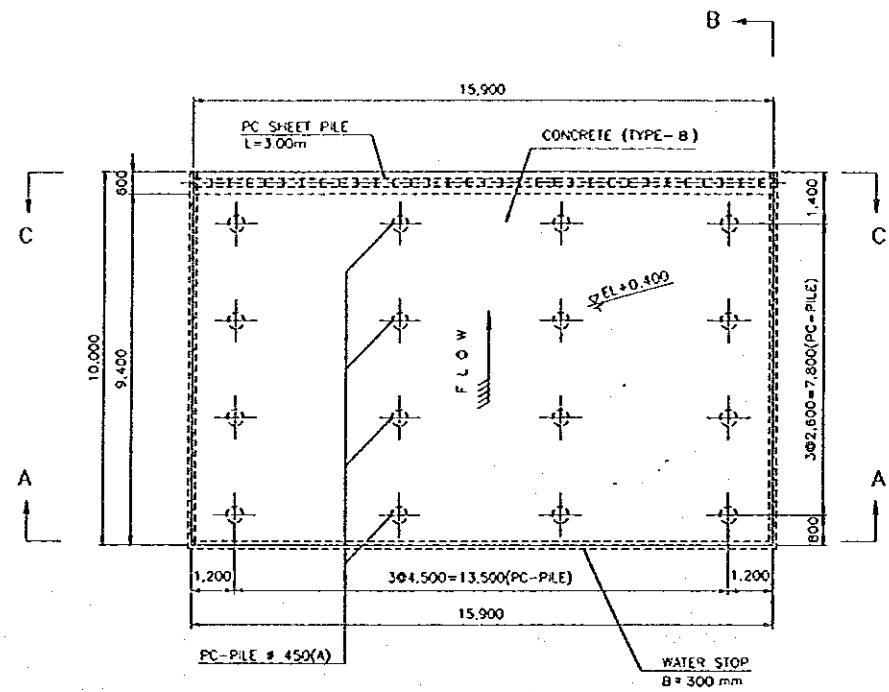


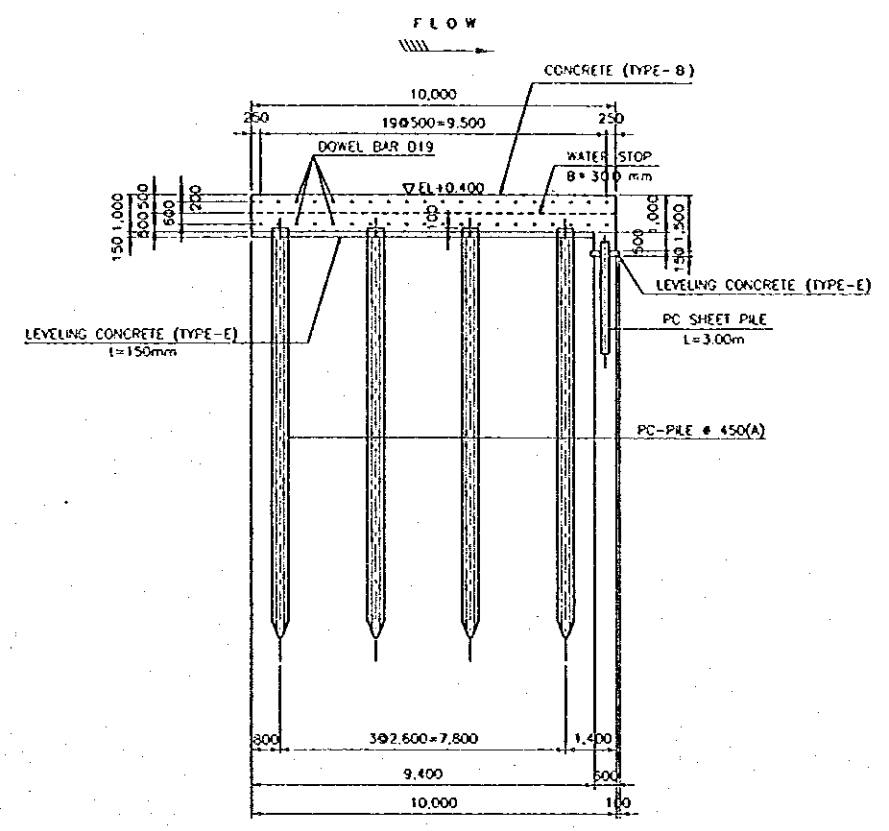
NOTE : PILE LENGTH SHOWN ON THE DRAWING IS TENTATIVE. THE CONTRACTOR SHALL DETERMINE THE LENGTH OF PILE BY TEST PILING.

| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |

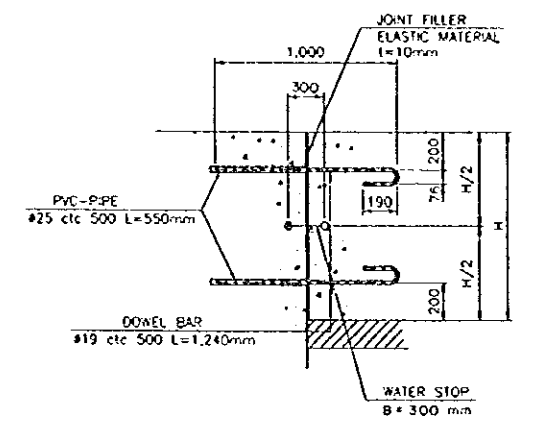
| | | |
|---|--|---|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROVINCE CENTRAL JAVA |
| JATUNGSUBANA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT WEIR PIER, GATE FLOOR SLAB AND APRON DOWNSTREAM CONCRETE APRON - 1 (2/2) | | PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY |
| JAPAN INTERNATIONAL COOPERATION AGENCY C/O INDOBRAND CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND JARCO INTERNATIONAL INC. | | DRAWING NO. W-8-P8-W-81-10 SHEET NO. 55 |
| CHIEF OF PLANNING AND DESIGN PROJECT MANAGER | | DATE CONTRACT NO. |



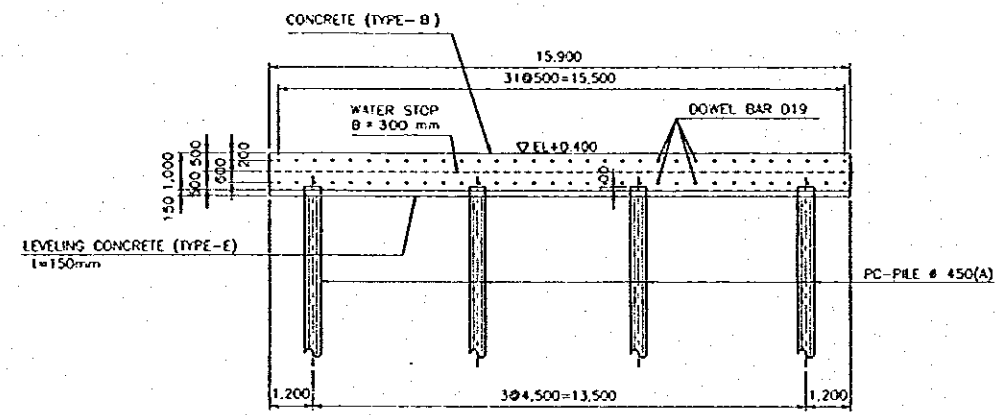
PLAN
SCALE A



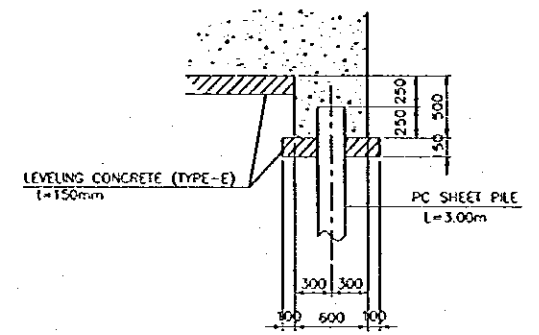
SECTION B-B
SCALE A



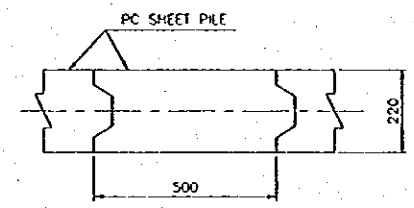
DETAIL OF JOINTING
SCALE C



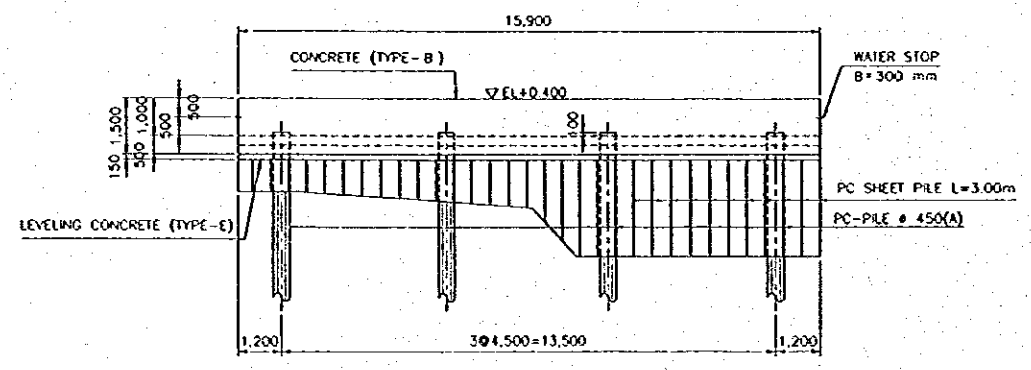
SECTION A-A
SCALE A



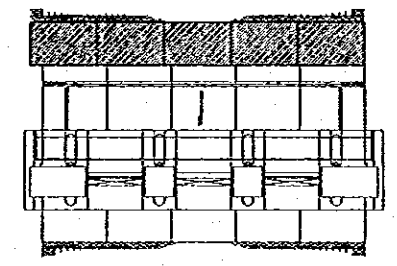
DETAIL OF CUTOFF
SCALE B



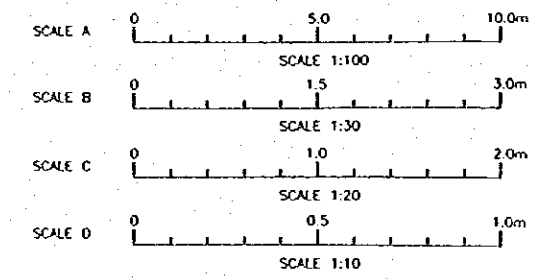
SECTION OF PC SHEET PILE
SCALE D



SECTION C-C
SCALE A



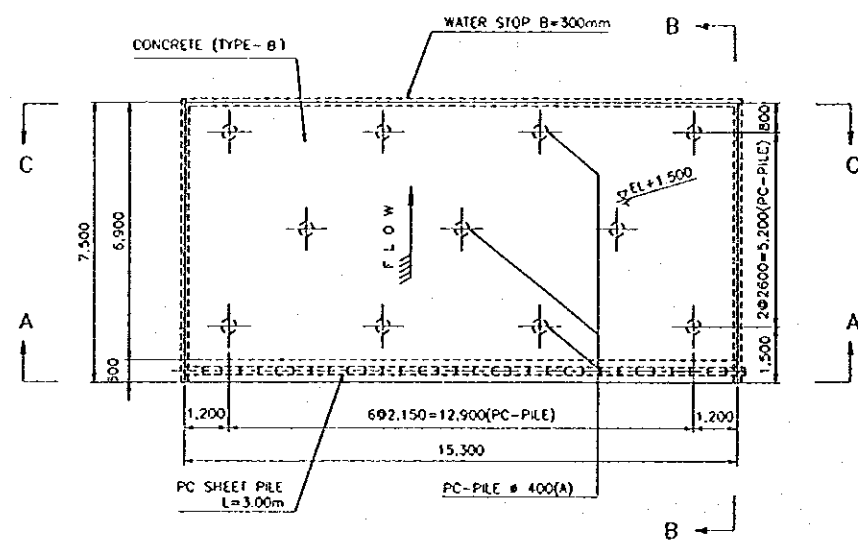
KEY PLAN



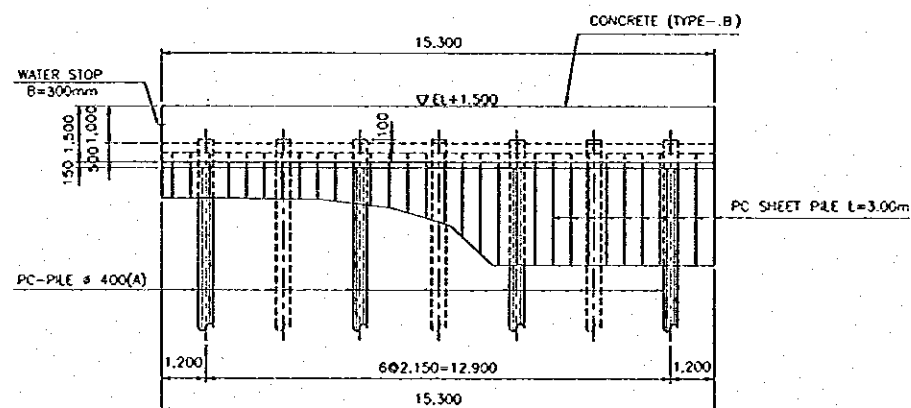
NOTE : PILE LENGTH SHOWN ON THE DRAWING IS TENTATIVE.
THE CONTRACTOR SHALL DETERMINE THE LENGTH OF PILE BY TEST PILING.

| | | |
|--|--|--|
| THIS REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROVINCE CENTRAL JAVA |
| PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA | | DISTRICT SEMARANG CITY |
| COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT WEIR PIER, GATE FLOOR SLAB AND APRON DOWNSTREAM CONCRETE APRON - 2 | | DRAWING NO. W-0-P-2-Ws-31-41 SHEET NO. 55 |
| JAFAR INTERNATIONAL COOPERATION AGENCY C/O ENGINEERING CO., LTD. 21 400-00000000 PACIFIC COMMERCE BANK INTERNATIONAL BANKING CORPORATION | | DATE CONTRACT NO. |
| DESIGNED CHECKED CRYSTAL INTERNATIONAL INC. | | PROJECT MANAGER |

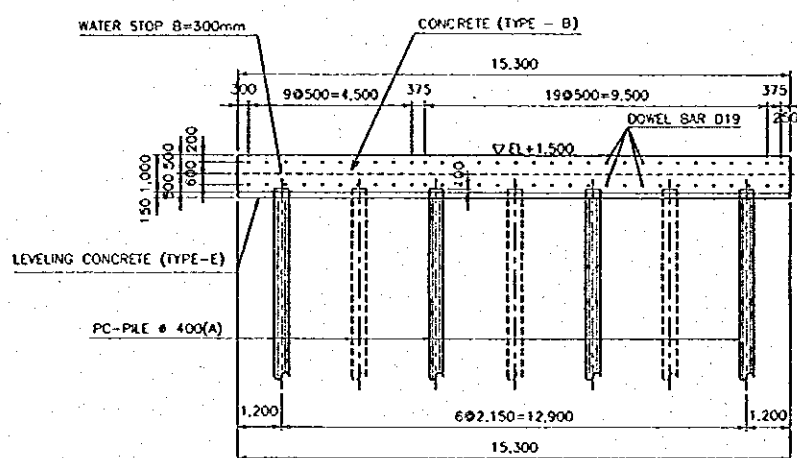
| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |



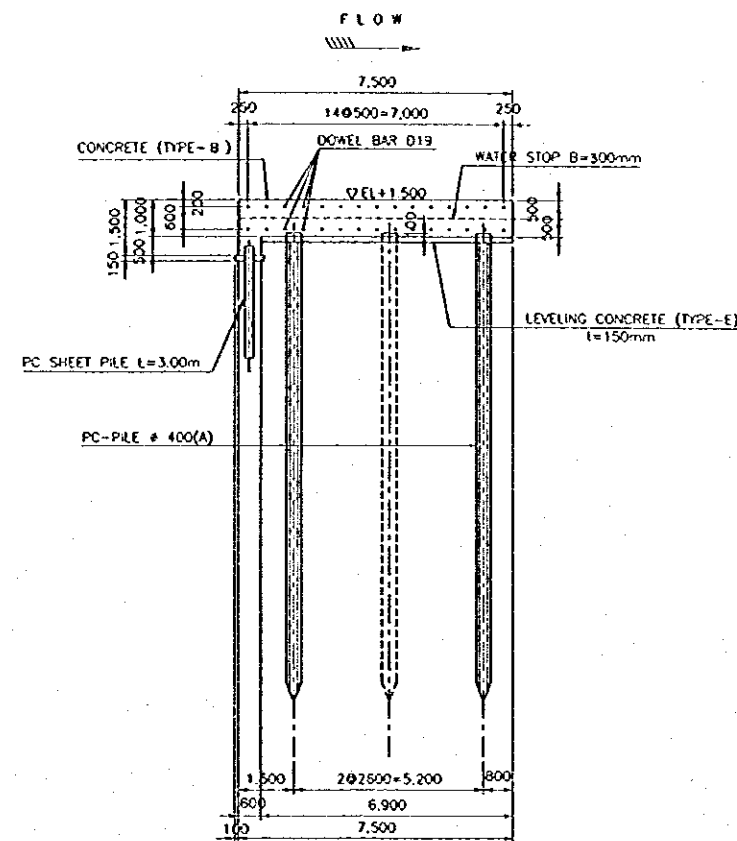
PLAN
SCALE A



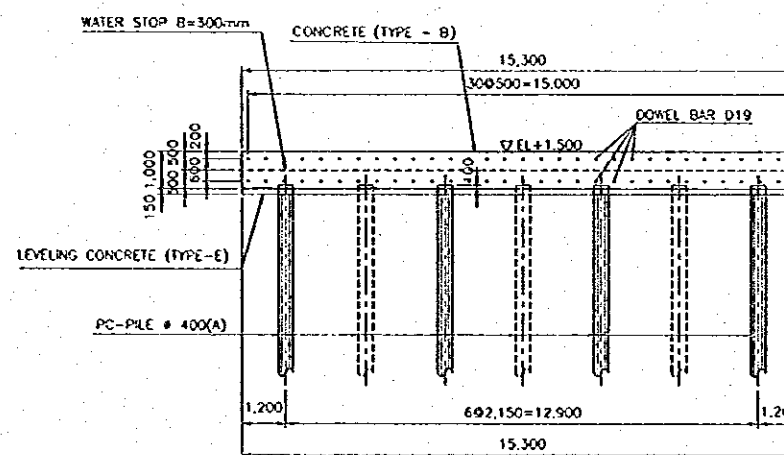
SECTION A-A
SCALE A



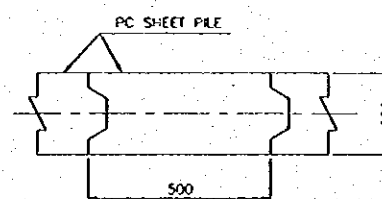
SECTION C-C (END SECTION)
SCALE A



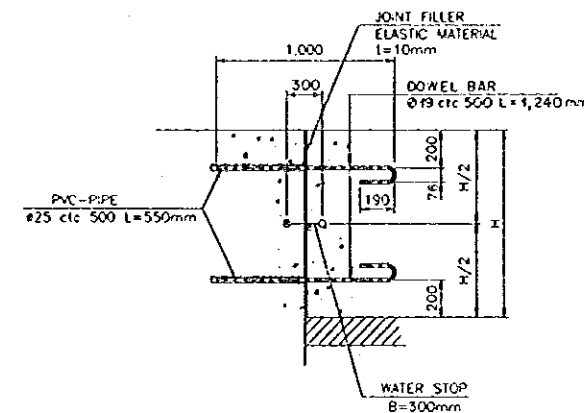
SECTION B-B
SCALE A



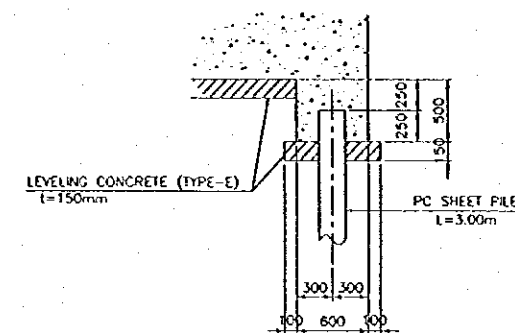
SECTION C-C (MIDDLE SECTION)
SCALE A



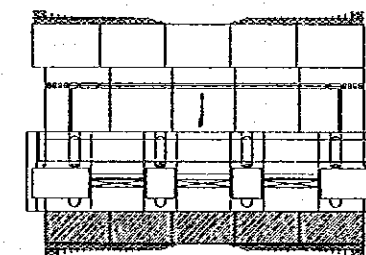
SECTION OF PC SHEET PILE
SCALE D



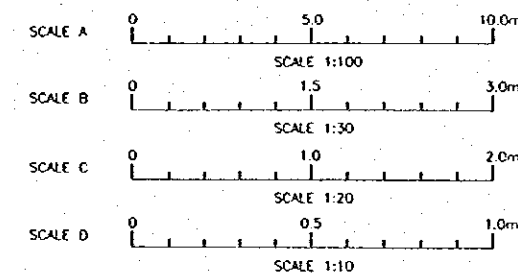
DETAIL OF JOINTING
SCALE C



DETAIL OF CUTOFF
SCALE B

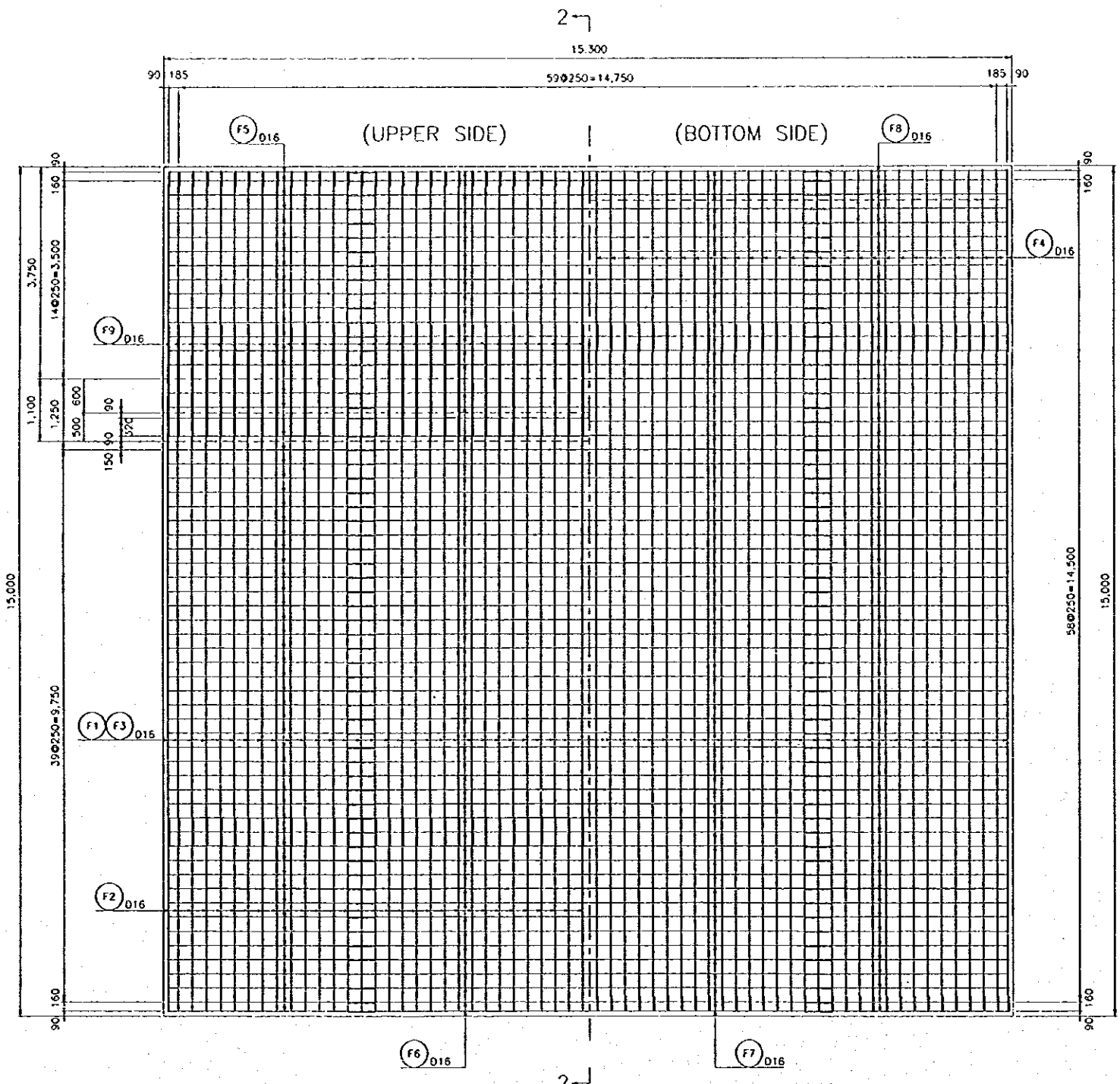


KEY PLAN

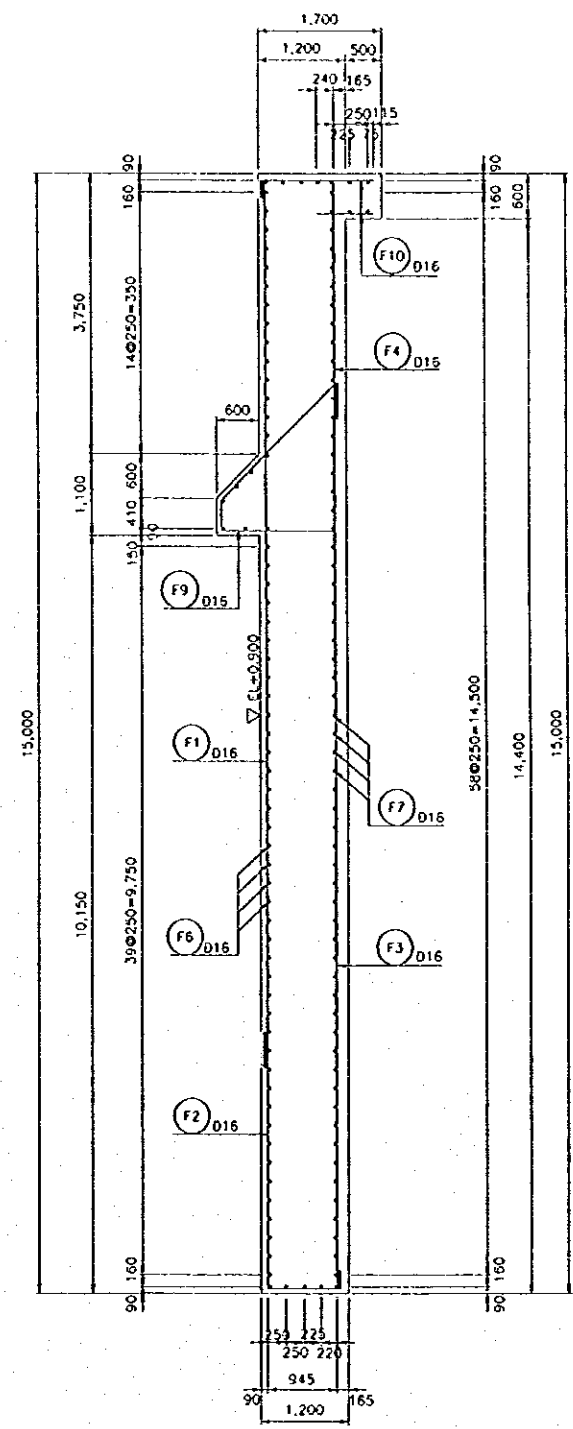


NOTE: PILE LENGTH SHOWN ON THE DRAWING IS TENTATIVE. THE CONTRACTOR SHALL DETERMINE THE LENGTH OF PILE BY TEST PILING.

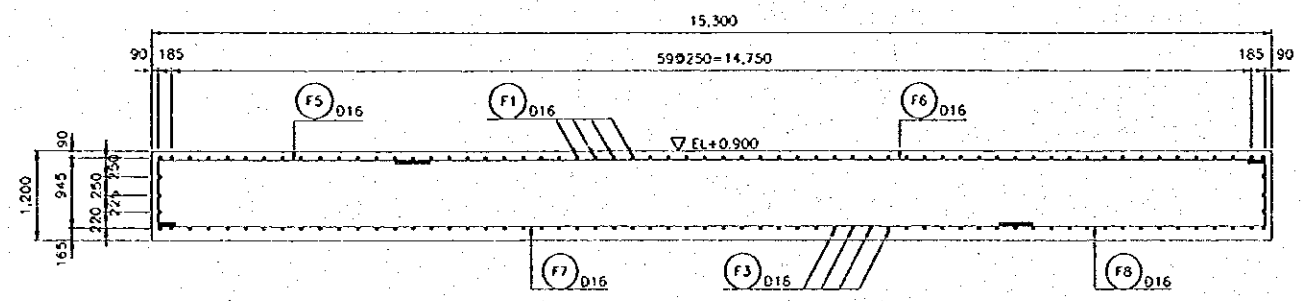
| | | | | | | | | |
|-----|------|-----------|------------|----------|--|--|--|--|
| | | | | | THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROVINCE CENTRAL JAVA | |
| | | | | | PT. BANGSAKUMUDA CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PAKO INTERNATIONAL INC. | | PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA | |
| | | | | | COMPONENT: WEST FLOODWAY / GARANO RIVER IMPROVEMENT WEIR PIER, GATE FLOOR SLAB AND APRON UPSTREAM CONCRETE APRON | | DISTRICT SEMARANG CITY | |
| | | | | | DRAWING NO. W.R.P2-Wa-3t-42 SHEET NO. 57 | | CONTRACT NO. | |
| | | | | | APPROVED: <i>[Signature]</i> CHIEF OF PLANNING AND DESIGN | | DATE: <i>[Date]</i> PROJECT MANAGER | |
| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED | | | |



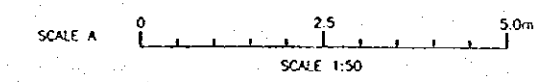
BAR ARRANGEMENT ON UPPER SIDE AND BOTTOM SIDE OF CONCRETE APRON(EL+0.900:MIDDLE POSITION)



2 - 2

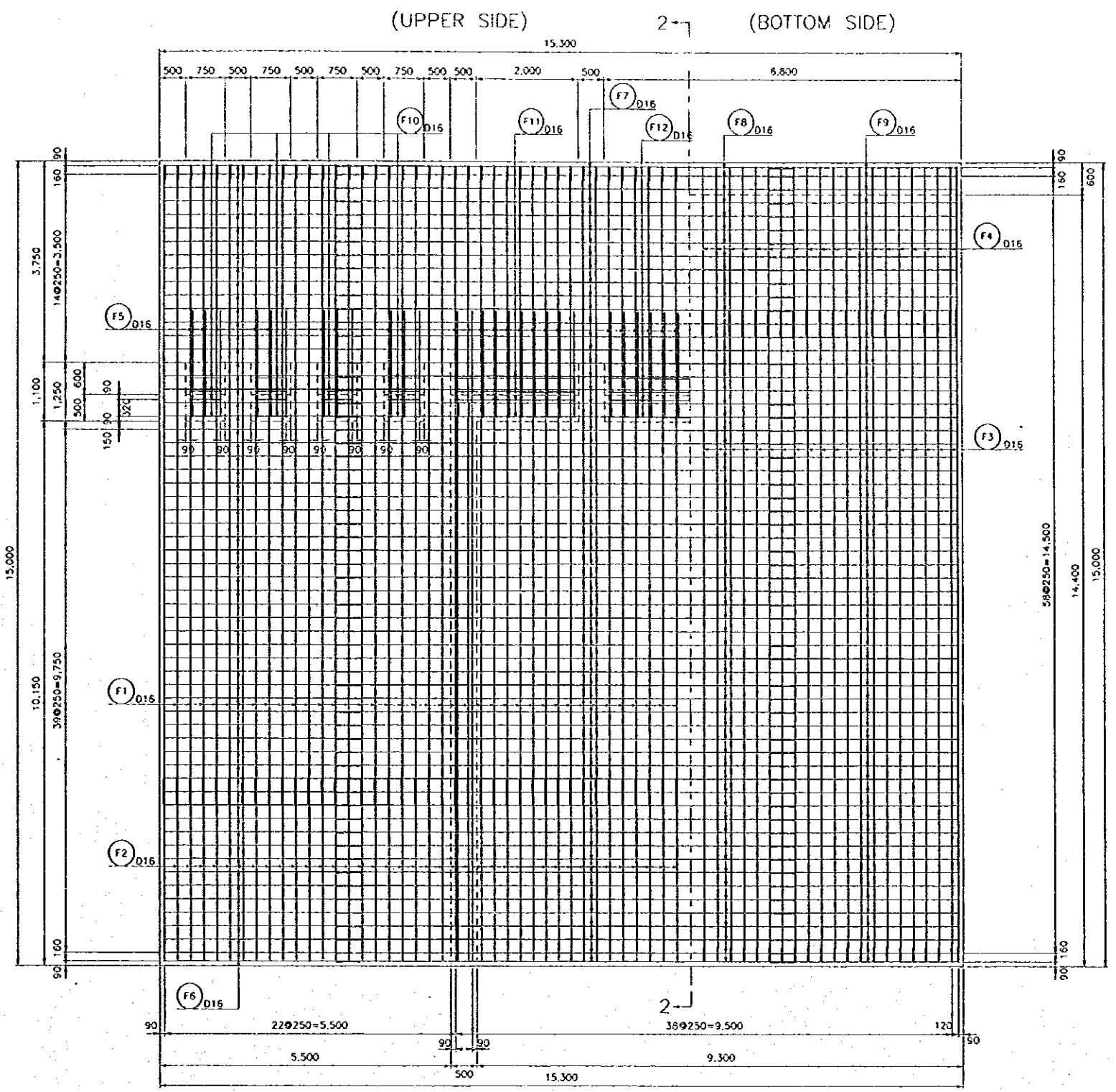
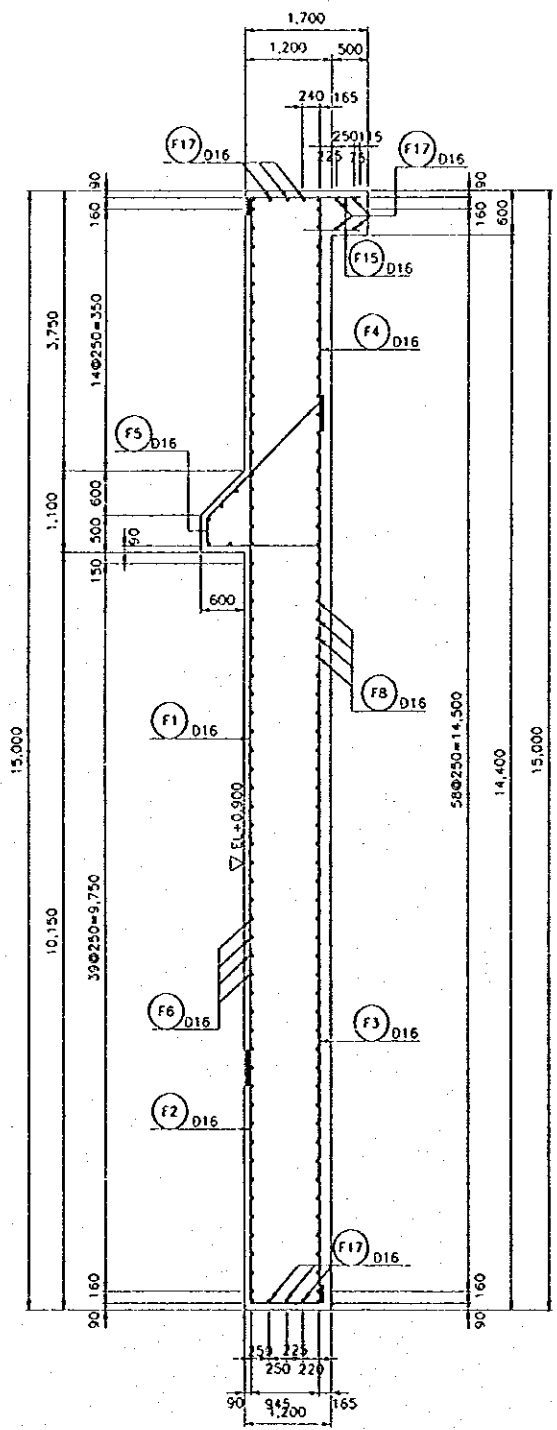


1 - 1

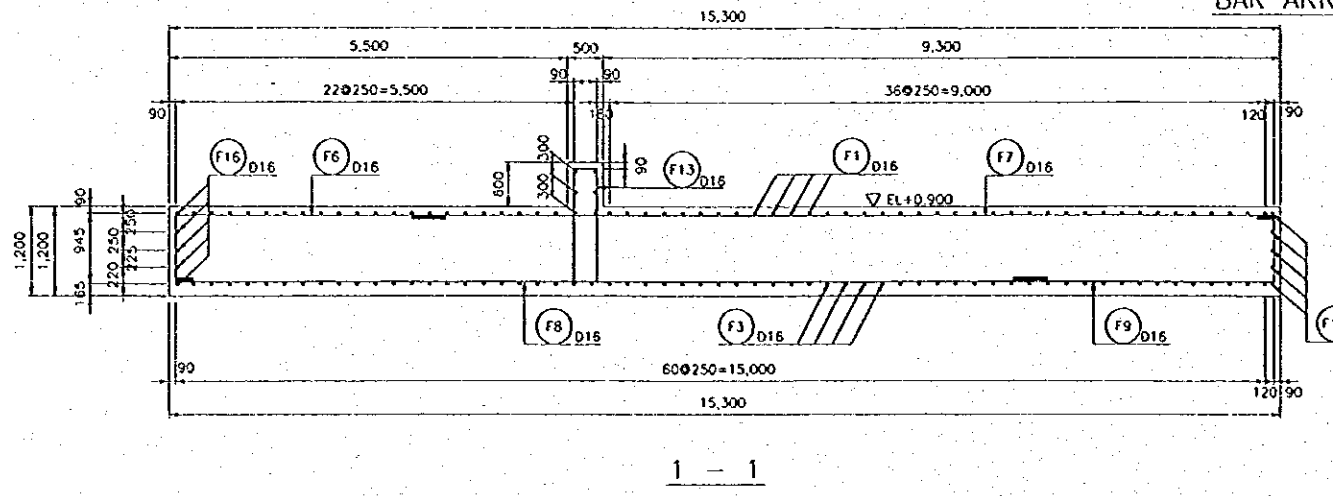


| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |
| | | | | | |

| | | |
|---|-------------------------------|--|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA |
| IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT WEIR PIER, GATE FLOOR SLAB AND APRON REINFORCING BAR ARRANGEMENT FOR CONCRETE APRON/6 | | DISTRICT SEMARANG CITY |
| JAPAN INTERNATIONAL COOPERATION AGENCY JICA ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PARO INTERNATIONAL INC. | | DRAWING NO. WB-P2-WE-R4-43 SHEET NO. 58 |
| DESIGNED <i>[Signature]</i> | CHECKED <i>[Signature]</i> | DATE CONTRACT NO. |
| CHIEF OF PLANNING AND DESIGN PROJECT MANAGER | | |



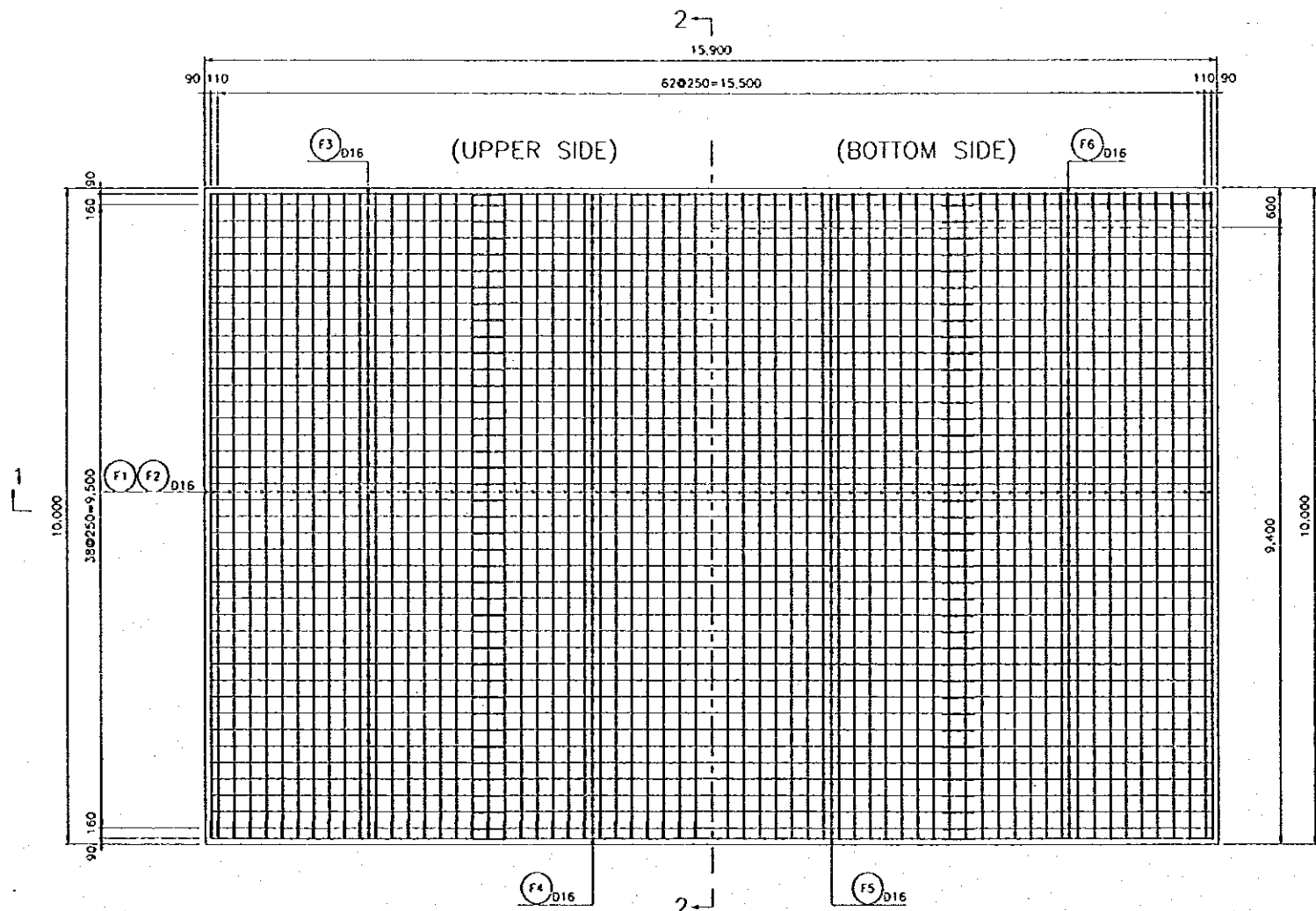
BAR ARRANGEMENT ON UPPER SIDE AND BOTTOM SIDE OF CONCRETE APRON(EL+0.900:END POSITION)



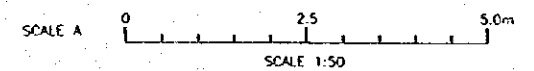
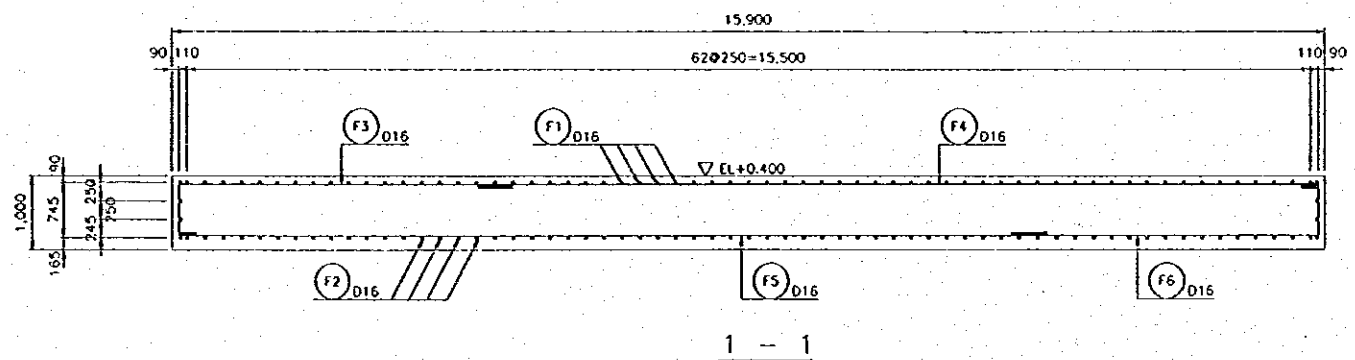
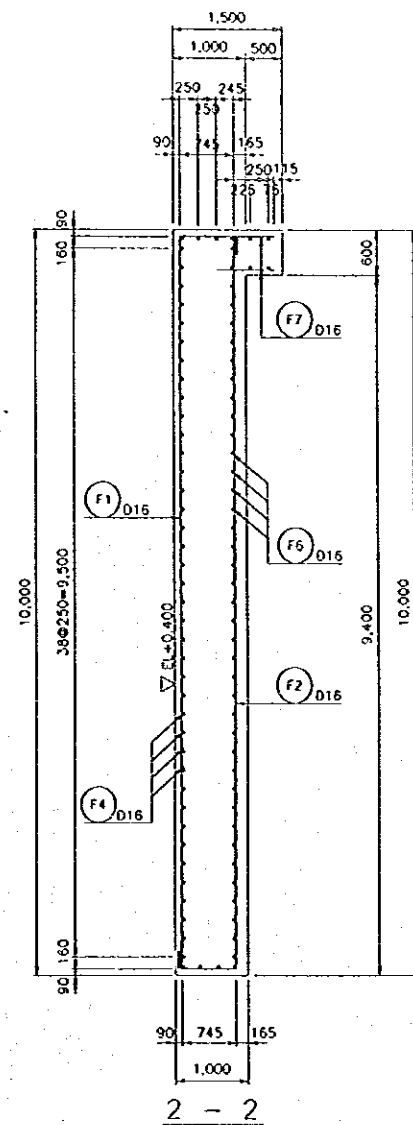
SCALE A 0 2.5 5.0m
SCALE 1:50

| | | |
|--|--|---|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROVINCE CENTRAL JAWA |
| IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT WEIR PIER, GATE FLOOR SLAB AND APRON REINFORCING BAR ARRANGEMENT FOR CONCRETE APRON(2/6) | | PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY |
| LUN INTERNATIONAL COOPERATION AGENCY CI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND FARO INTERNATIONAL INC. | | DRAWING NO. W6-P2-WE-Rs-44 SHEET NO. 59 |
| DESIGNED CHECKED CHERY OF PLANNING AND DESIGN | | DATE CONTRACT NO. |

| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |

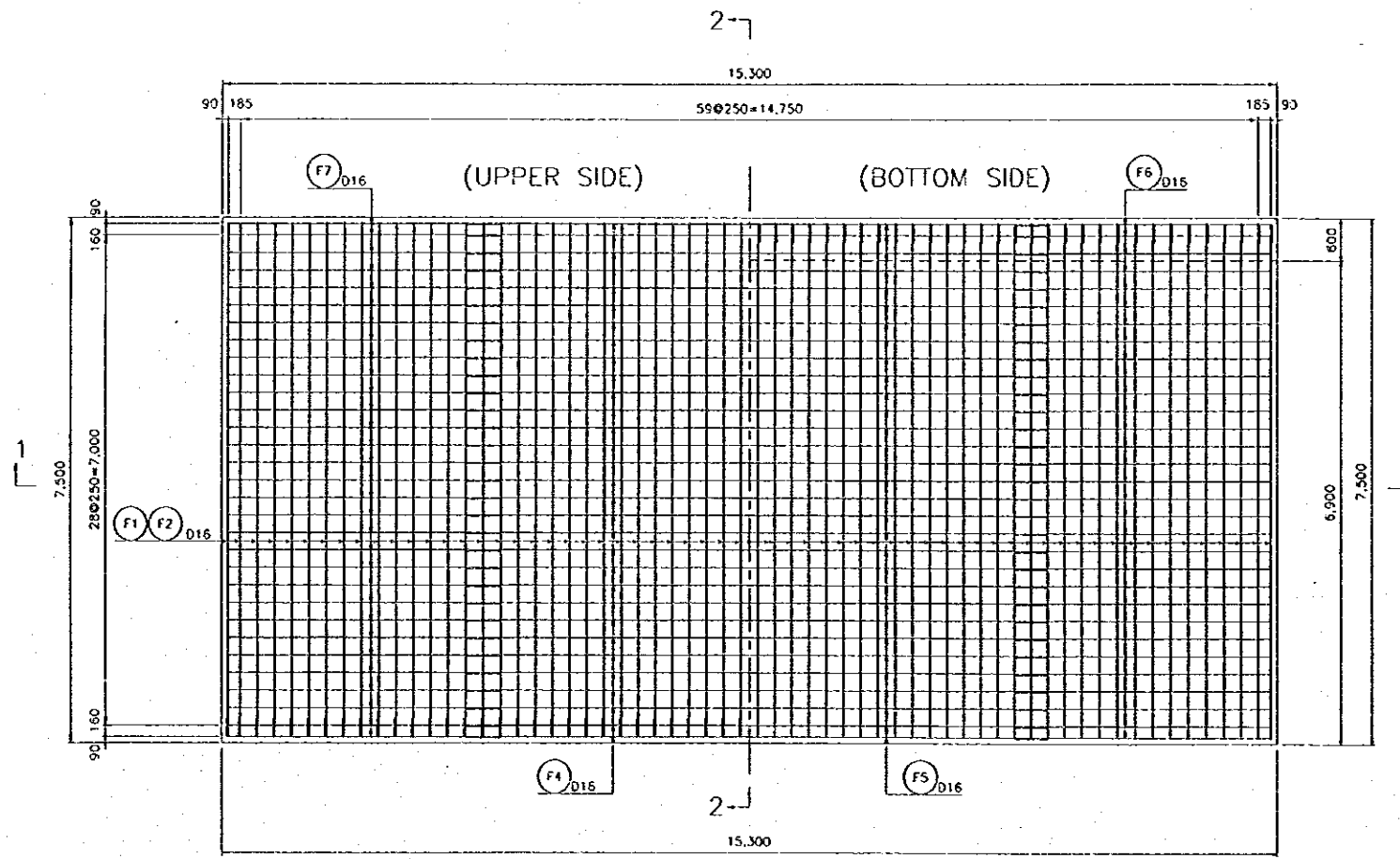


BAR ARRANGEMENT ON UPPER SIDE AND BOTTOM SIDE OF CONCRETE APRON(EL+0.400)

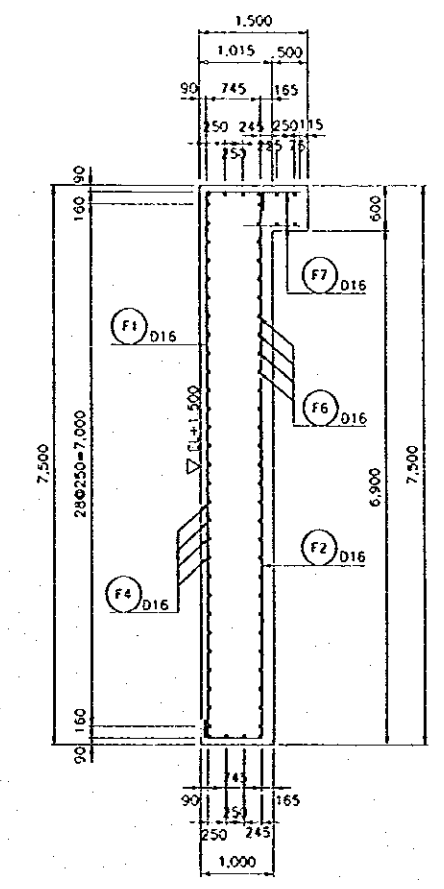


| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |
| | | | | | |

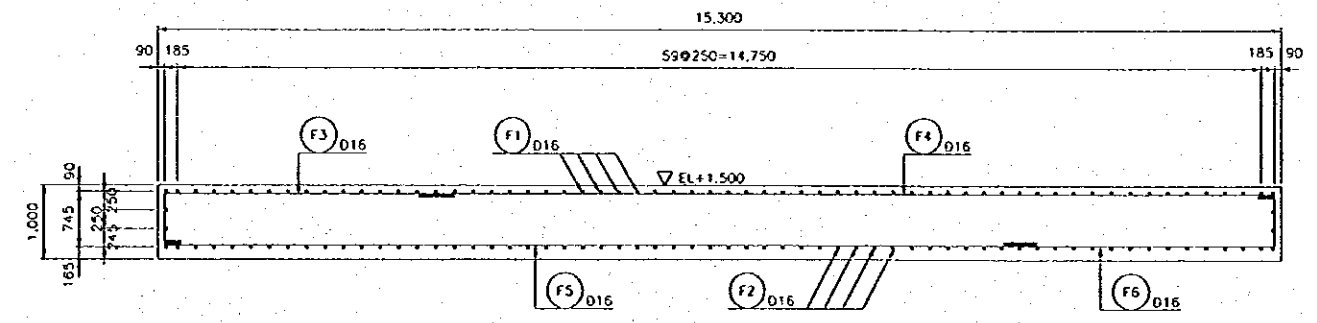
| | | |
|--|--|--|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROVIDER CENTRAL JAYA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA |
| IRATUNSELUMA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT WEIR PIER, GATE FLOOR SLAB AND APRON REINFORCING BAR ARRANGEMENT FOR CONCRETE APRON(3/6) | | DISTRICT SEMARANG CITY DRAWING NO. WG-P2-WE-P1-65 SHEET NO. 60 |
| JAPAN INTERNATIONAL COOPERATION AGENCY JICA ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND JACO INTERNATIONAL INC. | | DATE CONTRACT NO. |
| CHIEF OF PLANNING AND DESIGN PROJECT MANAGER | | CHECKED CHECKED |



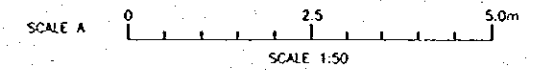
BAR ARRANGEMENT ON UPPER SIDE AND BOTTOM SIDE OF CONCRETE APRON(EL+1.500)



2 - 2

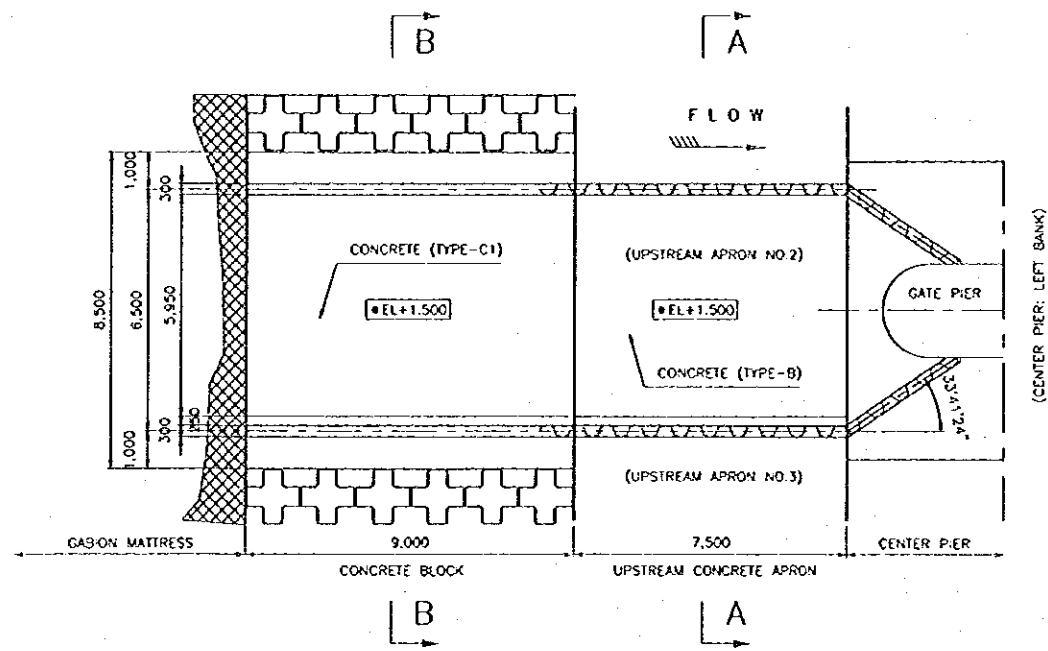


1 - 1

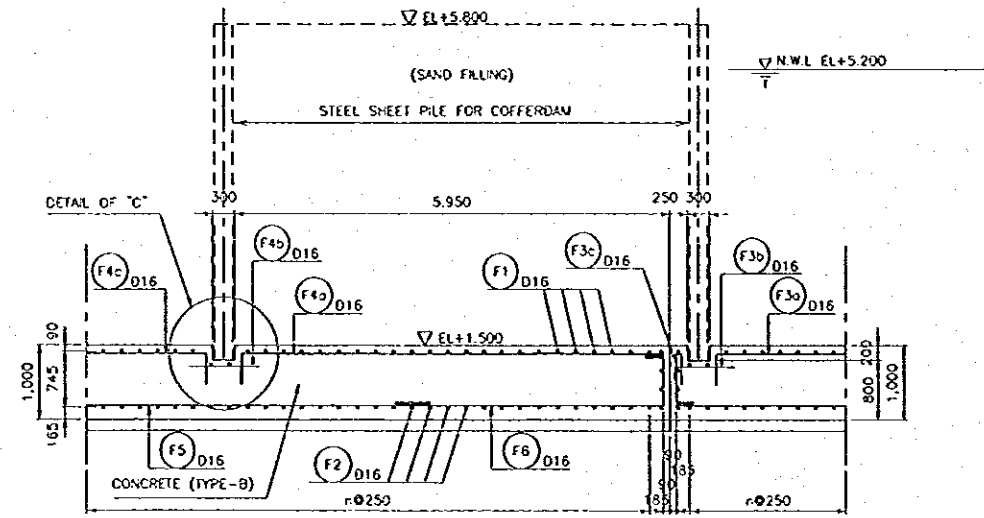


| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |
| | | | | | |

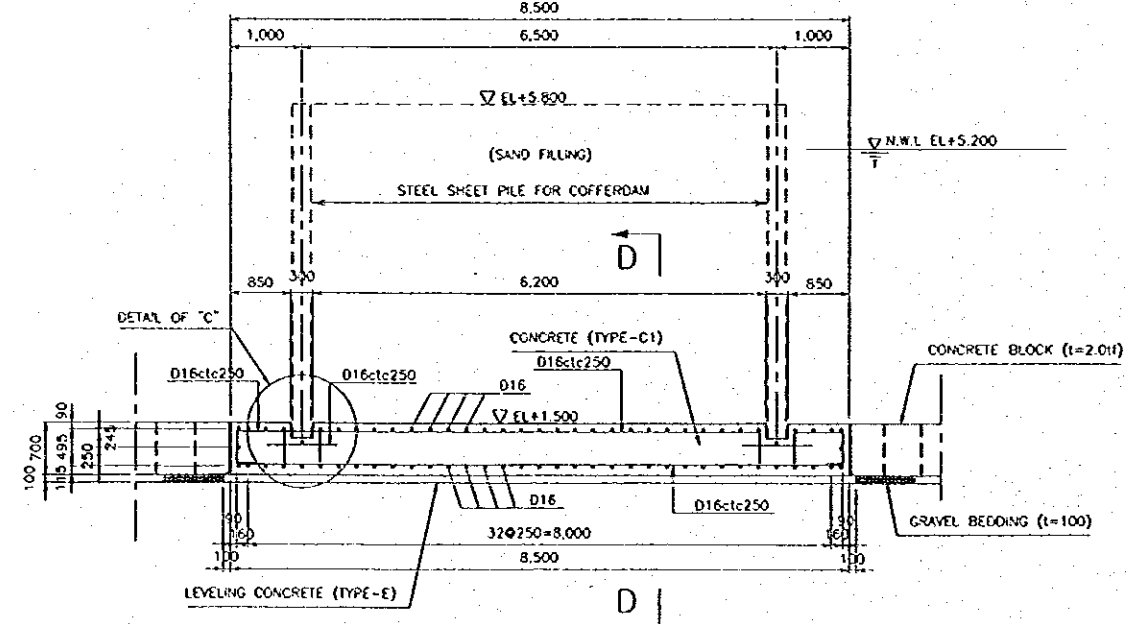
| | | |
|---|----------------------|--|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROVINCE CENTRAL JAVA |
| IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT WEIR PIER, GATE FLOOR SLAB AND APRON REINFORCING BAR ARRANGEMENT FOR CONCRETE APRON (4/6) | | PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA |
| LAFAP INTERNATIONAL COOPERATIVE AGENCY CEO: IRWANSYAH UD, LTD. irwansyah@lifa.com PACIFIC CENTRAL PARTS INTERNATIONAL AND PACIFIC INTERNATIONAL PSC | | DEFECT SEMARANG CITY |
| DESIGNED CHECKED CHIEF OF PLANNING AND DESIGN | DATE CONTRACT NO. | DRAWING NO. WS-P2-WE-R4-45 SHEET NO. 61 |



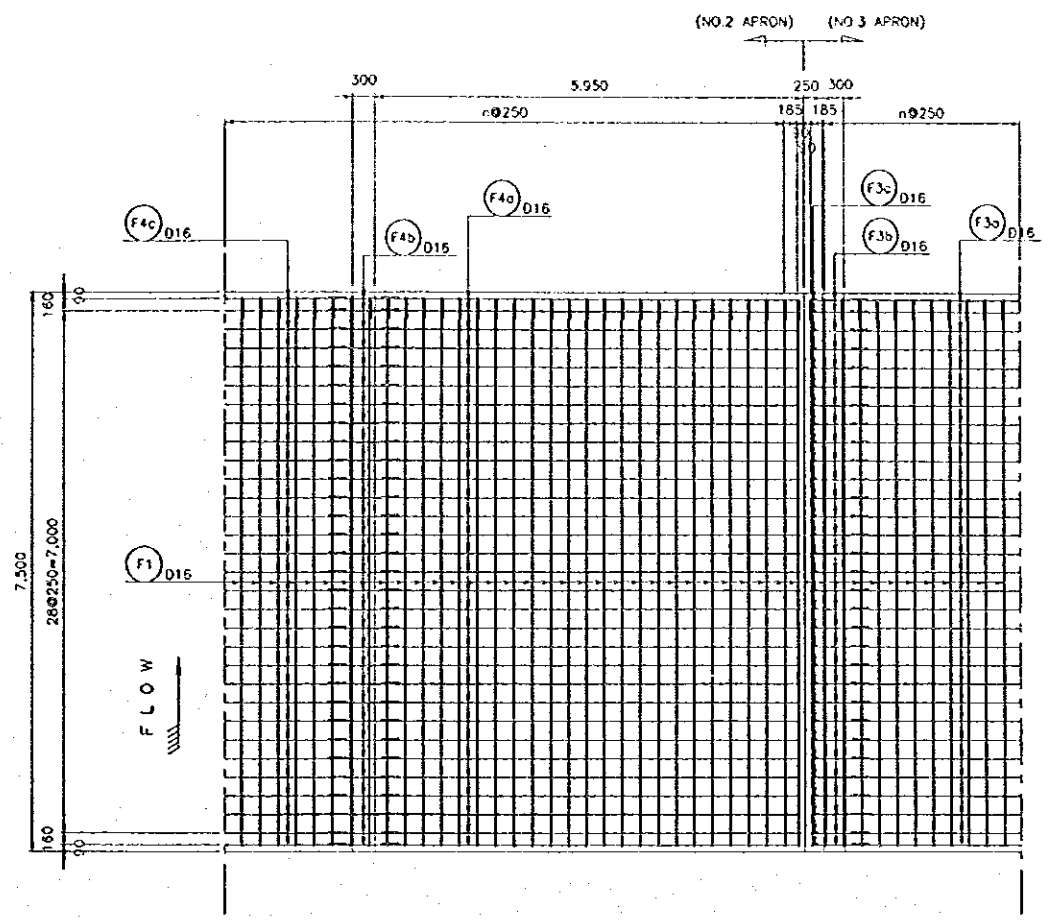
ARRANGEMENT OF SLIT FOR COFFERDAM
SCALE A



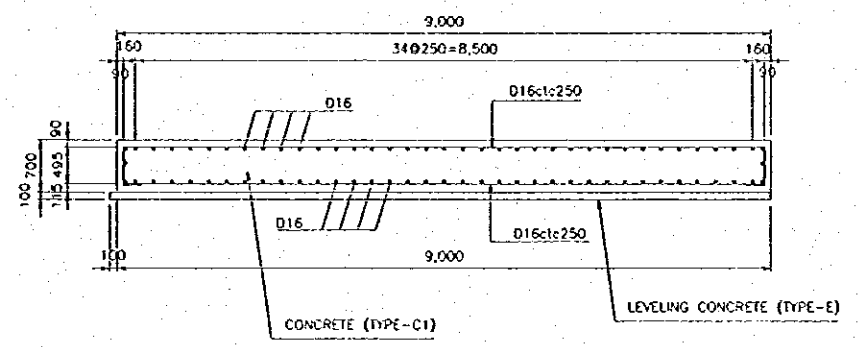
SECTION A-A
SCALE B



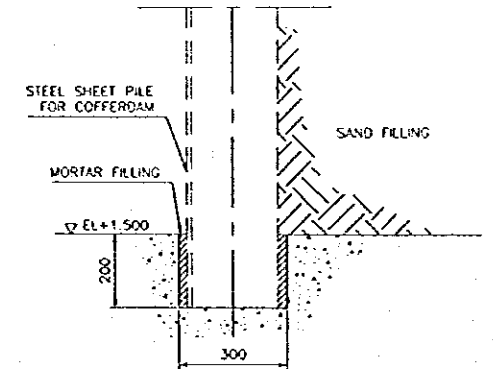
SECTION B-B
SCALE B



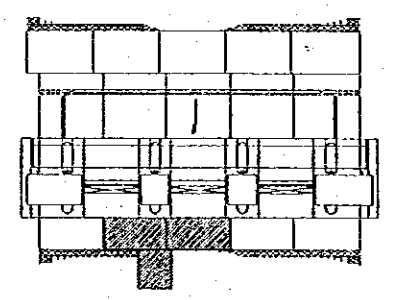
BAR ARRANGEMENT OF SLIT ON APRON
SCALE B



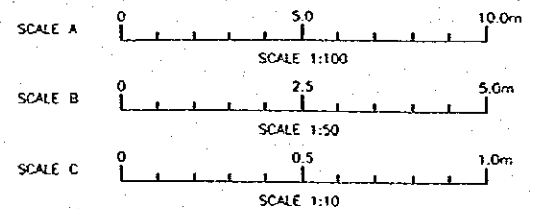
SECTION D-D
SCALE B



DETAIL OF "C"
SCALE C



KEY PLAN



NOTE:
1. DETAIL OF "C" IS DRAWING FOR REFERENCE IN TEAMS OF TEMPORARY COFFERDAM.

| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED | APPROVED |
|-----|------|-----------|------------|----------|----------|----------|
| | | | | | | |
| | | | | | | |

| | | |
|--|---------------------|---|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY |
| COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT WEIR PIER, GATE FLOOR SLAB AND APRON REINFORCING BAR ARRANGEMENT FOR CONCRETE APRON (5/6) | | DRAWING NO. WG - PE - WE - RE - 47 SHEET NO. 63 |
| JAPAN INTERNATIONAL COOPERATION AGENCY CH. ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSTRUCTION INTERNATIONAL TOKYO INTERNATIONAL B.S. | DESIGNED CHECKED | DATE CONTRACT NO. |
| CHIEF OF PLANNING AND DESIGN PROJECT MANAGER | | |

CONCRETE APRON(EL+1.500)

BAR BENDING SCHEDULE

SHAPE

| TYPE | SHAPE | DA | NUMBER | LENGTH (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | R (mm) |
|------|-------|----|--------|-------------|---------|---------|---------|---------|---------|--------|
| F1 | 2 | 16 | 62 | 8310 | 7310 | 725 | 278 | | | |
| F2 | 2 | 16 | 66 | 8310 | 7310 | 725 | 278 | | | |
| F3 | 2 | 16 | 31 | 4590 | 278 | 725 | 3590 | | | |
| F4 | 1 | 16 | 31 | 12000 | 12000 | | | | | |
| F5 | 1 | 16 | 39 | 12000 | 12000 | | | | | |
| F6 | 2 | 16 | 39 | 4590 | 3590 | 725 | 278 | | | |
| F7 | 1 | 16 | 124 | 790 | 790 | | | | | |

BAR WEIGHT

| TYPE | DA (mm) | LENGTH (mm) | NUMBER | WEIGHT PER 'M' (kg) | WEIGHT PER 'BAR' (kg) | WEIGHT (kg) | SHAPE |
|-------|---------|-------------|--------|---------------------|-----------------------|-------------|-------|
| F1 | 16 | 8310 | 62 | 156 | 1236 | 80374 | |
| F2 | 16 | 8310 | 66 | 156 | 1296 | 85500 | |
| F3 | 16 | 4590 | 31 | 156 | 736 | 22197 | |
| F4 | 16 | 12000 | 31 | 156 | 1872 | 53032 | |
| F5 | 16 | 12000 | 39 | 156 | 1872 | 73008 | |
| F6 | 16 | 4590 | 39 | 156 | 736 | 27925 | |
| F7 | 16 | 790 | 124 | 156 | 123 | 15282 | |
| TOTAL | | | | | | 352379 | |

CONCRETE APRON(EL+0.900:MIDDLE POSITION)

BAR BENDING SCHEDULE

SHAPE

| TYPE | SHAPE | DA | NUMBER | LENGTH (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | R (mm) |
|------|-------|----|--------|-------------|---------|---------|---------|---------|---------|--------|
| F1 | 1 | 16 | 62 | 12000 | 12000 | | | | | |
| F2 | 2 | 16 | 62 | 4400 | 278 | 925 | 3290 | | | |
| F3 | 1 | 16 | 68 | 12000 | 12000 | | | | | |
| F4 | 2 | 16 | 68 | 4400 | 278 | 925 | 3290 | | | |
| F5 | 2 | 16 | 58 | 4790 | 278 | 925 | 3590 | | | |
| F6 | 1 | 16 | 58 | 12000 | 12000 | | | | | |
| F7 | 1 | 16 | 71 | 12000 | 12000 | | | | | |
| F8 | 2 | 16 | 71 | 4790 | 3590 | 925 | 278 | | | |
| F9 | 3 | 16 | 62 | 4290 | 1670 | 400 | 2364 | | | |
| F10 | 1 | 16 | 124 | 790 | 790 | | | | | |

BAR WEIGHT

| TYPE | DA (mm) | LENGTH (mm) | NUMBER | WEIGHT PER 'M' (kg) | WEIGHT PER 'BAR' (kg) | WEIGHT (kg) | SHAPE |
|-------|---------|-------------|--------|---------------------|-----------------------|-------------|-------|
| F1 | 16 | 12000 | 62 | 156 | 1872 | 116064 | |
| F2 | 16 | 4400 | 62 | 156 | 700 | 43427 | |
| F3 | 16 | 12000 | 68 | 156 | 1872 | 127296 | |
| F4 | 16 | 4400 | 68 | 156 | 700 | 47830 | |
| F5 | 16 | 4790 | 58 | 156 | 747 | 43097 | |
| F6 | 16 | 12000 | 58 | 156 | 1872 | 110448 | |
| F7 | 16 | 12000 | 71 | 156 | 1872 | 132912 | |
| F8 | 16 | 4790 | 71 | 156 | 747 | 53054 | |
| F9 | 16 | 1670 | 62 | 156 | 251 | 15572 | |
| F10 | 16 | 790 | 124 | 156 | 123 | 15282 | |
| TOTAL | | | | | | 709772 | |

CONCRETE APRON(EL+0.900:END POSITION)

BAR BENDING SCHEDULE

SHAPE

| TYPE | SHAPE | DA | NUMBER | LENGTH (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | R (mm) |
|------|-------|----|--------|-------------|---------|---------|---------|---------|---------|--------|
| F1 | 1 | 16 | 60 | 12000 | 12000 | | | | | |
| F2 | 3 | 16 | 60 | 4490 | 3290 | 925 | 278 | | | |
| F3 | 1 | 16 | 60 | 12000 | 12000 | | | | | |
| F4 | 3 | 16 | 60 | 4540 | 3290 | 925 | 278 | | | |
| F5 | 4 | 16 | 28 | 4110 | 1535 | 420 | 2175 | | | |
| F6 | 3 | 16 | 61 | 3590 | 3590 | | | | | |
| F7 | 1 | 16 | 61 | 12000 | 12000 | 925 | 278 | | | |
| F8 | 1 | 16 | 61 | 12000 | 12000 | | | | | |
| F9 | 3 | 16 | 61 | 4790 | 3590 | 925 | 278 | | | |
| F10 | 3 | 16 | 20 | 1110 | 278 | 590 | 278 | | | |
| F11 | 3 | 16 | 5 | 2380 | 278 | 1800 | 278 | | | |
| F12 | 3 | 16 | 5 | 2360 | 278 | 6900 | 278 | | | |
| F13 | 3 | 16 | 41 | 2970 | 1335 | 300 | 1335 | | | |
| F14 | 2 | 16 | 4 | 10980 | 10380 | 278 | | | | |
| F15 | 1 | 16 | 242 | 790 | 790 | | | | | |
| F16 | 2 | 16 | 14 | 12000 | 278 | 11722 | | | | |
| F16a | 2 | 16 | 14 | 3850 | 278 | 3568 | | | | |
| F17 | 2 | 16 | 10 | 12000 | 278 | 11722 | | | | |
| F17a | 2 | 16 | 10 | 3560 | 278 | 3298 | | | | |

BAR WEIGHT

| TYPE | DA (mm) | LENGTH (mm) | NUMBER | WEIGHT PER 'M' (kg) | WEIGHT PER 'BAR' (kg) | WEIGHT (kg) | SHAPE |
|-------|---------|-------------|--------|---------------------|-----------------------|-------------|-------|
| F1 | 16 | 12000 | 60 | 156 | 1872 | 112320 | |
| F2 | 16 | 4490 | 60 | 156 | 700 | 42026 | |
| F3 | 16 | 12000 | 60 | 156 | 1872 | 112320 | |
| F4 | 16 | 4540 | 60 | 156 | 771 | 46236 | |
| F5 | 16 | 4110 | 28 | 156 | 641 | 17952 | |
| F6 | 16 | 3590 | 61 | 156 | 590 | 34182 | |
| F7 | 16 | 12000 | 61 | 156 | 2059 | 125611 | |
| F8 | 16 | 12000 | 61 | 156 | 1872 | 114192 | |
| F9 | 16 | 4790 | 61 | 156 | 747 | 45681 | |
| F10 | 16 | 1110 | 20 | 156 | 179 | 3483 | |
| F11 | 16 | 2380 | 5 | 156 | 358 | 1841 | |
| F12 | 16 | 2360 | 5 | 156 | 1117 | 5585 | |
| F13 | 16 | 2970 | 41 | 156 | 483 | 19696 | |
| F14 | 16 | 10980 | 4 | 156 | 1693 | 6652 | |
| F15 | 16 | 790 | 242 | 156 | 123 | 29624 | |
| F16 | 16 | 12000 | 14 | 156 | 1872 | 26208 | |
| F16a | 16 | 3850 | 14 | 156 | 601 | 8408 | |
| F17 | 16 | 12000 | 10 | 156 | 1872 | 18720 | |
| F17a | 16 | 3560 | 10 | 156 | 594 | 5538 | |
| TOTAL | | | | | | 775440 | |

CONCRETE APRON(EL+0.400)

BAR BENDING SCHEDULE

SHAPE

| TYPE | SHAPE | DA | NUMBER | LENGTH (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | R (mm) |
|------|-------|----|--------|-------------|---------|---------|---------|---------|---------|--------|
| F1 | 2 | 16 | 65 | 10810 | 9810 | 725 | 278 | | | |
| F2 | 2 | 16 | 69 | 10810 | 9810 | 725 | 278 | | | |
| F3 | 2 | 16 | 41 | 5190 | 278 | 725 | 4190 | | | |
| F4 | 1 | 16 | 41 | 12000 | 12000 | | | | | |
| F5 | 1 | 16 | 49 | 12000 | 12000 | | | | | |
| F6 | 2 | 16 | 49 | 5190 | 4190 | 725 | 278 | | | |
| F7 | 1 | 16 | 130 | 790 | 790 | | | | | |

BAR WEIGHT

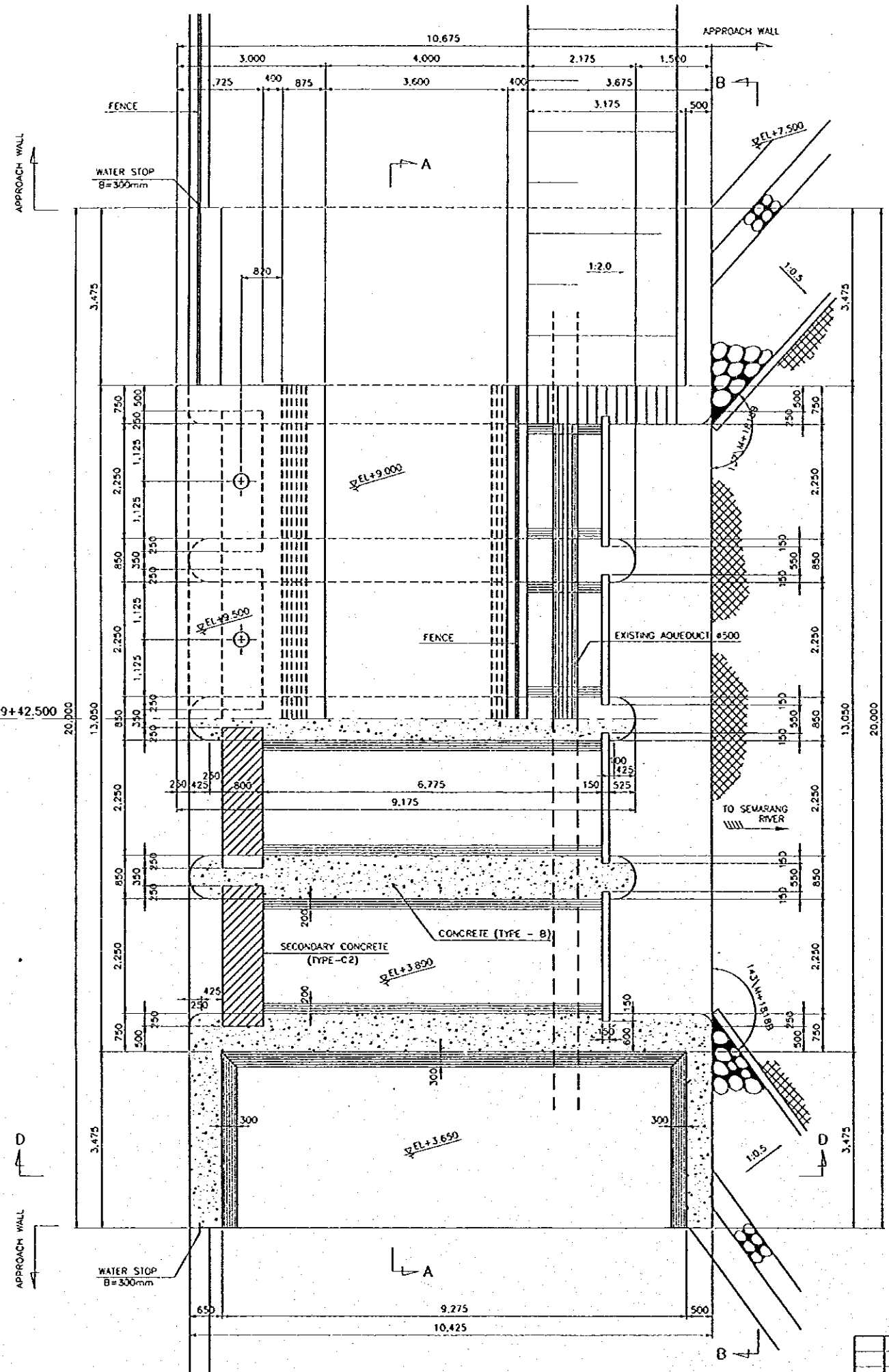
| TYPE | DA (mm) | LENGTH (mm) | NUMBER | WEIGHT PER 'M' (kg) | WEIGHT PER 'BAR' (kg) | WEIGHT (kg) | SHAPE |
|-------|---------|-------------|--------|---------------------|-----------------------|-------------|-------|
| F1 | 16 | 10810 | 65 | 156 | 1626 | 105615 | |
| F2 | 16 | 10810 | 69 | 156 | 1636 | 112899 | |
| F3 | 16 | 5190 | 41 | 156 | 810 | 33195 | |
| F4 | 16 | 12000 | 41 | 156 | 1872 | 76792 | |
| F5 | 16 | 12000 | 49 | 156 | 1872 | 91728 | |
| F6 | 16 | 5190 | 49 | 156 | 810 | 39672 | |
| F7 | 16 | 790 | 130 | 156 | 123 | 16021 | |
| TOTAL | | | | | | 483441 | |

BAR BENDING DETAIL

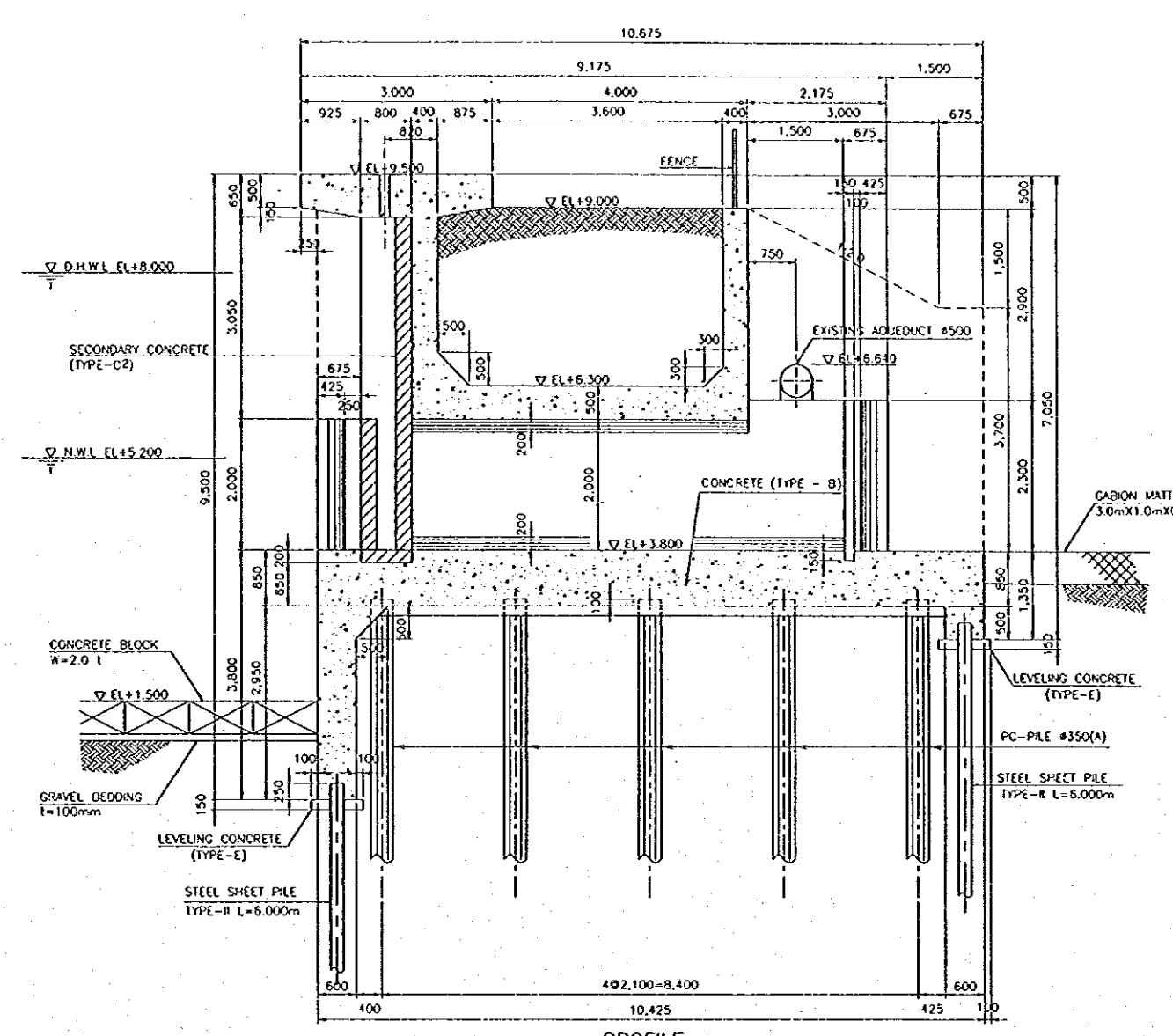
| DA | a | b | L1+L2 | R |
|-----|-----|-----|-------|----|
| D13 | 68 | 156 | 190 | 42 |
| D15 | 75 | 193 | 230.5 | 46 |
| D19 | 94 | 278 | 280 | 60 |
| D22 | 104 | 272 | 324 | 66 |
| D25 | 122 | 308 | 367 | 78 |
| D29 | 141 | 340 | 419.5 | 90 |
| D32 | 151 | 365 | 460.5 | 96 |

| | | |
|--|---|--|
| | THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | REGIONAL CENTRAL - JAVA |
| | PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA | DISTRICT SEMARANG CITY |
| | PROJECT JRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT WEIR PIER, GATE FLOOR SLAB AND APRON REINFORCING BAR ARRANGEMENT FOR CONCRETE APRON (6 / 6) | DRAWING NO. WS-P2-WE-Ra-48 SHEET NO. 43 |
| | IAFAR INTERNATIONAL COOPERATION AGENCY CCI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PACIFIC INTERNATIONAL INC. | DESIGNED CHECKED DATE CONTRACT NO. |

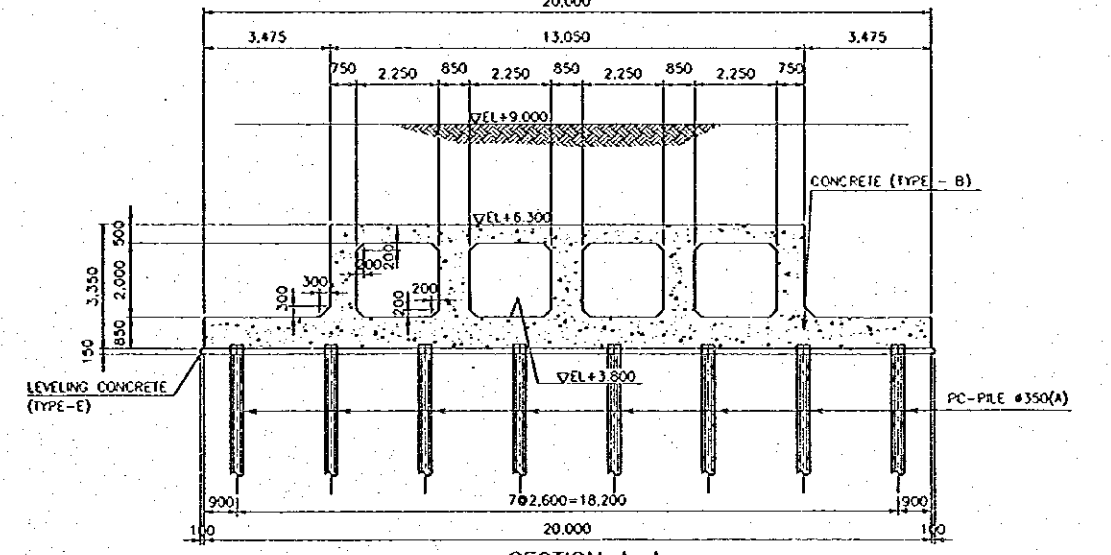
| NO. | DATE | REVISIONS | ORIGINATOR | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |



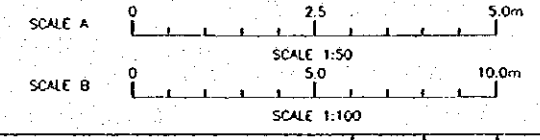
PLAN
SCALE A



PROFILE
SCALE A
20,000

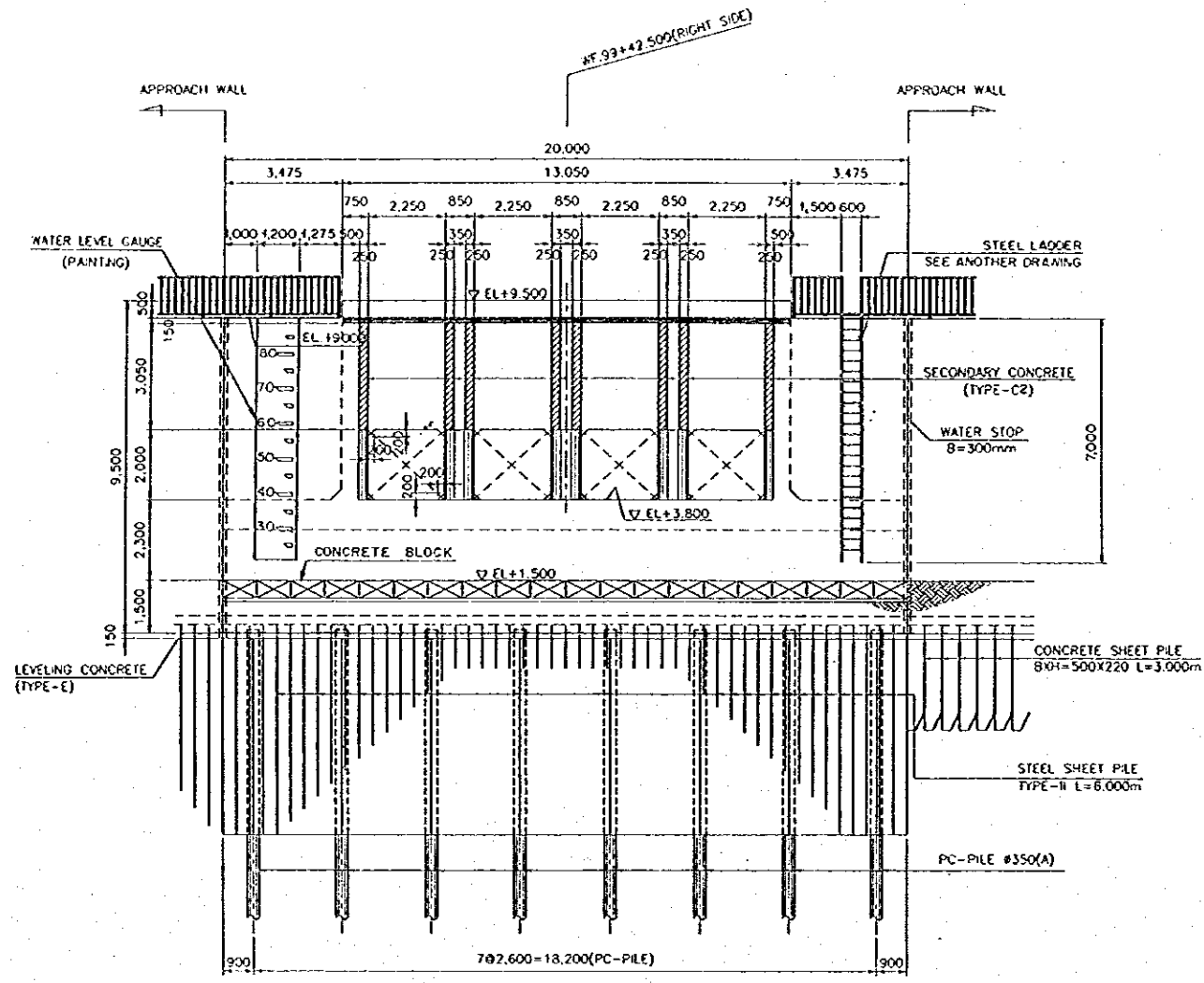


SECTION A-A
SCALE B

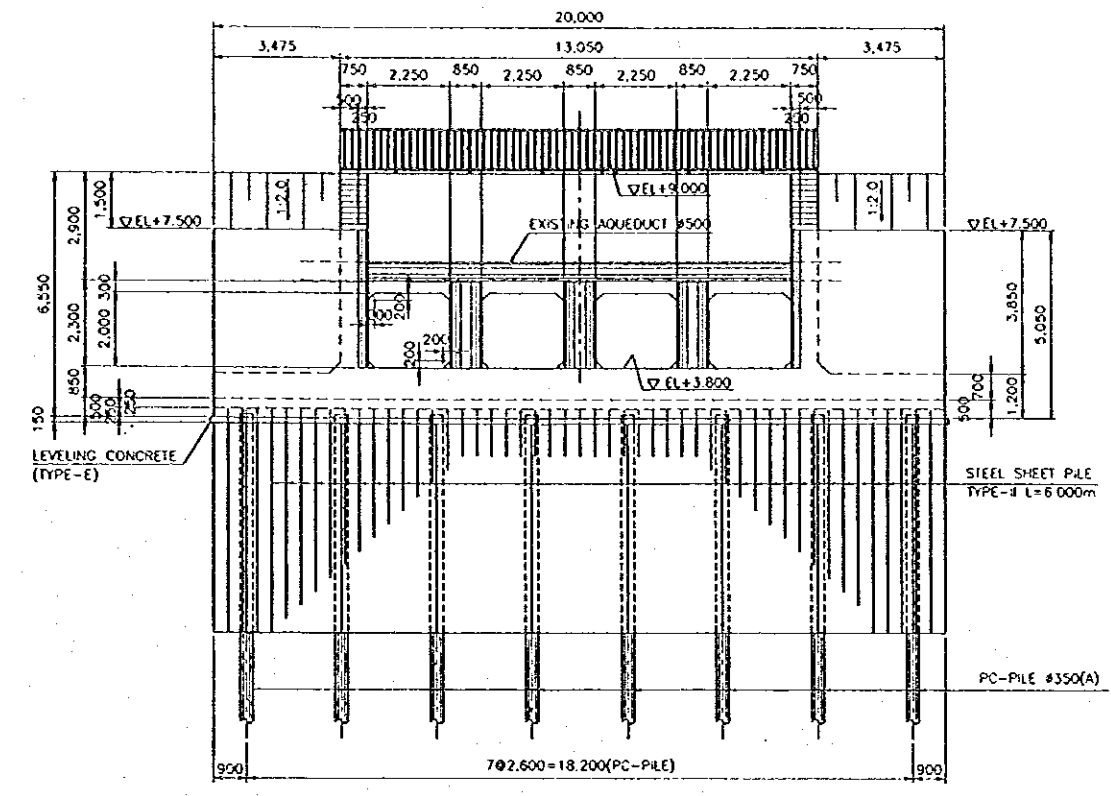


| | | | |
|---|--|---|---|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCE DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA | PROVIDER CENTRAL JAVA |
| JATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT | | DISTRICT SEMARANG CITY | DRAWING NO. WB - P2-15-81-4 SHEET NO. 54 |
| INTAKE STRUCTURES RIGHT BANK INTAKE STRUCTURES (1/2) | | DESIGNED CHECKED | DATE CONTRACT NO. |
| LAJAN INTERNATIONAL COOPERATIVE IN ASSOCIATION WITH C/D INDO-BERBANG CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PACIFIC INTERNATIONAL INC. | | CHIEF OF PLANNING AND DESIGN PROJECT MANAGER | |

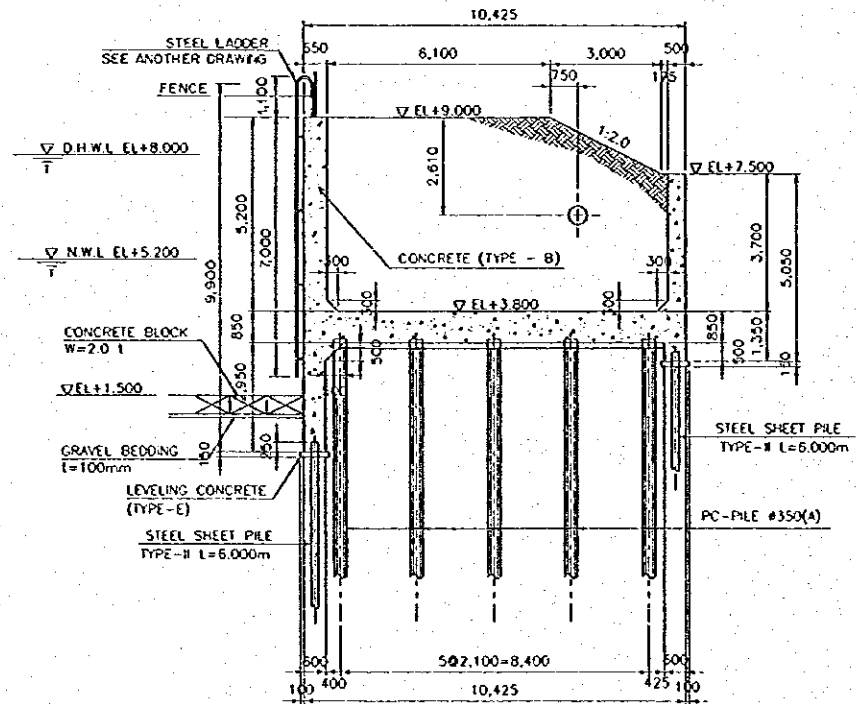
| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |



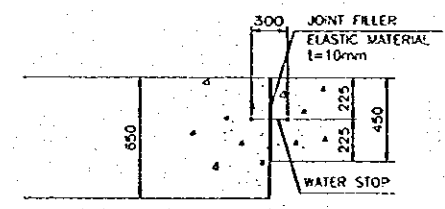
ELEVATION OF RIVER SIDE
SCALE C



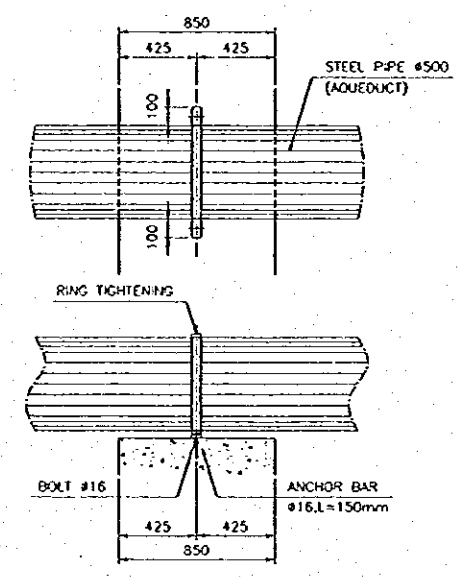
SECTION B-B
SCALE C



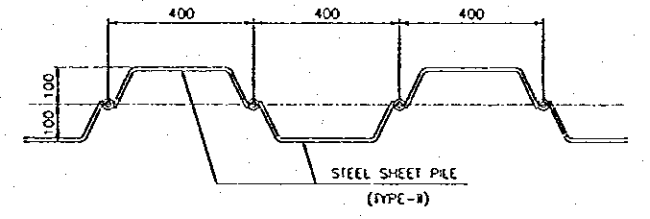
SECTION D-D
SCALE C



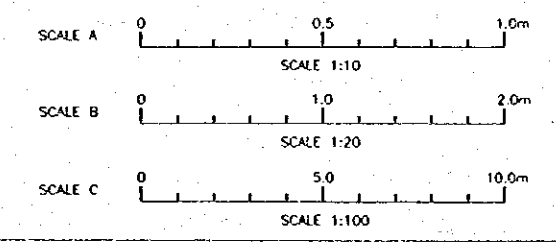
JOINTING
SCALE B



DETAIL OF PIPE SUPPORT
SCALE B



SECTION OF STEEL SHEET PILE
SCALE A



| NO. | DATE | REVISIONS | ORIGINATOR | DESIGNER | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |
| | | | | | |

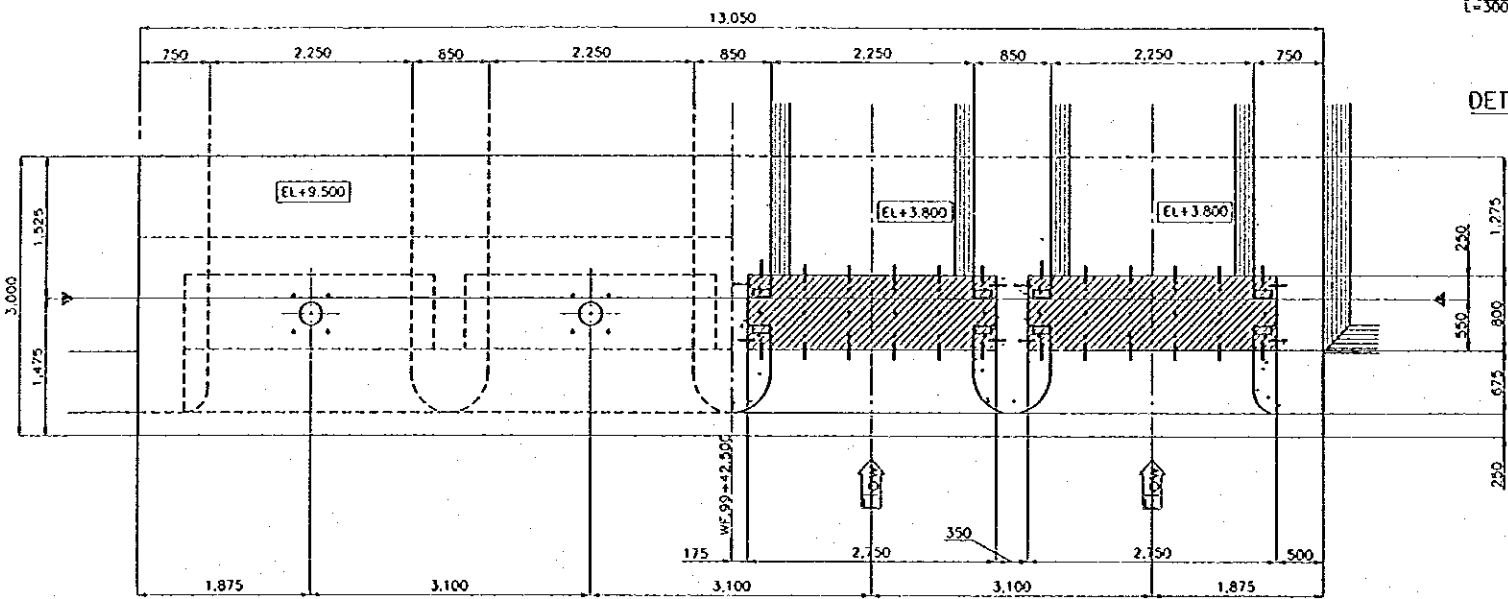
THE REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT

PROVINCE: CENTRAL JAVA
PROJECT NAME: FLOOD CONTROL, URBAN PLANNING AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
DISTRICT: SEMARANG CITY
DRAWING NO. WB-P2-18-S1-2
SHEET NO. 65

TRATUNSELUNA FLOOD CONTROL PROJECT
COMPONENT: WEST FLOODWAY / GARANO RIVER IMPROVEMENT
INTAKE STRUCTURES
RIGHT BANK INTAKE STRUCTURES (2/2)

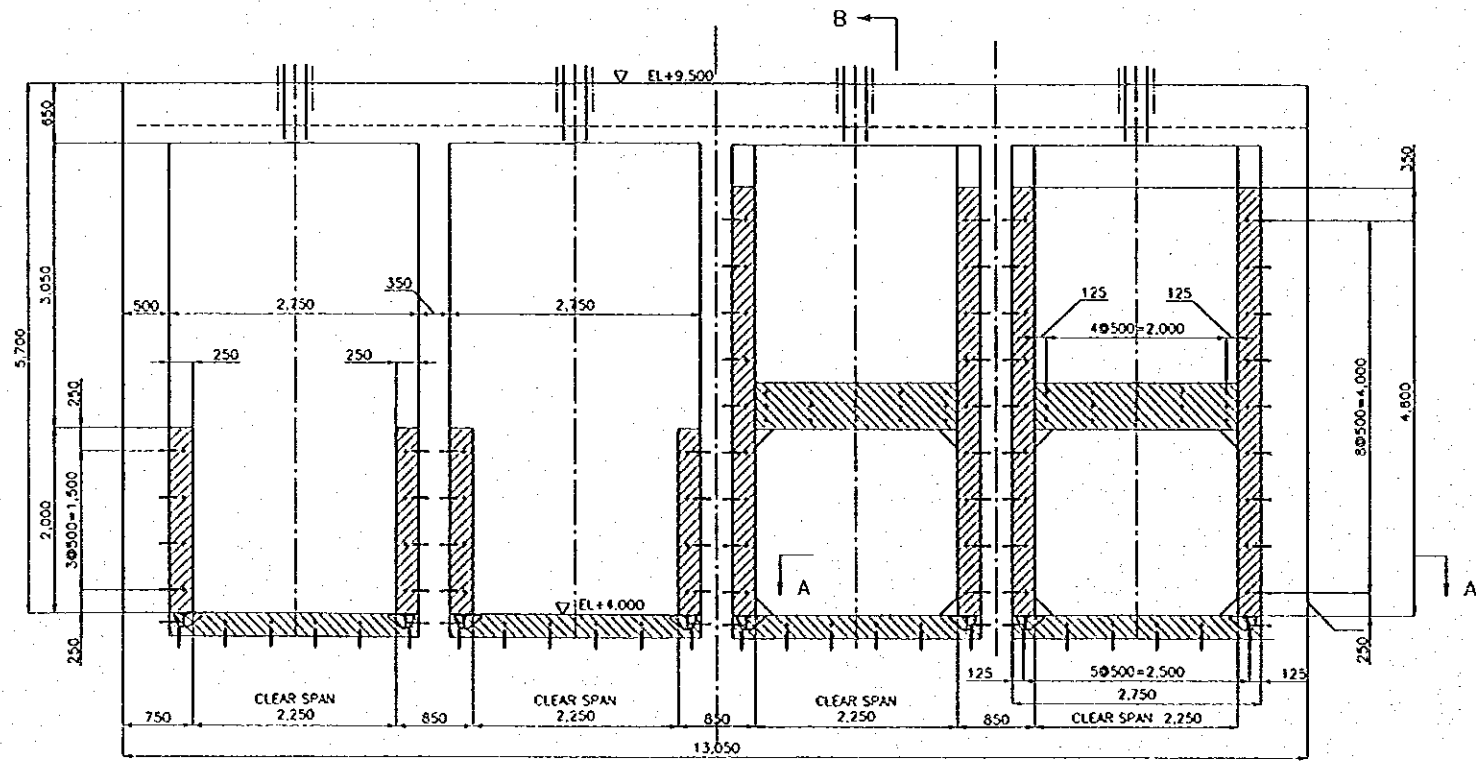
DESIGNED: [Signature]
CHECKED: [Signature]
DATE: [Date]
CONTRACT NO. [Number]

CREP OF PLANNING AND DESIGN
PROJECT MANAGER



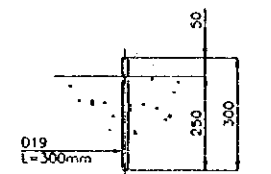
PLAN
SCALE A

SECTION A-A
SCALE A

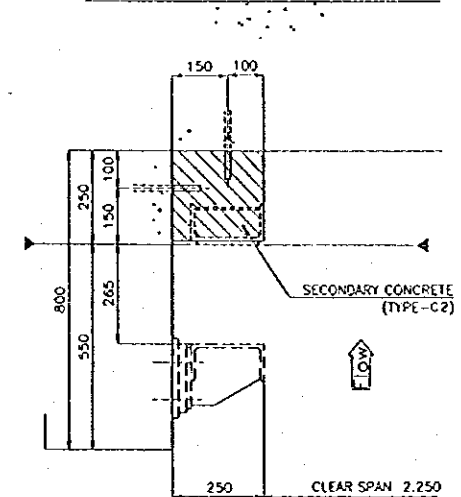


SECTION C-C
SCALE A

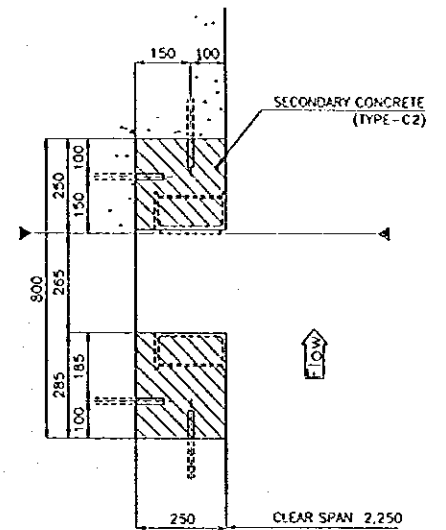
SECTION D-D
SCALE A



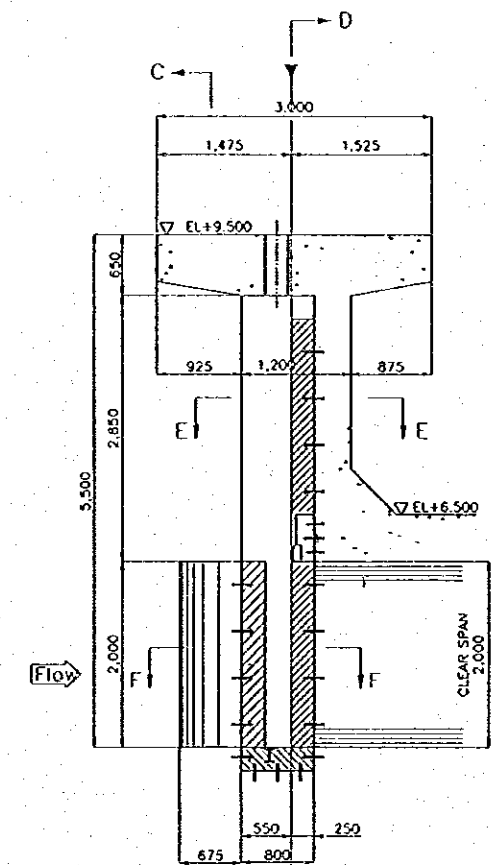
DETAIL OF ANCHOR BAR
SCALE B



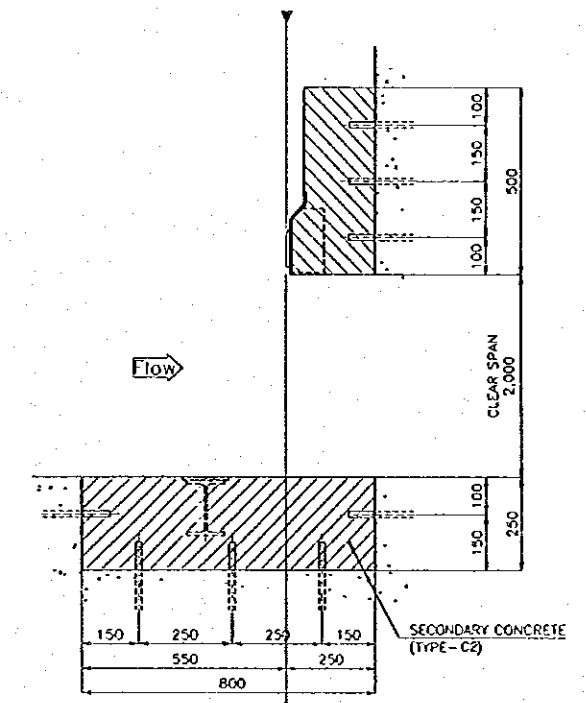
SECTION E-E
SCALE B



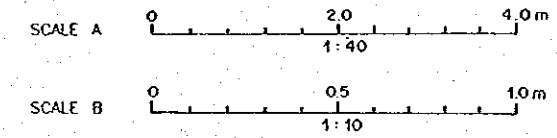
SECTION F-F
SCALE B



SECTION B-B
SCALE A



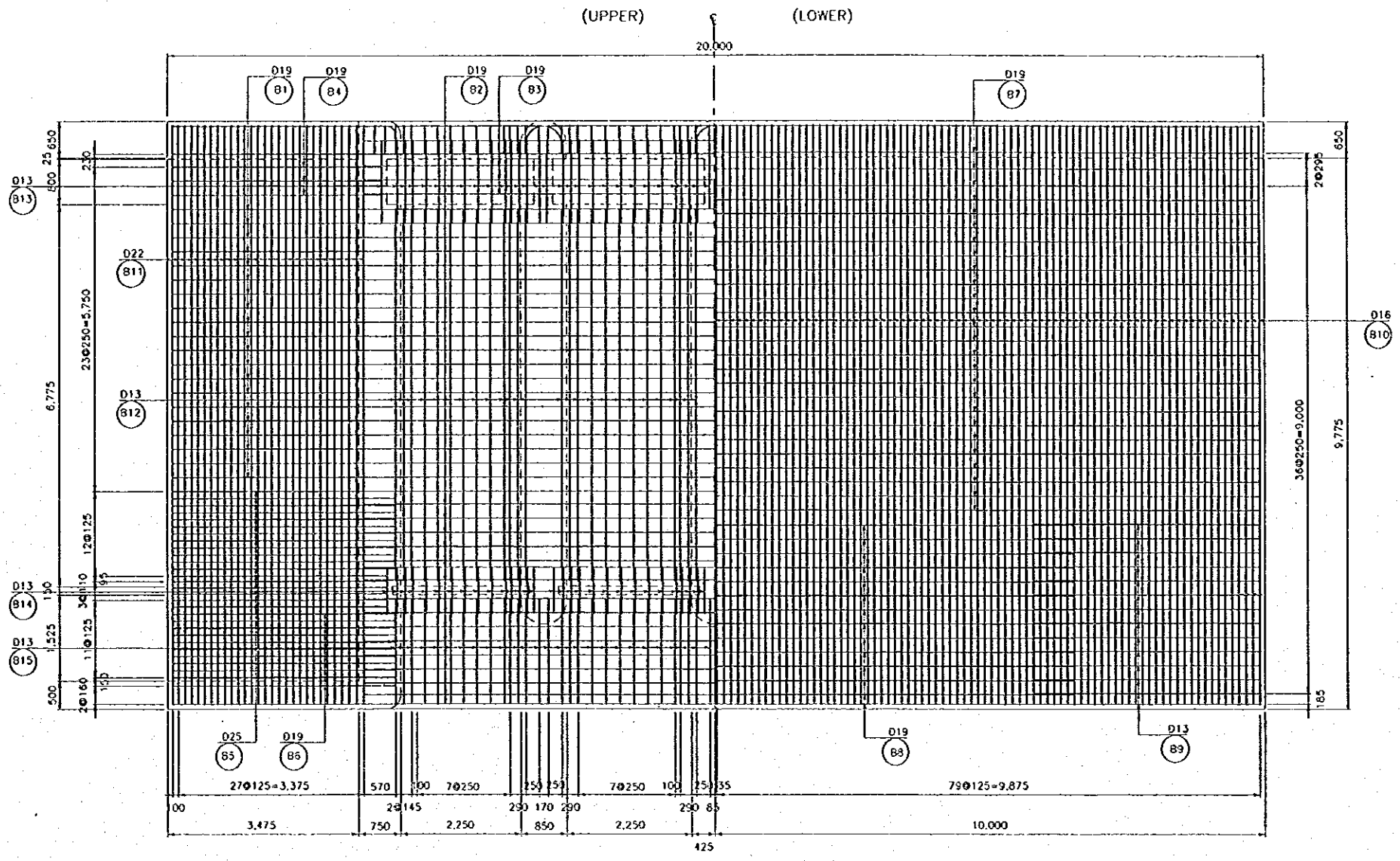
DETAIL OF TOP & BOTTOM SEAL
SCALE B



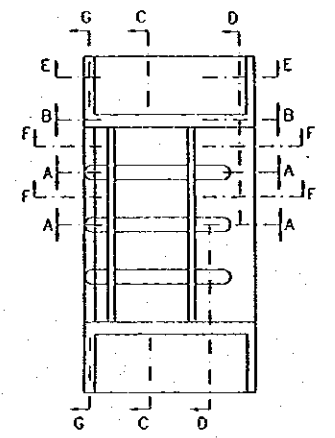
REMARKS
MARK "←" SHOWS STANDARD LINE FOR INSTALLATION

| NO | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |

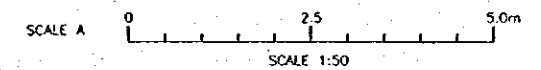
| | | |
|---|-------------------------------|--|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROVINCE CENTRAL JAVA |
| JRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT | | PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA |
| INTAKE STRUCTURES BLOCKOUT FOR INTAKE GATE (RIGHT BANK) | | DISTRICT SEMARANG CITY |
| DRAWING NO. W 8 - P 2 - 18 - 51 - 3 | | SHEET NO. 66 |
| DESIGNED <i>[Signature]</i> | CHECKED <i>[Signature]</i> | DATE CONTRACT NO. |
| CHIEF OF PLANNING AND DESIGN PROJECT MANAGER | | |



BOTTOM SLAB
SCALE A

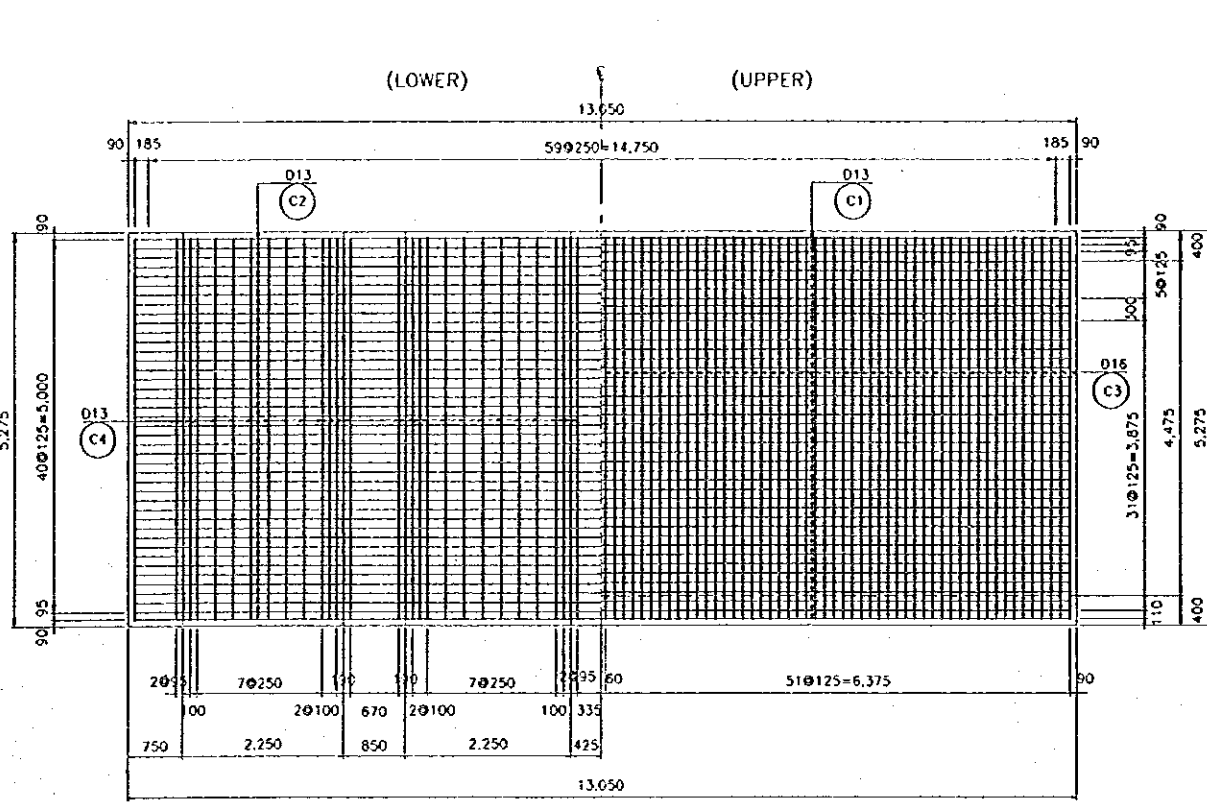


KEY PLAN

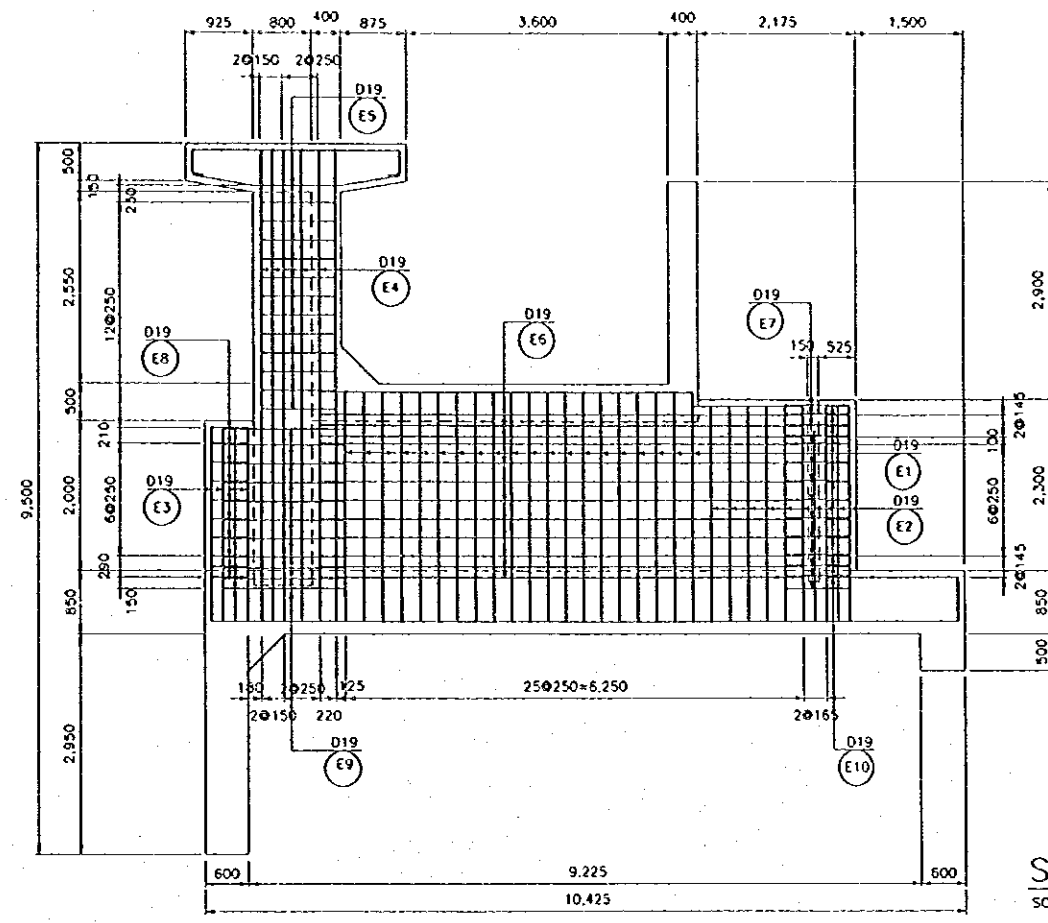


| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |
| | | | | | |

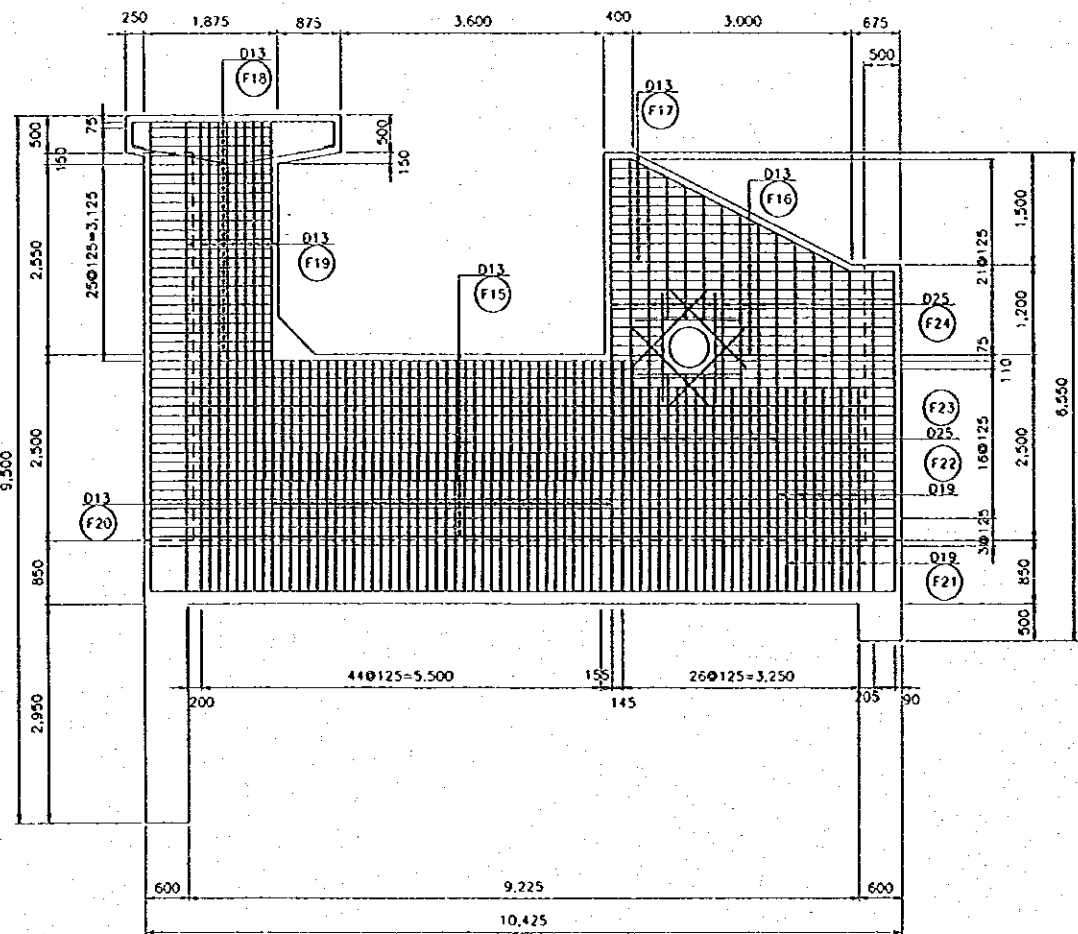
| | | |
|--|--|---|
| | THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | PROVINCE CENTRAL JAVA |
| | JRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT INTAKE STRUCTURES REINFORCING BAR ARRANGEMENT FOR RIGHT INTAKE STRUCTURE (1/5) | PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG BY THE REPUBLIC OF INDONESIA |
| | LIAISON INTERNATIONAL COOPERATION AGENCY CIL (CONSULTING) CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL INC. PASCO INTERNATIONAL INC. | DISTRICT SEMARANG CITY |
| | DESIGNED CHECKED | DRAWING NO. WB - P2 - 15 - R4 - 4 SHEET NO. 67 |
| | APPROVED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER | DATE CONTRACT NO. |



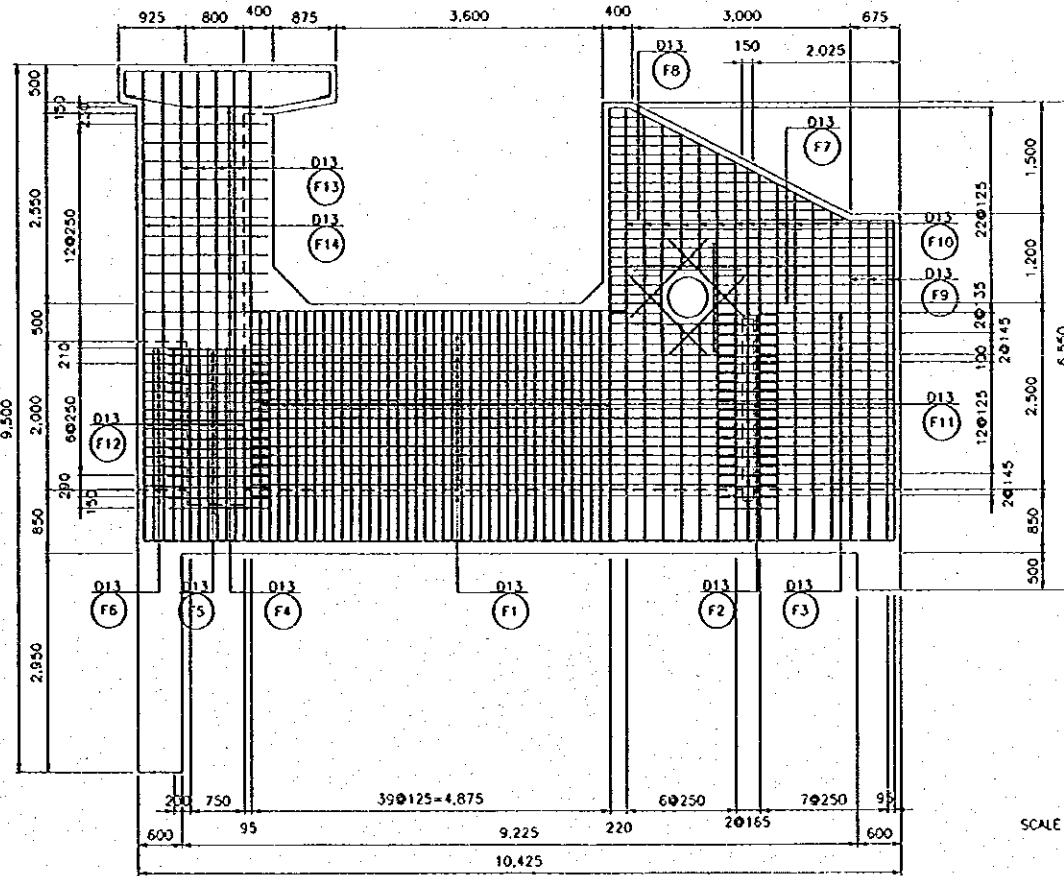
TOP SLAB
SCALE A



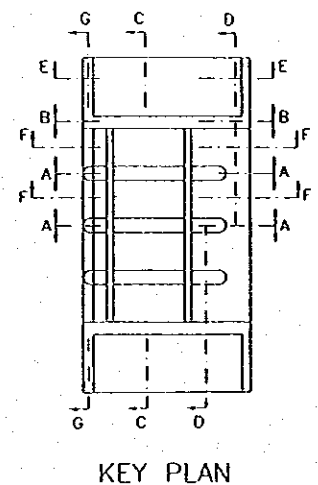
SECTION A-A
SCALE A



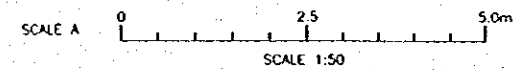
SECTION B-B (OUT SIDE)
SCALE A



SECTION B-B (IN SIDE)
SCALE A



KEY PLAN



| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

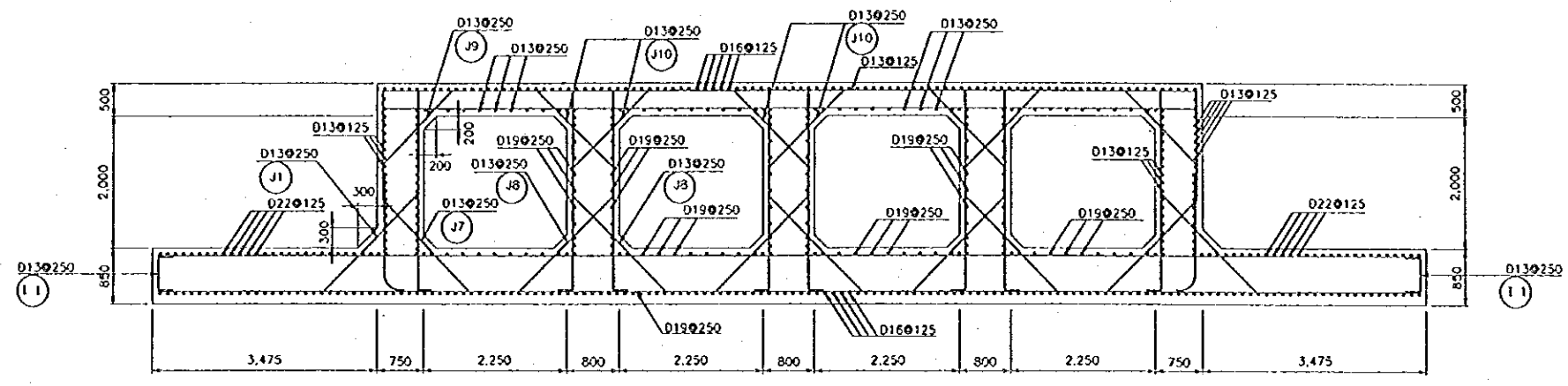
THE REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT

IRATUNSELUNA FLOOD CONTROL PROJECT
 COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT
 INTAKE STRUCTURES
 REINFORCING BAR ARRANGEMENT (2/5)

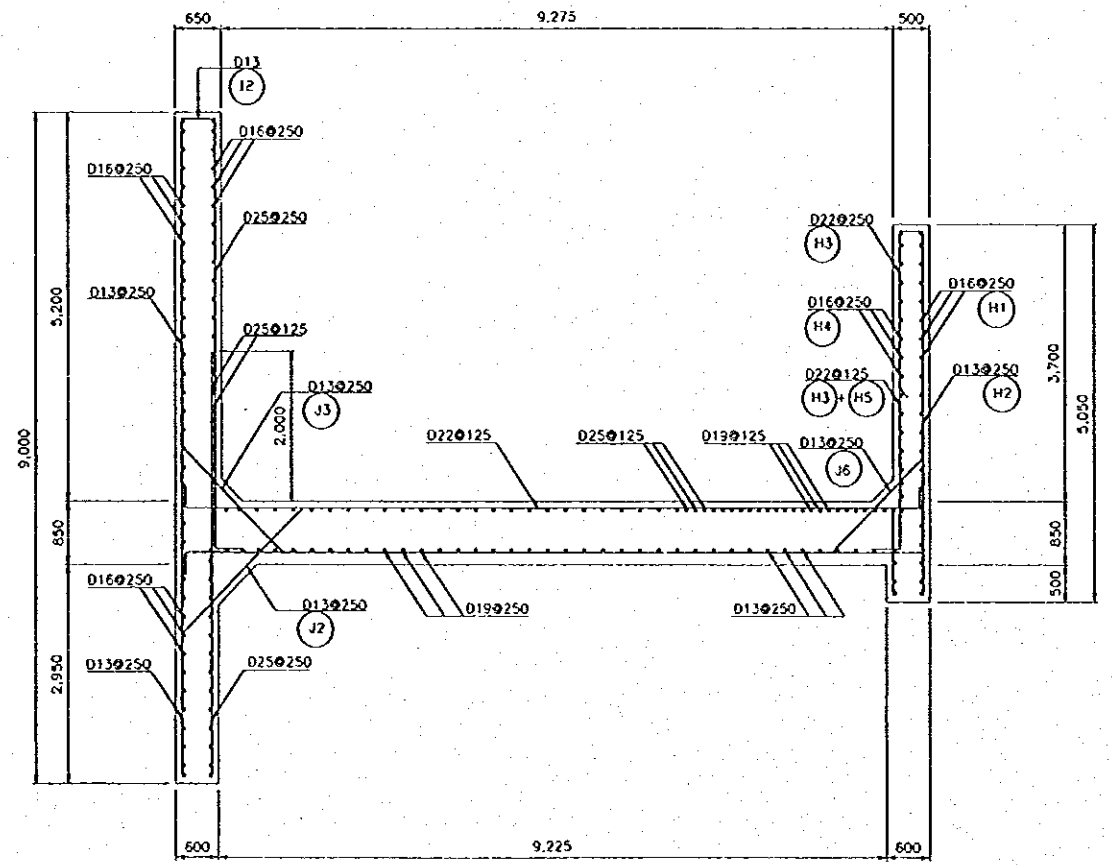
LOAN INTERNATIONAL COOPERATION AGENCY
 CIE ENGINEERING CO. LTD. IN ASSOCIATION WITH
 PACIFIC CONSULTANTS INTERNATIONAL AND
 PARCO INTERNATIONAL INC.

PROJECT: CENTRAL JAWA
 PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND
 WATER RESOURCES DEVELOPMENT IN
 SEMARANG IN THE REPUBLIC OF INDONESIA
 DISTRICT: SEMARANG CITY
 DRAWING NO. WB - P2-13 - R4-5
 SHEET NO. 68
 DATE: [Signature]
 CONTRACT NO. [Signature]

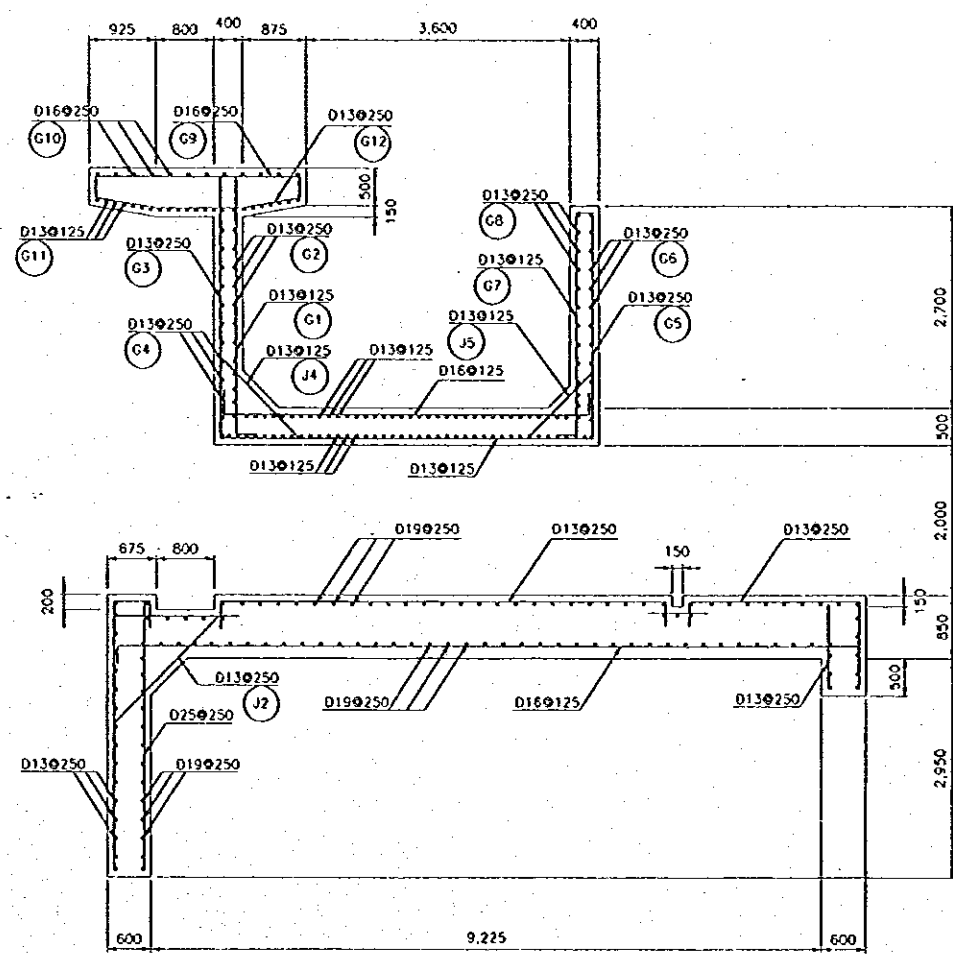
APPROVED: [Signature]
 PROJECT MANAGER



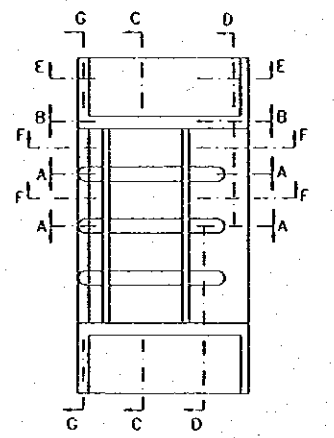
SECTION C-C
SCALE A



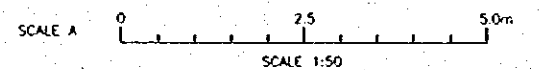
SECTION E-E
SCALE A



SECTION F-F
SCALE A

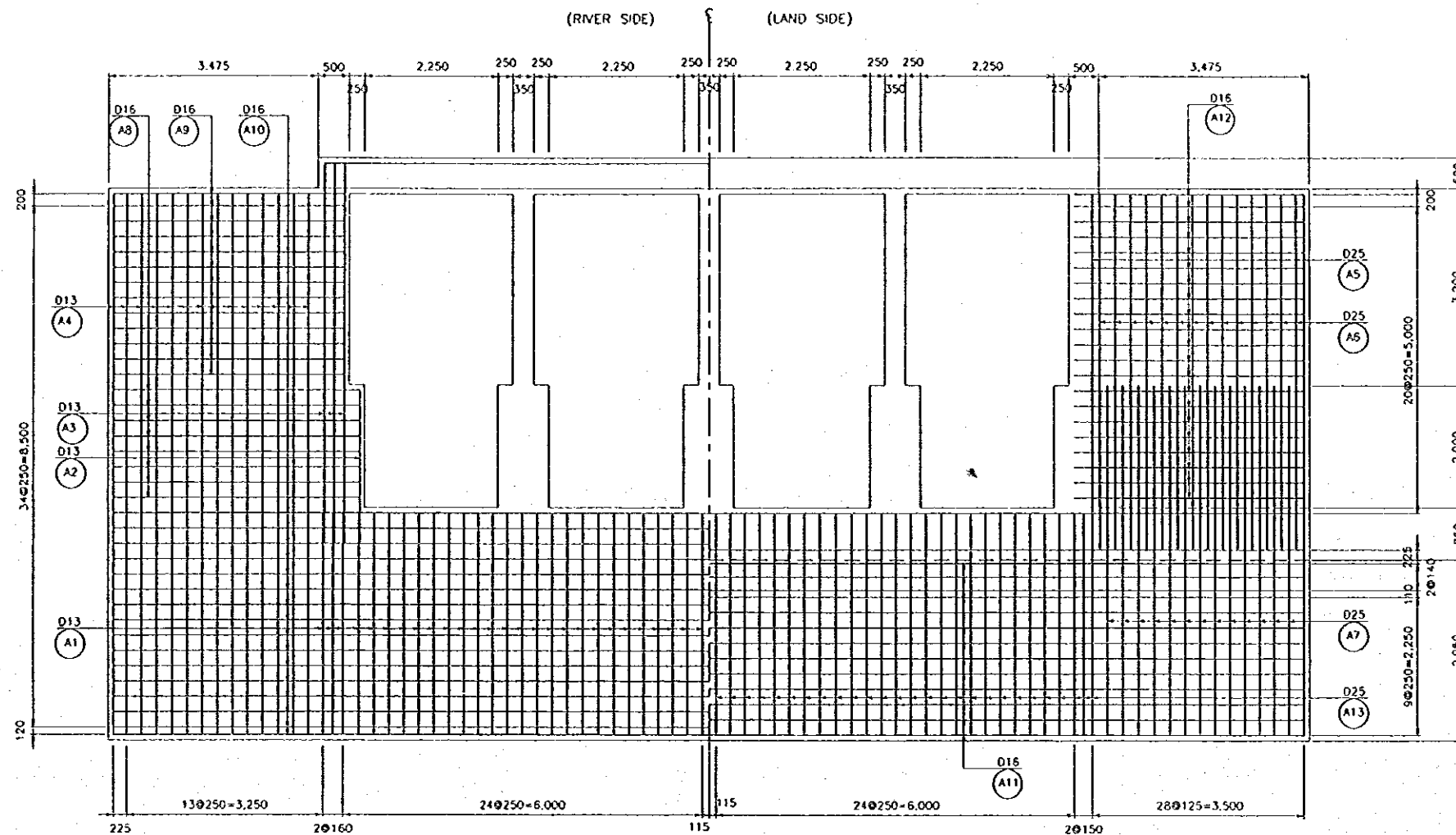


KEY PLAN

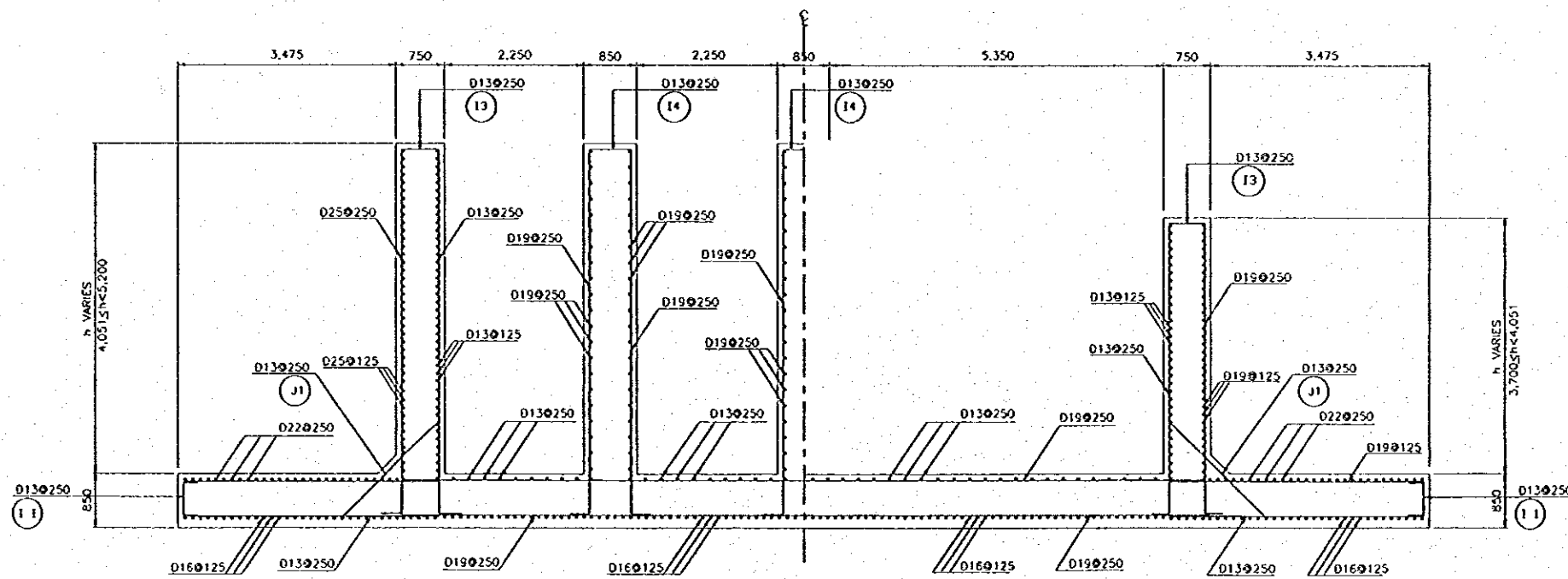


| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |
| | | | | | |

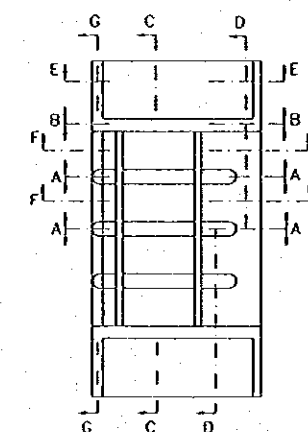
| | | |
|--|--|--|
| | THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | PROVINCE CENTRAL JAVA |
| | JATUNGLUNG FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / QARANG RIVER IMPROVEMENT INTAKE STRUCTURES REINFORCING BAR ARRANGEMENT FOR RIGHT INTAKE STRUCTURE 3/5 | PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA |
| | DESIGNED: [Signature] CHECKED: [Signature] | DATE: [Blank] CONTRACT NO.: [Blank] |
| | PROJECT MANAGER | SHEET NO. 69 |



SECTION G-G
SCALE A

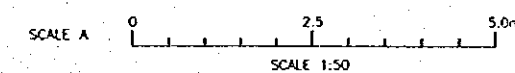


SECTION D-D
SCALE A



KEY PLAN

SCALE A



| NO. | DATE | REVISION | ORIGINATED | DESIGNED | APPROVED |
|-----|------|----------|------------|----------|----------|
| | | | | | |
| | | | | | |

| | | |
|---|--|---|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROVINCE CENTRAL JAVA |
| JATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT INTAKE STRUCTURES REINFORCING BAR ARRANGEMENT FOR RIGHT INTAKE STRUCTURE (4/5) | | PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY |
| JAPAN INTERNATIONAL COOPERATION AGENCY OTE ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL INC. JAPAN INTERNATIONAL INC. | | DRAWING NO. W0-P2-15-R2-7 SHEET NO. 78 |
| DESIGNED: [Signature] CHECKED: [Signature] | | DATE: [Date] CONTRACT NO.: [Number] |
| CHIEF OF PLANNING AND DESIGN PROJECT MANAGER | | |

LIST OF REINFORCEMENT

| BAR MARK | ØA (mm) | a (mm) | b (mm) | c (mm) | d (mm) | LENGTH OF BAR (mm) | NO REQ'D UNIT | TOTAL LENGTH | UNIT WEIGHT (kg/m) | WEIGHT (kg) | SHAPE | REMARK |
|----------|---------|--------|--------|--------|--------|--------------------|---------------|--------------|--------------------|-------------|-------|--------|
| A1 | D13 | 3620 | 400 | 350 | - | 4465 | 54 | 241110 | 1.04 | 250.754 | | |
| A2 | D13 | 2500 | - | - | - | 2500 | 2 | 5000 | 1.04 | 5.200 | | |
| A3 | D13 | 6200 | - | - | - | 6200 | 6 | 37200 | 1.04 | 38.688 | | |
| A4 | D13 | 8820 | - | - | - | 8820 | 28 | 246960 | 1.04 | 256.838 | | |
| A5 | D25 | 8820 | - | - | - | 8820 | 4 | 35280 | 3.850 | 135.828 | | |
| A6 | D25 | 5795 | 750 | - | - | 6545 | 26 | 170170 | 3.850 | 685.155 | | |
| A7 | D25 | 5710 | - | - | - | 5710 | 26 | 148460 | 3.850 | 571.571 | | |
| A8 | D16 | 3885 | 251 | 400 | - | 4536 | 16 | 72576 | 1.580 | 114.870 | | |
| A9 | D16 | 3795 | 200 | - | - | 3995 | 26 | 103870 | 1.580 | 164.115 | | |
| A10 | D16 | 12000 | 8320 | 500 | - | 20820 | 16 | 333120 | 1.580 | 526.330 | | |
| A11 | D16 | 12000 | 8320 | 500 | - | 20820 | 13 | 270660 | 1.580 | 427.634 | | |
| A12 | D16 | 3745 | - | - | - | 3745 | 42 | 157290 | 1.580 | 248.518 | | |
| A13 | D25 | 3620 | 750 | - | - | 4370 | 54 | 235980 | 3.850 | 908.513 | | |
| B1 | D19 | 10210 | 600 | - | - | 20420 | 21 | 428820 | 2.230 | 956.269 | | |
| B2 | D19 | 12000 | 1470 | 600 | - | 13470 | 19 | 255930 | 2.230 | 570.724 | | |
| B3 | D19 | 12000 | 1470 | 600 | - | 13470 | 3 | 40410 | 2.230 | 90.114 | | |
| B4 | D19 | 3795 | - | - | - | 3795 | 6 | 22770 | 2.230 | 50.777 | | |
| B5 | D25 | 4045 | 750 | - | - | 4795 | 36 | 172620 | 3.850 | 664.587 | | |
| B6 | D19 | 4045 | 600 | - | - | 4545 | 22 | 102190 | 2.230 | 227.884 | | |
| B7 | D19 | 12000 | 8320 | 500 | - | 20320 | 26 | 528320 | 2.230 | 1178.154 | | |
| B8 | D19 | 11000 | 2370 | 500 | - | 13370 | 28 | 374360 | 2.230 | 834.823 | | |
| B9 | D13 | 4045 | - | - | - | 4045 | 28 | 113260 | 1.040 | 117.790 | | |
| B10 | D16 | 10245 | 500 | - | - | 10745 | 160 | 1719200 | 1.580 | 2716.336 | | |
| B11 | D22 | 10245 | 700 | - | - | 11645 | 58 | 675410 | 2.980 | 2012.722 | | |
| B12 | D13 | 6595 | 350 | 300 | - | 7245 | 52 | 376740 | 1.040 | 391.810 | | |
| B13 | D13 | 1280 | - | - | - | 1280 | 60 | 76800 | 1.040 | 79.872 | | |
| B14 | D13 | 630 | - | - | - | 630 | 56 | 35280 | 1.040 | 36.691 | | |
| B15 | D13 | 400 | 1845 | - | - | 2245 | 84 | 188580 | 1.040 | 78.187 | | |
| C1 | D13 | 1650 | 10340 | 3030 | 500 | 15690 | 43 | 717670 | 1.040 | 745.377 | | |
| C2 | D13 | 12000 | 1370 | 500 | - | 13370 | 42 | 551540 | 1.040 | 584.002 | | |
| C3 | D16 | 5095 | 500 | - | - | 6095 | 104 | 633880 | 1.580 | 1001.530 | | |
| C4 | D13 | 5095 | - | - | - | 5095 | 52 | 264940 | 1.040 | 275.538 | | |

| | ØA | WEIGHT (kg) |
|-------------|-----|-------------|
| TOTAL | D13 | 9421.325 |
| | D16 | 6204.966 |
| | D19 | 8573.709 |
| | D22 | 2768.599 |
| | D25 | 3542.337 |
| GRAND TOTAL | | 30510.936 |

LIST OF REINFORCEMENT

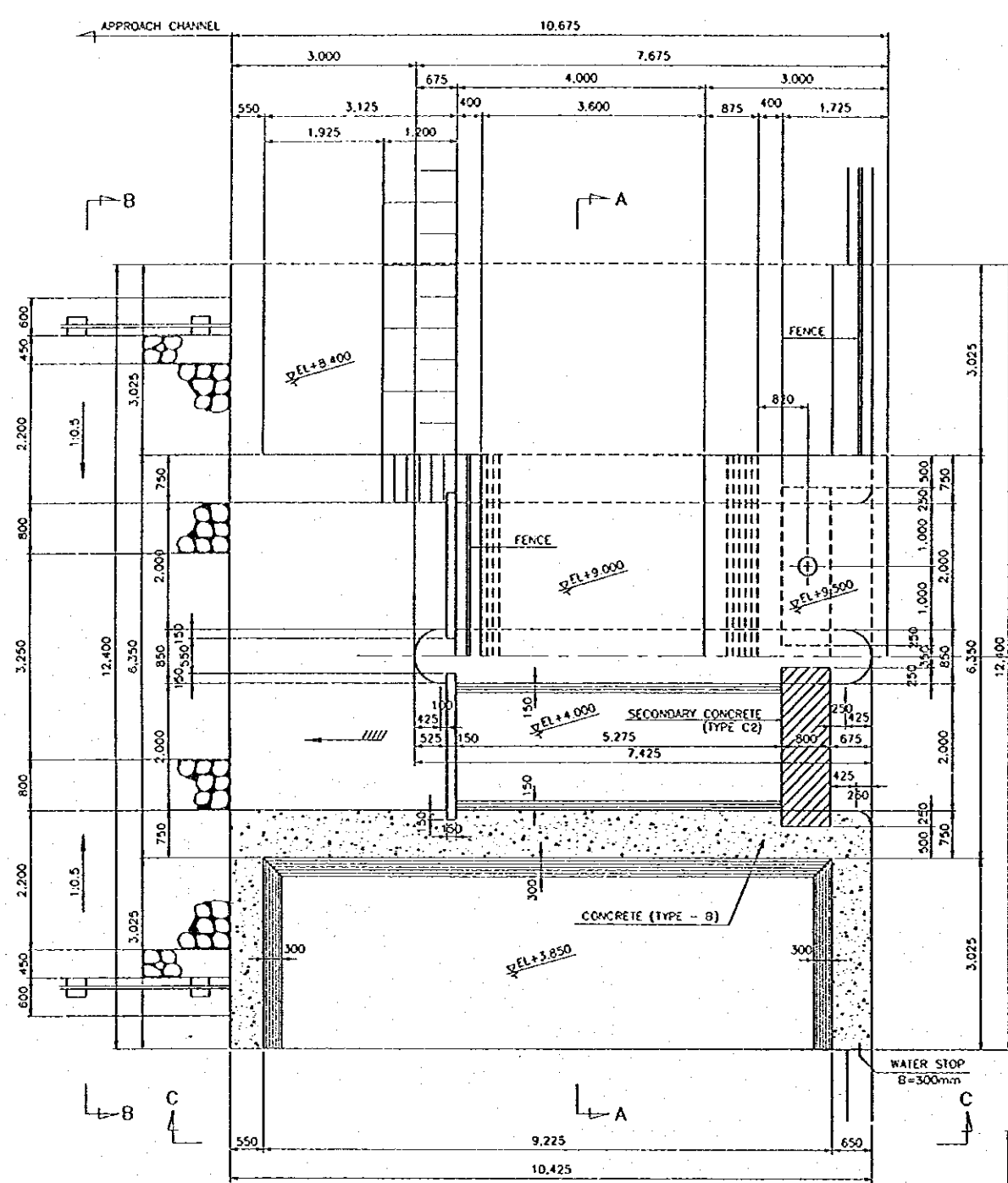
| BAR MARK | ØA (mm) | a (mm) | b (mm) | c (mm) | d (mm) | LENGTH OF BAR (mm) | NO REQ'D UNIT | TOTAL LENGTH | UNIT WEIGHT (kg/m) | WEIGHT (kg) | SHAPE | REMARK |
|----------|---------|--------|--------|--------|--------|--------------------|---------------|--------------|--------------------|-------------|-------|----------|
| E1 | D19 | 3095 | 400 | - | - | 3495 | 126 | 440370 | 2.23 | 982.025 | | |
| E2 | D19 | 2895 | 400 | - | - | 3295 | 72 | 327240 | 2.23 | 729.745 | | |
| E3 | D19 | 2895 | 400 | - | - | 3295 | 30 | 98850 | 2.23 | 270.436 | | |
| E4 | D19 | 6295 | 400 | - | - | 6695 | 36 | 241020 | 2.23 | 537.475 | | |
| E5 | D19 | 1020 | - | - | - | 1020 | 78 | 79560 | 2.23 | 177.419 | | |
| E6 | D19 | 6595 | 400 | - | - | 7395 | 72 | 532440 | 2.23 | 1187.341 | | |
| E7 | D19 | 630 | - | - | - | 630 | 84 | 52920 | 2.23 | 118.011 | | |
| E8 | D19 | 300 | 335 | 1052 | - | 2322 | 36 | 83592 | 2.23 | 186.410 | | |
| E9 | D19 | 1280 | - | - | - | 1280 | 72 | 92160 | 2.23 | 205.517 | | |
| E10 | D19 | 400 | 10 | 1052 | - | 1872 | 30 | 56160 | 2.23 | 125.237 | | |
| F1 | D13 | 6595 | 400 | 300 | - | 7295 | 36 | 262620 | 1.04 | 273.125 | | |
| F2 | D13 | 630 | - | - | - | 630 | 44 | 27720 | 1.04 | 28.829 | | |
| F3 | D13 | 1845 | 300 | - | - | 2145 | 36 | 77220 | 1.04 | 80.309 | | |
| F4 | D13 | 1695 | - | - | - | 1695 | 26 | 44070 | 1.04 | 45.833 | | |
| F5 | D13 | 1280 | - | - | - | 1280 | 36 | 46080 | 1.04 | 47.923 | | |
| F6 | D13 | 300 | 335 | 251 | 200 | 1086 | 34 | 36924 | 1.04 | 38.401 | | R=250 |
| F7 | D13 | 3895 | - | - | - | 3895 | 20 | 77900 | 1.04 | 81.016 | | |
| F8 | D13 | 2148 | - | - | - | 2148 | 22 | 47256 | 1.04 | 49.148 | | a varies |
| F9 | D13 | 4295 | 200 | - | - | 4495 | 8 | 35960 | 1.04 | 37.393 | | |
| F10 | D13 | 5300 | 200 | - | - | 5500 | 26 | 143000 | 1.04 | 148.72 | | a varies |
| F11 | D13 | 3095 | 200 | - | - | 3295 | 76 | 250420 | 1.04 | 260.437 | | |
| F12 | D13 | 2595 | 200 | - | - | 2795 | 18 | 50310 | 1.04 | 52.322 | | |
| F13 | D13 | 6295 | 200 | - | - | 6495 | 12 | 77940 | 1.04 | 81.058 | | |
| F14 | D13 | 3700 | - | - | - | 3700 | 4 | 14800 | 1.04 | 15.322 | | |
| F15 | D13 | 10245 | - | - | - | 10245 | 40 | 409800 | 1.04 | 426.192 | | |
| F16 | D13 | 3895 | 200 | - | - | 4095 | 20 | 81900 | 1.04 | 85.176 | | |
| F17 | D13 | 2148 | 200 | - | - | 2348 | 24 | 58352 | 1.04 | 58.606 | | a varies |
| F18 | D13 | 1695 | 200 | - | - | 1895 | 50 | 94750 | 1.04 | 98.540 | | |
| F19 | D13 | 6295 | 500 | - | - | 6795 | 20 | 135900 | 1.04 | 141.336 | | |
| F20 | D13 | 2010 | 195 | 750 | - | 2956 | 72 | 212832 | 1.04 | 221.345 | | R=125 |
| F21 | D19 | 2760 | 600 | - | - | 3360 | 10 | 33600 | 2.23 | 74.928 | | |
| F22 | D19 | 3900 | 600 | - | - | 4500 | 12 | 54000 | 2.23 | 120.420 | | |
| F23 | D25 | 2760 | 600 | - | - | 3360 | 18 | 60480 | 3.85 | 232.848 | | |
| F24 | D25 | 4650 | 600 | - | - | 5250 | 18 | 94500 | 3.85 | 263.825 | | a varies |

| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

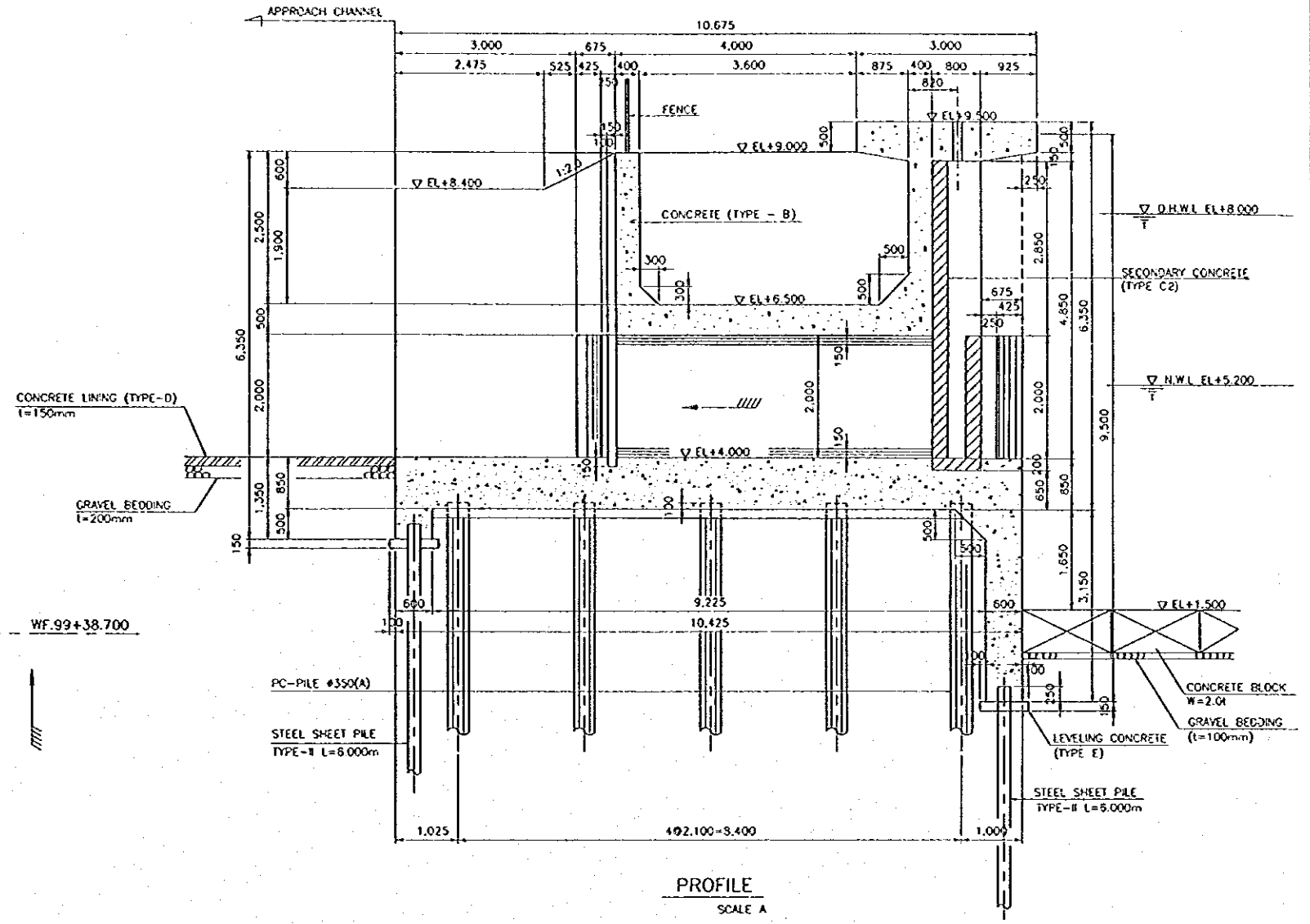
LIST OF REINFORCEMENT

| BAR MARK | ØA (mm) | a (mm) | b (mm) | c (mm) | d (mm) | LENGTH OF BAR (mm) | NO REQ'D UNIT | TOTAL LENGTH | UNIT WEIGHT (kg/m) | WEIGHT (kg) | SHAPE | REMARK |
|----------|---------|--------|--------|--------|--------|--------------------|---------------|--------------|--------------------|-------------|-------|--------|
| G1 | D13 | 3520 | 500 | - | - | 4520 | 102 | 461040 | 1.04 | 479.482 | | |
| G2 | D13 | 12000 | 1370 | 500 | - | 13370 | 11 | 147070 | 1.04 | 152.953 | | |
| G3 | D13 | 3520 | 500 | - | - | 4520 | 51 | 230520 | 1.04 | 239.472 | | |
| G4 | D13 | 12000 | 1370 | 500 | - | 13370 | 11 | 147070 | 1.04 | 152.953 | | |
| G5 | D13 | 3020 | 500 | - | - | 3520 | 51 | 179520 | 1.04 | 186.701 | | |
| G6 | D13 | 12000 | 1370 | 500 | - | 13370 | 11 | 147070 | 1.04 | 152.953 | | |
| G7 | D13 | 3020 | 500 | - | - | 3520 | 102 | 359040 | 1.04 | 373.402 | | |
| G8 | D13 | 12000 | 1370 | 500 | - | 13370 | 11 | 147070 | 1.04 | 152.953 | | |
| G9 | D16 | 2820 | 320 | 150 | - | 3760 | 52 | 195520 | 1.58 | 303.922 | | |
| G10 | D16 | 12000 | 1370 | 500 | - | 13370 | 13 | 173810 | 1.58 | 247.620 | | |
| G11 | D13 | 12000 | 1370 | 500 | - | 13370 | 23 | 307510 | 1.04 | 319.810 | | |
| G12 | D13 | 847 | 1200 | 738 | - | 2845 | 103 | 293035 | 1.04 | 304.756 | | |
| H1 | D16 | 3885 | - | - | - | 3885 | 42 | 163170 | 1.58 | 257.809 | | |
| H2 | D13 | 4870 | - | - | - | 4870 | 34 | 165580 | 1.04 | 172.203 | | |
| H3 | D22 | 4295 | 700 | - | - | 4995 | 30 | 149850 | 2.98 | 445.553 | | |
| H4 | D16 | 4145 | - | - | - | 4145 | 30 | 124350 | 1.58 | 196.473 | | |
| H5 | D22 | 2760 | 700 | - | - | 3460 | 30 | 103800 | 2.98 | 309.324 | | |
| I1 | D13 | 670 | 150 | - | - | 970 | 84 | 81480 | 1.04 | 84.739 | | |
| I2 | D13 | 470 | 150 | - | - | 770 | 28 | 21560 | 1.04 | 22.422 | | |
| I3 | D13 | 570 | 150 | - | - | 870 | 32 | 27840 | 1.04 | 28.954 | | |
| I4 | D13 | 670 | 150 | - | - | 970 | 81 | 78570 | 1.04 | 81.713 | | |
| J1 | D13 | 2432 | - | - | - | 2432 | 82 | 199424 | 1.04 | 207.401 | | |
| J2 | D13 | 2503 | - | - | - | 2503 | 80 | 200240 | 1.04 | 208.250 | | |
| J3 | D13 | 2291 | - | - | - | 2291 | 28 | 64148 | 1.04 | 66.714 | | |
| J4 | D13 | 1725 | - | - | - | 1725 | 52 | 89700 | 1.04 | 93.288 | | |
| J5 | D13 | 1442 | - | - | - | 1442 | 52 | 74934 | 1.04 | 77.933 | | |
| J6 | D13 | 2078 | - | - | - | 2078 | 28 | 58184 | 1.04 | 60.511 | | |
| J7 | D13 | 2291 | - | - | - | 2291 | 44 | 100304 | 1.04 | 104.836 | | |
| J8 | D13 | 2432 | - | - | - | 2432 | 132 | 321024 | 1.04 | 333.865 | | |
| J9 | D13 | 1795 | - | - | - | 1795 | 104 | 79024 | 1.04 | 82.185 | | |
| J10 | D13 | 1937 | - | - | - | 1937 | 132 | 255634 | 1.04 | 265.911 | | |

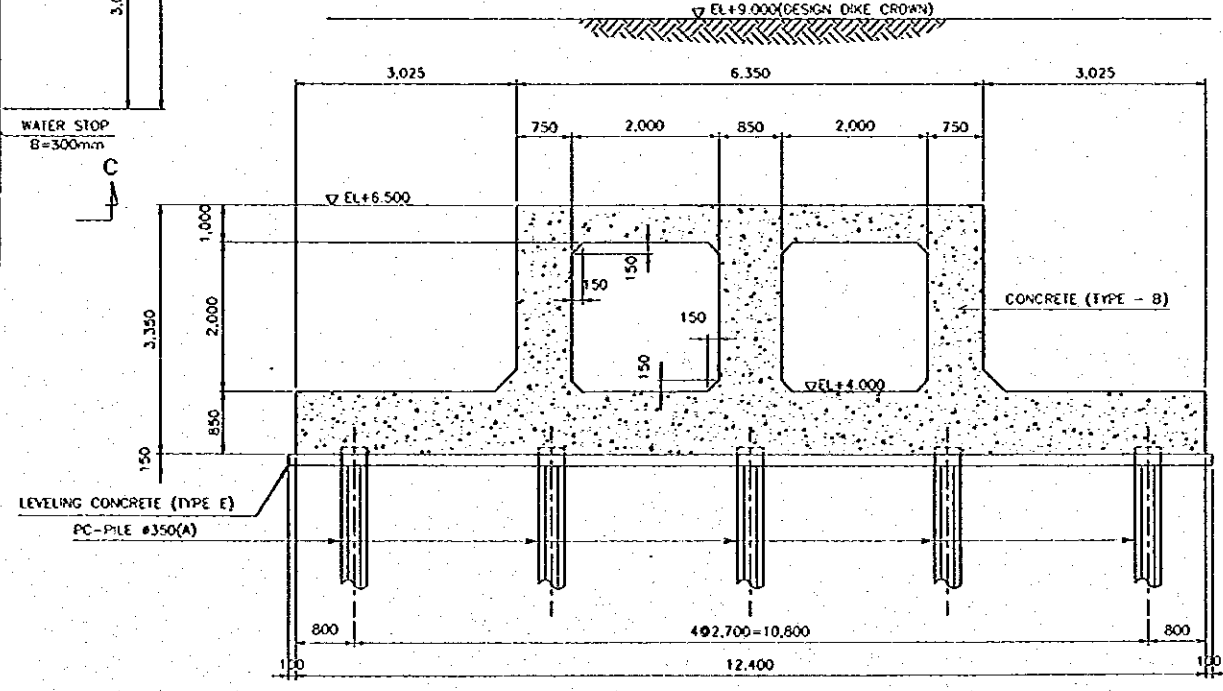
| | | | | |
|--|--|--|--|--------------------------|
| | THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | | PROVINCE CENTRAL JAVA |
| | PT. INDOBAR | | | |



PLAN
SCALE A



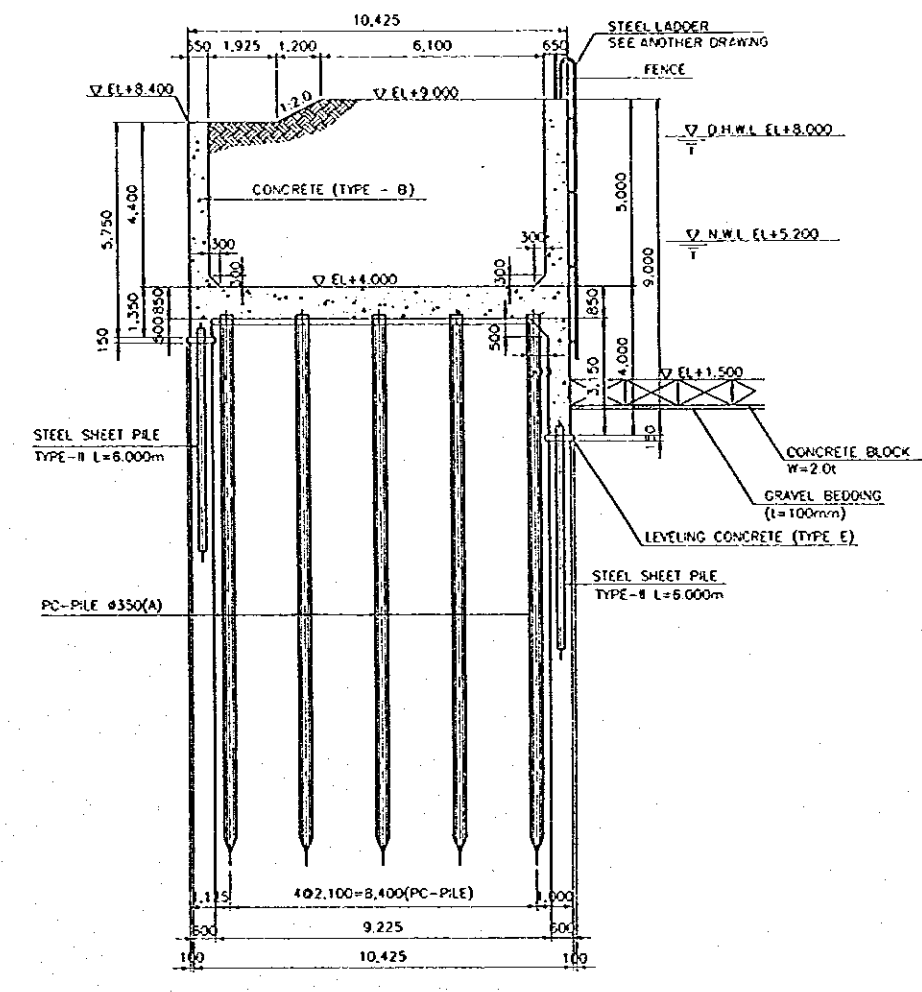
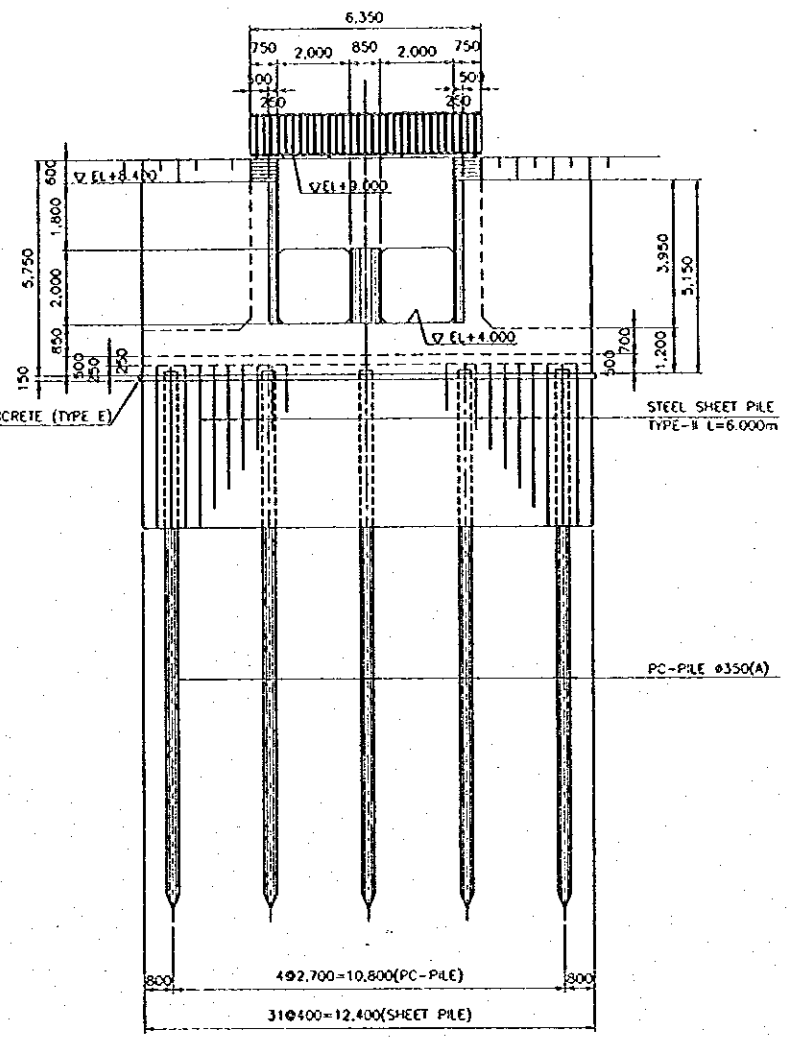
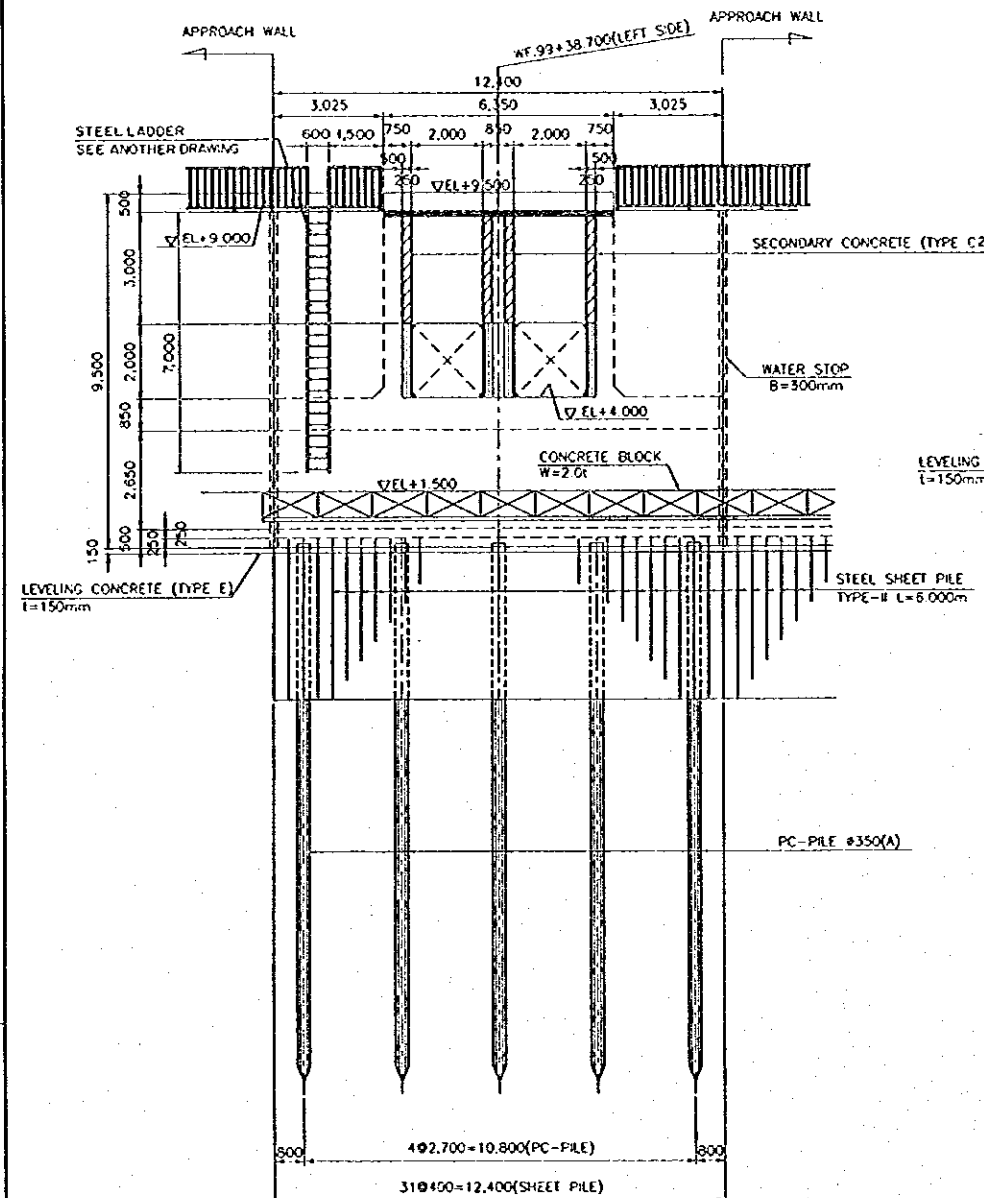
PROFILE
SCALE A



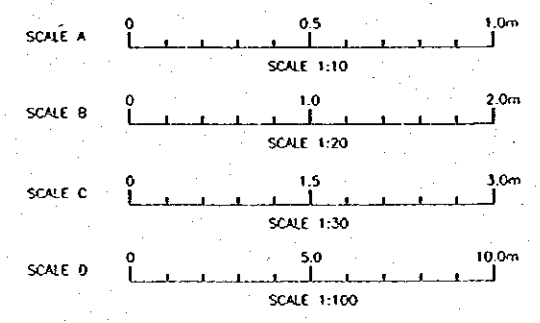
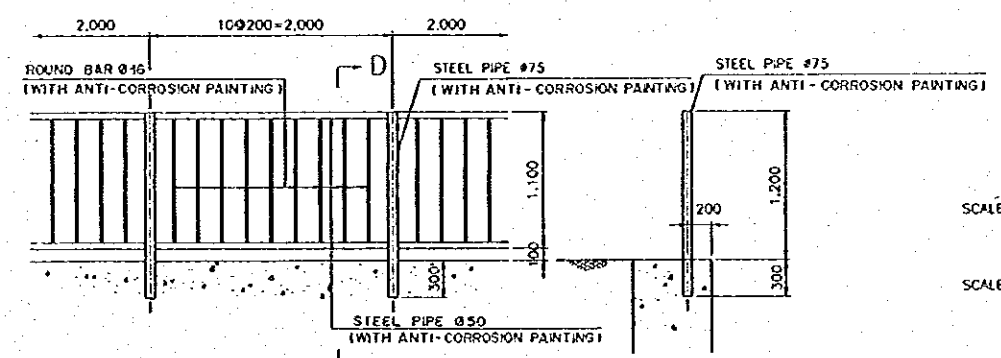
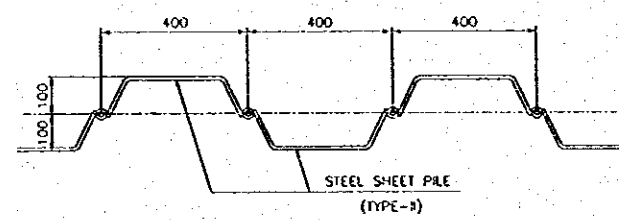
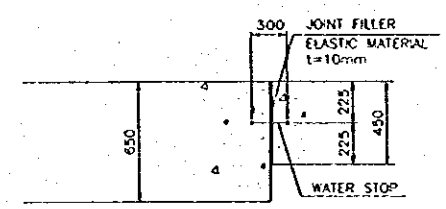
SECTION A-A
SCALE A

| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |
| | | | | | |

| | | |
|---|--|--|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROJECT NAME FLOOD CONTROL, LEAKY DAMAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. W3-P2-15-S1-8 SHEET NO. 72 DATE CONTRACT NO. |
| PROJECT CENTRAL JAVA | | DESIGNED CHECKED APPROVED PROJECT MANAGER |

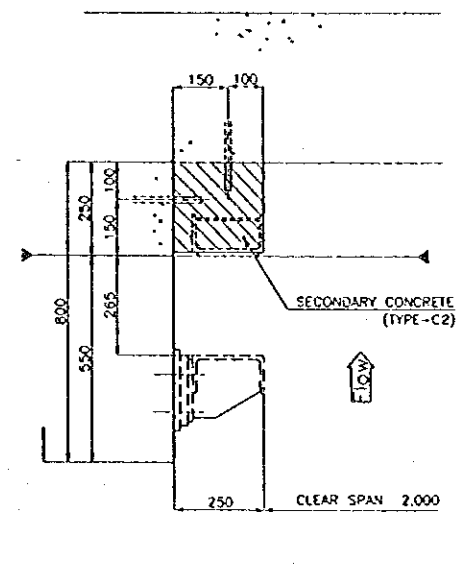
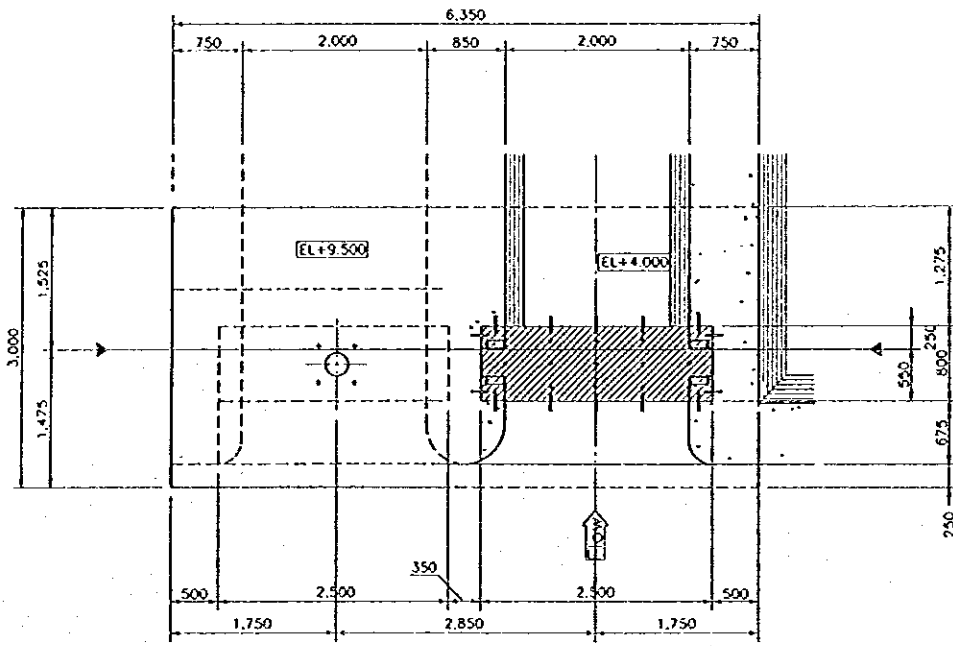


RIVER SIDE ELEVATION
SCALE D

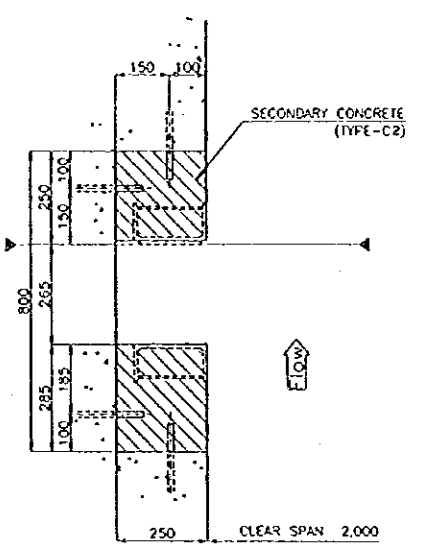


| NO. | DATE | REVISIONS | ORIGINATED | DRAWN | APPROVED |
|-----|------|-----------|------------|-------|----------|
| | | | | | |
| | | | | | |
| | | | | | |

| | | |
|---|--|---|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROVINCE: CENTRAL JAVA PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT: SEMARANG CITY DRAWING NO. W2-P2-15-S1-10 SHEET NO. 73 |
| JIATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT INTAKE STRUCTURES LEFT BANK INTAKE STRUCTURE (2/2) | | DATE: 15/05/2010 PROJECT MANAGER: |



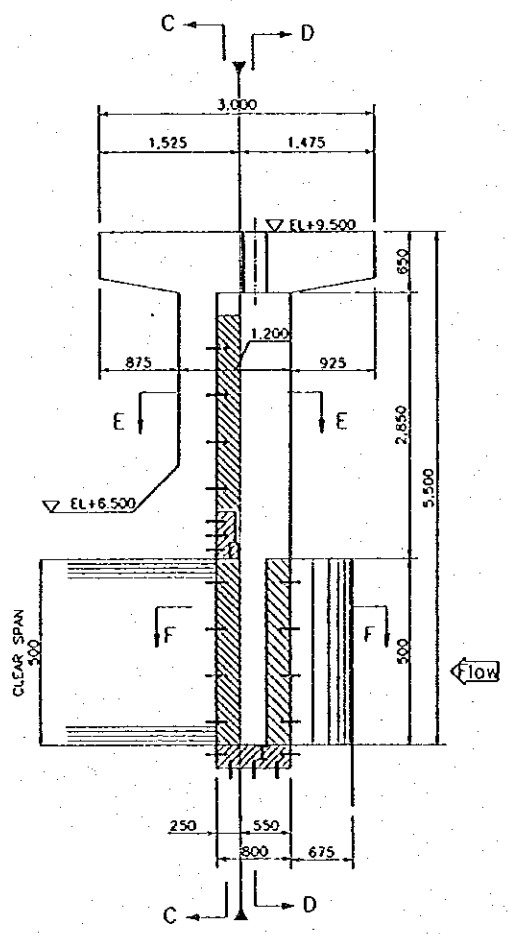
SECTION E-E
SCALE B



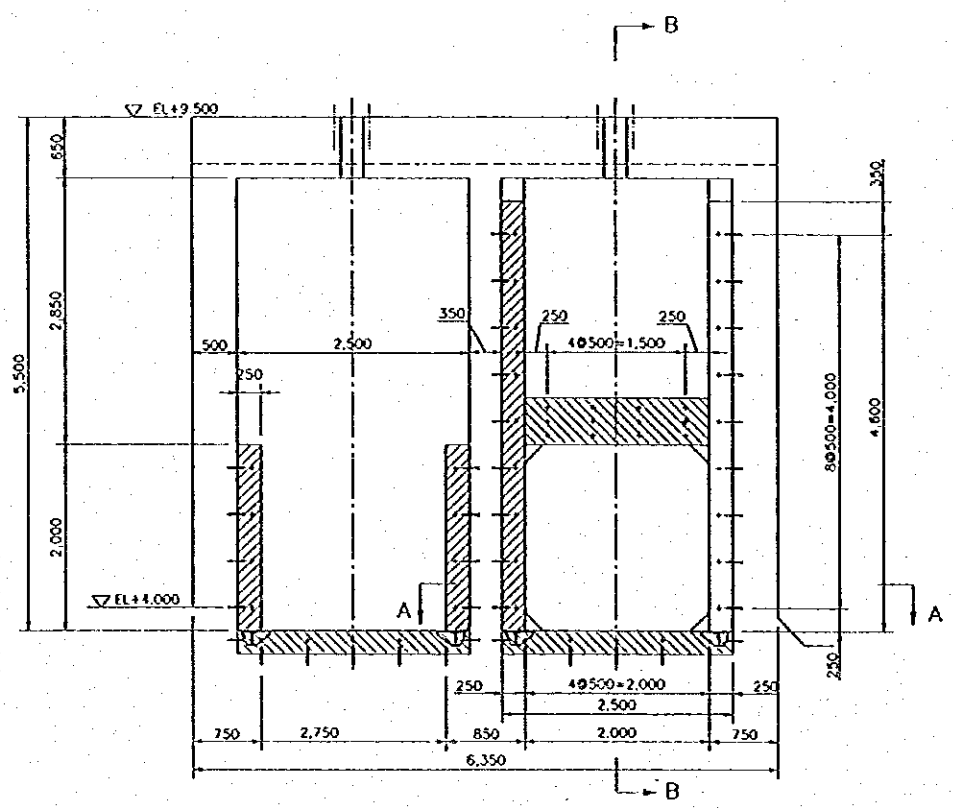
SECTION F-F
SCALE B

PLAN
SCALE A

SECTION A-A
SCALE A

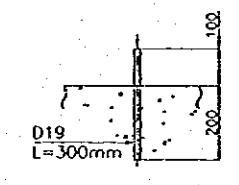


SECTION B-B
SCALE A

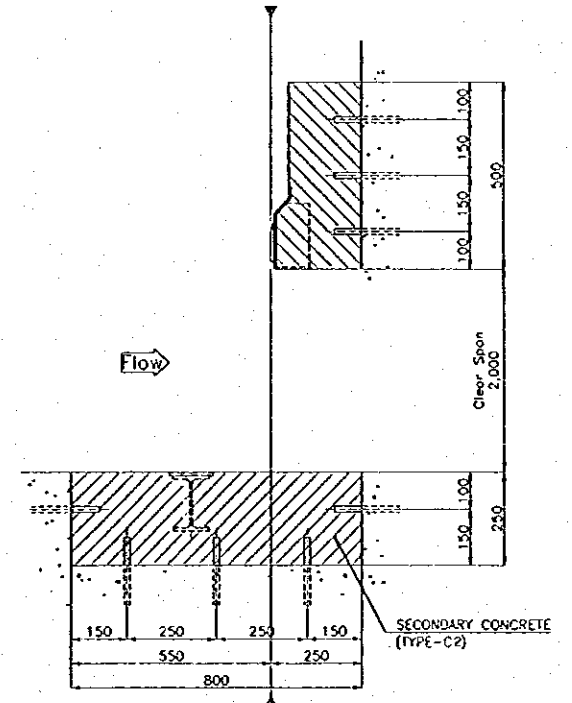


SECTION C-C
SCALE A

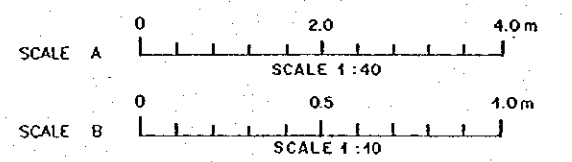
SECTION D-D
SCALE A



DETAIL OF ANCHOR BAR
SCALE B



DETAIL OF TOP & BOTTOM SEAL
SCALE B

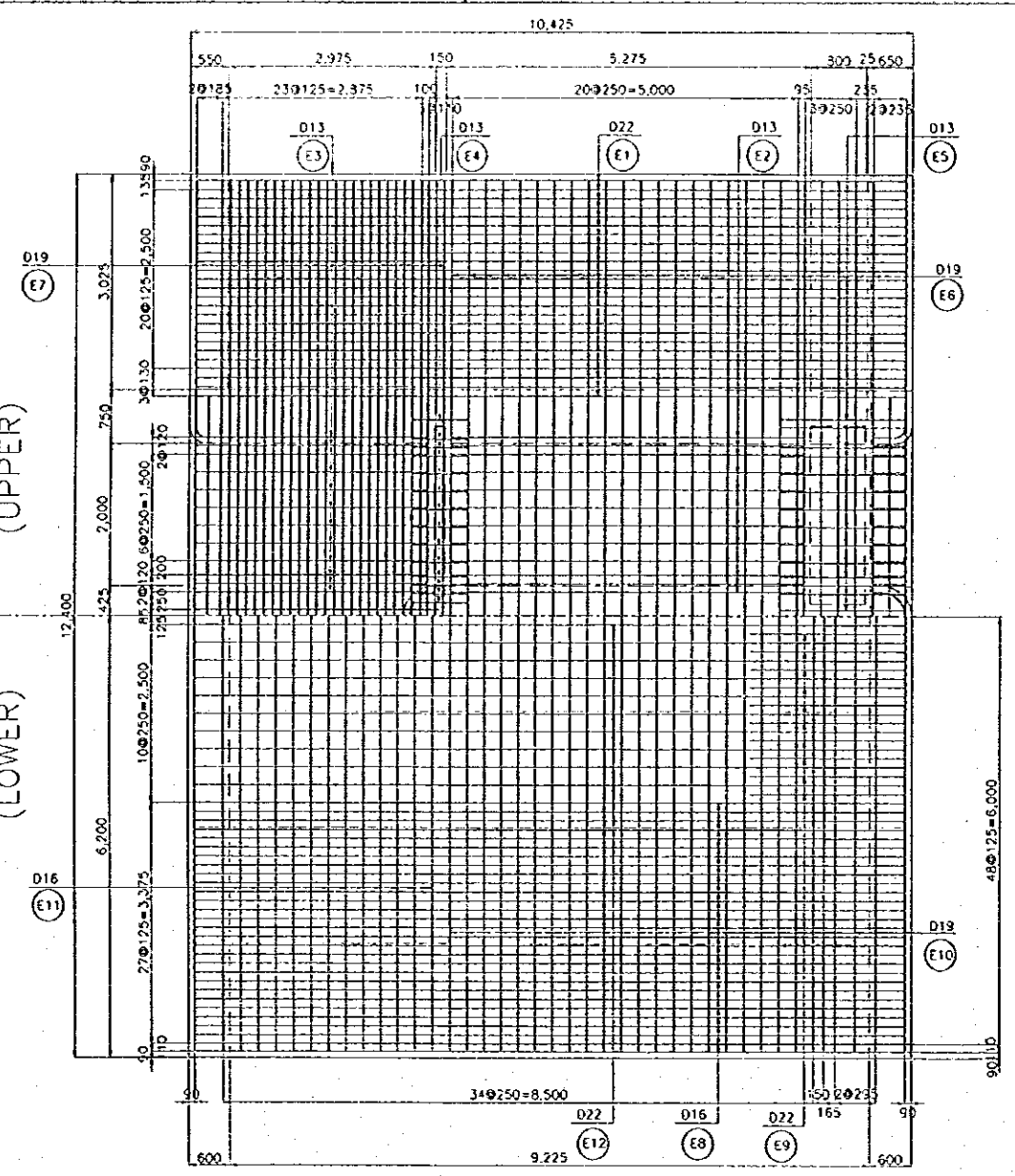


REMARKS
MARK " " SHOWS STANDARD LINE
FOR INSTALLATION

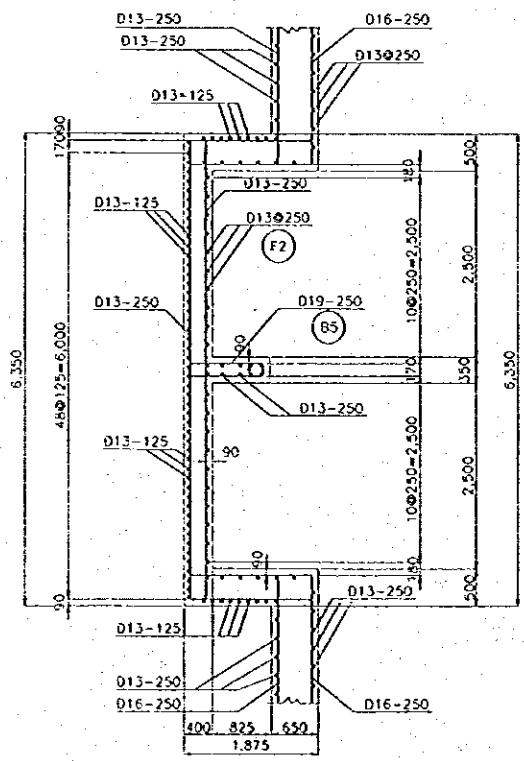
| NO. | DATE | REVISIONS | ORIGINATED | DESIGNED | APPROVED |
|-----|------|-----------|------------|----------|----------|
| | | | | | |
| | | | | | |
| | | | | | |

| | | |
|---|--|---|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT | | PROVINCE CENTRAL JAVA |
| PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA | | DISTRICT SEMARANG CITY |
| COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT INTAKE STRUCTURES BLOCKOUT FOR INTAKE GATE (LEFT BANK) | | DRAWING NO. W0-P2-15-S1-M SHEET NO. 11 |
| SAJAN INTERNATIONAL COOPERATION AGENCY CII ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL INC. PACIFIC INTERNATIONAL INC. | DESIGNED CHECKED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER | DATE CONTRACT NO. |

(UPPER)
(LOWER)

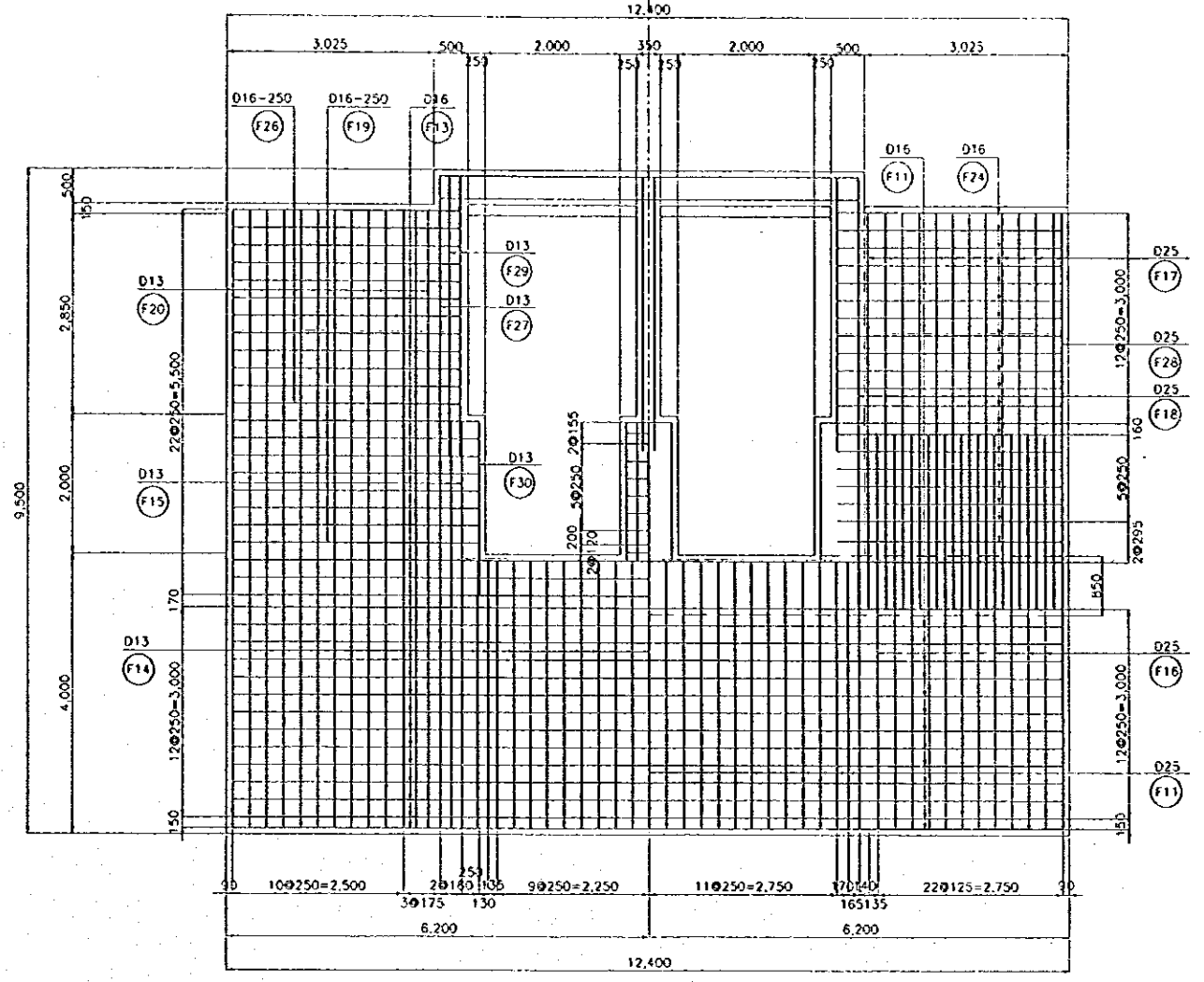


1 - 1

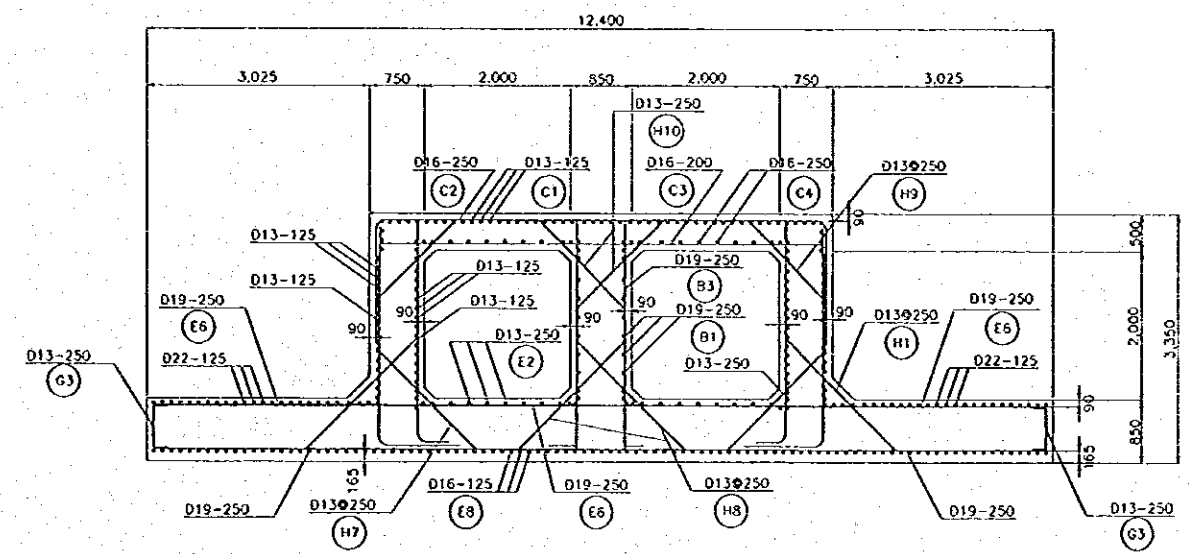


3 - 3

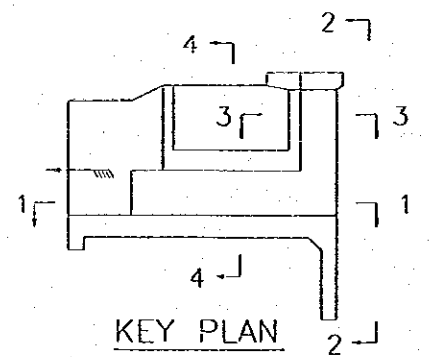
(RIVER SIDE) | (LAND SIDE)



2 - 2



4 - 4



KEY PLAN

| | | |
|---|-----------------------------|--|
| THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT BRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT INTAKE STRUCTURES REINFORCING BAR ARRANGEMENT FOR LEFT INTAKE STRUCTURE | | PROJECT CENTRAL JAVA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. W.8-P2-15-R-12 SHEET NO. 75 |
| DESIGNED CHECKED DATE | APPROVED PROJECT MANAGER | CONTRACT NO. |

