No S	Culvert No	Location (Sta.)	Size	Length (m)
outh Se	ction 1 L	0+423.65	ø 0.91m	44.3
2	2 L 3 L	0+532.74 0+692.20	1-1.0x1.0 Ø 0.91m	24.6
4	3 L 4 L	0+819.44	1-1.0×1.0	48.0 18.7
5 6	7 L 7A I	1+270.22 1+430.33	ø 0.91m ø 0.91m	16.5
7	8 L	1+428.79	ø 1.07m	17.1 17.8
8	9 L 9A L	1+445.19 1+450.73	1-1.0x1.0 ø 0.91m	19.4 18.0
10	9B L	1+512.86	ø 0.91m	17.6
11	10 L 11 L	1+575.29 1+678.68	ø 0.91m ø 0.91m	15.6
13	12 L	1+809.50	ø 0.91m 2-1.5x1.5	
14 15	13 L 13A L	1+819.97 1+827.02	2-1.5x1.5 Ø 0.91m	17.2 17.0
16 17	13B L 14 L	1+856.00	ø 0.91m	21.2 21.4
18	15 L	2+039.89 2+125.58	1-1.0x1.0 1-1.0x1.0	20.0
19 20	16 L 17 L	2+218.25	Ø 0.91m Ø 0.91m	18.0
21	18 L	2+284.16 2+302.79	ø 0.91m	16.3 16.5
22 23	20 L 21 L	2+940.89 3+033.00	ø 1.07m ø 1.07m	17.3 17.0
24	21A L	3+035.50 3+120.26	l ø 0.91m	17.2
25 26	22 L 23 L	3+120.26 3+170.00	ø 1.07m ø 0.91m	18.4 18.8
27 28	24 L 26 L	3+236.30	ø 1.07m ø 1.07m 1-2.0x1.5	18.5 19.1
29	27 L	3+390.31 3+627.00	1-2.0x1.5	16.2
30 31	28 L 29 L	3+635.00 3+895.15	ø 0.91m 1-1.0x1.0	18.3 17.5
32	29B L	4+034.48	ø 0.91m	25.3
33 34	30 L 30A L	4+096.45 4+178.95	ø 0.91m ø 0.91m	
35	31 L	4+207.85 4+360.93	1-1.0×1.0	18.5
36 37	32 L 33 L	4+360.93 4+459.09	Ø 0.91m 1-1.0x1.0	25.4 31.6
38	34 L	4+511.00	1-4.5x4.8	21.9
39 40	35 L 36 L	4+523.08 5+041.25	2-2.5x2.5 1-1.0x1.0	42.3 17.1
41	37A L	5+296.00	1-1.5x1.0 ø 0.91m	28.8
42 43	37B L 38 L	7+532.00 8+286.00	Ø 0.91m 1-2.0x2.0 1-1.0x1.0	17.1 16.1
44	39 L	8+615.00 8+866.00	1-1.0x1.0 1-1.0x1.0	21.0
46	41 L	9+062 00	1-1.0×1.0	24.2 31.5
47 48	41A L 41B L	9+822.00 10+017.50	1-1.0x1.0 1-1.0x1.0	52.3 47.5
49	41A1 L	0+299.90 (Ramp-B)	1-1.0x1.0	21.3
50 51	41B1 L 41B2 L	0+265.80 (Ramp-A) 0+428.50 (Ramp -B)	1-1.0x1.0 1-1.0x1.0	26.9 24.0
52	Syphon L	0+042.00 (Ramp -A) 10+258.00	1-1.0x1.0	28.2
53 54	42 L 43 L	10+262.70	1-1.5x1.5 1-4.5x4.8	43.3 32.4
55 56	44 L 46 L	10+269.00	1-1.5×1.5	51.3 68.9
57	47 L	10+946.60 10+954.15 10+962.30	ø 0.91m 1-1.5x1.5	63.7
58 59	48 L 50 L	10+962.30 11+021.00	1-4.5x4.8 1-2.5x2.5	26.6 28.9
60	50A L	11+038.00	ø 0.91m	38.2
61	51 L 52 L	11+109.00 11+260.00	1-1.0×1.0 1-4.5×4.8	39.8 15.4 47.7
63	Syphon L	11+275.00 11+312.45	1-1.5×1.5	47.7
64 65	53 L 53A L	11+338.00	2-1.5x1.5 1-1.0x1.0 2-1.5x1.5	65.6 67.4 19.5
66 67	54 L 55 L	11+674.00 12+040.00	2-1.5x1.5 1-1.0x1.0	19.5 18.8
68	56 L	12+171.00	1-1.5x1.5	22.2
69 70	57 L 58 L	12+340.00 13+366.00	1-1.0×1.0 1-3.5×4.0	21.4 19.5
71	59 L	13+375.50	ø 1.07m	35.5
72 73	60 L 61 L	13+872.60 14+361.00	1-2.0x2.0 1-2.0x2.0	15.6 26.0
73 74 75	62 L 63 L	14+361.00 14+734.00 14+900.00	1-2.0x2.0 1-2.0x2.0	26.0 35.1 38.5
76	64 L	15+050.00	1-1.0x1.0 1-1.0x1.0	27.3
77 78	65 L 66 L	15+244.00 15+498.00	1-2.0x2.0 2-3.0x3.0	19.8 60.1
79	66A L	15+789.00	1-1.5x1.5	56.8
80	66B L 67 L	15+575.00 18+562.60	1-5.0x5.5 1-2.0x2.0	17.5 115.7
82	68 L	18+640.60	1-2.0x2.0	133.1
83 84	69 L 69A L	19+642.00 19+834.00	1-2.0x2.0 1-2.0x2.0	53.1 19.0
85 86	69B L	19+975.00	1-2.0x2.0 3-2.5x2.5	71.8
tal Leng	72 L th for South:	20+002.46	1-4.0x4.0	2,636.1
tal No.:	tion			86
87	73 1	18+380.00	3-3.0×3.0	32.2 24.1
88	74 L	18+558.00 18+829.00	ø 1.07m 1-1.5x1.5 1-5.0x5.0	
90	75B L	19+290.00	1-5.0×5.0	24.1
91 92	76 L	19+323.00 19+481.00		30.8
93	77 L 78 L	19+481.00 19+600.00	1-2.5x2.5 ø 1.07m	16.4
94 95	79 L 80 L	19+800.00 20+123.00	Ø 1.07m 1-2.0x2.0	15.1 24.4 20.7
96	80A L	20+355.00	3-3.5x3.5	20.7
97 98	80B L 81 L	20+535.00 20+567.50 20+753.00	1-2.5x2.5 1-4.5x4.8	26.0
99	81A L	20+753.00	2-3.0x3.0	22.4
101	82 L 87A L	20+818.00 22+246.00	4-3.0x3.0 ø 1.07m	27.7 21.7
102 103	88A L 89 L	22+645.00 22+832.00	1-3.5x3.5 1-3.0x3.0	16.8
104	90 L	23+023.00	1-3.5x3.5	20.2
105 106	91 L 92 L	23+247.00 23+415.00	ø 1.07m 1-2.5x2.5	22.9 16.8
107	93 L			
108 109	94 L 95 L	23+667.00 23+987.00	1-1.0x1.0 1-2.75x2.75	41.7 15.6
110	95A L	24+075.00	ø 1.07m	29.2
111 112	95B L 96 L	24+296.00 24+531.00	1-2.0x2.0 1-3.0x3.0	18.9 23.0
113	96A L 96B L	24+703.00 24+792.00		16.3
114 115	96C I	24+862.80	ø 1.07m 1-1.5x2.0 1-3.0x3.0	27.2 24.8
116	97 L	24+900.00	1-3.0x3.0	23.7
118	97A L 97B L	24+993.00 25+070.00	1-2.0x2.0 1-2.0x2.5	20.0 15.9
119 120	98 L SBI-1 L	25+121.00 0+172.65 (Route-I)	1-2.5x2.5 8-2.5x2.5	18.0 12.1
121	SBI-2 L	0+094.00	1-2.0x2.0	19.5
122 123	SBI-3 L Syphon L	0+276.00 0+034.60	1-1.0x1.0 1-1.0x1.0	9.3 21.8
124	75B L	25+290.00	1-4.5x4.8	24.1
125	98A L th for North:	25+317.00	1-1.5×2.0	14.6 868.8
				30
tal No.:				3,504.9

Culvert No	nel Access Road Pipe Culve	rts								Singl- C-"			Box Culverts					2.0-!-		-	T ~**		Total for Section
	ø 0.91m ø	1.07m	1-1.0×1.0	1-1.5×1.0	1-1.5×1.5	1-1.5x2.0	1-2.0x1.5	1-2.0x2.0	1-2.0x2.5	1-2.5×2.5	1-2.75x2.75 1-3.0x3.0	1-3.5x3.5	1-3.5x4.0	1-4.0x4.0	1-4.5x4.8	1-5.0×5.0	2-1.5×1.5	2 Cells 2-2.5x2.5	3 Cell 2-3.0x3.0 3-2.5x2.5 3-3.0x3	.0 3-3.5×3.5	4-3.0x3.0 2	s 2-6.15x5.5	for Section
1 R	South Section 29.7		15.0																				
3 R	32.2		11.4																				
7 R	11.0 11.4										***************************************												
8 R 9 R		11.9	11.8																				
9A R 9B R	12.0 11.8 11.4 10.5 10.8																						
10 R 11 R	11.4 10.5									-													
12 R 13 R																	10.5						
13A R 13B R	11.4 14.2																						
14 R 15 R	10.0		13.1 12.2																				
16 R 17 R	12.0 10.9 11.0																						
20 R	11.0	11.6 11.4																					
21A R	11.5	12.3																					
23 R 24 R	12.6																						
26 R 27 R		12.4 12.8					9.9														-		
28 R 29 R	12.2		10.7																				
29B R 30 R	17.0 16.6 27.0																						
30A R 31 R	27.0 17.0		11.3																				
32 K 33 R	17.0		19.3												13.4								
35 R 36 R			10.5												13.4			25.8					
37A R 37B R	11.5		10.0	17.6																			
2 R R R R R R R R R R R R R R R R R R R			12.8					9.8															
40 R 41 R			12.8 14.8 19.2 31.9 29.0																				
41A R 41B R			31.9 29.0																				
46 R 47 R 48 R 50 R 50A R 51 R 52 R	46.2				38.9																		
47 R 48 R					38.9					17.6					16.2								
50 R 50A R	25.6		24.3							17.6													
52 R			24.0												9.4								
53 R 53A R			41.1														40.0						
54 R 55 R			11.5									-				***************************************	11.9				-		
56 R 57 R			13.1		13.5																		
58 R 59 R		23.8											11.9										
60 R 61 R								9.5 15.9 21.4															
62 R 63 R			23.5 16.7					21.4															
65 R			16.7					12.1											36.7				
66A R 66B R					34.6														55.7			34.91	
67 R 68 R								70.6 81.2															
69 R 69A R								70.6 81.2 32.4 11.6															
69B R 72 R														11.1					17.5				
52 R 53 R 534 R 54 R 55 R 55 R 56 R 57 R 58 R 59 R 60 R 60 R 60 R 60 R 664 R 664 R 665 R 667 R 668 R 668 R 668 R 669 R	th: 397.5 24 North Section	96.2 7	353.2 20	17.6 1	87.0 3	-	9.9 1	264.5 9		17.6 1			11.9 1	11.1	39.0 3	-	62.4 3	25.8 1	36.7 17.5 1 1	1 1	1	34.9 1	1,482.8 78
73 R	North Section	16.2																		1.2			-
73 R 74 R 75A R 75B R					20.1											16.1							
76 R		20.6								15.2						10.1							
76 R 77 R 78 R 79 R 80 R 800 R 811 R 811 R 812 R 82 R 898 A R 99 R 99 R 91 R		11.0 10.1																					
80 R 80A R								16.1												13.7			
80B R 81 R										22.3					17.2								
81A R 82 R																			14.8		18.3		
87A R 88A R		14.5										11.1											
89 R 90 R		15.4									14.4	13.4											
91 R 92 R		15.4								11.1 14.4													
93 R 94 R 95 R 95B R 96B R 96A R 96A R 96C R 97 R 97 R 97B R			27.5							14.4	10.3												
95A R 95B P		19.6						12.5															
96 R 96A R								12.5		10.8	15.2												
96B R 96C R		18.3				16.3				.5.0													
97 R 97A R								13.2			15.6												
97B R 98 R									10.5	11.9													
SBI-3 R 75B R 98A R otal Length for Nort otal No.: otal Length: otal Length:			6.1																				
75B R 98A R						9.6 25.9									15.9								
otal Length for Nort otal No.:	397.5 24	125.7 8 221.9 15	33.6 2 386.8	17.6	20.1 1 107.1		9.9	41.8 3 306.3	1	6	10.3 45.2 1 3 10.3 45.2	2	11.9	11.1	33.1 2 72.1 5	16.1 1 16.1	62.4	25.8		1.2 13.7 1 1 1.2 13.7	1 1	34.9 1	540.5 3 2,023.4 114

PROJECT NAME	CLIEN'	TS	CONSULTANTS	DRAWING TITLE	SCALE	DWG NO
FEASIBILITY STUDY ON THE 2ND KOHAT TUNNEL AND ACCESS ROADS PROJECT	GOVERNMENT OF PAKISTAN MINISTRY OF COMMUNICATIONS NATIONAL HIGHWAY AUTHORITY	JAPAN INTERNATIONAL	NIPPON KOEI CO., LTD AND ALMEC CORPORATION	LIST OF CULVERTS	NTS	CUL-1



