Sheridan House, Hartfield Road, Forest Row, East Sussex RH18 5EA Tully De'Ath Unit 4, St Saviours Wharf, Mill Street, London, SE1 2BE 01342 828000 Phone: Email: info@tullydeath.com 01342 828001 Fax: Website: tullydeath.com JOB: KIDDERPORE AVENUE-Job No: 11316 By: SFK Sheet No: HAND 03 6 Und 0 STORM TAA DRAINACE FORM 2 6 F R ANDEN C KAR NTEROSTORANS A2 MICRODO A INA EA A 1 CAC 18.4 mm In 40.6 mm INGON 52.6 DAYR IN mm GR.L 1N 100/2+30% 10 AL 5 Mi CRODIAMAG 0 NOU CARE THE CA NDEX BE NE 0 2 TA C.C E E Er UN -OF CALCOLATIONN F tha 6 0 OAF di SAVES 0 GDEFER E1 0 STIF 10 AR AC ows: OUL 21255 3 3 18.6X 10 NR X 0.45 × -15 3 3 29 1.O.GX J-SOM 55 10. X 10 -203.0 X IN 1 2 295 5 3 S 2 NO X -90. ~ 12955KD 45K 68.4×10+2 3 -30% IN 100 7.9 -INDUCATES NOTE PR SPORTION OI NDGX WE OF DISCHARCING FROM ANDSCAPED AREAN SURPACE WATER IN ATTPICAL THE AREA. AA DCOLITY. 14 15 VALUE FOR 1945 m2 OF IMPAMEABLE EXISTING VOLUMES SURPACE 5000+ (12955-5000)045)× 18.4× 103-148 IN 52.1 m 335.5m3 1NSOR = ((\$000+ (12255-500)0.45) × 40.6 × 1053 = 12255-5000,45 X 52.6 X1073 (Soloot 454.7m3 1111004 5000+ 12955-5000 045 ×68.4×10-3 IN

Sheridan House, Hartfield Road, Forest Row, East Sussex RH18 5EA Tully De'Ath Unit 4, St Saviours Wharf, Mill Street, London, SE1 2BE Phone: 01342 828000 Email: info@tullydeath.com Fax: 01342 828001 Website: tullydeath.com JOD: KIDDERPORE AVENUE Job No: 1.1.5.16 Date: 24/6/15 Sheet No: HAND/04 BV: SFK RUNL DA SMES DAF VOL 6 Mayor 1 DINJER STOR UN-ATTENUMED 1790 m2 FIRDAN RUN OFT AREA ASSOCIATER WITH RETAINED RUKDINGS N CENTRAL SITE AREA. GAR WINTER STORM FIGURES FOR RAINFALL ON AL TATED HAND 03. 18.4×10-3 INVA 1605 24.5m 3 × -3 IN JORE 40.6× 1605 × 10 65.2 3 IN 100 YR = 1605 52.6X X 0 XL ×68.4×10-3-09.8 IN 10012 + 30% = 1605 23 HOUR Vocumes OP QUNLOFF - 5 WINTER STORMS AREA REMAINING GREEN FIELD FROM POG 12255 TEVELOPMENT Terre 818 -4075m SOIL NDGK 0.45 1 m3 LINDIVR 4070 DUSX 8.1×10-3 X 3.7 130-02 O.LSX KD. KKID 13 3 5 × 74.5 1 07 m m 3 ~3 LIN IDDYA 4075 X D.45X 52.6×10 LIN 0041+30% (10) m3 04SX 68.4 XIO 25 1L



Sheridan House, Hartfield Road, Forest Row, East Sussex RH18 5EAPhone:01342 828000Email:info@tullydeath.comFax:01342 828001Websitetullydeath.com



KIDDERPORE AVENUE Job No: 11316 Job: Sheet No: HAND/05 Date: 25/6/15 SFK By: SEE MD/06-23 FLOUSE FROM PROPOSED DEVELOPMENT UNATTENUATED STORM WESS EAST 217522 TOTAL 818012 1605m2 EVENT 4300m 22.31/2 3.71/5 30.71/5 MI 4.71/5 50.41/5 59.00/5 4.98/5 1,1,30 3.71/5 64-21/5 73.30/5 4.20/5 4.916 1.N100 83.515 4.91/5 95.41/5 11N100+30% 5.015 PROPOSED RATES - SECTION 4 - CAMBEN P20-FORMA VOLUMES FROM PROPOSED DEVELOPMENT STORM UNATTEND GREEN FIELD EAST 2175m2 TOTAL 1225512 WEST 1605m 4075m2 EVENT 4300m2 29.5m3 42.2m3 696-13 175.0~3 Inl 33.7m3 165.4 m3 65.2 M3 929 m3 LINJO 74.5m3 398.0m2 84.6m3 96.5m3 215.3m2 516.6m3 11000 120.4m3 675.5m2 109.8m 125.4m² 156.6m3 2837-2 11N100-50% PROPOSED VOLUMES - SECTIONS - CAMDEN PRO-FORMA

GREEN FIELD RUN-OFF RATES MD/O Tully De'Ath Page 1 Sheridan House Hartfield Road Forest Row Micro Date 24/06/2015 11:19 Designed by sfk Drainage File 150605-Greenfield.srcx Checked by XP Solutions Source Control 2014.1.1 IH 124 Mean Annual Flood Input Return Period (years) 100 Soil 0.450 Area (ha) 50.000 Urban 0.000 626 Region Number Region 6 SAAR (mm) Results 1/s QBAR Rural 192.7 QBAR Urban 192.7 🖟 Q100 years 614.8 Q1 year 163.8 ** Q2 years 169.8 Q5 years 246.7 Q10 years 312.2 Q20 years 386.1 Q25 years 414.0 Q30 years 436.8 * Q50 years 505.0 Q100 years 614.8* Q200 years 722.8 Q250 years 757.5 Q1000 years 994.5 RUN OFF RATES FOR 1.2255 AQ . IN 148: 1.2255/50×163.8 = 4.01/5 QBAR! 1.2255/50 × 192.7 = 4.71/5 11NBOR! 1.2255/50×436.8= 10.71/5 1 IN 100 YR: 1.2255/50×6148= 15.18/5 ©1982-2014 XP Solutions

Tully De'Ath	Page 3
Sheridan House	
Hartfield Road	L'a
Forest Row	Micco
Date 24/06/2015 12:43	Designed by sfk
File 150624-WestGreenRoofCas	
XP Solutions	Source Control 2014.1.1
Cascade Rainfall Details for Rainfall Model Return Period (years) Region Engl M5-60 (mm) Ratio R Summer Storms <u>Ti</u> Tot	r 150624-WestStandardImp&Attenuation.srcx FSR Winter Storms 100 Cv (Summer) 0.750 and and Wales Cv (Winter) 0.438 Longest Storm (mins) 100 Yes Climate Change % +30 me Area Torm: To: 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 <tr td=""> 0</tr>
a1000	-2014 VD Solutions
©1982	-2014 XP Solutions

Tully De'Ath	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Page 3
Sheridan House		raye s
Hartfield Road		4
Forest Row		1 mm
Date 24/06/2015 12:55	Designed by sfk	- Micro
File 150624-WestGreenRoofCas	Checked by	Drainage
XP Solutions	Source Control 2014.1.1	
Cascade Rainfall Details for	150624-WestStandardImp&Attenu	ation.srcx
Rainfall Model Return Period (years) Region Engla M5-60 (mm) Ratio R Summer Storms <u>Tim</u> Tota	FSR Winter Storms 100 Cv (Summer) and and Wales Cv (Winter) 21.000 Shortest Storm (mins) 0.438 Longest Storm (mins) Yes Climate Change % me Area Diagram al Area (ha) 0.275 Ime (mins) Area om: To: (ha) 0 4 0.275	Yes 0.750 0.840 15 10080

LIN 30 42 STORMI ully De'Ath	Page 3
heridan House	
artfield Road	N
orest Row	
ate 24/06/2015 13:02	Designed by sfk
ile 150624-WestGreenRoofCas	
P Solutions	Source Control 2014.1.1
Cascade Rainfall Details fo	r 150624-WestStandardImp&Attenuation.srcx
M5-60 (mm) Ratio R Summer Storms <u>Ti</u> To	FSR Winter Storms Yes 30 Cv (Summer) 0.750 land and Wales Cv (Winter) 0.840 21.000 Shortest Storm (mins) 15 0.438 Longest Storm (mins) 10080 Yes Climate Change % +0 mme Area Diagram tal Area (ha) 0.275 Fime (mins) Area rom: To: (ha) 0 4 0.275

Page 3 Designed by sfk Checked by Source Control 2014.1.1 D50624-WestStandardImp&Attenuation.srcx FSR Winter Storms Yes 1 Cv (Summer) 0.750 d and Wales Cv (Winter) 0.840 21.000 Shortest Storm (mins) 15 0.438 Longest Storm (mins) 10080 Yes Climate Change % +0 Area Diagram Area (ha) 0.275 a (mins) Area b To: (ha) 0 4 0.275
Checked by Source Control 2014.1.1 150624-WestStandardImp&Attenuation.srcx FSR Winter Storms Yes 1 Cv (Summer) 0.750 d and Wales Cv (Winter) 0.840 21.000 Shortest Storm (mins) 15 0.438 Longest Storm (mins) 10080 Yes Climate Change % +0 Area Diagram Area (ha) 0.275 a (mins) Area h: To: (ha)
Checked by Source Control 2014.1.1 150624-WestStandardImp&Attenuation.srcx FSR Winter Storms Yes 1 Cv (Summer) 0.750 d and Wales Cv (Winter) 0.840 21.000 Shortest Storm (mins) 15 0.438 Longest Storm (mins) 10080 Yes Climate Change % +0 Area Diagram Area (ha) 0.275 a (mins) Area h: To: (ha)
Checked by Source Control 2014.1.1 150624-WestStandardImp&Attenuation.srcx FSR Winter Storms Yes 1 Cv (Summer) 0.750 d and Wales Cv (Winter) 0.840 21.000 Shortest Storm (mins) 15 0.438 Longest Storm (mins) 10080 Yes Climate Change % +0 Area Diagram Area (ha) 0.275 a (mins) Area h: To: (ha)
Checked by Source Control 2014.1.1 150624-WestStandardImp&Attenuation.srcx FSR Winter Storms Yes 1 Cv (Summer) 0.750 d and Wales Cv (Winter) 0.840 21.000 Shortest Storm (mins) 15 0.438 Longest Storm (mins) 10080 Yes Climate Change % +0 Area Diagram Area (ha) 0.275 a (mins) Area h: To: (ha)
Source Control 2014.1.1 150624-WestStandardImp&Attenuation.srcx FSR Winter Storms Yes 1 Cv (Summer) 0.750 d and Wales Cv (Winter) 0.840 21.000 Shortest Storm (mins) 15 0.438 Longest Storm (mins) 10080 Yes Climate Change % +0 Area Diagram Area (ha) 0.275 a (mins) Area x: To: (ha)
FSR Winter Storms Yes 1 Cv (Summer) 0.750 d and Wales Cv (Winter) 0.840 21.000 Shortest Storm (mins) 15 0.438 Longest Storm (mins) 10080 Yes Climate Change % +0 <u>Area Diagram</u> Area (ha) 0.275 e (mins) Area h: To: (ha)
1 Cv (Summer) 0.750 d and Wales Cv (Winter) 0.840 21.000 Shortest Storm (mins) 15 0.438 Longest Storm (mins) 10080 Yes Climate Change % +0 Area Diagram Area (ha) 0.275 e (mins) Area a: To: (ha)
Area (ha) 0.275 e (mins) Area a: To: (ha)
e (mins) Area 1: To: (ha)
a: To: (ha)
0 4 0.275

Tully De'Ath		2) - M				Page 3
Sheridan House	9		1			1	
Hartfield Road	£						4
Forest Row							N
Date 24/06/201	15 12:20		Design	ed by sfk			MICLO
File 150624-We		RoofCas	CONTRACTOR OF A	Service Service Service			Drainac
XP Solutions	- acoreen	noorcas		Control 2	01/ 1 1		
AF SOLUCIONS		-	Source	CONCLOT 2	014.1.1		
Cascade	Model De	tails for	150624-0	NestStanda	rdImp&At	tenuation	.srcx
	5	Storage is (Online Cov	er Level (m)	97.000		
		Tank	c or Pond	Structure			
		Inv	ert Level	(m) 91.500			
Depth (m) A	rea (m²)	Depth (m) A	rea (m²) I	Depth (m) Ar	ea (m²) De	epth (m) Ar	ea (m²)
0.000	91.2	1.400	91.2	2.800	0.0	4.200	0.0
0.200	91.2	1.600	91.2	3.000	0.0	4.400	0.0
0.400	91.2	1.800	91.2	3.200	0.0	4.600	0.0
0.600	91.2 91.2	2.000	91.2	3.400	0.0	4.800	0.0
0.800 1.000	91.2	2.200 2.400	91.2 45.6	3.600 3.800	0.0	5.000	0.0
1.200	91.2	2.600	0.0	4.000	0.0		
	(1942)		1.001				
	<u>H</u> 7	ydro-Brake	e Optimum	® Outflow	Control		
			it Referend ign Head (1	ce MD-SHE-00	88-5000-24	400-5000 2.400	
			n Flow $(1/s)$			5.0	
			Flush-Flo		Cal	lculated	
			Objectiv	ve Minimise	upstream	storage	
			iameter (mr			88	
м	inimum Out		ct Level (r			91.500	
Pi		tlet Pipe D: d Manhole D:				100 1200	
		Control H	Points	Head (m)	Flow (l/s)		
	Des	ign Point (Calculated) 2.400	5.0		
			Flush-Flo		3.7		
			Kick-Flo		3.0		
		n Flow over			3.8		
The hydrologic Hydro-Brake Op Hydro-Brake Op invalidated	timum® as	specified.	Should an	nother type	of control	device oth	ner than a
Depth (m) Flo	w (l/s) De	epth (m) Fl	ow (1/s) D	epth (m) Fl	ow (l/s)	epth (m) F	low (1/s)
0.100	2.7	1.200	3.6	3.000	5.5	7.000	8.3
0.200	3.5	1.400	3.9	3.500	6.0	7.500	8.5
0.300	3.7	1.600	4.1	4.000	6.4	8.000	8.8
0.400	3.7	1.800	4.4	4.500	6.7	8.500	9.1
0.500	3.7	2.000	4.6	5.000	7.1	9.000	9.3
0.600 0.800	3.6	2.200 2.400	4.8	5.500 6.000	7.4	9.500	9.6
1.000	3.3	2.400	5.0	6.500	8.0		
		e1.00	2014 25	Solutions			

Fully De'Ath								Pa	age 1 🍟
Sheridan House								C	
Hartfield Road								2	L.
Forest Row								N	lingen
Date 24/06/2015 12:	20		Des	signed	by sfk	-			
File 150624-WestGre	enRo	ofCas.	Che	ecked .	by				Irainage
XP Solutions			Sou	irce C	ontrol	2014.	1.1		
	73.7	1000						1.	
Cascade Summary	of R	esults	for 1	50624-	WestSta	Indarc	lImp&Att	enuatio	n.srcx
Ūr	strea	am		O	itflow To		Over	Elow To	
	uctu				10110# 10		Over	10 10	
150004-51			150	CO 4 12				· · · · · · · · · · · · · · · · · · ·	
150624-Wes	Gree	nROOI.SI	CX 1500	oz4-wes	COUTIALL	Tank.s	rcx	(None)	
	Sto	orm	Max	Max	Max	Max	Status		
	Eve	ent		1.1.1	Control		à		
			(m)	(m)	(1/s)	(m³)			
1	5 mir	n Summer	92.498	0.998	3.7	91.0	о к		
		n Summer			3.8	120.			
		n Summer			4.2	148.4			
		n Summer			4.5	174.3			
		n Summer n Summer			4.6	180.4			
		Summer			4.0				
		Summer			4.5				
60	0 mir	Summer	93.365	1.865	4.4	170.1	ОК		
		Summer			4.4	164.0			
		Summer			4.3	155.2			
		n Summer n Summer			4.0 3.7	137.0			
		Summer			3.7	95.			
432	0 mir	Summer	92.110	0.610	3.7	55.0			
		n Summer			3.7	31.0	0 К		
		Summer			3.5	19.5			
004	J 1111	a Summer	91.040	0.140	3.2	13.5	о к		
	Sto	rm	Rain	Flood	ed Disch	arge T	ime-Peak		
	Eve	nt	(mm/hr)	Volum	ne Volu	me	(mins)		
				(m³)	(m ³)			
15	min	Summer	139.672	0	.0 1	04.0	50		
		Summer	90.181			36.7	62		
		Summer	55.351			69.3	86		
		Summer	32.803			03.6	130		
		Summer Summer	23.841			19.8 33.7	182 242		
		Summer	13.629			52.3	332		
		Summer	10.798			67.1	390		
		Summer	9.007			78.6	454		
		Summer	7.764			87.3	520		
		Summer Summer	6.137			02.7	656		
		Summer	4.401 3.151			24.0 45.3	936 1344		
		Summer	2.484			4J.J 65.1	1744		
		Summer	1.775			90.1	2460		
0.000		Summer	1.397			06.0	3088		
7200		Summer	1.160 0.996			17.6	3752		
0.040		Summor	11 446	0	11 A.	26.6	4416		
8640	III III	Jununer	0.990	, v	.0 4.	20.0	4410		

WEST ATTENU							Page 2
Sheridan House							
lartfield Road							4
orest Row							1 m
ate 24/06/2015 12:20		Des	igned b	ov sfk			Micro
ile 150624-WestGreen	RoofCas	1.122.12	cked by	-			Drainac
P Solutions	ROOLCAD.	02-10-2	rce Con		011 1	1	Town and water
F SOLUCIONS		300	rce con	ILLOI 2	2014.1	• 1	
Cascade Summary of	Results	for 15	0624-W	estSta	ndardI	mp&Attenu	ation.srcx
							u ch ch ch ch ch ch
	Storm	Max	Max	Max	Max	Status	
1	Ivent		Depth (
		(m)	(m)	(1/s)	(m ³)		
10080	min Summer	91.613	0.113	3.0	10.3	ОК	
	min Winter		1.1.1.2.2.2.	m per	103.6	O K	
	min Winter		1000000	4.0	136.8	O K	
	min Winter			4.4	168.0	O K	
	min Winter			4.8	196.5	ОК	
	min Winter				207.6	OK	
	min Winter min Winter			4.9	209.6	OK	
	min Winter min Winter				207.7	OK	
	min Winter				195.9	OK	
	min Winter				190.2	0 K	
960	min Winter	93.437	1.937	4.5	176.6	O K	
	min Winter				147.0	O K	
	min Winter			3.8	120.3	ОК	
	min Winter				93.0	ОК	
	min Winter min Winter			3.7	33.4 15.3	O K O K	
	min Winter			2.9	9.9	OK	
	min Winter			2.5	8.3	OK	
10080	min Winter	91.581	0.081	2.2	7.3	ОК	
S	torm	Rain	Floode	d Disch	arge Ti	me-Peak	
E	vent	(mm/hr)	Volume	Volu	me	(mins)	
			(m³)	(m ³)		
10080 n	in Summer	0.875	0.	0 4	33.6	5136	
	in Winter				17.4	51	
	in Winter	90.181			54.0	64	
	in Winter				90.4	88	
	in Winter	32.803			27.7	132	
	in Winter				48.7	180	
	in Winter	18.904			52.2 33.7	236 346	
	in Winter	10.798			99.5	432	
	in Winter	9.007			12.8	478	
	in Winter	7.764			23.7	554	
	in Winter	6.137	0.0		40.0	706	
	in Winter	4.401			58.9	1010	
	in Winter	3.151			92.6	1444	
	in Winter	2.484			13.6	1872	
	in Winter in Winter	1.775			39.8 58.2	2464 3056	
	in Winter	1.160			71.9	3056	
	in Winter	0.996			32.7	4400	
	in Winter	0.875			91.3	5072	

heridan House artfield Road orest Row ate 24/06/2015 12:55 ile 150624-WestGreenRoofCas P Solutions	Des						
orest Row ate 24/06/2015 12:55 ile 150624-WestGreenRoofCas	Des						4
ate 24/06/2015 12:55 ile 150624-WestGreenRoofCas	Des						1 m
ile 150624-WestGreenRoofCas	Des		_				Mirro
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	igned					Drainag
P Solutions	. Che	cked b	У				Jianiagi
	Sou	rce Co	ntrol	2014.	1.1		
Cascade Summary of Results	for 15	50624-W	estSta	ndard	Imp&Att	enuati	on.srcx
			flow To		- 75.5	flow To	
Upstream Structures		out	.110w 10	,	Over.	100 10	
150624-WestGreenRoof.sr	cx 1506	24-West	Outfall	Tank.sı	rcx	(None)	
Storm	Max	Max	Max	Max	Status		
Event	Level	Depth C		Volume			
	(m)	(m)	(1/s)	(m³)			
15 min Summer	92 220	0.720	3.7	65.7	ОК		
30 min Summer			3.7				
60 min Summer				111.3			
120 min Summer	92.906	1.406	3.9				
180 min Summer			4.0				
240 min Summer 360 min Summer			4.0	133.5			
480 min Summer			3.9				
600 min Summer			3.8				
720 min Summer	92.788	1.288	3.7	117.4	0 K		
960 min Summer			3.7				
1440 min Summer			3.7	90.2			
2160 min Summer 2880 min Summer			3.7 3.7	69.9 48.9			
4320 min Summer		0.04.000	3.7				
5760 min Summer			3.3				
7200 min Summer			3.0				
8640 min Summer	91.597	0.097	2.6	8.9	0 K		
Storm Event	Rain	Volume			ime-Peak (mins)		
Event	(1111)	(m ³)	(m ³		(mins)		
15 min Summer	107.440	0.	0	77.9	45		
30 min Summer	69.370			03.2	58		
60 min Summer	42.578			29.3	80		
120 min Summer 180 min Summer	25.233			53.7	124		
240 min Summer	18.339			67.2 77.8	182 240		
360 min Summer	10.484			92.7	312		
480 min Summer	8.306			02.5	376		
600 min Summer	6.928			12.3	440		
720 min Summer	5.972			19.4	506		
960 min Summer 1440 min Summer	4.721 3.385			30.3 44.3	646 924		
2160 min Summer	2.424			65.2	1324		
2880 min Summer	1.911			78.6	1648		
4320 min Summer	1.365			95.0	2308		
5760 min Summer	1.074			06.2	3000		
7200 min Summer	0.892			14.1	3672		
8640 min Summer	0.766	0.	u 3.	19.9	4408		

Fully De'Ath				-					Page 2
Sheridan House									
Hartfield Road									Mr.
Forest Row									Micro
Date 24/06/2015	12:55	5	-	Des	igned h	ov sfk	_		
File 150624-West	tGreet	RoofCa			cked by				Drainag
XP Solutions					rce Cor		2014 1	1	
II SOLUCIONS				bou.	LCE COI	ICTOL 2	2014.1	• 1	
Cascade Summa	ary of	Result	ts for	15	0624-W	estSta	ndard]	mp&Atten	uation.srcx
		Storm		iax	Max	Max	Max	Status	
		Event			Depth (Volume		
			(m)	(m)	(1/s)	(m ³)		
	10090	min Sum	mer 01	505	0 005	2.2	7 0	O V	
		min Sum min Win				2.3	7.8 76.4		
		min Win				3.7	101.5		
		min Win					126.5		
		min Win				4.1	146.4		
		min Win					153.2		
		min Win				4.2			
	360	min Win	ter 93.	135	1.635	4.2	149.2	ОК	
		min Win				4.1	144.4	O K	
		min Win				4.1	139.4		
		min Win				4.0	133.0		
		min Wind				3.8	118.3		
		min Wint				3.7 3.7	98.5 63.8	OK	
		min Wind				3.7	35.1		
		min Wint				3.3	13.7		
		min Wint				2.7	9.0	0 K	
		min Wint				2.2	7.5		
		min Wint				1.9			
	10080	min Wint	ter 91.	565	0.065	1.6	6.0	O K	
		Storm		in				me-Peak	
	1.1	Ivent	(mm	/hr)				(mins)	
					(m ³)	(m ³)		
	10080	min Summ	er 0	.673	0.	3:	24.3	5136	
		min Wint					38.5	50	
		min Wint		.370			16.3	59	
		min Wint		.578			45.6	82	
		min Wint					73.4	126	
		min Wint	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.339			39.5	178	
	-	min Wint		.542			99.6	236	
		<mark>min </mark> Wint min Wint		.484			15.3 28.6	340 394	
		min Wint min Wint		. 928			38.6	394 466	
		min Wint		.972			45.8	542	
		min Wint		.721			55.5	696	
		min Wint		.385			77.8	996	
		min Wint		.424			0.5	1404	
		min Wint		.911			14.3	1700	
	4320	min Wint		.365			33.4	2292	
	5760	min Wint	er 1	.074	0.0		46.5	2944	
		min Wint		.892	0.0		56.0	3672	
		min Wint		.766			53.3	4408	
	10080	min Wint	er O	.673	0.0) 3	58.9	5144	

WEST ATTER Tully De'Ath	~ ¥	F1 150	10 11	112	VIK			SUMM Page 1
Sheridan House								
Hartfield Road								12
Forest Row								Micro
Date 24/06/2015 13:	02		Des	signed	by sf	ς		
File 150624-WestGre	enRc	ofCas.	Che	ecked	by			Drain
XP Solutions			Sou	arce C	ontrol	2014.1	.1	
Cascade Summary	of R	esults	for 1	50624-	WestSta	andardI	mp&Att	enuation.sro
	ostre ructu			O	utflow T	o	Overf	Elow To
150624-Wes	tGree	nRoof.s:	rcx 1500	524-Wes	tOutfall	Tank.sr	cx	(None)
	Ste	orm	Max	Max	Max	Max	Status	
		ent			Control		Julus	
			(m)	(m)	(1/s)	(m³)		
	.5 mir	n Summer	92.009	0.509	3.7	46.4	ОК	
	80 mir	n Summer	92.194	0.694	3.7		OK	
		n Summer			3.7		ОК	
		n Summer n Summer			3.7		O K O K	
		n Summer			3.7		OK	
30	50 mir	n Summer	92.518	1.018	3.7		ОК	
		n Summer			3.7		OK	
		n Summer n Summer			3.7	85.9 82.5	O K O K	
		Summer			3.7		OK	
		Summer			3.7	56,8	ОК	
		n Summer n Summer			3.7		OK	
		a Summer			3.7		0 K	
		Summer			2.9	10.0	ОК	
		Summer			2.5		ΟK	
864	U MIR	n Summer	91.579	0.079	2.1	7.2	ОК	
	Sto		Rain	Flood	od Diach	orgo Mi	Doolo	
	Eve		(mm/hr)		ed Disch ne Volu	96.127 C. C. C.	mins)	
				(m³)				
		Summer	82.549			57.9	38	
		Summer Summer	52.907 32.372			76.4 95.8	51	
		Summer	19.217			95.8	74 124	
		Summer	14.018			25.6	182	
		Summer	11.161			34.0	240	
		Summer Summer	8.089			46.4 55.1	298 362	
		Summer	5.381			62.1	428	
72	0 min	Summer	4.649	0	.0 1	68.3	498	
		Summer	3.690			77.0	636	
		Summer Summer	2.662			91.7 07.9	880 1236	
		Summer	1.520			18.1	1236	
		Summer	1.094	0	.0 2	32.0	2252	
		Summer	0.865			41.5	2944	
		Summer Summer	0.722			48.2 53.1	3672 4400	

Storm Max Max Event Level Depth Co. 10080 min Summer 91.571 0.071 15 min Winter 92.092 0.592 30 min Winter 92.308 0.808 60 min Winter 92.506 1.006 120 min Winter 92.673 1.173 180 min Winter 92.712 1.212 240 min Winter 92.678 1.178 180 min Winter 92.678 1.178 480 min Winter 92.678 1.178 960 min Winter 92.678 1.058 720 min Winter 92.472 0.972 960 min Winter 92.374 0.874 1440 min Winter 92.122 0.622 2160 min Winter 91.688 0.188 4320 min Winter 91.688 0.188 4320 min Winter 91.569 0.069 8640 min Winter 91.562 0.062 10080 min Winter 91.557 0.057	rol 2014.1.1 tStandardImp&Att	
Forest Row Date 24/06/2015 13:02 Designed by Checked by File 150624-WestGreenRoofCas Checked by XP Solutions Source Cont Cascade Summary of Results for 150624-West Event Max Max Event Level Depth Co (m) (m) (m) (m) 10080 min Summer 91.571 0.071 15 min Winter 92.092 0.592 30 min Winter 92.092 0.592 30 min Winter 92.092 0.592 30 min Winter 92.076 1.006 120 min Winter 92.073 1.173 180 min Winter 92.073 1.173 180 min Winter 92.076 1.206 10080 min Winter 92.712 1.212 240 min Winter 92.076 1.206 30 min Winter 92.076 1.206 30 min Winter 92.076 1.206 30 min Winter 92.272 0.622 2160 min Winter 92.122 0.622 2160 min Winter 91.660 0.100 570 min Winter 91.660 0.100	rol 2014.1.1 AtStandardImp&Att Max Max Status ntrol Volume 1/s) (m ³) 1.9 6.5 0 F 3.7 53.9 0 F 3.7 73.7 0 F 3.7 91.8 0 F 3.7 91.8 0 F 3.7 107.0 0 F 3.7 110.5 0 F 3.7 110.0 0 F 3.7 107.4 0 F	
Date 24/06/2015 13:02 Designed by Checked by File 150624-WestGreenRoofCas Source Cont Cascade Summary of Results for 150624-West Source Cont Cascade Summary of Results for 150624-West Max Max Event Level Depth Co (m) Oppt Co 10080 min Summer 91.571 0.071 15 min Winter 92.092 0.592 30 min Winter 92.506 1.006 120 min Winter 92.706 1.206 10080 min Summer 91.571 0.071 15 min Winter 92.706 1.206 120 min Winter 92.506 1.006 120 min Winter 92.706 1.206 360 min Winter 92.673 1.173 180 min Winter 92.706 1.206 360 min Winter 92.673 1.173 180 min Winter 92.706 1.206 360 min Winter 92.673 1.178 480 min Winter 92.576 1.058 720 min Winter 92.706 1.206 360 30.30 2400 min Winter 92.172 0.972 960 1.058 720 min Winter 91.850 0.30 2880 min Winter 91.560 0.69 8400 min Winter 91.560 0.60 10080 min Winter 91.567 <t< td=""><td>rol 2014.1.1 AtStandardImp&Att Max Max Status ntrol Volume 1/s) (m³) 1.9 6.5 0 F 3.7 53.9 0 F 3.7 73.7 0 F 3.7 91.8 0 F 3.7 91.8 0 F 3.7 107.0 0 F 3.7 110.5 0 F 3.7 110.0 0 F 3.7 107.4 0 F</td><td></td></t<>	rol 2014.1.1 AtStandardImp&Att Max Max Status ntrol Volume 1/s) (m ³) 1.9 6.5 0 F 3.7 53.9 0 F 3.7 73.7 0 F 3.7 91.8 0 F 3.7 91.8 0 F 3.7 107.0 0 F 3.7 110.5 0 F 3.7 110.0 0 F 3.7 107.4 0 F	
File 150624-WestGreenRoofCas Checked by Source Cont Cascade Summary of Results for 150624-West Storm Max Max Event Level Depth Co (m) (m) (m) (m) 10080 min Summer 91.571 0.071 15 min Winter 92.092 0.592 30 min Winter 92.073 1.173 1800 min Winter 92.706 1.206 30 min Winter 92.706 1.206 30 min Winter 92.172 0.622 2160 min Winter 91.830 0.330 2850 min Winter 91.560 0.662	rol 2014.1.1 AtStandardImp&Att Max Max Status ntrol Volume 1/s) (m ³) 1.9 6.5 0 F 3.7 53.9 0 F 3.7 73.7 0 F 3.7 91.8 0 F 3.7 91.8 0 F 3.7 107.0 0 F 3.7 110.5 0 F 3.7 110.0 0 F 3.7 107.4 0 F	
XP Solutions Source Cont Cascade Summary of Results for 150624-West Max Max Event Level Depth Co. (m) Co. (m) 10080 min Summer 91.571 0.071 15 min Winter 92.092 0.592 30 min Winter 92.002 0.592 30.808 60 min Winter 92.056 1.006 120 min Winter 92.050 1.006 120 min Winter 92.712 1.212 240 min Winter 92.673 1.173 180 min Winter 92.678 1.206 360 min Winter 92.678 1.061 120 min Winter 92.678 1.068 720 min Winter 92.678 1.058 720 0.622 2160 min Winter 92.472 0.622 2160 0.804 7200 min Winter 91.680 0.188 4320 0.800 7200 min Winter 91.580 0.080 7200 0.60 7200 min Winter 91.557 0.057 0.57 Storm Rain Flooded 8000 min Winter 91.557 0.057 0.60 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0	Max Max Status mirol Volume 1/s) (m ³) 1.9 6.5 0 K 3.7 53.9 0 K 3.7 73.7 0 K 3.7 91.8 0 K 3.7 107.0 0 K 3.7 110.5 0 K 3.7 110.0 0 K 3.7 107.4 0 K	enuation.srcx
Storm Max Max Event Level Depth Co. (m) Co. (m) Co. (m) 10080 min Summer 91.571 0.071 15 min Winter 92.092 0.592 30 min Winter 92.308 0.808 60 min Winter 92.308 0.808 60 min Winter 92.308 0.808 60 min Winter 92.371 1.173 180 min Winter 92.706 1.206 360 min Winter 92.673 1.173 180 min Winter 92.673 1.178 480 min Winter 92.678 1.178 480 min Winter 92.472 0.972 960 min Winter 91.800 0.300 280 min Winter 91.800 0.300 2800 min Winter 91.600 0.100 5760 min Winter 91.557 0.057 0.00	Max Max Status mirol Volume 1/s) (m ³) 1.9 6.5 0 K 3.7 53.9 0 K 3.7 73.7 0 K 3.7 91.8 0 K 3.7 107.0 0 K 3.7 110.5 0 K 3.7 110.0 0 K 3.7 107.4 0 K	
Storm Max Max Depth Co Cm 10080 min Summer 91.571 0.071 15 min Winter 92.092 0.592 30 min Winter 92.308 0.808 60 min Winter 92.308 0.808 60 min Winter 92.302 1.173 180 min Winter 92.706 1.206 360 min Winter 92.702 1.178 480 min Winter 92.702 1.206 360 min Winter 92.712 1.212 240 min Winter 92.712 1.212 900 min Winter 92.613 1.178 480 min Winter 92.374 0.874 1440 min Winter 92.122 0.622 2160 min Winter 91.600 0.300 7200 min Winter 91.500 0.000 7200 min Winter 91.500 0.002 7200 min Winter 91.502	Max Max Status ntrol Volume 1/s) (m ³) 1.9 6.5 O F 3.7 53.9 O F 3.7 73.7 O F 3.7 91.8 O F 3.7 107.0 O F 3.7 110.5 O F 3.7 110.0 O F 3.7 107.4 O F	
Storm Max Max Depth Co Cm 10080 min Summer 91.571 0.071 15 min Winter 92.092 0.592 30 min Winter 92.308 0.808 60 min Winter 92.308 0.808 60 min Winter 92.302 1.173 180 min Winter 92.706 1.206 360 min Winter 92.702 1.178 480 min Winter 92.702 1.206 360 min Winter 92.712 1.212 240 min Winter 92.712 1.212 900 min Winter 92.613 1.178 480 min Winter 92.374 0.874 1440 min Winter 92.122 0.622 2160 min Winter 91.600 0.300 7200 min Winter 91.500 0.000 7200 min Winter 91.500 0.002 7200 min Winter 91.502	Max Max Status ntrol Volume 1/s) (m ³) 1.9 6.5 O F 3.7 53.9 O F 3.7 73.7 O F 3.7 91.8 O F 3.7 107.0 O F 3.7 110.5 O F 3.7 110.0 O F 3.7 107.4 O F	
Event Level (m) Depth (m) Co (m) 10080 min Summer 15 min Winter 91.571 0.071 15 min Winter 92.092 0.592 30 min Winter 92.308 0.808 60 min Winter 92.673 1.173 180 min Winter 92.673 1.173 480 min Winter 92.673 1.178 480 min Winter 92.673 1.178 480 min Winter 92.673 1.178 480 min Winter 92.673 1.058 720 min Winter 92.612 0.972 960 min Winter 92.374 0.874 1440 min Winter 92.302 0.622 2160 min Winter 91.600 0.100 5760 min Winter 91.562 0.062 8640 min Winter 91.557 0.57 10080 min Summer	Nolume 1.9 6.5 0 3.7 53.9 0 3.7 73.7 0 3.7 91.8 0 3.7 107.0 0 3.7 107.0 0 3.7 110.5 0 3.7 110.0 0 3.7 107.4 0	
(m) (m) (m) 10080 min Summer 91.571 0.071 15 min Winter 92.092 0.592 30 min Winter 92.308 0.808 60 min Winter 92.673 1.173 180 min Winter 92.673 1.173 180 min Winter 92.678 1.178 480 min Winter 92.673 1.178 480 min Winter 92.673 1.178 480 min Winter 92.673 1.178 600 min Winter 92.673 1.058 720 min Winter 92.619 1.19 600 min Winter 92.619 1.19 600 min Winter 92.374 0.874 1440 min Winter 92.300 0.330 2800 min Winter 91.680 0.100 5760 min Winter 91.560 0.062 10080 min Winter 91.557 0.57	1/s) (m³) 1.9 6.5 0 3.7 53.9 0 3.7 73.7 0 3.7 91.8 0 3.7 107.0 0 3.7 107.0 0 3.7 110.5 0 3.7 110.0 0 3.7 107.4 0	
10080 min Summer 91.571 0.071 15 min Winter 92.002 0.592 30 min Winter 92.308 0.808 60 min Winter 92.506 1.006 120 min Winter 92.673 1.173 180 min Winter 92.712 1.212 240 min Winter 92.706 1.206 360 min Winter 92.707 1.173 180 min Winter 92.673 1.178 480 min Winter 92.673 1.178 480 min Winter 92.672 0.972 960 min Winter 92.472 0.972 960 min Winter 92.374 0.874 1440 min Winter 91.830 0.330 2880 min Winter 91.688 0.188 4320 min Winter 91.560 0.069 8640 min Winter 91.557 0.057 Storm Rain Flooded Revent (ms/n) Yolume (m³) 10080 min Summer 0.548 0.0 0.5 15 min Winter 82.549 0.0 0 30 min Winter 32.	1.9 6.5 0 F 3.7 53.9 0 F 3.7 73.7 0 F 3.7 91.8 0 F 3.7 107.0 0 F 3.7 110.5 0 F 3.7 110.0 0 F 3.7 107.4 0 F	
15 min Winter 92.092 0.592 30 min Winter 92.308 0.808 60 min Winter 92.506 1.006 120 min Winter 92.673 1.173 180 min Winter 92.712 1.212 240 min Winter 92.706 1.206 360 min Winter 92.678 1.178 480 min Winter 92.678 1.178 480 min Winter 92.558 1.058 720 min Winter 92.558 1.058 720 min Winter 92.374 0.874 1440 min Winter 91.22 0.622 2160 min Winter 91.688 0.188 4320 min Winter 91.680 0.180 7200 min Winter 91.560 0.060 7200 min Winter 91.560 0.069 8640 min Winter 91.557 0.057 Storm Rain Flooded 7200 min Winter 91.557 0.057 Storm Rain Flooded 7200 min Winter 91.557 0.057 Storm Rain Flooded 7200 min Winter 91.52 0.062 10080 min Winter 91.52 0.062 10080 min Winter 91.557 0.057 Storm Rain Flooded 7200 min Winter 91.557 0.057 Storm Rain Flooded 7200 min Winter 91.557 0.057 Storm Rain Flooded 7200 min Winter 91.557 0.057	3.7 53.9 0 K 3.7 73.7 0 K 3.7 91.8 0 K 3.7 107.0 0 K 3.7 110.5 0 K 3.7 110.0 0 K 3.7 107.4 0 K	
30 min Winter 92.308 0.808 60 min Winter 92.506 1.006 120 min Winter 92.673 1.173 180 min Winter 92.712 1.212 240 min Winter 92.706 1.206 360 min Winter 92.673 1.178 480 min Winter 92.678 1.178 480 min Winter 92.619 1.119 600 min Winter 92.374 0.874 480 min Winter 92.374 0.874 1440 min Winter 92.374 0.874 1440 min Winter 91.830 0.330 2880 min Winter 91.688 0.188 4320 min Winter 91.560 0.069 8640 min Winter 91.562 0.062 10080 min Winter 91.557 0.057 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 12.372 0.0 120 min Winter 14.018 0.0 120 min Winter 14.018 0.0 120 min Winter 14.018 0.0 <td< td=""><td>3.7 73.7 0 K 3.7 91.8 0 K 3.7 107.0 0 K 3.7 110.5 0 K 3.7 110.0 0 K 3.7 107.4 0 K</td><td></td></td<>	3.7 73.7 0 K 3.7 91.8 0 K 3.7 107.0 0 K 3.7 110.5 0 K 3.7 110.0 0 K 3.7 107.4 0 K	
60 min Winter 92.506 1.006 120 min Winter 92.673 1.173 180 min Winter 92.712 1.212 240 min Winter 92.706 1.206 360 min Winter 92.678 1.178 480 min Winter 92.678 1.178 480 min Winter 92.619 1.119 600 min Winter 92.558 1.058 720 min Winter 92.374 0.874 1440 min Winter 92.122 0.622 2160 min Winter 91.830 0.330 2880 min Winter 91.668 0.188 4320 min Winter 91.560 0.069 8640 min Winter 91.562 0.062 10080 min Winter 91.557 0.057 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 19.217 0.0 120 min Winter 14.018 0.0 180 min Winter 14.018 0.0 180 min Winter 14.018 0.0 140 min Winter 1.161 0.0	3.7 91.8 0 K 3.7 107.0 0 K 3.7 110.5 0 K 3.7 110.0 0 K 3.7 107.4 0 K	
120 min Winter 92.673 1.173 180 min Winter 92.712 1.212 240 min Winter 92.706 1.206 360 min Winter 92.678 1.178 480 min Winter 92.678 1.178 480 min Winter 92.619 1.119 600 min Winter 92.558 1.058 720 min Winter 92.374 0.874 1440 min Winter 91.688 0.188 4320 min Winter 91.600 0.100 5760 min Winter 91.569 0.062 10080 min Winter 91.557 0.057 Storm Rain Flooded Event (mm/hr) Volume (m³) 100800 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter	3.7 107.0 0 K 3.7 110.5 0 K 3.7 110.0 0 K 3.7 107.4 0 K	
180 min Winter 92.712 1.212 240 min Winter 92.706 1.206 360 min Winter 92.678 1.178 480 min Winter 92.619 1.119 600 min Winter 92.558 1.058 720 min Winter 92.472 0.972 960 min Winter 92.374 0.874 1440 min Winter 92.374 0.874 1440 min Winter 92.122 0.622 2160 min Winter 91.830 0.330 2880 min Winter 91.688 0.188 4320 min Winter 91.560 0.060 5760 min Winter 91.562 0.062 10080 min Winter 91.557 0.057 Storm Rain Flooded Event (mm/hr) Volume (m³) 100800 min Summer 0.548 0.0 15 min Winter 92.372 0.0 0 30 min Winter 32.372 0.0 0 30 min Winter 19.217 0.0 180 min Winter 14.018 0.0 240 min Winter 11.161 0.0 240 min Winter	3.7 110.5 0 R 3.7 110.0 0 K 3.7 107.4 0 K	
360 min Winter 92.678 1.178 480 min Winter 92.619 1.119 600 min Winter 92.558 1.058 720 min Winter 92.472 0.972 960 min Winter 92.374 0.874 1440 min Winter 92.122 0.622 2160 min Winter 91.830 0.330 2880 min Winter 91.688 0.188 4320 min Winter 91.600 0.100 5760 min Winter 91.580 0.080 7200 min Winter 91.557 0.057 8640 min Winter 91.557 0.057 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 52.907 0.0 60 min Winter 32.372 0.0 120 min Winter 19.217 0.0 180 min Winter 14.018 0.0 240 min Winter 14.018 0.0 240 min Winter 11.161 0.0 360 min Winter 5.381 0.0	3.7 110.0 ОК 3.7 107.4 ОК	
480 min Winter 92.619 1.119 600 min Winter 92.558 1.058 720 min Winter 92.472 0.972 960 min Winter 92.374 0.874 1440 min Winter 92.122 0.622 2160 min Winter 91.830 0.330 2880 min Winter 91.688 0.188 4320 min Winter 91.600 0.100 5760 min Winter 91.569 0.069 8640 min Winter 91.562 0.062 10080 min Winter 91.557 0.057 Ktorm Rain Flooded Flooded Wolume (m³) 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 32.372 0.0 30 min Winter 19.217 0.0 180 min Winter 14.018 0.0 240 min Winter 5.381 0.0		7.51
600 min Winter 92.558 1.058 720 min Winter 92.472 0.972 960 min Winter 92.374 0.874 1440 min Winter 92.122 0.622 2160 min Winter 91.830 0.330 2880 min Winter 91.688 0.188 4320 min Winter 91.600 0.100 5760 min Winter 91.569 0.069 8640 min Winter 91.569 0.062 10080 min Winter 91.557 0.057 Storm Rain Flooded Event (mm/hr) Volume (m ³) 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 19.217 0.0 120 min Winter 19.217 0.0 180 min Winter 11.161 0.0 240 min Winter 11.161 0.0 360 min Winter 8.089 0.0 480 min Winter 5.381 0.0	1 7 102 1 OF	
720 min Winter 92.472 0.972 960 min Winter 92.374 0.874 1440 min Winter 92.122 0.622 2160 min Winter 91.830 0.330 2880 min Winter 91.688 0.188 4320 min Winter 91.600 0.100 5760 min Winter 91.569 0.069 8640 min Winter 91.562 0.062 10080 min Winter 91.557 0.057 Storm Rain Flooded Event (mm/hr) Volume (m³) 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 32.372 0.0 120 min Winter 19.217 0.0 180 min Winter 14.018 0.0 240 min Winter 11.161 0.0 360 min Winter 8.089 0.0 480 min Winter 5.381 0.0	3.7 96.5 OK	
960 min Winter 92.374 0.874 1440 min Winter 92.122 0.622 2160 min Winter 91.830 0.330 2880 min Winter 91.688 0.188 4320 min Winter 91.600 0.100 5760 min Winter 91.560 0.069 8640 min Winter 91.562 0.062 10080 min Winter 91.557 0.057 Storm Rain Flooded (mm/hr) Volume (m ³) 10080 min Summer 0.548 0.0 15 min Winter 32.372 0.0 10 min Winter 19.217 0.0 120 min Winter 19.217 0.0 180 min Winter 11.161 0.0 360 min Winter 8.089 0.0 480 min Winter 6.431 0.0 600 min Winter 5.381 0.0	3.7 96.5 OK	
2160 min Winter 91.830 0.330 2880 min Winter 91.688 0.188 4320 min Winter 91.600 0.100 5760 min Winter 91.580 0.080 7200 min Winter 91.569 0.069 8640 min Winter 91.557 0.057 10080 min Winter 91.557 0.057 Kernt Rain Flooded (m ³) 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 52.907 0.0 60 min Winter 19.217 0.0 180 min Winter 14.018 0.0 240 min Winter 11.161 0.0 360 min Winter 8.089 0.0 480 min Winter 6.431 0.0 600 min Winter 5.381 0.0	3.7 79.7 OK	
2880 min Winter 91.688 0.188 4320 min Winter 91.600 0.100 5760 min Winter 91.580 0.080 7200 min Winter 91.569 0.069 8640 min Winter 91.562 0.062 10080 min Winter 91.557 0.057 Storm Rain Flooded Event (mm/hr) Volume (m³) 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 52.907 0.0 60 min Winter 19.217 0.0 120 min Winter 14.018 0.0 240 min Winter 11.161 0.0 360 min Winter 8.089 0.0 480 min Winter 6.431 0.0 600 min Winter 5.381 0.0	3.7 56.8 OK	
4320 min Winter 91.600 0.100 5760 min Winter 91.580 0.080 7200 min Winter 91.569 0.069 8640 min Winter 91.562 0.062 10080 min Winter 91.557 0.057 Kernt Rain Flooded Event (mm/hr) Volume (m³) 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 52.907 0.0 60 min Winter 19.217 0.0 120 min Winter 14.018 0.0 240 min Winter 11.161 0.0 360 min Winter 8.089 0.0 480 min Winter 6.431 0.0 600 min Winter 5.381 0.0	3.7 30.1 ОК	
5760 min Winter 91.580 0.069 7200 min Winter 91.569 0.062 8640 min Winter 91.557 0.057 10080 min Winter 91.557 0.057 Storm Rain Flooded (mm/hr) Volume (m³) 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 52.907 0.0 60 min Winter 19.217 0.0 120 min Winter 14.018 0.0 240 min Winter 11.161 0.0 360 min Winter 8.089 0.0 480 min Winter 6.431 0.0 600 min Winter 5.381 0.0	3.4 17.1 OK	
7200 min Winter 91.569 0.069 8640 min Winter 91.562 0.062 10080 min Winter 91.557 0.057 Storm Rain Flooded (mm/hr) Volume (m ³) 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 52.907 0.0 60 min Winter 19.217 0.0 180 min Winter 14.018 0.0 240 min Winter 11.161 0.0 360 min Winter 8.089 0.0 480 min Winter 6.431 0.0 600 min Winter 5.381 0.0	2.7 9.2 ОК 2.1 7.3 ОК	
Storm Rain Flooded Event (mm/hr) Volume (m³) 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 52.907 0.0 60 min Winter 19.217 0.0 120 min Winter 19.217 0.0 180 min Winter 11.161 0.0 360 min Winter 8.089 0.0 480 min Winter 6.431 0.0 600 min Winter 5.381 0.0	1.8 6.3 OK	
Storm Rain Flooded Event (mm/hr) Volume (m ³) 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 52.907 0.0 60 min Winter 19.217 0.0 120 min Winter 19.217 0.0 180 min Winter 11.161 0.0 240 min Winter 11.161 0.0 360 min Winter 8.089 0.0 480 min Winter 6.431 0.0 600 min Winter 5.381 0.0	1.5 5.6 ОК	
Event(mm/hr)Volume (m³)10080 min Summer0.5480.015 min Winter82.5490.030 min Winter52.9070.060 min Winter32.3720.0120 min Winter19.2170.0180 min Winter14.0180.0240 min Winter11.1610.0360 minWinter8.0890.0480 min Winter6.4310.0600 min Winter5.3810.0	1.4 5.2 OK	
Event(mm/hr)Volume (m³)10080 min Summer0.5480.015 min Winter82.5490.030 min Winter52.9070.060 min Winter32.3720.0120 min Winter19.2170.0180 min Winter14.0180.0240 min Winter11.1610.0360 minWinter8.0890.0480 min Winter6.4310.0600 min Winter5.3810.0		
(m ³) 10080 min Summer 0.548 0.0 15 min Winter 82.549 0.0 30 min Winter 52.907 0.0 60 min Winter 32.372 0.0 120 min Winter 19.217 0.0 180 min Winter 14.018 0.0 240 min Winter 11.161 0.0 360 min Winter 8.089 0.0 480 min Winter 6.431 0.0 600 min Winter 5.381 0.0	Discharge Time-Peal	
10080 min Summer0.5480.015 min Winter82.5490.030 min Winter52.9070.060 min Winter32.3720.0120 min Winter19.2170.0180 min Winter14.0180.0240 min Winter11.1610.0360 minWinter8.0890.0480 min Winter6.4310.0600 min Winter5.3810.0	Volume (mins) (m ³)	
15 min Winter82.5490.030 min Winter52.9070.060 min Winter32.3720.0120 min Winter19.2170.0180 min Winter14.0180.0240 min Winter11.1610.0360 minWinter8.0890.0480 minWinter6.4310.0600 minWinter5.3810.0	(
30 min Winter52,9070.060 min Winter32.3720.0120 min Winter19.2170.0180 min Winter14.0180.0240 min Winter11.1610.0360 minWinter8.0890.0480 minWinter6.4310.0600 minWinter5.3810.0	256.6 5130	
60 min Winter32.3720.0120 min Winter19.2170.0180 min Winter14.0180.0240 min Winter11.1610.0360 minWinter8.0890.0480 minWinter6.4310.0600 minWinter5.3810.0	65.9 40 86.8 5	
120 min Winter19.2170.0180 min Winter14.0180.0240 min Winter11.1610.0360 minWinter8.0890.0480 minWinter6.4310.0600 minWinter5.3810.0	108.4 78	
240 min Winter11.1610.0360 minWinter8.0890.0480 minWinter6.4310.0600 minWinter5.3810.0	130.6 122	
360 minWinter8.0890.0480 minWinter6.4310.0600 minWinter5.3810.0	142.3 180	
480 min Winter 6.431 0.0 600 min Winter 5.381 0.0	150.4 234	
600 min Winter 5.381 0.0	165.4 330 174.5 382	
	181.6 458	
All Minder 1,015 0.0	185.4 536	
960 min Winter 3.690 0.0	198.9 690	
1440 min Winter 2.662 0.0	218.2 942	
2160 min Winter 1.919 0.0 2880 min Winter 1.520 0.0	234.8 1276	
4320 min Winter 1.520 0.0	246.5 1588 262.8 2216	
5760 min Winter 0.865 0.0	274.1 2936	
7200 min Winter 0.722 0.0	282.3 3640	
8640 min Winter 0.622 0.0		
10080 min Winter 0.548 0.0	288.6 4408 293.4 5128	

WEST ATTER		e-1 / P.D.					-	SUMM	ge 1
Sheridan House									,o ±
lartfield Road								4	
forest Row									~ m
Date 24/06/2015 13:	0.5				1			—— Mi	Cro
		50	A 11 1772	1.5	by sfk	2		Dr	ainago
Tile 150624-WestGre	enko	picas.		ecked					annage
XP Solutions			Sou	irce C	ontrol	2014.1	1		
Cascade Summary	of Re	esults	for 1	50624-	WestSta	andard	[mp&Att	enuation	.srcx
201	strea			Ot	itflow To	o	Over	flow To	
150624-Wes			cx 1506	524-Wes	tOutfall	Tank.sr	cx	(None)	
	Sto: Eve		Max	Max	Max	Max	Status		
	Eve	ii C	Level (m)		Control (1/s)	(m ³)			
						, ,			
		Summer					ΟK		
		Summer Summer					OK		
		Summer					O K O K		
		Summer							
		Summer					ОК		
36	0 min	Summer	91.784	0.284	3.7	25.9	ОК		
		Summer			3.7		ОК		
		Summer			3.6		ΟK		
		Summer			3.6		OK		
		Summer Summer			3.5		O K O K		
		Summer					OK		
		Summer			2.4				
		Summer			1.9		ОК		
		Summer			1.5		ОК		
		Summer			1.3		OK		
864	0 min	Summer	91.551	0.051	1.1	4.6	0 K		
	0.1		14030						
	Stor Even		Rain (mm/hr)		ed Disch Ne Volu	CO20110	me-Peak (mins)		
	Litan		(,	(m ³)			(millio)		
1	min	Summer	33.607	0	.0	18.8	17		
		Summer	21.695			26.4	31		
		Summer	13.524			35.0	62		
12) min	Summer	8.249			44.6	110		
		Summer	6.145		.0	50.6	140		
		Summer	4.980			55.0	172		
		Summer	3.676			60.9	238		
		Summer Summer	2.958		.0 .0	66.2 70.5	304 368		
		Summer	2.490			73.9	430		
		Summer	1.751			79.3	550		
		Summer	1.289			87.1	784		
		Summer	0.949	0	.0	95.3	1128		
		Summer	0.764			01.1	1480		
		Summer	0.562			08.6	2204		
		Summer Summer	0.452			13.7	2936		
		Summer	0.382			18.0	3672 4400		
504			3.000	0					

WEST ATTENUATION			-			MD/14 INTER Page 2
Sheridan House	1					
Hartfield Road						4
Forest Row						m
Date 24/06/2015 13:05	Dest	igned b	v sfk			- MICLO
File 150624-WestGreenRoofCas	1. 1. 1. 1. 1. 1.	cked by	C			Drainage
XP Solutions		rce Con		2014.1	1	
			0101			
Cascade Summary of Results fo	or 15	0624-We	stSta	ndardI	mp&Attenu	ation.srcx
Storm	Max	Max	Max	Max	Status	
Event I	Level	Depth C	ontrol	Volume		
	(m)	(m)	(1/s)	(m³)		
10080 min Summer 9	1.547	0.047	1.0	4.3	O K	
15 min Winter 9		11111	3.5	17.4	OK	
30 min Winter 9			3.6	21.5	O K	
60 min Winter 9	100.00 CT 00.000	a al alla a	3.7	27.7	O K	
120 min Winter 9 180 min Winter 9			3.7	32.5	0 K 🔵	- I
180 min Winter 9 240 min Winter 9			3.7	32.2	O K	
360 min Winter 9			3.7	29.0	OK	
480 min Winter 9	1.793	0.293	3.7	26.8	O K	
600 min Winter 9			3.6	23.7	O K	
720 min Winter 9 960 min Winter 9			3.6 3.4	20.9	OK	
1440 min Winter 9			3.0	16.2	ОК	
2160 min Winter 9			2.3	7.8	OK	
2880 min Winter 9			1.9	6.5	ОК	
4320 min Winter 9			1.4	5.2	O K	
5760 min Winter 9 7200 min Winter 9			$1.1 \\ 0.9$	4.6 4.1	O K	
8640 min Winter 9			0.9	3.8	OK	
10080 min Winter 9	1.539	0.039	0.7	3.5	ОК	
Storm	Rain	Flooded	Disch	arge Ti	me-Peak	
	m/hr)	Volume	Volu	and Automatic	(mins)	
		(m³)	(m ³)		
10080 min Summer	0.296	0.0	12	24.8	5136	
	3.607			22.0	17	
	2 524			30.7	37	
	3.524	0.0		39.9 51.1	62 118	
180 min Winter	6.145			57.4	150	
	4.980	0.0	(61.5	184	
	3.676			69.6	256	-
480 min Winter 600 min Winter	2.958	0.0		76.0	324	
720 min Winter	2.498	0.0		30.4 34.1	390 452	
960 min Winter	1.751			90.2	570	
1440 min Winter	1.289	0.0	9	99.2	780	
2160 min Winter	0.949	0.0		08.7	1128	
	0.764	0.0		15.5 24.7	1472 2232	
	0.362			24.7 31.0	2232	
The second s	0.382			35.6	3672	
	0.333			39.2	4400	
10080 min Winter	0.296	0.0	14	42.6	5144	

Prefield Road Designed by sfk Designed by sfk te 25/06/2015 09:02 Designed by sfk Checked by Solutions Source Control 2014.1.1 Model Details Storage is Online Cover Level (m) 92.300 Tank or Pond Structure Invert Level (m) 89.175 Depth (m) Area (m ²) Depth (m) Area (m ²) Depth (m) Area (m ²) 0.000 64.8 1.400 64.8 2.100 0.0 0.100 64.8 1.600 0.10 0.200 0.00 64.8 1.600 0.00	High Designed by sfk Checked by Solutions Source Control 2014.1.1 Model Details Solutions Source Control 2014.1.1 Model Details Storage is Online Cover Level (m) 92.300 Tank or Pond Structure Invert Level (m) 89.175 Depth (m) Area (m²) Oppth (m) Area (m²) 0.000 64.8 0.000 64.8 1.000 64.8 1.000 64.8 1.000 64.8 1.000 64.8 1.000 64.8 1.000 64.8 1.000 64.8 1.000 64.8 1.000 64.8 1.000 64.8 1.000 64.8 1.000 64.8 1.000 64.8	Solutions Storage is (<u>Tank</u> Inv Depth (m) Area (m ²) Depth (m) A	Checke Source <u>Model De</u> Online Cov <u>c or Pond</u> vert Level wrea (m ²)	d by Control etails er Level (m Structur (m) 89.175	2014.1.1 a) 92.300 re			je	
rest Row Designed by sfk Checked by Designed by sfk Checked by Solutions Model Details Solutions Tank or Pond Structure Invert Level (m) 92.300 Tank or Pond Structure Invert Level (m) 92.300 Colspan="2">Solutions 0.00 64.8 0.700 64.8 1.400 64.8 2.100 0.0 0.300 64.8 1.000 64.8 1.200 64.8 1.200 64.8 1.500 0.0 Optimum® Outflow Control Wintimize upstream storage Diameter (ma) <td< th=""><th>Instrument Designed by sfk Designed by sfk is 150624-EastImp&Attenuat Designed by sfk Designed by sfk Solutions Source Control 2014.1.1 Model Details Source Control 2014.1.1 Model Details Source Control 2014.1.1 Storage is Online Cover Level (m) 92.300 Tank or Pond Structure Invert Level (m) 89.175 Depth (m) Area (m²) Depth (m) Area (m²)</th><th>rest Row te 25/06/2015 09:02 le 150624-EastImp&Attenuat Solutions Storage is (<u>Tank</u> Inv Depth (m) Area (m²) Depth (m) A</th><th>Checke Source <u>Model De</u> Online Cov <u>c or Pond</u> vert Level wrea (m²)</th><th>d by Control etails er Level (m Structur (m) 89.175</th><th>2014.1.1 a) 92.300</th><th>2 ::</th><th></th><th>je</th></td<>	Instrument Designed by sfk Designed by sfk is 150624-EastImp&Attenuat Designed by sfk Designed by sfk Solutions Source Control 2014.1.1 Model Details Source Control 2014.1.1 Model Details Source Control 2014.1.1 Storage is Online Cover Level (m) 92.300 Tank or Pond Structure Invert Level (m) 89.175 Depth (m) Area (m²)	rest Row te 25/06/2015 09:02 le 150624-EastImp&Attenuat Solutions Storage is (<u>Tank</u> Inv Depth (m) Area (m ²) Depth (m) A	Checke Source <u>Model De</u> Online Cov <u>c or Pond</u> vert Level wrea (m ²)	d by Control etails er Level (m Structur (m) 89.175	2014.1.1 a) 92.300	2 ::		je	
Besigned by sfk Minimum Outlet Pipe Diameter (mm) 0.000 64.8 1.300 64.8 2.200 0.0 0.400 64.8 1.300 64.8 2.200 0.0 0.400 64.8 1.300 64.8 2.200 0.0 0.400 64.8 1.400 64.8 2.100 0.0 0.400 64.8 1.600 64.8 2.100 0.0 0.400 64.8 1.600 64.8 2.100 0.0 0.400 64.8 1.600 0.0 2.500 0.0 0.400 64.8 1.600 0.0 2.500 0.0 0.500 64.8 1.200 64.8 1.200 0.0 0.500 64.8 1.200 64.8 1.200 0.0 0.600 64.8 1.200 64.8 1.200 0.0 0.500 1.200 64.8 1.200 0.0 0.50 1000 1.200 64.8 1.200	The 25/06/2015 09:02 Designed by sfk Multiple Control 2014.1.1 Solutions Source Control 2014.1.1 Model Details Source Control 2014.1.1 Model Details Storage is Online Cover Level (m) 92.300 Tank or Pond Structure Invert Level (m) 89.175 Depth (m) Area (m²) Depth (m) Area (m²) <th colspan<="" td=""><td>te 25/06/2015 09:02 le 150624-EastImp&Attenuat Solutions Storage is (<u>Tank</u> Inv Depth (m) Area (m²) Depth (m) A</td><td>Checke Source <u>Model De</u> Online Cov <u>c or Pond</u> vert Level wrea (m²)</td><td>d by Control etails er Level (m Structur (m) 89.175</td><td>2014.1.1 a) 92.300</td><td>2</td><td></td><td>ge</td></th>	<td>te 25/06/2015 09:02 le 150624-EastImp&Attenuat Solutions Storage is (<u>Tank</u> Inv Depth (m) Area (m²) Depth (m) A</td> <td>Checke Source <u>Model De</u> Online Cov <u>c or Pond</u> vert Level wrea (m²)</td> <td>d by Control etails er Level (m Structur (m) 89.175</td> <td>2014.1.1 a) 92.300</td> <td>2</td> <td></td> <td>ge</td>	te 25/06/2015 09:02 le 150624-EastImp&Attenuat Solutions Storage is (<u>Tank</u> Inv Depth (m) Area (m ²) Depth (m) A	Checke Source <u>Model De</u> Online Cov <u>c or Pond</u> vert Level wrea (m ²)	d by Control etails er Level (m Structur (m) 89.175	2014.1.1 a) 92.300	2		ge
Le 150624-EastImp&Attenuat Checked by Solutions Source Control 2014.1.1 Model Details Storage is Online Cover Level (m) 92.300 Tank or Pond Structure Invert Level (m) 89.175 Depth (m) Area (m ²) Depth (m) Area	Iso624-EastImp&Attenuat Checked by Solutions Source Control 2014.1.1 Model Details Storage is Online Cover Level (m) 92.300 Tank or Pond Structure Invert Level (m) 89.175 Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Colspan="2">Colspan="2" Unit Reference MD-SHE-0098-5000-1500-5000 Design Fear (Cm) Colspan="2" Unit Reference MD-SHE-0098-5000-1500-5000 Design Fear (Cm) Colspan="2" Unit Reference MD-SHE-0098-5000-1500-5000 Colspan="2" <	le 150624-EastImp&Attenuat Solutions Storage is (<u>Tank</u> Inv Depth (m) Area (m ²) Depth (m) A	Checke Source <u>Model De</u> Online Cov <u>c or Pond</u> vert Level wrea (m ²)	d by Control etails er Level (m Structur (m) 89.175	2014.1.1 a) 92.300		Draina	ge	
Solutions Source Control 2014.1.1 Model Details Storage is Online Cover Level (m) 92.300 Tank or Pond Structure Invert Level (m) 89.175 Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) Depth (m) Area (m²) 0.000 64.8 0.700 64.8 1.400 64.8 2.100 0.0 0.100 64.8 0.800 64.8 1.600 0.0 2.200 0.0 0.200 64.8 1.000 64.8 1.200 0.0 2.400 0.0 0.400 64.8 1.200 64.8 1.200 0.0 2.400 0.0 0.400 64.8 1.200 64.8 1.200 0.0 2.500 0.0 0.500 64.8 1.300 64.8 1.300 0.0 2.500 0.0 0.600 64.8 1.300 64.8 2.000 0.0 1.500 1.500 1.500 1.500 1.500 1.500 1.500 1.900 1.900 <td< td=""><td>Solutions Source Control 2014.1.1 Model Details Storage is Online Cover Level (m) 92.300 Tank or Pond Structure Invert Level (m) 89.175 Depth (n) Area (n°) Depth (m) Area (n°) Depth (m) Area (n°) Depth (m) Area (n°) Depth (m) Area (n°) 0.000 64.8 0.700 64.8 1.400 64.8 2.100 0.0 0.100 64.8 0.800 64.8 1.500 64.8 2.200 0.0 0.200 64.8 0.900 64.8 1.600 0.0 2.400 0.0 0.400 64.8 1.200 64.8 1.200 0.0 2.400 0.0 0.400 64.8 1.200 64.8 1.200 0.0 2.500 0.0 0.400 64.8 1.300 64.8 1.500 0.0 2.500 0.0 0.600 64.8 1.300 64.8 2.000 0.0 1.500 Design Flow (1/s) Calculated 1.500 5.0 Elsein Head (m)</td></td<> <td>Solutions Storage is (<u>Tank</u> Inv Depth (m) Area (m²) Depth (m) A</td> <td>Source <u>Model De</u> Online Cov <u>c or Pond</u> vert Level urea (m²)</td> <td>Control etails ver Level (m l Structur (m) 89.175</td> <td>n) 92.300 re</td> <td></td> <td></td> <td></td>	Solutions Source Control 2014.1.1 Model Details Storage is Online Cover Level (m) 92.300 Tank or Pond Structure Invert Level (m) 89.175 Depth (n) Area (n°) Depth (m) Area (n°) Depth (m) Area (n°) Depth (m) Area (n°) Depth (m) Area (n°) 0.000 64.8 0.700 64.8 1.400 64.8 2.100 0.0 0.100 64.8 0.800 64.8 1.500 64.8 2.200 0.0 0.200 64.8 0.900 64.8 1.600 0.0 2.400 0.0 0.400 64.8 1.200 64.8 1.200 0.0 2.400 0.0 0.400 64.8 1.200 64.8 1.200 0.0 2.500 0.0 0.400 64.8 1.300 64.8 1.500 0.0 2.500 0.0 0.600 64.8 1.300 64.8 2.000 0.0 1.500 Design Flow (1/s) Calculated 1.500 5.0 Elsein Head (m)	Solutions Storage is (<u>Tank</u> Inv Depth (m) Area (m ²) Depth (m) A	Source <u>Model De</u> Online Cov <u>c or Pond</u> vert Level urea (m²)	Control etails ver Level (m l Structur (m) 89.175	n) 92.300 re				
Model Details Storage is Online Cover Level (m) 92.300 Tank or Pond Structure Invert Level (m) 89.175 Depth (m) Area (m²) Depth (m) Area	Model Details Storage is Online Cover Level (m) 92,300 Tank or Pond Structure Invert Level (m) 89,175 Depth (m) Area (m²) Depth (m²) Depth (m²) Depth (m²) Depth	Storage is (<u>Tank</u> Inv Depth (m) Area (m ²) Depth (m) A	<u>Model De</u> Online Cov <u>c or Pond</u> vert Level urea (m²)	etails ver Level (m l Structur (m) 89.175	n) 92.300 re				
Journal of the second structure Storage is Online Cover Level (m) 92.300 Tank or Pond Structure Invert Level (m) 89.175 Depth (m) Area (m ²) 0.00 64.8 1.500 64.8 2.100 0.0 0.100 64.8 0.900 64.8 1.500 64.8 2.200 0.0 0.200 64.8 1.900 64.8 1.200 0.0 2.400 0.0 0.400 64.8 1.200 64.8 1.900 0.0 2.500 0.0 0.500 64.8 1.300 64.8 2.000 0.0 2.500 0.0 0.500 64.8 1.300 64.8 2.000 0.0 2.500 0.0 0.500 64.8 1.300 64.8 2.000 0.0 2.500 0.0 5.0 Flush=Flo ^m (Diminine upstream storage <	$ \begin{array}{c cccc} \hline & & & & & & & & & & & & & & & & & & $	Tank Inv Depth (m) Area (m²) Depth (m) A	Online Cov <u>c or Pond</u> vert Level rea (m²)	ver Level (m l Structur (m) 89.175	e				
Tark or Pond StructureInvert Level (m) 89.175 0.000 64.8 0.700 64.8 1.400 64.8 2.100 0.00 0.000 64.8 0.900 64.8 1.500 $0.64.8$ 2.300 0.00 0.200 64.8 0.900 64.8 1.500 0.0 2.300 0.0 0.300 64.8 1.200 64.8 1.900 0.0 2.300 0.0 Output to the set of the set	$\frac{Tark \ or \ Pond \ Structure}{Invert \ Level \ (m) \ 89.175}$ $0.000 \ 64.8 \ 0.700 \ 64.8 \ 1.400 \ 64.8 \ 2.000 \ 0.0 \ 0.00 \ 0.00 \ 64.8 \ 0.900 \ 64.8 \ 1.500 \ 0.0 \ 2.300 \ 0.0 \ 0.00 \ 0.00 \ 0.00 \ 64.8 \ 1.900 \ 64.8 \ 1.900 \ 0.0 \ 2.300 \ 0.0 \ 0.00 \ 0.500 \ 64.8 \ 1.900 \ 64.8 \ 1.900 \ 0.0 \ 2.500 \ 0.0 \ 0.00 \ 0.500 \ 64.8 \ 1.900 \ 64.8 \ 1.900 \ 0.0 \ 2.500 \ 0.0 \ 0.00 \ 0.500 \ 64.8 \ 1.900 \ 64.8 \ 1.900 \ 0.0 \ 0.00 \ 2.500 \ 0.0 \ 0.00 \$	Tank Inv Depth (m) Area (m²) Depth (m) A	(or Pond vert Level wrea (m²)	l Structur (m) 89.175	e				
Tark or Pond StructureInvert Level (m) 89.175 0.000 64.8 0.700 64.8 1.400 64.8 2.100 0.00 0.000 64.8 0.900 64.8 1.500 $0.64.8$ 2.300 0.00 0.200 64.8 0.900 64.8 1.500 0.0 2.300 0.0 0.300 64.8 1.200 64.8 1.900 0.0 2.300 0.0 Output to the set of the set	$\frac{Tark \ or \ Pond \ Structure}{Invert \ Level \ (m) \ 89.175}$ $0.000 \ 64.8 \ 0.700 \ 64.8 \ 1.400 \ 64.8 \ 2.000 \ 0.0 \ 0.00 \ 0.00 \ 64.8 \ 0.900 \ 64.8 \ 1.500 \ 0.0 \ 2.300 \ 0.0 \ 0.00 \ 0.00 \ 0.00 \ 64.8 \ 1.900 \ 64.8 \ 1.900 \ 0.0 \ 2.300 \ 0.0 \ 0.00 \ 0.500 \ 64.8 \ 1.900 \ 64.8 \ 1.900 \ 0.0 \ 2.500 \ 0.0 \ 0.00 \ 0.500 \ 64.8 \ 1.900 \ 64.8 \ 1.900 \ 0.0 \ 2.500 \ 0.0 \ 0.00 \ 0.500 \ 64.8 \ 1.900 \ 64.8 \ 1.900 \ 0.0 \ 0.00 \ 2.500 \ 0.0 \ 0.00 \$	Tank Inv Depth (m) Area (m²) Depth (m) A	(or Pond vert Level wrea (m²)	l Structur (m) 89.175	e				
Invert Level (m) 89.175 Depth (m) Area (m²) Depth (m) Area (m²) 0.000 64.8 0.700 64.8 1.400 64.8 2.100 0.0 0.100 64.8 0.800 64.8 1.400 64.8 2.100 0.0 0.200 64.8 0.900 64.8 1.500 0.0 2.300 0.0 0.300 64.8 1.100 64.8 1.800 0.0 2.400 0.0 0.400 64.8 1.100 64.8 1.800 0.0 2.500 0.0 0.500 64.8 1.200 64.8 1.900 0.0 2.500 0.0 0.600 64.8 1.300 64.8 2.000 0.0 2.500 0.0 Unit Reference MD-SHE-0098-5000-1500-5000 Design Flow (1/s) Diameter (m) 1.500 5.0 Flush-Flow Calculated 0bjective Minimus eupstream storage Diameter (ms) 1200 Suggested Manhole Diameter (ms) 1200	Invert Level (m) 89.175 Depth (m) Area (m ²) 0.000 64.8 0.700 64.8 1.400 64.8 2.100 0.0 0.200 64.8 0.900 64.8 1.500 64.8 2.200 0.0 0.300 64.8 1.000 64.8 1.700 0.0 2.400 0.0 0.400 64.8 1.100 64.8 1.800 0.0 2.500 0.0 0.400 64.8 1.200 64.8 2.000 0.0 2.500 0.0 0.500 64.8 1.200 64.8 2.000 0.0 2.500 0.0 0.600 64.8 1.300 64.8 2.000 0.0 2.500 0.0 0.600 64.8 1.200 Minimase upstream storage 1.500 5.0 Flush=Flo* 1.500 5.0 Flush=Flo* 1.500 5.0 Flush=Flo* 1.500 5.0 <	Inv Depth (m) Area (m²) Depth (m) A	vert Level rea (m²)	(m) 89.175					
Depth (m) Area (m ³) Depth (m) Area (m ²) Depth (m) Area (m ²) Depth (m) Area (m ²) 0.000 64.8 0.700 64.6 1.400 64.8 2.100 0.0 0.200 64.8 0.900 64.8 1.600 0.0 2.300 0.0 0.300 64.8 1.000 64.8 1.600 0.0 2.300 0.0 0.300 64.8 1.000 64.8 1.700 0.0 2.400 0.0 0.500 64.8 1.200 64.8 1.900 0.0 2.500 0.0 0.600 64.8 1.300 64.8 2.000 0.0 2.500 0.0 0.600 64.8 1.300 64.8 2.000 0.0 2.500 0.0 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated 5.0 2.000 2.00 2.00 Diameter (mm) 1200 Eagen Flow (1/s) Besign Flow (1/s) 89.175 3.9 3.9 3.9 3.9 3.9	Depth (m) Area (m ²) 0.000 64.8 0.700 64.8 1.400 64.8 2.100 0.0 0.200 64.8 0.900 64.8 1.500 64.8 2.200 0.0 0.300 64.8 1.000 64.8 1.600 0.0 2.300 0.0 0.400 64.8 1.000 64.8 1.700 0.0 2.400 0.0 0.500 64.8 1.200 64.8 2.000 0.0 2.400 0.0 0.600 64.8 1.300 64.8 2.000 0.0 2.400 0.0 0.600 64.8 1.300 64.8 1.500 5.0 Elsign Flow (1/s) 5.0 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated 150 Suggested Manhole Diameter (mm) 1200 Minimum Outlet Fipe Diameter (mm) 1200 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo@ 0.878	Depth (m) Area (m²) Depth (m) A	urea (m²) I						
Depth (m) Area (m ³) Depth (m) Area (m ²) Depth (m) Area (m ²) Depth (m) Area (m ²) 0.000 64.8 0.700 64.6 1.400 64.8 2.100 0.0 0.200 64.8 0.900 64.8 1.600 0.0 2.300 0.0 0.300 64.8 1.000 64.8 1.600 0.0 2.300 0.0 0.300 64.8 1.000 64.8 1.700 0.0 2.400 0.0 0.500 64.8 1.200 64.8 1.900 0.0 2.500 0.0 0.600 64.8 1.300 64.8 2.000 0.0 2.500 0.0 0.600 64.8 1.300 64.8 2.000 0.0 2.500 0.0 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated 5.0 2.000 2.00 2.00 Diameter (mm) 1200 Eagen Flow (1/s) Besign Flow (1/s) 89.175 3.9 3.9 3.9 3.9 3.9	Depth (m) Area (m ²) 0.000 64.8 0.700 64.8 1.400 64.8 2.100 0.0 0.200 64.8 0.900 64.8 1.500 64.8 2.200 0.0 0.300 64.8 1.000 64.8 1.600 0.0 2.300 0.0 0.400 64.8 1.000 64.8 1.700 0.0 2.400 0.0 0.500 64.8 1.200 64.8 2.000 0.0 2.400 0.0 0.600 64.8 1.300 64.8 2.000 0.0 2.400 0.0 0.600 64.8 1.300 64.8 1.500 5.0 Elsign Flow (1/s) 5.0 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated 150 Suggested Manhole Diameter (mm) 1200 Minimum Outlet Fipe Diameter (mm) 1200 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo@ 0.878	Depth (m) Area (m²) Depth (m) A	urea (m²) I						
0.000 64.8 0.700 64.8 1.400 64.8 2.100 0.0 0.200 64.8 0.900 64.8 1.500 64.8 2.200 0.0 0.300 64.8 1.000 64.8 1.700 0.0 2.300 0.0 0.400 64.8 1.100 64.8 1.700 0.0 2.400 0.0 0.500 64.8 1.200 64.8 1.900 0.0 2.500 0.0 0.600 64.8 1.300 64.8 2.000 0.0 0.0 0.600 64.8 1.300 64.8 2.000 0.0 0.0 0.600 64.8 1.300 64.8 2.000 0.0 0.0 0.600 64.8 1.200 64.8 2.000 0.0 0.0 0.600 64.8 1.200 64.8 2.000 0.0 0.0 0.600 64.8 1.200 MDS Calculated 1.500 5.0 Plush-Flow (Als) 1.500 5.0 Flush-Flow 0.431 4.9	0.000 64.8 0.700 64.8 1.400 64.8 2.100 0.0 0.200 64.8 0.900 64.8 1.500 64.8 2.200 0.0 0.300 64.8 1.700 0.0 2.300 0.0 0.400 64.8 1.700 0.0 2.400 0.0 0.400 64.8 1.700 0.0 2.400 0.0 0.500 64.8 1.200 64.8 1.900 0.0 0.600 64.8 1.200 64.8 2.000 0.0 0.600 64.8 1.300 64.8 2.000 0.0 0.600 64.8 1.300 64.8 2.000 0.0 0.600 64.8 1.300 64.8 2.000 0.0 0.600 64.8 1.200 64.8 2.000 0.0 0.600 64.8 1.200 64.8 2.000 0.0 0.600 64.8 1.200 64.8 2.000 0.0 0.600 64.8 1.200 64.8 2.000			Jepth (m) A					
0.100 64.8 0.800 64.8 1.500 64.8 2.200 0.0 0.200 64.8 0.900 64.8 1.600 0.0 2.300 0.0 0.400 64.8 1.000 64.8 1.700 0.0 2.400 0.0 0.400 64.8 1.200 64.8 1.800 0.0 2.500 0.0 0.600 64.8 1.200 64.8 2.000 0.0 Hydro-Brake Optimum® Outflow Control Unit Reference MD-SHE-0098-5000-1500-5000 Design Head (m) 1.500 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) 150 Suggested Manhole Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Mean Flow over Head Range - 4.3 the hydrological calculations have been based on the Head/Discharge relationship for the tydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Destrage routing as specified. Should another type of control device other than a Nean Flow over Head Range - 4.3 the hydrological calculations have been based on the Head/Discharge relationship for the tydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.500 8.4 8.500 11.3 0.500 4.8 2.200 6.0 5.70 5.000 8.4 8.500 11.3 0.500 4.8 2.200 6.2 5.000 8.4 9.500 11.6 0.600 4.8 2.200 6.2 5.000 9.6	0.100 64.8 0.800 64.8 1.500 64.8 2.200 0.0 0.200 64.8 0.900 64.8 1.600 0.0 2.300 0.0 0.300 64.8 1.000 64.8 1.700 0.0 2.300 0.0 0.400 64.8 1.100 64.8 1.800 0.0 2.500 0.0 0.500 64.8 1.300 64.8 2.000 0.0 0.600 64.8 1.300 64.8 2.000 0.0 Hydro-Brake Optimum® Outflow Control Unit Reference MD-SHE-0098-5000-1500-5000 Design Fload (m) 1.500 Design Float (1/s) 5.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) 150 Suggested Manhole Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Pion (Calculated) 1.500 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo@ 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Desting Point (calculated) 1.500 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo@ 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.500 8.4 8.500 11.3 0.500 4.8 2.200 6.0 5.500 9.2 9.500 11.9 0.600 4.8 2.200 6.2 6.000 9.6	0.000 64.8 0.700	CA O		rea (m [*])	Jepth (m)	Area (m²)		
0.200 64.8 0.900 64.8 1.600 0.0 2.300 0.0 0.300 64.8 1.000 64.8 1.700 0.0 2.400 0.0 0.400 64.8 1.100 64.8 1.800 0.0 2.500 0.0 0.500 64.8 1.200 64.8 1.900 0.0 0.600 64.8 1.300 64.8 2.000 0.0 Hydro-Brake Optimum® Outflow Control Unit Reference MD-SHE-0098-5000-1500-5000 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo ^m 0.431 4.9 Kick-Flo ^m 0.431 4.9 Mean Flow over Head Range - 4.3 The hydrological calculations have been based on the Head/Discharge relationship for the hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.000 4.3 2.200 6.0 5.500 9.2 9.500 11.3 0.500 4.8 2.200 6.0 5.500 9.2 9.500 11.9	0.200 64.8 0.900 64.8 1.600 0.0 2.300 0.0 0.300 64.8 1.000 64.8 1.700 0.0 2.400 0.0 0.400 64.8 1.100 64.8 1.800 0.0 2.500 0.0 0.500 64.8 1.200 64.8 1.900 0.0 0.600 64.8 1.300 64.8 2.000 0.0 Hydro-Brake Optimum® Outflow Control Unit Reference MD-SHE-0098-5000-1500-5000 Design Flew (1/s) 5.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Fipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Flow (Calculated) 1.500 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 5.0 9.00 11.3 0.200 5.7 5.000 8.4 8.500 11.3 0.500 4.8 2.200 6.0 5.500 9.2 9.500 11.9	0 100 64 0 0 000							
0.300 64.8 1.000 64.8 1.700 0.0 2.400 0.0 0.400 64.8 1.100 64.8 1.800 0.0 2.500 0.0 0.500 64.8 1.200 64.8 1.900 0.0 0.600 64.8 1.300 64.8 2.000 0.0 Hydro-Brake Optimum® Outflow Control Unit Reference MD-SHE-0098-5000-1500-5000 Design Head (m) 1.500 Design Head (m) 5.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo ^m 0.878 3.9 Mean Flow over Head Range - 4.3 the hydrological calculations have been based on the Head/Discharge relationship for the hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.500 7.4 7.500 10.7 0.300 4.8 1.600 5.4 4.500 8.4 8.500 11.3 0.500 4.8 2.200 6.0 5.500 9.2 9.500 11.9	0.300 64.8 1.000 64.8 1.700 0.0 2.400 0.0 0.400 64.8 1.100 64.8 1.800 0.0 2.500 0.0 0.500 64.8 1.200 64.8 1.900 0.0 0.600 64.8 1.300 64.8 2.000 0.0 Hydro-Brake Optimum® Outflow Control Unit Reference MD-SHE-0098-5000-1500-5000 Design Head (m) 1.500 Design Head (m) 1.500 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Flow 0.431 4.9 Kick-Flo@ 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 0.100 5.0 Flush - Storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 0.200 4.4 1.400 5.4 4.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 0.000 4.3 2.000 5.7 5.000 8.4 8.500 11.3 0.500 4.4 2.200 6.0 5.500 9.2 0.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6								
0.400 64.8 1.100 64.8 1.900 0.0 2.500 0.0 0.600 64.8 1.200 64.8 2.000 0.0 0.0 Hydro-Brake Optimum® Outflow Control Unit Reference MD-SHE-0098-5000-1500-5000 Design Head (m) 1.500 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 150 Suggested Manhole Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo [®] 0.878 3.9 Mean Flow over Head Range - 4.3 The hydrological calculations have been based on the Head/Discharge relationship for the tydro-Brake Optimum® as specified. Should another type of control device other than a lydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.500 7.4 8.500 11.3 0.500 4.4 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.6000 9.6	0.400 64.8 1.100 64.8 1.900 0.0 2.500 0.0 0.500 64.8 1.200 64.8 2.000 0.0 Hydro-Brake Optimum® Outflow Control Unit Reference MD-SHE-0098-5000-1500-5000 Design Head (m) 1.500 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 150 Suggested Manhole Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Flow (1/s) 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.8 2.200 6.0 5.50 9.2 9.500 11.9 0.600 4.8 2.200 6.2 5.000 9.6				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
0.600 64.8 1.300 64.8 2.000 0.0 Hydro-Brake Optimum® Outflow Control Unit Reference MD-SHE-0098-5000-1500-5000 Design Head (m) 1.500 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo ^m 0.431 4.9 Kick-Flo ^m 0.431 4.9 Mean Flow over Head Range - 4.3 The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake Optimum® as specified. Should another type of control device other than a hydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.000 5.7 5.000 8.8 9.000 11.6 0.600 4.8 2.200 6.0 5.500 9.2 9.500 11.9	0.600 64.8 1.300 64.8 2.000 0.0 Hydro-Brake Optimum® Outflow Control Unit Reference MD-SHE-0098-5000-1500-5000 Design Head (m) 1.500 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo ^m 0.431 4.9 Kick-Flo ^m 0.431 4.9 Kick-Flo ^m 0.431 4.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.4 1.600 5.1 4.000 7.4 8.500 11.3 0.600 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.4 1.600 5.1 4.000 7.4 8.500 11.3 0.500 4.4 1.600 5.1 4.000 7.4 8.500 11.3 0.500 4.3 2.000 5.7 5.000 8.8 9.000 11.6 0.600 4.3 2.400 6.2 6.000 9.6 9.2 9.500 11.9	0.400 64.8 1.100	64.8						
Hydro-Brake Optimum® Outflow Control Unit Reference MD-SHE-0098-5000-1500-5000 Design Flew (1/s) S.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) Diameter (mm) Diameter (mm) Diameter (mm) Diameter (mm) Design Point (Calculated) Noterion (Calculated) Diameter (mm) Design Point (Calculated) Flush-Flo [®] Mean Flow over Head Range 4.3 Pepth (m) Flow (1/s) Depth	Hydro-Brake Optimum® Outflow Control Unit Reference MD-SHE-0098-5000-1500-5000 Design Head (m) 1.500 Design Flow (1/s) S.0 Flush-Flow Calculated Objective Minimise upstream storage Diameter (mm) Diameter (mm) Novert Level (m) Minimum Outlet Pipe Diameter (mm) Suggested Manhole Diameter (mm) Design Point (Calculated) Control Points Mead (m) Flow (1/s) Design Point (Calculated) Flush-Flow Note: Flush-Flow Kick-Flo@ 0.878 Mean Flow over Head Range - Note: Flow Note: Flow Note: Flow Mean Flow over Head Range - Note: Flow Outling for the sydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) <td colspa<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td>	<td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Unit Reference MD-SHE-0098-5000-1500-5000 Design Flow (1/s) Design Flow (1/s) 5.0 Flush-Flo** Calculated Objective Minimise upstream storage Diameter (mm) Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 Flush-Flo** 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 Control device other than a lydro-Brake Optimum® as specified. Should another type of control device other than a lydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 <	Unit Reference MD-SHE-0099-5000-1500-5000 Design Flow (1/s) 5.0 Design Flow (1/s) 5.0 Flush-Flo™ Calculated Objective Minimise upstream storage Diameter (mm) Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 Flush-Flo™ 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Pepth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8	0.600 64.8 1.300	64.8	2.000	0.0				
Design Head (m) 1.500 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 Chepth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 0.300 4.4 1.600 5.4 0.100 3.2 1.200 4.5 0.300 4.4 1.600 5.4 0.200 4.4 1.400 4.8 0.500 7.90 10.31 0.200 4.4 1.600 5.4 0.400 7.9 8.000 11.3 0.500	Design Head (m) 1.500 Design Flow (1/s) 5.0 Flush-Flo [™] Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo [™] 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 0.300 4.4 1.400 4.8 0.500 4.4 1.400 7.500 0.300 4.8 1.600 5.4 0.300 4.8 1.600 1.1.3 0.500	Hydro-Brake	e Optimum	® Outflow	Control				
Design Head (m) 1.500 Design Flow (1/s) 5.0 Flush-Flo ^m Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 Chepth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 0.300 4.4 1.600 5.4 0.100 3.2 1.200 4.5 0.300 4.4 1.600 5.4 0.200 4.4 1.400 4.8 0.500 7.90 10.31 0.200 4.4 1.600 5.4 0.400 7.9 8.000 11.3 0.500	Design Head (m) 1.500 Design Flow (1/s) 5.0 Flush-Flo [™] Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo [™] 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 0.300 4.4 1.400 4.8 0.500 4.4 1.400 7.500 0.300 4.8 1.600 5.4 0.300 4.8 1.600 1.1.3 0.500	11	t Defense	ND OUD O	000 5000	1500 5000			
Design Flow (1/s) 5.0 Flush-Flo ^{man} Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1,500 5.0 Flush-Flo ^{man} 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 Popth (m) Flow (1/s) Mean Flow over Head Range - Nupto-Brake Optimum® as specified. Should another type of control device other than a lydro-Brake Optimum® be utilised then these storage routing calculations will be Nupto-Brake Optimum® as specified. 3.000 6.9 7.000 10.3 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.200 <	Design Flow (1/s) 5.0 Flush-Flo ^{man} Calculated Objective Minimise upstream storage Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo ^{man} 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000				098-5000-				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Objective Minimise upstream storage Diameter (mm) 98 1nvert Level (m) 98 99.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo ²⁴ Nean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 0.200 4.4 1.400 4.8 0.200 4.4 1.400 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.000 5.7 5.000 8.8 9.000 11.6 0.600								
Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo™ 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 The hydrological calculations have been based on the Head/Discharge relationship for the lydro-Brake Optimum® as specified. Should another type of control device other than a lydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 0.200 4.4 3.500 7.4 0.200 4.4 1.400 4.8 0.200 4.4 1.600 5.1 0.200 4.8 1.600 7.9 0.300 4.8 1.600 5.4 0.400 4.9 2.000 5.7 0.400 4.8	Diameter (mm) 98 Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo@ 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum@ as specified. Should another type of control device other than a ydro-Brake Optimum@ be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) Pepth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11								
Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo [®] 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 The hydrological calculations have been based on the Head/Discharge relationship for the lydro-Brake Optimum® as specified. Should another type of control device other than a lydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated Depth (m) Flow (1/s) Pepth (m) Flow (1/s) Pepth (m) Flow (1/s) Pepth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.8 2.200 6.0 5.500 9.500 11.9	Invert Level (m) 89.175 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (l/s) Design Point (Calculated) 1.500 5.0 Flush-Flo® 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (l/s) Depth (m) Flow (l/s) Depth (m) Flow (l/s) Depth (m) Flow (l/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.000 5.7 5.000 8.8 9.000 <t< td=""><td></td><td></td><td></td><td>e upstrea</td><td></td><td></td><td></td></t<>				e upstrea				
Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo™ 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 Wether State Optimum® as specified. Should another type of control device other than a lydro-Brake Optimum® be utilised then these storage routing calculations will be unvalidated Depth (m) Flow (1/s)	Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo ^m 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.8 2.200 6.7 5.000 8.8 9.000 11.6		Charles and the second second second						
Control PointsHead (m) Flow (1/s)Design Point (Calculated) 1.500 5.0 Flush-Flo™ 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range- 4.3 The hydrological calculations have been based on the Head/Discharge relationship for thekydro-Brake Optimum® as specified.Should another type of control device other than alydro-Brake Optimum® be utilised then these storage routing calculations will benvalidatedDepth (m) Flow (1/s)Depth (m) Flow (1/s)0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 0.500 4.8 0.600 4.8 2.200 6.0 0.600 4.8 2.200 6.0 0.800 4.3 2.400 6.2 6.000 9.6	Control Points Head (m) Flow (1/s) Design Point (Calculated) 1.500 5.0 Flush-Flo™ 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.8 2.200 6.0 5.500 9.2 9.500 11.9 0.600 4.8 2.200 6.0 5.500 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Suggested Manhole Di	iameter (m	m.)		1200			
Flush-Flom 0.431 4.9 Nick-Flo® 4.9 Nether Flow over Head Range 3.9 AMean Flow over Head Range- 4.3 The hydrological calculations have been based on the Head/Discharge relationship for the lydro-Brake Optimum® as specified. Should another type of control device other than a lydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidatedDepth (m) Flow (1/s)Depth (m) Flow (1/s)Depth (m) Flow (1/s)Depth (m) Flow (1/s) 0.100 3.2 0.200 1.200 4.5 1.400 3.000 6.9 3.500 7.000 10.3 7.500 0.400 4.8 1.600 5.1 4.500 4.000 7.9 8.000 11.0 8.500 11.3 9.500 0.400 4.9 2.000 5.7 5.000 8.8 9.000 9.000 11.6 9.500 0.600 4.8 2.200 6.0 6.2 6.000 9.6 9.500	Flush-Flo ^m 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6 11.9	Control H	Points	Head (m)	Flow (1/s)			
Flush-Flom 0.431 4.9 Nick-Flo® 4.9 Nether Flow over Head Range 3.9 AMean Flow over Head Range- 4.3 The hydrological calculations have been based on the Head/Discharge relationship for the lydro-Brake Optimum® as specified. Should another type of control device other than a lydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidatedDepth (m) Flow (1/s)Depth (m) Flow (1/s)Depth (m) Flow (1/s)Depth (m) Flow (1/s) 0.100 3.2 0.200 1.200 4.5 1.400 3.000 6.9 3.500 7.000 10.3 7.500 0.400 4.8 1.600 5.1 4.500 4.000 7.9 8.000 11.0 8.500 11.3 9.500 0.400 4.9 2.000 5.7 5.000 8.8 9.000 9.000 11.6 9.500 0.600 4.8 2.200 6.0 6.2 6.000 9.6 9.500	Flush-Flo ^m 0.431 4.9 Kick-Flo® 0.878 3.9 Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6 11.9	Design Point (Calculated	1,500	5.	0			
Mean Flow over Head Range - 4.3 Che hydrological calculations have been based on the Head/Discharge relationship for the lydro-Brake Optimum® as specified. Should another type of control device other than a lydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.200 6.0 5.500 9.2 9.500 11.9 0.600 4.3 2.400 6.2 6.000 9.6 11.9	Mean Flow over Head Range - 4.3 he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.000 5.7 5.000 8.8 9.000 11.6 0.600 4.8 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6 11.9			0.431					
Che hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake Optimum® as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.000 5.7 5.000 8.8 9.000 11.6 0.600 4.8 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6 11.9	he hydrological calculations have been based on the Head/Discharge relationship for the ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.000 5.7 5.000 8.8 9.000 11.6 0.600 4.8 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6 11.9	Moon Flow over							
Aydro-Brake Optimum® as specified. Should another type of control device other than a lydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.000 5.7 5.000 8.8 9.000 11.6 0.600 4.8 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6 11.9	ydro-Brake Optimum® as specified. Should another type of control device other than a ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.000 5.7 5.000 8.8 9.000 11.6 0.600 4.8 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6 9.500 11.9	Mean Flow Over	неац капд	le –	4.	3			
Aydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.000 5.7 5.000 8.8 9.000 11.6 0.600 4.8 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6 11.9	ydro-Brake Optimum® be utilised then these storage routing calculations will be nvalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.000 5.7 5.000 8.8 9.000 11.6 0.600 4.8 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6 11.9								
Depth (m) Flow (1/s)	nvalidated Depth (m) Flow (1/s) 0.100 3.2 1.200 4.5 3.000 6.9 7.000 10.3 0.200 4.4 1.400 4.8 3.500 7.4 7.500 10.7 0.300 4.8 1.600 5.1 4.000 7.9 8.000 11.0 0.400 4.9 1.800 5.4 4.500 8.4 8.500 11.3 0.500 4.9 2.000 5.7 5.000 8.8 9.000 11.6 0.600 4.8 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6 11.9							a	
0.1003.21.2004.53.0006.97.00010.30.2004.41.4004.83.5007.47.50010.70.3004.81.6005.14.0007.98.00011.00.4004.91.8005.44.5008.48.50011.30.5004.92.0005.75.0008.89.00011.60.6004.82.2006.05.5009.29.50011.90.8004.32.4006.26.0009.611.9	0.1003.21.2004.53.0006.97.00010.30.2004.41.4004.83.5007.47.50010.70.3004.81.6005.14.0007.98.00011.00.4004.91.8005.44.5008.48.50011.30.5004.92.0005.75.0008.89.00011.60.6004.82.2006.05.5009.29.50011.90.8004.32.4006.26.0009.611.9	Invalidated	nen chese :	scorage rou	cing carc	IIALIONS W.	III De		
0.1003.21.2004.53.0006.97.00010.30.2004.41.4004.83.5007.47.50010.70.3004.81.6005.14.0007.98.00011.00.4004.91.8005.44.5008.48.50011.30.5004.92.0005.75.0008.89.00011.60.6004.82.2006.05.5009.29.50011.90.8004.32.4006.26.0009.611.9	0.1003.21.2004.53.0006.97.00010.30.2004.41.4004.83.5007.47.50010.70.3004.81.6005.14.0007.98.00011.00.4004.91.8005.44.5008.48.50011.30.5004.92.0005.75.0008.89.00011.60.6004.82.2006.05.5009.29.50011.90.8004.32.4006.26.0009.611.9	Dopth (m) Flow (1/c) Dopth (m) Fl	ou /1/a) r	onth (m) E	low (1/a)	Depth (m)	F lass (1 /-)		
0.2004.41.4004.83.5007.47.50010.70.3004.81.6005.14.0007.98.00011.00.4004.91.8005.44.5008.48.50011.30.5004.92.0005.75.0008.89.00011.60.6004.82.2006.05.5009.29.50011.90.8004.32.4006.26.0009.611.9	0.2004.41.4004.83.5007.47.50010.70.3004.81.6005.14.0007.98.00011.00.4004.91.8005.44.5008.48.50011.30.5004.92.0005.75.0008.89.00011.60.6004.82.2006.05.5009.29.50011.90.8004.32.4006.26.0009.611.9				11111	Deptn (m)	f10W (1/S)		
0.3004.81.6005.14.0007.98.00011.00.4004.91.8005.44.5008.48.50011.30.5004.92.0005.75.0008.89.00011.60.6004.82.2006.05.5009.29.50011.90.8004.32.4006.26.0009.611.9	0.3004.81.6005.14.0007.98.00011.00.4004.91.8005.44.5008.48.50011.30.5004.92.0005.75.0008.89.00011.60.6004.82.2006.05.5009.29.50011.90.8004.32.4006.26.0009.611.9								
0.4004.91.8005.44.5008.48.50011.30.5004.92.0005.75.0008.89.00011.60.6004.82.2006.05.5009.29.50011.90.8004.32.4006.26.0009.611.9	0.4004.91.8005.44.5008.48.50011.30.5004.92.0005.75.0008.89.00011.60.6004.82.2006.05.5009.29.50011.90.8004.32.4006.26.0009.69.6								
0.5004.92.0005.75.0008.89.00011.60.6004.82.2006.05.5009.29.50011.90.8004.32.4006.26.0009.611.9	0.5004.92.0005.75.0008.89.00011.60.6004.82.2006.05.5009.29.50011.90.8004.32.4006.26.0009.6								
0.600 4.8 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6 11.9	0.600 4.8 2.200 6.0 5.500 9.2 9.500 11.9 0.800 4.3 2.400 6.2 6.000 9.6								
					(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)				
1.000 4.11 2.000 6.51 6.500 10.01	1.000 4.1 2.000 6.5 6.500 10.0				1				
		1.000 4.1 2.600	6.5	6.500	10.0				

EAST ATTEN Tully De'Ath	UNITO	J 1	INIC	DT	00	10	SUMME Page 1
Sheridan House							
Hartfield Road							4
Forest Row							1 mm
Date 25/06/2015 09:0	2	Des	igned b	ov sfk	-		- MICro
File 150624-EastImp&			cked by				Drainag
XP Solutions	ine contact.		rce Cor		2014 1	1	
AI DOIDCIOND		500		ICTOL 2	2014.1		
Summary	of Results	for 1	00 year	r Retu	rn Per	iod (+30	8)
	Storm	Max	Max	Max	Max	Status	
	Event	Level	Depth C				
		(m)	(m)	(1/s)	(m ³)		
			0.000			1.2.2	
	5 min Summer) min Summer			4.9 4.9	56.1 70.3		
) min Summer) min Summer			4.9	80.9		
) min Summer			4.9	84.5		
) min Summer			4.9	82.1	ОК	
) min Summer			4.9	79.0		
) min Summer) min Summer			4.9	73.2		
) min Summer) min Summer			4.9 4.9	67.7 62.4	O K O K	
) min Summer			4.9	56.6		
) min Summer			4.9	45.1		
) min Summer			4.9	29.1		
) min Summer) min Summer			4.6 4.2	16.2 10.3		
) min Summer			3.3	6.6		
) min Summer			2.6	5.3		
) min Summer			2.2	4.7		
) min Summer			1.8	4.2		
) min Summer 5 min Winter			1.6 4.9	3.9 63.3	O K	
) min Winter			4.9	79.4	ОК	
	Storm	Rain	Flooder	d Disch	argo Ti	.me-Peak	
	Event	(mm/hr)				(mins)	
			(m³)	(m ³	3)		
15	min Summer	139.672	0.0	0	59.6	18	
30	min Summer	90.181			77.0	33	
	min Summer	55.351			94.6	62	
	min Summer min Summer	32.803 23.841			12.2	120 154	
	min Summer	18.904			22.3 29.3	154	
	min Summer	13.629			39.8	252	
	min Summer	10.798	0.0	0 1	47.7	322	
	min Summer	9.007			54.0	392	
	min Summer min Summer	7.764			59.3 67.9	462 578	
	min Summer	4.401			80.5	810	
	min Summer	3.151			94.0	1148	
	min Summer	2.484			03.9	1496	
	min Summer	1.775			18.4	2200	
	min Summer min Summer	1.397			29.3 37.9	2920 3672	
	min Summer	0.996			37.9 45.1	4400	
	min Summer	0.875			51.3	5136	
	min Winter				66.8	18	
30	min Winter	90.181	0.0	0	86.3	32	

EAST AT	10 0	e of a con	U 11	2100	10	010		N	Page	
Sheridan House	9								rage .	
lartfield Road									4	
Forest Row			· · · · · · · · · · · · · · · · · · ·							1 1
Date 25/06/201	5 00.02		Doo	impod	by sfk			-	Micro	Ĩ
					2 C C C C C C C C C C C C C C C C C C C				Drain	ian
Tile 150624-Ea XP Solutions	ISCIMPAA	iccentuat		cked b	-	014 1	-		Contraction of	
Solucions	_		Sou	rce co	ntrol 2	014.1	•1			
Su	ummary o	f Results	for 1	00 yea	r Retur	n Per	iod (+	30%)		
					1.43	1.5	1.1.1			
		Storm Event	Max	Max	Max	Max	Status			
		Event	Level (m)	(m)	Control (1/s)	(m ³)				
			(111)	(111)	(1/3)	(m)				
		min Winter			4.9	91.8	ОК			
		min Winter			5.0			-		
		min Winter min Winter			4.9	95.1	OK			
		min Winter			4.9	91.1 83.6	O K			
		min Winter			4.9	75.9	OK			
		min Winter			4.9	68.2	ОК			
		min Winter			4.9	60.1	ОК			
		min Winter min Winter			4.9	42.2	OK			
		min Winter			4.8 4.1	21.2	O K O K			
		min Winter			3.3	6.7	OK			
	4320	min Winter	89.253	0.078	2.4	5.0	ОК			
		min Winter			1.9	4.3				
		min Winter min Winter			1.6	3.8				
		min Winter			1.3 1.2	3.5	O K O K			
						5.2	0 It			
	S	torm	Rain	Floode	d Discha	rge Ti	me-Peak			
	E	vent	(mm/hr)		volu					
				(m ³)	(m ³)				
	60 r	min Winter	55.351	0.	0 10	6.0	60			
		min Winter	32.803			5.6	118			
		min Winter	23.841			6.9	170			
		min Winter min Winter	18.904			4.8	194			
	and the second se	min Winter min Winter	13.629 10.798			6.6	270 348			
		min Winter	9.007			2.5	424			
		min Winter	7.764			8.4	500			
		min Winter	6.137			8.0	616			
		nin Winter	4.401			2.2	836			
		nin Winter nin Winter	3.151 2.484	0. 0.		7.2	1148 1468			
		nin Winter	1.775			4.6	2188			
		nin Winter	1.397			6.8	2936			
		nin Winter	1.160		0 26	6.5	3576			
		nin Winter	0.996			4.5	4304			
	T0080 U	nin Winter	0.875	0.	0 28	1.5	5136			
			2-2014							

EAST AT	10-	S	Abor.					Page 1
Sheridan House								
Hartfield Road								4
Forest Row								1 min
Date 25/06/2015	5 09:02		Des	igned	by sfk	1		- MICro
File 150624-Eas				cked b				Drainage
(P Solutions	o c m np u n	ccondac			ntrol :	2014 1	1	
ir borucrons			bou.	100 00	neror .	2014.1	. 1	
	Summar	ry of Resu	ults fo	or 100	year H	Return	Period	
	14	Storm	Max	Max	Max	Max	Status	
	1	Event	Level	Depth	Control	Volume		
			(m)	(m)	(1/s)	(m³)		
	15	min Summer	89 830	0 653	4.9	42.3	ОК	
		min Summer			4.9	42.5	OK	
		min Summer			4.9	60.2	0 K	
	120	min Summer	90.123	0.948	4.9	61.5	O K	
		min Summer			4.9	58.8	O K	
		min Summer min Summer			4.9 4.9	55.4 48.9	O K	
		min Summer			4.9	48.9	OK	
		min Summer			4.9	38.1	OK	
		min Summer			4.9	33.4	O K	
		min Summer			4.9	25.8	OK	
		min Summer min Summer			4.6 4.0	16.0 9.3	O K O K	
		min Summer			3.5	7.0	OK	
	4320	min Summer	89.256	0.081	2.5	5.2	ОК	
		min Summer			2.0	4.4	O K	
		min Summer min Summer			1.7	4.0	OK	
		min Summer			1.4	3.6	O K O K	
		min Winter			4.9	47.8	ОК	
	30	min Winter	90.099	0.924	4.9	59.9	O K	
		torm	Rain				me-Peak	
	E	vent	(mm/hr)	Volumo (m ³)	e Volu (m ³		(mins)	
	15 r	min Summer	107,440	0.	0	45.8	18	
		min Summer	69.370			59.2	32	
		min Summer	42.578			72.8	62	
		min Summer min Summer	25.233			86.3	118	
		min Summer	18.339			94.0 99.4	146 176	
		min Summer	10.484			07.5	238	
		min Summer	8.306			13.6	304	
		min Summer	6.928			18.4	368	
		nin Summer min Summer	5.972			22.5	430	
		nin Summer	4.721 3.385			29.1 38.9	550 780	
		min Summer	2.424			49.2	1124	
		min Summer	1.911			56.8	1468	
		min Summer	1.365			68.0	2200	
		min Summer min Summer	1.074 0.892			76.4 83.0	2912	
		nin Summer	0.892			88.6	3664 4328	
		min Summer	0.673			93.3	5024	
		min Winter				51.4	18	
	30 r	min Winter	69.370	0.	0	66.3	32	

		o fin		1.1.10			WD MD
Tully De'Ath							Page 2
Sheridan House							6
Hartfield Road	1						12y
Forest Row				_			Micro
Date 25/06/201			igned b				Draina
	astImp&Attenuat.		cked by				Diama
XP Solutions		Sou	rce Con	ntrol 2	2014.1	.1	
	Summary of Res	ults fo	or 100	year R	eturn	Period	
	Storm	Max	Max	Max	Max	Status	
	Event	Level				Sector Comp	
		(m)	(m)	(1/s)	(m³)		
	60 min Winter	90.234	1.059	4.9	68.6	ОК	
	🥌 120 min Winter			4.9	71,1	0 к 🧫	
	180 min Winter		100 C 10 C 10 C	4.9	67.9		
	240 min Winter			4.9	64.1		
	360 min Winter 480 min Winter			4.9 4.9	55.3 46.1		
	600 min Winter			4.9	38.1		
	720 min Winter			4.9	31.3		
	960 min Winter			4.8	21.0		
	1440 min Winter 2160 min Winter			4.2	10.5		
	2880 min Winter			3.2	6.5 5.3		
	4320 min Winter			1.8	4.2		
	5760 min Winter			1.5	3.6		
	7200 min Winter			1.2	3.3		
	8640 min Winter 10080 min Winter			$1.0 \\ 0.9$	3.0		
	Storm	Rain			arge Ti	.me-Peak	
	Event	(mm/hr)	Volume (m³)	Volu (m³		(mins)	
	60 min Winter	42.578	0.0) 8	31,5	60	
	120 min Winter)	96.6	116	
	180 min Winter 240 min Winter				05.3	166	
	360 min Winter				11.4	188 264	
	480 min Winter				27.2	330	
	600 min Winter	6.928	0.0) 13	32.7	394	
	720 min Winter				37.2	456	
	960 min Winter 1440 min Winter				44.6 55.5	568 782	
	2160 min Winter				57.1	1104	
	2880 min Winter				75.6	1468	
	4320 min Winter				38.2	2176	
	5760 min Winter 7200 min Winter				97.5	2888	
	8640 min Winter				05.0 11.2	3672 4280	
	10080 min Winter				16.5	5080	

MD/20 SUMMER

EAST	ATTENUATION	11230
Tully De	1 Ath	

Tully De'Ath		Page 1
Sheridan House		
Hartfield Road		4
Forest Row		Micro
Date 25/06/2015 09:04	Designed by sfk	
File 150624-EastImp&Attenuat	Checked by	Drainage
XP Solutions	Source Control 2014.1.1	

Summary of Results for 30 year Return Period

	Stor	m	Max	Max	Max	Max	Status
	Even	it	Level	Depth	Control	Volume	
			(m)	(m)	(1/s)	(m ³)	
15	min	Summer	89.666	0.491	4.9	31.8	OK
30	min	Summer	89.772	0.597	4.9	38.7	ОК
60	min	Summer	89.832	0.657	4.9	42.6	ОК
120	min	Summer	89.825	0.650	4.9	42.1	ОК
180	min	Summer	89.792	0.617	4.9	40.0	O K
240	min	Summer	89.752	0.577	4.9	37.4	O K
360	min	Summer	89.676	0.501	4.9	32.4	O K
480	min	Summer	89.607	0.432	4.9	28.0	O K
600	min	Summer	89.547	0.372	4.9	24.1	ОК
720	min	Summer	89.496	0.321	4.8	20.8	ОК
960	min	Summer	89.419	0.244	4.6	15.8	OK
1440	min	Summer	89.330	0.155	4.1	10.0	OK
2160	min	Summer	89.282	0.107	3.4	6.9	OK
2880	min	Summer	89.262	0.087	2.8	5.7	OK
4320	min	Summer	89.244	0.069	2.0	4.5	ОК
5760	min	Summer	89.235	0.060	1.6	3.9	ОК
7200	min	Summer	89.229	0.054	1.3	3.5	O K
8640	min	Summer	89.224	0.049	1.2	3.2	OK
10080	min	Summer	89.221	0.046	1.0	3.0	ΟK
15	min	Winter	89.730	0.555	4.9	36.0	OK
30	min	Winter	89.855	0.680	4.9	44.1	OK
				1.1.1.1.2.01			

	Stor Even		Rain (mm/hr)		e	Discharge Volume (m³)	Time-Peak (mins)	
15	min	Summer	82.549	0.	. 0	35.2	18	
30	min	Summer	52,907	0,	0	45.1	32	
60	min	Summer	32.372	0.	. 0	55.3	60	
120	min	Summer	19.217	0.	. 0	65.7	94	
180	min	Summer	14.018	0.	0	71.9	126	
240	min	Summer	11.161	0.	. 0	76.3	160	
360	min	Summer	8.089	0.	0	83.0	226	
480	min	Summer	6.431	0.	. 0	87.9	290	
600	min	Summer	5.381	0.	.0	92.0	352	
720	min	Summer	4.649	0.	. 0	95.4	412	
960	mín	Summer	3.690	0.	.0	100.9	530	
1440	min	Summer	2.662	0.	. 0	109.2	762	
2160	min	Summer	1.919	0.	.0	118.1	1104	
2880	min	Summer	1.520	0.	0	124.7	1468	
4320	min	Summer	1.094	0.	. 0	134.6	2200	
5760	min	Summer	0.865	0.	.0	142.0	2936	
7200	min	Summer	0.722	0.	0	148.0	3640	
8640	min	Summer	0.622	0.	0	153.1	4400	
10080	min	Summer	0.548	0.	0	157.4	5128	
15	min	Winter	82.549	0.	0	39.4	18	
30	min	Winter	52.907	0.	0	50.6	32	
		©198	32-2014	XP Sc	5 1	utions		

Tully De'Ath	ENVATION	11.9					WID/21 WINTER Page 2
Sheridan House		1					rage z
Hartfield Road							
Charles and a series of the series of							1 m
Forest Row					_		Mirro
Date 25/06/201			igned k				Drainage
File 150624-Ea	stImp&Attenuat	. Che	cked by	1		-	Drainago
KP Solutions		Sou	rce Cor	ntrol 2	2014.1	.1	
						146.27	
	Summary of Res	ults f	or 30	year Re	eturn	Period	
	0 to 100						
	Storm Event	Max	Max Depth (Max	Max	Status	
	Event	(m)	(m)	(1/s)	(m ³)		
		(m)	(ш)	(1/5)	(11-)		
	🥣 60 min Winter			4.9			-
	120 min Winter			4.9	48.7		
	180 min Winter			4.9	45.6		
	240 min Winter 360 min Winter			4.9 4.9			
	480 min Winter			4.9	34.2 27.5		
	600 min Winter			4.8	21.9		
	720 min Winter	89.446	0.271	4.7	17.6	ОК	
	960 min Winter			4.3			
	1440 min Winter 2160 min Winter			3.5	7.1 5.3		
	2880 min Winter			2.6	5.3 4.5		
	4320 min Winter			1.5			
	5760 min Winter			1.2			
	7200 min Winter			1.0	2.9		
	8640 min Winter 10080 min Winter		W and don	0.8			
	10090 WITH WINCEL	09.213	0.038	0.7	2.5	O K	
	Storm	Rain				me-Peak	
	Event	(mm/hr)				(mins)	
			(m ³)	(m ³	,		
	60 min Winter	32.372	0.0) (62.0	60	
	120 min Winter	19.217			73.6	110	
	180 min Winter	14.018			80.5	138	
	240 min Winter 360 min Winter	11.161 8.089			85.5	174 244	
	480 min Winter	6.431			98.5	310	
	600 min Winter	5.381			03.0	370	
	720 min Winter	4.649	0.0) 10	06.8	428	
	960 min Winter	3.690			13.0	540	
	1440 min Winter	2.662			22.3	750	
	2160 min Winter 2880 min Winter	1.919			32.3 39.7	$1104 \\ 1456$	
	4320 min Winter	1.094			59.7	2200	
	5760 min Winter	0.865			59.1	2920	
	7200 min Winter	0.722	0.0		65.8	3640	
	8640 min Winter	0.622			71.5	4400	
	10080 min Winter	0.548	0.0) 17	76.4	5136	
	@108	2-2014	XP So	lution	0		

EAST ATT	ENUI	ATIC	S	lint	YR			MD/2 Summe
Tully De'Ath								Page 1
Sheridan House								
Hartfield Road								4
Forest Row			1					VE
Date 25/06/2015	09:05		Des	igned	by sfk	_		Micro
File 150624-Eas	tImp&Atten	uat.	10000	cked b	1.5			Drainag
XP Solutions					ntrol 2	2014.1	.1	
		1000					5. A. I.T.	
	Summary o	of Res	ults :	for 1	year Re	turn 1	Period	
	Storm	0	Max	Max	Max	Max	Status	
	Event		Level		Control			
			(m)	(m)	(1/s)	(m ³)		
	15 min 8				4.3	12.0	ОК	
	30 min 8				4.5	13.9	ОК	
	60 min 5				4.6	14.9	OK	
	120 min 9 180 min 9				4.5	14.5	OK	
	240 min 3				4.5 4.4	13.4 12.2	OK	
	360 min 5				4.4	12.2	OK	
	480 min 5				3.9	8.5	O K	
	600 min \$				3.7	7.5	ОК	
	720 min 5				3.4	6.8	ΟK	
	960 min 5				2.9	5.9	OK	
	1440 min S 2160 min S				2.3	4.8	OK	
	2880 min 5				1.7	4.0 3.6	OK	
	4320 min 5				1.0	3.0	OK	
	5760 min S				0.8	2.7	O K	
	7200 min S				0.7	2.4	O K	
	8640 min S				0.6	2.2	O K	
	10080 min S 15 min W				0.6 4.5	2.1 13.6	OK	
	30 min W				4.5	13.6	O K O K	
						10.0	0 11	
	Storm		Rain	Floode	d Disch	arge Ti	me-Peak	
	Event		(mm/hr)	Voluma (m ³)	∋ Volu (m³		(mins)	
	15 min S	ummer	33.607	0.	0	14.3	16	
	30 min S		21.695			18.5	27	
	60 min S		13.524		0 :	23.1	44	
	120 min S		8.249			28.2	78	
	180 min S		6.145			31.5	110	
	240 min S 360 min S		4.980			34.0 37.7	144 204	
	480 min S		2.958			40.4	262	
	600 min S		2.498			42.7	320	
	720 min S		2.177			44.6	382	
	960 min S		1.751			47.9	500	
	1440 min S		1.289			52.8	736	
	2160 min S		0.949			58.4	1104	
	2880 min S 4320 min S		0.764			62.7 69.1	1468 2204	
	5760 min S		0.452			74.1	2204	
	7200 min S		0,382			78.3	3632	
	8640 min S		0.333			31.9	4400	
	10080 min S		0.296			35.0	5104	
	15 min W		33.607			16.0	16	
	30 min W.	inter	21.695	0.	()	20.7	29	

		. Cheo Soults f Max Level (m) 89.432 89.414 89.385 89.357 89.312	Max Depth Co (m) 0.257 0.239 0.210 0.182	trol 2 ear Re Max ontrol (1/s) 4.7 4.6	turn E Max Volume (m ³) 16.7		Micro Drainage
Forest Row Date 25/06/2015 09 File 150624-EastIm XP Solutions <u>S</u>	ummary of Res Storm Event 60 min Winter 120 min Winter 180 min Winter 240 min Winter 360 min Winter 480 min Winter	. Cheo Soults f Max Level (m) 89.432 89.414 89.385 89.357 89.312	cked by rce Con Eor 1 ye Max Depth Ca (m) 0.257 0.239 0.210 0.182	trol 2 ear Re Max ontrol (1/s) 4.7 4.6	turn E Max Volume (m ³) 16.7	Period Status	Micro Drainage
Date 25/06/2015 09 File 150624-EastIm XP Solutions <u>Su</u>	ummary of Res Storm Event 60 min Winter 120 min Winter 180 min Winter 240 min Winter 360 min Winter 480 min Winter	. Cheo Soults f Max Level (m) 89.432 89.414 89.385 89.357 89.312	cked by rce Con Eor 1 ye Max Depth Ca (m) 0.257 0.239 0.210 0.182	trol 2 ear Re Max ontrol (1/s) 4.7 4.6	turn E Max Volume (m ³) 16.7	Period Status	Micro Drainage
File 150624-EastIm XP Solutions <u>Su</u>	ummary of Res Storm Event 60 min Winter 120 min Winter 180 min Winter 240 min Winter 360 min Winter 480 min Winter	. Cheo Soults f Max Level (m) 89.432 89.414 89.385 89.357 89.312	cked by rce Con Eor 1 ye Max Depth Ca (m) 0.257 0.239 0.210 0.182	trol 2 ear Re Max ontrol (1/s) 4.7 4.6	turn E Max Volume (m ³) 16.7	Period Status	Drainage
XP Solutions	storm Event 60 min Winter 120 min Winter 180 min Winter 240 min Winter 360 min Winter 480 min Winter 600 min Winter	. Cheo Soults f Max Level (m) 89.432 89.414 89.385 89.357 89.312	cked by rce Con Eor 1 ye Max Depth Ca (m) 0.257 0.239 0.210 0.182	trol 2 ear Re Max ontrol (1/s) 4.7 4.6	turn E Max Volume (m ³) 16.7	Period Status	Urainage
XP Solutions	storm Event 60 min Winter 120 min Winter 180 min Winter 240 min Winter 360 min Winter 480 min Winter 600 min Winter	Sou: Sults f Max Level (m) 89.432 89.414 89.385 89.357 89.312	Max Depth Co (m) 0.257 0.239 0.210 0.182	trol 2 ear Re Max ontrol (1/s) 4.7 4.6	turn E Max Volume (m ³) 16.7	Period Status	
	Storm Event 60 min Winter 120 min Winter 180 min Winter 240 min Winter 360 min Winter 480 min Winter	Max Level (m) 89.432 89.414 89.385 89.357 89.312	Max Depth Co (m) 0.257 0.239 0.210 0.182	Max ontrol (1/s) 4.7 4.6	Max Volume (m ³) 16.7	Status	
	Storm Event 60 min Winter 120 min Winter 180 min Winter 240 min Winter 360 min Winter 480 min Winter	Max Level (m) 89.432 89.414 89.385 89.357 89.312	Max Depth Co (m) 0.257 0.239 0.210 0.182	Max ontrol (1/s) 4.7 4.6	Max Volume (m ³) 16.7	Status	
	Event 60 min Winter 120 min Winter 180 min Winter 240 min Winter 360 min Winter 480 min Winter	Level (m) 89.432 89.414 89.385 89.357 89.312	Depth Co (m) 0.257 0.239 0.210 0.182	ontrol (1/s) 4.7 4.6	Volume (m³) 16.7		
	60 min Winter 120 min Winter 180 min Winter 240 min Winter 360 min Winter 480 min Winter 600 min Winter	(m) 89.432 89.414 89.385 89.357 89.312	(m) 0.257 0.239 0.210 0.182	(1/s) 4.7 4.6	(m³) 16.7	0 K	
	120 min Winter 180 min Winter 240 min Winter 360 min Winter 480 min Winter 600 min Winter	89.414 89.385 89.357 89.312	0.239 0.210 0.182	4.6		0 K 🖛	
	120 min Winter 180 min Winter 240 min Winter 360 min Winter 480 min Winter 600 min Winter	89.414 89.385 89.357 89.312	0.239 0.210 0.182	4.6		0 11	
	180 min Winter 240 min Winter 360 min Winter 480 min Winter 600 min Winter	89.385 89.357 89.312	0.210 0.182		15.5	OK	
	360 min Winter 480 min Winter 600 min Winter	89.312		4.5	13.6	O K	
	480 min Winter 600 min Winter			4.3	11.8	O K	
	600 min Winter	07.201		4.0	8.9	OK	
				3.6 3.1	7.3	O K O K	
	a a man manour			2.8	5.7	O K	
	960 min Winter	89.250	0.075	2.3	4.9	ОК	
	440 min Winter			1.7	4.0	ОК	
	160 min Winter 880 min Winter			1.3 1.0	3.4	OK	
	320 min Winter			0.8	2.5	O K O K	
	760 min Winter			0.6	2.2	OK	
	200 min Winter			0.5	2.0	ОК	
	640 min Winter			0.4	1.9	O K	
10	080 min Winter	89.203	0.028	0.4	1.8	ОК	
	Storm Event	Rain (mm/hr)	Flooded Volume	Volu		me-Peak (mins)	
		(,	(m ³)	(m ³		(
	ALC: NO. LANSING MALE						
	60 min Winter 120 min Winter	13,524			25.9	46	
	180 min Winter	6.145			81.6 85.3	84 118	
	240 min Winter	4.980			88.1	150	
	360 min Winter	3.676		4	2.2	210	
	480 min Winter	2.958			5.3	266	
	500 min Winter 720 min Winter	2.498			17.8	326 384	
	960 min Winter	1,751			i3.6	384 502	
	140 min Winter	1.289			9.2	738	
	160 min Winter	0.949			5.4	1104	
	380 min Winter	0.764			0.2	1472	
	320 min Winter 760 min Winter	0.562			7.4	2204 2912	
	200 min Winter	0.382			7.7	3640	
86	640 min Winter	0.333	0.0	9	1.7	4488	
100	080 min Winter	0.296	0.0	9	95.2	5240	

Feasibility Research

EIA, Flood Risk & **Transportation** Assessment

Urban Planning and **Design**

Integrated Transport Solutions

Infrastructure Development

Structural Design

Eco and MMC Focused

Tully De'Ath offers a range of excellent design services to a wide client base. If you want to find out more about the services we offer, please contact your nearest office on the details below.



Sheridan House, Forest Row, East Sussex, RH18 5EA 01342 828000 ph 01342 828001 fax

Unit 4, St Saviours Wharf, Mill Street, London, SE1 2BE 0845 850 8280 ph 0845 850 8281 fax www.tullydeath.com