	S1	S2	S1	S2	S1	S2	S1	S2		
STATION	0+742.5		0+714.5		0+686.5		0+658.5		0+630.5	
SHOES CONDITION	MOVE	FIX	MOVE	FIX	MOVE	FIX	MOVE	FIX		
SHOES TYPE	C	A	C	A	C	A	C	A		
EL1 (m)	15.481	15.566	15.568	15.618	15.619	15.635	15.635	15.616		
EL2 (m)	15.467	15.551	15.553	15.603	15.604	15.620	15.620	15.601		
PAVEMENT (mm)	75		75		75		75			
SLAB (mm)	206		207		207		207			
GIRDER (mm)	1500		1500		1500		1500			
T1 (mm)	20	20	20	20	20	20	20	20		
T2 (mm)	44	36	44	36	44	36	44	36		
T3 (mm)	264	36	30	37	30	38	30	38		
H (mm)	2109	1874	1876	1875	1876	1876	1876	1876		
EL3 (m)	13.358	13.678	13.678	13.729	13.729	13.745	13.745	13.726		

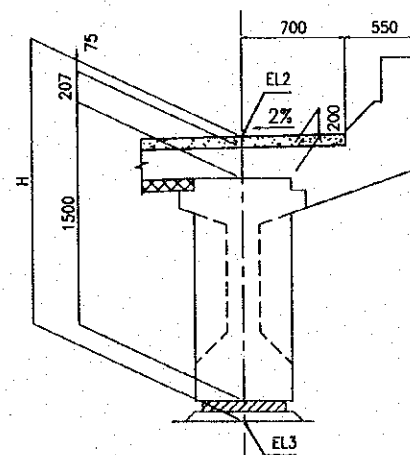
DETAIL OF SHOES
S = 1:50



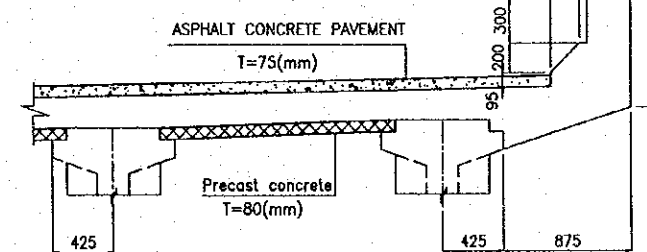
TYPICAL CROSS SECTION OF SPAN
S = 1:200



DETAIL G1
S = 1:50

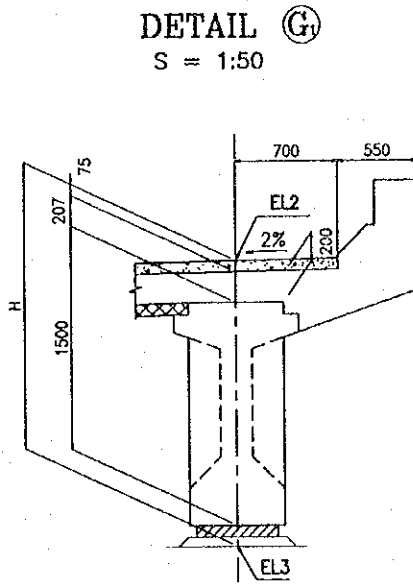
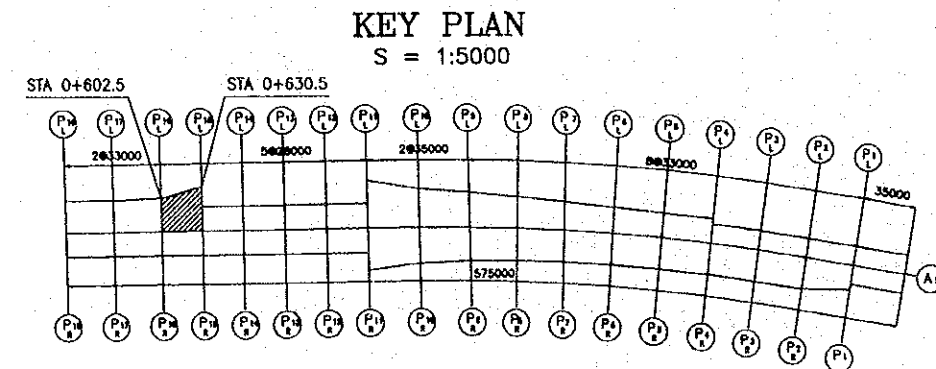
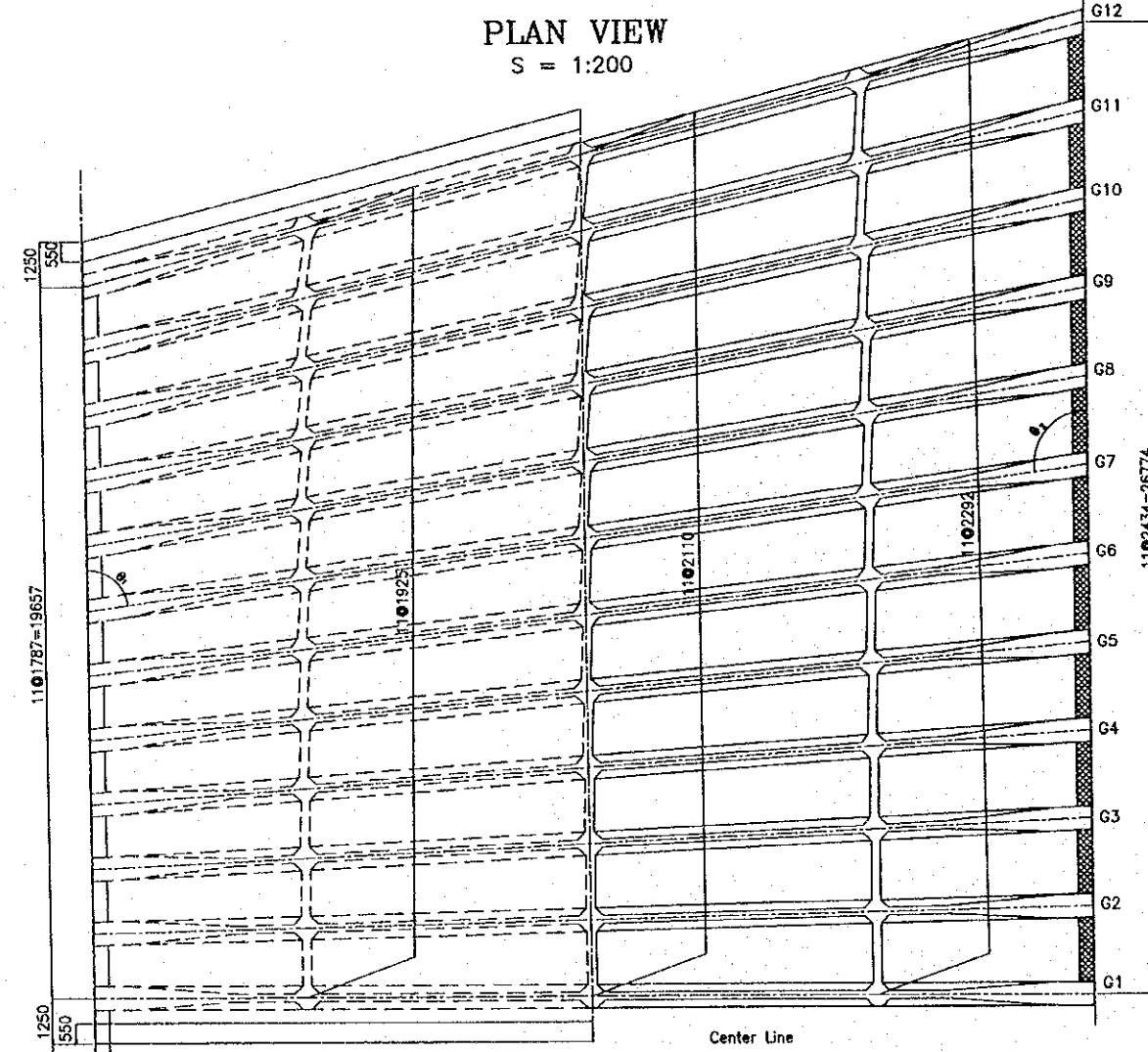
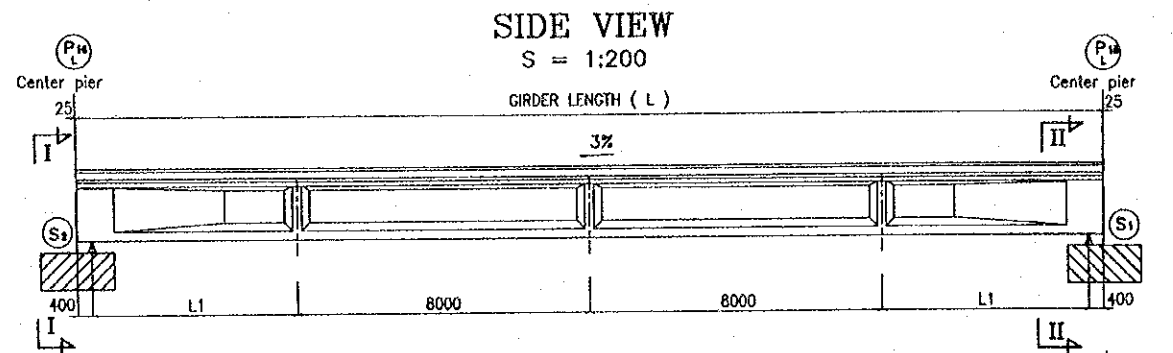


DETAIL OF A
S = 1:50



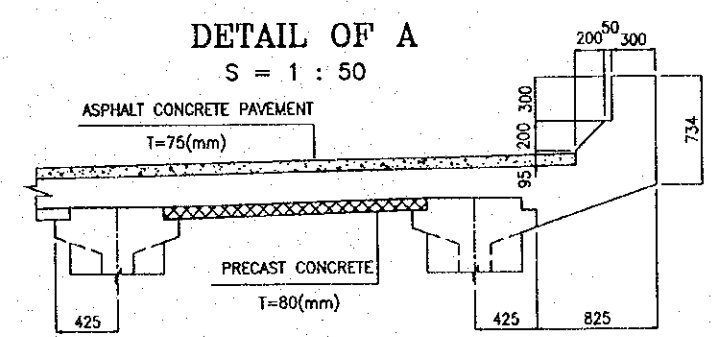
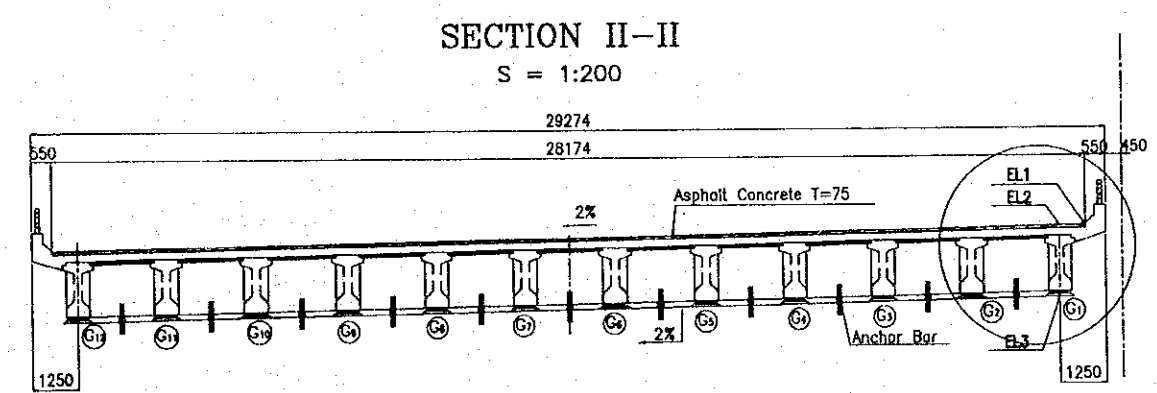
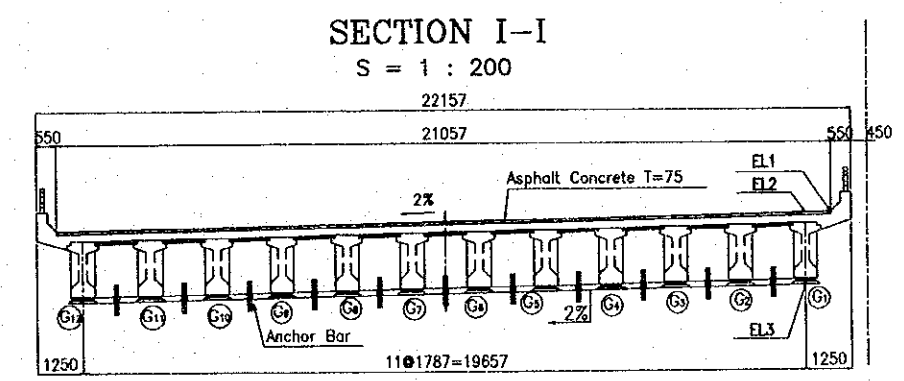
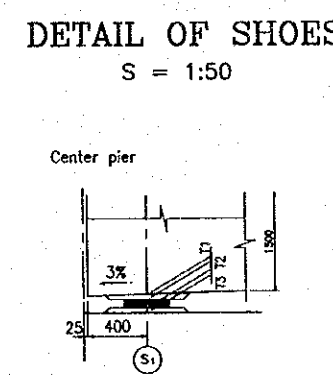
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000. 8. 17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-2b-11	SHEET No.
DETAIL OF PHAP VAN VIADUCT (11)			



GIRDER	L (mm)	L1 (mm)	θ ₁ (degree)	θ ₂ (degree)
G1	27950	5575	90.0	90.0
G2	27952	5579	88.7	91.3
G3	27980	5590	87.3	92.7
G4	28017	5608	86.0	94.0
G5	28070	5633	84.6	95.4
G6	28137	5666	83.3	96.7
G7	28218	5705	82.0	98.0
G8	28315	5752	80.6	99.4
G9	28425	5806	79.3	100.7
G10	28550	5867	78.0	102.0
G11	28689	5934	76.8	103.2
G12	28842	6008	75.5	104.5

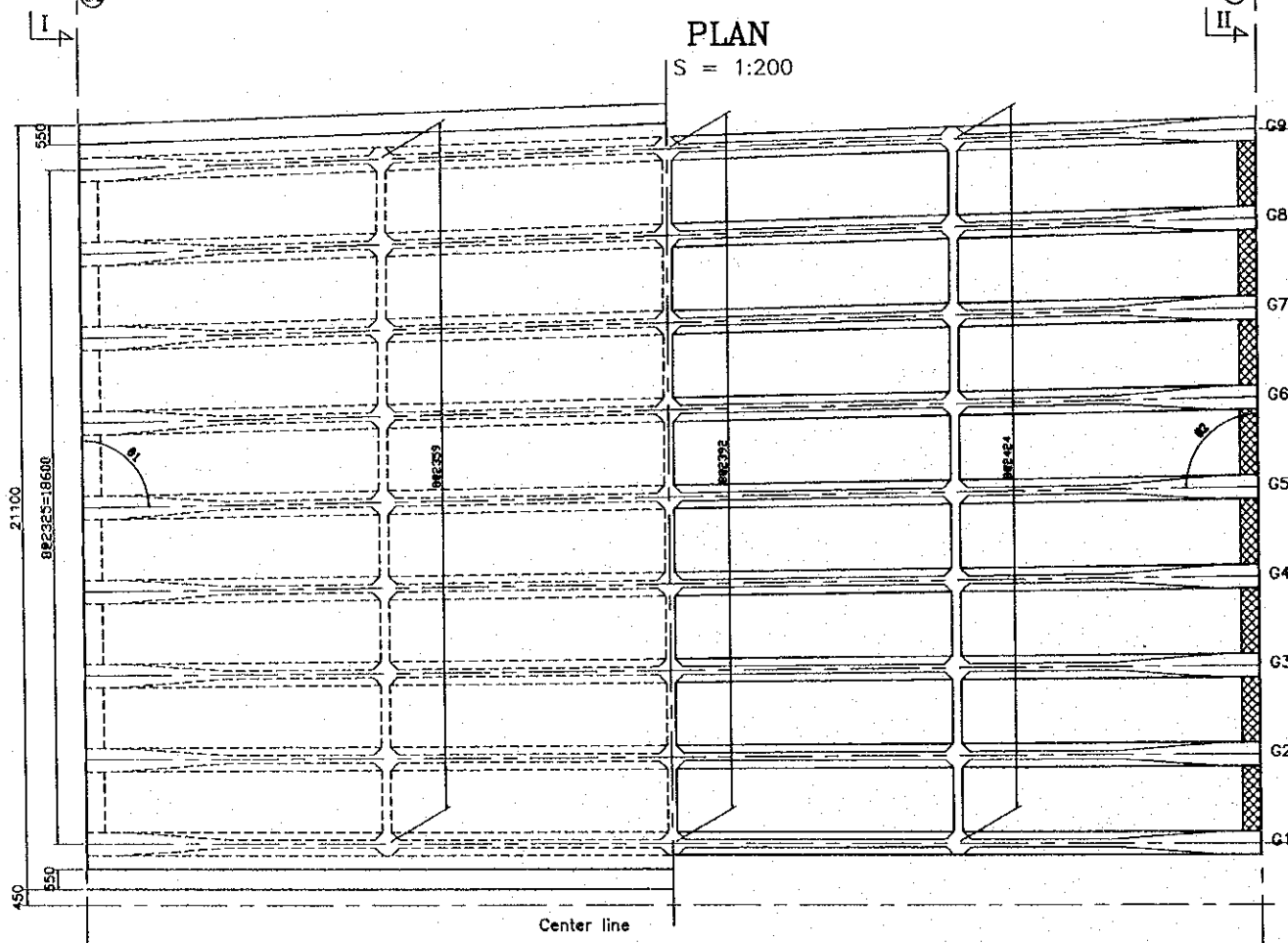
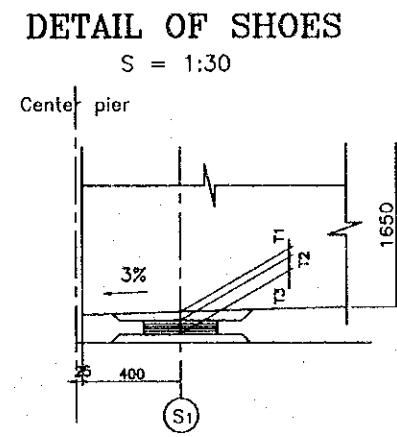
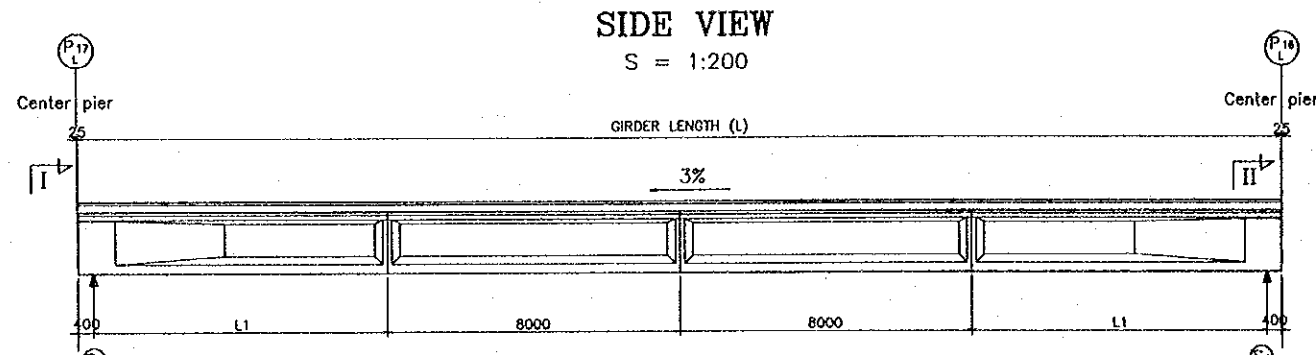
	P15 L S1	P16 L S2	REMARKS
SHOES CONDITION	MOVE	FIX	
SHOES TYPE	B	A	
EL1 (m)	15.615	15.562	
EL2 (m)	15.601	15.548	
PAVEMENT (mm)	75		
SLAB (mm)	207		
GIRDER (mm)	1500		
T1 (mm)	20	20	
T2 (mm)	44	36	
T3 (mm)	30	190	
H (mm)	1876	2028	
EL3 (m)	13.726	13.521	



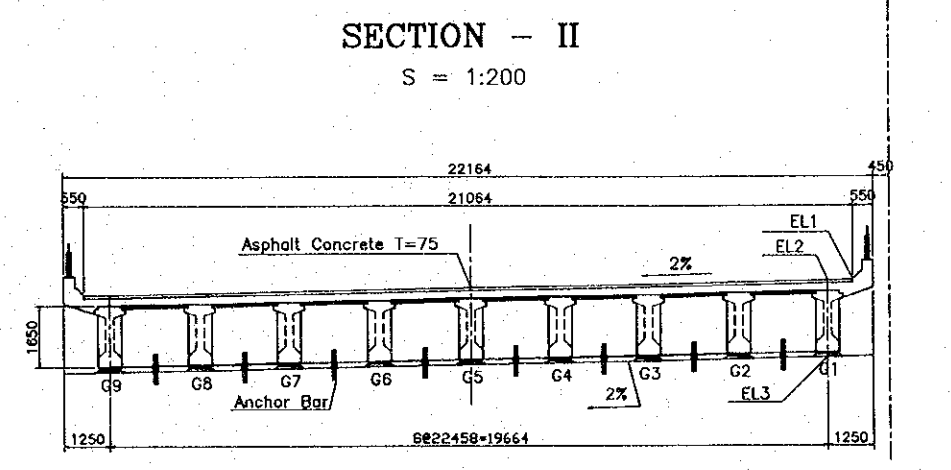
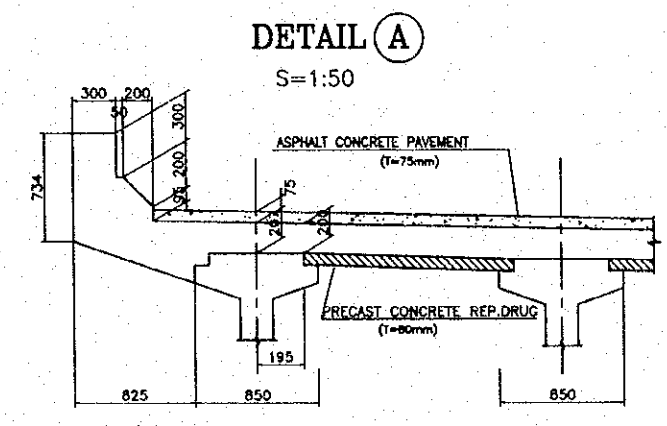
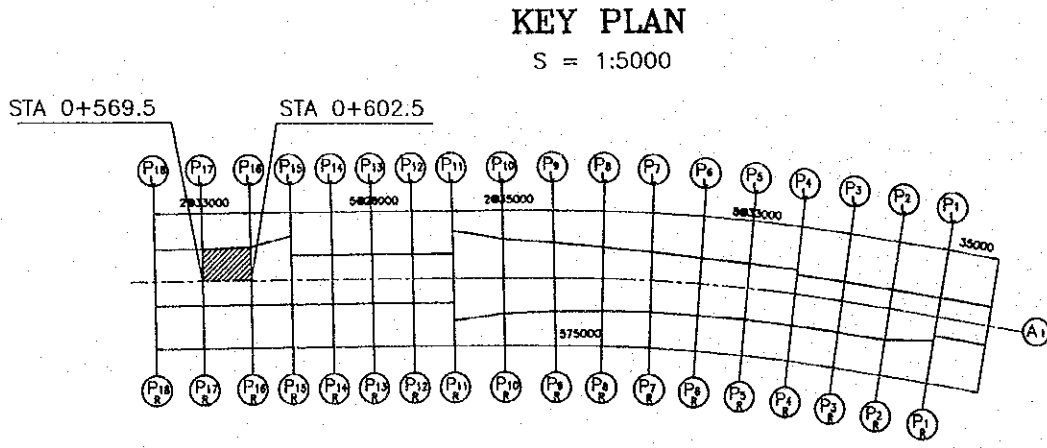
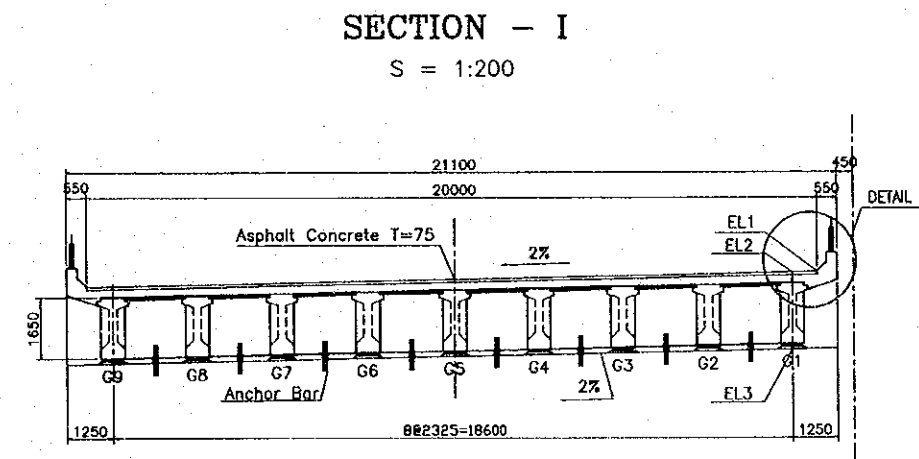
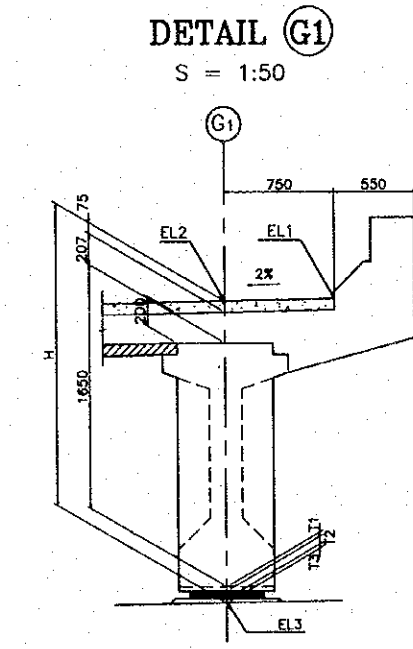
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME S. WATABE
RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.11.14

PACKAGE 3	SCALE	DRAWING No. C-1-2b-12	SHEET No.
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DETAIL OF PHAP VAN VIADUCT (12)



GIRDER	L (mm)	L1 (mm)	θ1 (degree)	θ2 (degree)			REMARKS
					P16L S1	P17L S2	
G1	32950	8475	90.00	90.00	MOVE	FIX	
G2	32950	8475	89.77	90.23	B	A	
G3	32951	8475.5	89.54	90.46			EL1 (m) 15.560 15.453
G4	32952	8476	89.31	90.69			EL2 (m) 15.546 15.439
G5	32954	8477	89.08	90.92			PAVEMENT(mm) 75
G6	32957	8478.5	88.84	91.16			SLAB (mm) 207
G7	32960	8480	88.61	91.39			GIRDER (mm) 1650
G8	32963	8481.5	88.38	91.62			T1 (mm) 20 20
G9	32967	8483.5	88.15	90.85			T2 (mm) 54 36
							T3 (mm) 20 41
							H (mm) 2026 2029
							EL3 (m) 13.521 13.411



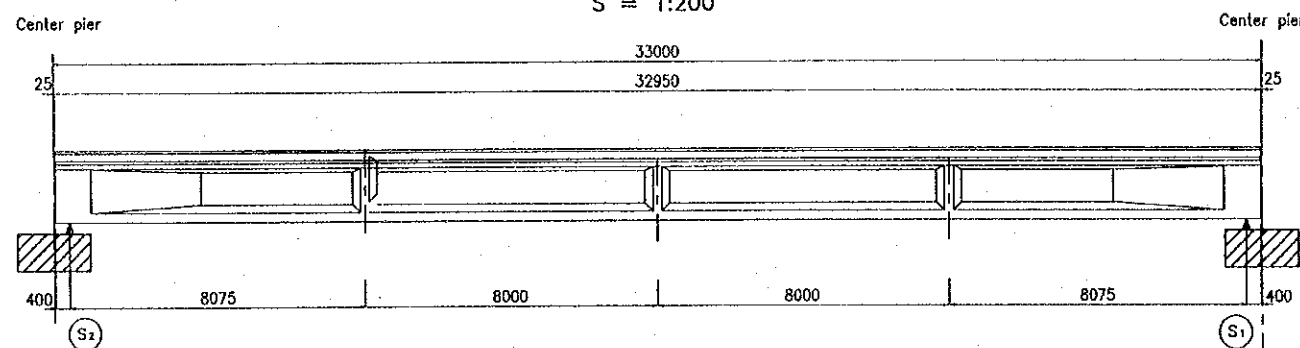
133

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY	S. WATABE
	NAME	S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SIGNATURE	<i>[Signature]</i>
PROJECT RED RIVER BRIDGE (NHANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE	2000.05.17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

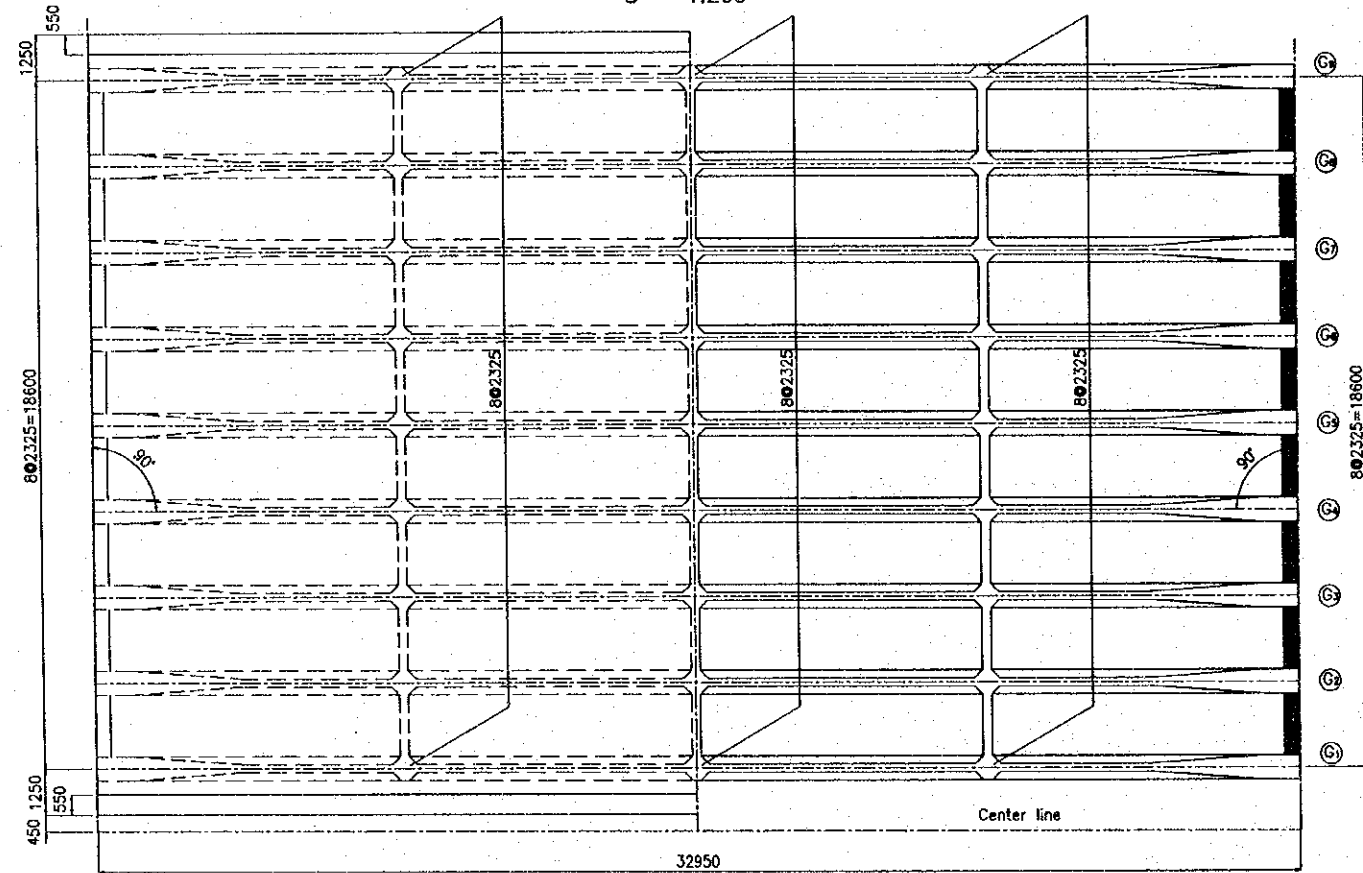
PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-2b-13	

DETAIL OF PHAP VAN VIADUCT (13)

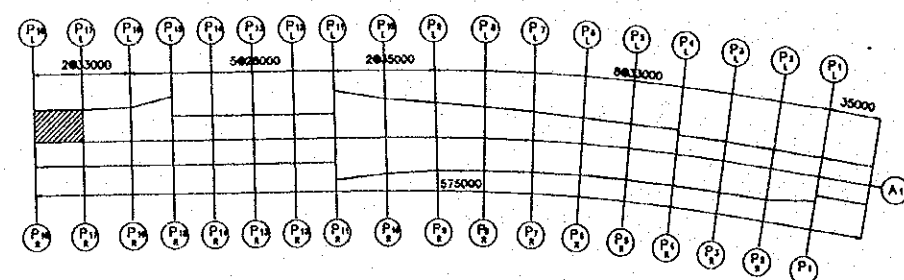
SIDE VIEW
S = 1:200



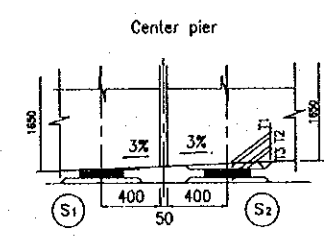
PLAN VIEW
S = 1:200



KEY PLAN
S = 1:5000

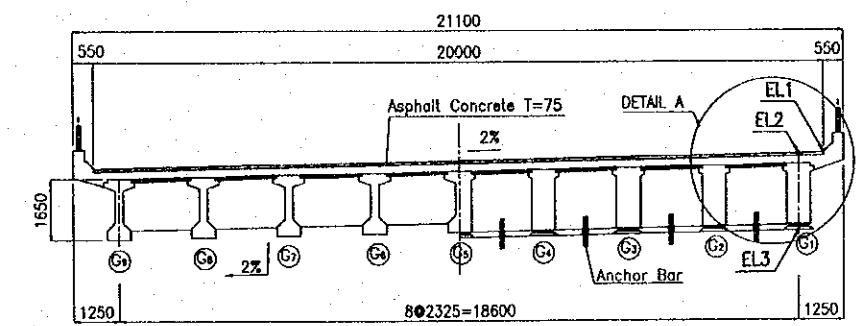


DETAIL OF SHOES
S = 1:50

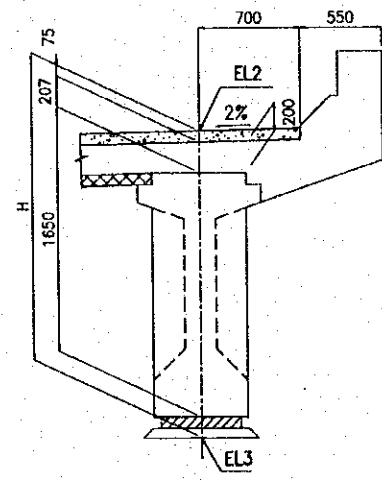


	P17 L	P18 L	REMARKS
	S1	S2	
STATION	0+569.5	0+536.5	
SHOES CONDITION	MOVE	FIX	
SHOES TYPE	B	A	
EL1 (m)	15.450	15.296	
EL2 (m)	15.436	15.282	
PAVEMENT (mm)	75	75	
SLAB (mm)	207	207	
GIRDER (mm)	1650	1650	
T1 (mm)	20	20	
T2 (mm)	54	36	
T3 (mm)	20	68	
H (mm)	2026	2056	
EL3 (m)	13.411	13.227	

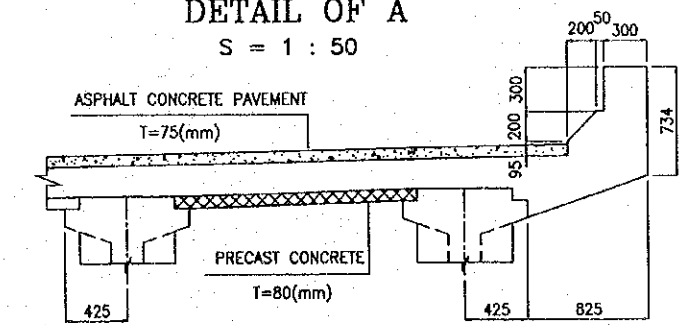
TYPICAL CROSS SECTION OF SPAN
S = 1:200



DETAIL G1
S = 1:50



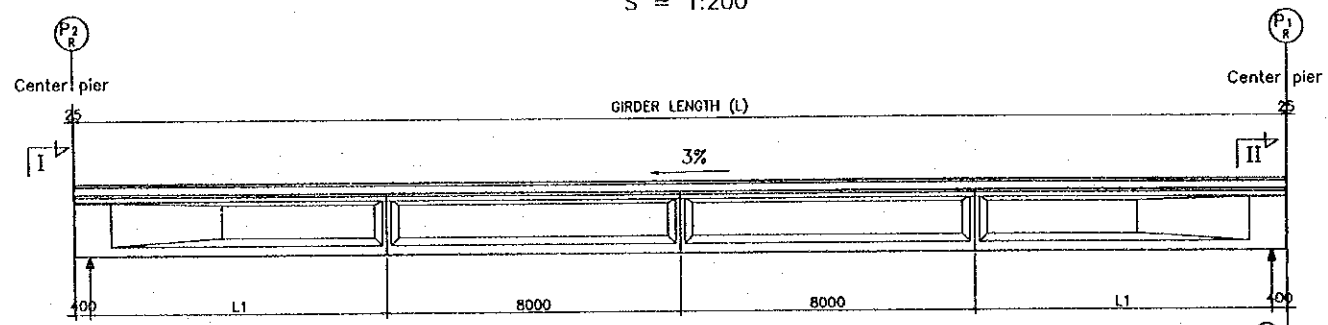
DETAIL OF A
S = 1:50



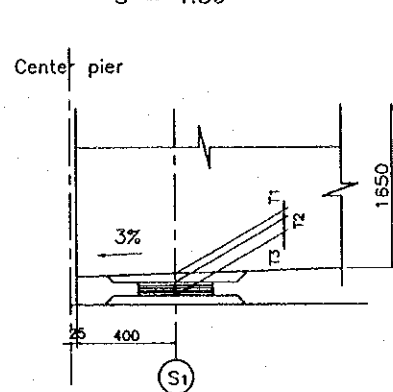
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (HANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.11.14

PACKAGE 3	SCALE	DRAWING No. C-1-2b-14	SHEET No.
DETAIL OF PHAP VAN VIADUCT (14)			

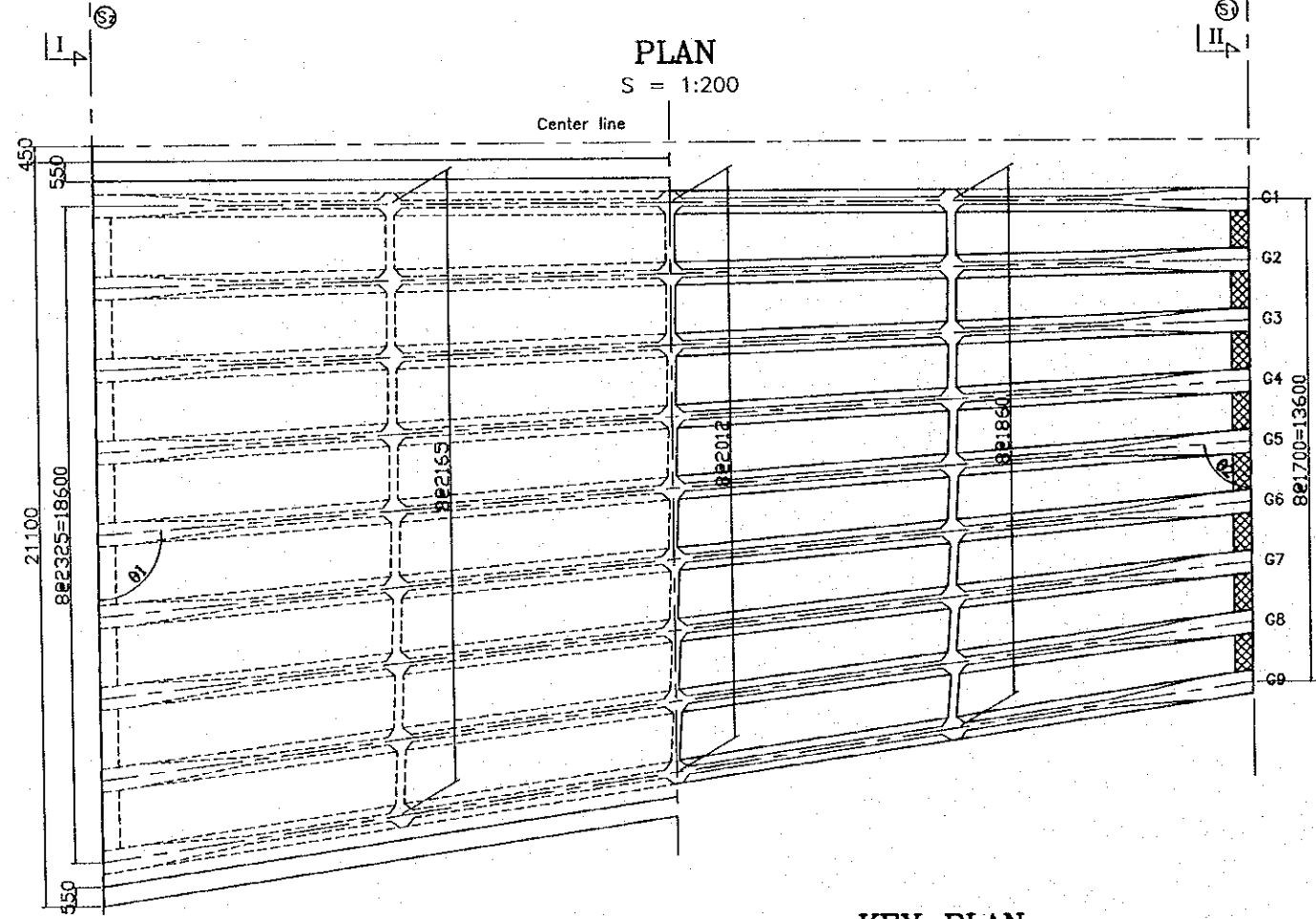
SIDE VIEW
S = 1:200



DETAIL OF SHOES
S = 1:30



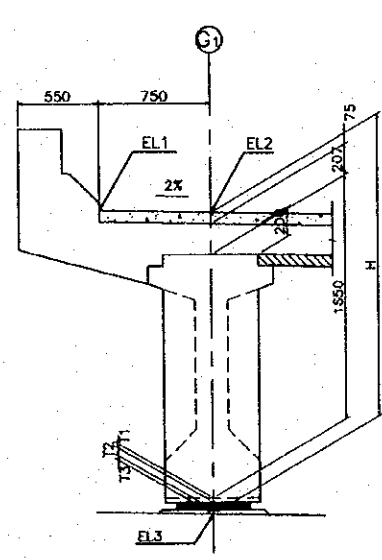
PLAN
S = 1:200



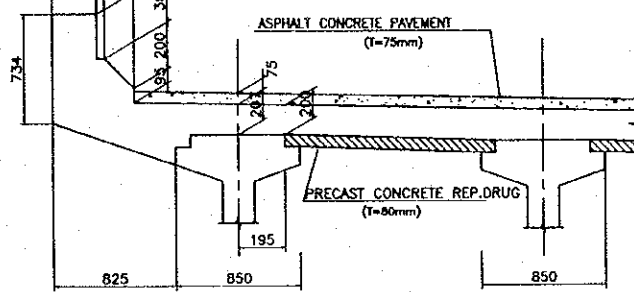
GIRDER	L (mm)	L1 (mm)	θ1 (degree)	θ2 (degree)	P1 R		P2 R		REMARKS
					S1	S2	S1	S2	
G1	32695	8347.5	90.2	89.8					
G2	32931	8465.5	91.3	88.7					
G3	32936	8468	92.4	87.6					
G4	32952	8476	93.5	86.5					
G5	32981	8490.5	94.6	85.4					
G6	33002	8501	95.7	84.3					
G7	33074	8537	96.8	83.2					
G8	33138	8569	97.8	82.2					
G9	33214	8607	98.9	81.1					

SHOES CONDITION	P1 R MOVE	P2 R FIX	REMARKS
SHOES TYPE	B	A	
EL1 (m)	11.418	11.913	
EL2 (m)	11.403	11.898	
PAVEMENT(mm)	75		
SLAB (mm)	207		
GIRDER (mm)	1750		
T1 (mm)	20	20	
T2 (mm)	54	36	
T3 (mm)	30	20	
H (mm)	2136	2108	
EL3 (m)	9.268	9.791	

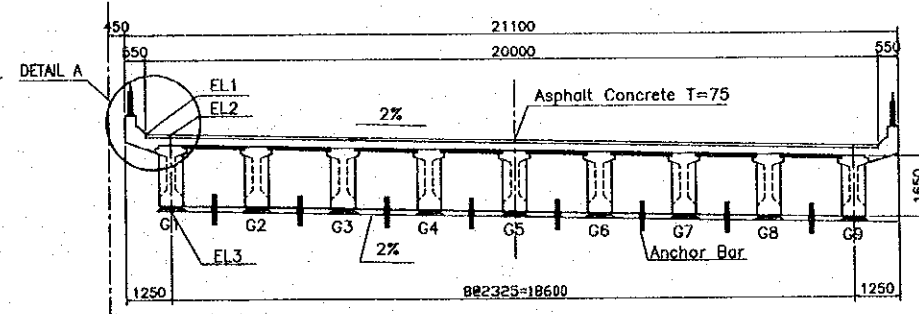
DETAIL (G1)
S = 1:50



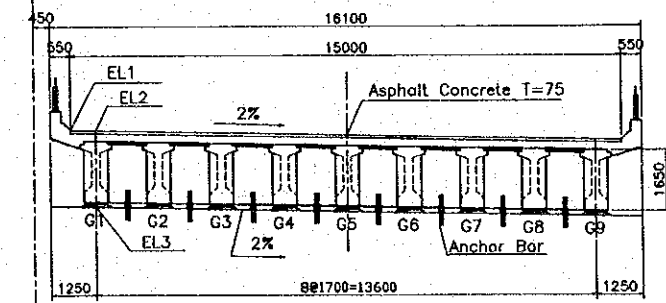
DETAIL (A)
S = 1:50



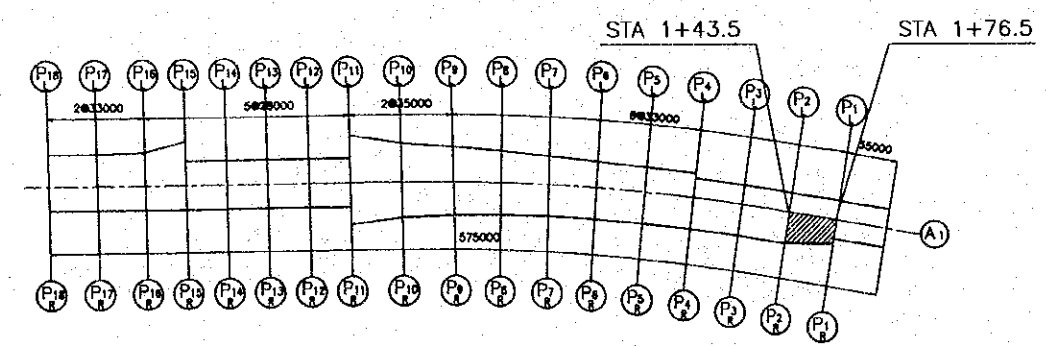
SECTION - I
S = 1:200



SECTION - II
S = 1:200



KEY PLAN
S = 1:5000



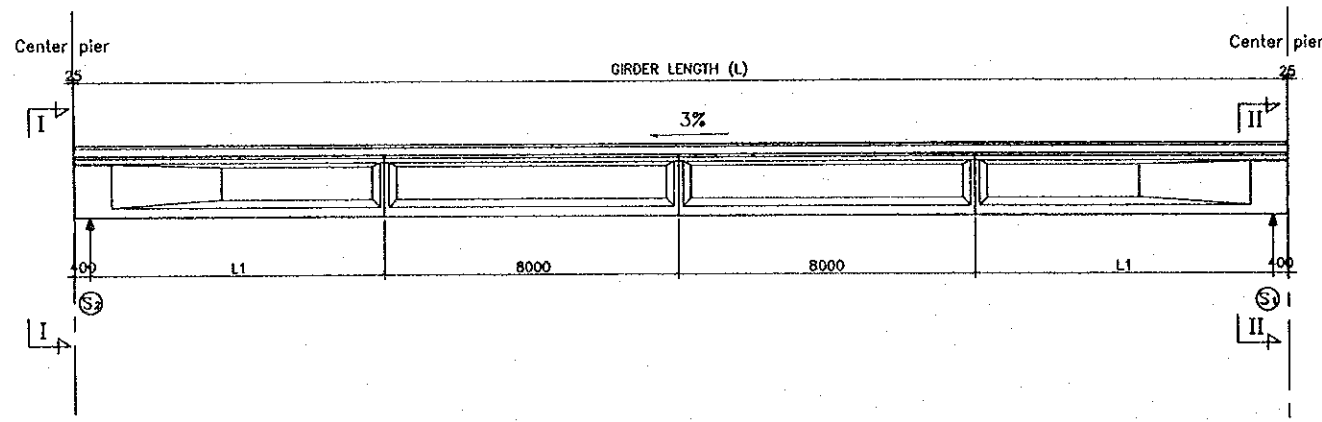
141

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. WATADA
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.11.17

PACKAGE 3	SCALE	DRAWING No. C-1-2b-15	SHEET No.
DETAIL OF PHAP VAN VIADUCT (15-1)			

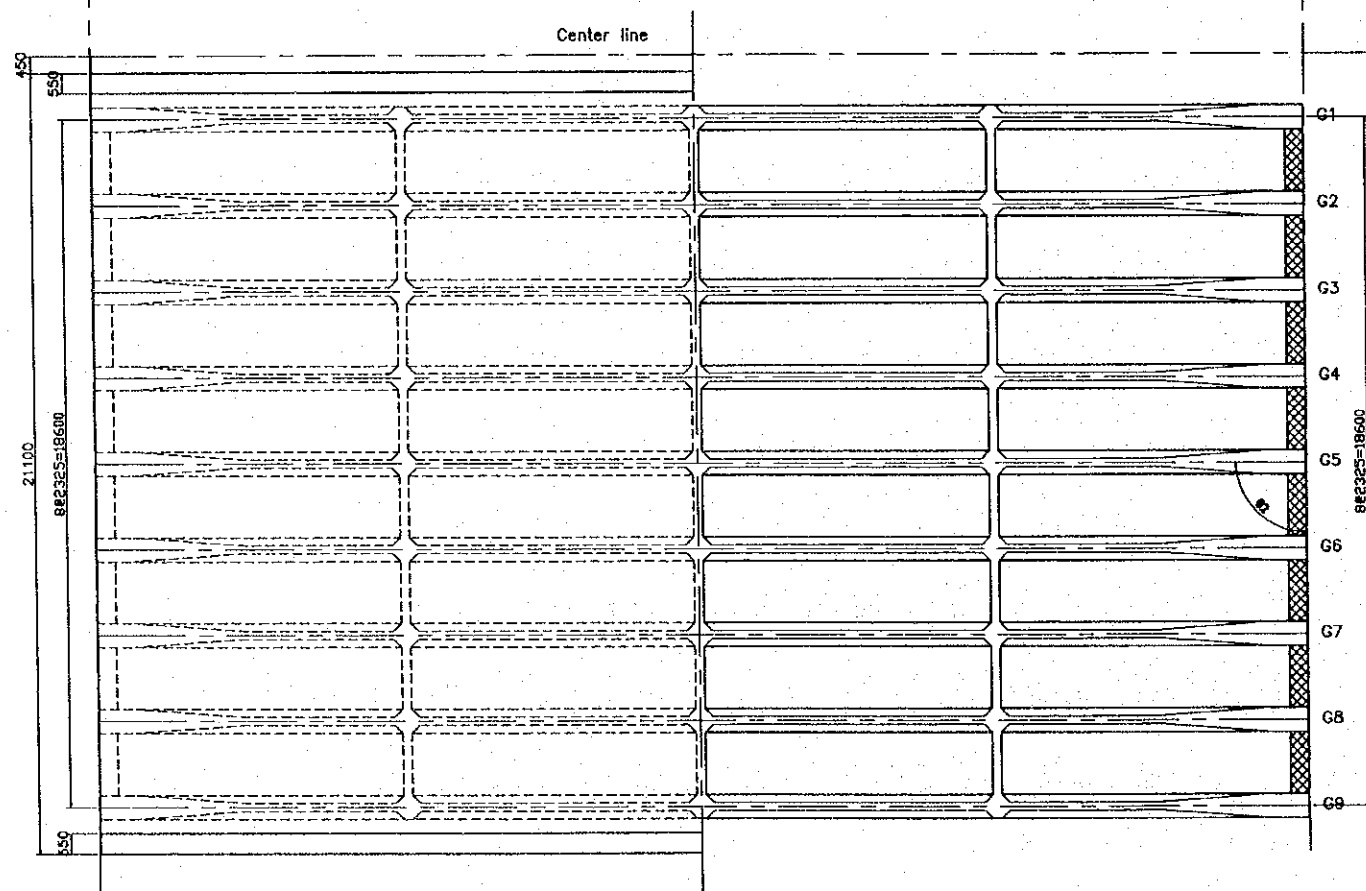
SIDE VIEW

S = 1:200



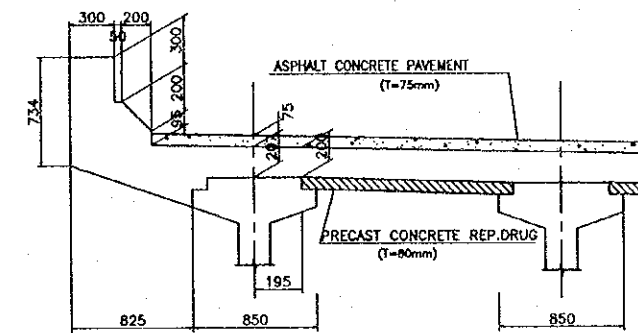
PLAN

S = 1:200



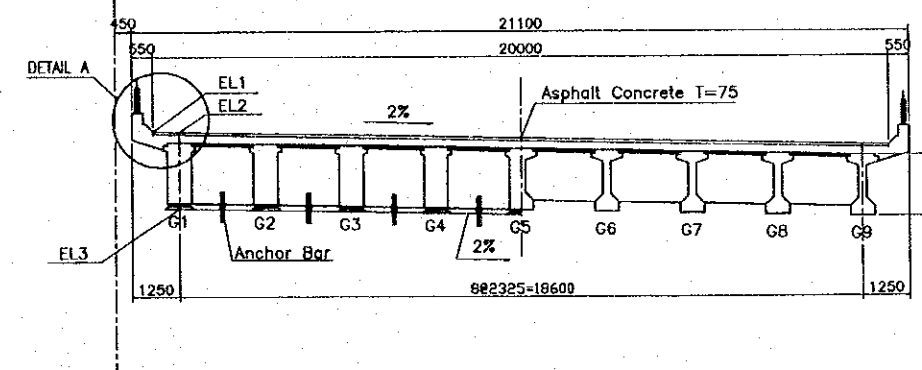
DETAIL A

S=1:50



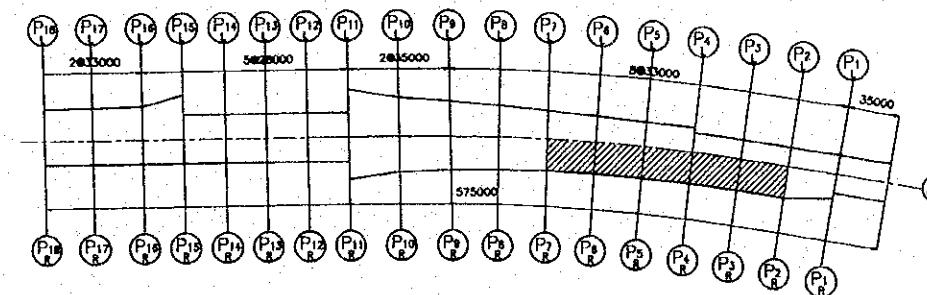
TYPICAL CROSS SECTION OF SPAN

S = 1:200



KEY PLAN

S = 1:5000



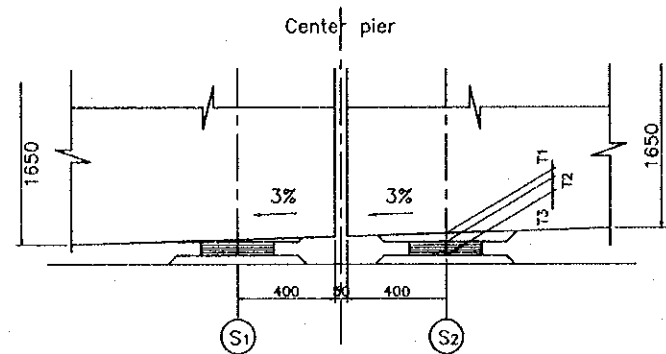
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATARE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2/2000, 3/19	

PACKAGE 3	SCALE	DRAWING No. C-1-2b-16	SHEET No.
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DETAIL OF PHAP VAN VIADUCT (15-2)

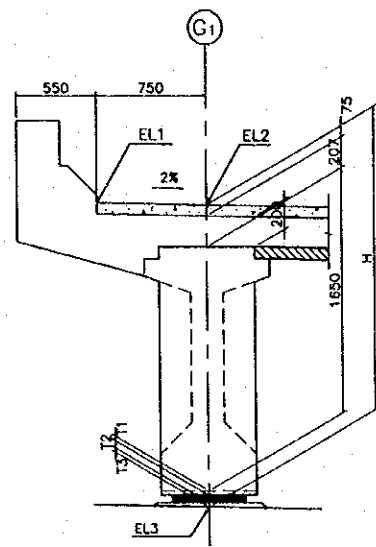
DETAIL OF SHOES

S = 1:30



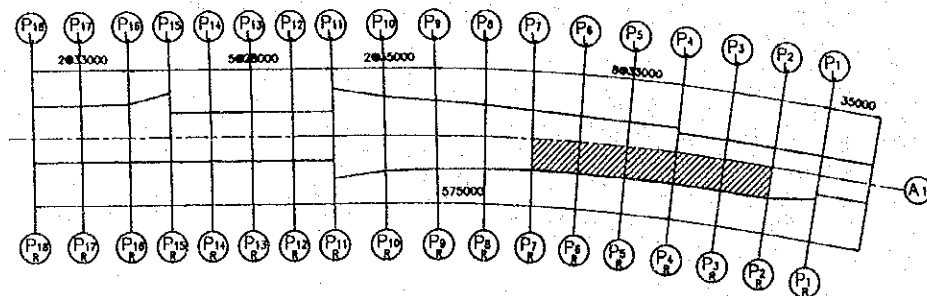
DETAIL (G1)

S = 1:50



KEY PLAN

S = 1:5000

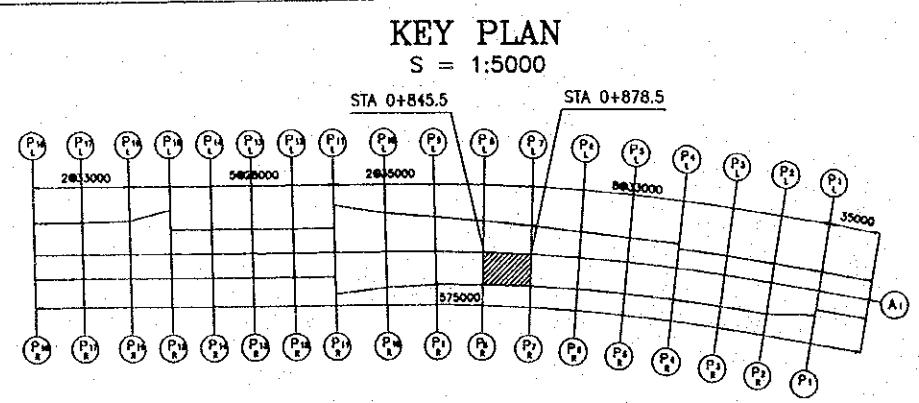
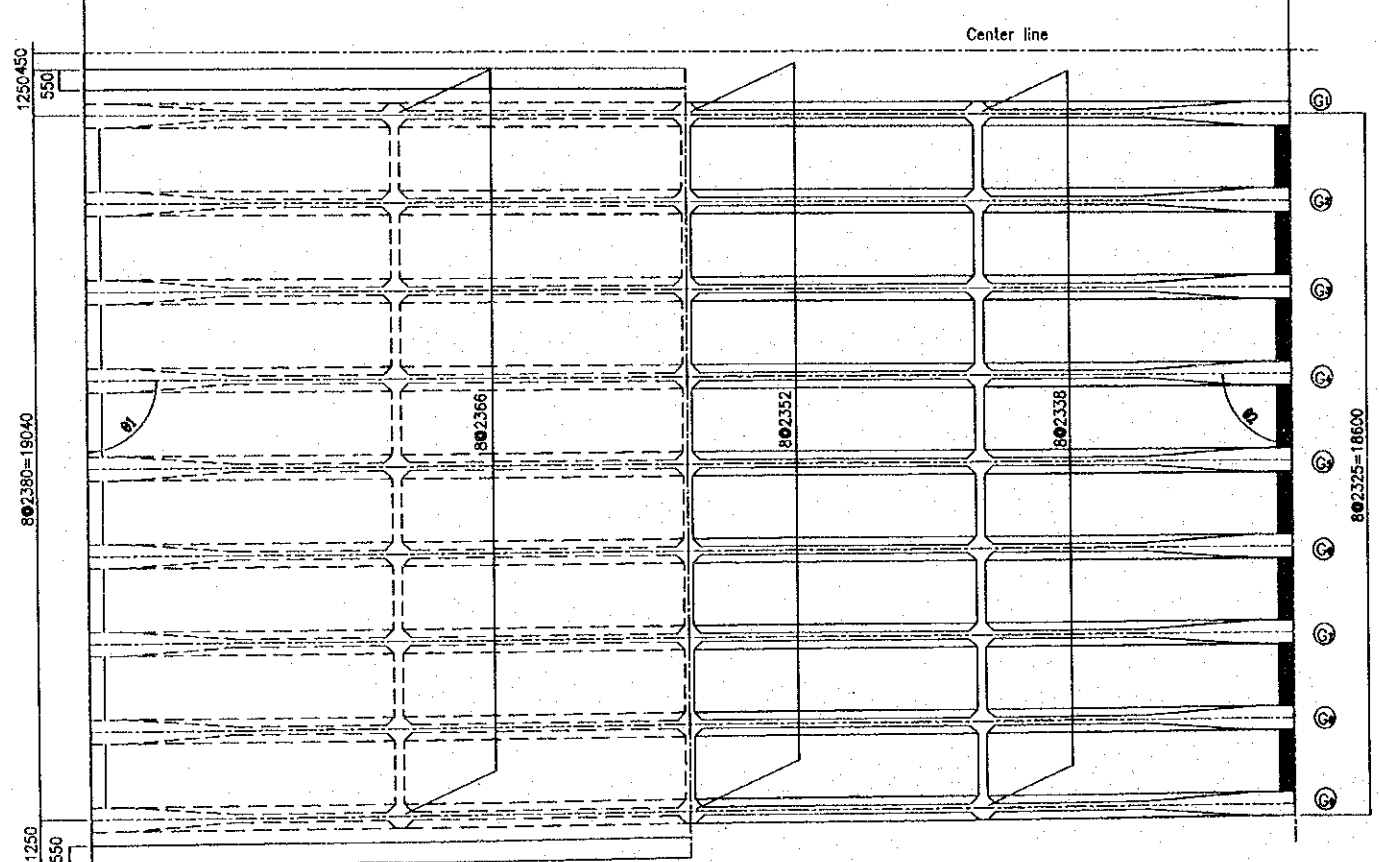
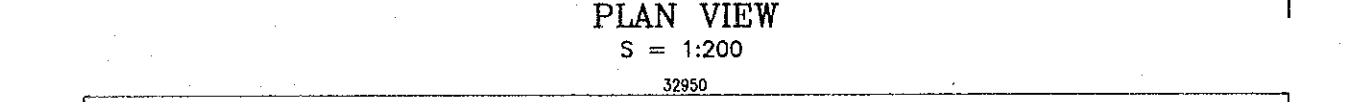
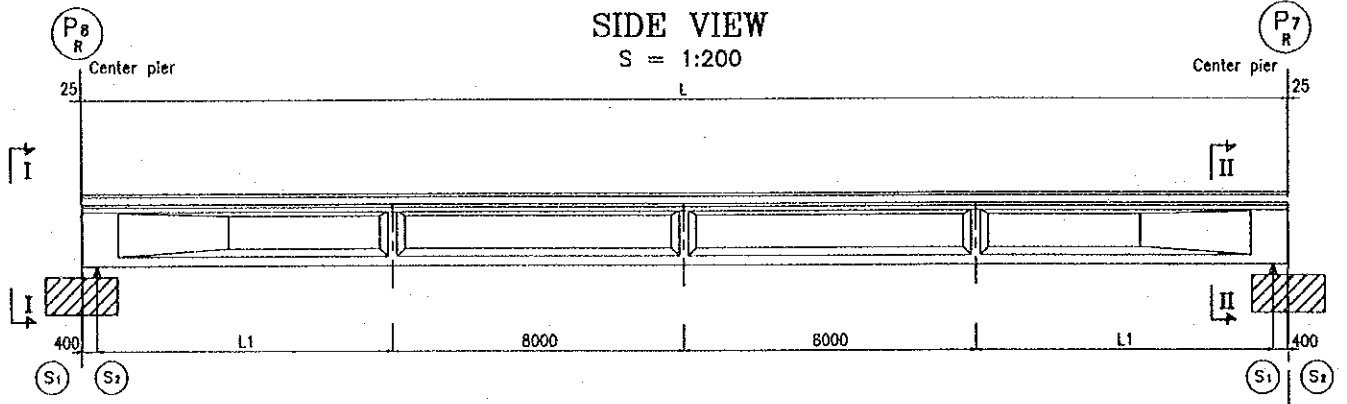


	P2 _R		P3 _R		P4 _R		P5 _R		P6 _R		P7 _R		REMARKS
	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	
STATION	1+43.5		1+10.5		0+977.5		0+944.5		0+911.5		0+878.5		
SHOES CONDITION	FIX	MOVE	FIX	MOVE	FIX	MOVE	FIX	MOVE	FIX	MOVE	FIX	MOVE	
SHOES TYPE	A	B	A	B	A	B	A	B	A	B	A	B	
EL1 (m)	12.390	12.403	12.868	12.880	13.346	13.358	13.795	13.806	14.196	14.206	14.556	14.556	
EL2 (m)	12.375	12.388	12.847	12.859	13.318	13.330	13.765	13.778	14.168	14.178	14.528	14.528	
PAVEMENT (mm)	75		75		75		75		75		75		
SLAB (mm)	207		209		212		213		213		213		
GIRDER (mm)	1650		1650		1650		1650		1650		1650		
T1 (mm)	20	20	20	20	20	20	20	20	20	20	20	20	
T2 (mm)	36	54	36	54	36	54	36	54	36	54	36	54	
T3 (mm)	35	30	36	30	36	30	39	30	38	30	30	20	
H (mm)	2023	2036	2026	2038	2029	2041	2033	2042	2032	2042	2024	2032	
EL3 (m)	10.353	10.353	10.822	10.821	11.289	11.288	11.732	11.736	12.136	12.136	12.496	12.496	

		P2 _R ~ P3 _R	P3 _R ~ P4 _R	P4 _R ~ P5 _R	P5 _R ~ P6 _R	P6 _R ~ P7 _R	REMARKS
		L (mm)	G1	32927	32915	32906	
	G2	32895	32868	32848	32847	32847	
	G3	32864	32821	32789	32788	32788	
	G4	32833	32774	32731	32729	32729	
	G5	32801	32727	32672	32670	32670	
	G6	32770	32681	32614	32611	32611	
	G7	32738	32634	32555	32552	32552	
	G8	32707	32587	32497	32493	32493	
	G9	32676	32540	32438	32434	32434	
L1 (mm)	G1	8463.5	8457.5	8453	8453	8453	
	G2	8447.5	8434	8424	8423.5	8423.5	
	G3	8432	8410.5	8394.5	8394	8394	
	G4	8416.5	8387	8365.5	8364.5	8364.5	
	G5	8400.5	83663.5	8336	8335	8335	
	G6	8385	8340.5	8307	8305.5	8305.5	
	G7	8369	8317	8277.5	8276	8276	
	G8	8353.5	8293.5	8248.5	8246.5	8246.5	
	G9	8338	8270	8219	8217	8217	
θ ₁ (degree)	G1 ~ G9	89.6	89.4	89.3	89.3	89.3	
θ ₂ (degree)	G1 ~ G9	89.6	89.5	89.3	89.3	89.3	

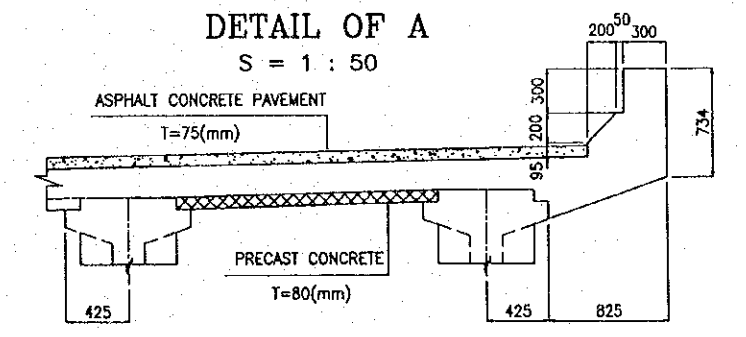
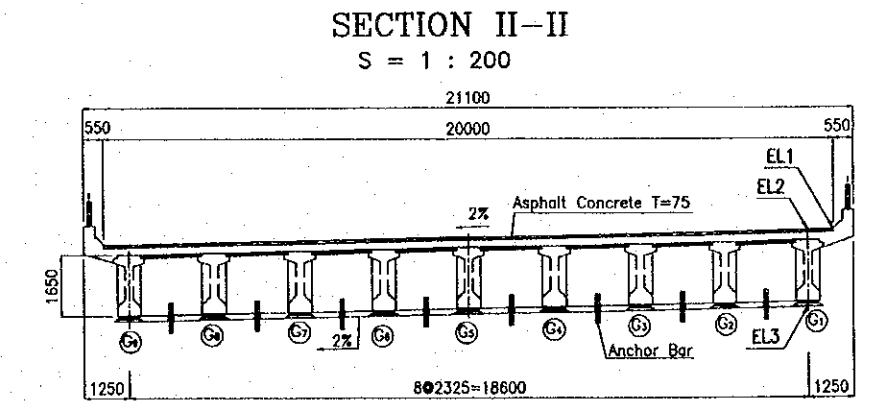
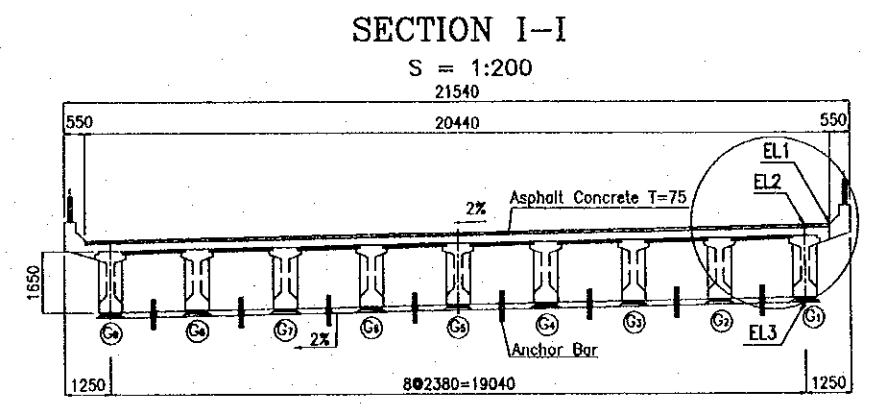
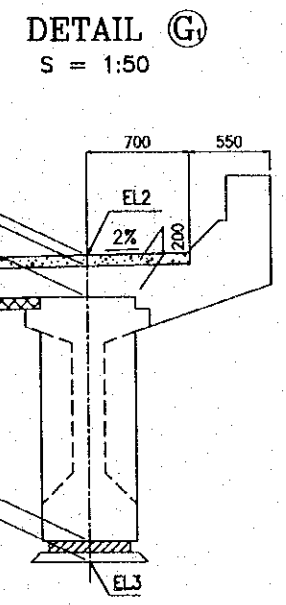
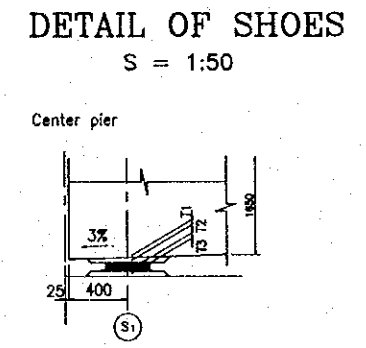
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM HUNG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. WATABE
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE	2000. 3. 17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-2b-17	
DETAIL OF PHAP VAN VIADUCT (16)			



GIRDER	L (mm)	L1 (mm)	θ_1 (degree)	θ_2 (degree)
G1	32950	8075	89.3	89.3
G2	32950	8075	89.4	89.2
G3	32950	8075	89.5	89.1
G4	32950	8075	89.6	89.0
G5	32951	8076	89.7	88.9
G6	32951	8076	89.8	88.8
G7	32952	8076	89.9	88.7
G8	32952	8077	90.0	88.6
G9	32954	8077	90.1	88.5

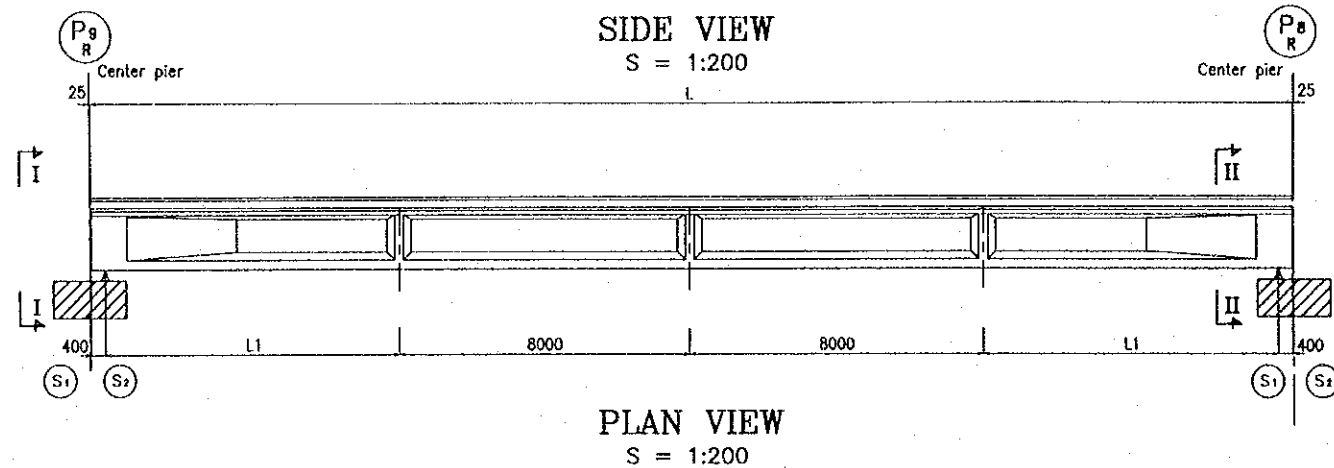
	P6 R		P7 R		REMARKS
	S1	S2	S1	S2	
SHOES CONDITION	FIX	MOVE	FIX	MOVE	
SHOES TYPE	A	B	A	B	
EL1 (m)	14.196	14.206	14.548	14.556	
EL2 (m)	14.168	14.178	14.520	14.528	
PAVEMENT (mm)	75				
SLAB (mm)	213				
GIRDER (mm)	1650				
T1 (mm)	20	20	20	20	
T2 (mm)	36	54	36	54	
T3 (mm)	38	30	30	20	
H (mm)	2032	2042	2024	2032	
EL3 (m)	12.136	12.136	12.496	12.496	



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. NAITABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME S. NAITABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 3. 14

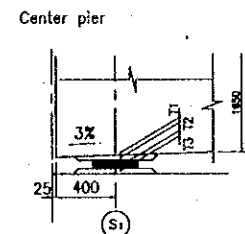
PACKAGE 3	SCALE	DRAWING No. C-1-2b-18	SHEET No.
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DETAIL OF PHAP VAN VIADUCT (17)



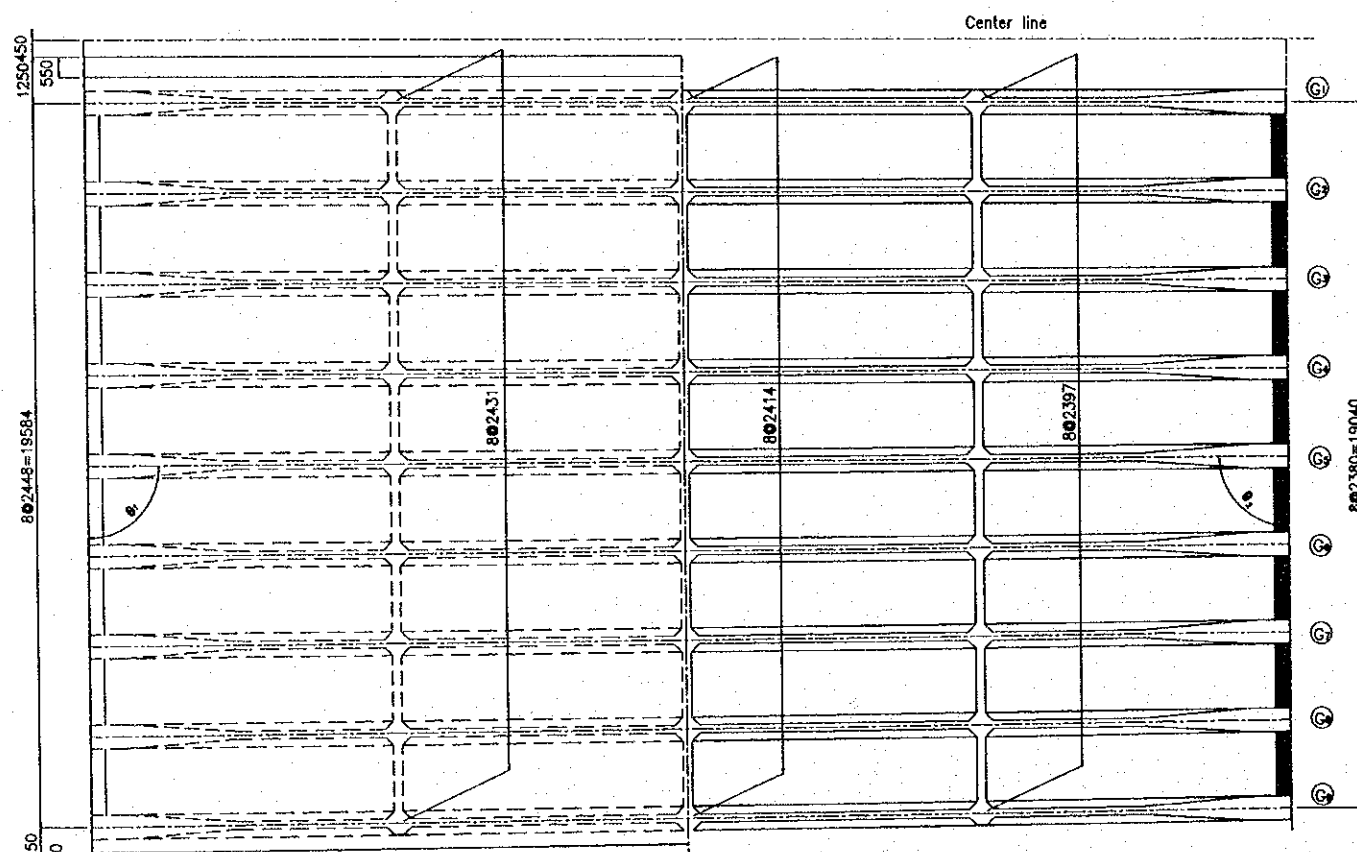
DETAIL OF SHOES

S = 1:50



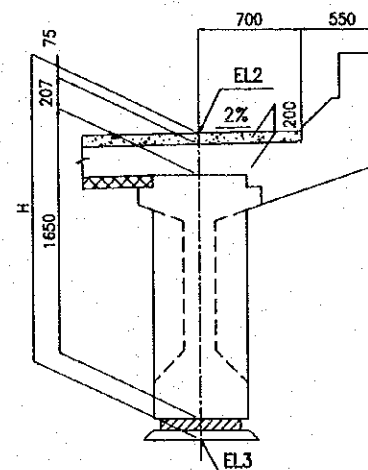
GIRDER	L (mm)	L1 (mm)	θ ₁ (degree)	θ ₂ (degree)
G1	32950	8075	89.4	89.4
G2	32950	8075	89.6	89.2
G3	32950	8075	89.7	89.1
G4	32951	8075	89.8	89.0
G5	32951	8076	89.9	88.9
G6	32952	8076	90.0	88.8
G7	32953	8076	90.2	88.6
G8	32953	8077	90.3	88.5
G9	32954	8077	90.4	88.4

	P8 R		P9 R		REMARKS
	S1	S2	S1	S2	
SHOES CONDITION	FIX	MOVE	FIX	MOVE	
SHOES TYPE	A	B	A	B	
EL1 (m)	14.850	14.857	15.103	15.109	
EL2 (m)	14.823	14.830	15.085	15.089	
PAVEMENT (mm)	75	75	75	75	
SLAB (mm)	212	212	208	209	
GIRDER (mm)	1650	1650	1650	1750	
T1 (mm)	20	20	20	20	
T2 (mm)	36	54	36	54	
T3 (mm)	31	20	135	20	
H (mm)	2024	2031	2124	2128	
EL3 (m)	12.799	12.799	12.961	12.961	



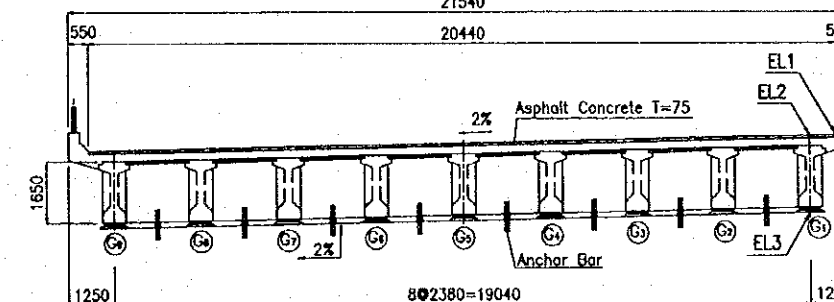
DETAIL G₁

S = 1:50



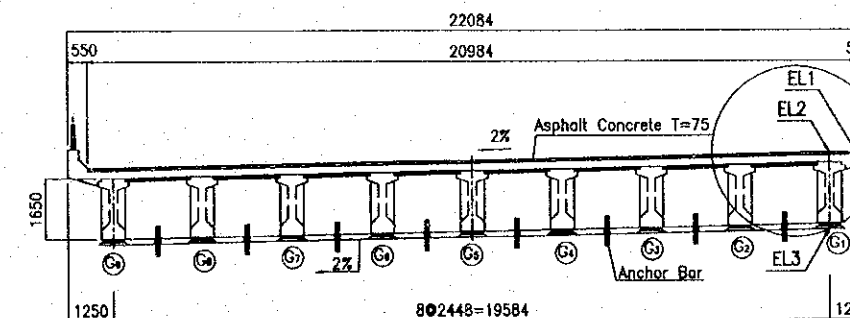
SECTION II-II

S = 1:200



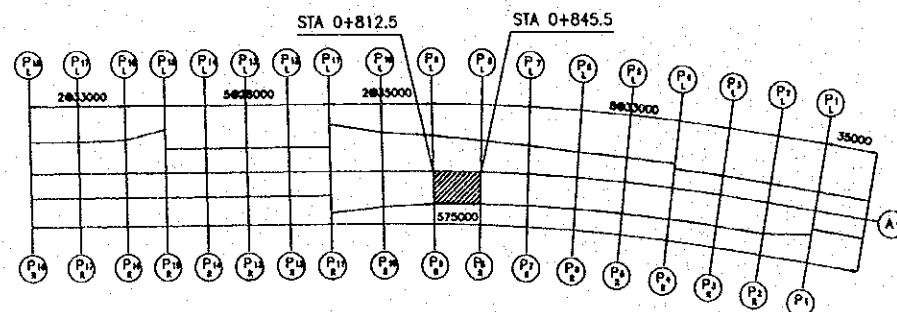
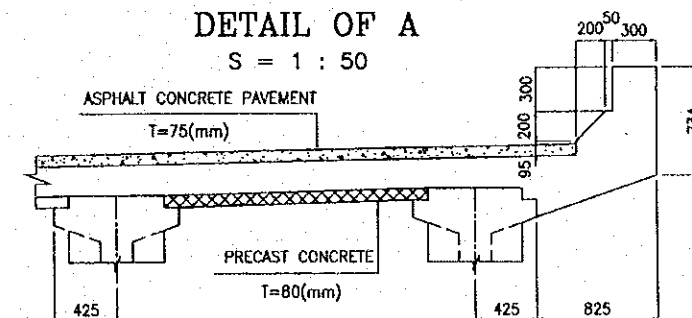
SECTION I-I

S = 1:200



DETAIL OF A

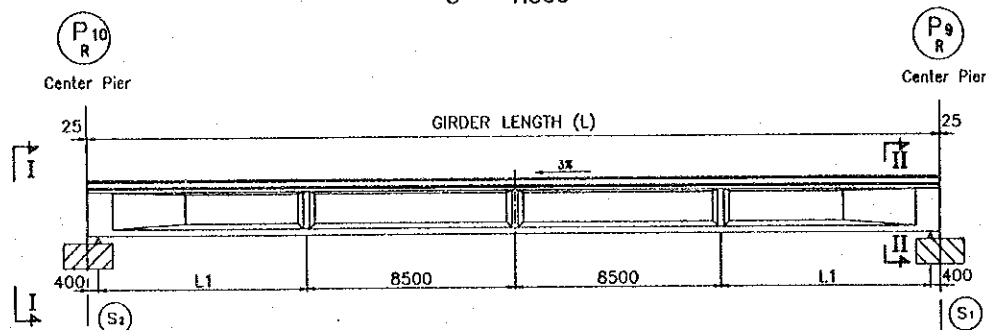
S = 1:50



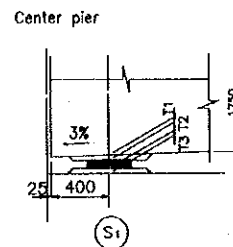
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		2000. 11. 17

PACKAGE 3	SCALE	DRAWING No. C-1-2b-19	SHEET No.
DETAIL OF PHAP VAN VIADUCT (18)			

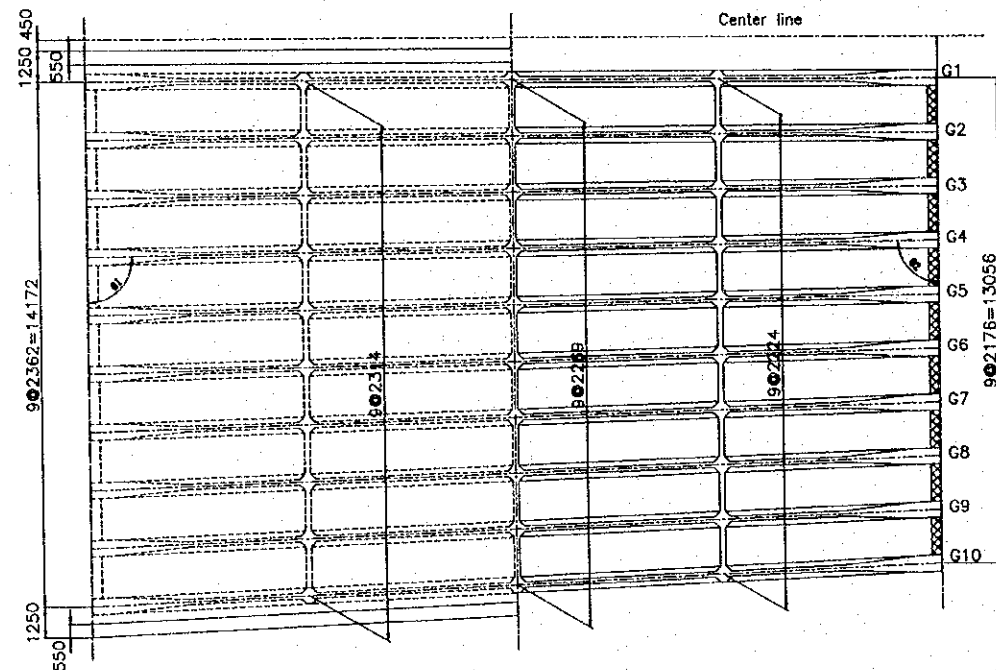
SIDE VIEW
S = 1:300



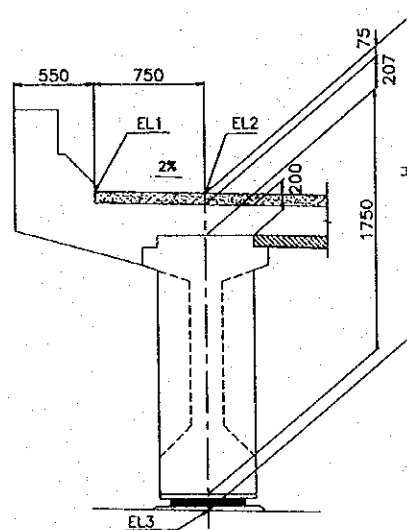
DETAIL OF SHOES
S = 1:50



PLAN VIEW
S = 1:300



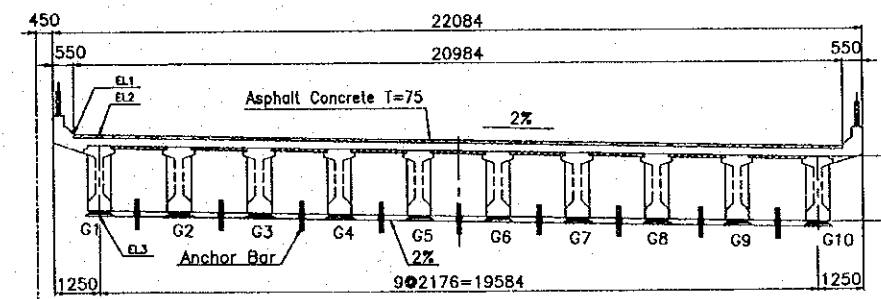
DETAIL G1
S = 1:50



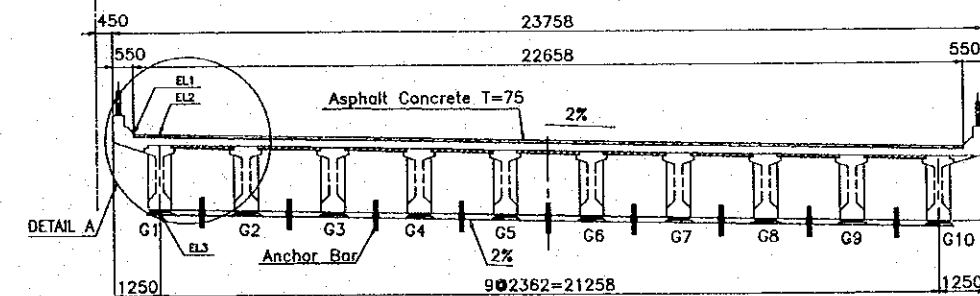
GIRDER	L (mm)	L1 (mm)	θ1 (degree)	θ2 (degree)
G1	34925	8562	89.6	89.5
G2	34892	8546	89.9	89.2
G3	34860	8530	90.2	88.9
G4	34829	8514	90.5	88.6
G5	34799	8499	90.9	88.3
G6	34770	8485	91.2	88.0
G7	34742	8471	91.5	87.7
G8	34715	8458	91.8	87.4
G9	34689	8445	92.1	87.1
G10	34663	8432	92.4	86.7

	P9R	P10R	REMARKS
	S1	S2	
SHOES CONDITION	MOVE	FIX	
SHOES TYPE	B	A	
EL1 (m)	15.109	15.318	
EL2 (m)	15.089	15.304	
PAVEMENT (mm)	75	75	
SLAB (mm)	209	207	
GIRDER (mm)	1750	1750	
T1 (mm)	20	20	
T2 (mm)	54	36	
T3 (mm)	20	33	
H (mm)	2128	2121	
EL3 (m)	12.961	13.184	

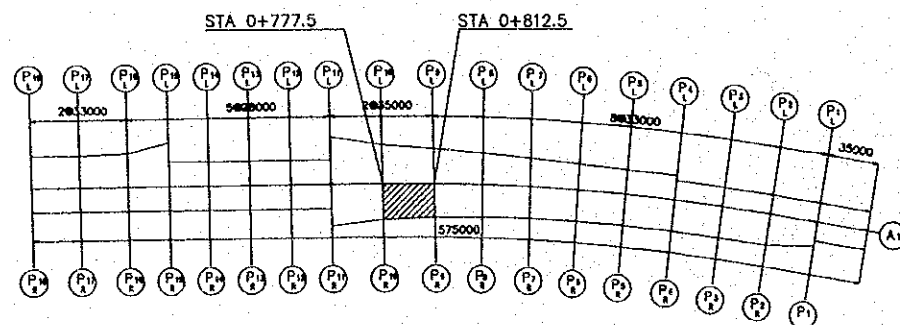
SECTION II-II
S = 1:200



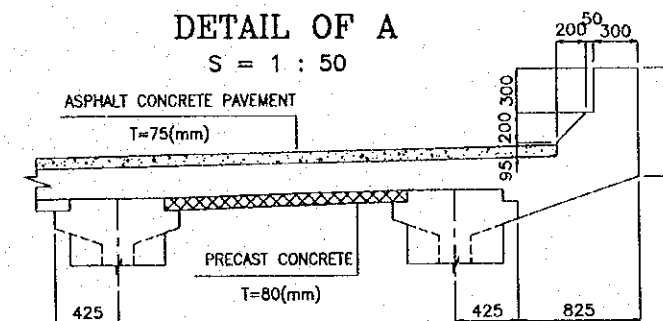
SECTION I-I
S = 1:200



KEY PLAN
S = 1:5000

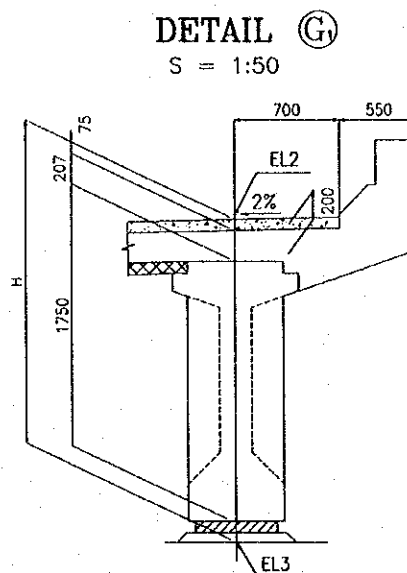
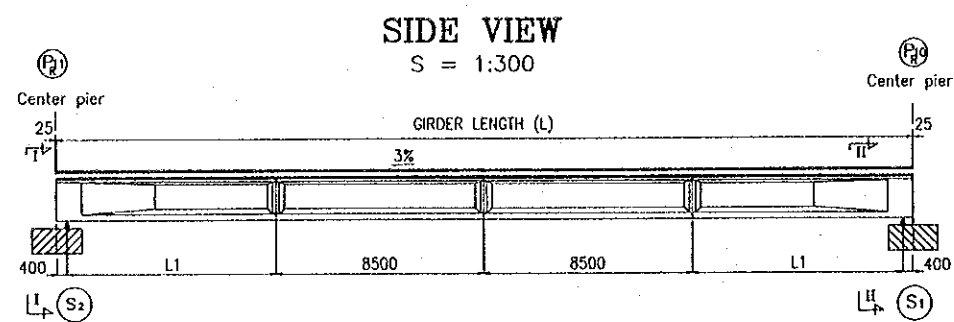


DETAIL OF A
S = 1:50



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.12.17	
COMPANY PACIFIC CONSULTANTS INTERNATIONAL		

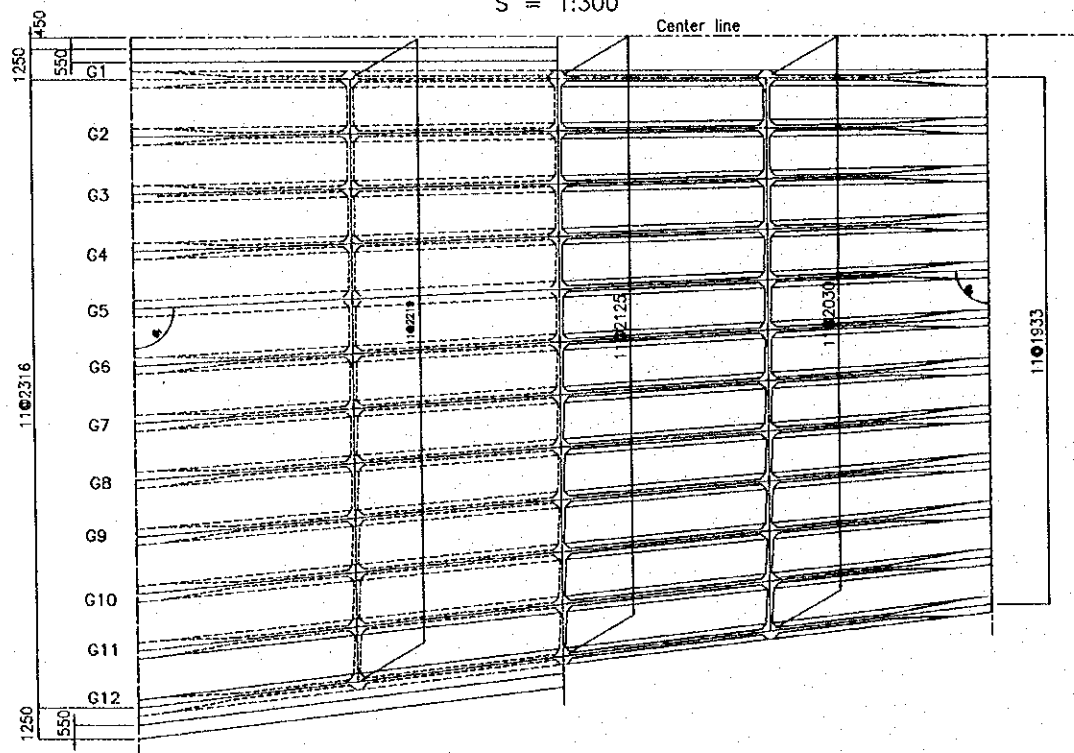
PACKAGE 3	SCALE	DRAWING No. C-1-2b-20	SHEET No.
DETAIL OF PHAP VAN VIADUCT (19)			



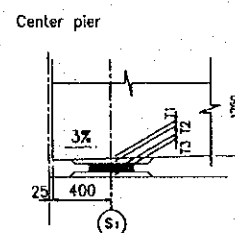
GIRDER	L (mm)	L1 (mm)	θ_1 (degree)	θ_2 (degree)
G1	34950	8575	89.8	89.8
G2	34952	8576	90.5	89.1
G3	34958	8579	91.1	88.5
G4	34970	8584	92.4	87.9
G5	34984	8591	93.0	87.2
G6	35002	8601	93.7	86.6
G7	35026	8612	94.3	85.9
G8	35053	8625	94.9	85.3
G9	35084	8641	96.4	84.7
G10	35120	8658	95.6	84.0
G11	35159	8677	96.2	83.4
G12	35203	8699	96.8	82.8

	P10 R	P11 R	REMARKS
	S1	S2	
SHOES CONDITION	MOVE	FIX	
SHOES TYPE	B	A	
EL1 (m)	15.323	15.478	
EL2 (m)	15.309	15.464	
PAVEMENT (mm)	75	75	
SLAB (mm)	207	207	
GIRDER (mm)	1750	1750	
T1 (mm)	20	20	
T2 (mm)	54	36	
T3 (mm)	20	20	
H (mm)	2126	2108	
EL3 (m)	13.184	13.357	

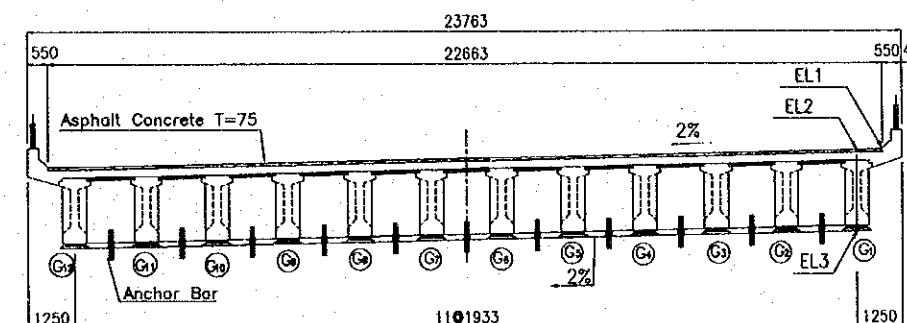
PLAN VIEW
S = 1:300



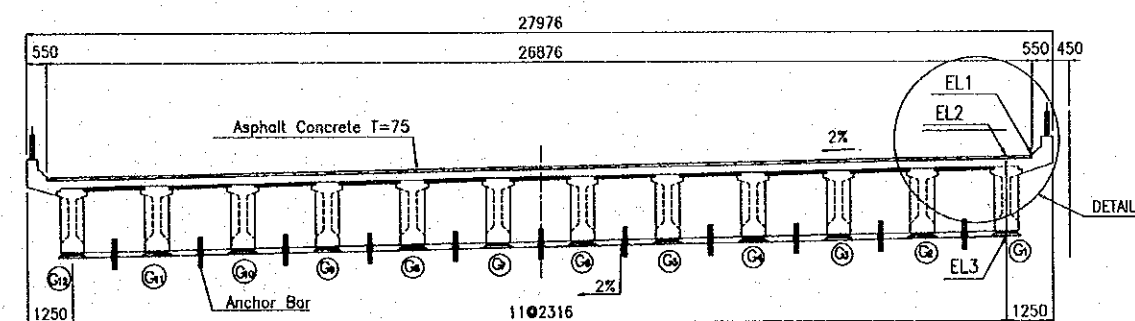
DETAIL OF SHOES
S = 1:50



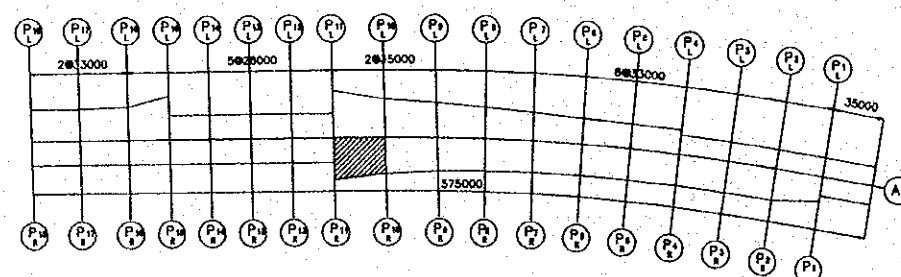
SECTION II-II
S = 1:200



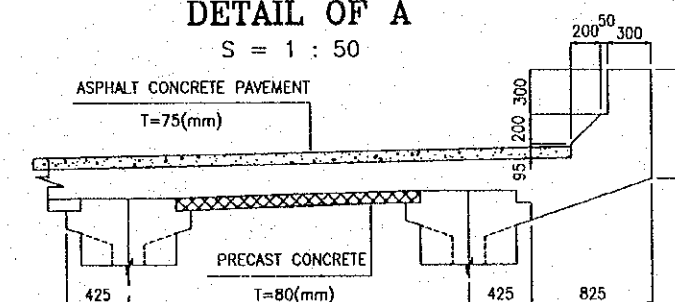
SECTION I-I
S = 1:200



KEY PLAN
S = 1:5000



DETAIL OF A
S = 1:50

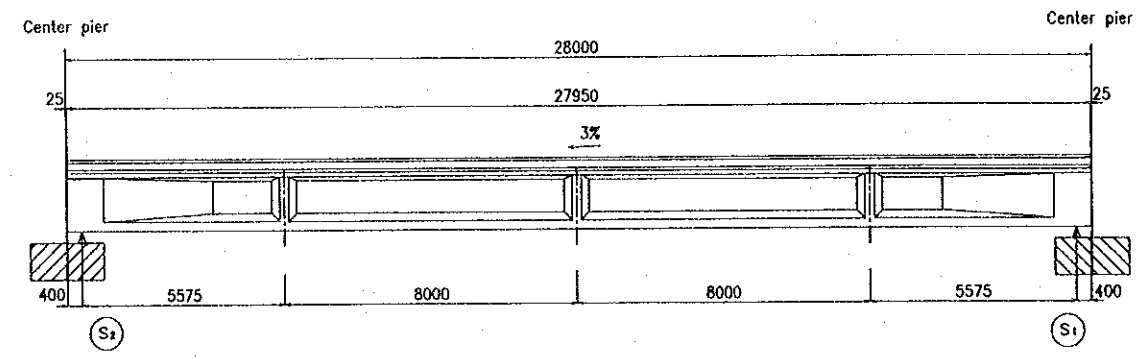


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2002.08.17

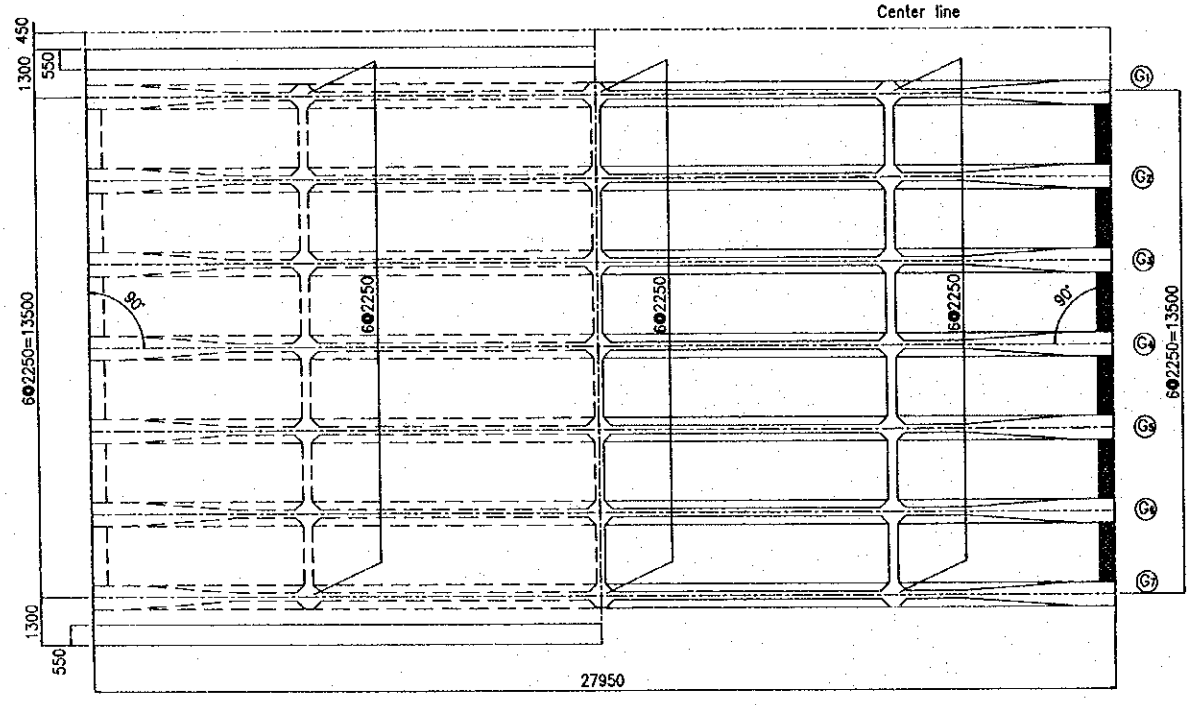
PACKAGE 3	SCALE	DRAWING No. C-1-2b-21	SHEET No.
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DETAIL OF PHAP VAN VIADUCT (20)

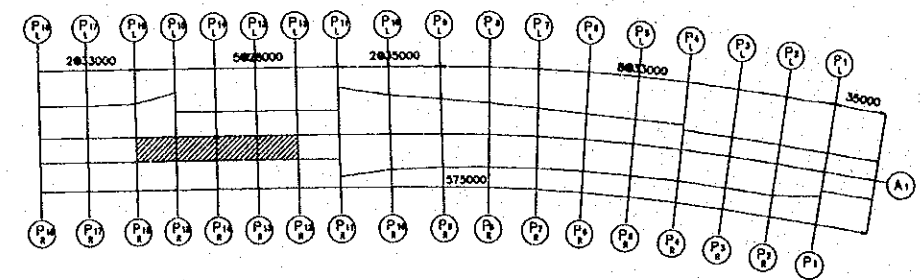
SIDE VIEW
S = 1:200



PLAN VIEW
S = 1:200

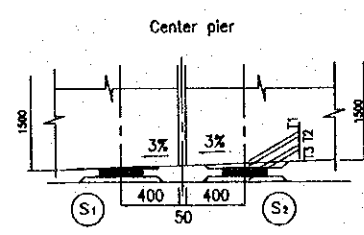


KEY PLAN
S = 1:5000

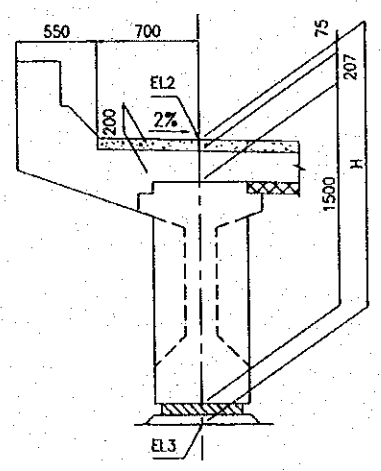


STATION	P11 R		P12 R		P13 R		P14 R		P15 R		P16 R	REMARKS
	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2		
0+742.5												
0+714.5												
0+686.5												
0+658.5												
0+630.5												
0+602.5												
SHOES CONDITION	MOVE	FIX	MOVE	FIX	MOVE	FIX	MOVE	FIX	MOVE	FIX		
SHOES TYPE	C	A	C	A	C	A	C	A	C	A		
EL1 (m)	15.481	15.566	15.568	15.618	15.619	15.635	15.635	15.616	15.615	15.582		
EL2 (m)	15.466	15.551	15.553	15.603	15.604	15.620	15.620	15.601	15.601	15.548		
PAVEMENT (mm)	75											
SLAB (mm)	207											
GIRDER (mm)	1500											
T1 (mm)	20	20	20	20	20	20	20	320	20	20		
T2 (mm)	44	3636	44	36	44	36	44	36	44	36		
T3 (mm)	264	36	30	37	30	38	30	38	30	190		
H (mm)	2110	1874	1876	1875	1876	1876	1876	1876	1876	2028		
EL3 (m)	13.357	13.678	13.678	13.729	13.745	13.745	13.745	13.726	13.726	13.521		

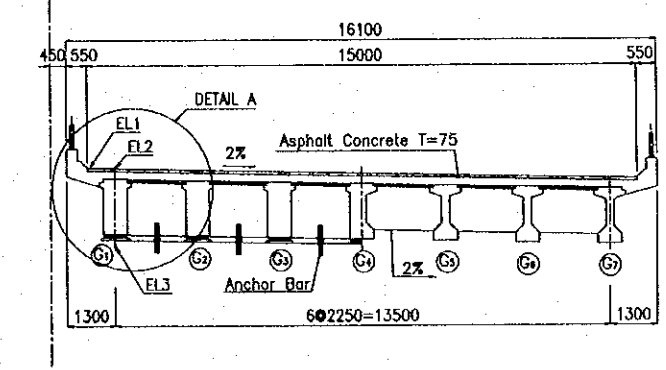
DETAIL OF SHOES
S = 1:50



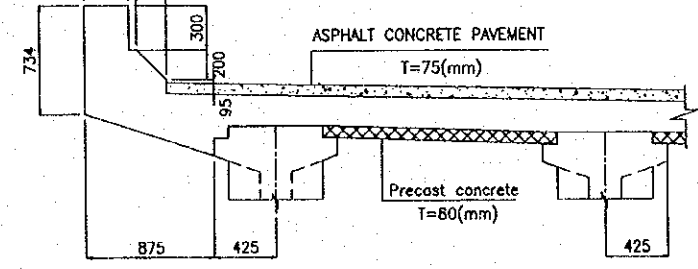
DETAIL G1
S = 1:50



TYPICAL CROSS SECTION OF SPAN
S = 1:200

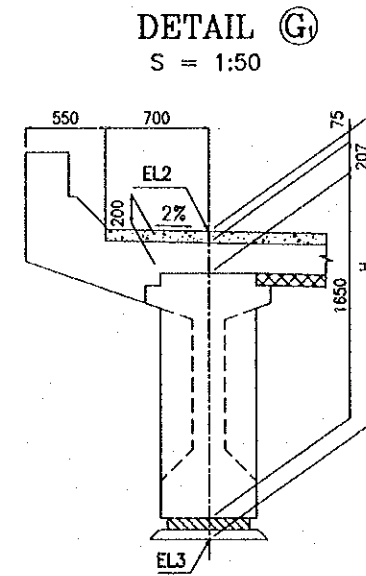
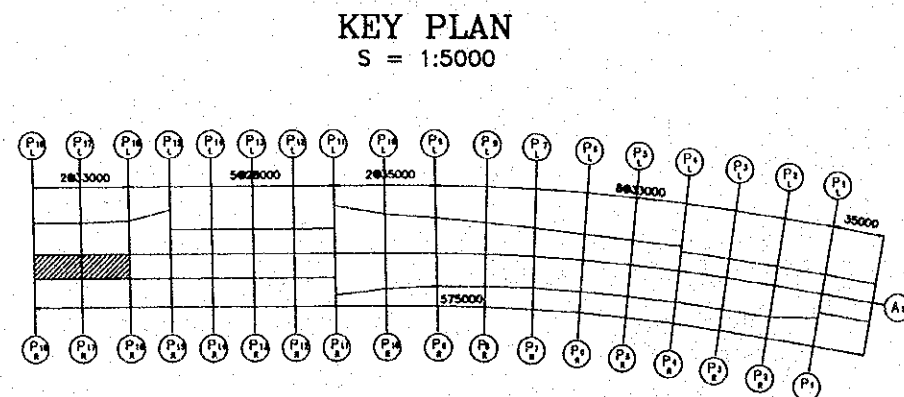
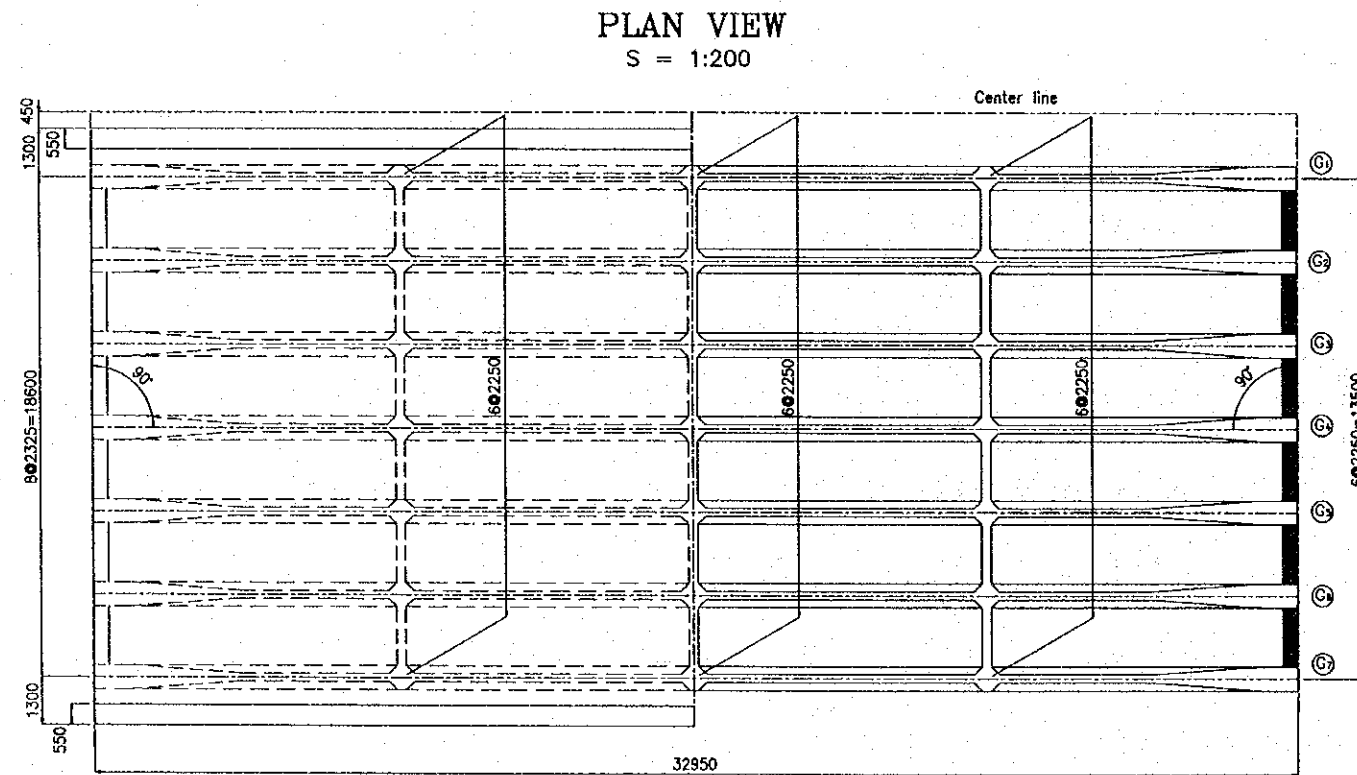
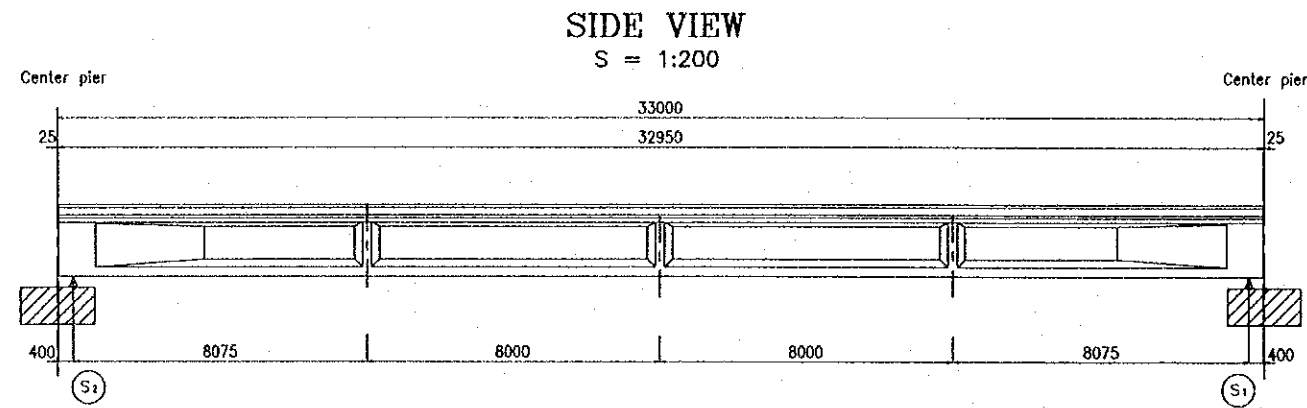


DETAIL OF A
S = 1:50

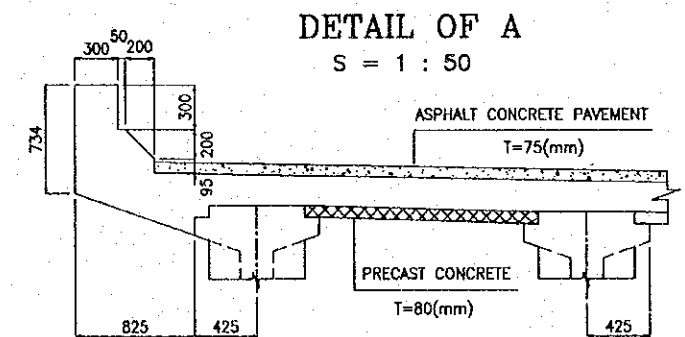
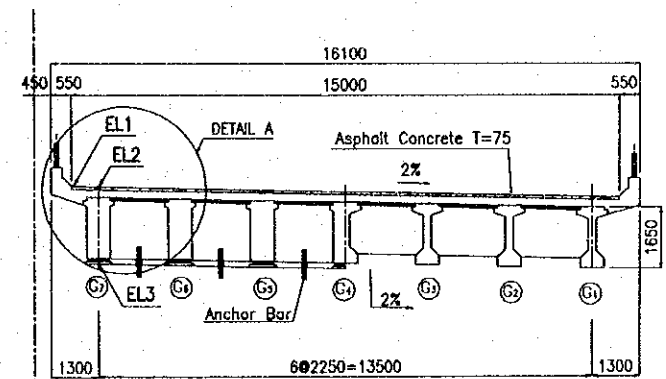
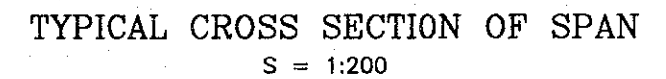
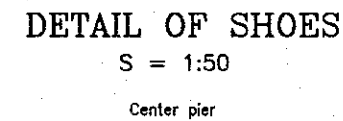


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (TUANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CORPORATION PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.14

PACKAGE 3	SCALE C-1-2b-22	DRAWING No. C-1-2b-22	SHEET No.
DETAIL OF PHAP VAN VIADUCT (21)			



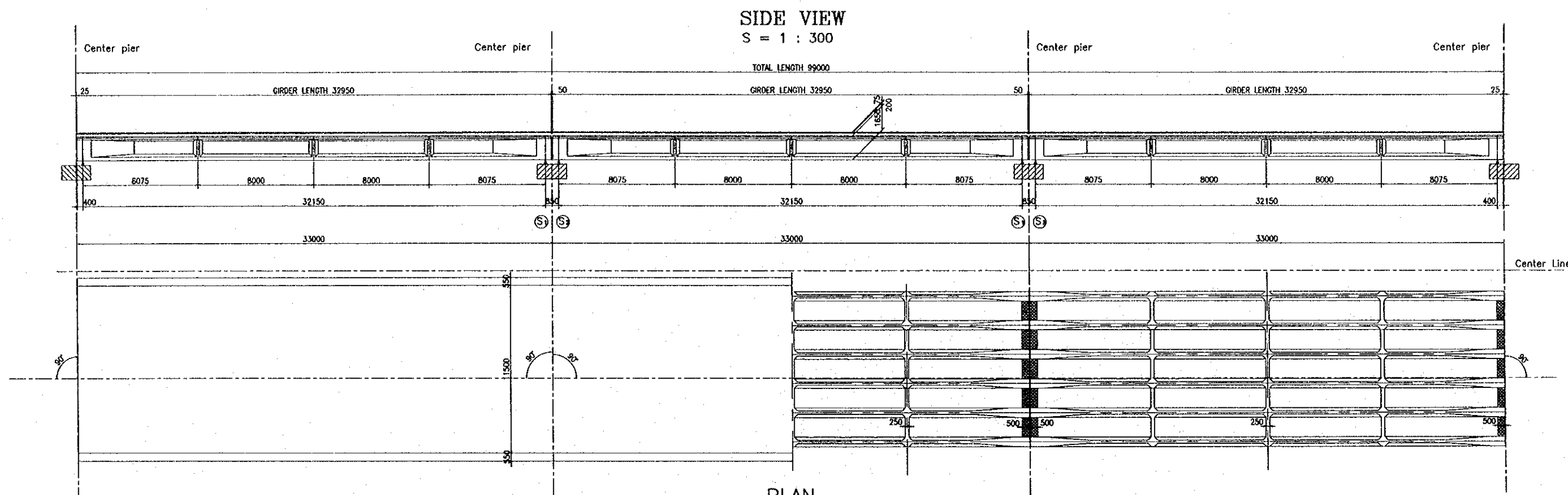
	P16R		P17R		P18R		REMARKS
	S1	S2	S1	S2	S1	S2	
STATION	0+802.5		0+569.5		0+536.5		
SHOES CONDITION	MOVE		FIX		MOVE		
SHOES TYPE	B		A		B		
EL1 (m)	15.560		15.453		15.450		
EL2 (m)	15.546		15.439		15.436		
PAVEMENT (mm)	75						
SLAB (mm)	207						
GIRDER (mm)	1650						
T1 (mm)	20		20		20		
T2 (mm)	54		36		54		
T3 (mm)	20		41		20		
H (mm)	2026		2029		2026		
EL3 (m)	13.521		13.411		13.411		



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NIKITAE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
COMPLETION PACIFIC CONSULTANTS INTERNATIONAL		DATE 2020. 8. 17

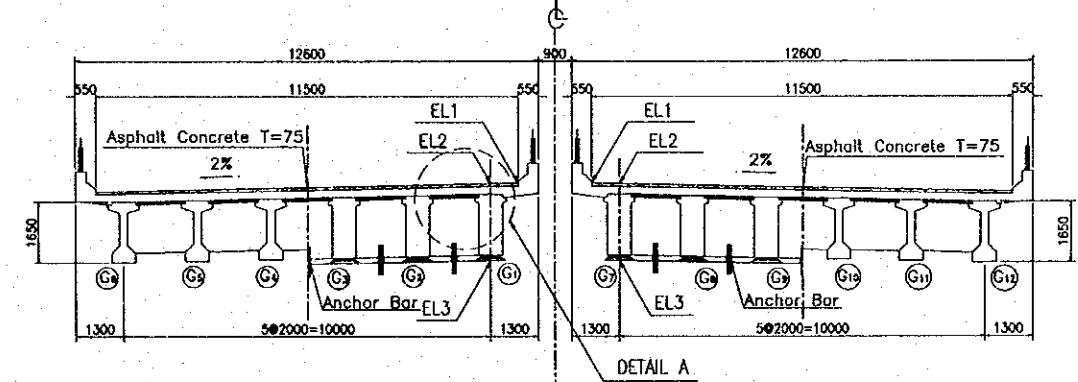
PACKAGE 3	SCALE	DRAWING No. C-1-2b-23	SHEET No.
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DETAIL OF KIM NGUU RIVER BRIDGE (1)

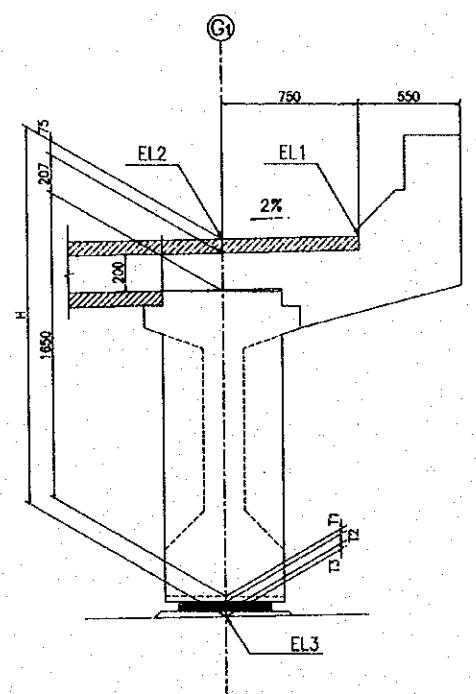


PLAN
S = 1 : 300

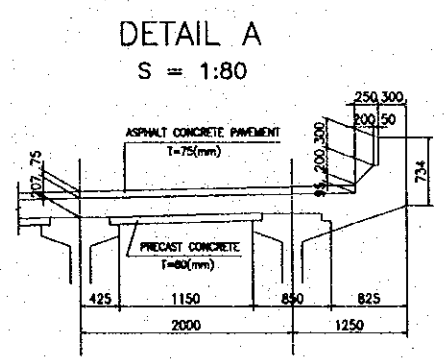
TYPICAL CROSS SECTION OF SPAN
S = 1 : 200



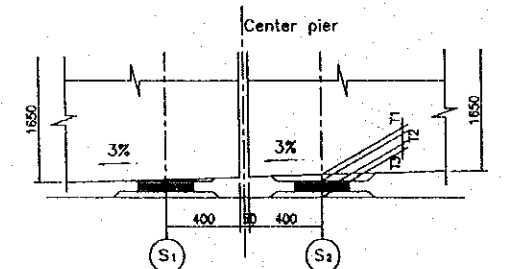
	A1	P1L (P1R)		P2L (P2R)		A2	REMARKS
		S1	S2	S1	S2		
SHOES CONDITION	FIX	MOVE	FIX	MOVE	FIX	MOVE	
SHOES TYPE	A	B	A	B	A	B	
EL1 (m)	9.552	9.680	9.682	9.746	9.747	9.748	
EL2 (m)	9.537	9.665	9.667	9.731	9.732	9.733	
PAVEMENT (mm)	75						
SLAB (mm)	207						
GIRDER (mm)	1650						
T1 (mm)	20	20	20	20	20	20	
T2 (mm)	36	54	36	54	36	54	
T3 (mm)	30	20	40	20	39	30	
H (m)	2.018	2.026	2.028	2.026	2.027	2.036	
EL3 (m)	7.520	7.640	7.640	7.706	7.806	7.698	



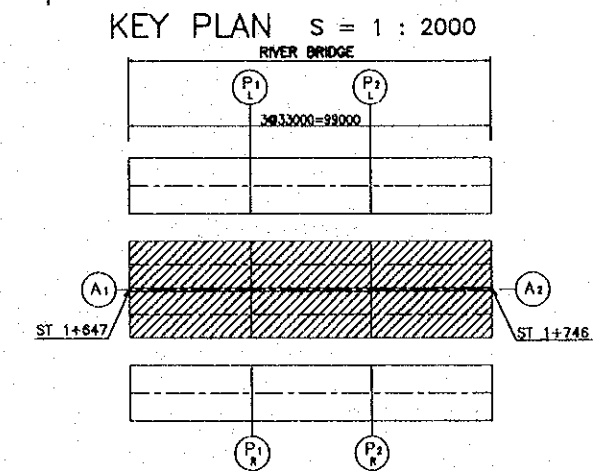
DETAIL G
S = 1 : 40



DETAIL A
S = 1:80



DETAIL OF SHOES
S = 1 : 40



KEY PLAN S = 1 : 2000

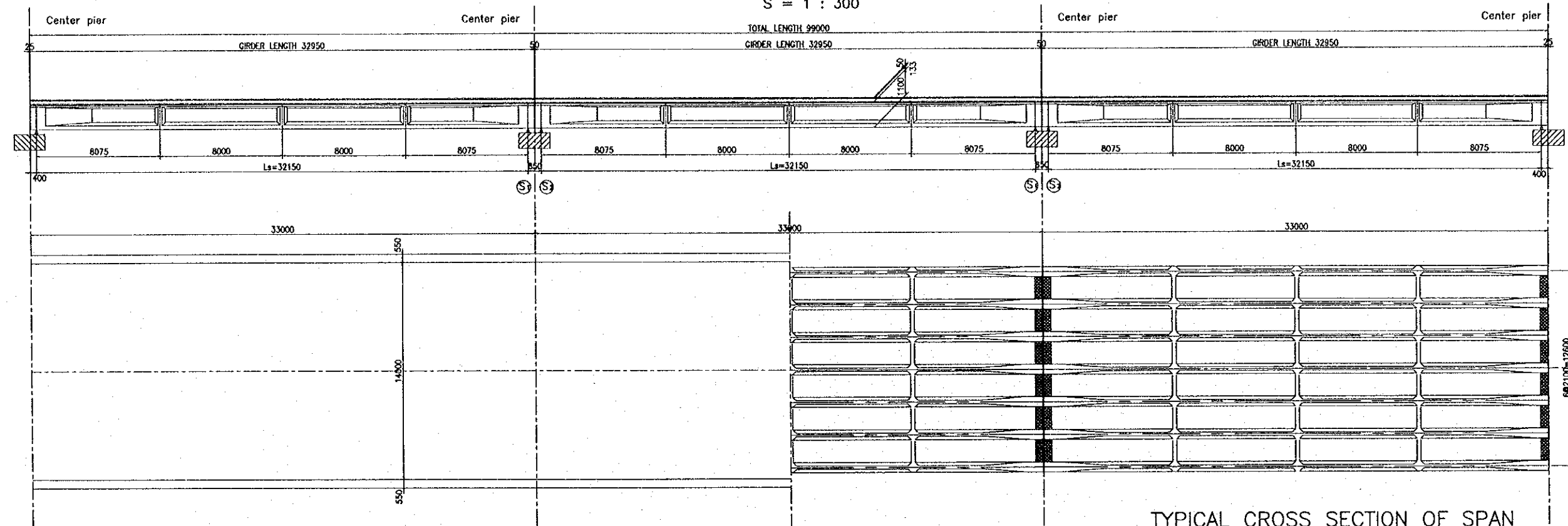
150

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME S. MATSUDA
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.11.19

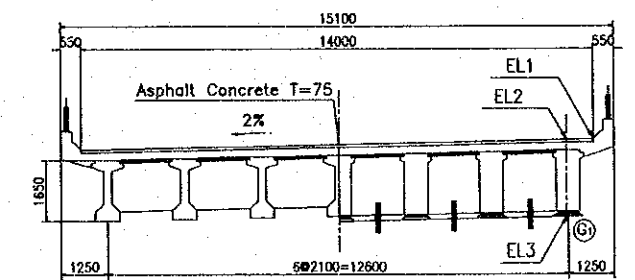
PACKAGE 3	SCALE	DRAWING No. C-1-2b-24	SHEET No.
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DETAIL OF KIM NGUU RIVER BRIDGE (2)

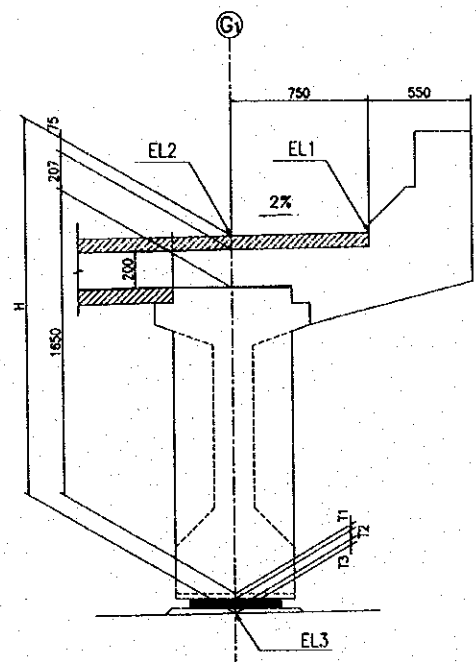
SIDE VIEW
S = 1 : 300



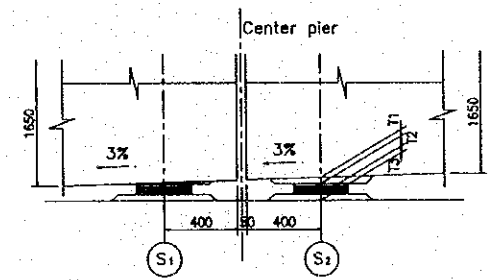
TYPICAL CROSS SECTION OF SPAN
S = 1 : 200



	A1	P1L (P1R)		P2L (P2R)		A1	REMARKS
		S1	S2	S1	S2		
SHOES CONDITION	FIX	MOVE	FIX	MOVE	FIX	MOVE	
SHOES TYPE	A	B	A	B	A	B	
EL1 (m)	11.833	12.797	12.823	13.787	13.813	14.777	
EL2 (m)	11.818	12.782	12.808	13.772	13.798	14.762	
PAVEMENT (mm)	75						
SLAB (mm)	207						
GIRDER (mm)	1650						
T1 (mm)	34	8	34	8	34	8	
T2 (mm)	36	56	36	56	36	56	
T3 (mm)	20	20	40	20	40	20	
H (m)	2.022	2.016	2.042	2.016	2.042	2.016	
EL3 (m)	9.796	10.766	10.766	11.756	11.756	12.746	

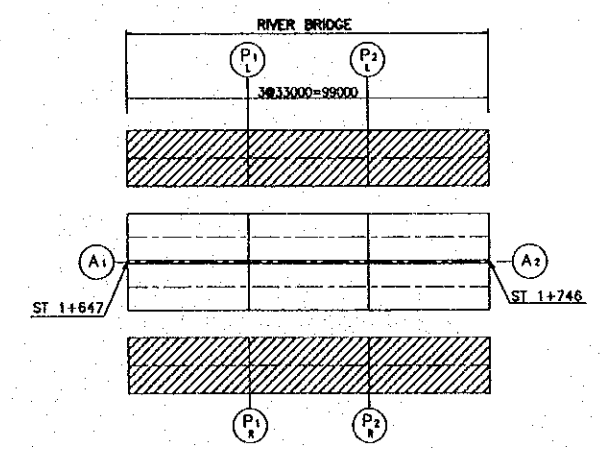


DETAIL G
S = 1 : 40



DETAIL OF SHOES
S = 1 : 40

KEY PLAN
S = 1 : 2000



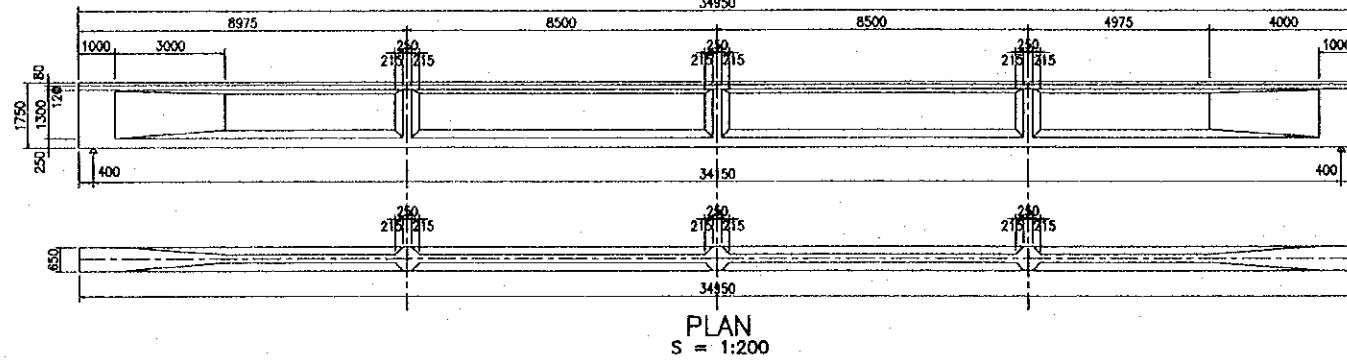
151

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE

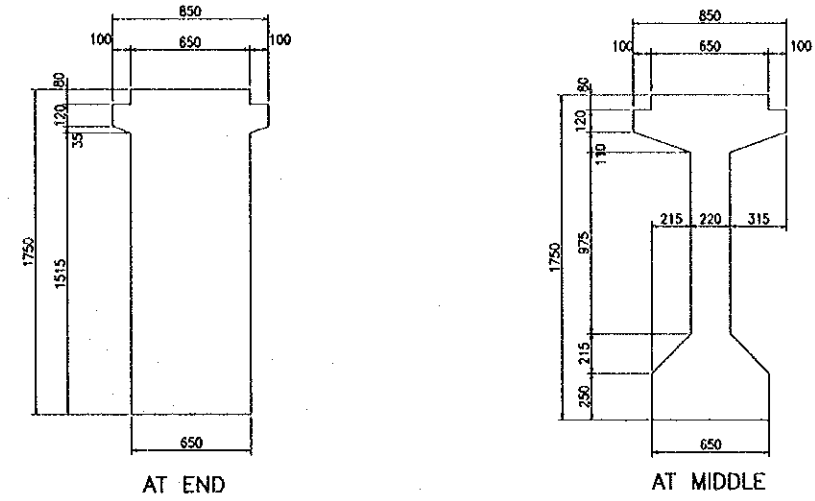
NAME	SIGNATURE	DATE
	<i>[Signature]</i>	2000.3.17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-2b-25	
GENERAL VIEW OF GIRDER			

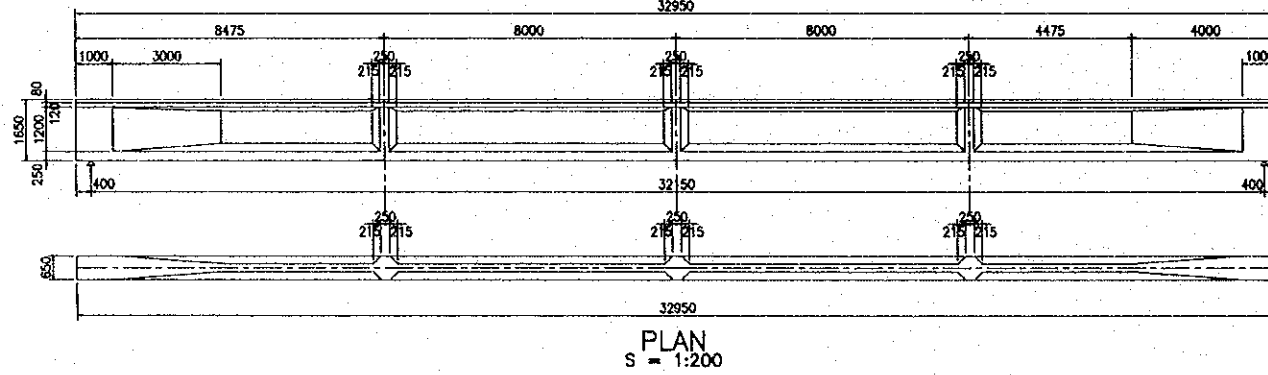
SIDE VIEW (Lg=34.95m)
S = 1:200



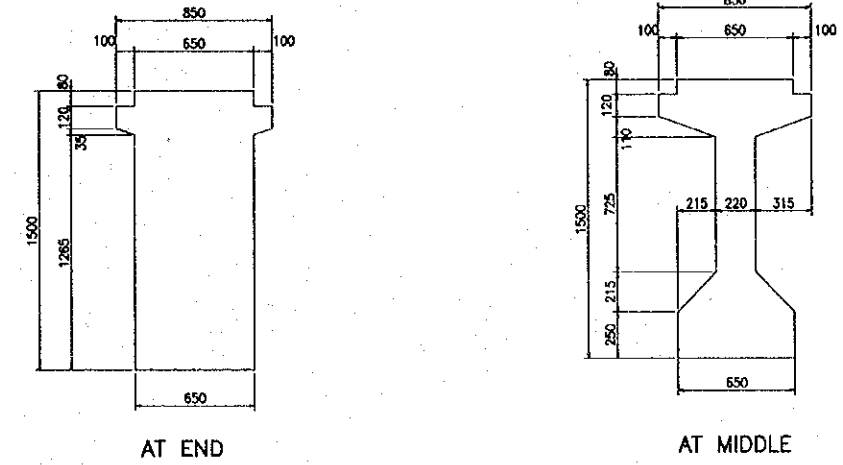
GIRDER CROSS SECTION
(Lg=34.95m) S = 1 : 40



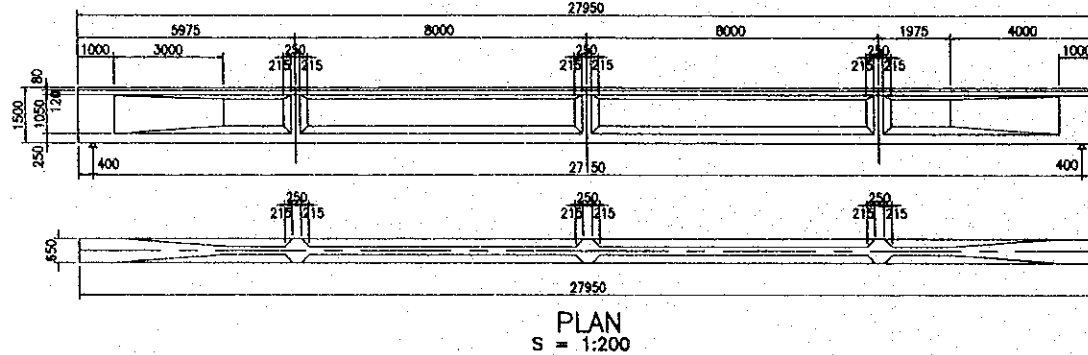
SIDE VIEW (Lg=32.95m)
S = 1:200



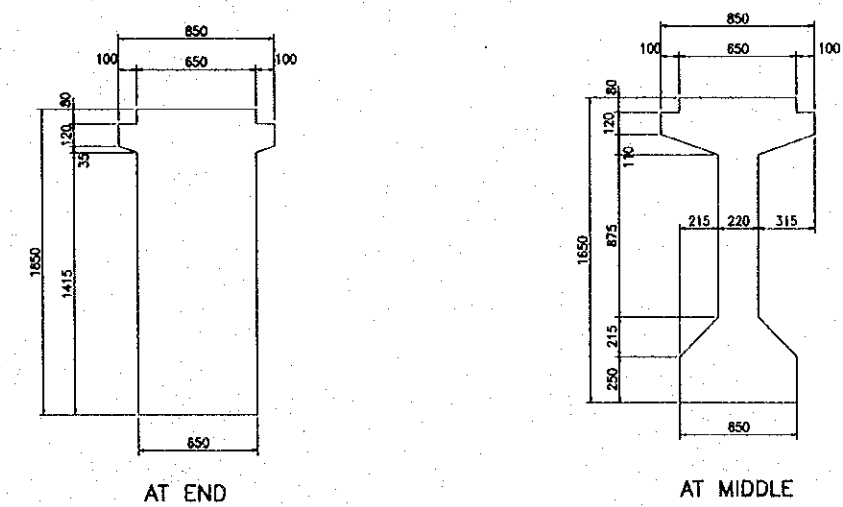
GIRDER CROSS SECTION
(Lg=27.95m) S = 1 : 40



SIDE VIEW (Lg=27.95m)
S = 1:200



GIRDER CROSS SECTION
(Lg=32.95m) S = 1 : 40



157

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. MATSUDA
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000. 11. 17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

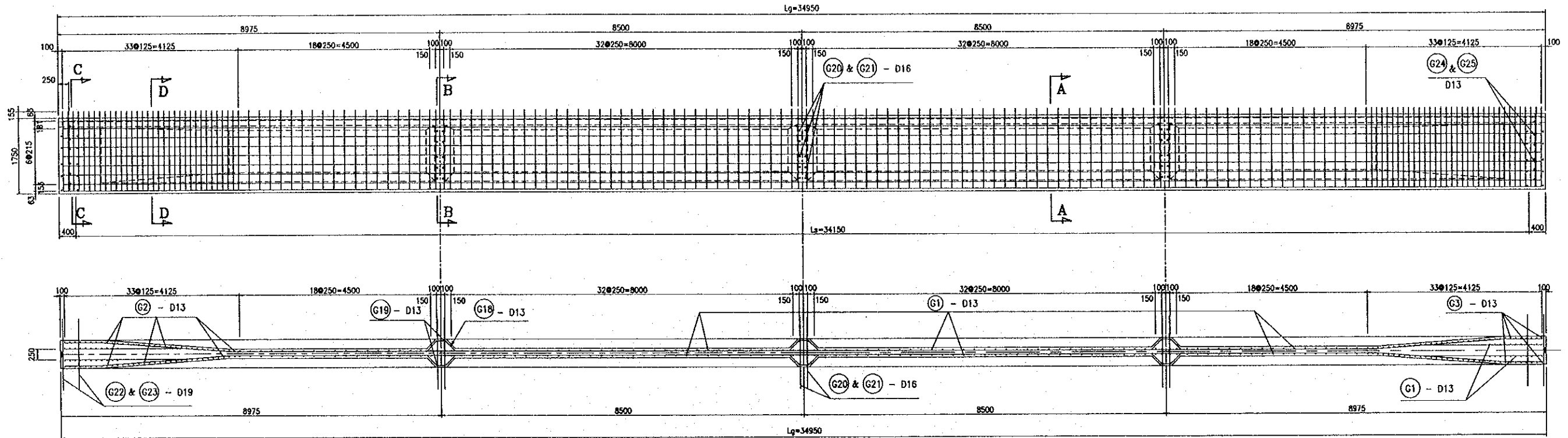
PACKAGE 3	SCALE C-1-2b-26	DRAWING No. C-1-2b-26	SHEET No.
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RE-BAR ARRANGEMENT OF GIRDER (1)

Lg = 34.950 (m)

SIDE VIEW

S = 1 : 100

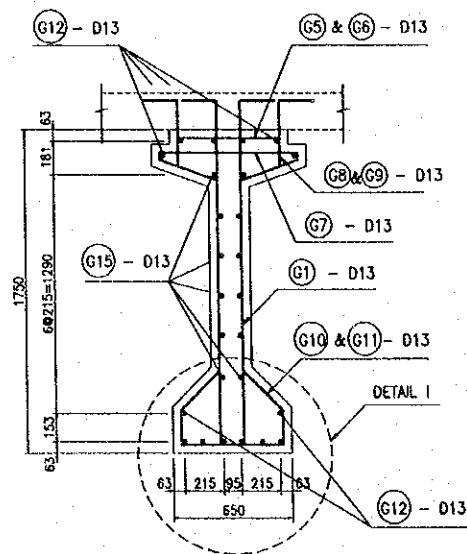


PLAN

S = 1 : 100

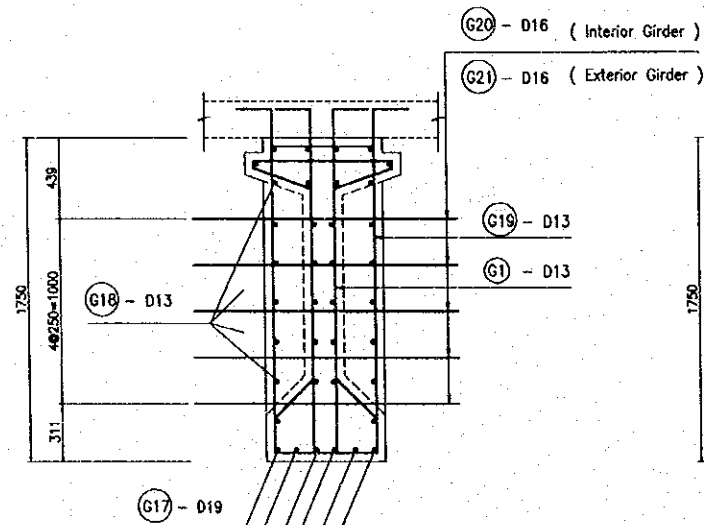
SECTION A-A

S = 1 : 40



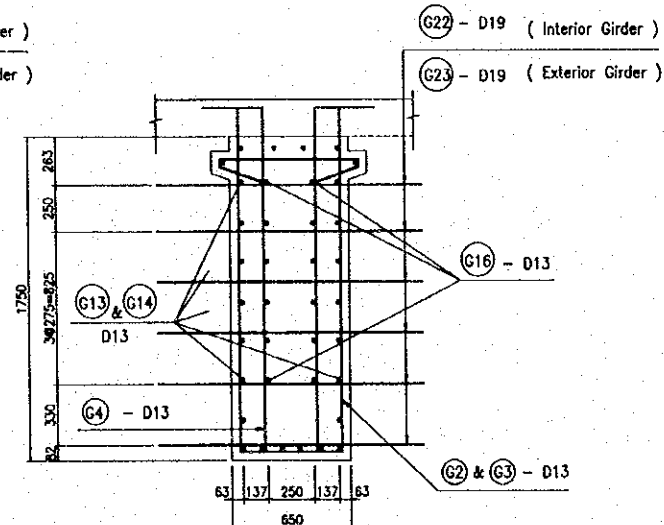
SECTION B-B

S = 1 : 40



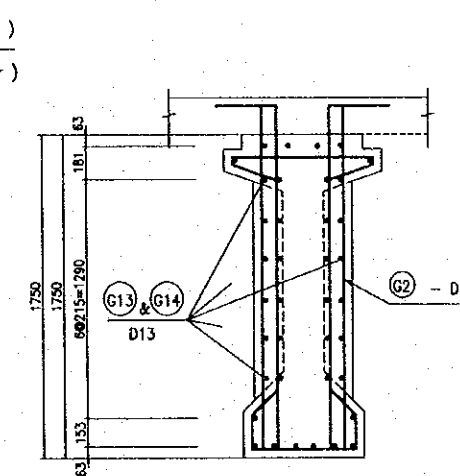
SECTION C-C

S = 1 : 40



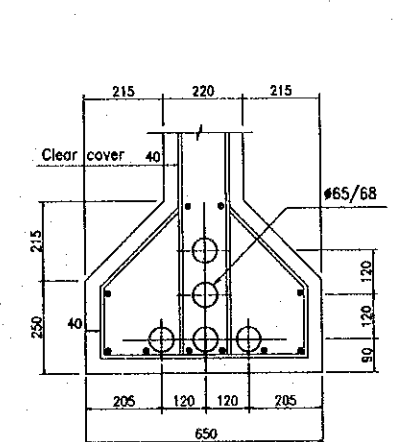
SECTION D-D

S = 1 : 40



DETAIL I

S = 1 : 20

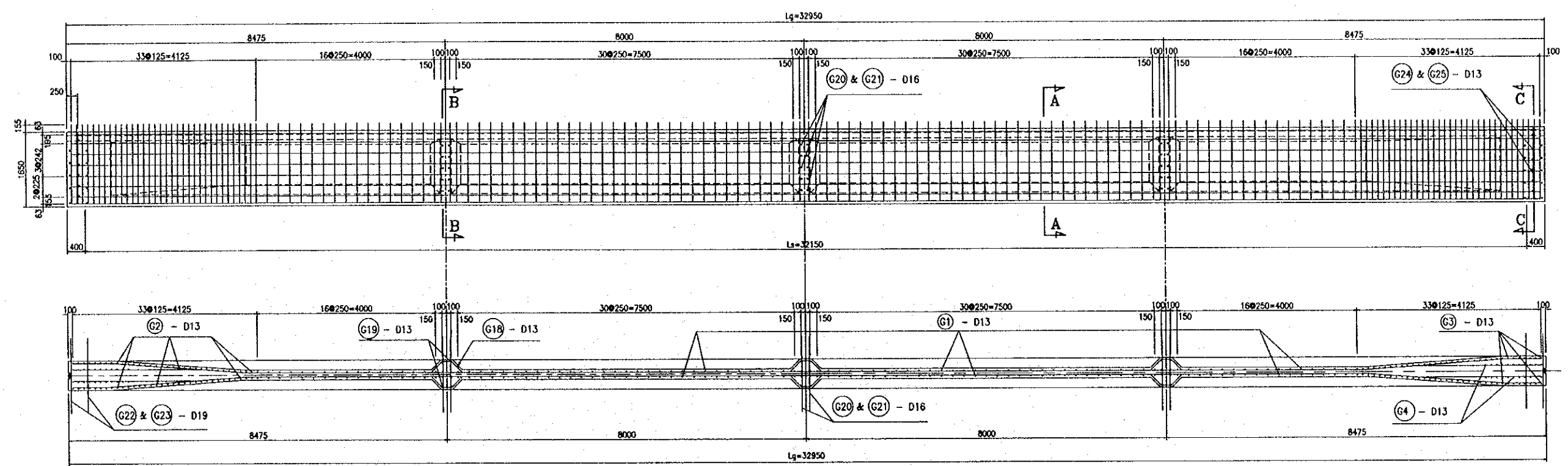


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i>
DATE 2000.3.19		

PACKAGE 3	SCALE	DRAWING No. C-1-2b-27	SHEET No.
RE-BAR ARRANGEMENT OF GIRDER (2)			

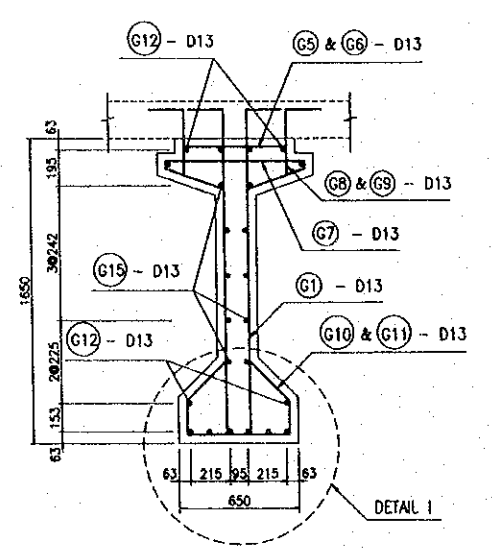
Lg = 32.950 (m)

SIDE VIEW
S = 1 : 100

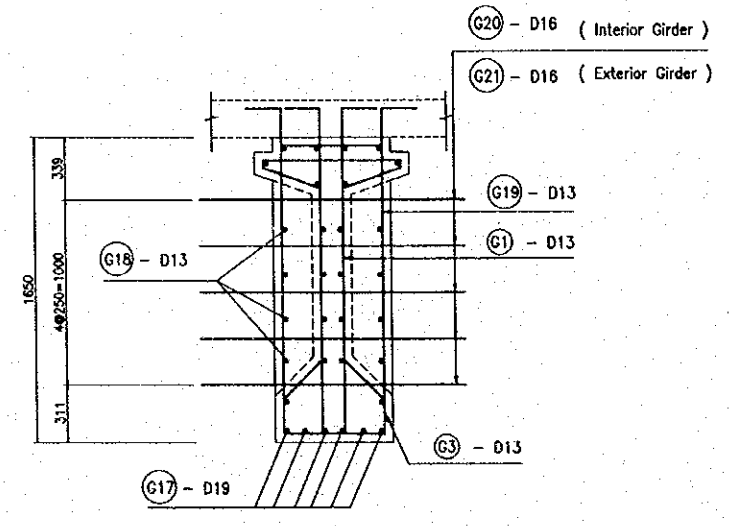


PLAN
S = 1 : 100

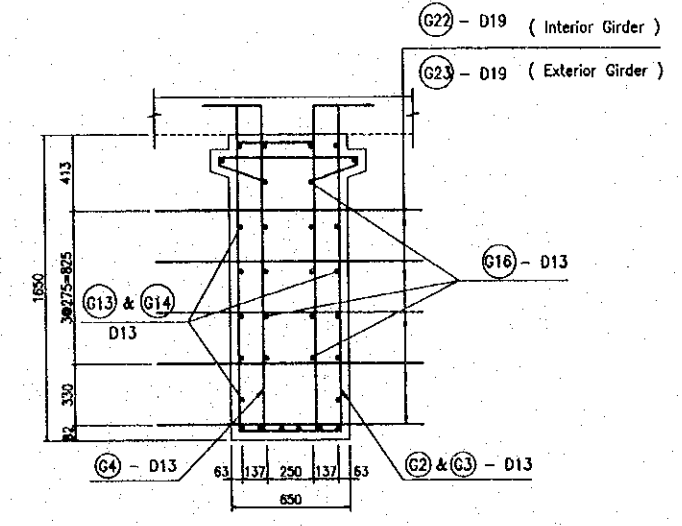
SECTION A-A
S = 1 : 40



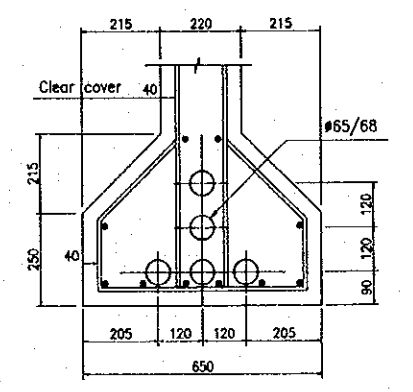
SECTION B-B
S = 1 : 40



SECTION C-C
S = 1 : 40



DETAIL I
S = 1 : 20



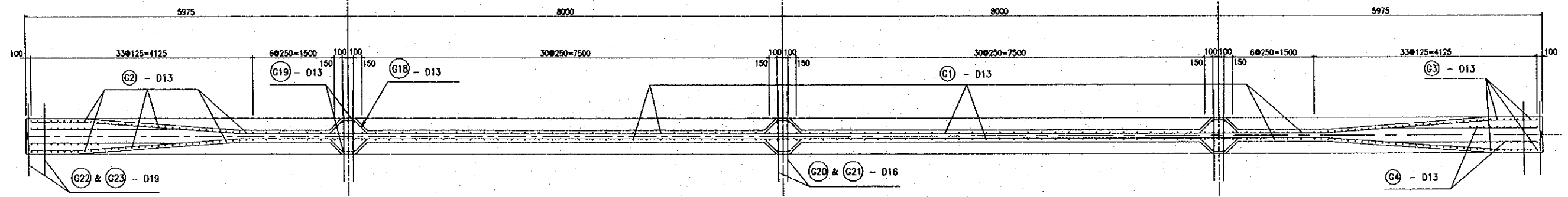
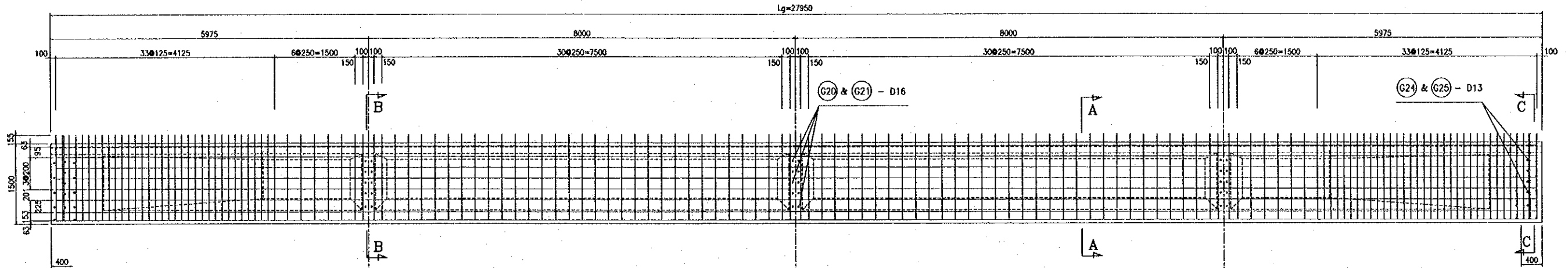
154

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATADA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2007.03.14

PACKAGE 3	SCALE	DRAWING No. C-1-2b-28	SHEET No.
RE-BAR ARRANGEMENT OF GIRDER (3)			

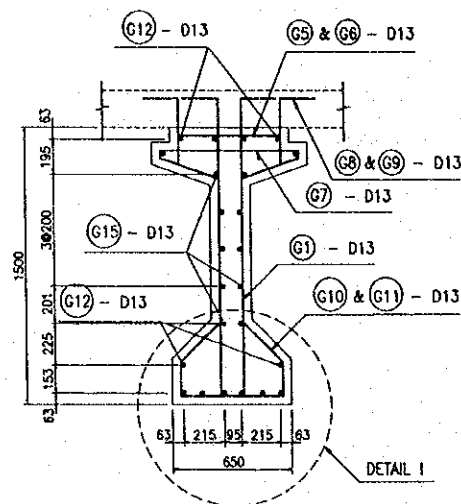
Lg = 27.950 (m) Hg = 1.50 (m)

SIDE VIEW
S = 1 : 80

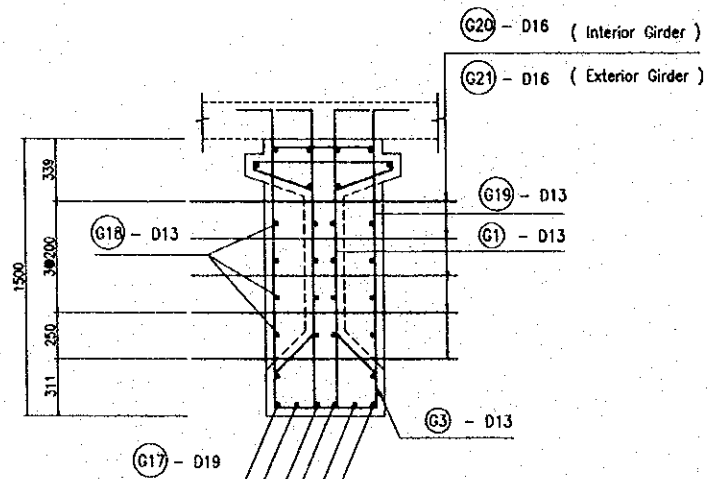


PLAN
S = 1 : 80

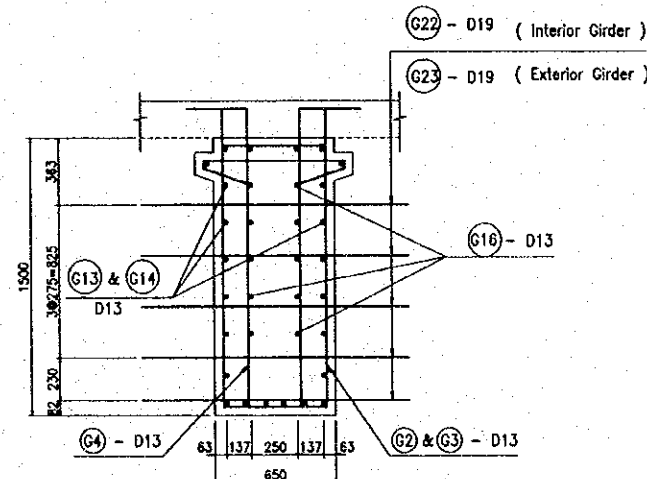
SECTION A-A
S = 1 : 40



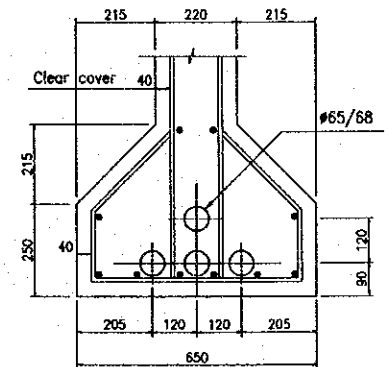
SECTION B-B
S = 1 : 40



SECTION C-C
S = 1 : 40



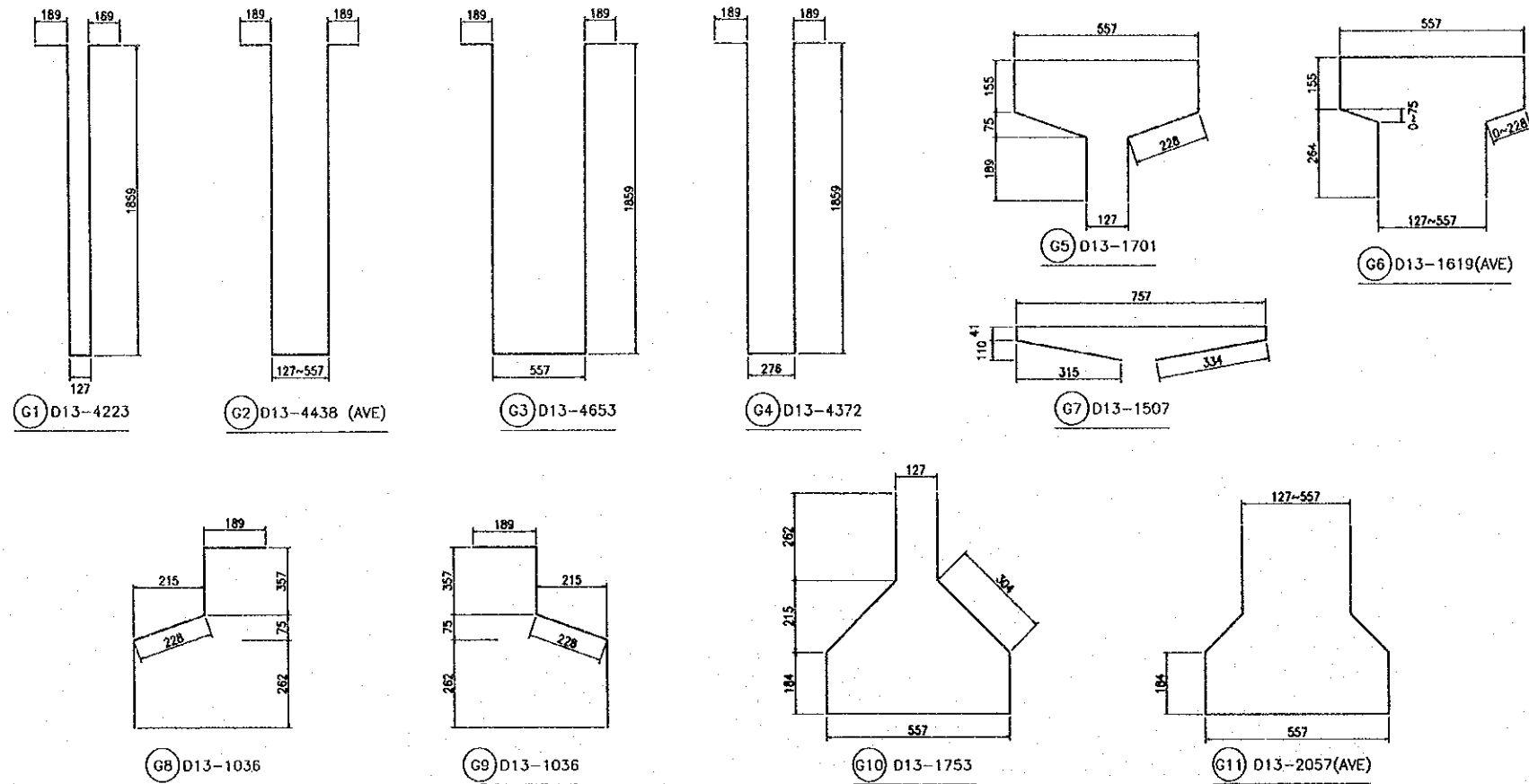
DETAIL I
S = 1 : 20



150

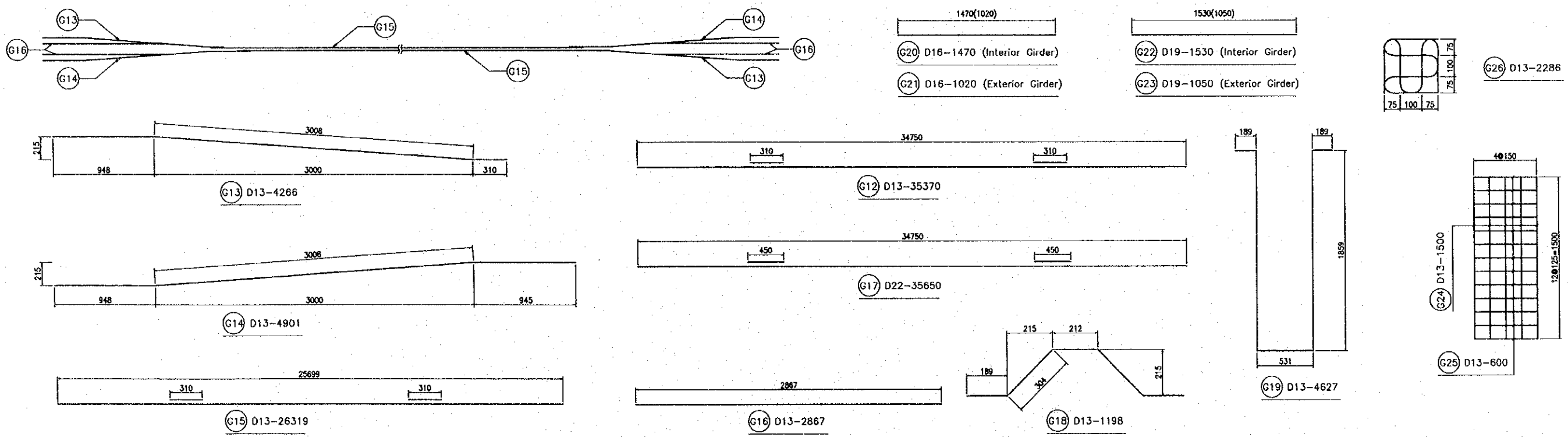
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY NAME S. MATSUDA
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.17

PACKAGE 3	SCALE	DRAWING No. C-1-2b-29	SHEET No.
RE-BAR BENDING SCHEDULE OF GIRDER (1)			



BAR LIST						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
G1	D13	4223	112	0.995	470.6	
G2	D13	4438	48	0.995	212	AVERAGE
G3	D13	4653	16	0.995	74.1	
G4	D13	4372	22	0.995	95.7	
G5	D13	1701	112	0.995	189.6	
G6	D13	1619	48	0.995	77.3	AVERAGE
G7	D13	1507	176	0.995	263.9	
G8	D13	1036	154	0.995	158.7	
G9	D13	1036	154	0.995	158.7	
G10	D13	2057	112	0.995	229.2	
G11	D13	1753	48	0.995	83.7	AVERAGE
G12	D13	35370	8	0.995	281.5	
G13	D13	4266	12	0.995	50.9	
G14	D13	4901	12	0.995	58.5	
G15	D13	26319	12	0.995	314.2	
G16	D13	2867	24	0.995	68.5	
G17	D22	35650	6	3.040	650.3	
G18	D13	1198	30	0.995	35.8	
G19	D13	4627	6	0.995	27.6	
G20	D16	1470	30	1.560	68.8	INTERIOR GIRDER
G21	D16	1020	30	1.560	47.7	EXTERIOR GIRDER
G22	D19	1530	24	2.250	82.6	INTERIOR GIRDER
G23	D19	1050	24	2.250	56.7	EXTERIOR GIRDER
G24	D13	1500	10	0.995	14.9	
G25	D13	600	26	0.995	15.5	
G26	D13	2286	10	0.995	22.7	
TOTAL			3705.3		(3684.2)	
D13			2903.8		(2903.8)	
D16			68.8		(47.7)	
D19			82.6		(82.6)	
D22			650.3		(650.3)	

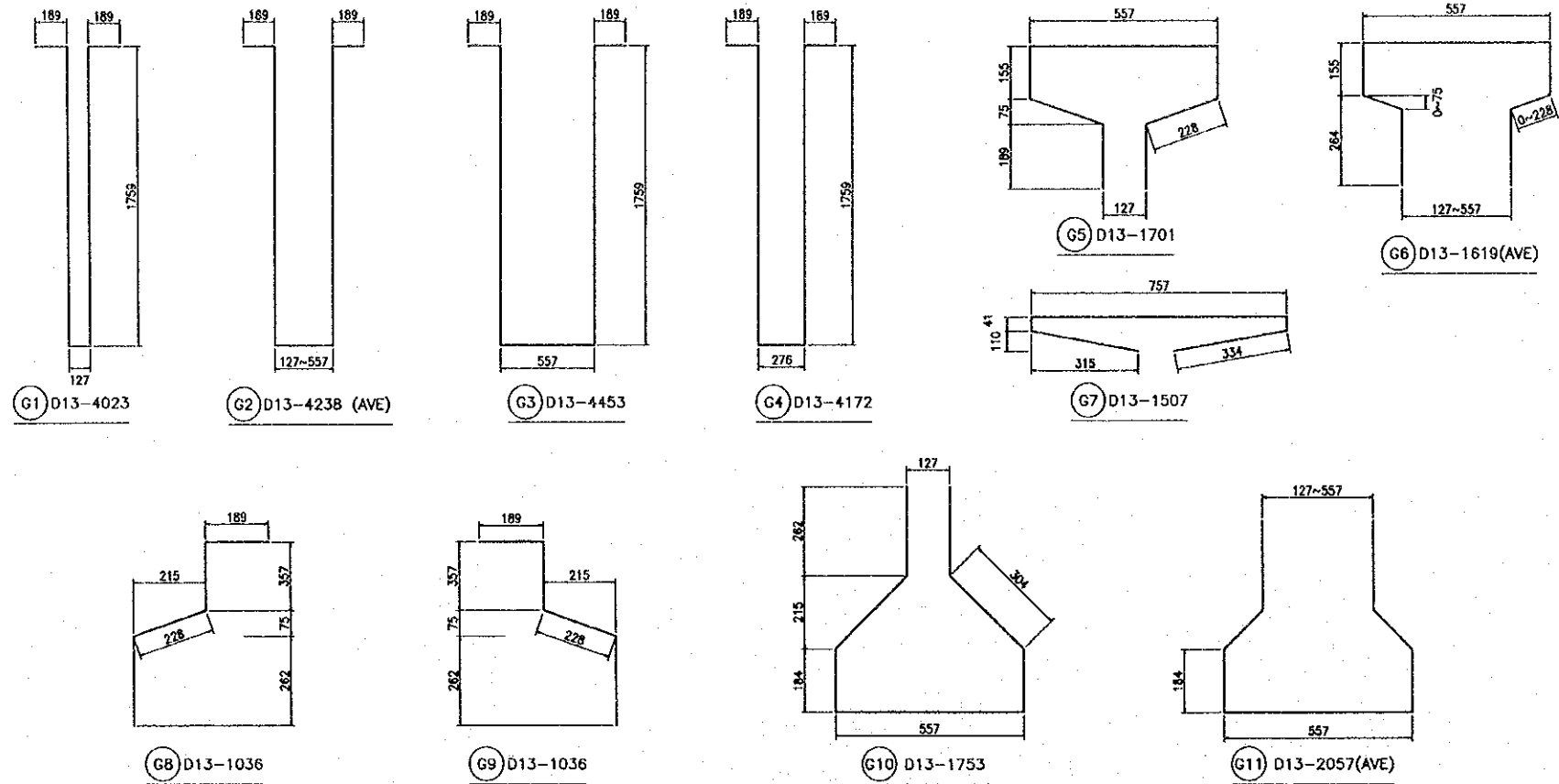
THE VALUE OF INSIDE () ARE FOR EXTERIOR GIRDER



156

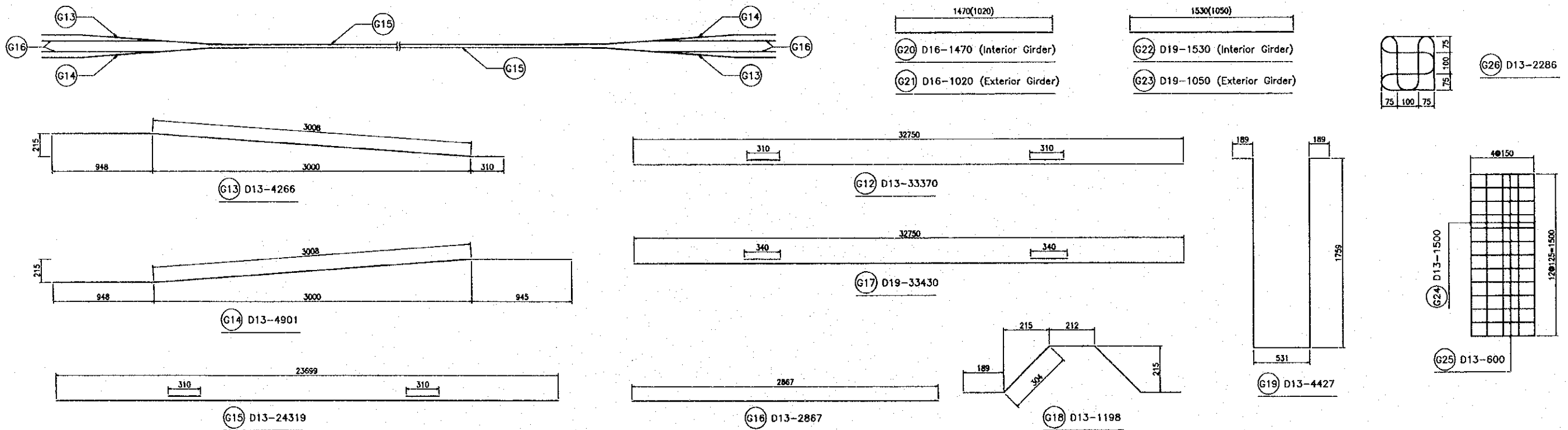
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE 	
CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.11.14	

PACKAGE 3	SCALE C-1-2b-30	DRAWING No. C-1-2b-30	SHEET No. RE-BAR BENDING SCHEDULE OF GIRDER (2)
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BAR LIST						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
G1	D13	4023	104	0.995	416.3	
G2	D13	4238	48	0.995	202.4	AVERAGE
G3	D13	4453	16	0.995	70.9	
G4	D13	4172	22	0.995	91.3	
G5	D13	1701	104	0.995	176	
G6	D13	1619	48	0.995	77.3	AVERAGE
G7	D13	1507	168	0.995	251.9	
G8	D13	1036	146	0.995	150.5	
G9	D13	1036	146	0.995	150.5	
G10	D13	2057	104	0.995	212.9	
G11	D13	1753	48	0.995	83.7	AVERAGE
G12	D13	33370	8	0.995	265.6	
G13	D13	4266	10	0.995	42.4	
G14	D13	4901	10	0.995	48.8	
G15	D13	24319	10	0.995	242	
G16	D13	2867	20	0.995	57.1	
G17	D19	33430	6	2.250	451.3	
G18	D13	1198	24	0.995	28.6	
G19	D13	4427	6	0.995	26.4	
G20	D16	1470	30	1.560	68.8	INTERIOR GIRDER
G21	D16	1020	30	1.560	47.7	EXTERIOR GIRDER
G22	D19	1530	20	2.250	68.9	INTERIOR GIRDER
G23	D19	1050	20	2.250	47.3	EXTERIOR GIRDER
G24	D13	1500	10	0.995	14.9	
G25	D13	600	26	0.995	15.5	
G26	D13	2286	10	0.995	22.7	
TOTAL			3236.7		(3194.0)	
D13			2647.7		(2647.7)	
D16			68.8		(47.7)	
D19			520.2		(498.6)	

THE VALUE OF INSIDE () ARE FOR EXTERIOR GIRDER

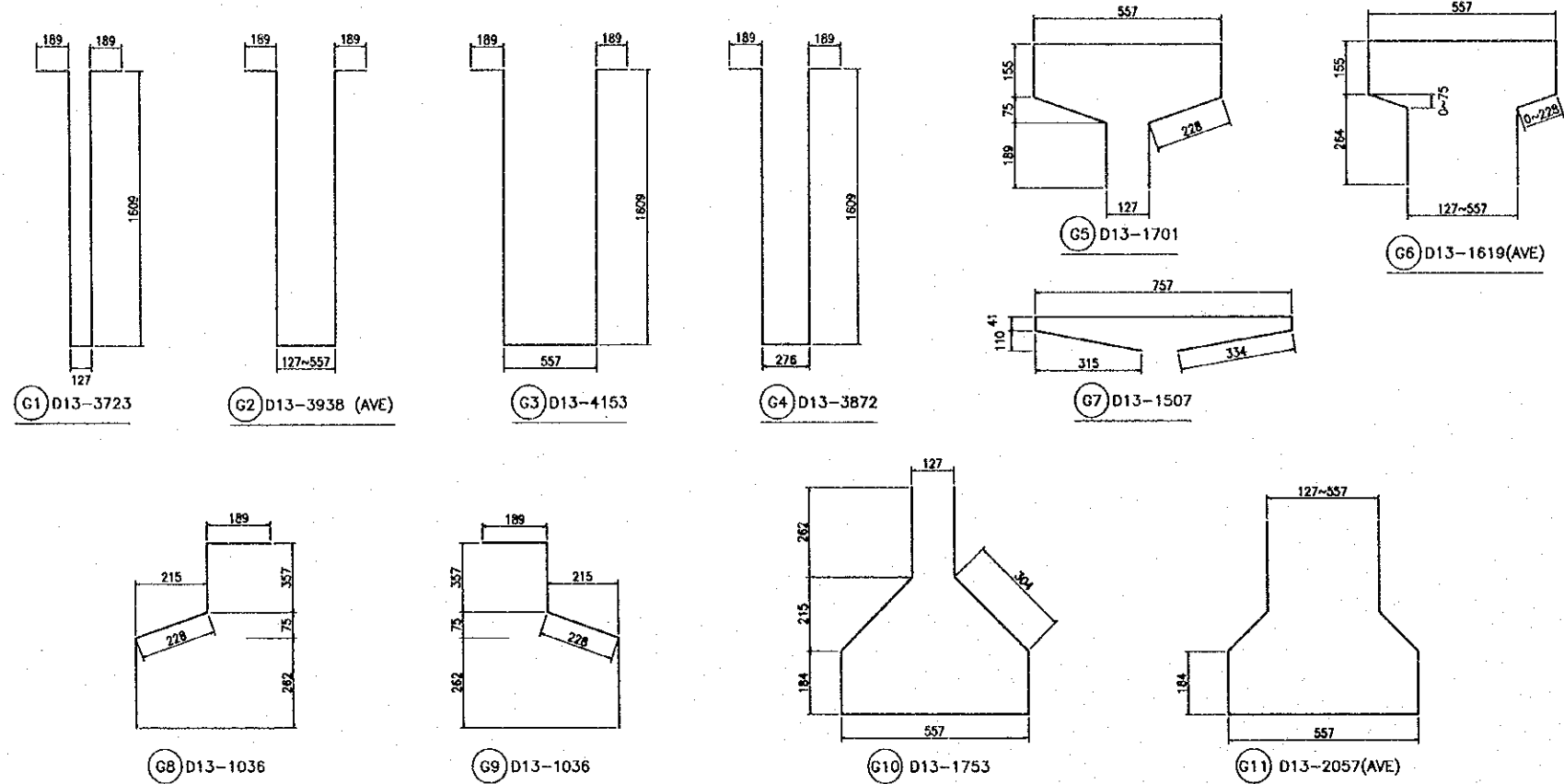


157

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE

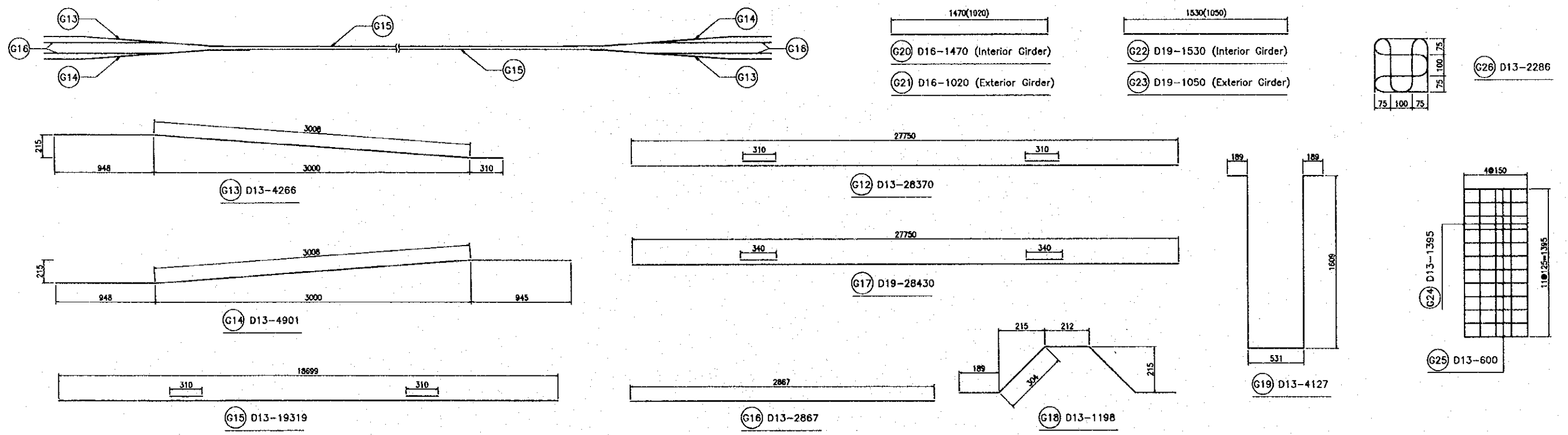
PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-2b-31	
RE-BAR BENDING SCHEDULE OF GIRDER (3)			

(H = 1.50 m)



BAR LIST						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
G1	D13	3723	84	0.995	311.2	
G2	D13	3938	48	0.995	188.1	AVERAGE
G3	D13	4153	16	0.995	66.1	
G4	D13	3872	22	0.995	84.8	
G5	D13	1701	84	0.995	142.2	
G6	D13	1619	48	0.995	77.3	AVERAGE
G7	D13	1507	148	0.995	221.9	
G8	D13	1036	126	0.995	129.9	
G9	D13	1036	126	0.995	129.9	
G10	D13	2057	84	0.995	171.9	
G11	D13	1753	48	0.995	83.7	AVERAGE
G12	D13	28370	8	0.995	225.8	
G13	D13	4266	10	0.995	42.4	
G14	D13	4901	10	0.995	48.8	
G15	D13	19319	10	0.995	192.2	
G16	D13	2867	20	0.995	57.1	
G17	D19	28430	6	2.250	383.8	
G18	D13	1198	24	0.995	28.6	
G19	D13	4127	6	0.995	24.6	
G20	D16	1470	30	1.560	68.8	INTERIOR GIRDER
G21	D16	1020	30	1.560	47.7	EXTERIOR GIRDER
G22	D19	1530	20	2.250	68.9	INTERIOR GIRDER
G23	D19	1050	20	2.250	47.3	EXTERIOR GIRDER
G24	D13	1500	10	0.995	13.7	
G25	D13	600	24	0.995	14.3	
G26	D13	2286	8	0.995	18.2	
TOTAL			2794.2		(2751.5)	
D13			2272.7		(2272.7)	
D16			68.8		(47.7)	
D19			452.7		(431.1)	

THE VALUE OF INSIDE () ARE FOR EXTERIOR GIRDER

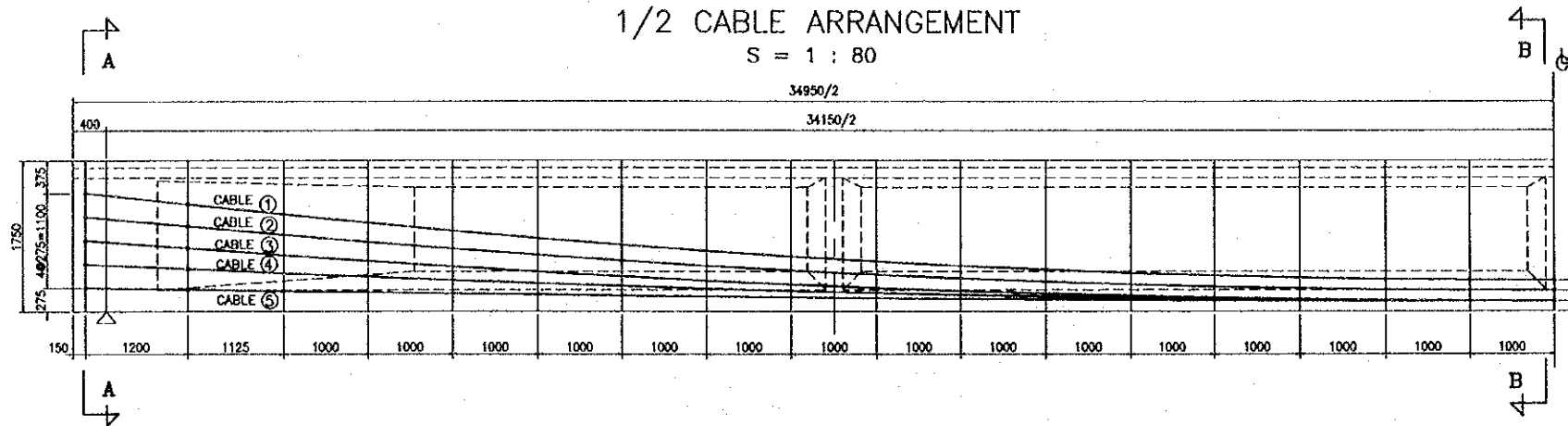


153

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE
COMPAISRE	PACIFIC CONSULTANTS INTERNATIONAL	2000. 3. 17

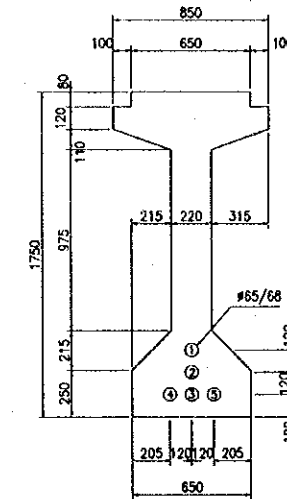
PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-2b-32	
PC CABLE ARRANGEMENT OF GIRDER (1)			

Lg = 34.950 (m)



GIRDER CROSS SECTION

S = 1 : 40



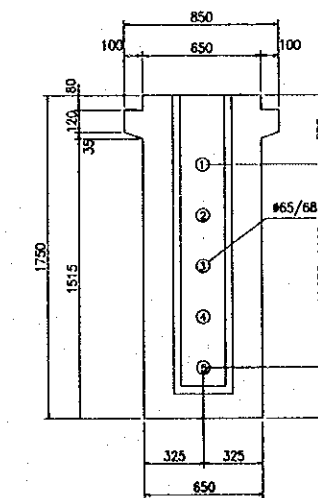
AT MIDDLE

POSITION OF CABLE CENTER FROM GIRDER BOTTOM

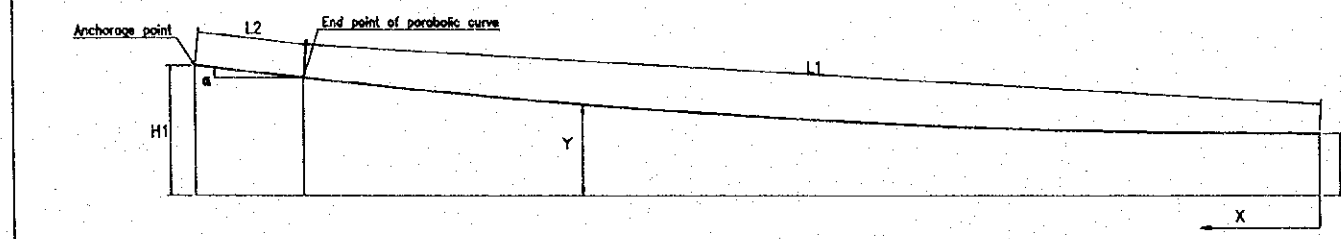
L	17325	16125	15000	14000	13000	12000	11000	10000	9000	8000	7000	6000	5000	4000	3000	2000	1000	000
CABLE ①	1375	1244	1127	1028	936	851	773	701	636	578	527	483	445	415	391	374	363	360
CABLE ②	1100	989	890	806	728	656	590	529	474	425	382	344	312	286	266	252	243	240
CABLE ③	825	734	653	585	521	461	407	357	312	272	236	205	179	158	141	129	122	120
CABLE ④	550	493	444	402	363	327	294	264	237	212	191	172	156	143	133	126	121	120
CABLE ⑤	275	255	237	222	208	195	183	172	162	153	145	139	133	128	125	122	121	120

CABLE LENGTH AND ELEVATION

PC CABLE 12S 12.7B								(UNIT : m)
CABLE No	H1	H2	α	Y	L1	L2	$2 \times \sum L$	
①	1.375	0.360	6.26200	$0.00341 \cdot X^2 + H2$	16.132	1.207	34.678	
②	1.100	0.240	5.31169	$0.00289 \cdot X^2 + H2$	16.123	1.205	34.656	
③	0.825	0.120	4.35844	$0.00237 \cdot X^2 + H2$	16.116	1.203	34.638	
④	0.550	0.120	2.66156	$0.00144 \cdot X^2 + H2$	16.106	1.201	34.614	
⑤	0.275	0.120	0.96000	$0.00052 \cdot X^2 + H2$	16.101	1.200	34.602	
							$\Sigma = 173.188$	
WEIGHT 173.188 m x 9.288 kg/m = 1608.57kg								



AT END



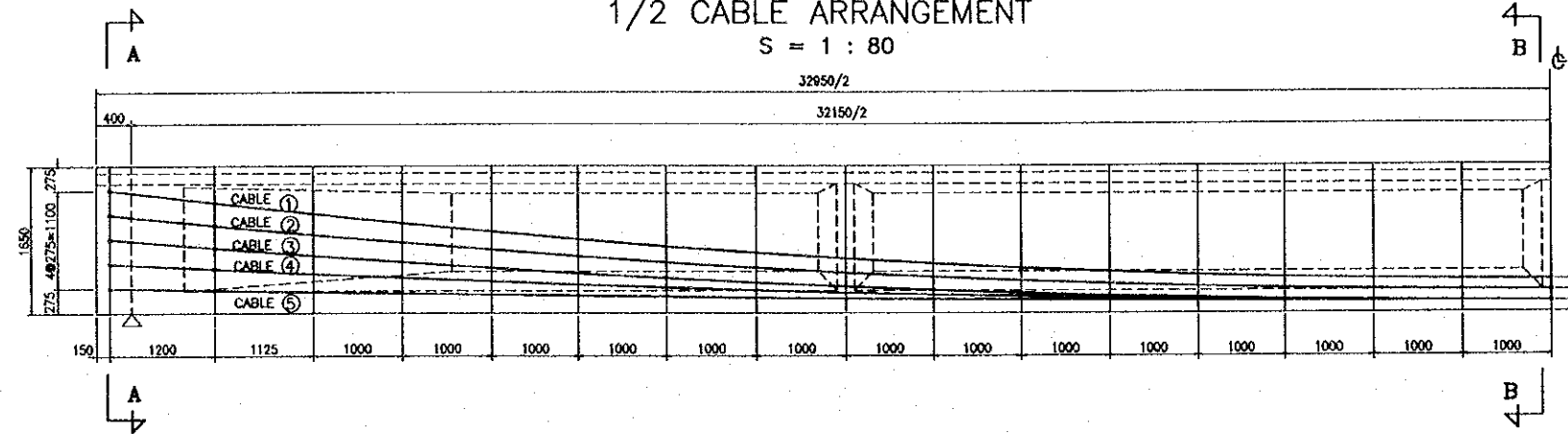
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NAITAKE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE 2000. 5. 14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-2b-33	SHEET No.
PC CABLE ARRANGEMENT OF GIRDER (2)			

Lg = 32.950 (m)

1/2 CABLE ARRANGEMENT

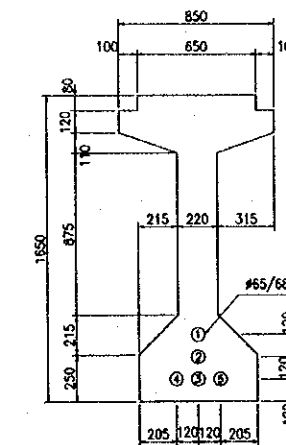
S = 1 : 80



POSITION OF CABLE CENTER FROM GIRDER BOTTOM

L	16325	15125	14000	13000	12000	11000	10000	9000	8000	7000	6000	5000	4000	3000	2000	1000	000
CABLE ①	1375	1236	1113	1009	913	825	744	671	606	548	498	456	421	395	375	364	360
CABLE ②	1100	981	877	789	708	633	565	503	448	399	357	321	292	269	253	243	240
CABLE ③	825	729	643	571	504	443	387	336	291	251	216	187	163	144	131	123	120
CABLE ④	550	492	439	395	355	317	283	252	224	200	179	161	146	135	127	122	120
CABLE ⑤	275	255	236	220	205	191	179	168	158	149	141	135	129	125	122	121	120

GIRDER CROSS SECTION



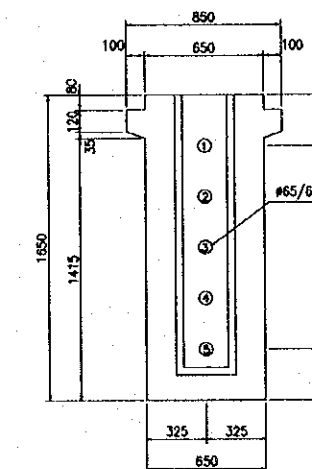
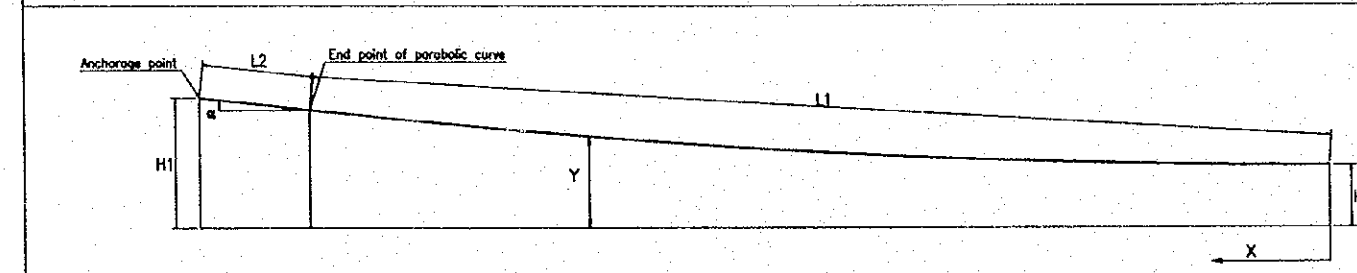
SECTION B-B
S = 1 : 40

CABLE LENGTH AND ELEVATION

PC CABLE 12S 12.7B (UNIT : m)							
CABLE No	H1	H2	α	Y	L1	L2	$2 \times \Sigma L$
①	1.375	0.360	6.61674	$0.00384 \cdot X^2 + H2$	15.134	1.208	32.684
②	1.100	0.240	5.61333	$0.00325 \cdot X^2 + H2$	15.124	1.206	32.660
③	0.825	0.120	4.60645	$0.00267 \cdot X^2 + H2$	15.116	1.204	32.640
④	0.550	0.120	2.81341	$0.00163 \cdot X^2 + H2$	15.106	1.201	32.614
⑤	0.275	0.120	1.01485	$0.00059 \cdot X^2 + H2$	15.101	1.200	32.602

$\Sigma = 163.200$

WEIGHT 163.200 m x 9.288 kg/m = 1515.802 kg

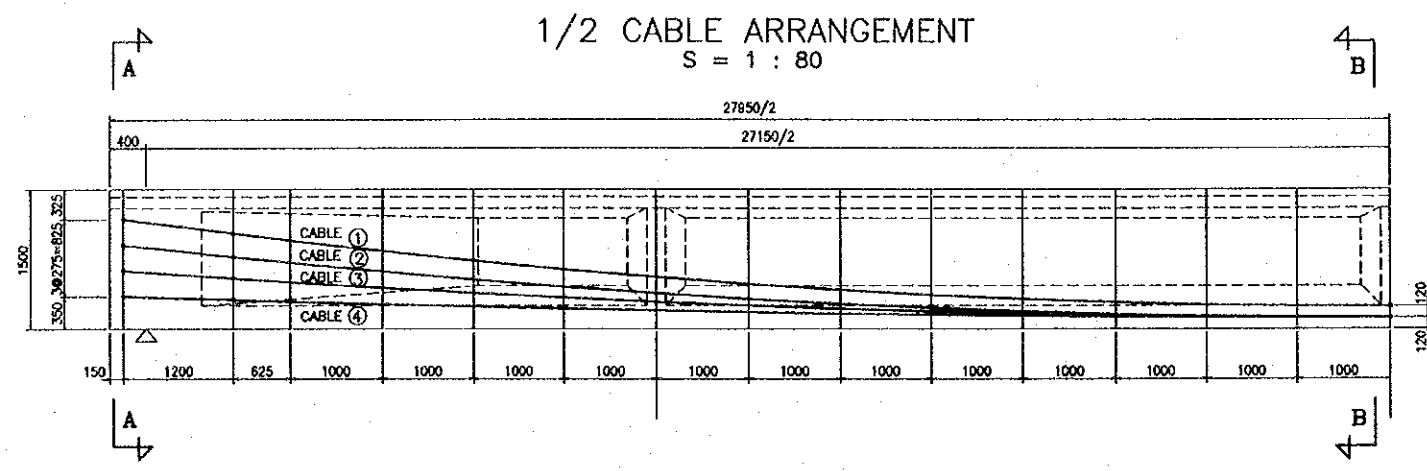


SECTION A-A
S = 1 : 40

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY NAME S.WATARE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2010. 3. 19
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	

PACKAGE 3	SCALE	DRAWING No. C-1-2b-34	SHEET No.
PC CABLE ARRANGEMENT OF GIRDER (3)			

Lg = 27.950 (m) H=1.500(m)

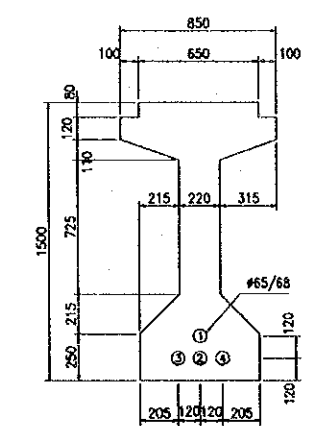


POSITION OF CABLE CENTER FROM GIRDER BOTTOM

L	13825	12625	12000	11000	10000	9000	8000	7000	6000	5000	4000	3000	2000	1000	000
CABLE ①	1175	1026	950	837	733	639	556	482	417	363	319	284	260	245	240
CABLE ②	900	775	712	617	531	453	383	321	268	223	186	157	136	124	120
CABLE ③	625	544	503	442	386	335	290	250	216	187	163	144	131	123	120
CABLE ④	350	313	294	266	241	218	197	179	164	150	139	131	125	121	120

TYPICAL CROSS SECTION

S = 1 : 40

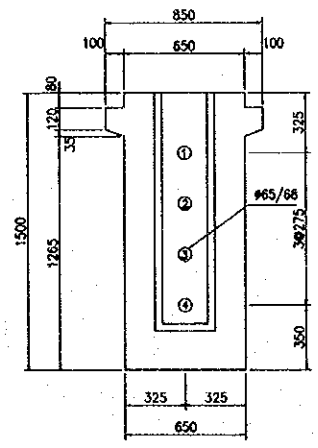
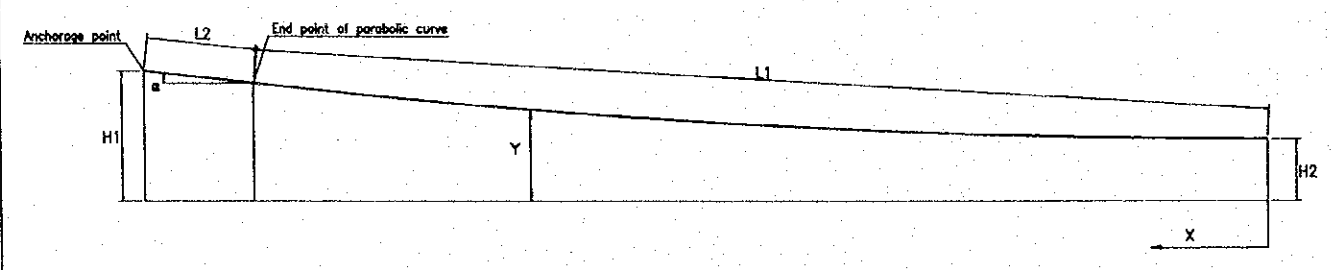


SECTION B-B

CABLE LENGTH AND ELEVATION

PC CABLE 12S 12.7B								(UNIT : m)
CABLE No	H1	H2	α	Y	L1	L2	$2x \Sigma L$	
①	1.175	0.240	7.09451	$0.00493 \cdot X^2 + H2$	12.658	1.209	27.734	
②	0.900	0.120	5.92761	$0.00411 \cdot X^2 + H2$	12.648	1.206	27.708	
③	0.625	0.120	3.84571	$0.00266 \cdot X^2 + H2$	12.635	1.203	27.676	
④	0.350	0.120	1.75360	$0.00121 \cdot X^2 + H2$	12.627	1.201	27.656	
							$\Sigma = 110.774$	

WEIGHT 110.774 m x 9.288 kg/m = 1028.87 kg



SECTION A-A

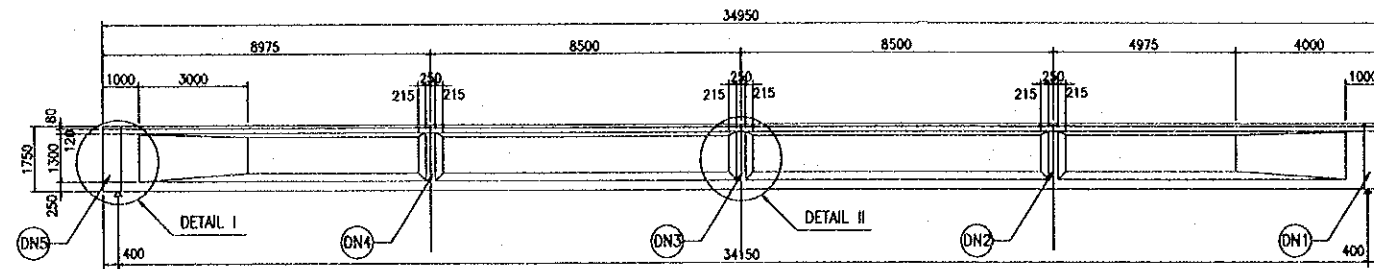
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i>
CONSULTANT		DATE 2000.5.17

PACKAGE 3	SCALE	DRAWING No. C-1-2b-35	SHEET No.
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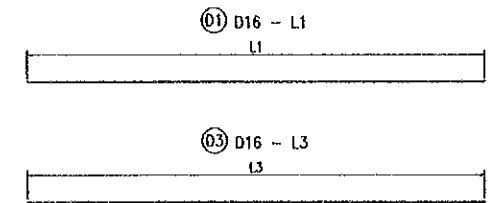
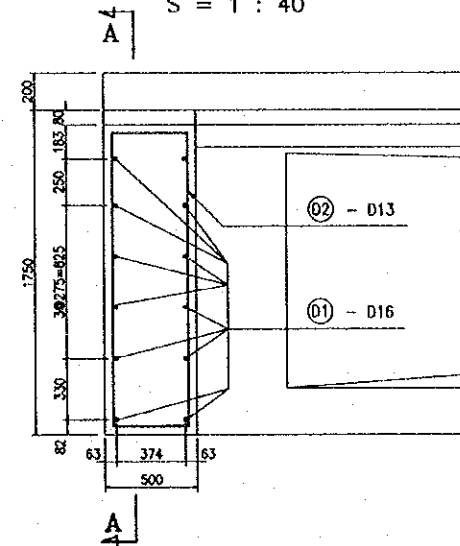
RE-BAR ARRANGEMENT OF DIAPHRAGM (1-1)

Lg = 34.950 (m) W=31.53~23.32(m)

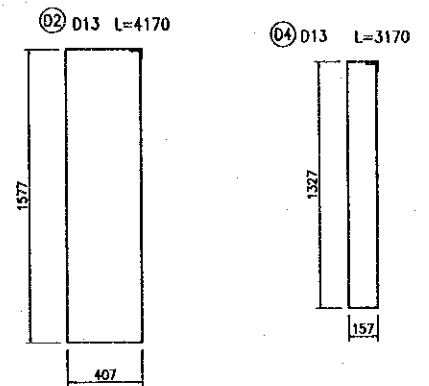
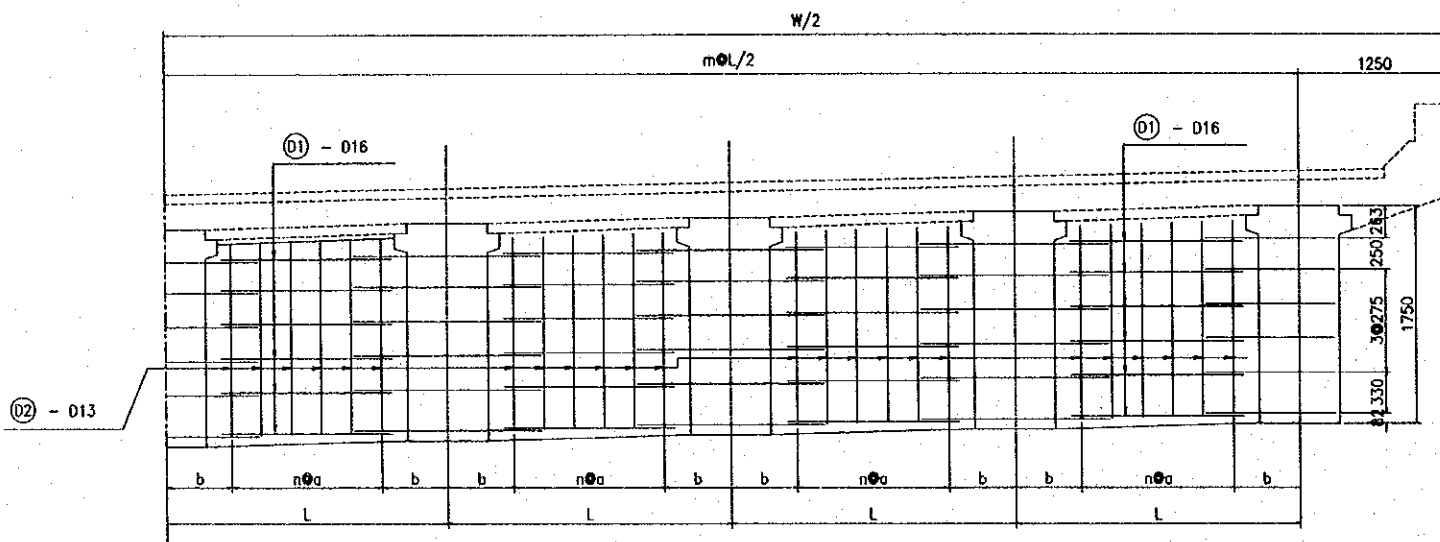
SIDE VIEW
S = 1 : 200



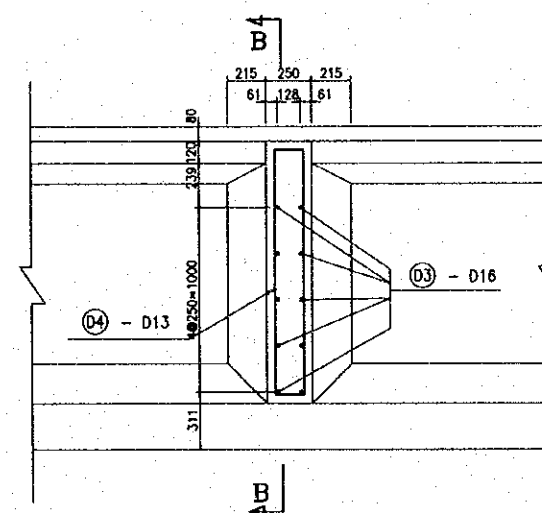
DETAIL I
S = 1 : 40



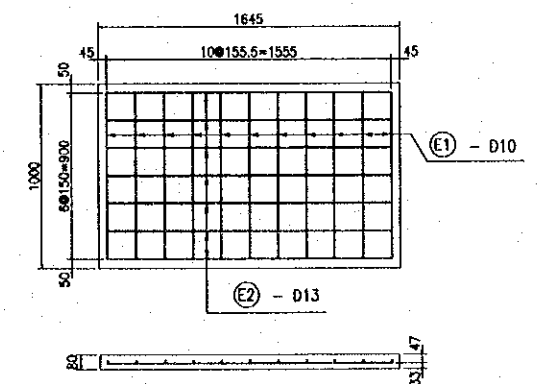
SECTION A-A
S = 1 : 60



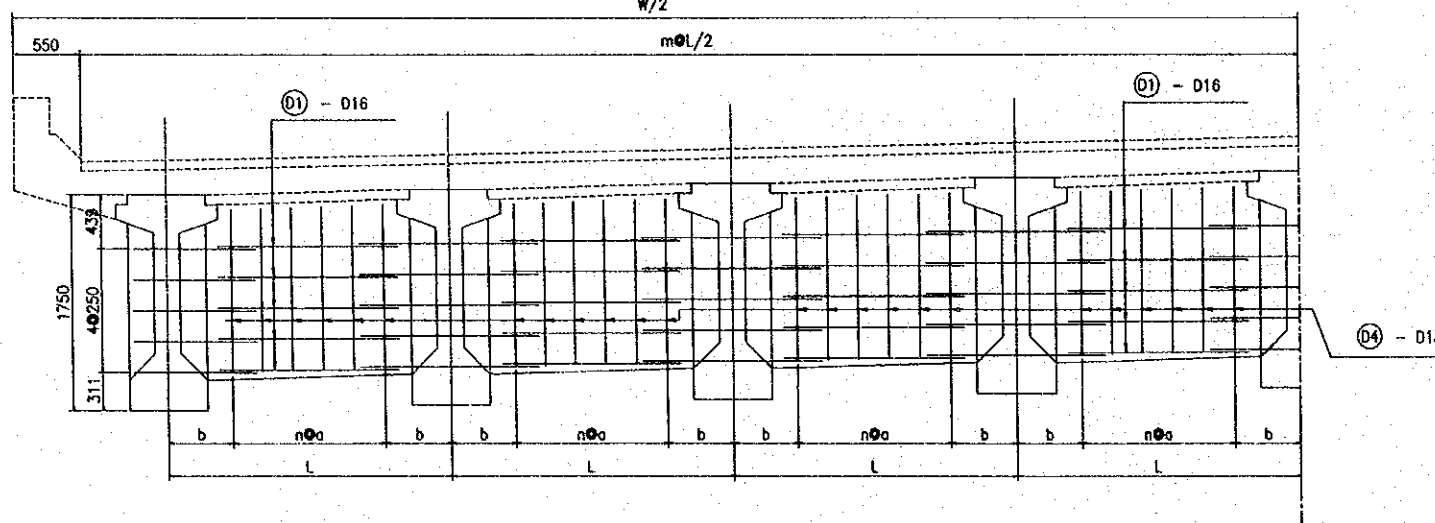
DETAIL II
S = 1 : 40



DETAIL OF PRECAST PLATE
S = 1 : 40



SECTION B-B
S = 1 : 60



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE

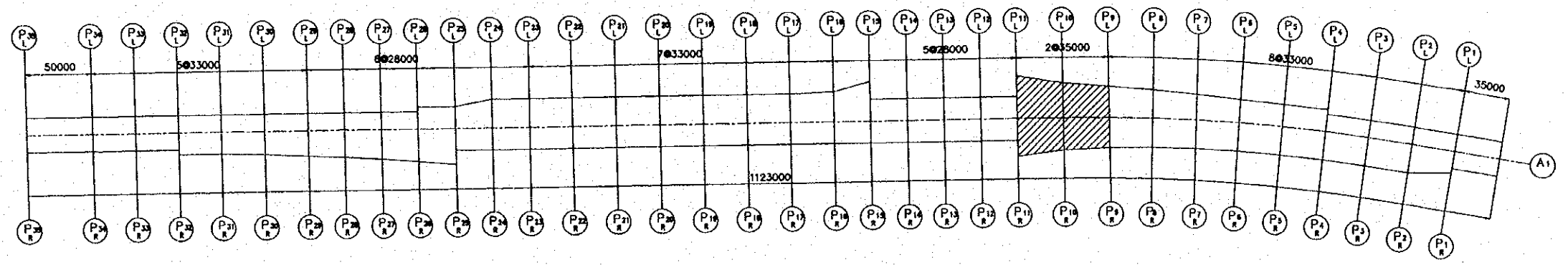
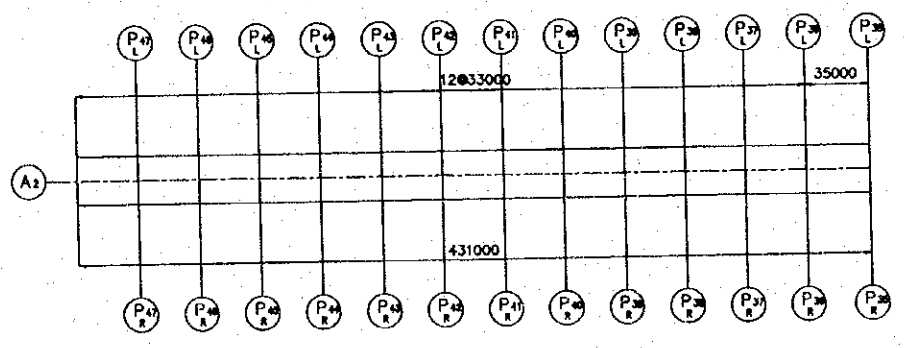
PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-2b-36	

RE-BAR ARRANGEMENT OF DIAPHRAGM (1-2)

Ls = 28.000 (m) W=31.53~23.32(m)

	SPAN (P _{9L} - P _{10L})					SPAN (P _{10L} - P _{11L})					SPAN (P _{9R} - P _{10R})					SPAN (P _{10R} - P _{11R})				
	DN1	DN2	DN3	DN4	DN5	DN1	DN2	DN3	DN4	DN5	DN1	DN2	DN3	DN4	DN5	DN1	DN2	DN3	DN4	DN5
W	23320	23970	24590	25210	25860	25852	27328	28684	30052	31528	22084	22507	22921	23335	23758	23763	24830	25864	26898	27976
m	10	10	10	10	10	12	12	12	12	12	9	9	9	9	9	11	11	11	11	11
L	2082	2147	2209	2271	2336	1946	2069	2182	2296	2419	2176	2223	2269	2315	2362	1933	2030	2124	2218	2316
n	4	5	5	5	5	4	4	5	5	6	5	5	5	5	5	4	3	5	5	5
a	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
b	541	448.5	479.5	510.5	543	473	534.5	466	523	459.5	463	486.5	509.5	532.5	556	466.5	515	437	484	533
L1	1332	1397	1459	1521	1586	1196	1319	1432	1546	1669	1426	1473	1519	1565	1612	1183	1280	1374	1468	1566
L3	1332	1397	1459	1521	1586	1196	1319	1432	1546	1669	1426	1473	1519	1565	1612	1183	1280	1374	1468	1566

KEY PLAN
S = 1:4000



163

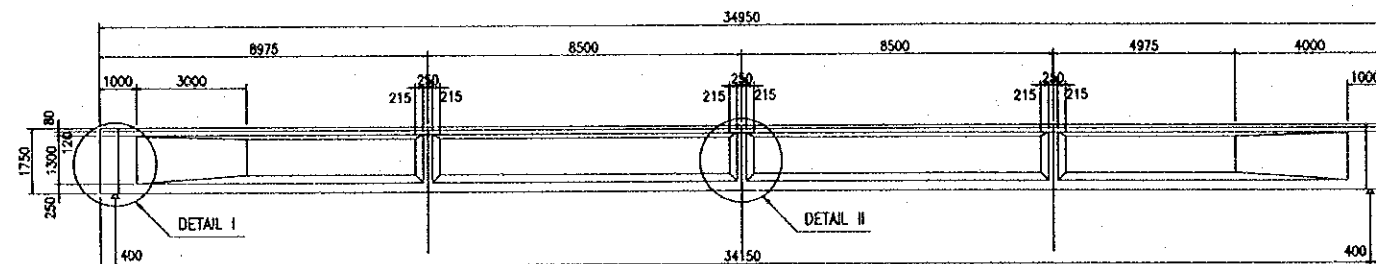
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THASO LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. NATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME S. NATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>
OPERATING PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 5. 17

PACKAGE 3	SCALE	DRAWING No. C-1-2b-37	SHEET No.
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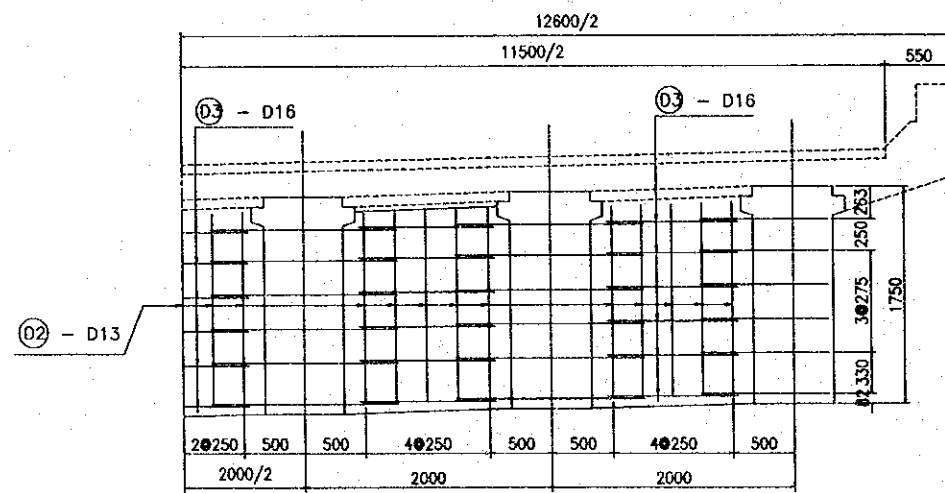
RE-BAR ARRANGEMENT OF DIAPHRAGM (2)

Lg = 34.950 (m) W = 12.6 (m)

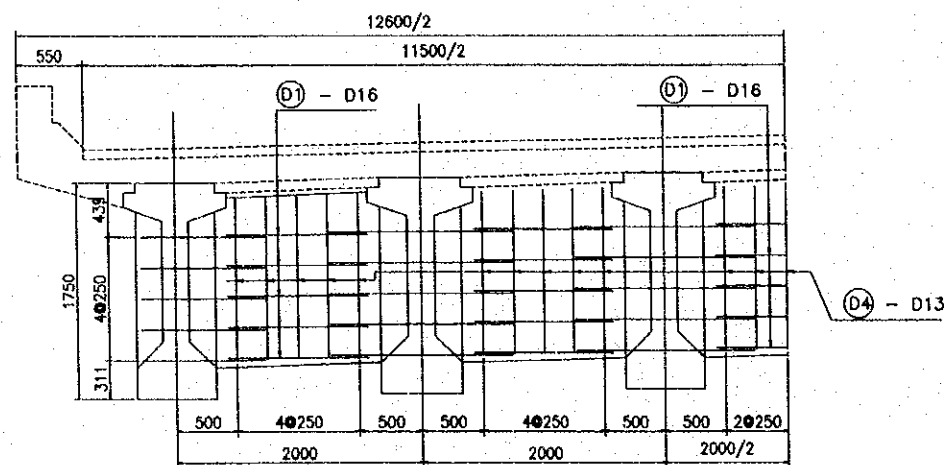
SIDE VIEW
S = 1 : 200



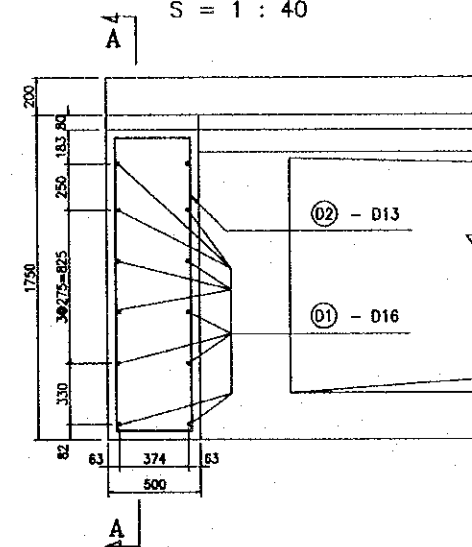
SECTION A-A
S = 1 : 60



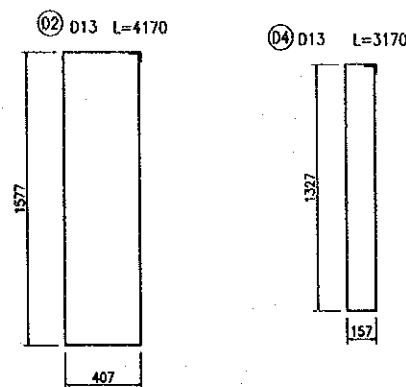
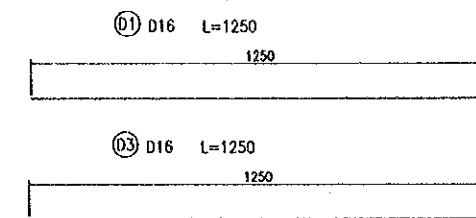
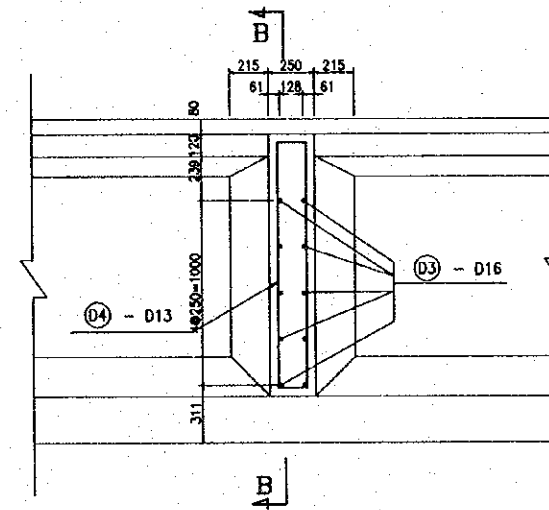
SECTION B-B
S = 1 : 60



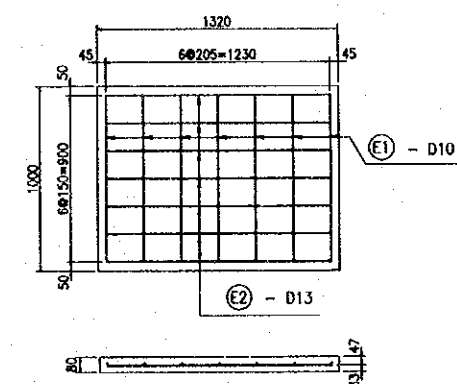
DETAIL I
S = 1 : 40



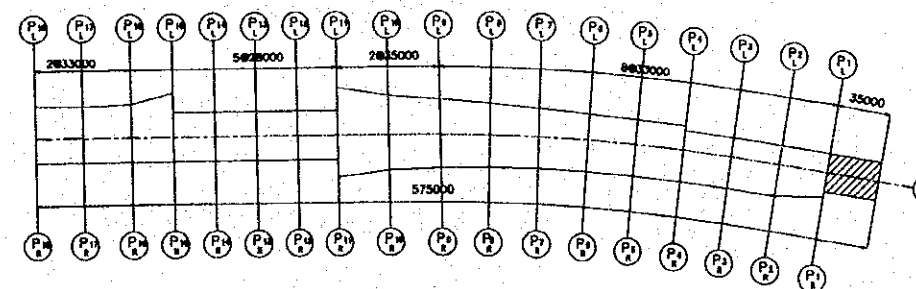
DETAIL II
S = 1 : 40



DETAIL OF PRECAST PLATE
S = 1 : 40



KEY PLAN
S = 1:5000



164

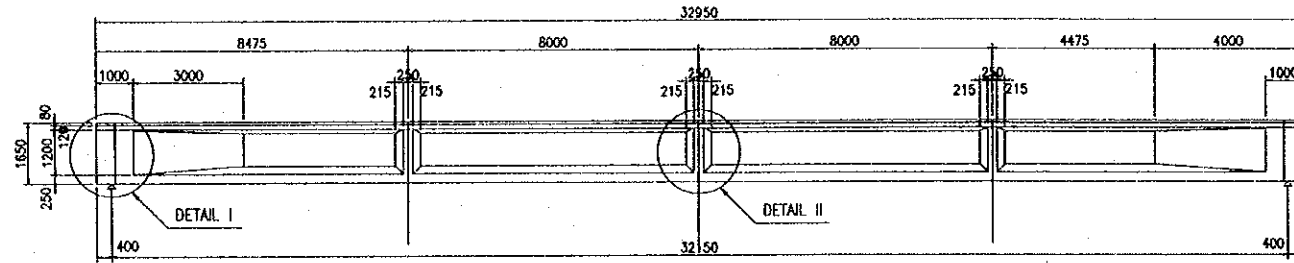
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TIHANG LOHO PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.MATARE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.11.17	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-2b-38	SHEET No.
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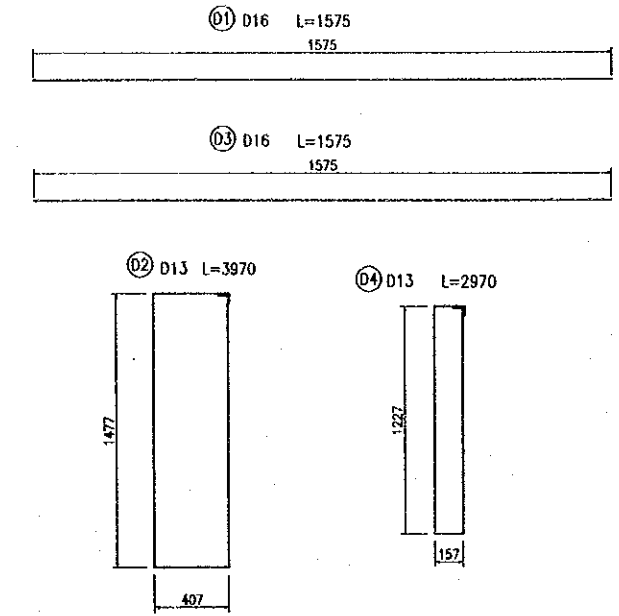
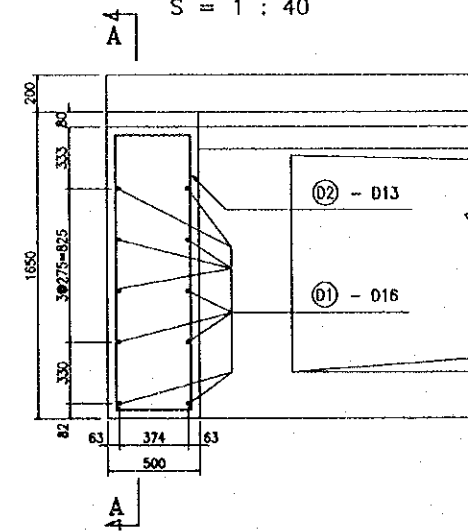
RE-BAR ARRANGEMENT OF DIAPHRAGM (3)

Lg = 32.950 (m) W = 21.1 (m)

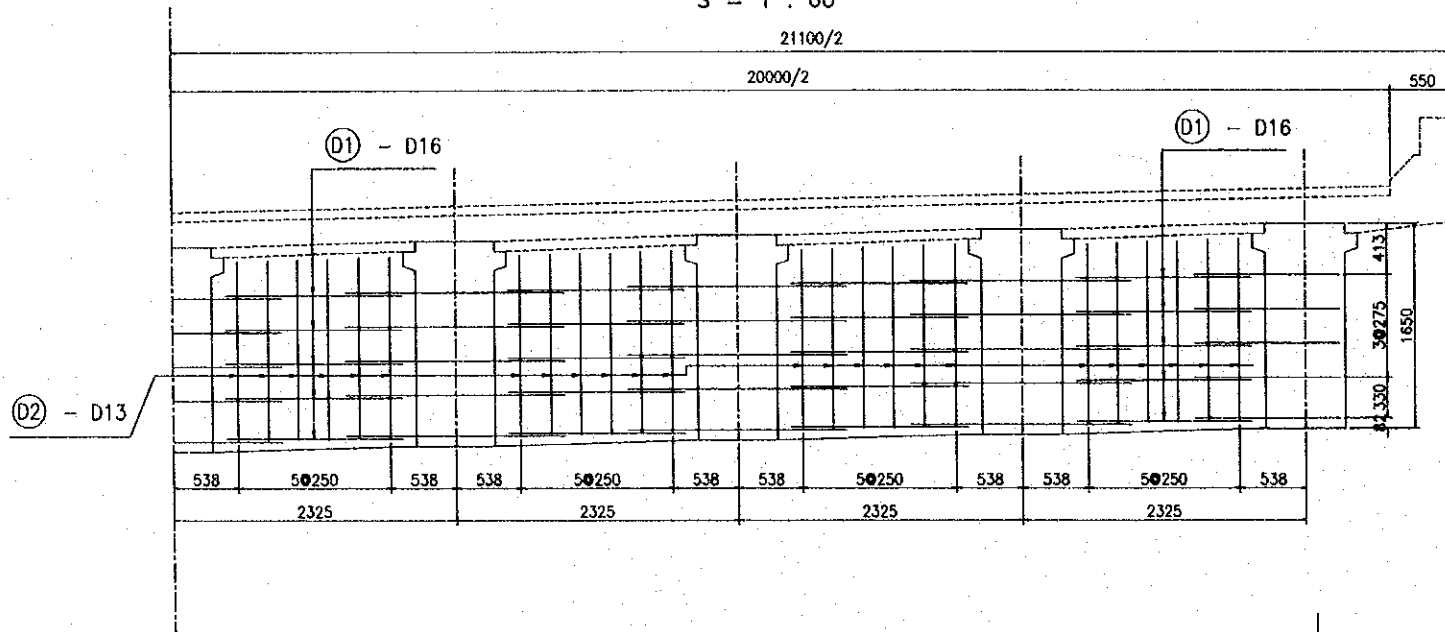
SIDE VIEW
S = 1 : 200



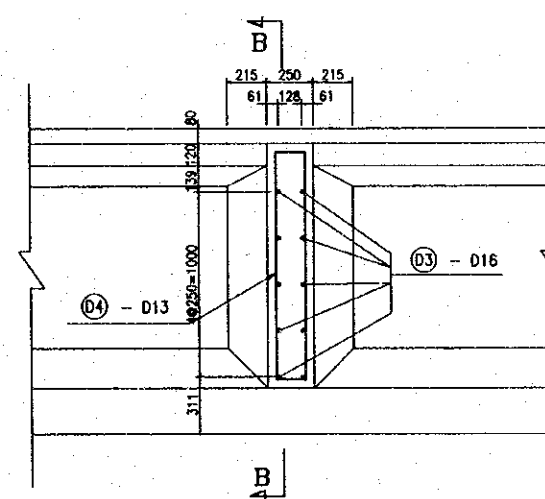
DETAIL I
S = 1 : 40



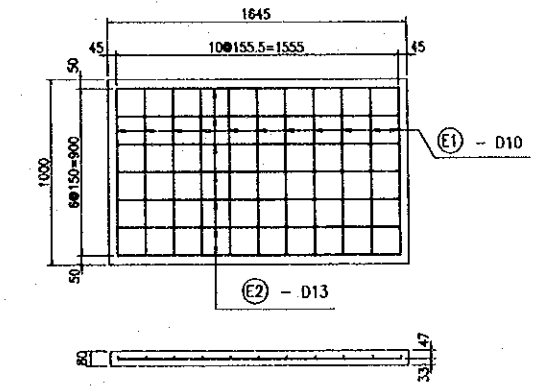
SECTION A-A
S = 1 : 60



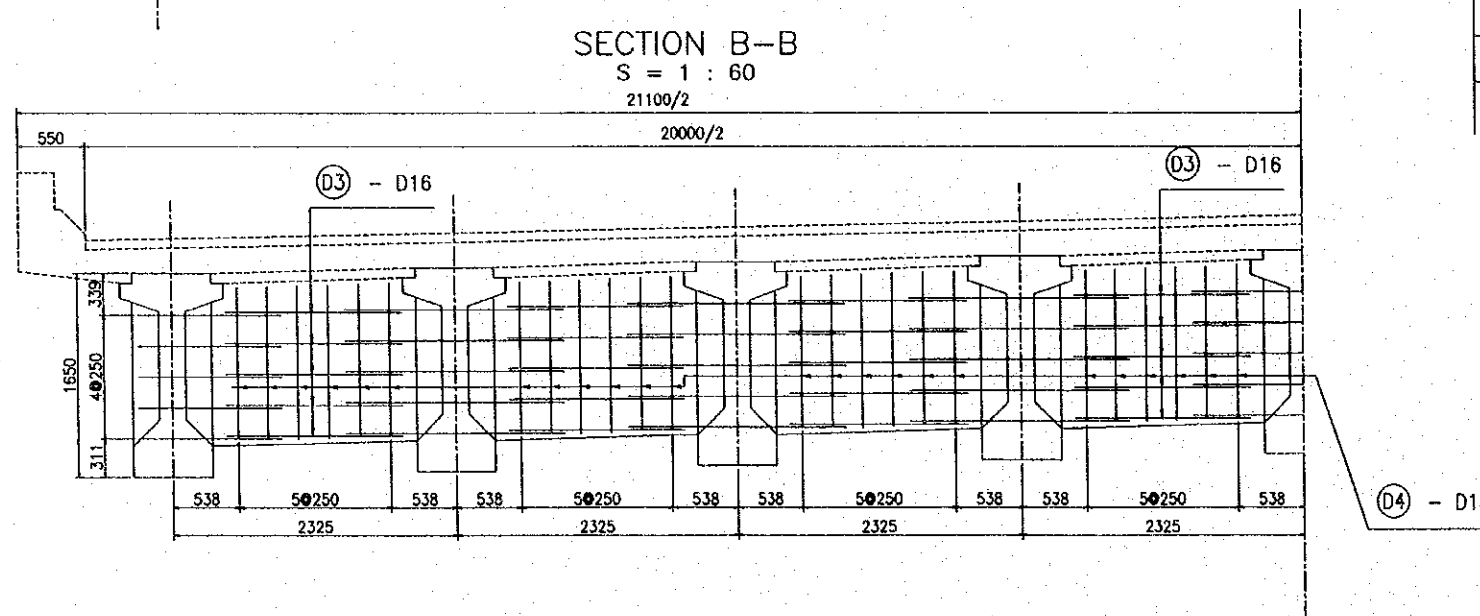
DETAIL II
S = 1 : 40



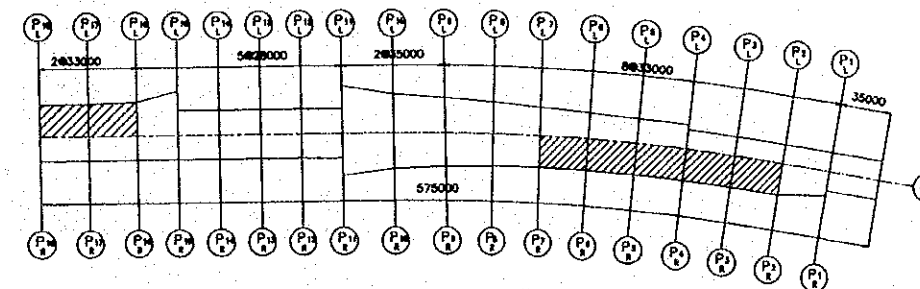
DETAIL OF PRECAST PLATE
S = 1 : 40



SECTION B-B
S = 1 : 60



KEY PLAN
S = 1:5000



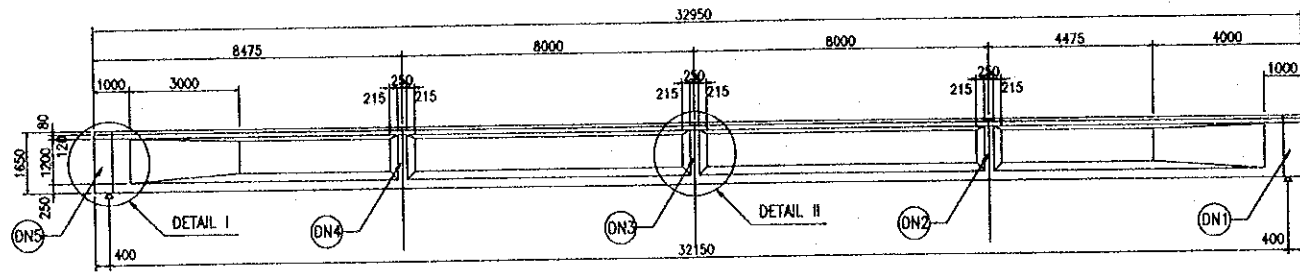
100

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.02.17	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

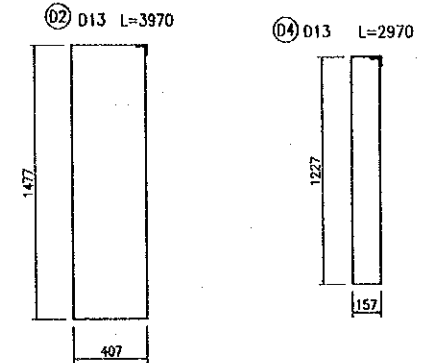
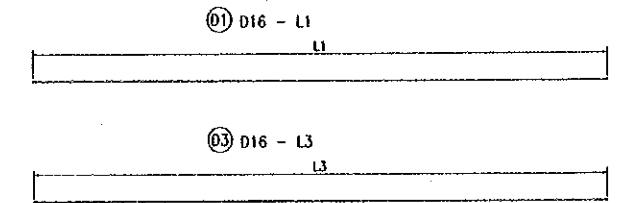
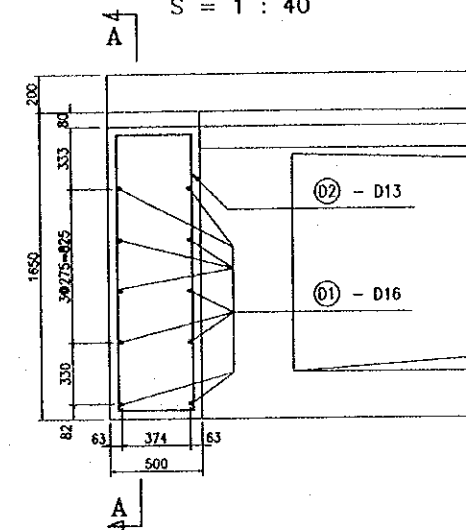
PACKAGE 3	SCALE	DRAWING No. C-1-2b-39	SHEET No.
RE-BAR ARRANGEMENT OF DIAPHRAGM (4-1)			

LS = 33.000 (m) W=23.32~16.1(m)

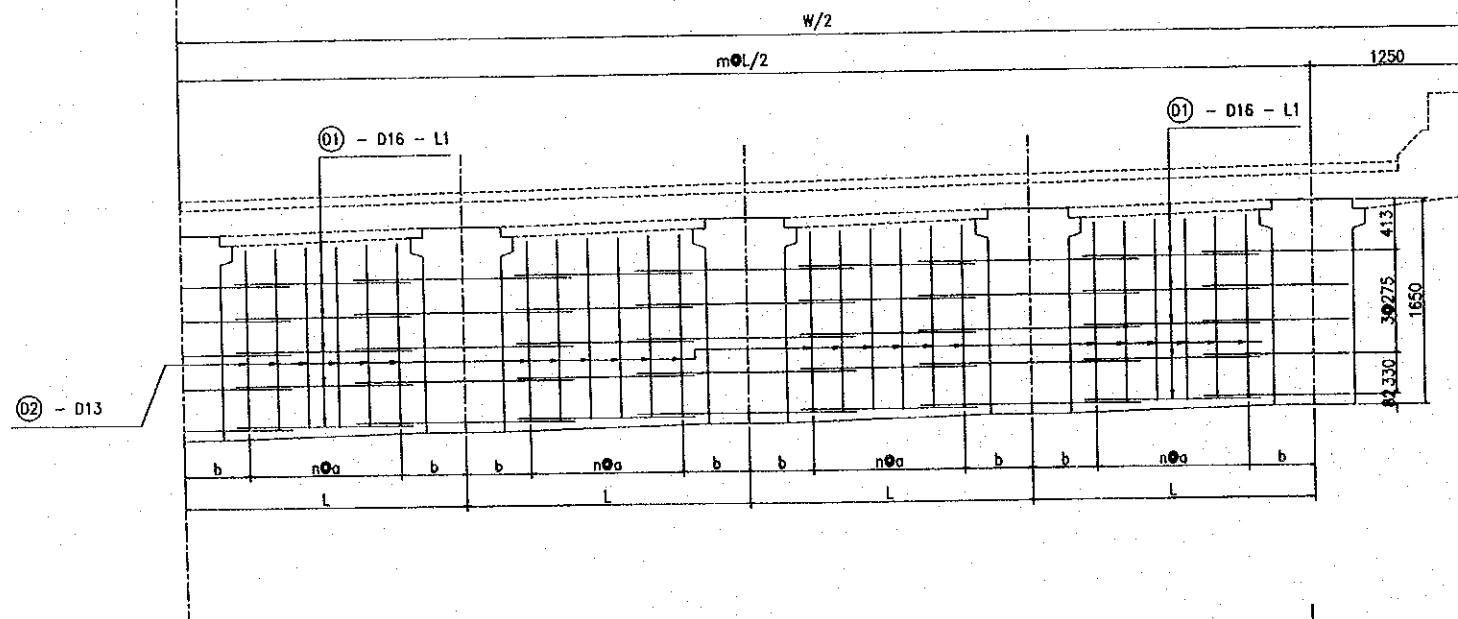
SIDE VIEW
S = 1 : 200



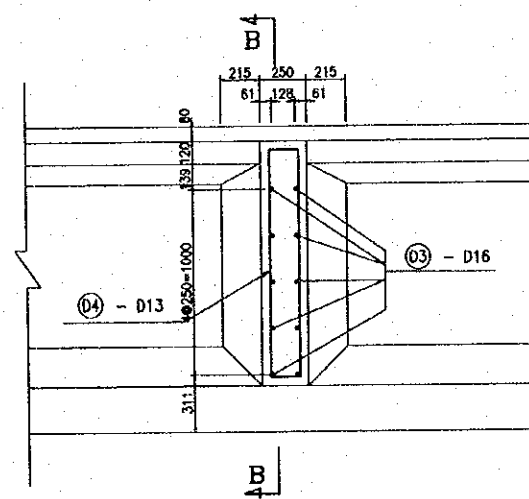
DETAIL I
S = 1 : 40



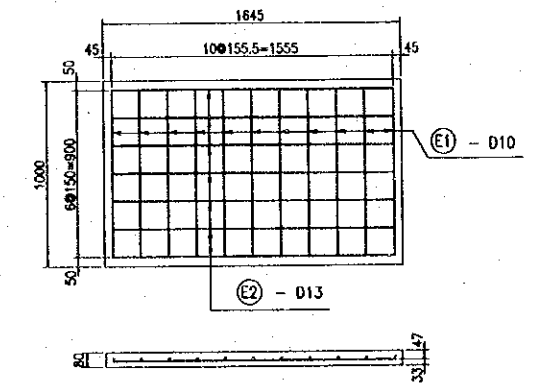
SECTION A-A
S = 1 : 60



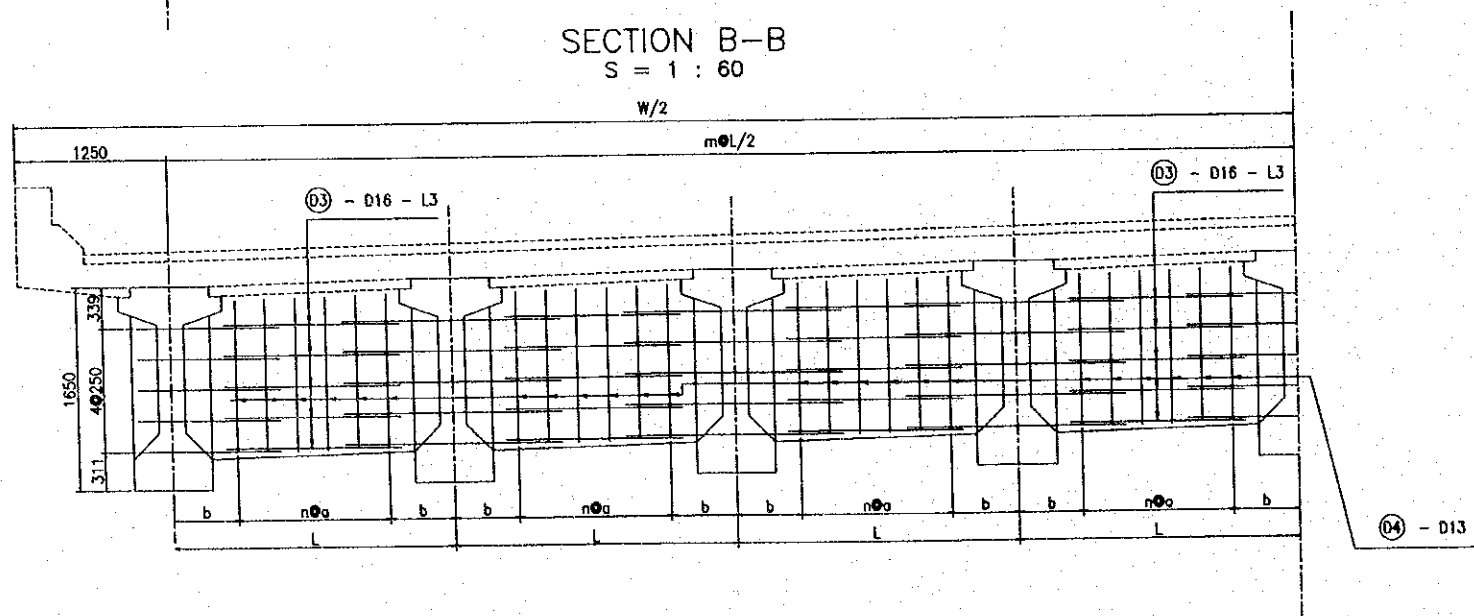
DETAIL II
S = 1 : 40



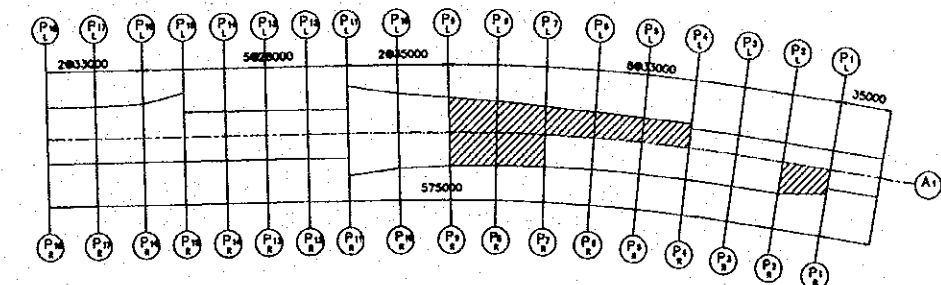
DETAIL OF PRECAST PLATE
S = 1 : 40




SECTION B-B
S = 1 : 60



KEY PLAN
S = 1:5000



166

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE 	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.11.17	

PACKAGE 3	SCALE	DRAWING No. C-1-2b-40	SHEET No.
RE-BAR ARRANGEMENT OF DIAPHRAGM (4-2)			

$L_s = 33.000 (m)$ $W = 23.32 \sim 16.1(m)$

	SPAN (P _{4L} - P _{5L})					SPAN (P _{5L} - P _{6L})					SPAN (P _{6L} - P _{7L})					SPAN (P _{7L} - P _{8L})				
	DN1	DN2	DN3	DN4	DN5	DN1	DN2	DN3	DN4	DN5	DN1	DN2	DN3	DN4	DN5	DN1	DN2	DN3	DN4	DN5
W	16100	16112	16130	16142	16158	16158	16366	16564	16768	16976	16976	17424	17851	18271	1193	18724	19276	19796	20316	20876
m	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8
L	2250	2252	2255	2257	2260	2276	2311	2344	2378	2413	2068	2132	2193	2253	18726	2028	2097	2162	2227	2297
n	5	5	5	5	5	5	5	5	6	6	5	5	5	5	5	4	4	5	5	5
a	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
b	500	501	502.5	503.5	505	513	530.5	547	439	456.5	409	441	471.5	501.5	534	514	548.5	456	488.5	523.5
L1	1500	1502	1505	1507	1510	1526	1561	1594	1628	1663	1318	1382	1443	1503	1568	1278	1347	1412	1477	1547
L3	1500	1502	1505	1507	1510	1526	1561	1594	1628	1663	1318	1382	1443	1503	1568	1278	1347	1412	1477	1547

	SPAN (P _{1R} - P _{2R})					SPAN (P _{7R} - P _{8R})					SPAN (P _{8R} - P _{9R})					SPAN (P _{8L} - P _{9L})				
	DN1	DN2	DN3	DN4	DN5	DN1	DN2	DN3	DN4	DN5	DN1	DN2	DN3	DN4	DN5	DN1	DN2	DN3	DN4	DN5
W	16100	17380	18569	19812	21100	21100	21204	21316	21428	21540	21540	21676	21812	21948	22084	20878	21508	22093	22687	23317
m	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9
L	1700	1860	2012	2164	2325	2325	2338	2352	2366	2380	2380	2397	2414	2431	2448	2042	2112	2177	2243	2313
n	4	4	4	5	5	5	5	5	6	6	6	6	6	6	6	4	5	5	5	5
a	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
b	350	430	506	457	537.5	537.5	544	551	433	440	440	448.5	457	465.5	474	521	431	463.5	496.5	531.5
L1	950	1110	1262	1414	1575	1575	1588	1602	1616	1630	1630	1647	1664	1681	1698	1292	1362	1427	1493	1563
L3	950	1110	1262	1414	1575	1575	1588	1602	1616	1630	1630	1647	1664	1681	1698	1292	1362	1427	1493	1563

107

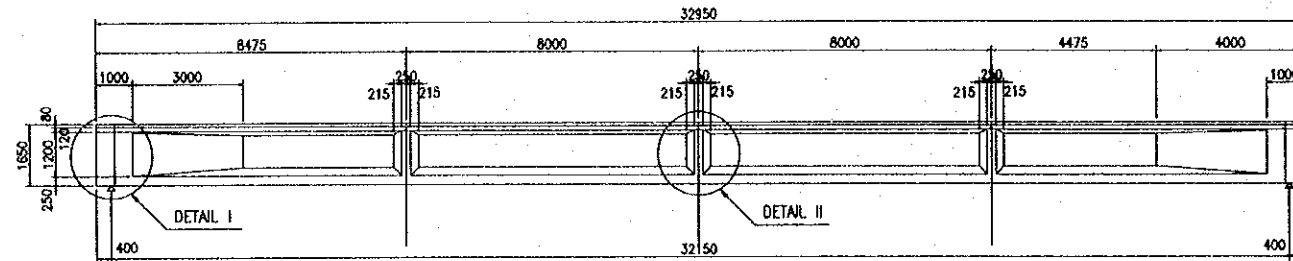
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATAKE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.07.17	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-2b-41	SHEET No.
RE-BAR ARRANGEMENT OF DIAPHRAGM (5)			

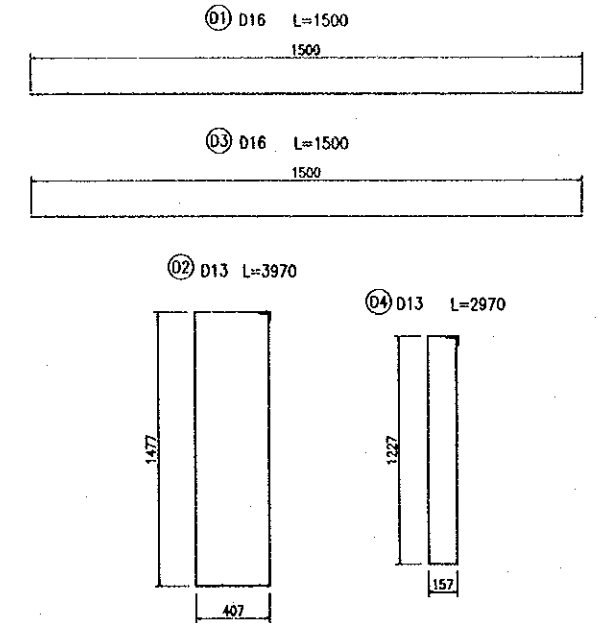
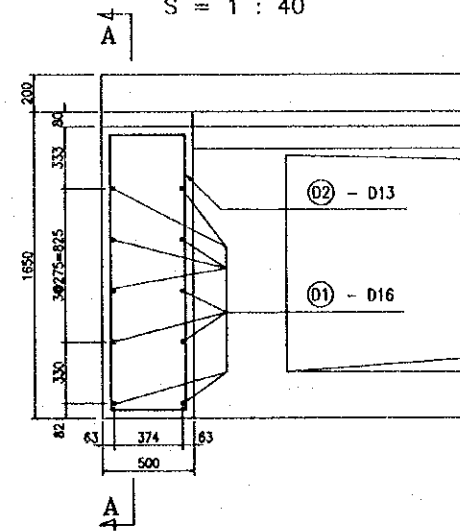
Lg = 32.950 (m)

W = 16.1 (m)

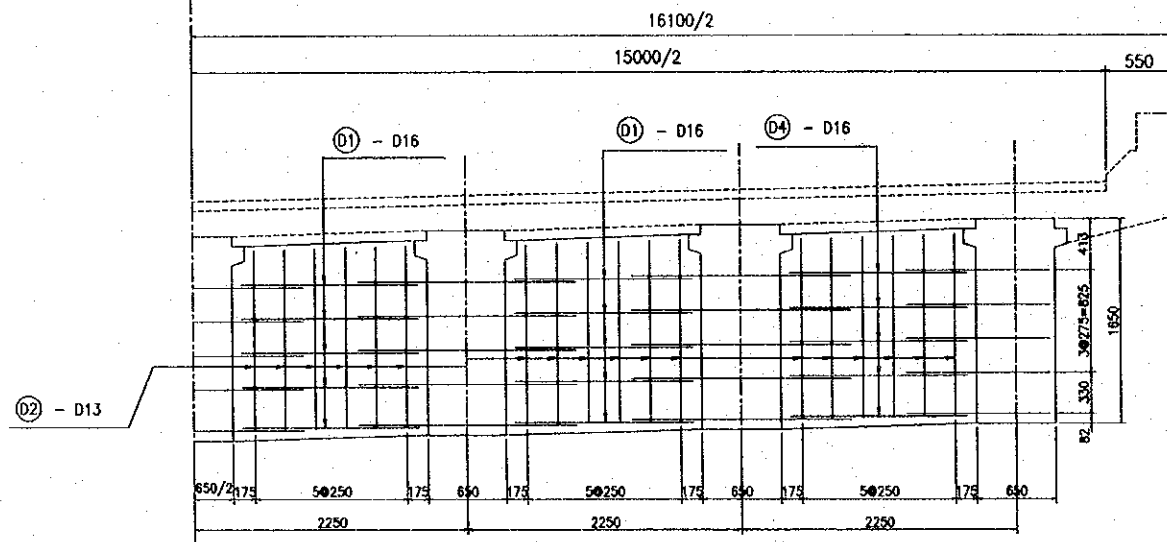
SIDE VIEW
S = 1 : 200



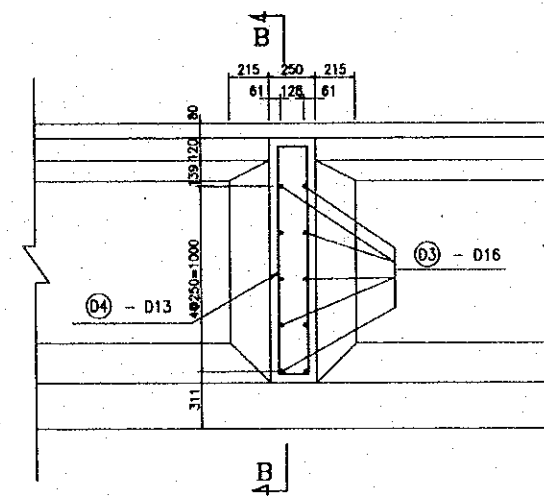
DETAIL I
S = 1 : 40



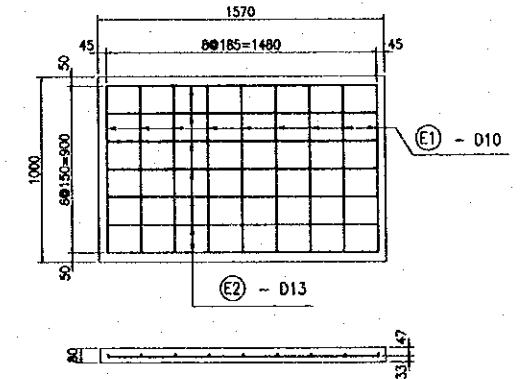
SECTION A-A
S = 1 : 60



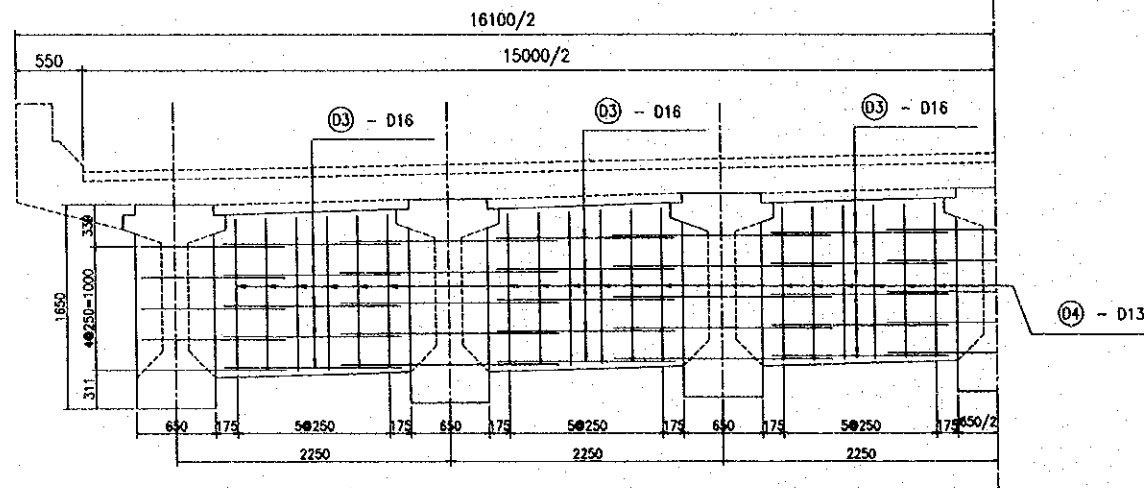
DETAIL II
S = 1 : 40



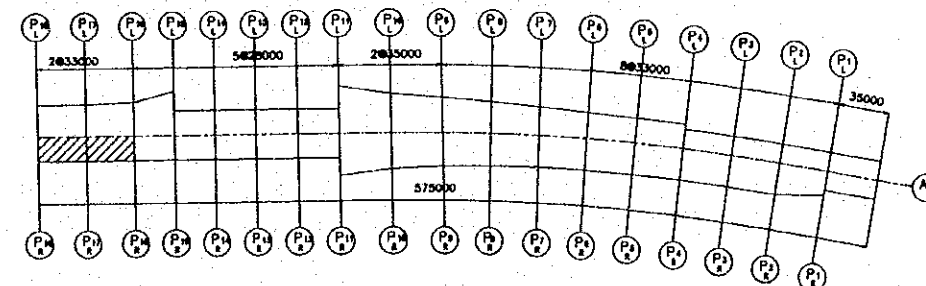
DETAIL OF PRECAST PLATE
S = 1 : 40



SECTION B-B
S = 1 : 60



KEY PLAN
S = 1 : 5000



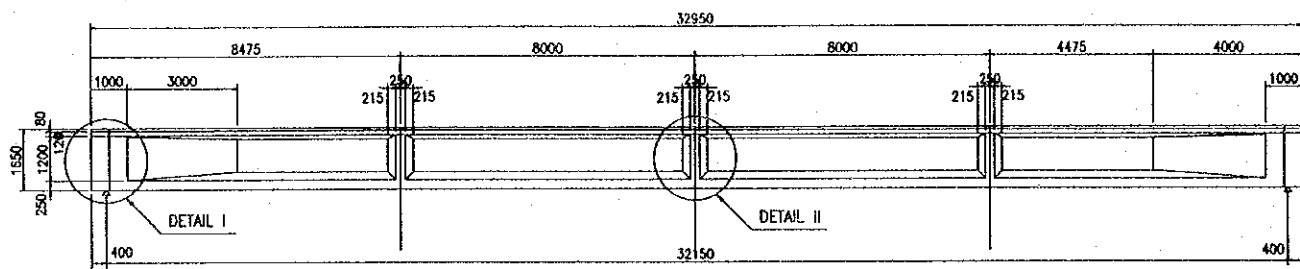
103

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NAITABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. NAITABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.17

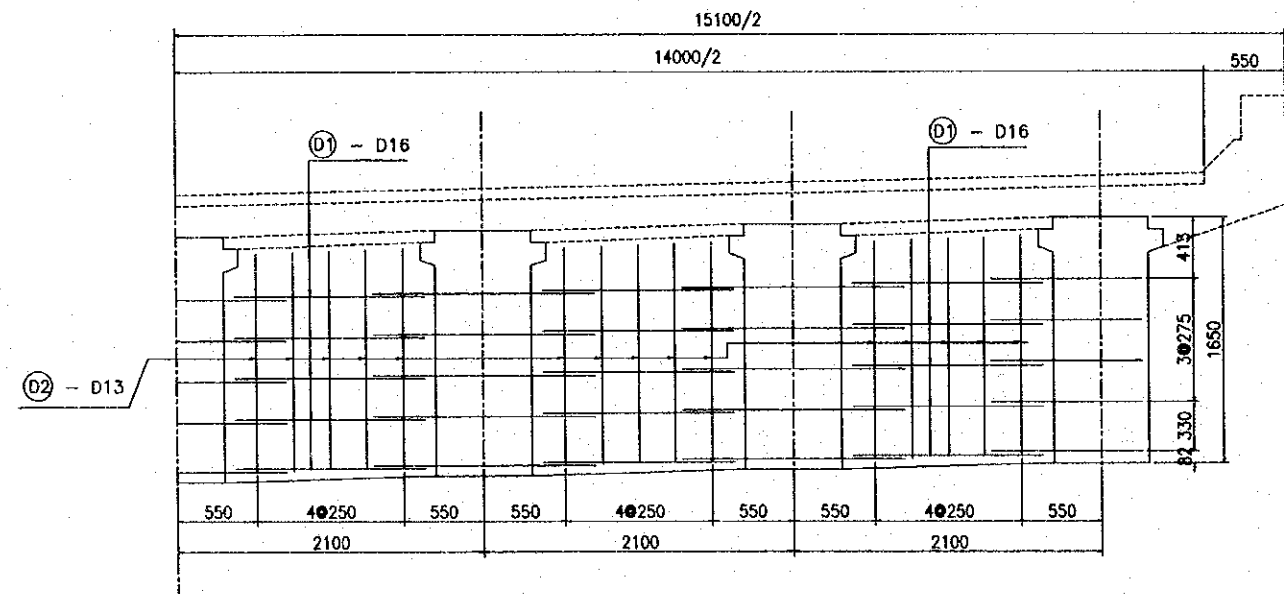
Lg = 32.950 (m) W = 15.1 (m)

PACKAGE 3	SCALE	DRAWING No. C-1-2b-42	SHEET No.
RE-BAR ARRANGEMENT OF DIAPHRAGM (B)			

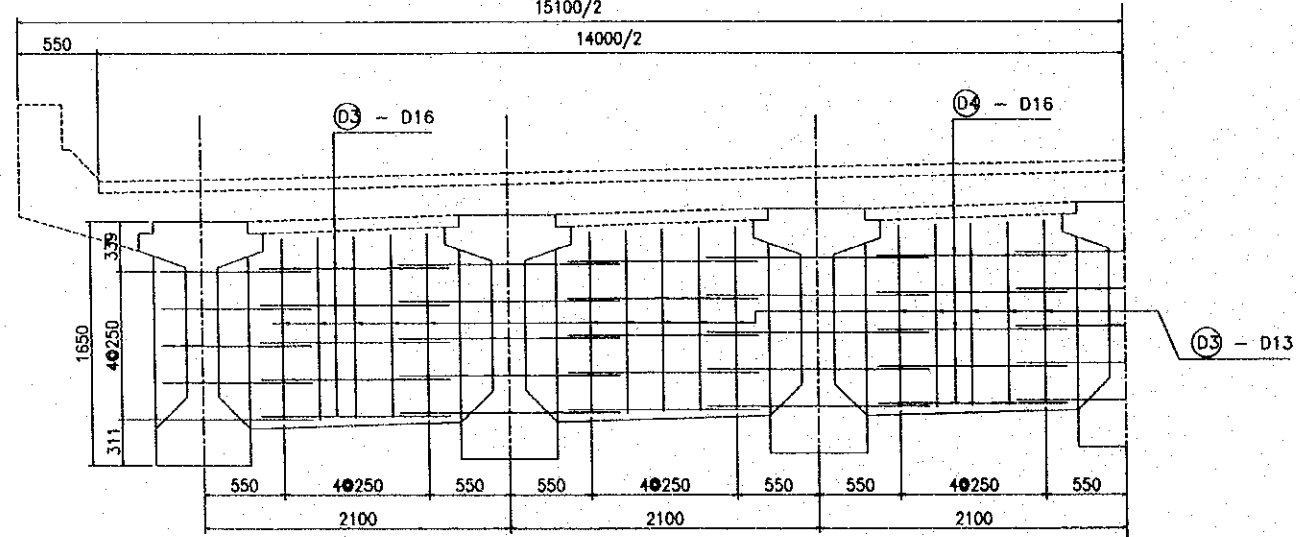
SIDE VIEW
S = 1 : 200



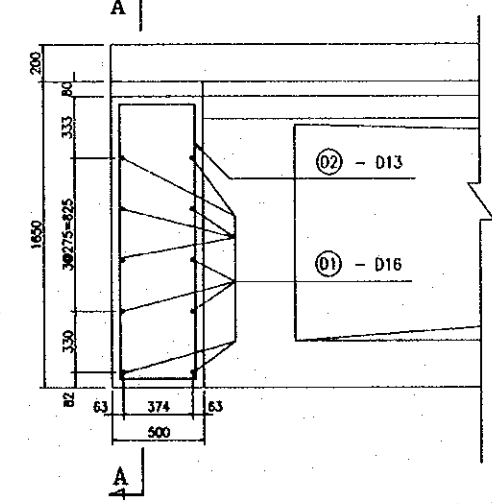
SECTION A-A
S = 1 : 50



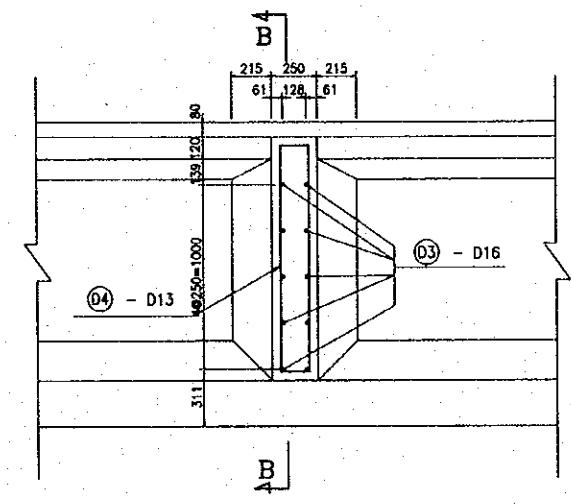
SECTION B-B
S = 1 : 50



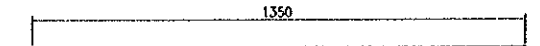
DETAIL I
S = 1 : 40



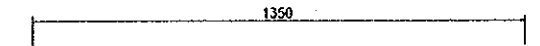
DETAIL II
S = 1 : 40



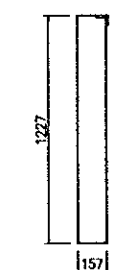
⓪1 D16 L=1350



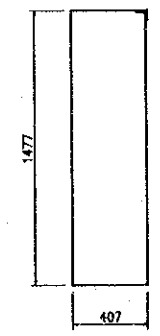
⓪3 D16 L=1350



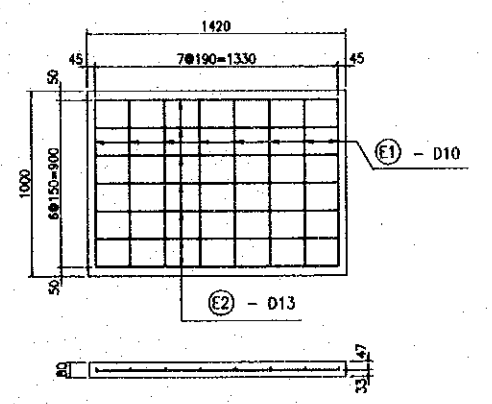
⓪4 D13 L=2970



⓪2 D13 L=3970



DETAIL OF PRECAST PLATE
S = 1 : 40



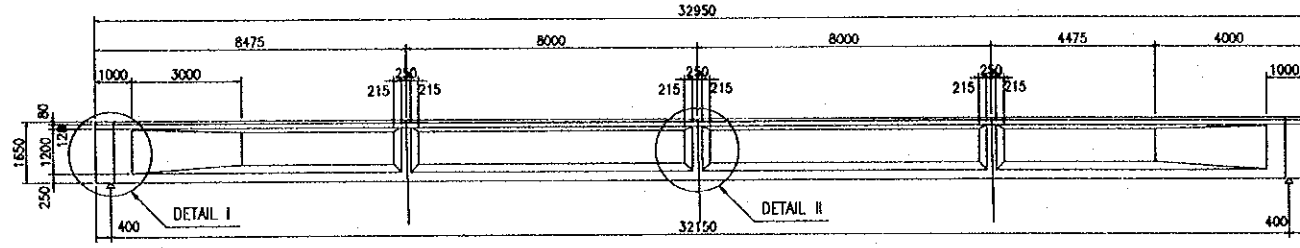
169

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATATE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.3.17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

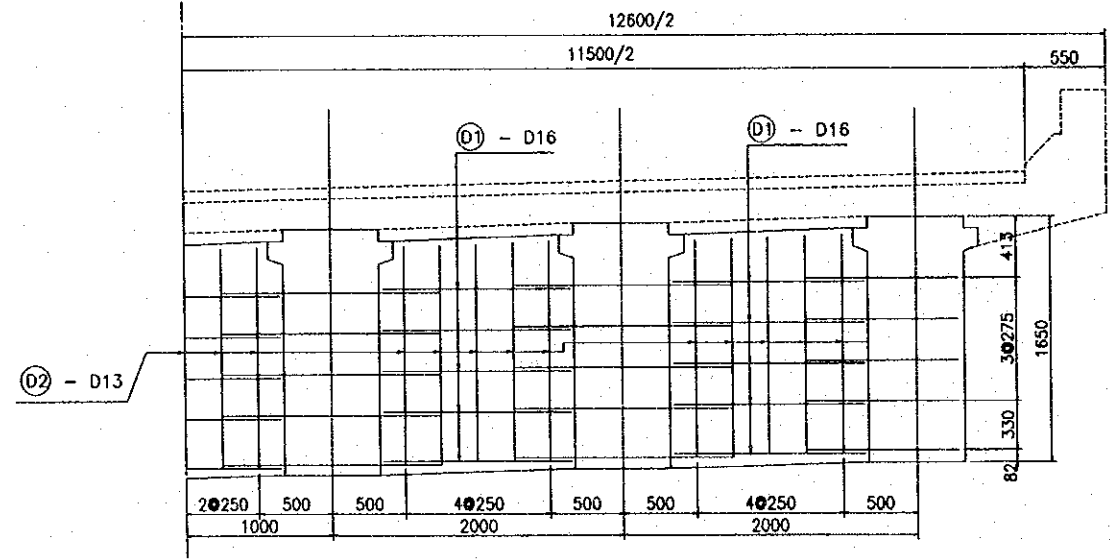
PACKAGE 3	SCALE	DRAWING No. C-1-2b-43	SHEET No.
RE-BAR ARRANGEMENT OF DIAPHRAGM (7)			

Lg = 32.950 (m) W = 12.6 (m)

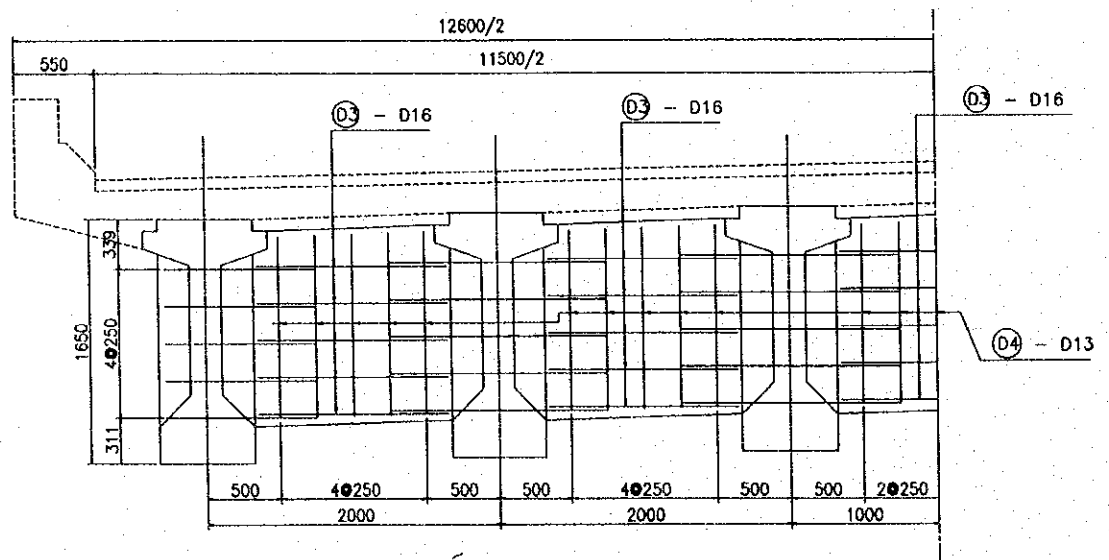
SIDE VIEW
S = 1 : 200



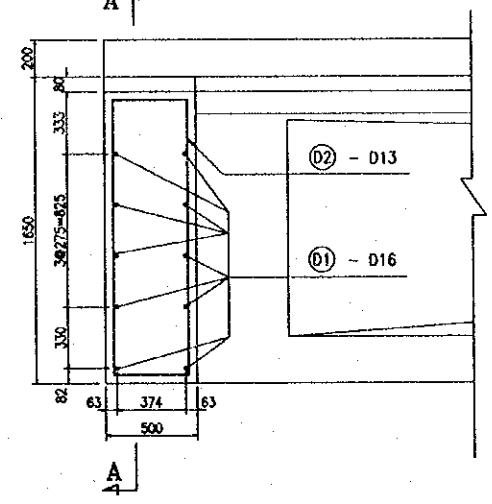
SECTION A-A
S = 1 : 50



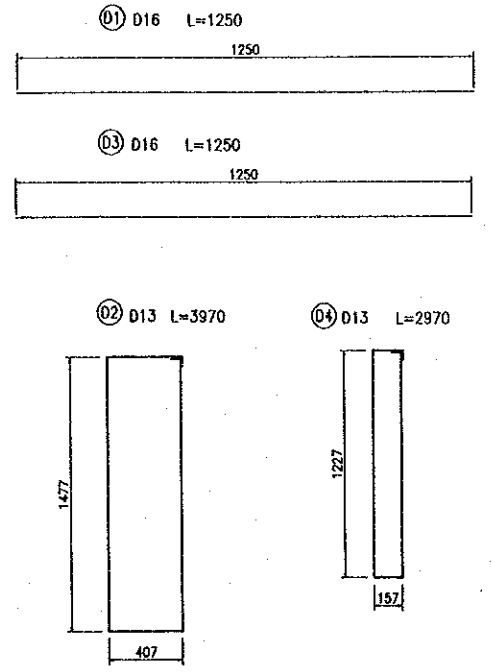
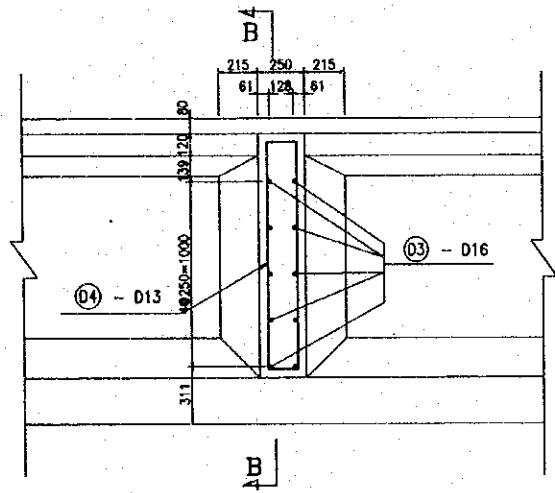
SECTION B-B
S = 1 : 50



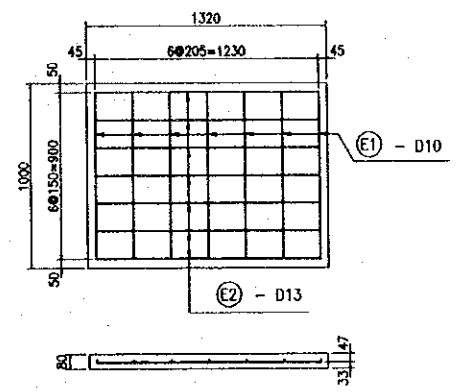
DETAIL I
S = 1 : 40



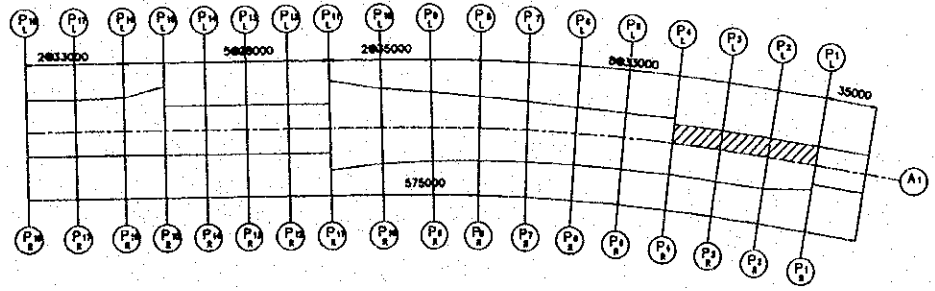
DETAIL II
S = 1 : 40



DETAIL OF PRECAST PLATE
S = 1 : 40



KEY PLAN
S = 1:5000

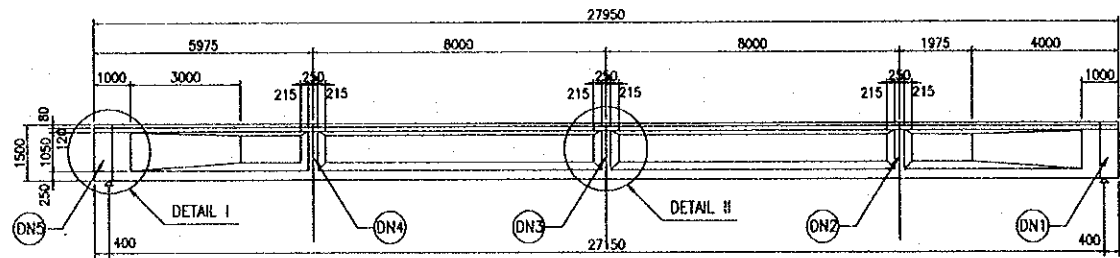


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAGI
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i>
		DATE 2000.3.14

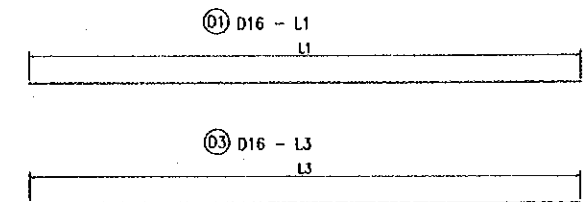
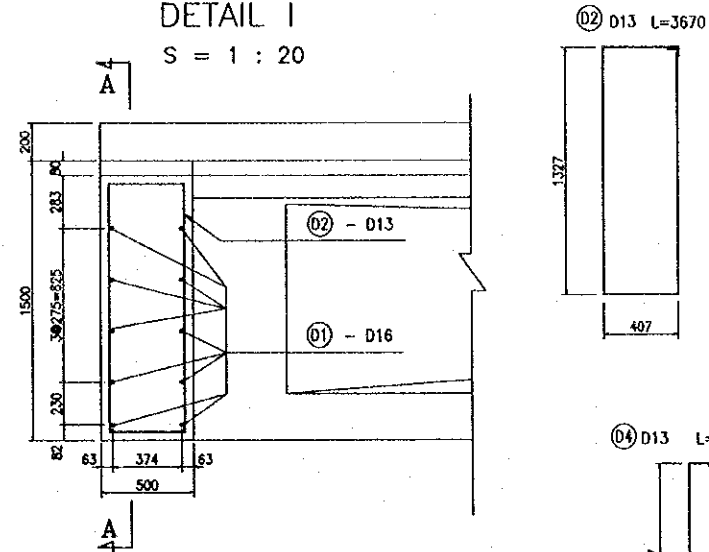
PACKAGE 3	SCALE C-1-2b-44	DRAWING No. C-1-2b-44	SHEET No.
RE-BAR ARRANGEMENT OF DIAPHRAGM (B)			

$L_s = 28.000 (m)$ $W = 22.16 \sim 29.27(m)$

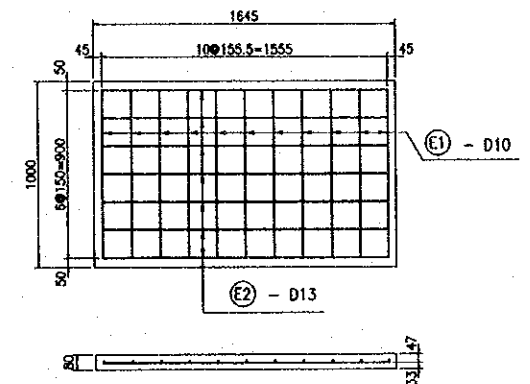
SIDE VIEW
S = 1 : 200



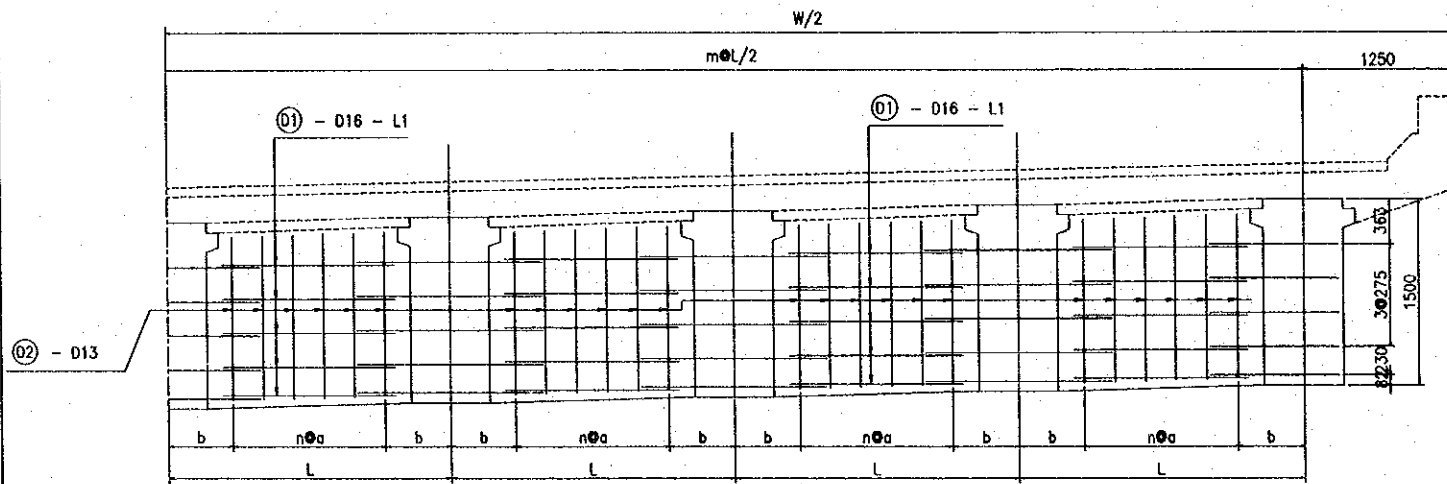
DETAIL I
S = 1 : 20



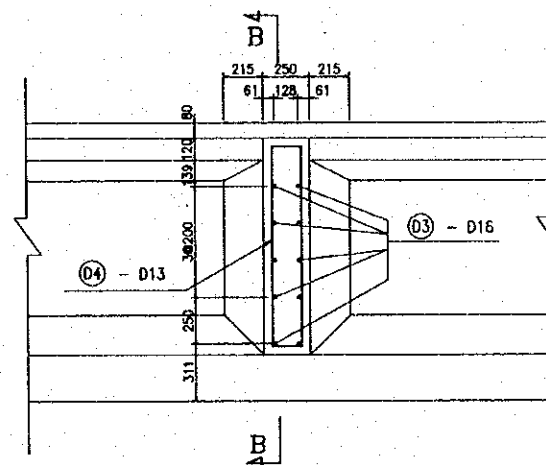
DETAIL OF PRECAST PLATE
S = 1 : 40



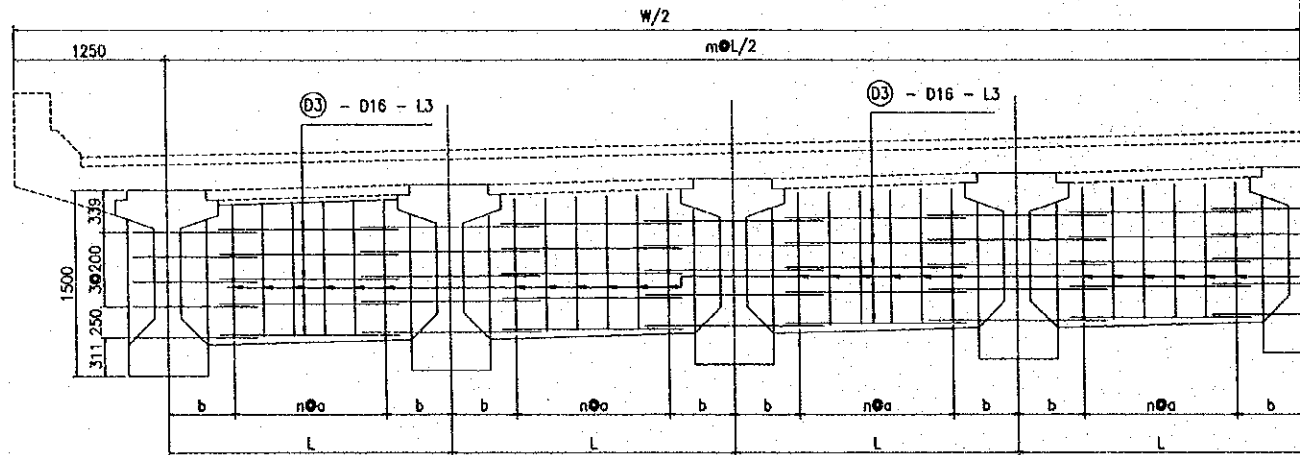
SECTION A-A
S = 1 : 60



DETAIL II
S = 1 : 40

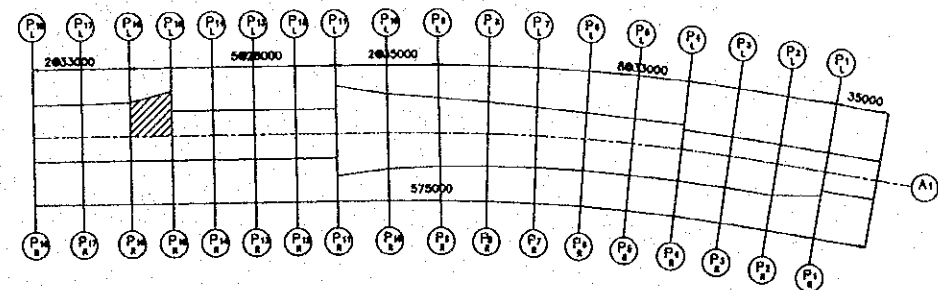


SECTION B-B
S = 1 : 60



	SPAN (P _{1st} - P _{1st})				
	DN1	DN2	DN3	DN4	DN5
W	29274	27701	25710	23730	22157
m	11	11	11	11	11
L	2434	2291	2110	1930	1787
n	8	5	5	4	4
a	250	250	250	250	250
b	467	520.5	430	465	393.5
L1	1884	1541	1360	1180	1037
L3	1684	1541	1360	1180	1037

KEY PLAN
S = 1:5000

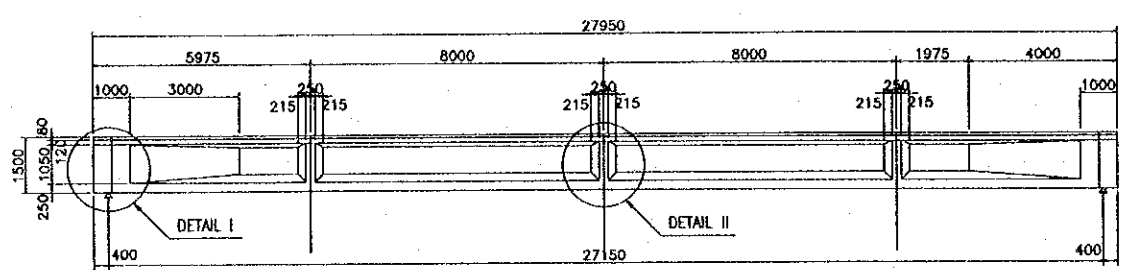


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. WATAGE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2020.3.19

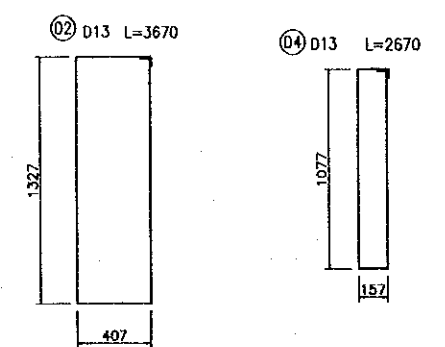
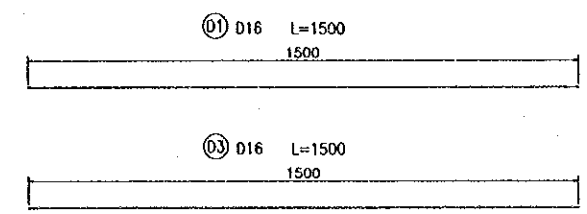
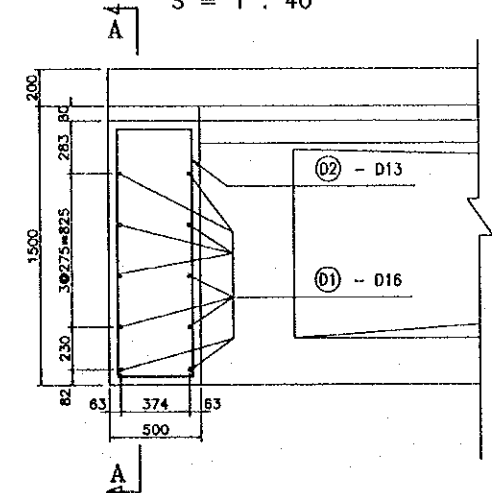
PACKAGE 3	SCALE	DRAWING No. C-1-2b-45	SHEET No.
RE-BAR ARRANGEMENT OF DIAPHRAGM (9)			

Lg = 27.950 (m) W = 16.1 (m)

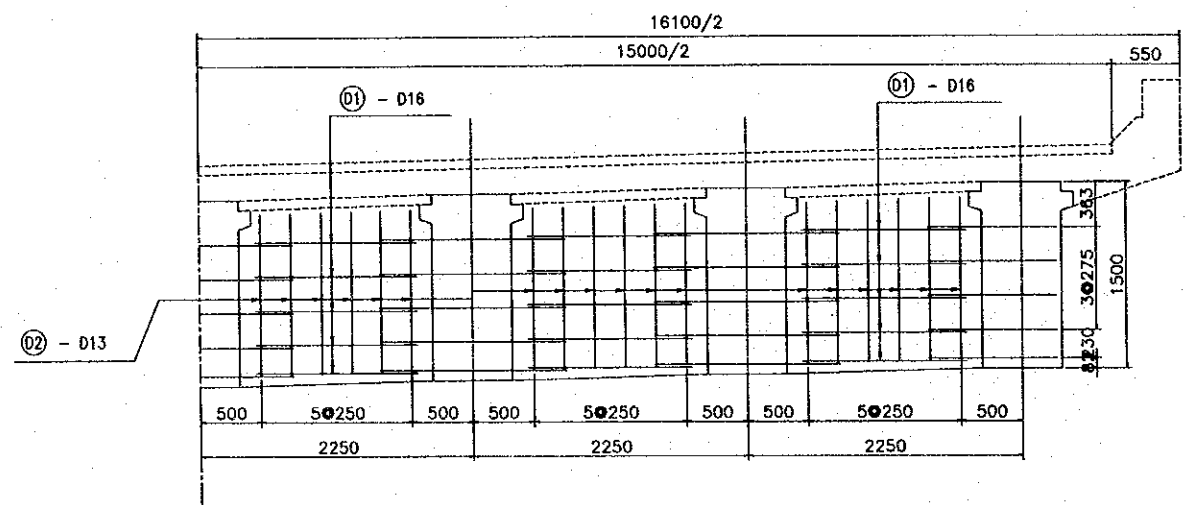
SIDE VIEW
S = 1 : 200



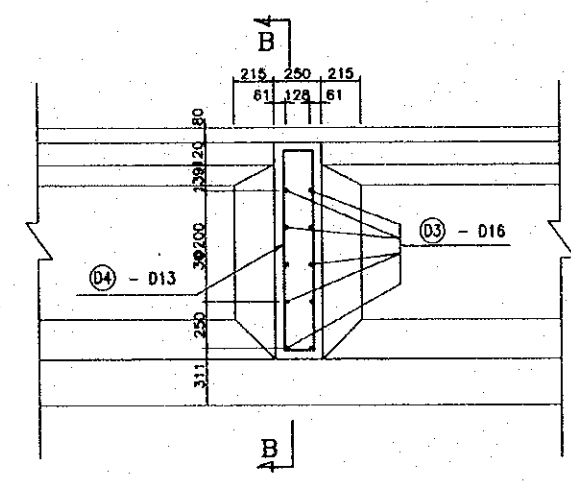
DETAIL I
S = 1 : 40



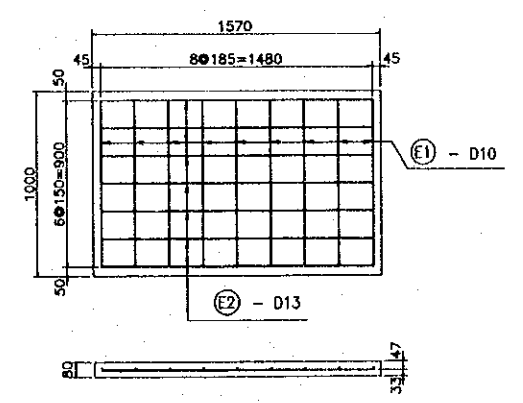
SECTION A-A
S = 1 : 60



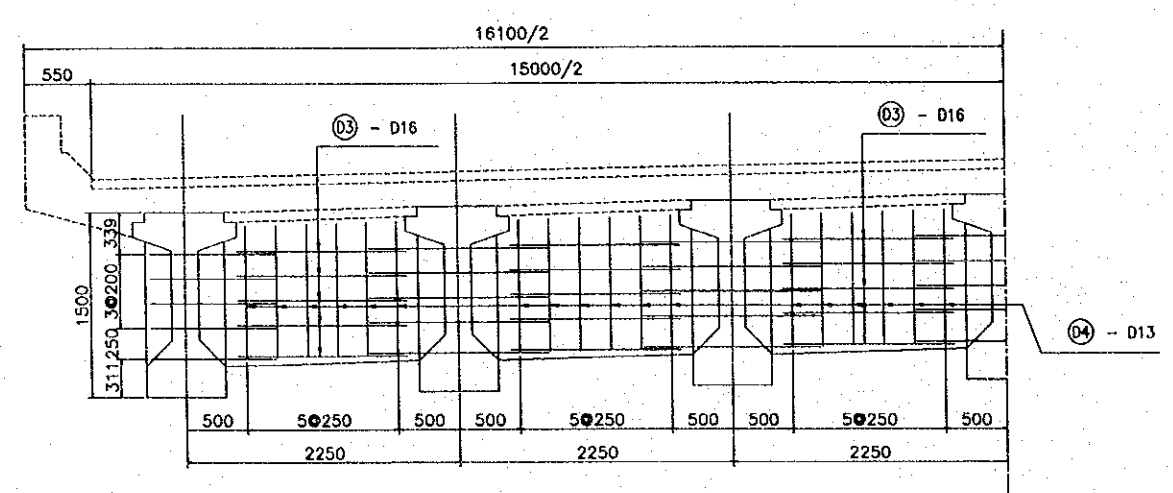
DETAIL II
S = 1 : 40



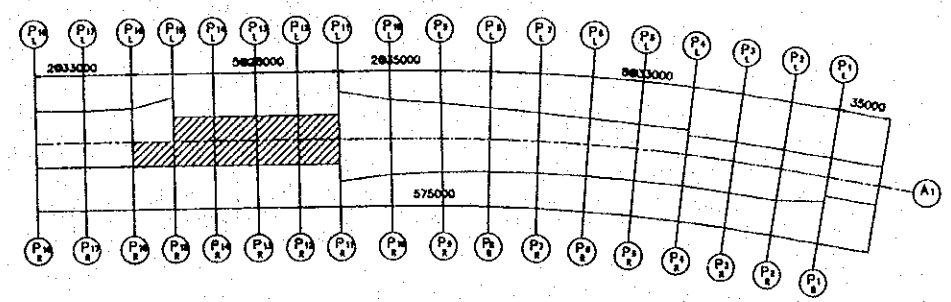
DETAIL OF PRECAST PLATE
S = 1 : 40



SECTION B-B
S = 1 : 60



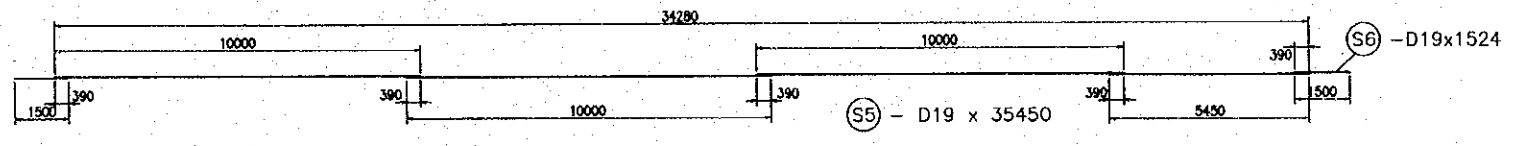
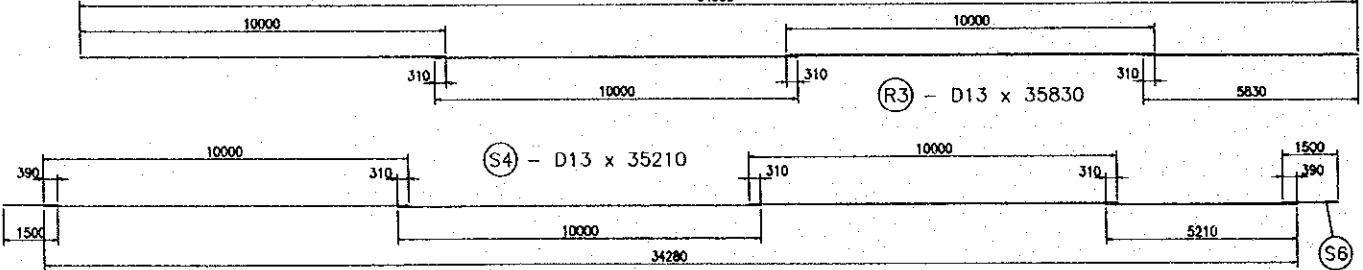
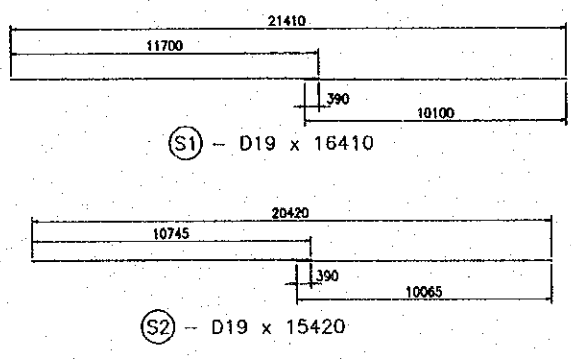
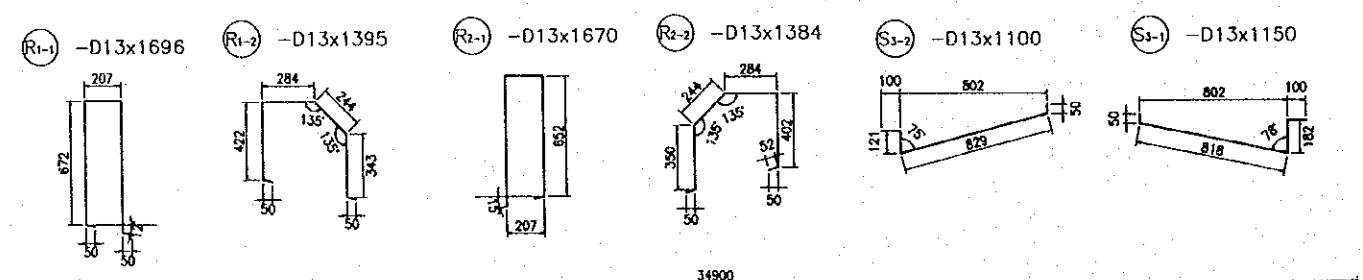
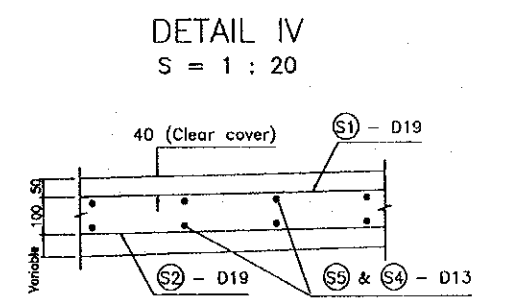
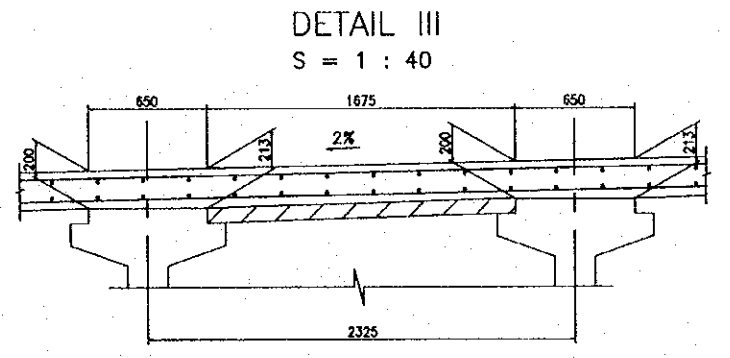
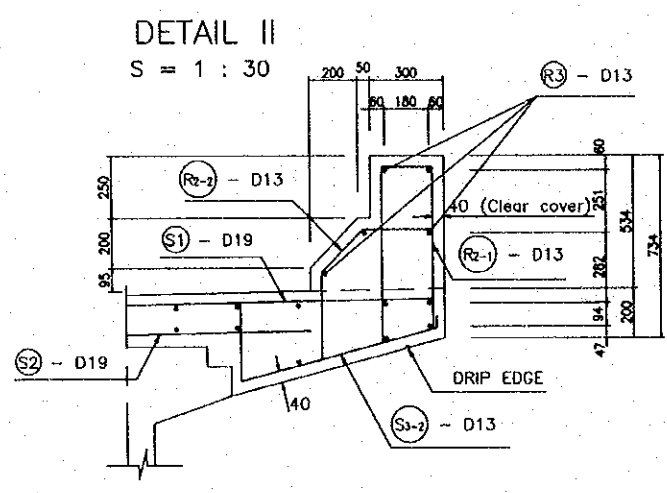
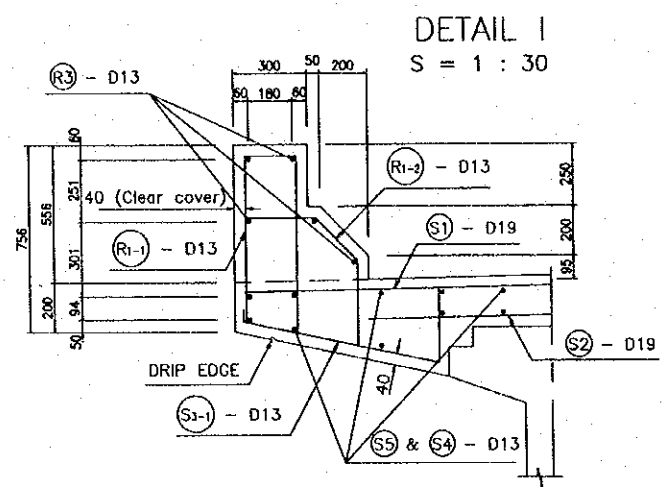
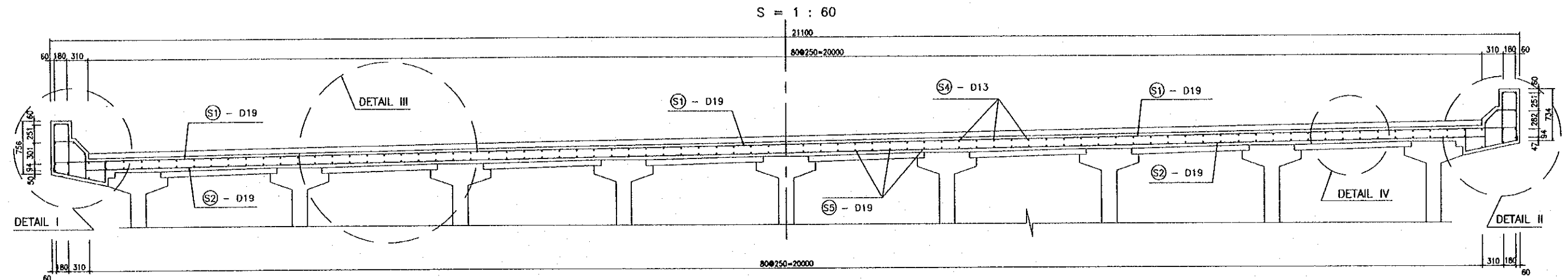
KEY PLAN
S = 1:2500



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.14
CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL	

PACKAGE 3	SCALE	DRAWING No. C-1-2b-46	SHEET No.
RE-BAR ARRANGEMENT OF DECK SLAB (1-1)			

(L=35m W=21.100 m)
CROSS SECTION OF DECK SLAB
S = 1 : 60

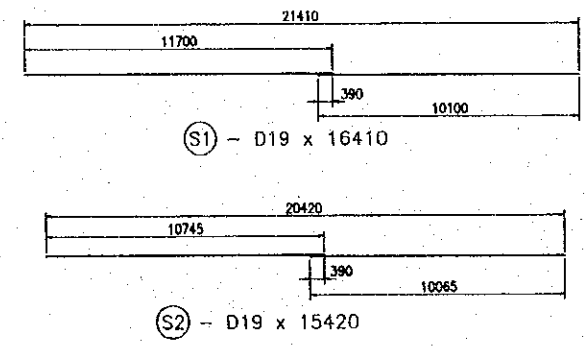
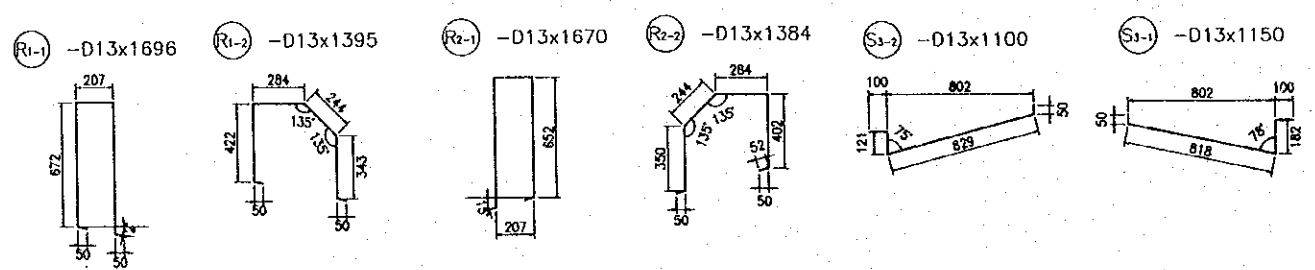
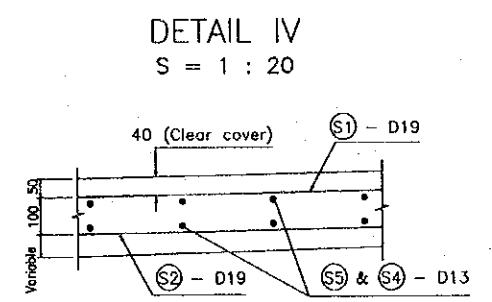
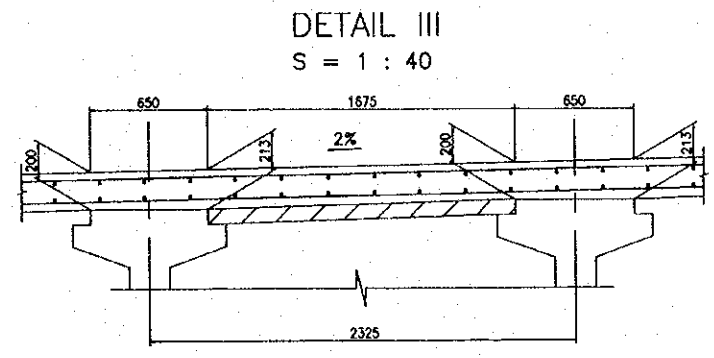
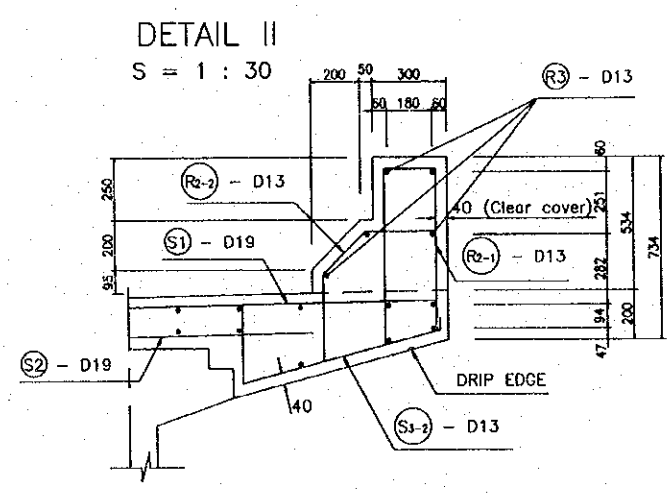
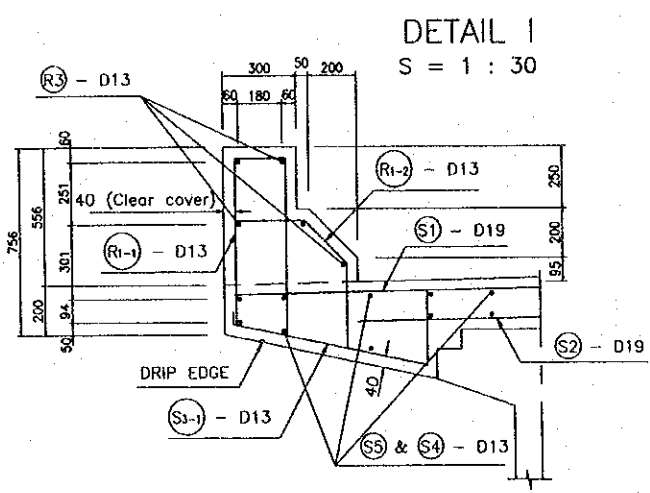
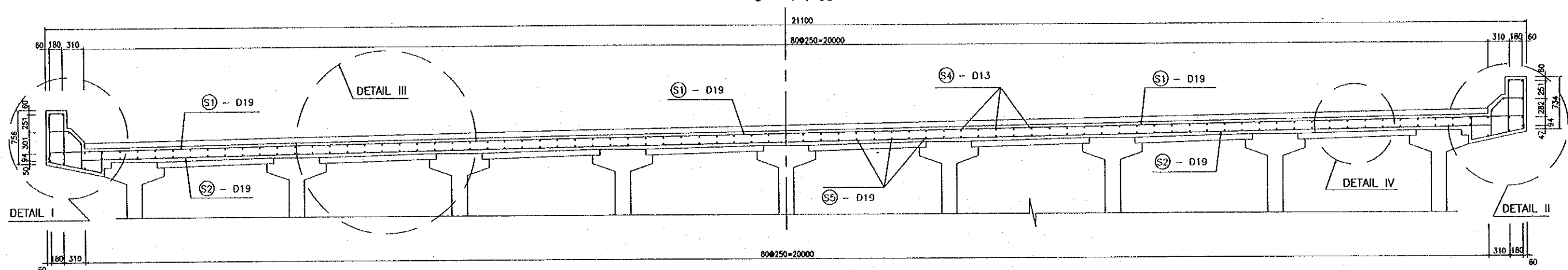


BAR LIST OF DECK SLAB						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
S1	19	21800	279	2.25	13685	
S2	19	20810	279	2.25	13063.5	
S3-1	13	1150	279	0.995	319.2	
S3-2	13	1100	279	0.995	305.4	
S4	13	35210	85	0.995	2977.9	
S5	19	35450	85	2.25	6779.8	
S6	19	1524	320	2.25	1097.3	
SUB TOTAL (FOR 1 SPAN)						38228.1
					D13	3602.5
					D19	34625.6
BAR LIST OF CURB						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
R1-1	13	1696	279	0.995	470.8	
R1-2	13	1395	279	0.995	387.3	
R2-1	13	1670	279	0.995	463.6	
R2-2	13	1384	279	0.995	384.2	
R3	13	35830	10	0.995	356.5	
SUB TOTAL (FOR 1 SPAN)						2062.4
					D13	2062.4

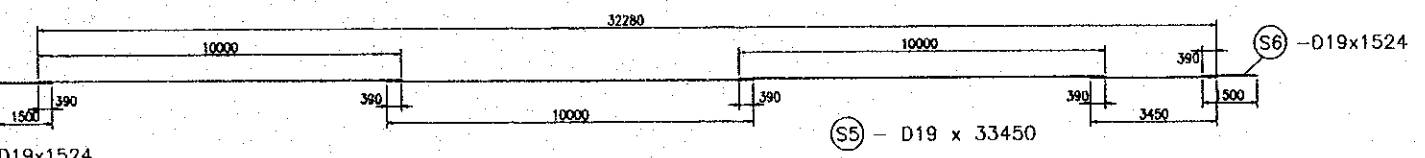
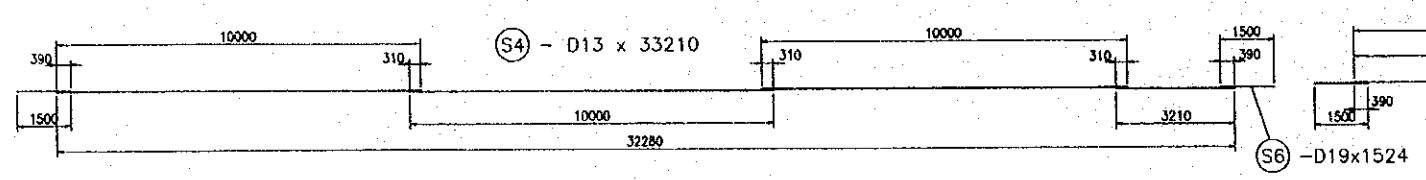
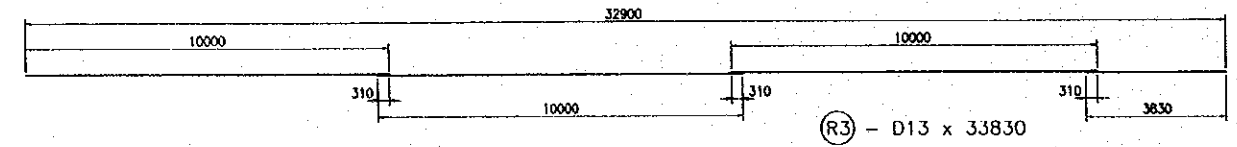
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.17

PACKAGE 3	SCALE	DRAWING No. C-1-2b-47	SHEET No.
RE-BAR ARRANGEMENT OF DECK SLAB (1-2)			

(L=33m W=21.100 m)
CROSS SECTION OF DECK SLAB
S = 1 : 60



BAR LIST OF DECK SLAB						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
S1	19	21800	263	2.25	12900.2	
S2	19	20810	263	2.25	12314.3	
S3-1	13	1150	263	0.995	300.9	
S3-2	13	1100	263	0.995	287.9	
S4	13	33210	85	0.995	2808.7	
S5	19	33450	85	2.25	6397.3	
S6	19	1524	320	2.25	1097.3	
SUB TOTAL (FOR 1 SPAN)					36106.6	
D13					3397.5	
D19					32709.1	
BAR LIST OF CURB						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
R1-1	13	1696	263	0.995	443.8	
R1-2	13	1395	263	0.995	365	
R2-1	13	1670	263	0.995	437	
R2-2	13	1384	263	0.995	362.2	
R3	13	33830	10	0.995	336.6	
SUB TOTAL (FOR 1 SPAN)					1944.7	
D13					1944.7	

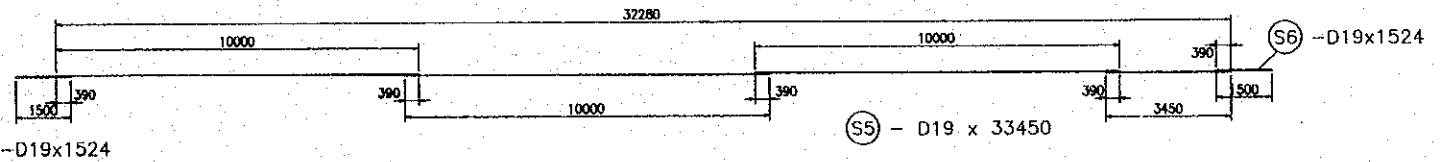
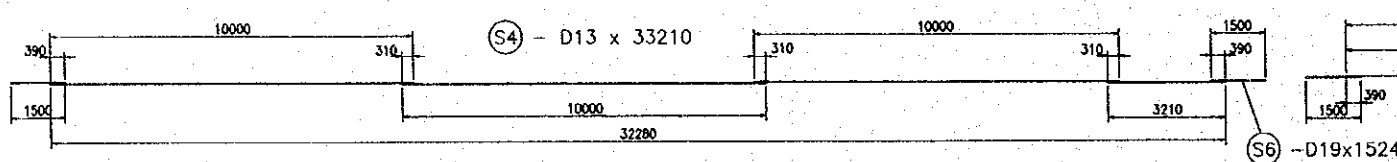
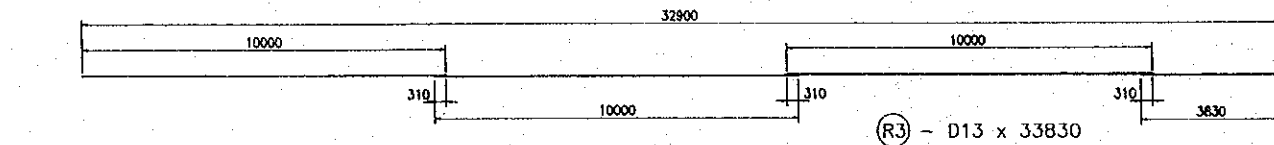
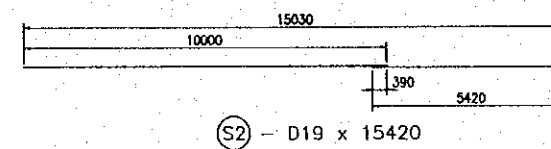
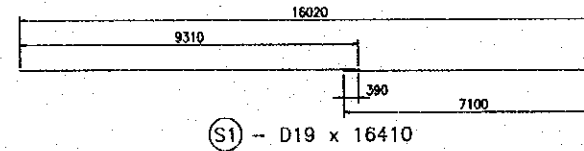
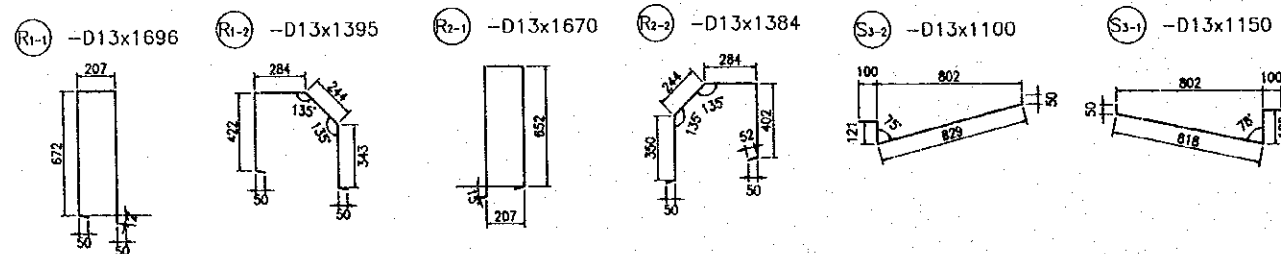
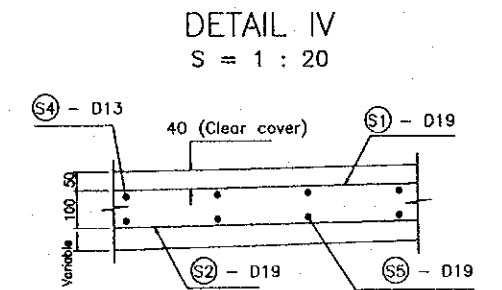
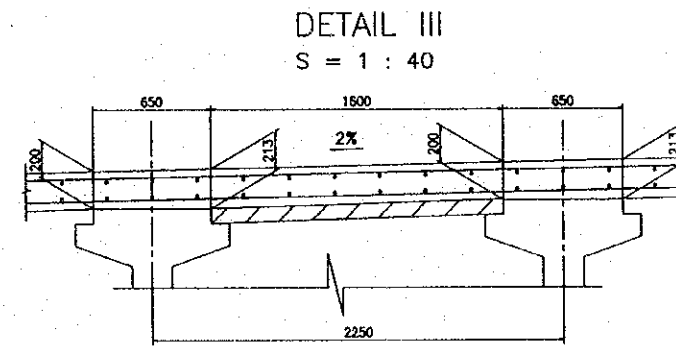
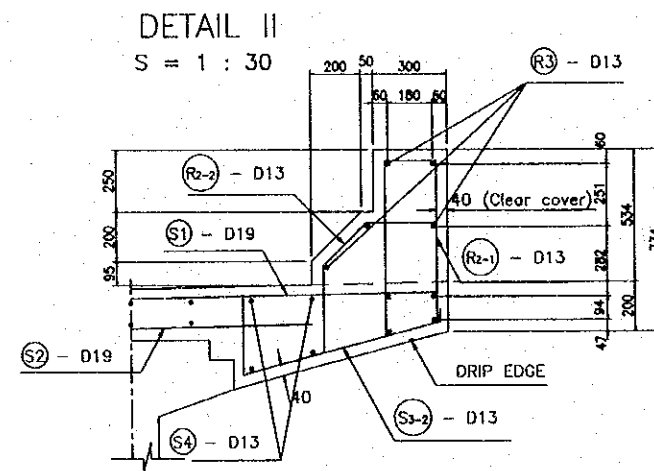
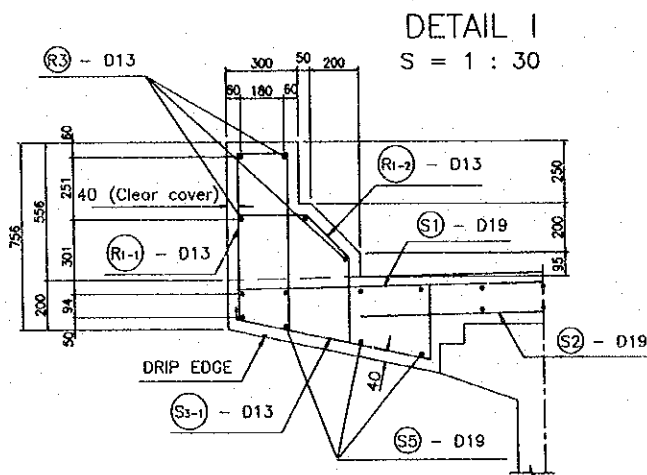
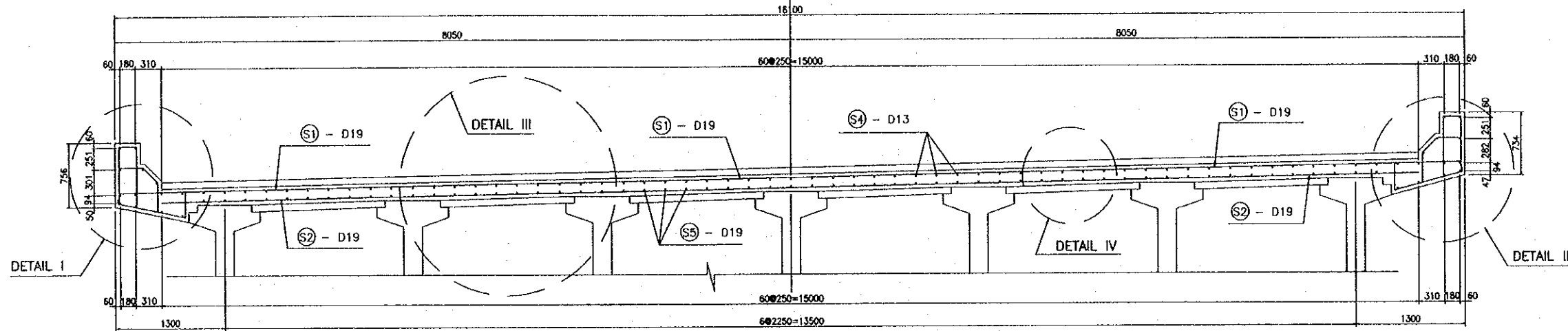


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATADE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 2. 14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-2b-48	

RE-BAR ARRANGEMENT OF DECK SLAB (1-3)

(L=33m W=16.100 m)
CROSS SECTION OF DECK SLAB
S = 1 : 60

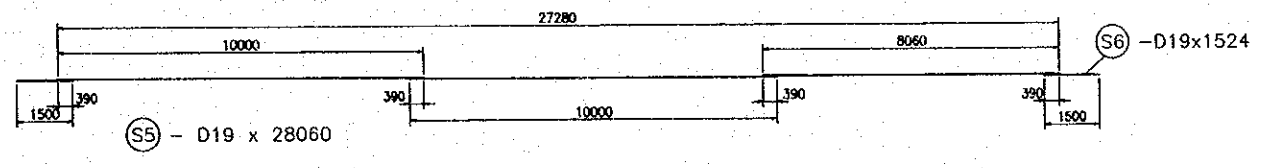
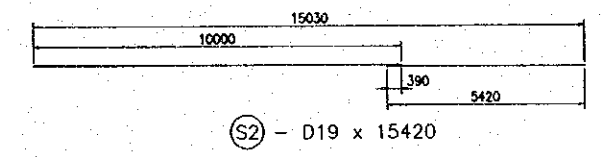
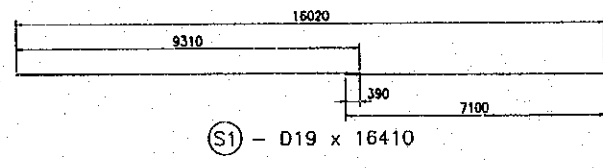
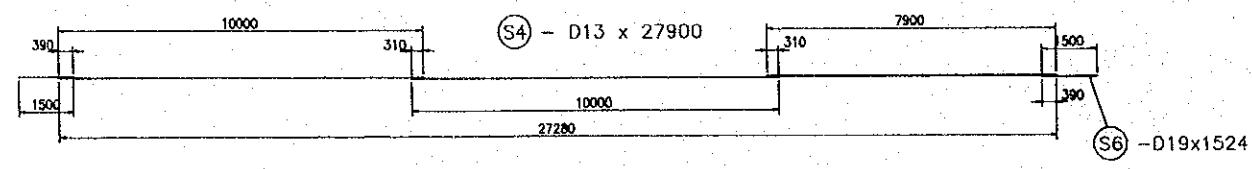
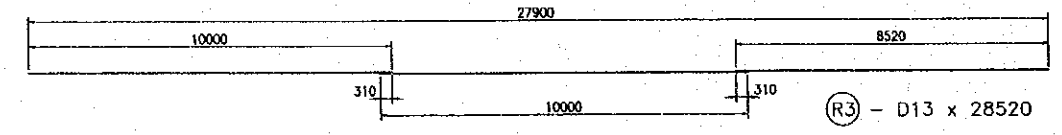
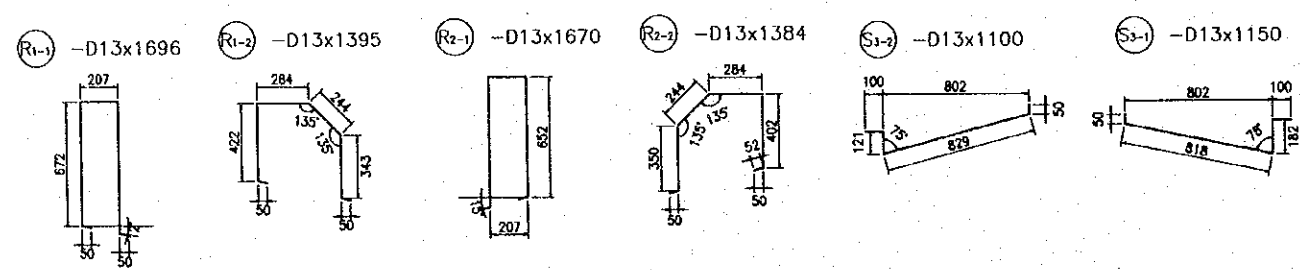
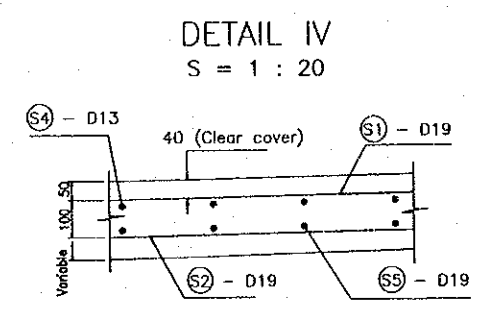
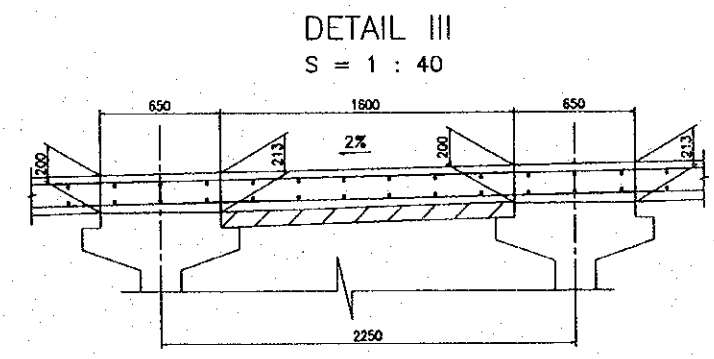
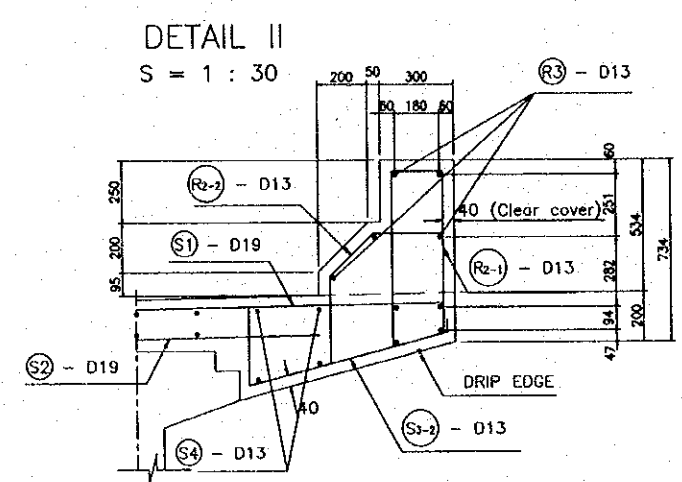
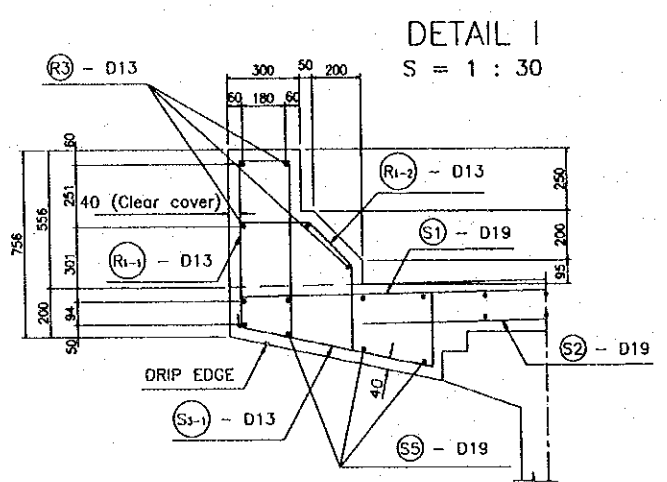
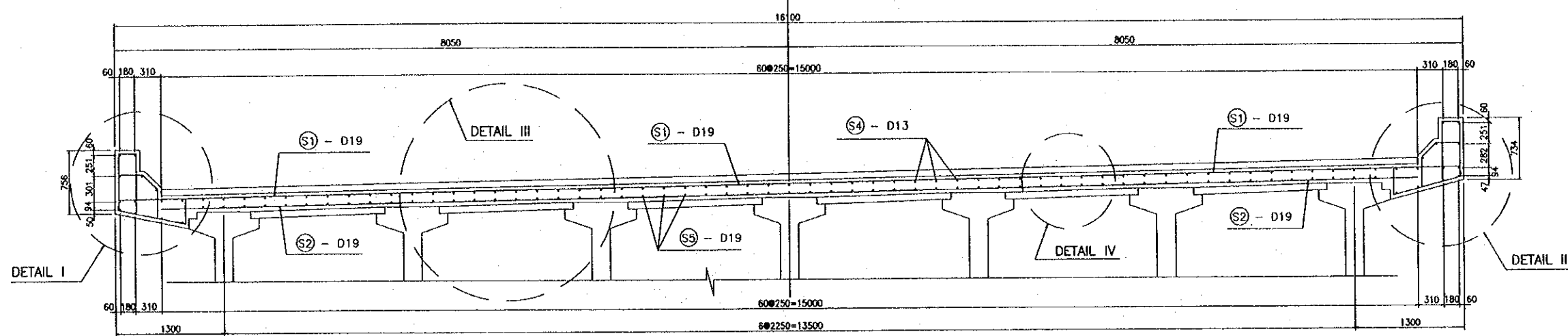


BAR LIST OF DECK SLAB						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
S1	19	16410	263	2.25	9710.6	
S2	19	15420	263	2.25	9124.8	
S3-1	13	1150	263	0.995	300.9	
S3-2	13	1100	263	0.995	287.9	
S4	13	33210	65	0.995	2147.9	
S5	19	33450	65	2.25	4892.1	
S6	19	1524	242	2.25	829.8	
SUB TOTAL (FOR 1 SPAN)					27294	
					D13	2736.7
					D19	24557.3
BAR LIST OF CURB						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
R1-1	13	1696	263	0.995	443.8	
R1-2	13	1395	263	0.995	365	
R2-1	13	1670	263	0.995	437	
R2-2	13	1384	263	0.995	362.2	
R3	13	33830	10	0.995	336.6	
SUB TOTAL (FOR 1 SPAN)					1944.7	
					D13	1944.7

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.17

PACKAGE 3	SCALE	DRAWING No. C-1-2b-49	SHEET No.
RE-BAR ARRANGEMENT OF DECK SLAB (1-4)			

(L=28m W=16.100 m)
CROSS SECTION OF DECK SLAB
S = 1 : 60



BAR LIST OF DECK SLAB						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
S1	19	16410	223	2.25	8233.7	
S2	19	15420	223	2.25	7737	
S3-1	13	1150	223	0.995	255.2	
S3-2	13	1100	223	0.995	244.1	
S4	13	27900	65	0.995	1804.4	
S5	19	28060	65	2.25	4103.8	
S6	19	1524	242	2.25	829.8	
SUB TOTAL (FOR 1 SPAN)					23208	
					D13	2303.7
					D19	20904.3
BAR LIST OF CURB						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
R1-1	13	1696	223	0.995	376.3	
R1-2	13	1395	223	0.995	309.5	
R2-1	13	1670	223	0.995	370.5	
R2-2	13	1384	223	0.995	307.1	
R3	13	28520	10	0.995	283.8	
SUB TOTAL (FOR 1 SPAN)					1647.2	
					D13	1647.2

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.17	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

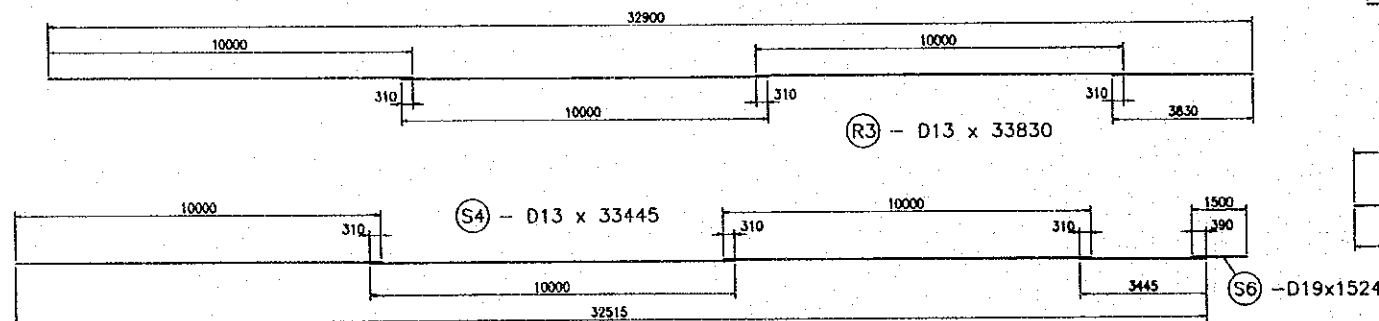
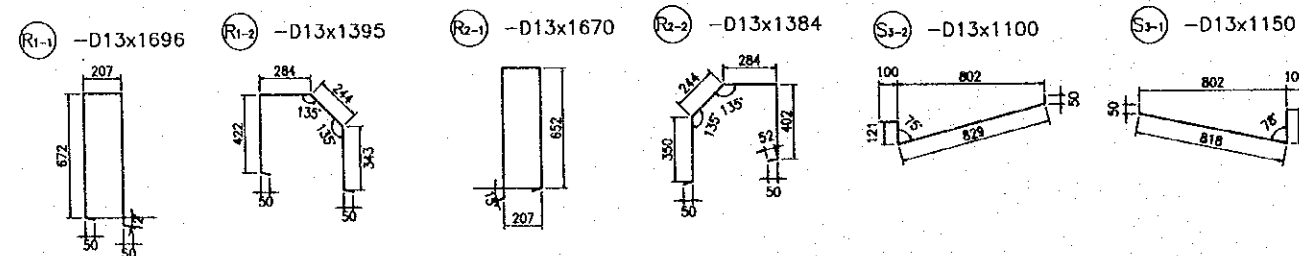
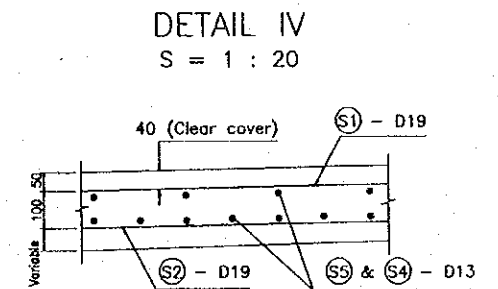
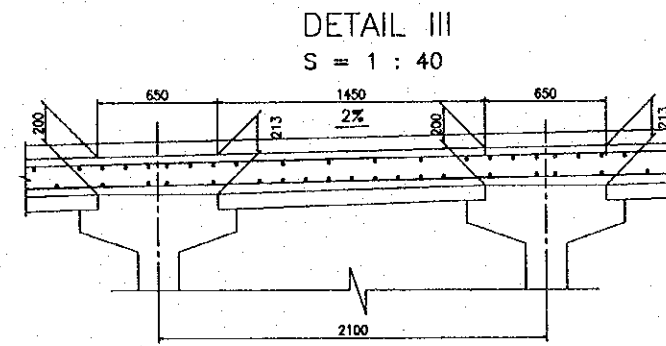
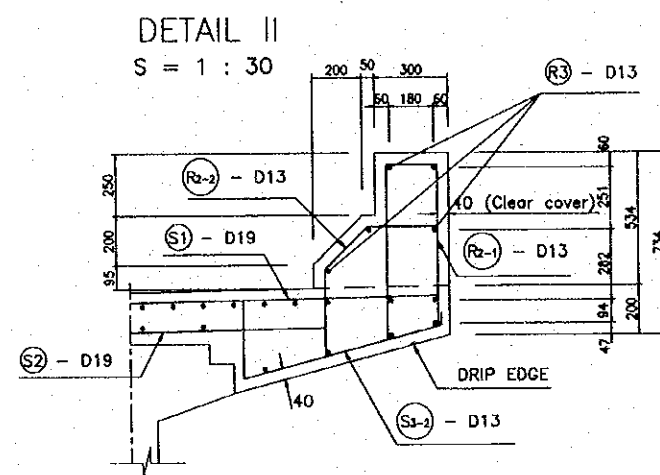
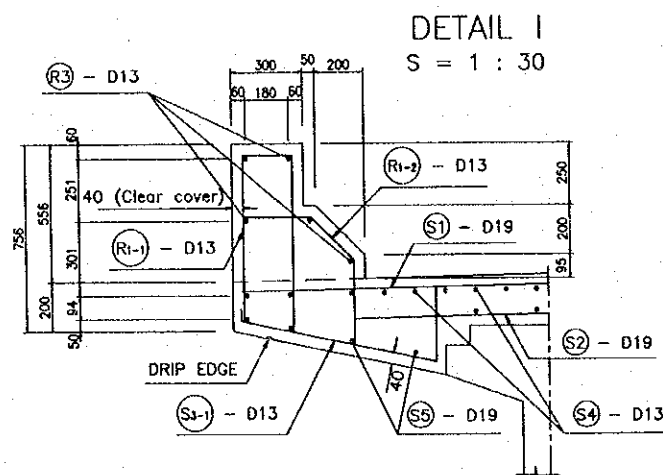
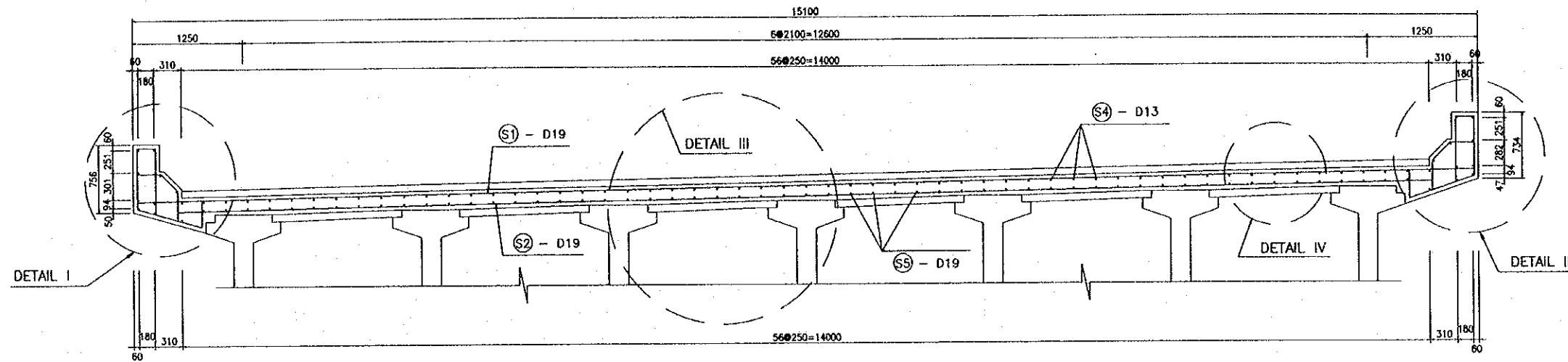
PACKAGE 3	SCALE C-1-2b-50	DRAWING No. C-1-2b-50	SHEET No.
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RE-BAR ARRANGEMENT OF DECK SLAB (1-5)

(W=15.100 m)

CROSS SECTION OF DECK SLAB

S = 1 : 30

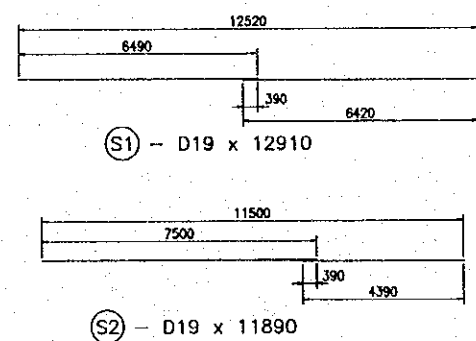
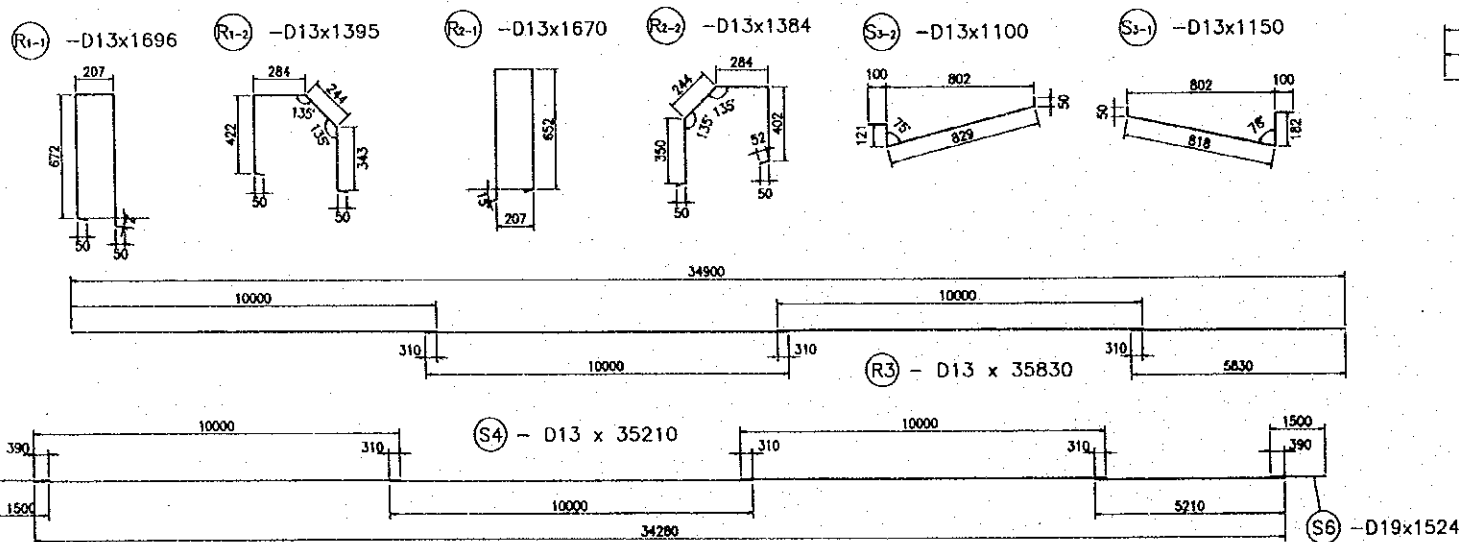
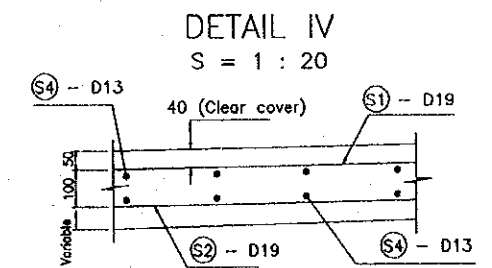
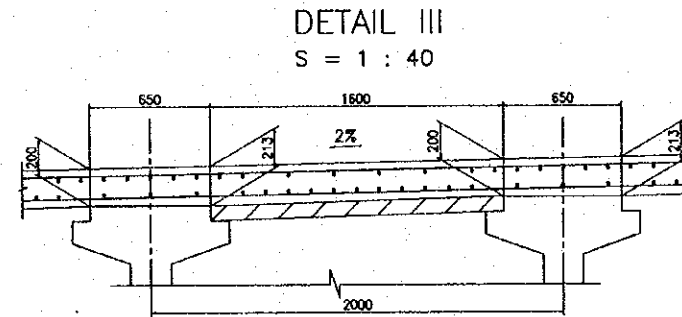
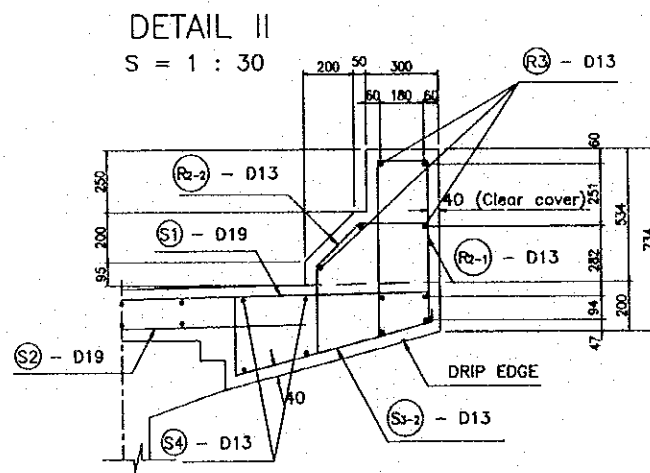
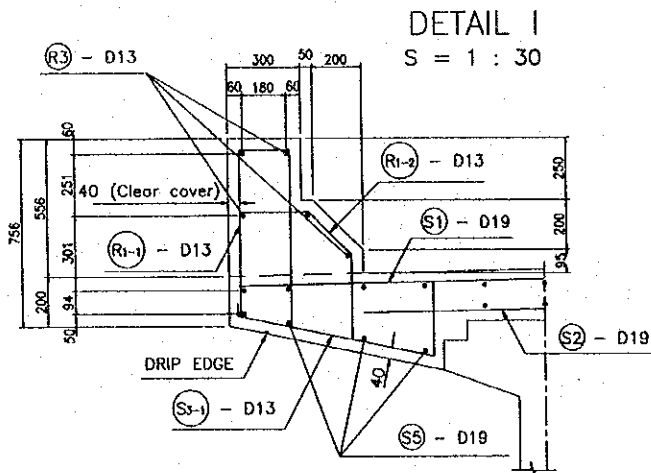
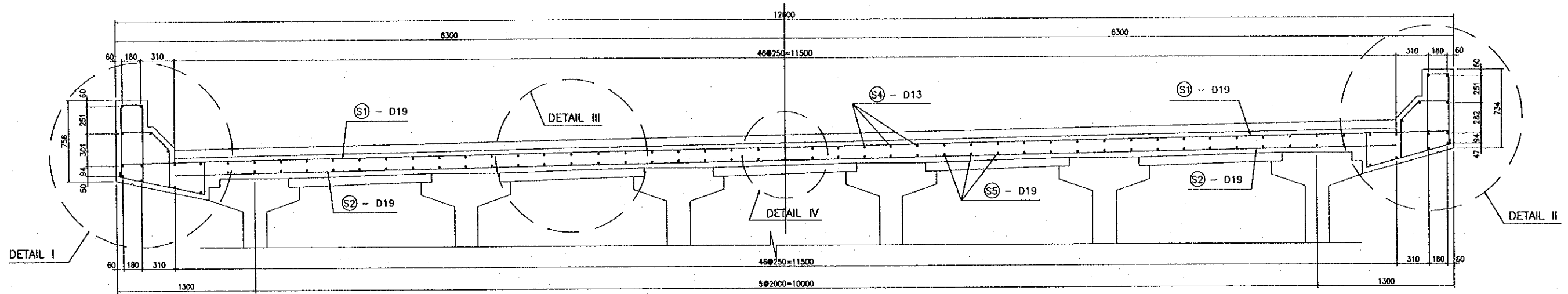


BAR LIST						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
S1	19	16410	263	2.25	9710.6	
S2	19	15420	263	2.25	9124.8	
S3-1	13	1150	263	0.995	300.9	
S3-2	13	1100	263	0.995	287.8	
S4	13	33445	263	0.995	2961.7	
S5	13	32555	89	0.995	2882.9	
S6	19	1500	87	2.25	293.6	
S7	19	3280	87	2.25	642.1	
R1-1	13	1696	263	0.995	443.8	
R1-2	13	1395	263	0.995	365	
R2-1	13	1670	263	0.995	437	
R2-2	13	1384	263	0.995	362.2	
R3	13	33830	10	0.995	336.6	
SUB TOTAL (FOR 1 SPAN)					28149	
					D13	8377.9
					D19	19771.1

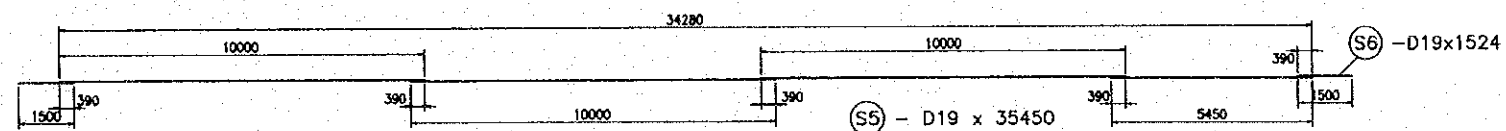
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.8.14

PACKAGE 3	SCALE	DRAWING No. C-1-2b-51	SHEET No.
RE- BAR ARRANGEMENT OF DECK SLAB (1-6)			

(L=35m W=12.600 m)
CROSS SECTION OF DECK SLAB
S = 1 : 40



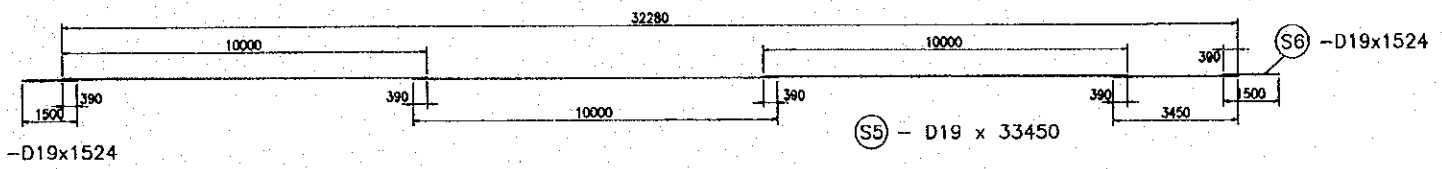
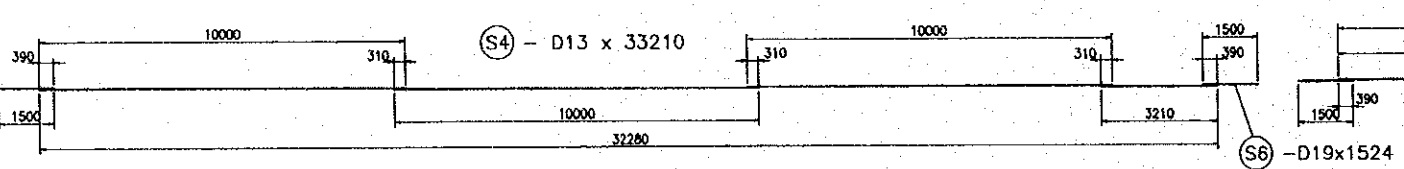
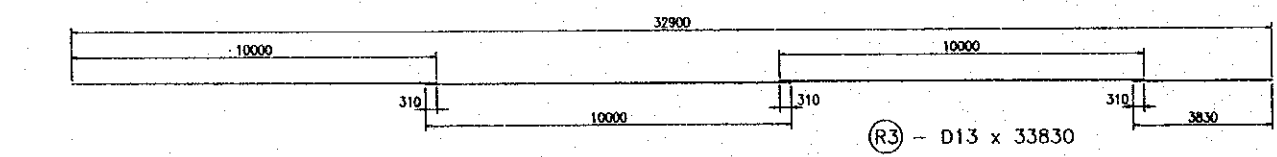
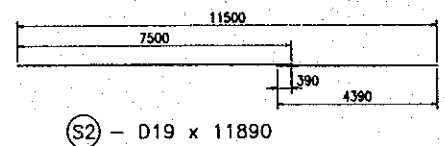
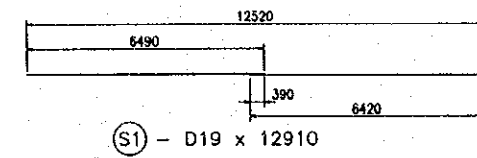
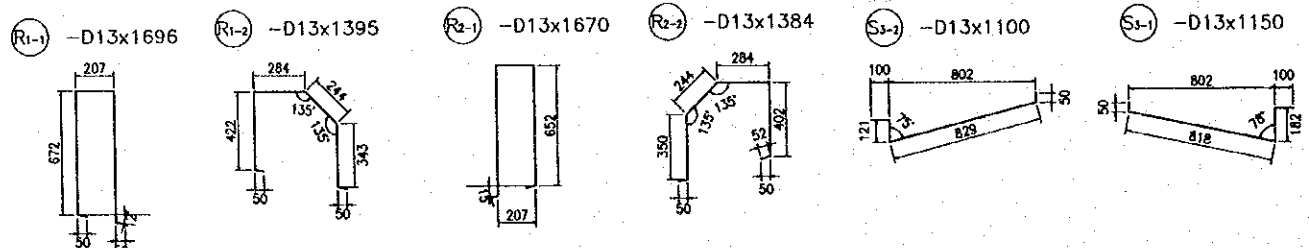
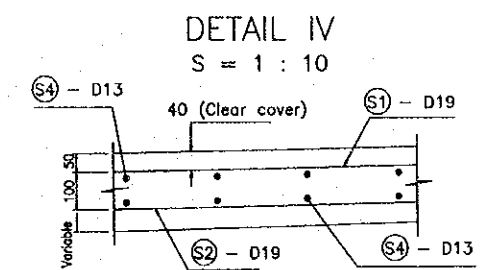
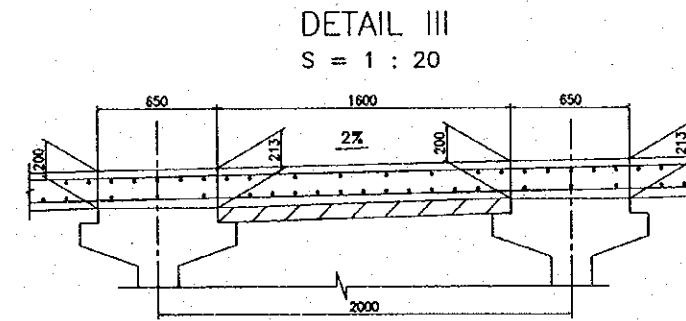
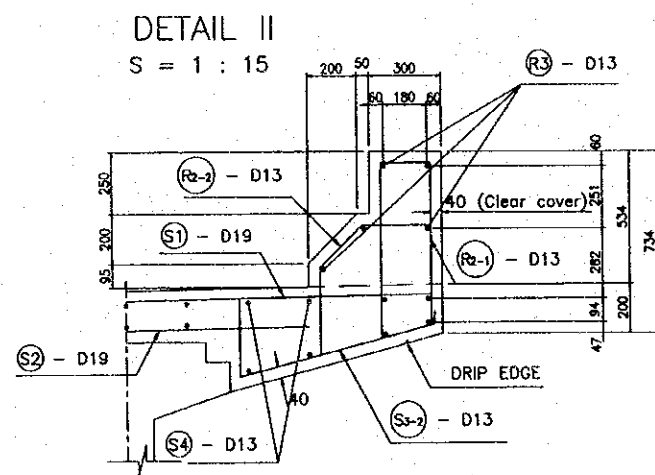
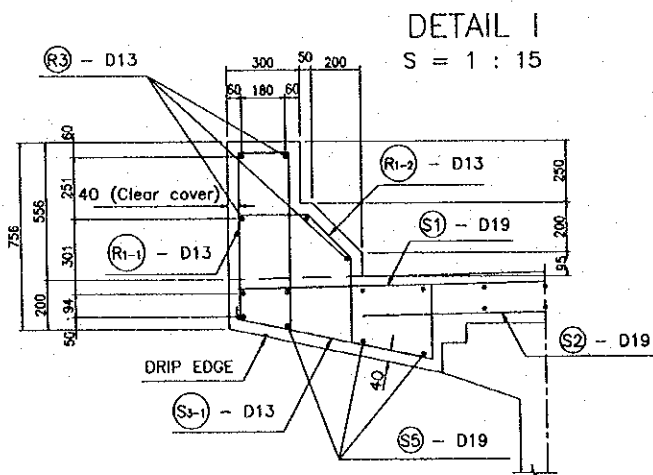
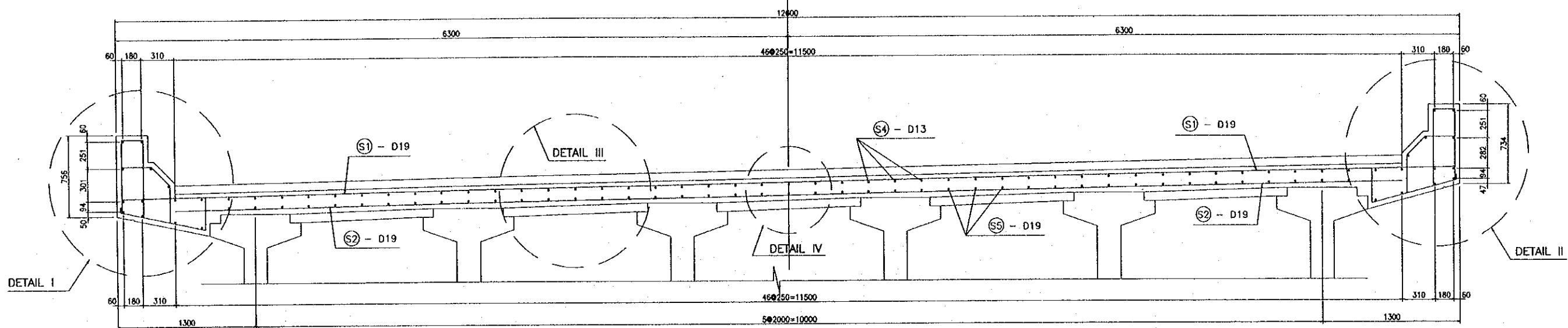
BAR LIST OF DECK SLAB						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
S1	19	12910	279	2.25	8104.3	
S2	19	11890	279	2.25	7463.9	
S3-1	13	1150	279	0.995	319.2	
S3-2	13	1100	279	0.995	305.4	
S4	13	35210	51	0.995	1786.7	
S5	19	35450	51	2.25	4067.9	
S6	19	1524	186	2.25	637.8	
SUB TOTAL (FOR 1 SPAN)					22685.2	
					D13	2411.3
					D19	20273.9
BAR LIST OF CURB						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
R1-1	13	1696	279	0.995	470.8	
R1-2	13	1395	279	0.995	387.3	
R2-1	13	1670	279	0.995	463.6	
R2-2	13	1384	279	0.995	384.2	
R3	13	35830	10	0.995	356.5	
SUB TOTAL (FOR 1 SPAN)					2062.4	
					D13	2062.4



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATADA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
FORMAL NAME PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.8.14

PACKAGE 3	SCALE	DRAWING No. C-1-2b-52	SHEET No.
RE-BAR ARRANGEMENT OF DECK SLAB (1-7)			

(L=33m W=12.600 m)
CROSS SECTION OF DECK SLAB
S = 1 : 20



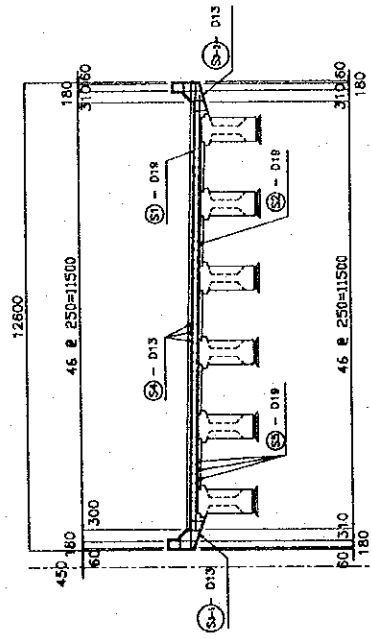
BAR LIST OF DECK SLAB						
REIN No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
S1	19	12910	263	2.25	7639.5	
S2	19	11890	263	2.25	7035.9	
S3-1	13	1150	263	0.995	300.9	
S3-2	13	1100	263	0.995	287.9	
S4	13	33210	51	0.995	1685.2	
S5	19	33450	51	2.25	3838.4	
S6	19	1524	186	2.25	637.8	
SUB TOTAL (FOR 1 SPAN)					21425.6	
D13					2274	
D19					19151.6	
BAR LIST OF CURB						
R1-1	13	1696	263	0.995	443.8	
R1-2	13	1395	263	0.995	365	
R2-1	13	1670	263	0.995	437	
R2-2	13	1384	263	0.995	362.2	
R3	13	33830	10	0.995	336.6	
SUB TOTAL (FOR 1 SPAN)					1944.7	
D13					1944.7	

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THUNG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATIAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.08.19

PACKAGE 3	SCALE	DRAWING No. C-1-2b-53	SHEET No.
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RE-BAR ARRANGMENT OF DECK SLAB (2-1)

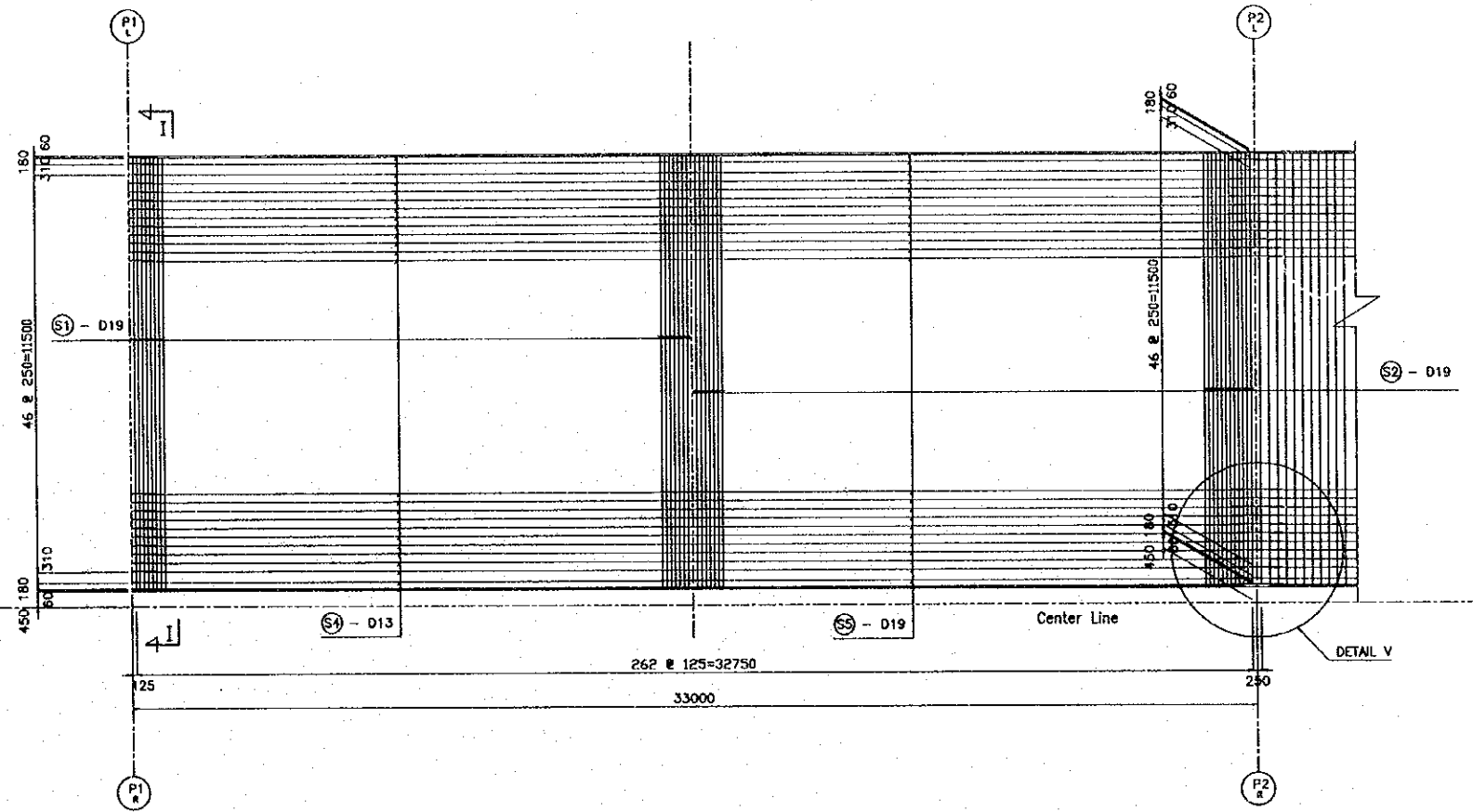
SECTION I-I
S = 1 : 200



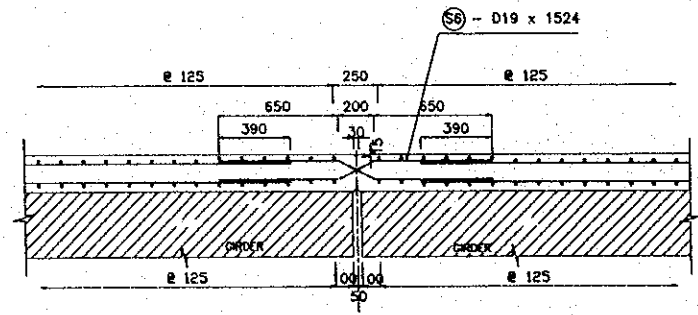
TOP REINFORCEMENT

BOTTOM REINFORCEMENT

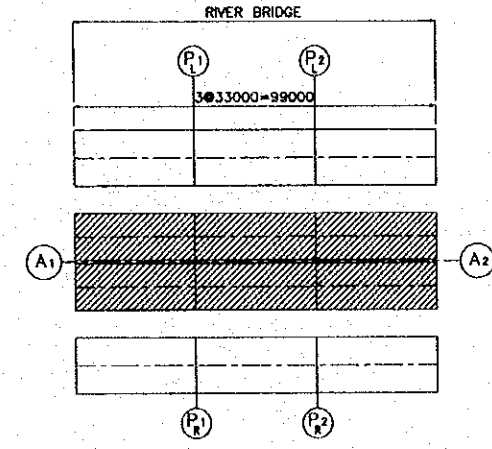
S = 1:200



DETAIL V
S = 1:20



KEY PLAN
S = 1:2000

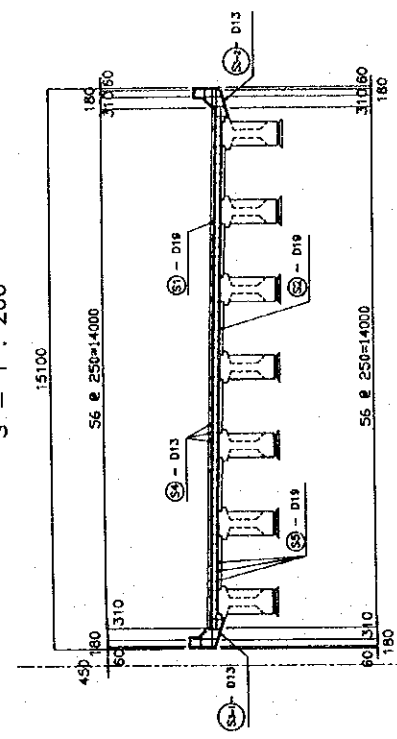


100

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.5.17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-2b-54	SHEET No.
RE-BAR ARRANGMENT OF DECK SLAB (2-2)			

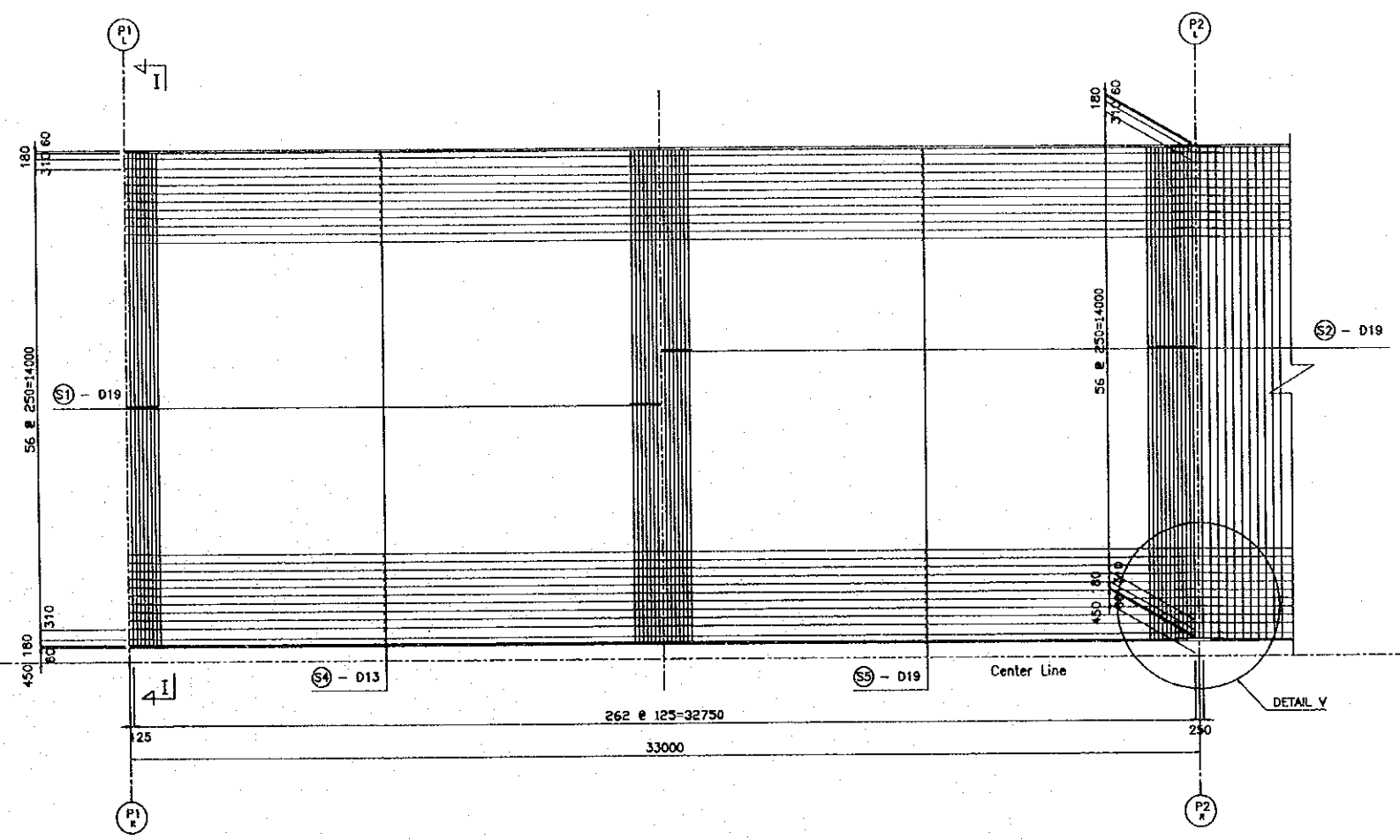
SECTION I-I
S = 1 : 200



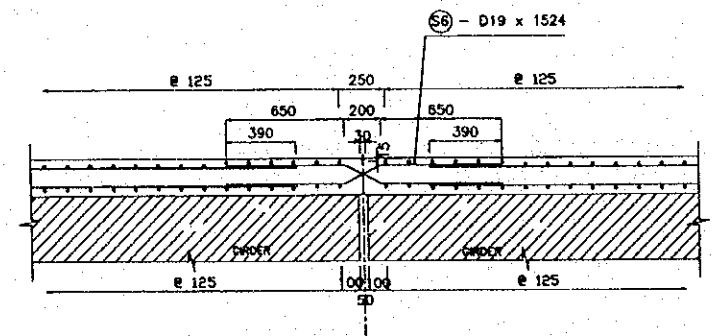
TOP REINFORCEMENT

BOTTOM REINFORCEMENT

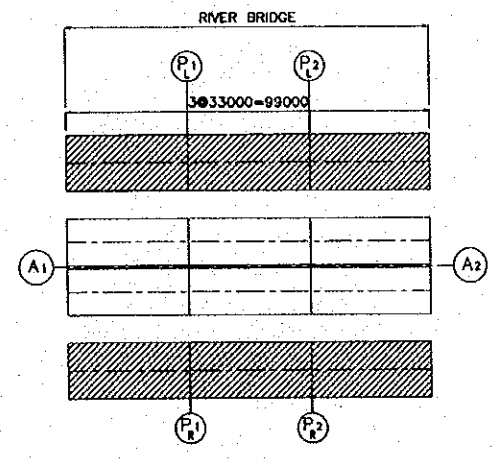
S = 1:200



DETAIL V
S = 1:20



KEY PLAN
S = 1:2000



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		
PROJECT RED RIVER BRIDGE (THANH BI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2002.11.14	

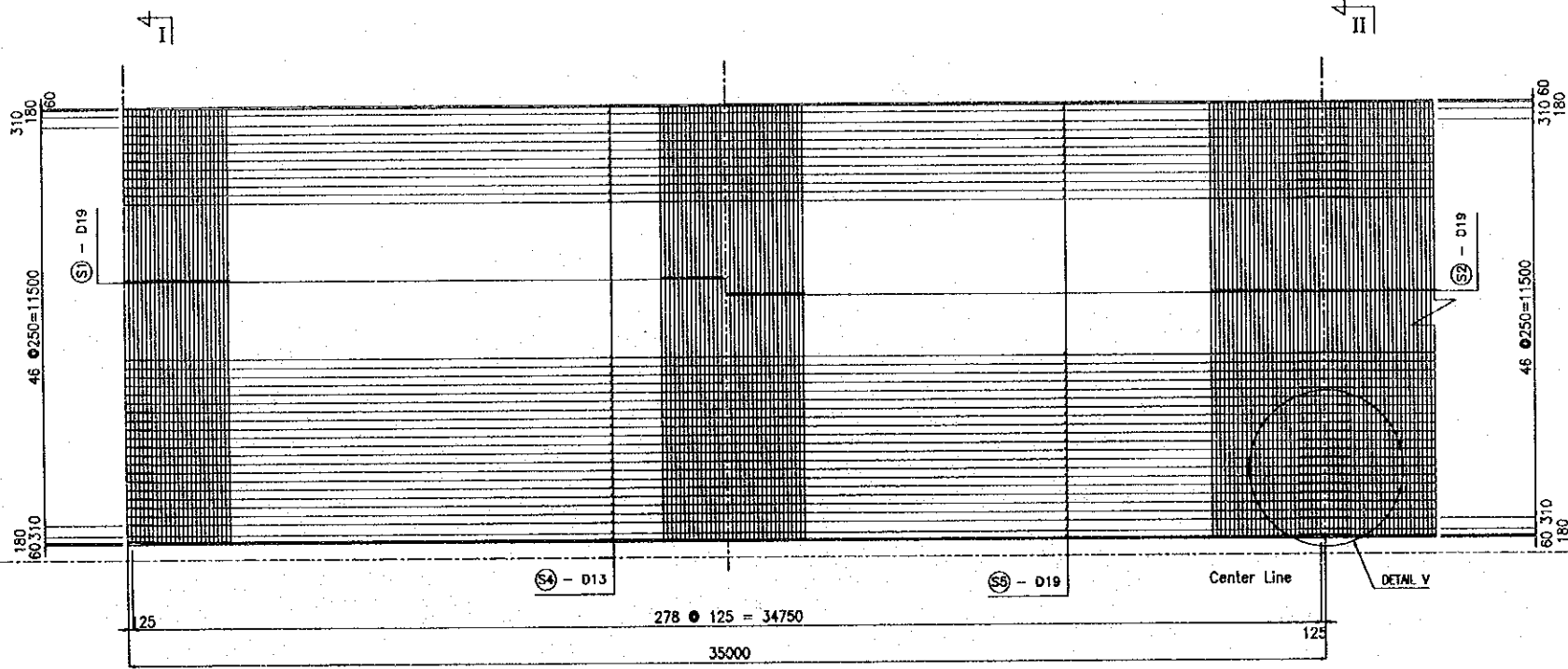
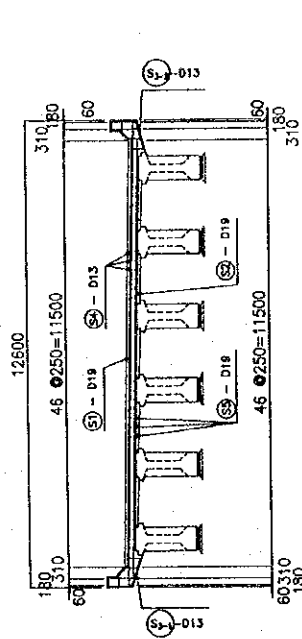
PACKAGE 3	SCALE	DRAWING No. C--1-2b-55	SHEET No.
RE-BAR ARRANGEMENT OF DECK SLAB (2-3)			

TOP REINFORCEMENT

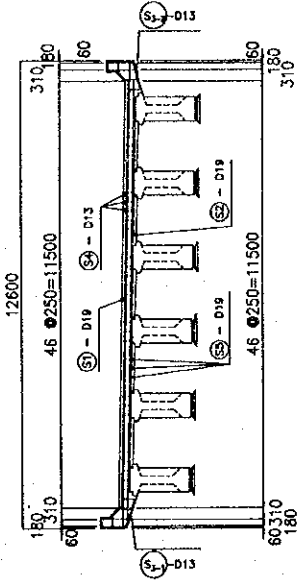
S = 1:200

BOTTOM REINFORCEMENT

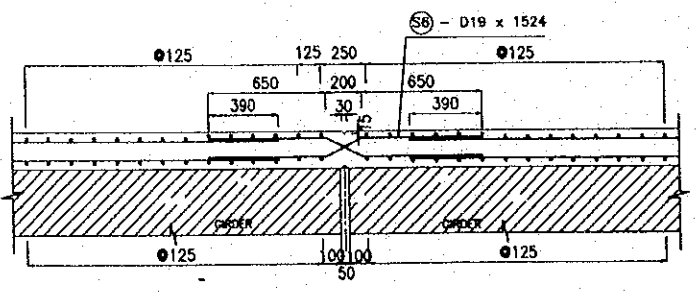
SECTION I-I
S = 1 : 200



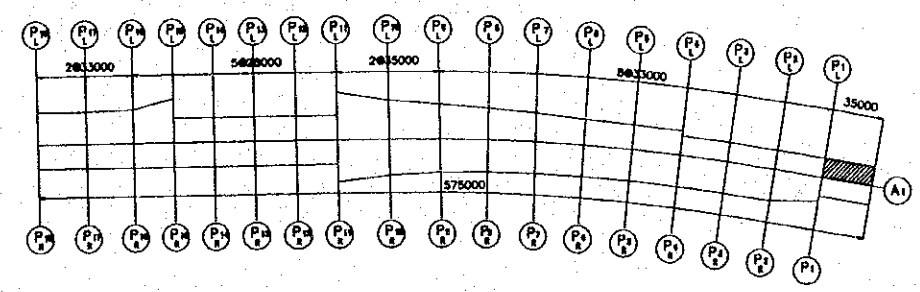
SECTION II-II
S = 1:200



DETAIL V
S = 1:20



KEY PLAN
S = 1:5000



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (NHANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 11. 19

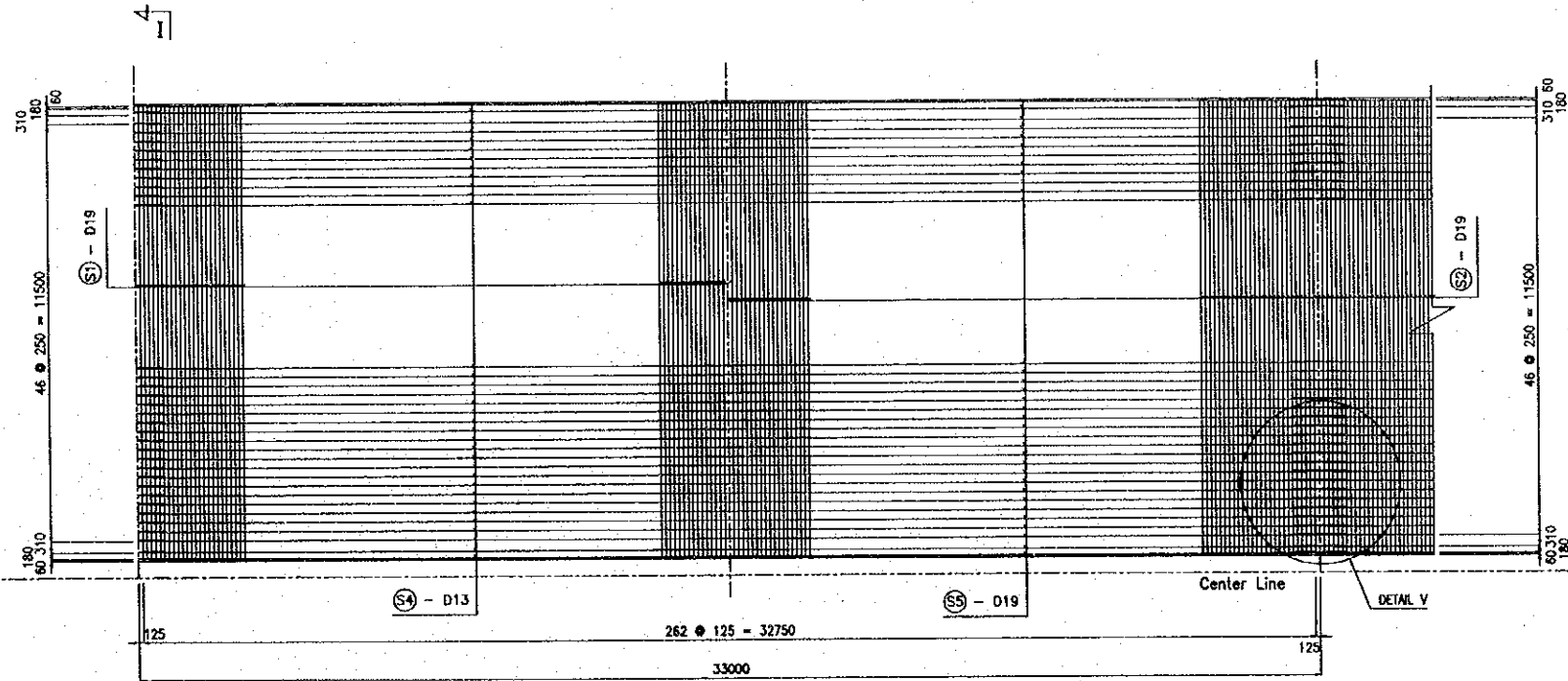
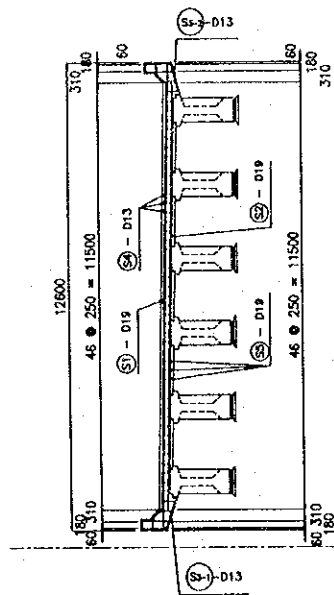
PACKAGE 3	SCALE	DRAWING No. C-1-2b-56	SHEET No.
RE-BAR ARRANGEMENT OF DECK SLAB (2-4)			

TOP REINFORCEMENT

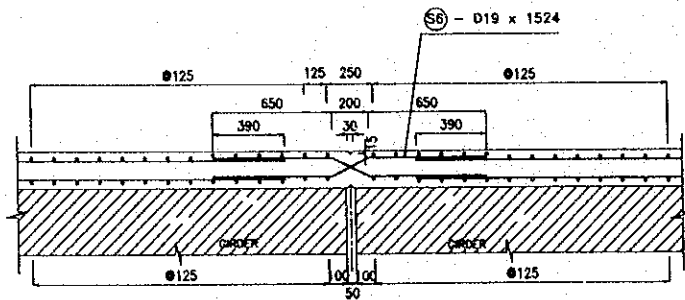
BOTTOM REINFORCEMENT

S = 1:200

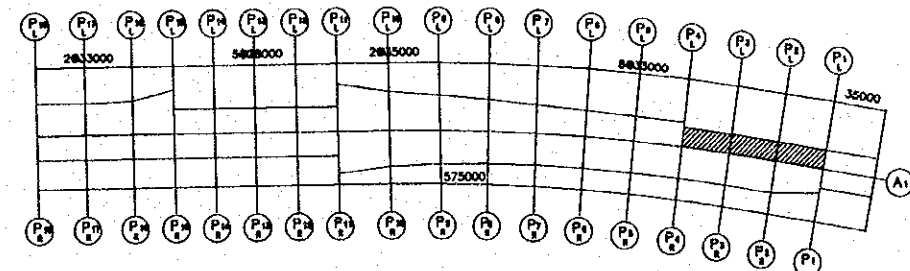
SECTION I-I
S = 1 : 200



DETAIL V
S = 1:20



KEY PLAN
S = 1:5000



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATARC
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 11. 19
CONTRACT		SIGNATURE

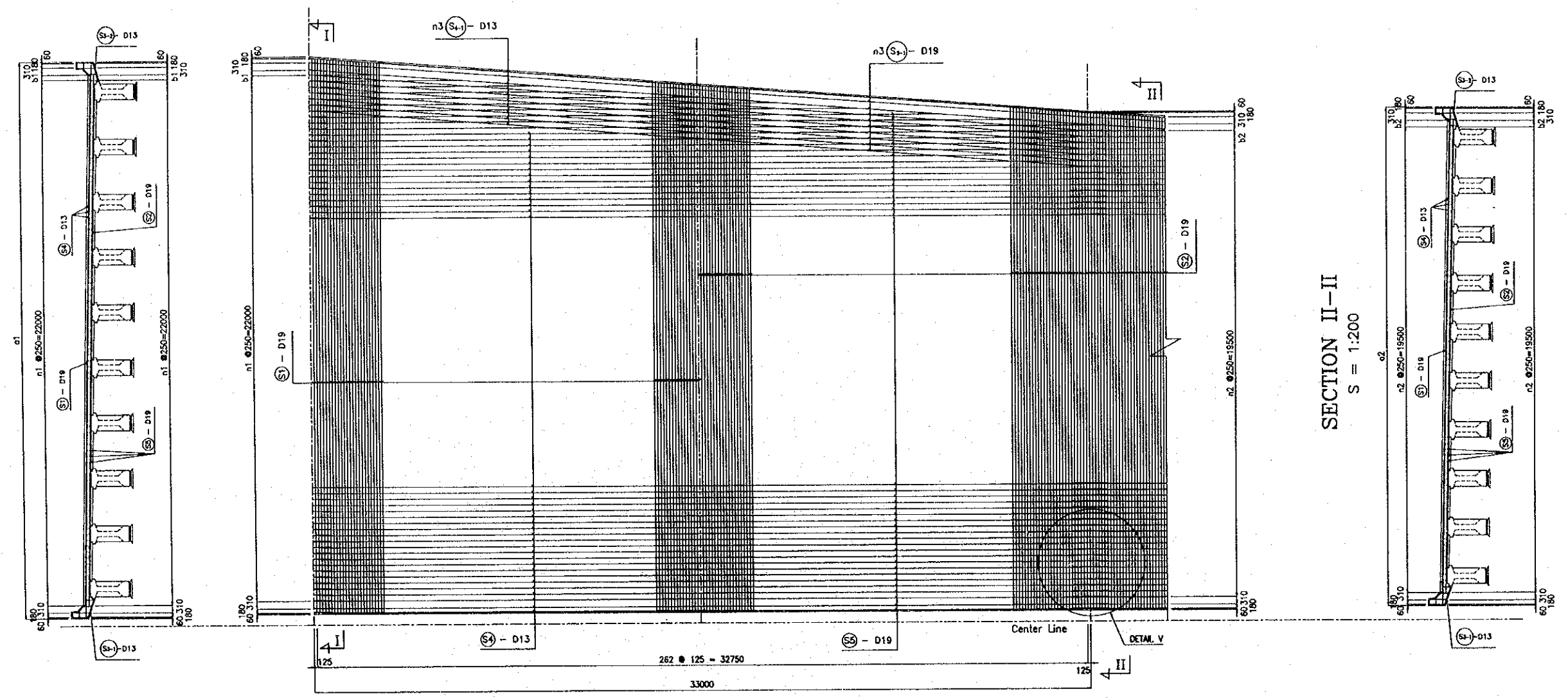
PACKAGE 3	SCALE	DRAWING No. C-1-2b-57	SHEET No.
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RE-BAR ARRANGEMENT OF DECK SLAB (2-5)

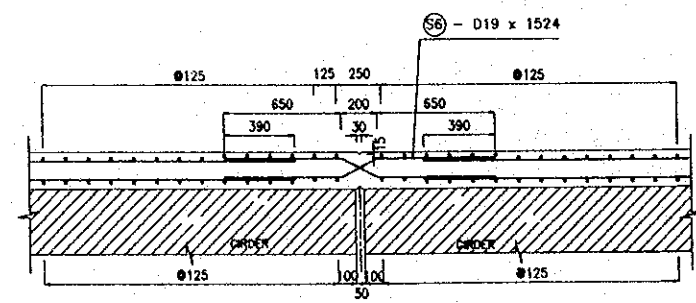
TOP REINFORCEMENT S = 1:200 BOTTOM REINFORCEMENT

SECTION I-I
S = 1 : 200

SECTION II-II
S = 1:200

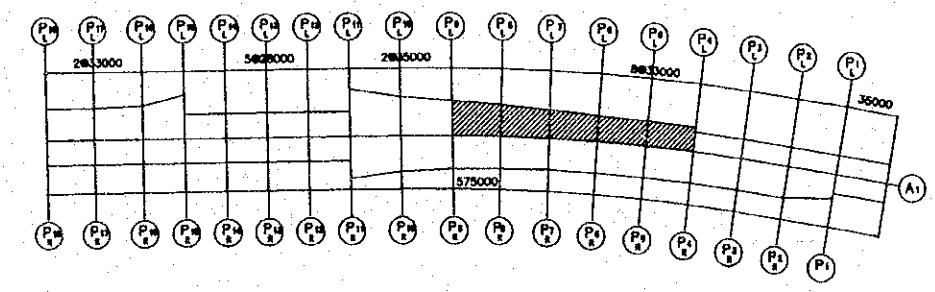


DETAIL V
S = 1:20



SPAN No	a1 (mm)	a2 (mm)	b1 (mm)	b2 (mm)	n1	n2	n3
P4L-P5L	16158	16100	308	0	59	60	3
P5L-P6L	16976	16158	376	308	62	59	3
P6L-P7L	18727	16976	377	376	69	62	7
P7L-P8L	20878	18727	278	377	78	69	9
P8L-P9L	23317	20878	217	278	88	78	10

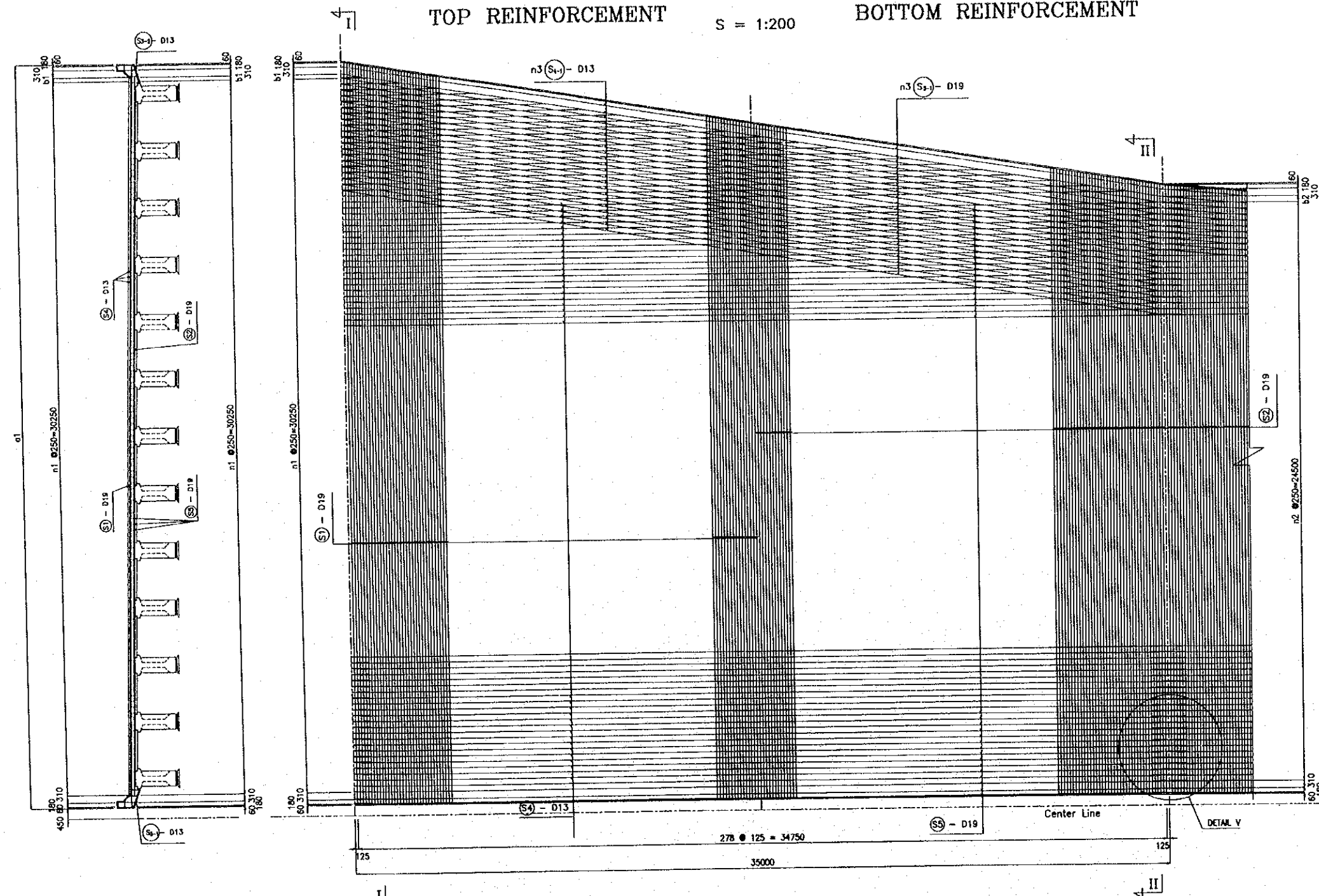
KEY PLAN
S = 1:5000



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000. 8. 14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

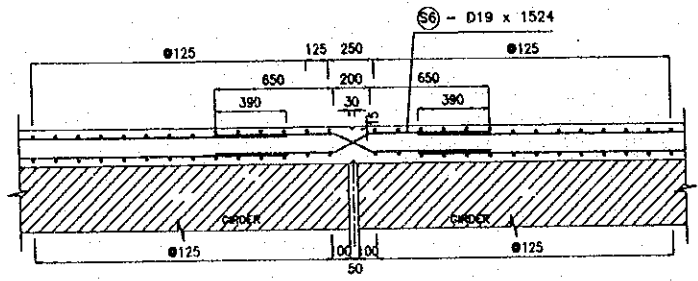
PACKAGE 3	SCALE	DRAWING No. C-1-2b-5B	SHEET No.
RE-BAR ARRANGEMENT OF DECK SLAB (2-6)			

SECTION I-I
S = 1 : 200



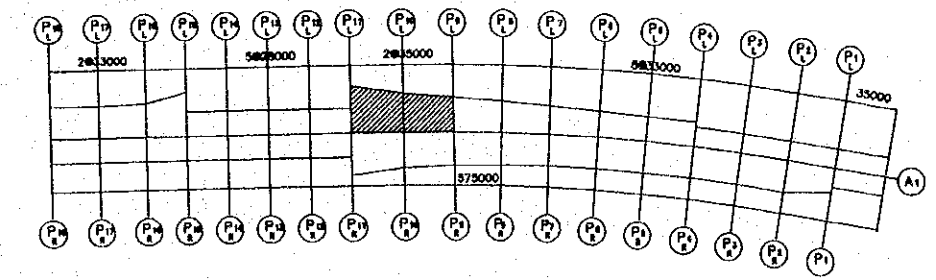
SECTION II-II
S = 1:200

DETAIL V
S = 1:20



SPAN No	a1 (mm)	a2 (mm)	b1 (mm)	b2 (mm)	n1	n2	n3
P9L-P10L	25852	22870	252	270	98	86	12
P10L-P11L	31528	25852	178	252	121	98	23

KEY PLAN
S = 1:5000



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAJE	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 8. 17

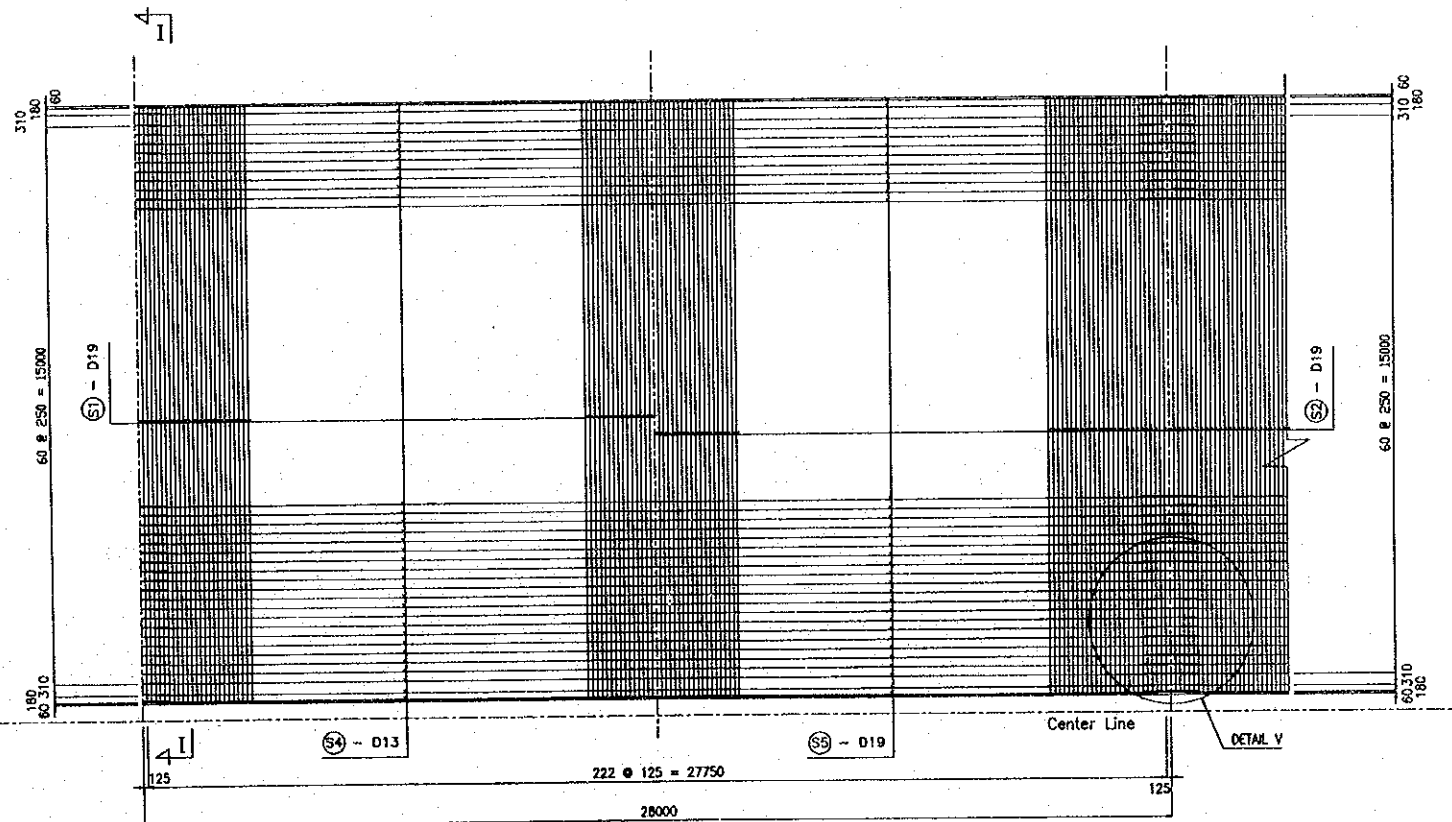
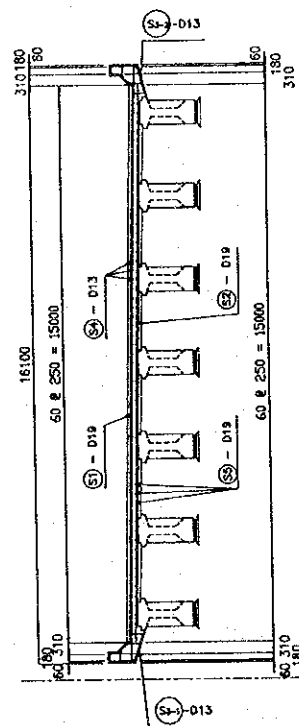
PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-2b-59	
RE-BAR ARRANGEMENT OF DECK SLAB (2-7)			

TOP REINFORCEMENT

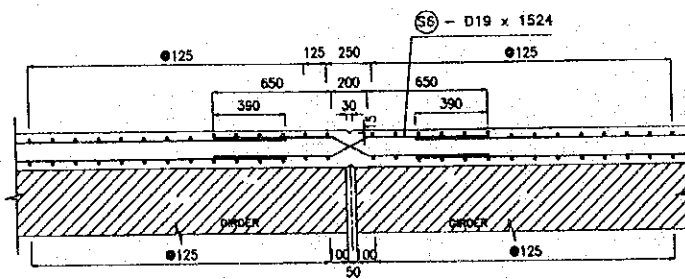
S = 1:200

BOTTOM REINFORCEMENT

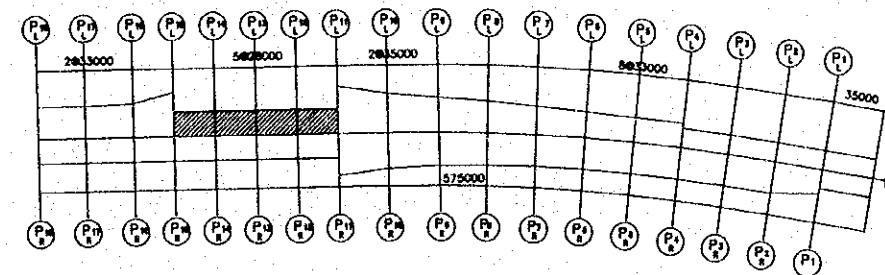
SECTION I-I
S = 1 : 200



DETAIL V
S = 1:20



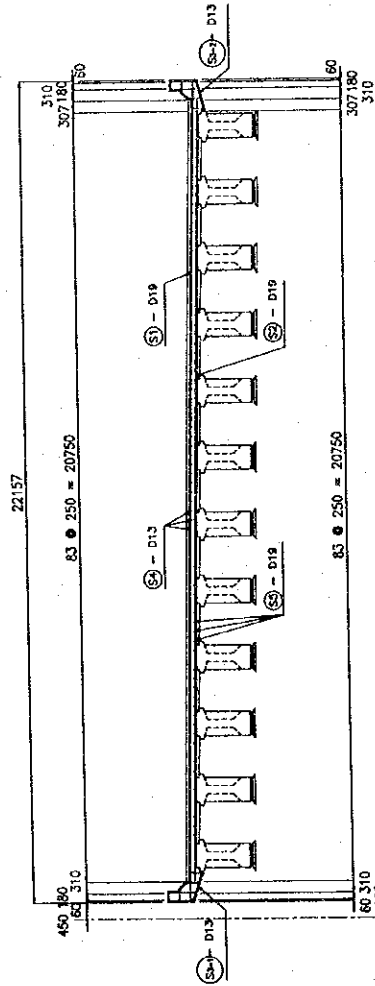
KEY PLAN
S = 1:5000



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (TUANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2009.3.14

PACKAGE 3	SCALE	DRAWING No. C-1-2b-60	SHEET No.
RE-BAR ARRANGEMENT OF DECK SLAB (2--B)			

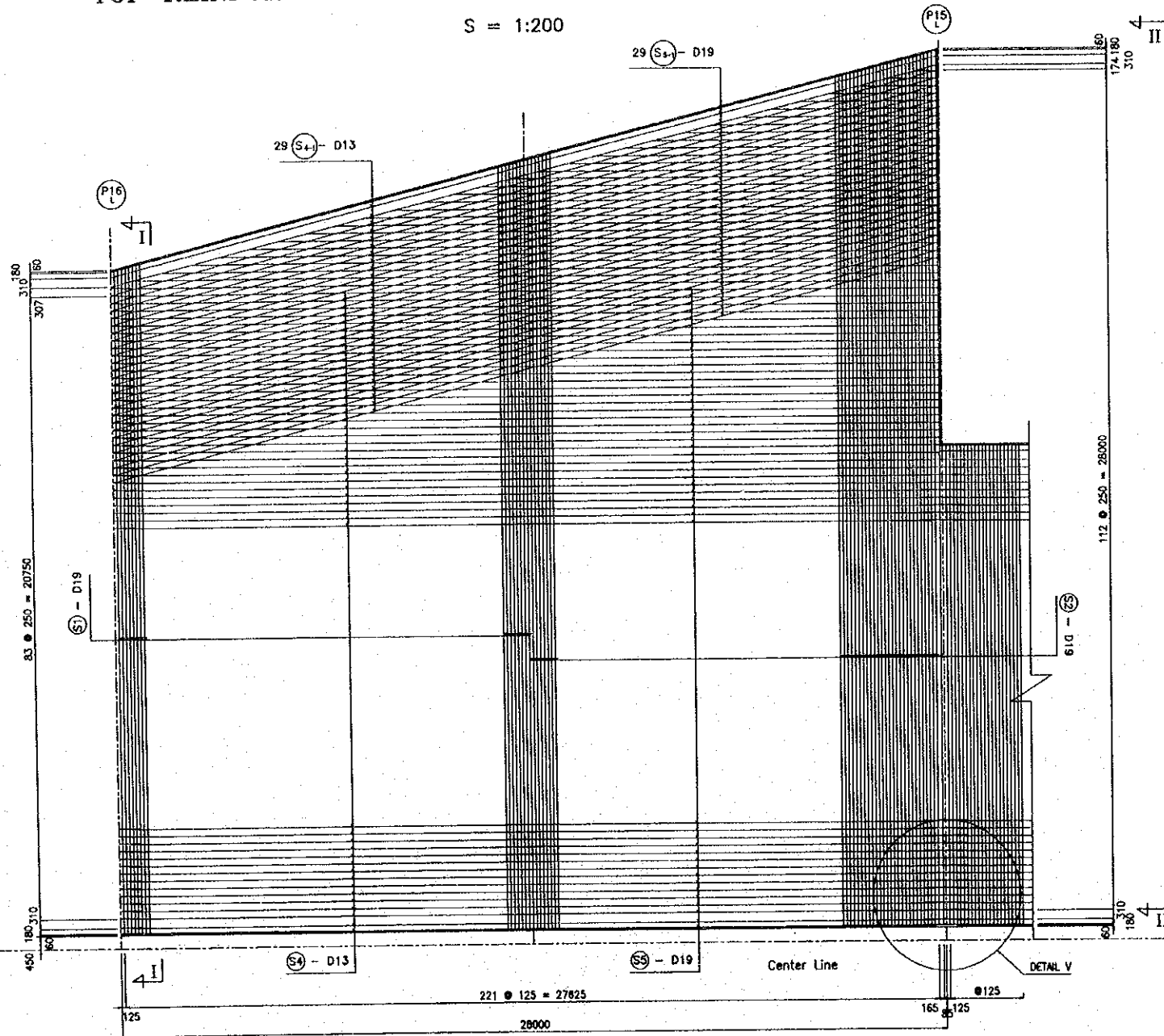
SECTION I-I
S = 1 : 200



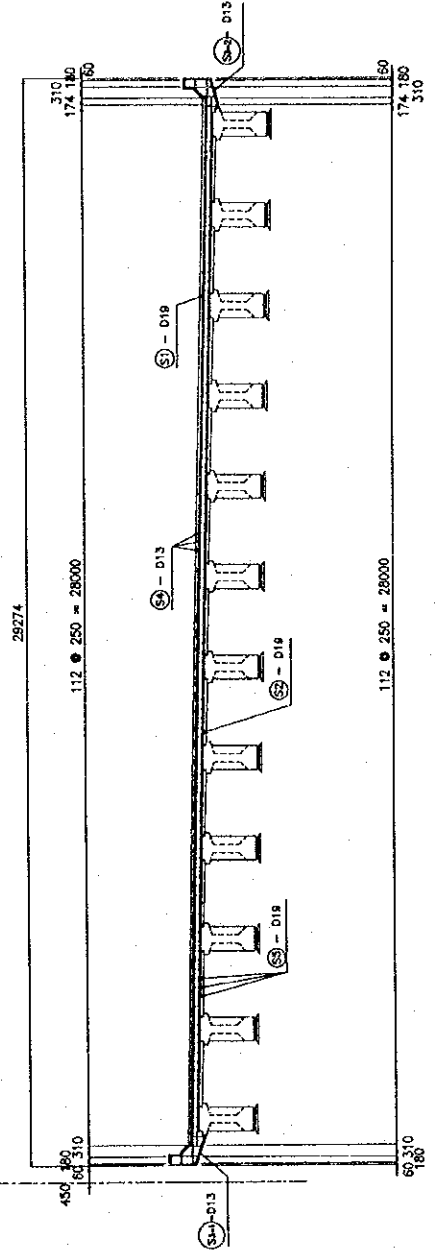
TOP REINFORCEMENT

BOTTOM REINFORCEMENT

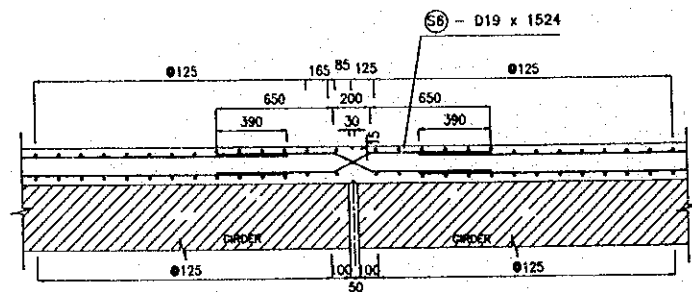
S = 1:200



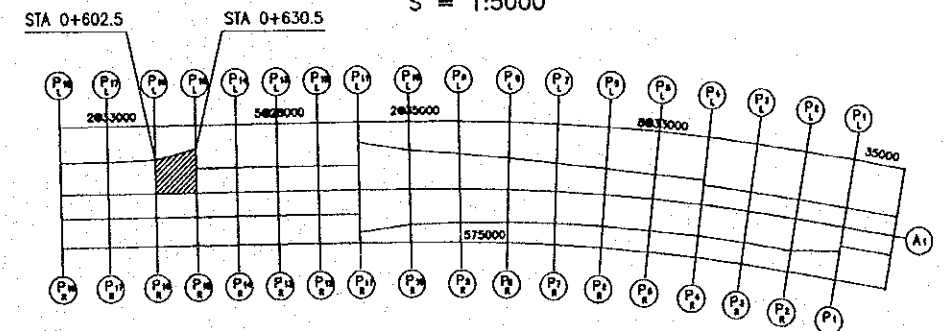
SECTION II-II
S = 1:200



DETAIL V
S = 1:20



KEY PLAN
S = 1:5000



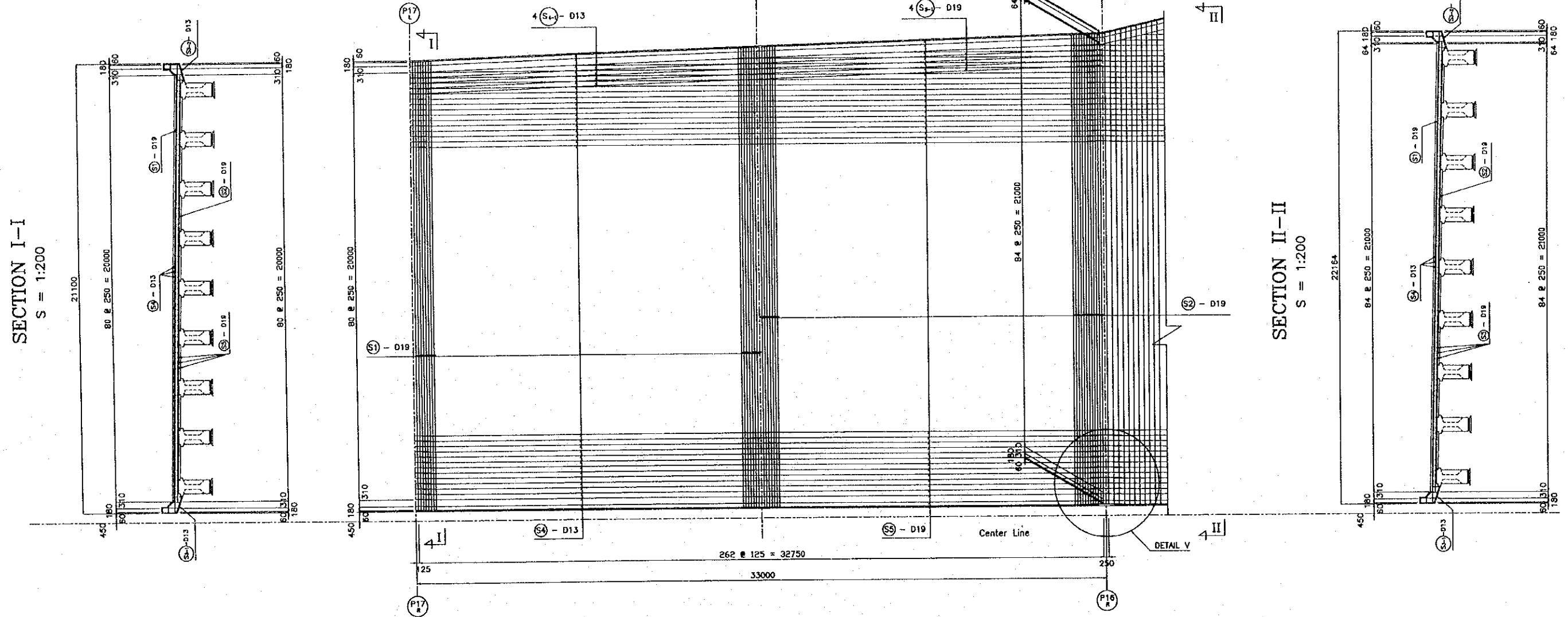
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2002. 4. 14

PACKAGE 3	SCALE	DRAWING No. C-1-2b-61	SHEET No.
RE-BAR ARRANGMENT OF DECK SLAB (2-9)			

TOP REINFORCEMENT

BOTTOM REINFORCEMENT

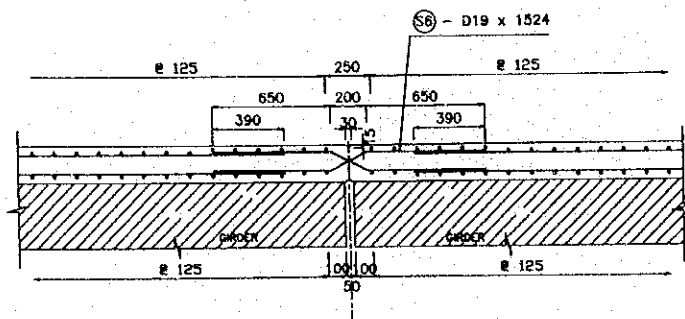
S = 1:200



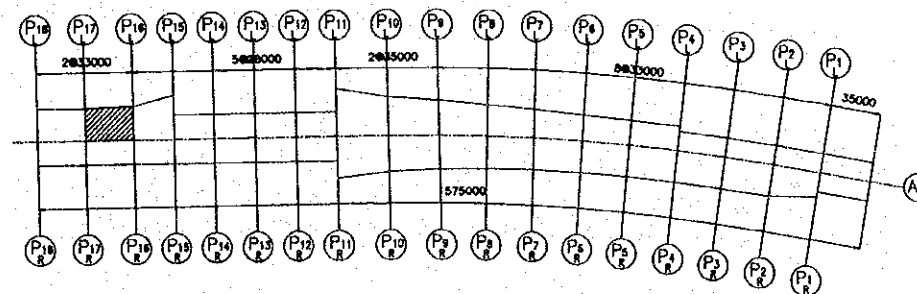
SECTION I-I
S = 1:200

SECTION II-II
S = 1:200

DETAIL V
S = 1:20



KEY PLAN
S = 1:5000



103

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 3. 17

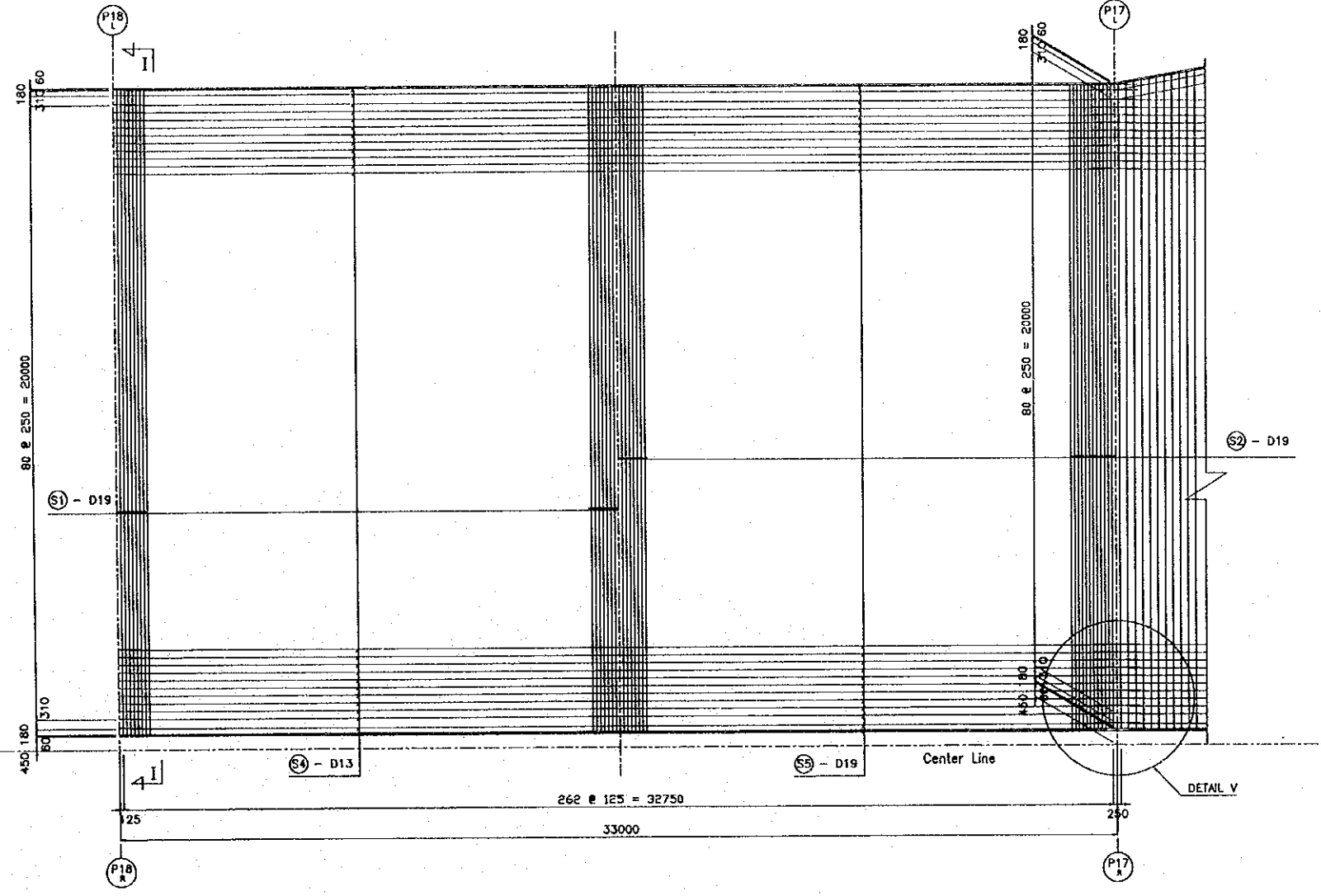
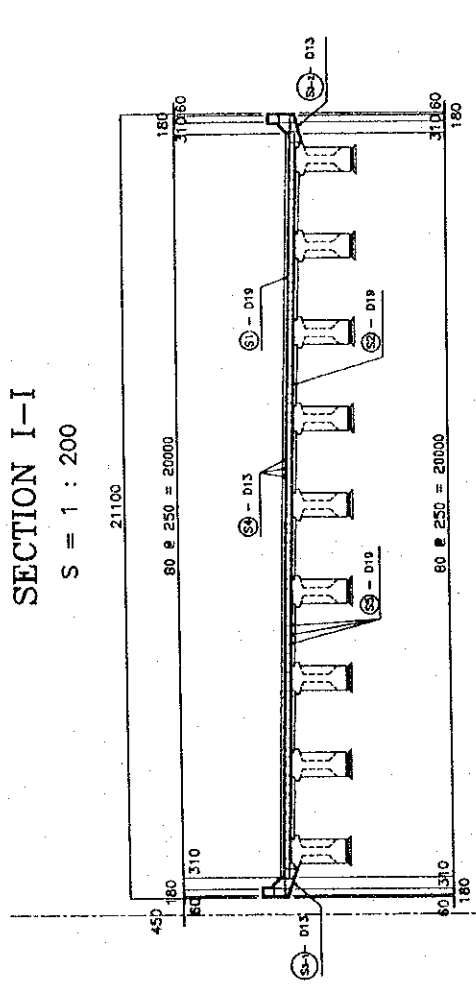
PACKAGE 3	SCALE	DRAWING No. C-1-2b-62	SHEET No.
RE-BAR ARRANGMENT OF DECK SLAB (2-10)			

TOP REINFORCEMENT

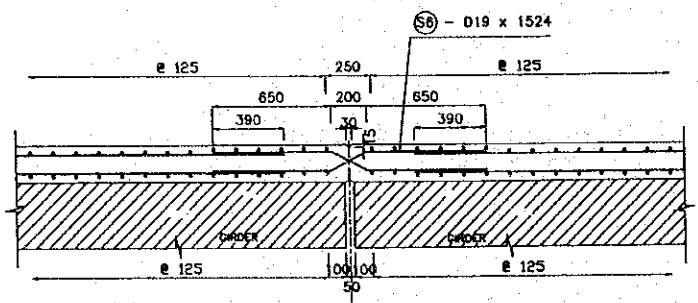
BOTTOM REINFORCEMENT

S = 1:200

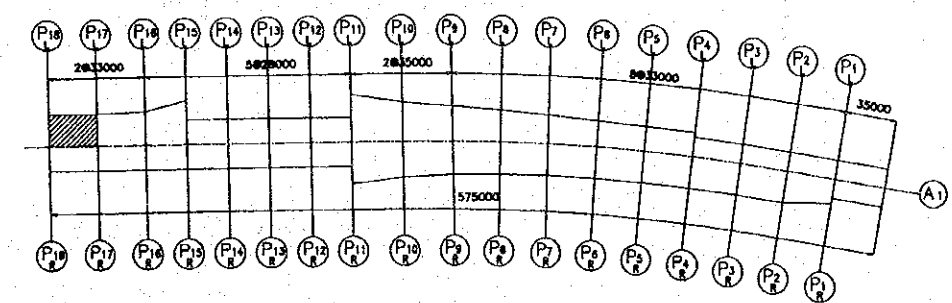
SECTION I-I
S = 1:200



DETAIL V
S = 1:20



KEY PLAN
S = 1:5000



181

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TUANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.17

PACKAGE 3	SCALE	DRAWING No. C-1-2b-63	SHEET No.
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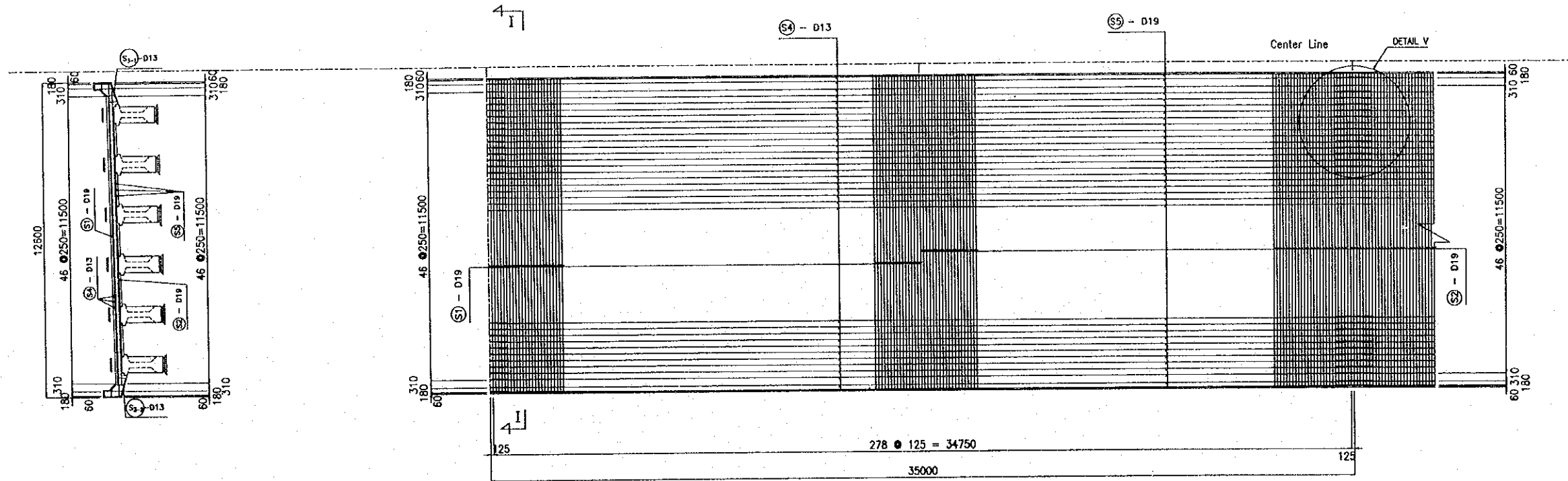
RE-BAR ARRANGEMENT OF DECK SLAB (2-11)

TOP REINFORCEMENT

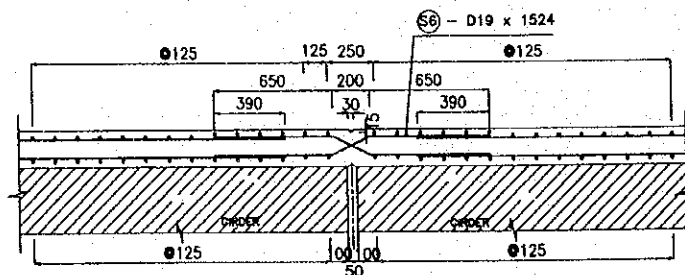
BOTTOM REINFORCEMENT

S = 1:200

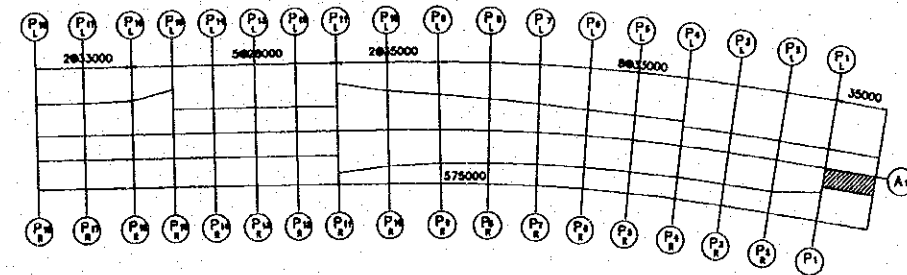
SECTION I-I
S = 1 : 200



DETAIL V
S = 1:20



KEY PLAN
S = 1:5000

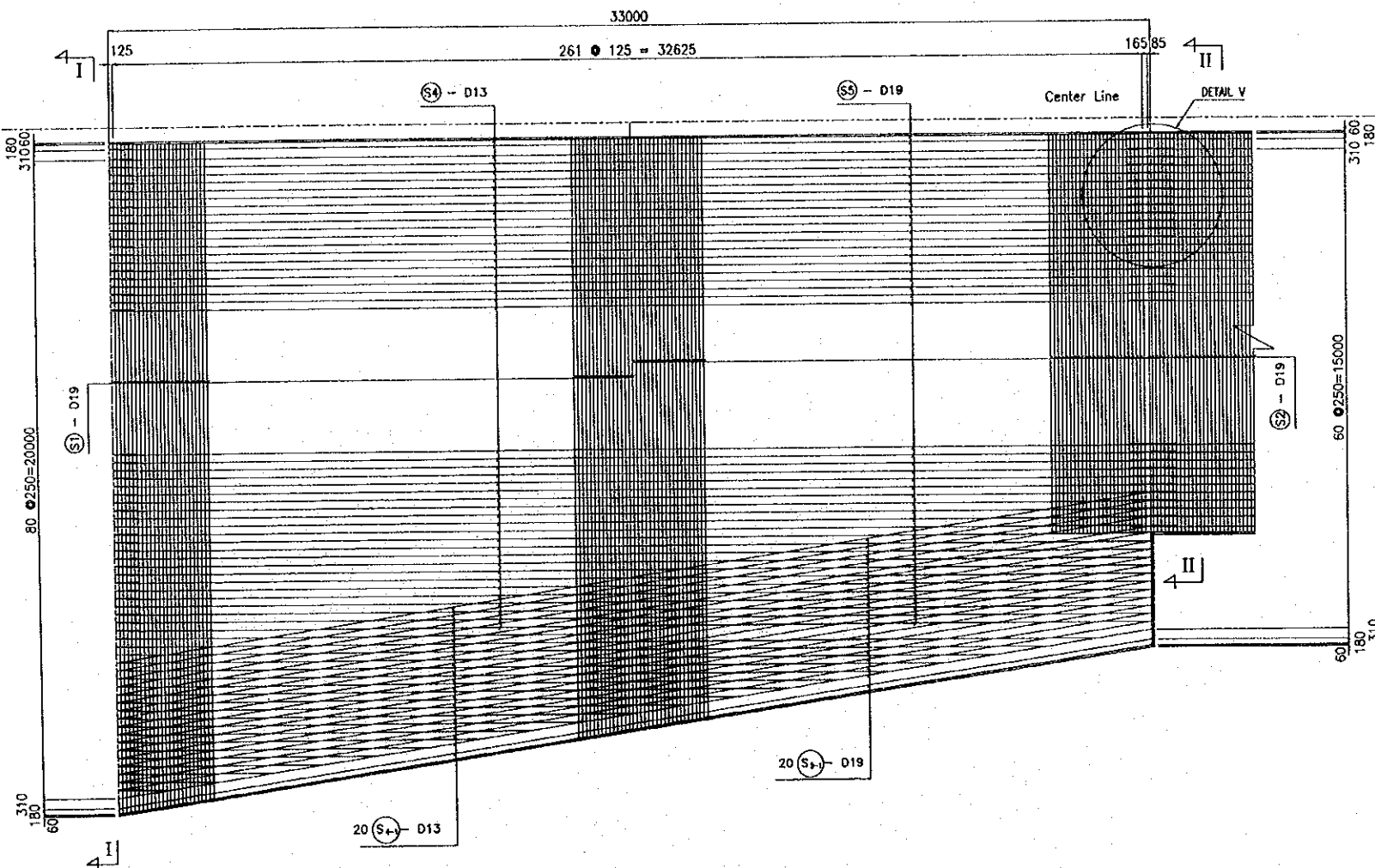
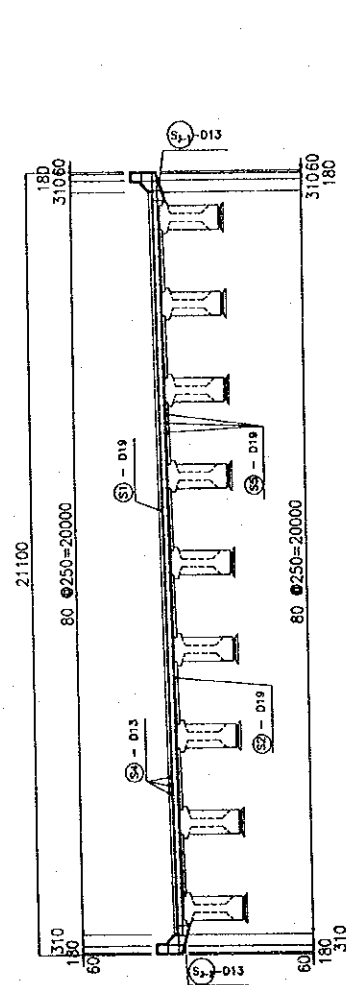


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE
CONSULTANT		DATE 2000. 11. 17

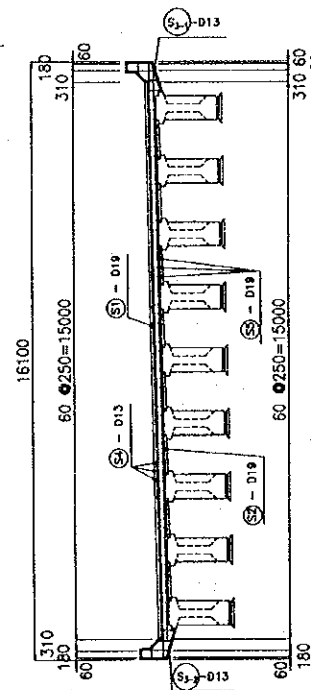
PACKAGE 3	SCALE	DRAWING No. C-1-2b-64	SHEET No.
RE-BAR ARRANGEMENT OF DECK SLAB (2-12)			

TOP REINFORCEMENT S = 1:200 BOTTOM REINFORCEMENT

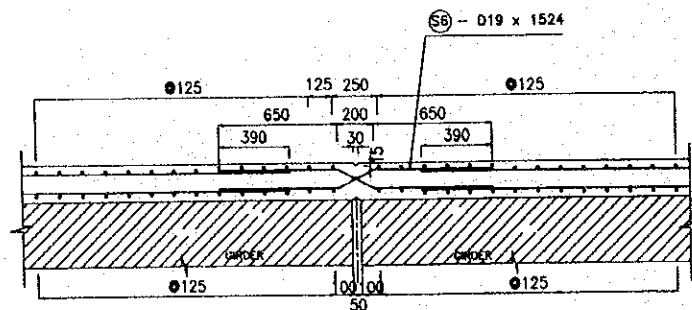
SECTION I-I
S = 1 : 200



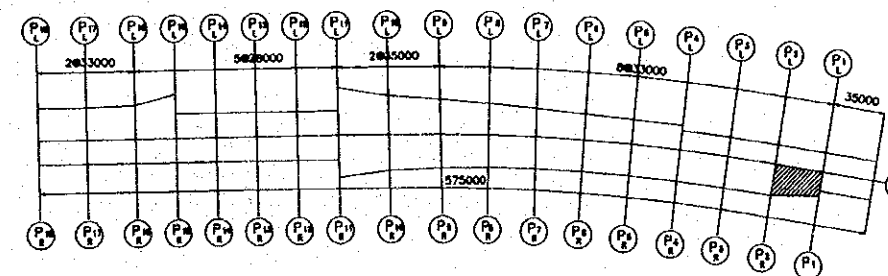
SECTION II-II
S = 1:200



DETAIL V
S = 1:20



KEY PLAN
S = 1:5000



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.3.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-2b-65	SHEET No.
RE-BAR ARRANGEMENT OF DECK SLAB (2-13)			

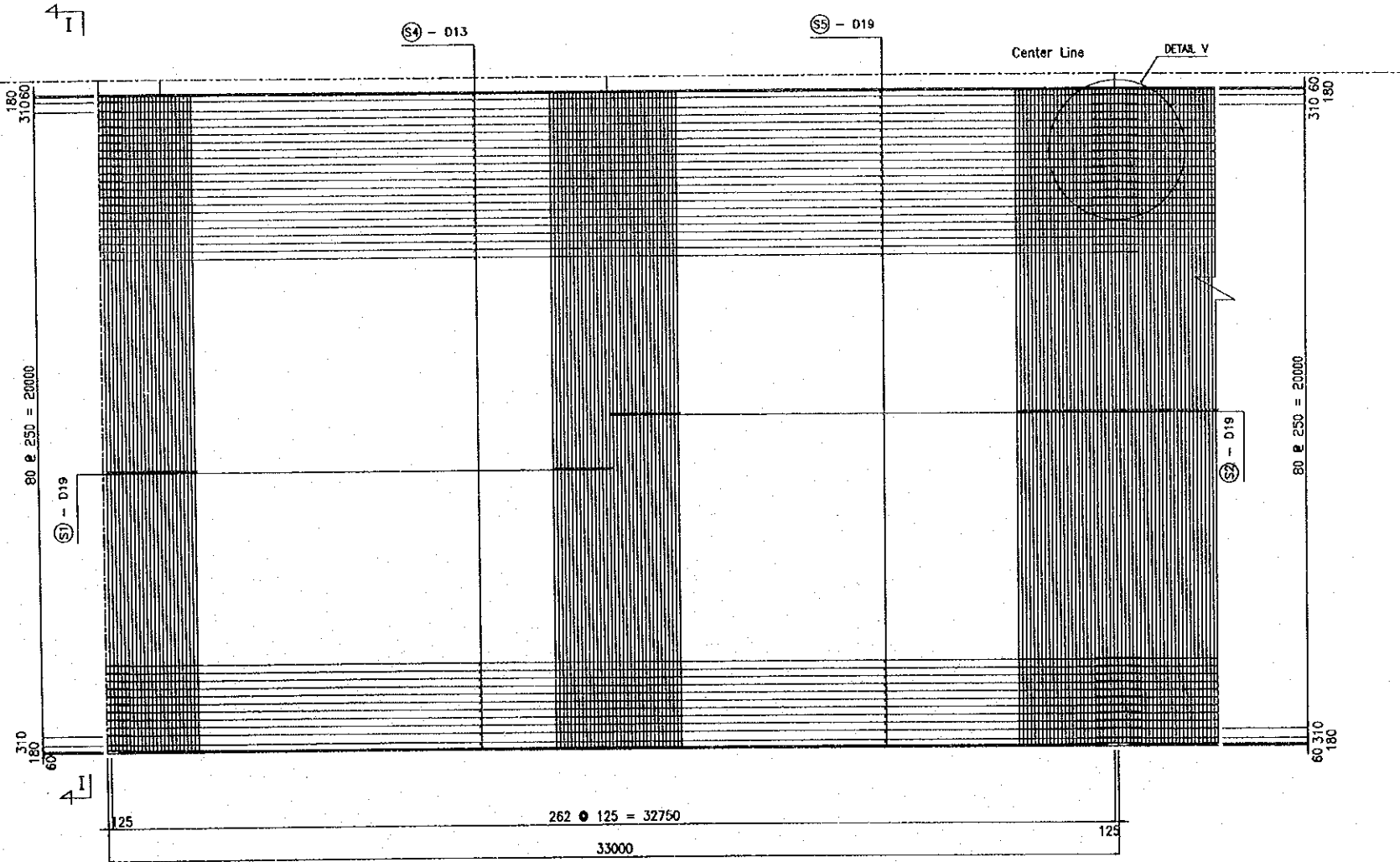
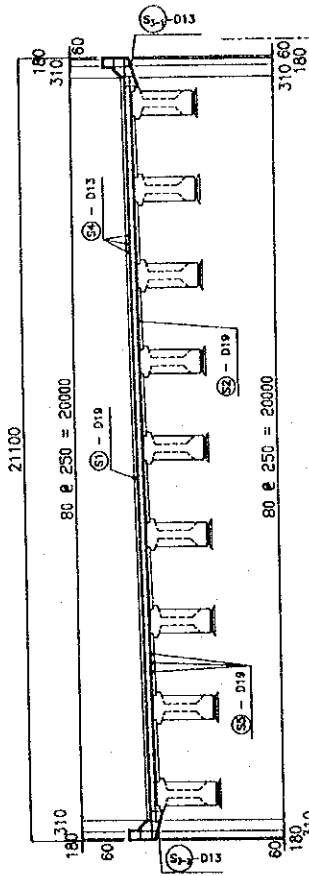
TOP REINFORCEMENT

BOTTOM REINFORCEMENT

S = 1:200

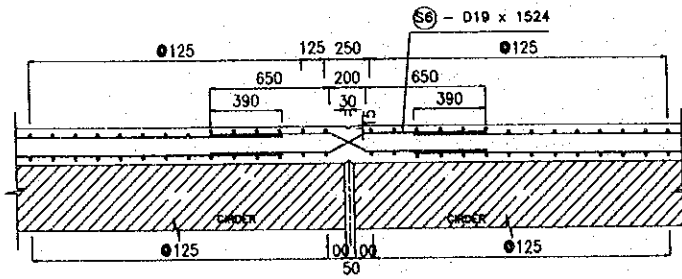
SECTION I-I

S = 1:200



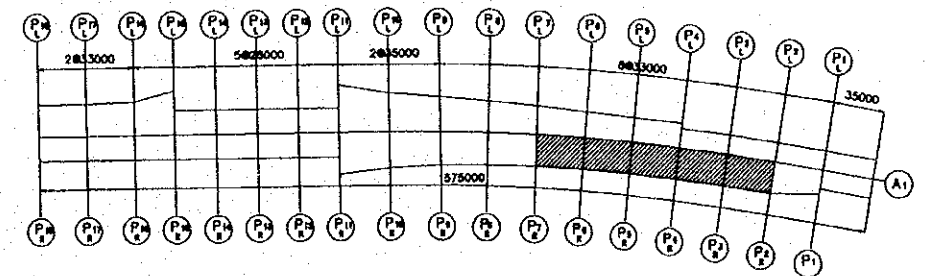
DETAIL V

S = 1:20



KEY PLAN

S = 1:5000



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2006. 8. 14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

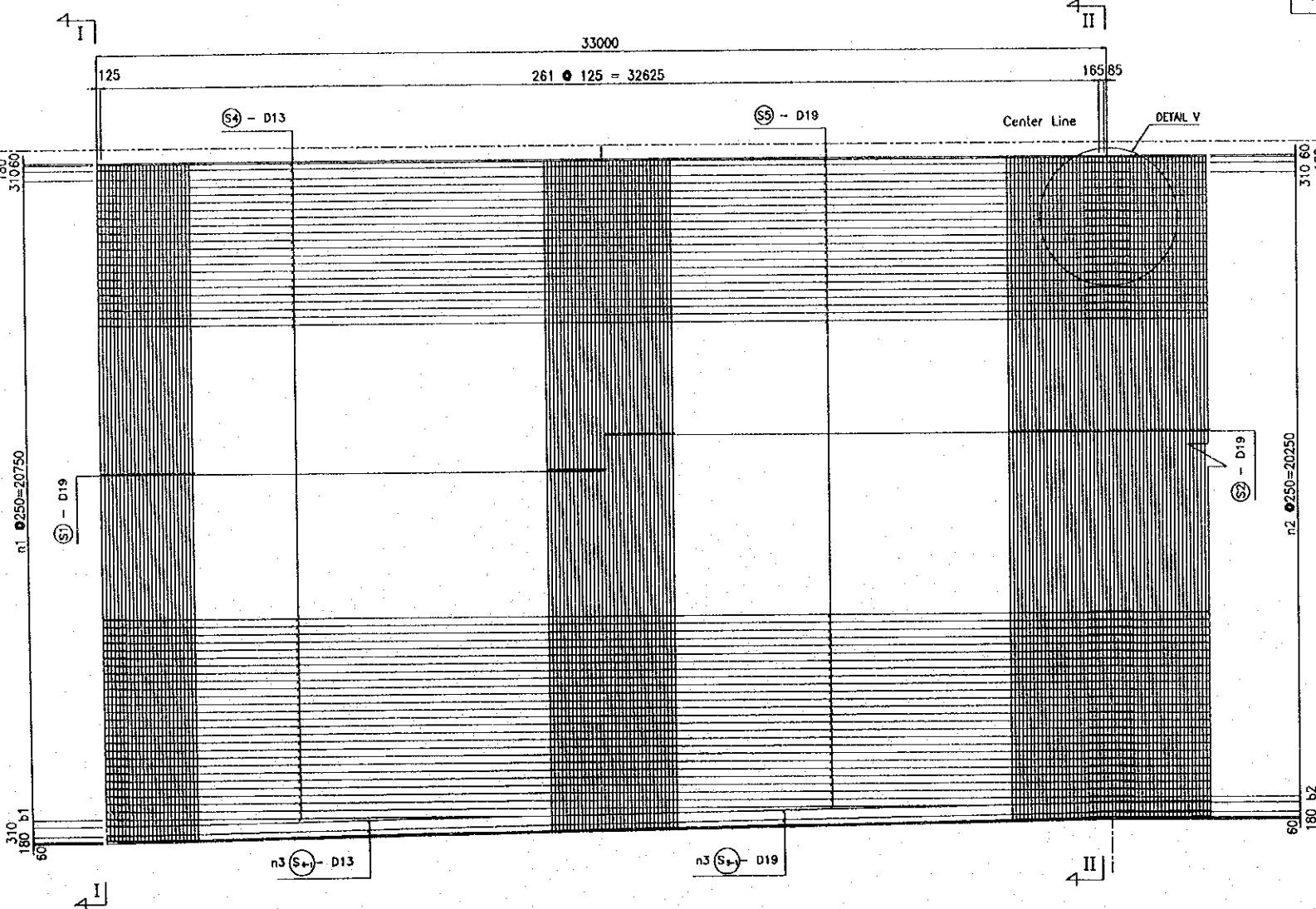
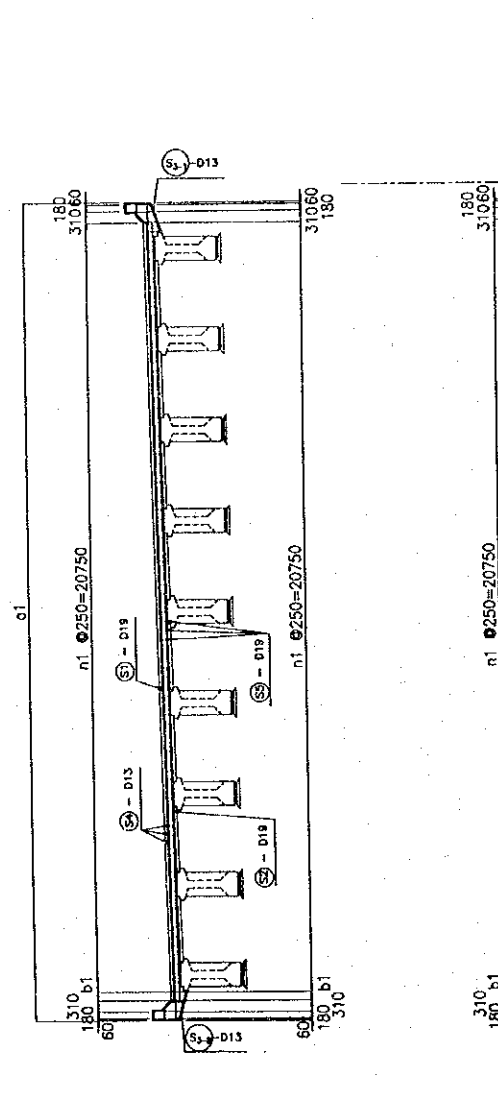
PACKAGE 3	SCALE	DRAWING No. C-1-2b-66	SHEET No.
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RE-BAR ARRANGEMENT OF DECK SLAB (2-14)

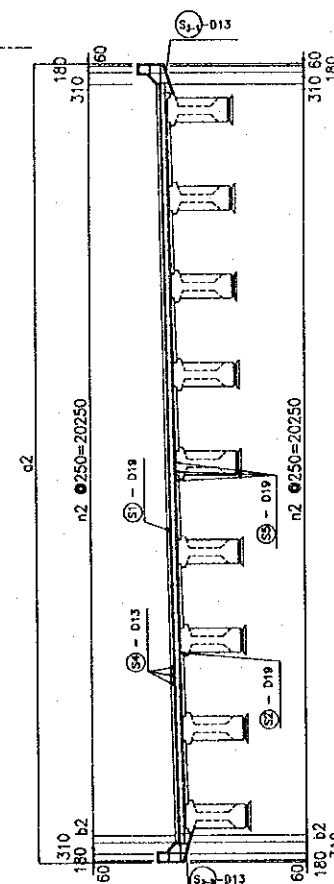
SPAN No	a1 (mm)	a2 (mm)	b1 (mm)	b2 (mm)	n1	n2	n3
P7R-P8R	21540	21100	190	0	81	80	3
P8R-P9R	22084	21540	234	190	83	81	3

TOP REINFORCEMENT S = 1:200 BOTTOM REINFORCEMENT

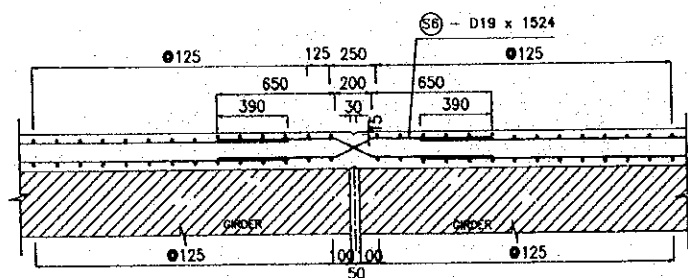
SECTION I-I
S = 1 : 200



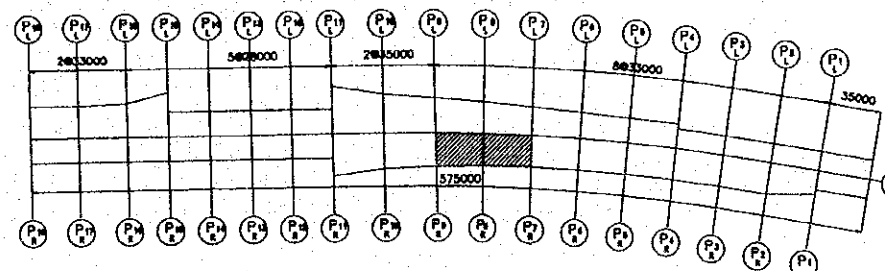
SECTION II-II
S = 1:200



DETAIL V
S = 1:20



KEY PLAN
S = 1:5000



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE 	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.14	

PACKAGE 3	SCALE	DRAWING No. C-1-2b-67	SHEET No.
RE-BAR ARRANGMENT OF DECK SLAB (2-15)			

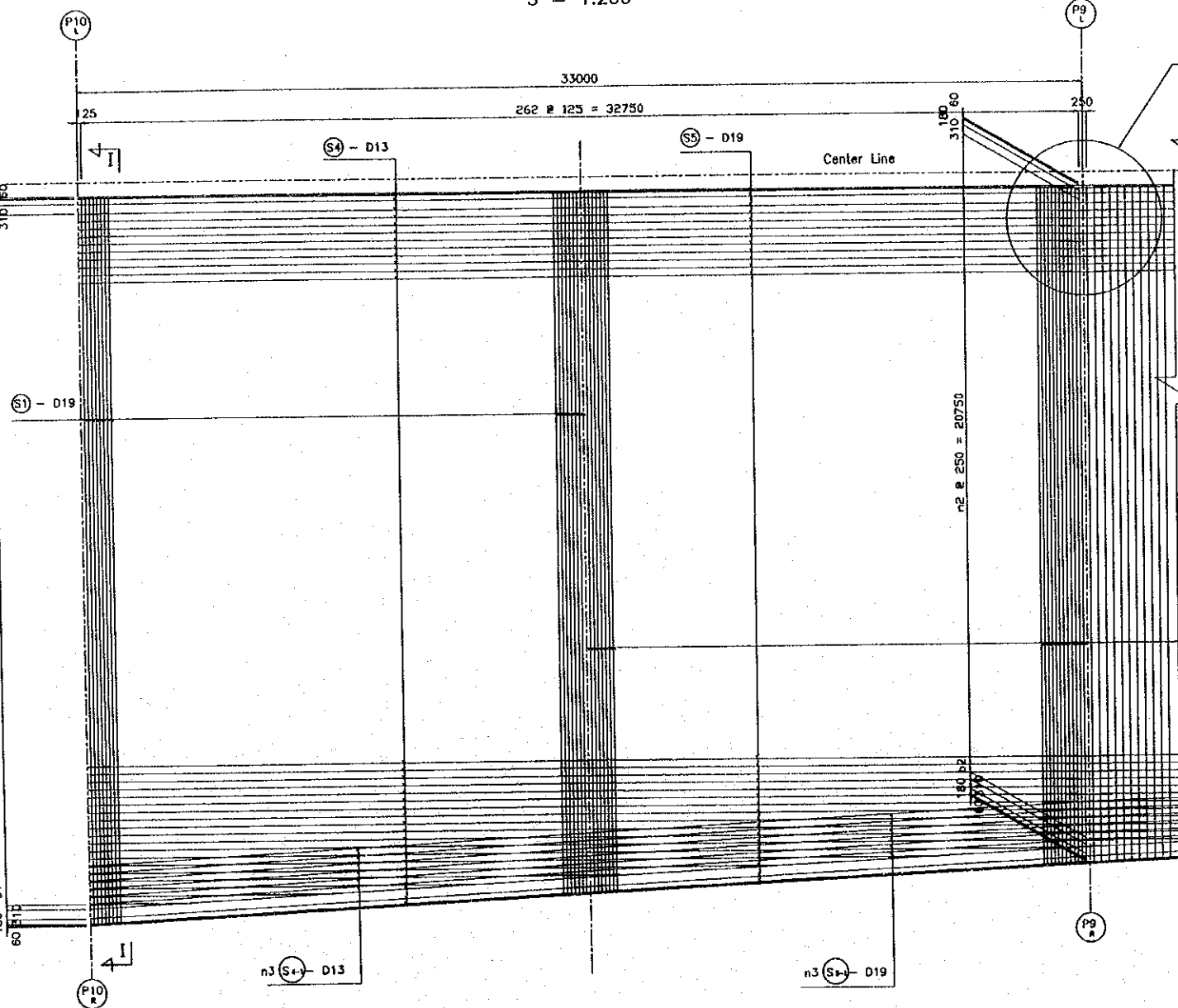
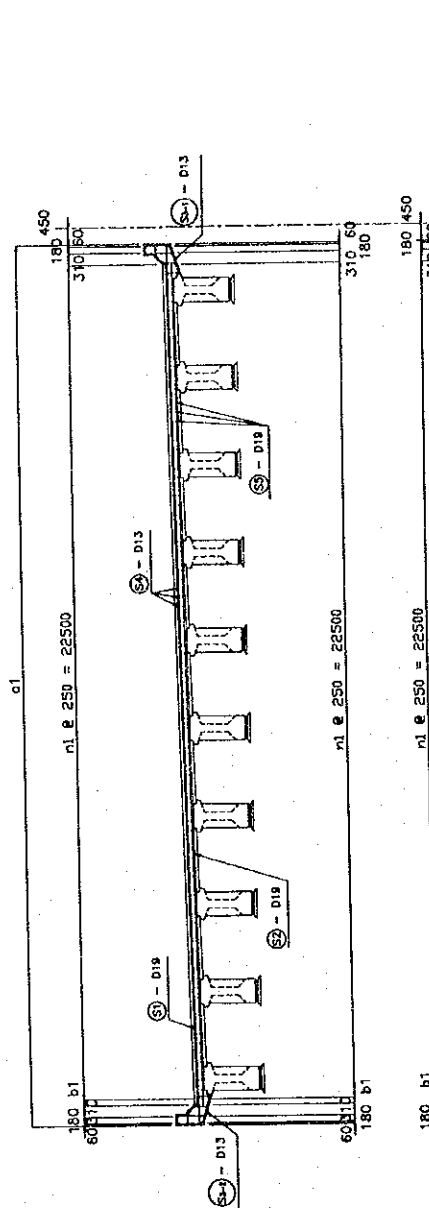
TOP REINFORCEMENT

BOTTOM REINFORCEMENT

S = 1:200

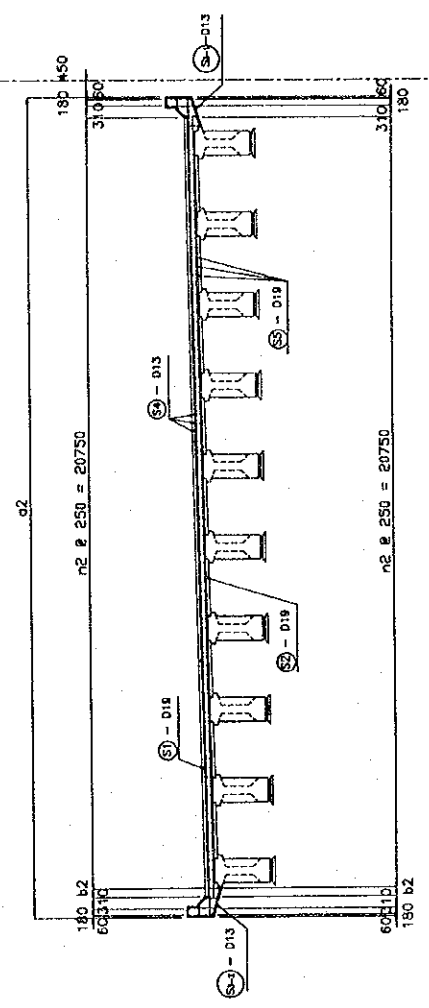
SECTION I-I

S = 1:200



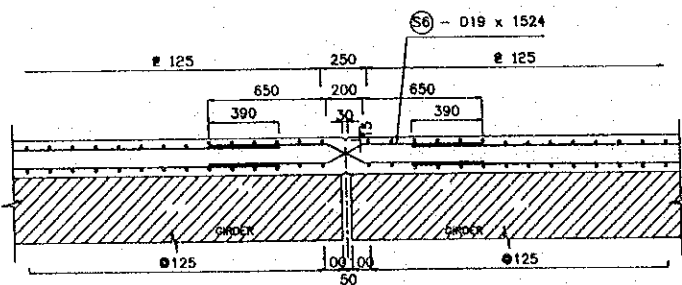
SECTION II-II

S = 1:200



DETAIL V

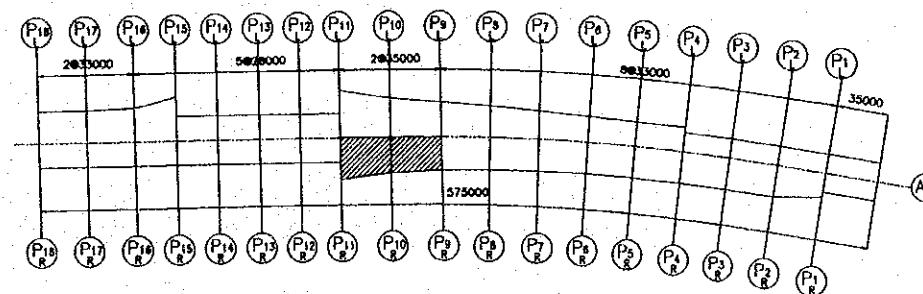
S = 1:20



SPAN No	a1 (mm)	a2 (mm)	b1 (mm)	b2 (mm)	n1	n2	n3
P9R-10R	22084	23756	234	156	83	90	7
P10R-11R	23763	27976	163	126	90	107	17

KEY PLAN

S = 1:5000



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000. 5. 14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-2b-6B	SHEET No.
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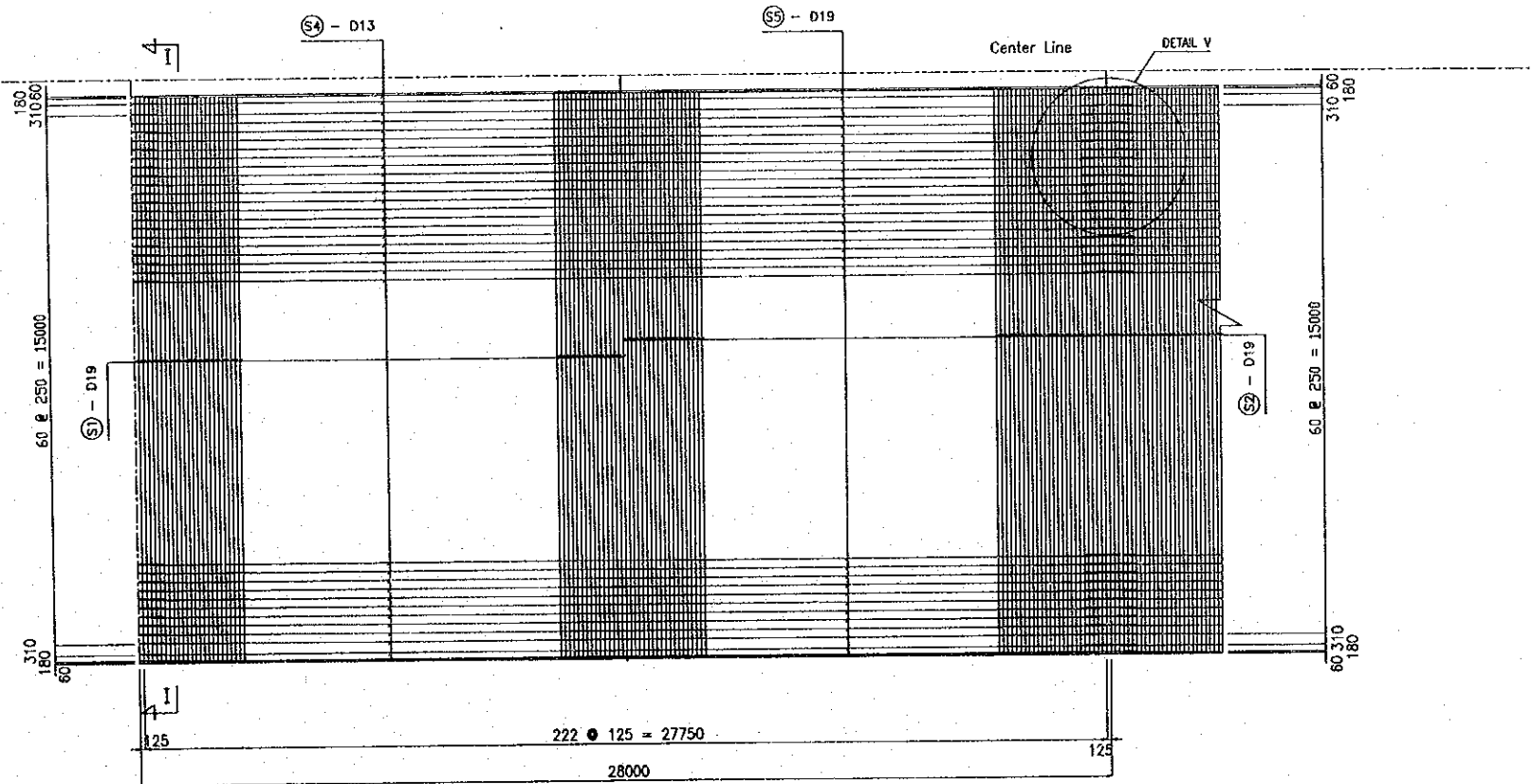
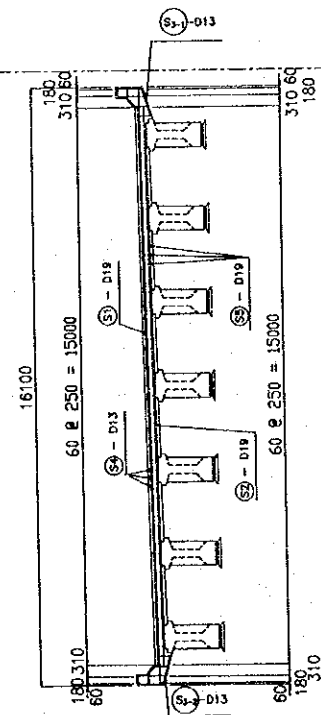
RE-BAR ARRANGEMENT OF DECK SLAB (2-16)

TOP REINFORCEMENT

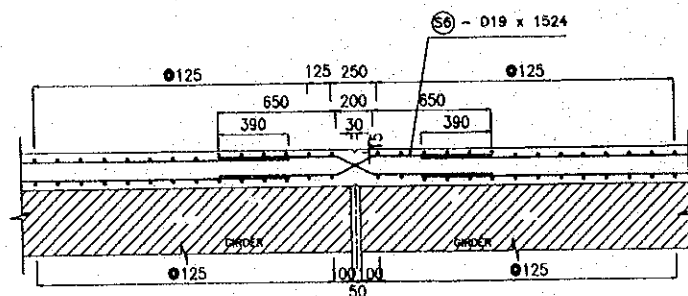
S = 1:200

BOTTOM REINFORCEMENT

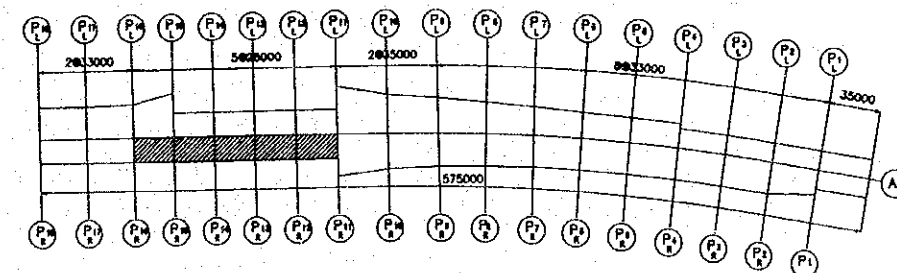
SECTION I-I
S = 1 : 200



DETAIL V
S = 1:20



KEY PLAN
S = 1:5000

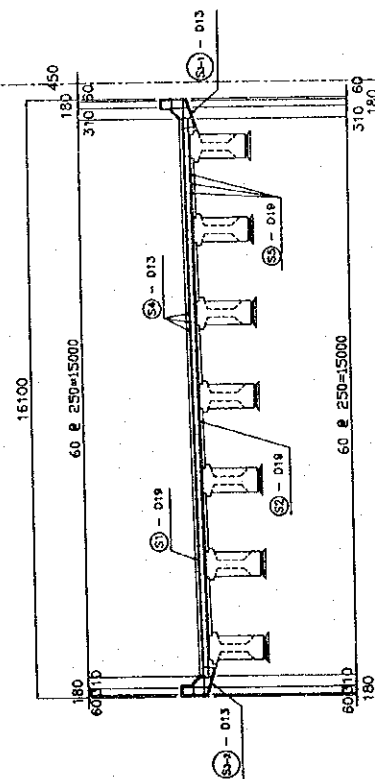


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM HUANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.2.17

PACKAGE 3	SCALE	DRAWING No. C-1-2b-69	SHEET No.
RE-BAR ARRANGMENT OF DECK SLAB (2-17)			

SECTION I-I

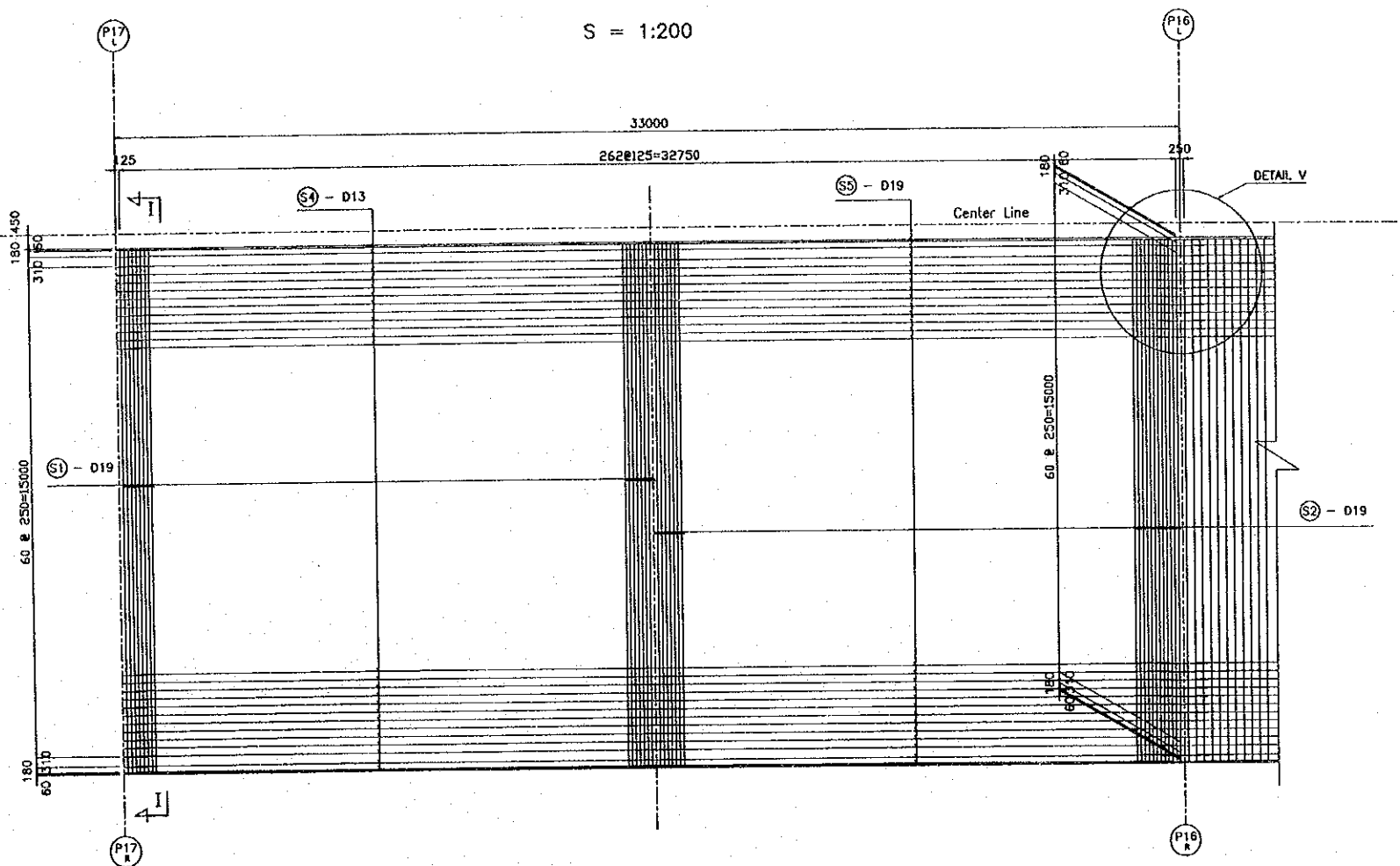
S = 1 : 200



TOP REINFORCEMENT

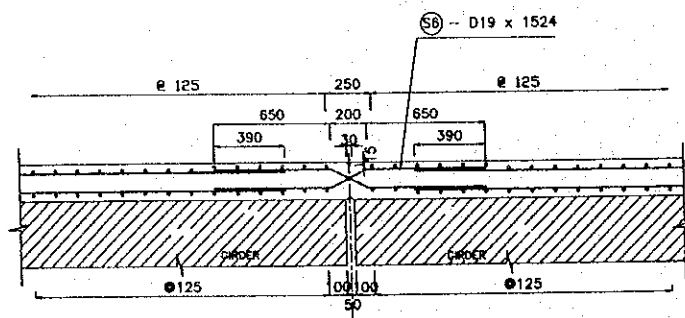
BOTTOM REINFORCEMENT

S = 1:200



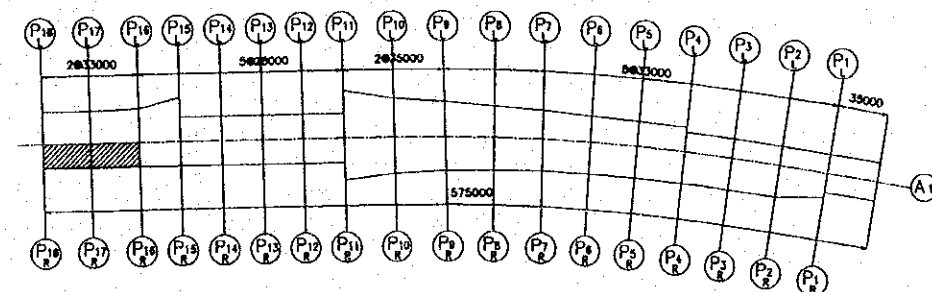
DETAIL V

S = 1:20



KEY PLAN

S = 1:5000



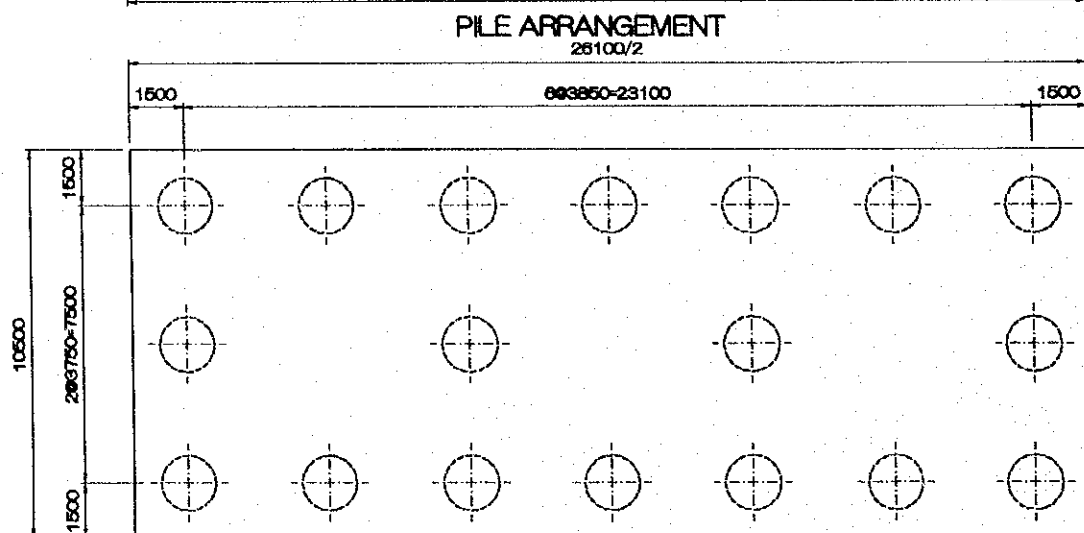
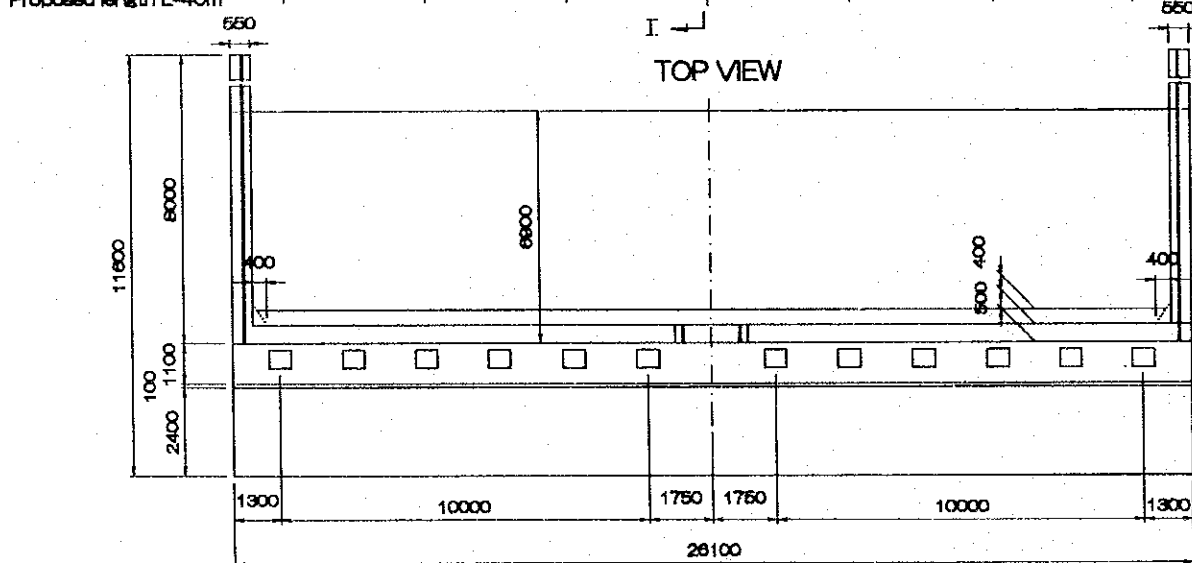
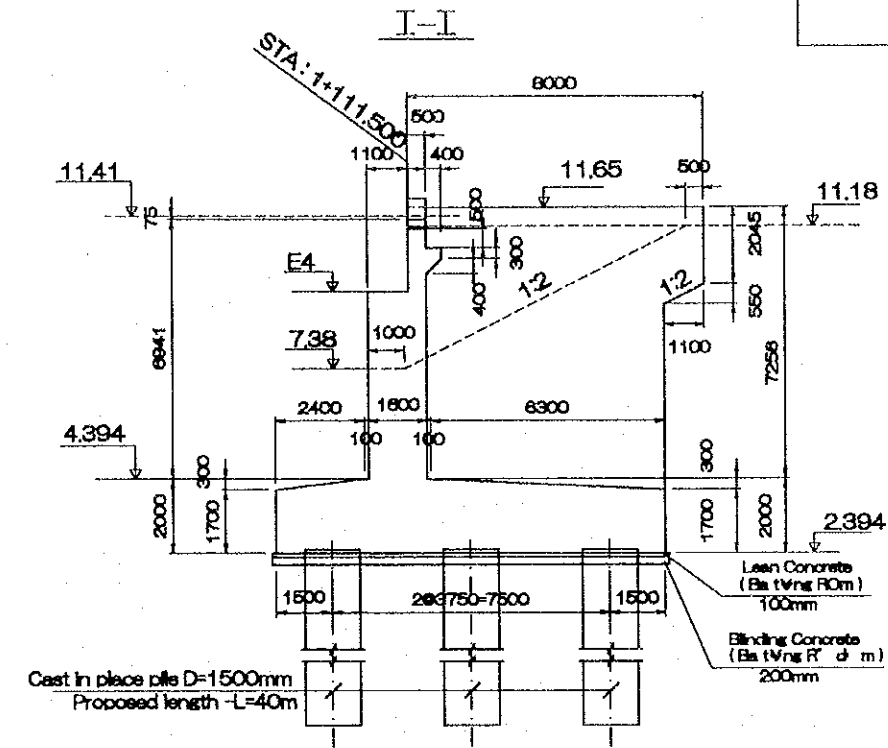
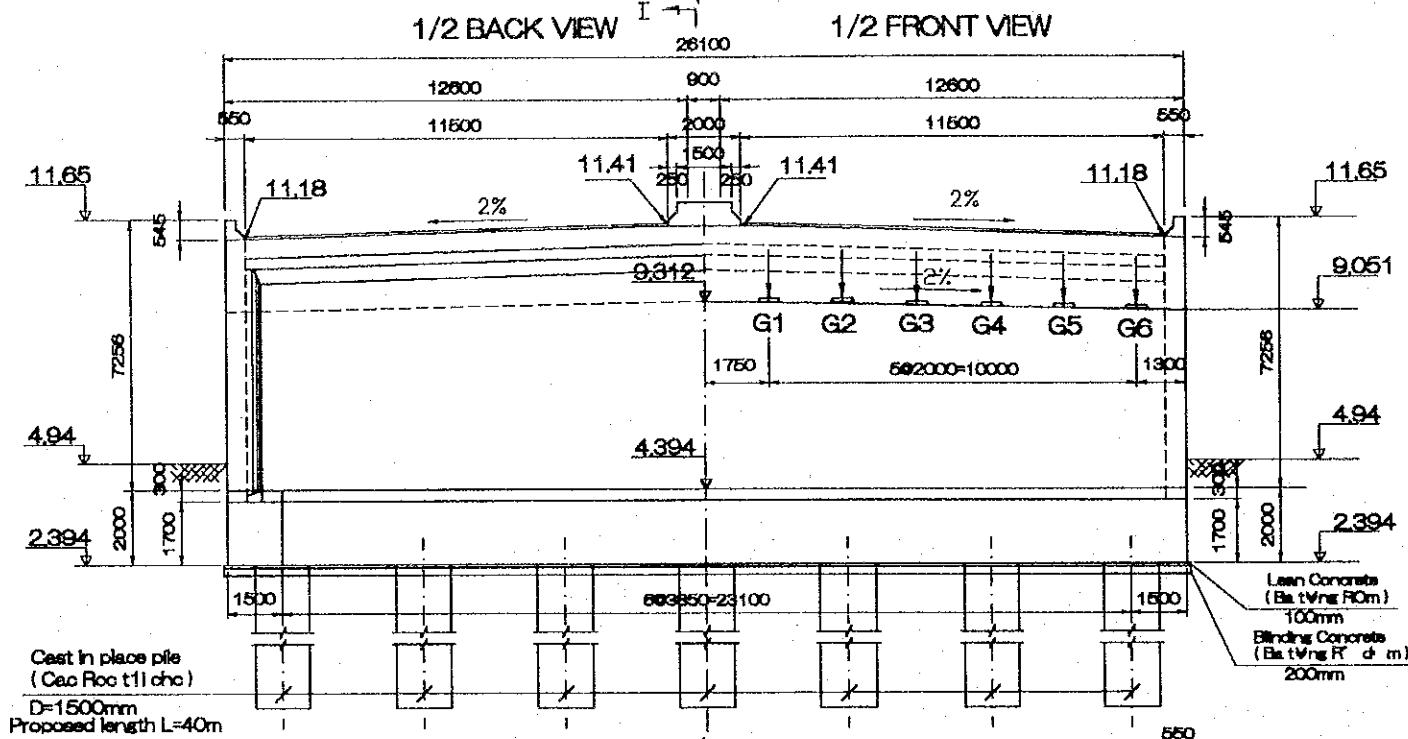
C-1 THROUGHWAY

C-1-3 SUBSTRUCTURE

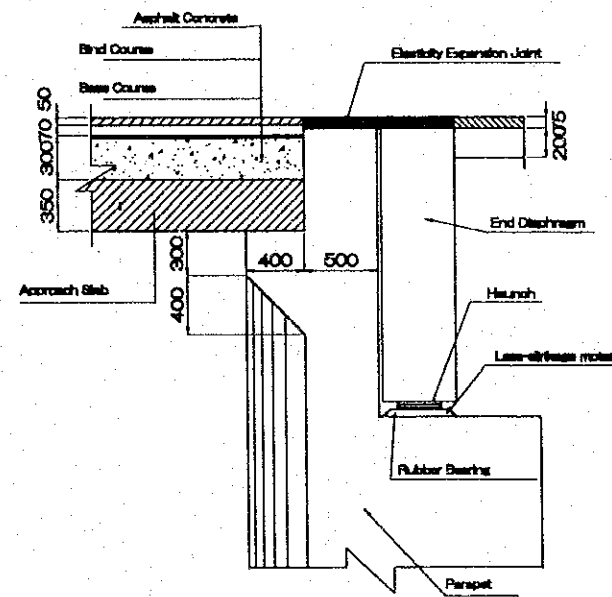
C-1-3a PHAP VAN VIADUCT

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NAITANE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	DATE 2000.10.	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

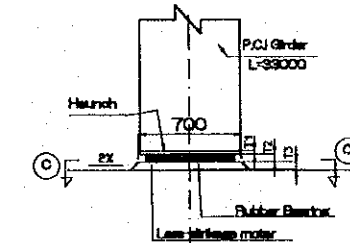
PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-1	SHEET No.
DETAIL OF ABUTMENT - A1			



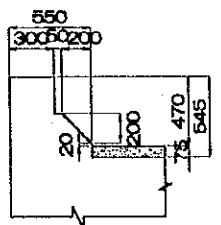
DETAIL OF PARAPET
S=1/50



BEARING SEAT DETAIL OF P.C.I GIRDER
S=1/50



DETAIL OF CURB
S=1/50



DEPTH OF SUPERSTRUCTURE (MM)

P.C.I Girder	MOVE
Pavement	75
Slab	207
Girder	1750
Haunch(T1)	20
Bearing(T2)	36
Motor(T3)	30
Sub Total	2118

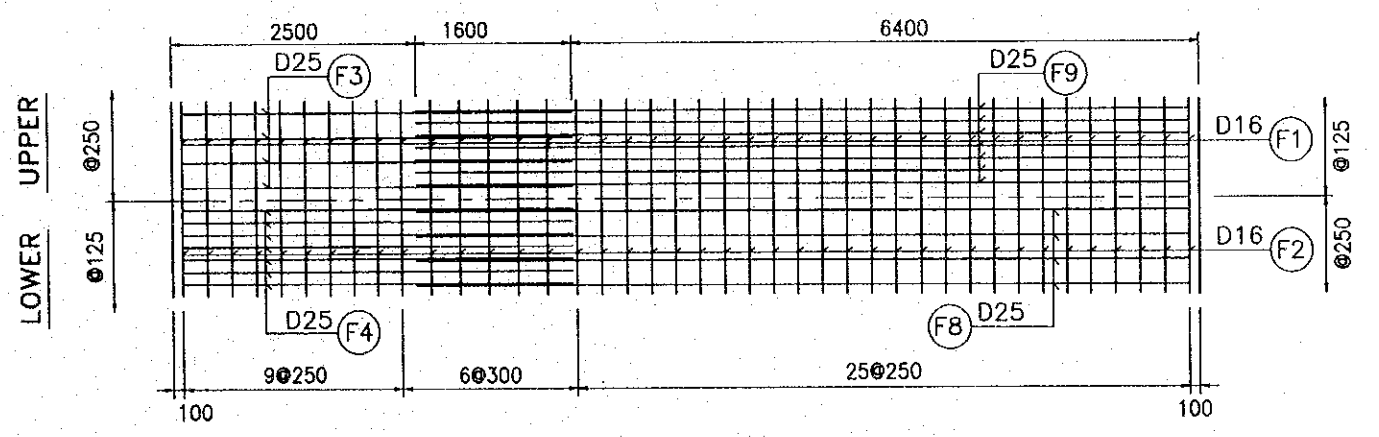
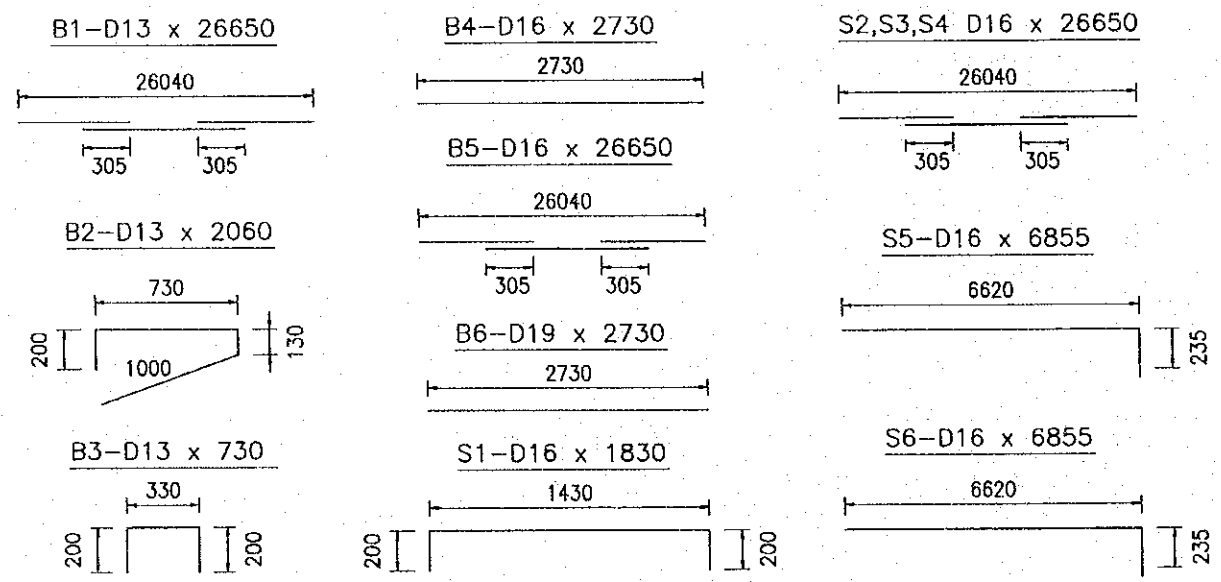
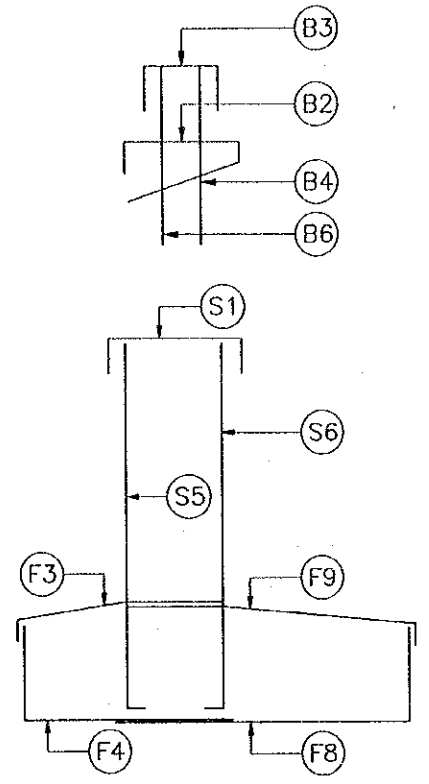
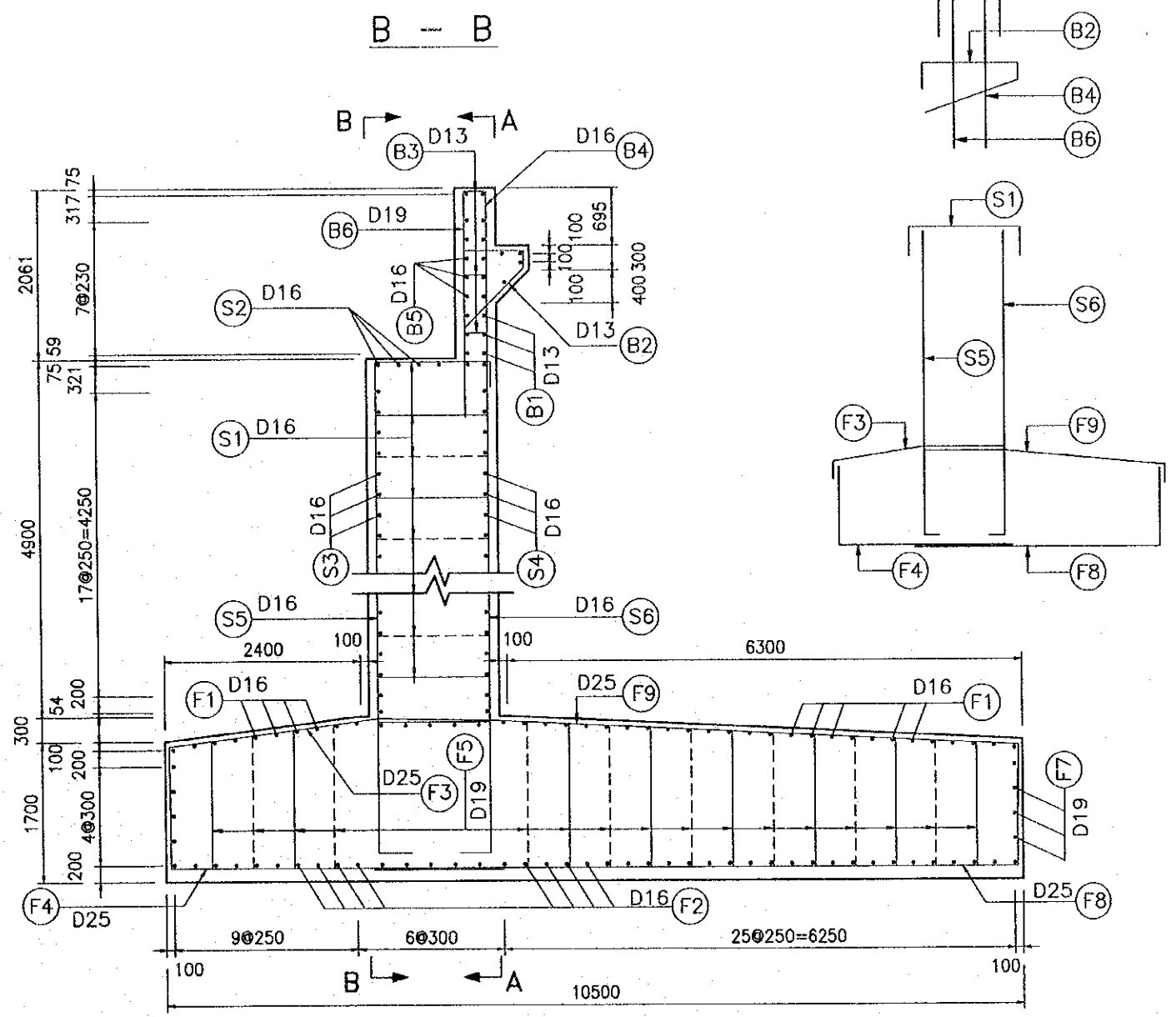
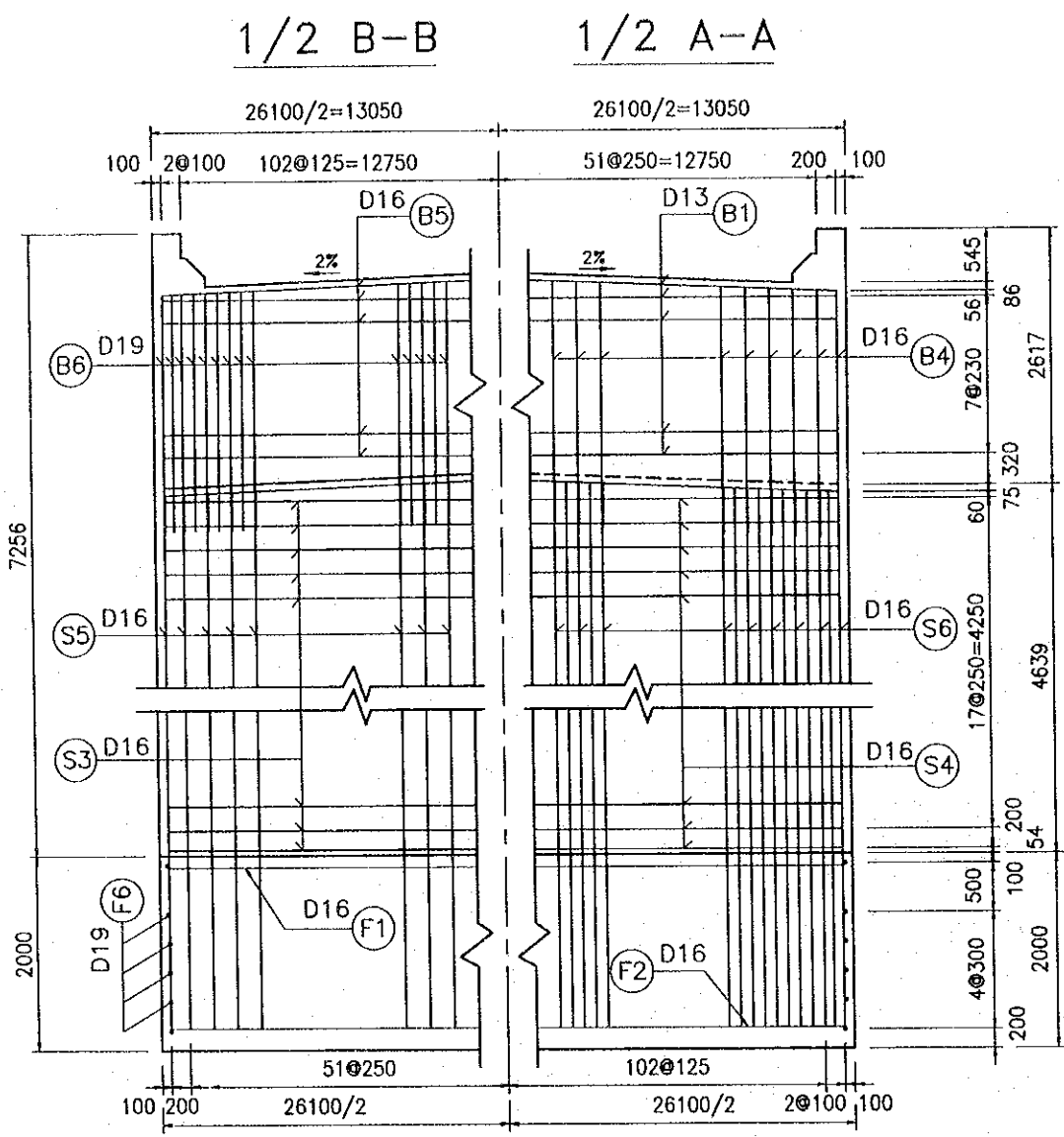
ELEVATION OF TOP BEARING SEAT

BEARING SEAT	G 1	G 2	G 3	G 4	G 5	G 6
ELEVATION	9.307	9.267	9.227	9.187	9.147	9.107

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	NAME	SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.8.14

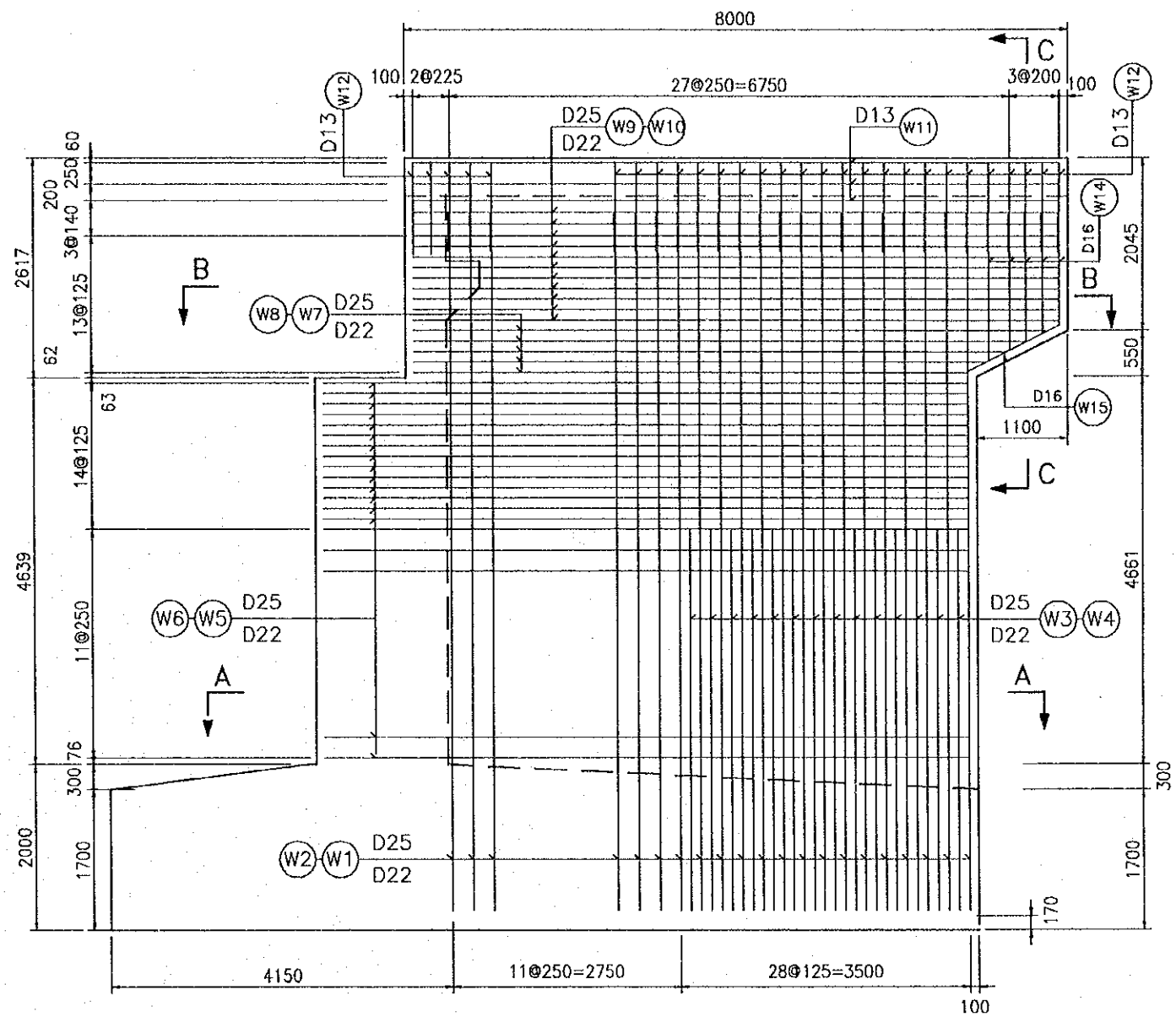
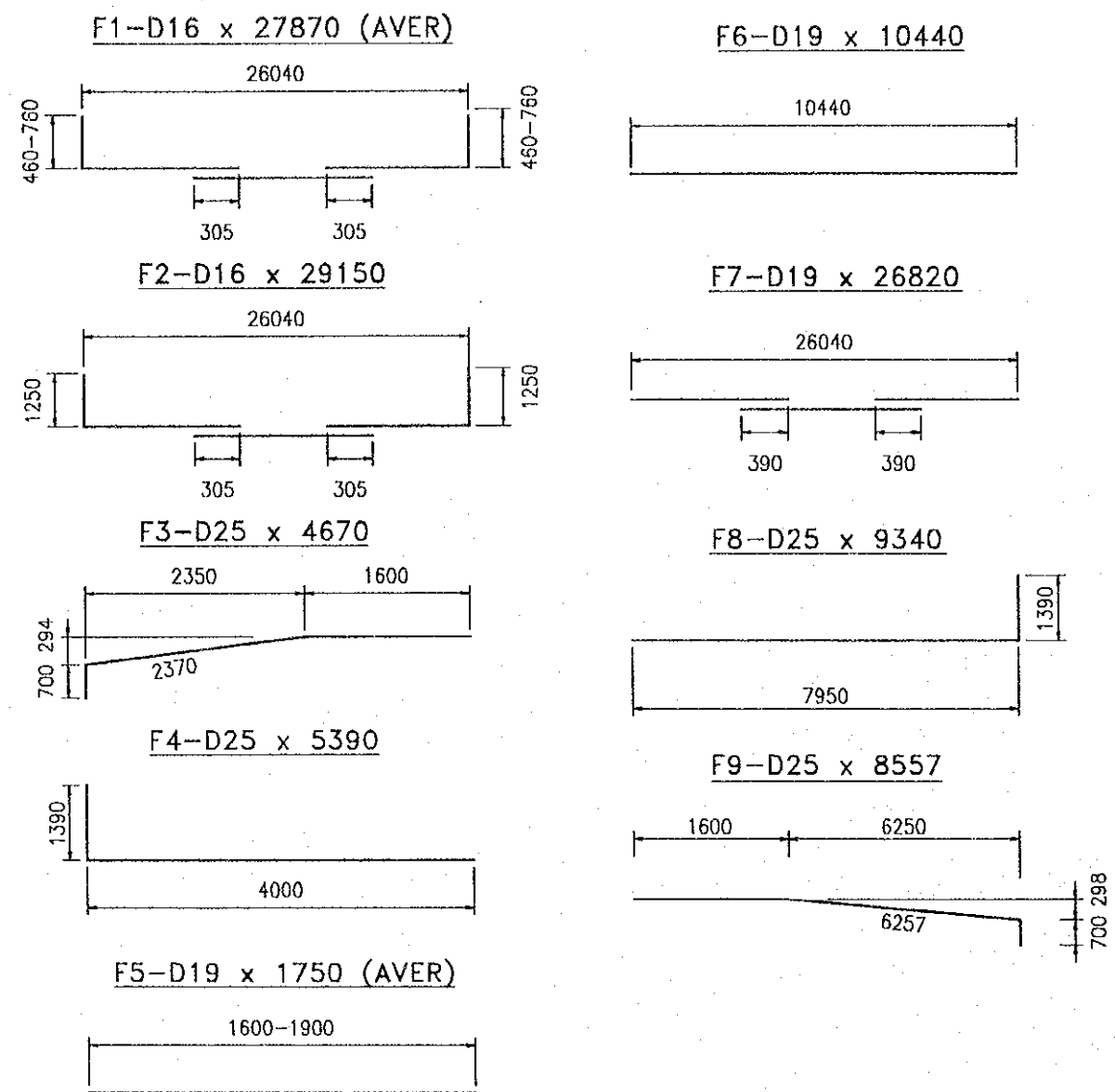
PACKAGE 3	SCALE 1/75	DRAWING No. C-1-3a-2	SHEET No.
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BAR ARRANGEMENT OF A1 (1)



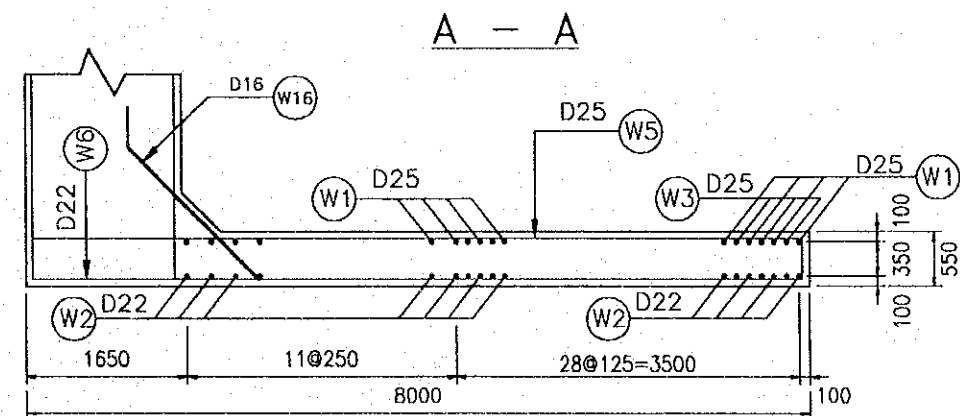
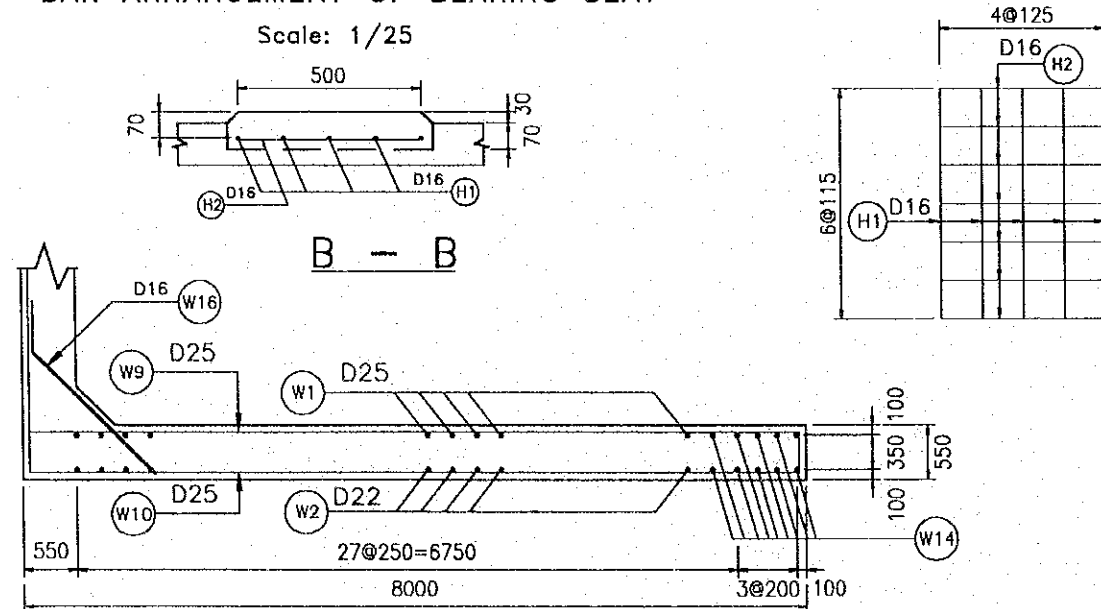
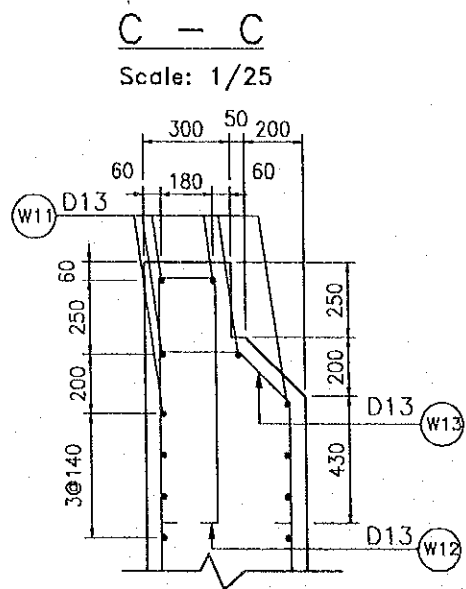
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.6.4

PACKAGE 3	SCALE	DRAWING No. C-1-3a-3	SHEET No.
BAR ARRANGEMENT OF A1 (2)			



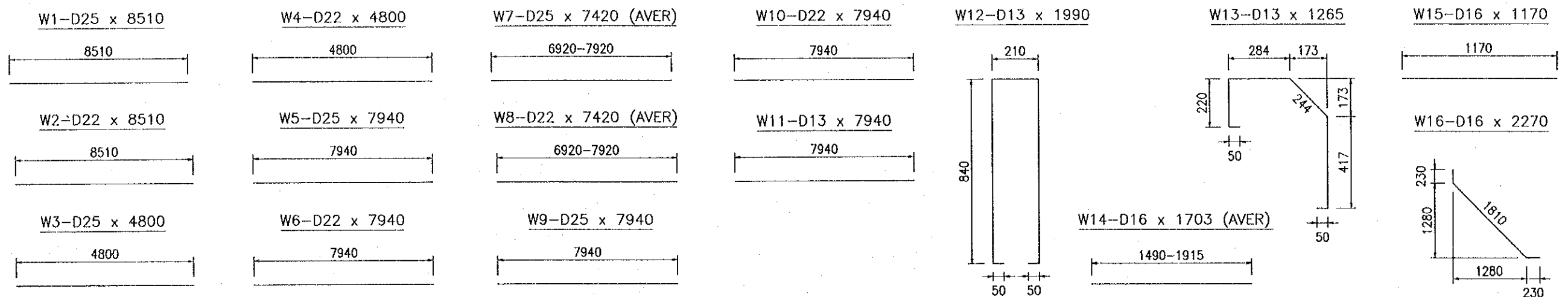
BAR ARRANGEMENT OF BEARING SEAT

Scale: 1/25



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE
CONSULTANT		DATE 2000. 5. 14

PACKAGE 3	SCALE C-1-3a-4	DRAWING No. C-1-3a-4	SHEET No.
BAR ARRANGMENT OF A1 (3)			



Detail	Bars	Shape	Dia (mm)	Length (mm)	No' s	Unit Weight (Kg/m)	Weight (Kg)	Remarks
BALAST WALL	B1		D13	26650	13	0.995	344.72	
	B2		D13	2060	101	0.995	207.02	
	B3		D13	730	260	0.995	188.85	
	B4		D16	2730	105	1.56	447.17	
	B5		D16	26650	9	1.56	374.17	
	B6		D19	2730	209	2.25	1283.78	
STEM	S1		D16	1830	578	1.56	1650.07	
	S2		D16	26650	7	1.56	291.02	
	S3		D16	26650	19	1.56	789.91	
	S4		D16	26650	19	1.56	789.91	
	S5		D16	6855	105	1.56	1122.85	
	S6		D16	6855	209	1.56	2235.00	
	H1		D16	710	60	1.56	66.46	
	H2		D16	520	84	1.56	68.14	
FOOTING	F1		D16	27870	41	1.56	1782.57	AVER
	F2		D16	29150	41	1.56	1864.43	
	F3		D25	4670	105	3.98	1951.59	
	F4		D25	5390	209	3.98	4483.51	
	F5		D19	1750	848	2.25	3339.00	AVER
	F6		D19	10440	8	2.25	187.92	
	F7		D19	26820	8	2.25	482.76	
	F8		D25	9340	105	3.98	3903.19	
	F9		D25	8557	209	3.98	7117.88	

Detail	Bars	Shape	Dia (mm)	Length (mm)	No' s	Unit Weight (Kg/m)	Weight (Kg)	Remarks	
WING WALL	W1		D25	8510	52	3.98	1761.23		
	W2		D22	8510	52	3.04	1345.26		
	W3		D25	4800	28	3.98	534.91		
	W4		D22	4800	28	3.04	408.58		
	W5		D25	7940	52	3.98	1643.26		
	W6		D22	7940	52	3.04	1255.16		
	W7		D25	7420	10	3.98	295.32	AVER	
	W8		D22	7420	10	3.04	225.57	AVER	
	W9		D25	7940	22	3.98	695.23		
	W10		D22	7940	22	3.04	531.03		
	W11		D13	7940	12	0.995	94.80		
	W12		D13	1990	66	0.995	130.68		
	W13		D13	1265	66	0.995	83.07		
	W14		D16	1703	20	1.56	53.13	AVER	
	W15		D16	1170	4	1.56	7.30		
	W16		D16	2270	68	1.56	240.80		
SUMMARY	TOTAL							44277.25	
						D13 : 1049.15	D22 : 3765.59		
						D16 : 11782.93	D25 : 22386.12		
						D19 : 5293.46			

201

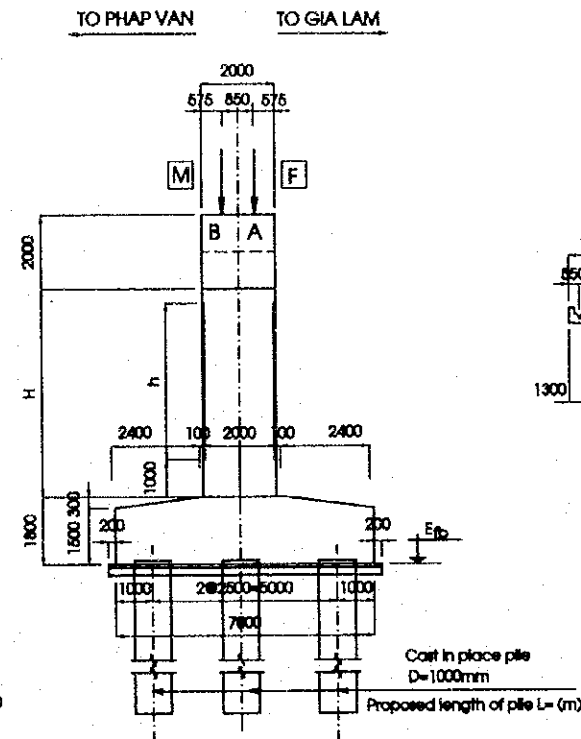
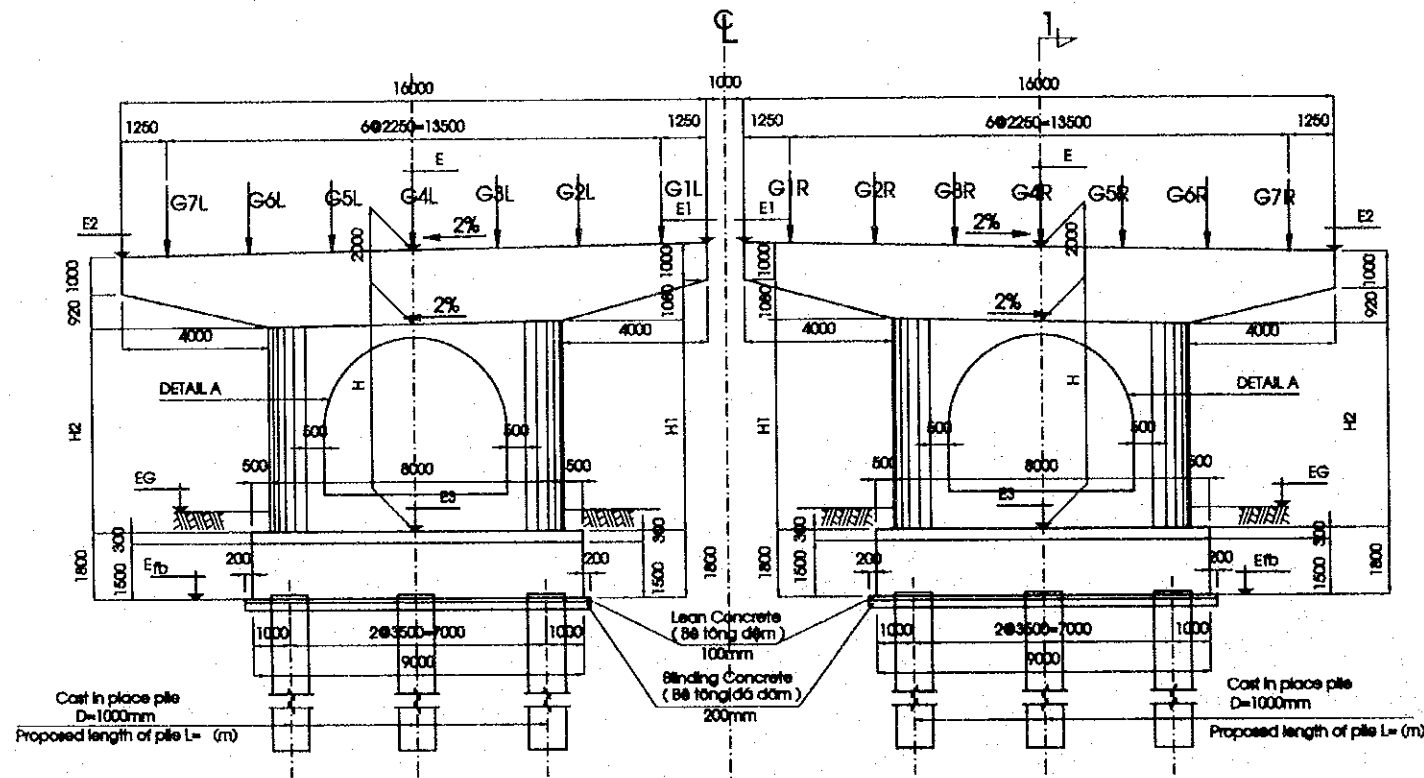
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (NHANH TRU BRIDGE) CONSTRUCTION PROJECT	DATE 2000.1.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-5	SHEET No.
DETAIL OF 2 PERS P1R, P12L~P14L, P12R~P18R (1)			

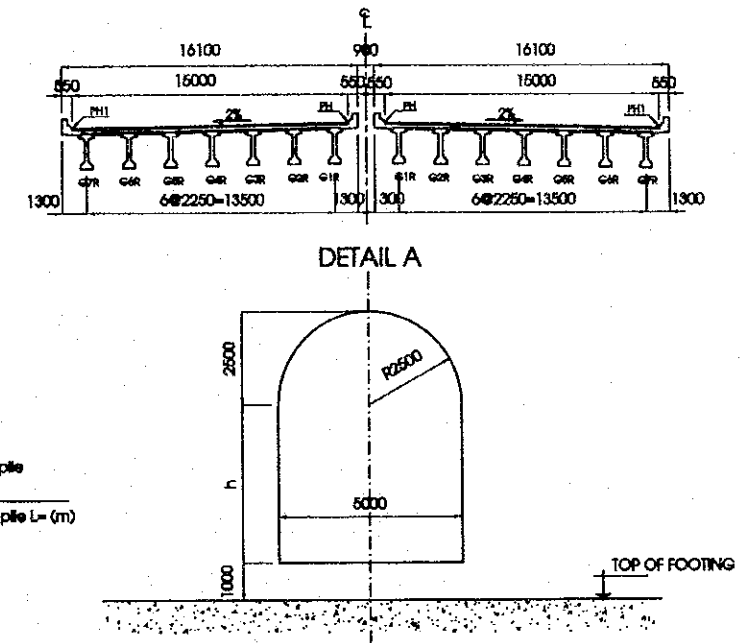
LEFT PIER

RIGHT PIER

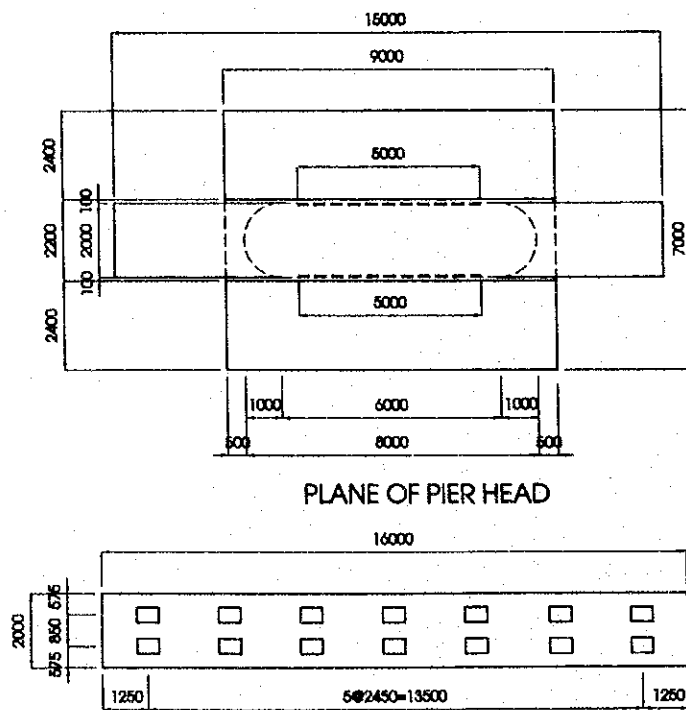
SECTION 1-1



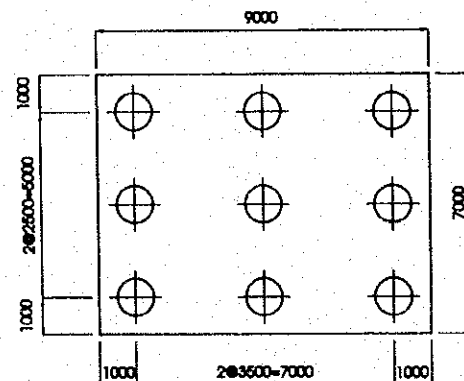
CROSS SECTION OF SUPERSTRUCTURE
(SCALE: 1/400)



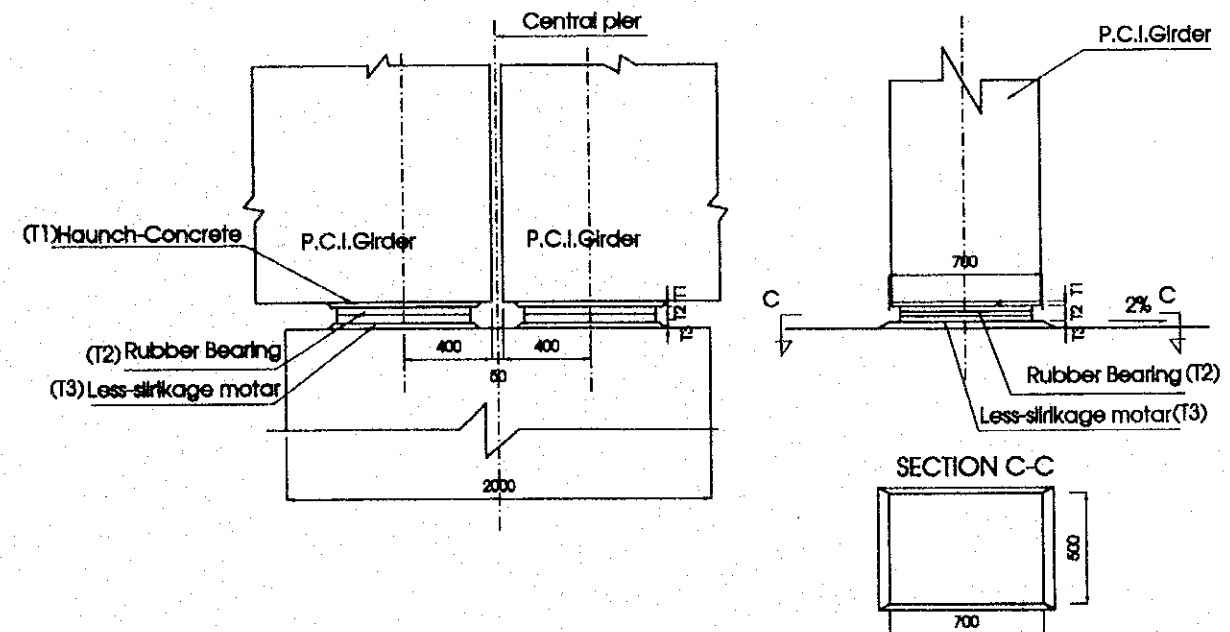
PLAN



PILE ARRANGEMENT



BEARING SEAT DETAIL OF P.C I GIRDER
(SC=1/50)



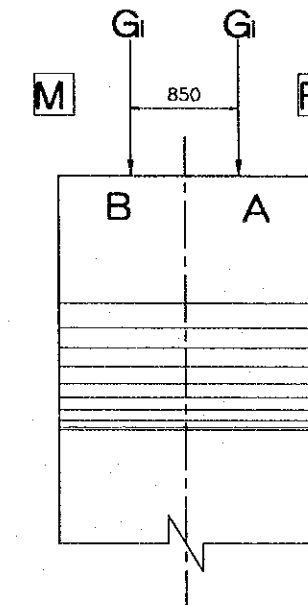
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	SIGNATURE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE	2007.6.1
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/200	C-1-3a-6	
DETAIL OF PIERS P1R, P12L~P14L, P12R~P18R (2)			

LIST OF ELEVATION, DIMENTION AND PROPOSED LENGTHS OF PIER

Piers	Depth of superstructure (mm)		Dimensions of piers (mm)				PH	Top Cap beam elevations (m)						Ground Elevation Eg(m)	Foot bottom Elevation Ef(m)	Proposed length of piles L (m)
	B	A	H1	H	H2	h		E1		E		E2				
								B	A	B	A	B	A			
P1R	2.121	2.108	3080	3000	2920	2500	11.92	9.809	9.822	9.649	9.662	9.489	9.502	5.33	2.856	40
P12L	1.876	1.874	9080	9000	8920	5750	15.57	13.704	13.706	13.544	13.546	13.384	13.386	3.16	0.745	39
P13L	1.876	1.875	9080	9000	8920	5750	15.62	13.754	13.755	13.594	13.595	13.434	13.435	3.08	0.795	39
P14L	1.876	1.876	9080	9000	8920	5750	15.64	13.774	13.774	13.614	13.614	13.454	13.454	3.21	0.814	39
P12R	1.876	1.874	9080	9000	8920	5750	15.57	13.704	13.706	13.544	13.546	13.384	13.386	3.16	0.745	39
P13R	1.876	1.875	9080	9000	8920	5750	15.62	13.754	13.755	13.594	13.595	13.434	13.435	3.08	0.795	39
P14R	1.876	1.876	9080	9000	8920	5750	15.64	13.774	13.774	13.614	13.614	13.454	13.454	3.21	0.814	39
P15R	1.876	1.876	9080	9000	8920	5750	15.62	13.754	13.754	13.594	13.594	13.434	13.434	3.20	0.794	39
P16R	2.026	2.029	9080	9000	8920	5750	15.56	13.544	13.541	13.384	13.381	13.224	13.221	3.10	0.583	39
P17R	2.026	2.028	9080	9000	8920	5750	15.46	13.444	13.442	13.284	13.282	13.124	13.122	3.17	0.483	39
P18R	2.051	2.056	8180	8000	8020	4750	15.3	13.259	13.254	13.099	13.094	12.939	12.934	3.67	1.297	39

To PHAP VAN ← → To GIA LAM

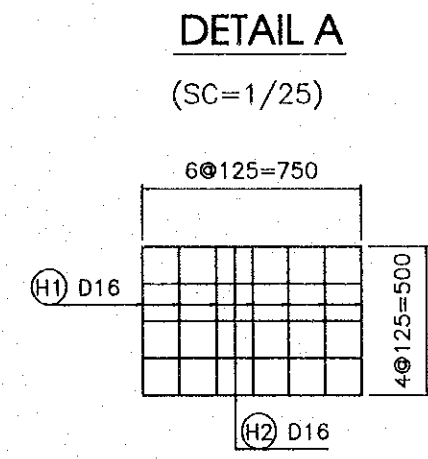
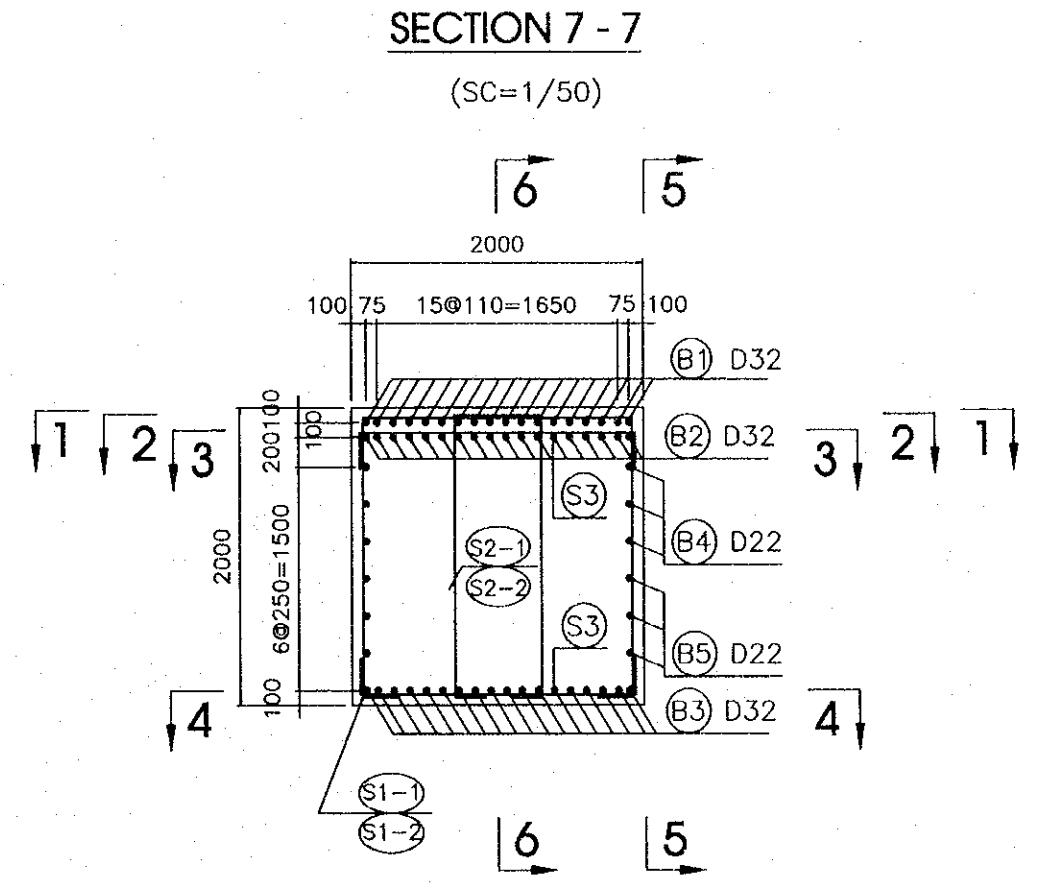
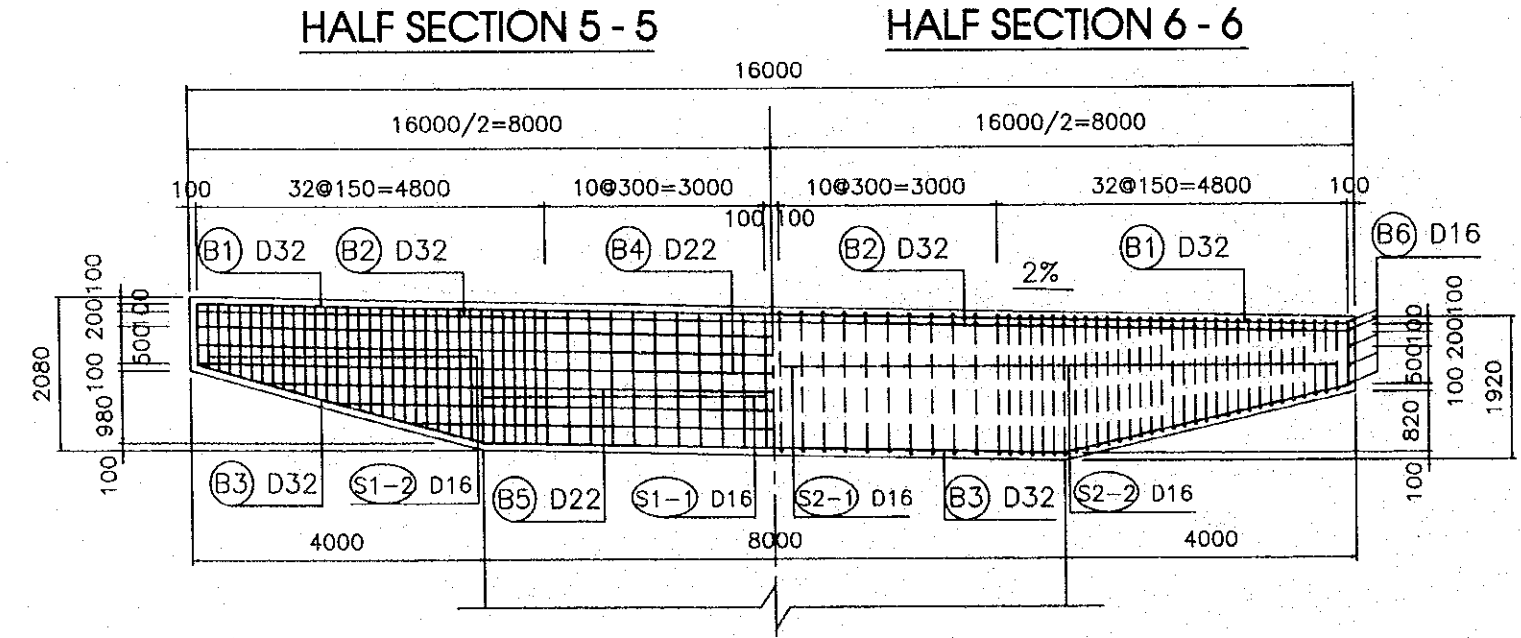
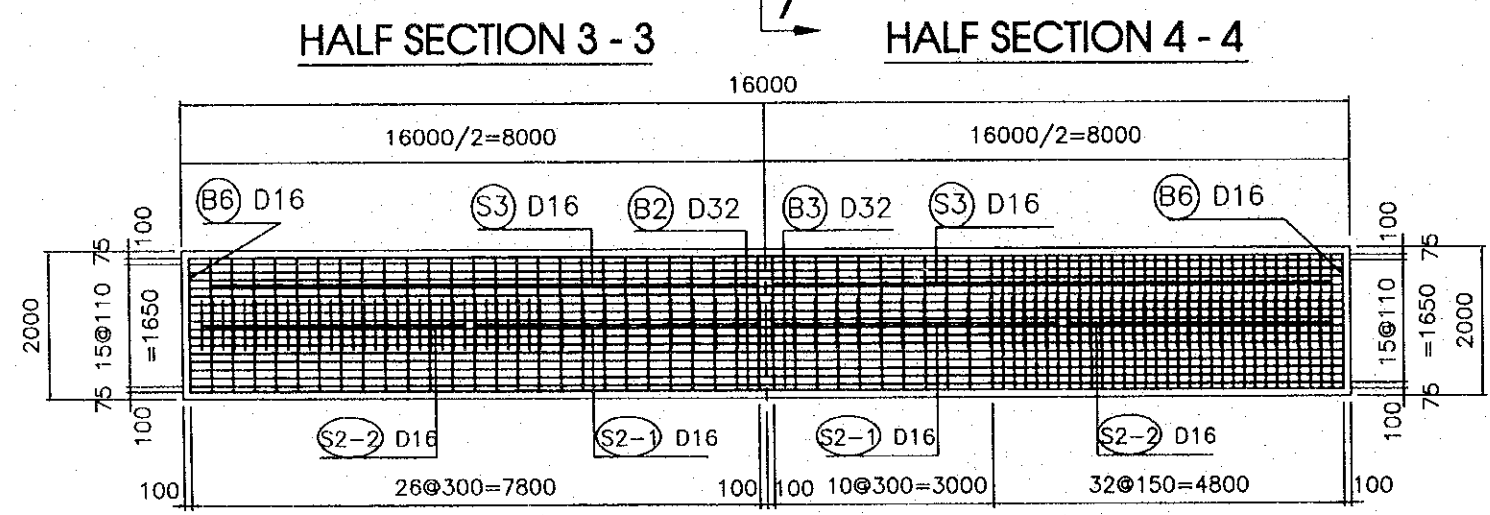
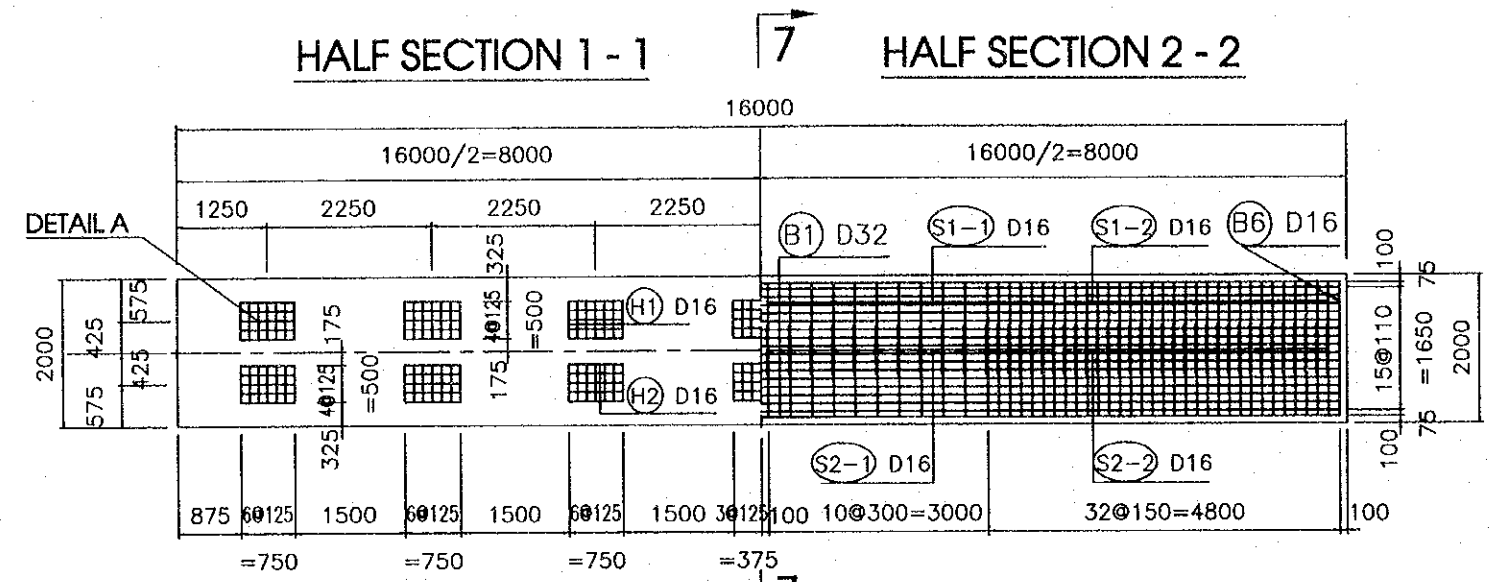


ELEVATION OF TOP PIER HEAD FOR BOTH OF LEFT AND RIGHT (M)

Piers	Depth of Super (mm)		G1		G2		G3		G4		G5		G6		G7	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A
P1R	2.121	2.108	9.784	9.797	9.739	9.752	9.694	9.707	9.649	9.662	9.604	9.617	9.559	9.572	9.514	9.527
P12L	1.876	1.874	13.679	13.681	13.634	13.636	13.589	13.591	13.544	13.546	13.499	13.501	13.454	13.456	13.409	13.411
P13L	1.876	1.875	13.729	13.730	13.684	13.685	13.639	13.640	13.594	13.595	13.549	13.550	13.504	13.505	13.459	13.460
P14L	1.876	1.876	13.749	13.749	13.704	13.704	13.659	13.659	13.614	13.614	13.569	13.569	13.524	13.524	13.479	13.479
P12R	1.876	1.874	13.679	13.681	13.634	13.636	13.589	13.591	13.544	13.546	13.499	13.501	13.454	13.456	13.409	13.411
P13R	1.876	1.875	13.729	13.730	13.684	13.685	13.639	13.640	13.594	13.595	13.549	13.550	13.504	13.505	13.459	13.460
P14R	1.876	1.876	13.749	13.749	13.704	13.704	13.659	13.659	13.614	13.614	13.569	13.569	13.524	13.524	13.479	13.479
P15R	1.876	1.876	13.729	13.729	13.684	13.684	13.639	13.639	13.594	13.594	13.549	13.549	13.504	13.504	13.459	13.459
P16R	2.026	2.029	13.519	13.516	13.474	13.471	13.429	13.426	13.384	13.381	13.339	13.336	13.294	13.291	13.249	13.246
P17R	2.026	2.028	13.419	13.417	13.374	13.372	13.329	13.327	13.284	13.282	13.239	13.237	13.194	13.192	13.149	13.147
P18R	2.051	2.056	13.234	13.229	13.189	13.184	13.144	13.139	13.099	13.094	13.054	13.049	13.009	13.004	12.964	12.959

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT: RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL	DATE: 2000.03.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-7	
BAR ARRANGEMENT OF P1R, P12L~P14L, P12R~P18R			



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i>
		DATE 2000. V. 14

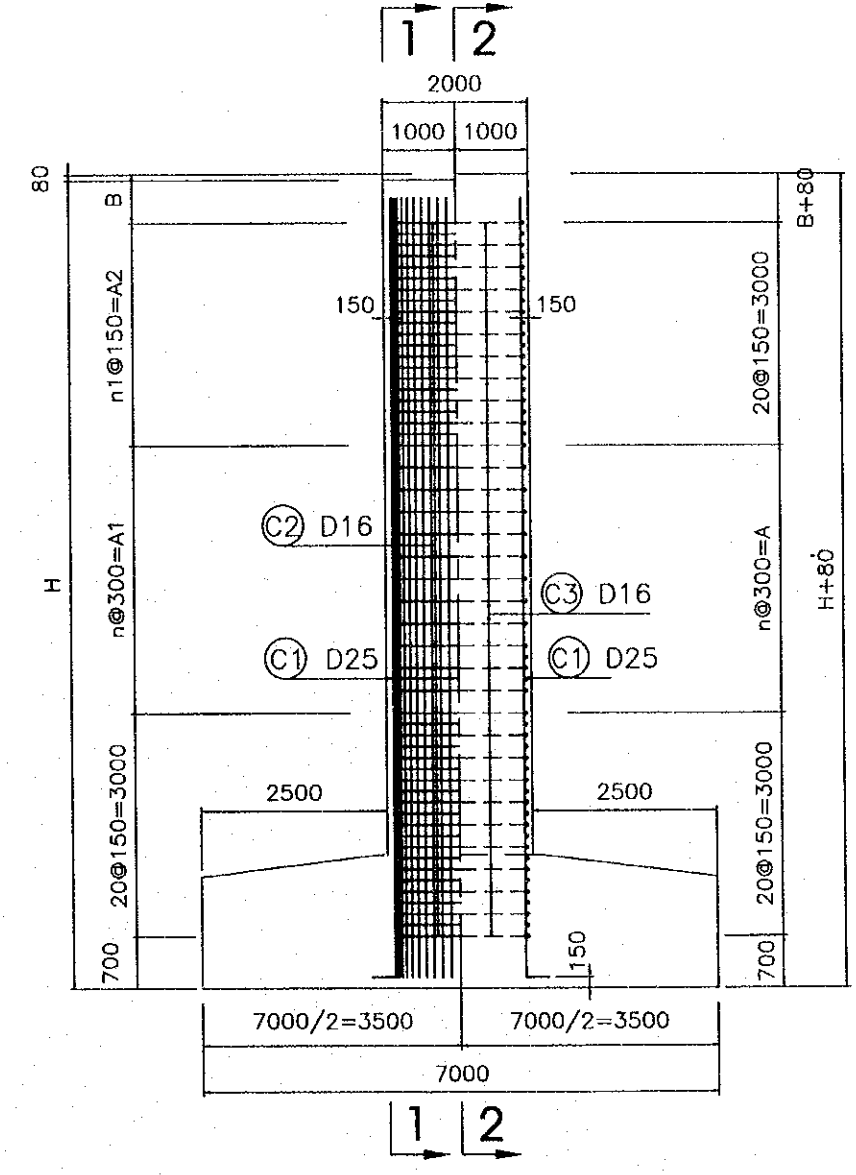
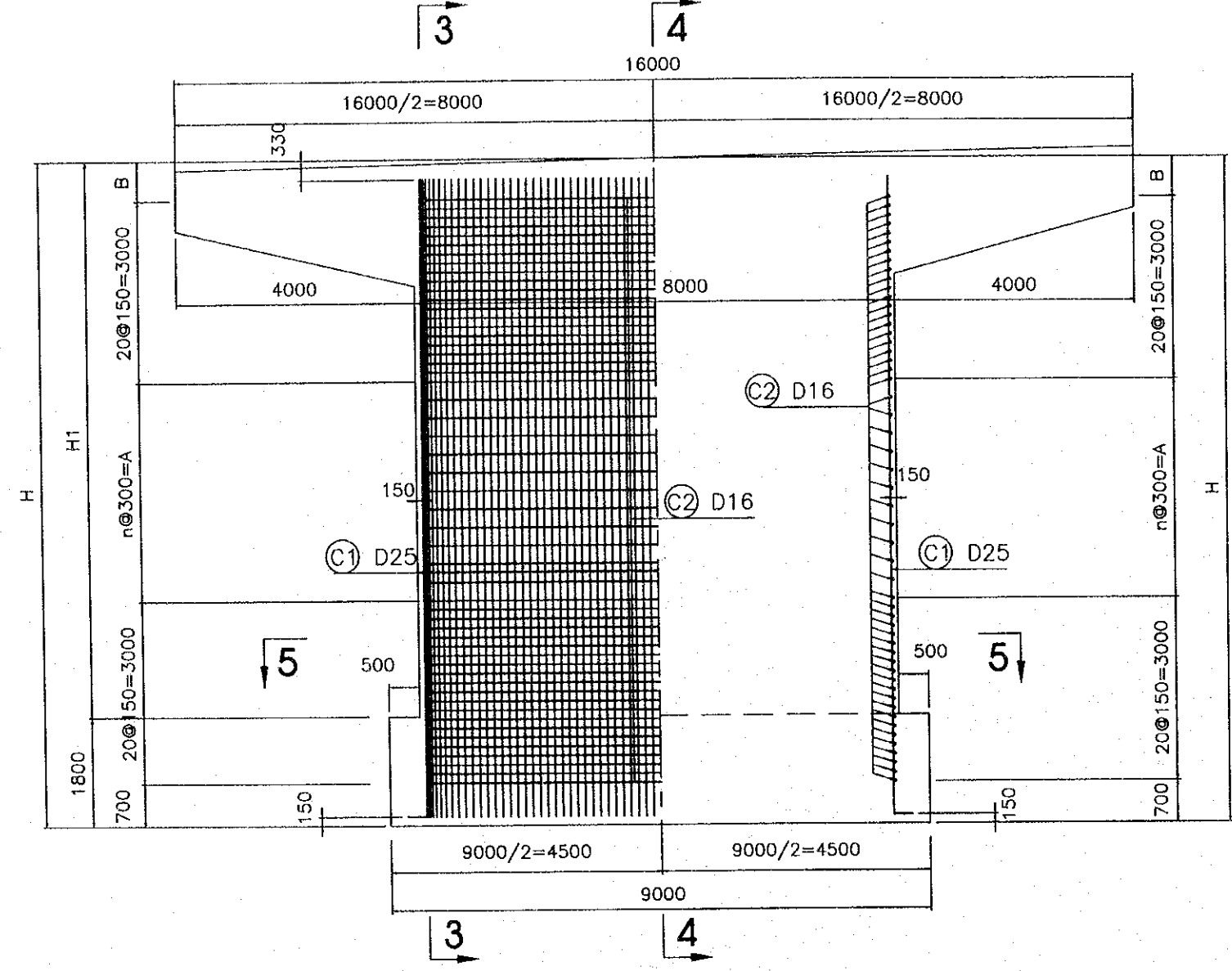
PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-8	SHEET No.
BAR ARRANGEMENT OF P1R P12L~P14L, P12R~P18R (2)			

HALF SECTION 1 - 1

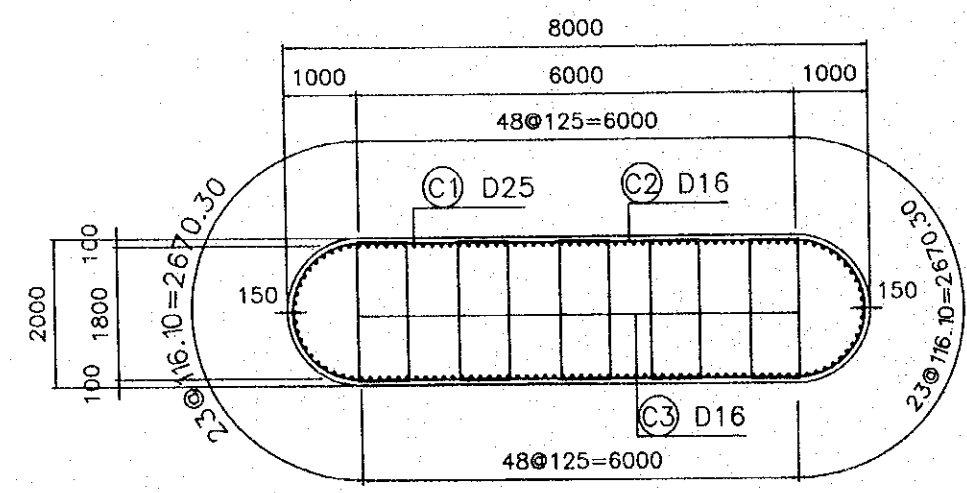
HALF SECTION 2 - 2

HALF SECTION 3 - 3

HALF SECTION 4 - 4



SECTION 5 - 5



DIMENSION OF PIERS

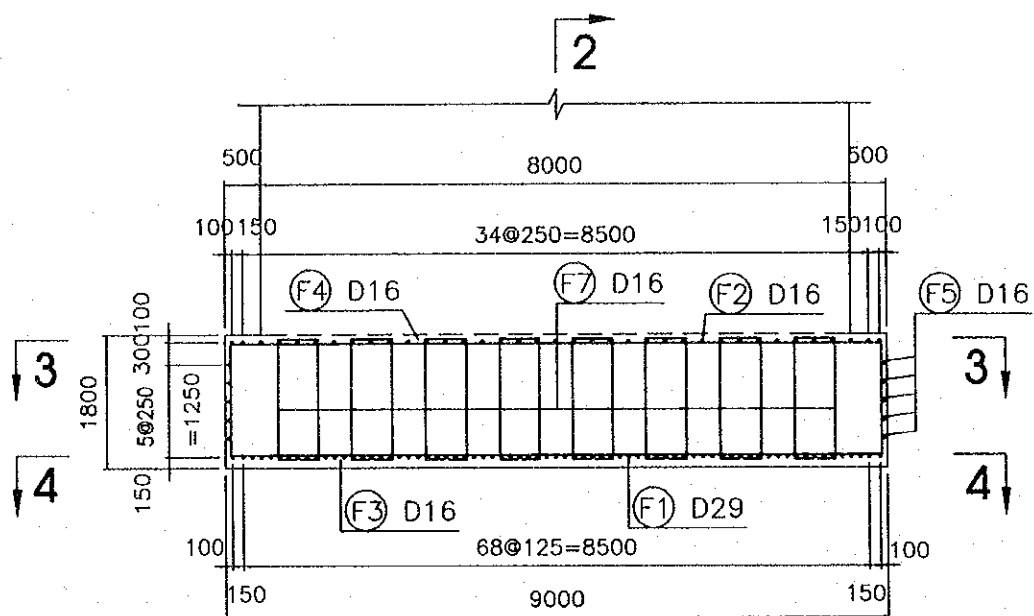
ITEMS	H(mm)	H1(mm)	A1(mm)	A2(mm)	B(mm)	n	n1
PIER	6800	5000	0	2700	400	0	18
P12L~P14L P12R~P14R	12800	11000	5700	3000	400	19	20
P18R	11800	1000	4800	3000	300	16	20

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY NAME S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.8.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	

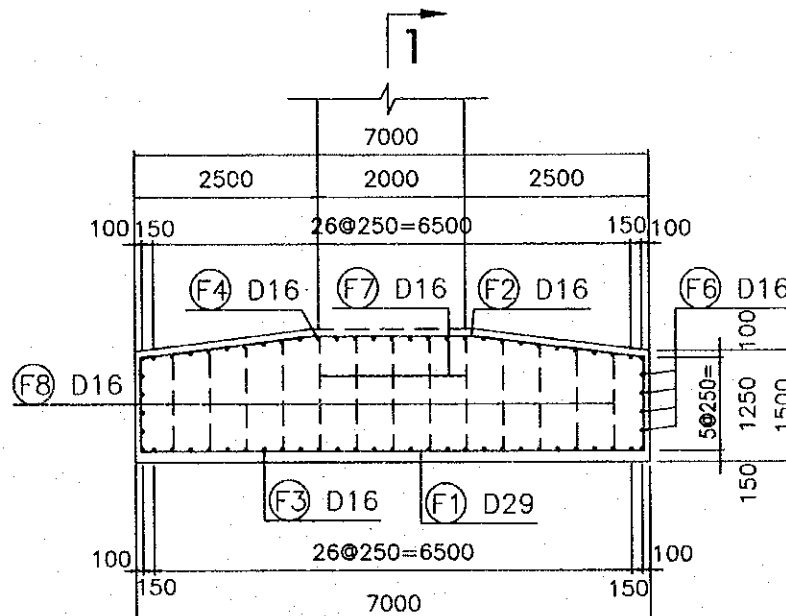
PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-9	SHEET No.
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BAR ARRANGEMENT OF
P1R, P12L~P14L, P12R~P18R (3)

SECTION 1 - 1

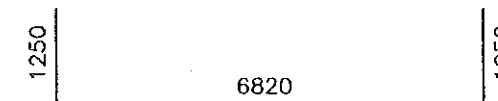


SECTION 2 - 2

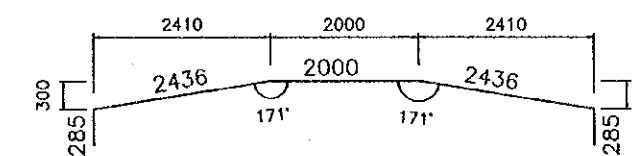


LIST OF REINFORCING BARS FOR FOOTING

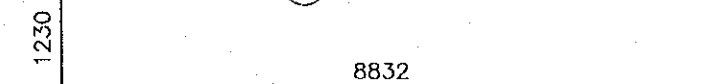
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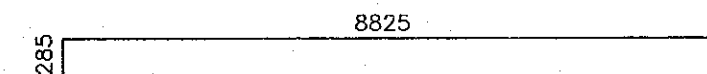
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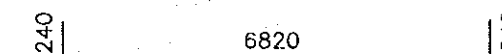
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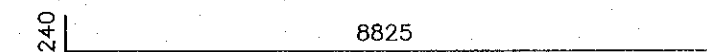
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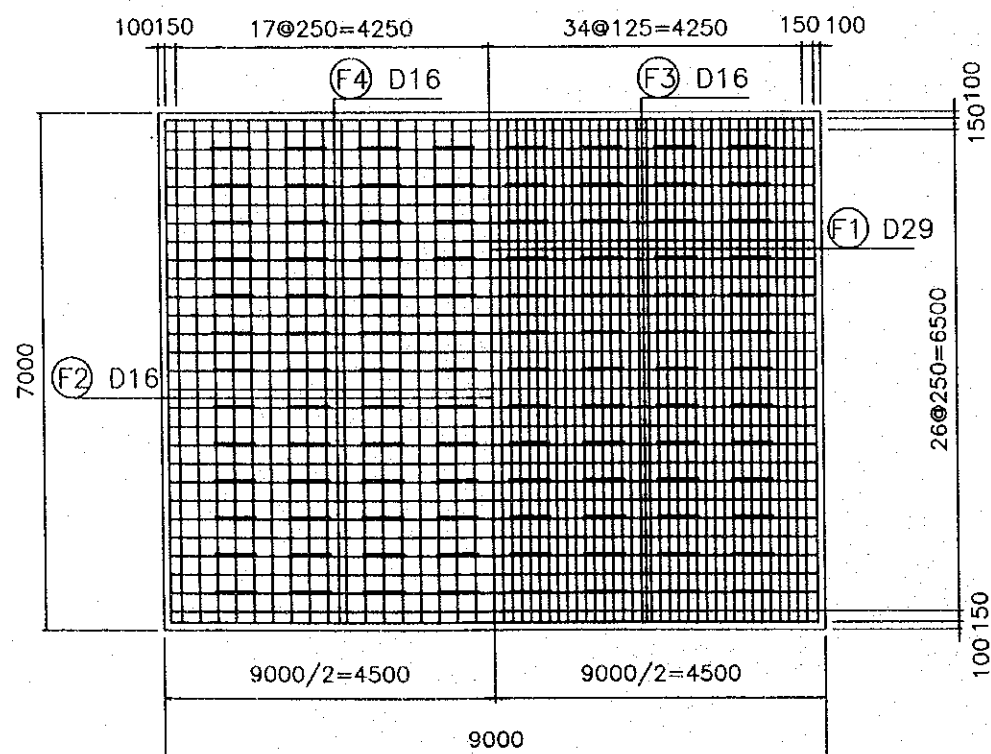
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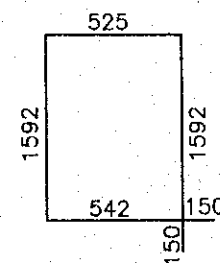
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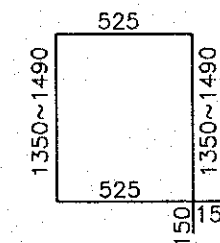
HALF SECTION 3 - 3 HALF SECTION 4 - 4



(F7) D16-4534



(F8) D16-4190 (AVE)

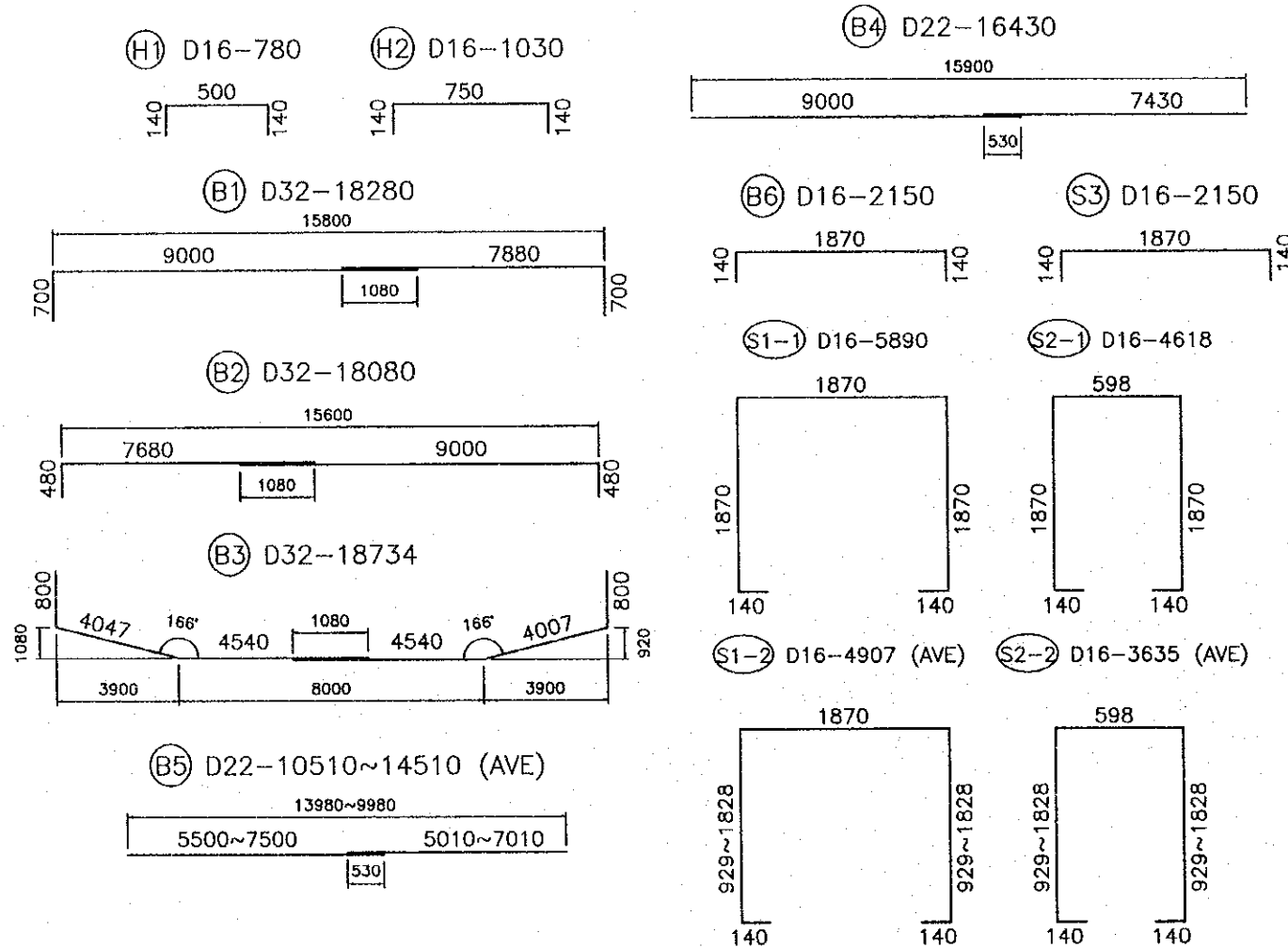


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE 2000. 0. 17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-10	SHEET No.
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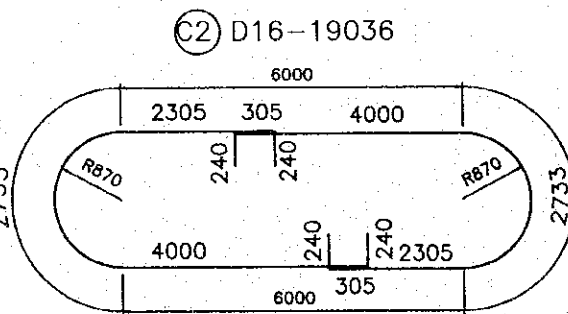
BAR ARRANGEMENT OF
P1R, P12L~P14L, P12R~P18R (4)

LIST OF REINFORCING BARS FOR BEAM AND COLUMN



DIMENSIONS OF BAR C1

Items	Diameter (mm)	A (mm)	L (mm)	L1 (mm)	L2 (mm)	Total (mm)
P1R	D25	375	6320	6320	0	6695
P12L~P14L P12R~P17R	D25	375	12320	8000	4320	13385
P18R	D25	375	11320	7500	3820	12385



BAR ARRANGEMENT OF 9 PIERS P12L~P14L, P12R~P17R

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D16	780	98	1.56	119.25
	H2	[Diagram]	D16	1030	70	1.56	112.48
	B1	[Diagram]	D32	18280	18	6.23	2049.92
	B2	[Diagram]	D32	18080	18	6.23	2027.49
	B3	[Diagram]	D32	18734	18	6.23	2100.83
	B4	[Diagram]	D22	16430	6	3.04	299.68
	B5	[Diagram]	D22	12510	6	3.04	228.18
	B6	[Diagram]	D16	2150	10	1.56	33.54
	S1-1	[Diagram]	D16	5890	34	1.56	312.41
	S1-2	[Diagram]	D16	4907	50	1.56	382.75
	S2-1	[Diagram]	D16	4618	34	1.56	244.94
	S2-2	[Diagram]	D16	3635	60	1.56	340.24
	S3	[Diagram]	D16	2150	138	1.56	462.85
	STEM	C1	[Diagram]	D25	13385	140	3.98
C2		[Diagram]	D16	19036	60	1.56	1781.77
C3		[Diagram]	D16	5148	195	1.56	1566.02
FOOTING	F1	[Diagram]	D29	9320	71	5.04	3335.07
	F2	[Diagram]	D16	7436	37	1.56	429.21
	F3	[Diagram]	D16	11292	29	1.56	510.85
	F4	[Diagram]	D16	9395	29	1.56	425.03
	F5	[Diagram]	D16	7300	10	1.56	113.88
	F6	[Diagram]	D16	9305	8	1.56	116.13
	F7	[Diagram]	D16	4534	40	1.56	282.92
	F8	[Diagram]	D16	4190	48	1.56	313.75
TOTAL FOR ONE PIER :							25,047.29
SUMMARY FOR ONE PIER :						D16 =	7,547.99
						D22 =	527.87
						D25 =	7,458.12
						D29 =	3,335.07
						D32 =	6,178.24
TOTAL FOR 11 PIERS :							225,425.61
SUMMARY FOR 9 PIERS :						D16 =	67,931.94
						D22 =	4,750.79
						D25 =	67,123.10
						D29 =	30,015.62
						D32 =	55,604.17

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE
DATE	2000. 8. 19	

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-3a-11	
BAR ARRANGEMENT OF P1R, P18R (5)			

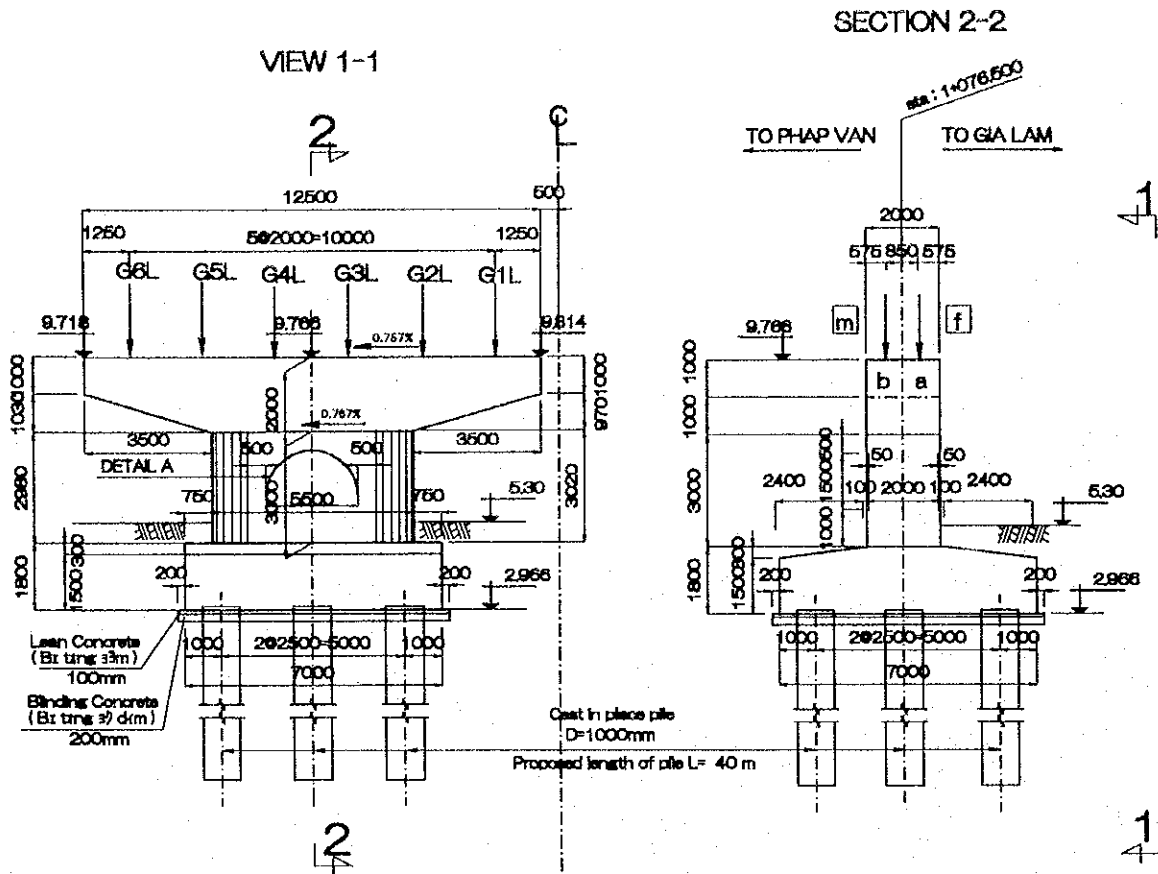
QUANTITY REINFORCEMENT FOR PIER P1R

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D16	780	98	1.56	119.25
	H2		D16	1030	70	1.56	112.48
	B1		D32	18280	18	6.23	2049.92
	B2		D32	18080	18	6.23	2027.49
	B3		D32	18734	18	6.23	2100.83
	B4		D22	16430	6	3.04	299.68
	B5		D22	12510	6	3.04	228.18
	B6		D16	2150	10	1.56	33.54
	S1-1		D16	5890	34	1.56	312.41
	S1-2		D16	4907	50	1.56	382.75
	S2-1		D16	4618	34	1.56	244.94
	S2-2		D16	3635	60	1.56	340.24
	S3		D16	2150	138	1.56	462.85
	STEM	C1		D25	13385	140	3.98
C2			D16	19036	39	1.56	1158.15
C3			D16	5148	95	1.56	762.93
FOOTING	F1		D29	9320	71	5.04	3335.07
	F2		D16	7436	37	1.56	429.21
	F3		D16	11292	29	1.56	510.85
	F4		D16	9395	29	1.56	425.03
	F5		D16	7300	10	1.56	113.88
	F6		D16	9305	8	1.56	116.13
	F7		D16	4534	40	1.56	282.92
	F8		D16	4190	48	1.56	313.75
TOTAL							23,620.58
SUMMARY			D16 =				6,121.29
			D22 =				527.87
			D25 =				7,458.12
			D29 =				3,335.07
			D32 =				6,178.24

QUANTITY REINFORCEMENT FOR PIER P18R

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D16	780	98	1.56	119.25
	H2		D16	1030	70	1.56	112.48
	B1		D32	18280	18	6.23	2049.92
	B2		D32	18080	18	6.23	2027.49
	B3		D32	18734	18	6.23	2100.83
	B4		D22	16430	6	3.04	299.68
	B5		D22	12510	6	3.04	228.18
	B6		D16	2150	10	1.56	33.54
	S1-1		D16	5890	34	1.56	312.41
	S1-2		D16	4907	50	1.56	382.75
	S2-1		D16	4618	34	1.56	244.94
	S2-2		D16	3635	60	1.56	340.24
	S3		D16	2150	138	1.56	462.85
	STEM	C1		D25	13385	140	3.98
C2			D16	19036	57	1.56	1692.68
C3			D16	5148	78	1.56	626.41
FOOTING	F1		D29	9320	71	5.04	3335.07
	F2		D16	7436	37	1.56	429.21
	F3		D16	11292	29	1.56	510.85
	F4		D16	9395	29	1.56	425.03
	F5		D16	7300	10	1.56	113.88
	F6		D16	9305	8	1.56	116.13
	F7		D16	4534	40	1.56	282.92
	F8		D16	4190	48	1.56	313.75
TOTAL							24,018.59
SUMMARY			D16 =				6,519.29
			D22 =				527.87
			D25 =				7,458.12
			D29 =				3,335.07
			D32 =				6,178.24

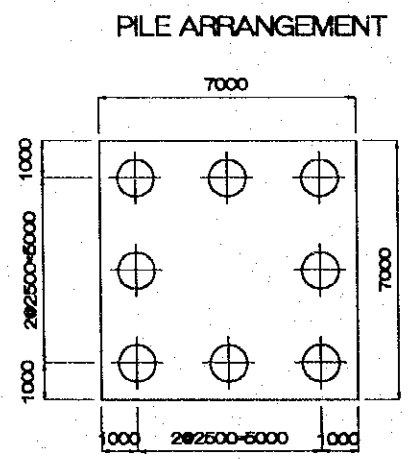
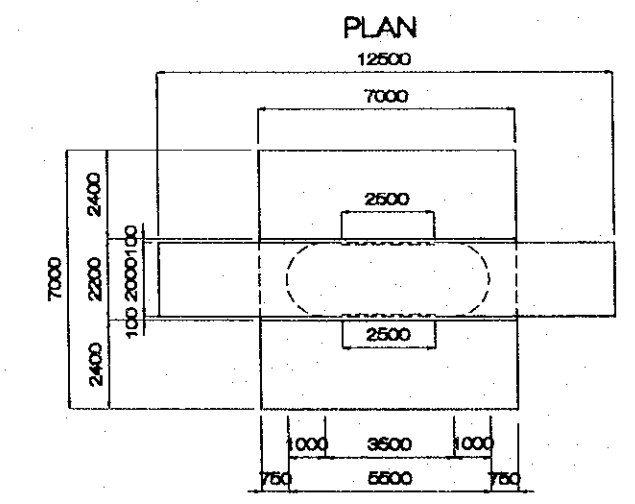
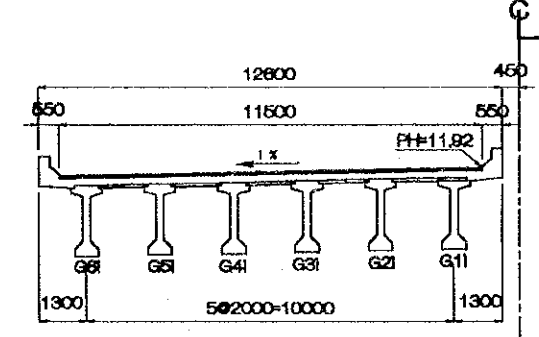
200



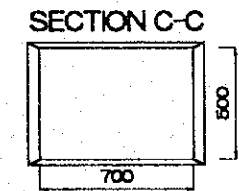
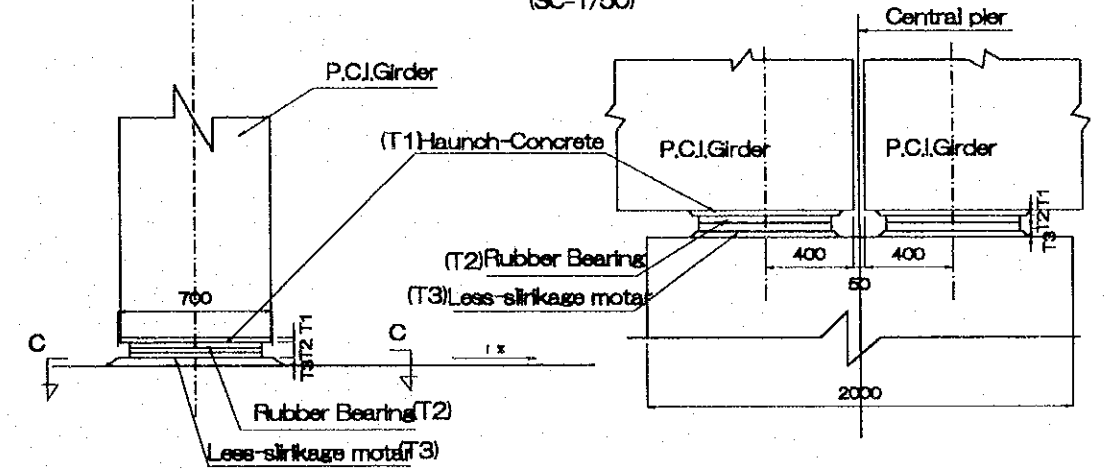
DEPTH OF SUPERSTRUCTURE (MM)

Structure	B(MOVE)	A(FIXED)
Pavement	75	75
Slab	202	203
Girder	1650	1750
Haunch (T1)	20	20
Bearing (T2)	56	36
Mortar (T3)	112	20
Sub Total	2115	2104

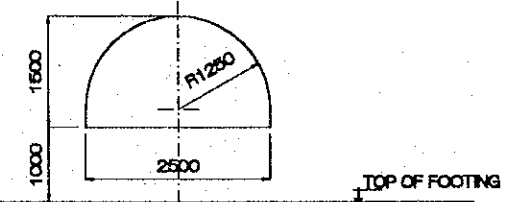
CROSS SECTION LEFT OF SUPERSTRUCTURE



BEARING SEAT DETAIL OF P.C.I GIRDER (SC=1/50)



DETAIL A (SC=1/100)

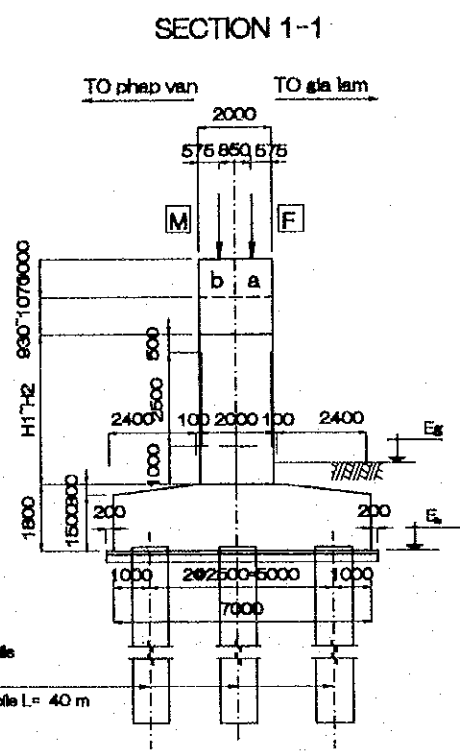
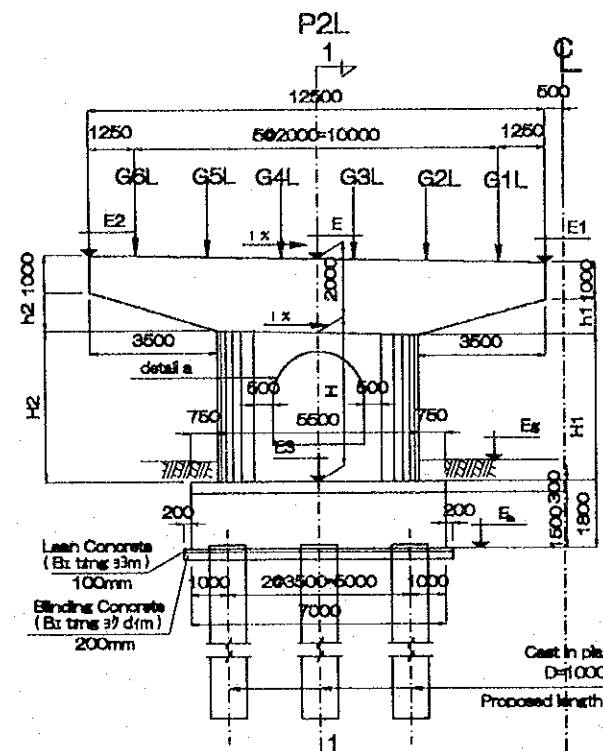


TOP PIER HEAD ELEVATION

Bearing seat	G1L		G2L		G3L		G4L		G5L		G6L		Cross Incline 1%	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A
Elevation	9.805	9.805	9.790	9.790	9.774	9.774	9.759	9.759	9.744	9.744	9.728	9.728	0.713	0.713

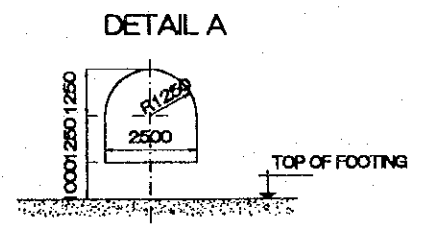
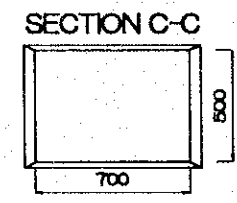
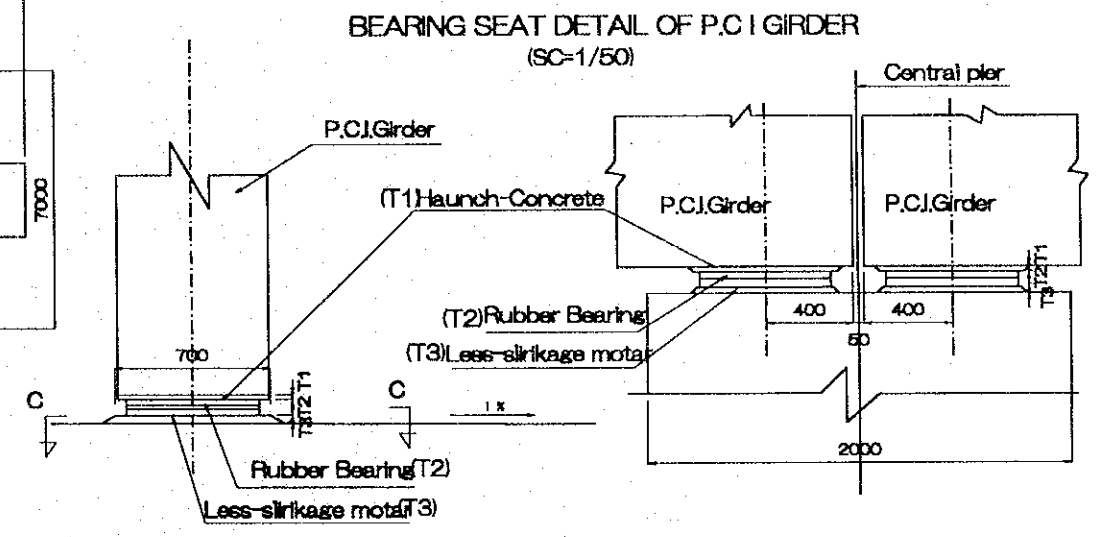
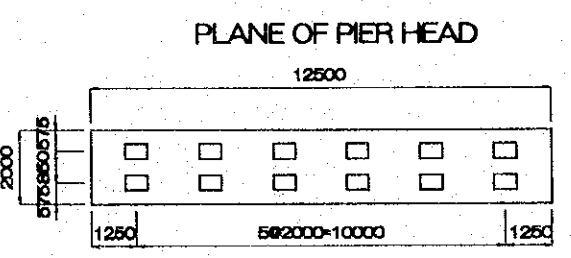
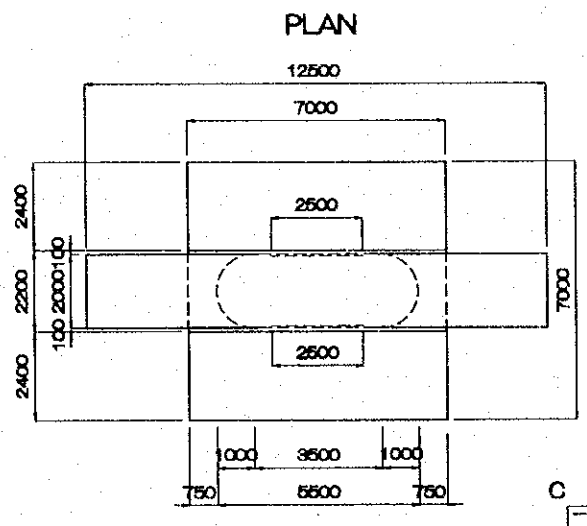
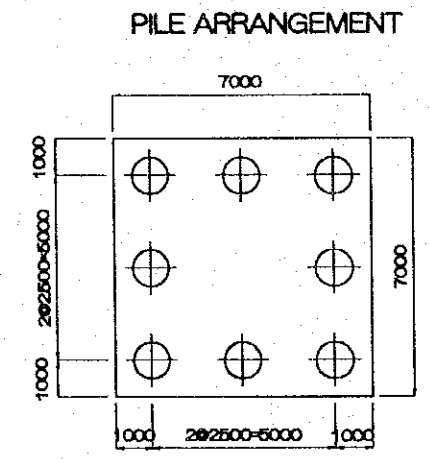
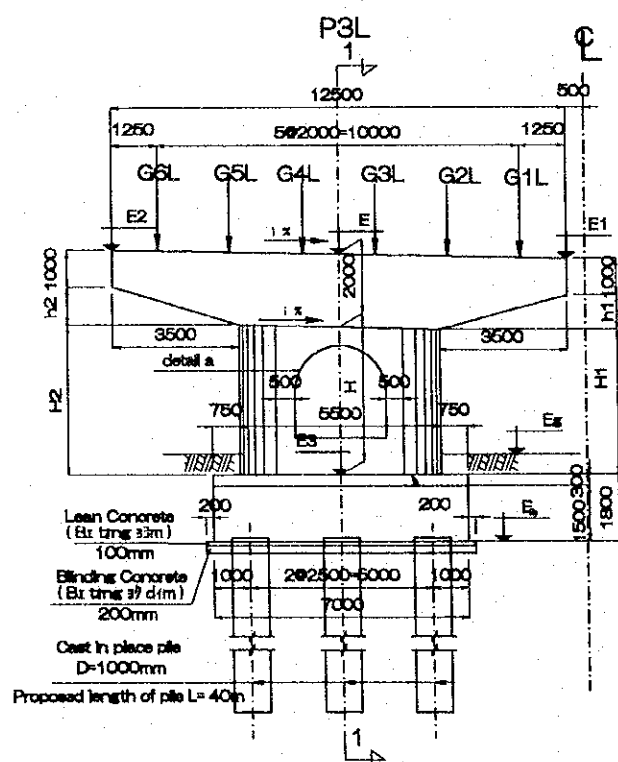
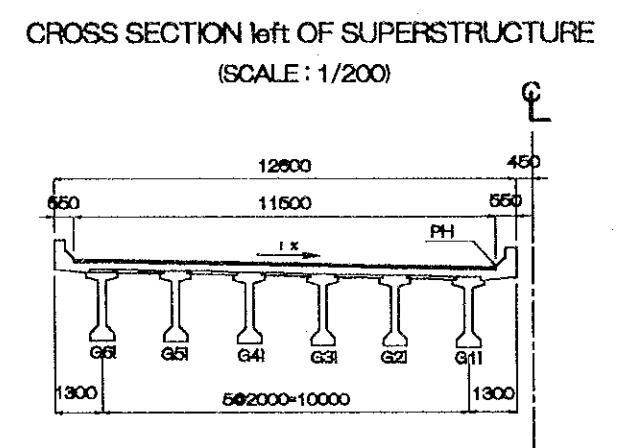
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATANE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE 2000.6.1
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-13	SHEET No.
DETAIL OF PIER P2L, P3L			



DEPTH OF SUPERSTRUCTURE (MM)

	P2L		P3L	
	MOVE	FIXED	MOVE	FIXED
Pavement	B	A	B	A
Slab	75	75	75	75
Girder	205	205	209	209
Haunch T1	1650	1650	1650	1650
Bearing T2	20	20	20	20
Mortar T3	56	36	56	36
Sub Total	2033	2021	2038	2026



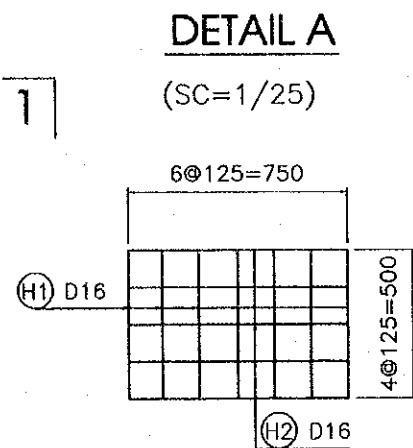
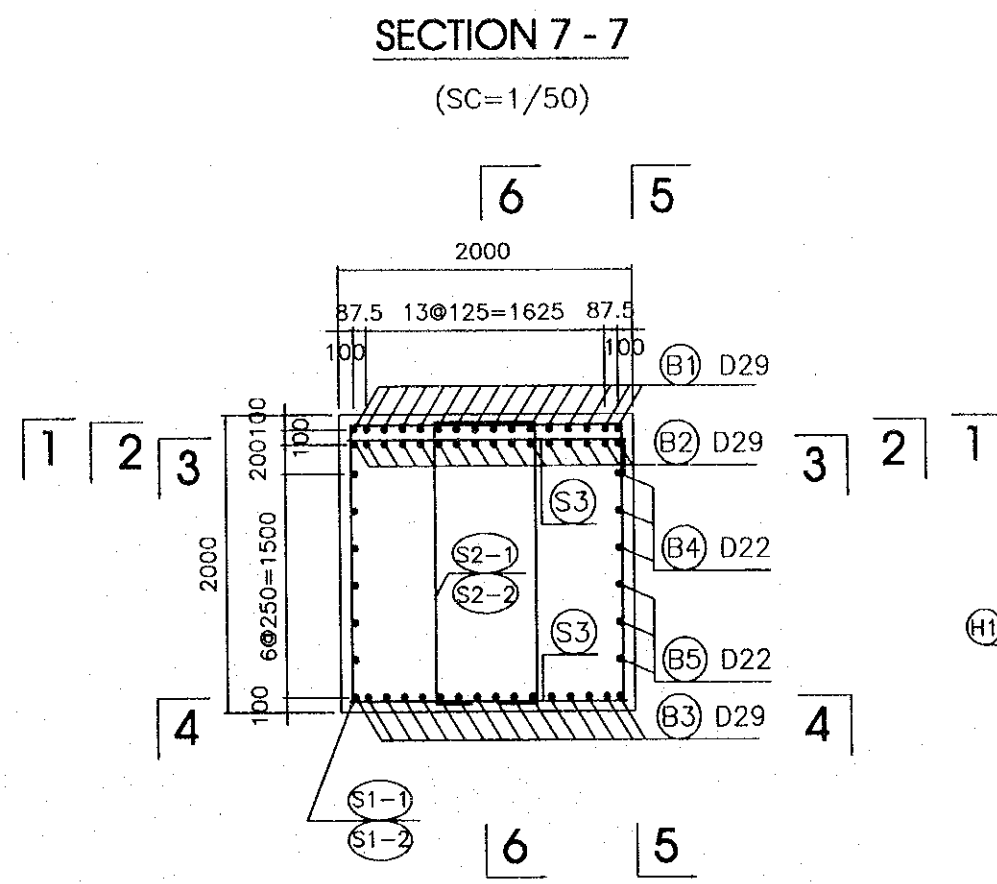
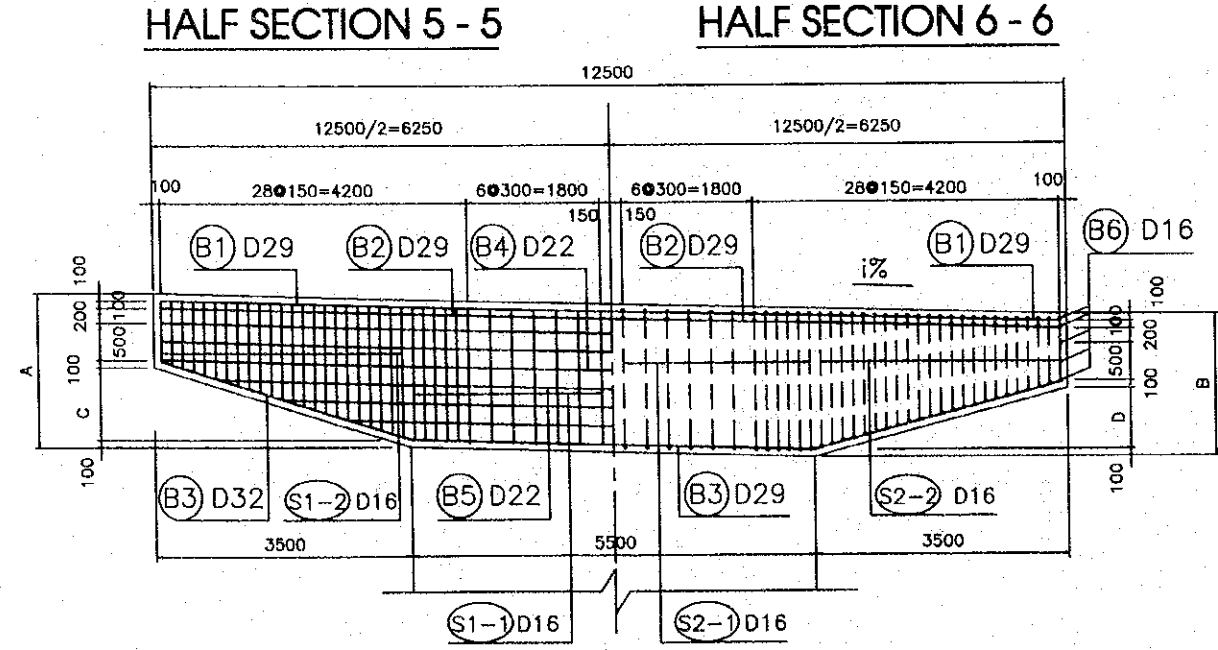
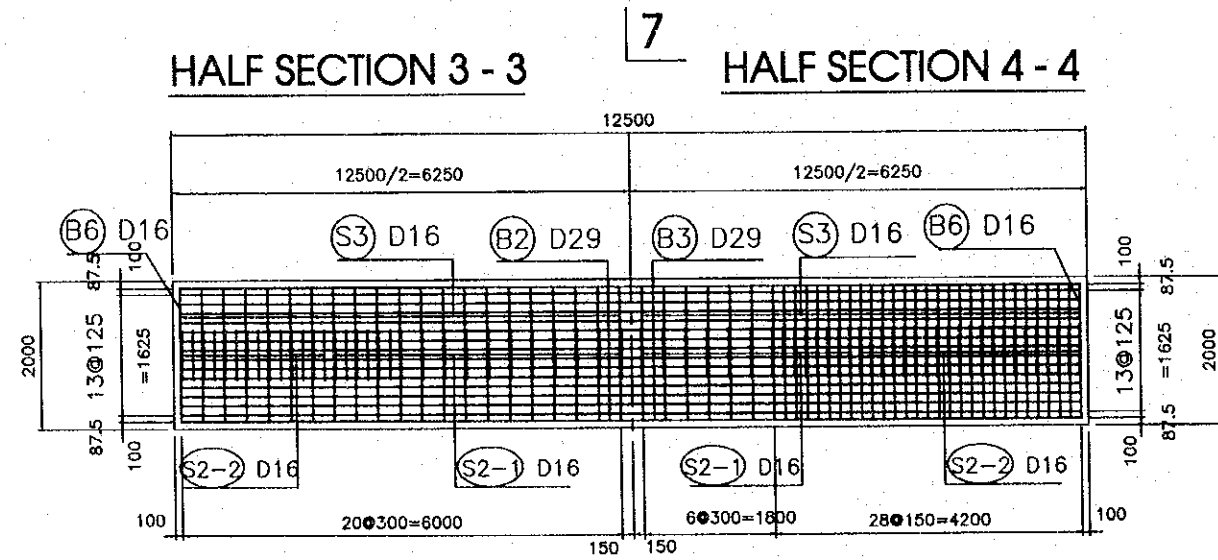
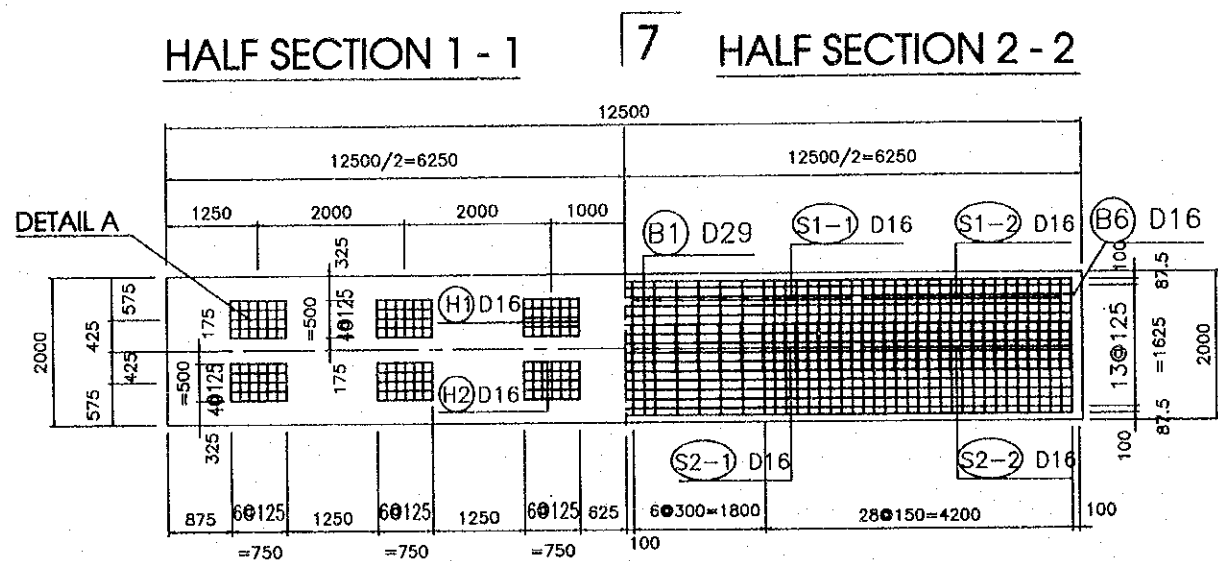
LIST OF ELEVATION, DIMENTIONS AND PROPOSED LENGTHS OF PILES

Piers	Height dimensions (mm)					PH	Cross incline i %		Top pier head elevations (m)												Ground Elevation E _G (m)	Foot. bottom Elevation E _{F,b} (m)	Proposed length of piles L (m)						
	H ₁	H	H ₂	h ₁	h ₂		B	A	E1		E		E2		G1L		G2L		G3L					G4L		G5L		G6L	
									B	A	B	A	B	A	B	A	B	A	B	A				B	A				
P2L	3960	4000	4039	950	1050	12.40	1.462	1.405	10.364	10.364	10.454	10.454	10.543	10.543	10.382	10.382	10.411	10.411	10.439	10.439	10.468	10.468	10.497	10.497	10.525	10.525	5.23	2.654	40
P3L	3828	4000	4071	900	1100	12.87	2.767	2.741	10.830	10.830	11.002	11.002	11.173	11.173	10.864	10.864	10.919	10.919	10.974	10.974	11.029	11.029	11.084	11.084	11.139	11.139	5.20	3.202	40

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATARE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE 2002.5.14
ORGANIZATION PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-14	SHEET No.
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BAR ARRANGEMENT P1L~P3L (1)



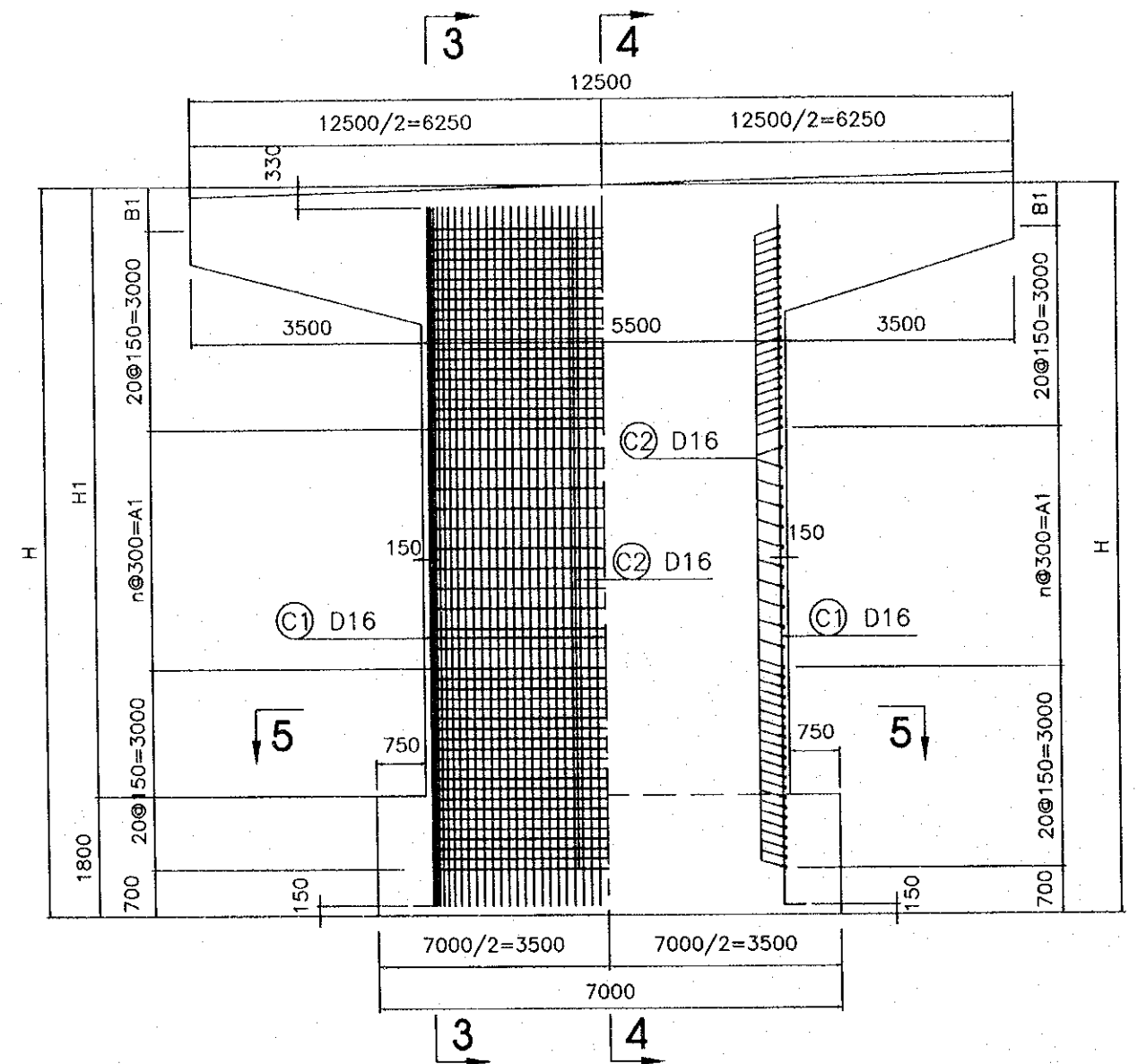
DIMENSIONS OF PIERS

PIER	A(mm)	B(mm)	C(mm)	D(mm)	i %
P1L	2030	1970	1030	970	0.768
P2L	2050	1950	1050	950	1.430
P3L	2100	1900	1100	900	2075

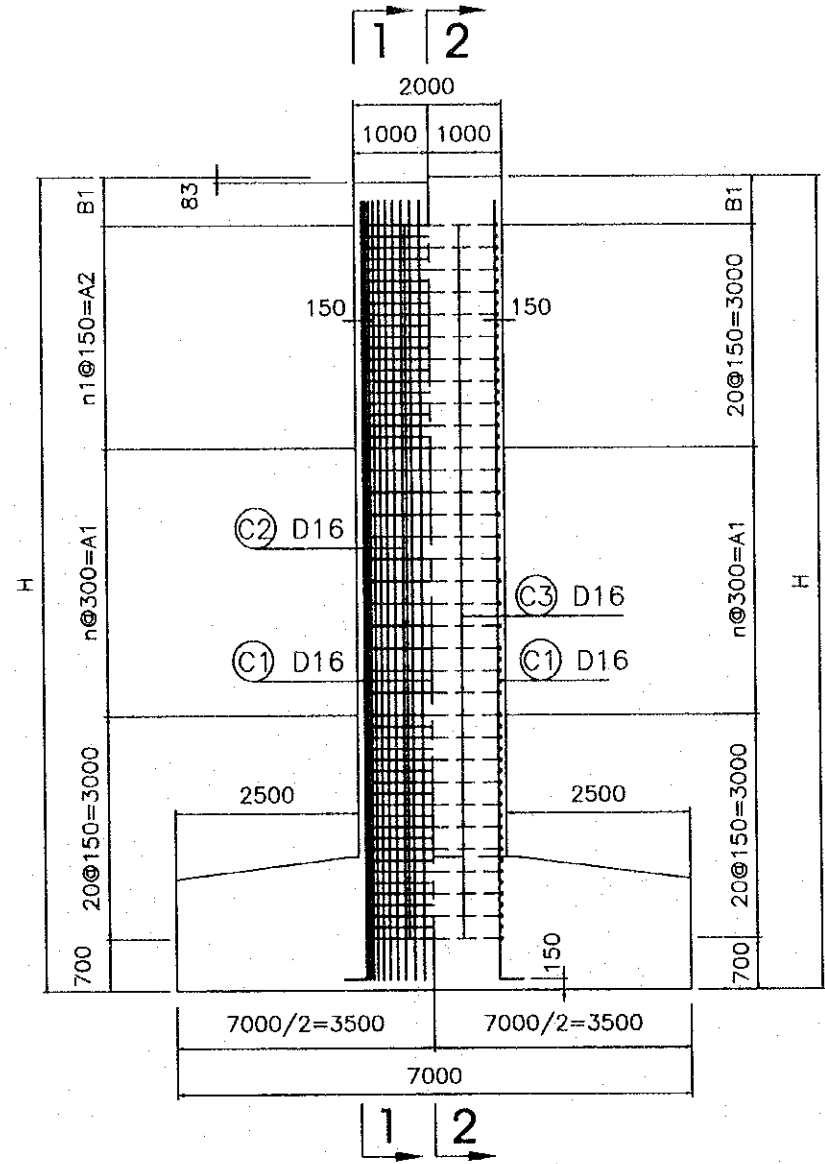
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATAKE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 3. 17	

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-15	SHEET No.
BAR ARRANGEMENT P1L~P3L (2)			

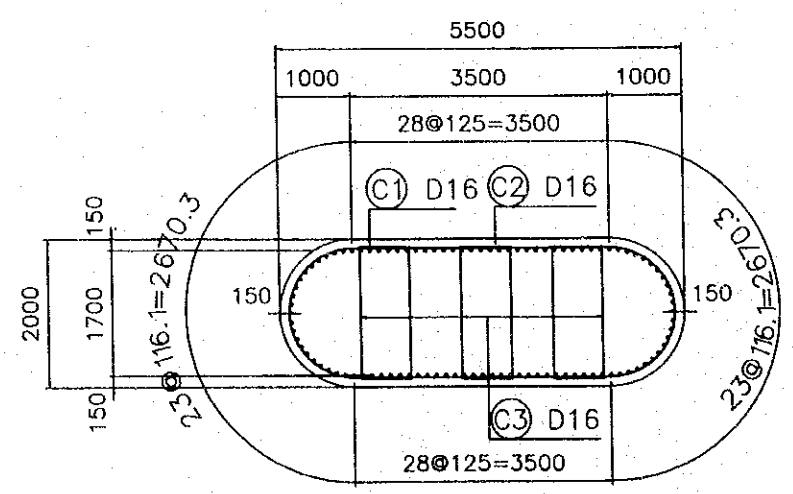
HALF SECTION 1 - 1 HALF SECTION 2 - 2



HALF SECTION 3 - 3 HALF SECTION 4 - 4



SECTION 5 - 5



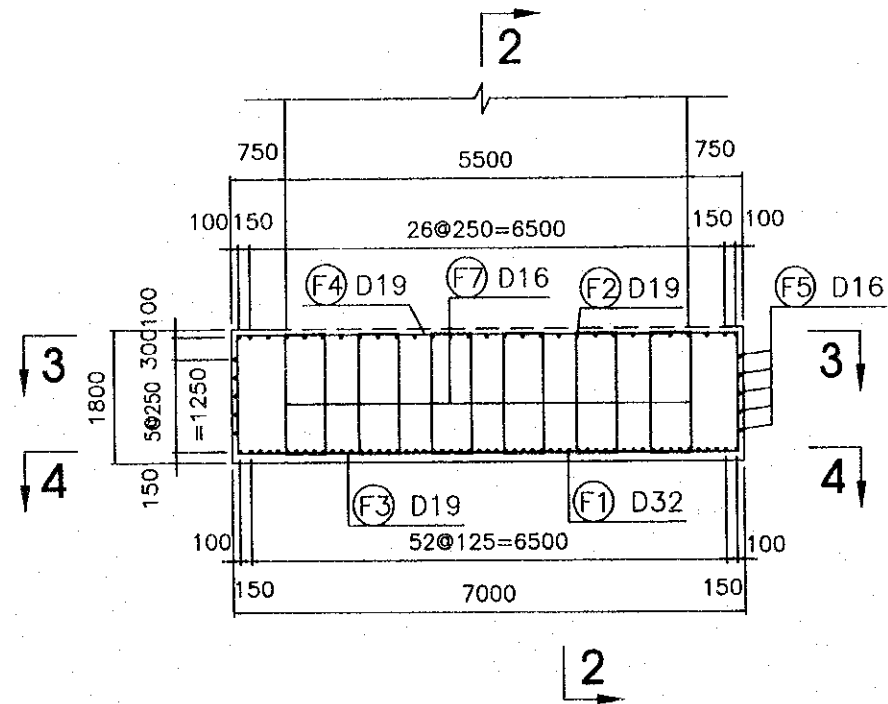
DIMENSIONS OF PIERS

ITEMS	H(m)	H1(m)	A1(mm)	A2(mm)	B1(mm)	n	n1
PIER P1L	6800	5000	0	2250	770	0	17
PIER P2L	7800	6000	600	3000	500	2	20
PIER P3L	7800	6000	600	3000	500	2	20

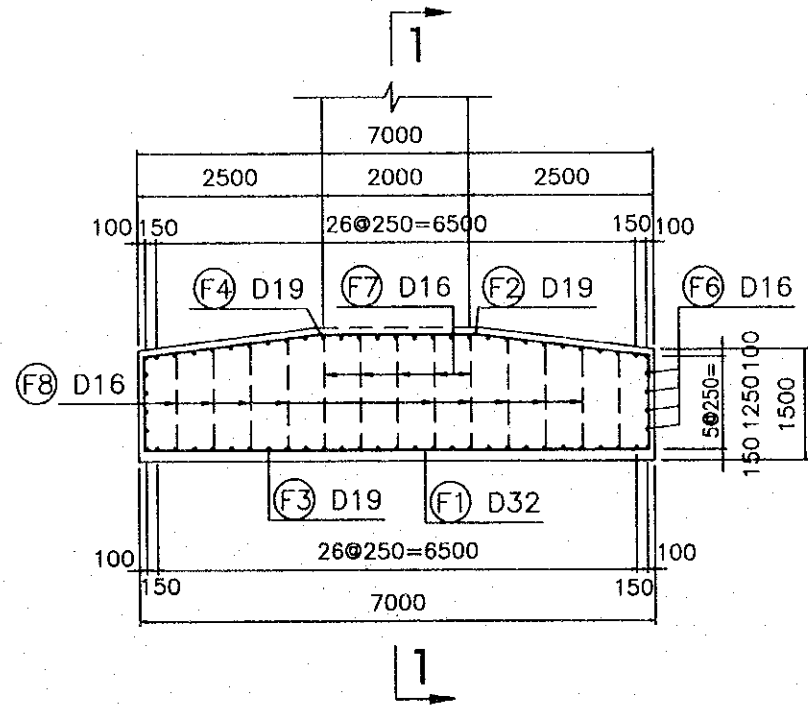
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATARE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.17	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/100	DWG No. C-1-3a-16	SHEET No.
BAR ARRANGEMENT P1L~P3L (3)			

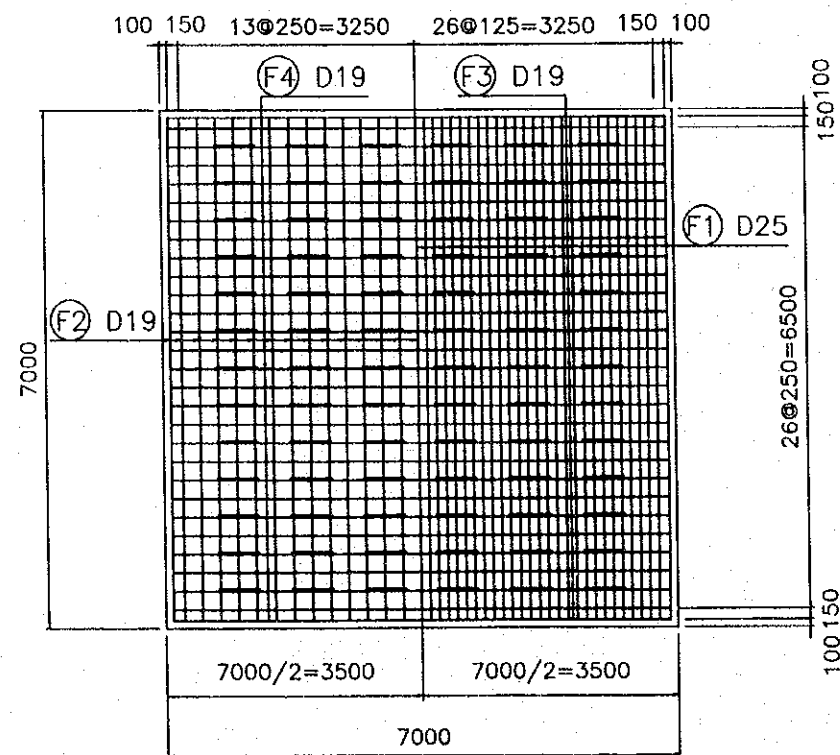
SECTION 1 - 1



SECTION 2 - 2

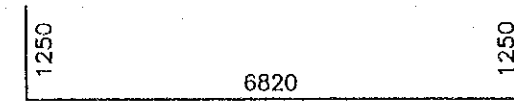


HALF SECTION 3 - 3 HALF SECTION 4 - 4

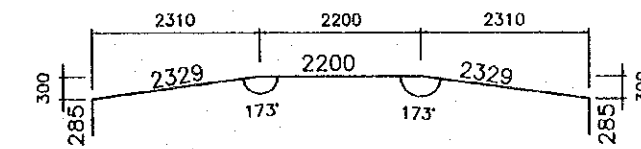


LIST OF REINFORCING BARS FOR FOOTING

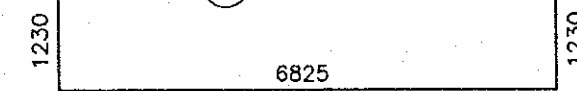
(F1) D32-9320



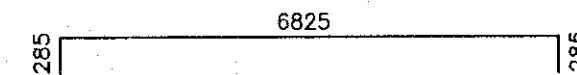
(F2) D19-7436



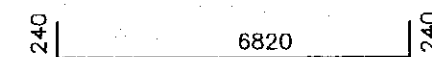
(F3) D19-9285



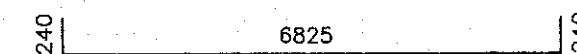
(F4) D19-7395



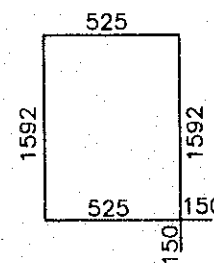
(F5) D16-7300



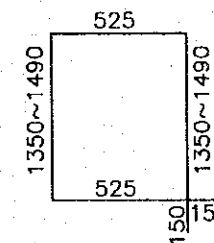
(F6) D16-7305



(F7) D16-4534



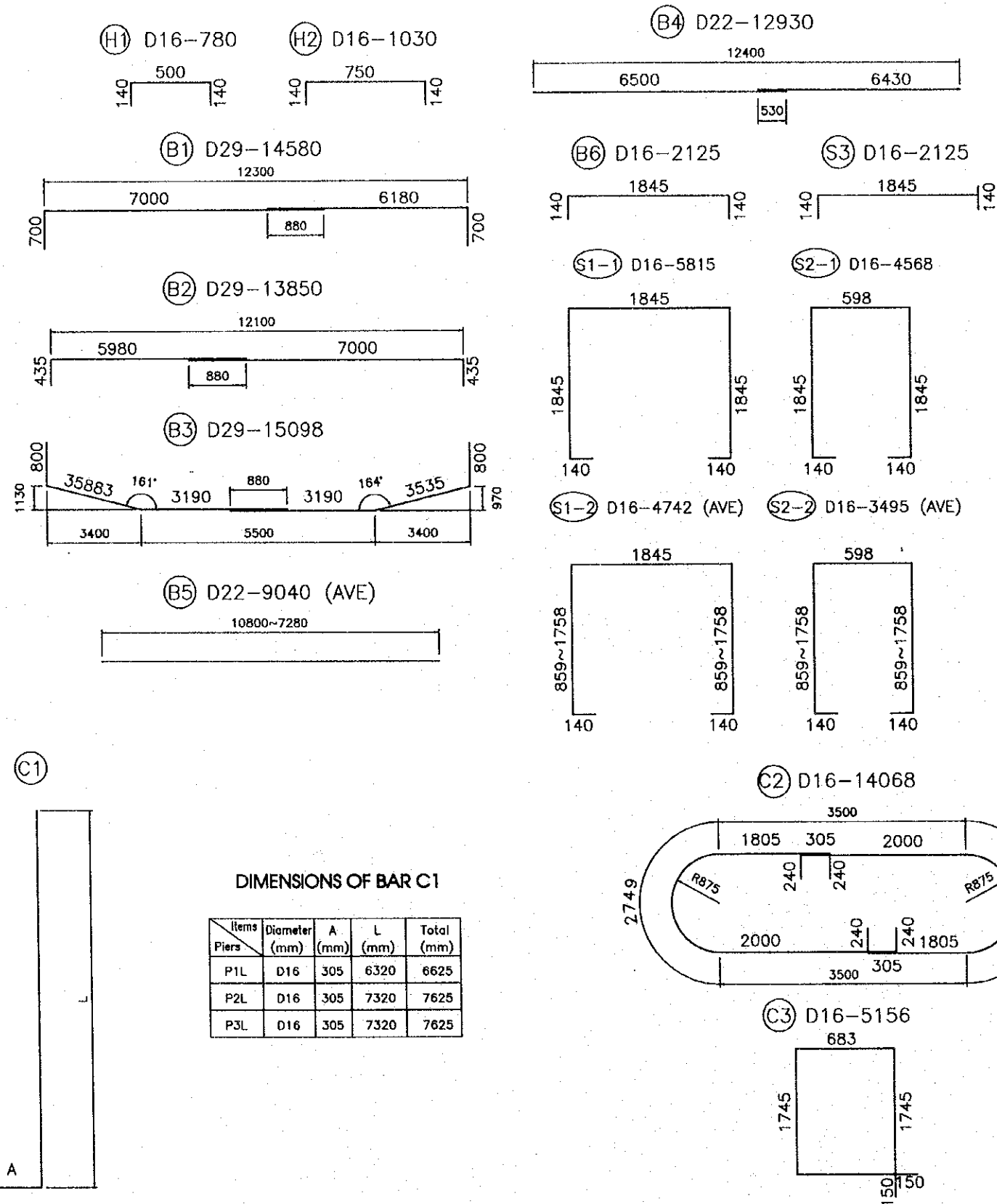
(F8) D16-4190 (AVE)



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE
		DATE 2002.3.14

PACKAGE 3	SCALE	DRAWING No. C-1-3a-17	SHEET No.
BAR ARRANGEMENT P1L~P3L (4)			

LIST OF REINFORCING BARS FOR BEAM AND COLUMN



BAR ARRANGEMENT P1L

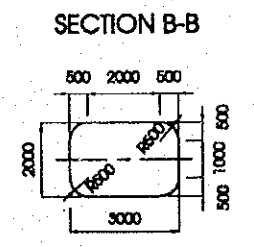
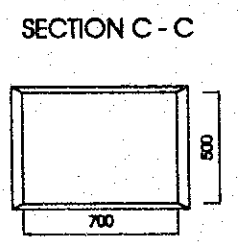
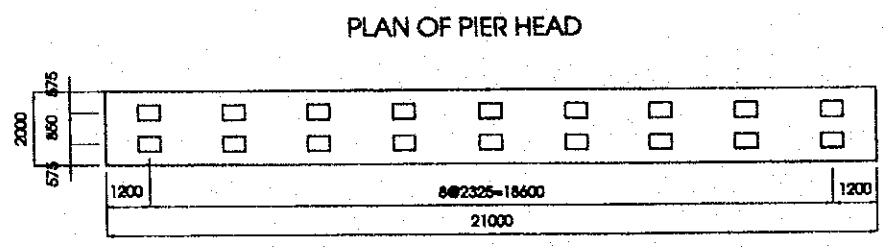
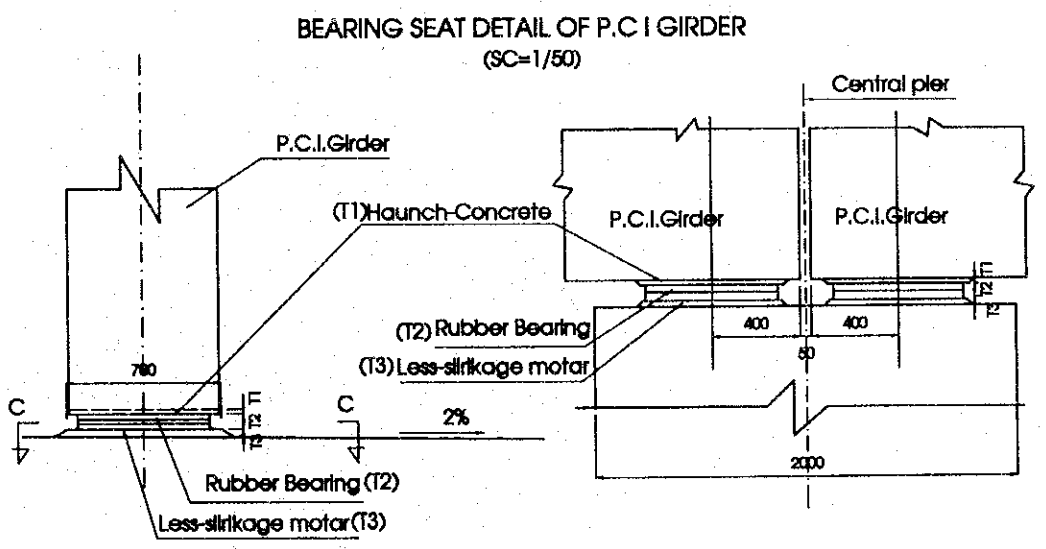
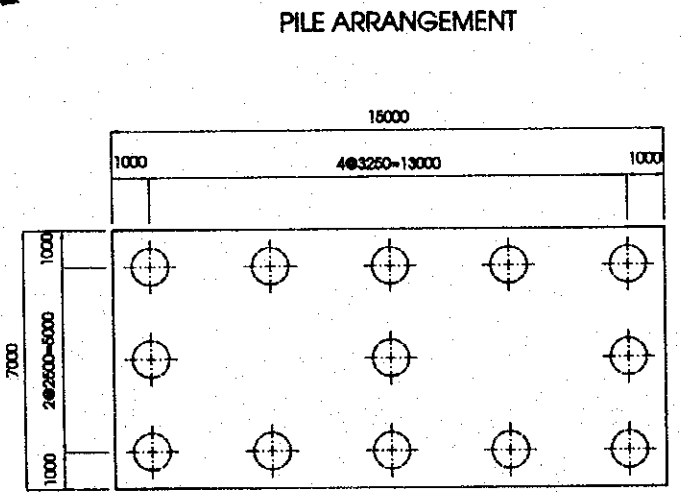
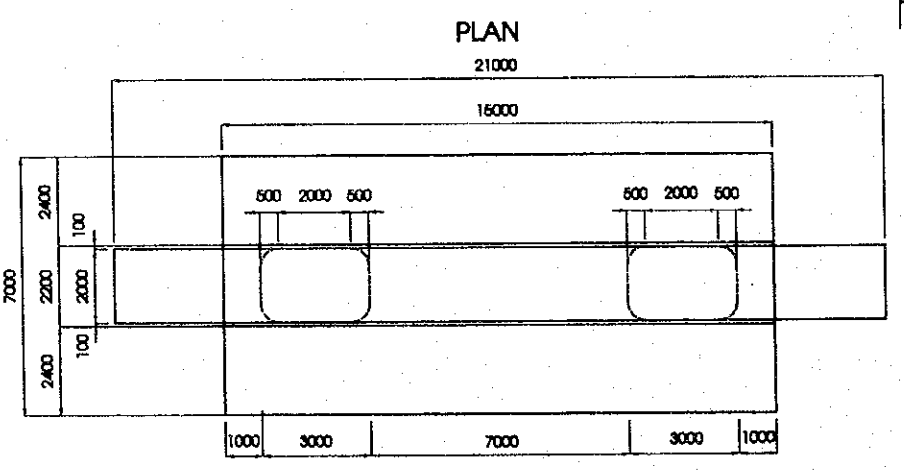
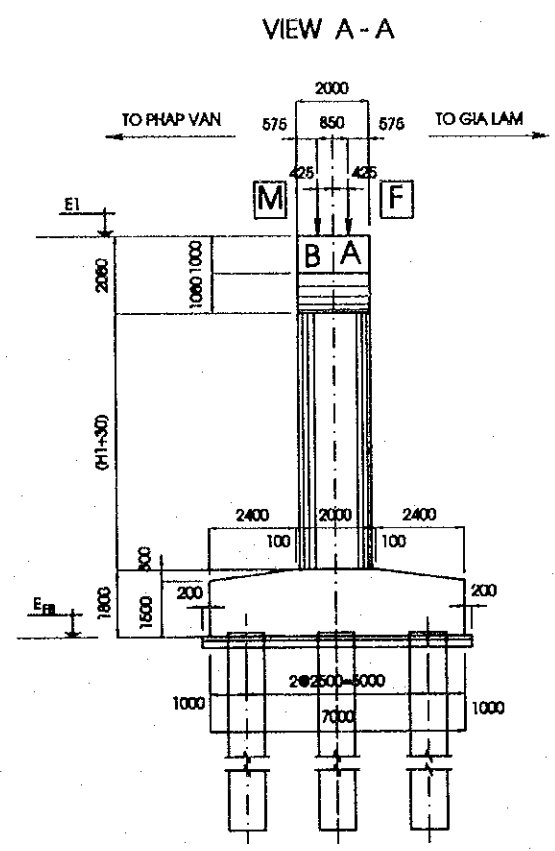
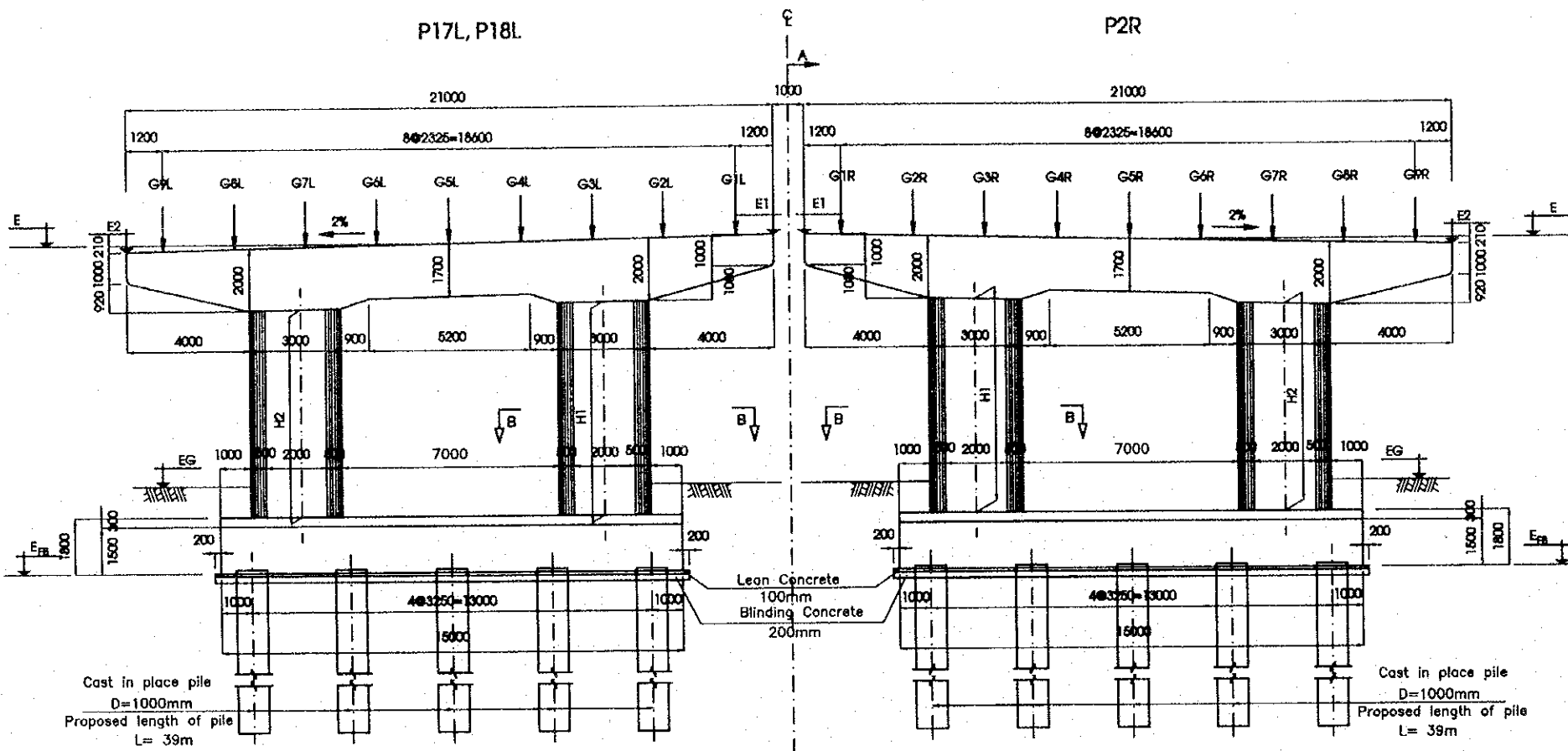
DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Shape]	D16	780	84	1.56	102.21
	H2	[Shape]	D16	1030	60	1.56	96.41
	B1	[Shape]	D32	14580	16	6.23	1453.33
	B2	[Shape]	D32	13850	16	6.23	1380.57
	B3	[Shape]	D32	15098	16	6.23	1504.97
	B4	[Shape]	D22	12930	6	3.04	235.84
	B5	[Shape]	D22	9040	6	3.04	164.89
	B6	[Shape]	D16	2125	10	1.56	33.15
	S1-1	[Shape]	D16	5815	24	1.56	217.71
	S1-2	[Shape]	D16	4742	44	1.56	325.49
	S2-1	[Shape]	D16	4568	24	1.56	171.03
	S2-2	[Shape]	D16	3495	44	1.56	239.90
	S3	[Shape]	D16	2125	136	1.56	450.84
	STEM	C1	[Shape]	D16	6625	100	1.56
C2		[Shape]	D16	14068	38	1.56	833.95
C3		[Shape]	D16	5156	111	1.56	892.81
FOOTING	F1	[Shape]	D29	9320	55	5.04	2,583.50
	F2	[Shape]	D16	7436	29	1.56	336.40
	F3	[Shape]	D16	9285	29	1.56	420.05
	F4	[Shape]	D16	7395	29	1.56	334.55
	F5	[Shape]	D16	7300	10	1.56	113.88
	F6	[Shape]	D16	7305	8	1.56	91.17
	F7	[Shape]	D16	4534	30	1.56	212.19
	F8	[Shape]	D16	4190	48	1.56	313.75
TOTAL							13,542.10
SUMMARY						D16 =	6,218.99
						D22 =	400.73
						D29 =	2,583.50
						D32 =	4,338.87

BAR ARRANGEMENT P2L, P3L

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Shape]	D16	780	84	1.56	102.21
	H2	[Shape]	D16	1030	60	1.56	96.41
	B1	[Shape]	D32	14580	16	6.23	1453.33
	B2	[Shape]	D32	13850	16	6.23	1380.57
	B3	[Shape]	D32	15098	16	6.23	1504.97
	B4	[Shape]	D22	12930	6	3.04	235.84
	B5	[Shape]	D22	9040	6	3.04	164.89
	B6	[Shape]	D16	2125	10	1.56	33.15
	S1-1	[Shape]	D16	5815	24	1.56	217.71
	S1-2	[Shape]	D16	4742	44	1.56	325.49
	S2-1	[Shape]	D16	4568	24	1.56	171.03
	S2-2	[Shape]	D16	3495	44	1.56	239.90
	S3	[Shape]	D16	2125	136	1.56	450.84
	STEM	C1	[Shape]	D16	6625	100	1.56
C2		[Shape]	D16	14068	43	1.56	943.68
C3		[Shape]	D16	5156	126	1.56	1013.46
FOOTING	F1	[Shape]	D29	9320	55	5.04	2,583.50
	F2	[Shape]	D16	7436	29	1.56	336.40
	F3	[Shape]	D16	9285	29	1.56	420.05
	F4	[Shape]	D16	7395	29	1.56	334.55
	F5	[Shape]	D16	7300	10	1.56	113.88
	F6	[Shape]	D16	7305	8	1.56	91.17
	F7	[Shape]	D16	4534	30	1.56	212.19
	F8	[Shape]	D16	4190	48	1.56	313.75
TOTAL							13,772.48
SUMMARY						D16 =	6,449.37
						D22 =	400.73
						D29 =	2,583.50
						D32 =	4,338.87
TOTAL FOR 2 PIERS							27,544.96
SUMMARY FOR 2 PIERS						D16 =	12,898.75
						D22 =	801.47
						D29 =	5,167.01
						D32 =	8,677.74

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.05.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-18	SHEET No.
DETAIL OF PIER P2R, P17L, P18L (1)			



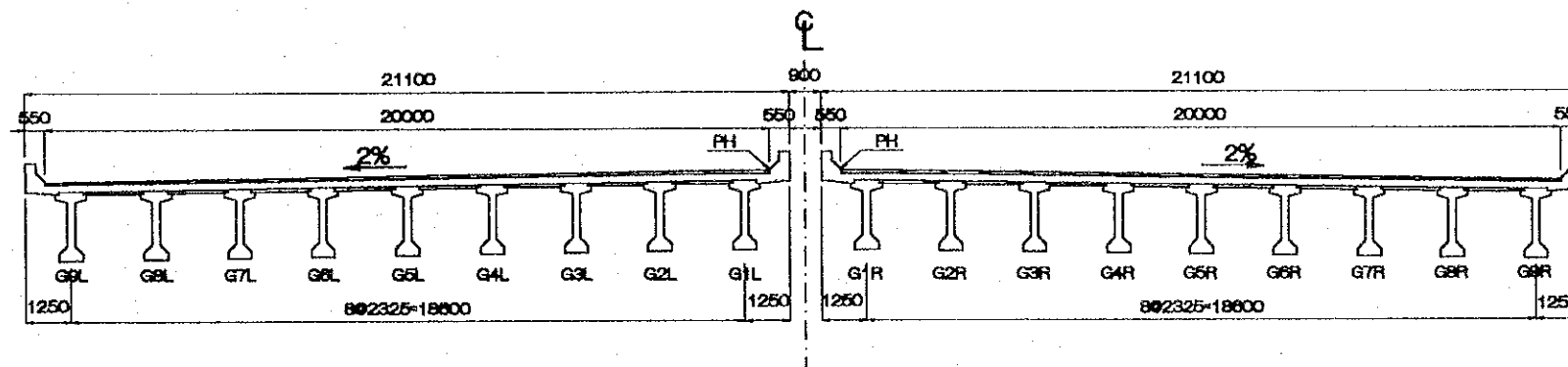
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
COMMISSIONED BY PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.6.1

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-19	SHEET No.
DETAIL OF PIER P2R, P17L, P18L (2)			

DEPTH OF SUPERSTRUCTURE (MM)

	P2R		P17L		P18L	
	B (MOVE)	A (FIXED)	B (MOVE)	A (FIXED)	B (MOVE)	A (FIXED)
Pavement	75	75	75	75	75	75
Slab	207	207	207	207	207	207
Girder	1650	1650	1650	1650	1650	1650
Haunch T1	20	20	20	20	20	20
Bearing T2	56	36	56	36	56	36
Mortar T3	20	35	20	43	20	44
Sub Total	2028	2023	2028	2031	2028	2032

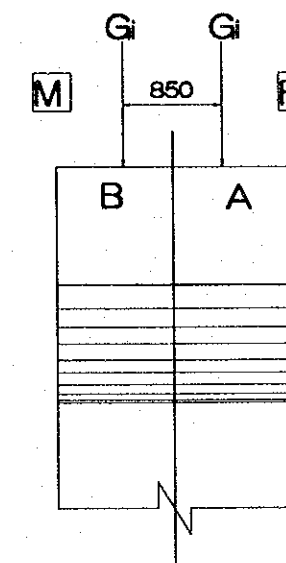
CROSS SECTION OF SUPERSTRUCTURE



LIST OF ELEVATIONS, DIMENSIONS AND PROPOSED LENGTHS OF PIER

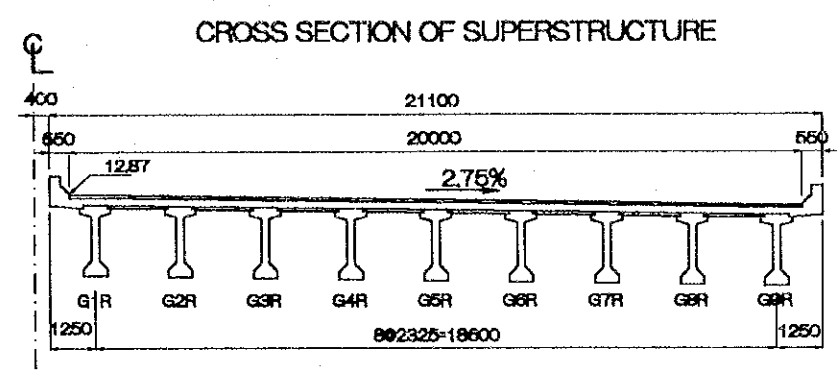
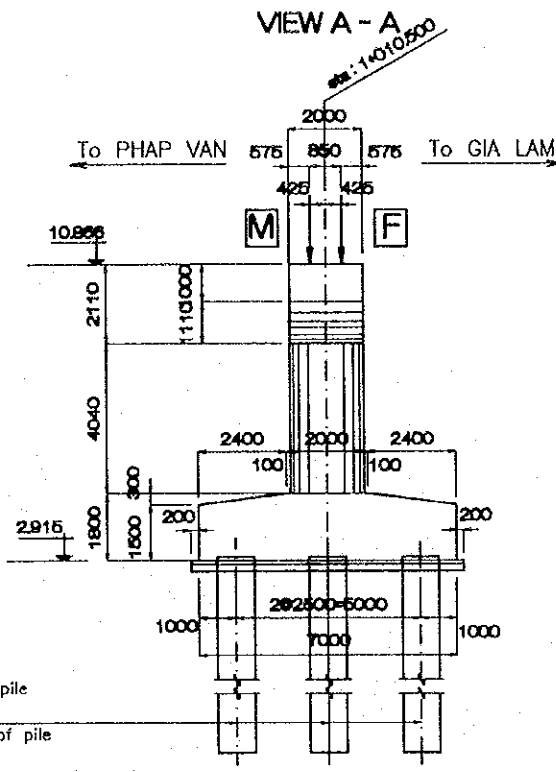
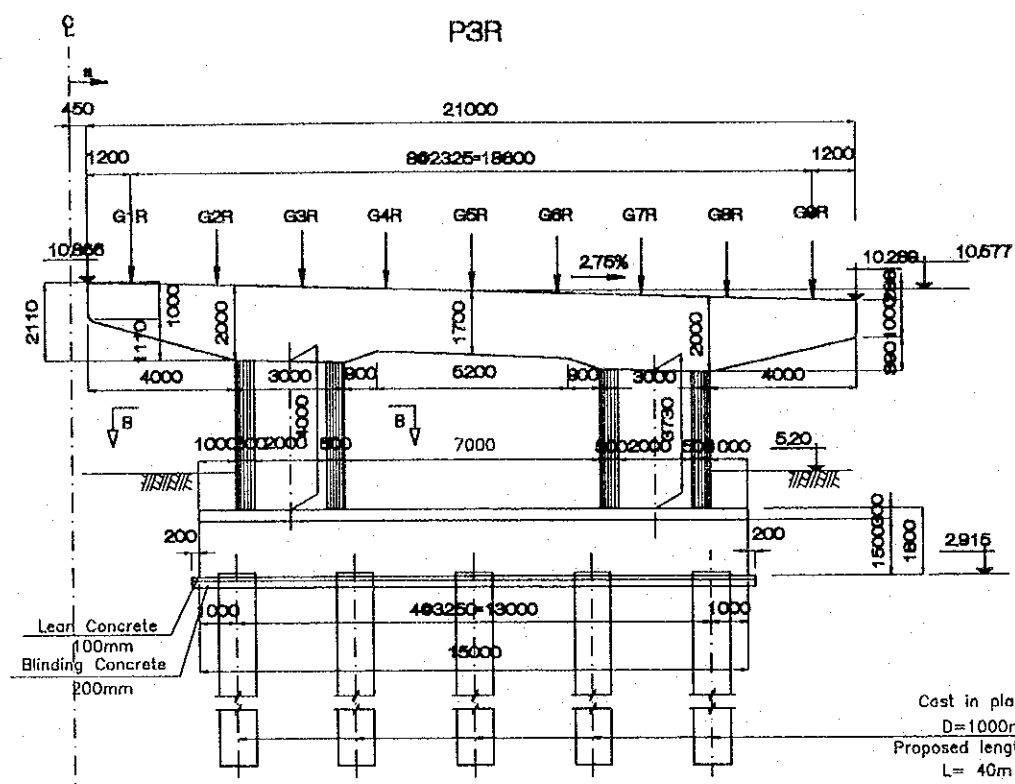
Piers	Dimensions of piers (mm)		PH	Elevation of top pier head (m)						Ground Elevation E _G (m)	Foot. bottom Elevation E _{F,b} (m)	Proposed length of piles L (m)
	H ₁	H ₂		E1		E		E2				
				B	A	B	A	B	A			
P2R	4000	3800	12.4	10.386	10.386	10.176	10.176	9.966	9.966	5.23	2.476	39
P17L	9000	8800	15.46	13.432	13.432	13.222	13.222	13.012	13.012	3.67	0.522	39
P18L	9000	8800	15.30	13.273	13.273	13.063	13.063	12.853	12.853	3.17	0.363	39

TO PHAP VAN TO GIA LAM



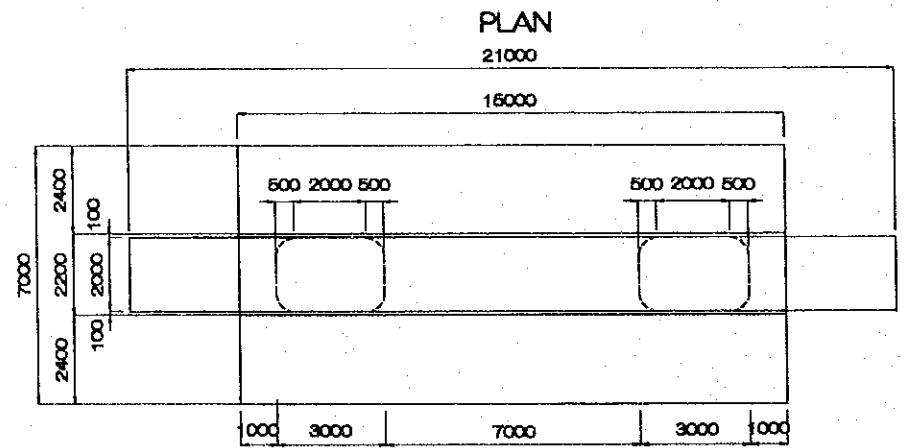
ELEVATION OF TOP PIER HEAD (M)

Piers	G1		G2		G3		G4		G5		G6		G7		G8		G9	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A
P2R	10.362	10.362	10.316	10.316	10.269	10.269	10.223	10.223	10.176	10.176	10.130	10.130	10.083	10.083	10.037	10.037	9.990	9.990
P17L	13.408	13.408	13.362	13.362	13.315	13.315	13.269	13.269	13.222	13.222	13.176	13.176	13.129	13.129	13.083	13.083	13.036	13.036
P18L	13.249	13.249	13.203	13.203	13.156	13.156	13.118	13.118	13.063	13.063	13.017	13.017	12.970	12.970	12.923	12.923	12.877	12.877

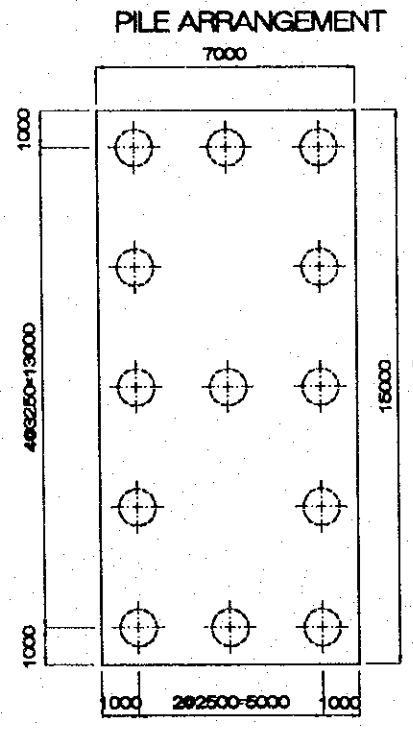


SUPERSTRUCTURE DEPTHS (MM)

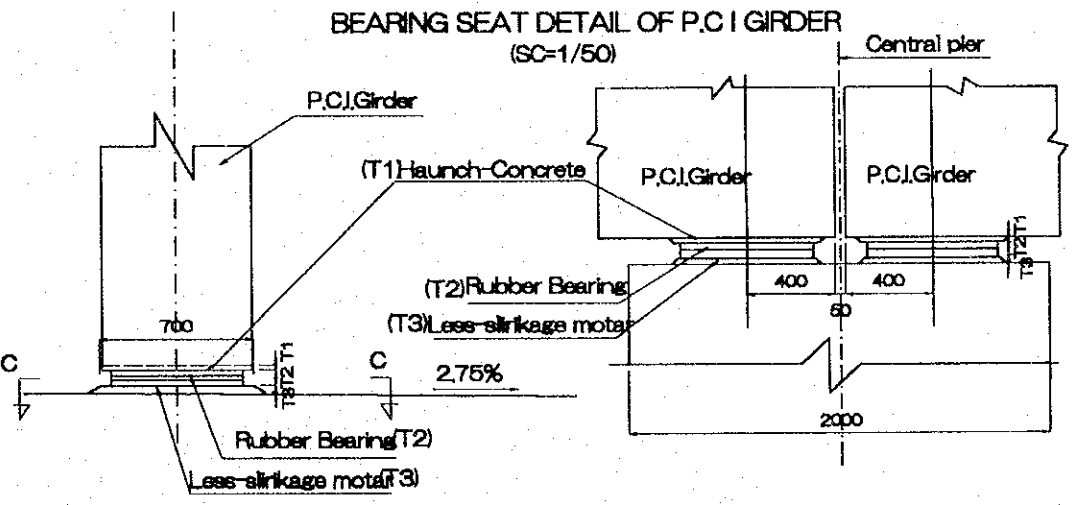
	MOVE	FIXED
	B	A
Pavement	75	75
Slab	209	209
Girder	1650	1650
Haunch T1	20	20
Bearing T2	56	36
Mortar T3	20	28
Sub Total	2030	2018



PLAN OF PIER HEAD

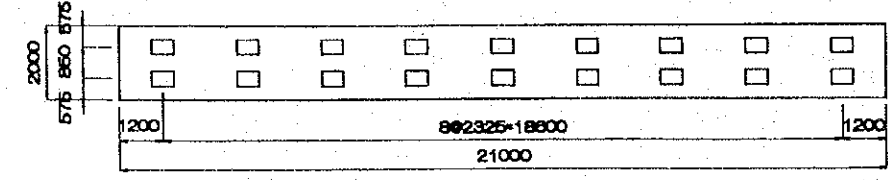


TOP PIER HEAD ELEVATION (M)



SECTION C-C

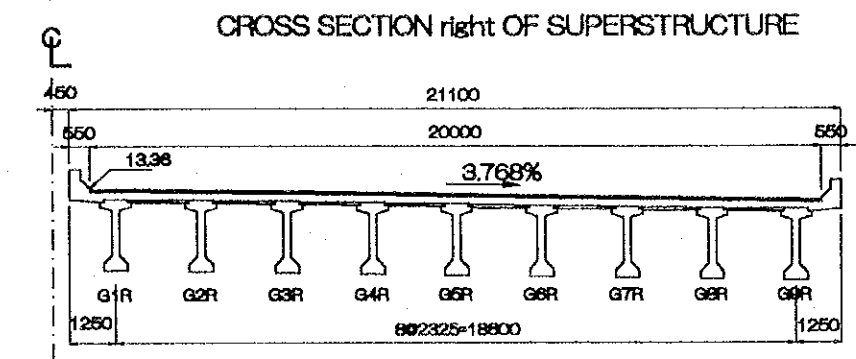
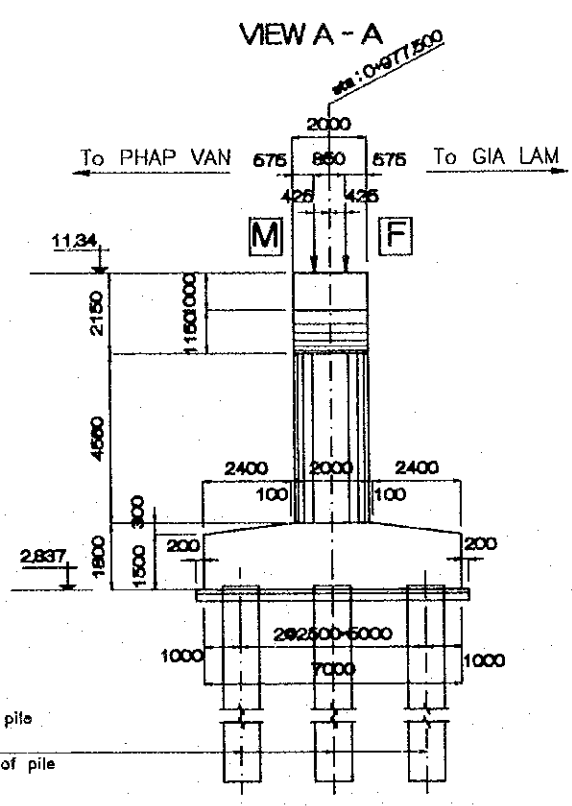
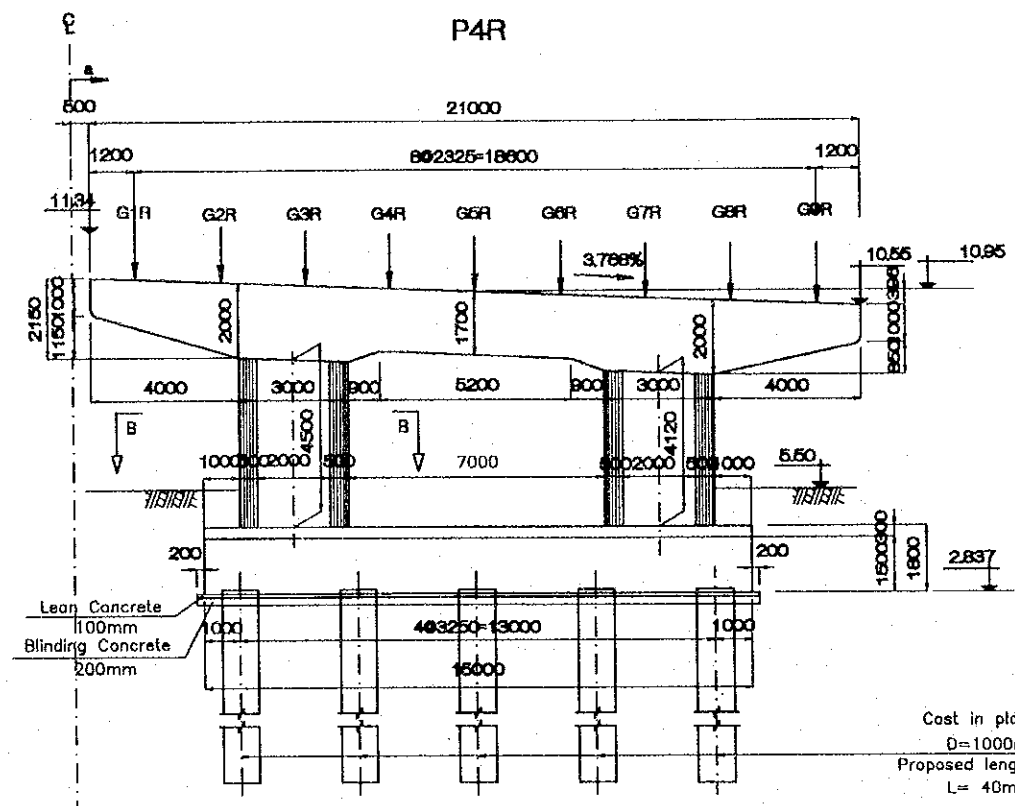
SECTION B-B



Bearing seat	G1		G2		G3		G4		G5		G6		G7		G8		G9	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A
Elevation	10.833	10.833	10.769	10.769	10.705	10.705	10.641	10.641	10.577	10.577	10.513	10.513	10.449	10.449	10.385	10.385	10.322	10.322

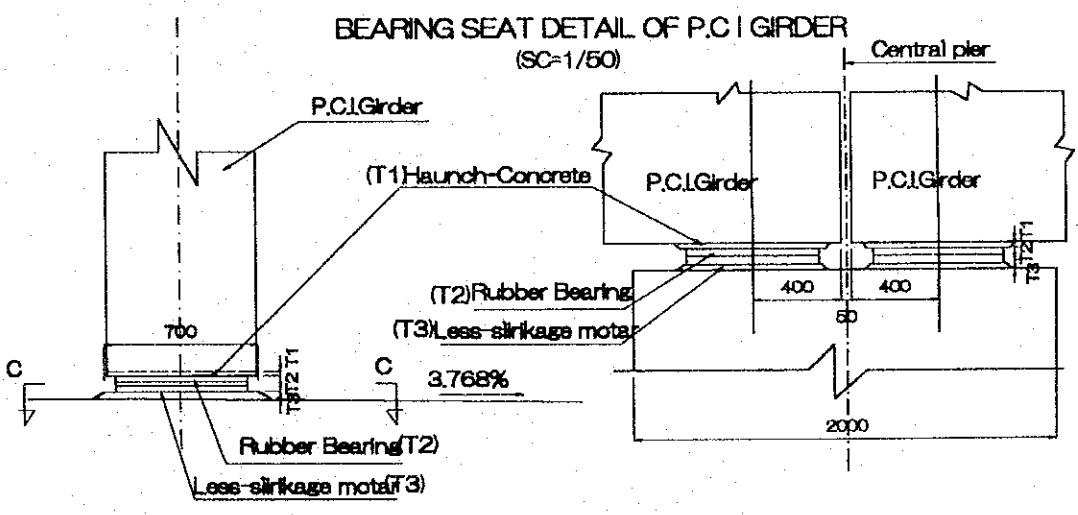
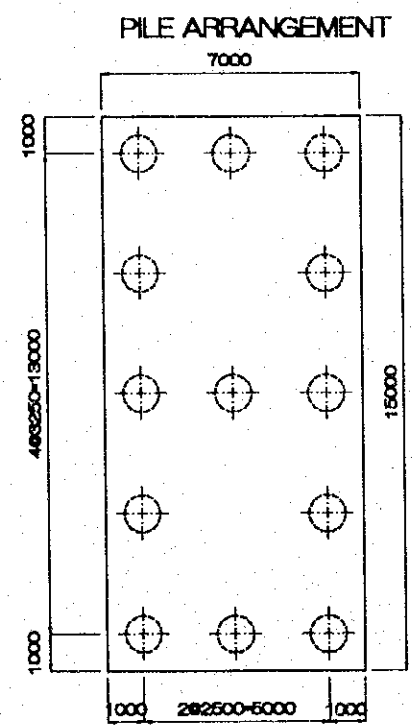
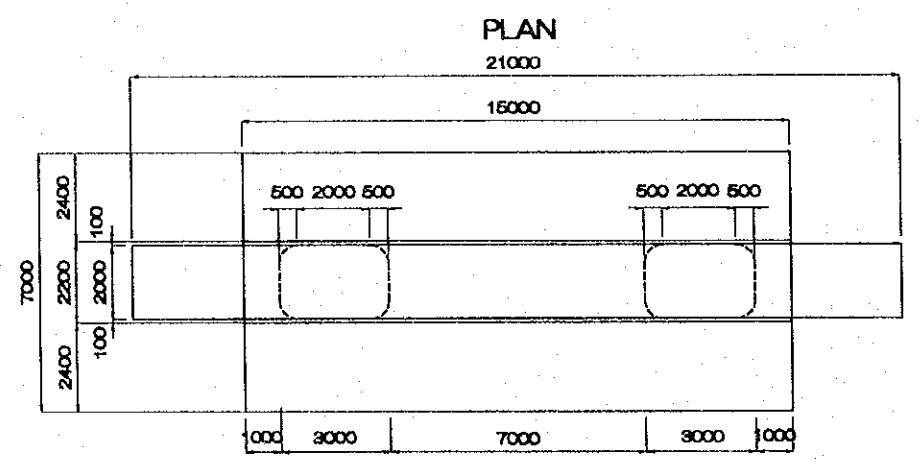
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. NAYABE
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
COMMITTEE PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.6.1

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/200	C-1-3a-21	
DETAIL OF PIER P4R			



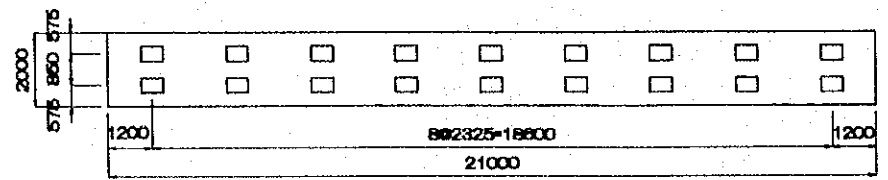
SUPERSTRUCTURE DEPTHS (MM)

	MOVE	FIXED
	B	A
Pavement	75	75
Slab	212	212
Grider	1650	1650
Haunch T1	20	20
Bearing T2	56	36
Mortar T3	28	36
Sub Total	2041	2029



PLAN OF PIER HEAD

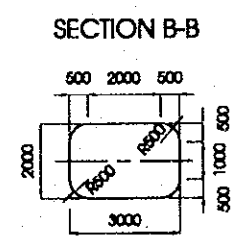
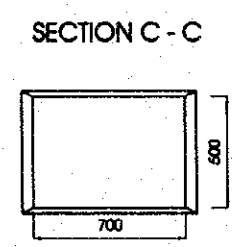
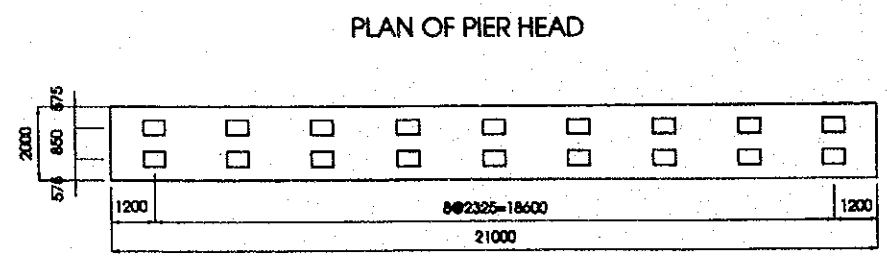
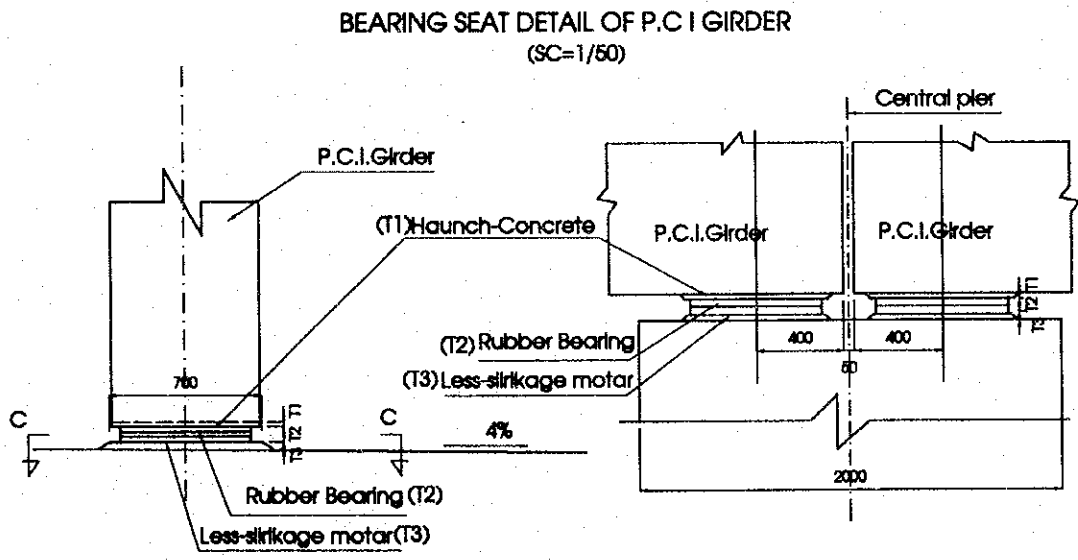
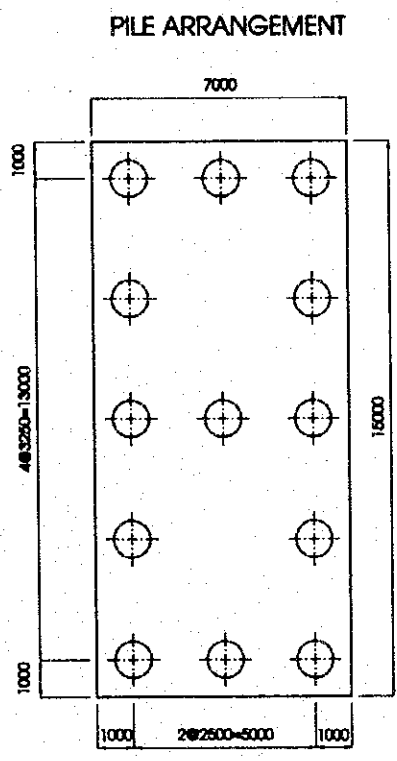
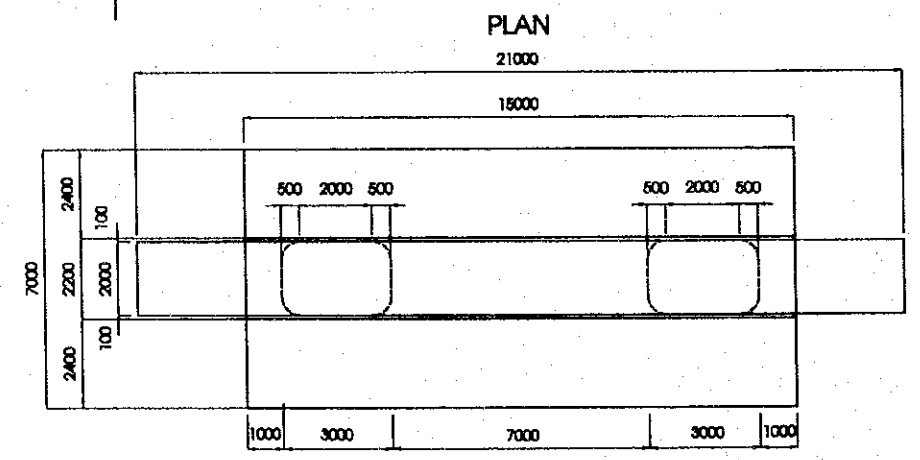
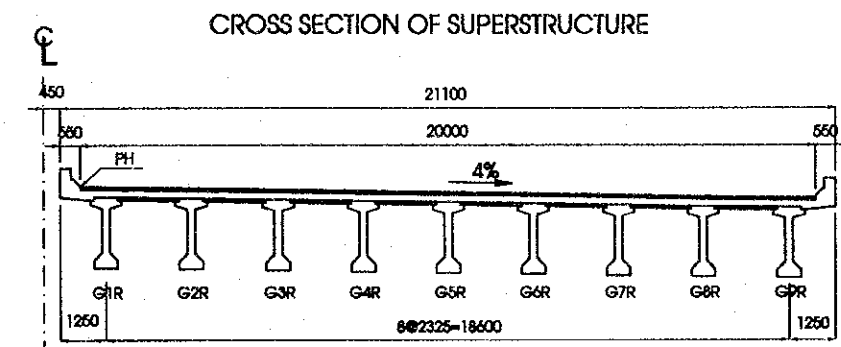
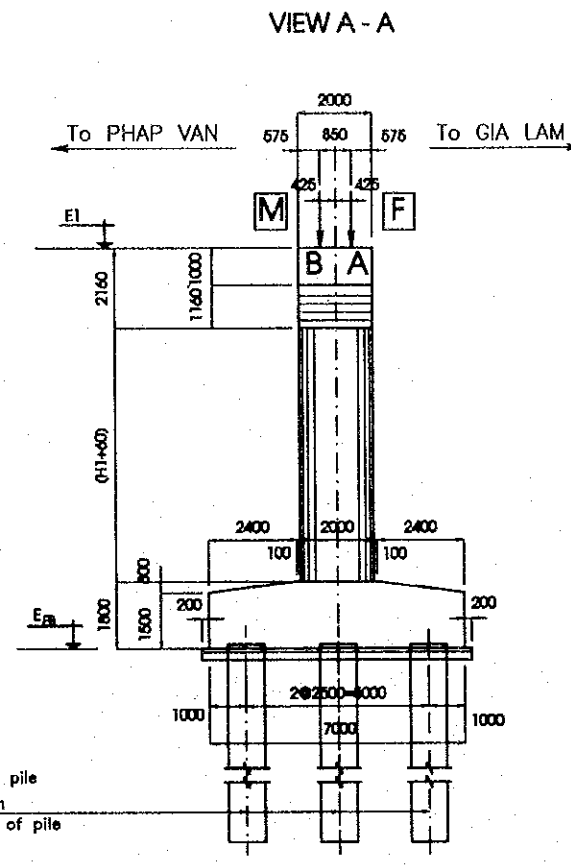
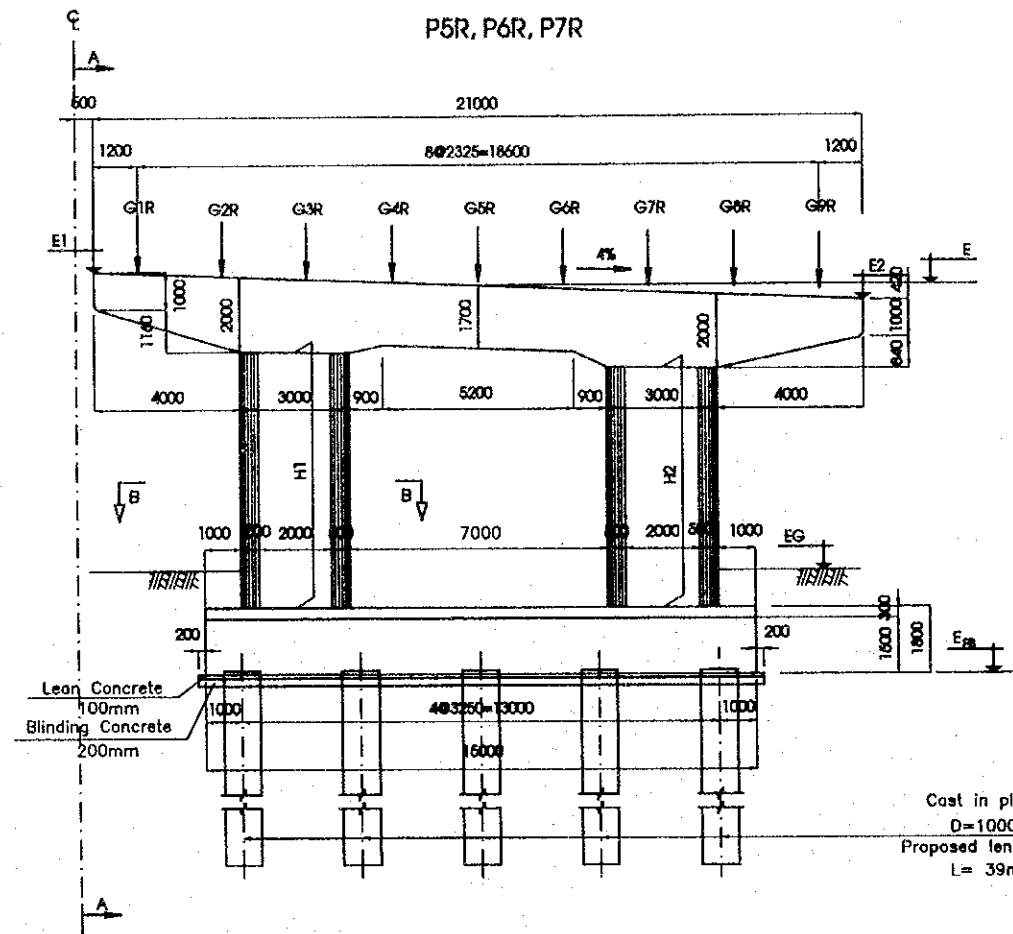
ELEVATION OF TOP PIER HEAD (M)



Bearing seat	G1		G2		G3		G4		G5		G6		G7		G8		G9	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A
Elevation	11.292	11.292	11.204	11.204	11.117	11.117	11.029	11.029	10.942	10.942	10.854	10.854	10.766	10.766	10.679	10.679	10.591	10.591

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000. 11. 14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/200	C-1--3a-22	
DETAIL OF PIER P6R, P6R, P7R (1)			



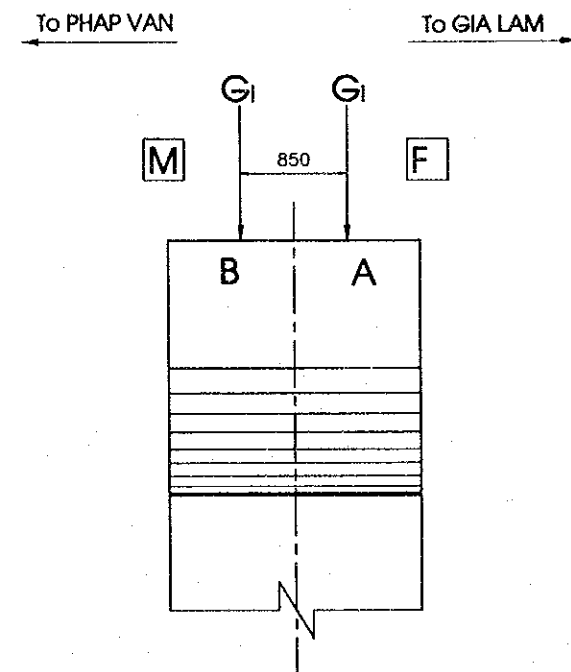
213

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.01.17	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-23	SHEET No.
DETAIL OF PIER P5R,P6R,P7R (2)			

LIST OF ELEVATIONS, DIMENSIONS AND PROPOSED LENGTHS OF PIER

Piers	Dimensions of piers (mm)		PH	Top pier head elevations (m)						Ground Elevation E _G (m)	Foot. bottom Elevation E _{F,b} (m)	Proposed length of piles L (m)
	H ₁	H ₂		E1		E		E2				
				B	A	B	A	B	A			
P5R	7500	7100	13.81	11.788	11.797	11.368	11.377	10.948	10.957	3.7	0.273	39
P6R	7500	7100	14.21	12.188	12.198	11.768	11.778	11.348	11.358	3.7	0.673	39
P7R	7500	7100	14.56	12.538	12.556	12.118	12.136	11.698	11.716	3.3	1.027	39



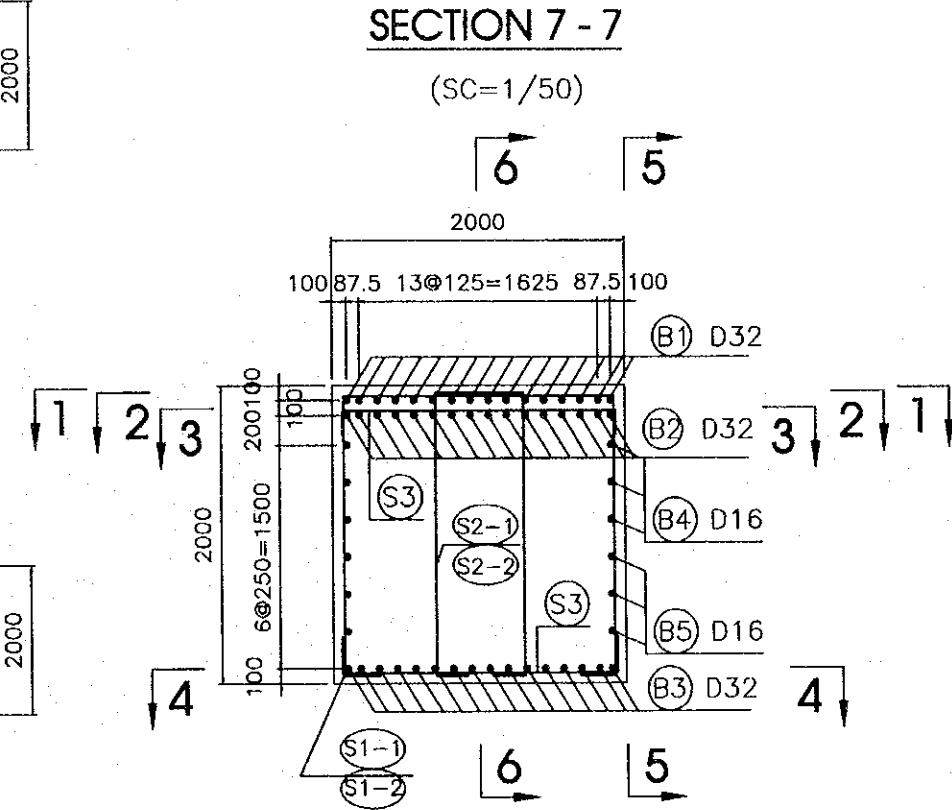
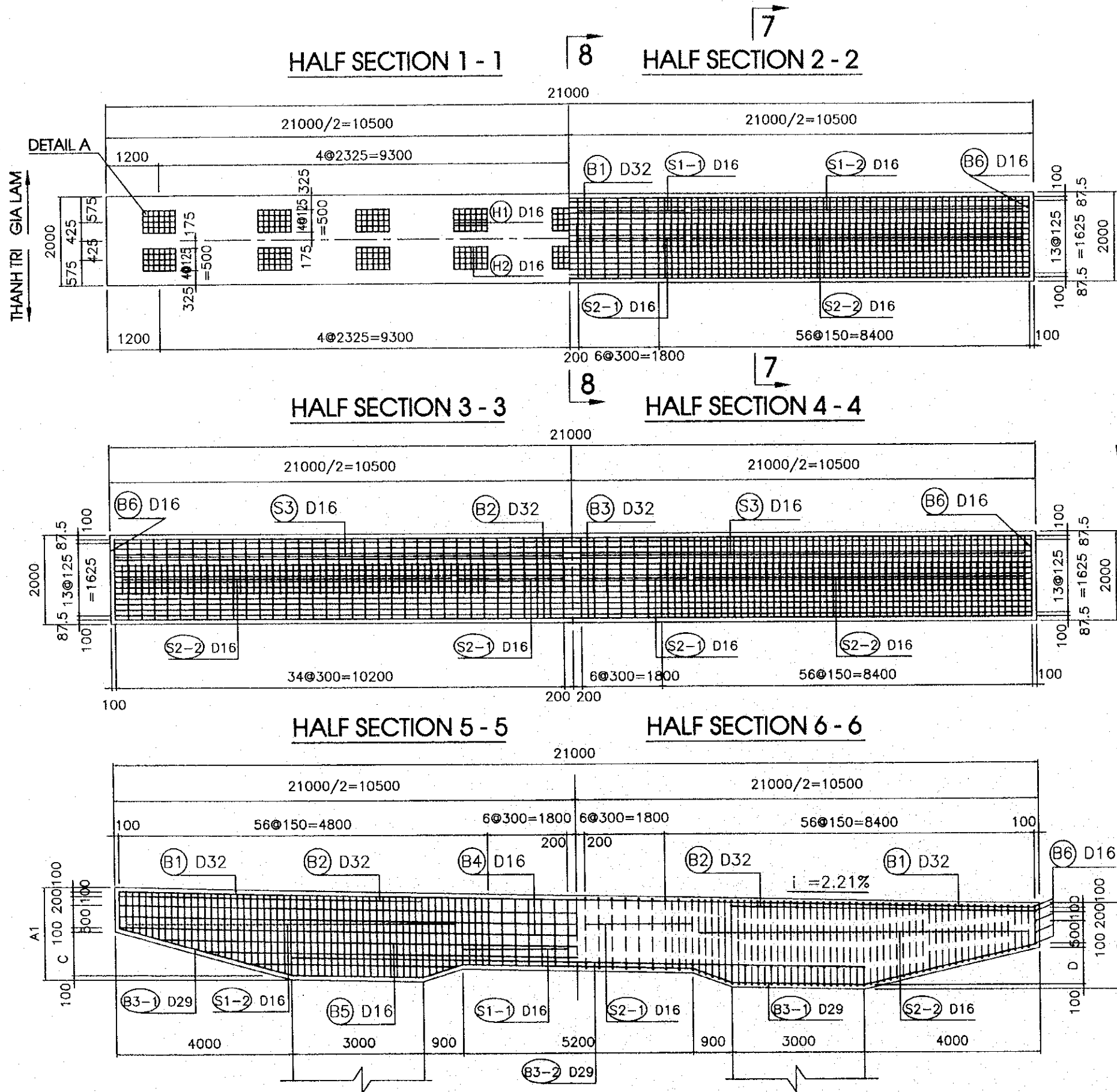
ELEVATION OF TOP PIER HEAD (M)

Piers	G1		G2		G3		G4		G5		G6		G7		G8		G9	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A
P5R	11.740	11.749	11.647	11.656	11.554	11.563	11.461	11.470	11.368	11.377	11.275	11.284	11.182	11.191	11.089	11.098	10.996	11.005
P6R	12.140	12.150	12.047	12.057	11.954	11.964	11.861	11.871	11.768	11.778	11.675	11.685	11.582	11.592	11.489	11.499	11.396	11.406
P7R	12.490	12.508	12.397	12.415	12.304	12.322	12.211	12.229	12.118	12.136	12.025	12.043	11.932	11.950	11.839	11.857	11.746	11.764

220

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.2.17	

PACKAGE 2	SCALE 1/100	DRAWING No. C-1-3a-24	SHEET No.
BAR ARRANGEMENT OF PIER P2R~P17R, P17LP18L (1)			



DIMENSIONS OF PIERS

ITEMS PIERS	A (mm)	B (mm)	C (mm)	D (mm)	i (mm)
P2R, P17L P18L	2080	1920	980	820	2
P3R	2110	1890	1010	790	2.75
P4R	2150	1850	1050	750	3.77
P5R~P7R	2160	1840	1060	740	4

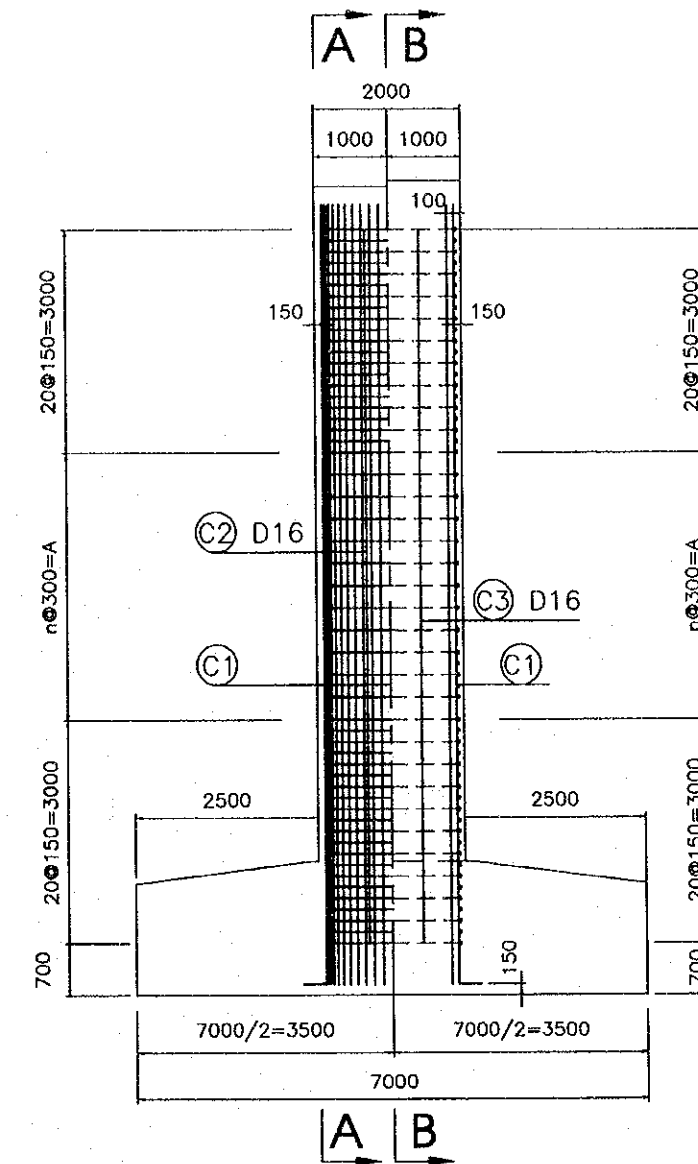
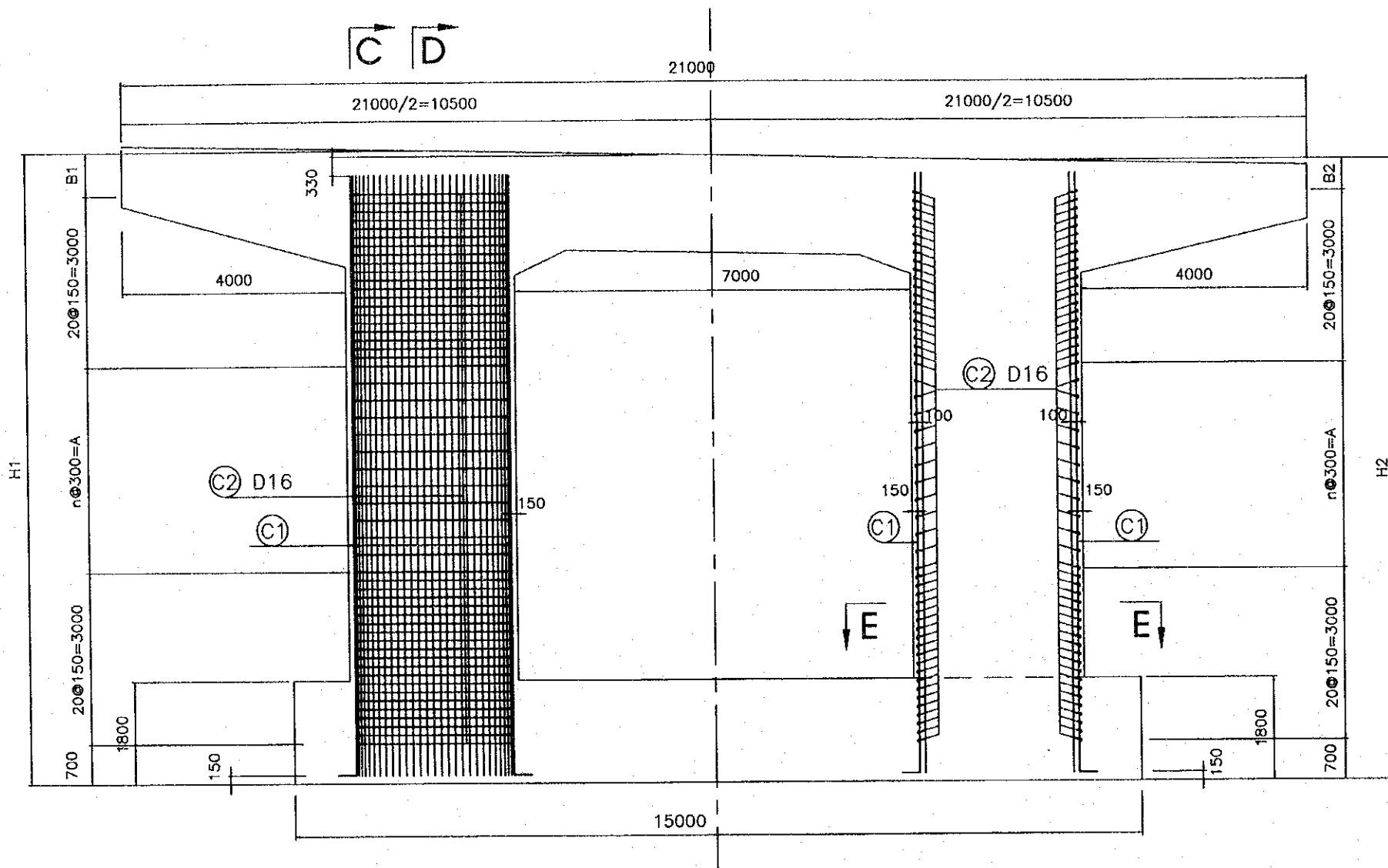
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.12.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-25	
BAR ARRANGEMENT P2R~P7R, P17L,P18L (2)			

HALF SECTION A - A

HALF SECTION B - B

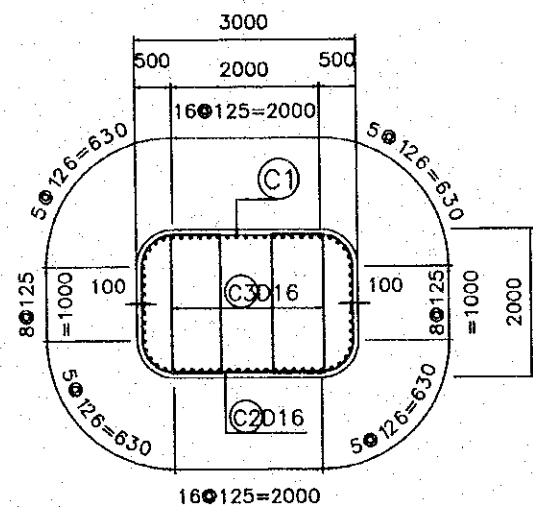
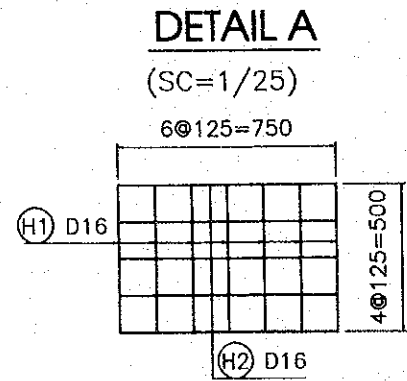
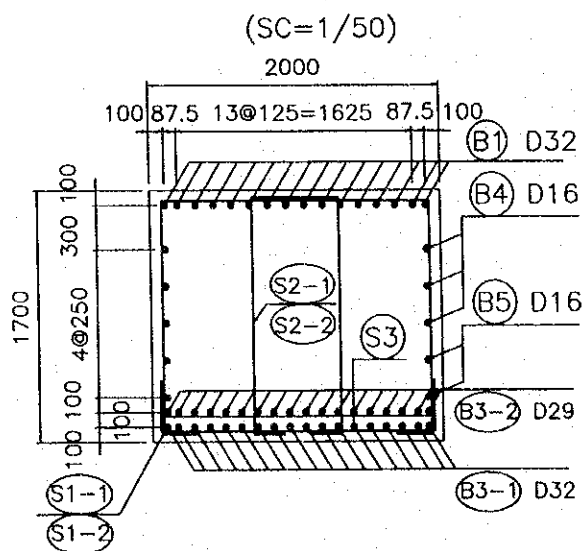
HALF SECTION C - C HALF SECTION D - D



SECTION 8 - 8

SECTION E - E

DIMENSIONS OF PIERS

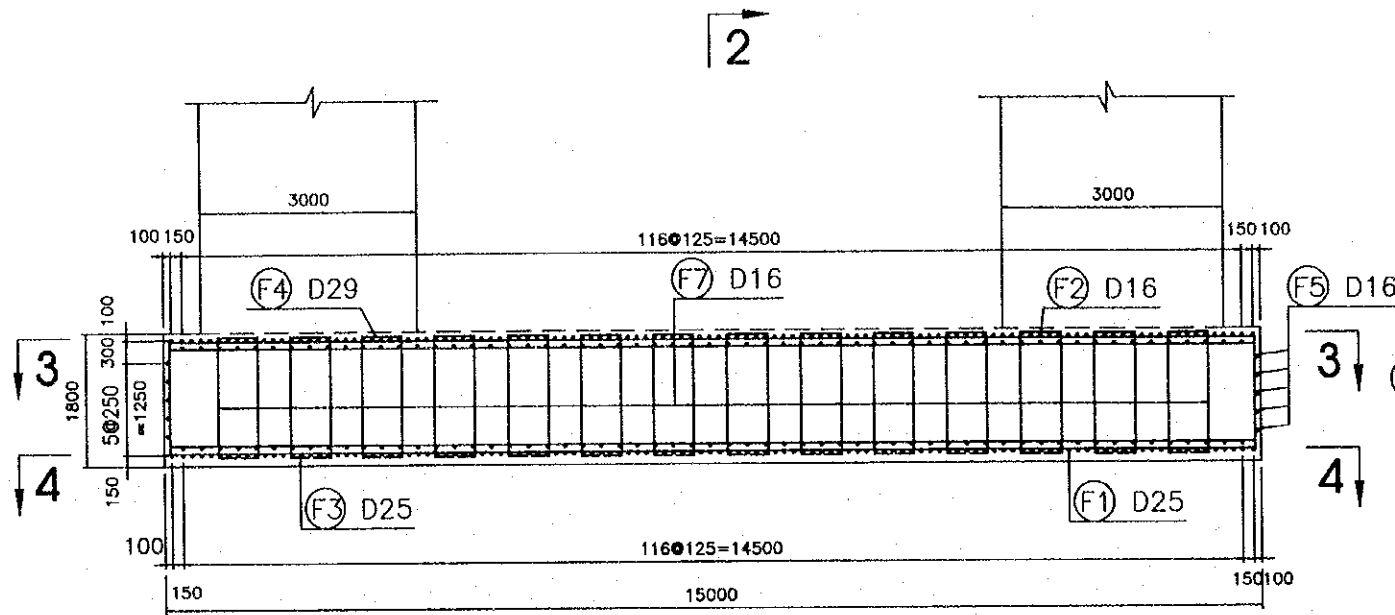


Pier	Items	H1 (mm)	H2 (mm)	n (mm)	A (mm)	B1 (mm)	B2 (mm)	i (%)
P2R		7800	7600	2	600	500	480	2
P3R		7800	7530	2	600	500	230	2.75
P4R		8300	7920	3	900	700	320	3.768
P5R~P7R		11300	10900	13	3900	700	300	4
P17L~P18L		12800	12600	19	5700	400	380	2

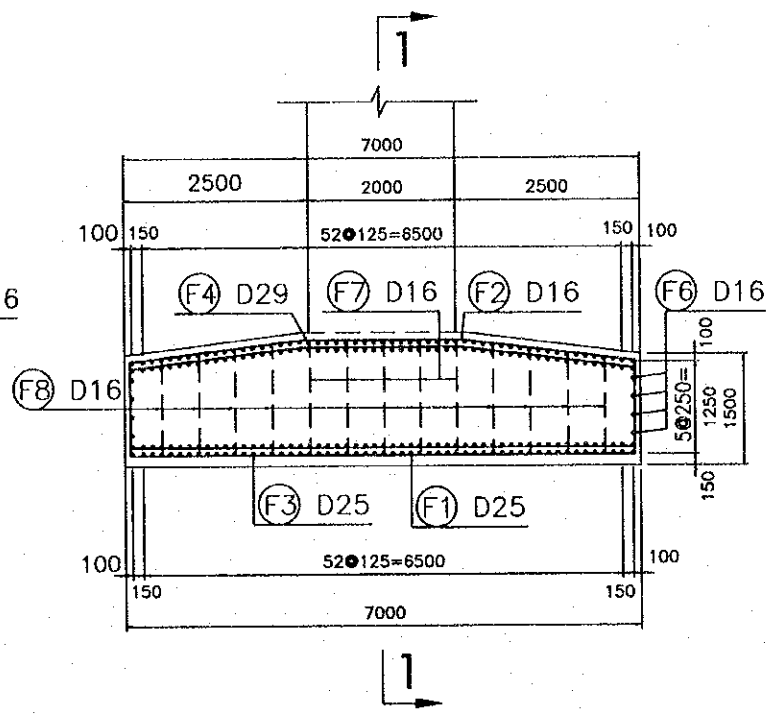
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THAILO LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.8.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-26	SHEET No.
BAR ARRANGEMENT FOR P2R~P7R, P17L, P18L (3)			

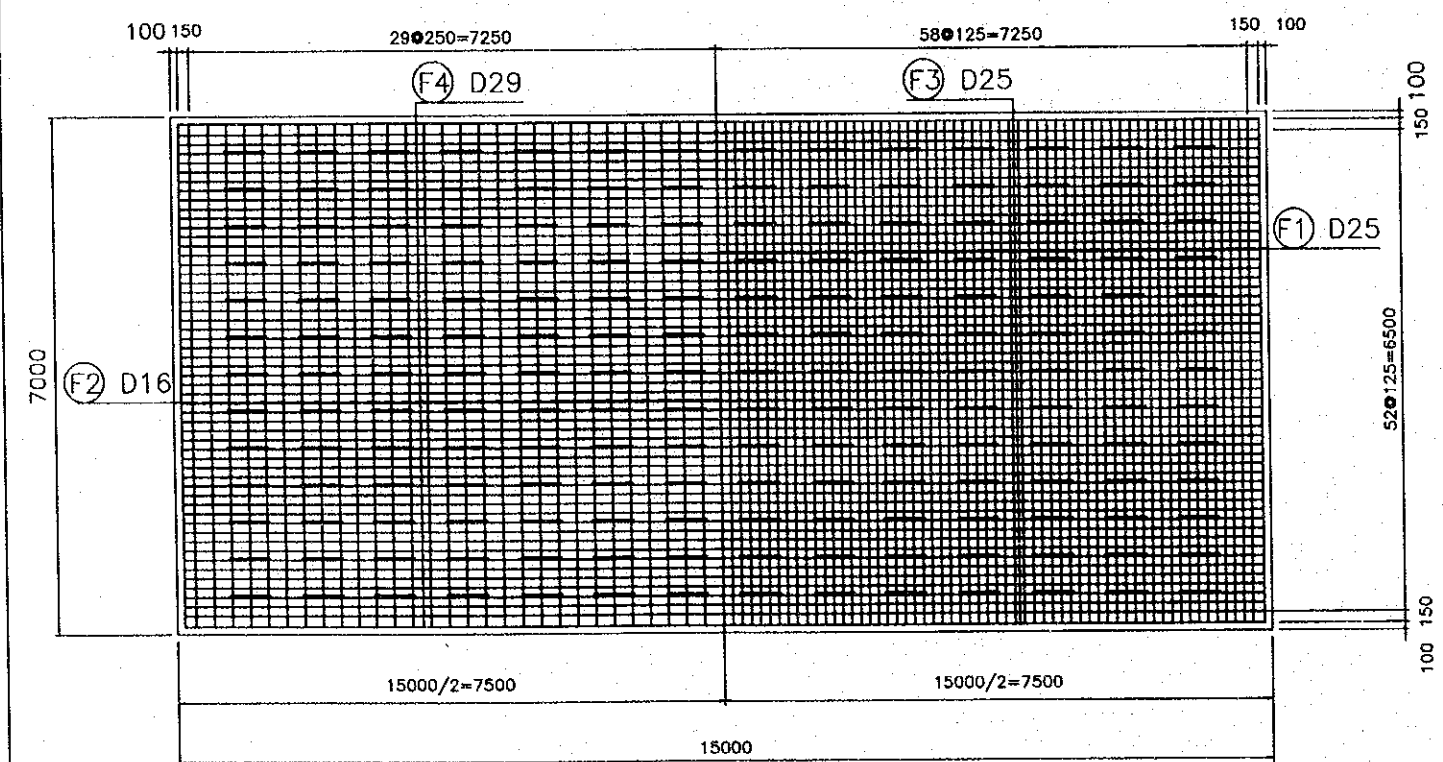
SECTION 1 - 1



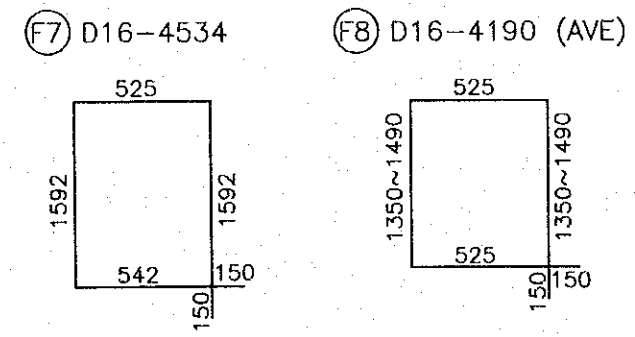
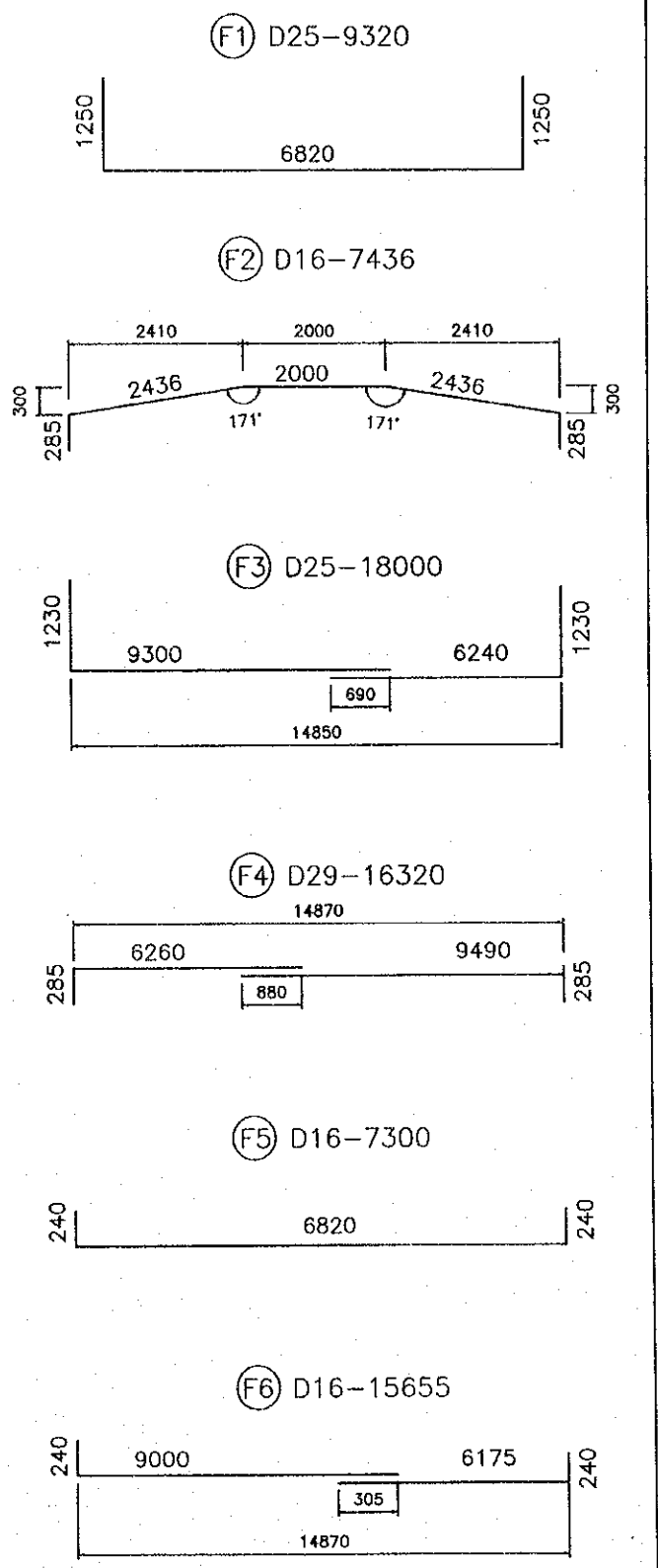
SECTION 2 - 2



HALF SECTION 3 - 3 HALF SECTION 4 - 4



LIST OF REINFORCING BARS FOR FOOTING



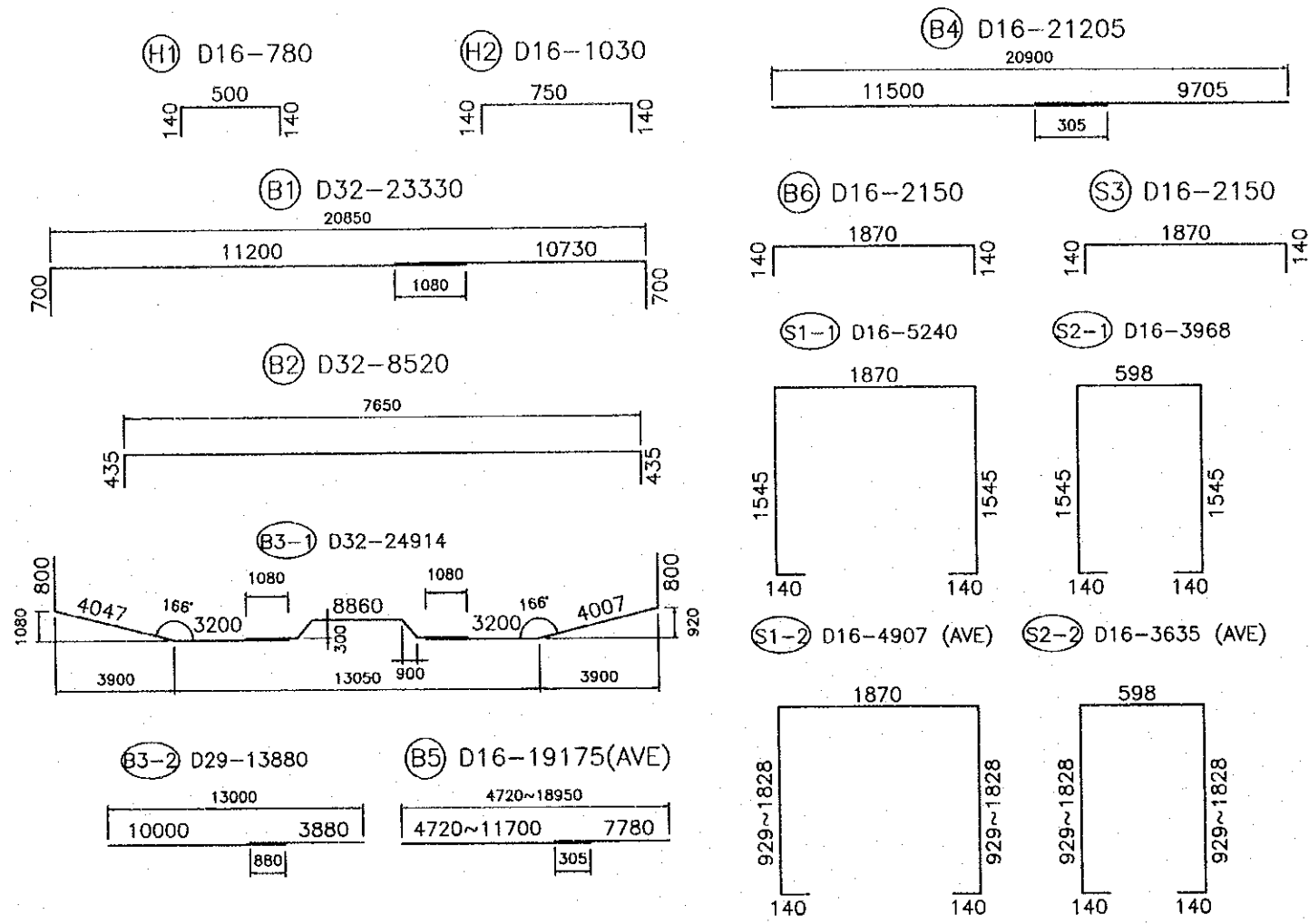
223

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-27	SHEET No.
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BAR ARRANGEMENT OF P2R~P7R, P17L, P18L (4)

LIST OF REINFORCING BARS FOR BEAM AND COLUMN

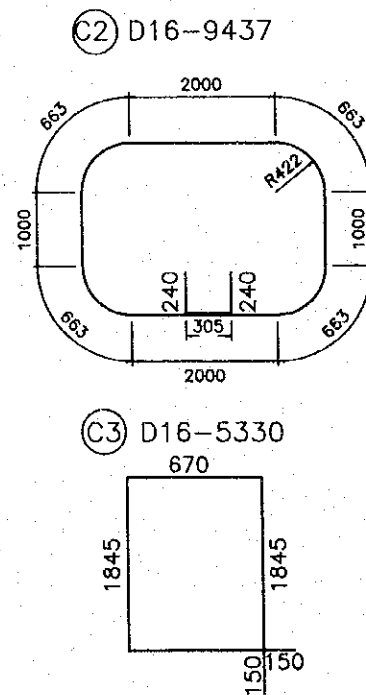


QUANTITY REINFORCEMENT FOR P2R, P3R

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D16	780	126	1.56	153.32
	H2	[Diagram]	D16	1030	90	1.56	144.61
	B1	[Diagram]	D32	23330	16	6.23	2325.53
	B2	[Diagram]	D32	8520	32	6.23	1698.55
	B(3-1)	[Diagram]	D32	24914	16	6.23	2483.43
	B(3-2)	[Diagram]	D29	13880	16	5.04	1119.28
	B4	[Diagram]	D16	21205	6	1.56	198.48
	B5	[Diagram]	D16	15765	8	1.56	196.75
	B6	[Diagram]	D16	2150	10	1.56	33.54
	S1-1	[Diagram]	D16	5240	22	1.56	179.84
	S1-2	[Diagram]	D16	4907	104	1.56	796.11
	S2-1	[Diagram]	D16	3968	16	1.56	99.04
	S2-2	[Diagram]	D16	3635	104	1.56	589.74
	S3	[Diagram]	D16	2125	218	1.56	722.67
STEM	C1	[Diagram]	D25	5895	172	3.98	4035.48
	C2	[Diagram]	D16	9437	43	1.56	633.03
	C3	[Diagram]	D16	5330	55	1.56	457.31
FOOTING	F1	[Diagram]	D25	9320	180	3.98	6,676.85
	F2	[Diagram]	D16	7436	180	1.56	2088.03
	F3	[Diagram]	D25	18000	110	3.98	7880.40
	F4	[Diagram]	D29	16320	110	5.04	9047.81
	F5	[Diagram]	D16	7300	10	1.56	113.88
	F6	[Diagram]	D16	15655	8	1.56	195.37
	F7	[Diagram]	D16	4534	30	1.56	212.19
	F8	[Diagram]	D16	4190	48	1.56	313.75
TOTAL FOR ONE PIER							42,395.00
SUMMARY FOR ONE PIER							
D16 =							7,127.67
D25 =							18,592.73
D29 =							10,167.09
D32 =							6,507.51
TOTAL FOR 2 PIERS							84,789.99
SUMMARY FOR 2 PIERS							
D16 =							14,255.33
D25 =							37,185.46
D29 =							20,334.18
D32 =							13,015.02

DIMENSIONS OF BAR C1

Piers	D (mm)	A (mm)	L (mm)	Total (mm)
P2R	D25	375	5520	5895
P3R	D25	375	5520	5895
P4R	D25	375	6020	6395
P5R~P7R	D25	375	9020	9395
P17L~P18L	D25	375	10520	10895



QUANTITY REINFORCEMENT FOR PIER P17L, P18L

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D16	780	126	1.56	153.32
	H2		D16	1030	90	1.56	144.61
	B1		D32	23330	16	6.23	2325.53
	B2		D32	8520	32	6.23	1698.55
	B(3-1)		D32	24914	16	6.23	2483.43
	B(3-2)		D29	13880	16	5.04	1119.28
	B4		D16	21205	6	1.56	198.48
	B5		D16	15765	8	1.56	196.75
	B6		D16	2150	10	1.56	33.54
	S1-1		D16	5240	22	1.56	179.84
	S1-2		D16	4907	104	1.56	796.11
	S2-1		D16	3968	16	1.56	99.04
	S2-2		D16	3635	104	1.56	589.74
	S3		D16	2125	218	1.56	722.67
STEM	C1		25	10895	172	3.98	7458.28
	C2		D16	9437	60	1.56	883.30
	C3		D16	5330	78	1.56	648.55
FOOTING	F1		D25	9320	180	3.98	6,676.85
	F2		D16	7436	180	1.56	2088.03
	F3		D25	18000	110	3.98	7880.40
	F4		D29	16320	110	5.04	9047.81
	F5		D16	7300	10	1.56	113.88
	F6		D16	15655	8	1.56	195.37
	F7		D16	4534	30	1.56	212.19
	F8		D16	4190	48	1.56	313.75
TOTAL FOR ONE PIER							46,259.31
SUMMARY FOR ONE PIER							
D16 =							7,569.18
D25 =							22,015.53
D29 =							10,167.09
D32 =							6,507.51
TOTAL FOR 2 PIERS							92,518.61
SUMMARY FOR 2 PIERS							
D16 =							15,138.35
D25 =							44,031.06
D29 =							20,334.18
D32 =							13,015.02

QUANTITY REINFORCEMENT FOR PIER P4R

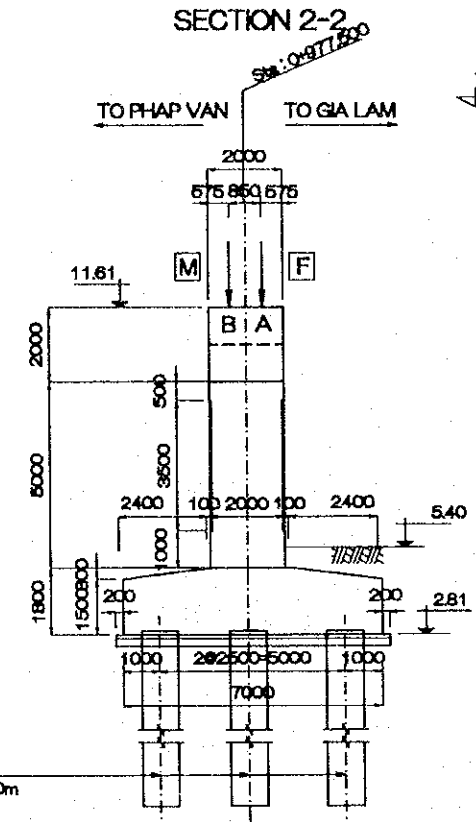
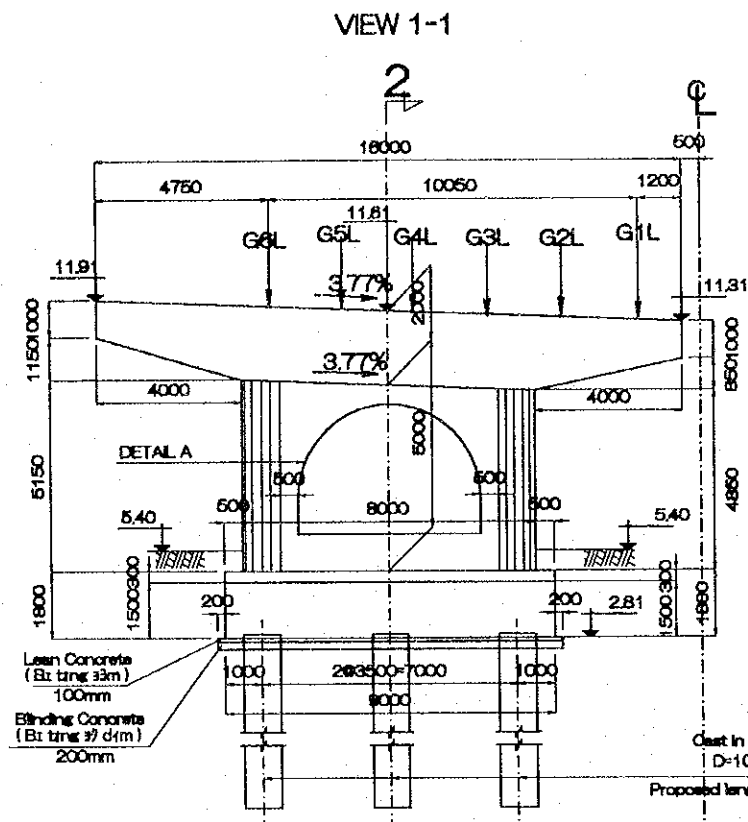
DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D16	780	126	1.56	153.32
	H2		D16	1030	90	1.56	144.61
	B1		D32	23330	16	6.23	2325.53
	B2		D32	8520	32	6.23	1698.55
	B(3-1)		D32	24914	16	6.23	2483.43
	B(3-2)		D29	13880	16	5.04	1119.28
	B4		D16	21205	6	1.56	198.48
	B5		D16	15765	8	1.56	196.75
	B6		D16	2150	10	1.56	33.54
	S1-1		D16	5240	22	1.56	179.84
	S1-2		D16	4907	104	1.56	796.11
	S2-1		D16	3968	16	1.56	99.04
	S2-2		D16	3635	104	1.56	589.74
	S3		D16	2125	218	1.56	722.67
STEM	C1		25	6395	172	3.98	4377.76
	C2		D16	9437	44	1.56	647.76
	C3		D16	5330	56	1.56	465.63
FOOTING	F1		D25	9320	180	3.98	6,676.85
	F2		D16	7436	180	1.56	2088.03
	F3		D25	18000	110	3.98	7880.40
	F4		D29	16320	110	5.04	9047.81
	F5		D16	7300	10	1.56	113.88
	F6		D16	15655	8	1.56	195.37
	F7		D16	4534	30	1.56	212.19
	F8		D16	4190	48	1.56	313.75
TOTAL							42,760.31
SUMMARY							
D16 =							7,150.70
D25 =							18,935.01
D29 =							10,167.09
D32 =							6,507.51

QUANTITY REINFORCEMENT FOR PIER P5R~P7R

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D16	780	126	1.56	153.32
	H2		D16	1030	90	1.56	144.61
	B1		D32	23330	16	6.23	2325.53
	B2		D32	8520	32	6.23	1698.55
	B(3-1)		D32	24914	16	6.23	2483.43
	B(3-2)		D29	13880	16	5.04	1119.28
	B4		D16	21205	6	1.56	198.48
	B5		D16	15765	8	1.56	196.75
	B6		D16	2150	10	1.56	33.54
	S1-1		D16	5240	22	1.56	179.84
	S1-2		D16	4907	104	1.56	796.11
	S2-1		D16	3968	16	1.56	99.04
	S2-2		D16	3635	104	1.56	589.74
	S3		D16	2125	218	1.56	722.67
STEM	C1		25	9395	172	3.98	6431.44
	C2		D16	9437	54	1.56	794.97
	C3		D16	5330	69	1.56	573.72
FOOTING	F1		D25	9320	180	3.98	6,676.85
	F2		D16	7436	180	1.56	2088.03
	F3		D25	18000	110	3.98	7880.40
	F4		D29	16320	110	5.04	9047.81
	F5		D16	7300	10	1.56	113.88
	F6		D16	15655	8	1.56	195.37
	F7		D16	4534	30	1.56	212.19
	F8		D16	4190	48	1.56	313.75
TOTAL FOR ONE PIER							45,069.30
SUMMARY FOR ONE PIER							
D16 =							7,406.01
D25 =							20,988.69
D29 =							10,167.09
D32 =							6,507.51
TOTAL FOR 3 PIERS							135,207.91
SUMMARY FOR 3 PIERS							
D16 =							22,218.04
D25 =							62,966.07
D29 =							30,501.27
D32 =							19,522.53

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAKE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.6.1	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

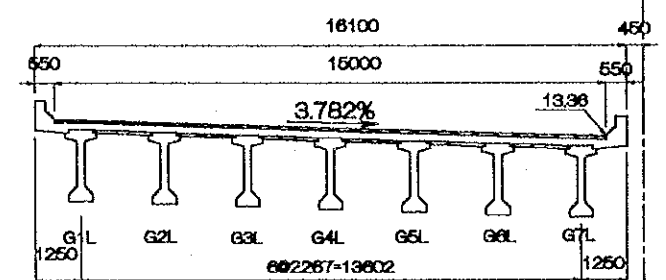
PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-29	SHEET No.
DETAIL OF PIER P4L			



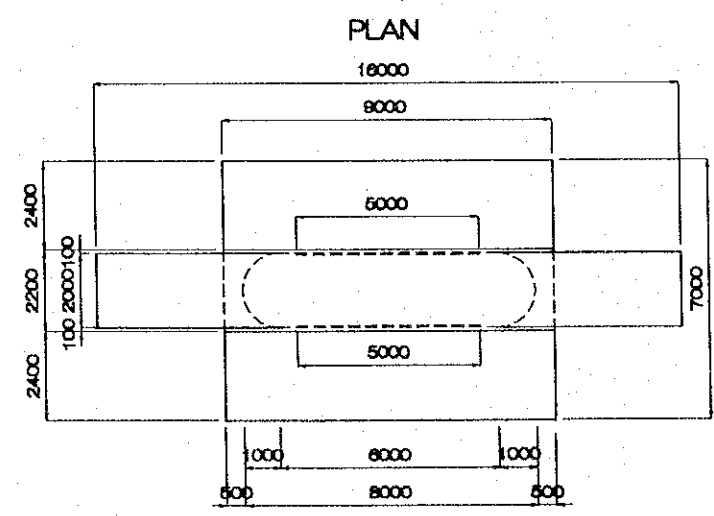
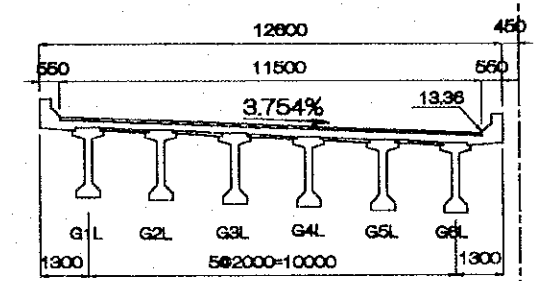
DEPTH OF SUPERSTRUCTURE (MM)

Condition Structure	B(MOVE)	A(FIX)
Pavement	75	75
Slab	212	212
Girder	1650	1650
Haunch (T1)	20	20
Bearing (T2)	56	36
Motor (T3)	28	36
Sub Total	2041	2029

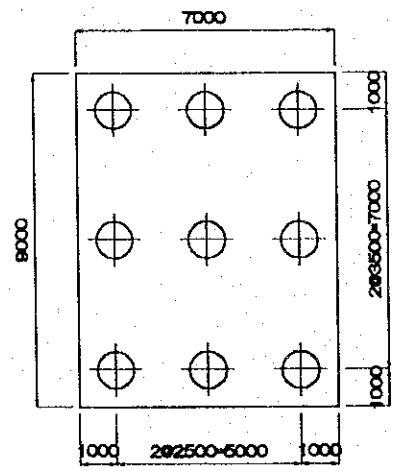
CROSS SECTION B OF SUPERSTRUCTURE



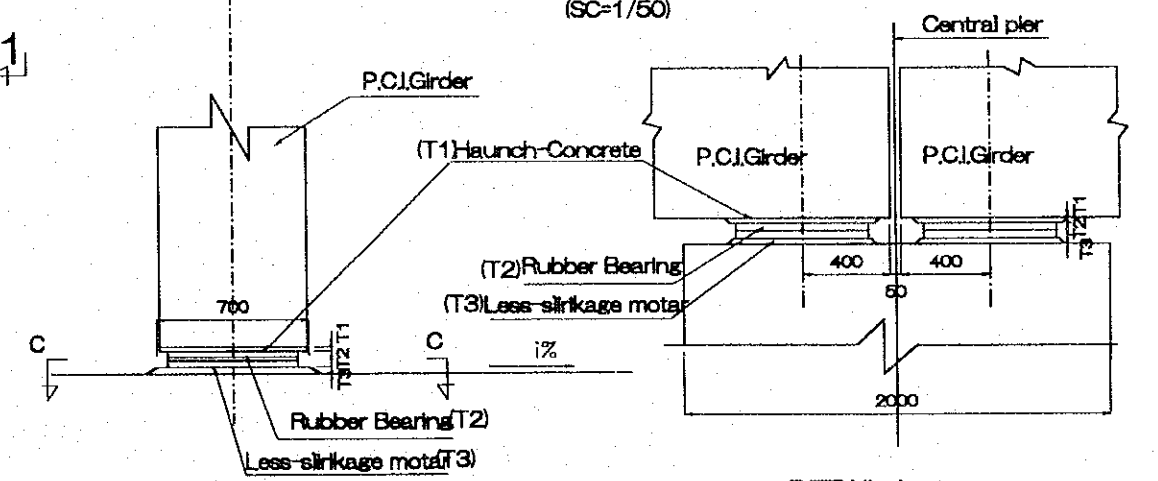
CROSS SECTION A OF SUPERSTRUCTURE



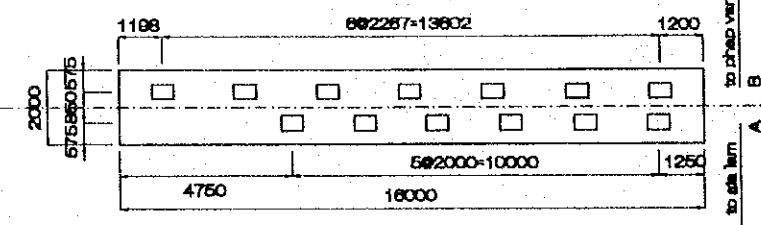
PILE ARRANGEMENT



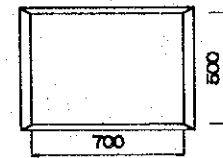
BEARING SEAT DETAIL OF P.C I GIRDER (SC=1/50)



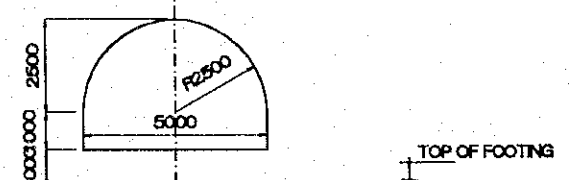
PLAN OF PIER HEAD



SECTION C-C



DETAIL A

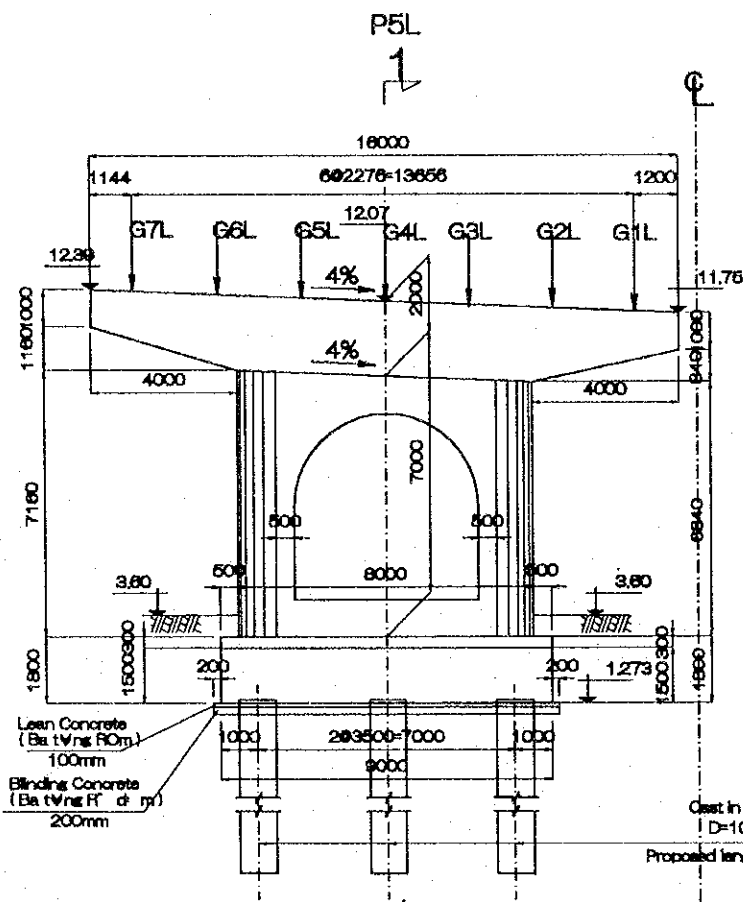


ELEVATION OF TOP PIER HEAD (M)

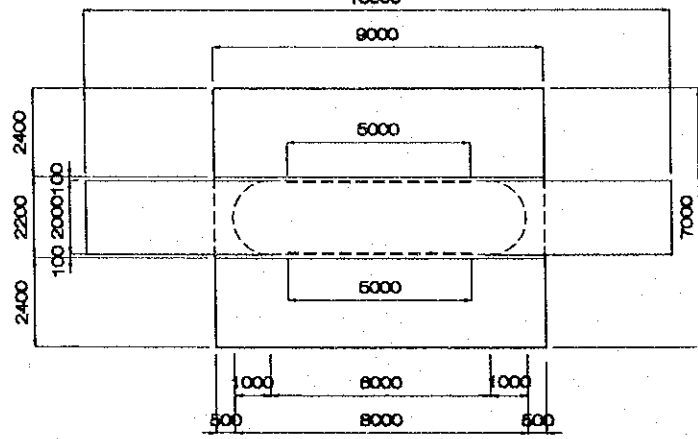
Bearing seat	G1		G2		G3		G4		G5		G6		G7	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A
Elevation	11.345	11.357	11.431	11.432	11.517	11.507	11.603	11.583	11.688	11.658	11.774	11.733	11.860	

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	NAME	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE	<i>[Signature]</i>
	DATE	2000.6.11

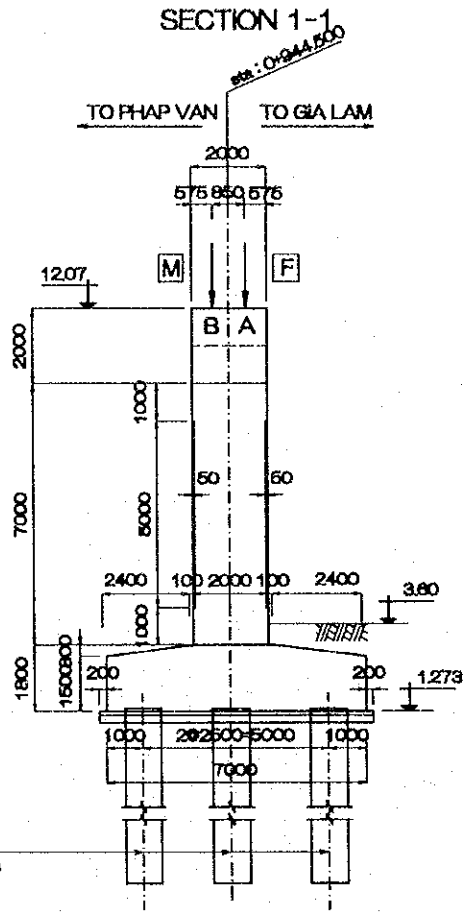
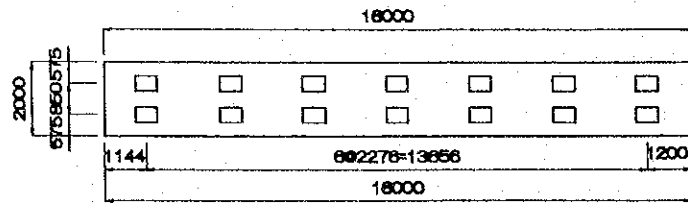
PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/200	C-1-3a-30	
DETAIL OF PIER P5L			



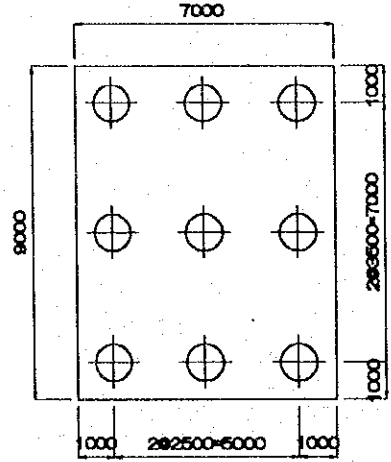
PLAN



PLAN OF PIER HEAD



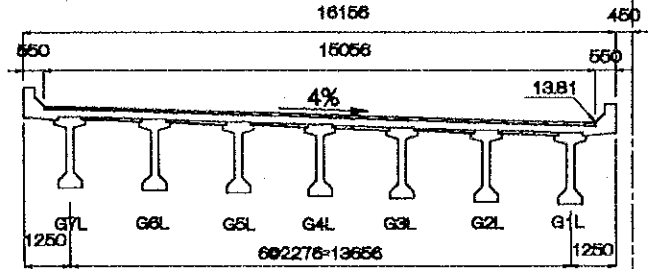
PILE ARRANGEMENT



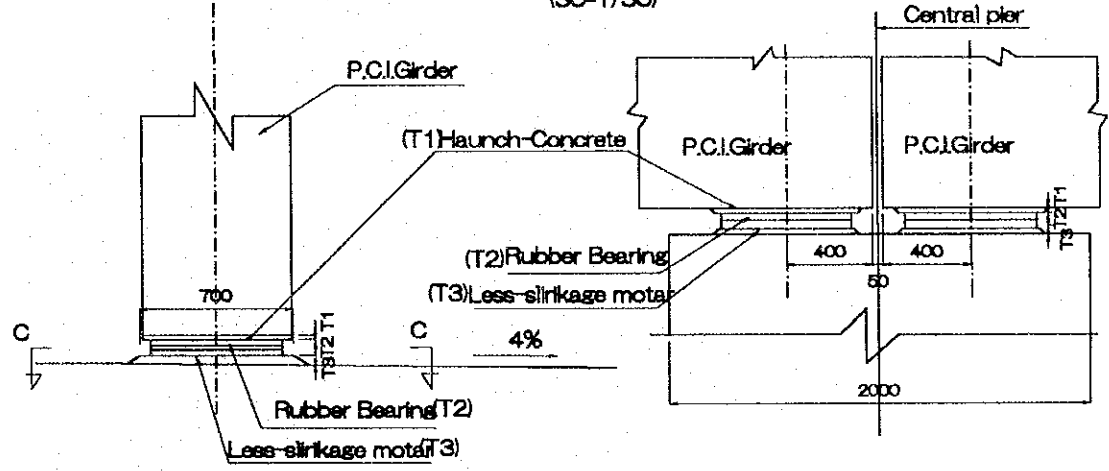
DEPTH OF SUPERSTRUCTURE (MM)

Condition Structure	B(MOVE)	A(FIX)
Pavement	75	75
Slab	213	213
Girder	1650	1650
Haunch (T1)	20	20
Bearing (T2)	56	36
Motor (T3)	30	39
Sub Total	2044	2033

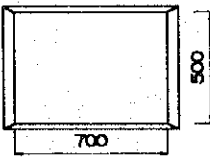
CROSS SECTION LEFT OF SUPERSTRUCTURE



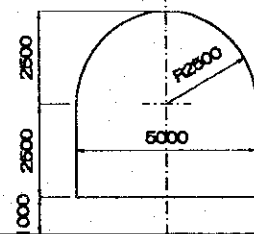
BEARING SEAT DETAIL OF P.C I GIRDER (SC-1/50)



SECTION C-C



DETAIL A



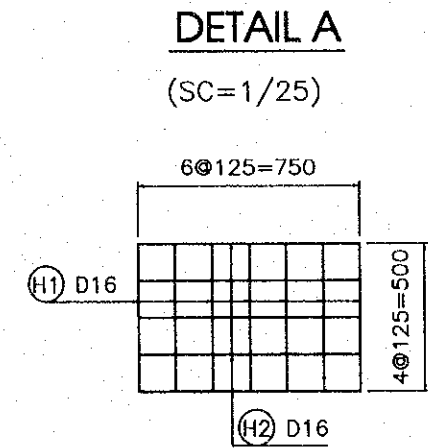
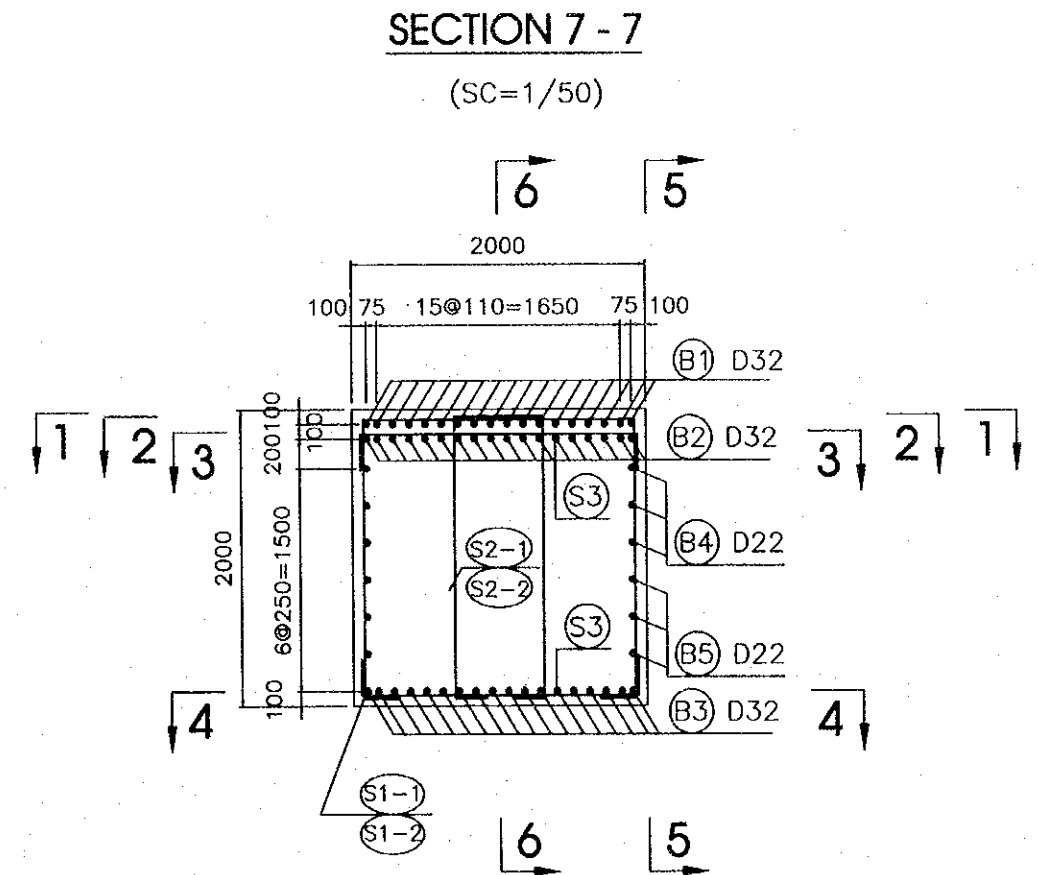
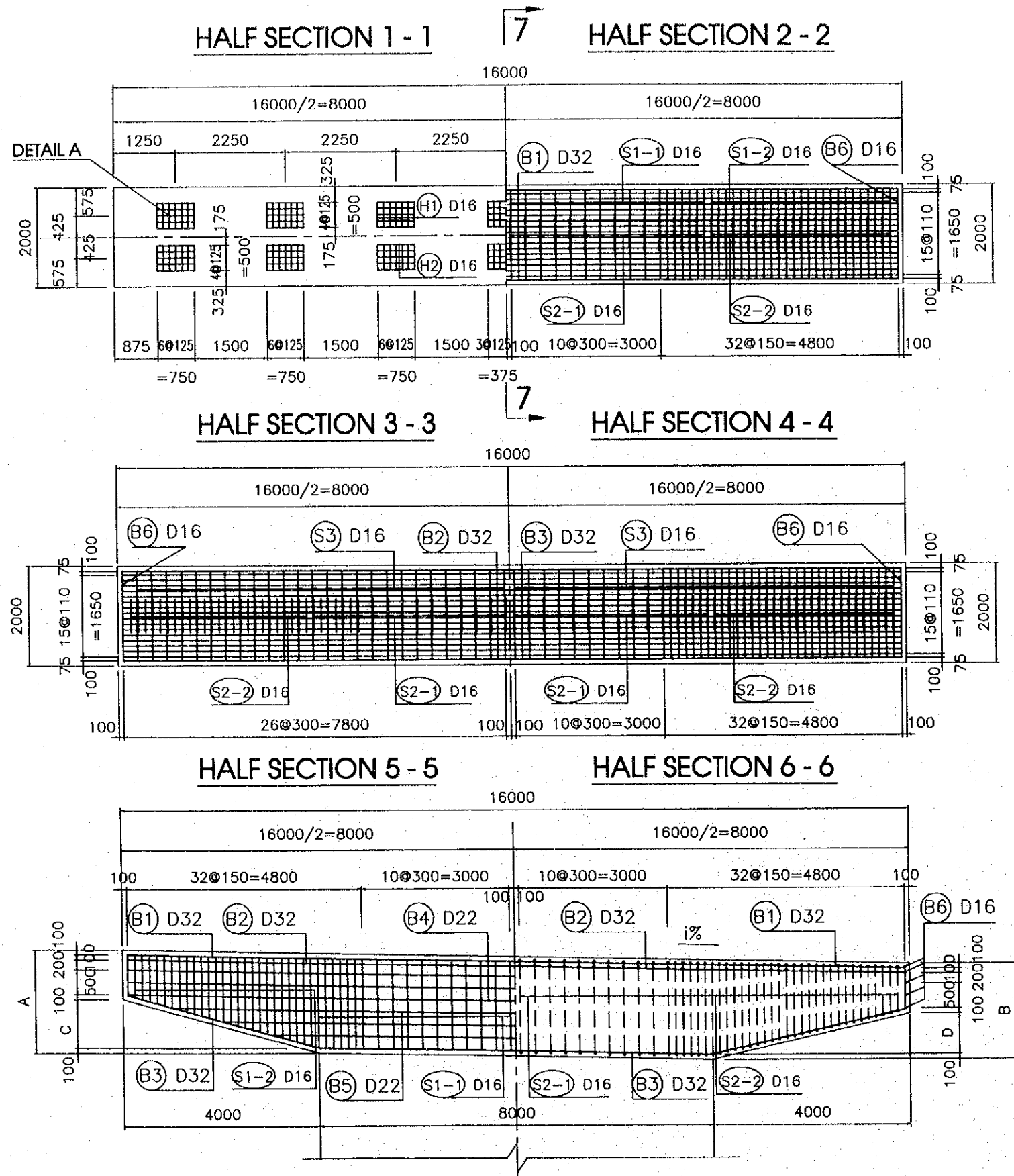
ELEVATION OF TOP PIER HEAD (M)

Bearing seat	G1		G2		G3		G4		G5		G6		G7	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A
Elevation	11.791	11.791	11.882	11.882	11.973	11.973	12.064	12.064	12.155	12.155	12.246	12.246	12.337	12.337

TOP OF FOOTING

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY NAME SIGNATURE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DATE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.01.14

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-31	SHEET No.
BAR ARRANGEMENT OF P4L, P5L (1)			



DIMENSIONS OF PIERS

PIERS	A (mm)	B (mm)	C (mm)	D (mm)	i%
P4L	2115	1850	1050	850	3.77
P5L	2116	1840	1060	840	4

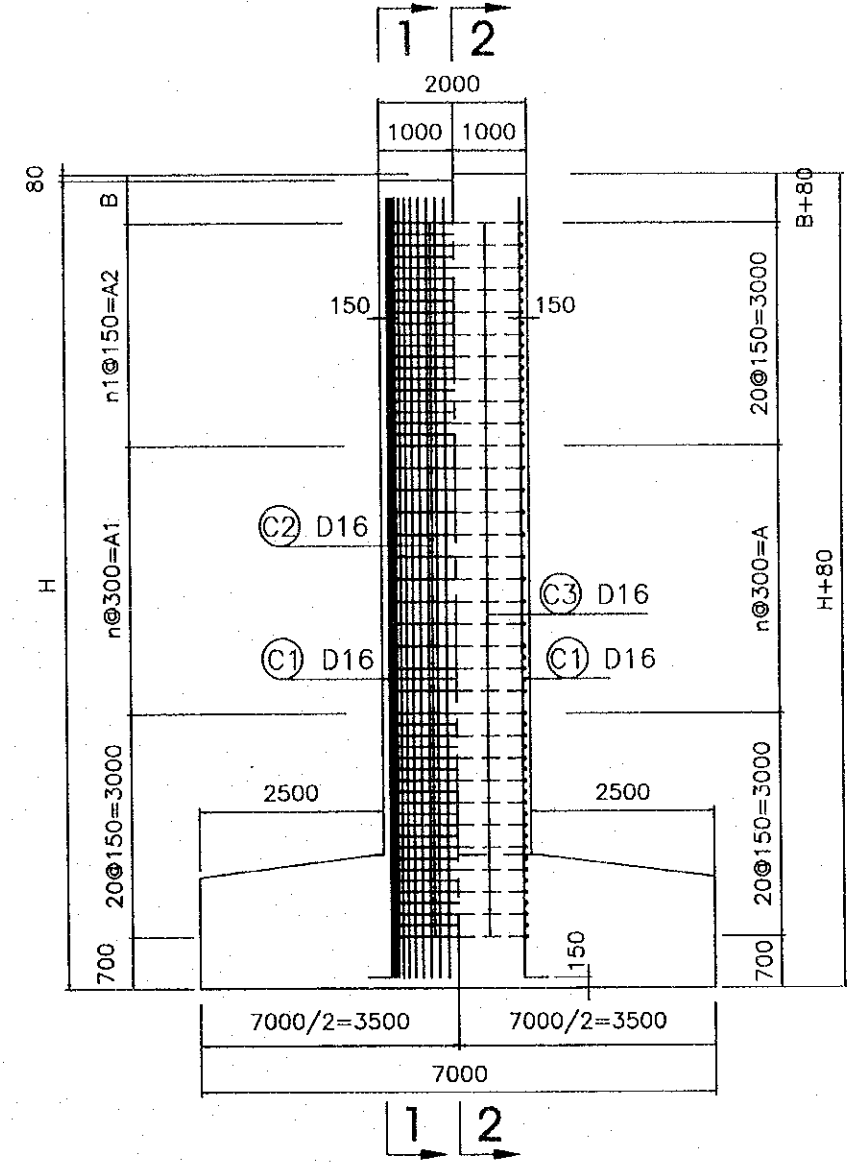
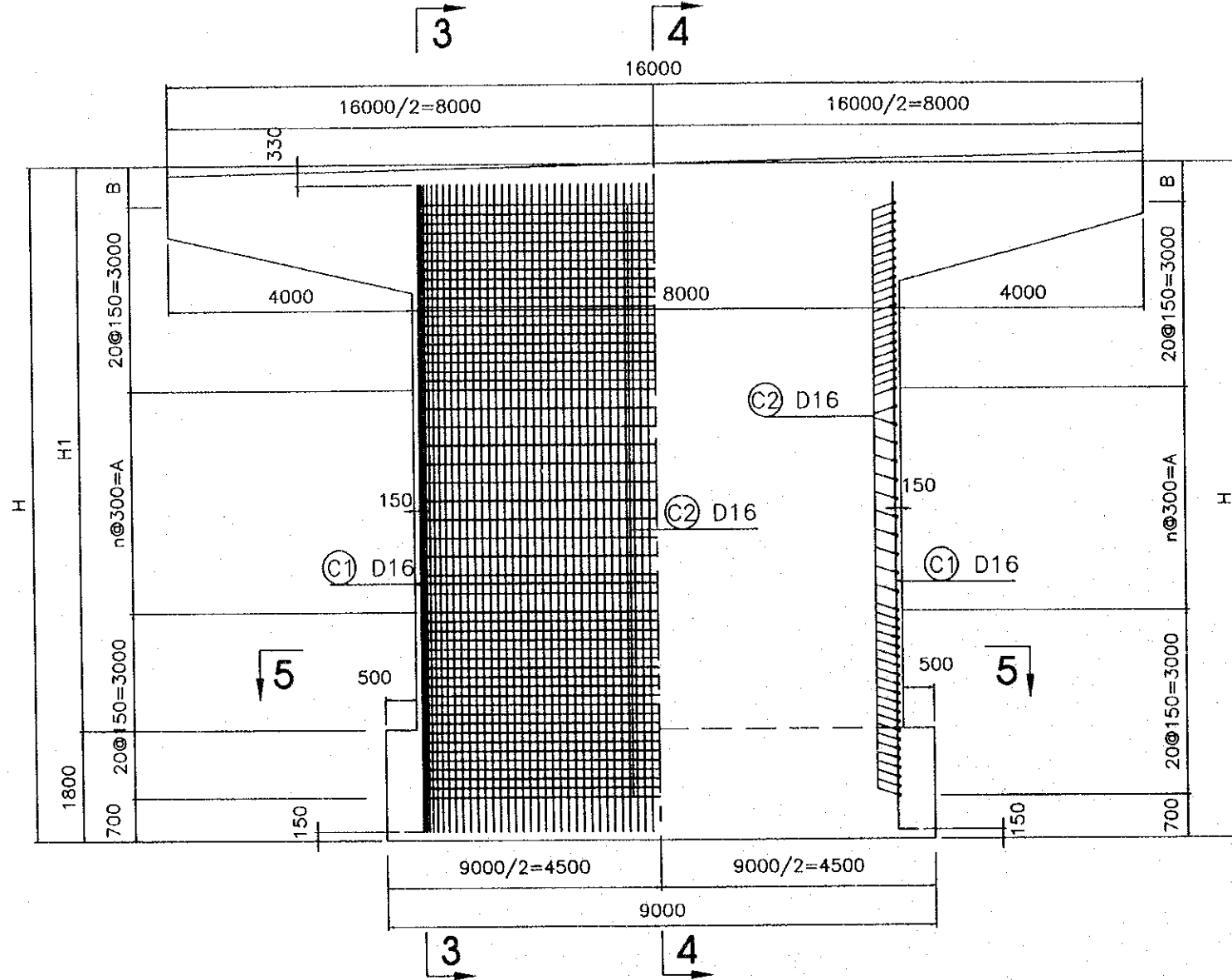
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE
DATE	2000.11.14	

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-32	SHEET No.
BAR ARRANGEMENT OF P4L, P5L (2)			

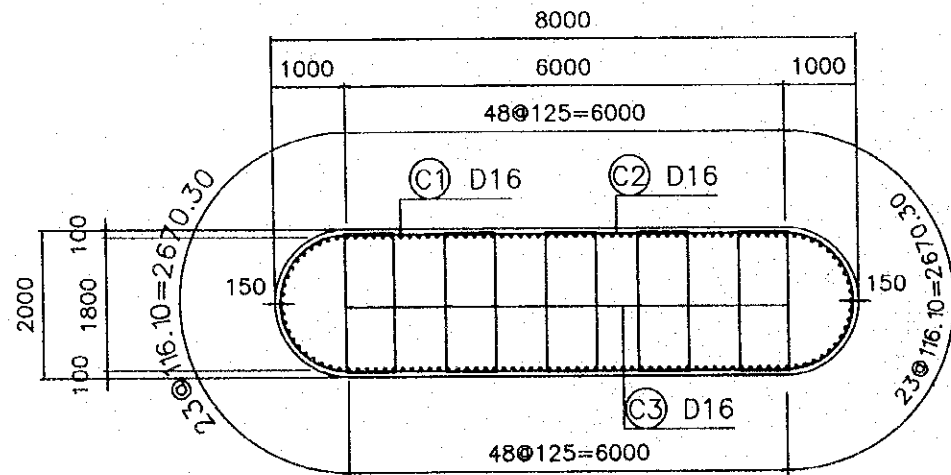
HALF SECTION 1 - 1

HALF SECTION 2 - 2

HALF SECTION 3 - 3 HALF SECTION 4 - 4



SECTION 5 - 5



DIMENSION OF PIERS

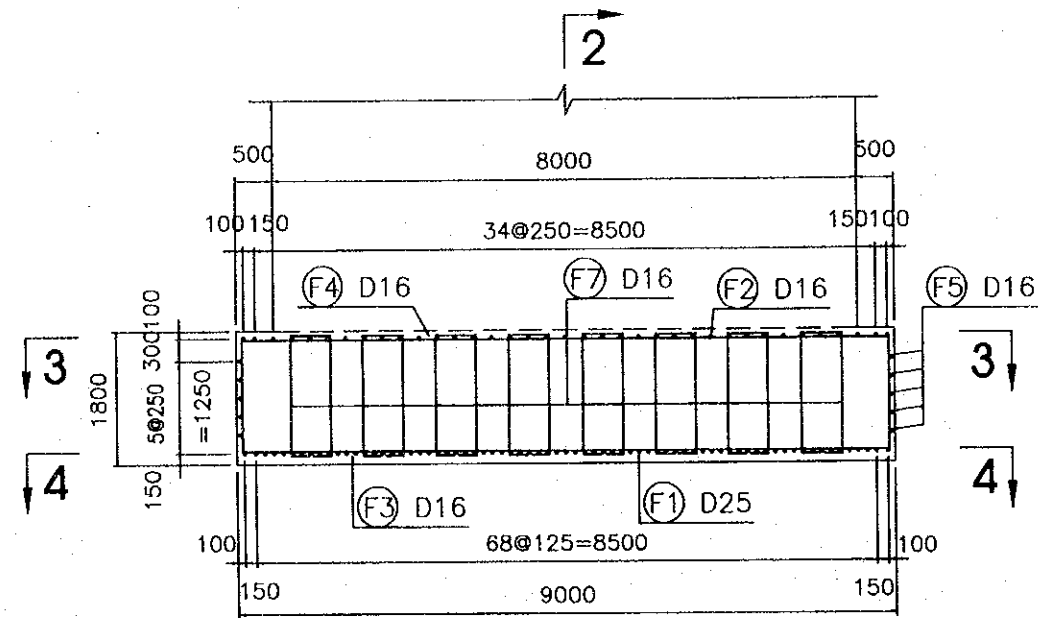
ITEMS	H(mm)	H1(mm)	A(mm)	B(mm)	n
P4L	8000	7000	1500	600	5
P5L	10800	9000	3600	500	12

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATARE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.5.19	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

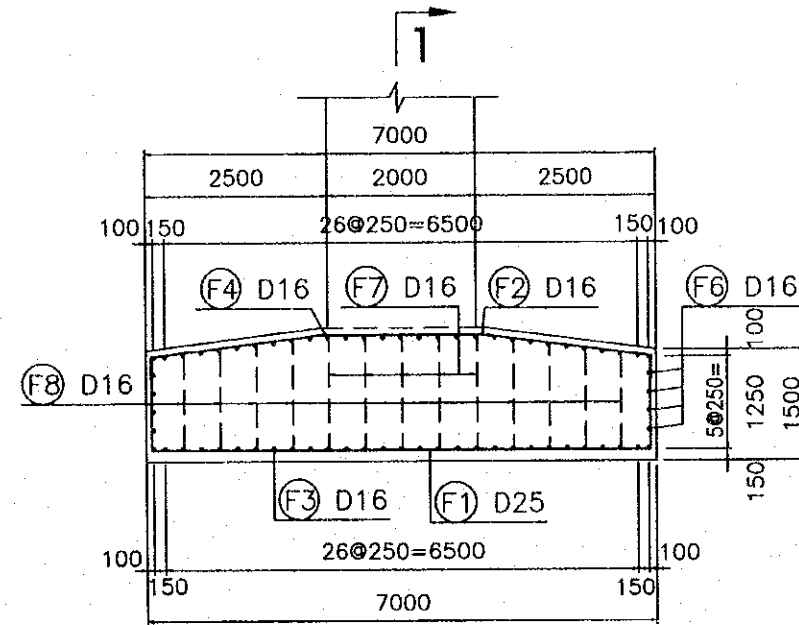
PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-33	SHEET No.
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BAR ARRANGEMENT OF P4L, P5L (3)

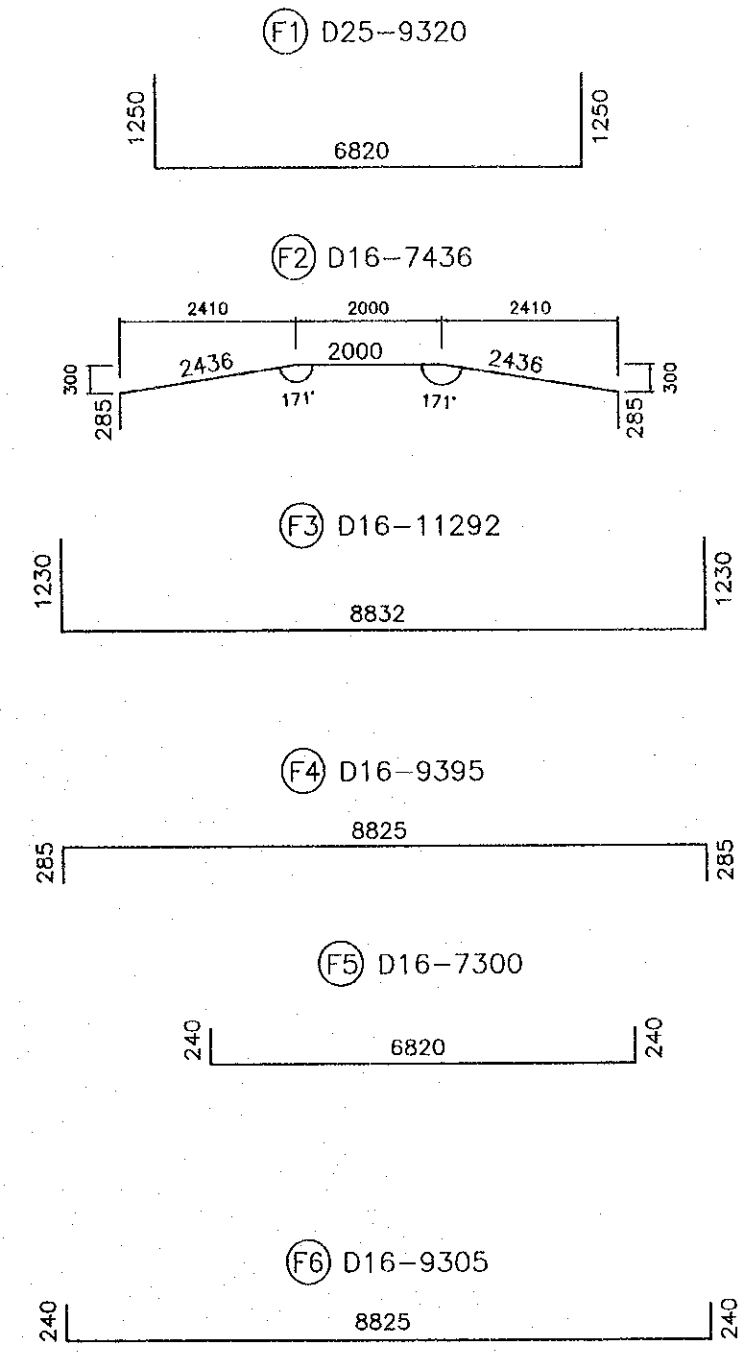
SECTION 1 - 1



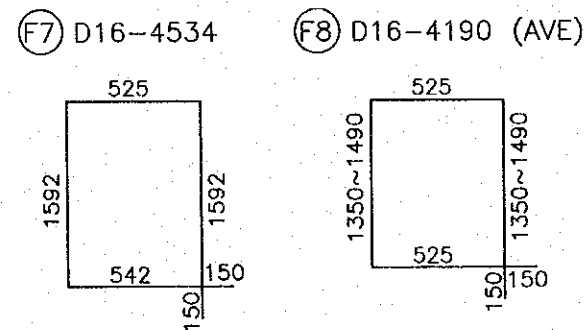
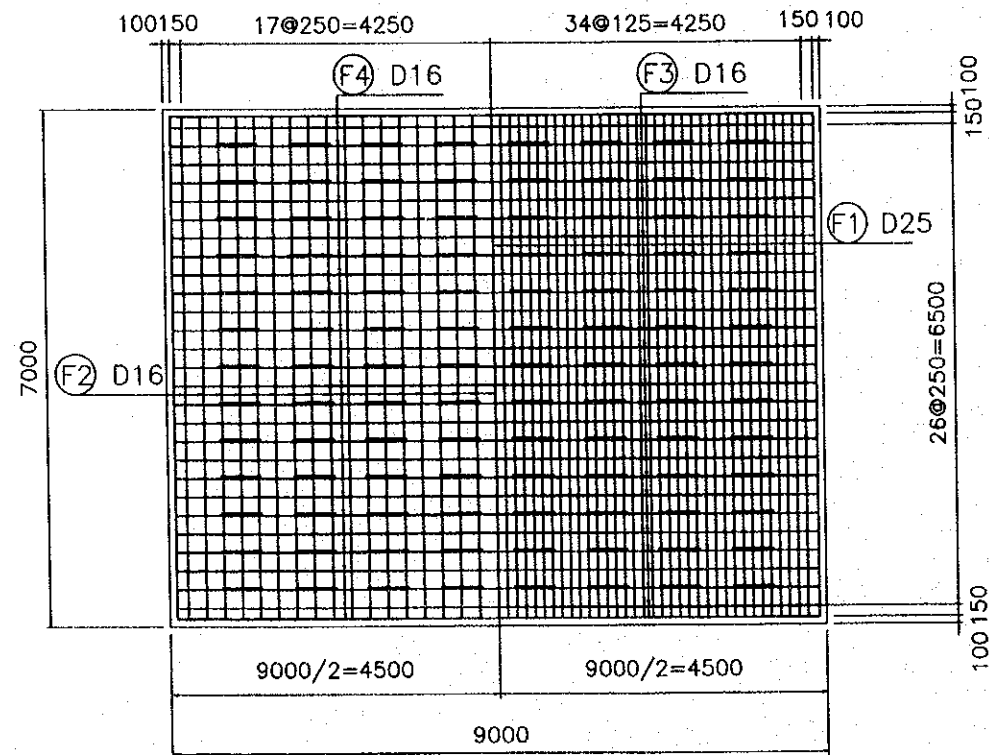
SECTION 2 - 2



LIST OF REINFORCING BARS FOR FOOTING



HALF SECTION 3 - 3 HALF SECTION 4 - 4



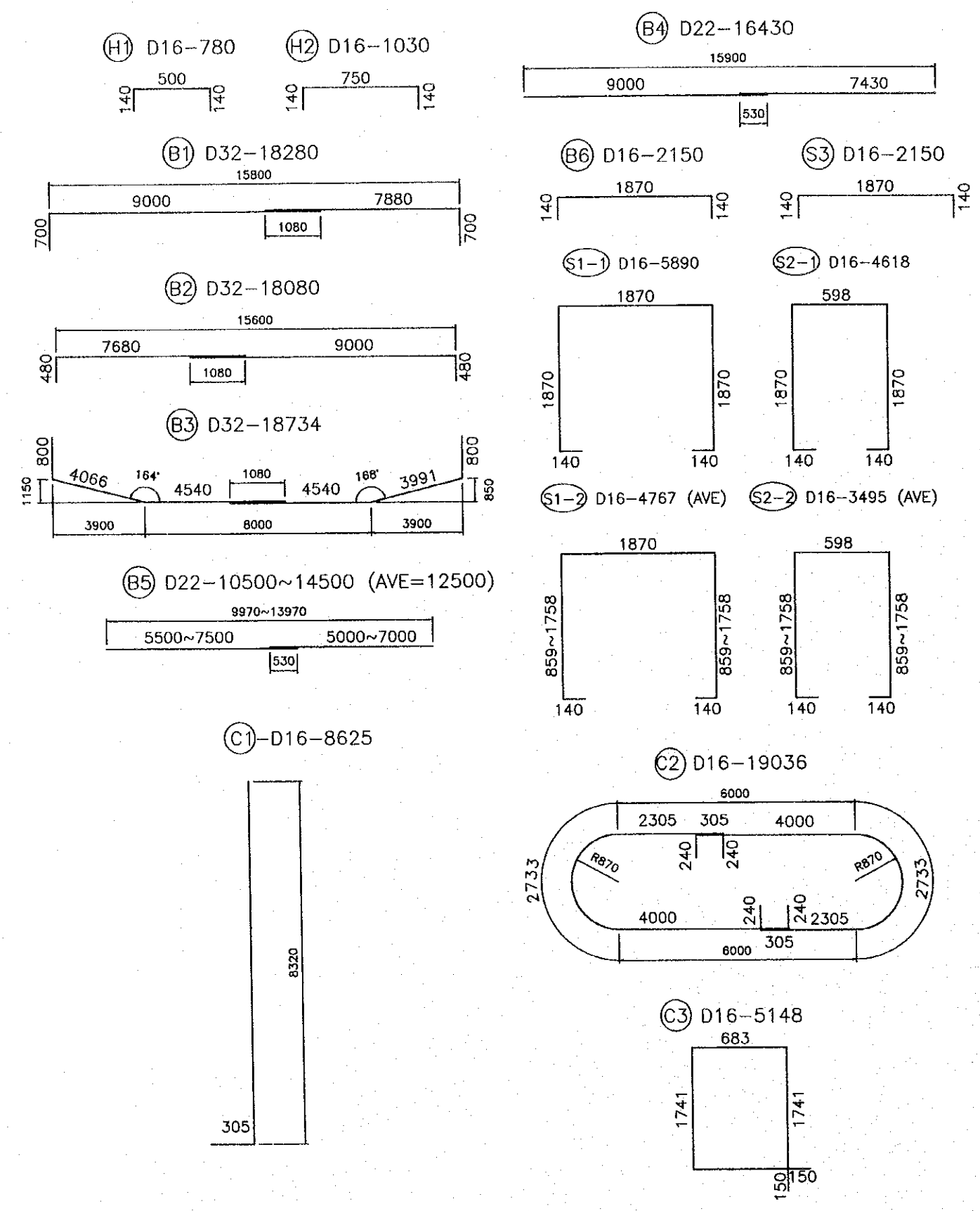
082

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE
CONSULTANT		DATE 2000.02.14

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-34	SHEET No.
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BAR ARRANGEMENT OF P4L, P5L (4)

LIST OF REINFORCING BARS FOR BEAM AND COLUMN



BAR ARRANGEMENT OF P4L

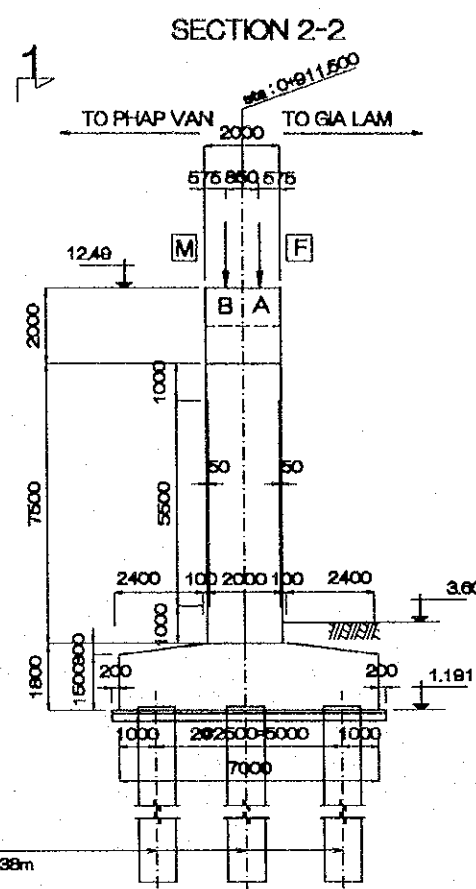
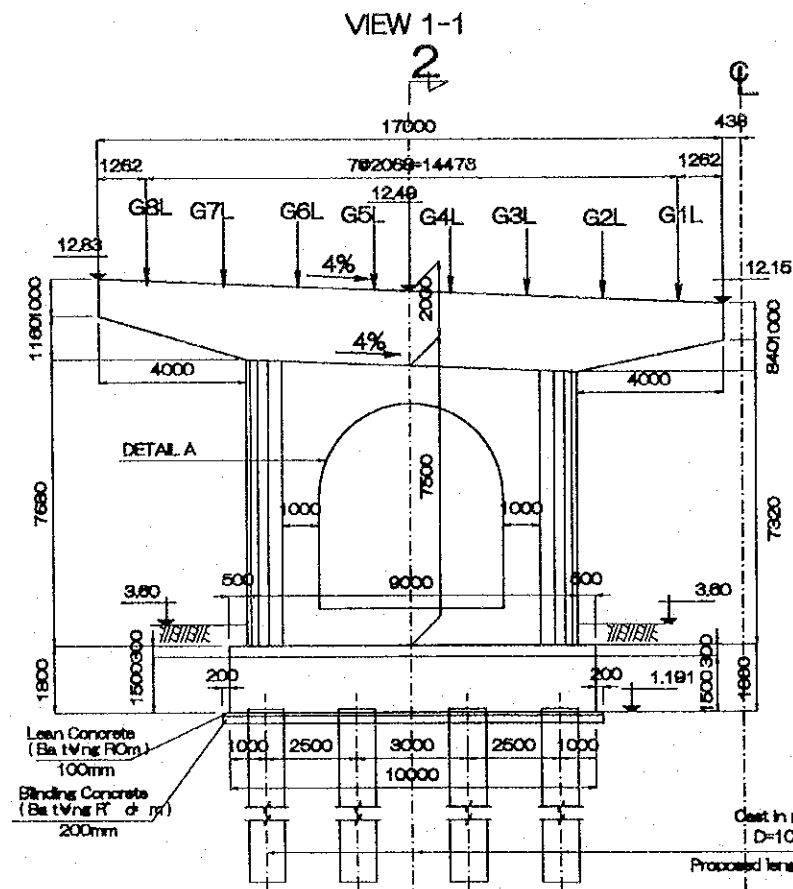
DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D16	780	98	1.56	119.25
	H2	[Diagram]	D16	1030	70	1.56	112.48
	B1	[Diagram]	D32	18280	18	6.23	2049.92
	B2	[Diagram]	D32	18080	18	6.23	2027.49
	B3	[Diagram]	D32	18737	18	6.23	2101.17
	B4	[Diagram]	D22	16430	6	3.04	299.68
	B5	[Diagram]	D22	12500	6	3.04	228.00
	B6	[Diagram]	D16	2150	10	1.56	33.54
	S1-1	[Diagram]	D16	5890	34	1.56	312.41
	S1-2	[Diagram]	D16	4767	50	1.56	371.83
	S2-1	[Diagram]	D16	4618	34	1.56	244.94
	S2-2	[Diagram]	D16	3495	60	1.56	327.13
	S3	[Diagram]	D16	2150	138	1.56	462.85
	STEM	C1	[Diagram]	D16	8625	140	1.56
C2		[Diagram]	D16	19036	46	1.56	1366.02
C3		[Diagram]	D16	5148	125	1.56	1003.86
FOOTING	F1	[Diagram]	D25	9320	71	3.98	2633.65
	F2	[Diagram]	D16	7436	37	1.56	429.21
	F3	[Diagram]	D16	11292	29	1.56	510.85
	F4	[Diagram]	D16	9395	29	1.56	425.03
	F5	[Diagram]	D16	7300	10	1.56	113.88
	F6	[Diagram]	D16	9305	8	1.56	116.13
	F7	[Diagram]	D16	4534	40	1.56	282.92
	F8	[Diagram]	D16	4190	48	1.56	313.75
TOTAL							17,769.67
SUMMARY							D16 = 8,429.76
							D22 = 527.68
							D25 = 2,633.65
							D32 = 6,178.58

BAR ARRANGEMENT OF P5L

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D16	780	98	1.56	119.25
	H2	[Diagram]	D16	1030	70	1.56	112.48
	B1	[Diagram]	D32	18280	18	6.23	2049.92
	B2	[Diagram]	D32	18080	18	6.23	2027.49
	B3	[Diagram]	D32	18737	18	6.23	2101.17
	B4	[Diagram]	D22	16430	6	3.04	299.68
	B5	[Diagram]	D22	12500	6	3.04	228.00
	B6	[Diagram]	D16	2150	10	1.56	33.54
	S1-1	[Diagram]	D16	5890	34	1.56	312.41
	S1-2	[Diagram]	D16	4767	50	1.56	371.83
	S2-1	[Diagram]	D16	4618	34	1.56	244.94
	S2-2	[Diagram]	D16	3495	60	1.56	327.13
	S3	[Diagram]	D16	2150	138	1.56	462.85
	STEM	C1	[Diagram]	D16	8625	140	1.56
C2		[Diagram]	D16	19036	53	1.56	1573.90
C3		[Diagram]	D16	5148	156	1.56	1252.82
FOOTING	F1	[Diagram]	D25	9320	71	3.98	2633.65
	F2	[Diagram]	D16	7436	37	1.56	429.21
	F3	[Diagram]	D16	11292	29	1.56	510.85
	F4	[Diagram]	D16	9395	29	1.56	425.03
	F5	[Diagram]	D16	7300	10	1.56	113.88
	F6	[Diagram]	D16	9305	8	1.56	116.13
	F7	[Diagram]	D16	4534	40	1.56	282.92
	F8	[Diagram]	D16	4190	48	1.56	313.75
TOTAL							18,226.50
SUMMARY							D16 = 8,886.59
							D22 = 527.68
							D25 = 2,633.65
							D32 = 6,178.58

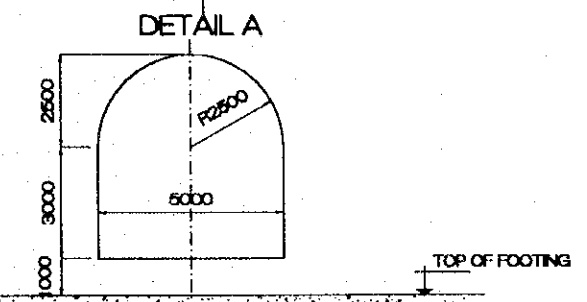
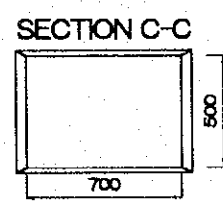
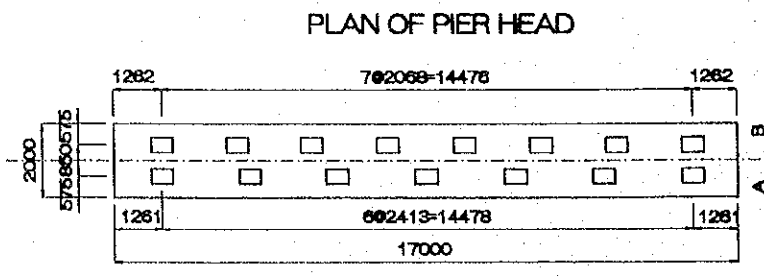
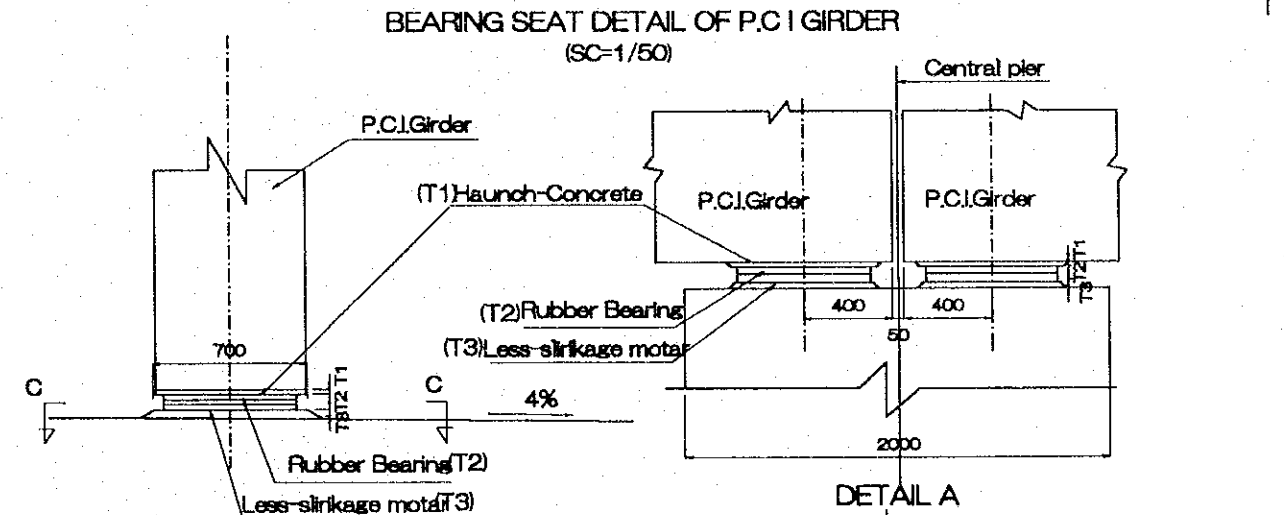
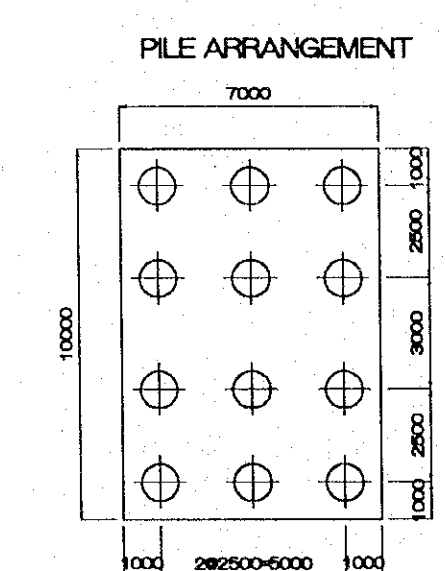
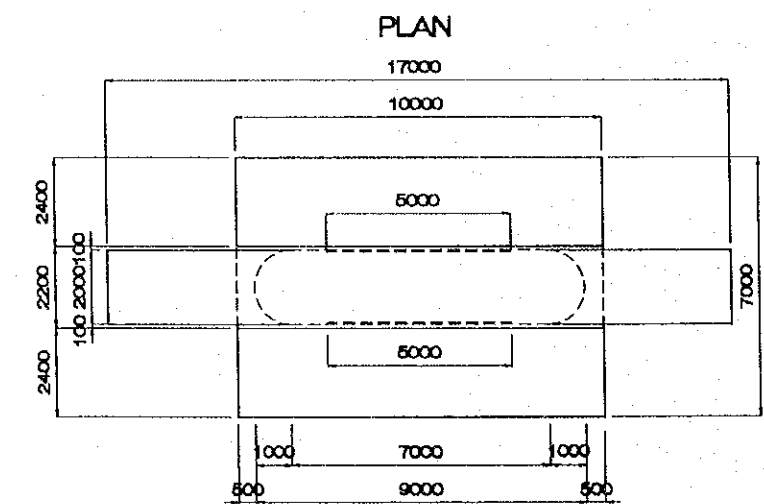
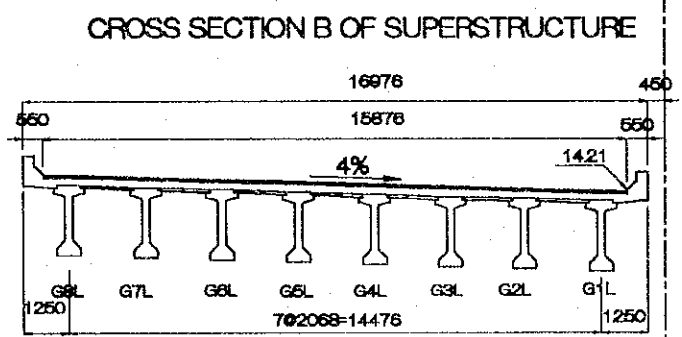
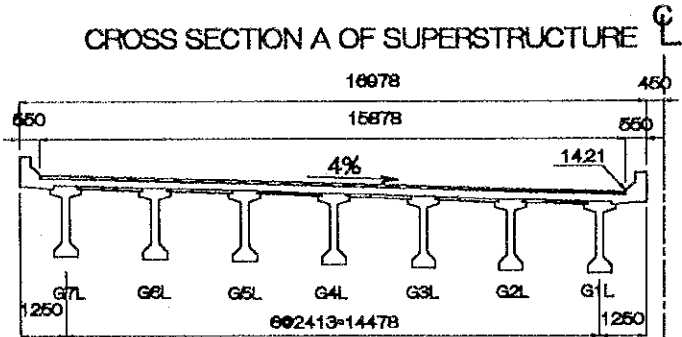
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT		NAME
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		SIGNATURE <i>[Signature]</i>
		DATE 2000.6.1

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-35	SHEET No.
DETAIL PIER P6L			



DEPTH OF SUPERSTRUCTURE (MM)

Structure	Condition	B(MOVE)	A(FIX)
Pavement		75	75
Slab		213	213
Girder		1650	1650
Haunch(T1)		20	20
Bearing (T2)		56	36
Motar (T3)		28	38
Sub Total		2042	2032



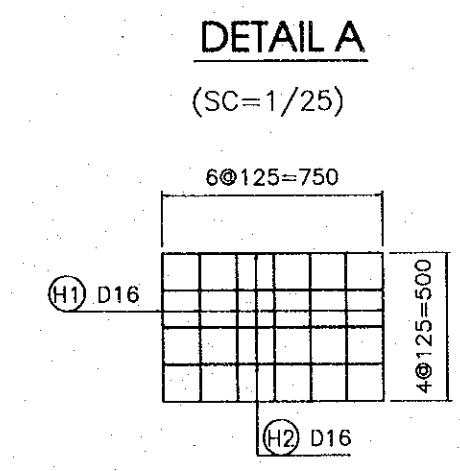
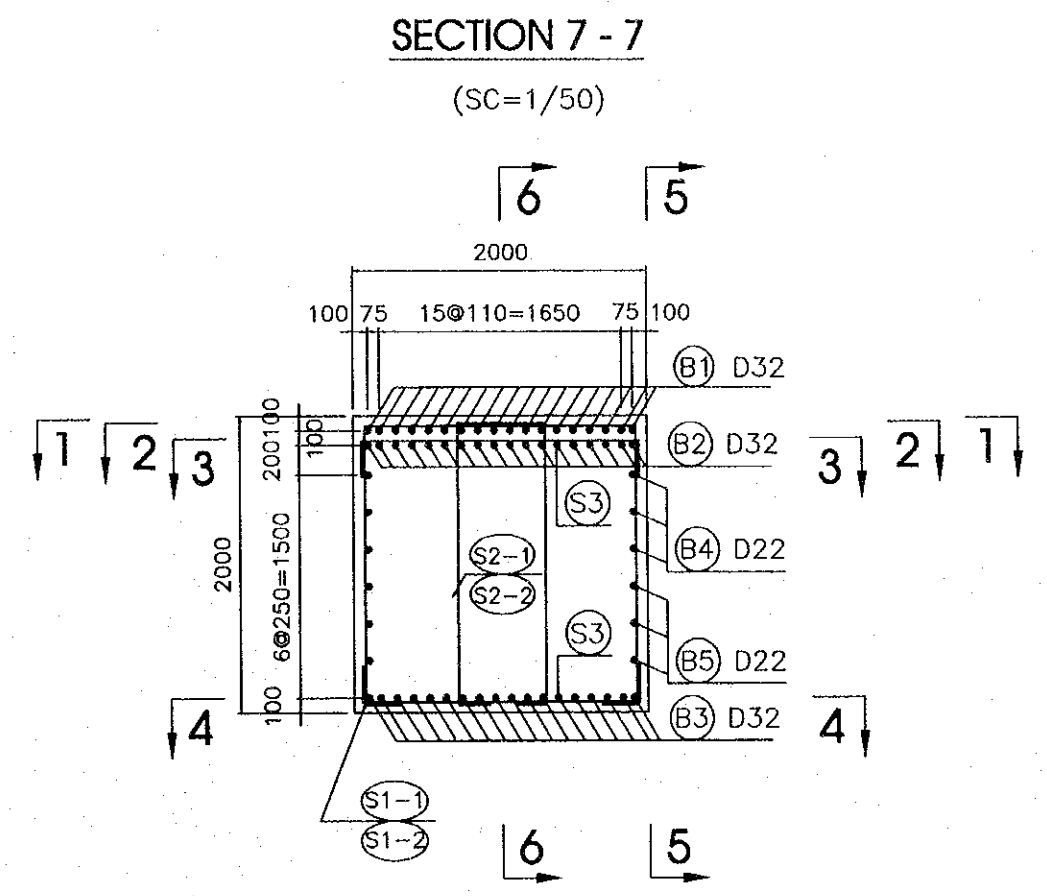
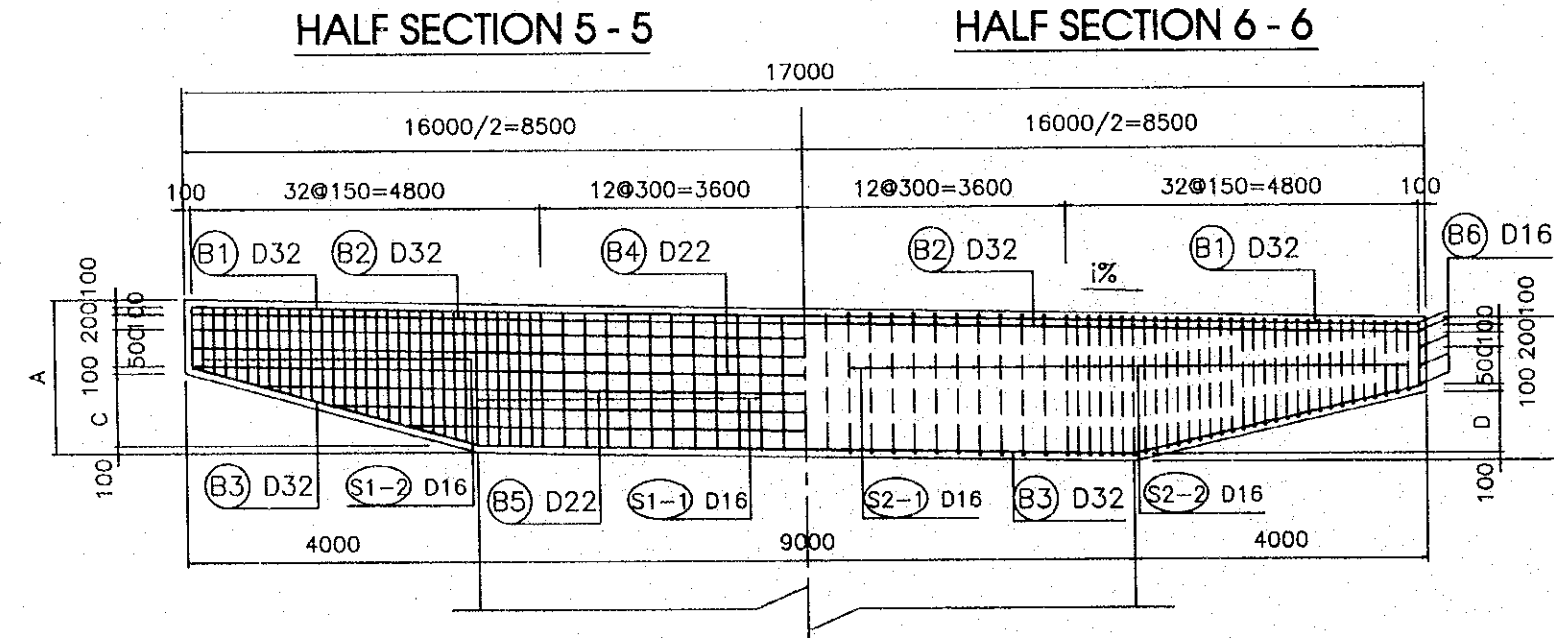
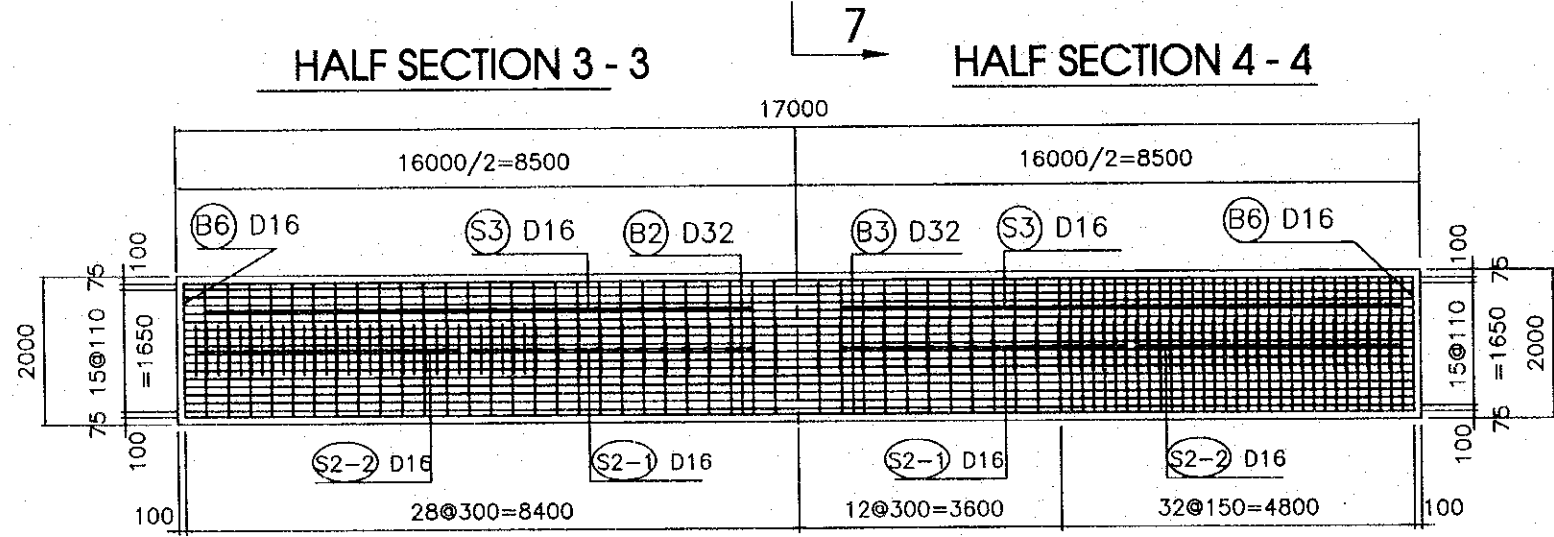
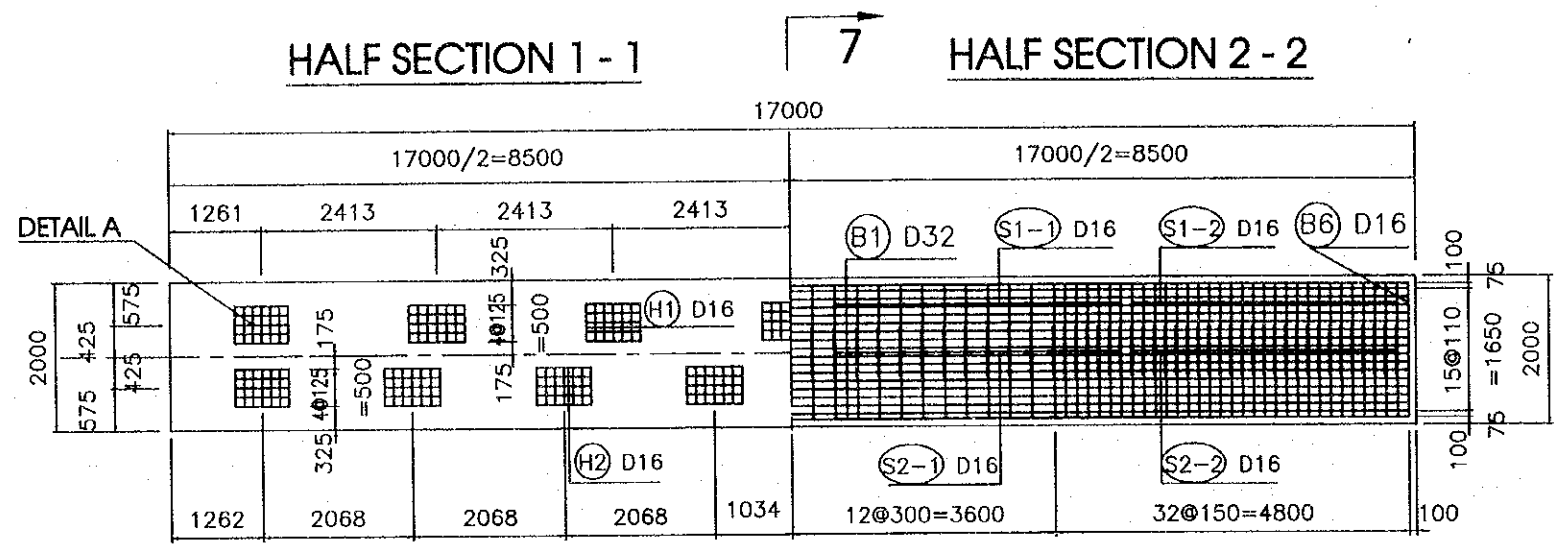
ELEVATION OF TOP PIER HEAD (M)

Bearing seat	G1		G2		G3		G4		G5		G6		G7		G8		
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	
Elevation	12.193	12.193	12.276	12.290	12.358	12.386	12.441	12.482	12.524	12.579	12.607	12.676	12.689	12.772	12.772		

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE 	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.14	

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-36	SHEET No.
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BAR ARRANGEMENT OF P&L (1)



DIMENSIONS OF PIERS

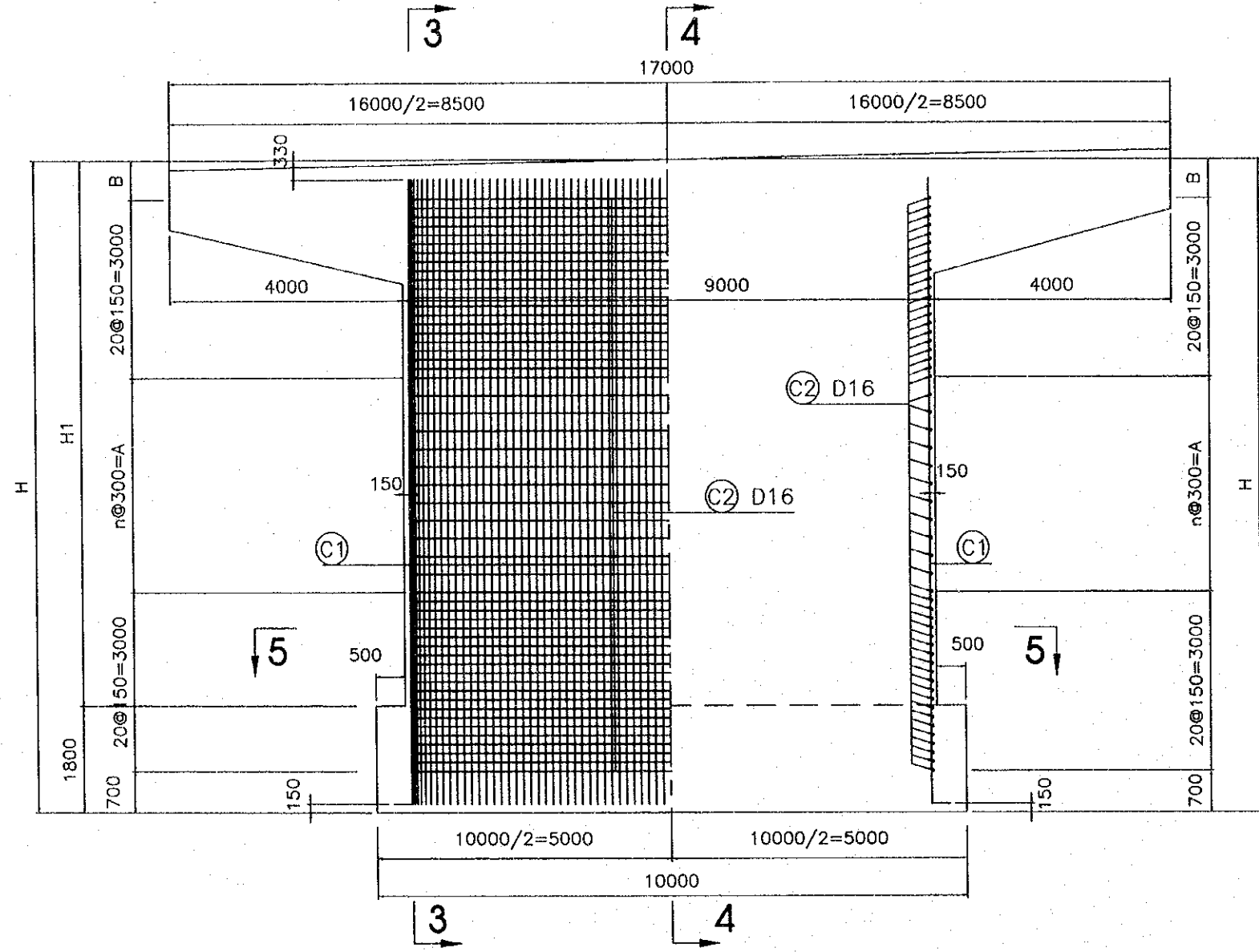
PIERS	A (mm)	B (mm)	C (mm)	D (mm)	i%
P&L	2160	1840	1060	740	4.0

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i>
DATE 2000. 11. 17		

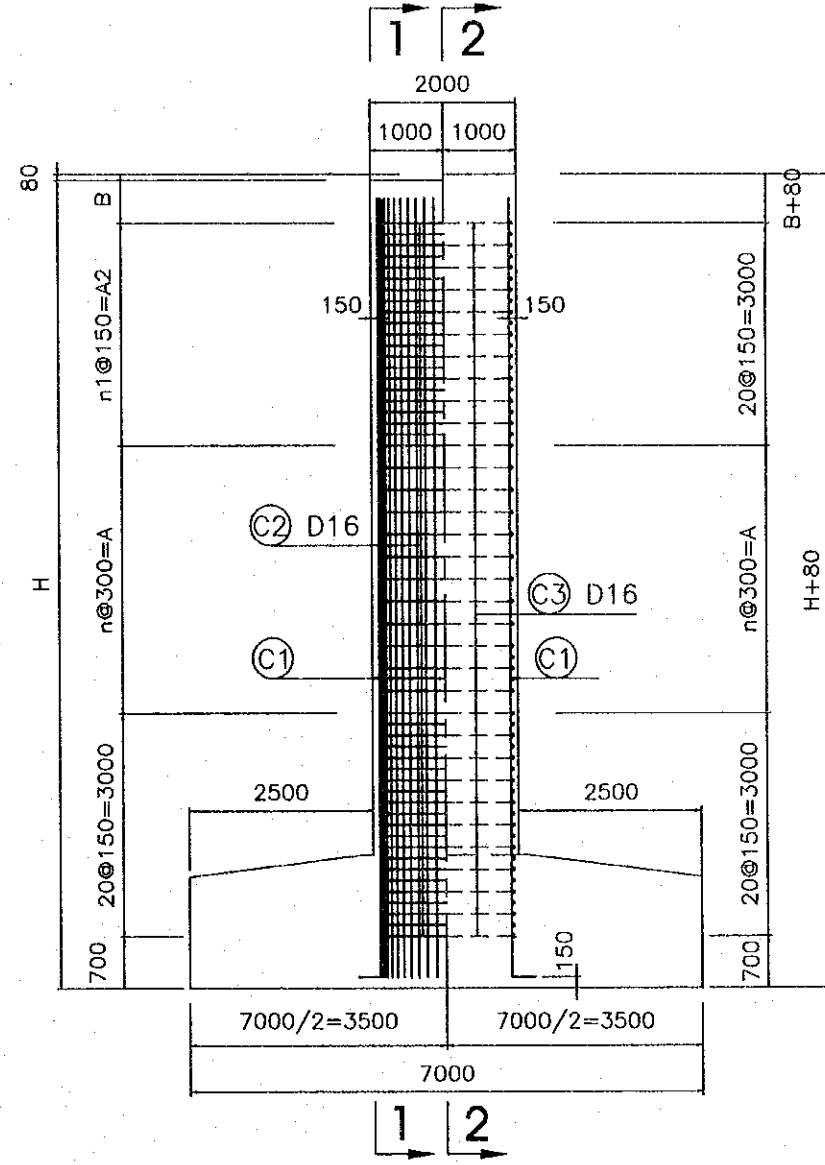
PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-37	SHEET No.
BAR ARRANGEMENT OF P6L (2)			

HALF SECTION 1 - 1

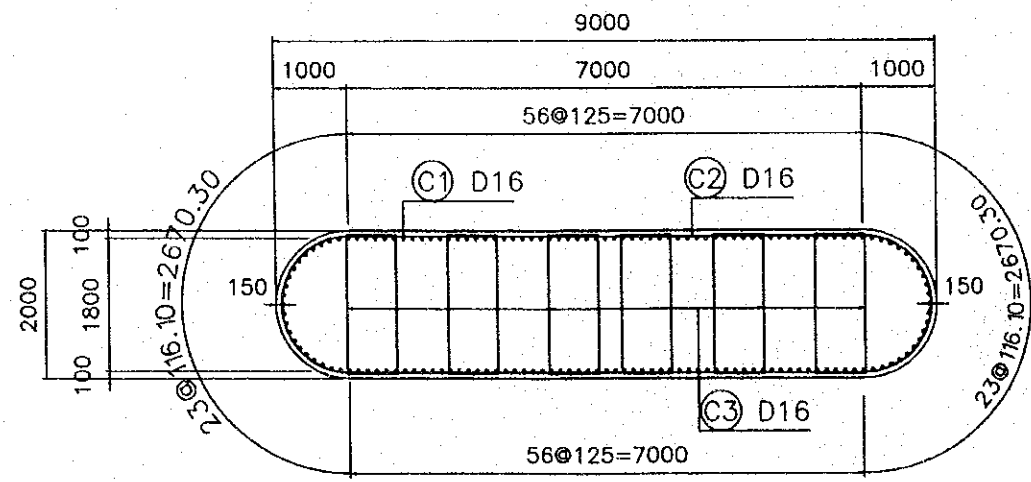
HALF SECTION 2 - 2



HALF SECTION 3 - 3 HALF SECTION 4 - 4



SECTION 5 - 5



DIMENSION OF PIERS

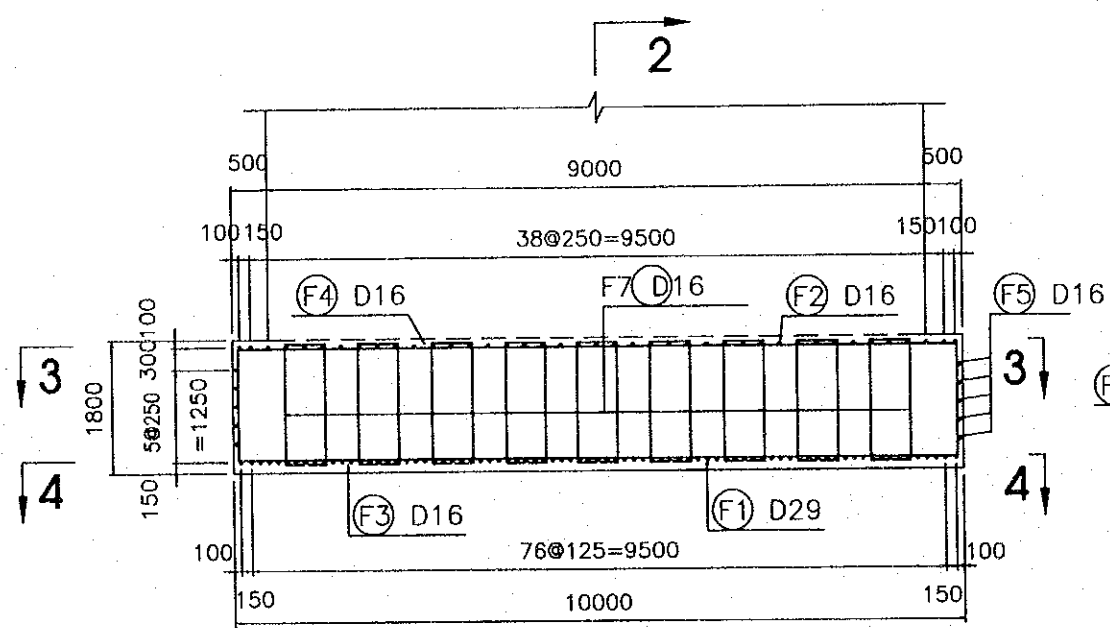
ITEMS	H(mm)	H1(mm)	A(mm)	B(mm)	n
PIER	11300	9500	3900	700	13
P6L	11300	9500	3900	700	13

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NITABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 11. 15	

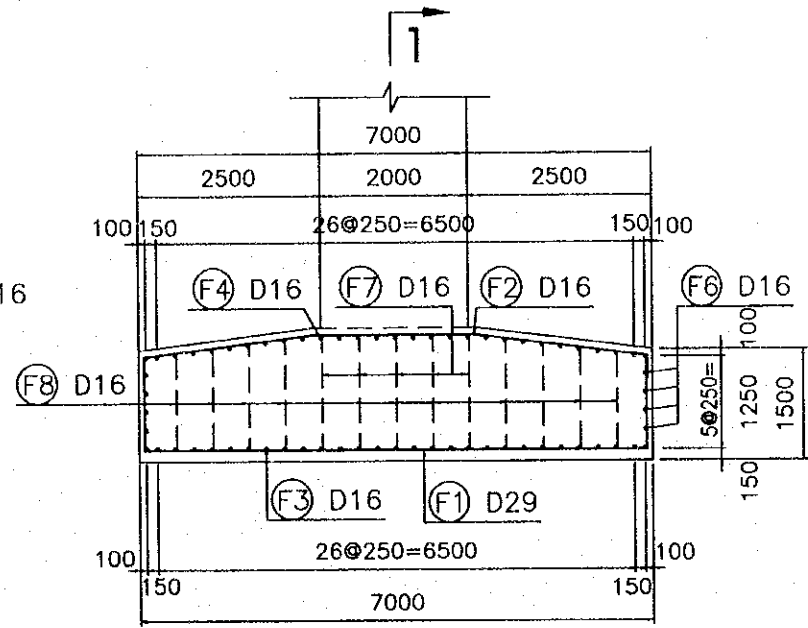
PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-38	SHEET No.
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BAR ARRANGEMENT OF PSL (3)

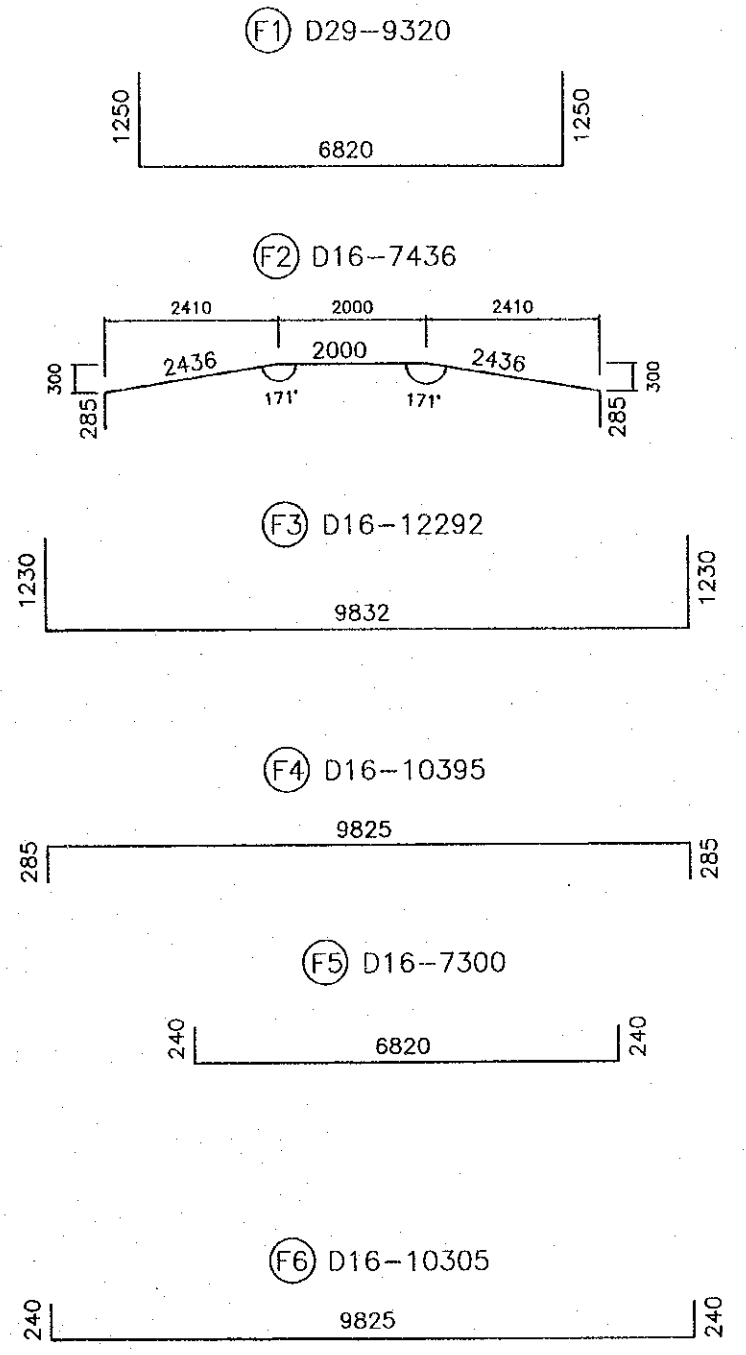
SECTION 1 - 1



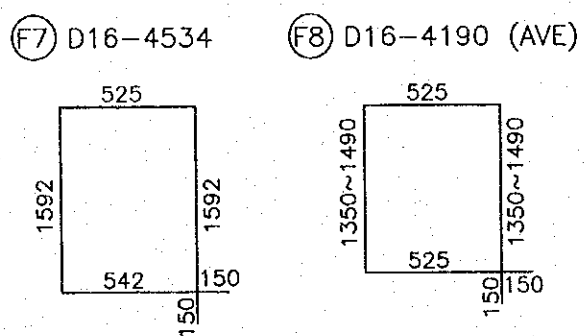
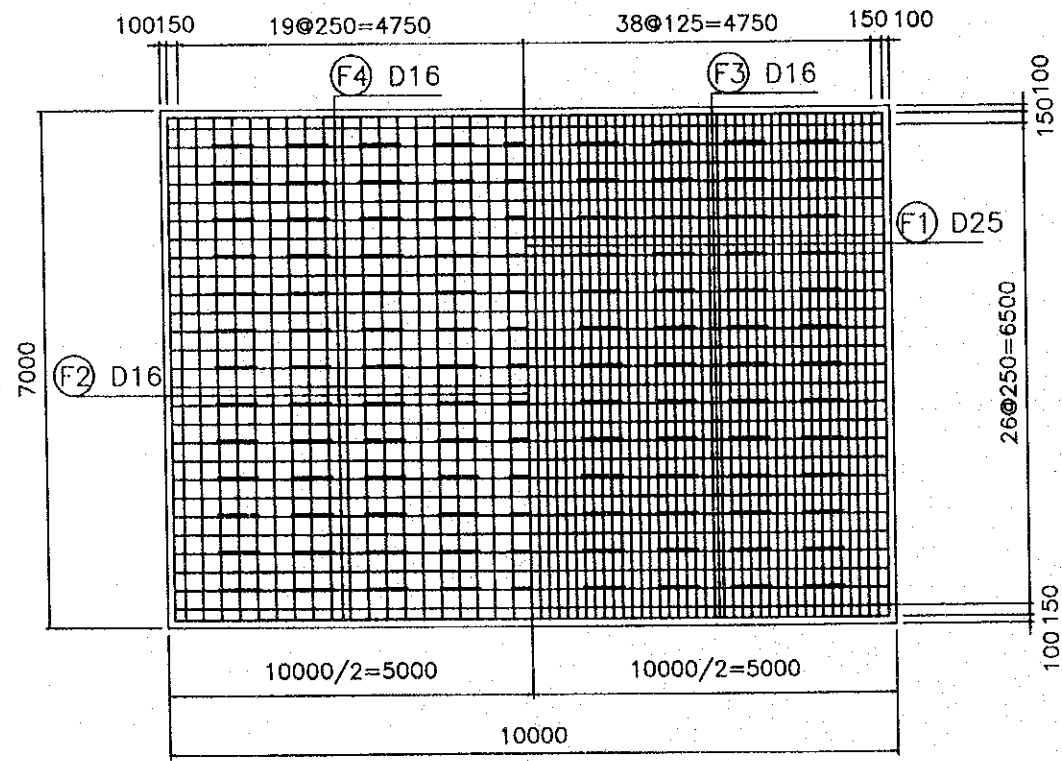
SECTION 2 - 2



LIST OF REINFORCING BARS FOR FOOTING



HALF SECTION 3 - 3 HALF SECTION 4 - 4



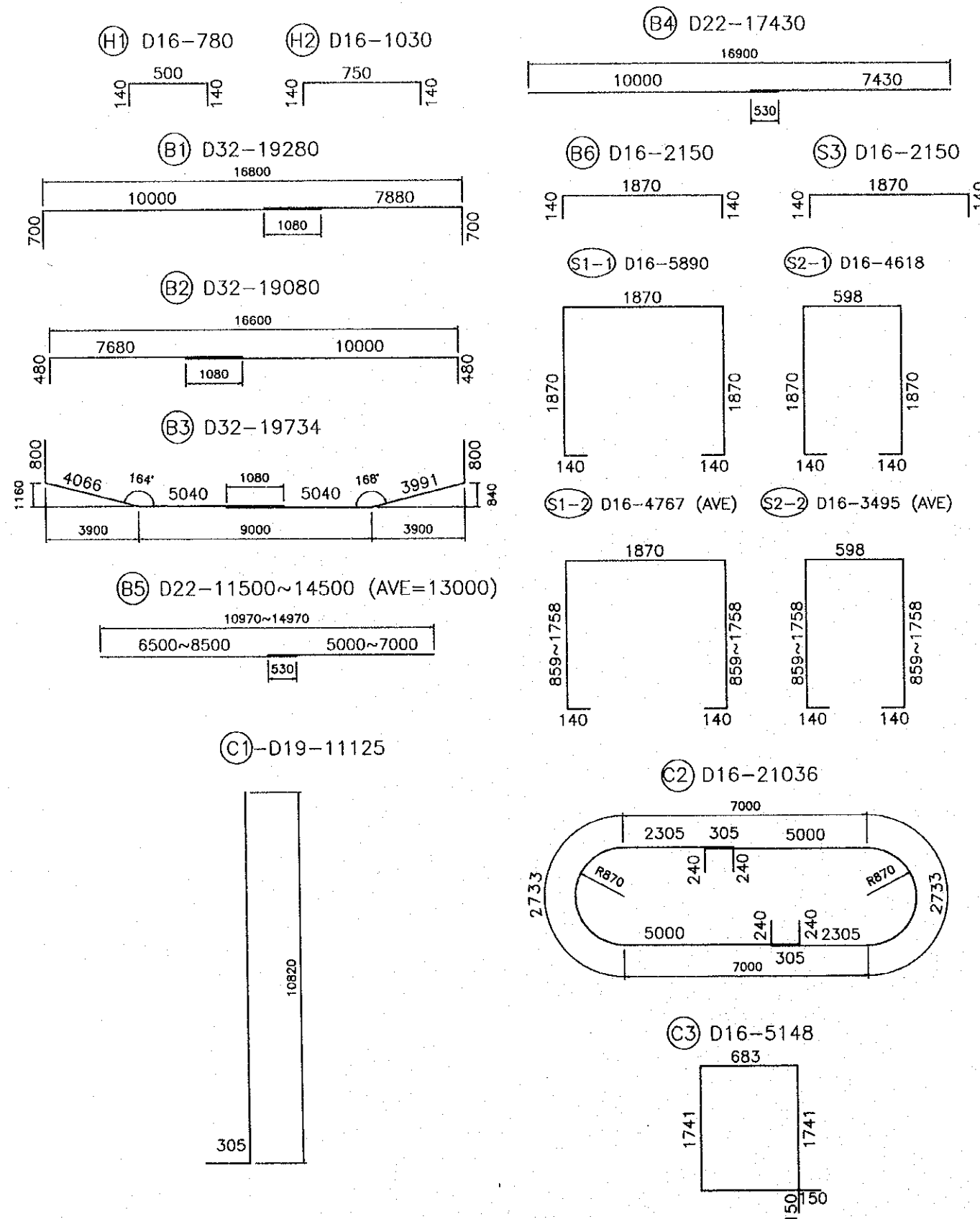
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THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-39	

BAR ARRANGEMENT OF PBL (4)

LIST OF REINFORCING BARS FOR BEAM AND COLUMN



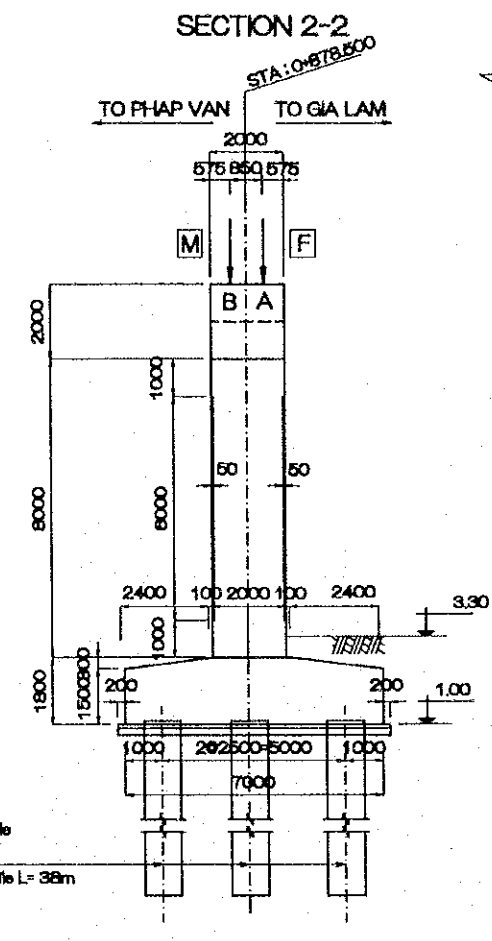
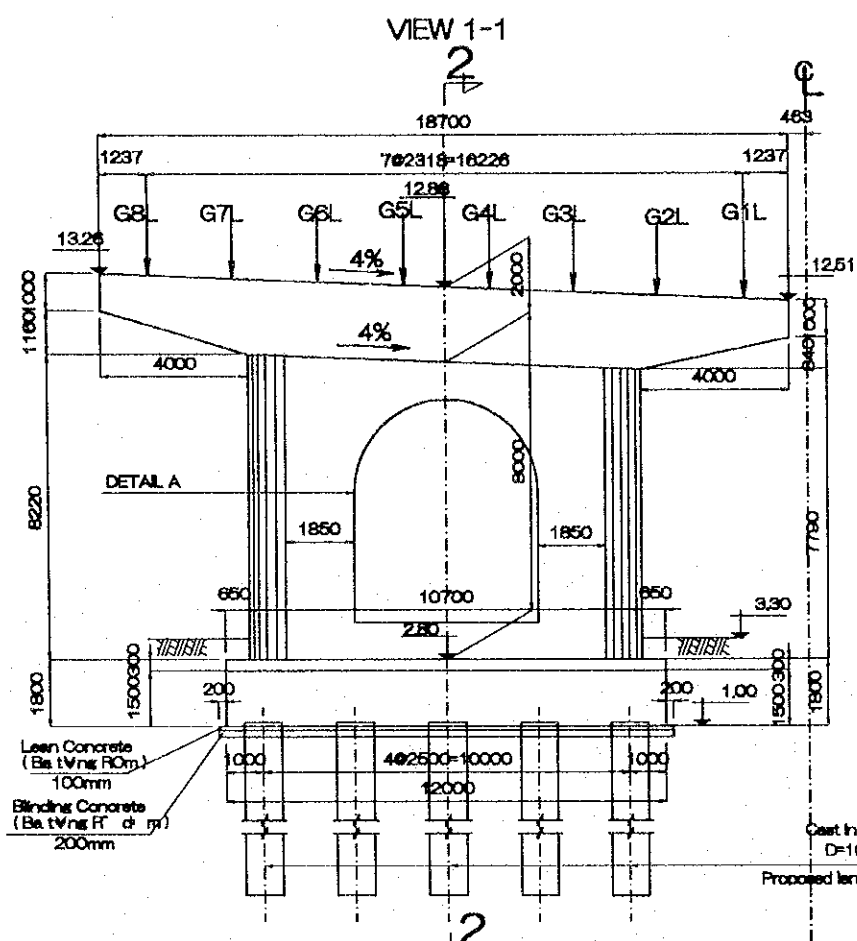
BAR ARRANGEMENT OF P6L

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D16	780	105	1.56	127.76
	H2	[Diagram]	D16	1030	75	1.56	120.51
	B1	[Diagram]	D32	19280	18	6.23	2162.06
	B2	[Diagram]	D32	19080	18	6.23	2139.63
	B3	[Diagram]	D32	19737	18	6.23	2213.31
	B4	[Diagram]	D22	17430	6	3.04	317.92
	B5	[Diagram]	D22	13000	6	3.04	237.12
	B6	[Diagram]	D16	2150	10	1.56	33.54
	S1-1	[Diagram]	D16	5890	36	1.56	330.78
	S1-2	[Diagram]	D16	4767	50	1.56	371.83
STEM	S2-1	[Diagram]	D16	4618	36	1.56	259.35
	S2-2	[Diagram]	D16	3495	60	1.56	327.13
FOOTING	S3	[Diagram]	D16	2150	176	1.56	590.30
	C1	[Diagram]	D19	11125	158	2.25	3954.94
	C2	[Diagram]	D16	21036	54	1.56	1772.07
	C3	[Diagram]	D16	5148	132	1.56	1060.08
	F1	[Diagram]	D29	9320	79	5.04	3710.85
	F2	[Diagram]	D16	7436	41	1.56	475.61
	F3	[Diagram]	D16	12292	29	1.56	556.09
	F4	[Diagram]	D16	10395	29	1.56	470.27
TOTAL	F5	[Diagram]	D16	7300	10	1.56	113.88
	F6	[Diagram]	D16	10305	8	1.56	128.61
	F7	[Diagram]	D16	4534	45	1.56	318.29
	F8	[Diagram]	D16	4190	66	1.56	431.40
TOTAL							22,223.33
SUMMARY	D16 =						7,487.50
	D19 =						3,954.94
	D22 =						555.04
	D29 =						3,710.85
	D32 =						6,515.00

982

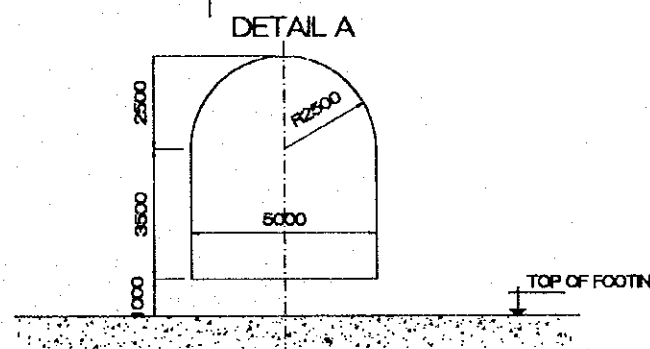
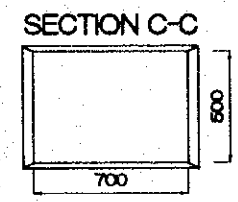
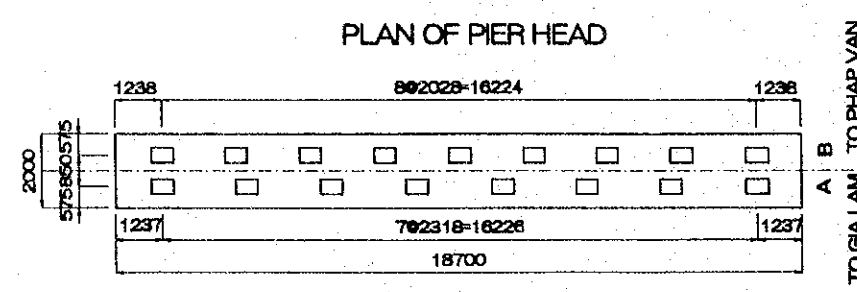
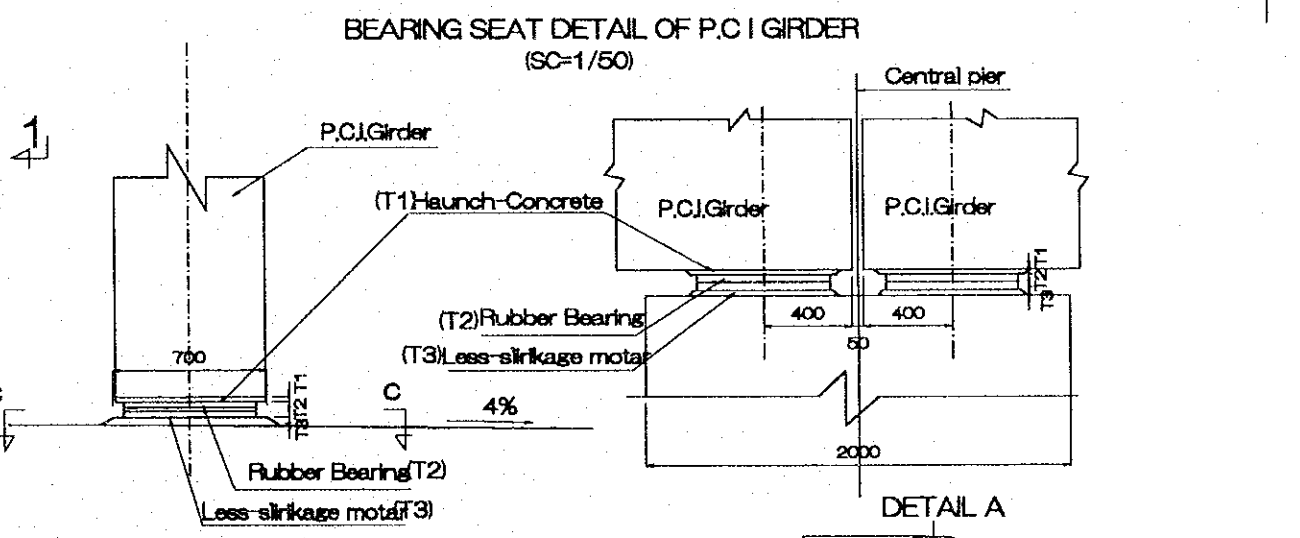
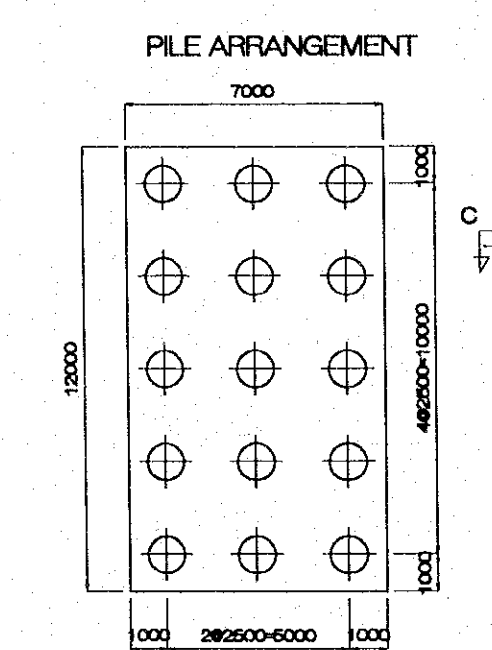
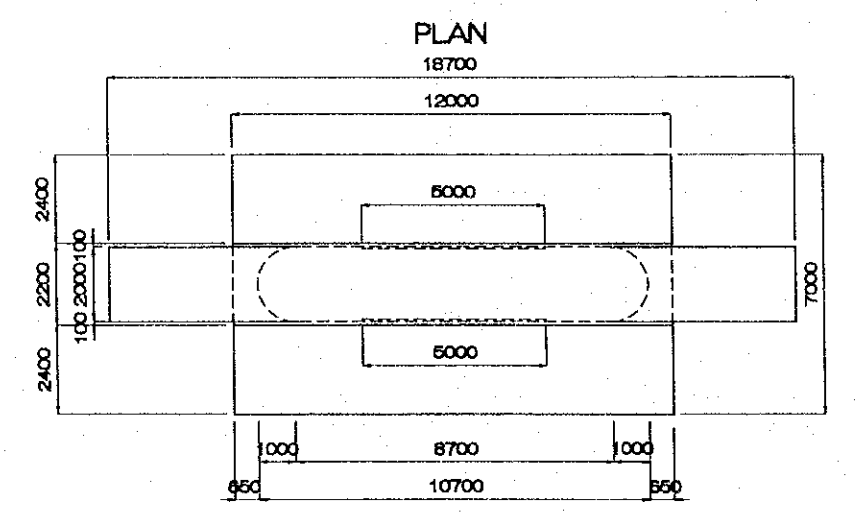
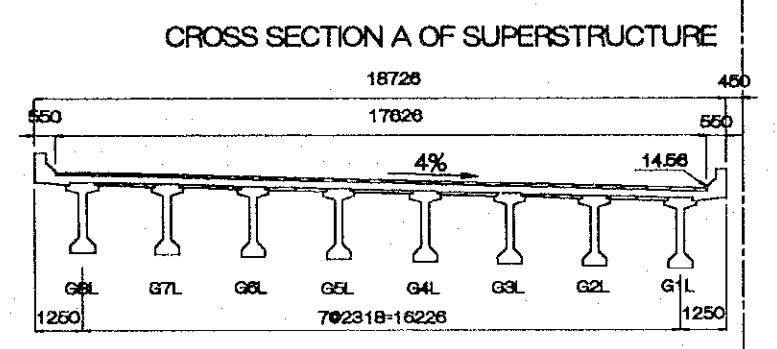
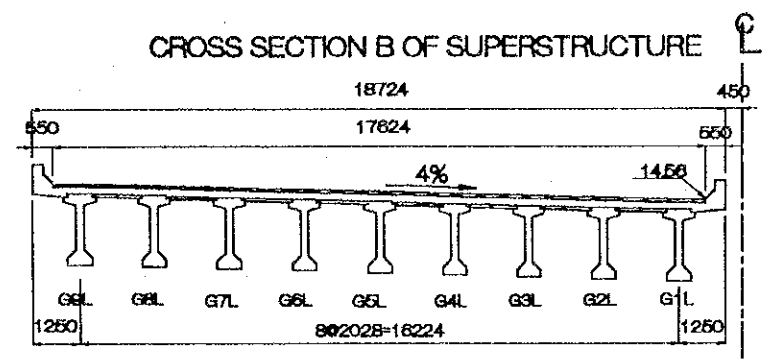
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-40	SHEET No.
DETAIL OF PIER P7L			



DEPTH OF SUPERSTRUCTURE (MM)

Condition Structure	B(MOVE)	A(FIX)
Pavement	75	75
Slab	213	213
Girder	1650	1650
Haunch (T1)	20	20
Bearing (T2)	56	36
Motor (T3)	20	31
Sub Total	2032	2025

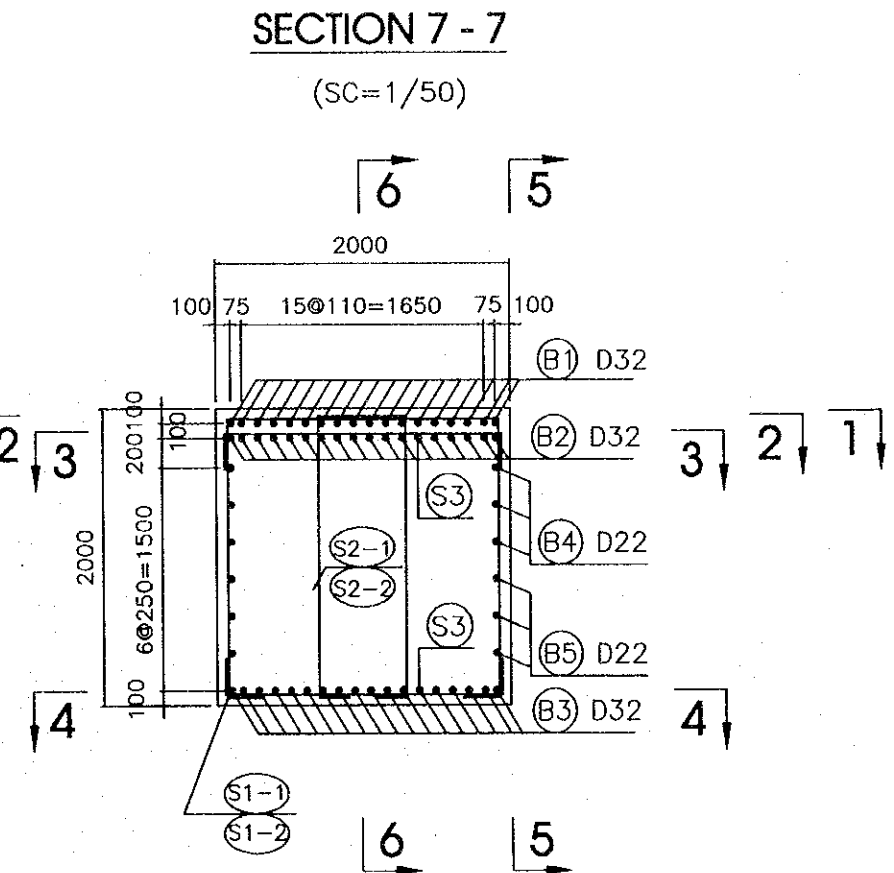
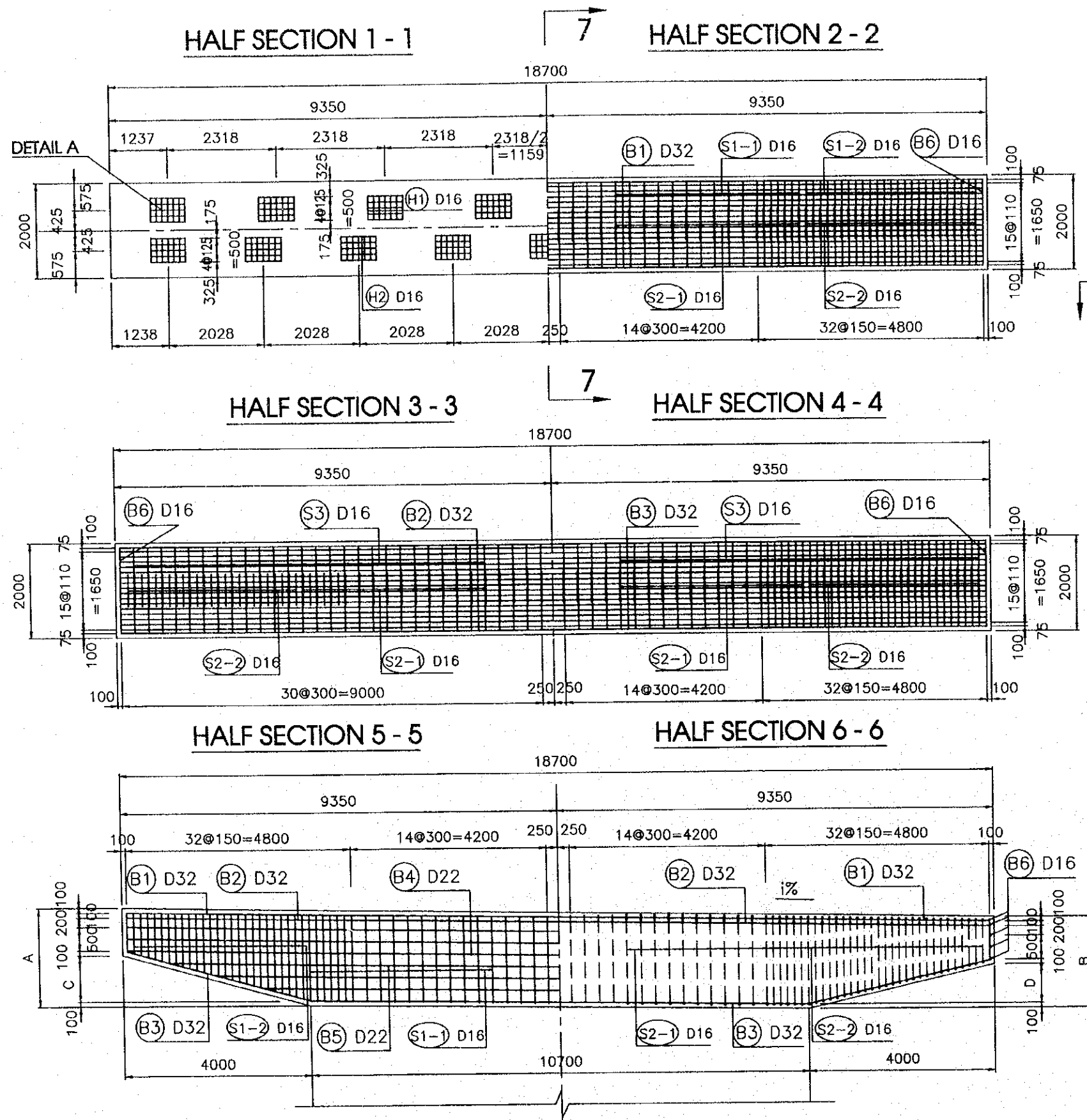


ELEVATION OF TOP PIER HEAD (M)

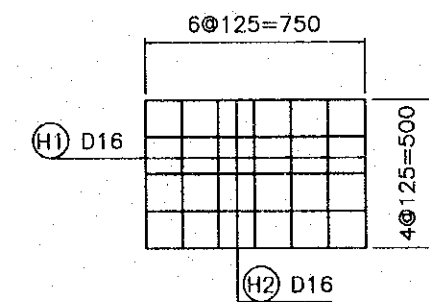
Bearing seat	G1		G2		G3		G4		G5		G6		G7		G8		G9		
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	
Elevation	12.555	12.552	12.636	12.645	12.717	12.737	12.798	12.830	12.879	12.923	12.960	13.016	13.041	13.108	13.122	13.201	13.204		

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY NAME SIGNATURE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SIGNATURE
PROJECT RED RIVER BRIDGE (HANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-41	
BAR ARRANGEMENT OF P7L (1)			



DETAIL A
(SC=1/25)



DIMENSIONS OF PIERS

PIERS	A (mm)	B (mm)	C (mm)	D (mm)	i%
P7L	2160	1840	1060	740	4.0

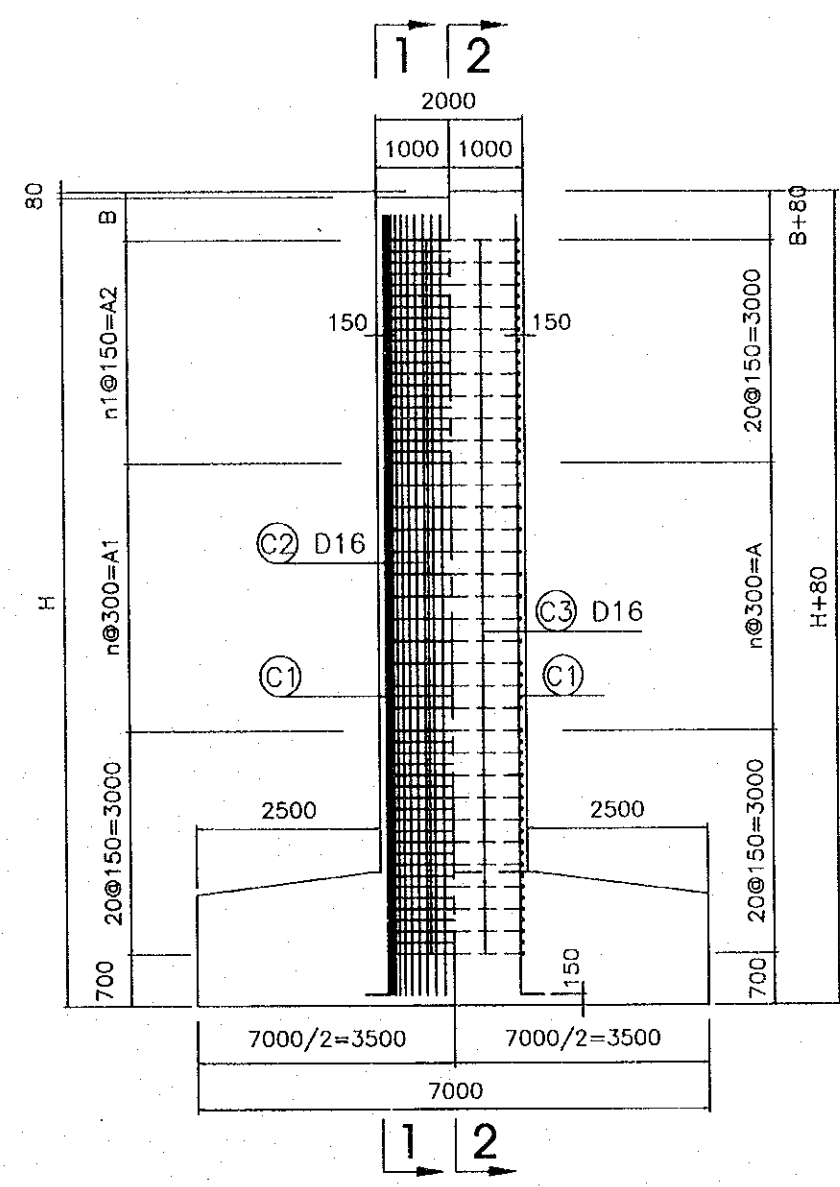
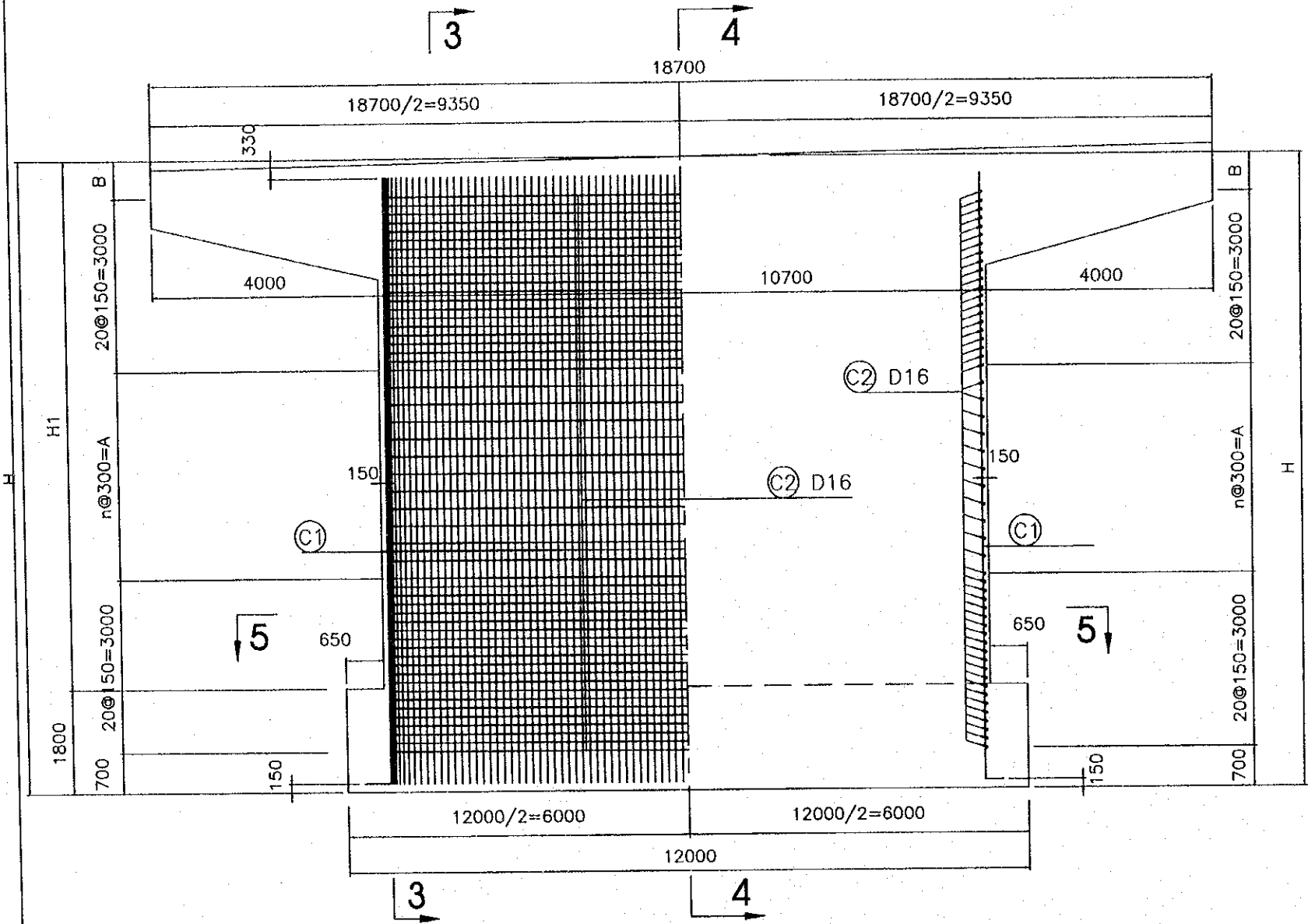
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.11.14	

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-42	SHEET No.
BAR ARRANGEMENT OF P7L (2)			

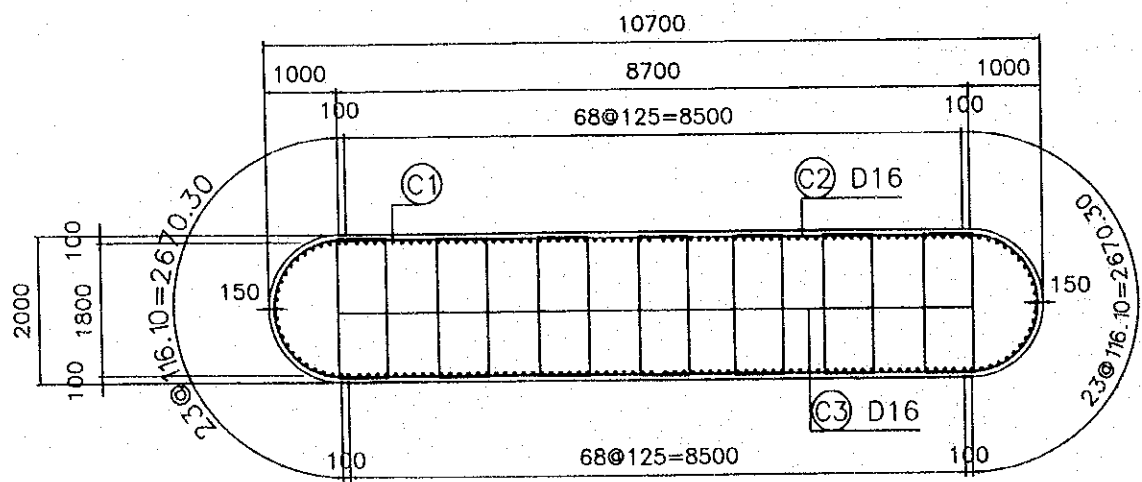
HALF SECTION 1 - 1

HALF SECTION 2 - 2

HALF SECTION 3 - 3 HALF SECTION 4 - 4



SECTION 5 - 5



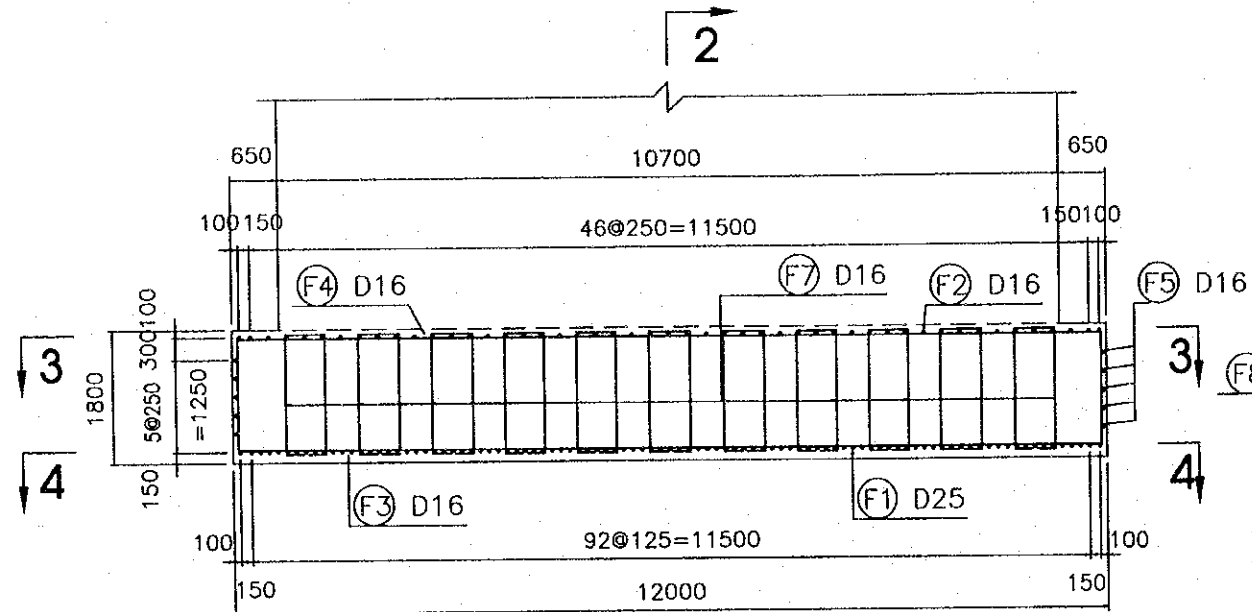
DIMENSION OF PIERS

ITEMS	H(mm)	H1(mm)	A(mm)	B(mm)	n
PIER					
P7L	11800	10000	4500	600	15

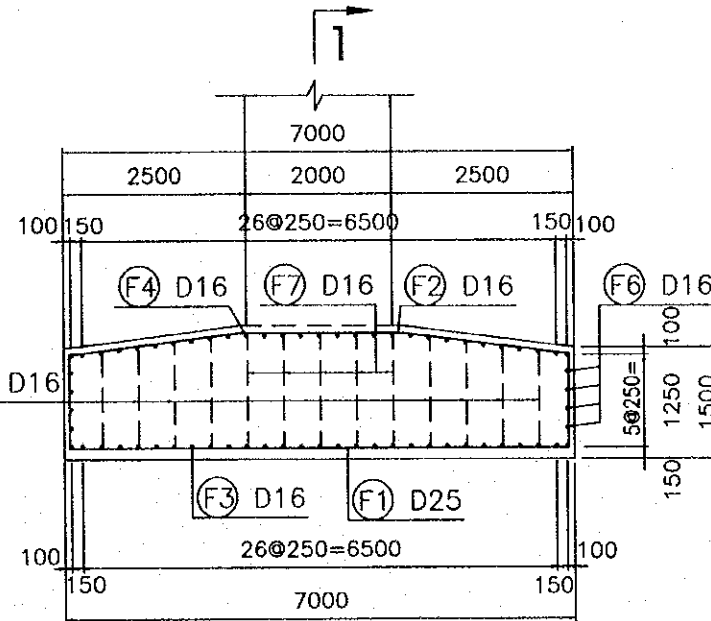
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 8. 17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-43	
BAR ARRANGEMENT OF P7L (3)			

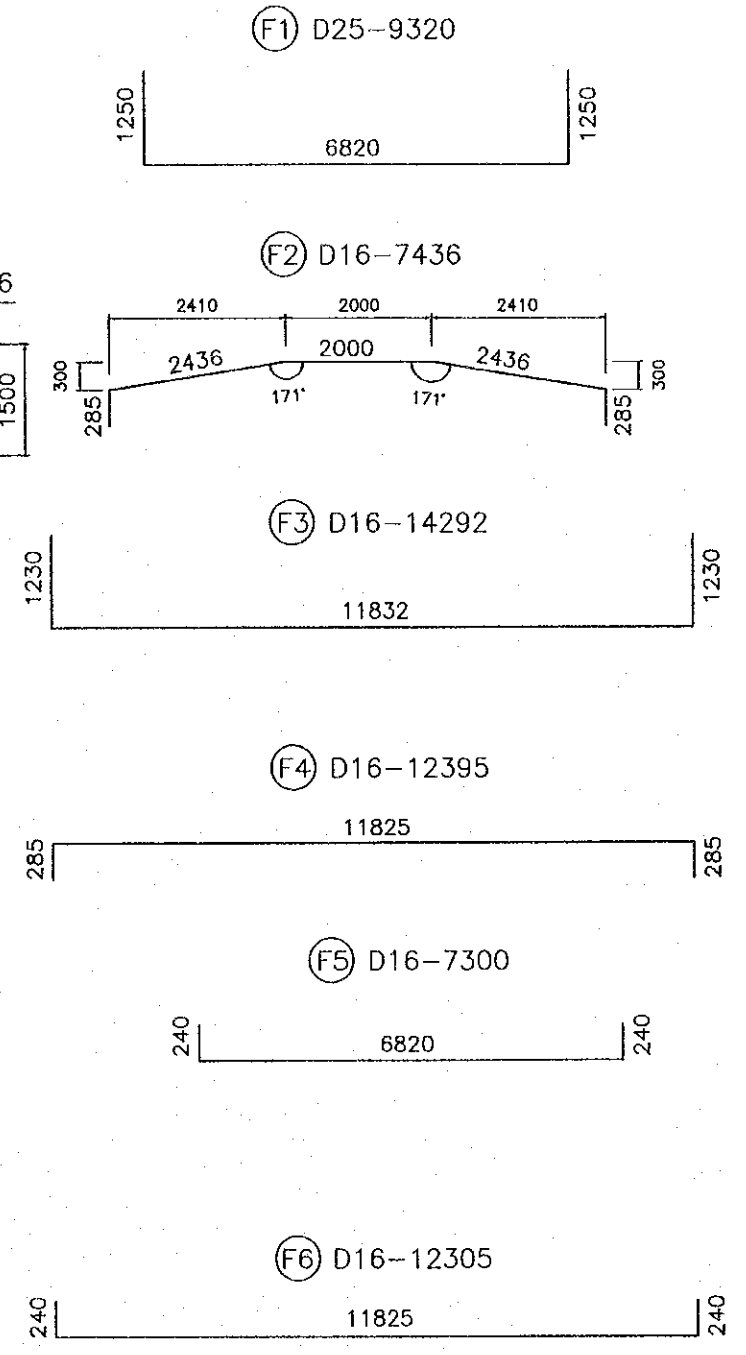
SECTION 1 - 1



SECTION 2 - 2

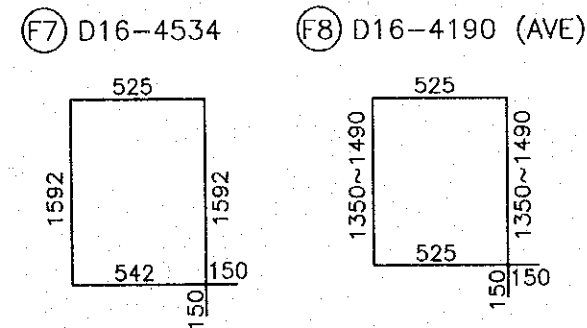
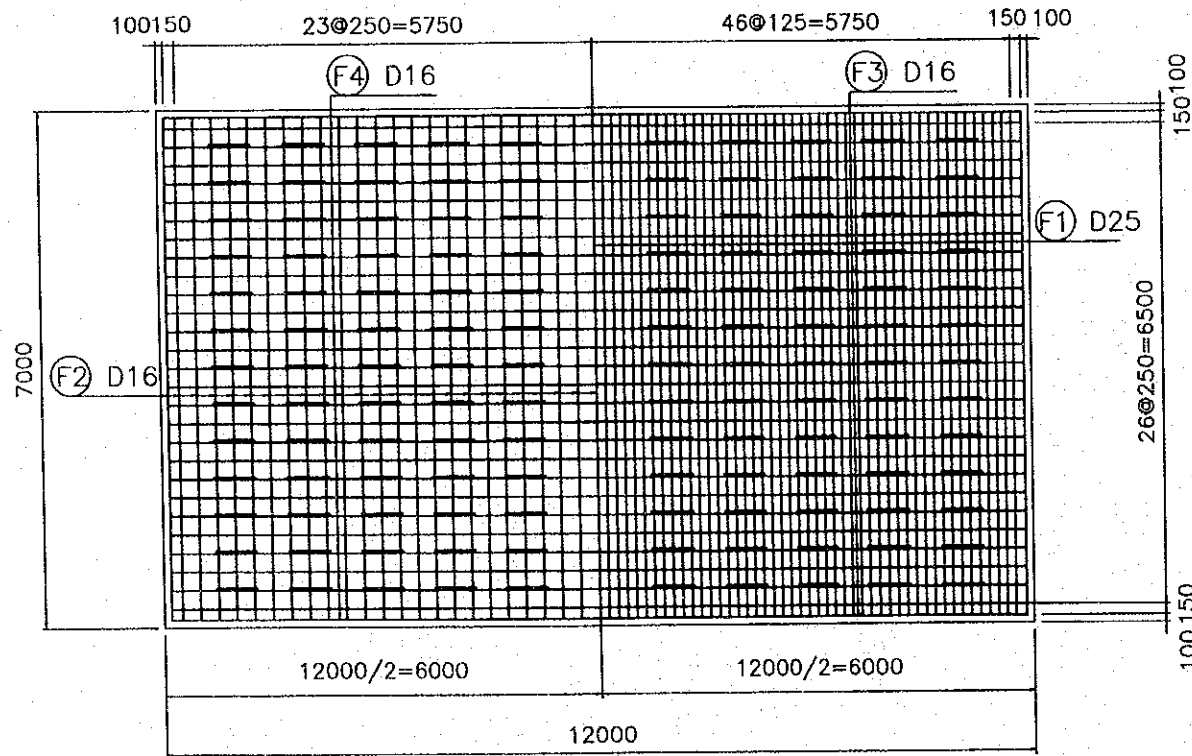


LIST OF REINFORCING BARS FOR FOOTING



HALF SECTION 3 - 3

HALF SECTION 4 - 4



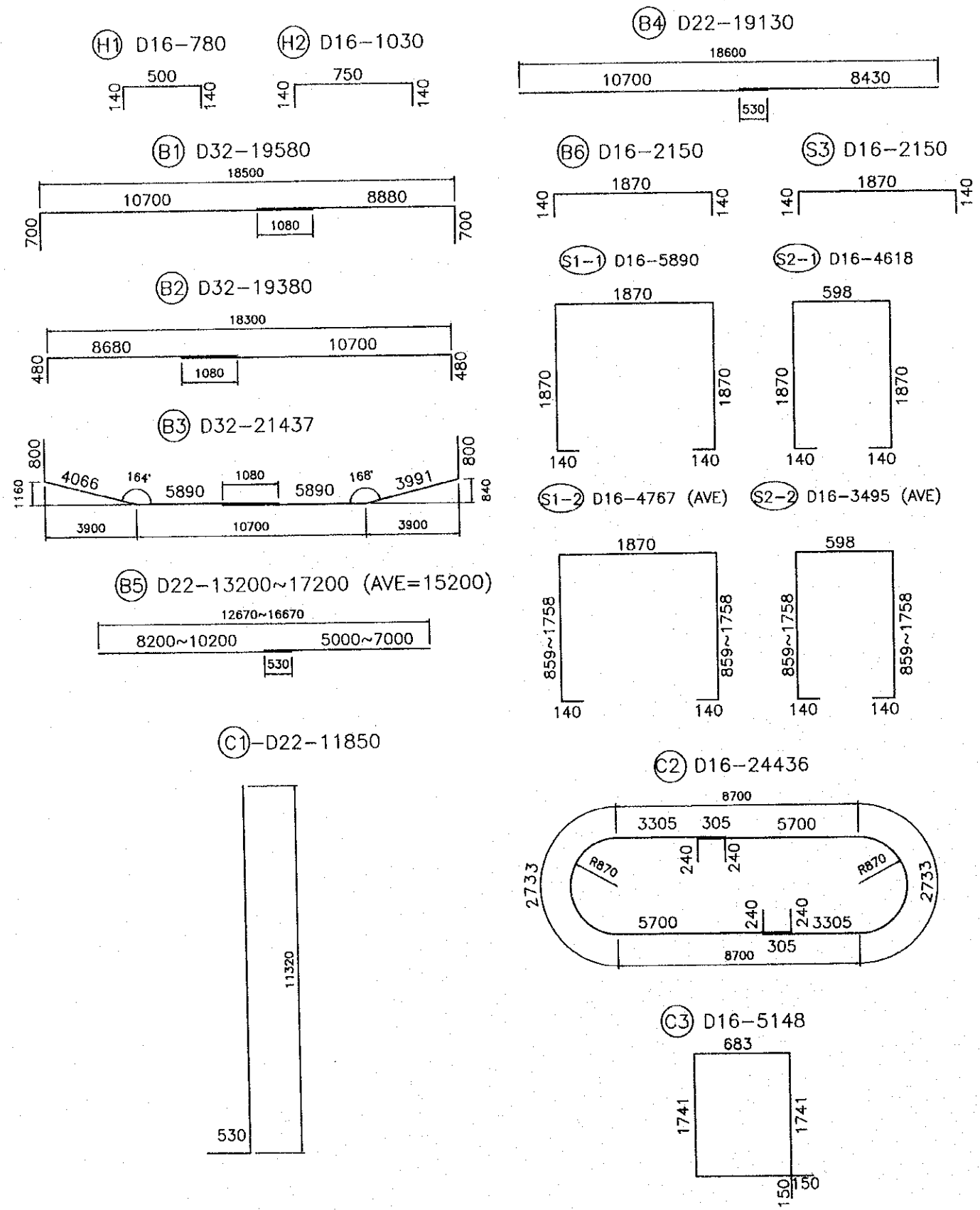
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THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.14	

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-44	SHEET No.
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BAR ARRANGEMENT OF P7L (4)

LIST OF REINFORCING BARS FOR BEAM AND COLUMN

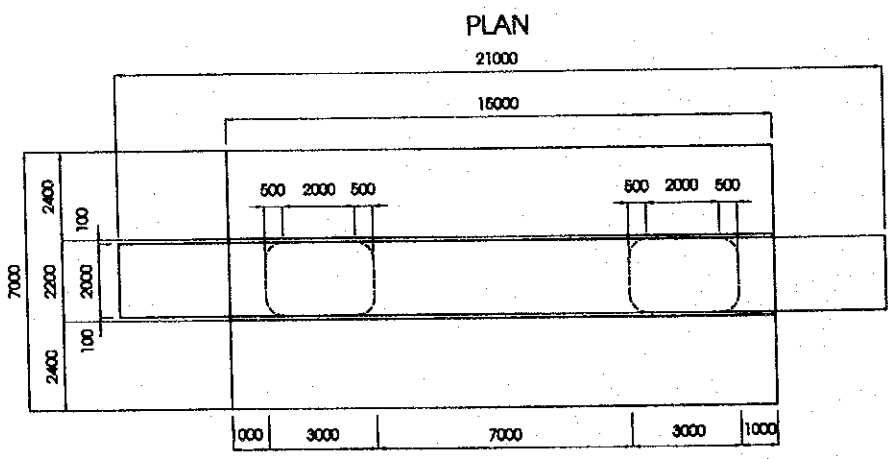
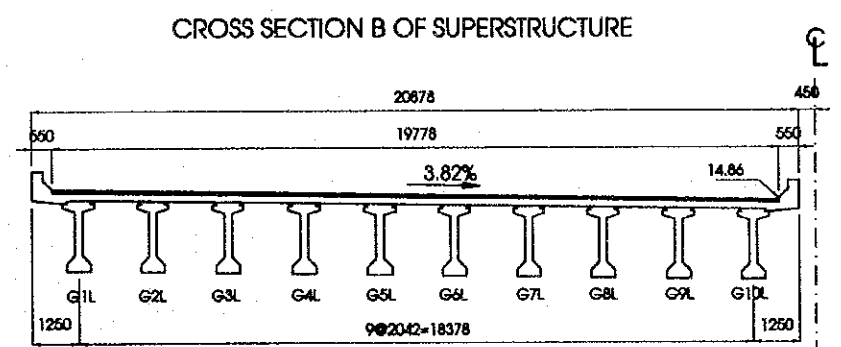
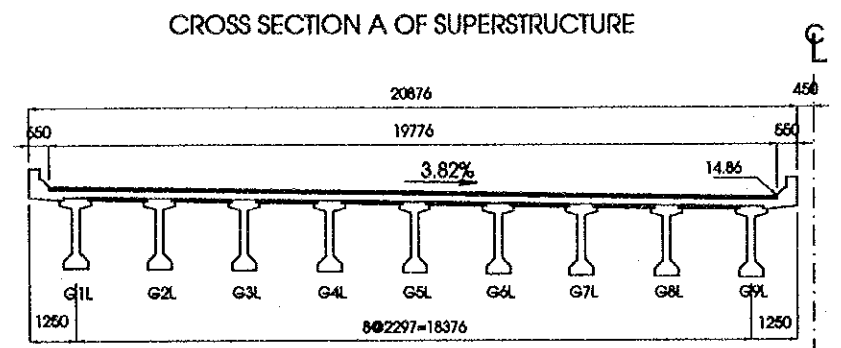
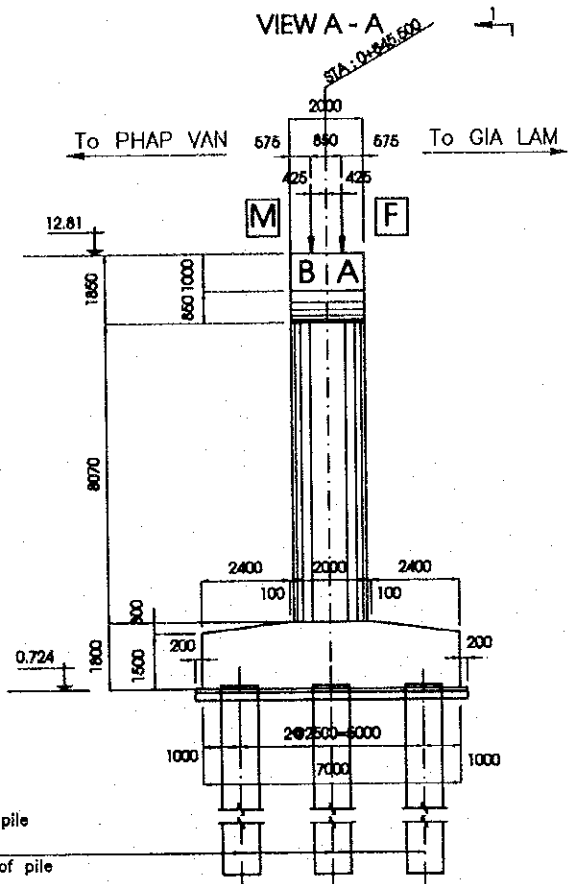
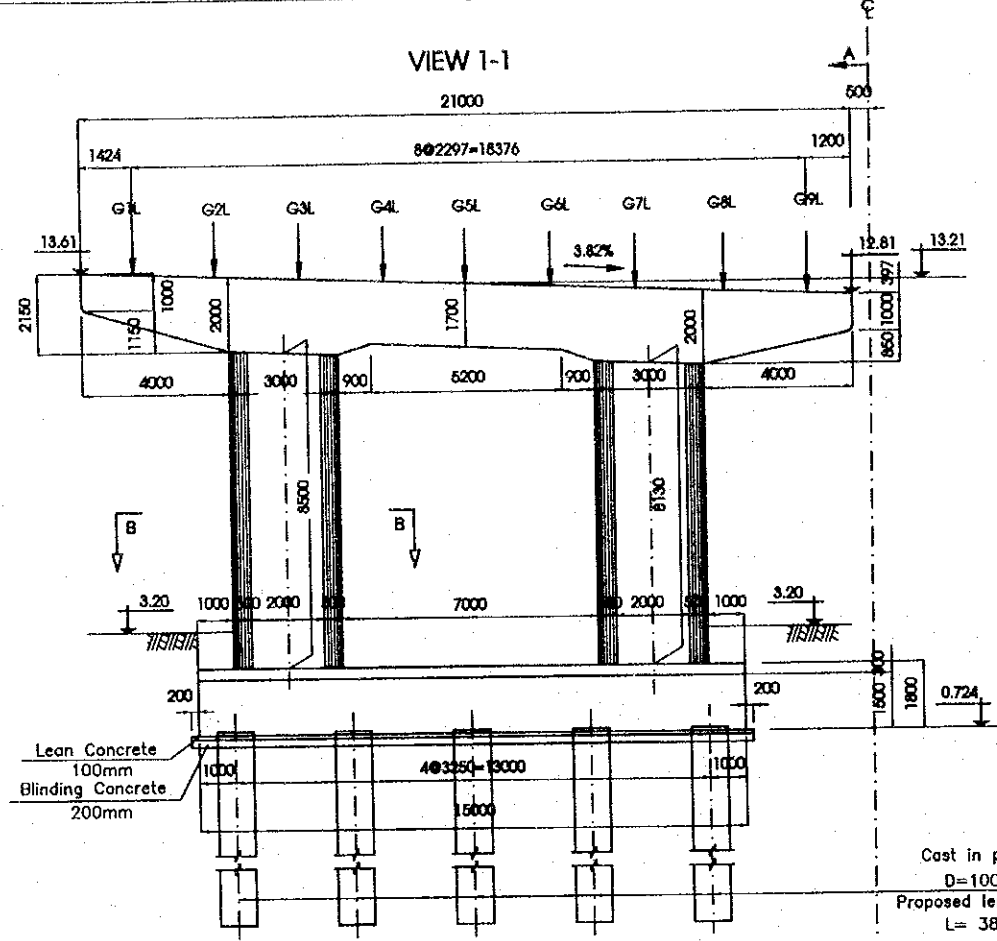


BAR ARRANGEMENT OF P7L

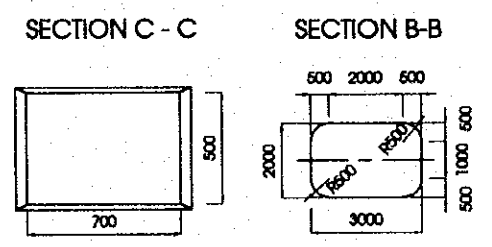
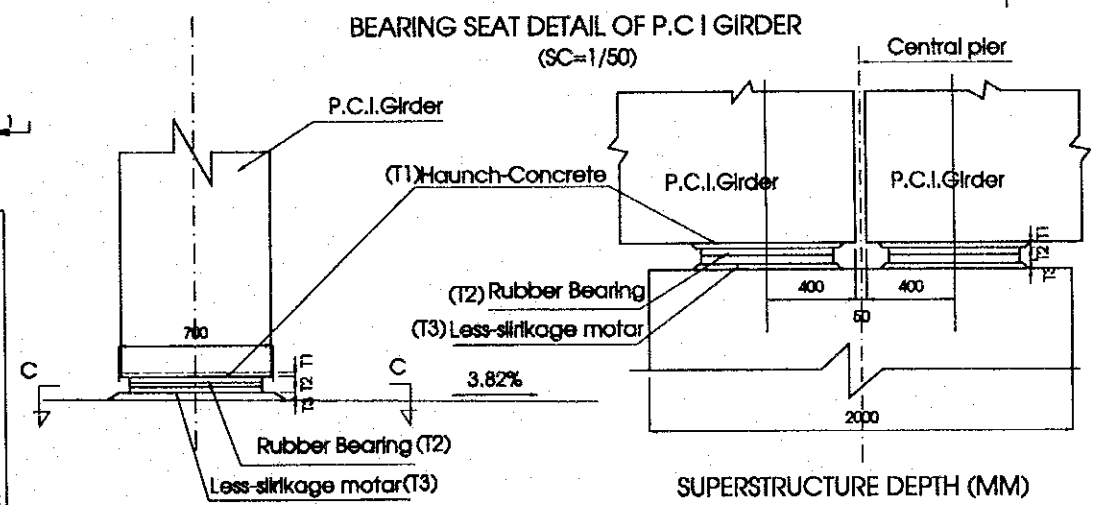
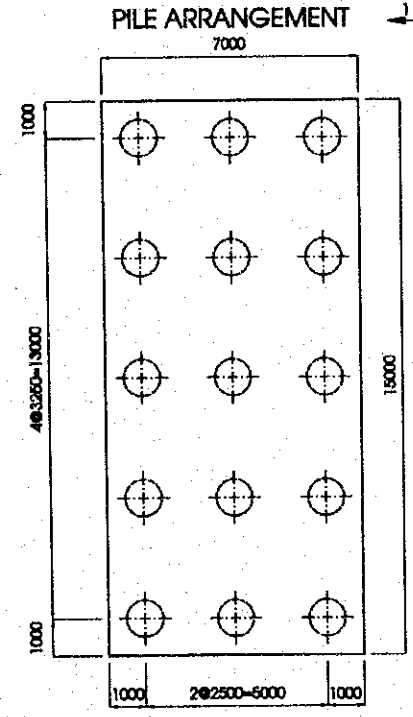
DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)	
CAP BEAM	H1	[Symbol]	D16	780	119	1.56	144.80	
	H2	[Symbol]	D16	1030	85	1.56	136.58	
	B1	[Symbol]	D32	19580	18	6.23	2195.70	
	B2	[Symbol]	D32	19380	18	6.23	2173.27	
	B3	[Symbol]	D32	21437	18	6.23	2403.95	
	B4	[Symbol]	D22	19130	6	3.04	348.93	
	B5	[Symbol]	D22	15200	6	3.04	277.25	
	B6	[Symbol]	D16	2150	10	1.56	33.54	
	S1-1	[Symbol]	D16	5890	44	1.56	404.29	
	S1-2	[Symbol]	D16	4767	50	1.56	371.83	
STEM	S2-1	[Symbol]	D16	4618	44	1.56	316.98	
	S2-2	[Symbol]	D16	3495	60	1.56	327.13	
	S3	[Symbol]	D16	2150	184	1.56	617.14	
	C1	[Symbol]	D22	11850	182	3.04	6556.37	
	C2	[Symbol]	D16	24436	56	1.56	2134.73	
	C3	[Symbol]	D16	5148	140	1.56	1124.32	
	FOOTING	F1	[Symbol]	D25	9320	95	3098	3523.89
		F2	[Symbol]	D16	7436	49	1.56	568.41
F3		[Symbol]	D16	14292	29	1.56	646.57	
F4		[Symbol]	D16	12395	29	1.56	560.75	
F5		[Symbol]	D16	7300	10	1.56	113.88	
F6		[Symbol]	D16	12305	8	1.56	153.57	
F7		[Symbol]	D16	4534	55	1.56	389.02	
F8		[Symbol]	D16	4190	88	1.56	575.20	
TOTAL							26,098.09	
SUMMARY	D16 =						8,618.73	
	D22 =						7,182.55	
	D25 =						3,523.89	
	D32 =						6,772.92	

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT RED RIVER BRIDGE (HUANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.05.19

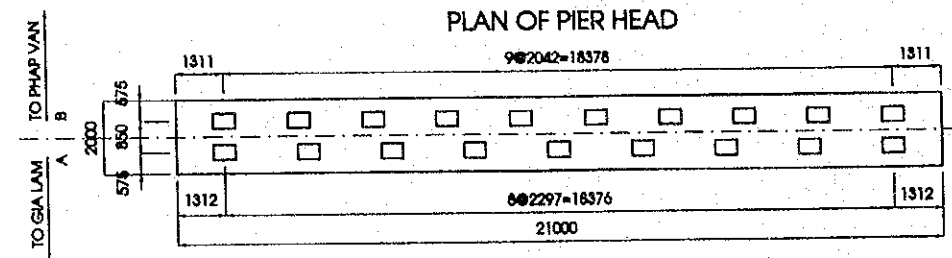
PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-45	SHEET No.
DETAIL OF PIER P8L			



Cast in place pile
D=1000mm
Proposed length of pile
L= 38m



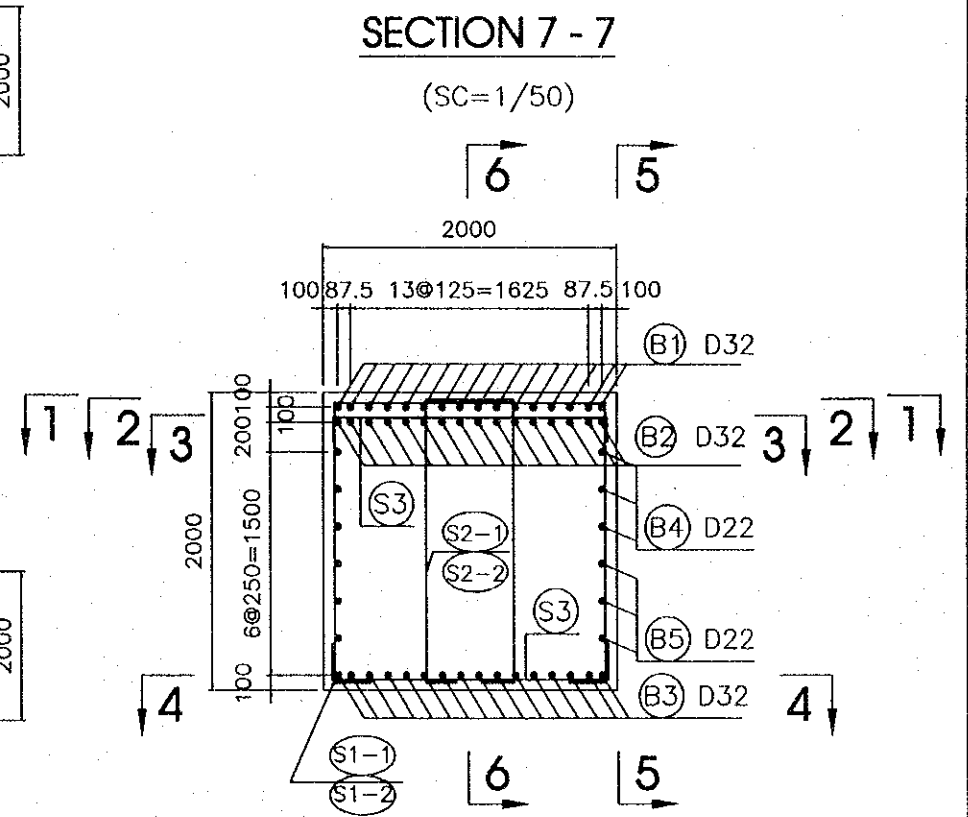
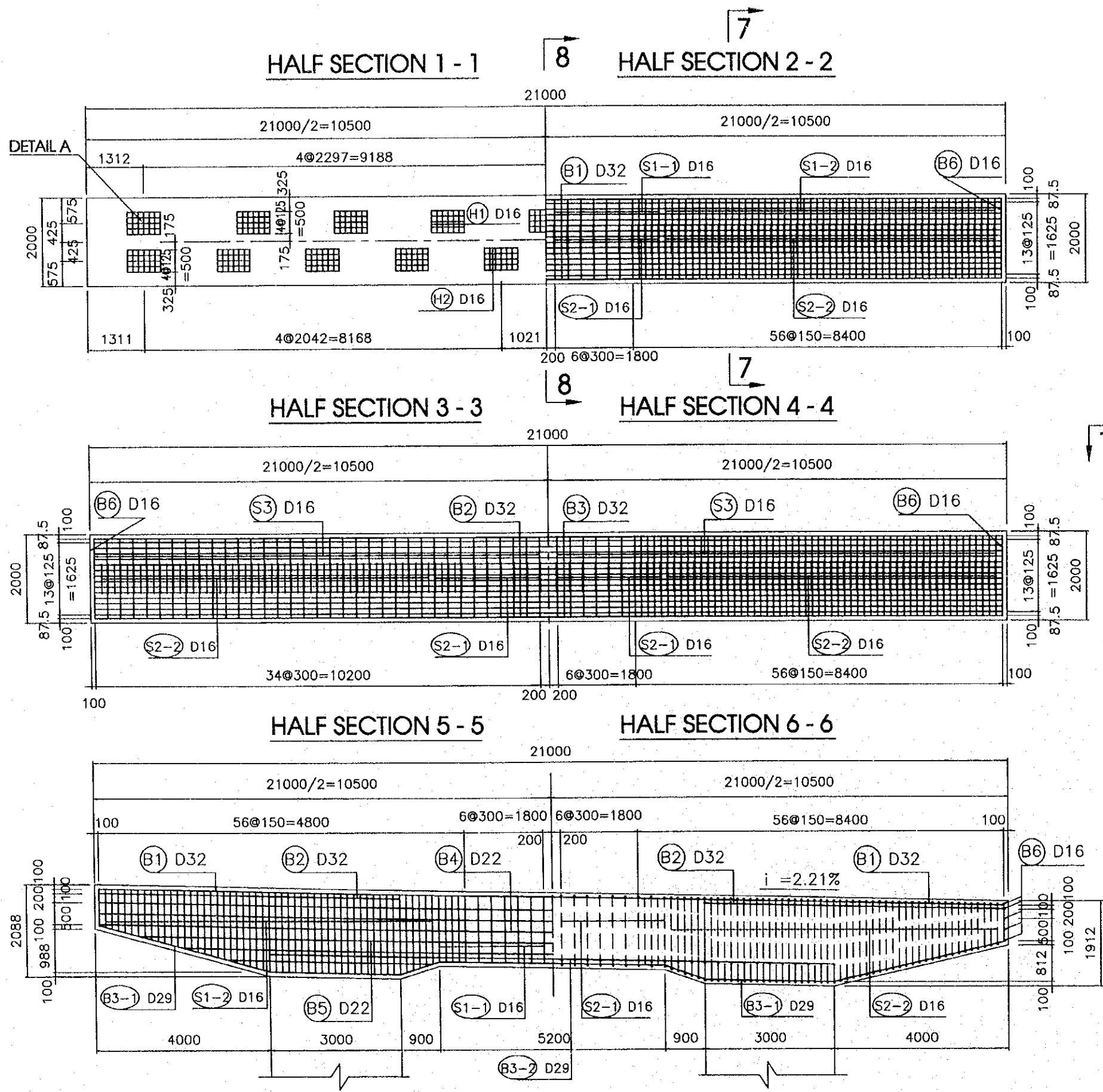
	MOVE		FIXED	
	B	A	B	A
Pavement	75	75		
Slab	212	212		
Girder	1650	1650		
Haunch T1	20	20		
Bearing T2	54	36		
Mortar T3	20	31		
Sub Total	2031	2024		



Bearing sect	G1		G2		G3		G4		G5		G6		G7		G8		G9		G10	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A		
Elevation	12.764	12.771	12.842	12.859	12.920	12.947	12.997	13.035	13.075	13.123	13.153	13.221	13.230	13.300	13.308	13.388	13.386	13.476	13.463	

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.04.17	

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-46	SHEET No.
BAR ARRANGEMENT OF PBL (1)			



240

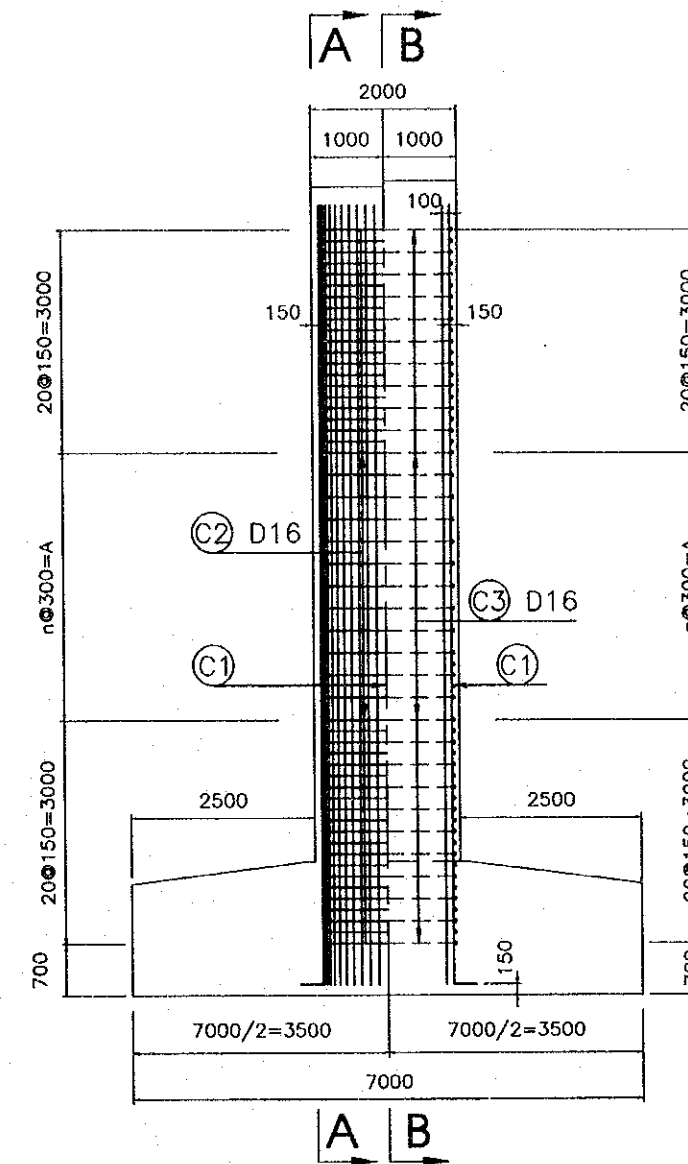
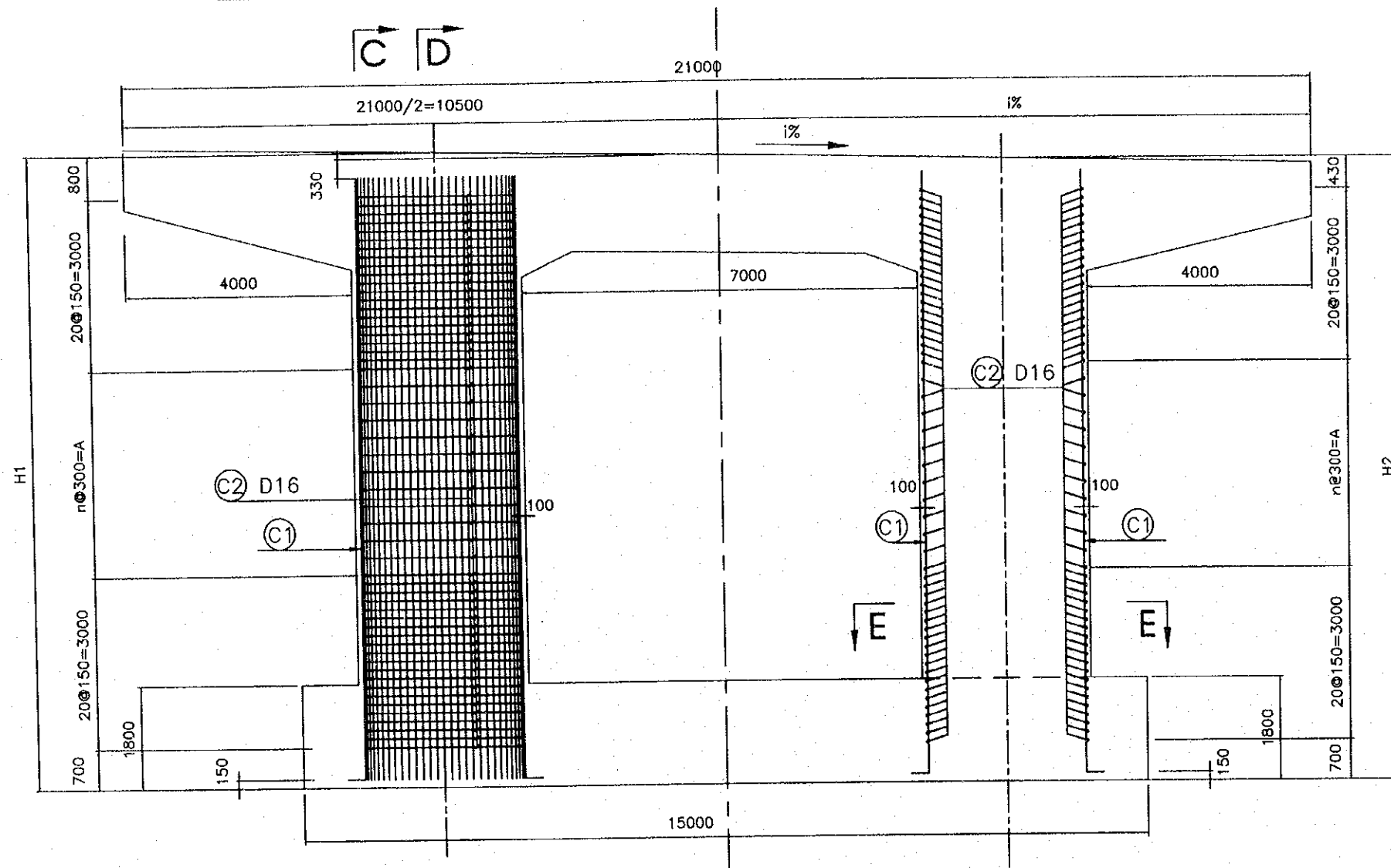
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.8.14	

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-47	SHEET No.
BAR ARRANGEMENT P8L (2)			

HALF SECTION A - A

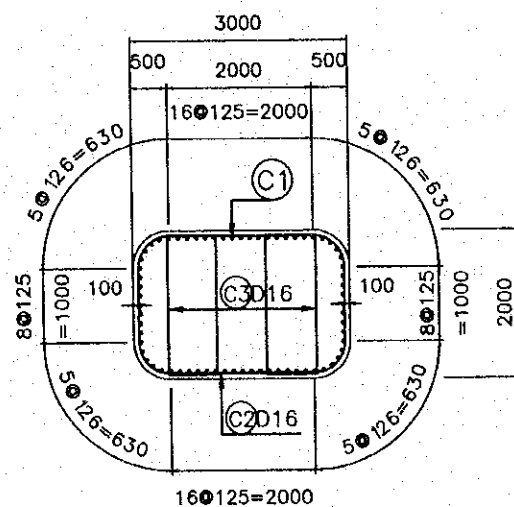
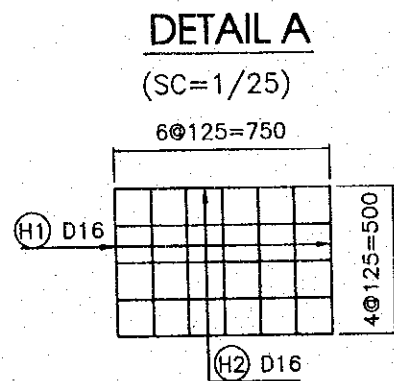
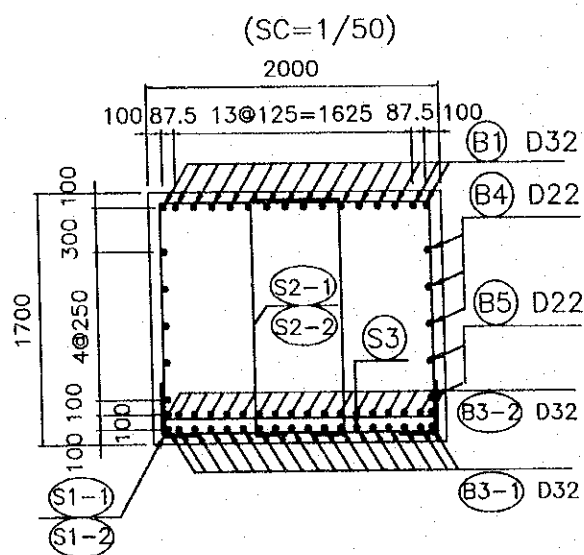
HALF SECTION B - B

HALF SECTION C - C HALF SECTION D - D



SECTION 8 - 8

SECTION E - E



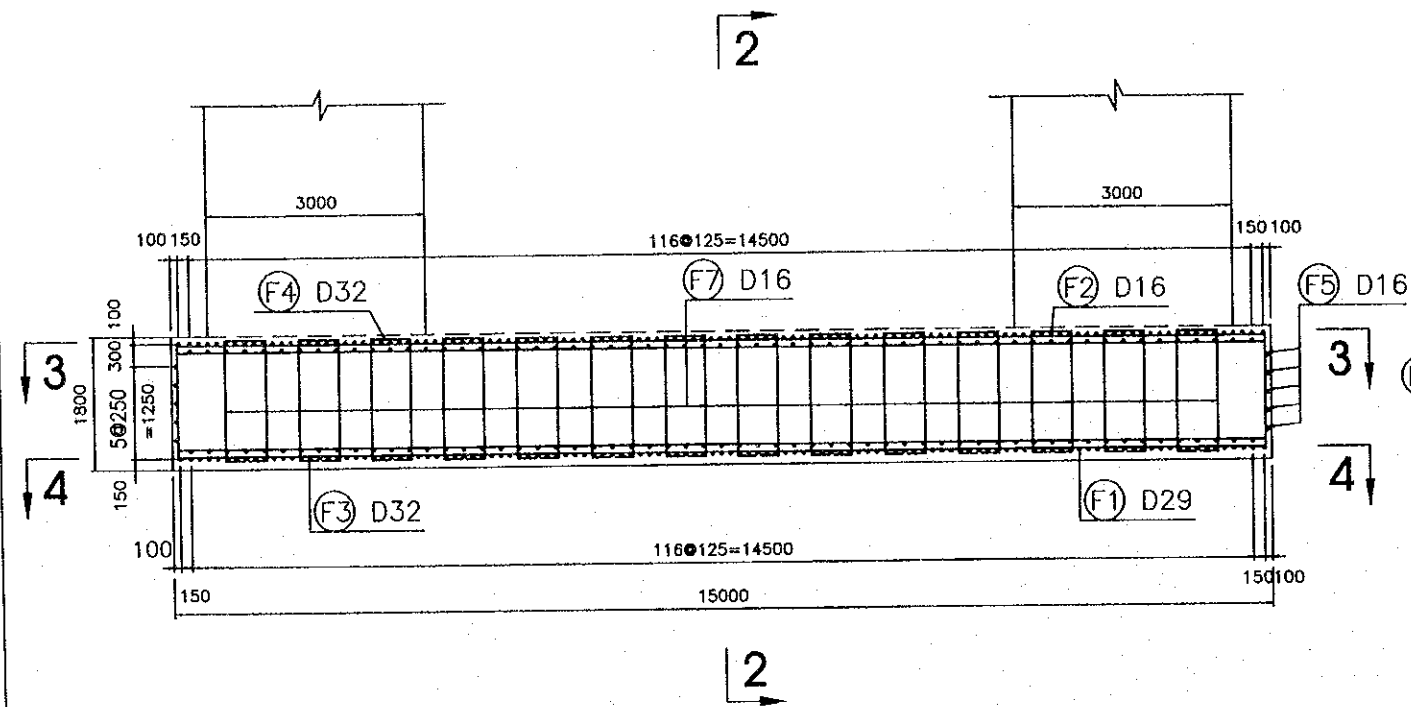
DIMENSIONS OF PIERS

Items	H1 (mm)	H2 (mm)	n	A (mm)	i (%)
P8L	12300	11930	16	4800	3.82

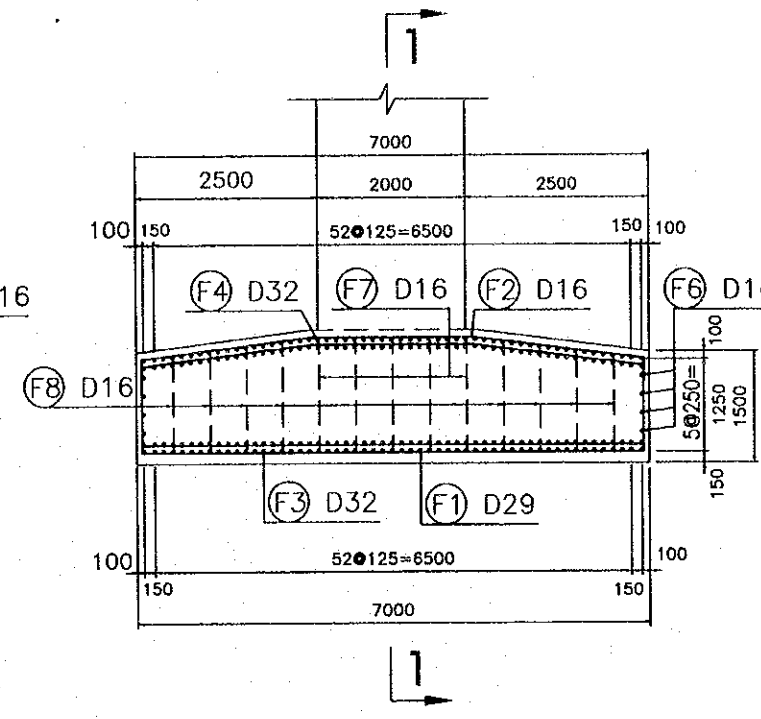
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.9.17	

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-48	SHEET No.
BAR ARRANGEMENT FOR PBL (3)			

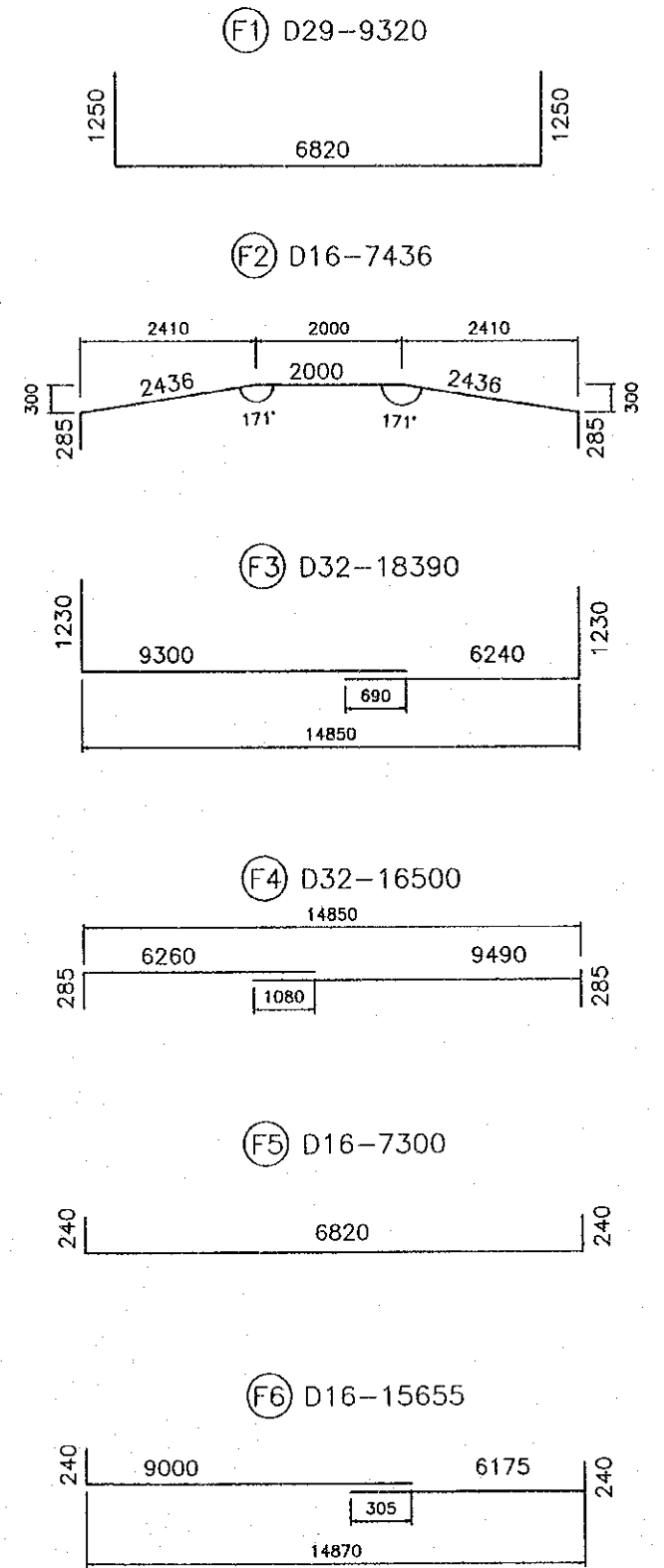
SECTION 1 - 1



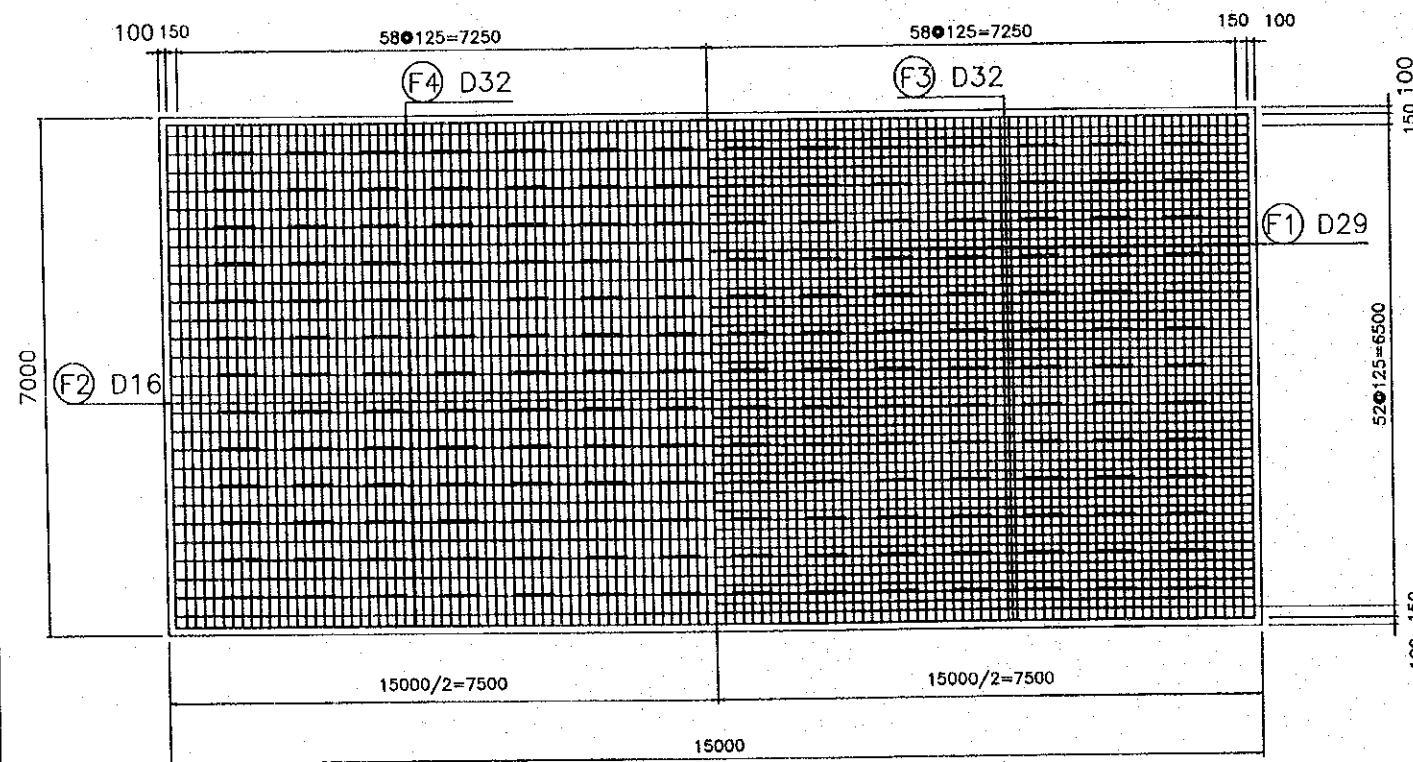
SECTION 2 - 2



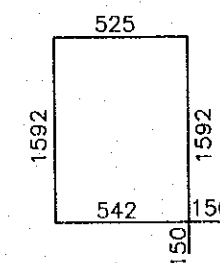
LIST OF REINFORCING BARS FOR FOOTING



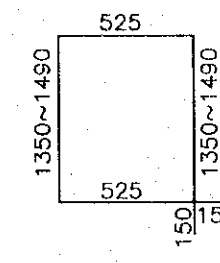
HALF SECTION 3 - 3 HALF SECTION 4 - 4



F7 D16-4534



F8 D16-4190 (AVE)

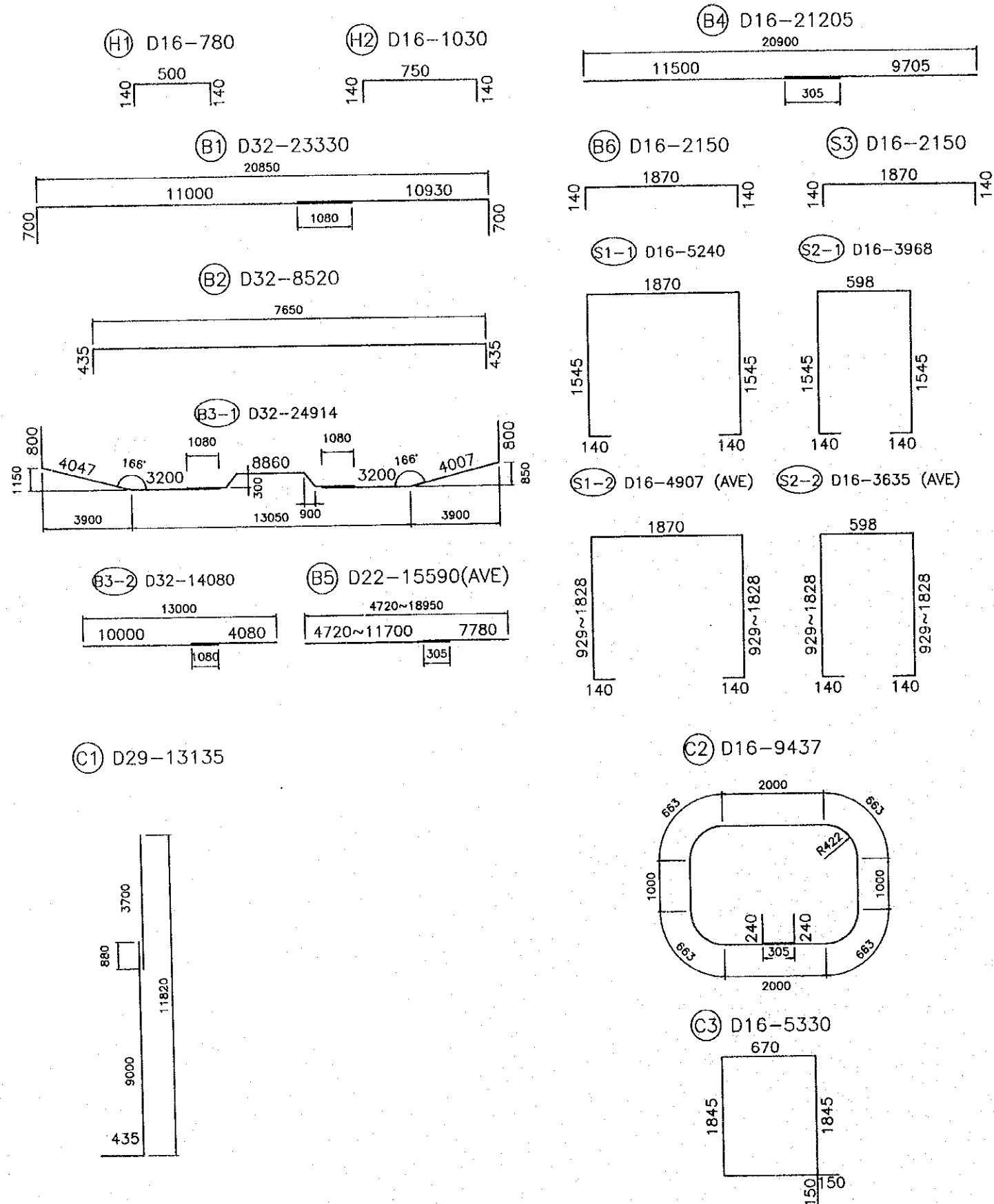


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATASE	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE	2000. 11. 19

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-49	

BAR ARRANGEMENT OF PBL (4)

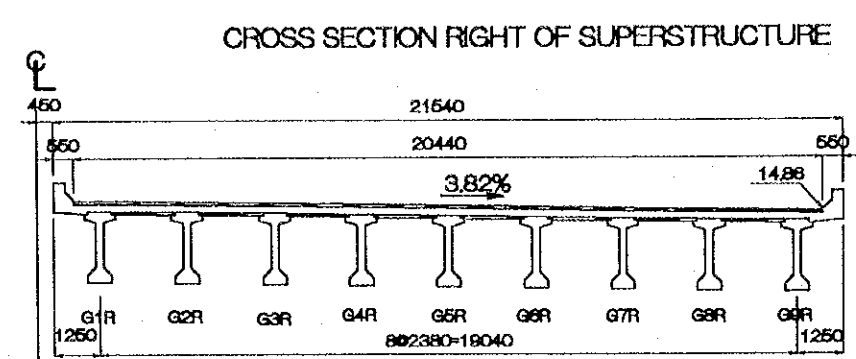
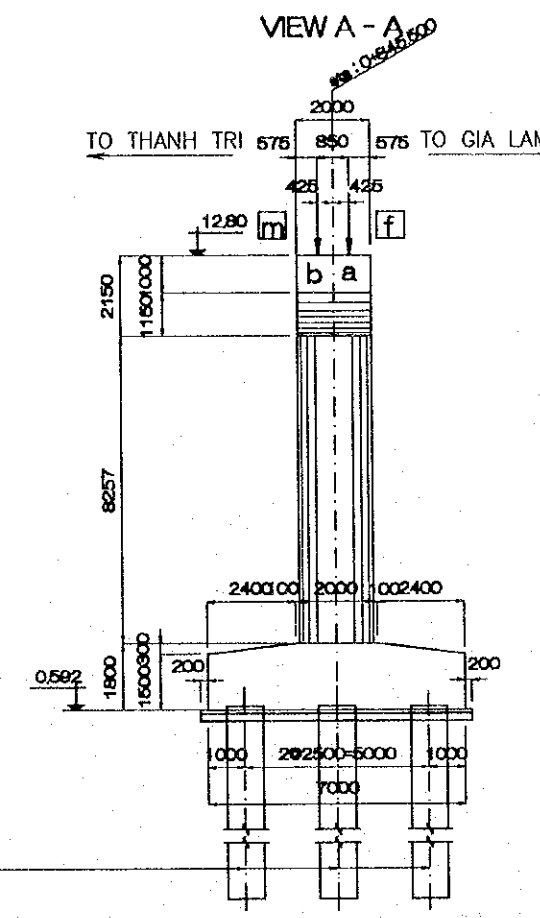
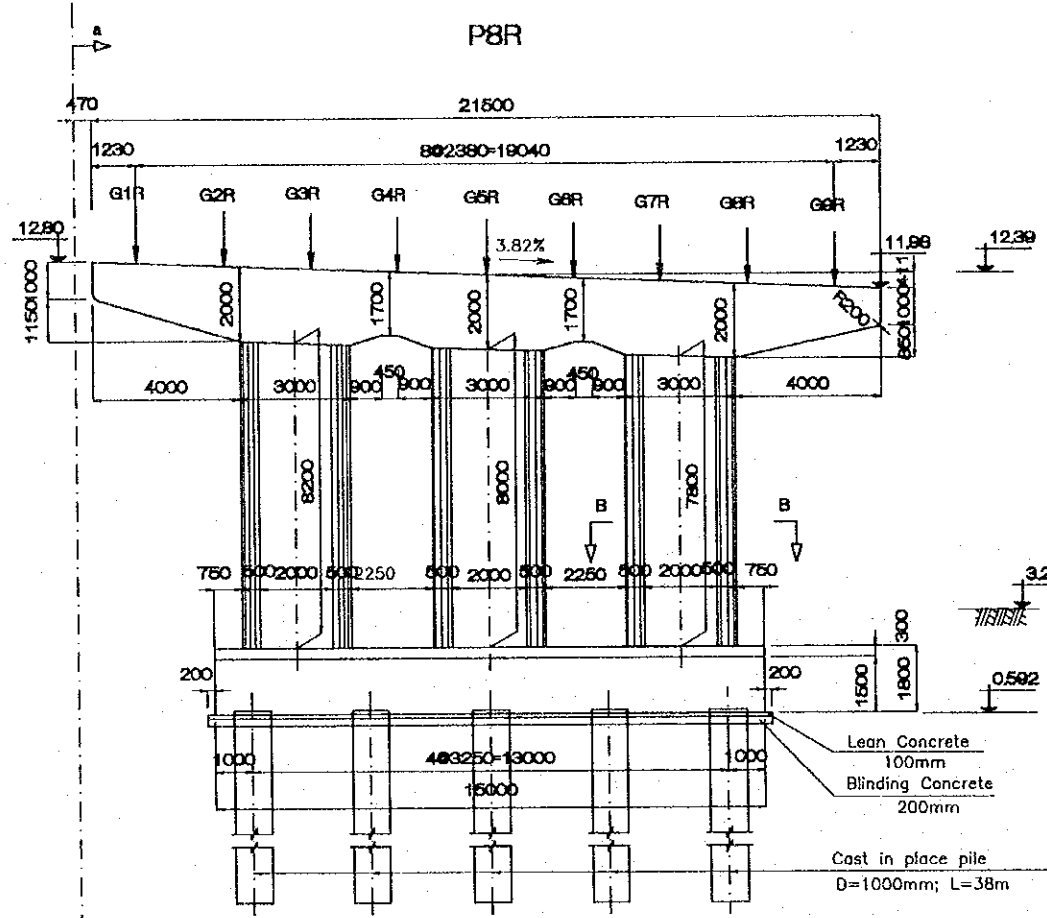
LIST OF REINFORCING BARS FOR BEAM AND COLUMN



QUANTITY REINFORCEMENT OF PBL

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D16	780	133	1.56	161.83
	H2		D16	1030	95	1.56	152.65
	B1		D32	23330	16	6.23	2325.53
	B2		D32	8520	32	6.23	1698.55
	B(3-1)		D32	24914	16	6.23	2483.43
	B(3-2)		D32	13880	16	6.23	1383.56
	B4		D22	21205	6	3.04	386.78
	B5		D22	15765	8	3.04	383.40
	B6		D16	2150	10	1.56	33.54
	S1-1		D16	5240	22	1.56	179.84
	S1-2		D16	4907	104	1.56	796.11
	S2-1		D16	3968	16	1.56	99.04
	S2-2		D16	3635	104	1.56	589.74
	S3		D16	2125	218	1.56	722.67
STEM	C1		D29	13135	172	5.04	11386.47
	C2		D16	9437	57	1.56	839.14
	C3		D16	5330	74	1.56	615.30
FOOTING	F1		D29	9320	119	5.04	5589.76
	F2		D16	7436	119	1.56	1380.42
	F3		D32	18000	55	6.23	6167.70
	F4		D32	16320	84	6.23	8540.58
	F5		D16	7300	10	1.56	113.88
	F6		D16	15655	8	1.56	195.37
	F7		D16	4534	30	1.56	212.19
	F8		D16	4190	48	1.56	313.75
TOTAL							46,751.23
SUMMARY			D16 =				6,405.47
			D22 =				770.18
			D29 =				16,976.23
			D32 =				22,599.35

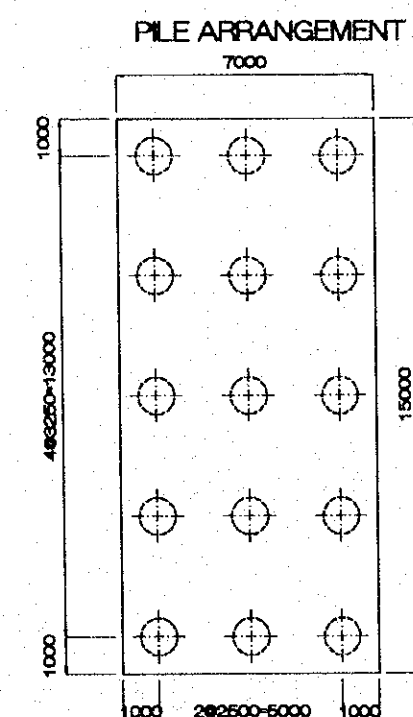
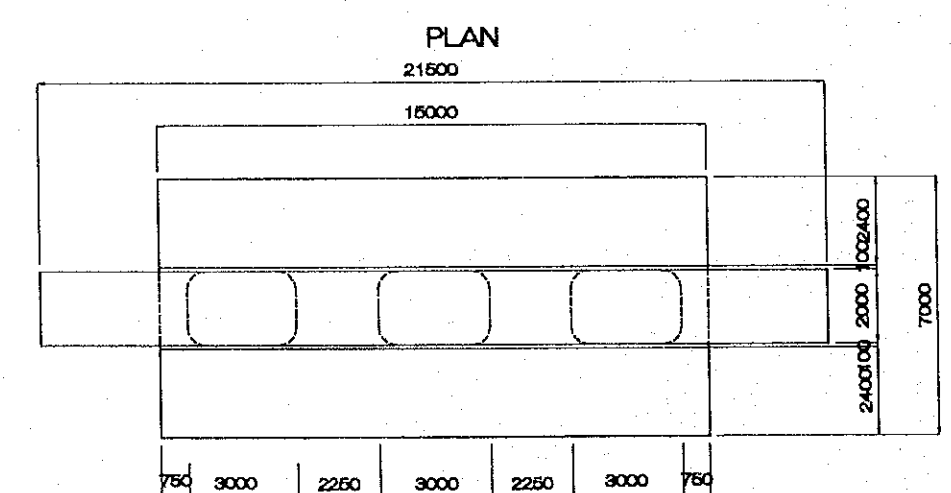
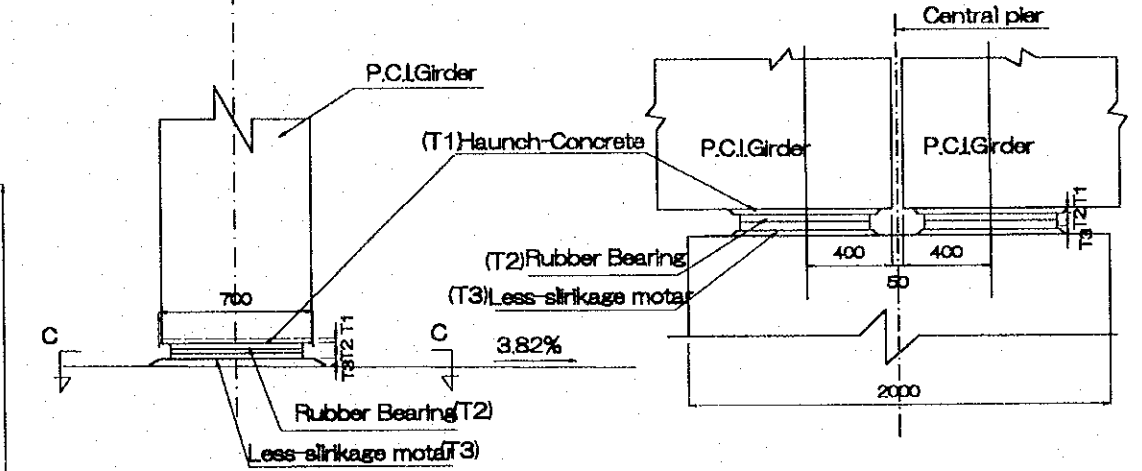
0.20



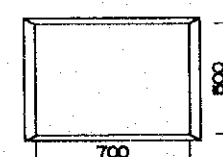
SUPERSTRUCTURE DEPTHS (MM)

	MOVE	FIXED
	B	A
Pavement	75	75
Slab	212	212
Girder	1650	1750
Haunch T1	20	20
Bearing T2	56	36
Mortar T3	18	31
Sub Total	2031	2124

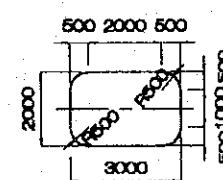
BEARING SEAT DETAIL OF P.C. GIRDER (SC=1/50)



SECTION C-C

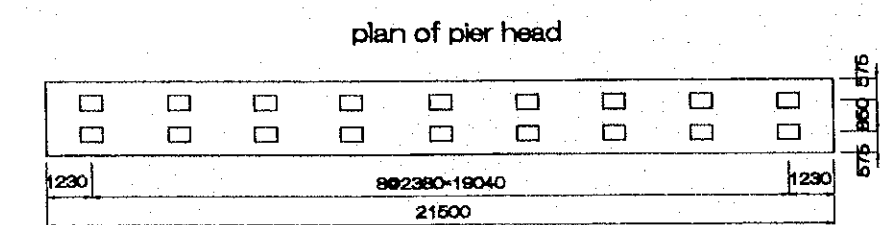


SECTION B-B



ELEVATION OF TOP PIER HEAD (M)

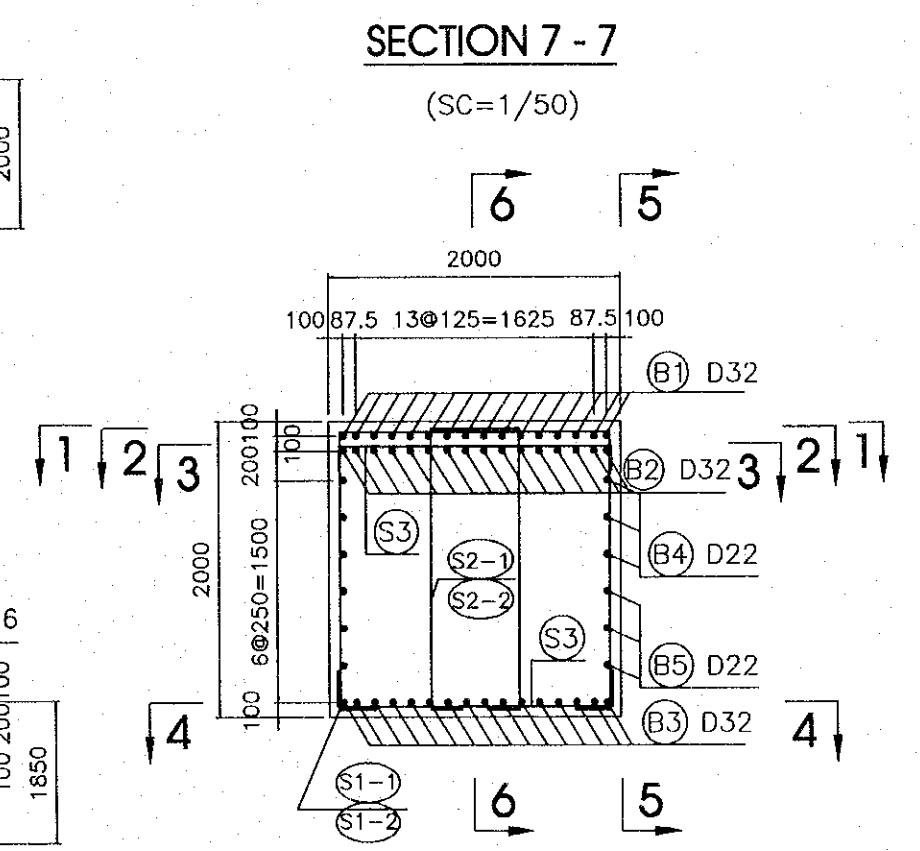
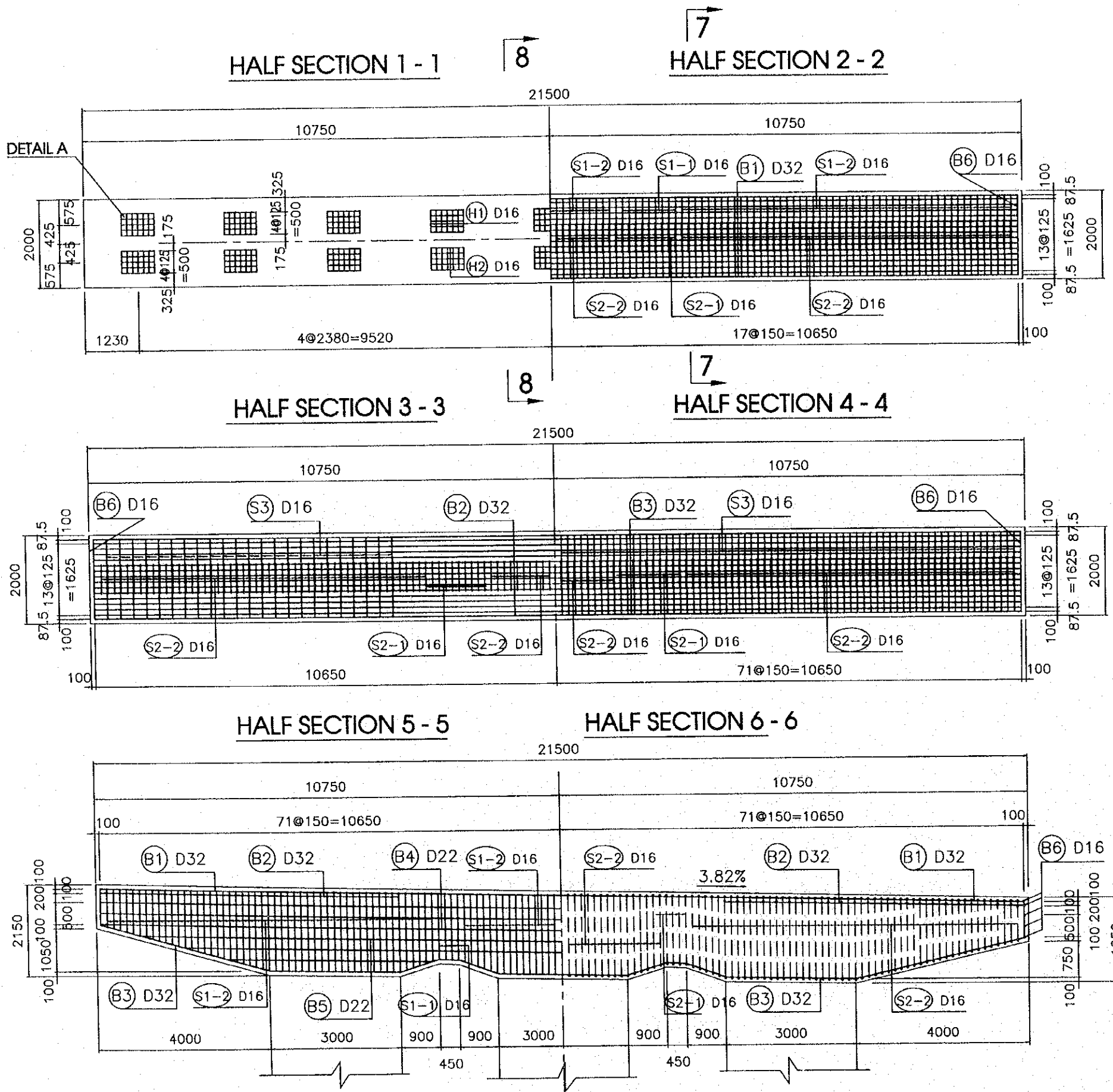
Bearing seat	G1		G2		G3		G4		G5		G6		G7		G8		G9	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A
Elevation	12.800	12.700	12.709	12.609	12.618	12.518	12.527	12.427	12.436	12.336	12.345	12.245	12.255	12.155	12.164	12.064	12.072	11.973



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. NAITAKE	
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.14	

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-51	

BAR ARRANGEMENT OF PBR (1)



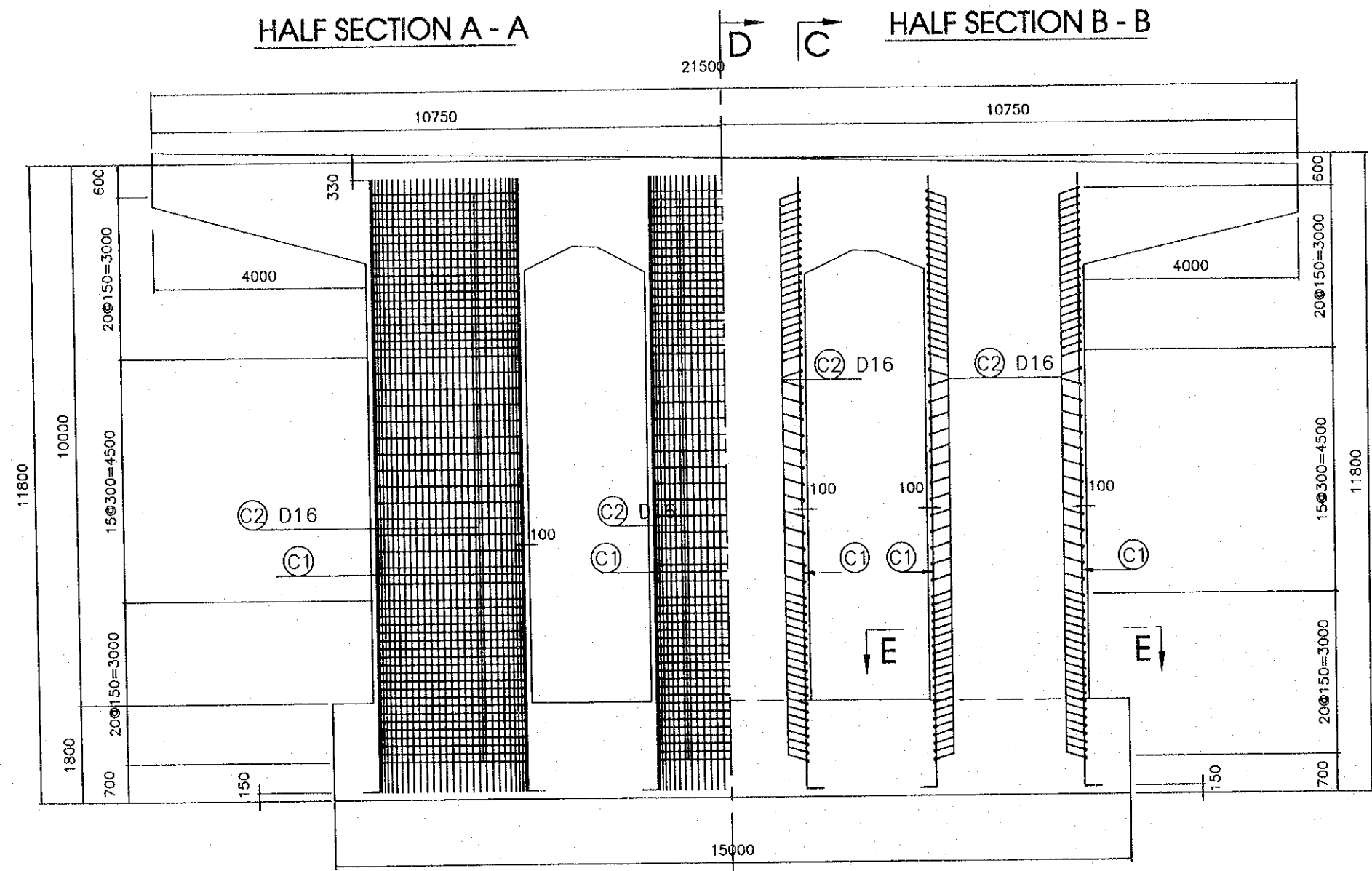
220

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000. 3. 14

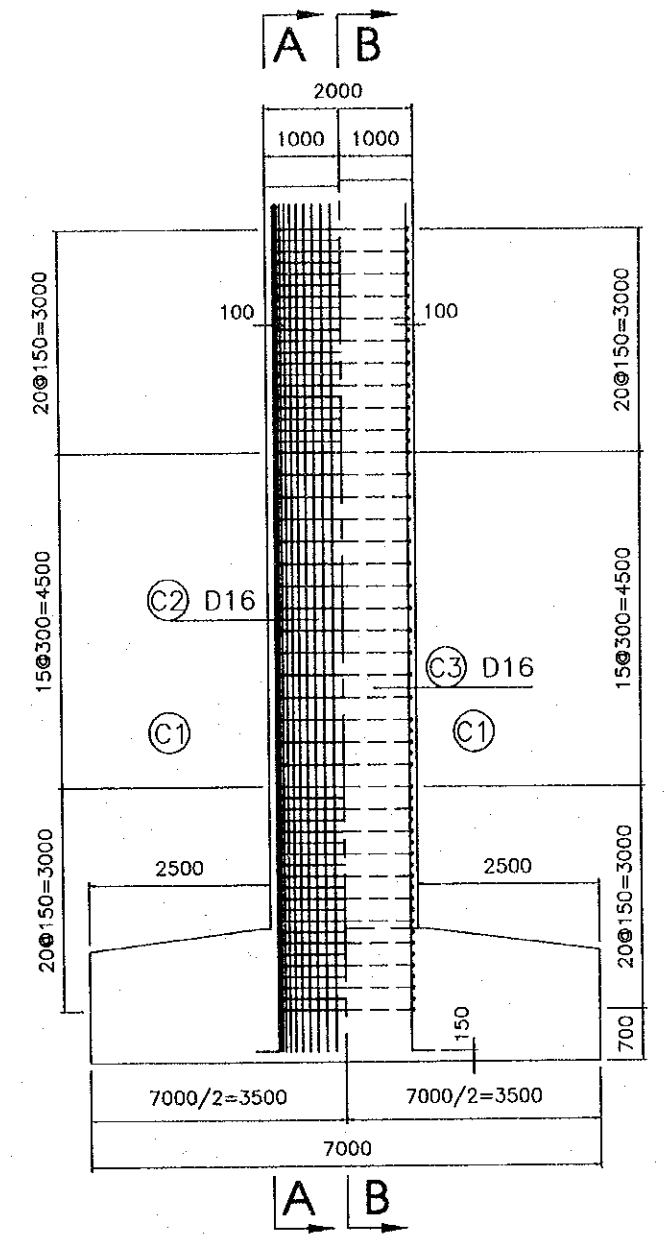
PACKAGE 3	SCALE 1/100	DRAWING No. C-1-2a-52	SHEET No.
BAR ARRANGEMENT FOR PIERS PBR (2)			

HALF SECTION A - A

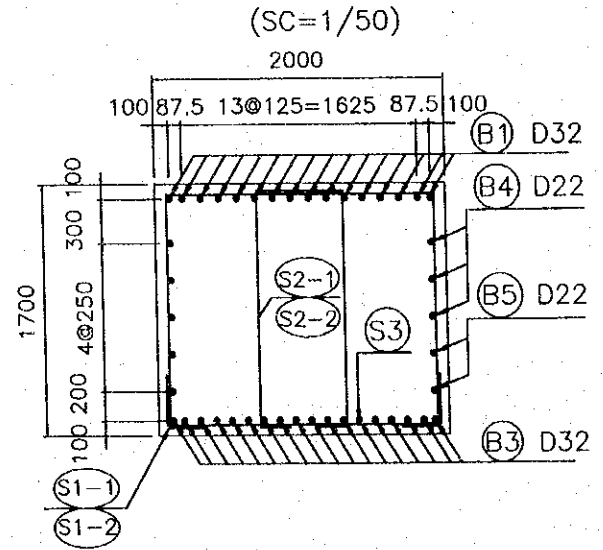
HALF SECTION B - B



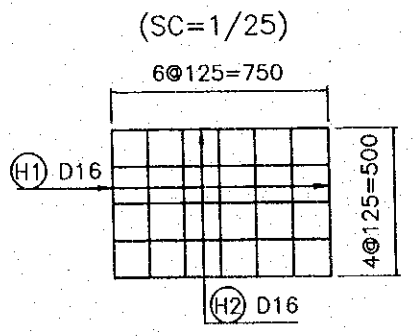
HALF SECTION C - C HALF SECTION D - D



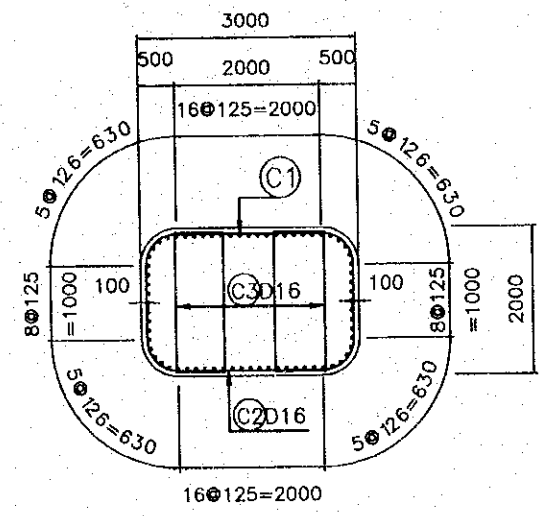
SECTION 8 - 8



DETAIL A



SECTION E - E

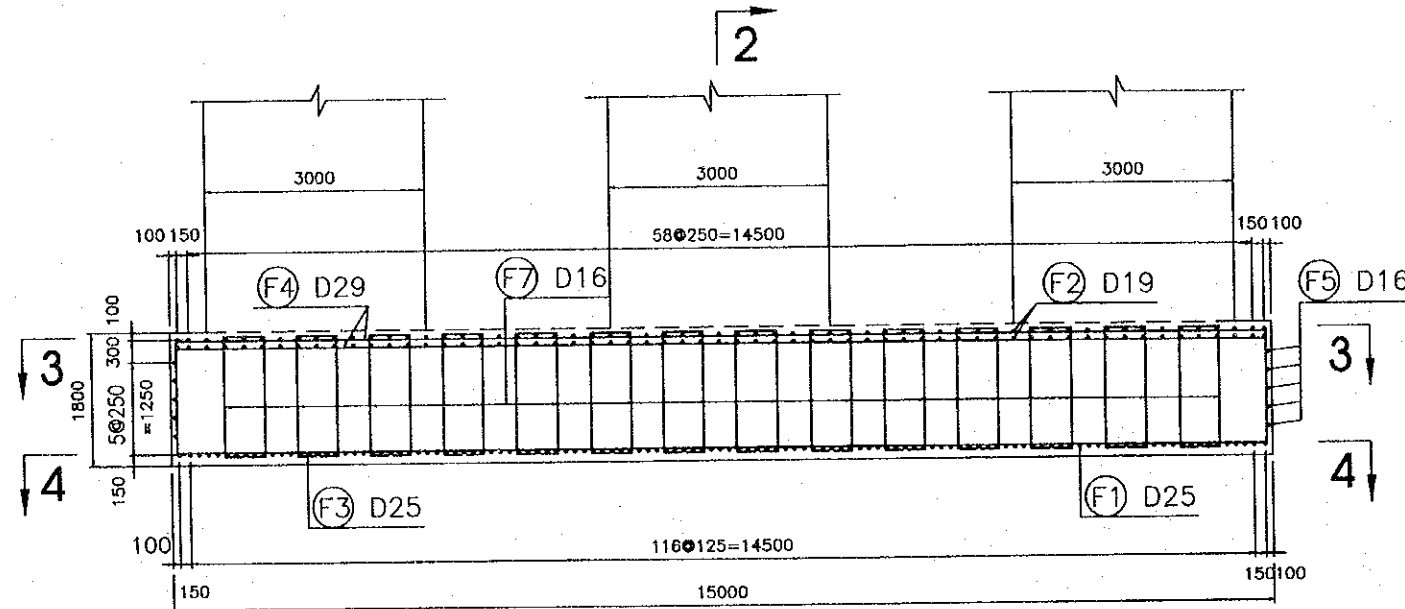


243

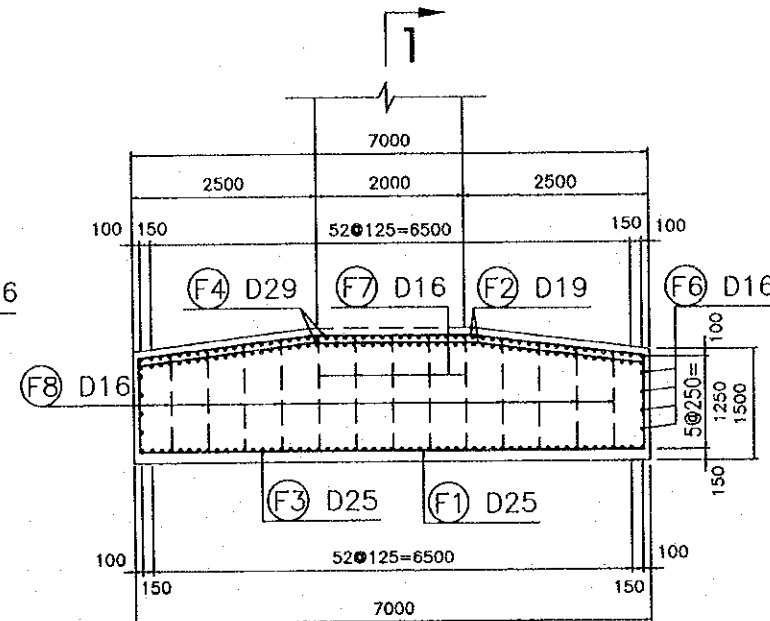
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE: <i>[Signature]</i>
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE: 2000.12.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-53	
BAR ARRANGEMENT OF P&R (3)			

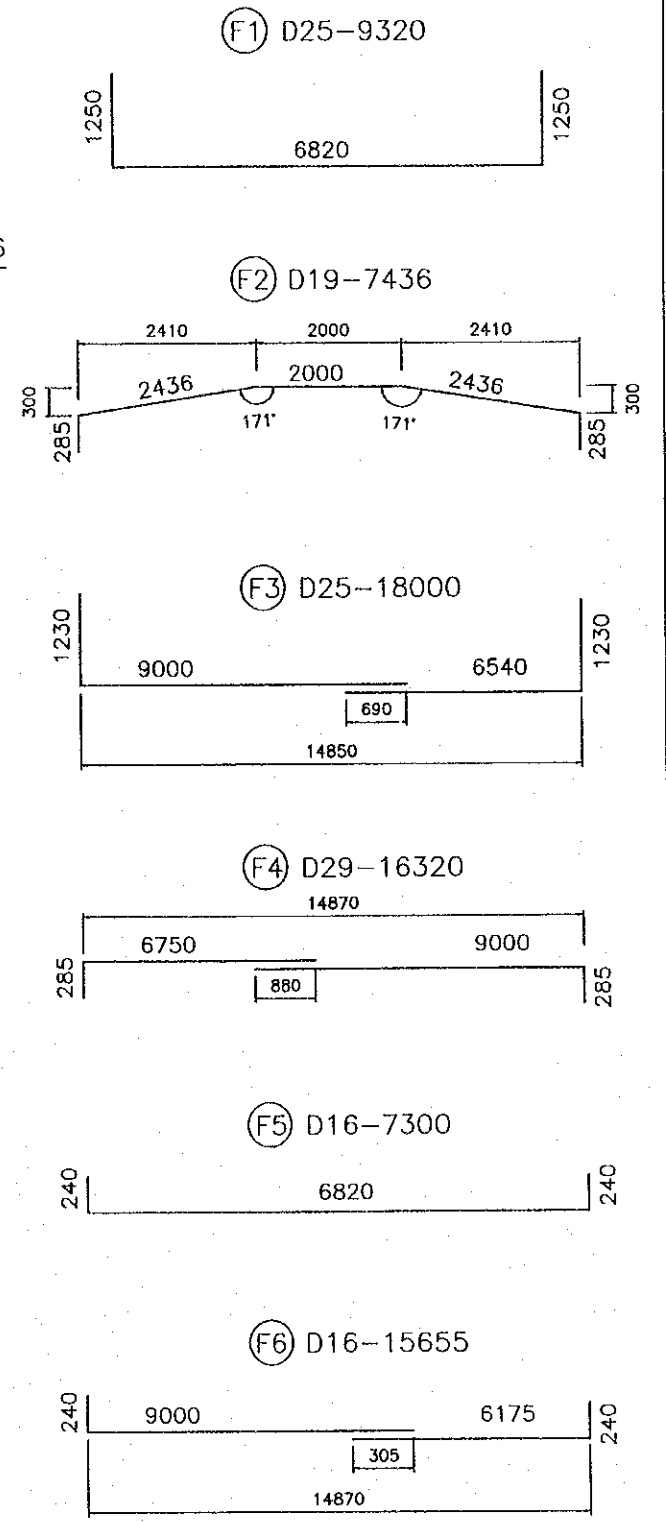
SECTION 1 - 1



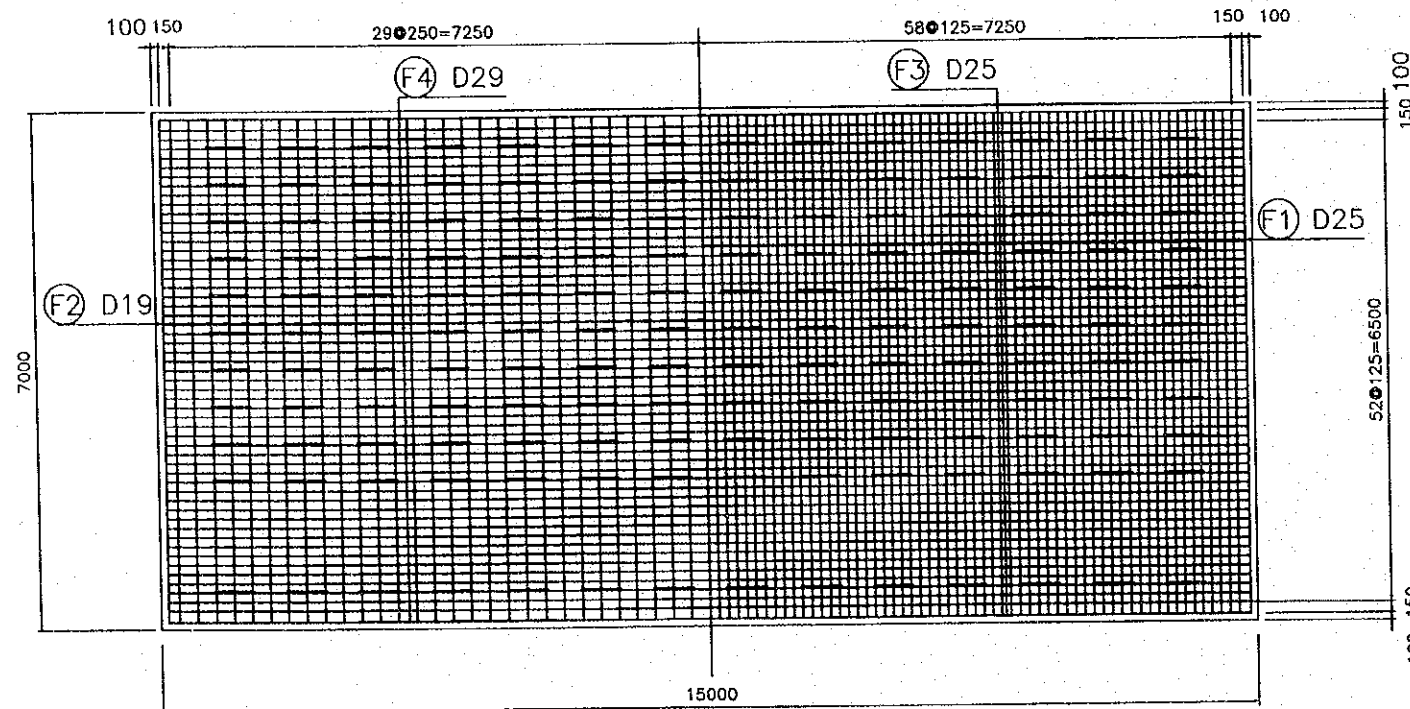
SECTION 2 - 2



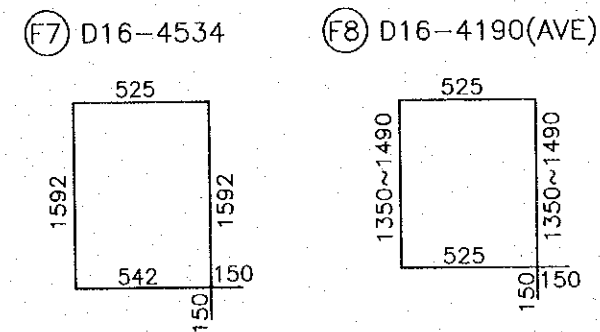
LIST OF REINFORCING BARS FOR FOOTING



HALF SECTION 3 - 3



HALF SECTION 4 - 4

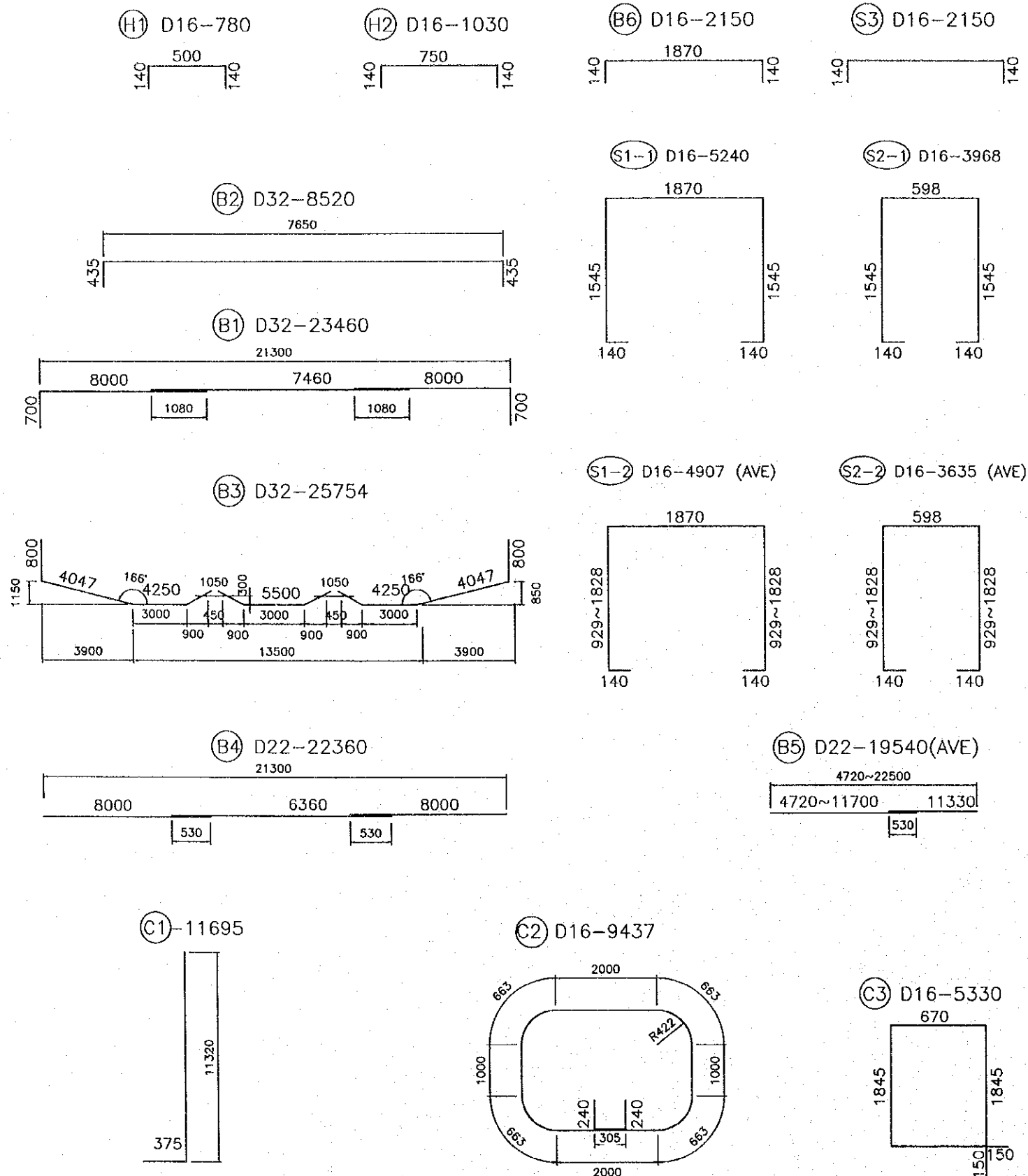


250

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. WATARE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE
		DATE 2000.3.14

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-54	SHEET No.
BAR ARRANGEMENT OF P8R (4)			

LIST OF REINFORCING BARS FOR BEAM AND COLUMN



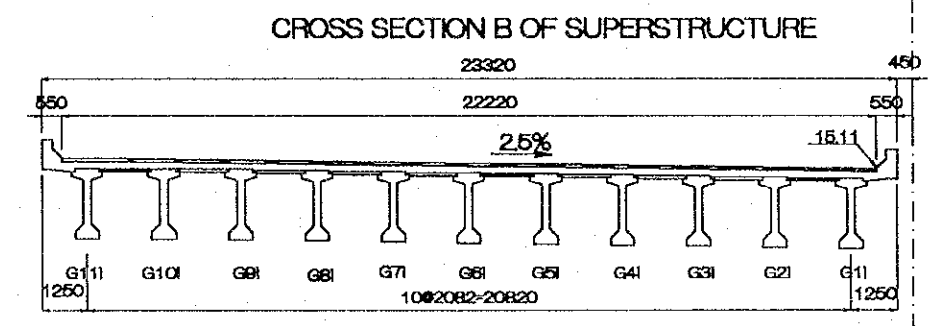
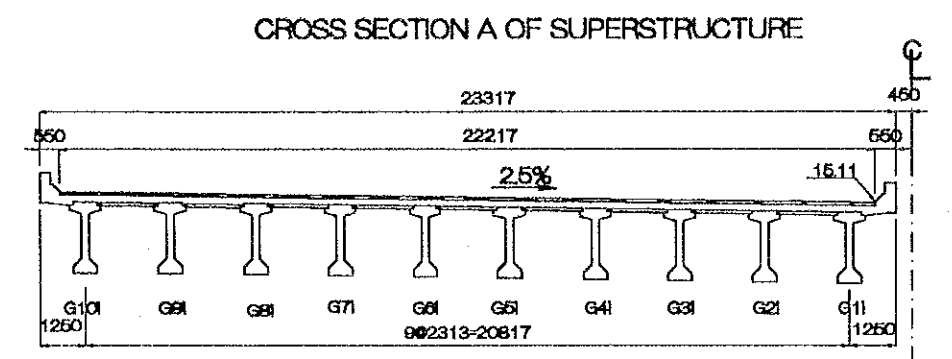
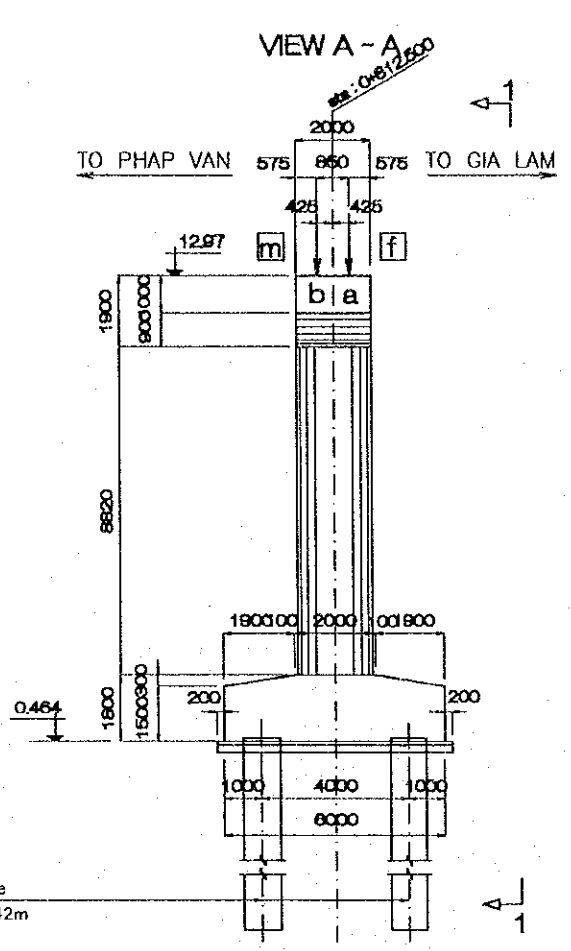
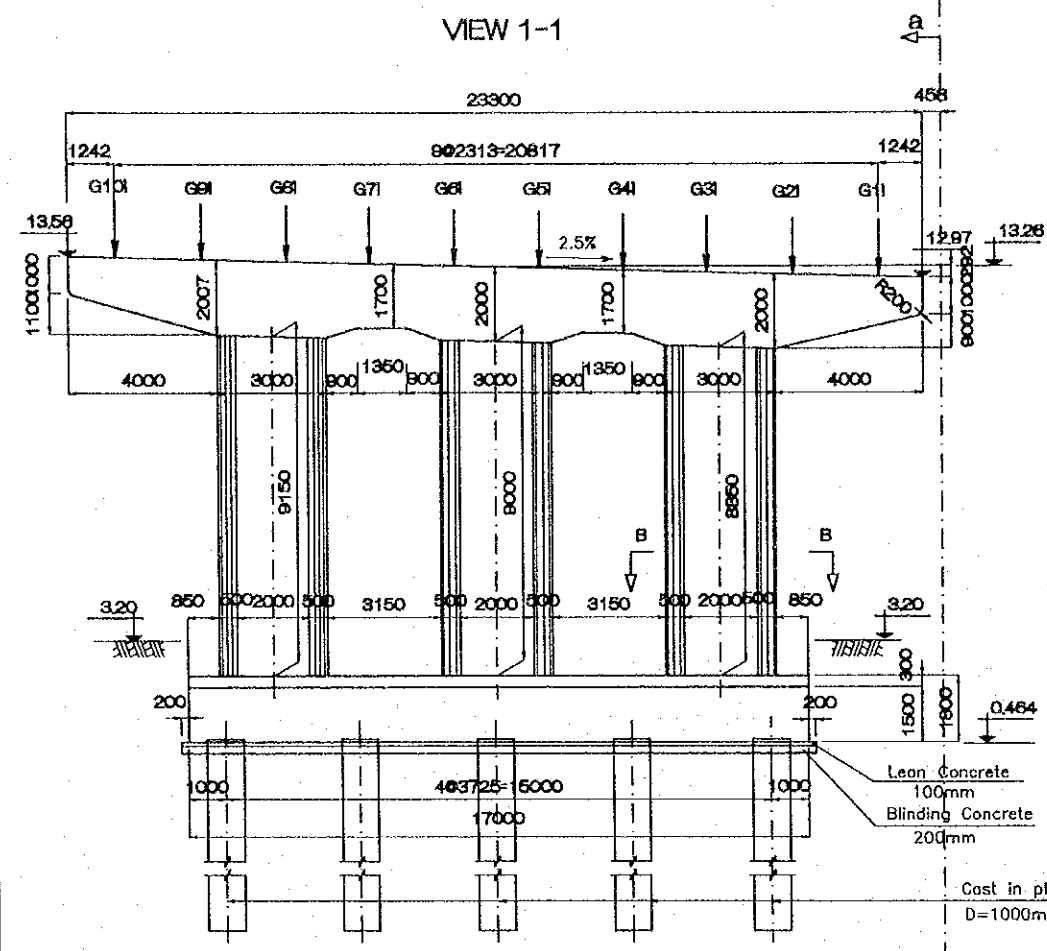
QUANTITY REINFORCEMENT FOR PIER P8R

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)	
CAP BEAM	H1		D16	780	147	1.56	178.87	
	H2		D16	1030	105	1.56	168.71	
	B1		D32	23460	16	6.23	2338.49	
	B2		D32	8520	32	6.23	1698.55	
	B3		D32	25754	16	6.23	2567.16	
	B4		D22	22360	6	3.04	407.85	
	B5		D22	19540	6	3.04	356.41	
	B6		D16	2150	10	1.56	33.54	
	S1-1		D16	5240	10	1.56	81.74	
	S1-2		D16	4907	104	1.56	796.11	
STEM	S2-1		D16	3968	10	1.56	61.90	
	S2-2		D16	3635	104	1.56	589.74	
	S3		D16	2125	218	1.56	722.67	
	C1		D29	11695	204	5.04	12024.33	
	C2		D16	9437	177	1.56	2605.74	
	C3		D16	5330	220	1.56	1829.26	
	FOOTING	F1		D25	9320	125	3.98	4,636.70
		F2		D19	7436	122	2.25	2041.18
		F3		D25	18000	47	3.98	3367.08
		F4		D29	16320	94	5.04	7731.76
F5			D16	7300	10	1.56	113.88	
F6			D16	15655	8	1.56	195.37	
F7			D16	4534	90	1.56	636.57	
F8			D16	4190	103	1.56	673.25	
TOTAL							45,856.88	
SUMMARY			D16 =				8,687.37	
			D19 =				2,041.18	
			D22 =				764.26	
			D25 =				8,003.78	
			D29 =				19,756.09	
		D32 =				6604.20		

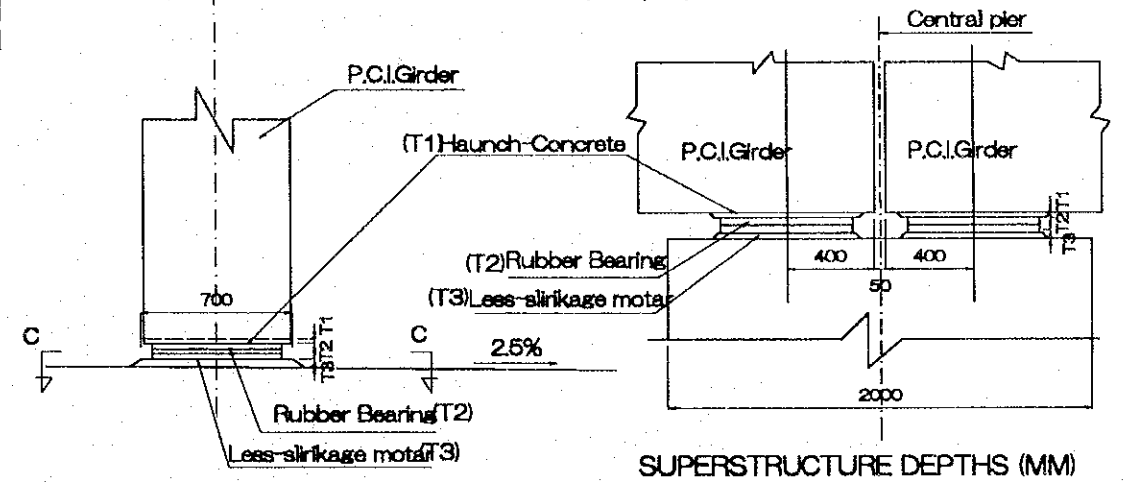
152

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.6.1	

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-55	SHEET No.
DETAIL OF PIER P&L			

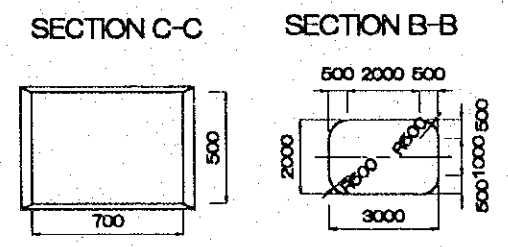


BEARING SEAT DETAIL OF P.C.I GIRDER (SC-1/50)



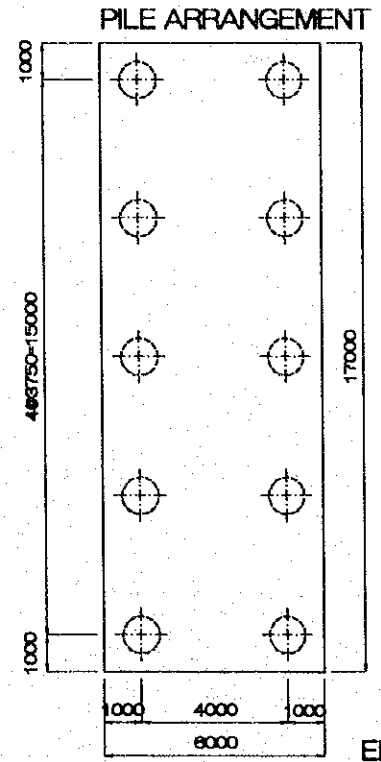
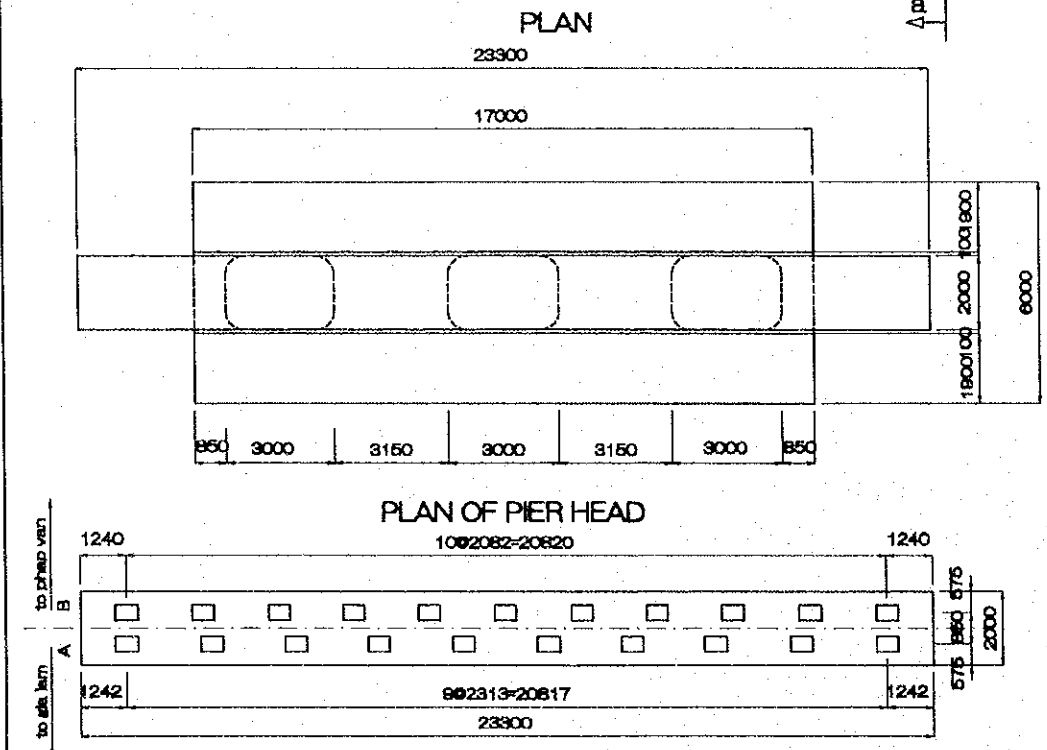
SUPERSTRUCTURE DEPTHS (MM)

	MOVE		FIXED	
	B	A	B	A
Pavement	75	75		
Slab	208	208		
Girder	1750	1650		
Haunch T1	20	20		
Bearing T2	56	36		
Mortar T3	18	132		
Sub Total	2127	2121		



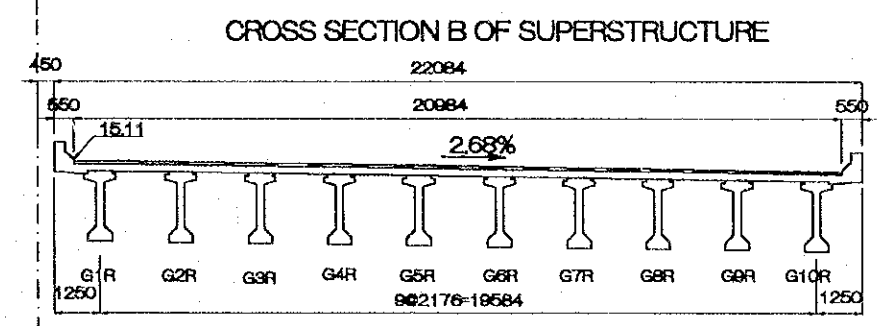
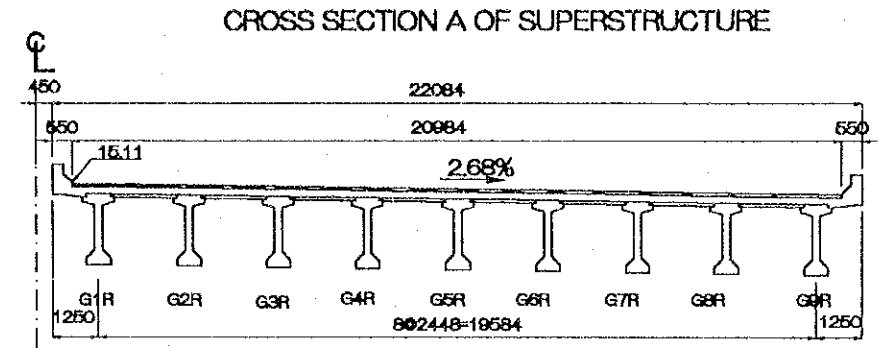
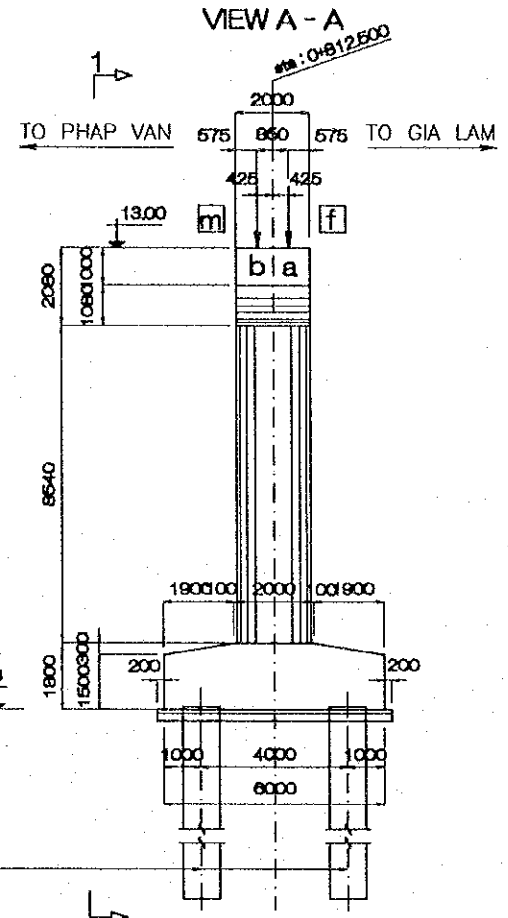
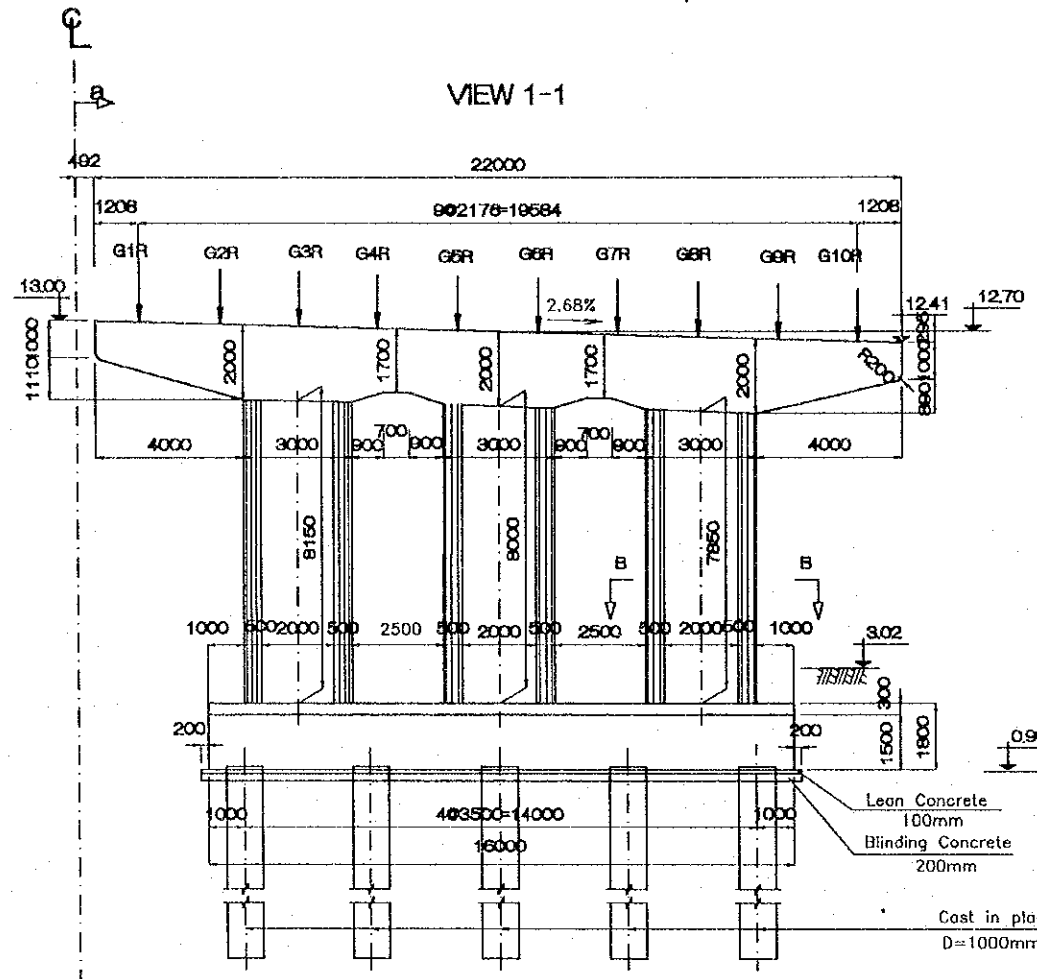
ELEVATION OF TOP PIER HEAD (M)

Bearing seat	G1		G2		G3		G4		G5		G6		G7		G8		G9		G10		G11		
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	
Elevation	12.999	13.006	13.051	13.064	13.103	13.122	13.154	13.180	13.206	13.238	13.258	13.297	13.310	13.355	13.361	13.413	13.413	13.471	13.465	13.530	13.516		

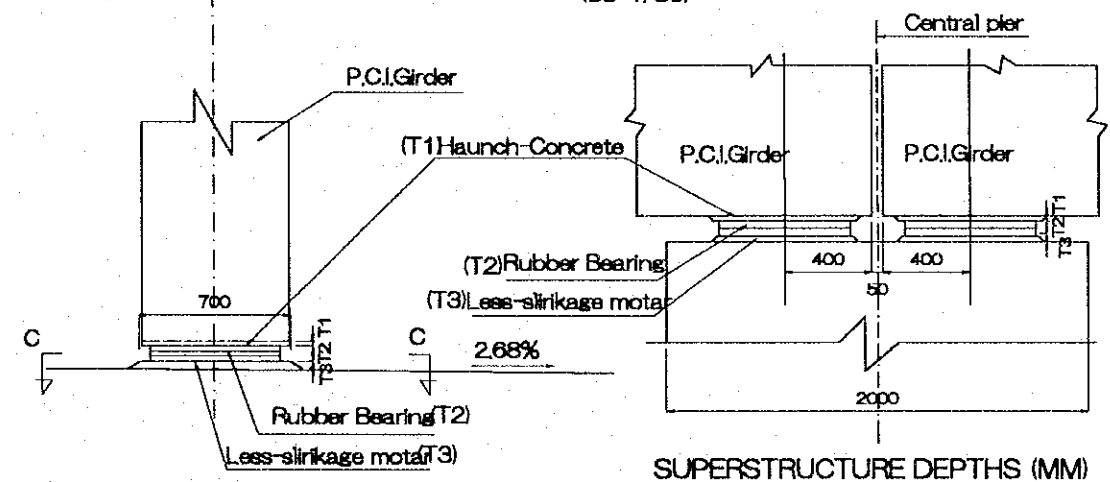


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LOAN PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.6.1	

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-56	SHEET No.
DETAIL OF PIER PDR			

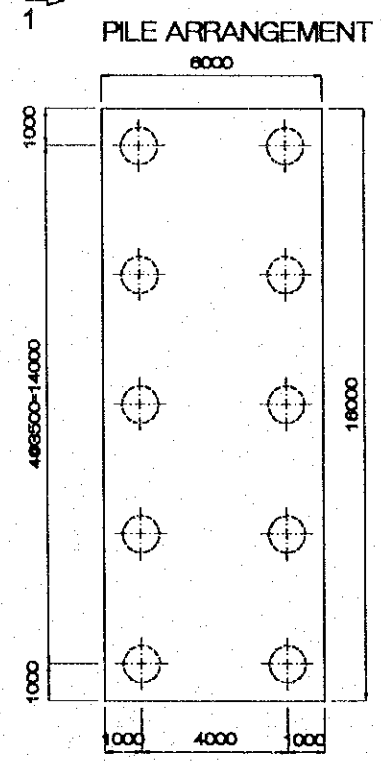
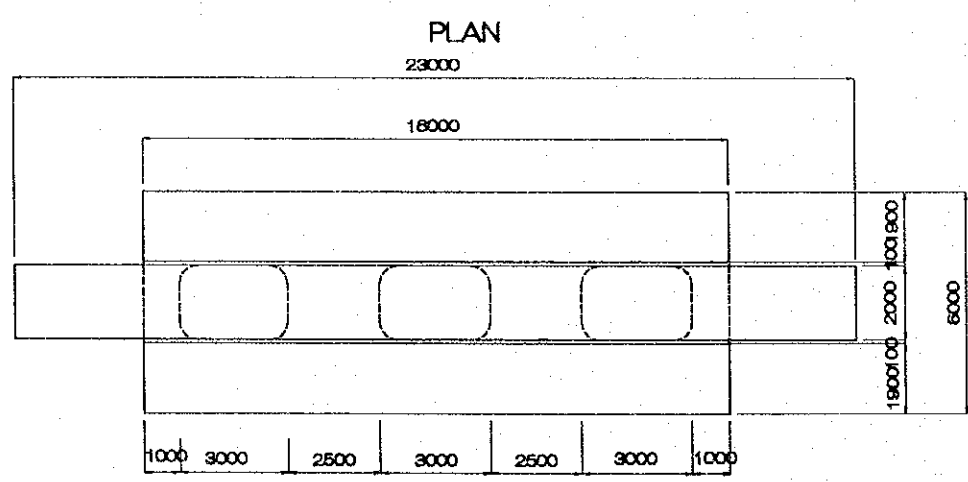


BEARING SEAT DETAIL OF P.C I GIRDER (SC=1/50)

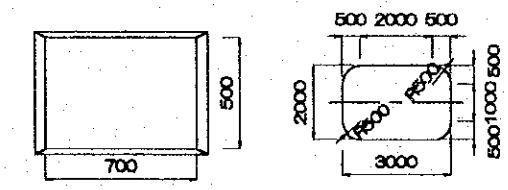


SUPERSTRUCTURE DEPTHS (MM)

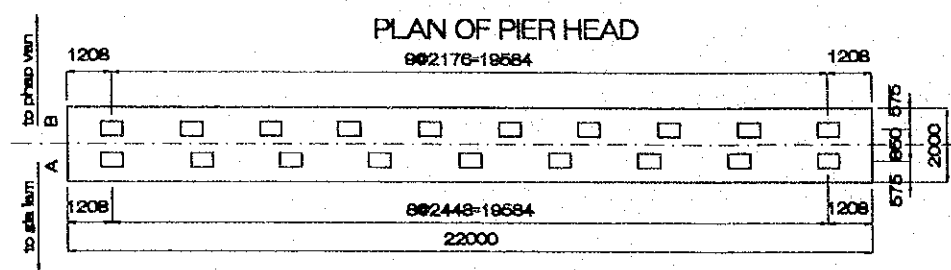
	MOVE		FIXED	
	B	A	B	A
Pavement	75	75		
Slab	209	208		
Girder	1750	1650		
Haunch T1	20	20		
Bearing T2	56	36		
Mortar T3	18	133		
Sub Total	2128	2122		



SECTION C-C SECTION B-B



ELEVATION OF TOP PIER HEAD (M)

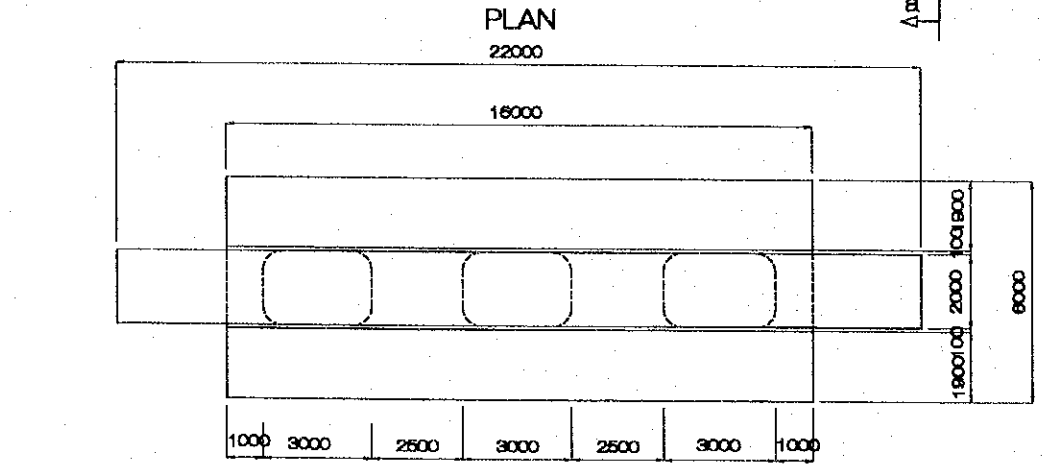
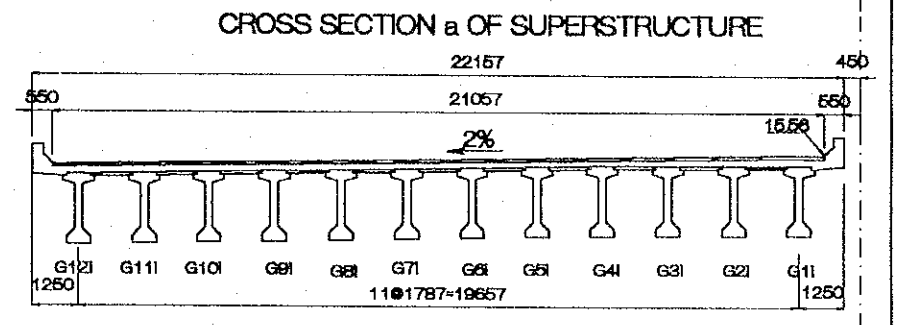
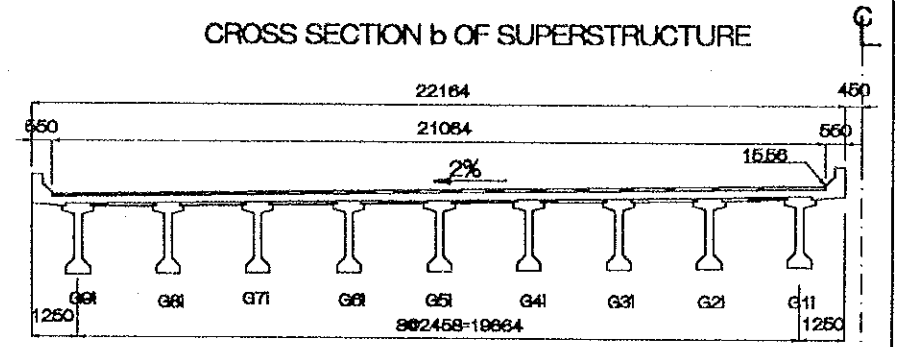
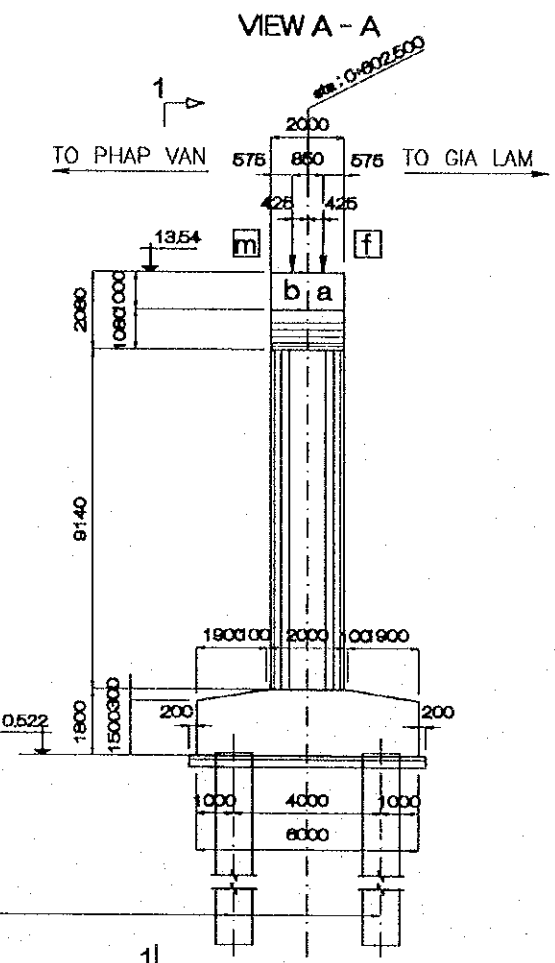
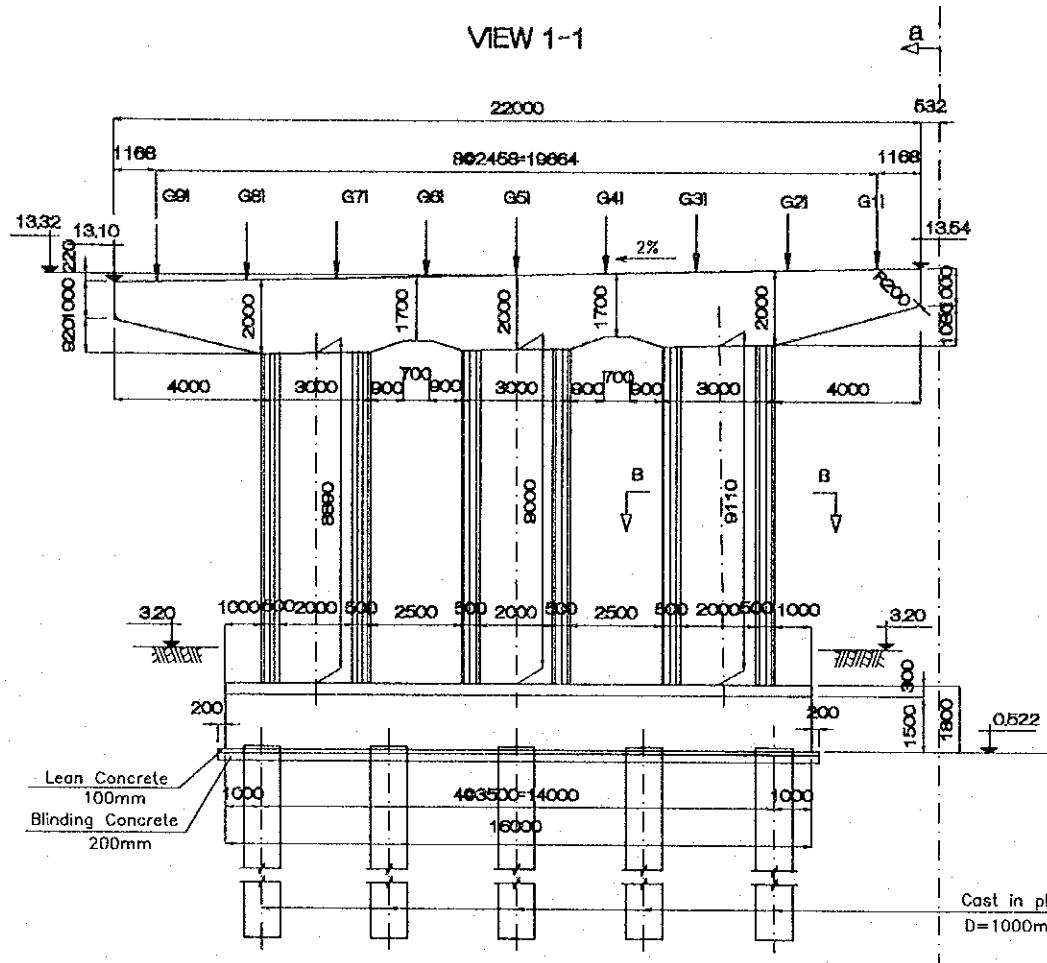


Bearing seat	G1		G2		G3		G4		G5		G6		G7		G8		G9		G10	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A		
Elevation	12.963	12.963	12.905	12.897	12.846	12.832	12.788	12.766	12.730	12.701	12.671	12.635	12.613	12.569	12.555	12.504	12.496	12.438	12.438	

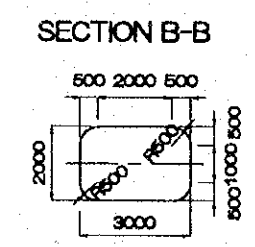
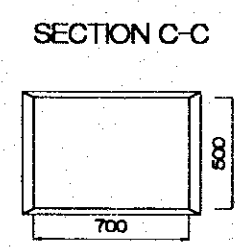
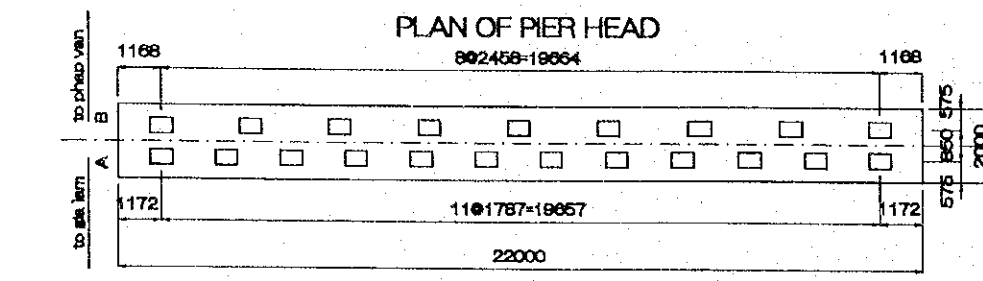
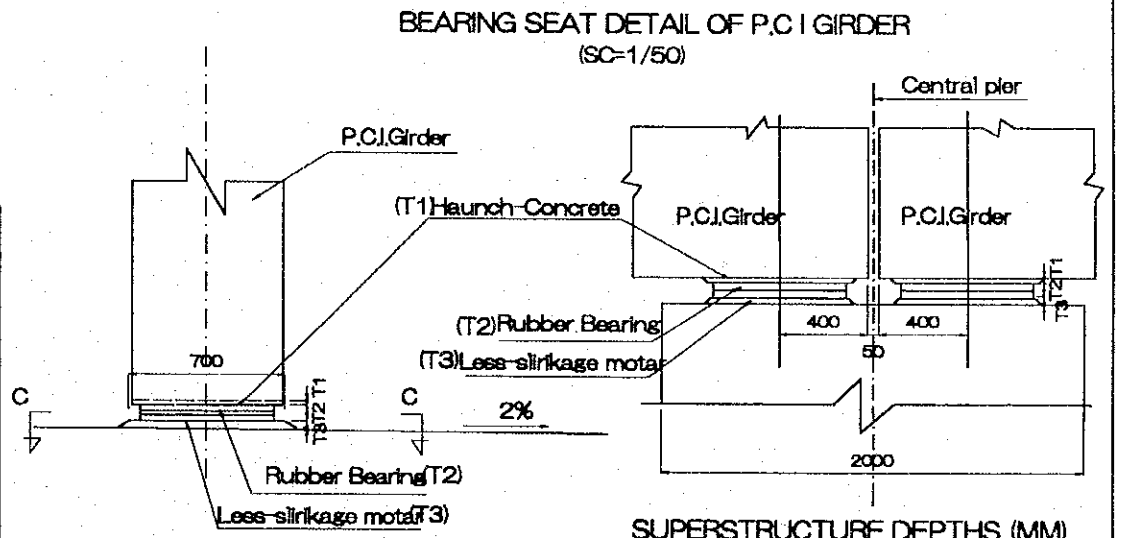
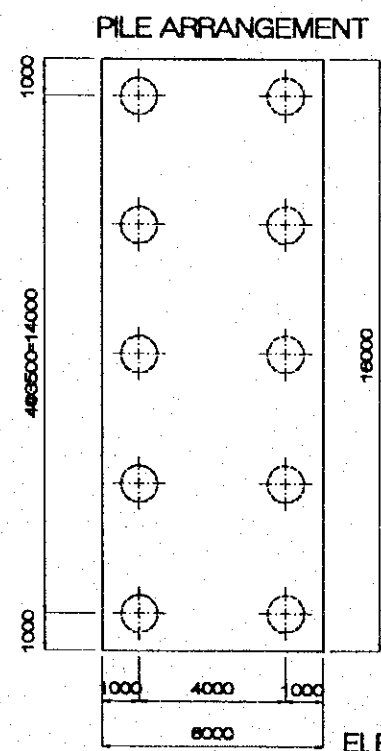
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		2000.6.1

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/200	C-1-3a-57	

DETAIL OF PIER P18L



Cast in place pile
D=1000mm; L=39m



ELEVATION OF TOP PIER HEAD (M)

SUPERSTRUCTURE DEPTHS (MM)

	MOVE		FIXED	
	B	A	B	A
Pavement	75	75		
Slab	207	207		
Girder	1650	1500		
Haunch T1	20	20		
Bearing T2	44	36		
Mortar T3	30	190		
Sub Total	2026	2028		

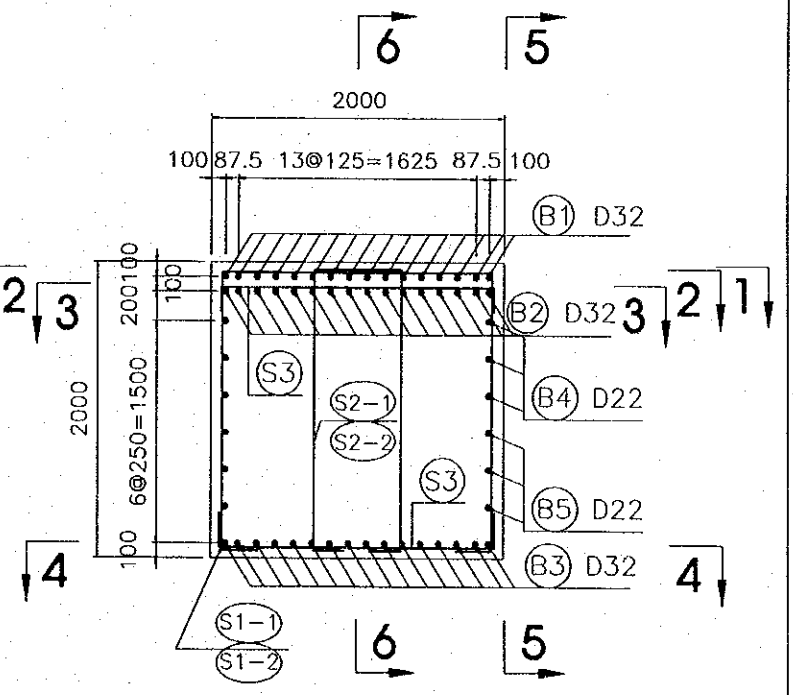
Bearing seat	G1		G2		G3		G4		G5		G6		G7		G8		G9		G10		G11		G12	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A		
Elevation	13.519	13.517	13.470	13.482	13.421	13.446	13.372	13.410	13.323	13.374	13.274	13.339	13.224	13.303	13.175	13.267	13.126	13.231		13.196		13.160		13.124

DIMENSIONS OF PIERS

Pier Items	P9L	P9R	P16L
A(mm)	23300	22000	22000
B(mm)	11650	11000	11000
C(mm)	150	100	100
D(mm)	1350	700	700
n	10	9	8
A1(mm)	2082	2176	2458
B1(mm)	20820	19584	19664
n1	9	8	11
C1(mm)	2313	2448	1787
D1(mm)	20817	19584	19657
n2	76	72	72
B2(mm)	11400	10800	10800
E1(mm)	1240	1208	1168
E2(mm)	1242	1208	1172
F1(mm)	1000	1010	980
F2(mm)	2100	2110	2080
F3(mm)	800	790	820
F4(mm)	1900	1890	1920
i (%)	2.5	2.68	2

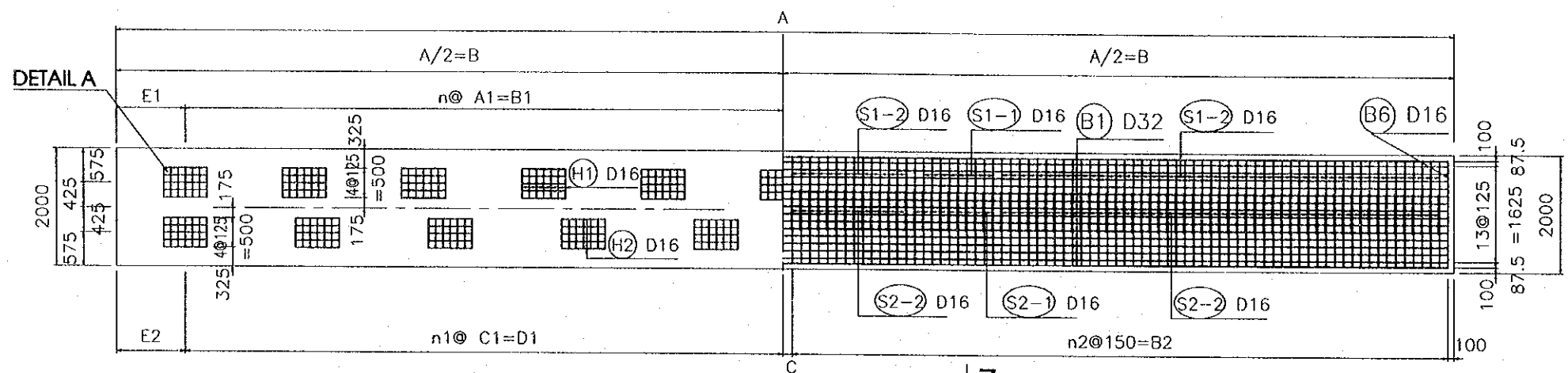
SECTION 7-7

(SC=1/50)



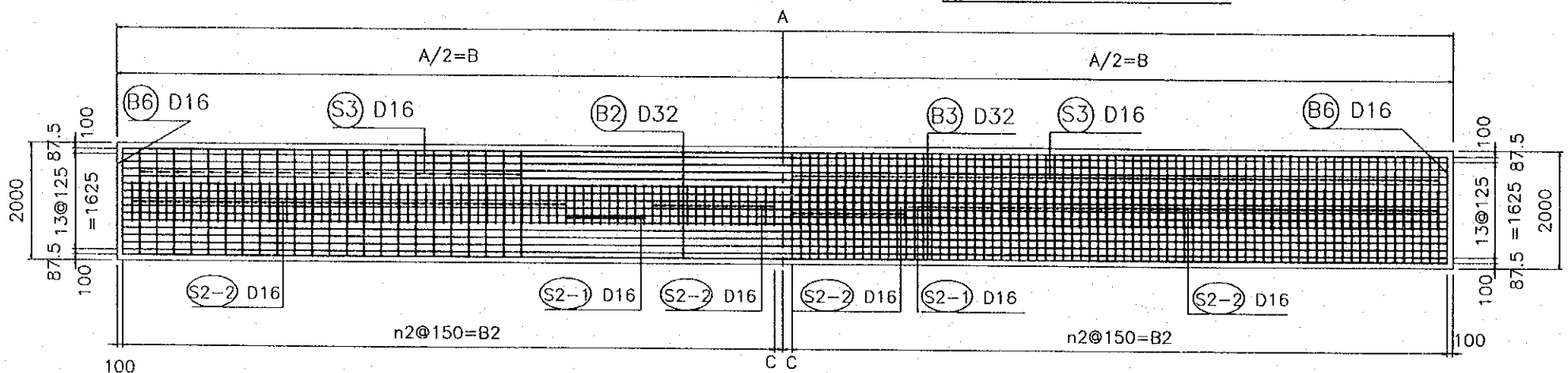
HALF SECTION 1-1

HALF SECTION 2-2



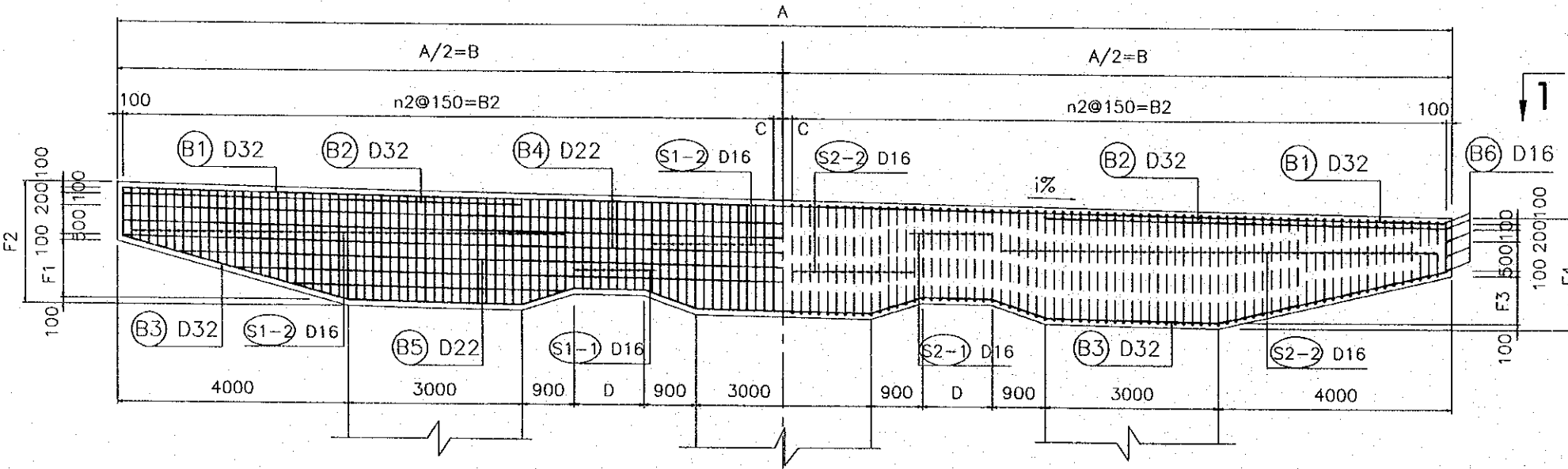
HALF SECTION 3-3

HALF SECTION 4-4



HALF SECTION 5-5

HALF SECTION 6-6



253

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (HAIH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE

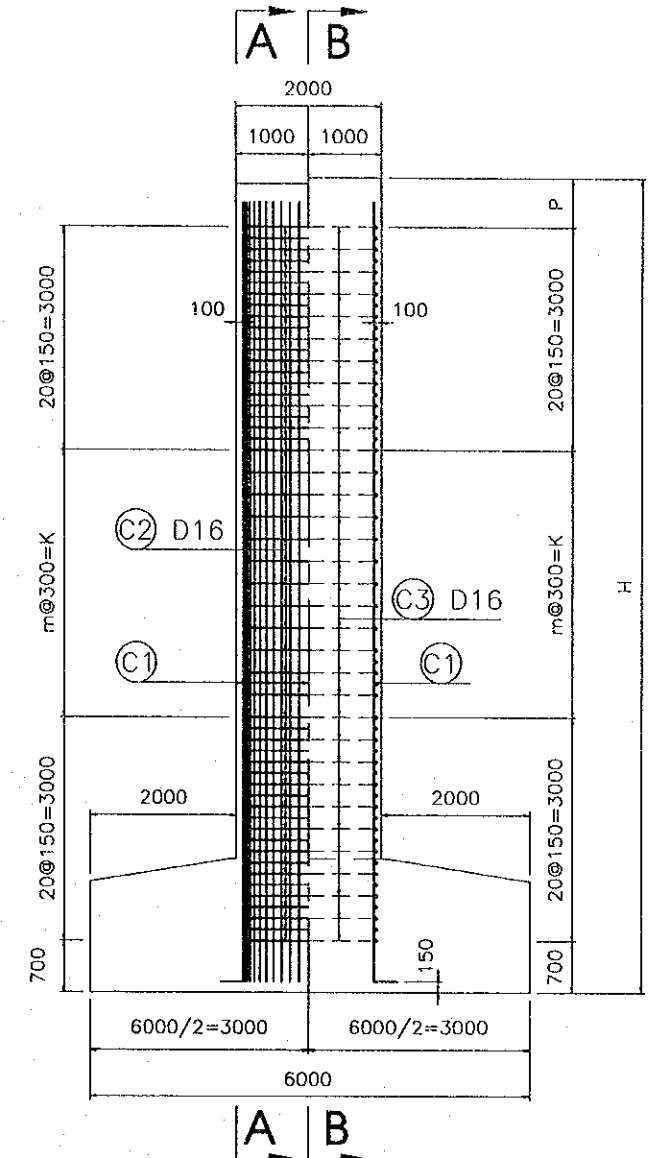
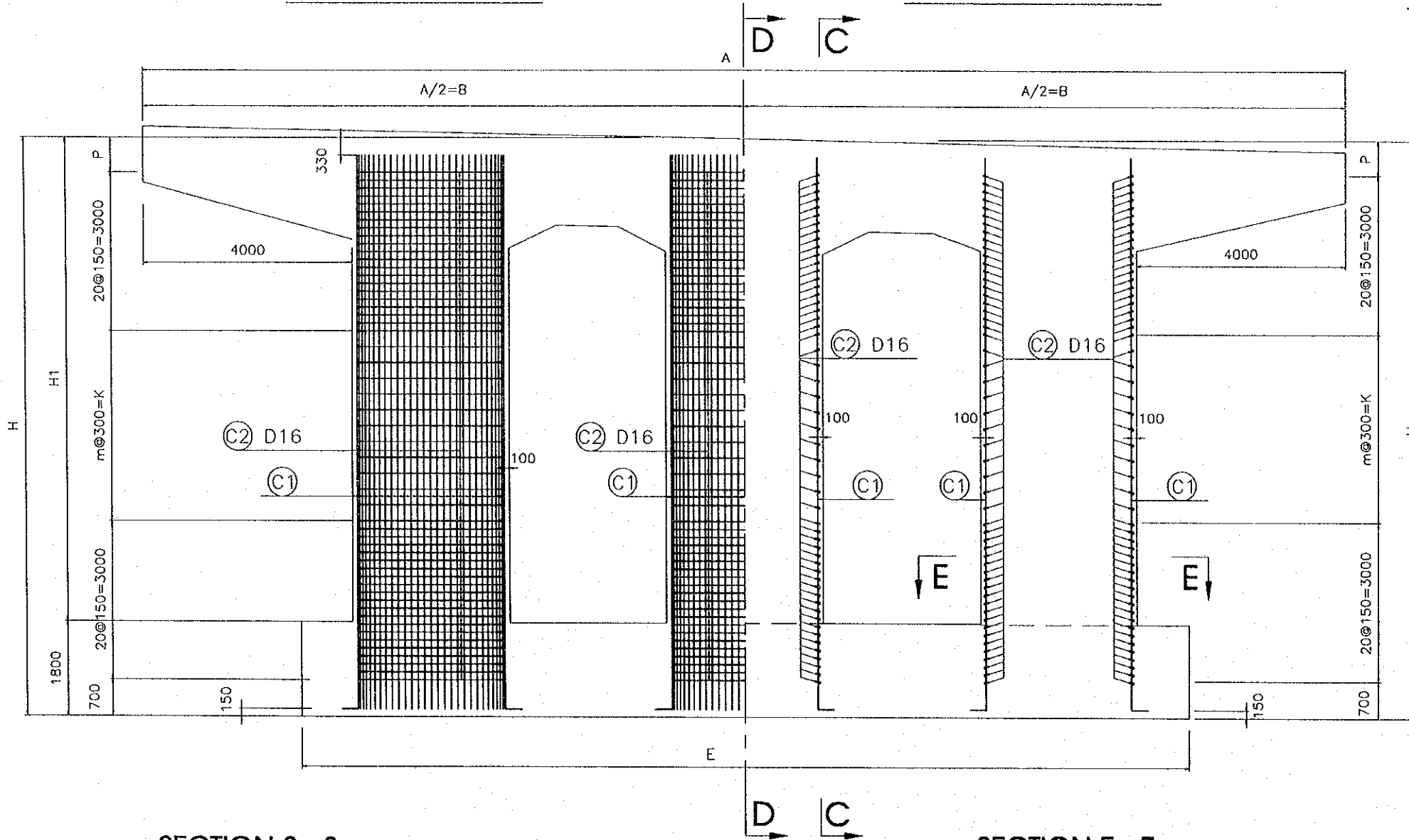
PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-59	

BAR ARRANGEMENT OF P9L, P9R, P16L (2)

HALF SECTION A - A

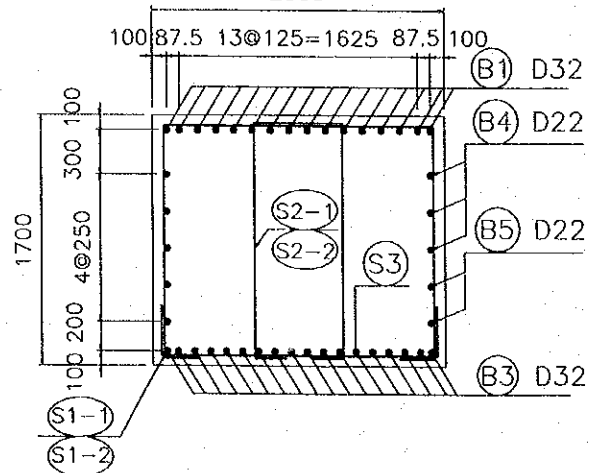
HALF SECTION B - B

HALF SECTION C - C HALF SECTION D - D



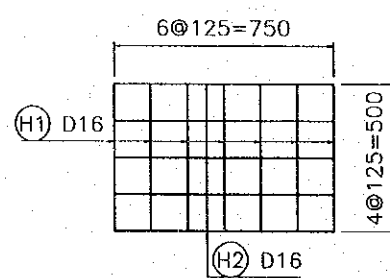
SECTION 8 - 8

(SC=1/50)
2000

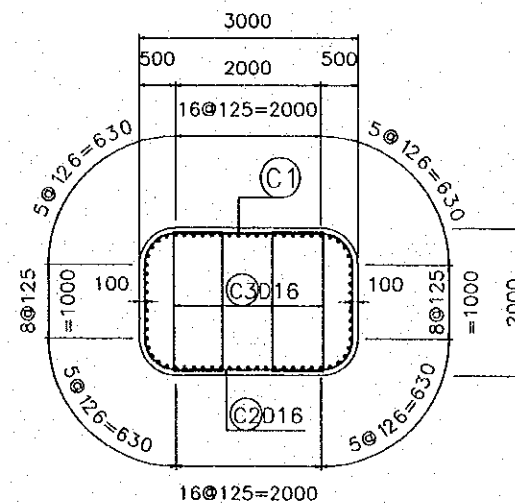


DETAIL A

(SC=1/25)
6@125=750



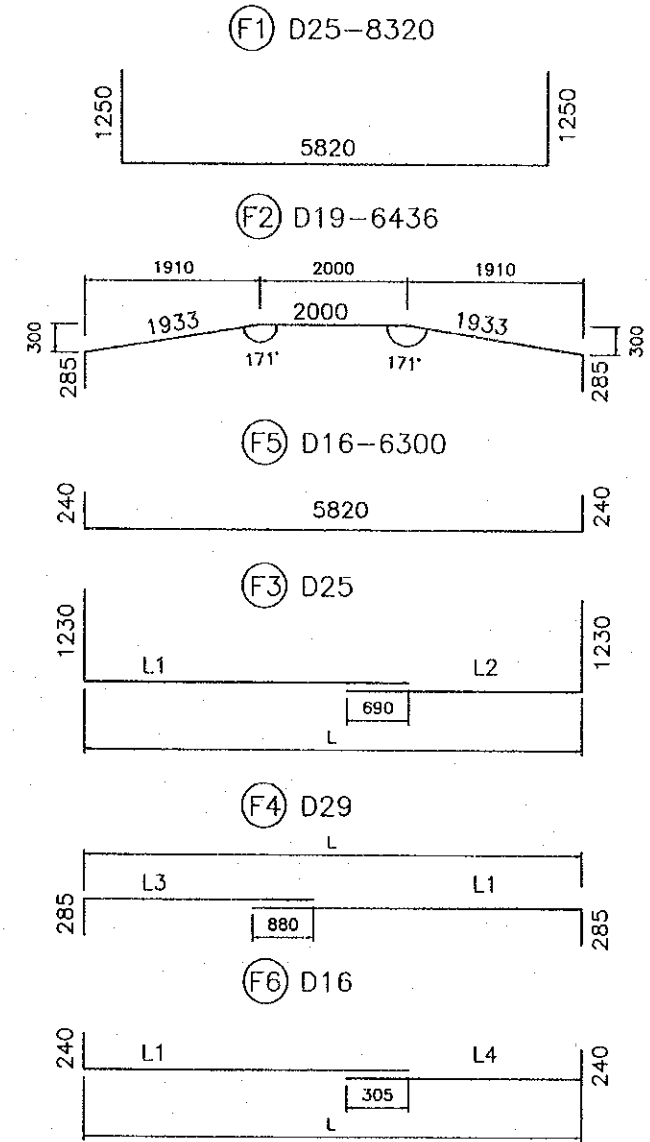
SECTION E - E



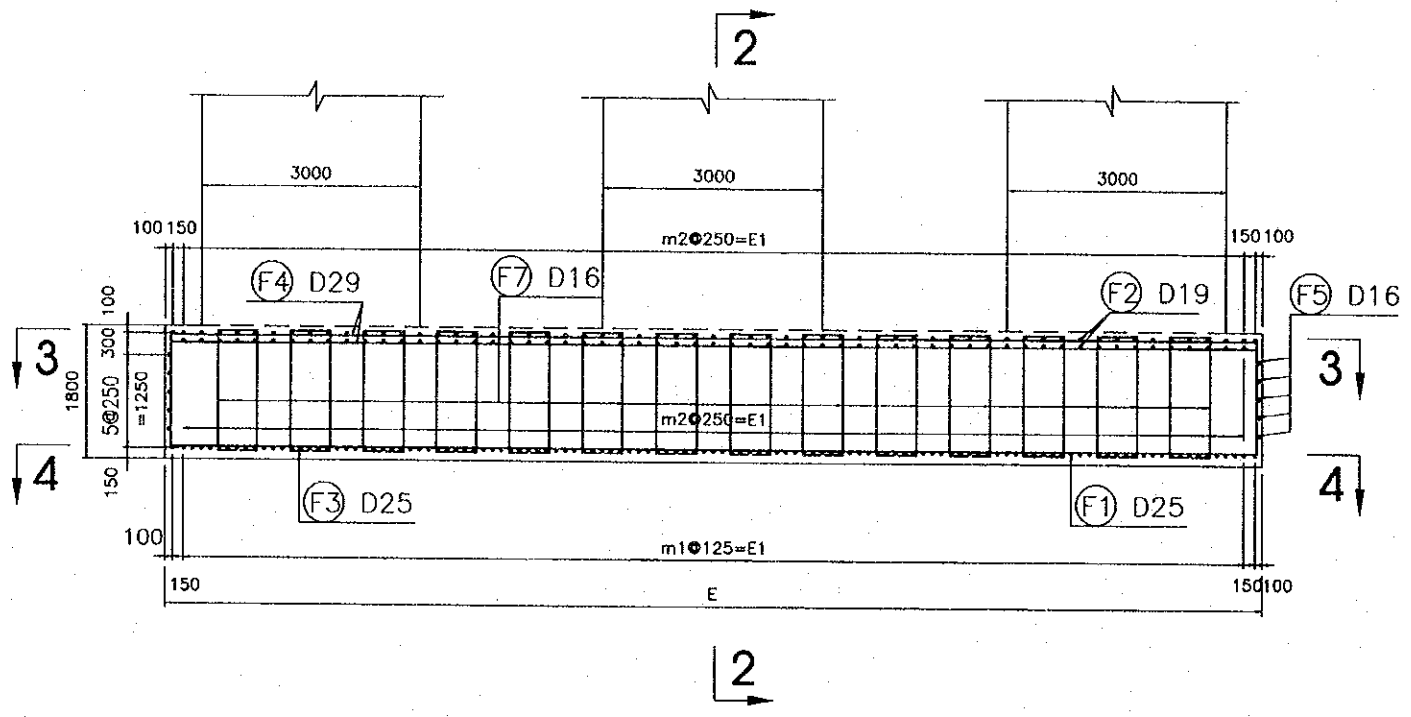
DIMENSIONS OF PIERS

Pier	P9L	P9R	P16L
A(mm)	23300	22000	22000
B(mm)	11650	11000	11000
E(mm)	17000	16000	16000
H(mm)	12800	11800	12800
H1(mm)	11000	10000	11000
m	18	15	18
K(mm)	5400	4500	5400
P(mm)	700	600	700

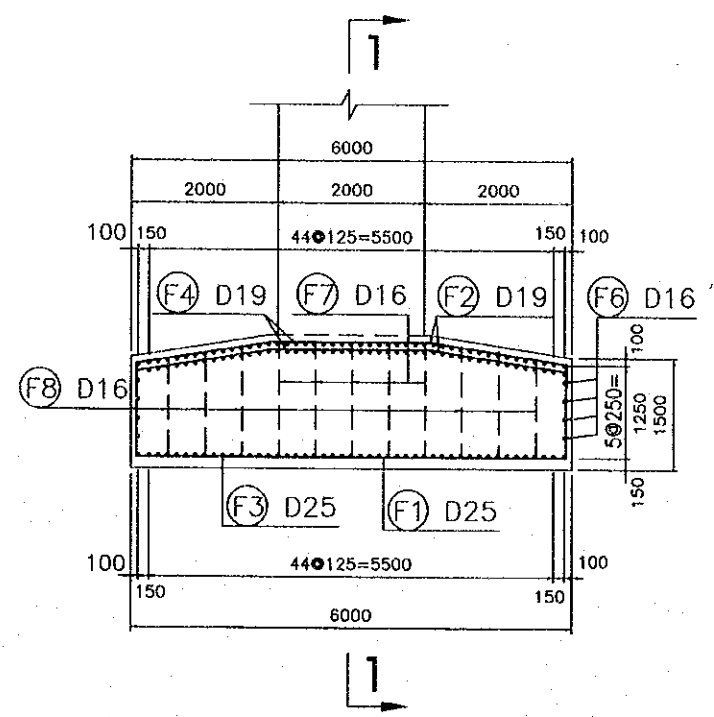
LIST OF REINFORCING BARS FOR FOOTING



SECTION 1 - 1



SECTION 2 - 2



DIMENSIONS OF FOOTING

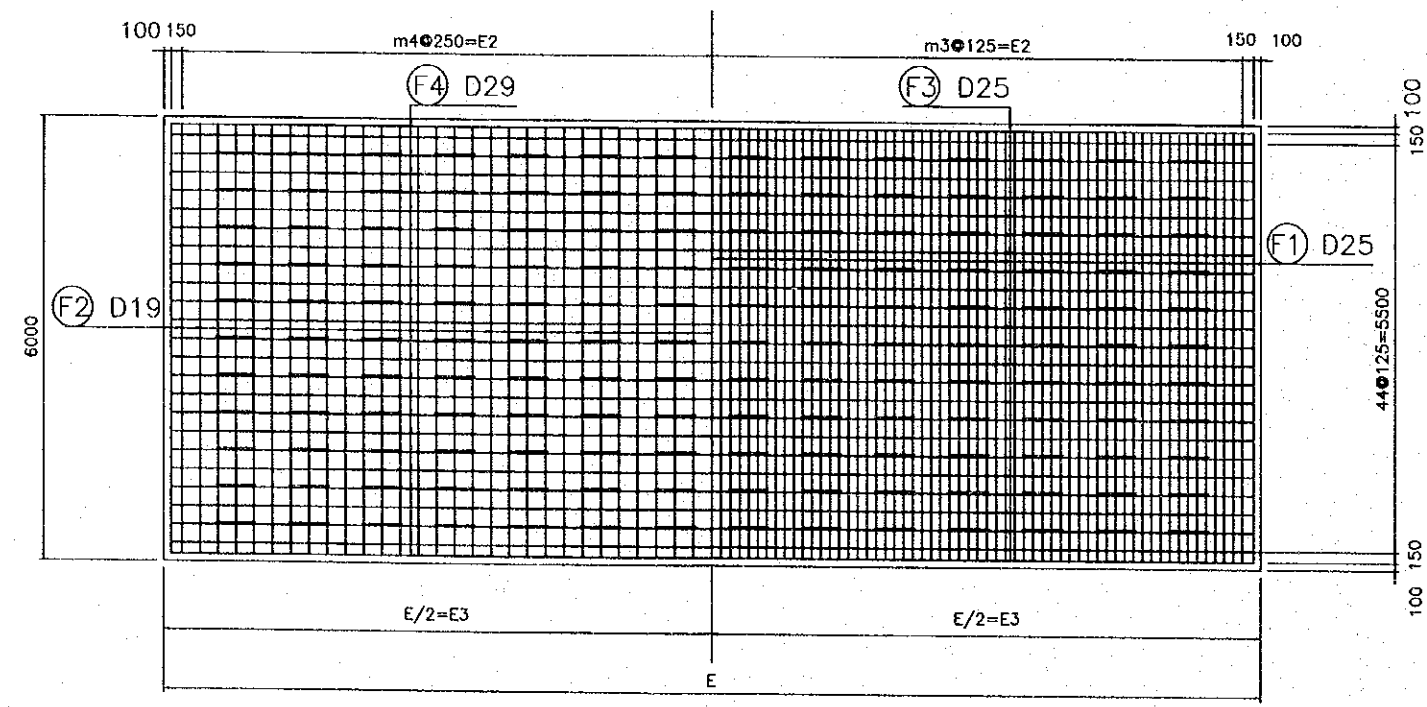
Pier	P9L	P9R	P16L
E (mm)	17000	16000	16000
m1	132	124	124
E1 (mm)	16500	15500	15500
m2	66	62	62
m3	66	62	62
m4	33	31	31
E2 (mm)	8250	7750	7750
E3 (mm)	8500	8000	8000

DIMENSIONS OF BARS F3, F4, F6

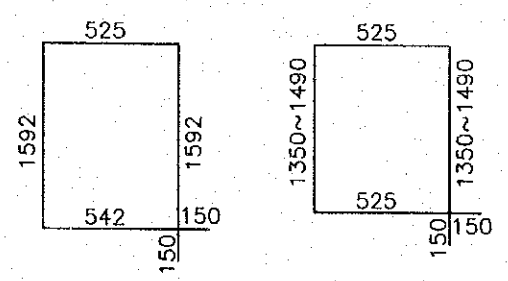
Items	L(mm)	L1(mm)	L2(mm)
P9L	16800	10000	7490
P9R	15800	10000	6490
P16L	15800	10000	6490

HALF SECTION 3 - 3

HALF SECTION 4 - 4

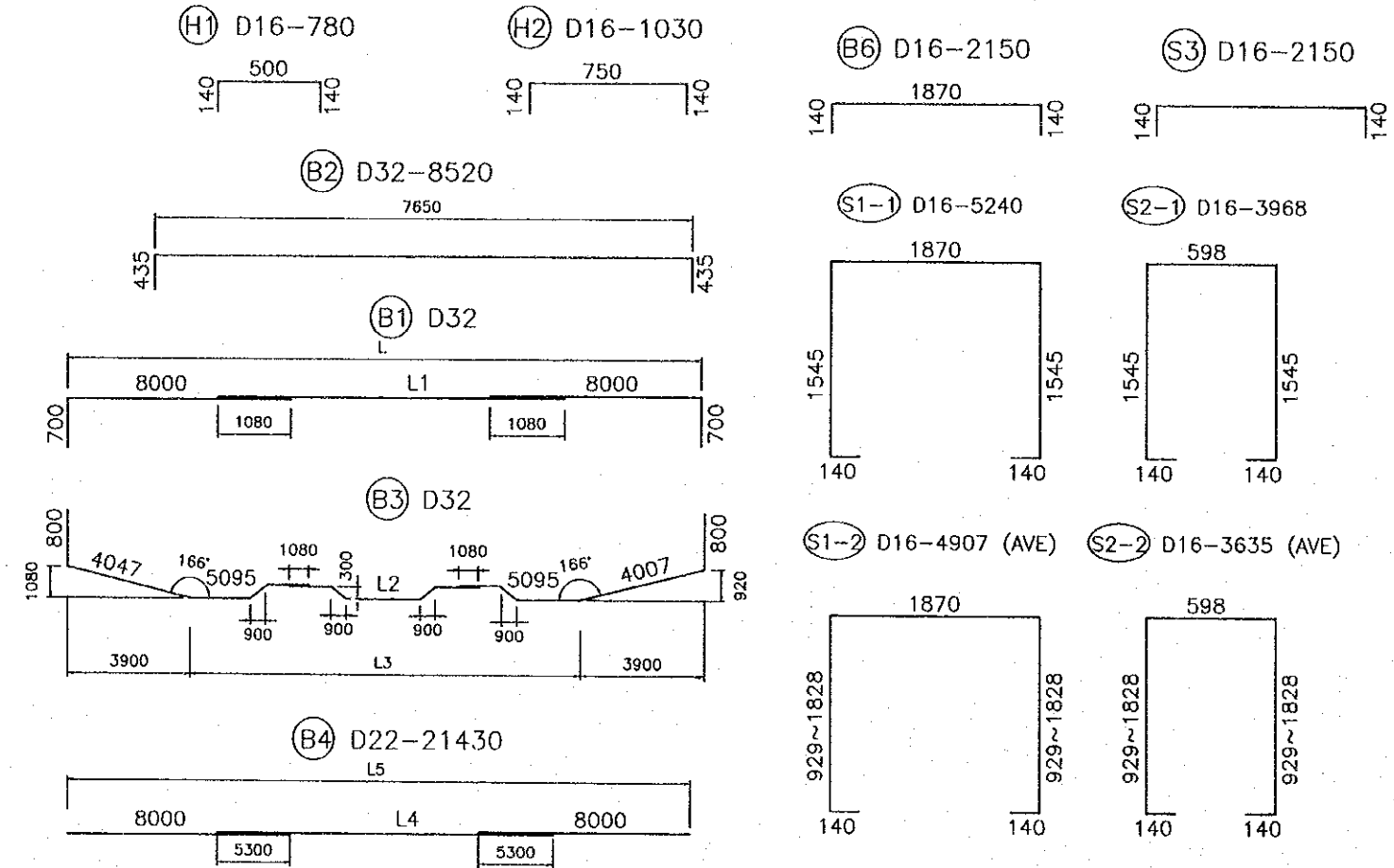


(F7) D16-4534 (F8) D16-4190(AVE)



Pier	Items	L3(mm)	L4(mm)	F3(mm)	F4(mm)	F6(mm)
P9L		7680	7105	19550	18250	17585
P9R		6680	6105	18950	17250	16585
P16L		6680	6105	18950	17250	16585

LIST OF REINFORCING BARS FOR BEAM AND COLUMN



DIMENSIONS OF BARS B1,B3,B4

Items Pier	L(mm)	L1(mm)	L2(mm)	L3(mm)	L4(mm)	L5(mm)	B1(mm)	B3(mm)	B4(mm)
P9L	23100	9260	7456	15300	8210	23150	25260	27300	24210
P9R	21800	7960	7058	14000	6910	21850	23960	26902	22910
P16L	21800	7960	7058	14000	6910	21850	23960	26902	22910

DIMENSIONS OF BAR C1

Items Piers	D (mm)	A (mm)	L (mm)	Total (mm)
P9L	D29	375	12320	12695
P9R	D29	375	11320	11695
P16L	D29	375	12320	12695

QUANTITY REINFORCEMENT FOR PIER P9L

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)	
CAP BEAM	H1	[Diagram]	D16	780	147	1.56	178.87	
	H2	[Diagram]	D16	1030	105	1.56	168.71	
	B1	[Diagram]	D32	25260	16	6.23	2517.92	
	B2	[Diagram]	D32	8520	32	6.23	1698.55	
	B3	[Diagram]	D32	27300	16	6.23	2721.26	
	B4	[Diagram]	D22	24210	6	3.04	441.59	
	B5	[Diagram]	D22	19540	6	3.04	356.41	
	B6	[Diagram]	D16	2150	10	1.56	33.54	
	S1-1	[Diagram]	D16	5240	22	1.56	179.84	
	S1-2	[Diagram]	D16	4907	104	1.56	796.11	
STEM	S2-1	[Diagram]	D16	3968	16	1.56	99.04	
	S2-2	[Diagram]	D16	3635	104	1.56	589.74	
	S3	[Diagram]	D16	2125	218	1.56	722.67	
	C1	[Diagram]	D29	12695	204	5.04	13052.49	
	C2	[Diagram]	D16	9437	177	1.56	2605.74	
	C3	[Diagram]	D16	5330	220	1.56	1829.26	
	FOOTING	F1	[Diagram]	D25	8320	135	3.98	4,470.34
		F2	[Diagram]	D19	6436	138	2.25	1998.38
F3		[Diagram]	D25	19550	47	3.98	3657.02	
F4		[Diagram]	D29	18250	94	5.04	8646.12	
F5		[Diagram]	D16	6300	10	1.56	98.28	
F6		[Diagram]	D16	17585	8	1.56	219.46	
F7		[Diagram]	D16	4534	95	1.56	671.94	
F8		[Diagram]	D16	4190	114	1.56	745.15	
TOTAL							48,498.43	
SUMMARY			D16 =				8,938.36	
			D19 =				1998.38	
			D22 =				798.00	
			D25 =				8,127.36	
			D29 =				21,698.61	
		D32 =				6,937.73		

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S.WAYABE
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.01.18

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-3a-62	
BAR ARRANGEMENT OF P9L, P9R, P16L (5)			

QUANTITY REINFORCEMENT OF P9R

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D16	780	147	1.56	178.87
	H2		D16	1030	105	1.56	168.71
	B1		D32	23960	16	6.23	2388.33
	B2		D32	8520	32	6.23	1698.55
	B3		D32	26902	16	6.23	2681.59
	B4		D22	22910	6	3.04	417.88
	B5		D22	19540	6	3.04	356.41
	B6		D16	2150	10	1.56	33.54
	S1-1		D16	5240	10	1.56	81.74
	S1-2		D16	4907	104	1.56	796.11
	S2-1		D16	3968	10	1.56	61.90
	S2-2		D16	3635	104	1.56	589.74
	S3		D16	2125	218	1.56	722.67
	STEM	C1		D29	11695	204	5.04
C2			D16	9437	168	1.56	2473.25
C3			D16	5330	215	1.56	1787.68
FOOTING	F1		D25	8320	125	3.98	4,139.20
	F2		D19	6436	130	2.25	1,882.53
	F3		D25	18950	47	3.98	3544.79
	F4		D29	17250	94	5.04	8172.36
	F5		D16	6300	10	1.56	98.28
	F6		D16	16585	8	1.56	206.98
	F7		D16	4534	90	1.56	636.57
	F8		D16	4190	103	1.56	673.25
TOTAL							45,815.27
SUMMARY			D16 =				8,509.31
			D19 =				1,882.53
			D22 =				774.29
			D25 =				7,683.99
			D29 =				20,196.69
		D32 =				6,768.47	

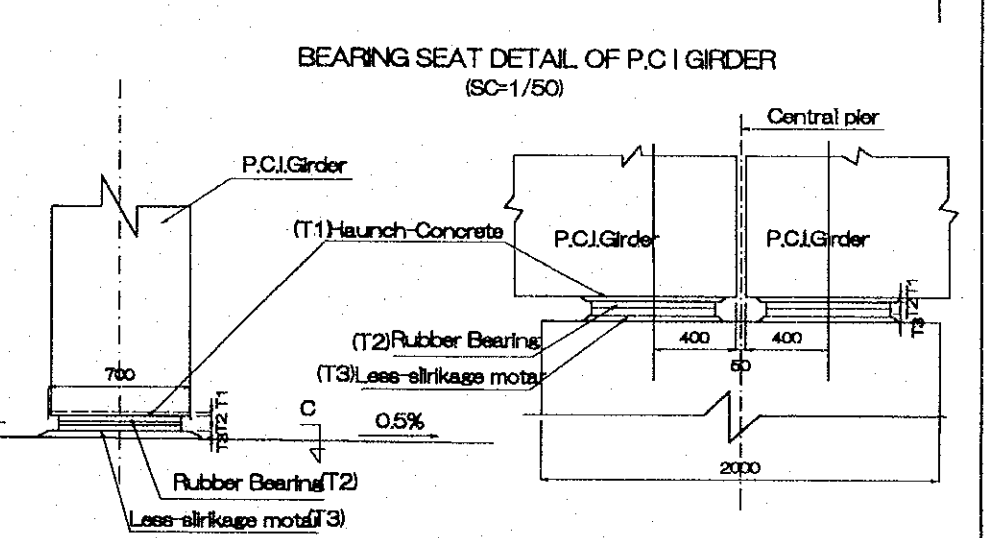
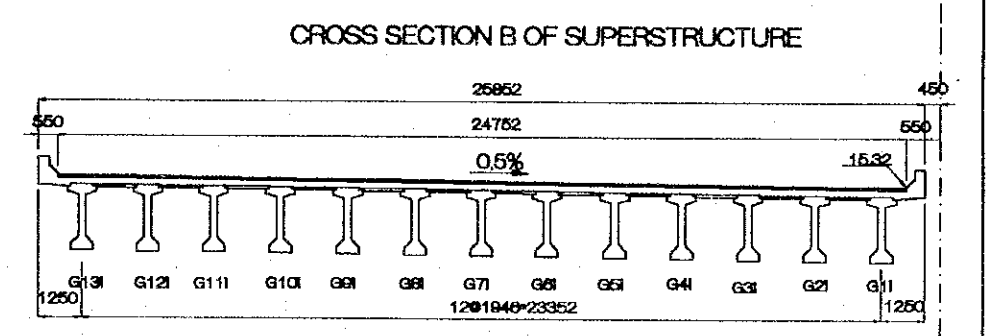
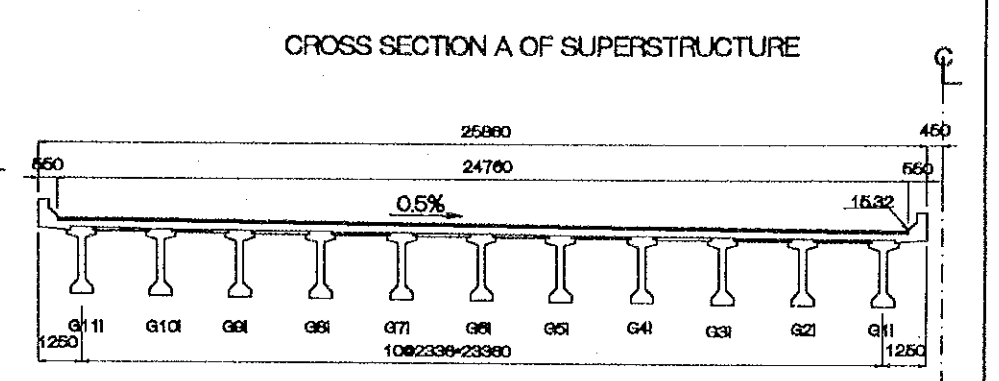
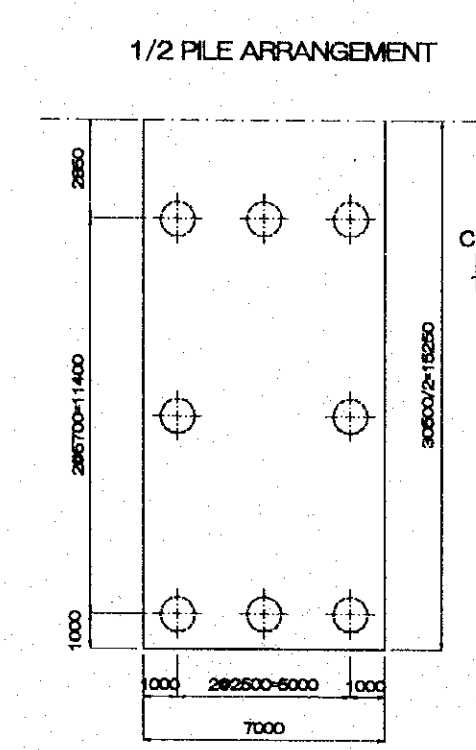
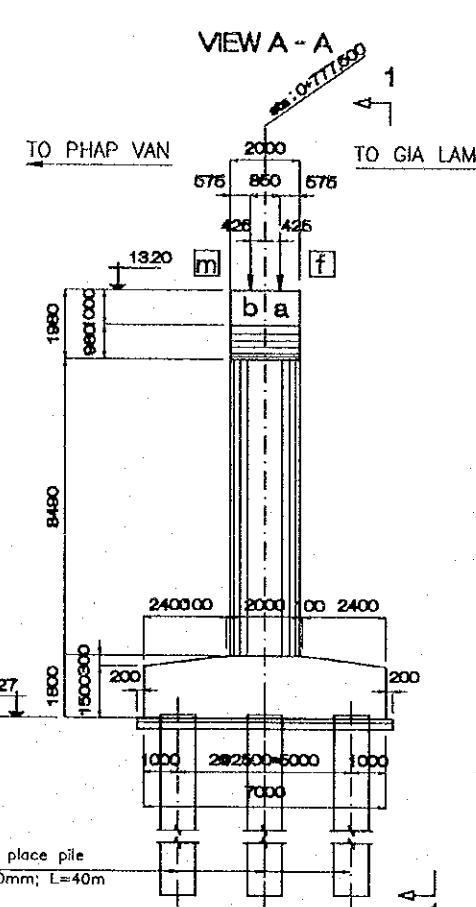
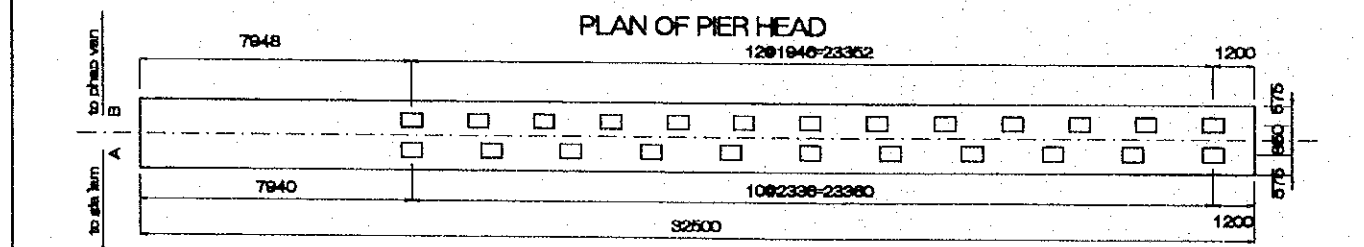
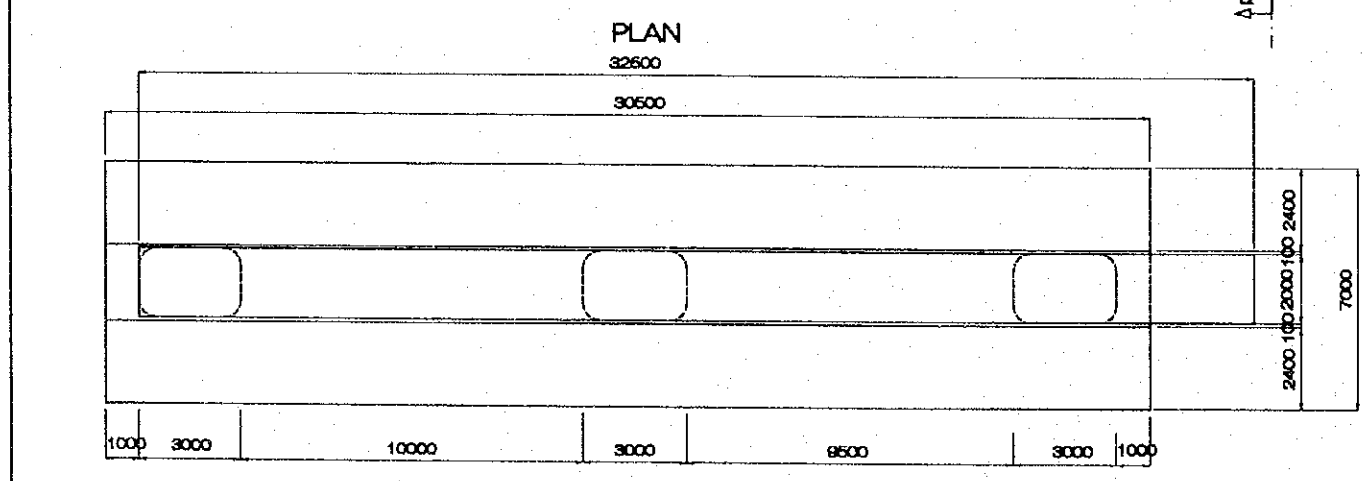
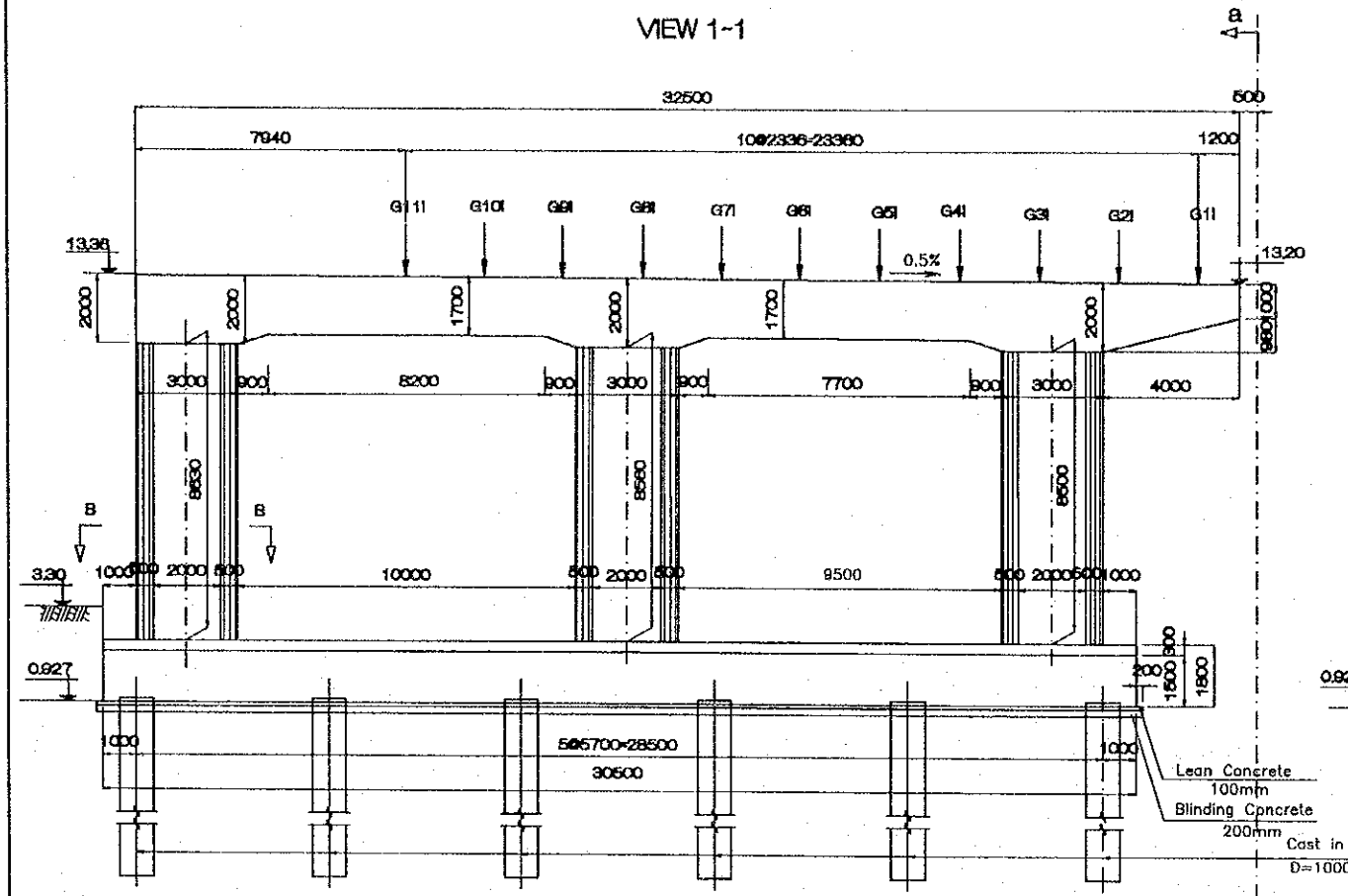
QUANTITY REINFORCEMENT OF P16L

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D16	780	147	1.56	178.87
	H2		D16	1030	105	1.56	168.71
	B1		D32	23960	16	6.23	2388.33
	B2		D32	8520	32	6.23	1698.55
	B3		D32	26902	16	6.23	2681.59
	B4		D22	22910	6	3.04	417.88
	B5		D22	19540	6	3.04	356.41
	B6		D16	2150	10	1.56	33.54
	S1-1		D16	5240	10	1.56	81.74
	S1-2		D16	4907	104	1.56	796.11
	S2-1		D16	3968	10	1.56	61.90
	S2-2		D16	3635	104	1.56	589.74
	S3		D16	2125	218	1.56	722.67
	STEM	C1		D29	12695	204	5.04
C2			D16	9437	177	1.56	2605.74
C3			D16	5330	220	1.56	1829.26
FOOTING	F1		D25	8320	125	3.98	4,139.20
	F2		D19	6436	130	2.25	1,882.53
	F3		D25	18950	47	3.98	3544.79
	F4		D29	17250	94	5.04	8172.36
	F5		D16	6300	10	1.56	98.28
	F6		D16	16585	8	1.56	206.98
	F7		D16	4534	90	1.56	636.57
	F8		D16	4190	103	1.56	673.25
TOTAL							47,017.50
SUMMARY			D16 =				8,683.38
			D19 =				1,882.53
			D22 =				774.29
			D25 =				7,683.99
			D29 =				21,224.85
		D32 =				6,768.47	

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATADE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.6.1

PACKAGE 3	SCALE 1/250	DRAWING No. C-1-3a-63	SHEET No.
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DETAIL OF PIER P10L



SECTION C-C

SECTION B-B

SUPERSTRUCTURE DEPTHS (MM)

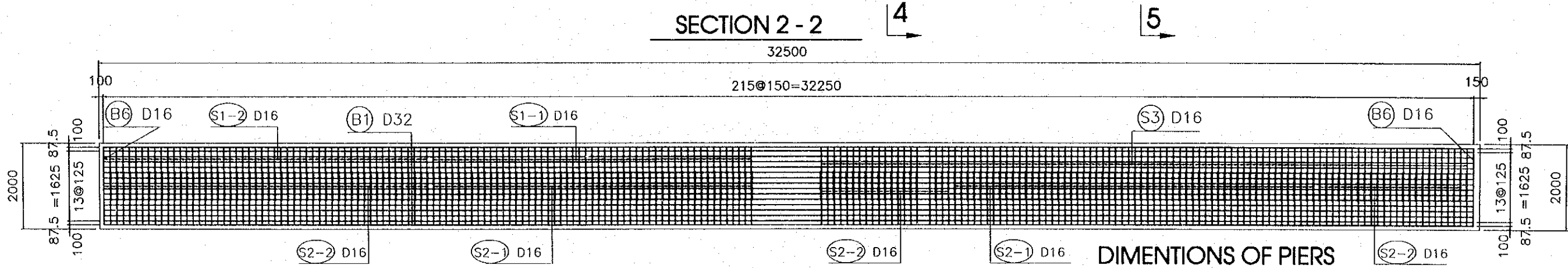
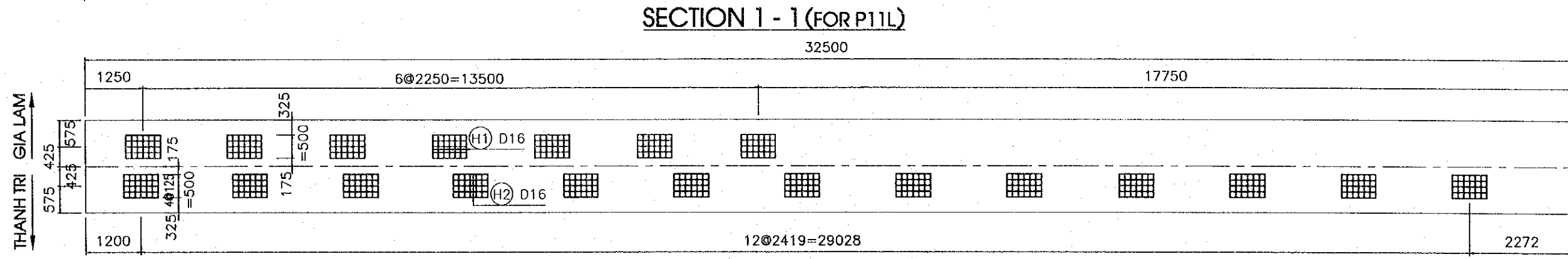
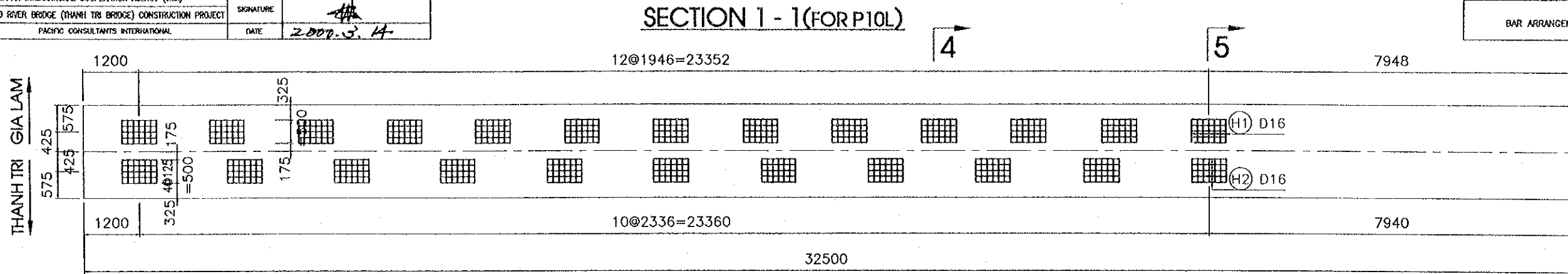
	MOVE	FIXED
	B	A
Pavement	75	75
Slab	202	202
Girder	1750	1750
Haunch T1	20	20
Bearing T2	56	36
Mortar T3	18	34
Sub Total	2121	2117

ELEVATION OF TOP PIER HEAD (M)

Bearing seat	G1		G2		G3		G4		G5		G6		G7		G8		G9		G10		G11		G12		G13	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A		
Elevation	13.206	13.206	13.216	13.218	13.225	13.229	13.235	13.241	13.245	13.253	13.255	13.264	13.264	13.276	13.274	13.288	13.284	13.299	13.294	13.311	13.303	13.323	13.313		13.323	

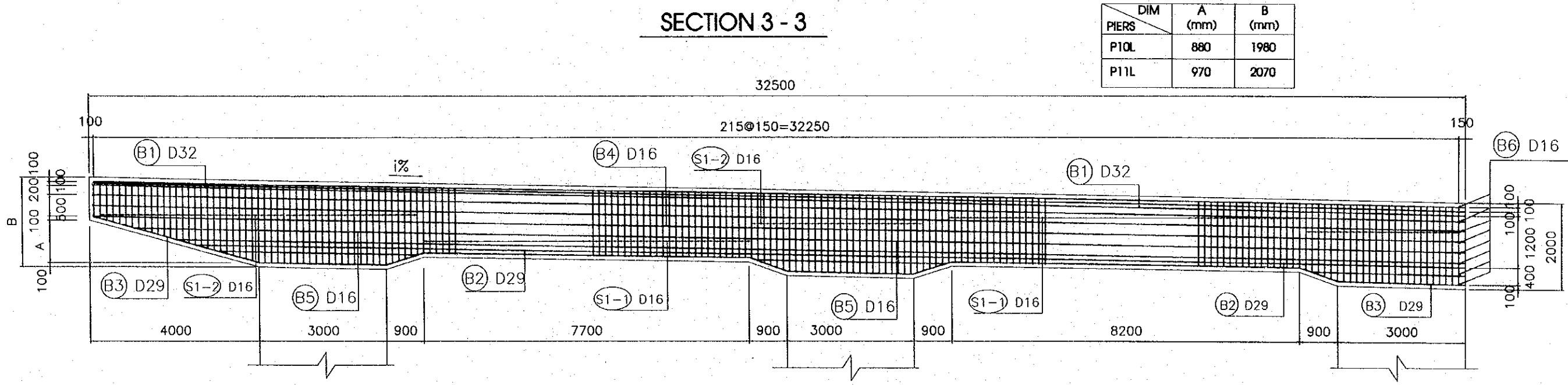
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE: 2000.3.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-65	
BAR ARRANGEMENT OF P10L, P11L (1)			



DIMENSIONS OF PIERS

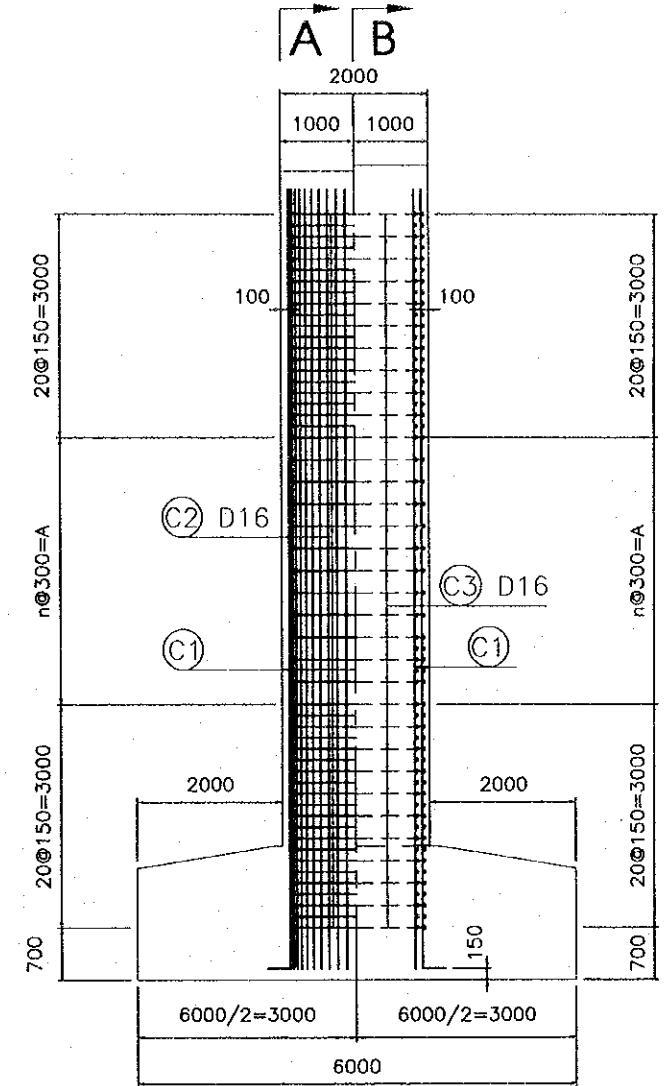
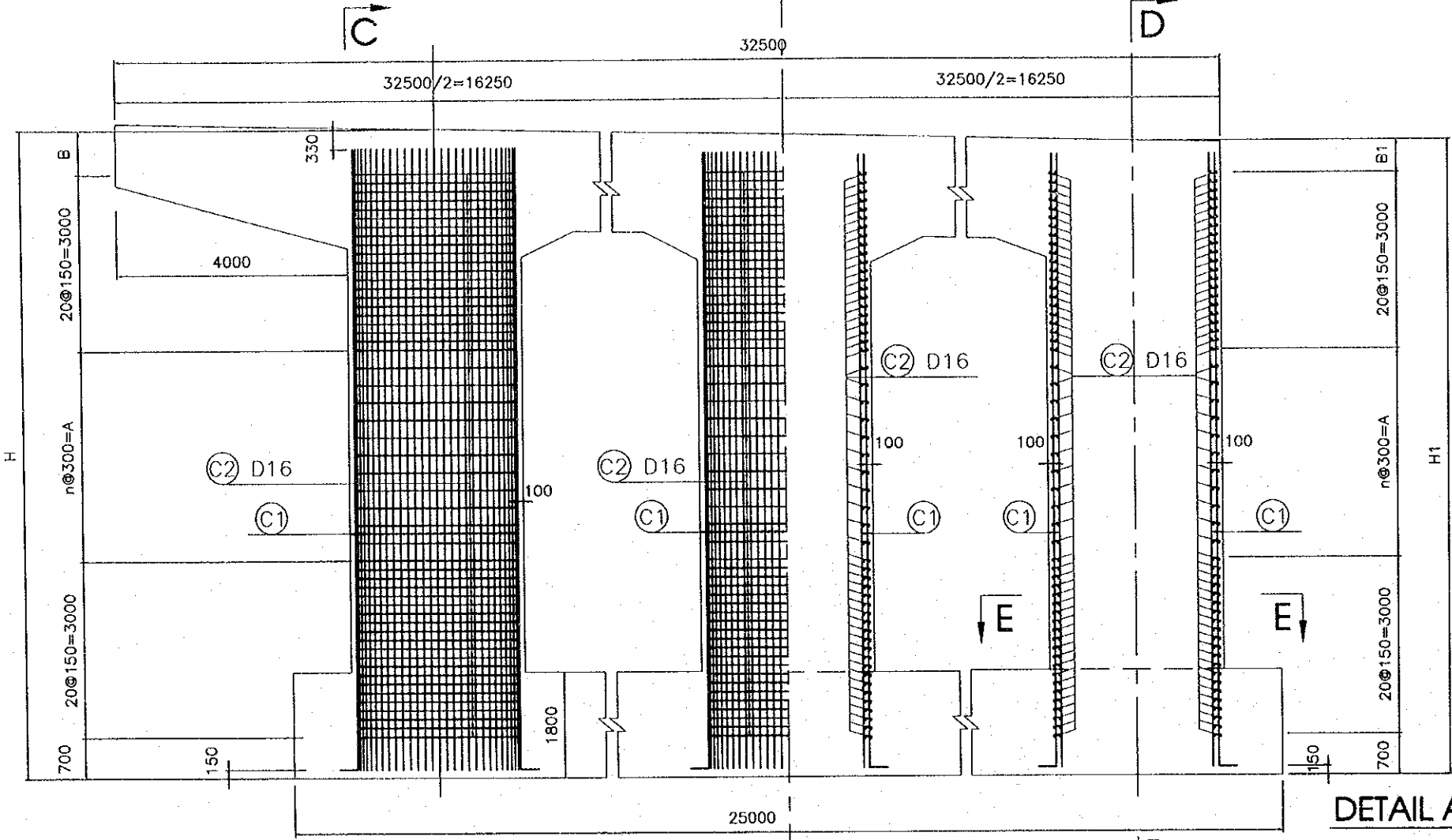
DIM	A (mm)	B (mm)
P10L	880	1980
P11L	970	2070



HALF SECTION A - A

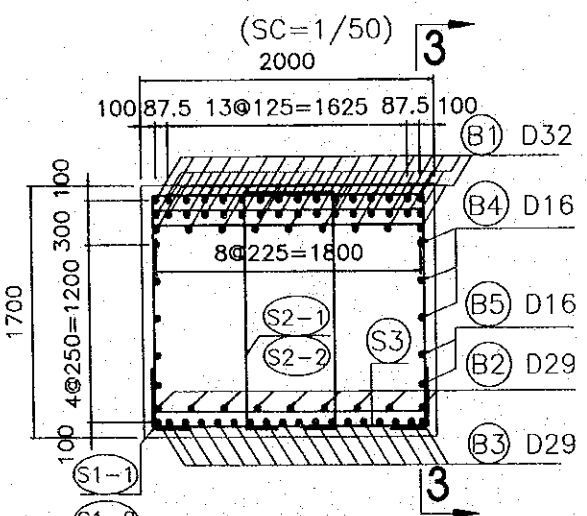
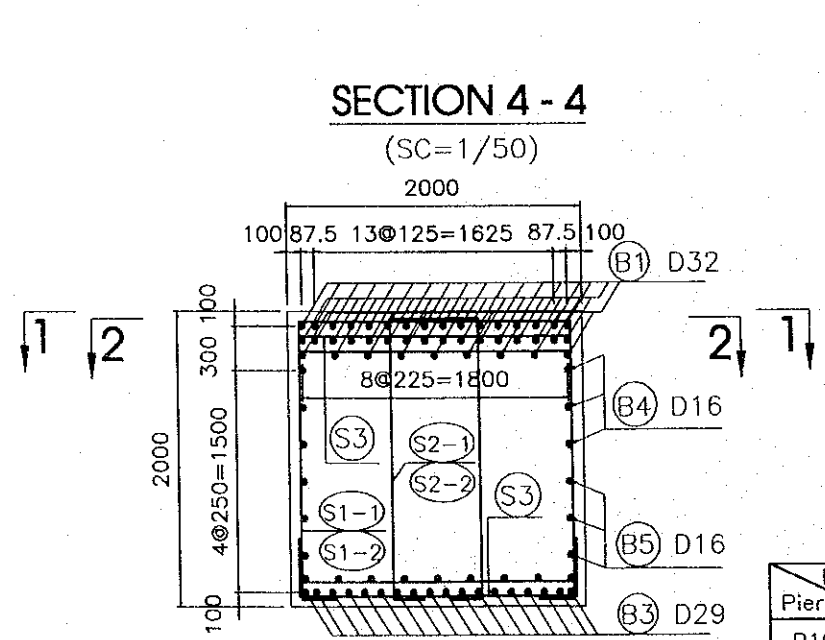
HALF SECTION B - B

HALF SECTION C - C HALF SECTION D - D



SECTION 5 - 5

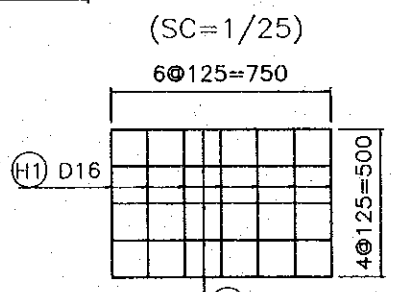
SECTION 4 - 4



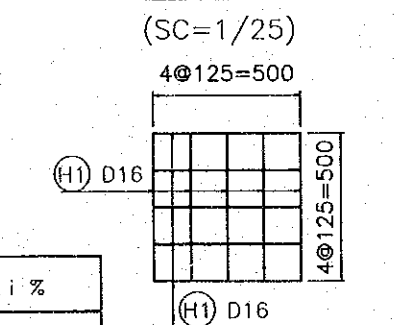
DIMENSIONS OF PIERS

Items	H(mm)	H1(mm)	n	A(mm)	B(mm)	B1(mm)	i %
P10L	12300	12430	17	5100	500	630	0.5
P11L	12300	11800	16	4800	800	300	1.834

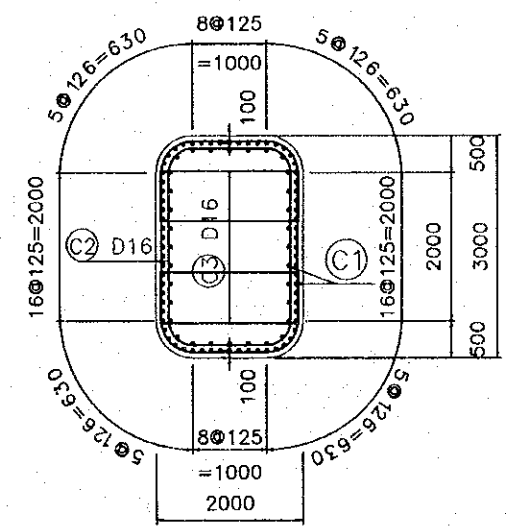
DETAIL A



DETAIL B



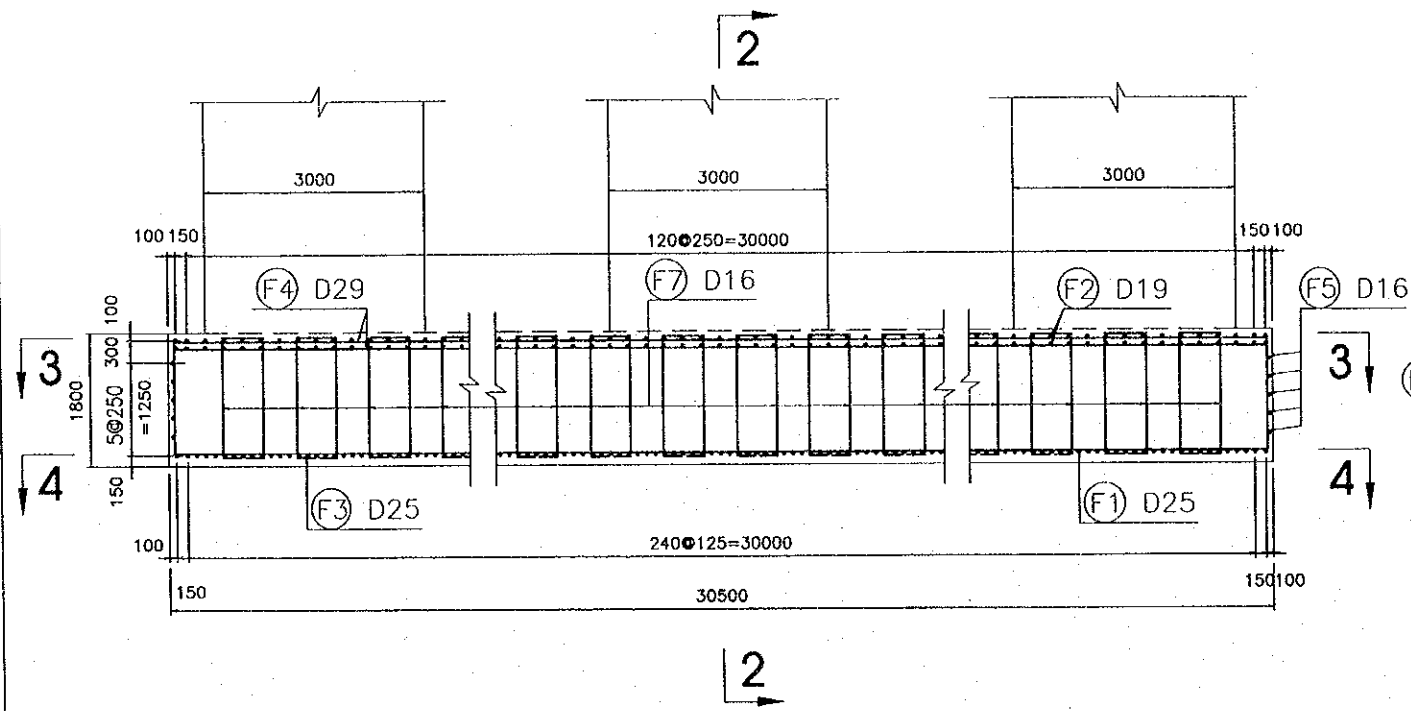
SECTION E - E



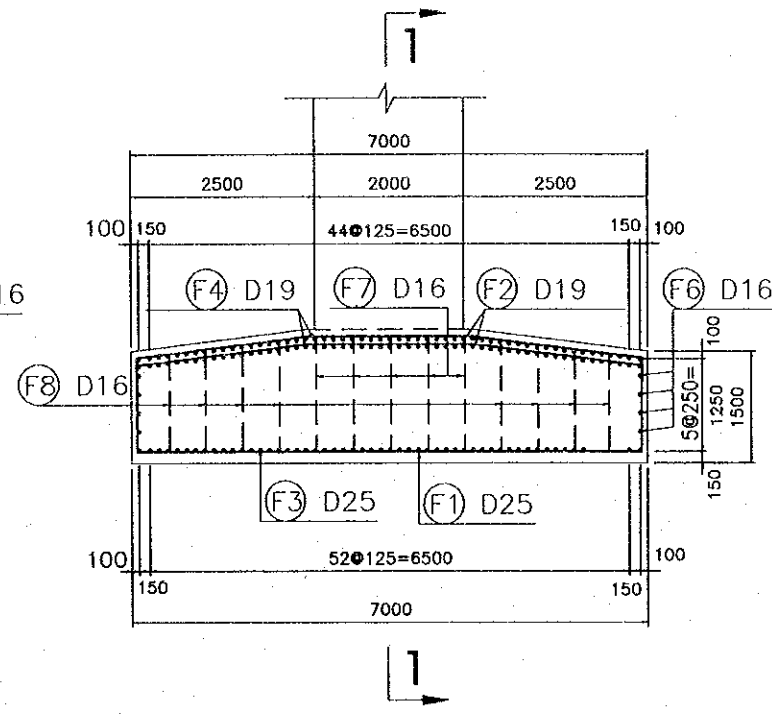
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATAPE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i>
CONSULTANT		DATE 2000.3.14

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-67	SHEET No.
BAR ARRANGEMENT FOR P15L (3)			

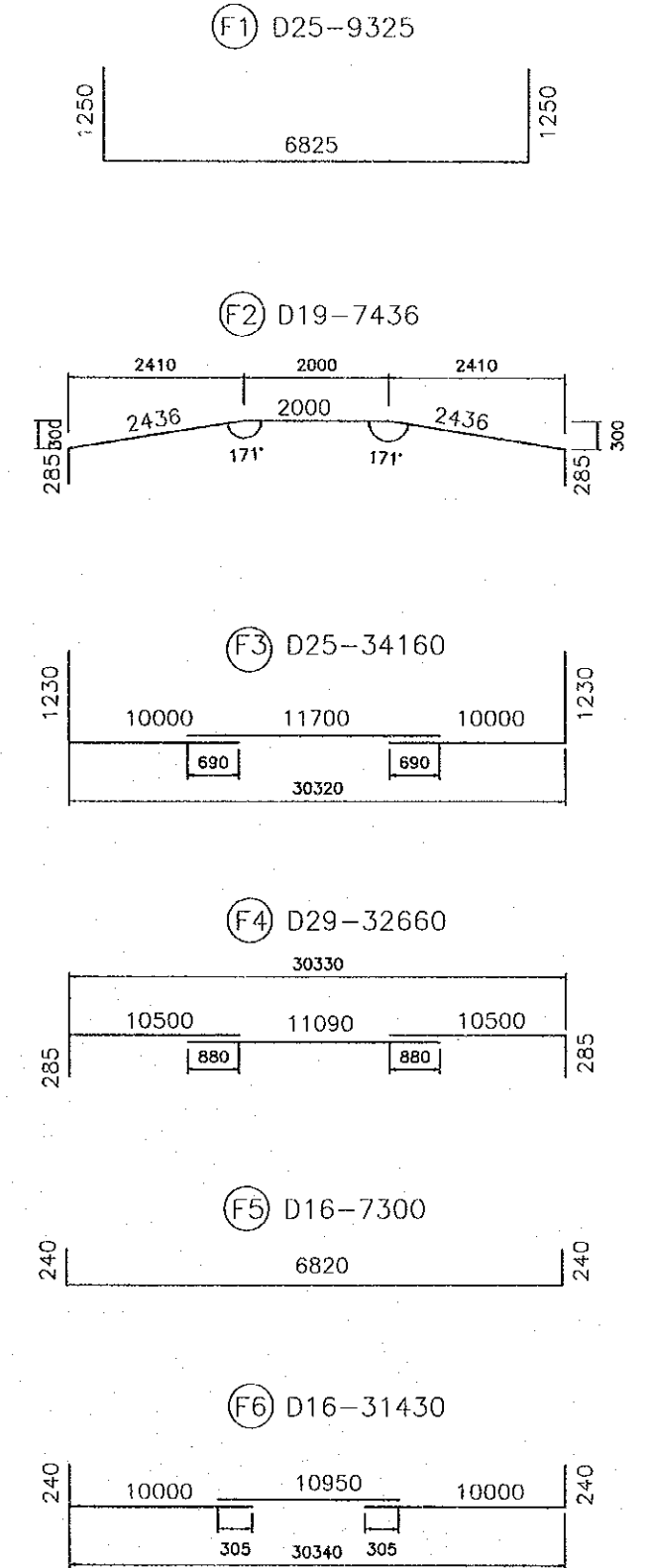
SECTION 1 - 1



SECTION 2 - 2

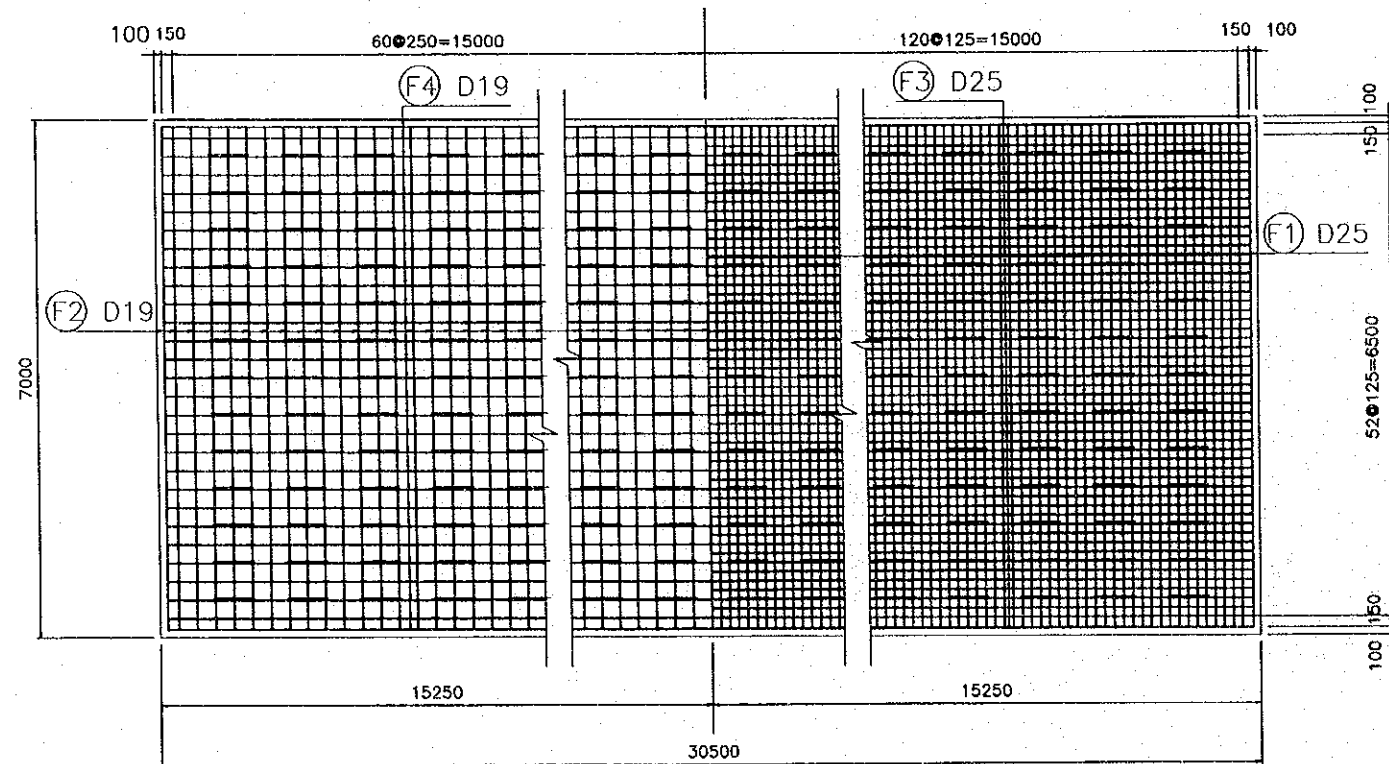


LIST OF REINFORCING BARS FOR FOOTING

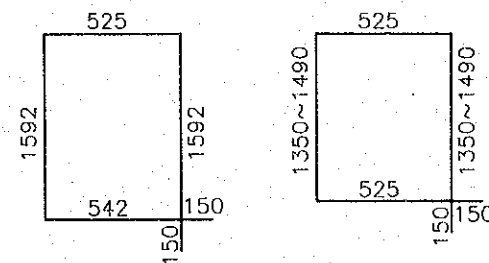


HALF SECTION 3 - 3

HALF SECTION 4 - 4



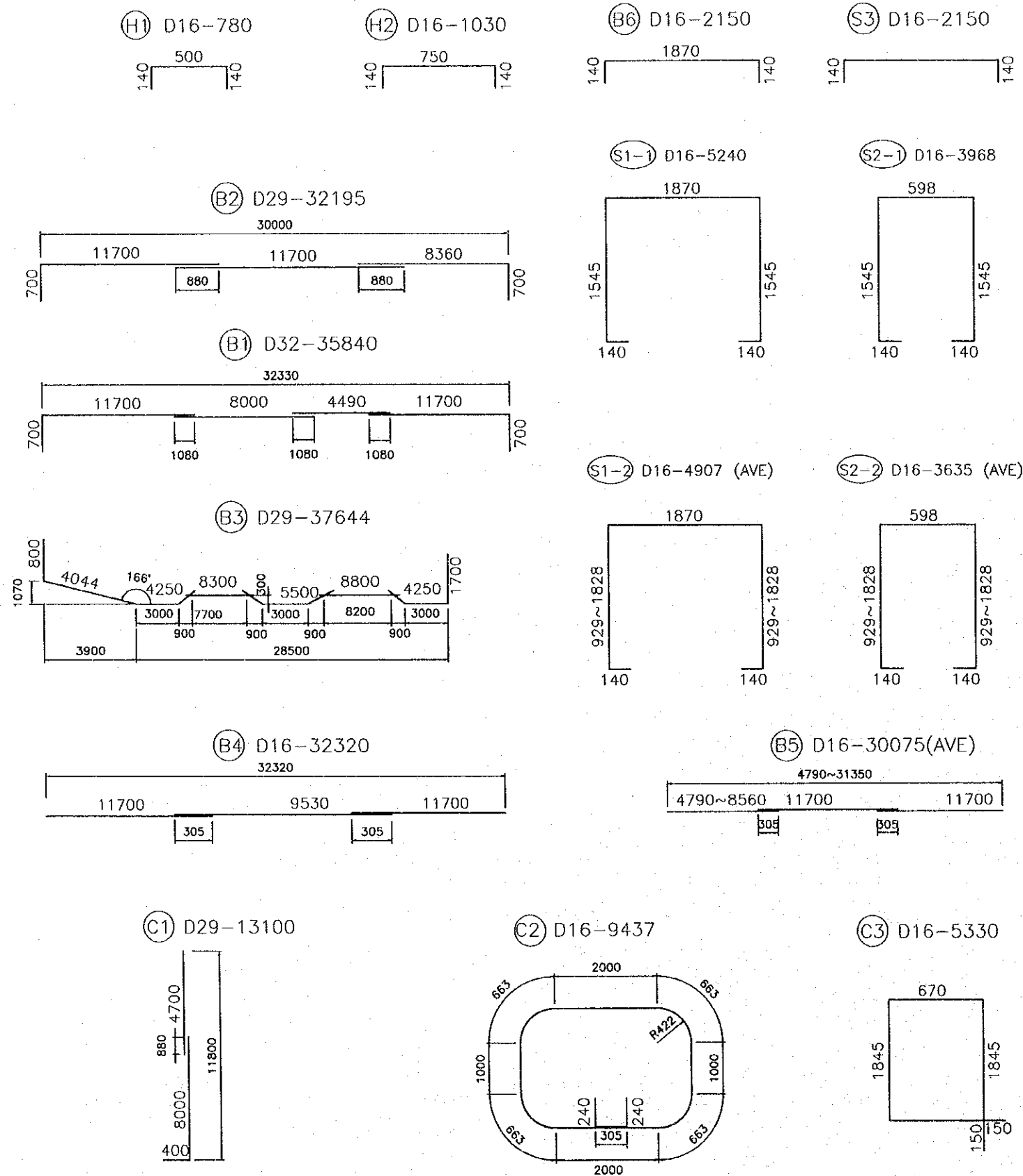
F7 D16-4534 F8 D16-4190(AVE)



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.8.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-6B	
BAR ARRANGEMENT OF P10, P11L (4)			

LIST OF REINFORCING BARS FOR BEAM AND COLUMN



QUANTITY REINFORCEMENT FOR PIER P10L

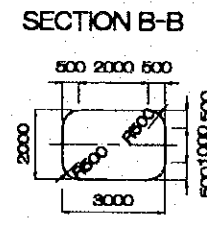
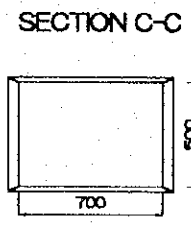
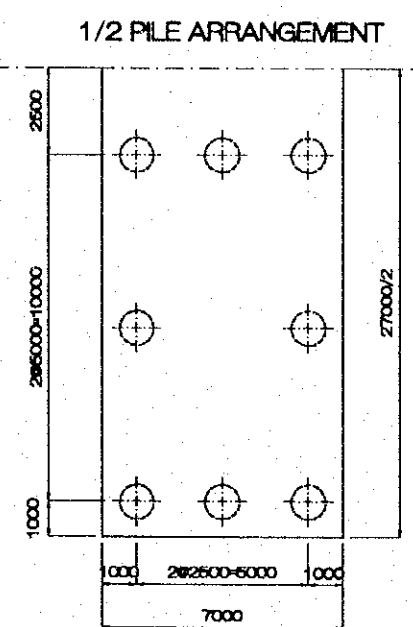
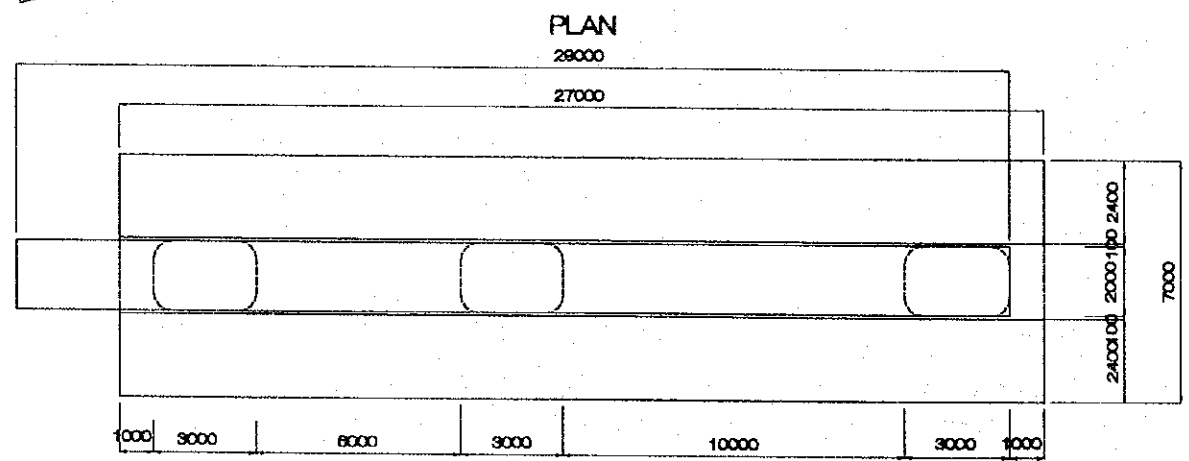
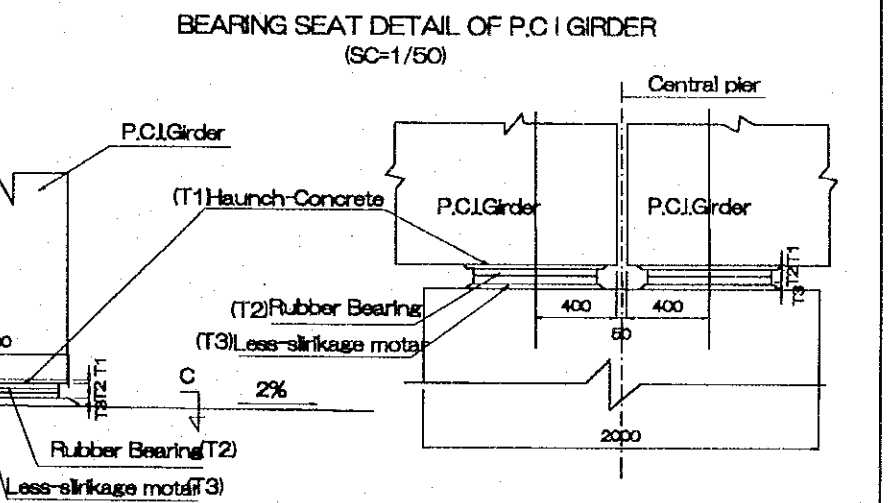
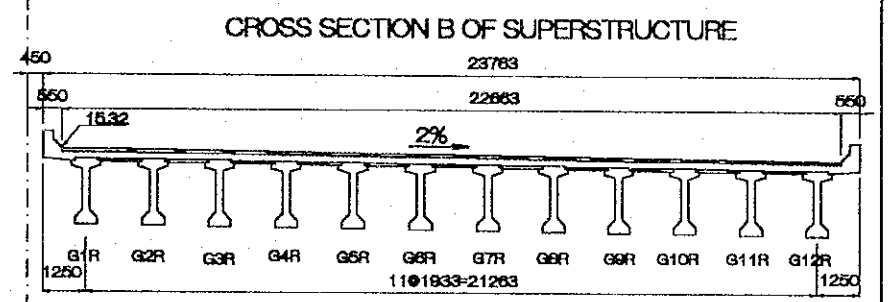
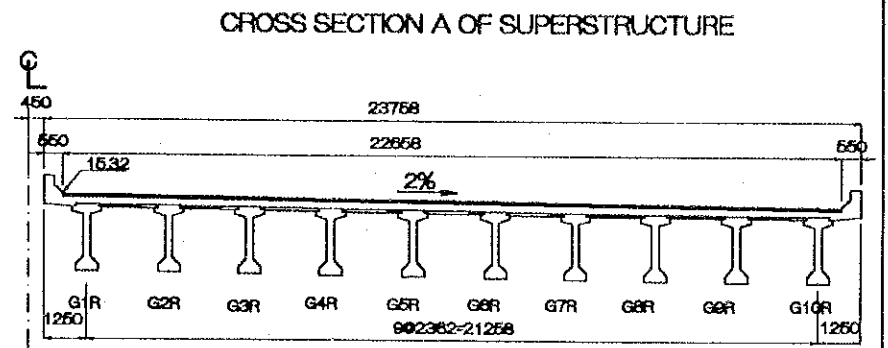
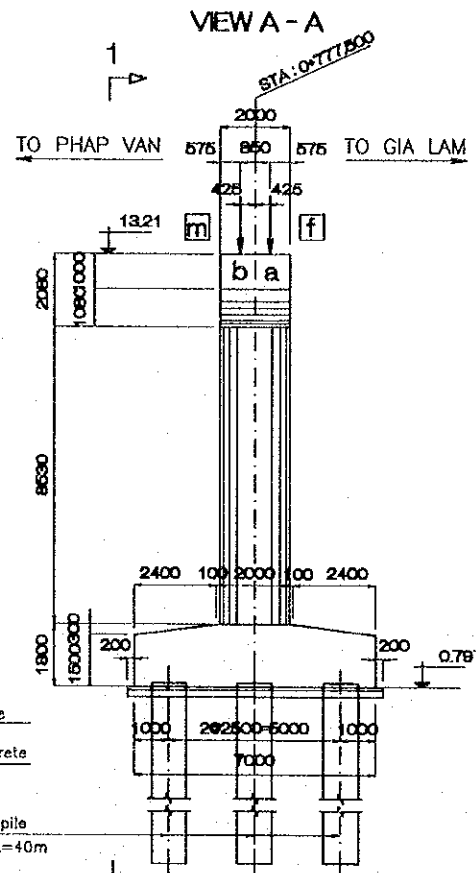
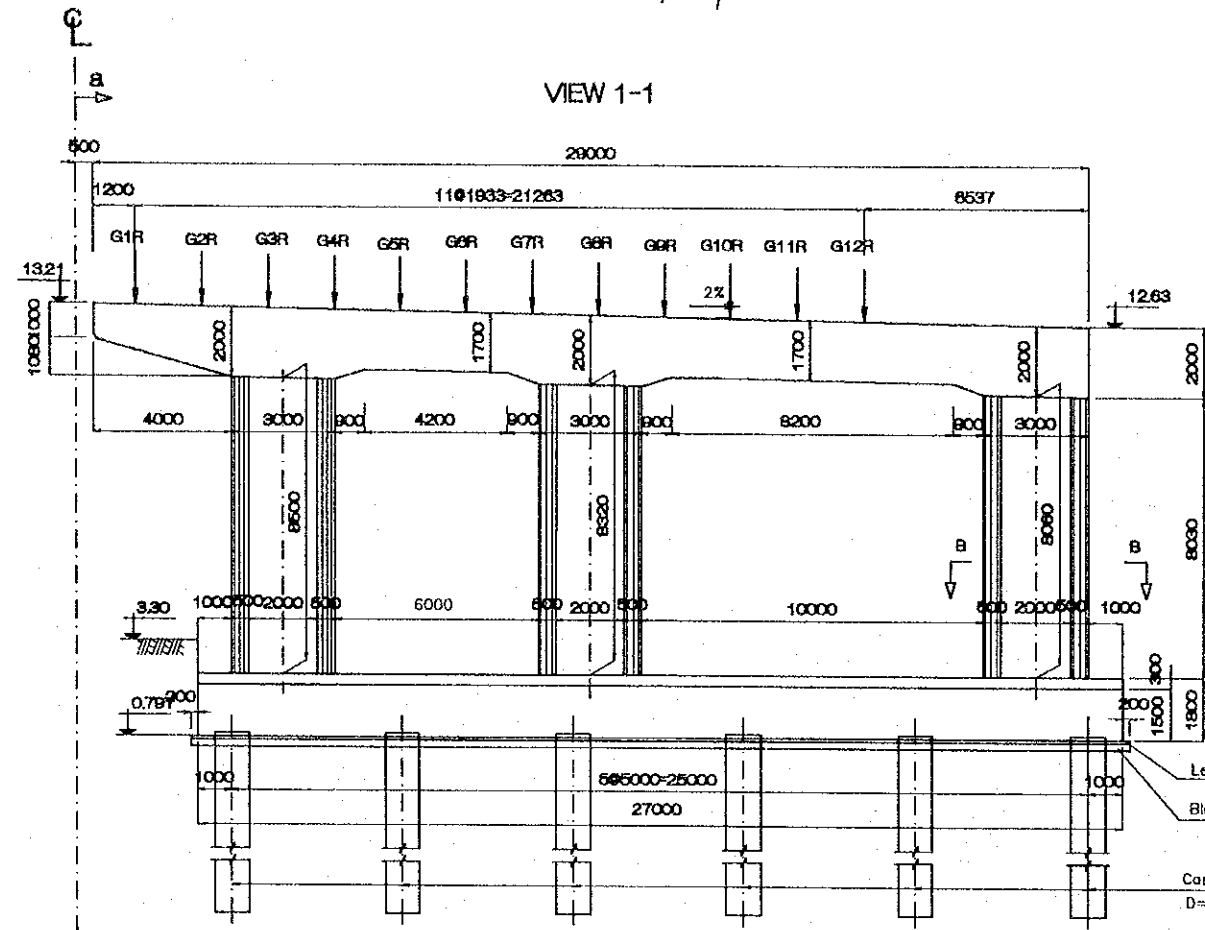
DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D16	780	168	1.56	204.42
	H2	[Diagram]	D16	1030	120	1.56	192.82
	B1	[Diagram]	D32	35890	41	6.23	9167.38
	B2	[Diagram]	D29	32195	9	5.04	1460.37
	B3	[Diagram]	D29	37644	16	5.04	3035.61
	B4	[Diagram]	D16	32320	6	1.56	302.52
	B5	[Diagram]	D16	30075	6	1.56	281.50
	B6	[Diagram]	D16	2150	10	1.56	33.54
	S1-1	[Diagram]	D16	5240	131	1.56	1070.85
	S1-2	[Diagram]	D16	4907	112	1.56	857.35
	S2-1	[Diagram]	D16	3968	131	1.56	810.90
	S2-2	[Diagram]	D16	3635	112	1.56	635.11
STEM	C1	[Diagram]	D29	13100	306	5.04	20203.34
	C2	[Diagram]	D16	9437	174	1.56	2561.58
	C3	[Diagram]	D16	5330	111	1.56	922.94
FOOTING	F1	[Diagram]	D25	9325	243	3.98	9,018.58
	F2	[Diagram]	D19	7436	246	2.25	4,115.83
	F3	[Diagram]	D25	34160	55	3.98	7,477.62
	F4	[Diagram]	D29	32660	110	5.04	18,106.70
	F5	[Diagram]	D16	7300	10	1.56	113.88
	F6	[Diagram]	D16	31430	8	1.56	392.25
	F7	[Diagram]	D16	4534	152	1.56	1,075.10
	F8	[Diagram]	D16	4190	244	1.56	1,594.88
TOTAL							85,067.15
SUMMARY			D16 =				12,481.71
			D19 =				4,115.83
			D25 =				16,496.20
			D29 =				42,806.03
			D32 =				9,167.38

QUANTITY REINFORCEMENT FOR PIER P11L

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D16	780	133	1.56	161.83
	H2	[Diagram]	D16	1030	95	1.56	152.65
	B1	[Diagram]	D32	35890	41	6.23	9167.38
	B2	[Diagram]	D29	32195	9	5.04	1460.37
	B3	[Diagram]	D29	37644	16	5.04	3035.61
	B4	[Diagram]	D16	32320	6	1.56	302.52
	B5	[Diagram]	D16	30075	6	1.56	281.50
	B6	[Diagram]	D16	2150	10	1.56	33.54
	S1-1	[Diagram]	D16	5240	131	1.56	1070.85
	S1-2	[Diagram]	D16	4907	112	1.56	857.35
	S2-1	[Diagram]	D16	3968	131	1.56	810.90
	S2-2	[Diagram]	D16	3635	112	1.56	635.11
STEM	C1	[Diagram]	D29	13100	306	5.04	20203.34
	C2	[Diagram]	D16	9437	171	1.56	2517.41
	C3	[Diagram]	D16	5330	111	1.56	922.94
FOOTING	F1	[Diagram]	D25	9325	243	3.98	9,018.58
	F2	[Diagram]	D19	7436	246	2.25	4,115.83
	F3	[Diagram]	D25	34160	55	3.98	7,477.62
	F4	[Diagram]	D29	32660	110	5.04	18,106.70
	F5	[Diagram]	D16	7300	10	1.56	113.88
	F6	[Diagram]	D16	31430	8	1.56	392.25
	F7	[Diagram]	D16	4534	152	1.56	1,075.10
	F8	[Diagram]	D16	4190	244	1.56	1,594.88
TOTAL							84,940.23
SUMMARY			D16 =				12,354.79
			D19 =				4,115.83
			D25 =				16,496.20
			D29 =				42,806.03
			D32 =				9,167.38

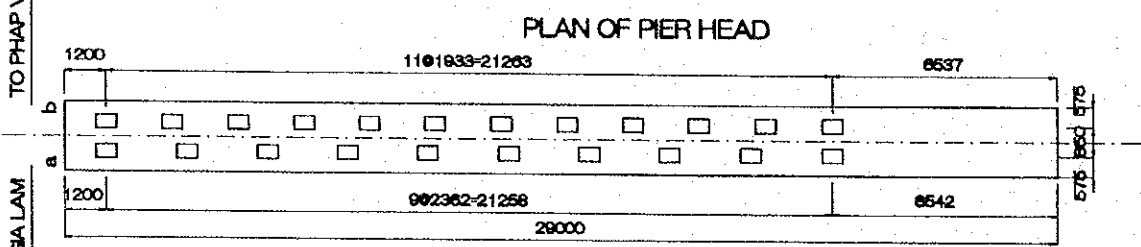
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WAIABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000/16/1

PACKAGE 3	SCALE 1/250	DRAWING No. C-1-3a-69	SHEET No.
DETAIL OF PIER P10R			



SUPERSTRUCTURE DEPTHS (MM)

	PIOR	
	MOVE B	FIXED A
Pavement	75	75
Slab	207	207
Girder	1750	1750
Haunch T1	20	20
Bearing T2	56	36
Mortar T3	18	34
Sub Total	2126	2122

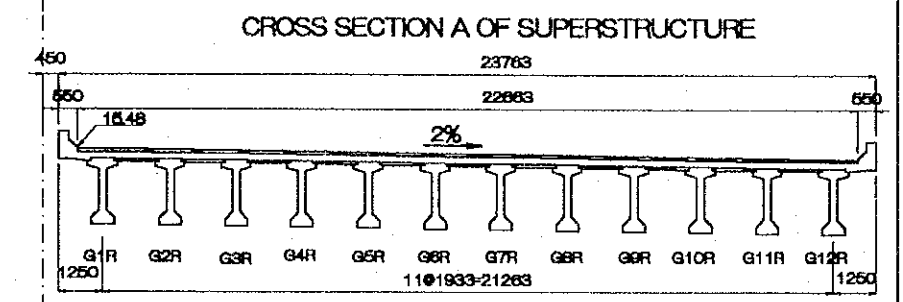
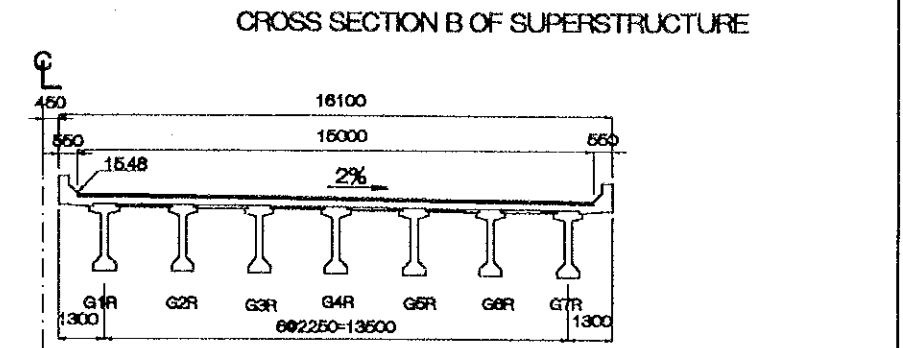
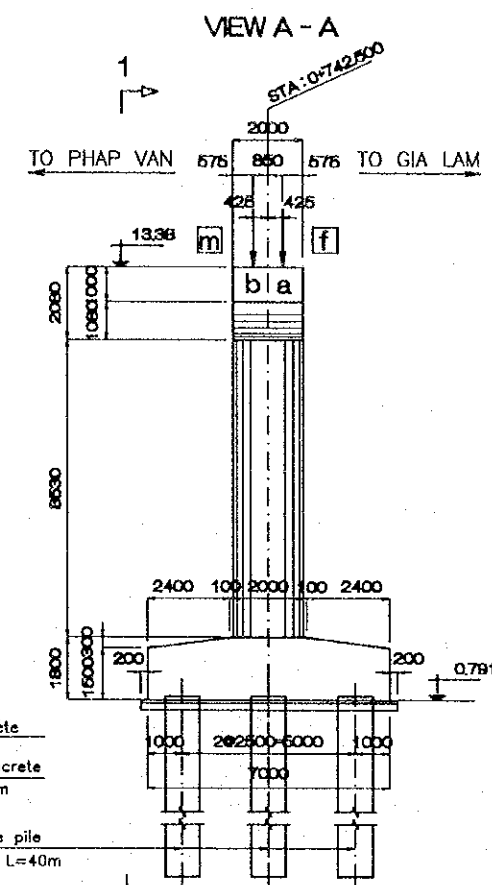
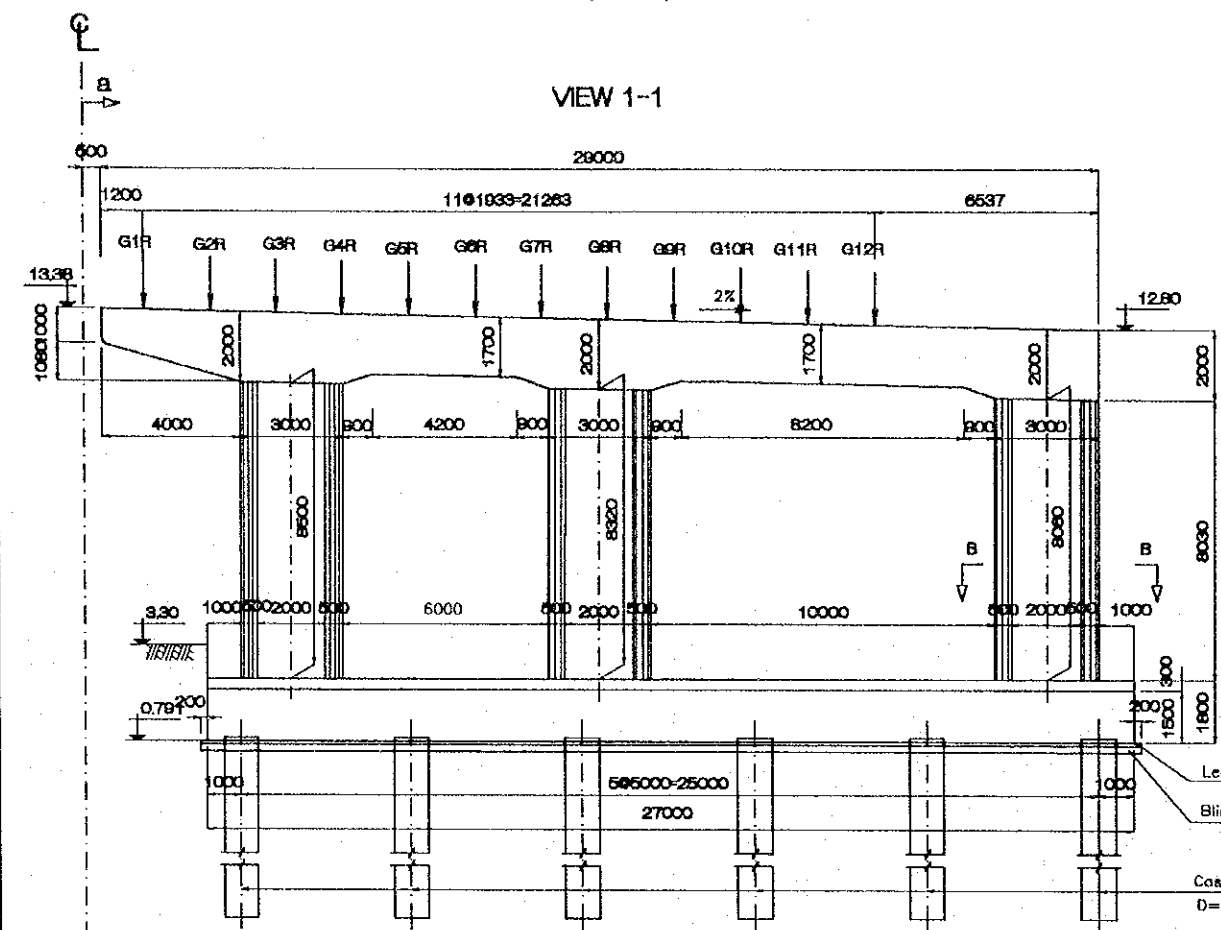


ELEVATION OF TOP PIER HEAD (M)

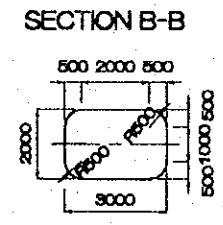
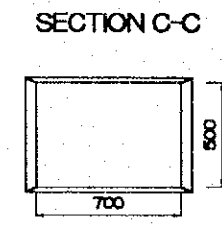
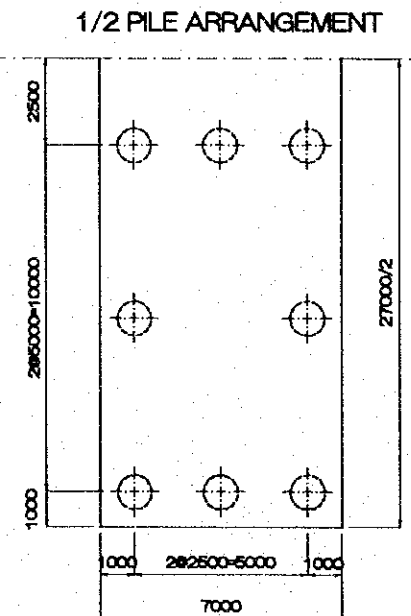
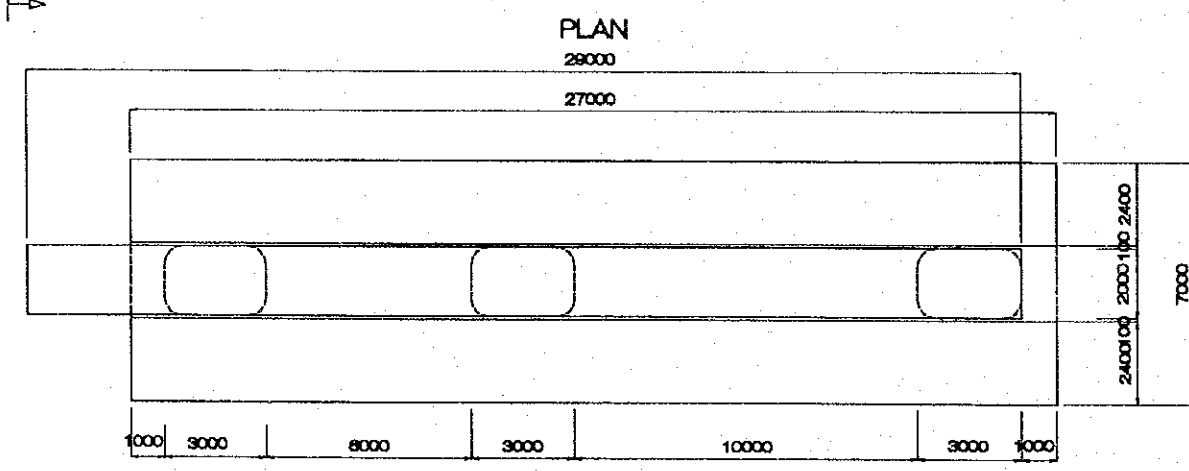
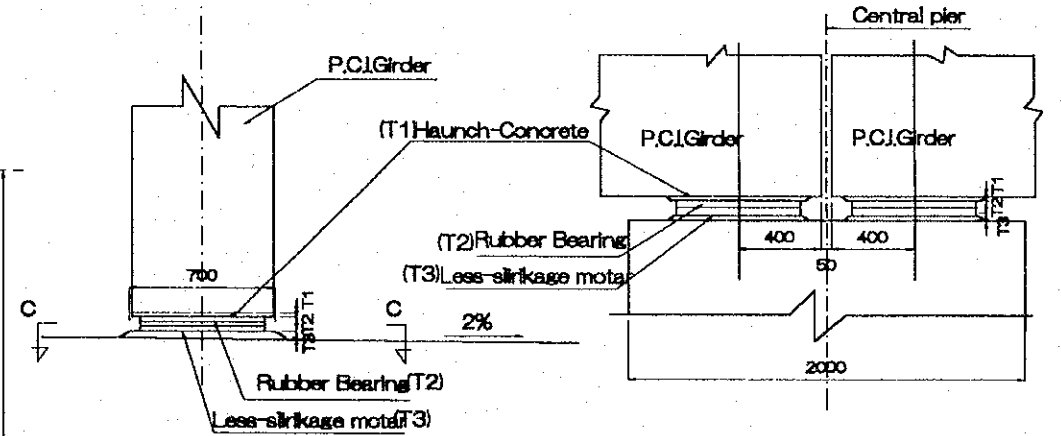
Bearing seat	G1		G2		G3		G4		G5		G6		G7		G8		G9		G10		G11		G12	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A		
P10R	13.183	13.183	13.144	13.136	13.106	13.089	13.067	13.041	13.028	12.994	12.990	12.947	12.951	12.900	12.912	12.852	12.874	12.805	12.835	12.758	12.796	A	B	A

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT: RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>Atta</i>
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.6.1

PACKAGE 3	SCALE 1/250	DRAWING No. C-1-3a-70	SHEET No.
DETAIL OF P11R			

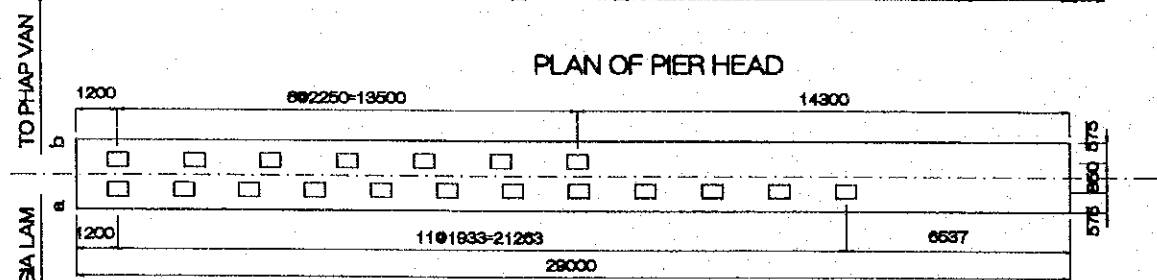


BEARING SEAT DETAIL OF P.C.I GIRDER (SC=1/50)



SUPERSTRUCTURE DEPTHS (MM)

	P11R	
	MOVE B	FIXED A
Pavement	75	75
Slab	207	207
Girder	1500	1750
Haunch T1	20	20
Bearing T2	44	36
Mortar T3	265	20
Sub Total	2111	2108



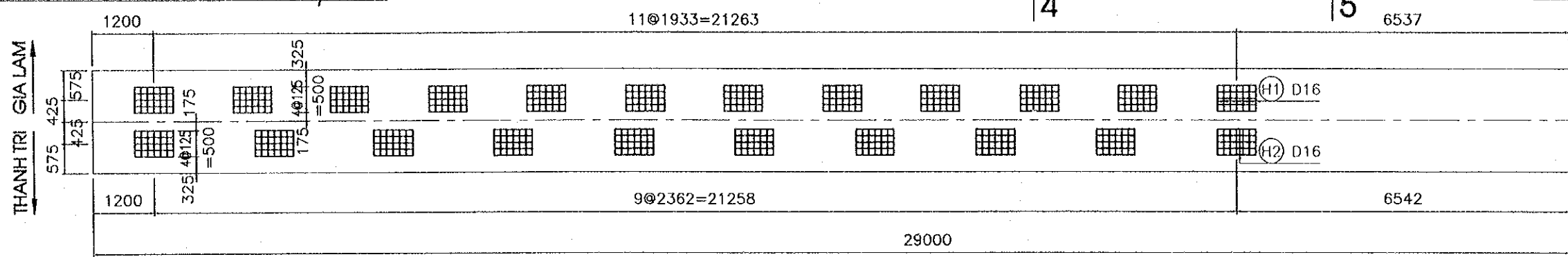
ELEVATION OF TOP PIER HEAD (M)

Bearing seat	G1		G2		G3		G4		G5		G6		G7		G8		G9		G10		G11		G12	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A		
P11R	13.356	13.356	13.311	13.317	13.266	13.279	13.221	13.240	13.176	13.201	13.131	13.163	13.086	13.124		13.085		13.047		13.008		12.969		12.931

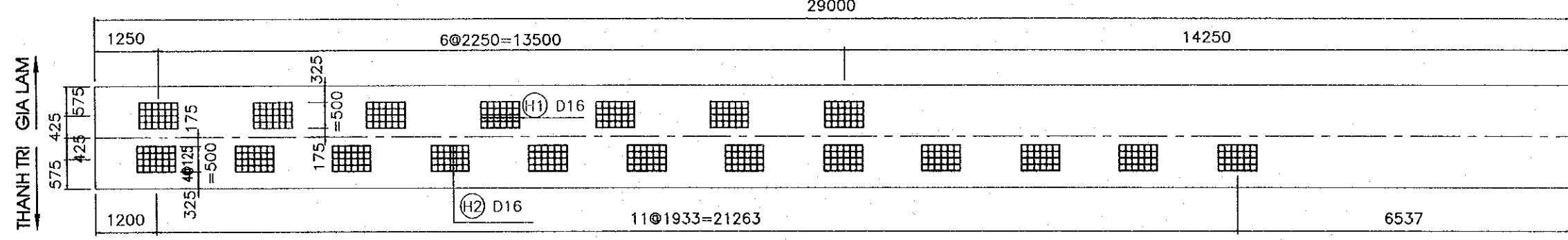
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE: 2000.3.14

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-71	SHEET No.
BAR ARRANGEMENT OF P10R, P11R (1)			

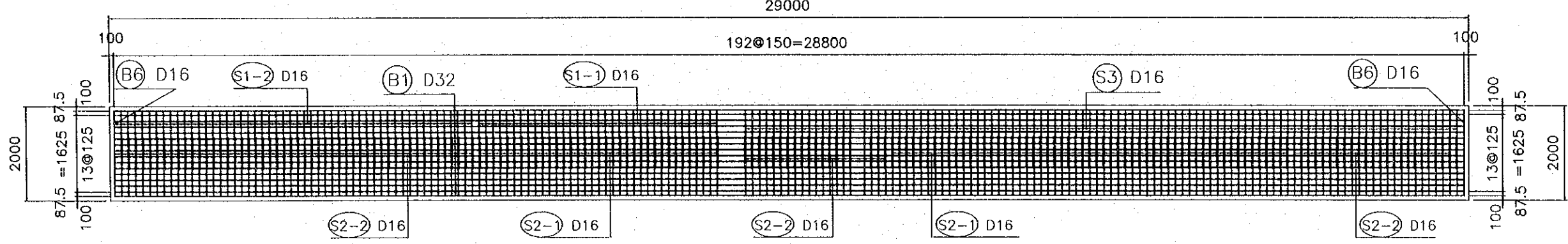
SECTION 1 - 1 (FOR P10R)



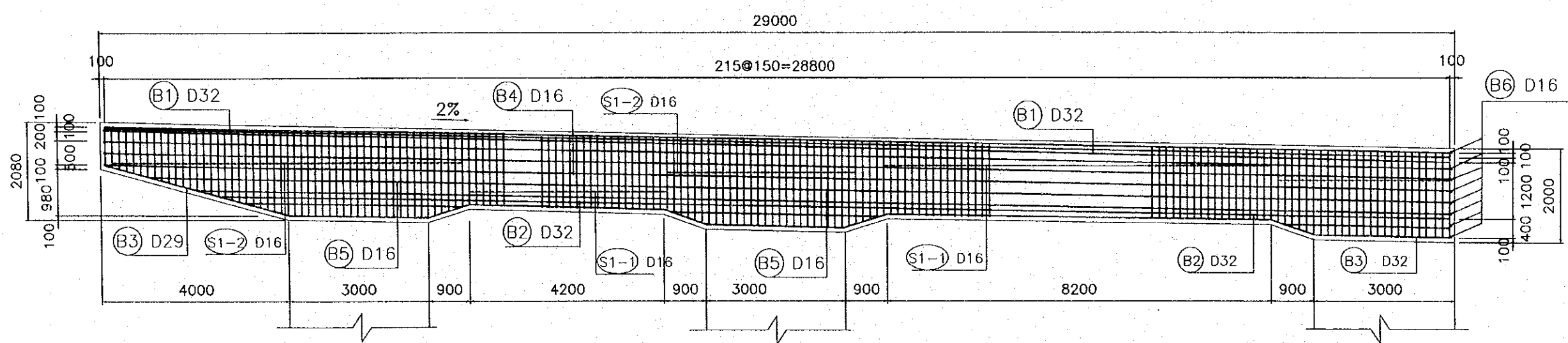
SECTION 1 - 1 (FOR P11R)



SECTION 2 - 2



SECTION 3 - 3



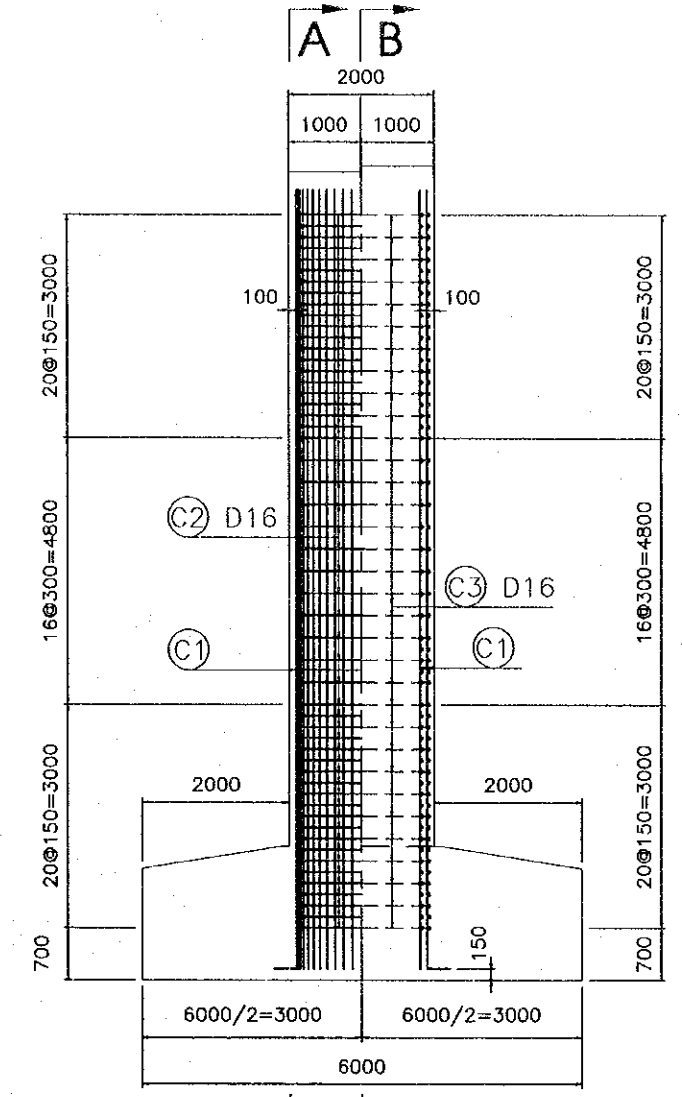
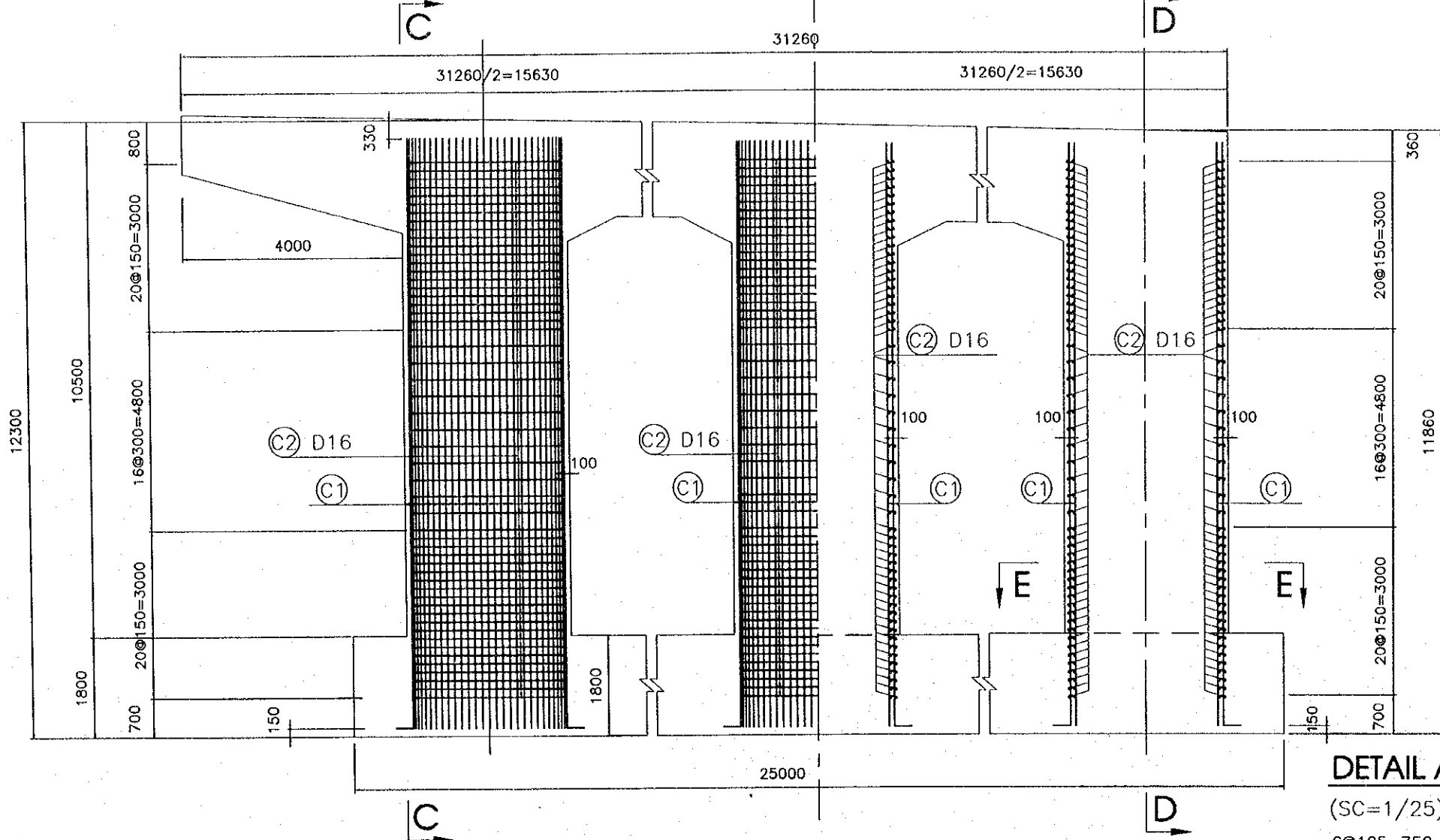
253

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATARAJ
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.03.14	

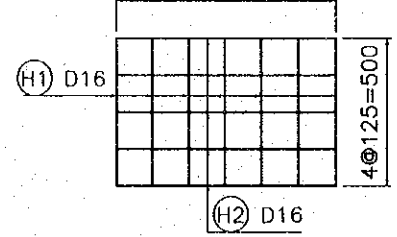
PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-72	SHEET No.
BAR ARRANGEMENT FOR P10R, P11R (2)			

HALF SECTION A - A HALF SECTION B - B

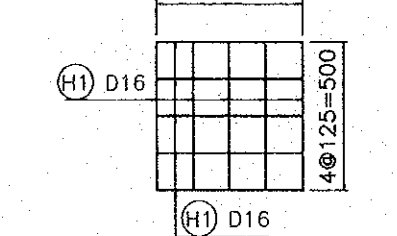
HALF SECTION C - C HALF SECTION D - D



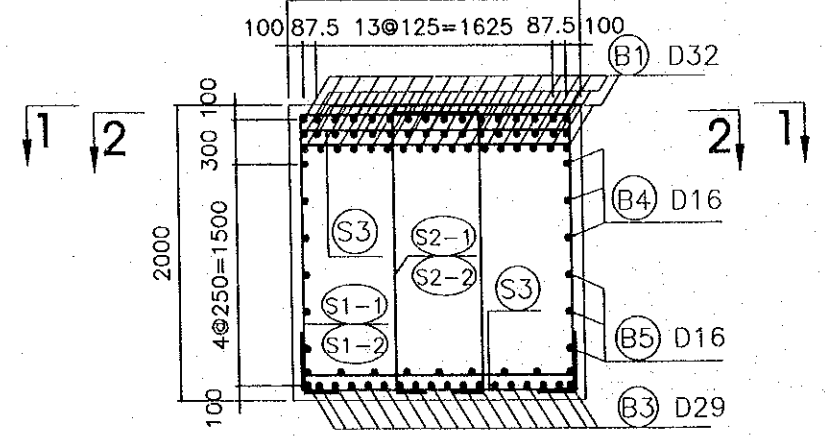
DETAIL A
(SC=1/25)
6@125=750



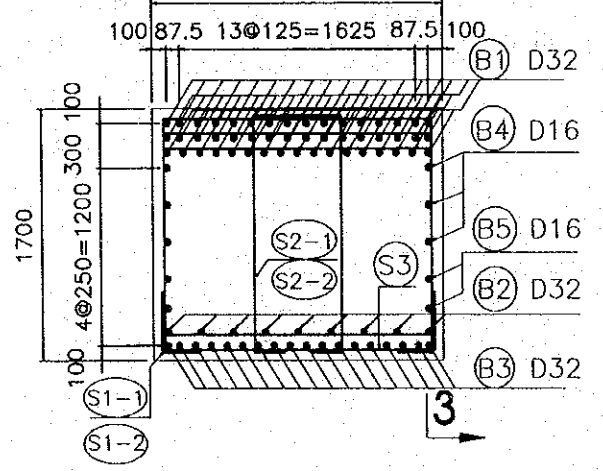
DETAIL B
(SC=1/25)
4@125=500



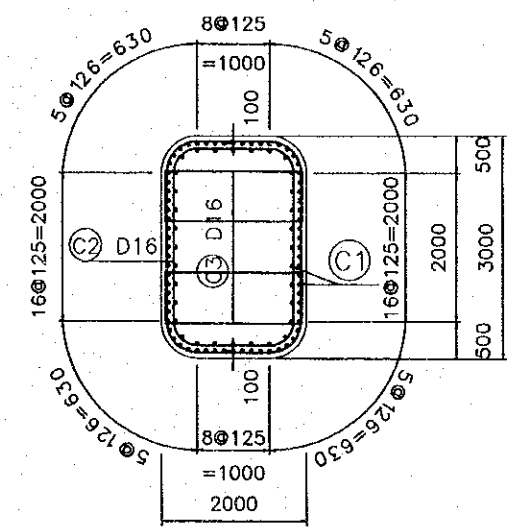
SECTION 4 - 4
(SC=1/50)
2000



SECTION 5 - 5
(SC=1/50)
2000



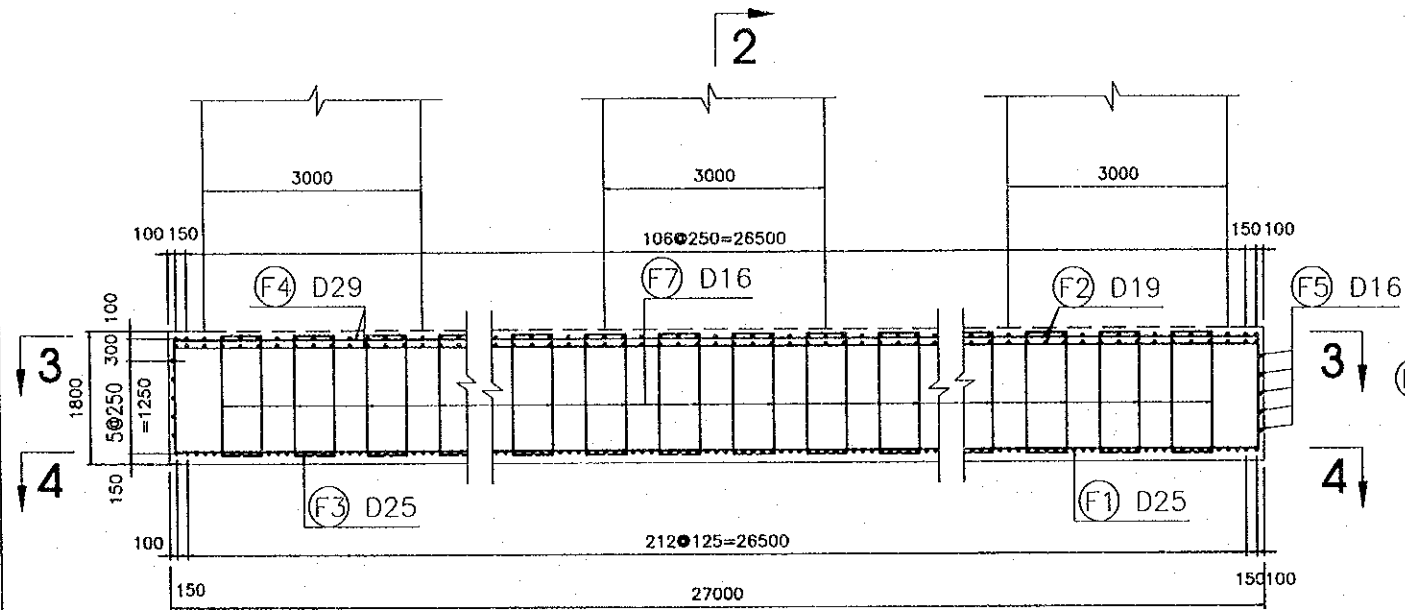
SECTION E - E



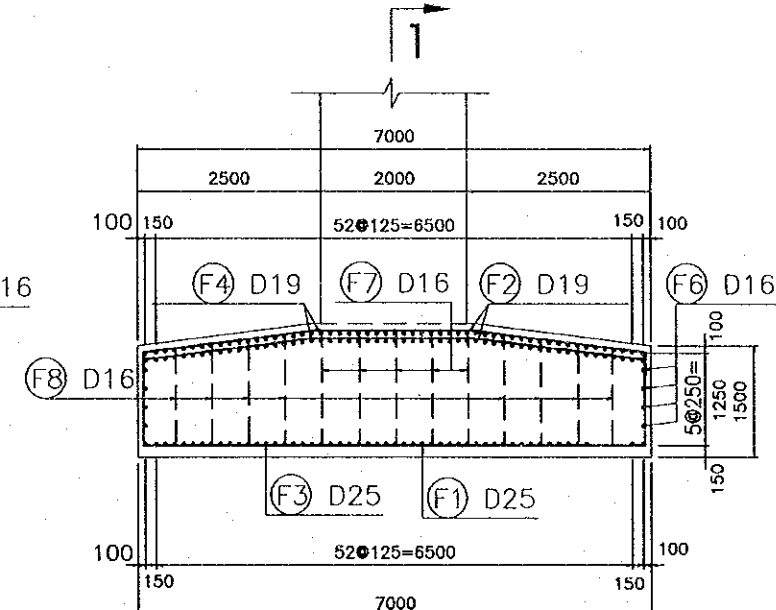
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE
		2002.03.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-73	
BAR ARRANGEMENT FOR P10L, P11L (3)			

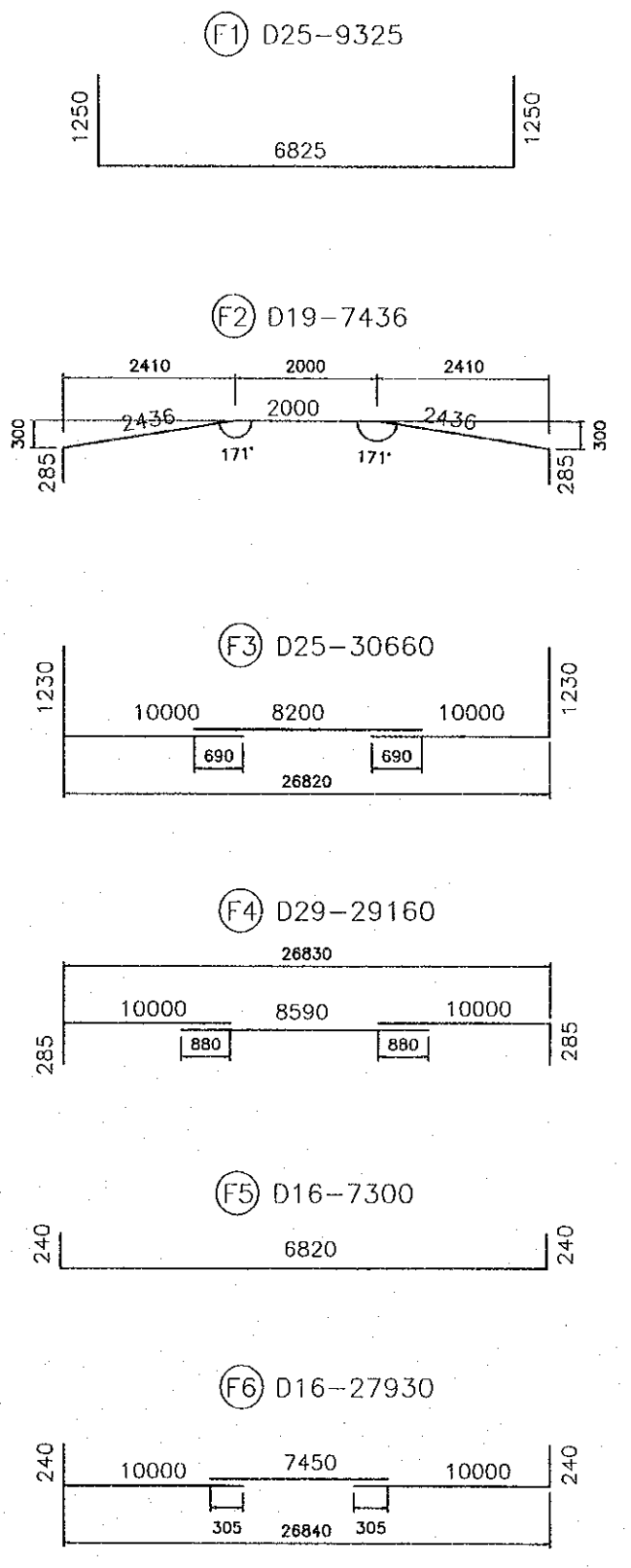
SECTION 1 - 1



SECTION 2 - 2

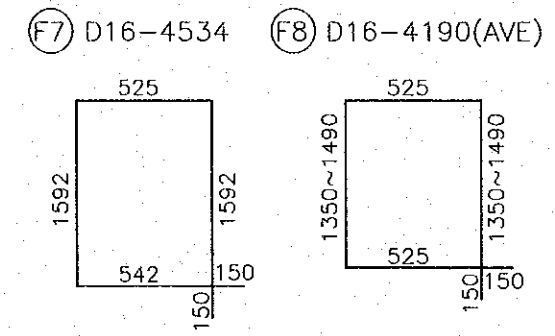
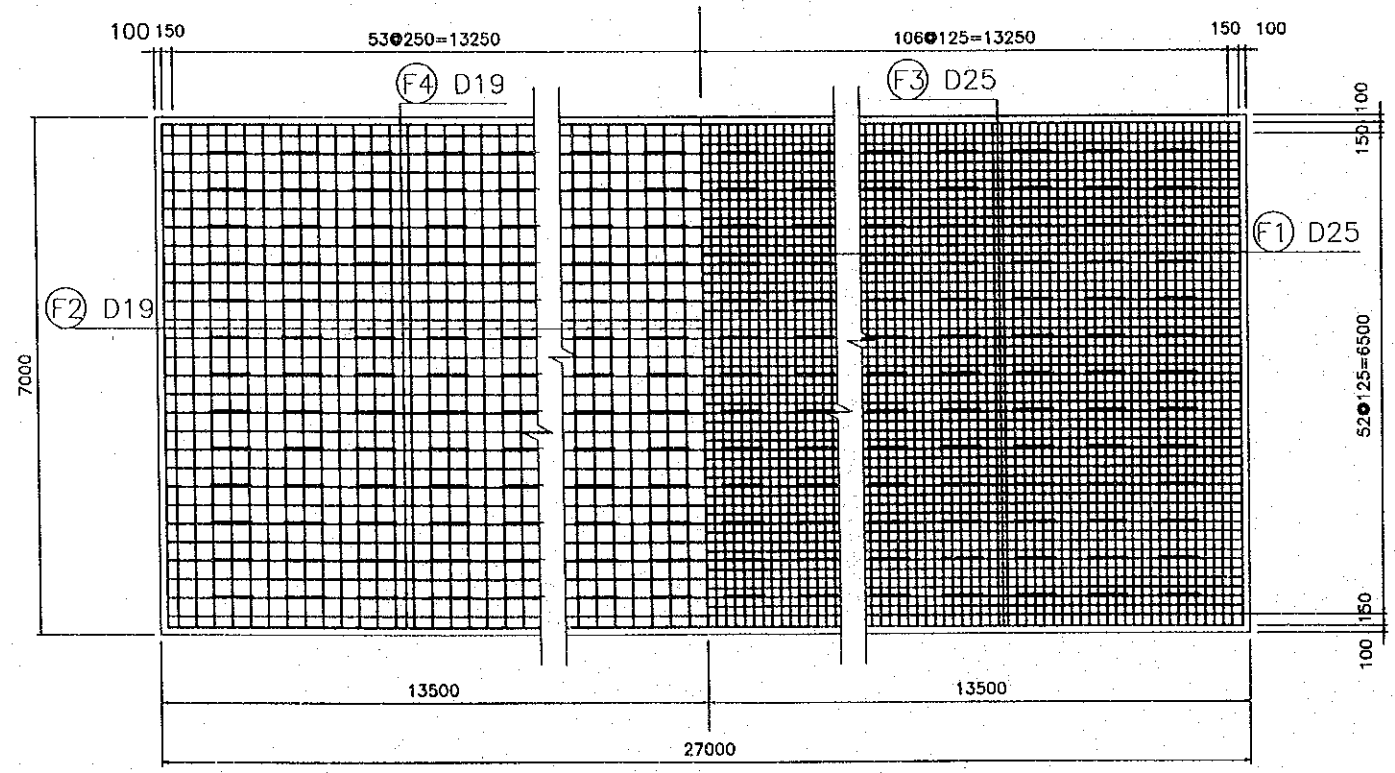


LIST OF REINFORCING BARS FOR FOOTING



HALF SECTION 3 - 3

HALF SECTION 4 - 4

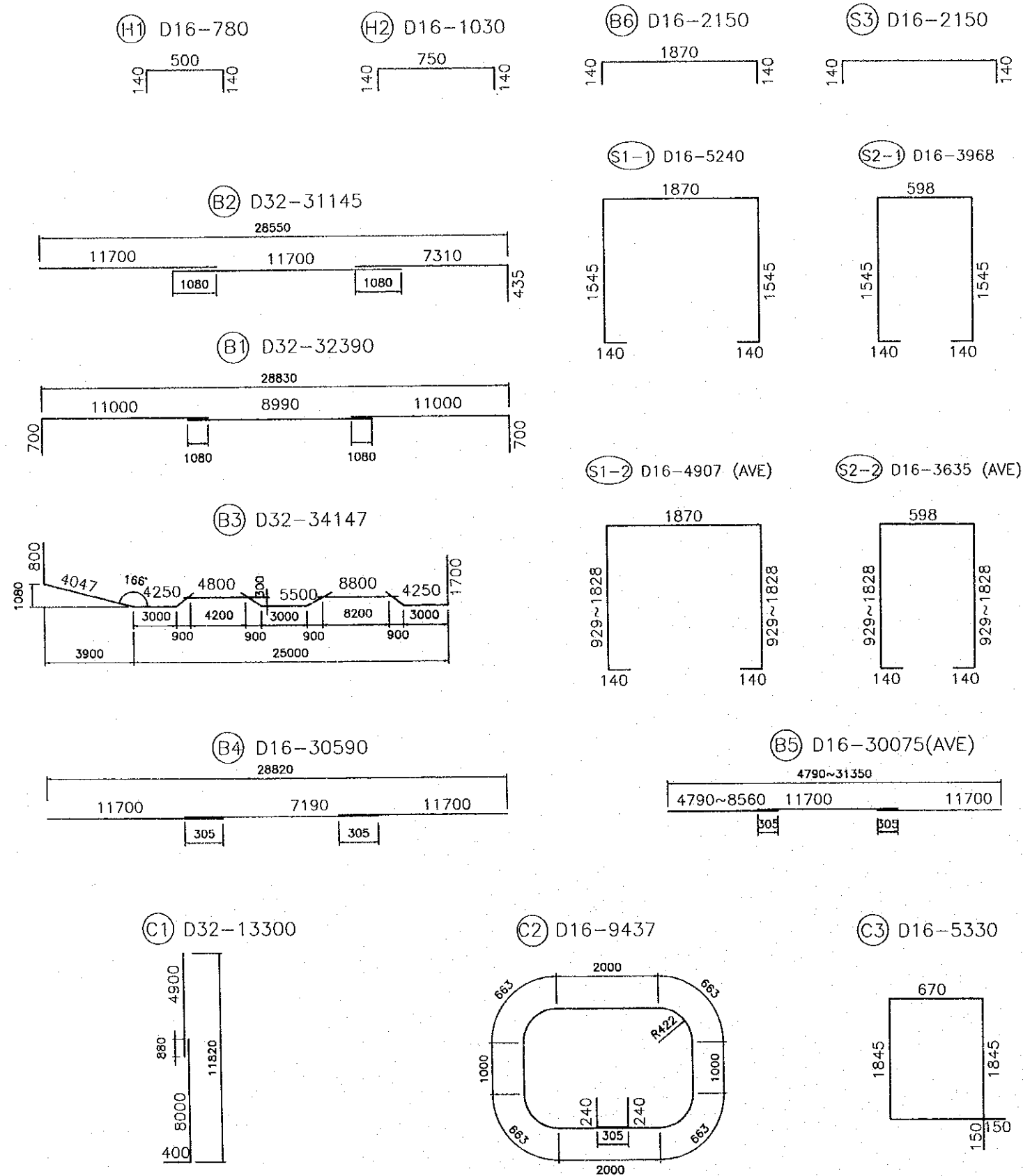


270

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.12.17	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-74	SHEET No.
BAR ARRANGEMENT OF P10R, P11R (4)			

LIST OF REINFORCING BARS FOR BEAM AND COLUMN



QUANTITY REINFORCEMENT FOR PIER P10R

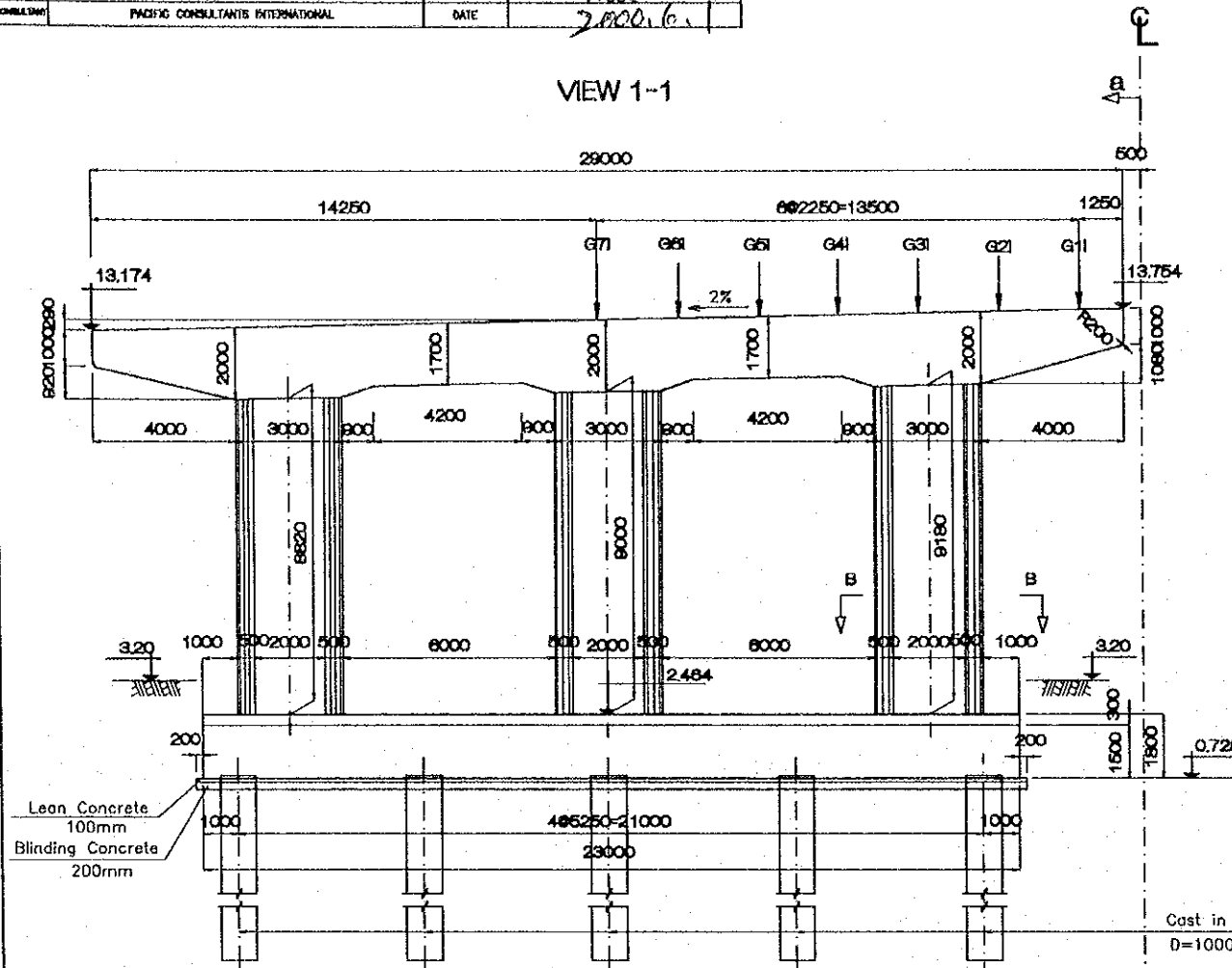
DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)	
CAP BEAM	H1		D16	780	154	1.56	187.39	
	H2		D16	1030	110	1.56	176.75	
	B1		D32	32390	48	6.23	9685.91	
	B2		D32	31145	9	6.23	1746.30	
	B3		D32	34147	16	6.23	3403.77	
	B4		D16	30590	6	1.56	286.32	
	B5		D16	28325	6	1.56	265.12	
	B6		D16	2150	10	1.56	33.54	
	S1-1		D16	5240	108	1.56	882.84	
	S1-2		D16	4907	112	1.56	857.35	
STEM	S2-1		D16	3968	108	1.56	668.53	
	S2-2		D16	3635	112	1.56	635.11	
	S3		D16	2125	384	1.56	1272.96	
	C1		D32	13300	306	6.23	25354.85	
	C2		D16	9437	171	1.56	2517.41	
	C3		D16	5330	111	1.56	922.94	
	FOOTING	F1		D25	9325	215	3.98	7,979.40
		F2		D19	7436	216	2.25	3613.90
		F3		D25	30660	55	3.98	6711.47
		F4		D29	29160	110	5.04	16166.30
F5			D16	7300	10	1.56	113.88	
F6			D16	27930	8	1.56	348.57	
F7			D16	4534	134	1.56	947.79	
F8			D16	4190	214	1.56	1398.79	
TOTAL							86,177.19	
SUMMARY	D16 =						11,515.28	
	D19 =						3,613.90	
	D25 =						14,690.88	
	D29 =						16,166.30	
	D32 =						40,190.83	

QUANTITY REINFORCEMENT FOR PIER P11R

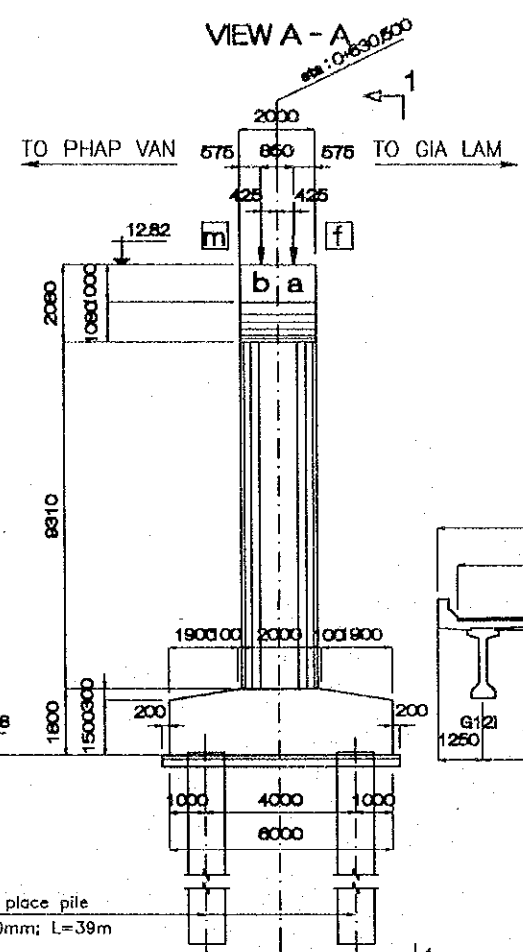
DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)	
CAP BEAM	H1		D16	780	133	1.56	161.83	
	H2		D16	1030	95	1.56	152.65	
	B1		D32	32390	48	6.23	9685.91	
	B2		D32	31145	9	6.23	1746.30	
	B3		D32	34147	16	6.23	3403.77	
	B4		D16	30590	6	1.56	286.32	
	B5		D16	28325	6	1.56	265.12	
	B6		D16	2150	10	1.56	33.54	
	S1-1		D16	5240	108	1.56	882.84	
	S1-2		D16	4907	112	1.56	857.35	
STEM	S2-1		D16	3968	108	1.56	668.53	
	S2-2		D16	3635	112	1.56	635.11	
	S3		D16	2125	384	1.56	1272.96	
	C1		D32	13300	306	6.23	25354.85	
	C2		D16	9437	171	1.56	2517.41	
	C3		D16	5330	111	1.56	922.94	
	FOOTING	F1		D25	9325	215	3.98	7,979.40
		F2		D19	7436	216	2.25	3613.90
		F3		D25	30660	55	3.98	6711.47
		F4		D29	29160	110	5.04	16166.30
F5			D16	7300	10	1.56	113.88	
F6			D16	27930	8	1.56	348.57	
F7			D16	4534	134	1.56	947.79	
F8			D16	4190	214	1.56	1398.79	
TOTAL							86,127.54	
SUMMARY	D16 =						11,465.63	
	D19 =						3,613.90	
	D25 =						14,690.88	
	D29 =						16,166.30	
	D32 =						40,190.83	

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LOANG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.6.1

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3a-75	SHEET No.
DETAIL OF PIER P15L			

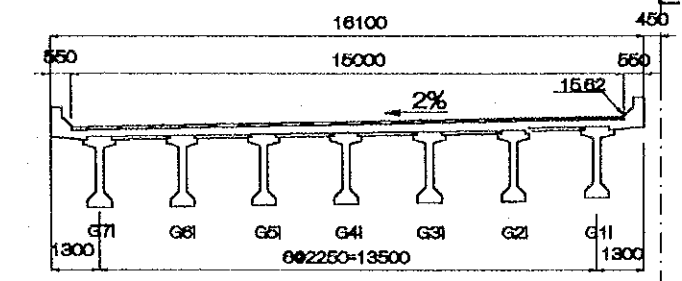


VIEW 1-1

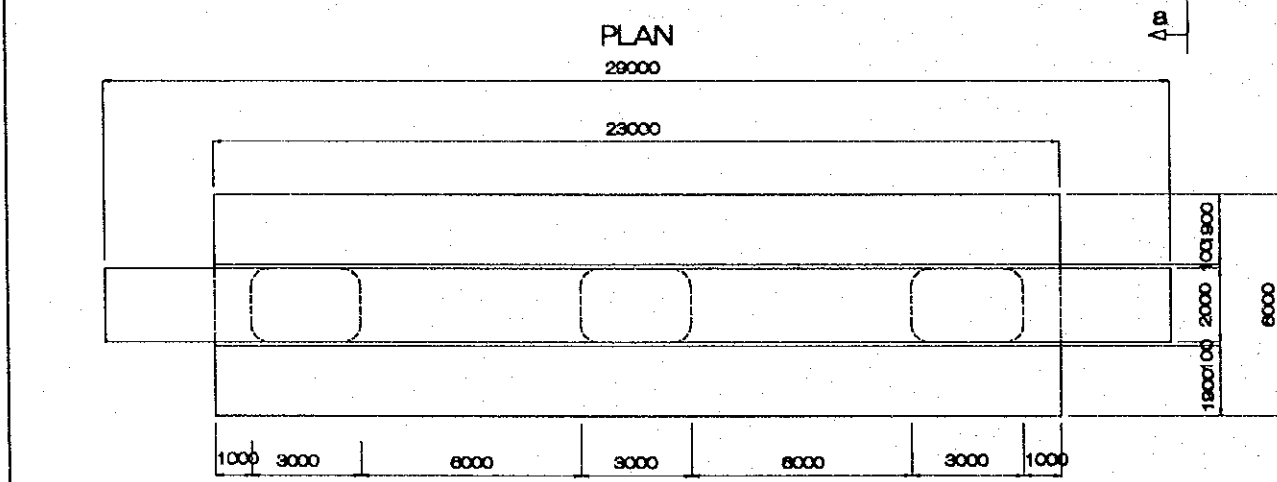
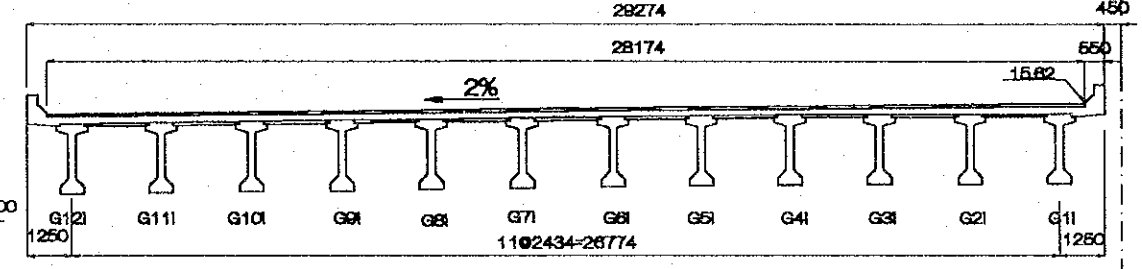


VIEW A-A

CROSS SECTION A OF SUPERSTRUCTURE

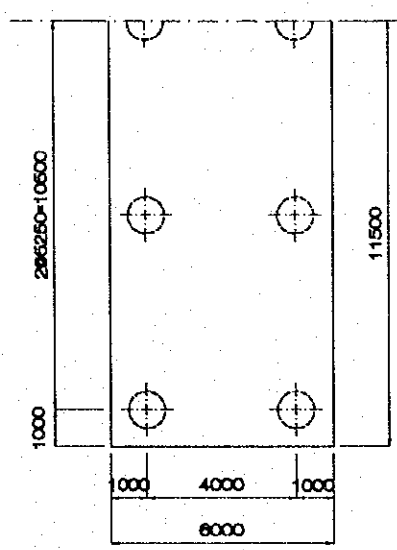


CROSS SECTION B OF SUPERSTRUCTURE

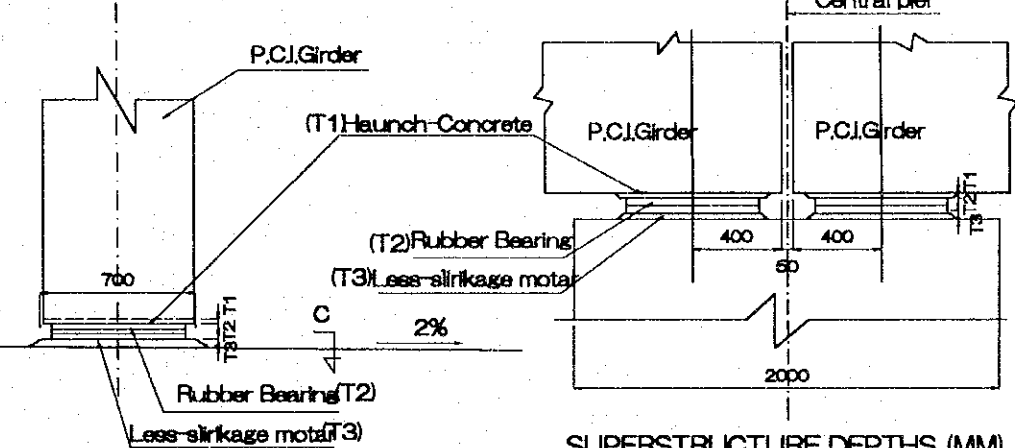


PLAN

1/2 PILE ARRANGEMENT



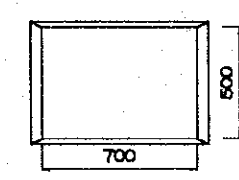
BEARING SEAT DETAIL OF P.C I GIRDER (SC=1/50)



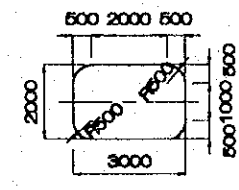
SUPERSTRUCTURE DEPTHS (MM)

	MOVE		FIXED	
	B	A	B	A
Pavement	75	75		
Slab	207	207		
Girder	1500	1500		
Haunch T1	20	20		
Bearing T2	44	36		
Mortar T3	30	39		
Sub Total	1876	1877		

SECTION C-C

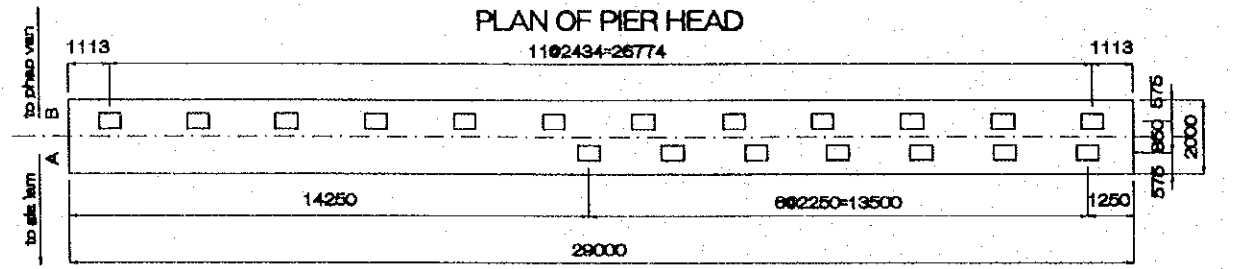


SECTION B-B



ELEVATION OF TOP PIER HEAD (M)

Bearing seat	G1		G2		G3		G4		G5		G6		G7		G8		G9		G10		G11		G12	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A		
Elevation	13.727	13.724	13.678	13.679	13.630	13.634	13.581	13.589	13.532	13.544	13.484	13.499	13.435	13.454	13.386		13.338		13.289		13.240		13.192	

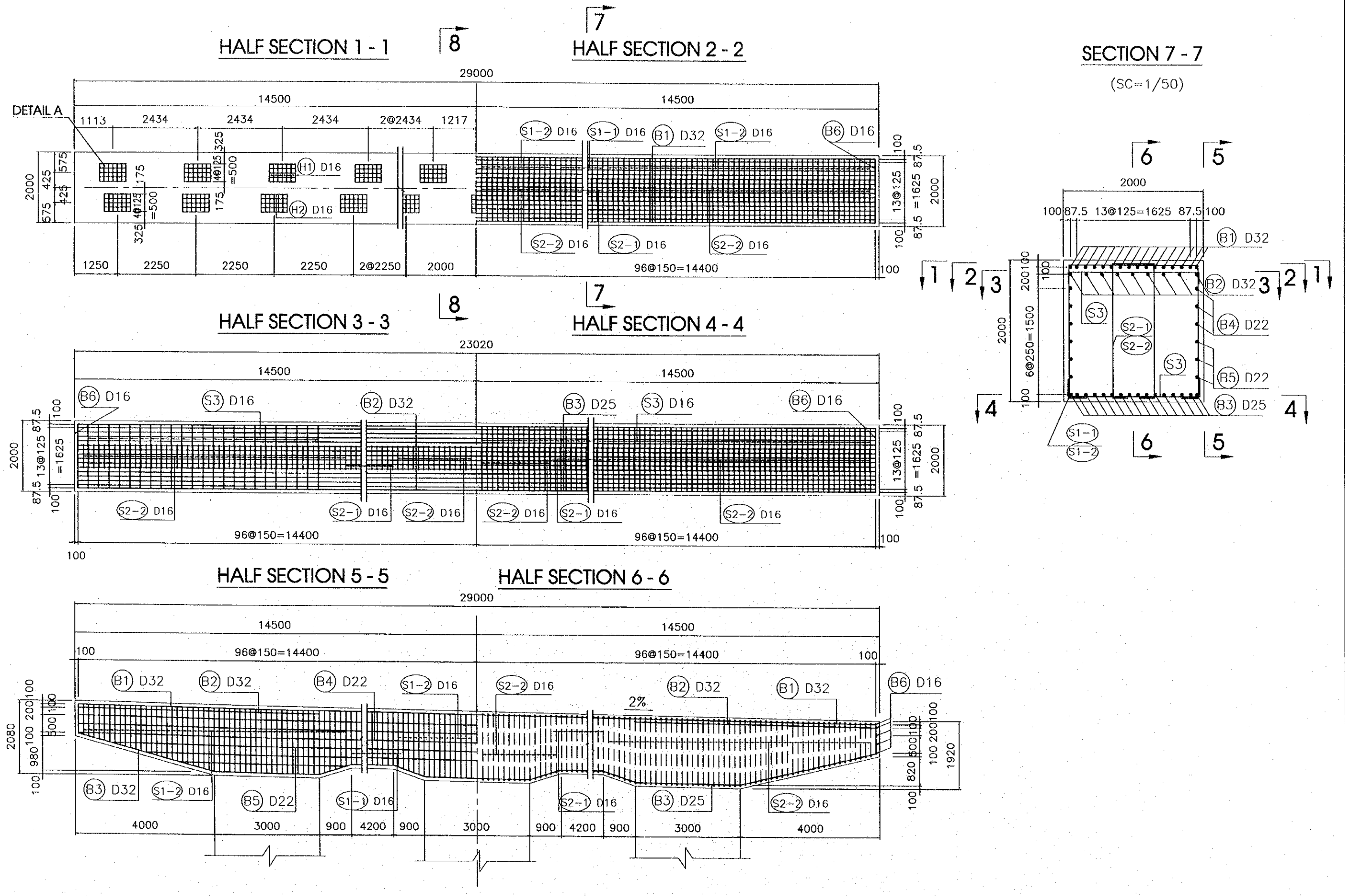


PLAN OF PIER HEAD

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT RED RIVER BRIDGE (TIANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.14

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-76	SHEET No.
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BAR ARRANGEMENT OF P15L (1)



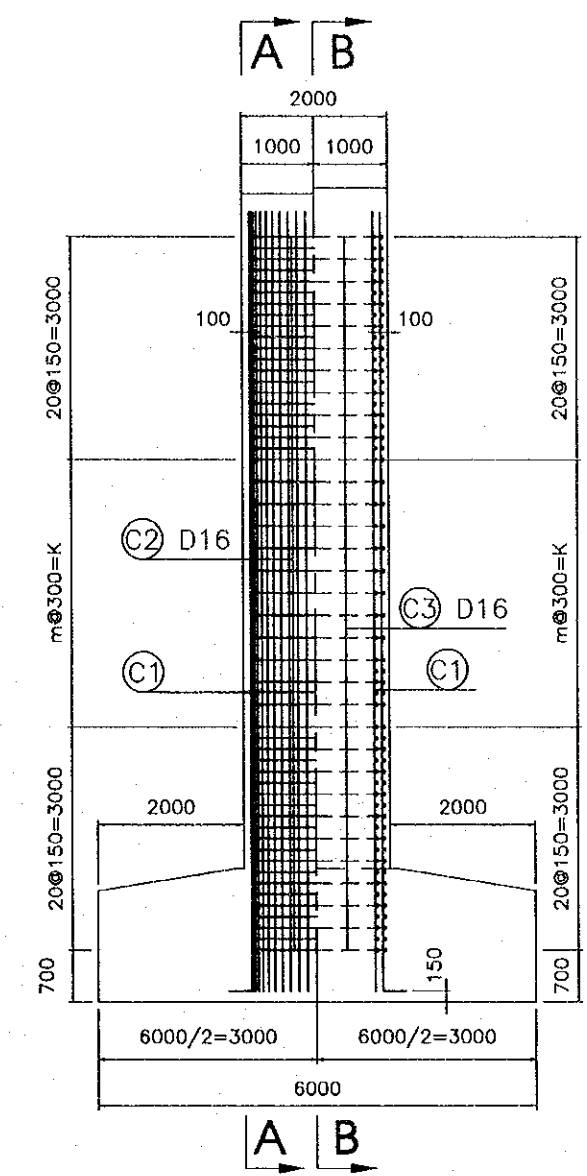
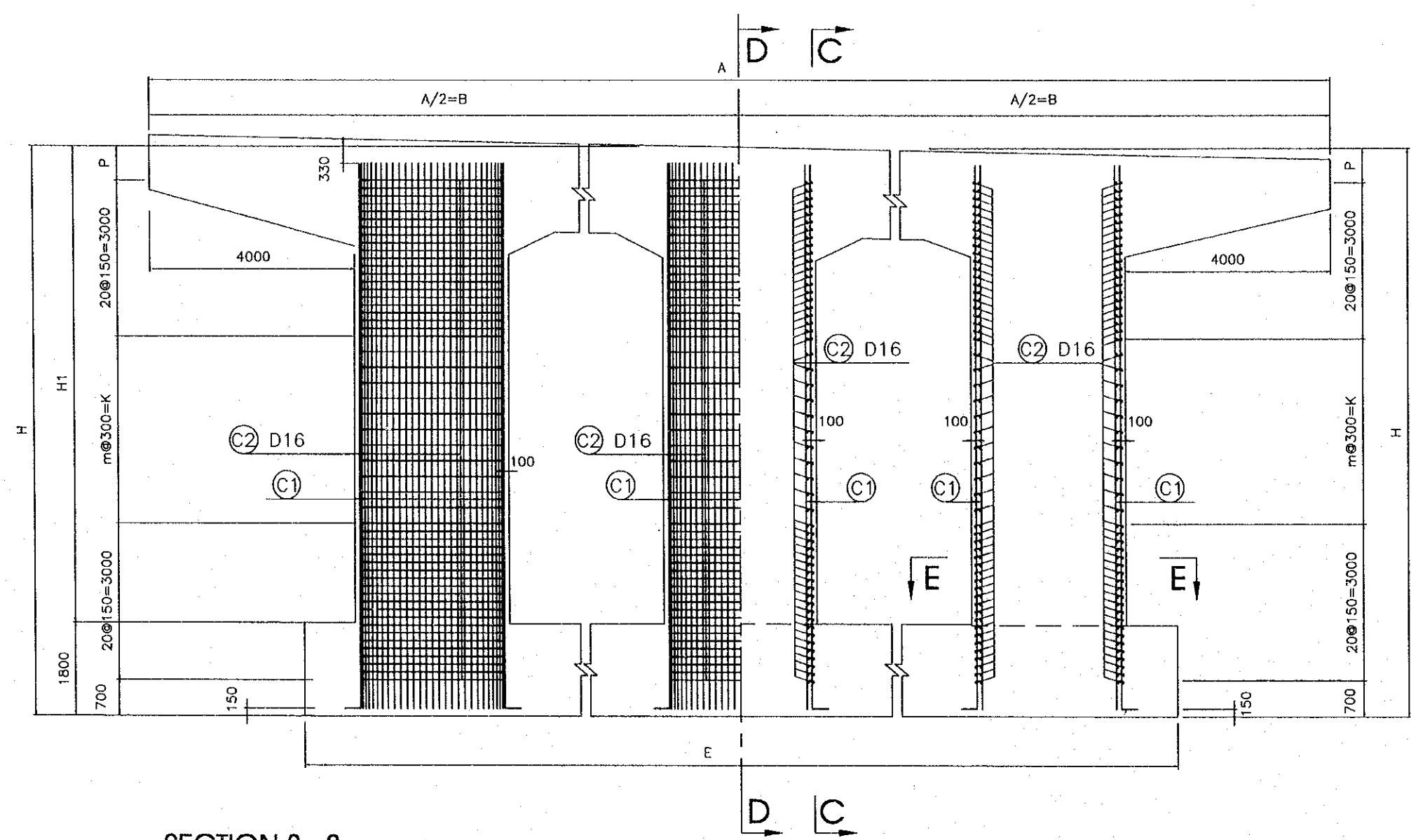
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. NATADE
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000. 11. 14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-77	
BAR ARRANGEMENT FOR P15L(2)			

HALF SECTION A - A

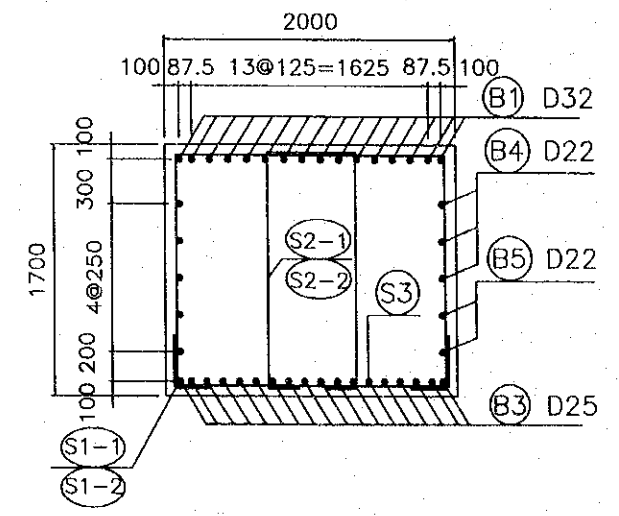
HALF SECTION B - B

HALF SECTION C - C HALF SECTION D - D



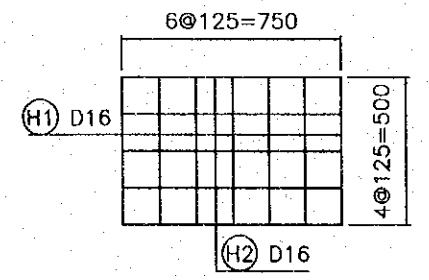
SECTION 8 - 8

(SC=1/50)

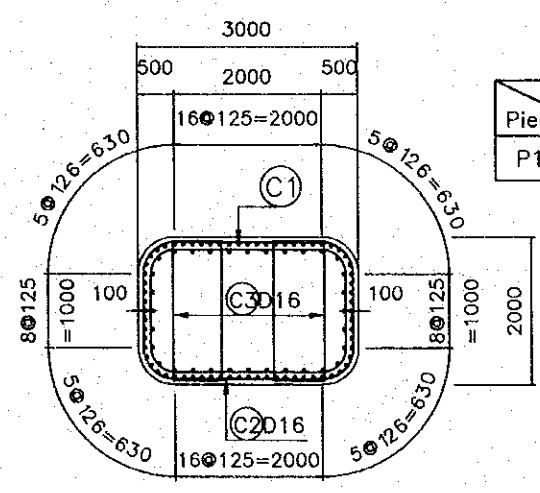


DETAIL A

(SC=1/25)



SECTION E - E



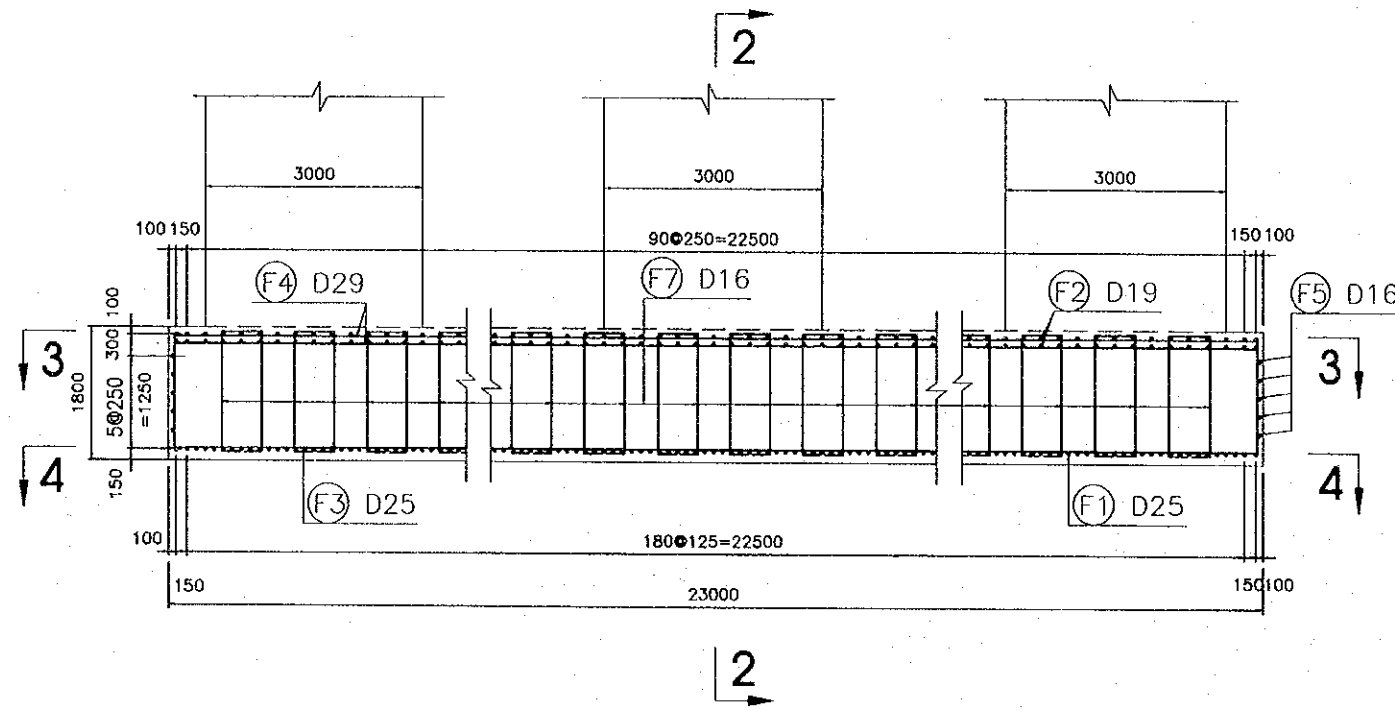
DIMENSIONS OF PIERS

Items	A(mm)	B(mm)	E(mm)	H(mm)	H1(mm)	m	K(mm)	P(mm)
Pier								
P15L	21000	14500	23000	12800	11000	18	5400	700

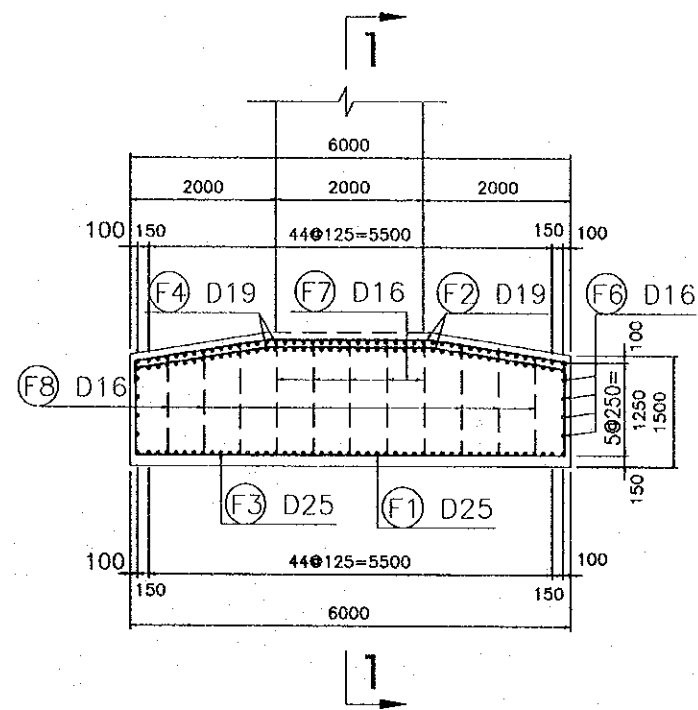
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000. 3. 14

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3a-78	SHEET No.
BAR ARRANGEMENT FOR P15L (3)			

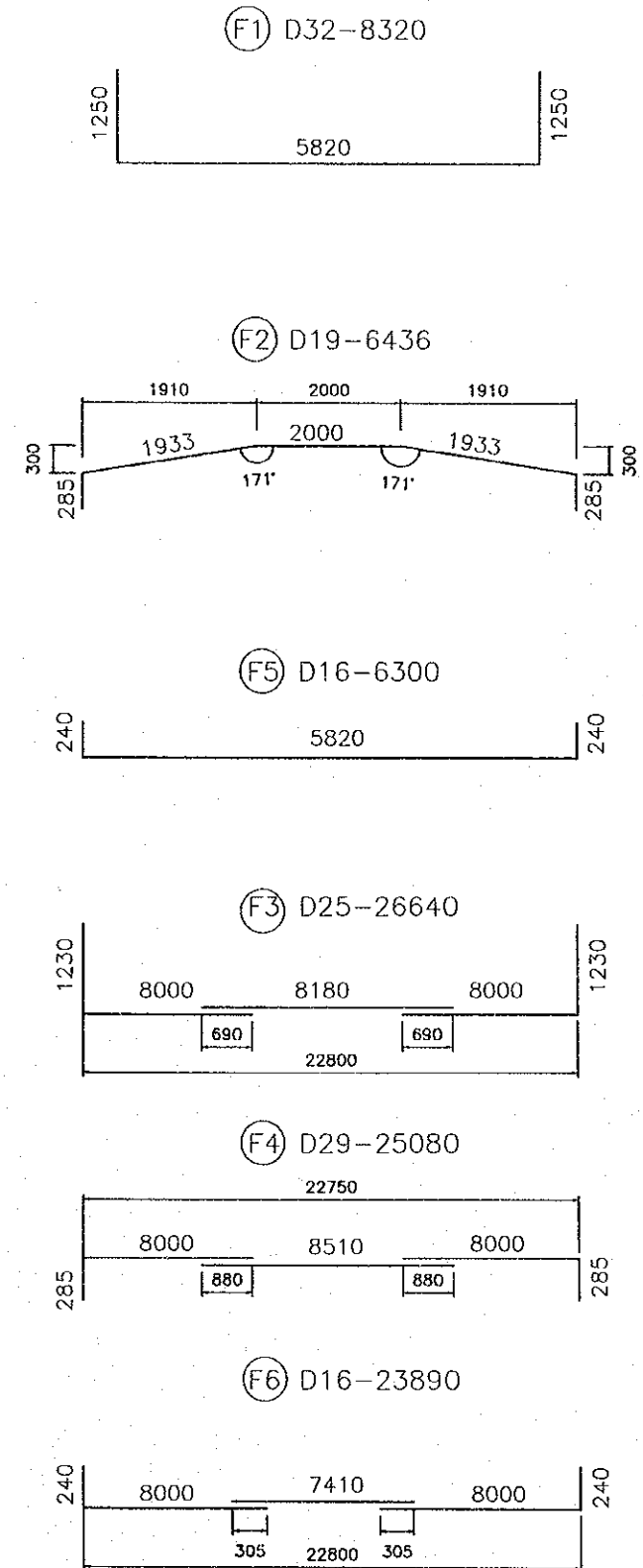
SECTION 1 - 1



SECTION 2 - 2

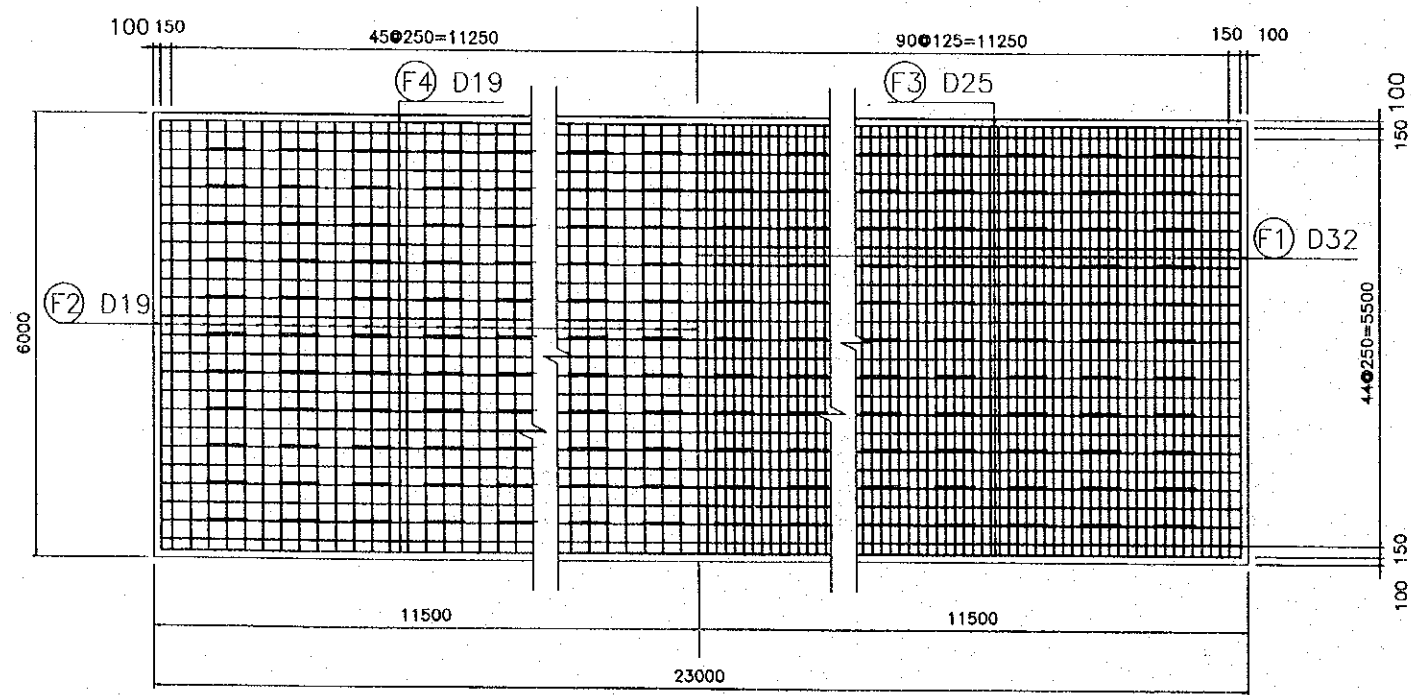


LIST OF REINFORCING BARS FOR FOOTING



HALF SECTION 3 - 3

HALF SECTION 4 - 4

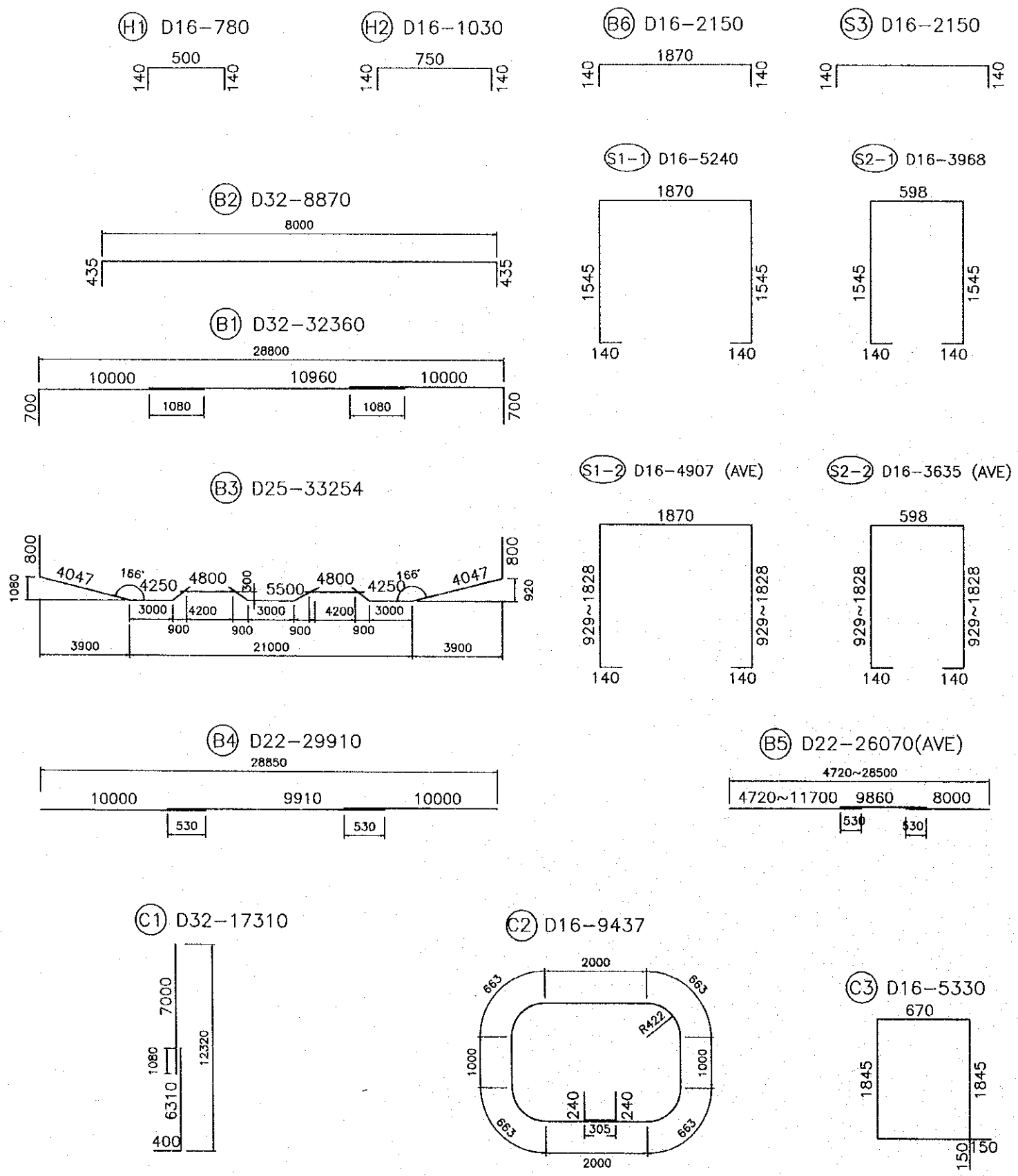


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. WATABE
PROJECT RED RIVER BRIDGE (11HAH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.11.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3a-79	

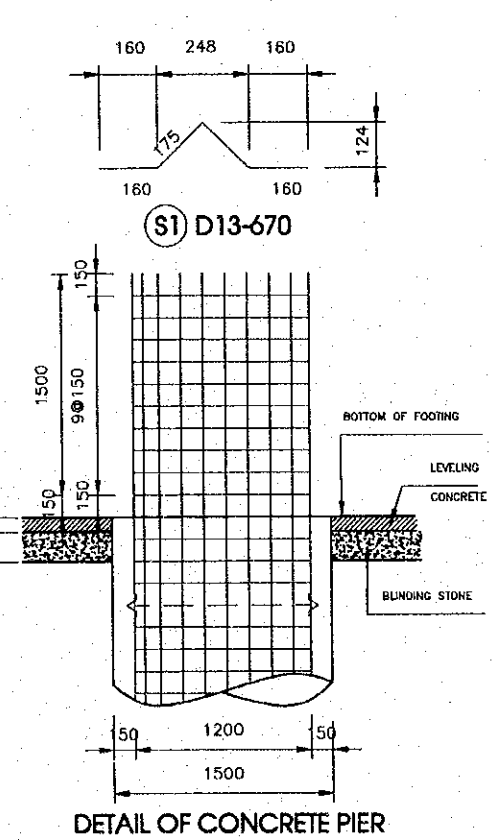
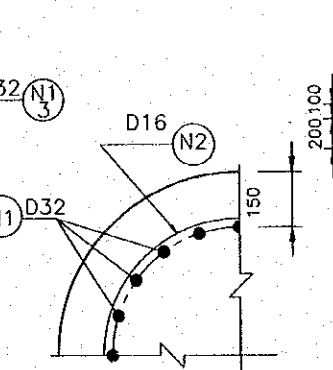
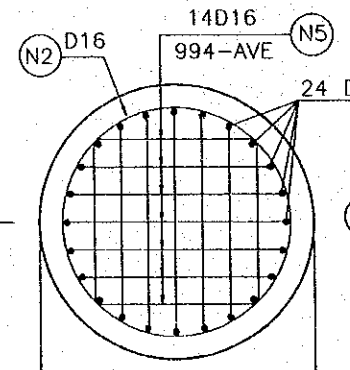
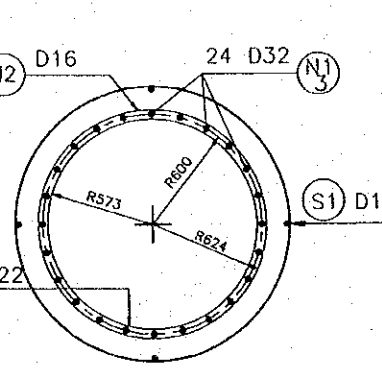
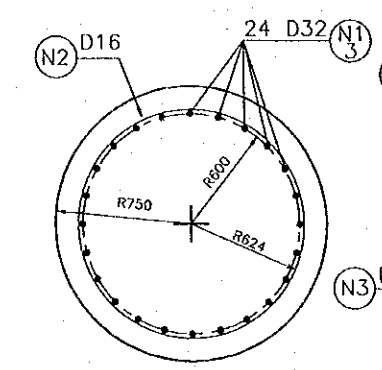
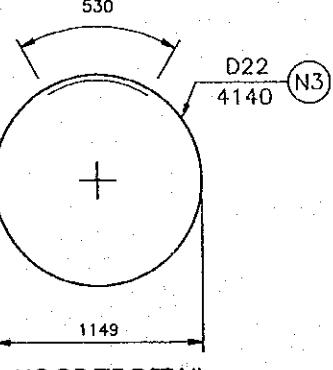
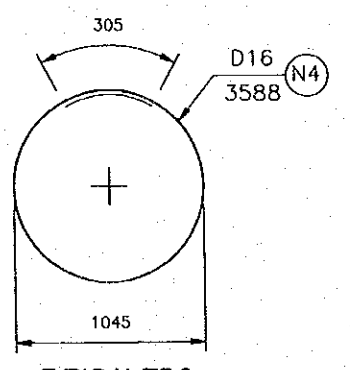
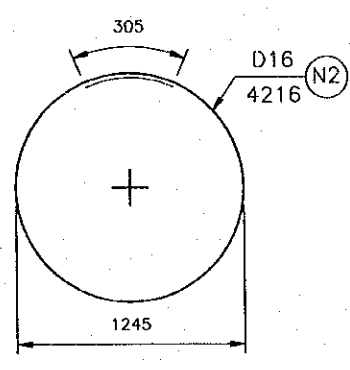
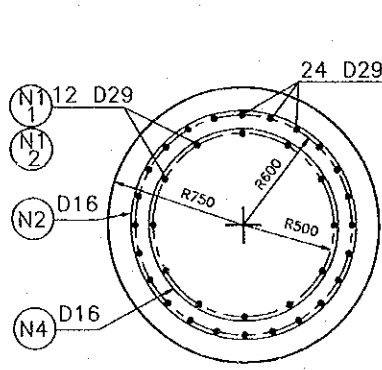
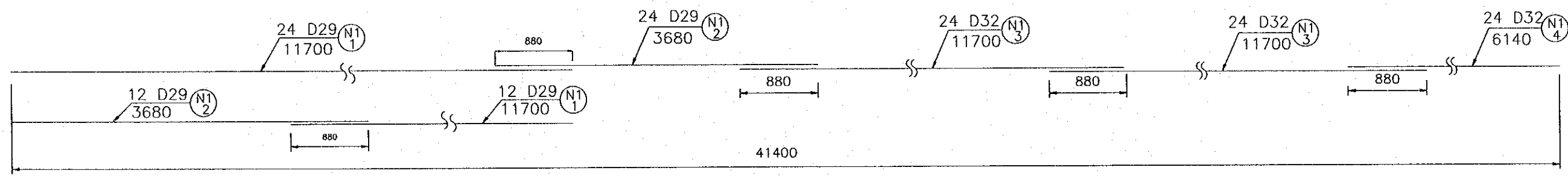
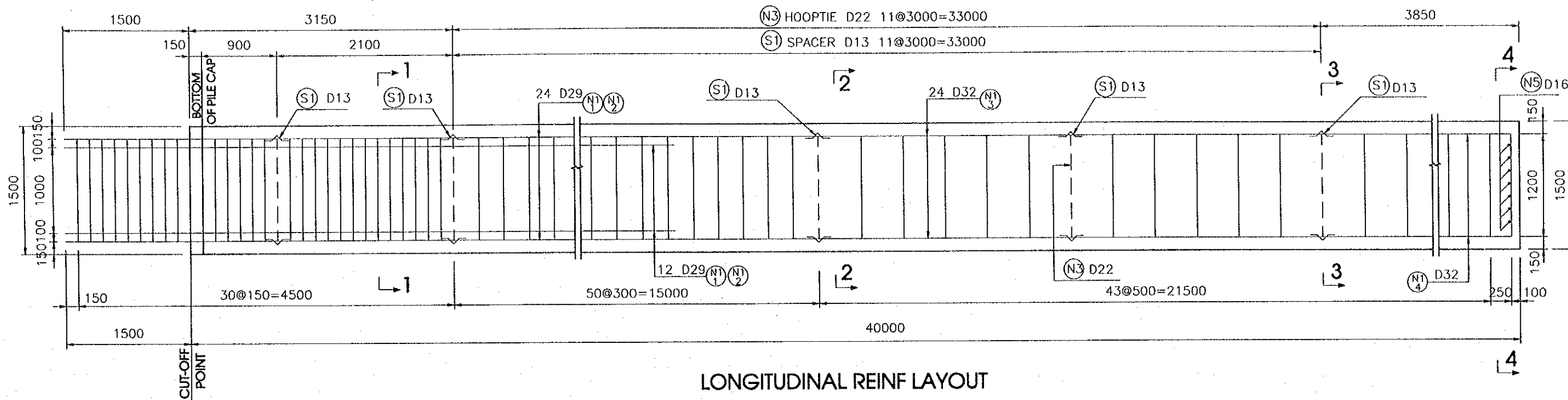
BAR ARRANGEMENT OF P15L (4)

LIST OF REINFORCING BARS FOR BEAM AND COLUMN



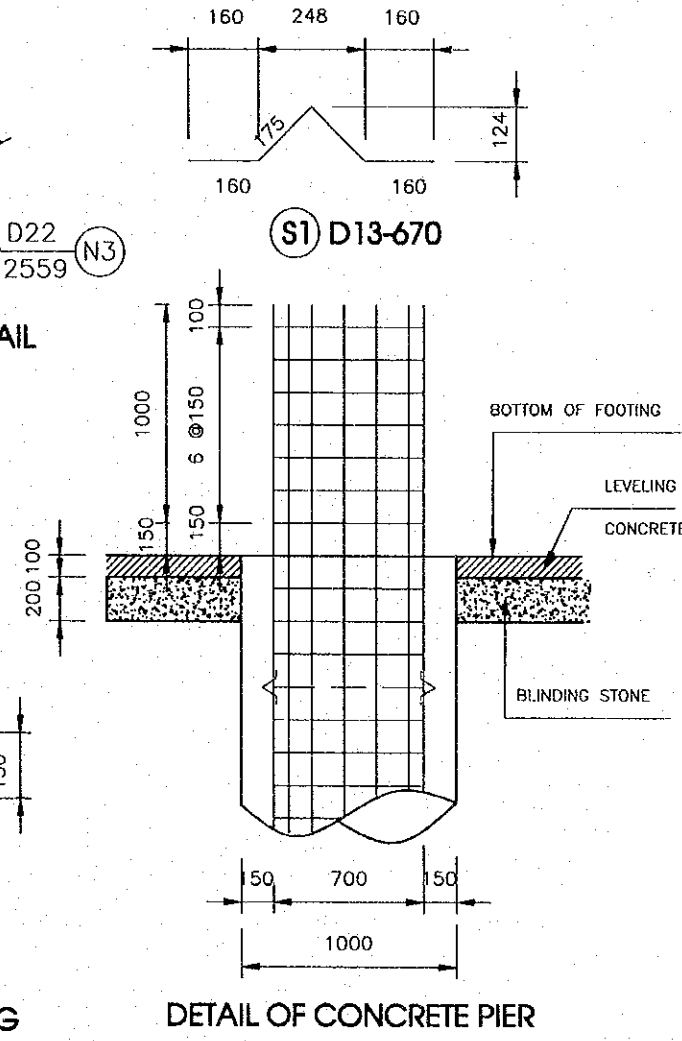
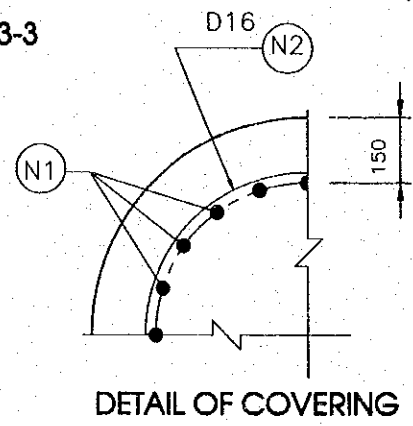
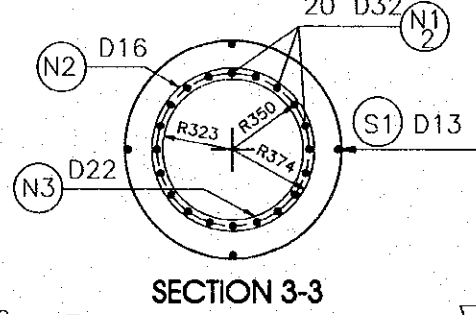
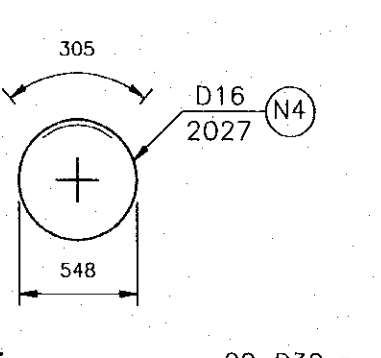
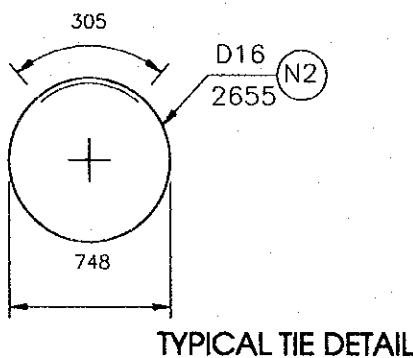
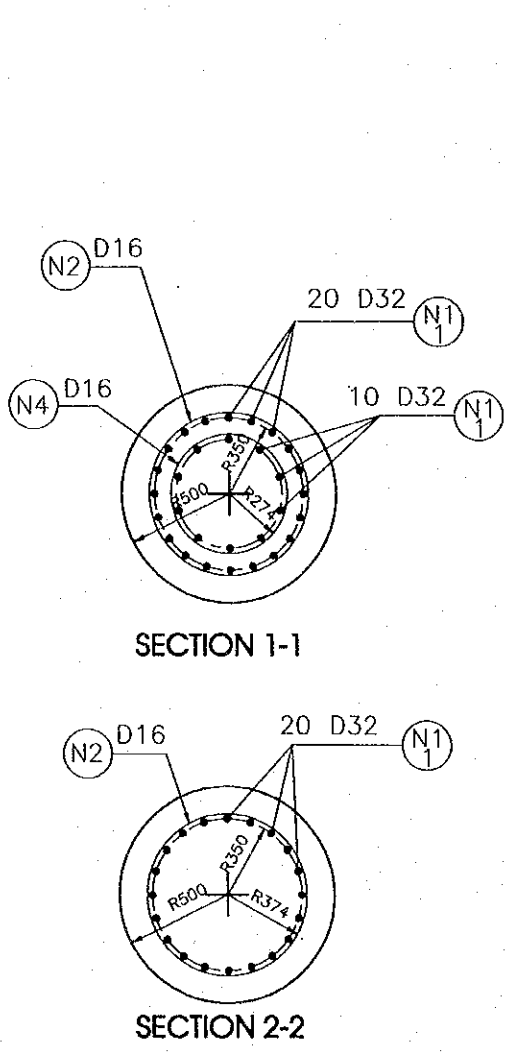
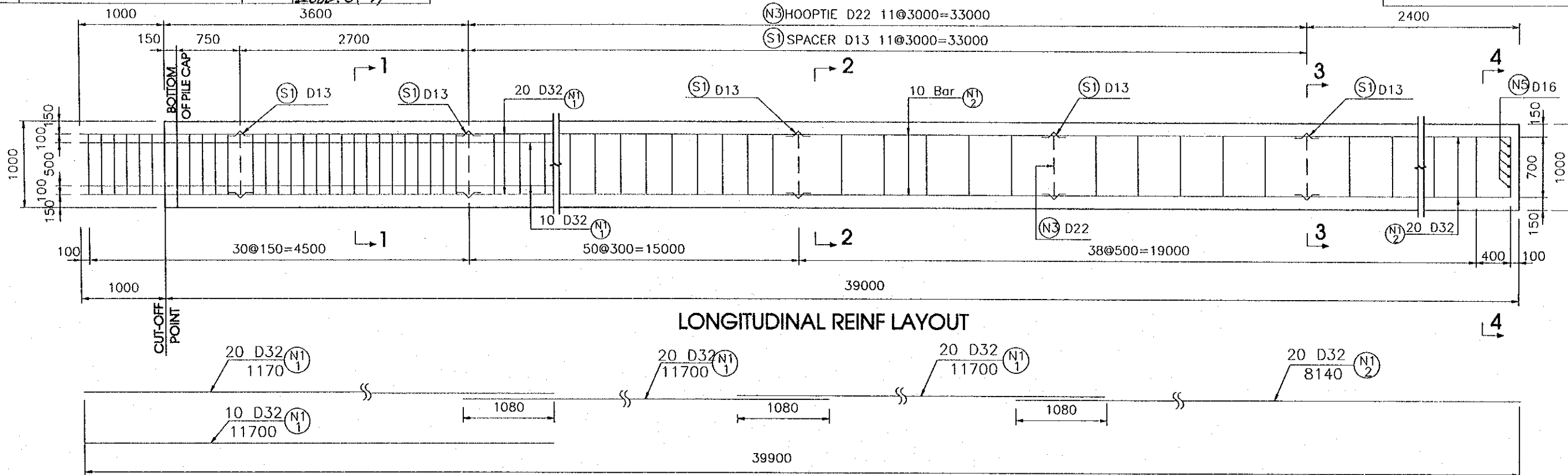
QUANTITY REINFORCEMENT FOR PIER P15L

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D16	780	133	1.56	161.83
	H2	[Diagram]	D16	1030	95	1.56	152.65
	B1	[Diagram]	D32	32360	16	6.23	3225.64
	B2	[Diagram]	D32	8870	9	6.23	497.34
	B3	[Diagram]	D25	33254	16	3.98	2117.61
	B4	[Diagram]	D22	29910	6	3.04	545.56
	B5	[Diagram]	D22	26070	6	3.04	475.52
	B6	[Diagram]	D16	2150	10	1.56	33.54
	S1-1	[Diagram]	D16	5240	56	1.56	457.77
	S1-2	[Diagram]	D16	4907	104	1.56	796.11
	S2-1	[Diagram]	D16	3968	56	1.56	346.64
	S2-2	[Diagram]	D16	3635	104	1.56	589.74
STEM	S3	[Diagram]	D16	2125	384	1.56	1272.96
	C1	[Diagram]	D32	17310	306	6.23	32999.44
	C2	[Diagram]	D16	9437	177	1.56	2605.74
	C3	[Diagram]	D16	5330	256	1.56	2203.42
FOOTING	F1	[Diagram]	D25	8320	193	3.98	6059.79
	F2	[Diagram]	D19	6436	93	2.25	1346.73
	F3	[Diagram]	D25	26640	47	3.98	4983.28
	F4	[Diagram]	D29	25080	94	5.04	11881.90
	F5	[Diagram]	D16	6300	10	1.56	98.28
	F6	[Diagram]	D16	23890	8	1.56	298.15
	F7	[Diagram]	D16	4534	115	1.56	813.40
	F8	[Diagram]	D16	4190	138	1.56	902.02
TOTAL							74865.08
SUMMARY			D16 =				10732.26
			D19 =				1346.73
			D22 =				1021.08
			D25 =				13160.68
			D29 =				11881.90
		D32 =				36722.42	



BAR QUANTITIES OF A1 ABUTMENT PILES

SYMBOL	SHAPE	Dia (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)
N1	—	D29	11700	36	5.04	2123
N1 ₂	—	D29	3680	36	5.04	668
N1 ₃	—	D32	11700	48	6.23	3499
N1 ₄	—	D32	6140	24	6.23	918
N2	○	D16	4216	123	1.56	809
N3	○	D22	4140	13	3.04	164
N4	○	D16	3588	63	1.56	353
N5	—	D16	990	14	1.56	22
S1	—	D13	670	26	0.997	17
Total for one pile						8572
SUMMARY FOR 18 PILES				D13~D22		24556
				D29~D32		129733
				Total		154288



BAR QUANTITIES OF P1R, P12L~P14L, P12R~P18R

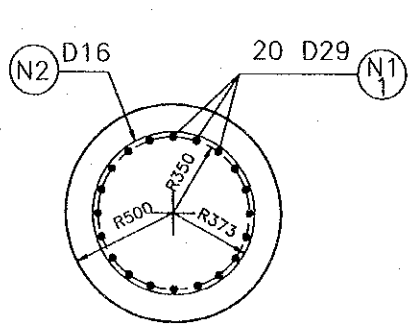
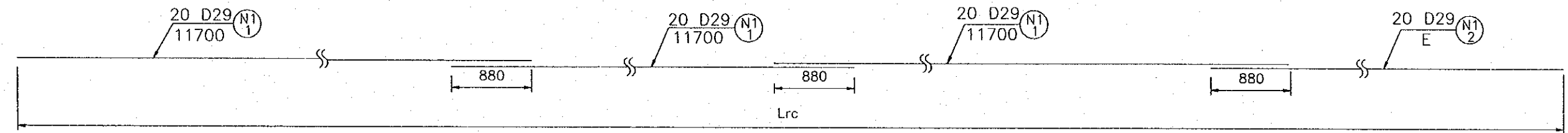
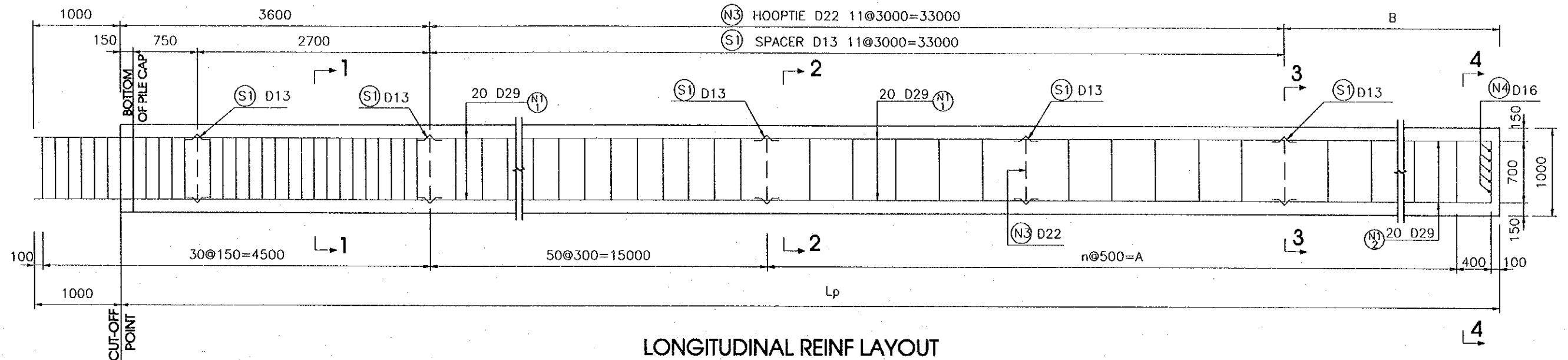
SYMBOL	SHAPE	Dia (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)
N1 ₁	—	D32	11700	630	6.23	45921
N1 ₂	—	D32	8140	180	6.23	9128
N2	○	D16	2655	1071	1.56	4436
N3	○	D22	2559	117	3.04	910
N4	○	D16	2027	495	1.56	1565
N5	—	D16	990	90	1.56	139
S1	—	D13	670	117	0.997	78
Total for one pier						62178
SUMMARY FOR 11 PIERS						
D13~D22						78413
D29~D32						605545
Total						683958

BAR QUANTITIES OF P16L

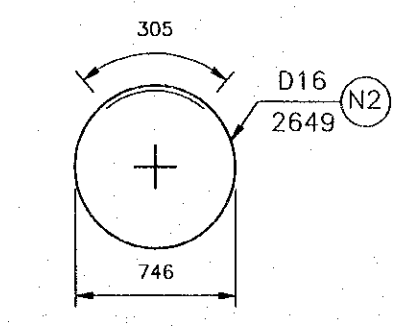
SYMBOL	SHAPE	Dia (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)
N1 ₁	—	D32	11700	700	6.23	51024
N1 ₂	—	D32	8140	200	6.23	10142
N2	○	D16	2655	1190	1.56	4929
N3	○	D22	2559	130	3.04	1011
N4	○	D16	2027	550	1.56	1739
N5	—	D16	990	100	1.56	154
S1	—	D13	670	130	0.997	87
Total for one pile						69087
SUMMARY						
D13~D22						7921
D29~D32						61166

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM HANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT RED RIVER BRIDGE (HUANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.08.14

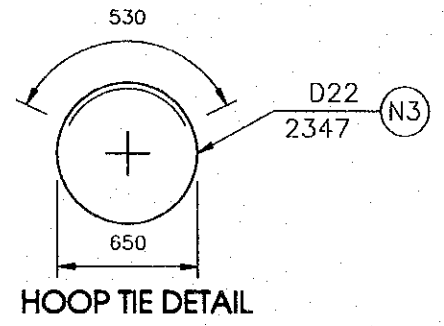
PACKAGE 3	SCALE 1/50	DRAWING No. C-1-3a-82	SHEET No.
DETAIL OF D=1.0 m CAST IN PLACE CONCRETE PILE (2)			



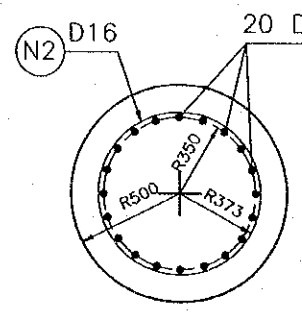
SECTION 1-1



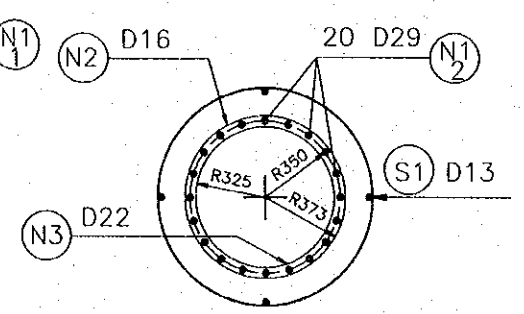
TYPICAL TIE DETAIL



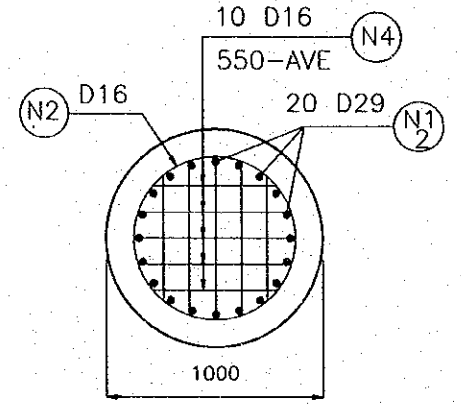
HOOP TIE DETAIL



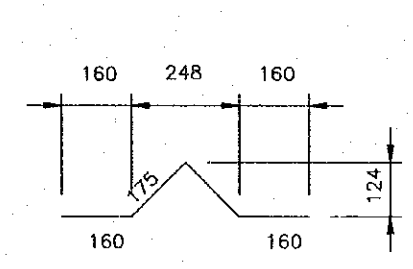
SECTION 2-2



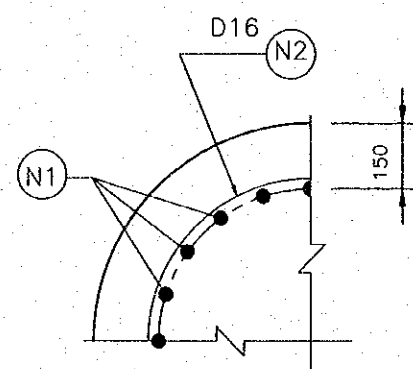
SECTION 3-3



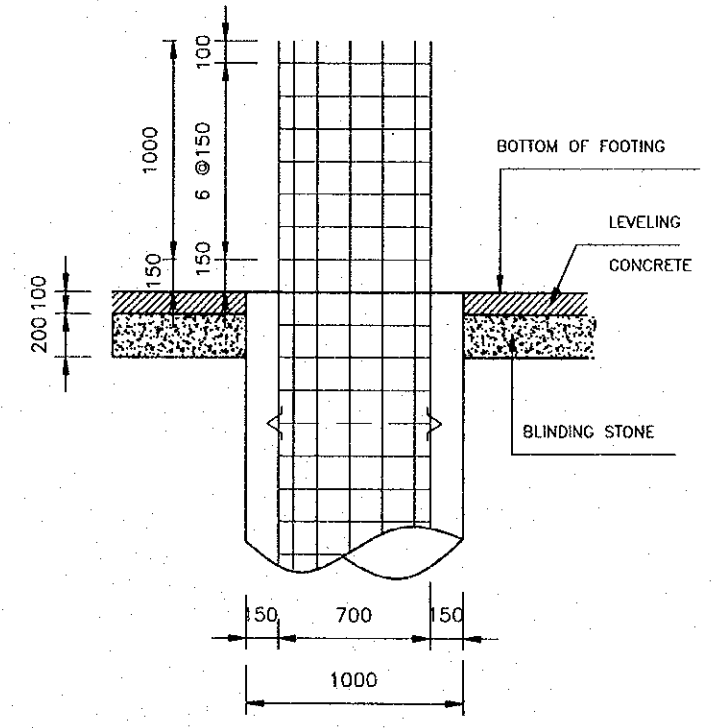
SECTION 4-4



(S1) D13-670



DETAIL OF COVERING



DETAIL OF CONCRETE PIER

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.14

PACKAGE 3	SCALE	DRAWING No. C-1-3a-B3	SHEET No.
DETAIL OF D=1.0m CAST IN PLACE PILE (3)			

LIST OF BAR CAST-IN-PLACE CONCRETE PILE D=100 CM

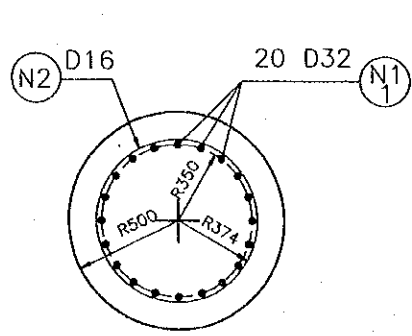
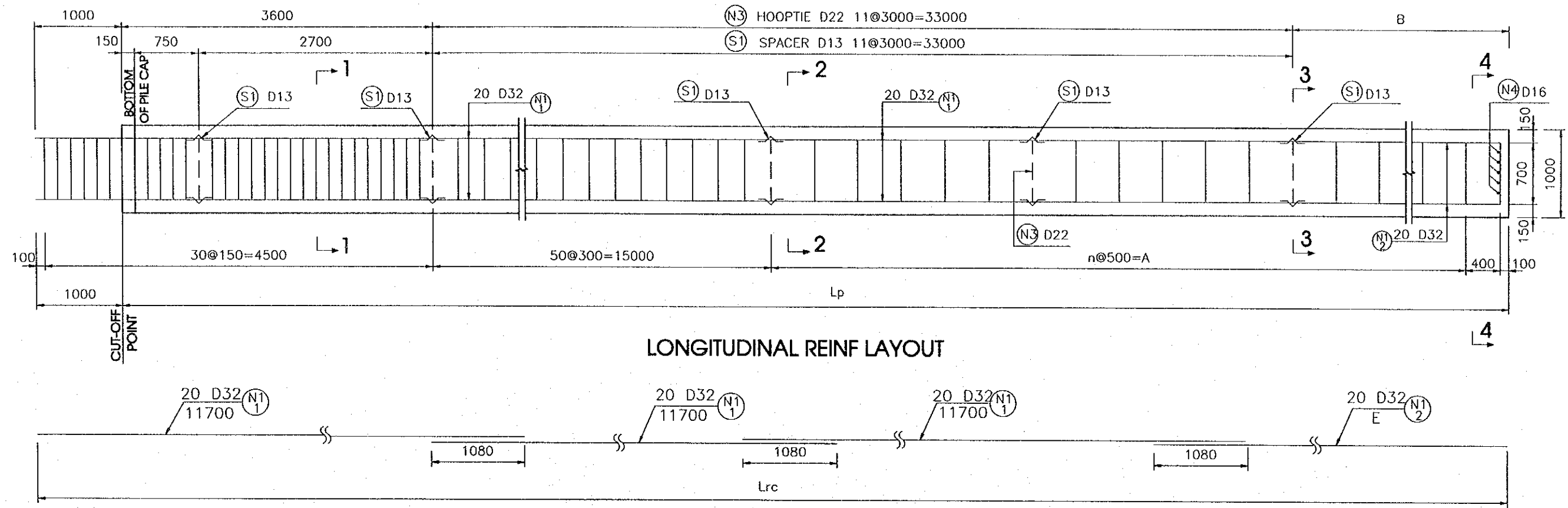
PIER NAME	PILES		Pile Dimensions (mm)			Dimensions of N1 (mm)		n
	Diameter (mm)	Number	Lp	A	B	Lrc	E	
P1L	1000	8	40 000	21 000	3 400	41 000	8 540	42
P2L	1000	8	40 000	21 000	3 400	41 000	8 540	42
P3L	1000	8	40 000	21 000	3 400	41 000	8 540	42
P3R	1000	13	40 000	21 000	3 400	41 000	8 540	42
P4R	1000	13	40 000	21 000	3 400	41 000	8 540	42
P6L	1000	12	38 000	19 000	1 400	39 000	8 540	38
P7L	1000	15	38 000	19 000	1 400	39 000	8 540	38
P8L	1000	15	38 000	19 000	1 400	39 000	8 540	38
P8R	1000	15	38 000	19 000	1 400	39 000	8 540	38
P9L	1000	10	42 000	23 000	5 400	43 000	10 540	46
P9R	1000	10	42 000	23 000	5 400	43 000	10 540	46
P15L	1000	10	39 000	20 000	2 400	40 000	7 540	40

QUANTITIES OF PILES FOR PIER P1L~P3L, P3R, P4R, P6L~P9L, P9R, P15L

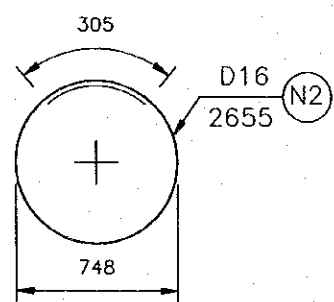
SYMBOL	SHAPE	Diameter (mm)	Unit Weight (Kg/m)	P1L,P2L,P3L			P3R, P4R			P6L			P7L,P8L,P8R			P9L,P9R			P15L								
				Length (mm)	Number	Weight (Kg)	Length (mm)	Number	Weight (Kg)	Length (mm)	Number	Weight (Kg)	Length (mm)	Number	Weight (Kg)	Length (mm)	Number	Weight (Kg)	Length (mm)	Number	Weight (Kg)						
N1 ₁		D29	5.04	11 700	480	28 305	11 700	780	45 995	11 700	720	42 457	11 700	900	53 071	11 700	600	35 381	11 700	600	35 381						
N1 ₂		D29	5.04	8 540	160	6 887	8 540	260	11 191	6 540	240	7 911	6 540	300	9 888	10 540	200	10 824	7 540	200	7 600						
N2		D16	1.56	2 649	992	4 099	2 649	1612	6 661	2 649	1440	5 951	2 649	1800	7 438	2 649	1280	5 290	2 649	1220	5 042						
N3		D22	3.04	2 347	104	742	2 347	169	1 206	2 347	156	1 113	2 347	195	1 391	2 347	130	928	2 347	130	928						
N4		D16	1.56	550	80	69	550	130	112	550	120	103	550	150	129	550	100	86	550	100	86						
S1		D13	0.995	670	208	139	670	338	225	670	312	208	670	390	260	670	260	173	670	260	173						
				Total 1 piers			40 240	Total 1 piers			65 390	Total 1 piers			57 742	Total 1 piers			72 178	Total 1 piers			52 481	Total			49 209
SUMMARY				D13~D22			5 049	D13~D22			8 204	D13~D22			7 375	D13~D22			9 218	D13~D22			6 476	D13~D22			6 228
				D29~D32			35 191	D29~D32			57 186	D29~D32			50 368	D29~D32			62 960	D29~D32			48 005	D29~D32			42 981
SUMMARY				D13~D23			15 146	D13~D23			16 408	D13~D23			27 655	D13~D23			12 952	D13~D23				D13~D23			
				D29~D33			105 574	D29~D33			114 372	D29~D33			188 879	D29~D33			92 010	D29~D33				D29~D33			
				Total 3 piers			120 720	Total 2 piers			130 780	Total 3 piers			216 534	Total 2 piers			104 963								

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.03.14

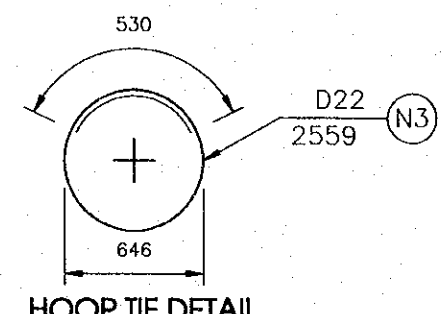
PACKAGE	SCALE	DRAWING No.	SHEET No.
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DETAIL OF D=1.0 m CAST IN PLACE CONCRETE PILE (4)			



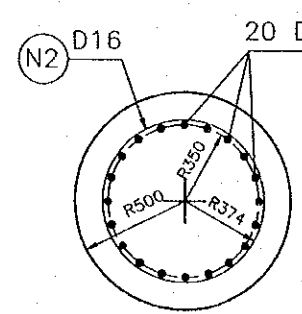
SECTION 1-1



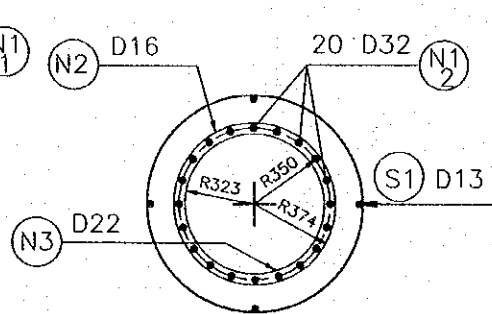
TYPICAL TIE DETAIL



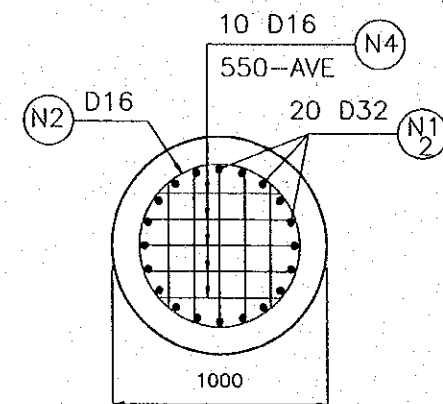
HOOP TIE DETAIL



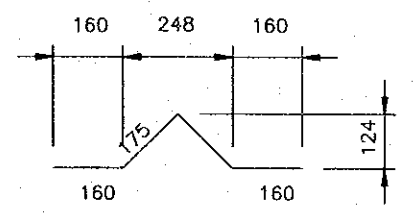
SECTION 2-2



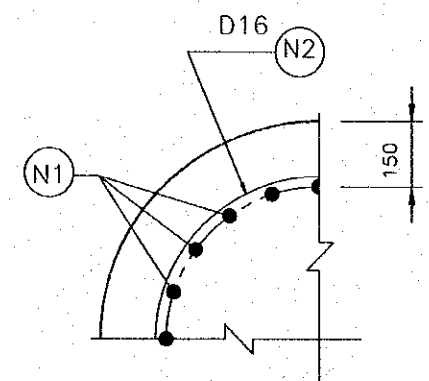
SECTION 3-3



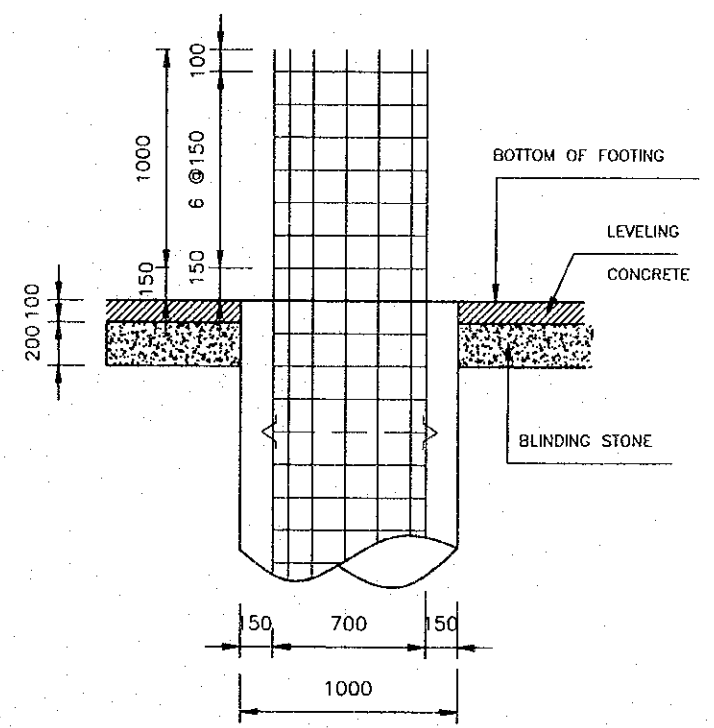
SECTION 4-4



S1 D13-670



DETAIL OF COVERING



DETAIL OF CONCRETE PIER

281

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		NAME S. WATABE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		SIGNATURE
		DATE 2000.3.14

PACKAGE 3	SCALE	DRAWING No. C-1-3a-85	SHEET No.
DETAIL OF D=1.0m CAST IN PLACE PILE (5)			

LIST OF BAR FOR CAST-IN-PLACE CONCRETE PILE D=100 cm

PIER NAME	PILES		Pile Dimensions (mm)			Dimensions of N1 (mm)		n
	Diameter (mm)	Number	Lp	A	B	Lrc	E	
P2R	1000	13	39 000	20 000	2 400	40 000	7 540	40
P5R	1000	13	39 000	20 000	2 400	40 000	7 540	40
P6R	1000	13	39 000	20 000	2 400	40 000	7 540	40
P7R	1000	13	39 000	20 000	2 400	40 000	7 540	40
P17L	1000	13	39 000	20 000	2 400	40 000	7 540	40
P18L	1000	13	39 000	20 000	2 400	40 000	7 540	40
P4L	1000	9	40 000	21 000	3 400	41 000	8 540	42
P5L	1000	9	40 000	21 000	3 400	41 000	8 540	42
P10L	1000	16	40 000	21 000	3 400	41 000	8 540	42
P10R	1000	16	40 000	21 000	3 400	41 000	8 540	42
P11L	1000	16	40 000	21 000	3 400	41 000	8 540	42
P11R	1000	16	40 000	21 000	3 400	41 000	8 540	42

QUANTITIES OF PILES FOR PIER P4L, P5L

symbol	Saphe	Diameter (mm)	Unit Weight (Kg/m)	Length (mm)	Number	Weight (Kg)
N1 1		D32	6.23	11 700	540	39 381
N1 2		D32	6.23	8 540	180	9 577
N2		D16	1.56	2 655	1116	4 622
N3		D22	3.04	2 559	117	910
N4		D16	1.56	550	90	77
S 1		D13	0.995	670	234	156
Total 1 piers						54 704
SUMMARY FOR ONE PIER				D13-D22	5 766	
				D29-D32	48 938	
SUMMARY FOR 2 PIERS				D13-D23	11 531	
				D29-D33	97 876	
Total 2 piers						109 407

QUANTITIES OF PILES FOR PIER P2R, P5R, P6R, P7R, P17L, P18L

symbol	Saphe	Diameter (mm)	Unit Weight (Kg/m)	Length (mm)	Number	Weight (Kg)
N1 1		D32	6.23	11 700	780	56 855
N1 2		D32	6.23	7 540	260	12 213
N2		D16	1.56	2 655	1586	6 569
N3		D22	3.04	2 559	189	1 315
N4		D16	1.56	550	130	112
S 1		D13	0.995	670	338	225
Total 1 piers						77 289
SUMMARY FOR ONE PIER				D13-D22	8 220	
				D29-D32	69 068	
SUMMARY FOR 6 PIERS				D13-D23	49 323	
				D29-D33	414 410	
Total 6 piers						463 732

QUANTITIES OF PILES FOR PIER P10L, P10R, P11L, P11R

symbol	Saphe	Diameter (mm)	Unit Weight (Kg/m)	Length (mm)	Number	Weight (Kg)
N1 1		D32	6.23	11 700	960	69 975
N1 2		D32	6.23	8 540	320	17 025
N2		D16	1.56	2 655	1984	8 217
N3		D22	3.04	2 559	208	1 618
N4		D16	1.56	550	160	137
S 1		D13	0.995	670	416	277
Total 1 piers						97 251
SUMMARY FOR ONE PIER				D13-D22	10 250	
				D29-D32	87 001	
SUMMARY FOR 4 PIERS				D13-D23	41 000	
				D29-D33	348 003	
Total 4 piers						389 003

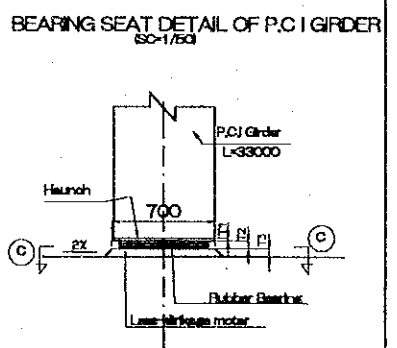
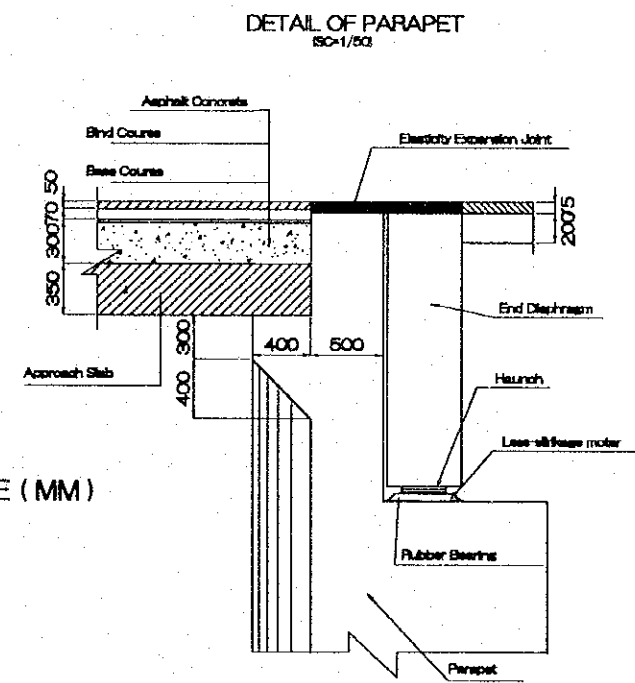
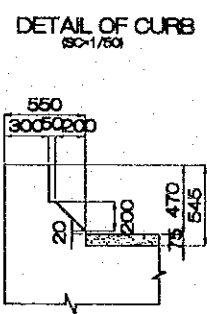
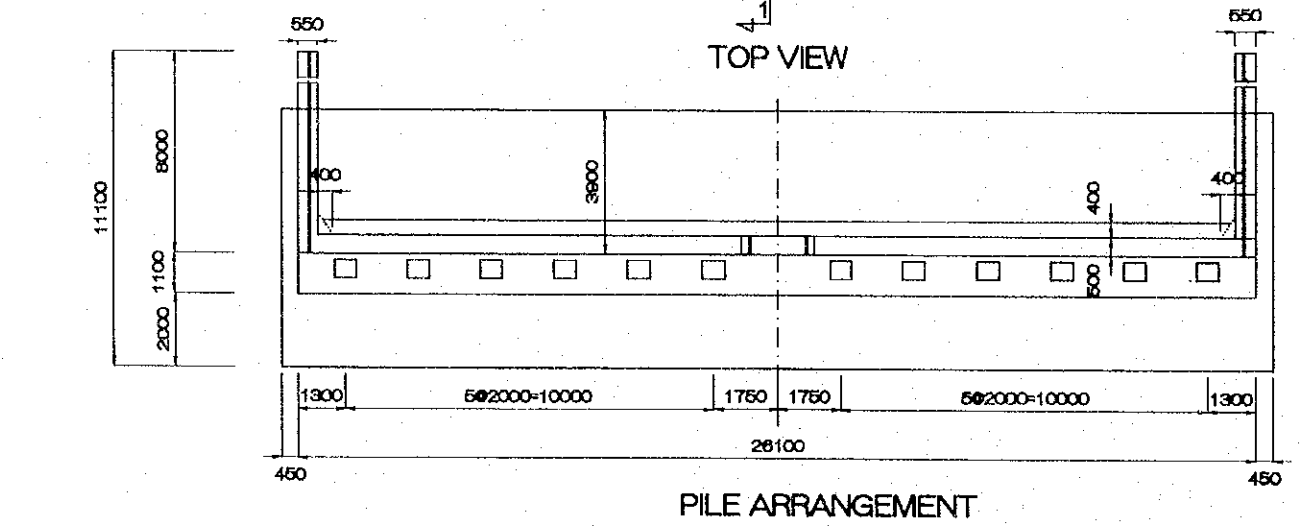
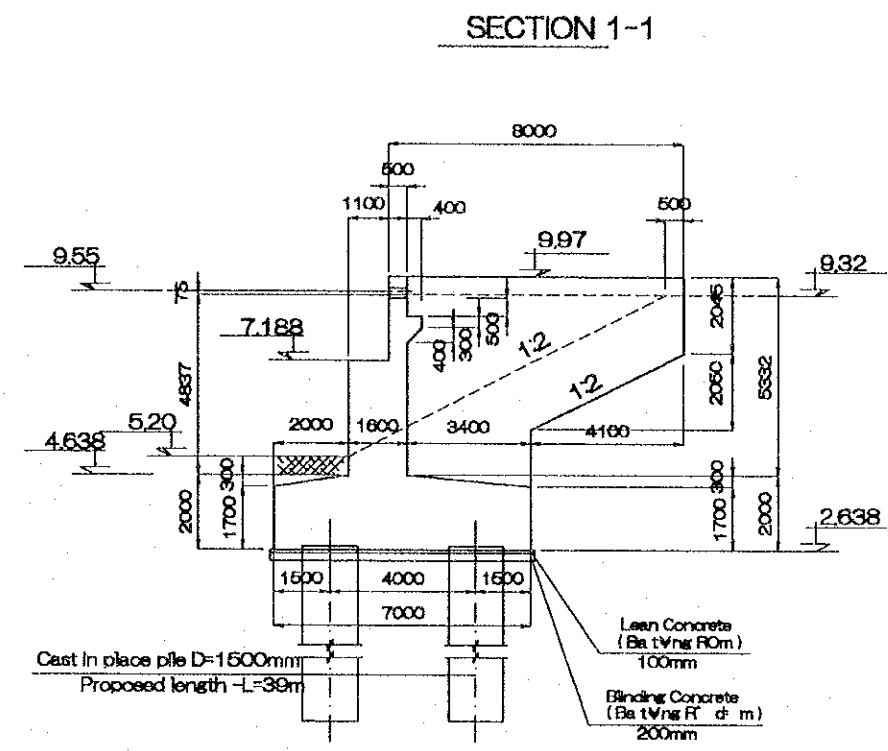
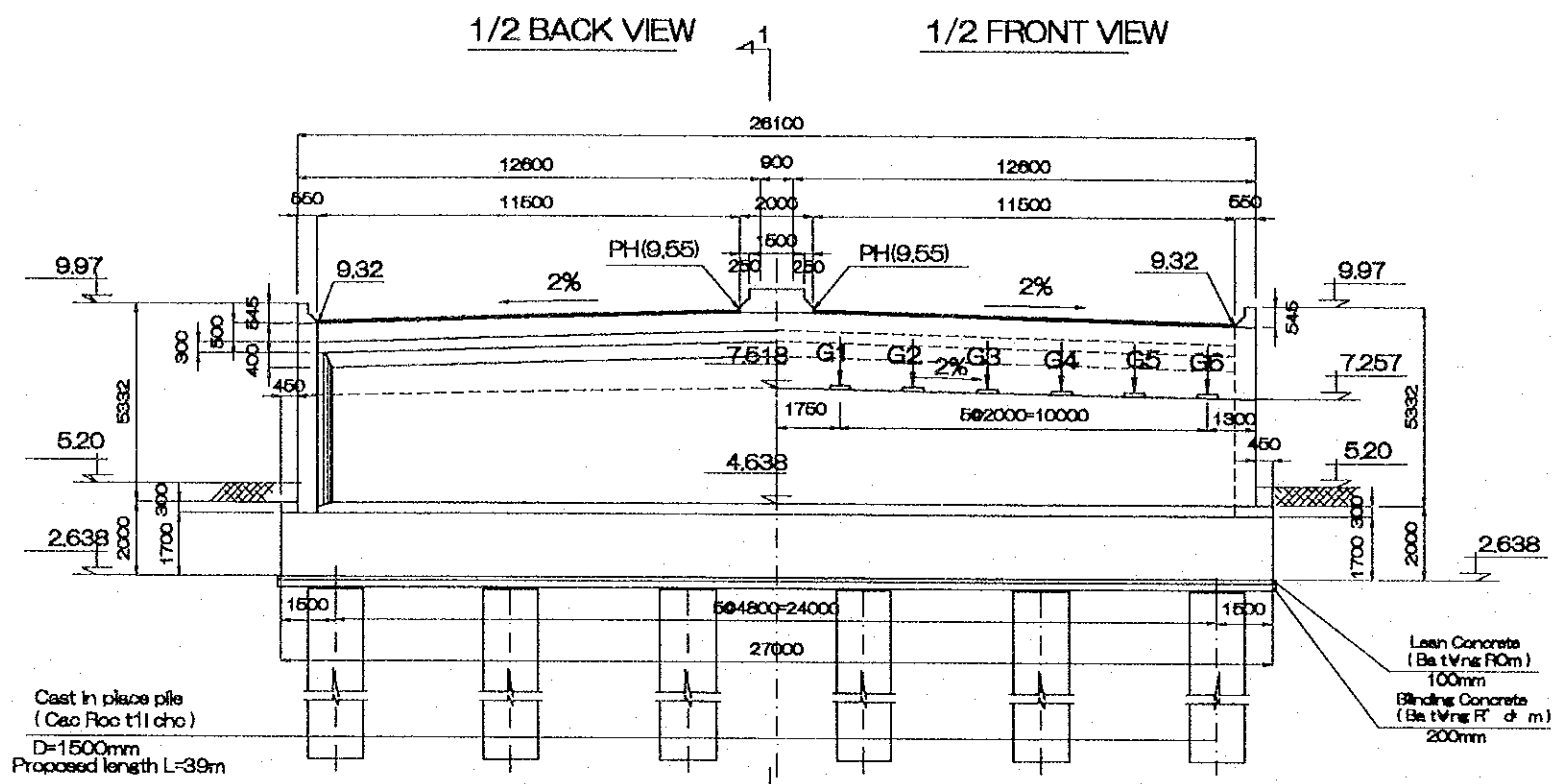
C-1 THROUGHWAY

C-1-3 SUBSTRUCTURE

C-1-3b KIM NGUU RIVER BRIDGE

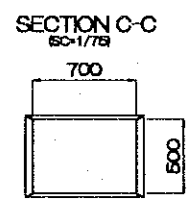
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAKE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2007.16.1
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1:200	DRAWING No. C-1-3b-1	SHEET No.
DETAIL OF ABUTMENT- A1C, A2C - CARIAGEWAY			



DEPTH OF SUPERSTRUCTURE (MM)

	P.C I Girder
Pavement	75
Slab	207
Girder	1650
Haunch	34
Bearing	56
Mortar	30
Sub Total	2052

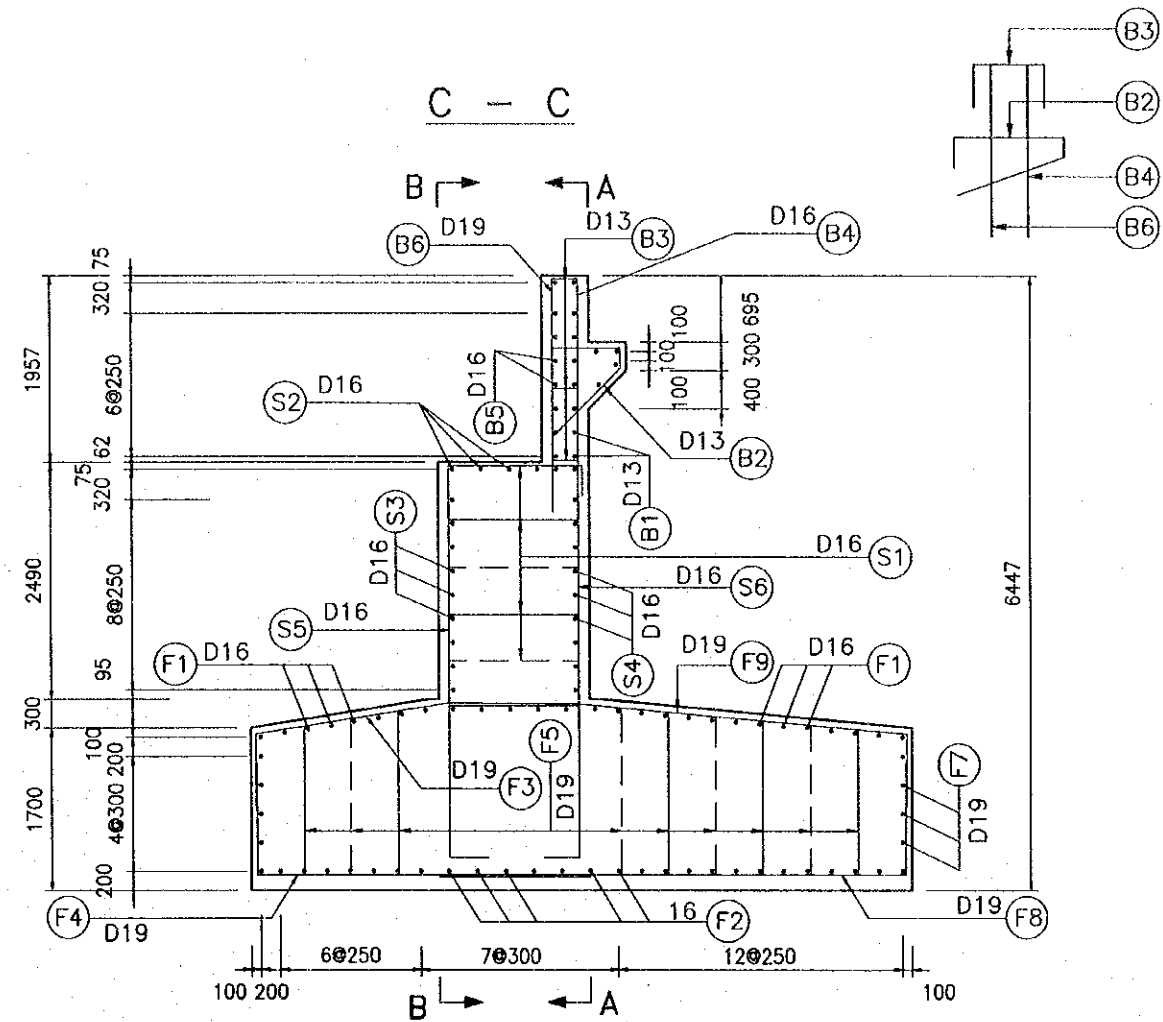
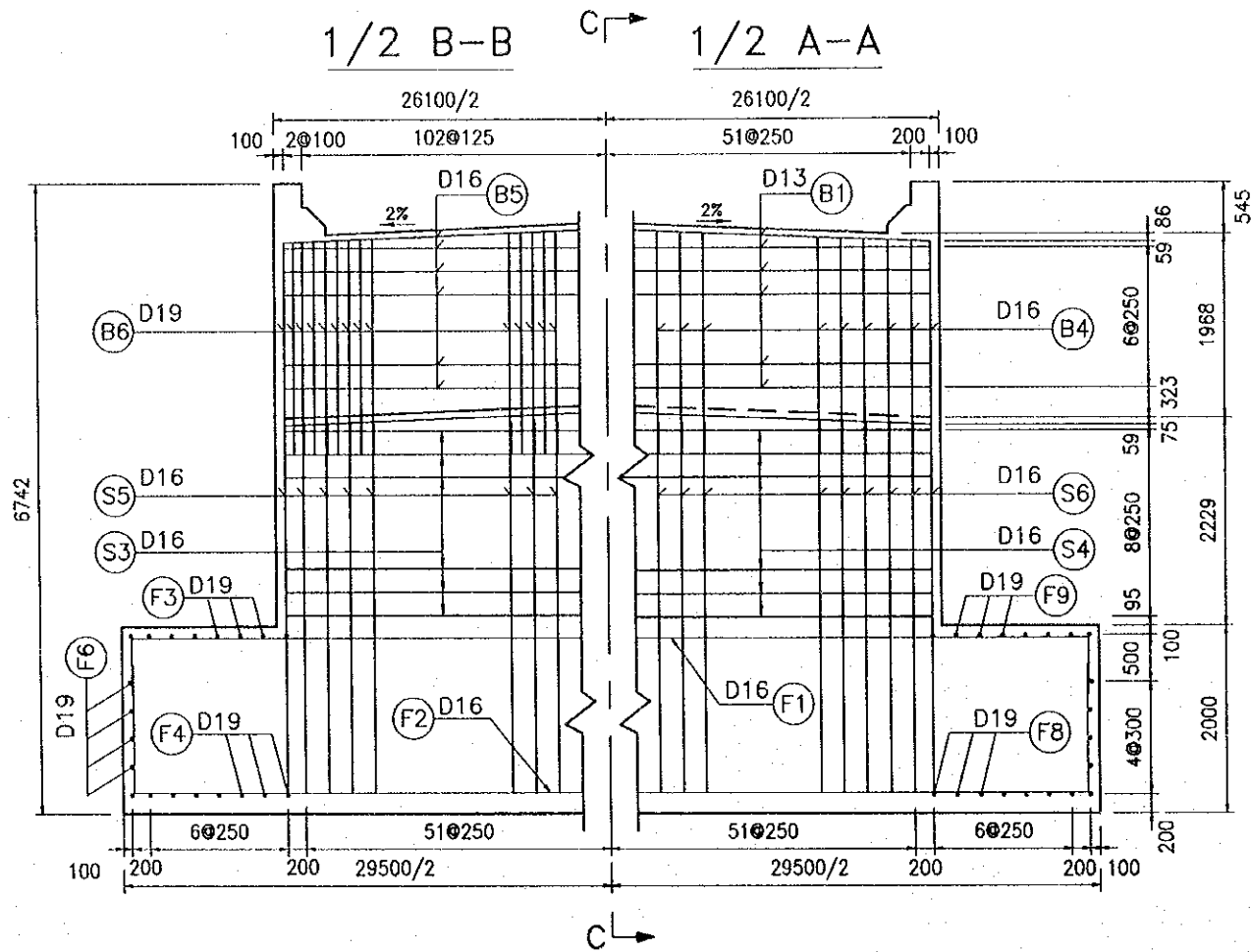


TOP MORTAR ELEVATION (M)

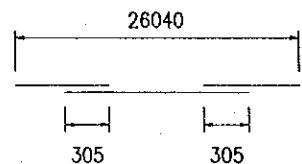
P.C I Girder	Bearing seat Elevation	G1	G2	G3	G4	G5	G6
		7.483	7.443	7.403	7.363	7.323	7.283

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
COORDINATOR PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.14

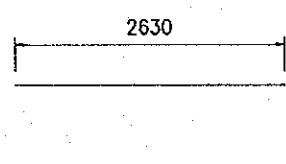
PACKAGE 3	SCALE 1:75	DRAWING No. C-1-3b-2	SHEET No.
BAR ARRANGMENT OF ABUTMENT A1C,A2C (1)			



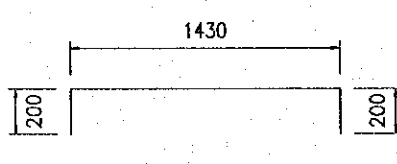
B1-D13 x 26650



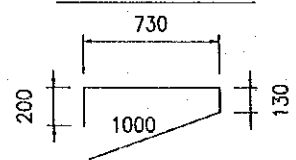
B4-D16 x 2630



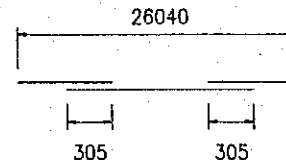
S1-D16 x 1830



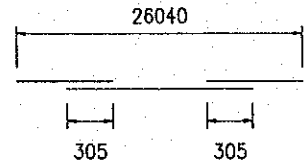
B2-D13 x 2060



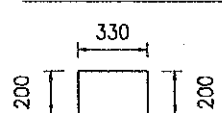
B5-D16 x 26650



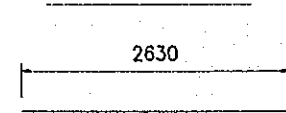
S2,S3,S4-D16 x 26650



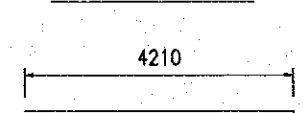
B3-D13 x 730



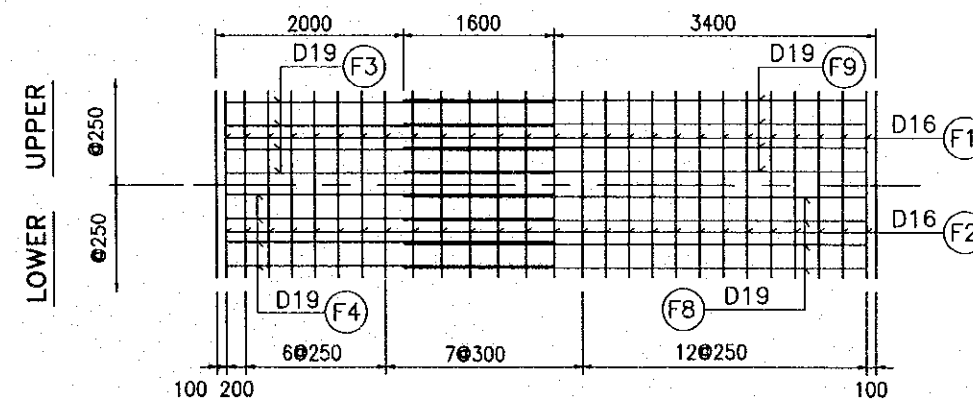
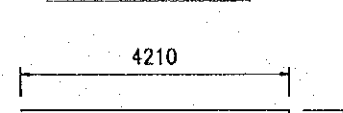
B6-D19 x 2630



S5-D16 x 4445



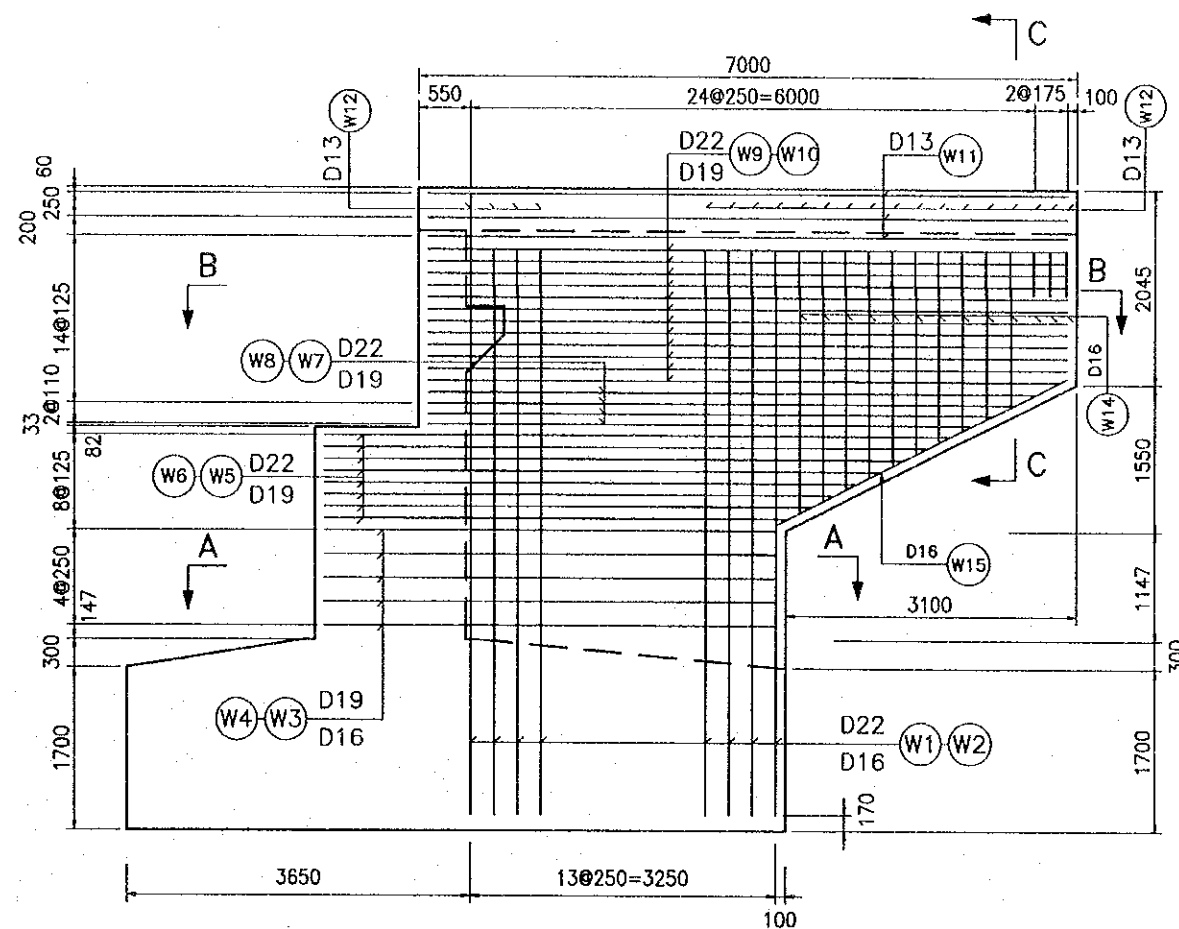
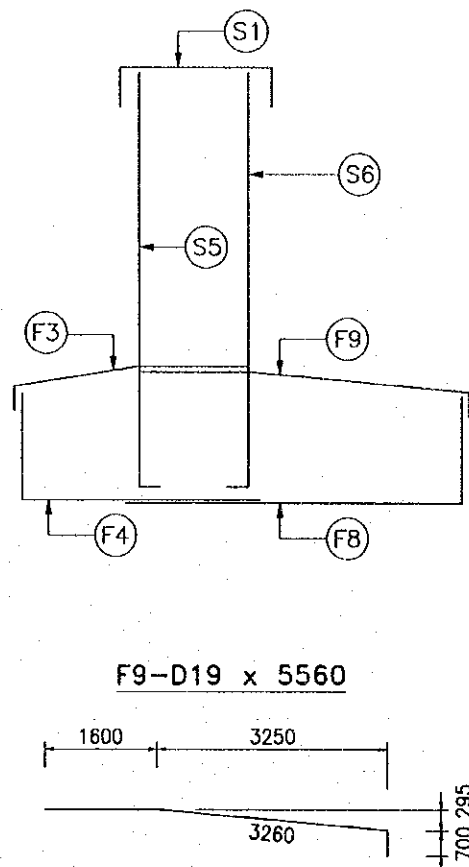
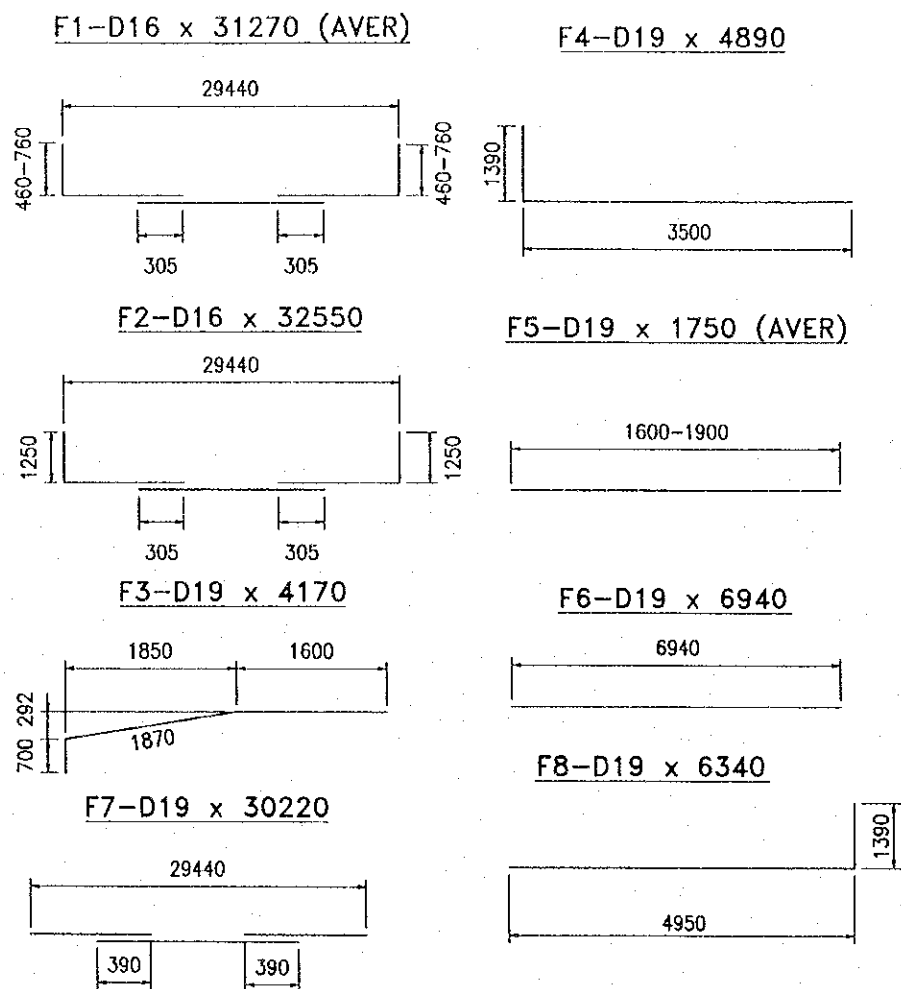
S6-D16 x 4445



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRUNG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		DATE 2000. 11. 17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

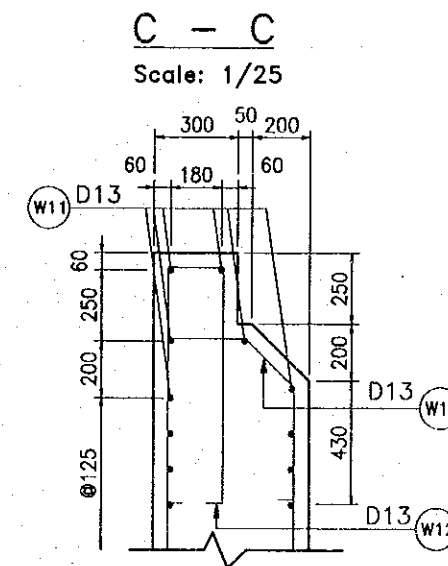
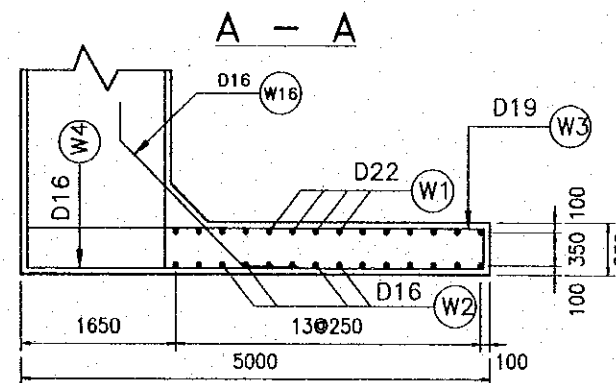
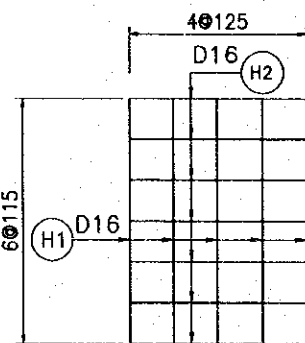
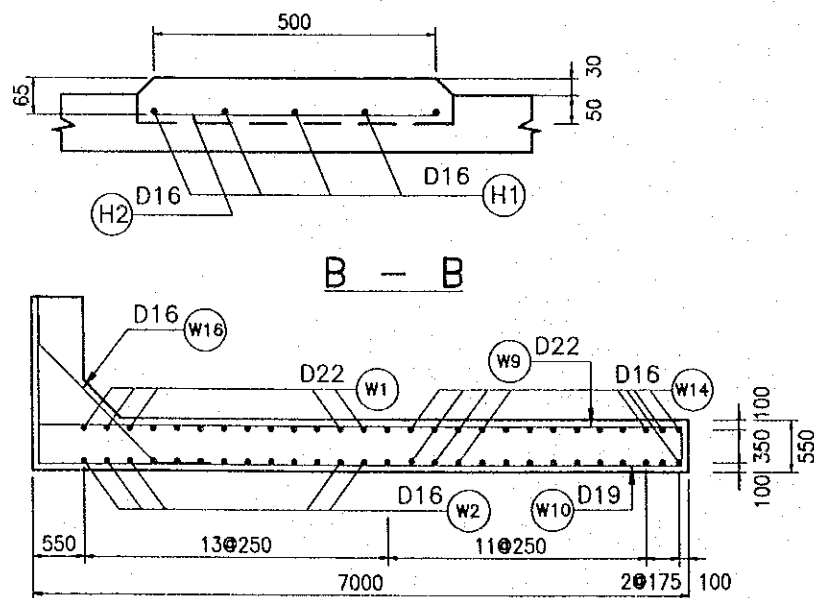
PACKAGE 3	SCALE 1:75	DRAWING No. C-1-3b-3	SHEET No.
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BAR ARRANGEMENT OF ABUTMENT A1C, A2C (2)



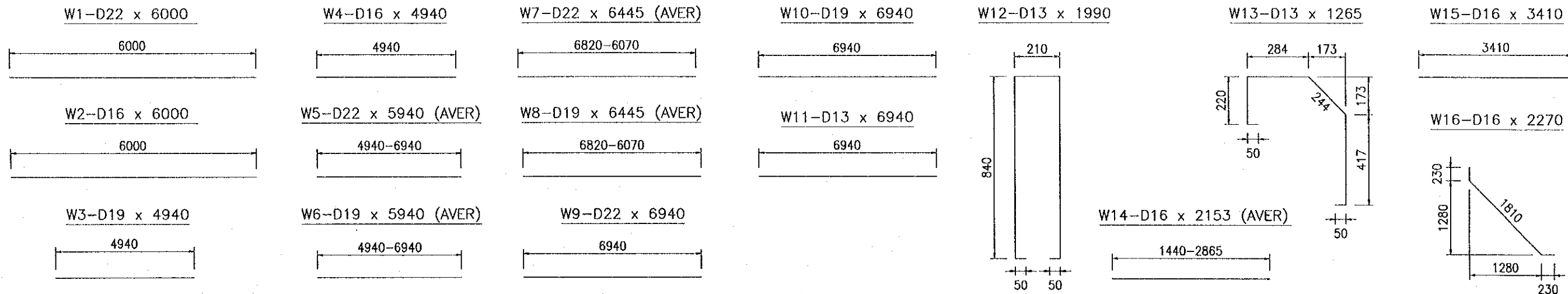
BAR ARRANGEMENT OF BEARING SEAT

Scale: 1/25



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.14	

PACKAGE 3	SCALE	DRAWING No. C-1-3b-4	SHEET No.
BAR ARRANGEMENT OF ABUTMENT A1C, A2C (3)			



Detaile	Bars	Shape	Dia (mm)	Length (mm)	No' s	Unit Weight (Kg/m)	Weight (Kg)	Remarks
BALAST WALL	B1		D13	26650	12	0.995	318.2	
	B2		D13	2060	99	0.995	202.92	
	B3		D13	730	200	0.995	145.27	
	B4		D16	2630	105	1.56	430.79	
	B5		D16	26650	8	1.56	332.59	
	B6		D19	2630	209	2.25	1236.76	
STEM	S1		D16	1830	130	1.56	371.12	
	S2		D16	26650	6	1.56	249.44	
	S3		D16	26650	9	1.56	374.17	
	S4		D16	26650	9	1.56	374.17	
	S5		D16	4445	105	1.56	728.09	
	S6		D16	4445	105	1.56	728.09	
	H1		D16	710	60	1.56	66.46	
	H2		D16	520	84	1.56	68.14	
FOOTING	F1		D16	31270	27	1.56	1317.09	AVER
	F2		D16	32550	27	1.56	1371.01	
	F3		D19	4170	119	2.25	1116.52	
	F4		D19	4890	119	2.25	1309.30	
	F5		D19	1750	420	2.25	1653.75	AVER
	F6		D19	6940	8	2.25	124.92	
	F7		D19	30220	8	2.25	543.96	
	F8		D19	6340	119	2.25	1697.54	
	F9		D19	5560	119	2.25	1488.69	

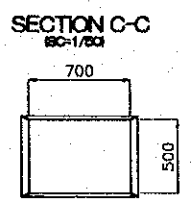
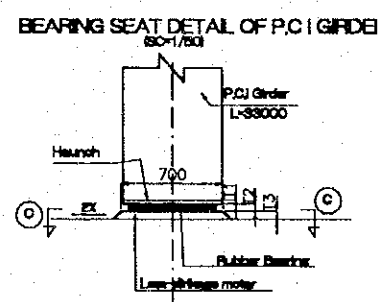
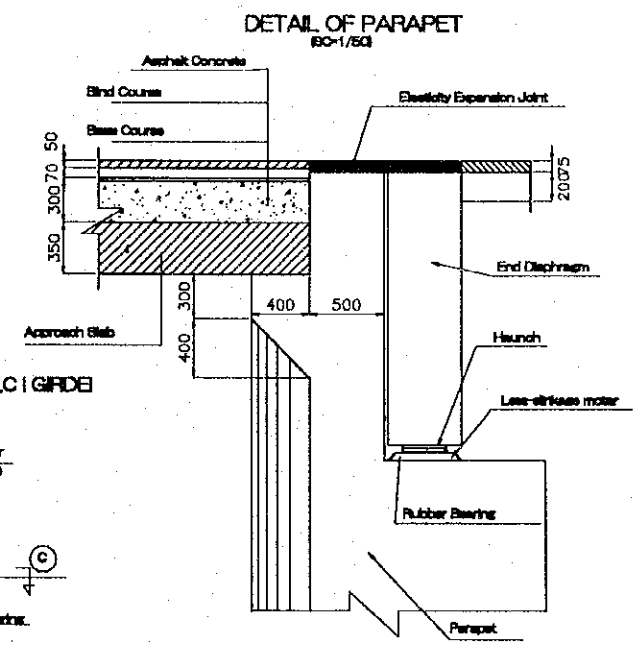
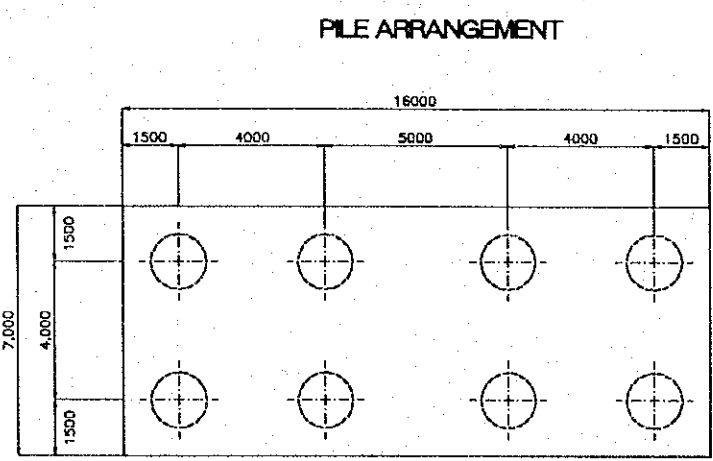
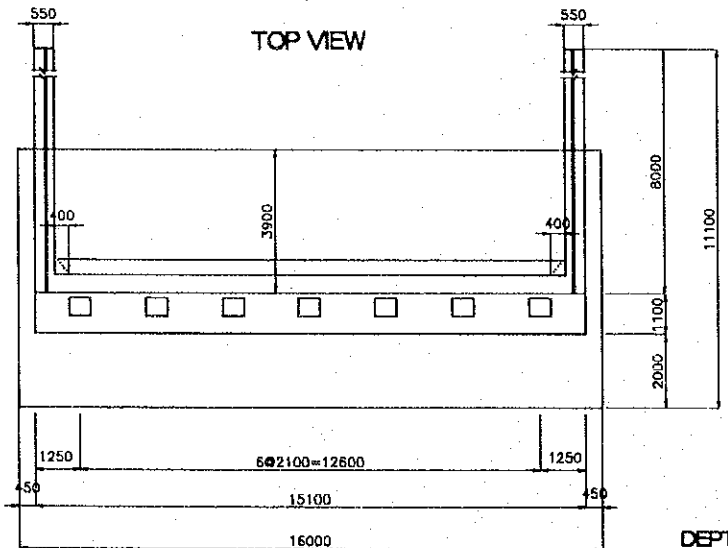
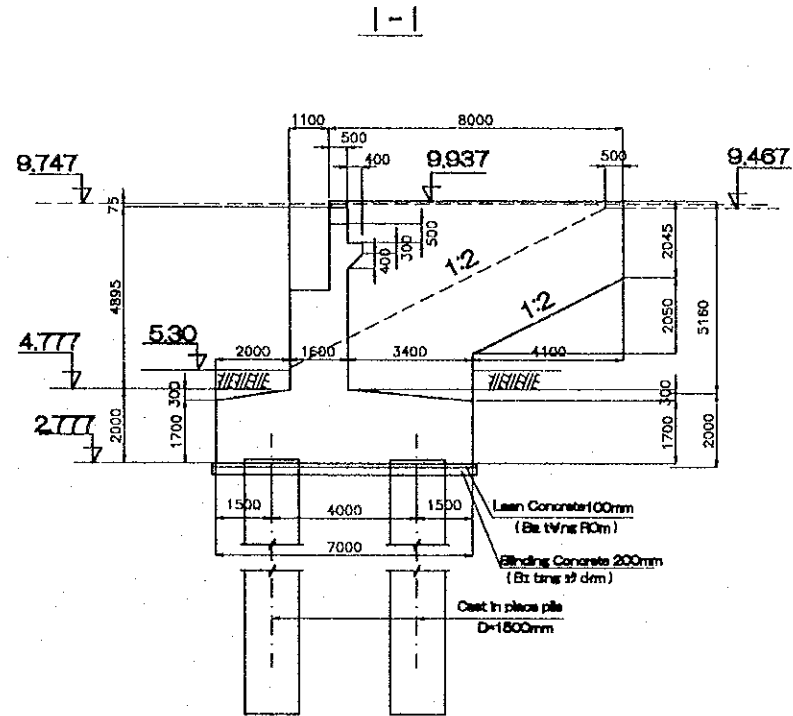
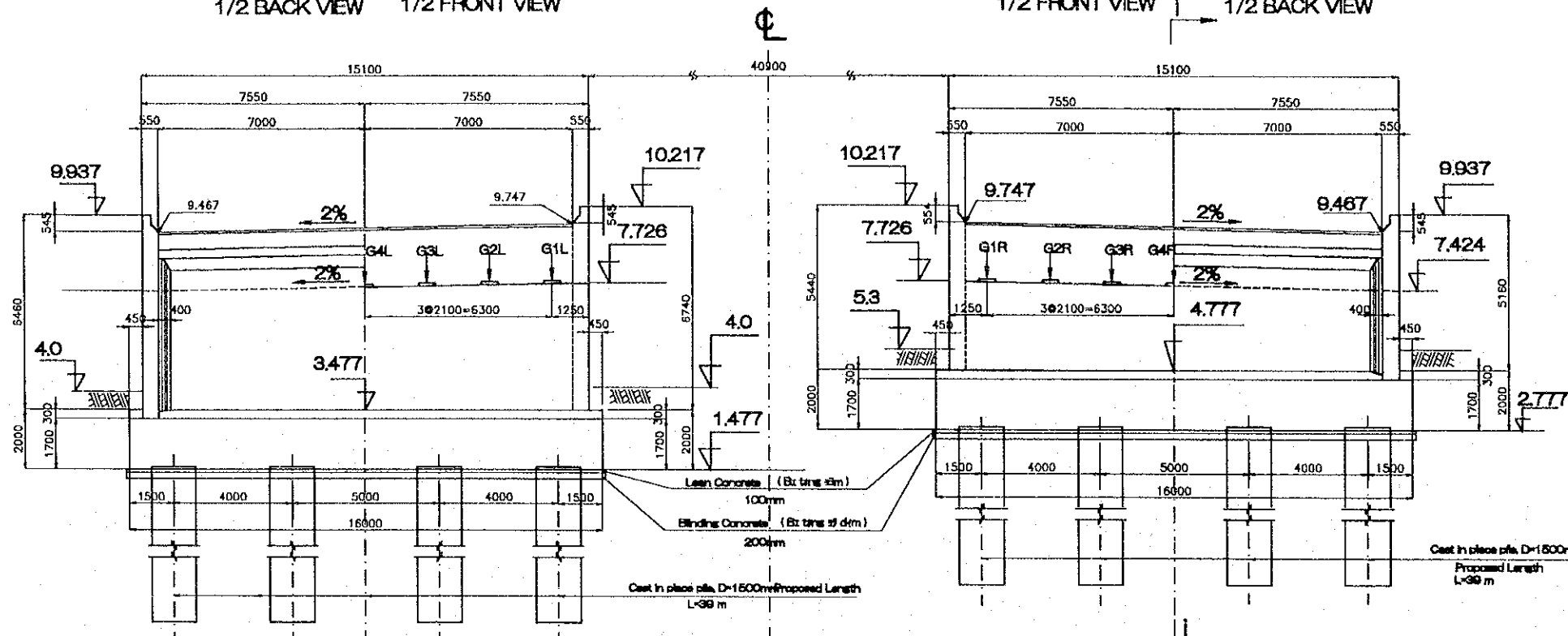
Detaile	Bars	Shape	Dia (mm)	Length (mm)	No' s	Unit Weight (Kg/m)	Weight (Kg)	Remarks	
WING WALL	W1		D22	6000	28	3.04	510.72		
	W2		D16	6000	28	1.56	262.08		
	W3		D19	4940	10	2.25	111.15		
	W4		D16	4940	10	1.56	77.06		
	W5		D22	5940	16	3.04	288.92	AVER	
	W6		D19	5940	16	2.25	213.84	AVER	
	W7		D22	6445	8	3.04	156.74	AVER	
	W8		D19	6445	8	2.25	116.01	AVER	
	W9		D22	6940	24	3.04	506.34		
	W10		D19	6940	24	2.25	374.76		
	W11		D13	6940	12	0.995	82.86		
	W12		D13	1990	54	0.995	106.92		
	W13		D13	1265	54	0.995	67.97		
	W14		D16	2153	52	1.56	174.65	AVER	
	W15		D16	3400	4	1.56	21.22		
	W16		D16	2270	58	1.56	205.39		
SUMMARY	TOTAL							19525.62	
	D13 : 924.15						D22 : 1462.73		
	D16 : 7151.56								
	D19 : 9987.19								

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAKE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.6.1
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1:200	DRAWING No. C-1-3b-5	SHEET No.
DETAIL OF ABUTMENT A1 FL, A2FL, A1 FR, A2FR			

FRONTAGE - L
1/2 BACK VIEW 1/2 FRONT VIEW

FRONTAGE - R
1/2 FRONT VIEW 1/2 BACK VIEW

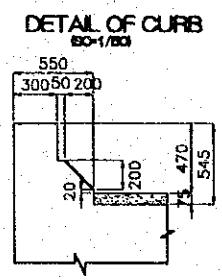


DEPTH OF SUPERSTRUCTURE (MM)

ELEVATION OF PIER HEAD (M)
(FOR ALL LEFT AND RIGHT SIDE)

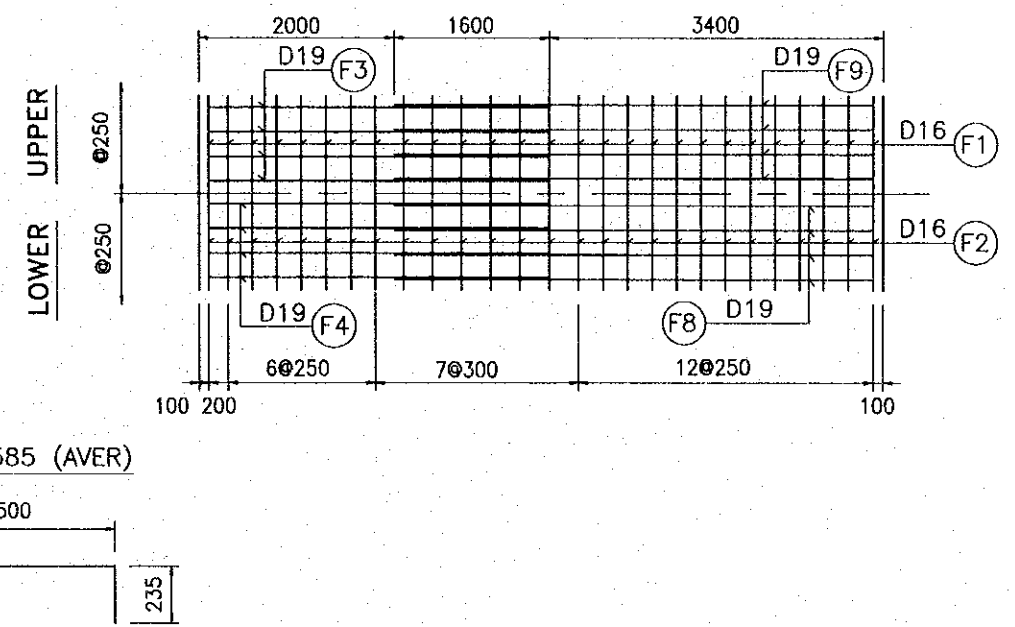
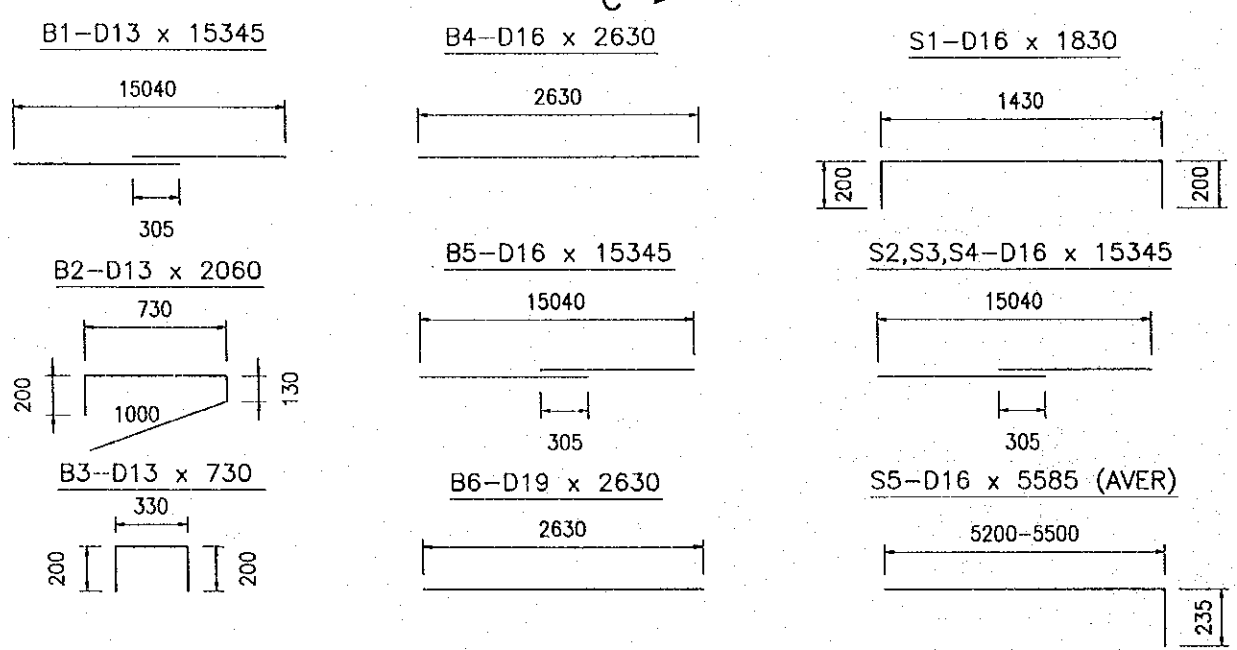
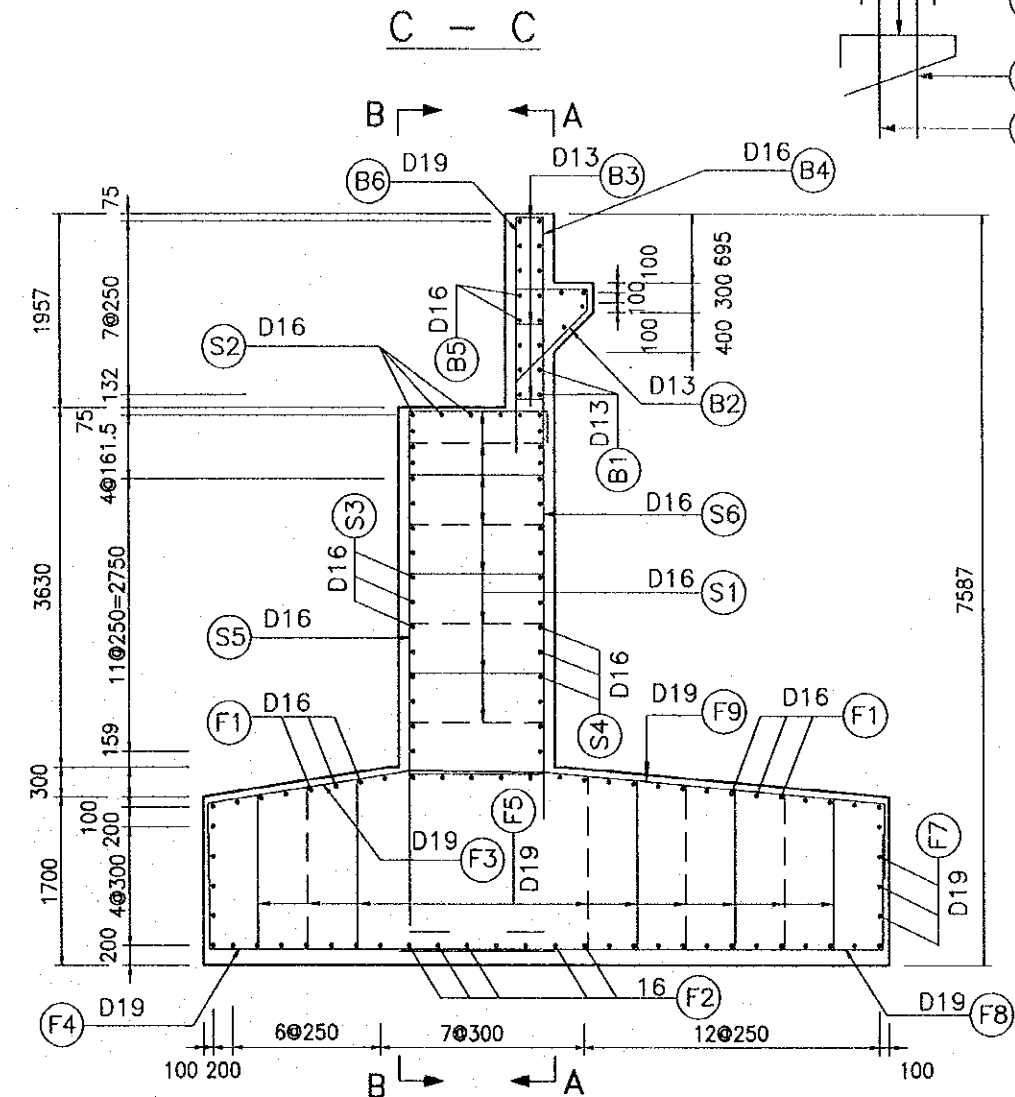
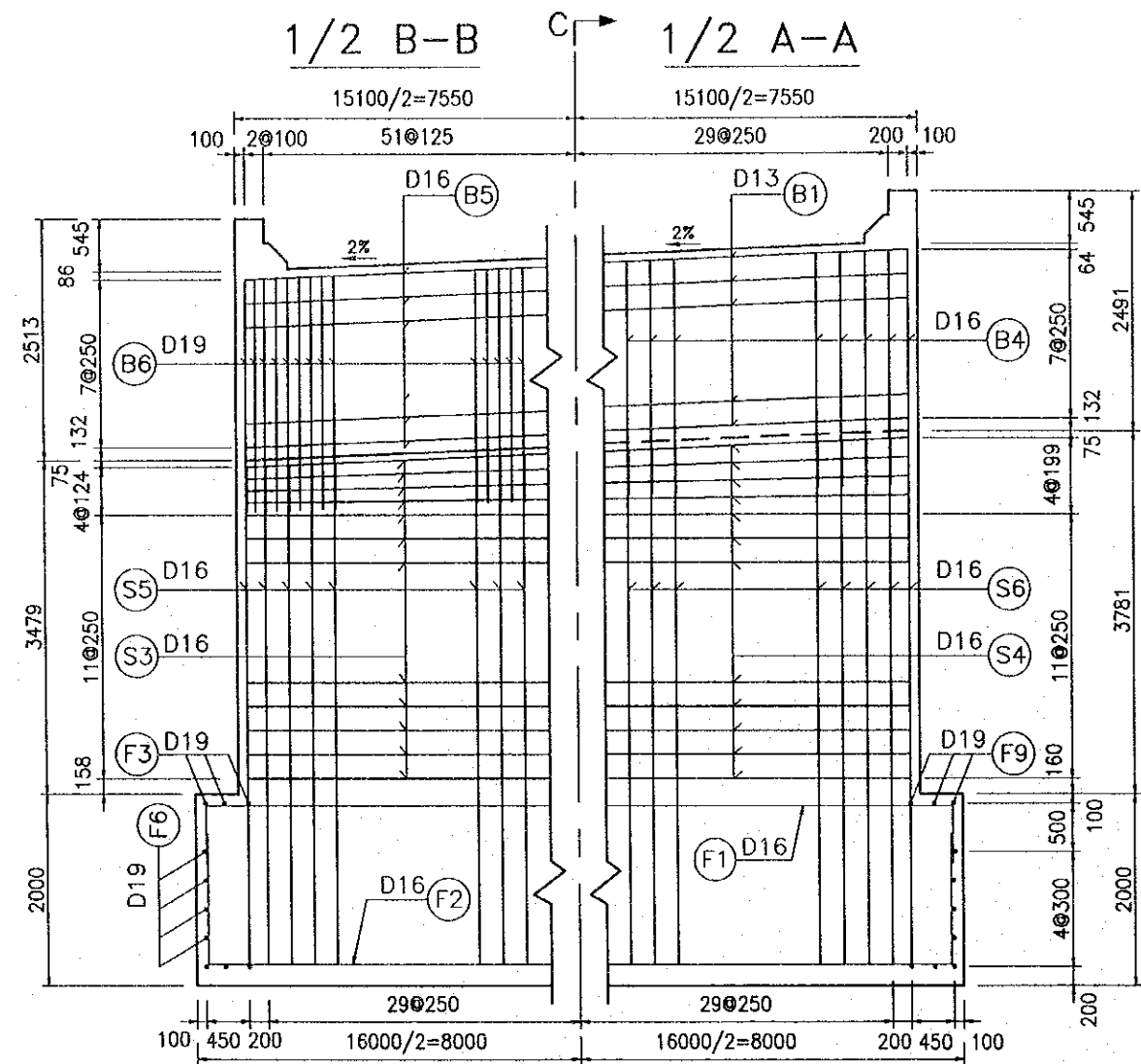
P.C I Girder	Bearing seat	G1	G2	G3	G4	G5	G6	G7
	Elevation	7.701	7.859	7.817	7.575	7.533	7.491	7.449

	P.C I Girder
Pavement	75
Slab	207
Girder	1650
Haunch	14
Bearing	68
Mortar	30
Sub Total	2032



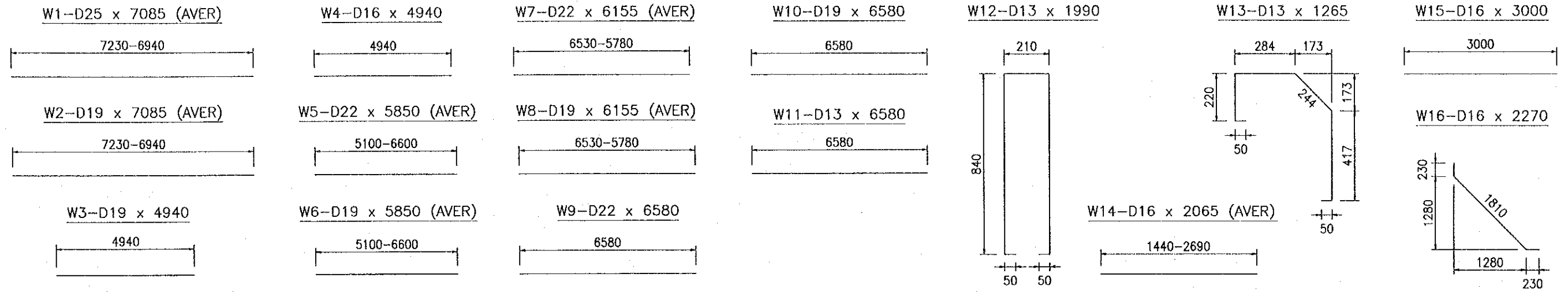
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.14

PACKAGE 3	SCALE 1:75	DRAWING No. C-1-3b-6	SHEET No.
BAR ARRANGEMENT OF ABUTMENT A1FL, A2FL (1)			



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.4.17	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-3b-B	SHEET No.
BAR ARRANGMENT OF ABUTMENT A1FL, A2FL (3)			

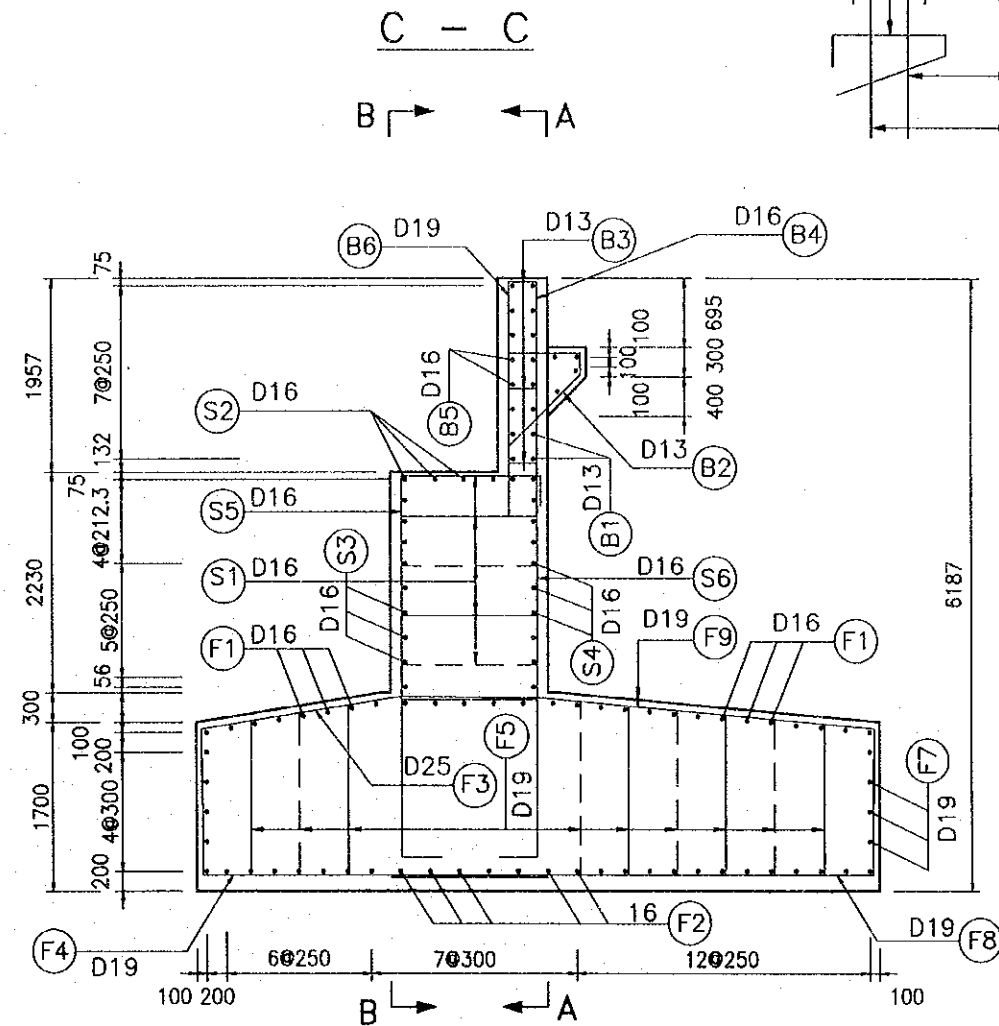
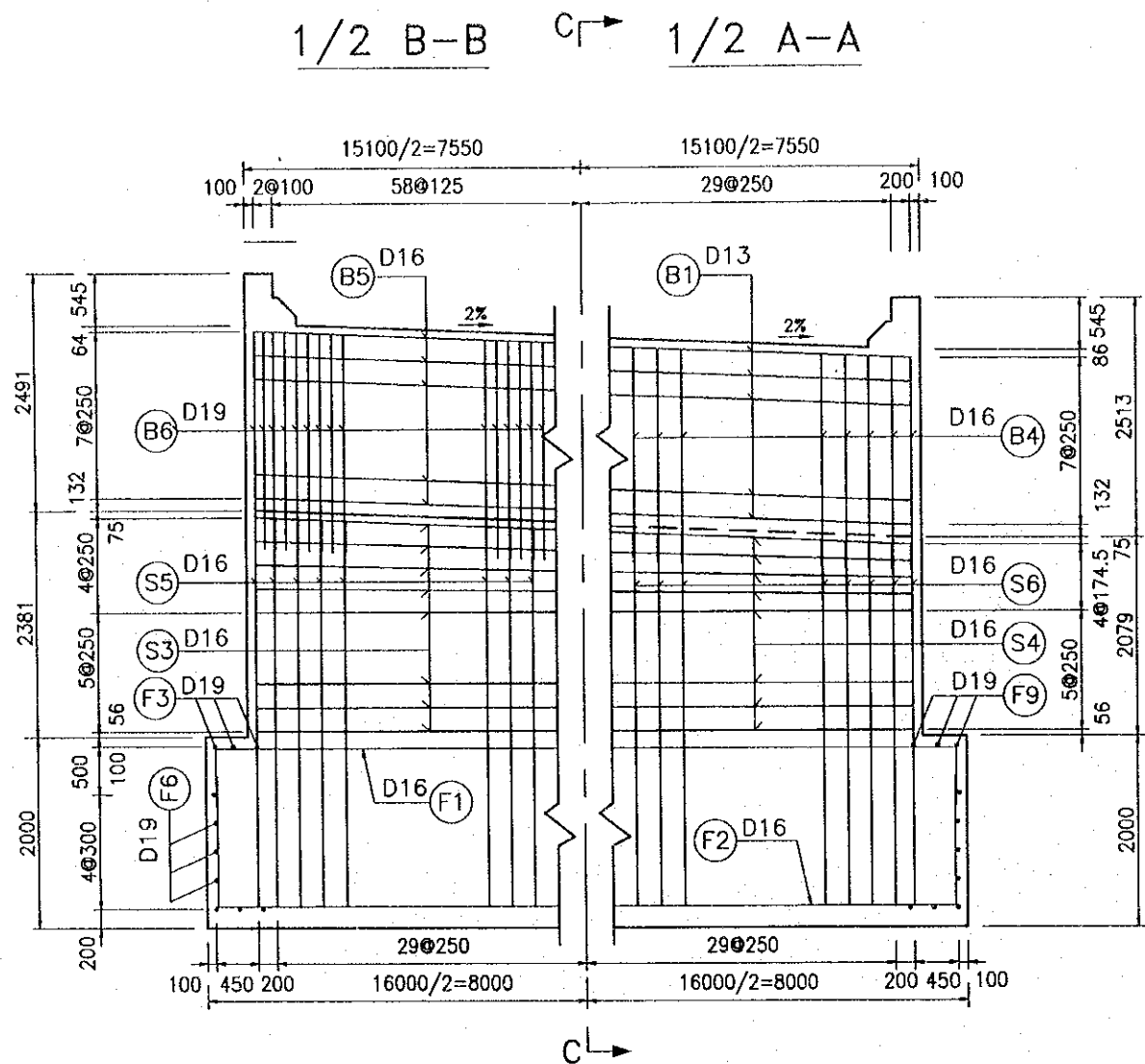


Detaile	Bars	Shape	Dia (mm)	Length (mm)	No' s	Unit Weight (Kg/m)	Weight (Kg)	Remarks
BALAST WALL	B1		D13	15345	12	0.995	183.22	
	B2		D13	2060	57	0.995	116.83	
	B3		D13	730	87	0.995	63.19	
	B4		D16	2630	61	1.56	250.27	
	B5		D16	15345	8	1.56	191.51	
	B6		D19	2630	121	2.25	716.02	
STEM	S1		D16	1830	287	1.56	819.33	
	S2		D16	15345	6	1.56	143.63	
	S3		D16	15345	15	1.56	359.07	
	S4		D16	15345	15	1.56	359.07	
	S5		D16	5585	61	1.56	531.47	
	S6		D16	5585	61	1.56	531.47	
	H1		D16	710	35	1.56	38.77	
	H2		D16	520	49	1.56	39.75	
FOOTING	F1		D16	17465	27	1.56	735.63	AVER
	F2		D16	18745	27	1.56	789.54	
	F3		D19	4170	65	2.25	609.86	
	F4		D19	4890	65	2.25	715.16	
	F5		D19	1750	231	2.25	909.56	AVER
	F6		D19	6940	8	2.25	124.92	
	F7		D19	16330	8	2.25	293.94	
	F8		D19	6340	65	2.25	927.23	
	F9		D19	5560	65	2.25	813.15	

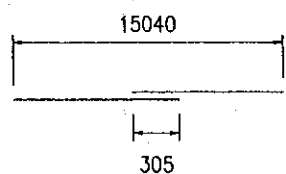
Detaile	Bars	Shape	Dia (mm)	Length (mm)	No' s	Unit Weight (Kg/m)	Weight (Kg)	Remarks	
WING WALL	W1		D25	7085	28	3.98	789.55	AVER	
	W2		D19	7085	28	2.25	446.36	AVER	
	W3		D19	4940	29	2.25	322.34		
	W4		D16	4940	29	1.56	223.49		
	W5		D22	5850	14	3.04	248.98	AVER	
	W6		D19	5850	14	2.25	184.28	AVER	
	W7		D22	6155	8	3.04	149.69	AVER	
	W8		D19	6155	8	2.25	110.79	AVER	
	W9		D22	6580	24	3.04	480.08		
	W10		D19	6580	24	2.25	355.32		
	W11		D13	6580	12	0.995	78.57		
	W12		D13	1990	50	0.995	99.00		
	W13		D13	1265	50	0.995	62.93		
	W14		D16	2065	44	1.56	141.74	AVER	
	W15		D16	3000	4	1.56	18.72		
	W16		D16	2270	77	1.56	272.67		
SUMMARY	TOTAL							14247.07	
	D13 : 603.75					D22 : 878.74			
	D16 : 5446.12					D25 : 789.55			
	D19 : 6528.92								

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000. 11. 17	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

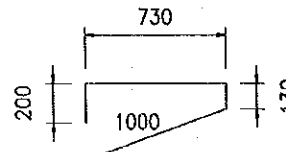
PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3b-9	SHEET No.
BAR ARRANGEMENT OF ABUTMENT A1FR, A2FR (1)			



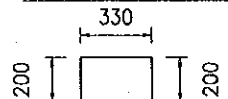
B1-D13 x 15345



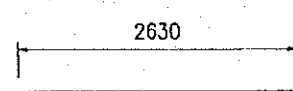
B2-D13 x 2060



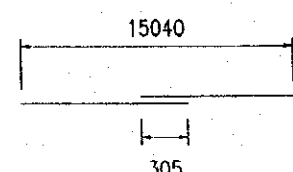
B3-D13 x 730



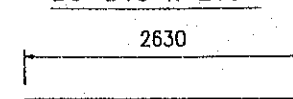
B4-D16 x 2630



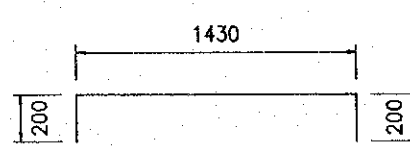
B5-D16 x 15345



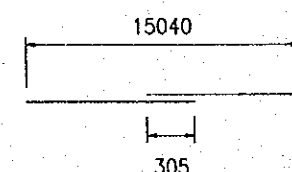
B6-D19 x 2630



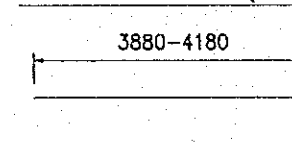
S1-D16 x 1830



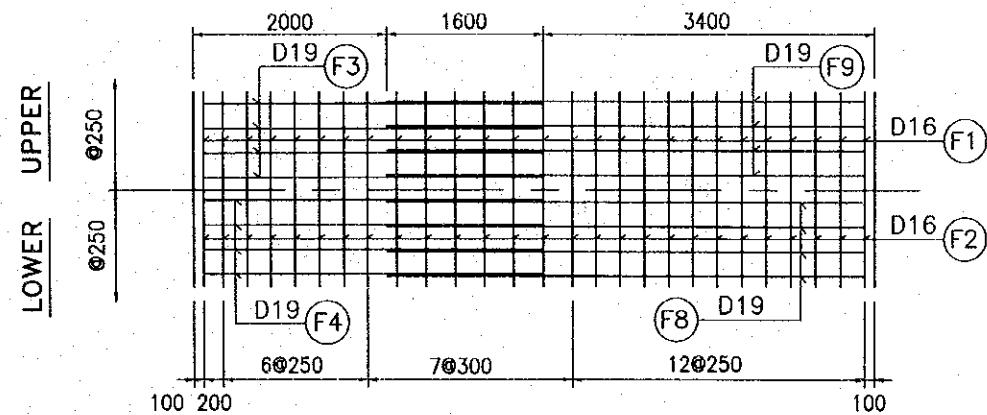
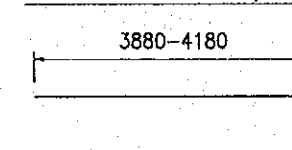
S2,S3,S4-D16 x 15345



S5-D16 x 4030 (AVER)



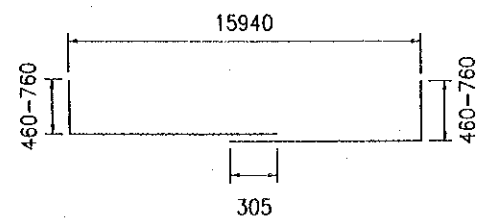
S6-D16 x 4030 (AVER)



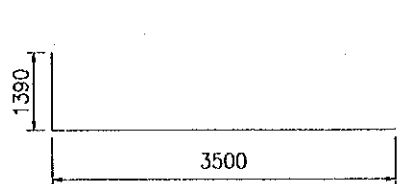
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DESIGNED BY NAME S.WATARE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>
CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.5.14

PACKAGE 3	SCALE 1:75	DRAWING No. C-1-3b-10	SHEET No.
BAR ARRANGEMENT OF ABUTMENT A1FR, A2FR (2)			

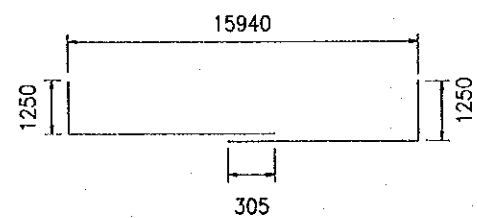
F1-D16 x 17465 (AVER)



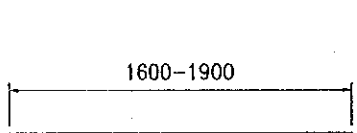
F4-D19 x 4890



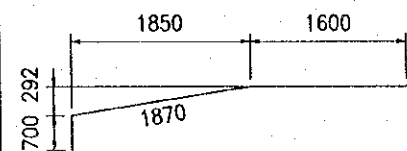
F2-D16 x 18745



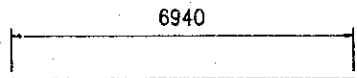
F5-D19 x 1750 (AVER)



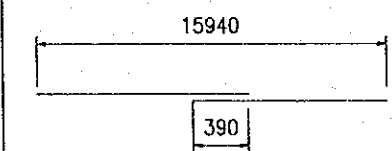
F3-D19 x 4170



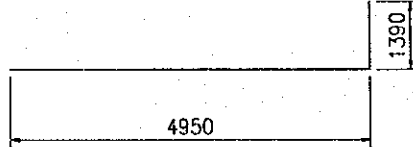
F6-D19 x 6940



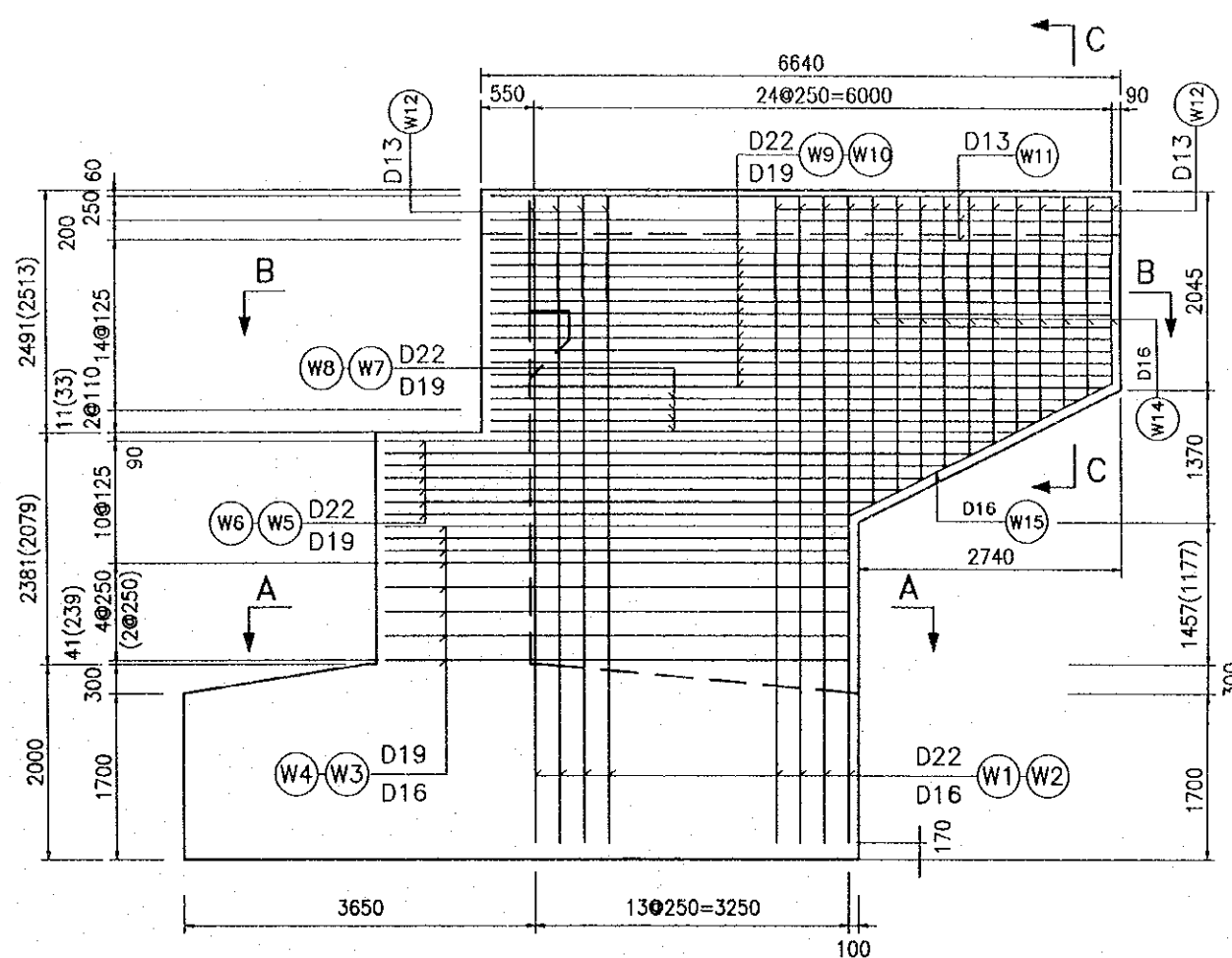
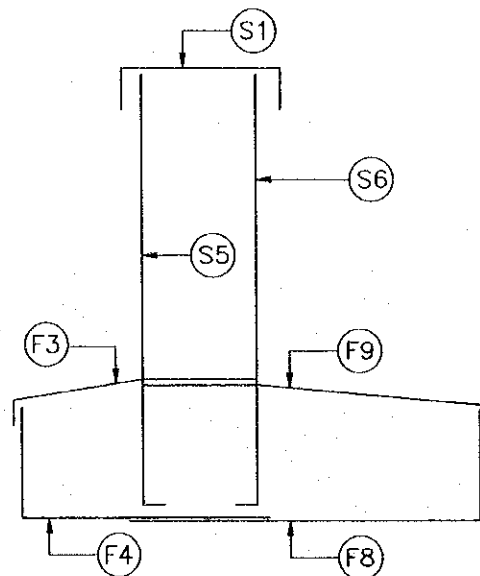
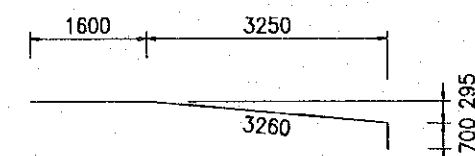
F7-D19 x 16330



F8-D19 x 6340

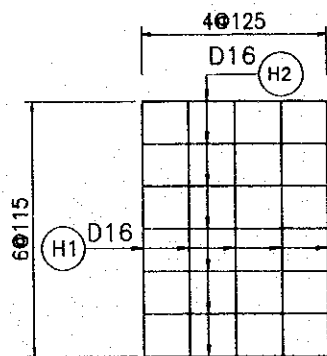
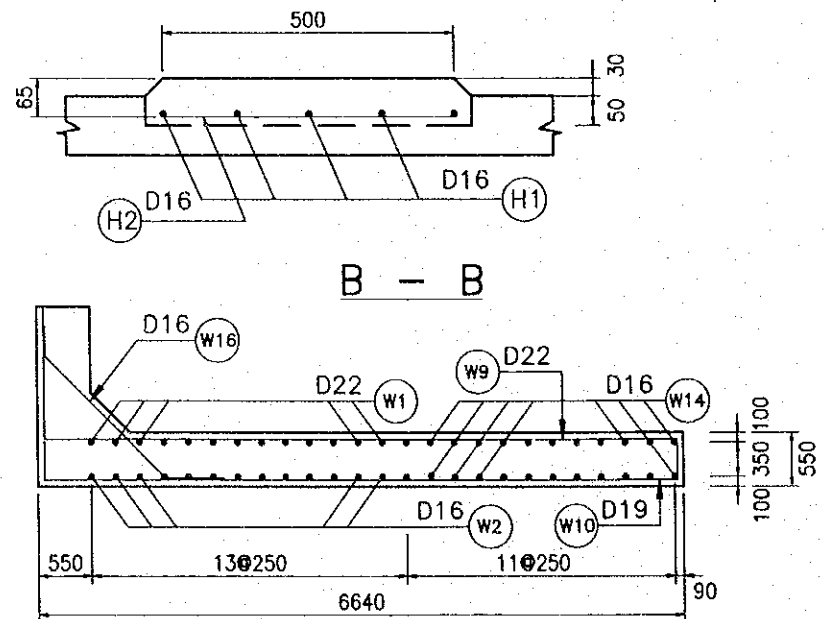


F9-D19 x 5560



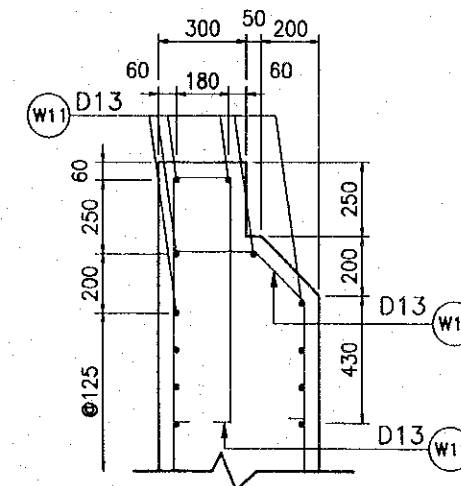
BAR ARRANGEMENT OF BEARING SEAT

Scale: 1/25

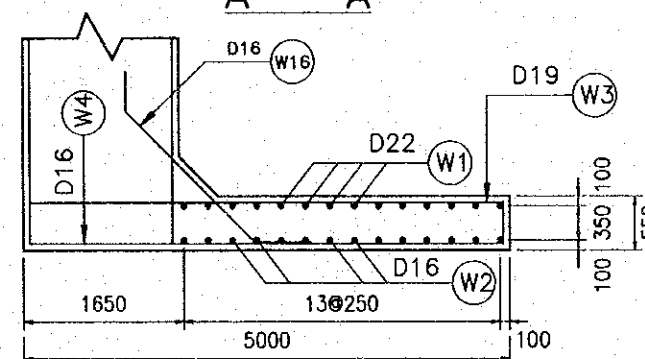


C - C

Scale: 1/25

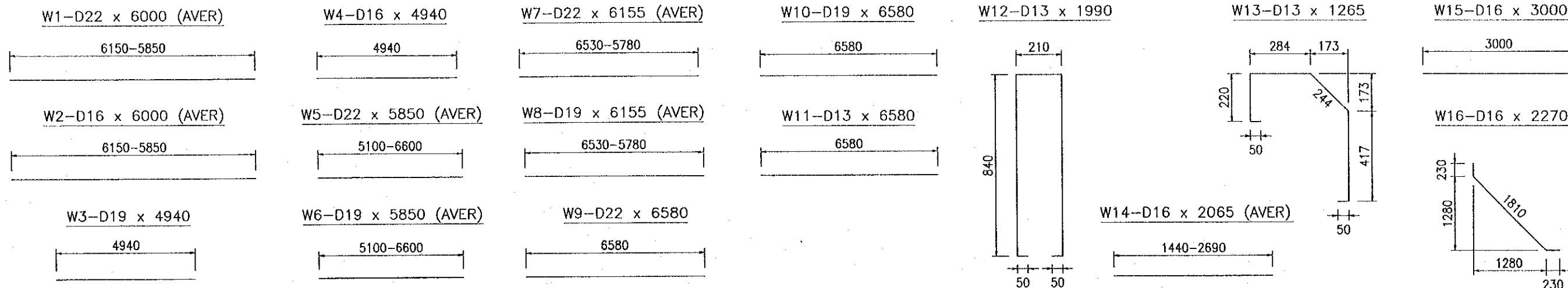


A - A



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. HATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.0.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-3b-11	SHEET No.
BAR ARRANGEMENT OF A1FR, A2FR (3)			



Detaile	Bars	Shape	Dia (mm)	Length (mm)	No' s	Unit Weight (Kg/m)	Weight (Kg)	Remarks
BALAST WALL	B1	—	D13	15345	12	0.995	183.22	
	B2	—	D13	2060	57	0.995	116.83	
	B3	—	D13	730	87	0.995	63.19	
	B4	—	D16	2630	61	1.56	250.27	
	B5	—	D16	15345	8	1.56	191.51	
	B6	—	D19	2630	121	2.25	716.02	
STEM	S1	—	D16	1830	177	1.56	505.3	
	S2	—	D16	15345	6	1.56	143.63	
	S3	—	D16	15345	9	1.56	215.44	
	S4	—	D16	15345	9	1.56	215.44	
	S5	—	D16	4030	61	1.56	383.49	
	S6	—	D16	4030	61	1.56	383.49	
	H1	—	D16	710	35	1.56	38.77	
	H2	—	D16	520	49	1.56	39.75	
FOOTING	F1	—	D16	17465	27	1.56	735.63	AVER
	F2	—	D16	18745	27	1.56	789.54	
	F3	—	D19	4170	65	2.25	609.86	
	F4	—	D19	4890	65	2.25	715.16	
	F5	—	D19	1750	231	2.25	909.56	AVER
	F6	—	D19	6940	8	2.25	124.92	
	F7	—	D19	16330	8	2.25	293.94	
	F8	—	D19	6340	65	2.25	927.23	
	F9	—	D19	5560	65	2.25	813.15	

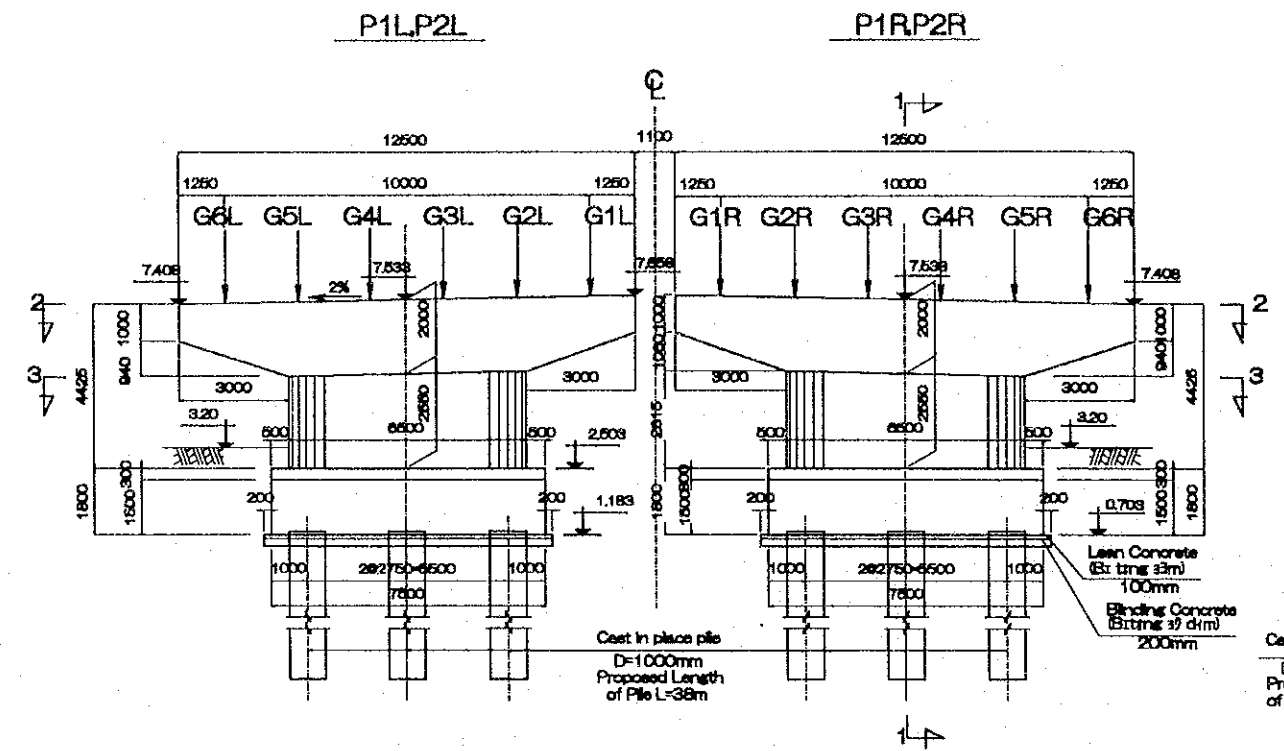
Detaile	Bars	Shape	Dia (mm)	Length (mm)	No' s	Unit Weight (Kg/m)	Weight (Kg)	Remarks	
WING WALL	W1	—	D22	6000	28	3.04	510.72	AVER	
	W2	—	D16	6000	28	1.56	262.08	AVER	
	W3	—	D19	4940	14	2.25	155.61		
	W4	—	D16	4940	14	1.56	107.89		
	W5	—	D22	5850	14	3.04	248.98	AVER	
	W6	—	D19	5850	14	2.25	184.28	AVER	
	W7	—	D22	6155	8	3.04	149.69	AVER	
	W8	—	D19	6155	8	2.25	110.79	AVER	
	W9	—	D22	6580	24	3.04	480.08		
	W10	—	D19	6580	24	2.25	355.32		
	W11	—	D13	6580	12	0.995	78.57		
	W12	—	D13	1990	50	0.995	99.00		
	W13	—	D13	1265	50	0.995	62.93		
	W14	—	D16	2065	44	1.56	141.74	AVER	
	W15	—	D16	3000	4	1.56	18.72		
	W16	—	D16	2270	77	1.56	272.67		
SUMMARY	TOTAL							12604.41	
	D13 : 603.75					D22 : 1389.46			
	D16 : 4695.37								
	D19 : 5915.84								

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT: RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL	DATE: 2002.6.1

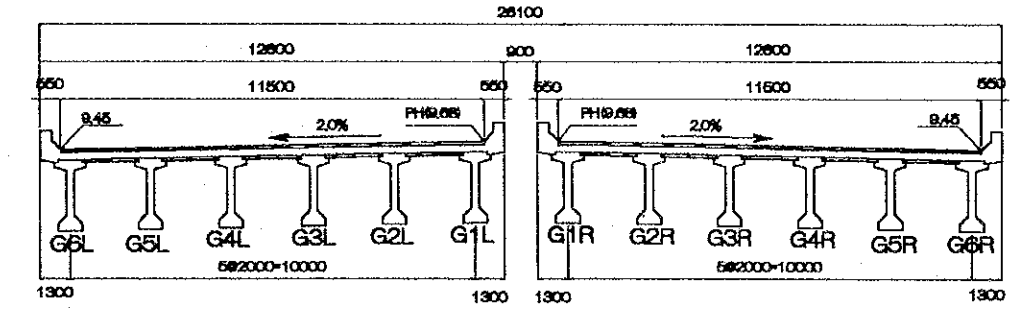
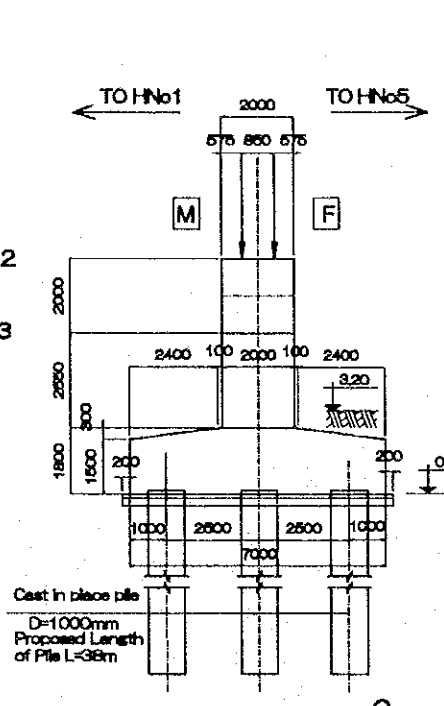
PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/200	C-1-3b-12	
DETAIL OF P1, P2			

CROSS SECTION OF SUPERSTRUCTURE (CARRIAGEWAY)
(SCALE: 1/200)

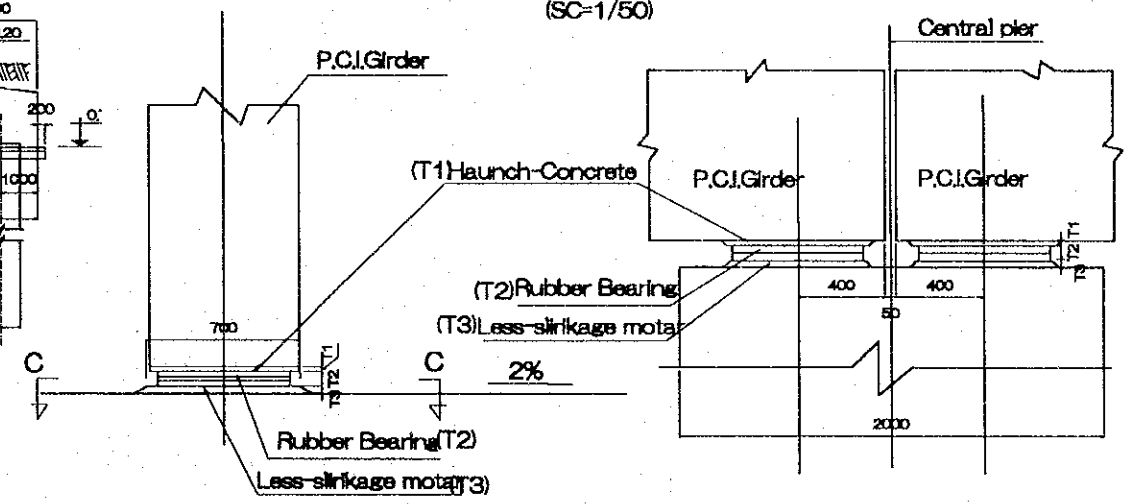
FRONT VIEW



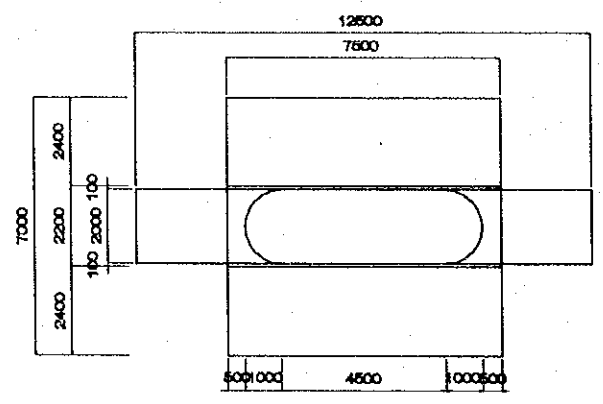
SECTION 1-1



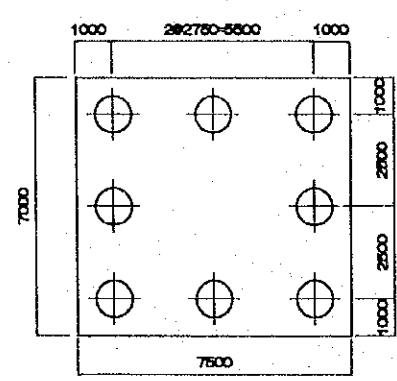
BEARING SEAT DETAIL OF P.C.I. GIRDER
(SC=1/50)



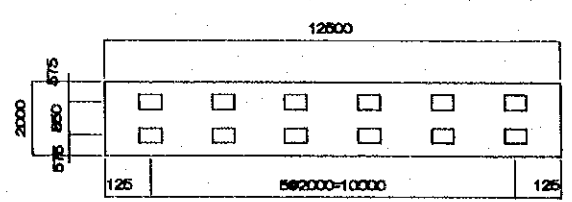
SECTION 3-3



PILE ARRANGEMENT



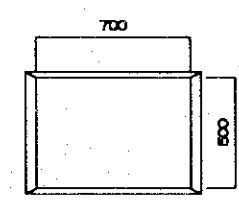
SECTION 2-2



TOP MORTAR ELEVATION (M)

Bearing seat	G1L,G1R	G2L,G2R	G3L,G3R	G4L,G4R	G5L,G5R	G6L,G6R
Elevation	7.663	7.623	7.583	7.543	7.503	7.463

SECTION C-C

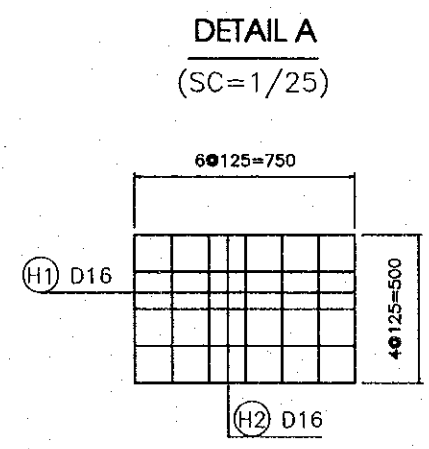
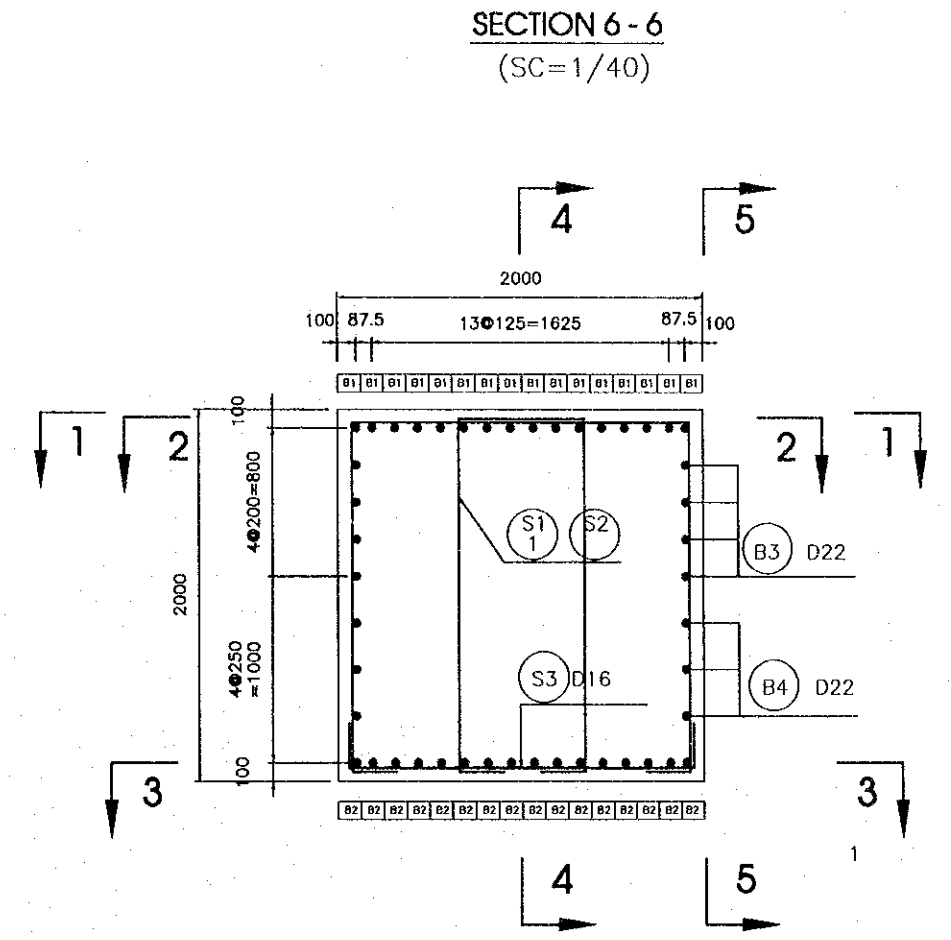
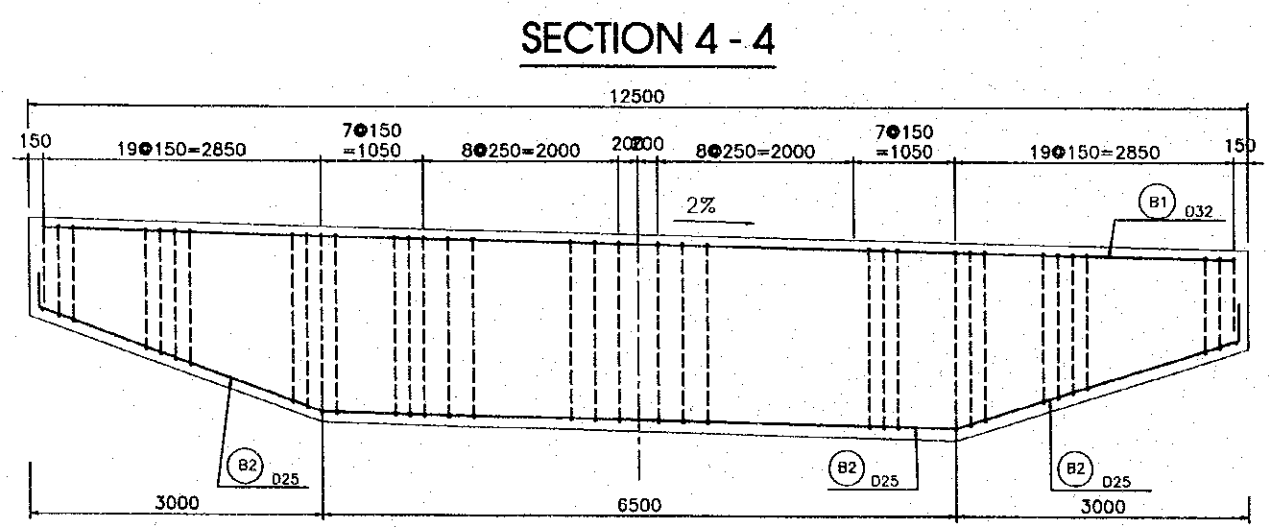
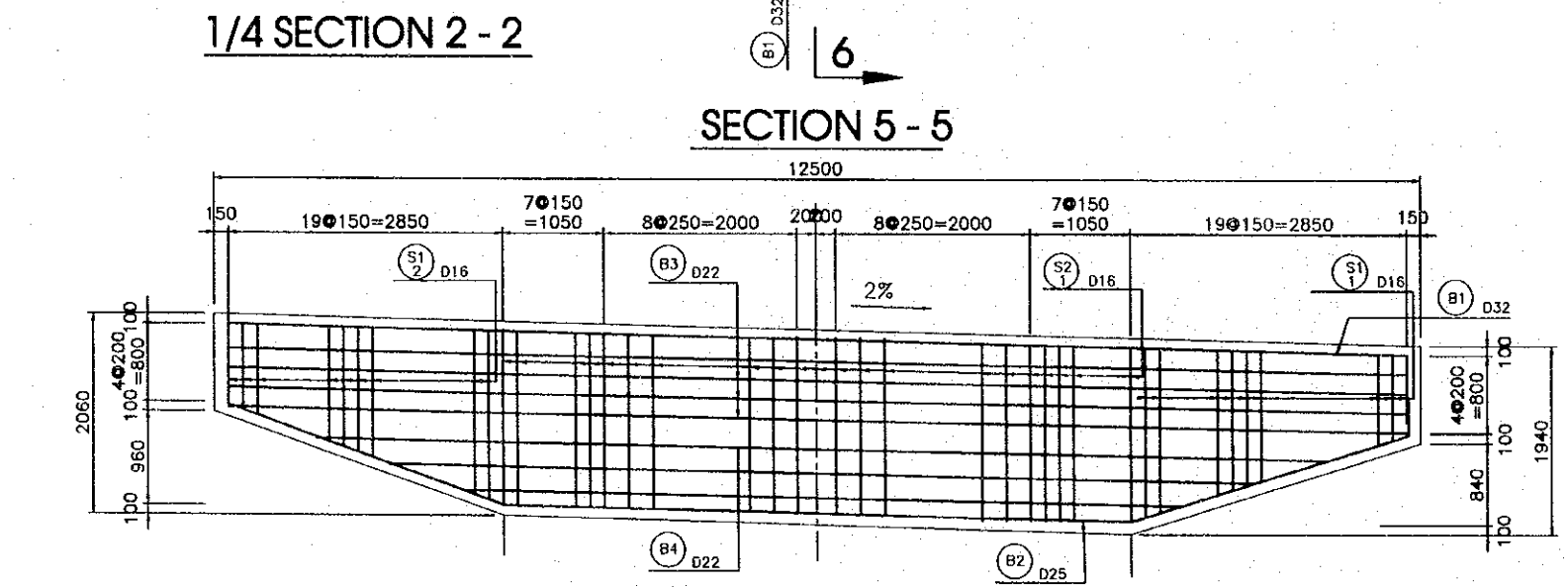
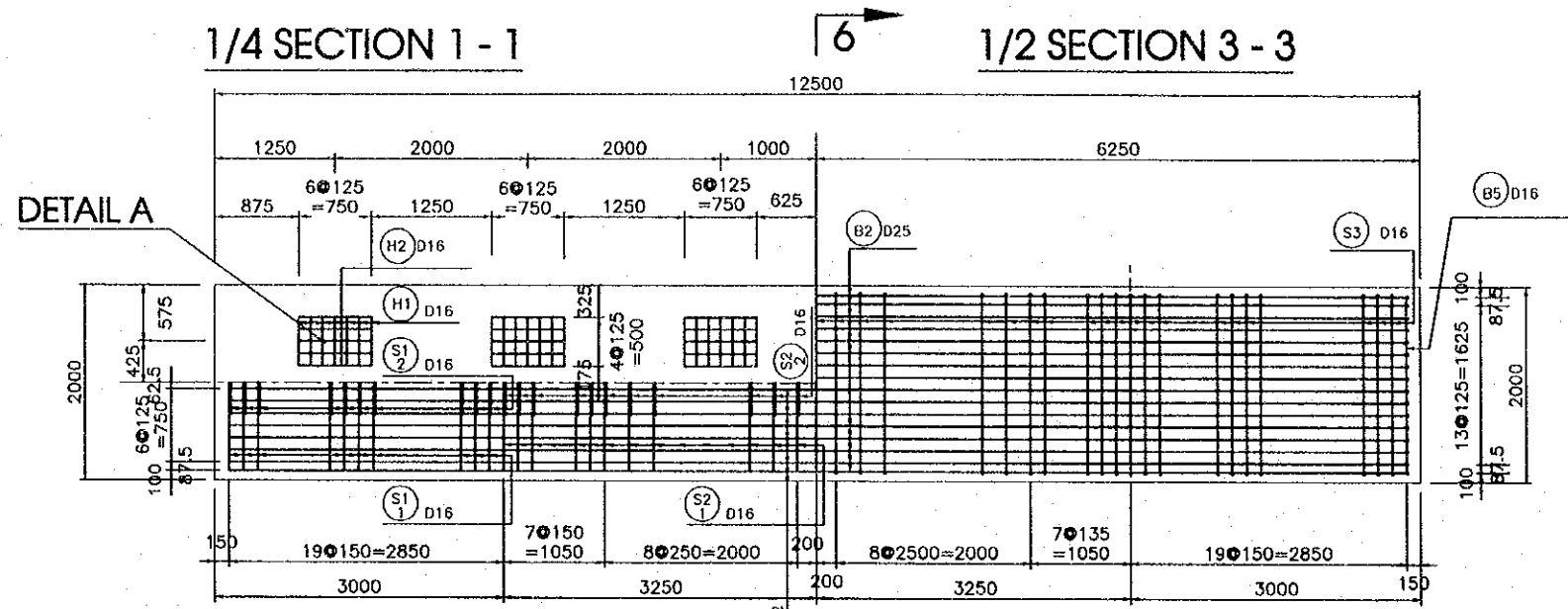


DEPTH OF SUPERSTRUCTURE (MM)

structure	condition	MOVE	FIX
Pavement		75	75
Slab		207	207
Girder		1650	1650
Haunch(T1)		14	34
Bearng (T2)		56	36
Motar (T3)		30	30
Sub Total		2032	2032

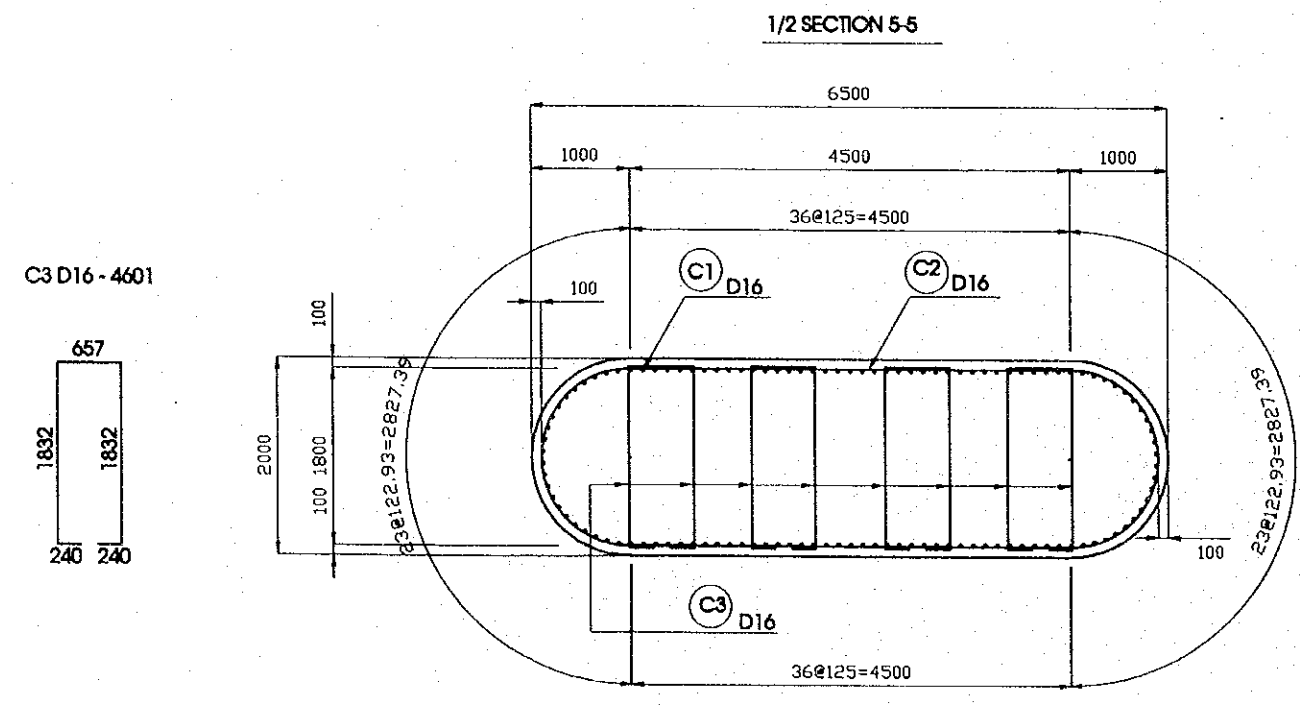
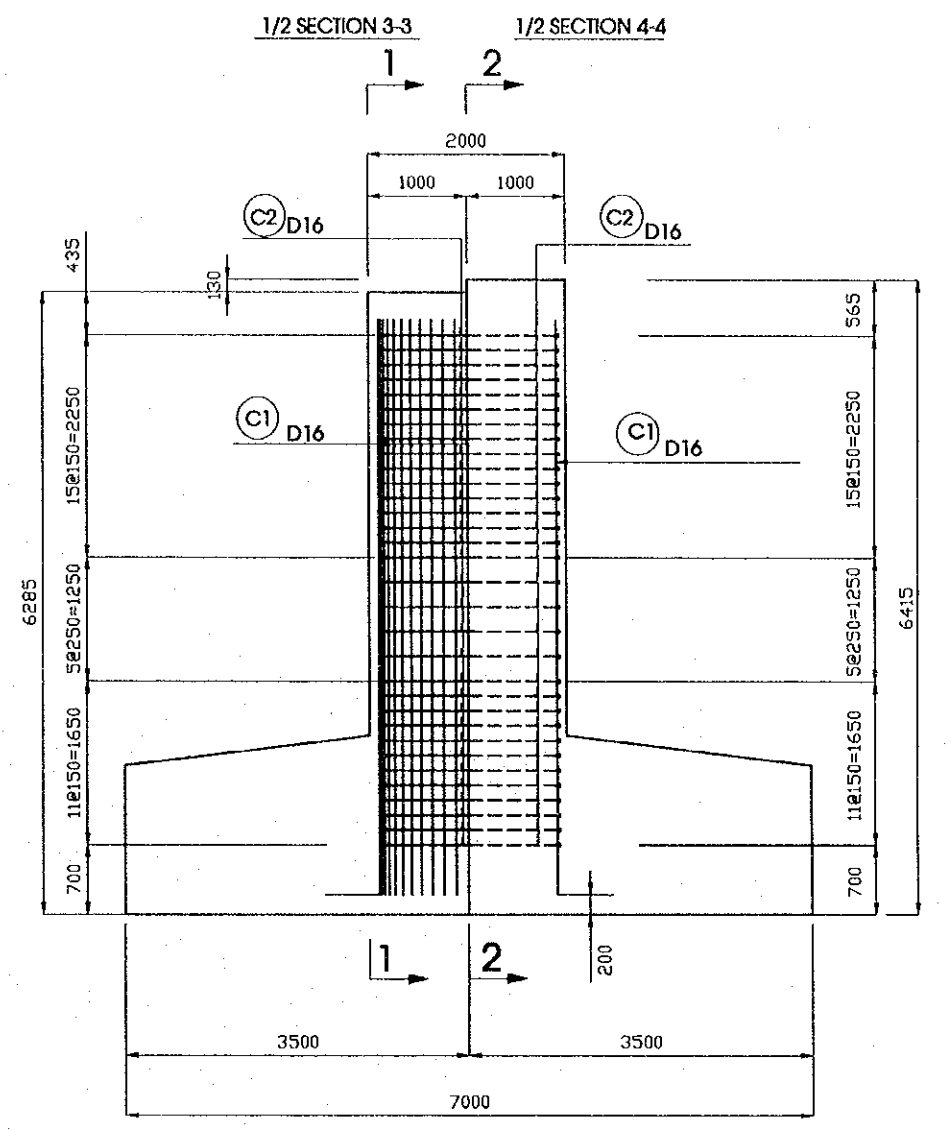
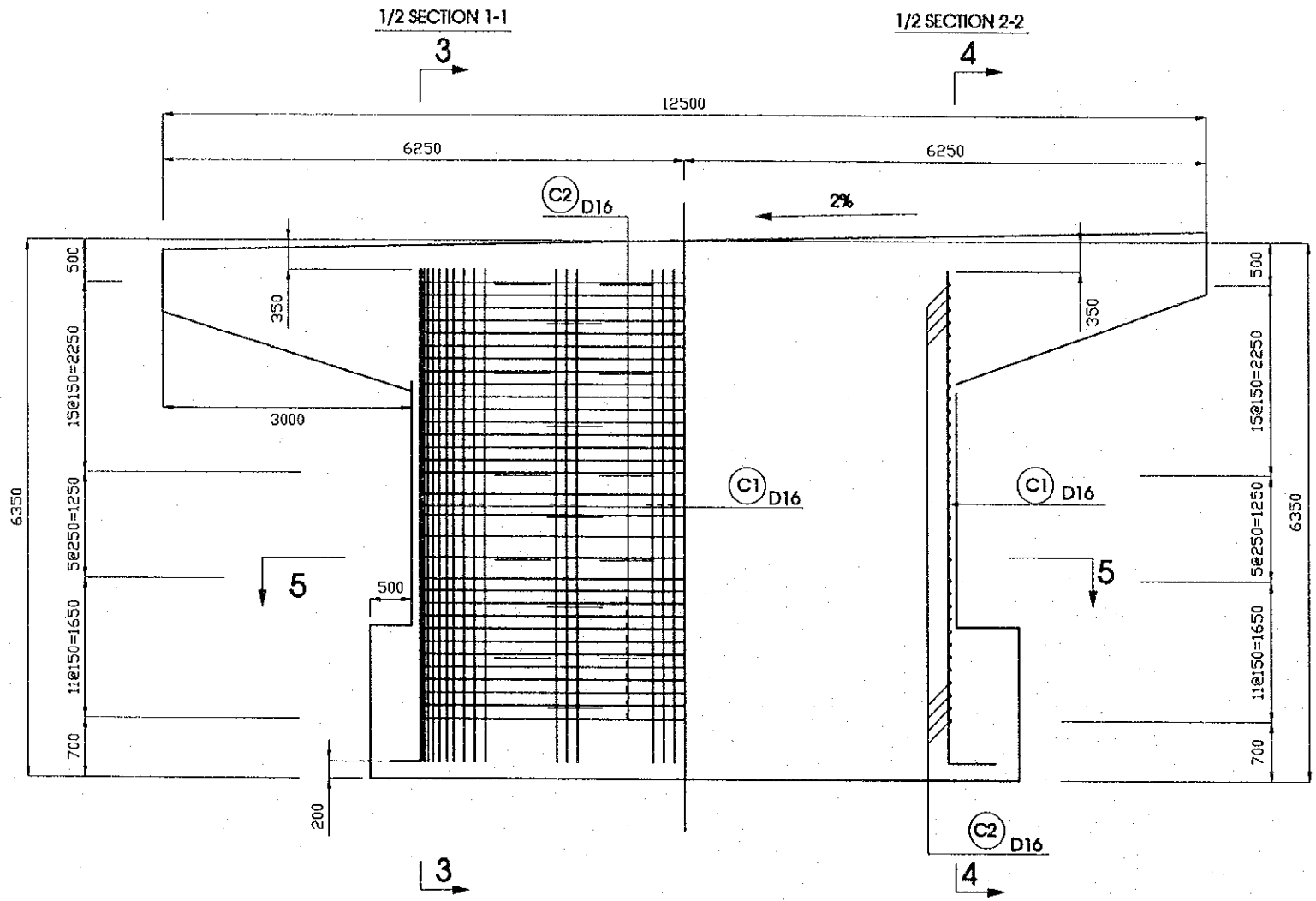
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.0.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/75	DRAWING No. C-1-3b-13	SHEET No.
BAR ARRANGMENT OF P1, P2 (1)			

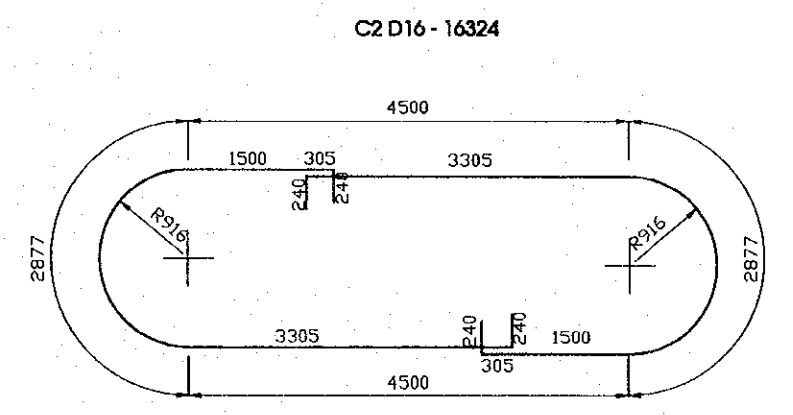


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE	2000.3.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/75	C-1-3b-14	
BAR ARRANGEMENT OF P1, P2 (2)			



C1 D16 - 6040

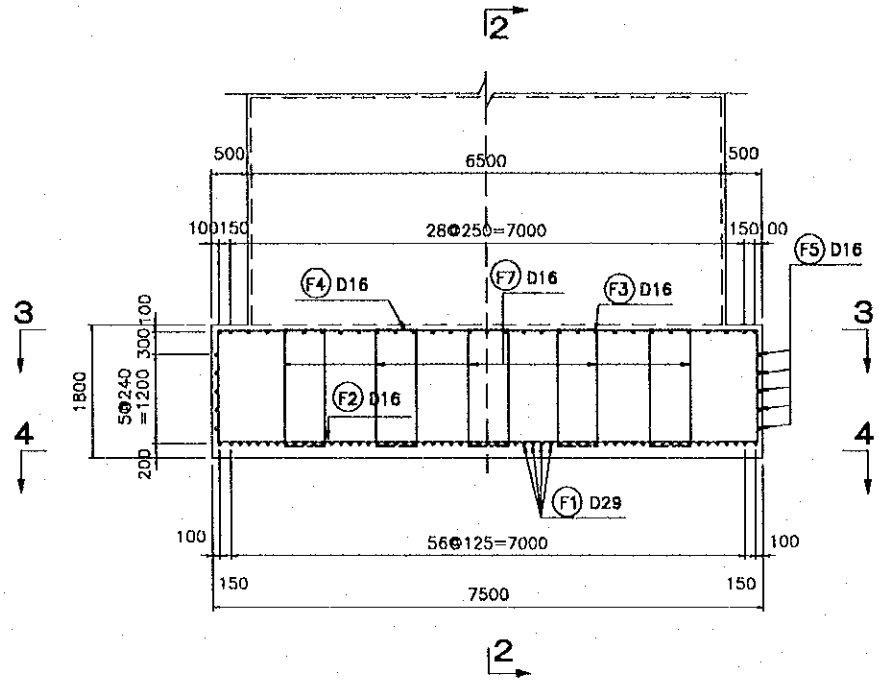


C2 D16 - 16324

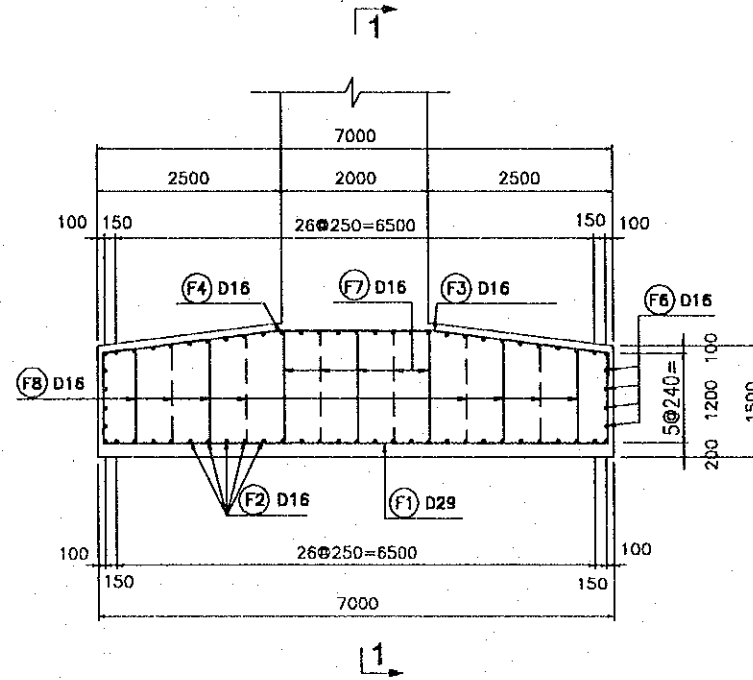
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.6.1

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3b-15	SHEET No.
BAR ARRANGMENT OF P1, P2 (3)			

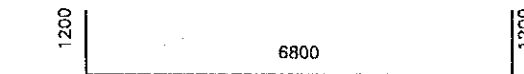
SECTION 1 - 1



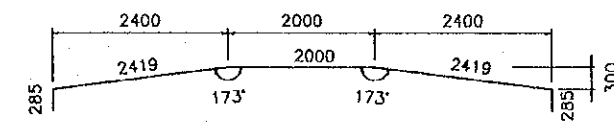
SECTION 2 - 2



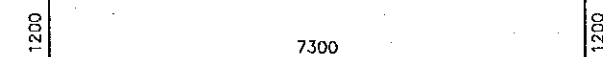
F1 D29-9200



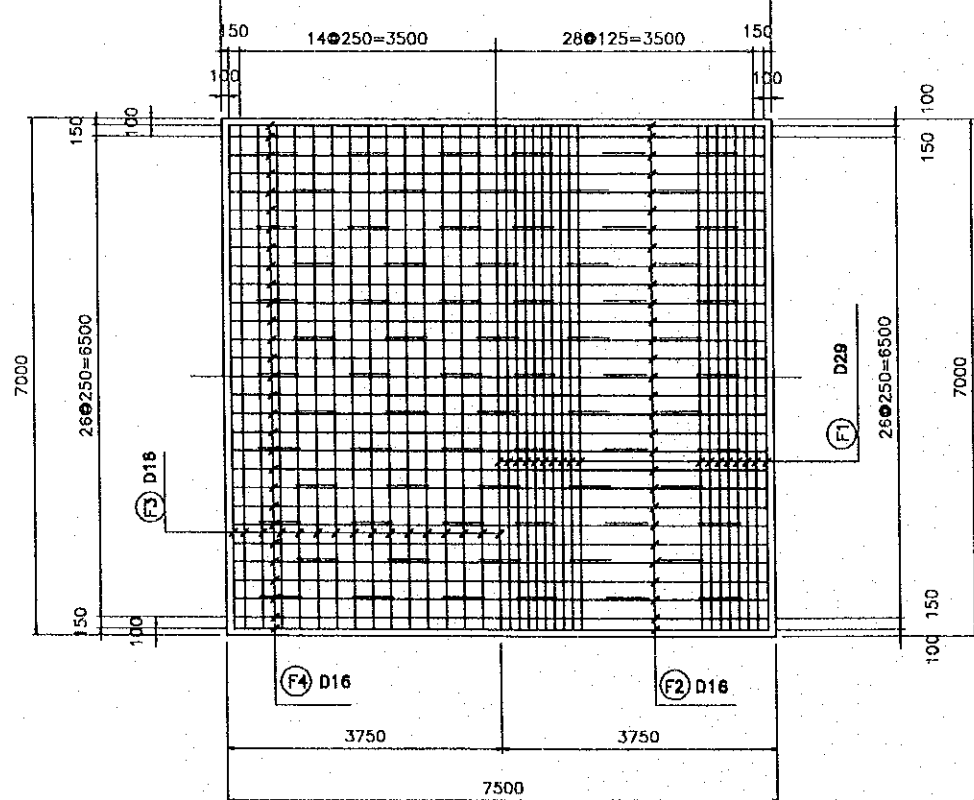
F3 D16-7408



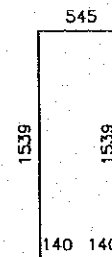
F2 D16-9700



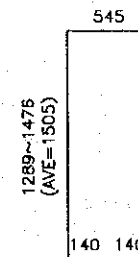
1/2 SECTION 3-3 7500 1/2 SECTION 4-4



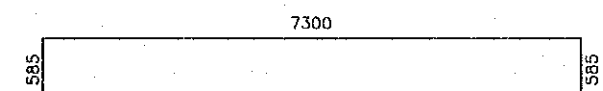
F7 D16-3903
SCALE= 1:50



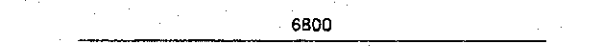
F8 D16-3590(AVE)
SCALE= 1:50



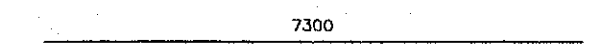
F4 D16-8470



F5 D16-6800

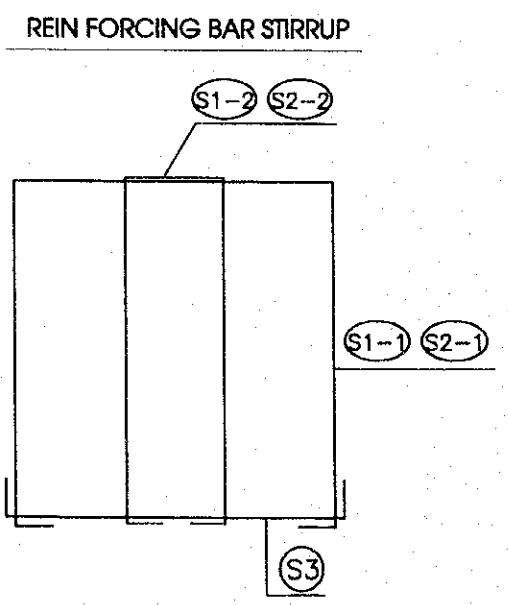
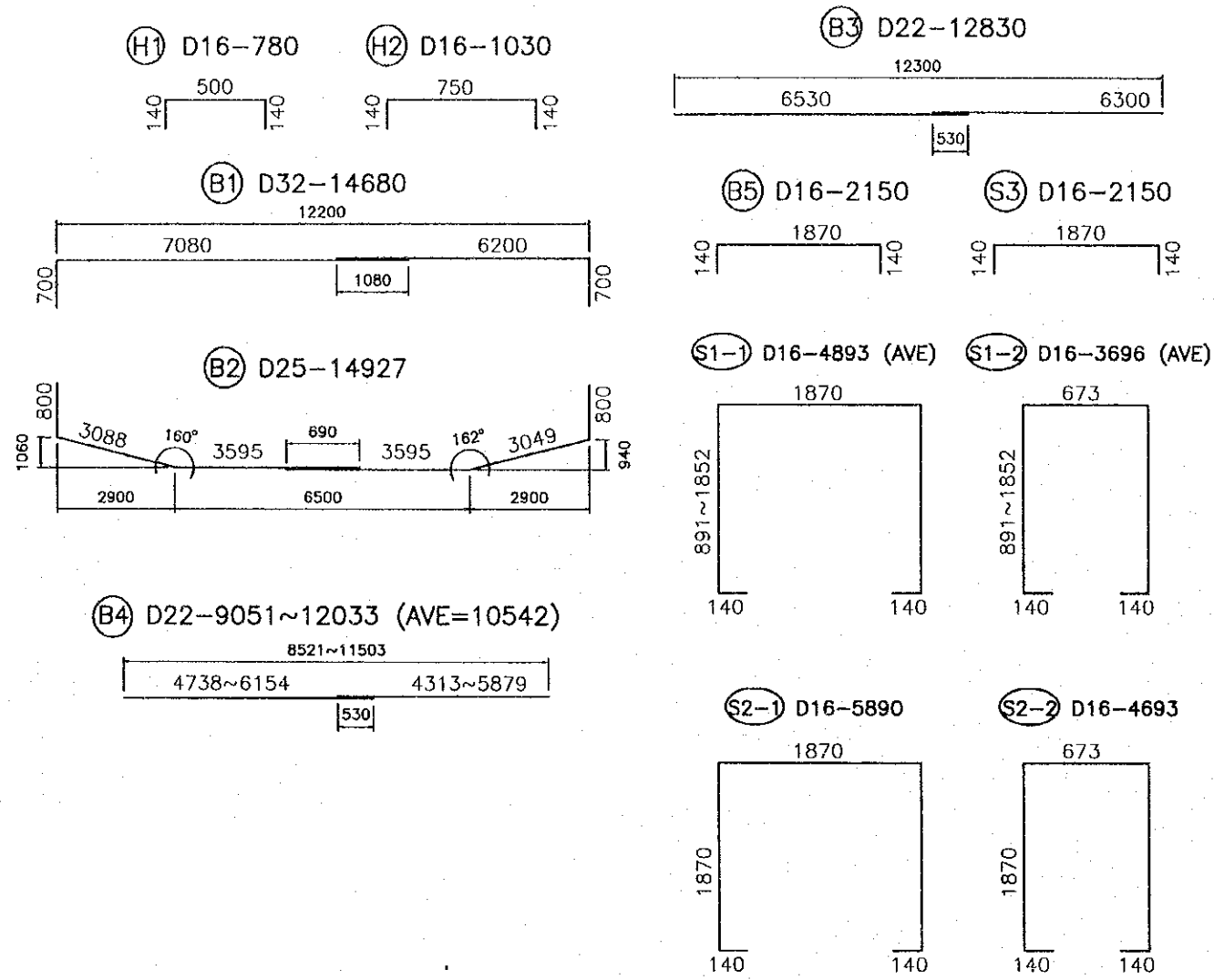


F6 D16-7300



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-3b-16	SHEET No.
BAR ARRANGMENT OF P1, P2 (4)			

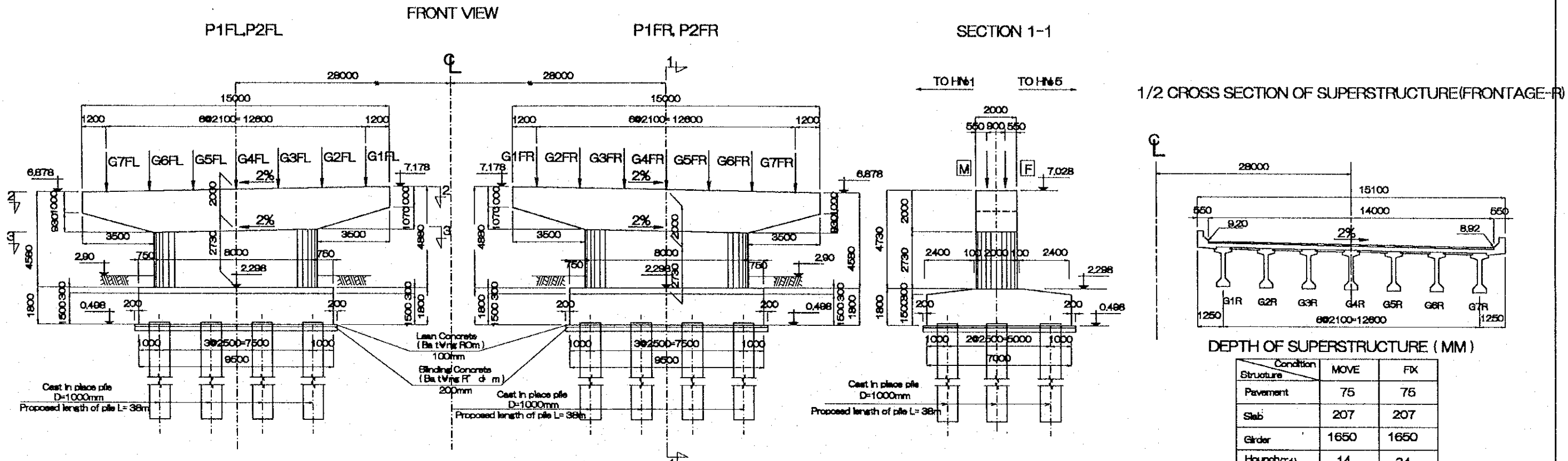


REIN FORCING BAR QUANTITIES FOR PIER P1L,P2L,P1R,P2R

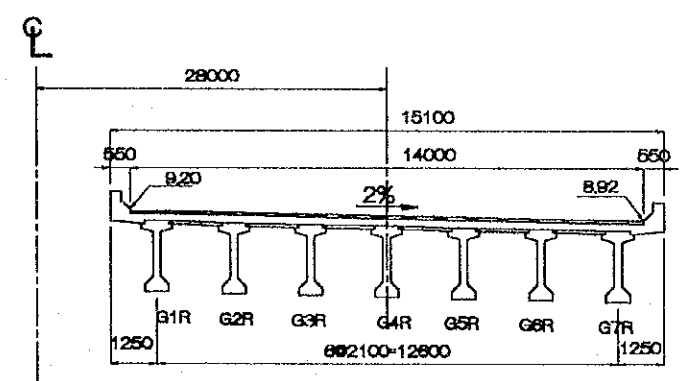
DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)	
CAP BEAM	H1	[Shape]	D16	780	84	1.56	102.21	
	H2	[Shape]	D16	1030	60	1.56	96.41	
	B1	[Shape]	D32	14680	16	6.23	1463.30	
	B2	[Shape]	D25	14927	16	3.98	950.55	
	B3	[Shape]	D22	12830	8	3.04	312.03	
	B4	AVE	[Shape]	D22	10542	6	3.04	192.29
	B5	[Shape]	D16	2150	14	1.56	46.96	
	S1-1	AVE	[Shape]	D16	4893	38	1.56	290.06
	S1-2	AVE	[Shape]	D16	3696	38	1.56	219.10
	S2-1	[Shape]	D16	5890	33	1.56	303.22	
	S2-2	[Shape]	D16	4693	33	1.56	241.60	
	S3	[Shape]	D16	2150	71	1.56	238.13	
	STEM	C1	[Shape]	D16	6040	120	1.56	1130.69
C2		[Shape]	D16	16324	32	1.56	814.89	
C3		[Shape]	D16	4601	28	1.56	200.97	
F1		[Shape]	D29	9200	59	5.04	2735.71	
FOOTING	F2	[Shape]	D16	9700	29	1.56	438.83	
	F3	[Shape]	D16	7408	31	1.56	358.25	
	F4	[Shape]	D16	8470	29	1.56	383.18	
	F5	[Shape]	D16	6800	8	1.56	84.86	
	F6	[Shape]	D16	7300	8	1.56	91.10	
	F7	[Shape]	D16	3903	27	1.56	164.39	
	F8	AVE	[Shape]	D16	3590	44	1.56	262.96
	TOTAL							11121.69
SUMMARY FOR ONE PIER			D16 =				5467.82	
			D22 =				504.31	
			D25 =				3686.26	
			D32 =				1463.30	
TOTAL							44486.77	
SUMMARY FOR 4 PIERS			D16 =				21871.26	
			D22 =				2017.25	
			D25 =				14745.05	
			D32 =				5853.21	

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LOANG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL	DATE: 2003.6.1

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/200	C-1-3b-17	
DETAIL OF PIERS P1F, P2F			



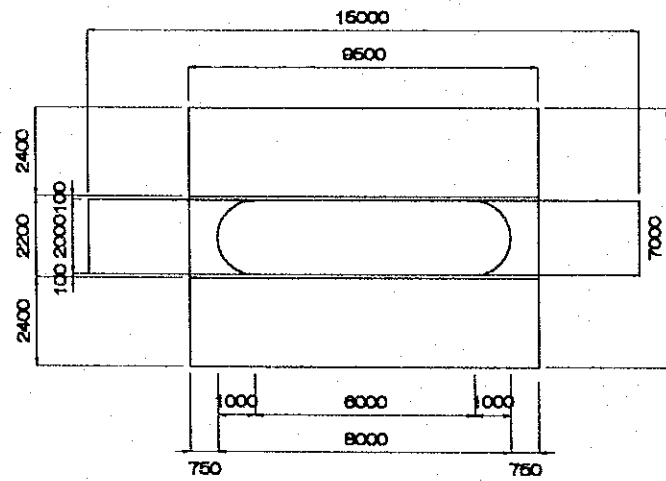
1/2 CROSS SECTION OF SUPERSTRUCTURE (FRONTAGE-R)



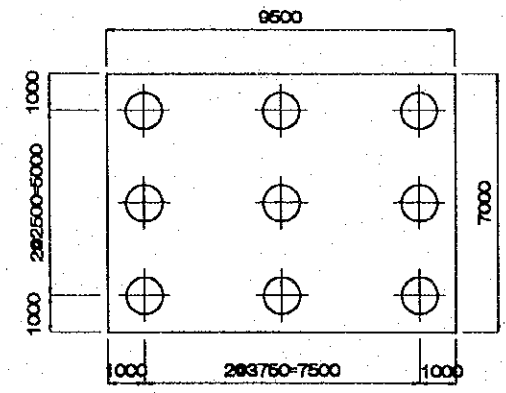
DEPTH OF SUPERSTRUCTURE (MM)

Structure	Condition	
	MOVE	FIX
Pavement	75	75
Slab	207	207
Girder	1650	1650
Haunch (T1)	14	34
Bearing (T2)	56	36
Motor (T3)	30	30
Sub Total	2032	2032

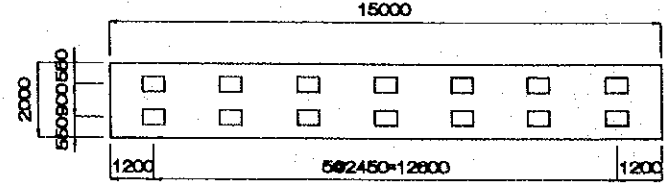
SECTION 3-3



PILE ARRANGEMENT



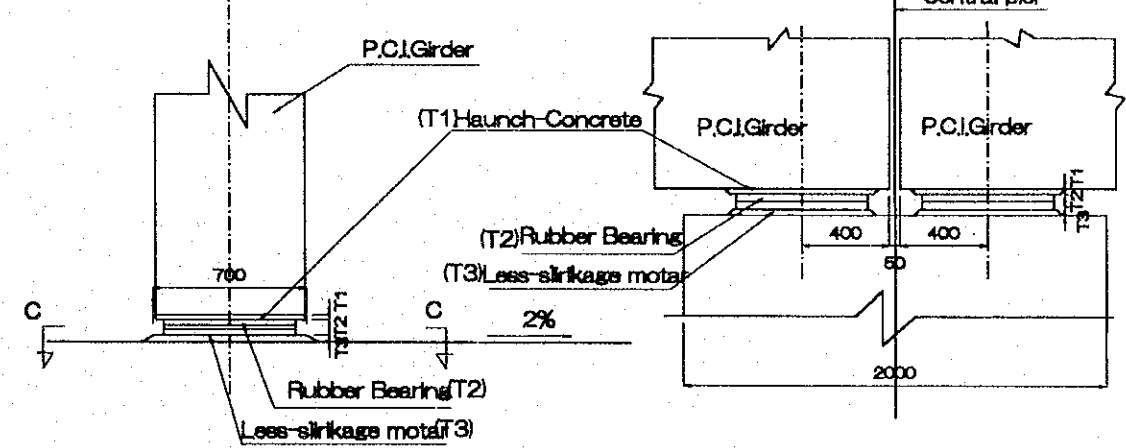
SECTION 2-2



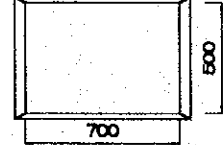
DIMENSIONS, ELEVATIONS OF P1F, P2F

Pier	Elevation of top mortar (m)										Facing bottom Elevation E ₂₂ (m)
	E ₁	E	E ₁	G1FL (G1FR)	G2FL (G2FR)	G3FL (G3FR)	G4FL (G4FR)	G5FL (G5FR)	G6FL (G6FR)	G7FL (G7FR)	
P1R/P1F	7.284	7.284	7.284	7.28	7.216	7.276	7.284	7.48	7.45	7.48	6.884
P2R/P2F	7.46	7.4	7.28	7.276	7.284	7.282	7.28	7.288	7.216	7.24	6.8

BEARING SEAT DETAIL OF P.C.I GIRDER (SC=1/50)

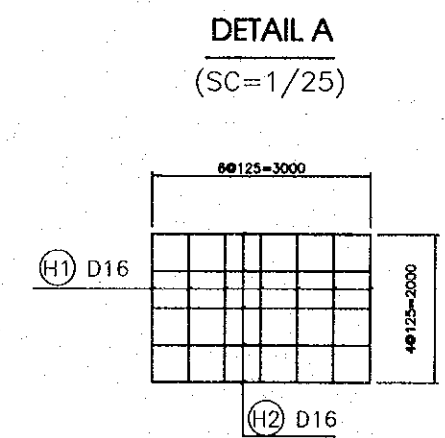
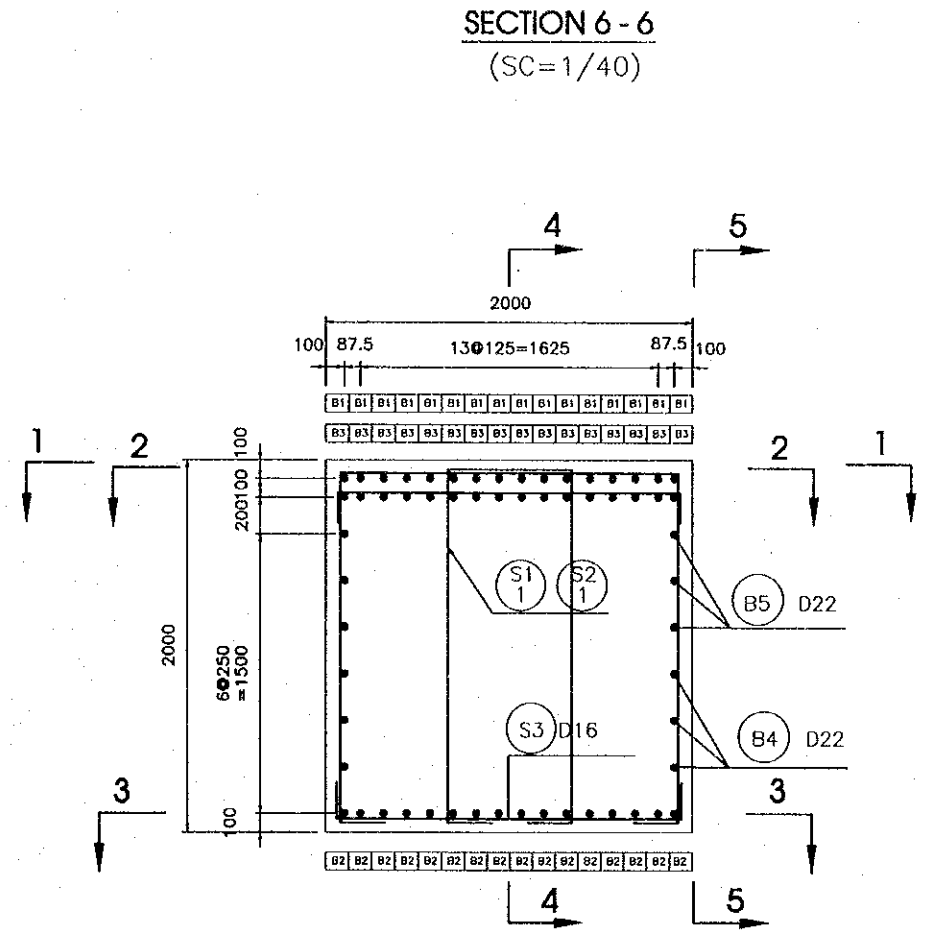
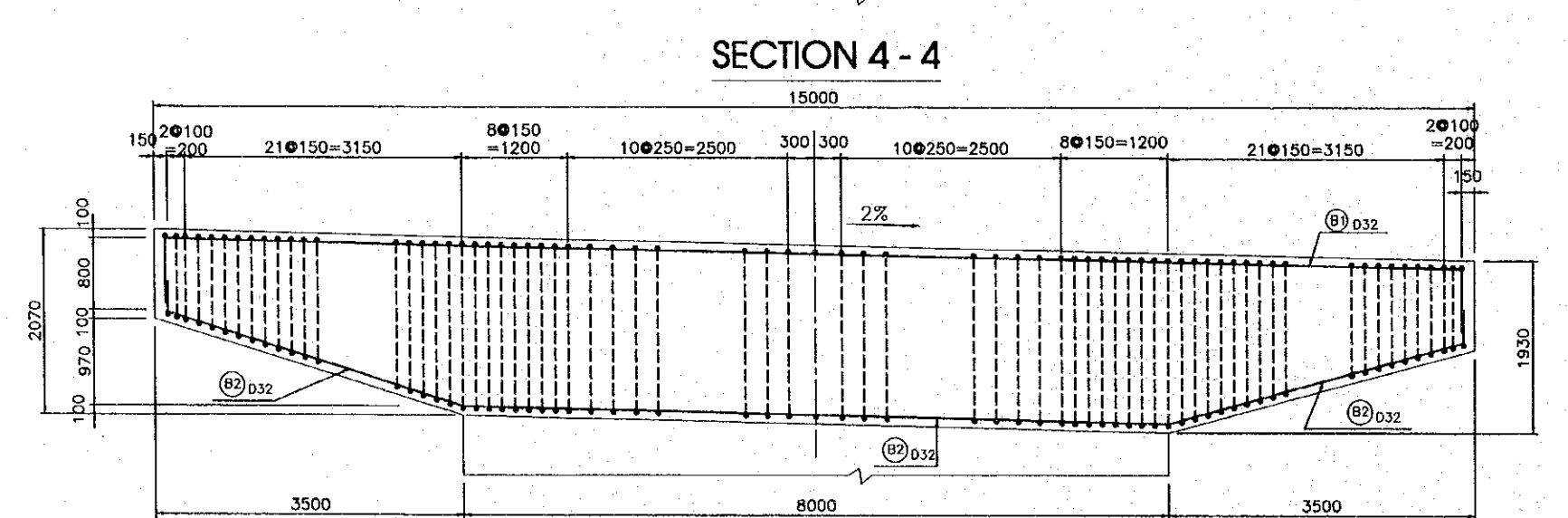
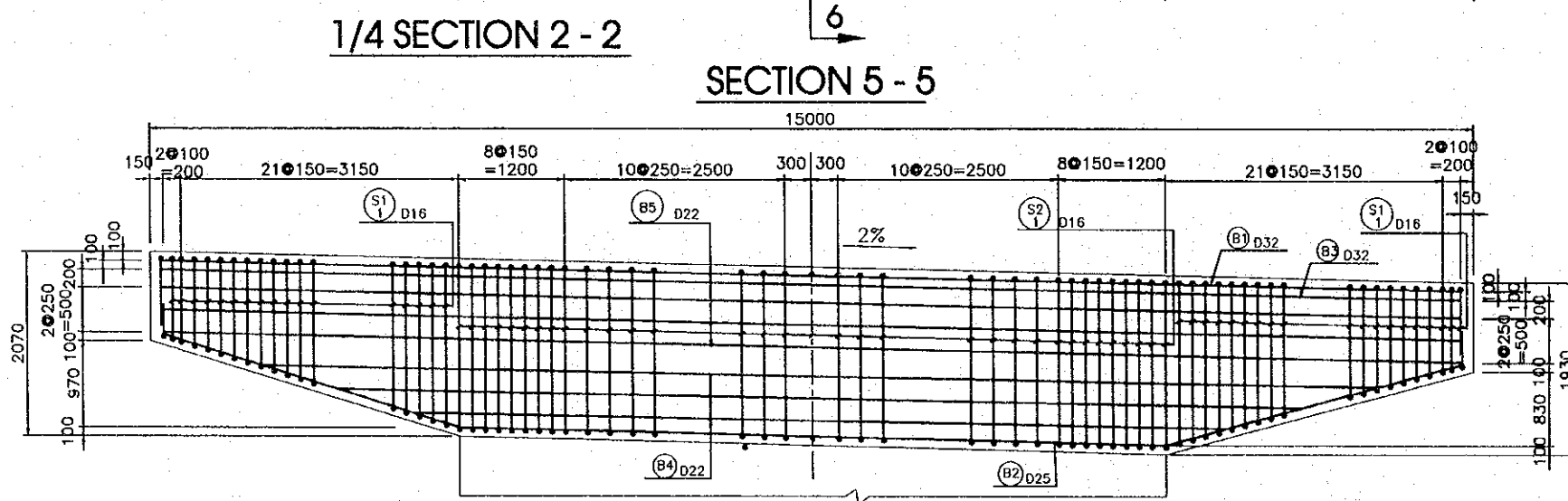
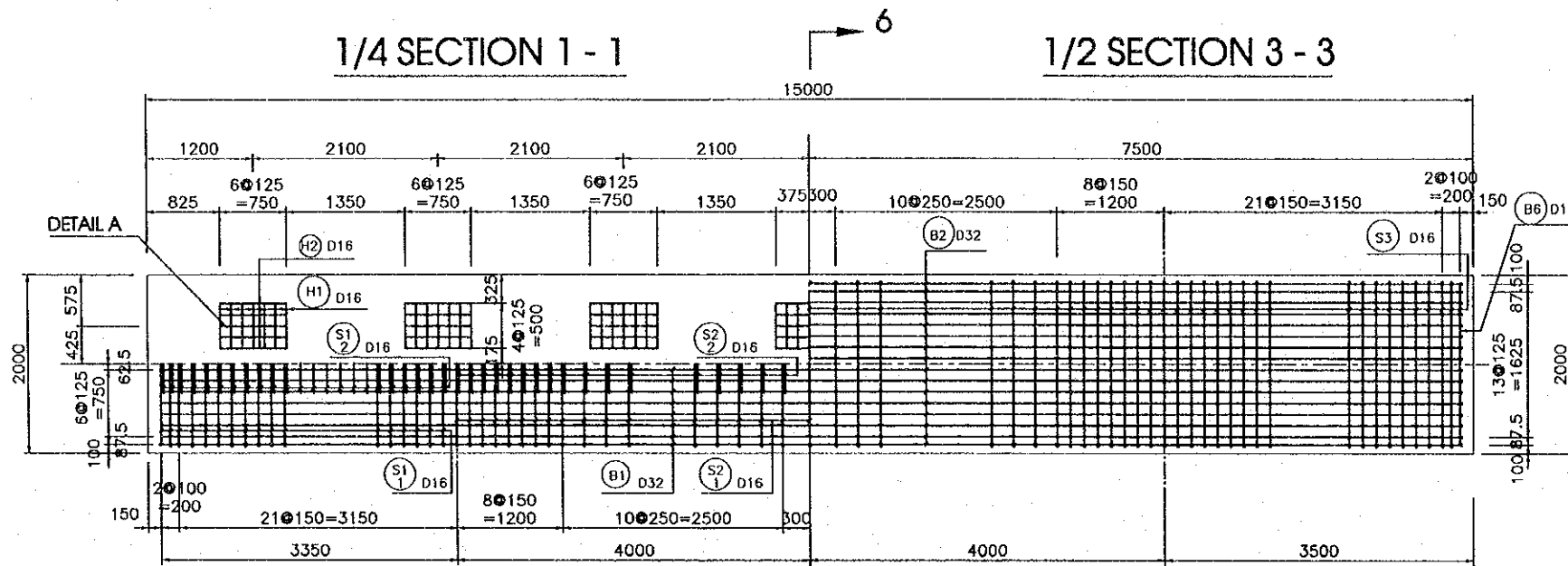


SECTION C-C



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (HANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.14

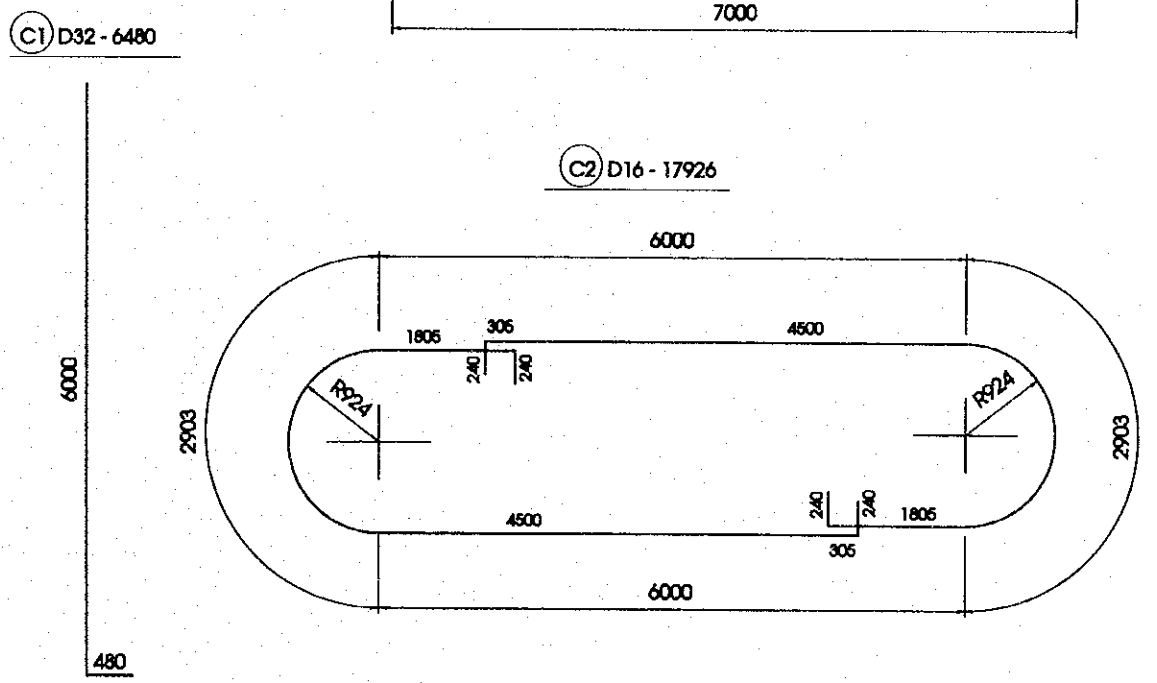
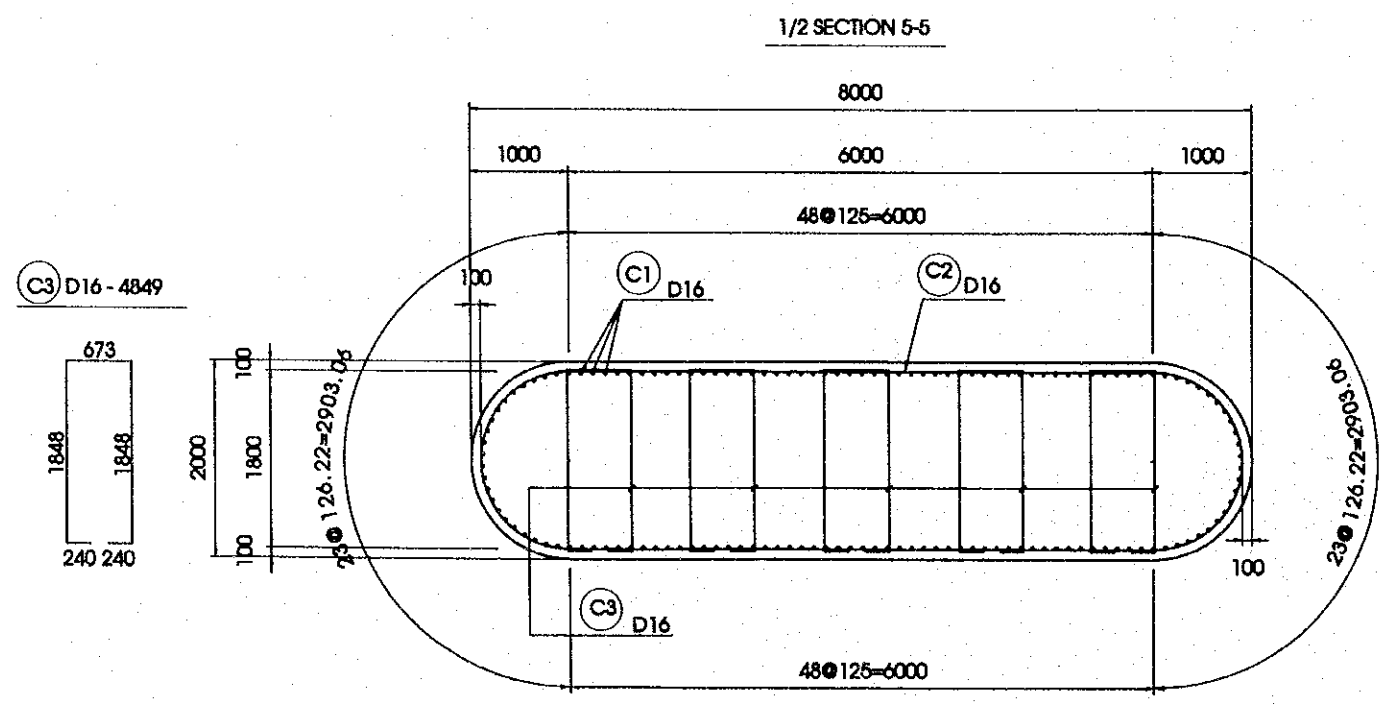
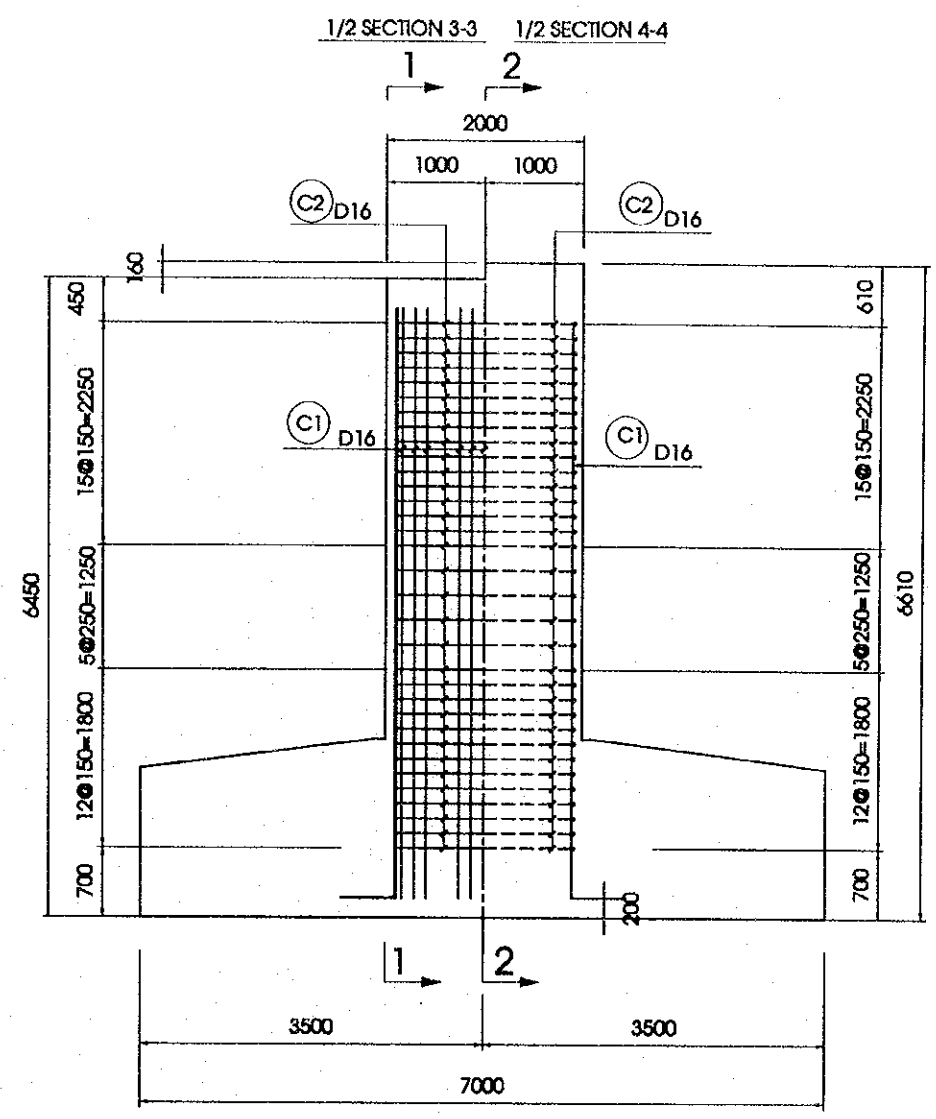
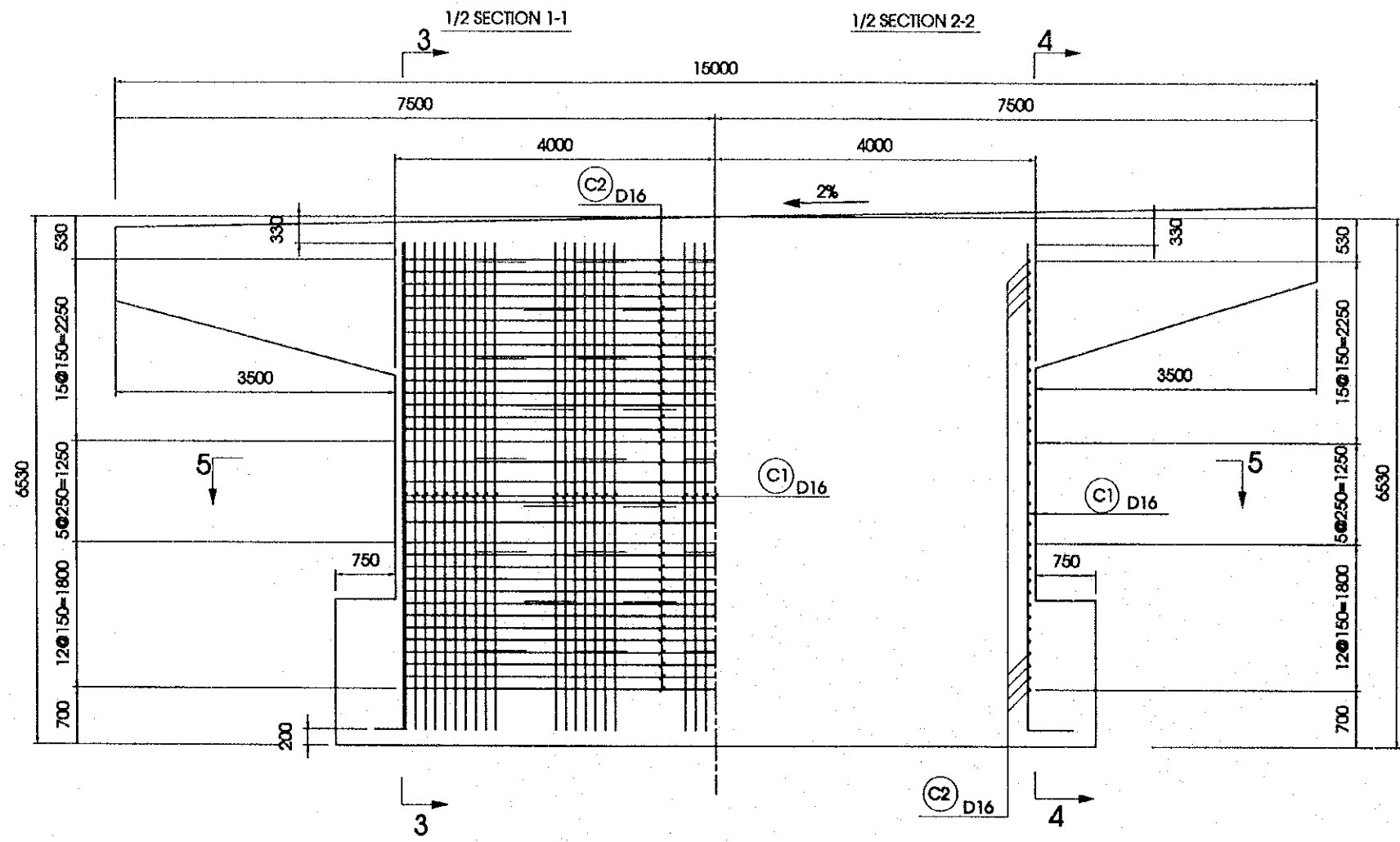
PACKAGE 3	SCALE 1:75	DRAWING No. C-1-3b-18	SHEET No.
BAR ARRANGEMENT OF PIER P1F, P2F (1)			



301

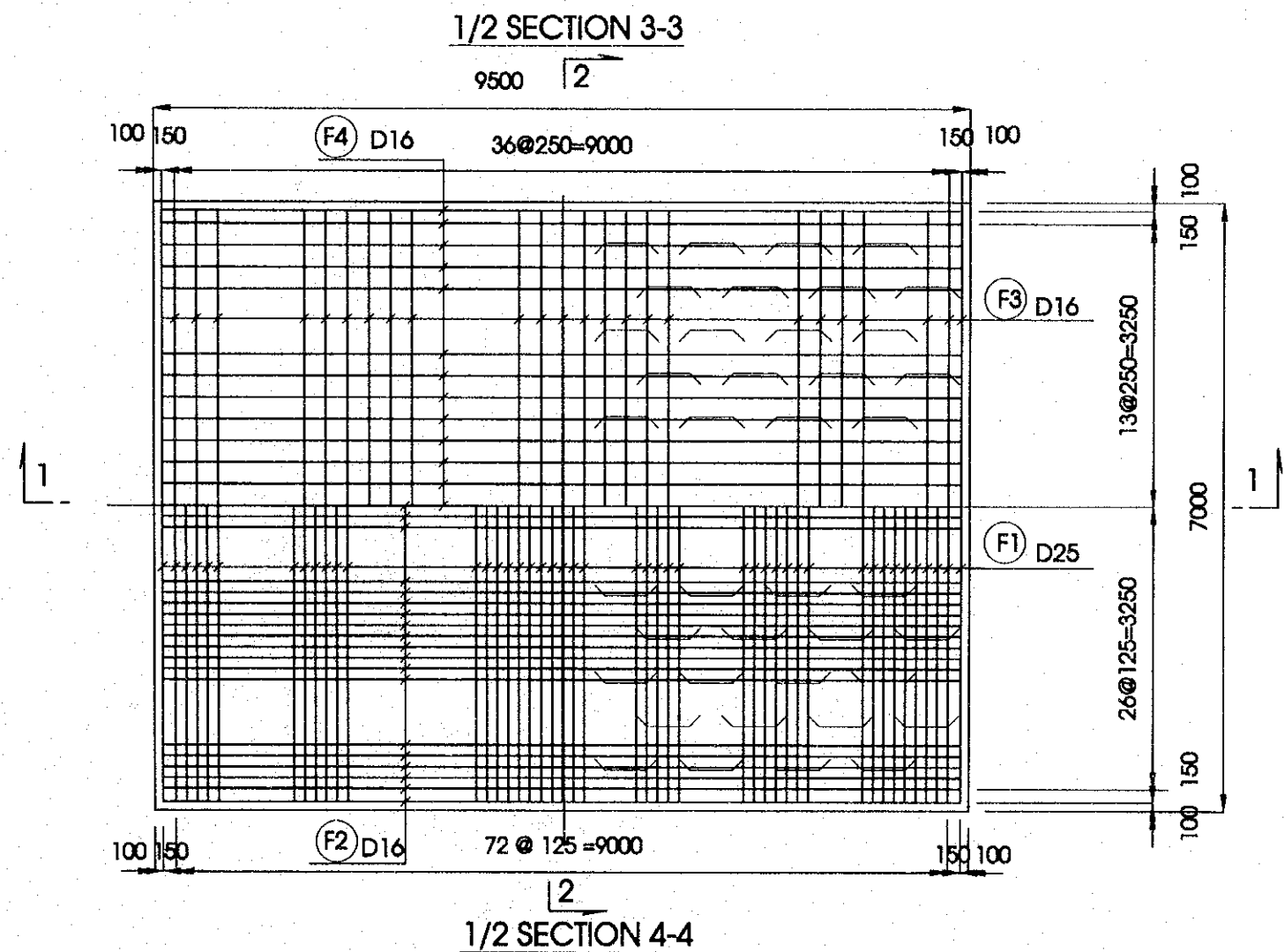
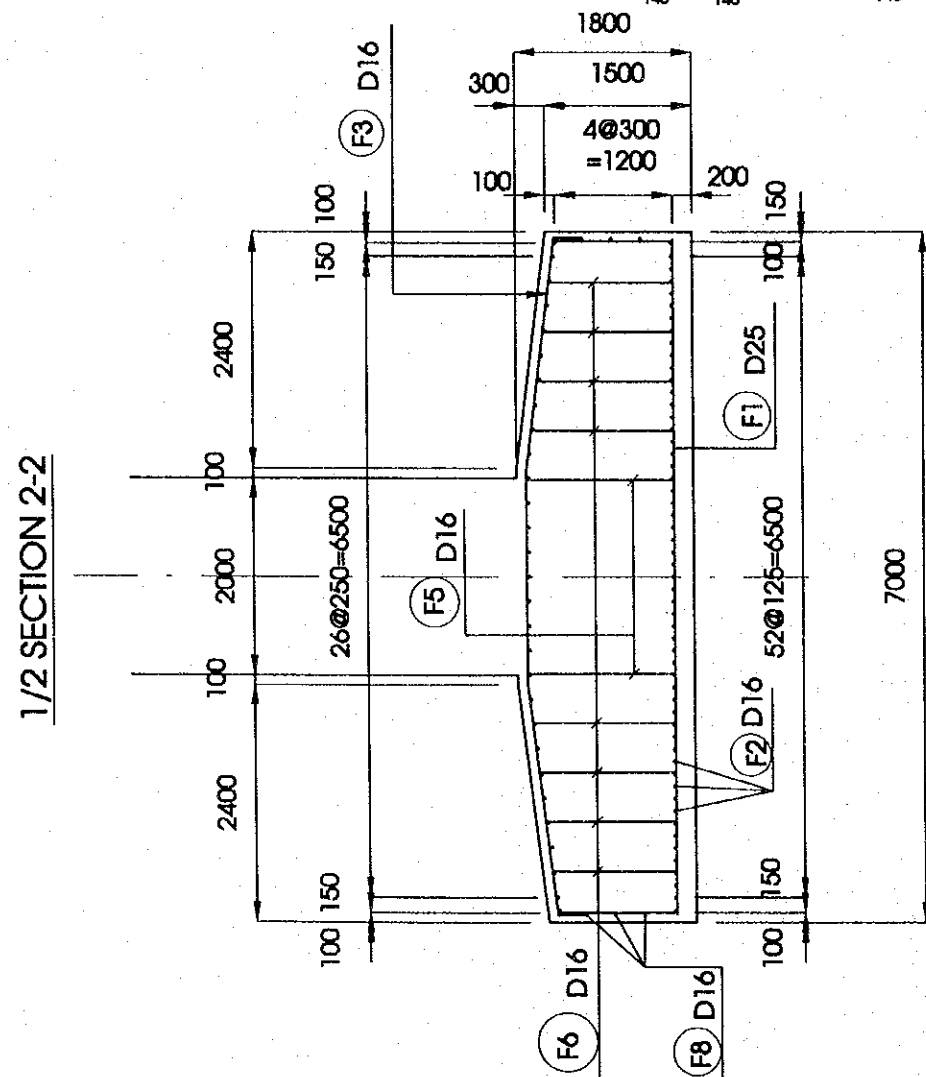
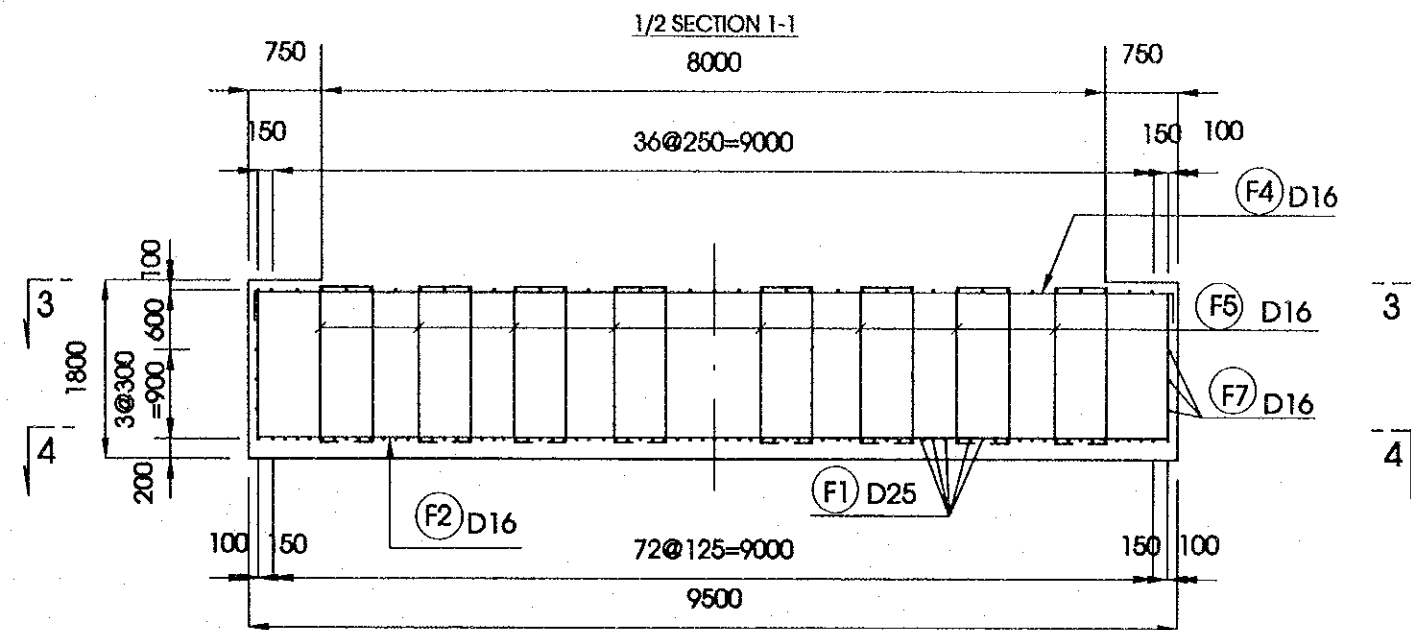
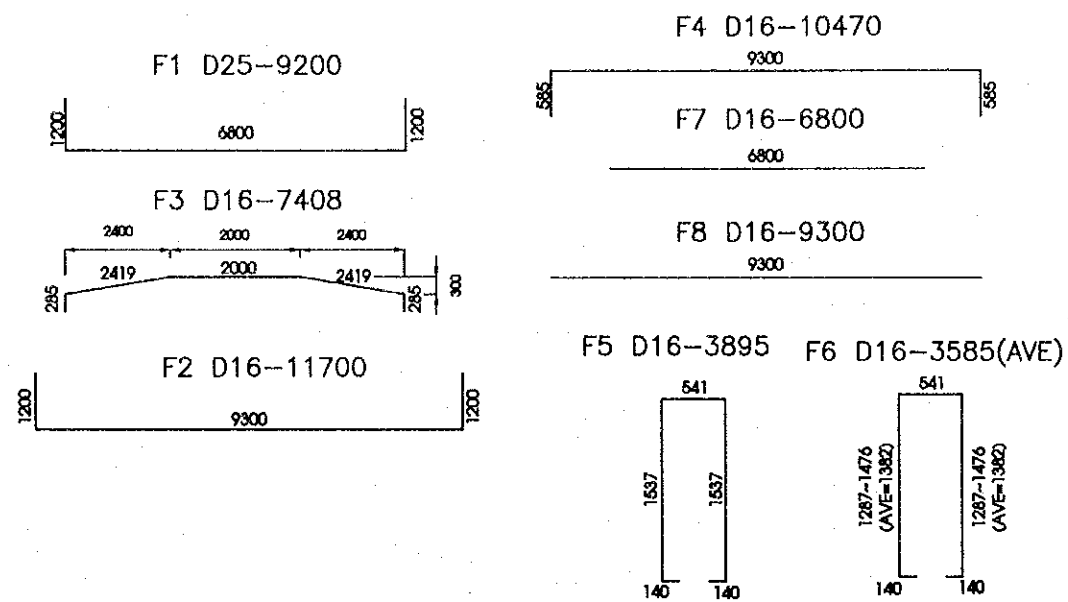
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (HANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.11.17

PACKAGE 3	SCALE 1/75	DRAWING No. C-1-3b-19	SHEET No.
BAR ARRANGEMENT OF PIER P1F, P2F (2)			



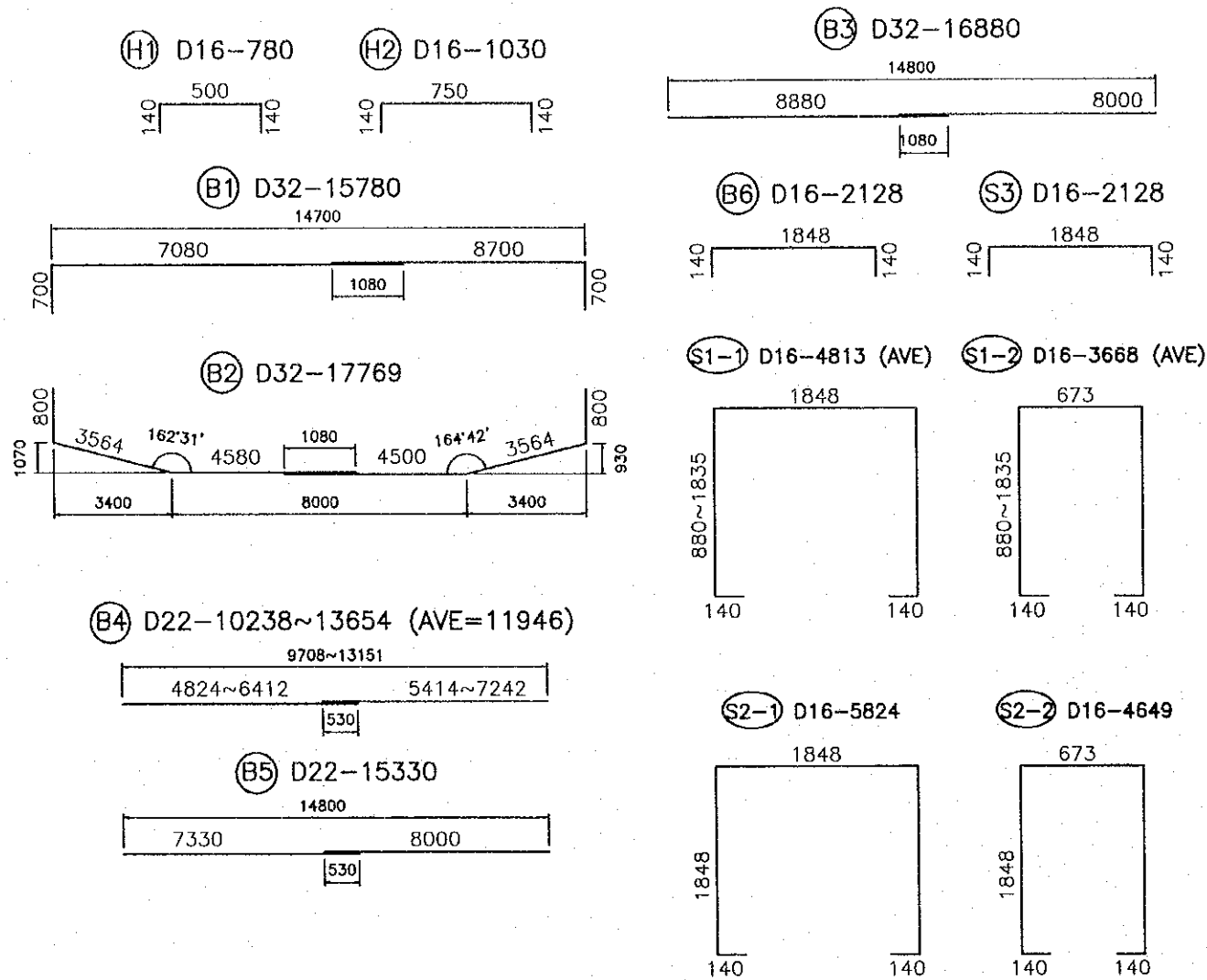
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE
CONSULTANT		DATE 2000.3.14

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3b-20	SHEET No.
BAR ARRANGEMENT OF PIER P1F, P2F (3)			

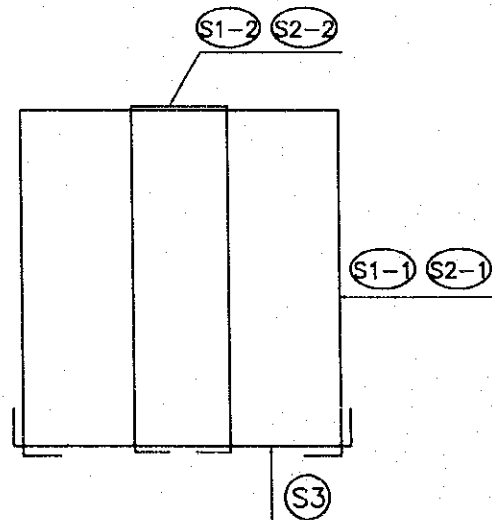


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.11.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 4	SCALE	DRAWING No. C-1-3a-21	SHEET No.
BAR ARRANGEMENT OF PIER P1F, P2F (4)			



REIN FORCING BAR STIRRUP

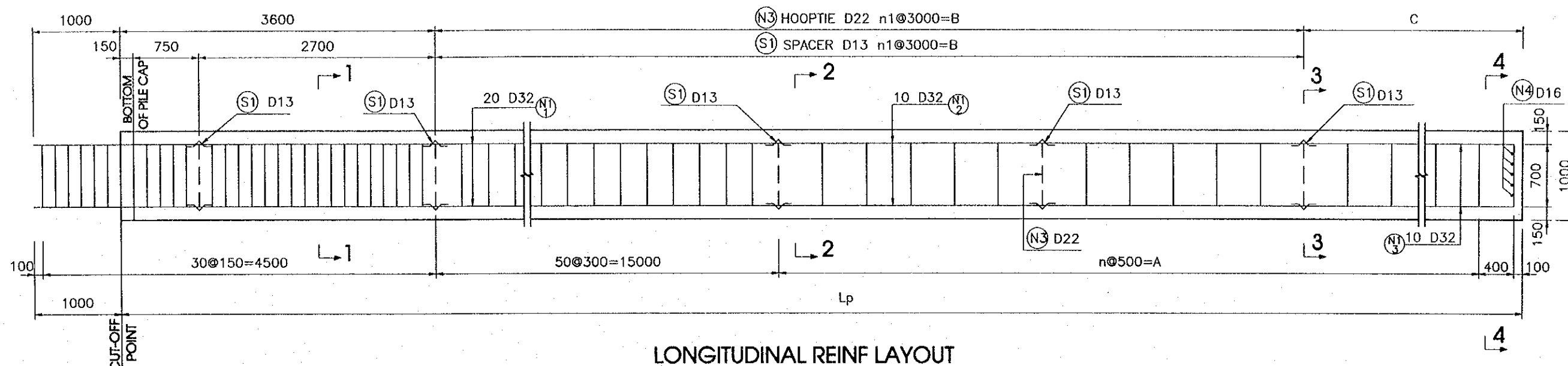


REIN FORCING BAR QUANTITIES FOR PIER P1FL, P2FL, P1FR, P2FR

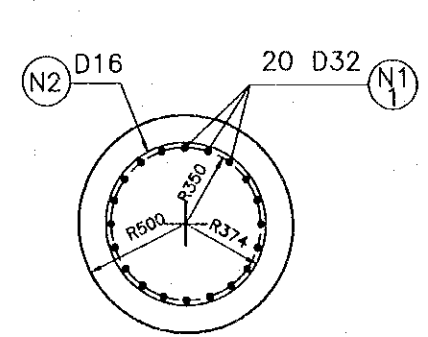
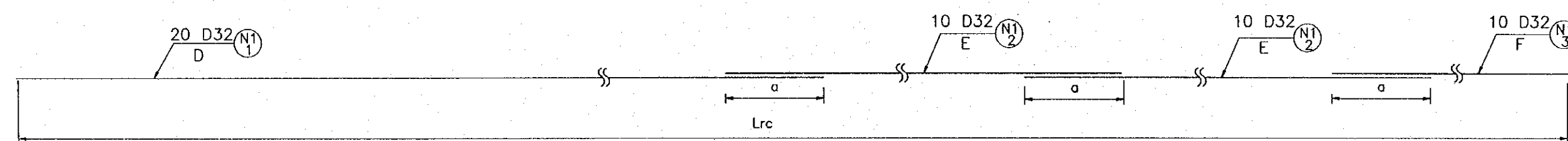
DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)	
CAP BEAM	H1	[Shape]	D16	780	98	1.56	119.25	
	H2	[Shape]	D16	1030	60	1.56	96.41	
	B1	[Shape]	D32	15780	16	6.23	1,572.95	
	B2	[Shape]	D32	17769	16	6.23	1,771.21	
	B3	[Shape]	D32	16880	16	6.23	1,682.60	
	B4	[Shape]	D22	11946	6	3.04	217.90	
	B5	[Shape]	D22	15330	6	3.04	279.62	
	B6	[Shape]	D16	2128	14	1.56	46.48	
	S1-1	AVE	[Shape]	D16	4813	48	1.56	360.40
	S1-2	AVE	[Shape]	D16	3668	48	1.56	274.66
	S2-1	[Shape]	D16	5824	39	1.56	354.33	
	S2-2	[Shape]	D16	4649	39	1.56	282.85	
	S3	[Shape]	D16	2128	87	1.56	288.81	
	STEM	C1	[Shape]	D16	6480	144	1.56	1,455.67
C2		[Shape]	D16	17926	33	1.56	922.83	
C3		[Shape]	D16	4849	41	1.56	310.14	
FOOTING	F1	[Shape]	D25	9200	75	3.98	2,746.20	
	F2	[Shape]	D16	11700	55	1.56	1,003.86	
	F3	[Shape]	D16	7480	39	1.56	455.08	
	F4	[Shape]	D16	10470	29	1.56	473.66	
	F5	[Shape]	D16	3895	16	1.56	97.22	
	F6	AVE	[Shape]	D16	3585	64	1.56	357.93
	F7	[Shape]	D16	6800	6	1.56	63.65	
	F8	[Shape]	D16	9300	6	1.56	87.05	
TOTAL							15320.74	
SUMMARY FOR ONE PIER			D16 =			7,050		
			D22 =			498		
			D25 =			2,746		
			D32 =			5,027		
TOTAL							61,283	
SUMMARY FOR 4 PIERS			D16 =			28,201		
			D22 =			1,990		
			D25 =			10,985		
			D32 =			20,107		

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (HUANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 3. 14

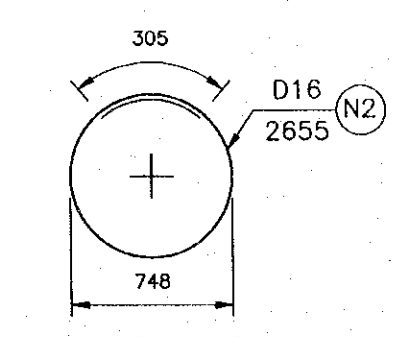
PACKAGE 3	SCALE 1:50	DRAWING No. C-1-3b-22	SHEET No.
DETAIL OF $\phi=100$ CM CAST-IN-PLACE CONCRETE PILE			



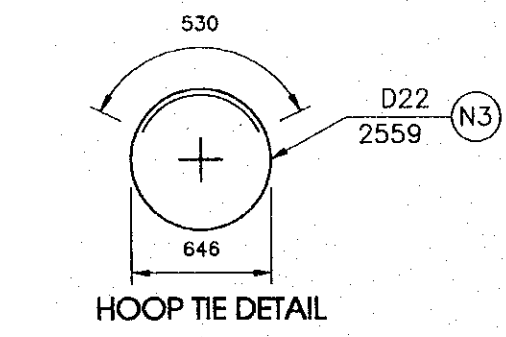
LONGITUDINAL REINF LAYOUT



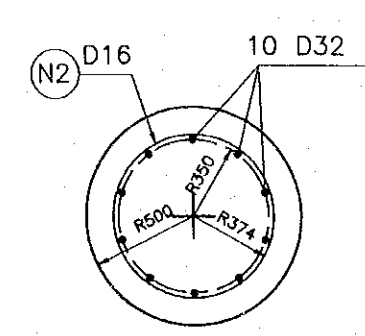
SECTION 1-1



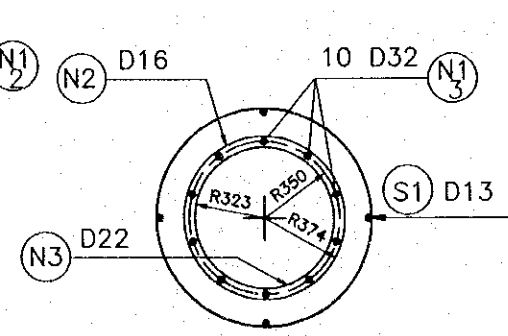
TYPICAL TIE DETAIL



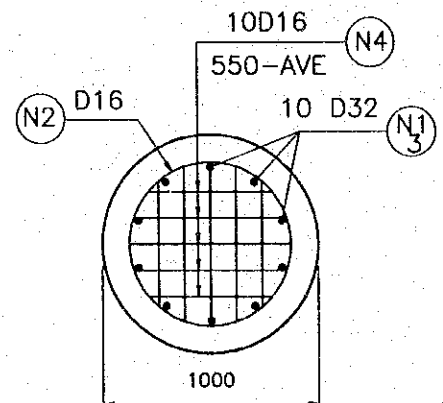
HOOP TIE DETAIL



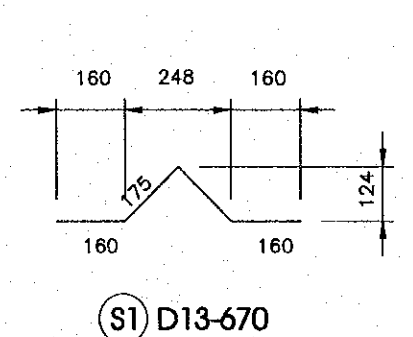
SECTION 2-2



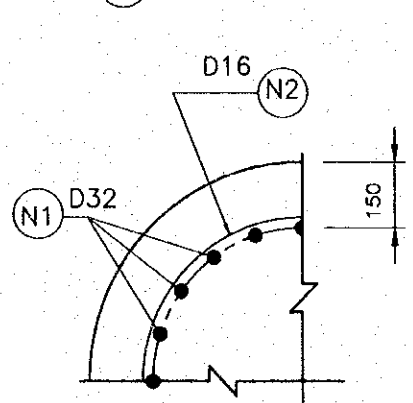
SECTION 3-3



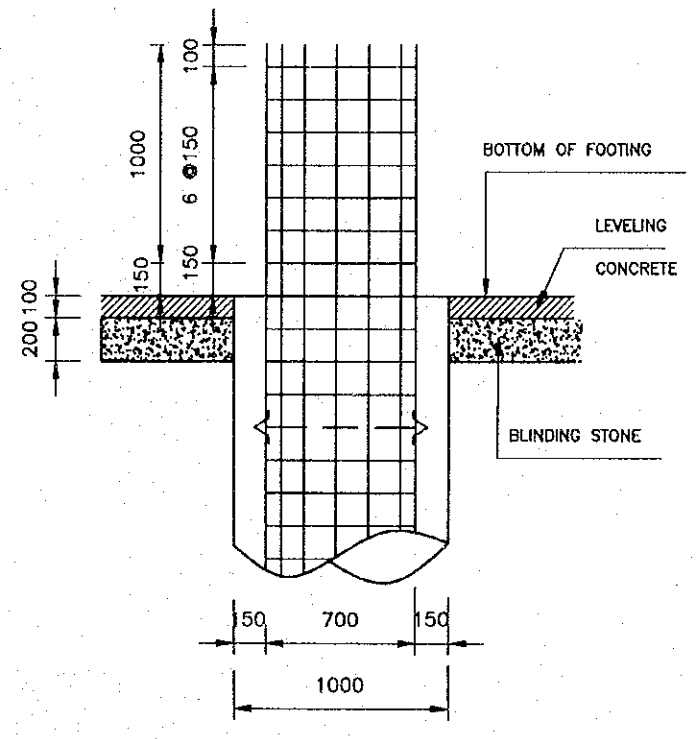
SECTION 4-4



(S1) D13-670



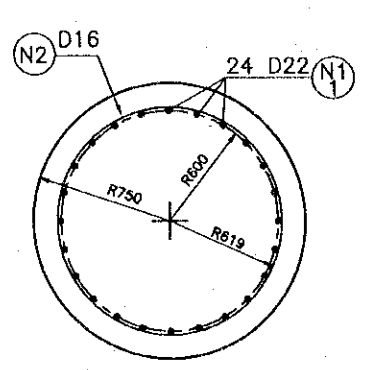
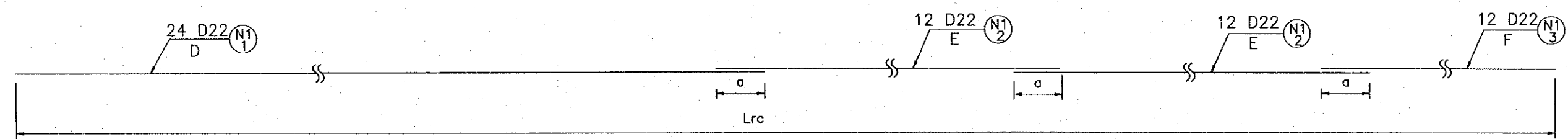
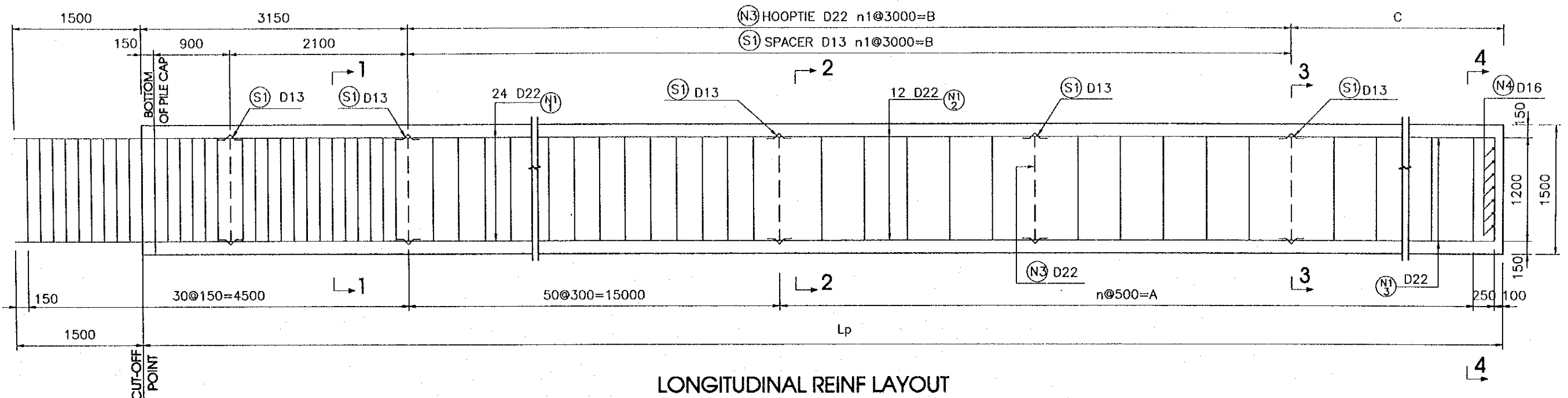
DETAIL OF COVERING



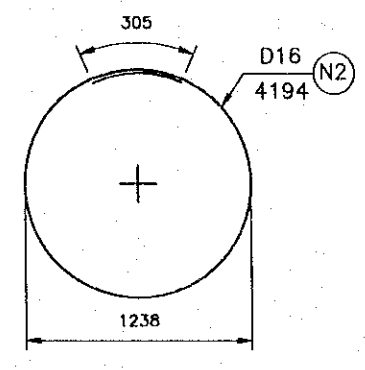
DETAIL OF CONCRETE PIER

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE 2000. 8. 17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

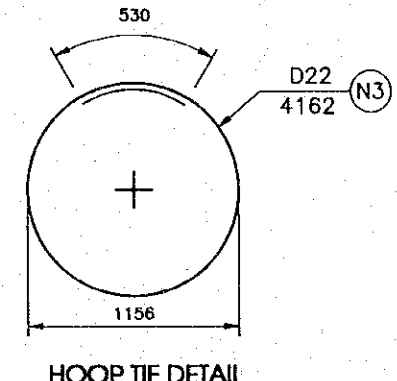
PACKAGE 3	SCALE 1:50	DRAWING No. C-1-3b-23	SHEET No.
DETAIL OF D=150CM CAST-IN-PLACE CONCRETE PILE			



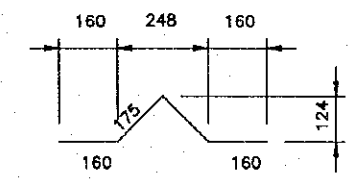
SECTION 1-1



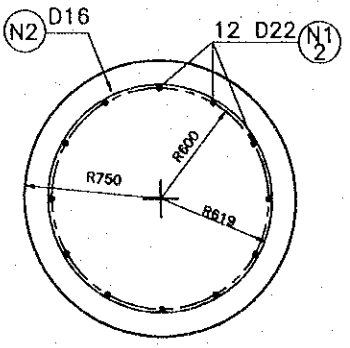
TYPICAL TIE DETAIL



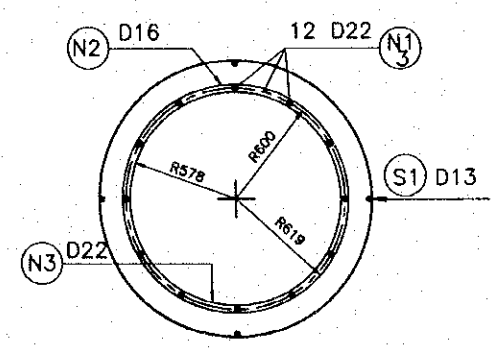
HOOP TIE DETAIL



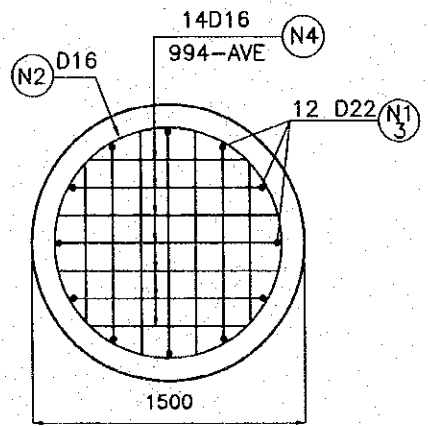
S1 D13-670



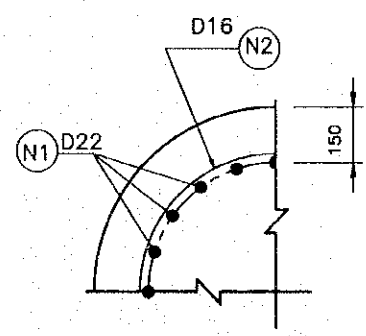
SECTION 2-2



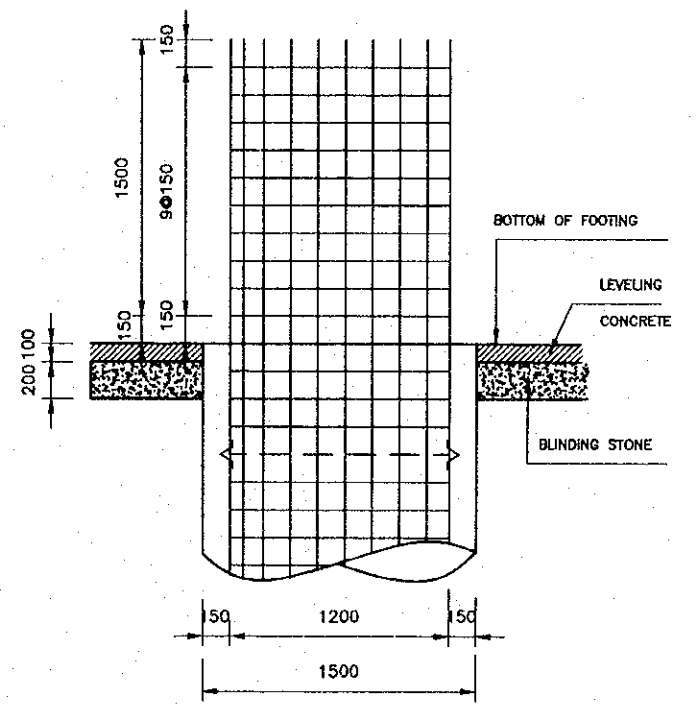
SECTION 3-3



SECTION 4-4



DETAIL OF COVERING



DETAIL OF CONCRETE PIER

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		
PROJECT RED RIVER BRIDGE (BIANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE 	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 0. 14	

PACKAGE 3	SCALE	DRAWING No. C-1-3b-24	SHEET No.
BAR ARRANGEMENT OF CAST-IN-PLACE CONCRETE PILE (D=1000 mm and D=1500mm)			

PARAMETERS OF PIER PILES (D=1000 MM)

PIER NUMBER	PILES		Pile Dimensions (mm)				Dimension of N1 (mm)						Spacer number		
	Diameter (mm)	Number	Lp	A	B	C	Diameter (mm)	Lrc	a	D	E (3 x E)	F	Total	n	n1
4 Piers	1000	32	38 000	19 000	33 000	1 400	D32	39 000	1 080	13 080	2 x 11700	5 760	42 240	38	11
4 Piers	1000	36	38 000	19 000	33 000	1 400	D32	39 000	1 080	13 080	2 x 11700	5 760	42 240	38	11

REINFORCING BAR QUANTITIES OF PIER PILES (D=1000 MM)

SYMBOL	SHAPE	P1R,P1L,P2R,P2L					P1FR,P1FL,P2FR,P2FL						
		Diameter (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)	Diameter (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)		
N1 1		D32	13.080	180	6.23	13 038.1	D32	13.080	180	6.23	14 667.9		
N1 2		D32	11.700	160	6.23	11 662.6	D32	11.700	180	6.23	13 120.4		
N1 3		D32	5.760	80	6.23	2 870.8	D32	5.760	90	6.23	3 229.6		
N2		D16	2.655	980	1.56	3 976.1	D16	2.655	1080	1.56	4 473.1		
N3		D22	2.559	104	3.04	809.1	D22	2.559	117	5.04	1 509.0		
N4		D16	0.55	80	1.56	68.6	D16	0.55	90	1.56	77.2		
S 1		D13	0.67	416	0.997	277.9	D13	0.67	468	0.997	312.6		
		Total for one Piers					32 703.2	Total for one Piers					37 389.9
FOR FOUR PIERS		Σ D13~D22					20 526.8	Σ D13~D22					25 487.9
		Σ D29~D32					110 286.0	Σ D29~D32					124 071.7
		TOTAL					130 812.8	TOTAL					149 559.6

PARAMETERS OF ABUTMENT PILES (D=1500 MM)

NAME	PILES		Pile Dimensions (mm)				Dimension of N1 (mm)						Spacer number		
	Diameter (mm)	Number	Lp	A	B	C	Diameter (mm)	Lrc	a	D	E (3 x E)	F	Total	n	n1
A1C,A2C	1500	24	39 000	20 500	33 000	2 850	D22	40 500	530	14 030	2 x 11700	4 660	42 090	41	11
A1FL,A1FR,A2FL,A2FR	1500	32	39 000	20 500	33 000	2 850	D22	40 500	530	14 030	2 x 11700	4 660	42 090	41	11

REINFORCING BAR QUANTITIES OF ABUTMENT PILES (D=1500 MM)

SYMBOL	SHAPE	A1C,A2C					A1FL,A1FR,A2FL,A2FR						
		Diameter (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)	Diameter (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)		
N1 1		D22	14.030	288	3.04	12 283.5	D22	14.030	192	3.04	8 189.0		
N1 2		D22	11.700	288	3.04	10 243.6	D22	11.700	192	3.04	6 829.1		
N1 3		D22	4.660	144	3.04	2 040.0	D22	4.660	96	3.04	1 360		
N2		D16	4.194	1476	1.56	9 659.9	D16	4.194	984	1.56	6 438.0		
N3		D22	4.162	156	3.04	1 973.8	D22	4.162	104	3.04	1 315.9		
N4		D16	0.994	168	1.56	260.5	D16	0.994	112	1.56	173.7		
S 1		D13	0.67	624	0.997	416.8	D13	0.67	416	0.997	277.9		
TOTAL		For one Abutment					36 875.1	For one Abutment					24 583.4
		For two Abutments (Σ D13~D22)					73 750.3	For four Abutments (Σ D13~D22)					98 333.7

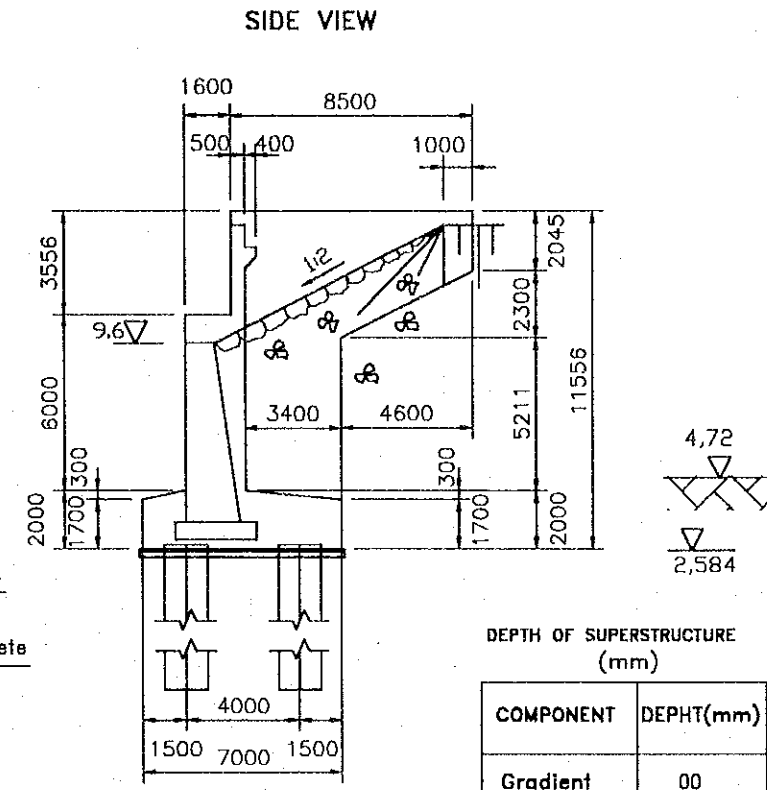
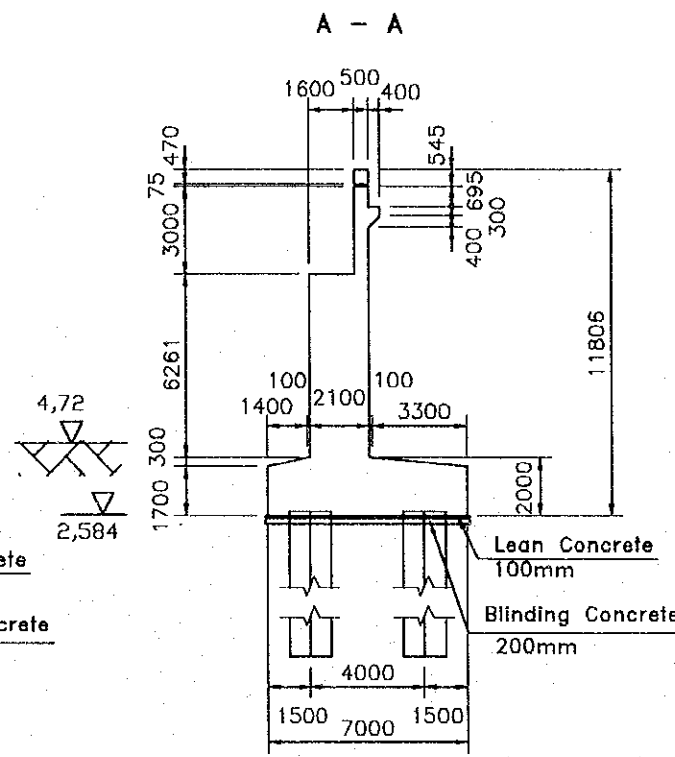
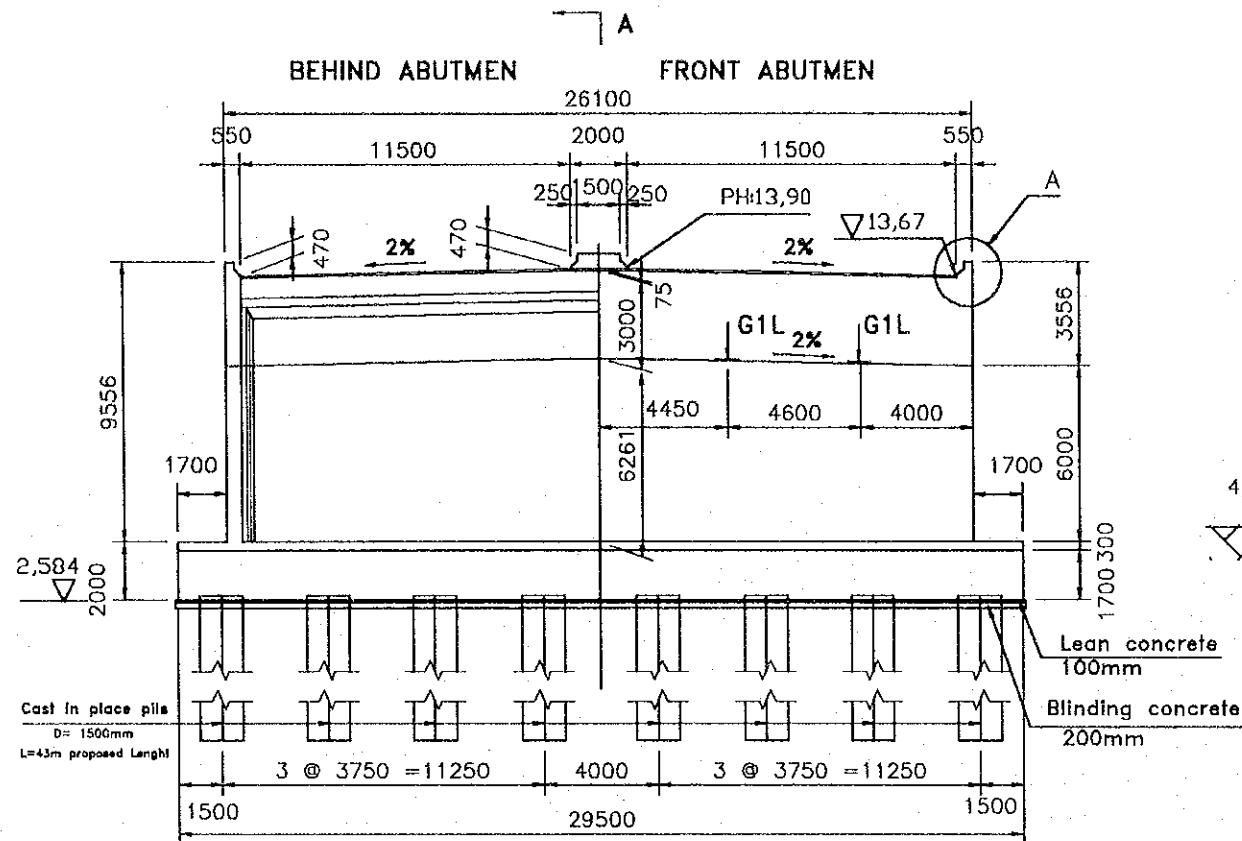
C-1 THROUGHWAY

C-1-3 SUBSTRUCTURE

C-1-3c NGUYEN TAM TRINH BRIDGE

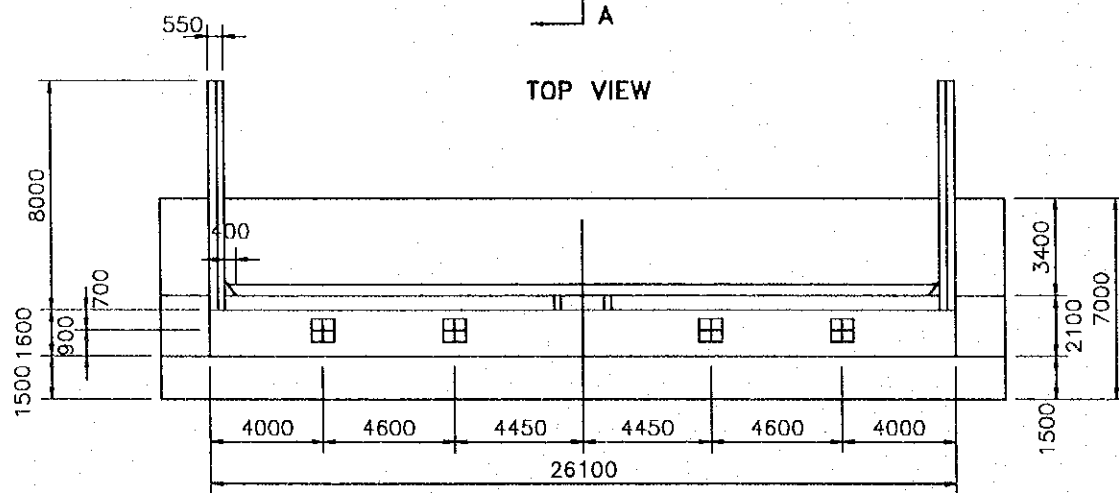
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.6.1
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	

PACKAGE 3	SCALE 1/250	DRAWING No. C-1-3c-1	SHEET No.
BAR ARRANGEMENT OF A1, A2			

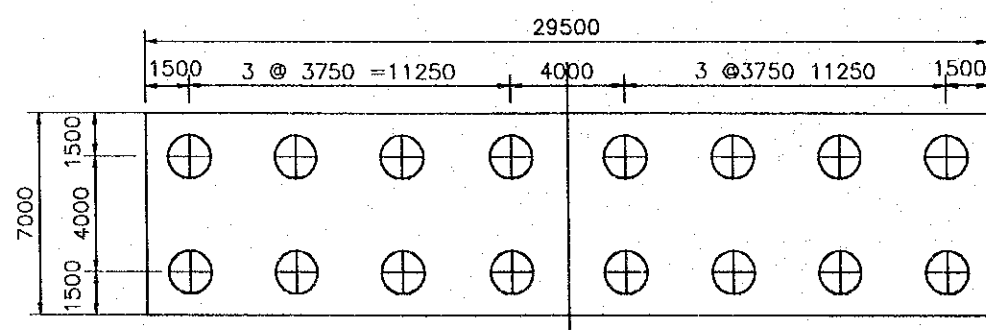


DEPTH OF SUPERSTRUCTURE (mm)

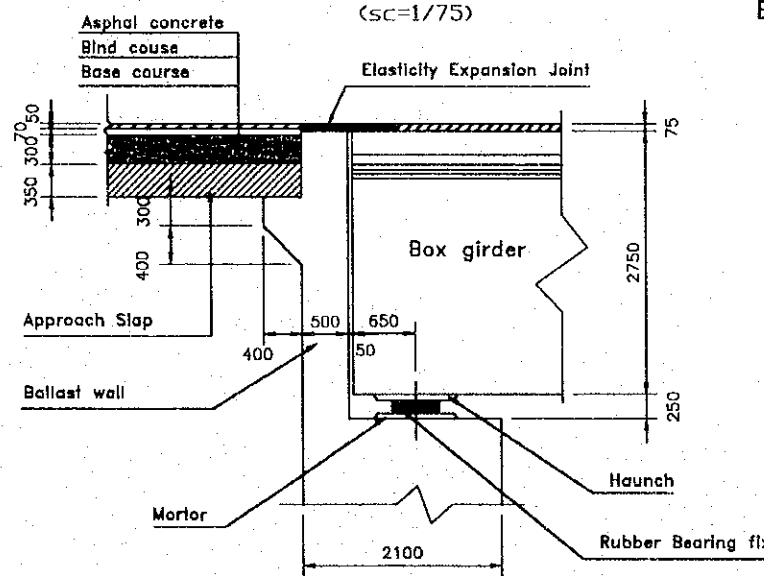
COMPONENT	DEPTH(mm)
Gradient	00
Pavement	75
Box Girder	2750
haunch	55
Bearing fix	145
Mortar	50
TOTAL	3075



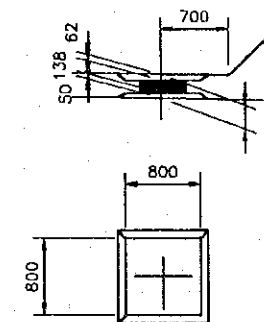
PILE ARRANGEMENT



DETAIL OF BALLAST WALL (sc=1/75)



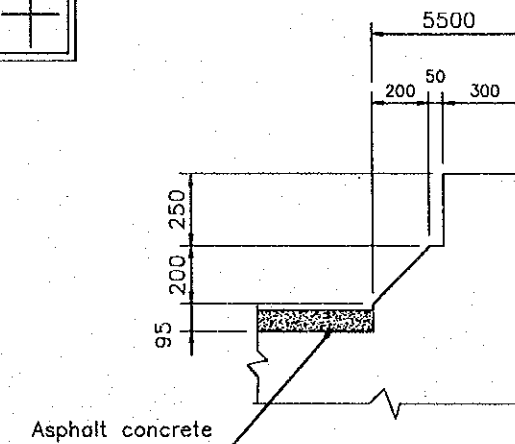
BEARING SEAT DETAIL (sc=1/75)



ELEVATION OF TOP BEARING SEAT(m)

Bearing seat	G1L	G2L
Elevation	10,806	10,714

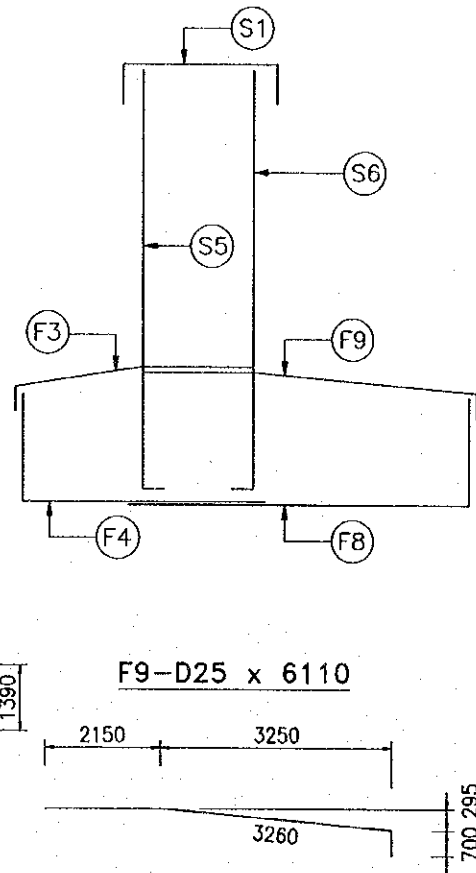
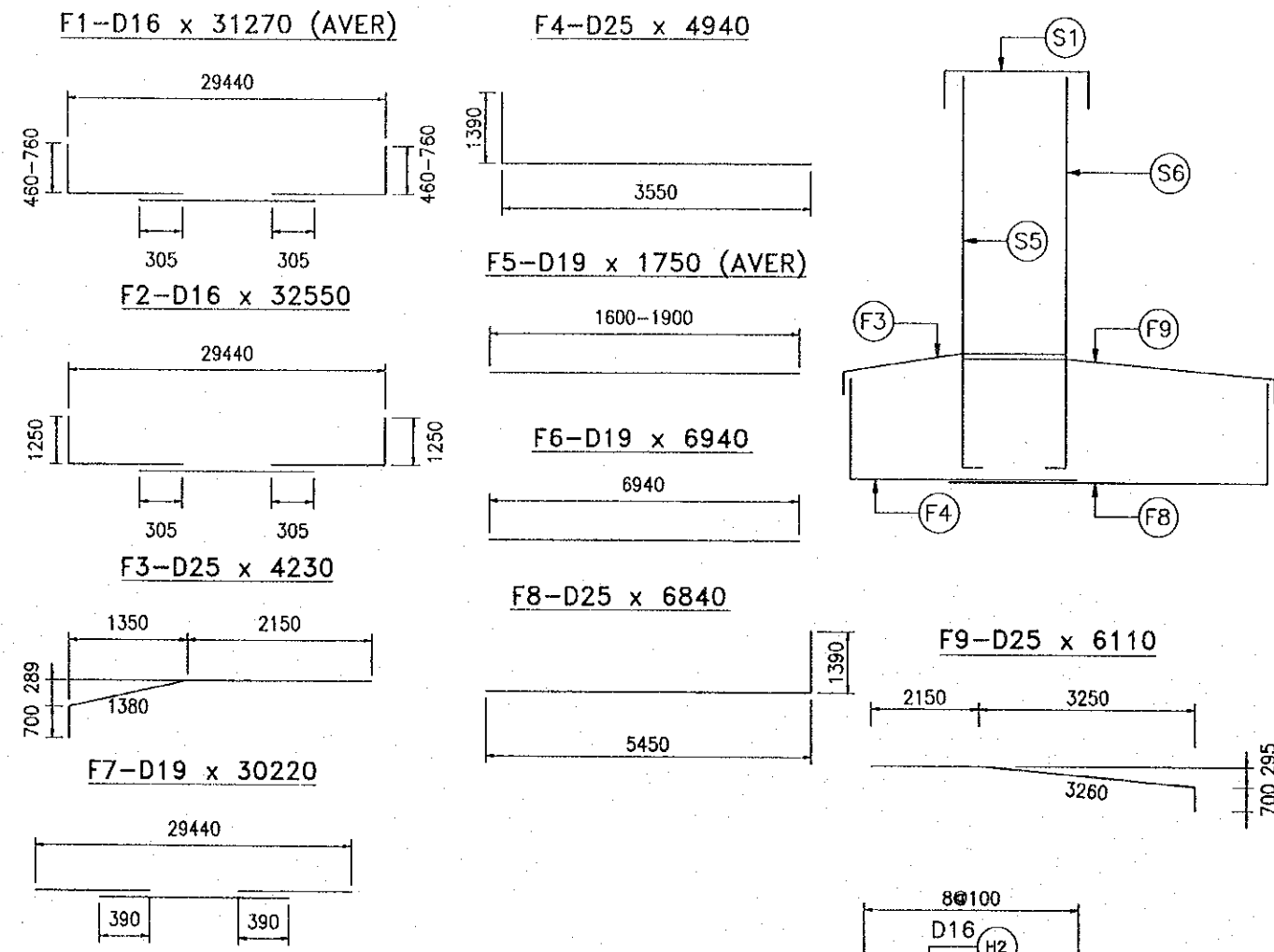
DETAIL -A (sc=1/25)



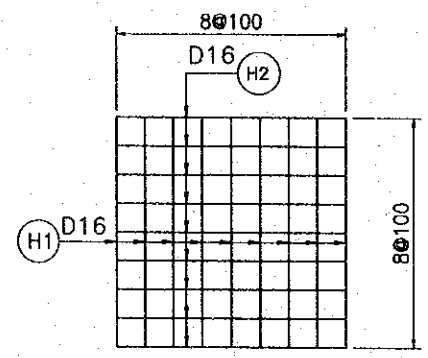
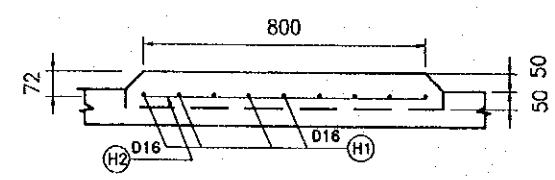
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.14

PACKAGE 3	SCALE	DRAWING No. C-1-3c-3	SHEET No.
--------------	-------	-------------------------	-----------

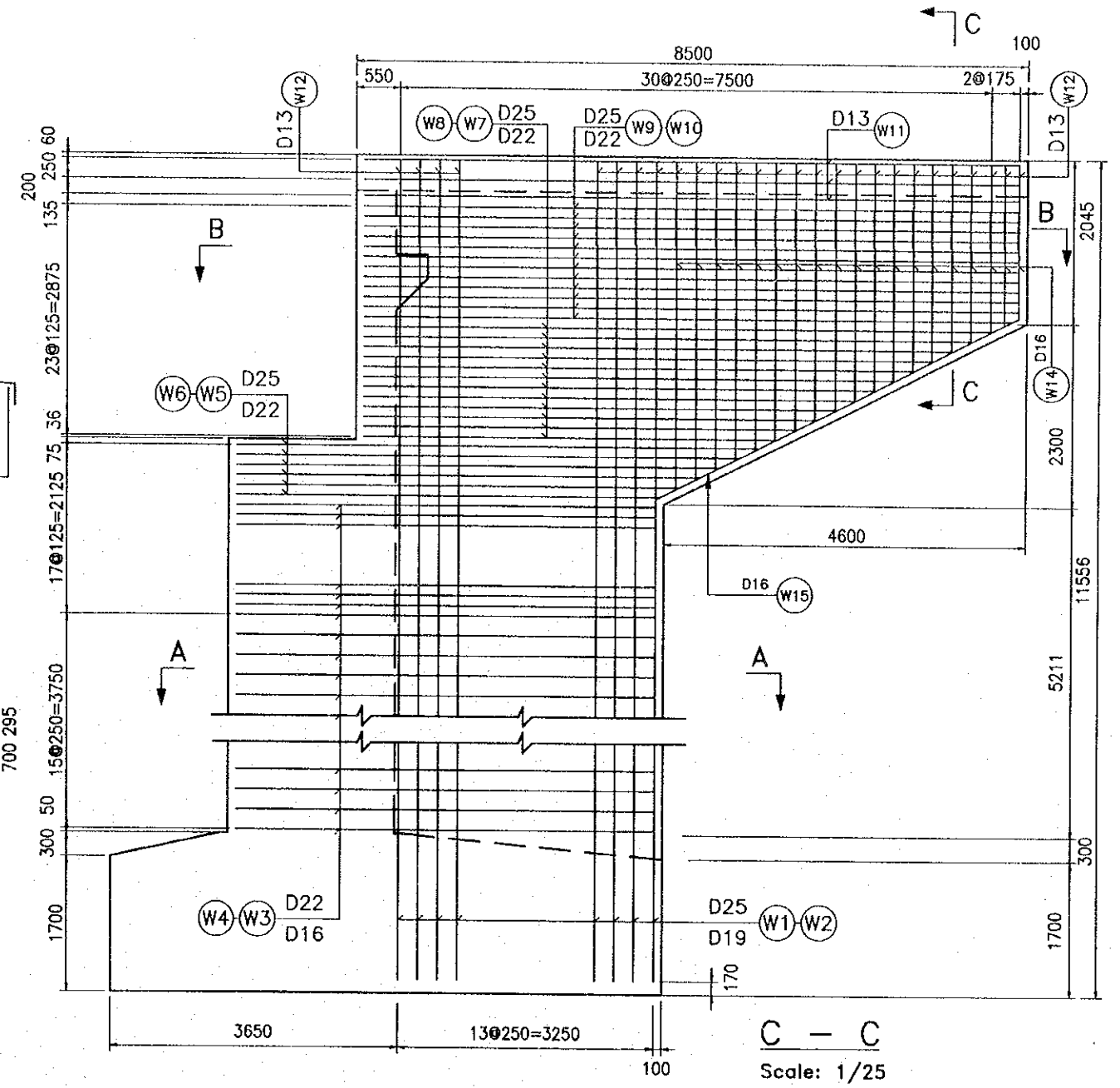
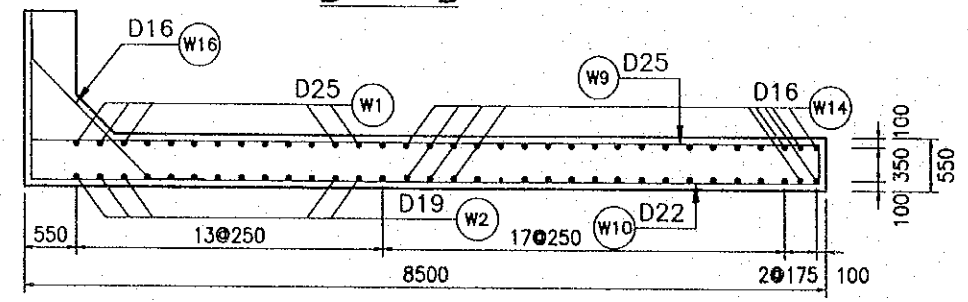
BAR ARRANGMENT OF A1, A2 (2)



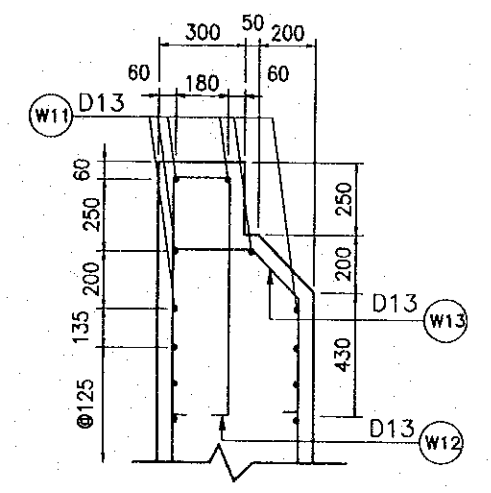
BAR ARRANGEMENT OF BEARING SEAT
Scale: 1/20



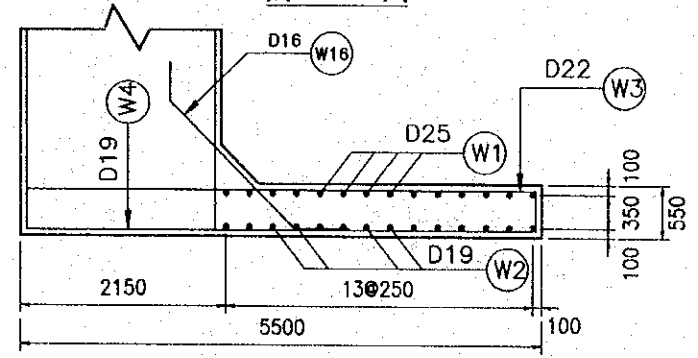
B - B



C - C
Scale: 1/25



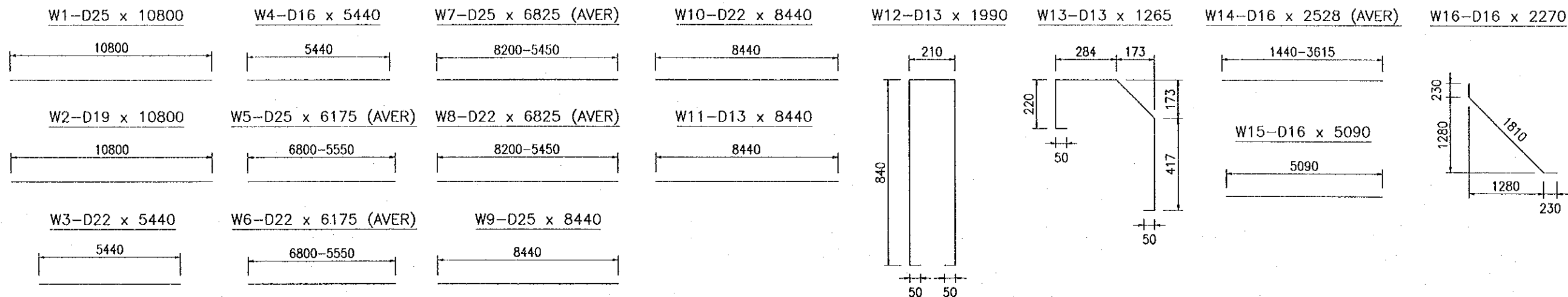
A - A



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE
ORGANIZATION		DATE 2000.3.17

PACKAGE 3	SCALE	DRAWING No. C-1-3c-4	SHEET No.
BAR ARRANGMENT OF A1, A2 (3)			

NGUYEN TAM CHINH ROAD-FLYOVER BRIDGE LIST OF REINFORCING FOR ABUTMENT A1, A2 (3)

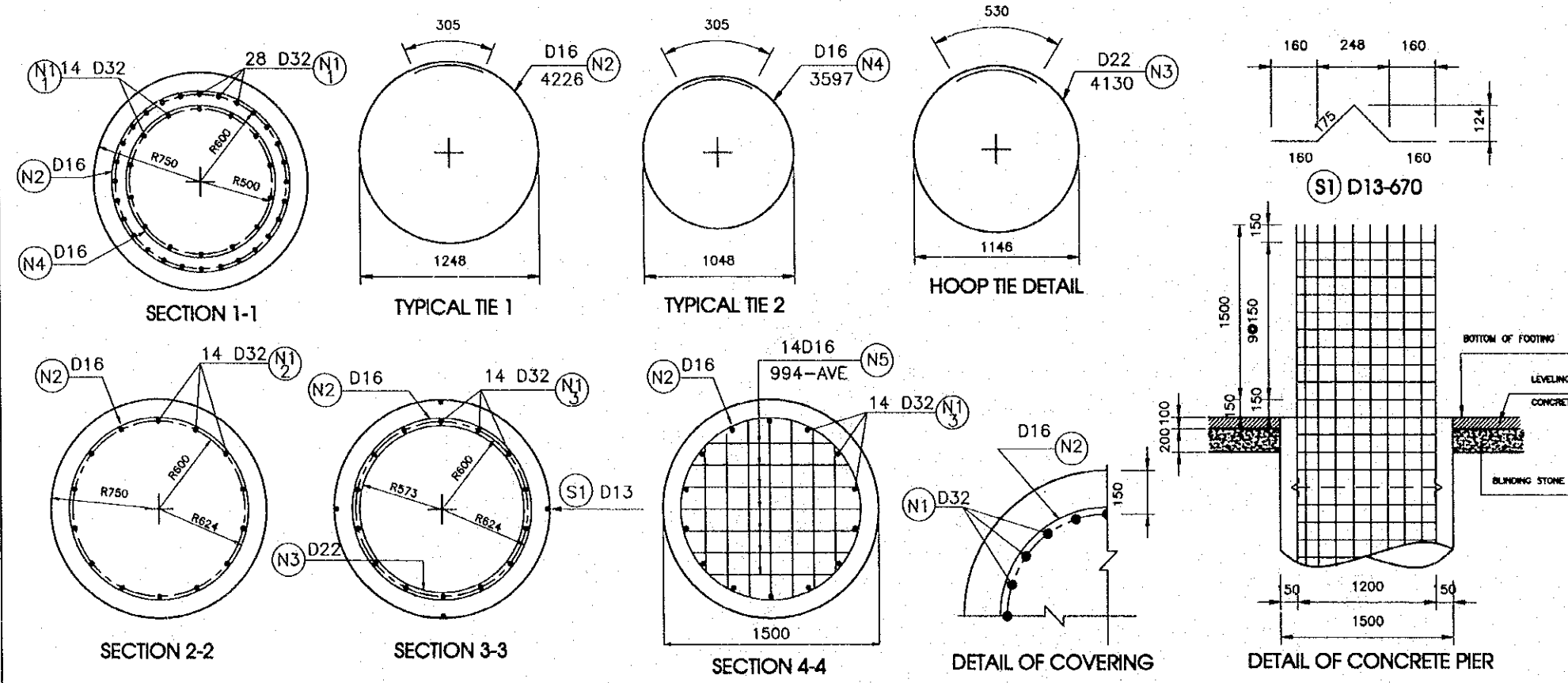
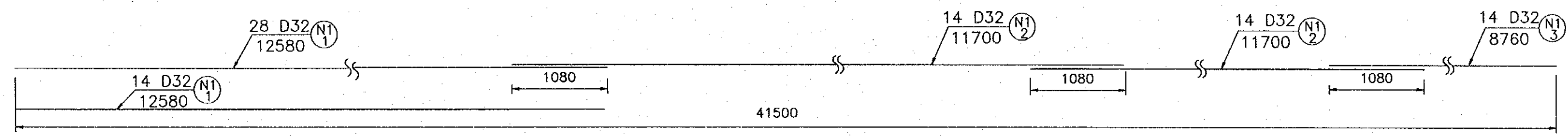
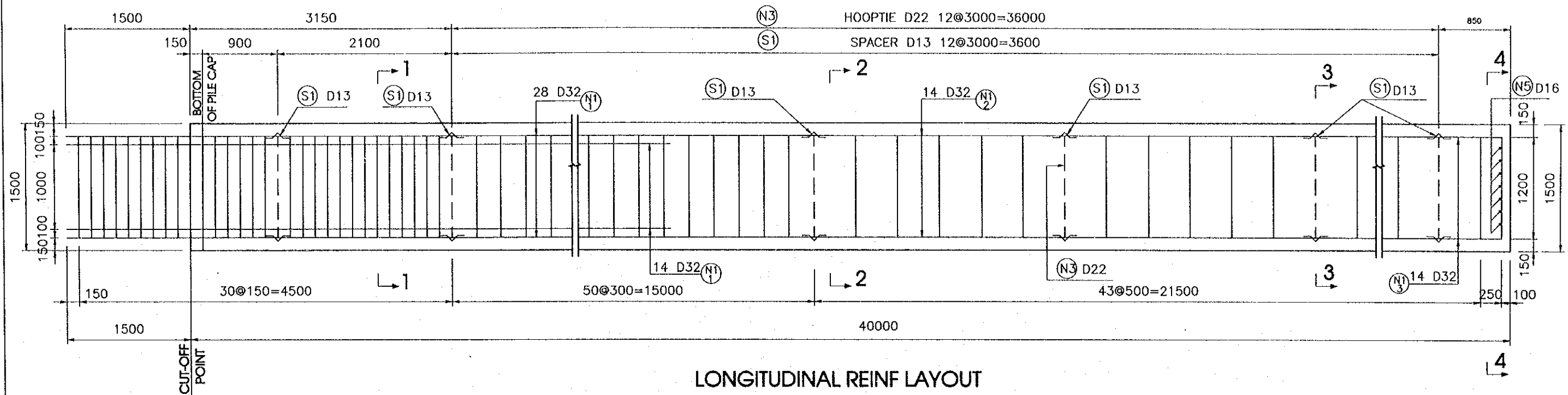


Detail	Bars	Shape	Dia (mm)	Length (mm)	No' s	Unit Weight (Kg/m)	Weight (Kg)	Remarks
BALAST WALL	B1		D13	26650	16	0.995	424.27	
	B2		D13	2060	99	0.995	202.92	
	B3		D13	730	200	0.995	145.27	
	B4		D16	3700	105	1.56	606.06	
	B5		D16	26650	12	1.56	498.89	
	B6		D19	3700	209	2.25	1739.93	
STEM	S1		D16	2330	683	1.56	2482.57	
	S2		D16	26650	8	1.56	332.59	
	S3		D16	26650	24	1.56	997.78	
	S4		D16	26650	24	1.56	997.78	
	S5		D25	8355	105	3.98	3491.55	
	S6		D25	8355	209	3.98	6949.86	
	H1		D16	8100	36	1.56	454.90	
	H2		D16	8100	36	1.56	454.90	
FOOTING	F1		D16	31270	29	1.56	1414.65	AVER
	F2		D16	32550	29	1.56	1472.56	
	F3		D25	4230	119	3.98	2003.41	
	F4		D25	4940	237	3.98	4659.7	
	F5		D19	1750	472	2.25	1858.5	AVER
	F6		D19	6940	8	2.25	124.92	
	F7		D19	30220	8	2.25	453.96	
	F8		D25	6840	119	3.98	3239.56	
	F9		D25	6110	237	3.98	5763.32	

Detail	Bars	Shape	Dia (mm)	Length (mm)	No' s	Unit Weight (Kg/m)	Weight (Kg)	Remarks	
WING WALL	W1		D25	10800	28	3.98	1203.55		
	W2		D19	10800	28	2.25	680.40		
	W3		D22	5440	54	3.04	893.03		
	W4		D16	5440	54	1.56	458.27		
	W5		D25	6175	12	3.98	294.92	AVER	
	W6		D22	6175	12	3.04	225.26	AVER	
	W7		D25	6825	24	3.98	651.92	AVER	
	W8		D22	6825	24	3.04	497.95	AVER	
	W9		D25	8440	24	3.98	806.19		
	W10		D22	8440	24	3.04	615.78		
	W11		D13	8440	12	0.995	100.77		
	W12		D13	1990	66	0.995	130.68		
	W13		D13	1265	66	0.995	83.07		
	W14		D16	2528	76	1.56	299.72	AVER	
	W15		D16	5090	4	1.56	31.76		
	W16		D16	2270	98	1.56	347.04		
SUMMARY	TOTAL						48180.17		
	D13 : 1086.99					D22 : 2232.03			
	D16 : 10849.45					D25 : 29063.99			
	D19 : 4947.71								

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DESIGNED BY S. WATASE
PROJECT RED RIVER BRIDGE (HANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>
CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.14

PACKAGE 3	SCALE	DRAWING No. C-1-3c-5	SHEET No.
DETAIL OF D=150 CM CAST IN PLACE CONCRETE PILE			



REINFORCING BAR QUANTITY OF ABUTMENT PILES

Bar	Symbol	Dia (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)
N1	—	D32	12.580	896	6.23	70 222.57
N1 ₂	—	D32	11.700	448	6.23	32 655.17
N1 ₃	—	D32	8.760	448	6.23	24 449.51
N2	○	D16	4.226	4000	1.56	26 370.24
N3	○	D22	4.130	448	3.04	5 624.73
N4	○	D16	3.597	4000	1.56	22 445.28
N5	—	D16	0.994	448	1.56	694.69
S1	—	D13	0.670	1792	0.997	1 197.04
Total						183 659.22
FOR 2 ABUTMENTS		D13~D22		112 663.9		
		D29~D32		254 654.5		
Total						367 318.4

314

C-1 THROUGHWAY

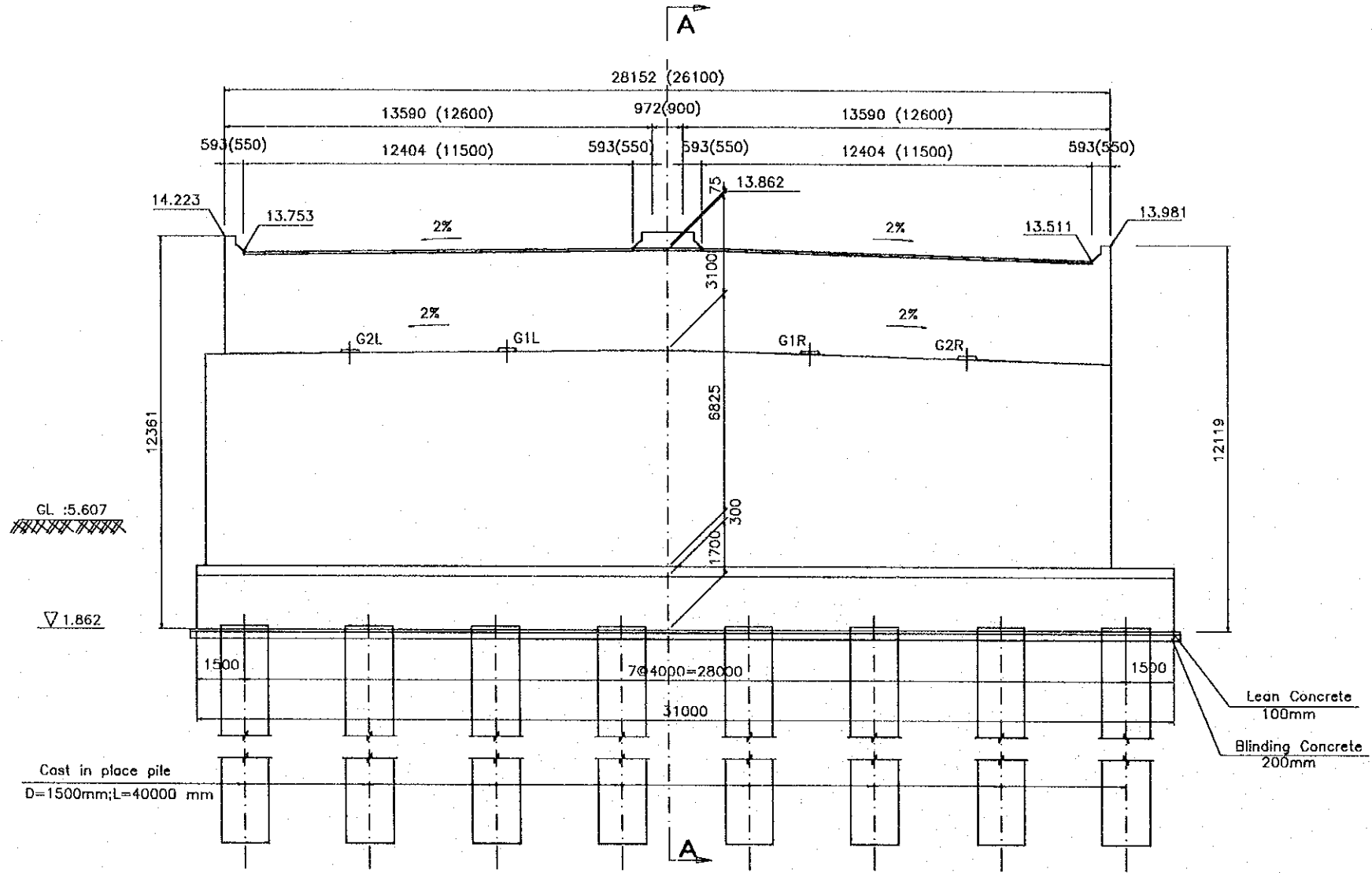
C-1-3 SUBSTRUCTURE

C-1-3d LINH NAM BRIDGE

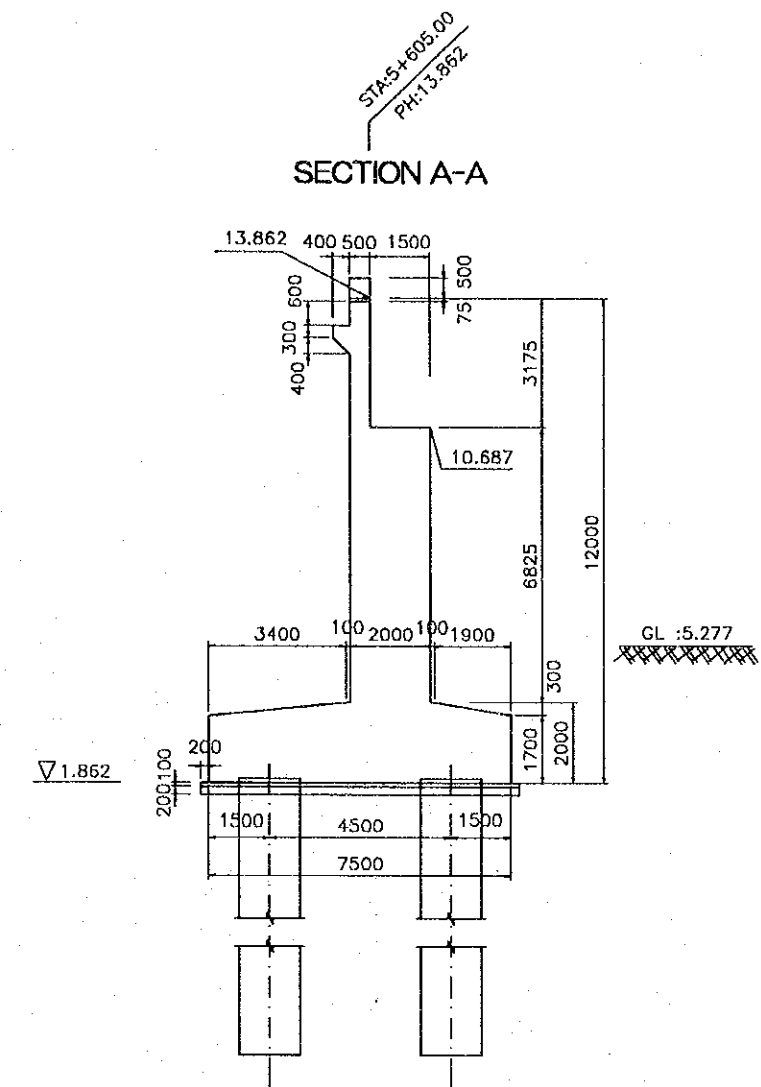
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. MATSUDA
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	<i>[Signature]</i>
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE	2-10-00, 6.1

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/200	C-1-3d-1	
LINH NAM BRIDGE - DETAIL OF ABUTMENT A1 (1)			

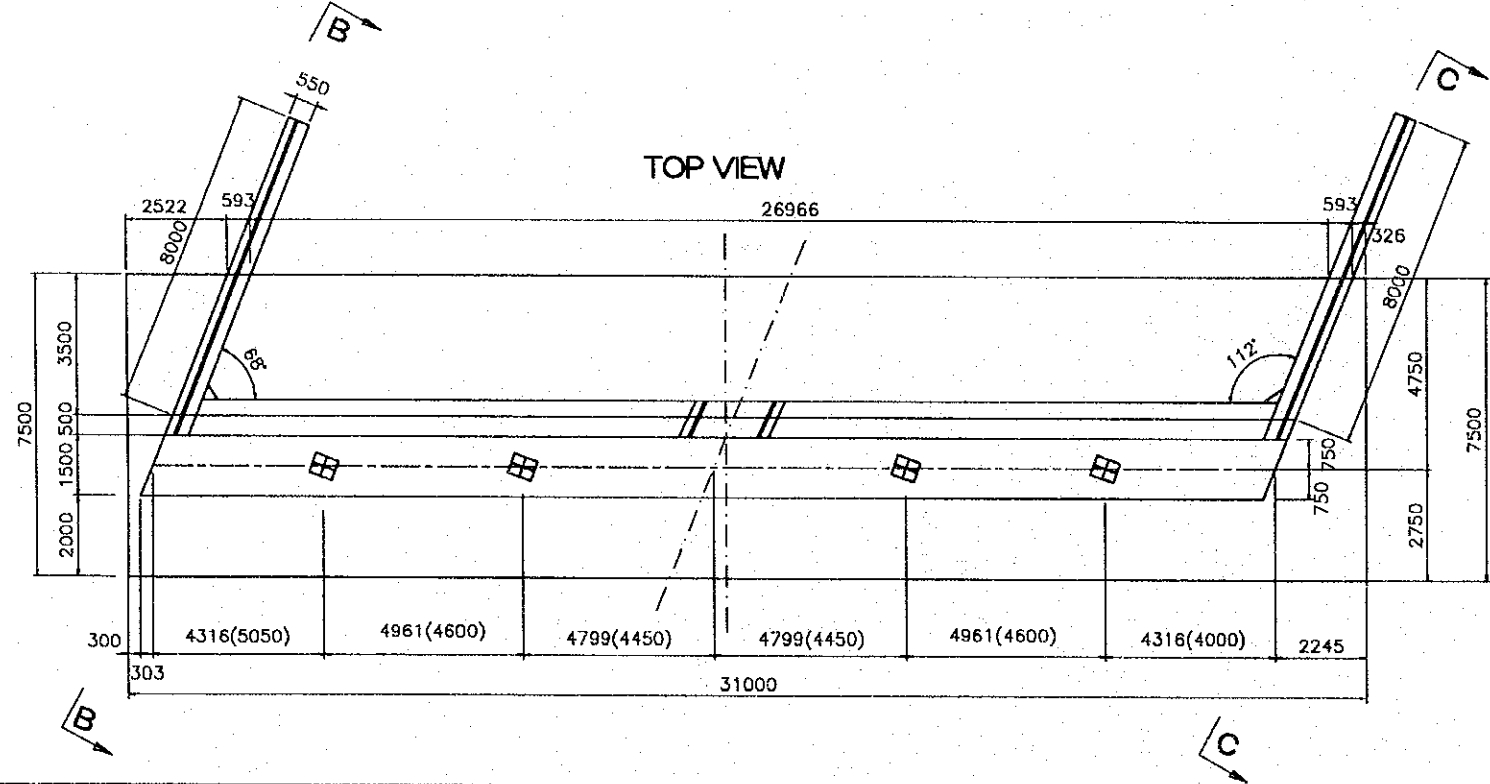
FRONT VIEW



SECTION A-A



TOP VIEW



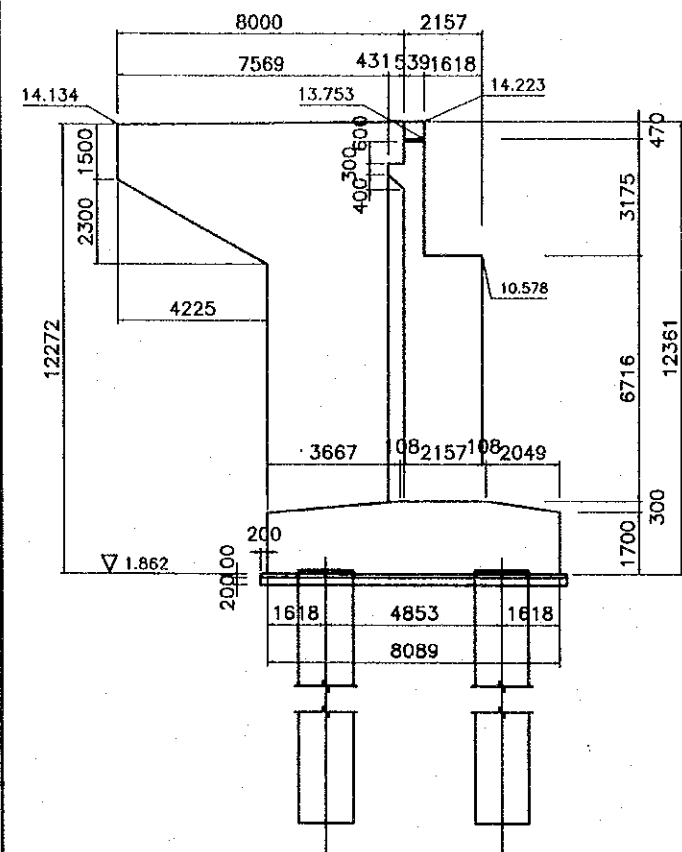
DEPTH OF SUPERSTRUCTURE

Component	Depth(mm)
Gradient	150
AC Layer	75
Girder	2750
Mortar1	25
Shoe(F)	145
Mortar2	30
Total	3175

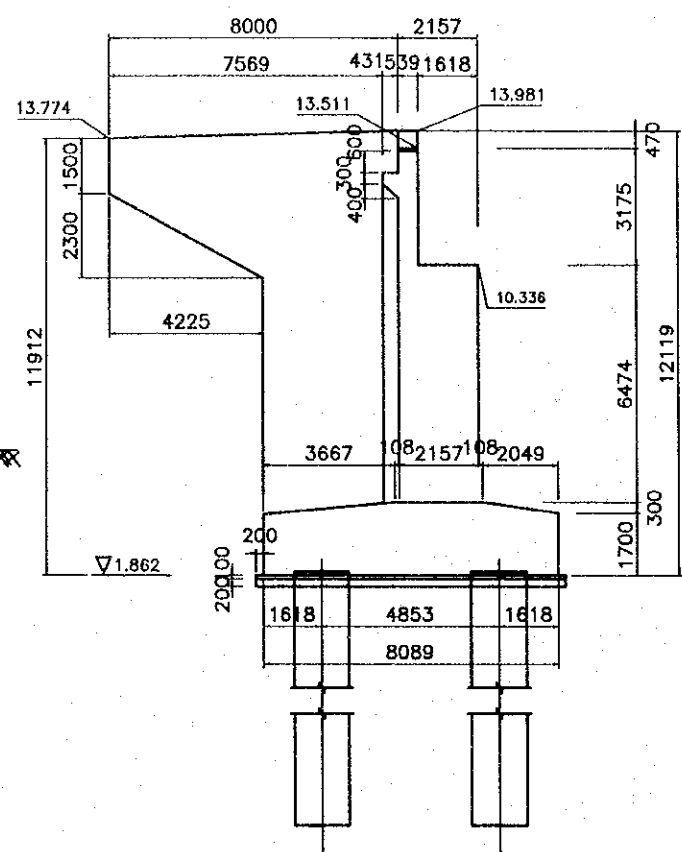
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.3.17

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3d-2	SHEET No.
LINH NAM BRIDGE - DETAIL OF ABUTMENT A1 (2)			

SECTION B-B

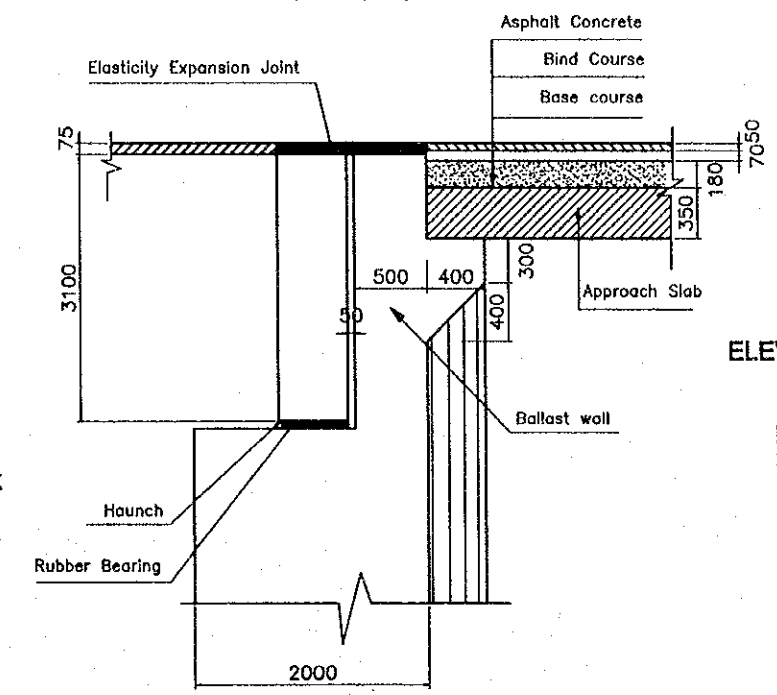


SECTION C-C



DETAIL OF BALLAST WALL

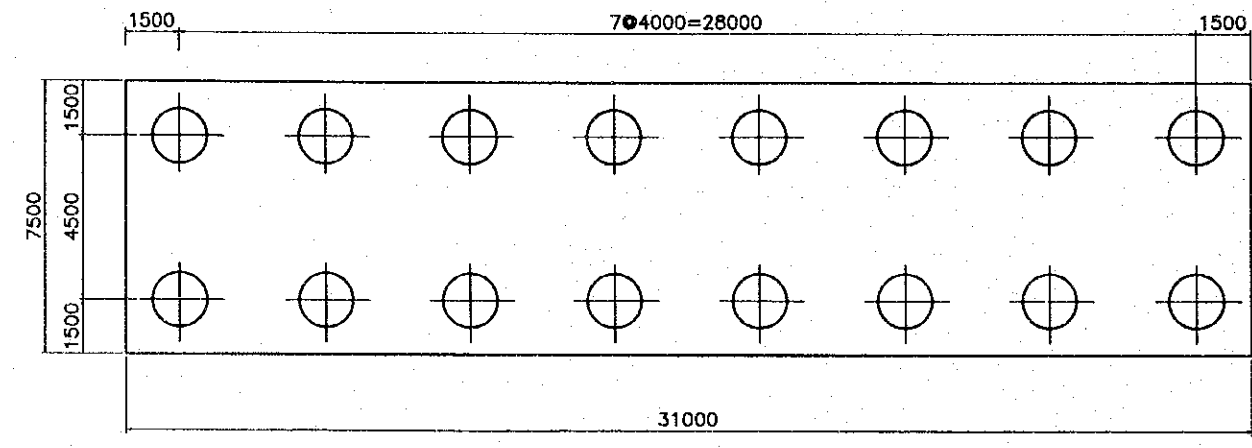
(SC = 1/ 50)



ELEVATION OF TOP BEARING SEAT

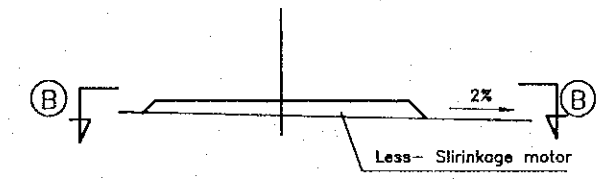
Left seat	G1L (m)	G2L (m)
Elevation	10.884	10.829
Right seat	G1R (m)	G2R (m)
Elevation	10.812	10.883

PILE ARRANGEMENT

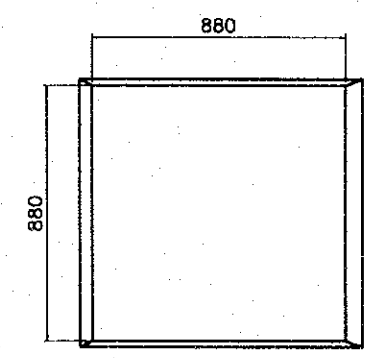


GIRDER BEARING SEAT DETAIL

(SC = 1/ 25)

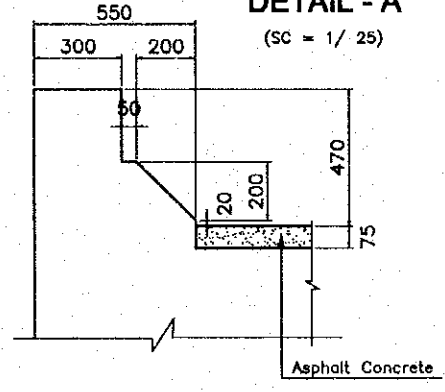


SECTION B-B



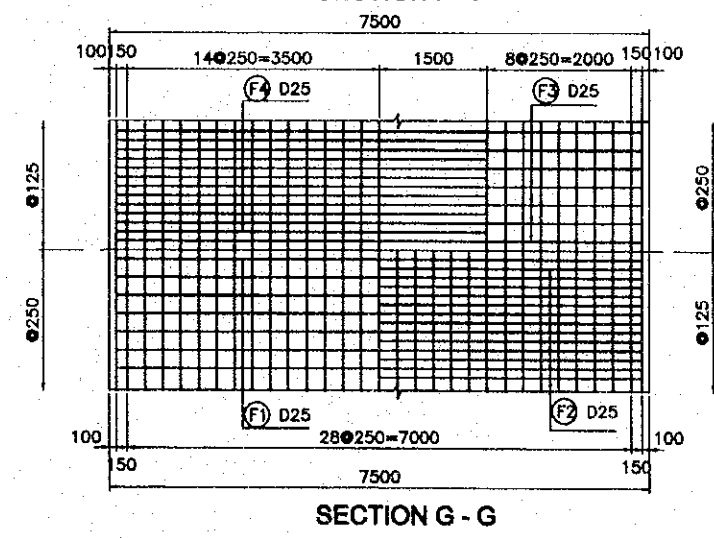
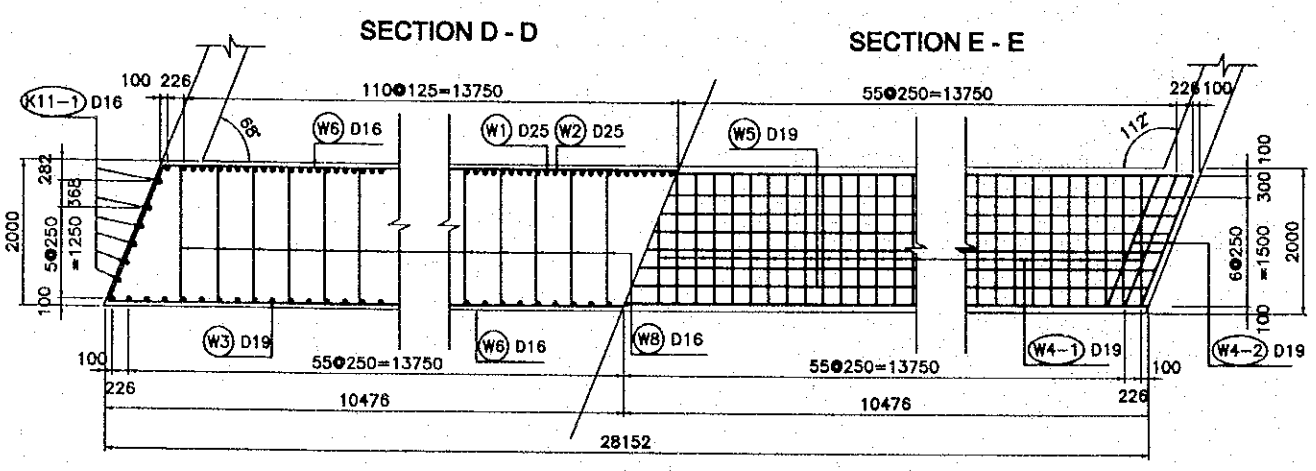
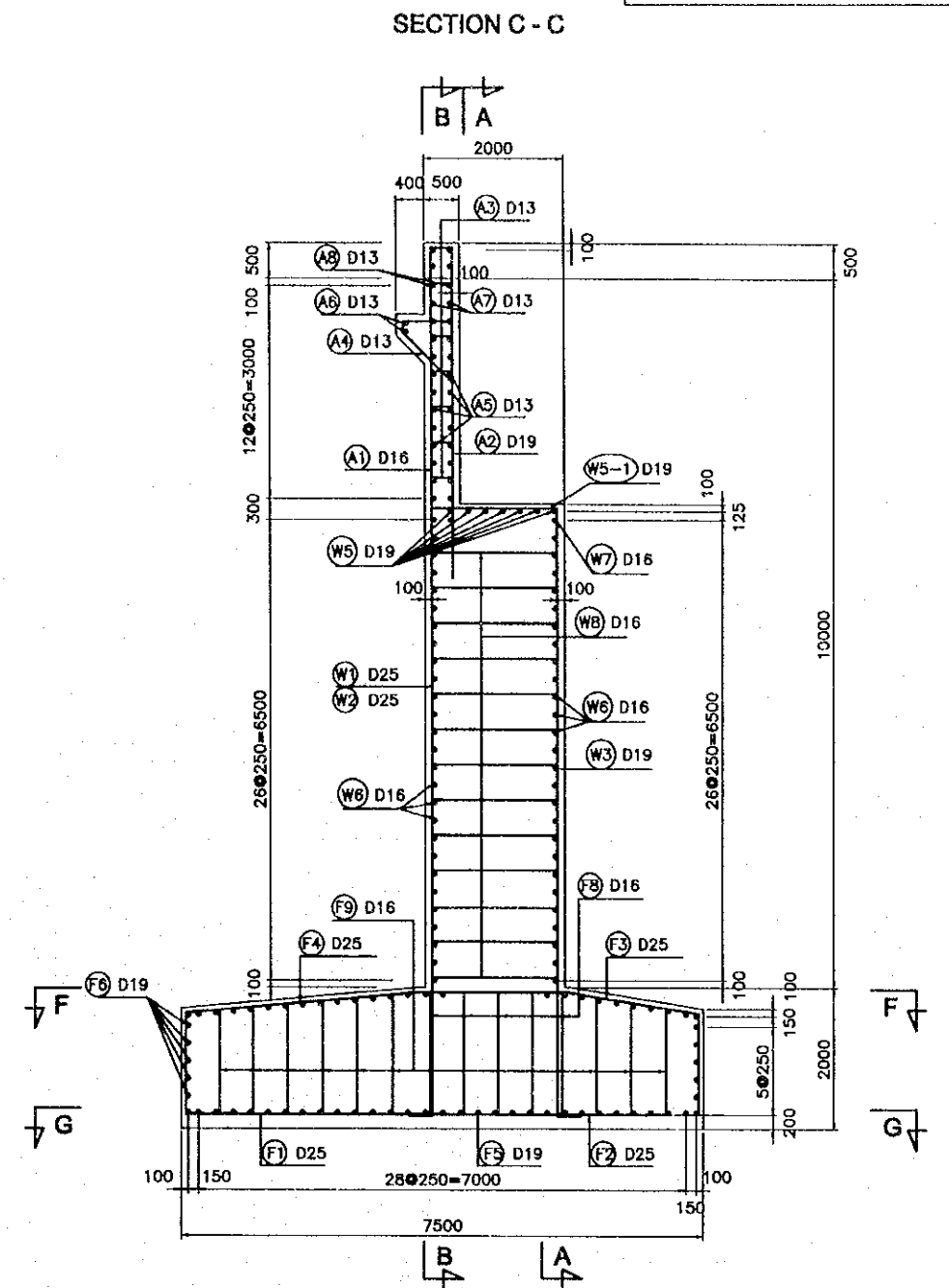
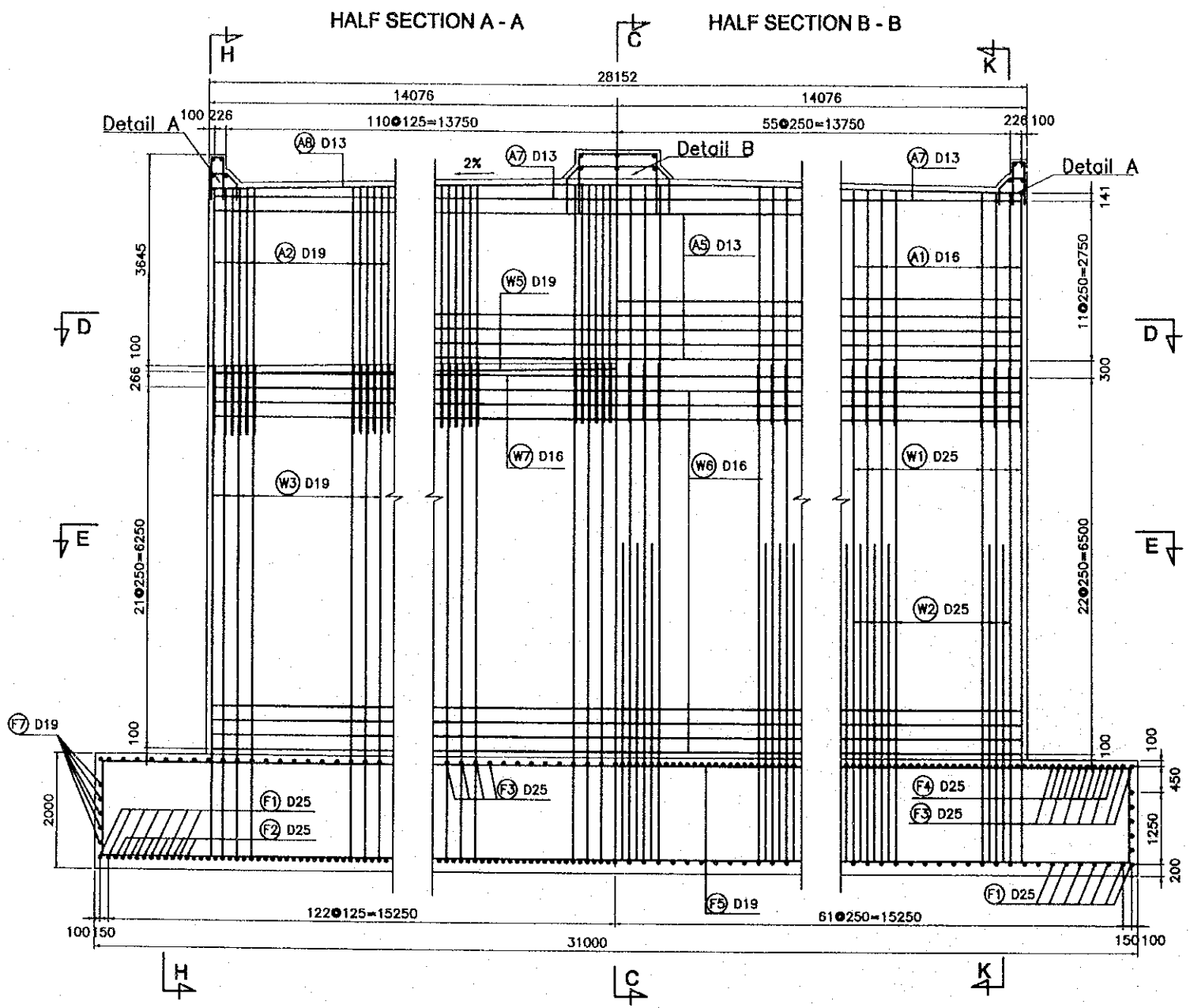
DETAIL - A

(SC = 1/ 25)



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.19	

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3d-3	
LINH NAM BRIDGE BAR ARRANGEMENT FOR ABUTMENT A1(1)			

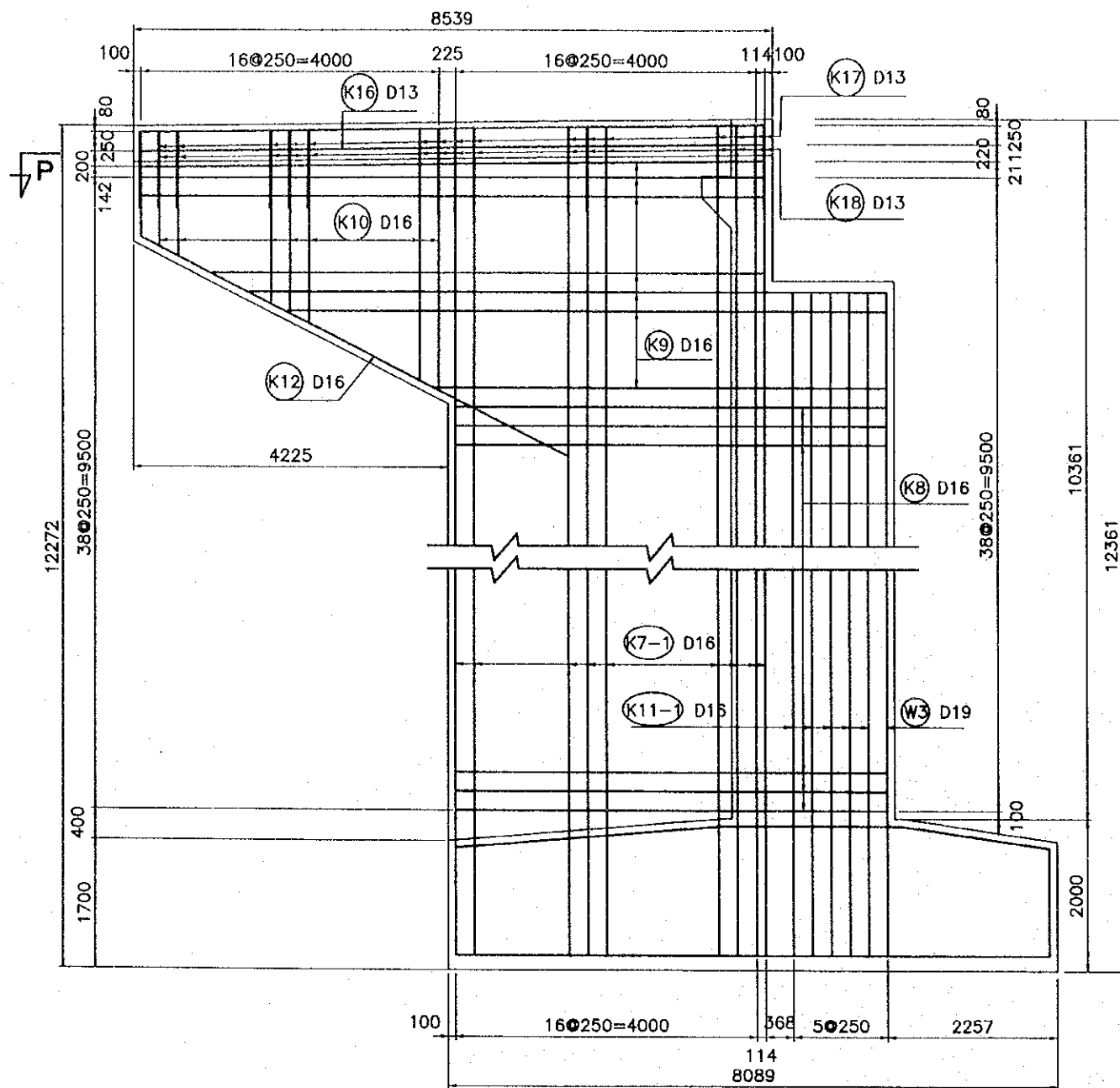


317

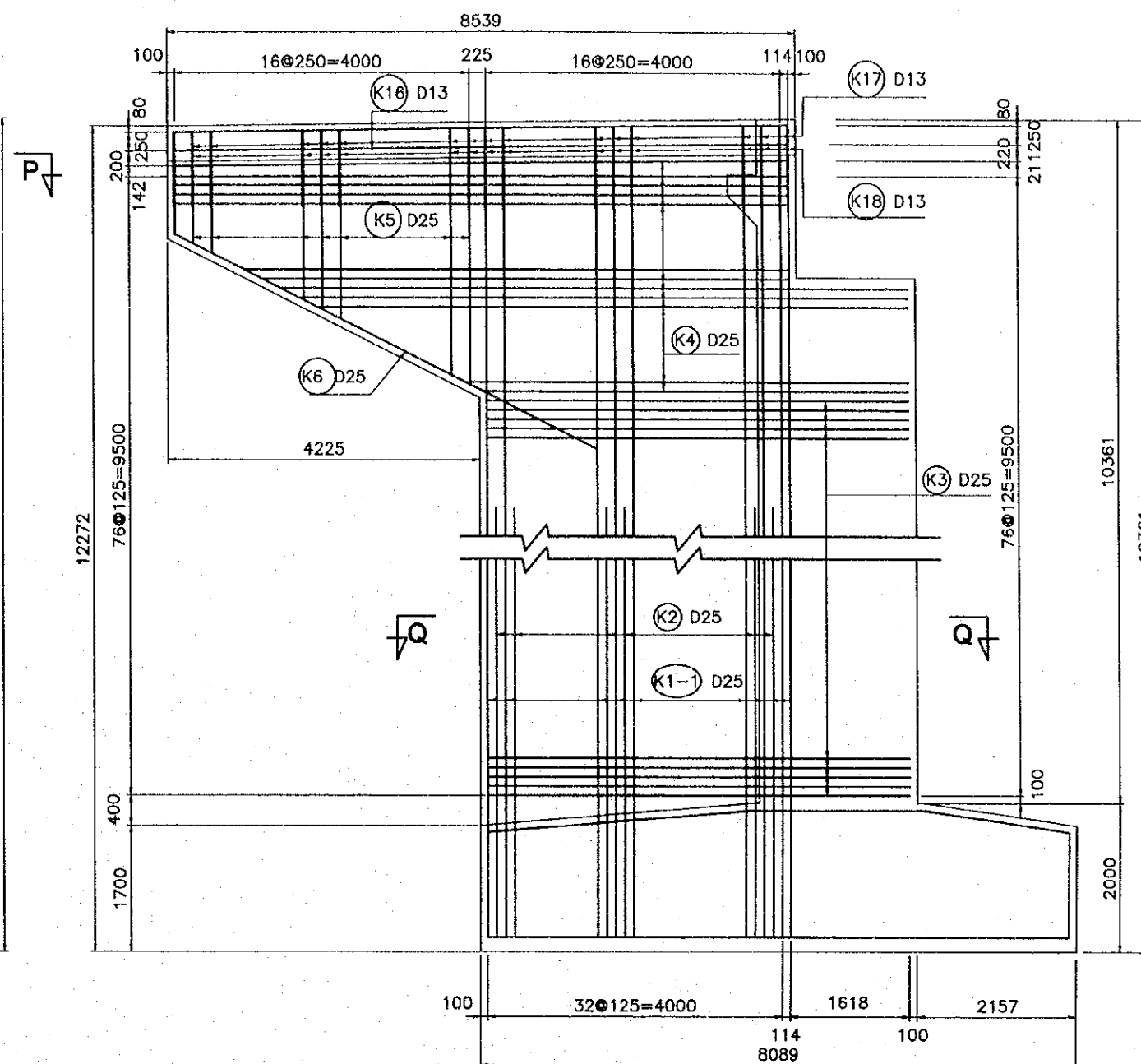
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.3.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3d-4	SHEET No.
LINH NAM BRIDGE BAR ARRANGMENT FOR ABUTMENT A1 (2)			

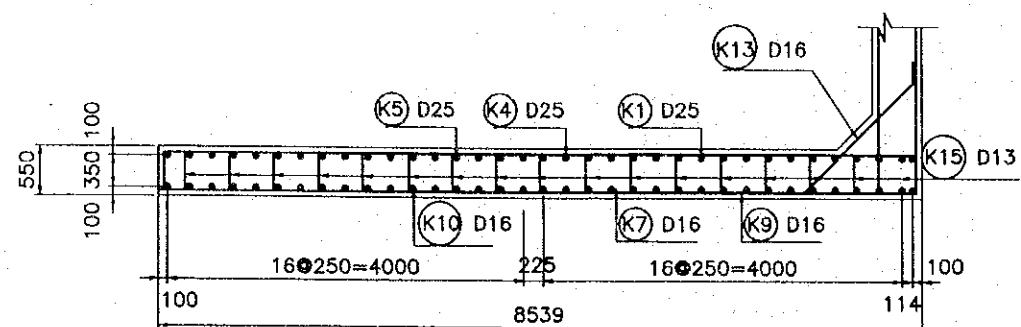
SECTION H - H



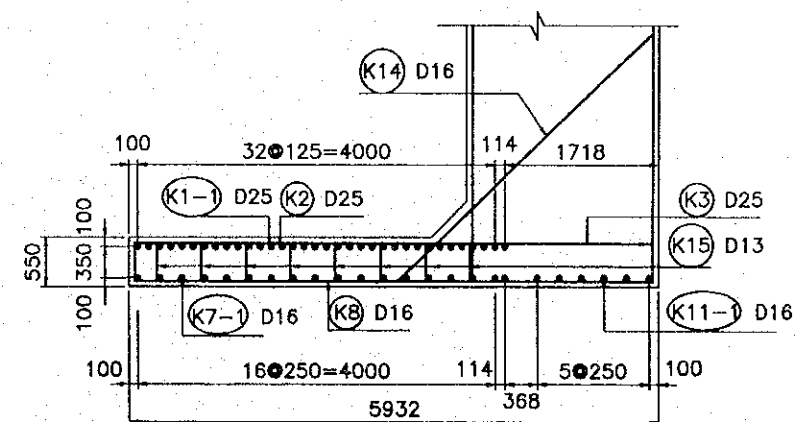
SECTION K - K



SECTION P - P



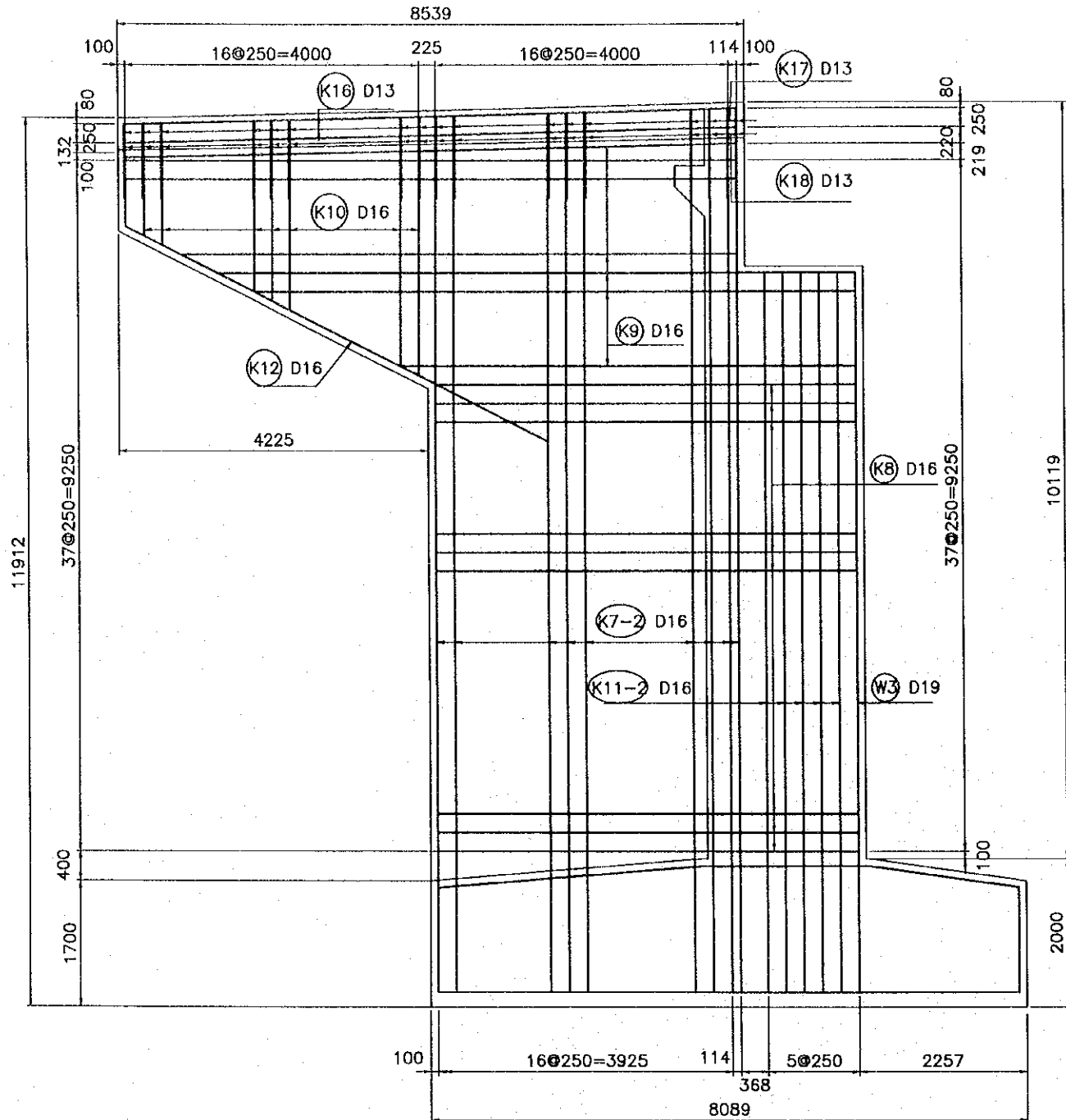
SECTION Q - Q



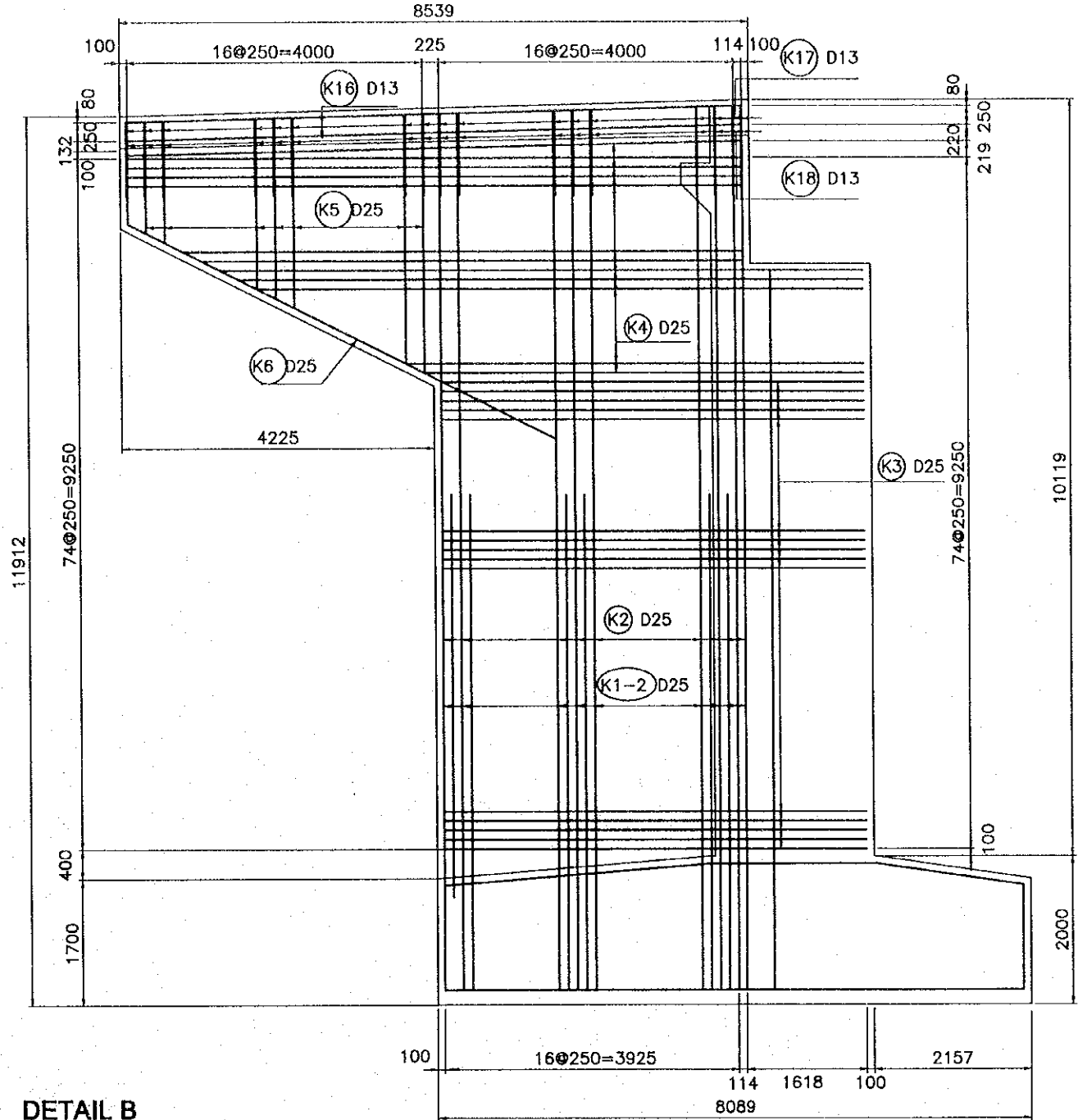
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.17

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3d-5	SHEET No.
LINH NAM BRIDGE BAR ARRANGEMENT FOR ABUTMENT A1 (3)			

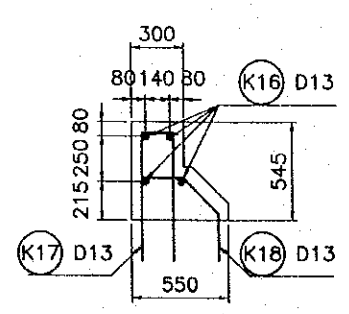
SECTION M - M



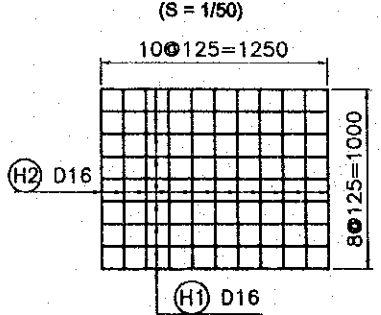
SECTION N - N



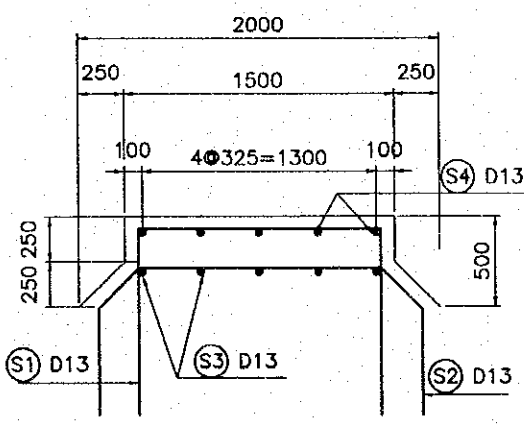
DETAIL A
(S = 1/50)



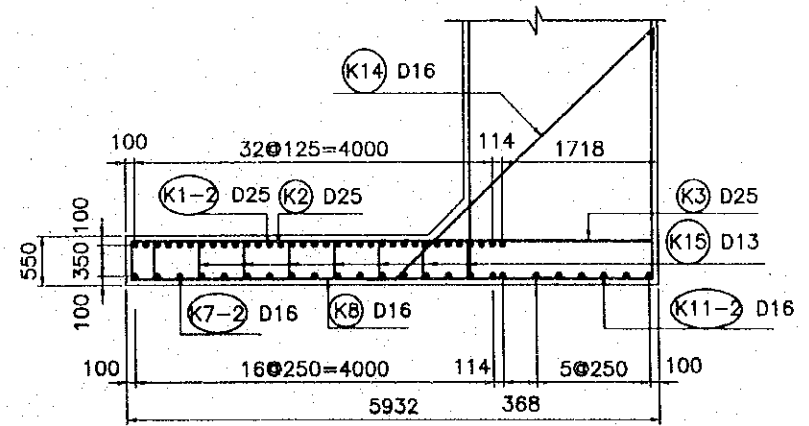
REI. BARS UNDER GROUND PAD
(S = 1/50)



DETAIL B
(S = 1/50)



SECTION X - X



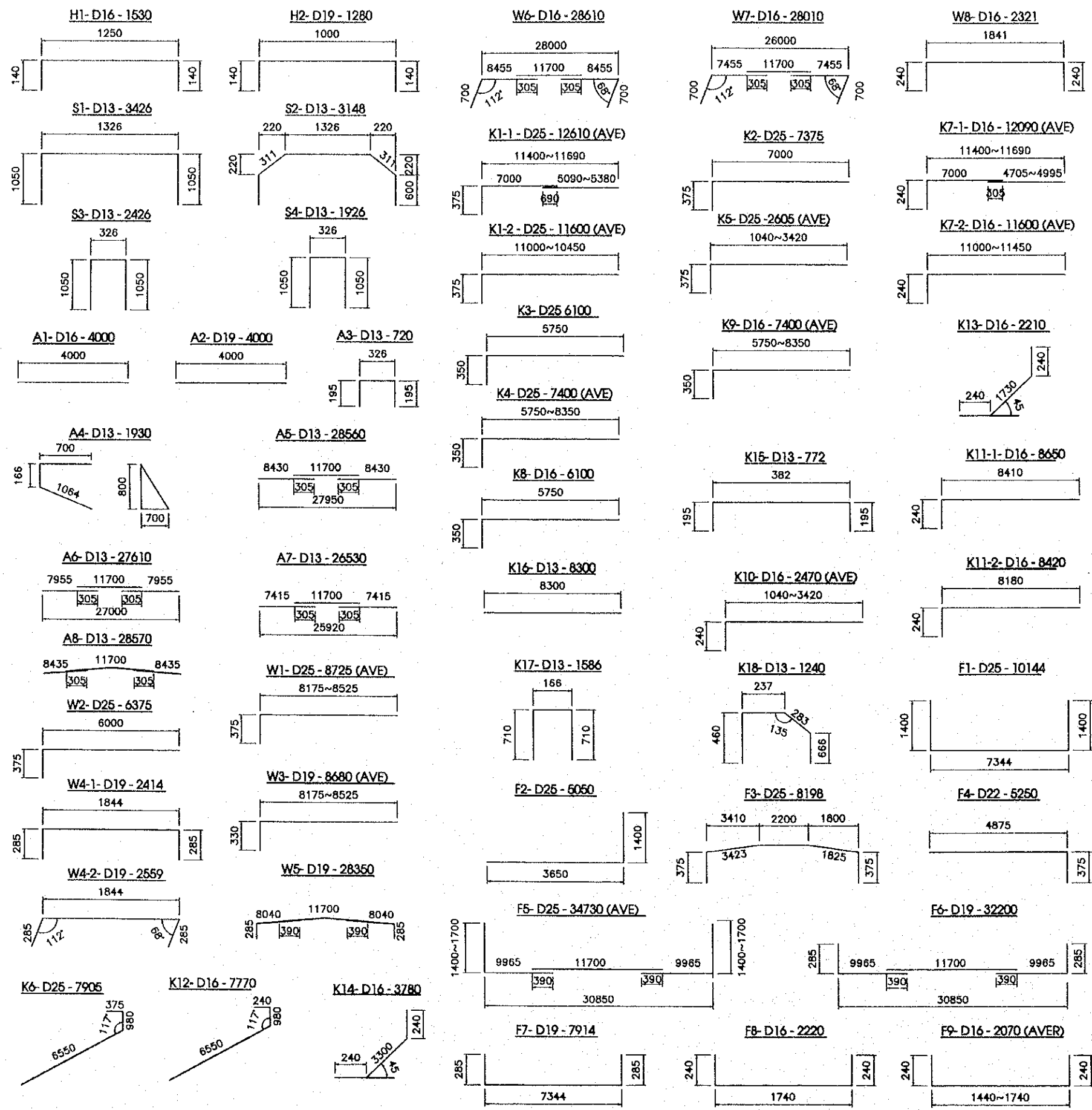
C18

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE 2000.03.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-1-3d-6	SHEET No.
LINH NAM BRIDGE BAR ARRANGMENT FOR ABUTMENT A1 (4)			

LIST OF REINFORCING BARS

QUANTITY REINFORCEMENT FOR ABUTMENT A1

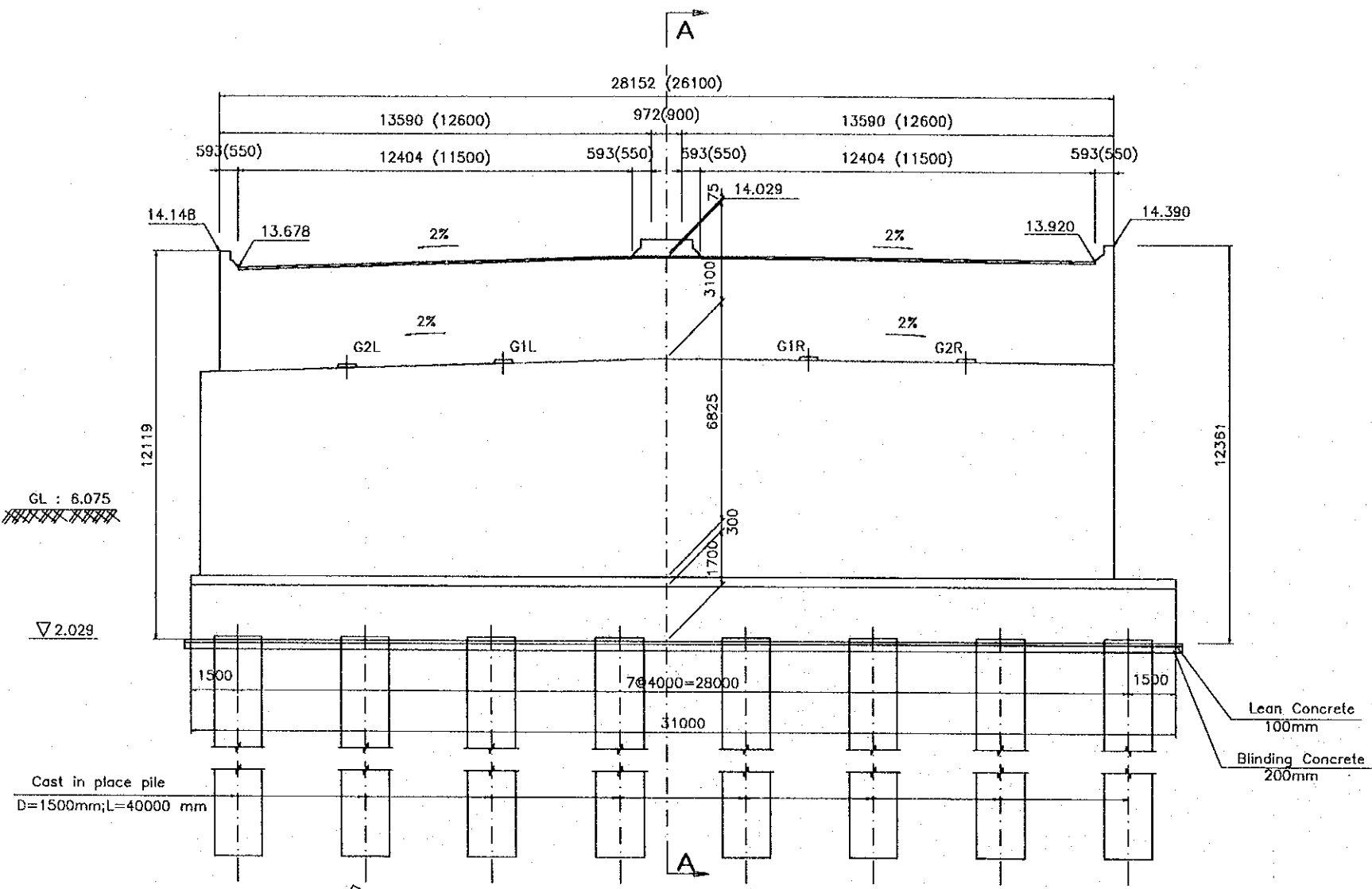


TYPE	SHAPE	DIAMETER		LENGTH	NUMBER	UNIT WEIGHT		WEIGHT	
		mm	mm			kg/m	kg		
H1	[Diagram]	D16	1530	36	1.560	85.92			
H2	[Diagram]	D16	1280	44	1.560	87.86			
S1	[Diagram]	D13	3426	2	0.995	6.82			
S2	[Diagram]	D13	3148	2	0.995	6.82			
S3	[Diagram]	D13	2426	5	0.995	12.07			
S4	[Diagram]	D13	1926	5	0.995	9.58			
A1	[Diagram]	D16	4000	113	1.560	705.12			
A2	[Diagram]	D19	4000	223	2.250	2007.00			
A3	[Diagram]	D13	720	660	0.995	472.82			
A4	[Diagram]	D13	1930	105	0.995	207.40			
A5	[Diagram]	D13	28560	24	0.995	682.01			
A6	[Diagram]	D13	27610	2	0.995	54.94			
A7	[Diagram]	D13	26530	2	0.995	52.79			
A8	[Diagram]	D13	28570	2	0.995	56.85			
W1	AVE [Diagram]	D25	8725	113	3.980	3923.98			
W2	[Diagram]	D25	7375	109	3.980	2765.60			
W3	AVE [Diagram]	D19	8680	113	2.250	2206.89			
W4-1	[Diagram]	D19	2414	113	2.250	613.76			
W4-2	[Diagram]	D19	2559	6	2.250	34.55			
W5	[Diagram]	D19	28350	6	2.250	382.73			
W6	[Diagram]	D16	28610	53	1.560	2365.47			
W7	[Diagram]	D16	28010	1	1.560	43.70			
W8	[Diagram]	D16	2321	364	1.560	1317.96			
K1-1	AVE [Diagram]	D25	12610	18	3.980	903.38			
K1-2	AVE [Diagram]	D25	11600	18	3.980	831.02			
K2	[Diagram]	D25	7375	30	3.980	880.58			
K3	[Diagram]	D25	6100	85	3.980	2063.63			
K4	AVE [Diagram]	D25	7400	70	3.980	2061.64			
K5	AVE [Diagram]	D25	2605	34	3.980	352.51			
K6	[Diagram]	D25	7905	2	3.980	62.92			
K7-1	AVE [Diagram]	D16	12090	18	1.560	339.49			
K7-2	AVE [Diagram]	D16	11465	18	1.560	321.94			
K8	[Diagram]	D16	6100	43	1.560	409.19			
K9	AVE [Diagram]	D16	7400	35	1.560	404.04			
K10	AVE [Diagram]	D16	2470	34	1.560	131.01			
K11-1	[Diagram]	D16	8650	5	1.560	67.47			
K11-2	[Diagram]	D16	8420	5	1.560	65.68			
K12	[Diagram]	D16	7770	2	1.560	24.24			
K13	[Diagram]	D16	2210	10	1.560	34.48			
K14	[Diagram]	D16	3780	58	1.560	342.01			
K15	[Diagram]	D13	772	300	0.995	230.44			
K16	[Diagram]	D13	8300	8	0.995	66.07			
K17	[Diagram]	D13	1586	68	0.995	107.31			
K18	[Diagram]	D13	1240	68	0.995	83.90			
F1	[Diagram]	D25	10144	125	3.980	5046.64			
F2	[Diagram]	D25	5050	121	3.980	2431.98			
F3	[Diagram]	D25	8198	125	3.980	4078.51			
F4	[Diagram]	D25	5250	121	3.980	2528.30			
F5	AVE [Diagram]	D19	34730	57	2.250	4454.12			
F6	[Diagram]	D19	32200	10	2.250	724.50			
F7	[Diagram]	D19	7914	10	2.250	178.07			
F8	[Diagram]	D16	2220	117	1.560	612.99			
F9	AVE [Diagram]	D16	2070	649	1.560	2095.75			
TOTAL ABUTMENT A1									
		D25		27930.68	Kg				
		D19		10601.61	Kg				
		D16		9454.31	Kg				
		D13		2049.28	Kg				

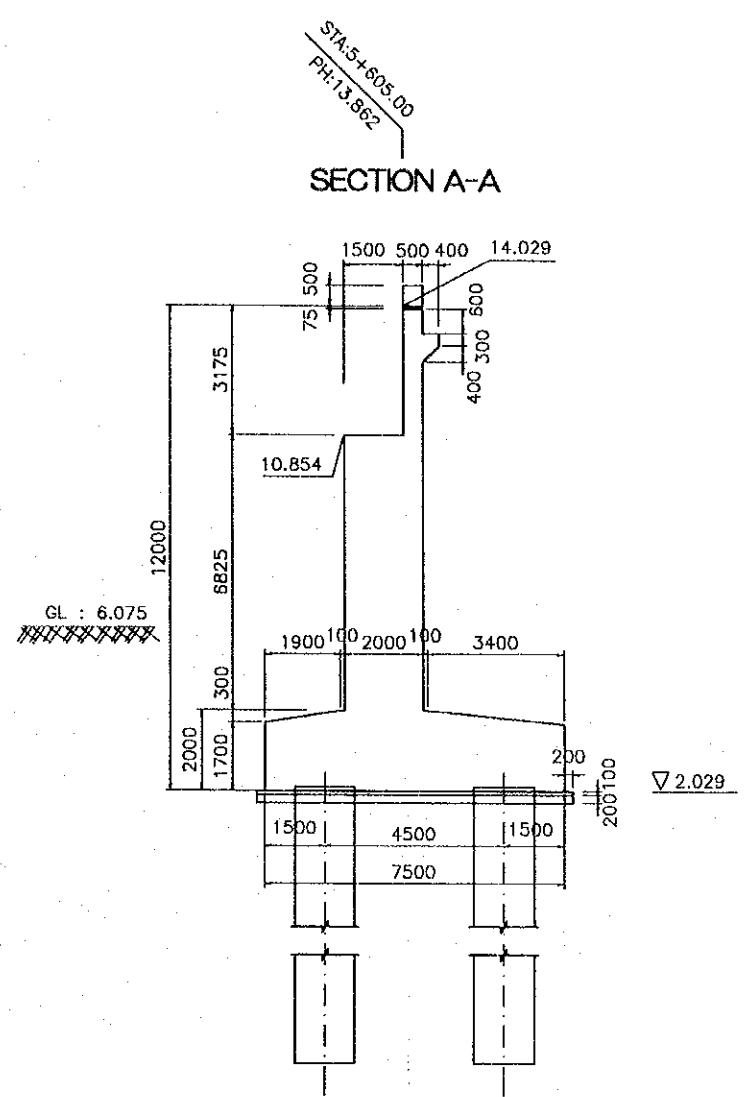
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANG LOAN PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2002.6.1

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3d-7	SHEET No.
LINH NAM BRIDGE - DETAIL OF ABUTMENT A2 (1)			

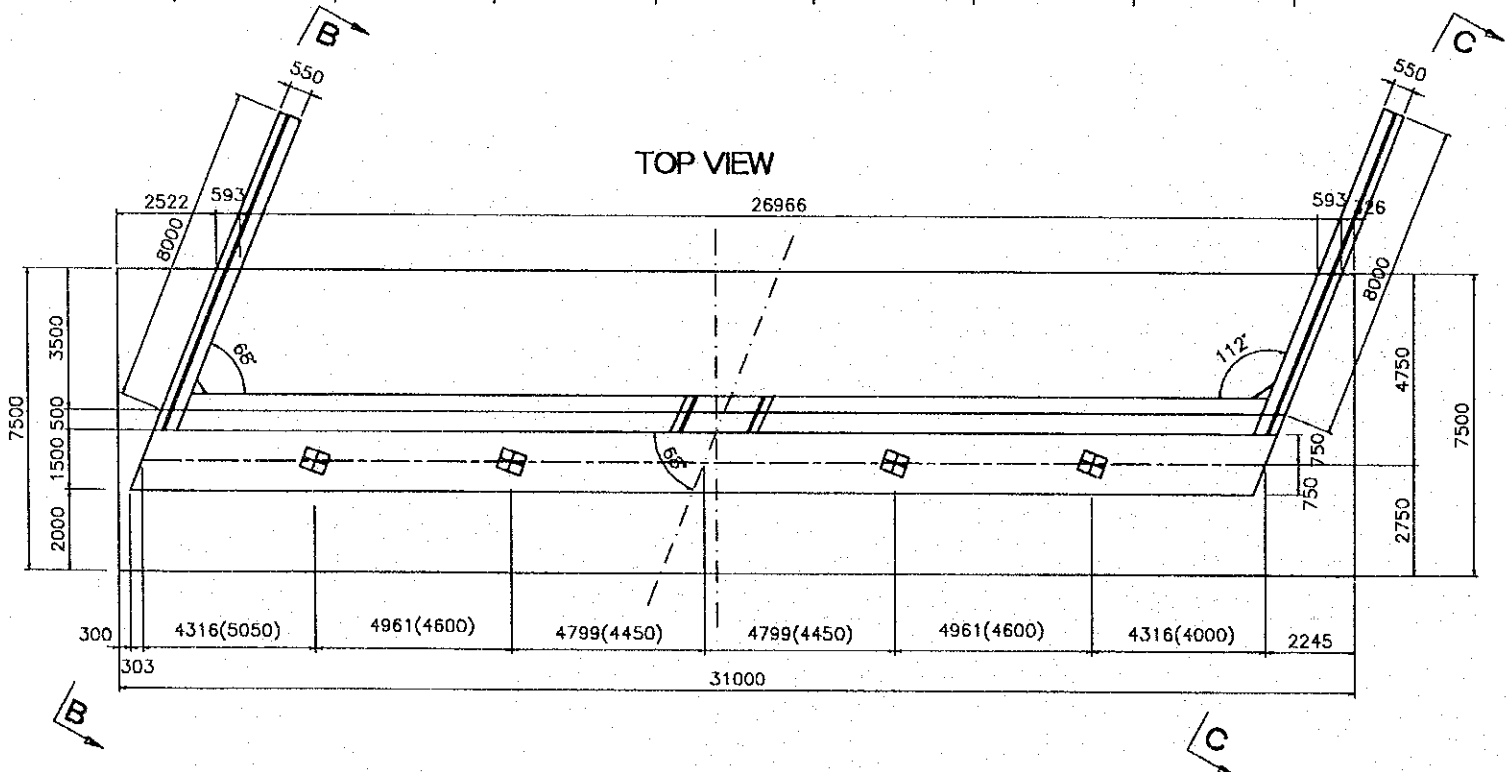
FRONT VIEW



SECTION A-A



TOP VIEW



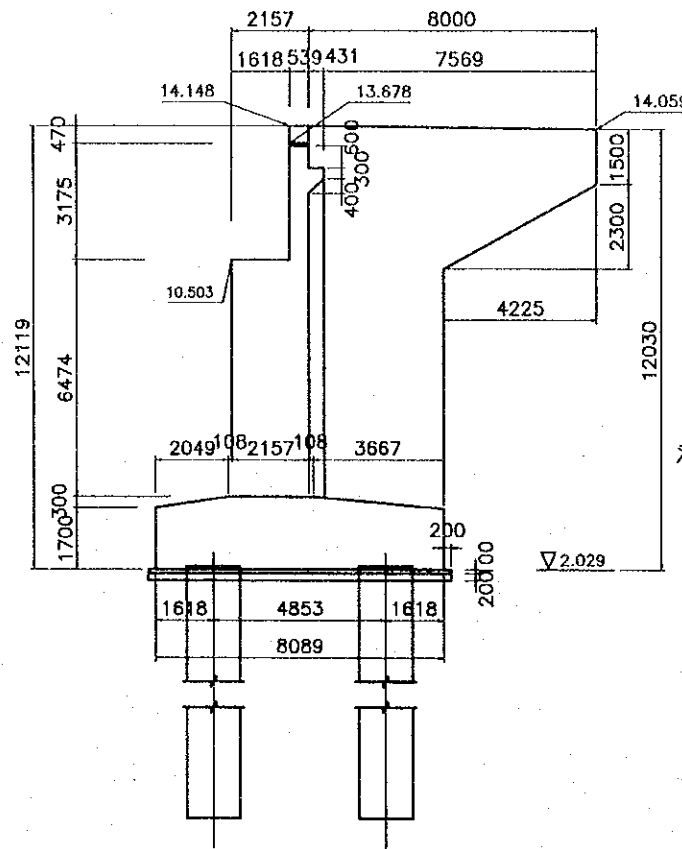
DEPTH OF SUPERSTRUCTURE

Component	Depth(mm)
Gradient	150
AC Layer	75
Girder	2750
Mortar1	25
Shoe(F)	145
Mortar2	30
Total	3175

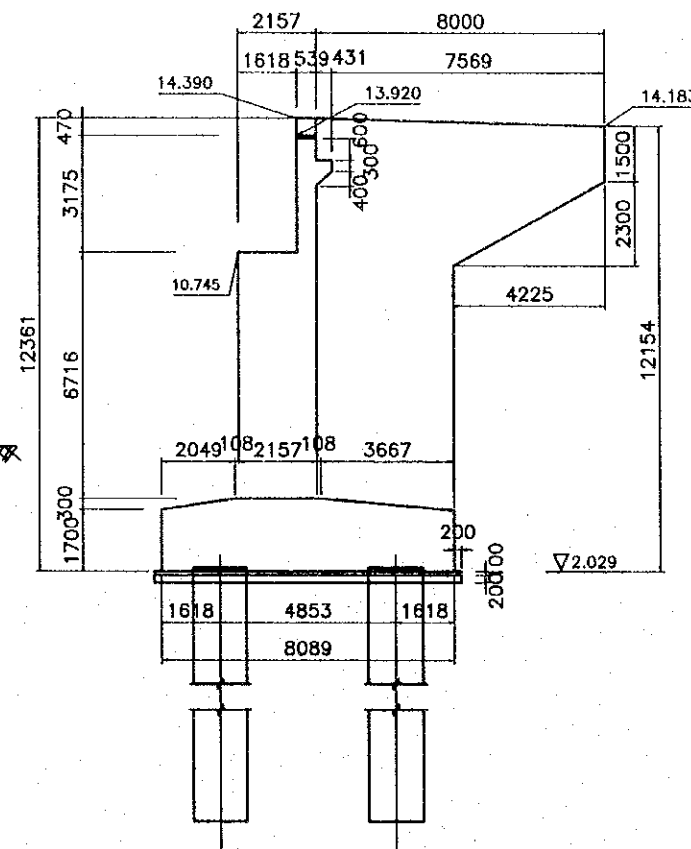
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 28.03.17	

PACKAGE 3	SCALE 1/200	DRAWING No. C-1-3d-8	SHEET No.
LINH NAM BRIDGE - DETAIL OF ABUTMENT A2 (2)			

SECTION B-B

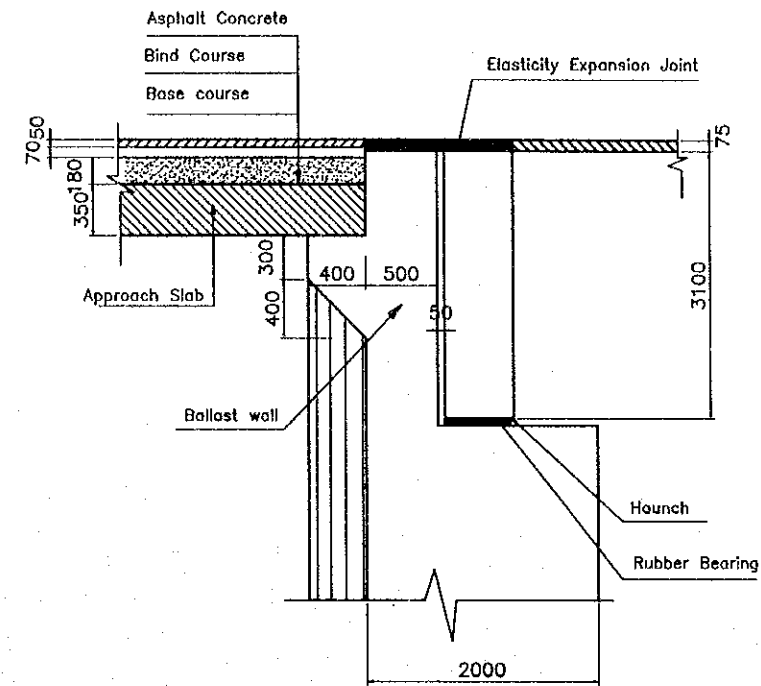


SECTION C-C



DETAIL OF BALLAST WALL

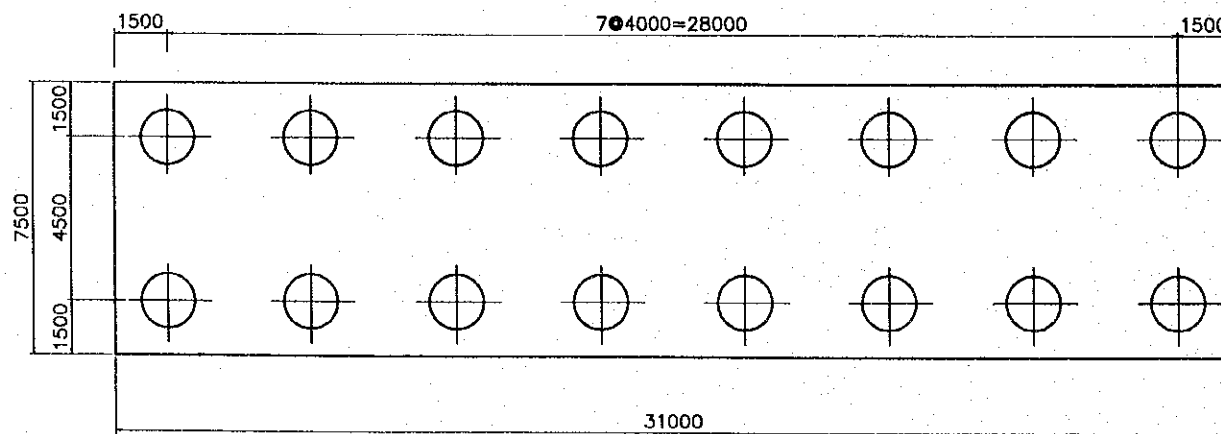
(SC = 1/50)



ELEVATION OF TOP BEARING SEAT

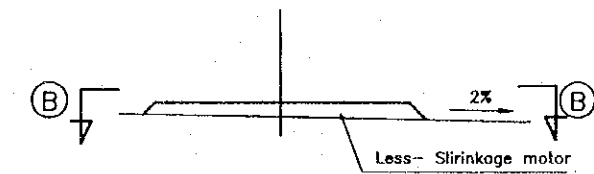
Left seat	G1L (m)	G2L (m)
Elevation	10.979	10.850
Right seat	G1R (m)	G2R (m)
Elevation	11.051	10.998

PILE ARRANGEMENT



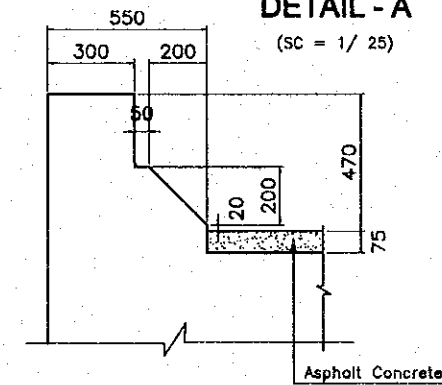
GIRDER BEARING SEAT DETAIL

(SC = 1/25)

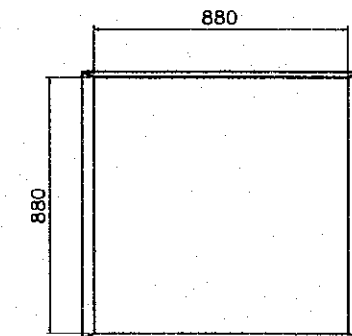


DETAIL - A

(SC = 1/25)



SECTION B-B

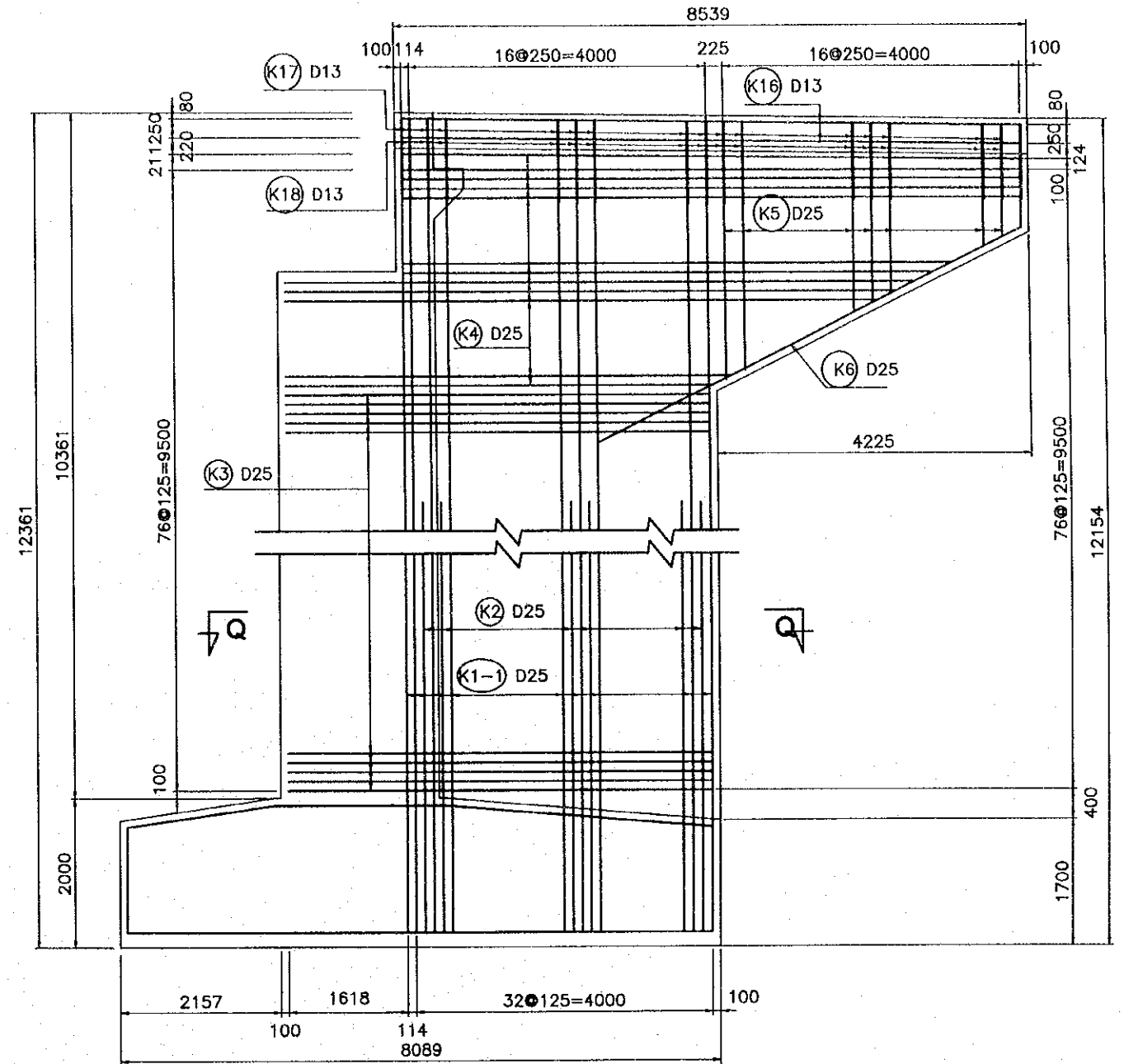
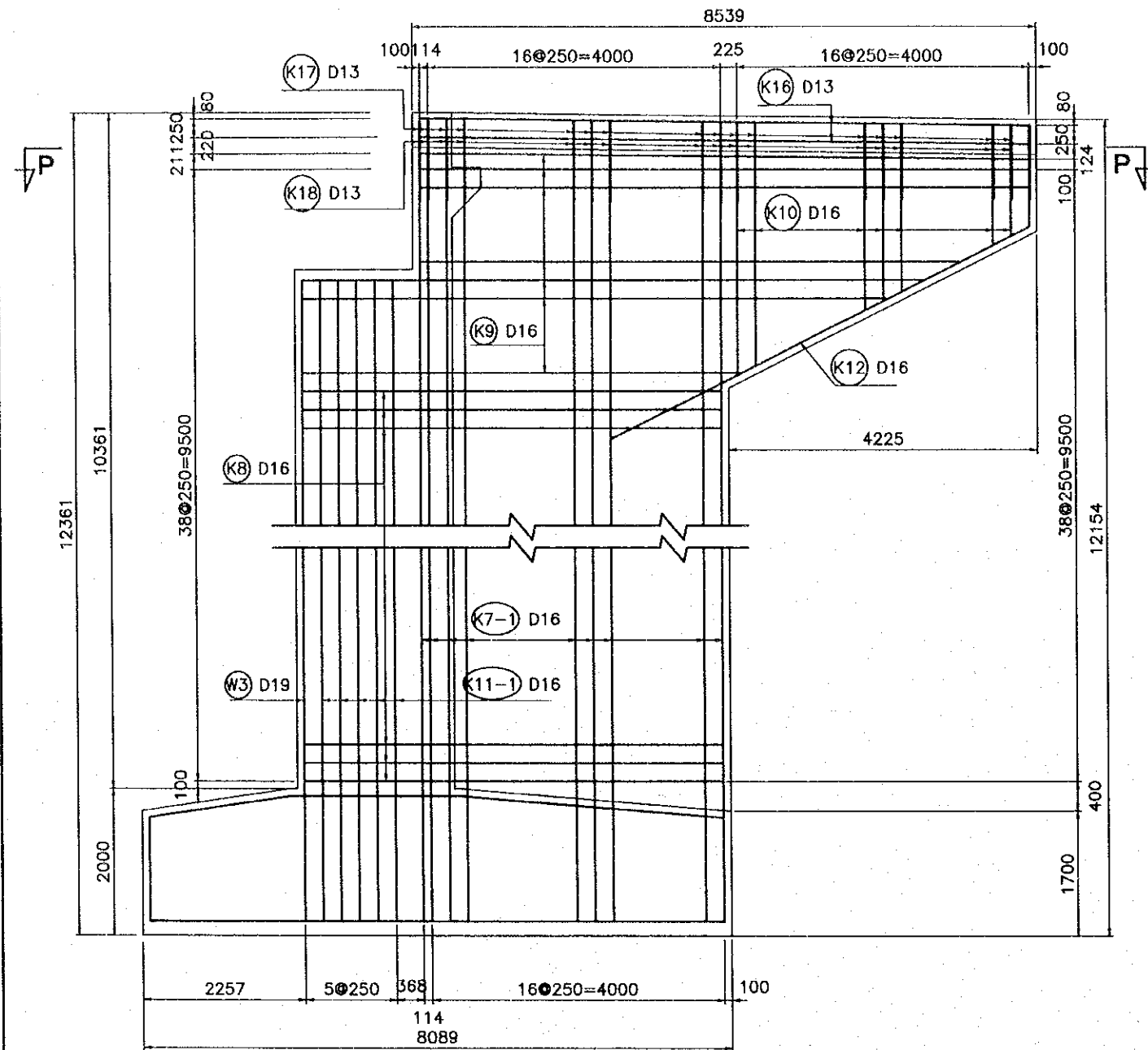


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.WATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.03.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/100	DRAWING No. C-1-3d-10	SHEET No.
LINH NAM BRIDGE BAR ARRANGMENT FOR ADJUTMENT A2 (2)			

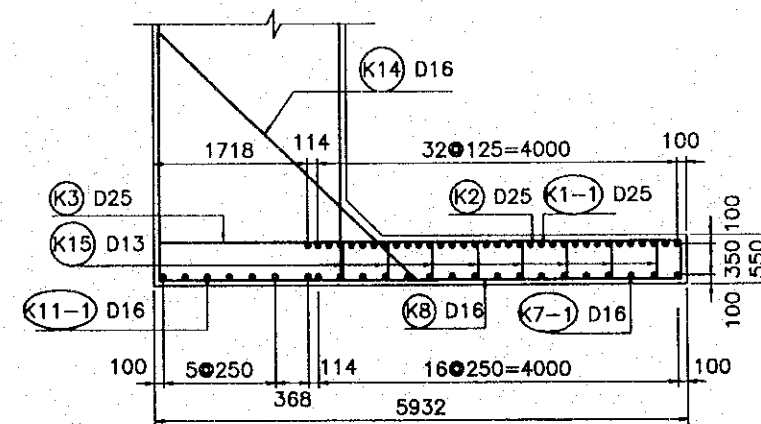
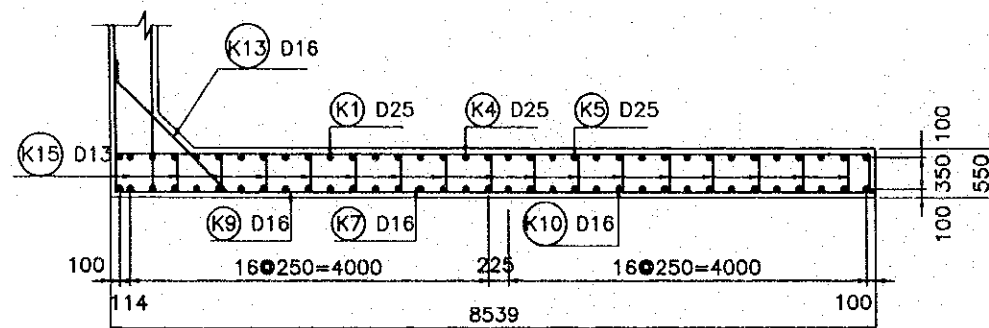
SECTION H - H

SECTION K - K



SECTION P - P

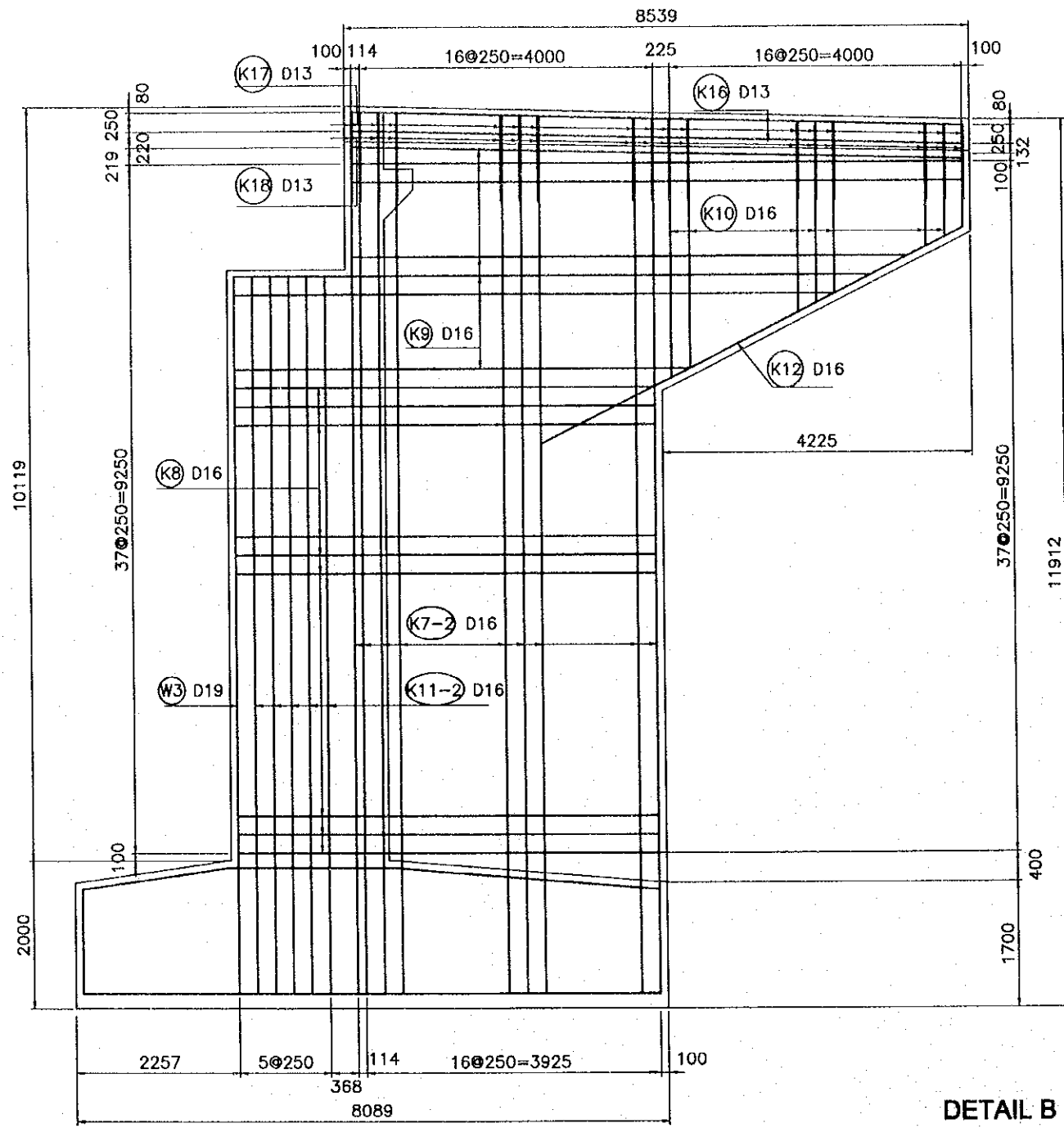
SECTION Q - Q



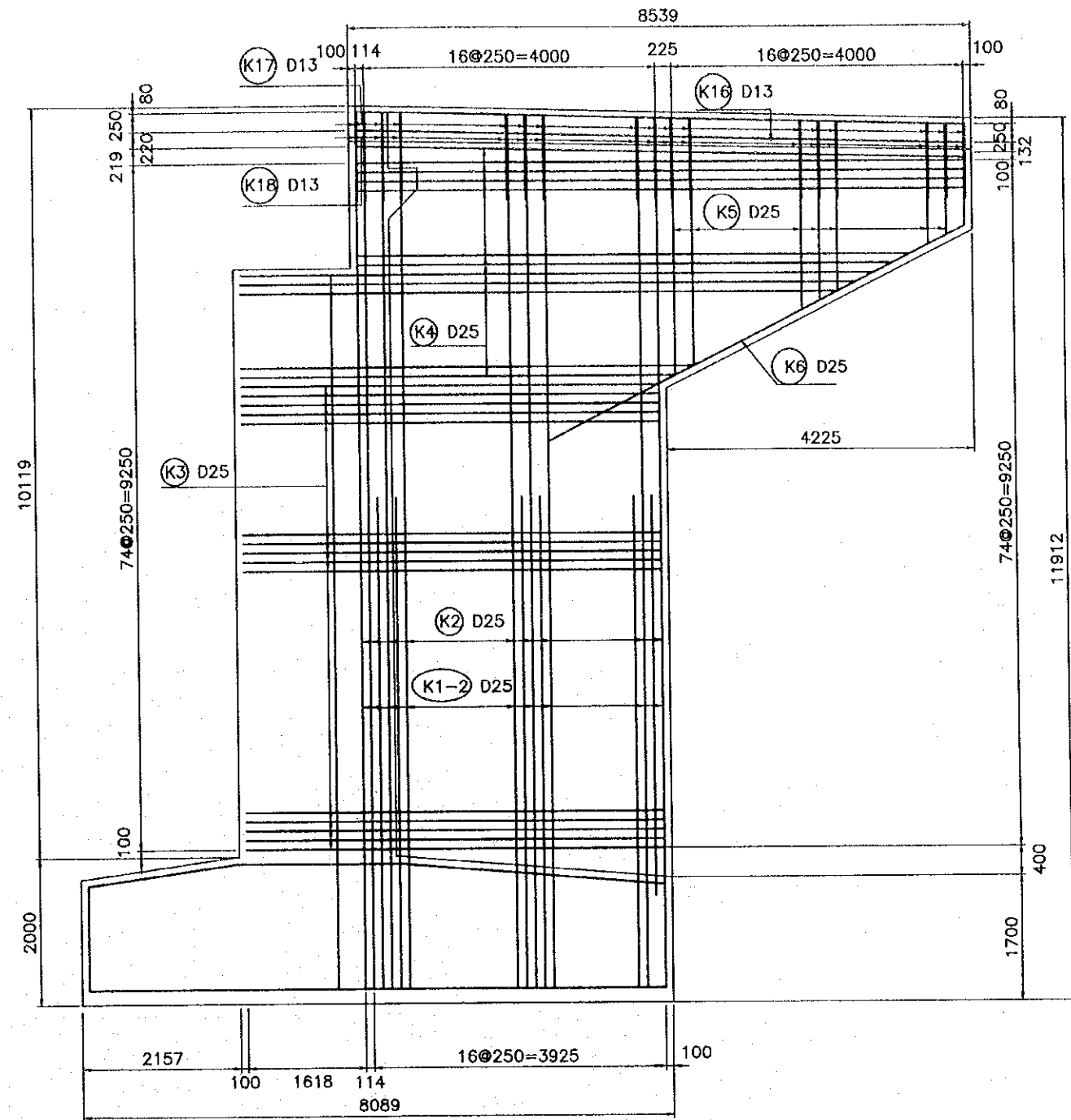
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.14	

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-1-3d-11	
LINH NAM BRIDGE BAR ARRANGMENT FOR ABUTMENT A2 (3)			

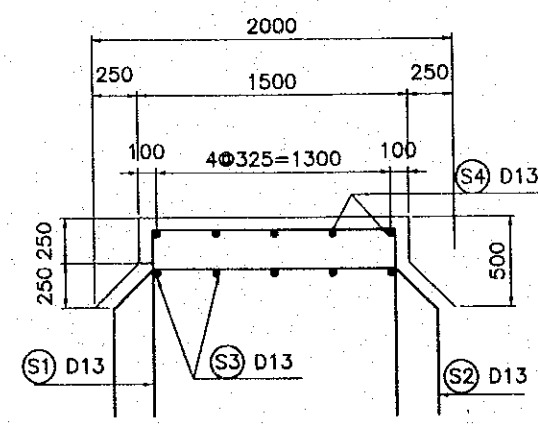
SECTION M - M



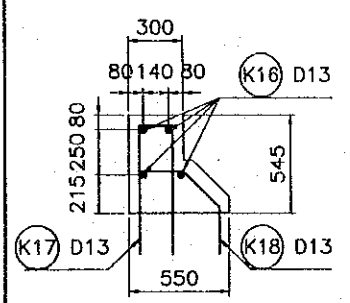
SECTION N - N



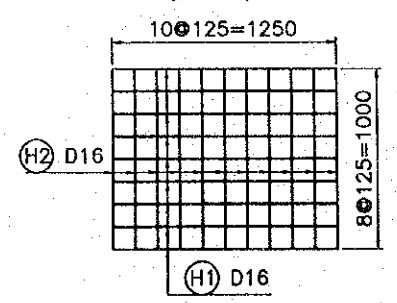
DETAIL B
(S = 1/50)



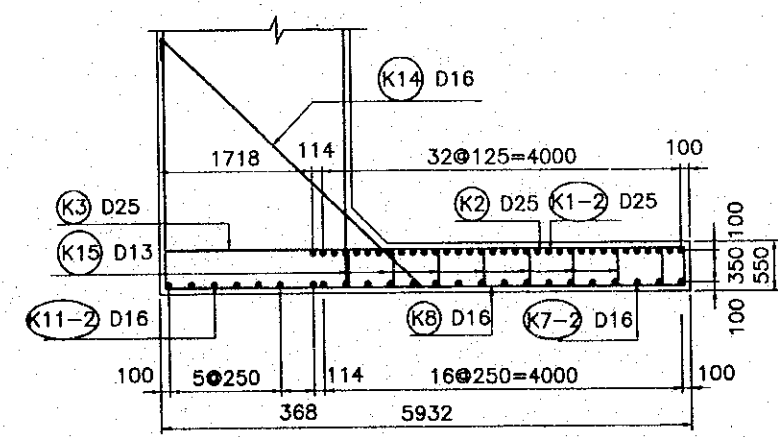
DETAIL A
(S = 1/50)



REI. BARS UNDER GROUND PAD
(S = 1/50)



SECTION X - X

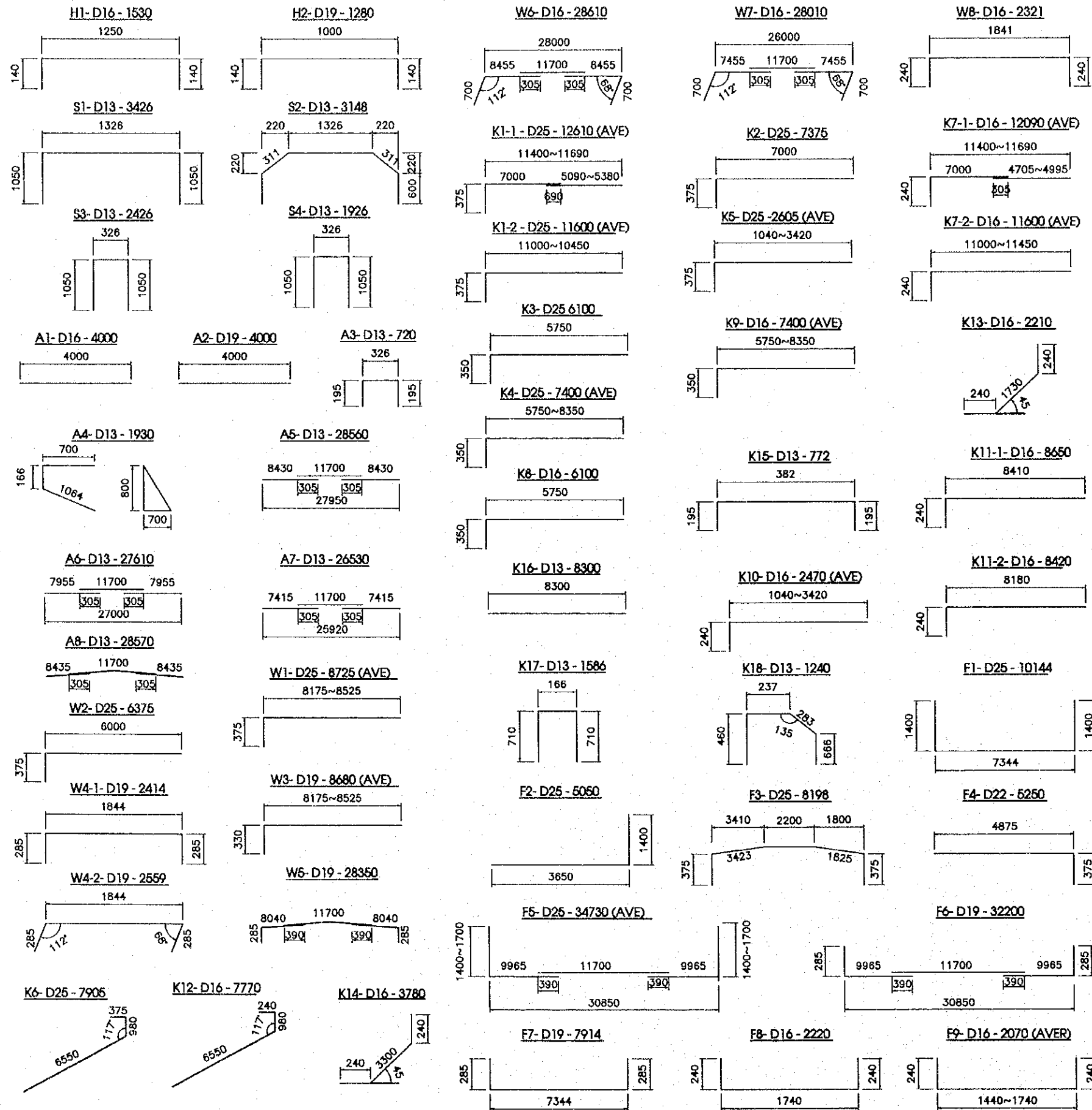


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.WATASE	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE	<i>[Signature]</i>
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE	2000.3.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-3d-12	
LINH NAM BRIDGE BAR ARRANGMENT FOR ABUTMENT A2 (4)			

LIST OF REINFORCING BARS

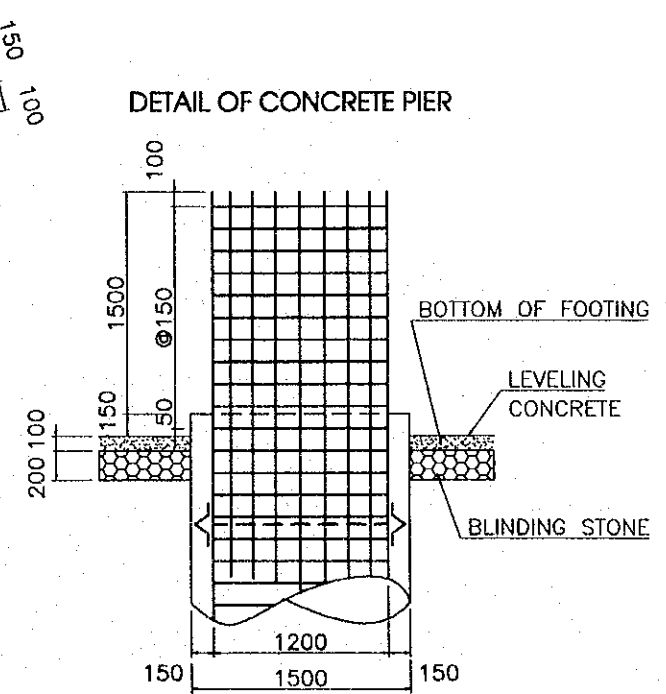
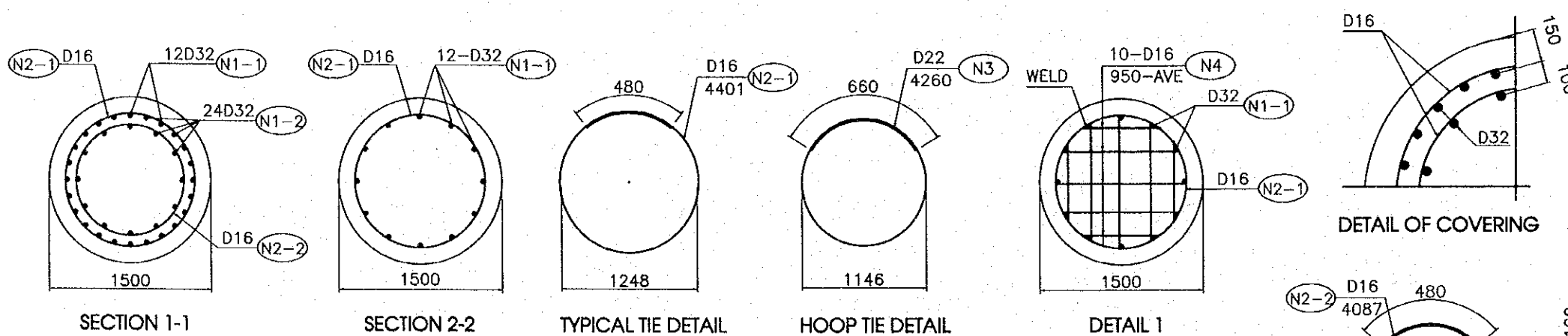
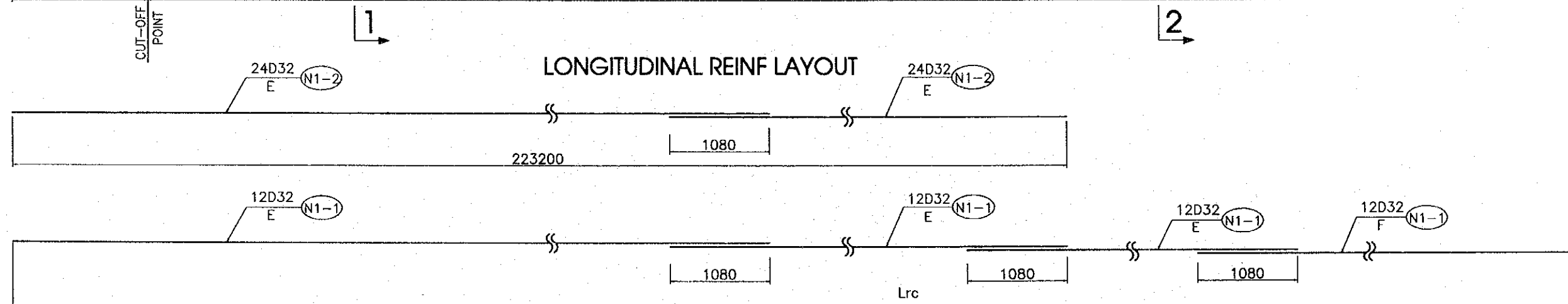
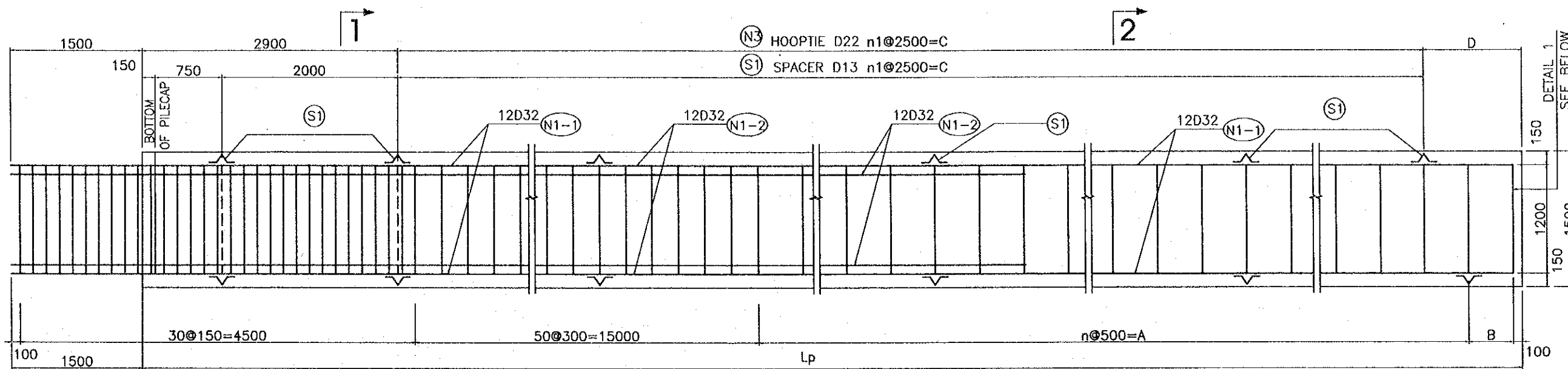
QUANTITY REINFORCEMENT FOR ABUTMENT A2



TYPE	SHAPE	DIAMETER	LENGTH	NUMBER	UNIT WEIGHT	WEIGHT
		mm	mm		kg/m	kg
H1	[Diagram]	D16	1530	36	1.560	85.92
H2	[Diagram]	D16	1280	44	1.560	87.86
S1	[Diagram]	D13	3426	2	0.995	6.82
S2	[Diagram]	D13	3148	2	0.995	6.82
S3	[Diagram]	D13	2426	5	0.995	12.07
S4	[Diagram]	D13	1926	5	0.995	9.58
A1	[Diagram]	D16	4000	113	1.560	705.12
A2	[Diagram]	D19	4000	223	2.250	2007.00
A3	[Diagram]	D13	720	660	0.995	472.82
A4	[Diagram]	D13	1930	105	0.995	207.40
A5	[Diagram]	D13	28560	24	0.995	682.01
A6	[Diagram]	D13	27610	2	0.995	54.94
A7	[Diagram]	D13	26530	2	0.995	52.79
A8	[Diagram]	D13	28570	2	0.995	56.85
W1	AVE [Diagram]	D25	8725	113	3.980	3923.98
W2	[Diagram]	D25	7375	109	3.980	2765.60
W3	AVE [Diagram]	D19	8680	113	2.250	2206.89
W4-1	[Diagram]	D19	2414	113	2.250	613.76
W4-2	[Diagram]	D19	2559	6	2.250	34.55
W5	[Diagram]	D19	28350	6	2.250	382.73
W6	[Diagram]	D16	28610	53	1.560	2365.47
W7	[Diagram]	D16	28010	1	1.560	43.70
W8	[Diagram]	D16	2321	364	1.560	1317.96
K1-1	AVE [Diagram]	D25	12610	18	3.980	903.38
K1-2	AVE [Diagram]	D25	11600	18	3.980	831.02
K2	[Diagram]	D25	7375	30	3.980	880.58
K3	[Diagram]	D25	6100	85	3.980	2063.63
K4	AVE [Diagram]	D25	7400	70	3.980	2061.64
K5	AVE [Diagram]	D25	2605	34	3.980	352.51
K6	[Diagram]	D25	7905	2	3.980	62.92
K7-1	AVE [Diagram]	D16	12090	18	1.560	339.49
K7-2	AVE [Diagram]	D16	11465	18	1.560	321.94
K8	[Diagram]	D16	6100	43	1.560	409.19
K9	AVE [Diagram]	D16	7400	35	1.560	404.04
K10	AVE [Diagram]	D16	2470	34	1.560	131.01
K11-1	[Diagram]	D16	8650	5	1.560	67.47
K11-2	[Diagram]	D16	8420	5	1.560	65.68
K12	[Diagram]	D16	7770	2	1.560	24.24
K13	[Diagram]	D16	2210	10	1.560	34.48
K14	[Diagram]	D16	3780	58	1.560	342.01
K15	[Diagram]	D13	772	300	0.995	230.44
K16	[Diagram]	D13	8300	8	0.995	66.07
K17	[Diagram]	D13	1586	68	0.995	107.31
K18	[Diagram]	D13	1240	68	0.995	83.90
F1	[Diagram]	D25	10144	125	3.980	5046.64
F2	[Diagram]	D25	5050	121	3.980	2431.98
F3	[Diagram]	D25	8198	125	3.980	4078.51
F4	[Diagram]	D25	5250	121	3.980	2528.30
F5	AVE [Diagram]	D19	34730	57	2.250	4454.12
F6	[Diagram]	D19	32200	10	2.250	724.50
F7	[Diagram]	D19	7914	10	2.250	178.07
F8	[Diagram]	D16	2220	117	1.560	612.99
F9	AVE [Diagram]	D16	2070	649	1.560	2095.75
TOTAL ABUTMENT A2						
		D25		27930.68	Kg	
		D19		10801.61	Kg	
		D16		9454.31	Kg	
		D13		2049.28	Kg	

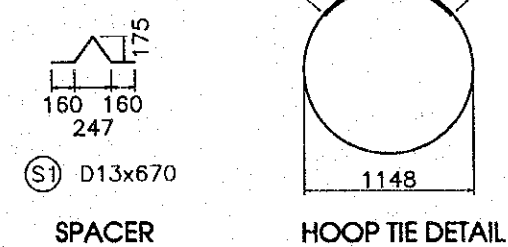
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.19

PACKAGE 3	SCALE 1/50	DRAWING No. C-1-3d-13	SHEET No.
LINH NAM BRIDGE DETAIL OF D=150CM CAST-IN-PLACE CONCRETE PILE(1)			



DIMENSIONS OF PILE

Pile	Dimensions of pile						Dimensions of bar N1					N1-2 Total(mm)
	Lp(mm)	A(mm)	B(mm)	C(mm)	D(mm)	n	n1	Lrc(mm)	E(mm)	F(mm)	Total(mm)	
A1	40000	21500	300	35000	2600	43	14	41400	11700	9540	44640	23400
A2	40000	21500	300	35000	2600	43	14	41400	11700	9540	44640	23400



327

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. WATABE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 3. 19

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-1-3d-14	
LINH NAM BRIDGE			
DETAIL OF D=150CM CAST-IN-PLACE CONCRETE PILE(2)			

LINH NAM BRIDGE

DETAIL OF D=150 CM CAST-IN-PLACE CONCRETE PILE (2)

QUANTITY MATERIAL OF PILE FOR ABUTMENT A1 (PER 1 PILE)

TYPE	SHAPE	DIAMETER	LENGTH	NUMBER	UNIT WEIGHT	WEIGHT
		mm	mm		kg/m	kg
N1-1	—————	D32	44640	12	6.230	3337.29
N1-2	—————	D32	23400	24	6.230	3498.77
N2-1	○	D16	4401	124	1.560	851.33
N2-2	○	D16	4087	89	1.560	567.44
N3	○	D22	4260	16	3.040	207.21
N4	AVE —————	D16	950	10	1.560	14.82
S1	∧	D13	670	64	0.995	42.67
Total Abutment A1						8519.51
					D32	6836.05 Kg
					D22	207.21 Kg
					D16	1433.59 Kg
					D13	42.67 Kg
Concrete Volume (m3)						70.69

QUANTITY MATERIAL OF PILE FOR ABUTMENT A2 (PER 1 PILE)

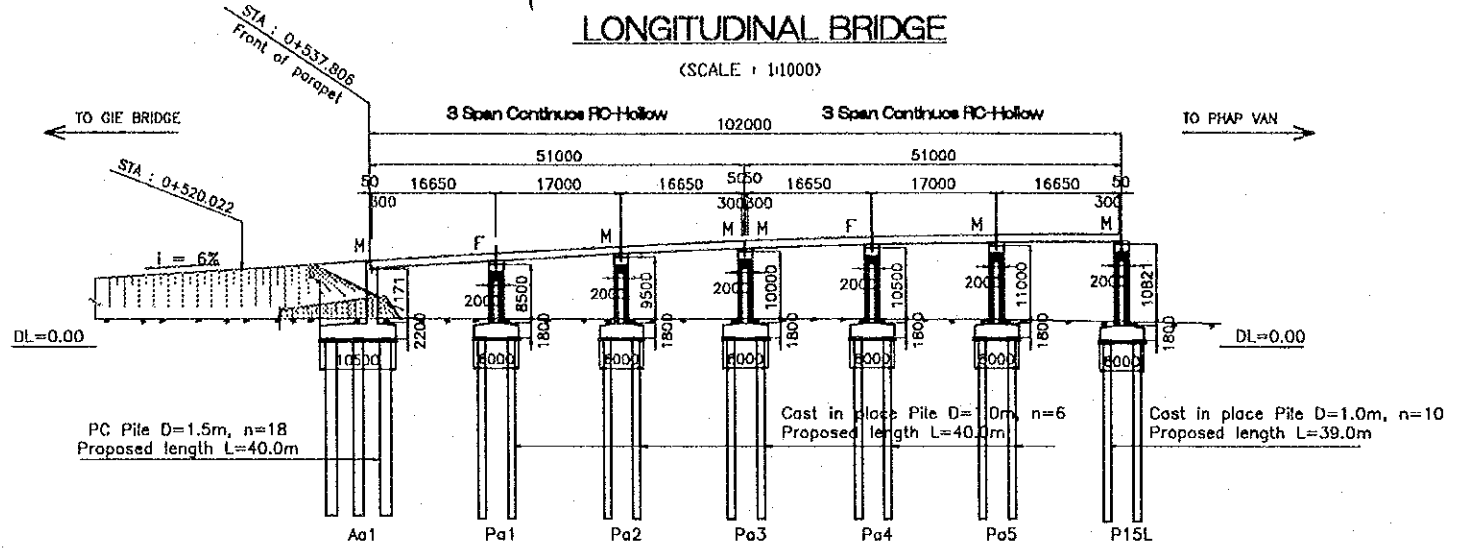
TYPE	SHAPE	DIAMETER	LENGTH	NUMBER	UNIT WEIGHT	WEIGHT
		mm	mm		kg/m	kg
N1-1	—————	D32	44640	12	6.230	3337.29
N1-2	—————	D32	23400	24	6.230	3498.77
N2-1	○	D16	4401	124	1.560	851.33
N2-2	○	D16	4087	89	1.560	567.44
N3	○	D22	4260	16	3.040	207.21
N4	AVE —————	D16	950	10	1.560	14.82
S1	∧	D13	670	64	0.995	42.67
Total Abutment A2						8519.51
					D32	6836.05 Kg
					D22	207.21 Kg
					D16	1433.59 Kg
					D13	42.67 Kg
Concrete Volume (m3)						70.69

C-2 RAMP BRIDGE

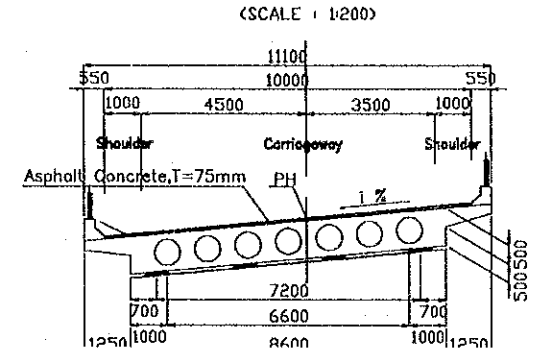
C-2-1 GENERAL VIEW

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. MATSUE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. MATSUE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.6.1

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-2-1-1	
GENERAL VIEW OF A-RAMP BRIDGE			



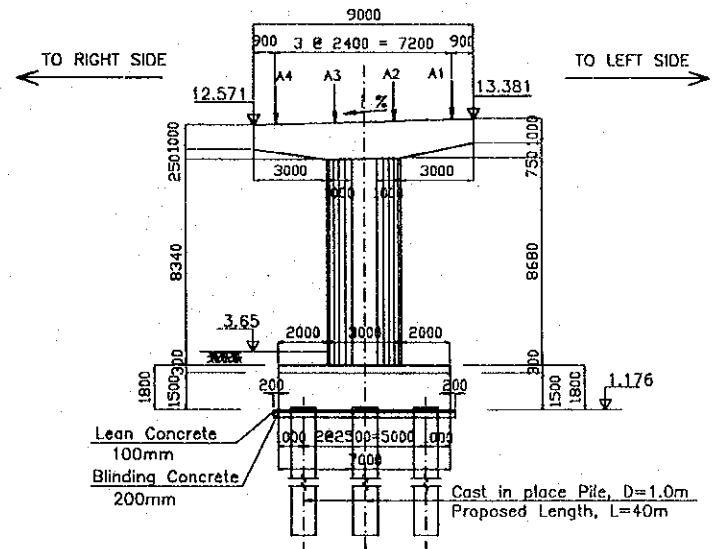
TYPICAL CROSS SECTION OF BRIDGE
(SCALE: 1:200)



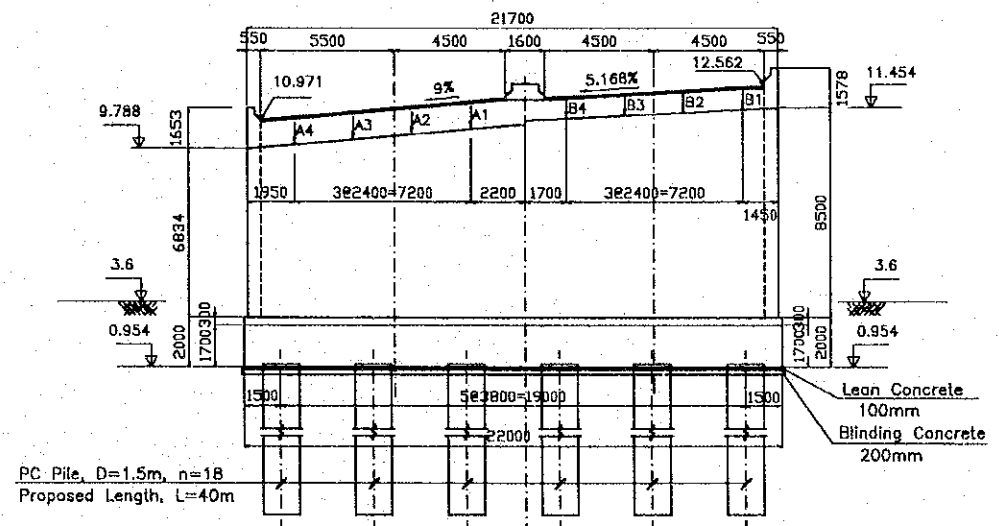
TYPICAL CROSS SECTION OF SUPERSTRUCTURE
(SCALE: 1:200)

TYPICAL CROSS SECTION OF SUBSTRUCTURE
(SCALE: 1:300)

FRONT VIEW OF Pa3



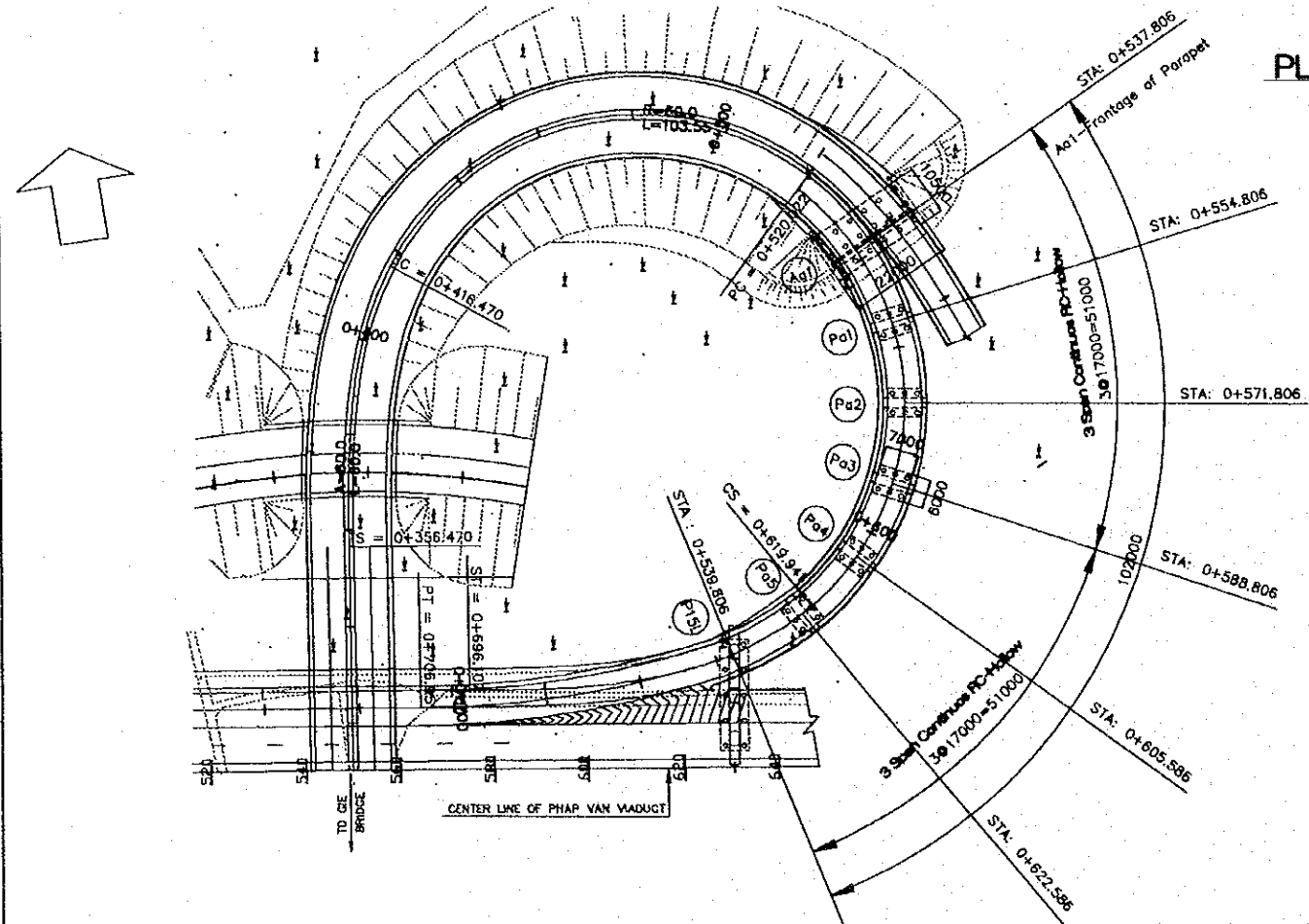
FRONT VIEW OF Aa1



GRADE	10.399		11.466		12.486		14.184		14.228		14.681		14.91		14.942		15.121	
ELEVATION	9.56	10.399	11.466	12.486	12.80	13.449	14.184	14.228	14.681	14.91	14.942	15.121						
GROUND HEIGHT																		
STATION	0+500	0+520.022	0+537.806	0+554.806	0+560.00	0+571.806	0+588.806	0+590.00	0+605.806	0+620.00	0+622.806	0+639.806						

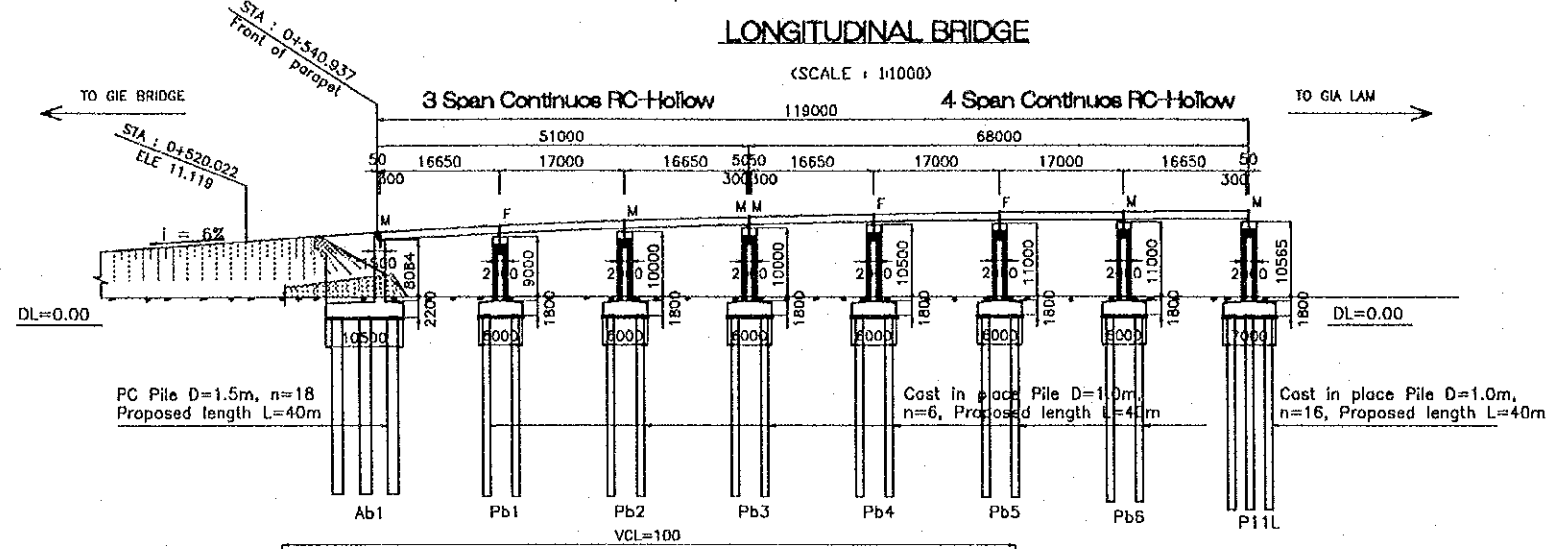
PLAN OF RAMP A bridge

(SCALE: 1:1500)

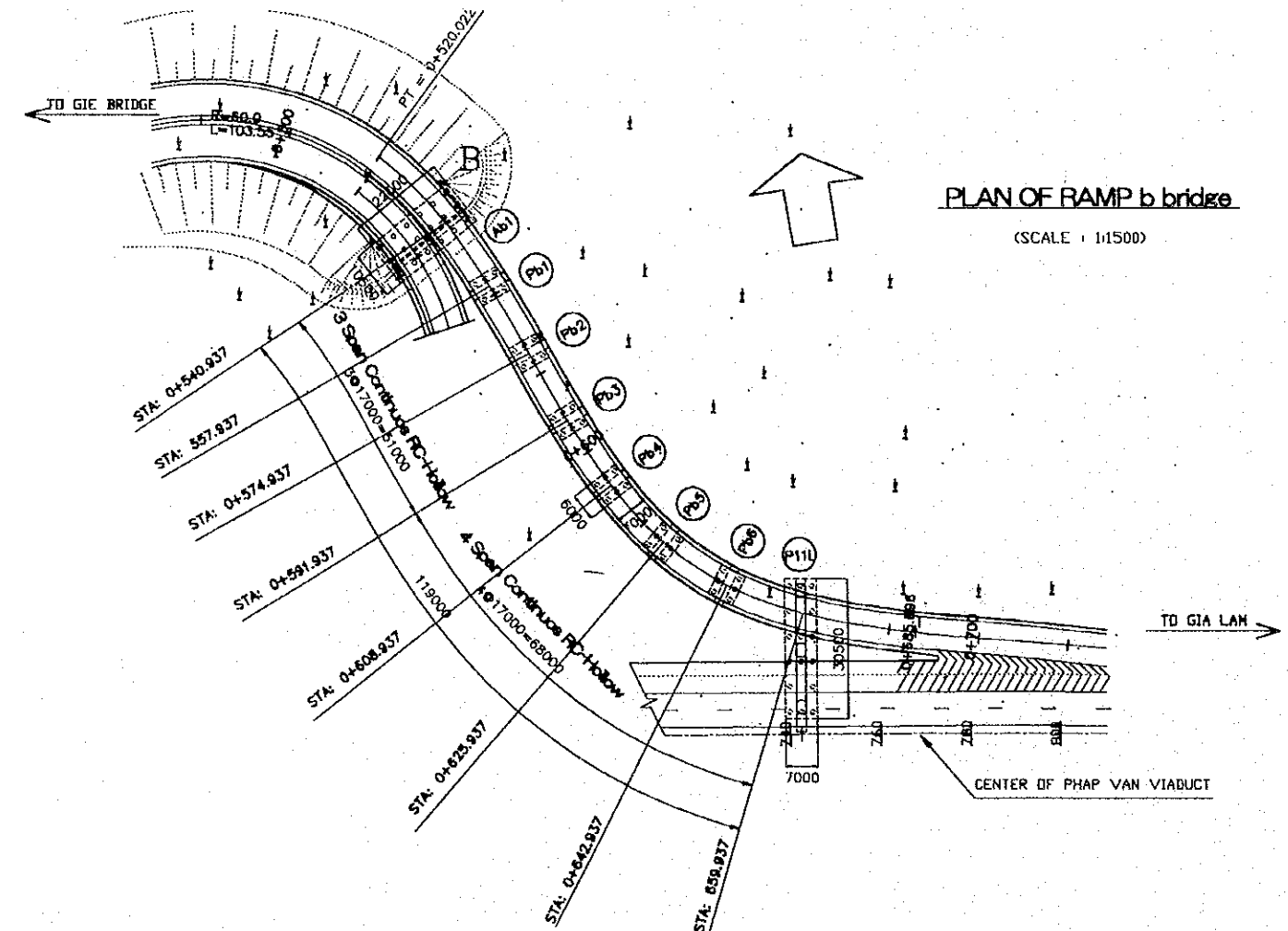


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2/2001.6.1

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-2-1-2	
GENERAL VIEW OF B-RAMP BRIDGE			



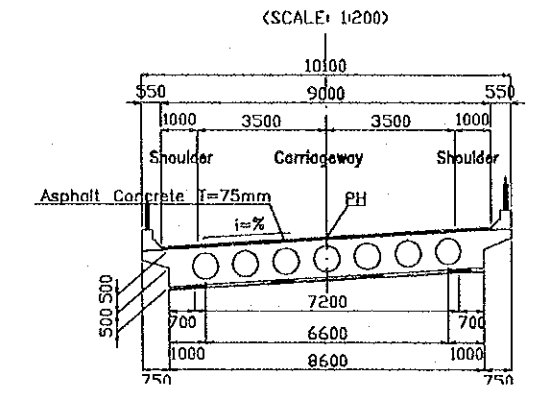
GRADE	i=6% L=57.86m		i=0.7%	
ELEVATION	11.119	12.329	13.155	13.828
GROUND HEIGHT	3.60	3.60	3.60	3.60
STATION	0+520.022	0+540.937	0+557.937	0+574.937
	0+527.882		0+577.882	0+591.937
			0+608.937	0+625.937
			0+627.882	0+642.937
				0+659.937
				15.165



TYPICAL CROSS SECTION OF BRIDGE

TYPICAL CROSS SECTION OF SUPERSTRUCTURE

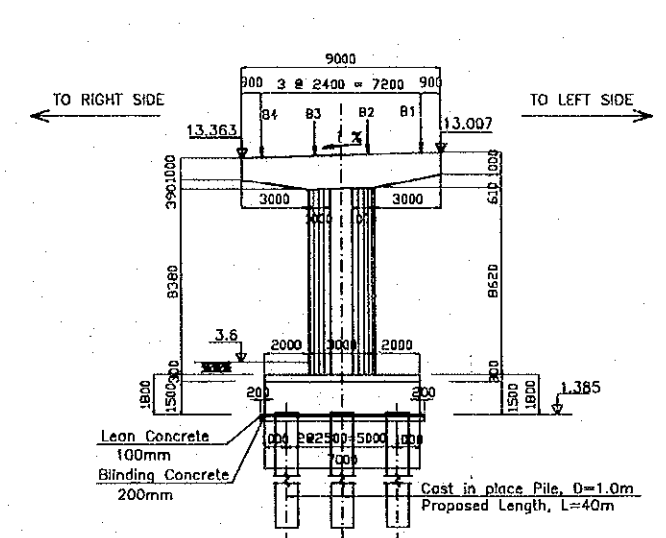
(SCALE: 1:200)



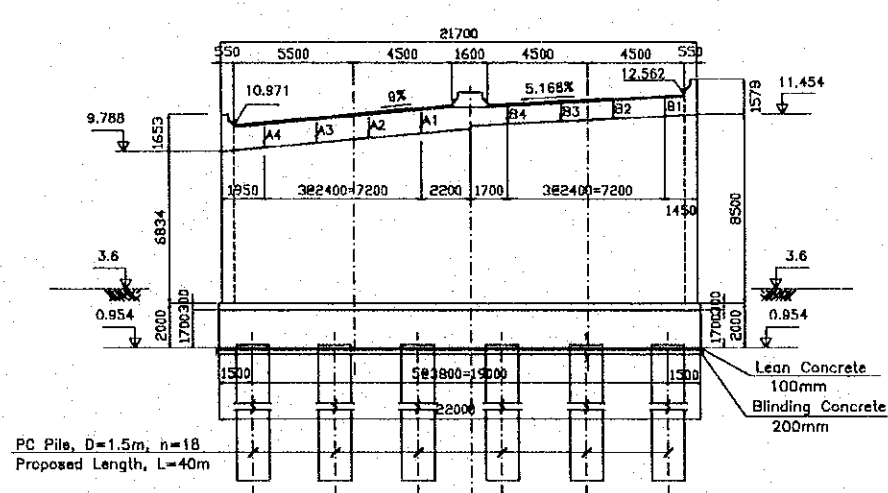
TYPICAL CROSS SECTION OF SUBSTRUCTURE

FRONT VIEW OF Pb3

(SCALE: 1:300)



FRONT VIEW OF Ab1

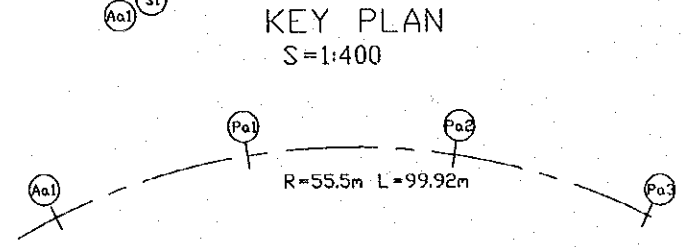
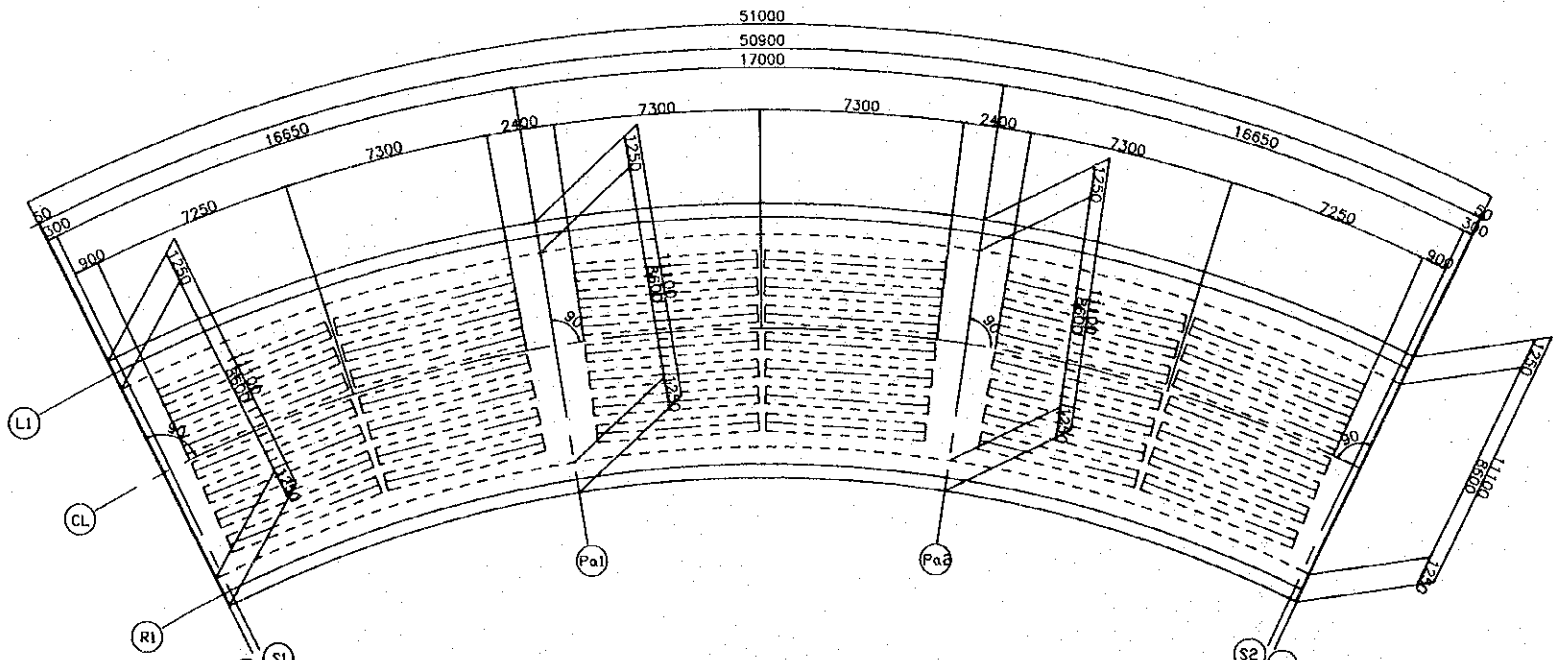
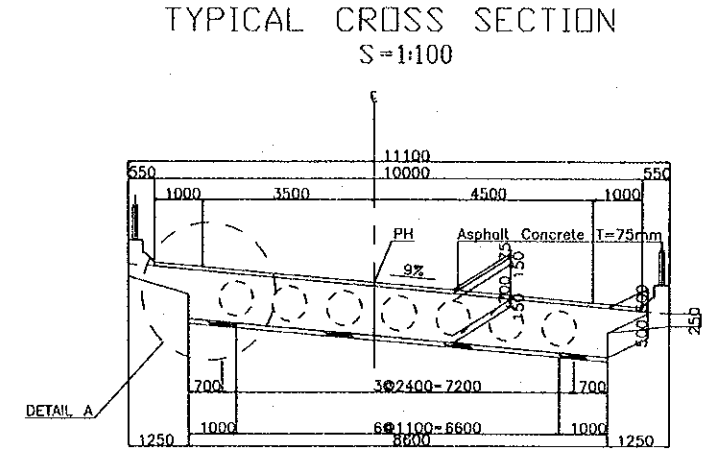
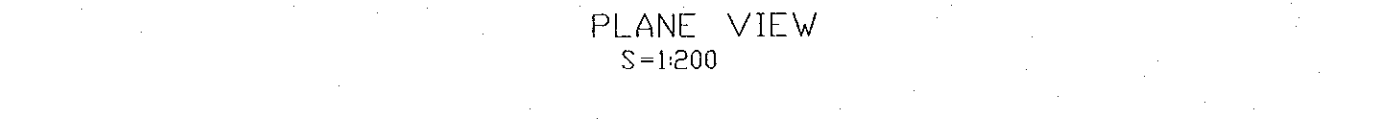
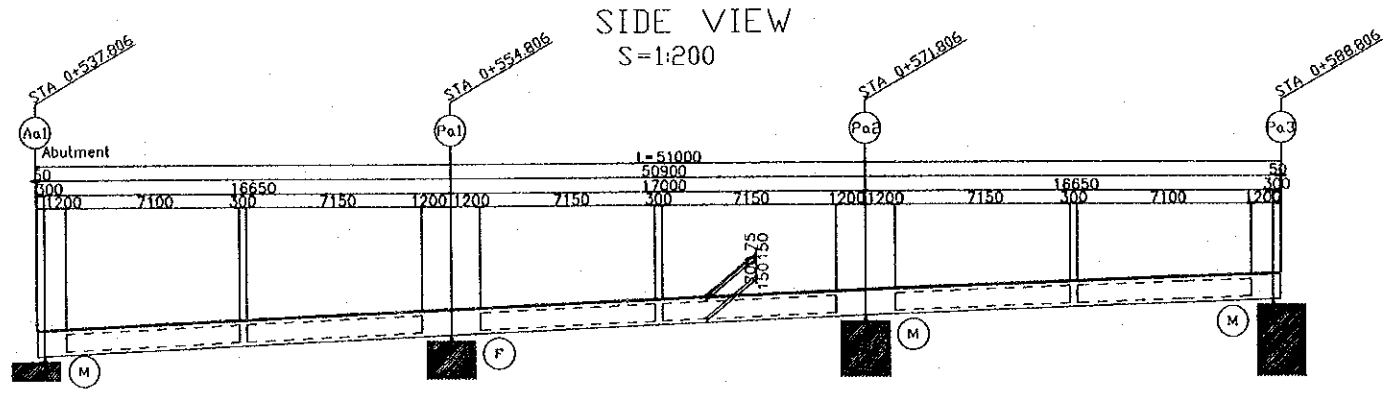


C-2 RAMP BRIDGE

C-2-2 SUPERSTRUCTURE

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATARE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.03.17	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE C-2-2-1	DRAWING No. C-2-2-1	SHEET No.
DETAIL OF PHAP VAN WADUCT A-RAMP BRIDGE 1			

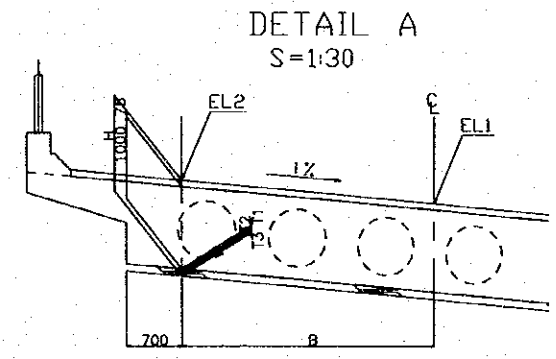


PLANE LOCATION

	Aa1	Pa1	Pa2	Pa3	REMARKS
L1	X				
	Y				
CL	X				
	Y				
R1	X				
	Y				

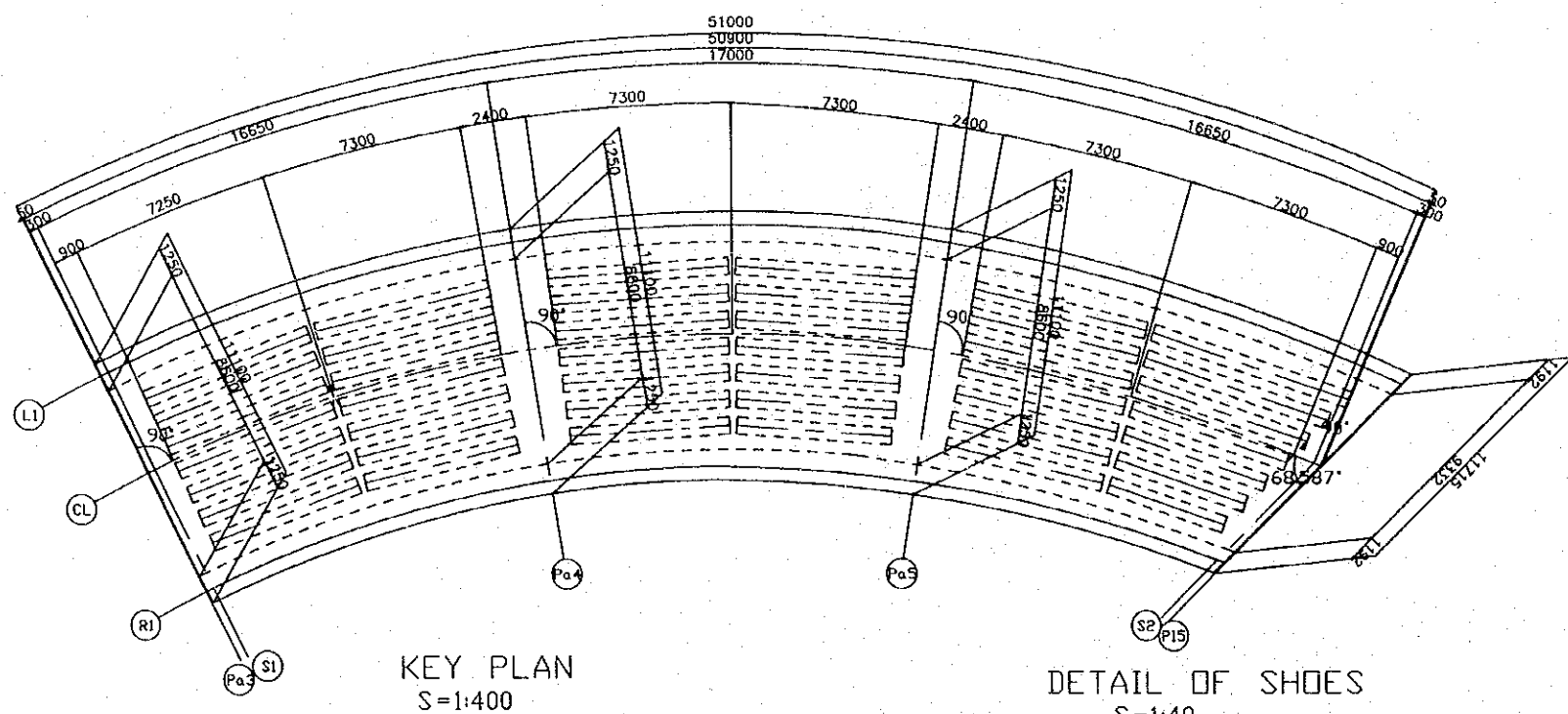
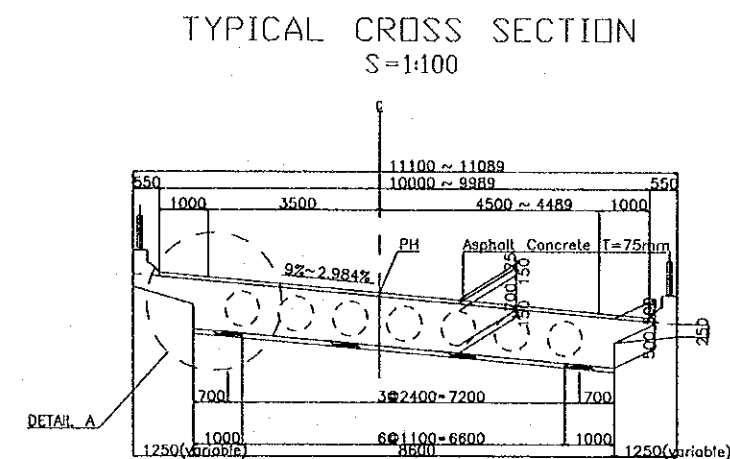
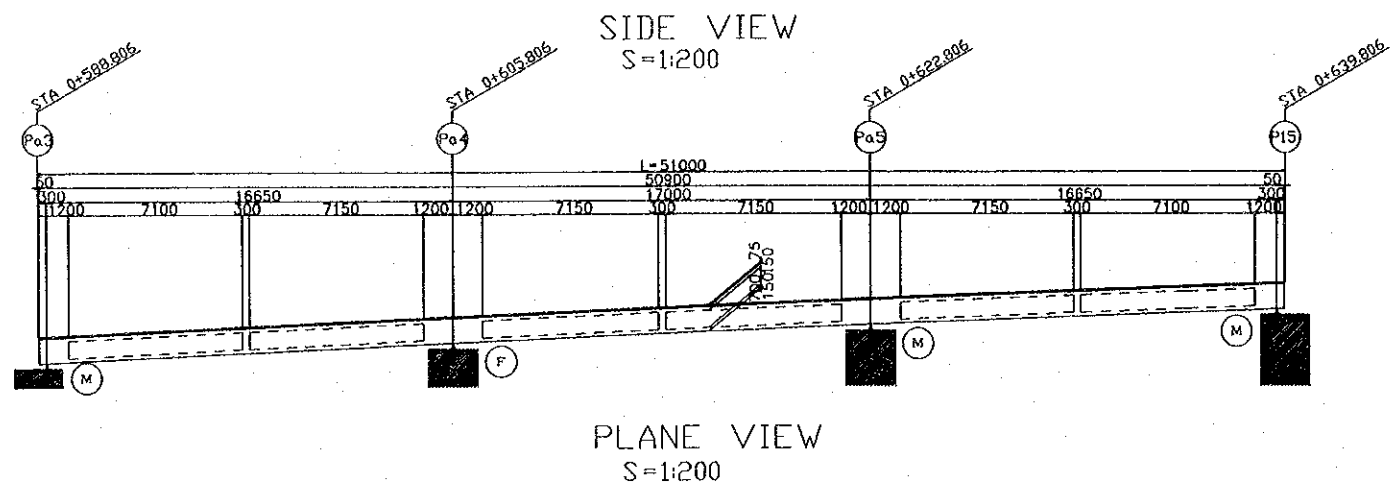
DEPTH OF SUPERSTRUCTURE

	Aa1	Pa1	Pa2	Pa3	REMARKS
SHOES CONDITION	S1	FIX	MOVE	S2	
SHOES TYPE	B	A	B	B	
EL1(m)					
EL2(m)					
PAVEMENT(mm)	75	75	75	75	
SLAB(mm)	1000	1000	1000	1000	
T1(mm)					
T2(mm)					
T3(mm)					
H(m)					
EL3(m)					



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.01.14

PACKAGE 3	SCALE C-2-2-2	DRAWING No. C-2-2-2	SHEET No.
DETAIL OF PHAP VAN VADUCT A-RAMP BRIDGE 2			



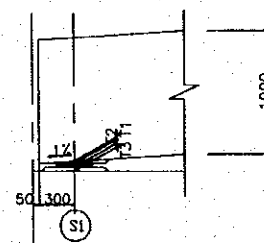
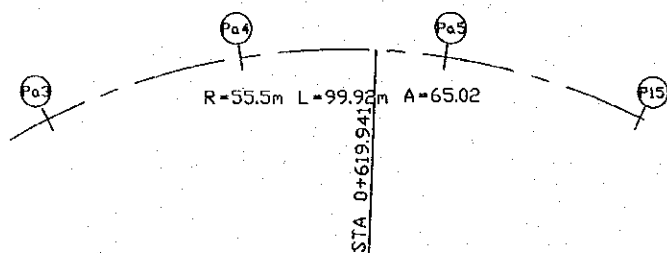
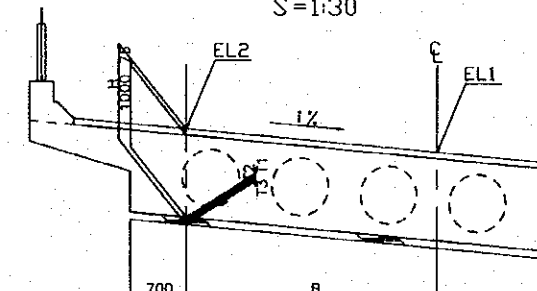
PLANE LOCATION

	Pa3	Pa4	Pa5	P15	REMARKS
L1	X				
	Y				
CL	X				
	Y				
R1	X				
	Y				

DEPTH OF SUPERSTRUCTURE

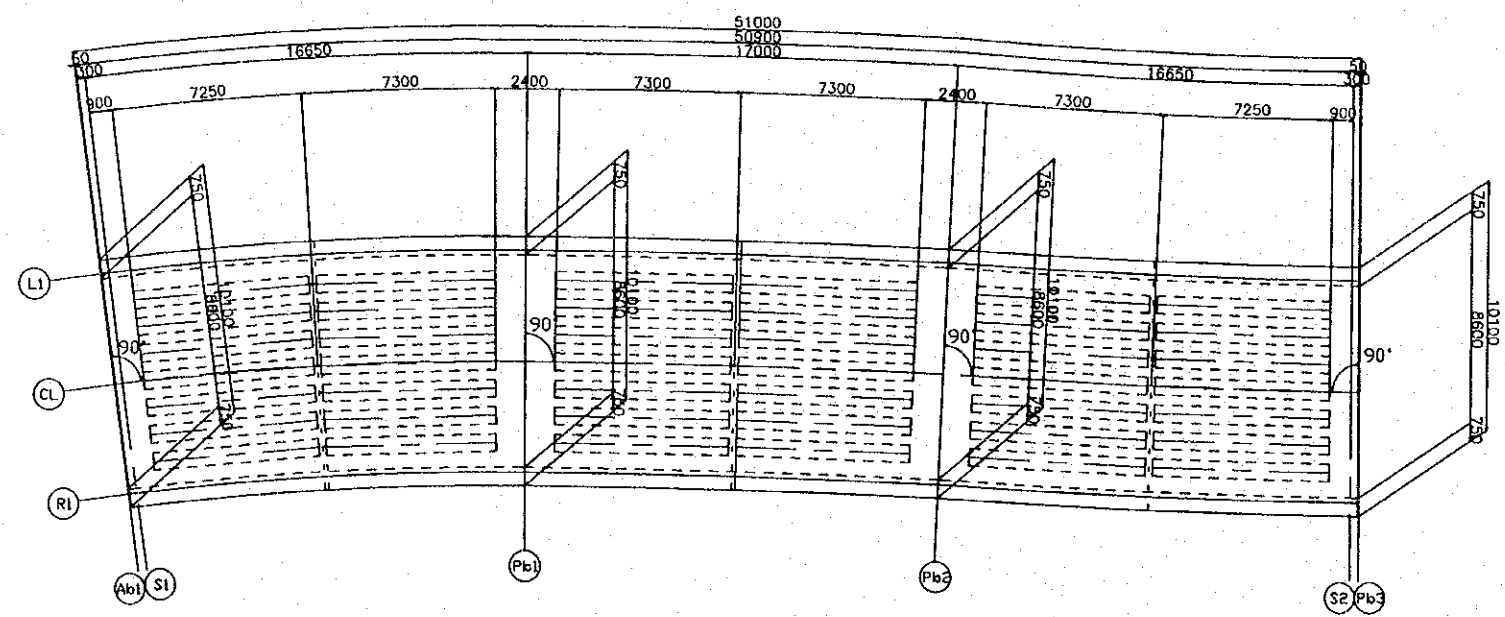
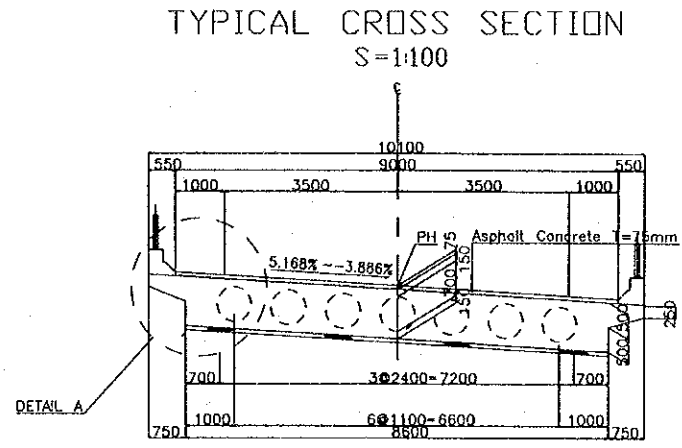
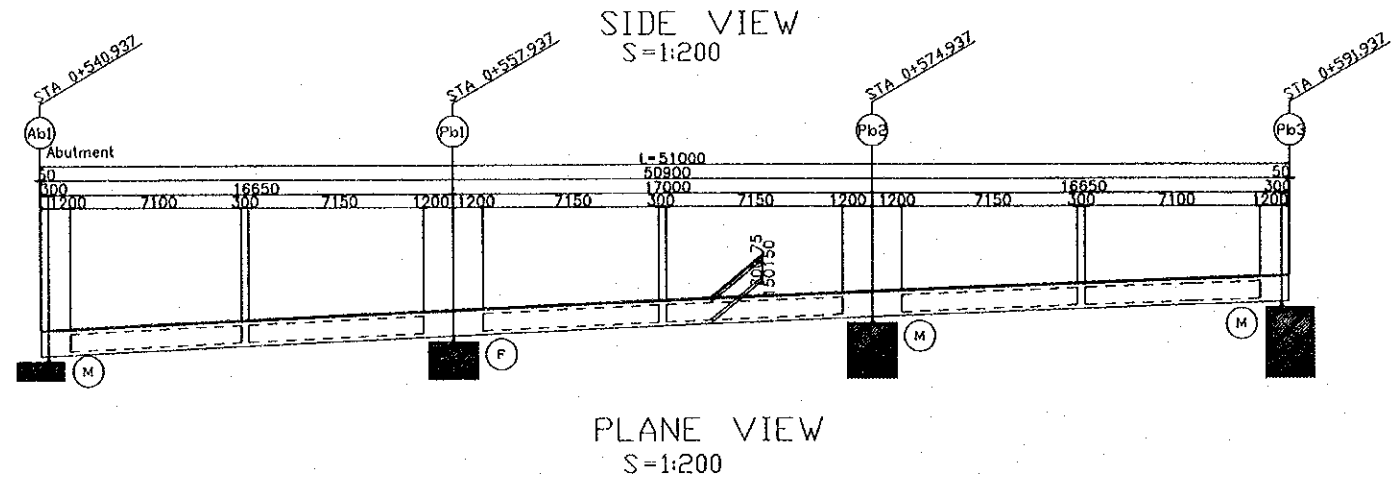
	Pa3	Pa4	Pa5	P15	REMARKS
SHOES CONDITION	S1			S2	
SHOES TYPE	B	A	B	B	
EL1(m)					
EL2(m)					
PAVEMENT(mm)	75	75	75	75	
SLAB(mm)	1000	1000	1000	1000	
T1(mm)					
T2(mm)					
T3(mm)					
H(m)					
EL3(m)					

DETAIL A
S=1:30



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATANE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2001.01.14	

PACKAGE 3	SCALE	DRAWING No. C-2-2-3	SHEET No.
DETAIL OF PHAP VAN VADUCT B-RAMP BRIDGE 1			

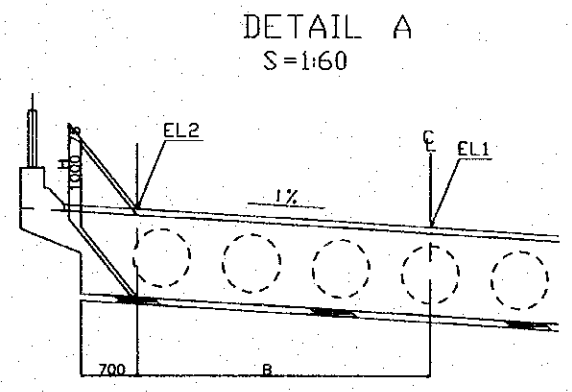
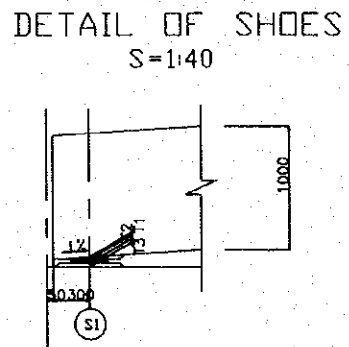
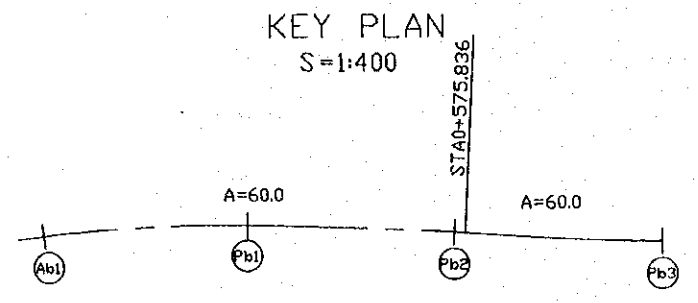


PLANE LOCATION

	Ab1	Pb1	Pb2	Pb3	REMARKS
L1	X				
	Y				
CL	X				
	Y				
RI	X				
	Y				

DEPTH OF SUPERSTRUCTURE

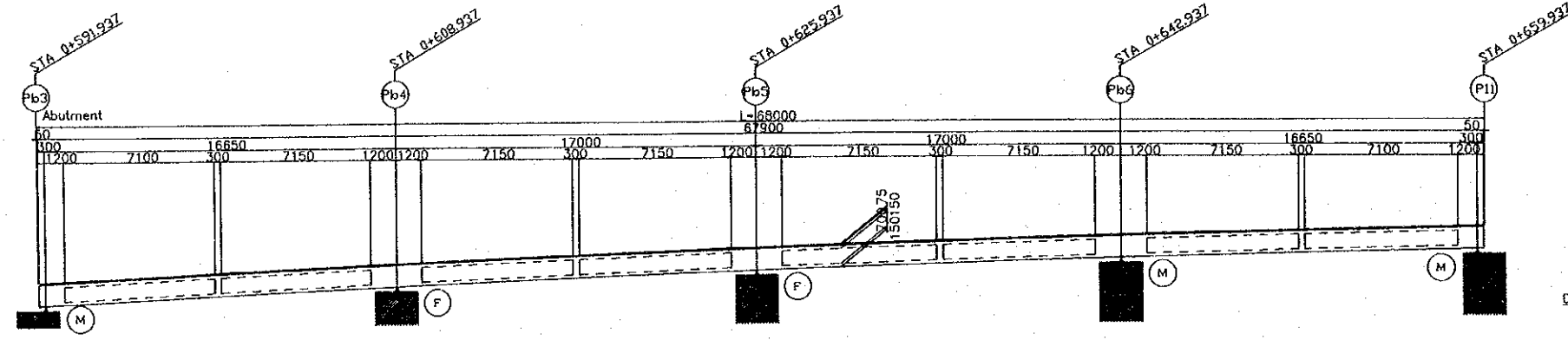
	Ab1	Pb1	Pb2	Pb3	REMARKS
SHOES CONDITION	S1			S2	
SHOES TYPE	B	A	B	B	
EL1(m)					
EL2(m)					
PAVEMENT(mm)	75	75	75	75	
SLAB(mm)	1000	1000	1000	1000	
T1(mm)					
T2(mm)					
T3(mm)					
H(m)					
EL3(m)					



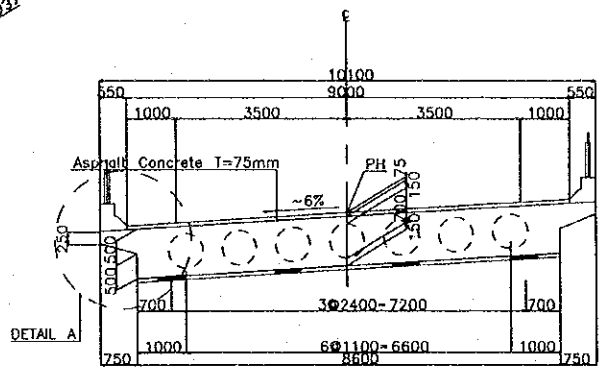
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATANE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-2-2-4	
DETAIL OF PHAP VAN VIADUCT B--RAMP BRIDGE 2			

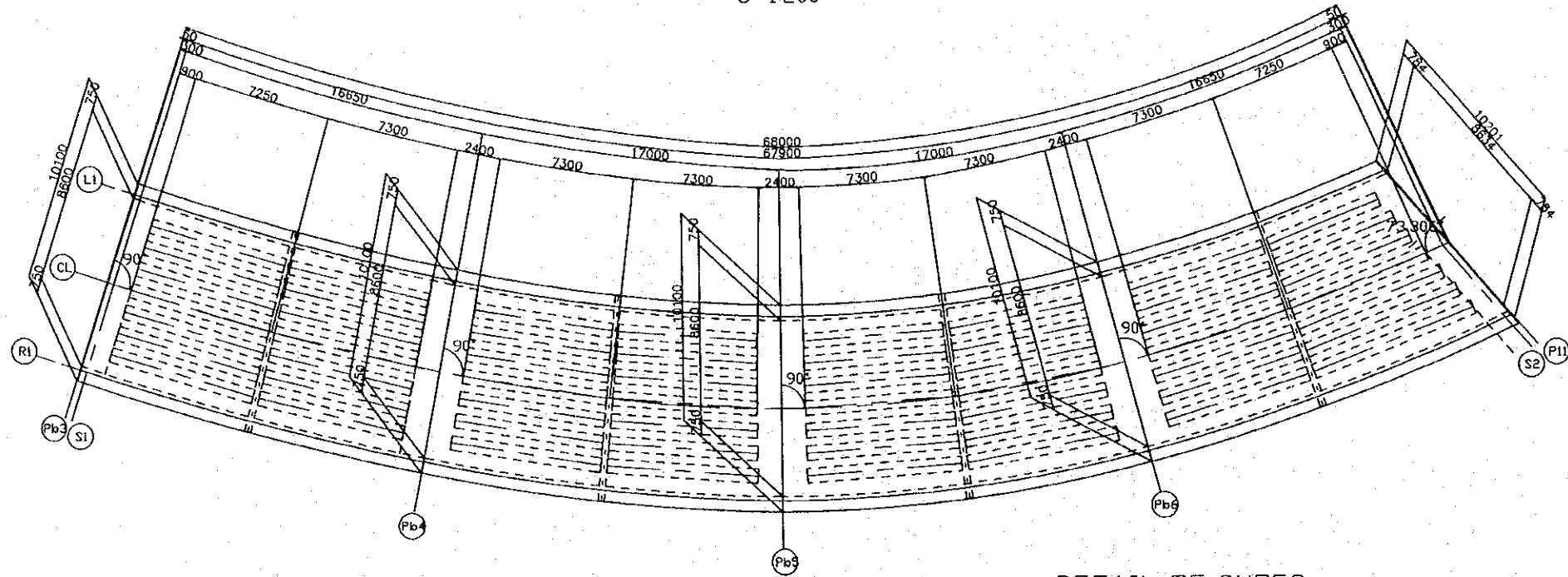
SIDE VIEW
S=1:200



TYPICAL CROSS SECTION
S=1:100



PLANE VIEW
S=1:200



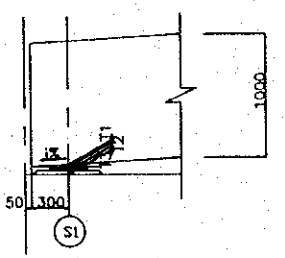
PLANE LOCATION

	Pb3	Pb4	Pb5	Pb6	P11	REMARKS
L1	X					
	Y					
CL	X					
	Y					
R1	X					
	Y					

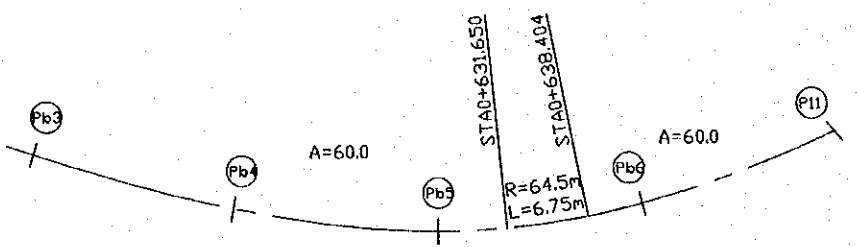
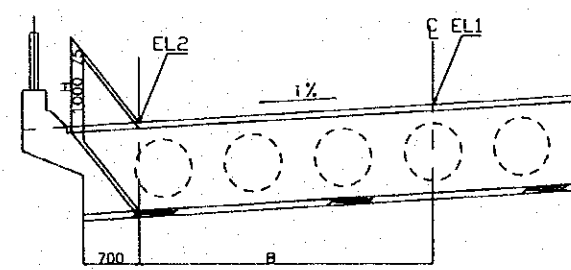
DEPTH OF SUPERSTRUCTURE

	Pb3	Pb4	Pb5	Pb6	P11	REMARKS
SHOES CONDITION	MOVE	FIX	FIX	MOVE	MOVE	
SHOES TYPE	B	A	A	B	B	
EL1(m)						
EL2(m)						
PAVEMENT(mm)	75	75	75	75	75	
SLAB(mm)	1000	1000	1000	1000	1000	
T1(mm)						
T2(mm)						
T3(mm)						
H(m)						
EL3(m)						

DETAIL OF SHOES
S=1:40



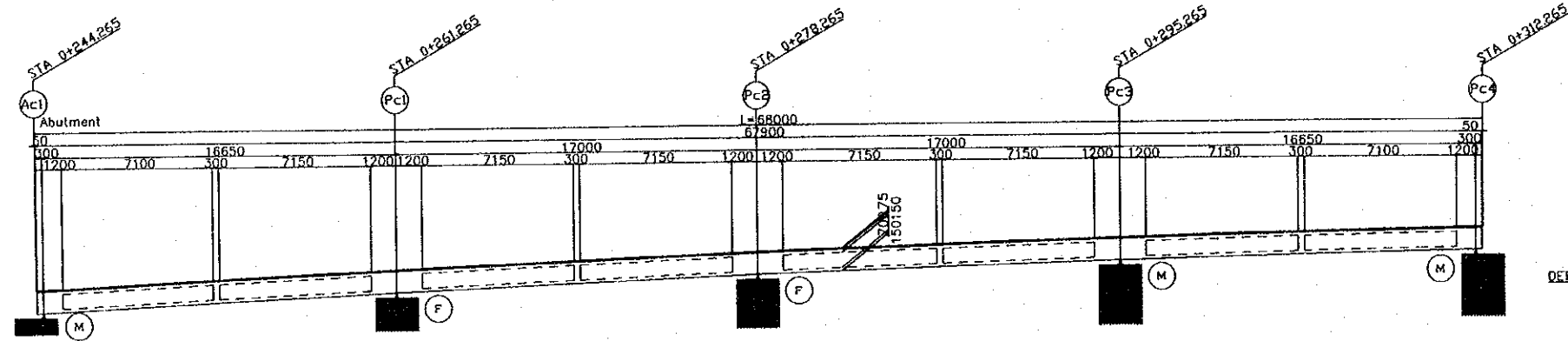
DETAIL A
S=1:30



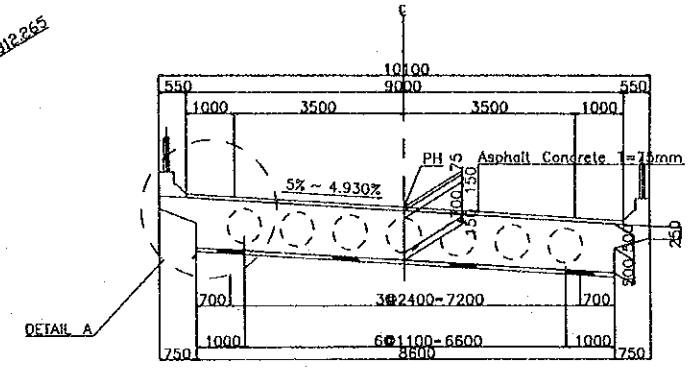
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NAYABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.14

PACKAGE 3	SCALE	DRAWING No. C-2-2-5	SHEET No.
DETAIL OF PHAP VAN VADUCT C-RAMP BRIDGE 1			

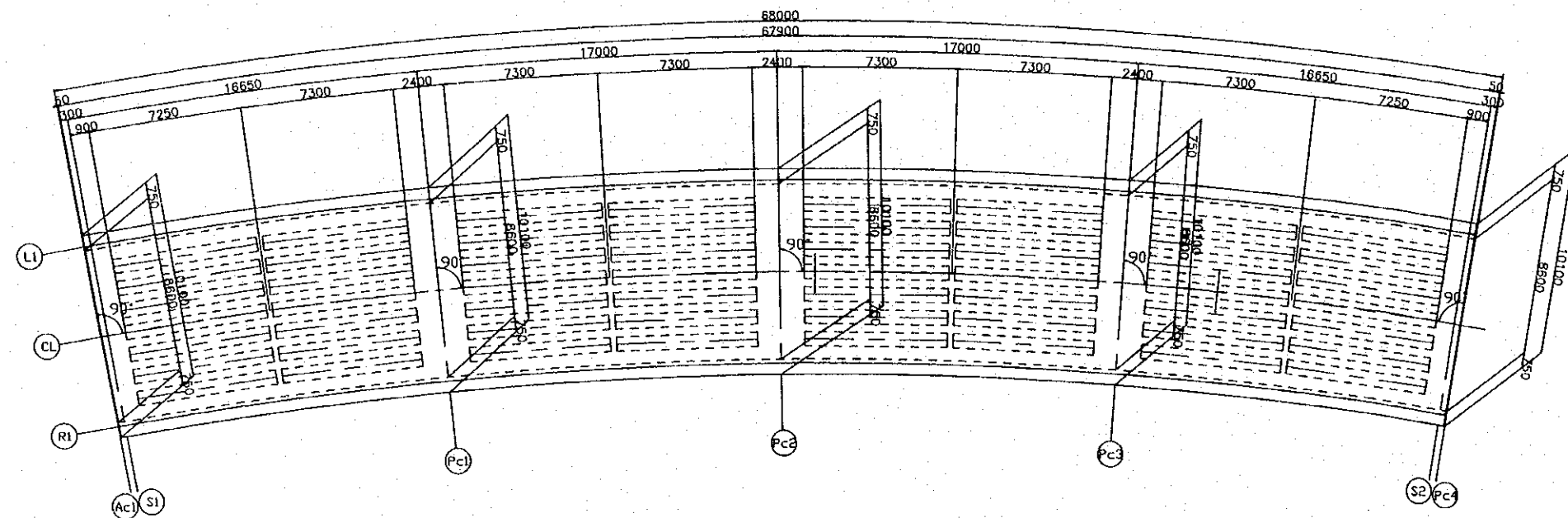
SIDE VIEW
S=1:200



TYPICAL CROSS SECTION
S=1:100



PLANE VIEW
S=1:200



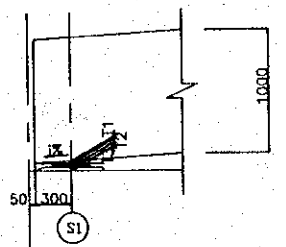
PLANE LOCATION

	Ac1	Pc1	Pc2	Pc3	Pc4	REMARKS
LI	X					
	Y					
CL	X					
	Y					
RI	X					
	Y					

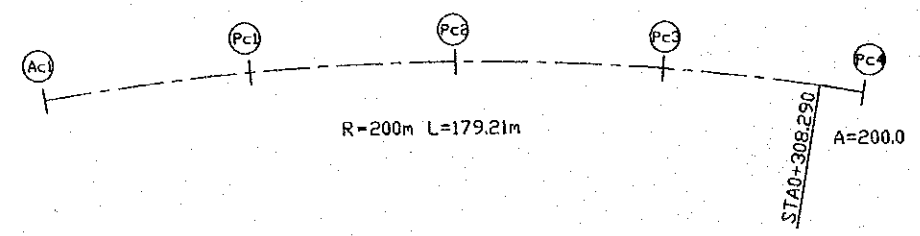
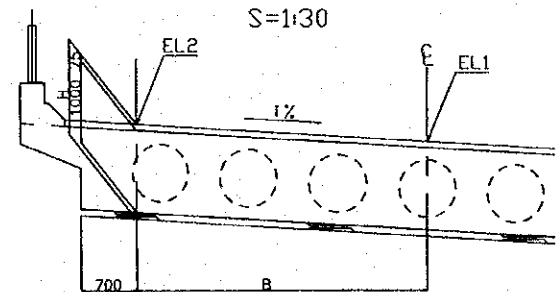
DEPTH OF SUPERSTRUCTURE

	Ac1	Pc1	Pc2	Pc3	Pc4	REMARKS
SHOES CONDITION	S1	FIX	FIX	MOVE	S2	
SHOES TYPE	B	A	A	B	B	
EL1(m)						
EL2(m)						
PAVEMENT(mm)	75	75	75	75	75	
SLAB(mm)	1000	1000	1000	1000	1000	
T1(mm)						
T2(mm)						
T3(mm)						
H(m)						
EL3(m)						

DETAIL OF SHOES
S=1:40



DETAIL A
S=1:30

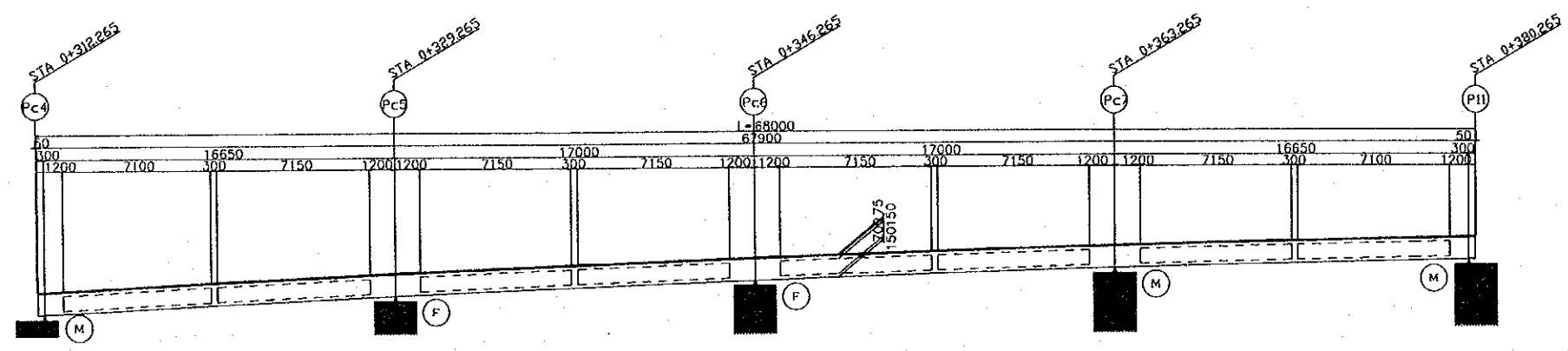


3.5.0

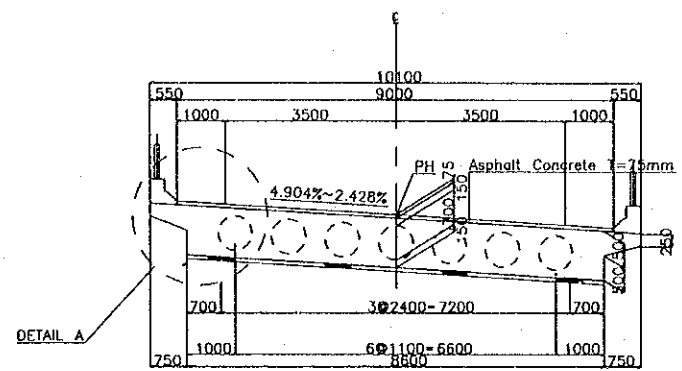
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MAYARE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH THIE BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2-2002, V. 17

PACKAGE 3	SCALE	DRAWING No. C-2-2-6	SHEET No.
DETAIL OF PHAP VAN VADUCT C-RAMP BRIDGE 2			

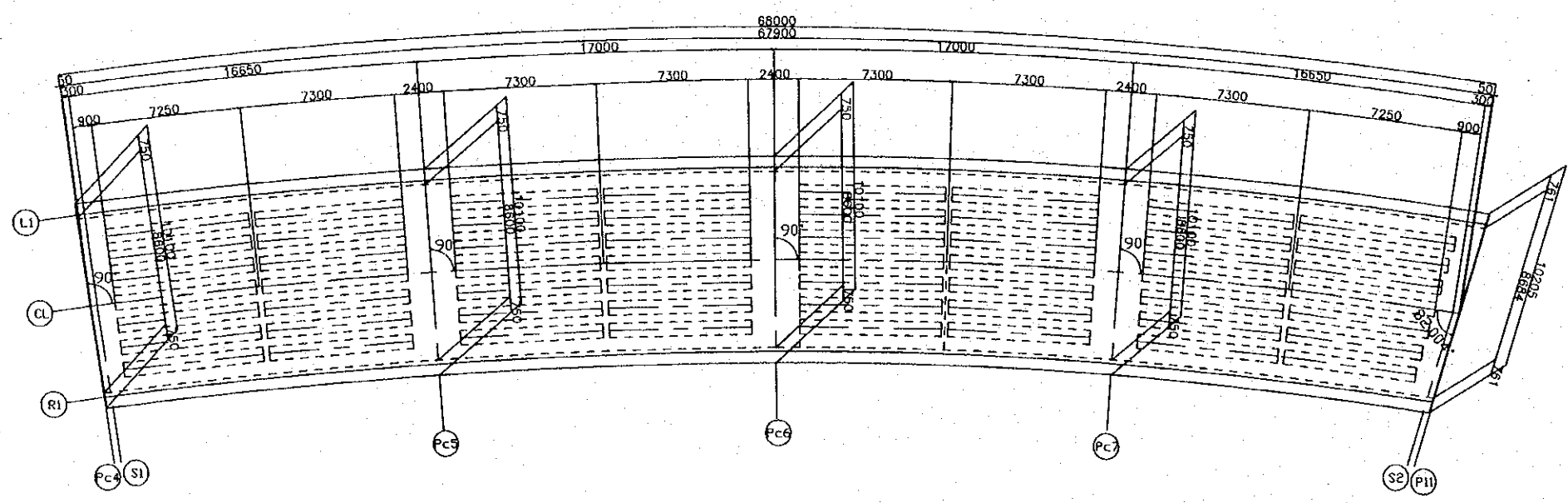
SIDE VIEW
S=1:200



TYPICAL CROSS SECTION
S=1:100



PLANE VIEW
S=1:200



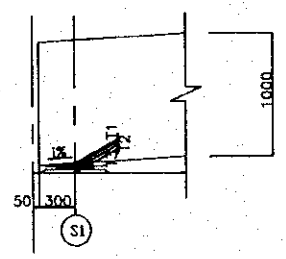
PLANE LOCATION

		Pc4	Pc5	Pc6	Pc7	P11	REMARKS
L1	X						
	Y						
CL	X						
	Y						
R1	X						
	Y						

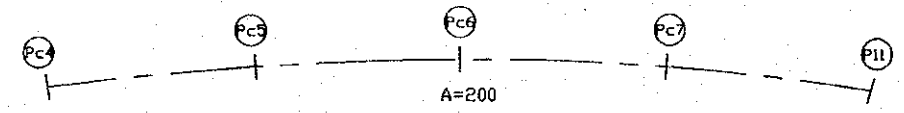
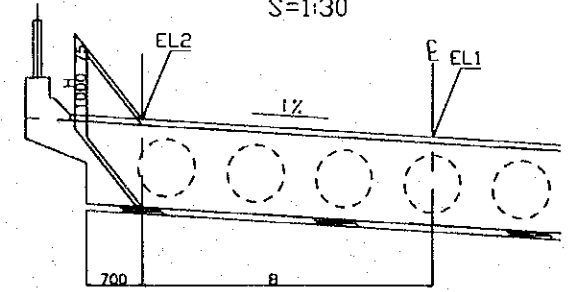
DEPTH OF SUPERSTRUCTURE

		Pc4	Pc5	Pc6	Pc7	P11	REMARKS
SHOES CONDITION	SI						
	MOVE						
SHOES TYPE		B	A	A	B	B	
EL1(m)							
EL2(m)							
PAVEMENT(mm)		75	75	75	75	75	
SLAB(mm)		1000	1000	1000	1000	1000	
T1(mm)							
T2(mm)							
T3(mm)							
H(m)							
EL3(m)							

DETAIL OF SHOES
S=1:40



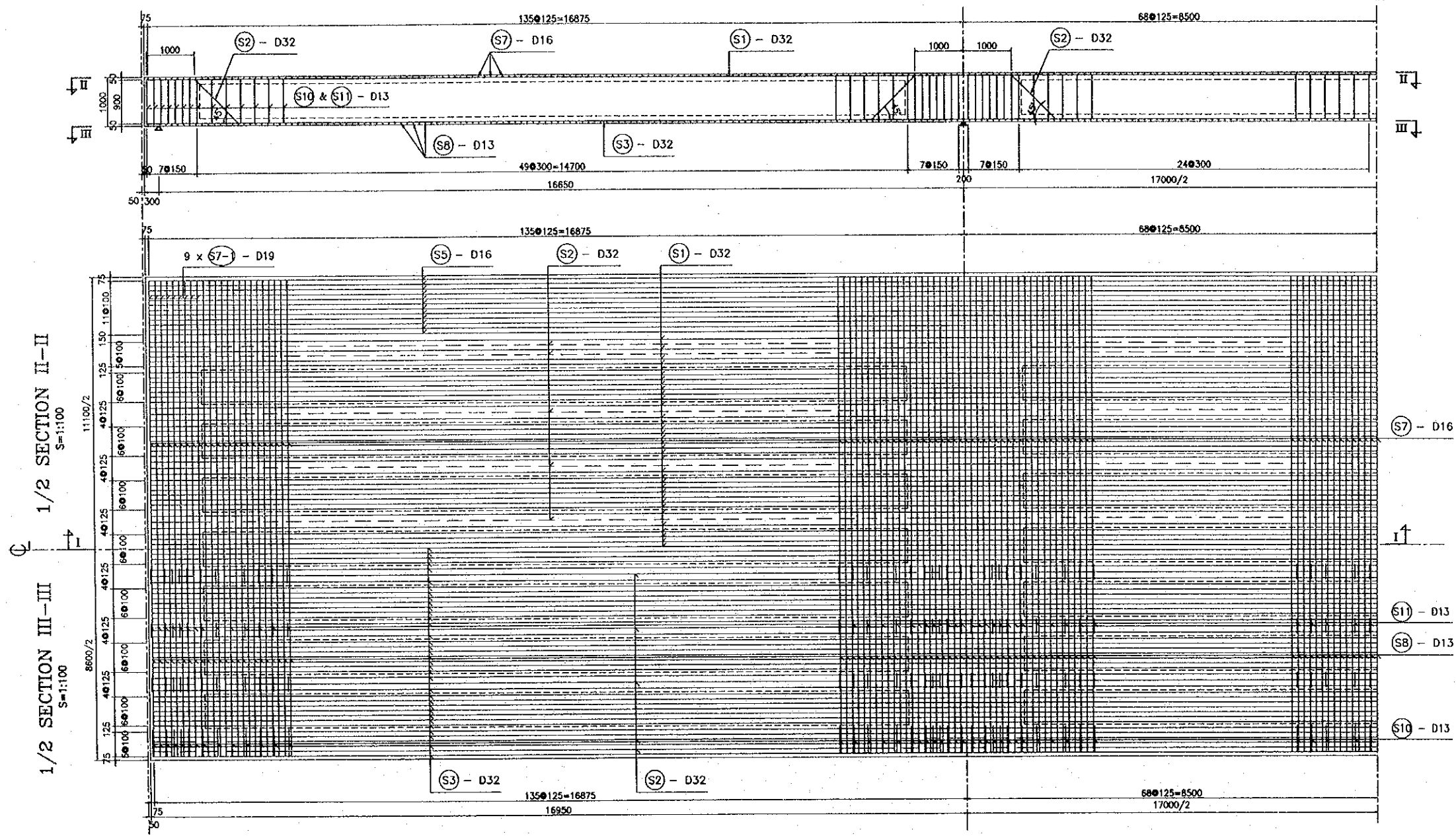
DETAIL A
S=1:30



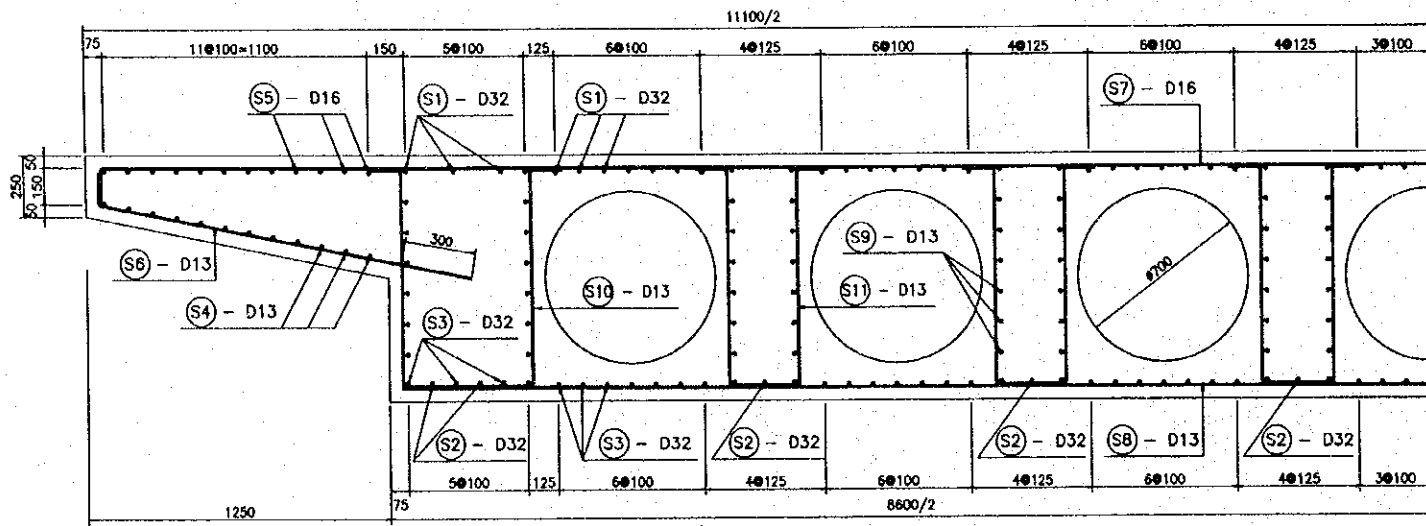
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.14

PACKAGE 3	SCALE	DRAWING No. C-2-2-7	SHEET No.
RE-BAR ARRANGMENT OF A-RAMP BRIDGE			

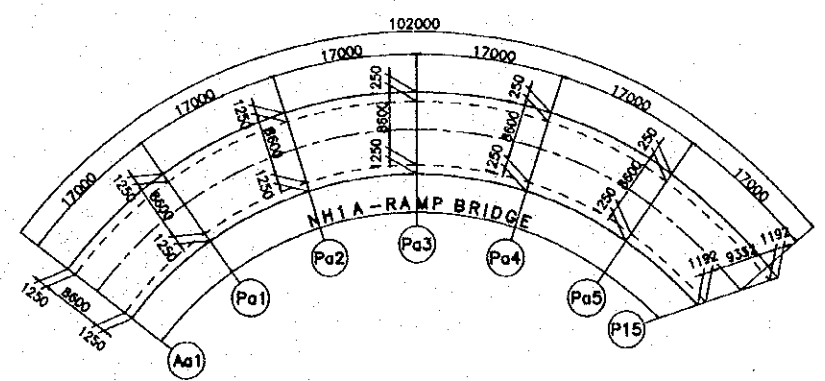
SECTION I-I
S=1:100



HALF OF CROSS SECTION
S=1:30



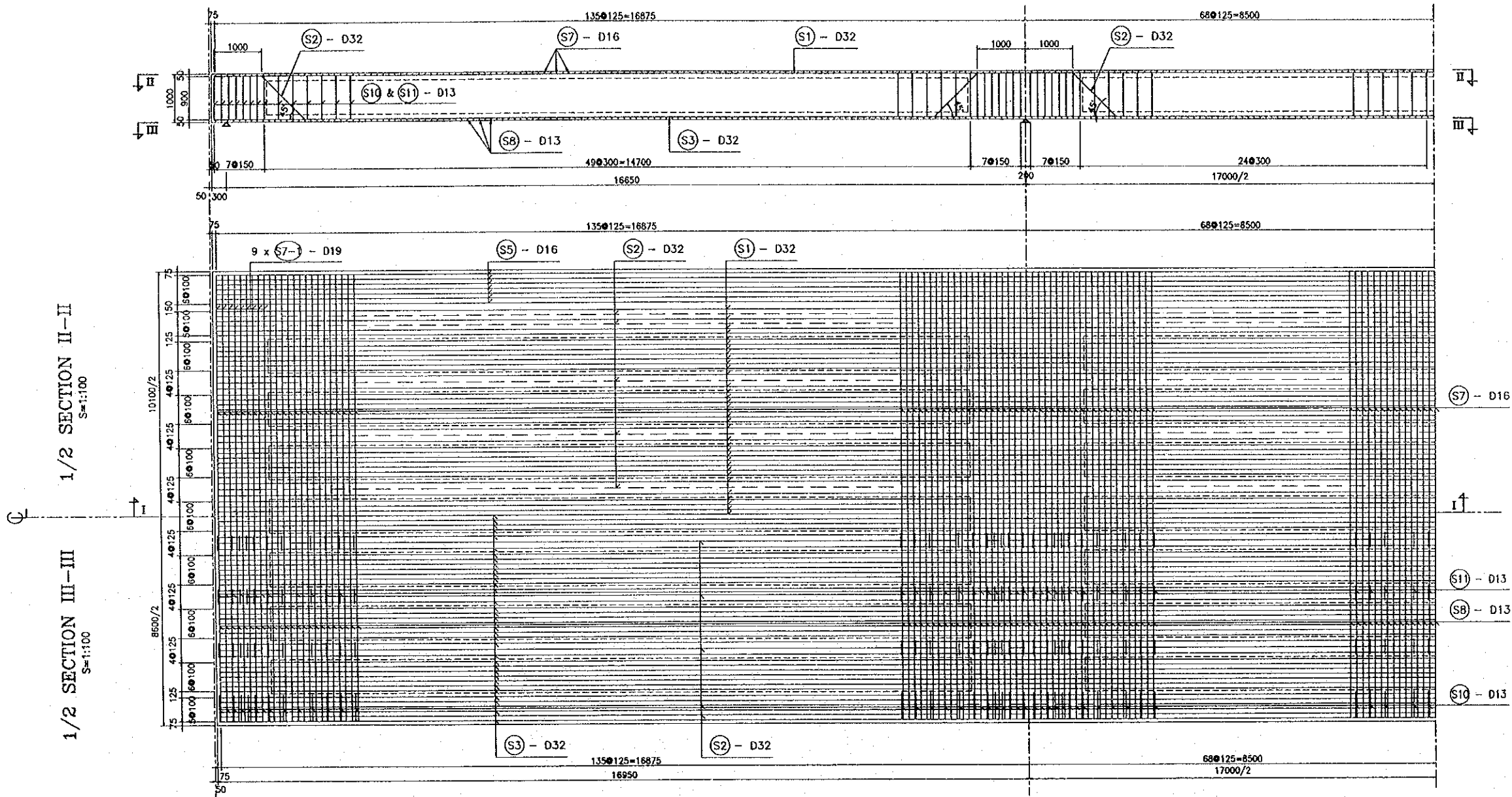
KEY PLAN
S=1:1000



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.3.17

SECTION I-I
S=1:100

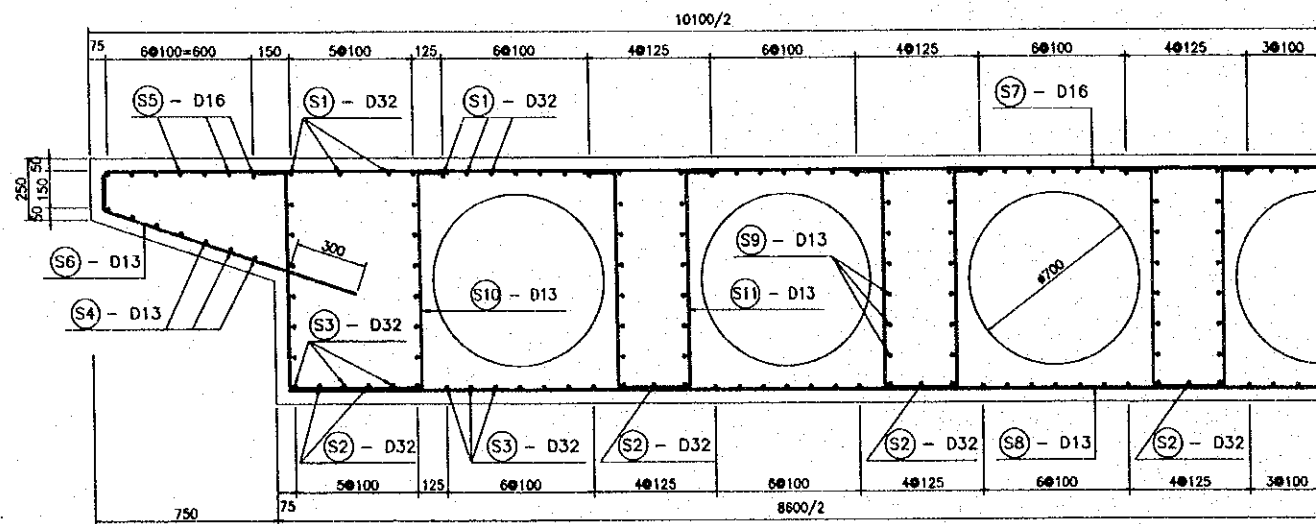
PACKAGE 3	SCALE	DRAWING No. C-2-2-8	SHEET No.
RE-BAR ARRANGEMENT OF B-RAMP BRIDGE			



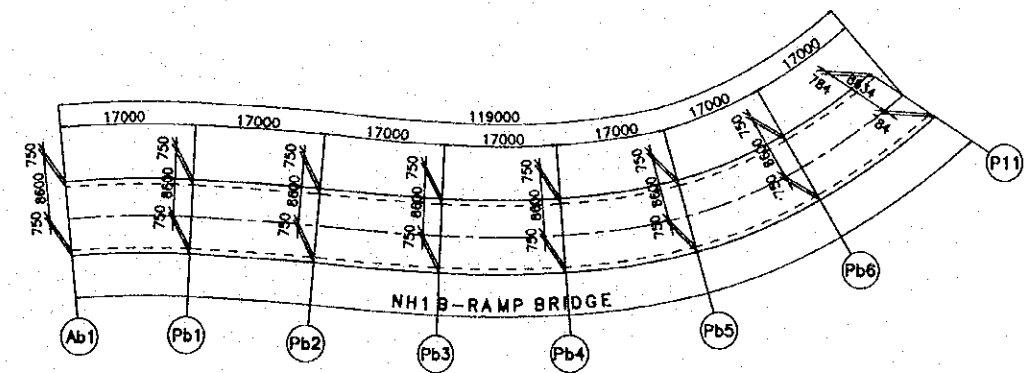
1/2 SECTION II-I
S=1:100

1/2 SECTION III-III
S=1:100

HALF OF CROSS SECTION
S=1:30



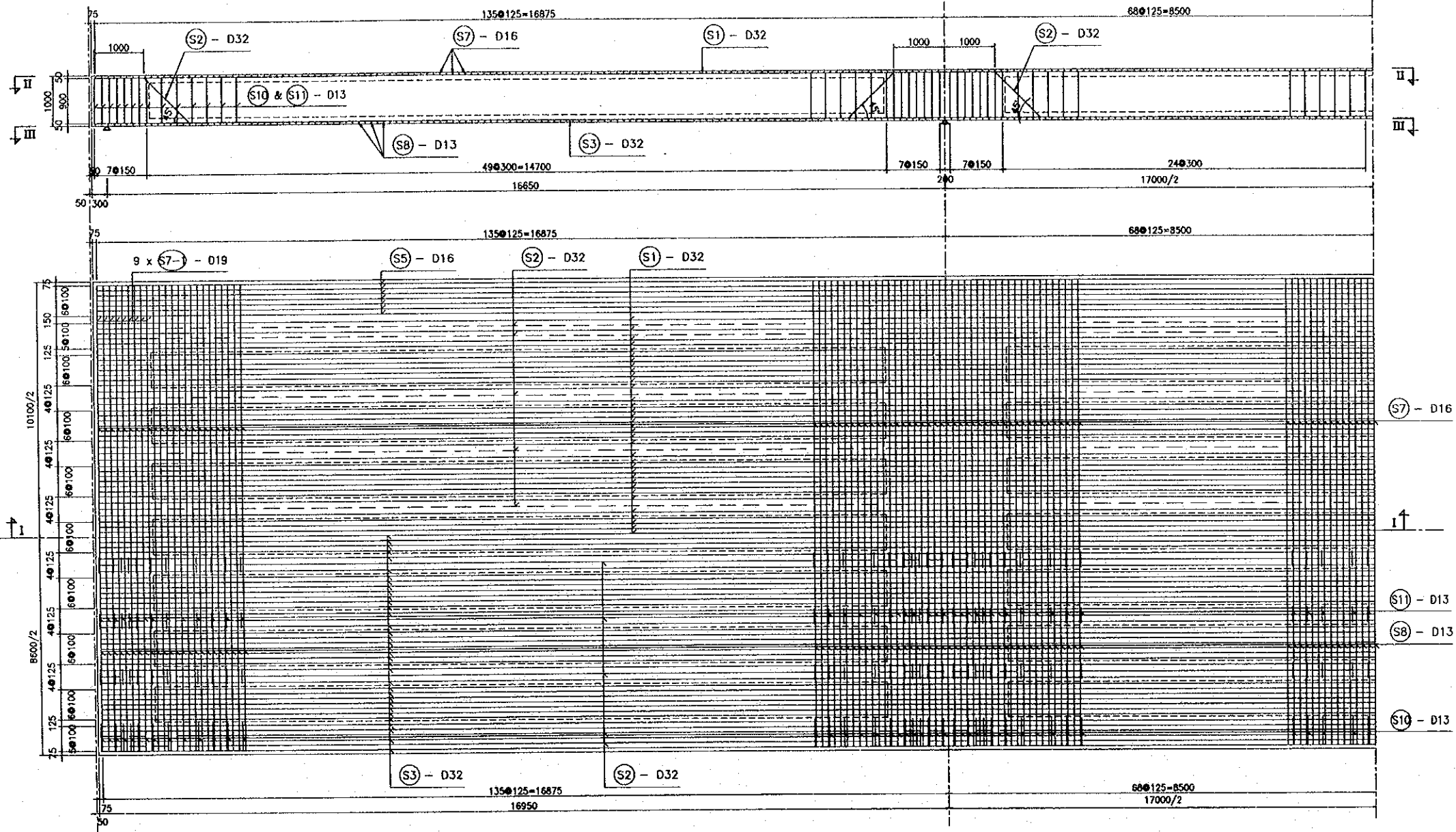
KEY PLAN
S=1:1000



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.14

PACKAGE 3	SCALE	DRAWING No. C-2-2-9	SHEET No.
RE-BAR ARRANGMENT OF C-RAMP BRIDGE			

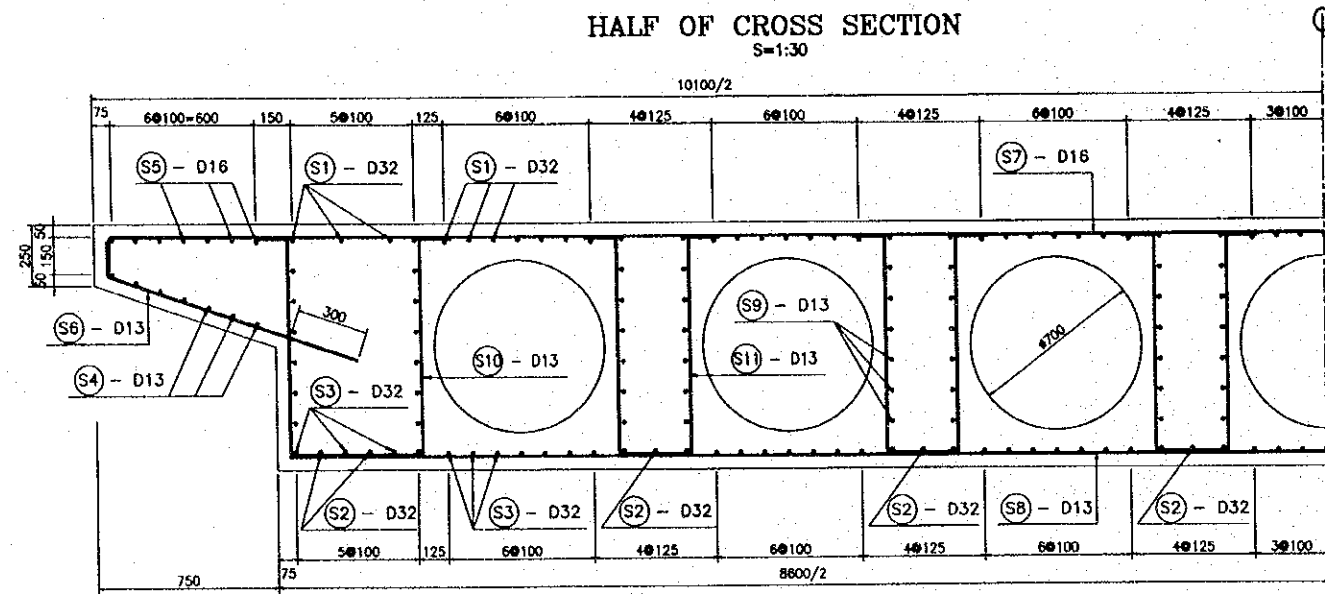
SECTION I-I
S=1:100



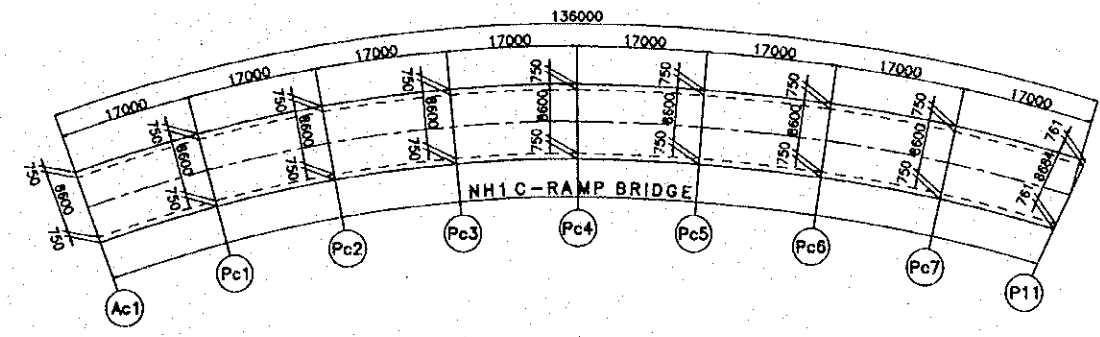
1/2 SECTION II-II
S=1:100

1/2 SECTION III-III
S=1:100

HALF OF CROSS SECTION
S=1:30



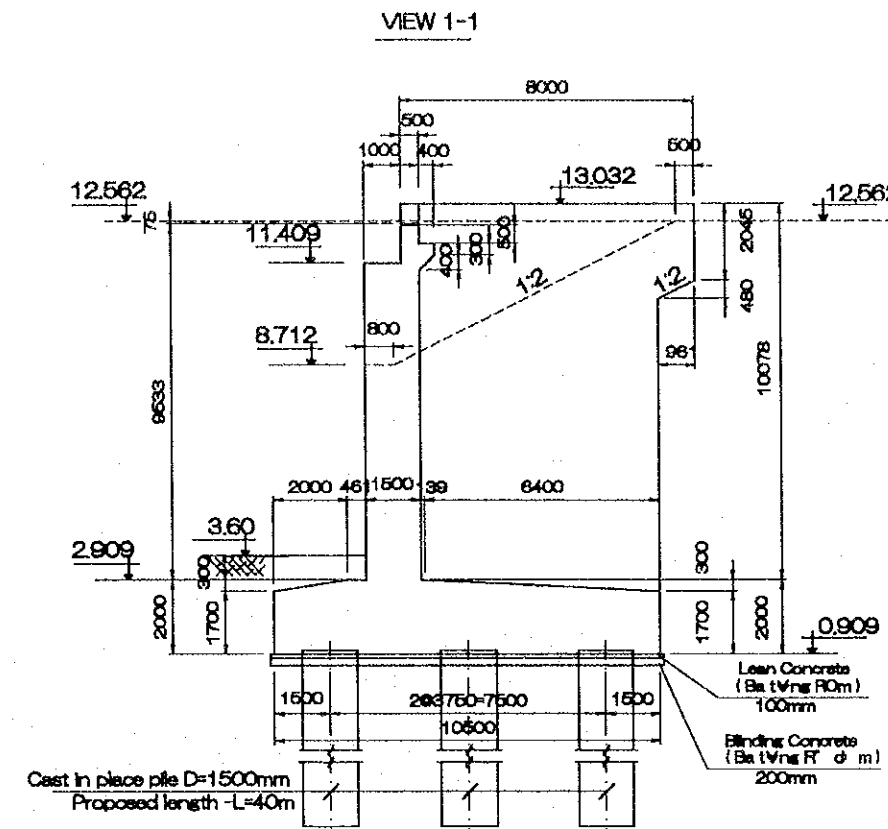
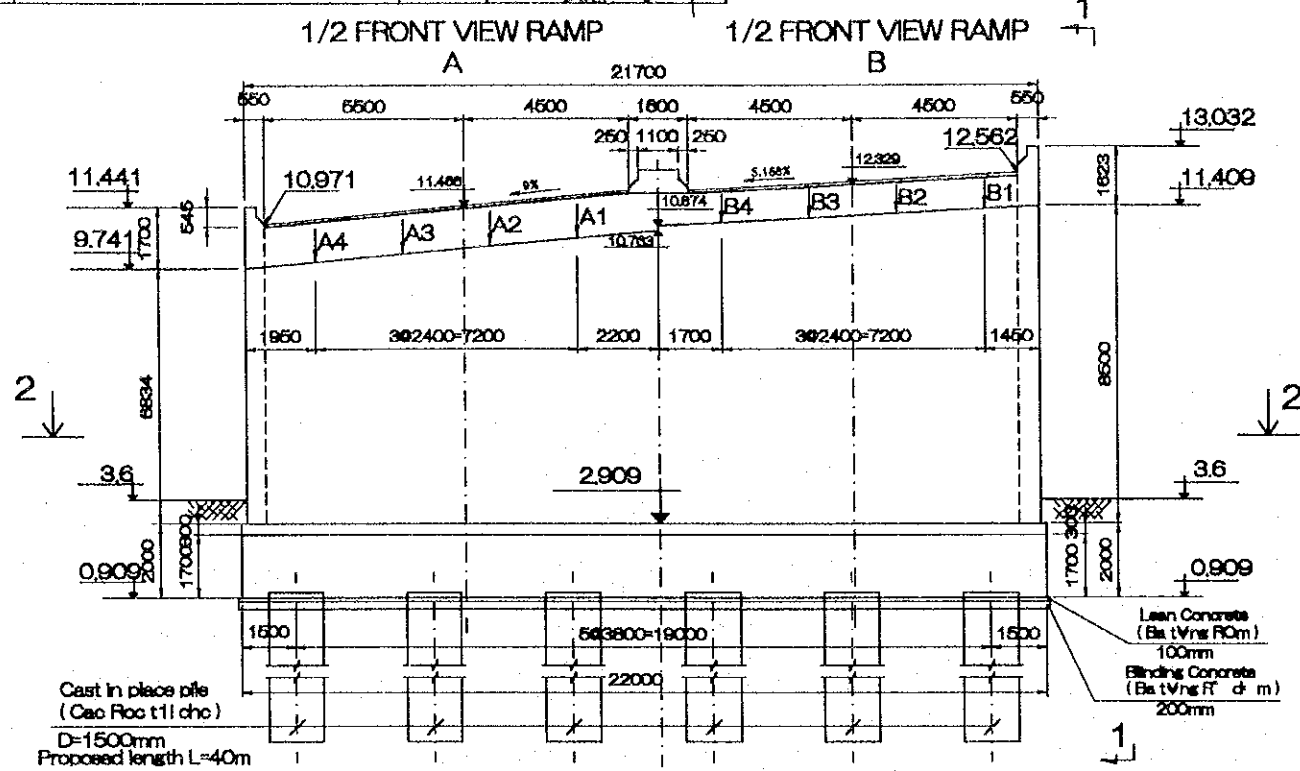
KEY PLAN
S=1:1000



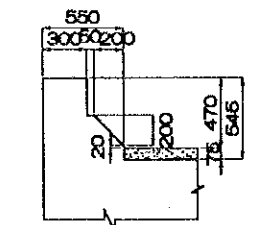
342

C-2 RAMP BRIDGE

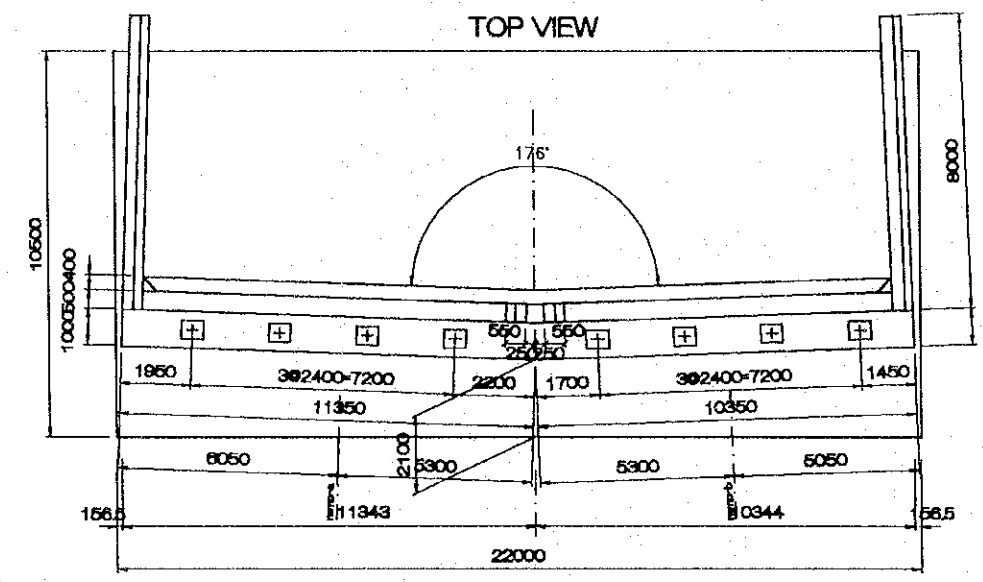
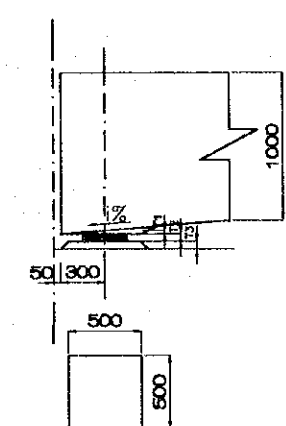
C-2-3 SUBSTRUCTURE



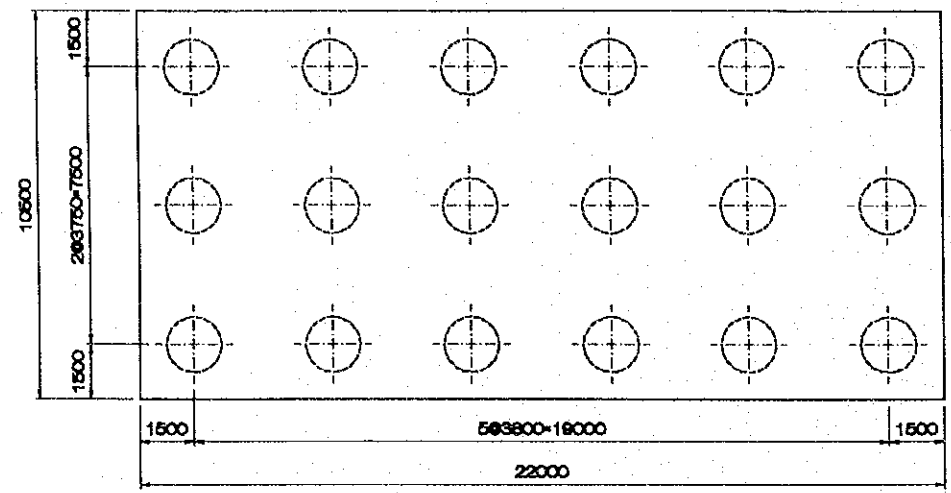
DETAIL OF CURB
(S=1/50)



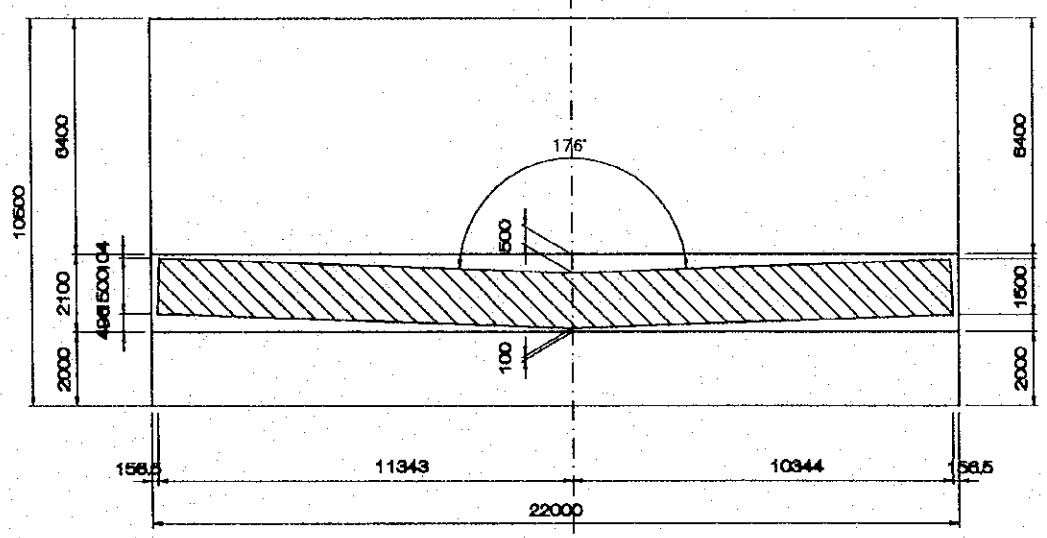
DETAIL OF SHOES
(S=1/50)



PILE ARRANGEMENT



SECTION 2-2



ELEVATION OF TOP ABUTMENT WALL

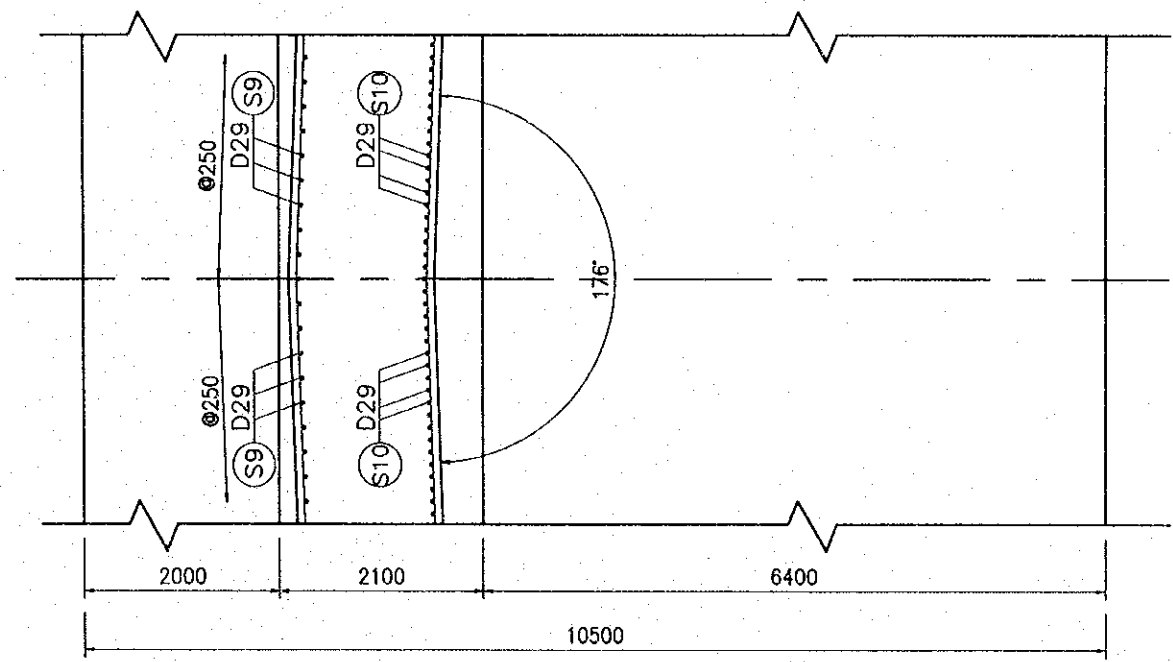
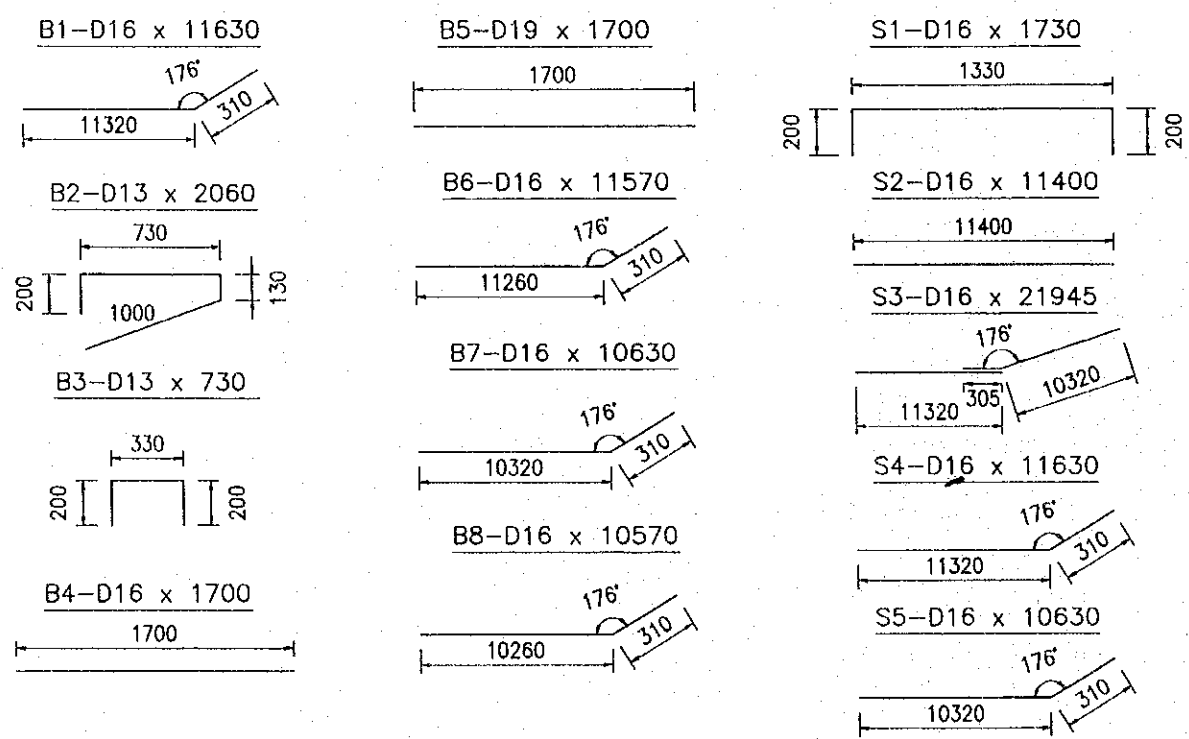
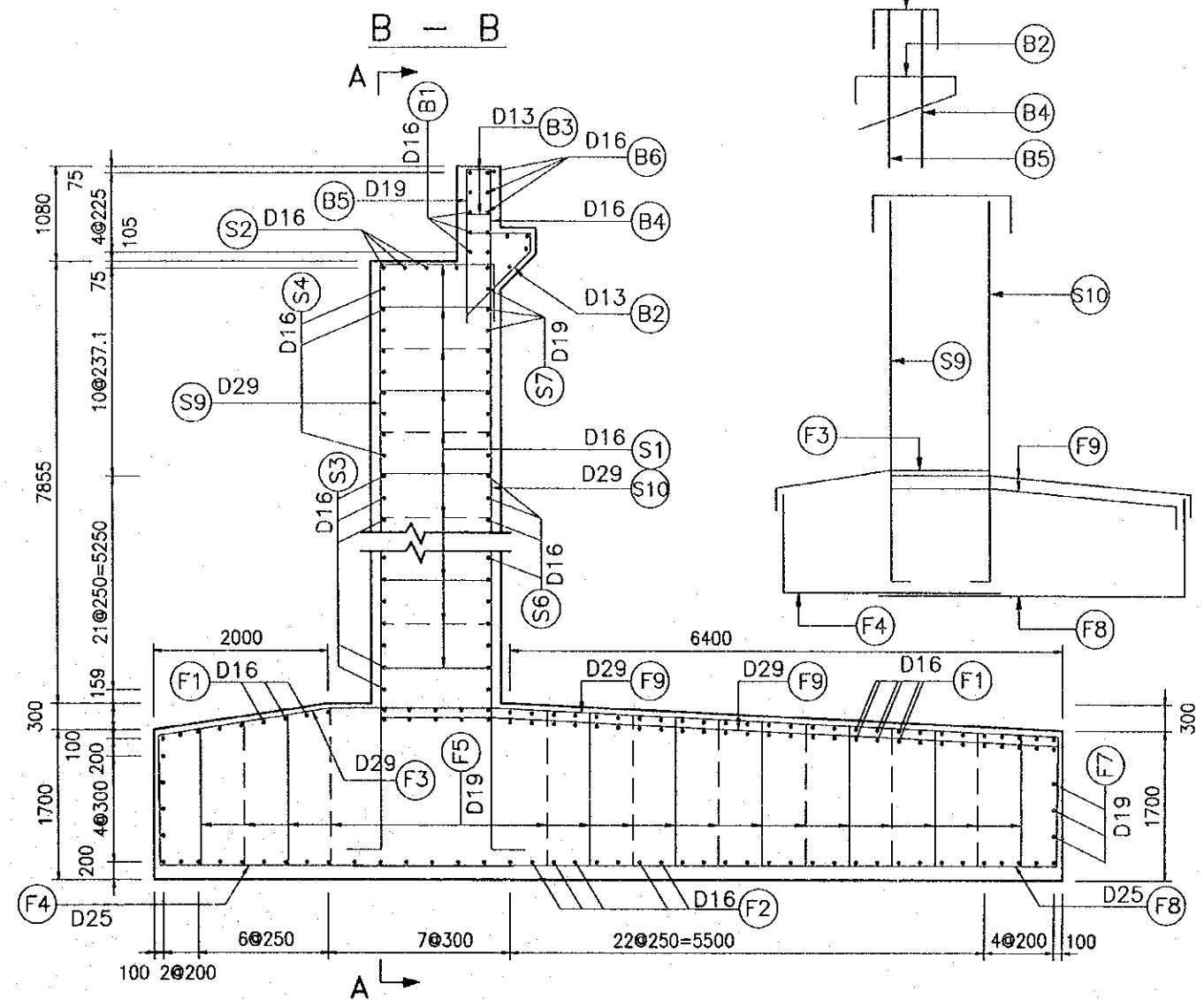
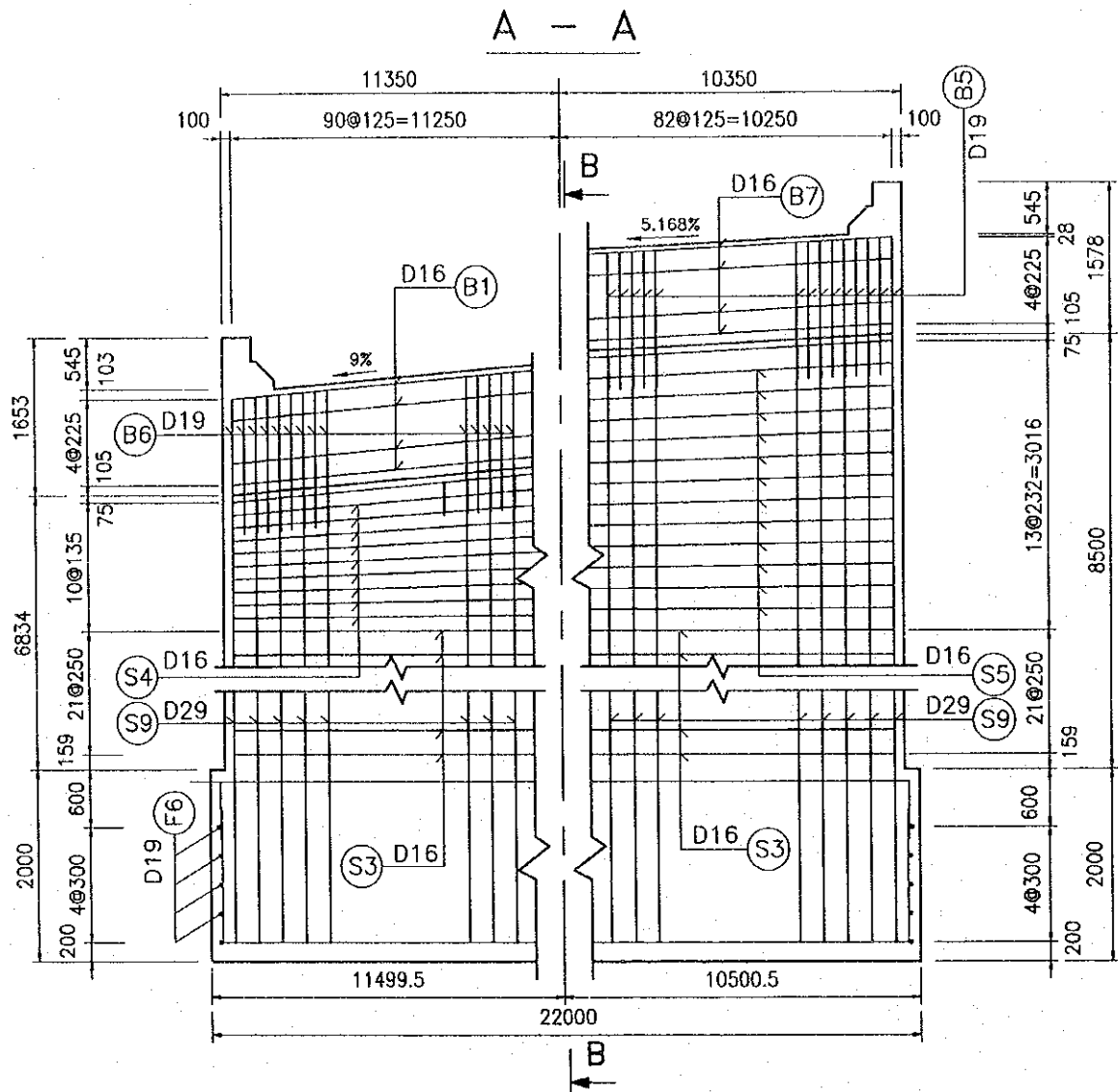
POINT	A 1	A 2	A 3	A 4	B 1	B 2	B 3	B 4
ELEVATION	10.594	10.378	10.162	9.946	11.364	11.240	11.116	10.992

DEPTH OF SUPERSTRUCTURE (MM)

P.C.I Girder	MOVE
Pavement	75
Slab	1000
Haunch(T1)	20
Bearing(T2)	56
Motor(T3)	30
Sub Total	1181

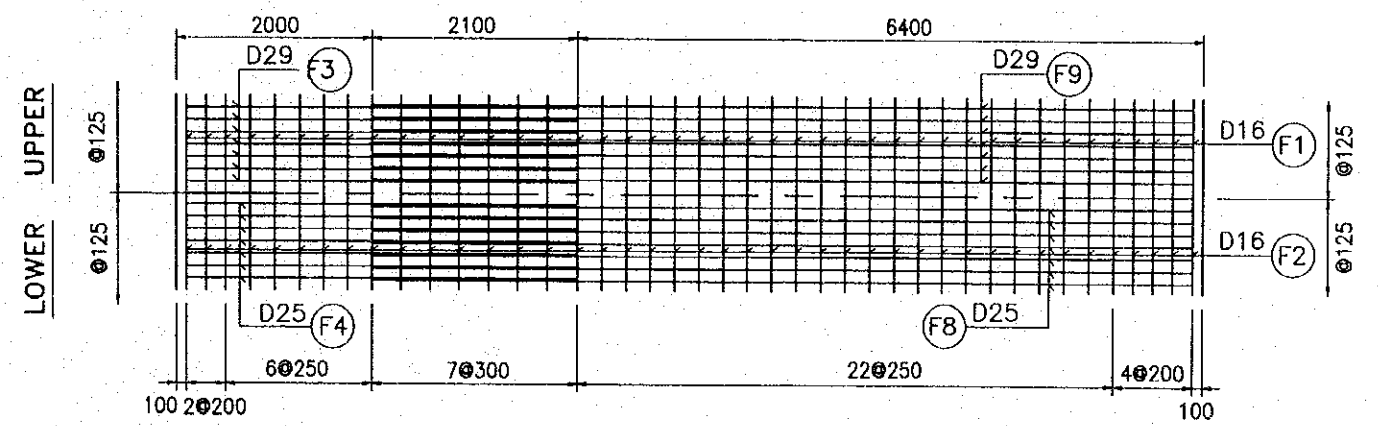
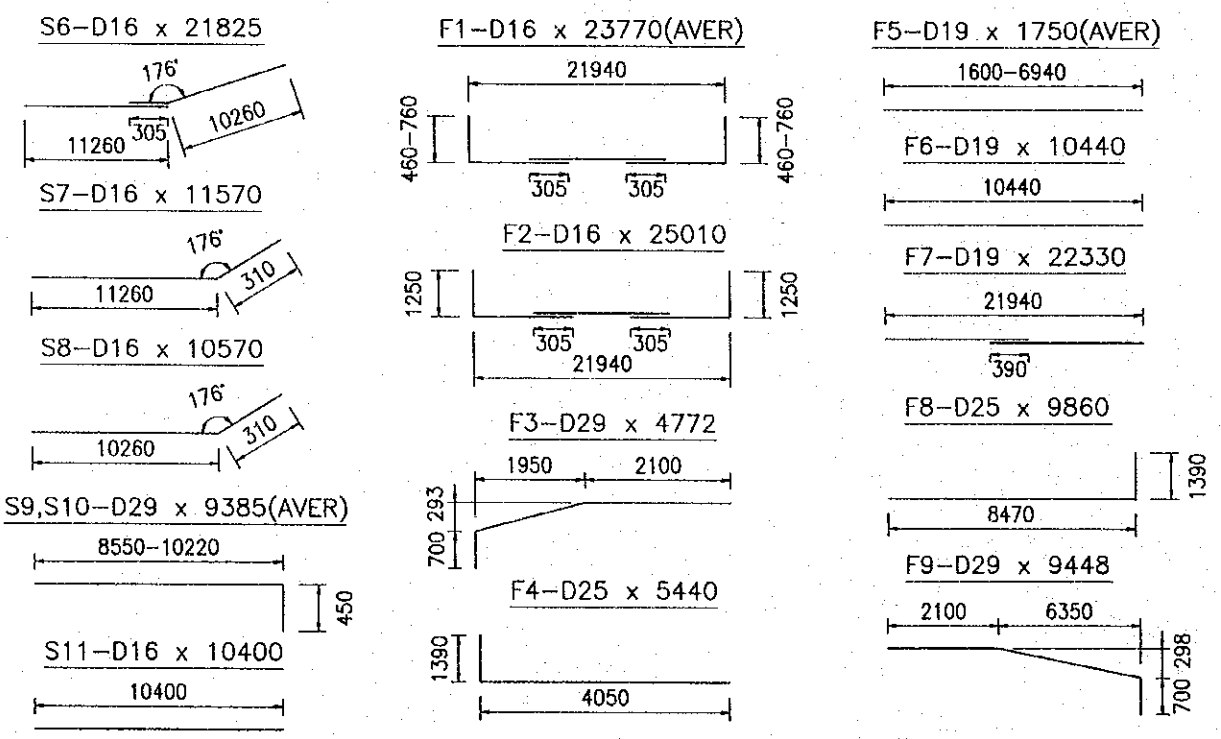
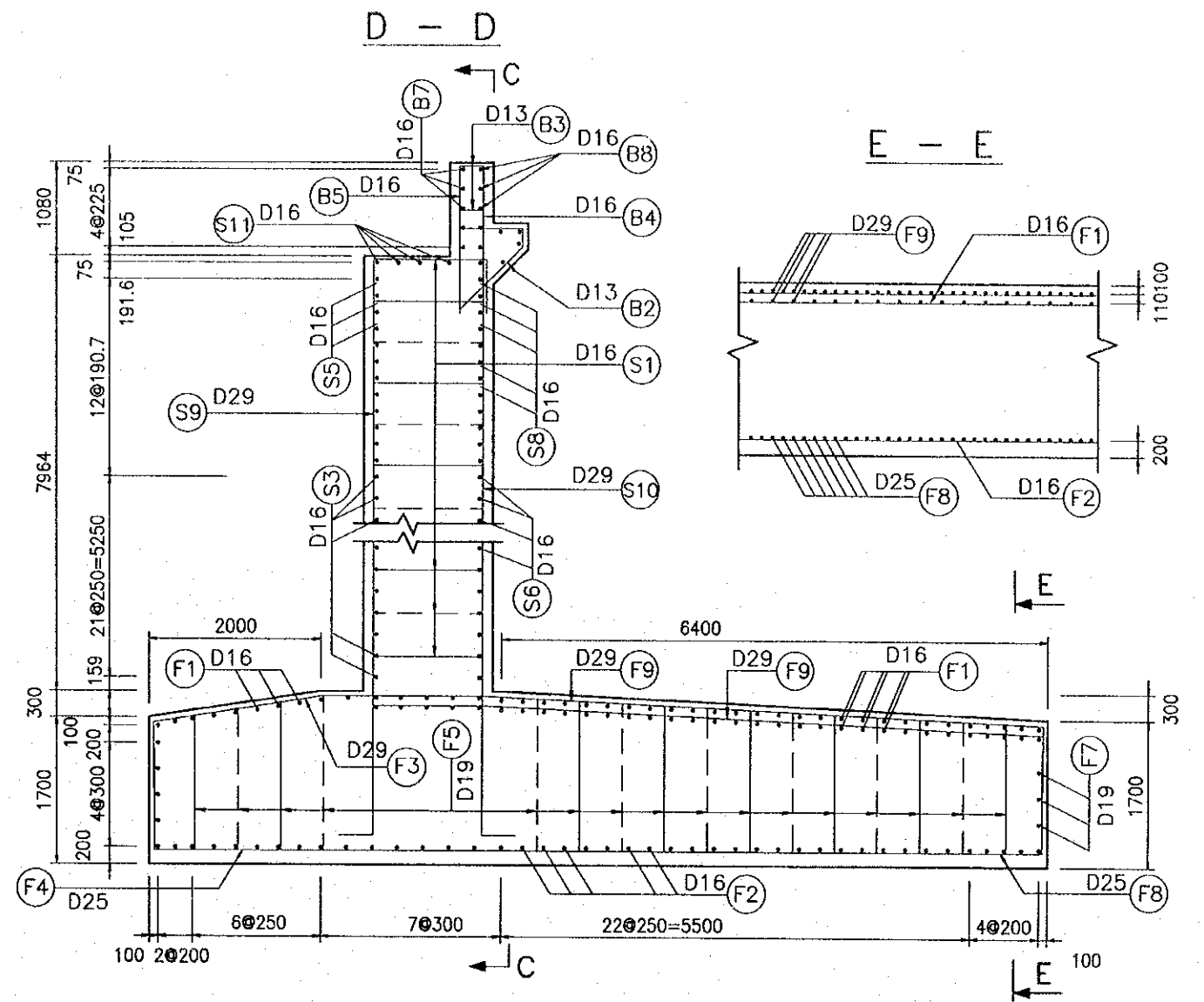
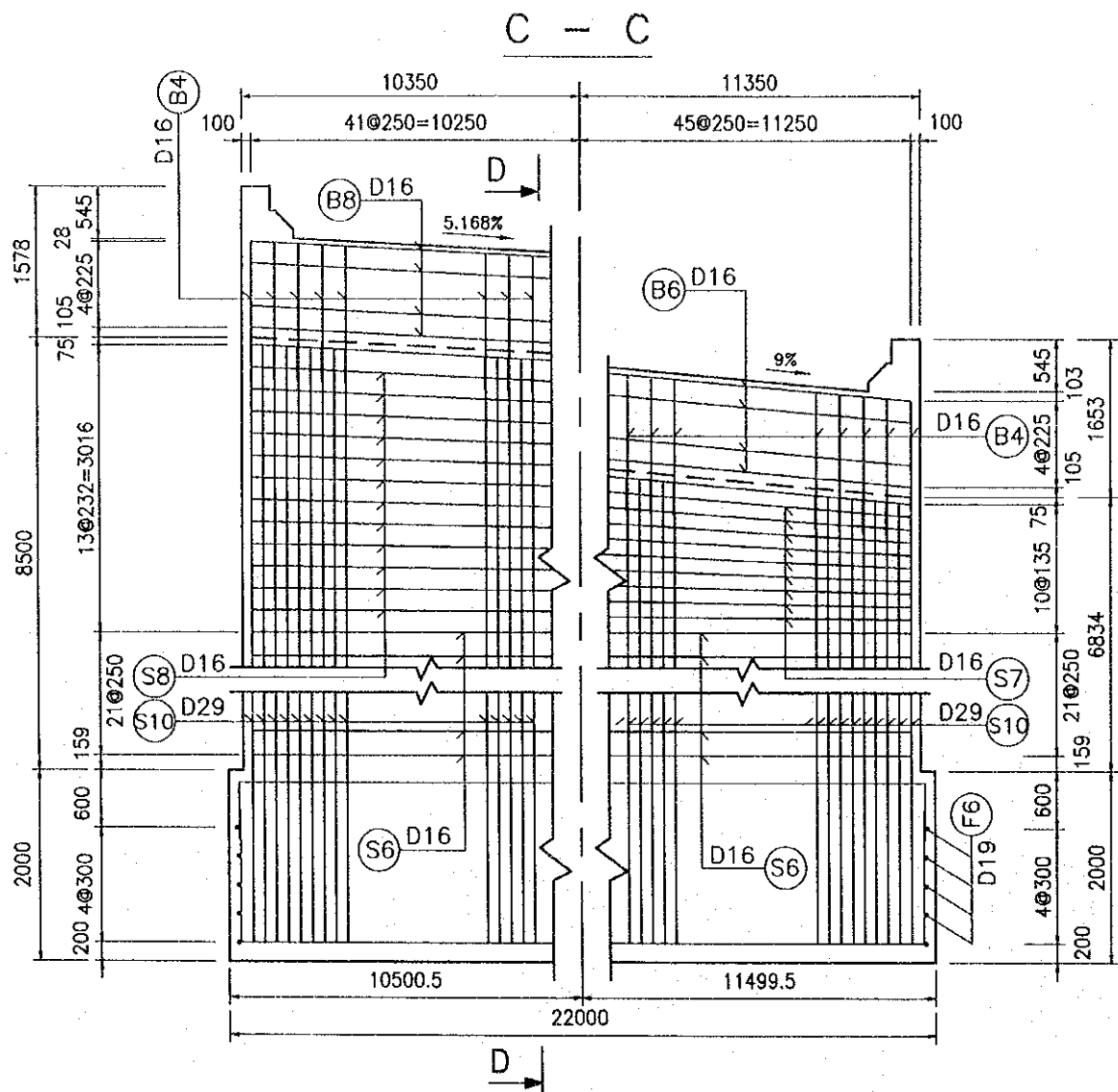
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATARE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.2.19	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/75	DRAWING No. C-2-3-2	SHEET No.
BAR ARRANGEMENT OF ABUTMENT Ab1 (1)			



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANHO LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.WATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.5.17	

PACKAGE 3	SCALE 1/75	DRAWING No. C-2-3-3	SHEET No.
BAR ARRANGEMENT OF ABUTMENT Aob1 (2)			



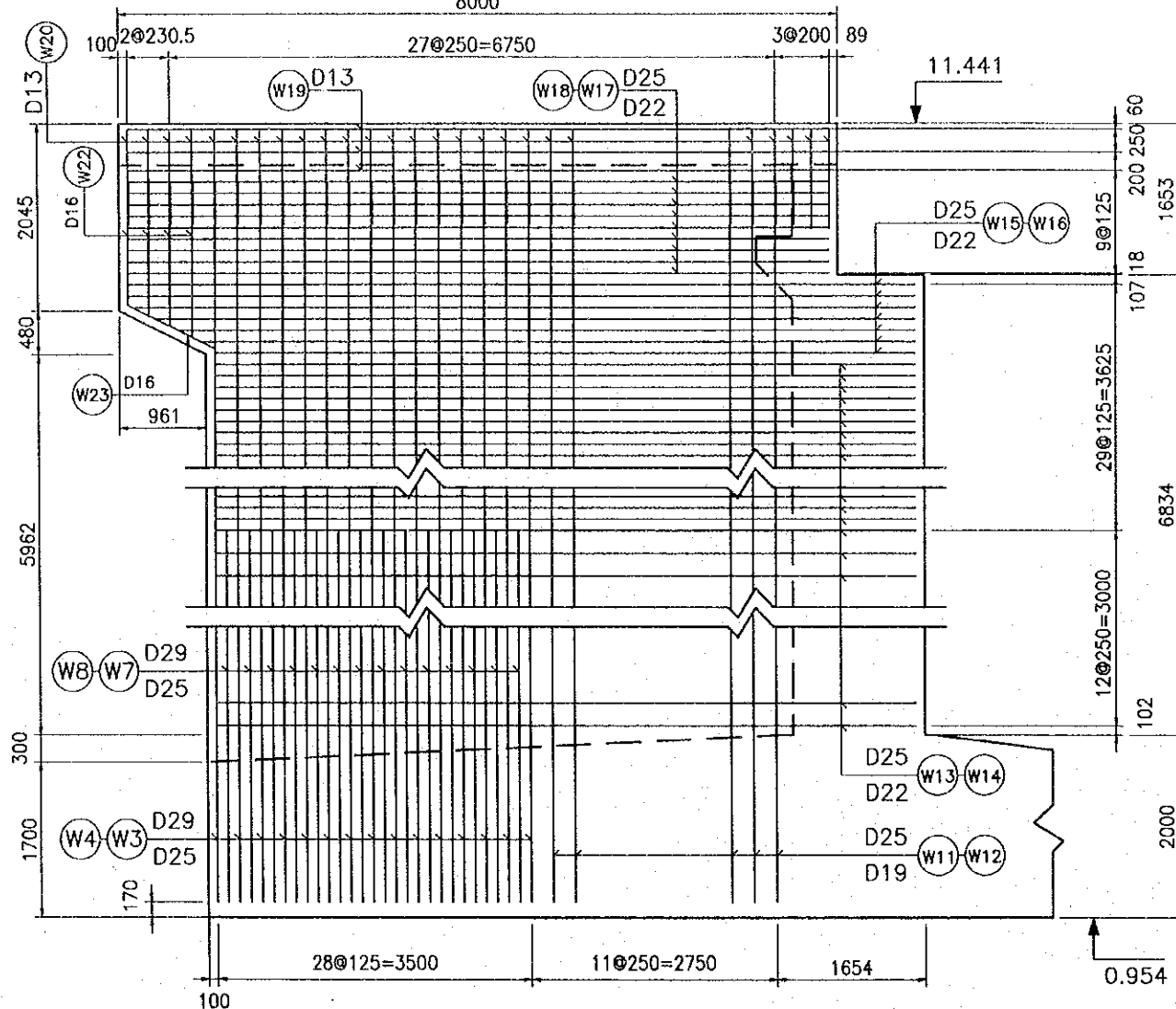
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.3.17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/75	C-2-3-4	

BAR ARRANGEMENT OF ABUTMENT (3)

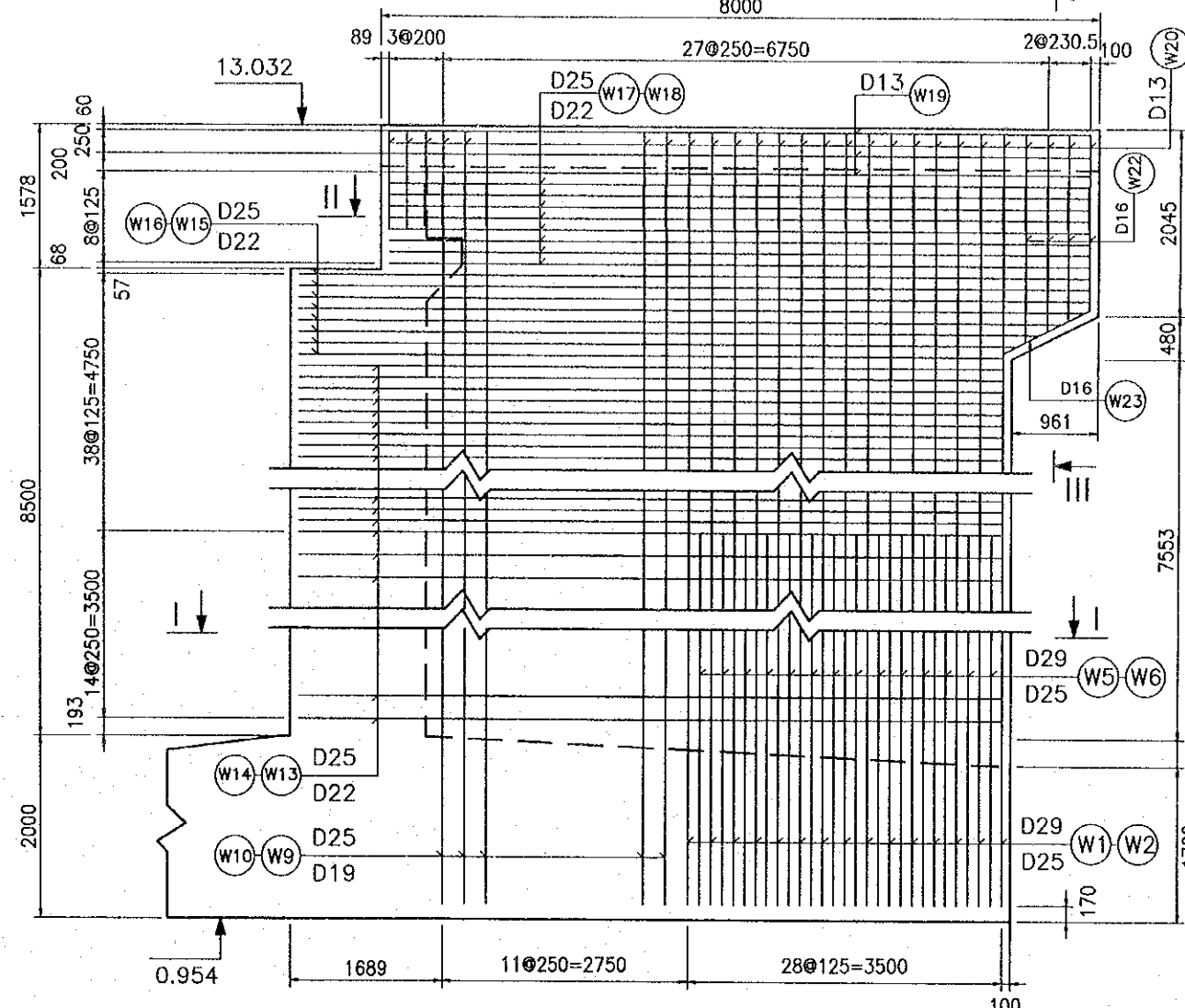
SIDE OF RAMP -- A

8000



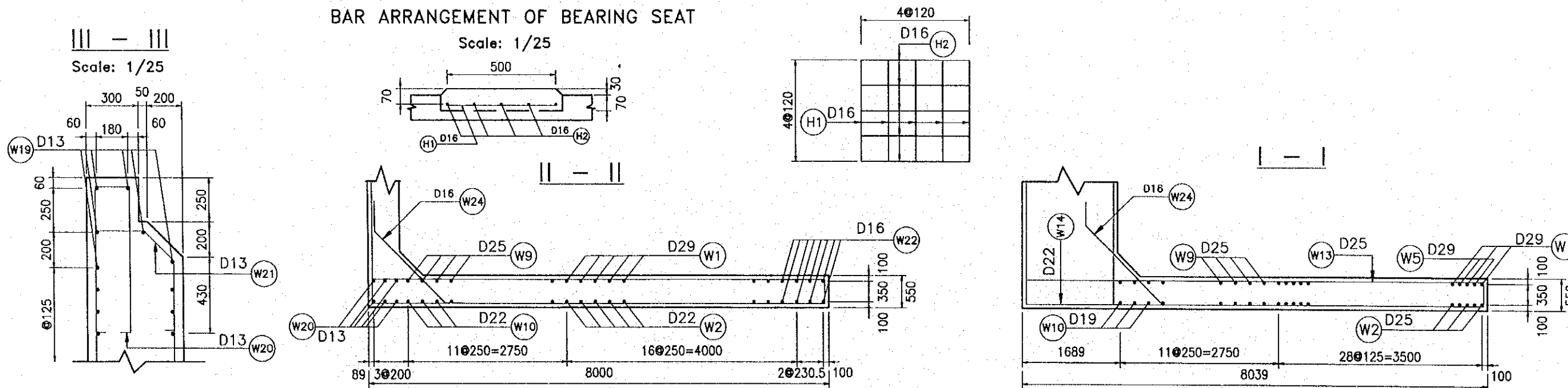
SIDE OF RAMP -- B

8000



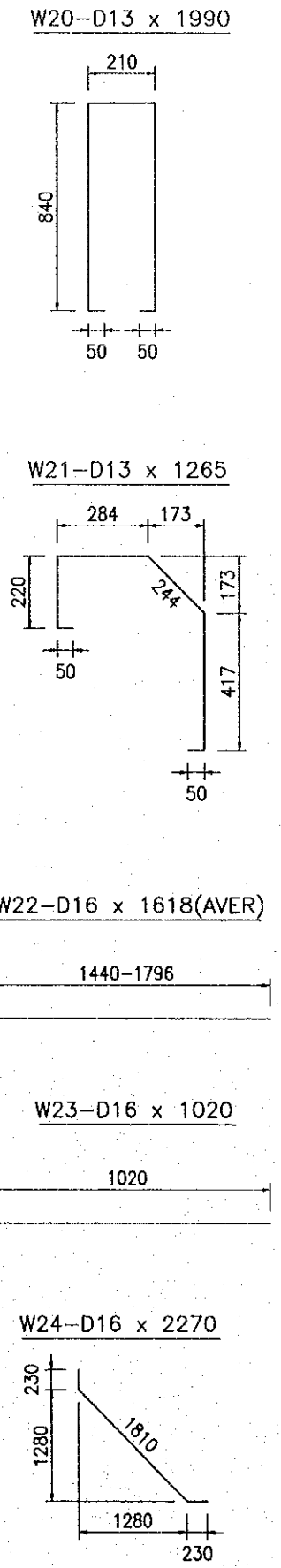
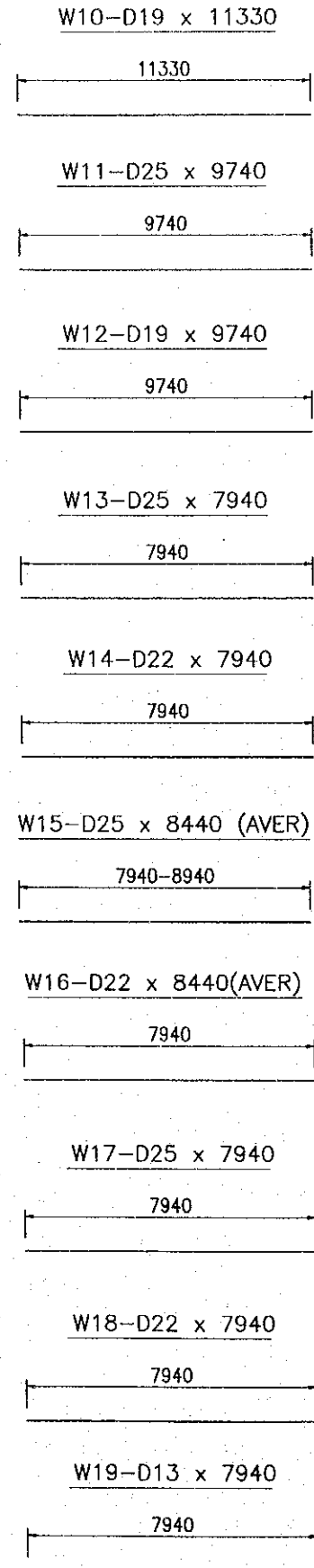
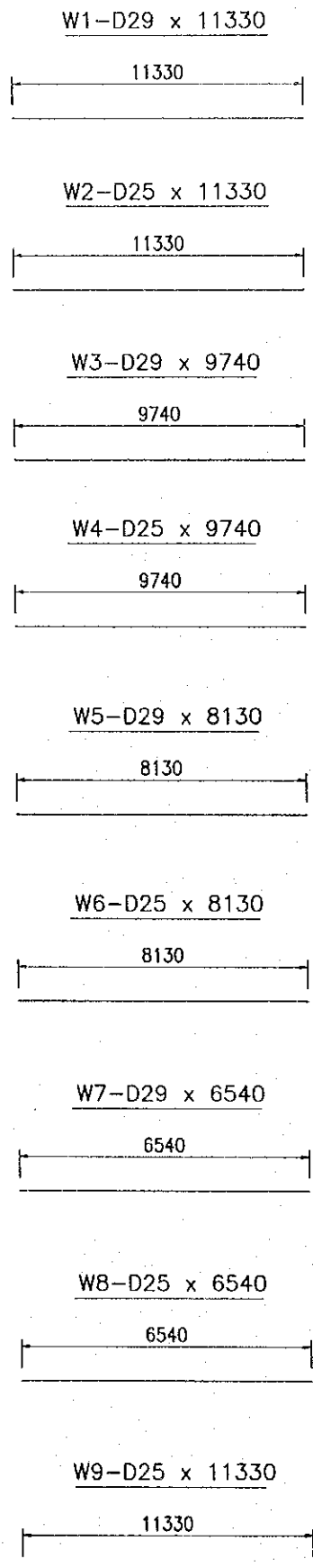
BAR ARRANGEMENT OF BEARING SEAT

Scale: 1/25



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		
PROJECT RED RIVER BRIDGE (HANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000. 11. 14	

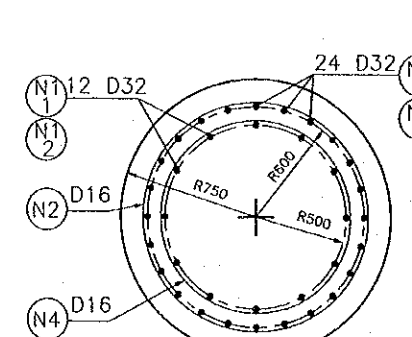
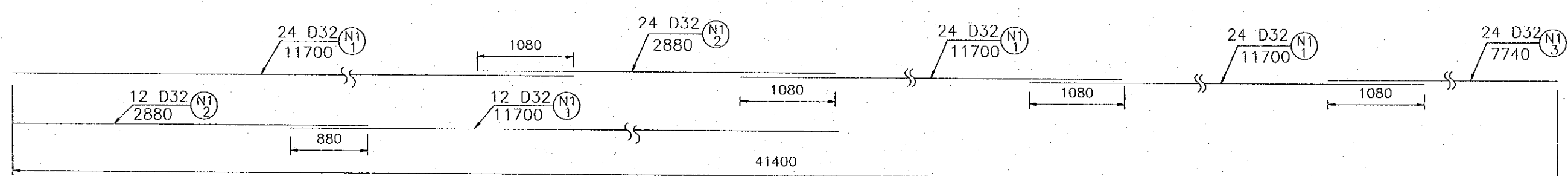
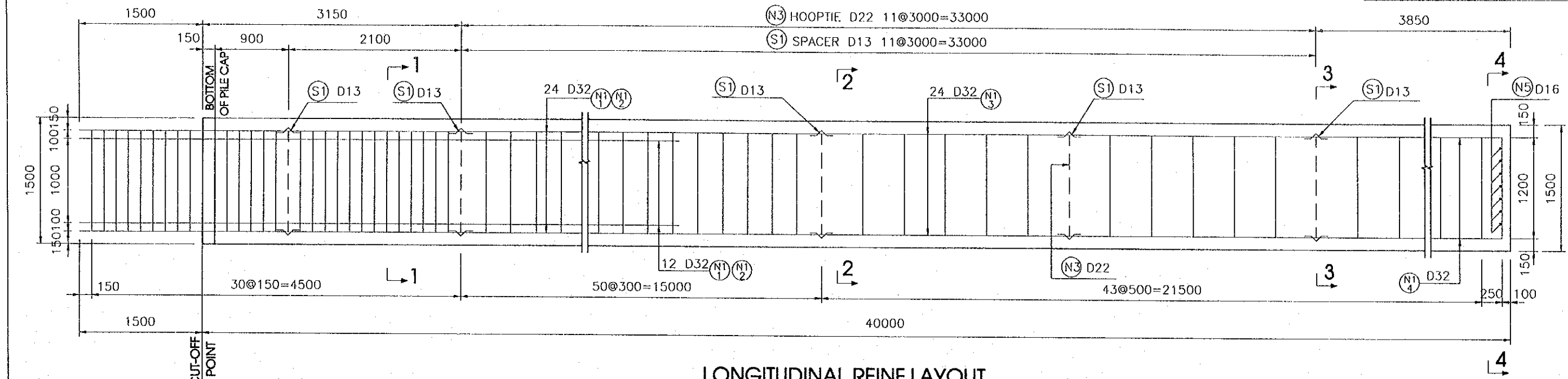
PACKAGE 3	SCALE	DRAWING No. C-2-3-5	SHEET No.
REINFORCING BARS OF ABUTMENT A2b1 (4)			



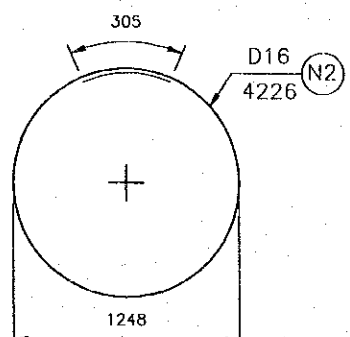
Detail	Bars	Dia (mm)	Length (mm)	No's	Unit Weight (Kg/m)	Weight (Kg)	Remarks	
BALLAST WALL	B1	D16	11630	5	1.560	90.71		
	B2	D13	2060	83	0.995	170.13		
	B3	D13	730	131	0.995	95.15		
	B4	D16	1700	87	1.560	230.72		
	B5	D19	1700	173	2.250	661.73		
	B6	D16	11570	9	1.560	162.44		
	B7	D16	10630	5	1.560	82.91		
	B8	D16	10570	9	1.560	148.40		
STEM	S1	D16	1730	704	1.560	1899.96		
	S2	D16	11400	5	1.560	88.92		
	S3	D16	21945	22	1.560	753.15		
	S4	D16	11630	9	1.560	163.29		
	S5	D16	10630	12	1.560	198.99		
	S6	D16	21825	22	1.560	749.03		
	S7	D16	11570	9	1.560	162.44		
	S8	D16	10570	12	1.560	197.87		
	S9	D29	9385	87	5.040	4115.13		
	S10	D29	9385	173	5.040	8182.97		
	S11	D16	10400	5	1.560	81.12		
FOOTING	H1	D16	500	40	1.560	31.2		
	H2	D16	500	40	1.560	31.2		
	F1	D16	23770	74	1.560	2744.01	AVER	
	F2	D16	25010	42	1.560	1638.66		
	F3	D29	4772	177	5.040	4257.01		
	F4	D25	5440	177	3.980	3832.26		
	F5	D19	1750	1335	2.250	5256.56	AVER	
	F6	D19	10440	8	2.250	187.92		
	F7	D19	21940	8	2.250	394.92		
WING WALL	F8	D25	9860	177	3.980	6945.98		
	F9	D29	9448	266	5.040	12666.4		
	W1	D29	11330	15	5.040	856.55		
	W2	D25	11330	15	3.980	676.40		
	W3	D29	9740	15	5.040	736.34		
	W4	D25	9740	15	3.980	581.48		
	W5	D29	8130	14	5.040	573.65		
	W6	D25	8130	14	3.980	453.00		
	W7	D29	6540	14	5.040	461.46		
	W8	D25	6540	14	3.980	364.41		
	W9	D25	11330	11	3.980	496.03		
	W10	D19	11330	11	2.250	280.42		
	W11	D25	9740	11	3.980	426.42		
	W12	D19	9740	11	2.250	241.07		
	W13	D25	7940	82	3.980	2591.3		
	W14	D22	7940	82	3.040	1979.28		
	W15	D25	8440	15	3.980	503.87	AVER	
	W16	D22	8440	15	3.040	384.86	AVER	
	W17	D25	7940	17	3.980	537.22		
	W18	D22	7940	17	3.040	410.34		
	W19	D13	7940	12	0.995	94.80		
	W20	D13	1990	66	0.995	130.68		
	W21	D13	1265	66	0.995	83.07		
	W22	D16	1618	16	1.560	40.39		
W23	D16	1020	4	1.560	6.36			
W24	D16	2270	96	1.560	339.96			
SUMMARY	TOTAL						69470.52	
	D13 : 573.8			D22 : 2774.5				
	D16 : 9841.7			D25 : 17408.4				
	D19 : 7022.6			D29 : 31849.5				

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S.WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL		DATE: 2000.3.14

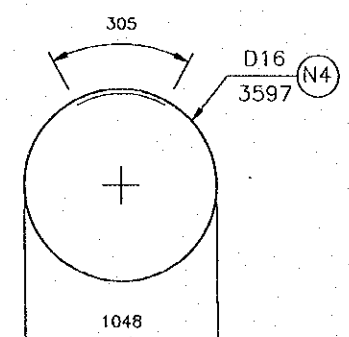
PACKAGE 3	SCALE 1/50	DRAWING No. C-2-3-6	SHEET No.
Abutment DETAIL OF D=150CM CAST IN PLACE CONCRETE PILE			



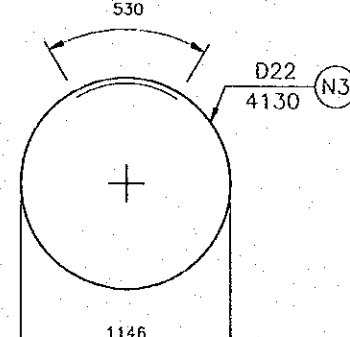
SECTION 1-1



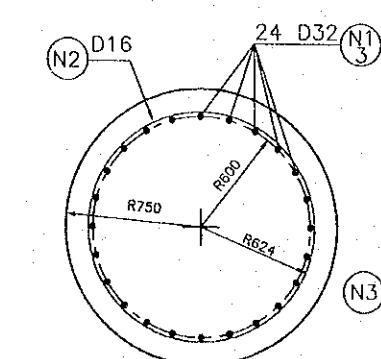
TYPICAL TIE 1



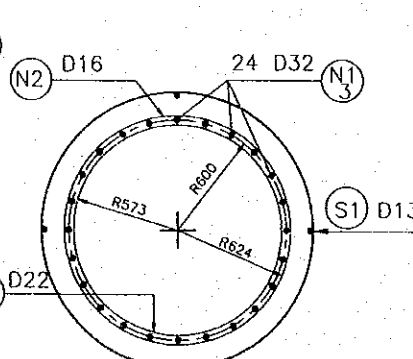
TYPICAL TIE 2



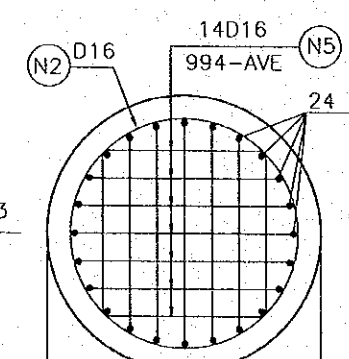
HOOP TIE DETAIL



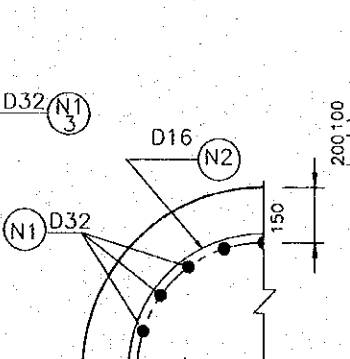
SECTION 2-2



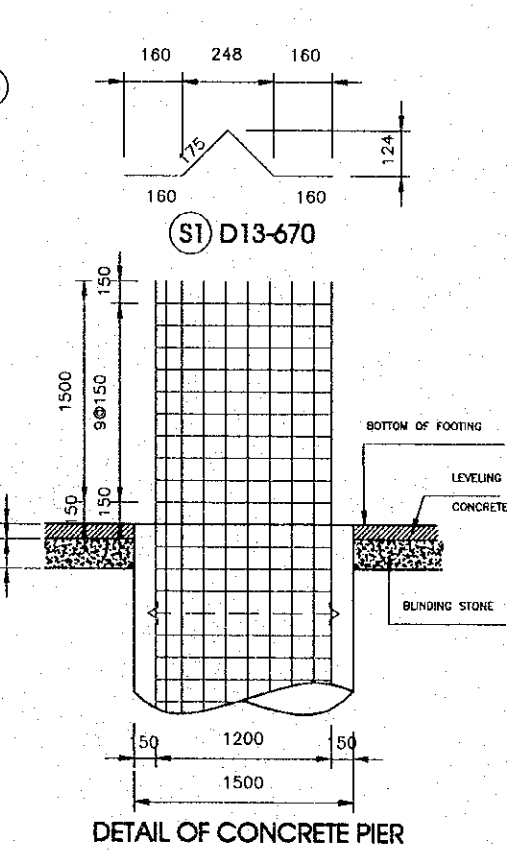
SECTION 3-3



SECTION 4-4



DETAIL OF COVERING



DETAIL OF CONCRETE PIER

BAR QUANTITIES OF PILES OF ABUTMENT AAB1

SYMBOL	SHAPE	Dia (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)
N1 ₁	—	D32	11700	84	6.23	6123
N1 ₂	—	D32	2680	36	6.23	601
N1 ₃	—	D32	7140	24	6.23	1068
N2	○	D16	4216	125	1.56	822
N3	○	D22	4140	13	3.04	164
N4	○	D16	3588	55	1.56	308
N5	—	D16	990	14	1.56	22
S1	—	D13	670	26	0.997	17
Total for one pile						9124
SUMMARY FOR 18 PILES	D13~D22					23986
	D29~D32					140247
	Total					164233

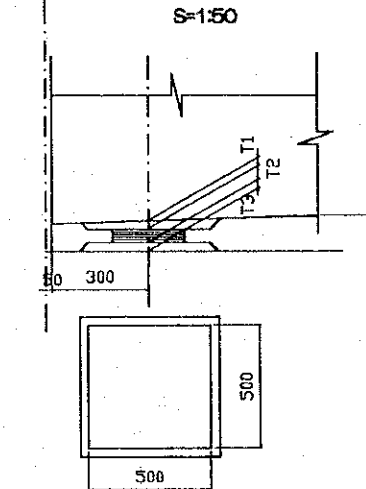
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.6.1

PACKAGE 3	SCALE 1/200	DRAWING No. C-2-3-7	SHEET No.
DETAIL OF PIER (Pa1 ~ Pa5)			

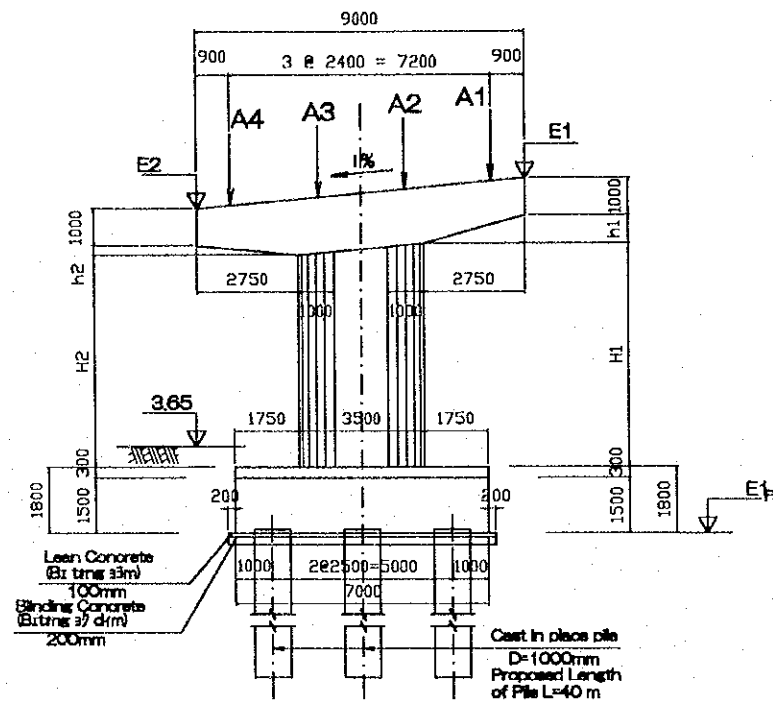
DEPTH OF SUPERSTRUCTURE (MM)

	MOVE	FIX
Pavement	75	75
Slab	1000	1000
Haunch (T1)	20	20
Bearing (T2)	56	32
Mortar (T3)	30	30
Sub Total	1181	1157

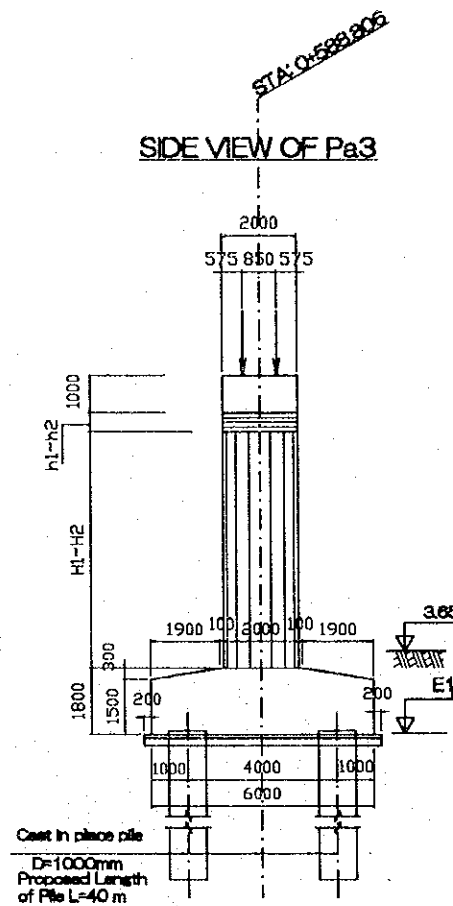
DETAIL OF SHOES



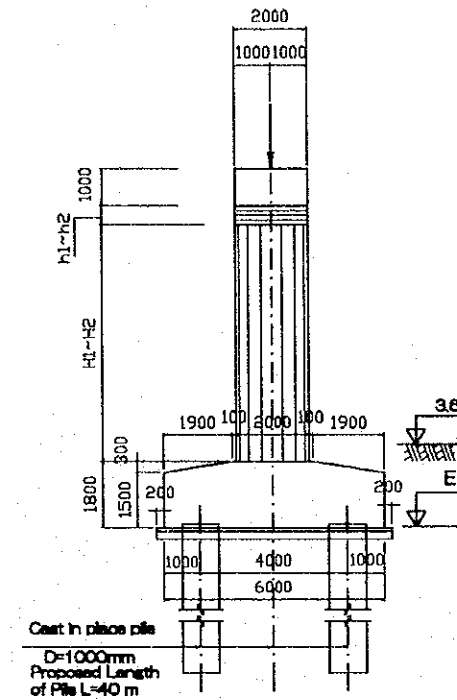
FRONT VIEW



SIDE VIEW OF Pa3



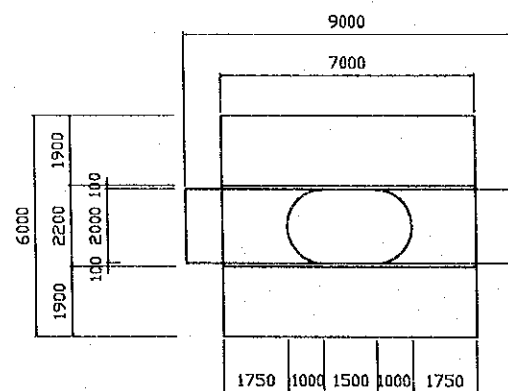
SIDE VIEW OF Pa1, Pa2, Pa4, Pa5



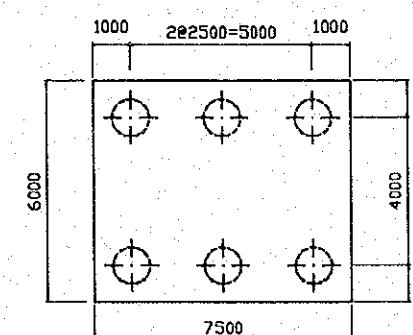
ELEVATIONS, DIMENSIONS OF PIERS

Piers	Depth of superstructure (mm)		Dimensions of piers (mm)					PH	Incline (%)	Elevation of top pier head (m)			Foot, bottom Elevation Efb(m)
	B(Move)	A(Fix)	h1	h2	H1	H	H2			E1	E	E2	
Pa1		1157	748	253	7157	7000	6842	12.486	9	11.734	11.329	10.924	1.029
Pa2	1181		748	253	8157	8000	7842	13.449	9	12.673	12.268	11.863	0.968
Pa3	1181		748	253	8657	8500	8342	14.184	9	13.408	13.003	12.598	1.203
Pa4		1157	723	277	9142	9000	8858	14.681	8.115	13.889	13.524	13.159	1.224
Pa5	1181		651	348	9597	9500	9404	14.942	5.522	14.009	13.761	13.513	0.961
P15L	1181							15.121	2.984	14.074	13.940	13.806	

PLAN



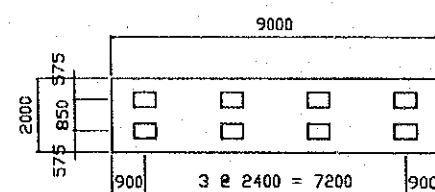
PILE ARRANGEMENT



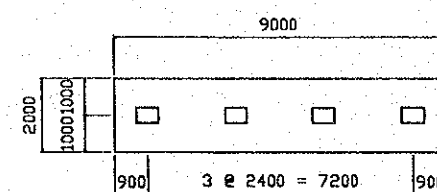
ELEVATION OF TOP PIER HEAD

Piers	A1	A2	A3	A4
Pa1	11.653	11.437	11.221	11.005
Pa2	12.592	12.376	12.160	11.944
Pa3	13.327	13.111	12.895	12.679
Pa4	13.818	13.621	13.426	13.232
Pa5	13.959	13.826	13.694	13.561
P15L	14.047	13.975	13.904	13.832

PIER HEAD OF PA3



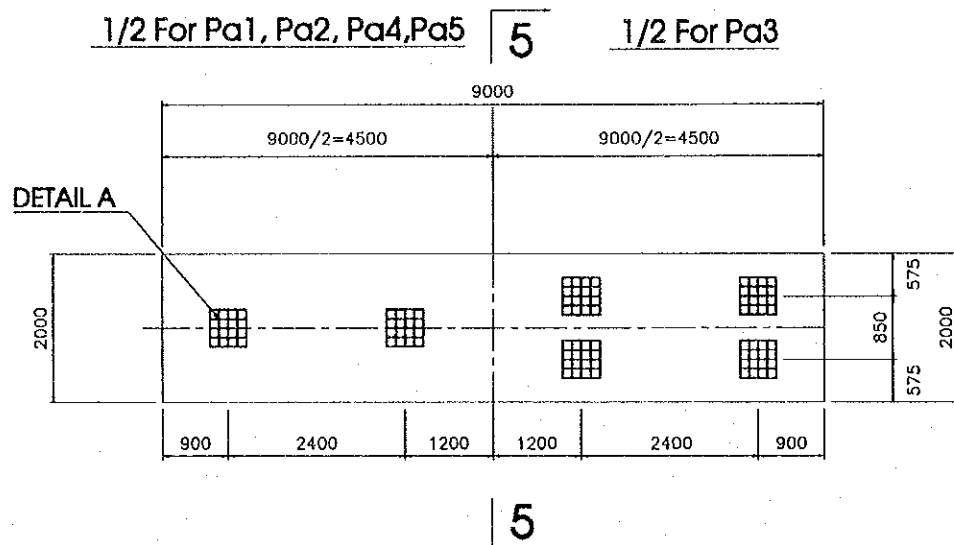
PIER HEAD OF PA1, PA2, PA4, PA5



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY NAME S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2002.11.14

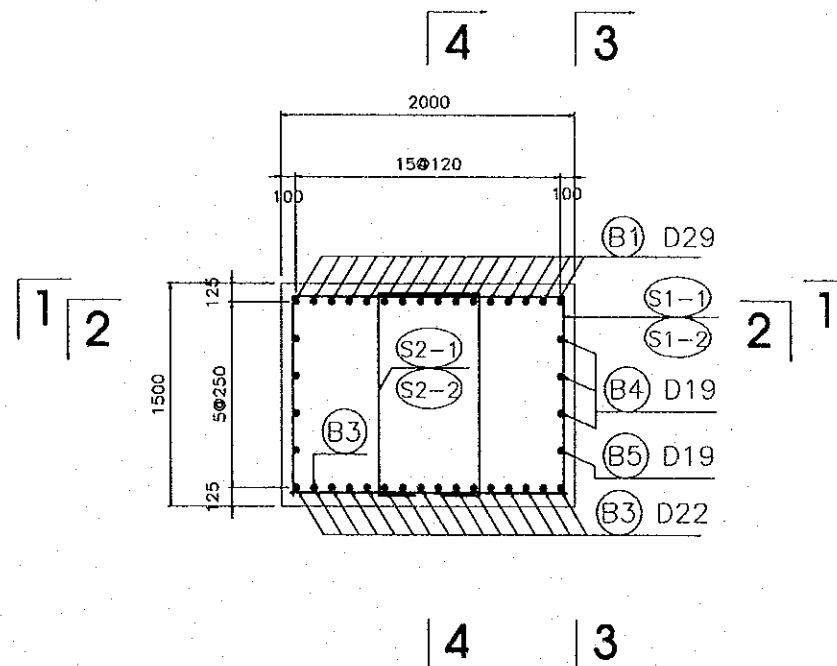
PACKAGE 3	SCALE 1/100	DRAWING No. C-2-3-8	SHEET No.
A - RAMP BAR ARRANGEMENT OF PIERS Pa1~Pa5 (1)			

SECTION 1 - 1



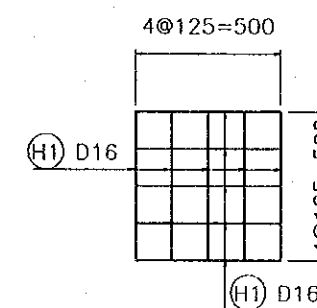
SECTION 5-5

(SC=1/50)

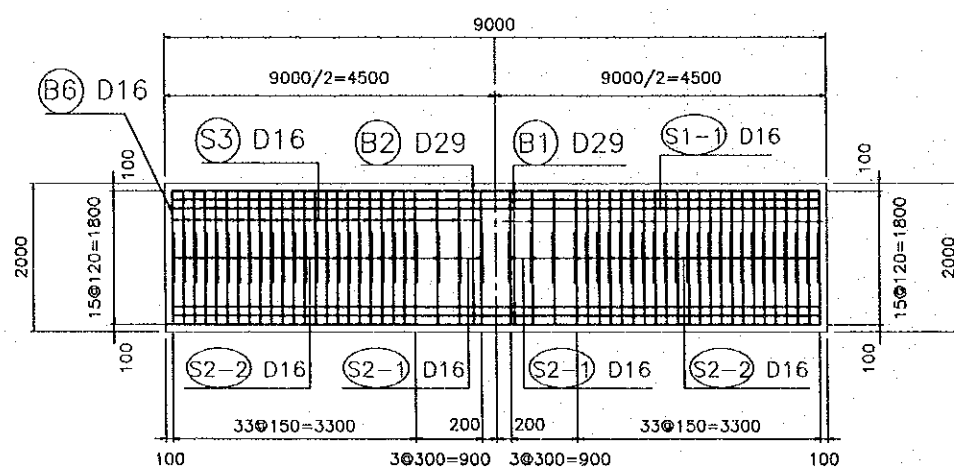


DETAIL A

(SC=1/25)



SECTION 2-2

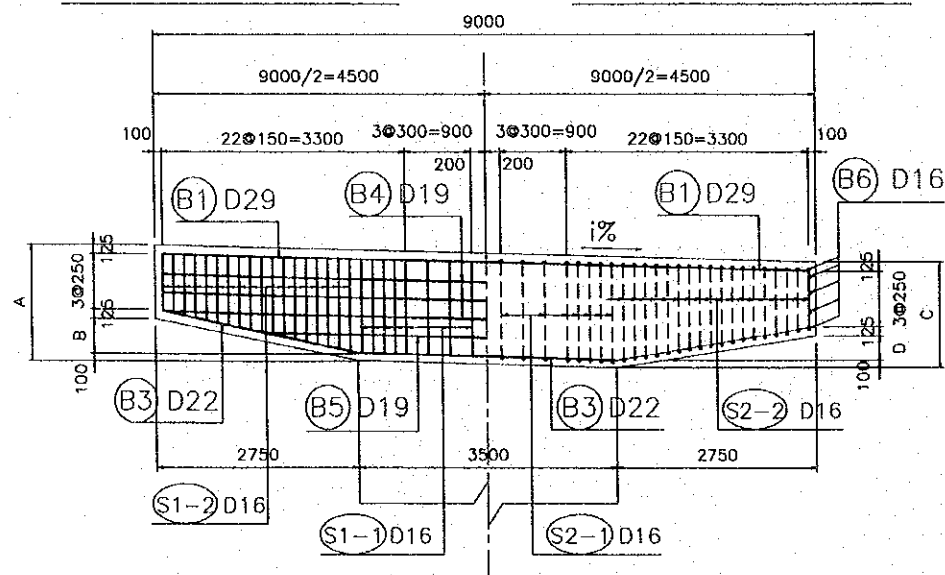


DIMENSIONS OF PIERS

PIER	A(mm)	B(mm)	C(mm)	D(mm)	i %
Pa1~Pa3	1750	650	1250	150	9.00
Pa4	1720	620	1280	180	8.115
Pa5	1650	550	1350	250	5.522

HALF SECTION 3-3

HALF SECTION 4-4

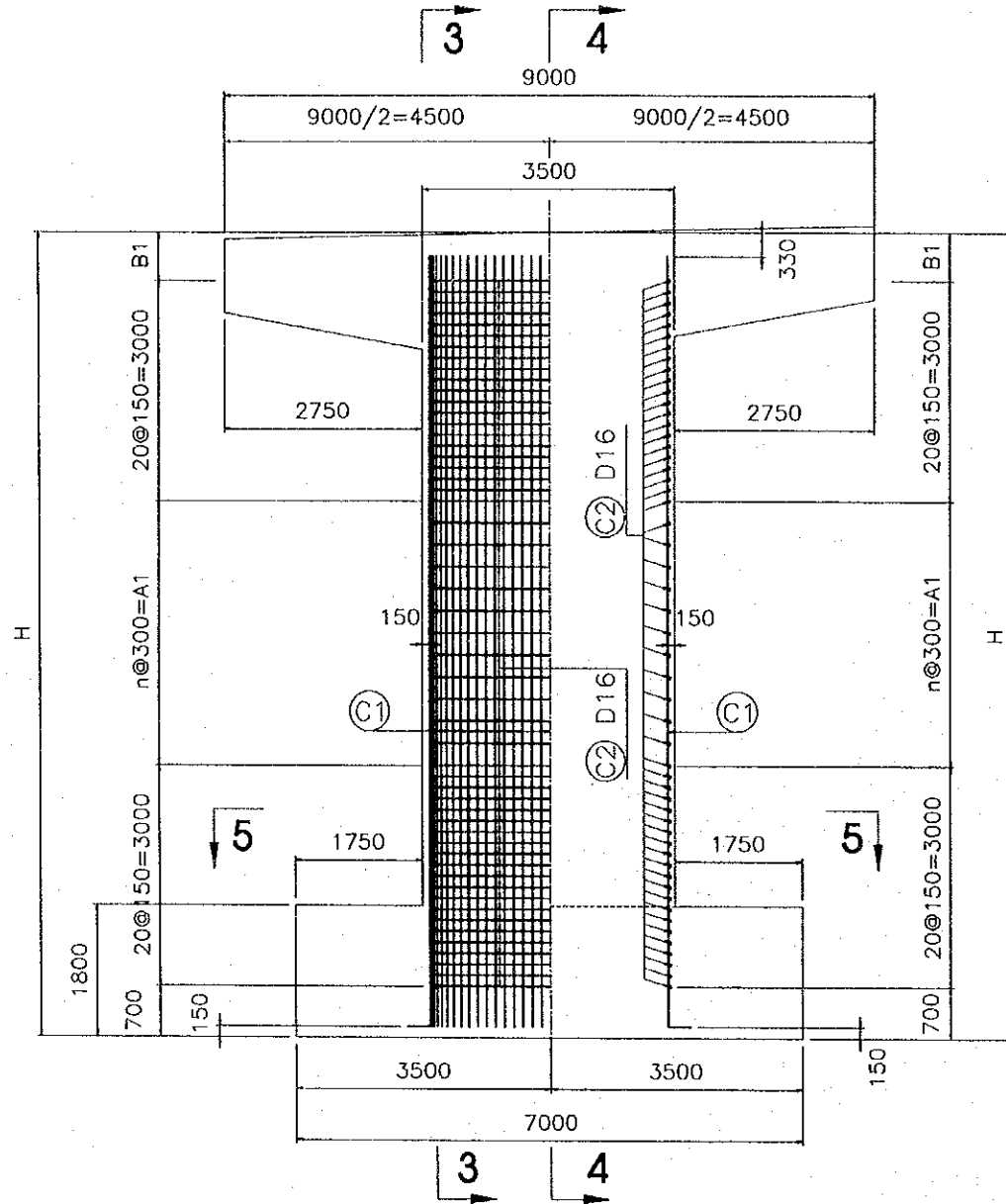


THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TIANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i>
CONSULTANT		DATE 2000.8.14

PACKAGE 3	SCALE 1/100	DRAWING No. C-2-3-9	SHEET No.
BAR ARRANGEMENT OF Pa1~Pa5 (2)			

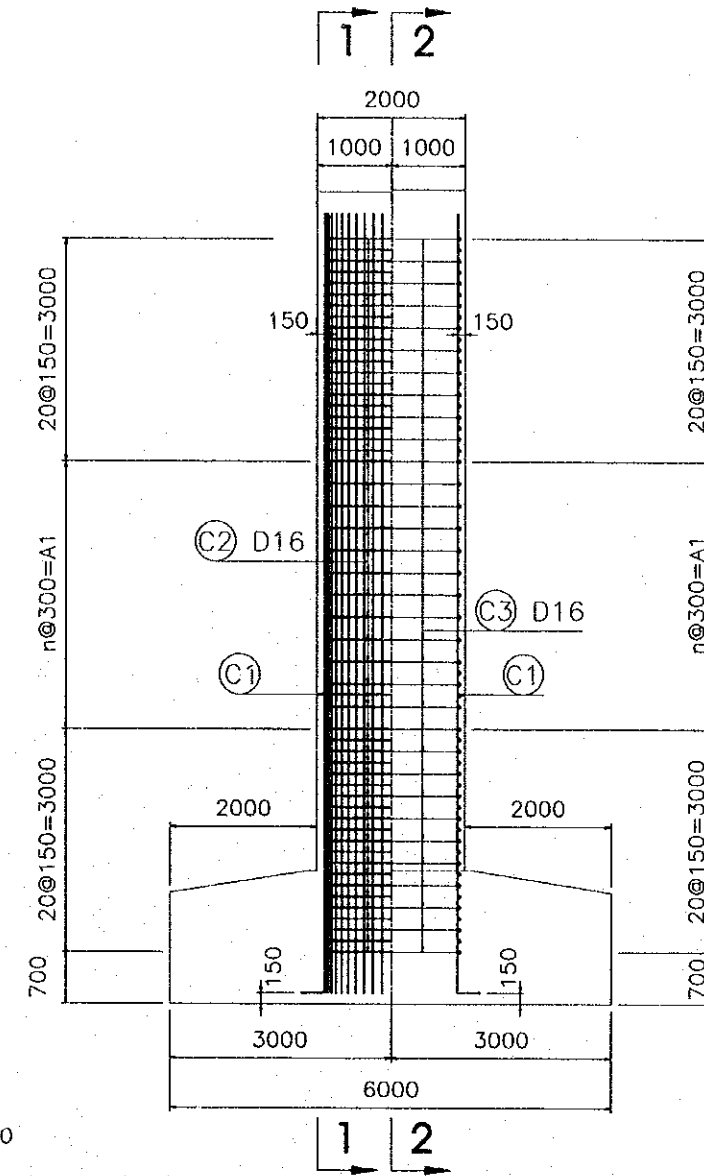
HALF SECTION 1 - 1

HALF SECTION 2 - 2

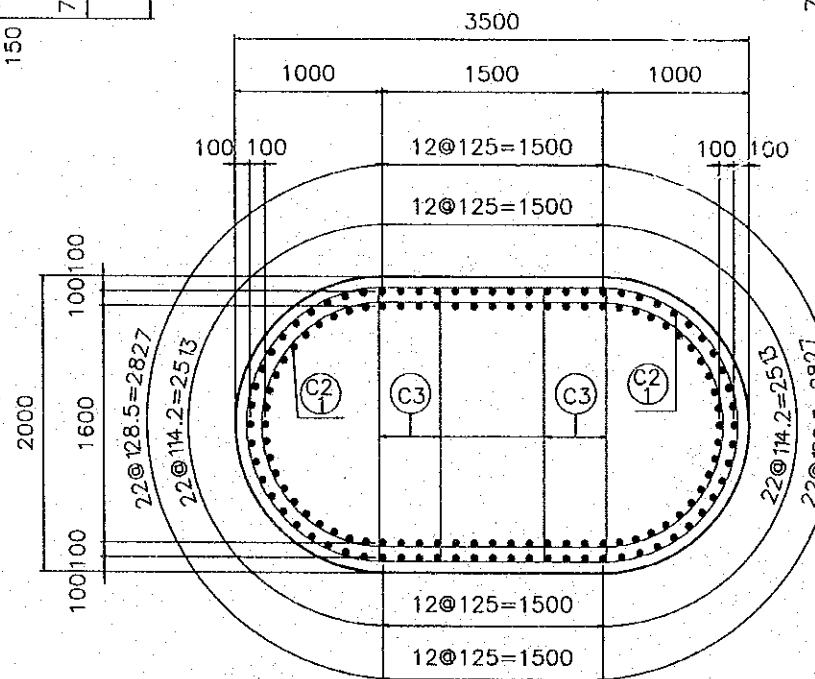


HALF SECTION 3 - 3

HALF SECTION 4 - 4



SECTION 5 - 5(Pa1~Pa5)
scale: 1/50



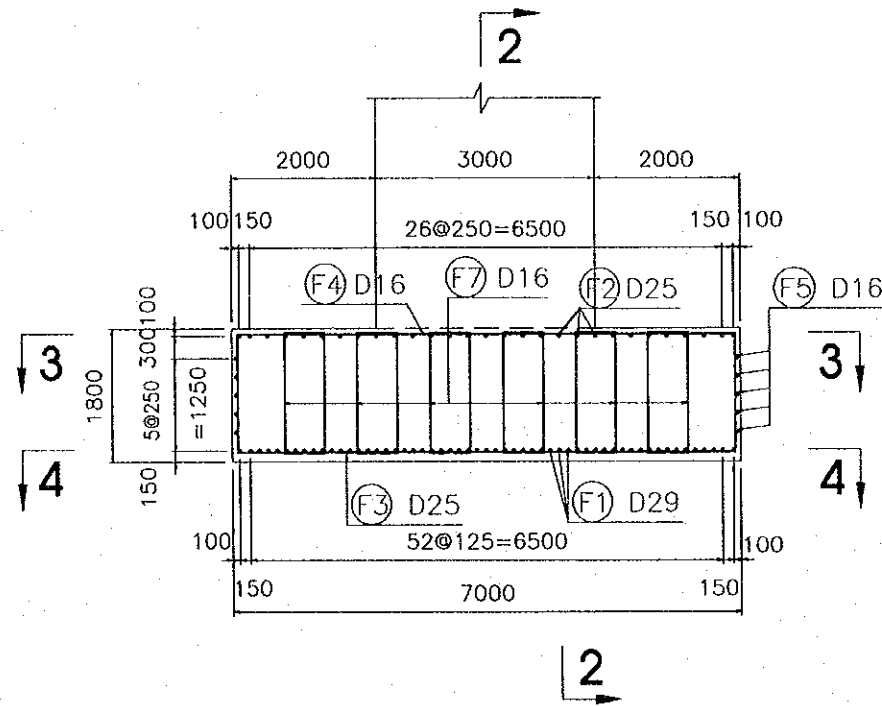
DIMENSION OF PIERS

ITEMS PIER	H	n	A1	B1
Pa1	10300	10	3000	600
Pa2	11300	14	4200	400
Pa3	11800	15	4500	600
Pa4	12300	17	5100	500
Pa5	12800	19	5700	400

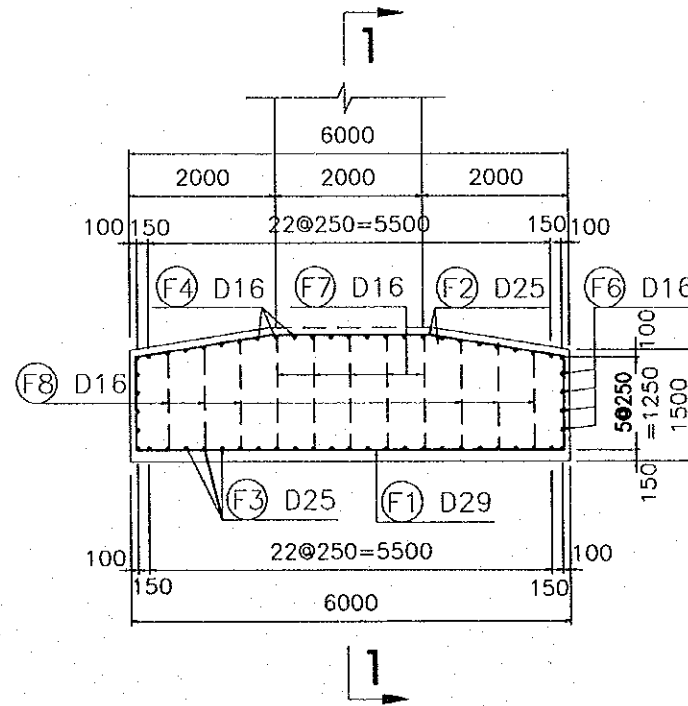
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i>
DATE 2000.03.14		

PACKAGE 3	SCALE 1/100	DRAWING No. C-2-3-10	SHEET No.
BAR ARRANGEMENT OF P01~P05 (3)			

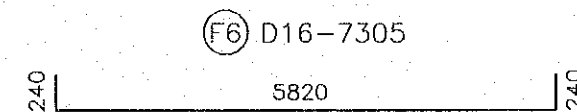
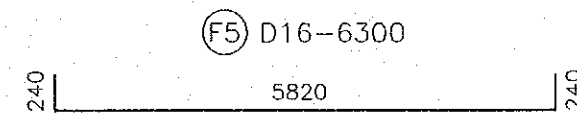
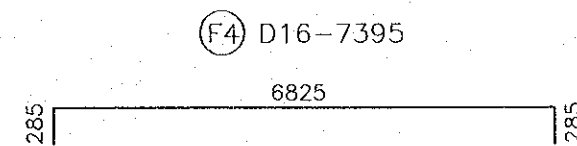
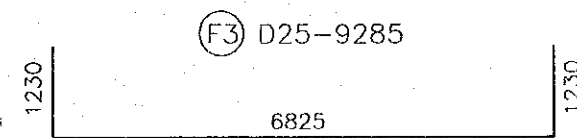
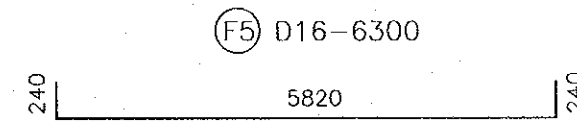
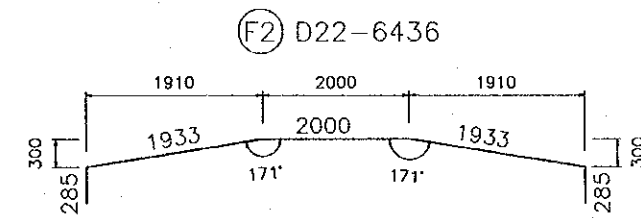
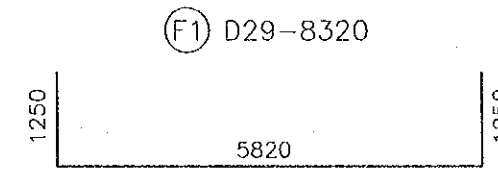
SECTION 1 - 1



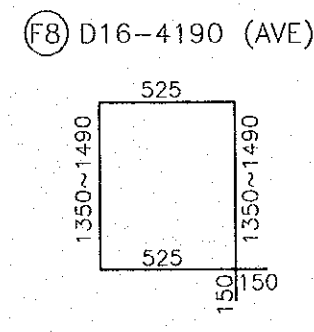
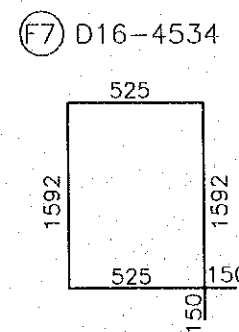
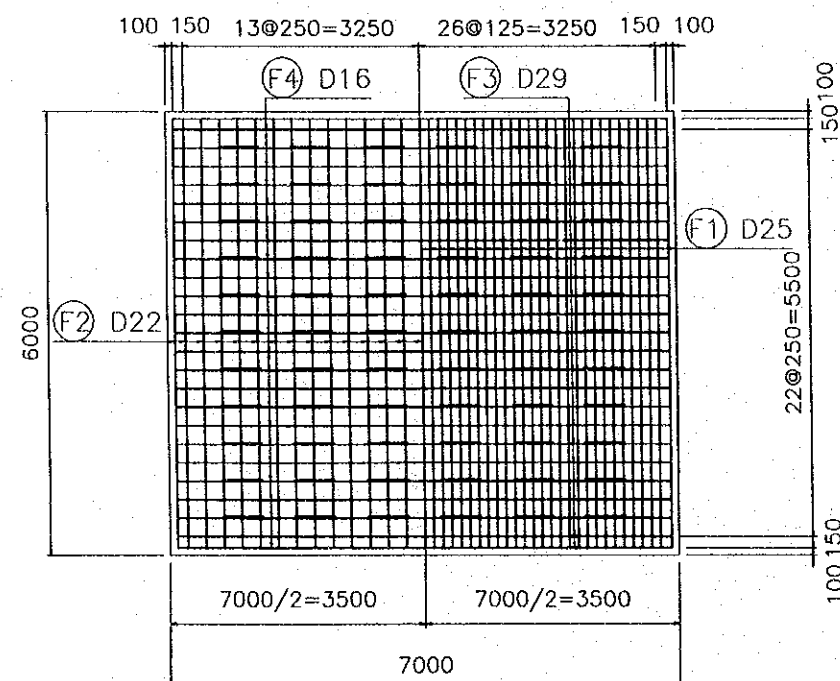
SECTION 2 - 2



LIST OF REINFORCING BARS FOR FOOTING



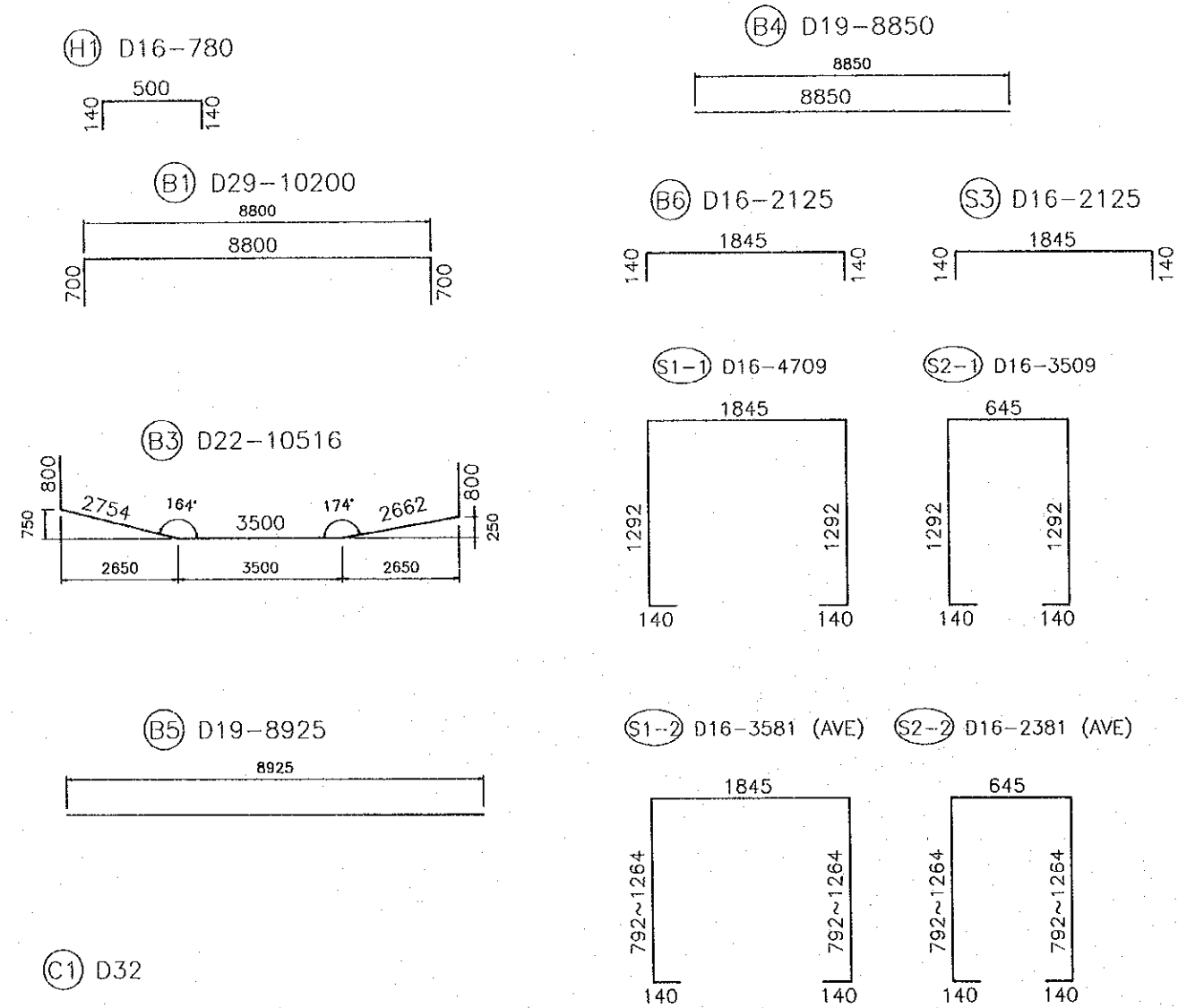
HALF SECTION 3 - 3 HALF SECTION 4 - 4



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		S. WATABE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE
		2000. 3. 14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-2-3-11	
BAR ARRANGEMENT OF Pa1~Pa5 (4)			

LIST OF REINFORCING BARS FOR BEAM AND COLUMN

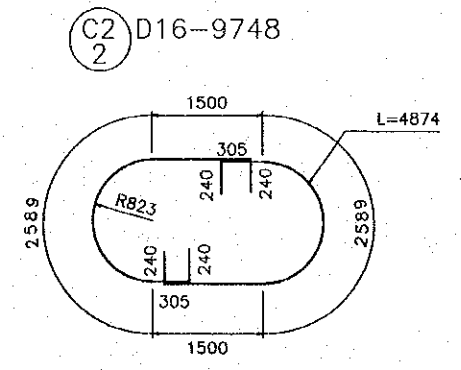
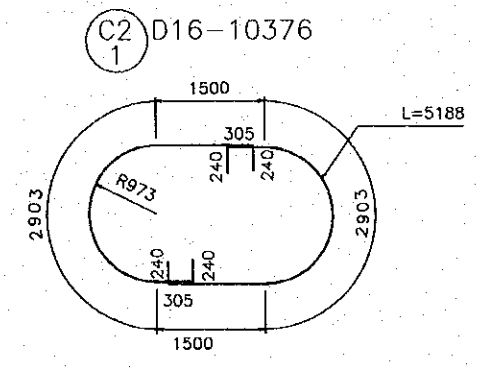
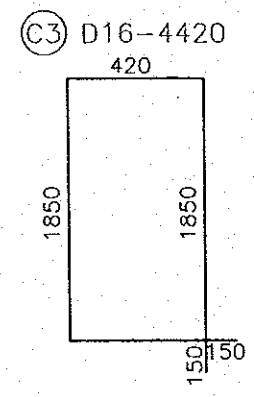
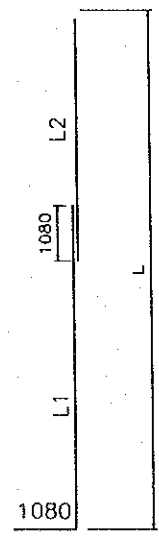


BAR QUANTITIES OF Pa1

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D18	780	20	1.56	24.34
	B1	[Diagram]	D29	10200	16	5.04	822.53
	B3	[Diagram]	D22	10516	16	3.04	511.50
	B4	[Diagram]	D19	8850	6	2.25	119.48
	B5	[Diagram]	D18	8925	2	2.25	40.16
	B6	[Diagram]	D16	2125	10	1.56	33.15
	S1-1	[Diagram]	D16	4709	16	1.56	117.54
	S1-2	[Diagram]	D16	3581	36	1.56	201.11
	S2-1	[Diagram]	D18	3509	16	1.56	87.58
	S2-2	[Diagram]	D18	2381	36	1.56	133.72
S3	[Diagram]	D16	2125	52	1.56	172.38	
STEM	C1	[Diagram]	D32	10900	120	6.23	8148.84
	C21	[Diagram]	D18	10376	51	1.56	825.51
	C22	[Diagram]	D16	9748	51	1.56	775.55
	C3	[Diagram]	D16	4420	45	1.56	310.28
FOOTING	F1	[Diagram]	D29	8320	55	5.04	2,306.30
	F2	[Diagram]	D25	6436	29	3.98	742.84
	F3	[Diagram]	D25	9285	25	3.98	923.86
	F4	[Diagram]	D16	7395	25	1.56	288.41
	F5	[Diagram]	D16	6300	10	1.56	98.28
	F6	[Diagram]	D16	7305	8	1.56	91.17
	F7	[Diagram]	D16	4534	30	1.56	212.19
	F8	[Diagram]	D18	4190	36	1.56	235.31
TOTAL							17,222.02
SUMMARY	D16 =						3,606.52
	D19 =						159.64
	D22 =						511.50
	D25 =						1,666.70
	D29 =						3,128.83
D32 =						8,148.84	

DIMENSIONS OF BAR C1

Items	L (mm)	L1 (mm)	L2 (mm)	Total (mm)
Pb1	9820	9820	0	10900
Pb2	10820	10600	1300	12980
Pb3	11320	10600	1800	13480
Pb4	11820	10600	2300	13980
Pb5	12320	10600	1800	14480



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JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.11	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE	DRAWING No. C-2-3-12	SHEET No.
BAR ARRANGEMENT OF Pa1~Pa5 (5)			

BAR QUANTITIES OF Pa2

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D16	780	20	1.56	24.34
	B1		D29	10200	16	5.04	822.53
	B3		D22	10516	16	3.04	511.50
	B4		D19	8850	6	2.25	119.48
	B5		D19	8925	2	2.25	40.16
	B6		D16	2125	10	1.56	33.15
	S1-1		D16	4709	16	1.56	117.54
	S1-2		D16	3581	36	1.56	201.11
	S2-1		D16	3509	16	1.56	87.58
	S2-2		D16	2381	36	1.56	133.72
S3		D16	2125	52	1.56	172.36	
STEM	C1		D32	12880	120	6.23	9703.85
	C21		D16	10378	55	1.56	890.26
	C22		D16	9748	55	1.56	836.36
	C3		D16	4420	53	1.56	365.45
FOOTING	F1		D29	8320	55	5.04	2,306.30
	F2		D25	6436	29	3.98	742.84
	F3		D25	9285	25	3.98	923.86
	F4		D16	7395	25	1.56	288.41
	F5		D16	6300	10	1.56	98.28
	F6		D16	7305	8	1.56	91.17
	F7		D16	4534	30	1.56	212.19
	F8		D16	4190	36	1.56	235.31
TOTAL							18,957.77
SUMMARY			D16 =			3,787.25	
			D19 =			150.64	
			D22 =			511.50	
			D25 =			1,666.70	
			D29 =			3,128.83	
			D32 =			9,703.85	

BAR QUANTITIES OF Pa4

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D16	780	20	1.56	24.34
	B1		D29	10200	16	5.04	822.53
	B3		D22	10516	16	3.04	511.50
	B4		D19	8850	6	2.25	119.48
	B5		D19	8925	2	2.25	40.16
	B6		D16	2125	10	1.56	33.15
	S1-1		D16	4709	16	1.56	117.54
	S1-2		D16	3581	36	1.56	201.11
	S2-1		D16	3509	16	1.56	87.58
	S2-2		D16	2381	36	1.56	133.72
S3		D16	2125	52	1.56	172.36	
STEM	C1		D32	13980	120	6.23	10451.45
	C21		D16	10378	58	1.56	938.82
	C22		D16	9748	58	1.56	882.00
	C3		D16	4420	56	1.56	380.13
FOOTING	F1		D29	8320	55	5.04	2,306.30
	F2		D25	6436	29	3.98	742.84
	F3		D25	9285	25	3.98	923.86
	F4		D16	7395	25	1.56	288.41
	F5		D16	6300	10	1.56	98.28
	F6		D16	7305	8	1.56	91.17
	F7		D16	4534	30	1.56	212.19
	F8		D16	4190	36	1.56	235.31
TOTAL							18,820.23
SUMMARY			D16 =			3,902.12	
			D19 =			159.84	
			D22 =			511.50	
			D25 =			1,666.70	
			D29 =			3,128.83	
			D32 =			10,451.45	

BAR QUANTITIES OF Pa3

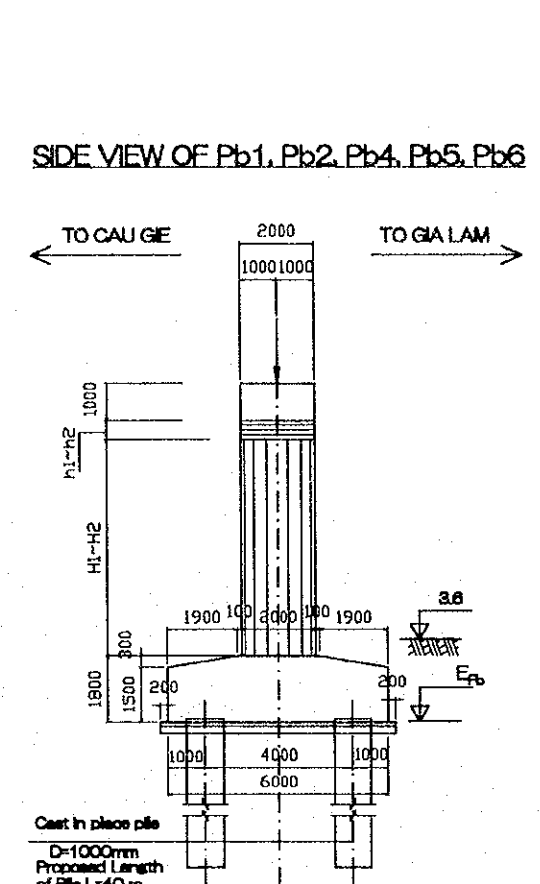
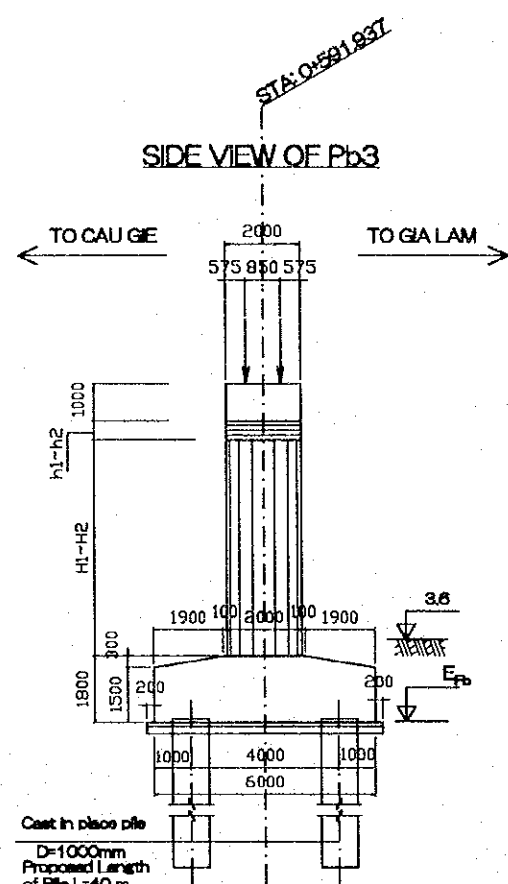
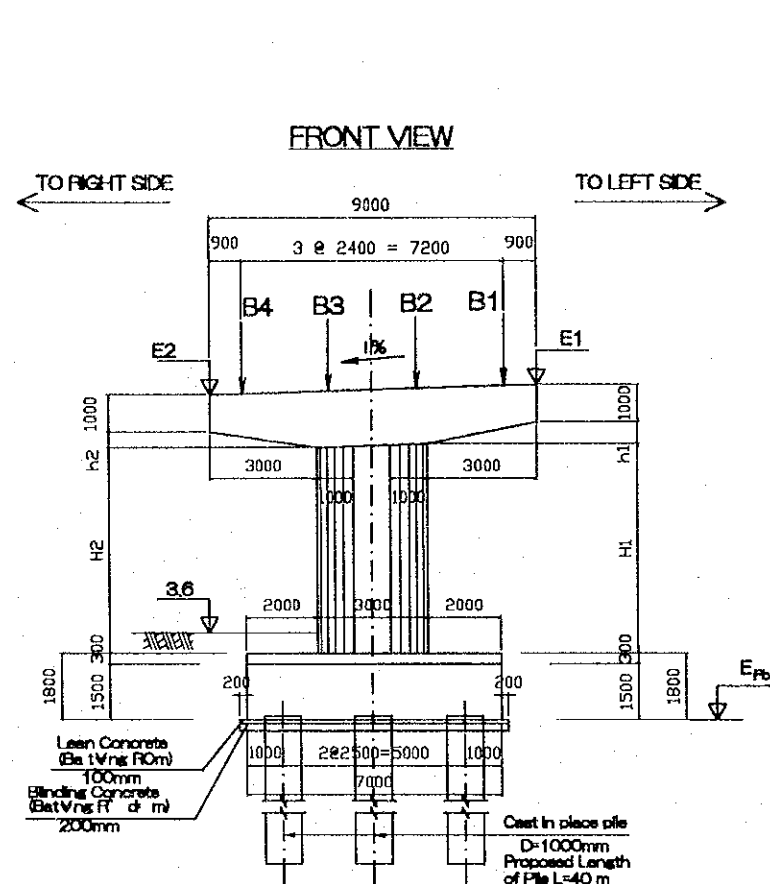
DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D16	780	40	1.56	48.67
	B1		D29	10200	16	5.04	822.53
	B3		D22	10516	16	3.04	511.50
	B4		D19	8850	6	2.25	119.48
	B5		D19	8925	2	2.25	40.16
	B6		D16	2125	10	1.56	33.15
	S1-1		D16	4709	16	1.56	117.54
	S1-2		D16	3581	36	1.56	201.11
	S2-1		D16	3509	16	1.56	87.58
	S2-2		D16	2381	36	1.56	133.72
S3		D16	2125	52	1.56	172.36	
STEM	C1		D32	13480	120	6.23	10077.65
	C21		D16	10378	56	1.56	906.45
	C22		D16	9748	56	1.56	851.59
	C3		D16	4420	55	1.56	379.24
FOOTING	F1		D29	8320	55	5.04	2,306.30
	F2		D25	6436	29	3.98	742.84
	F3		D25	9285	25	3.98	923.86
	F4		D16	7395	25	1.56	288.41
	F5		D16	6300	10	1.56	98.28
	F6		D16	7305	8	1.56	91.17
	F7		D16	4534	30	1.56	212.19
	F8		D16	4190	36	1.56	235.31
TOTAL							19,401.09
SUMMARY			D16 =			3,856.77	
			D19 =			150.64	
			D22 =			511.50	
			D25 =			1,666.70	
			D29 =			3,128.83	
			D32 =			10,077.65	

BAR QUANTITIES OF Pa5

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D16	780	20	1.56	24.34
	B1		D29	10200	16	5.04	822.53
	B3		D22	10516	16	3.04	511.50
	B4		D19	8850	6	2.25	119.48
	B5		D19	8925	2	2.25	40.16
	B6		D16	2125	10	1.56	33.15
	S1-1		D16	4709	16	1.56	117.54
	S1-2		D16	3581	36	1.56	201.11
	S2-1		D16	3509	16	1.56	87.58
	S2-2		D16	2381	36	1.56	133.72
S3		D16	2125	52	1.56	172.36	
STEM	C1		D32	14480	120	6.23	10825.25
	C21		D16	10378	60	1.56	971.19
	C22		D16	9748	60	1.56	912.41
	C3		D16	4420	59	1.56	406.82
FOOTING	F1		D29	8320	55	5.04	2,306.30
	F2		D25	6436	29	3.98	742.84
	F3		D25	9285	25	3.98	923.86
	F4		D16	7395	25	1.56	288.41
	F5		D16	6300	10	1.56	98.28
	F6		D16	7305	8	1.56	91.17
	F7		D16	4534	30	1.56	212.19
	F8		D16	4190	36	1.56	235.31
TOTAL							20,277.51
SUMMARY			D16 =			3,965.58	
			D19 =			150.64	
			D22 =			511.50	
			D25 =			1,666.70	
			D29 =			3,128.83	
			D32 =			10,825.25	

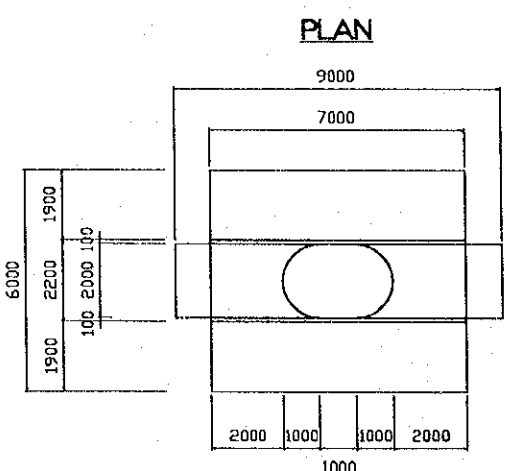
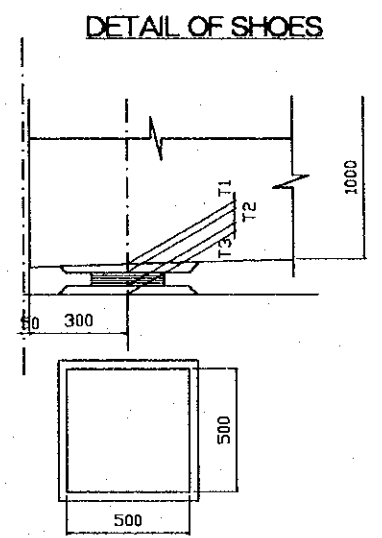
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATAJE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.6.1
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/200	DRAWING No. C-2-3-14	SHEET No.
DETAIL OF PIER (Pb1 ~ Pb6)			



DEPTH OF SUPERSTRUCTURE (MM)

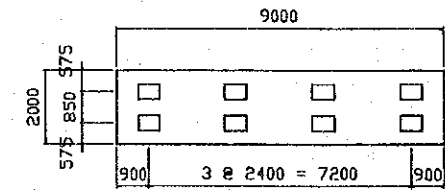
	MOVE	FIX
Pavement	75	75
Slab	1000	1000
Haunch(T1)	20	20
Bearing(T2)	56	32
Motor (T3)	30	30
Sub Total	1181	1157



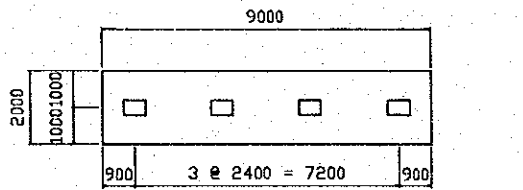
ELEVATIONS, DIMENSIONS OF PIERS

Piers	Depth of superstructure (mm)		Dimensions of piers (mm)					PH	Incline (%)		Elevation of top pier head (m)			Foot. bottom Elevation E _{F,b} (m)
	B(Move)	A(Fix)	h ₁	h ₂	H ₁	H	H ₂		A	B	E ₁	E	E ₂	
Pb1		1157	565	435	7533	7500	7467	13.155	2.171	12.096	11.998	11.900	1.198	
Pb2	1181		473	527	8487	8500	8513	13.828	-0.889	12.607	12.647	12.687	0.847	
Pb3	1181		382	618	8440	8500	8560	14.347	-3.886	12.988	13.166	13.344	1.366	
Pb4		1157	290	710	8895	9000	9105	14.713	-7.009	13.241	13.556	13.871	1.256	
Pb5		1157	230	770	9365	9500	9635	14.926	-9	13.364	13.769	14.174	0.969	
Pb6	1181		246	754	9372	9500	9627	15.046	-8.471	13.483	13.865	14.246	1.065	
P11L	1181							15.165	-5.471	13.747	13.984	14.230		

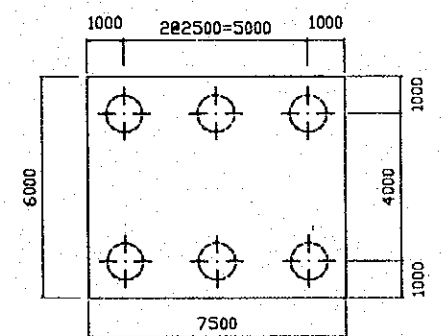
PIER HEAD OF Pb3



PIER HEAD OF Pb1, Pb2, Pb4, Pb5, Pb6



PILE ARRANGEMENT



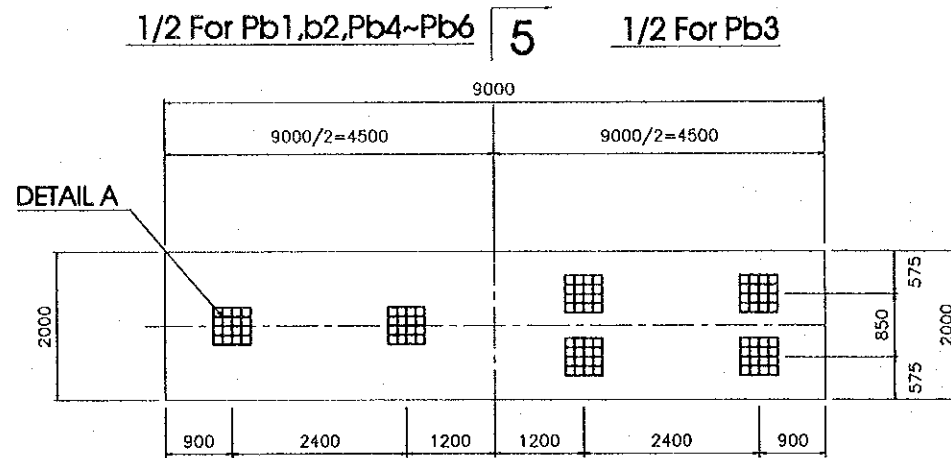
ELEVATION OF TOP PIER HEAD

Piers	B1		B2		B3		B4	
	A	B	A	B	A	B	A	B
Pb1	12.076	12.034	11.972				11.920	
Pb2	12.615	12.636	12.658				12.679	
Pb3	13.025	13.021	13.118	13.117	13.212	13.214	13.305	13.310
Pb4	13.304		13.472		13.640		13.809	
Pb5	13.445		13.661		13.877		14.093	
Pb6	13.559		13.762		13.966		14.169	
P11L	13.796		13.927		14.059		14.190	

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.11.17

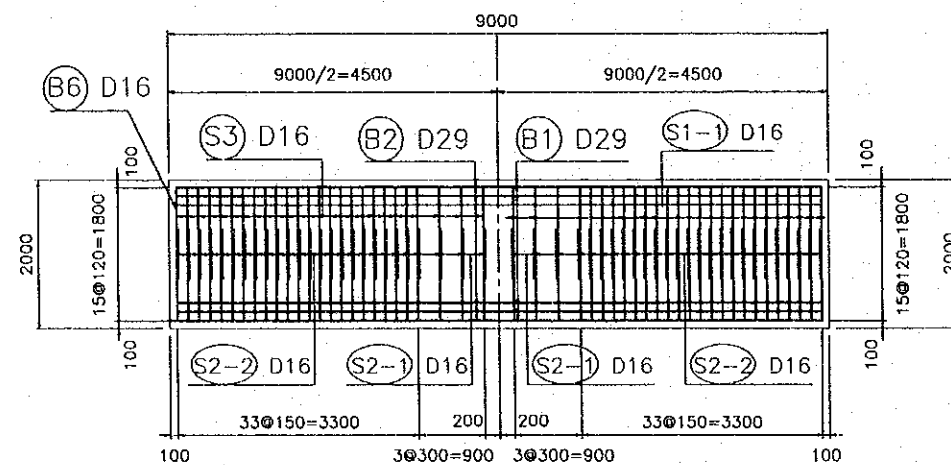
PACKAGE 3	SCALE 1/100	DRAWING No. C-2-3-15	SHEET No.
BAR ARRANGEMENT OF PIERS Pb1~Pb6 (1)			

SECTION 1-1



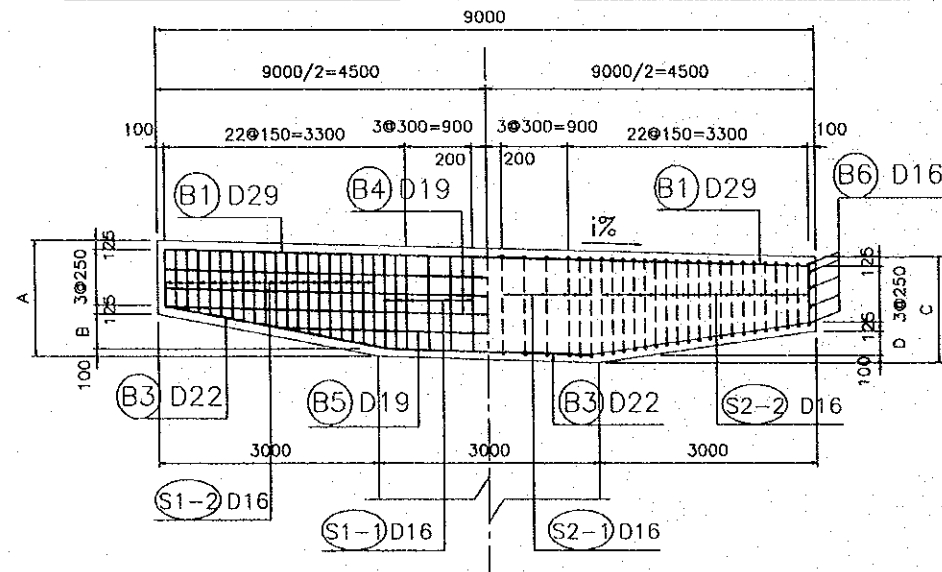
5

SECTION 2-2



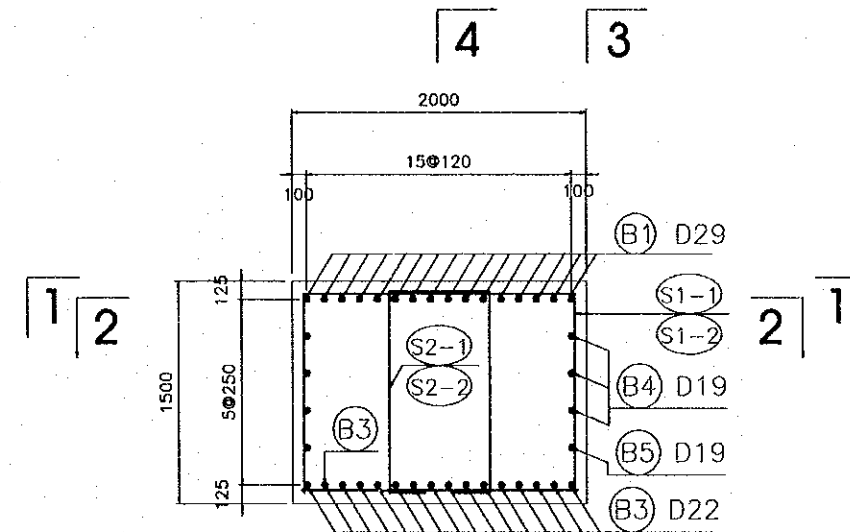
HALF SECTION 3-3

HALF SECTION 4-4



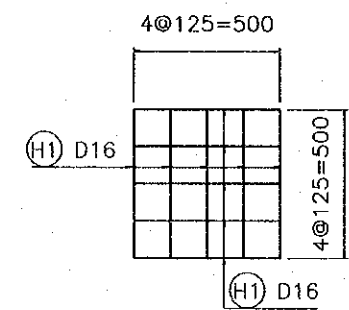
SECTION 5-5

(SC=1/50)



DETAIL A

(SC=1/25)



DIMENSIONS OF PIERS

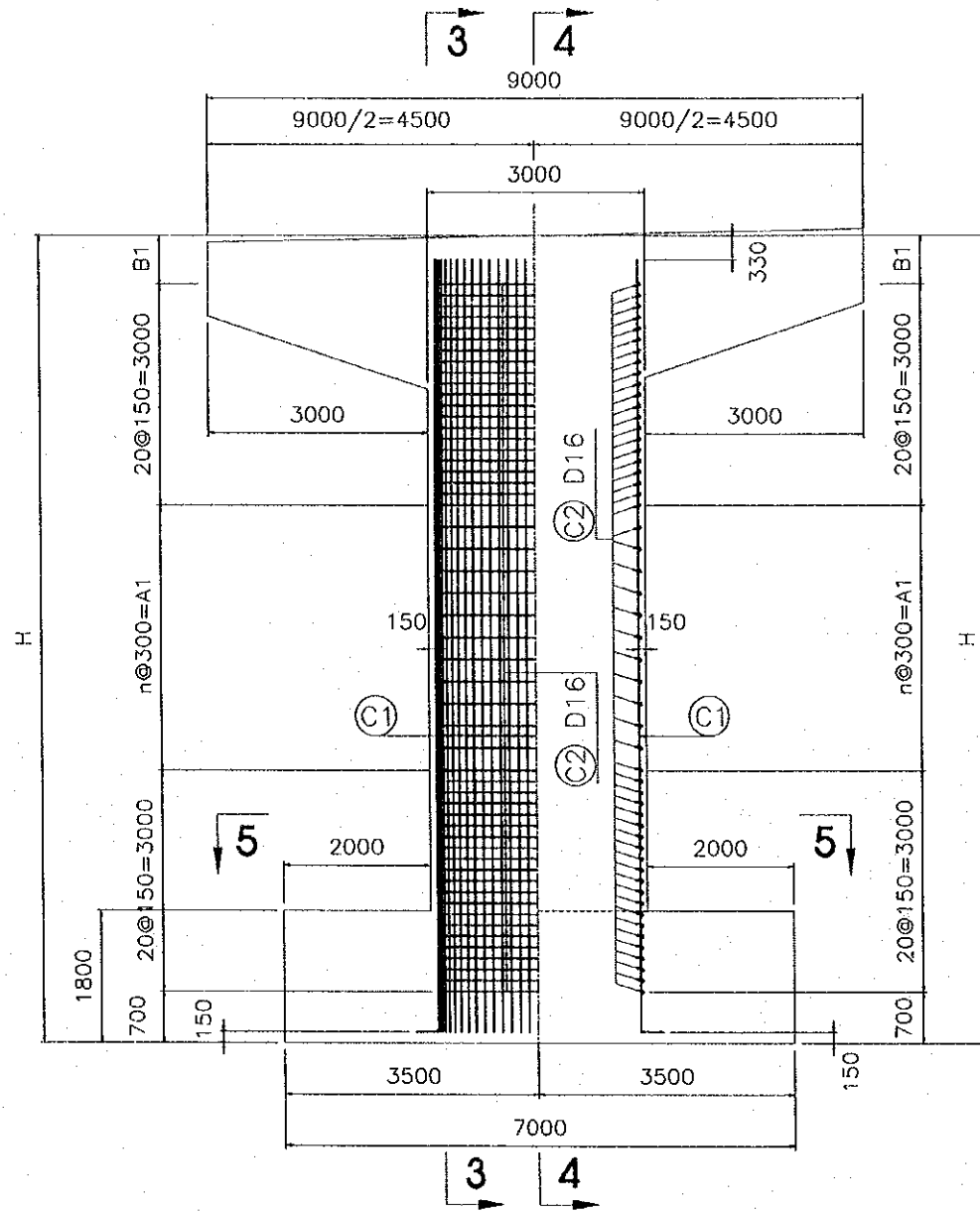
PIER	A(mm)	B(mm)	C(mm)	D(mm)	i %
Pb1	1560	460	1440	340	-2.171
Pb2	1470	370	1530	430	0.9
Pb3	1390	290	1610	510	4.0
Pb4	1310	210	1690	590	7.0
Pb5	1250	150	1750	650	9.0
Pb6	1270	170	1730	630	8.47

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i>
CONSULTANT		DATE 2000.8.14

PACKAGE 3	SCALE 1/100	DRAWING No. C-2-3-16	SHEET No.
BAR ARRANGEMENT OF Pb1~Pb6 (2)			

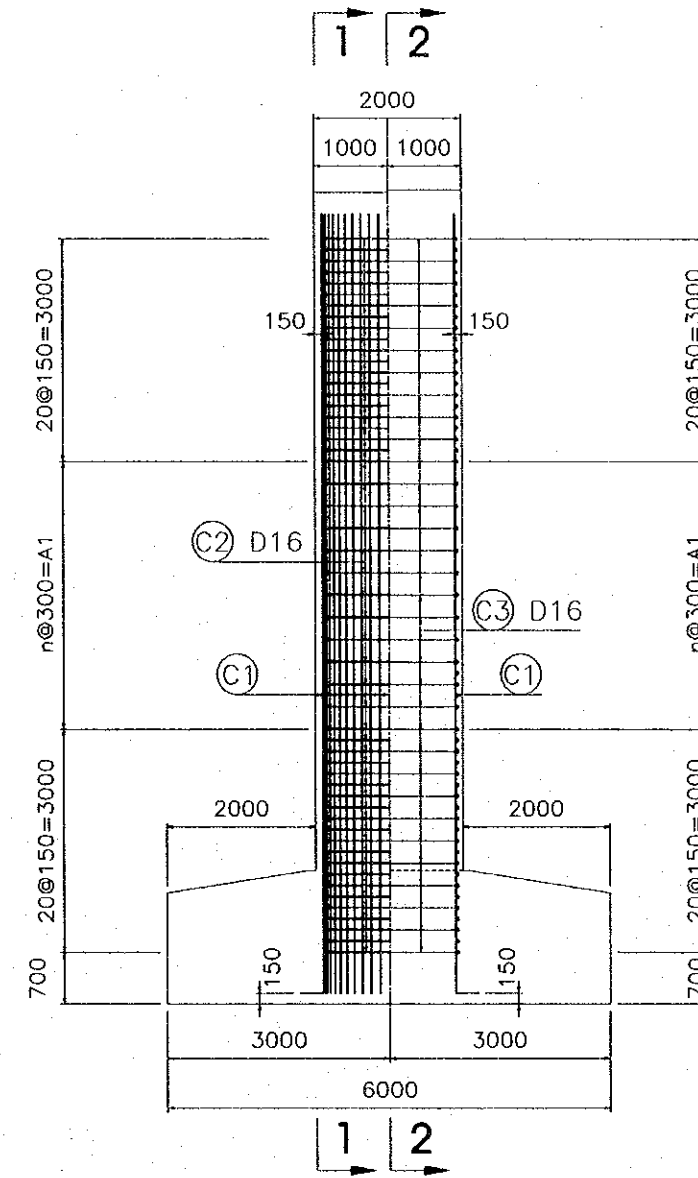
HALF SECTION 1 - 1

HALF SECTION 2 - 2

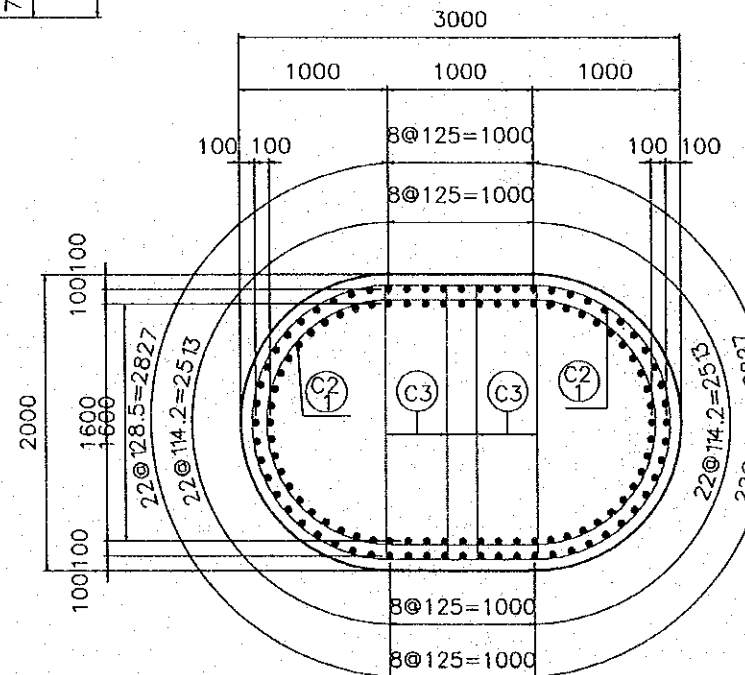


HALF SECTION 3 - 3

HALF SECTION 4 - 4



SECTION 5 - 5(Pb1~Pb6) scale: 1/50



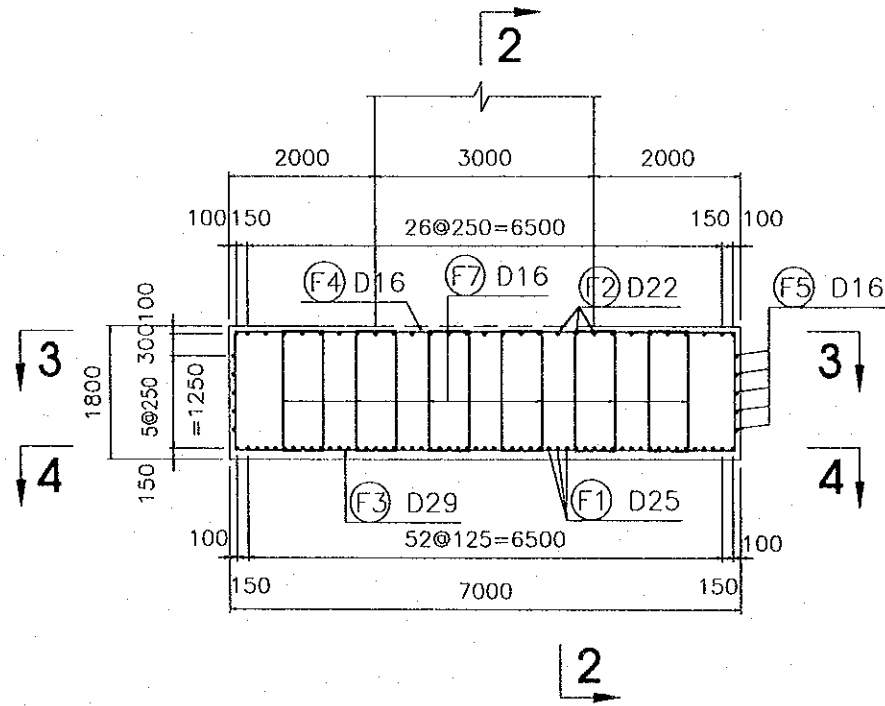
DIMENSION OF PIERS

ITEMS PIER	H	n	A1	B1
Pb1	10800	12	3600	500
Pb2	11800	15	4500	500
Pb3	11800	15	4500	600
Pb4	12300	17	5100	500
Pb5	12800	18	5400	700
Pb6	12800	18	5400	700

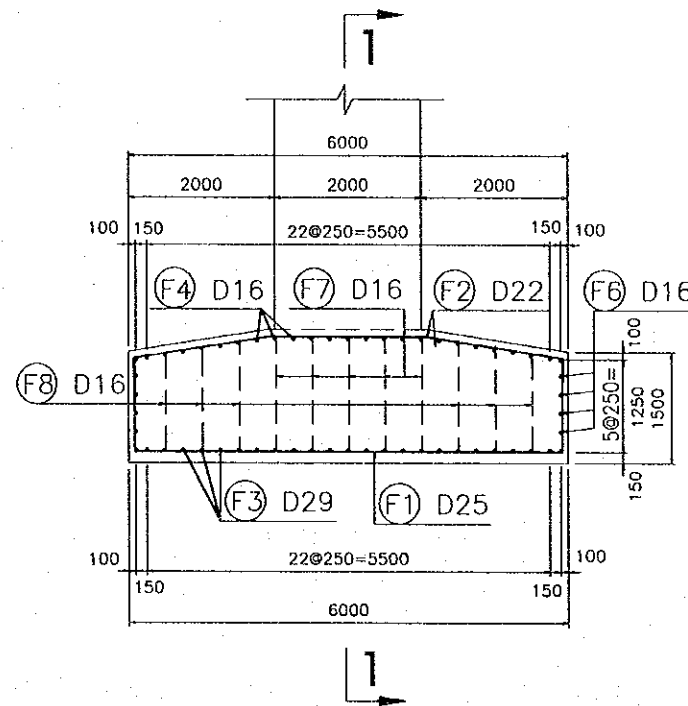
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000. 3. 17

PACKAGE 3	SCALE 1/100	DRAWING No. C-2-3-17	SHEET No.
BAR ARRANGEMENT OF Pb1~Pb6 (3)			

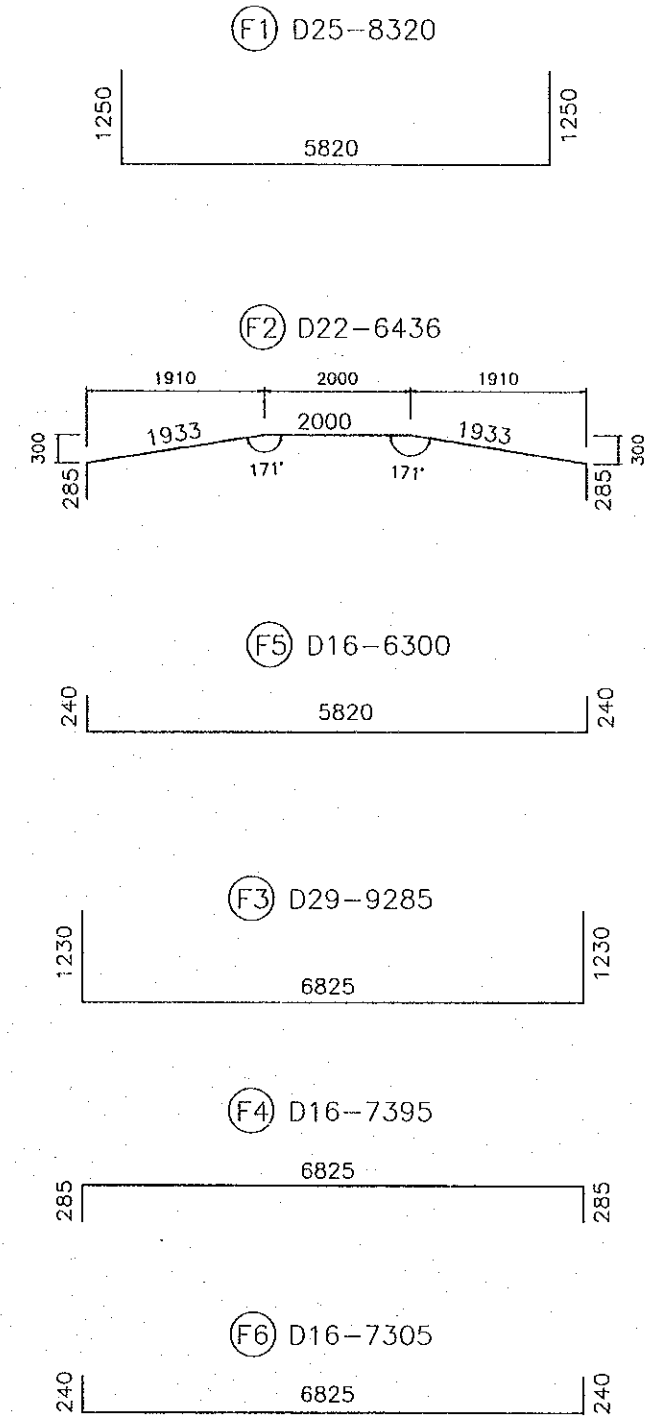
SECTION 1 - 1



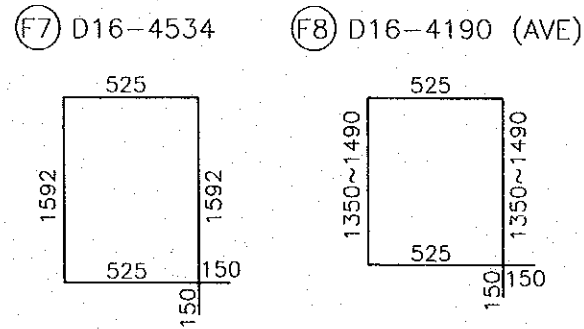
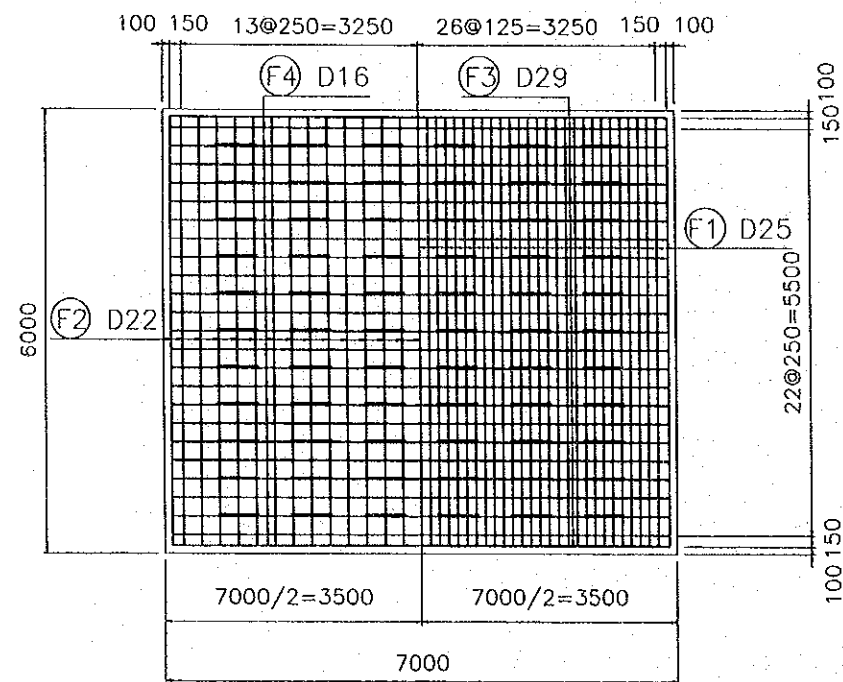
SECTION 2 - 2



LIST OF REINFORCING BARS FOR FOOTING



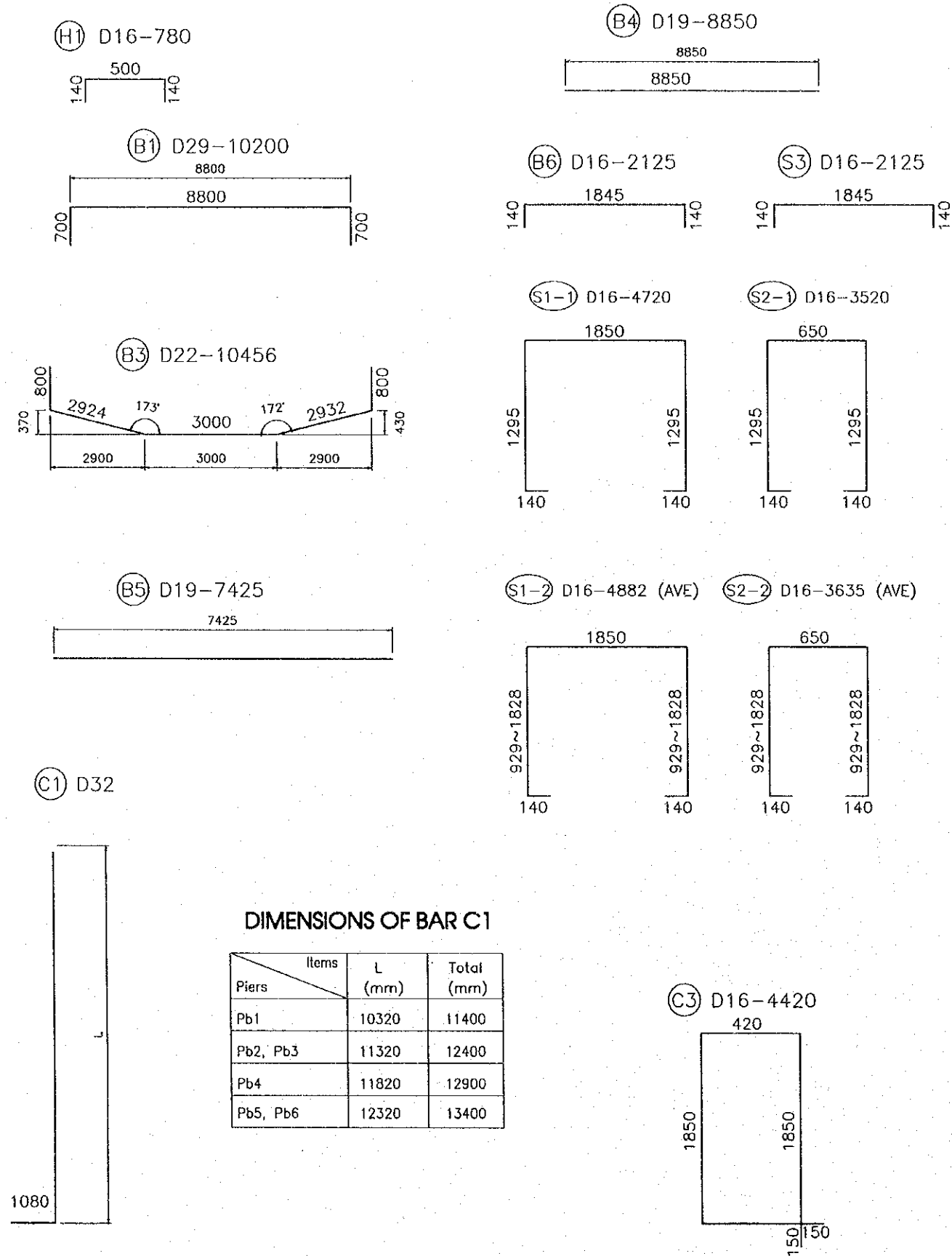
HALF SECTION 3 - 3 HALF SECTION 4 - 4



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.05.14

PACKAGE 3	SCALE	DRAWING No. C-2-3-18	SHEET No.
BAR ARRANGEMENT OF Pb1~Pb6 (4)			

LIST OF REINFORCING BARS FOR BEAM AND COLUMN



DIMENSIONS OF BAR C1

Piers	Items	L (mm)	Total (mm)
Pb1		10320	11400
Pb2, Pb3		11320	12400
Pb4		11820	12900
Pb5, Pb6		12320	13400

BAR QUANTITIES OF Pb1

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D16	780	20	1.56	24.34
	B1	[Diagram]	D29	10200	18	5.04	822.53
	B3	[Diagram]	D22	10456	18	3.04	508.58
	B4	[Diagram]	D19	8850	6	2.25	119.48
	B5	[Diagram]	D19	7425	2	2.25	33.41
	B6	[Diagram]	D16	2125	10	1.56	33.15
	S1-1	[Diagram]	D16	4720	13	1.56	95.72
	S1-2	[Diagram]	D16	4882	40	1.56	304.64
	S2-1	[Diagram]	D16	3520	13	1.56	71.39
	S2-2	[Diagram]	D16	3635	40	1.56	226.82
S3	[Diagram]	D16	2125	52	1.56	172.38	
STEM	C1	[Diagram]	D32	11400	120	6.23	8522.64
	C2 ₁	[Diagram]	D16	9376	53	1.56	775.21
	C2 ₂	[Diagram]	D16	8208	53	1.56	678.64
	C3	[Diagram]	D16	4420	64	1.56	441.29
FOOTING	F1	[Diagram]	D25	8320	55	3.98	1,821.25
	F2	[Diagram]	D22	6436	29	3.04	567.40
	F3	[Diagram]	D29	9285	25	5.04	1169.91
	F4	[Diagram]	D16	7395	25	1.56	288.41
	F5	[Diagram]	D16	6300	10	1.56	98.28
	F6	[Diagram]	D16	7305	8	1.56	91.17
	F7	[Diagram]	D16	4534	30	1.56	212.19
	F8	[Diagram]	D16	4190	36	1.56	235.31
TOTAL							17,314.12
SUMMARY	D16 =						3,748.92
	D19 =						152.89
	D22 =						1,075.98
	D25 =						1,821.25
	D29 =						1,992.44
D32 =						8,522.64	

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. WATABE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.0.17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-2-3-19	
BAR ARRANGEMENT OF Pb1~Pb6 (5)			

BAR QUANTITIES OF Pb4

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D18	780	20	1.56	24.34
	B1		D29	10200	16	5.04	822.53
	B3		D22	10456	16	3.04	508.58
	B4		D19	8850	6	2.25	119.48
	B5		D19	7425	2	2.25	33.41
	B6		D18	2125	10	1.56	33.15
	S1-1		D18	4720	13	1.56	95.72
	S1-2		D18	4882	40	1.56	304.64
	S2-1		D18	3520	13	1.56	71.39
	S2-2		D18	3635	40	1.56	226.82
S3		D18	2125	52	1.56	172.38	
STEM	C1		D32	11400	128	6.23	8090.82
	C21		D18	9376	56	1.56	848.34
	C22		D18	8208	56	1.56	742.06
	C3		D18	4420	72	1.56	496.45
FOOTING	F1		D25	8320	55	3.98	1,821.25
	F2		D22	8436	29	3.04	567.40
	F3		D29	9285	25	5.04	1189.91
	F4		D18	7395	25	1.56	288.41
	F5		D18	6300	10	1.56	98.28
	F6		D18	7305	8	1.56	91.17
	F7		D18	4534	30	1.56	212.19
	F8		D18	4190	36	1.56	235.31
TOTAL							16,074.61
SUMMARY			D18 =			3,941.24	
			D19 =			152.89	
			D22 =			1,075.98	
			D25 =			1,821.25	
			D29 =			1,992.44	
		D32 =			8,090.82		

BAR QUANTITIES OF Pb3

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D18	780	40	1.56	48.87
	B1		D29	10200	16	5.04	822.53
	B3		D22	10456	16	3.04	508.58
	B4		D19	8850	6	2.25	119.48
	B5		D19	7425	2	2.25	33.41
	B6		D18	2125	10	1.56	33.15
	S1-1		D18	4720	13	1.56	95.72
	S1-2		D18	4882	40	1.56	304.64
	S2-1		D18	3520	13	1.56	71.39
	S2-2		D18	3635	40	1.56	226.82
S3		D18	2125	52	1.56	172.38	
STEM	C1		D32	11400	120	6.23	8522.64
	C21		D18	9376	56	1.56	819.00
	C22		D18	8208	56	1.56	717.05
	C3		D18	4420	68	1.56	488.87
FOOTING	F1		D25	8320	65	3.98	1,821.25
	F2		D22	8436	29	3.04	567.40
	F3		D29	9285	25	5.04	1189.91
	F4		D18	7395	25	1.56	288.41
	F5		D18	6300	10	1.56	98.28
	F6		D18	7305	8	1.56	91.17
	F7		D18	4534	30	1.56	212.19
	F8		D18	4190	36	1.56	235.31
TOTAL							17,448.33
SUMMARY			D18 =			3,883.13	
			D19 =			152.89	
			D22 =			1,075.98	
			D25 =			1,821.25	
			D29 =			1,992.44	
		D32 =			8,522.64		

BAR QUANTITIES OF Pb2

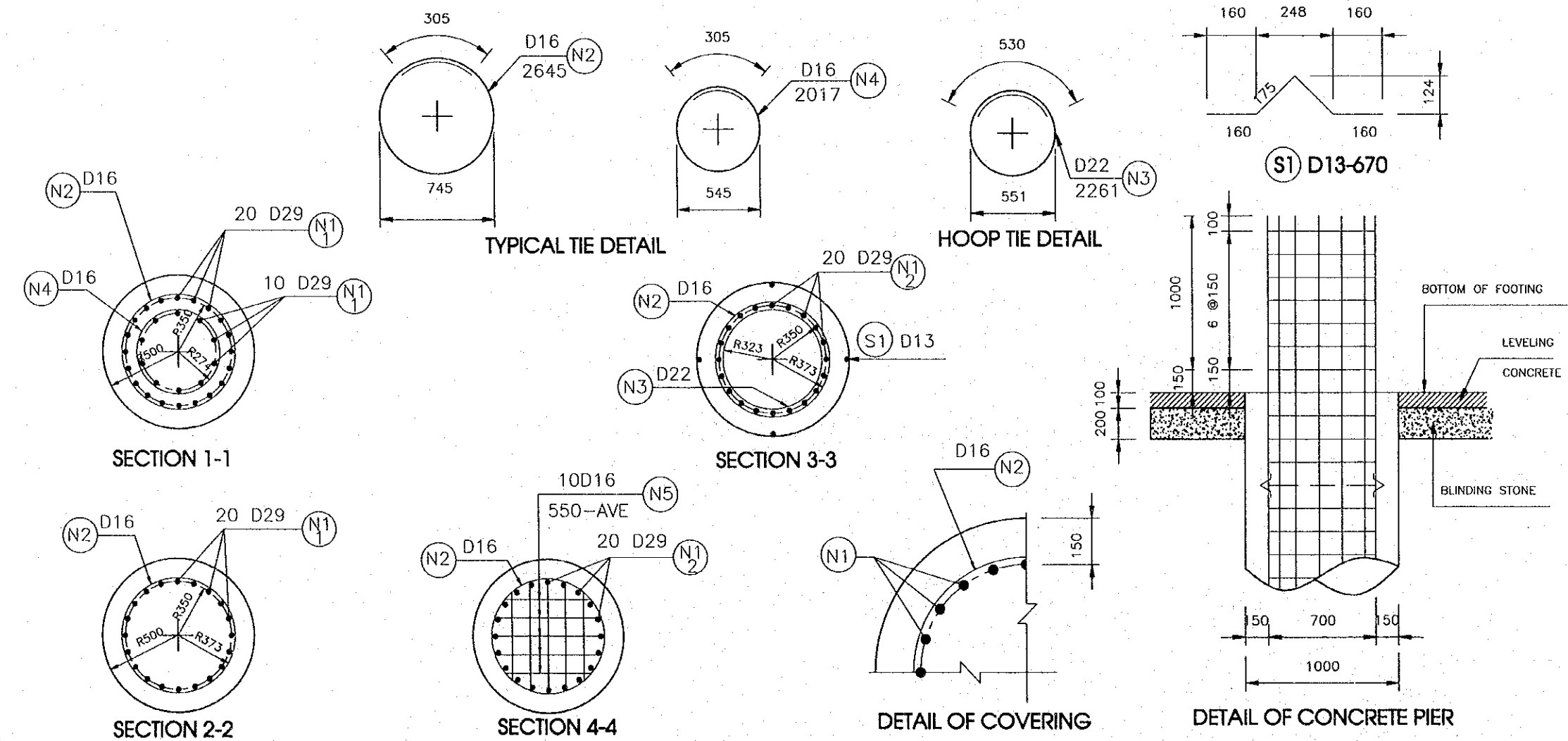
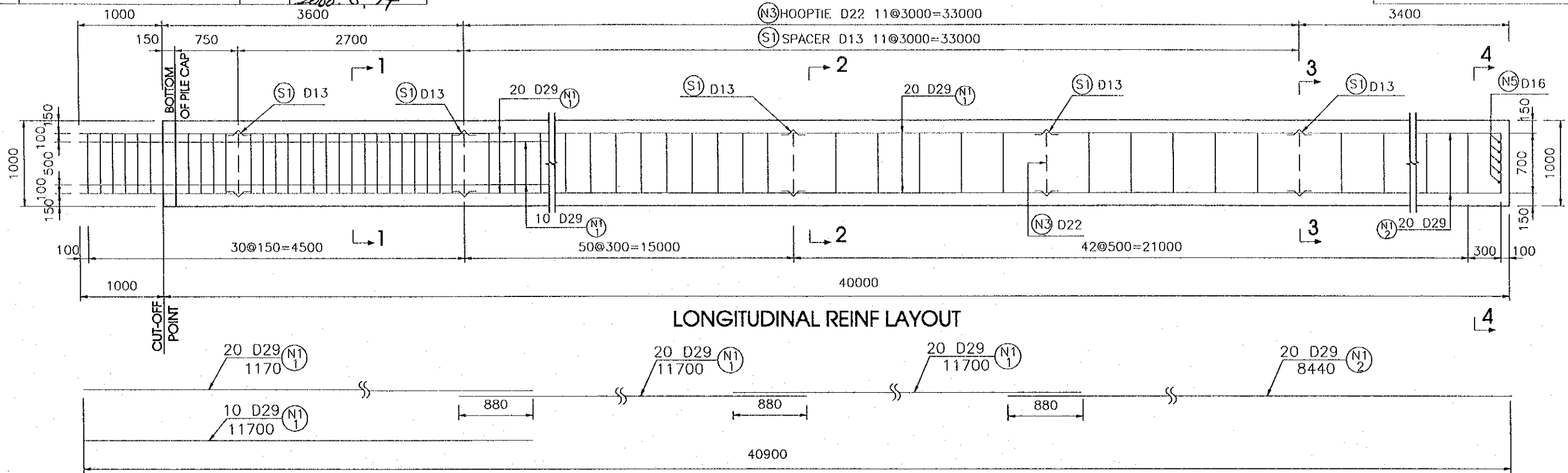
DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D18	780	20	1.56	24.34
	B1		D29	10200	16	5.04	822.53
	B3		D22	10456	16	3.04	508.58
	B4		D19	8850	6	2.25	119.48
	B5		D19	7425	2	2.25	33.41
	B6		D18	2125	10	1.56	33.15
	S1-1		D18	4720	13	1.56	95.72
	S1-2		D18	4882	40	1.56	304.64
	S2-1		D18	3520	13	1.56	71.39
	S2-2		D18	3635	40	1.56	226.82
S3		D18	2125	52	1.56	172.38	
STEM	C1		D32	11400	120	6.23	8522.64
	C21		D18	9376	56	1.56	819.00
	C22		D18	8208	56	1.56	717.05
	C3		D18	4420	68	1.56	488.87
FOOTING	F1		D25	8320	55	3.98	1,821.25
	F2		D22	8436	29	3.04	567.40
	F3		D29	9285	25	5.04	1189.91
	F4		D18	7395	25	1.56	288.41
	F5		D18	6300	10	1.56	98.28
	F6		D18	7305	8	1.56	91.17
	F7		D18	4534	30	1.56	212.19
	F8		D18	4190	36	1.56	235.31
TOTAL							17,423.99
SUMMARY			D18 =			3,858.80	
			D19 =			152.89	
			D22 =			1,075.98	
			D25 =			1,821.25	
			D29 =			1,992.44	
		D32 =			8,522.64		

BAR QUANTITIES OF Pb5, Pb6

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1		D18	780	20	1.56	24.34
	B1		D29	10200	16	5.04	822.53
	B3		D22	10456	16	3.04	508.58
	B4		D19	8850	6	2.25	119.48
	B5		D19	7425	2	2.25	33.41
	B6		D18	2125	10	1.56	33.15
	S1-1		D18	4720	13	1.56	95.72
	S1-2		D18	4882	40	1.56	304.64
	S2-1		D18	3520	13	1.56	71.39
	S2-2		D18	3635	40	1.56	226.82
S3		D18	2125	52	1.56	172.38	
STEM	C1		D32	11400	120	6.23	8522.64
	C21		D18	9376	56	1.56	862.97
	C22		D18	8208	59	1.56	755.46
	C3		D18	4420	74	1.56	610.24
FOOTING	F1		D25	8320	55	3.98	1,821.25
	F2		D22	8436	29	3.04	567.40
	F3		D29	9285	25	5.04	1189.91
	F4		D18	7395	25	1.56	288.41
	F5		D18	6300	10	1.56	98.28
	F6		D18	7305	8	1.56	91.17
	F7		D18	4534	30	1.56	212.19
	F8		D18	4190	36	1.56	235.31
TOTAL							17,547.65
SUMMARY			D18 =			3,982.46	
			D19 =			152.89	
			D22 =			1,075.98	
			D25 =			1,821.25	
			D29 =			1,992.44	
		D32 =			8,522.64		
TOTAL FOR 2 PIERS							35,095.31
SUMMARY FOR 2 PIERS			D18 =			7,964.93	
			D19 =			305.78	
			D22 =			2,151.96	
			D25 =			3,642.50	
			D29 =			3,984.68	
		D32 =			17,045.28		

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATASE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.17	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/50	DRAWING No. C-2-3-20	SHEET No.
PIER PB1~PB6 DETAIL OF D=1.0m CAST IN PLACE CONCRETE PILE			



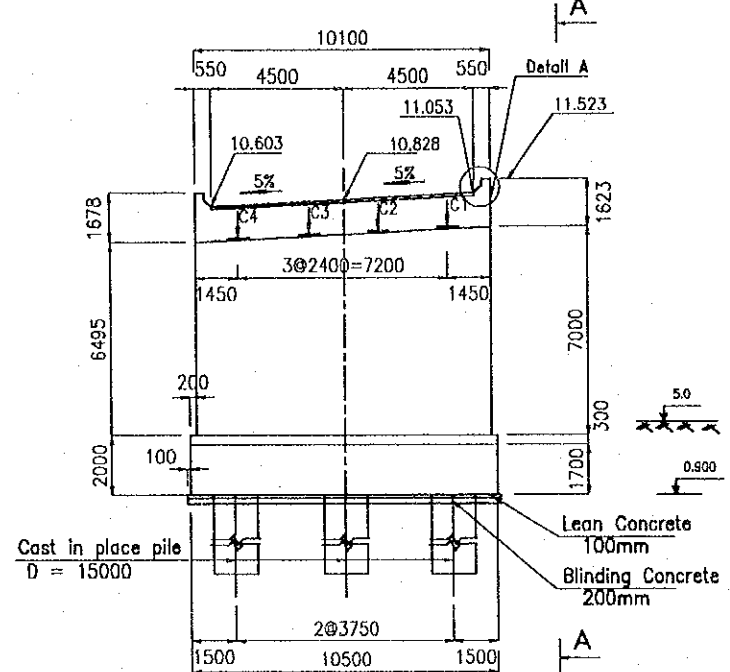
BAR QUANTITIES OF PIER PB1~PB6

SYMBOL	SHAPE	Dia (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)
N1 ₁	—	D29	11700	420	5.04	24767
N1 ₂	—	D29	8440	120	5.04	5105
N2	○	D16	2655	738	1.56	3057
N3	○	D22	2559	78	3.04	607
N4	○	D16	2027	294	1.56	1043
N5	—	D16	990	60	1.56	93
S1	~	D13	670	312	0.997	208
Total for one pier						34879
SUMMARY 6 PIERS						5008
						179226
Total						209275

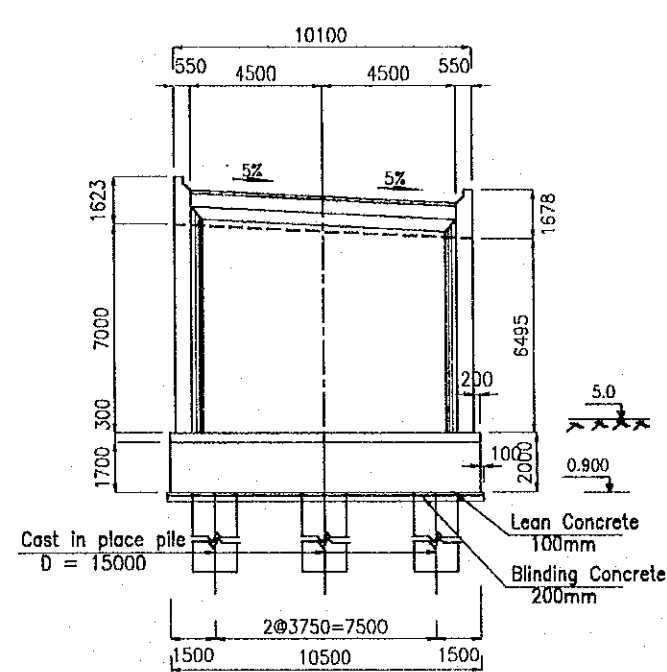
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.6.1	

PACKAGE 3	SCALE 1/250	DRAWING No. C-2-3-21	SHEET No.
RAMP - C BRIDGE DETAIL OF ABUTMENT AC1			

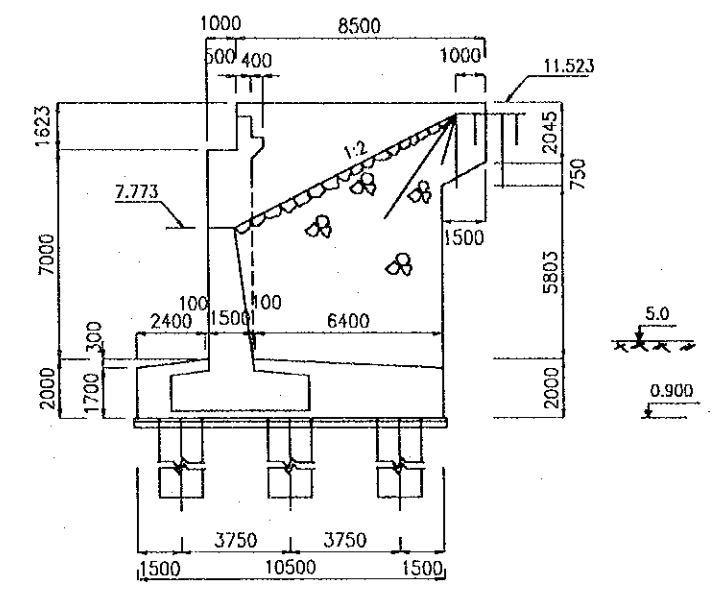
FRONT ABUTMENT



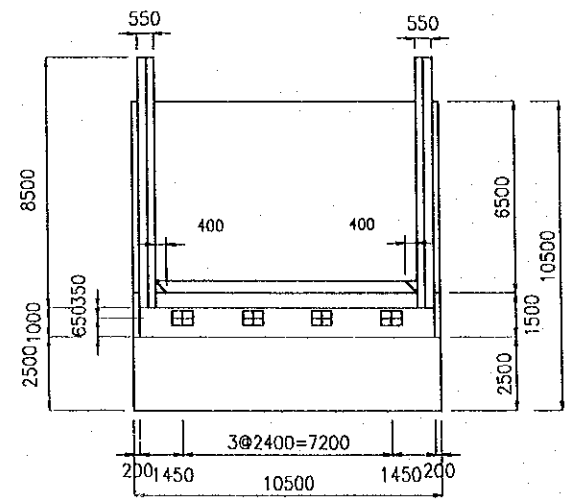
BEHIND ABUTMENT



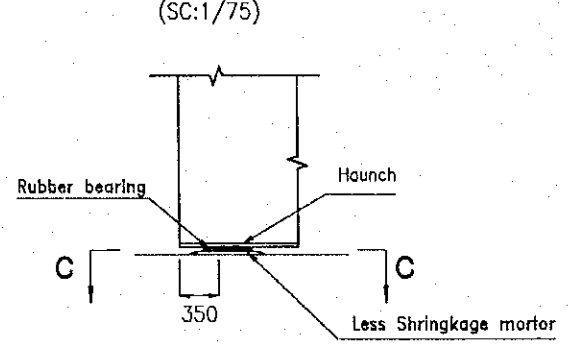
A-A



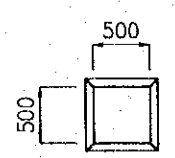
TOP VIEW



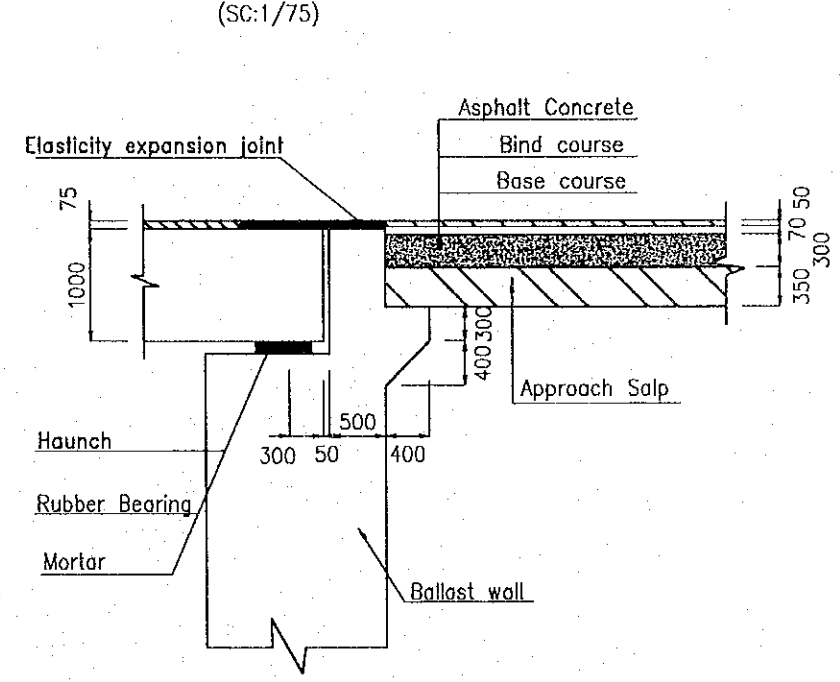
GIRDER BEARING SEAT DETAIL



SECTION C-C



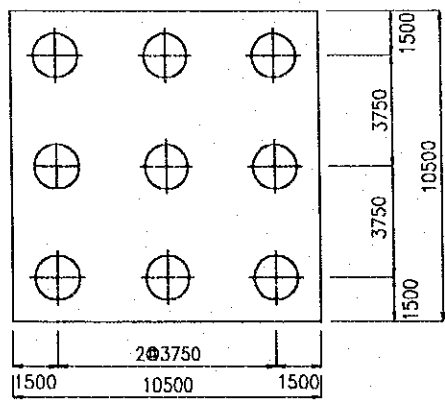
DETAIL OF BALLAST WALL



ELEVATION OF TOP BEARING SEAT

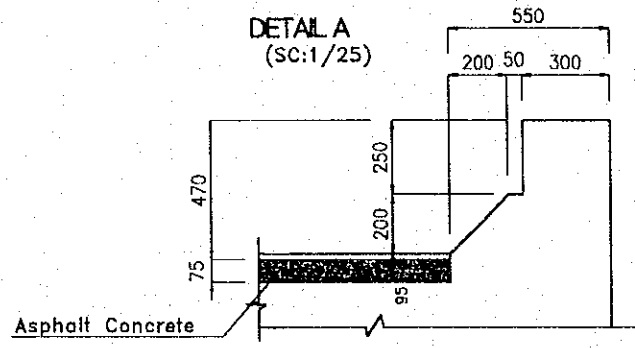
BEARING SEAT	C1	C2	C3	C4
ELEVATION	9.857	9.737	9.617	9.497

PILE ARRANGEMENT



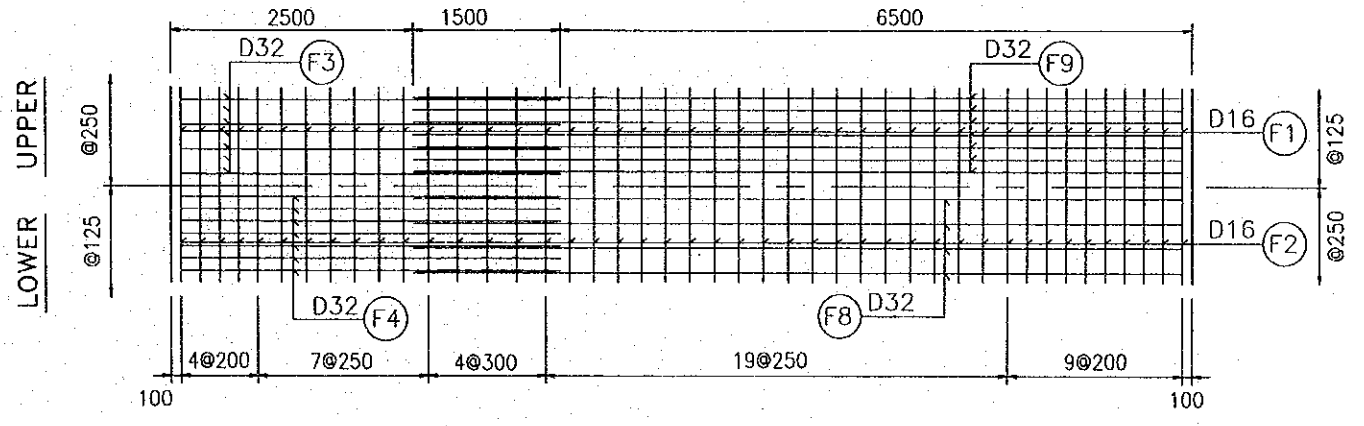
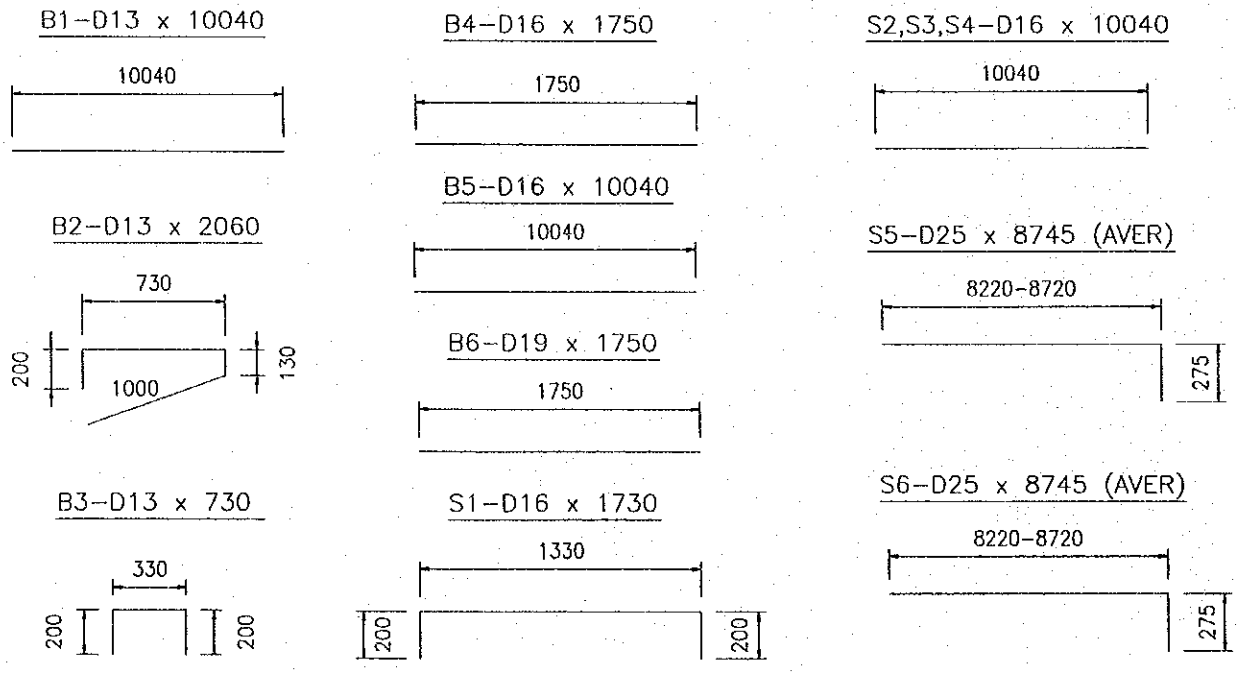
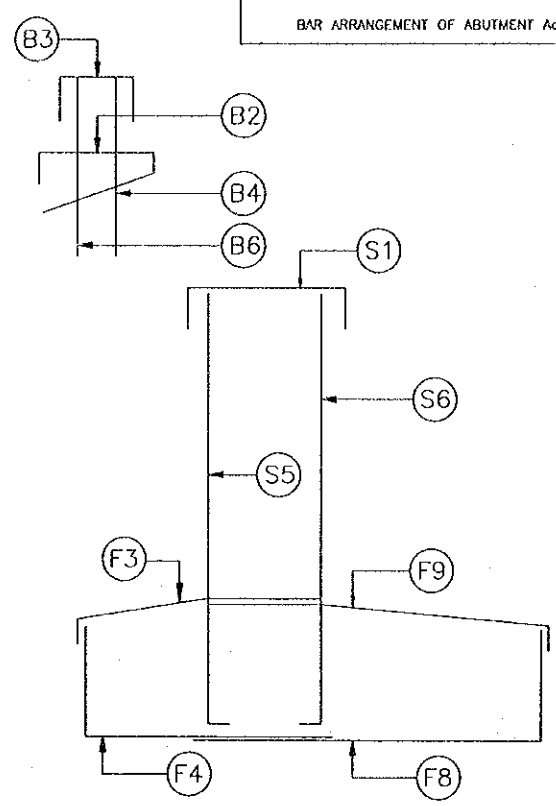
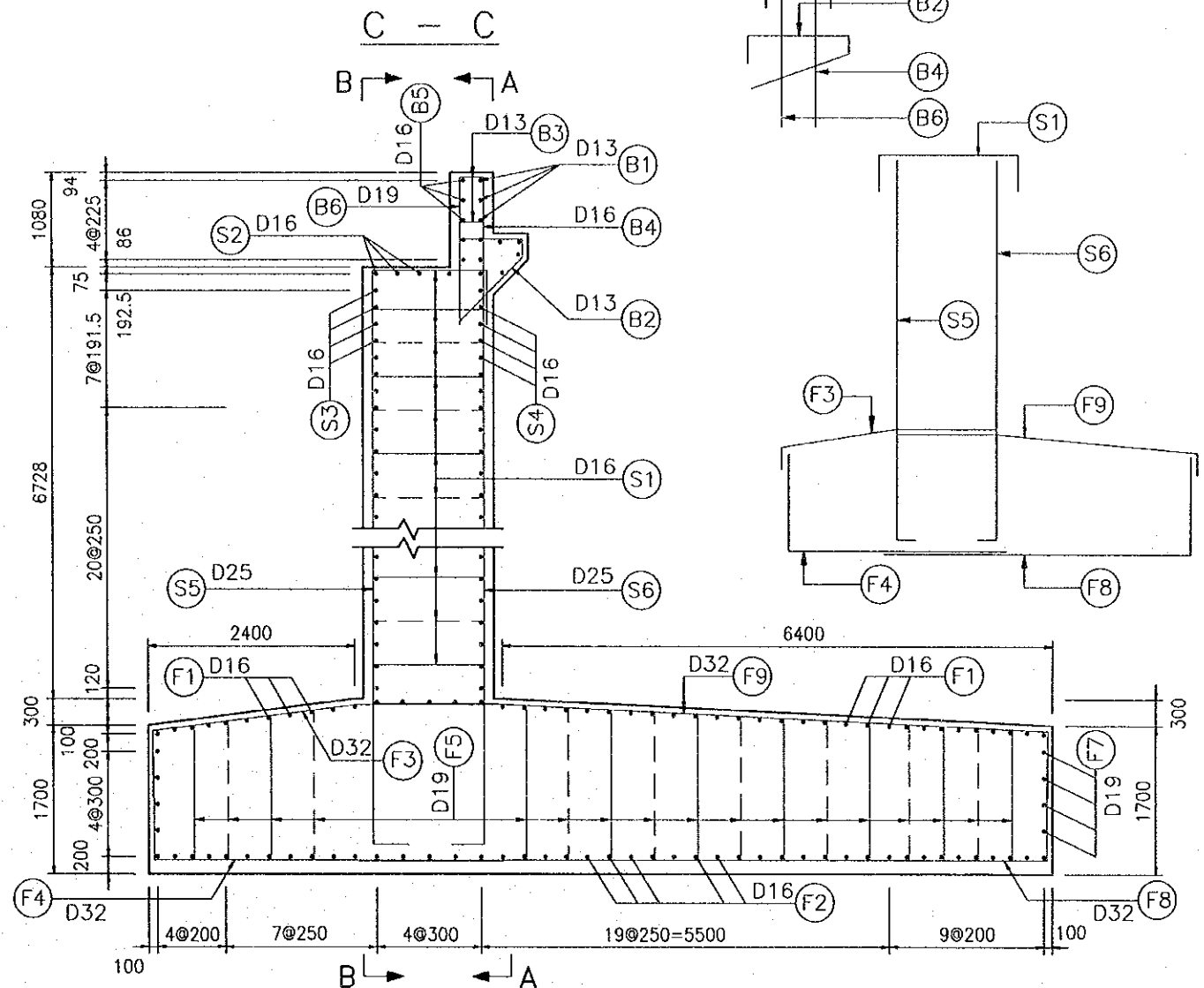
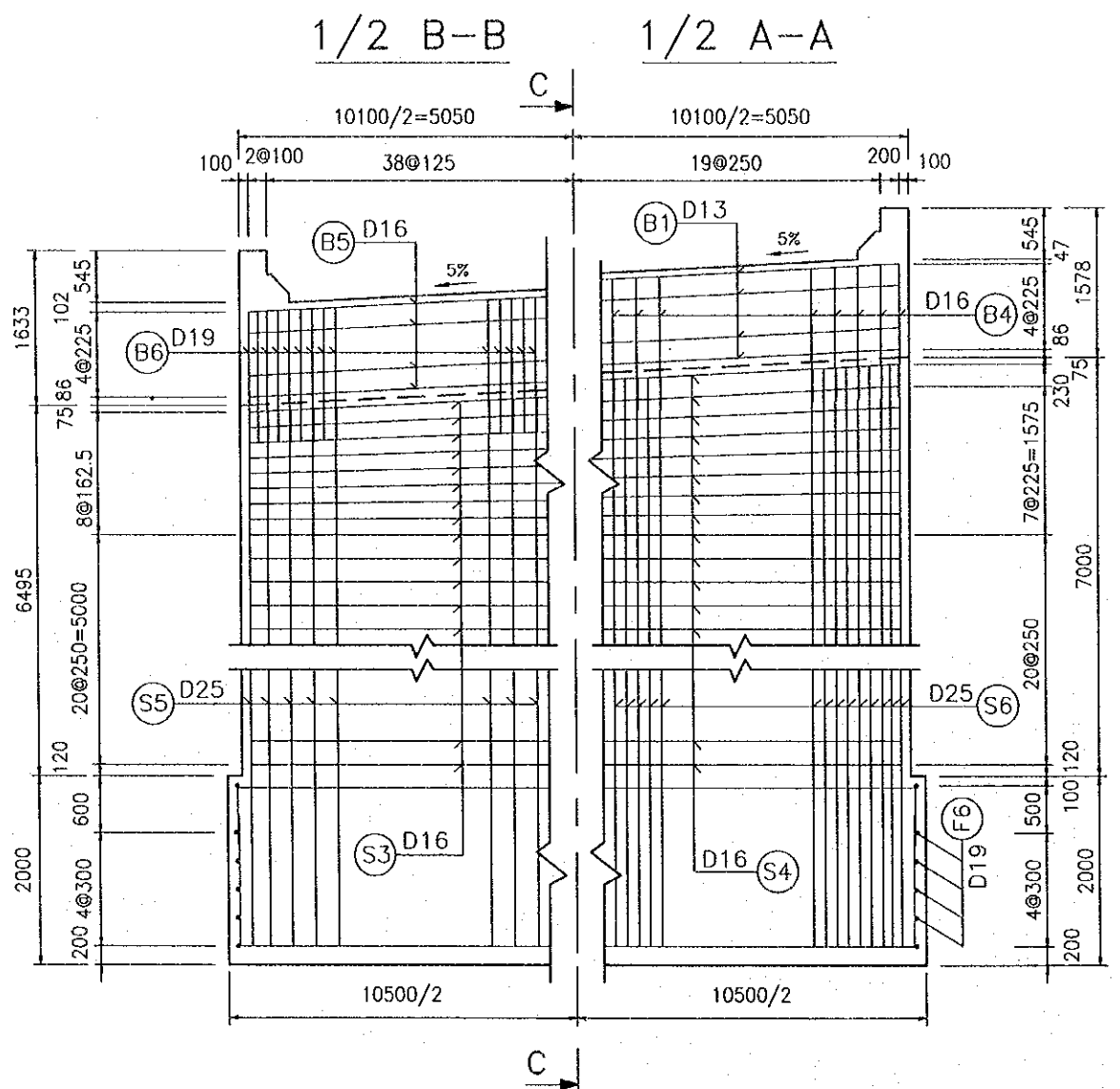
DEPTH OF SUPERSTRUCTURE

Abutment	AC1
Condition	M
Pavement	75
Slab	1000
Haunch	20
Bearing	56
Mortar	30
Total	1181



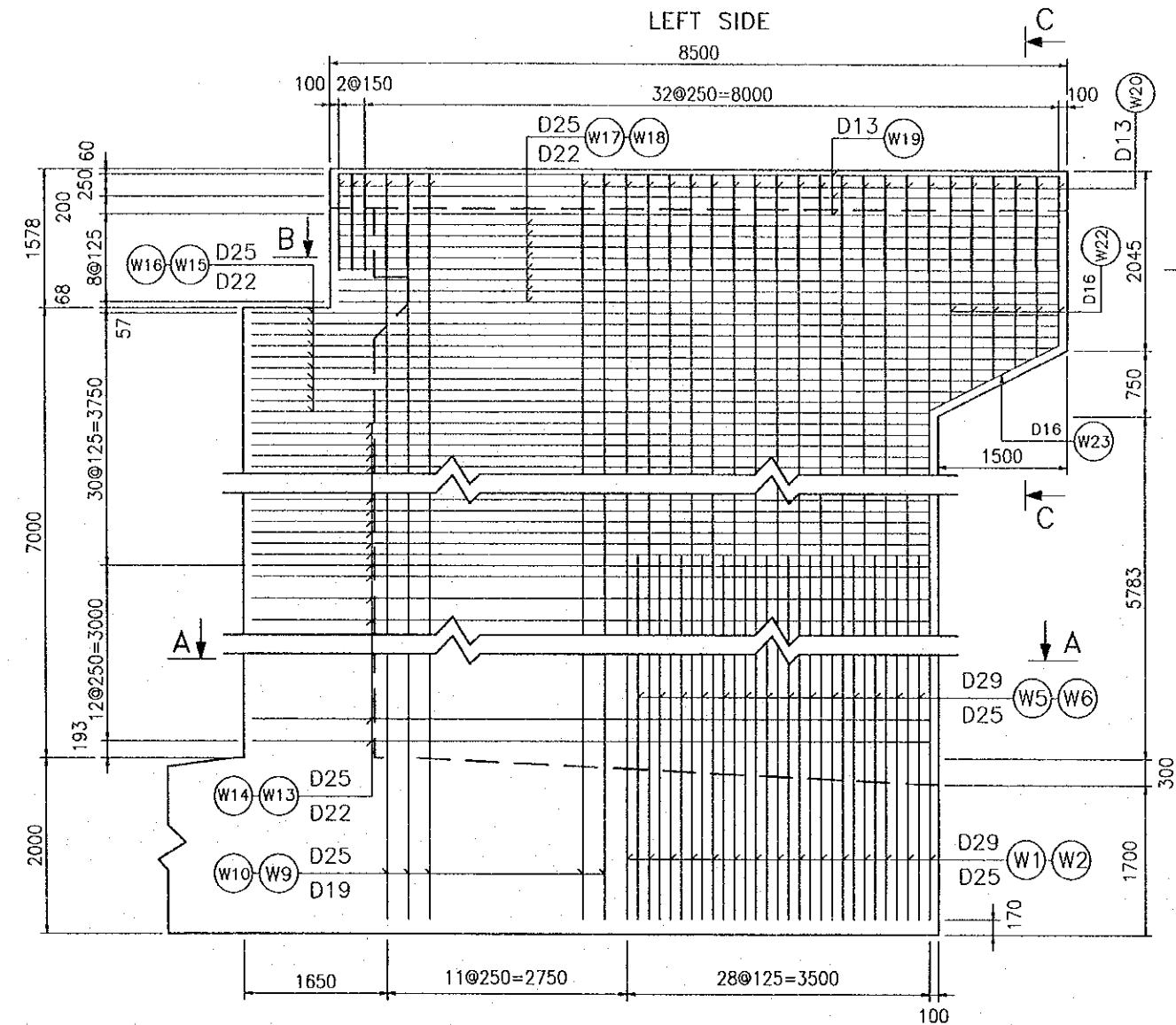
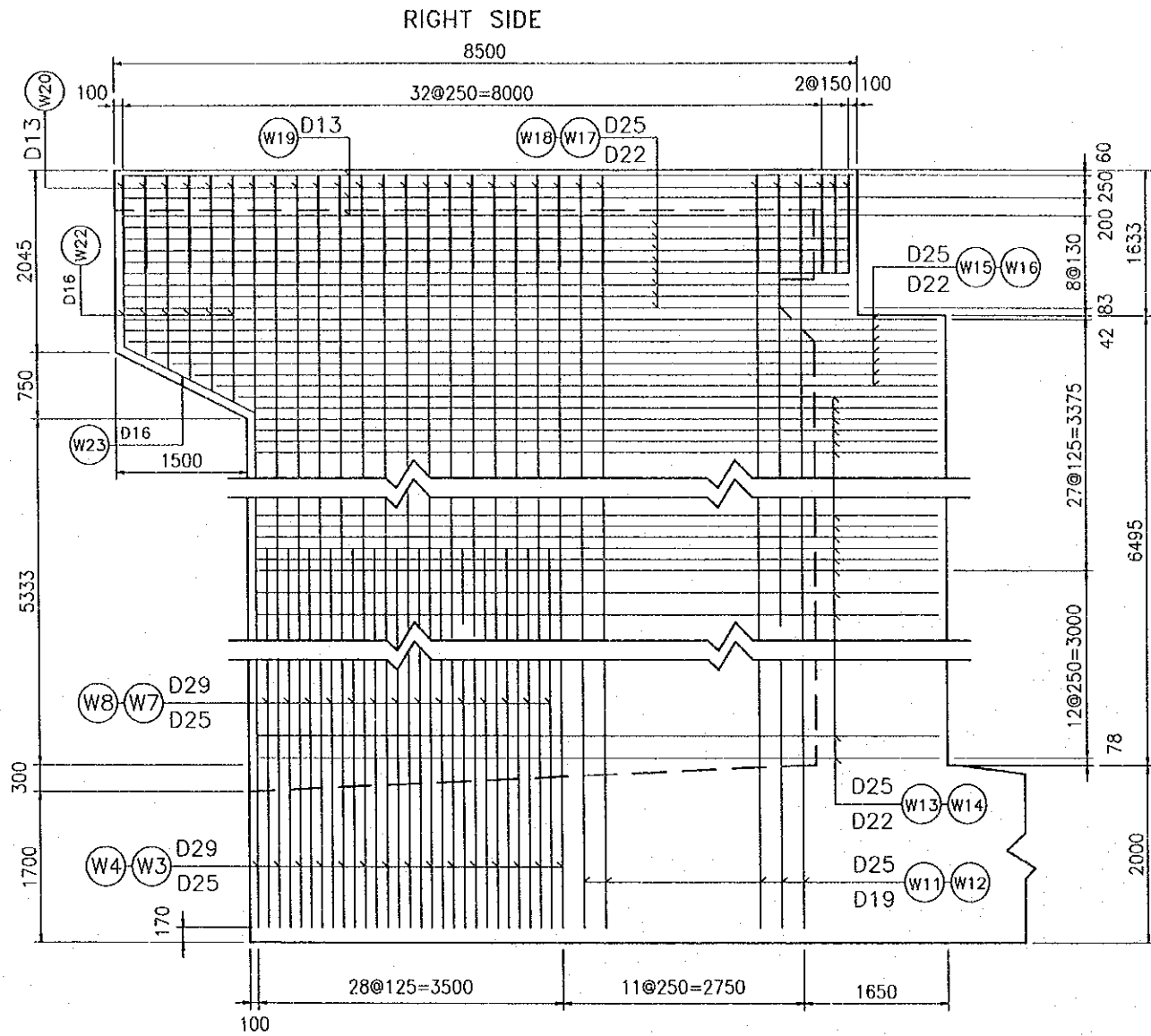
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 11. 14

PACKAGE 3	SCALE 1/75	DRAWING No. C-2-3-22	SHEET No.
BAR ARRANGEMENT OF ABUTMENT A-1 (1)			



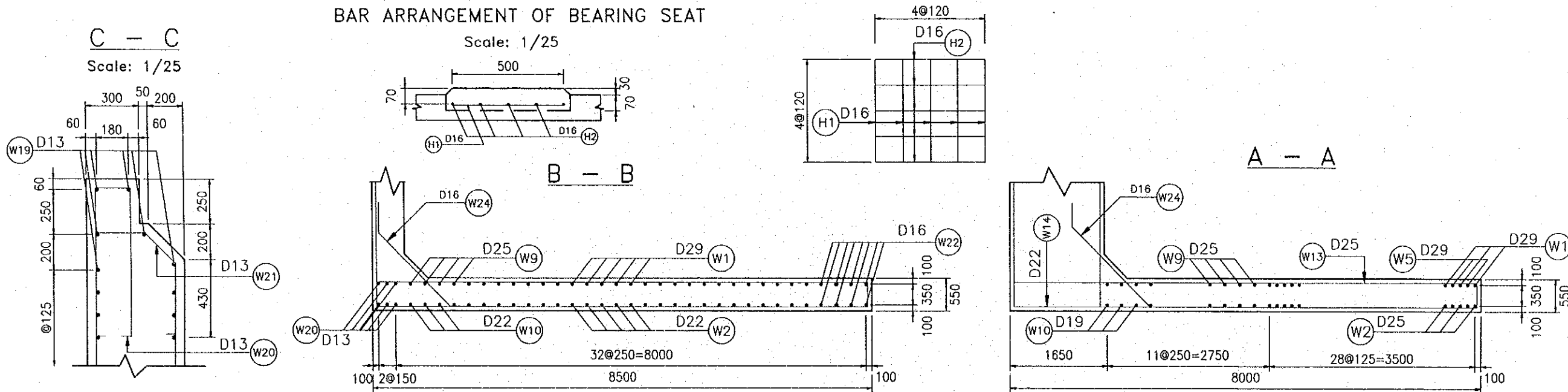
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE 2000.12.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/75	DRAWING No. C-2-3-23	SHEET No.
BAR ARRANGEMENT OF ABUTMENT A ₁ (2)			



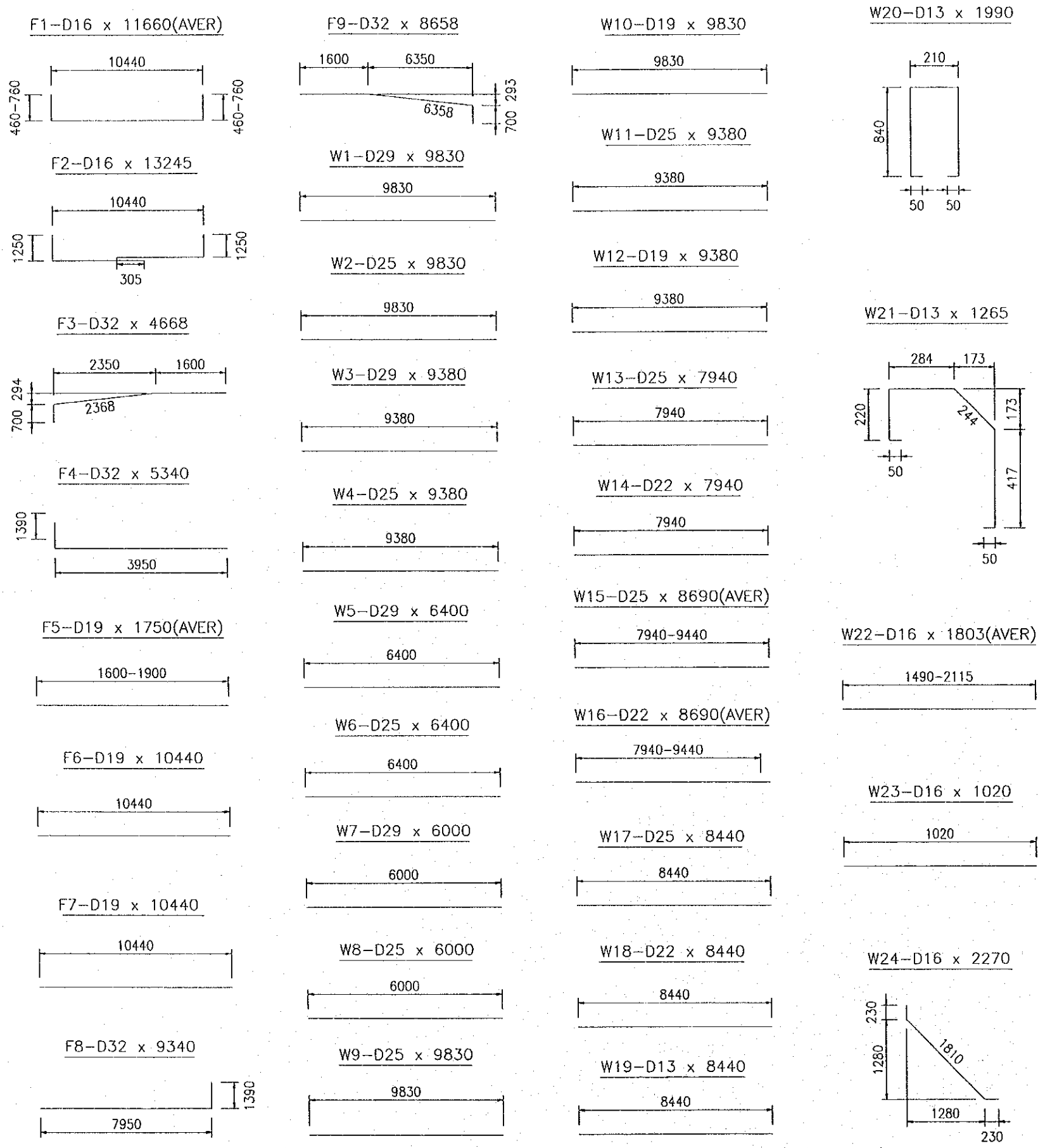
BAR ARRANGEMENT OF BEARING SEAT

Scale: 1/25



THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 5. 14

PACKAGE 3	SCALE 1/100	DRAWING No. C-2-3-24	SHEET No.
BAR ARRANGEMENT OF ABUTMENT AC1 (3)			

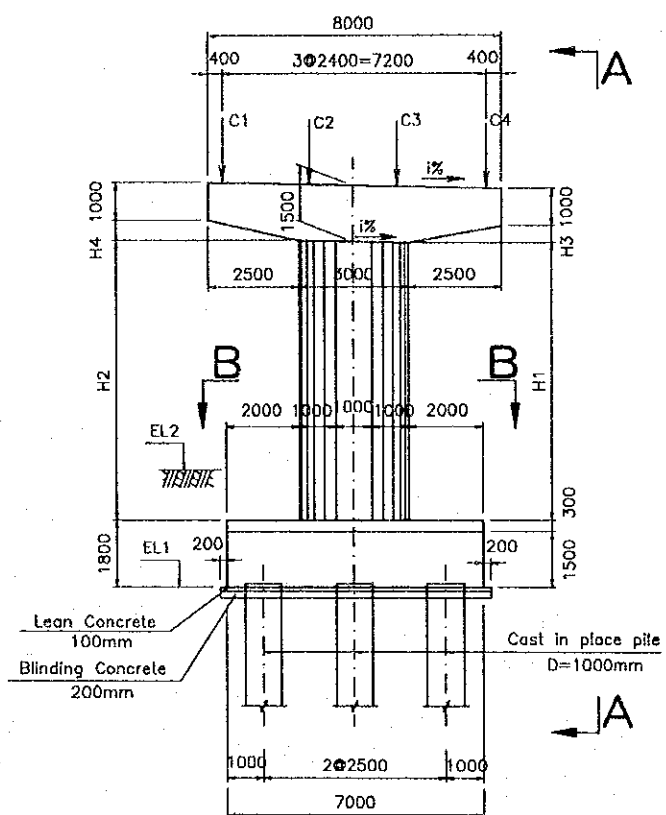


Detaile	Bars	Dia (mm)	Length (mm)	No' s	Unit Weight (Kg/m)	Weight (Kg)	Remarks
BALLAST WALL	B1	D13	10040	9	0.995	89.91	
	B2	D13	2060	39	0.995	79.94	
	B3	D13	730	62	0.995	45.03	
	B4	D16	1750	41	1.560	111.93	
	B5	D16	10040	5	1.560	78.31	
STEM	B6	D19	1750	81	2.250	318.94	
	S1	D16	1730	209	1.560	546.05	
	S2	D16	10040	5	1.560	78.31	
	S3	D16	10040	28	1.560	438.55	
	S4	D16	10040	28	1.560	438.55	
	S5	D25	8745	41	3.980	1427.01	AVER
	S6	D25	8745	81	3.980	2819.21	AVER
	H1	D16	500	20	1.560	15.60	
	H2	D16	500	20	1.560	15.60	
	FOOTING	F1	D16	11660	44	1.560	800.34
F2		D16	13245	44	1.560	909.14	
F3		D32	4668	43	6.230	1250.51	
F4		D32	5340	85	6.230	2827.80	
F5		D19	1750	387	2.250	1523.81	AVER
F6		D19	10440	8	2.250	187.92	
F7		D19	10440	8	2.250	187.92	
F8		D32	9340	43	6.230	2502.09	
F9		D32	8658	85	6.230	4584.84	
WING WALL	W1	D29	9830	15	5.040	743.15	
	W2	D25	9830	15	3.980	586.85	
	W3	D29	9380	15	5.040	709.13	
	W4	D25	9380	15	3.980	559.99	
	W5	D29	6400	14	5.040	451.58	
	W6	D25	6400	14	3.980	356.61	
	W7	D29	6000	14	5.040	423.36	
	W8	D25	6000	14	3.980	334.32	
	W9	D25	9830	11	3.980	430.36	
	W10	D19	9830	11	2.250	243.29	
	W11	D25	9380	11	3.980	410.66	
	W12	D19	9380	11	2.250	232.16	
	W13	D25	7940	64	3.980	2022.48	
	W14	D22	7940	64	3.040	1544.81	
	W15	D25	8690	19	3.980	657.14	AVER
	W16	D22	8690	19	3.040	501.93	AVER
	W17	D25	8440	17	3.980	571.05	
	W18	D22	8440	17	3.040	436.18	
	W19	D13	8440	12	0.995	100.77	
	W20	D13	1990	70	0.995	138.60	
	W21	D13	1265	70	0.995	88.11	
	W22	D16	1803	24	1.560	67.50	
	W23	D16	1020	4	1.560	6.36	
	W24	D16	2270	83	1.560	293.92	
SUMMARY	TOTAL					33205.6	
	D13 : 542.4		D25 : 10175.7				
	D16 : 3818.2		D29 : 2327.2				
	D19 : 2694.0		D32 : 11165.2				
	D22 : 2482.9						

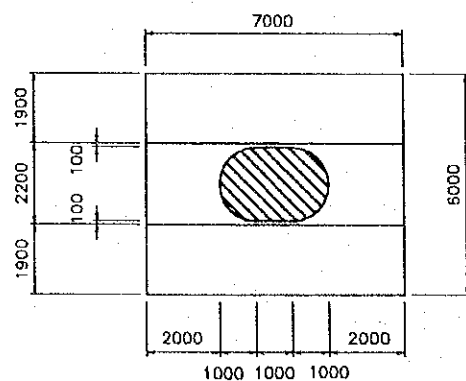
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT: RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE
CONSULTANT: PACIFIC CONSULTANTS INTERNATIONAL	DATE: 5.000.16.1

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/200	C-2-3-25	
DETAIL OF PIER PC1 - PC5			

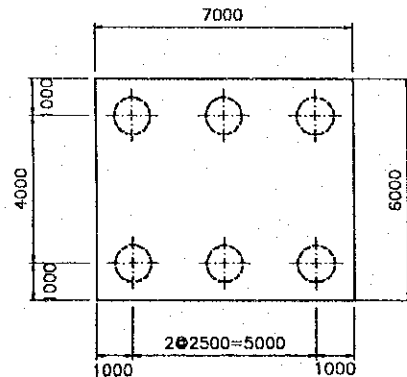
FRONT ELEVATION



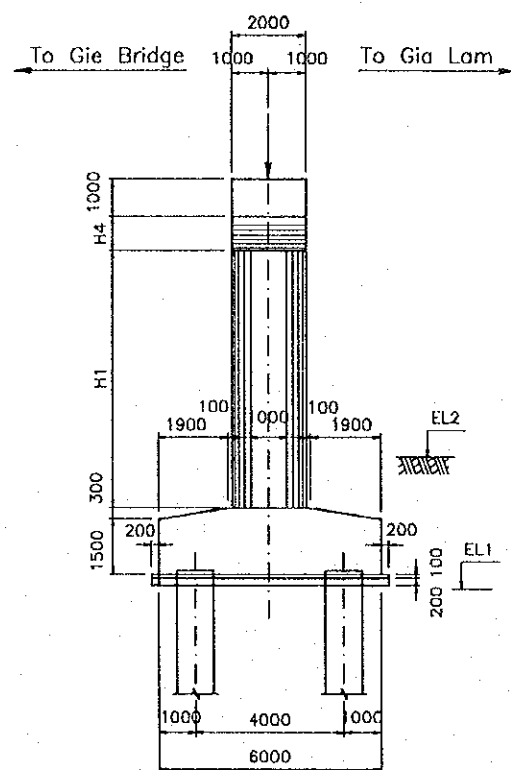
SECTION B - B



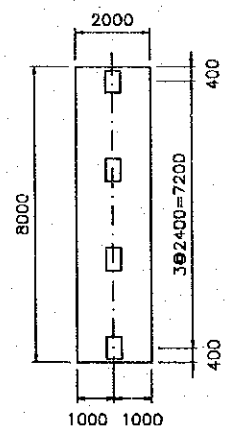
PILE ARRANGEMENT



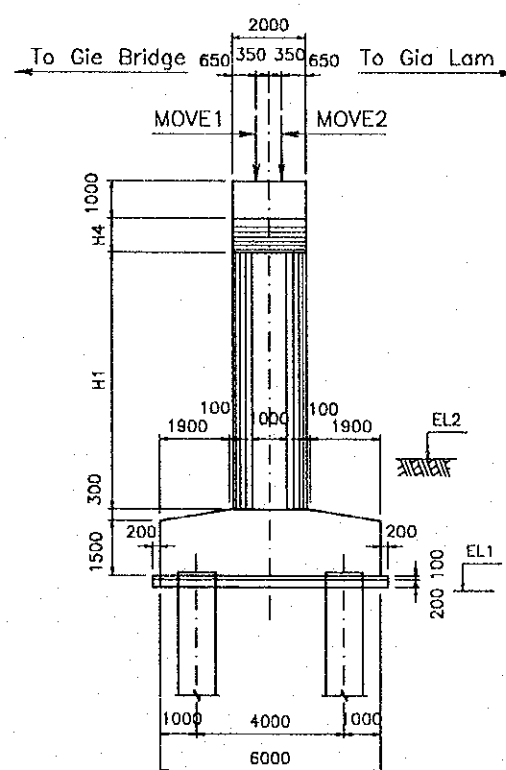
VIEW A-A
(Pc1, Pc2, Pc3, Pc5)



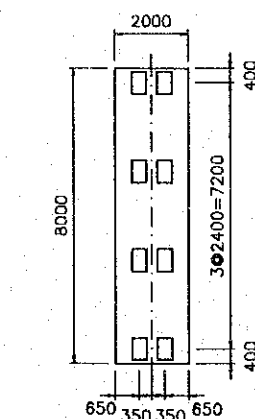
PLAN OF PIER HEAD
FOR PC1 : PC2 : PC3 : PC5



VIEW A-A (PC4)



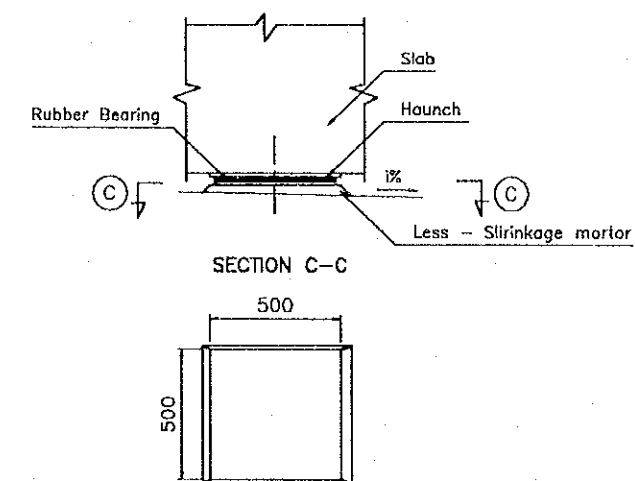
PLAN OF PIER HEAD
FOR PC4



DIMENSION OF PIERS

PIER	PC1	PC2	PC3	PC4	PC5
H1	4925	5525	8325	9025	9435
H2	5075	5675	8475	9173	9566
H3	375	375	375	377	393
H4	625	625	625	623	607

BEARING SEAT OF P.C.I GIRDER
(SC-1/40)



DEPTH OF SUPERSTRUCTURE

PIER	PC1	PC2	PC3	PC4	PC5	
CONDITION	Fix	Fix	Move	Move1	Move2	Fix
Pavement	75	75	75	75	75	75
Slab	1000	1000	1000	1000	1000	1000
Haunch	20	20	20	20	20	20
Bearing	32	32	44	56	56	44
Mortar	30	30	30	30	30	30
Total	1157	1157	1169	1181	1181	1169

ELEVATION OF TOP BEARING SEAT

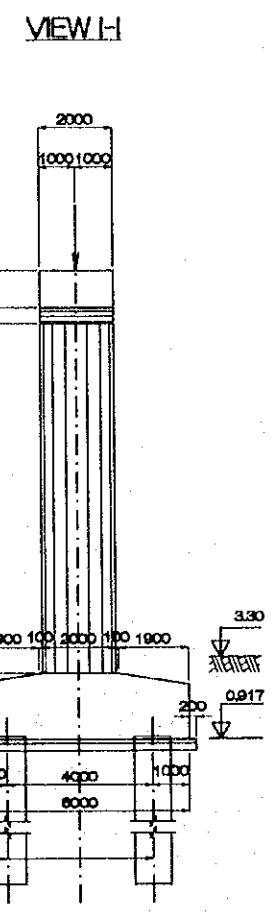
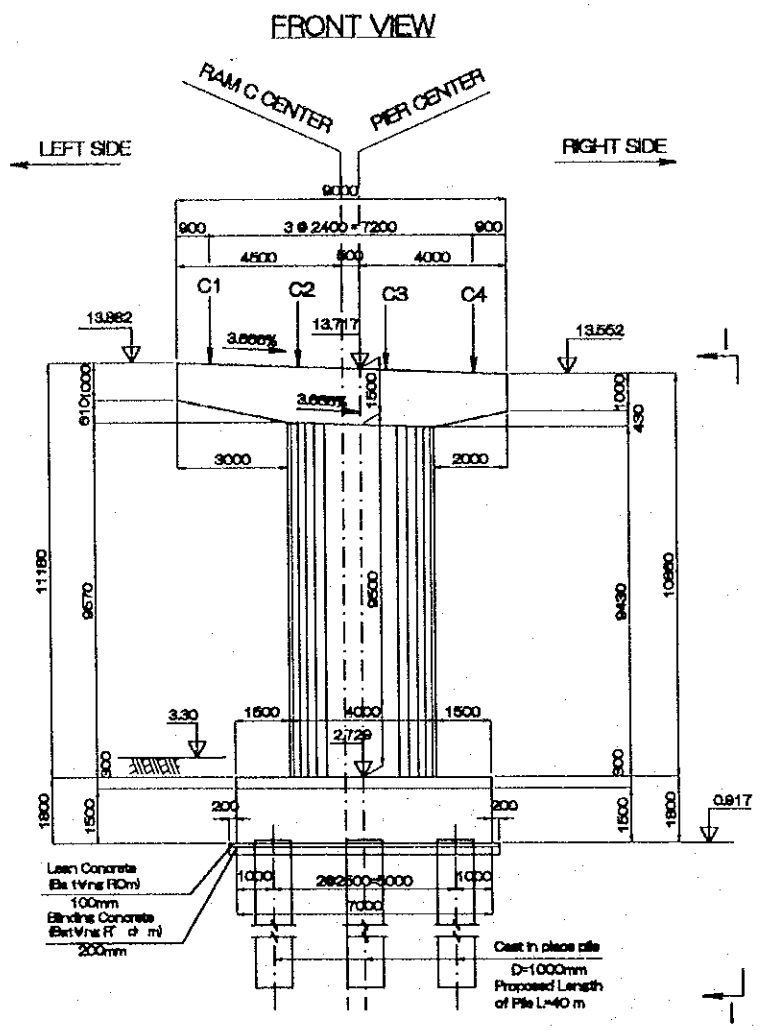
PIER	PC1	PC2	PC3	PC4	PC5	
BEARING	Fix	Fix	Move	Move1	Move2	Fix
C1	10.899	11.917	12.813	13.434	13.433	13.782
C2	10.779	11.797	12.693	13.316	13.315	13.678
C3	10.659	11.677	12.573	13.197	13.196	13.576
C4	10.539	11.557	12.453	13.079	13.080	13.473

ELEVATION EL1, EL2 AND INCLINE (%)

PIER	PC1	PC2	PC3	PC4	PC5	
EL1	2.389	2.807	0.903	0.827	0.799	
EL2	5.3	3.4	3.4	3.4	3.4	
%	5	5	5	SL	SR	4.291
				4.93	4.904	

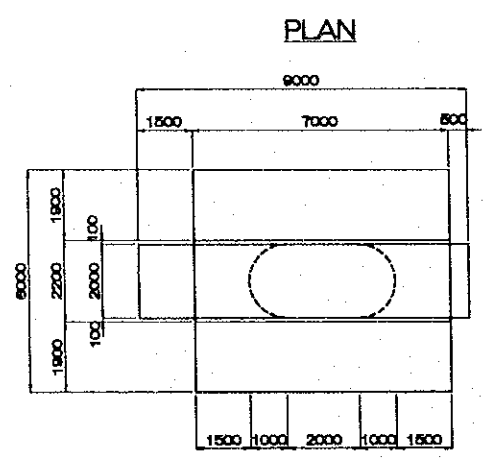
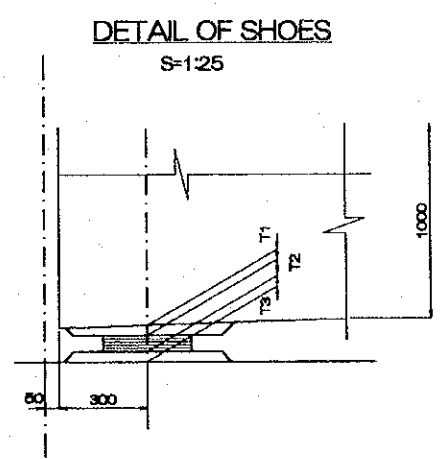
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>	
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE	2009.6.1
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/200	C-2-3-2B	
DETAIL OF PIER PC6			

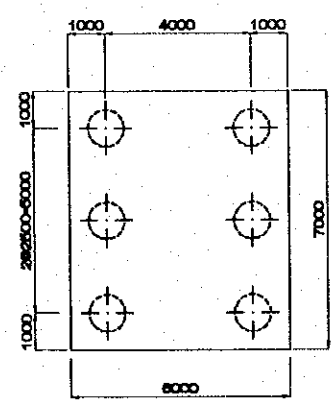


DEPTH OF SUPERSTRUCTURE (MM)

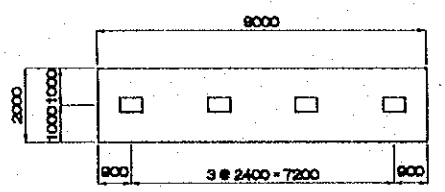
	FIX
Pavement	75
Slab	1000
Haunch (T1)	20
Bearing (T2)	32
Mortar (T3)	30
Sub Total	1157



PILE ARRANGEMENT



PLAN OF PIER HEAD



ELEVATION OF TOP PIER HEAD (M)

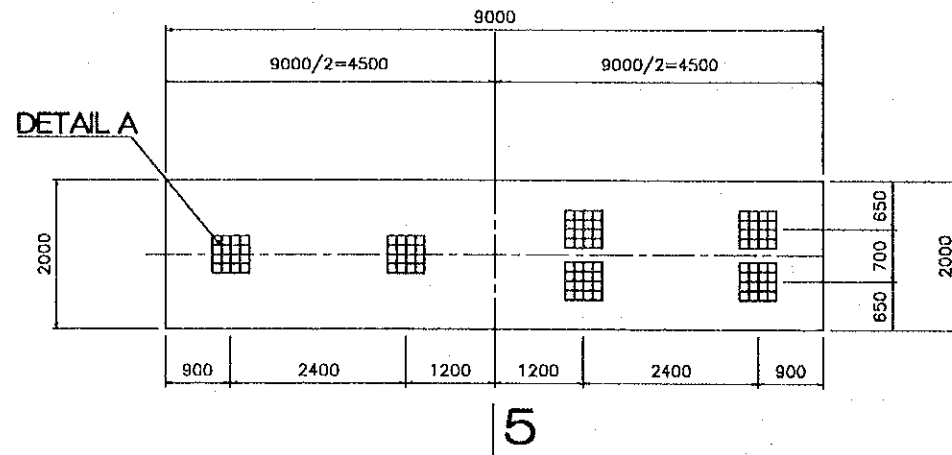
	C1	C2	C3	C4
Elevations	13.849	13.761	13.673	13.585

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. WATABE
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT		SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		DATE 2000.6.1

PACKAGE 3	SCALE 1/100	DRAWING No. C-2-3-27	SHEET No.
RAMP C BRIDGE BAR ARRANGEMENT OF PIERS PC1~PC6(1)			

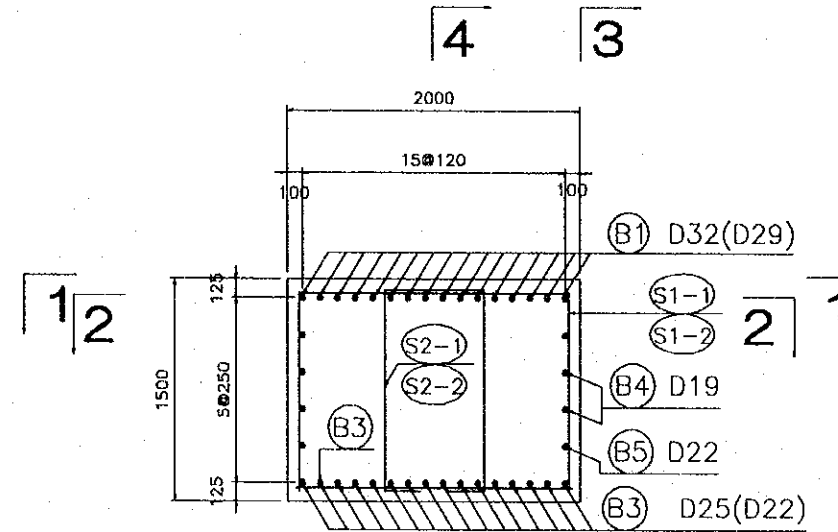
SECTION 1-1

1/2 FOR Pc1~Pc3, Pc5, Pc6 5 1/2 FOR Pc4



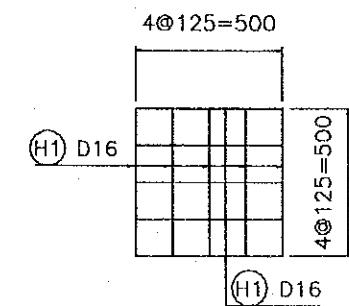
SECTION 5-5

(SC=1/50)

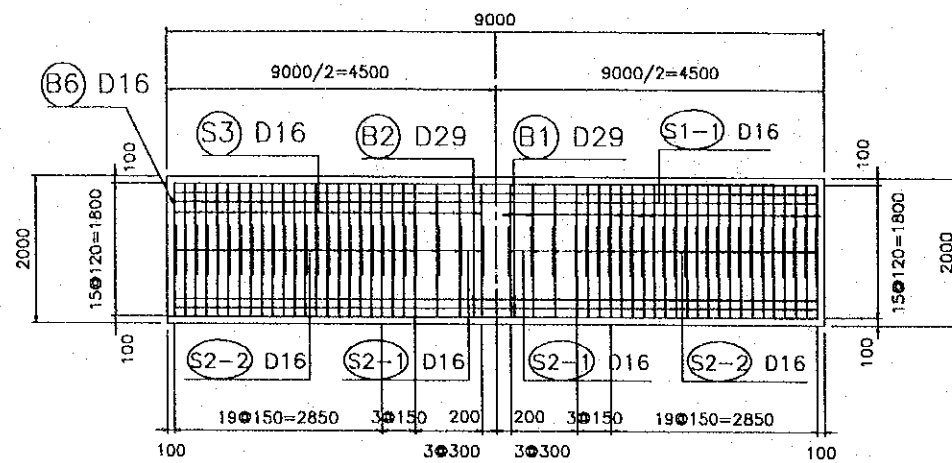


DETAIL A

(SC=1/25)



SECTION 2-2

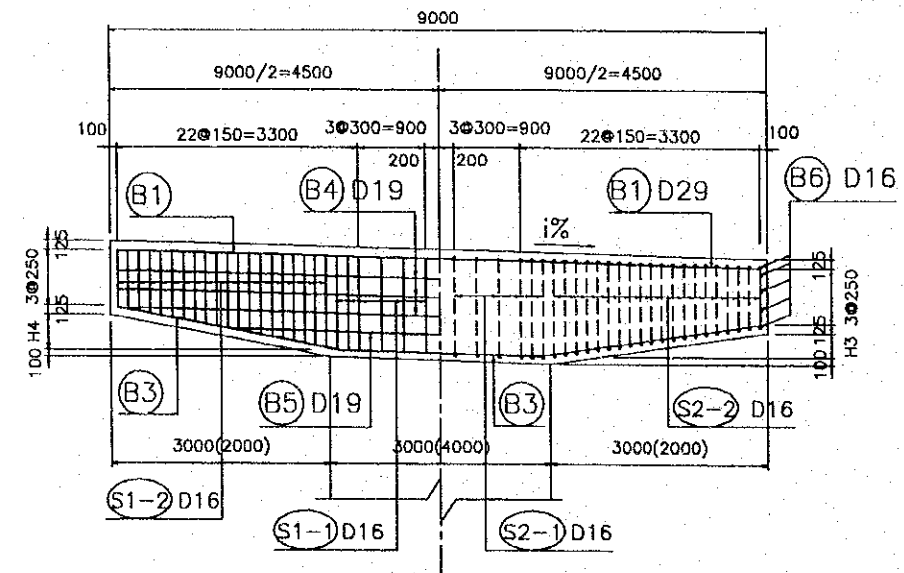


NOTE

Numbers in (..) use for Pc6

HALF SECTION 3-3

HALF SECTION 4-4



DIMENSIONS OF PIERS

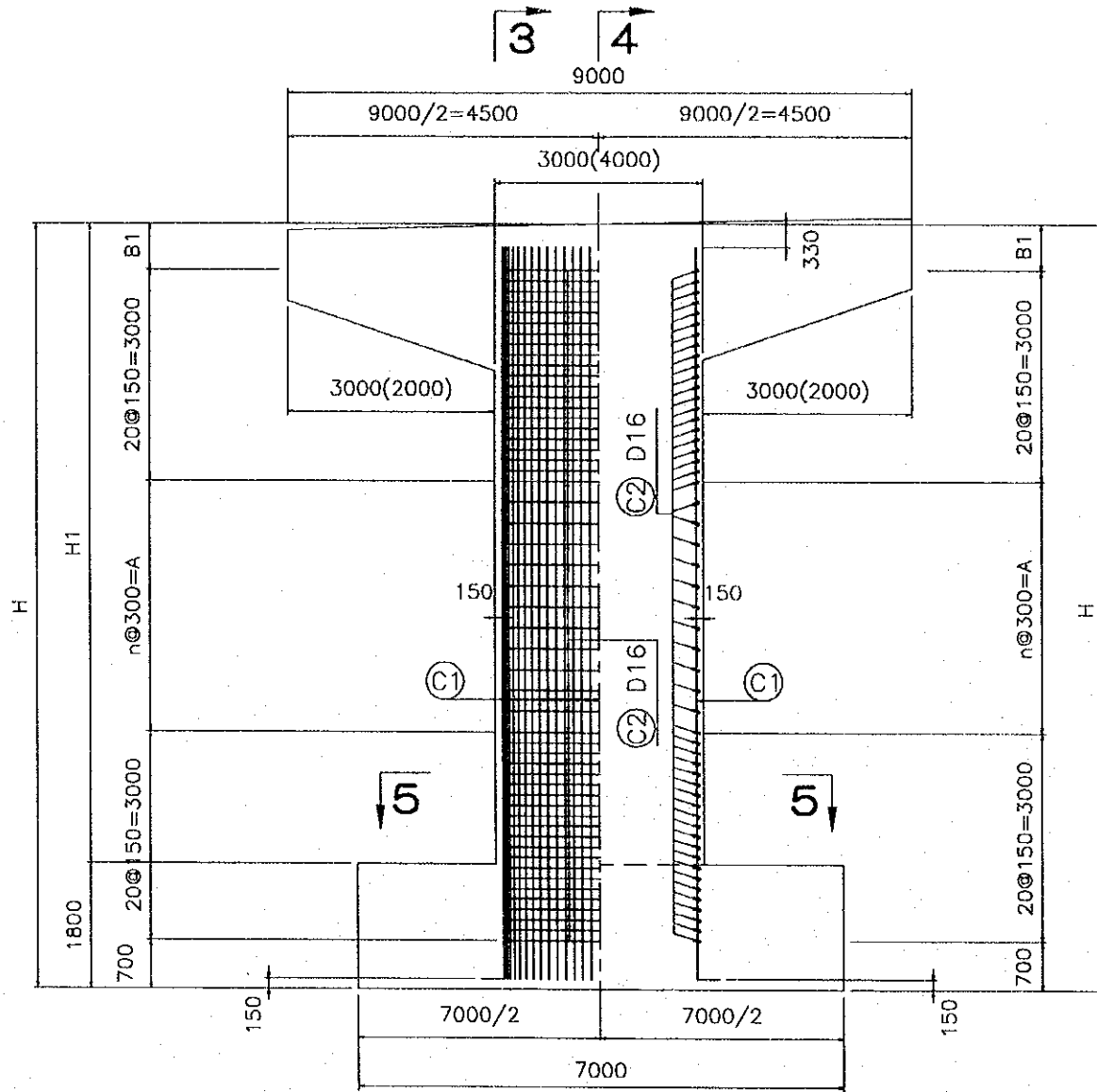
PIER	Pc1	Pc2	Pc3	Pc4	Pc5	Pc6
H3	350	350	350	352	371	430
H4	650	650	650	648	629	610

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JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i>
CONSULTANT		DATE 2006.11

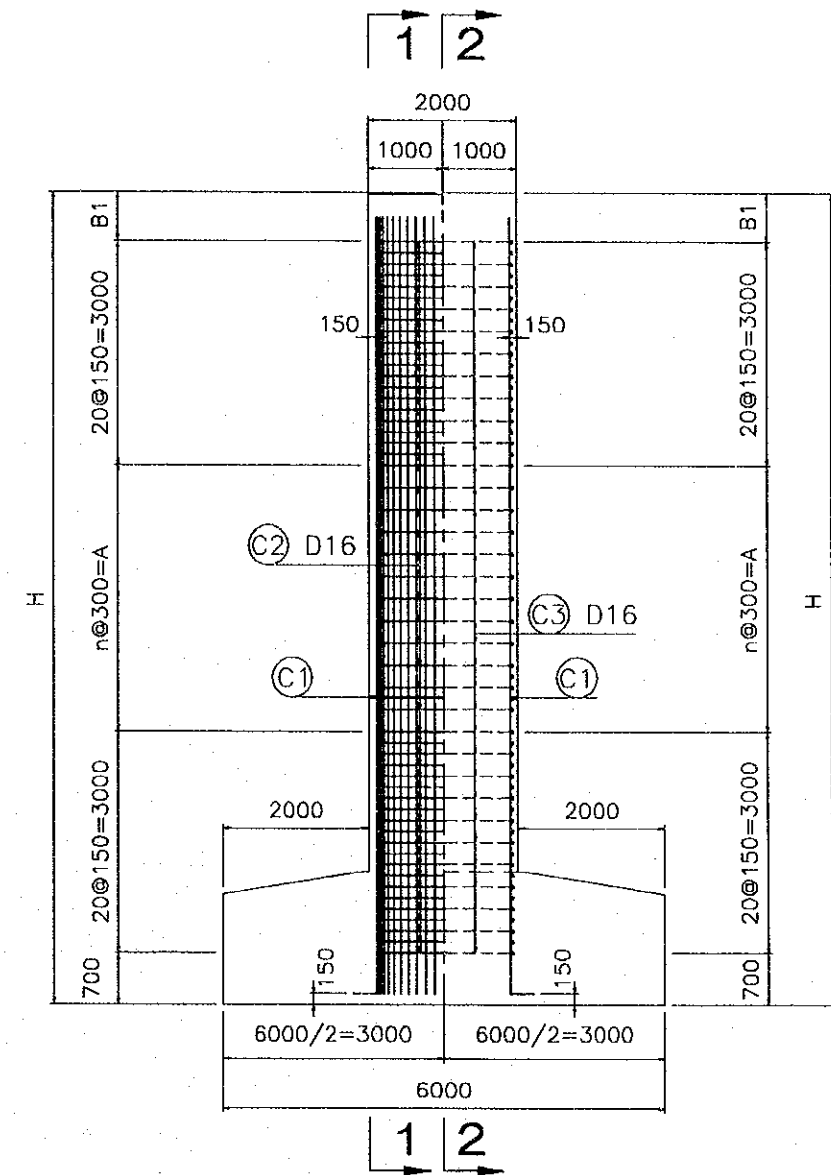
PACKAGE 3	SCALE 1/100	DRAWING No. C-2-3-28	SHEET No.
RAMP C BRIDGE BAR ARRANGEMENT OF PIERS PC1-PC6			

HALF SECTION 1 - 1

HALF SECTION 2 - 2



HALF SECTION 3 - 3 HALF SECTION 4 - 4

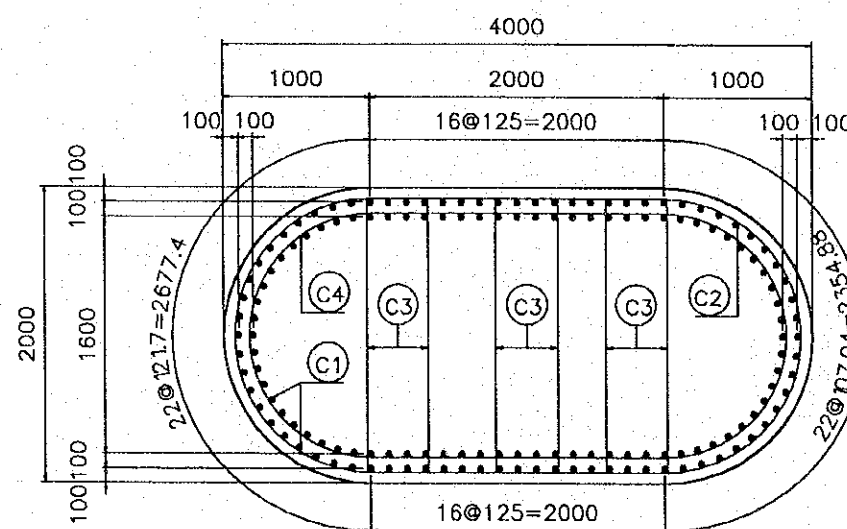
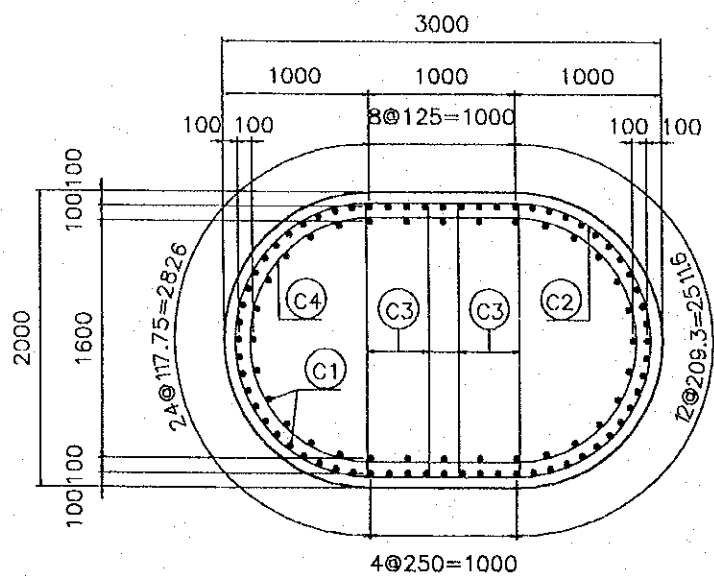


SECTION 5 - 5(PC1~PC5)

scale:1/50

SECTION 5 - 5(PC6)

scale:1/50



NOTE: Number in bracket(.) are used for Pc6

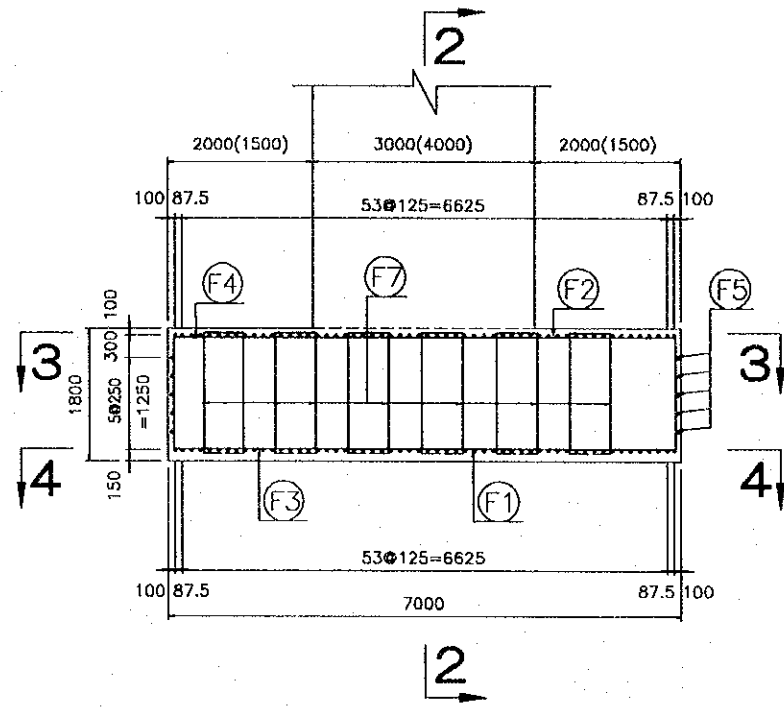
DIMENSION OF PIERS

ITEMS PIER	H	n	A	B1	nC2	nC4	nC3	nC1	LC1#29
Pc1	8300	4	1200	400	45	45	36	96	8700
Pc2	8900	6	1800	400	47	47	39	96	10300
Pc3	11700	15	4500	500	56	56	53	96	12980
Pc4	12400	17	5100	600	58	58	56	96	13680
Pc5	12800	19	5700	400	60	60	59	96	14080
Pc6	12800	19	5700	400	60	60	98	152	14080

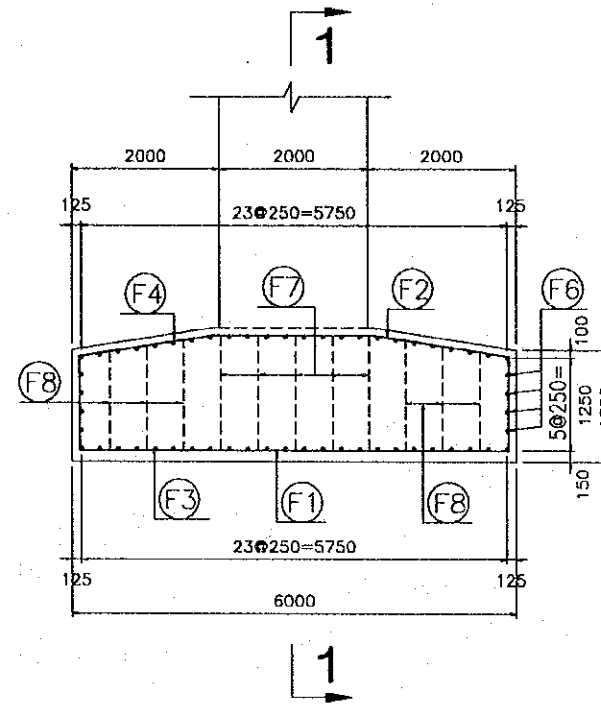
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	2.000.1.6-1

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-2-3-29	
RAMP C BRIDGE BAR ARRANGEMENT OF PIERS PC1~PC6(3)			

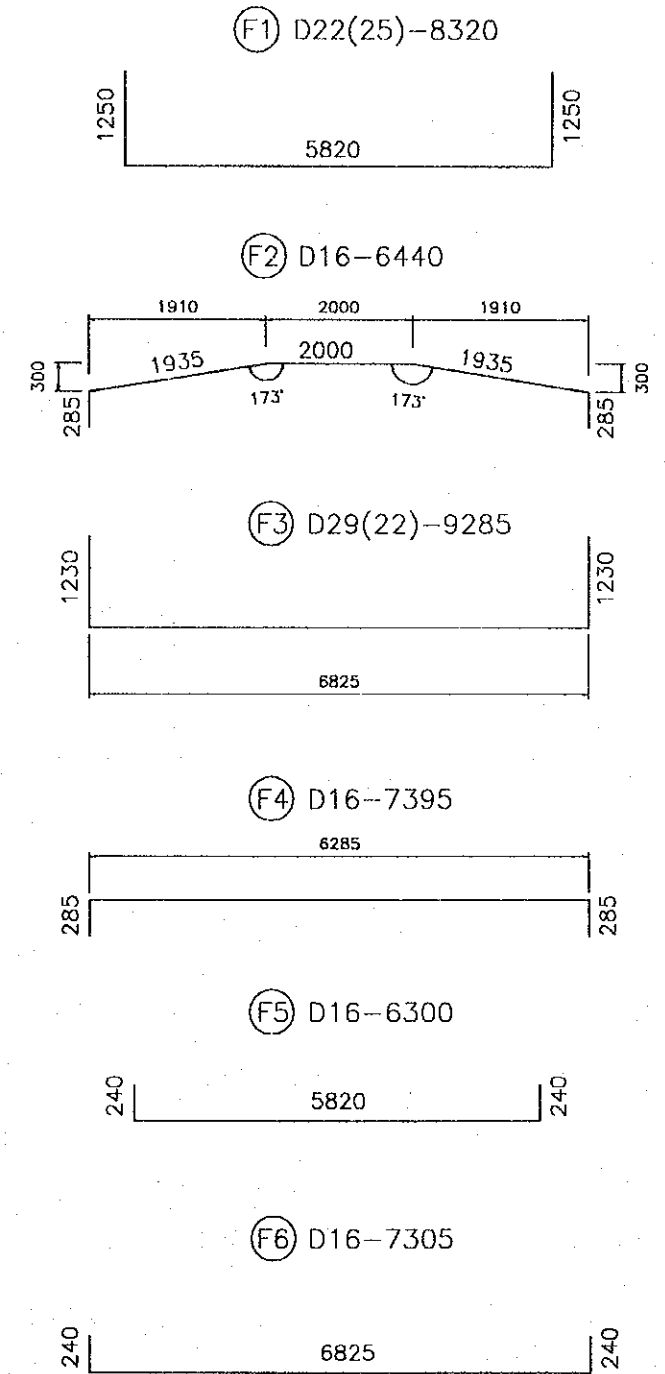
SECTION 1 - 1



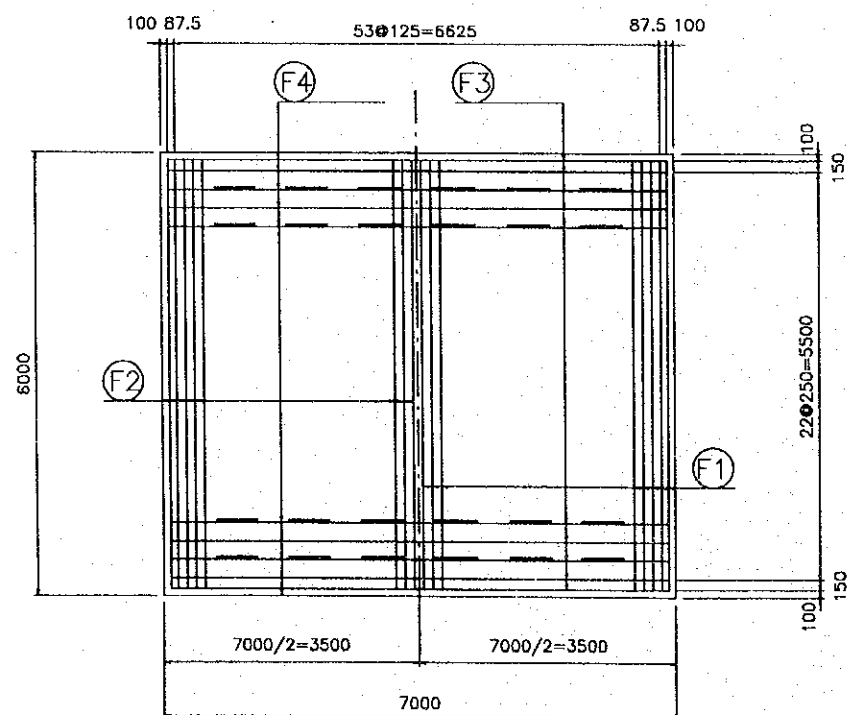
SECTION 2 - 2



LIST OF REINFORCING BARS FOR FOOTING



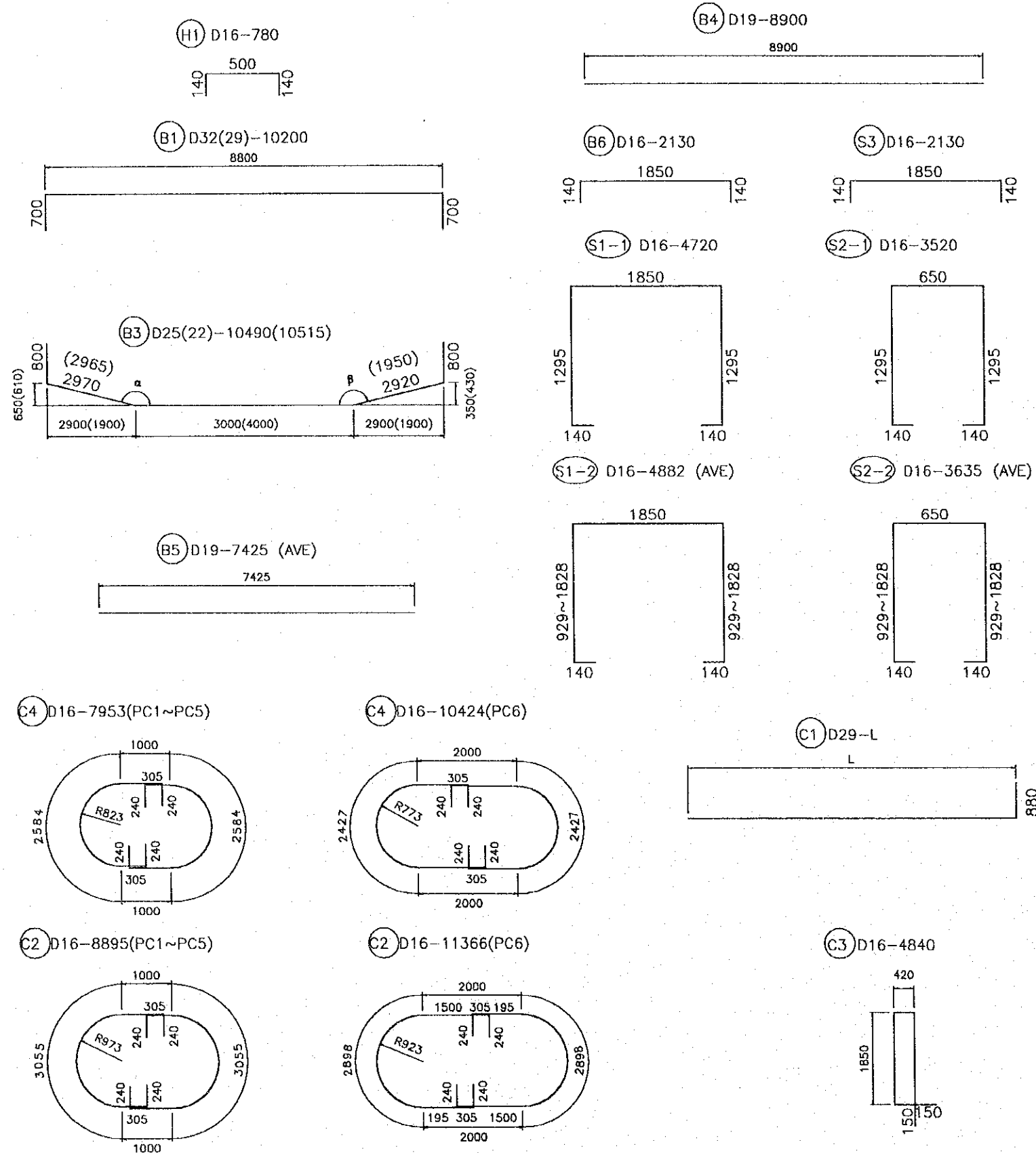
HALF SECTION 3 - 3 HALF SECTION 4 - 4



PIER TYPE	DIAMETER (CP1~CP5)	DIAMETER (CP6)
F1	22	25
F2	16	16
F3	29	22
F4	16	16

NOTE: Number in (.) use for PC6

LIST OF REINFORCING BARS FOR BEAM AND COLUMN



BAR QUANTITIES FOR PIER Pc1

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Shape]	D18	780	20	1.56	24.34
	B1	[Shape]	D32	10200	16	6.23	1016.74
	B3	[Shape]	D25	10490	16	3.98	668.00
	B4	[Shape]	D18	8900	8	2.25	120.15
	B5	[Shape]	D22	7425	2	3.04	45.14
	B6	[Shape]	D18	2130	10	1.56	33.23
	S1-1	[Shape]	D18	4720	13	1.56	95.72
	S1-2	[Shape]	D18	4882	40	1.56	304.64
	S2-1	[Shape]	D18	3520	13	1.56	71.38
	S2-2	[Shape]	D18	3635	40	1.56	228.82
STEM	S3	[Shape]	D18	2130	52	1.56	172.78
	C1	[Shape]	D28	8700	96	5.04	4208.41
	C2	[Shape]	D18	8895	45	1.56	624.43
	C4	[Shape]	D18	7953	45	1.56	658.30
FOOTING	C3	[Shape]	D18	4840	36	1.56	271.81
	F1	[Shape]	D22	8320	56	3.04	1,416.40
	F2	[Shape]	D18	8440	56	1.56	562.60
	F3	[Shape]	D28	9285	24	5.04	1123.11
	F4	[Shape]	D18	7385	24	1.56	278.87
	F5	[Shape]	D18	6300	10	1.56	98.28
	F6	[Shape]	D18	7305	8	1.56	91.17
	F7	[Shape]	D18	4534	30	1.56	212.19
F8	[Shape]	D18	4180	36	1.56	235.31	
TOTAL							12,458.83
SUMMARY				D18 = 3,859.88	D25 = 888.00		
				D19 = 120.15	D28 = 5,332.52		
				D22 = 1,461.54	D32 = 1,016.74		

BAR QUANTITIES FOR PIER Pc2

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Shape]	D18	780	20	1.56	24.34
	B1	[Shape]	D32	10200	16	6.23	1016.74
	B3	[Shape]	D25	10490	16	3.98	668.00
	B4	[Shape]	D18	8900	8	2.25	120.15
	B5	[Shape]	D22	7425	2	3.04	45.14
	B6	[Shape]	D18	2130	10	1.56	33.23
	S1-1	[Shape]	D18	4720	13	1.56	95.72
	S1-2	[Shape]	D18	4882	40	1.56	304.64
	S2-1	[Shape]	D18	3520	13	1.56	71.38
	S2-2	[Shape]	D18	3635	40	1.56	228.82
STEM	S3	[Shape]	D18	2130	52	1.56	172.78
	C1	[Shape]	D28	10300	96	5.04	4833.55
	C2	[Shape]	D18	8895	47	1.56	652.18
	C4	[Shape]	D18	7853	47	1.56	563.11
FOOTING	C3	[Shape]	D18	4840	36	1.56	294.47
	F1	[Shape]	D22	8320	56	3.04	1,416.40
	F2	[Shape]	D18	8440	56	1.56	562.60
	F3	[Shape]	D28	9285	24	5.04	1123.11
	F4	[Shape]	D18	7385	24	1.56	278.87
	F5	[Shape]	D18	6300	10	1.56	98.28
	F6	[Shape]	D18	7305	8	1.56	91.17
	F7	[Shape]	D18	4534	30	1.56	212.19
F8	[Shape]	D18	4180	36	1.56	235.31	
TOTAL							13,308.18
SUMMARY				D18 = 3,835.09	D25 = 888.00		
				D19 = 120.15	D28 = 6,108.67		
				D22 = 1,461.54	D32 = 1,016.74		

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TUANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DESIGNED BY S. MATSUDA
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i> DATE 2006-6-1

PACKAGE 3	SCALE 1/100	DRAWING No. C-2-3-31	SHEET No.
RAMP C BRIDGE BAR ARRANGEMENT OF PIERS PC3-PC6(5)			

BAR QUANTITIES FOR PIER Pc3

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D18	780	20	1.56	24.34
	B1	[Diagram]	D32	10200	16	6.23	1016.74
	B3	[Diagram]	D25	10490	16	3.98	668.00
	B4	[Diagram]	D19	8900	6	2.25	120.15
	B5	[Diagram]	D22	7425	2	3.04	45.14
	B6	[Diagram]	D18	2130	10	1.56	33.23
	S1-1	[Diagram]	D18	4720	13	1.56	85.72
	S1-2	[Diagram]	D18	4882	40	1.56	304.84
	S2-1	[Diagram]	D18	3520	13	1.56	71.39
	S2-2	[Diagram]	D18	3635	40	1.56	226.82
S3	[Diagram]	D18	2130	52	1.56	172.78	
STEM	C1	[Diagram]	D29	12880	96	5.04	6280.24
	C2	[Diagram]	D18	8895	56	1.56	777.07
	C4	[Diagram]	D18	7953	56	1.56	694.77
	C3	[Diagram]	D18	4840	53	1.56	400.17
FOOTING	F1	[Diagram]	D22	8320	56	3.04	1,416.40
	F2	[Diagram]	D18	6440	56	1.56	562.80
	F3	[Diagram]	D29	9285	24	5.04	1123.11
	F4	[Diagram]	D18	7395	24	1.56	276.87
	F5	[Diagram]	D18	6300	10	1.56	98.28
	F6	[Diagram]	D18	7305	8	1.56	91.17
	F7	[Diagram]	D18	4534	30	1.56	212.19
	F8	[Diagram]	D18	4190	36	1.56	235.31
TOTAL							14,847.13
SUMMARY							
D18 =							4,277.35
D19 =							120.15
D22 =							1,481.54
D25 =							668.00
D29 =							7,403.36
D32 =							1,016.74

BAR QUANTITIES FOR PIER Pc4

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D18	780	40	1.56	48.67
	B1	[Diagram]	D32	10200	16	6.23	1016.74
	B3	[Diagram]	D25	10490	16	3.98	668.00
	B4	[Diagram]	D19	8900	6	2.25	120.15
	B5	[Diagram]	D22	7425	2	3.04	45.14
	B6	[Diagram]	D18	2130	10	1.56	33.23
	S1-1	[Diagram]	D18	4720	13	1.56	85.72
	S1-2	[Diagram]	D18	4882	40	1.56	304.84
	S2-1	[Diagram]	D18	3520	13	1.56	71.39
	S2-2	[Diagram]	D18	3635	40	1.56	226.82
S3	[Diagram]	D18	2130	52	1.56	172.79	
STEM	C1	[Diagram]	D29	13680	96	5.04	6818.03
	C2	[Diagram]	D18	8895	56	1.56	804.82
	C4	[Diagram]	D18	7953	56	1.56	719.59
	C3	[Diagram]	D18	4840	56	1.56	422.82
FOOTING	F1	[Diagram]	D22	8320	56	3.04	1,416.40
	F2	[Diagram]	D18	6440	56	1.56	562.60
	F3	[Diagram]	D29	9285	24	5.04	1123.11
	F4	[Diagram]	D18	7395	24	1.56	276.87
	F5	[Diagram]	D18	6300	10	1.56	98.28
	F6	[Diagram]	D18	7305	8	1.56	91.17
	F7	[Diagram]	D18	4534	30	1.56	212.19
	F8	[Diagram]	D18	4190	36	1.56	235.31
TOTAL							15,385.37
SUMMARY							
D18 =							4,376.80
D19 =							120.15
D22 =							1,481.54
D25 =							668.00
D29 =							7,742.04
D32 =							1,016.74

BAR QUANTITIES FOR PIER Pc5

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D18	780	20	1.56	24.34
	B1	[Diagram]	D32	10200	16	6.23	1016.74
	B3	[Diagram]	D25	10490	16	3.98	668.00
	B4	[Diagram]	D19	8900	6	2.25	120.15
	B5	[Diagram]	D22	7425	2	3.04	45.14
	B6	[Diagram]	D18	2130	10	1.56	33.23
	S1-1	[Diagram]	D18	4720	13	1.56	85.72
	S1-2	[Diagram]	D18	4882	40	1.56	304.84
	S2-1	[Diagram]	D18	3520	13	1.56	71.39
	S2-2	[Diagram]	D18	3635	40	1.56	226.82
S3	[Diagram]	D18	2130	52	1.56	172.78	
STEM	C1	[Diagram]	D29	14080	96	5.04	6812.47
	C2	[Diagram]	D18	8895	60	1.56	832.57
	C4	[Diagram]	D18	7953	60	1.56	744.40
	C3	[Diagram]	D18	4840	58	1.56	448.47
FOOTING	F1	[Diagram]	D22	8320	56	3.04	1,416.40
	F2	[Diagram]	D18	6440	56	1.56	562.80
	F3	[Diagram]	D29	9285	24	5.04	1123.11
	F4	[Diagram]	D18	7395	24	1.56	276.87
	F5	[Diagram]	D18	6300	10	1.56	98.28
	F6	[Diagram]	D18	7305	8	1.56	91.17
	F7	[Diagram]	D18	4534	30	1.56	212.19
	F8	[Diagram]	D18	4190	36	1.56	235.31
TOTAL							15,629.79
SUMMARY							
D18 =							4,427.78
D19 =							120.15
D22 =							1,481.54
D25 =							668.00
D29 =							7,835.58
D32 =							1,016.74

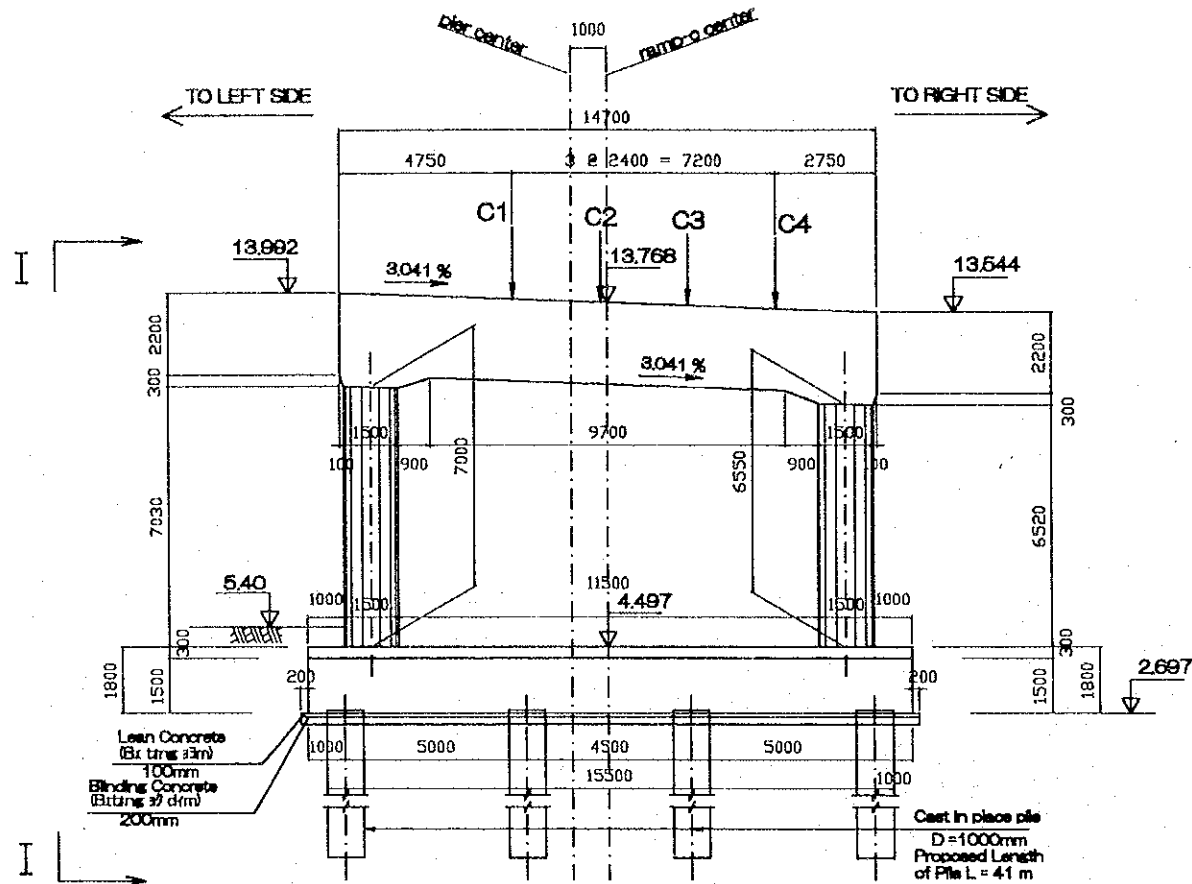
BAR QUANTITIES FOR PIER Pc6

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
CAP BEAM	H1	[Diagram]	D18	780	20	1.56	24.34
	B1	[Diagram]	D29	10200	16	5.04	822.53
	B3	[Diagram]	D22	10515	16	3.04	511.45
	B4	[Diagram]	D18	8900	6	2.25	120.15
	B5	[Diagram]	D22	7425	2	3.04	45.14
	B6	[Diagram]	D18	2130	10	1.56	33.23
	S1-1	[Diagram]	D18	4720	13	1.56	85.72
	S1-2	[Diagram]	D18	4882	40	1.56	304.84
	S2-1	[Diagram]	D18	3520	13	1.56	71.39
	S2-2	[Diagram]	D18	3635	40	1.56	226.82
S3	[Diagram]	D18	2130	52	1.56	172.78	
STEM	C1	[Diagram]	D29	14080	96	5.04	6812.47
	C2	[Diagram]	D18	11366	60	1.56	1063.86
	C4	[Diagram]	D18	10424	60	1.56	975.89
	C3	[Diagram]	D18	4840	98	1.56	739.84
FOOTING	F1	[Diagram]	D25	8320	56	3.98	1,854.36
	F2	[Diagram]	D18	6440	56	1.56	562.80
	F3	[Diagram]	D22	9285	24	3.04	877.43
	F4	[Diagram]	D18	7395	24	1.56	276.87
	F5	[Diagram]	D18	6300	10	1.56	98.28
	F6	[Diagram]	D18	7305	8	1.56	91.17
	F7	[Diagram]	D18	4534	30	1.56	212.19
	F8	[Diagram]	D18	4190	36	1.56	235.31
TOTAL							16,028.35
SUMMARY							
D18 =							5,184.82
D19 =							120.15
D22 =							722.58
D25 =							2,365.81
D29 =							6,812.47
D32 =							822.53

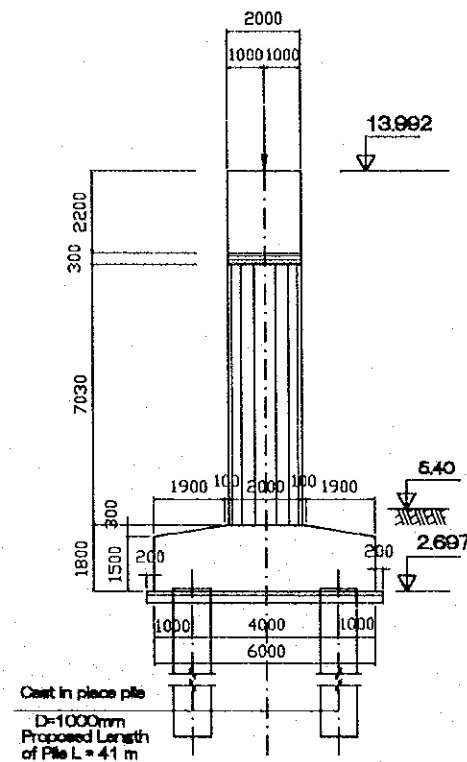
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATARE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANG THI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.16.1	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/200	DRAWING No. C-2-3-32	SHEET No.
DETAIL OF PIER Pc7			

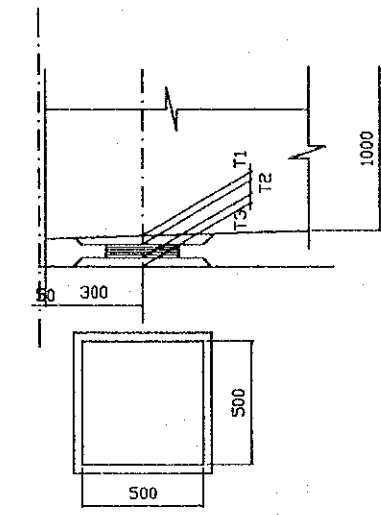
FRONT VIEW



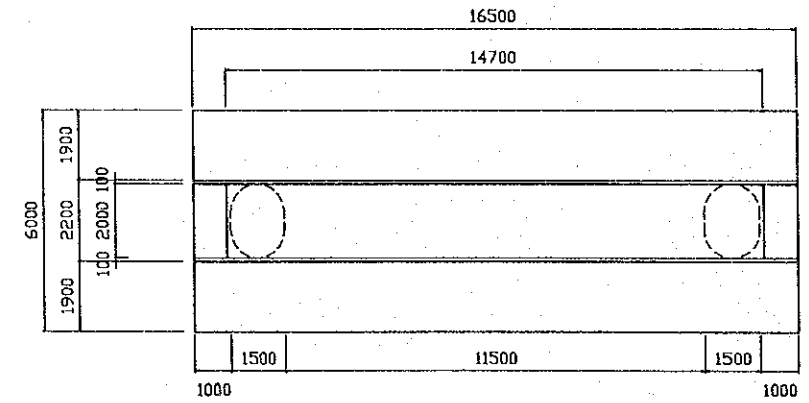
VIEW H



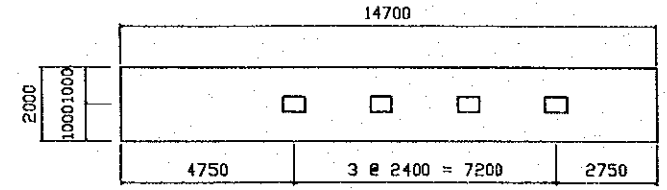
DETAIL OF SHOES



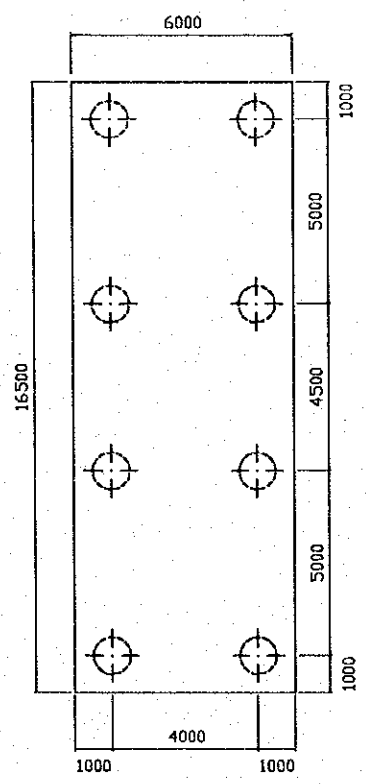
PLAN



PLAN OF PIER HEAD



PILE ARRANGEMENT



ELEVATION OF TOP PIER HEAD

	C1	C2	C3	C4
Elevation	13.847	13.774	13.701	13.628

DEPTH OF SUPERSTRUCTURE (MM)

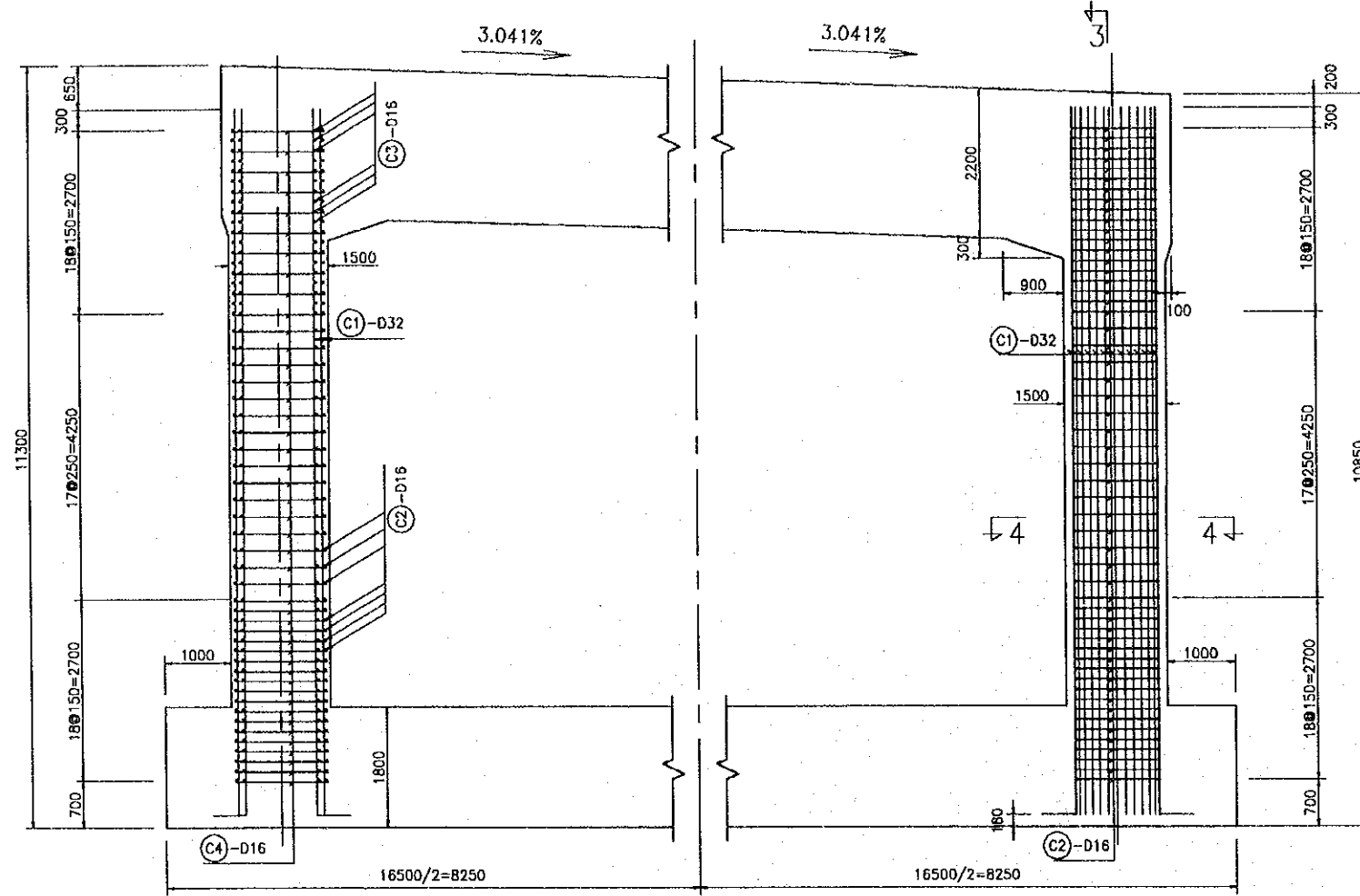
	MOVE
Pavement	75
Slab	1000
Haunch (T1)	20
Bearing (T2)	32
Mortar (T3)	30
Sub Total	1157

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TIANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.6.1
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

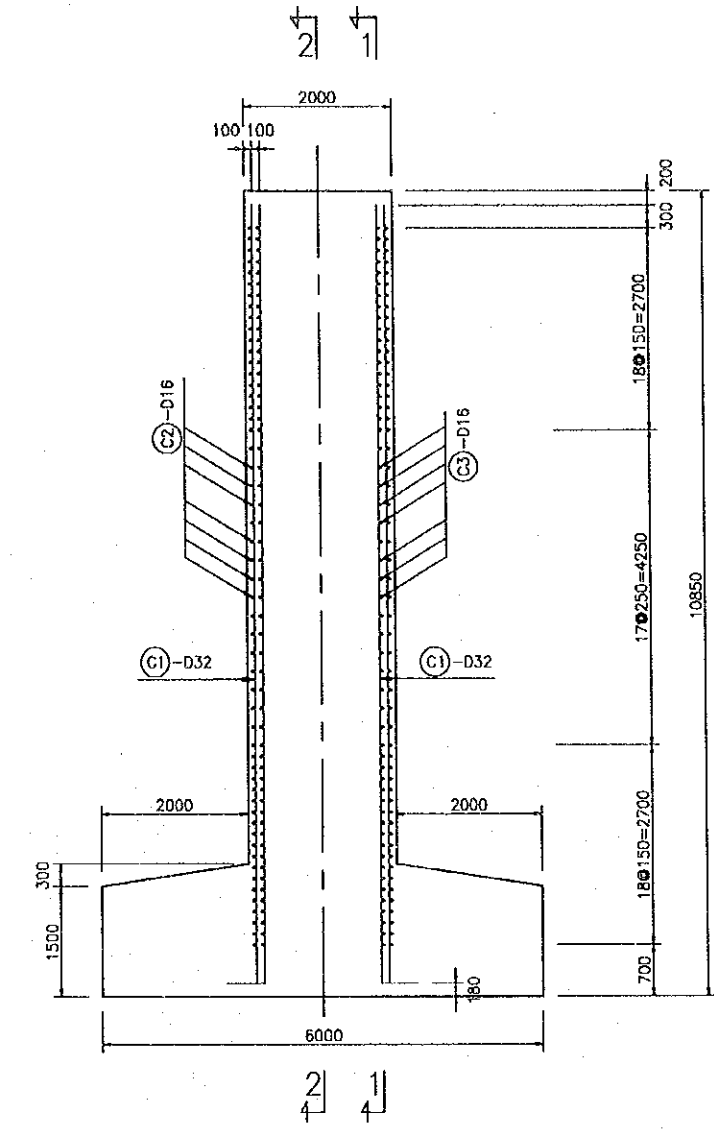
PACKAGE 3	SCALE 1/100	DRAWING No. C-2-3-34	SHEET No.
RAMP - C BRIDGE BAR ARRANGMENT OF PIER P67 (2)			

HALF SECTION 1-1

HALF SECTION 2-2

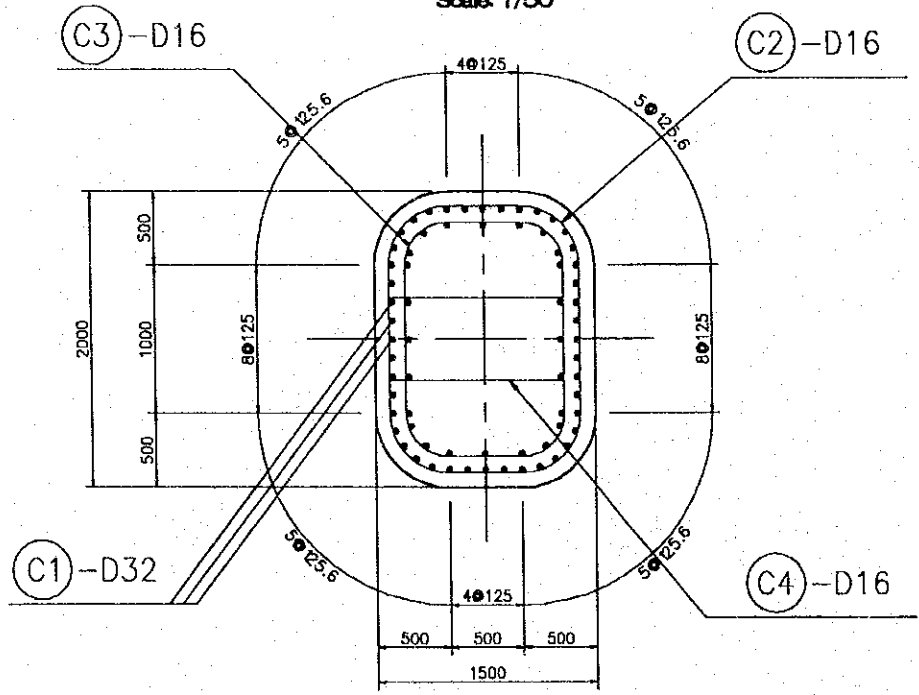


SECTION 3-3



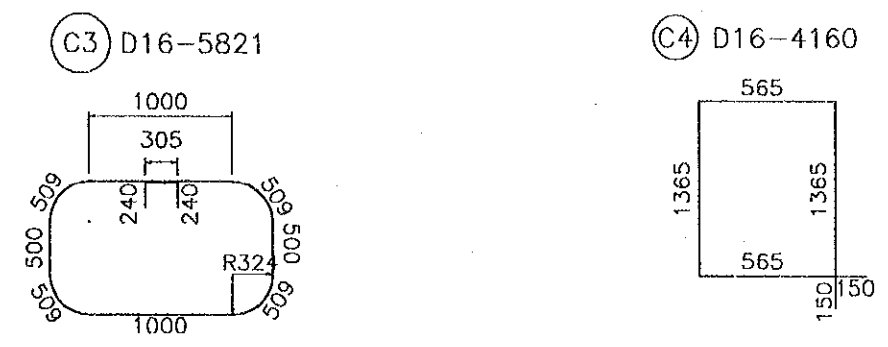
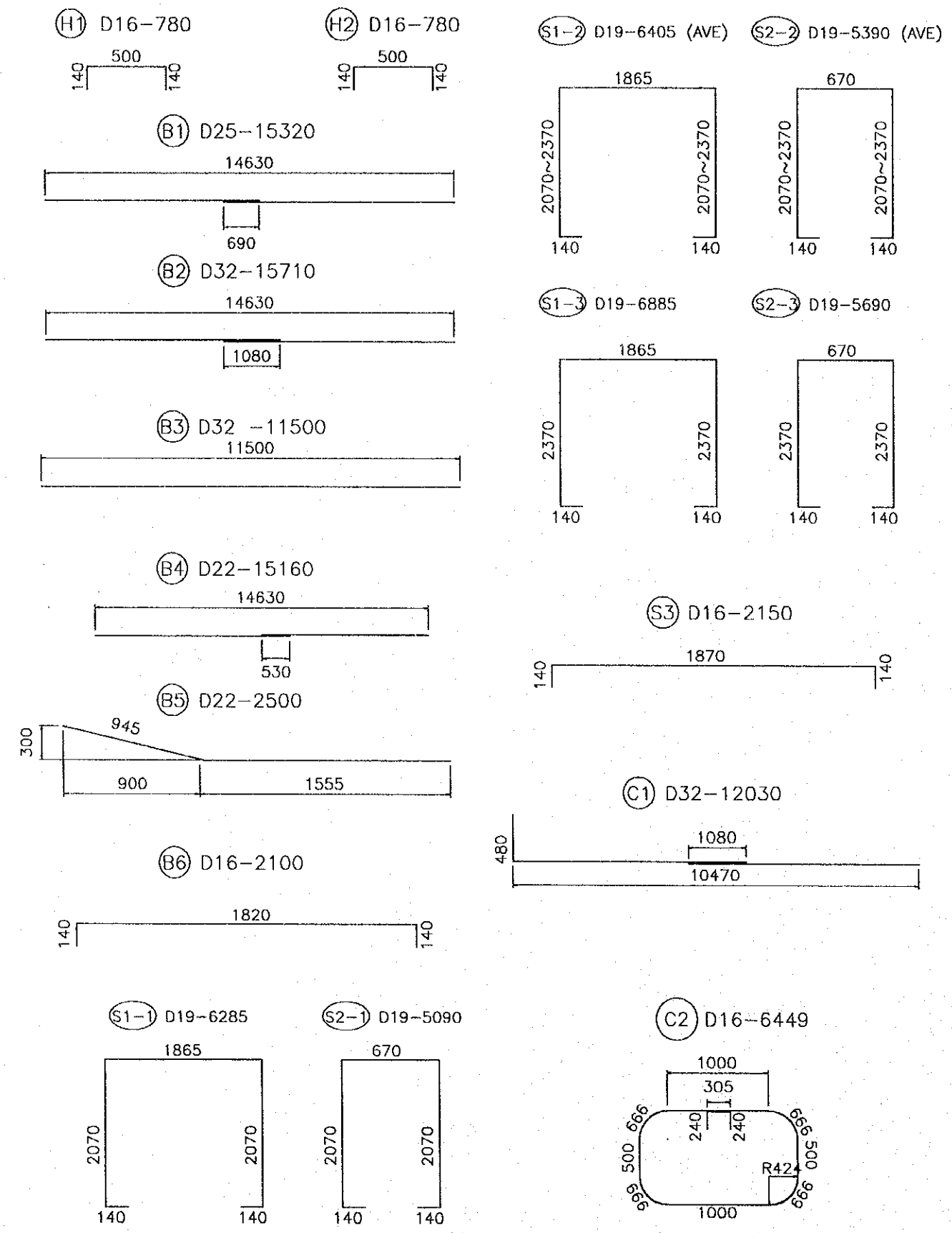
SECTION 4-4

Scale: 1/50



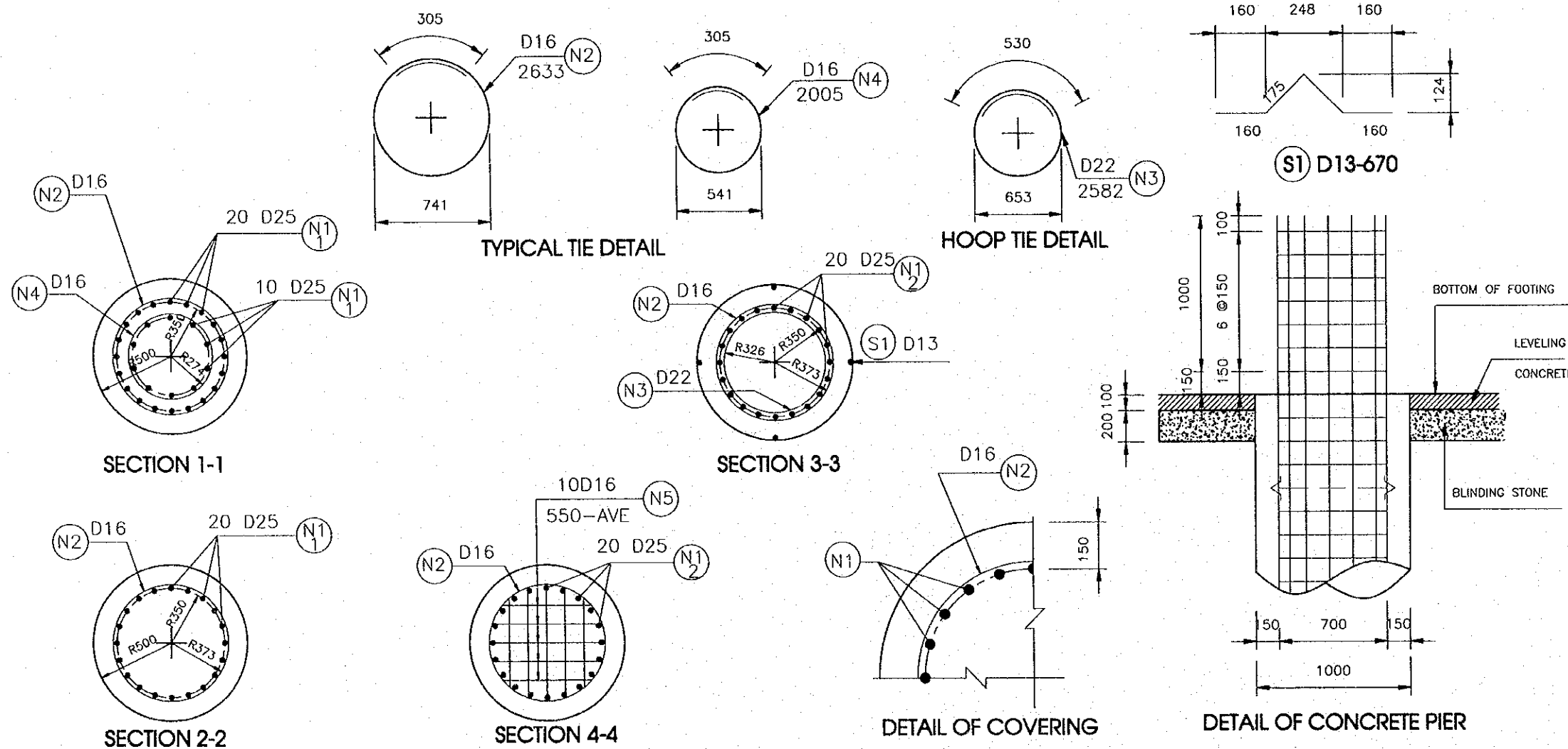
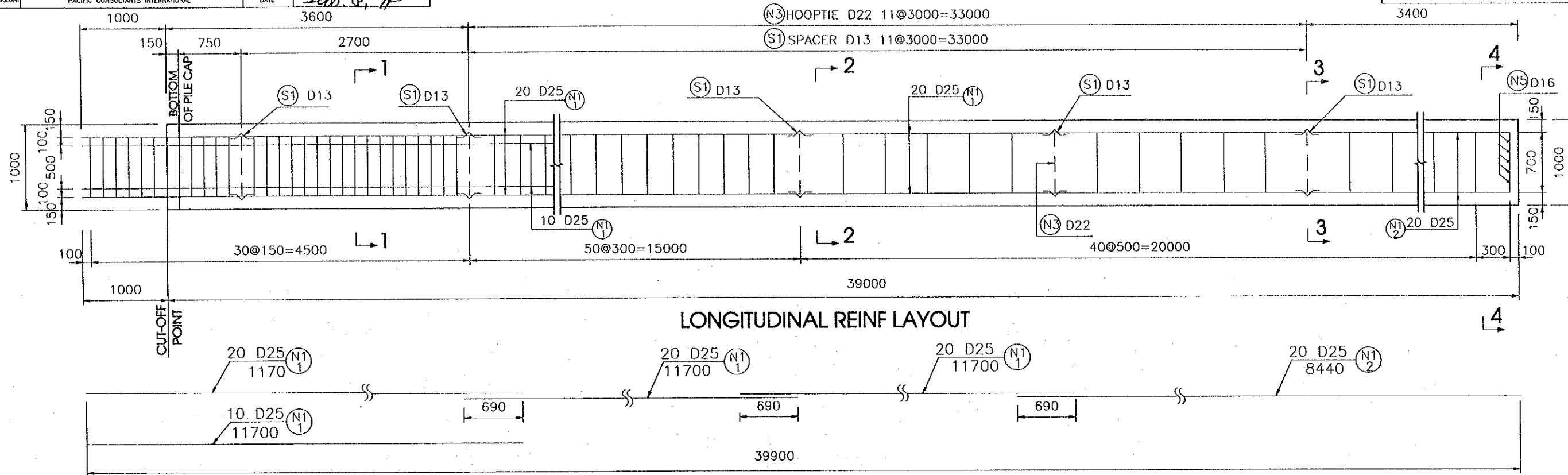
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>AB</i>
CONSULTANT		DATE 2000.6.1

PACKAGE 3	SCALE 1/100	DRAWING No. C-2-3-36	SHEET No.
RAMP -- C BRIDGE BAR ARRANGEMENT OF PIER PC7(4)			



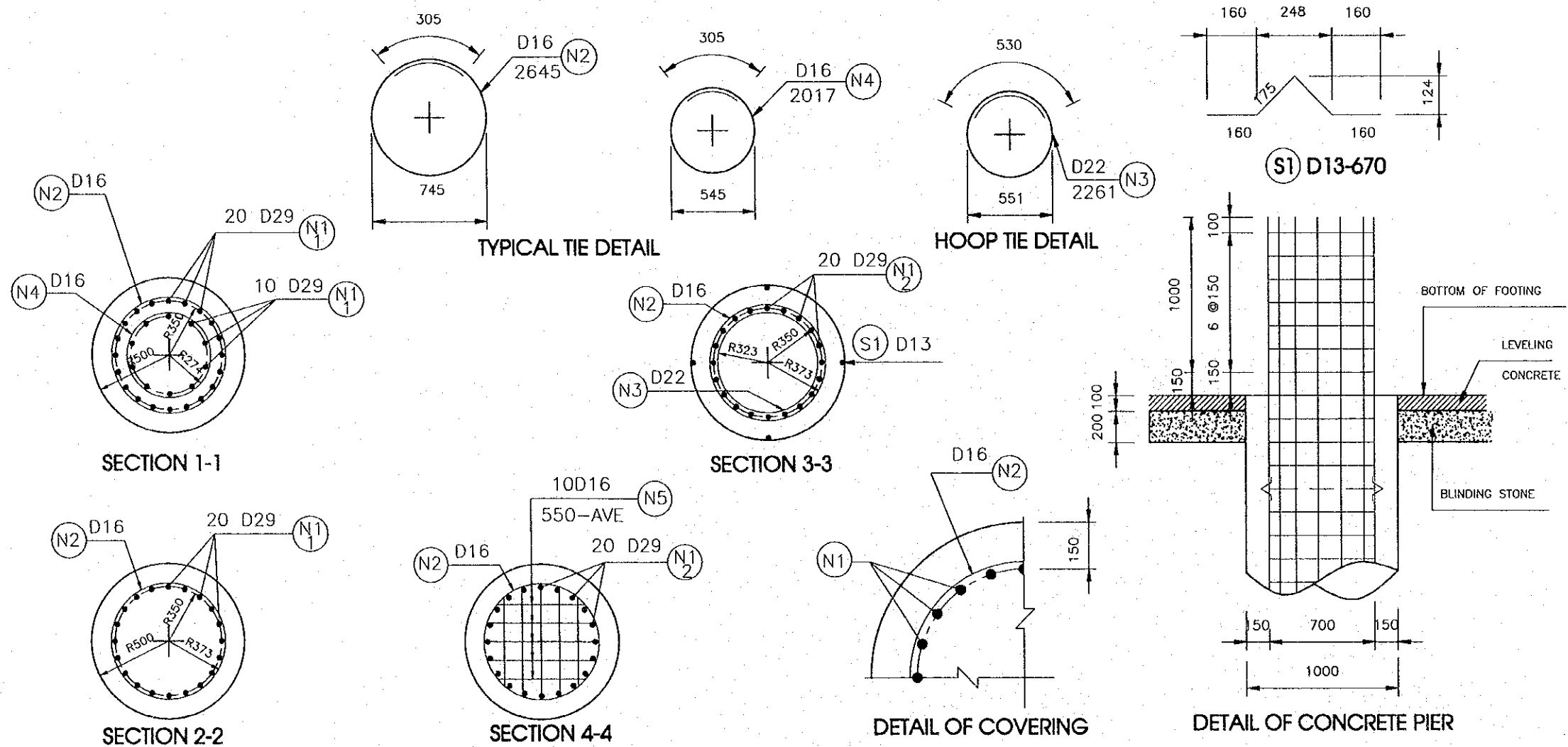
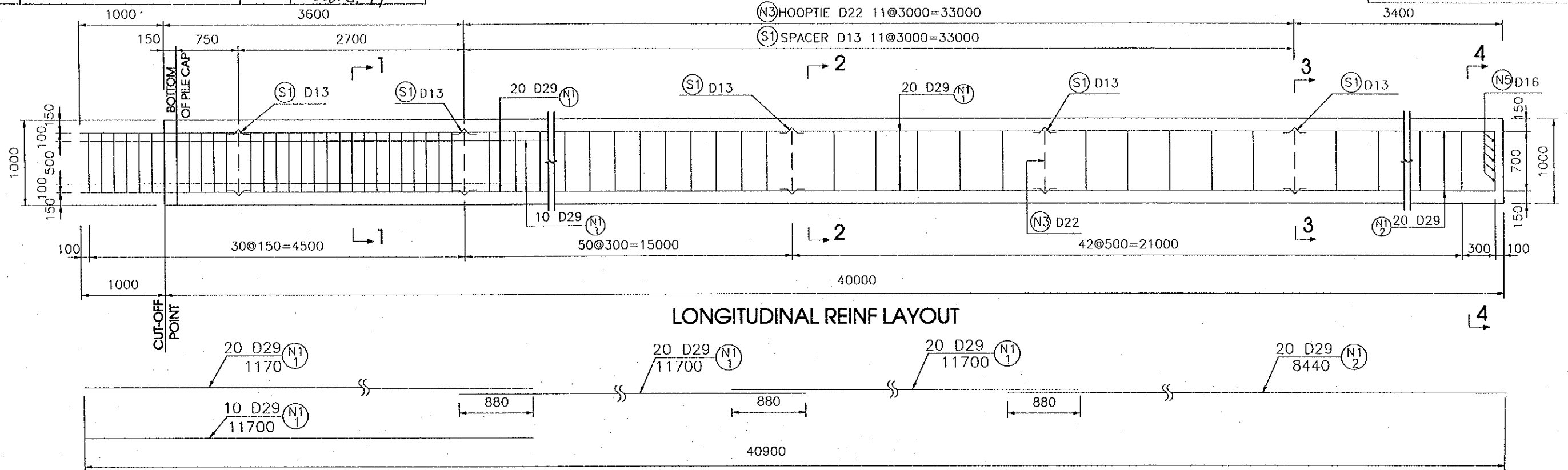
QUANTITY REINFORCEMENT FOR PIER PC7

DETAILS	SYMBOL	SHAPE	DIA (mm)	LENGTHS (mm)	NUMBER (unit)	UNITWEIGHT (Kg/m)	WEIGHT (Kg)
PIER CAP	H1	[Diagram]	D16	780	20	1.56	24.34
	H2	[Diagram]	D16	780	20	1.56	24.34
	B1	[Diagram]	D25	15320	19	3.98	1158.50
	B2	[Diagram]	D32	15710	21	6.23	2055.34
	B3	[Diagram]	D32	11500	17	6.23	1217.97
	B4	[Diagram]	D22	15160	14	3.04	645.21
	B5	[Diagram]	D22	2500	38	3.04	288.80
	B6	[Diagram]	D16	2100	14	1.56	45.86
	S1-1	[Diagram]	D19	6285	65	2.25	919.18
	S1-2	[Diagram]	D19	6405	12	2.25	172.94
	S1-3	[Diagram]	D19	6885	20	2.25	309.83
	S2-1	[Diagram]	D19	5090	65	2.25	744.41
	S2-2	[Diagram]	D19	5390	12	2.25	145.53
	S2-3	[Diagram]	D19	5690	20	2.25	256.05
S3	[Diagram]	D16	2150	194	1.56	650.68	
COLUMN	C1	[Diagram]	D32	12030	136	6.23	10192.78
	C2	[Diagram]	D16	6449	108	1.56	1086.53
	C3	[Diagram]	D16	5821	108	1.56	980.72
	C4	[Diagram]	D16	4160	108	1.56	700.88
FOOTING	F1	[Diagram]	D19	8430	198	2.25	3755.57
	F2	[Diagram]	D16	6630	180	1.56	1861.70
	F3	[Diagram]	D22	19640	72	3.04	4298.80
	F4	[Diagram]	D29	18380	96	5.04	8892.98
	F4-1	[Diagram]	D29	11500	96	5.04	5564.16
	F5	[Diagram]	D16	6410	10	1.56	100.00
	F6	[Diagram]	D16	17215	8	1.56	214.84
	F7	[Diagram]	D16	4534	70	1.56	495.11
F8	[Diagram]	D16	4190	84	1.56	549.06	
SUMMARY	TOTAL						47352.1
	D16 :			6734.1	D25 :		1158.5
	D19 :			6303.5	D29 :		14457.1
	D22 :			5232.8	D32 :		13466.1



BAR QUANTITIES OF PIER PC1~PC5

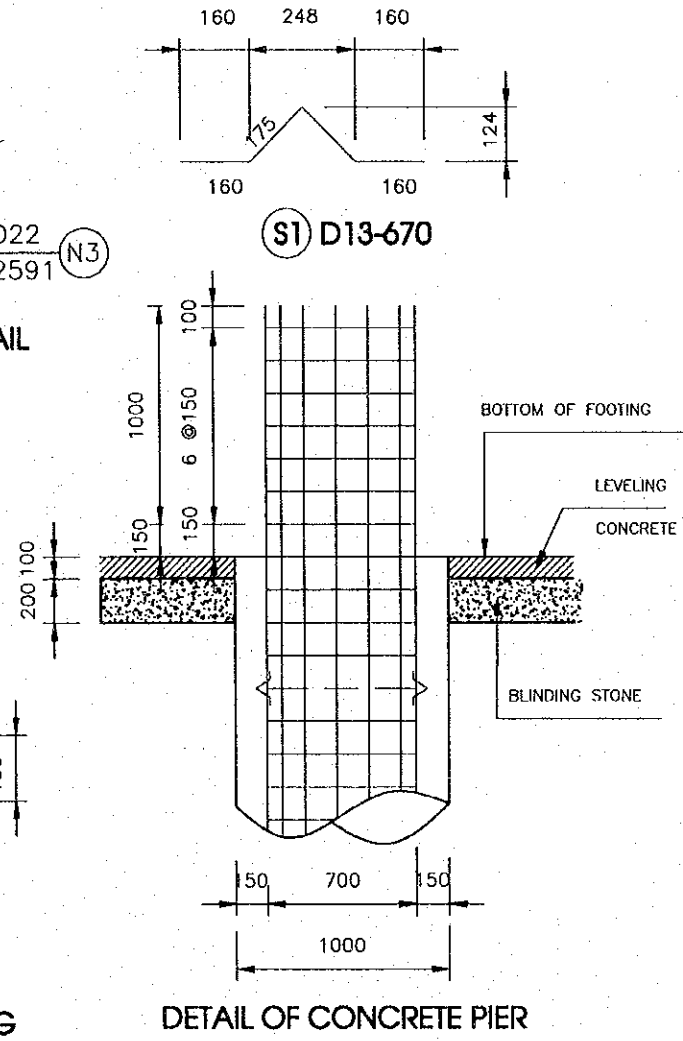
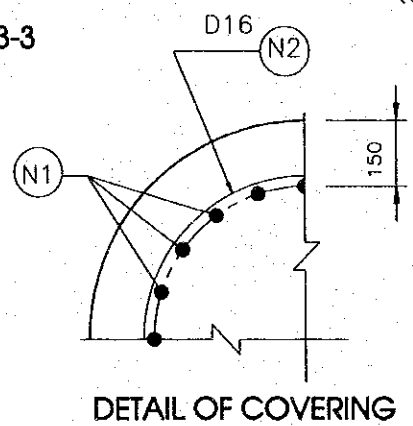
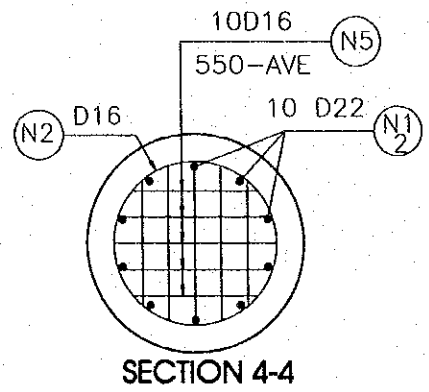
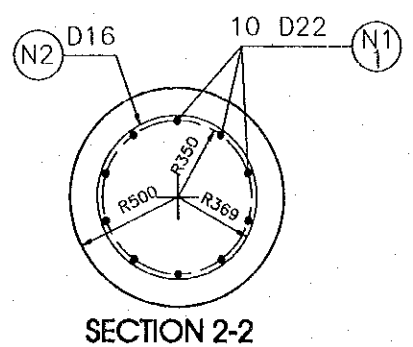
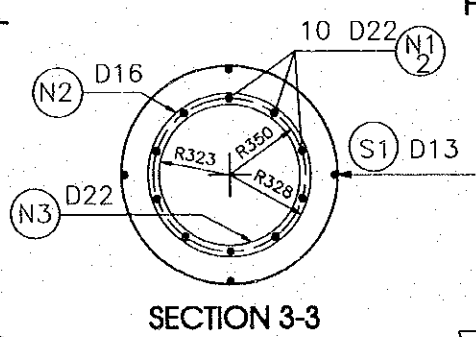
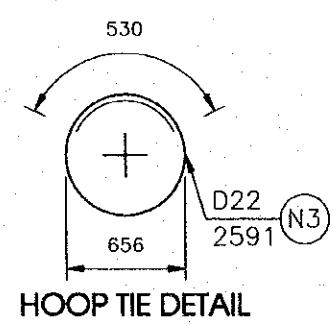
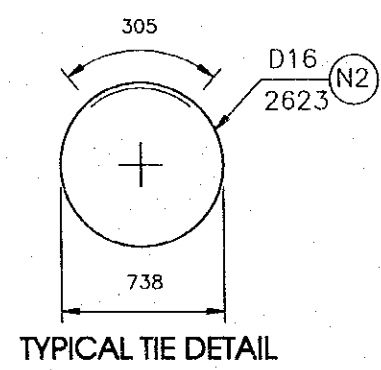
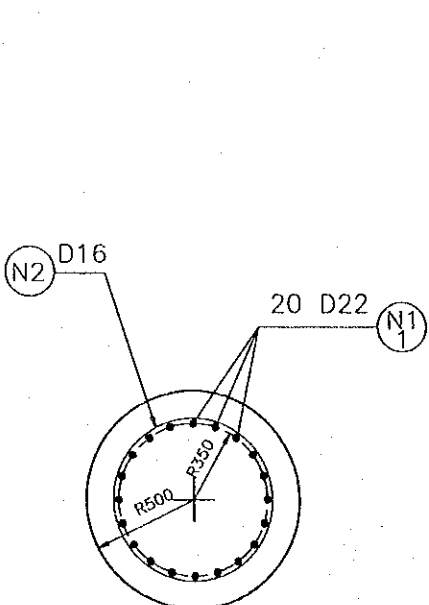
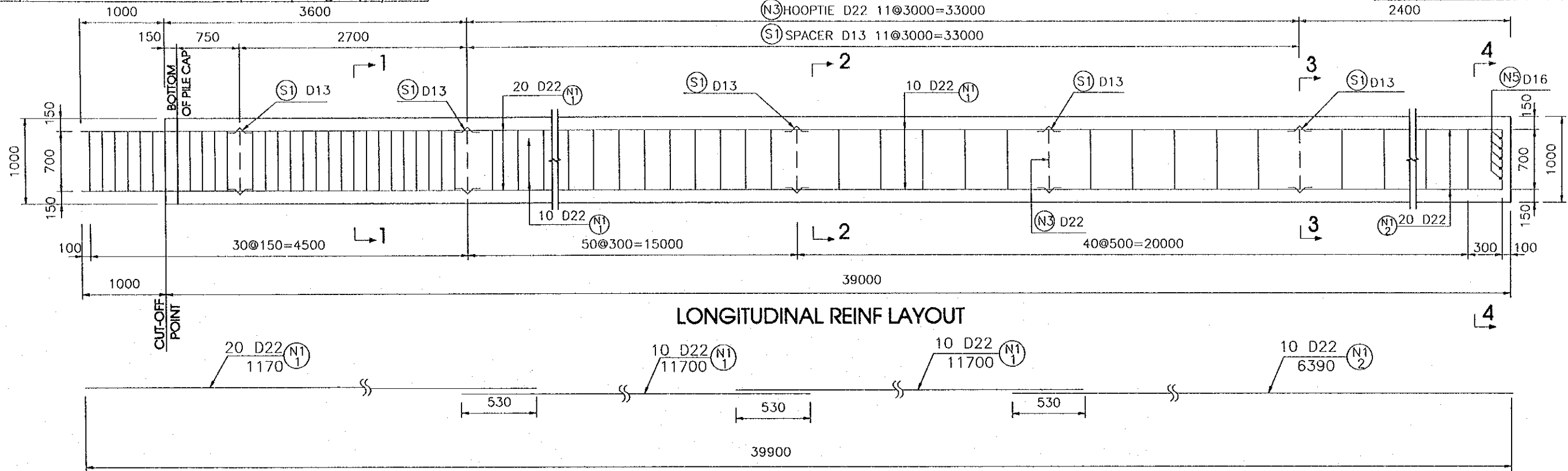
SYMBOL	SHAPE	Dia (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)
N1 ₁	—	D25	11700	420	3.98	19558
N1 ₂	—	D25	6870	120	3.98	3281
N2	○	D16	2633	726	1.56	2982
N3	○	D22	2582	78	3.04	612
N4	○	D16	2005	330	1.56	1032
N5	—	D16	990	60	1.56	93
S1	~	D13	670	312	0.997	208
Total for one pier						27766
SUMMARY 5 PIERS	D13~D22					24638
	D29					114194
	Total					138832



BAR QUANTITIES OF PIER PC6

SYMBOL	SHAPE	Dia (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)
N1 ₁	—	D29	11700	420	5.04	24767
N1 ₂	—	D29	8440	120	5.04	5105
N2	○	D16	2655	738	1.56	3057
N3	○	D22	2559	78	3.04	607
N4	○	D16	2027	294	1.56	1043
N5	—	D16	990	60	1.56	93
S1	—	D13	670	312	0.997	208
Total for one pier						34879
SUMMARY						5008
						29871

302



BAR QUANTITIES OF PD1~PD8

SYMBOL	SHAPE	Dia (mm)	Length (m)	Number	Unit Weight (Kg/m)	Weight (Kg)
N1 ₁	—	D22	11700	320	3.04	11382
N1 ₂	—	D22	6390	80	3.04	1554
N2	○	D16	2655	968	1.56	4009
N3	○	D22	2591	104	3.04	809
N5	—	D16	990	80	1.56	124
S1	∩	D13	670	416	0.997	278
Total for one pier						18156
SUMMARY FOR		D13~D22			5220	
		D29			12936	

C-3 MISCELLANEOUS

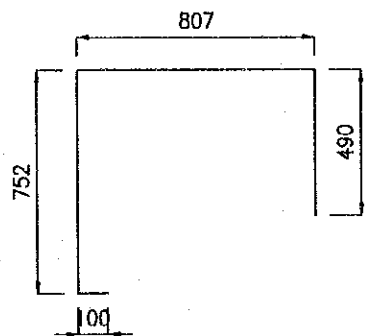
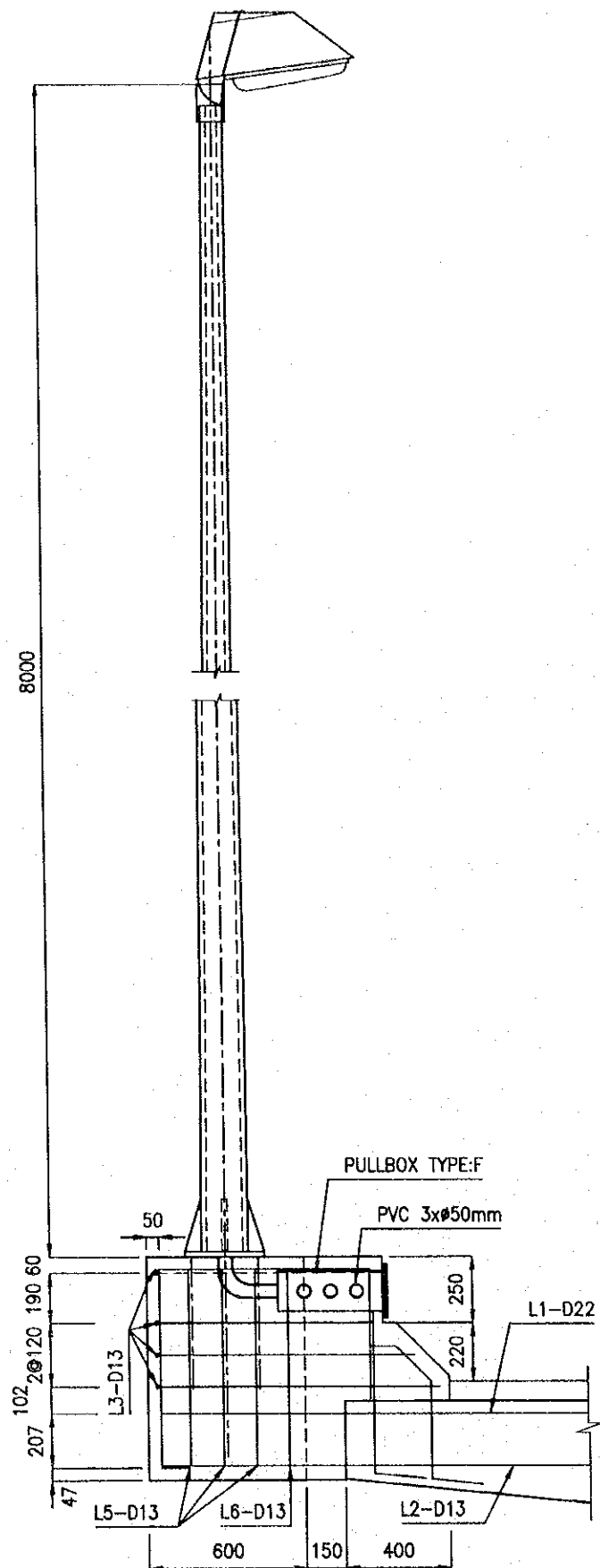
C-3-1 LIGHT POLE BASE, EXP, JP, PARAPET

C-3 MISCELLANEOUS

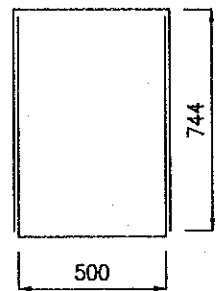
**C-3-1 LIGHT POLE BASE, EXP. JT, PARAPET, SHOE,
DRAINAGE ARRANGEMENT**

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	PACIFIC CONSULTANTS INTERNATIONAL	SIGNATURE <i>[Signature]</i>
CONSULTANT		DATE 2007. 11. 14

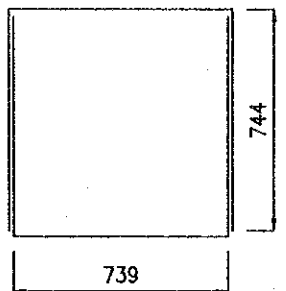
PACKAGE 3	SCALE 1/25	DRAWING No. C-3-1-1	SHEET No.
LIGHTING POLE BASE			



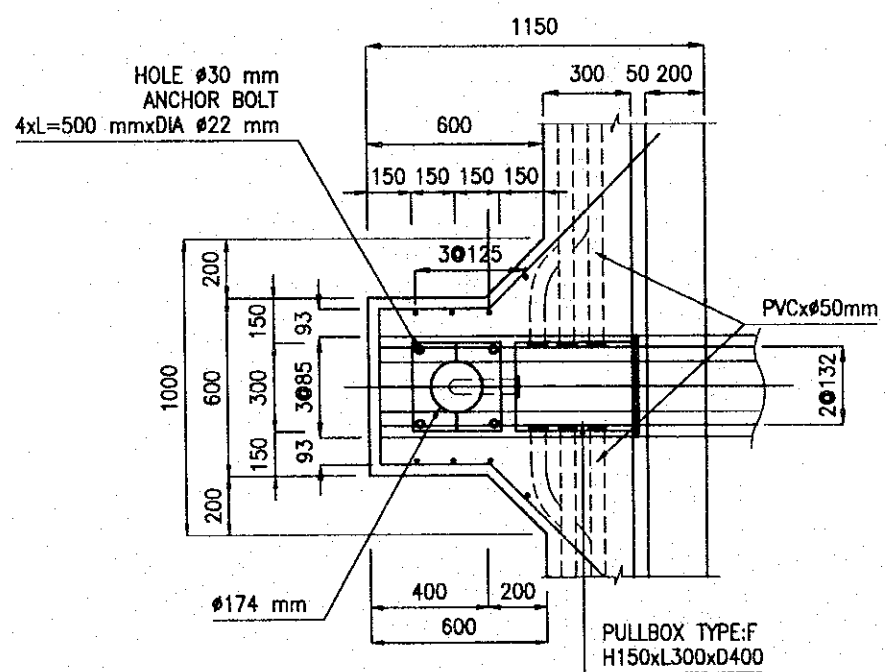
④ 4-D13x2150



⑤ 6-D13x1988

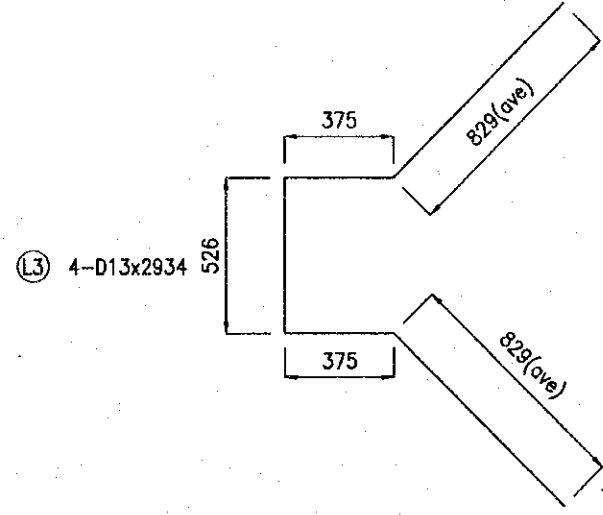


⑥ 2-D13x2227



① 5-D22x2300

② 3-D13x2300



③ 4-D13x2934

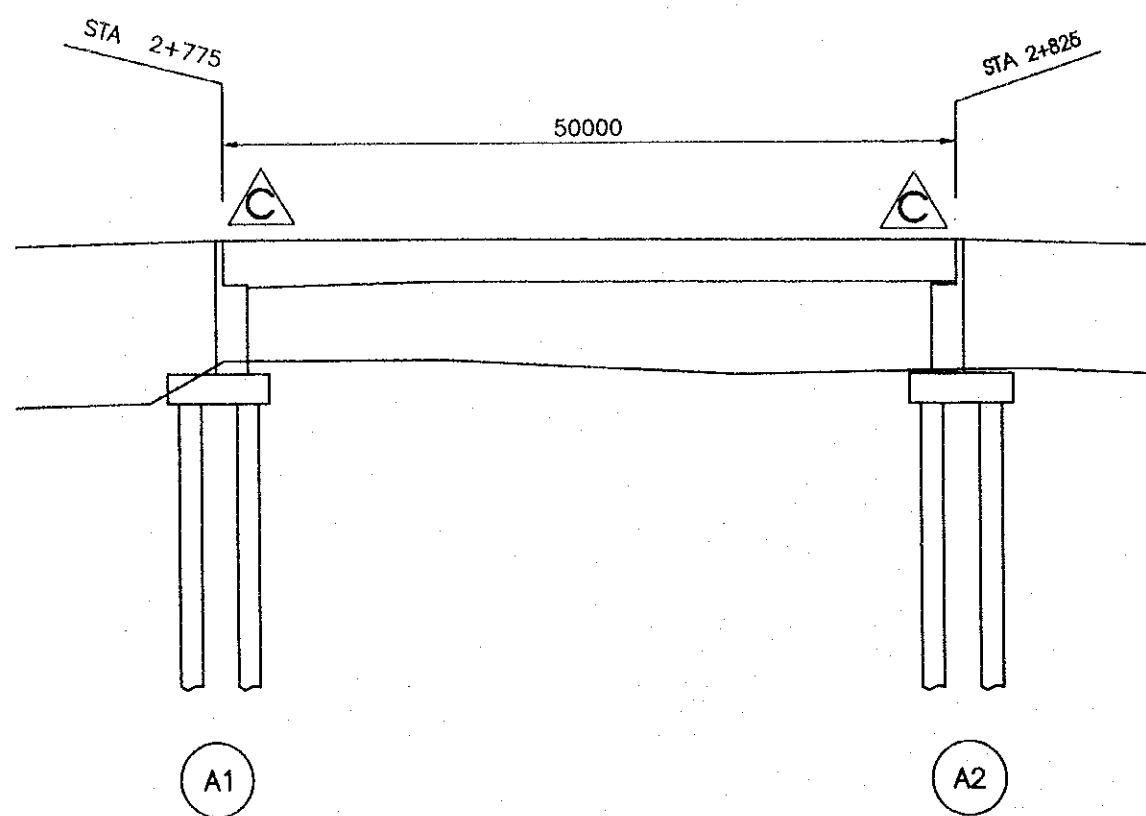
QUANTITY OF REINFORCNG BAR					
TYPE	DIAMETER (mm)	NUMBER	LENGTH (mm)	UNIT WEIGHT (kg/m)	WEIGHT (kg)
L1	D22	5	2300	3.04	34.96
L2	D13	3	2300	0.995	6.87
L3	D13	4	2934	0.995	11.68
L4	D13	4	2150	0.995	8.56
L5	D13	6	1988	0.995	11.87
L6	D13	2	2227	0.995	4.43
TOTAL				D22	34.96
				D13	43.41

392

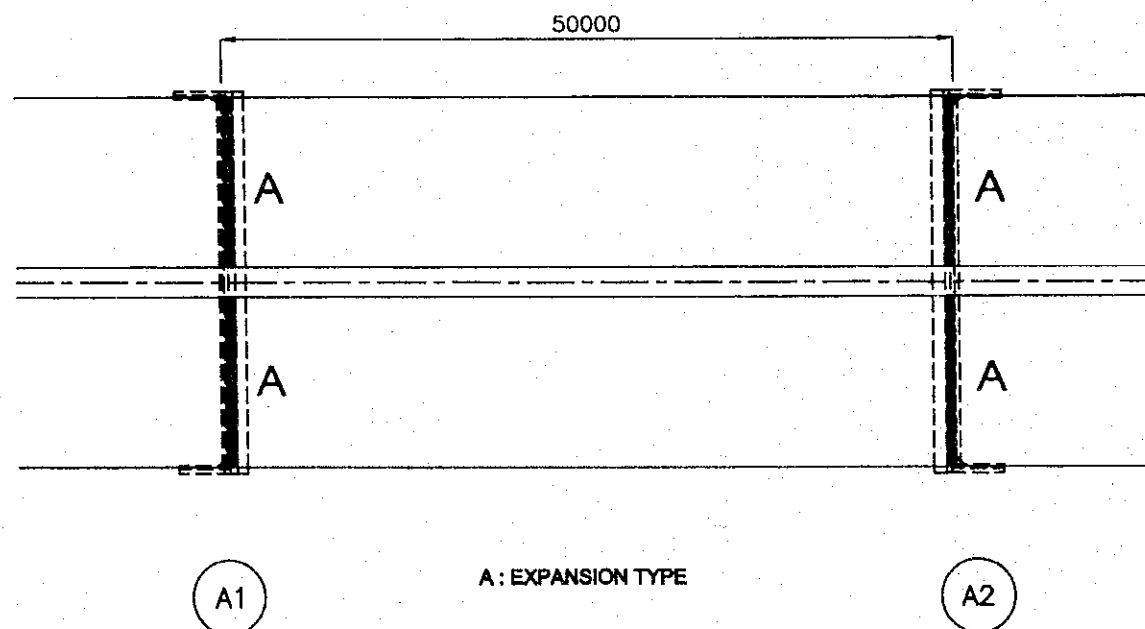
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRINH BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	DATE 2000.11.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/500	DRAWING No. C-3-1-2	SHEET No.
BRIDGE ACCESSORY OF NGUYEN TAM TRINH BRIDGE			

PROFILE OF NGUYEN TAM TRINH BRIDGE



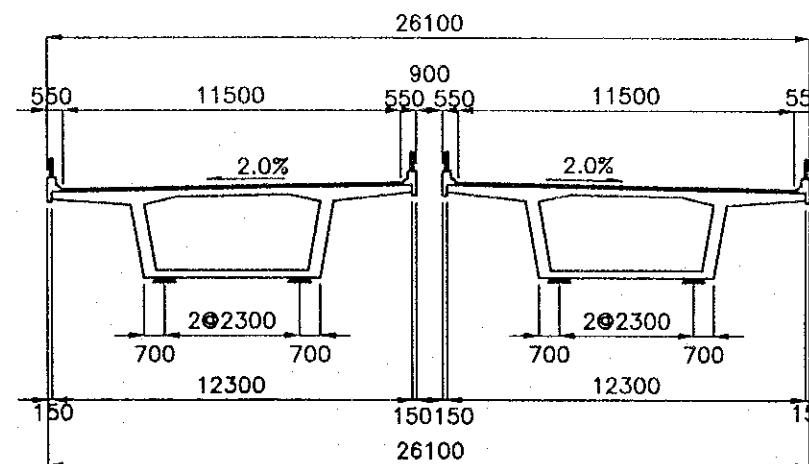
PLAN



A : EXPANSION TYPE

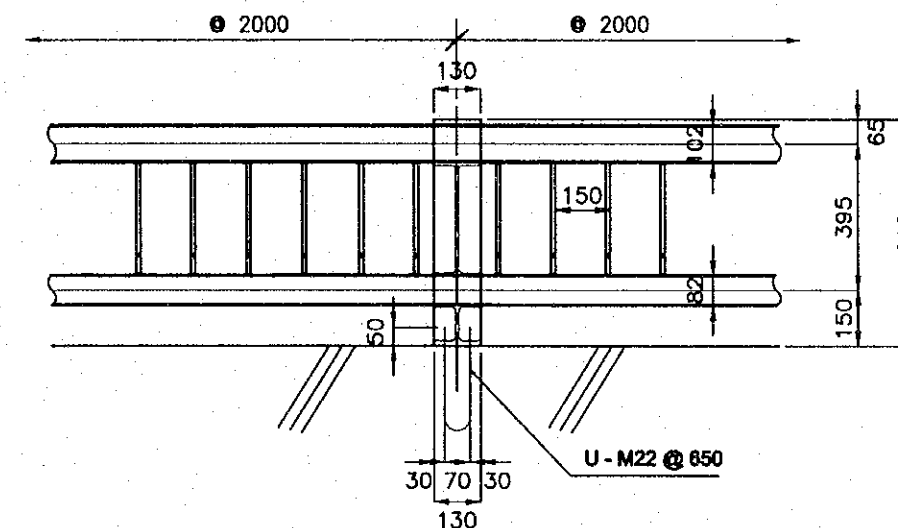
CROSS SECTION

SCALE : 1/250



RAILING

SCALE : 1/20



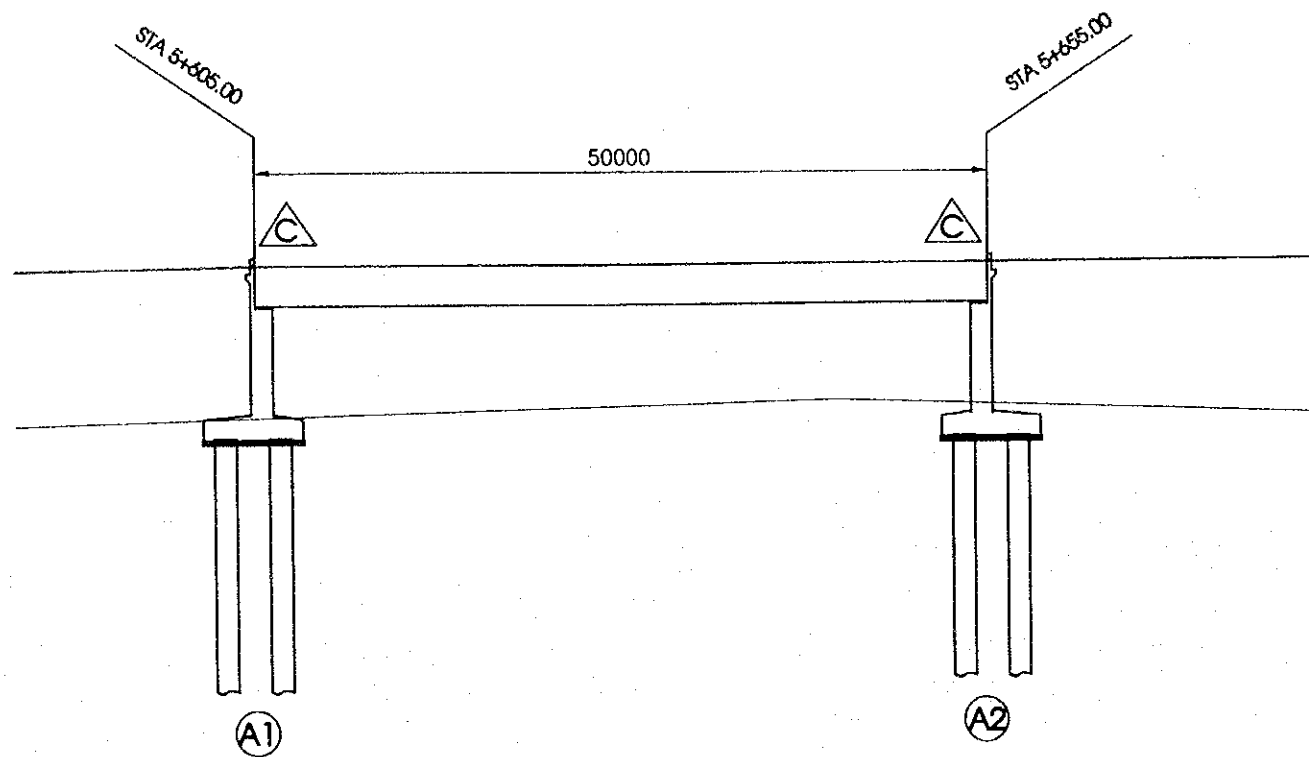
LIST OF BEARING SHOES, EXPANSION JOINT AND RAILING

PLACE	SPAN		KIND OF BEARING	BEARING			EXPANSION JOINT	
	LENGTH(m)	TYPE		TYPE		NUMBER		
A1L	50	PC BOX GIRDER	M	50M	POT BEARING	C	2	A
A2L			F	50F	POT BEARING	C	2	A
A1R	50	PC BOX GIRDER	M	50M	POT BEARING	C	2	A
A2R			F	50F	POT BEARING	C	2	A
TOTAL			POT BEARING(C)			8(each)		
			EXPANSION JOINT(A)			48(m)		
			RAILING			100(m)		

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	DATE 2000.01.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

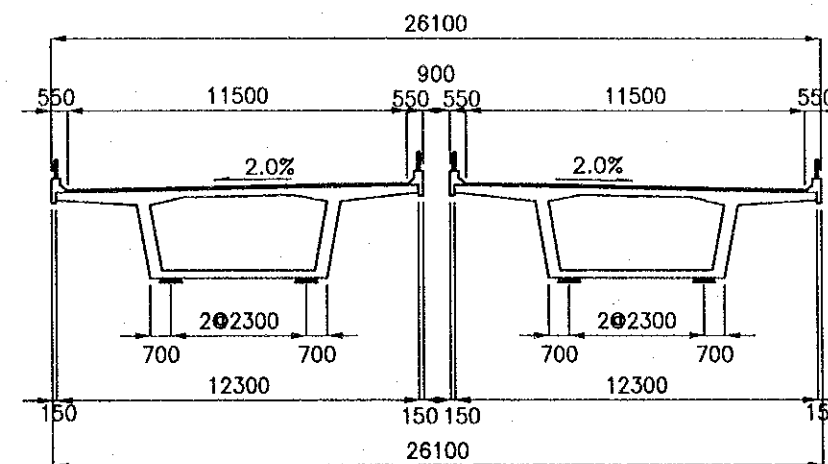
PACKAGE 3	SCALE 1/500	DRAWING No. C-3-1-3	SHEET No.
BRIDGE ACCESSORY OF LINH NAM BRIDGE			

PROFILE OF LINH NAM BRIDGE



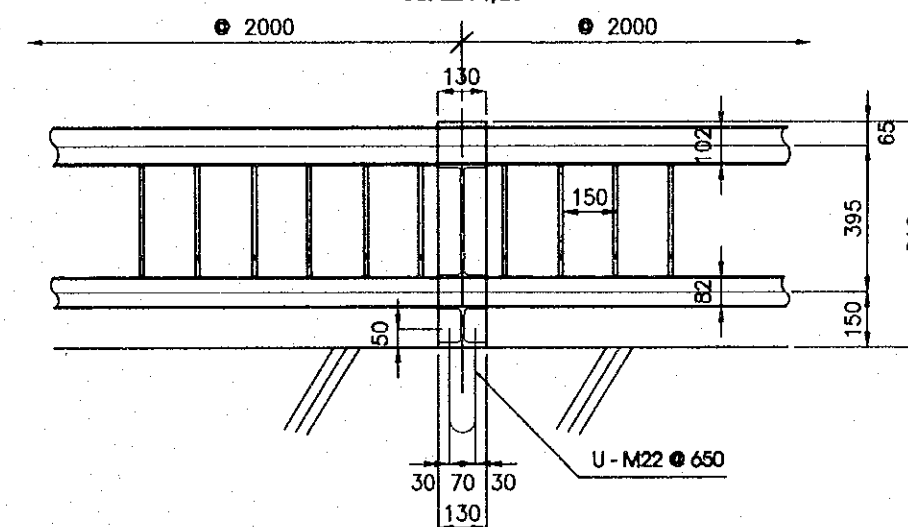
CROSS SECTION

SCALE : 1/250

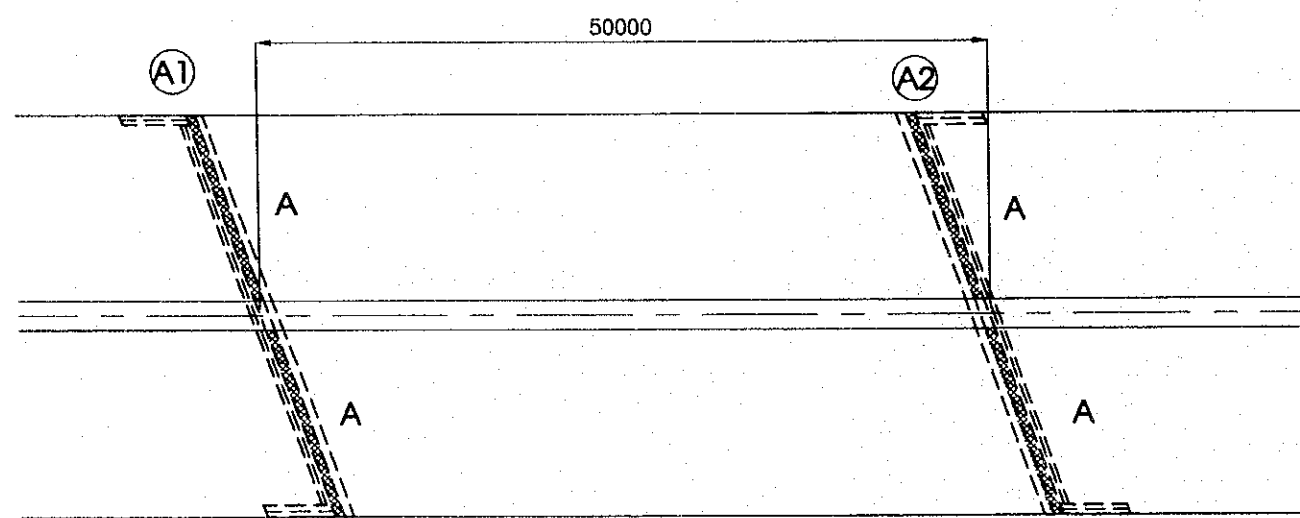


RAILING

SCALE : 1/20



PLAN

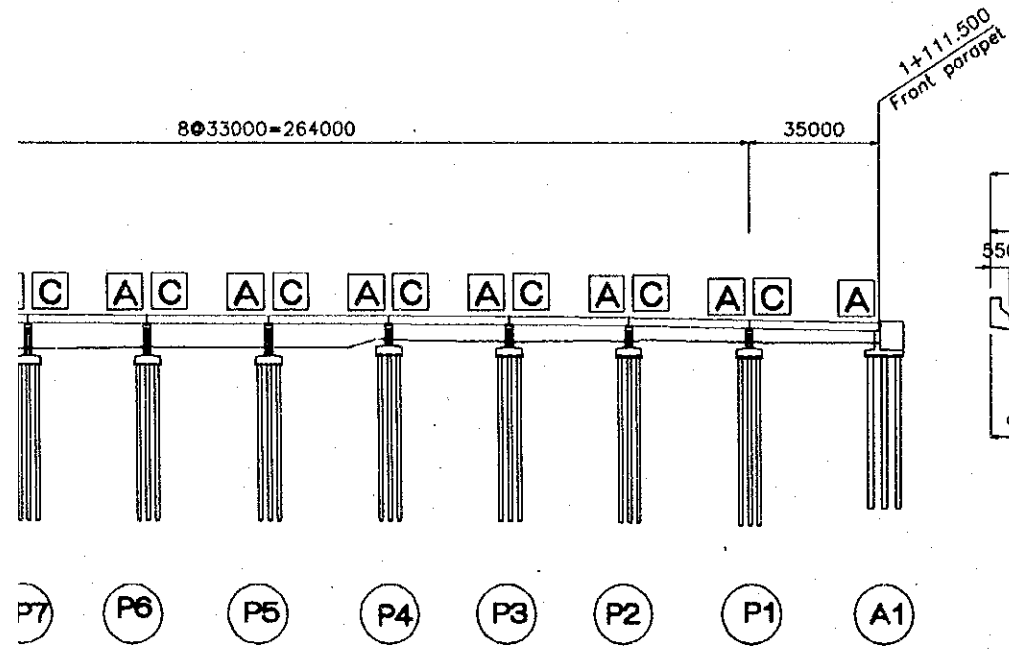


A : EXPANSION TYPE

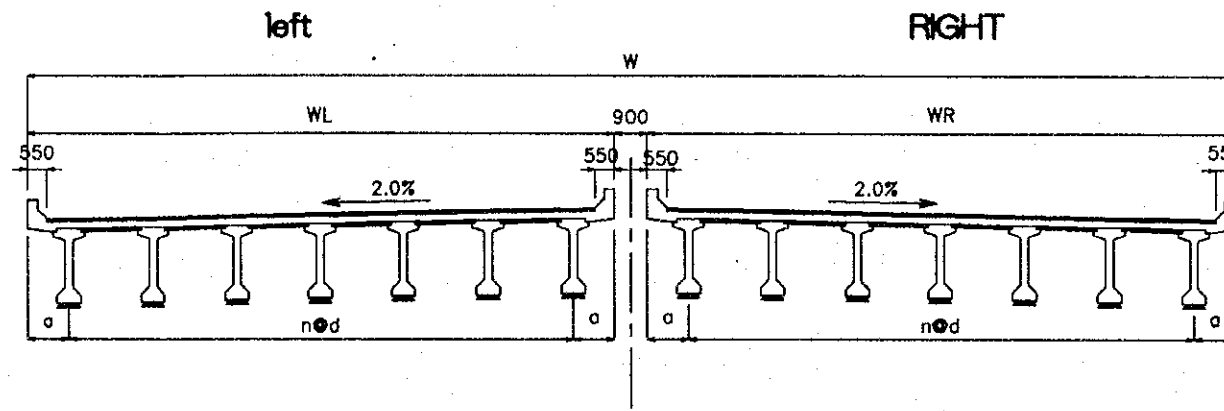
LIST OF BEARING SHOES, EXPANSION JOINT AND RAILING

PLACE	SPAN		KIND OF BEARING	BEARING			EXPANSION JOINT	
	LENGTH(m)	TYPE		TYPE		NUMBER		
A1L	50	PC BOX GIRDER	M	50M	POT BEARING	C	2	A
A2L			F	50F	POT BEARING	C	2	A
A1R	50	PC BOX GIRDER	M	50M	POT BEARING	C	2	A
A2R			F	50F	POT BEARING	C	2	A
TOTAL			POT BEARING(C)			8(each)		
			EXPANSION JOINT(A)			48(m)		
			RAILING			100(m)		

VIADUCT

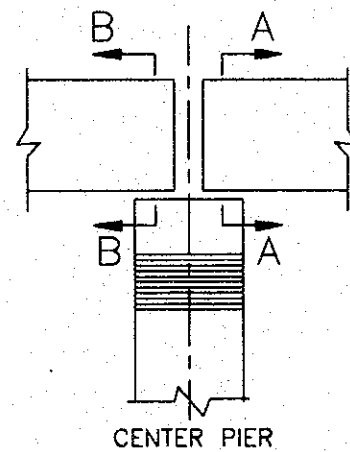
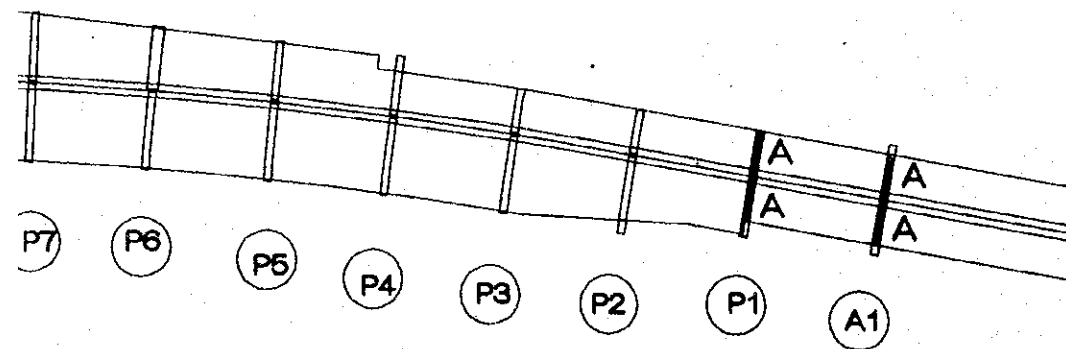
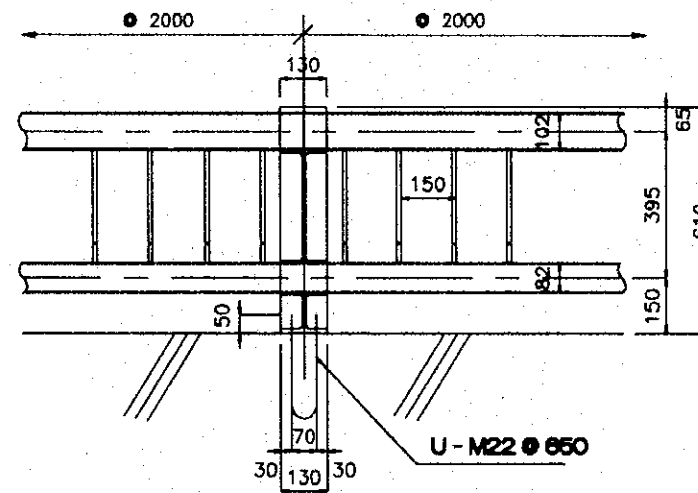


TYPICAL CROSS SECTION



RAILING

SCALE: 1/20



LIST OF BEARING SHOES

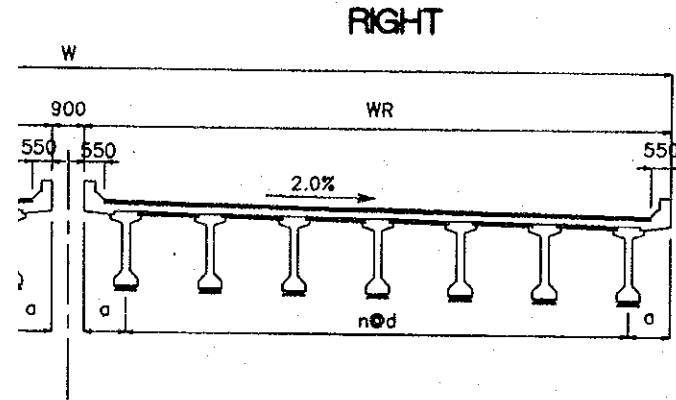
LOCATION	SECTION A				Number of girder	SPAN		KIND OF BEARING	TYPE
	n	d (mm)	a (mm)	WL (mm)		LENGTH (m)	TYPE		
A1						35	PCI-GIRDER		
P1	5	2000	1300	12600	6	33	PCI-GIRDER	M	ELASTOMERIC BE
P2	5	2000	1300	12600	6	33	PCI-GIRDER	M	ELASTOMERIC BE
P3	5	2000	1300	12600	6	33	PCI-GIRDER	M	ELASTOMERIC BE
P4	5	2000	1300	12600	6	33	PCI-GIRDER	M	ELASTOMERIC BE
P5	8	2278	1250	18158	7	33	PCI-GIRDER	M	ELASTOMERIC BE
P6	6	2413	1250	16976	7	33	PCI-GIRDER	M	ELASTOMERIC BE
P7	7	2318	1250	18727	8	33	PCI-GIRDER	M	ELASTOMERIC BE
P8	8	2297	1250	20878	9	33	PCI-GIRDER	M	ELASTOMERIC BE
P9	9	2313	1250	23317	10	35	PCI-GIRDER	M	ELASTOMERIC BE
P10	10	2338	1250	25856	11	35	PCI-GIRDER	M	ELASTOMERIC BE
P11	12	2419	1250	31528	13	28	PCI-GIRDER	M	ELASTOMERIC BE
P12	6	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BE
P13	6	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BE
P14	8	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BE
P15	8	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BE
P16	11	1787	1250	22160	12	28	PCI-GIRDER	M	ELASTOMERIC BE
P17	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BE
P18	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BE
TOTAL									ELASTOMERIC BE ELASTOMERIC BE ELASTOMERIC BE

LIST OF BEARING SHOES

LOCATION	SECTION A				Number of girder	SPAN		KIND OF BEARING	TYPE
	n	d (mm)	a (mm)	WL (mm)		LENGTH (m)	TYPE		
A1						35	PCI-GIRDER		
P1	5	2000	1300	12600	6	33	PCI-GIRDER	M	ELASTOMERIC BE
P2	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BE
P3	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BE
P4	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BE
P5	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BE
P6	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BE
P7	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BE
P8	8	2380	1250	21541	9	33	PCI-GIRDER	M	ELASTOMERIC BE
P9	8	2448	1250	22080	9	35	PCI-GIRDER	M	ELASTOMERIC BE
P10	9	2382	1250	23780	10	35	PCI-GIRDER	M	ELASTOMERIC BE
P11	11	2316	1250	27972	12	28	PCI-GIRDER	M	ELASTOMERIC BE
P12	6	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BE
P13	6	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BE
P14	8	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BE
P15	8	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BE
P16	8	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BE
P17	6	2250	1300	16100	7	33	PCI-GIRDER	M	ELASTOMERIC BE
P18	8	2250	1300	16100	7	33	PCI-GIRDER	M	ELASTOMERIC BE
TOTAL									ELASTOMERIC BE ELASTOMERIC BE ELASTOMERIC BE

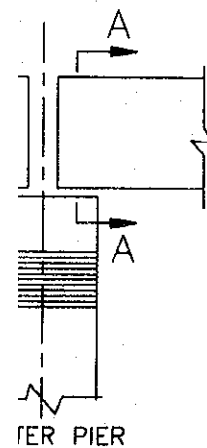
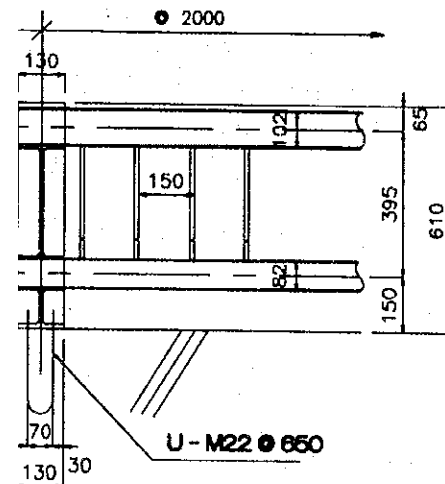
LIST OF BEARING SHOES, EXPANSION JOINT AND RAILING OF THE LEFT BRIDGE

CROSS SECTION



RAILING

SCALE: 1/20



LOCATION	SECTION A					SPAN LENGTH (m)	TYPE	KIND OF BEARING	BEARING			SECTION B					SPAN LENGTH (m)	TYPE	KIND OF BEARING	BEARING			EXPANSION JOINT			
	n	d (mm)	a (mm)	WL (mm)	Number of girder				TYPE	NUMBER (each)	LOCATION	n	d (mm)	a (mm)	WL (mm)	Number of girder				TYPE	NUMBER (each)	PIER	TYPE	LENGTH (mm)		
A1						35	PCI-GIRDER					A1	5	2000	1300	12600	6	35	PCI-GIRDER	F	ELASTOMERIC BEARING	A	6	A1	A	12600
P1	5	2000	1300	12600	6	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	6	P1	5	2000	1300	12600	6	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	6	P1	A	12600
P2	5	2000	1300	12600	6	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	6	P2	5	2000	1300	12600	6	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	6	P2		
P3	5	2000	1300	12600	6	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	6	P3	5	2000	1300	12600	6	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	6	P3		
P4	5	2000	1300	12600	6	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	6	P4	6	2267	1250	16100	7	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	7	P4		
P5	6	2276	1250	16158	7	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	7	P5	6	2276	1250	16158	7	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	7	P5		
P6	6	2413	1250	16976	7	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	7	P6	7	2088	1250	16976	8	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	8	P6		
P7	7	2318	1250	18727	8	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	8	P7	8	2028	1250	18727	9	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	9	P7		
P8	8	2297	1250	20878	9	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	9	P8	9	2042	1250	20878	10	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	10	P8		
P9	9	2313	1250	23317	10	35	PCI-GIRDER	M	ELASTOMERIC BEARING	C	10	P9	10	2082	1250	23317	11	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	11	P9	A	23317
P10	10	2336	1250	25856	11	35	PCI-GIRDER	M	ELASTOMERIC BEARING	C	11	P10	12	1946	1250	25856	13	35	PCI-GIRDER	F	ELASTOMERIC BEARING	A	13	P10		
P11	12	2419	1250	31528	13	28	PCI-GIRDER	M	ELASTOMERIC BEARING	C	13	P11	6	2250	1300	16100	7	28	PCI-GIRDER	F	ELASTOMERIC BEARING	B	7	P11	A	16100
P12	6	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BEARING	C	7	P12	6	2250	1300	16100	7	28	PCI-GIRDER	F	ELASTOMERIC BEARING	B	7	P12		
P13	6	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BEARING	C	7	P13	6	2250	1300	16100	7	28	PCI-GIRDER	F	ELASTOMERIC BEARING	B	7	P13		
P14	6	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BEARING	C	7	P14	6	2250	1300	16100	7	28	PCI-GIRDER	F	ELASTOMERIC BEARING	B	7	P14		
P15	6	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BEARING	C	7	P15	11	2434	1250	29272	12	28	PCI-GIRDER	F	ELASTOMERIC BEARING	B	12	P15		
P16	11	1787	1250	22160	12	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	12	P16	8	2458	1250	22160	9	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	9	P16	A	22160
P17	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	9	P17	8	2325	1250	21100	9	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	9	P17		
P18	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	9	P18	8	2325	1250	21100	9	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	9	P18	A	21100
TOTAL								ELASTOMERIC BEARING(A) :118 (each)					EXPANSION JOINT(A) :108 (m)													
								ELASTOMERIC BEARING(B) :40 (each)					RAILING :575 (m)													
								ELASTOMERIC BEARING(C) :147 (each)																		

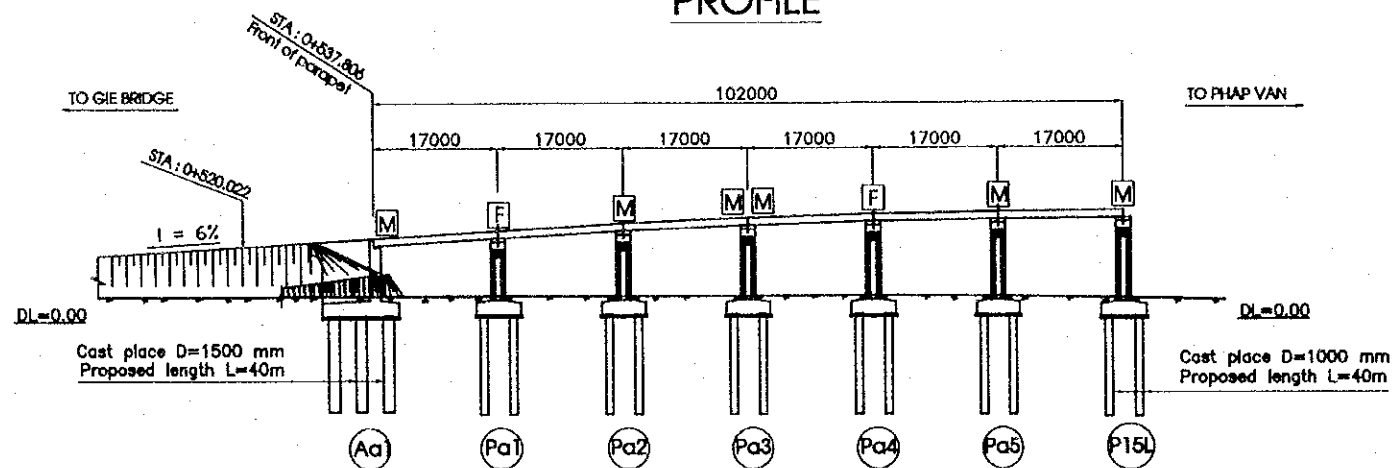
LIST OF BEARING SHOES, EXPANSION JOINT AND RAILING OF THE RIGHT BRIDGE

LOCATION	SECTION A					SPAN LENGTH (m)	TYPE	KIND OF BEARING	BEARING			SECTION B					SPAN LENGTH (m)	TYPE	KIND OF BEARING	BEARING			EXPANSION JOINT			
	n	d (mm)	a (mm)	WL (mm)	Number of girder				TYPE	NUMBER (each)	LOCATION	n	d (mm)	a (mm)	WL (mm)	Number of girder				TYPE	NUMBER (each)	PIER	TYPE	LENGTH (mm)		
A1						35	PCI-GIRDER					A1	5	2000	1300	12600	6	35	PCI-GIRDER	F	ELASTOMERIC BEARING	A	6	A1	A	12600
P1	5	2000	1300	12600	6	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	6	P1	8	1700	1250	16100	9	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	6	P1	A	16100
P2	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	6	P2	8	2325	1250	21100	9	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	6	P2		
P3	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	6	P3	8	2325	1250	21100	9	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	6	P3		
P4	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	6	P4	8	2325	1250	21100	9	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	6	P4		
P5	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	7	P5	8	2325	1250	21100	9	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	7	P5		
P6	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	7	P6	8	2325	1250	21100	9	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	8	P6		
P7	8	2325	1250	21100	9	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	8	P7	8	2325	1250	21100	9	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	9	P7		
P8	8	2380	1250	21541	9	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	9	P8	8	2380	1250	21541	9	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	10	P8		
P9	8	2448	1250	22080	9	35	PCI-GIRDER	M	ELASTOMERIC BEARING	C	10	P9	9	2176	1250	22080	10	35	PCI-GIRDER	F	ELASTOMERIC BEARING	A	11	P9	A	22080
P10	9	2362	1250	23760	10	35	PCI-GIRDER	M	ELASTOMERIC BEARING	C	11	P10	11	1933	1250	23762	12	35	PCI-GIRDER	F	ELASTOMERIC BEARING	A	13	P10		
P11	11	2316	1250	27972	12	28	PCI-GIRDER	M	ELASTOMERIC BEARING	C	13	P11	6	2250	1300	16100	7	28	PCI-GIRDER	F	ELASTOMERIC BEARING	B	7	P11	A	16100
P12	6	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BEARING	C	7	P12	6	2413	1300	16100	7	28	PCI-GIRDER	F	ELASTOMERIC BEARING	B	7	P12		
P13	6	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BEARING	C	7	P13	6	2413	1300	16100	7	28	PCI-GIRDER	F	ELASTOMERIC BEARING	B	7	P13		
P14	6	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BEARING	C	7	P14	6	2413	1300	16100	7	28	PCI-GIRDER	F	ELASTOMERIC BEARING	B	7	P14		
P15	6	2250	1300	16100	7	28	PCI-GIRDER	M	ELASTOMERIC BEARING	C	7	P15	6	2413	1300	16100	7	28	PCI-GIRDER	F	ELASTOMERIC BEARING	B	12	P15		
P16	6	2250	1300	16100	7	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	12	P16	6	2413	1300	16100	7	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	9	P16	A	16100
P17	6	2250	1300	16100	7	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	9	P17	6	2413	1300	16100	7	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	9	P17		
P18	6	2250	1300	16100	7	33	PCI-GIRDER	M	ELASTOMERIC BEARING	C	9	P18	6	2413	1300	16100	7	33	PCI-GIRDER	F	ELASTOMERIC BEARING	A	9	P18	A	16100
TOTAL								ELASTOMERIC BEARING(A) :118 (each)					EXPANSION JOINT(A) :99.1 (m)													
								ELASTOMERIC BEARING(B) :40 (each)					RAILING :575 (m)													
								ELASTOMERIC BEARING(C) :147 (each)																		

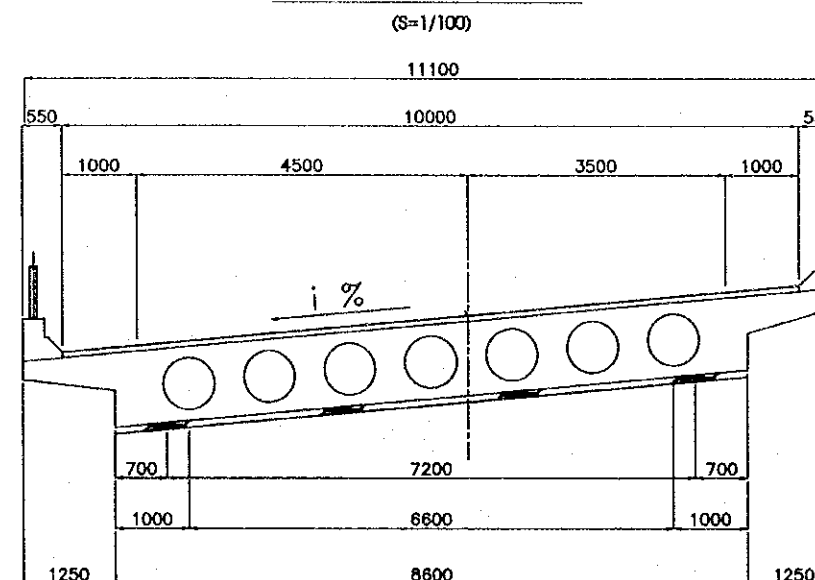
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/1000	DRAWING No. C-3-1-6	SHEET No.
BRIDGE ACCESSORY OF RAMP A			

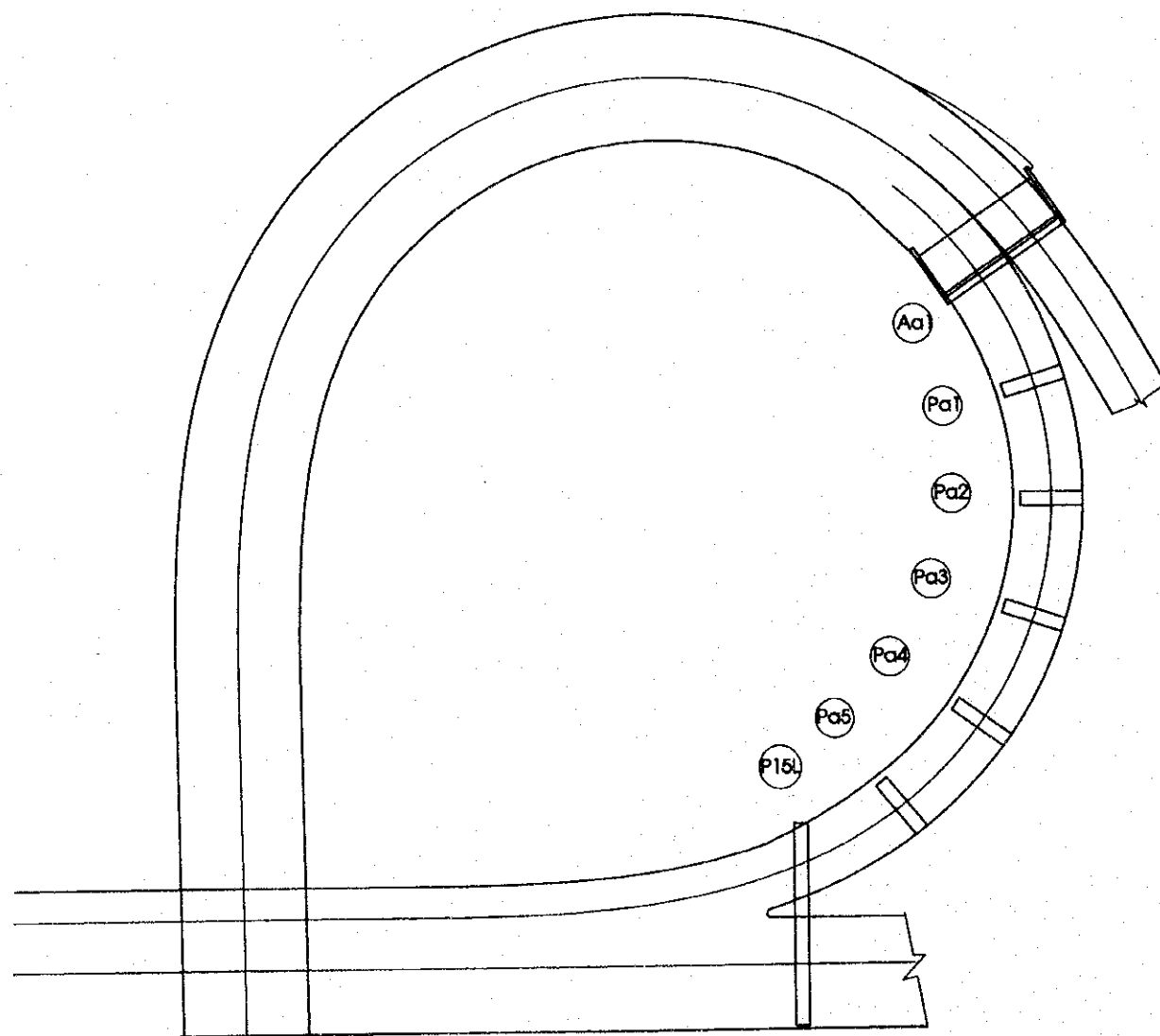
PROFILE



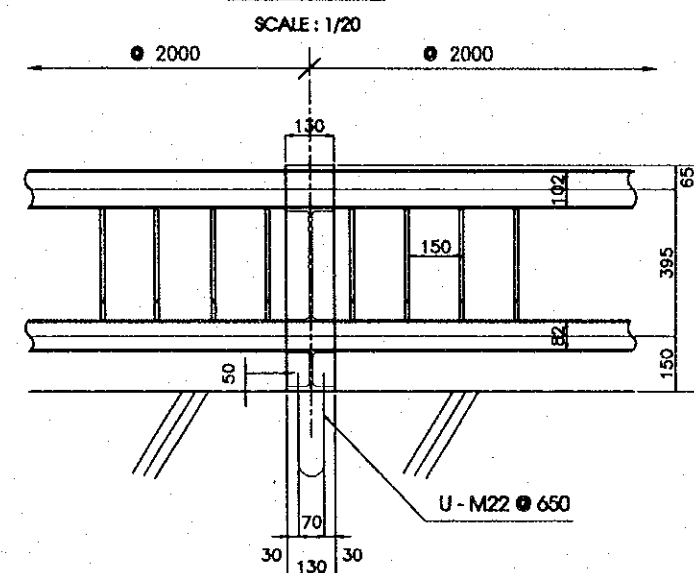
CROSS SECTION



PLAN



RAILING

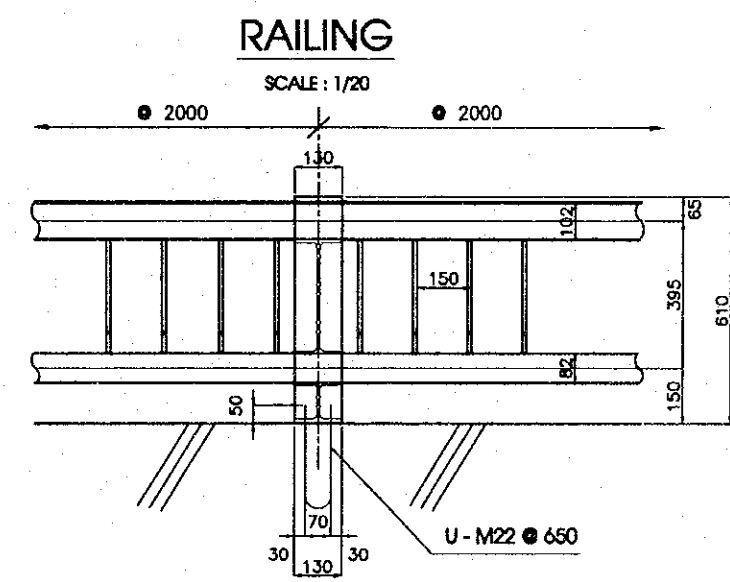
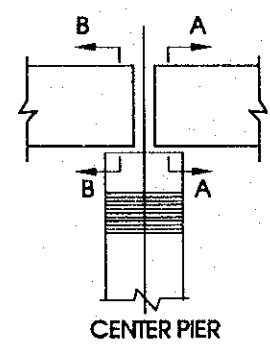
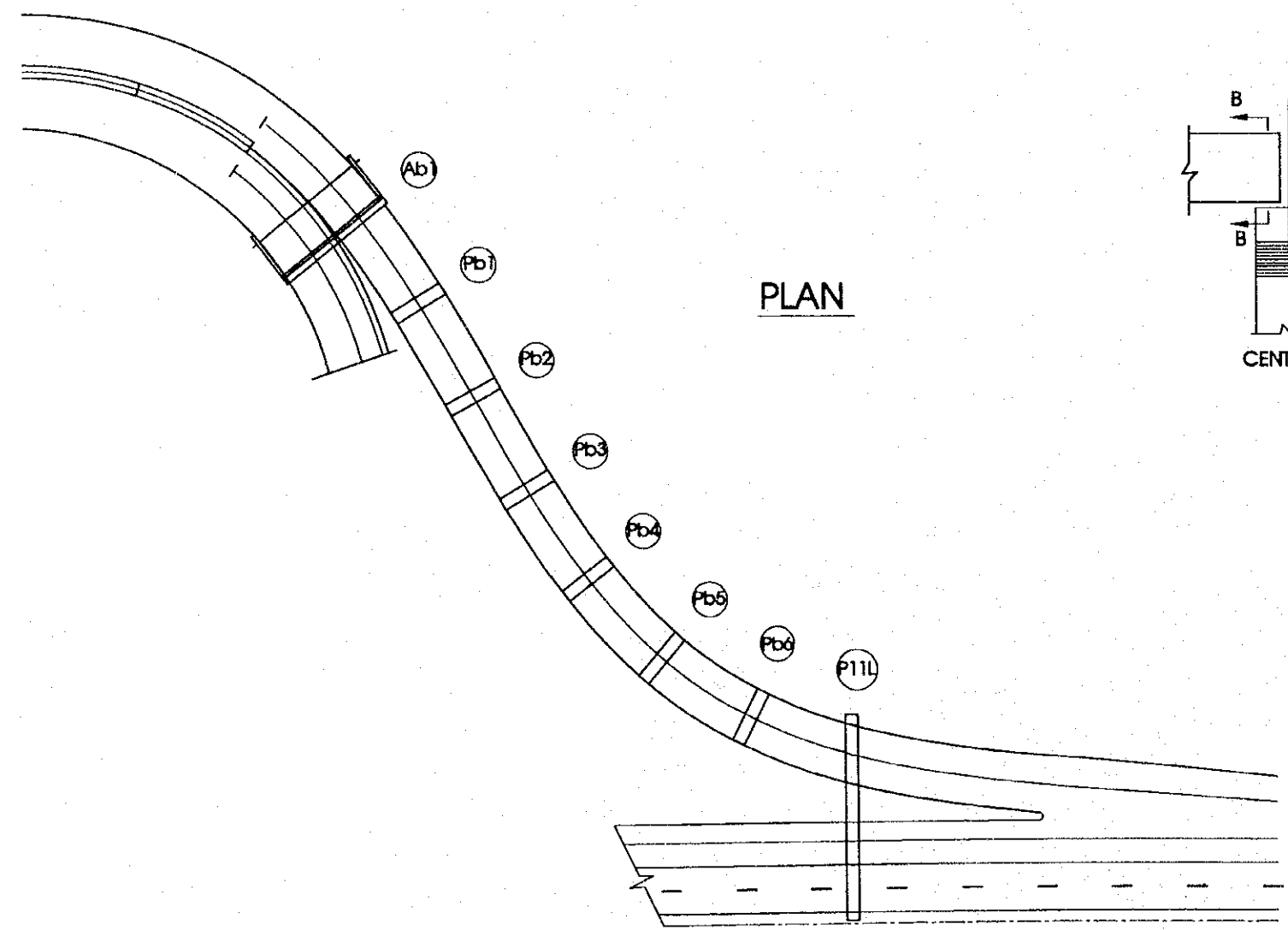
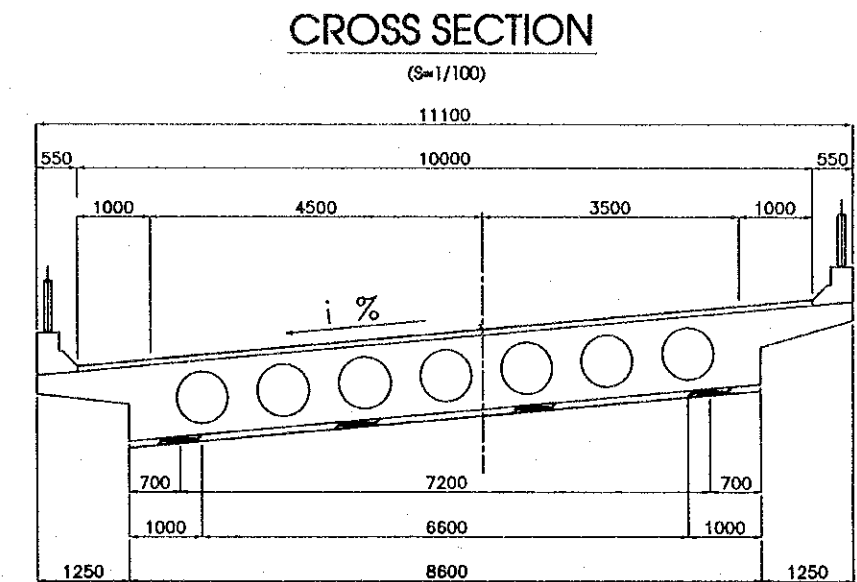
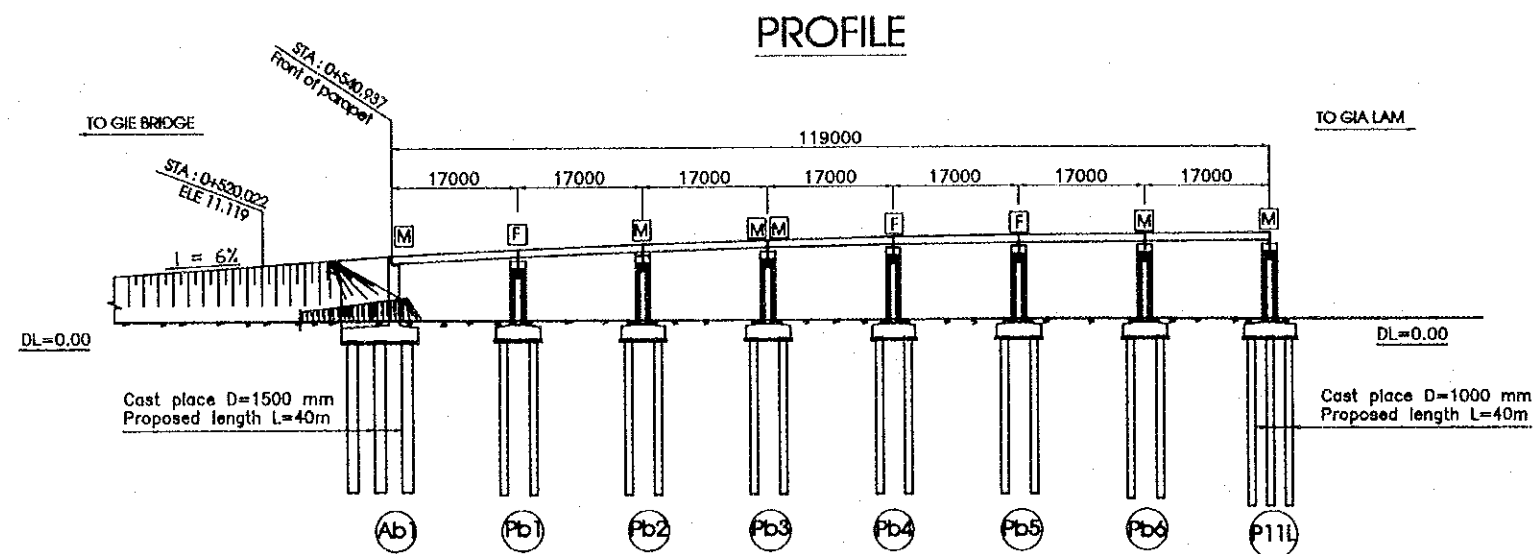


LIST OF BEARING SHOE, EXPANSION JOINT AND RAILING

LOCATION	NUMBER OF GIRDER	KIND OF BEARING	TYPE	NUMBER (each)
Aa1	1	E.B	E	4
Pa1	1	E.B	G	4
Pa2	1	E.B	G	4
Pa3	1	E.B	E	4
Pa4	1	E.B	G	4
Pa5	1	E.B	G	4
P15L	1	E.B	E	4
TOTAL	E.B(E) 12(each)		EXPANSION JOINT(SD40):10.1 m	
	E.B(G) 18(each)		RAILING:204 m	

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2002.3.17

PACKAGE 3	SCALE 1/1000	DRAWING No. C-3-1-7	SHEET No.
BRIDGE ACCESSORY OF RAMP B			

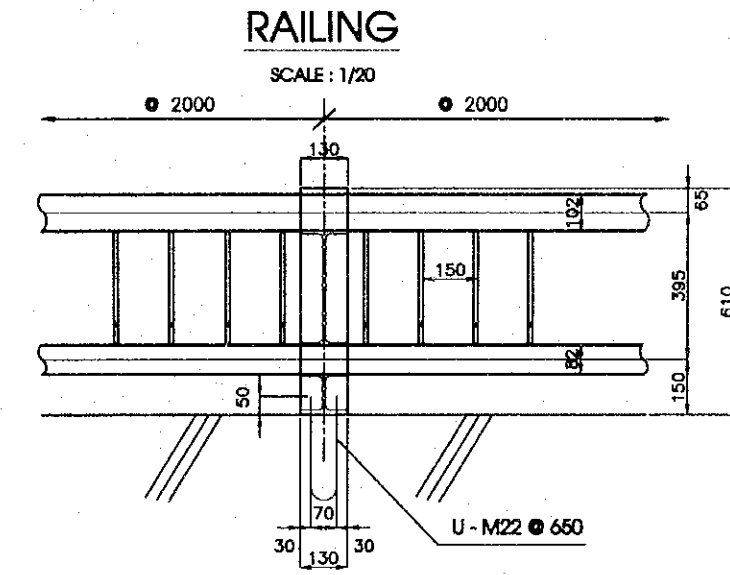
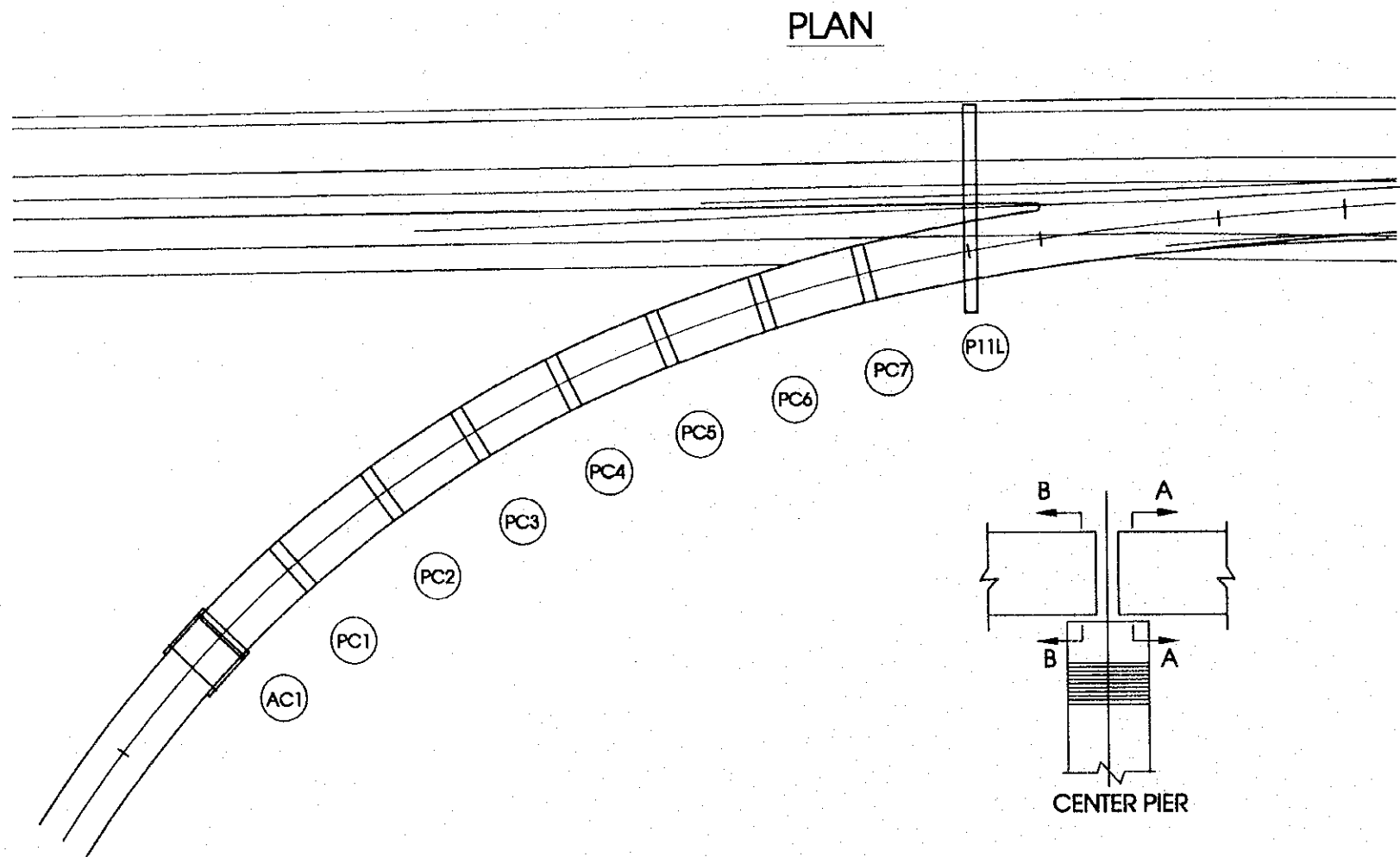
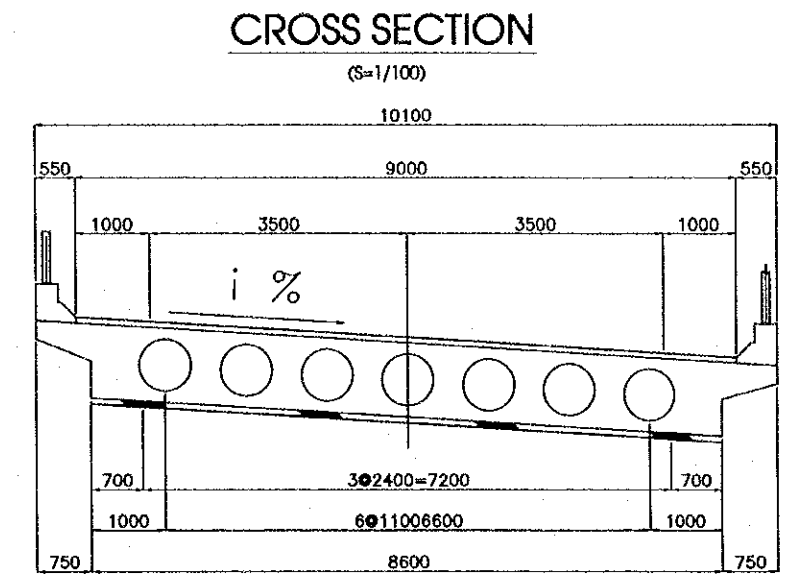
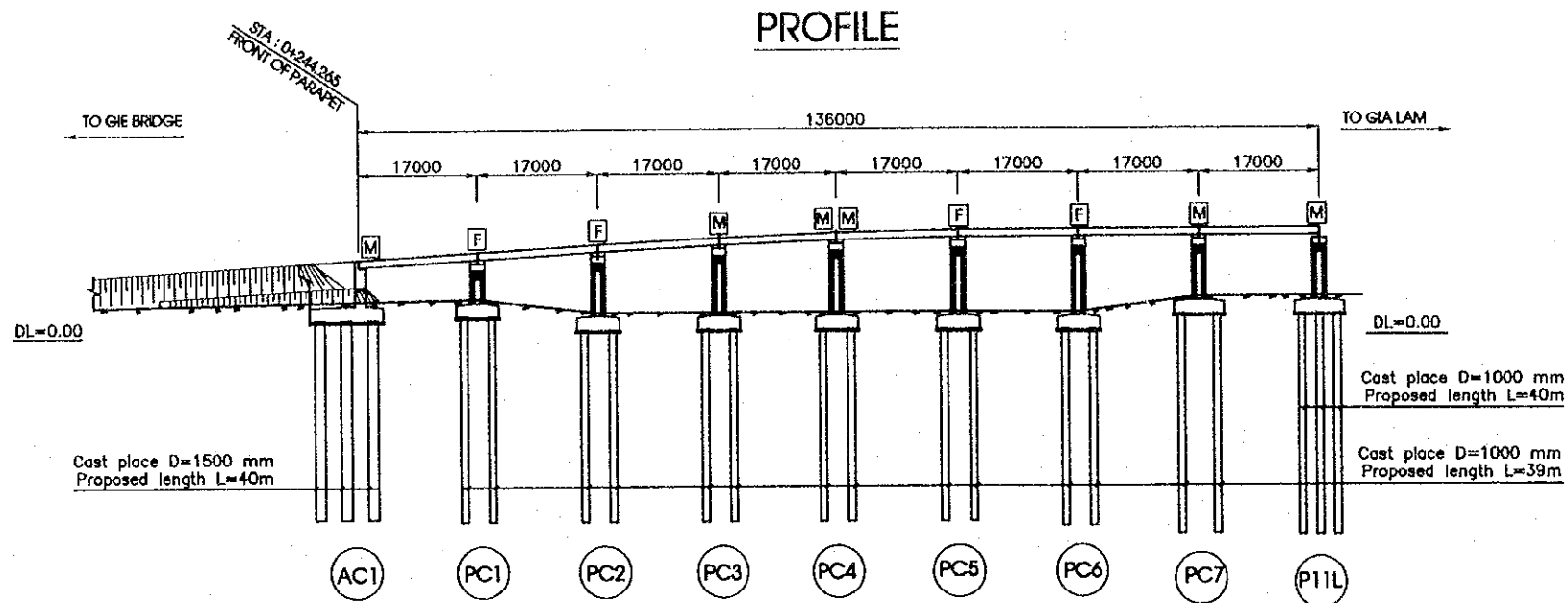


LIST OF BEARING SHOE, EXPANSION JOINT AND RAILING

LOCATION	NUMBER OF GIRDER	KIND OF BEARING	TYPE	NUMBER (each)
Ab1	1	E.B	E	4
Pb1	1	E.B	G	4
Pb2	1	E.B	G	4
Pb3	1	E.B(B-B)	E	4
	1	E.B(A-A)	E	4
Pb4	1	E.B	G	4
Pb5	1	E.B	I	4
Pb6	1	E.B	F	4
P11L	1	E.B	E	4
TOTAL	E.B(E)	16(each)	EXPANSION JOINT(SD40):	20.2 m
	E.B(G)	12(each)	RAILING:	204 m
	E.B(I)	4(each)	E.B(F)	4(each)

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT	DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	NAME
PROJECT RED RIVER BRIDGE (THANH TRU BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.11.19

PACKAGE 3	SCALE 1/1000	DRAWING No. C-3-1-8	SHEET No.
DRAINAGE ARRANGEMENT OF RAMP C BRIDGE			



LIST OF BEARING SHOE, EXPANSION JOINT AND RAILING

LOCATION	NUMBER OF GIRDER	KIND OF BEARING	TYPE	NUMBER (each)
Ac1	1	E.B	E	4
Pc1	1	E.B	G	4
Pc2	1	E.B	I	4
Pc3	1	E.B	F	4
Pc4	1	E.B(B-B)	E	4
		E.B(A-A)	E	4
Pc5	1	E.B	F	4
Pc6	1	E.B	I	4
Pc7	1	E.B	G	4
P11L	1	E.B	E	4
TOTAL	E.B(E) 16(each) EXPANSION JOINT(SD40):18.04 m E.B(G) 8(each) RAILING:272 m E.B(I) 8(each) E.B(F) 8(each)			

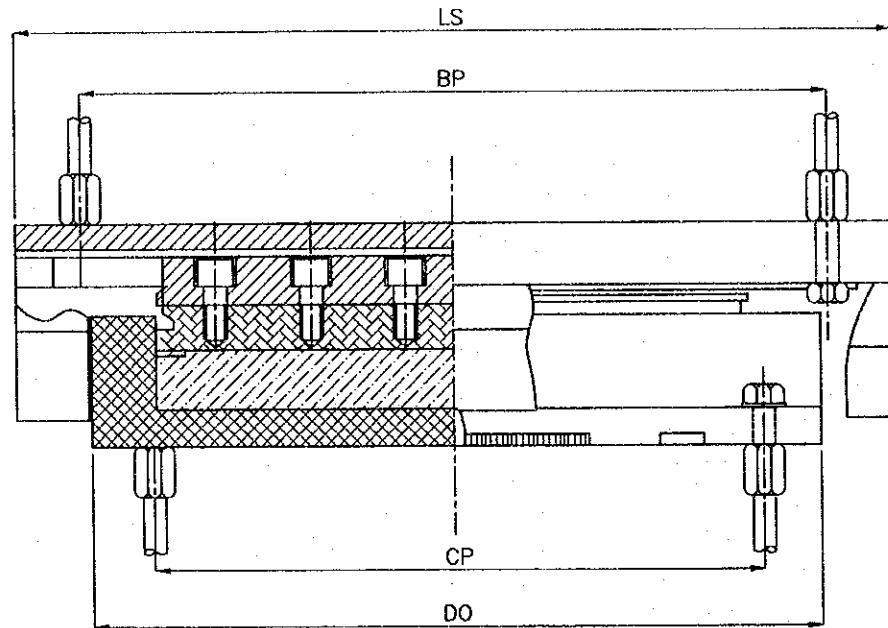
333

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATADE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (DUY THI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2011.3.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

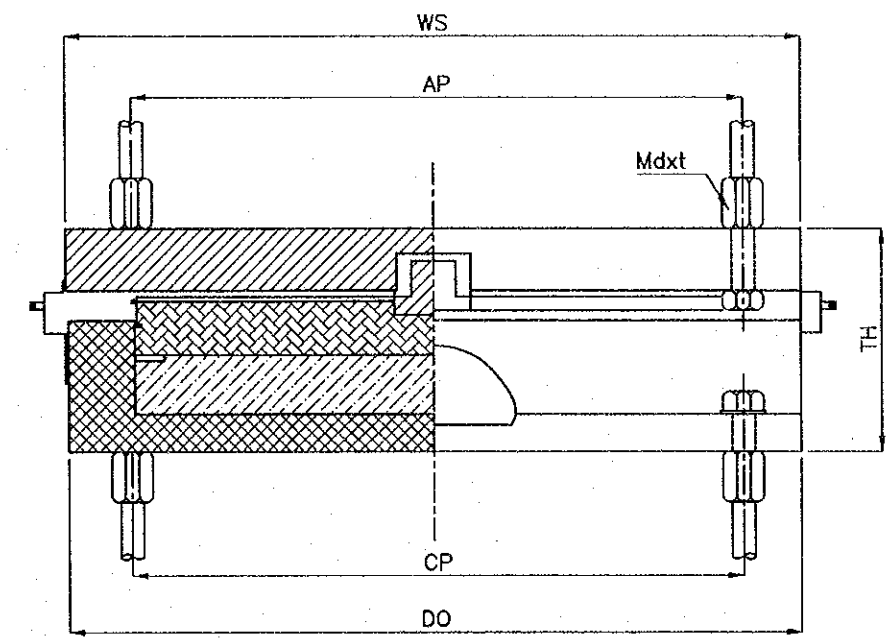
PACKAGE 3	SCALE 1/5	DRAWING No. C-3-1-11	SHEET No.
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DETAIL OF POT BEARING SHOE(MOVE)

LONGITUDINAL



TRANSVERSE



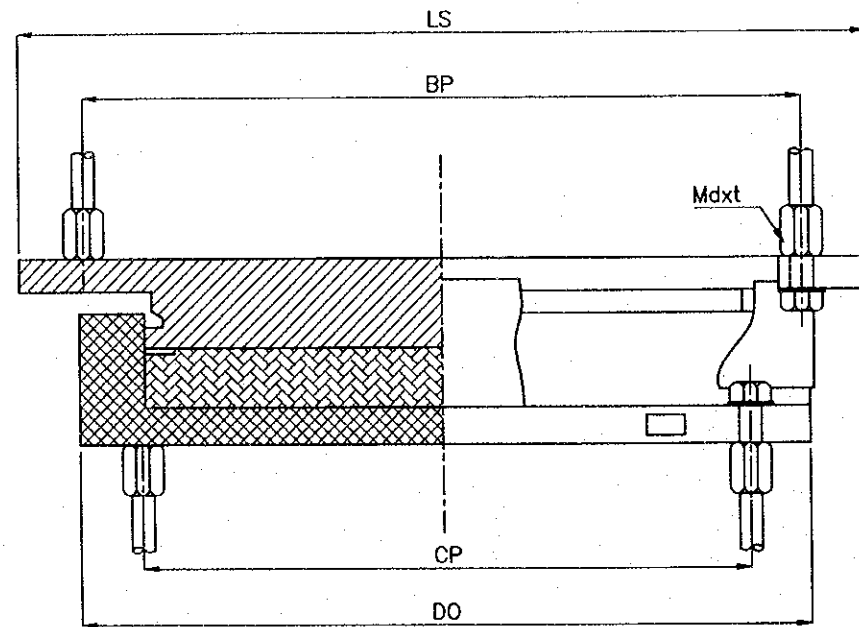
TYPE	REACTION (KN)	WEIGHT (KG)	DEMENSION							
			AP	BP	WS	LS	CP	DO	TH	Mdx
A-QPZ3500-ZX	3500	243	410	510	500	600	410	500	150	M20x2.5
B-QPZ4000-ZX	4000	317	460	560	550	650	460	550	160	M20x2.5
C-QPZ4500-ZX	4500	354	480	580	580	680	480	580	165	M20x2.5
D-QPZ10000-ZX	10000	994	730	830	880	980	730	880	220	M30x3
E-QPZ22500-ZX	22500	2830	1100	1300	1320	1520	1100	1320	275	M48x3

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. MATSUDA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.8.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

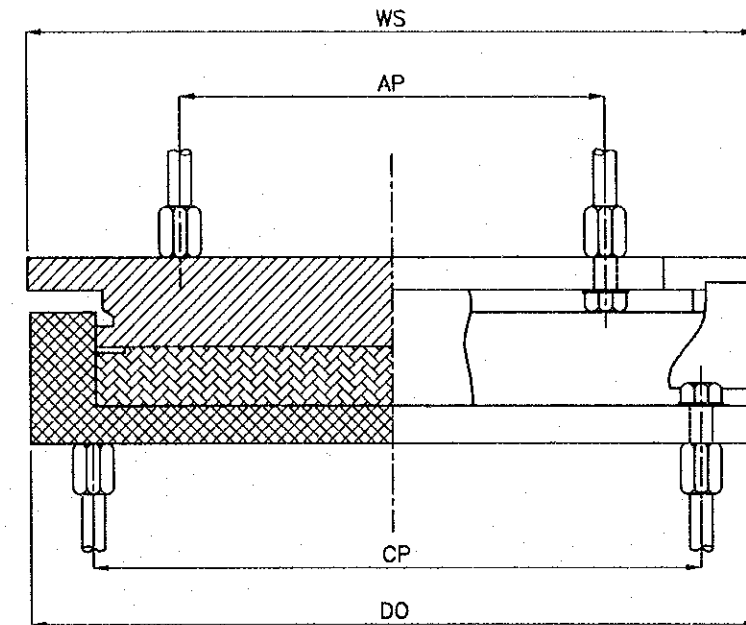
PACKAGE 3	SCALE 1/5	DRAWING No. C-3-1-12	SHEET No.
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DETAIL OF POT BEARING SHOE(FIX)

LONGITUDINAL



TRANSVERSE

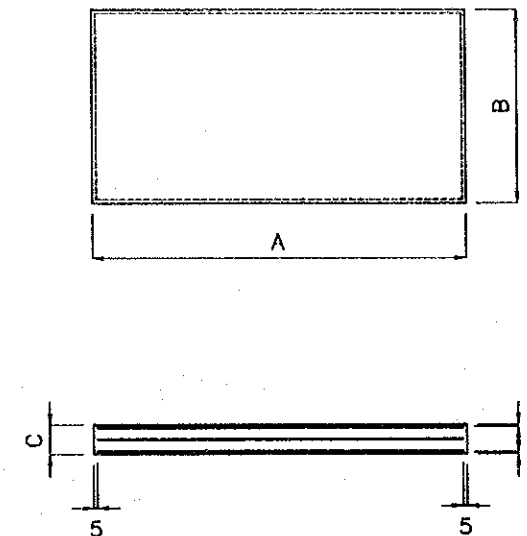
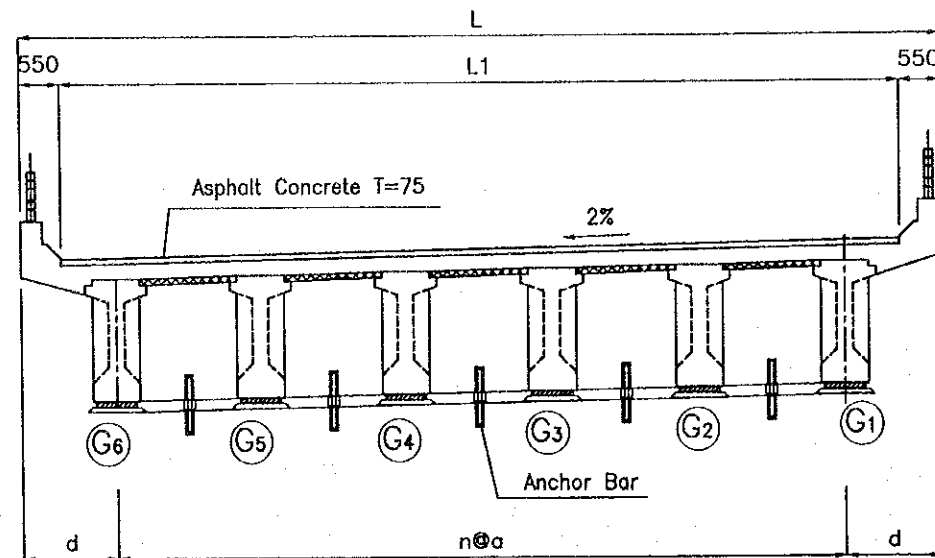


TYPE	REACTION (KN)	WEIGHT (KG)	DEMENSION							
			AP	BP	WS	LS	CP	DO	TH	MdxT
C-QPZ4500-GD	4500	306	330	560	580	660	480	580	145	M20x2.5
D-QPZ10000-GD	10000	933	490	850	880	1000	730	880	195	M30x3

337

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (HANG TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.4.14
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

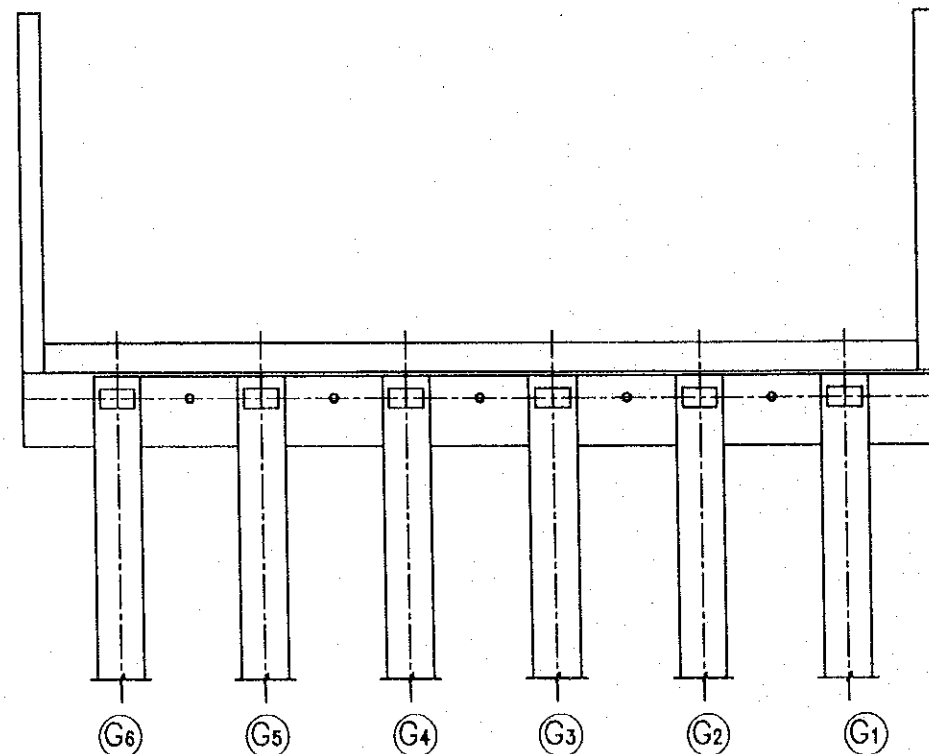
PACKAGE 3	SCALE 1/100	DRAWING No. C-3-1-13	SHEET No.
DETAIL OF ELASTOMERIC BEARING SHOE			



NOTE

ELASTOMERIC BEARING PAD IS USED
FOR GIRDER SPAN: 20 m ~ 35 m

DETAIL OF ELASTOMERIC BEARING PAD

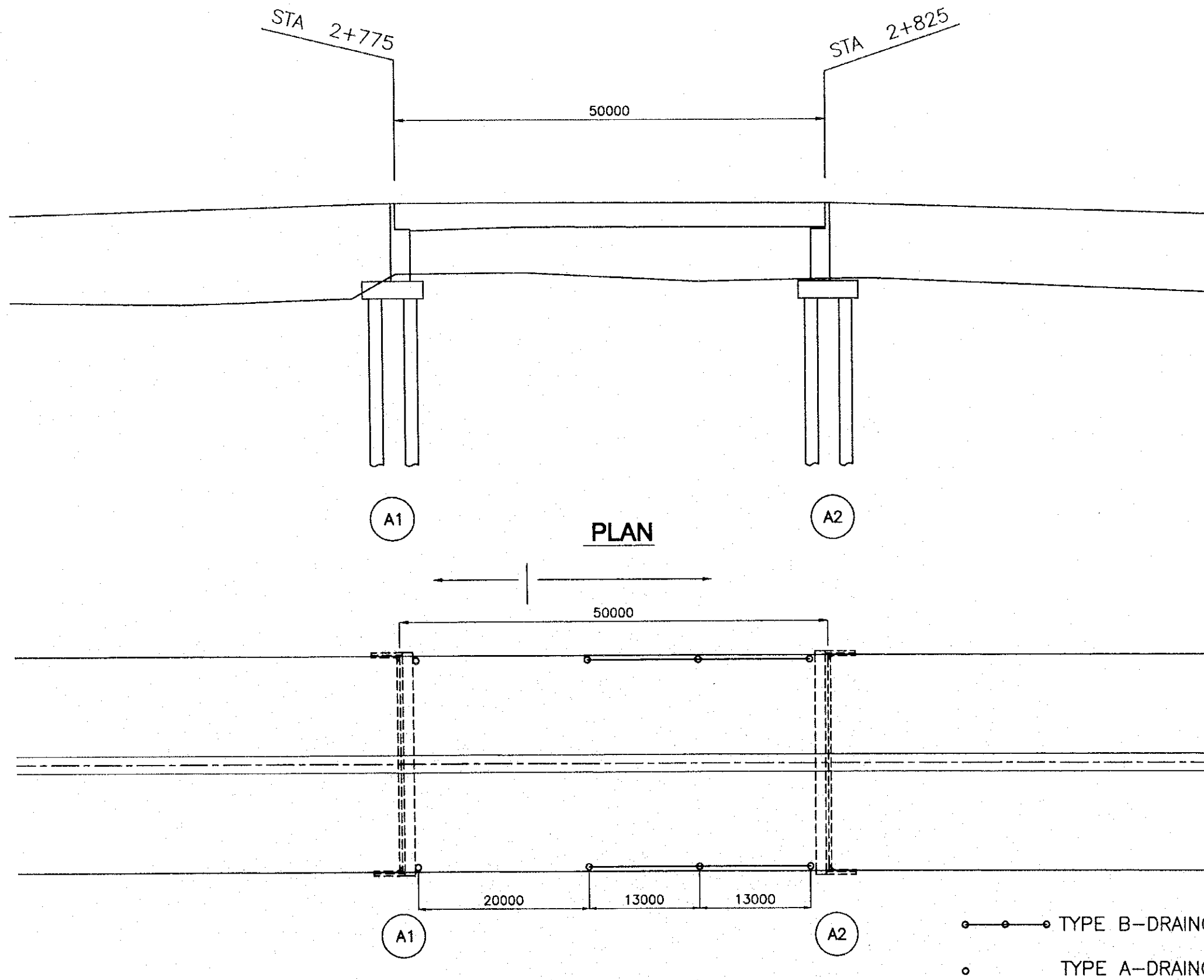


GIRDER SPAN(m)	TYPE			DEMENSION(mm)			PLATE	REMARKS
				A	B	C		
20	MOVE	20M	D	510	260	40	3-500x250x2	
	FIX	20F	D	510	260	40	3-500x250x2	
28	MOVE	28M	B	510	310	44	3-500x300x2	
	FIX	28F	C	510	260	36	3-500x250x2	
33	MOVE	33M	A	510	310	56	4-500x300x2	
	FIX	33F	C	510	260	36	3-500x250x2	
35	MOVE	35M	A	510	310	56	4-500x300x2	
	FIX	35F	C	510	260	36	3-500x250x2	
RAMP BRIDGE R.C HOLLOW			E	330	330	56	4-320x320x2	
			F	510	510	44	3-500x500x2	
			G	510	510	32	3-500x500x2	
			H	480	480	32	3-470x470x2	

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM TRANH LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAKE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.11.14

PACKAGE 3	SCALE 1/500	DRAWING No. C-3-1-14	SHEET No.
DRAINAGE ARRANGEMENT OF NGUYEN TAM TRINH BRIDGE			

PROFILE OF NGUYEN TAM TRINH BRIDGE

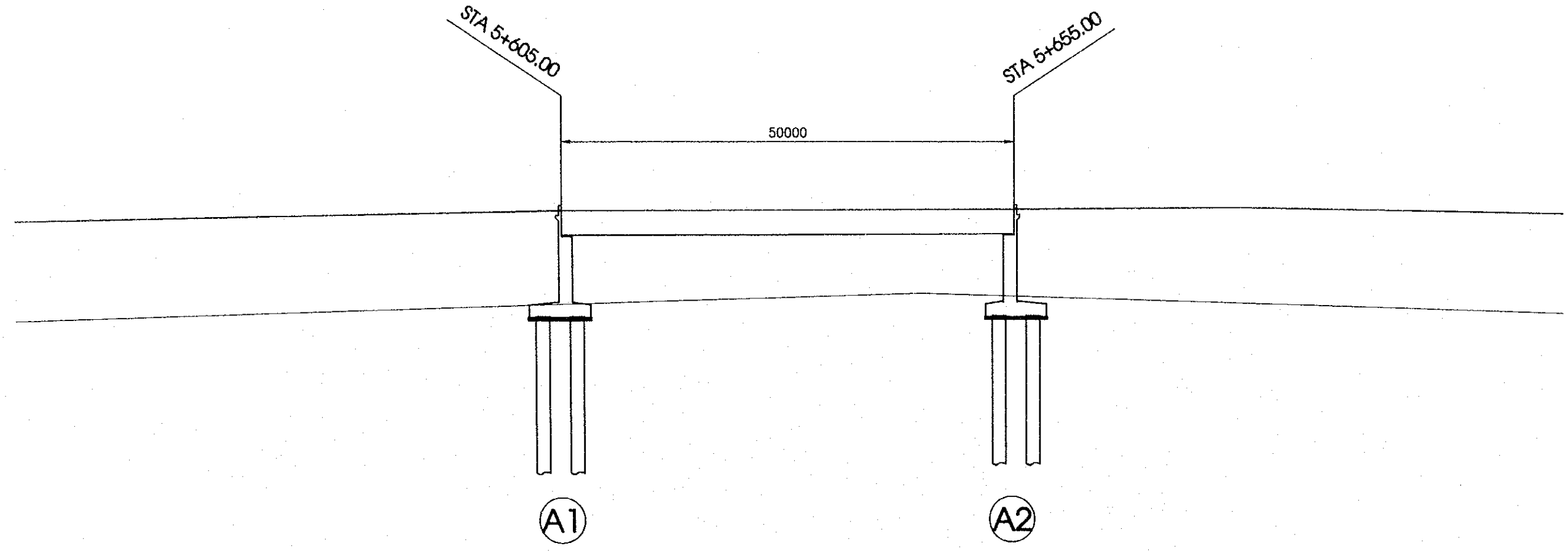


399

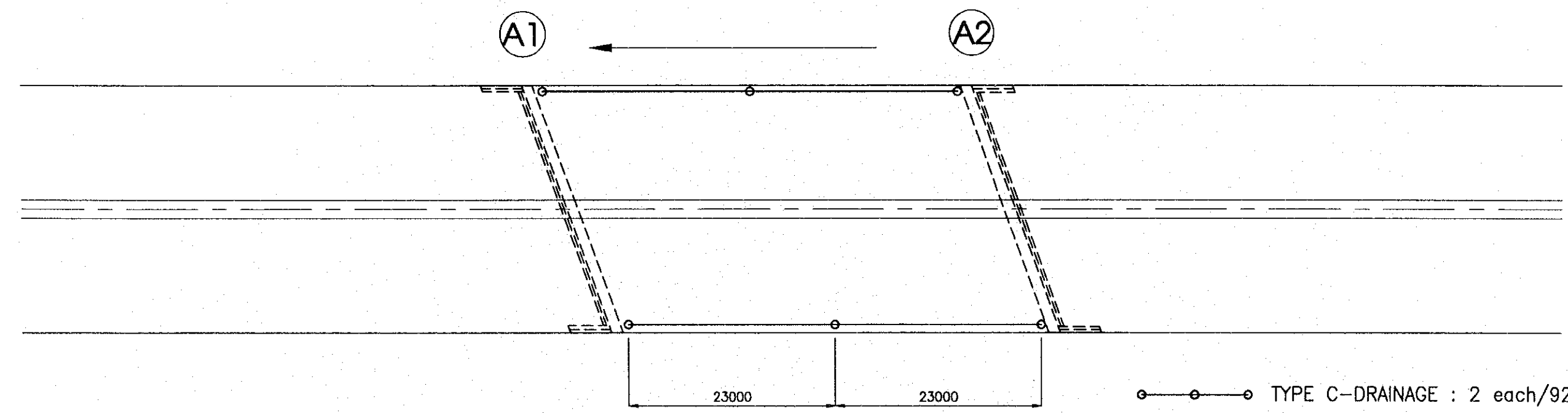
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. NATADE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2020.03.19	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/500	DRAWING No. C-3-1-15	SHEET No.
DRAINAGE ARRANGEMENT OF LINH NAM BRIDGE			

PROFILE OF LINH NAM BRIDGE



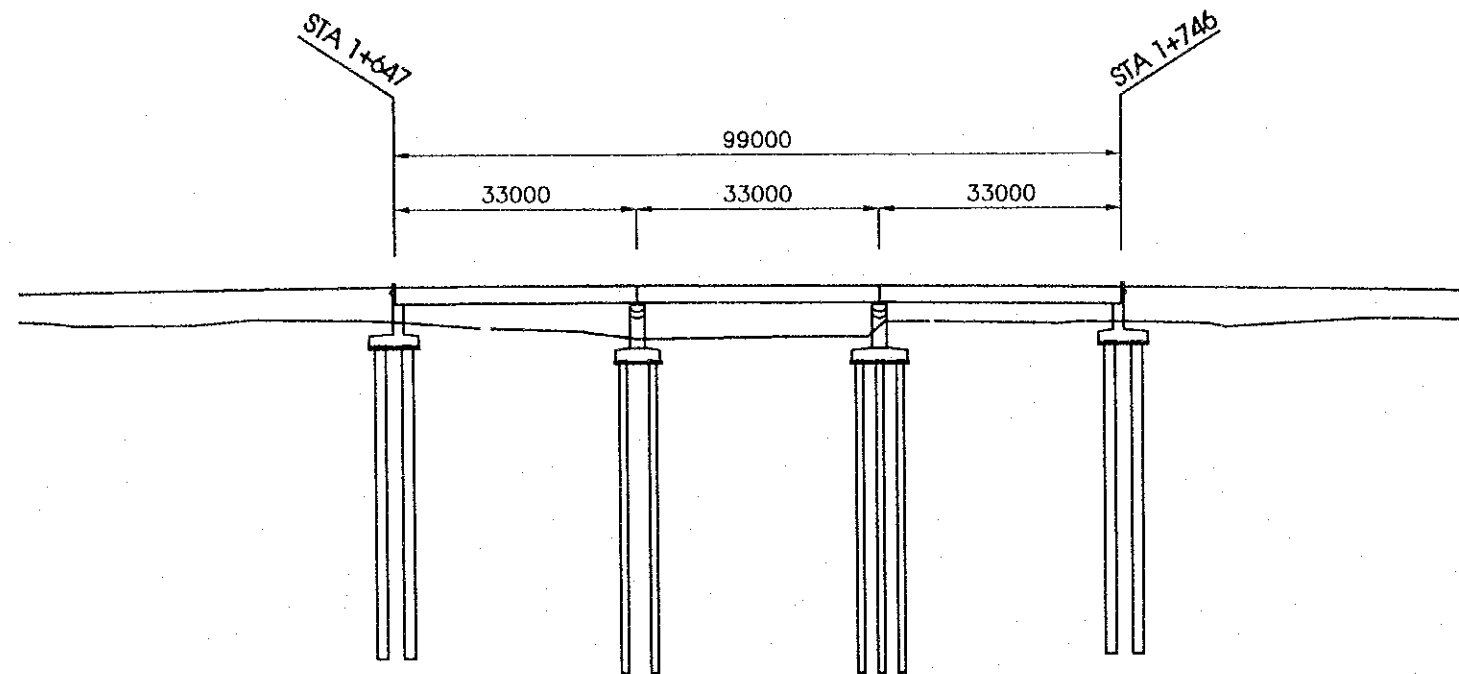
PLAN



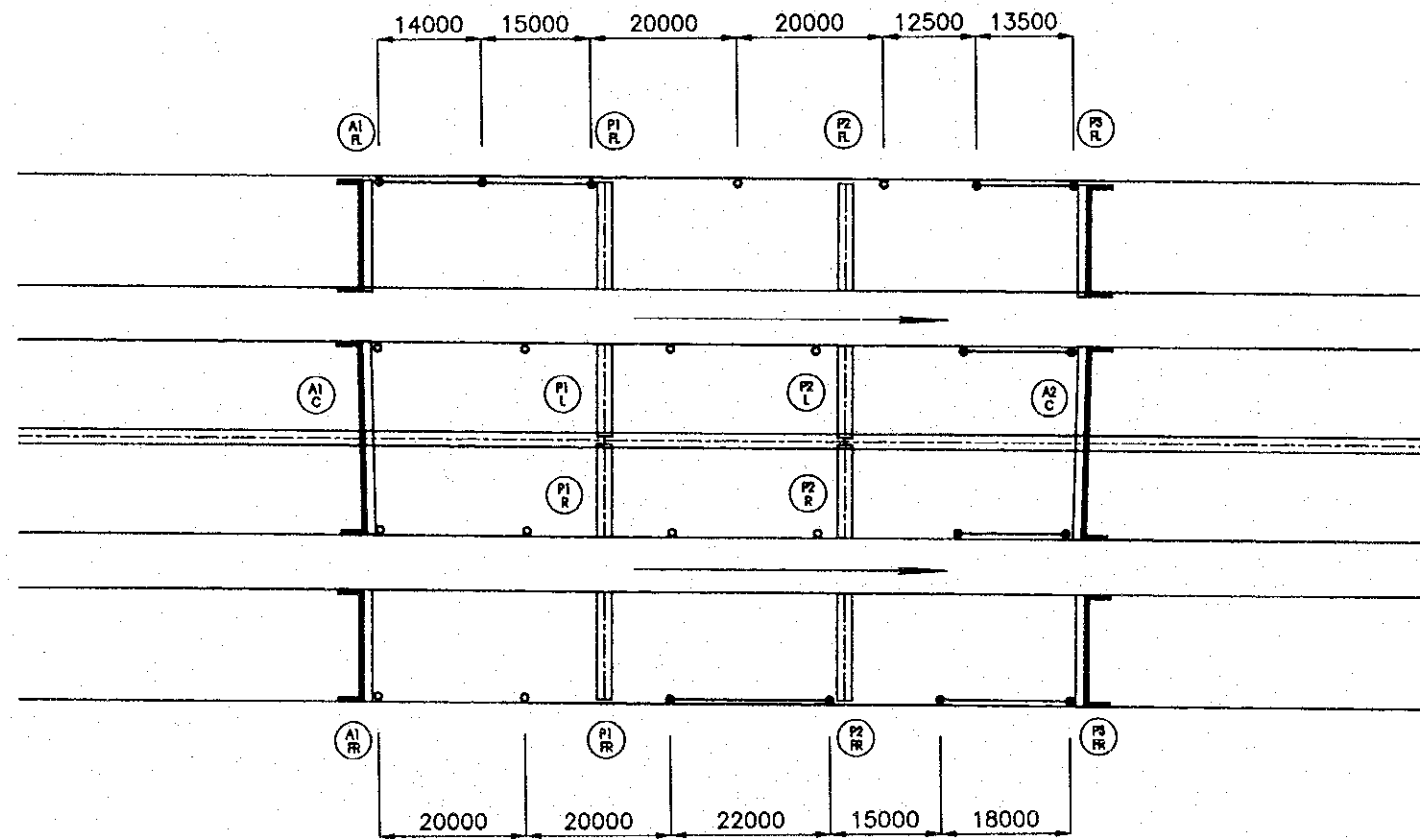
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY B. VIATAGE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.3.17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/1000	DRAWING NO. C-3-1-16	SHEET NO.
DRAINAGE ARRANGEMENT OF KIM NGUU BRIDGE			

PROFILE OF KIM NGUU RIVER BRIDGE



PLAN



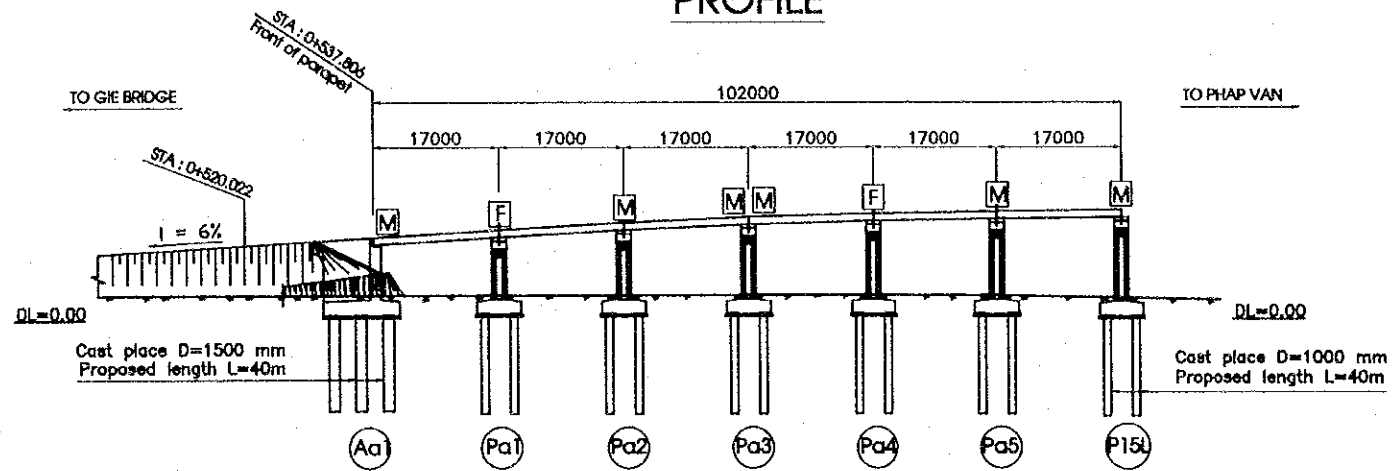
- TYPE A--DRAINAGE : 12 each
- TYPE B--DRAINAGE : 1 each/29 m
- TYPE C--DRAINAGE : 5 each/80.5 m

401

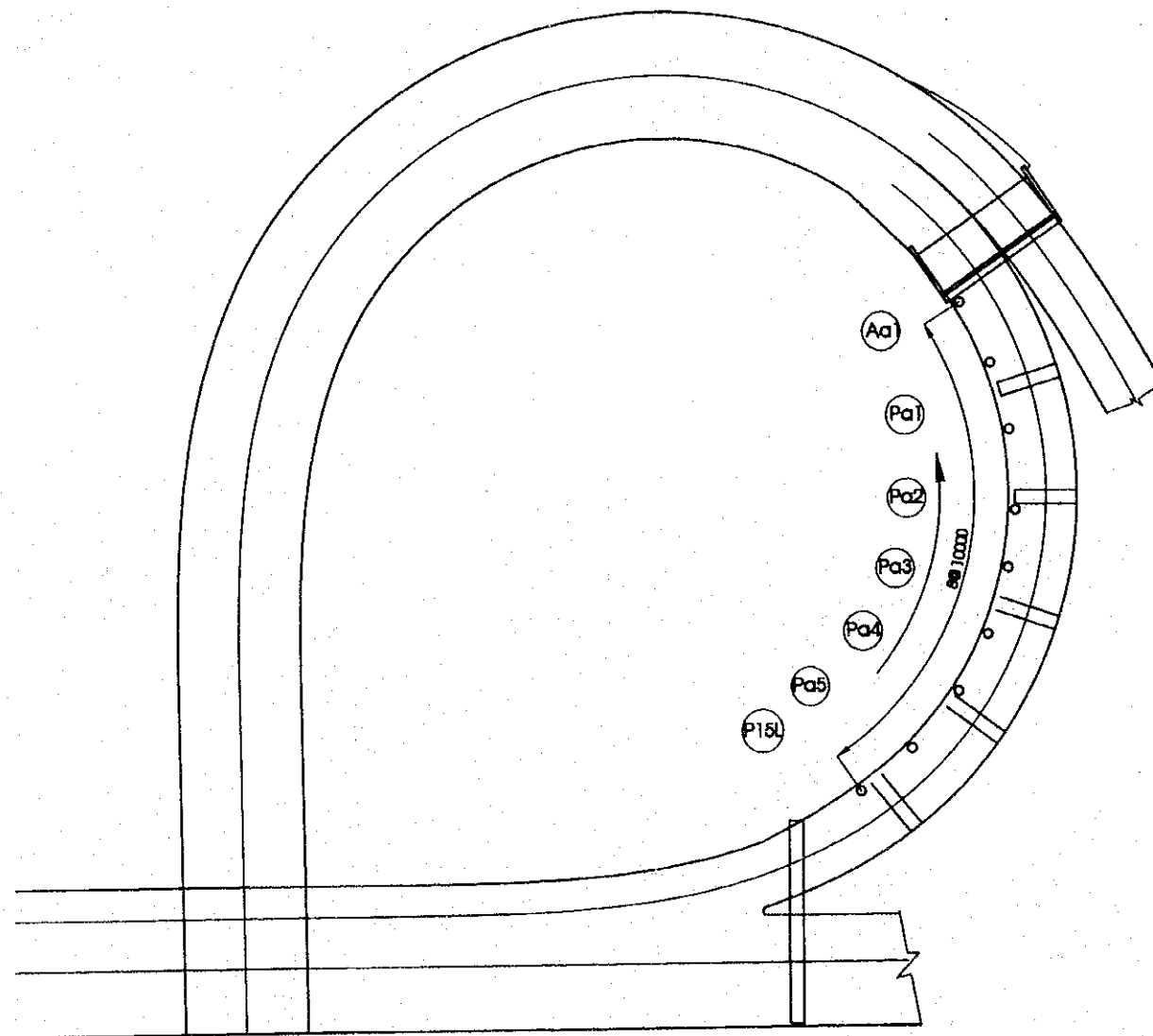
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAYABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.5.17
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/1000	DRAWING No. C-3-1-18	SHEET No.
DRAINAGE ARRANGEMENT OF RAMP A			

PROFILE



PLAN



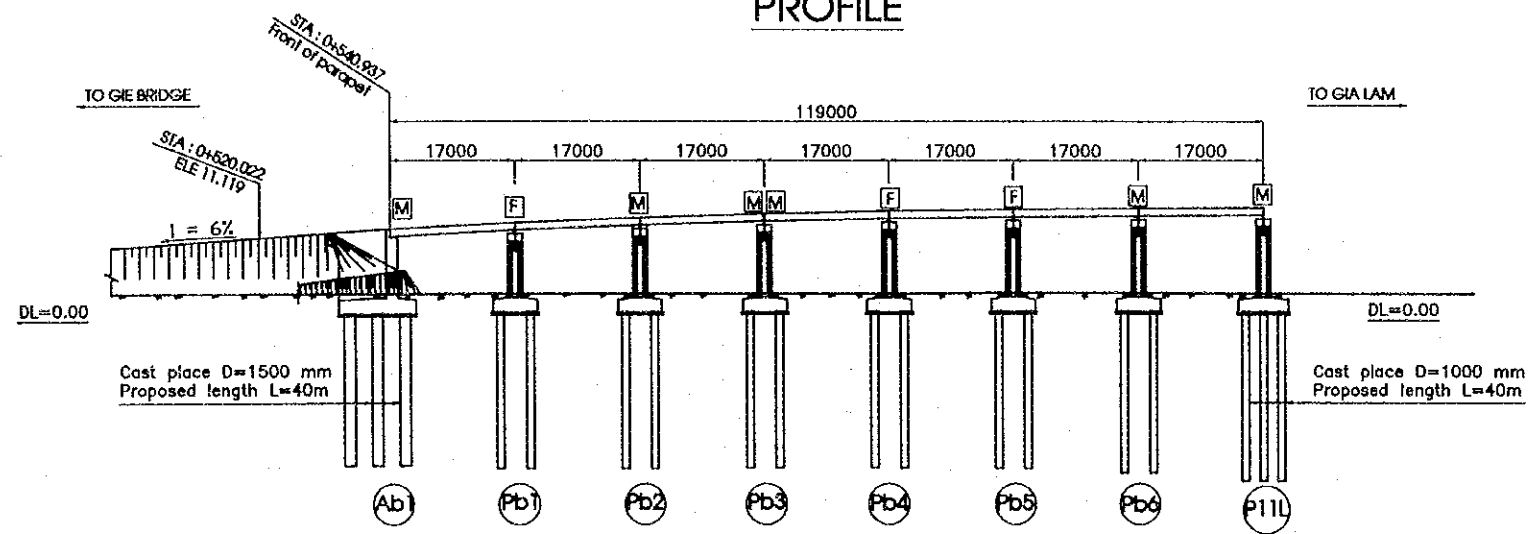
○ TYPE A-DRAINAGE : 9each/80 m

400

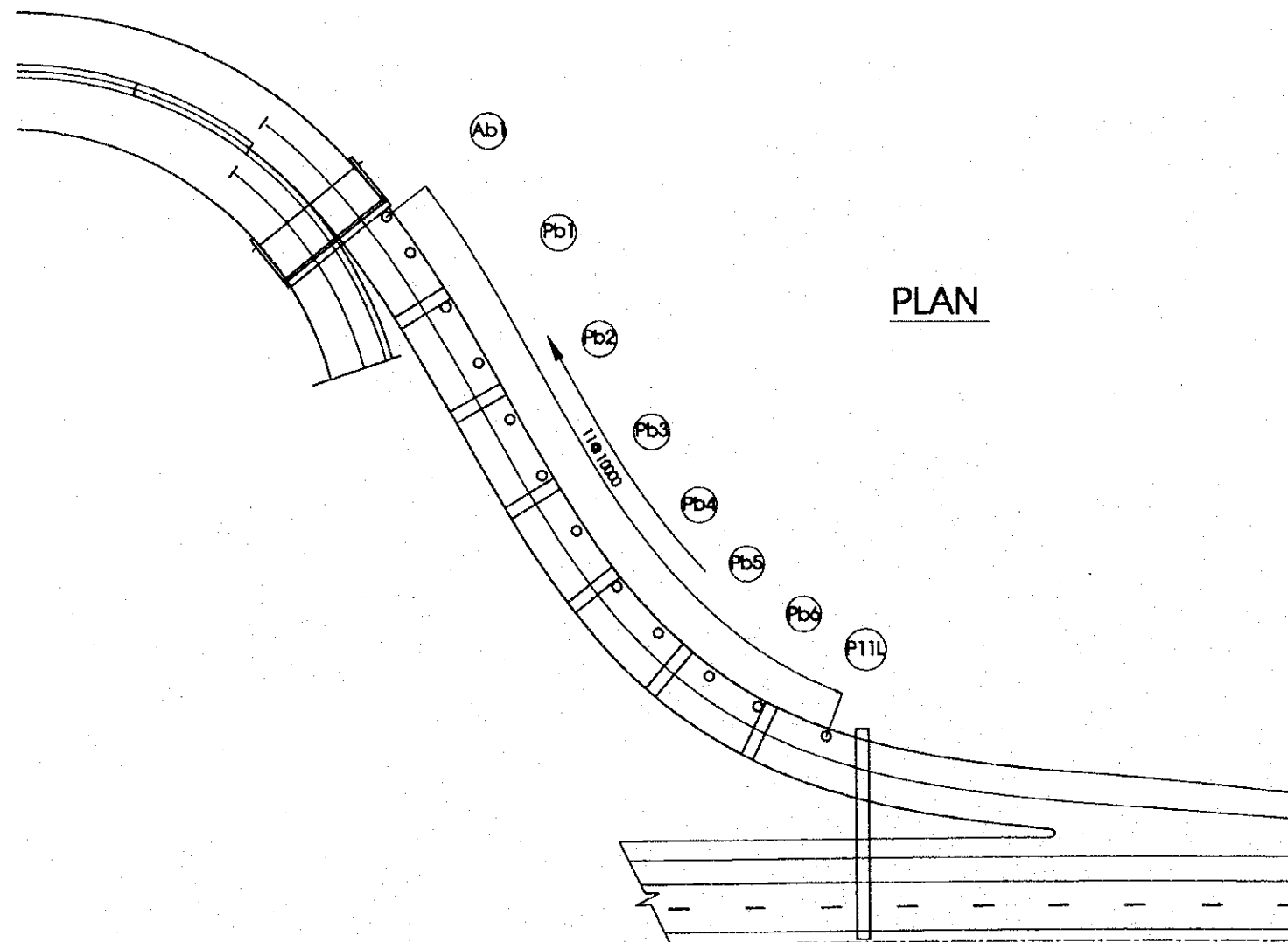
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAPE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.17	
CONTRACTOR PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/1000	DRAWING No. C-3-1-19	SHEET No.
DRAINAGE ARRANGEMENT OF RAMP B BRIDGE			

PROFILE



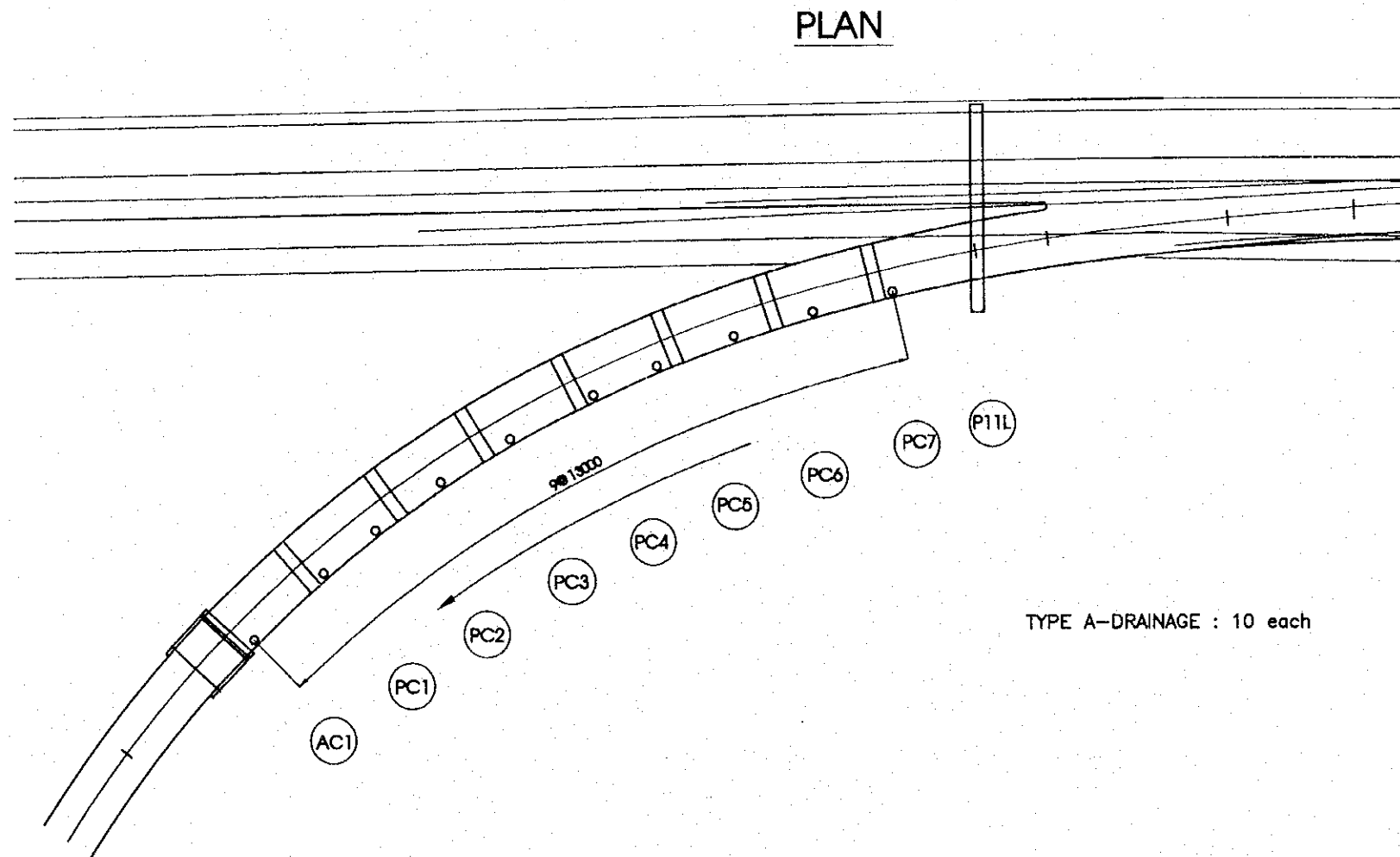
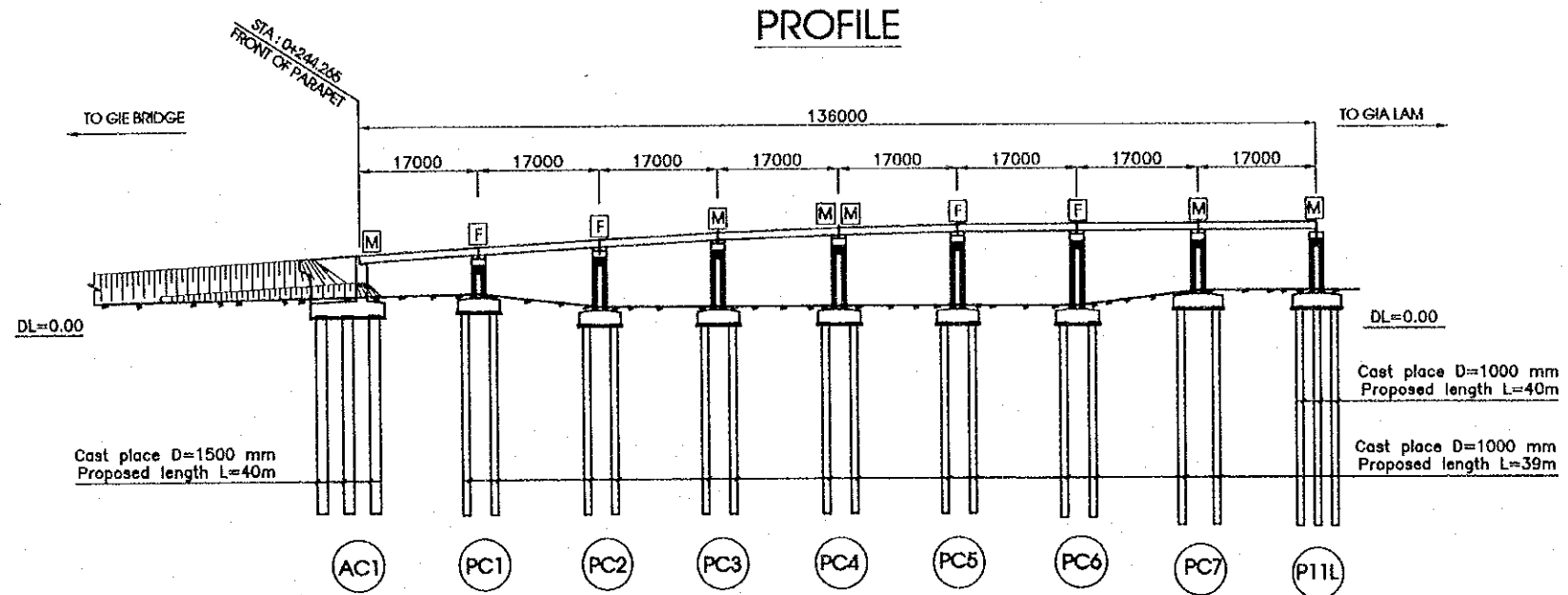
PLAN



o TYPE A-DRAINAGE : 12 each

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2007. 11. 19	

PACKAGE 3	SCALE 1/1000	DRAWING No. C-3-1-20	SHEET No.
DRAINAGE ARRANGEMENT OF RAMP C BRIDGE			

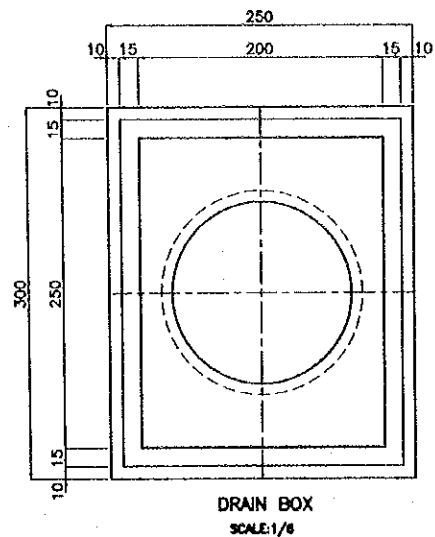


TYPE A-DRAINAGE : 10 each

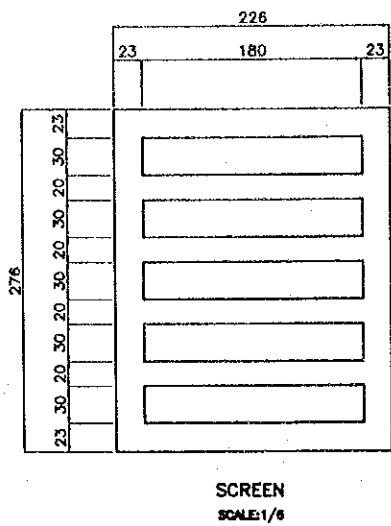
400

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATAKE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000. 08. 14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

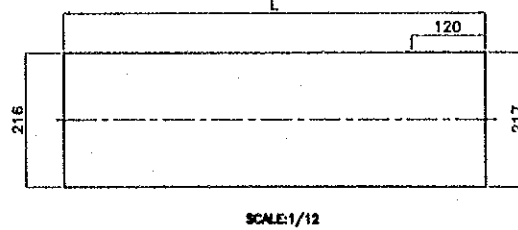
PACKAGE 3	SCALE 1/6	DRAWING No. C-3-1-21	SHEET No.
DETAIL OF DRAINAGE ON BRIDGE(1)			



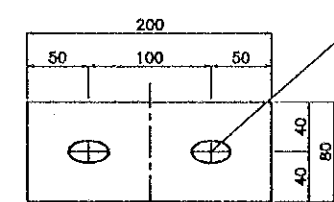
DRAIN BOX
SCALE:1/6



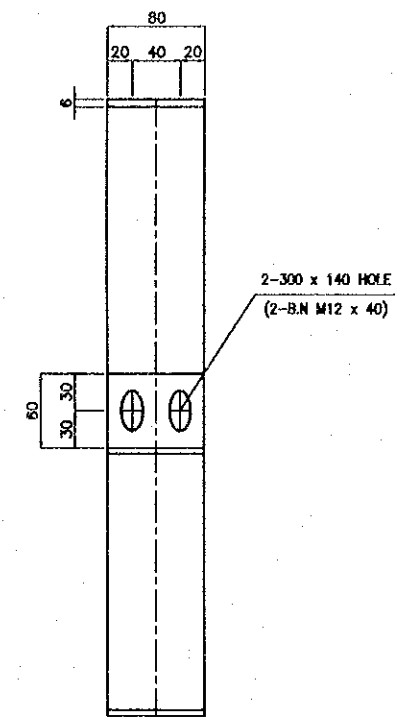
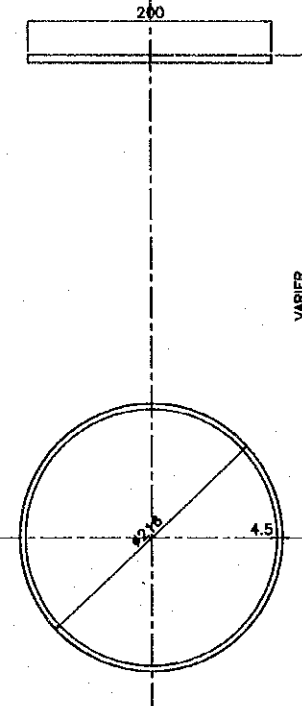
SCREEN
SCALE:1/6



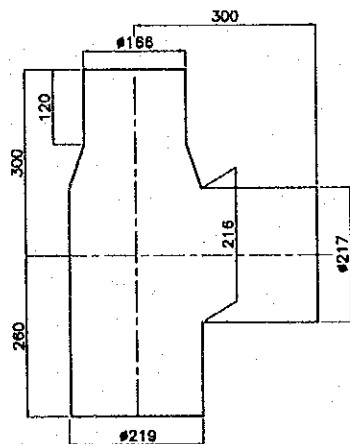
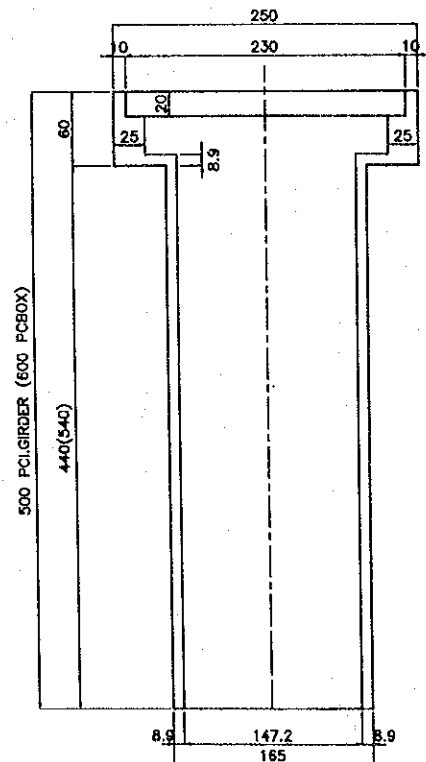
SCALE:1/12



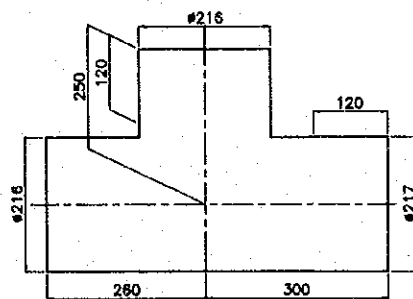
2-300 x 140 HOLE
(2-INSERT ANCHOR M12)



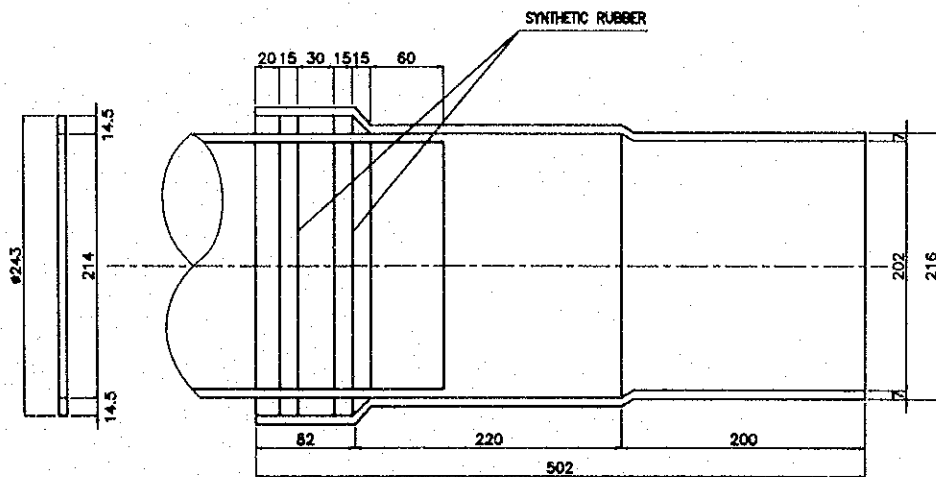
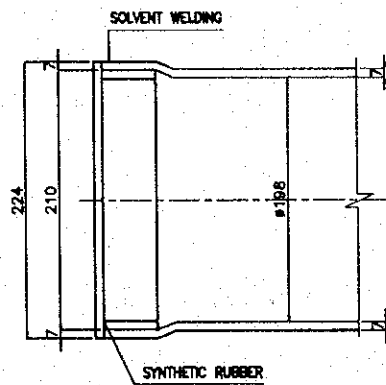
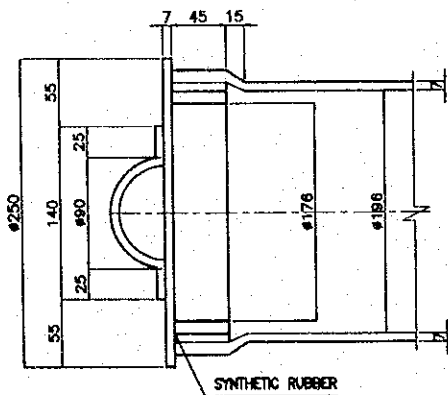
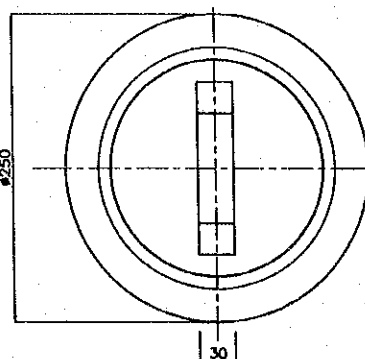
2-300 x 140 HOLE
(2-B.N M12 x 40)



TEELS(#=200mm) (T-1)
SCALE:1/12



TEELS(#=200mm) (T-2)
SCALE:1/12



EXPANSION PIPE JOINT
SCALE:1/6

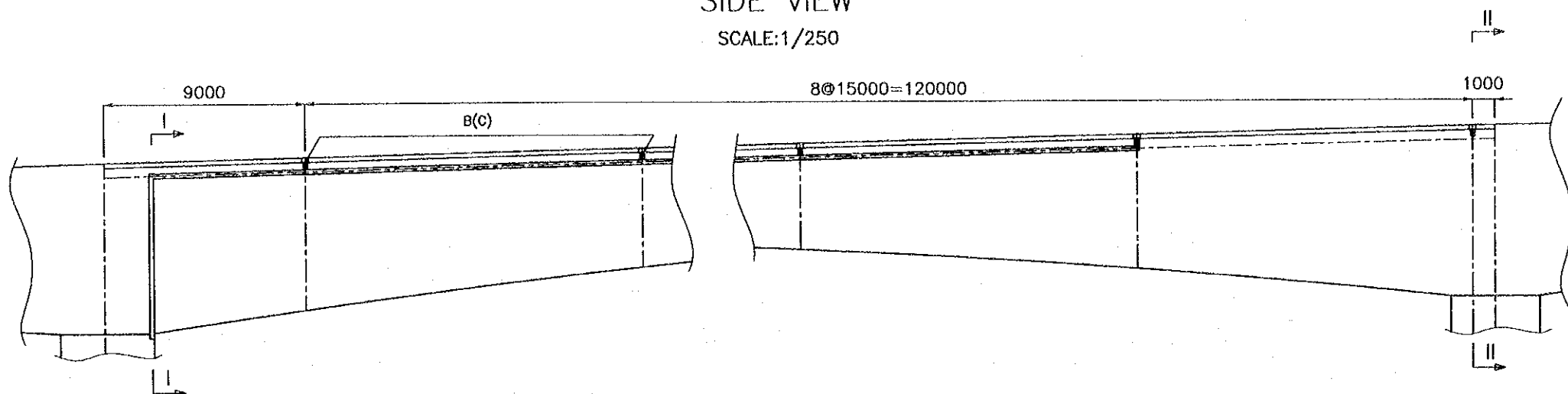
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE <i>[Signature]</i>	DATE 2000.3.17
COMPANY PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/250	C-3-1-22	

DETAIL OF DRAINAGE ON BRIDGE(2)

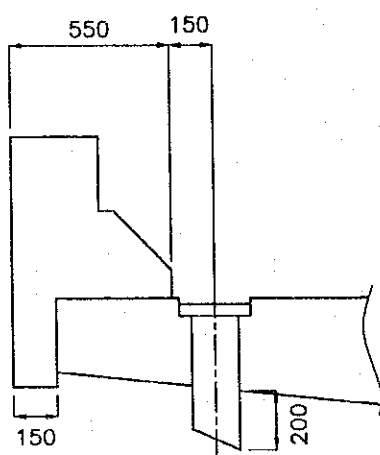
SIDE VIEW

SCALE:1/250



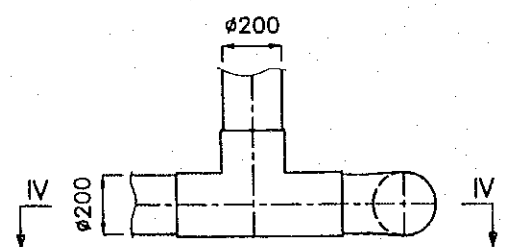
SECTION II-II(A)

SCALE:1/25



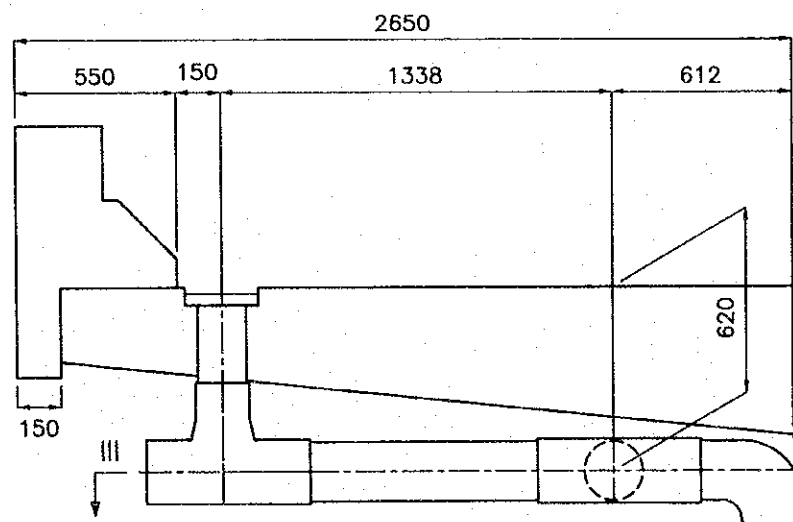
SECTION III-III

SCALE:1/25



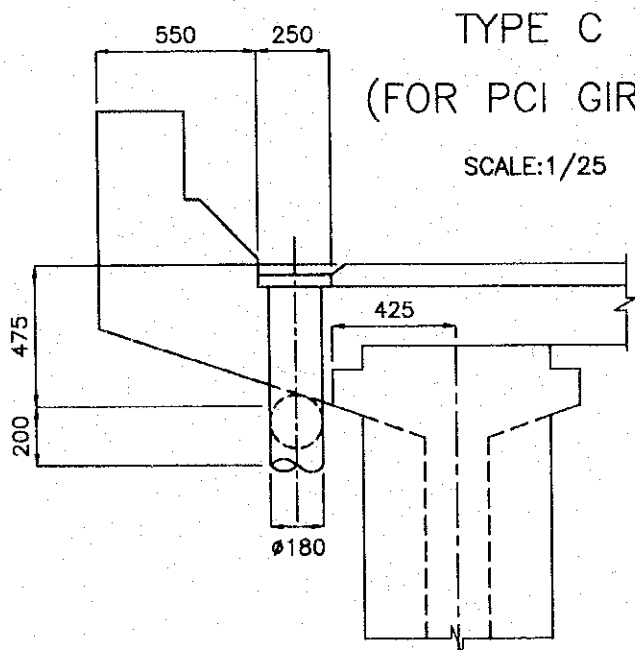
SECTION I-I
TYPE C(FOR BOX GIRDER)

SCALE:1/25



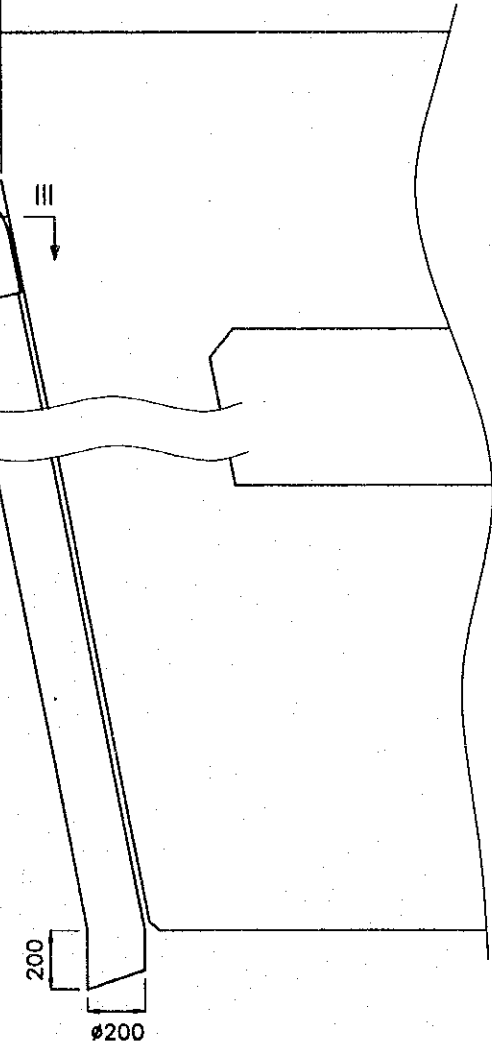
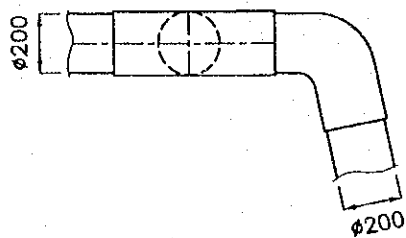
TYPE C
(FOR PCI GIRDER)

SCALE:1/25



SECTION IV-IV

SCALE:1/25



407

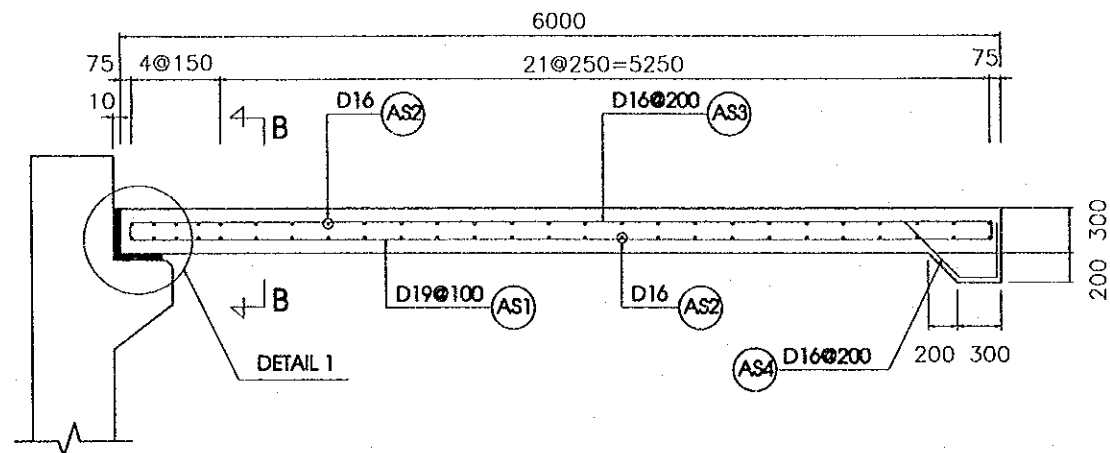
C-3 MISCELLANEOUS

C-3-2 APPROACH SLAB, SLOPE PROTECTION

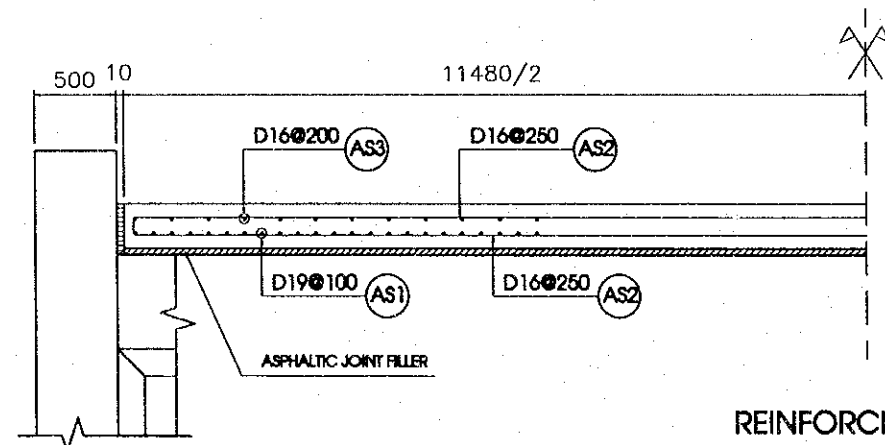
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. KATADA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		SIGNATURE <i>[Signature]</i>
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	DATE 2000.3.14	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL		

PACKAGE 3	SCALE 1/100	DRAWING No. C-3-2-1	SHEET No.
PHAP VAN VIADUCT DETAIL OF APPROACH SLAB (1)			

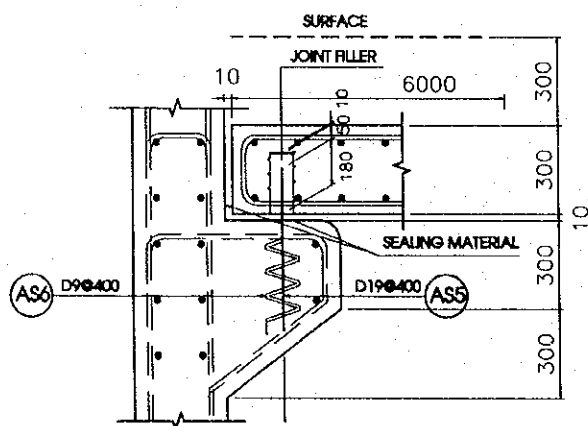
CROSS SECTION (TYPICAL)



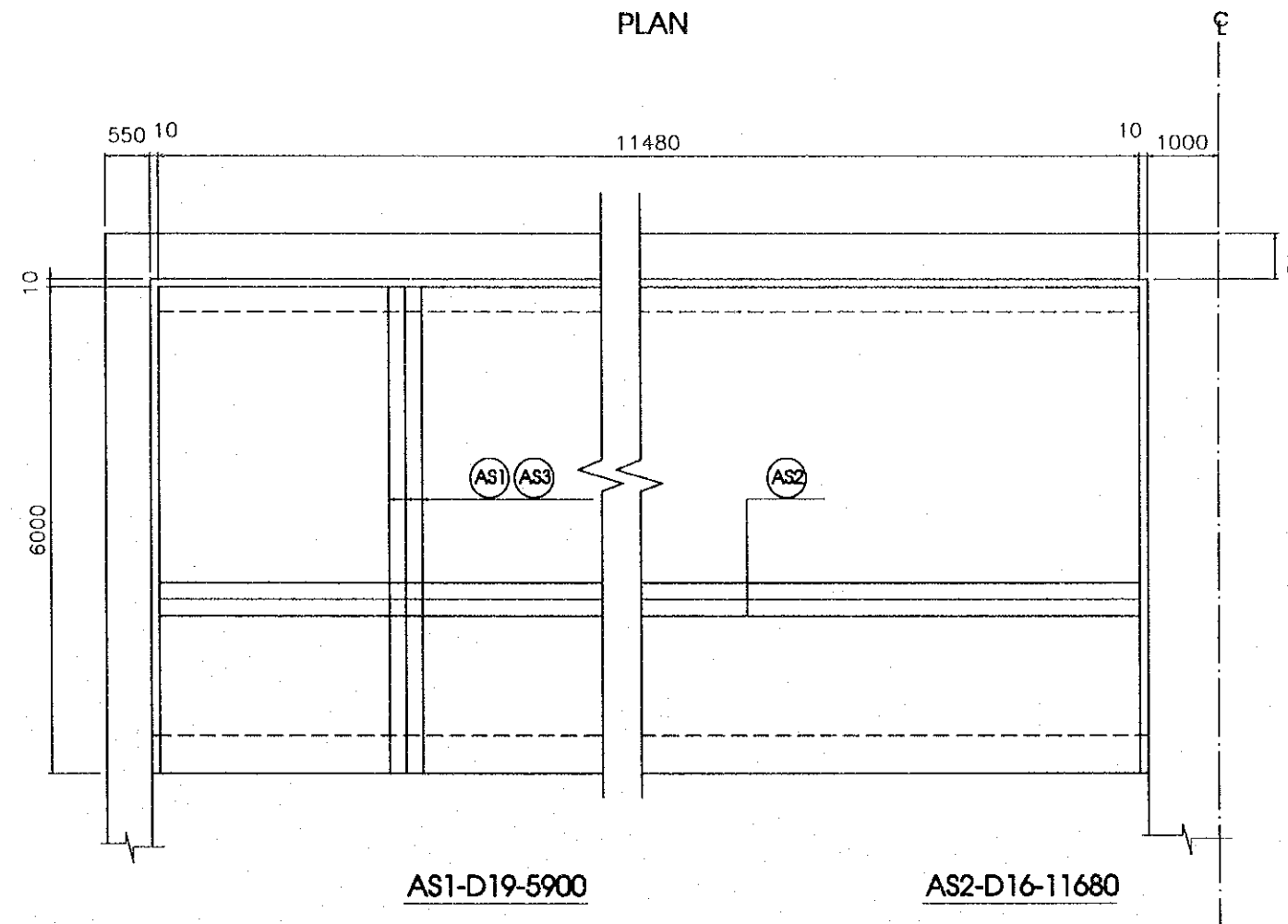
HALF SECTION B-B



DETAIL 1

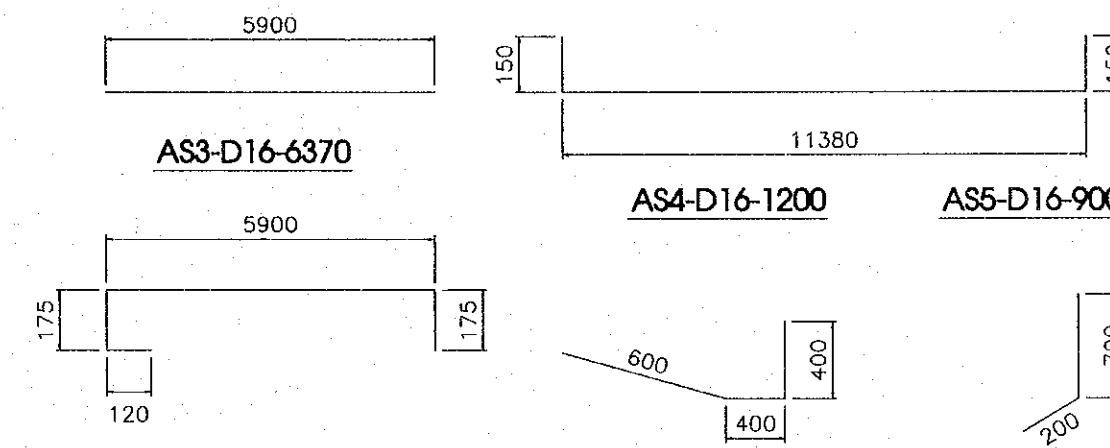


PLAN



REINFORCING BAR LIST FOR APPROACH SLAB

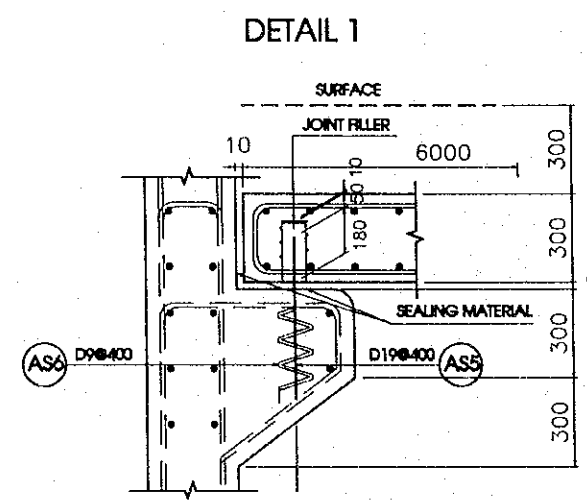
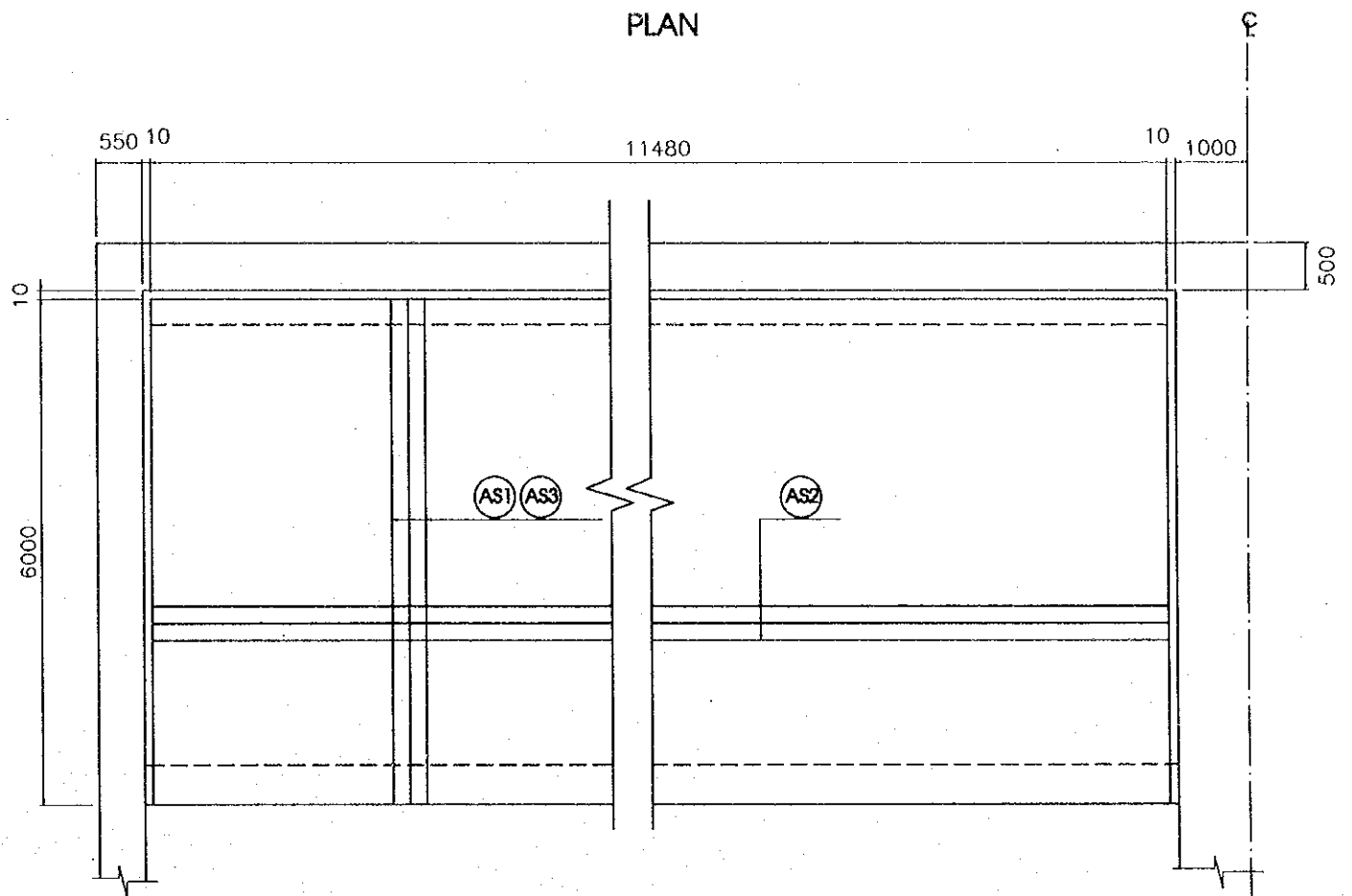
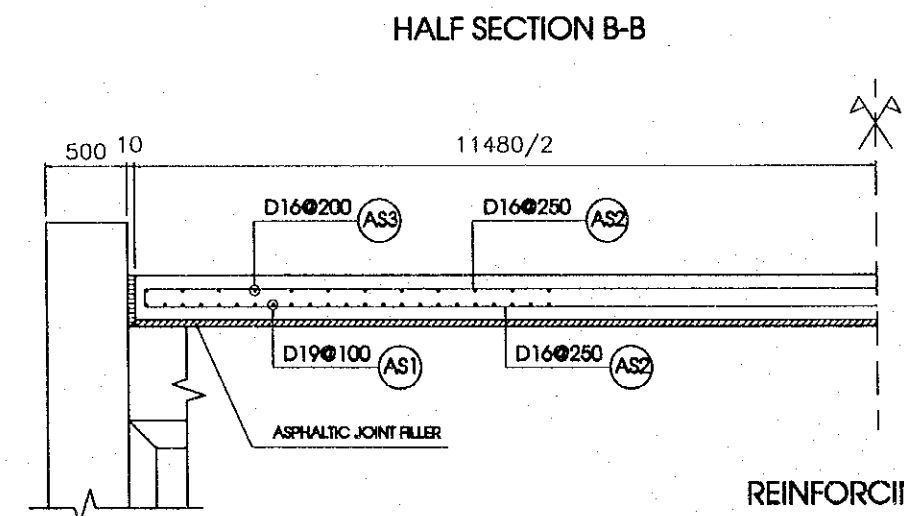
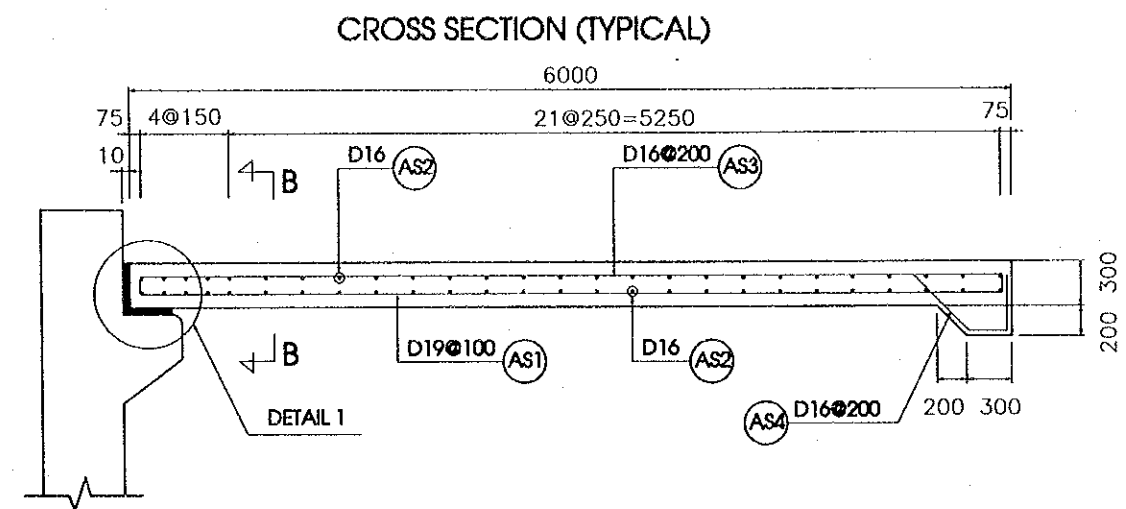
TYPE	SHAPE	DIAMETER OF BAR (mm)	QUANTITY OF BAR	LENGTH OF BAR (mm)	WEIGHT UNIT (Kg/m)	TOTAL STEEL (Kg)
AS1	—	D19	115	5900	2.250	1527
AS2	—	D16	52	11680	1.560	948
AS3	—	D16	58	6370	1.560	576
AS4	—	D16	58	1200	1.560	109
AS5	—	D19	28	900	2.250	57
AS6	—	D9	28	1260	0.499	18
Total for one slab						3235
D19						1584
D16						1633
D9						18
Quantity of concrete : 21.60 (m3)						
Total for one abutment						6470
D19						3188
D16						3266
D9						36
Quantity of concrete : 43.20 (m3)						



- NOTES:
- 1- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATES.
 - 2- REINFORCING BARS SHALL BE ARRANGED IN ACCORDANCE WITH THE AASHTO.
 - 3- SPLICES AND HOOKS SHALL BE PREPARED IN THE SHOP DRAWINGS PREPARED BY CONTRACTORS.
 - 4- REINFORCING BARS SHALL BE TWINED APPROPRIATELY AND STRONGLY.

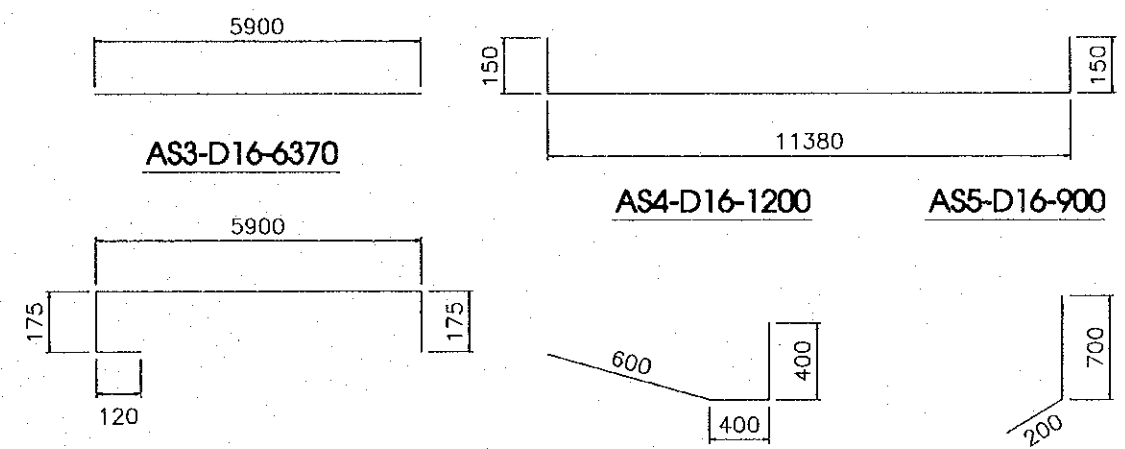
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. WATABE
PROJECT	RED RIVER BRIDGE (HANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.03.17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3	1/100	C-3-2-2	
KIM NGUU RIVER BRIDGE DETAIL OF APPROACH SLAB (2)			



REINFORCING BAR LIST FOR APPROACH SLAB

TYPE	SHAPE	DIAMETER OF BAR (mm)	QUANTITY OF BAR	LENGTH OF BAR (mm)	WEIGHT UNIT (Kg/m)	TOTAL STEEL (Kg)
AS1	—	D19	115	5900	2.250	1527
AS2	—	D16	52	11680	1.560	948
AS3	—	D16	58	6370	1.560	576
AS4	—	D16	58	1200	1.560	109
AS5	—	D19	28	900	2.250	57
AS6	—	D9	28	1260	0.499	18
Total for one slab						3235
D19						1584
D16						1633
D9						18
Quantity of concrete : 21.60 (m3)						
Total for 2 abutments						12933
D19						6333
D16						6530
D9						70
Quantity of concrete : 86.40 (m3)						

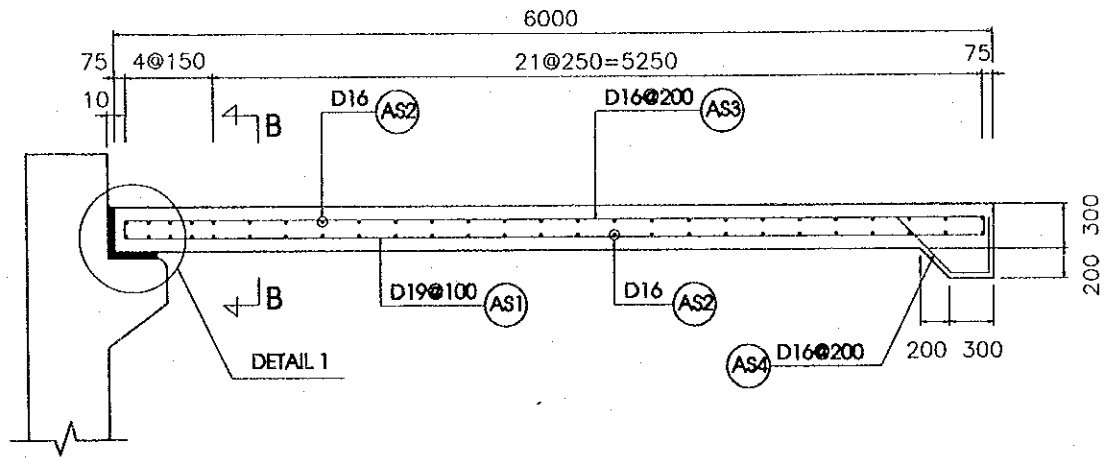


- NOTES:
- 1- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATES.
 - 2- REINFORCING BARS SHALL BE ARRANGED IN ACCORDANCE WITH THE AASHTO.
 - 3- SPLICES AND HOOKS SHALL BE PREPARED IN THE SHOP DRAWINGS PREPARED BY CONTRACTORS.
 - 4- REINFORCING BARS SHALL BE TWINED APPROPRIATELY AND STRONGLY.

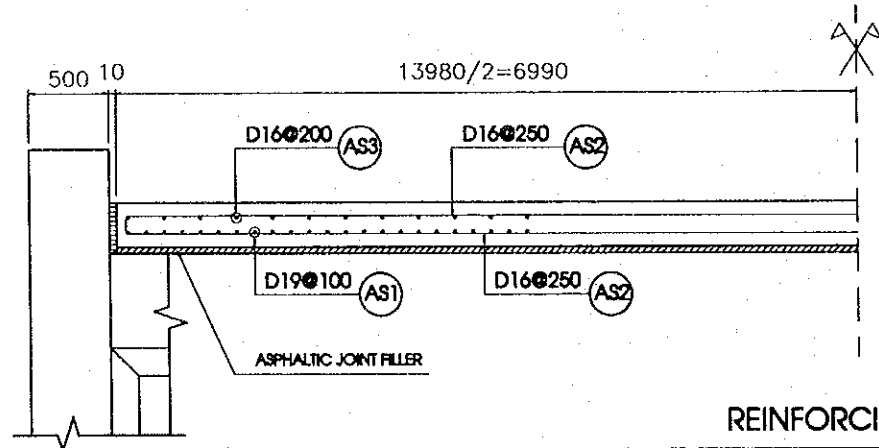
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME
PROJECT RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	
CONSULTANT PACIFIC CONSULTANTS INTERNATIONAL	DATE 2000.5.17	

PACKAGE 3	SCALE 1/100	DRAWING No. C-3-2-3	SHEET No.
KIM NGUU RIVER BRIDGE DETAIL OF APPROACH SLAB (3)			

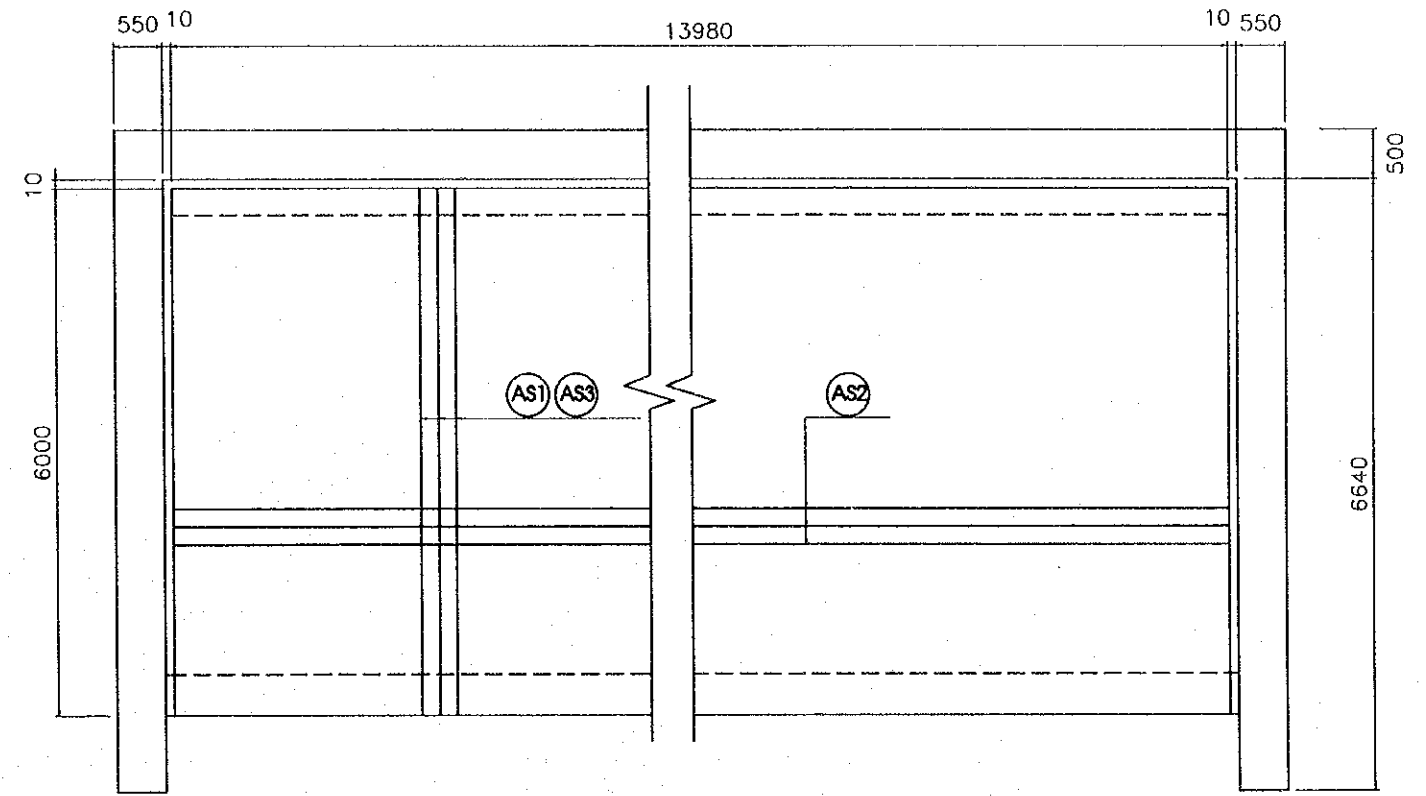
CROSS SECTION (TYPICAL)



HALF SECTION B-B



PLAN



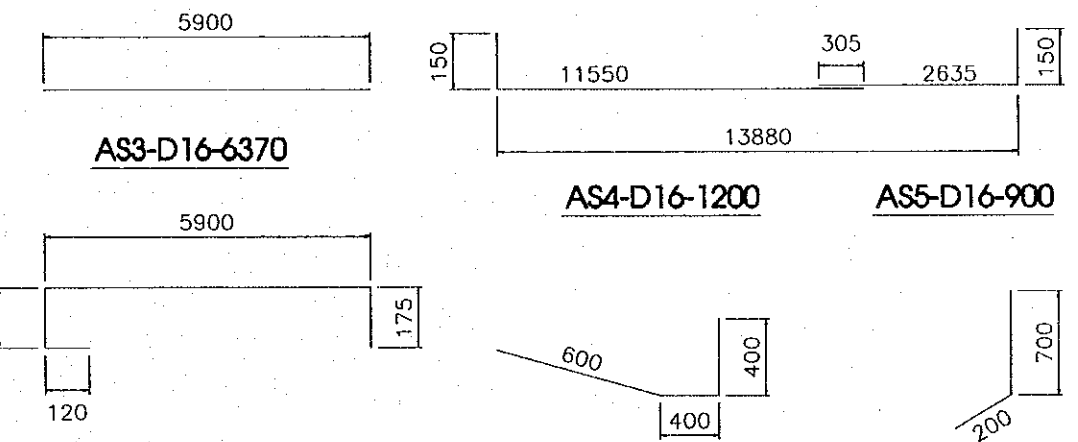
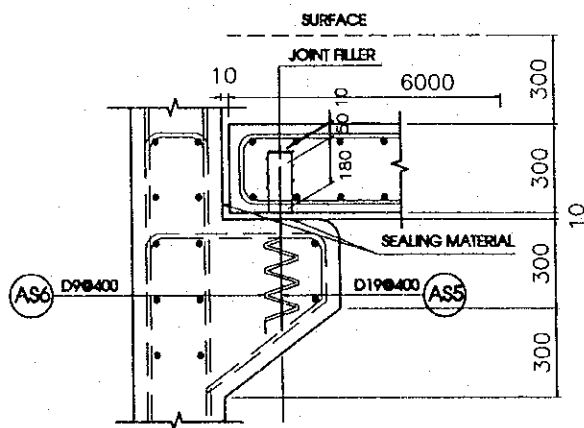
AS1-D19-5900

AS2-D16-11680

REINFORCING BAR LIST FOR APPROACH SLAB

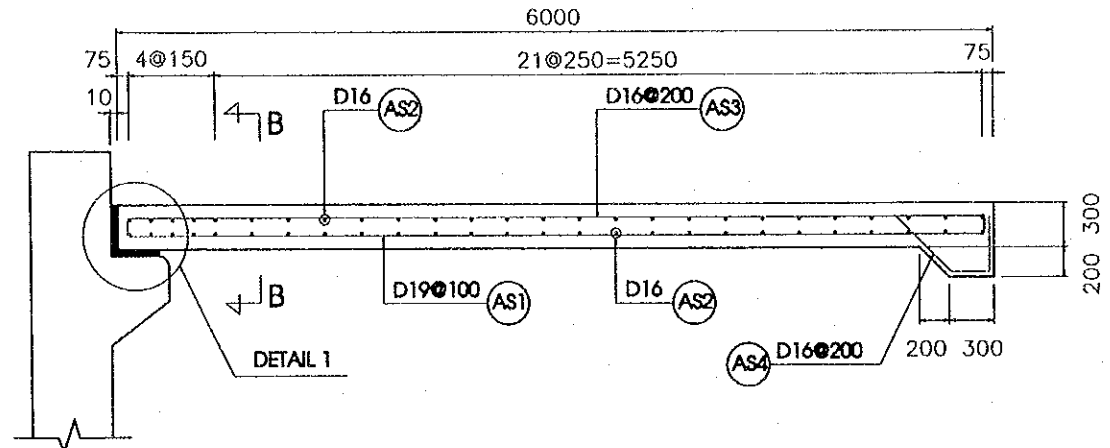
TYPE	SHAPE	DIAMETER OF BAR (mm)	QUANTITY OF BAR	LENGTH OF BAR (mm)	WEIGHT UNIT (Kg/m)	TOTAL STEEL (Kg)
AS1	—	D19	140	5900	2.250	1859
AS2	⌊	D16	52	14485	1.560	1175
AS3	⌊	D16	70	6370	1.560	696
AS4	⌋	D16	70	1200	1.560	131
AS5	⌋	D19	34	900	2.250	69
AS6	⌋	D9	34	1260	0.499	21
Total for one slab						3950
D19						1927
D16						2002
D9						21
Quantity of concrete : 26.30 (m3)						
Total for 4 abutment						15802
D19						7709
D16						8007
D9						86
Quantity of concrete : 105.2 (m3)						

DETAIL 1

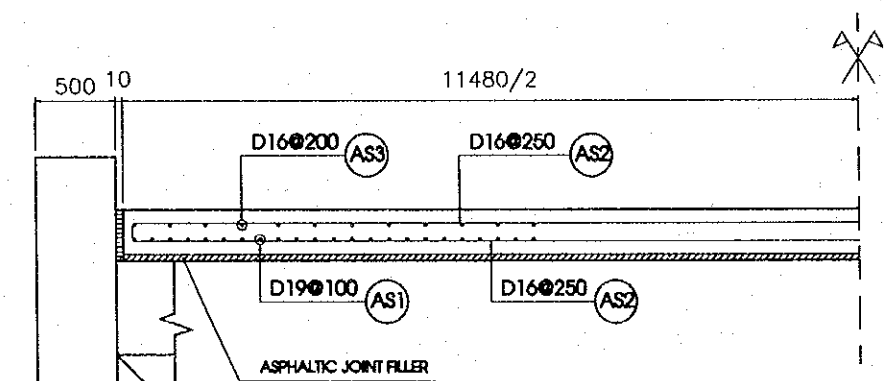


- NOTES:
- 1- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATES.
 - 2- REINFORCING BARS SHALL BE ARRANGED IN ACCORDANCE WITH THE AASHTO.
 - 3- SPLICES AND HOOKS SHALL BE PREPARED IN THE SHOP DRAWINGS PREPARED BY CONTRACTORS.
 - 4- REINFORCING BARS SHALL BE TWINED APPROPRIATELY AND STRONGLY.

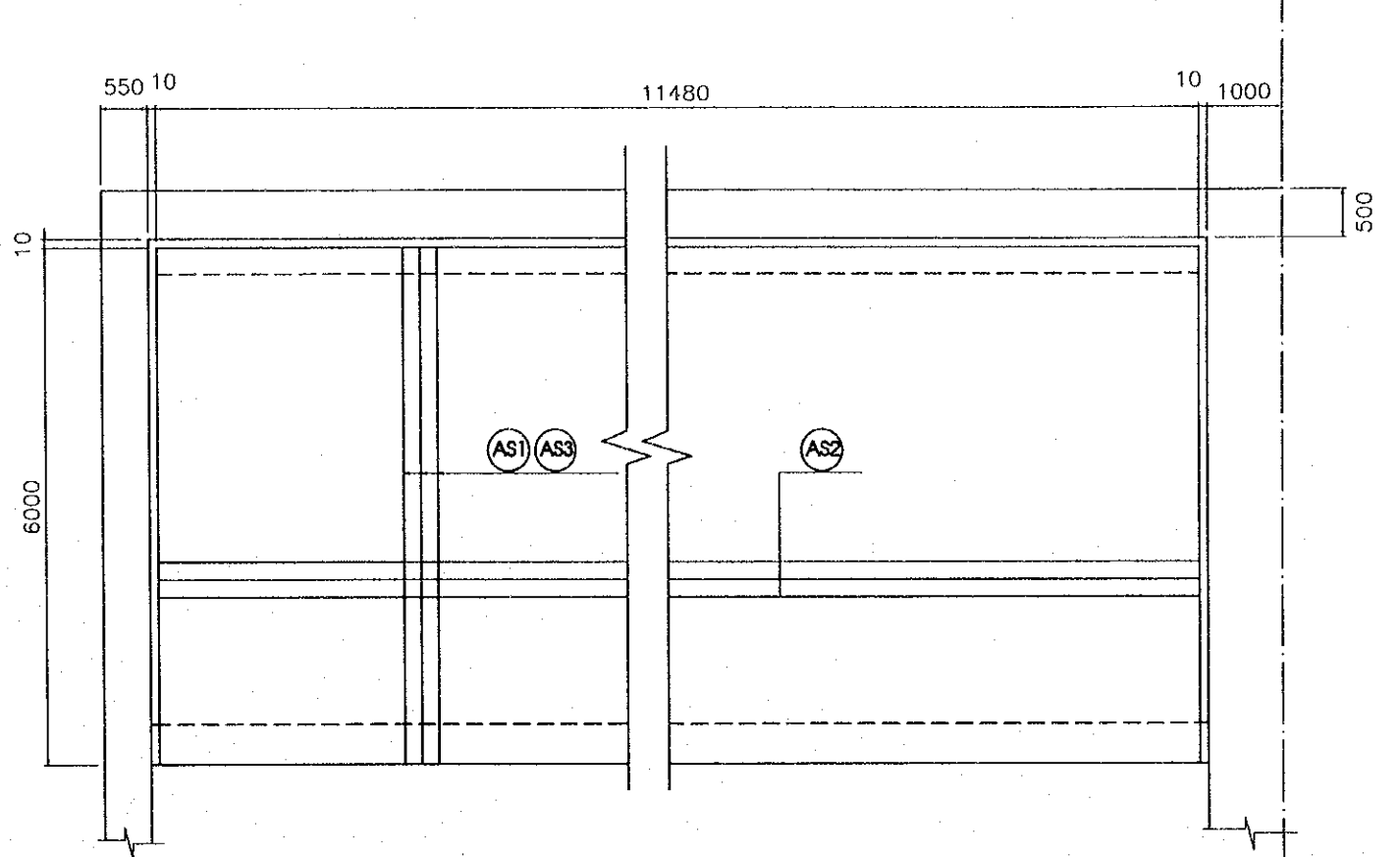
CROSS SECTION (TYPICAL)



HALF SECTION B-B



PLAN



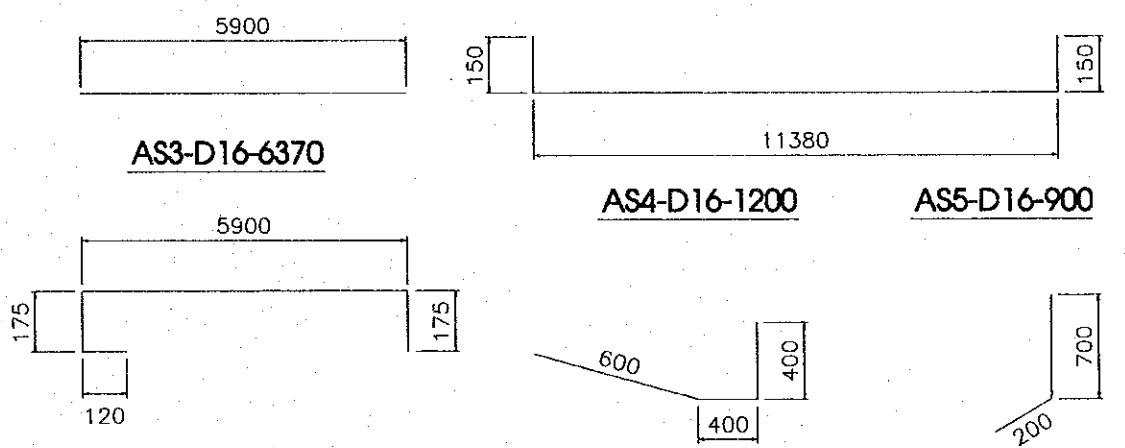
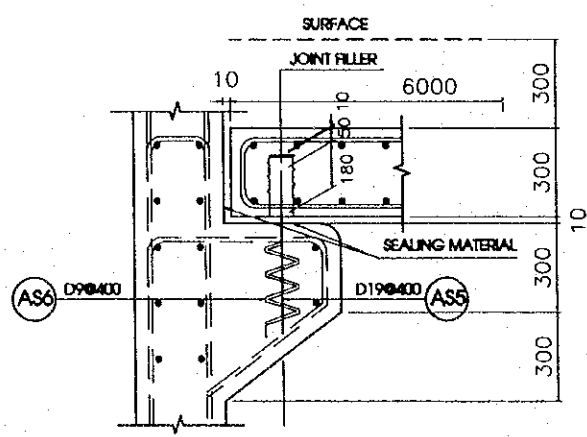
AS1-D19-5900

AS2-D16-11680

REINFORCING BAR LIST FOR APPROACH SLAB

TYPE	SHAPE	DIAMETER OF BAR (mm)	QUANTITY OF BAR	LENGTH OF BAR (mm)	WEIGHT UNIT (Kg/m)	TOTAL STEEL (Kg)
AS1	—	D19	115	5900	2.250	1527
AS2	—	D16	52	11680	1.560	948
AS3	—	D16	58	6370	1.560	576
AS4	—	D16	58	1200	1.560	109
AS5	—	D19	28	900	2.250	57
AS6	—	D9	28	1260	0.499	18
Total for one slab						3235
D19						1584
D16						1633
D9						18
Quantity of concrete : 21.60 (m3)						
Total for 2 abutment						12933
D19						6333
D16						6530
D9						70
Quantity of concrete : 86.4 (m3)						

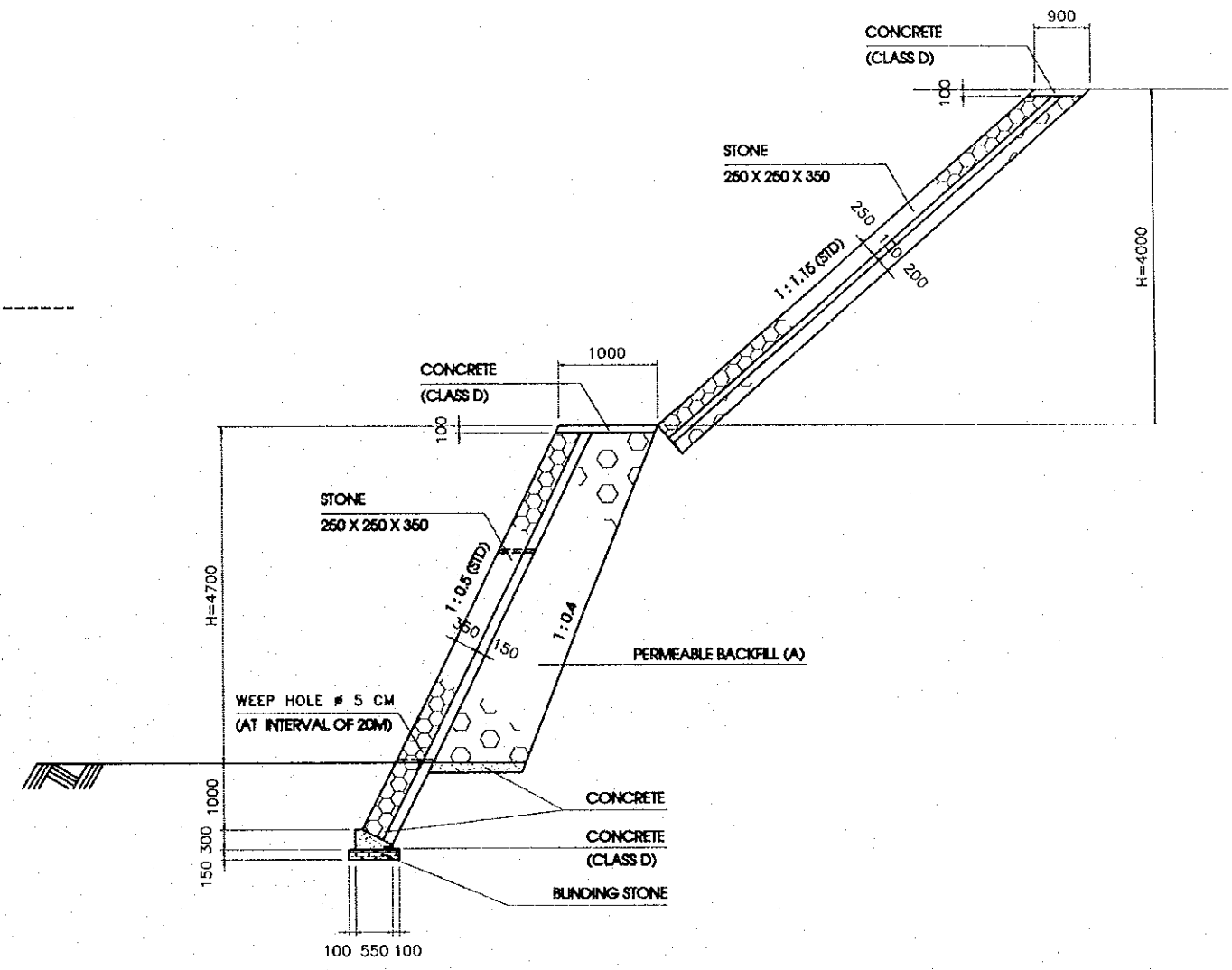
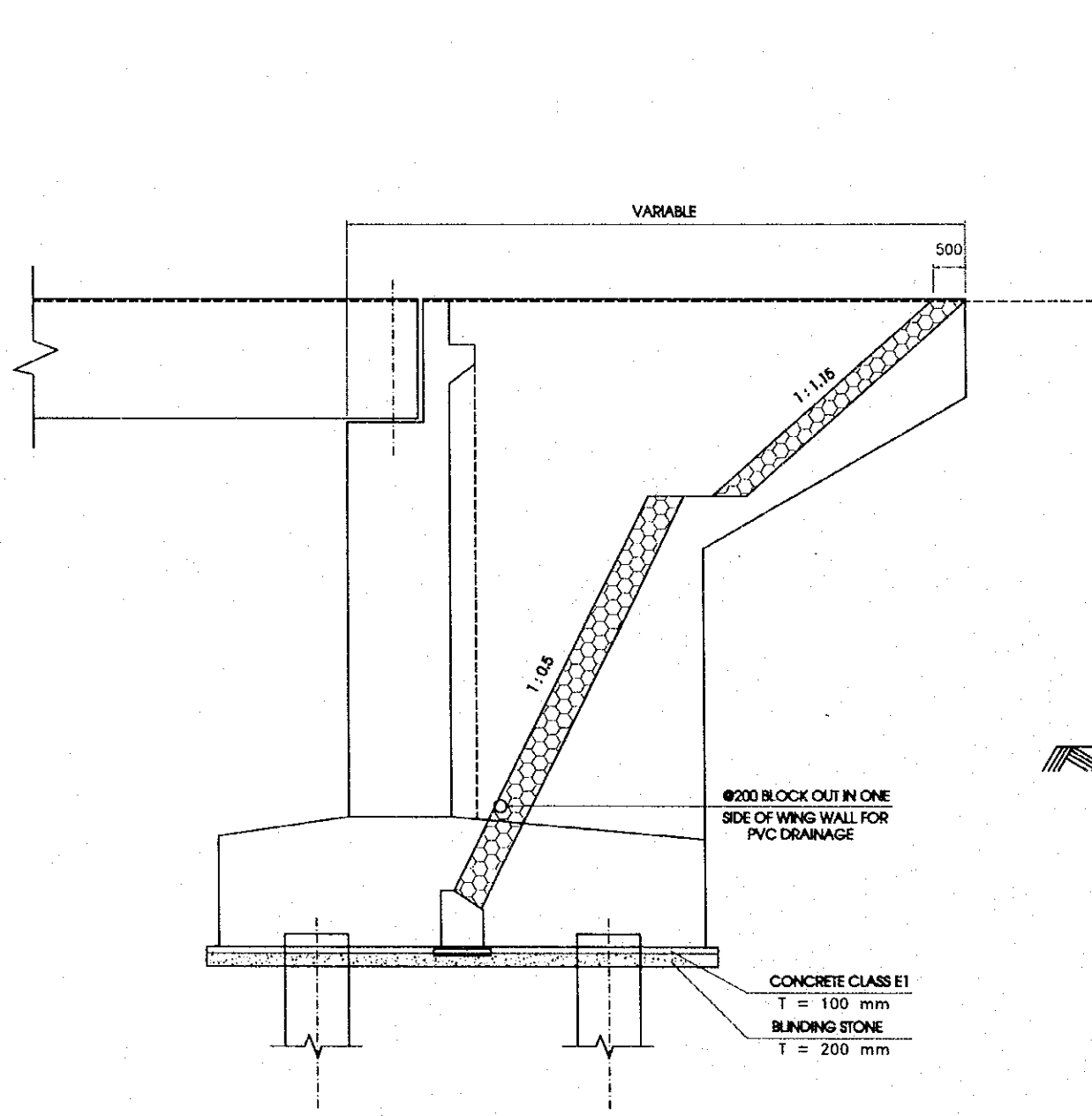
DETAIL 1



- NOTES:
- 1- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATES.
 - 2- REINFORCING BARS SHALL BE ARRANGED IN ACCORDANCE WITH THE AASHTO.
 - 3- SPLICES AND HOOKS SHALL BE PREPARED IN THE SHOP DRAWINGS PREPARED BY CONTRACTORS.
 - 4- REINFORCING BARS SHALL BE TWINED APPROPRIATELY AND STRONGLY.

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. WATABE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.8.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-3-2-5	
PHAP VAN VIADUCT BRIDGE DETAIL - OF SLOPE PROTECTION (1)			



NOTE:

1- SLOPE PROTECTION IS TO BE PROVIDED AROUND THE ABUTMENT OF BRIDGE AND ENBANKMENT OF 20M LONG IN LONGITUDINAL DIRECTION

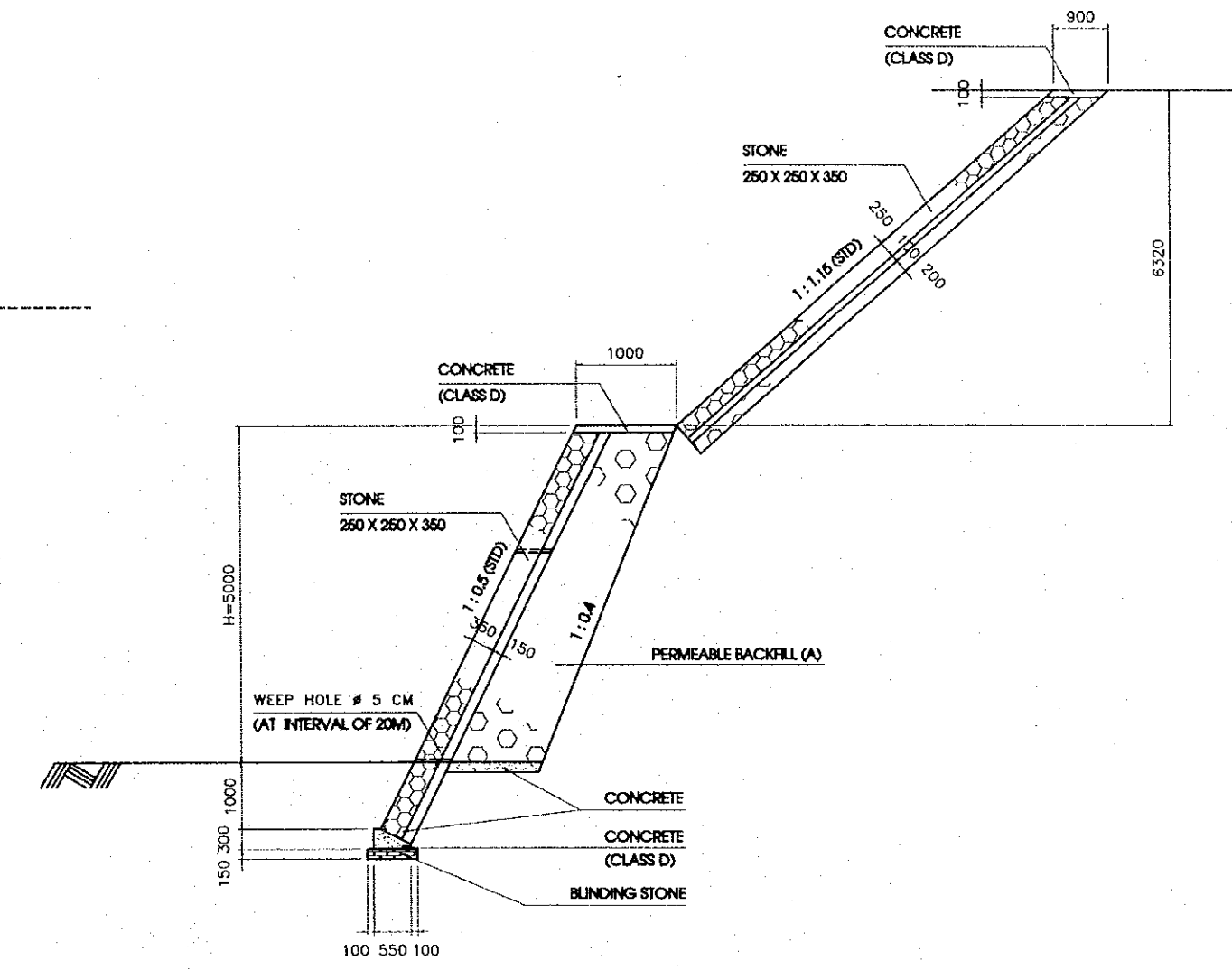
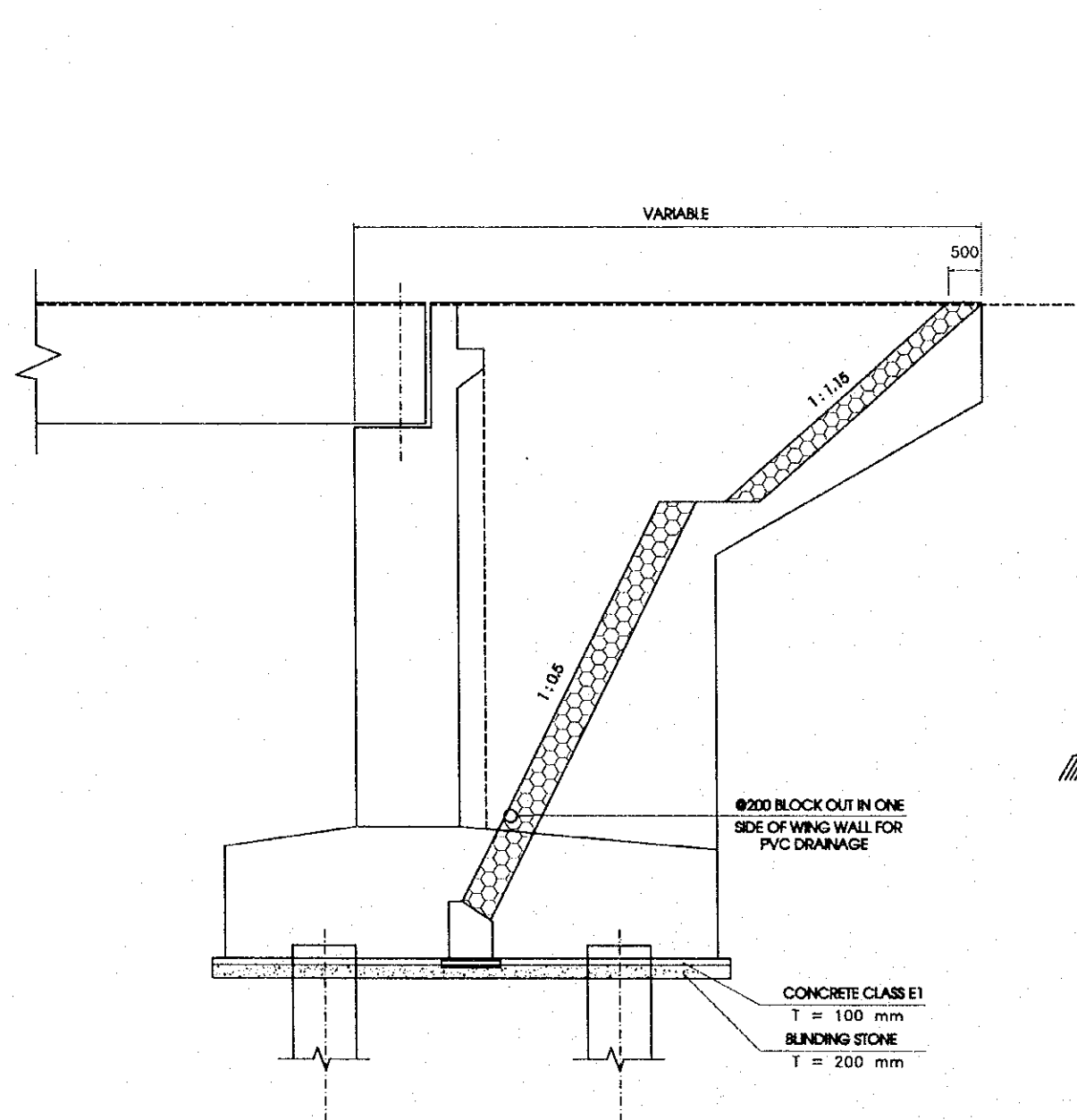
2- MATERIALS:

- STONES SIZE ARE TO BE 25 x 25 x 35 (cm) AND 20 x 20 x 25 (cm)
- BACKFILL CONCRETE IS TO BE CLASS-D
- BACKFILL GRAVEL SIZE IS TO BE 10 (cm) TO (cm)

41.3

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. WATABE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 11. 17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-3-2-6	
NGUYEN TAM TRINH BRIDGE DETAIL - OF SLOPE PROTECTION (2)			

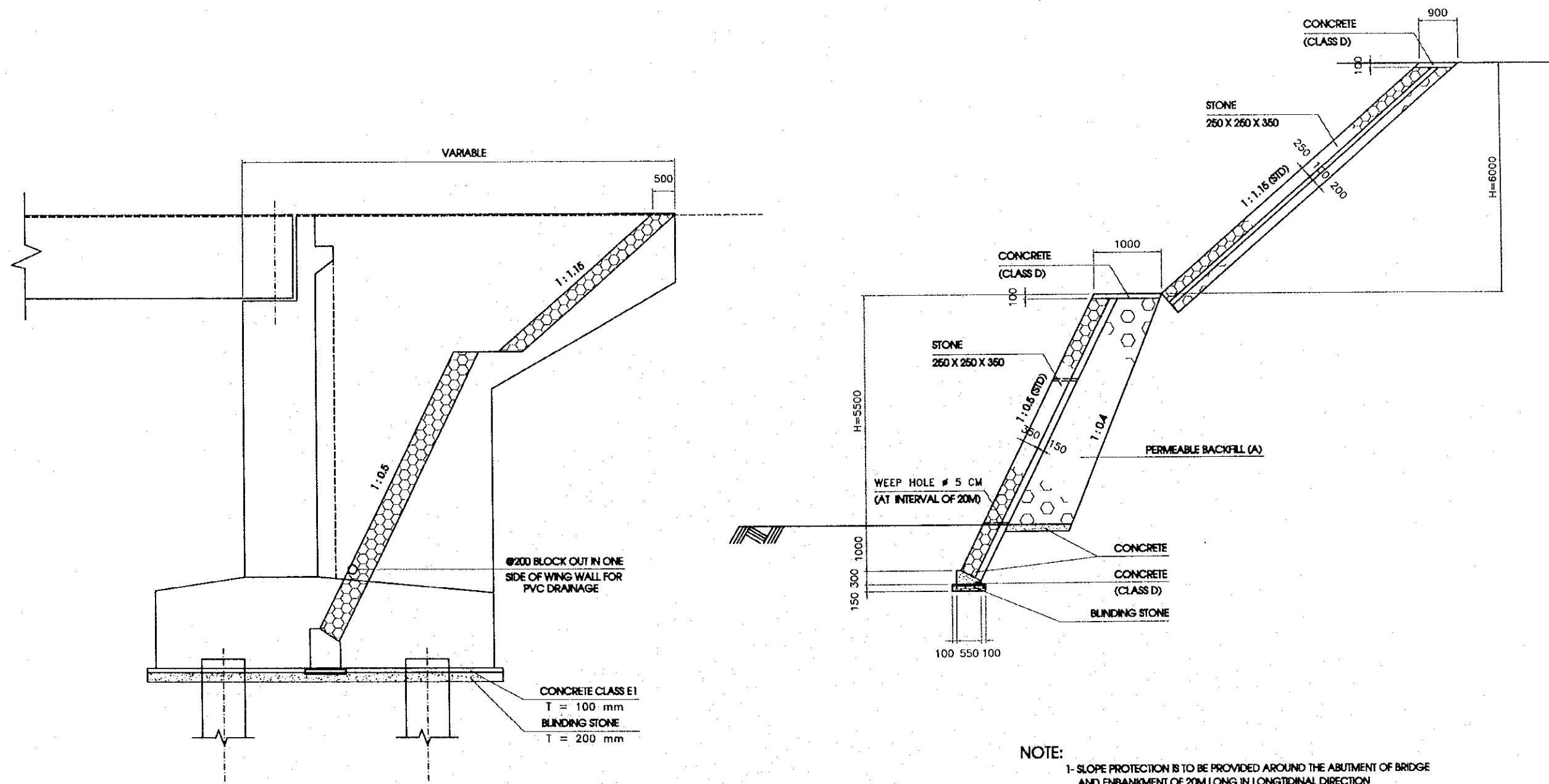


- NOTE:**
- SLOPE PROTECTION IS TO BE PROVIDED AROUND THE ABUTMENT OF BRIDGE AND ENBANKMENT OF 20M LONG IN LONGITUDINAL DIRECTION.
 - MATERIALS:
 - STONES SIZE ARE TO BE 25 x 25 x 35 (cm) AND 20 x 20 x 25 (cm)
 - BACKFILL CONCRETE IS TO BE CLASS-D
 - BACKFILL GRAVEL SIZE IS TO BE 10 (cm) TO (cm)

414

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. WATADE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. WATADE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000. 11. 17

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-3-2-7	
A, B RAMP BRIDGE DETAIL - OF SLOPE PROTECTION (3)			



NOTE:

1- SLOPE PROTECTION IS TO BE PROVIDED AROUND THE ABUTMENT OF BRIDGE AND ENBANKMENT OF 20M LONG IN LONGITUDINAL DIRECTION

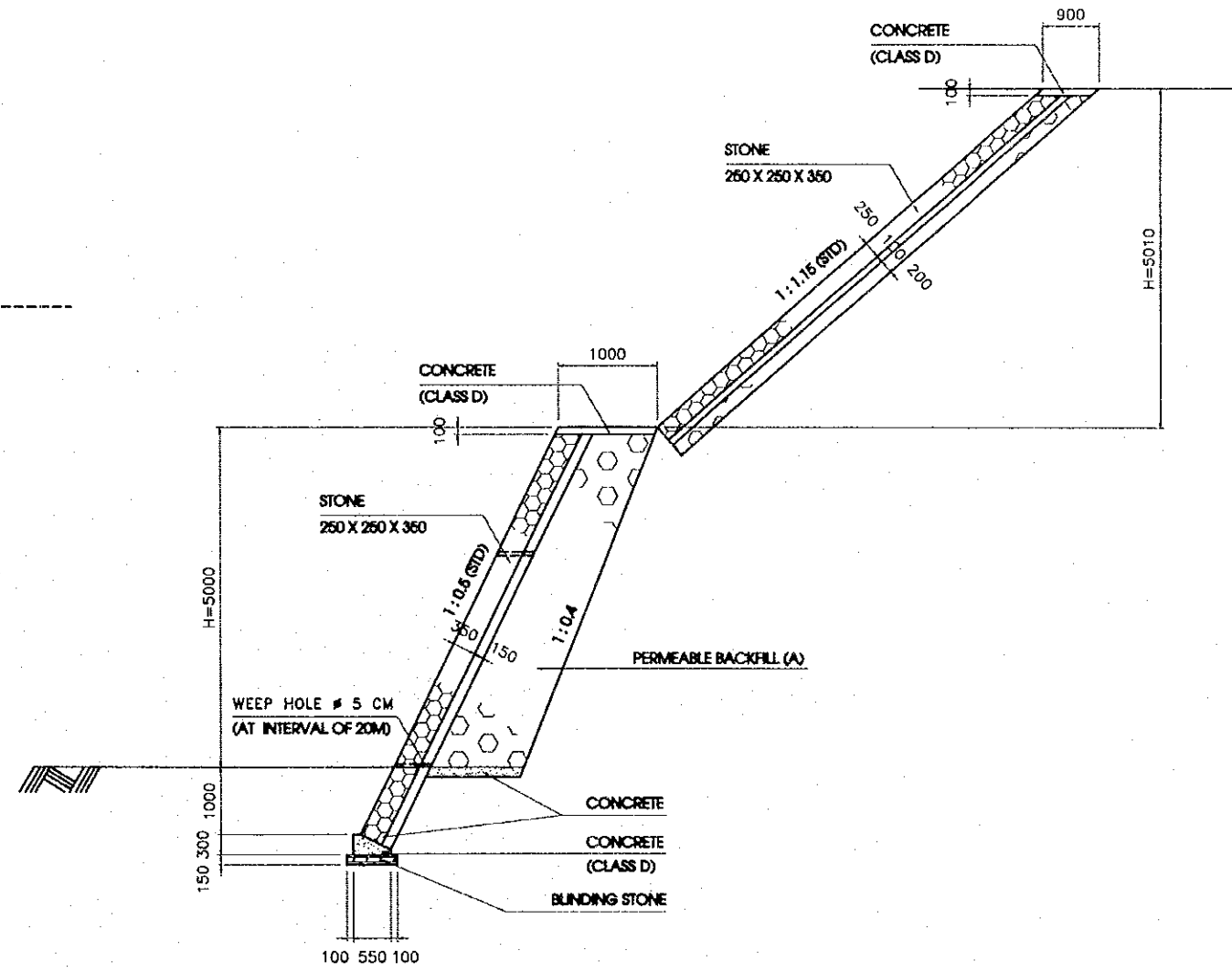
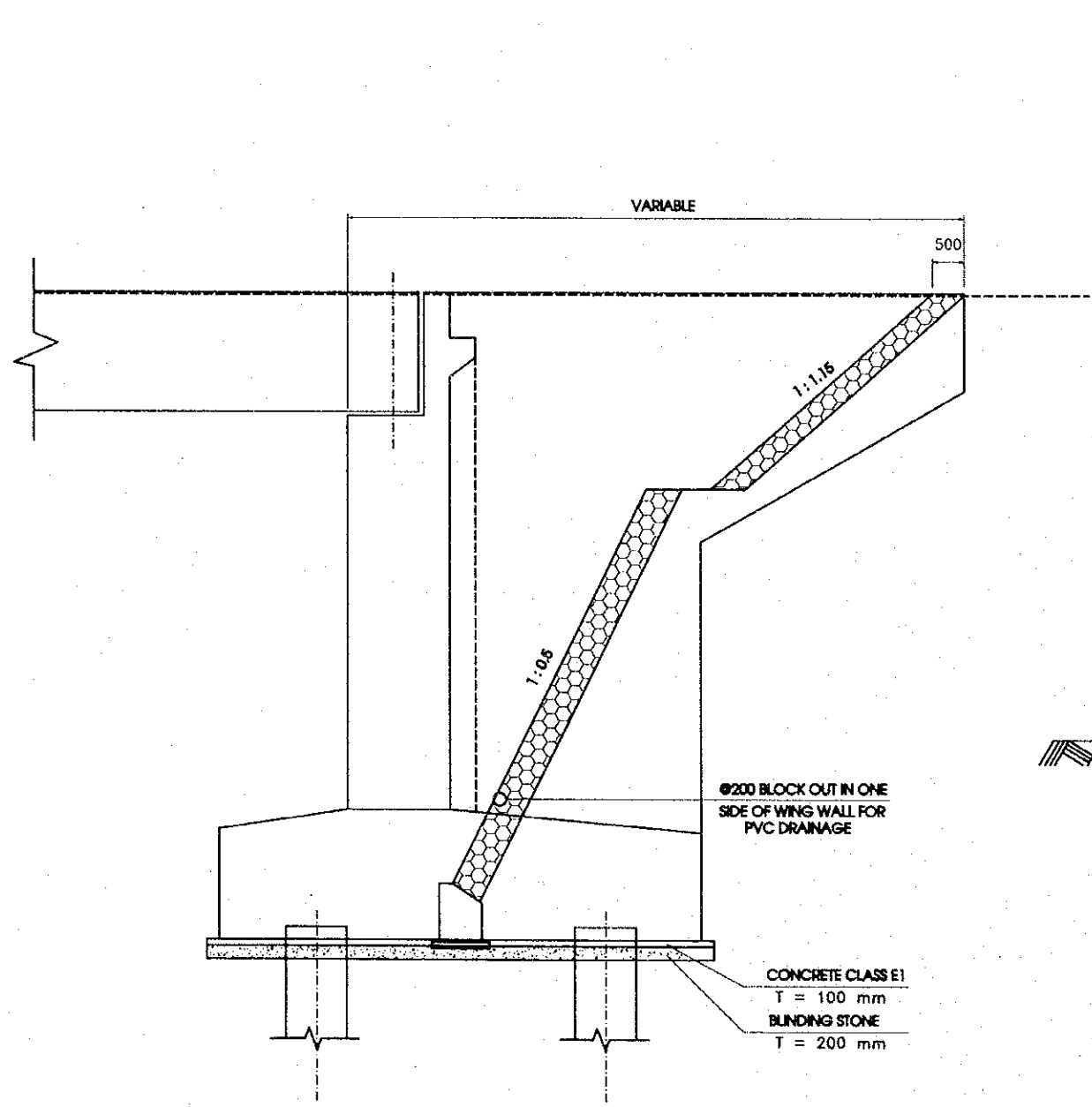
2- MATERIALS:

- STONES SIZE ARE TO BE 25 x 25 x 35 (cm) AND 20 x 20 x 25 (cm)
- BACKFILL CONCRETE IS TO BE CLASS-D
- BACKFILL GRAVEL SIZE IS TO BE 10 (cm) TO (cm)

410

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM THANG LONG PROJECTS MANAGEMENT UNIT, MINISTRY OF TRANSPORT		DESIGNED BY	S. WATABE
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		NAME	S. WATABE
PROJECT	RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT	SIGNATURE	<i>[Signature]</i>
CONSULTANT	PACIFIC CONSULTANTS INTERNATIONAL	DATE	2000.11.14

PACKAGE	SCALE	DRAWING No.	SHEET No.
3		C-3-2-8	
RAMP-C BRIDGE DETAIL - OF SLOPE PROTECTION (4)			



NOTE:

1- SLOPE PROTECTION IS TO BE PROVIDED AROUND THE ABUTMENT OF BRIDGE AND ENBANKMENT OF 20M LONG IN LONGITUDINAL DIRECTION

2- MATERIALS:

- STONES SIZE ARE TO BE 25 x 25 x 35 (cm) AND 20 x 20 x 25 (cm)
- BACKFILL CONCRETE IS TO BE CLASS-D
- BACKFILL GRAVEL SIZE IS TO BE 10 (cm) TO (cm)

416 E





JICA