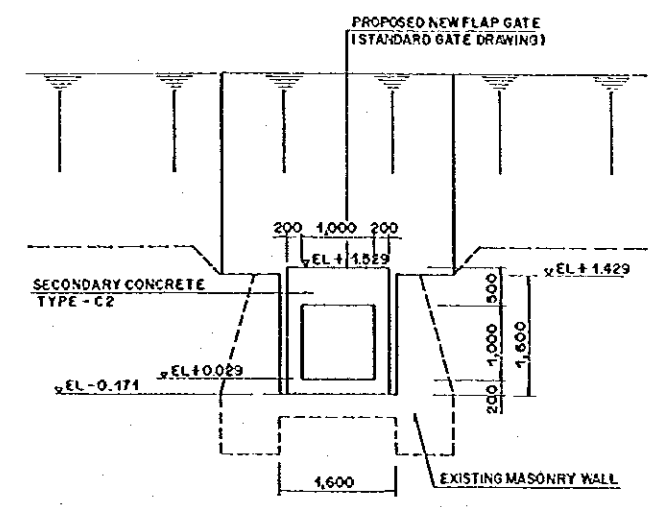
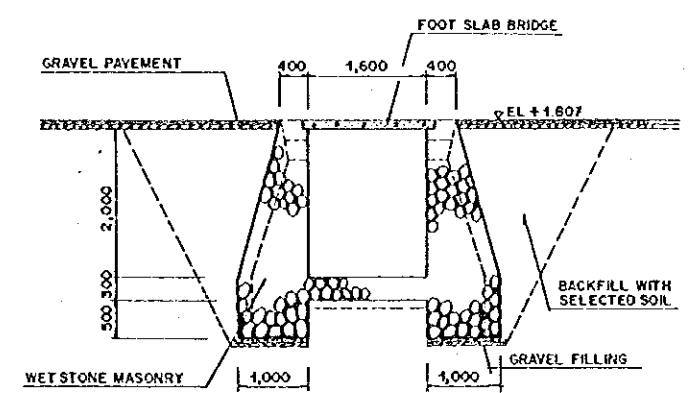


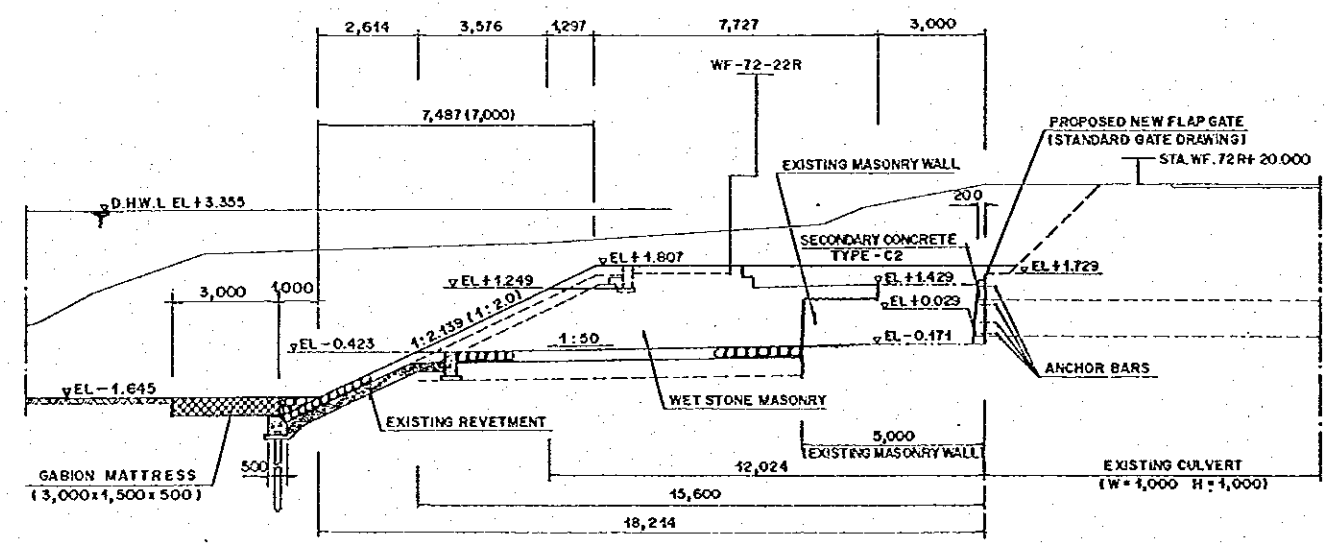
PLAN OF RIGHT SIDE OUTLET CHANNEL D/S OF NATIONAL ROAD BRIDGE (R.3A) (WF. 72R + 20.0 m)
SCALE A



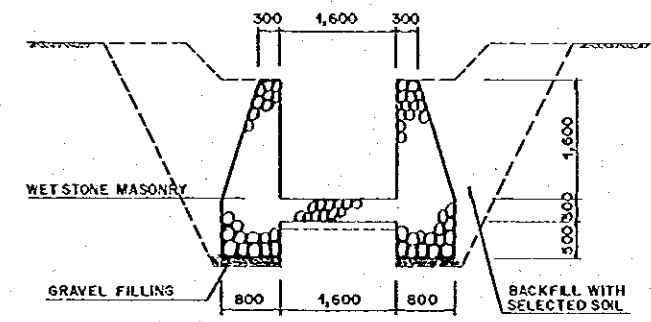
SECTION A-A
SCALE B



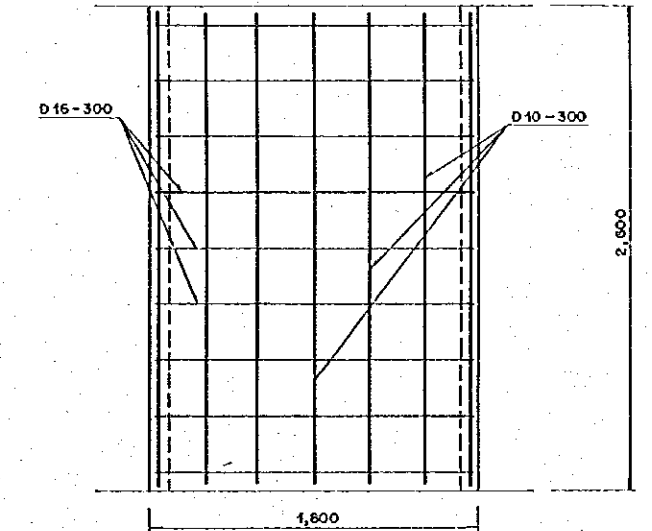
SECTION C-C
SCALE B



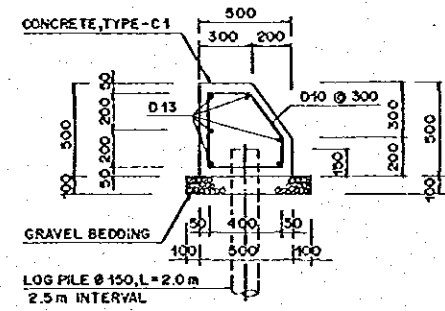
PROFILE OF RIGHT SIDE OUTLET CHANNEL D/S OF NATIONAL ROAD BRIDGE (R.3A)
SCALE A



SECTION B-B
SCALE B



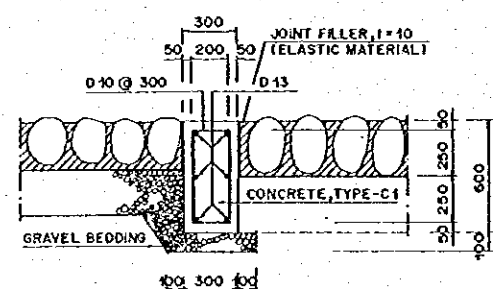
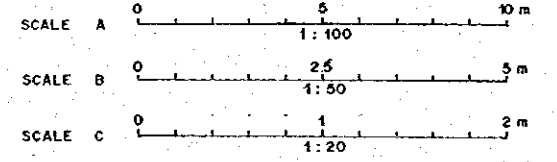
DETAIL OF FOOT SLAB BRIDGE
SCALE C



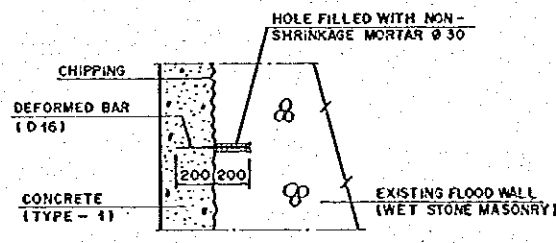
BASE CONCRETE
SCALE C

LIST OF DRAINAGE OUTLET IMPROVEMENT

NAME	LOCATION	DIMENSION n Ø W x H / Dia	NOTE
R3	WF.68R + 21 m	2 Ø W (0.8 - 1.4) x H 2.29	TO BE MODIFIED / NEW GATE
R3A	WF.72R + 20 m	W 1.00 x H 1.00	TO BE MODIFIED / NEW CONNECTING CHANNEL
R4	WF.74R + 5 m	Dia. 1.00 x W 1.20 x H 1.20	- DITTO -
R9	WF.457R + 00 m	W 1.05 x H 1.20	TO BE MODIFIED NEW GATE & NEW CONNECTING CHANNEL
R8	WF.162R + 41 m	W 1.10 x H 0.70	- DITTO -
R12	WF.165R + 9 m	W 1.50 x H 0.90	- DITTO -
R14	WF.176R + 27 m	Dia. 0.60	NEW CONCRETE OUTLET
R19	WF.176R + 41 m	Dia. 0.60	- DITTO -
L8	WF.15L + 20 m	W 1.20 x H 1.50	TO BE MODIFIED NEW GATE
L9	WF.22L + 37 m	W 1.40 x H 0.80	- DITTO -
L12	WF.74R + 8.0 m	W 1.50 x H 1.50	TO BE MODIFIED NEW CONNECTING CHANNEL



TOP CONCRETE
SCALE C



DETAIL OF JOINT AND ANCHOR
SCALE C

NOTE:
FOR THE DETAILS OF FLAP GATE,
REFER TO THE STANDARD DRAWING

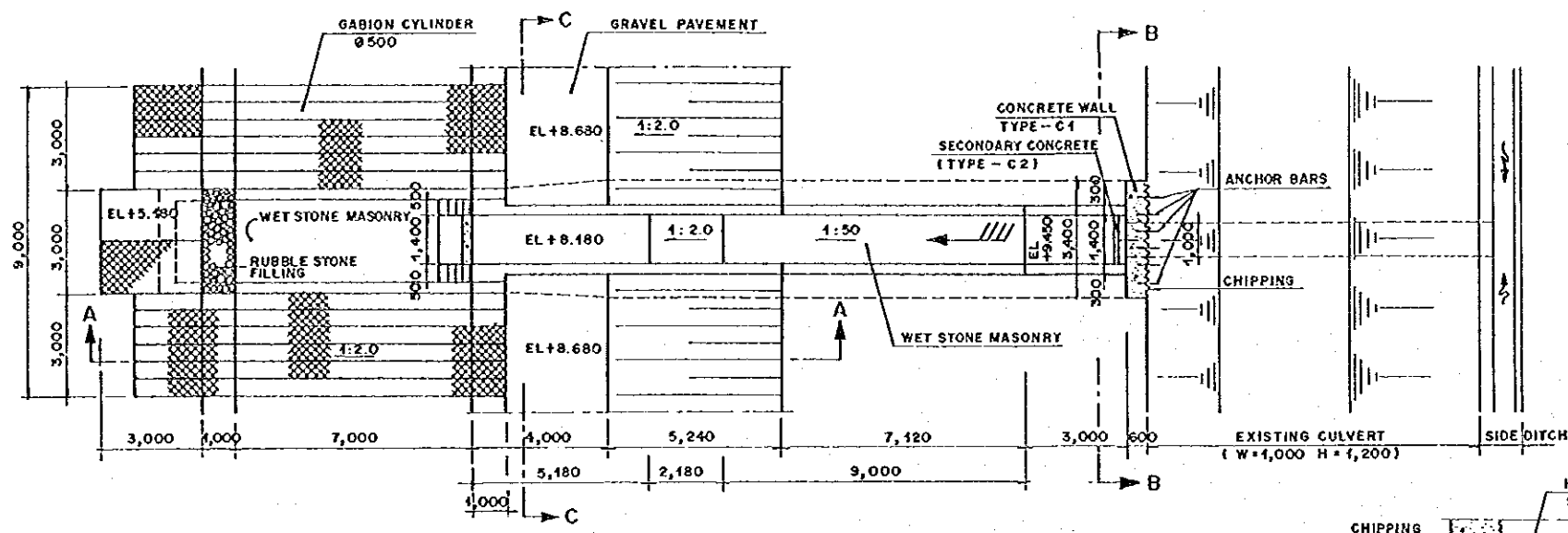
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

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

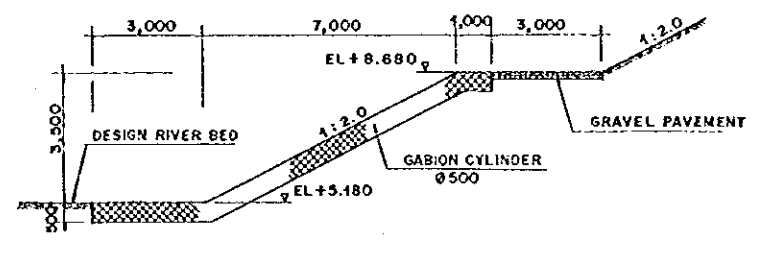
JRATUNSELUNA FLOOD CONTROL PROJECT
COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT
DRAINAGE OUTLET WORKS
PLAN, PROFILE AND STRUCTURAL DETAILS
OF OUTLET CHANNEL R3A

PROVIDER: CENTRAL JAVA
PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCE DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
DISTRICT: SEMARANG CITY
DRAWING NO. WB-P1-00-51-1
SHEET NO. 158
DATE: _____
CONTRACT NO. _____

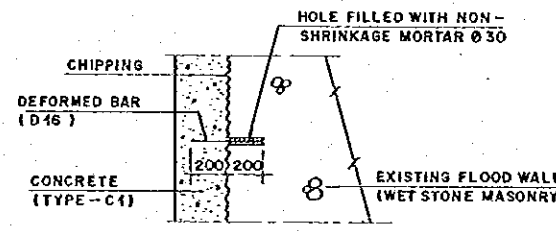
DESIGNED: _____
CHECKED: _____
PROJECT MANAGER: _____



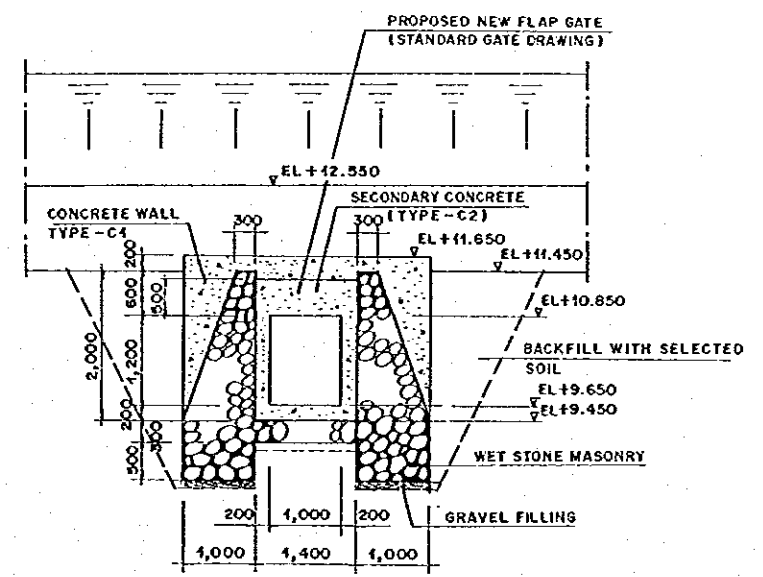
PLAN OF OUTLET CHANNEL R9 (WF. 157R)
SCALE . A



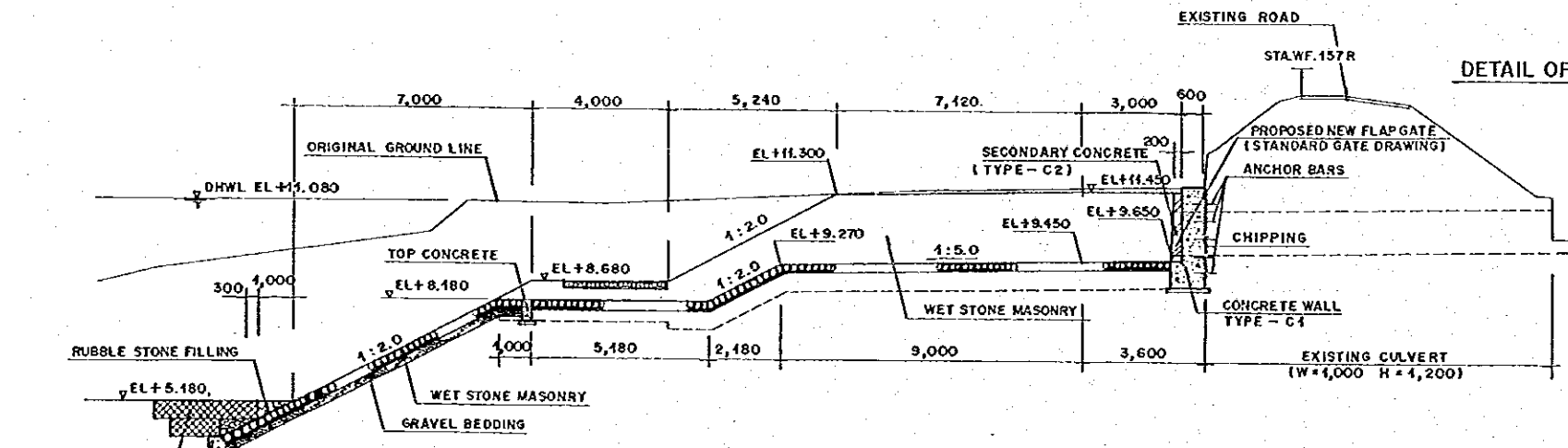
SECTION A-A
SCALE . B



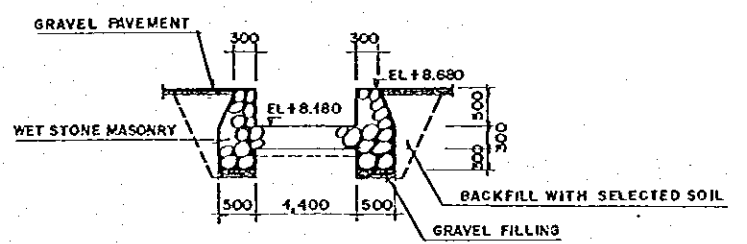
DETAIL OF JOINT AND ANCHOR
SCALE . C



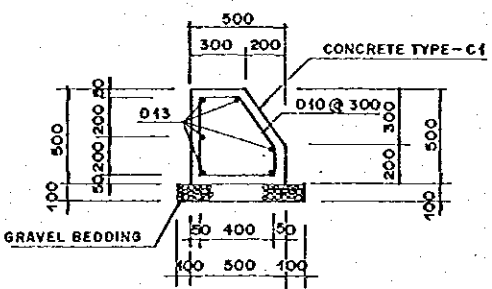
SECTION B-B
SCALE . B



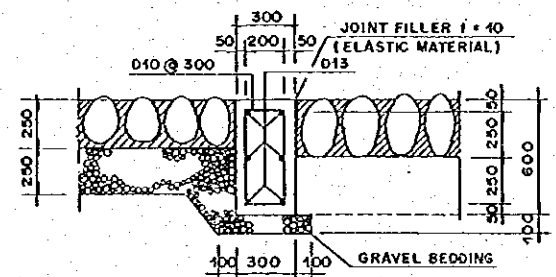
PROFILE OF OUTLET CHANNEL R9
SCALE . A



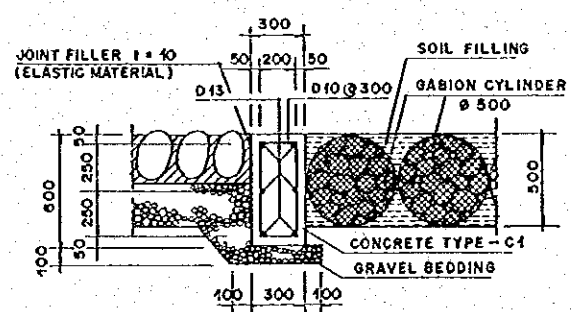
SECTION C-C
SCALE . B



BASE CONCRETE
SCALE . C

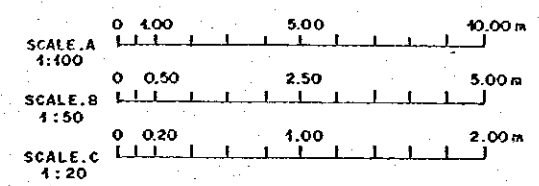


TOP CONCRETE
SCALE . C



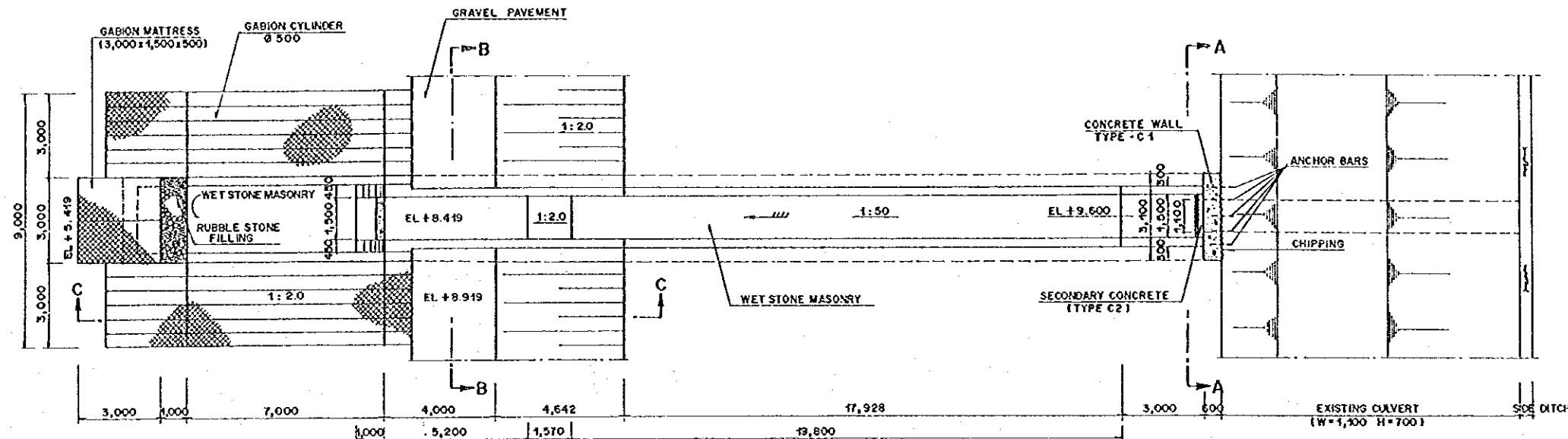
SIDE WALL
SCALE . C

NOTE:
FOR THE DETAILS OF FLAP GATE,
REFER TO THE STANDARD DRAWING.

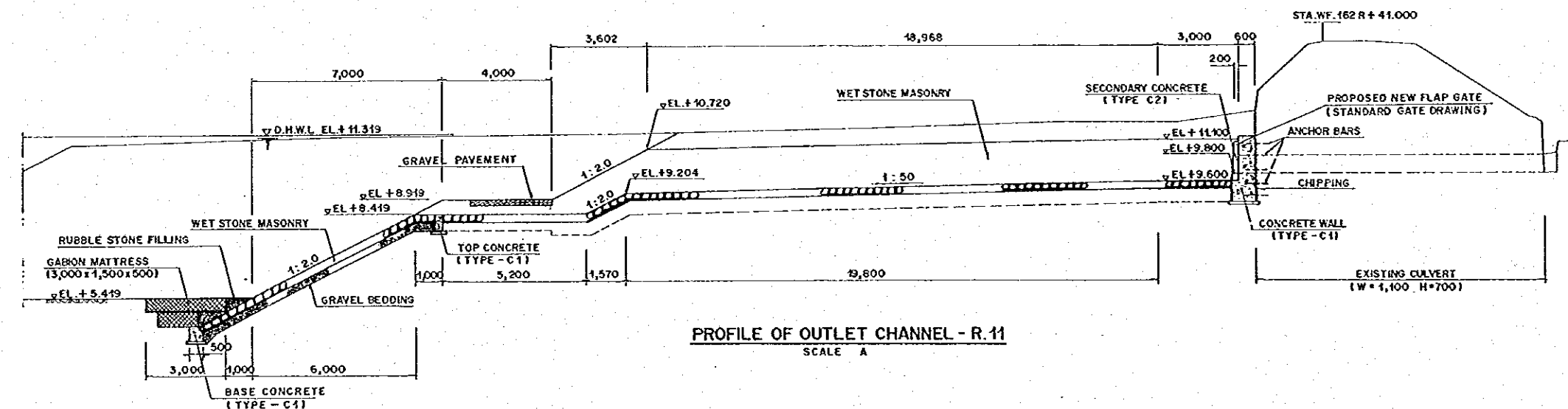
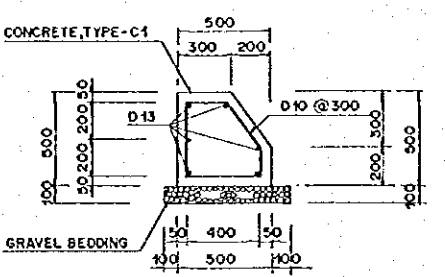
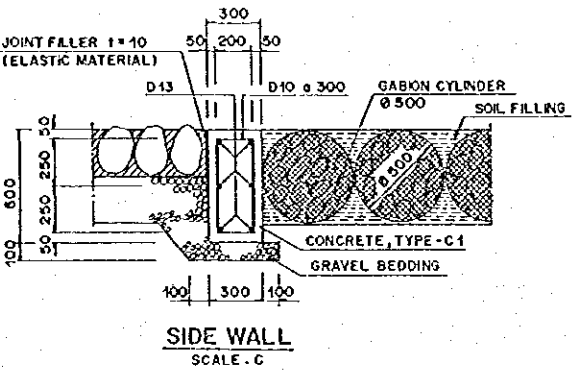
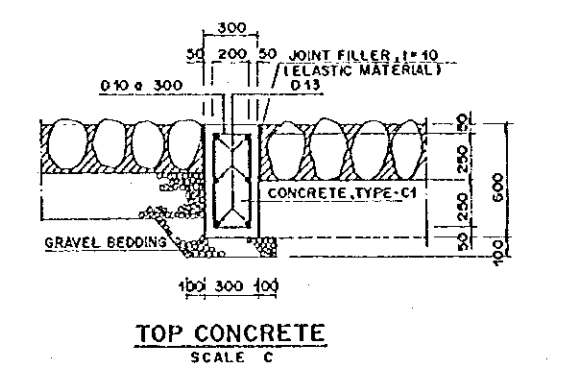


THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
IRATUNSELUNA FLOOD CONTROL RIVER IMPROVEMENT COMPONENT: WEST FLOODWAY / GARANO RIVER IMPROVEMENT DRAINAGE OUTLET WORKS PLAN, PROFILE AND STRUCTURAL DETAILS OF OUTLET CHANNEL R9		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCE DEVELOPMENT OF SEMARANG IN THE REPUBLIC OF INDONESIA
LOAN INTERNATIONAL COOPERATION AGENCY CIL ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND TAIACO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
DESIGNED CHECKED		DRAWING NO. W3-P1-50-51-2 SHEET NO. 169
DATE CONTRACT NO.		
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		

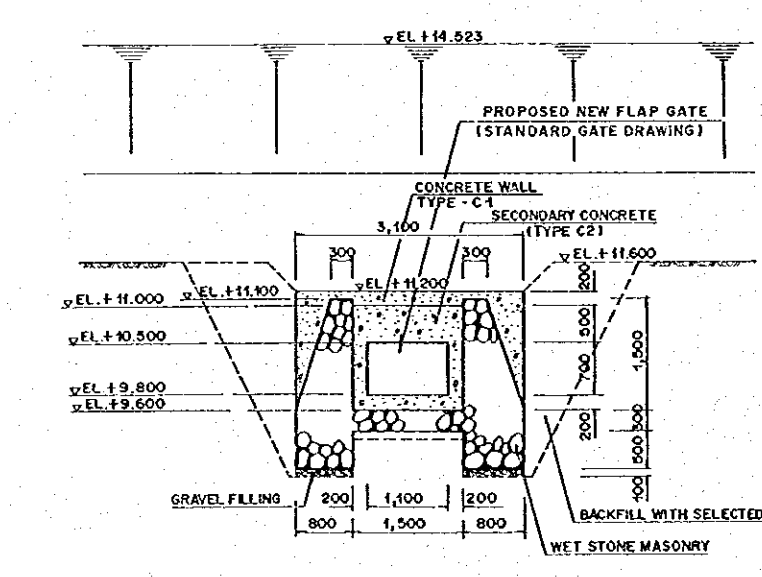
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED



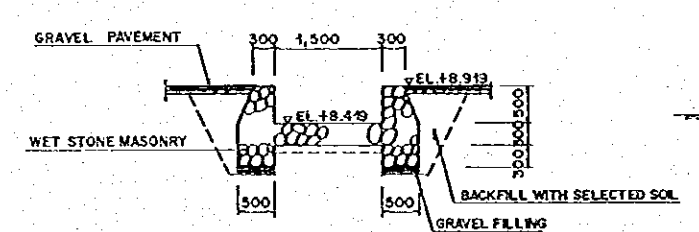
PLAN OF OUTLET CHANNEL R11
(WF. 162R + 41.0 m)
SCALE A



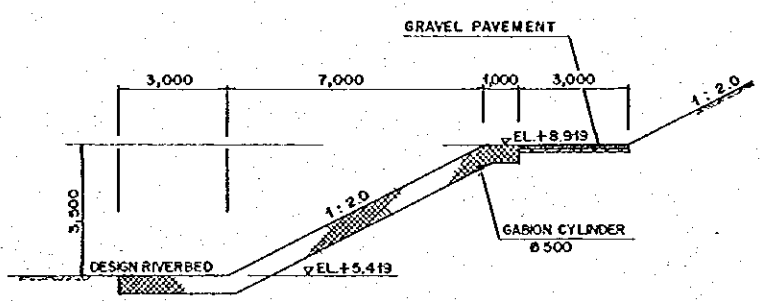
PROFILE OF OUTLET CHANNEL - R.11
SCALE A



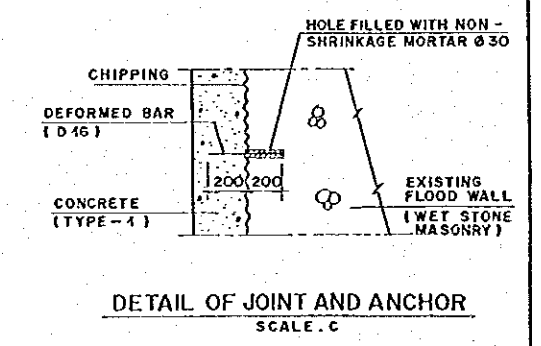
SECTION A-A
SCALE B



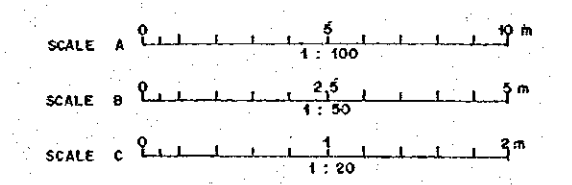
SECTION B-B
SCALE B



SECTION C-C
SCALE A



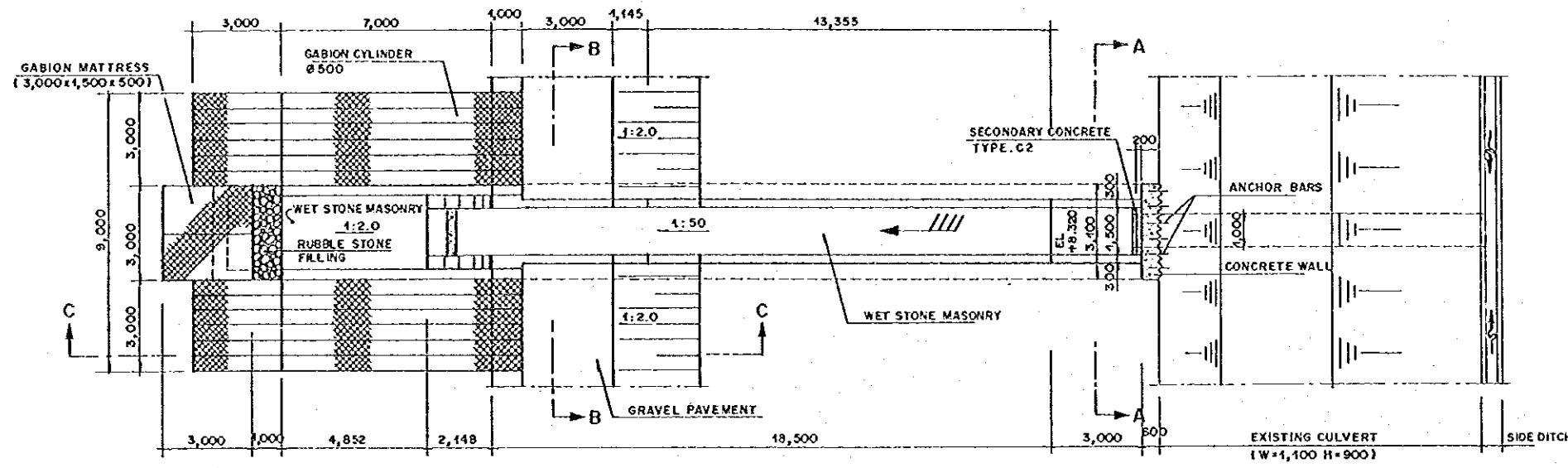
DETAIL OF JOINT AND ANCHOR
SCALE C



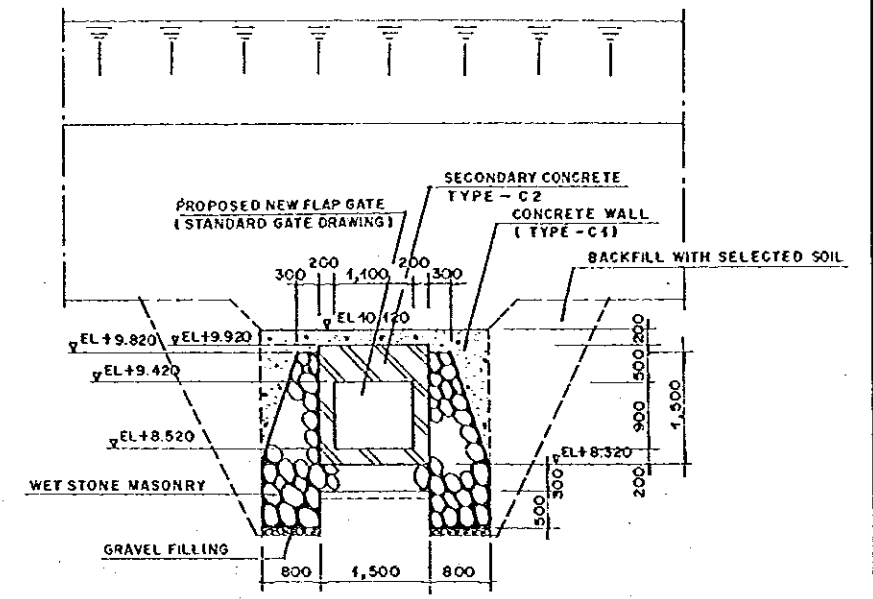
NOTE:
FOR THE DETAILS OF FLAP GATE,
REFER TO THE STANDARD DRAWING.

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

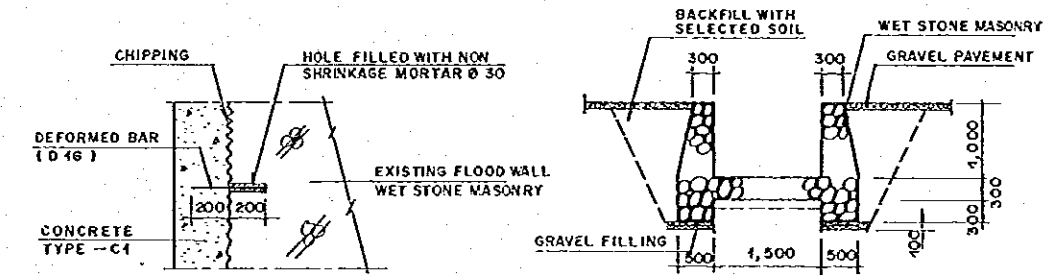
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT DRAINAGE OUTLET WORKS PLAN, PROFILE AND STRUCTURAL DETAILS OF OUTLET CHANNEL R11		PROJECT RANGE FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAWA INTERNATIONAL COOPERATION AGENCY PT. INDOENGGANG CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PAKSI REKREASI TEKNIK		CITY SEMARANG CITY
DESIGNED CHECKED CRUISE OF PLANNING AND DESIGN		DRAWING NO. WB-P1-DO-S1-3 SHEET NO. 118
PROJECT MANAGER		DATE CONTRACT NO.



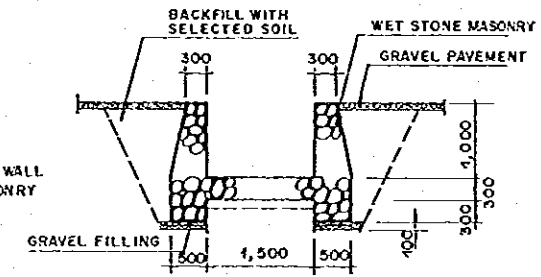
PLAN OF OUTLET CHANNEL R12
(WF. 165R + 9.0m)
SCALE. A



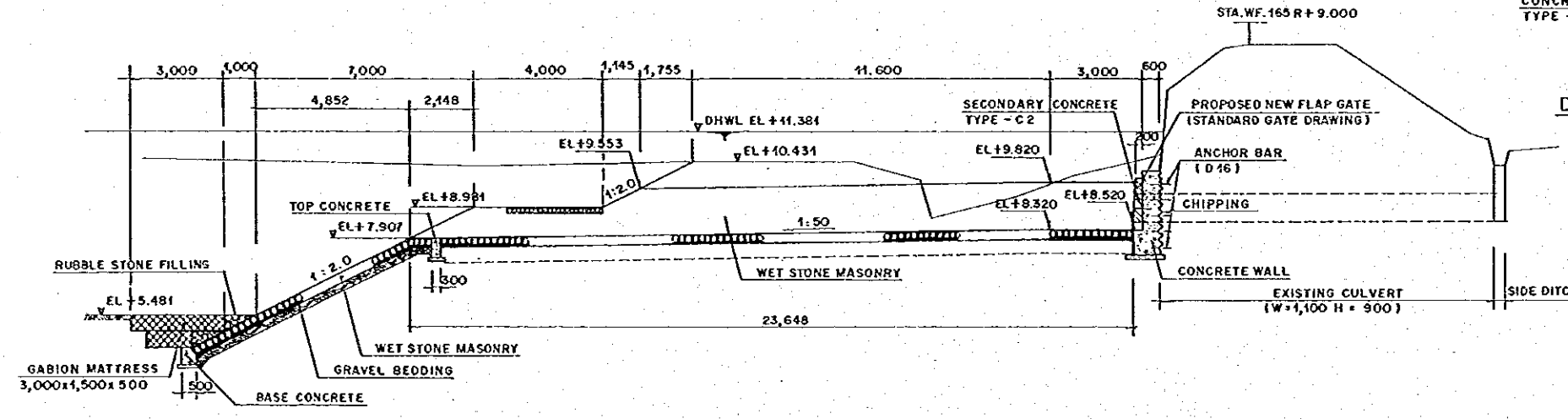
SECTION A-A
SCALE. B



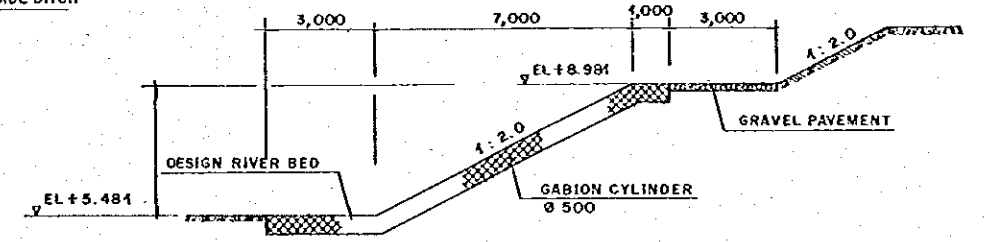
DETAIL OF JOINT AND ANCHOR
SCALE. B



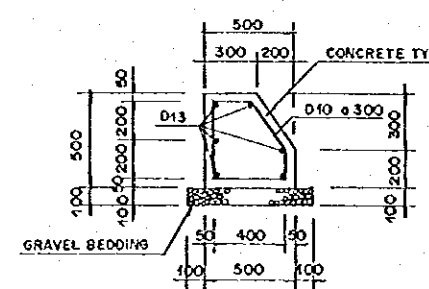
SECTION B-B
SCALE. B



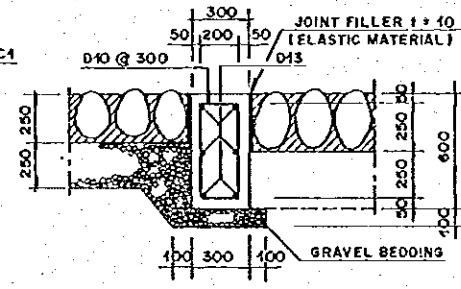
PROFILE OF OUTLET CHANNEL R12
SCALE. A



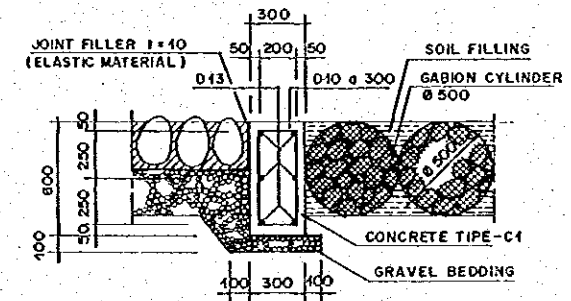
SECTION C-C
SCALE. B



BASE CONCRETE
SCALE. C

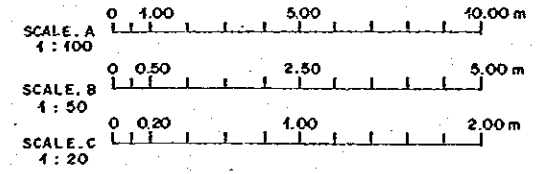


TOP CONCRETE
SCALE. C



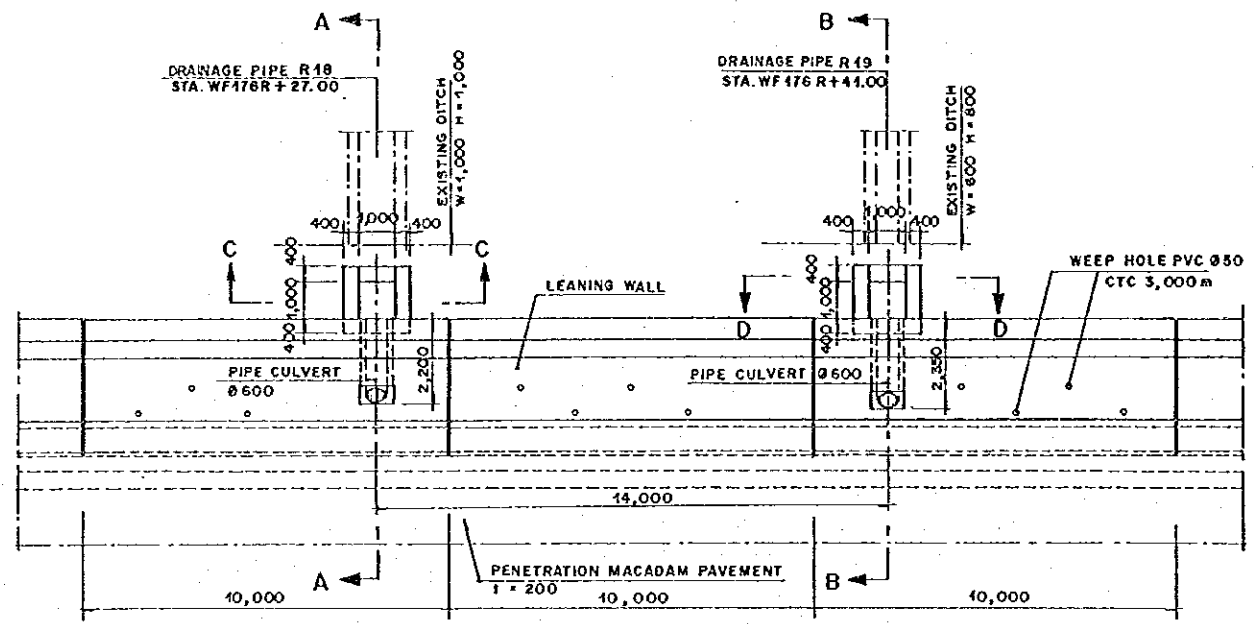
SIDE WALL
SCALE. C

NOTE:
FOR THE DETAILS OF FLAP GATE,
REFER TO THE STANDARD DRAWING.

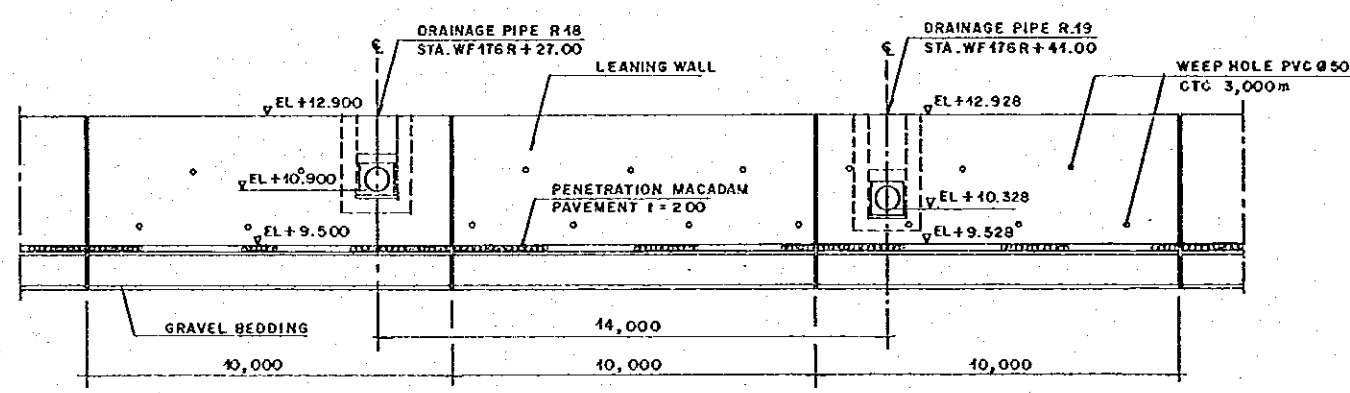


THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROJECT CENTRAL JAVA
PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA		DEFECT SEMARANG CITY
DRAWING NO. WS - P1 - 00 - 51 - 4 SHEET NO. 111		CONTRACTING
DESIGNED [Signature]	CHECKED [Signature]	DATE
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		APPROVED

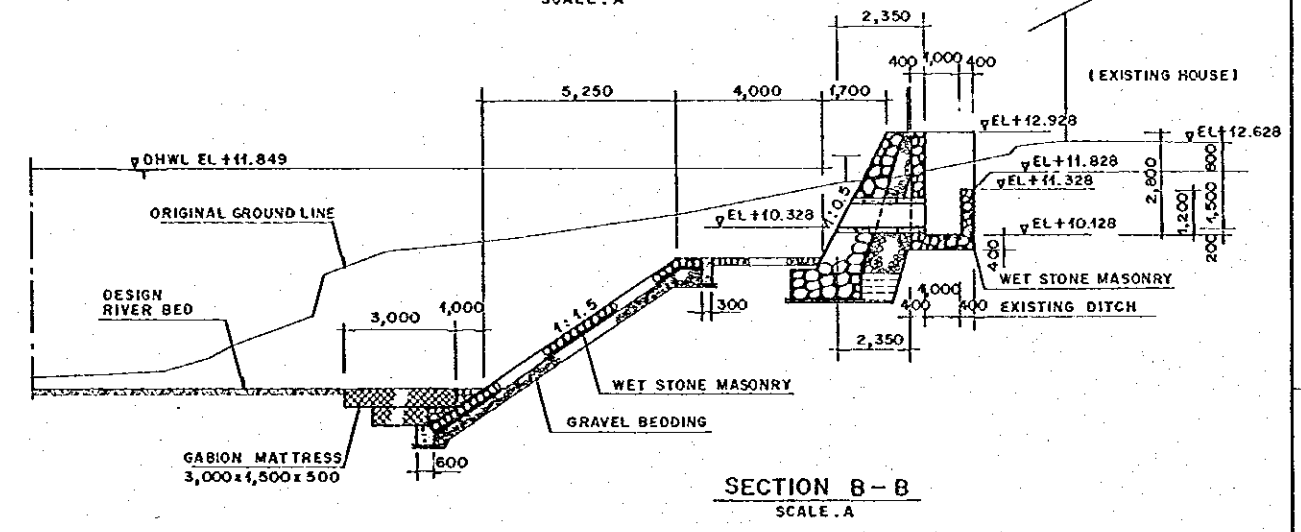
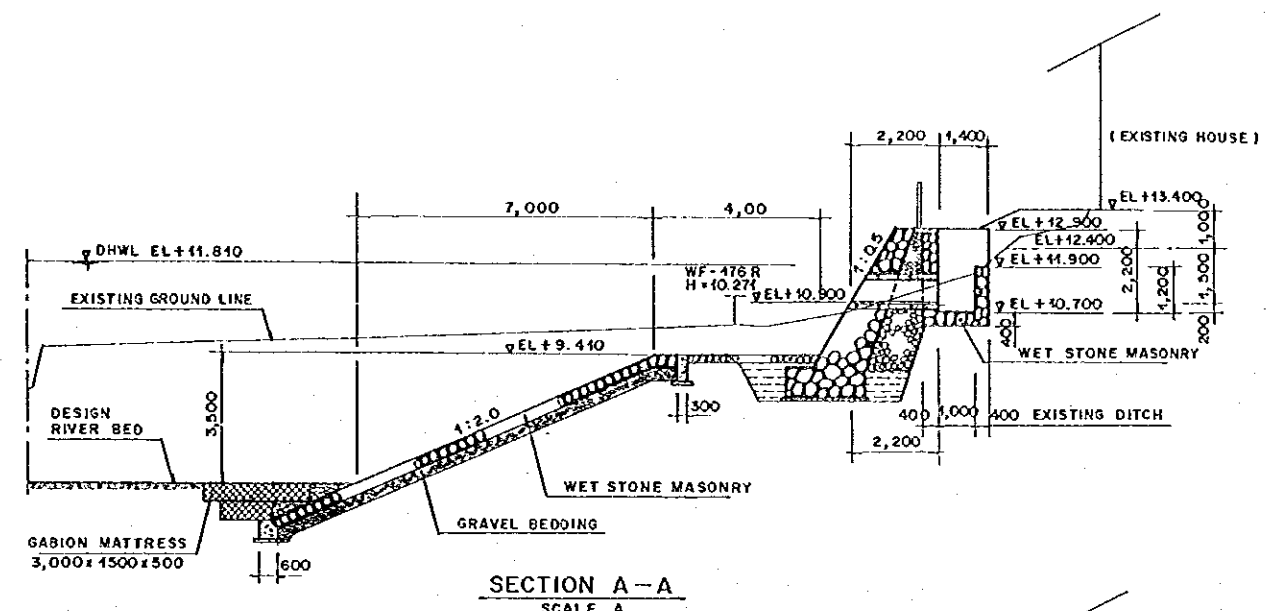
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED



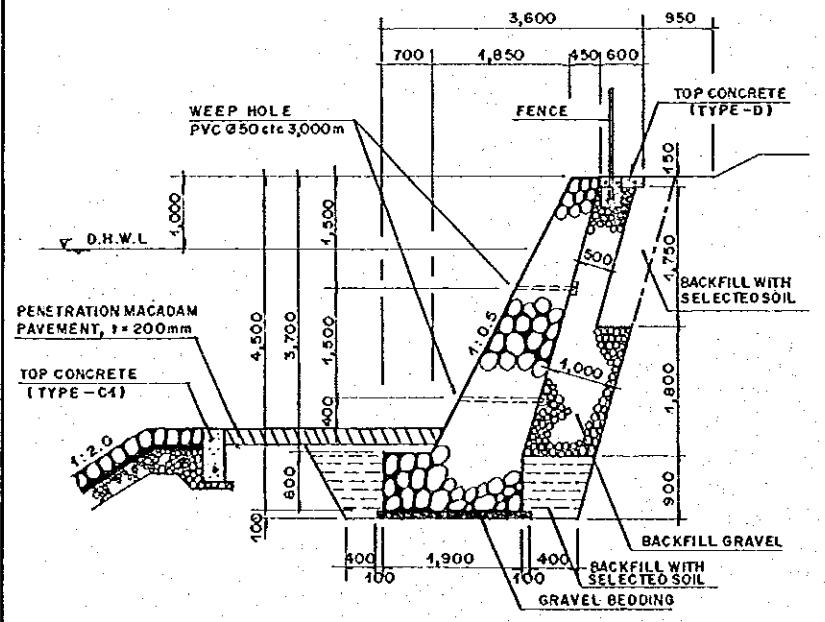
PLAN OF DRAINAGE PIPE R.18 AND R.19
(WF. 176R + 27.0m AND WF. 176R + 41.0m)
SCALE A



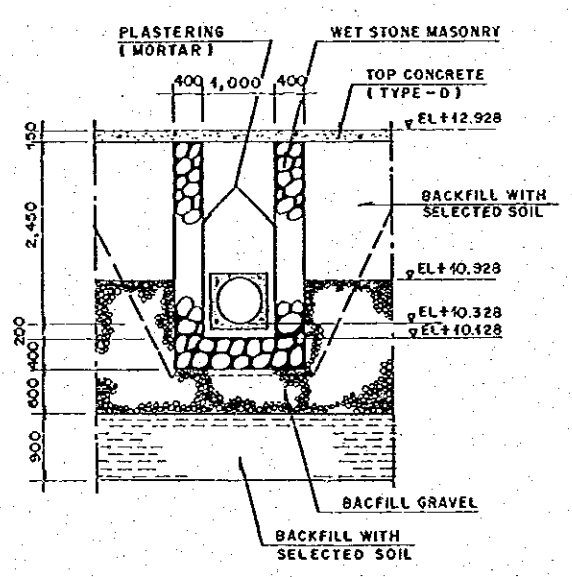
PROFILE OF DRAINAGE PIPE R.18 AND R.19
SCALE A



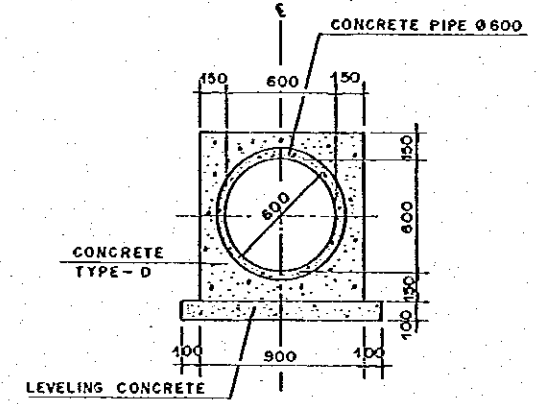
SECTION B-B
SCALE A



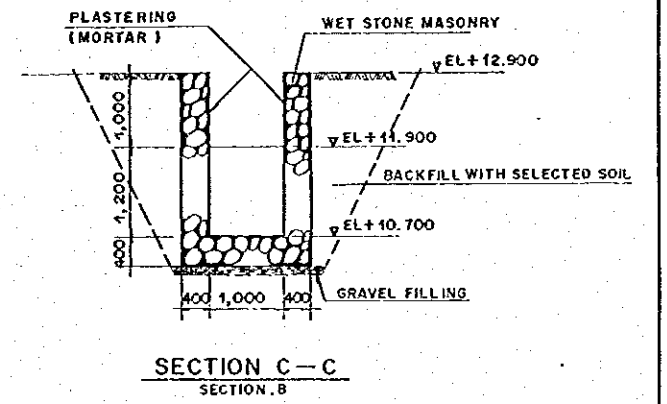
DETAIL OF LEANING WALL
SCALE B



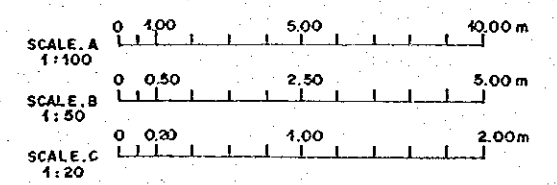
SECTION D-D
SCALE B



DETAIL OF DRAINAGE PIPE
SCALE C



SECTION C-C
SECTION B



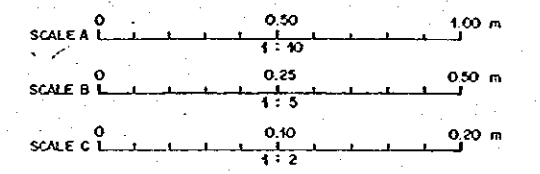
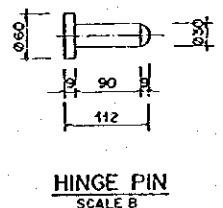
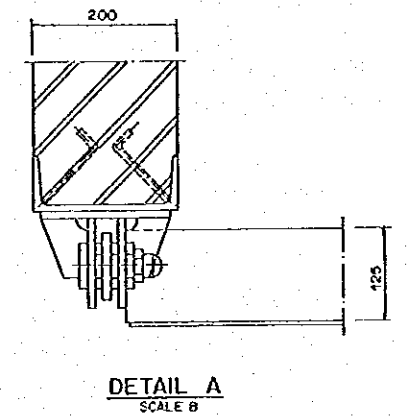
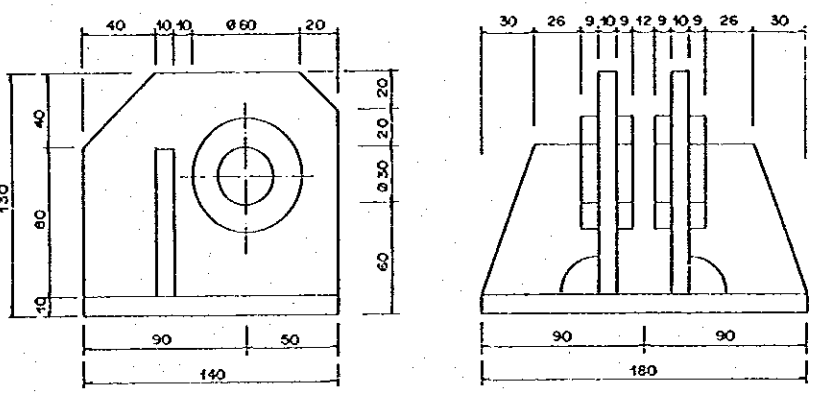
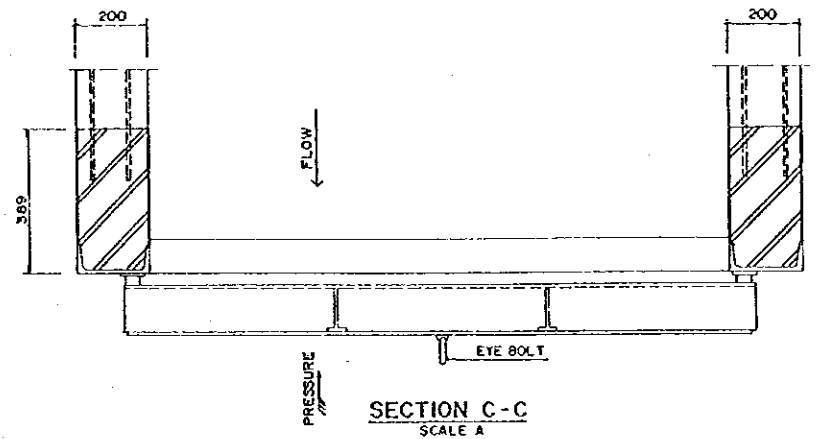
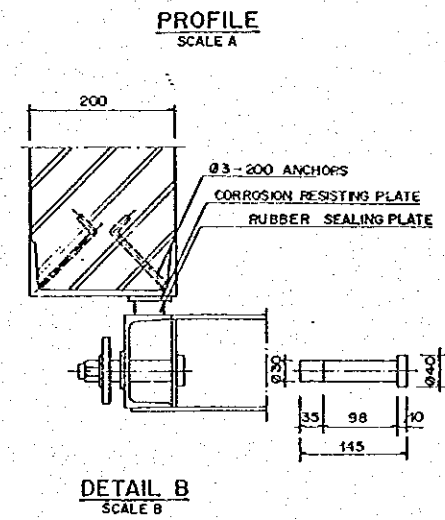
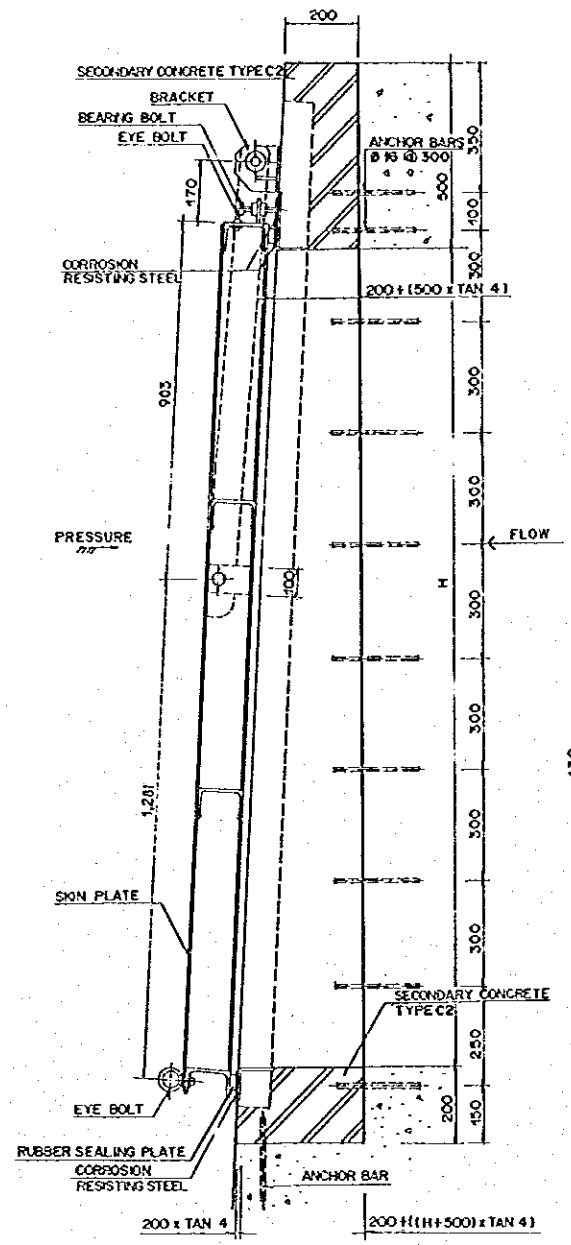
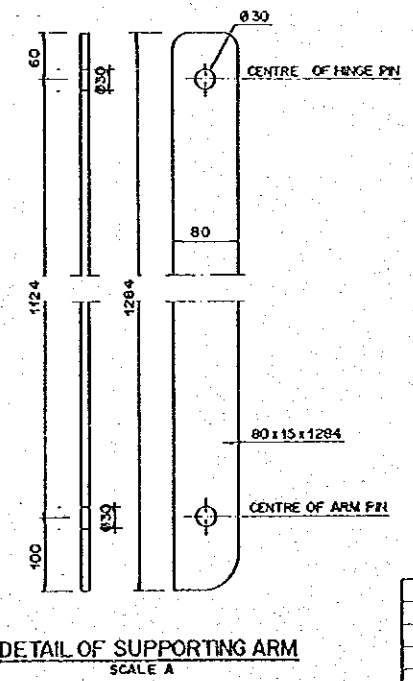
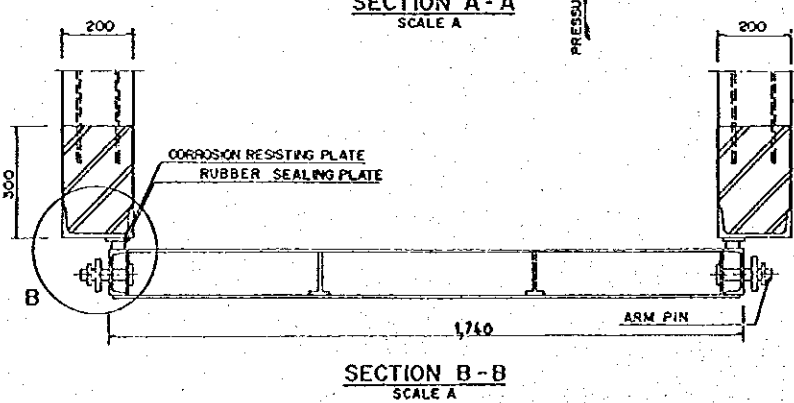
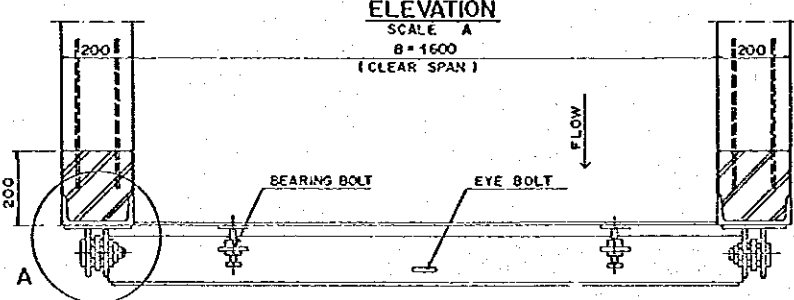
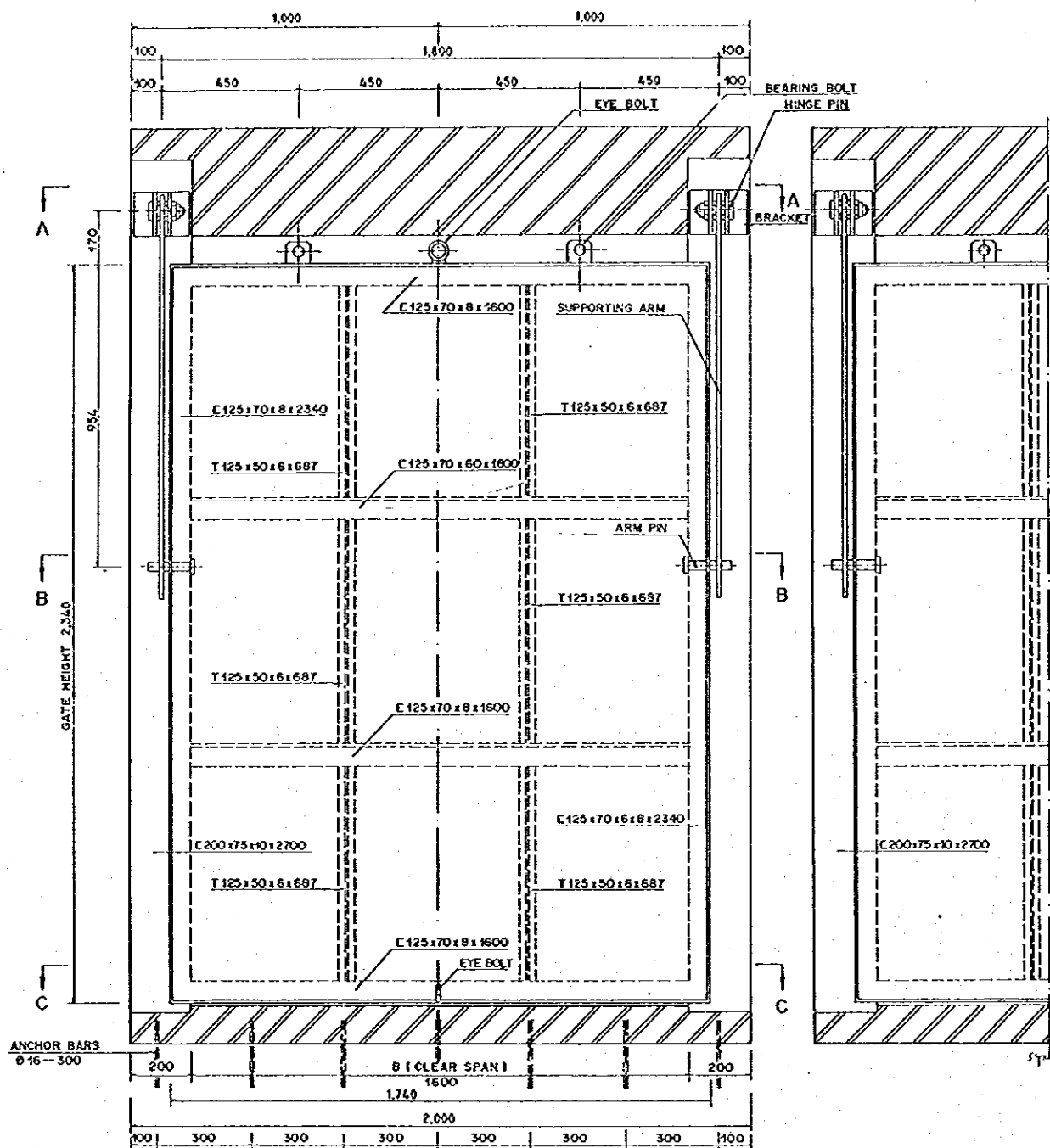
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

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

BRATUNSELUNA FLOOD CONTROL PROJECT
COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT
DRAINAGE OUTLET WORKS
PLAN, PROFILE AND STRUCTURAL DETAILS
OF DRAINAGE PIPE R.18 & R.19

PROVIDER: CENTRAL JAVA
PROJECT NAME: FLOOD CONTROL, LEAKY DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
DISTRICT: SEMARANG CITY
DRAWING NO. WS-P1-DO-51-3
SHEET NO. 171
DATE: _____
CONTRACT NO. _____

DESIGNED: _____
CHECKED: _____
CHIEF OF PLANNING AND DESIGN: _____
PROJECT MANAGER: _____



NO.	DATE	REVISIONS	PREPARED	DESIGNED	APPROVED

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

PT. TUNJUNG
JAWA INTERNATIONAL COOPERATIVE AGENCY
CI. ENGINEERING CO., LTD. IN ASSOCIATION WITH
PACIFIC CONSULTANTS INTERNATIONAL INC.
PACIFIC ENGINEERS INTERNATIONAL INC.

DESIGNED: *[Signature]*
CHECKED: *[Signature]*

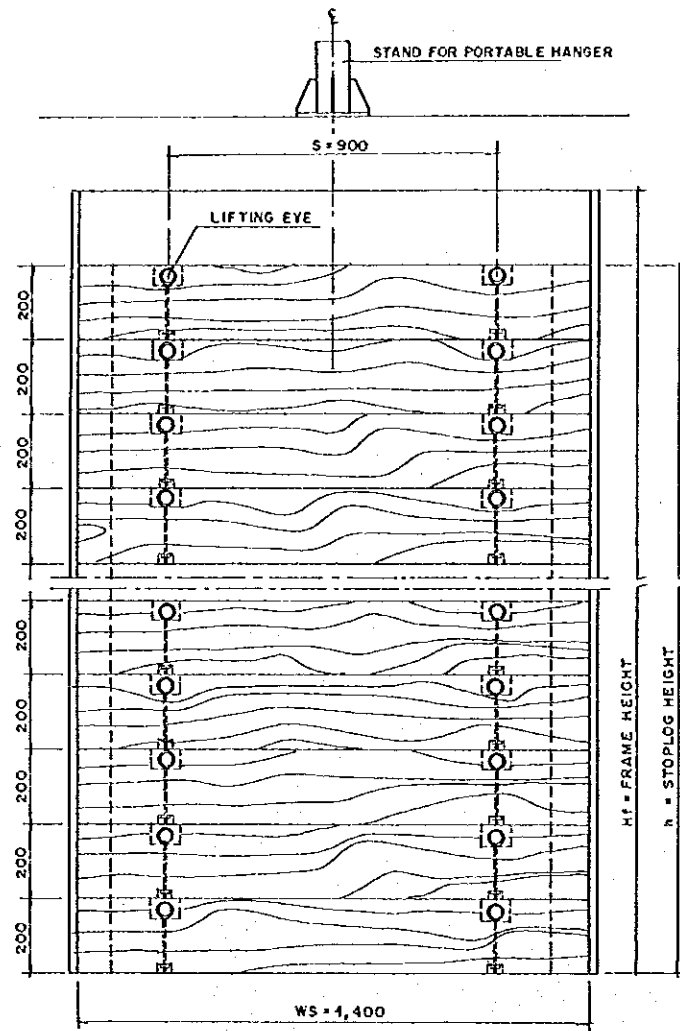
PROJECT: FLOOD CONTROL, URBAN DRAINAGE AND
WATER RESOURCES DEVELOPMENT IN
SEMARANG IN THE REPUBLIC OF INDONESIA

COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT

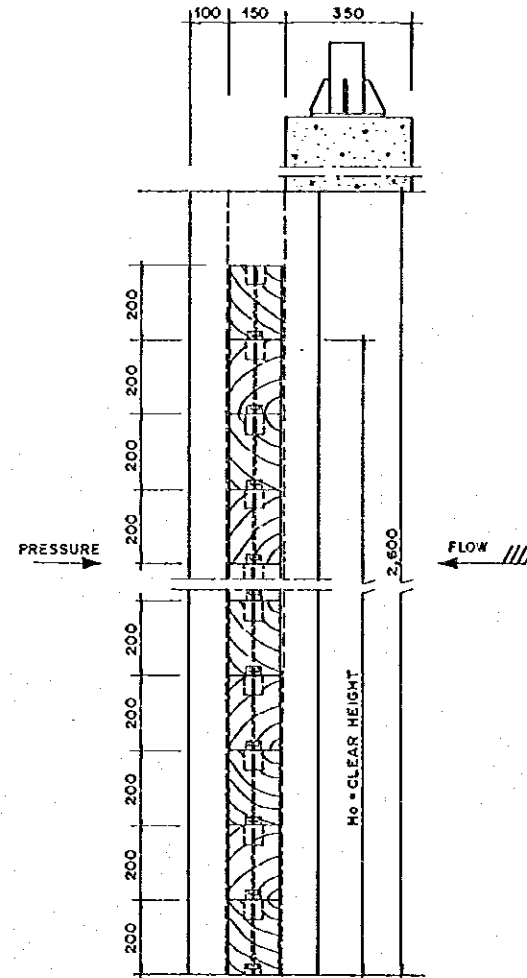
DRAINAGE OUTLET WORKS
STRUCTURAL DETAILS OF FLAP GATE R3

PROVINCE: CENTRAL JAWA
PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND
WATER RESOURCES DEVELOPMENT IN
SEMARANG IN THE REPUBLIC OF INDONESIA
DRAWING NO. WS-P1-00-S1-8
SHEET NO. 173
DATE: *[Date]*
CONTRACT NO. *[Number]*

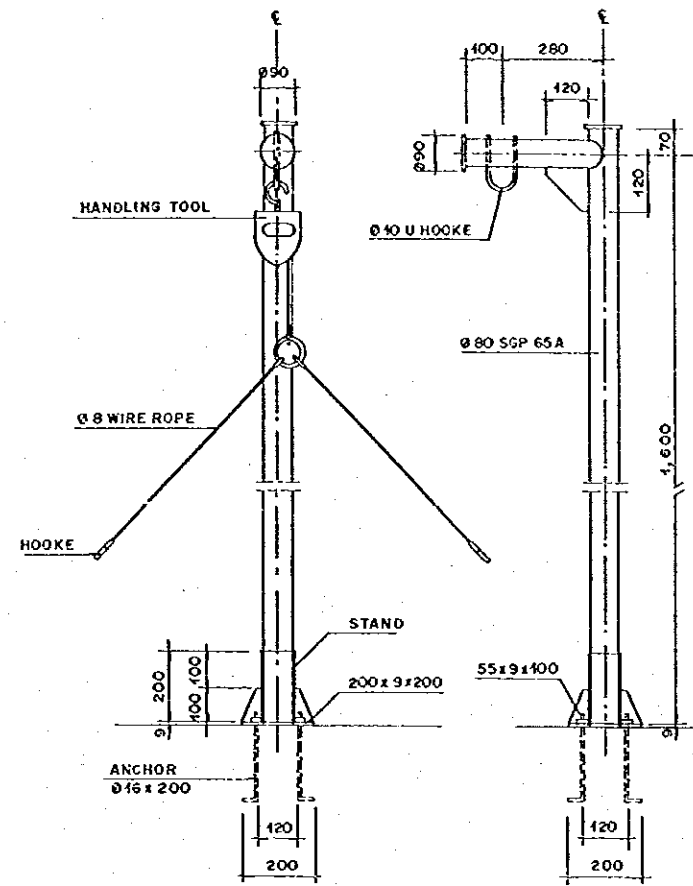
CREATED: *[Signature]*
DESIGNED: *[Signature]*
APPROVED: *[Signature]*
APPROVED: *[Signature]*
PROJECT MANAGER



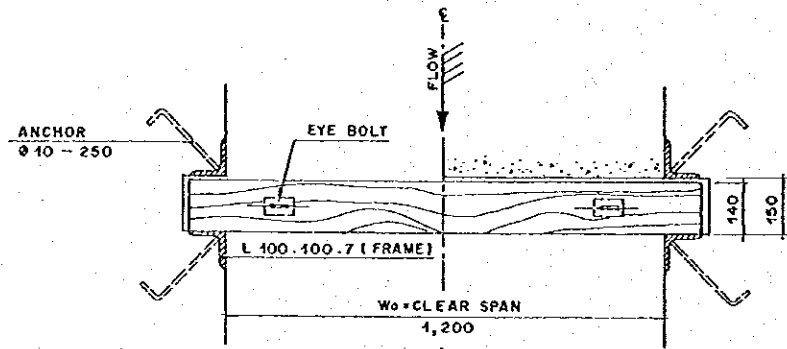
ELEVATION
SCALE . A



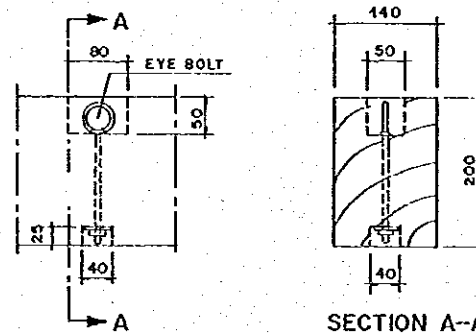
PROFILE
SCALE . A



PORTABLE HANGER FOR STOPLOG
SCALE . A

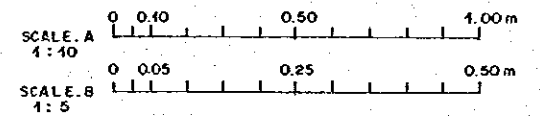


PLAN
SCALE . A



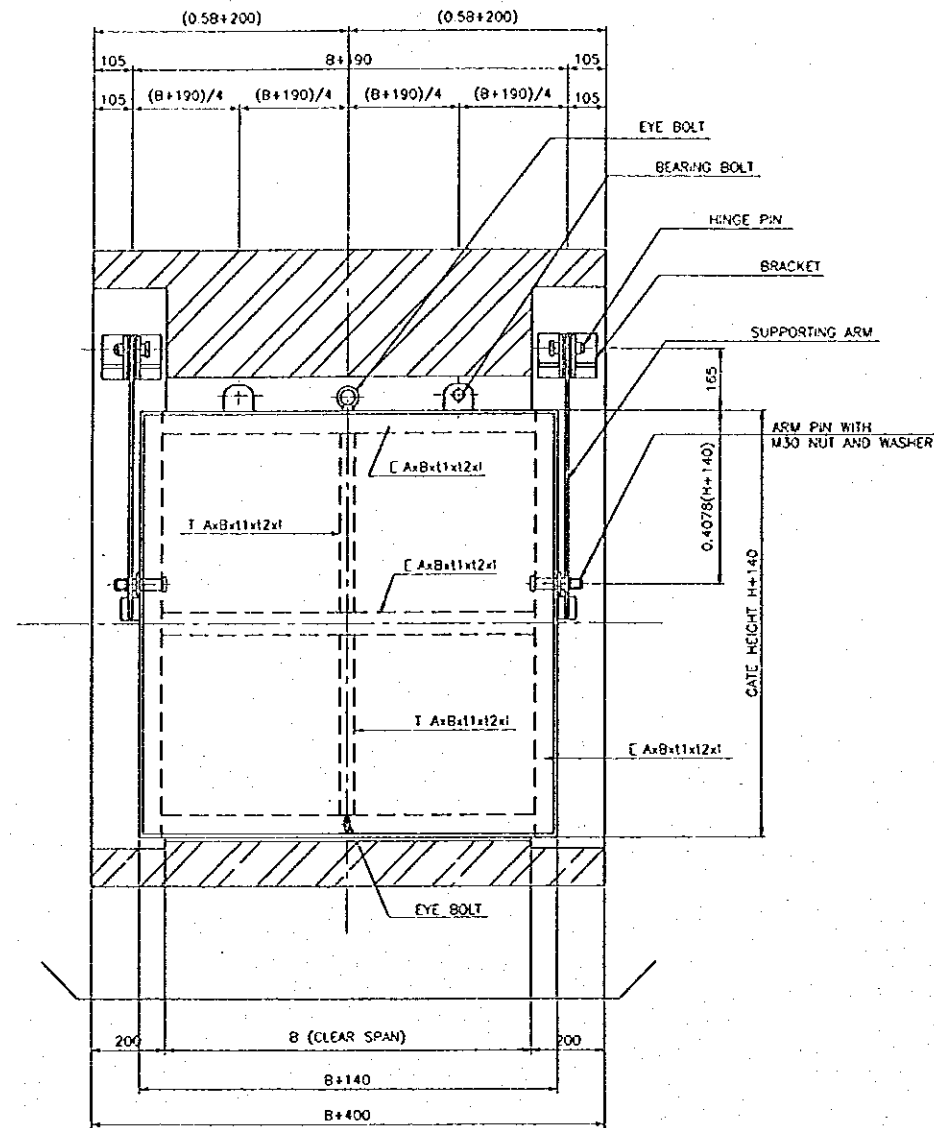
DETAIL OF LIFTING EYE
SCALE . B

DETAILS OF GATE FOR L8

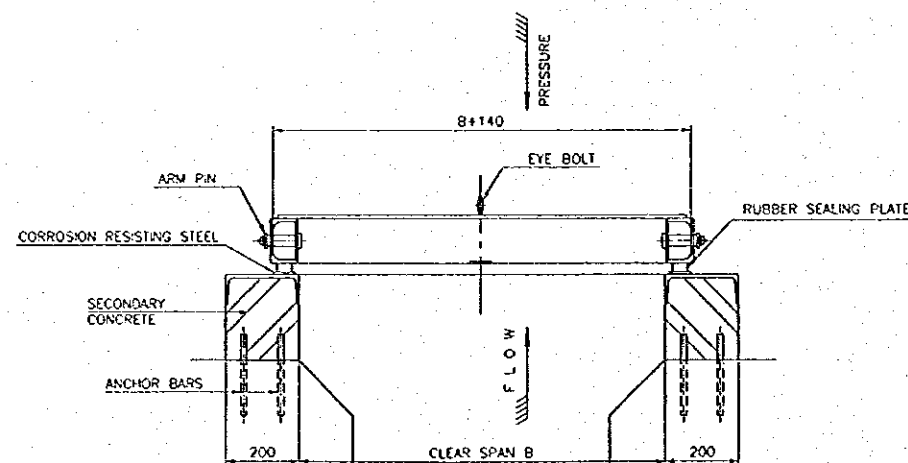


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

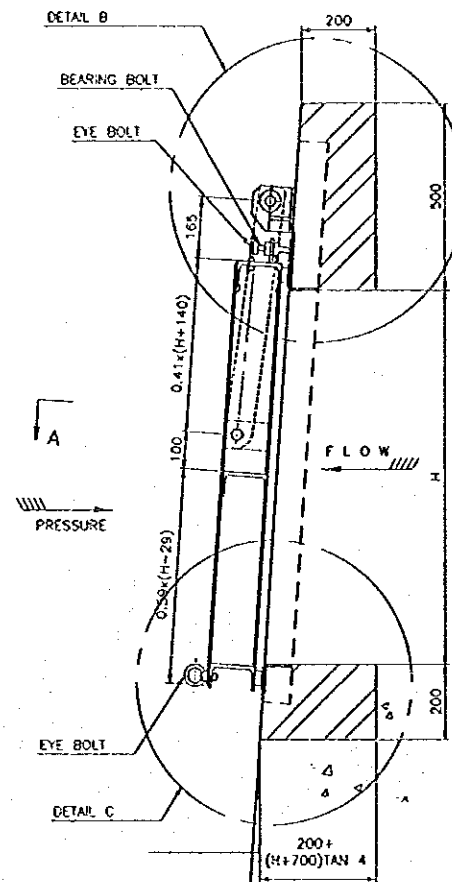
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT DRAINAGE OUTLET WORKS STRUCTURAL DETAILS OF STOP LOG L.8		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
DRAWING NO. WS-P1-00-S1-7 SHEET NO. 174		DATE CONTRACT NO.
SARAF INTERNATIONAL COOPERATION AGENCY CII ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PARCO INTERNATIONAL INC.		DESIGNED CHECKED DATE
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		APPROVED



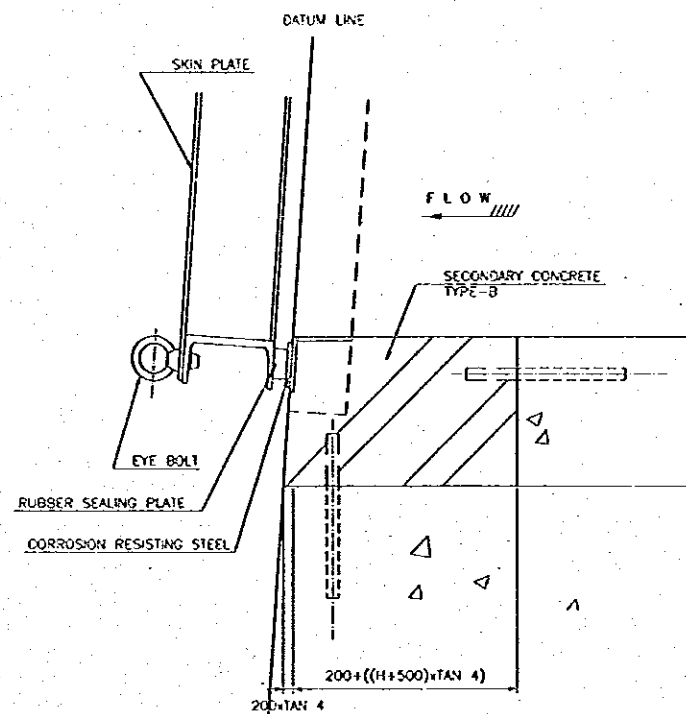
ELEVATION



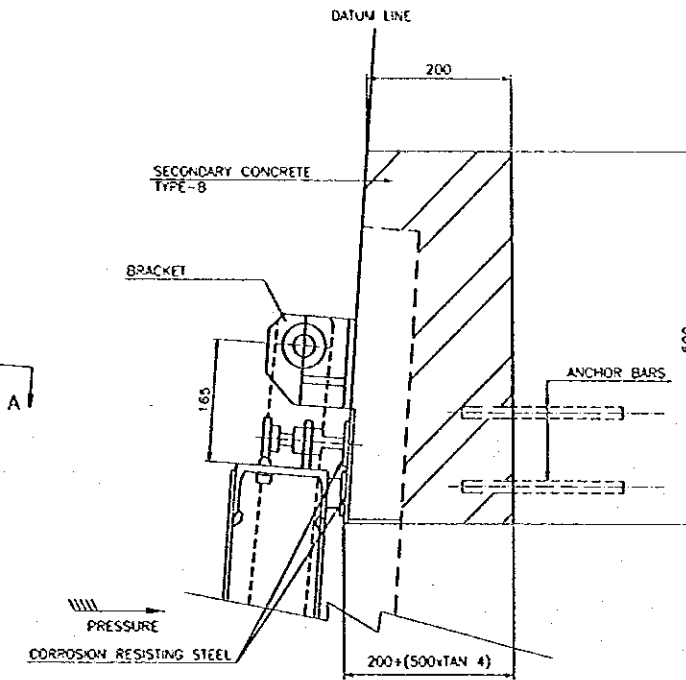
SECTION A-A



PROFILE



DETAIL C



DETAIL B

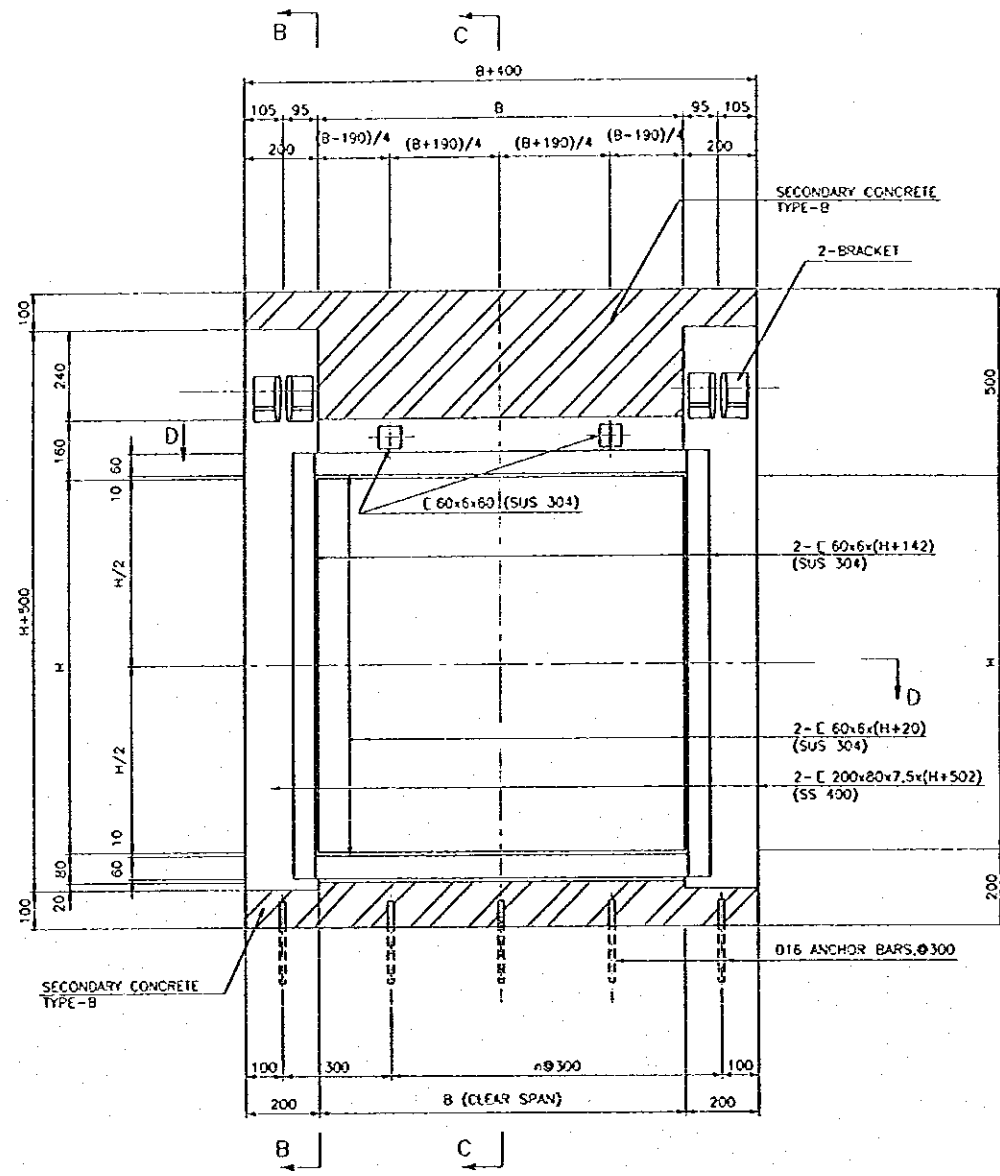
TABLE OF DIMENSIONS

OUTLET STRUCTURE	STATION	B (m)	H (m)	REMARK
R.3A	WF.72+20.0	1.00	1.00	SINGLE GATE
R.9	WF.157	1.00	1.20	SINGLE GATE
R.11	WF.162+41.0	1.00	0.70	SINGLE GATE
R.12	WF.165+9.0	1.00	0.90	SINGLE GATE

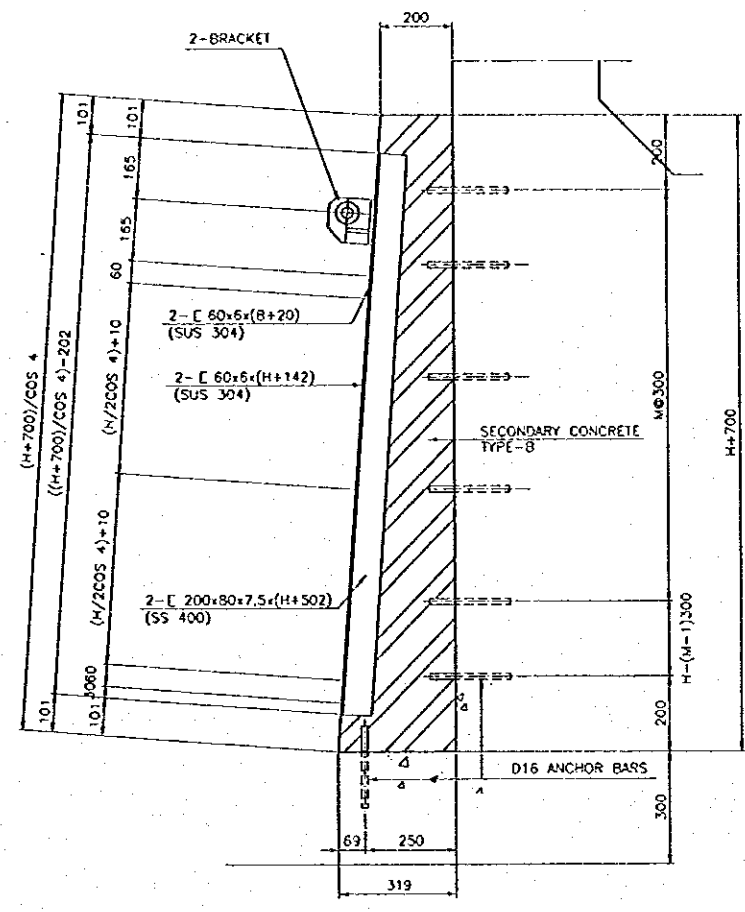
GENERAL GATE DRAWINGS FOR R3A, R9, R11&R12

NO.	DATE	REVISIONS	COORDINATED	DESIGNED	APPROVED

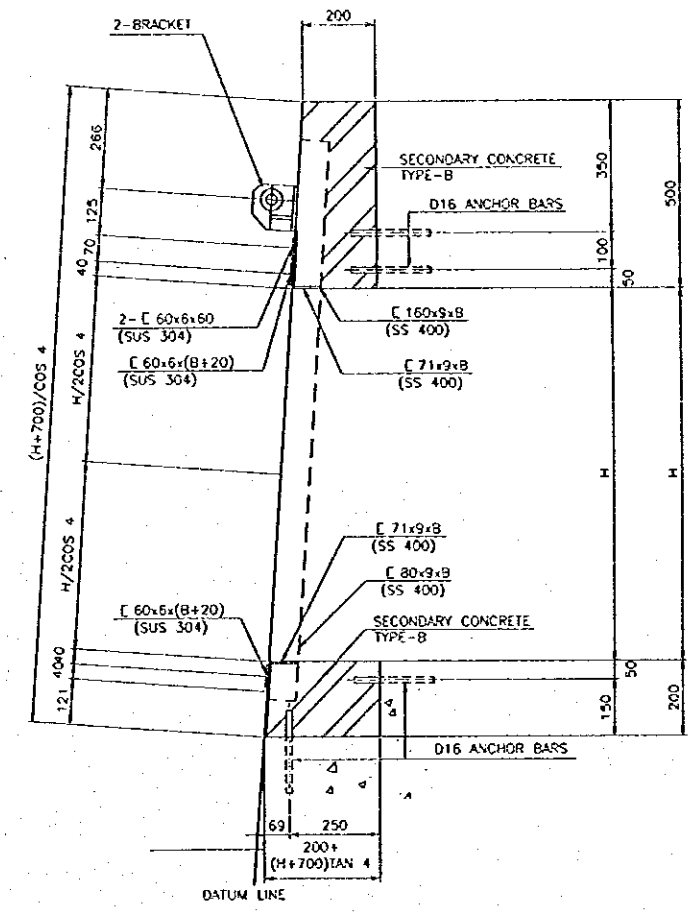
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT DRAINAGE OUTLET WORKS STANDARD DRAWING OF FLAP GATE (1/3)		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA OUTLET SEMARANG CITY
SAFARI INTERNATIONAL COOPERATION AGENCY CIL BANGKALAN CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND JACOBS INTERNATIONAL, INC.		DRAWING NO. W9-P1-00-91-9 SHEET NO. 116
DESIGNED <i>[Signature]</i>	CHECKED <i>[Signature]</i>	DATE CONTRACT NO.
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		APPROVED <i>[Signature]</i>



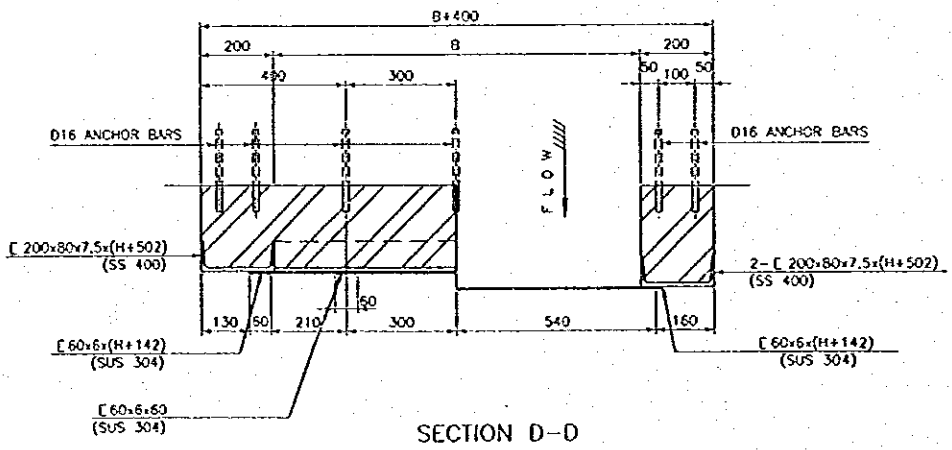
SECTION A-A
ELEVATION



SECTION B-B

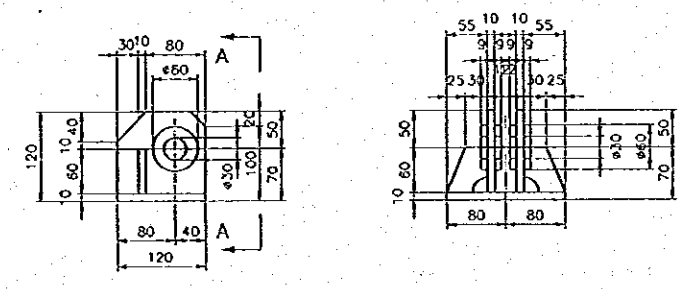


SECTION C-C



SECTION D-D

DETAILS OF BLOCK-OUT FOR R3A, R9, R11&R12



SECTION A-A
DETAIL OF BRACKET

TABLE OF DIMENSIONS

OUTLET STRUCTURE	STATION	B (m)	H (m)	REMARK
R.3A	WF.72+20.0	1.00	1.00	SINGLE GATE
R.9	WF.157	1.00	1.20	SINGLE GATE
R.11	WF.162+41.0	1.00	0.70	SINGLE GATE
R.12	WF.165+9.0	1.00	0.90	SINGLE GATE

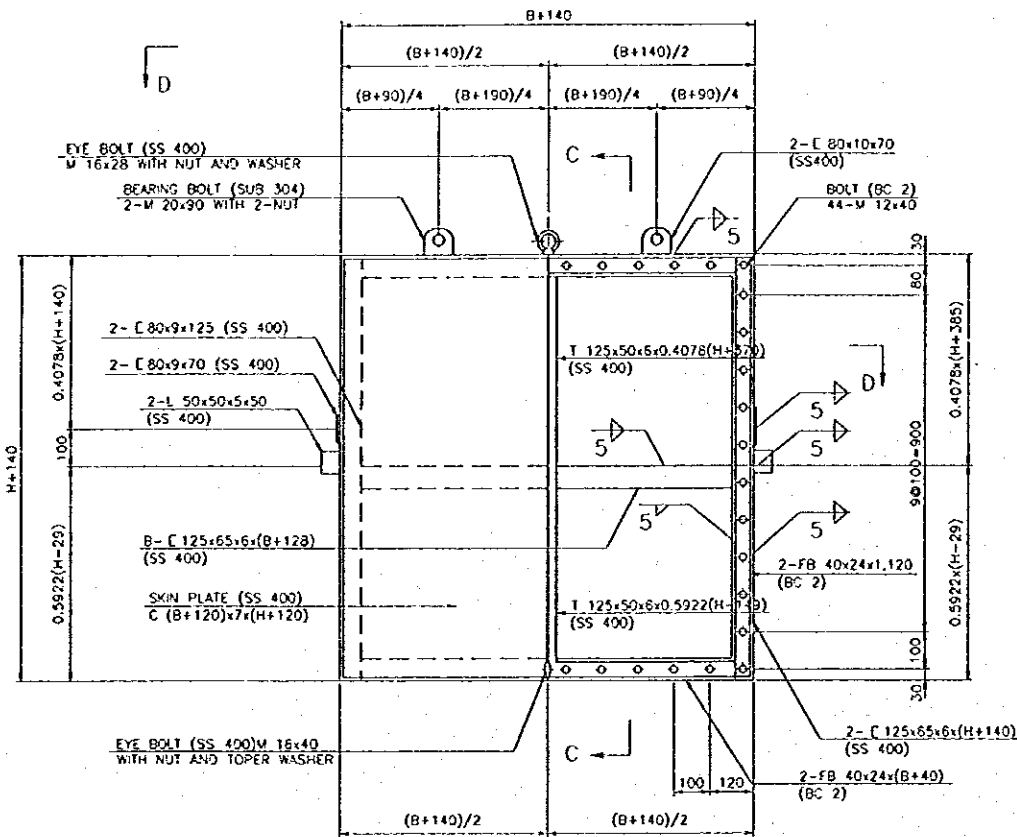
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT
 PRATUNSELUNA FLOOD CONTROL PROJECT
 COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT
 DRAINAGE OUTLET WORKS
 STANDARD DRAWING OF FLAP GATE (2/3)

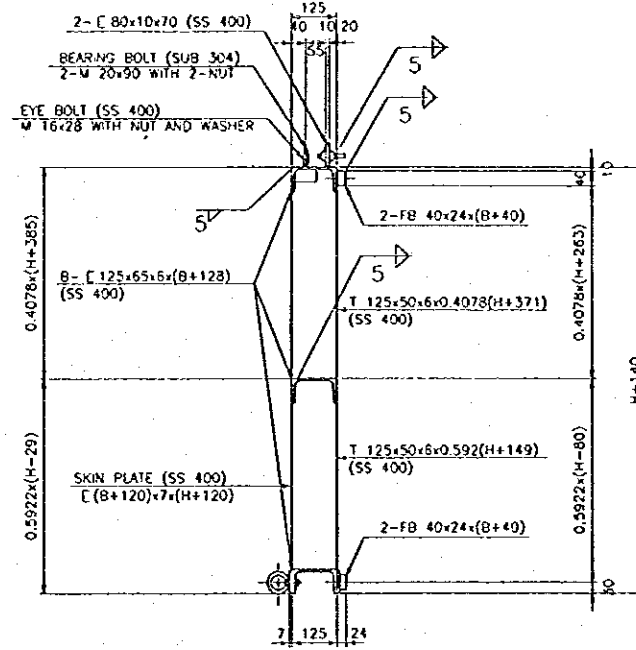
PROVINCE	CENTRAL JAVA
PROJECT NAME	FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
CITY	SEMARANG CITY
DRAWING NO.	W6-F4-00-81-10
SHEET NO.	177
DATE	
CONTRACT NO.	

LAYAN INTERNATIONAL COOPERATION AGENCY
 CITI ENGINEERING CO. LTD. IN ASSOCIATION WITH
 PACIFIC CONSULTANTS INTERNATIONAL, INC.
 PACO INTERNATIONAL, INC.

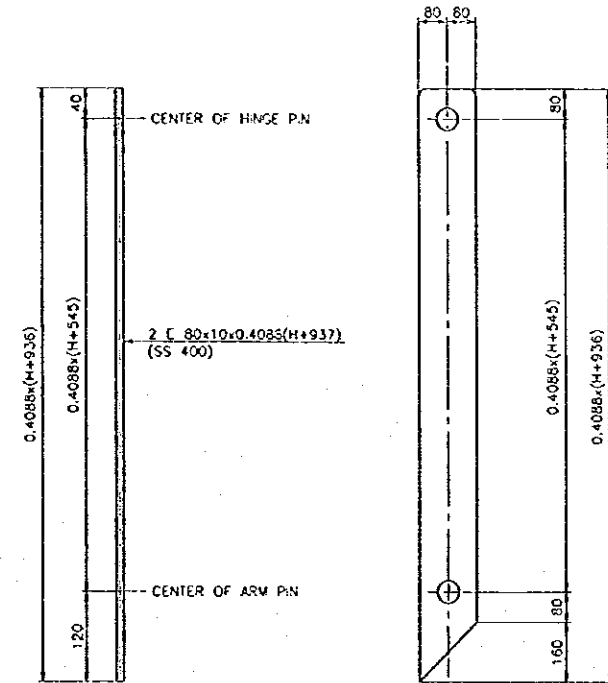
DESIGNED: *[Signature]*
 CHECKED: *[Signature]*
 CHIEF OF PLANNING AND DESIGN
 PROJECT MANAGER



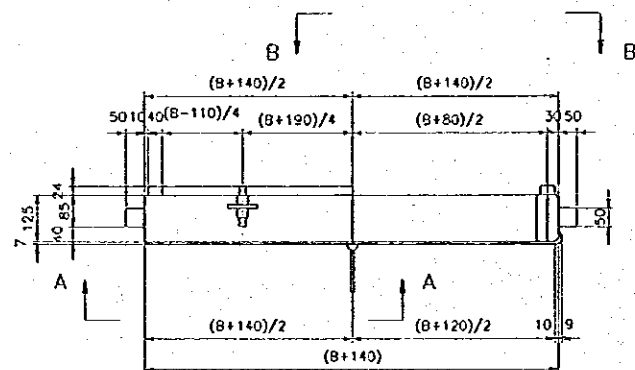
SECTION A-A SECTION B-B
ELEVATION OF FLAP GATE



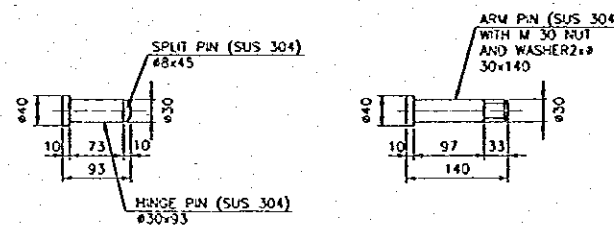
SECTION C-C



SECTION E-E
DETAIL OF SUPPORTING ARM



SECTION D-D



HINGE PIN

ARM PIN

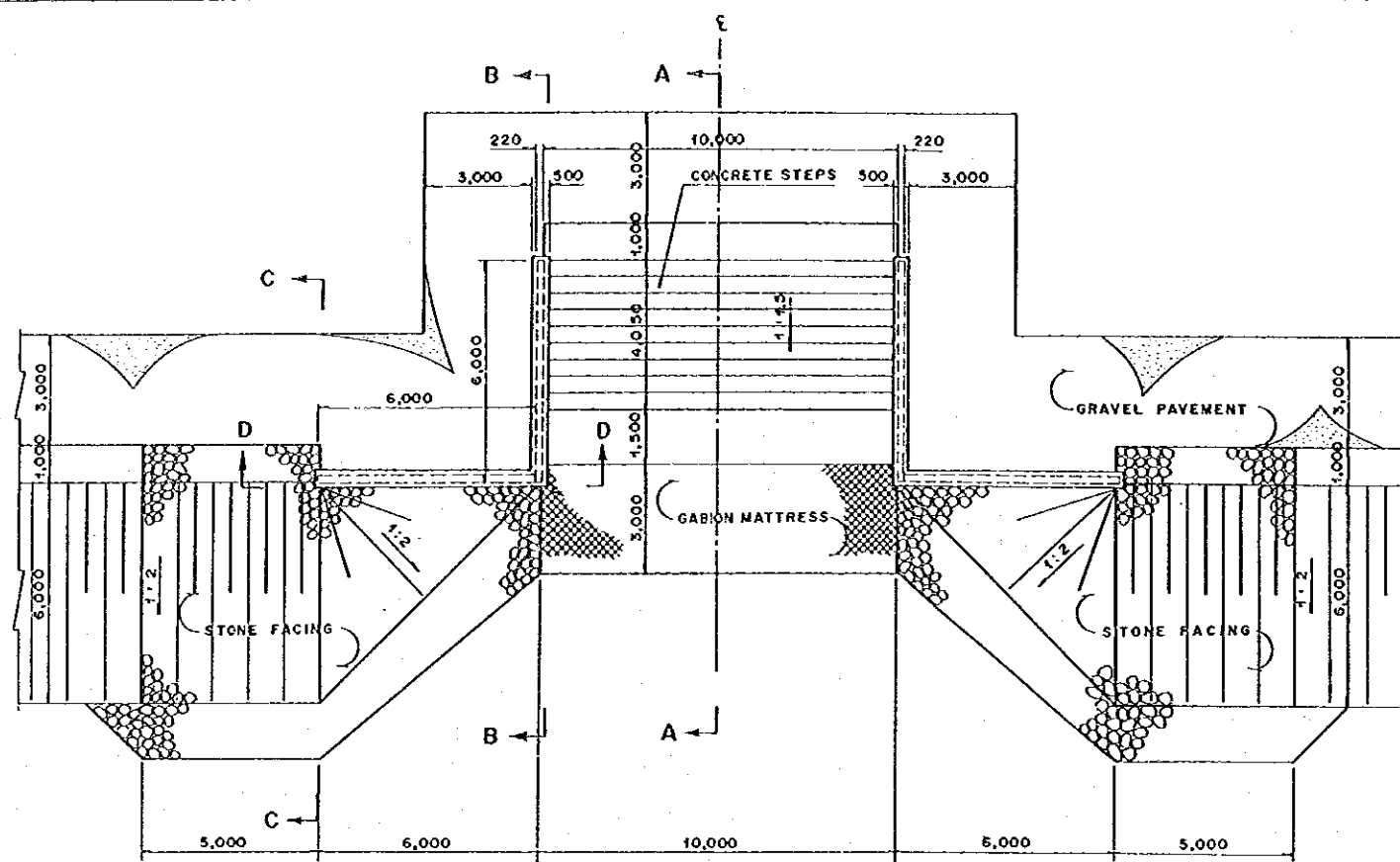
DETAIL OF PINS

TABLE OF DIMENSIONS

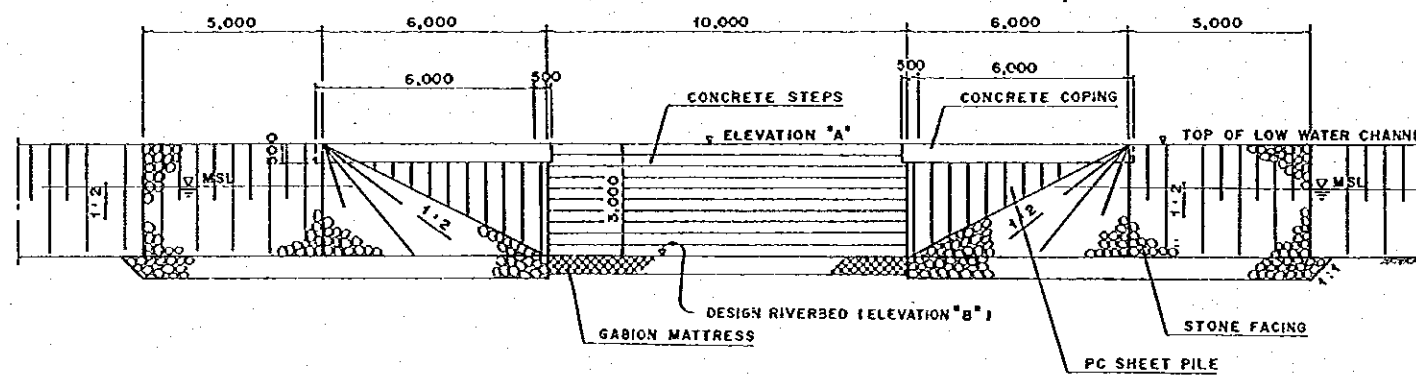
OUTLET STRUCTURE	STATION	B (m)	H (m)	REMARK
R.3A	WF.72+20.0	1.00	1.00	SINGLE GATE
R.9	WF.157	1.00	1.20	SINGLE GATE
R.11	WF.162+41.0	1.00	0.70	SINGLE GATE
R.12	WF.165+9.0	1.00	0.90	SINGLE GATE

DETAILS OF GATE LEAF FOR R3A, R9, R11&R12

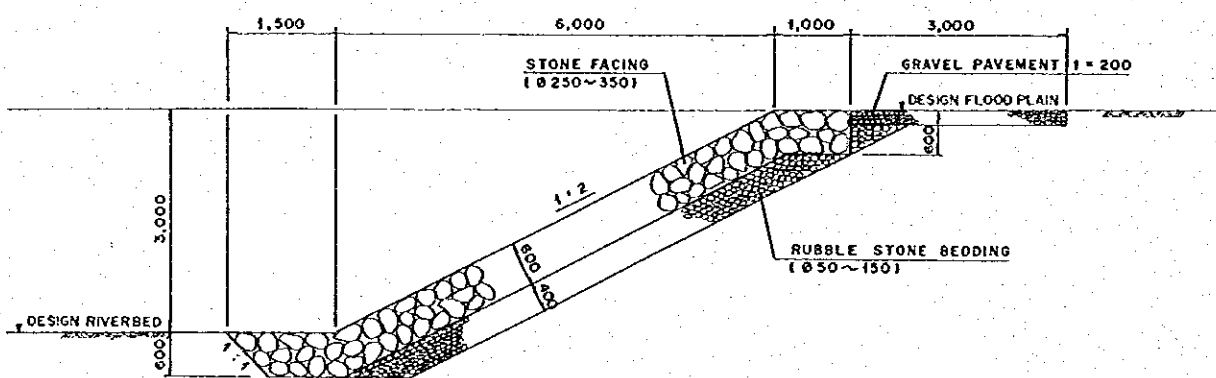
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT			PROVINCE CENTRAL JAVA		
IRATUNSELUMA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANO RIVER IMPROVEMENT DRAINAGE OUTLET WORKS			PROVINCE NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG, ENTER REGIONAL OF INDONESIA		
STANDARD DRAWING OF FLAP GATE (3/3)			DISTRICT SEMARANG CITY		
JAPAN INTERNATIONAL COOPERATION AGENCY CIE ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PARCO INTERNATIONAL INC.			DRAWING NO. W-00-00-51-11 SHEET NO. 178		
DESIGNED CHECKED			DATE CONTRACT NO.		
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER			APPROVED		
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED



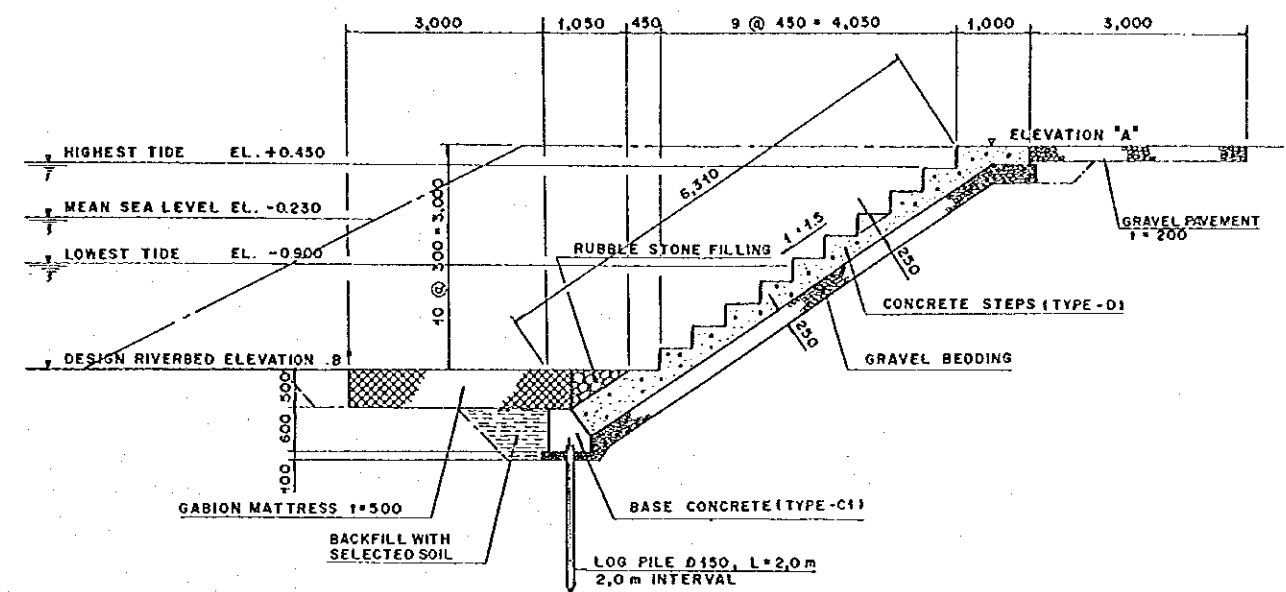
PLAN
SCALE A



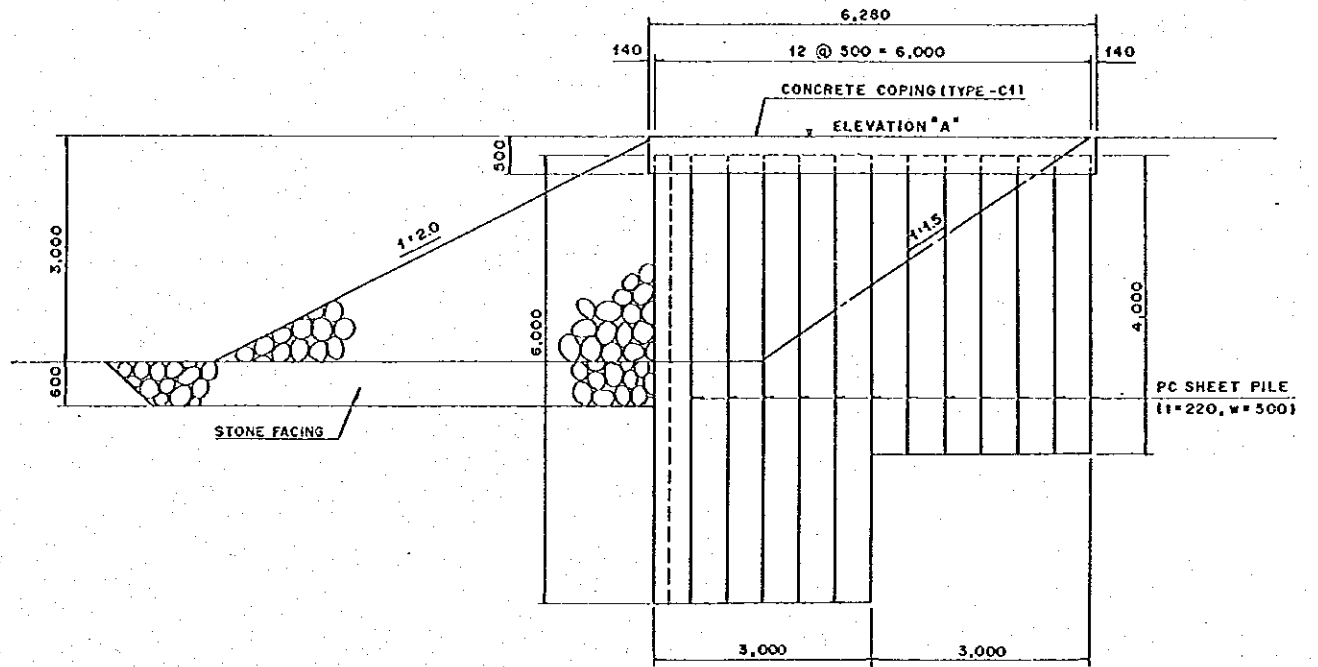
ELEVATION
SCALE A



SECTION C-C
SCALE B



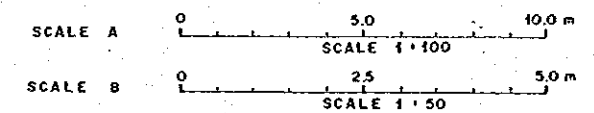
SECTION A-A
SCALE B



SECTION B-B
SCALE B

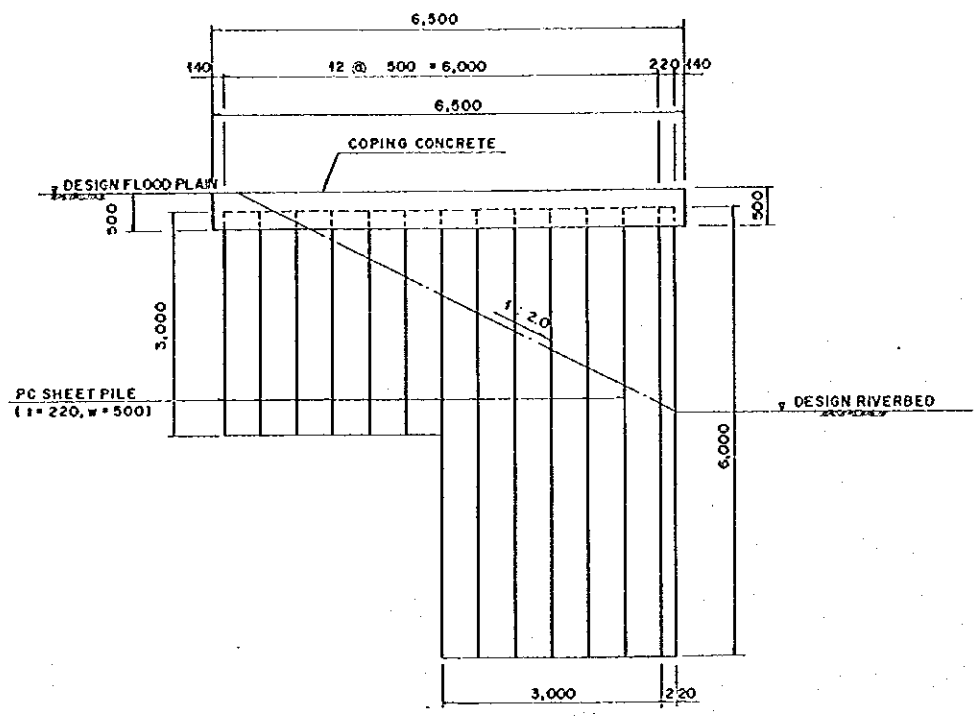
ELEVATION OF CHANNEL AT MOORING SITE

No.	LOCATION OF MOORING (CENTER LINE)	ELEVATION "A" (FLOOD PLAIN)	ELEVATION "B" (DESIGN RIVERBED)
1.	WF. 32 RIGHT BANK	EL. 0.544 m	EL. -2.459 m
2.	WF. 41 LEFT BANK	EL. 0.710 m	EL. -2.290 m
3.	WF. 46 RIGHT BANK	EL. 0.805 m	EL. -2.195 m

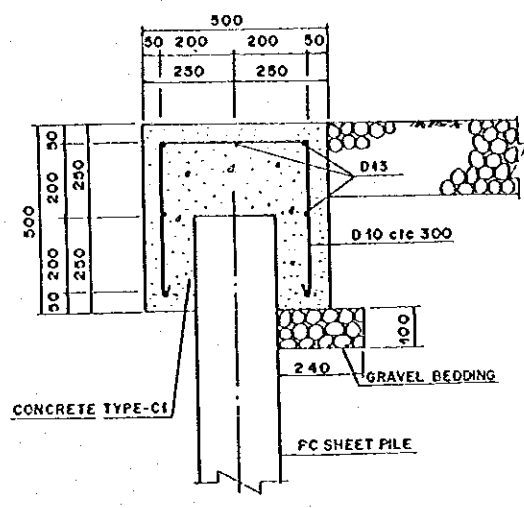


THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IRATUNSELISA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANO RIVER EMPLOYMENT		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
RIVER AMENITY AND MAINTENANCE FACILITIES STRUCTURAL DETAILS OF MOORING FACILITY (1/2)		DISTRICT SEMARANG CITY
JAPAN INTERNATIONAL COOPERATION AGENCY CIL ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL INC. PACO INTERNATIONAL INC.		DRAWING NO. WB-P1-AM-S1-4 SHEET NO. 119
DESKTOP CHECKED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DATE CONTRACT NO.

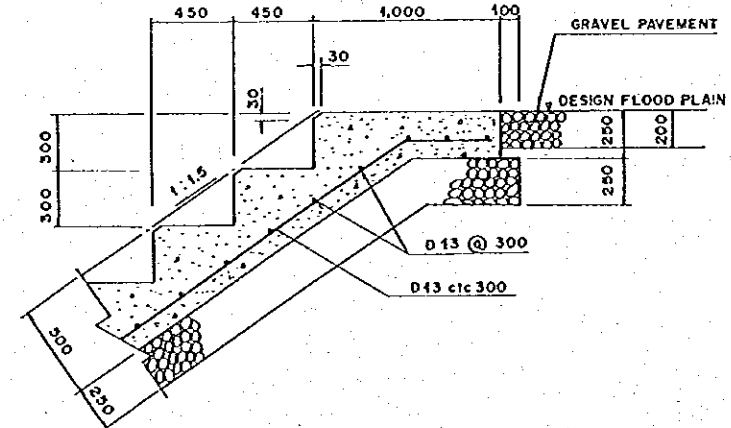
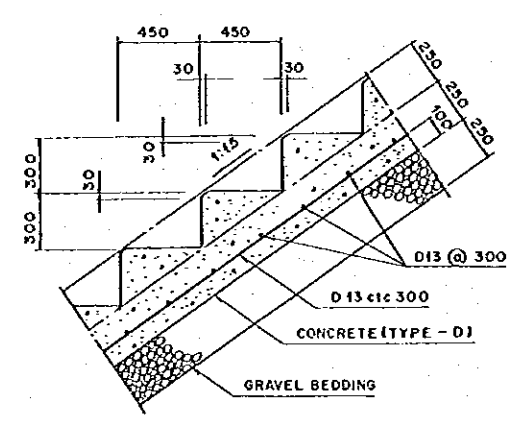
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED



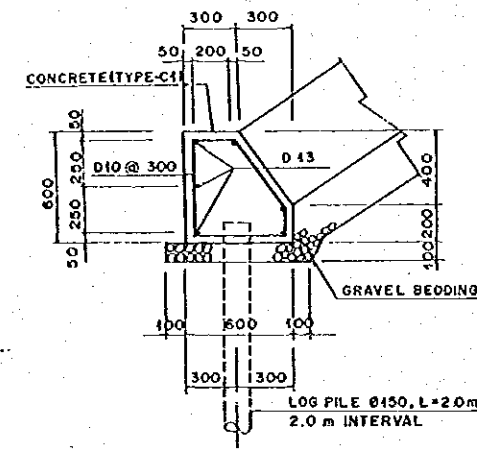
SECTION D-D
SCALE A



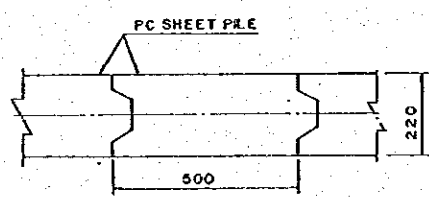
DETAIL OF COPING CONCRETE
SCALE C



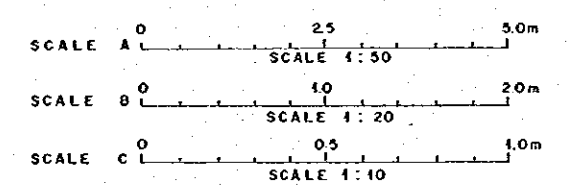
DETAIL OF STEPS
SCALE B



BASE CONCRETE
SCALE B

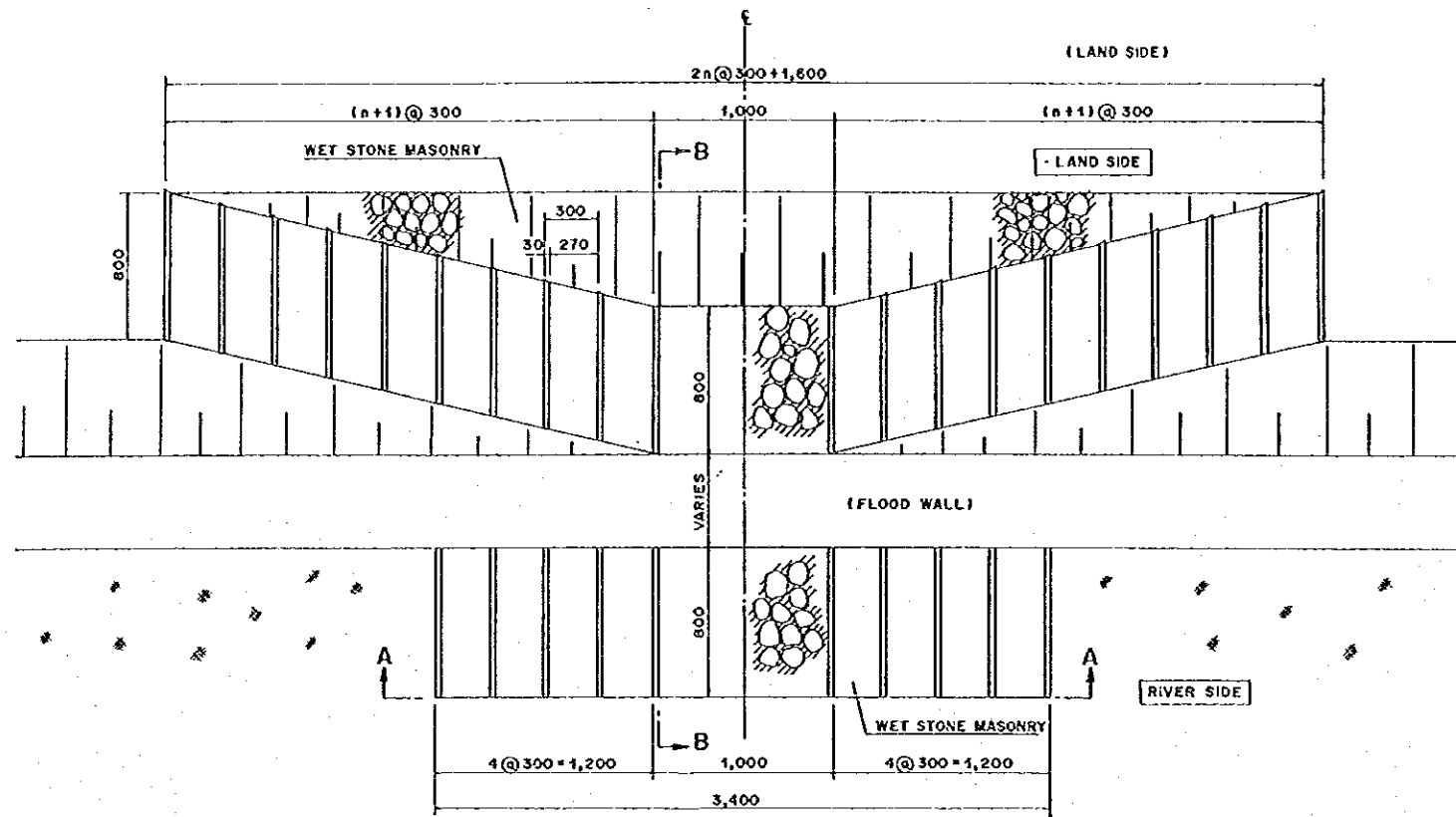


SECTION OF PC SHEET PILE
SCALE B

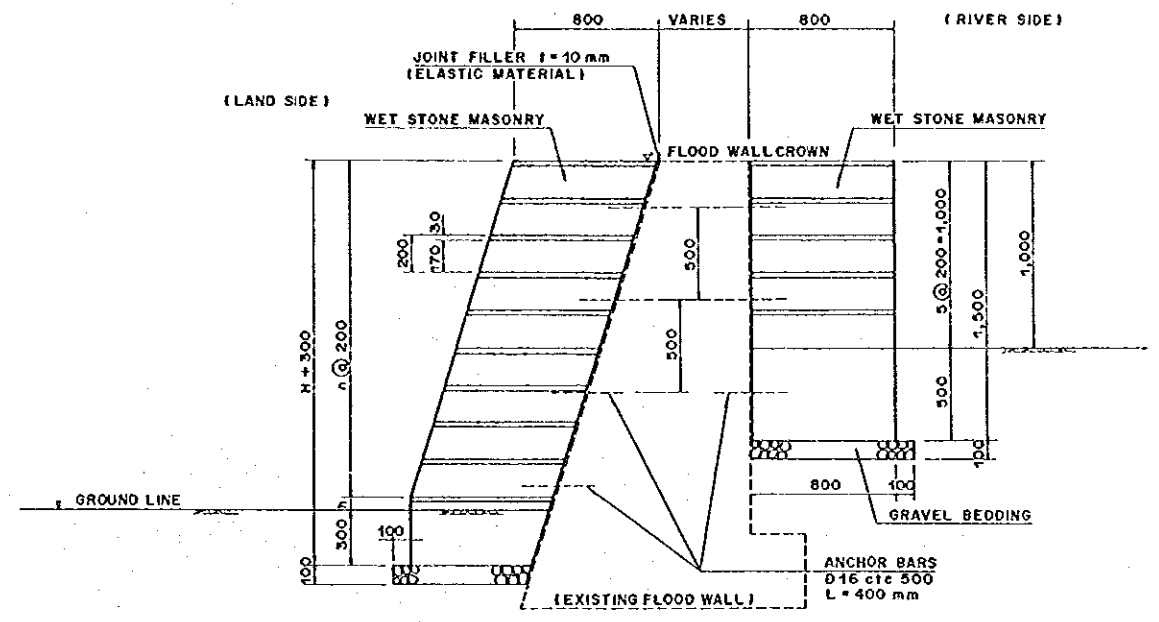


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

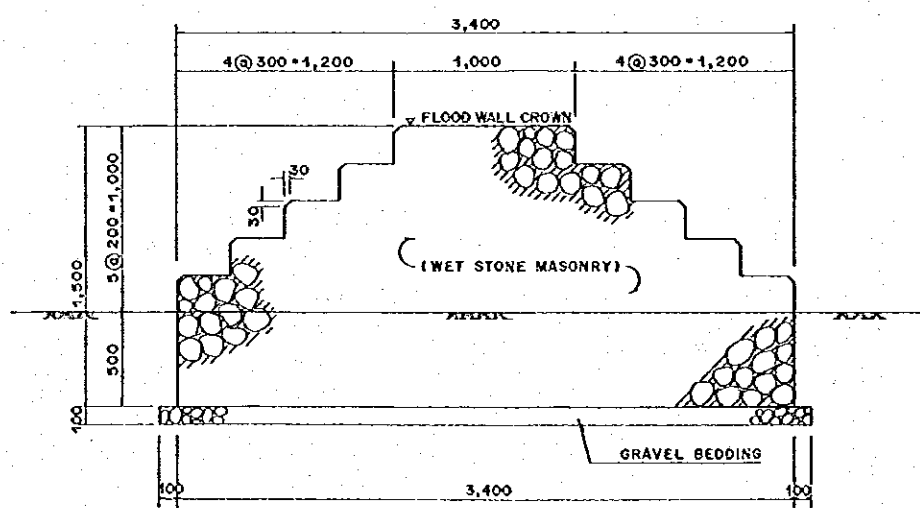
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		FILED IN CENTRAL JAWA
COMPONENT - WEST FLOODWAY / GARANG RIVER IMPROVEMENT RIVER AMENITY AND MAINTENANCE FACILITIES STRUCTURAL DETAILS OF MOORING FACILITY (2/2)		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCE DEVELOPMENT IN SOALANG, IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
LAFAR INTERNATIONAL COOPERATION AGENCY CITI ENGINEERING CO., LTD. PACIFIC CONSULTANTS INTERNATIONAL, INC. LAFAR INTERNATIONAL INC.		DRAWING NO. W8-P1-AM-ST-2 SHEET NO. 180
DISIGNED CHECKED	DATE CONTRACT NO.	PROJECT MANAGER



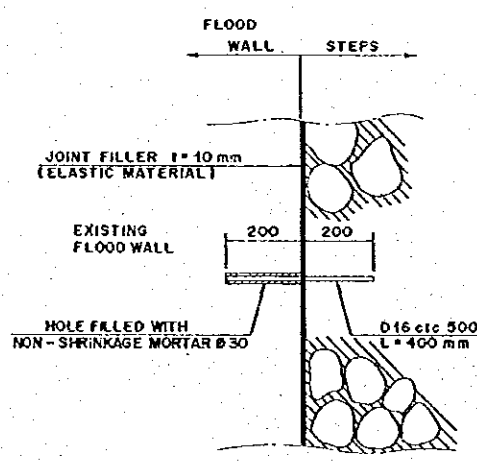
PLAN OF STEPS (TYPE WA-1)
SCALE A



SECTION B-B
SCALE A



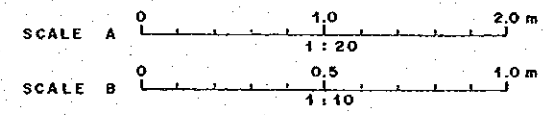
SECTION A-A
SCALE A



DETAIL OF JOINT
SCALE B

DIMENSIONS OF STEPS

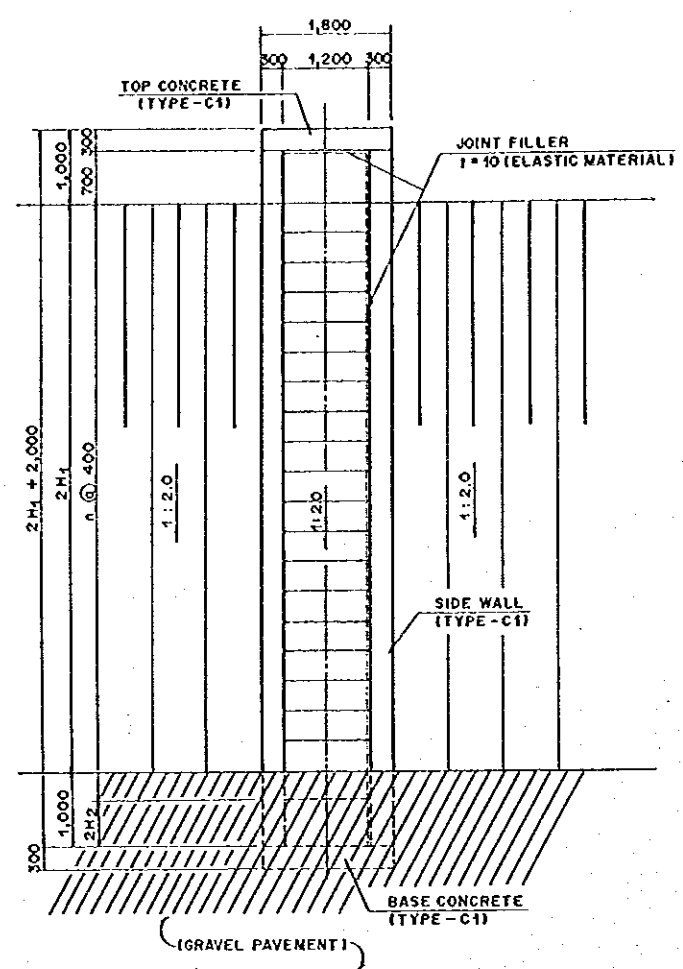
LOCATION (CENTER LINE)	FLOODWALL CROWN (EL. m)	EXISTING GROUND LEVEL ON LAND SIDE (EL. m)	HEIGHT OF STEPS ON LAND SIDE		NUMBER OF STEP n
			H (m)	h (mm)	
WF. 25 L + 28.0 m	2.438	1.070	1.368	168	6
WF. 30 L + 15.0 m	2.597	0.760	1.837	37	9
WF. 35 L + 40.0 m	2.772	0.960	1.812	212	8
WF. 40 L + 15.0 m	2.870	1.000	1.870	70	9
WF. 46 L + 17.0 m	3.028	1.470	1.558	158	7
WF. 53 L + 20.0 m	3.299	2.060	1.239	39	6
WF. 15 R + 50.0 m	2.242	0.850	1.412	12	7
WF. 34 R + 5.0 m	2.716	1.450	1.266	66	6
WF. 41 R + 0.0 m	2.890	1.000	1.890	90	9
WF. 47 R + 0.0 m	3.044	1.220	1.824	224	8
WF. 53 R + 0.0 m	3.274	2.510	0.764	64	3



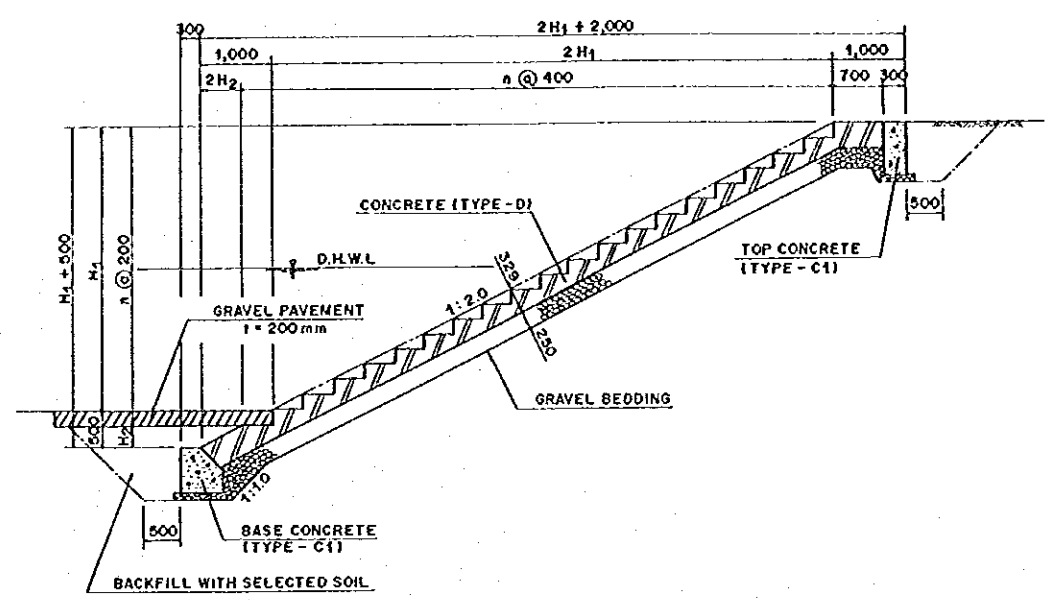
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT
 (PANTUNSELAMA FLOOD CONTROL PROJECT)
 COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT
RIVER AMENITY AND MAINTENANCE FACILITIES
APPROACH STEPS TYPE WA-1 IN WEST FLOODWAY

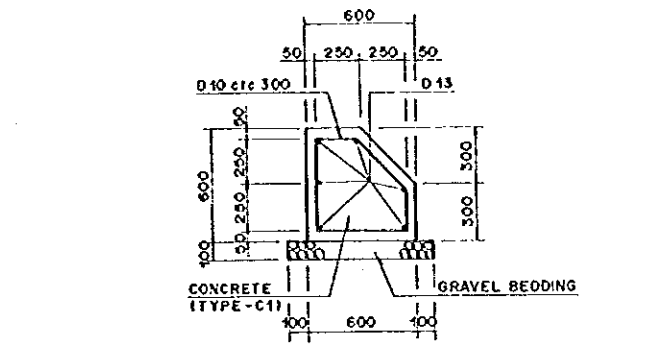
PROVINCE: CENTRAL JAVA
 PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCE DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
 DISTRICT: SEMARANG CITY
 DRAWING NO. WS-P4-JM-S1-3
 SHEET NO. 181
 DATE: _____ CONTRACT NO.: _____
 DESIGNED: _____ CHECKED: _____
 CHIEF OF PLANNING AND DESIGN: _____ PROJECT MANAGER: _____



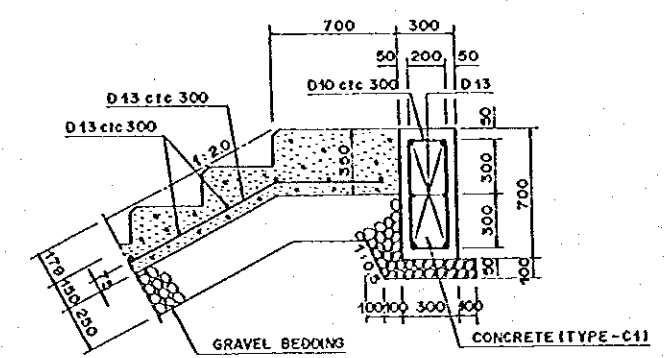
PLAN OF STEPS (WA-2)
SCALE A



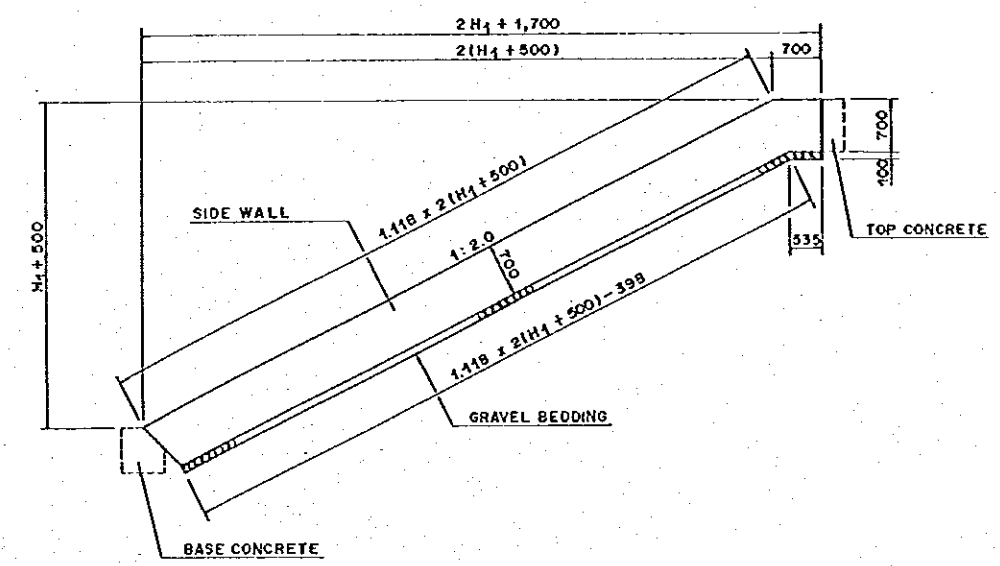
TYPICAL CROSS SECTION OF STEPS (WA-2)
SCALE A



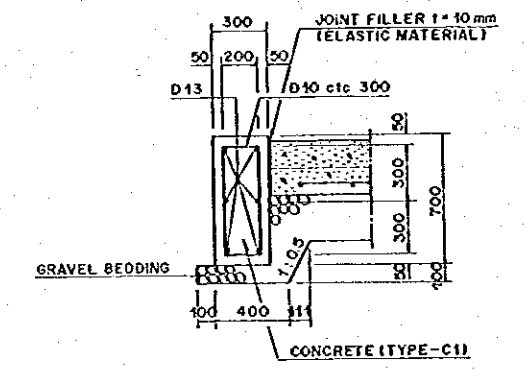
BASE CONCRETE
SCALE B



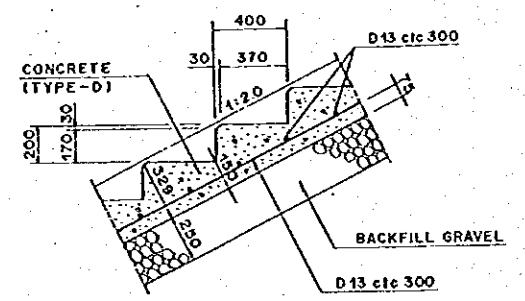
TOP CONCRETE
SCALE B



PROFILE OF SIDE WALL
SCALE A



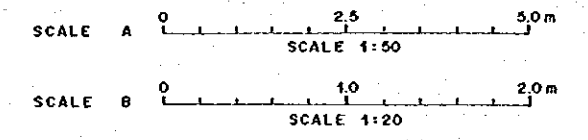
SIDE WALL
SCALE B



DETAIL OF STEPS
SCALE B

DIMENSION OF CONCRETE STEPS

STATION NO.	BANK	D.H.W.L. (EL. m)	DESIGN FLOOD PLAIN (EL. m)	DESIGN DIKE CROWN (EL. m)	H1 (m)	H2 (m)	n
WF.74L+25m	LEFT	3.435	1.841	3.435	1.594	0.206	9
WF.80L+15m	LEFT	3.688	1.952	4.500	2.548	0.248	14
WF.87L+4m	LEFT	3.986	2.081	5.450	3.369	0.269	18
WF.94L+12m	LEFT	4.274	2.205	4.274	2.069	0.169	12
WF.74R+15m	RIGHT	3.426	1.838	3.426	1.588	0.288	9
WF.80R+7m	RIGHT	3.681	1.949	5.480	3.531	0.231	19
WF.87R+6m	RIGHT	3.985	2.080	5.900	3.820	0.320	20

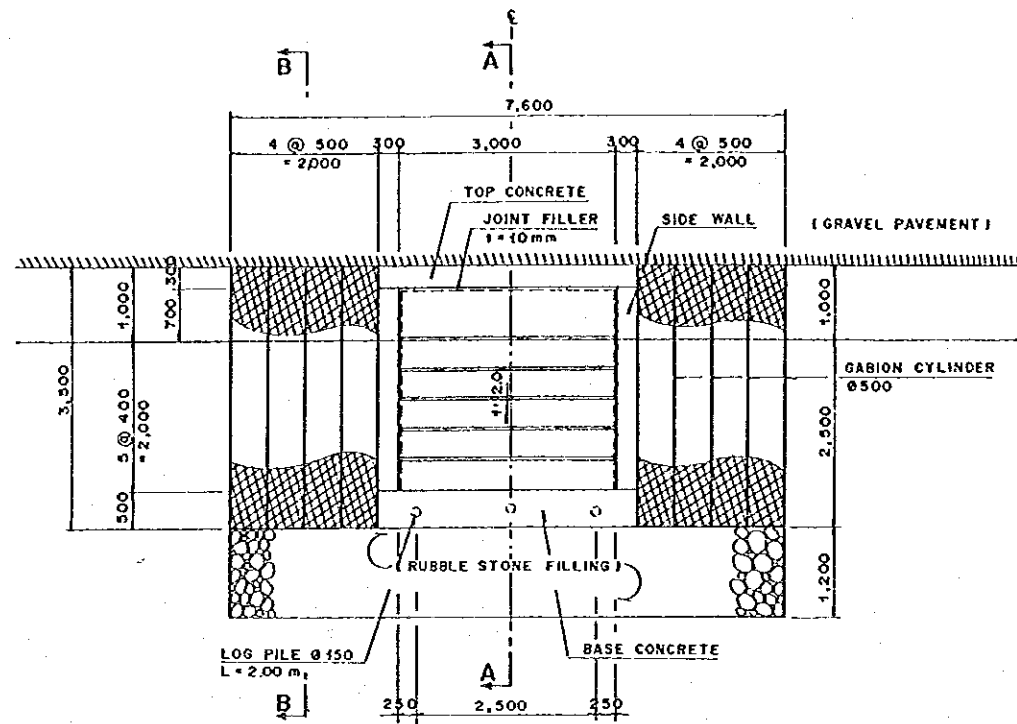


THE REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF URBAN SETTLEMENT
IRATUNSELINA FLOOD CONTROL PROJECT
COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT
RIVER AMENITY AND MAINTENANCE FACILITIES
APPROACH STEPS TYPE WA-2 IN WEST FLOODWAY

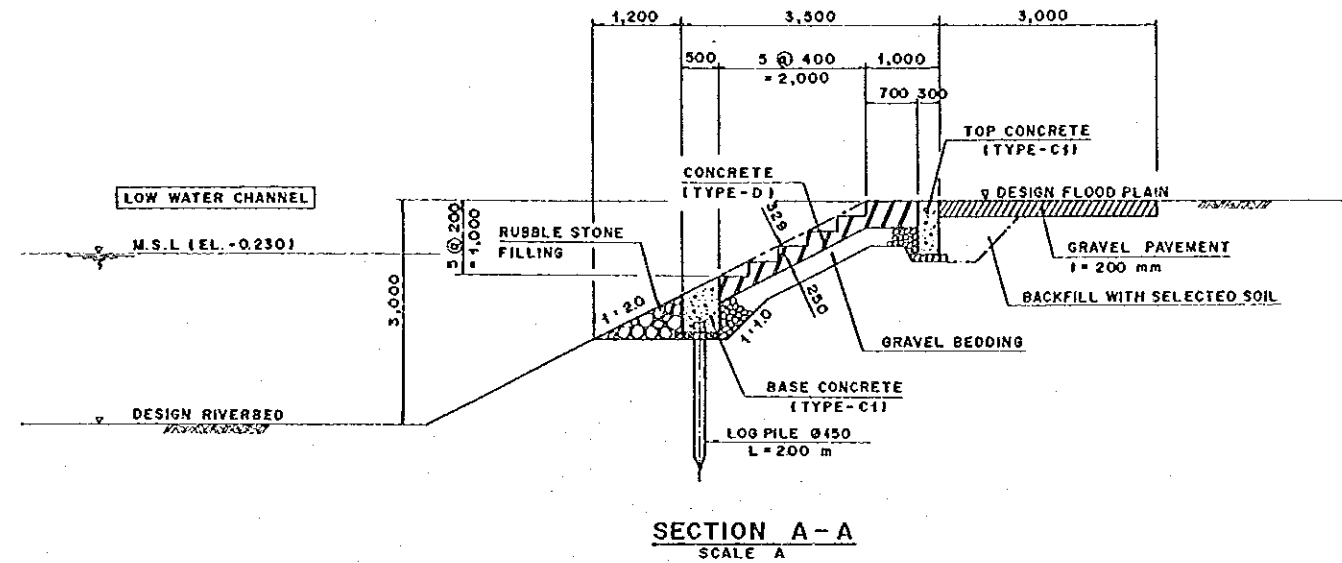
DESIGNED: [Signature]
CHECKED: [Signature]
DATE: [Date]
CONTRACT NO.:

PROVIDER: CENTRAL JAVA
PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN ISLAND OF THE REPUBLIC OF INDONESIA
DISTRICT: SEMARANG CITY
DRAWING NO. W6-P1-AM-51-4
SUBSET NO. 112

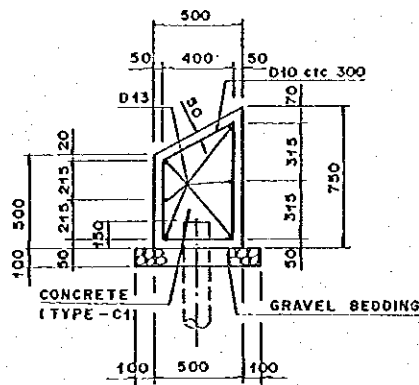
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED



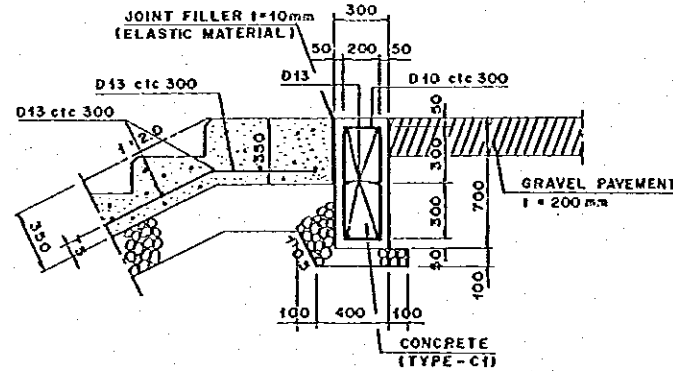
PLAN OF CONCRETE STEPS (WB)
SCALE A



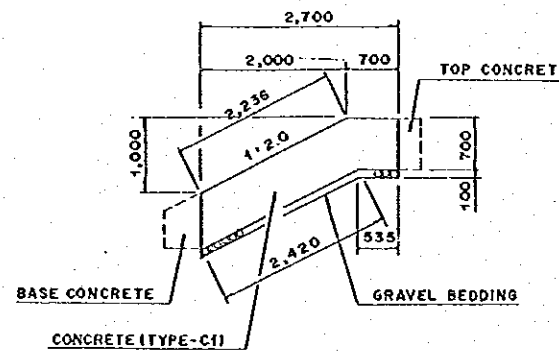
SECTION A-A
SCALE A



BASE CONCRETE
SCALE B



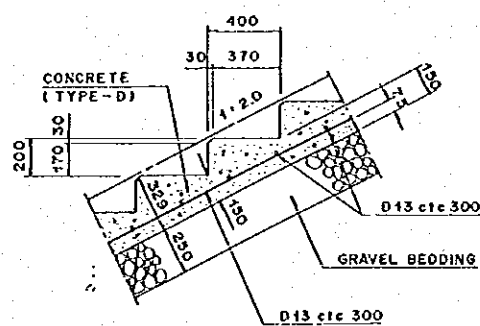
TOP CONCRETE
SCALE B



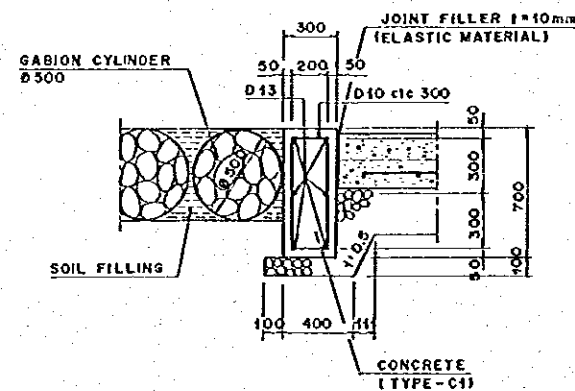
PROFILE OF SIDE WALL
SCALE A

LOCATION OF APPROACH STEPS

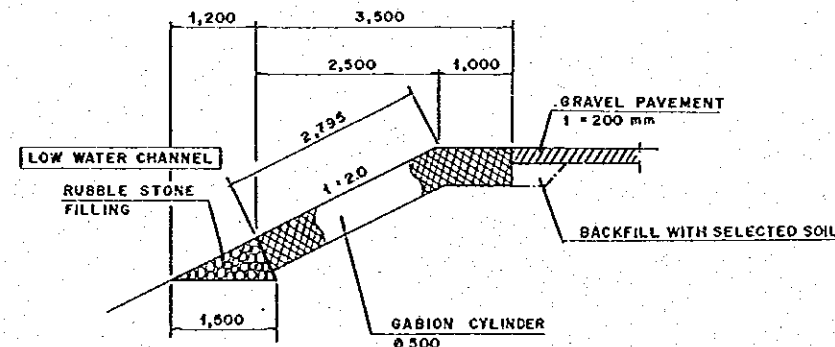
LOCATION (CENTER LINE)	ELEVATION (EL. m)	
	DESIGN RIVERBED	DESIGN FLOODPLAIN
WF.30L - 15.0m	- 2.500	0.500
WF.40L + 15.0m	- 2.305	0.695
WF.55L + 0.0m	- 2.025	1.115
WF.34R + 5.0m	- 2.417	0.583
WF.41R + 0.0m	- 2.990	0.010
WF.53R + 0.0m	- 2.063	1.009



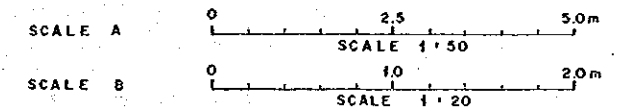
DETAIL OF STEPS
SCALE B



SIDE WALL
SCALE B

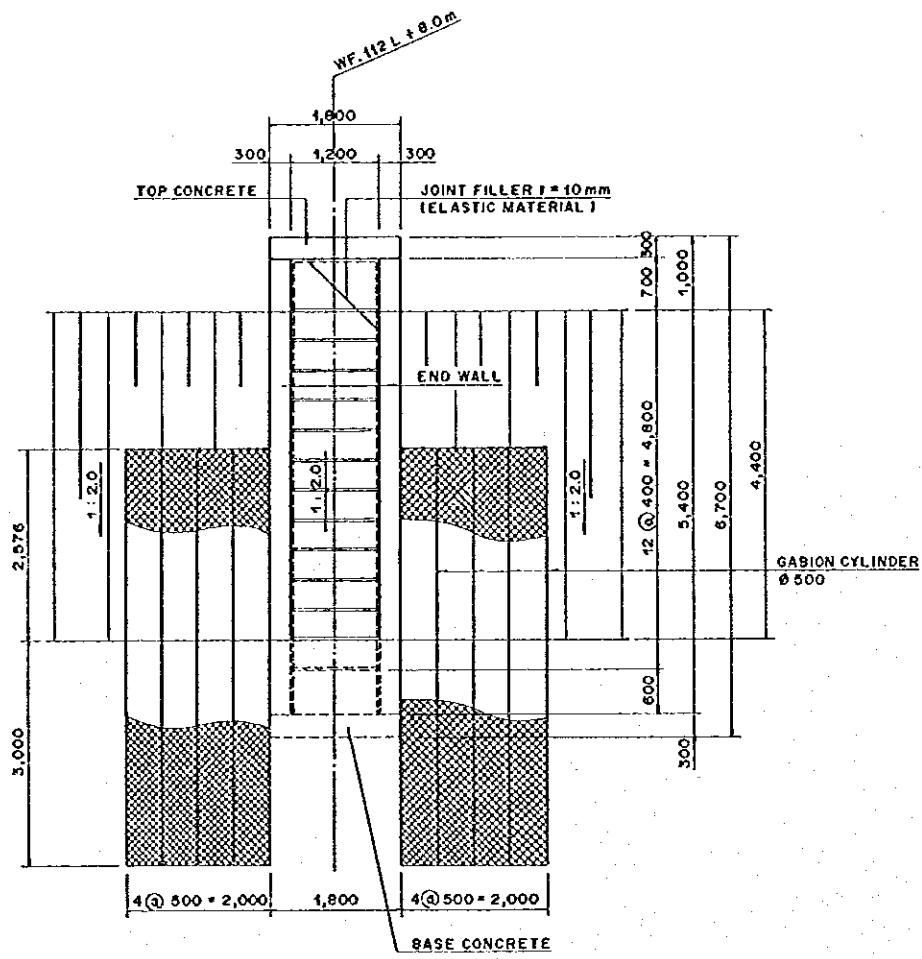


SECTION B-B
SCALE A

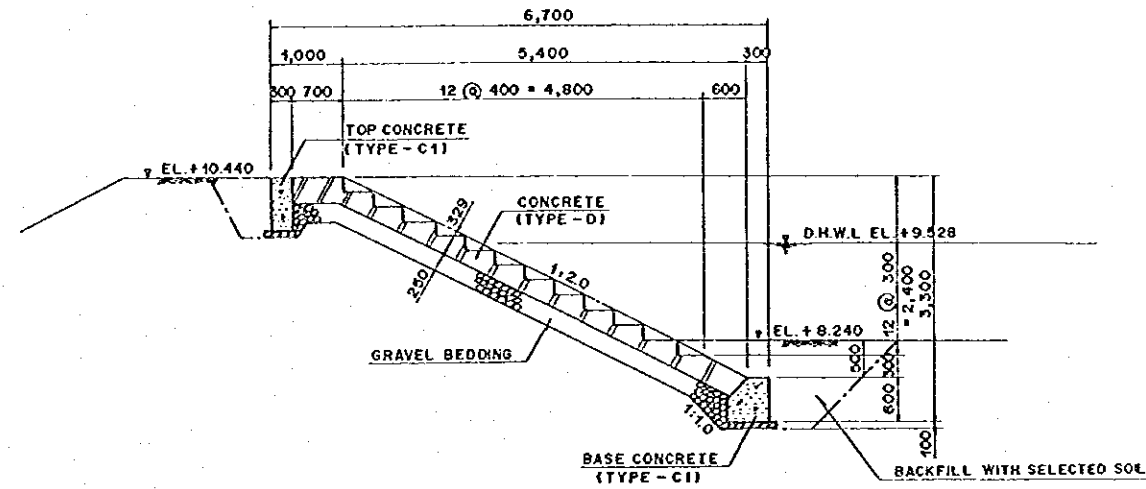


NO.	DATE	REVISIONS	ORIGINATED	ENURED	APPROVED

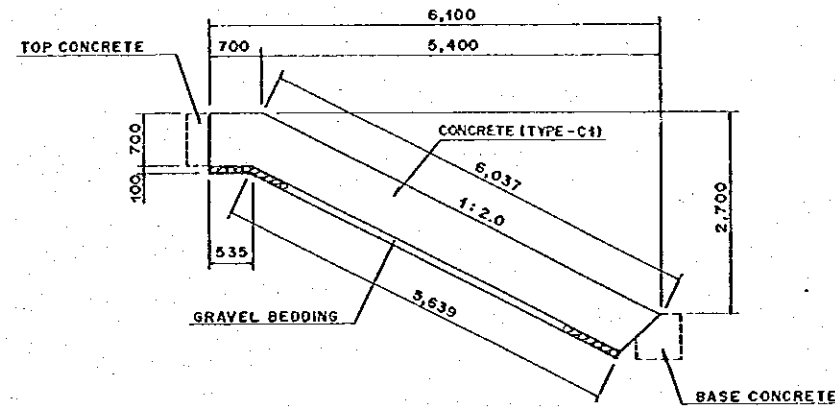
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT IRA TUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT RIVER AMENITY AND MAINTENANCE FACILITIES APPROACH STEPS TYPE WB IN WEST FLOODWAY		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. W2-P1-AM-51-5 SHEET NO. 183
LUNAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PARCO INTERNATIONAL INC.	DESIGNED CHECKED DATE	CONTRACT NO.
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER	APPROVED	DATE



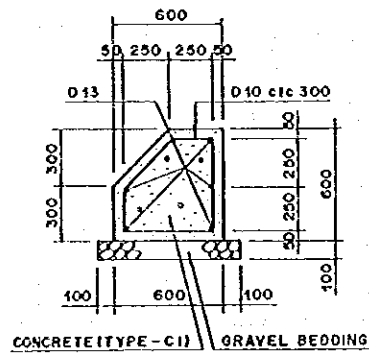
PLAN OF STEPS (GA-1)
SCALE A



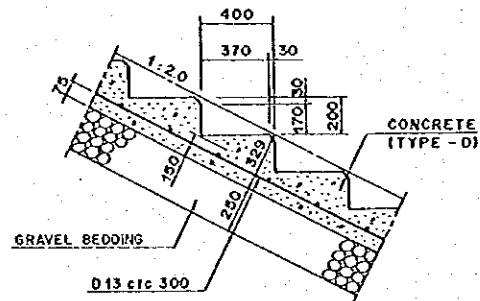
TYPICAL CROSS SECTION OF STEPS (WF. 112 L + 8.0 m)
SCALE A



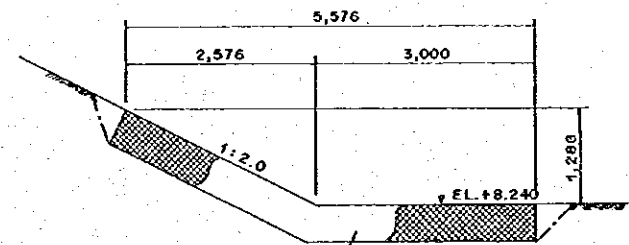
PROFILE OF END WALL
SCALE A



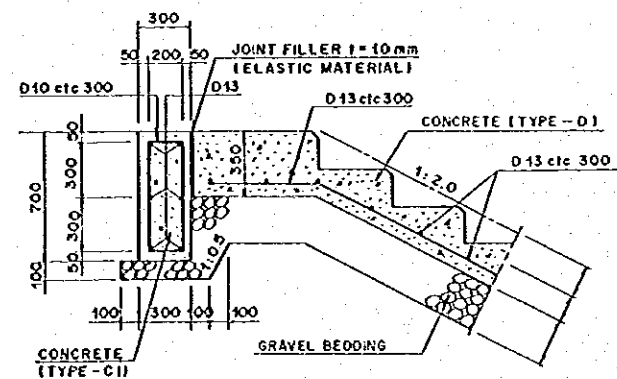
BASE CONCRETE
SCALE B



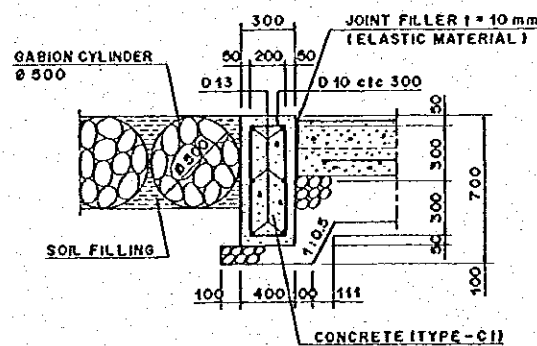
DETAIL OF STEPS
SCALE B



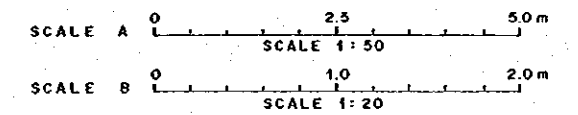
SECTION OF GABION CYLINDER
SCALE A



TOP CONCRETE
SCALE B

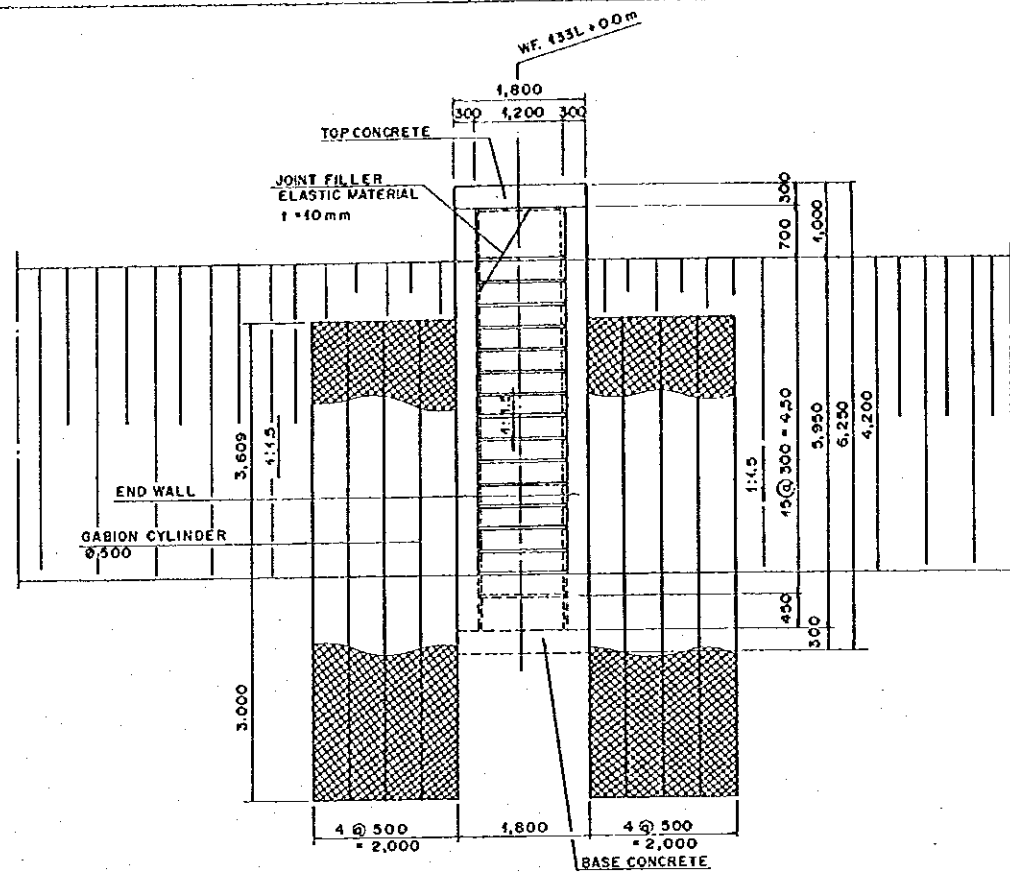


END WALL
SCALE B

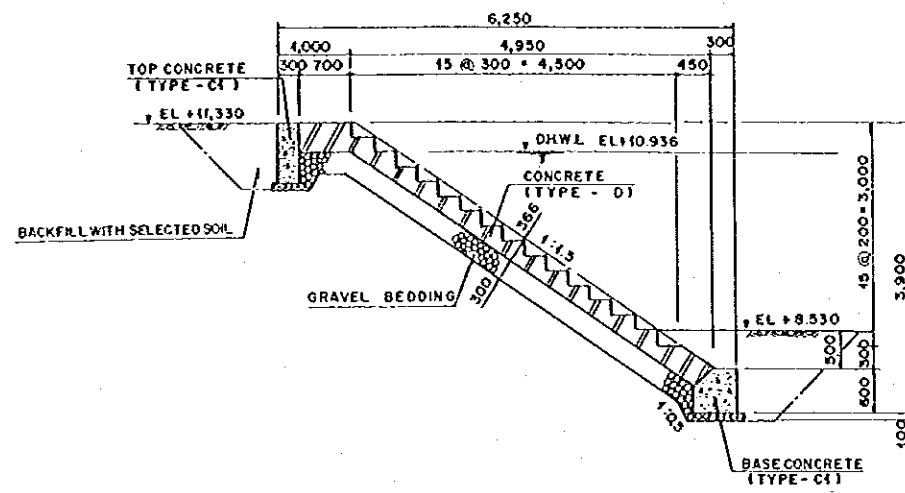


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED	APPROVED

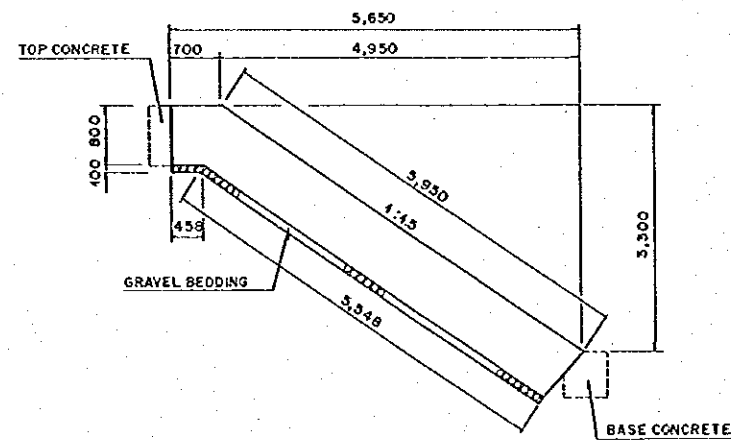
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
PRATUNSELUMA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT RIVER AMENITY AND MAINTENANCE FACILITIES APPROACH STEPS TYPE GA-1 IN GARANG RIVER		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSTRUCTION INTERNATIONAL AND PARCO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. W8-P1-AW-ST-8 SHEET NO. 154 DATE CONTRACT NO.



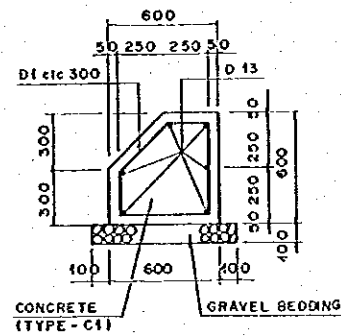
PLAN OF STEPS (GA-2)
SCALE A



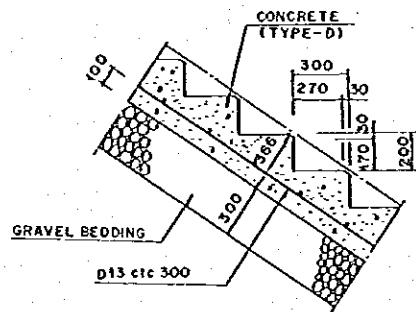
TYPICAL CROSS SECTION STEPS (WF 133L + 0.0 m)
SCALE A



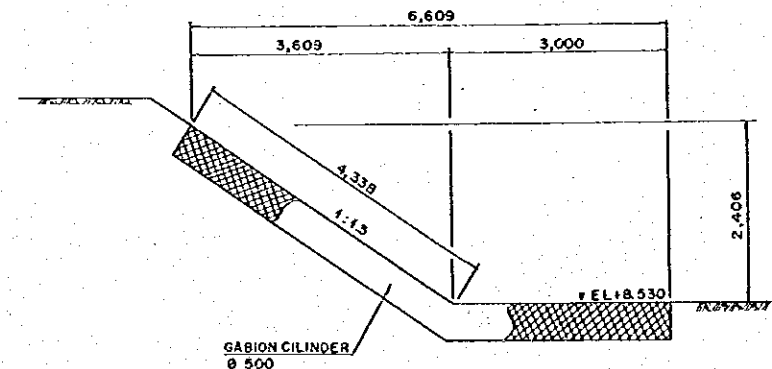
PROFILE OF END WALL
SCALE A



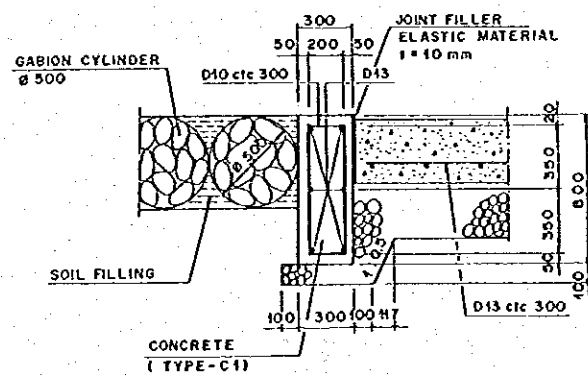
BASE CONCRETE
SCALE B



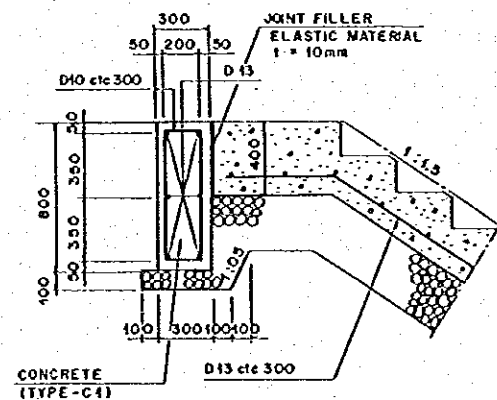
DETAIL OF STEPS
SCALE B



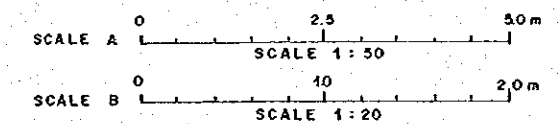
SECTION GABION CYLINDER
SCALE A



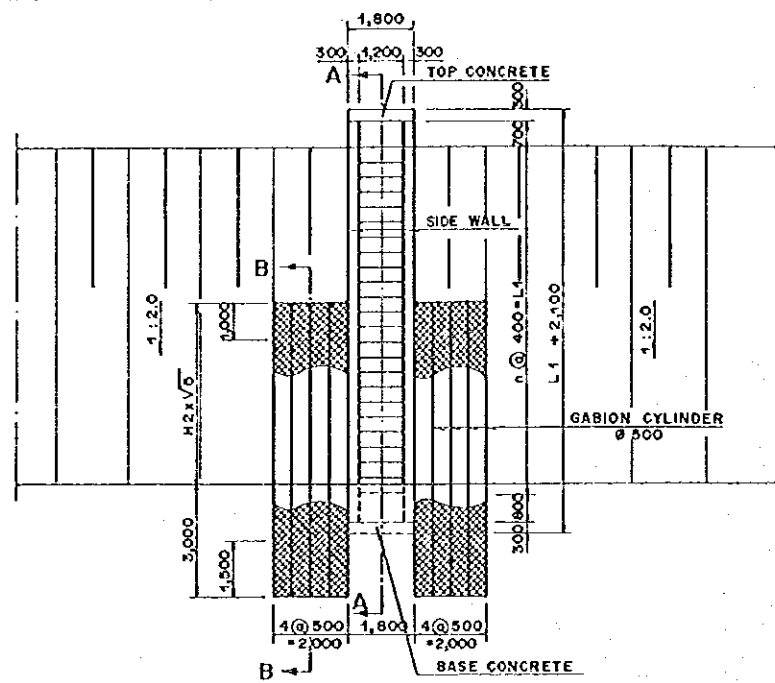
END WALL
SCALE B



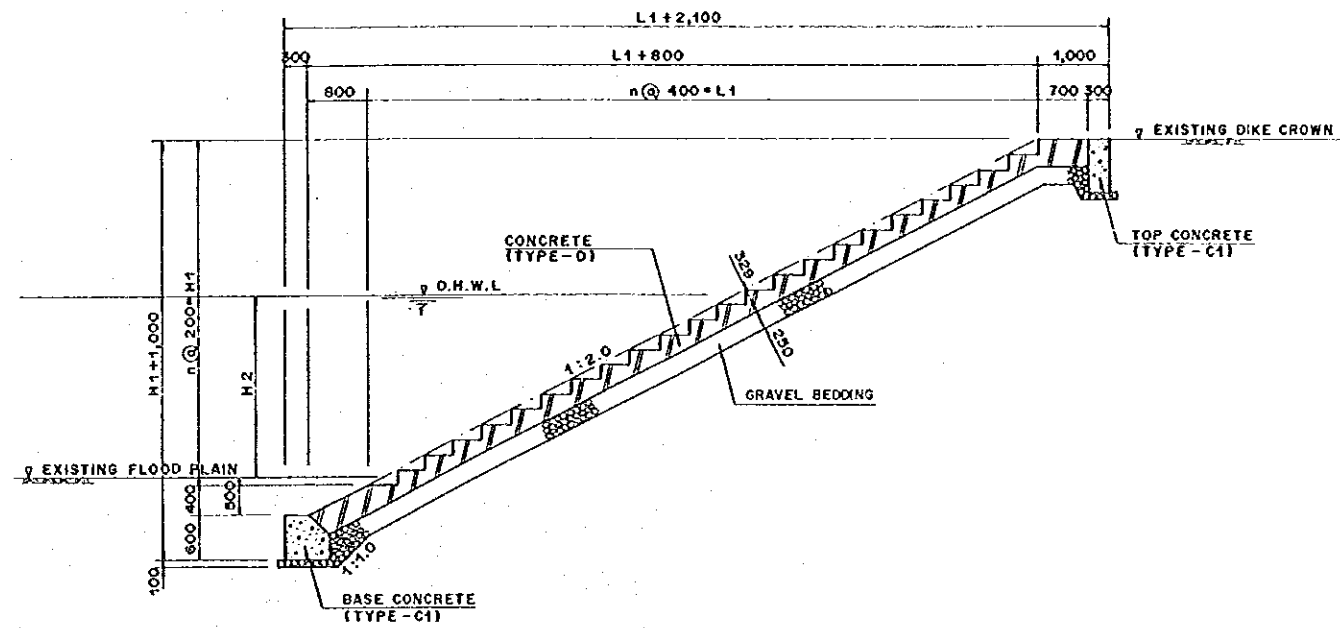
TOP CONCRETE
SCALE B



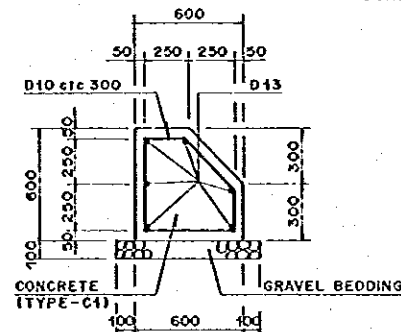
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT JATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY/GARANG RIVER IMPROVEMENT RIVER AMENITY AND MAINTENANCE FACILITIES APPROACH STEPS TYPE GA-2 IN GARANG RIVER					PROVINCE 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-P1-AM-S1-7 SHEET NO. 185 DATE CONTRACT NO.
JAPAN INTERNATIONAL COOPERATION AGENCY CEI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND FANCO INTERNATIONAL, INC.					DESIGNED CHECKED DATE
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER					APPROVED DATE
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED



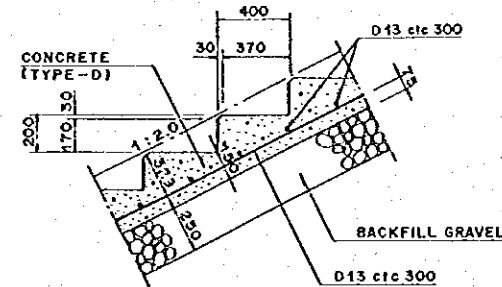
PLAN OF CONCRETE STEPS (GA-3)
SCALE A



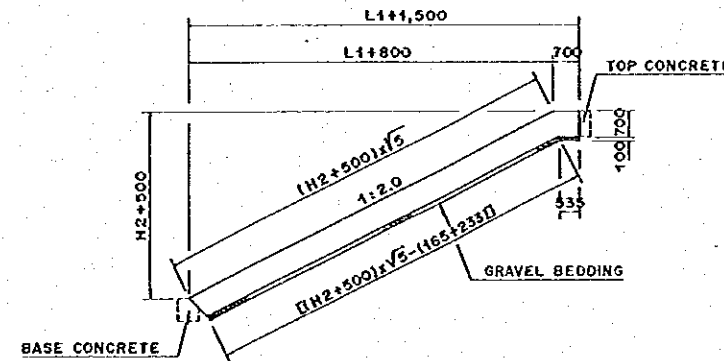
SECTION A-A
SCALE B



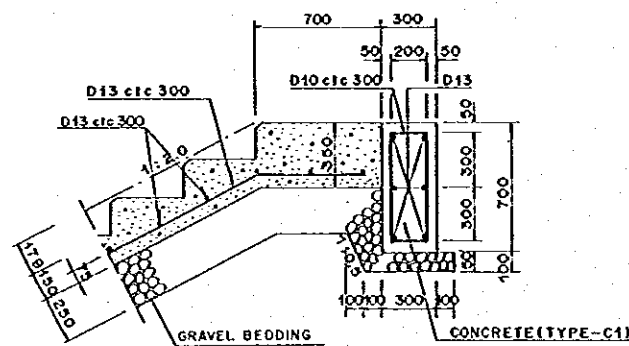
BASE CONCRETE
SCALE C



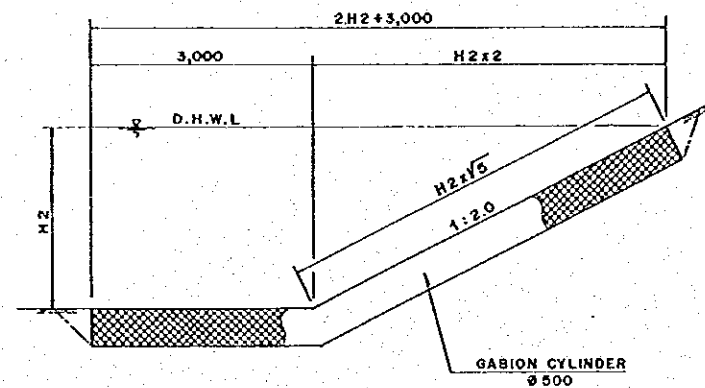
DETAIL OF STEPS
SCALE C



PROFILE OF SIDE WALL
SCALE A



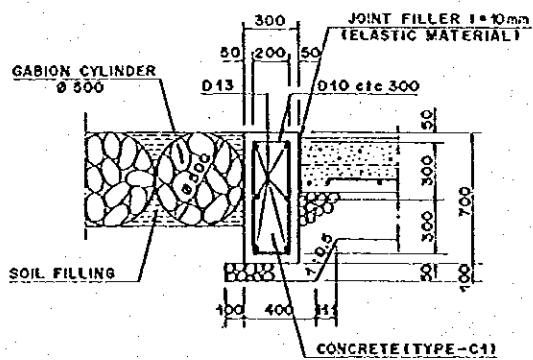
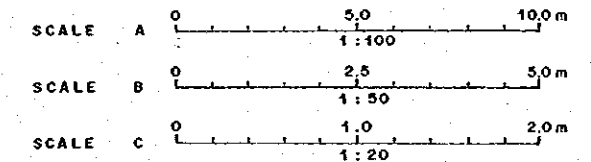
TOP CONCRETE
SCALE C



SECTION B-B
SCALE B

DIMENSION OF CONCRETE STEPS

LOCATION (CENTERLINE)	EXISTING		DESIGN HIGH WATER LEVEL (EL-m)	DIMENSION			
	DIKE CROWN (EL-m)	FLOOD PLAIN (EL-m)		H1(m)	H2(m)	n	L1(m)
WF.135R+30.0m	11.30	8.00	10.094	3.40	2.094	17	6.80
WF.140R+35.0m	12.50	8.00	10.421	4.60	2.421	23	9.20



SIDE WALL
SCALE C

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

TRATUNSELUMA FLOOD CONTROL PROJECT
COMPONENT: WEST FLOODWAY/GARANG RIVER IMPROVEMENT
RIVER AMENITY AND MAINTENANCE FACILITIES
APPROACH STEPS TYPE GA-3 IN GARANG RIVER

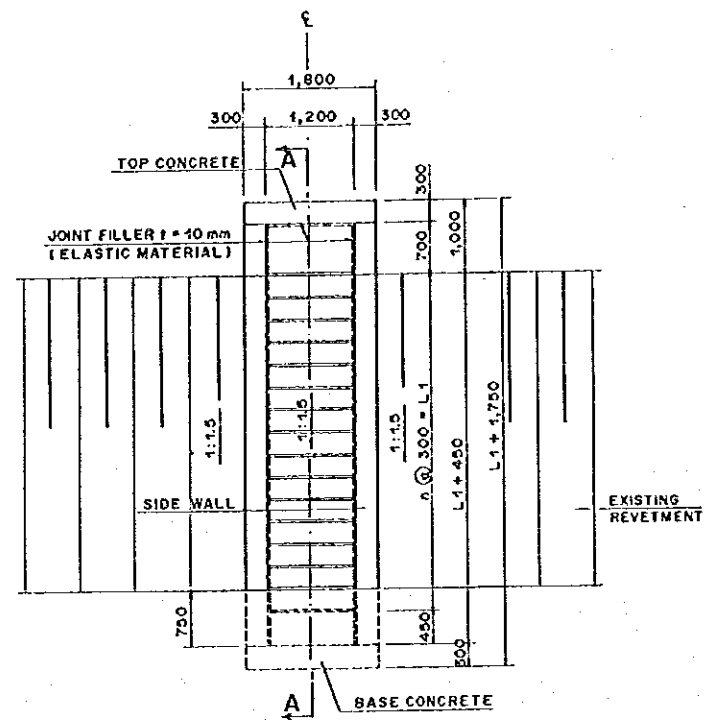
PROJECT NAME: CENTRAL JAWA
PROJECT LOCATION: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG, IN THE REPUBLIC OF INDONESIA
DISTRICT: SEMARANG CITY
DRAWING NO. W8-P1-AM-S1-B
SHEET NO. 186

JAPAN INTERNATIONAL COOPERATION AGENCY
CIJIBANG BUILDING CO., LTD. IN ASSOCIATION WITH
PACIFIC CONSULTANTS INTERNATIONAL AND
FARABO INTERNATIONAL INC.

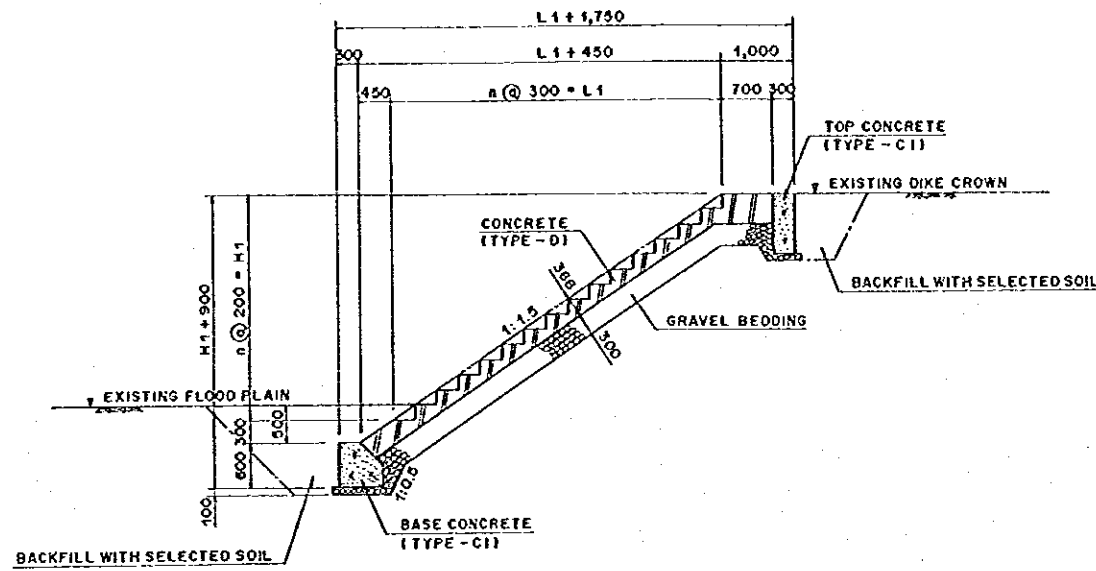
DESIGNED: [Signature]
CHECKED: [Signature]
DATE: [Date]
CONTRACT NO. [Number]

COPY OF PLANNING AND DESIGN
PROJECT MANAGER

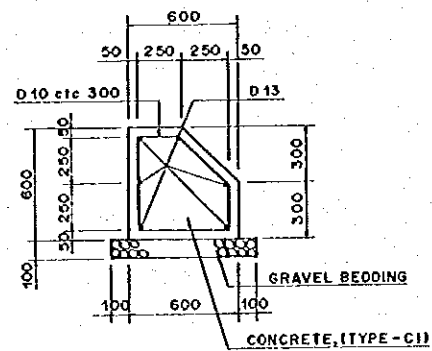
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED



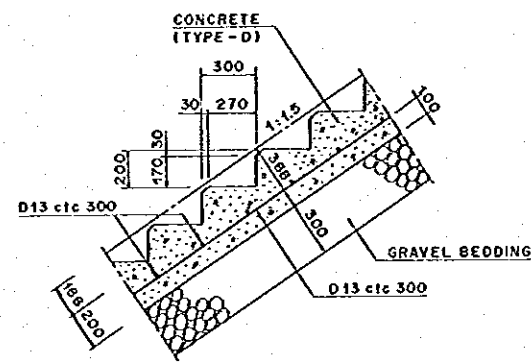
PLAN OF STEPS (GA-4)
SCALE A



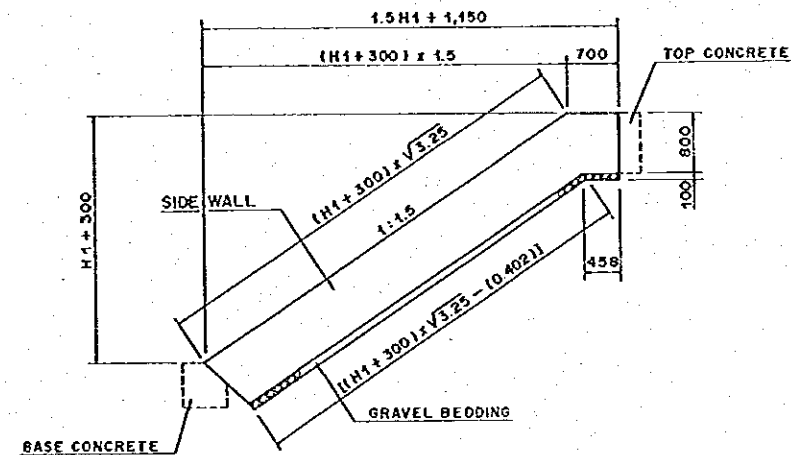
SECTION A-A
SCALE A



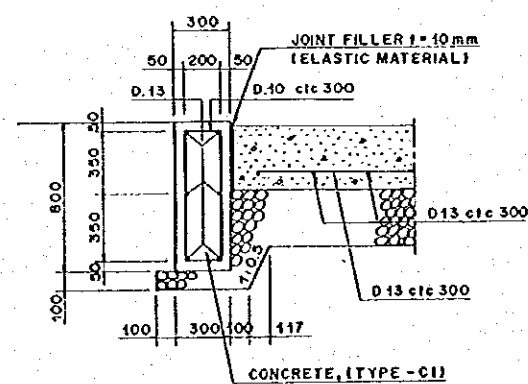
BASE CONCRETE
SCALE B



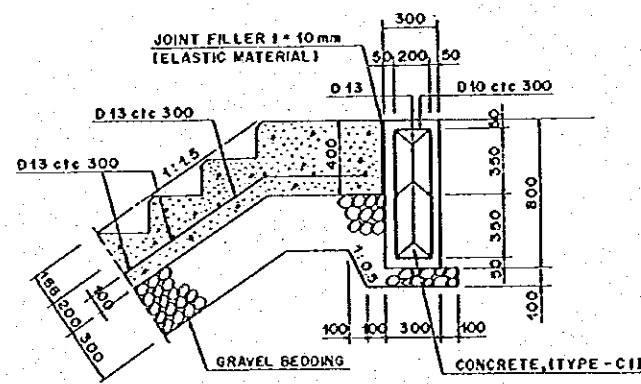
DETAIL OF STEPS
SCALE B



PROFILE OF SIDE WALL
SCALE A



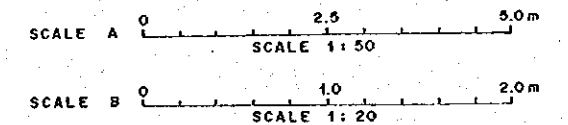
SIDE WALL
SCALE B



TOP CONCRETE
SCALE B

DIMENSIONS OF APPROACH STEPS

LOCATION (CENTER LINE)	EXISTING		DESIGN HIGH WATER LEVEL (EL. m)	DIMENSION		
	DIKE CROWN (EL. m)	FLOOD PLAIN (EL. m)		H1(m)	n	L1(m)
WF.145R+0.0m	13.370	11.170	10.650	2.40	12	3.60
WF.159R+10.0m	14.140	11.340	11.167	3.00	15	4.50



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

PROVINCE: CENTRAL JAWA
PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
DISTRICT: SEMARANG CITY
DRAWING NO. W2-P1-AM-S1-9
SHEET NO. 181

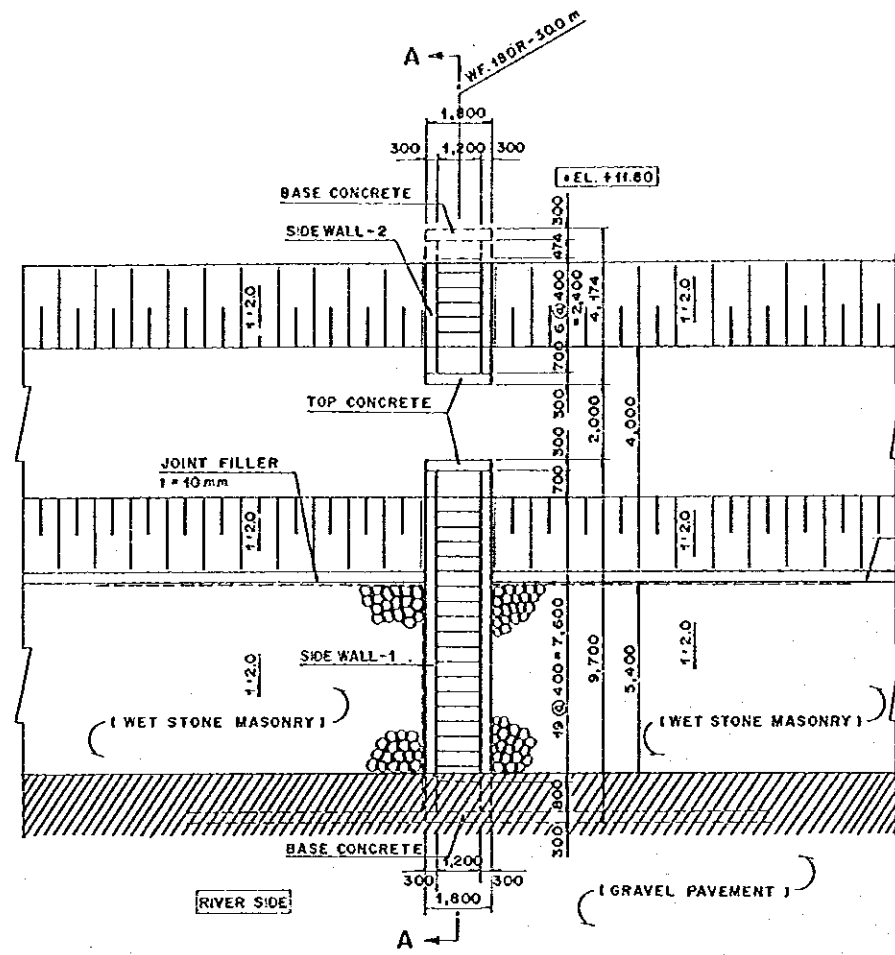
COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT
RIVER AMENITY AND MAINTENANCE FACILITIES
APPROACH STEPS TYPE GA-4 IN GARANG RIVER

JAPAN INTERNATIONAL COOPERATION AGENCY
CITY ENGINEERING CO., LTD. IN ASSOCIATION WITH
PACIFIC CONSULTANTS INTERNATIONAL AND
PACIFIC INTERNATIONAL INC.

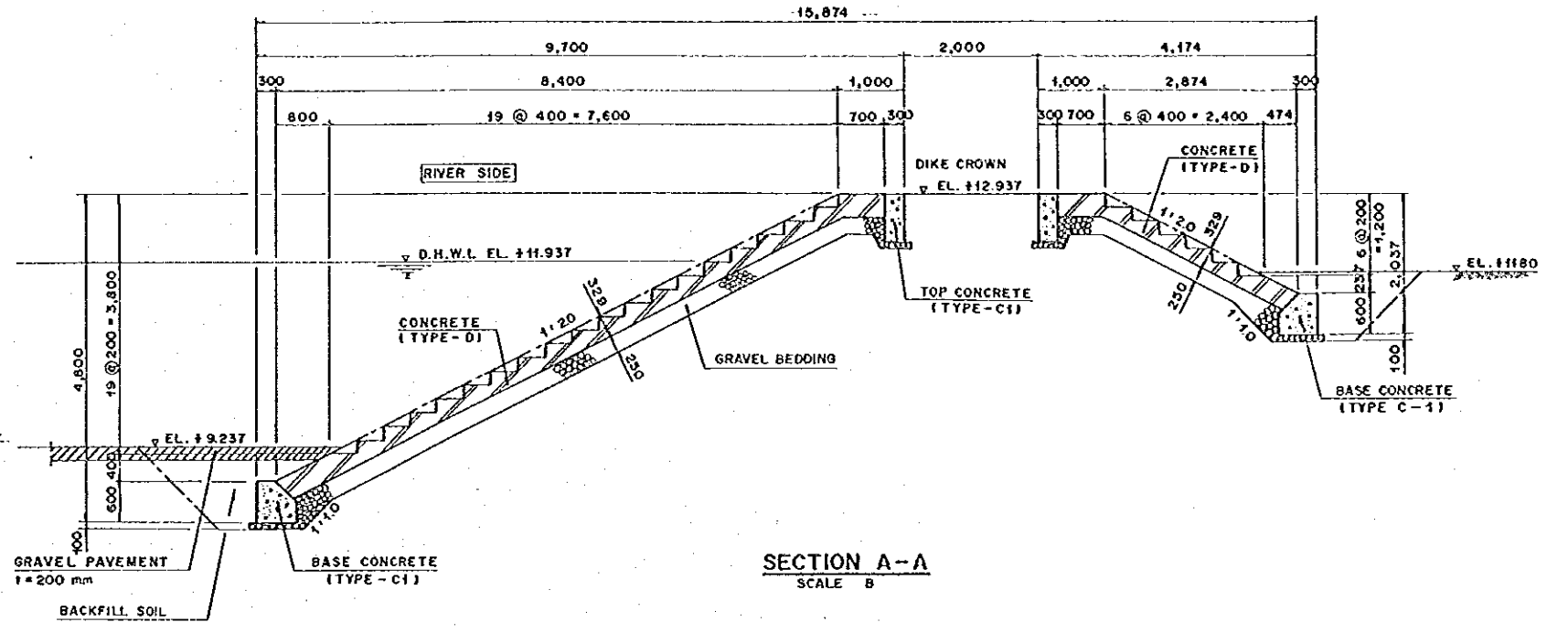
DESIGNED: [Signature]
CHECKED: [Signature]
DATE: [Date]
CONTRACT NO. [Number]

CITY OF PLANNING AND DESIGN
PROJECT MANAGER: [Signature]

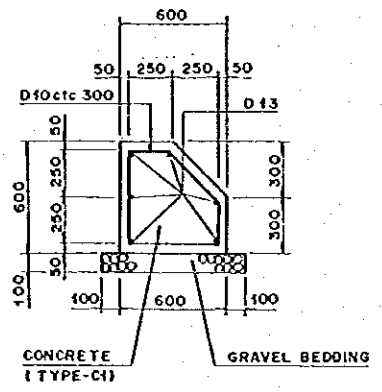
NO.	DATE	REVISIONS	OPERATED	DISKING	APPROVED



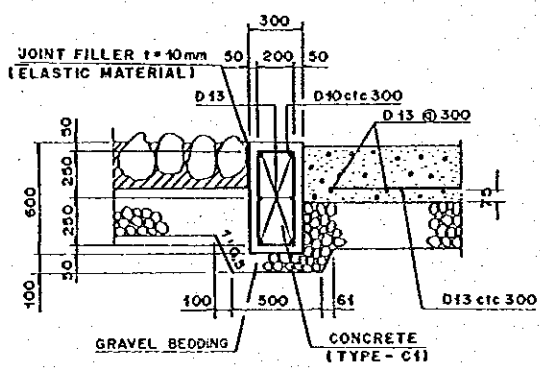
PLAN OF CONCRETE STEPS (GA-5)
SCALE A



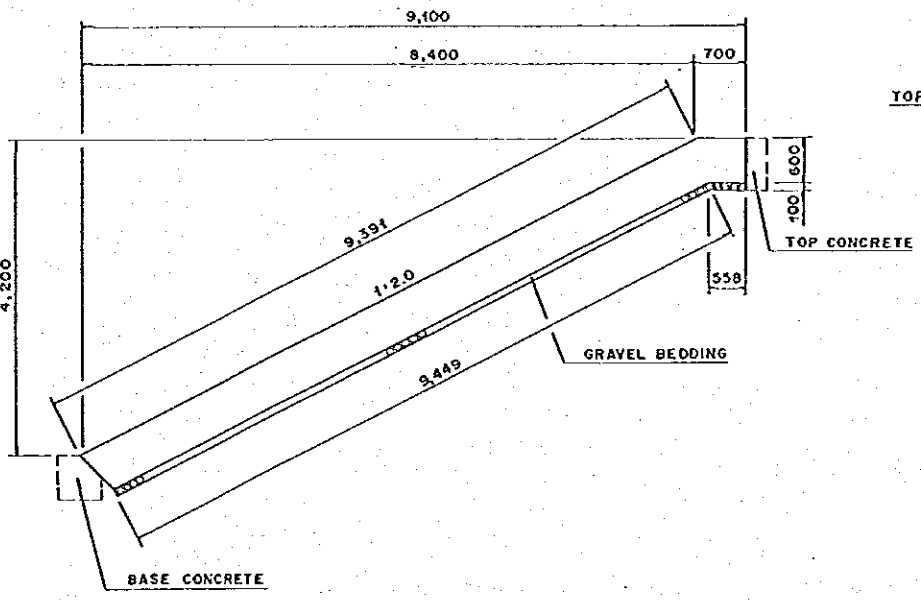
SECTION A-A
SCALE B



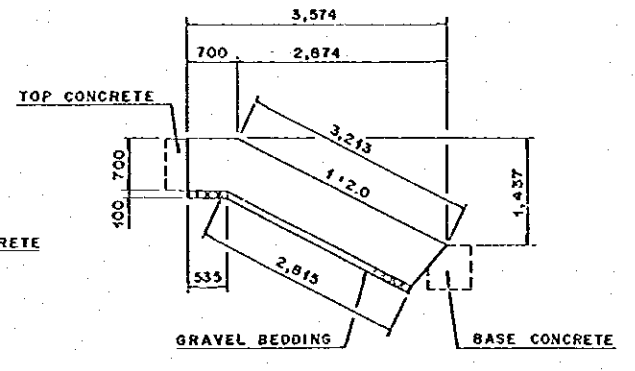
BASE CONCRETE
SCALE C



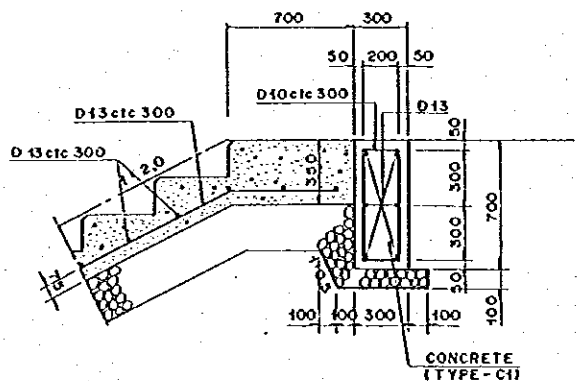
SIDE WALL - 1
SCALE C



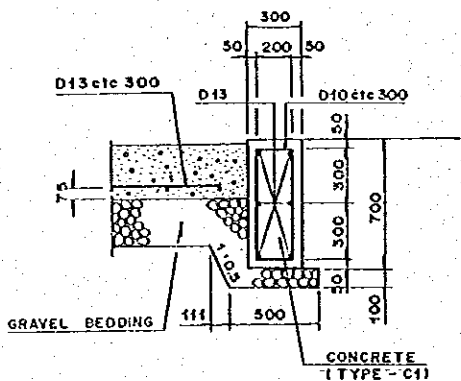
PROFILE OF SIDE WALL - 1
SCALE B



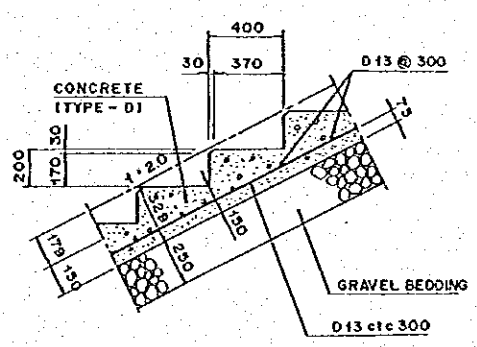
PROFILE OF SIDE WALL - 2
SCALE B



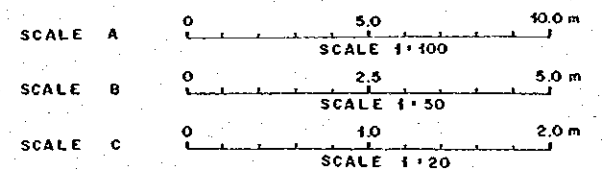
TOP CONCRETE
SCALE C



SIDE WALL - 2
SCALE C



DETAIL OF STEPS
SCALE C



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

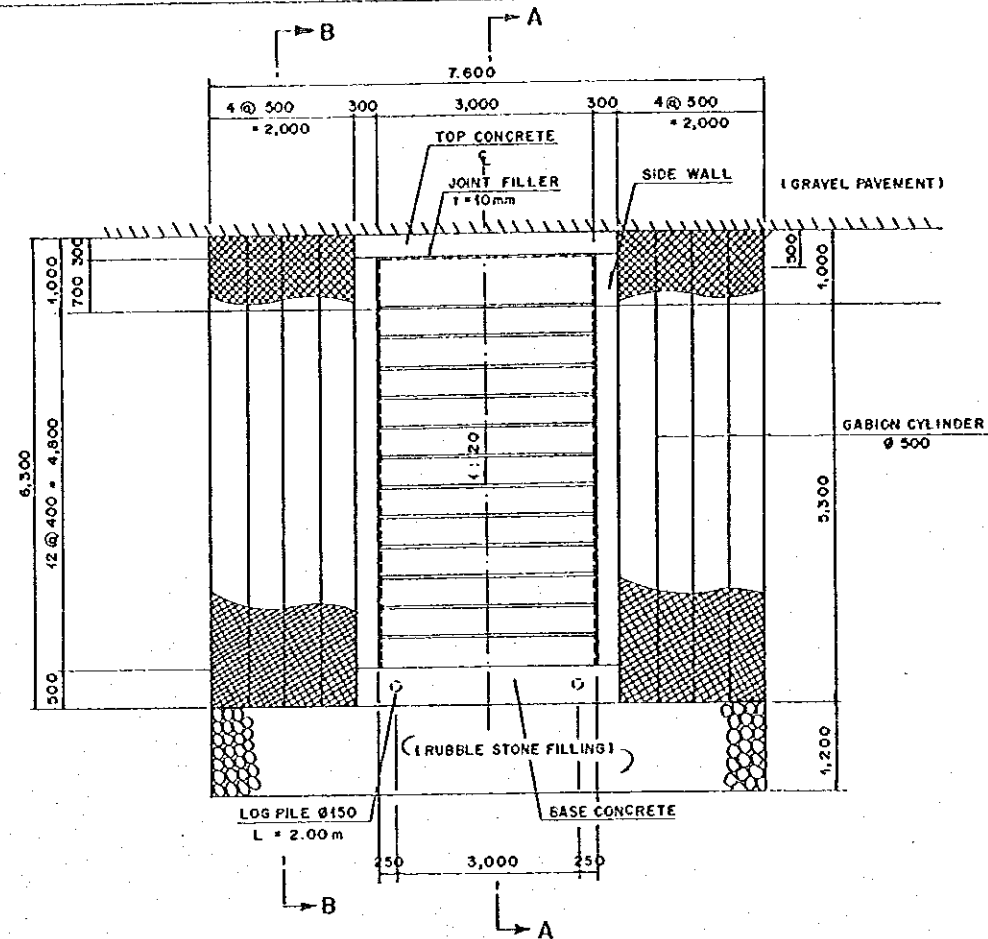
FRATUNSELUNA FLOOD CONTROL PROJECT
COMPONENT - WEST FLOODWAY / GARANG RIVER IMPROVEMENT
RIVER AMENITY AND MAINTENANCE FACILITIES
APPROACH STEPS TYPE GA-5 IN GARANG RIVER

LOAN INTERNATIONAL COOPERATION AGENCY
CITIBANKING CO., LTD. IN ASSOCIATION WITH
PACIFIC CONCRETE & STEEL INTERNATIONAL AND
FARCO INTERNATIONAL INC.

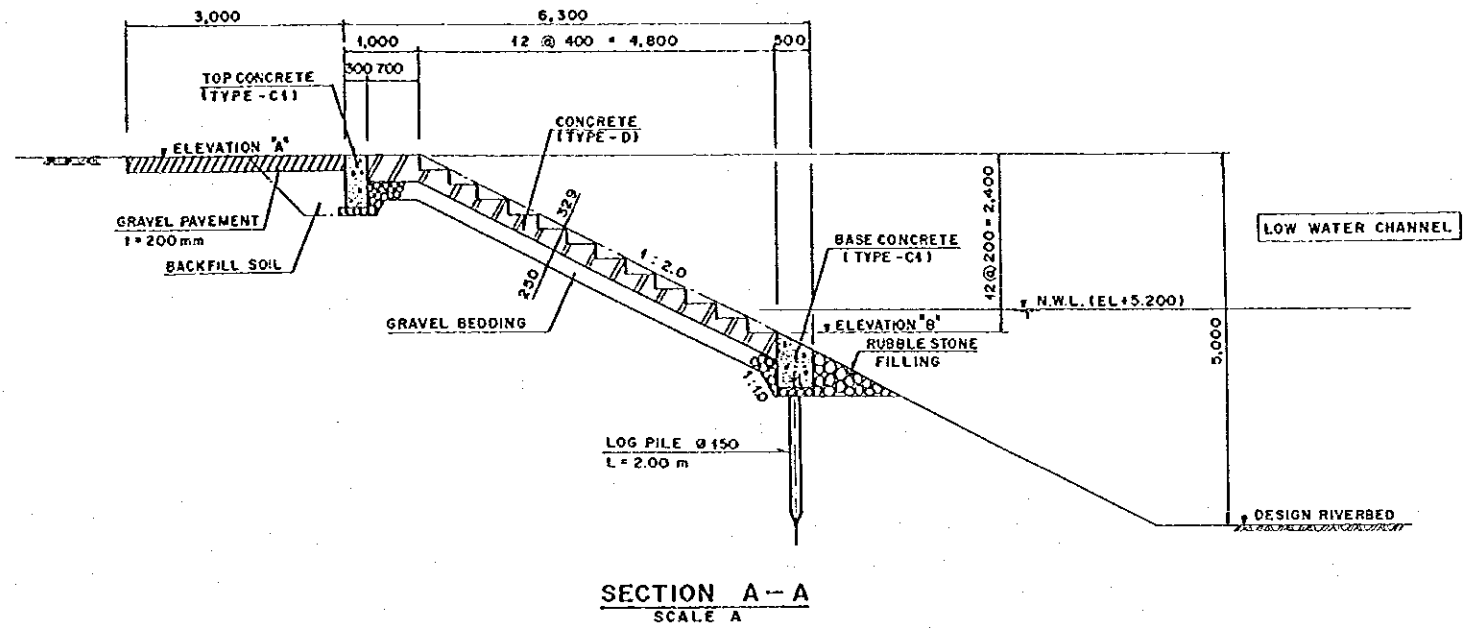
DESIGNED: [Signature]
CHECKED: [Signature]
APPROVED: [Signature]
CHIEF OF PLANNING AND DESIGN
PROJECT MANAGER

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-P1-AM-51-10
SHEET NO. 138

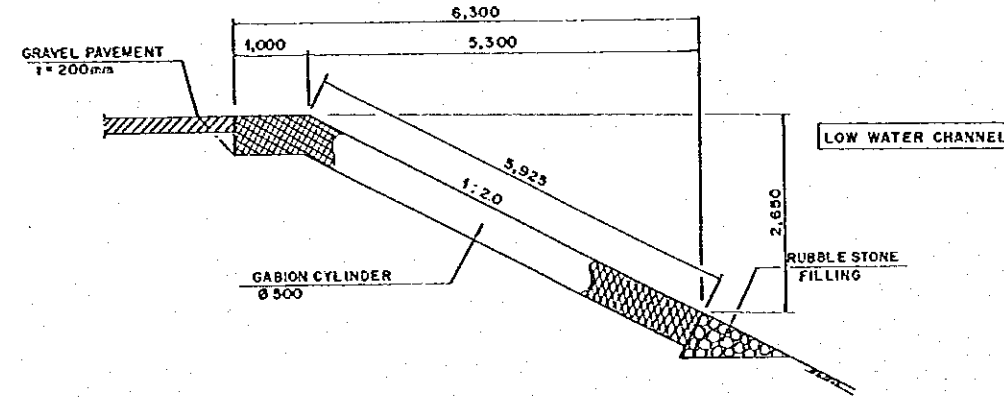
DATE: [Signature]
CONTRACT NO.:



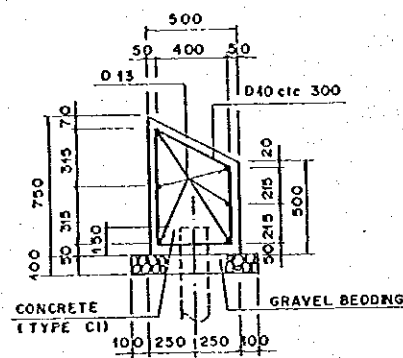
PLAN OF CONCRETE STEP (GB-1)
SCALE A



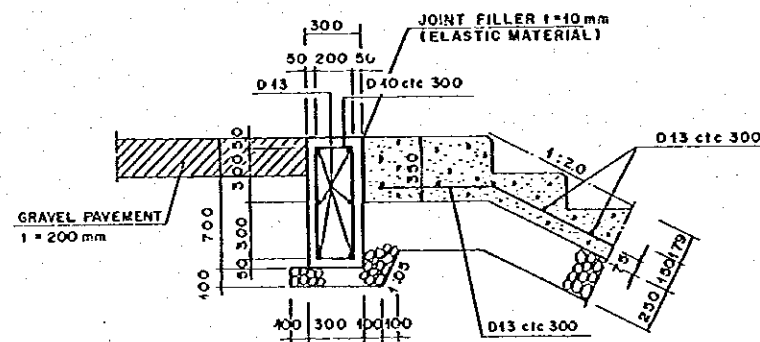
SECTION A-A
SCALE A



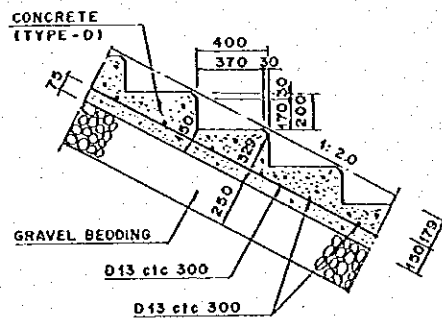
SECTION B-B
SCALE A



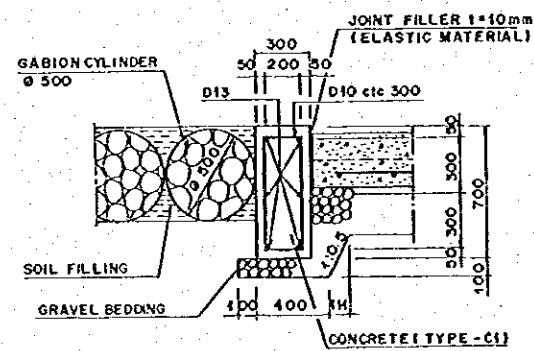
BASE CONCRETE
SCALE B



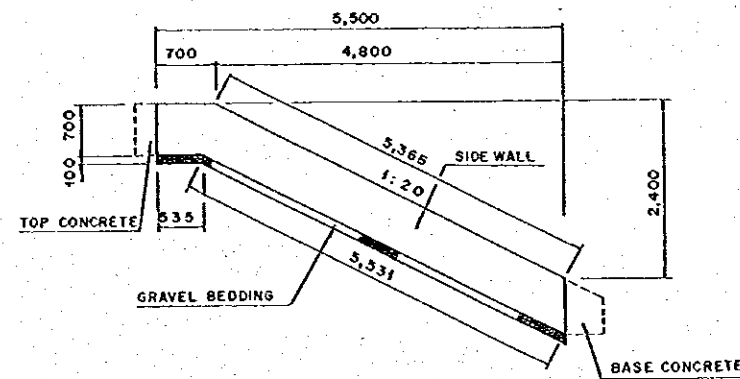
TOP CONCRETE
SCALE B



DETAIL OF STEPS
SCALE B



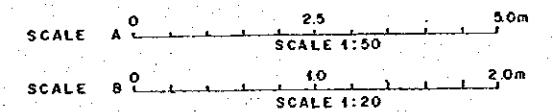
SIDE WALL
SCALE B



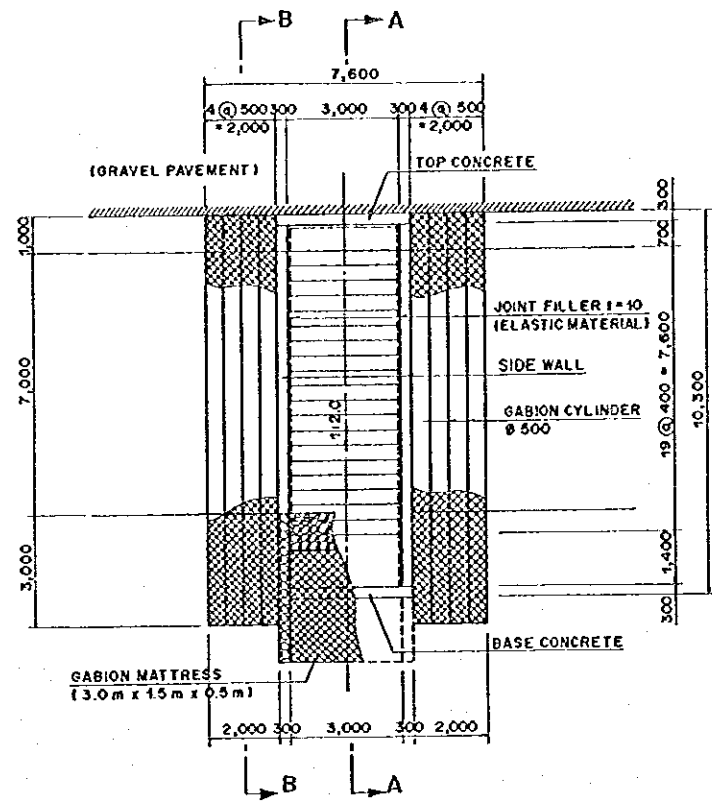
PROFILE OF SIDE WALL
SCALE A

LOCATION OF APPROACH STEPS

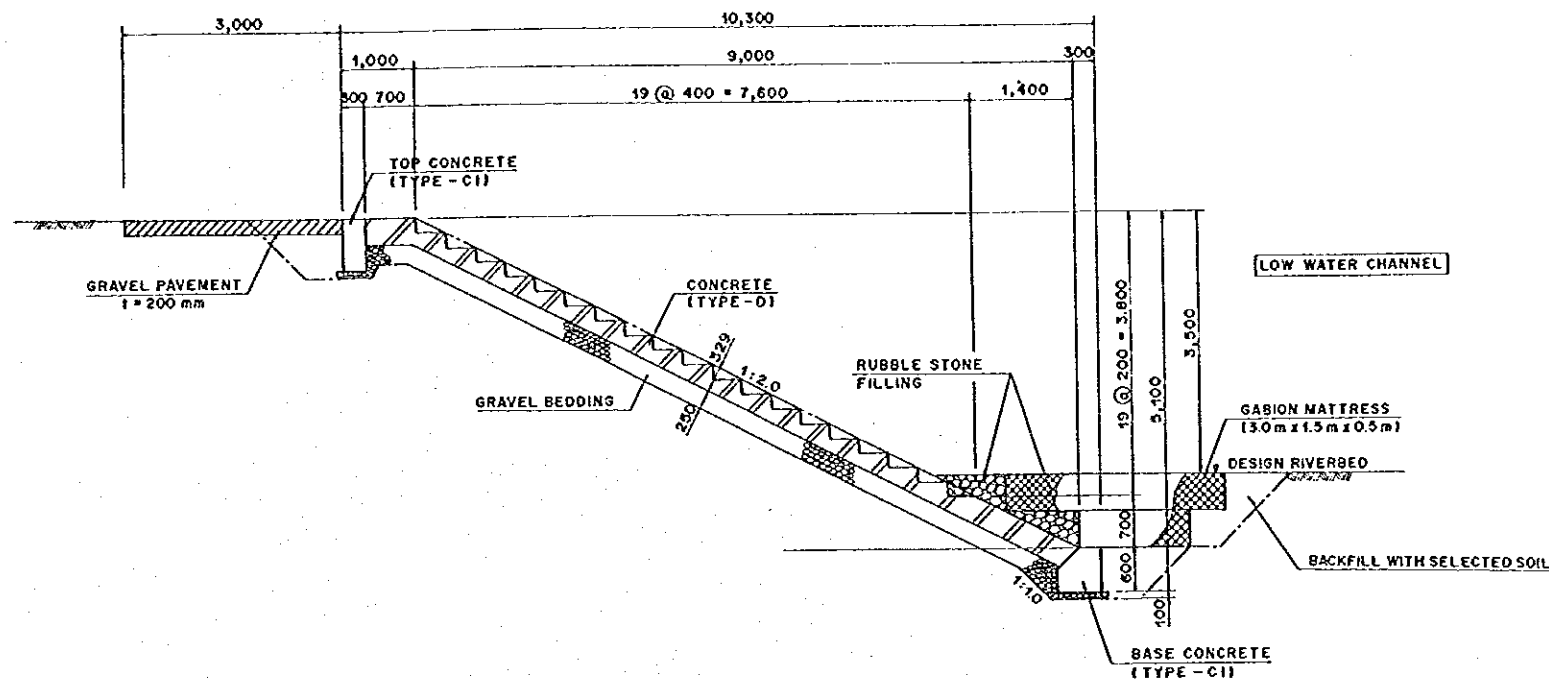
LOCATION (CENTER LINE)	ELEVATION (EL. m)	
	A	B
WF. 115 L + 20.0m	7.091	4.691
WF. 120 L + 10.0m	7.239	4.839



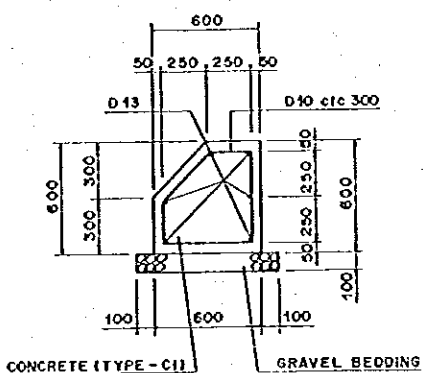
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT BRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANO RIVER IMPROVEMENT RIVER AMENITY AND MAINTENANCE FACILITIES APPROACH STEPS TYPE GB-1 IN GARANO RIVER				PROVIDER CENTRAL JAVA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. WS-P1-AM-31-11 SHEET NO. 189	
JAPAN INTERNATIONAL COOPERATION AGENCY CIL ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND JABCO INTERNATIONAL PTE. DESIGNED CHECKED CDR OF PLANNING AND DESIGN PROJECT MANAGER				DATE CONTRACT NO.	
NO.	DATE	REVISIONS	OPERATED	DESIGNED	APPROVED



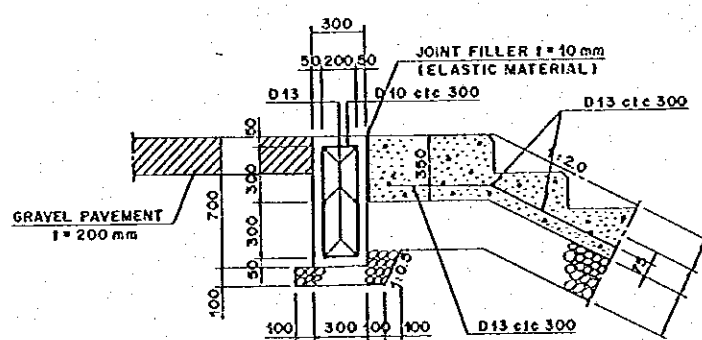
PLAN OF CONCRETE STEPS (GB-2)
SCALE A



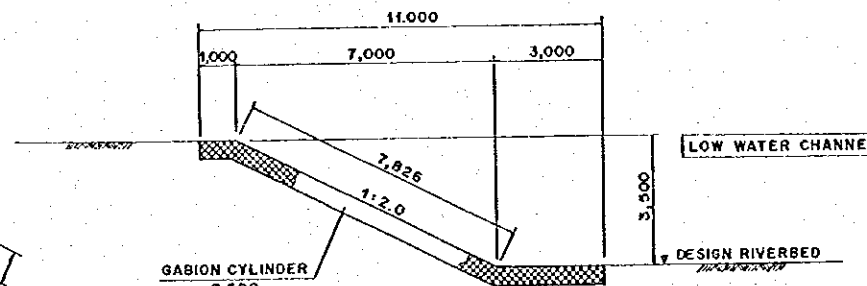
SECTION A-A
SCALE B



BASE CONCRETE
SCALE C



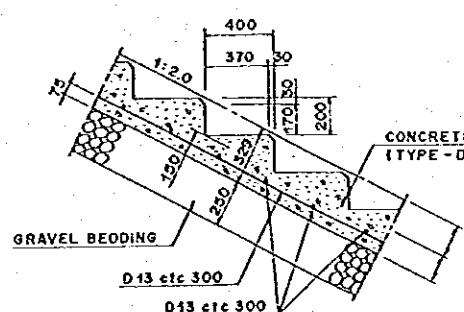
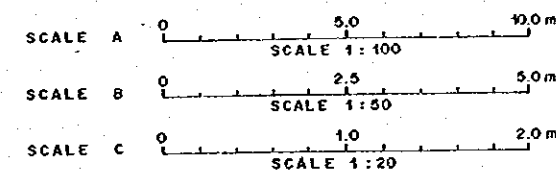
TOP CONCRETE
SCALE C



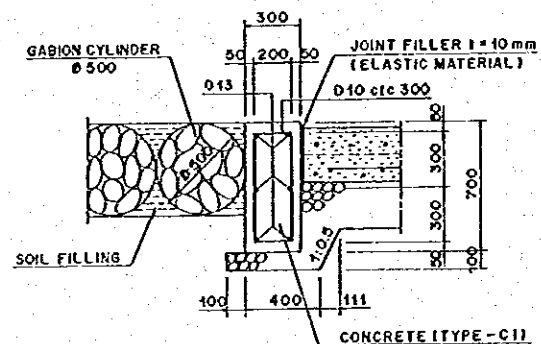
SECTION B-B
SCALE A

LOCATION OF APPROACH STEPS (GB-2)

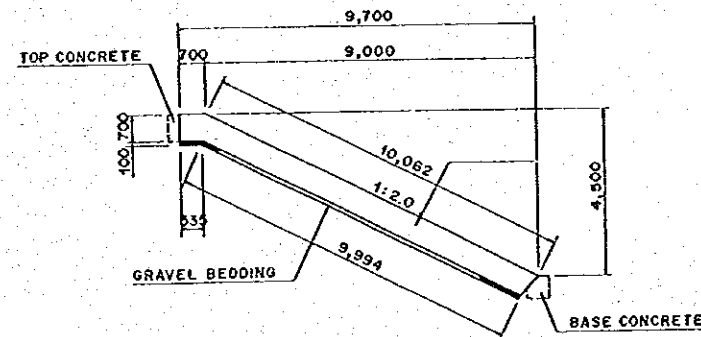
	LOCATION
RIGHT BANK	WF.135R - 30.0M
	WF.141R + 30.0M
	WF.145R + 0.0M
	WF.159R + 10.0M
LEFT BANK	WF.139L + 30.0M
	WF.153L + 30.0M
	WF.168L - 40.0M



DETAIL OF STEPS
SCALE C



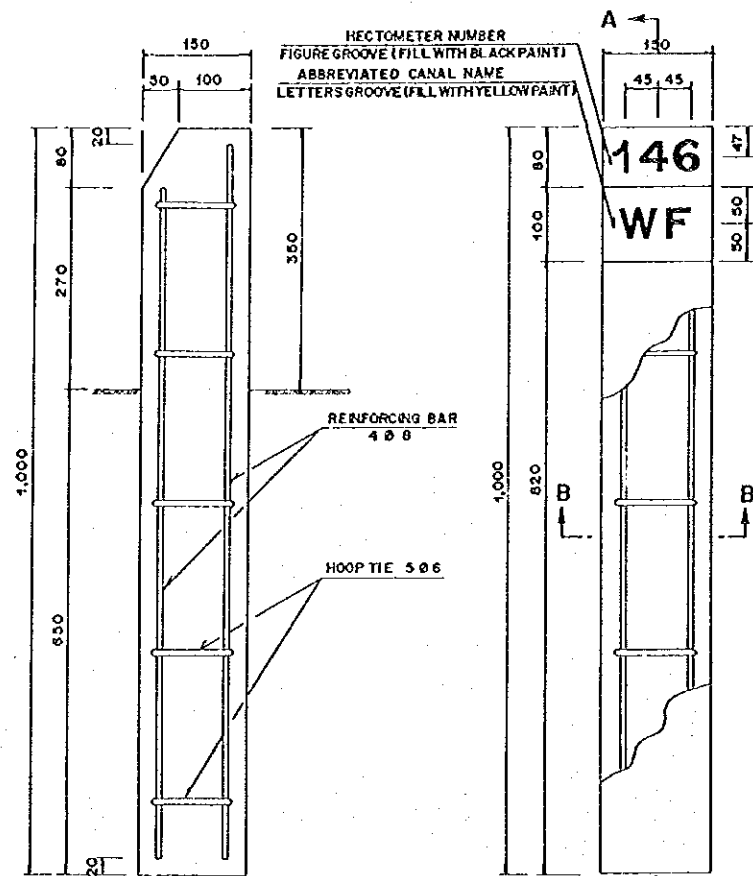
SIDE WALL
SCALE C



PROFILE OF END WALL
SCALE A

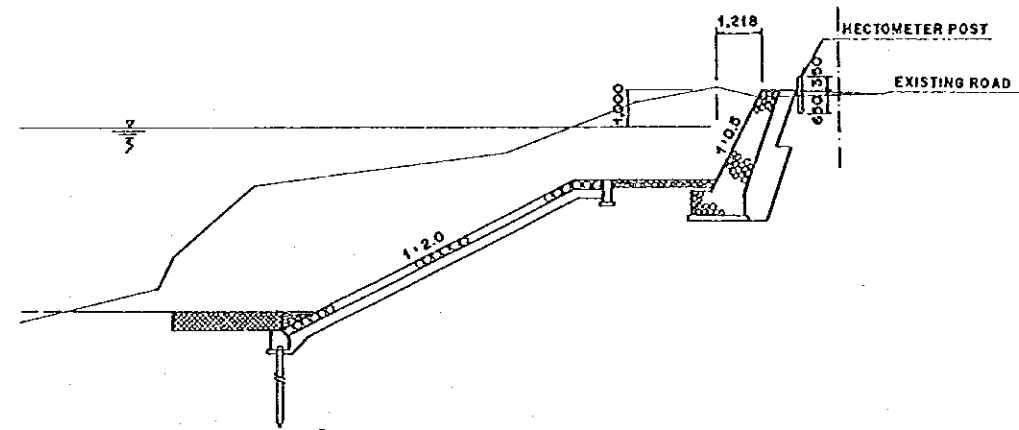
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT JATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT RIVER AMENITY AND MAINTENANCE FACILITIES APPROACH STEPS TYPE GB-2 IN GARANG RIVER		PROVIDER CENTRAL JAWA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. WS-P1-AM-51-12 SHEET NO. 159
JAPAN INTERNATIONAL COOPERATION AGENCY JICA ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PACIFIC INTERNATIONAL INC.	DESIGNED CHECKED CREEK OF PLANNING AND DESIGN PROJECT MANAGER	DATE CONTRACT NO.

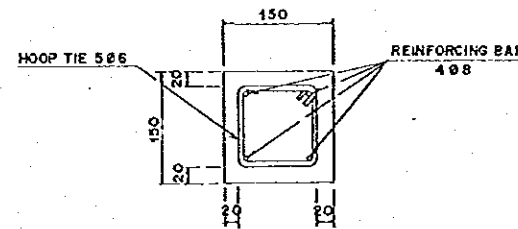


SECTION A-A
SCALE C

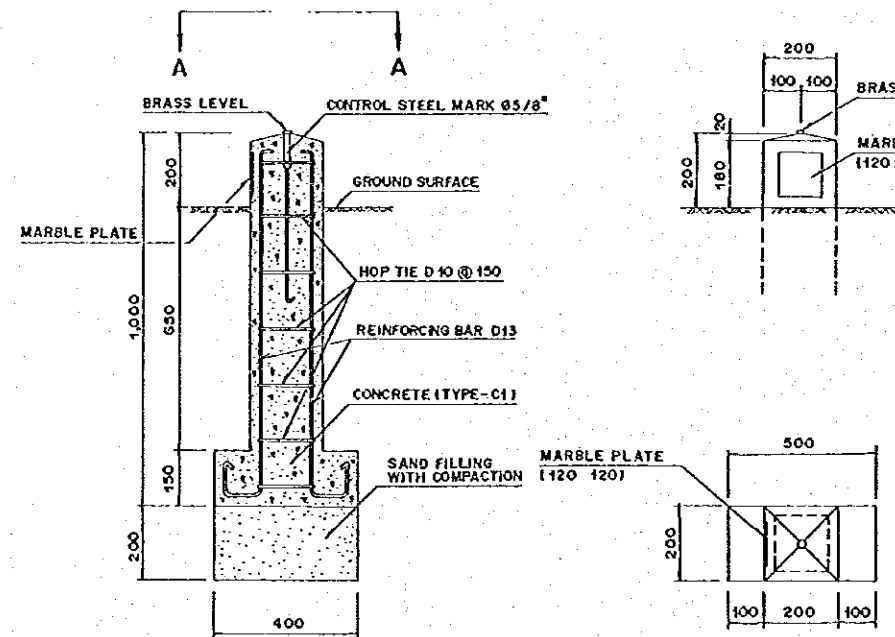
STANDARD OF HECTOMETER POST
SCALE C



PLACEMENT OF HECTOMETER POST
SCALE A

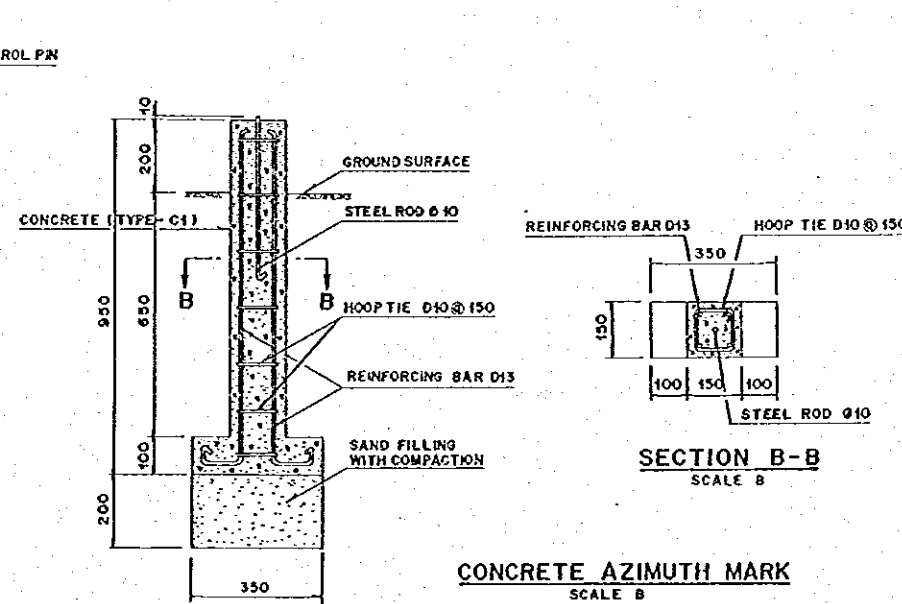


SECTION B-B
SCALE C



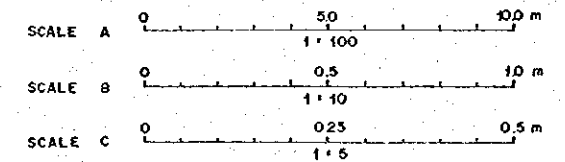
SECTION A-A
SCALE B

CONCRETE BENCHMARK
SCALE B



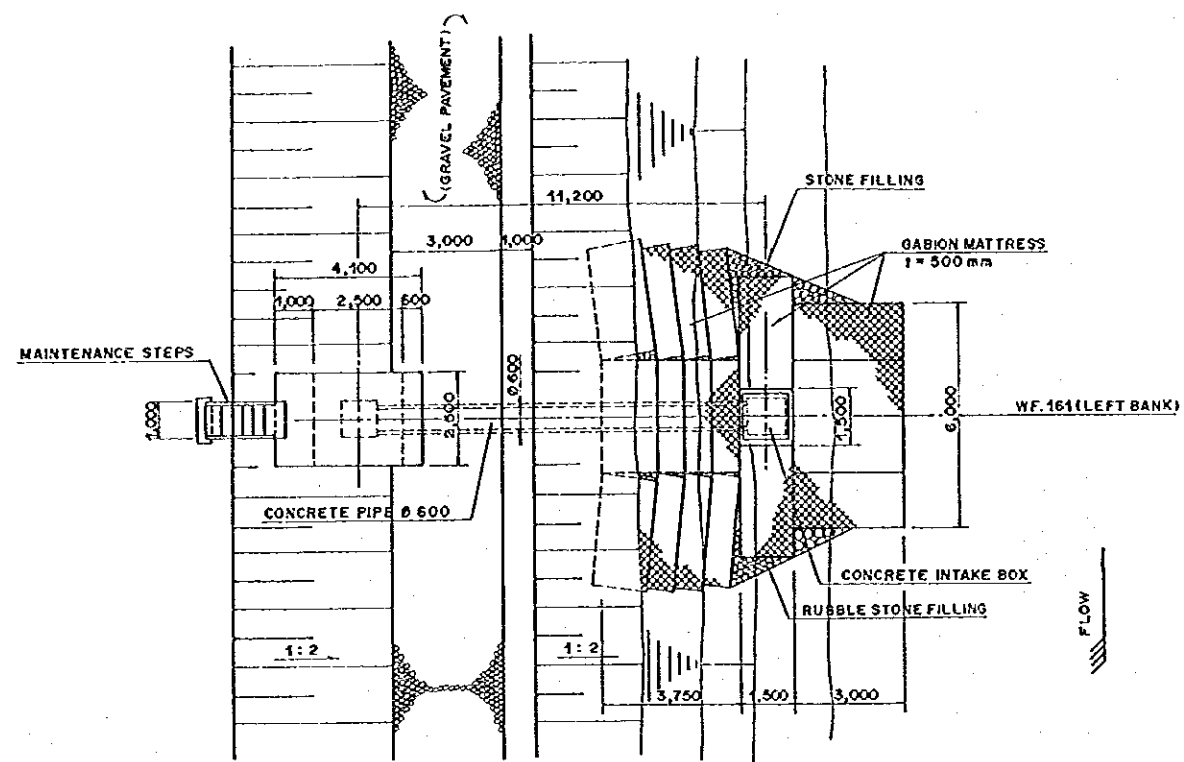
SECTION B-B
SCALE B

CONCRETE AZIMUTH MARK
SCALE B

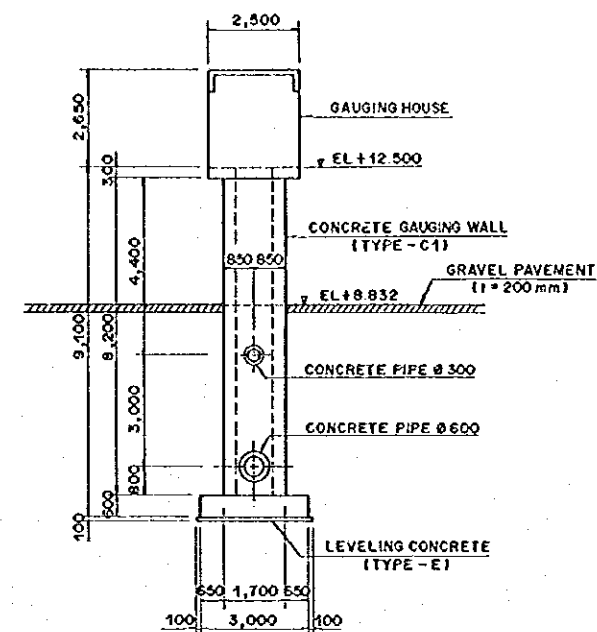


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

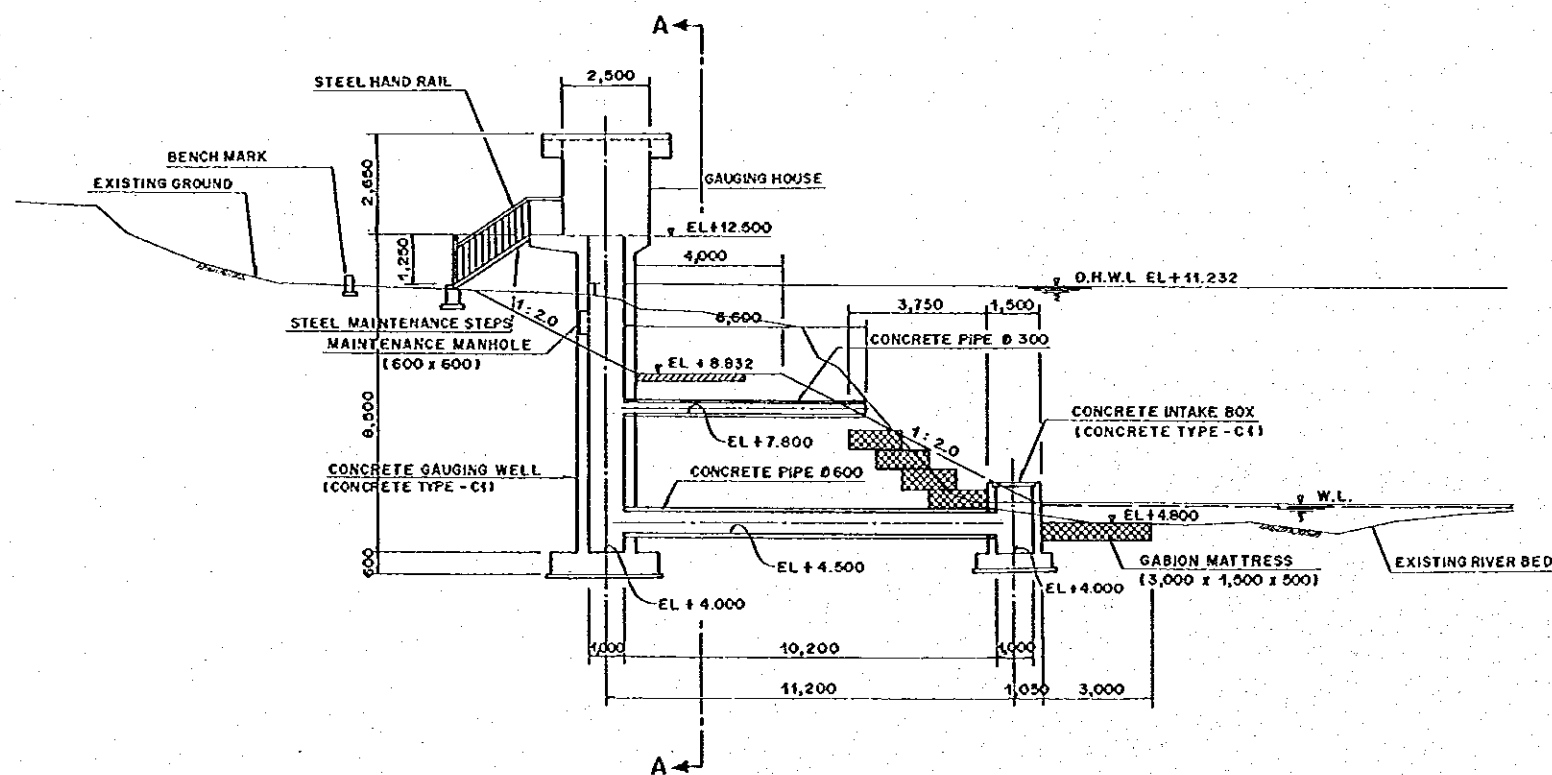
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
PRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT GROUND SILL DETAILS OF BENCHMARK, HECTOMETER POST AND AZIMUTH MARK		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
SAJAH INTERNATIONAL COOPERATION AGENCY CIVIL ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PARCO INTERNATIONAL INC.		DRAWING NO. W0-P1-AM-51-11 SHEET NO. 191
DESIGNED CHECKED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER	DATE CONTRACTING NO.	DATE CONTRACTING NO.



PLAN OF STATION SITE
SCALE A



SECTION A-A
SCALE A



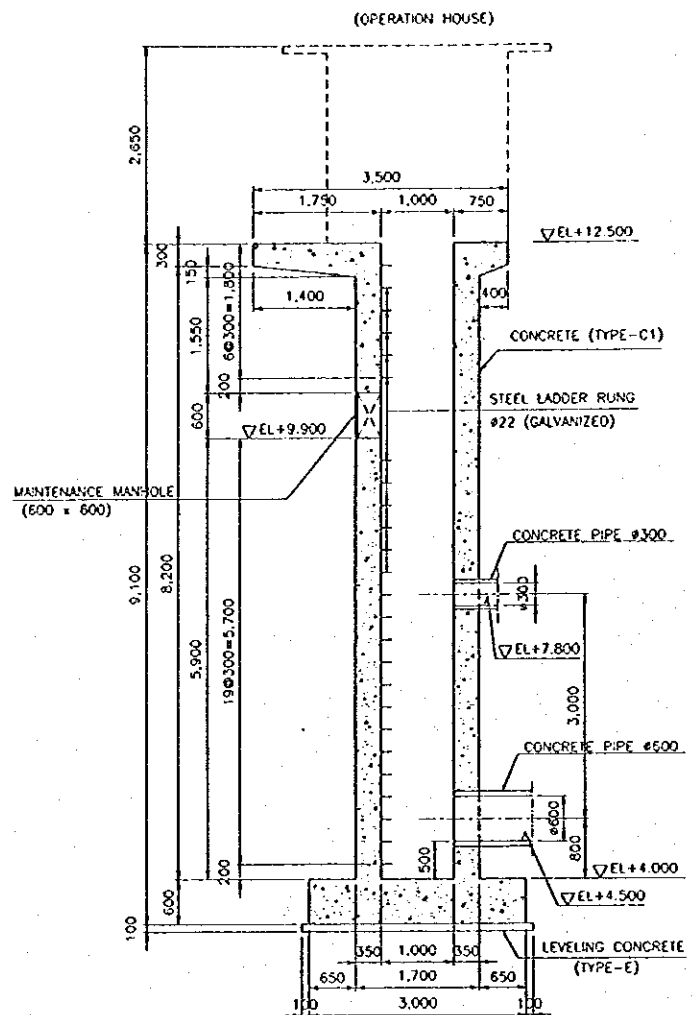
PROFILE OF STATION SITE
SCALE A

SCALE A 0 5.0 10.0 m
SCALE 1:100

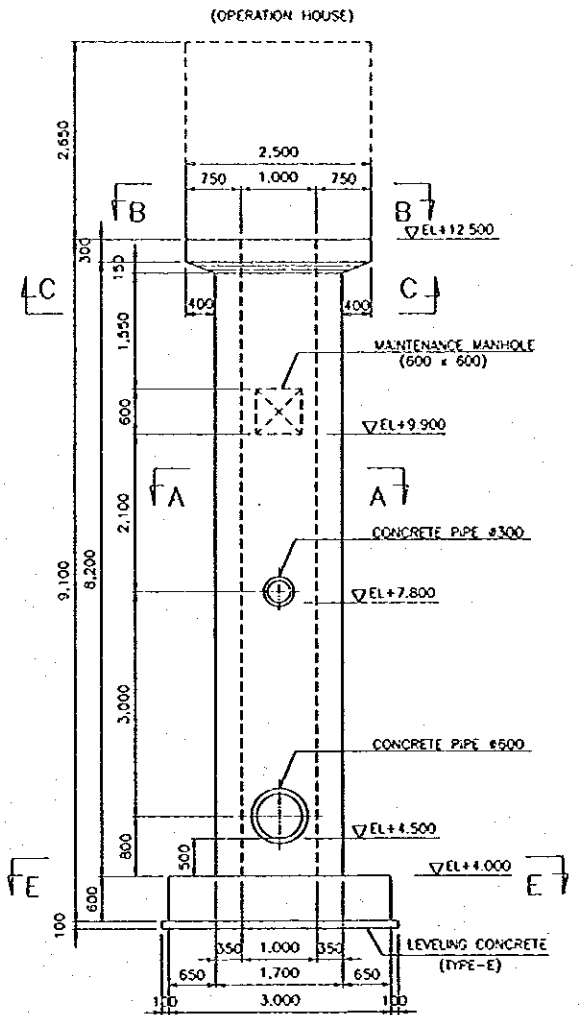
NOTE:

1. GAUGING EQUIPMENT INSTALLED IN THE PANJANGAN WATER LEVEL GAUGING STATION IN GARANG RIVER SHALL BE REMOVED AND USED FOR THE NEW GAUGING STATION SHOWN ON THIS DRAWING. THE EQUIPMENT INCLUDES A FLOAT-TYPE WATER LEVEL GAUGE AND RELATED APPARATUS.

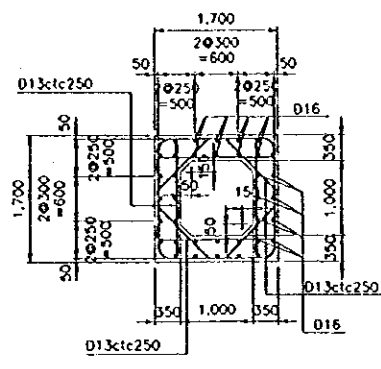
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA					
TRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA					
WATER LEVEL GAUGING STATION PLAN AND PROFILE OF GAUGING STATION		DISTRICT SEMARANG CITY					
JAPAN INTERNATIONAL COOPERATION AGENCY CTE ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND FARO INTERNATIONAL INC.		DRAWING NO. WS-P1-WL-S1-1 SHEET NO. 192					
DESIGNED CHECKED CRUISE OF PLANNING AND DESIGN PROJECT MANAGER		DATE CONTRACT NO.					
NO.	DATE	REVISIONS	QUANTIFIED	DESIGNED	APPROVED	APPROVED	APPROVED



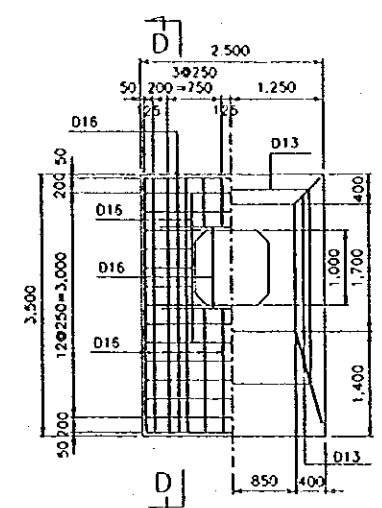
SECTIONAL ELEVATION OF GAUGING WALL
SCALE A



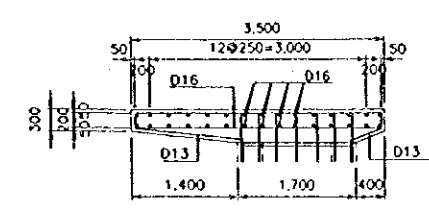
FRONT ELEVATION OF GAUGING WALL
SCALE A



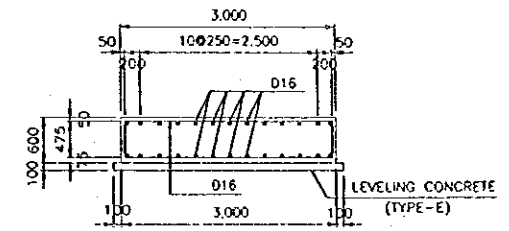
SECTION A-A
SCALE A



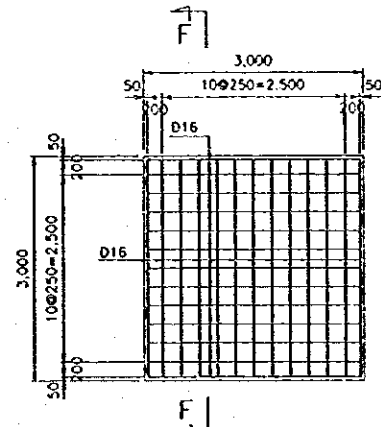
SECTION B-B
SCALE A



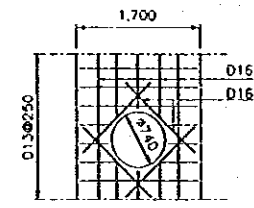
SECTION D-D
SCALE A



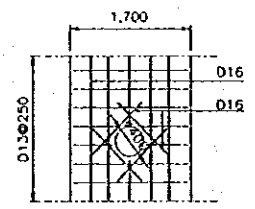
SECTION F-F
SCALE A



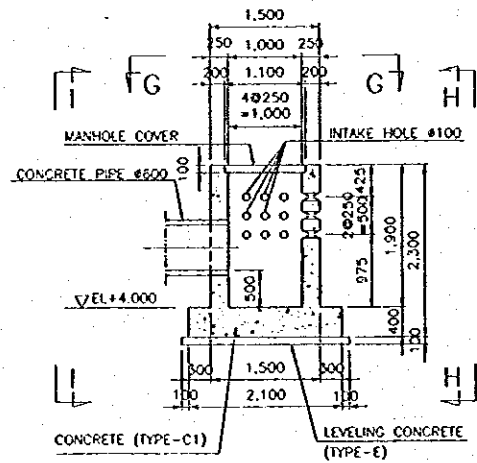
SECTION E-E
SCALE A



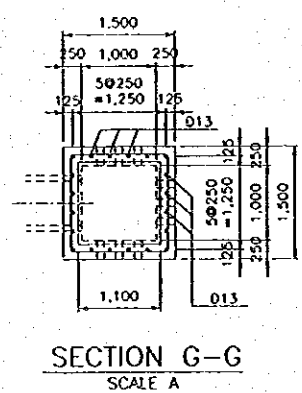
OPENINGS OF CONCRETE PIPE (φ600)
SCALE A



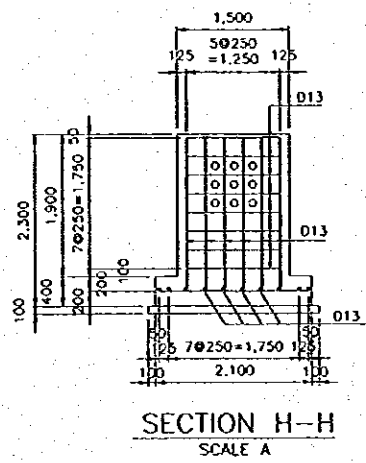
OPENINGS OF CONCRETE PIPE (φ300)
SCALE A



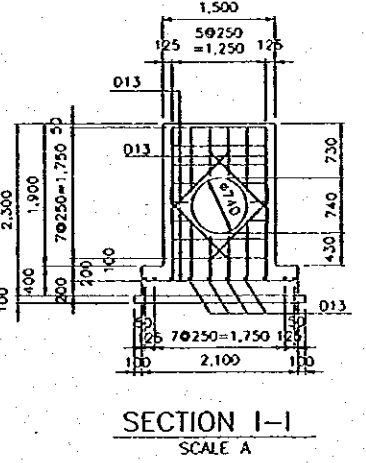
SECTION OF INTAKE BOX
SCALE A



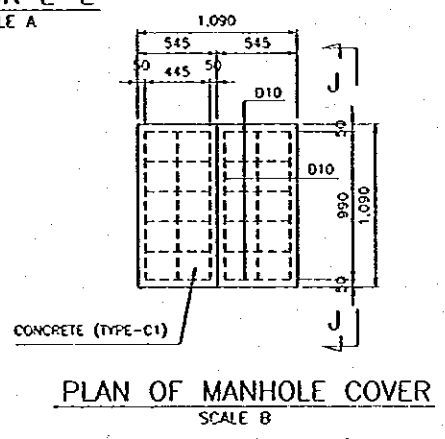
SECTION G-G
SCALE A



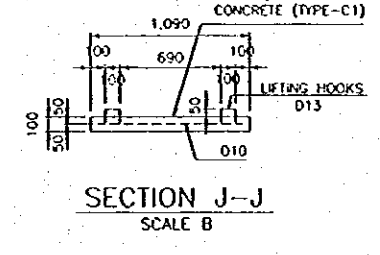
SECTION H-H
SCALE A



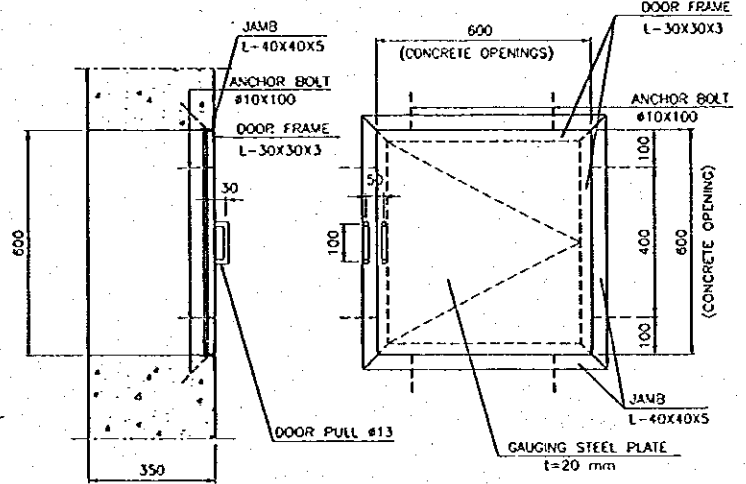
SECTION I-I
SCALE A



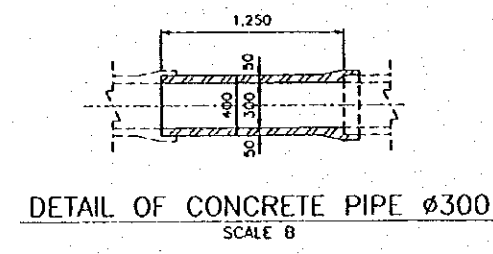
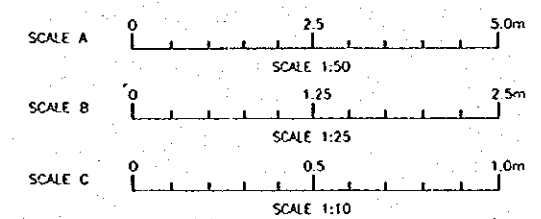
PLAN OF MANHOLE COVER
SCALE B



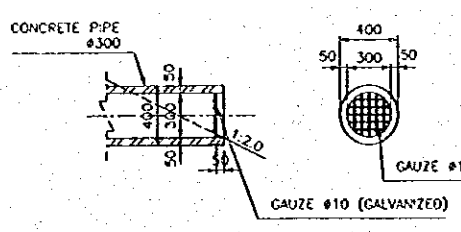
SECTION J-J
SCALE B



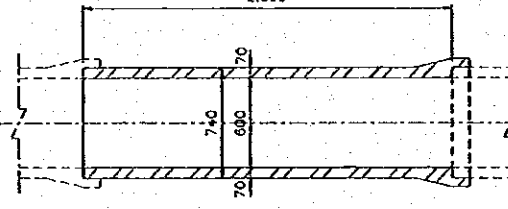
MAINTENANCE MANHOLE
SCALE C



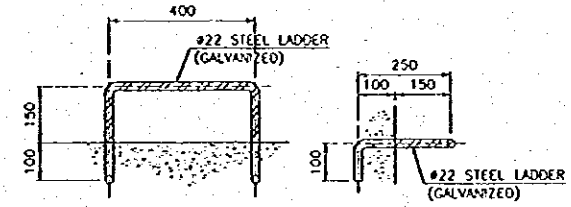
DETAIL OF CONCRETE PIPE φ300
SCALE B



DETAIL OF PIPE GAUZE
SCALE B



DETAIL OF CONCRETE PIPE φ600
SCALE B



DETAIL OF STEEL LADDER
SCALE C

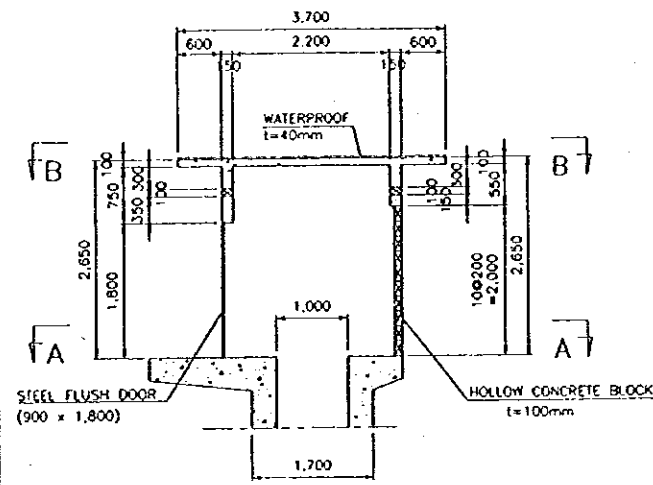
NO.	DATE	REVISIONS	COORDINATED	DESIGNED	APPROVED

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

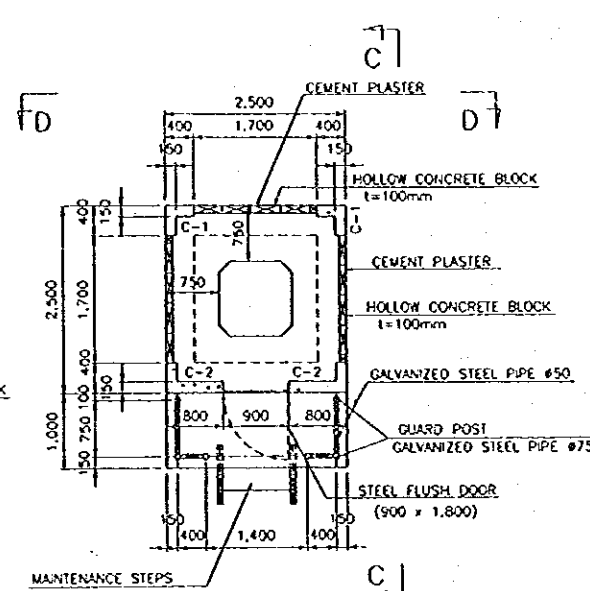
PROVINCE CENTRAL JAVA
PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
CONTRACT SEMARANG CITY
DEA WIDHO NO. WD - PH - WL - 51 - 2
SHEET NO. 133

COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT
STRUCTURAL DETAILS OF WELL, INTAKE PIPE AND INTAKE BOX

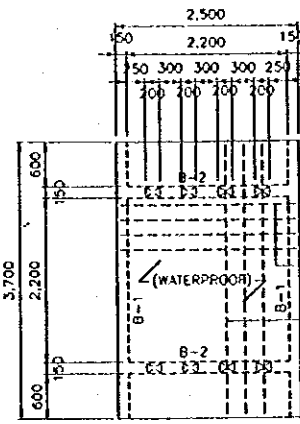
DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 DATE: [Date]
 PROJECT MANAGER: [Signature]



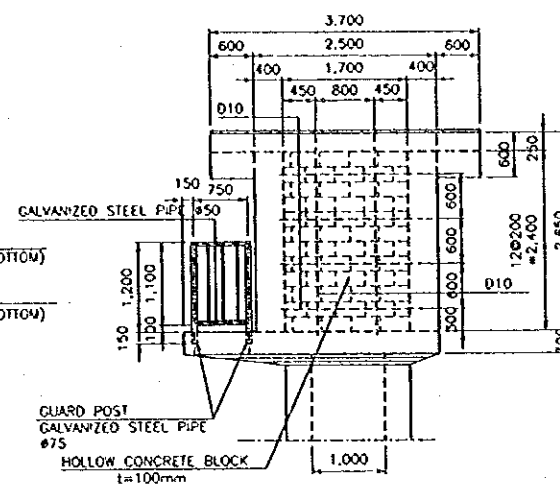
SECTION OF OPERATION HOUSE
SCALE A



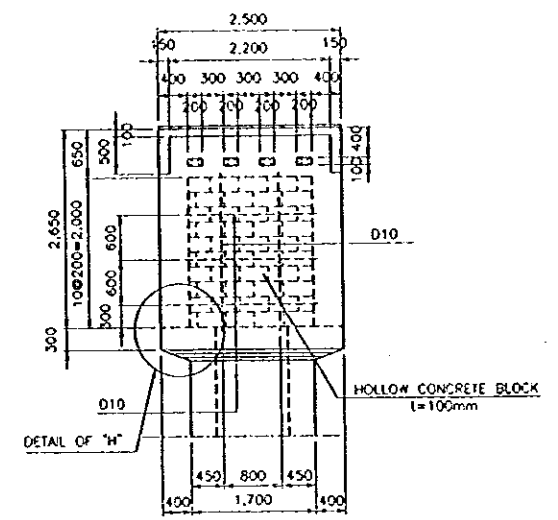
SECTION A-A
SCALE A



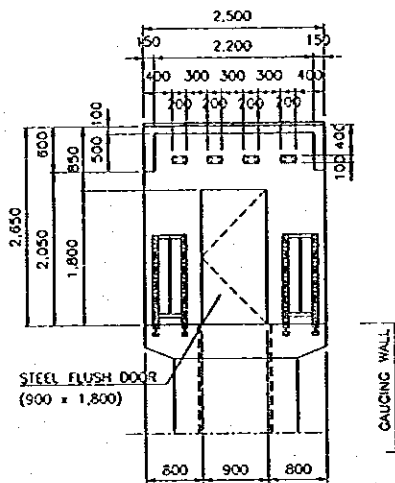
SECTION B-B
SCALE A



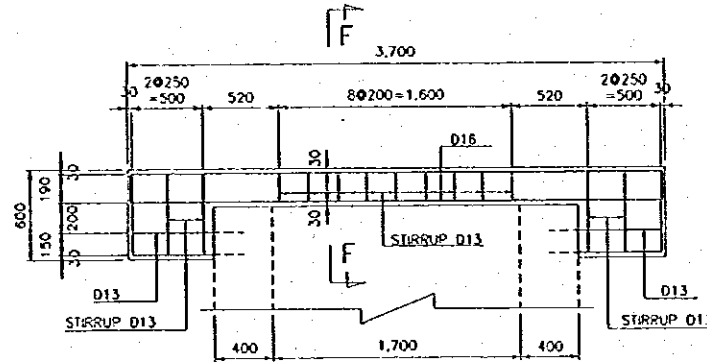
SECTION C-C
SCALE A



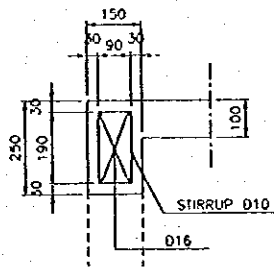
SECTION D-D
SCALE A



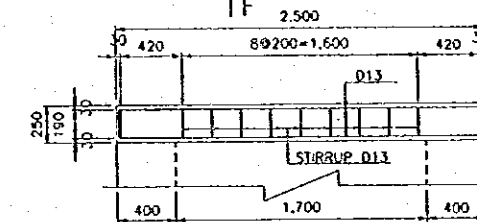
SECTION E-E
SCALE A



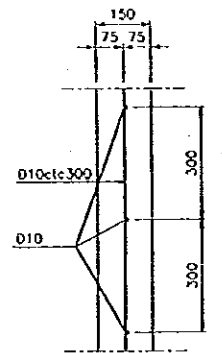
BEAM B-1
SCALE B



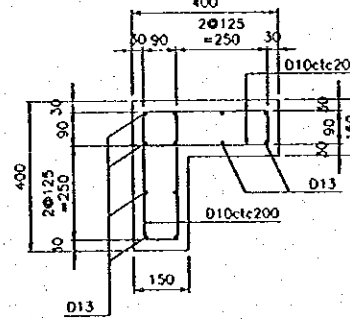
SECTION F-F
SCALE C



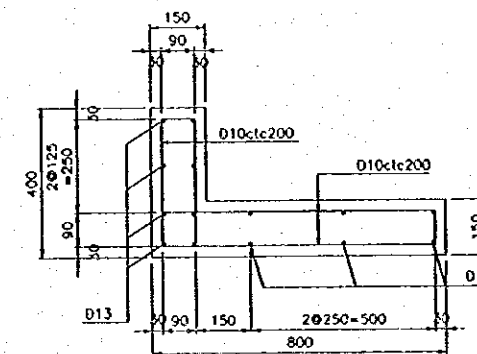
BEAM B-2
SCALE B



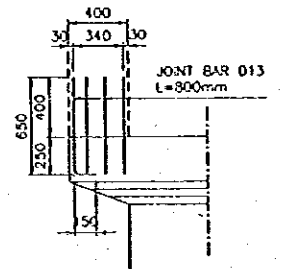
R.C WALL
SCALE C



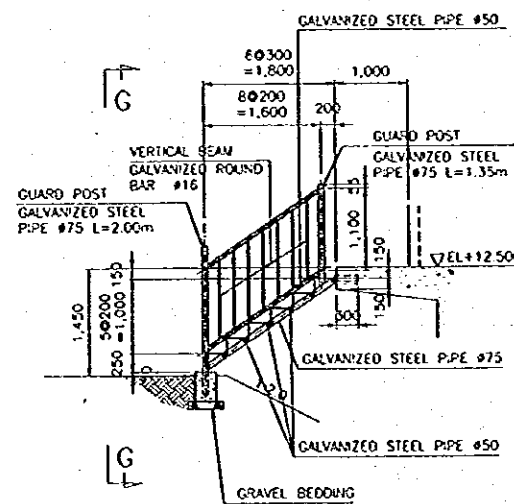
COLUMN C-1
SCALE C



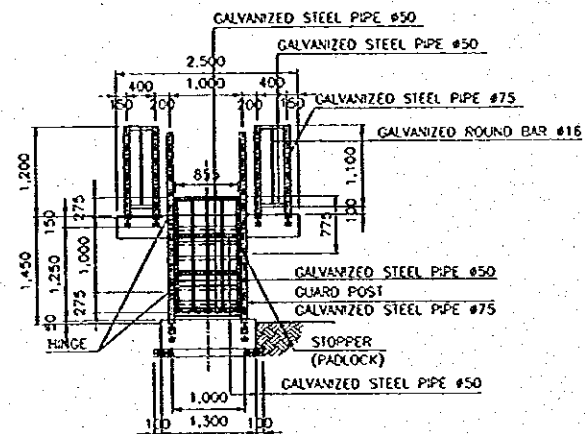
COLUMN C-2
SCALE C



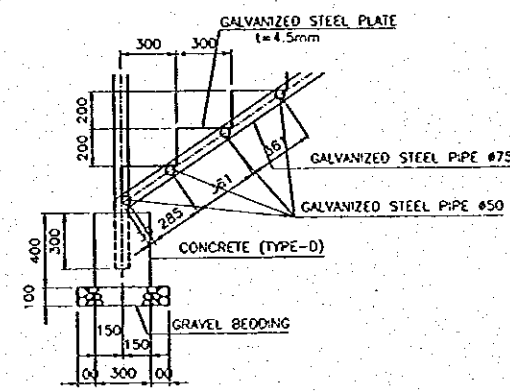
DETAIL OF "H" (JOINTING)
SCALE B



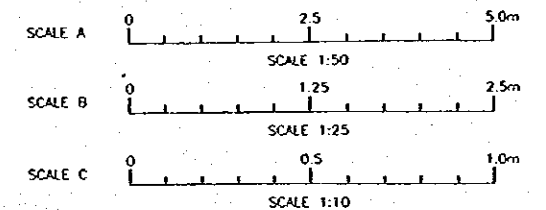
PROFILE OF MAINTENANCE STEPS
SCALE A



SECTION G-G
SCALE A



DETAIL OF STEPS
SCALE C



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

JATUNSELUNA FLOOD CONTROL PROJECT
COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT
WATER LEVEL GAUGING STATION
STRUCTURAL DETAILS OF GAUGING HOUSE

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. W3 - P1 - WL - S1 - 3
SHEET NO. 134

JAPAN INTERNATIONAL COOPERATION AGENCY
CEI ENGINEERING CO., LTD. IN ASSOCIATION WITH
PACIFIC CONSULTANTS INTERNATIONAL AND
PABCO INTERNATIONAL INC.

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

CHIEF OF PLANNING AND DESIGN
PROJECT MANAGER

