

**Micro Drainage Press Release – 28<sup>th</sup> May 2010**

**CRACKING THE CODE**

Code for Sustainable Homes: WinDes® W.12 builds in compliance auditing

**Newbury, Berkshire:** The latest edition of the industry standard WinDes drainage software suite incorporates automatic checks for compliance with the Code for Sustainable Homes. WinDes W.12, from Micro Drainage, features a Design Audit Wizard that builds the key requirements for compliance with the Surface Water Run-off section of the Code into the design process, including the stipulations on climate change.

The Wizard can be run to assess the proposed sustainable drainage system in terms of site runoff rate and volume. This rapid assessment allows engineers to ensure their designs are compliant prior to submission, avoiding extensive reworking at later stages of the project.

WinDes W.12 introduces the processing power and capacity of the 64-bit computing platform, allowing multiple modules within the suite to be run simultaneously, and to exchange data automatically.

The Code is the national standard for the sustainable design and construction of new homes. It measures the sustainability of a new home against nine categories of sustainable design including Energy, Surface Water Run-off and Waste. Mandatory minimum performance standards are set for some categories including Surface Water Run-off. Credits are then available to produce a 'starred' rating system giving a Code Level from 1 to 6. Within the Code, a Level 6 home would have a net zero carbon impact on the environment.

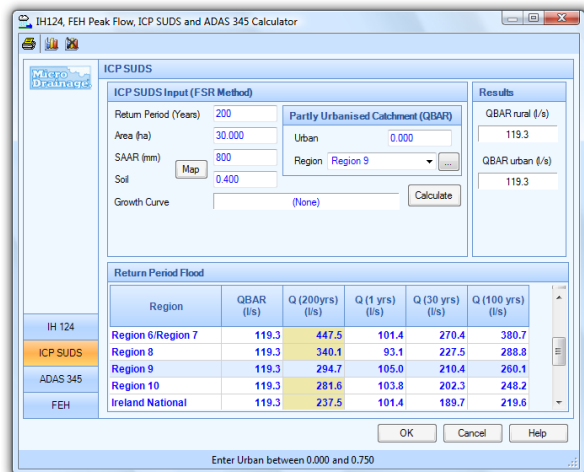


**Controlling surface water**

A mandatory element of the Code is the requirement for new developments to match or better the existing greenfield runoff rates and volume. WinDes enables the engineer to calculate the surface water runoff rate for a site within the Source Control module, and then check compliance within the Design Audit Wizard function of the APT module.

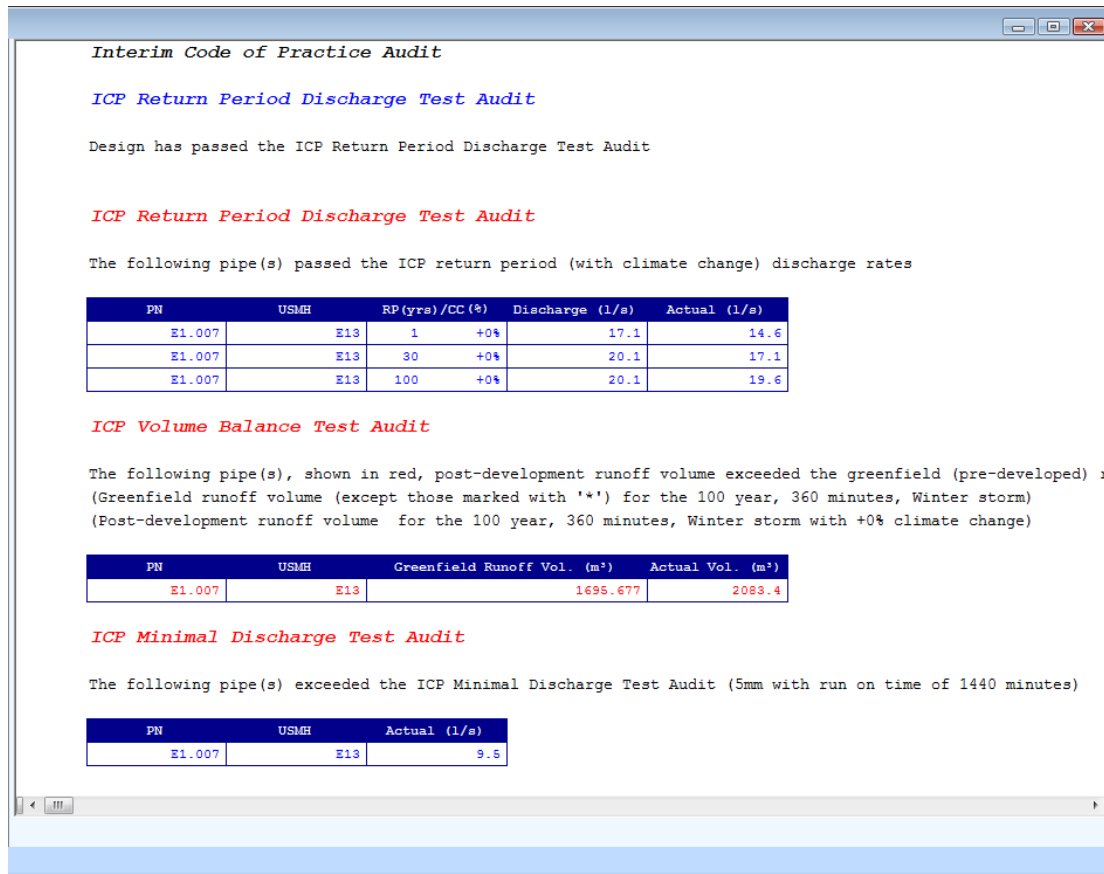
If the mandatory requirements are not met the software shows where the problem lies.

Jessica Johns, Senior Research Analyst with Micro Drainage, explains that the Code places heavy demands on new housing builds. "All new social housing must be built to a minimum of Code Level 3," she says.



### Quick compliance credits

The crucial benefit of making drainage systems compliant is that developers can get quick wins in terms of reaching the levels required. Two credits are awarded for using Sustainable Urban Drainage Systems (SUDS), with additional credits offered for mitigating the risk of flooding.



*Interim Code of Practice Audit*

*ICP Return Period Discharge Test Audit*

Design has passed the ICP Return Period Discharge Test Audit

*ICP Return Period Discharge Test Audit*

The following pipe(s) passed the ICP return period (with climate change) discharge rates

PN	USMH	RP (yrs)/CC (%)	Discharge (l/s)	Actual (l/s)
E1.007	E13	1 +0%	17.1	14.6
E1.007	E13	30 +0%	20.1	17.1
E1.007	E13	100 +0%	20.1	19.6

*ICP Volume Balance Test Audit*

The following pipe(s), shown in red, post-development runoff volume exceeded the greenfield (pre-developed) : (Greenfield runoff volume (except those marked with '\*\*') for the 100 year, 360 minutes, Winter storm) (Post-development runoff volume for the 100 year, 360 minutes, Winter storm with +0% climate change)

PN	USMH	Greenfield Runoff Vol. (m <sup>3</sup> )	Actual Vol. (m <sup>3</sup> )
E1.007	E13	1695.677	2083.4

*ICP Minimal Discharge Test Audit*

The following pipe(s) exceeded the ICP Minimal Discharge Test Audit (5mm with run on time of 1440 minutes)

PN	USMH	Actual (l/s)
E1.007	E13	9.5

"WinDes is designed to make it easier for engineers and developers to gain the credits they need for compliance," says Jessica Johns. "By automating many of the calculations needed to meet the requirements on flooding and drainage, we can reduce the time and money they may have to spend trying to achieve compliance in other areas."

"With the new government, it remains to be seen how the legislation will change. On 20<sup>th</sup> May Communities Secretary Eric Pickles laid an order suspending Home Information Packs with immediate effect, pending primary legislation for a permanent abolition. The roadmap for WinDes ensures that compliance with the Code will always be an inherent part of the design process."

For further information contact Micro Drainage on 01 635 582555 or visit [www.windesw12.co.uk](http://www.windesw12.co.uk)