

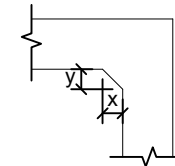
Typical cross section A-A Roadway

Haunch Detail

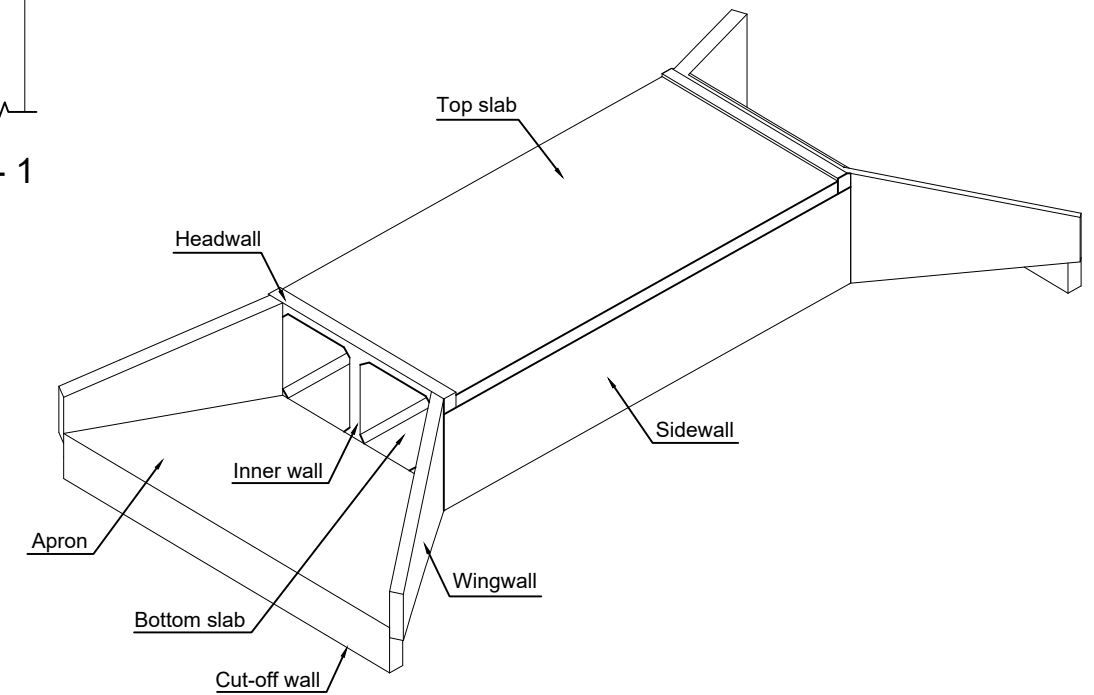
Box Span (m)	Haunch Size 'x' (mm)	Haunch Size 'y' (mm)
2x3.0	200	200
2x4.0	250	250
2x5.0	300	300

NOTES:

1. Dimensions: All dimensions are in millimeters.
2. Materials: Concrete Grade - C32/40  
Blinding Concrete - C12/15  
Reinforced ribbed Bars - Specified Characteristic value of upper yield strength  $\geq 500 \text{ N/mm}^2$
3. Cover to reinforcement 60mm.
4. Backfilling to be done according to specifications.
5. Soft and loose patches in the bearing area are to be replaced by compacted granular fills with layers not exceeding 300mm.

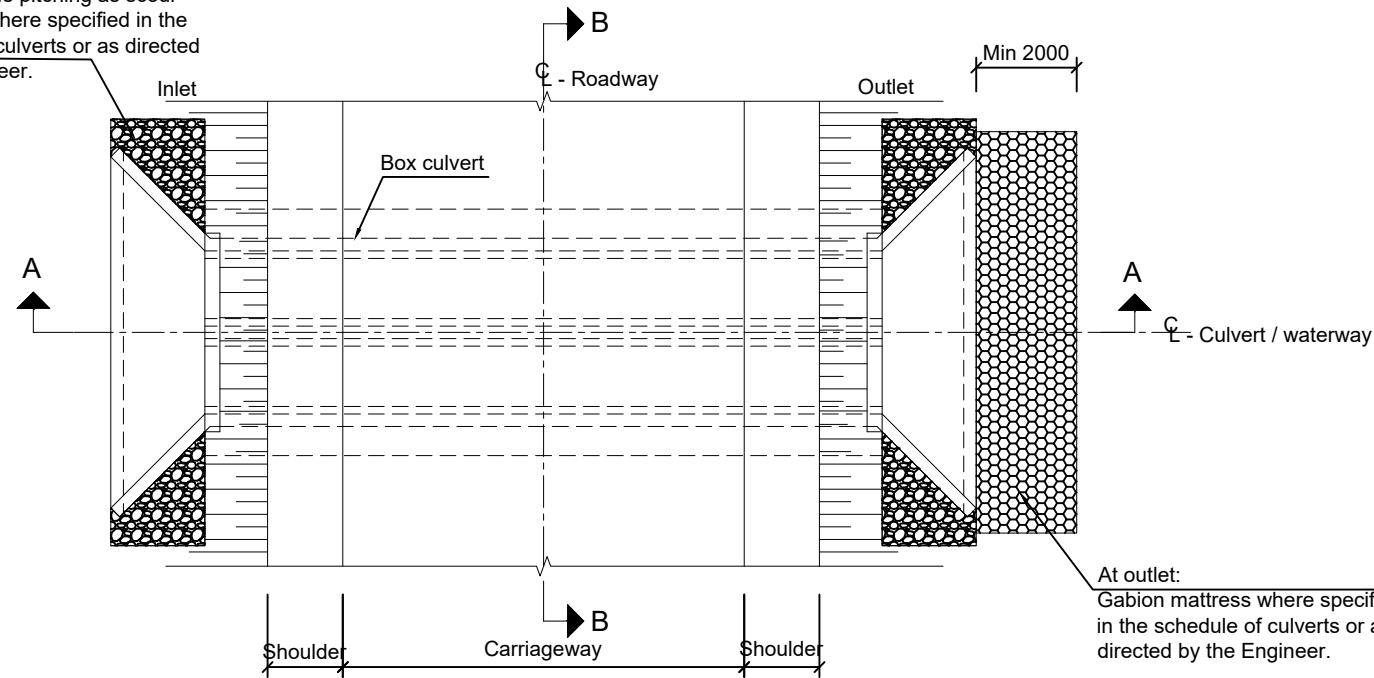


Detail - 1



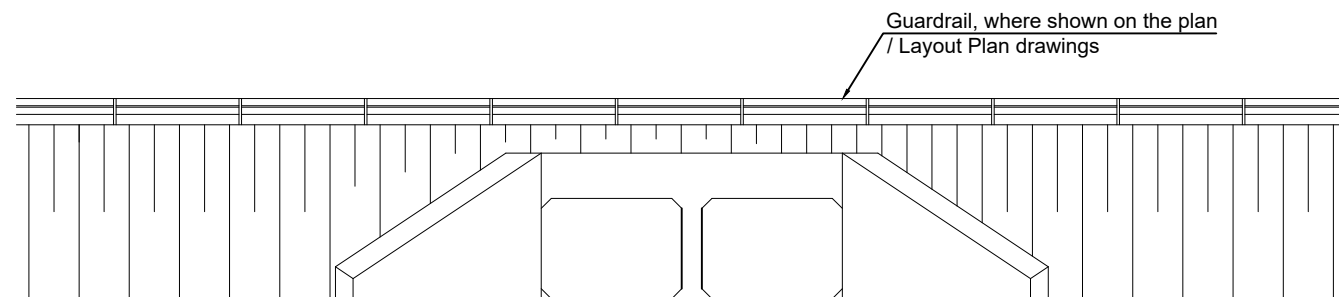
Isometric View

At inlet and/or at outlet:  
Grouted stone pitching as scour protection, where specified in the schedule of culverts or as directed by the Engineer.

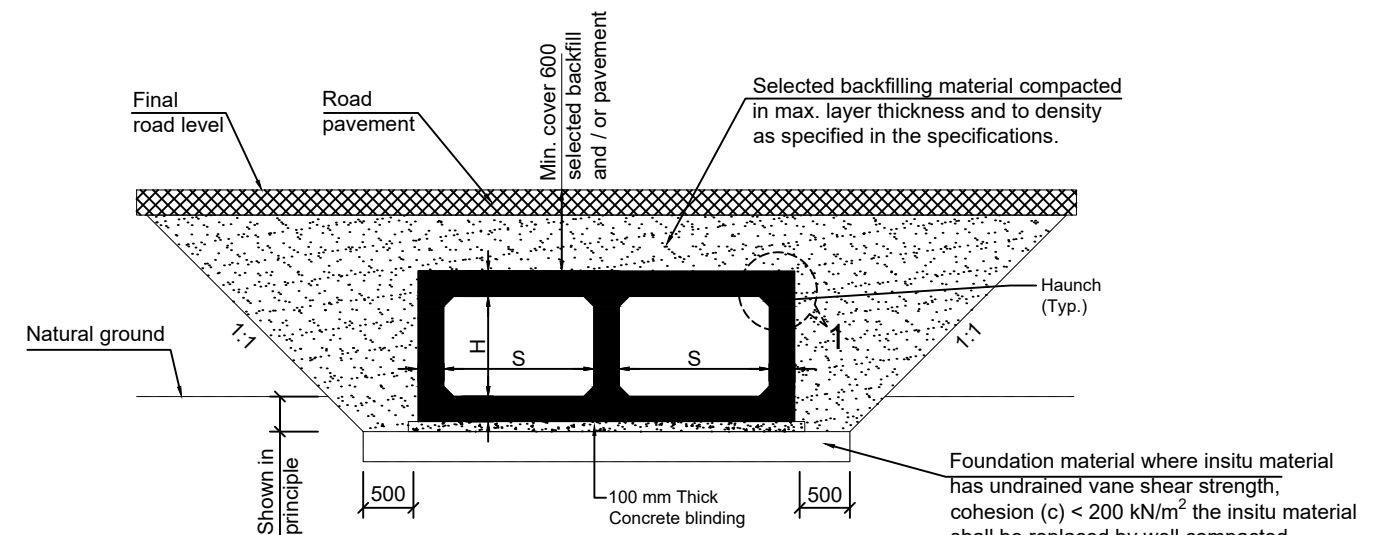


Plan  
Orthogonal crossing

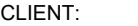
At outlet:  
Gabion mattress where specified in the schedule of culverts or as directed by the Engineer.

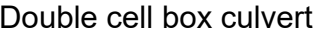


Elevation



Section B - B


NO.	AMENDMENTS	DATE	CLIENT:			STANDARD DRAINAGE DRAWINGS	TYPICAL GENERAL ARRANGEMENT DRAWING OF DOUBLE CELL RCC BOX STRUCTURES			
			 REPUBLIC OF KENYA MINISTRY OF ROADS AND TRANSPORT P.O. BOX 30260-00100 NAIROBI				DRAWING NO.: RDM/4/2/2/02			
								Date: Jan. 2024	Scale: N.T.S.	Sheet No.: 1/2



Span, S			m			3.00			3.00			4.00			4.00			4.00			5.00			5.00											
Height, H			m			1.50			3.00			1.50			3.00			4.00			1.50			3.00											
Max fill over top			m			0.6-1.0			2.00			3.00			0.6-1.0			2.00			3.00			0.6-1.0			2.00			3.00					
Concr	T1		m			0.40			0.40			0.40			0.40			0.50			0.50			0.50			0.55			0.55			0.55		
	Diaphragm wall T2		m			0.25			0.25			0.25			0.25			0.25			0.25			0.25			0.25			0.25			0.25		
Reinforce- ment	" a " Bars	T Size, @ spacing	T16 @150	T16 @150	T16 @140	T16 @140	T16 @140	T16 @130	T16 @100	T16 @130	T16 @120	T16 @100	T16 @120	T16 @120	T16 @130	T16 @120	T16 @110	T20 @110	T20 @125	T20 @110	T20 @110	T20 @110	T20 @110	T20 @110	T20 @110	T20 @110	T20 @110	T20 @100							
	" b " Bars	T Size, @ spacing	T16 @150	T16 @150	T16 @140	T16 @140	T16 @140	T16 @130	T16 @150	T16 @140	T16 @130	T16 @140	T16 @130	T16 @120	T16 @130	T16 @120	T16 @110	T20 @125	T20 @125	T20 @110	T20 @110	T20 @110	T20 @110	T20 @110	T20 @110	T20 @110	T20 @100								
	" c " Bars	T Size, @ spacing	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @180	T12 @170	T12 @160	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200								
	" d " Bars	T Size, @ spacing	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200								
	" e " Bars	T Size, @ spacing	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @170	T12 @170	T12 @150	T12 @150	T12 @150	T12 @150	T12 @150	T12 @150	T12 @140								
	" f " Bars	T Size, @ spacing	T12 @150	T12 @150	T12 @140	T12 @140	T12 @140	T12 @130	T12 @150	T12 @140	T12 @130	T12 @140	T12 @130	T12 @120	T12 @130	T12 @120	T12 @110	T12 @125	T12 @125	T12 @110	T12 @110	T12 @110	T12 @110	T12 @110	T12 @110	T12 @110	T12 @110								
Quan.	Blinding concrete	m3/m. run	0.740	0.740	0.740	0.740	0.740	0.740	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	1.185	1.185	1.185	1.185	1.185	1.185	1.185	1.185	1.185	1.185									
	Reinforced concrete	m3/m. run	7.560	7.560	7.560	9.360	9.360	9.360	11.750	11.750	11.750	14.000	14.000	14.000	15.500	15.500	15.500	15.290	15.290	15.290	17.765	17.765	17.765	17.765	17.765										
	Reinforcement	kg/m. run	470	470	487	598	598	622	582	603	627	714	743	777	821	858	902	998	998	1081	1236	1236	1236	1236	1236										

Span, S			m		5.00		5.00			
Height, H			m		4.00		5.00			
Max fill over top			m		0.6-1.0	2.00	3.00	0.6-1.0	2.00	3.00
Concr.	T1		m		0.55	0.55	0.55	0.55	0.55	0.55
	Diaphragm wall T2		m		0.25	0.25	0.25	0.25	0.25	0.25
Reinforce- ment	" a " Bars	T Size, @ spacing	T20 @100	T25 @160	T25 @150	T20 @100	T25 @160	T25 @150		
	" b " Bars	T Size, @ spacing	T20 @100	T25 @160	T25 @150	T20 @100	T25 @160	T25 @150		
	" c " Bars	T Size, @ spacing	T12 @200	T12 @180	T12 @200	T16 @200	T16 @200	T16 @190		
	" d " Bars	T Size, @ spacing	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200	T12 @200		
	" e " Bars	T Size, @ spacing	T12 @140	T12 @140	T12 @130	T12 @140	T12 @130	T12 @130		
	" f " Bars	T Size, @ spacing	T12 @100	T12 @160	T12 @150	T12 @100	T12 @160	T12 @150		
Quan.	Blinding concrete	m3/m. run	1.185	1.185	1.185	1.185	1.185	1.185		
	Reinforced concrete	m3/m. run	19.415	19.415	19.415	21.065	21.065	21.065		
	Reinforcement	kg/m. run	1426	1435	1493	1536	1536	1600		

Bar size	Lap length
12	450
16	600
20	850
25	1300

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			 REPUBLIC OF KENYA MINISTRY OF ROADS AND TRANSPORT P.O. BOX 30260-00100 NAIROBI				DRAWING NO.: RDM/4/2/2/02			
								Date: Jan. 2024	Scale: N.T.S.	Sheet No.: 2/2