Delivering the NIA’s priorities is an opportunity to improve short and long-term horizon planning for UK construction

The National Infrastructure Assessment (NIA) and the long-term strategic vision it sets out for our infrastructure requirements from 2020 to 2050 is a great step forward for the sector. It clearly demonstrates the commitment, ambition and maturity of infrastructure in the UK.

The challenge now is for the construction industry to collaborate with clients and translate this into delivery. The NIA should act as a catalyst that drives the industry to build the capacity needed to manage a pipeline of multiple infrastructure projects coming forward at an unprecedented scale and pace.

2020 is set to be an important year in terms of infrastructure delivery across the UK. Major national projects such as HS2 and Hinkley Point C will be in full swing, with Highways England’s Roads Programme also forecast to experience a huge ramp-up in activity levels as projects across the strategic network come online.

As the Mineral Products Association (MPA) highlighted in its recent report Long-term aggregates demand & supply scenarios, 2016-30, there is a growing need to think forward beyond economic cycles, and plan for potential materials demand and ways to ensure this demand can be met.

Planning effectively for this increase will require genuine collaboration across the whole supply chain if this pipeline is to be successfully scheduled and delivered. Early allocation of workloads will be vital to facilitate the necessary preparation and resourcing for this surge in volume.

It is crucial that materials supply – and the planning, skills and logistics that sit alongside it – isn’t overlooked. While the challenges around skills and workforce capacity facing the sector are well documented, less airtime has been given to planning for the physical resources needed. The misconception that construction materials supply is a tap which can be instantly turned on must be acknowledged and addressed if we are to support effective delivery of projects through domestic industry and skills.

As a sector, we can help this process if we are able to gain early insight into the detailed infrastructure plans that consider capacity challenges in the round: people, plant and materials.

Both shortterm and long-term horizon scanning will be vital to help smooth some of the potential delivery challenges that could accompany a sudden stepchange in activity from 2020. While consultancy from contractors and suppliers can support this process, good client procurement and smart strategies are crucial to driving projects and programmes.

Improved early engagement across the supply chain will be a key factor.

By beginning discussions sooner, clients can ensure that materials suppliers have adequate time to coordinate supply logistics, recruit and build skills, secure any planning consents, and bring sites and plants online to deliver the capacity and volumes required.

Embedding a new, more collaborative approach to supply chain working is a real opportunity to explore new ways of working and collaborate to build a manageable programme of projects.

Crucially, it also supports the UK’s ambitions to reduce the cost of infrastructure projects, unlock real innovation, boost productivity and add value for clients.

The launch of the National Infrastructure Assessment should receive a warm welcome from our industry, but it is also a call to action. To meet the demands of an ambitious infrastructure pipeline and drive real innovation that supports UK investment and skills, it’s vital that we work together to maximise engagement across the supply chain and ensure that we have the ability to rise to the challenges ahead.

Jeremy Greenwood, MD National Commercial and Construction Solutions at Tarmac
Armaphalt - What you want, when you want, where you want

What is Armaphalt

Armaphalt is a hot site mix asphalt that conforms to all relevant material specifications. Armaphalt and the process involved allows for a more flexible and effective maintenance program. Using Armaphalt will significantly increase the flexibility and productivity of your maintenance/reinstatement teams. Whilst at the same time helping save time and money and increasing quality.

Advantages of using Armaphalt

- **Zero Waste** – Anything you don’t use, you can simply reuse the next day or shift.
- **No down time** – No need to travel to an asphalt plant and then sit in plant traffic waiting for your material.
- **No extra charge** – Having the portable plant and material on hand 24/7 means you will have no need for paying asphalt plant opening charges. Whether this is night shift or weekend works.
- **Increased productivity** – Being able to go direct to site, results in increased time for gangs to complete sites.
- **Reduction in potential for failures** – Having the hot material on site at the correct heating and laying temperatures allows for reduction of air void/compaction related failures.

For a demonstration of Armaphalt and this process please contact:

Hayden Davie on; 07793250771
haydend@joblingpurser.com

Jobling Purser

New website for traffic management products

You may have noticed over the last couple of days that our website [www.tmp.solutions](http://www.tmp.solutions) looks a bit different, well a lot different actually. We’ve redesigned it from the ground up to better showcase who we are as an organisation and as a solutions partner for the highways and car park industry.

TMP Solutions, or Traffic Management Products Ltd as we used to be known, will always be synonymous with traffic bollards. But we’re more than that. We are an innovative British company with an experienced team passionate about delivering effective, long-lasting solutions over a wide range of product groups. For example, did you know that we make some of the most energy efficient sign lights and solar products available? As well as one of the most effective and easy to install passive chevron systems on the market today. And, not forgetting our brand new street furniture bollard range. We make the street bollards right here in the UK from a recyclable polymer. The innovation is that they fit both the round and square industry standard sockets that are already in the ground, as well as our new LockSafe® socket.

What you’ll find on our new website....

- Team TMP – who we are, what we’re about, our culture, values and why we’re far more than just bollards.
- Upcoming events and industry news.
- New and improved product solutions for highways and car parks with all new photography, so you can really see the quality and effort we put into everything we make.
- Easy access to data sheets and installation guides.
- Plus all the contact details you need to get in touch with us; maps, emails and mobile numbers of our service team.

What we’ve got planned...

Even more case studies of our solutions in action and how they can deliver results and cost savings.
Product showcase videos.
And much more...

Don’t miss out

Be sure to follow TMP Solutions on LinkedIn and Twitter, or sign-up for updates on our website.

P.S. Did we mention we have an awesome new range of street bollards that fit your existing ground sockets? Go on, have a look, they’re really good and could save you up to 30% on what you’re paying now*...
Ilyass Meslek, engineer at CCL, a specialist in engineered solutions for structures, discusses the design considerations for a road-over-rail replacement project in Blackpool where CCL was brought in to advise on the bridge bearing requirements during the early design stages.

With its kiss-me-quick hats, world famous tower and seven-mile stretch of sandy beach, Blackpool is a town built on tourism. So when a road-over-rail bridge needed to be replaced to enable electrification of the railway line below, it was vital that the job was delivered during the tourist ‘off season’ to minimise the commercial impact on the holiday hotspot. Moreover, Blackpool’s holiday season is longer than most. Beginning with the Easter break, it continues right through to early November when the celebrated illuminations along the Golden Mile are switched off to make way for Christmas decorations.

The bridge in question is on Plymouth Road. In addition to being on a major route into the town, it is in a residential area and above a busy rail line, which, aside from two weekend closures, had to remain operational throughout the programme.

The reason for the bridge replacement was the electrification of the rail line as part of a programme of works across the North West of England, creating the need for a larger clearance between the railway line and the road above. Blackpool Council considered a number of strategies to minimise the impact of the works, including the possibility of jacking up the existing bridge or lowering the section of line; however, the close proximity of a station to the relevant section of line ruled out the lowering option and the poor condition of the bridge, due to its age and the corroded steel within the structure, meant that jacking it up was not a viable option either. The only feasible strategy was to develop a programme of works that would enable replacement of the structure, including raising of the soffit, within the five-month off season window with works taking place during overnight rail line possessions.

Site preparation and safety

Designed by Wilde Consulting Engineers and delivered by Story Contracting for Network Rail, in association with Blackpool Council, the project required removal of the existing three-span deck, which equated to around 1,000 tonnes of concrete and steel.

Because the road closure was limited to the tourist off season, Story Contracting worked closely with Blackpool Council to develop a programme that enabled diversion of services, including high voltage, low voltage, telecoms, fibre, gas, street lighting and a 750mm water main prior to demolition in a single phase operation. This was achieved by designing a new edge beam to the eastern side of the existing bridge which could be installed pre-demolition, creating an additional lane so that two lanes of traffic could be maintained during the service diversions.

Once this was in place, the diversions were carried out as part of a three-month enabling phase. This solution provided a cost saving of £500,000 compared to the original plan for a two-stage diversion, as well as reducing programme risk.

A temporary service bridge was also constructed during this enabling phase to maintain pedestrian access throughout the scheme, thereby avoiding any requirement for a level crossing and reducing any risk to public safety associated with the scheme.

Due to the railway line below, the demolition works to the bridge could only be carried out at night when there were no train services and the line could be isolated. This gave the contractor an operational window of just six hours during the week and eight hours at weekends. Story Contracting used hydraulic bursting demolition techniques to minimise noise during the demolition phase, due to the close proximity of residential properties, and monitored noise throughout the programme.

Bridge construction

To ensure construction of the new bridge could be carried out over a minimal road closure period, the new bridge deck was constructed with 18 prestressed precast concrete beams per span, with 54 prestressed precast concrete beams in total for the three spans. The new bridge deck was constructed using the existing abutments and the concrete beams were lowered into position following installation of 108 custom-designed and manufactured elastomeric bridge bearings, using a 1,000-tonne lattice crane. With a combined weight of 600 tonnes, the precast beams were installed in day and night time operations over just two 54-hour weekend railway possessions. CCL was brought in to advise on the bridge bearing requirements of the project by Wilde Consulting during the early design stages of the project to ensure that the maximum vertical loading, transverse force and rotational movement could be achieved within the constraints of the bearing design. As a refurbishment project utilising the existing abutments and piers, the space available for the bearing shell and, consequently, the bearings, was limited to the existing structural parameters.

The existing structure also influenced the bridge design itself. Plymouth Road Bridge is a three-span bridge with the largest span in the centre, supported by a pair of central piers. If all three spans had been the same length, the replacement bridge could have been designed as a continuous structure. However, because the spans were different lengths, they were designed as semi-discrete structures to allow rotational
movement at the piers. An infilled slab ties the three spans together while each span can act independently.

Among the other key design criteria was the requirement for a high-containment parapet running the whole span of the bridge to safeguard pedestrians and mitigate the risk of any vehicles falling onto the railway line in the event of a road traffic accident. This parapet had to be factored into the design considerations for the bridge bearings because it increased the forces for the edge beams of the central span.

**Creating the central span**
The maximum force requirements for each element of the bridge were generated in structural analysis software and, for the majority of the 106 bridge bearings, the design requirements were for vertical forces of up to 750KN, transverse loading of up to 35KN and rotation of up to 0.006 radians.

The precast bearing shelf was fabricated in three sections for ease of transport and CCL had to design the bearings to fit the dimensions of the shelf, which were restricted by the abutments and pillars.

Speed of manufacture was also critical, as the bearings had to be installed within the prescribed window in the schedule, in line with agreed railway possessions. The CCL team developed a series of design iterations for the bearings so that the design and delivery team could agree the best-fit solution for the project. The bearings were then manufactured and delivered to site with guidance on the most appropriate fixing methodology.

Once the bearing shelves were in position, surveyors marked out the locations for each bearing across the length of the shelf and each bearing was secured in place using an epoxy mortar.

With all the bearings in place, the precast beams were lowered into position onto the bearings with a narrow void between each beam. All the beams were cast with transverse details to enable steel ties to be threaded through the new structure, tying the beams together. A concrete pour, totalling 800 tonnes of concrete poured in situ, filled the void between the beams to create a single, monolithic structure and a level deck 150mm above the surface of the beams. A bridge deck waterproofing surface was then sprayed onto the concrete deck prior to installation of the road surface.

**Early completion**
Throughout the project, keeping the programme on track was business critical for both the contractor, Network Rail and Blackpool Council and the project was successfully completed three weeks ahead of schedule.

*Blackpool Council*

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**Ennis-Flint, Inc. Announces Acquisition of VERNISOL SPA**

Greensboro, NC, USA and Chorley, UK, March 19, 2018.—Ennis-Flint, Inc., the world’s largest manufacturer and supplier of road marking materials, announced today the planned acquisition of the materials manufacturing business of VERNISOL SPA. The acquisition includes the Italian manufacturing facilities in Spinadesco and Turin, both of which provide high-quality and reliable products. The strong, experienced management team, workforce and sales team will remain in place to provide uninterrupted service to our valued customers. The managing director, Bruno Trentini, will remain in his current management position as well as remain a significant shareholder.

“My team and I are very excited to join the Ennis-Flint group” said Mr. Trentini “Our facilities in Italy and our technical knowledge in traffic paints and MMA/cold plastic adds to Ennis-Flint’s broad product range, which includes bitumen, thermoplastic, anti-skid, preformed thermoplastic and epoxy. With this, we are confident that we will be able to offer the best in the road safety industry. We are going to use this great opportunity to integrate ourselves with Ennis-Flint in the European, Middle Eastern and African markets by providing customers with the products and brands that they want and the quality and service that they deserve.”

As the two companies are integrated over the next several months, our number one focus will remain on our customers.

The transaction is expected to close in the next 30 days.

*Ennis Flint*
Road Surface Re-texturing Techniques

To the highway engineer, surface re-texturing provides a quick, efficient and cost-effective way of maintaining skid-resistant road surfaces. To obtain the best results it is essential to ensure the correct re-texturing technique is employed and to plan the work carefully. The speed of the re-texturing operation and the short duration of the works helps to minimise road user delays and provides a significant benefit to both highway authorities and motorists.

The purpose of re-texturing is to restore adequate levels of micro and/or macro texture and thereby wet skid resistance. This latter quality plays a major part in crash / collision reduction and was highlighted by the initiative of the Department for Transport in 1987 when the Minister introduced minimum mean summer SFC values for motorways and trunk roads. The importance of surface texture has been highlighted by TRL Report LR 286, which stresses that texture depth is important under both wet and dry conditions.

Up to date guidance is available in the Design Manual for Roads and Bridges (DMRB): HD32 and HD37.

The DMRB is available from: http://www.standardsforhighways.co.uk/ha/standards/

In the UK the following re-texturing techniques are available;
• Shot Blasting
• Fine Milling
• Longitudinal Scabbling
• Water Jetting

The highway authority should employ a competent Contractor with a demonstrable track record and have in place appropriate safety, quality and environmental management systems. National Highway Sector Scheme 13 is designed to regulate workforce training, competency and quality for operatives and supervisors working on the highway network. Re-texturing is incorporated within NHSS13 and client bodies are encouraged to require contractors to be registered to NHSS13 in tender documents. Some contractors may be registered to other applicable sector schemes.

SELECTING THE CORRECT TREATMENT
It is essential to choose the correct re-texturing treatment and confirm the existing surface is suitable for treatment so the required level of wet skid resistance can be restored for the required length of time. Choose the right technique and it is likely that the process can be undertaken again at the same location and on the same surface.

Whilst process specific specifications are usually available, it must be remembered that the resulting treatment can only be as good as the surface that is being treated. It is only improvements in texture that will be achieved, NOT improvements to the condition of the surface course itself. Where the aggregate in the existing surfacing is not capable of resisting the polishing action from traffic experienced at that site then the restoration of skid resistance will only be temporary.

The following are some of the factors the client should consider in selecting the appropriate treatment:
• Assess the suitability of a particular re-texturing process against the type and condition of the existing road surface (what needs improving? Micro, Macro texture or both?)
• Assess the potential weather implications (not all processes are weather independent)
• Ensure a consistent retextured finish has been achieved across the full treated width
• Seek professional advice.

Mechanical and/or pressure wash sweepers as appropriate are used to clean the road after re-texturing is carried out.

Re-Texturing Techniques

Impact Methods
Processes in this category involve striking the road surface with either hard-tipped tools or hard particles (steel shot) to effectively improve skid resistance and / or texture depth. These processes are effective where the loss of skid resistance is mainly due to polishing of the aggregate particles and include:

Shot Blasting
• Uses steel shot projected at high speed from a rotating wheel – variable treatment controlled by forward speed, velocity and size of steel shot.
• The treatment is controlled and consistent over a full lane width. Suitable on all surface types depending on surface conditions.
• The process is fully captive and dust free • both shot and arisings are collected and separated during the process. Secondary sweeping is not required.
• Increases, restores and optimises the skid resistance level of a surface by improving both the Micro and Macrotexture in one operation.
• The process does not alter the structural integrity of the surface and can be carried out several times on the same surface.
• Road features such as ironwork and road studs do not need to be removed prior to treatment and along with road markings can be instantly avoided.
• The process has no detrimental effect on transverse or longitudinal joints.
• A dry weather process although specialist lorry mounted jet road drying machines are available.

Longitudinal Scabbling
• uses hardened tips set into steel washers, loosely mounted side-by-side hydraulically loaded and drawn / rotated (on several axles around a central axle) along the road surface
• arisings are swept up separately
• micro texture improved by cutting through the surface aggregate and exposing new aggregate faces, creating a corduroy effect
• initially surface texture depth also improved by creation of longitudinal grooves
• relatively slow to carry out and substantial quantities of material are sometimes removed from the road surface, particularly where the existing surface is deformed (wheel track rutting)

Fine Milling
• rotating milling drum with tungsten tipped or diamond tipped tools
• texture can be increased or reduced by configuration of travel speed & drum speed
• treats full surface
• arisings are loaded direct onto tipper truck
• cuts into the surface of individual pieces of aggregate
• can be used under all weather conditions
• a fine milling retexturing road planing

Continued on pg 6
machine operates with precise electronic levelling equipment and sonic averaging beams which also improves the surface profile longitudinally & transversely.

To achieve accurate results a 2m wide planer is to be used, a 1m wide planer does not have the ability to match cut to cut. This process can be used on concrete as well as Bituminous Surfaces. Fine Milling is a very quick process and is best suited to larger areas.

**Fluid Action**

**Hydro-retexturing**

Hydro-retexturing uses water under ultra-high pressure to remove excess bitumen, surface contaminants, rubber deposits and thoroughly cleans the surface aggregate.

- It restores macro texture of the road surface by removing excess surface bitumen from between the aggregate.
- It can restore micro texture of the road surface by removing the binder film covering the aggregate thereby restoring the original texture of the road stone.
- It is an effective treatment consistent over the machine width (width of treatment can vary from about 150mm to 2m per pass). New aggregate surfaces are exposed from under bituminous films and the texture depth is improved.
- Treatment can be carried out to the full width of the road or to the wheel tracks only.

**RSTA**

**Cell Systems and Tree Root Protection**

The increasing population of the UK inevitably brings a demand for new housing developments. Given many new developments come into conflict with existing trees, the current landscape agenda revolves around the relationship between demands of the built environment and green spaces.

Pressure is applied to developers to consider the green credentials of their developments. Organisations such as the Arboricultural Association, the Institute of Chartered Foresters, TDAG and CIRIA, in addition to local authorities and private consultants, encourage the inclusion of new trees to ensure that developments include a long-term commitment to green space.

We are all very aware of the benefits that large healthy trees bring to the environment. The likes of iTree technology offer real-time measurement of tree stock value in terms of carbon management, water management and aesthetics.

Developers might say there are not always suitable spaces in which to plant trees; the only available land is often covered by hard landscaping. However, well-established products are available which can be used to promote the growth of large trees in these areas. Both TDAG and CIRIA offer guidance and case studies on how these systems can be successfully employed.

However, the benefits to the urban community’s air quality, water and aesthetics from an ancient oak cannot be understated. You can’t replace a 300-year-old oak with a sapling, so we should not overlook the need to protect and maintain as much of our existing tree stock as possible.

There are many aspects to trees on development sites. Adherence to BS5837:2012, the British Standard for tree inclusion, is vital to this ambition during the planning, design and construction stages.

The provision of suitable sub-base reinforcement systems is hugely important. We now understand how these systems perform, thanks to in-depth testing. Three-dimensional cell systems deliver significant reduction in the compaction of the soil rooting environment around tree roots.

Meanwhile, new developments in paving technology mean roads, car parks and even truck parks and bus lanes can be designed above tree roots with confidence that at the very least tree root health will not be harmed.

Although constantly referred to within arboricultural reports supporting planning applications in relation to retained trees, ‘no-dig’ is an over-used and misconstrued term and not always possible.

Often the reality of site conditions is that existing surface vegetation – weeds, brambles etc. – requires effectively a ‘reduced-dig’ to remove such organic matter to install the 3D cellular
vegetation that decays or regenerates within the webbing surfacing.

The specification and installation of 3D webbings works best when bespoke, detailed and product-supported materials are used. A Site Specific Arboricultural Method Statement (SSAMS) is essential to ensure tree protection compliance with planning approval for any given project.

In recent years, it has become obvious that a ‘one size fits all’ sub-base grading is not always the best solution. Smaller grades of aggregates do work in certain situations, certainly in the thinner depths of 3D cell systems such as the 50mm, 75mm and 100mm deep sections.

The inclusion of heavy grade, non-woven geotextiles under and within the construction layers are proven to reduce the impact on heavy metals and oil contamination of the existing soils, all of which are major advancements from the early 3D cell systems.

I have nearly 20 years of successful construction projects to reinforce the positive results of the technology. Such proof that these systems work – and the complete acceptance of them by the arboricultural profession – have contributed to the ease with which planning consent has been granted for even the most challenging of developments.

Other simple improvements include how we provide suitable edging restraints to these systems. Traditionally, timber edging was preferred but more recently it has been proven that concrete kerbs can be incorporated without the need to excavate a trench for the concrete haunching.

Kerbs are now easily integrated into 3D cells, adding strength and improving performance of the system. To some this might seem a small and insignificant point, but it minimises disruption, increases the life of the system and is easier and faster to install.

For further information email sue.grief@outlook.com

Roy Partington, Director of Geosynthetics, Wrekin Products

Navigating the highways industry procurement process; how can SMEs find their way?

The UK government has committed to 33% of central government procurement spend going to small and medium sized enterprises (SMEs) by 2022 (previously 2020). The latest figures show that spend with SMEs in the financial year 2015/2016 was at 24%. So there is still some way to go, but why does this matter and how does it relate to us in the highways industry?

It matters because, while working with only a few large contractors may be convenient and may offer efficiencies in the tender process, it leaves government open to risks that seem only too obvious in the wake of the Carillion collapse. Furthermore, many sectors rely on SME’s to deliver innovation in products and services, which larger organisations are not incentivised to research and develop.

Within the highways industry there are good reasons on occasion to work only with very large organisations; when contracts are both long running and high value. Arguably, the way the strategic road network is run, means that the provision of a broad range of services under one contract is simply too much for an SME to handle. However, Highways England represents the Department for Transport’s (DfT’s) second largest budget, so this area needs to change if there is a commitment to increasing government spend with SMEs.

Highways England’s first funding period RIS1 was procured through the Collaborative Delivery Framework, which took a one size fits all approach that was perhaps only appropriate for large Tier 1 suppliers. A more flexible approach has been designed for RIS2 entitled Routes to Market. This will be split into the regional investment programme, the smart motorway programme, complex infrastructure projects, and maintenance and improvement activities. This change should contribute to Highways England achieving the greater use of SMEs.

Highways England have also started to bring the decision making for a number of strategic route areas in-house with their asset-led delivery model. This should allow for greater flexibility, but after talk of ‘refinements’ to the approach it is not clear how this will progress.

There are valid question to ask of this new strategy. Is it asking too much of government-owned companies; asking them to take on more responsibility while facing spending cuts? The cuts mean government departments are ever more stretched and will likely want to manage just one contract rather than many if they lack the capacity to manage the whole
supply chain. With reduced budgets, departments are also less able to absorb the cost of projects overrunning or exceeding budgets. This makes it arguably more attractive to outsource the whole project so they essentially outsource this risk. SMEs cannot take on this level of risk. They also suffer when suppliers higher up the chain become so large that they take liberties-the latest in the Carillion disaster sees small businesses claiming that Carillion used delaying tactics and withheld money as security on work in order to bolster its balance sheets.

Is there a way for SMEs?
There are ways of working designed to overcome these issues. Project Bank Accounts are a government payment mechanism that allows payment direct to Tier 2 and 3 companies from a bank account set up specifically for a single scheme or framework. They place a higher burden on the client, but offer savings in the management costs paid to Tier 1 suppliers.

Ways of working that encourage greater collaboration could also be part of the solution. For example, alliance contracting where companies work together to deliver a project or service. Alliance members work towards a shared success and shared measures. Similarly, Vested Outsourcing is a way of working that focuses on outcomes rather than transactions.

So how does a SME survive in the highways industry?
Clearview Intelligence utilise various routes to get our solutions onto the network. One successful route is supplying technology direct to Highways England through our inclusion on framework agreements such as the Crown Commercial Service’s Traffic Management Technology 2 (TMT2) framework.

We also have strong collaborative relationships with Tier 1 suppliers where our solution design has resulted in award-winning installations. For example, our dynamic speed warning system on the A75 Stranraer to Gretna Green delivered for Scotland Transerv, and an Intelligent Road Stud Scheme on the A720 when working for BEAR Scotland and Amey. These relationships allow us to develop innovative solutions to complex problems, so making the most of the agility and creativity our small size affords.

Finally, we benefit from the reputation of our products that sees them built into the solution design regardless of who is supplying the solution.

Even with the reputation we have gained as innovative solution designers and the fact that we’ve been in the industry since 1974, we still invest heavily in responding to tenders and maintaining relationships with Tier 1 suppliers. It’s hard to imagine how a new entrant to the market can break through and compete. But that’s what needs to be encouraged if we truly want to support SMEs and reap the benefits of innovative thinking and cutting-edge technology on our road network.

Clearview Intelligence

Blakedale brings highway safety and quality to onshore wind farms

Blakedale has branched out by supplying more than 6,000 Flexible Cable Route Marker Posts to five ScottishPower Renewables operated windfarms across Scotland and the North of England.

The Flexible Cable Route Marker Post has been adapted from Blakedale’s innovative Fleximarker post, which is extensively used to highlight hazards along the UK’s roads.

“As well as being highly visible in extreme weather conditions, our post will also flex by up to 90 degrees and is self-righting after impact,” says Carmen Bowley, Joint Managing Director of Blakedale.

On windfarms, this unique flexibility and spring-back mechanism means that Blakedale’s cable route marker posts are less likely to be blown over in severe winds or displaced by sheep, cattle or deer using them as scratching posts. So operators like ScottishPower Renewables no longer have to go to the expense of correcting or replacing the posts on a regular basis.

“Cable route markers are an important aspect of windfarm safety as they are used to signal the location of buried high voltage electrical and fibre optic cables,” explains Gordon Anderson, Senior Project Manager—Construction at Scottish Power.

A variation of Blakedale’s Flexible Cable Route Marker Posts is also frequently used as Snow Poles on a number of other windfarms. In this role they help to guide maintenance vehicles and their drivers safely along access tracks in adverse weather or ‘white-out’ conditions.

Both versions are quick and easy to install into soil using an integral spike and barb. In ground where there is low cohesive strength, installation can be reinforced with a concrete pad foundation around each post. For the highways sector, Blakedale also offers Fleximarker Hi, for hard landscapes.

Blakedale has been supplying products and services to the highways and utilities industries for over 30 years and is widely recognised for its commitment to safety and innovation. In addition to its established Road Marker Posts division, the company also operates a successful self-drive hire fleet business, specialising in the hire and sale of Impact Protection, Traffic Management and Welfare Vehicles.

For more information, please visit www.roadsafety.co.uk/renewable-energy.

Blakedale

The durable and flexible windfarm posts have been adapted from Blakedale’s Fleximarker hazard delineator post, which is extensively used along the UK’s roads.

Almost four years after installation and Blakedale’s posts are still standing strong at Coal Clough Windfarm in Burnley.