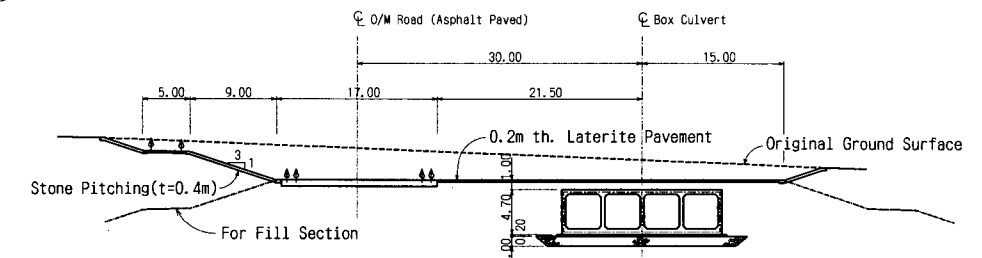
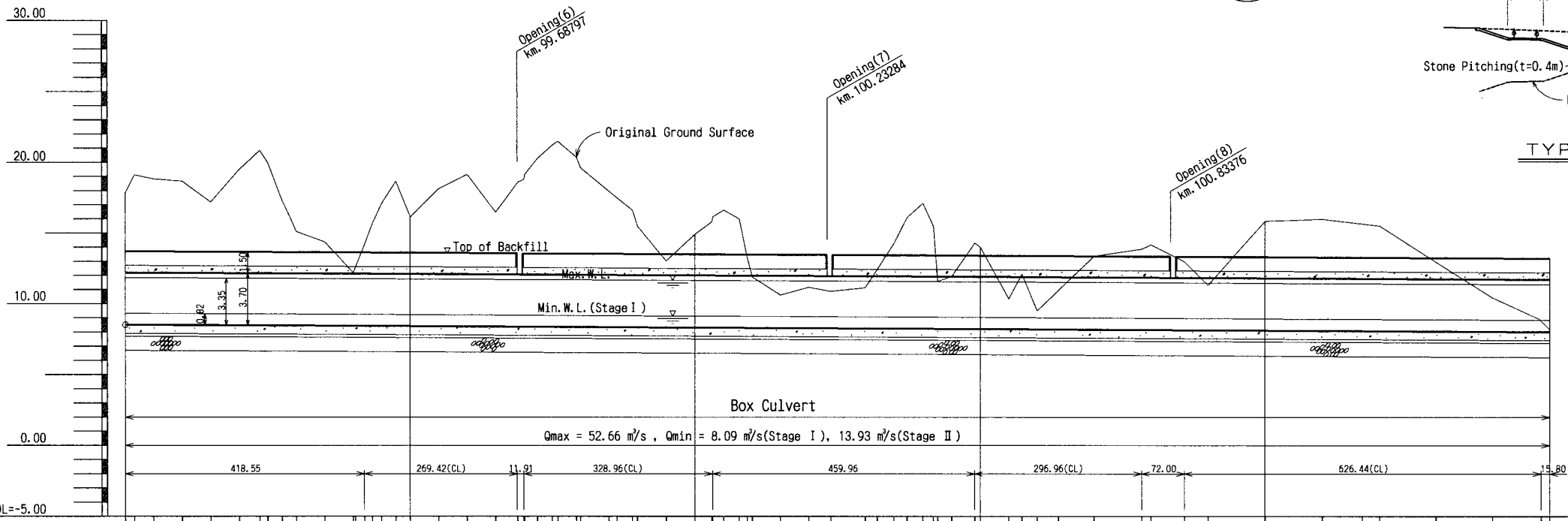
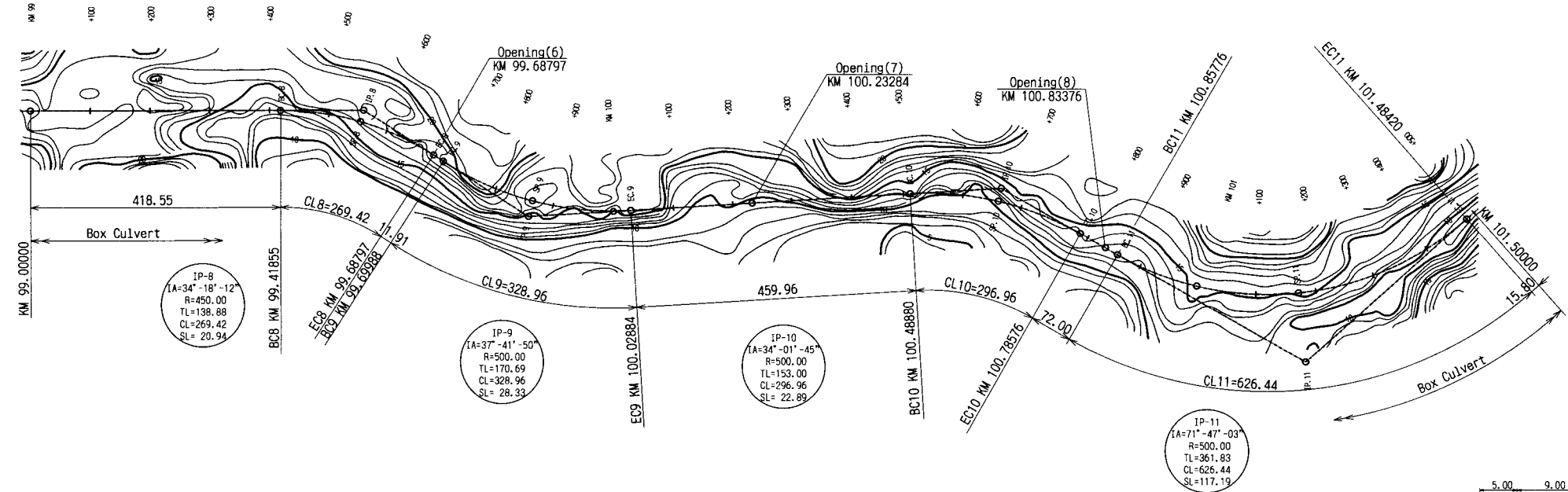


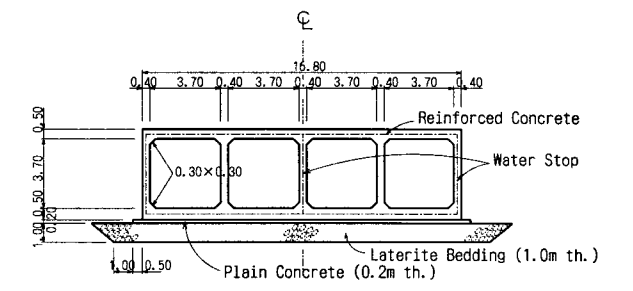
NOTES:

- For the plan and profile of the conveyance canal, see the following drawings.
 - No. 1 Open Canal.....Dwg. Nos. CCL-101~CCL-104
 - Box Culvert Conduit....Dwg. Nos. CCL-104~CCL-107
 - No. 2 Open Canal.....Dwg. Nos. CCL-107~CCL-109
- The location of curvatures on the canal route are as follows:

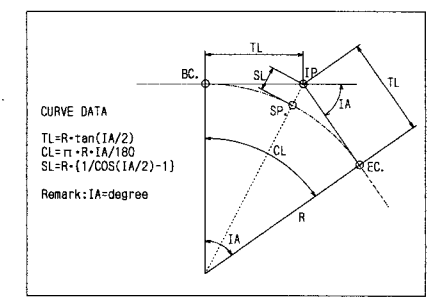
Principal peg	Distance (M)
BC-8	99,418.55
SP-8	99,553.26
EC-8	99,687.97
BC-9	99,699.88
SP-9	99,864.36
EC-9	100,028.84
BC-10	100,488.80
SP-10	100,637.28
EC-10	100,785.76
BC-11	100,857.76
SP-11	101,170.98
EC-11	101,484.20



TYPICAL CROSS SECTION OF BOX CULVERT
SCALE = 1:800



FOUR-CELL BOX
SCALE = 1:400



DISTANCE (KM)	ORIGINAL GROUND LEVEL	TOP OF BACKFILL (BERM LEVEL)	TOP OF O/M ROAD	Max. WATER LEVEL	Min. WATER LEVEL AT STAGE I	BOTTOM WIDTH	BOTTOM GRADE	BOTTOM ELEVATION	CURVE ARRANGEMENT
99.000	17.87	13.71	13.84	11.86	9.33			8.51	
99.016	19.12	13.71	13.84	11.86	9.33			8.49	
99.050	18.83	13.69	13.82	11.84	9.31			8.47	
99.100	18.67	13.67	13.80	11.82	9.29			8.45	
99.150	17.21	13.67	13.78	11.80	9.27			8.43	
99.200	19.50	13.65	13.76	11.78	9.25			8.43	
99.250	18.68	13.63	13.76	11.78	9.25			8.41	
99.300	17.30	13.63	13.76	11.78	9.23			8.39	
99.350	15.10	13.65	13.78	11.80	9.27			8.37	
99.400	14.38	13.63	13.76	11.78	9.25			8.35	
99.450	15.20	13.63	13.76	11.78	9.25			8.33	
99.500	17.09	13.61	13.74	11.76	9.23			8.31	
99.550	18.66	13.59	13.72	11.74	9.21			8.29	
99.600	16.15	13.59	13.72	11.74	9.21			8.27	
99.650	18.23	13.57	13.70	11.72	9.19			8.25	
99.700	19.15	13.57	13.70	11.72	9.19			8.23	
99.750	16.48	13.55	13.68	11.68	9.17			8.21	
99.800	18.88	13.53	13.66	11.66	9.15			8.19	
99.850	18.85	13.53	13.66	11.66	9.15			8.17	
99.900	21.36	13.53	13.66	11.66	9.15			8.15	
100.000	13.03	13.51	13.64	11.66	9.13			8.13	
100.050	14.91	13.50	13.63	11.65	9.12			8.11	
100.100	15.72	13.50	13.63	11.65	9.12			8.09	
100.150	16.63	13.49	13.62	11.64	9.11			8.07	
100.200	16.00	13.47	13.60	11.62	9.09			8.05	
100.250	11.91	13.47	13.60	11.62	9.09			8.03	
100.300	10.64	13.45	13.58	11.60	9.07			8.01	
100.350	12.43	13.43	13.56	11.58	9.05			7.99	
100.400	14.26	13.43	13.56	11.58	9.05			7.97	
100.450	16.10	13.41	13.54	11.56	9.03			7.95	
100.500	17.00	13.41	13.54	11.56	9.03			7.93	
100.550	11.95	13.39	13.52	11.54	9.01			7.91	
100.600	14.00	13.37	13.50	11.52	8.99			7.89	
100.650	10.36	13.37	13.50	11.52	8.99			7.87	
100.700	12.10	13.35	13.48	11.50	8.97			7.85	
100.750	9.52	13.35	13.48	11.50	8.97			7.83	
100.800	13.88	13.34	13.47	11.49	8.96			7.81	
100.850	14.19	13.33	13.46	11.48	8.95			7.79	
100.900	12.89	13.31	13.44	11.46	8.93			7.77	
100.950	11.33	13.29	13.42	11.44	8.91			7.75	
101.000	15.85	13.29	13.42	11.44	8.91			7.73	
101.050	15.98	13.27	13.40	11.42	8.89			7.71	
101.100	15.75	13.25	13.38	11.40	8.87			7.69	
101.150	15.51	13.23	13.36	11.38	8.85			7.67	
101.200	10.45	13.21	13.34	11.36	8.83			7.65	
101.250	8.09	13.21	13.34	11.36	8.83			7.63	
101.300	8.18	13.21	13.34	11.36	8.83			7.63	
101.350									
101.400									
101.450									
101.500									

THE ARAB REPUBLIC OF EGYPT
MINISTRY OF WATER RESOURCES AND IRRIGATION
NORTH SINAI DEVELOPMENT ORGANIZATION

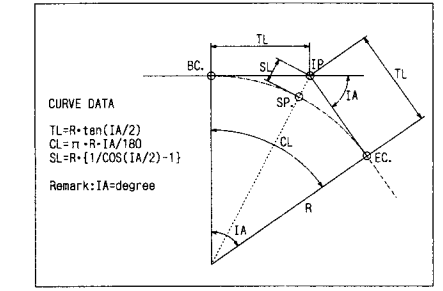
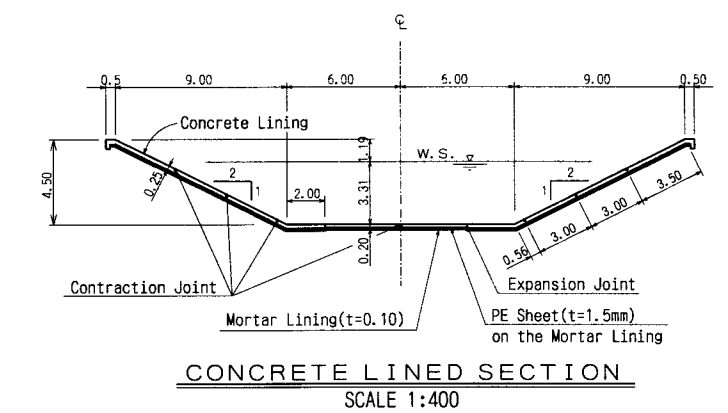
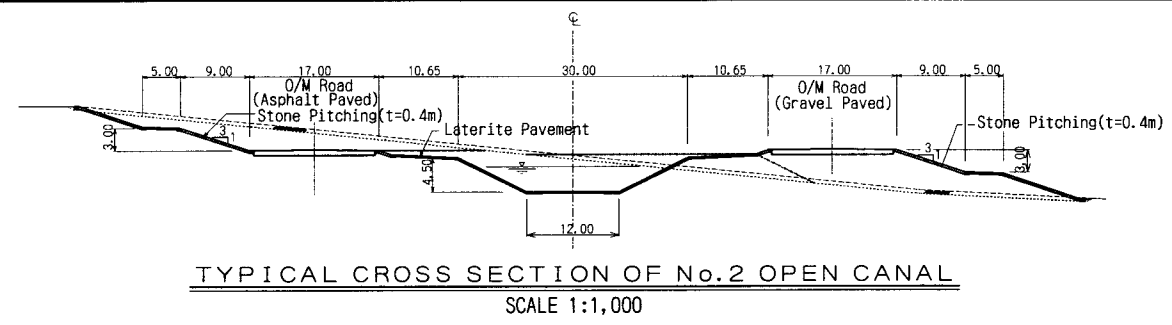
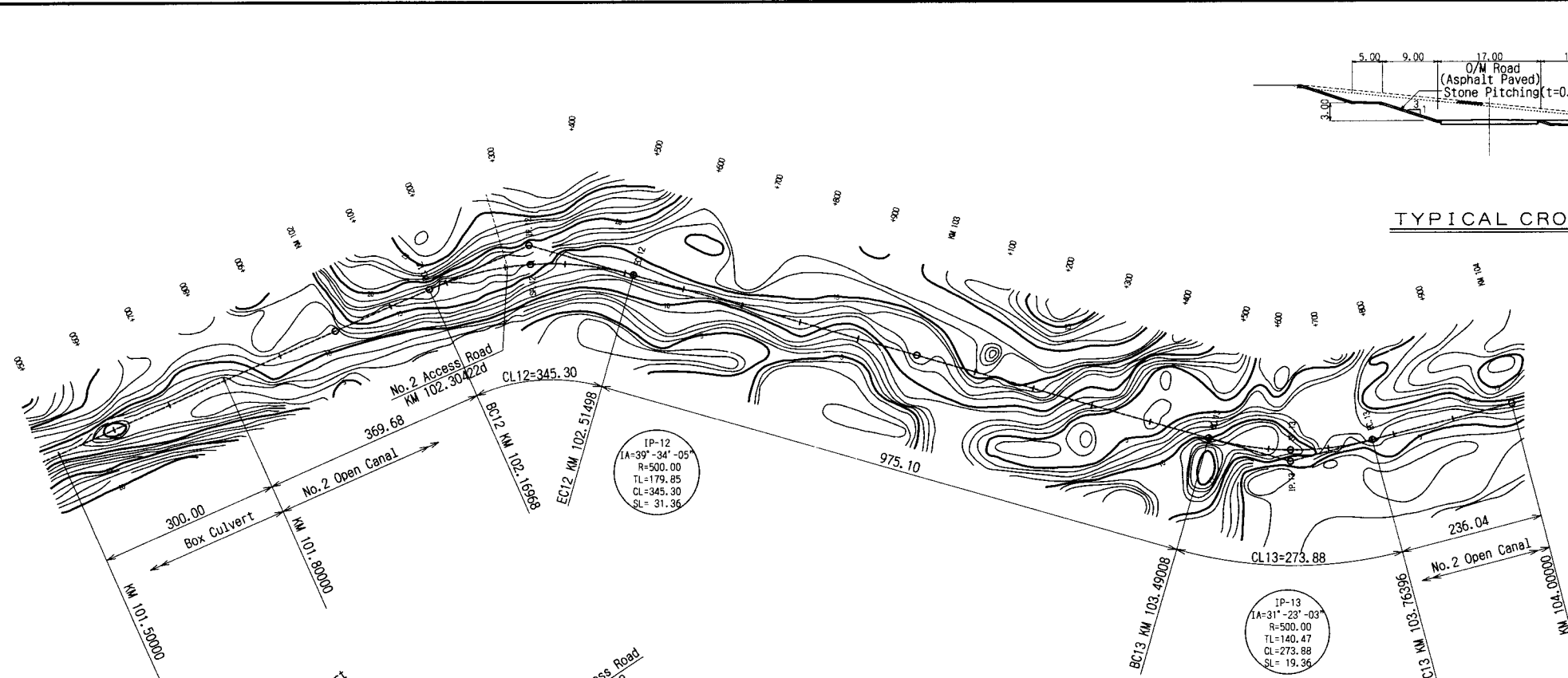
THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)

CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBAAH CANAL BETWEEN KM 86.500 AND KM 108.466

PLAN AND PROFILE BETWEEN KM 99.000 AND KM 101.500

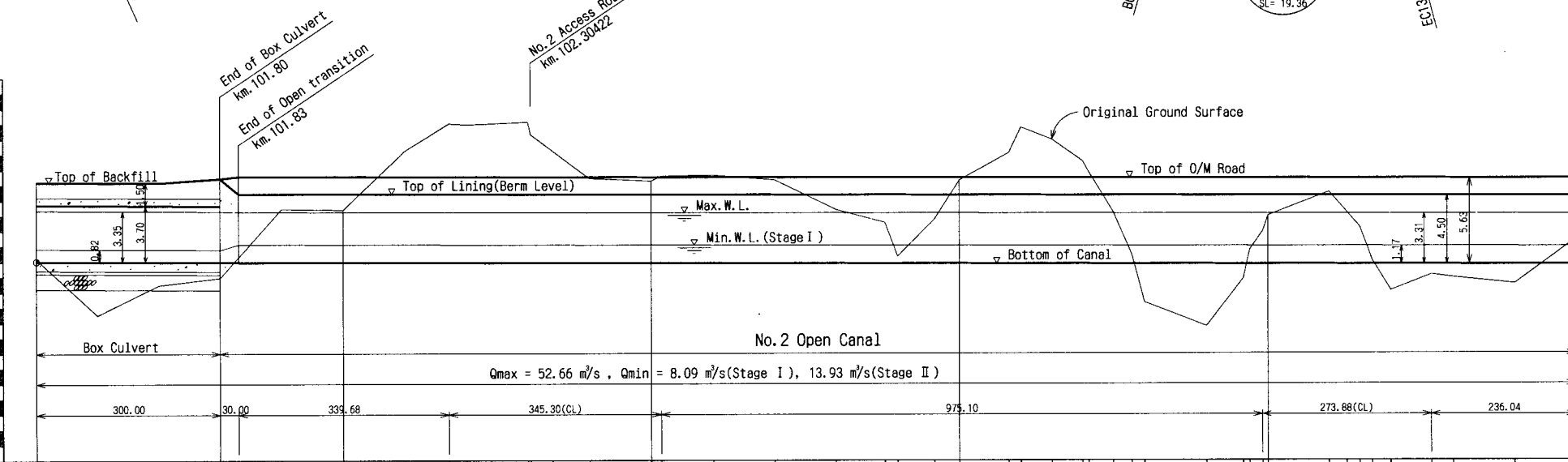
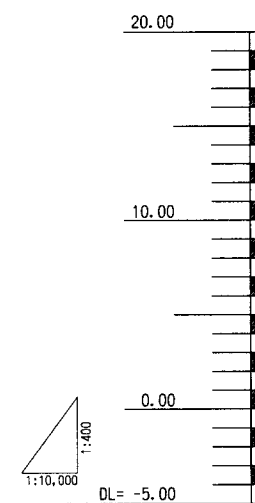
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
SANYU CONSULTANTS INC. PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED	
TRACED	
CHECKED	
APPROVED	
DRAWING NO.	CCL-106



- NOTES:
- For the plan and profile of the conveyance canal, see the following drawings.
 - No. 1 Open Canal.....Dwg. Nos. CCL-101~CCL-104
 - Box Culvert Conduit.....Dwg. Nos. CCL-104~CCL-107
 - No. 2 Open Canal.....Dwg. Nos. CCL-107~CCL-109
 - The location of curvatures on the canal route are as follows:

Principal peg	Distance (M)
EP-BC	101,800.00
EP-A2	102,304.22
BC-12	102,169.68
SP-12	102,342.33
EC-12	102,514.98
BC-13	103,490.08
SP-13	103,627.02
EC-13	103,763.96



DISTANCE (KM)	101.500	101.600	101.700	EP-BC	101.830	101.900	102.000	102.100	BC-12	102.200	102.300	102.400	102.500	102.600	102.700	102.800	102.900	103.000	103.100	103.200	103.300	103.400	103.500	103.600	103.700	103.800	103.900	104.000	
ORIGINAL GROUND LEVEL	8.18	4.51	6.46	6.94	6.94	11.45	11.40	15.25	17.04	16.97	17.03	16.24	13.45	13.28	13.35	11.39	10.55	10.75	15.11	16.76	15.96	14.56	11.22	8.41	3.76	12.53	11.05	6.52	9.41
BERM LEVEL	13.21	13.19	13.17	13.45	12.45	12.44	12.44	12.43	12.42	12.42	12.41	12.40	12.39	12.40	12.38	12.37	12.36	12.36	12.35	12.34	12.34	12.33	12.32	12.31	12.30	12.30	12.28	12.28	
TOP OF O/M ROAD	13.34	13.32	13.30	13.58	13.58	13.57	13.57	13.56	13.55	13.55	13.54	13.53	13.52	13.51	13.50	13.49	13.49	13.48	13.47	13.47	13.46	13.45	13.44	13.43	13.43	13.42	13.41	13.41	
Max. WATER LEVEL	11.36	11.34	11.32	11.30	11.26	11.25	11.25	11.24	11.23	11.23	11.22	11.21	11.20	11.19	11.18	11.17	11.17	11.16	11.15	11.15	11.14	11.13	11.12	11.11	11.11	11.10	11.09	11.09	
Min. WATER LEVEL AT STAGE I	8.83	8.81	8.79	8.77	9.12	9.11	9.11	9.10	9.09	9.09	9.08	9.07	9.06	9.05	9.04	9.03	9.03	9.02	9.01	9.01	9.00	8.99	8.98	8.97	8.97	8.96	8.95	8.95	
BOTTOM WIDTH	16m = Four-Cell Box Culvert			12.00 m																									
BOTTOM GRADE	20 cm/km = 1/5,000			8 cm/km = 1/12,500																									
BOTTOM ELEVATION	8.01	7.99	7.97	7.95	7.95	7.94	7.94	7.93	7.92	7.92	7.91	7.90	7.89	7.88	7.87	7.86	7.86	7.85	7.84	7.84	7.83	7.82	7.81	7.80	7.80	7.79	7.78	7.78	
CURVE ARRANGEMENT	IP12, IA=39° 34' 05", R=500.00, TL=179.85, CL=345.30m, SL=31.36m										IP13, IA=31° 23' 03", R=500.00, TL=140.47, CL=273.88m, SL=19.36m																		

THE ARAB REPUBLIC OF EGYPT
 MINISTRY OF WATER RESOURCES AND IRRIGATION
 NORTH SINAI DEVELOPMENT ORGANIZATION

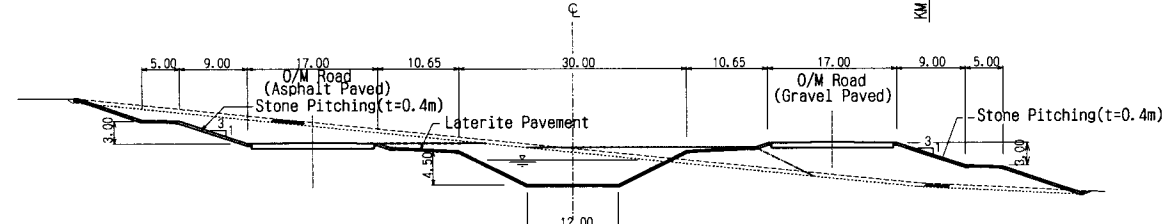
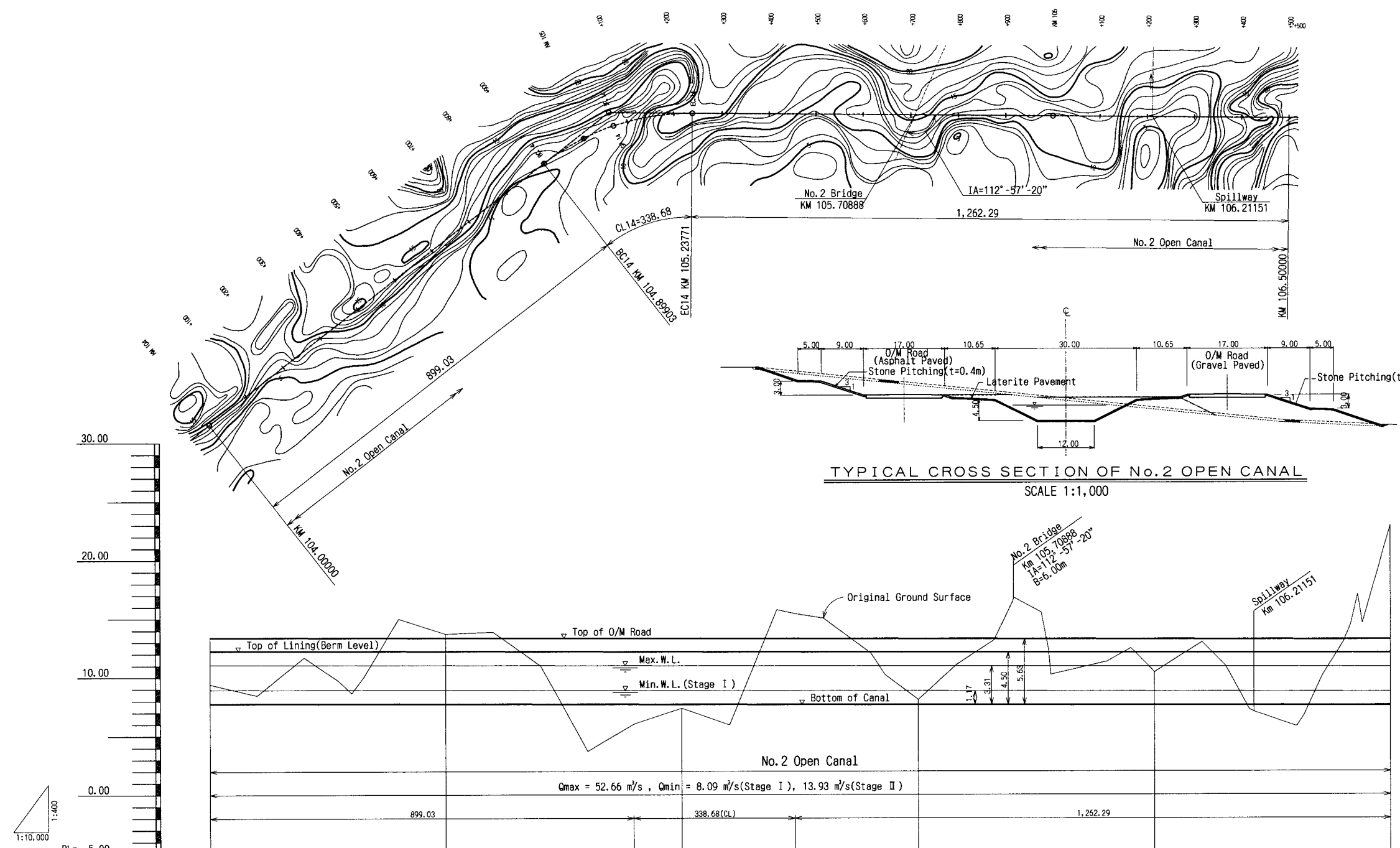
THE NORTH SINAI INTEGRATED RURAL
 DEVELOPMENT PROJECT (PHASE III)

CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBABH CANAL
 BETWEEN KM 86.500 AND KM 108.466

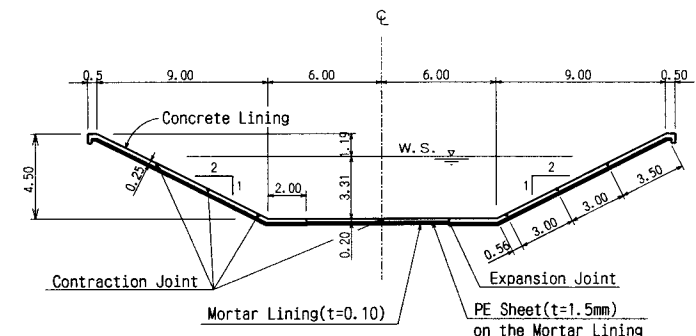
PLAN AND PROFILE
 BETWEEN KM 101.500 AND KM 104.000

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL

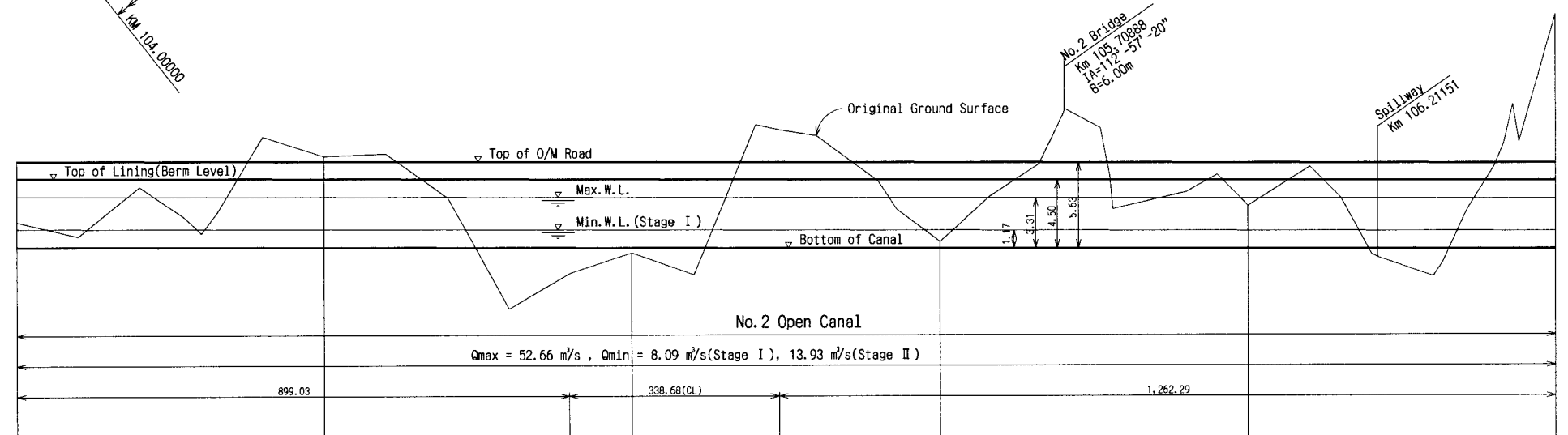
DESIGNED	
TRACED	
CHECKED	
APPROVED	
DRAWING NO.	CCL-107



TYPICAL CROSS SECTION OF No. 2 OPEN CANAL
SCALE 1:1,000



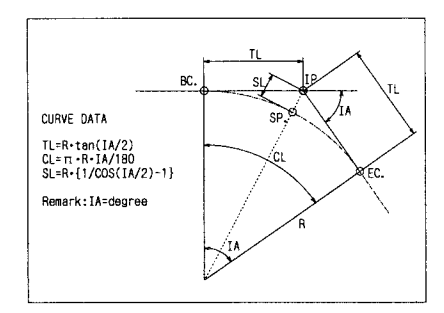
CONCRETE LINED SECTION
SCALE 1:400



DISTANCE (KM)	104.000	104.100	104.200	104.270	104.300	104.325	104.400	104.500	104.600	104.700	104.800	104.900	105.000	105.100	105.150	105.200	105.300	105.400	105.430	105.500	105.600	105.640	105.700	105.740	105.775	105.800	105.900	105.950	106.000	106.100	106.150	106.200	106.300	106.375	106.400	106.430	106.460	106.500		
ORIGINAL GROUND LEVEL	9.41	8.46	11.71	9.79	6.65	10.00	15.00	13.71	13.89	10.99	3.70	6.04	7.36	6.32	11.62	15.77	15.43	15.03	12.08	10.23	8.07	11.06	13.17	16.55	15.52	12.42	11.34	12.48	10.43	12.98	10.96	7.53	5.81	13.03	17.05	14.80	22.93			
BERM LEVEL	12.28	12.27	12.26	12.25	12.24	12.24	12.23	12.22	12.21	12.20	12.20	12.19	12.18	12.18	12.17	12.16	12.16	12.15	12.14	12.14	12.13	12.12	12.12	12.11	12.10	12.09	12.08	12.08	12.07	12.06	12.05	12.04	12.03	12.02	12.01	12.00	11.99	11.98	11.97	
TOP OF O/M ROAD	13.41	13.40	13.39	13.38	13.37	13.37	13.36	13.35	13.34	13.33	13.33	13.32	13.31	13.31	13.30	13.29	13.29	13.28	13.27	13.27	13.26	13.25	13.25	13.24	13.23	13.22	13.21	13.21	13.20	13.19	13.18	13.17	13.16	13.15	13.14	13.13	13.12	13.11		
Max. WATER LEVEL	11.09	11.08	11.07	11.06	11.05	11.05	11.04	11.03	11.02	11.01	11.01	11.00	10.99	10.99	10.98	10.97	10.97	10.96	10.95	10.95	10.94	10.93	10.93	10.92	10.91	10.90	10.89	10.89	10.88	10.87	10.86	10.85	10.84	10.83	10.83	10.82	10.81	10.80	10.79	
Min. WATER LEVEL AT STAGE I	8.95	8.94	8.93	8.92	8.91	8.91	8.90	8.89	8.88	8.87	8.87	8.86	8.85	8.85	8.84	8.83	8.83	8.82	8.81	8.81	8.80	8.79	8.79	8.78	8.77	8.76	8.75	8.75	8.74	8.73	8.72	8.71	8.70	8.70	8.69	8.68	8.67	8.66		
BOTTOM WIDTH	12.00 m																																							
BOTTOM GRADE	8 cm/km = 1/12,500																																							
BOTTOM ELEVATION	7.78	7.77	7.76	7.75	7.74	7.74	7.73	7.72	7.71	7.70	7.70	7.69	7.68	7.68	7.67	7.66	7.66	7.65	7.64	7.64	7.63	7.62	7.62	7.61	7.60	7.59	7.59	7.58	7.57	7.56	7.55	7.54	7.53	7.52	7.51	7.50	7.49	7.48		
CURVE ARRANGEMENT	<p>IP14, IA=38° 48' 33", R=500, TL=176.12m, CL=338.68m, SL=30.11m</p>																																							

- NOTES:
- For the plan and profile of the conveyance canal, see the following drawings.
 - No. 1 Open Canal.....Dwg. Nos. CCL-101~CCL-104
 - Box Culvert Conduit.....Dwg. Nos. CCL-104~CCL-107
 - No. 2 Open Canal.....Dwg. Nos. CCL-107~CCL-109
 - The location of curvatures on the canal route are as follows:

Principal peg	Distance (M)
BC-14	104,899.03
SP-14	105,068.37
EC-14	105,237.71



THE ARAB REPUBLIC OF EGYPT
MINISTRY OF WATER RESOURCES AND IRRIGATION
NORTH SINAI DEVELOPMENT ORGANIZATION

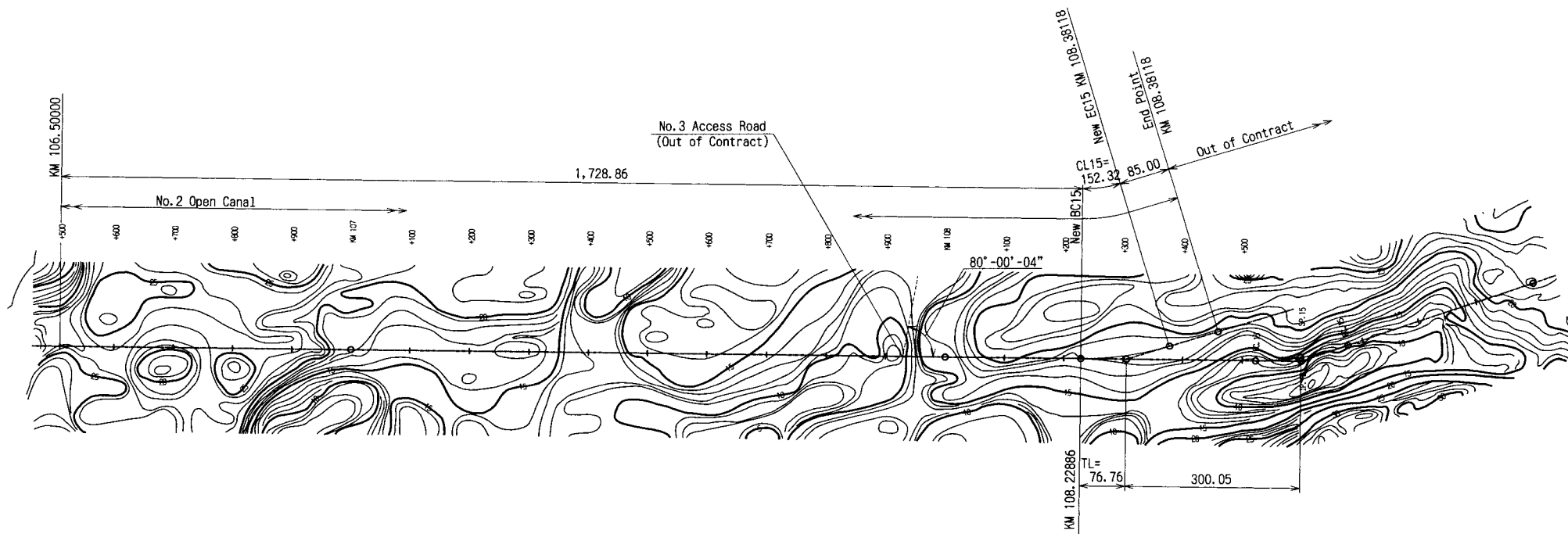
THE NORTH SINAI INTEGRATED RURAL
DEVELOPMENT PROJECT (PHASE III)

CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBABH CANAL
BETWEEN KM 85.500 AND KM 108.466

PLAN AND PROFILE
BETWEEN KM 104.000 AND KM 106.500

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL

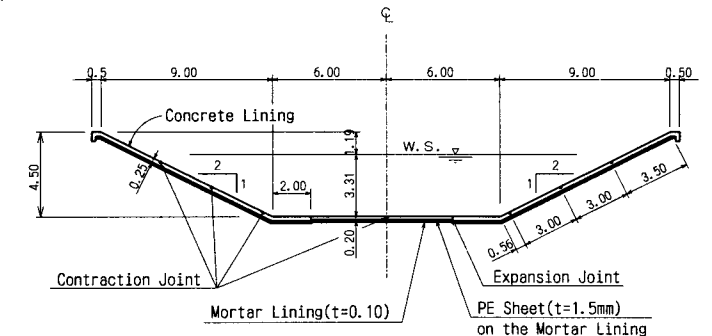
DESIGNED	
TRACED	
CHECKED	
APPROVED	
DRAWING NO.	CCL-108



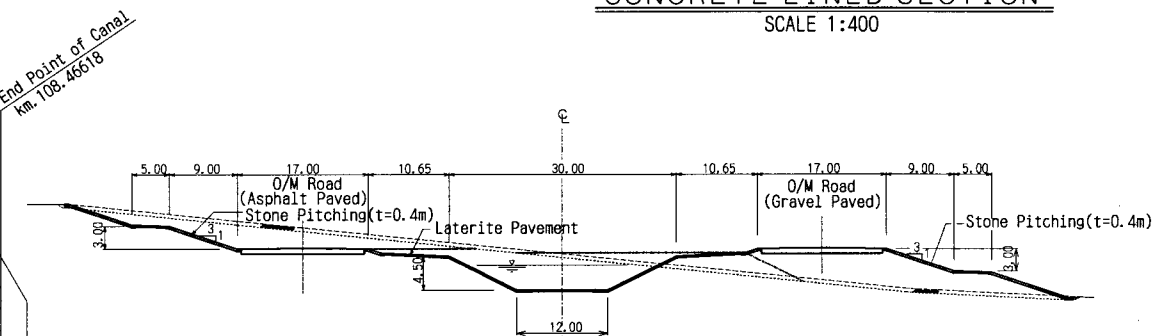
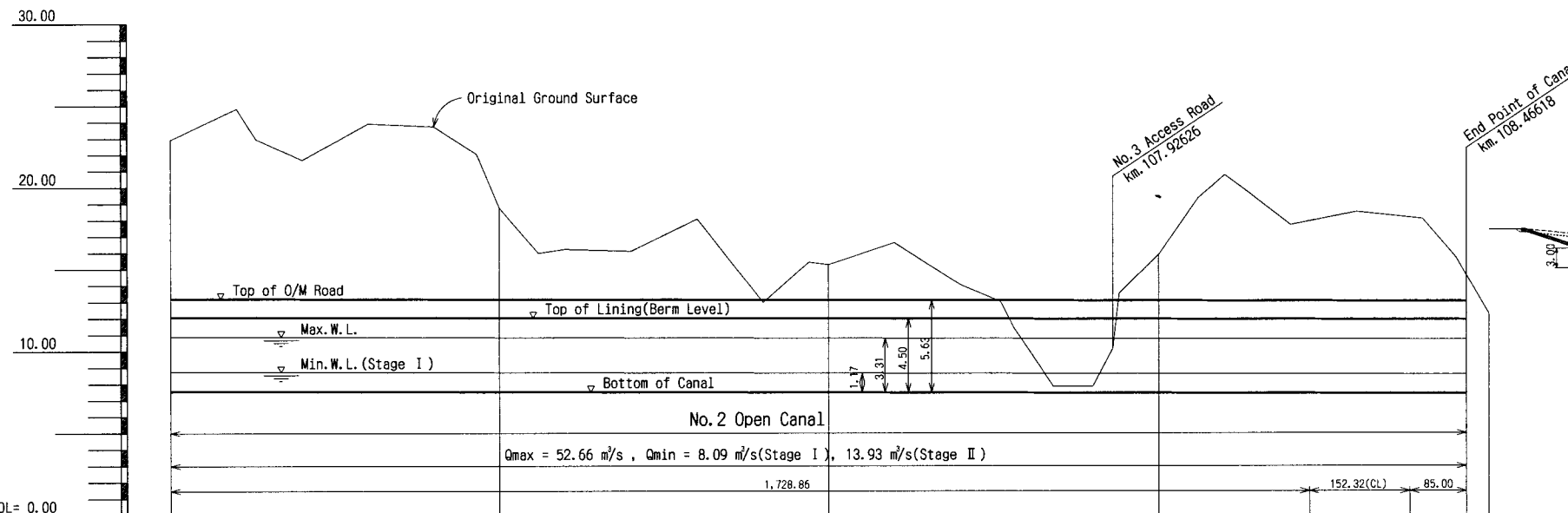
NOTES:

- For the plan and profile of the conveyance canal, see the following drawings.
 - No. 1 Open Canal.....Dwg. Nos. CCL-101~CCL-104
 - Box Culvert Conduit.....Dwg. Nos. CCL-104~CCL-107
 - No. 2 Open Canal.....Dwg. Nos. CCL-107~CCL-109
- The location of curvatures on the canal route are as follows:

Principal peg	Distance (M)
EP-A3	107,926.26
NEW BC-15	108,228.86
NEW SP-15	108,305.02
NEW EP-15	108,381.18

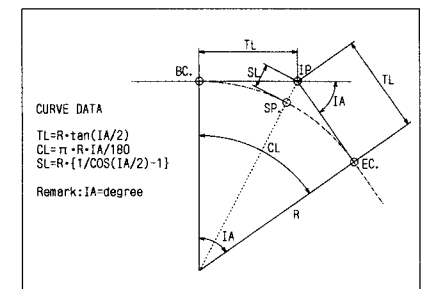


CONCRETE LINED SECTION
SCALE 1:400



TYPICAL CROSS SECTION OF No. 2 OPEN CANAL
SCALE 1:1,000

DISTANCE (KM)	106.500	106.600	106.700	106.800	106.900	107.000	107.100	107.200	107.300	107.400	107.500	107.600	107.700	107.800	107.900	108.000	108.100	108.200	108.300	108.400	108.500													
ORIGINAL GROUND LEVEL	22.93	24.82	22.96	21.70	23.92	23.74	22.07	18.77	16.01	16.25	16.12	18.09	15.54	12.98	15.45	15.30	16.64	14.04	13.03	11.43	10.29	7.86	13.23	13.23	15.91	19.38	20.76	19.88	17.71	18.30	18.70	18.09	16.00	12.27
BERM LEVEL	12.08	12.07	12.06	12.05	12.04	12.04	12.04	12.03	12.02	12.01	12.00	11.99	11.98	11.97	11.96	11.96	11.95	11.94	11.93	11.92	11.92	11.92	11.92	11.92	11.92	11.92	11.92	11.92	11.92	11.92	11.92	11.92	11.92	11.92
TOP OF O/M ROAD	13.21	13.20	13.19	13.18	13.17	13.17	13.16	13.15	13.14	13.13	13.12	13.11	13.10	13.09	13.09	13.08	13.07	13.06	13.05	13.05	13.05	13.05	13.05	13.05	13.05	13.05	13.05	13.05	13.05	13.05	13.05	13.05	13.05	13.05
Max. WATER LEVEL	10.89	10.88	10.87	10.86	10.85	10.85	10.84	10.83	10.82	10.81	10.81	10.80	10.79	10.78	10.77	10.76	10.75	10.74	10.73	10.73	10.73	10.73	10.73	10.73	10.73	10.73	10.73	10.73	10.73	10.73	10.73	10.73	10.73	10.73
Min. WATER LEVEL AT STAGE I	8.75	8.74	8.73	8.72	8.71	8.71	8.70	8.69	8.68	8.67	8.67	8.66	8.65	8.64	8.63	8.62	8.61	8.60	8.59	8.59	8.59	8.59	8.59	8.59	8.59	8.59	8.59	8.59	8.59	8.59	8.59	8.59	8.59	8.59
BOTTOM WIDTH	12.00 m																																	
BOTTOM GRADE	8 cm/km = 1/12,500																																	
BOTTOM ELEVATION	7.58	7.57	7.56	7.55	7.54	7.54	7.53	7.52	7.51	7.50	7.50	7.49	7.48	7.47	7.46	7.46	7.46	7.45	7.44	7.43	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.42	
CURVE ARRANGEMENT	NEW IP15, IA=17 27' 17", R=900, TL=76.76m, CL=152.32m, SL=5.86m																																	



THE ARAB REPUBLIC OF EGYPT
 MINISTRY OF WATER RESOURCES AND IRRIGATION
 NORTH SINAI DEVELOPMENT ORGANIZATION

THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)

CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBABH CANAL BETWEEN KM 86.500 AND KM 108.466

PLAN AND PROFILE BETWEEN KM 106.500 AND KM 108.470

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED	
TRACED	
CHECKED	
APPROVED	
DRAWING NO.	CCL-109