Brian Weatherall Senior Drainage Engineer Durham County Council



Who are we

- Unitary Authority since April 2009
- 223,000 households
- 2230 square km, 862
 Square miles
- 12 major centres
- Population 0.5m



Drainage and Coastal Protection Team

- Team created in 2011
- 8 full time officers
- Responsibilities
 - Duties of the LLFA
 - Drainage Design
 - Capital Works
 - Coastal Protection



SAB

- Summer 2014 began to look into adoption ahead of the enactment of Schedule 3
- December 2014 ministerial statement
- January 2015 agreed first SuDS adoption



SuDS ADOPTION Initial thoughts

- Required
 - By mutual agreement
 - Guaranteed income to cover maintenance
 - Land must be transferred
 - Adoption agreement in place prior to sale of plots
 - Accessible and low maintenance
 - Fair and accountable
- Desirable
 - Adoption of open spaces



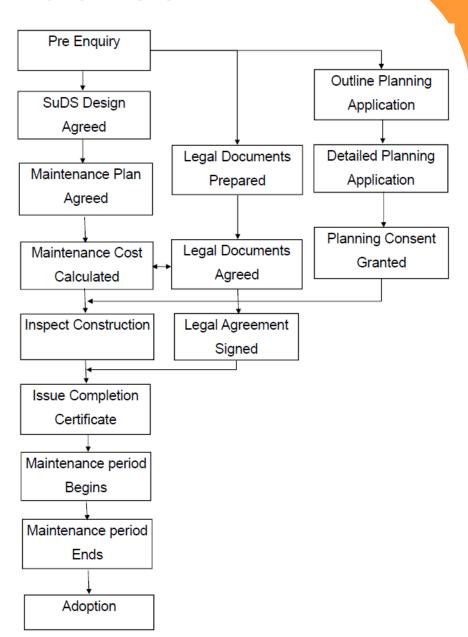
SuDS Adoption

- 5 Documents
 - SuDS Adoption Agreement
 - Rentcharge
 - Deed of Apportionment
 - SuDS Transfer
 - Deed of Covenant



SUDS ADOPTION PROCESS

- Three main activities
 - Technical Approval
 - Legal agreement
 - Planning consent



Altogether better

Example Site



Altogether better



Typical maintenance schedule

£150.00

£1.050.10

SUDS Maintenance

Area 850m2.

1) Litter Removal from area. 850m2 x 0.81 / 100m2 = £6.89 x 12 occasions per year £82.62 2) Grass Cutting on slopes and in bottom of basin and swale 850m2 x 0.0475 / m2 = £40.38 x 12 occasions per year £484.50 3) Scrub Clearance from Banksides 850m2 x £6.79 / 100m2 £57.71 4) Habitat mosaic 30% cut and remove to site wildlife piles 255m2 x £6.91 / 100m2 £17.62 5) Silt Removal - 8hrs x £83 /hr plus disposal of silt at £125 = £789 (once in 10 years) Cost peryear £78.90 6) Re-seed areas of poor vegetation growth £50.00 7) Repair of erosion / damage by re-seeding or turfing SUM £850 (once in 10 years) Cost peryear £85.00 8) Repair uneven surfaces and re-instate design levels SUM £1,750 (once in 40 years) Cost peryear £43.75 1) Inspect and Clean Control structures 1 hrs x £59 x 12 occasions per year = £708.00

2) Engineers Time 1 hrs x £35 x 12 occasions per year = £420.00

Drainage Maintenance – Total £1128.00

3) Administration Fee (invoicing/receipting) 56 properties =£560.00

Total cost per Year for Maintenance = £2738.10 + 10% unforeseen = £3011.91



Annual Grounds Maintenance - Total

Management Fee



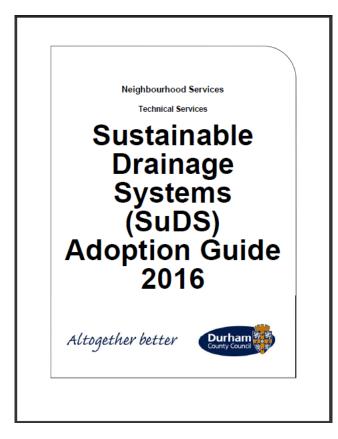
Typical apportionment schedule

Plot No	House Type	Plot Area (m2)	Rent charge	
39	851	186	£39.85	
40	651	176	£37.71	
41	651	126	£27.00	
		250		
42 43	851 955		£53.56 £50.99	
		238		
44	955	314	£67.27	
45	1054	249	£53.35	
46	651	113	£24.21	
47	1054	191	£40.92	
48	651	164	£35.14	
49	651	156	£33.42	
50	651	157	£33.64	
51	651	139	£29.78	
52	1054	186	£39.85	
53	651	124	£26.57	
54	1054	228	£48.85	
55	764	180	£38.56	
56	764	185	£39.64	
TOTAL		14,058		
t17 Annual rent charge		£3,011.91	£3,011.91	
	Total sqm	14,058	£53.78	Ave per property pa
	Rent per m2	£0.214248826		
			£4.48	Ave per property pm





Guidance



- Web page
- SuDS Adoption Guide
- Sample legal documents

http://www.durham.gov.uk/article/7363/Sustainable-drainage-systems





Questions

