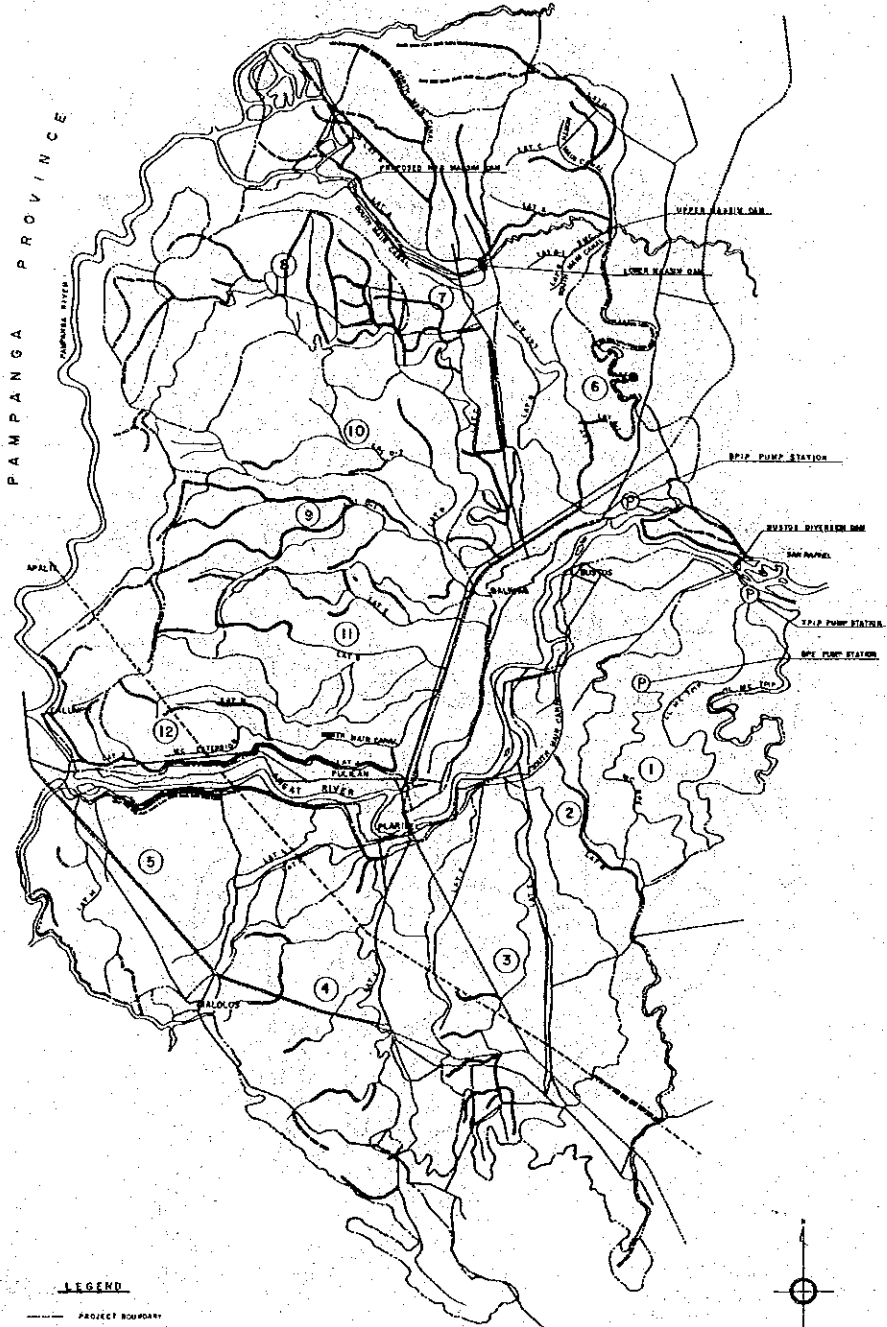


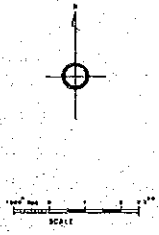
DRAWINGS

LOCATION MAP OF IRRIGATION CANAL



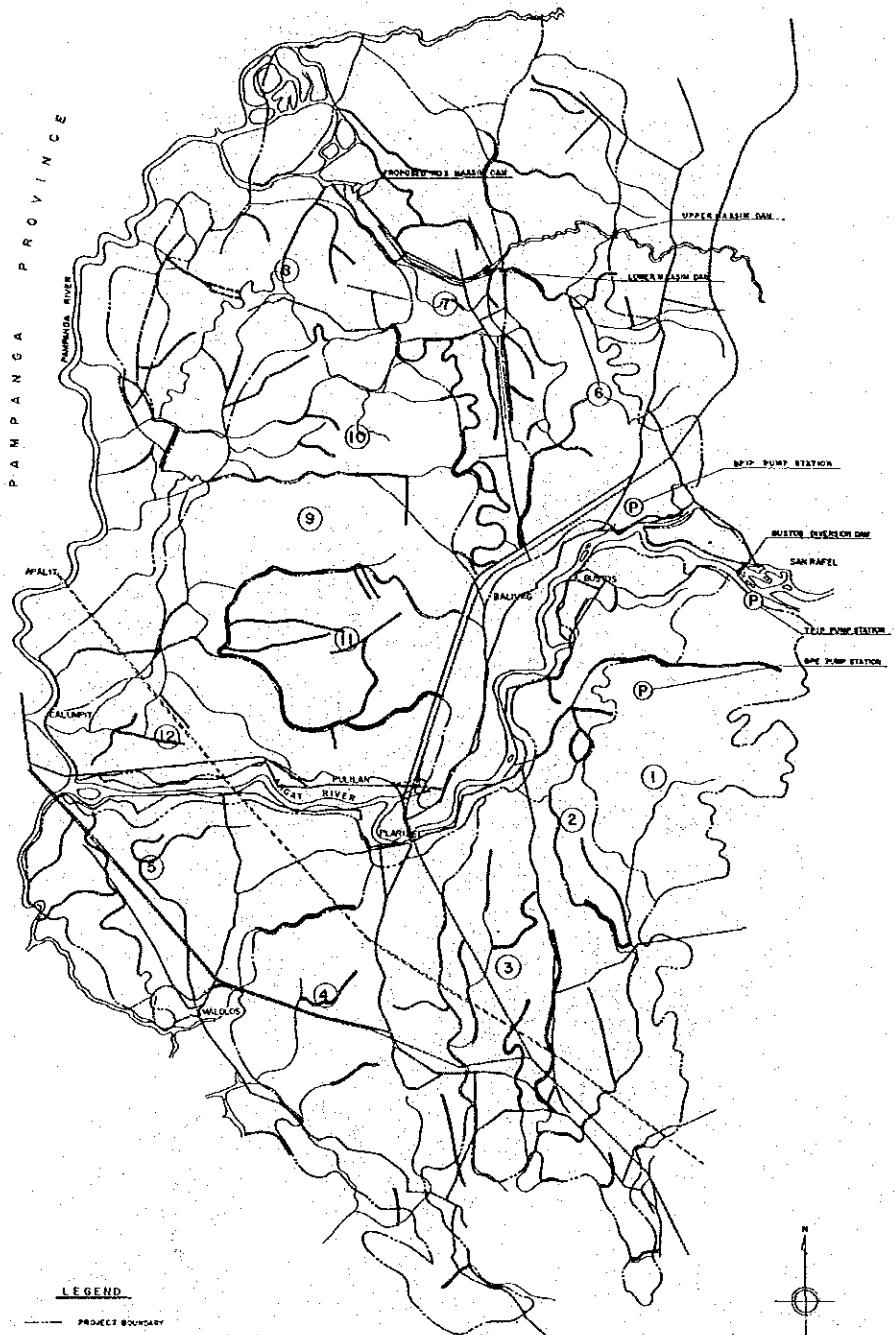
LEGEND

- PROJECT BOUNDARY
- WORKING STATION BOUNDARY
- == ROAD
- RAILWAY
- ==== EXPRESS HIGHWAY
- ③ WORKING STATION
- EXISTING IRRIGATION CANAL
- IRRIGATION CANAL FOR REHABILITATION
- IRRIGATION CANAL FOR NEW CONSTRUCTION



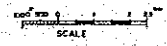
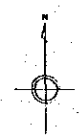
REPUBLIC OF THE PHILIPPINES	
NATIONAL IRRIGATION ADMINISTRATION	
AMRIS	
LOCATION MAP OF IRRIGATION CANAL	
DRAWING NO.	002
JAPAN INTERNATIONAL COOPERATION AGENCY	

LOCATION MAP OF CREEK AND DRAINAGE CANAL



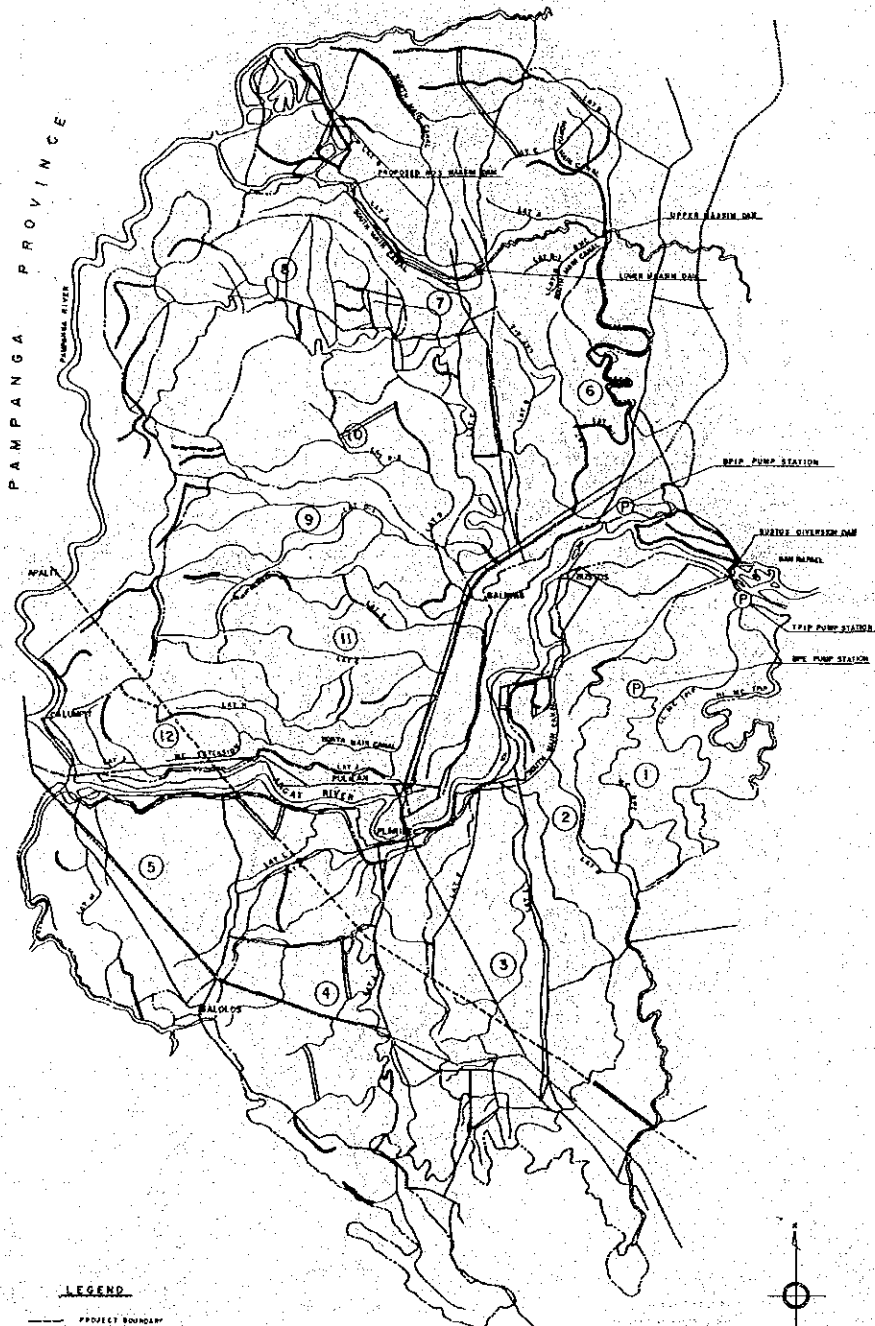
LEGEND

- PROJECT BOUNDARY
- WORKING STATION BOUNDARY
- == ROAD
- == RAILWAY
- ==== EXPRESS HIGHWAY
- ⊙ WORKING STATION
- EXISTING CREEK AND DRAINAGE CANAL
- CREEK AND DRAINAGE CANAL FOR REHABILITATION
- CREEK AND DRAINAGE CANAL FOR NEW CONSTRUCTION



REPUBLIC OF THE PHILIPPINES	
NATIONAL IRRIGATION ADMINISTRATION	
AMRIS	
LOCATION MAP OF CREEK AND DRAINAGE CANAL	
DESIGNED BY	002
JAPAN INTERNATIONAL COOPERATION AGENCY	

LOCATION MAP OF SERVICE ROAD ALONG
IRRIGATION CANAL AND ACCESS ROAD

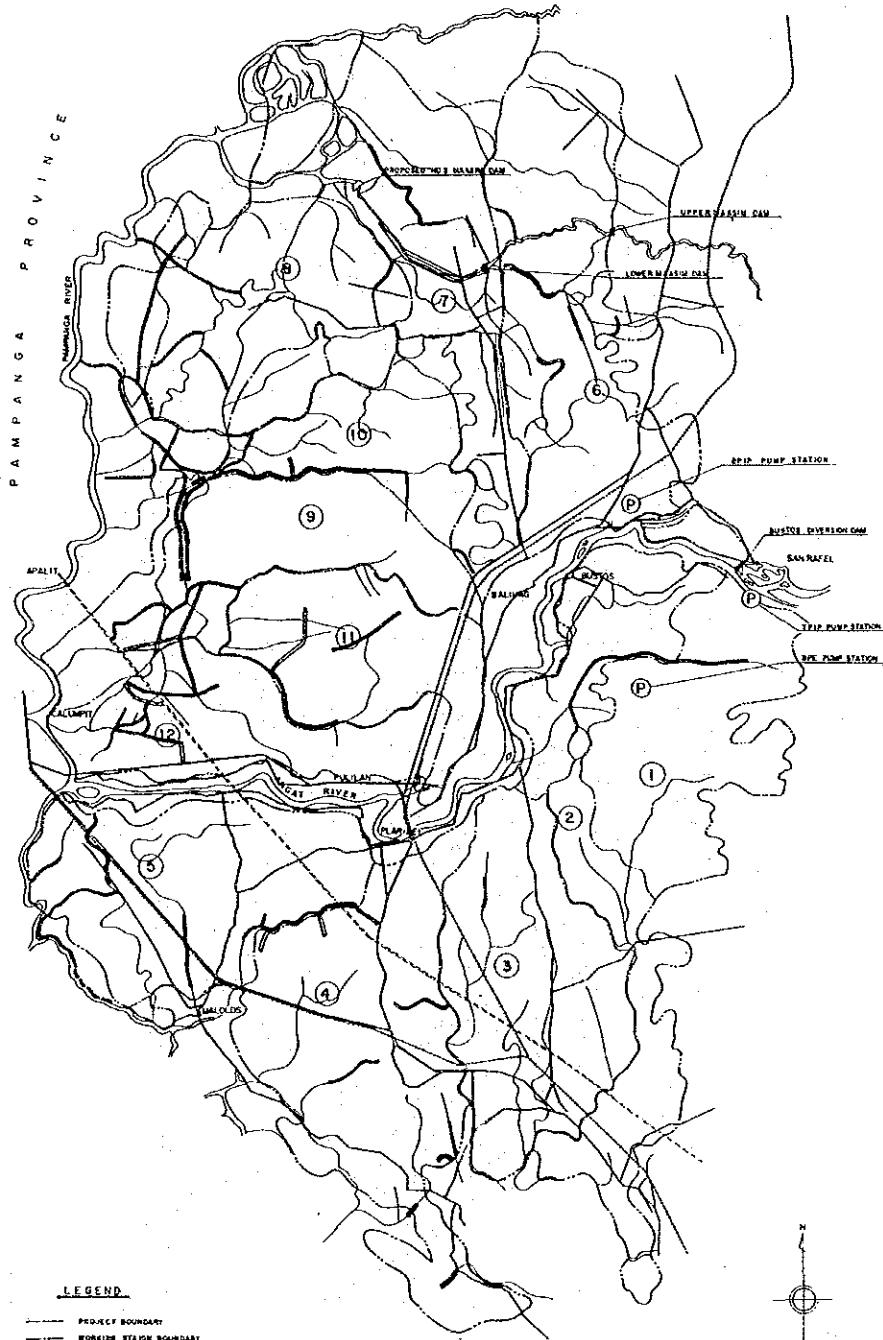


LEGEND

- PROJECT BOUNDARY
- WORKING STATION BOUNDARY
- == ROAD
- CANAL
- ==== EXPRESS HIGHWAY
- ③ WORKING STATION
- EXISTING IRRIGATION CANAL
- SERVICE ROAD FOR NEW CONSTRUCTION
- ACCESS ROAD FOR NEW CONSTRUCTION
- SERVICE ROAD FOR REHABILITATION

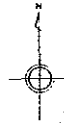
REPUBLIC OF THE PHILIPPINES
NATIONAL IRRIGATION ADMINISTRATION
ANDRO
LOCATION MAP OF SERVICE ROAD ALONG
IRRIGATION CANAL AND ACCESS ROAD
DRAWING NO. 001
JAPAN INTERNATIONAL COOPERATION AGENCY

LOCATION MAP OF SERVICE ROAD ALONG CREEK AND DRAINAGE CANAL, AND ACCESS ROAD



LEGEND

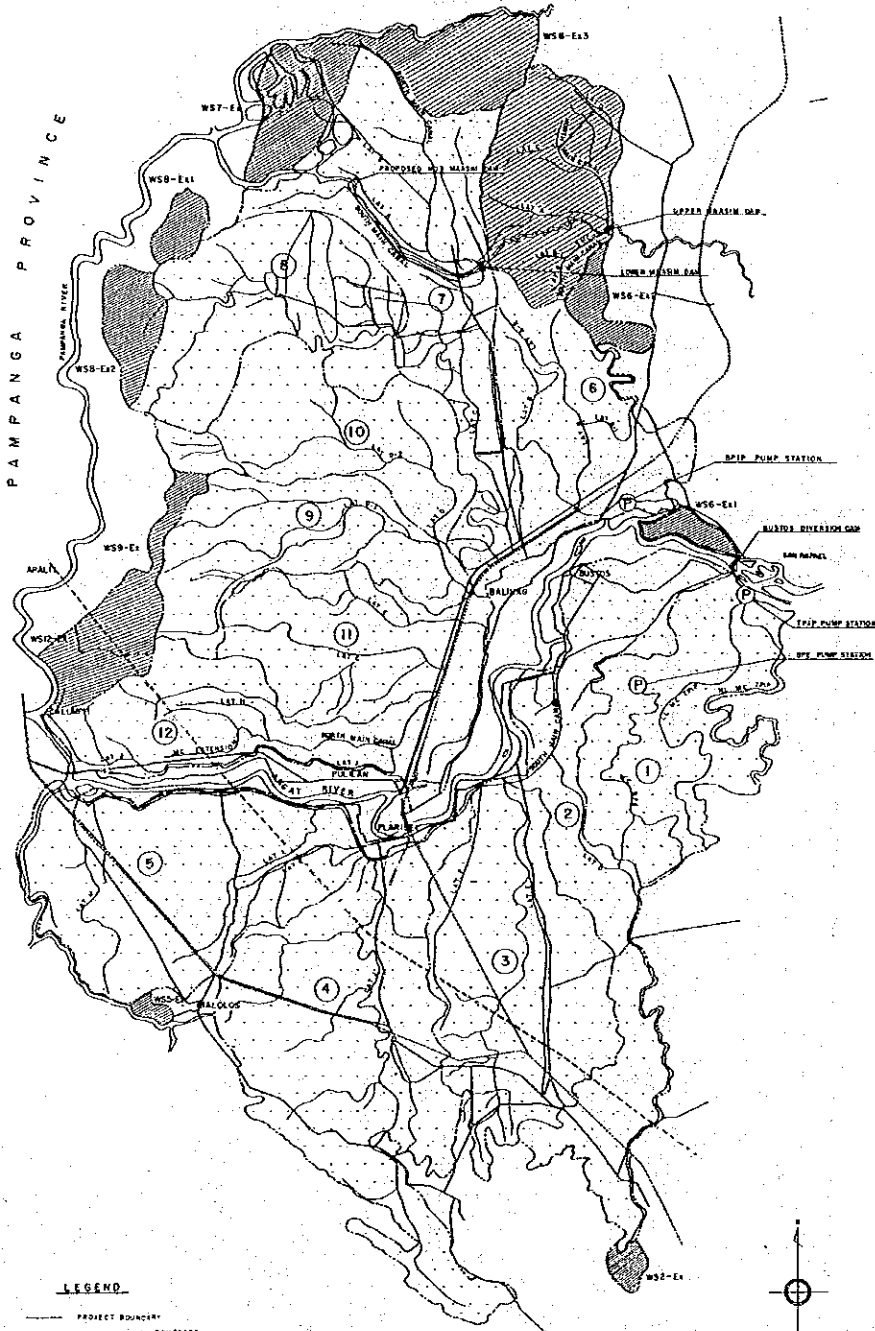
- PROTECT BOUNDARY
- WORKING STATION BOUNDARY
- ROAD
- RAILWAY
- EXPRESS HIGHWAY
- ③ WORKING STATION
- EXISTING DRAINAGE CANAL AND CREEK
- SERVICE ROAD FOR NEW CONSTRUCTION
- ACCESS ROAD FOR NEW CONSTRUCTION
- SERVICE ROAD FOR REHABILITATION
- ACCESS ROAD FOR REHABILITATION



0 100 200 300 400 500 600 700 800 900 1000
SCALE

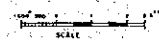
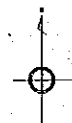
REPUBLIC OF THE PHILIPPINES
NATIONAL IRRIGATION ADMINISTRATION
AMRIS
LOCATION MAP OF SERVICE ROAD ALONG
CREEK AND DRAINAGE CANAL AND ACCESS ROAD
DRAWING NO. 004
JAPAN INTERNATIONAL COOPERATION AGENCY

CLASSIFICATION MAP OF ON FARM DEVELOPMENT

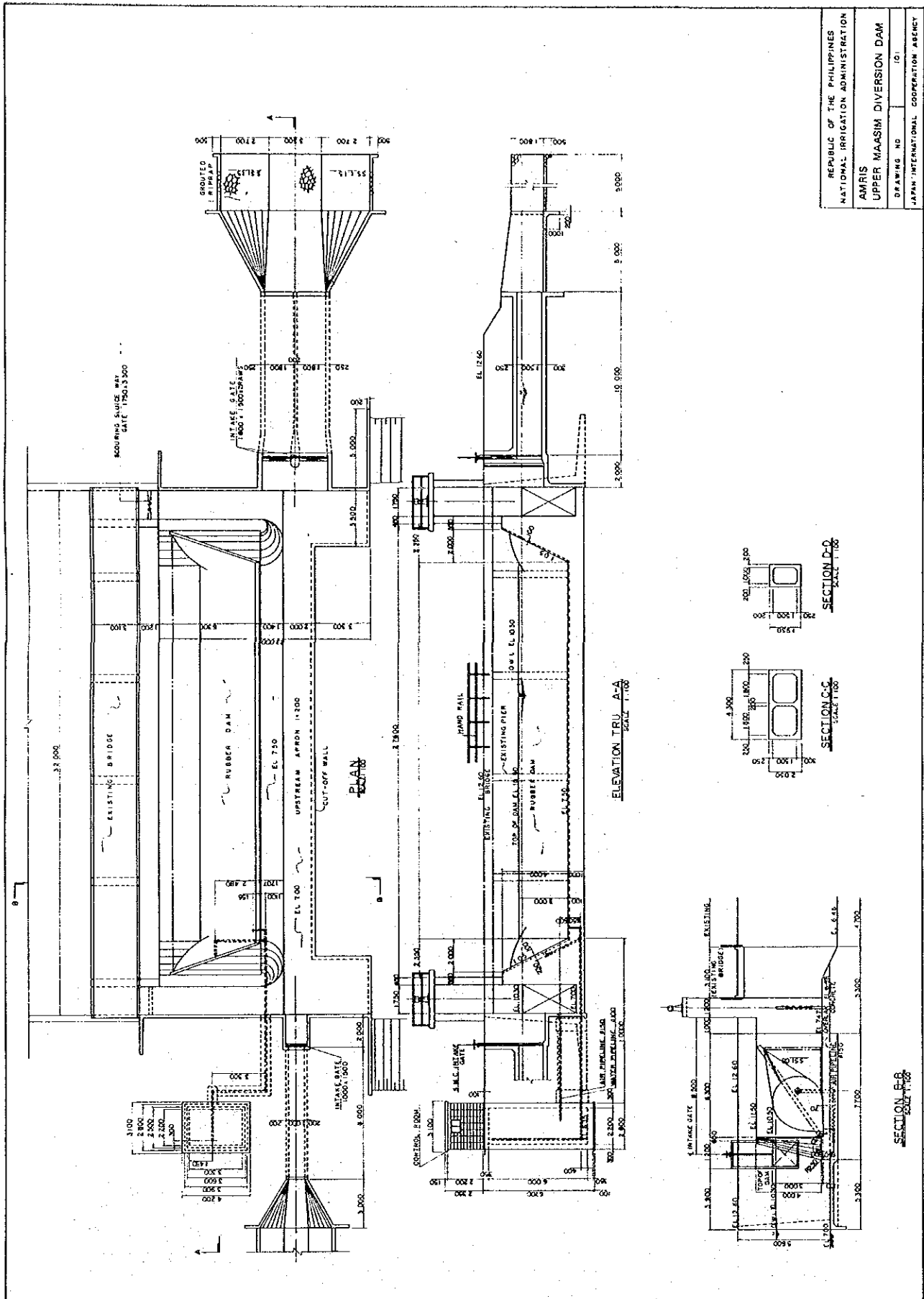


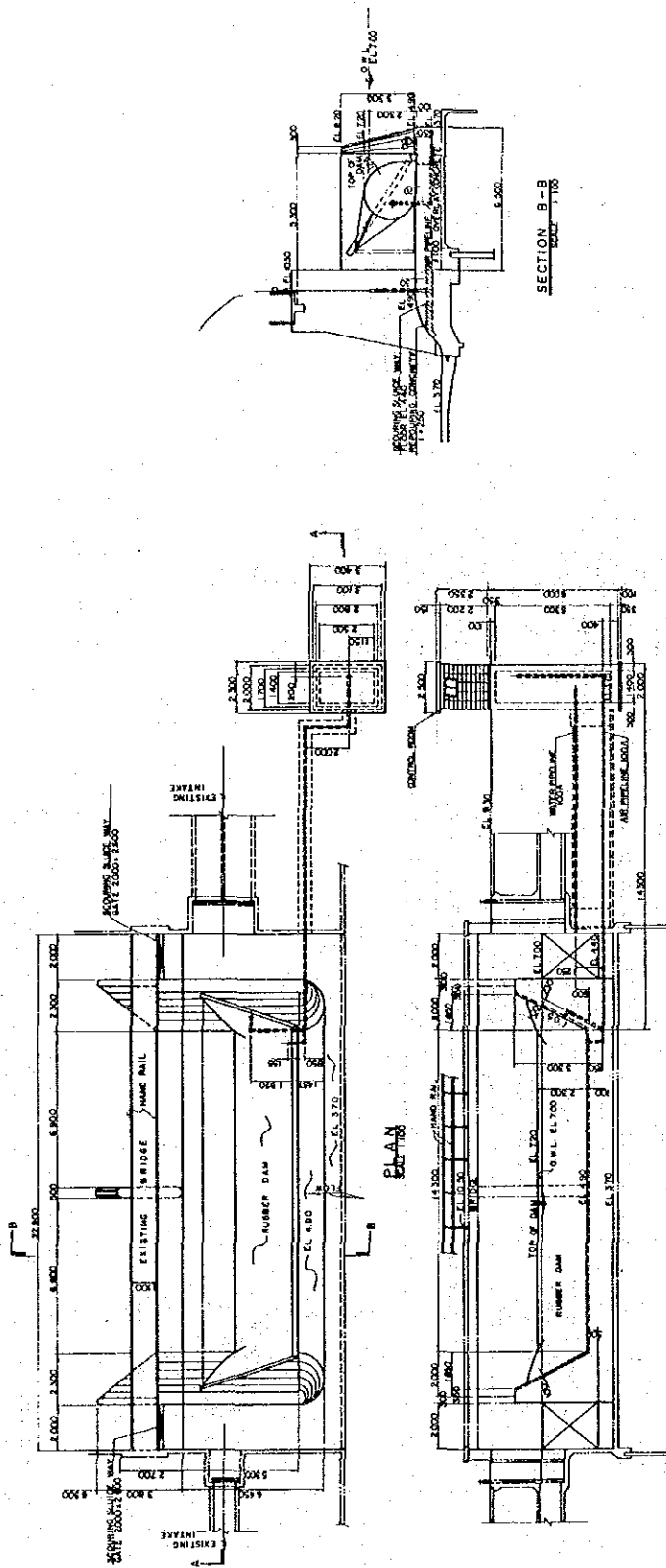
LEGEND

- PROJECT BOUNDARY
- WORKING STATION BOUNDARY
- ROAD
- RAILWAY
- EXPRESS HIGHWAY
- ③ ADMINISTRATION STATION
- FULL DEVELOPMENT OF ON FARM FACILITY
- ▨ PARTIAL DEVELOPMENT OF ON FARM FACILITY



REPUBLIC OF THE PHILIPPINES	
NATIONAL IRRIGATION ADMINISTRATION	
AMNIS	
CLASSIFICATION MAP OF ON FARM DEVELOPMENT	
DRAWING NO.	005
JAPANESE INTERNATIONAL COOPERATION AGENCY	



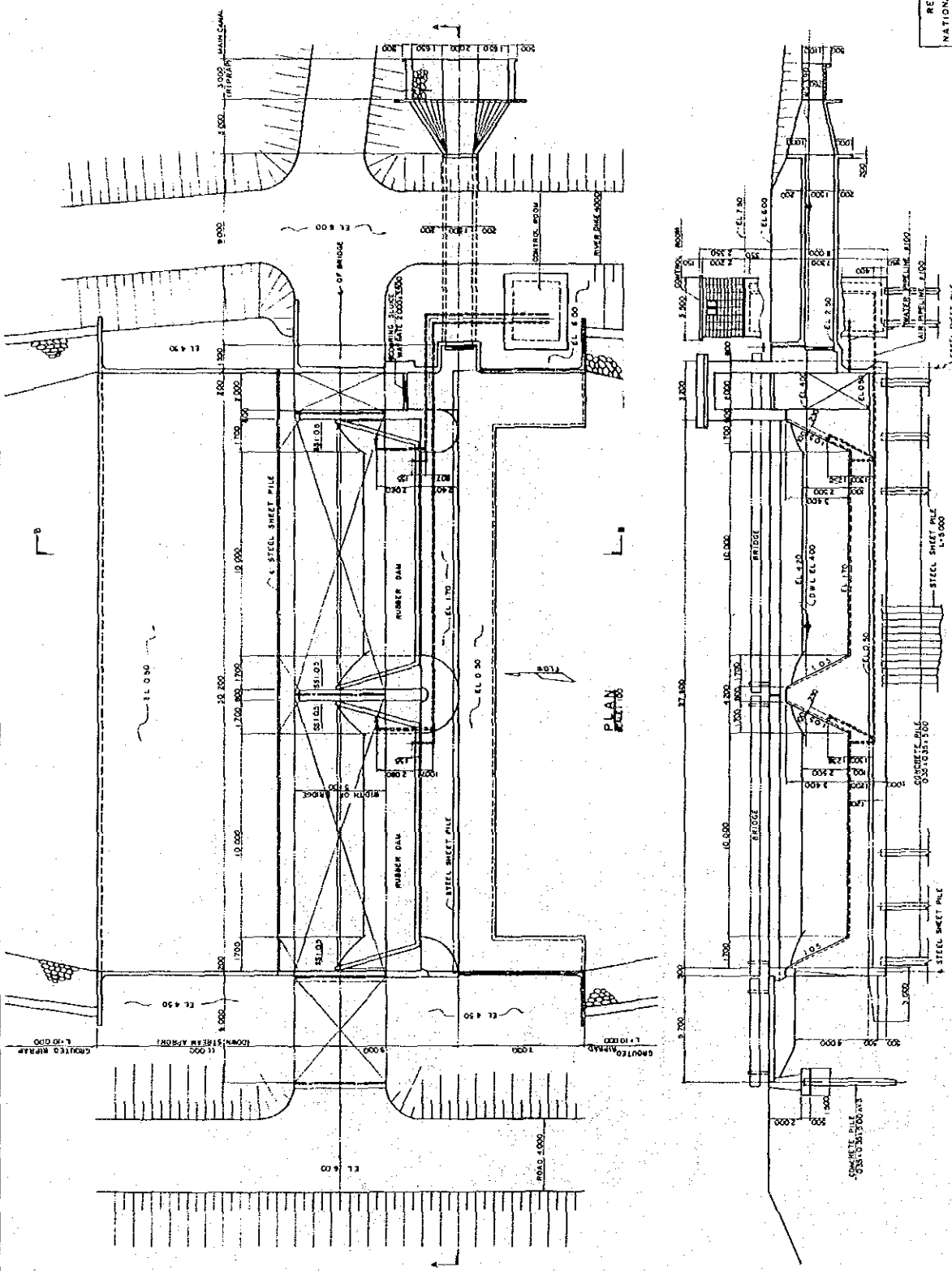


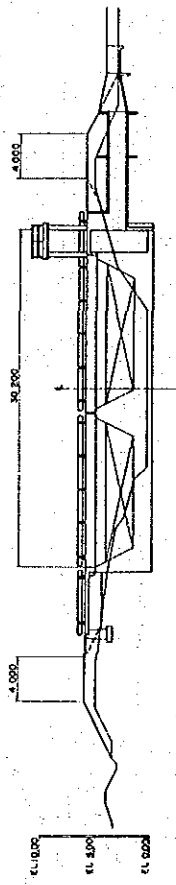
SECTION B-B
SCALE 1/100

ELEVATION THRU A-A

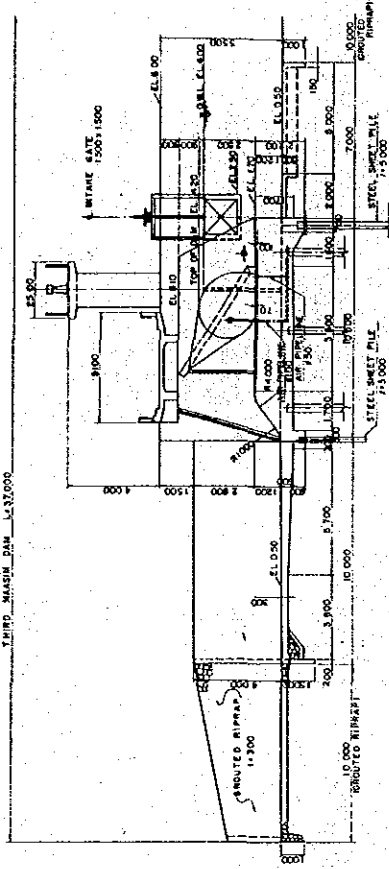
REPUBLIC OF THE PHILIPPINES
NATIONAL IRRIGATION ADMINISTRATION
AMRIS
LOWER MAASIM DIVERSION DAM
DRAWING NO. ICE
JAPAN INTERNATIONAL COOPERATION AGENCY

REPUBLIC OF THE PHILIPPINES
 NATIONAL IRRIGATION ADMINISTRATION
 AMRIS (1/2)
 THIRD MAASIM DIVERSION DAM
 DRAWING NO. 103
 JAPAN INTERNATIONAL COOPERATION AGENCY





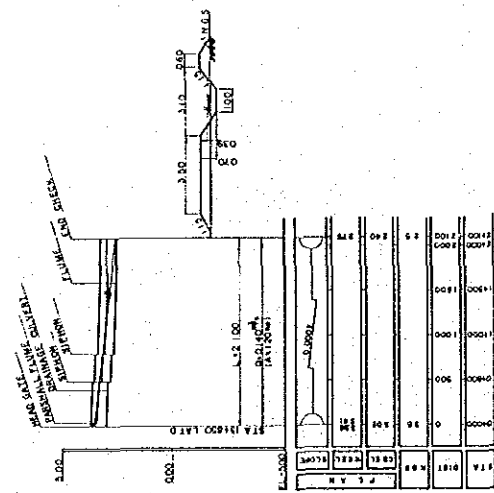
CROSS SECTION OF THIRD MAASIM DAM
SCALE 1:200



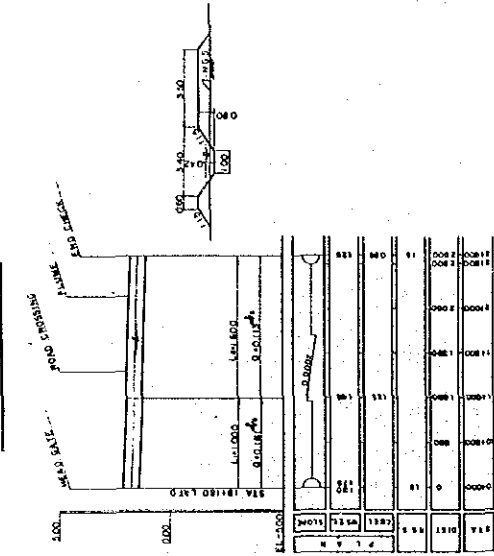
LONGITUDINAL SECTION THREE/B
SCALE 1:500

REPUBLIC OF THE PHILIPPINES	
NATIONAL IRRIGATION ADMINISTRATION	
AMRIS (2/2)	
THIRD MAASIM DIVERSION DAM	
DRAWING NO.	104
JAPAN INTERNATIONAL COOPERATION AGENCY	

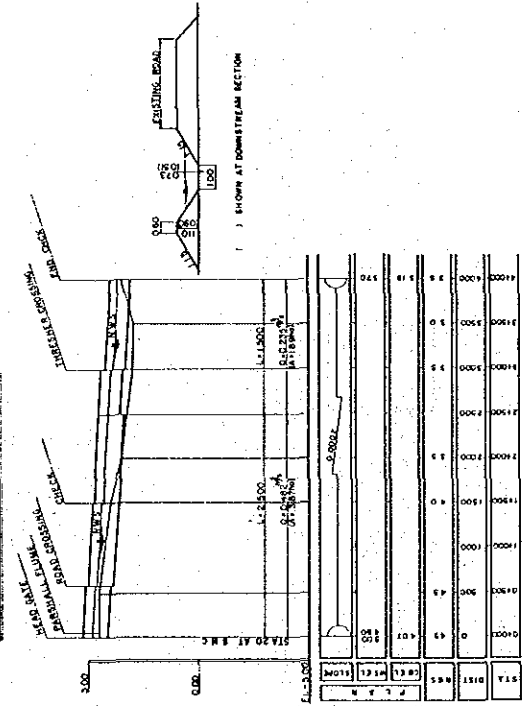
LAT D-6, WS2



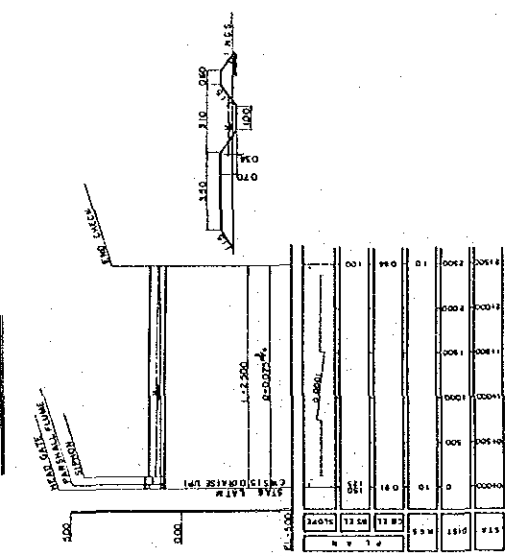
LAT DEXTN, WS2-EX



LAT L EXTN, ALONG S.M.C. WS5

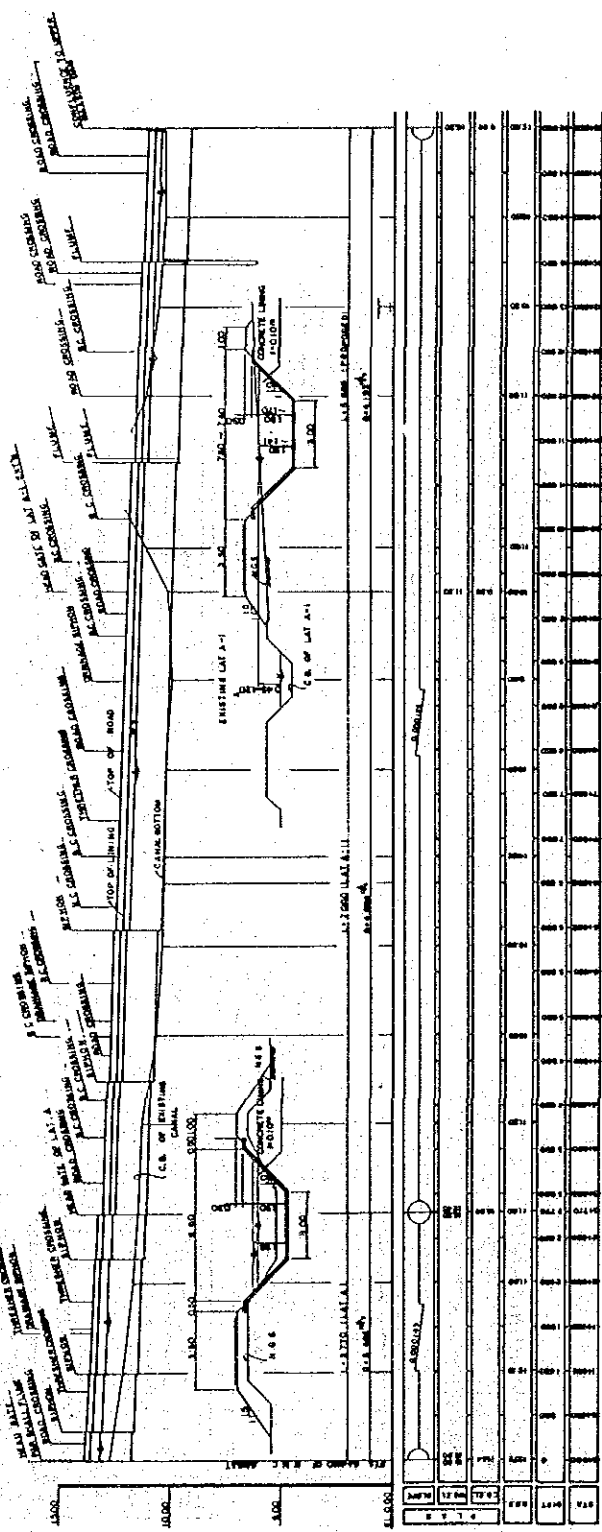


LAT M-4, WS5-EX

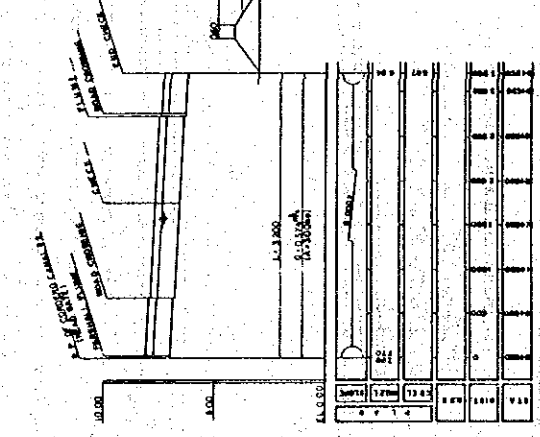


REPUBLIC OF THE PHILIPPINES
 NATIONAL IRRIGATION ADMINISTRATION
 AMRIS
 LAT. D-6, LAT D EXTN, LAT L EXTN
 ALONG S.M.C, LAT M-4
 DRAWING NO. 201
 JAPAN INTERNATIONAL COOPERATION AGENCY

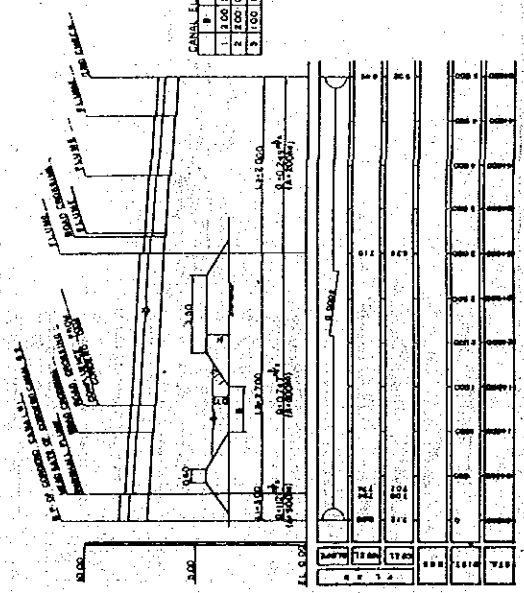
LAT A AS MAASIM FEEDER CANAL



CORDERO CANAL #2 WS 6 EX-3

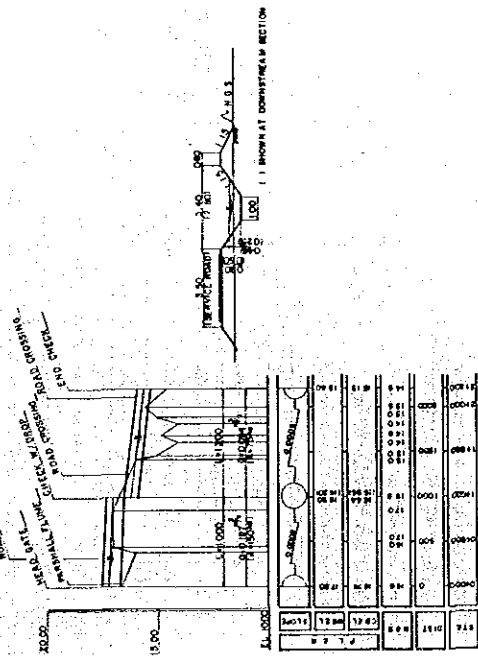


CORDERO CANAL #1 WS 6 EX-3

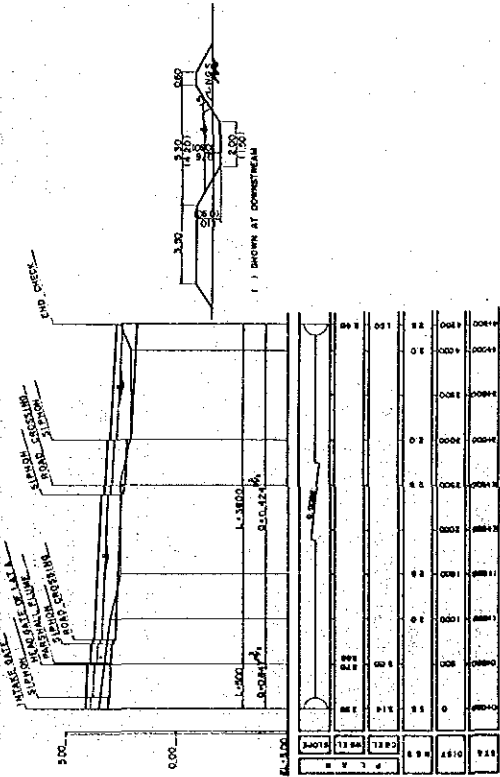


REPUBLIC OF THE PHILIPPINES
 NATIONAL IRRIGATION ADMINISTRATION
 AMRIS
 PROFILE OF MAASIM FEEDER CANAL
 AND CORDERO CANAL #1 & #2
 DRAWING NO. _____
 MAPA INTERNATIONAL COOPERATION AGENCY

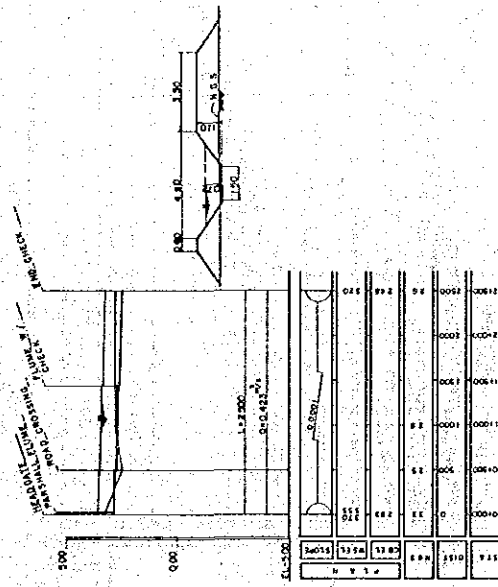
CAINGIN CANAL
(WS6 EX-1)



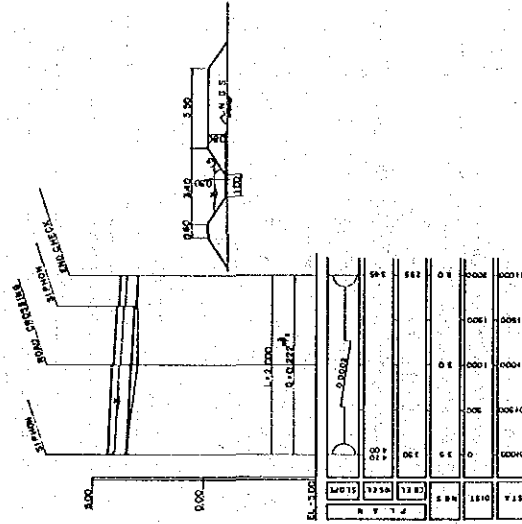
MAIN CANAL OF #3 MAASIM (WS7)



LATA OF #3 MAASIM (WS7)

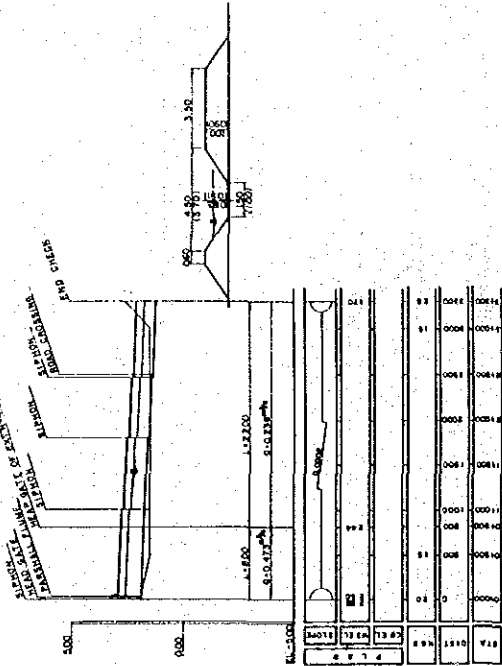


LATA EXTN. WS8-EX1

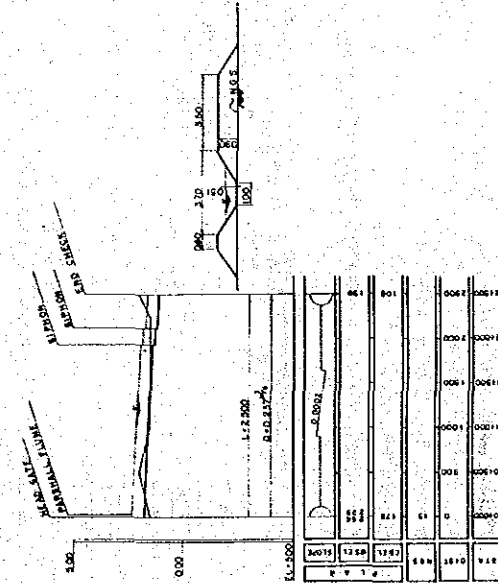


REPUBLIC OF THE PHILIPPINES
NATIONAL IRRIGATION ADMINISTRATION
ARRRIS
CAINGIN CANAL-MAIN CANAL AND LATA
OF THIRD MAASIM, LATA EXTN.
DRAWING NO. 1203
JAPAN INTERNATIONAL COOPERATION AGENCY

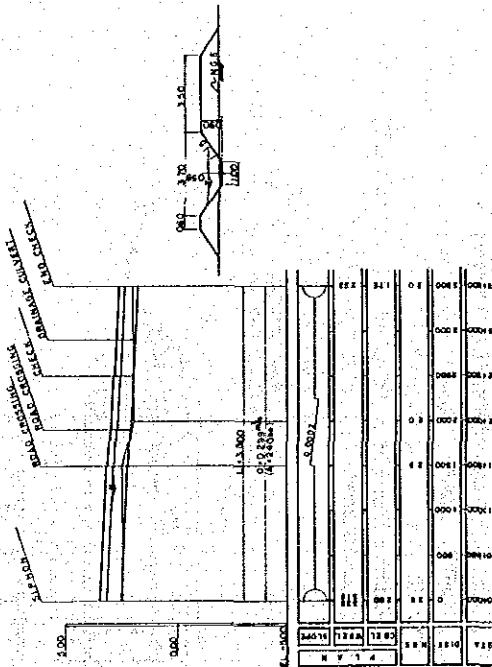
LAT D-1-A EXTN#3, WS9-EX



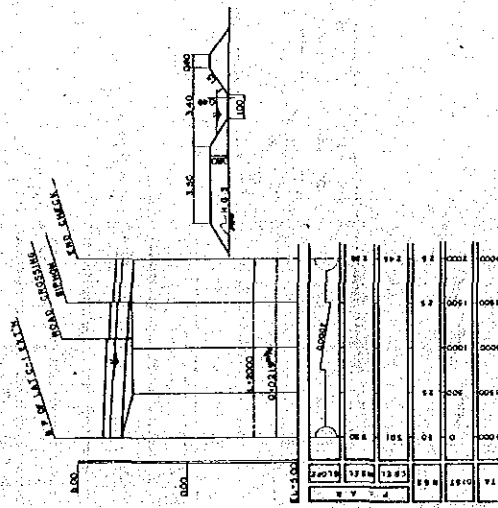
LAT D-1-A EXTN#4, WS9-EX



LAT C-1 EXTN, WS8-EX2

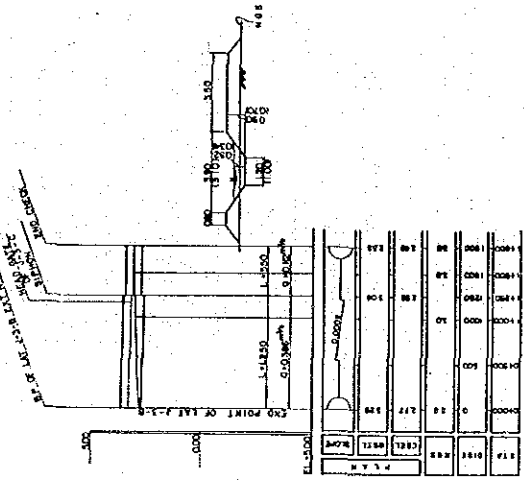


LAT C-1 EXTN, WS8-EX2

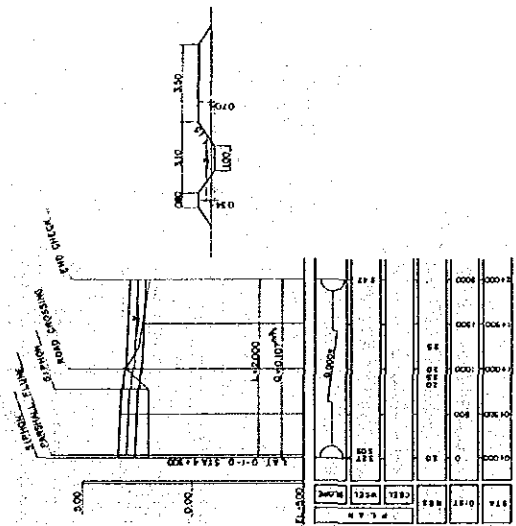


REPUBLIC OF THE PHILIPPINES
 NATIONAL IRRIGATION ADMINISTRATION
 AMRIS
 LAT C-1 EXTN, LAT C-1 EXTN #3
 LAT C-1 EXTN, LAT D-1A EXTN #4
 DRAWING NO. 204
 JAPAN INTERNATIONAL COOPERATION AGENCY

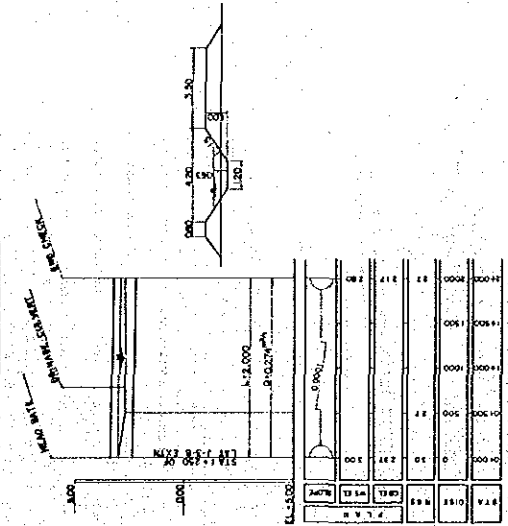
LAT J-3-B EXTN WS 12-EX

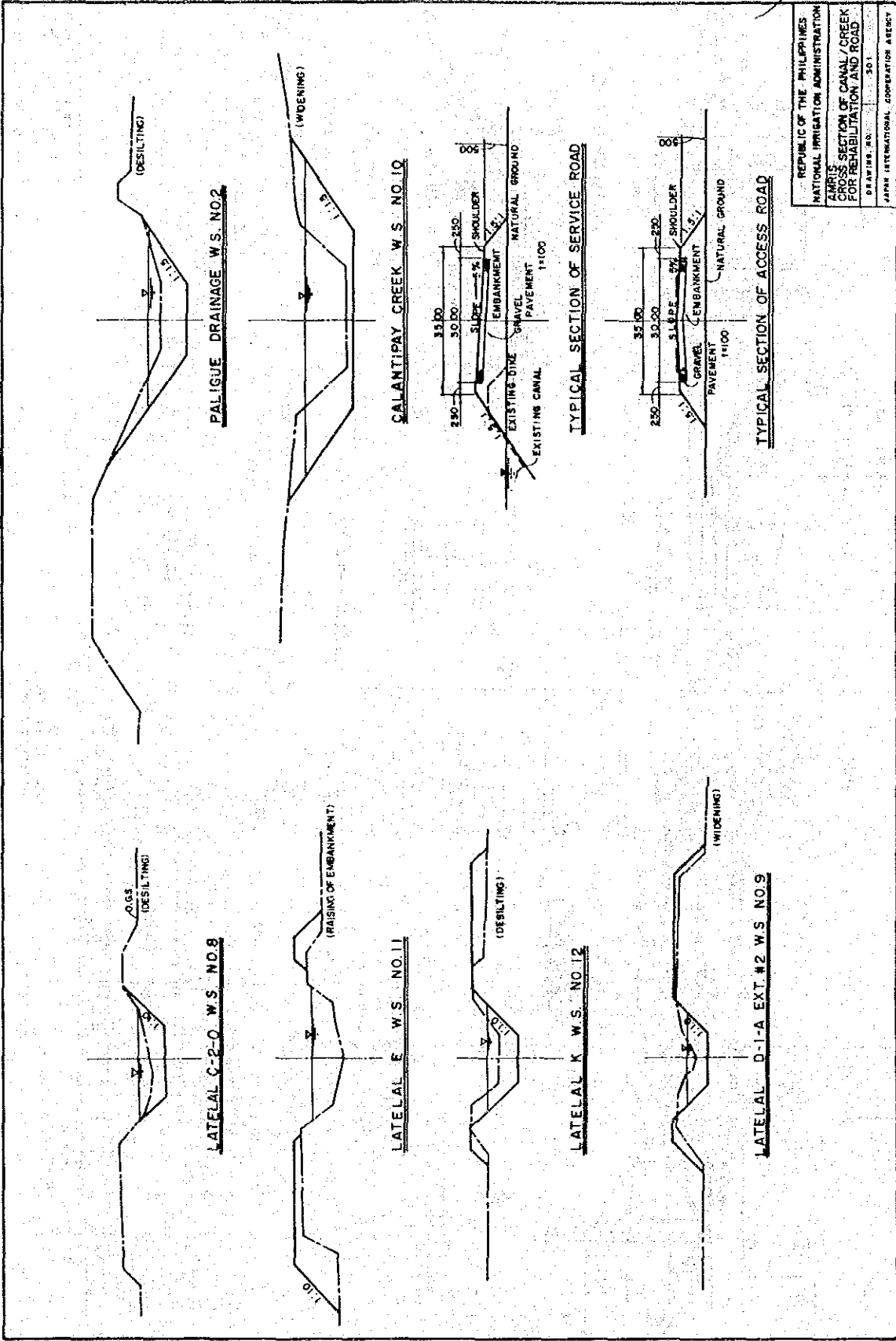


LAT D-1-D EXTN WS 9-EX

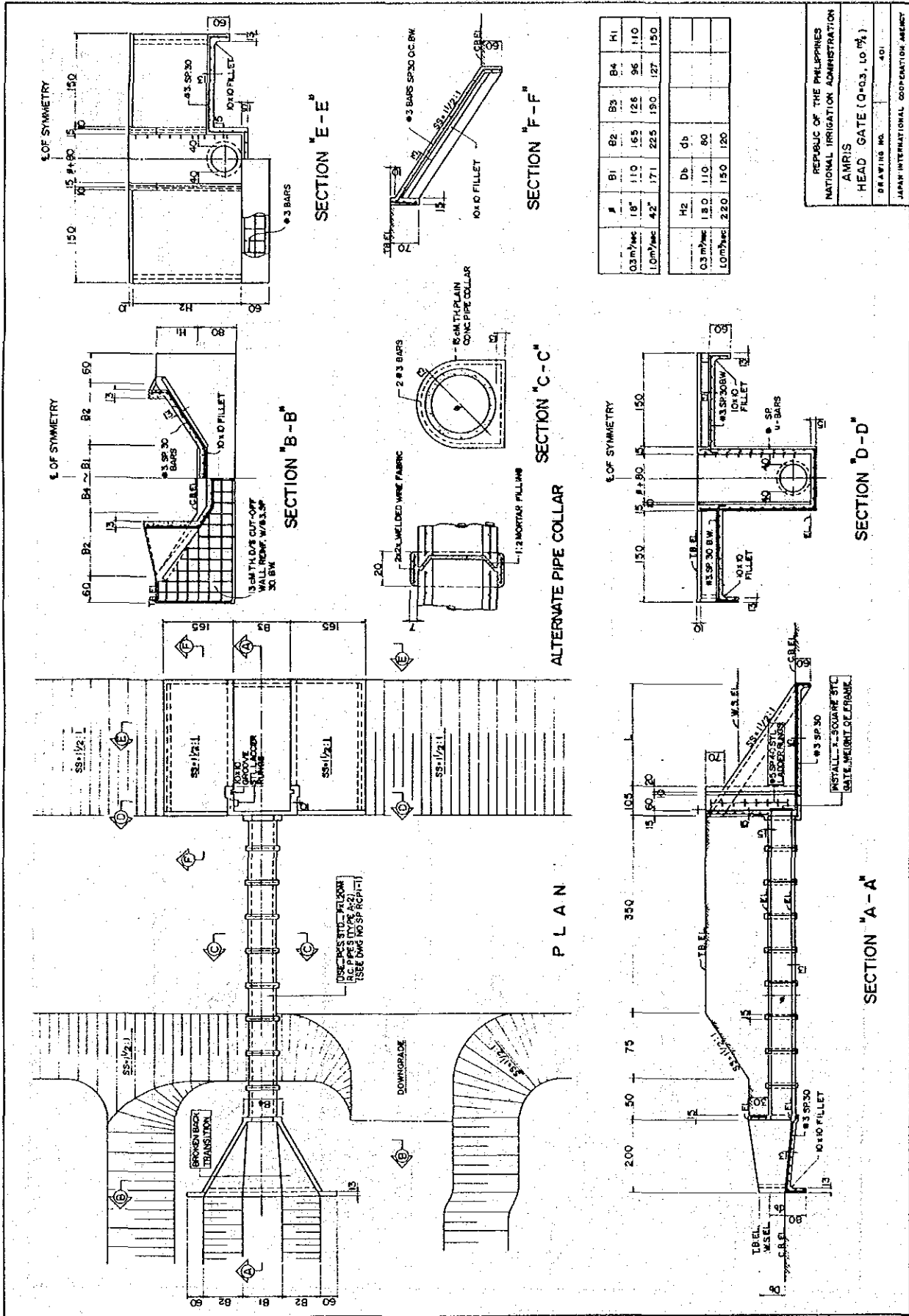


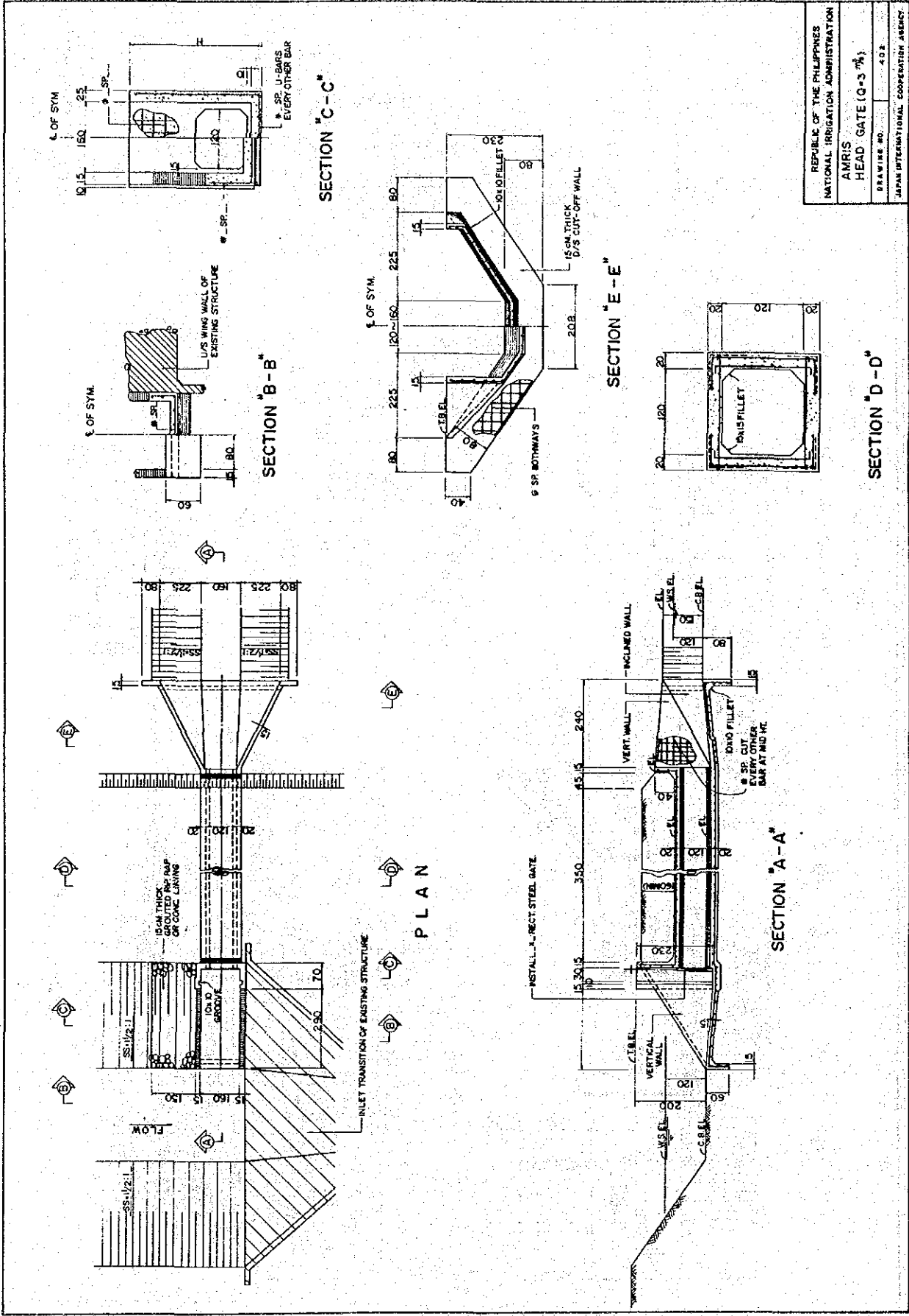
LAT J-3-C WS 12-EX



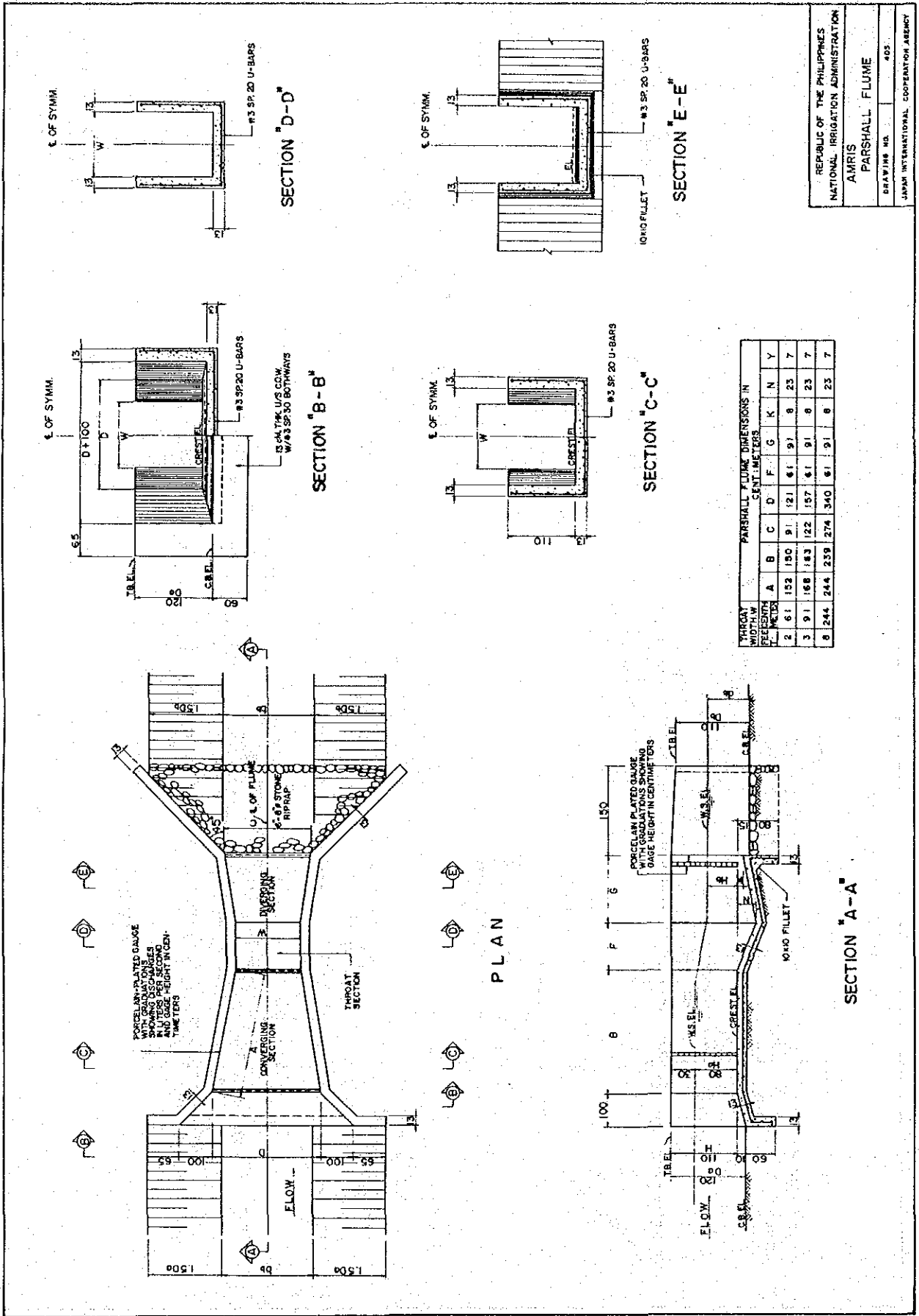


REPUBLIC OF THE PHILIPPINES
 NATIONAL IRRIGATION ADMINISTRATION
 AMRIS
 CROSS SECTION OF CANAL / CREEK
 FOR REHABILITATION AND ROAD
 DRAWING NO. 301
 JAPAN INTERNATIONAL COOPERATION AGENCY

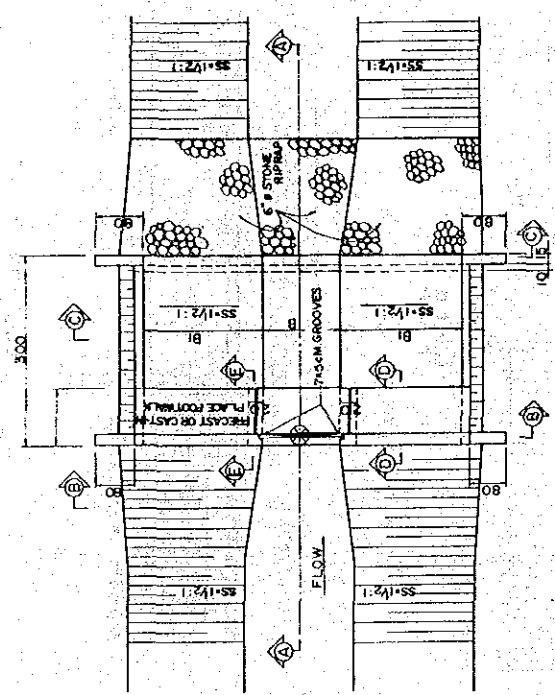




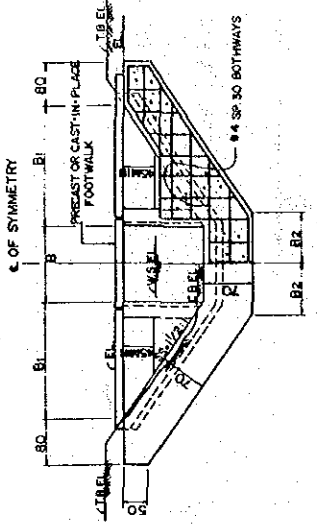
REPUBLIC OF THE PHILIPPINES NATIONAL IRRIGATION ADMINISTRATION	
AMRIS HEAD GATE (0-3 1/2')	
DRAWING NO.	432
JAPAN INTERNATIONAL COOPERATION AGENCY	



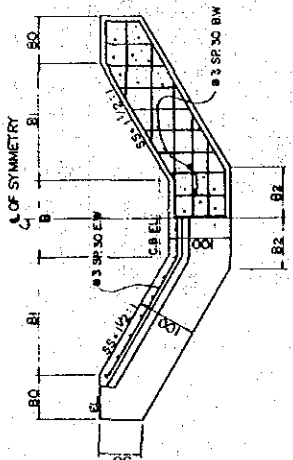
REPUBLIC OF THE PHILIPPINES
 NATIONAL IRRIGATION ADMINISTRATION
 AMRIS
 PARSHALL FLUME
 DRAWING NO. 403
 JAPAN INTERNATIONAL COOPERATION AGENCY



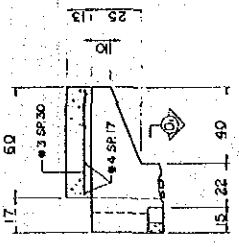
PLAN



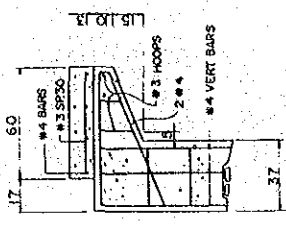
SECTION "B-B"



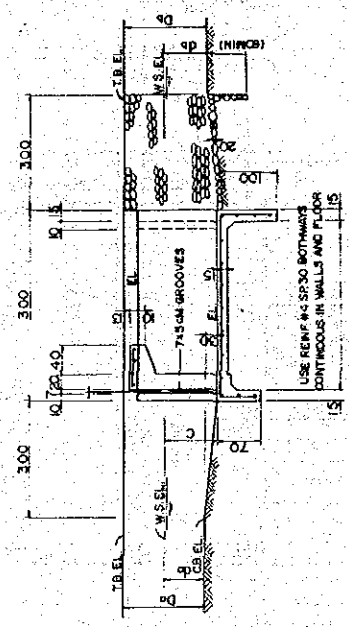
SECTION "C-C"



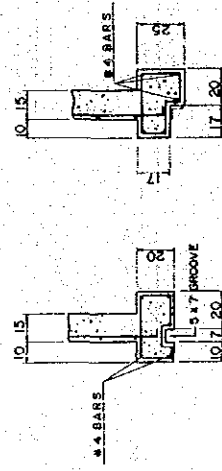
SECTION "D-D"



SECTION "E-E"



SECTION "A-A"



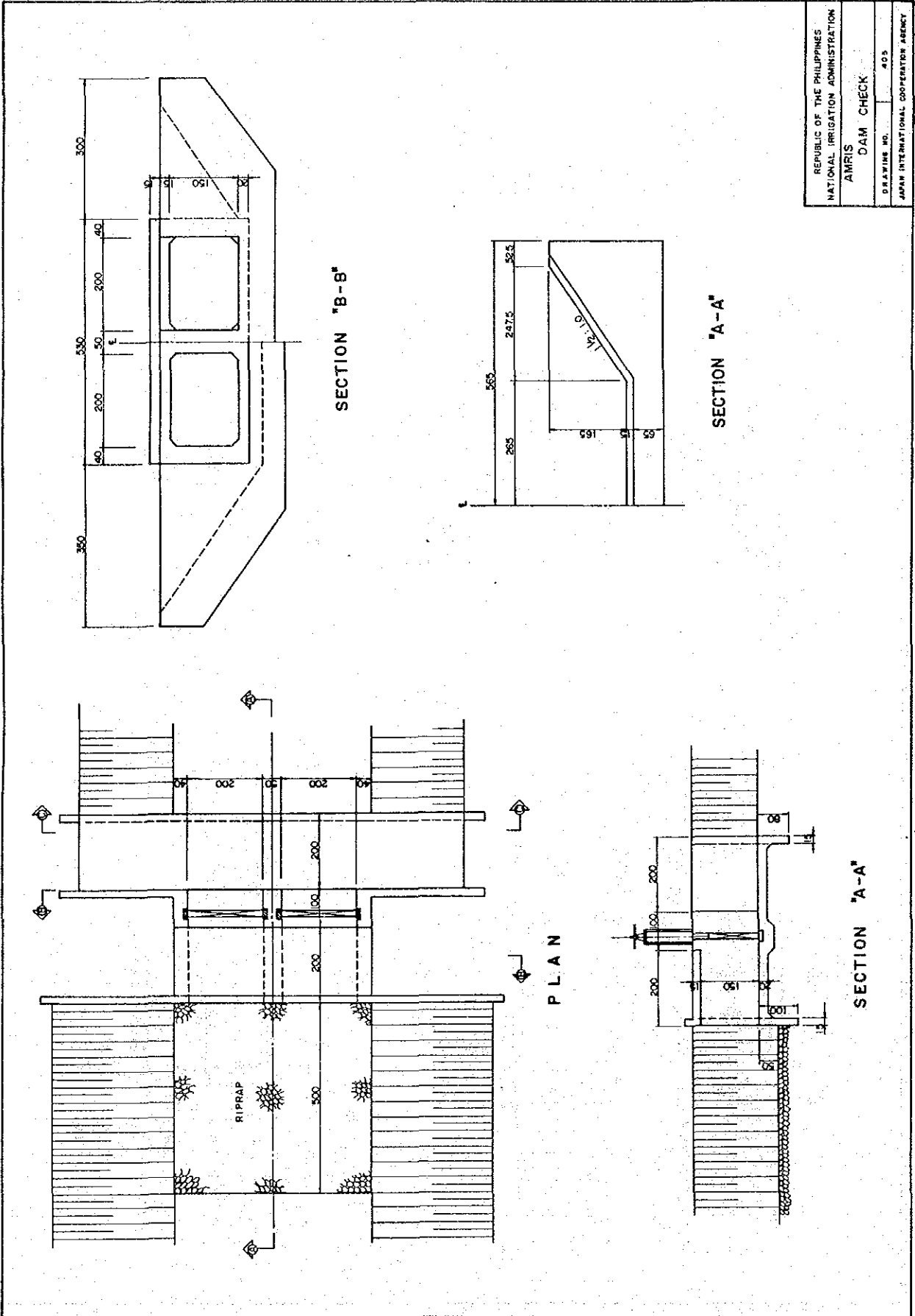
SECTION "D1-D1"

B	B1	B2	Dn	ds	Dh	dh
100	17.5.5	70	110	80	110	80
200	22.0.5	80	150	120	150	120

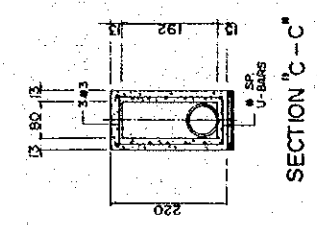
$10.3m^2/sec$
 $1.0 m^3/sec$

(FOR STOP LOGS) (FOR STEEL GATES)

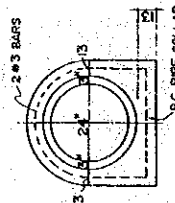
REPUBLIC OF THE PHILIPPINES
 NATIONAL IRRIGATION ADMINISTRATION
 AMRIS
 CHECK GATE
 DRAWING NO. 404
 JAPAN INTERNATIONAL COOPERATION AGENCY



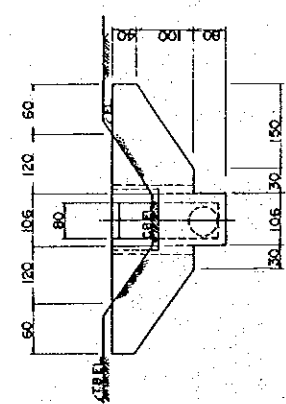
REPUBLIC OF THE PHILIPPINES	
NATIONAL IRRIGATION ADMINISTRATION	
AMRIS	DAM CHECK
DRAWING NO.	# 95
JAPAN INTERNATIONAL COOPERATION AGENCY	



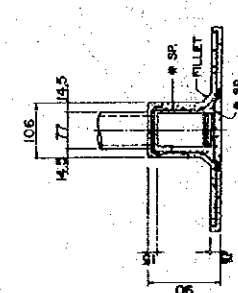
SECTION "C-C"



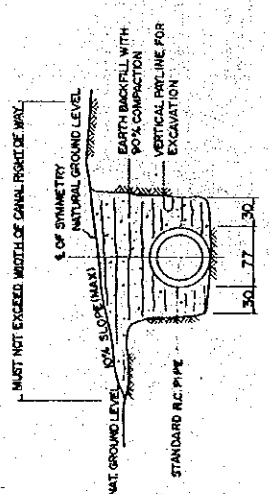
SECTION "E-E"



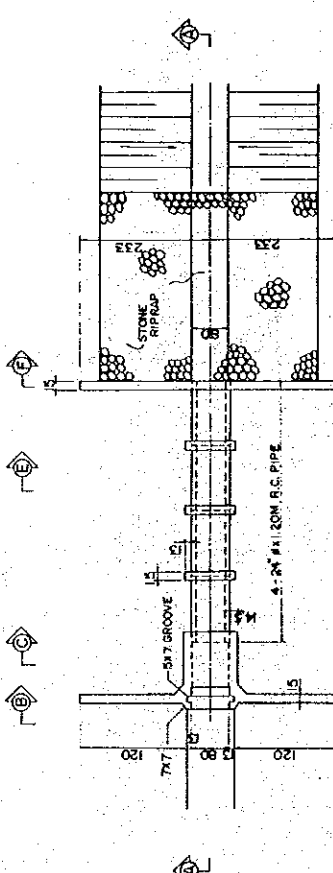
SECTION "B-B"



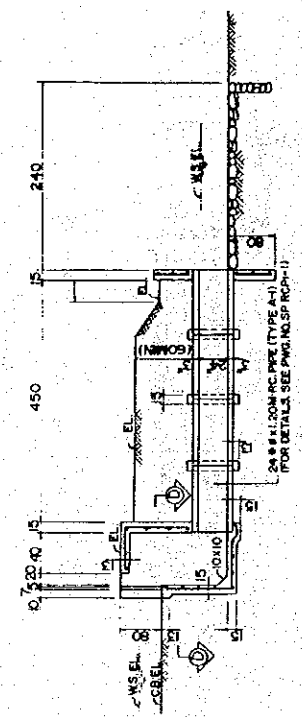
SECTION "D-D"



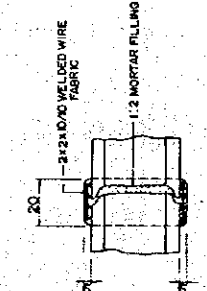
TYPICAL SECTION FOR LAYING PRE-CAST PC PIPE



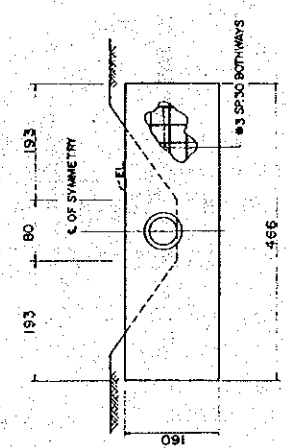
PRAN



SECTION "A-A"

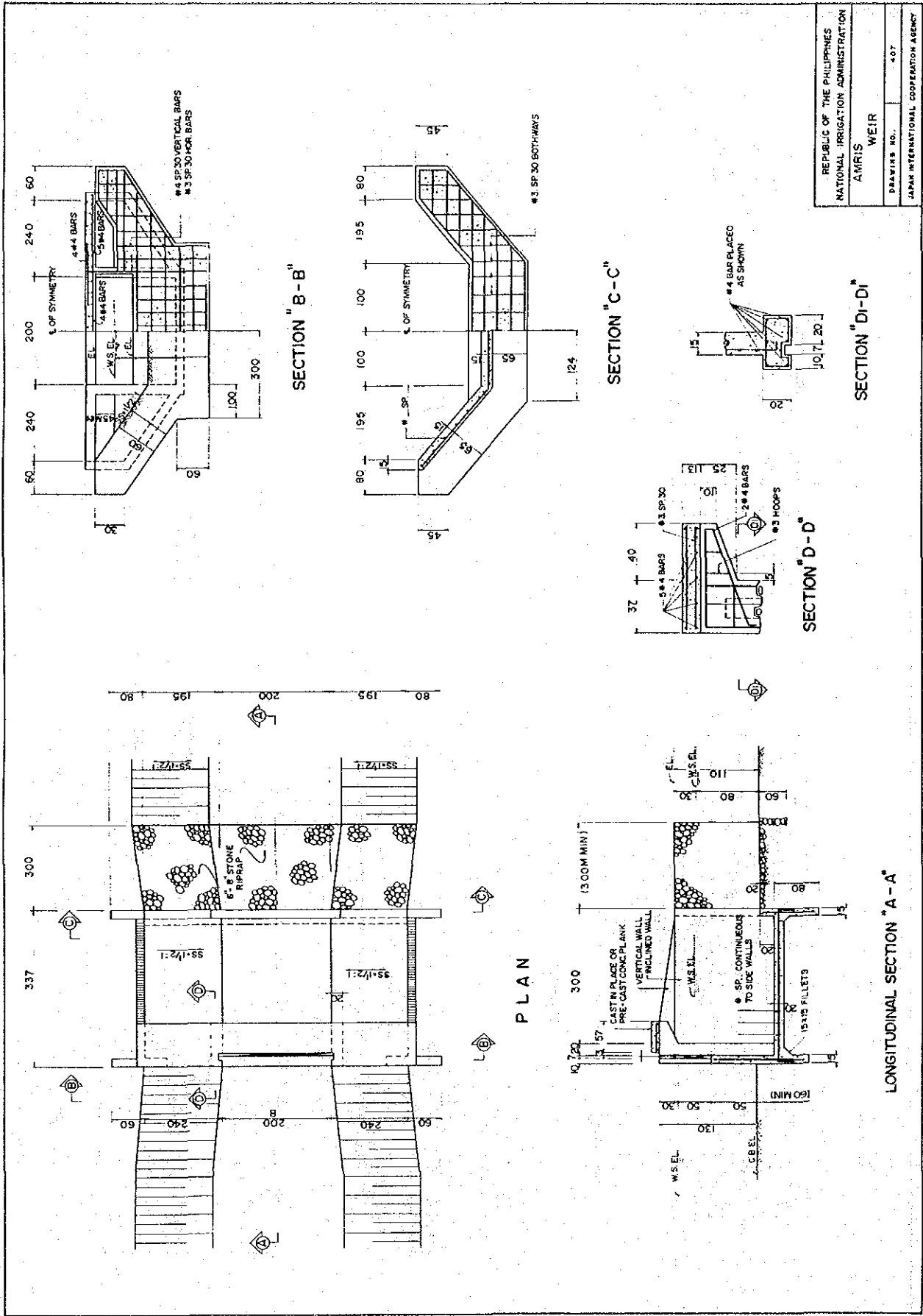


ALTERNATE PIPE COLLAR

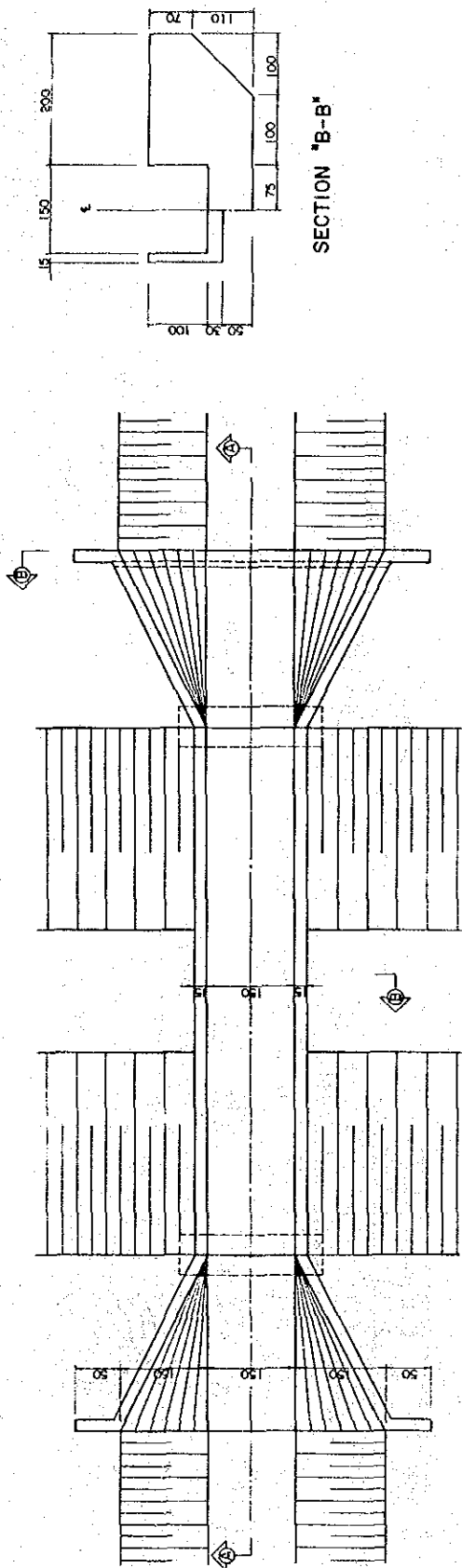


SECTION "F-F"

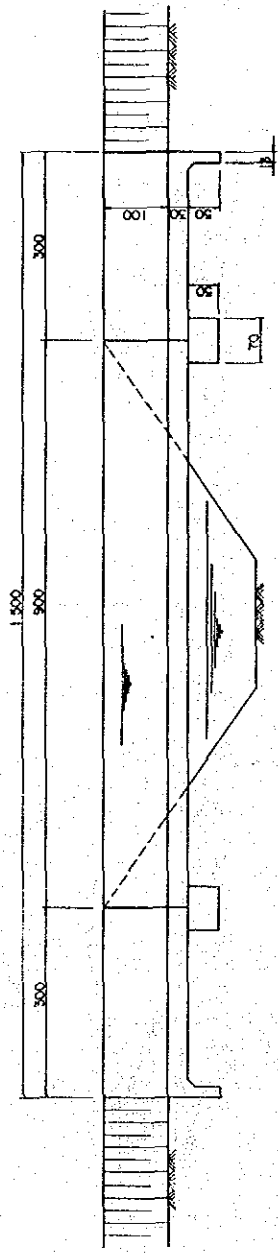
REPUBLIC OF THE PHILIPPINES	
NATIONAL IRRIGATION ADMINISTRATION	
AMRIS	END CHECK
DRAWING NO.	406
JAPAN INTERNATIONAL COOPERATION AGENCY	



REPUBLIC OF THE PHILIPPINES	
NATIONAL IRRIGATION ADMINISTRATION	
AMRIS	WEIR
DRAWING NO.	407
JAPAN INTERNATIONAL COOPERATION AGENCY	

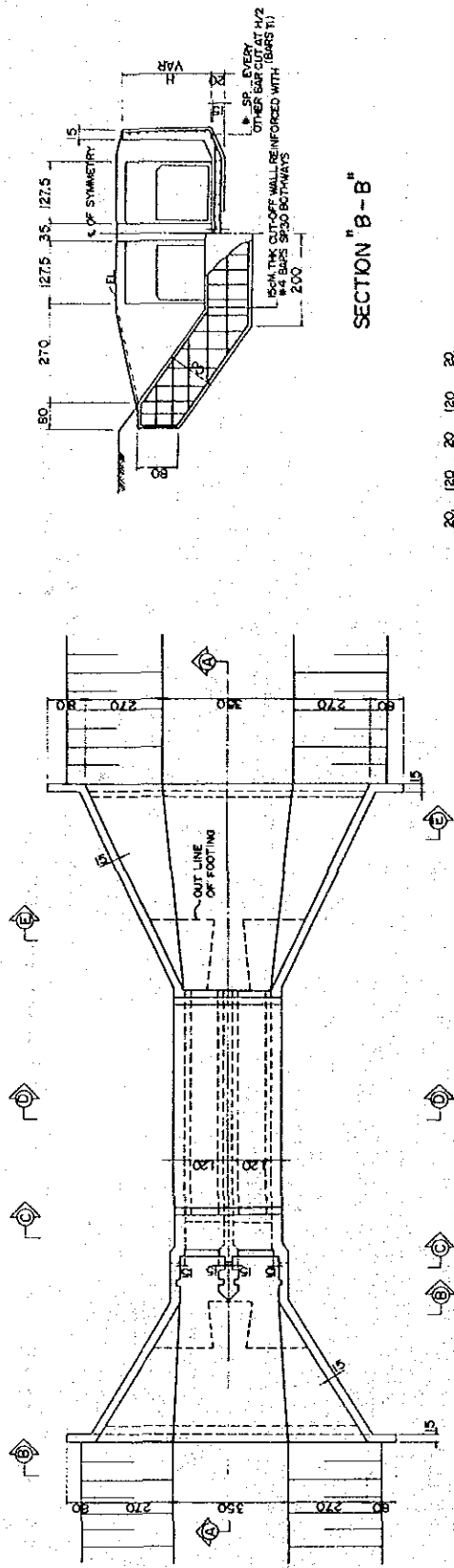


PLAN

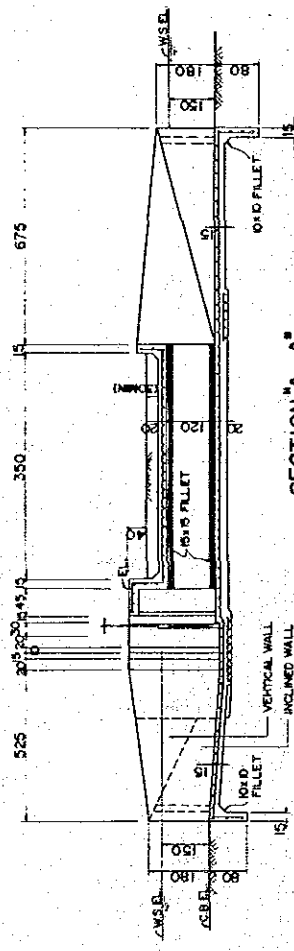


SECTION "A-A"

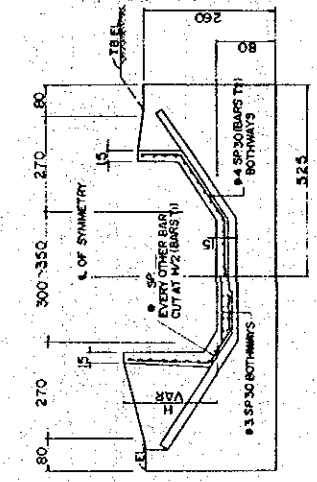
REPUBLIC OF THE PHILIPPINES NATIONAL IRRIGATION ADMINISTRATION AMRIS
OPEN FLUME
DRAWING NO. 408
JAPAN INTERNATIONAL COOPERATION AGENCY



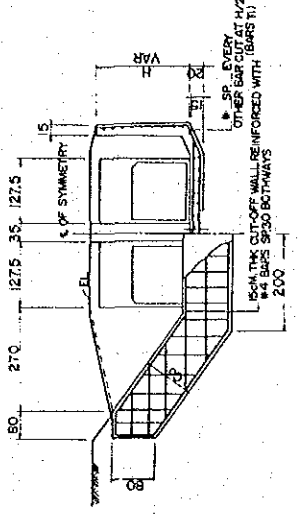
PLAN



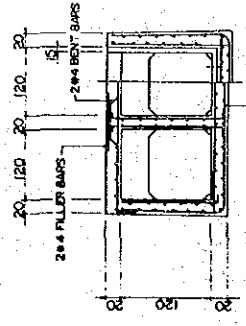
SECTION "A-A"



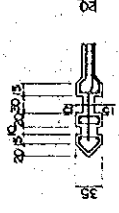
SECTION "E-E"



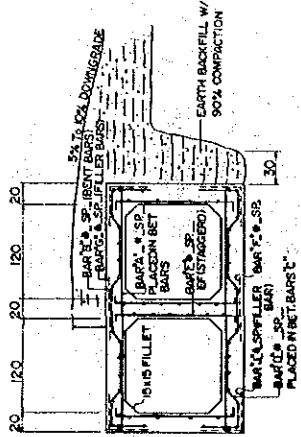
SECTION "B-B"



SECTION "C-C"

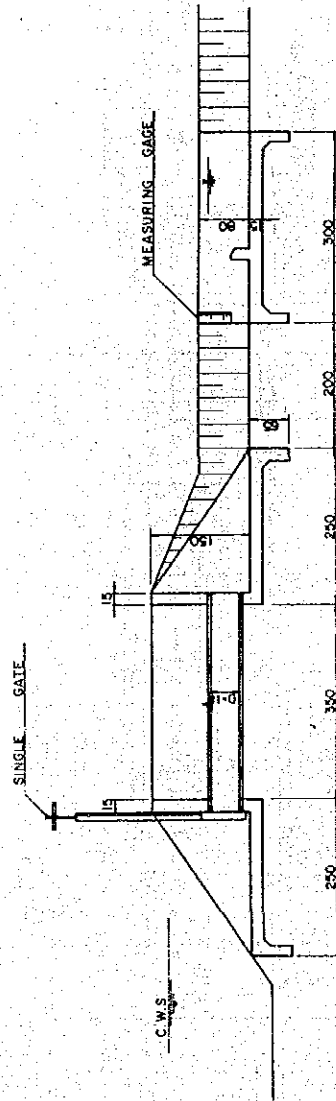
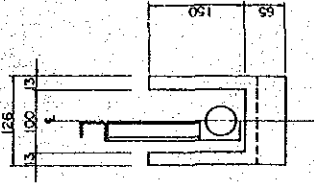
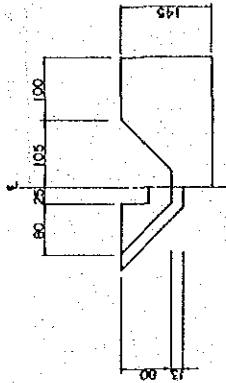
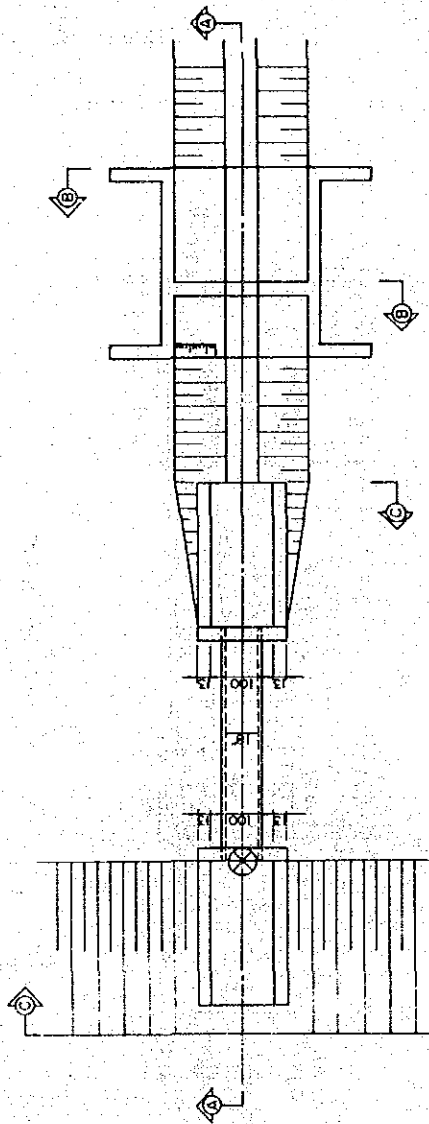


SECTIONAL DETAIL OF MIDDLE PIER

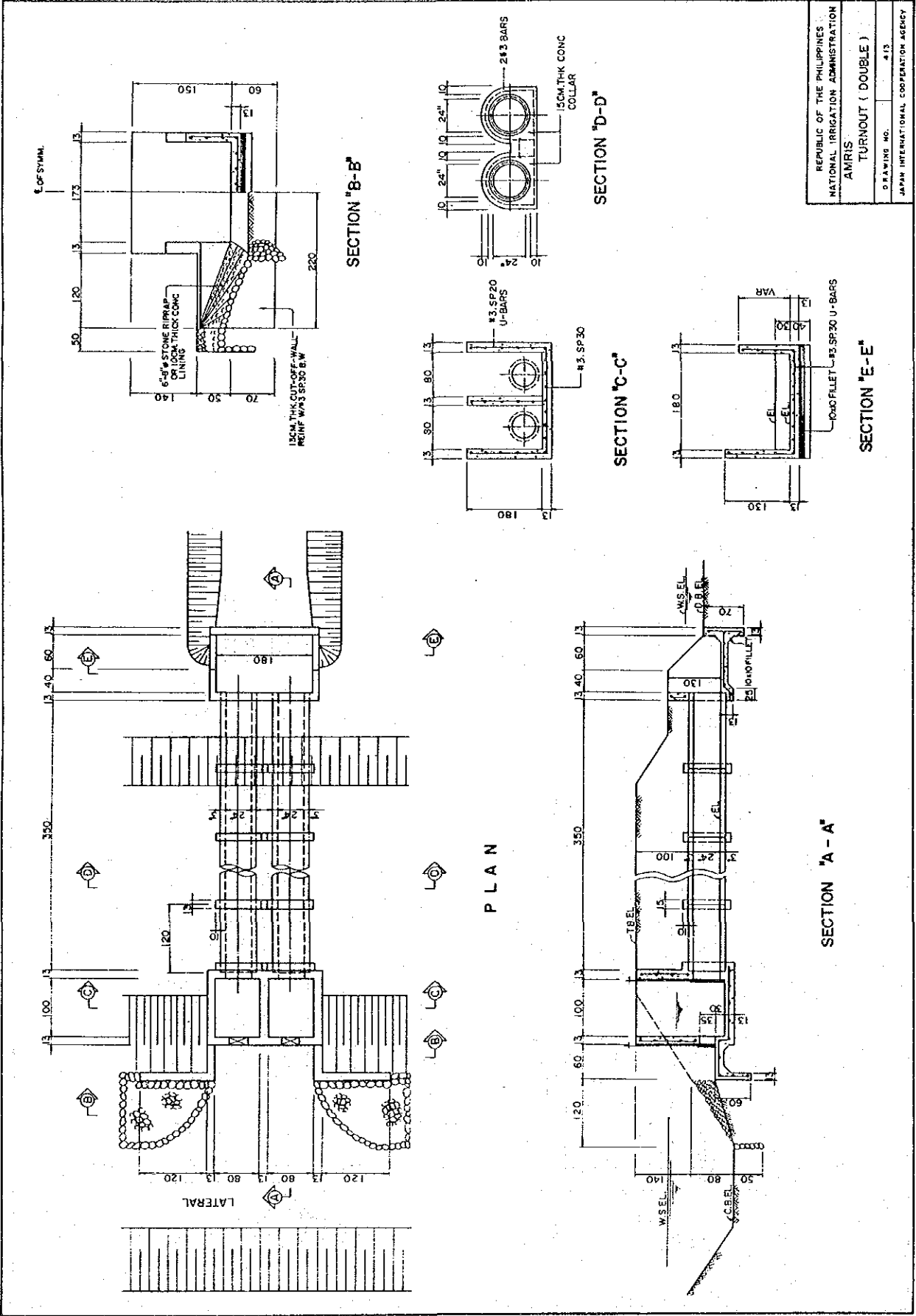


SECTION "D-D"

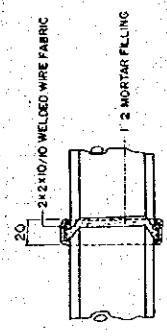
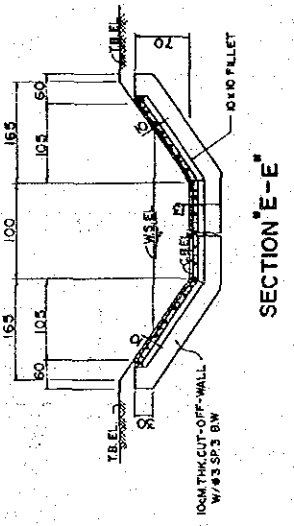
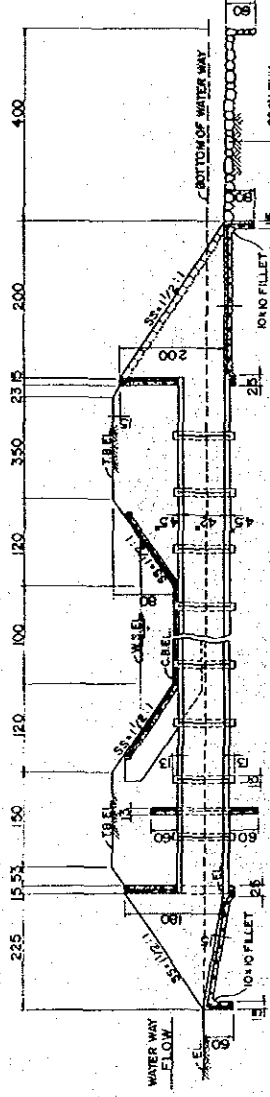
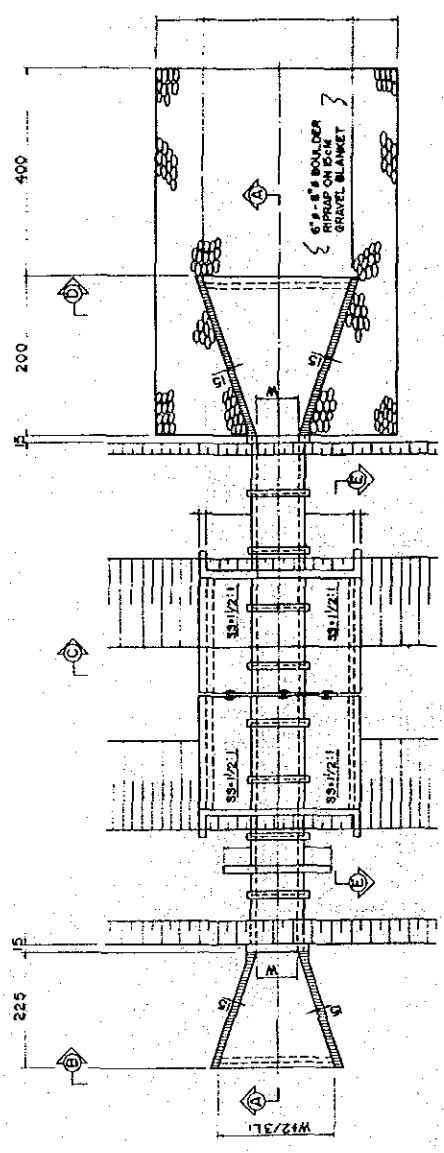
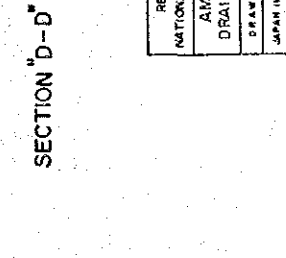
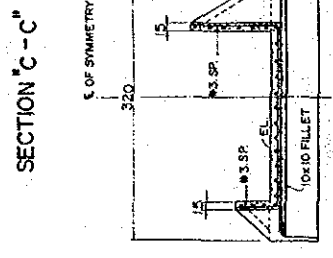
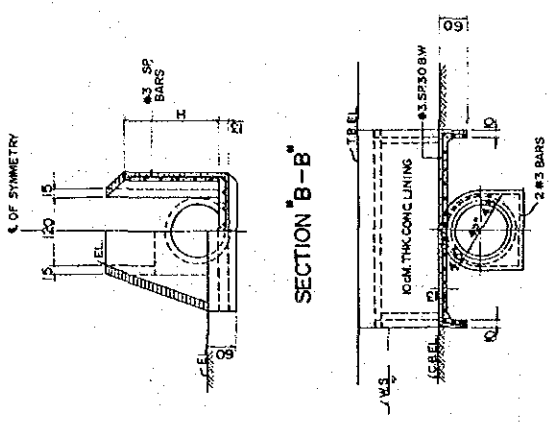
REPUBLIC OF THE PHILIPPINES
 NATIONAL IRRIGATION ADMINISTRATION
 AMRIS
 THRESHER CROSSING (50 FT²)
 DRAWING NO. 411
 JAPAN INTERNATIONAL COOPERATION AGENCY



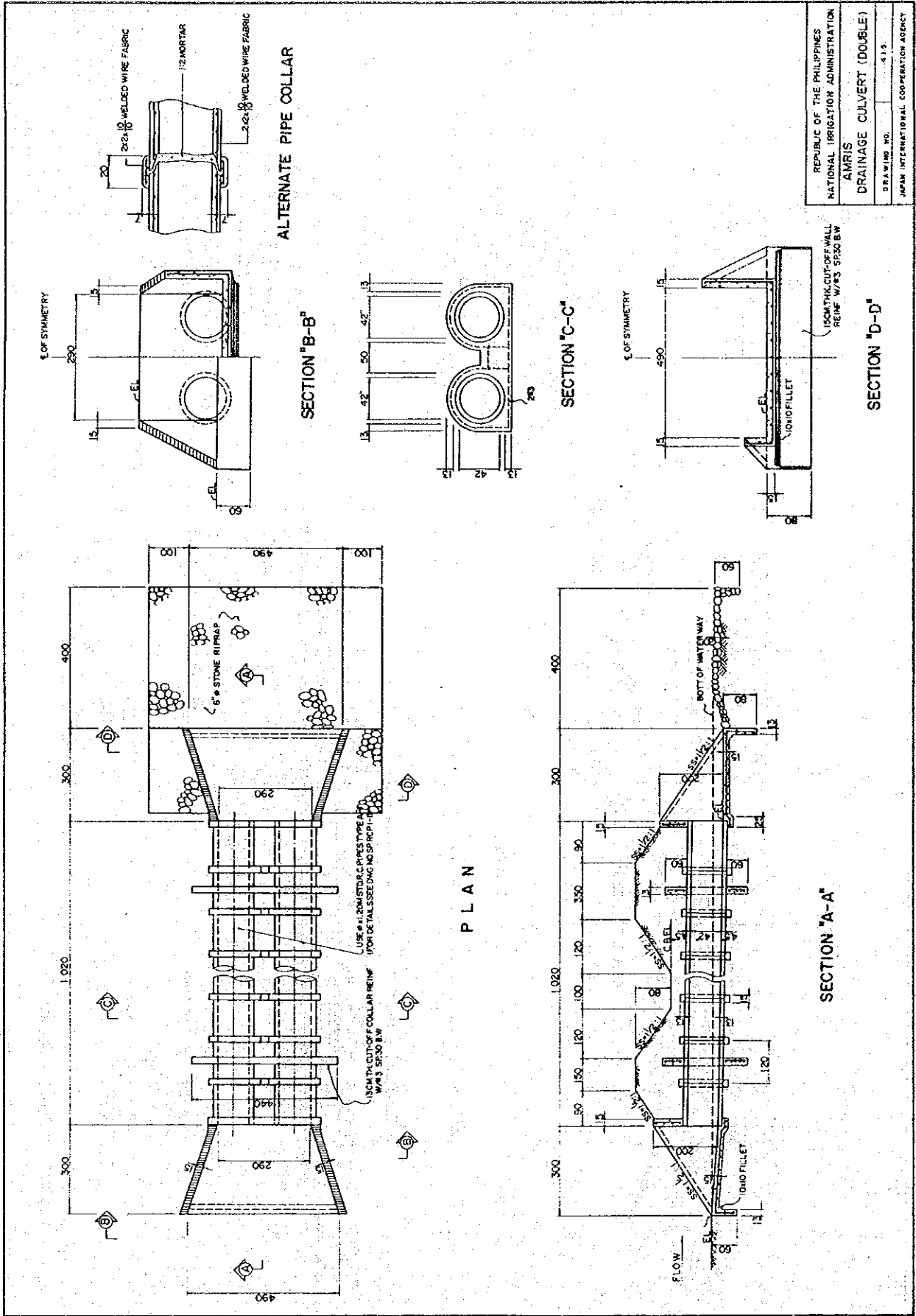
REPUBLIC OF THE PHILIPPINES	
NATIONAL IRRIGATION ADMINISTRATION	
AMRIS	
TURNOUT (SINGLE)	
DRAWING NO.	412
JAPAN INTERNATIONAL COOPERATION AGENCY	



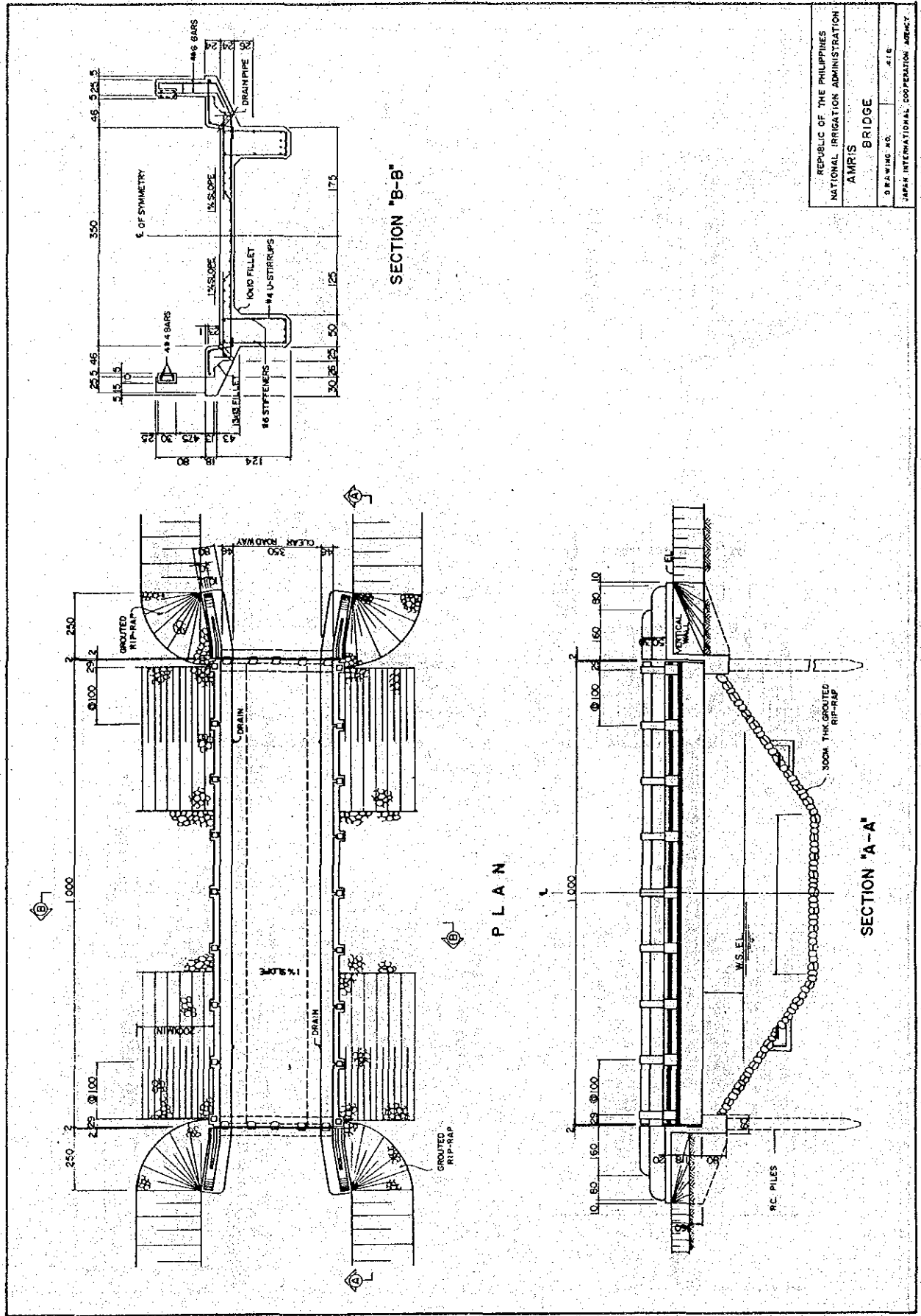
REPUBLIC OF THE PHILIPPINES
 NATIONAL IRRIGATION ADMINISTRATION
 AMRIS
 TURNOUT (DOUBLE)
 DRAWING NO. 413
 JAPAN INTERNATIONAL COOPERATION AGENCY



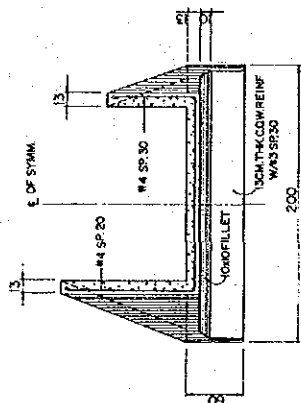
REPUBLIC OF THE PHILIPPINES
NATIONAL IRRIGATION ADMINISTRATION
AMRIS
DRAINAGE CULVERT (SINGLE)
DRAWING NO. 414
JAPAN INTERNATIONAL COOPERATION AGENCY



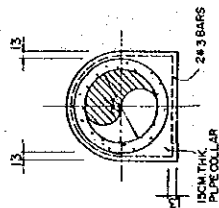
REPUBLIC OF THE PHILIPPINES
 NATIONAL IRRIGATION ADMINISTRATION
 AMRIS
 DRAINAGE CULVERT (DOUBLE)
 DRAWING NO. 415
 JAPAN INTERNATIONAL COOPERATION AGENCY



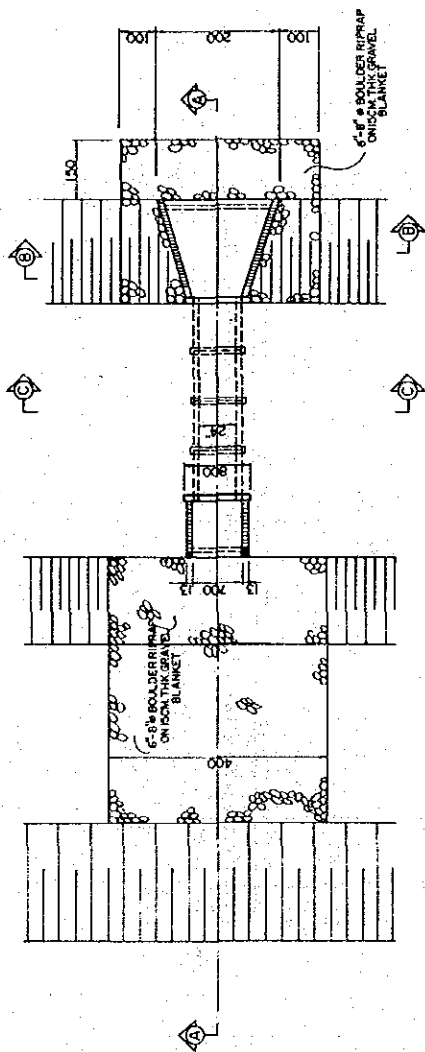
REPUBLIC OF THE PHILIPPINES NATIONAL IRRIGATION ADMINISTRATION	
AMRIS BRIDGE	
DRAWING NO.	418
JAPAN INTERNATIONAL COOPERATION AGENCY	



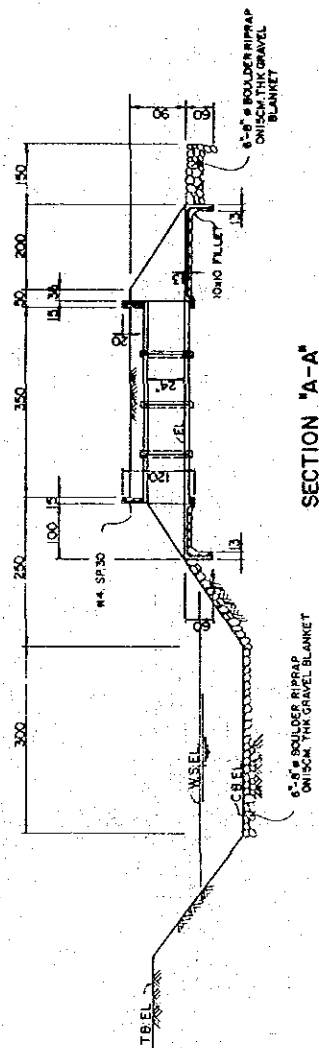
SECTION "B-B"



SECTION "C-C"



PLAN

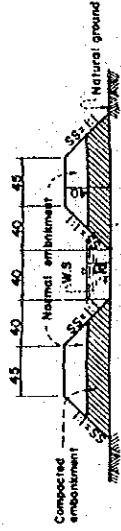


SECTION "A-A"

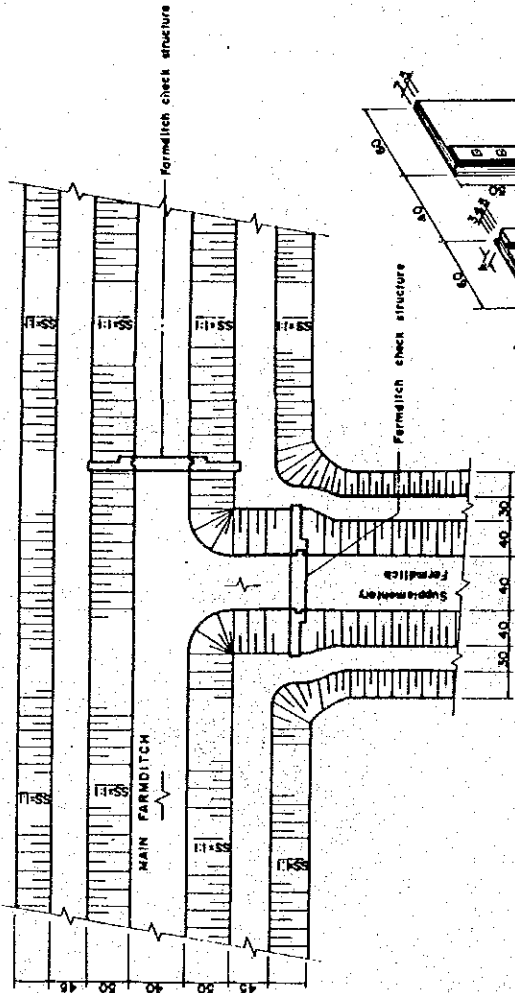
REPUBLIC OF THE PHILIPPINES NATIONAL IRRIGATION ADMINISTRATION AMRIS	OUTLET
DRAWING NO. 417	
JAPAN INTERNATIONAL COOPERATION AGENCY	

TYPICAL FARM DITCH

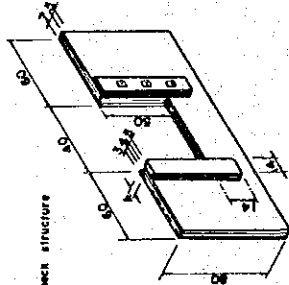
CASE I (When farmditch is not adjacent to lateral or canal)



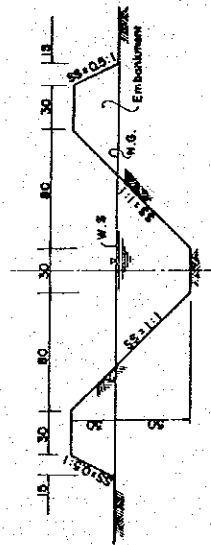
CASE II (When farmditch is adjacent to lateral or canal)



SCHEMATIC PLAN FOR DIVISION BOX



ISOMETRIC VIEW FARM DITCH CHECK STRUCTURE



FARM DRAIN

REPUBLIC OF THE PHILIPPINES	
NATIONAL IRRIGATION ADMINISTRATION	
AMRIS	
TYPICAL FARM DITCH SECTION AND DIVISION BOX	
DRAWING NO.	418
JAPAN INTERNATIONAL COOPERATION AGENCY	

