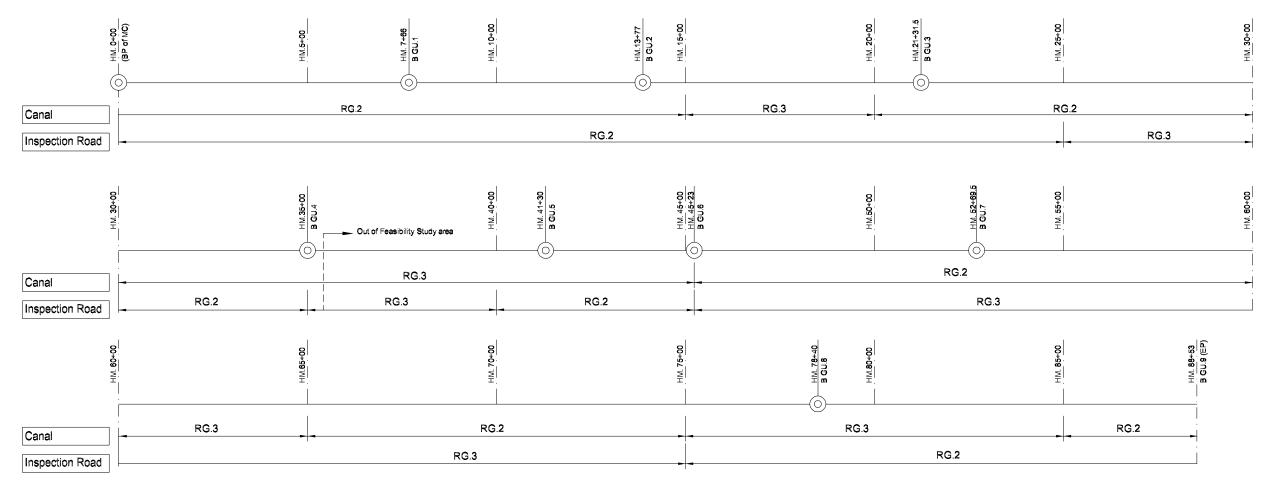
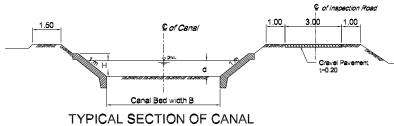
Rehabilitation Plan of Main Canal and Inspection Road



нм	Gu	Length (m)	Design Discharge (m³/s)	Canal Bed Width (B) (m)	Canal Height (m)	Lining Height (H) (m)	Uniform Water Depth (d) (m)	Side Slope	Hydraulic Gradient 1/I
0.00									
		18.00	8.983	5.00	2.25	0.91	0.61	0.0	113
0+18									
0.000		204.80	8.983	5.00	2.25	1.79	1.49	0.0	1575
2+22.8		F 40.00	0.000	4.00	4.00	4.05	4.05	4.0	640
7+66	B.Gu.1	543.20	8.983	4.00	1.80	1.35	1.05	1.0	610
7-00	B.Gu.1	611.00	8.905	4.00	1.78	1.33	1.03	1.0	576
13+77	B.Gu.2	011.00	0.900	4.00	1.10	1.00	1.03	1.0	3,0
10.11	5.00.2	80.00	8.356	3.00	1.60	0.59	0.29	0.0	4
14+57		00.00	0.000	0.00	1.50	0.00	J.20	0.0	
		674.50	8.356	3.00	1.45	1.00	0.70	1.0	100
21+31.5	B.Gu.3	1	1 2 2 2 2 2		,		2.0 4		
		151.00	8.089	6.00	1.10	1.14	0.84	1.0	755
22+82.5									
		52.50	8.089	3.00	1.10	0.55	0.25	0.0	3
23+35									
		315.00	8.089	6.00	1.10	0.65	0.35	1.0	41
26+50									
		160.00	8.089	6.00	1.12	0.66	0.36	1.0	45
28+10									
		640.00	8.089	6.00	1.12	0.67	0.37	1.0	49
34+50									
		34.00	8.089	6.00	1.12	0.60	0.30	1.0	24
34+84									
05.00	201	16.00	8.089	5.50	1.12	1.40	1.10	1.0	1600
35+00	B.Gu.4	Laf Face in 111	. Ottoral construct						
	↓ Our	t of Feasibility			0.00	0.75	0.50	4.0	453
35+40	'	40.80	4.004	5.50	0.83	0.75	0.50	1.0	453
30740		589.20	4.004	5.50	0.83	0.48	0.23	1.0	35
41+30	B.Gu.5	309.20	4.004	0.00	0.03	0.40	0.23	1.0	30
→ IT3U	ø.u.0	200.00	4.004	5.00	0.87	0.52	0.27	1.0	48
43+30		200.00	7.007	3.00	0.01	0.02	0.21	1.0	70
-,0.00		59.00	4.004	5.00	0.87	0.59	0.34	1.0	107
43+89		30.00	7.007	0.00	0.01	0.00	0.54	1.0	
		66.00	4.004	5.00	0.87	0.52	0.27	1.0	49
44+55		10.00							
		35.00	4.004	5.00	1.10	0.79	0.54	1.0	500

Dimension of Gung Main Canal

			Design	Canal	Canal	Lining	Uniform	Side	Hydraulic
НМ	Gu	Length (m)	Discharge (m³/s)	Bed Width (B) (m)	Height (m)	Height (H) (m)	Water Depth (d) (m)	Slope	Gradient 1/I
44+90									
		33.00	4.004	5.00	1.10	0.81	0.56	1.0	550
45+23	B.Gu.6								
		68.00	2.789	4.75	1.17	0.74	0.49	1.0	523
45+91									
		192.00	2.789	4.75	1.17	0.82	0.57	1.0	873
47+83									
		192.00	2.789	3.20	1.70	0.80	0.55	0.0	582
49+75						A ==			
		36.00	2.789	5.00	0.90	0.55	0.30	1.0	144
50+11		20.00	0 -00	4.00	2.00		2.0		•
50.50		39.00	2.789	1.60	0.90	0.71	0.46	1.0	65
50+50		400.00	0.700	4.60	0.00	0.54	0.00	4.0	40
51+50		100.00	2.789	1.60	0.89	0.54	0.29	1.0	13
5 1750		119.50	2.789	5.00	0.82	0.62	0.37	1.0	239
52+69.5	B.Gu.7	119.50	2./09	5.00	0.62	0.02	0.57	1.0	239
32-09.5	5.00.1	50.50	2.650	4.00	0.88	0.54	0.29	1.0	78
53+20		30.30	2.000	7.00	0.00	0.07	0.23	1.0	10
33.20		55.00	2.650	4.00	0.88	0.52	0.27	1.0	57
53+75		00.00	2.000	7.00	0.00	Ų.Ų.	U.21	1.0	
55.75		95.00	2.650	4.00	0.88	0.54	0.29	1.0	73
54+70					0,00				
		59.00	2.650	4.00	0.88	0.52	0.27	1.0	56
55+29									
		157.00	2.650	4.00	0.88	0.52	0.27	1.0	61
56+86									
		289.00	2.650	4.00	0.88	0.53	0.28	1.0	65
59+75									
·		125.00	2.650	4.00	0.85	0.50	0.25	1.0	45
61+00									
		85.00	2.650	4.00	0.85	0.49	0.24	1.0	38
61+85									
		84.00	2.650	4.00	0.87	0.52	0.27	1.0	58
62+69		L							
		254.00	2.650	4.00	0.87	0.52	0.27	1.0	58
65+23									
		122.00	2.650	4.00	0.91	0.55	0.30	1.0	85



			Design	Canal	Canal	Lining	Uniform	Side	Hydrauli
HM	Gu	Length (m)	Discharge	Bed Width (B)	Height	Height	Water Depth (d)		Gradien
		• ` '	(m³/s)	(m)	(m)	(H) (m)	(m)	Slope	1/I
66+45			` ′	(,,,)			()		
		100.00	2.650	4.00	0.91	0.55	0.30	1.0	88
67+45									
		100.00	2.650	4.00	0.86	0.52	0.27	1.0	56
68+45									
		201.50	2.650	4.00	0.86	0.51	0.26	1.0	50
70+46									
		429.50	2.650	4.00	0.89	0.54	0.29	1.0	74
74+76		044.00	0.050	4.00		2.54	0.00	4.0	
77.00		314.00	2.650	4.00	0.86	0.51	0.26	1.0	51
77+90		40.75	2.650	4.00	0.00	0.50	0.33	1.0	116
78+39.7	B.Gu.8	49.75	2.650	4.00	0.86	0.58	0.33	1.0	110
10-35.1	B.Gu.6	368.75	2.504	3.00	0.93	0.58	0.33	1.0	71
82+08		500.70	2.00-	3.00	0.00	0.00	0.00	1.0	
02.00		96.50	2.504	3.00	0.91	0.56	0.31	1.0	61
83+05		-				7.77			
		65.00	2.504	3.00	0.91	0.55	0.30	1.0	51
83+70									
		150.00	2.504	3.00	0.93	0.58	0.33	1.0	71
85+20									
		70.00	2.504	3.00	0.98	0.62	0.37	1.0	111
85+90									
		194.00	2.504	3.00	0.98	0.63	0.38	1.0	114
87+84			2.52.		4.00		2.05		
00.00	200	79.00	2.504	3.00	1.25	0.90	0.65	1.0	718
88÷63	B.Gu.9					l			

 $Rehabilitation\ grade:$

RG 3 : Large Scale Rehabilitation

RG 1 : No Rehabilitation

RG 2 : Minor Rehabilitation

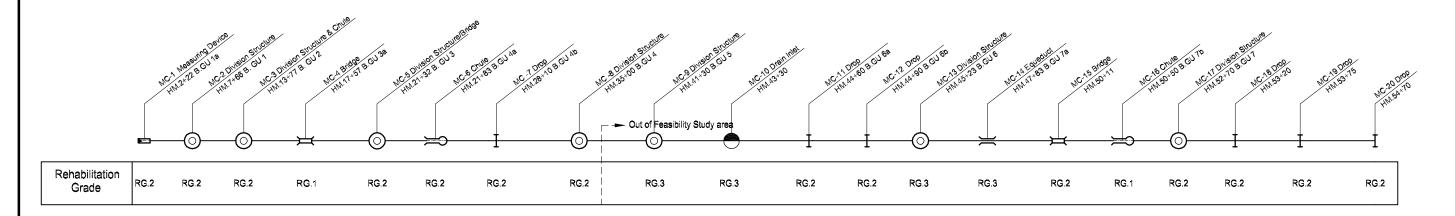
RG 4 : Replacement or New Construction

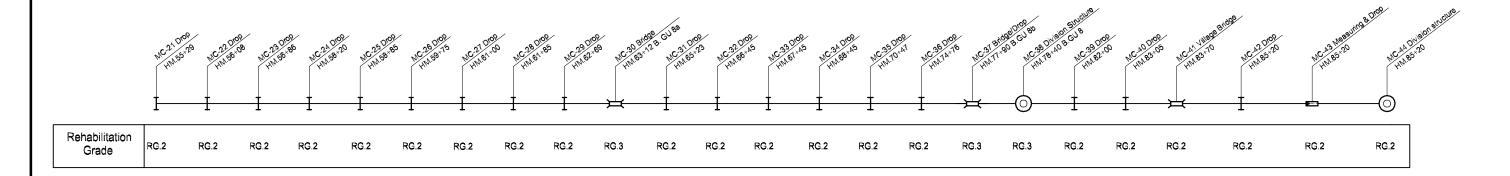
The Study on Comprehensive Recovery Program of Irrigation Agriculture

Japan International Cooperation Agency

Drawing 300-01
Gung Scheme
Rehabilitation Plan of
Main Canal and Inspection Road

REHABILITATION PLAN OF RELATED STRUCTURES





Summary of Rehabilitation Works of Related Structures

Structure	Structure	НМ	Name/Code of	Rehabilitation Grade		
Serial No.			Structure	Civil	Metal	
MC-1	Measuring Device	2+22	B.GU 1a	RG.2	RG.2	
MC-2	Division Structure	7+66	B.GU 1	RG.2	RG.2	
MC-3	Division structure & Chute	13+77	B.GU 2	RG.2	RG.2	
MC-4	Bridge	17+57	B.GU 3a	RG.1	RG.1	
MC-5	Division structure/bridge	21+32	B.GU 3	RG.2	RG.2	
MC-6	Chute	21+83	B.GU 4a	RG.2	RG.2	
MC-7	Drop	28+10	B.GU 4b	RG.2	-	
MC-8	Division structure	35+00	B.GU 4	RG.2	RG.2	
	d	Out of Feasibilit	y Study area	•	1	
MC-9	Division Structure	41+30	B.GU 5	RG.3	RG.2	
MC-10	Drain Inlet	43+30		RG.3	-	
MC-11	Drop	44+60	B.GU 6a	RG.2	-	
MC-12	Drop	44+90	B.GU 6b	RG.2	-	
MC-13	Division Structure	45+23	B.GU 6	RG.3	RG.2	
MC-14	Aqueduct	47+83	B.GU 7a	RG.3	RG.3	
MC-15	Bridge	50+11		RG.2	-	
MC-16	Chute	50+50	B.GU 7b	RG.1	-	
MC-17	Division structure	52+70	B.GU 7	RG.2	RG.3	
MC-18	Drop	53+20		RG.2	-	
MC-19	Drop	53+75		RG.2	-	
MC-20	Drop	54+70		RG.2	-	
MC-21	Drop	55+29		RG.2	-	
MC-22	Drop	56+08		RG.2	-	

Structure	Structure	НМ	Name/Code of	Rehabilitation Grade		
Serial No.	0		Structure	Civil	Metal	
MC-23	Drop	56+86		RG.2	-	
MC-24	Drop	58+20		RG.2	-	
MC-25	Drop	58+85		RG.2	-	
MC-26	Drop	59+75		RG.2	-	
MC-27	Drop	61+00		RG.2	-	
MC-28	Drop	61+85		RG.2	-	
MC-29	Drop	62+69		RG.2	-	
MC-30	Bridge	63+12	B.GU 8a	RG.3	-	
MC-31	Drop	65+23		RG.2	-	
MC-32	Drop	66+45		RG.2	-	
MC-33	Drop	67+45		RG.2	-	
MC-34	Drop	68+45		RG.2	-	
MC-35	Drop	70+47		RG.2	-	
MC-36	Drop	74+76		RG.2	-	
MC-37	Bridge/Drop	77+90	B.GU 8b	RG.3	-	
MC-38	Division Structure	78+40	B.GU 8	RG.3	RG.3	
MC-39	Drop	82+00		RG.2	-	
MC-40	Drop	83+05		RG.2	-	
MC-41	Village bridge	83+70		RG.2	-	
MC-42	Drop	85+20		RG.2	-	
MC-43	Measuring & Drop	87+84	B.GU 9b	RG.2	-	
MC-43	Division structure	88+63	B.GU 9	RG.2	RG.2	

Legend:

: Division Structure

 ${\ \ \ \ \ \ \ \ }$: Drainage Culvert

Setlling Basin

Siphon

Bridge

 $\mathbf{\Xi}$: Aqueduct \mathbf{I} : Drop

: Drain Inlet

⇒ : Chute

Rehabilitation grade:

RG 1 : No Rehabilitation

RG 2 : Minor Rehabilitation

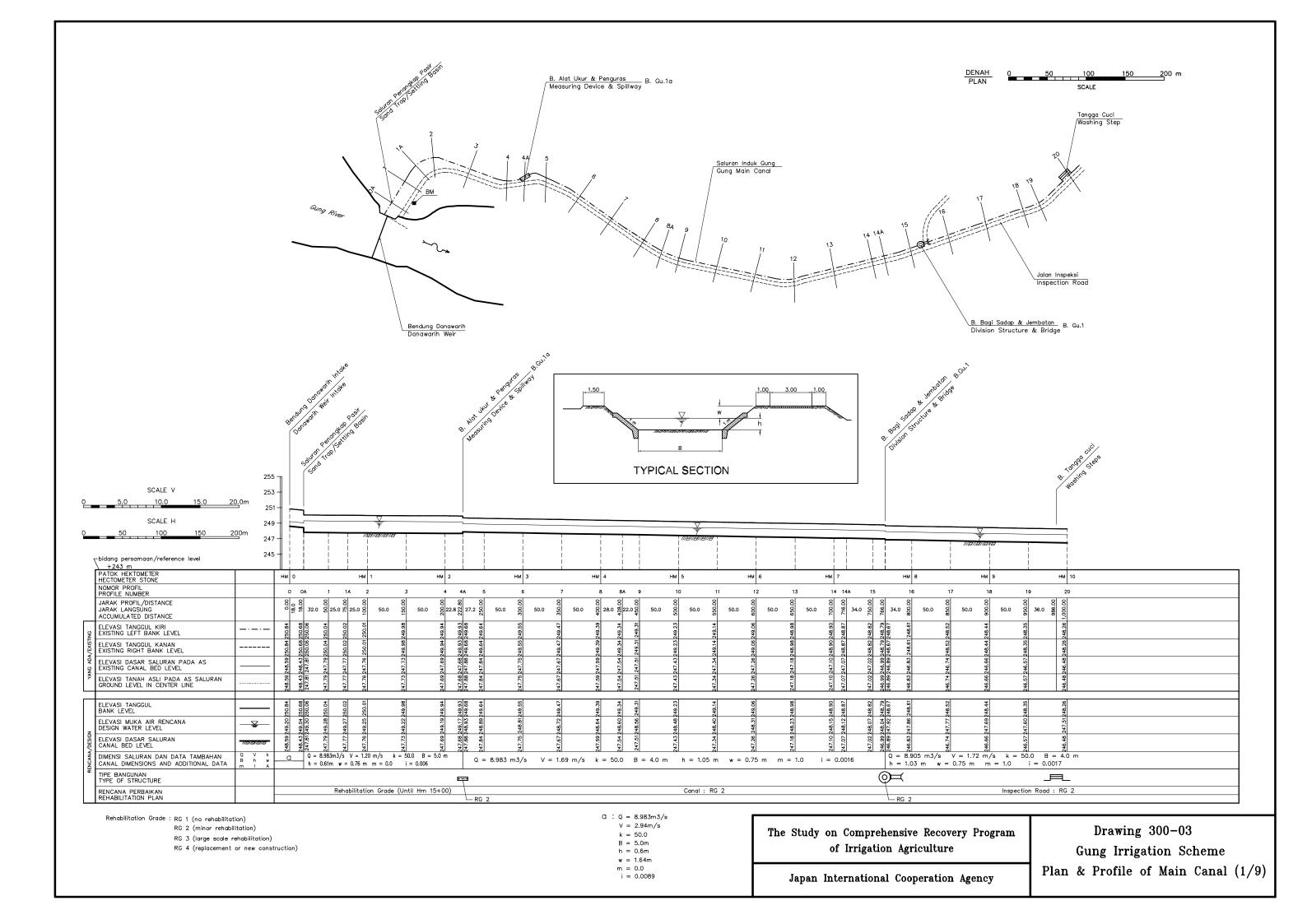
RG 3 : Large Scale Rehabilitation
RG 4 : Replacement or New Construction

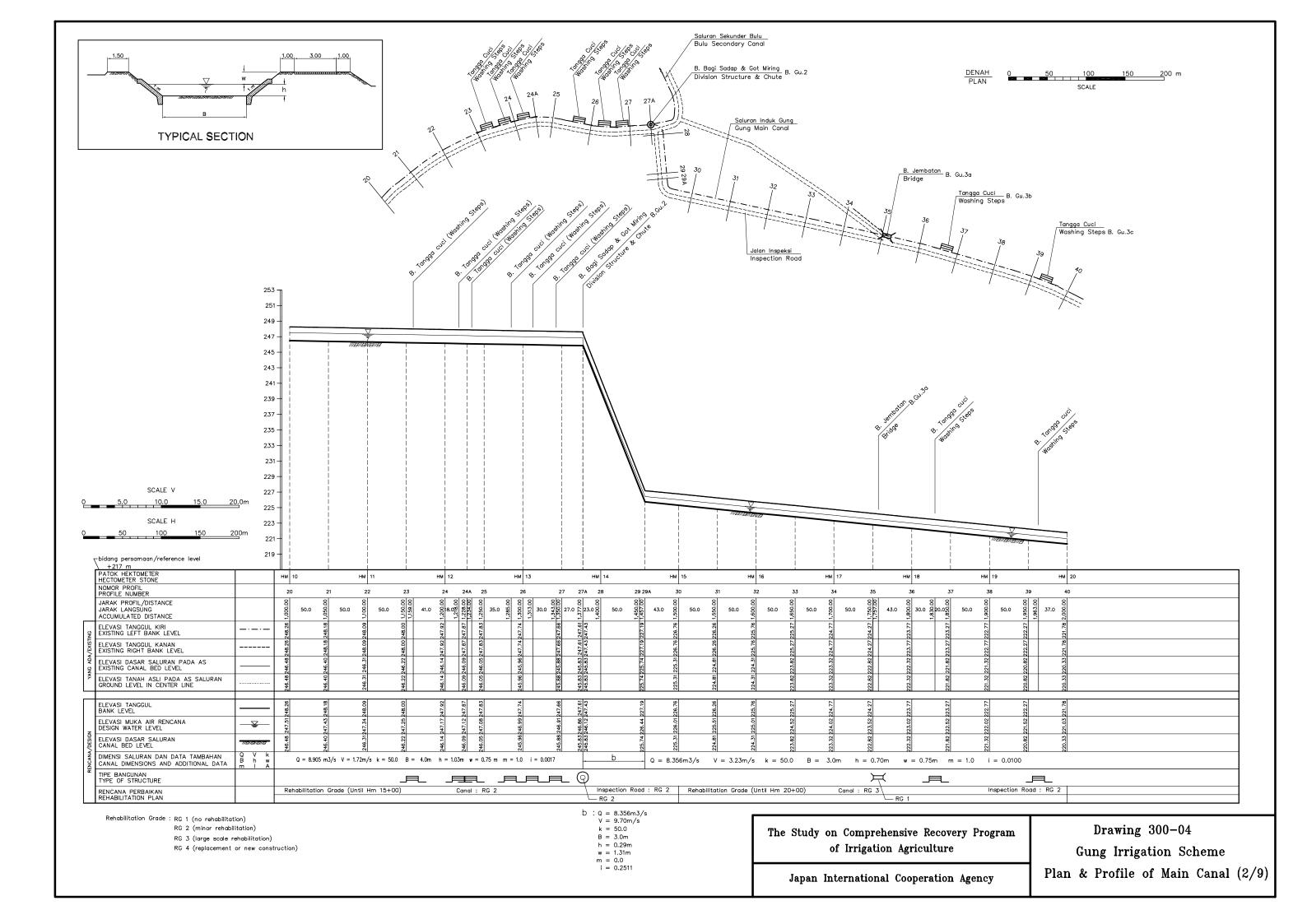
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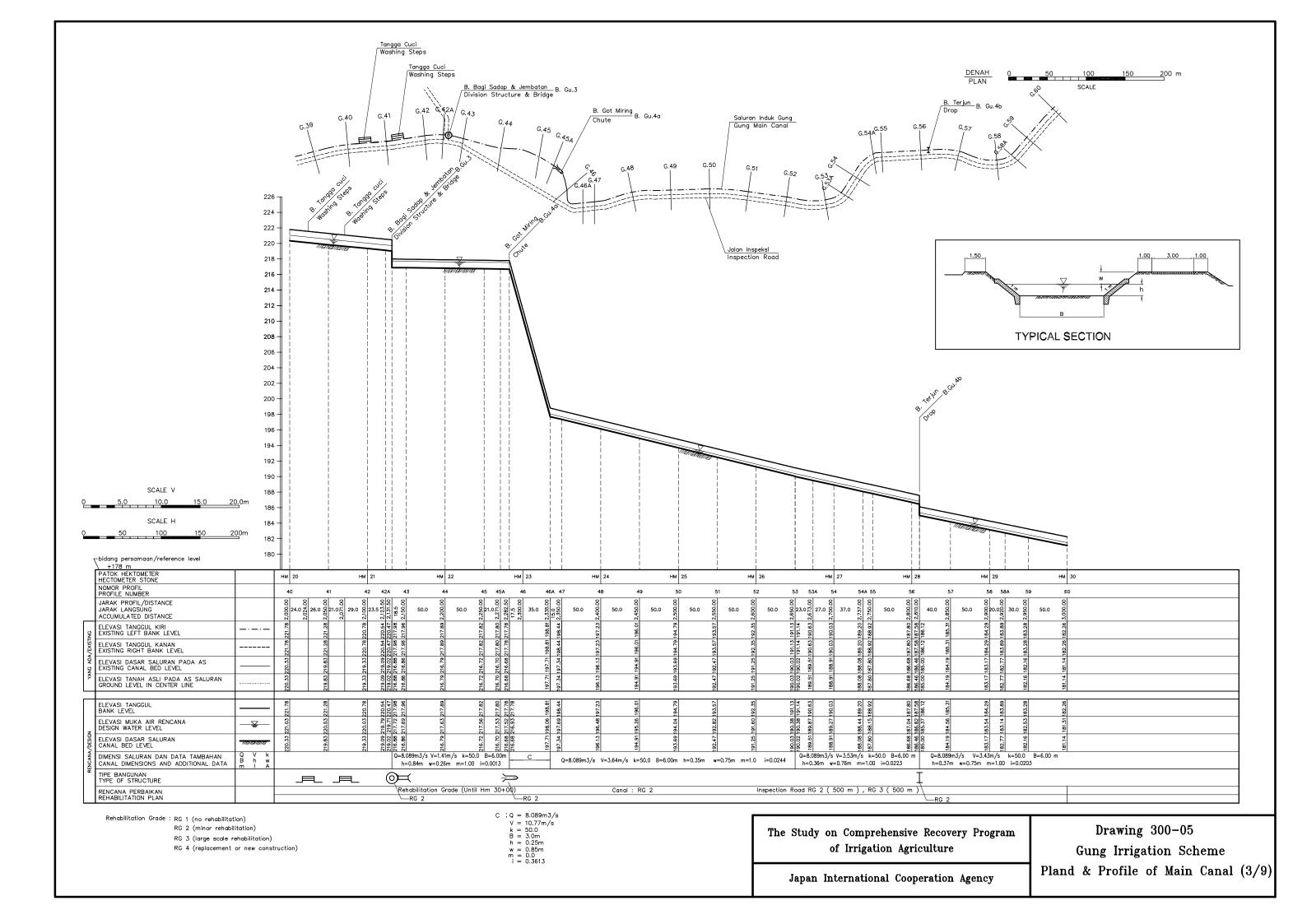
The Study on Comprehensive Recovery Program

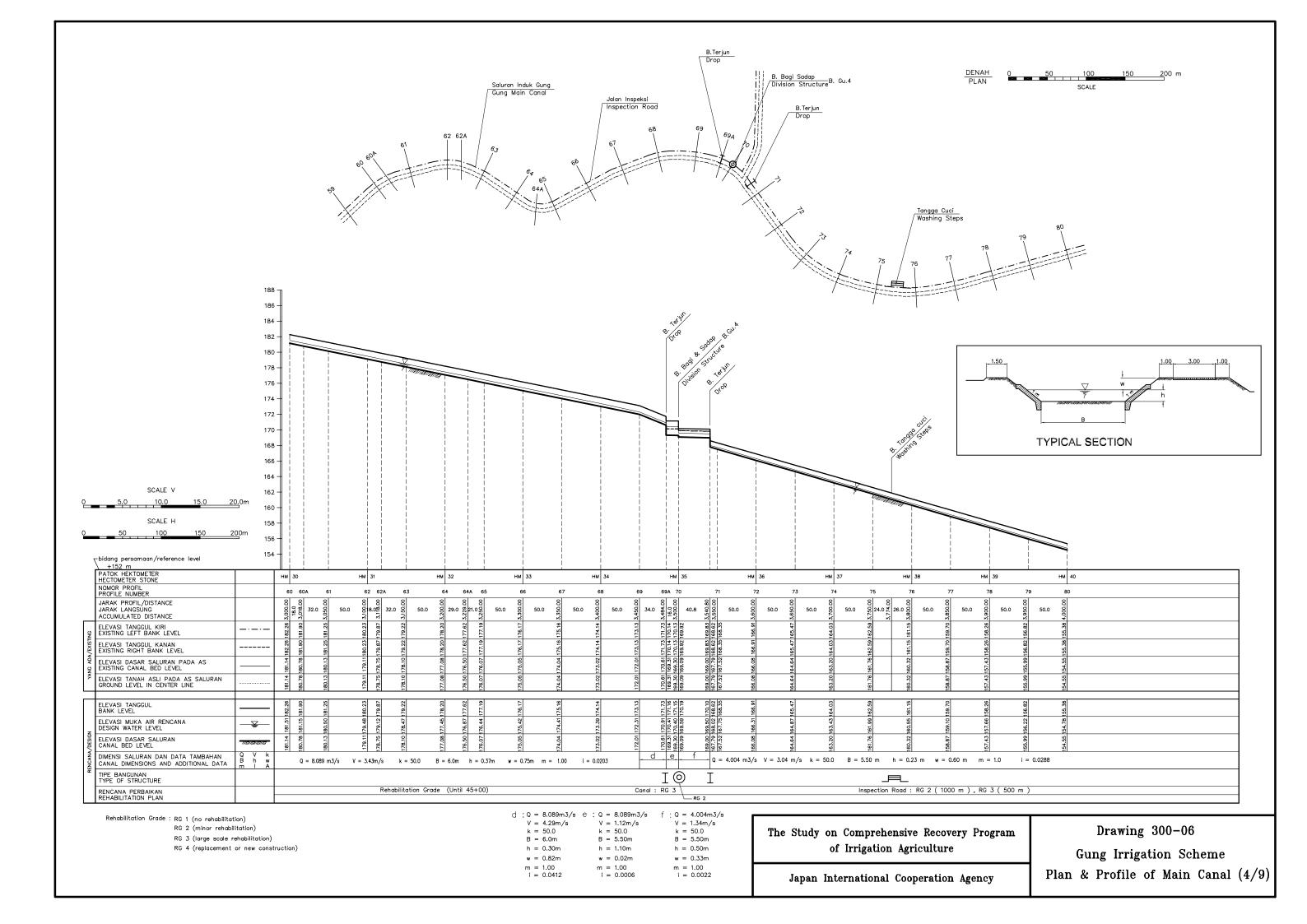
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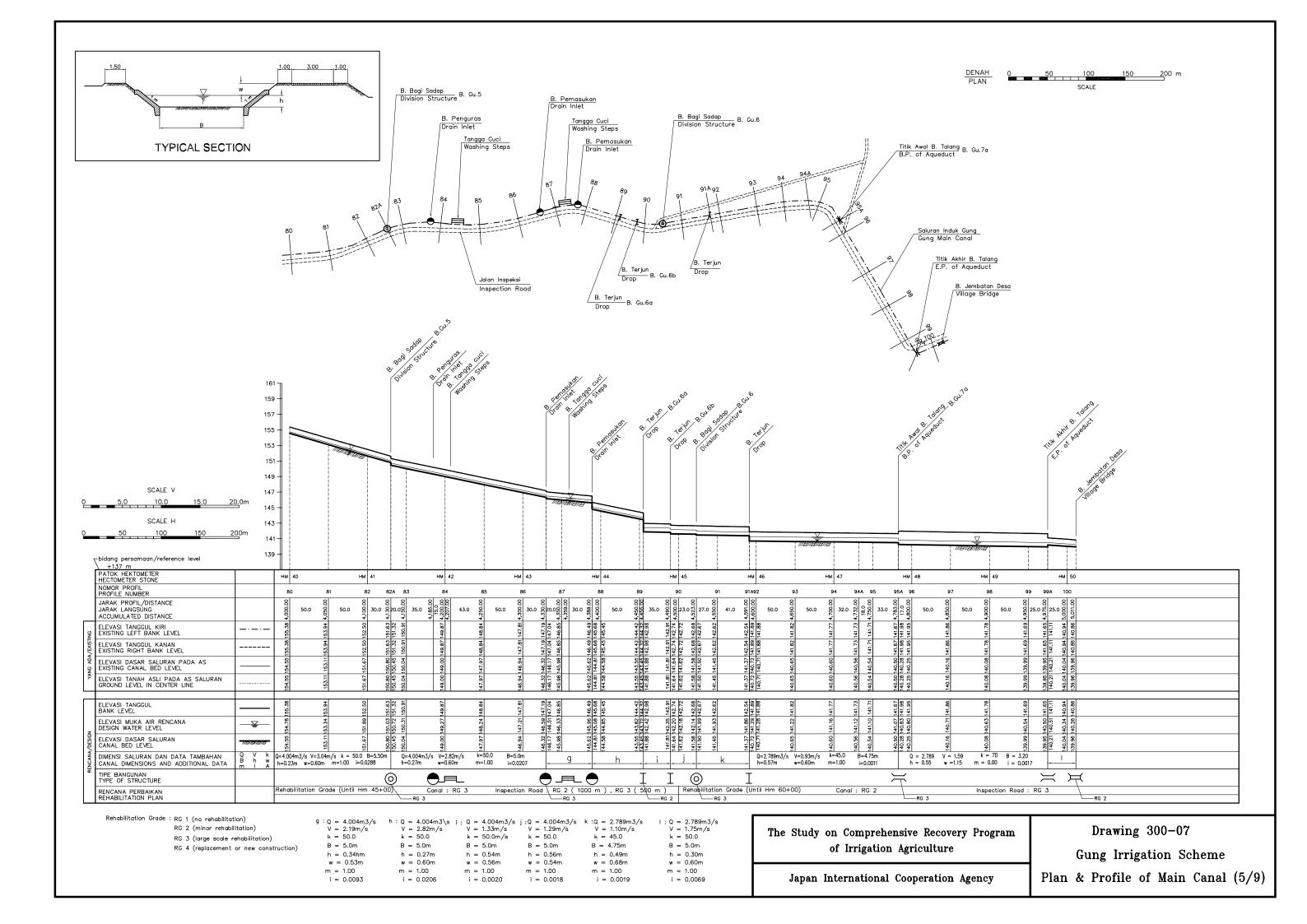
Drawing 300-02
Gung Scheme
Rehabilitation Plan of Main Canal
Related Structures

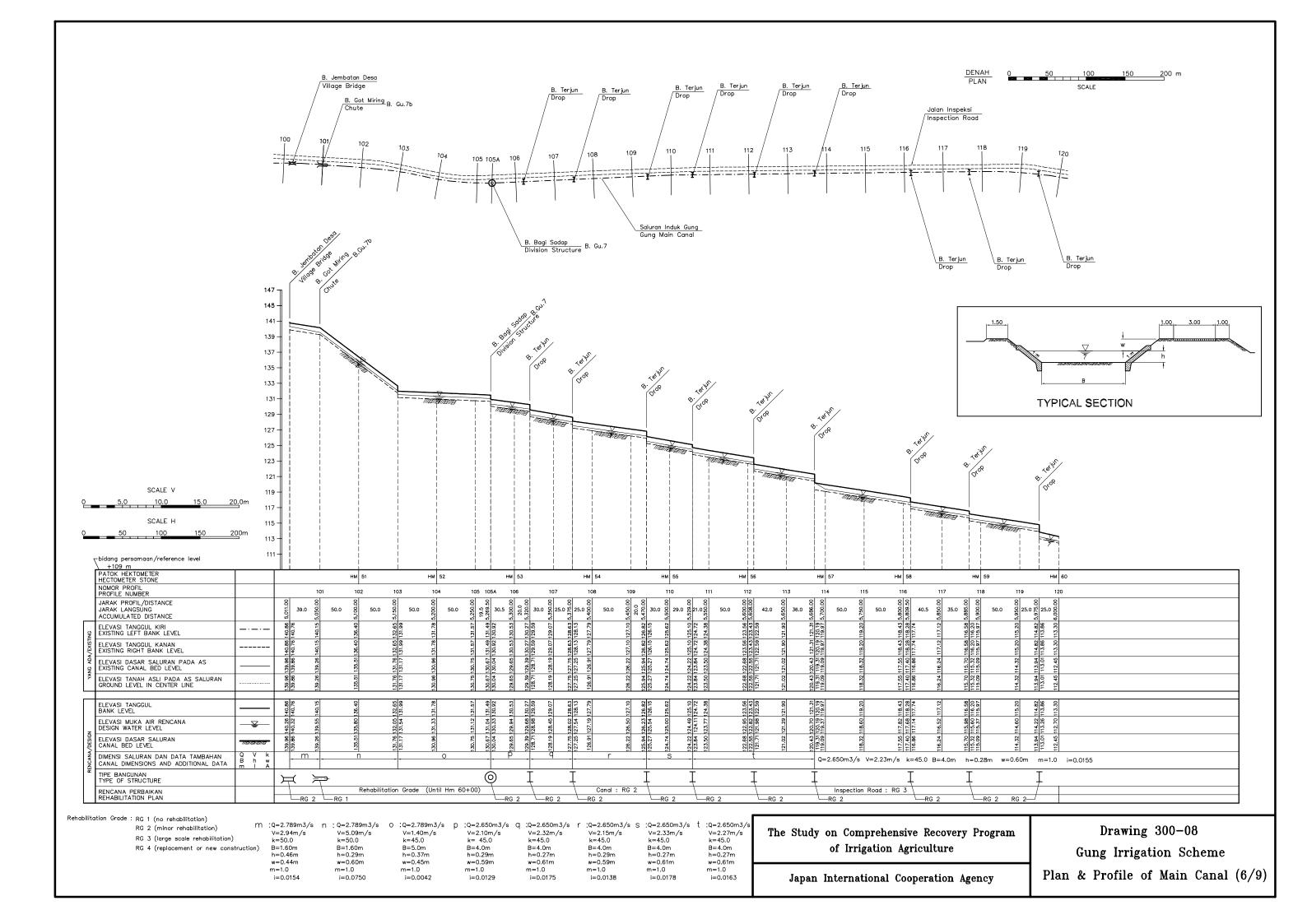


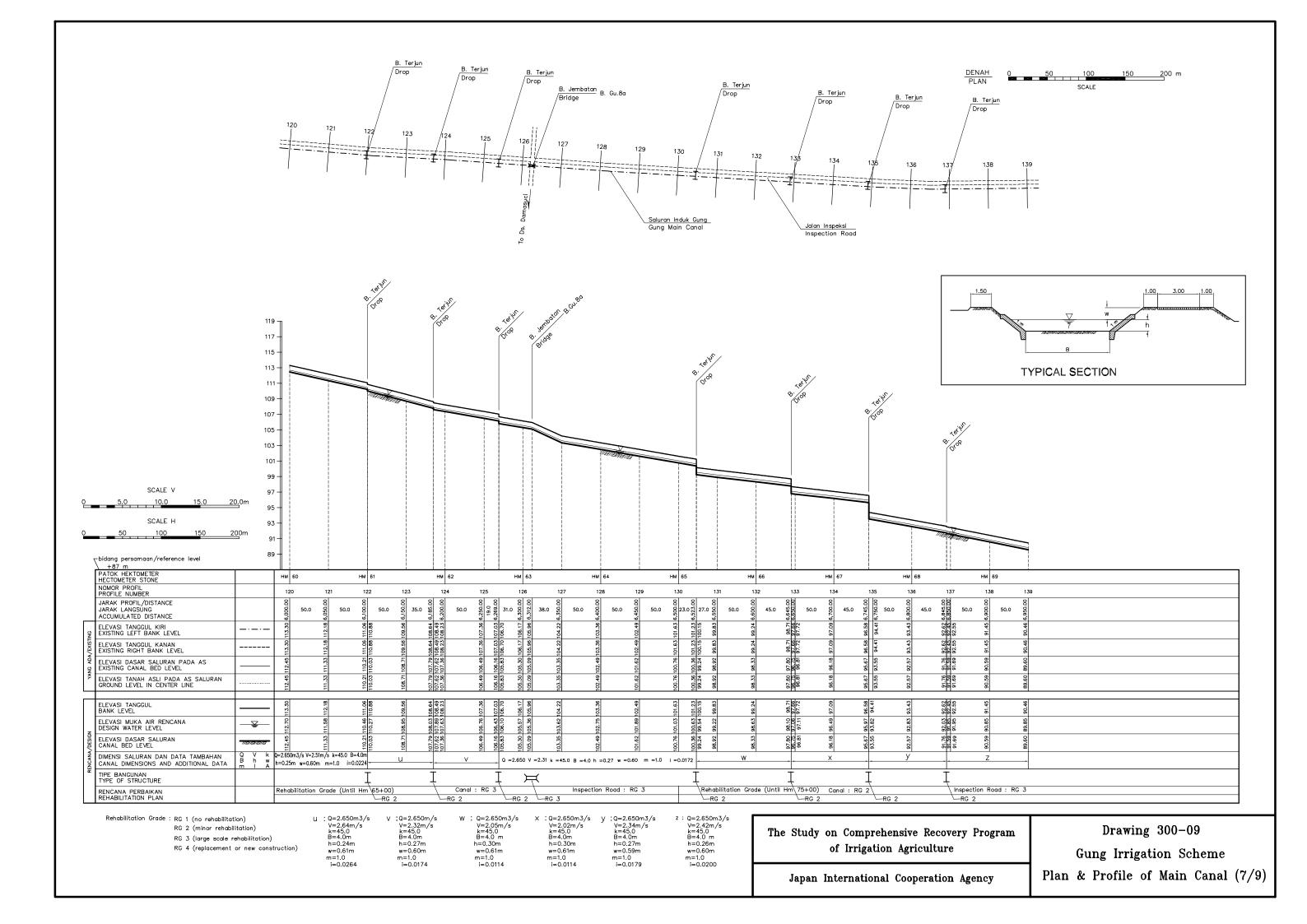


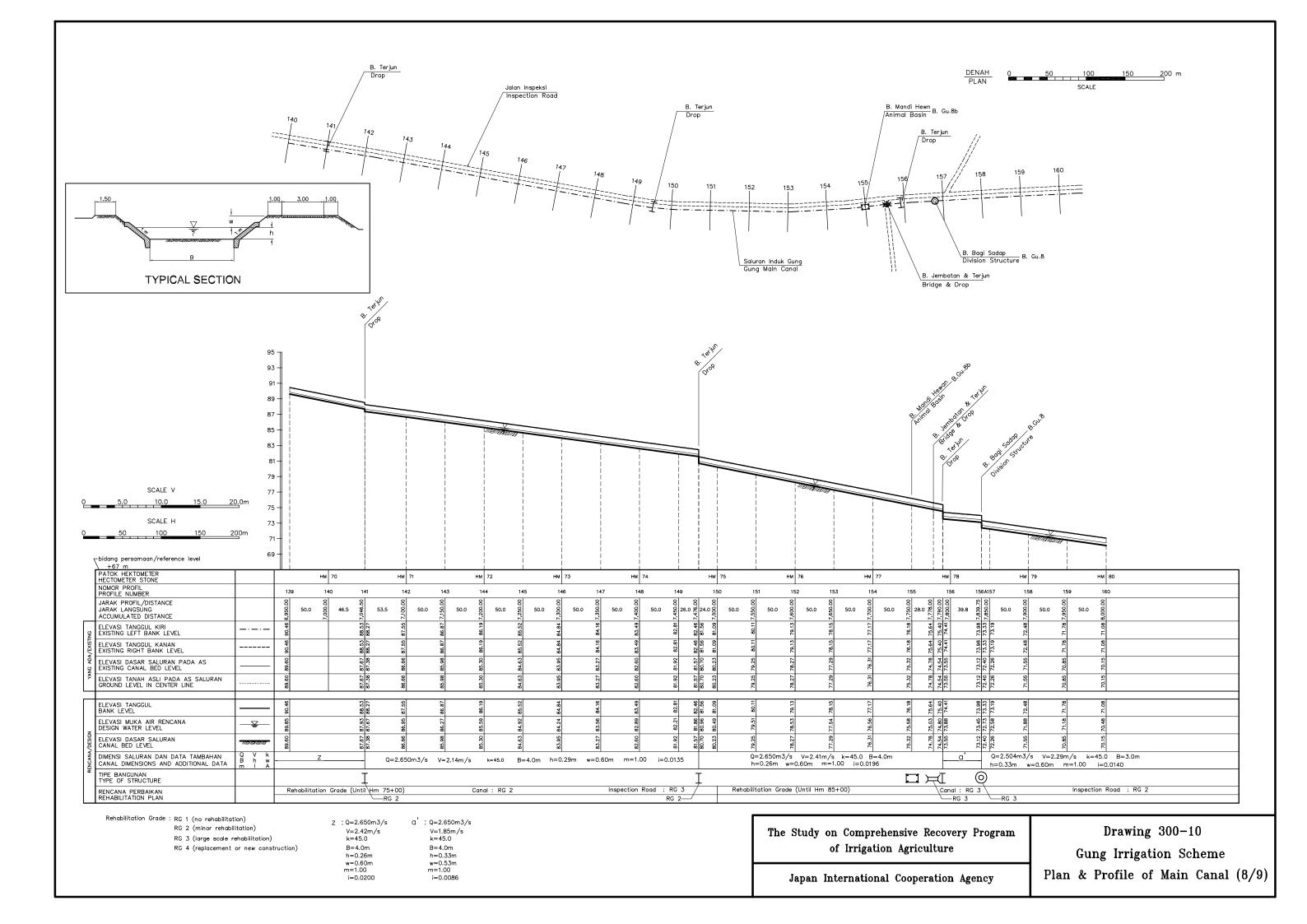


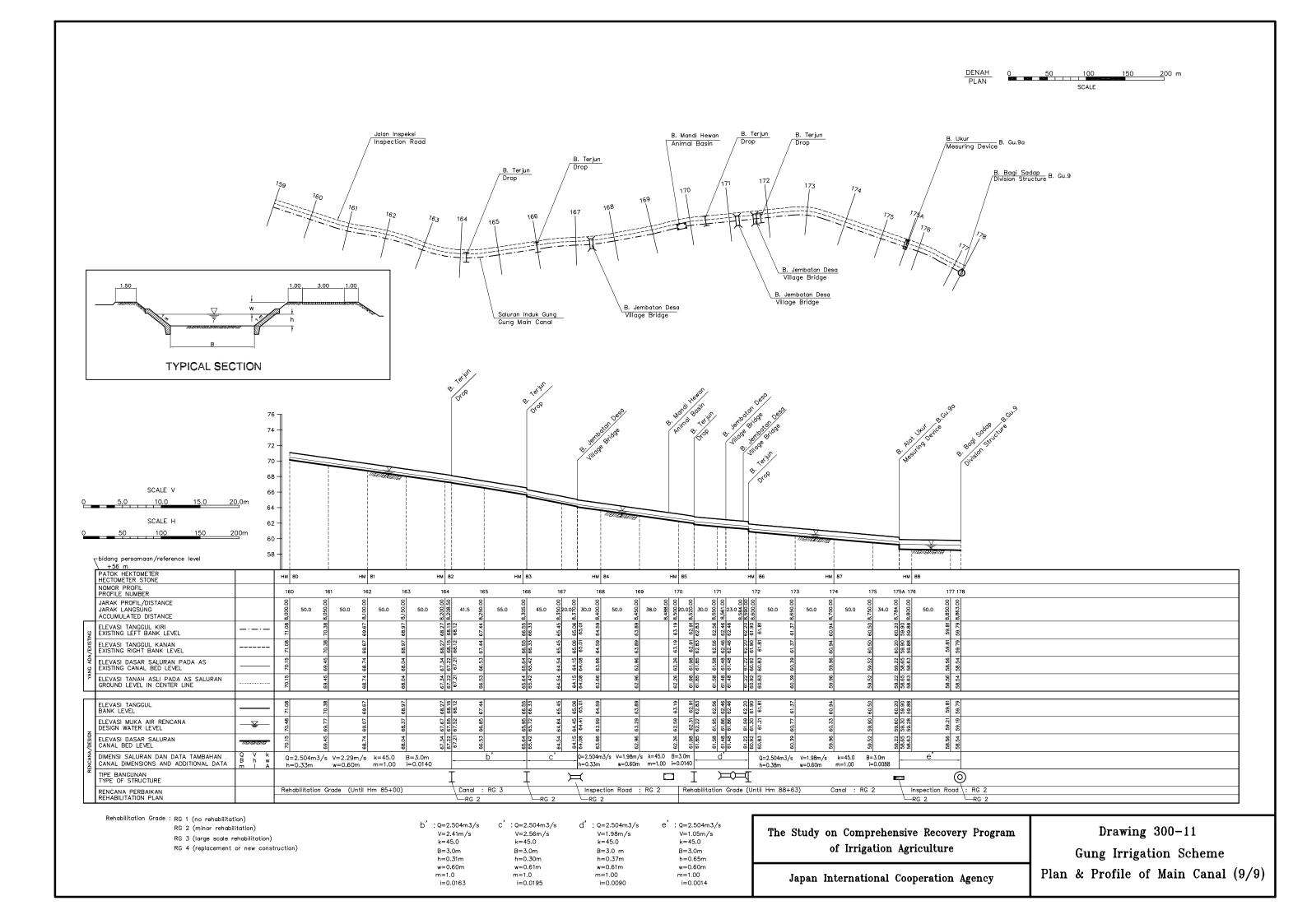


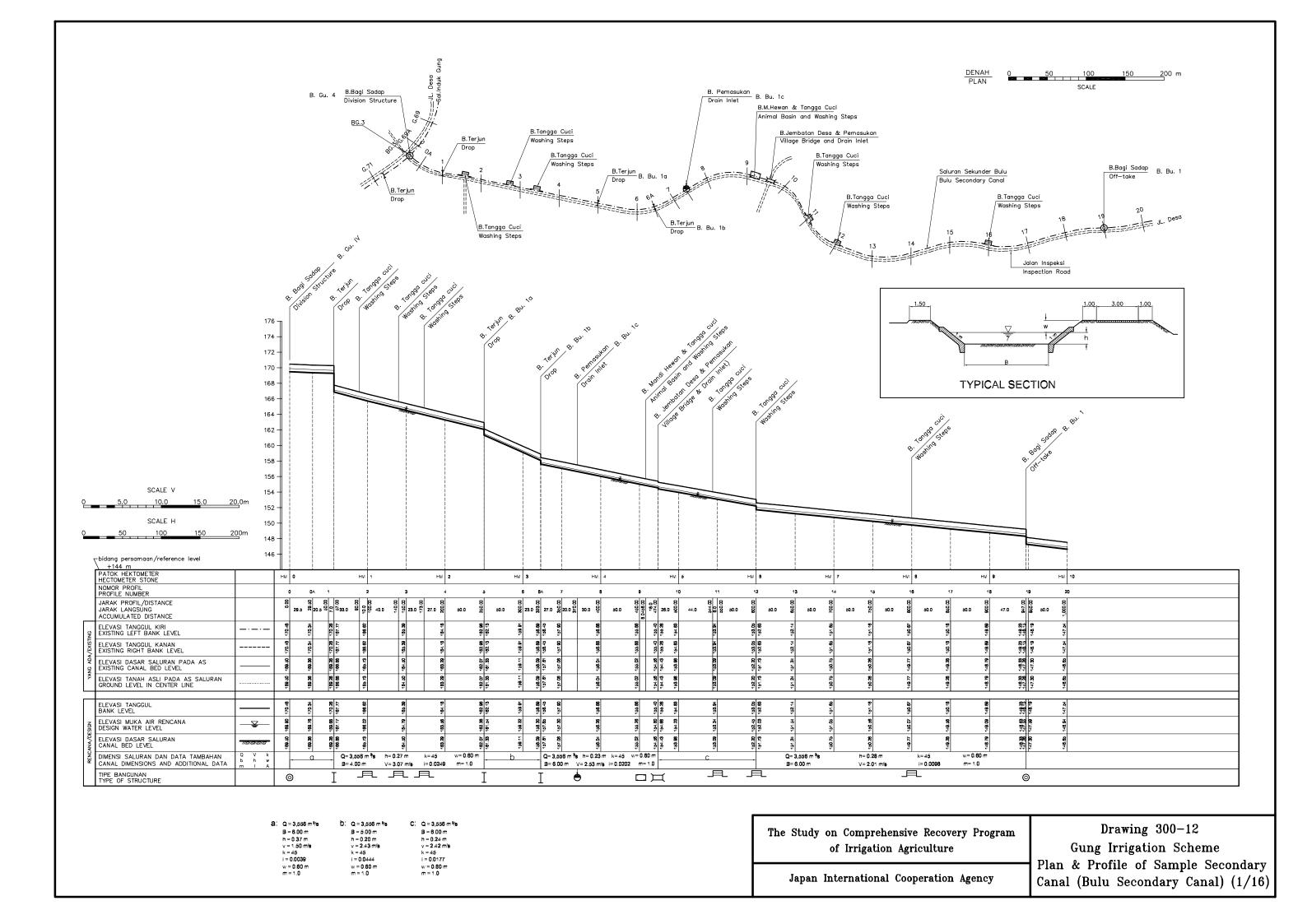


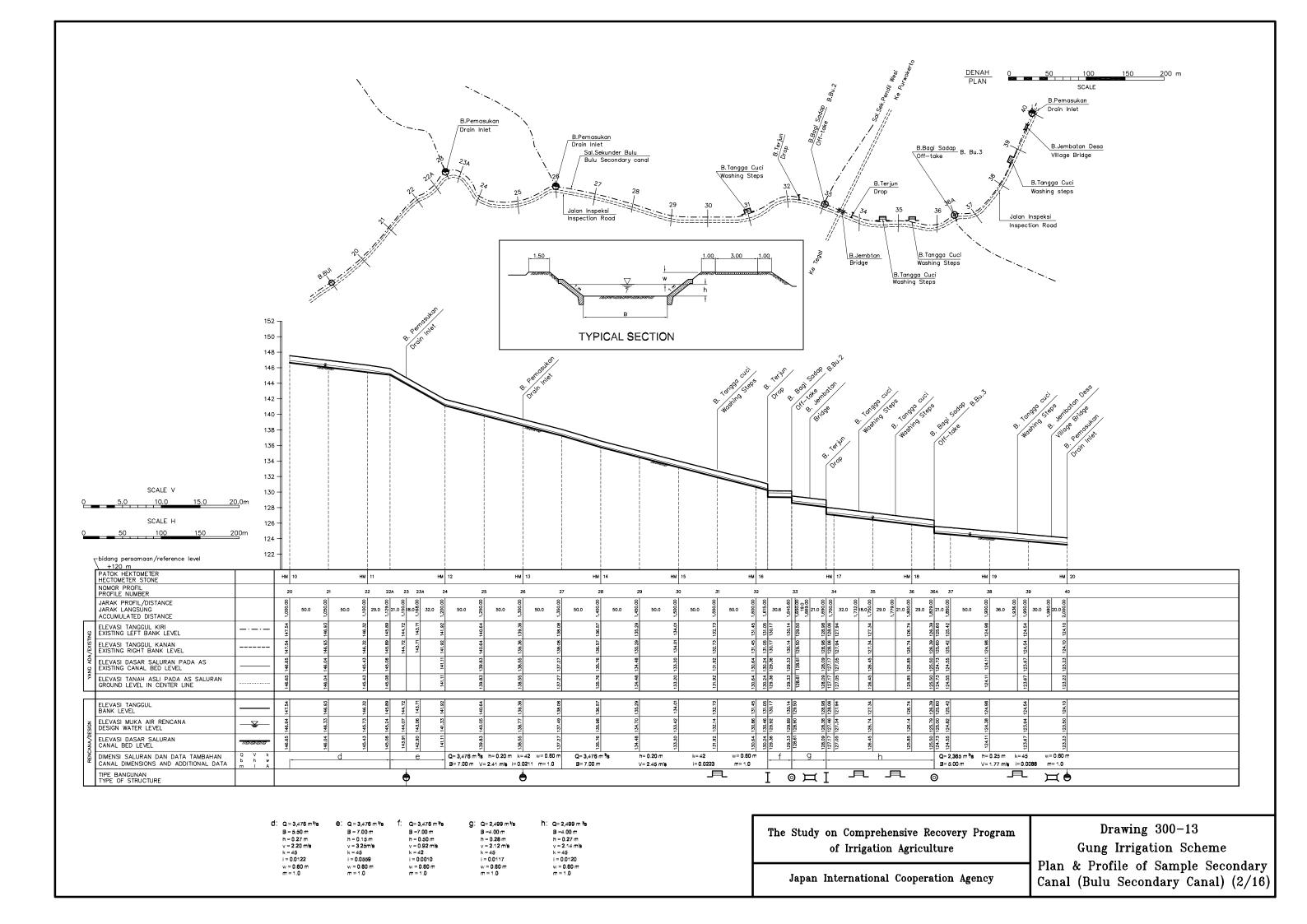


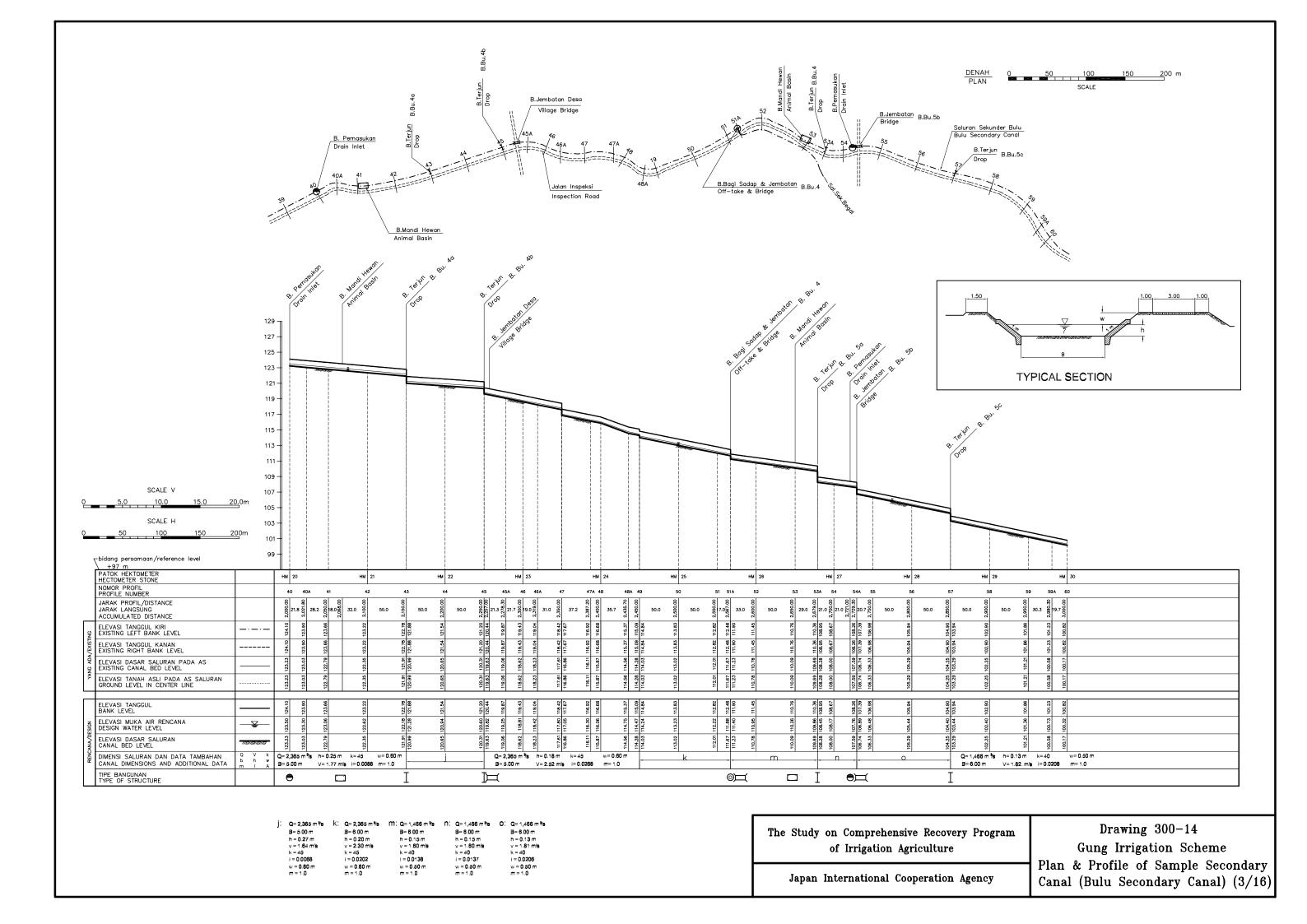


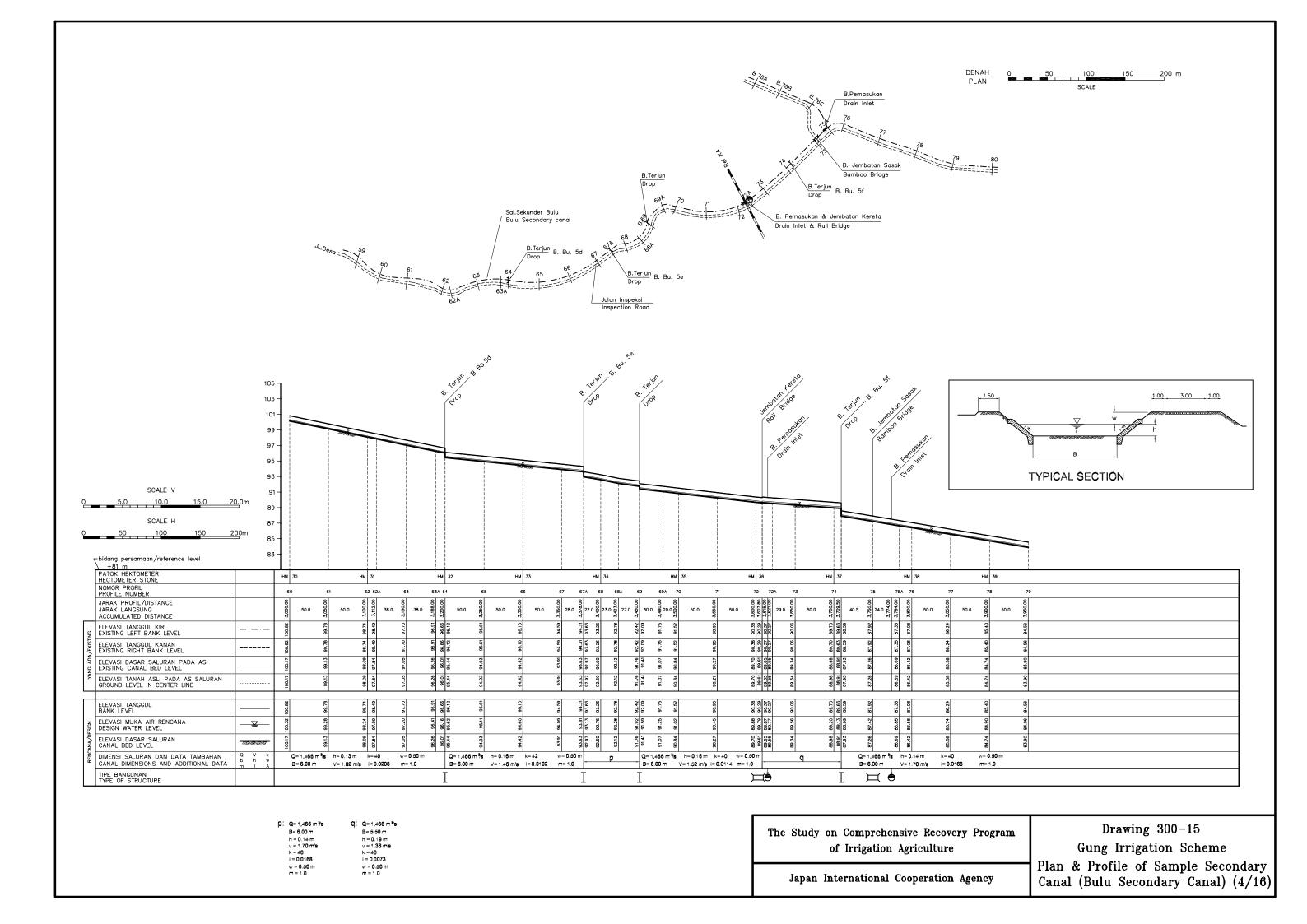


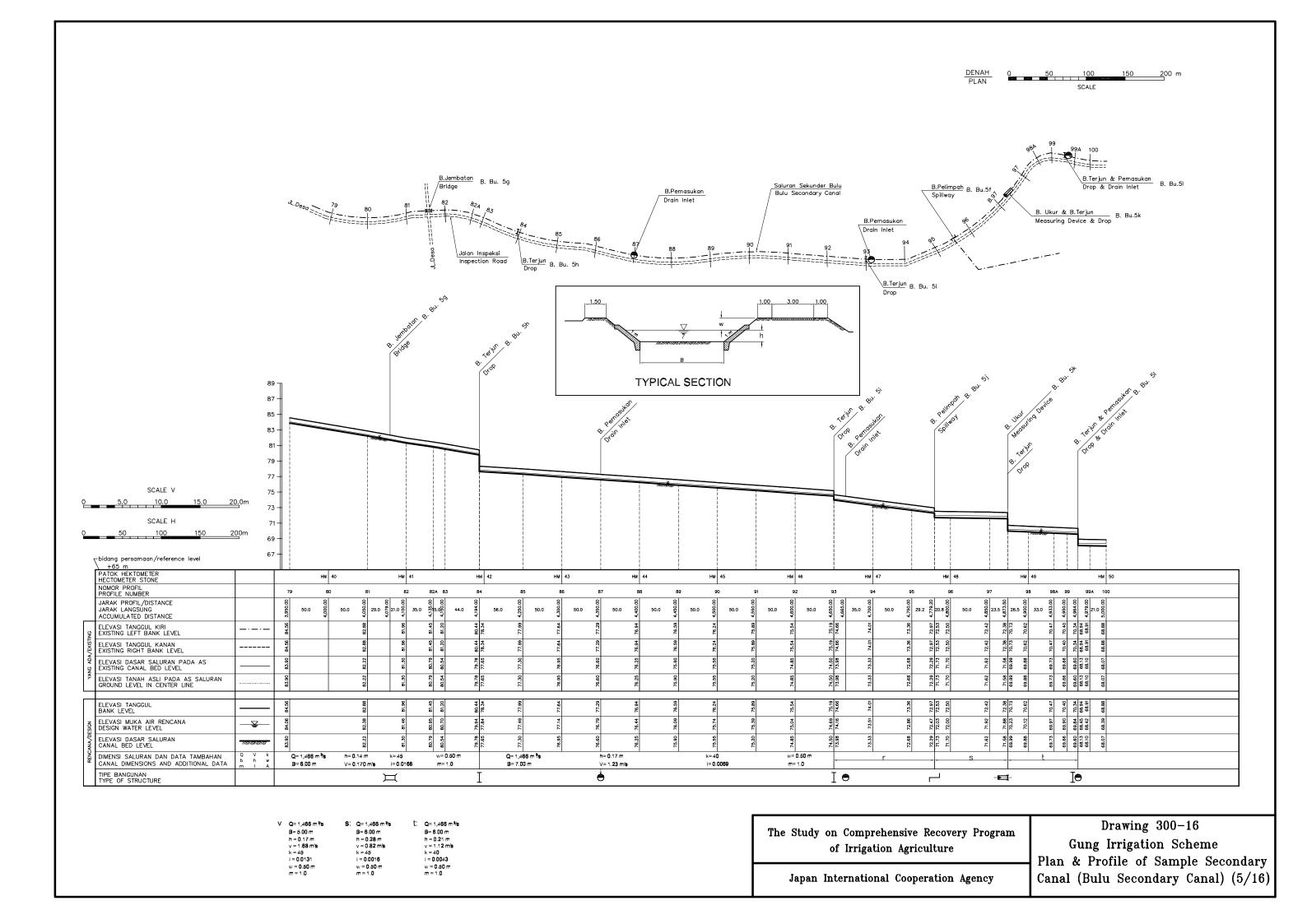


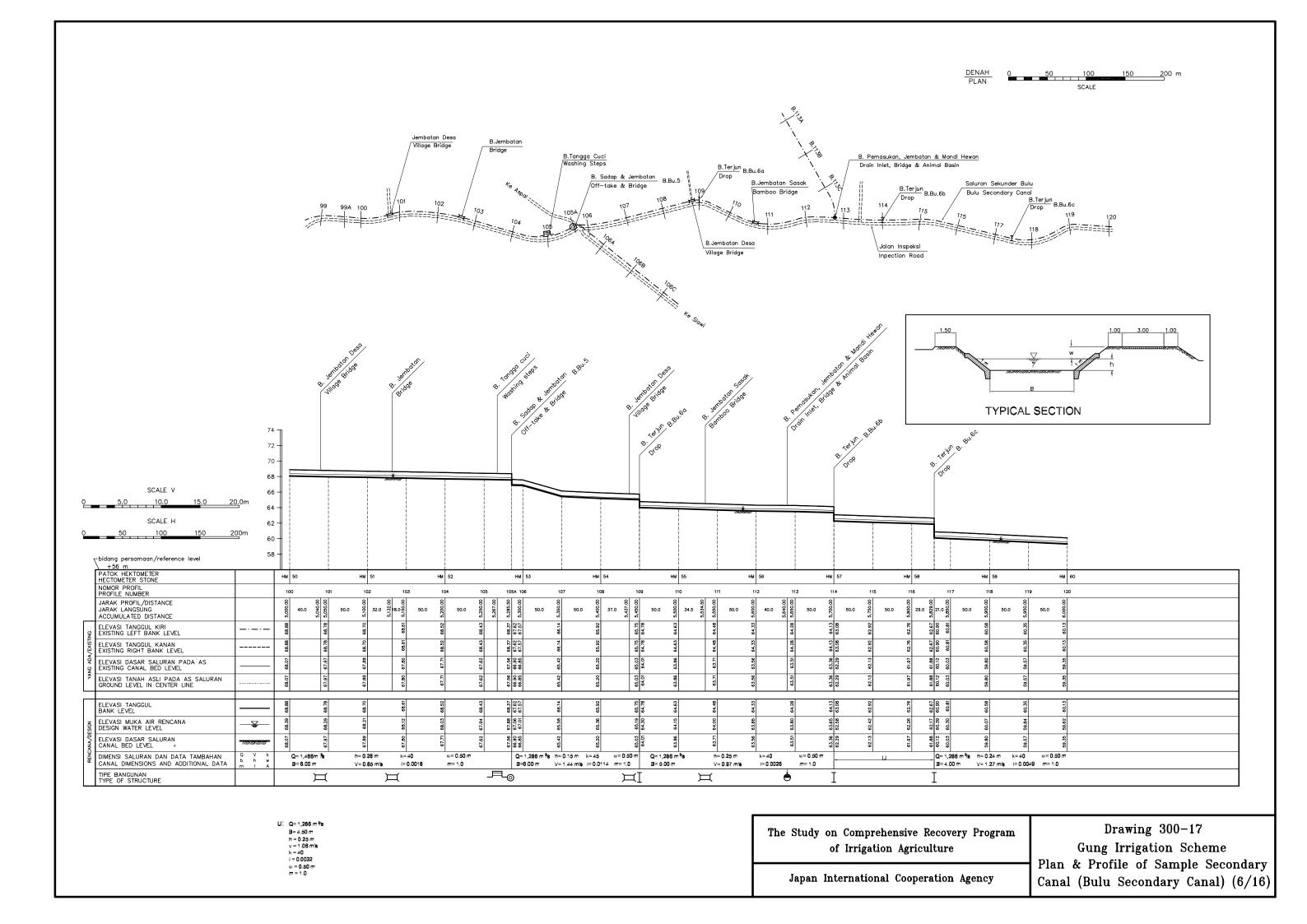


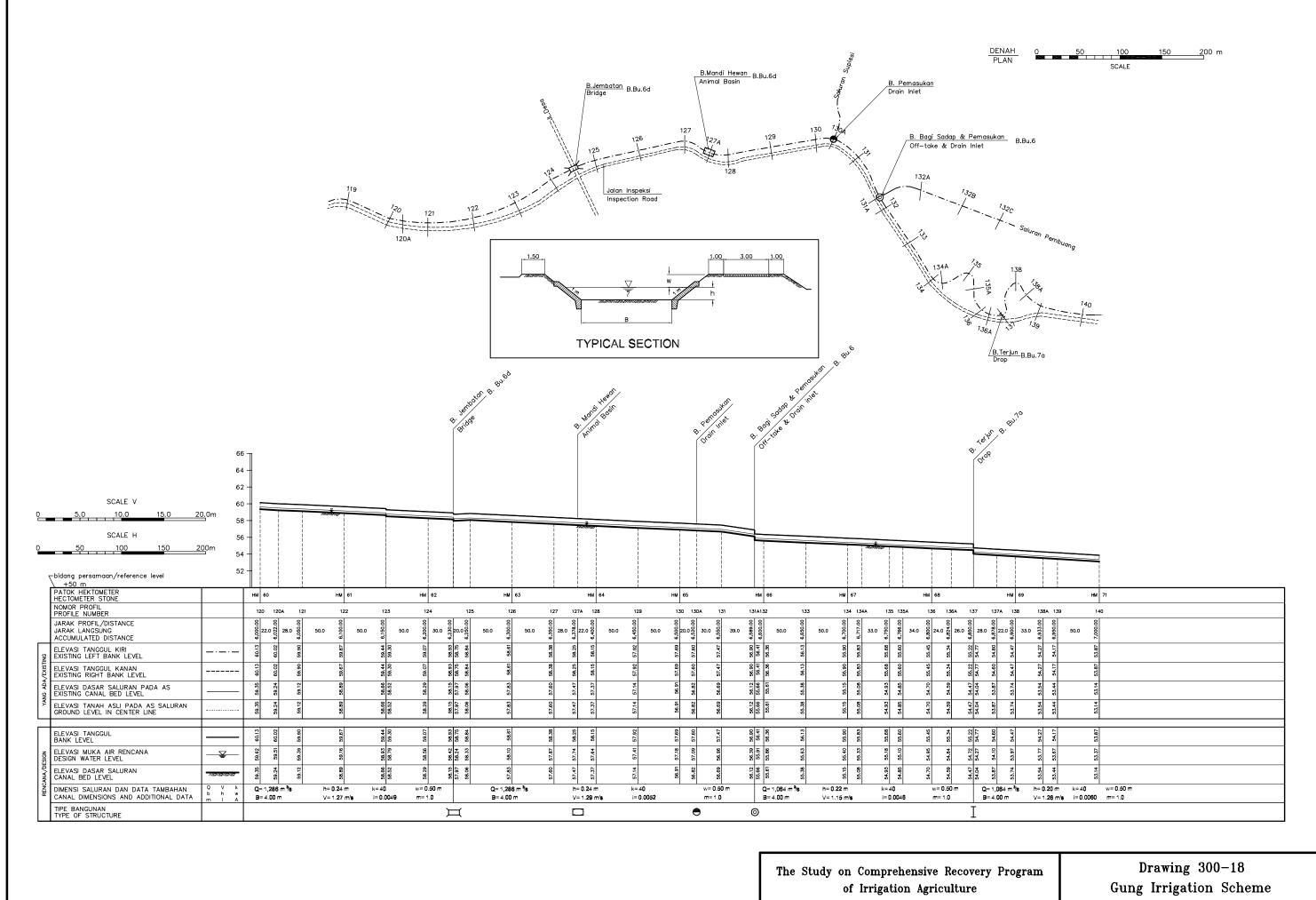






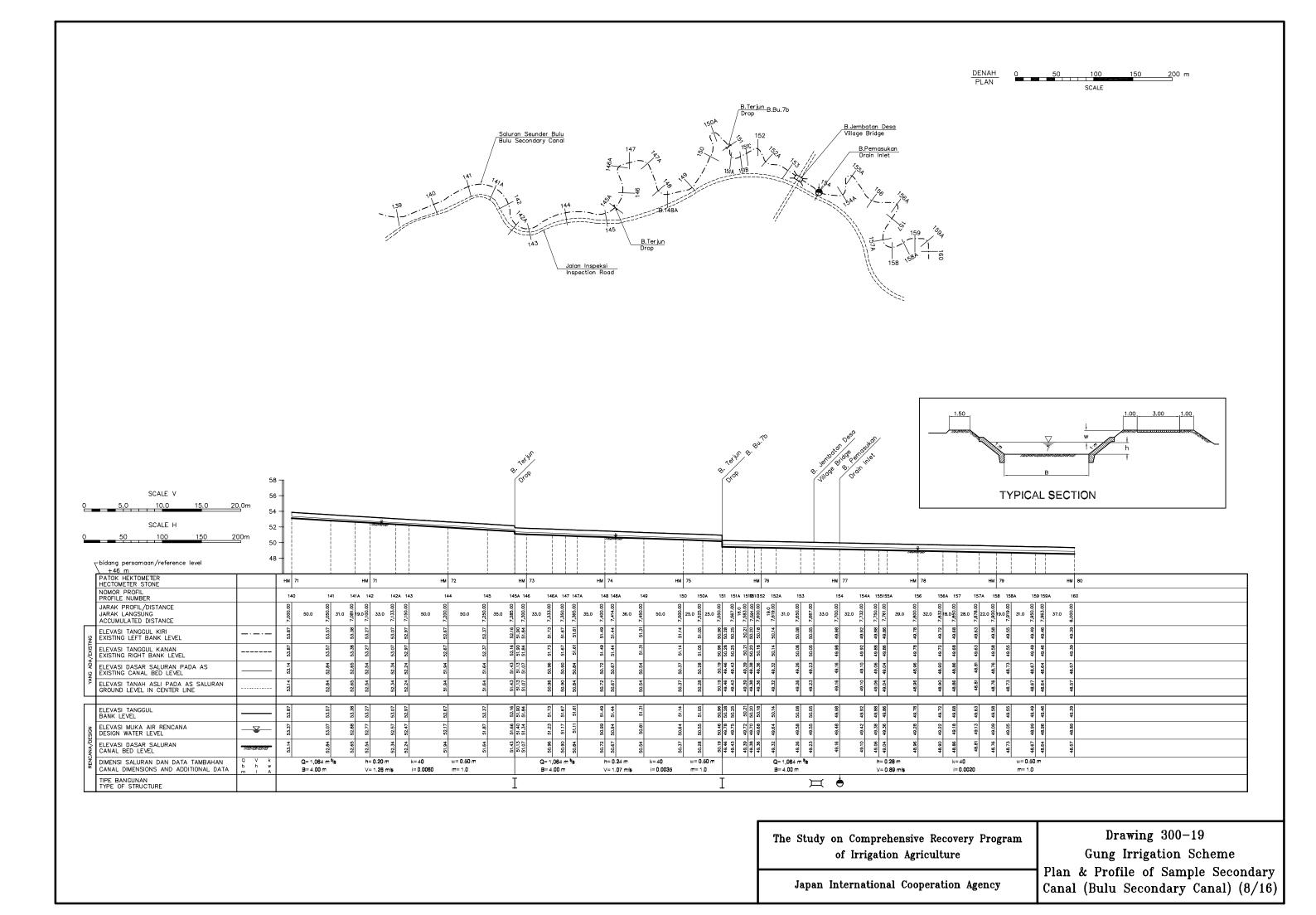


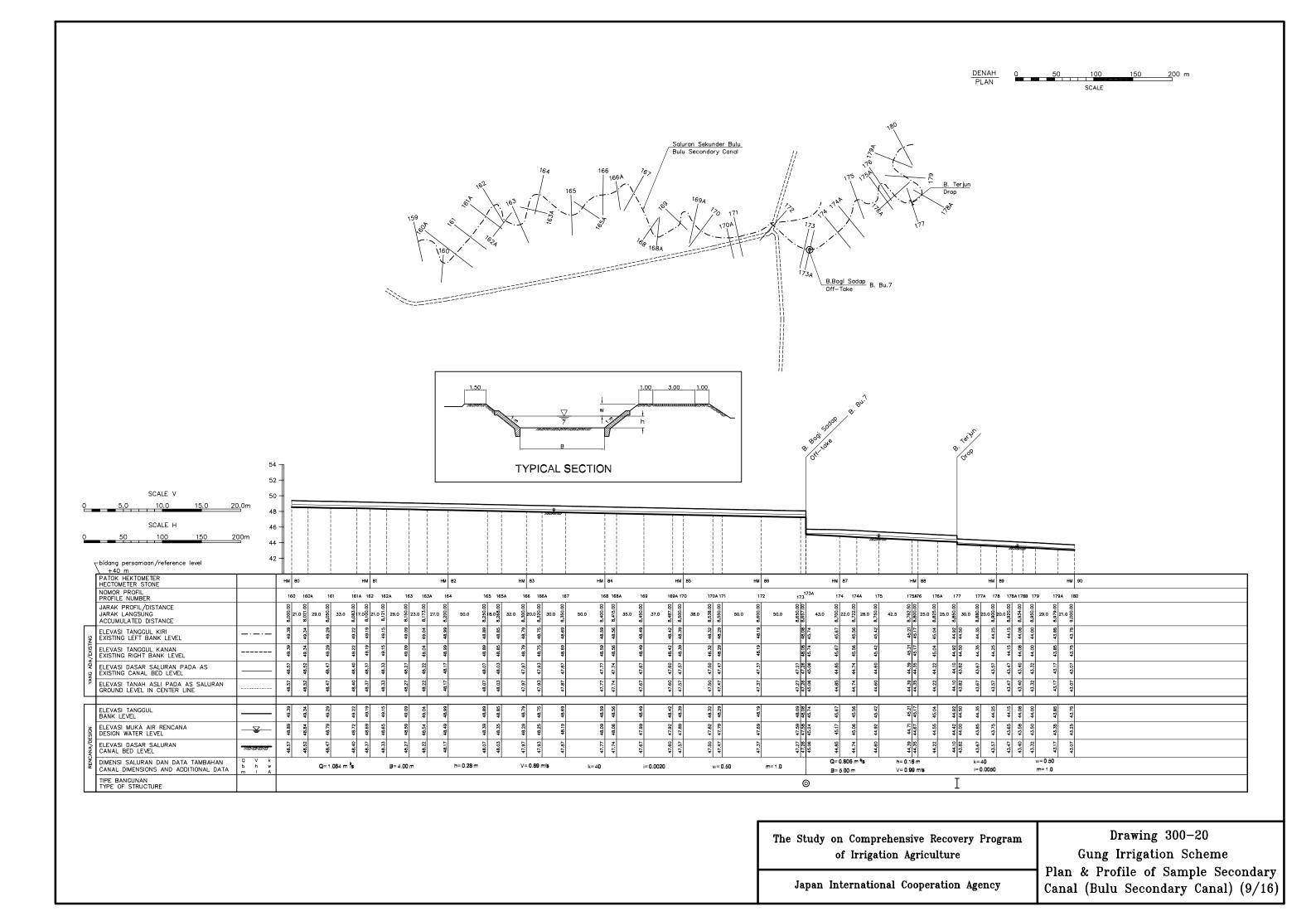


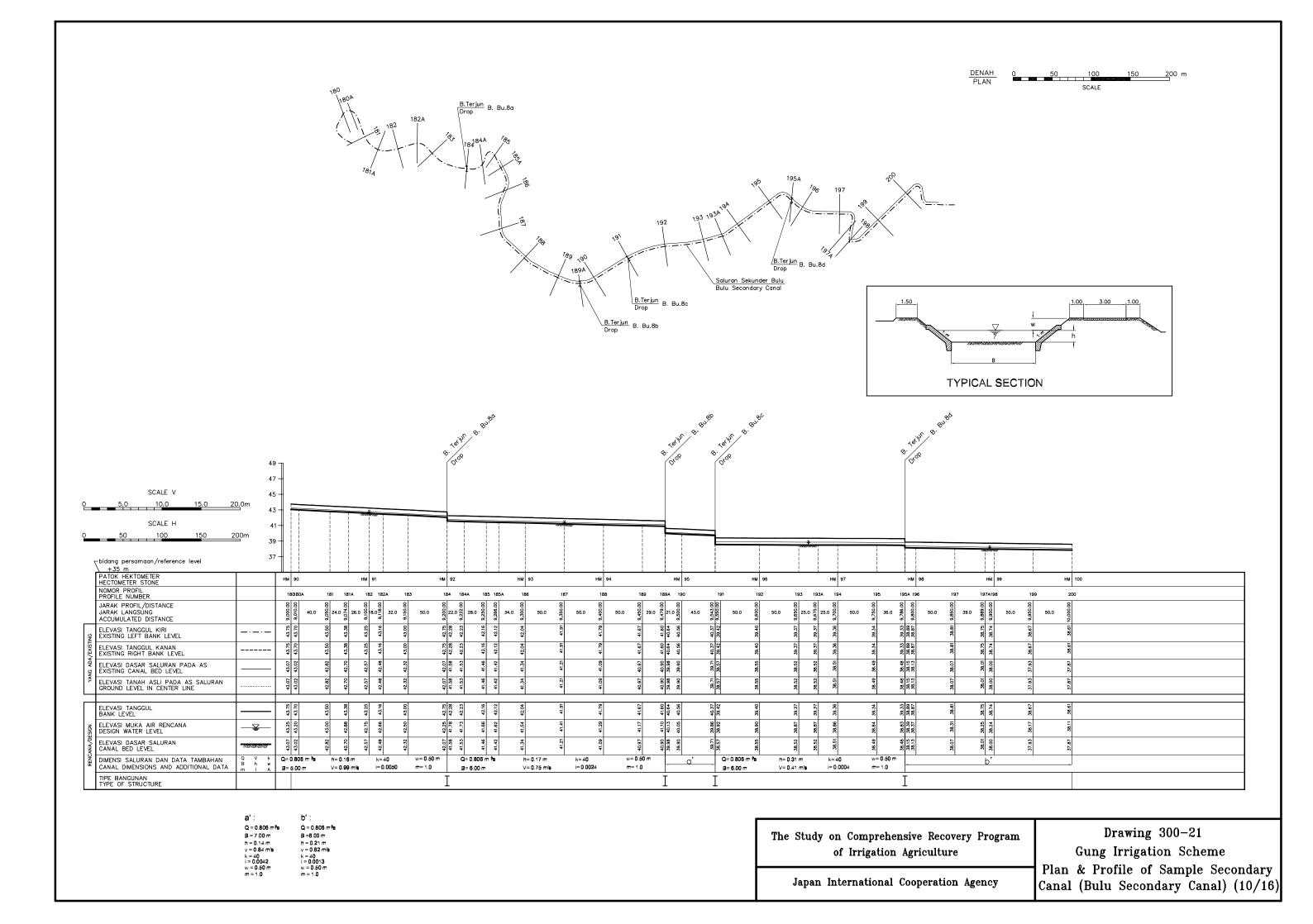


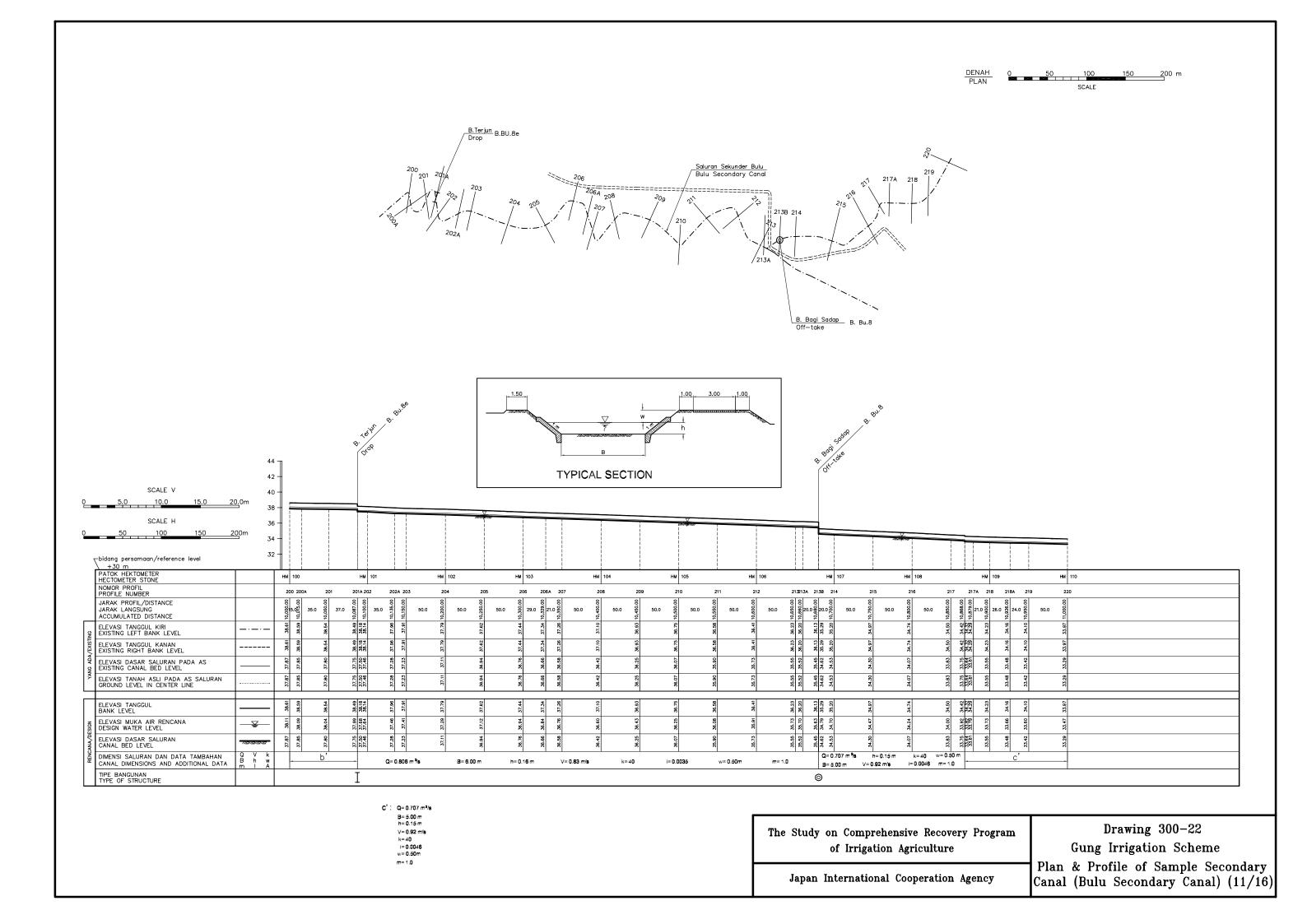
Japan International Cooperation Agency

Plan & Profile of Sample Secondary Canal (Bulu Secondary Canal) (7/16)

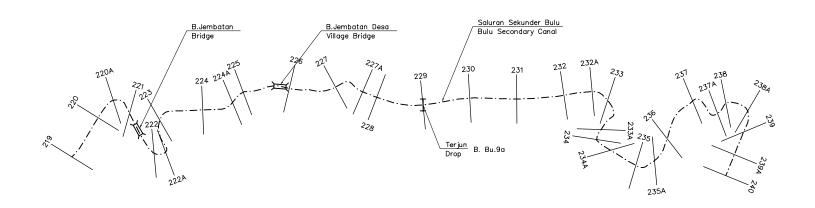


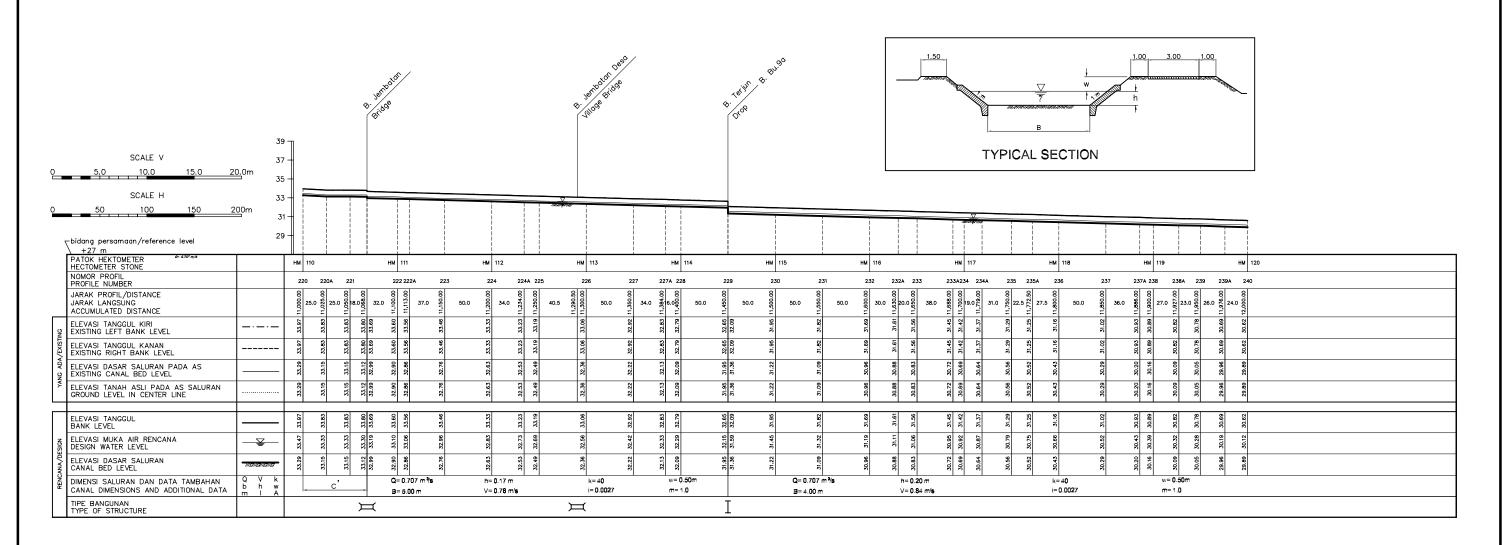








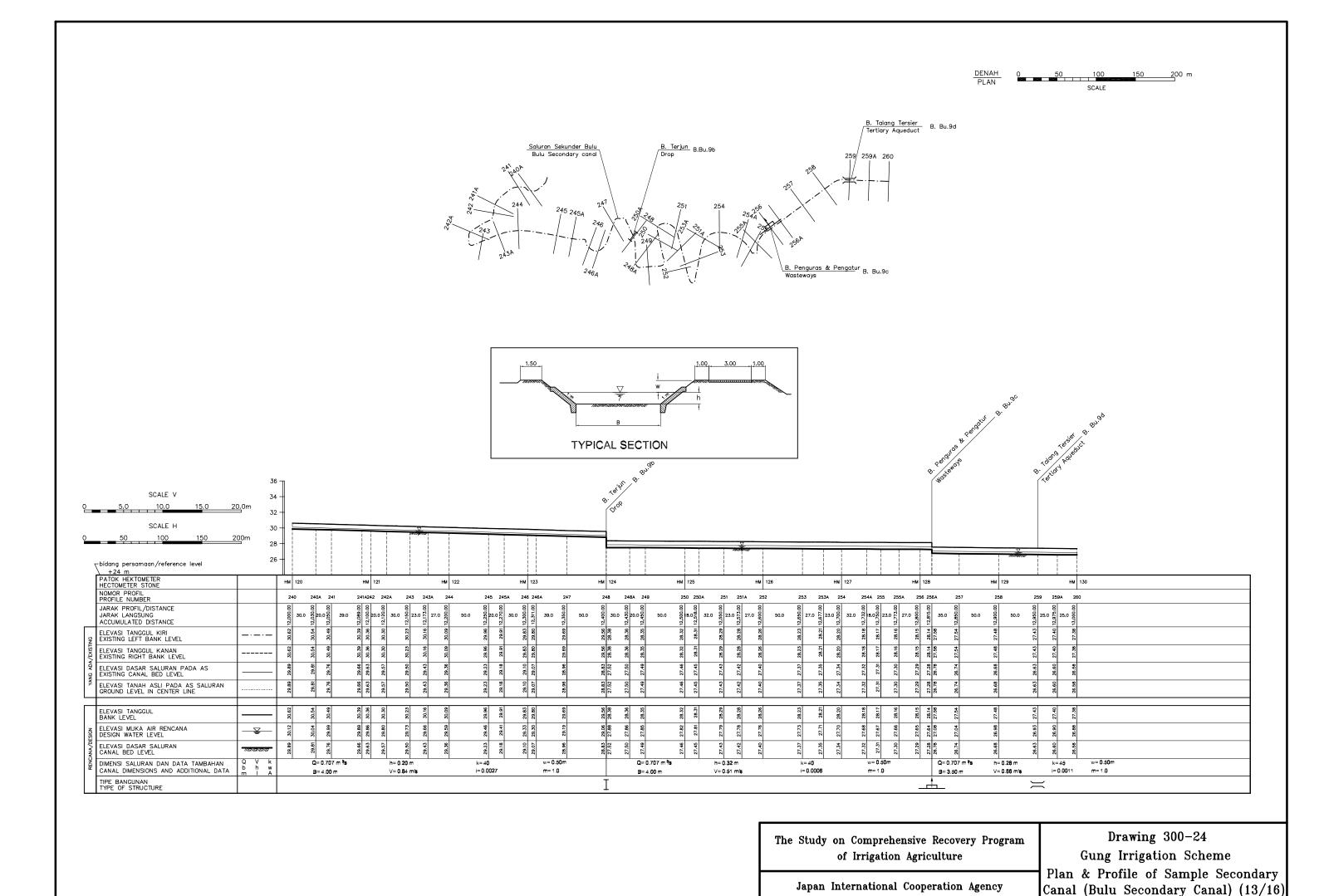


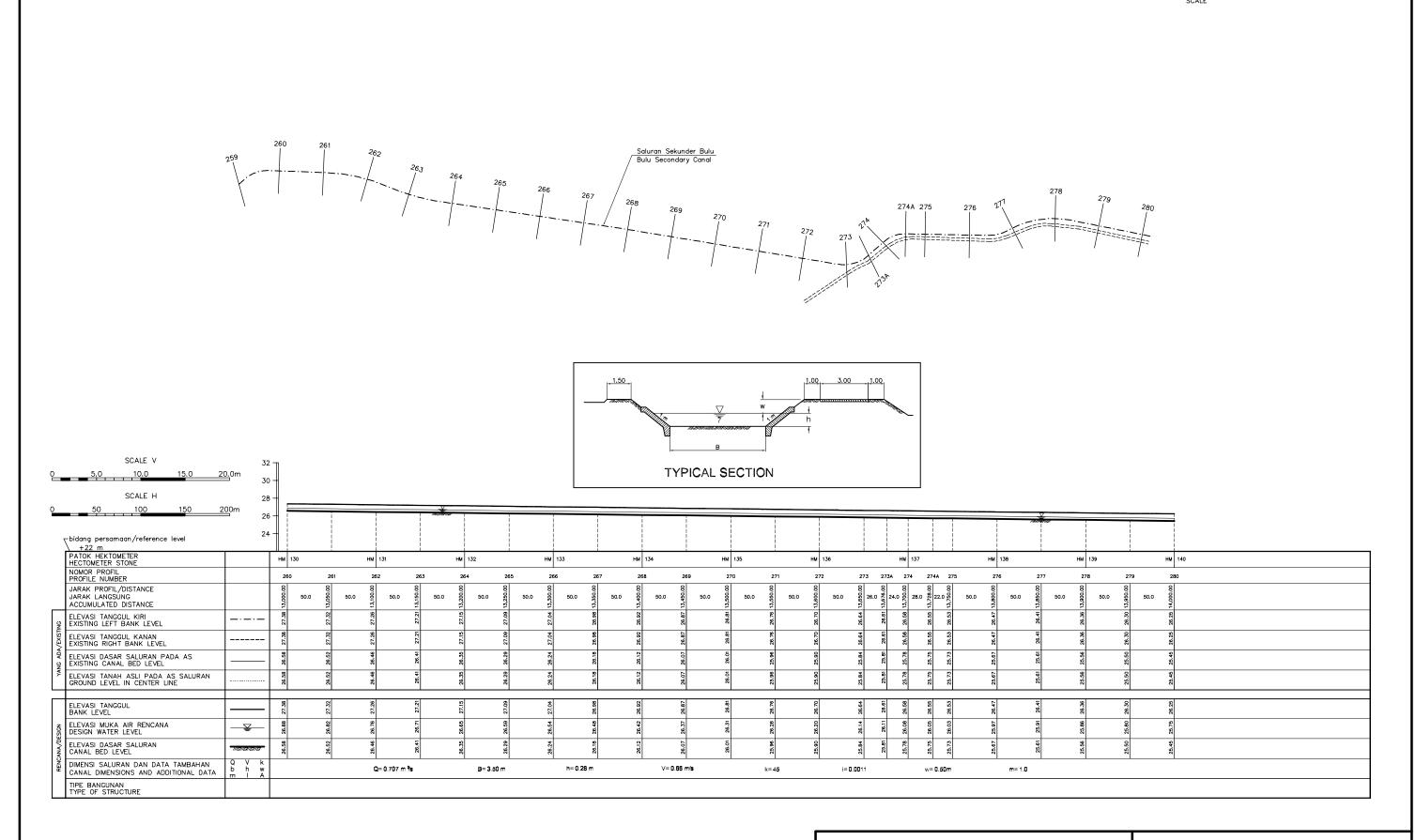


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Drawing 300-23
Gung Irrigation Scheme
Plan & Profile of Sample Secondary
Canal (Bulu Secondary Canal) (12/16)





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Drawing 300-25
Gung Irrigation Scheme
Plan & Profile of Sample Secondary
Canal (Bulu Secondary Canal) (14/16)

