Delivering SuDS in Kent – Design requirements and approval

Susdrain - Working Together to Deliver SuDS 14 November 2019

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Sustainable Drainage Team Leader



Topics

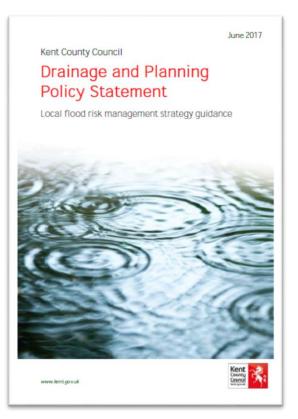
- 1. Policy
- 2. SuDS Delivery in Kent
- 3. Development context
- 4. Challenges
- 5. Successes
- 6. Partnership



Kent County Policy Layers



STRATEGIC: A Guide for Masterplanning for Sustainable Drainage in Developments POLICY: Drainage and Planning Policy Statement

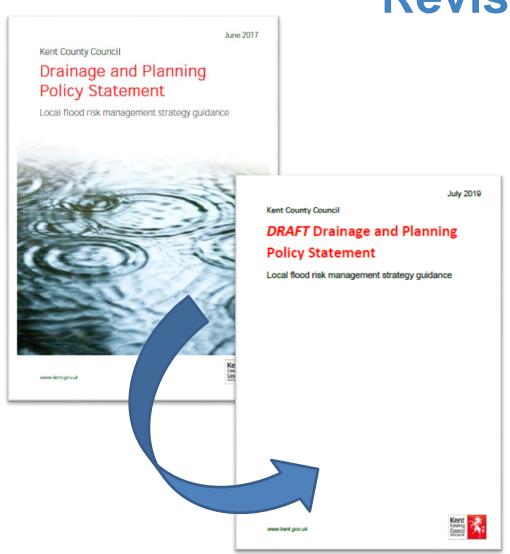


TECHNICAL DETAIL: Making It Happen





Revisions needed



- Original policy statement to support new role, 2015 & revised 2017
- As new NPPF was published, it provided for wider changes
- Consultation 2019
- Addresses:
 - Submission requirements
 - Multi-functionality
 - Verification



Revisions needed

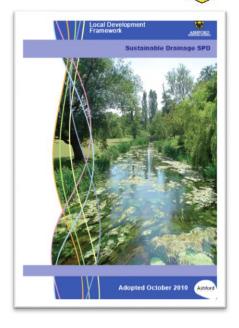


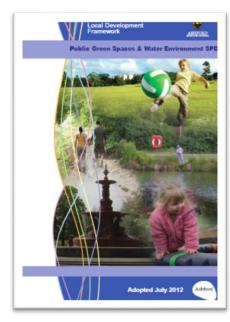
- Original 2007 document
- Revised, published 2019
- Filled gaps:
 - Wider flood risk, 1 in 100 year flood events
 - Other technical considerations:
 - Design storm events
 - Water quality
 - Catchment assessment
 - All types of SuDS



Local policy

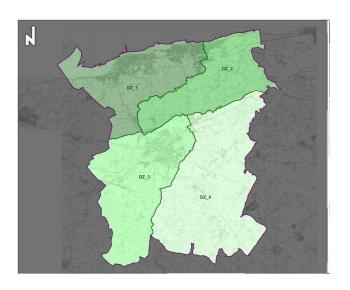






- SuDS 2010 & Open Space 2012
- Set rates
- Potential conflict with OS provision
- Revised discharge rates 2018





- Strategic Flood Risk Assessment
- Drainage pro-forma 2016
- Revised discharge rates



SuDS Delivery in Kent

- Primary driver has been management of quantity
 - Limitations of two tier authority
 - Excepting where supported by local policy
- Infiltration a priority
- Two appeal cases:
 - Demonstrated importance of technical requirements
 - PINS considers drainage a technical matter



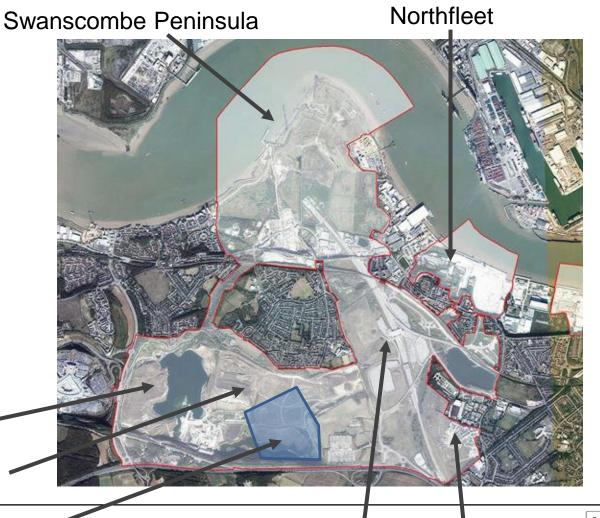


Ebbsfleet Development Corporation

- Applications previously granted by Gravesham & Dartford
- Brownfield land
- Train station 2007
- EDC took planning powers in 2015
- Drive to deliver 15,000 homes
- New Garden City Status

Castle Hill

Eastern Quarry



Ebsfleet Green

- Former Northfleet West Grid Substation
- Outline approval for 900 units 2005 by Dartford
- Demolition of substation 2013
- Remediation & archaeology 2014
- Drainage Statement submitted for Phase 1 and Infrastructure Phase, October 2014
- Reserved matters submitted January 2016





Challenges

Age of approval

Lack of ability to influence arrangements

Outfall location

No clear watercourse & highway culvert

- Physical characteristics of the site
 - Slopes and groundworks across site
 - Power lines
- Physical geometry of basins
- Residential perceptions
 - Demands on "useable" open space





Successes

Overall integration of development within site constraints

Due to diligent approach of applicant and consultant:

Cascaded system effective in providing treatment

Connected open space

Landscape scheme is diverse

From an approval and review perspective, management of proposal against original scheme

Accommodation of variations

Negotiation on final phases



Partnership Working

- KCC and Ebbsfleet Development Corporation
 - As a Garden City, very supportive and promote sustainable drainage approach
 - Engaged but hampered by existing planning conditions
- KCC and Consultant
 - WSP sought early engagement in 2014
 - Ongoing working on all parts of the submissions
 - Pilot for verification report
- KCC and Housebuilder
 - Redrow has stepped up for incorporation of a sustainable drainage approach – biodiversity delivery



Any questions?



