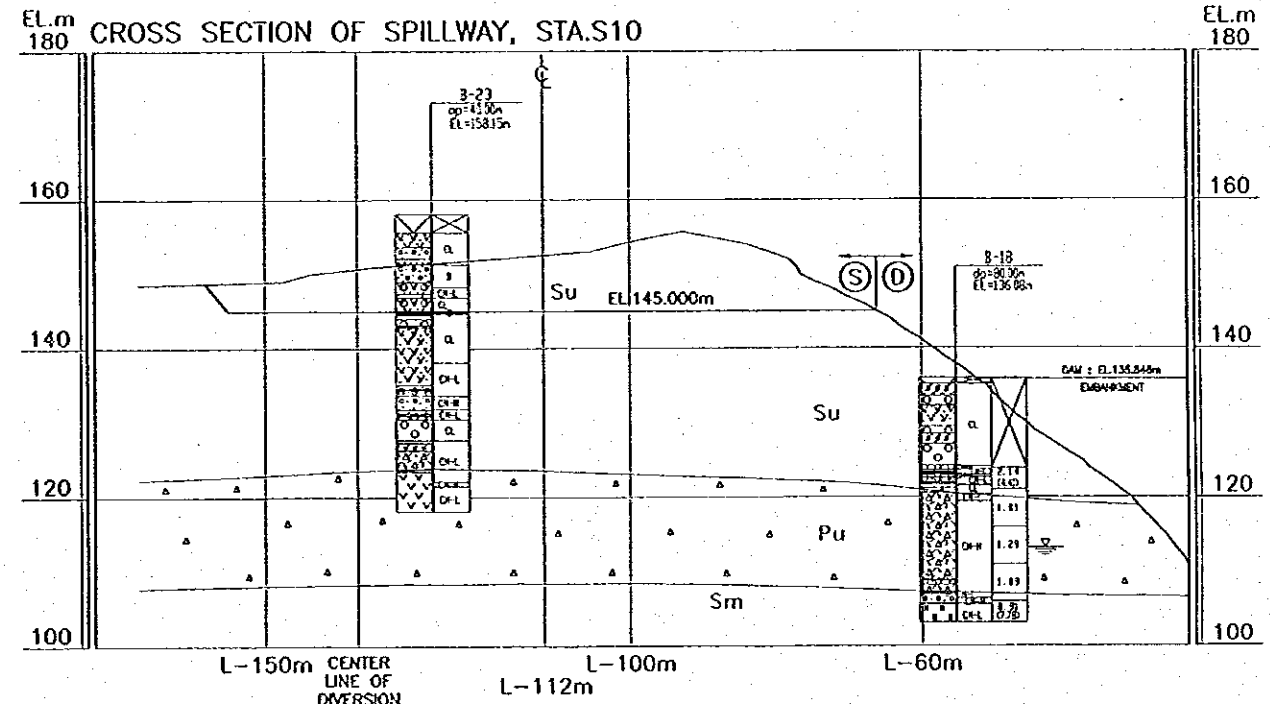
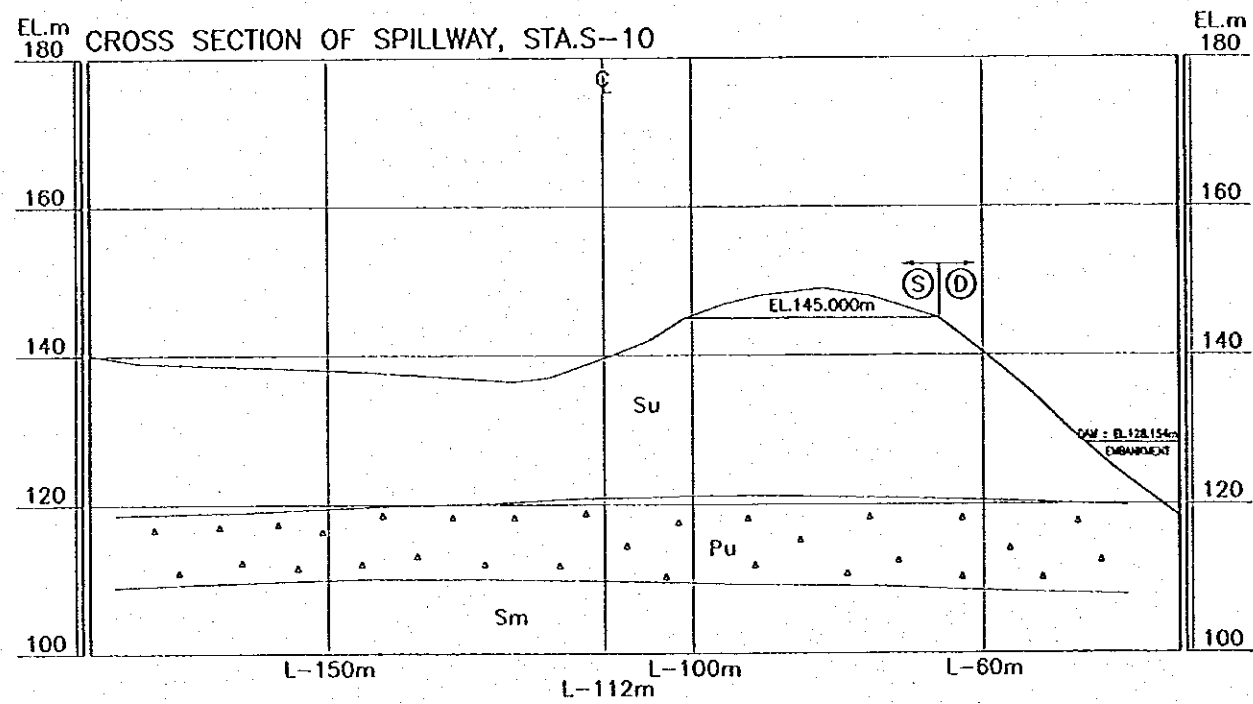
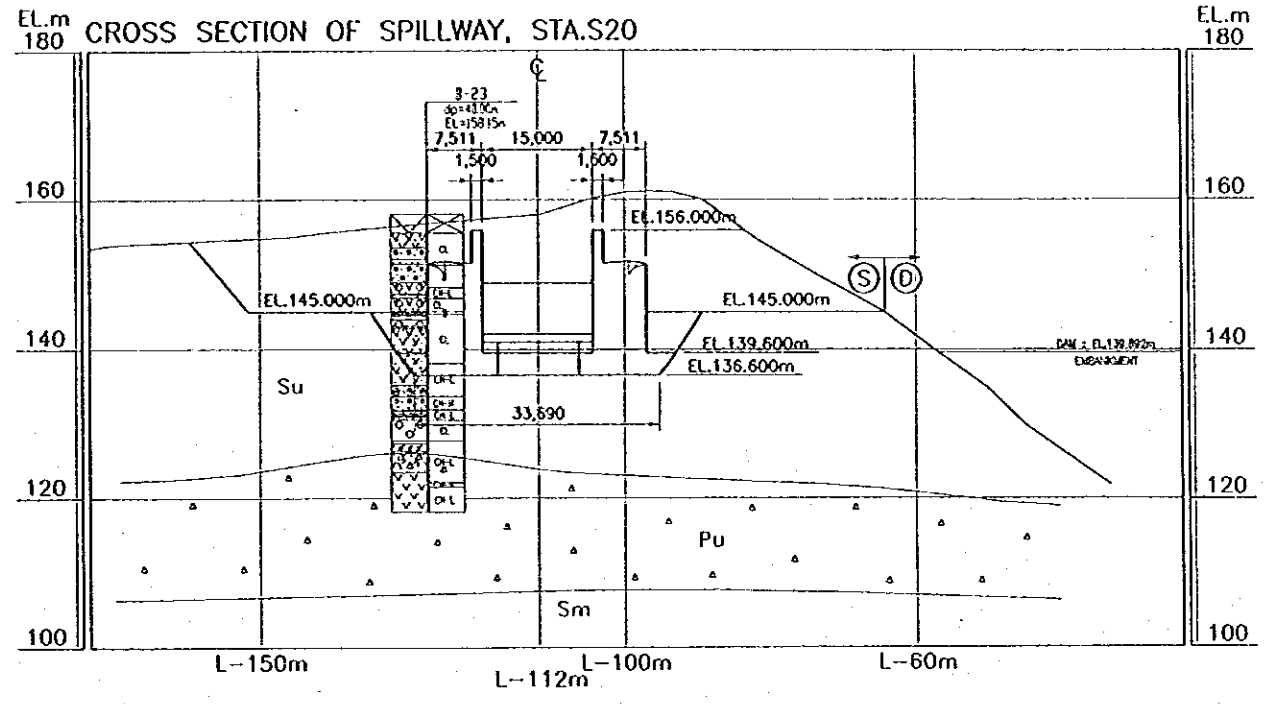
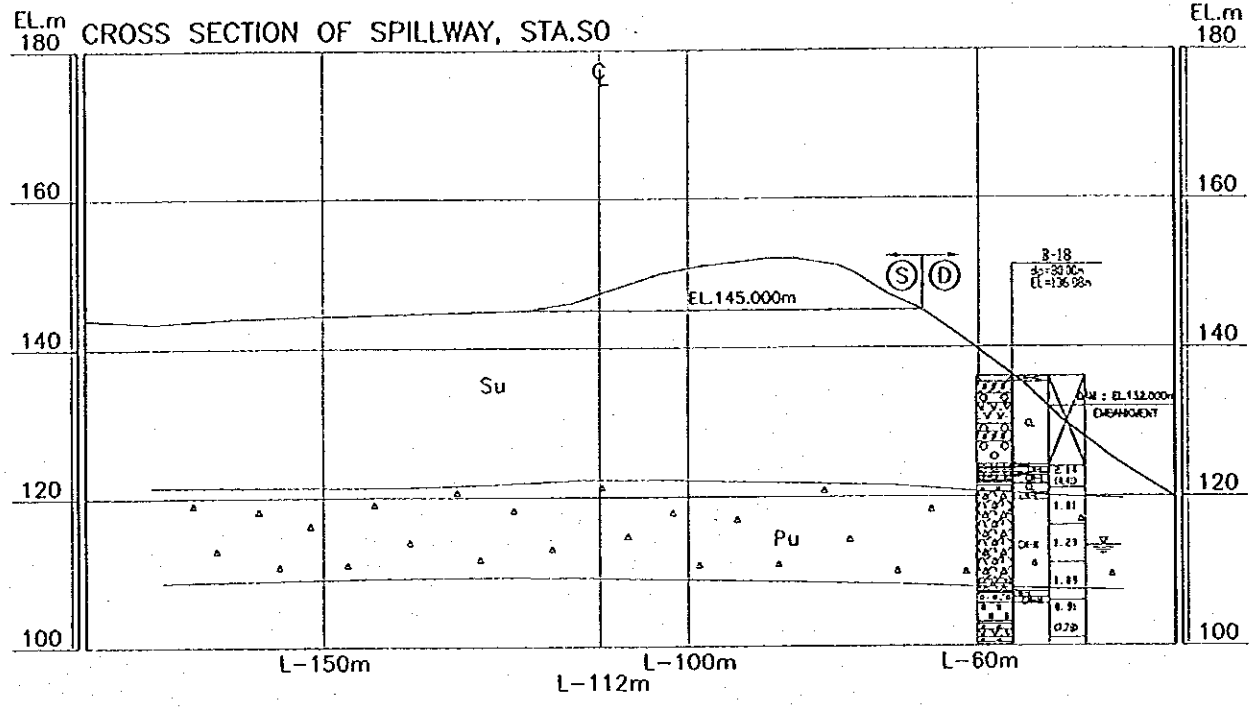


NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

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 : JATIBARANG DAM CONSTRUCTION SPILLWAY EXCAVATION PLAN		REGION : CENTRAL JAVA
	DESIGNER : PT. INDO INTERNATIONAL COOPERATION AGENCY C/O. INDOCONSULTING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSTRUCTION INTERNATIONAL JAPAN INTERNATIONAL CORP.		PROJECT NAME : JATIBARANG DAM CONSTRUCTION AND WATER RESOURCES DEVELOPMENT BY SEMARANG IN THE REPUBLIC OF INDONESIA
	CHECKED : 		DISTRICT : SEMARANG CITY
	APPROVED : CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. : JD-P1-SP-Ge-4 SHEET NO. : 86 DATE : CONTRACT NO. :

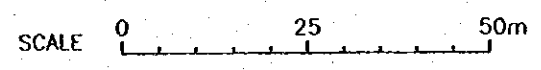
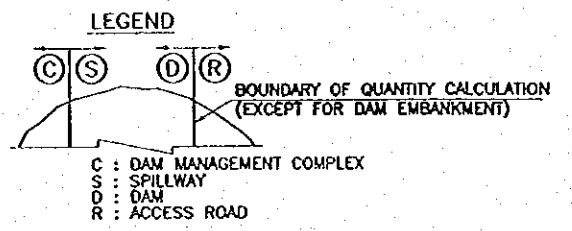


GEOLOGICAL STRATA

Age	Symbol	Formation and Strata Name
Quaternary	Holocene	Riverbed deposit
		Talus deposit
Tertiary-Quaternary	Su	Upper Sedimentary Rock Unit
	Pu	Upper Pyroclastic Rock Unit
	Sm	Middle Sedimentary Rock Unit
	Pi	Lower Pyroclastic Rock Unit
	Si	Lower Sedimentary Rock Unit

- NOTES**
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
 2. SECTIONS ARE REFERRED FROM DRAWING NO. JD-P1-SP-Ge-1.
 3. GEOLOGICAL INFORMATION IS ONLY FOR REFERENCE.
 4. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

REFERENCE DRAWINGS
 JD-P1-GE-Pr-1 GEOLOGICAL PROFILE ALONG DAM AXIS



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: JATIBARANG DAM CONSTRUCTION
 SPILLWAY
 CROSS SECTIONS (1/10)

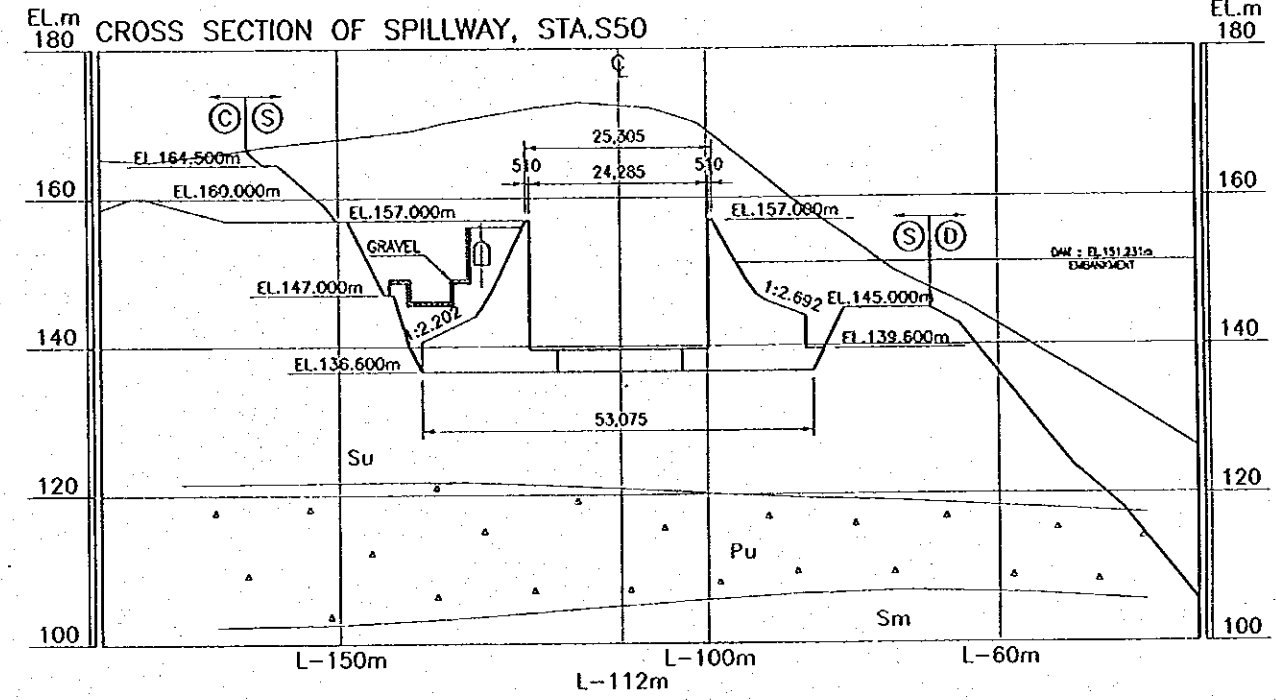
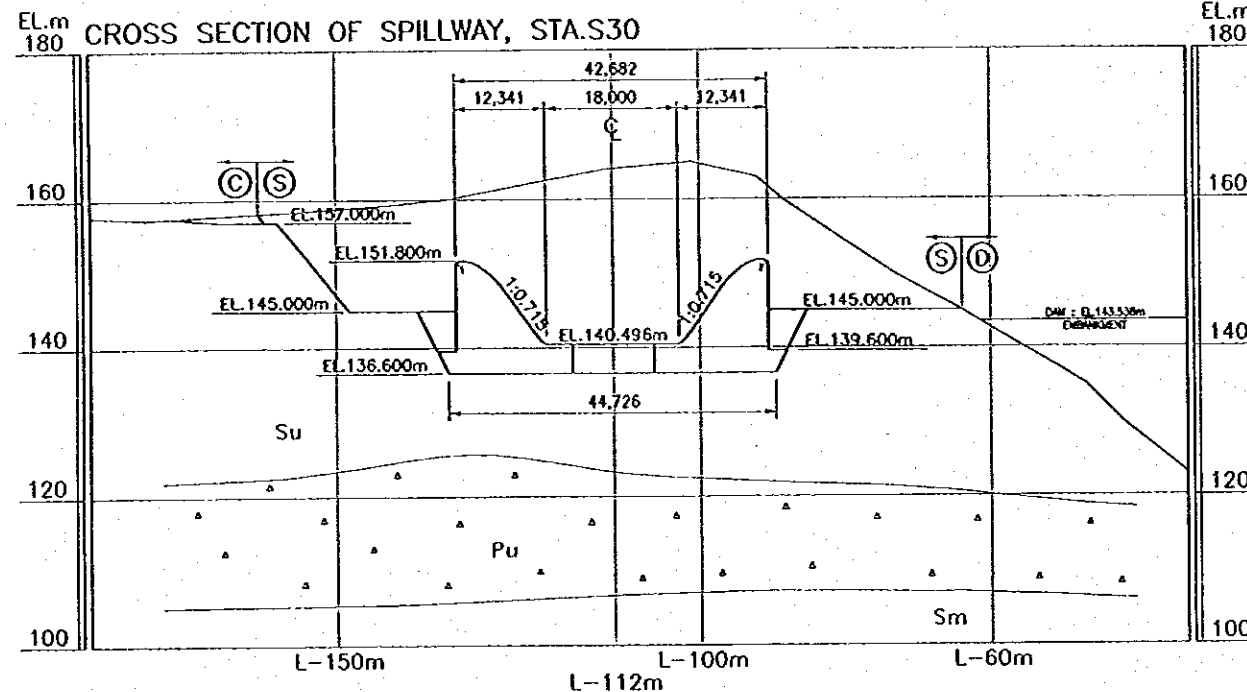
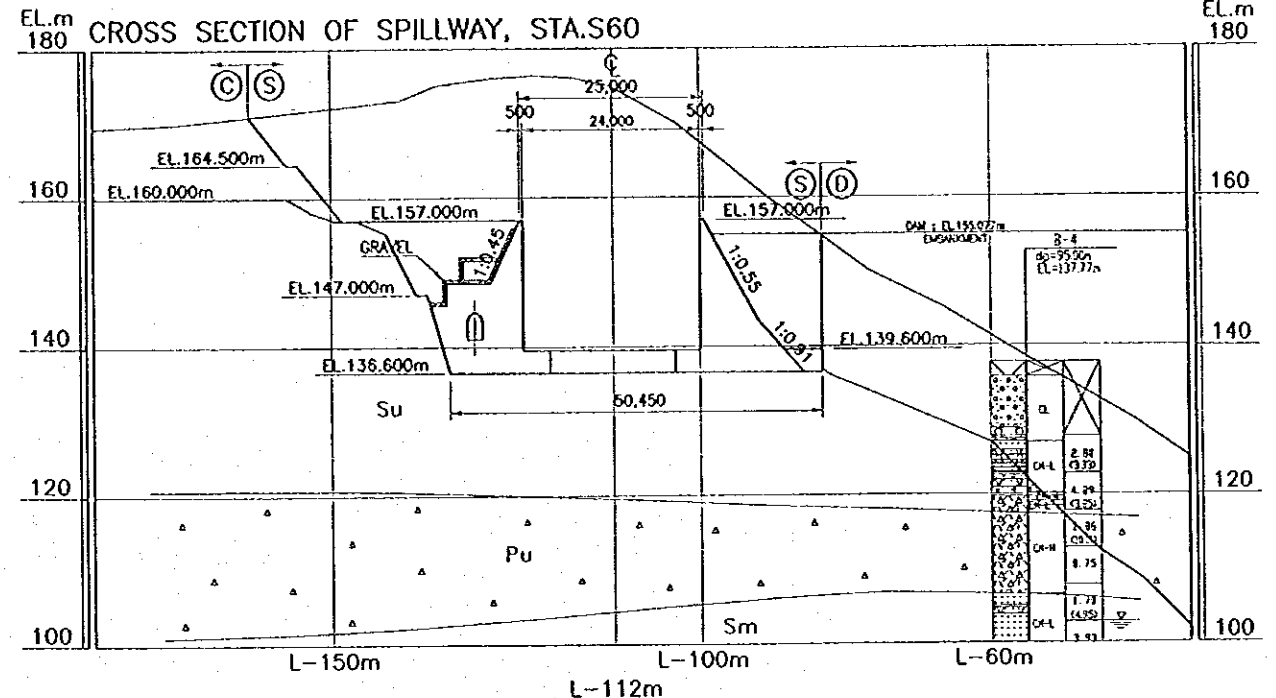
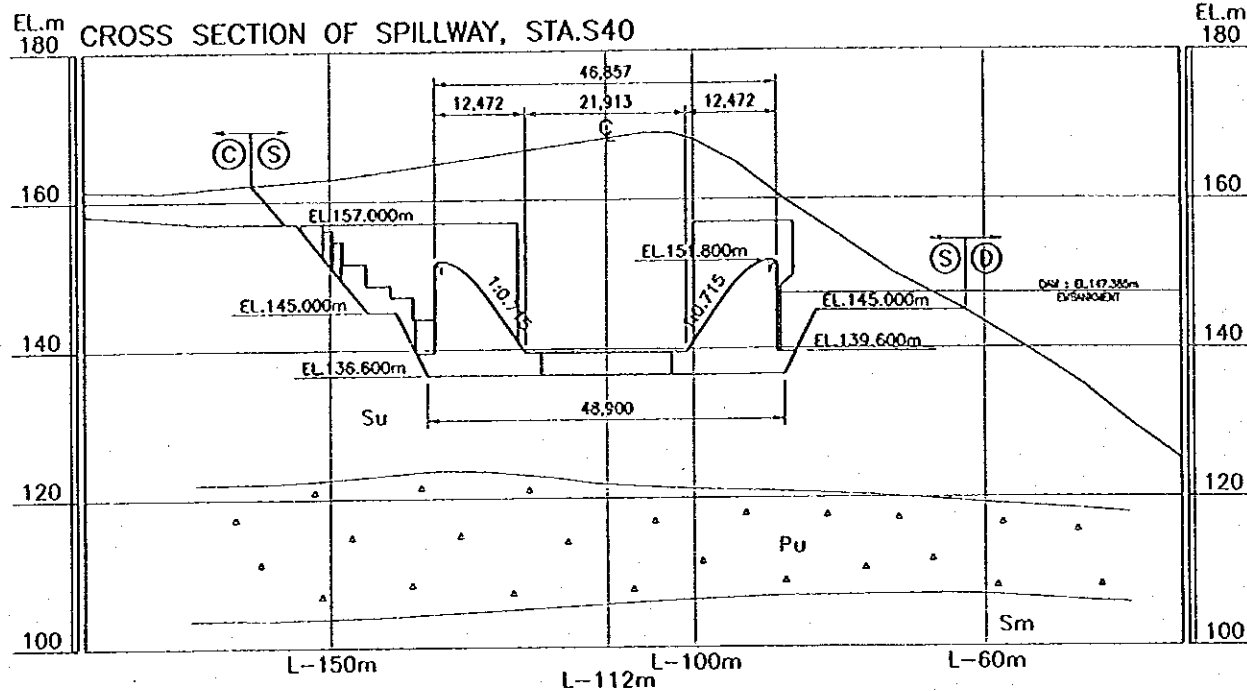
PROVINCE: CENTRAL JAWA
 PROJECT NAME: FLOOD CONTROL, URBAN GRADUATION AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
 DISTRICT: SEMARANG CITY
 DRAWING NO. JD-P1-SP-Cr-1
 SHEET NO. 87

DATE: CONTRACT NO.

JAPAK INTERNATIONAL COOPERATION AGENCY
 CH ENGINEERING CO. LTD. IN ASSOCIATION WITH
 PACIFIC CONSULTANTS INTERNATIONAL
 JAPAK INTERNATIONAL INC.

DESIGNED: CHECKED: DATE:

CRITIC OF PLANNING AND DESIGN
 PROJECT MANAGER



GEOLOGICAL STRATA

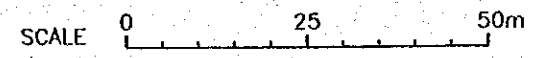
Age	Symbol	Formation and Strata Name
Quaternary	Holocene	Riverbed deposit
		Talus deposit
Tertiary-Quaternary	Pliocene-Pleistocene	Su
		Pu
		Sm
		Pl
		Sl

- NOTES**
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
 2. SECTIONS ARE REFERRED FROM DRAWING NO. JD-P1-SP-Ge-1.
 3. GEOLOGICAL INFORMATION IS ONLY FOR REFERENCE.
 4. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

REFERENCE DRAWINGS
 JD-P1-GE-Pr-1 GEOLOGICAL PROFILE ALONG DAM AXIS

LEGEND

C : DAM MANAGEMENT COMPLEX
 S : SPILLWAY
 D : DAM
 R : ACCESS ROAD



NO.	DATE	KEYWORD	ORIGINATED	DESIGNED	APPROVED

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

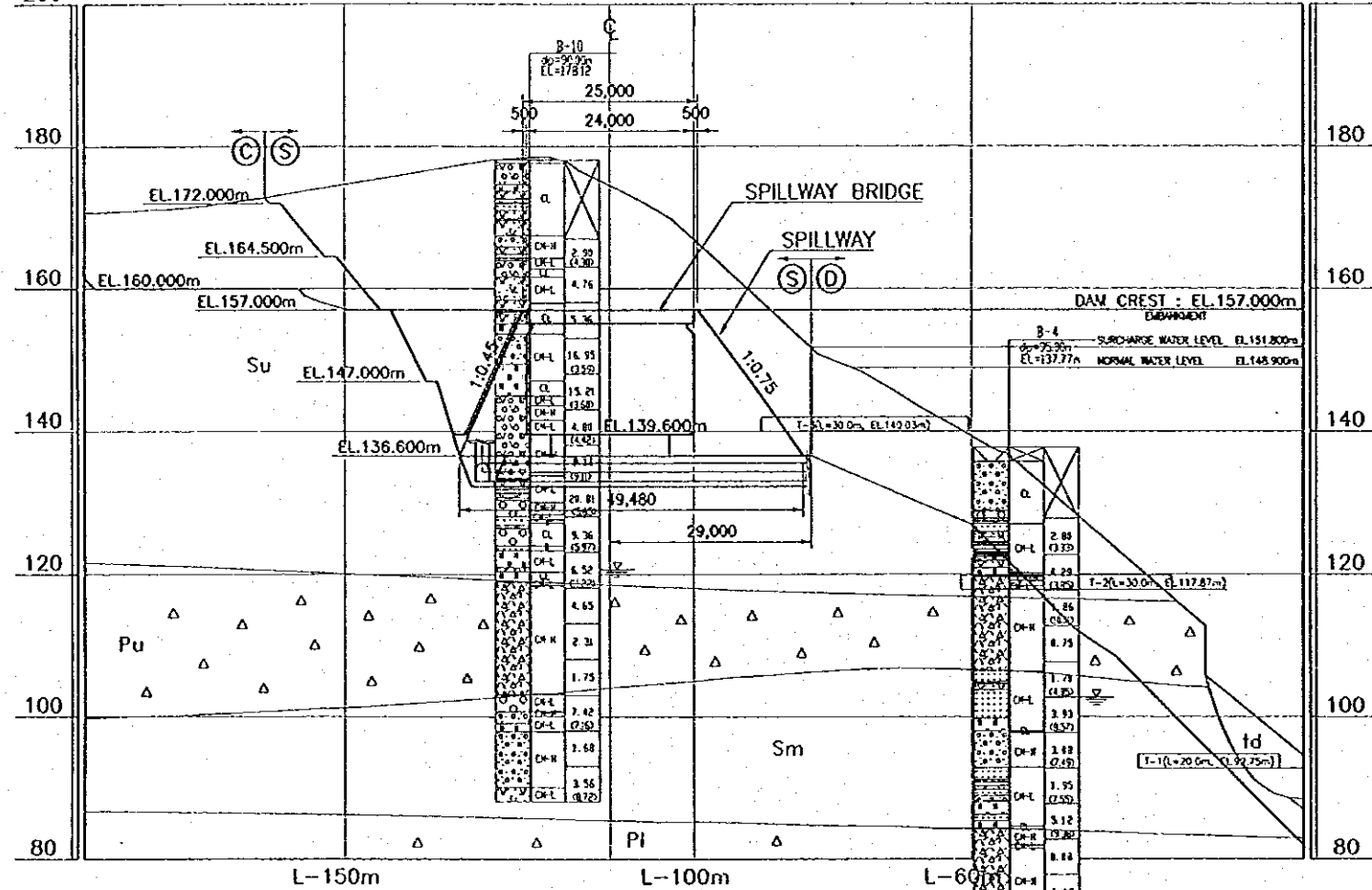
PROVINCE: CENTRAL JAWA
 PROJECT NAME: BATUNSELUNA FLOOD CONTROL PROJECT
 COMPONENT: JATIBARANO DAM CONSTRUCTION
 SPILLWAY
 CROSS SECTIONS (2/10)

SEMARANG CITY
 DRAWING NO. JD-P1-SP-Cr-2
 SHEET NO. 68
 DATE: []/ []/ []

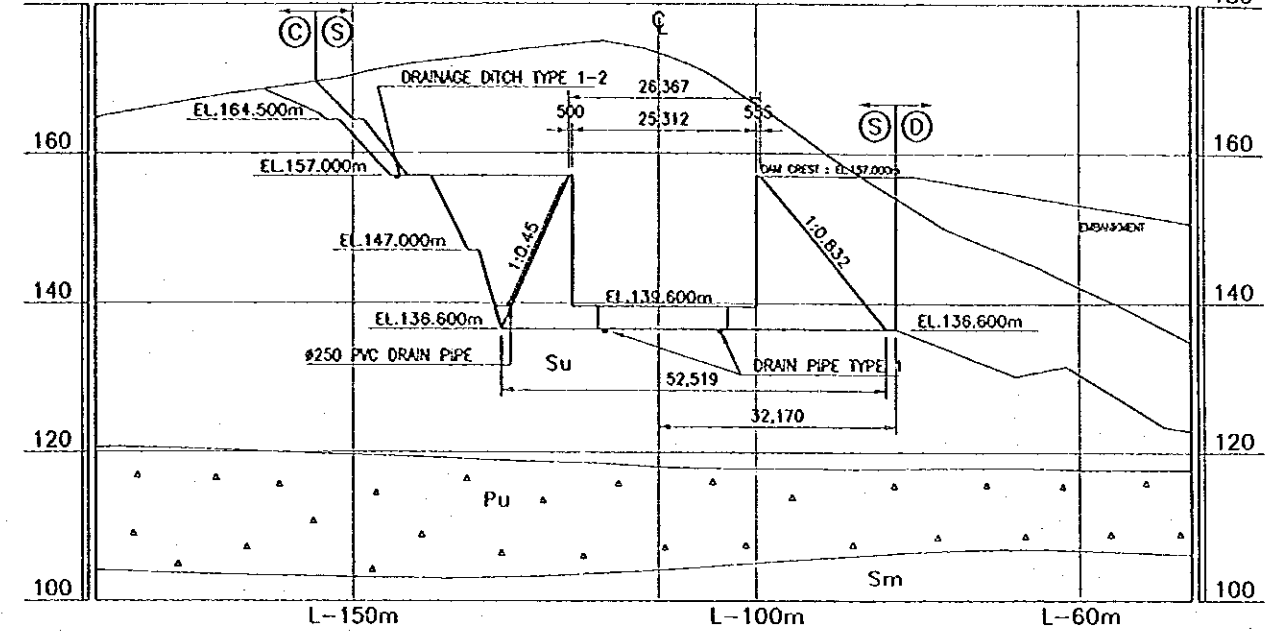
JAPAN INTERNATIONAL COOPERATION AGENCY
 CHE ENGINEERING CO. LTD. IN ASSOCIATION WITH
 PACIFIC CONSULTANTS INTERNATIONAL
 PACIFIC INTERNATIONAL INC.

LIBORNO
 CHIEF OF PLANNING AND DESIGN
 PROJECT MANAGER

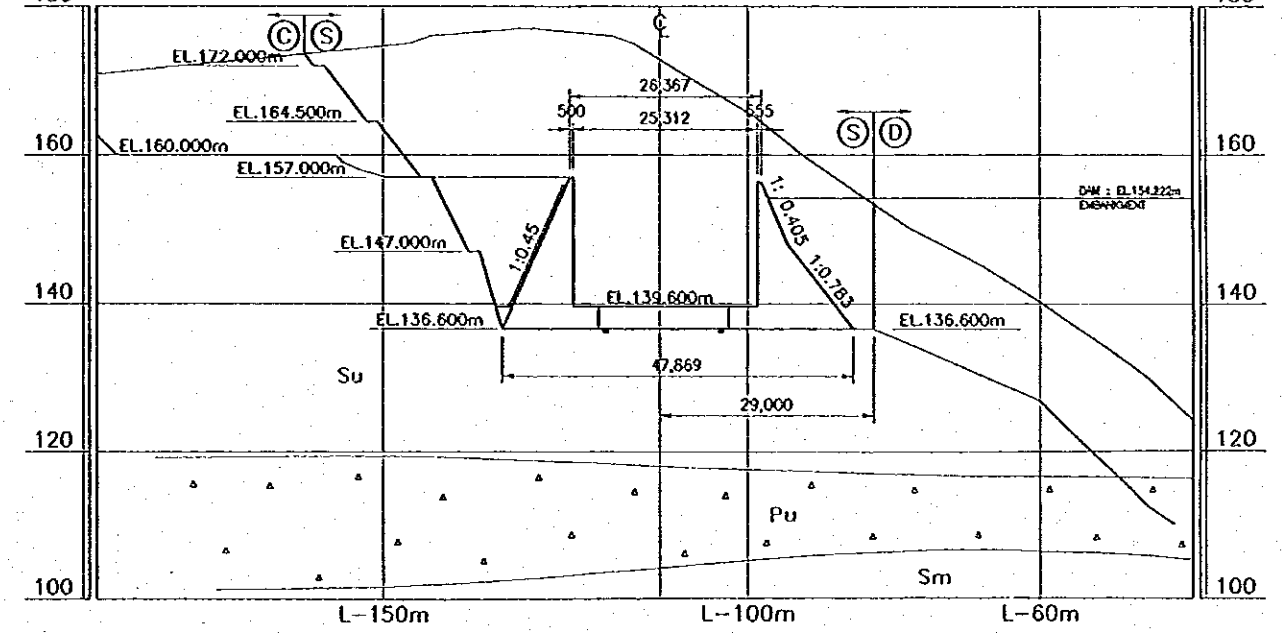
EL.m 200 CROSS SECTION OF SPILLWAY, STA.S70 (DAM AXIS) EL.m 200



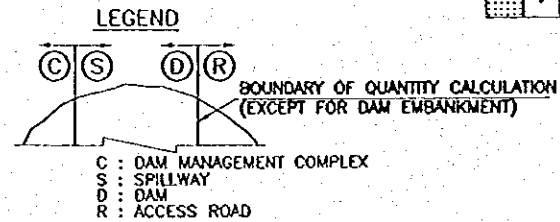
EL.m 180 CROSS SECTION OF SPILLWAY, STA.S80-2 EL.m 180



EL.m 180 CROSS SECTION OF SPILLWAY, STA.S80-1 EL.m 180



GEOLOGICAL STRATA			
Age	Symbol	Formation and Strata Name	
Quaternary	Holocene	Riverbed deposit	
		Talus deposit	
Tertiary-Quaternary	Pliocene-Pleistocene	Damer	Su Upper Sedimentary Rock Unit
			Pu Upper Pyroclastic Rock Unit
		Sm Middle Sedimentary Rock Unit	
		Pr Lower Pyroclastic Rock Unit	
		Sl Lower Sedimentary Rock Unit	



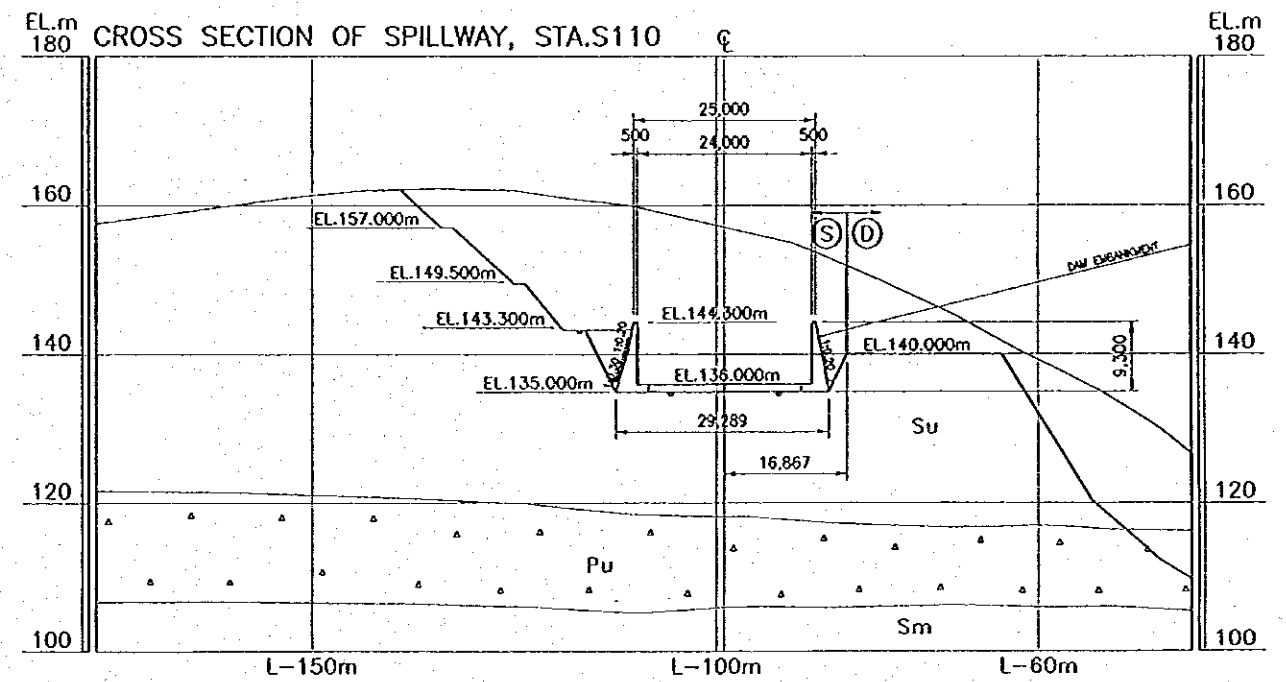
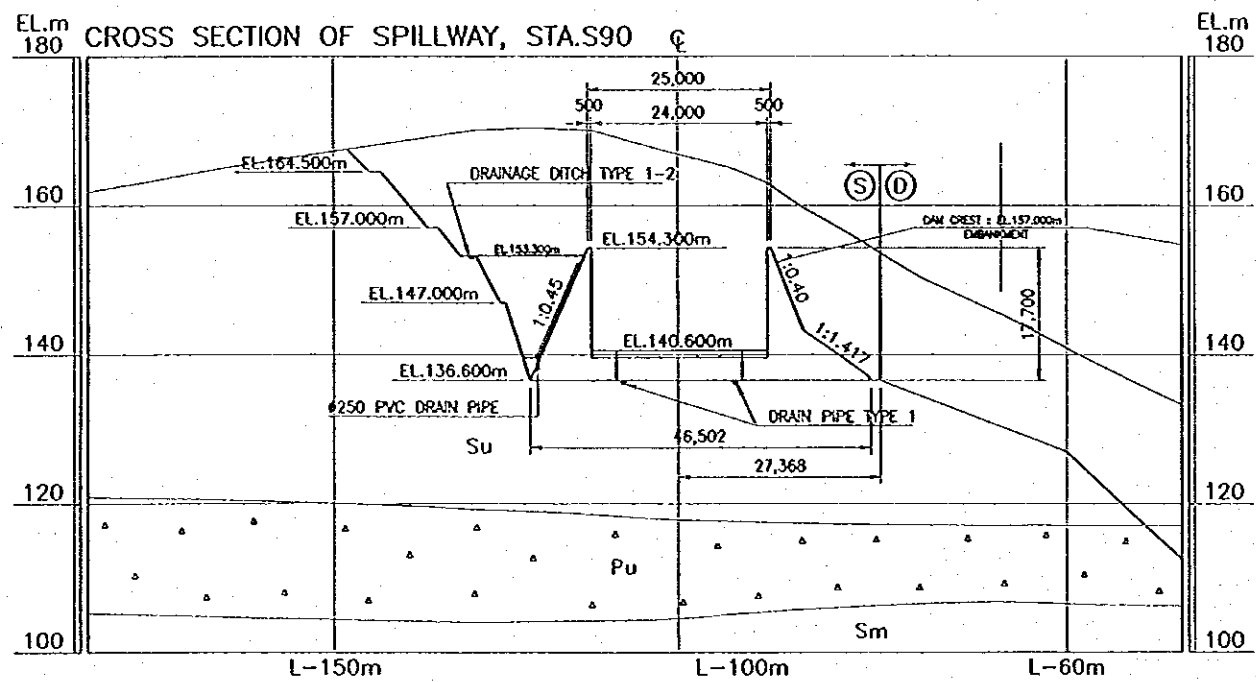
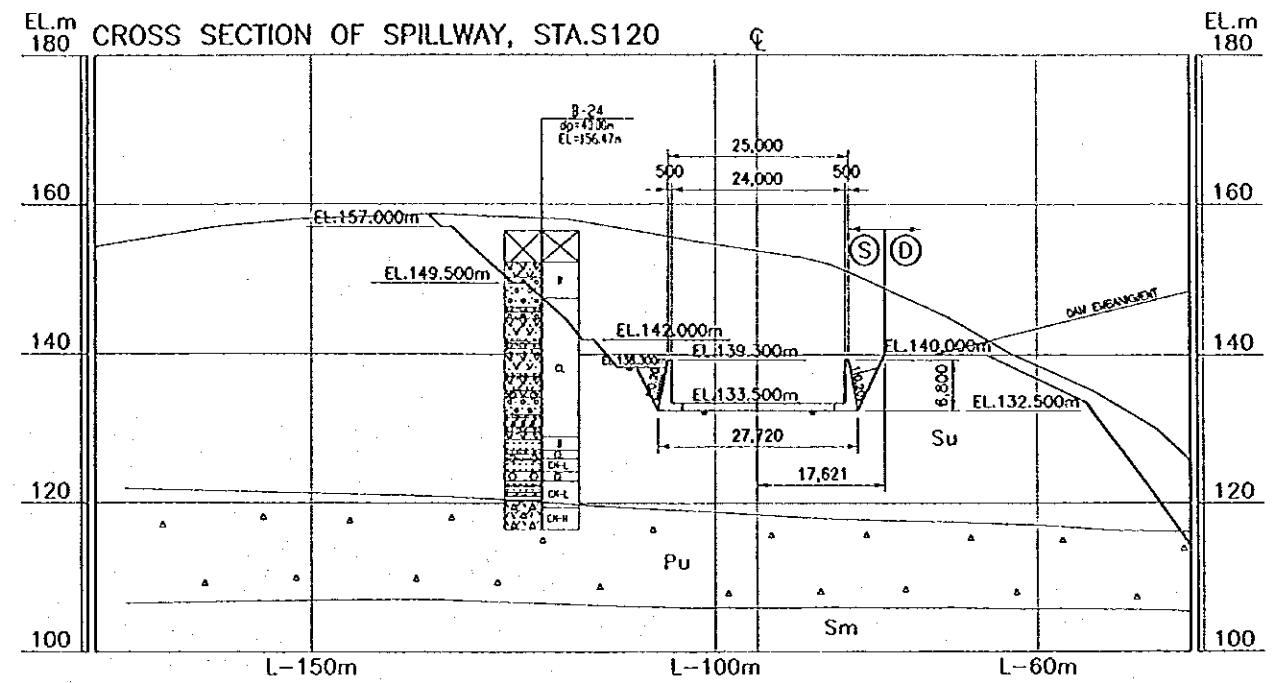
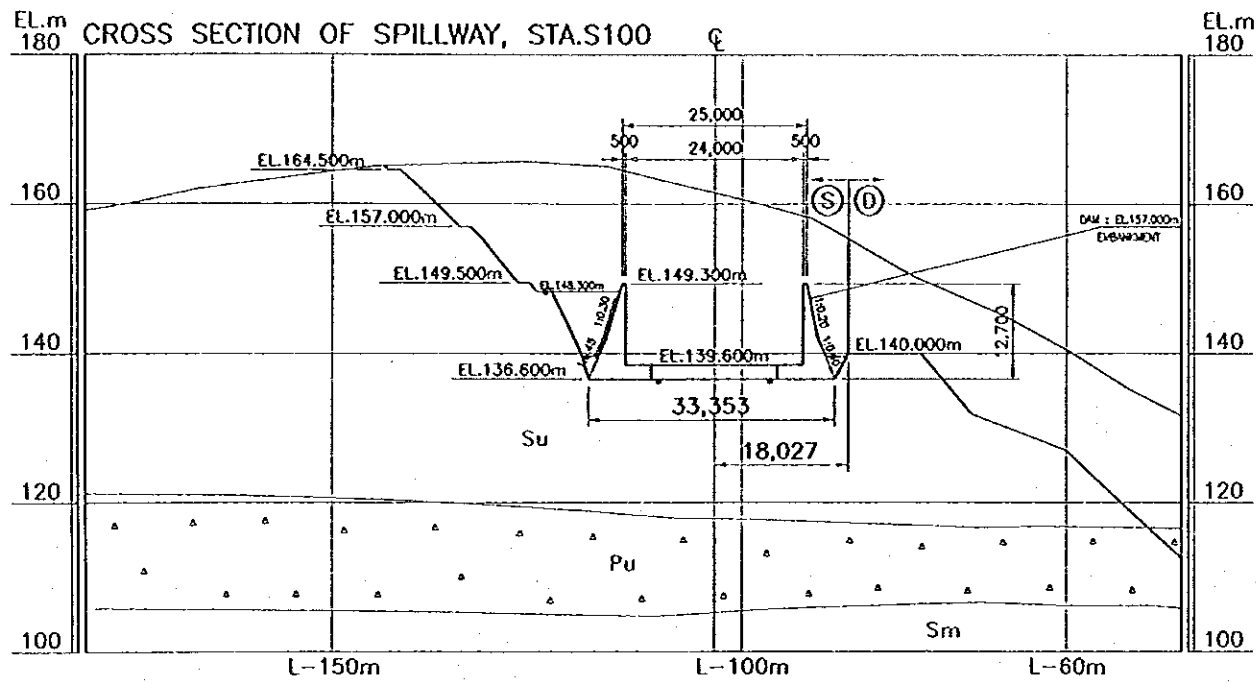
- NOTES**
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
 2. SECTIONS ARE REFERRED FROM DRAWING NO. JD-P1-SP-Ge-1.
 3. GEOLOGICAL INFORMATION IS ONLY FOR REFERENCE.
 4. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

REFERENCE DRAWINGS
JD-P1-GE-Pr-1 GEOLOGICAL PROFILE ALONG DAM AXIS

SCALE 0 25 50m

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
JATUNUSULANA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
SPILLWAY CROSS SECTIONS (3/10)		DISTRICT SEMARANG CITY
JAFAR INTERNATIONAL COOPERATION AGENCY CUI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PACIFIC INTERNATIONAL INC.		DRAWING NO. JD-P1-SP-Cr-3 SHEET NO. 89
CHIEF OF PLANNING AND DESIGN	PROJECT MANAGER	DATE CONTRACT NO.



GEOLOGICAL STRATA

Age	Symbol	Formation and Strata Name
Quaternary	Holocene	Riverbed deposit
		Talus deposit
Tertiary-Quaternary	Pliocene - Pleistocene	Upper Sedimentary Rock Unit
		Upper Pyroclastic Rock Unit
		Middle Sedimentary Rock Unit
		Lower Pyroclastic Rock Unit
		Lower Sedimentary Rock Unit

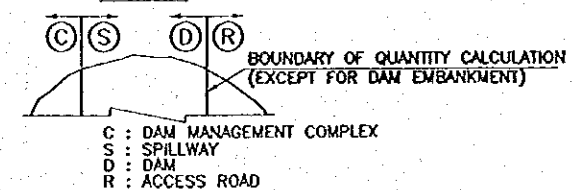
NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. SECTIONS ARE REFERRED FROM DRAWING NO. JD-P1-SP-Ge-1.
3. GEOLOGICAL INFORMATION IS ONLY FOR REFERENCE.
4. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

REFERENCE DRAWINGS

JD-P1-GE-Pr-1 GEOLOGICAL PROFILE ALONG DAM AXIS

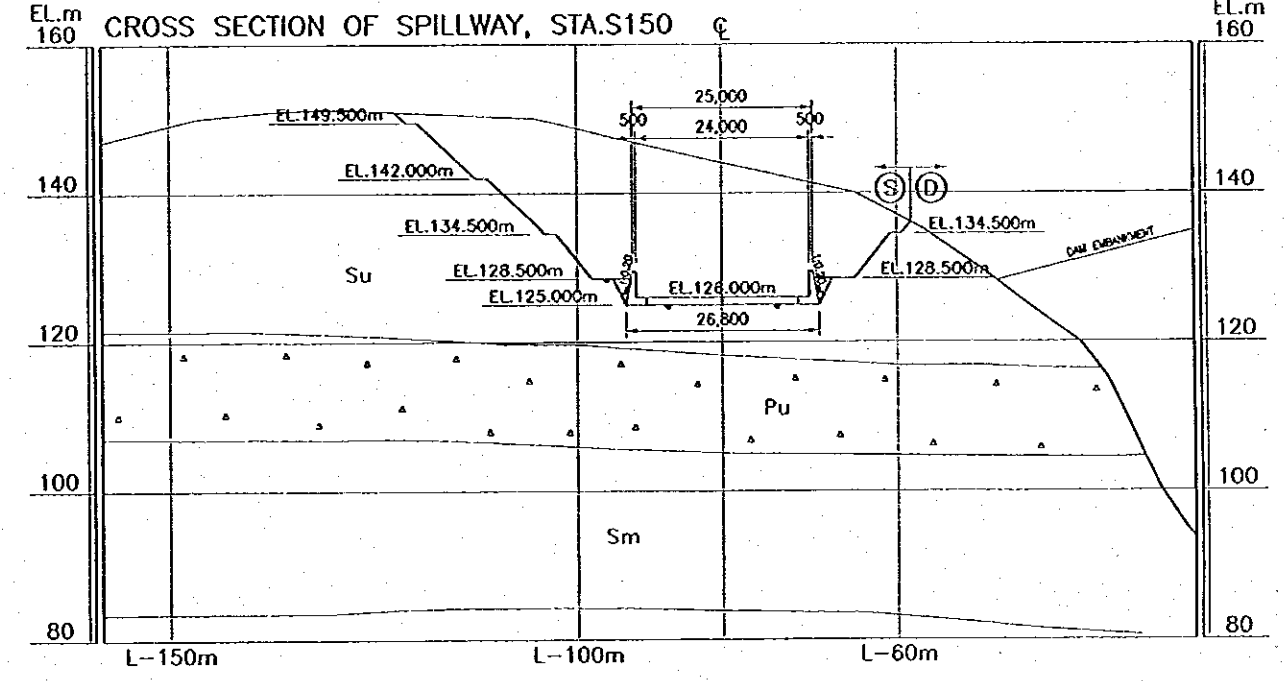
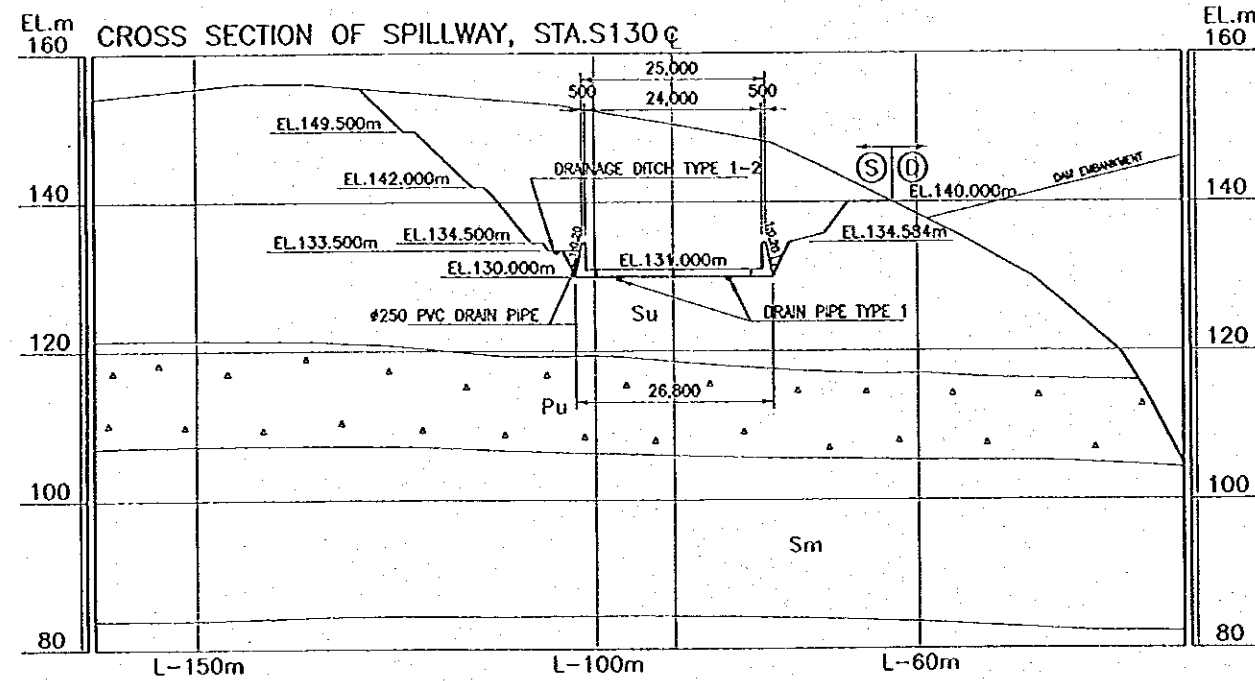
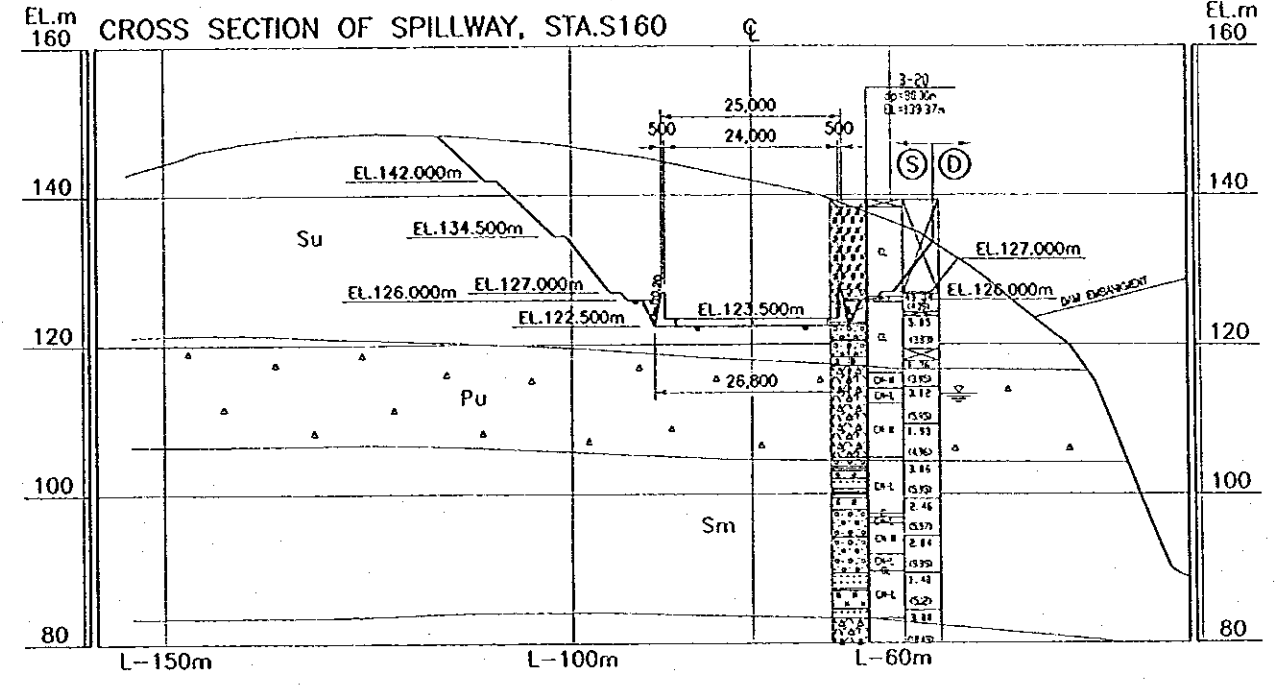
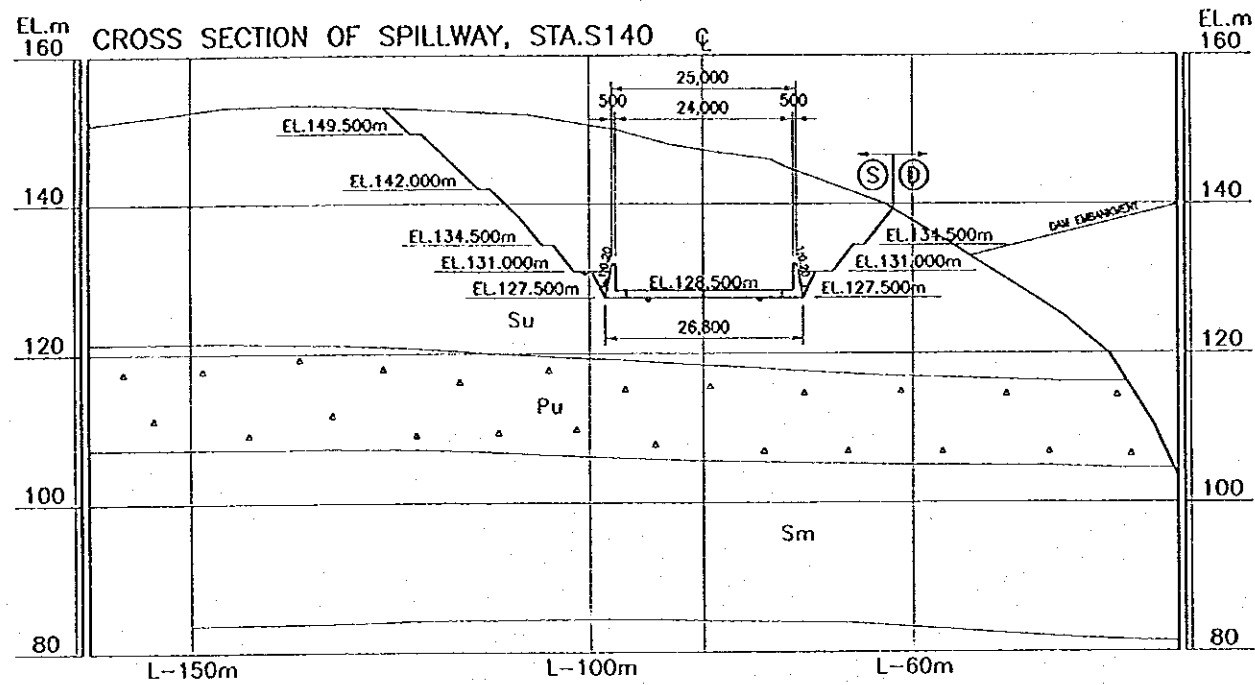
LEGEND



SCALE 0 25 50m

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
JATUNSEKELUA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
SPILLWAY CROSS SECTIONS (4/10)		DISTRICT SEMARANG CITY
DAM INTERNATIONAL COOPERATION AGENCY CITI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL JAWA BARU INTERNATIONAL, INC.		DRAWING NO. JD-P1-SP-Ge-4 SHEET NO. 90
DESIGNED CHECKED CITY OF PLANNING AND DESIGN PROJECT MANAGER		DATE CONTRACT NO.



GEOLOGICAL STRATA

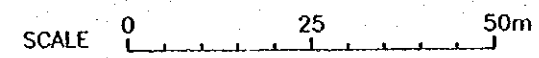
Age	Symbol	Formation and Strata Name
Quaternary	Holocene	Riverbed deposit
		Talus deposit
Tertiary-Quaternary	Su	Upper Sedimentary Rock Unit
	Pu	Upper Pyroclastic Rock Unit
	Sm	Middle Sedimentary Rock Unit
	Pl	Lower Pyroclastic Rock Unit
	Sl	Lower Sedimentary Rock Unit

- NOTES**
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
 2. SECTIONS ARE REFERRED FROM DRAWING NO. JD-P1-SP-Ge-1.
 3. GEOLOGICAL INFORMATION IS ONLY FOR REFERENCE.
 4. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

REFERENCE DRAWINGS
 JD-P1-GE-Pr-1 GEOLOGICAL PROFILE ALONG DAM AXIS

LEGEND

C : DAM MANAGEMENT COMPLEX
 S : SPILLWAY
 D : DAM
 R : ACCESS ROAD



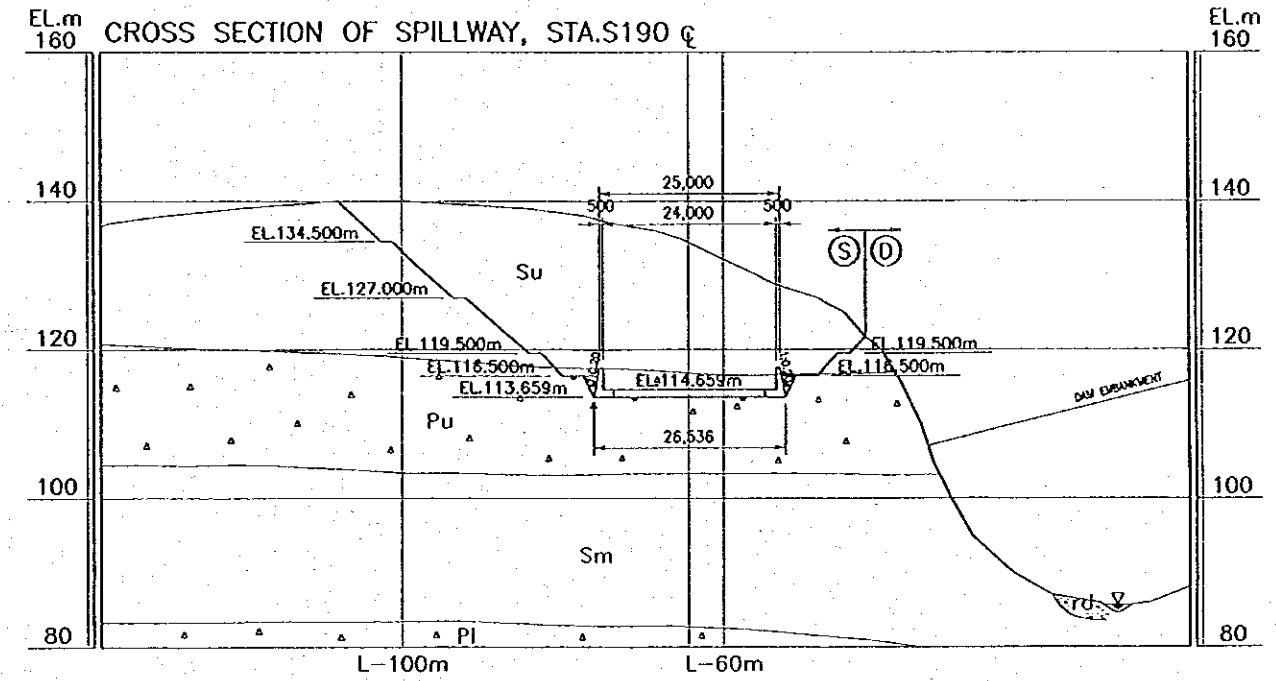
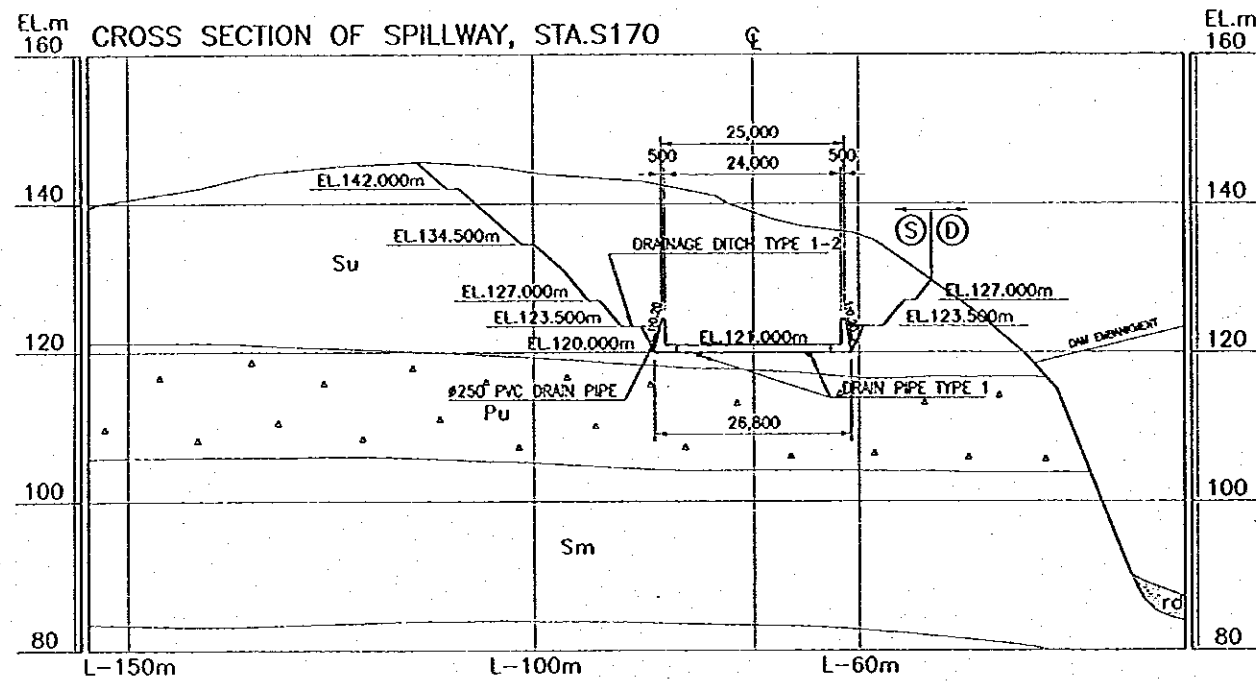
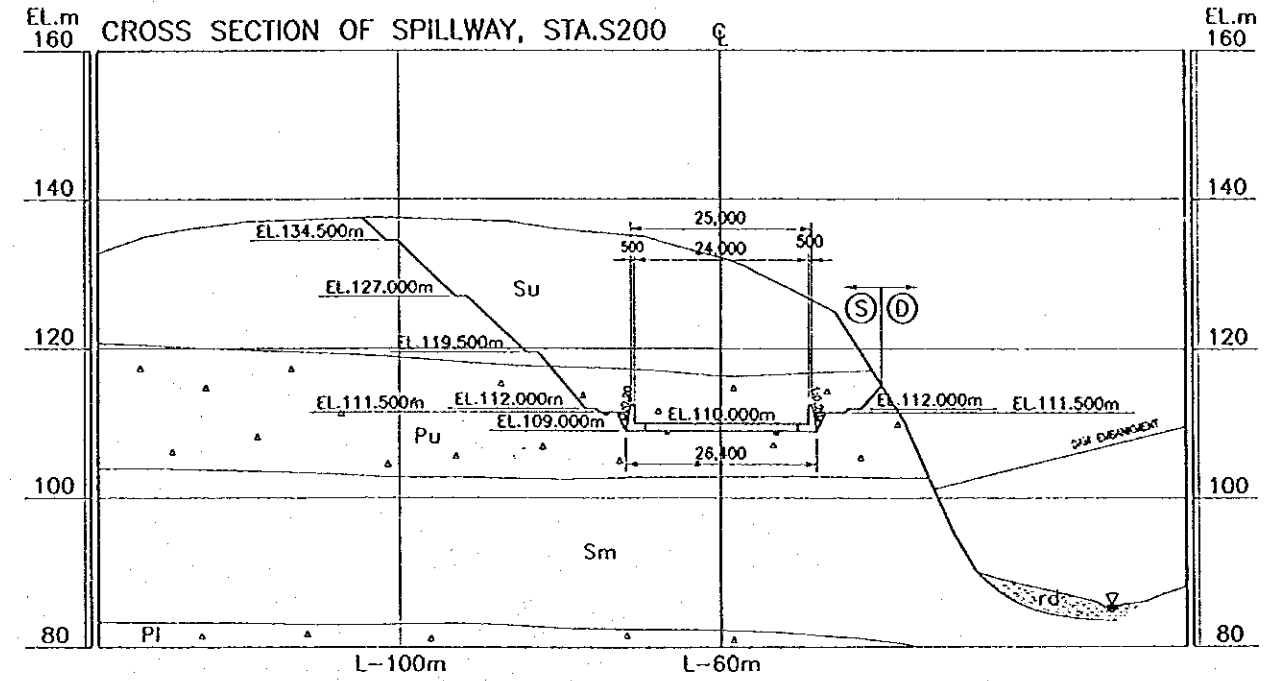
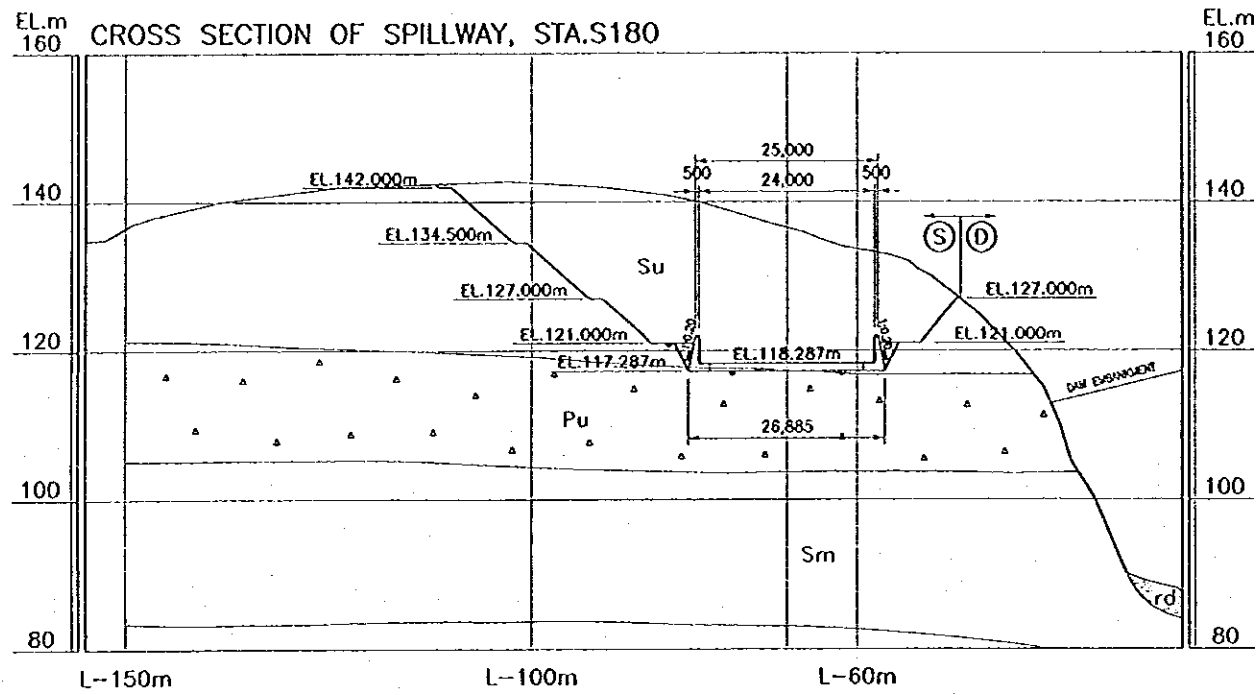
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

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
 DRAWING NO. JD-P1-SP-Ge-5
 SHEET NO. 91
 DATE: CONTRACT NO.

PT. BANGSA INTERNATIONAL COOPERATIVE AGENCY
 PT. BANGSA INTERNATIONAL CO. LTD. IN ASSOCIATION WITH
 PACIFIC CONSULTANTS INTERNATIONAL
 BANGSA INTERNATIONAL INC.

DESIGNED: [Signature]
 CHECKED: [Signature]
 APPROVED: [Signature]
 PROJECT MANAGER



GEOLOGICAL STRATA

Age	Symbol	Formation and Strata Name
Quaternary	Holocene	Riverbed deposit
		Talus deposit
Tertiary-Quaternary	Pliocene-Pleistocene	Upper Sedimentary Rock Unit (Su)
		Upper Pyroclastic Rock Unit (Pu)
		Middle Sedimentary Rock Unit (Sm)
		Lower Pyroclastic Rock Unit (Pl)
		Lower Sedimentary Rock Unit (Sl)

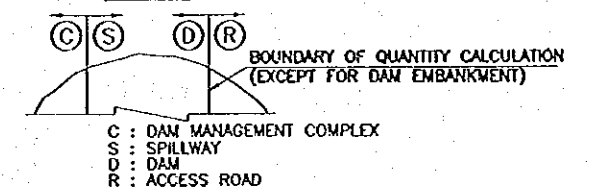
NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. SECTIONS ARE REFERED FROM DRAWING NO. JD-P1-SP-Ge-1.
3. GEOLOGICAL INFORMATION IS ONLY FOR REFERENCE.
4. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

REFERENCE DRAWINGS

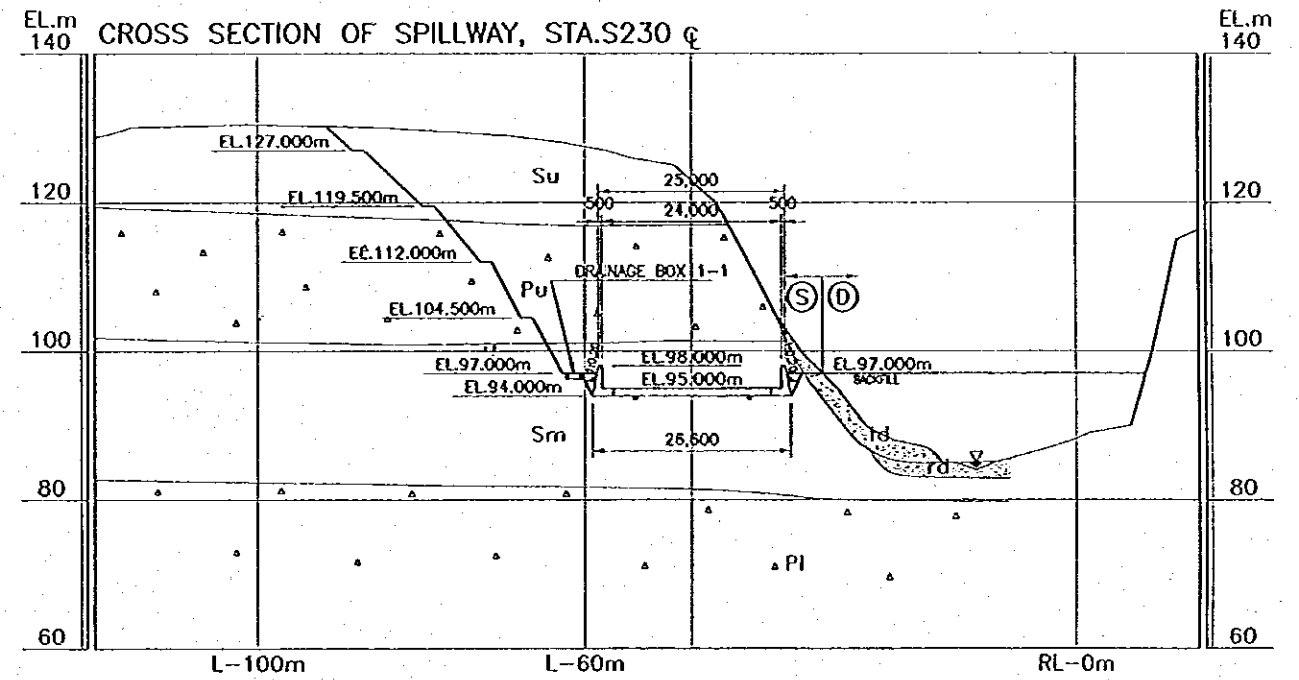
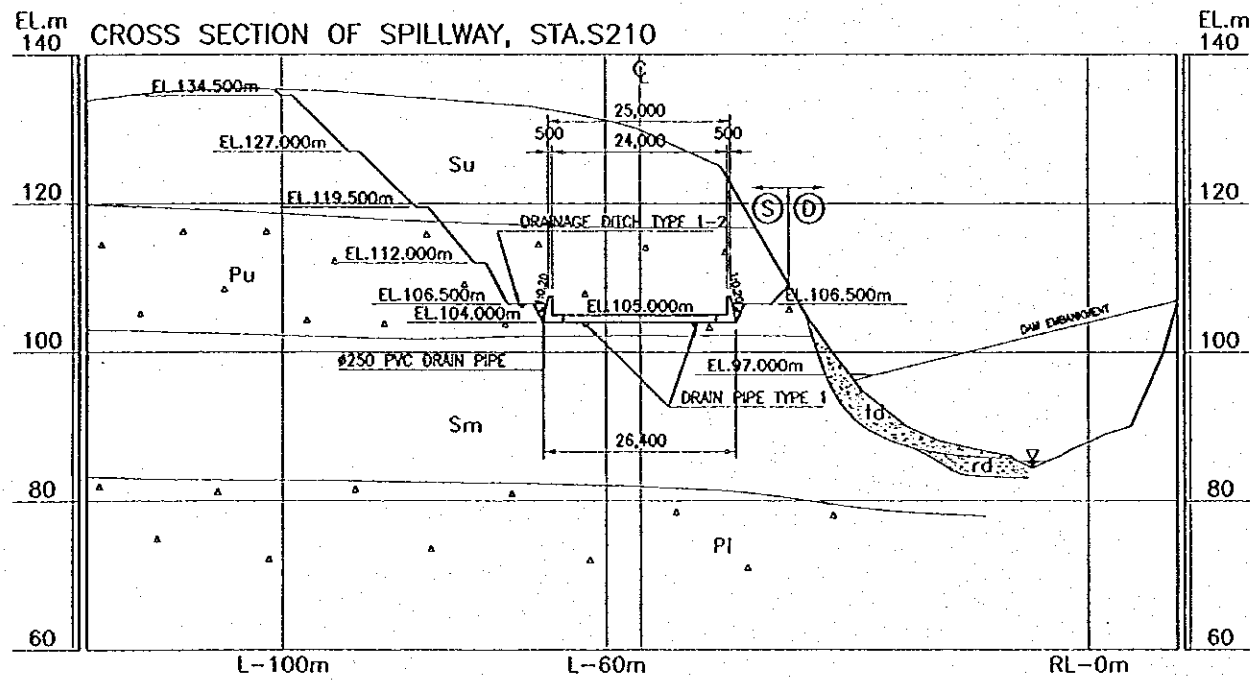
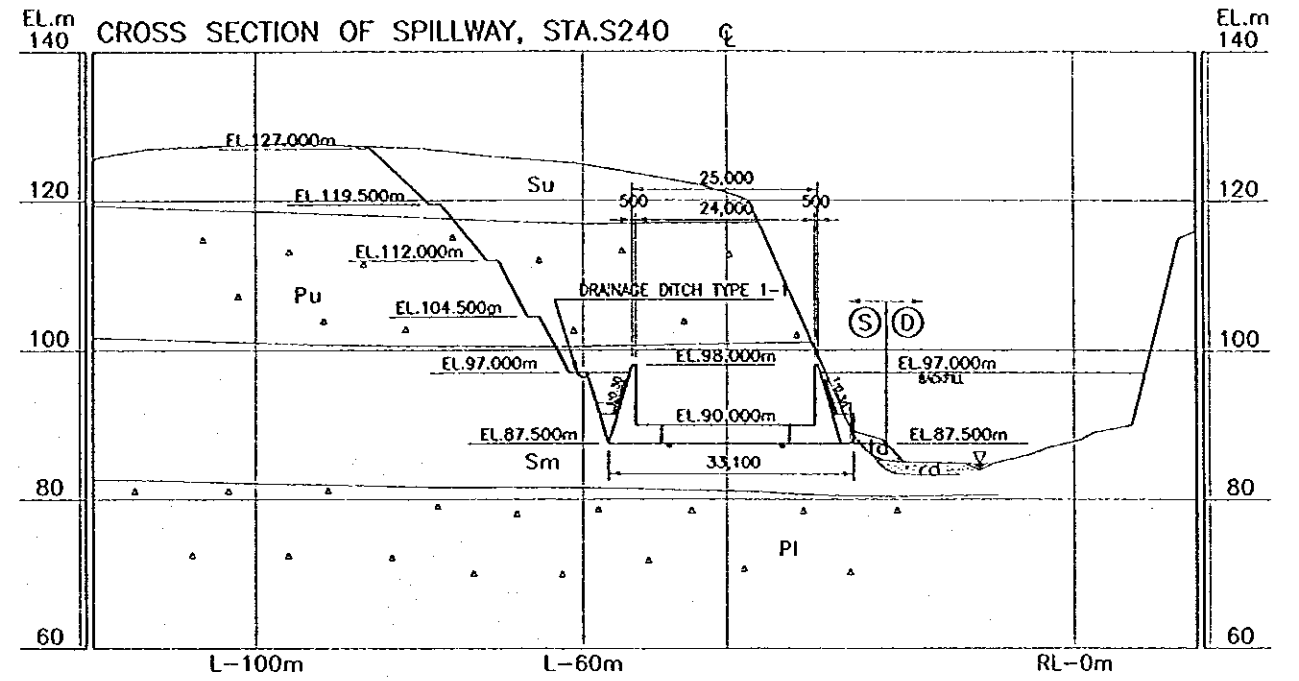
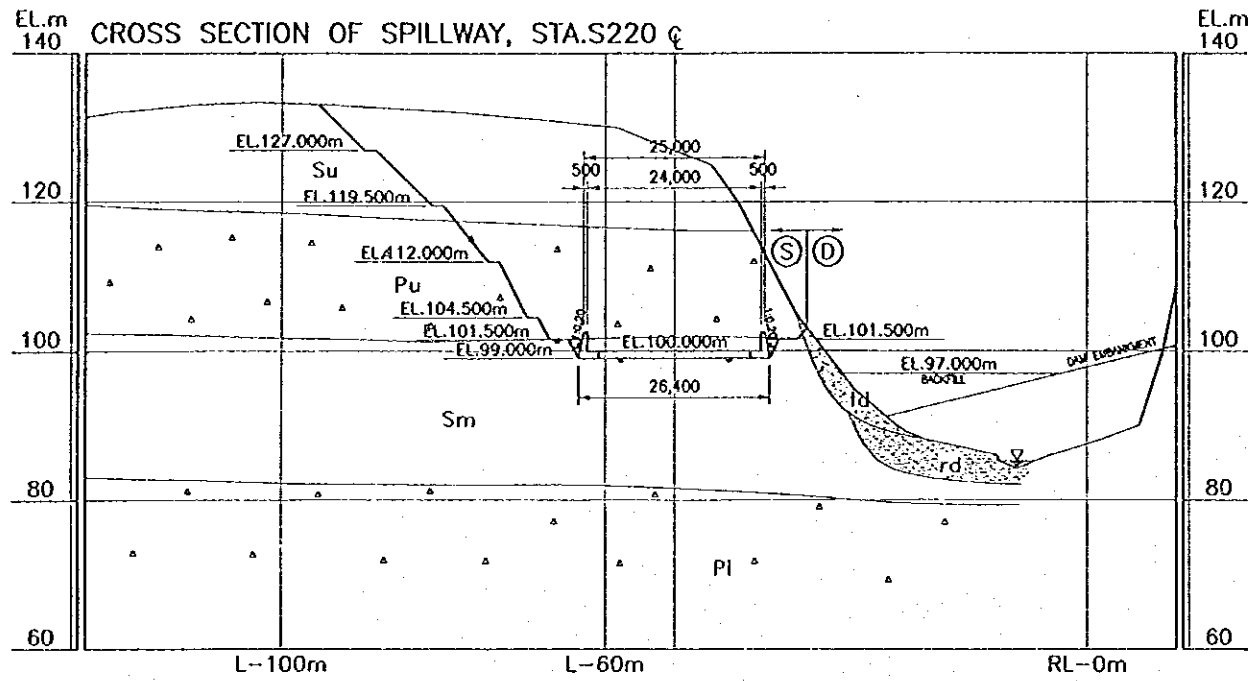
JD-P1-GE-Pr-1 GEOLOGICAL PROFILE ALONG DAM AXIS

LEGEND



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 : JATIBARANG DAM CONSTRUCTION		PROJECT CENTRAL JAYA
SPILLWAY CROSS SECTIONS (6/10)		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 CONSULTANTS INTERNATIONAL PABCO INTERNATIONAL, INC.		PROJECT SEMARANG CITY DRAWING NO. JD-P1-SP-Ge-6 SHEET NO. 92
DATE	PROJECT MANAGER	CONTRACT NO.



GEOLOGICAL STRATA

Age	Symbol	Formation and Strata Name
Quaternary	Holocene	Riverbed deposit
		Talus deposit
Tertiary-Quaternary	Pliocene-Pleistocene	Upper Sedimentary Rock Unit
		Upper Pyroclastic Rock Unit
		Middle Sedimentary Rock Unit
		Lower Pyroclastic Rock Unit
		Lower Sedimentary Rock Unit

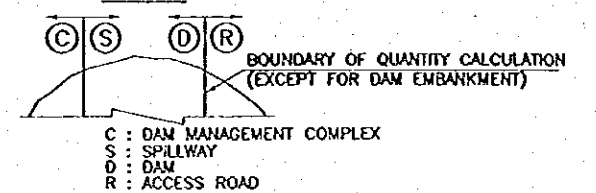
NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. SECTIONS ARE REFERRED FROM DRAWING NO. JD-P1-SP-Ge-1.
3. GEOLOGICAL INFORMATION IS ONLY FOR REFERENCE.
4. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

REFERENCE DRAWINGS

JD-P1-GE-Pr-1 GEOLOGICAL PROFILE ALONG DAM AXIS

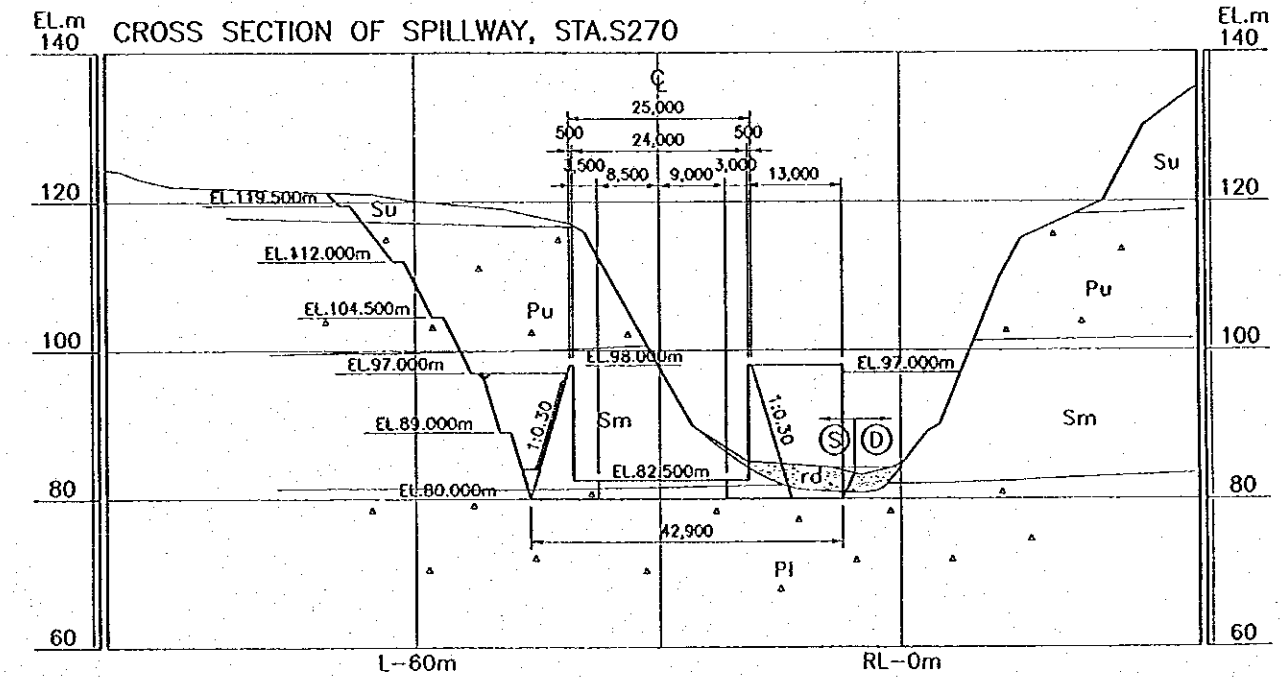
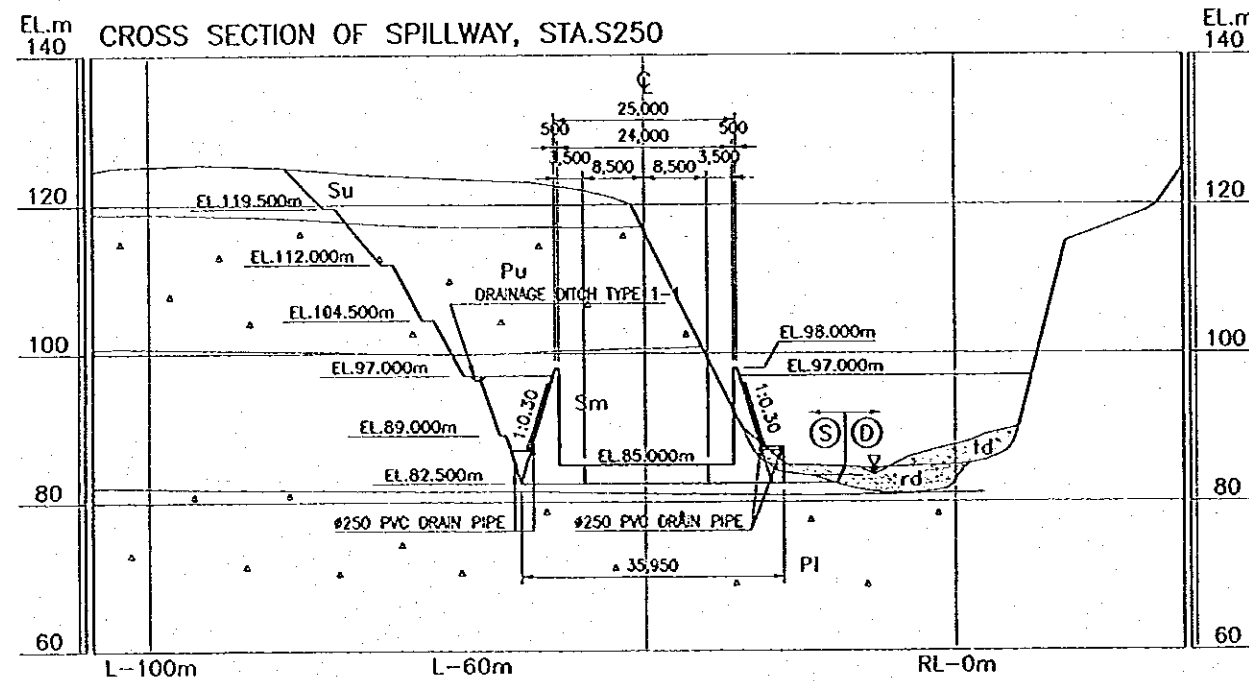
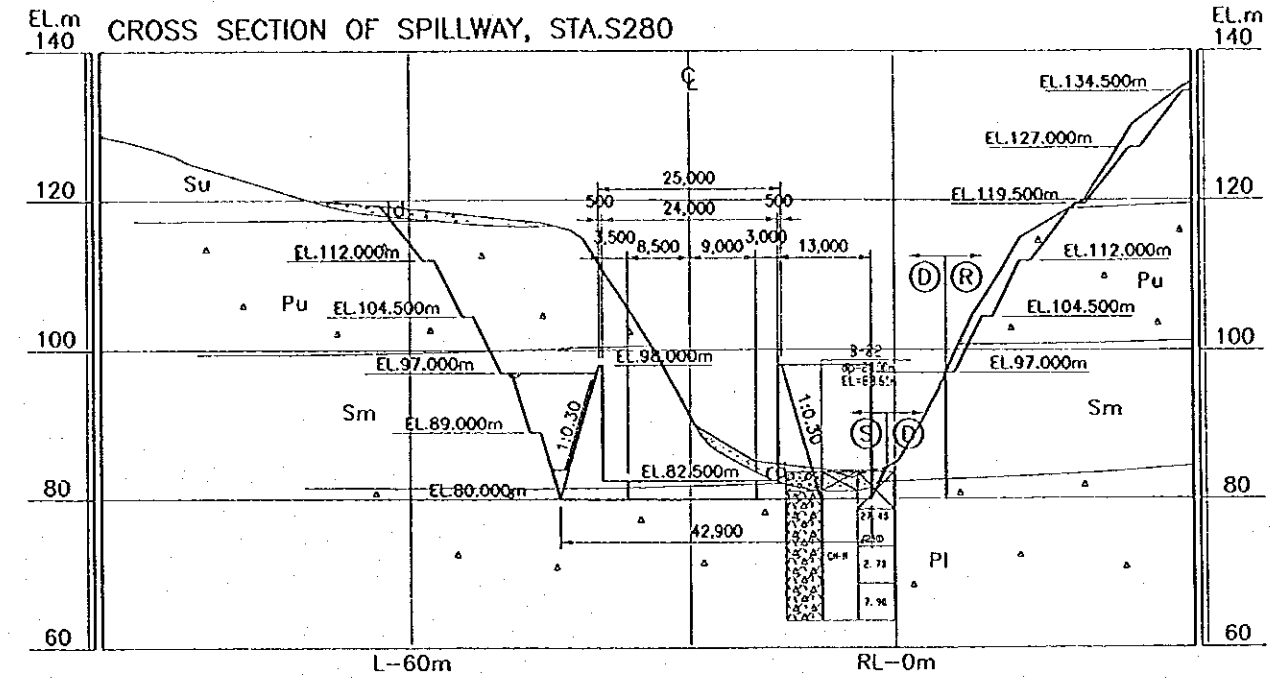
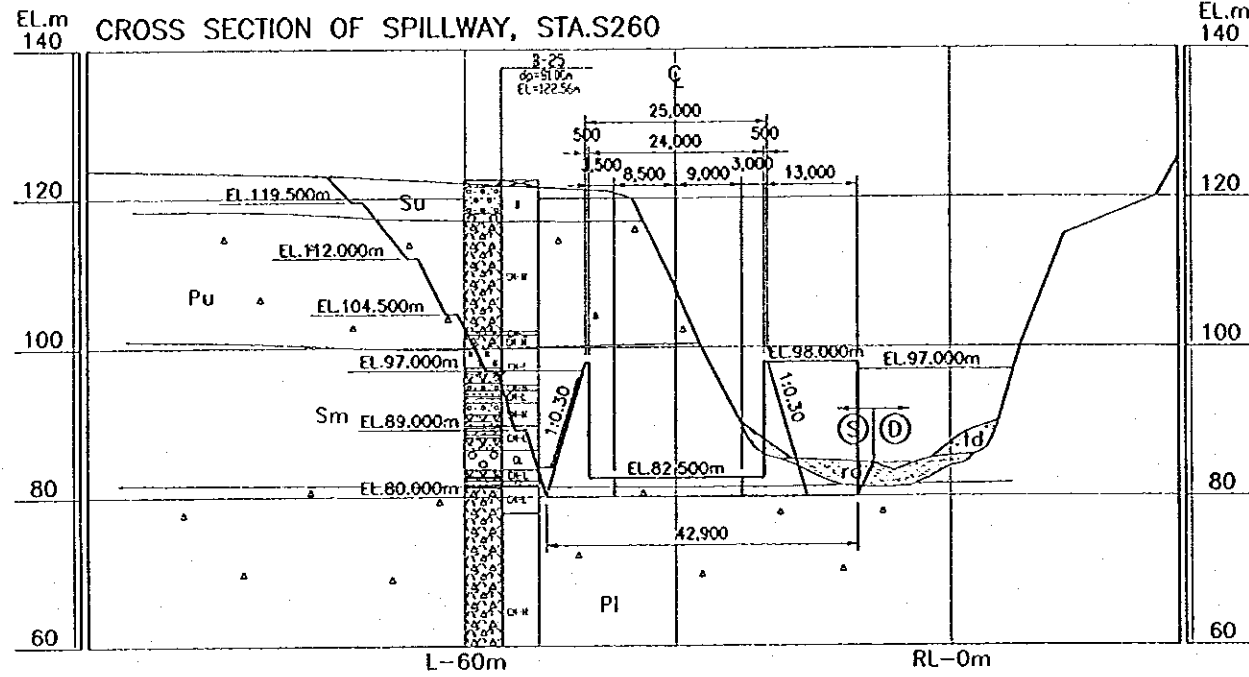
LEGEND



SCALE 0 25 50m

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 : JATIBARANG DAM CONSTRUCTION		PROVINCE CENTRAL JAVA PROJECT NAME FLOOD CONTROL, DAM, WEIR AND WATER CONTROL DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. JD-P1-SP-Ge-7 ASSIST. NO. 93 DATE CONTRACT NO.
SPILLWAY CROSS SECTIONS (7/10)		APPROVED PROJECT MANAGER



GEOLOGICAL STRATA

Age	Symbol	Formation and Strata Name
Quaternary	Holocene	Riverbed deposit
		Talus deposit
Tertiary-Quaternary	Pliocene-Pleistocene	Upper Sedimentary Rock Unit
		Upper Pyroclastic Rock Unit
		Middle Sedimentary Rock Unit
		Lower Pyroclastic Rock Unit
		Lower Sedimentary Rock Unit

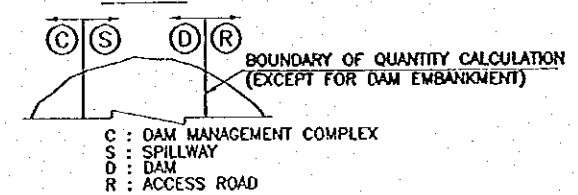
NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. SECTIONS ARE REFERRED FROM DRAWING NO. JD-P1-SP-Ge-1.
3. GEOLOGICAL INFORMATION IS ONLY FOR REFERENCE.
4. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

REFERENCE DRAWINGS

JD-P1-GE-Pr-1 GEOLOGICAL PROFILE ALONG DAM AXIS

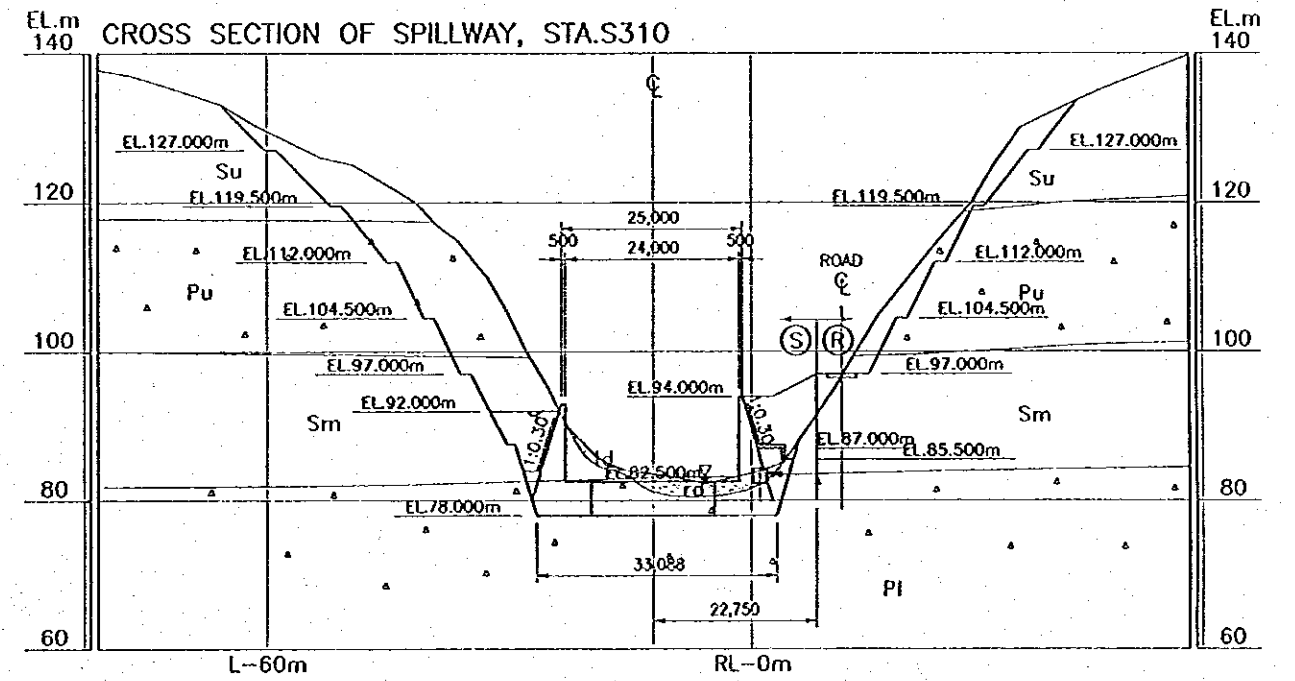
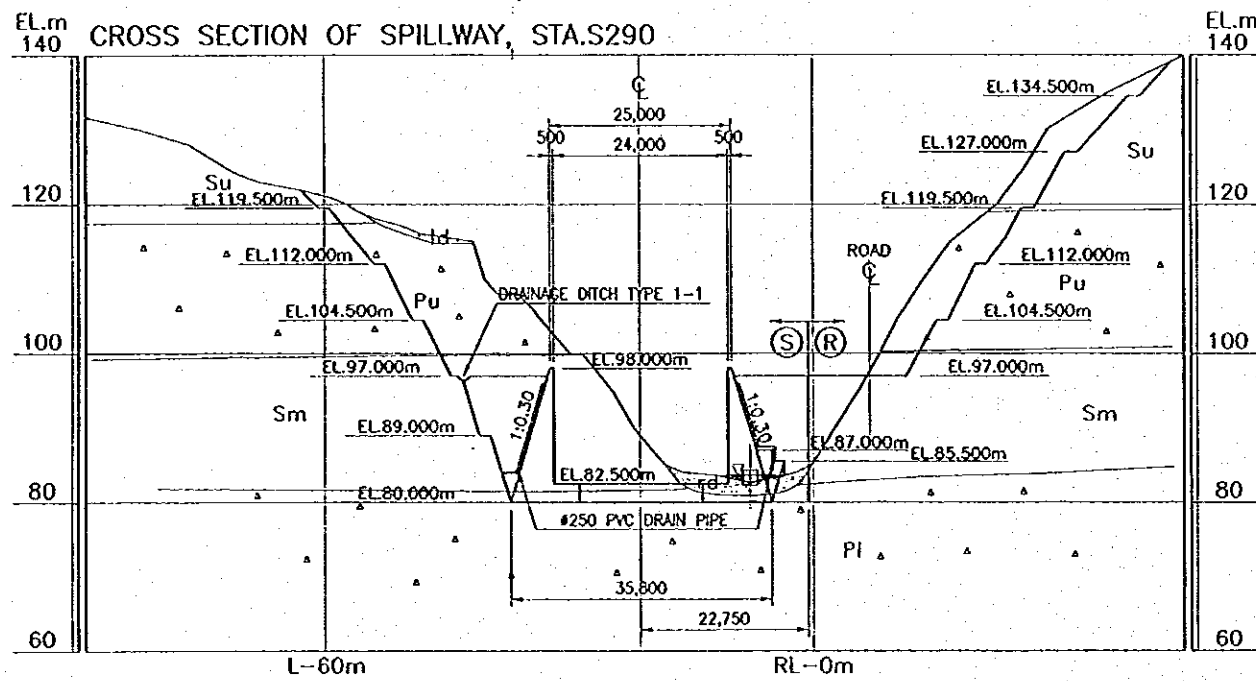
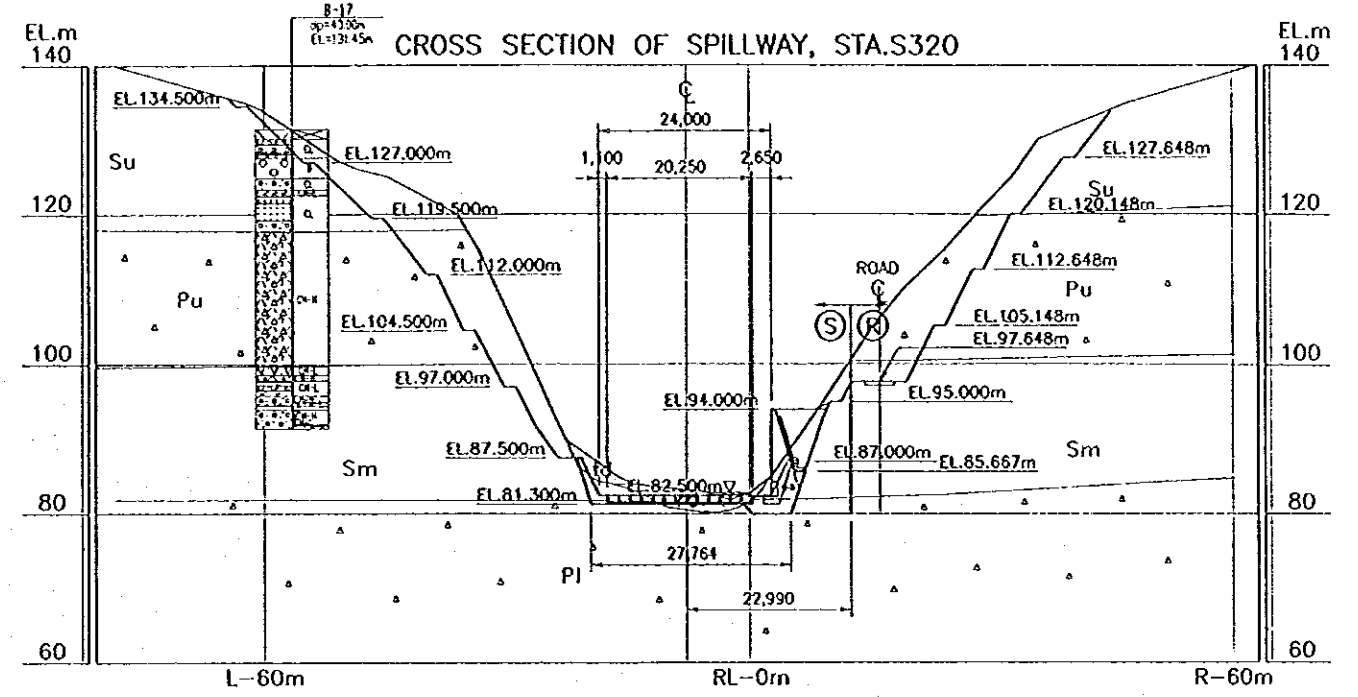
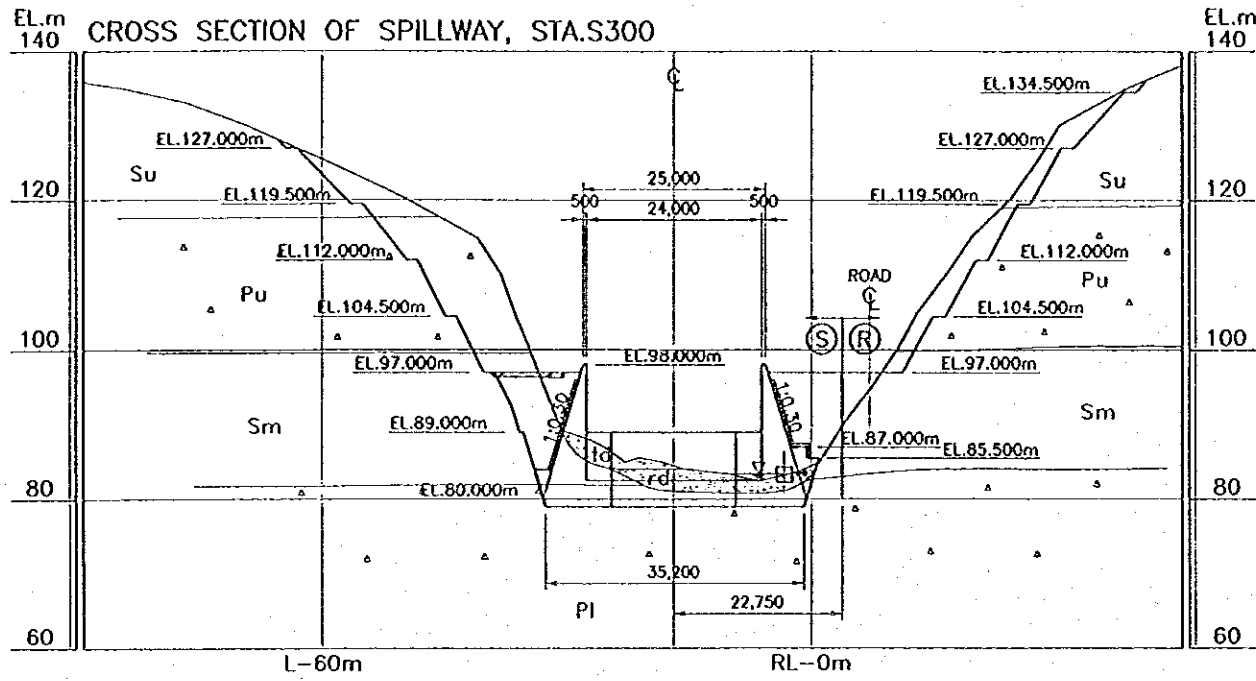
LEGEND



SCALE 0 25 50m

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 : JATIBARANG DAM CONSTRUCTION SPILLWAY CROSS SECTIONS (8/10)		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. JD-P1-SP-Cr-8 SHEET NO. 94 DATE CONTRACT NO.
JAWA INTERNATIONAL COOPERATION AGENCY CITI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PACIFIC INTERNATIONAL INC.	DESIGNED CHECKED CITEE OF PLANNING AND DESIGN PROJECT MANAGER	APPROVED



GEOLOGICAL STRATA

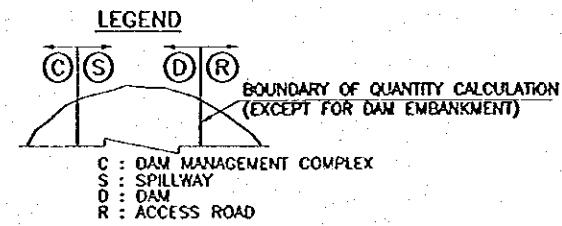
Age	Symbol	Formation and Strata Name
Quaternary	Holocene	Riverbed deposit
		Talus deposit
Tertiary	Pliocene - Pleistocene	Upper Sedimentary Rock Unit
		Upper Pyroclastic Rock Unit
		Middle Sedimentary Rock Unit
		Lower Pyroclastic Rock Unit
		Lower Sedimentary Rock Unit

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. SECTIONS ARE REFERRED FROM DRAWING NO. JD-P1-SP-Ge-1.
3. GEOLOGICAL INFORMATION IS ONLY FOR REFERENCE.
4. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

REFERENCE DRAWINGS

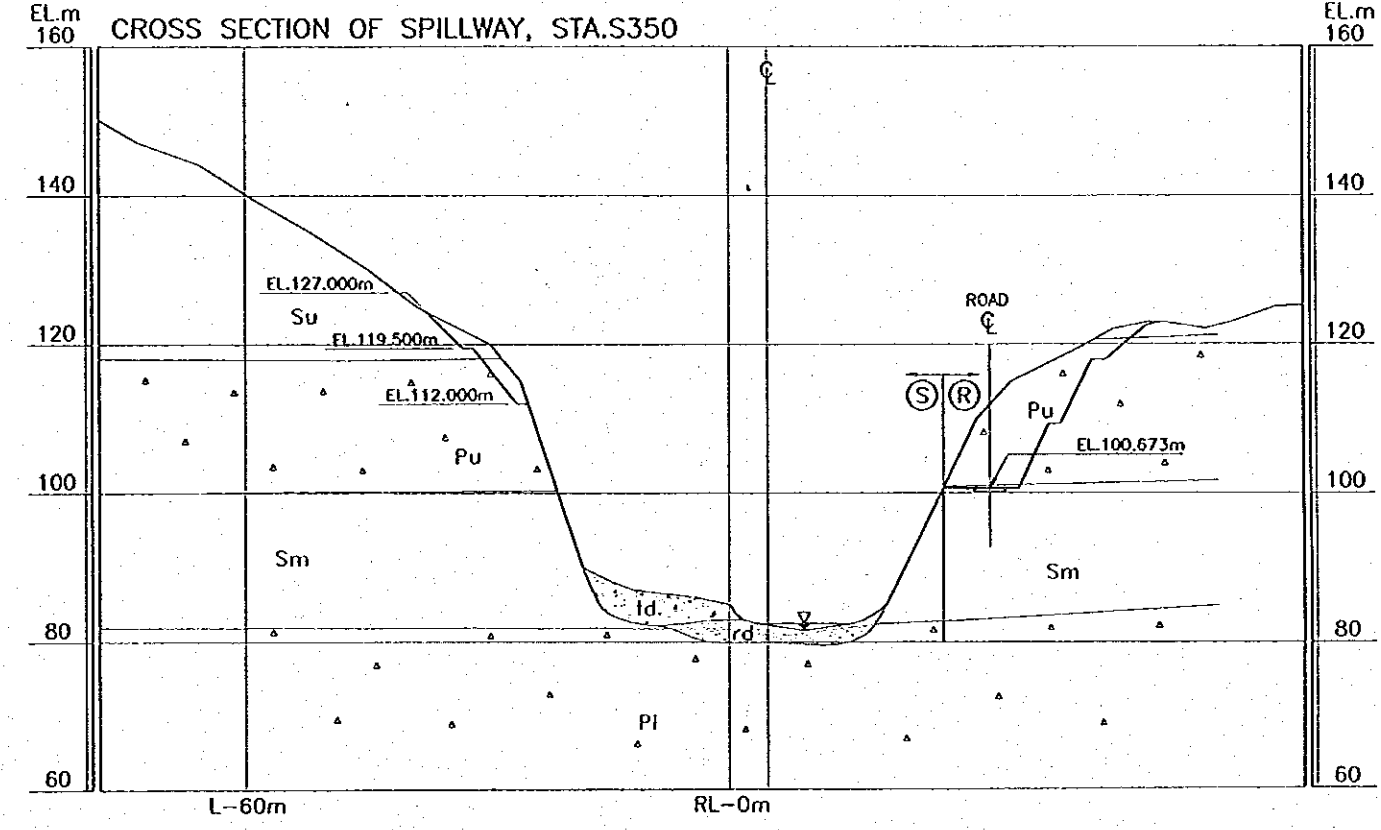
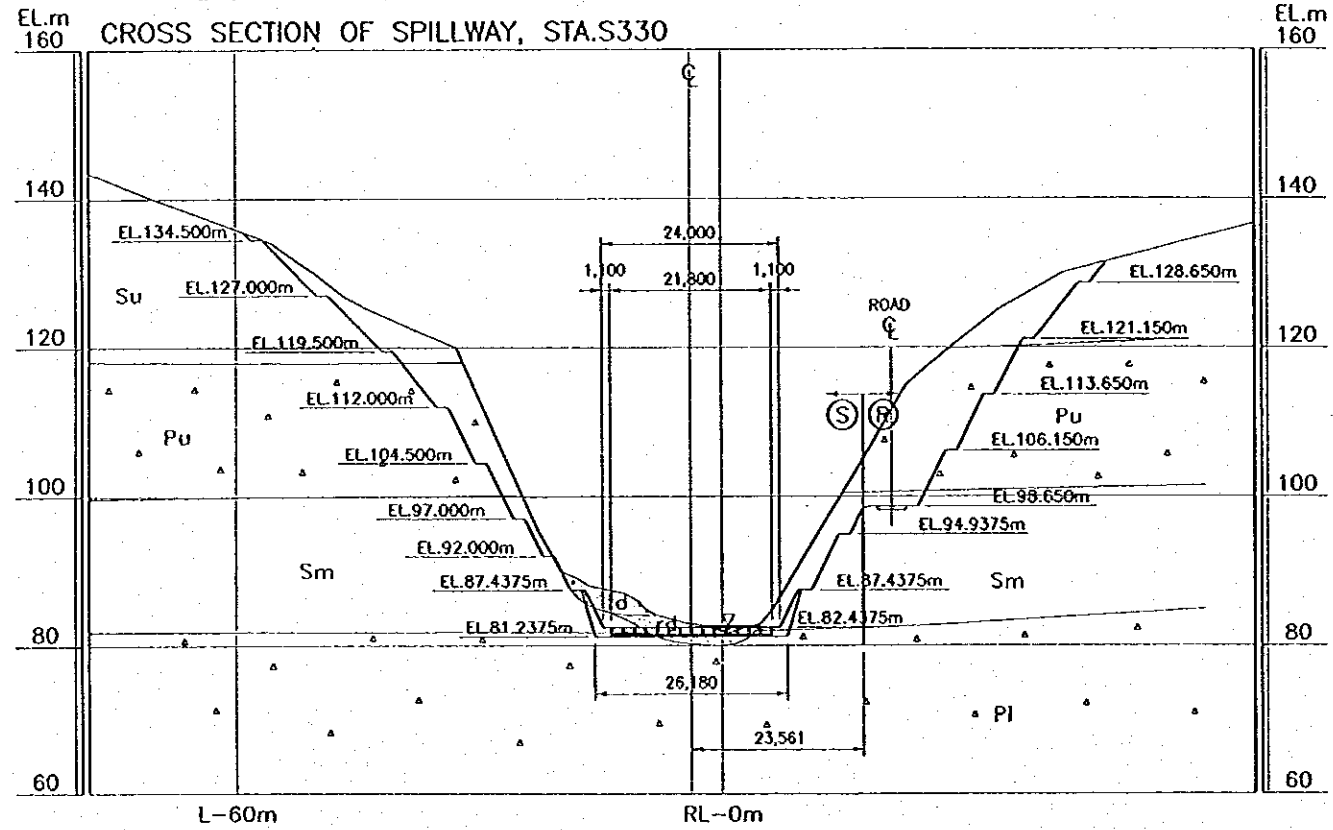
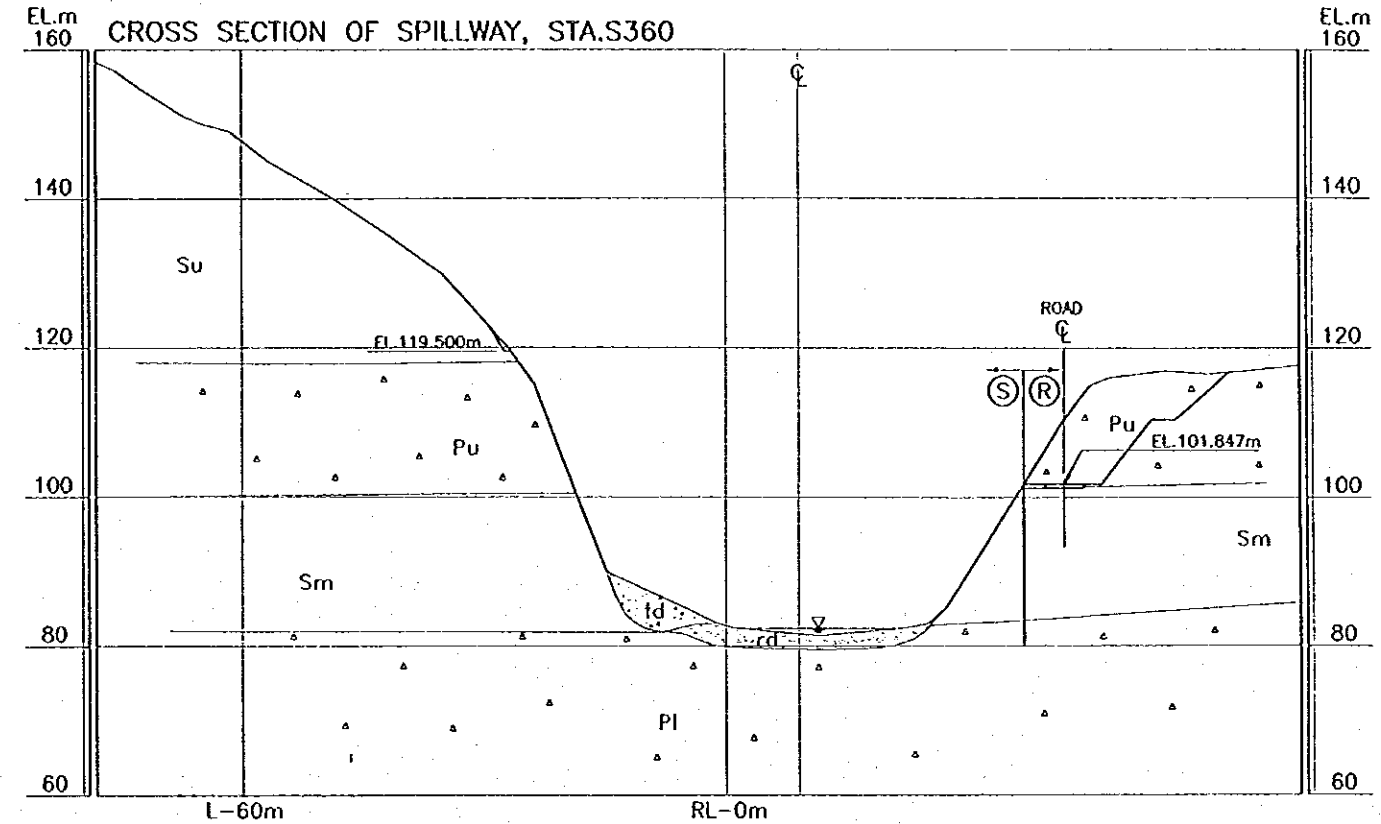
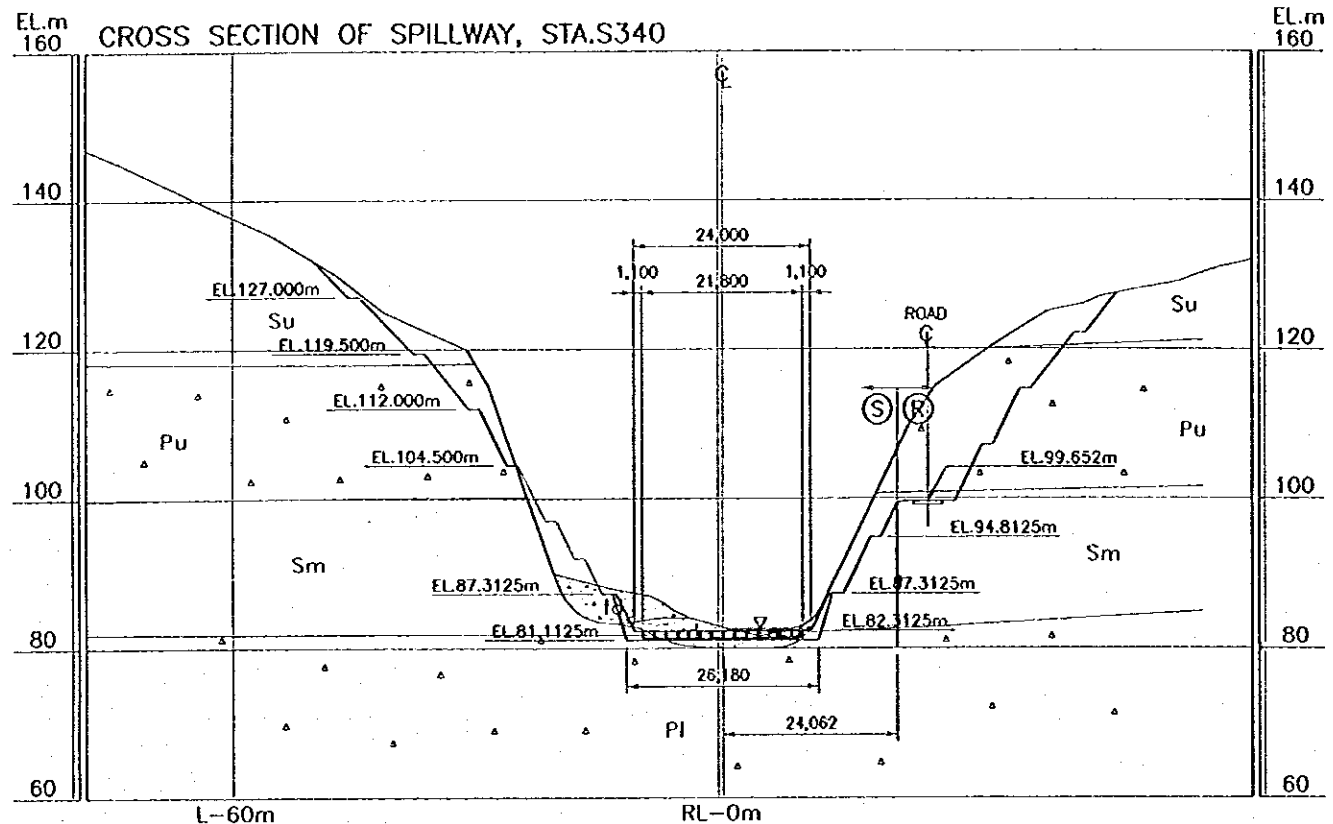
JD-P1-GE-Pr-1 GEOLOGICAL PROFILE ALONG DAM AXIS



SCALE 0 25 50m

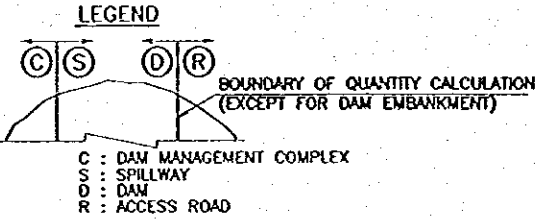
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
JATISURABAYA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY CROSS SECTIONS (9/10)		PROJECT NAME FLOOD CONTROL, URBAN DEADEND AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY JICA INTERNATIONAL COOPERATION AGENCY JICA INTERNATIONAL COOPERATION AGENCY JICA INTERNATIONAL COOPERATION AGENCY		DISTRICT SEMARANG CITY
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. JD-P1-SP-Cr-9 SHEET NO. 95
DATE		CONTRACT NO.



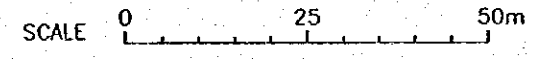
GEOLOGICAL STRATA

Age	Symbol	Formation and Strata Name
Quaternary	□	Fluvial deposit
	□	Talus deposit
Tertiary-Quaternary	Su	Upper Sedimentary Rock Unit
	Pu	Upper Pyroclastic Rock Unit
	Sm	Lower Sedimentary Rock Unit
	Pl	Lower Pyroclastic Rock Unit
	SI	Lower Sedimentary Rock Unit



- NOTES**
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
 2. SECTIONS ARE REFERRED FROM DRAWING NO. JD-P1-SP-Ge-1.
 3. GEOLOGICAL INFORMATION IS ONLY FOR REFERENCE.
 4. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

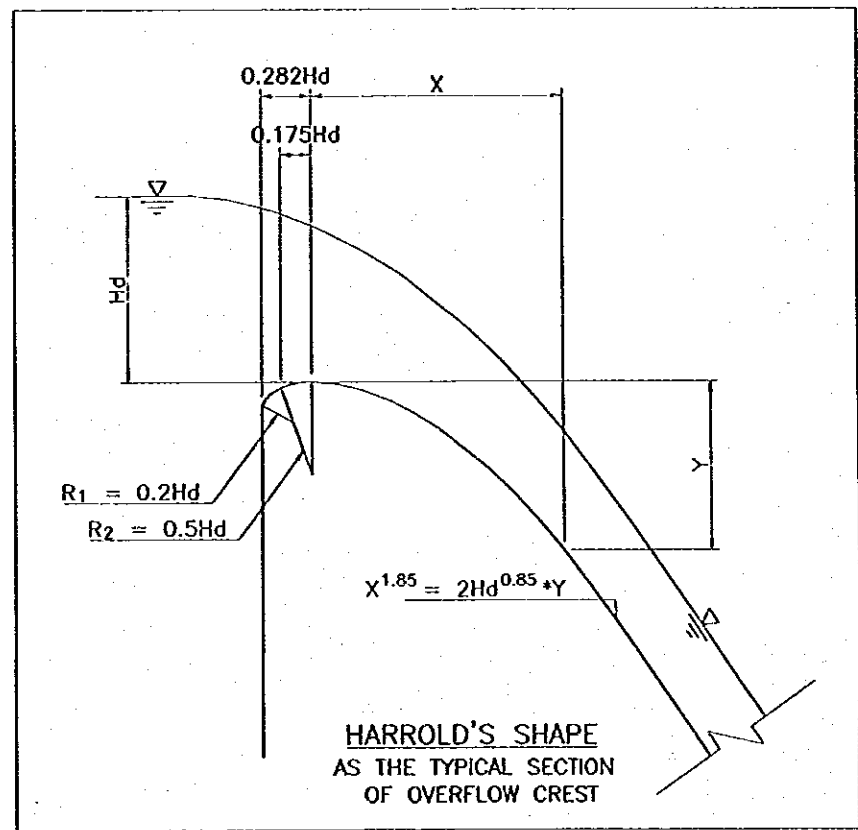
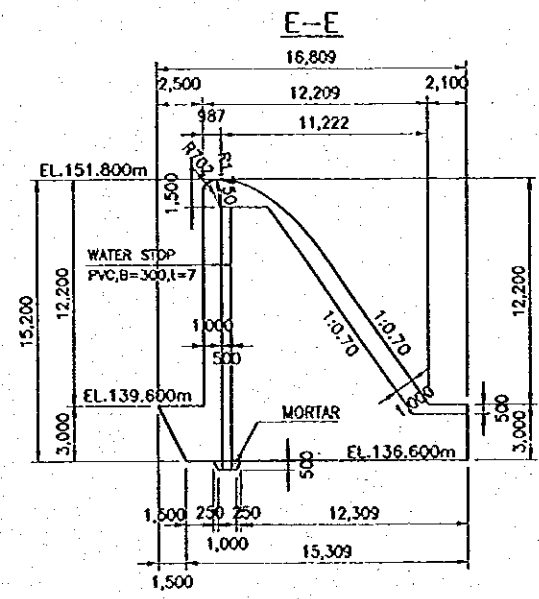
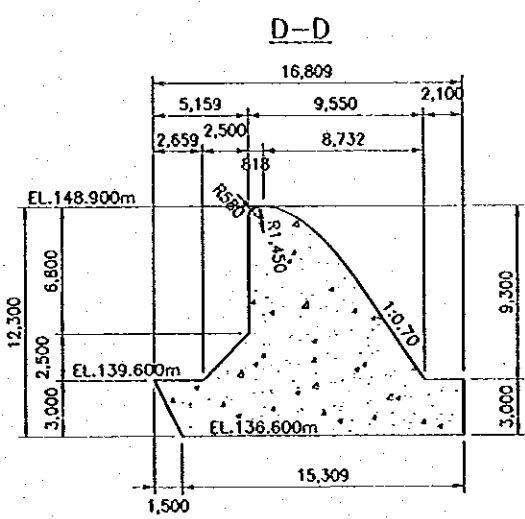
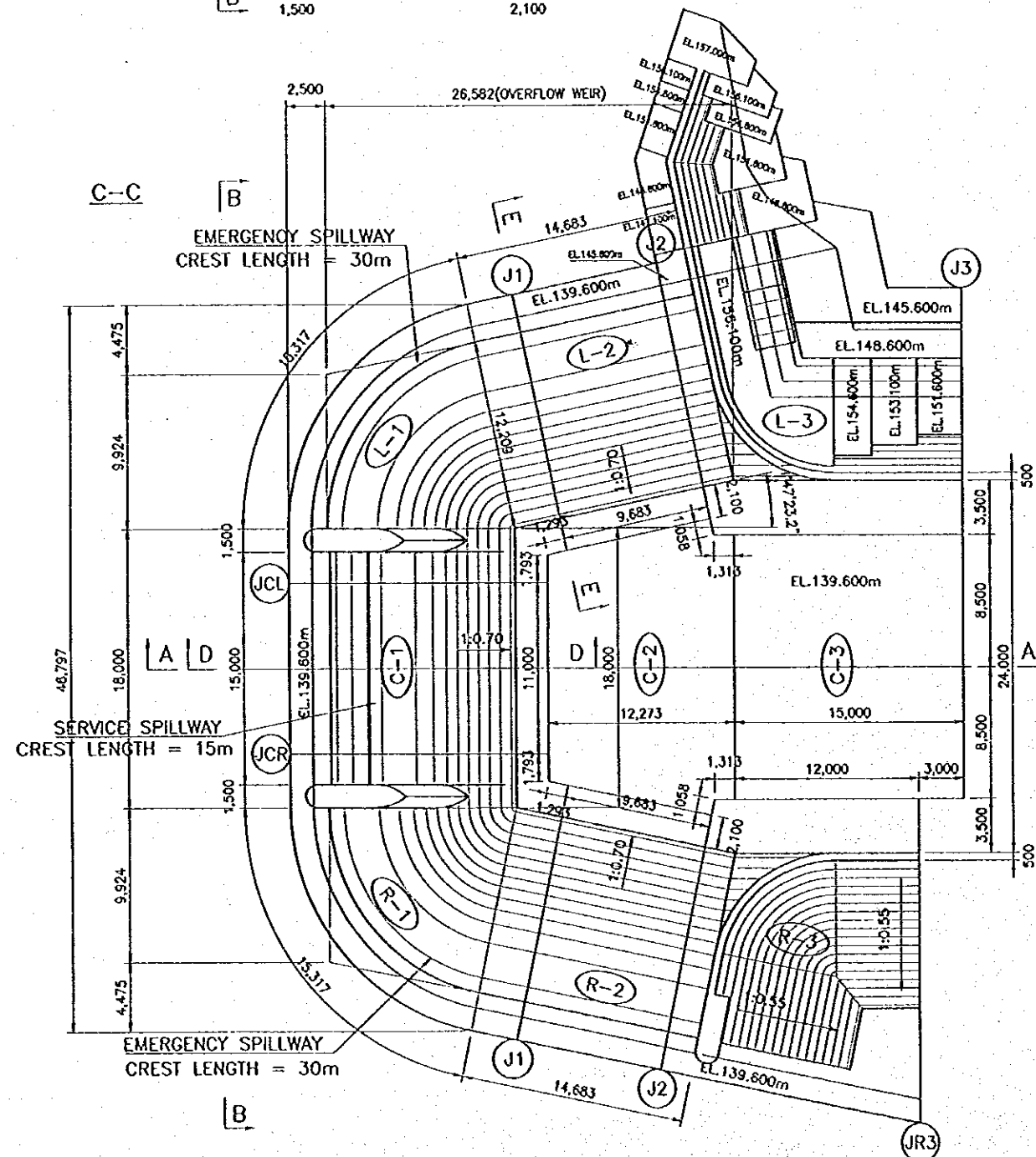
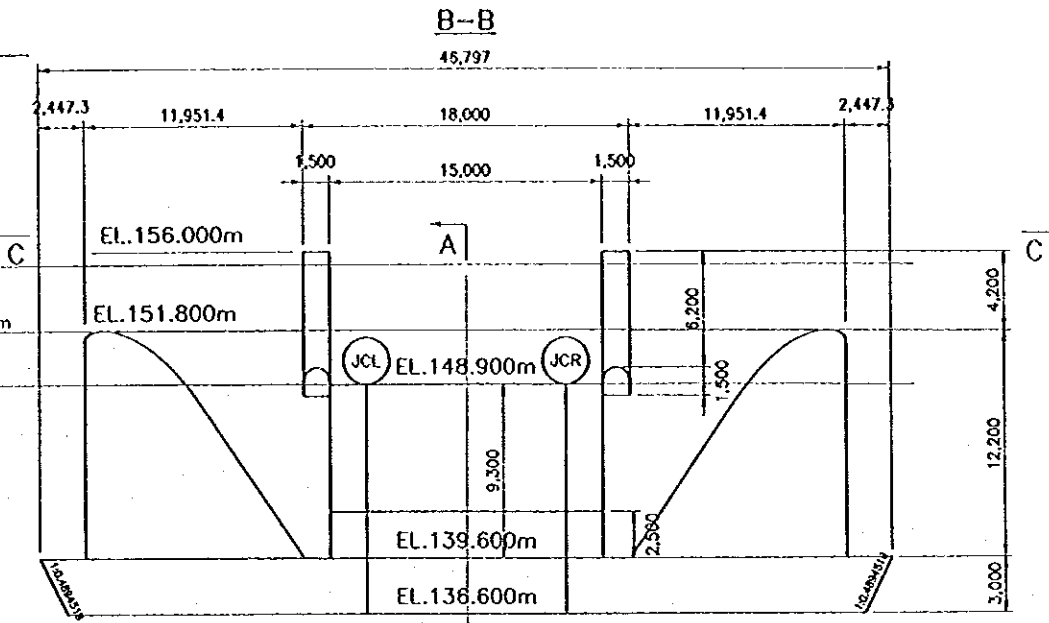
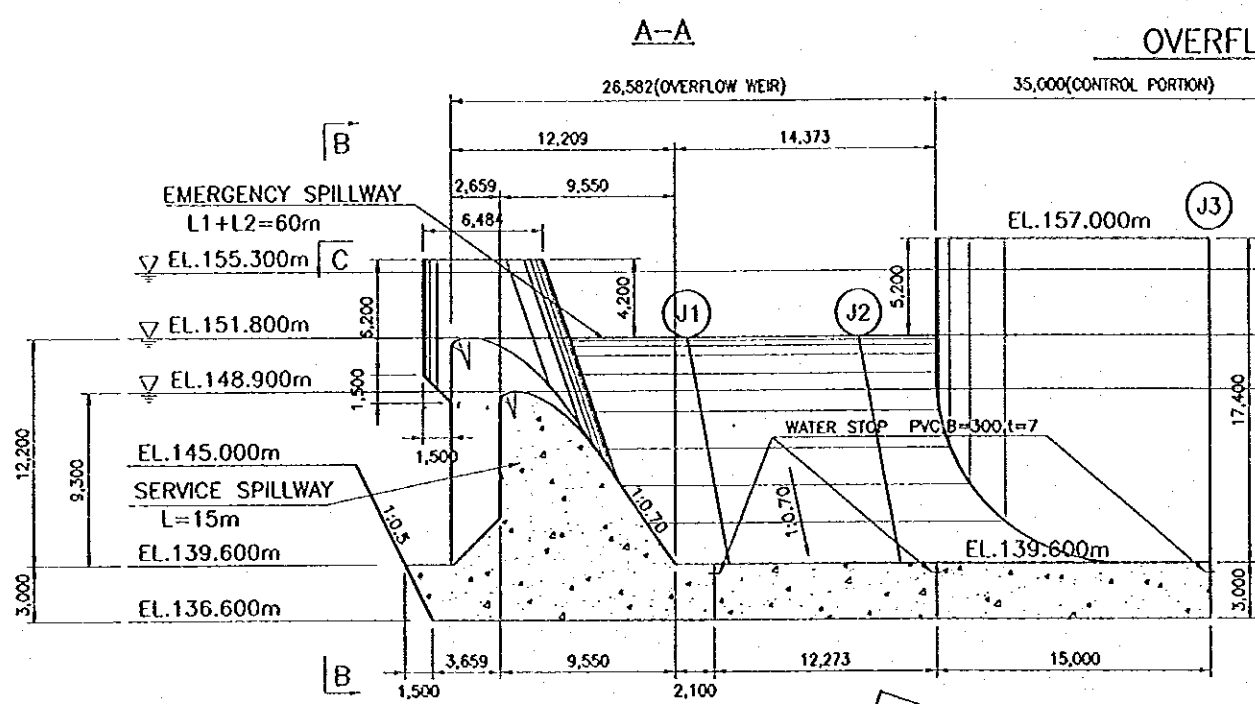
REFERENCE DRAWINGS
 JD-P1-GE-Pr-1 GEOLOGICAL PROFILE ALONG DAM AXIS



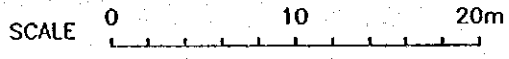
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
BATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY CROSS SECTIONS (10/10)		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CTE ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL FARCO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
DESIGNED CHECKED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. JD-P1-SP-Ge-10 SHEET NO. 96 DATE CONTRACT NO.

OVERFLOW WEIR ~ J3 and JR3

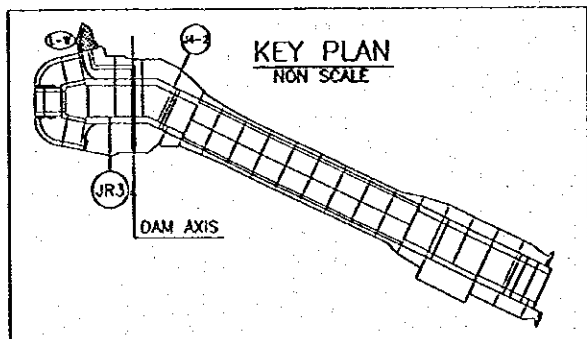
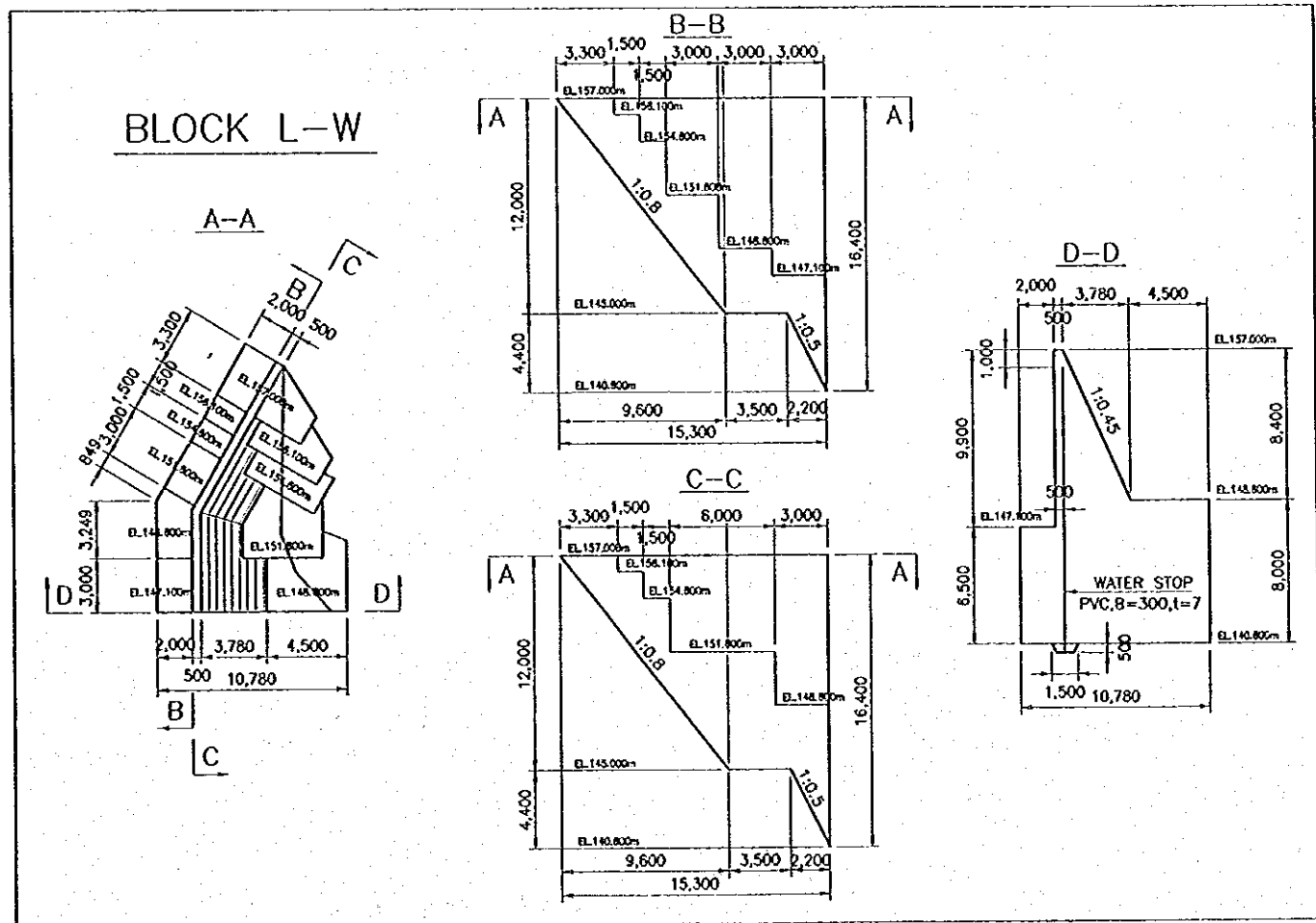
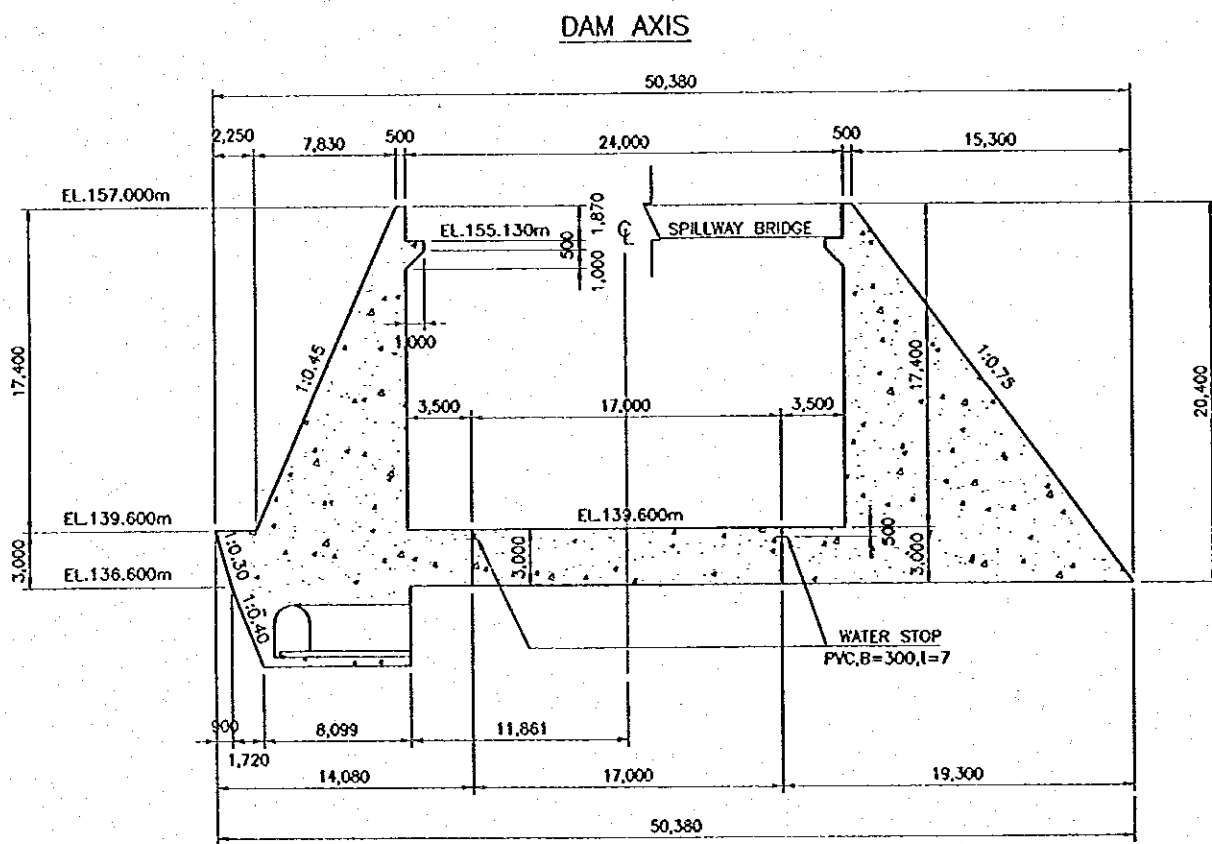
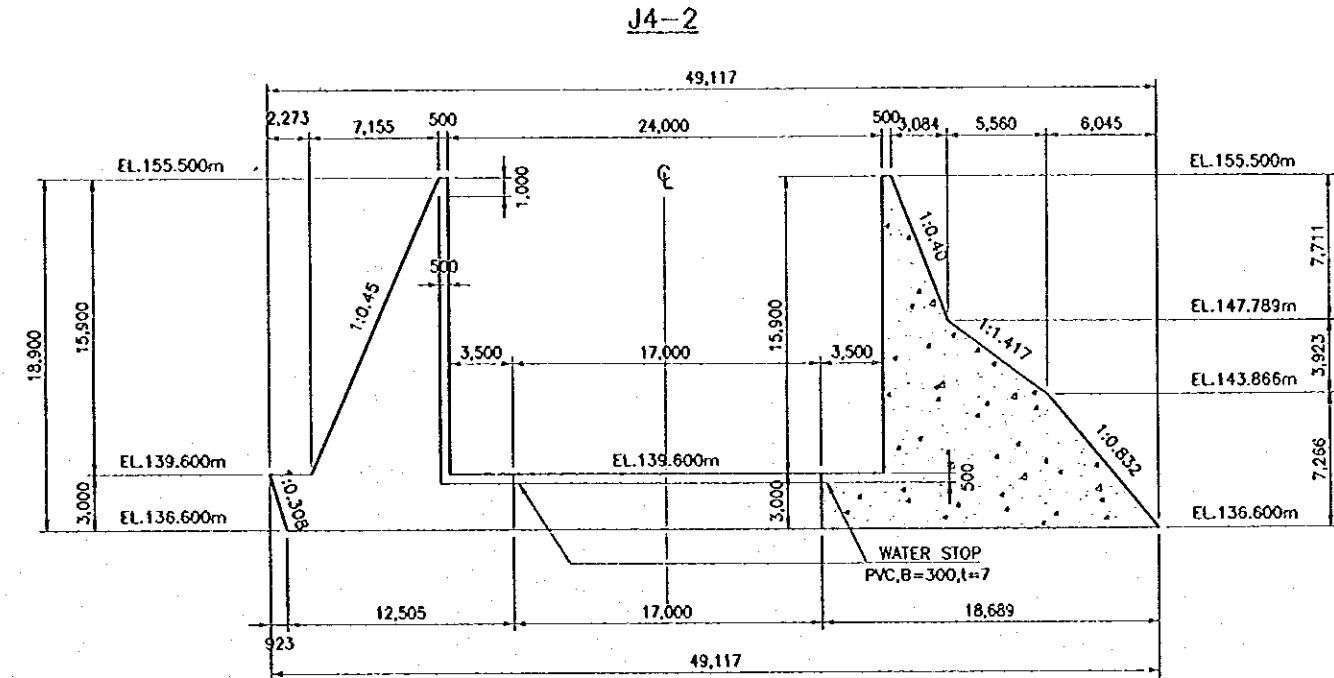
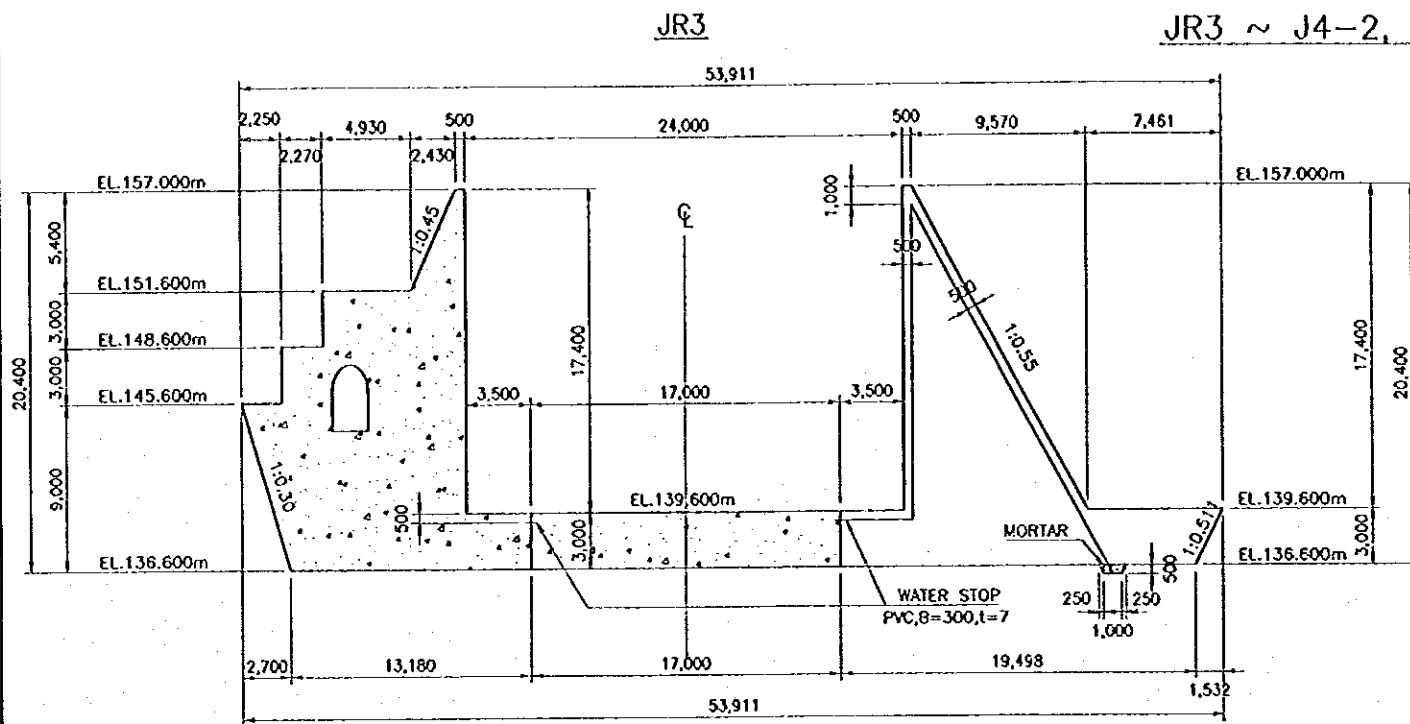


- NOTES
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
 2. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

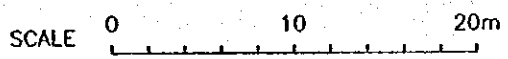


NO.	DATE	REVISIONS	ORIGINATED	DRAWN	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT JAWA BARU REGIONAL WATER RESOURCES DEVELOPMENT PROJECT : JATIBARANG DAM CONSTRUCTION COMPONENT : SPILLWAY OVERFLOW WEIR AND SIDE CHANNEL STRUCTURAL DETAIL		PROJECT NO. 97 SHEET NO. 97 CONTRACT NO.
SAFARI INTERNATIONAL COOPERATION AGENCY PT. INDOCONSULTING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL JAWA BARU REGIONAL WATER RESOURCES DEVELOPMENT PROJECT : JATIBARANG DAM CONSTRUCTION COMPONENT : SPILLWAY OVERFLOW WEIR AND SIDE CHANNEL STRUCTURAL DETAIL	DESIGNED CHECKED DATE	PROJECT MANAGER

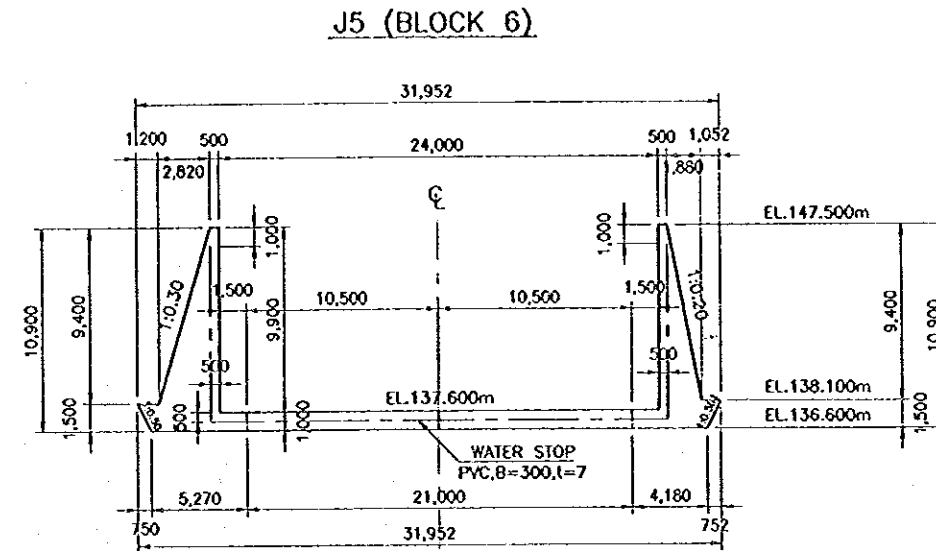
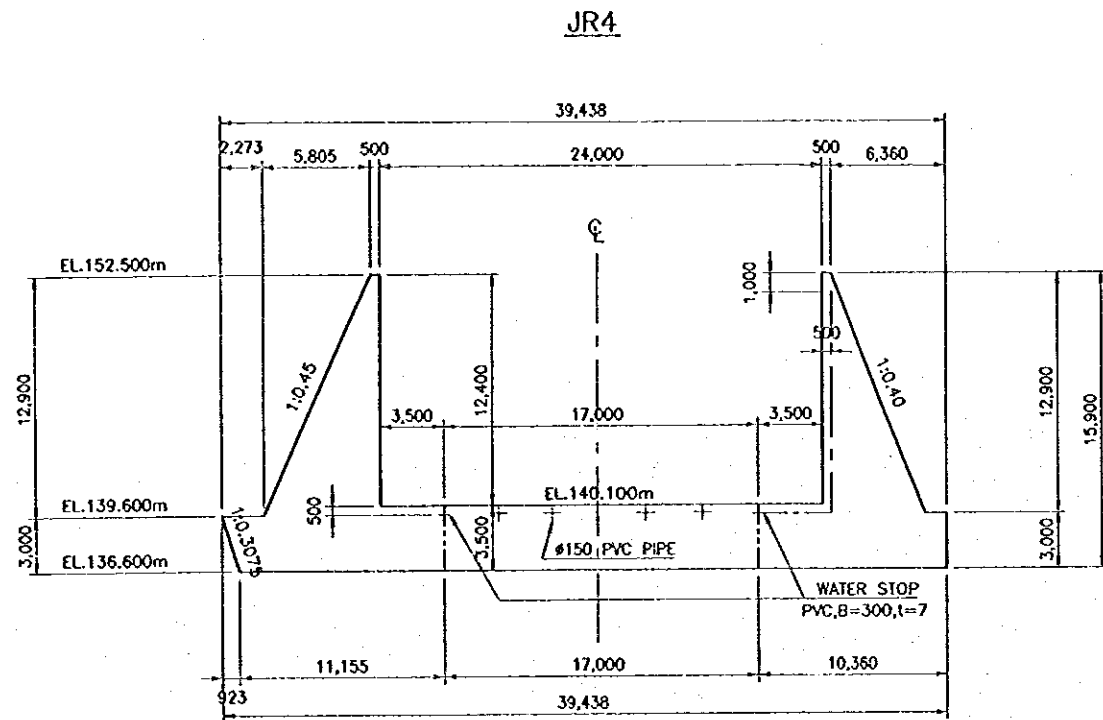


NOTES
 1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
 2. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

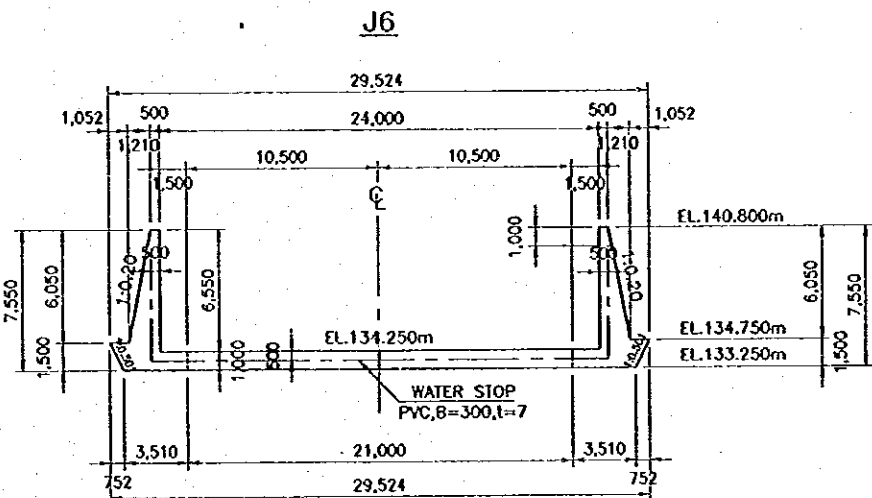
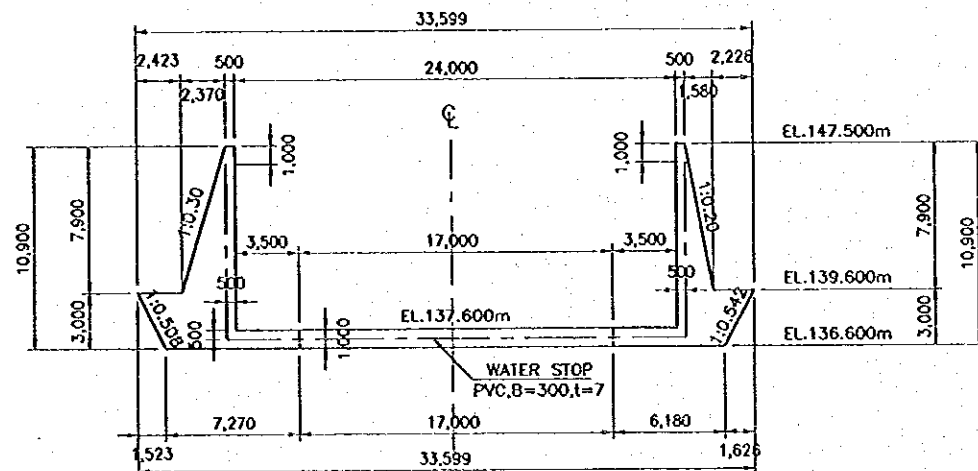


NO.	DATE	REVISIONS	OUTLINE	DESIGNED	APPROVED

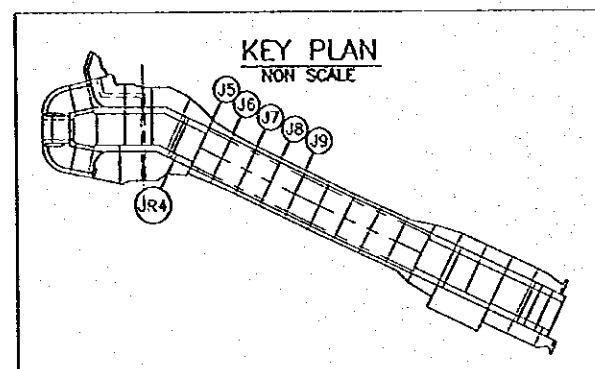
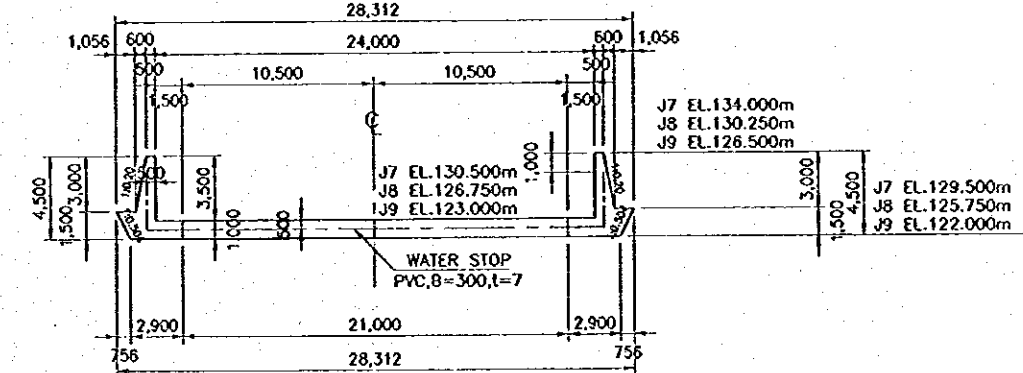
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IRATANSILUNA FLOOD CONTROL PROJECT COMPONENT: JATIBARANG DAM CONSTRUCTION SPILLWAY CONTROL PORTION STRUCTURAL DETAILS		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG, IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CIVIL ENGINEERING COL. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PACIFIC INTERNATIONAL, INC.		DISTRICT SEMARANG CITY
DESIGNED CHECKED DRAWN PROJECT MANAGER		DRAWING NO. JD-PI-SP-SI-2 SHEET NO. 98 DATE CONTRACT NO.



J5 (BLOCK 5)



J7, J8, J9



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

REFERENCE DRAWING

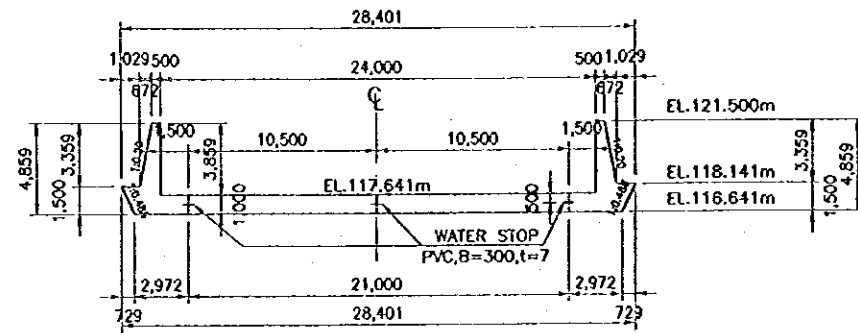
JD-P1-SP-S1-4 SPILLWAY CHUTE STRUCTURAL DETAILS (2/2)

SCALE 0 10 20m

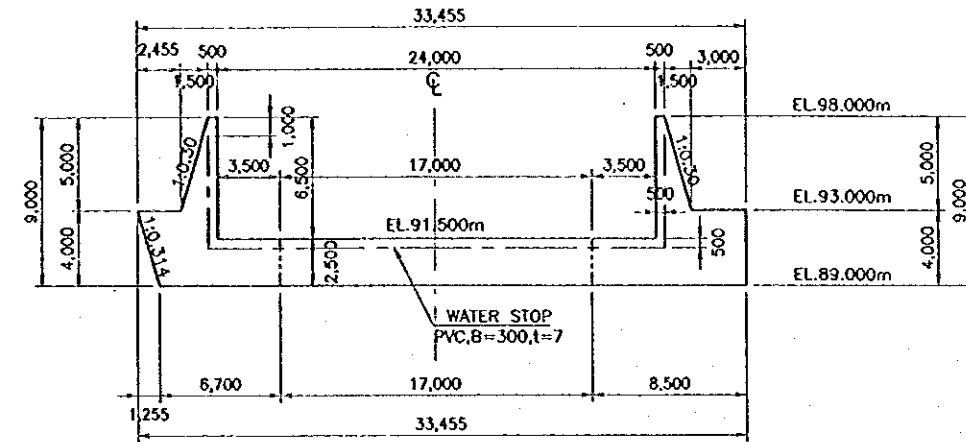
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IRATUNSELURA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY CHUTE STRUCTURAL DETAILS (1/2)		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
DRAWING NO. JD-P1-SP-S1-3 SHEET NO. 99		DATE CONTRACT NO.
UJAF INTERNATIONAL COOPERATION AGENCY CTE ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL JAPAN INTERNATIONAL INC.	DESIGNED CHECKED	PROJECT MANAGER

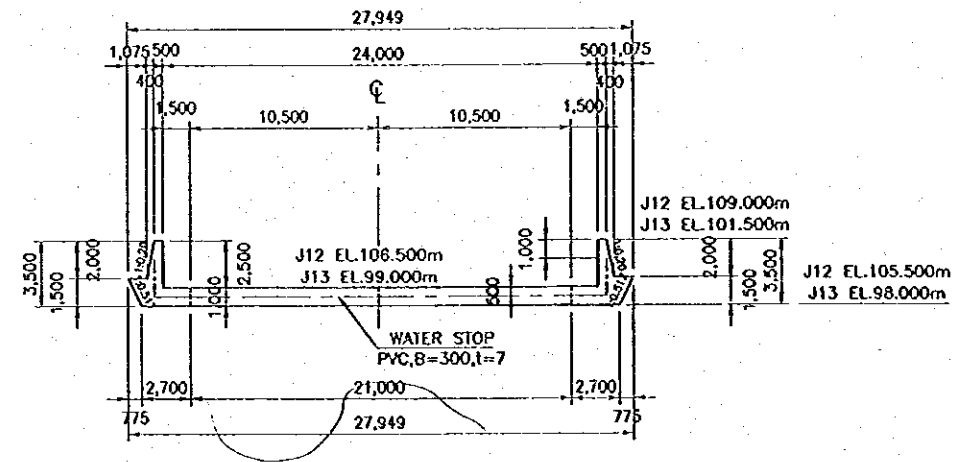
J10+5.000m



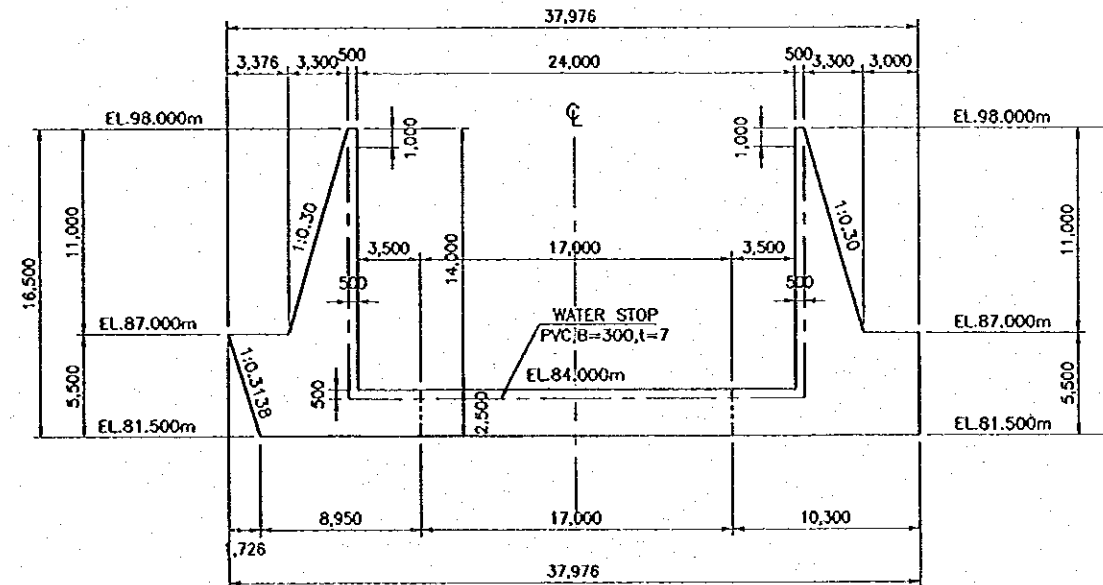
J14 (BLOCK 15)



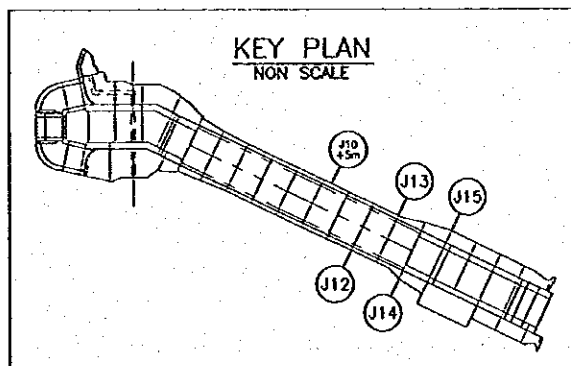
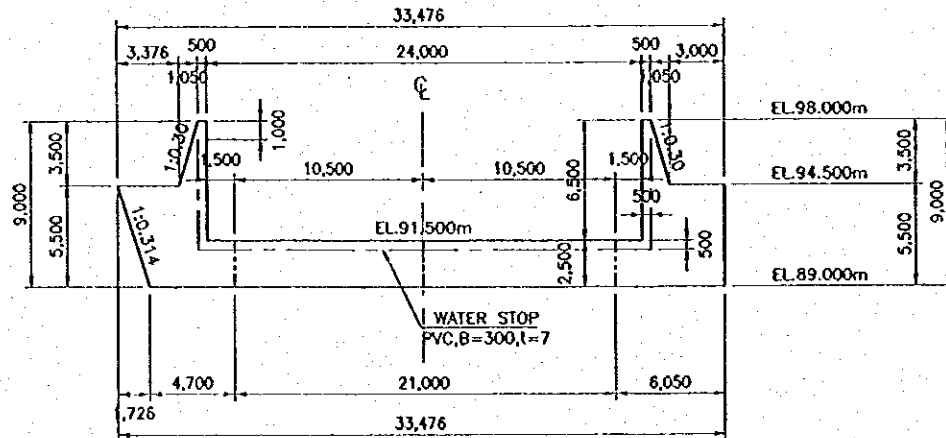
J12, J13



J15 (BLOCK 15)



J14 (BLOCK 14)

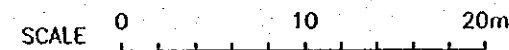


NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

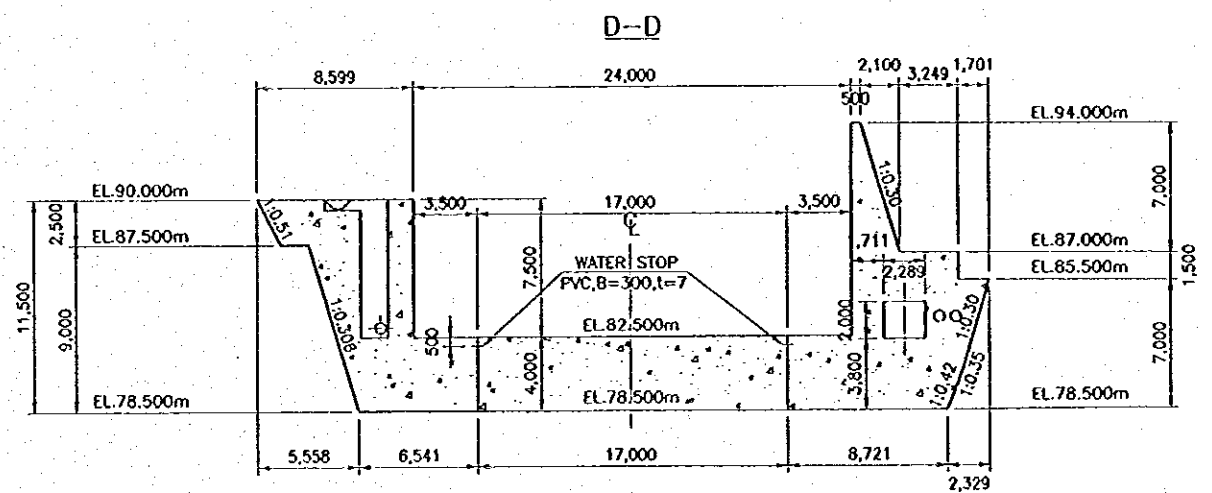
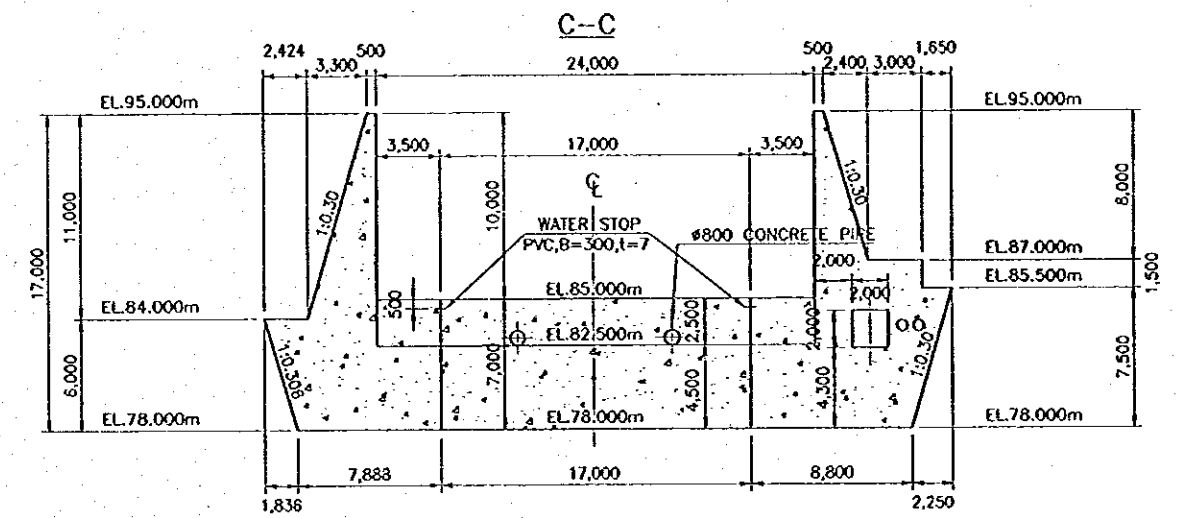
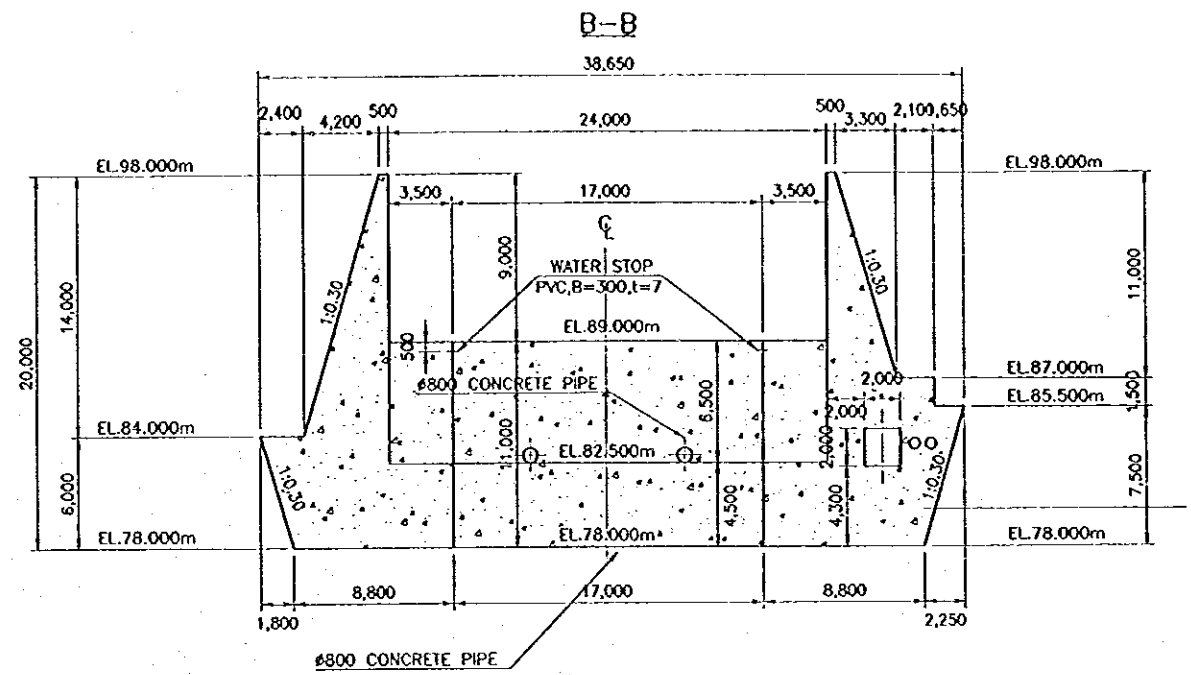
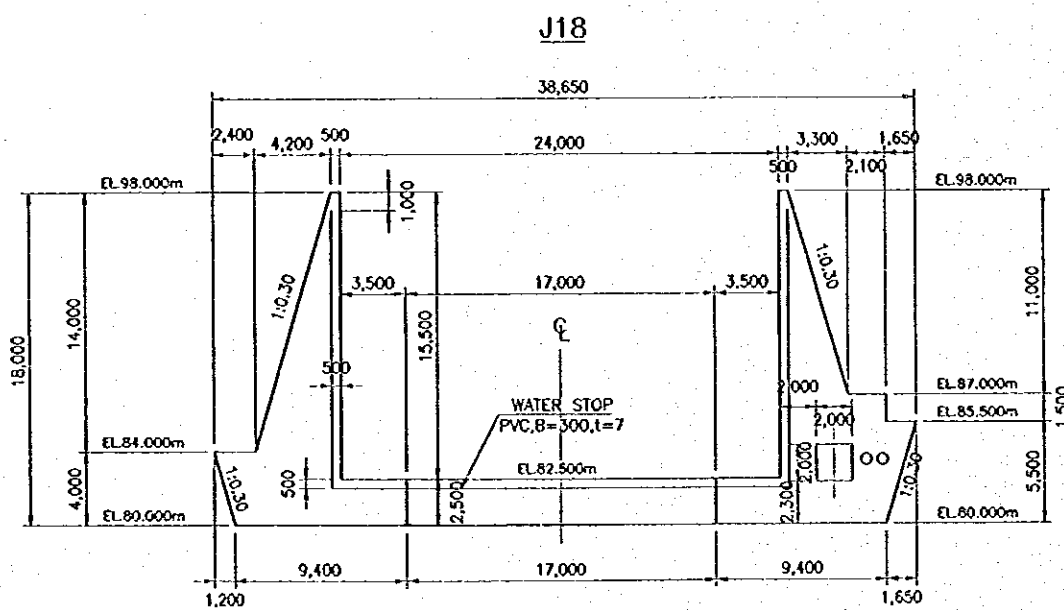
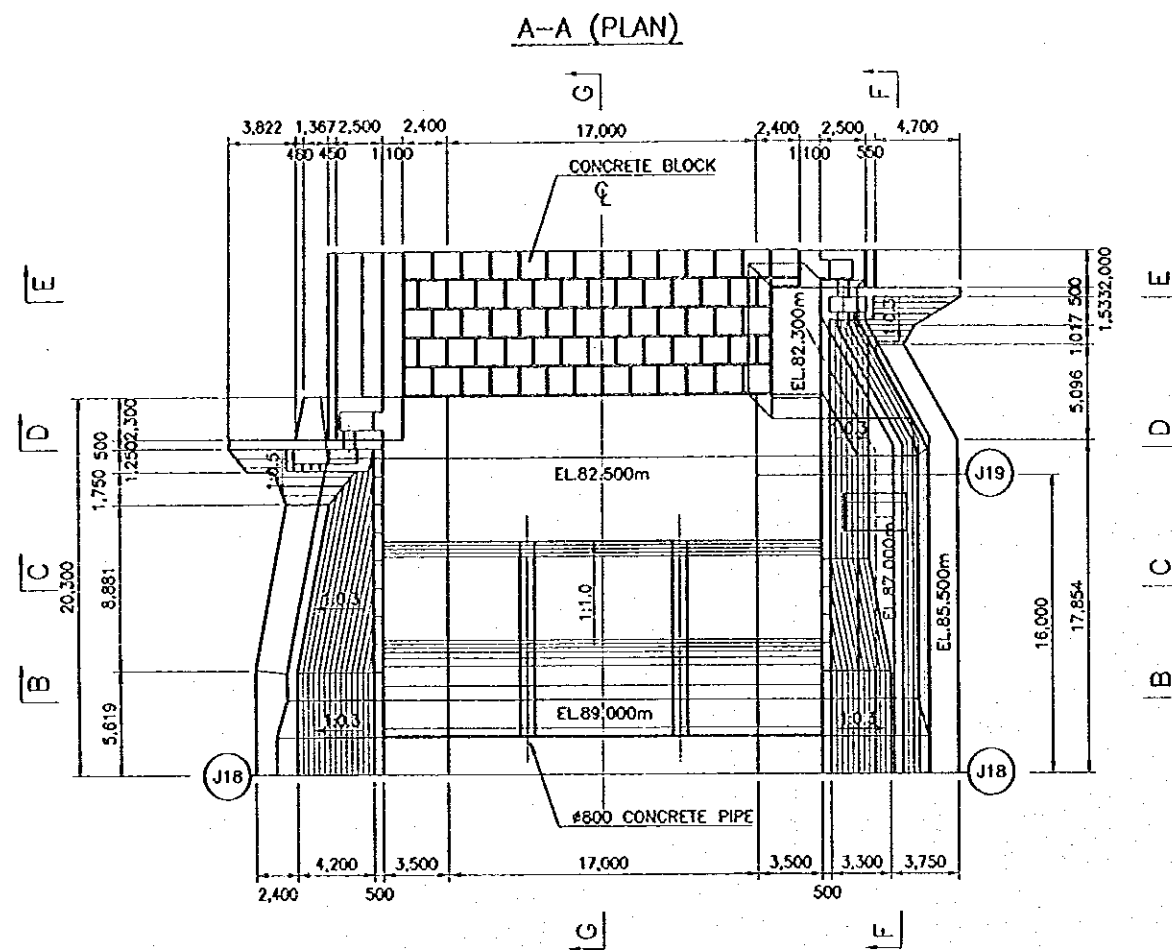
REFERENCE DRAWING

JD-P1-SP-S1-3 SPILLWAY CHUTE STRUCTURAL DETAILS (1/2)



NO.	DATE	REVISIONS	ORDERED BY	DESIGNED BY	APPROVED BY

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT TRATUNSELURA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY CHUTE STRUCTURAL DETAILS (2/2)		PROVIDER CENTRAL JAWA PROJECT NAME TRATUNSELURA FLOOD CONTROL AND WATER RESOURCE DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. JD-P1-SP-S1-4 SHEET NO. 100
LAFAR INTERNATIONAL COOPERATIVE AGENCY CIL ENGGING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PACIFIC INTERNATIONAL INC. CHIEF OF PLANNING AND DESIGN	DESIGNED CHECKED APPROVED	DATE CONTRACT NO.



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

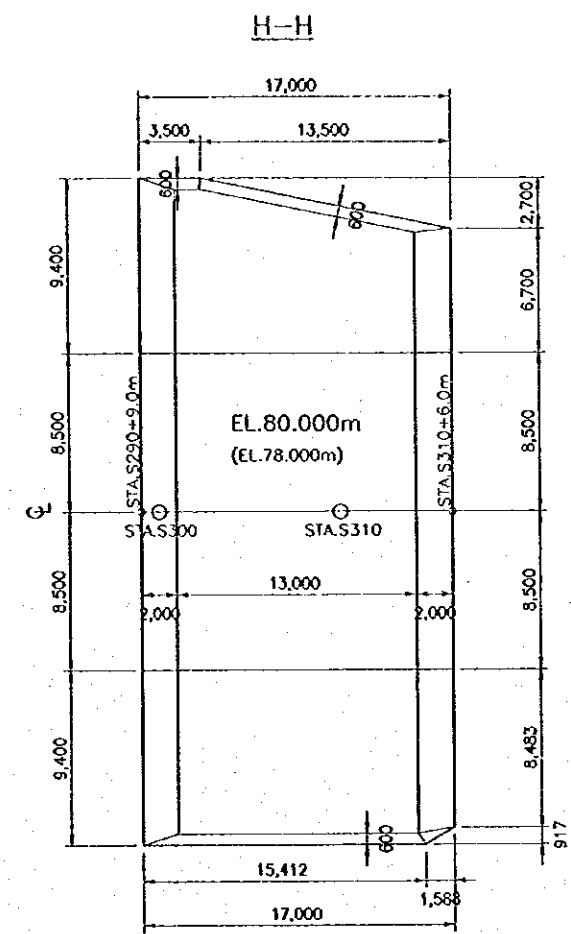
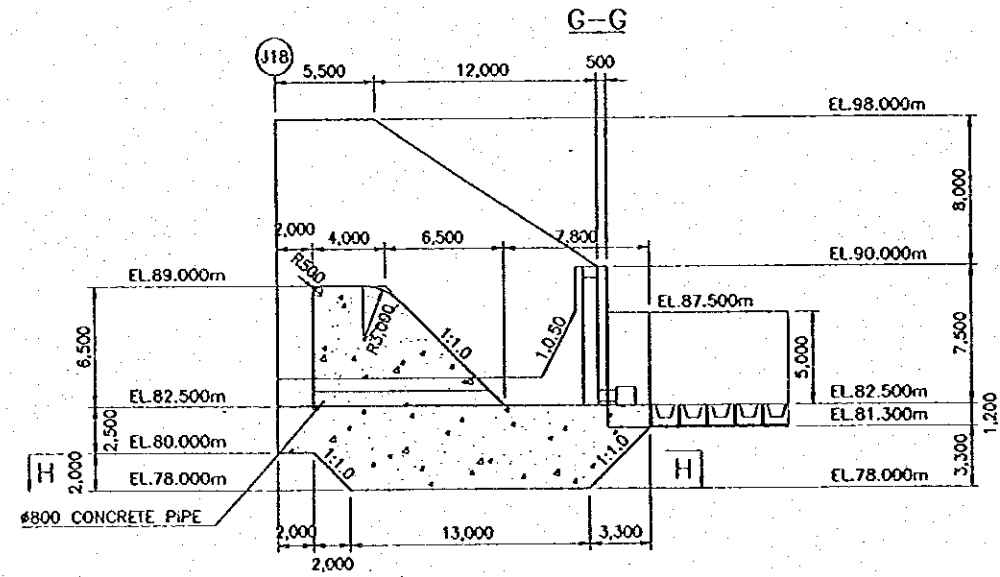
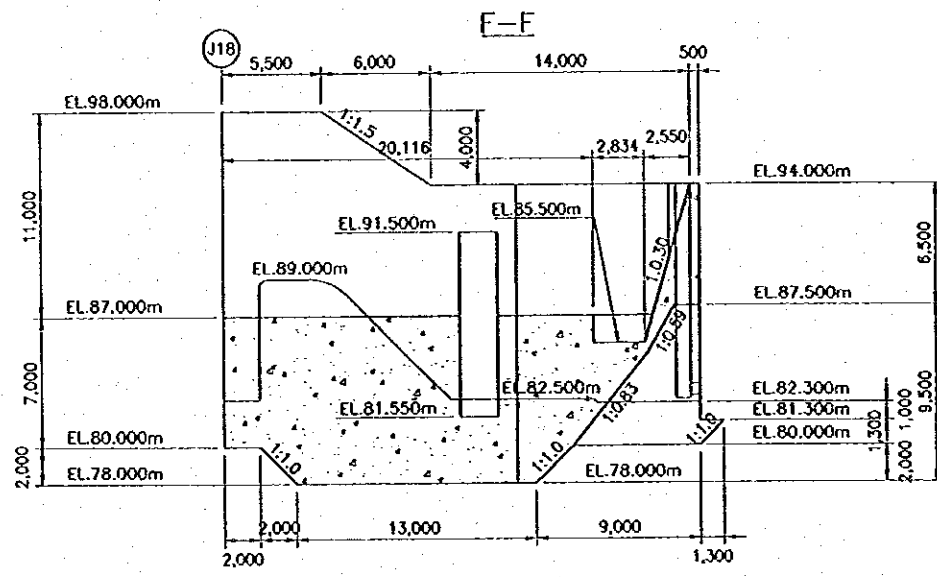
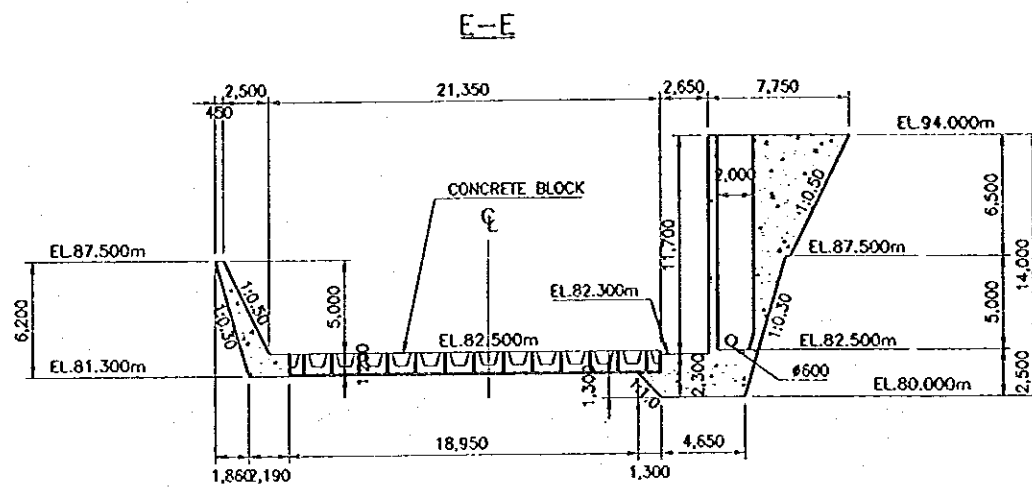
REFERENCE DRAWINGS

1. JD-P1-SP-St-6 SPILLWAY STILLING BASIN STRUCTURAL DETAILS (2/3)
2. JD-P1-SP-St-7 SPILLWAY STILLING BASIN STRUCTURAL DETAILS (3/3)

SCALE 0 10 20m

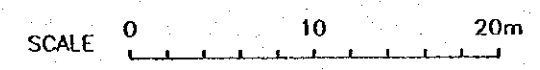
NO.	DATE	REVISIONS	ORGANIZED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF URBAN SETTLEMENT		PROVINCE CENTRAL JAVA
PRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : IATBARANG DAM CONSTRUCTION SPILLWAY STILLING BASIN STRUCTURAL DETAILS (1/3)		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
JAPAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO., LTD. PACIFIC CONSULTANTS INTERNATIONAL YAMCO INTERNATIONAL INC.		DRAWING NO. JD-P1-SP-St-5 SHEET NO. 101
DESIGNED CHECKED OFFICE OF PLANNING AND DESIGN PROJECT MANAGER		DATE CONTRACT NO.



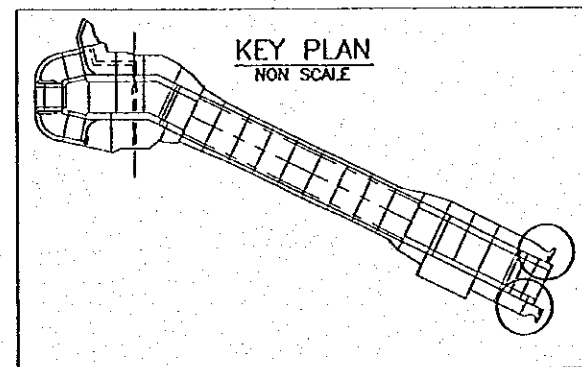
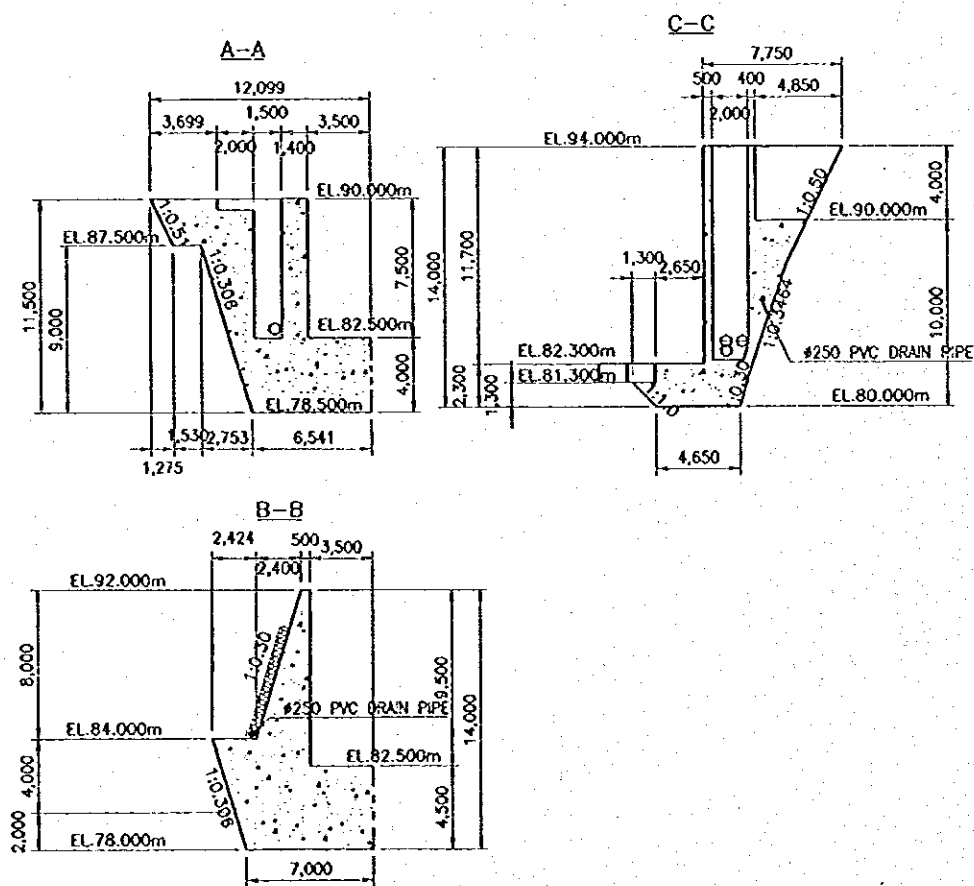
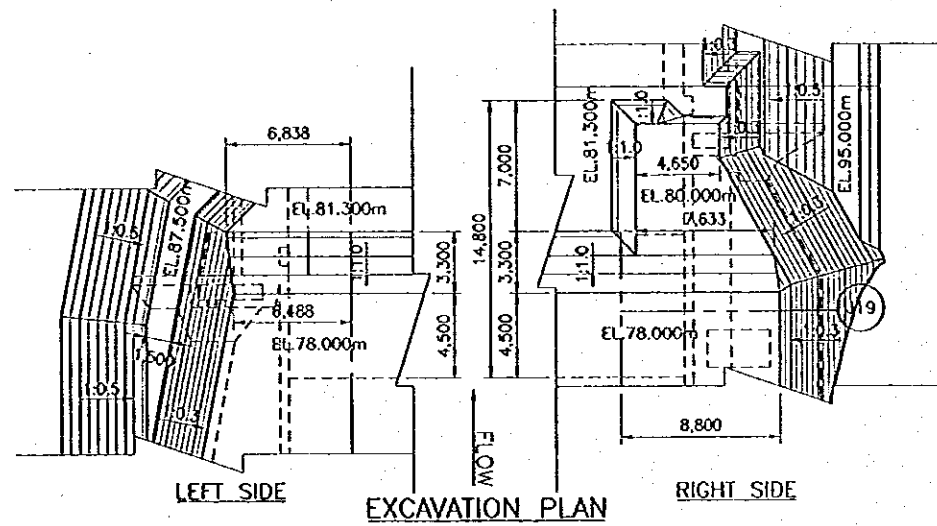
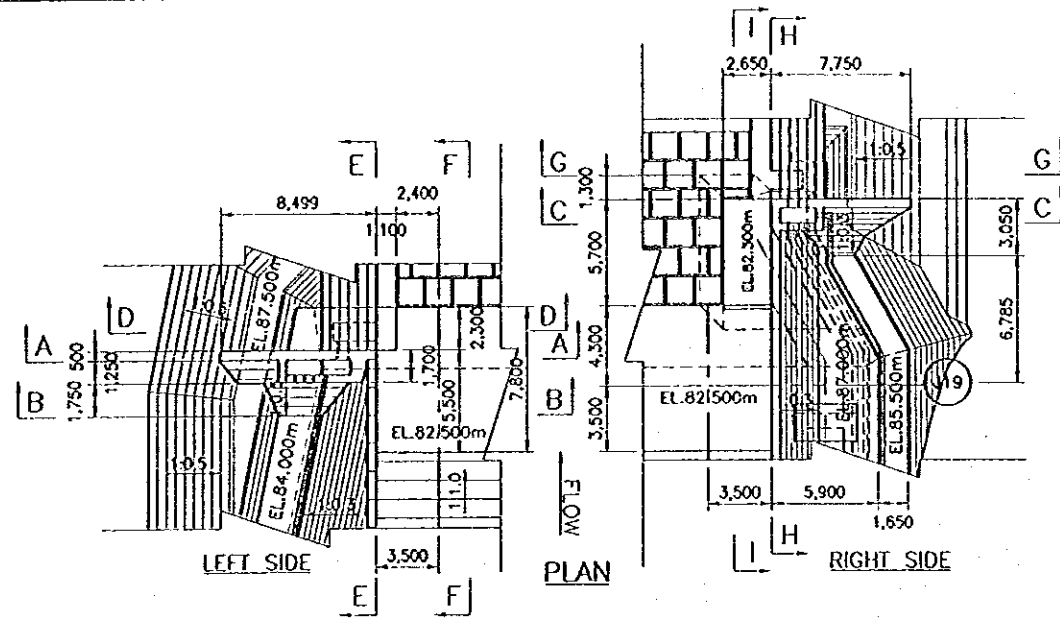
NOTES
 1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
 2. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

REFERENCE DRAWINGS
 1. JD-P1-SP-St-5 SPILLWAY STILLING BASIN STRUCTURAL DETAILS (1/3)
 2. JD-P1-SP-St-7 SPILLWAY STILLING BASIN STRUCTURAL DETAILS (3/3)



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		PROVINCE CENTRAL JAWA
DIKUSURSELUNA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY STILLING BASIN STRUCTURAL DETAILS (2/3)		PROJECT NAME FLOOD CONTROL, URBAN PLANNING AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
BAKI INTERNATIONAL COOPERATION AGENCY CITI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PAKO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
CHECKED DESIGNED APPROVED		DRAWING NO. JD-P1-SP-St-6 SHEET NO. 102
PROJECT MANAGER		DATE CONTRACT NO.



SCALE 0 10 20m

NOTES

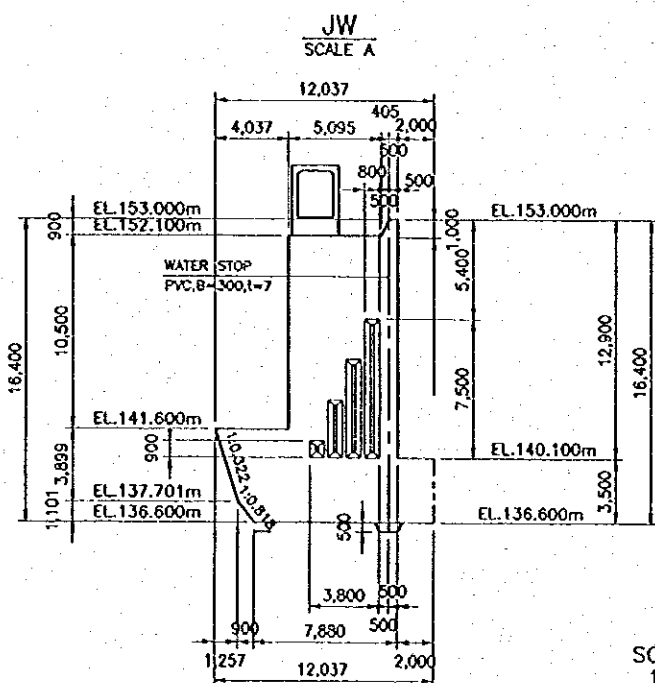
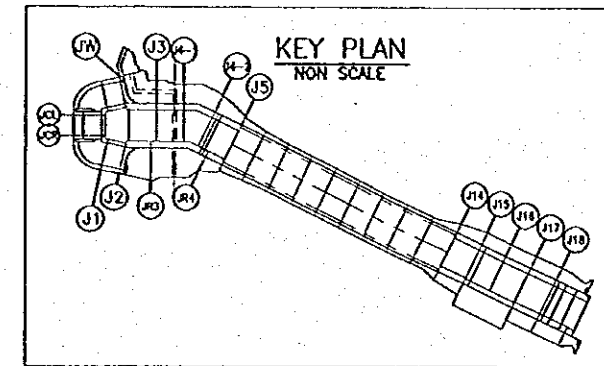
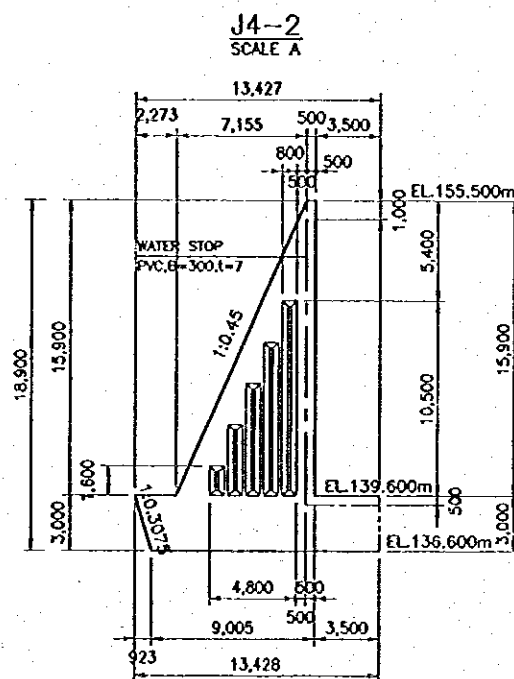
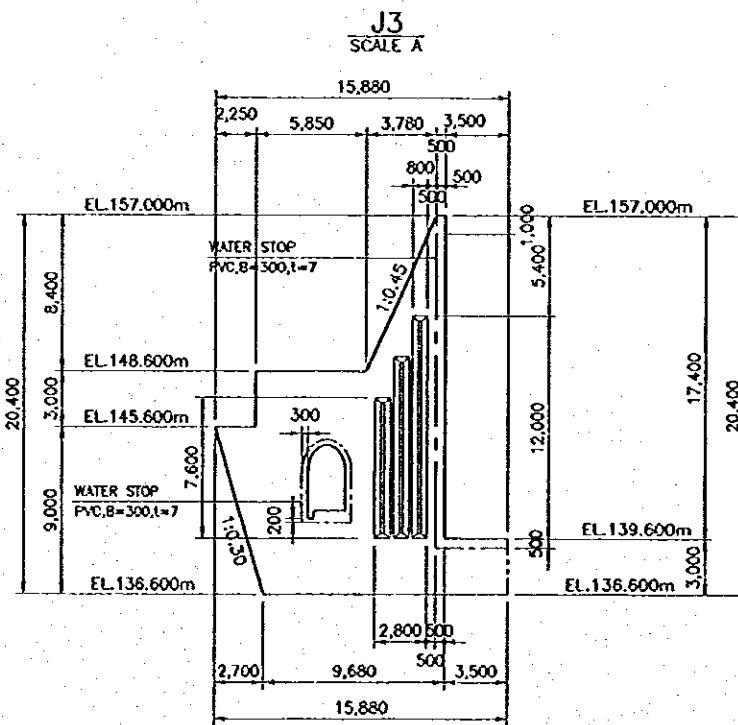
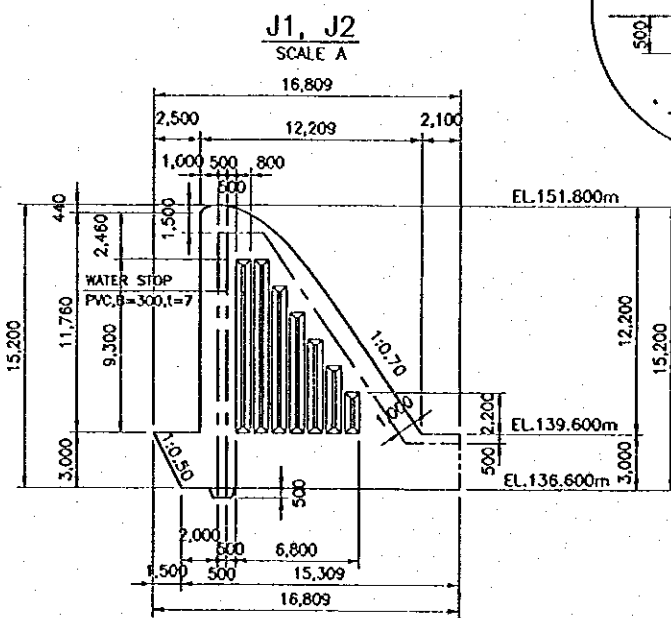
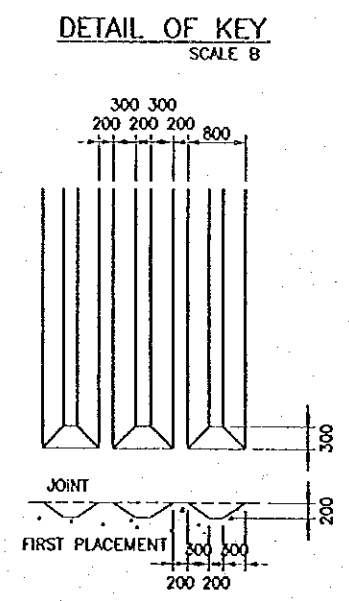
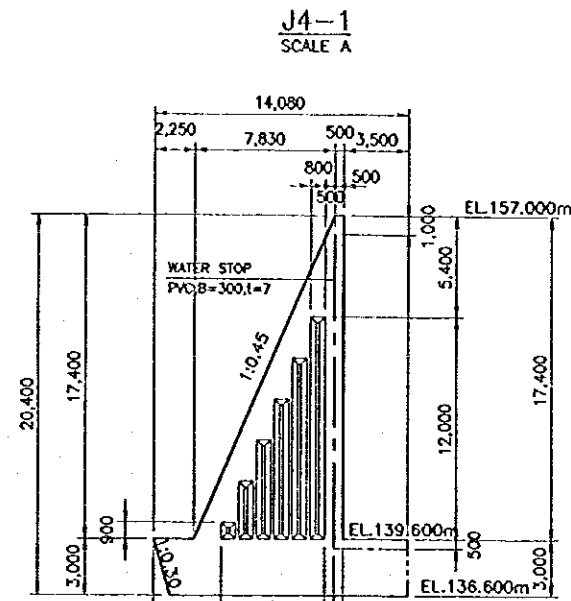
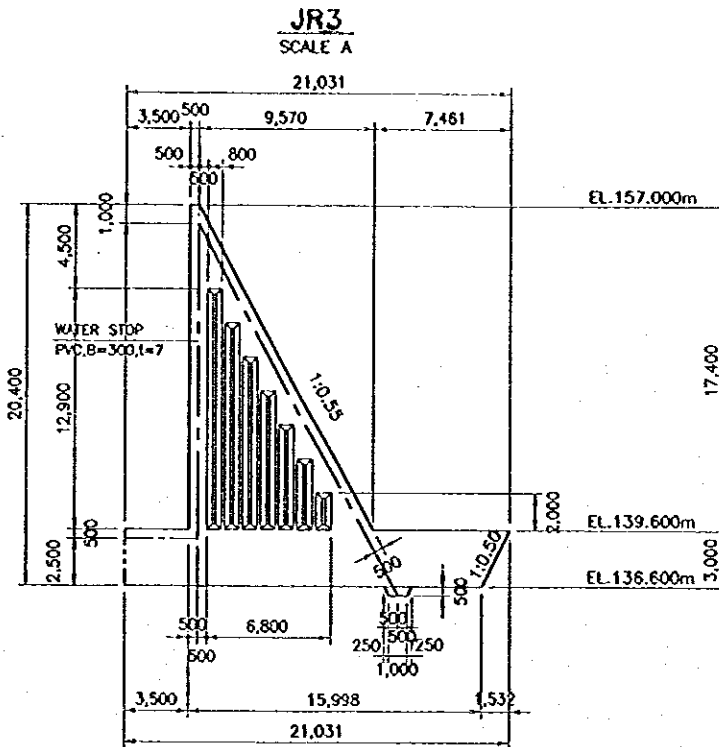
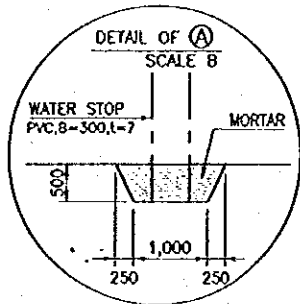
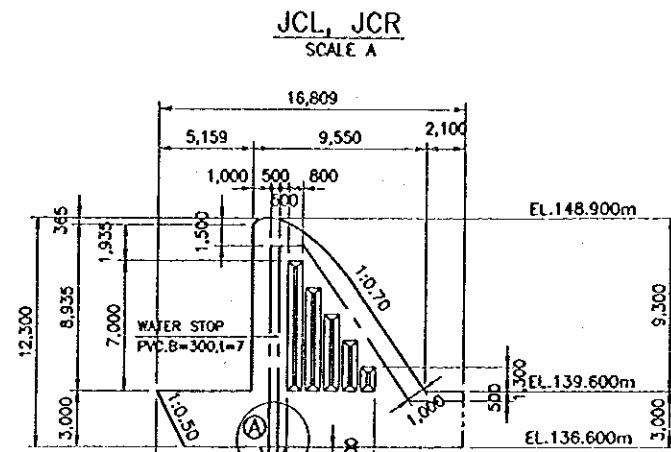
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

REFERENCE DRAWINGS

1. JD-P1-SP-SI-5 SPILLWAY STILLING BASIN STRUCTURAL DETAILS (1/3)
2. JD-P1-SP-SI-6 SPILLWAY STILLING BASIN STRUCTURAL DETAILS (2/3)

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 JAWA TUNJUNG FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
SPILLWAY STILLING BASIN STRUCTURAL DETAILS (3/3)		DRAWING NO. JD-P1-SP-SI-7 SHEET NO. 103
JAPAN INTERNATIONAL COOPERATION AGENCY CHE ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSTRUCTION INTERNATIONAL JAWA INTERNATIONAL P.C. CHIEF OF PLANNING AND DESIGN	DESIGNED CHECKED APPROVED	DATE CONTRACT NO.

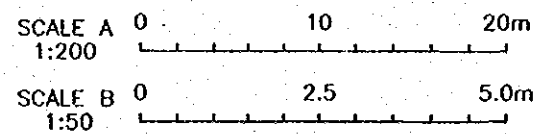


NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION

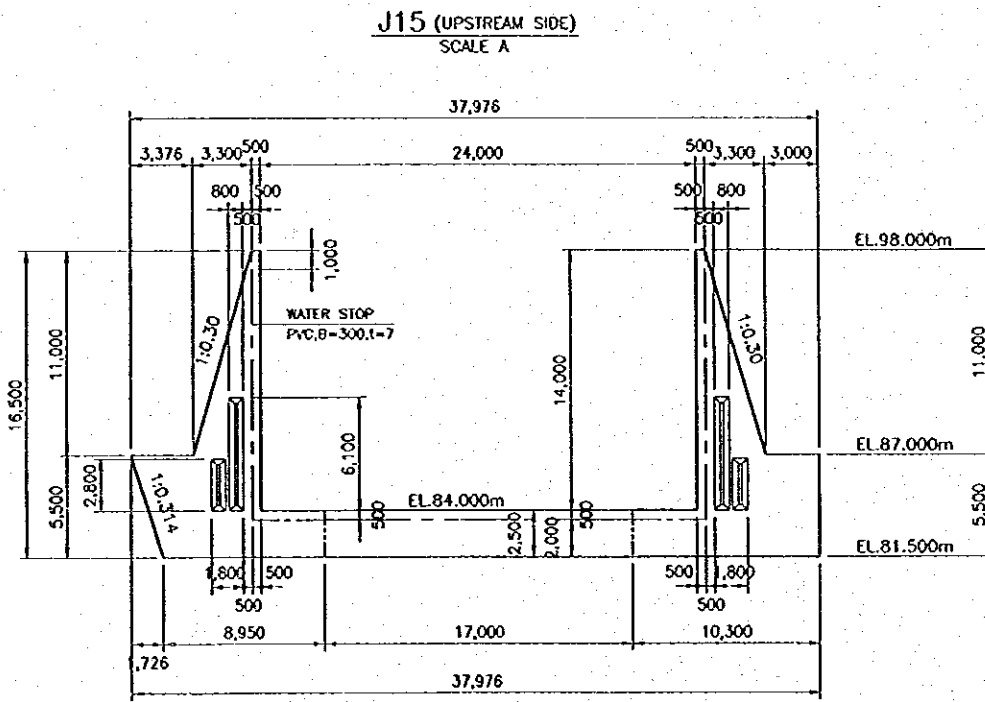
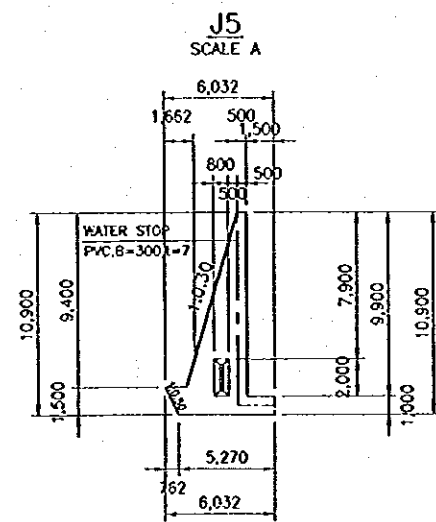
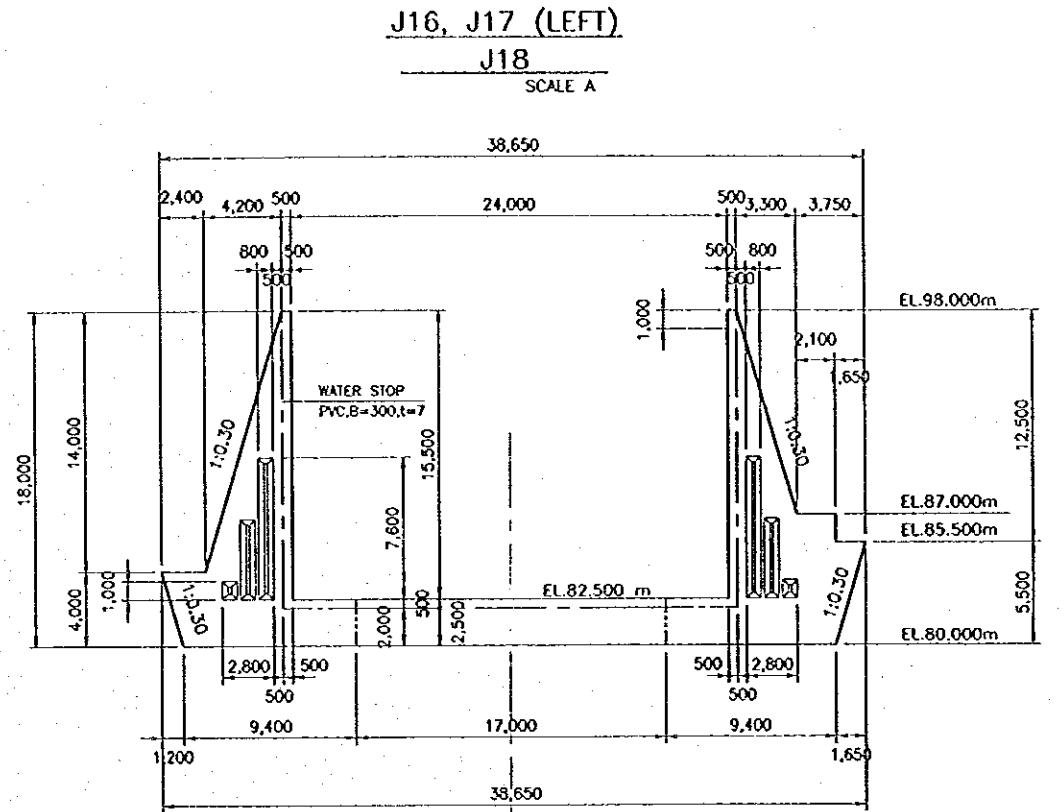
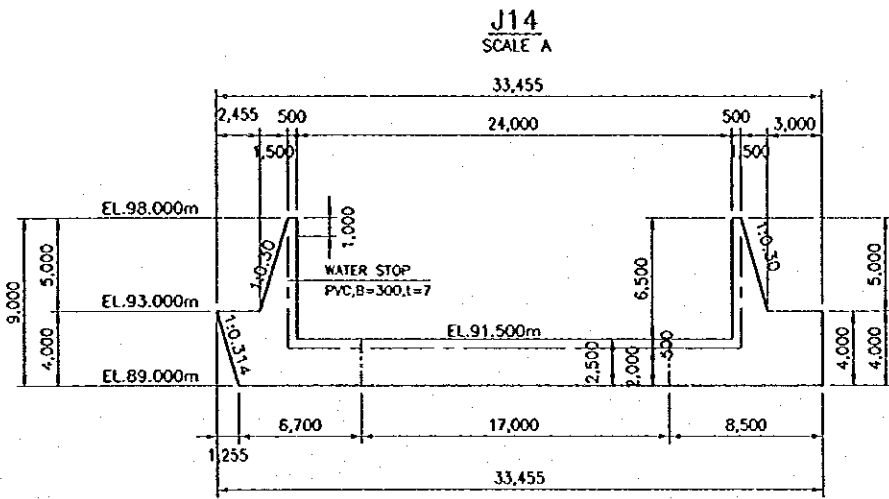
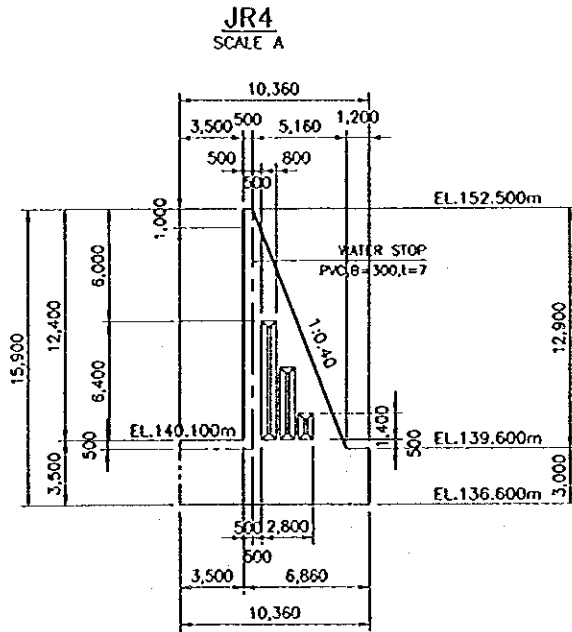
REFERENCE DRAWING

JD-P1-SP-SI-8 SPILLWAY DETAIL OF JOINT (2/2)

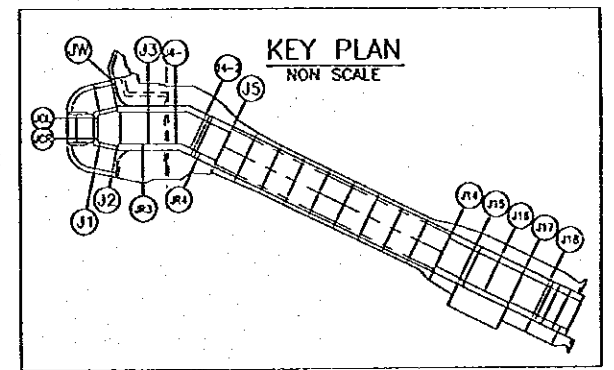
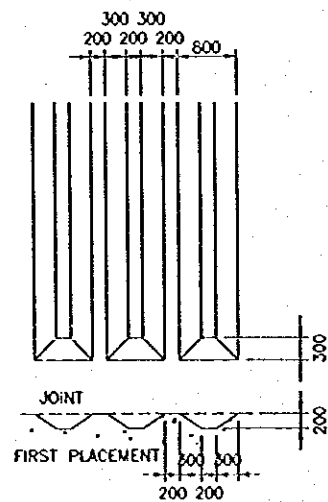


NO.	DATE	REVISIONS	CREATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT BRATUNGSILUNA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY DETAIL OF JOINT (1/2)		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. JD-P1-SP-SI-8 SHEET NO. 104 DATE CONTRACT NO.
JAPAN INTERNATIONAL COOPERATION AGENCY OJI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PACIFIC INTERNATIONAL INC.	DESIGNED CHECKED APPROVED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER	APPROVED



DETAIL OF KEY
SCALE B

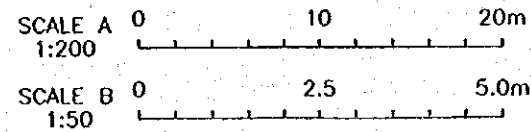


NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. SPILLWAY CONCRETE SHALL BE OF TYPE D AS PER SPECIFICATION.

REFERENCE DRAWING

JD-P1-SP-St-9 SPILLWAY DETAIL OF JOINT (1/2)



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: JATIBARANG DAM CONSTRUCTION		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
SPILLWAY DETAIL OF JOINT (2/2)		DISTRICT SEMARANG CITY
DRAWING NO. JD-P1-SP-St-9 SHEET NO. 105		DATE CONTRACT NO.
LIAISON INTERNATIONAL COOPERATION AGENCY CIVIL ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PAKO INTERNATIONAL INC.		CHECKED DATE
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		APPROVED DATE