

ASPIRE

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M-EC



New Division Launched



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MD'S Message

Founded at the height of the construction industry's worst recession, M-EC's directors, Eddie Mewies and Alexander Bennett, were under no illusion, although based on a combination of solid experience and expertise, their plan to grow their fledgling business into one of the region's leading consulting development engineers was more than ambitious.

Three years down the line, M-EC has a full time team of 20 – a combination of Chartered Engineers, graduates, technicians and surveyors focusing on transport, civil and structural infrastructure, flood risk, drainage and geo-environmental.

The business has just taken on its first apprentice and recently launched a Geomatics division, to complement the full range of services.

Eddie says: "We have a 'can do' approach, ensuring skills are available in-house to react swiftly and effectively to a client's requirements. We operate from early pre-planning stages right through to detailed design for every aspect of development, including site supervision and setting out services. We seamlessly partner our clients' projects and our reputation for added-value is definitely helping us to grow the business."

COVER STORY

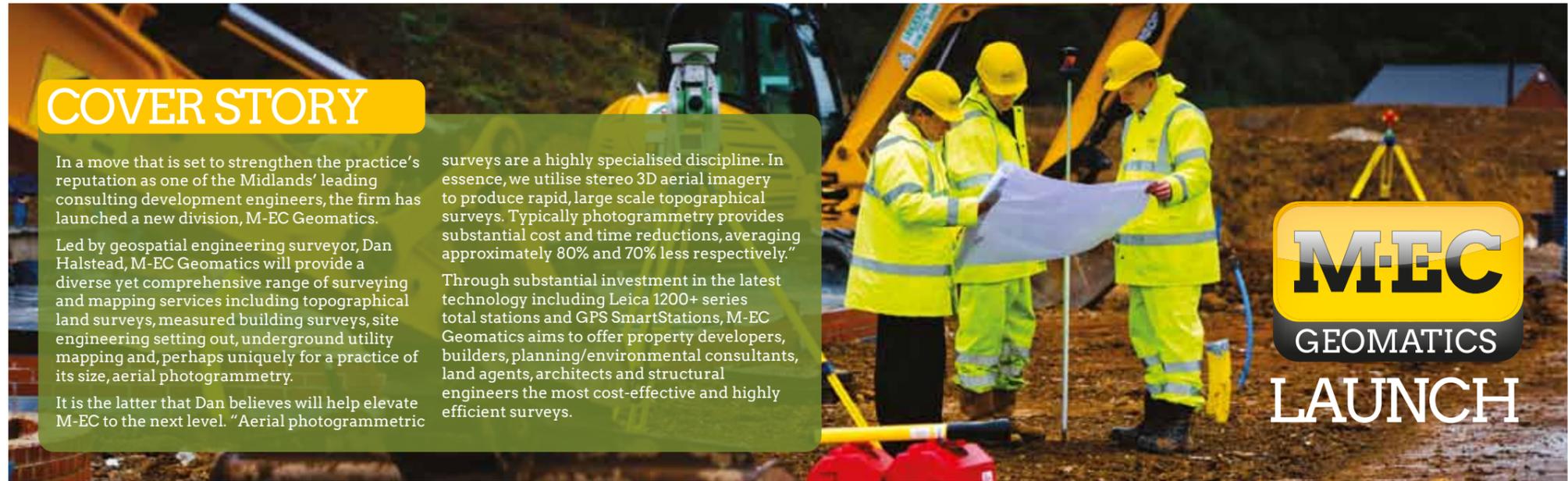
In a move that is set to strengthen the practice's reputation as one of the Midlands' leading consulting development engineers, the firm has launched a new division, M-EC Geomatics.

Led by geospatial engineering surveyor, Dan Halstead, M-EC Geomatics will provide a diverse yet comprehensive range of surveying and mapping services including topographical land surveys, measured building surveys, site engineering setting out, underground utility mapping and, perhaps uniquely for a practice of its size, aerial photogrammetry.

It is the latter that Dan believes will help elevate M-EC to the next level. "Aerial photogrammetric

surveys are a highly specialised discipline. In essence, we utilise stereo 3D aerial imagery to produce rapid, large scale topographical surveys. Typically photogrammetry provides substantial cost and time reductions, averaging approximately 80% and 70% less respectively."

Through substantial investment in the latest technology including Leica 1200+ series total stations and GPS SmartStations, M-EC Geomatics aims to offer property developers, builders, planning/environmental consultants, land agents, architects and structural engineers the most cost-effective and highly efficient surveys.



M-EC GEOMATICS LAUNCH

TAKE FIVE: new recruits at M-EC

M-EC is bucking the trend by adding to its rapidly developing team with five new appointments, representing a 25% growth in staff.

Bolstering the company's structural division is Jonathan Martin, a chartered structural engineer with extensive experience in large scale commercial projects and building information modelling (BIM). Joining the Geomatics department are head of geomatics, Dan Halstead; photogrammetric surveyor, Ken Hill and graduate civil engineer, Paul Hands. Collectively this trio has amassed over 35 years' experience in land and building surveying. Completing the new intake is Matt King, a services and utilities specialist. Matt will work closely with director, Alex Bennett at the pre-planning stage of a development.

M-EC's director Eddie Mewies said: "This is obviously a huge step in M-EC's business development strategy and we welcome all our new employees. It has long been our intention to expand our in-house team and increase the solutions we can offer clients, in essence, by providing a 'one stop shop'.



New Drainage Legislation and the facts!

Whether undertaking flood risk assessments or detailed infrastructure design for new developments, there is a raft of new policies, standards and Acts to follow. PPS25 is out and absorbed into the National Planning Policy Framework (NPPF), which condenses all planning policies into one standard for simplicity and to help speed up the planning process. But there's also a technical guidance document on flood risk which sits beside the NPPF, which regurgitates PPS25 to a large extent. So, from a flood risk perspective there isn't a great deal of simplification.

The Flood and Water Management Act was given Royal Assent two years ago, but is still potentially another two years away from full implementation. SuDS Approving Bodies (SABs), either County or Unitary Authorities shall be responsible for adopting SuDS, but we still await the National Standards. Whilst we wait, most Authorities are resisting to agree to adopt attenuation ponds and swales, which would seem somewhat out of the spirit of the Act.

Sewers for Adoption 7th Edition came out in October, ahead of the National Standards, but is still over a year late. This therefore only sets the design standards for foul drainage. There's a lot of confusion about how drainage should be designed, therefore we strongly recommend involving M-EC at the very earliest stages, as this will have an increasing impact on layout design. Drainage can no longer be an after-thought once planning has been obtained.

Building for Life 12



M-EC played its part in the launch of the new Building for Life 12 (BfL), the industry owned and Government endorsed guide for new home and neighbourhood design for developers and local authorities standard.

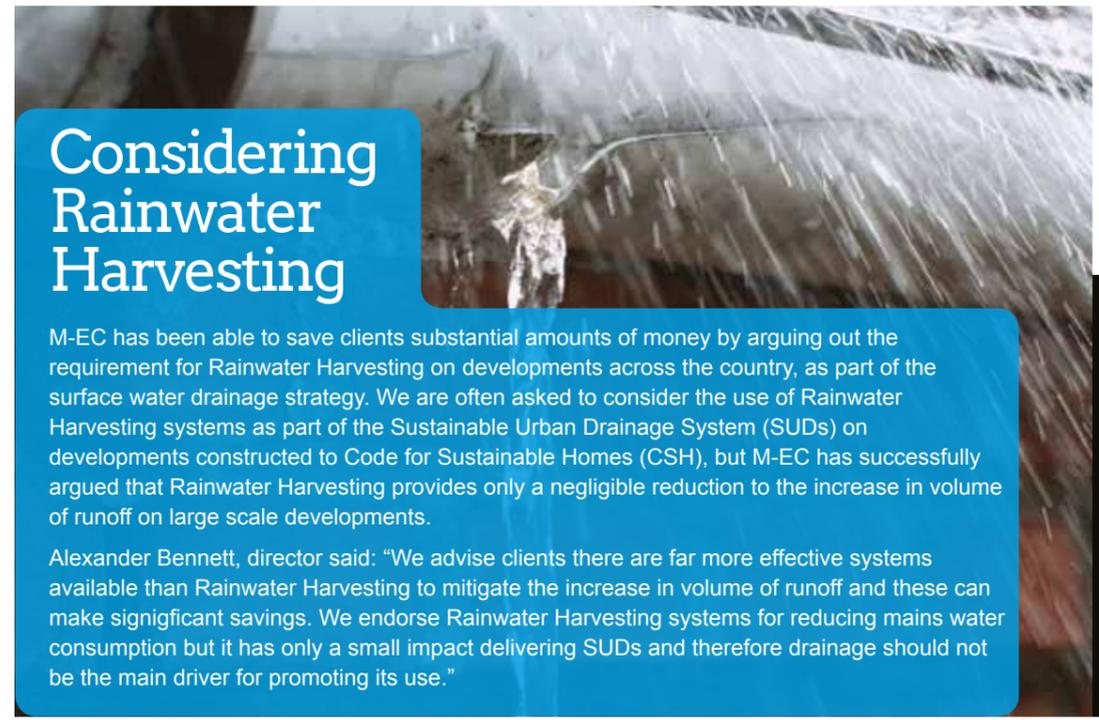
The event at Stephenson College in September, organised by North West Leicestershire District Council, Cabe at the Design Council, Design for Homes and the Home Builders Federation, brought together 115 members of the construction industry for the largest and most successful BfL launch to date.

Jonathan Martin, associate structural engineer said: **"BfL 12 is designed to help local communities become more involved in design conversations and in shaping development proposals. This standard coincides with the M-EC ethos of design and developing homes and schemes that meet the needs of its users."**

Considering Rainwater Harvesting

M-EC has been able to save clients substantial amounts of money by arguing out the requirement for Rainwater Harvesting on developments across the country, as part of the surface water drainage strategy. We are often asked to consider the use of Rainwater Harvesting systems as part of the Sustainable Urban Drainage System (SUDs) on developments constructed to Code for Sustainable Homes (CSH), but M-EC has successfully argued that Rainwater Harvesting provides only a negligible reduction to the increase in volume of runoff on large scale developments.

Alexander Bennett, director said: "We advise clients there are far more effective systems available than Rainwater Harvesting to mitigate the increase in volume of runoff and these can make significant savings. We endorse Rainwater Harvesting systems for reducing mains water consumption but it has only a small impact delivering SUDs and therefore drainage should not be the main driver for promoting its use."





Gravel Road Surface Passes the Test

M-EC developed and installed an innovative, golden gravel road surface system for Bloor Homes, having already provided civil and structural design services for a residential development in Houghton Conquest in central Bedfordshire.

Typically, a resin-bound gravel surface is costly to install and maintain and the developer would face a large Commuted Sum from the Highway Authority. However, M-EC's solution is both cheaper to manufacture and lay, utilising traditional surface dressing techniques and equipment.

Using this development as a trial site, M-EC was able to demonstrate to the Highway Authority that on-going maintenance and replacements would be cost-effective and

easily achieved using traditional surface dressing techniques. The new road surface system meets all requirements set by the Highways Authority and having undergone rigorous skid resistance tests at Vinci Construction's Technology Centre, achieved a Polished Stone Value (PSV) of 50.

Eddie Mewies, managing director, M-EC said: "We've developed a truly remarkable product that is set to save developers and local authorities a lot of time and money. Innovation is inherent in the M-EC ethos and we are determined to provide our clients with the best service and products on the market."

The specification was finalised in June 2012 and M-EC brought in specialist contractor, Topcoat to complete the works on site.

Would you accredit it?

Let's face it, our work is at the foundation of everything, so it needs to be right. We are pleased to announce that we are working towards ISO 9001, the recognised accreditation for quality management, which ensures systems and processes are in place for the efficient running of the business.

In addition, we are working towards ISO 14001, the recognised environmental management system which will fast become the industry standard, demonstrating M-EC's commitment to achieving

legal and regulatory compliance, ensuring we manage our environmental risks and commitment, now and in the future.

M-EC is also a qualified Assessor for CEEQUAL, the Assessment and Awards Scheme for improving sustainability in civil engineering, infrastructure, landscaping and public realm projects.

We are committed to achieving sustainability standards above statutory requirements, helping our clients and projects towards national recognition.

Apprentice Notes

My first month has been spent in the Flood Risk & Drainage division under the supervision of Paul Hands. I have completed various drawings and reports together with site location plans and assisted in the preparation of a Flood Risk Assessment for a site in Birmingham.

My main focus has been getting to grips with AutoCAD, the software used to create all drawings, and how to interpret raw data from ground investigations or soakage testing onto a template. In addition, I have been on two site visits in Leicestershire and Northamptonshire to undertake walkover studies and these have helped me understand how the practical side of the role relates to the technical one. Finally I was involved in a PR photo shoot and press release about my apprenticeship.

All in all a busy time but the variety of work remains interesting and everyone in the team is very willing to help; I am looking forward to the next step!

Jake

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