

TYPE 'A' INLETS AND OUTLETS

DIAMETER	'D'	300	375	450	525	600	675	750	900	1050	1200	1350	1500	1650	1800
HEADWALL & FOUNDATION	m ³	0.26	0.28	0.29	0.49	0.58	0.65	1.02	1.21	1.42	1.57	1.86	2.12	2.38	2.66
SIDEWALLS & INVERT	m ³	0.25	0.35	0.47	0.65	0.80	0.97	1.22	1.67	2.32	3.00	3.48	4.25	5.09	5.94

EXTRA FOR EACH ADDITIONAL PIPE

DIAMETER	'D'	300	375	450	525	600	675	750	900	1050	1200	1350	1500	1650	1800
HEADWALL & FOUNDATION	m ³	0.13	0.15	0.18	0.24	0.27	0.35	0.54	0.64	0.75	0.90	0.96	1.07	1.17	1.30
INVERT	m ³	0.10	0.15	0.19	0.24	0.30	0.36	0.42	0.57	0.75	0.95	1.17	1.41	1.67	1.95

TYPE 'B' INLETS AND OUTLETS

DIAMETER	'D'	1350	1500	1650	1800
HEADWALL & FOUNDATION	m ³	1.39	1.54	1.94	2.08
SIDEWALLS & INVERT	m ³	5.44	6.69	9.57	11.23

EXTRA FOR EACH ADDITIONAL PIPE

DIAMETER	'D'	1350	1500	1650	1800
HEADWALL & FOUNDATION	m ³	0.96	1.07	1.17	1.30
INVERT	m ³	1.17	1.41	1.67	1.95

QUANTITY OF STONEPITCHING

TYPE 'A' INLETS AND OUTLETS

DIAMETER	'D'	300	375	450	525	600	675	750	825	900	1050	1200	1350	1500	1650	1800
HEADWALL	m ³	0.19	0.23	0.26	0.39	0.42	0.47	0.57	0.63	0.69	0.79	0.92	1.09	1.23	1.38	1.54
APRON	m ³	0.08	0.10	0.12	0.14	0.20	0.23	0.26	0.29	0.32	0.39	0.46	0.54	0.62	0.71	0.80
WINGWALLS	m ³	0.15	0.21	0.29	0.49	0.61	0.75	0.90	1.06	1.24	1.63	2.08	2.58	3.12	3.73	4.40
F92 MESH	m ²	NOT APPLICABLE														
TOTAL CONCRETE	m ³	0.4	0.5	0.7	1.0	1.2	1.5	1.7	2.0	2.3	2.8	3.5	4.2	5.0	5.8	6.7

EXTRA FOR EACH ADDITIONAL PIPE

DIAMETER	'D'	300	375	450	525	600	675	750	825	900	1050	1200	1350	1500	1650	1800
HEADWALL	m ³	0.04	0.05	0.07	0.10	0.11	0.13	0.15	0.16	0.18	0.22	0.26	0.30	0.34	0.39	0.45
APRON	m ³	0.06	0.08	0.11	0.14	0.21	0.25	0.30	0.34	0.40	0.51	0.65	0.79	0.95	1.13	1.32
F92 MESH	m ²	NOT APPLICABLE														
TOTAL CONCRETE	m ³	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.7	0.9	1.1	1.3	1.4	1.8

EXTRA FOR EACH ADDITIONAL PIPE

DIAMETER	'D'	1350	1500	1650	1800	1950
HEADWALL	m ³	1.14	1.35	1.56	1.79	2.06
APRON	m ³	0.79	0.95	1.13	1.32	1.53
TOTAL CONCRETE	m ³	1.9	2.3	2.7	3.1	3.6

NOTES:

1. THIS STANDARD DRAWING TO BE READ IN CONJUNCTION WITH UMS 341 AND UMS 342.
2. QUANTITIES OF SPALLS FOR SIDEWALLS AND INVERT TAKEN FOR L=2d, FOR L=d MULTIPLY APPROPRIATE SPALLS QUANTITY BY 0.5.
3. QUANTITIES ARE SHOWN FOR WINGWALLS WHERE h = H IF h IS LESS THAN H ADJUSTMENT SHOULD BE MADE.
4. EXAMPLE : TWIN 1200 DIA PIPE
LENGTH OF INVERT = d
QUANTITIES : SPALLS FOR HEADWALL AND FOUNDATION = 1.57+0.9 = 2.47
SPALLS FOR SIDEWALLS AND INVERT
(3.0+0.95)x0.5 = 1.98
TOTAL = 2.47+1.98 = 4.45m³

FOR SKEWED PIPES

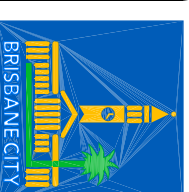
PIPE SKEW	5°-15°	16°-25°	26°-35°	36°-45°
SKEW FACTOR	1.02	1.07	1.16	1.32

INCREASE TOTAL QUANTITY FOR HEADWALL AND APRON ONLY, BY MULTIPLICATION FACTOR ABOVE

QUANTITY OF CONCRETE

ISSUE	AMENDMENT	DRAWN DATE	CHKD DATE	APPRD DATE
A	ORIGINAL ISSUE	April '01	May '01	June '01

DESIGN AUTHORISED FOR ISSUE B. BALL SIGNATURE ON ORIGINAL DATED 29/6/01		DESIGN	STD DWG GROUP	DATE
MANAGER ASSET SUPPORT - R.P.E.G. 3, 8, 5, 2 DESIGN APPROVED		DRAWN	CITY DESIGN	DATE
B. HANSEN SIGNATURE ON ORIGINAL DATED 27/6/01		CHECKED	M. STEER	DATE
PRINCIPAL ASSET OFFICER ROADS & DRAINAGE		DRAWING FILENAME	UMS 371	DATE
		ASSOCIATED PLANS	SUPERSIDES WS 56-2	DATE



BRISBANE CITY COUNCIL - URBAN MANAGEMENT DIVISION	
QUANTITIES FOR INLETS AND OUTLETS	NOT TO SCALE
UMS 371	REVISION
A3	A