



Contractors Mechanical Plant Engineers

NATIONAL NEWSLETTER

Members,

A very warm welcome to the latest issue of the National Newsletter.

The end to Covid measures may be in sight, as the Government suggested social distancing could be scrapped completely by next month.

The Prime Minister yesterday unveiled the return of 'sensible hugs' as he gave the green light for close friends and family members in England to embrace once more from May 17 - after months of forcibly being apart.

In further good news the premier also suggested Britain's Covid nightmare could be over by June 21, saying that even rules such as one-metre plus could be removed from that date onwards.

With this in mind, as an organisation which relies heavily on social activity, the CMPE may finally be able to hold branch and national meetings very soon.

As editor of this newsletter and being the current chairman of Preston & Fylde Branch, I am contemplating holding our long awaited Branch AGM on Thursday 1st July 2021. This still has to be organised and is only on my wish list at the moment, but I can assure all our members that it will happen sooner rather than later, if at all possible.

If any of the other branches around the country are putting plans together to commence your long awaited social programme, please forward your proposed schedule and I will ensure you get full coverage to all members.

The following article is a list of the “do’s” and the “do not’s” coming out of Covid.

David Nicholson
Editor

What's changing on Monday 17 May in England?

- People can meet in groups of up to 30 outdoors
- Six people or two households can meet indoors with overnight stays allowed
- People urged to be cautious about hugging close friends and family
- Pubs, restaurants, bars and cafes and other hospitality venues can seat customers indoors
- Adult indoor group sports and exercise classes can restart
- Indoor entertainment such as museums, theatres and cinemas can open
- Performances and large events can restart, with limits on audience numbers
- Remaining outdoor entertainment, such as outdoor theatres and cinemas can open
- Hotels, hostels and B&Bs can reopen
- Holidays abroad to green list countries allowed
- Up to 30 people can attend weddings and more than 30 can attend funerals

What can you do from 21 June in England?

- It's hoped all legal limits on social contact will be removed
- Nightclubs will be allowed to reopen



Industry News

How the new super-deduction capital allowance affects your plant buying timings



You can optimise your tax and cashflow savings from the super-deduction capital allowance through careful timing and using hire purchase.

The Budget 2021's new super-deduction allows you to claim a 130% capital allowance against qualifying new plant purchases.

If new plant and equipment acquisitions are a feature of your business plans for the next 10 months to April 2022, then chancellor Rishi Sunak's new super-deduction could both save tax and, (if you buy your new plant using hire purchase),

optimise cashflow if you time your purchase right.

The super-deduction capital allowance is one of the many measures introduced in the March Budget designed to stimulate business investment as the UK economy opens up after the latest lockdown. Expiring in April 2022, it is designed to encourage qualifying businesses making qualifying purchases to invest quickly, boosting the plant and equipment supply chain, but also improving the productivity and competitiveness of UK firms. The keyword here is 'qualifying' – the small print specifies restrictions on the types of business and equipment that can be acquired using the new capital allowance.

What are capital allowances?

When you buy an asset that will be used by your business, such as a Case wheeled loader, a capital allowance enables you to deduct some of the value of the acquisition from your profits. This in turn generates a corporation tax saving for limited companies, or an income tax saving for partnerships and sole traders.

The basic capital allowance available to all UK businesses is the writing down allowance (WDA). This allows you to deduct 18% of the cost of the asset each year over the asset's lifetime, until you stop using it.

Here is a worked example for year 1:

- If the asset cost your limited company £100,000, the WDA is £18,000 (18% of £100,000).
- Let's say your pre-profit is £1m, then at the current 19% corporation tax (CT) rate, your CT tax liability would be £190,000.
- The £18,000 WDA can be deducted from your pre-tax profits, so for tax purposes your profit is reduced to £982,000 (£1m - £18,000).
- Apply the 19% rate to the new profit of £982,000, and you get a CT liability of £186,580, which represents a CT saving of £3,420.
- In practice, you could apply WDA to all your qualifying purchases. If you've invested significantly, then the tax saving is correspondingly significant.
- The standard WDA can be applied each year, to the reducing asset value as it is written down. There are no expenditure limits or qualification periods.

The next capital allowance is the annual investment allowance (AIA). All business types, including sole traders, partnership and limited companies, qualify. There is a qualification period of January 2021 to December 2021 and an expenditure limit of £1m, i.e. the first million pounds of your plant and equipment investment during the period will qualify. Most importantly, there is a 100% allowance on plant and machinery, both new and used, during the period. Here is a worked example for a limited company:

- You buy your asset, such as the Case wheeled loader example used above, for £100,000 in May, during the January to December 2021 qualifying period, and it is the only asset bought to date.
- The asset cost your limited company £100,000, so the AIA is £100,000 – remember, AIA is 100% of the asset value up to £1m in the period
- As above, your pre-profit is £1m, then at the current 19% corporation tax (CT) rate, your CT tax liability would be £190,000.
- The AIA can be deducted from your pre-tax profits, so for tax purposes your profit is reduced to £900,000 (£1m - £100,000).
- Apply the 19% rate to the new profit of £900,000, and you get a CT liability of £171,000, which represents a CT saving of £19,000.
- As there are restrictions on the timing of this allowance, when you buy your plant can impact on you tax and cashflow benefits. Professional advice from an appropriately qualified accountant is essential when taking this decision.

The restrictions are detailed above. The AIA was introduced in 2008 to stimulate investment during the recession of the time and has been renewed every year since. It may be renewed again as it has been in the past, but this is not confirmed. Something else to check with your accountant if you are considering asset purchases that may overlap into 2022.

How does the super-deduction work?

There is now a third capital allowance, the super-deduction. There are qualifying conditions:

- The 130% first year allowance only applies to new plant and machinery, not pre-owned.
- Only limited companies qualify, not sole traders or partnership. This means only corporation tax savings can be made, not income tax.
- There are no expenditure limits, unlike the AIA.
- The scheme ends on 31 March 2023.
- Cars, used equipment and assets subject to onward hire are excluded, so you can't use the scheme to acquire plant and equipment you plan to rent out.

A major difference, and presumably why it is called a 'super-deduction', is that the allowance is worth more than what you paid for the asset. For comparison, here is the worked example for the wheeled loader above:

- Your limited company (remember only limited companies qualify) buys your asset for £100,000.
- Your pre-profit is £1m, then at the current 19% corporation tax (CT) rate, your CT tax liability would be £190,000.
- Here is where the super-deduction is different from the WDA and AIA: you can deduct 130% of the asset value, or £130,000, from your pre-tax profits
- This means for tax purposes your profit is reduced to £870,000 (£1m - £130,000).
- Apply the 19% rate to the new profit of £870,000, and you get a CT liability of £165,300, which represents a first-year CT saving of £24,700 (compared to the £19,000 under AIA, or £3,420 under WDA).

This allowance expires on 31 March 2023 and the basic rate of corporate tax is due to rise to 25% from April 2023. As a result, the timing of when you buy your plant is particularly important to optimise both tax savings and cashflow benefits, and the calculations are quite complex, so professional advice from an appropriately qualified accountant is essential.

Careful timing using higher purchase (HP) optimises tax and cashflow benefits

The super-deduction can also be applied to assets acquired via a hire purchase (HP) agreement, where the user owns the asset at the end of the agreement. Plus, there is an added benefit of the scheme as the super-deduction has both a capital and interest allowance. This means that there is a significant cashflow advantage of buying the asset using HP rather than paying cash.

Let's look at another example. Instead of buying the asset outright using cash, you've bought £100,000 of plant (including the deposit) over a 4-year HP agreement. The payments are £2,400 per month, totalling £115,200. Interest is £3,800 per year, totalling £15,200.

Crucially, the super-deduction applies in year 1, so even though you have not paid out £100,000 in cash on your asset, you still get the corporation tax saving of £24,700 (see the worked example in section above for the calculations).

The comparison is shown in the table below.

HP agreement		Super-deduction	
Year	Amount paid	Tax saved	True cost
1	£28,000 (12x monthly HP payments of £2400)	£25,422	£3,378
Cash		Super-deduction	
Year	Amount paid	Tax saved	True cost
1	£100,000	£24,700	£75,300

What's immediately clear is that your 'true cost' in year 1 is only £3,378 if acquiring the asset using HP, rather than £75,300 if using cash. And you get to use the machine to generate income right from the start. Once again, when making any investment decisions always consult a qualified accountant first.

If timed correctly, and if right for your company, the combination of the new super-deduction scheme and hire purchase could enable you to buy machinery and plant that might not have featured in your business plans before the Budget.

This article was paid for by Case Construction Equipment



Product shortages set to get worse



The Construction Leadership Council has issued a warning to the industry that shortages of building products and materials are set to get worse before they get better.

The construction industry is warned to expect more shortages, longer lead times and higher prices.

While the temporary blockage of the Suez Canal last month interrupted global trade, the supply chain problems run deeper, with demand outstripping supply.

The Construction Leadership Council has a 'product availability work group', which is co-chaired by Builders Merchants Federation chief executive John Newcomb and Construction Products Association chief executive Peter Caplehorn. Together they represent manufacturers, distributors and retailers of building products across the UK.

In a joint statement, they have set out this warning to the trade:

"Demand for construction products remains high both in the UK and globally and is set to continue throughout 2021 in every sector. Unfortunately, this means the availability issues we are currently experiencing are likely to worsen before they improve.

"While supplies of plaster and plasterboard are much improved on last year, almost every other product group is experiencing longer lead times and, as a consequence, higher prices.

"Plastics (PE and PP), cement and aggregates have joined existing lists of products in short supply, including timber, steel, roof tiles, bricks and imported products such as screws, fixing, plumbing items, sanitary-ware, shower enclosures, electrical products and appliances.

"Prior to the temporary blockage of the Suez Canal, we were seeing a slight lowering of both container costs and delivery times of these imported goods. We anticipate that this will continue once the effect of the temporary closure works through.

“Imports of timber will be an issue for the foreseeable future. Not enough timber is being produced to meet world demand. Added to this, other countries are prepared to pay more to secure their supply, pushing the UK lower down the pecking order.

“Steel is also experiencing strong global demand. While supply and demand are likely rebalance within the next few months, global dynamics will continue to drive prices up.

“Raw material shortages constraining polymer supplies are causing production problems for plastics (lower ground drainage etc). Coatings manufacturers are also experiencing raw material shortages beyond their control, at a time when demand is particularly high. These issues will continue for at least 2-3 months.

“All users should plan for increased demand and longer delays, keep open lines of communication with their suppliers and order early for future projects.”



Anti-ageing cream for roads



Highways England is hosting a trial of a new polymer-modified bitumen mix that is being described as an anti-ageing cream for roads.

A section of dual carriageway in Northamptonshire has become the first in the country to be resurfaced with Total Styrelf Long Life.

Total has several Styrelf polymer-modified binder (PMB) bitumen mixes, including Total Styrelf GP for racetracks and Total Styrelf Extreme for heavily trafficked roads.

The new mix being trialled is Total Styrelf Long Life. This is based on Total Styrelf Extreme but with additives to reduce the propensity for oxidative ageing.

Slowing down the ageing process means that the road surface stays flexible for longer, and so the binder's initial performance characteristics, such as resistance to fatigue, fretting, and thermal cracking, are retained for longer.

Total UK has worked with Highways England and Tarmac to resurface a busy section of the A43 near Silverstone with the new mix. Three sections of the road have been surfaced, the first with a standard bitumen, the second with Total Styrelf Extreme 100 and the third with Total Styrelf Long Life.

The trial could run for up to 15 years. Total UK's team will take samples from each section of the carriageway at regular intervals to measure the ageing performance and key characteristics of the bitumen, and to understand the degradation caused by oxidation and UV exposure.

The new material has previously been tested in the laboratories of Total, and on sections of road in Holland and Germany, but the A43 trial is the first time it has been used worldwide with such high traffic levels.

Tarmac technical director Brian Kent said: "What we have in this case is essentially an anti-ageing cream for roads – just as these products are designed to reduce and prevent the signs of fine lines and overall ageing of the skin, the new bitumen being trialled on the A43 will protect the road surface. It not only has the potential to offer improved value for



money to the public purse, but it also contains properties to increase the overall lifespan of roads. Through preventing cracks to the surface of the road caused by elements such as air and water, the longer life bitumen has the ability to reduce disruption, deliver long-term carbon savings and importantly help network operators to better manage their assets."

Highways England chief highways engineer Mike Wilson said: "We're always looking for innovative ways to help us keep England's motorways and major A-roads in good condition. The ultimate priority for us is safety so we invest in new technology and materials to keep those using the roads safe. Longer lasting roads means fewer roadworks, less disruption for motorists and a more sustainable network for everyone."



Plant Machinery

Kubota improves its micro excavators

Kubota has launched two new micro excavators that it says offer users 'enhanced performance and operational benefits'.

The new Kubota K008-5 and U10-5 machines replace the K008-3, U10-3 and U10-3SL models. They promise more power, thanks to the Kubota-designed Stage V engines.



Track widths are adjustable to as little as 700mm (the K008-5) and 750mm (the zero tail swing U10-5).

The exterior on both models has been redesigned for comfort. The U10-5 now has a side lever joystick as standard, and both models have been upgraded with a more durable operators' seat, more legroom and a new ergonomic console.

Other new features, all as standard, include engine safety start, an expanded control lock system, hi-vis orange seat belt and alarm, alongside green beacon capability and LED boom lights.

Glen Hampson, construction division manager at Kubota, says: "The new K008-5 and U10-5 models are the culmination of years of ongoing product development and investment with the aim of improving the design and performance of some of the most popular micro excavators available on the market.

"The new machines bring innovations first seen in our largest excavators to this smaller form factor, so that Kubota can offer users unrivalled safety, reliability and performance, without having to compromise on weight and size.

"Kubota understands the importance the construction sector will have in the global economic recovery following the impact of Covid-19 and we are excited to be able to offer operators enhanced machines that will give them improved levels of performance and productivity."



Introducing Cat's new 16-tonne crawler loader



This is the new Cat 953 tracked loader, the Stage V successor to the 953K.

The 119 kW C7.1 Caterpillar engine in the Cat 953 brings fuel efficiency improvements of up to 10%, when driven in Auto mode, the US manufacturer says. Eco mode will reduce speed for further reduction in fuel consumption in lighter duty applications, while the thirstier Power mode will keep engine speed high for a feel of readily available power at all times.

The 953 weighs in at just shy of 16 tonnes in its standard version (15 958 kg).

The cab has been updated, with suspension seat and adjustable armrests/controls. There is a 10-inch (254 mm) touchscreen dash display and a standard high-definition rearview camera. The Slope Indicator device shows machine main-fall and cross slope right on the display.

Users can select joystick or V-lever and pedal steering for transmission controls and either joystick or 2-lever implement controls. The joystick option provides familiar controls for operators experienced with skid steers and compact track loaders. With either control scheme, operators can set implement response – fine, normal or coarse – to match their preference or application. Repetitive lift, lower, rack, dump and float functions can be pre-set to make jobs like truck loading easier.

The standard general purpose bucket has a capacity of 1.8 cubic metres but there is also the option of a Performance Series bucket, at 2.1 cubic metres.

An optional Fusion quick coupler enables fast attachment changes. A variety of buckets, forks and other tools can be shared among track loaders, wheel loaders and other Fusion compatible machines.

Caterpillar offers purpose-built variants for special applications: Low Ground Pressure (LGP), Waste Handling, Ship Hold and partial Steel Mill machines are factory equipped with specialised undercarriage, guarding and other features specific to the tasks. The Waste Handler has an operating weight of 16,176kg and the LGP model weighs 17,261 kg.

There is the usual telemetry that you'd expect these days – Product Link, VisionLink, Remote Troubleshoot, etc., and Machine Security keeps the vehicle passcode protected to prevent unauthorised operation.



New eight-axle Liebherr for Ainscough

Ainscough Crane Hire has taken delivery of the first Liebherr LTM 1650-8.1 mobile crane in the UK.



The eight-axle Liebherr LTM 1650-8.1 can lift 700 tonnes at three metres radius; it has a maximum hoist height of 151 metres and can lift 2.4 tonnes at maximum reach of 110 metres.

The new model is capable of lifting 15 or 20% more than its predecessor, the LTM 1500-8.1. It is also quicker to set up, taking just 2.5 hours to rig.

Ainscough Crane Hire commercial director Derek Gow said: “This is a very proud day for Ainscough Crane Hire. The LTM 1650-8-1 is a highly impressive crane, and its arrival in the UK opens new opportunities for lifts in this country. Our crane investment programme will enhance the service we are able to provide our customers in a wide variety of sectors across the country as we look to support the recovery effort from the pandemic.

“ The new crane’s specialist Stage V engine will allow us to engage in eco-friendly construction practices and help our clients deliver upon ambitious and vital environmental strategies.”



Eurocomach dealer forges Engcon partnership

Robustrack, the new UK dealer for Eurocomach, has signed up as a dealer for Engcon UK as well.



Above: A Eurocomach excavator fitted with Engcon tiltrotator

Robustrack now offers sales, installation, parts, service and warranty work on Engcon tiltrotators, control systems, hitches and attachments.

The partnership means that Robustrack can offer tiltrotator options with Eurocomach excavators.

Davide Cerca, managing director and co-founder of Robustrack, said: "Tiltrotators are fast becoming the most sought after addition to an operators weaponry and we are thrilled to be able to form this partnership with Engcon UK and strengthen our offer to existing and new customers whilst maintaining our usual high standards.

"Robustrack's combination of quality Italian-made attachments and our knowledge and capacity to offer service and fabrication is what sets this partnership apart. We feel this is a perfect fit for not only our range of products but for our company culture and the way in which we like to do business. We are excited for the future working with Engcon."



JCB PotholePro proves its worth on M6



New pothole-fixing machine repairs 10 miles of fast-lane surface defects during two night-time lane closures

JCB's brand new pothole fixer has put in a night shift on the fast lane of the M6 – mending road defects in double-quick time.

The JCB PotholePro was sent to fix holes on one of the motorway's busiest stretches – from junctions 14 to 15 between Stafford and Newcastle-under-Lyme – during two night-time lane closures.

The night shift on the 10-mile stretch was part of a national demonstration programme to show how the innovative machine can repair a pothole, permanently, in less than eight minutes.

JCB PotholePro product specialist Ben Rawding said: 'The JCB PotholePro really did live up to expectations in the fast lane of the M6 – it filled the potholes so quickly that we ran out of tar. It was done so quickly and efficiently; it could have filled so many more holes. The main thing is that the repairs were done rapidly and permanently.'

JCB's PotholePro allowed the team to cut the defect, crop the edges and clean the hole with one machine – mechanising a job traditionally carried out by a pothole gang and reducing the number of people needed on the ground.

The machine can repair up to 250 square metres per day, equivalent to 700 potholes per month, and with a 40km/h travel speed, it can also rapidly relocate between sites without additional transport costs.

Crane hire firm adds electric spiders

Liverpool-based crane hire firm AMC has taken delivery of 11 new electric mini cranes.

AMC has bought six Japanese-made Maeda MC285CB-3 cranes and five Hoeflon C6e cranes. All have crawler tracks and spider-style outriggers for stability.



While Maeda cranes are well established in the UK market, Hoeflon is a relatively new Dutch manufacturer of mini cranes, represented in the UK by Foster Crane & Equipment, in Kidderminster. AMC now has the first Hoeflon cranes in the UK.

AMC owner/director Mark Davenport said: "Our mission is to continue innovating as a future-thinking company, so we can provide our customers with more choice, quality and reliability in bespoke lifting solutions. Our new electric cranes will help us achieve this tenfold and I am proud to see the company leading the competition in this arena. Electric cranes are the future of our industry and AMC is right there at the front."

AMC was known as A Mini Crane Hire until it was bought by Mark Davenport, taking over from Peter Piekarus and Anthony Travis.

Komatsu widens machine control offering

The new Komatsu PC360LCi-11 and PC360NLCi-11 with iMC 2.0 are excavators that promise "high productivity earthmoving and precision grading", the Japanese manufacturer says.



These new 36-tonne excavators for the European market expand the range of Komatsu's factory-integrated machine control.

"On the previous model we had examples of customers using iMC to replace standard excavators," says Rob Macintyre, product manager at Komatsu Europe. "They immediately benefitted from using their machine for grading as well as for truck loading, allowing them to redeploy other equipment and to really optimise their fleet on the jobsite. We believe that the new iMC 2.0 versions will give them even more opportunities to do this."

Operating weights of the PC360LCi/NLCi-11 range from 35,770 kg to 36,850 kg, and it has a maximum recommended bucket capacity of 2.66 m³. The Stage V Komatsu engine has a power output of 202kW / 271HP @ 1950rpm.

Launched in 2013, Komatsu's factory-integrated intelligent machine control system has so far racked up more than 1.5 million customer operating hours on excavators across Europe, Komatsu says. (That's more than 171 years...)

Introduction of the PC360LCi-11 and PC360NLCi-11 brings some new intelligent features that further boost productivity and efficiency, Komatsu says.

The new Auto Tilt Control for tilting buckets makes operations on slope and ditch work easier, automatically limits under-digging and increases bucket fill. The bucket automatically tilts to the design surface with no need for the operator to manually intervene.

With new Bucket Angle Hold, the operator no longer needs to use the lever to maintain the bucket angle through grading pass. Once the desired angle is selected, this feature automatically maintains it as the arm moves in.

The new iMC 2.0 monitor has intuitive smartphone-like screen navigation. It is slimmer and lighter but has more memory capacity and faster processing speed.

A new IMU sensor for tilt buckets – easy to mount and calibrate, Komatsu promises – increases attachment and machine utilisation as different tilting buckets can be integrated with the excavator's control system.

The new PC360LCi-11 and PC360NLCi-11 also have original Komatsu intelligent machine control features including Auto Stop Control, Auto Grade Assist and Minimum Distance Control.

Liebherr completes Gen8 excavator family



New from Liebherr France is the R 928 G8 crawler excavator, the eighth and final model in the Generation 8 series.

Designed and manufactured by Liebherr-France SAS in Colmar, the R 928 G8 sits between the R 926 G8 and the R 930 G8 and shares many features with those models. Weighing less than 30 tonnes, it has the same superstructure and equipment as the R 926 G8 and the same LC or NLC undercarriage as the R 930 G8.

The R 928 G8 crawler excavator is characterised by high drawbar pull, excellent load-bearing capacity and a large bucket, Liebherr says, meaning that it can hold its own with machines that are heavier than the R 926 G8 and lighter than the R 930 G8.

Liebherr Generation 8 crawler excavators have been reworked to deliver higher tear and breakout forces compared to the previous generation. The torque of the superstructure has also been increased and fuel consumption reduced by improved inertia in the rotary drive.



JCB goes for full Stage V compliance with spring product launch

JCB has unveiled no fewer than 45 new or improved machines in its first major product launch of 2021.



Above: The four-wheel steer 4CX PRO backhoe loader

The common theme in all of the new product announcements is the adoption of EU Stage V emissions-compliant diesel engines across the board, from a new 40kVA diesel generator to brand new compact excavators in the 3.5/3.6-tonne bracket.

Three new top-of-the-range backhoe loaders – the PRO range – are now available, all with the latest Stage V engines.

The two-wheel steer 3CX PRO, the four-wheel steer 4CX PRO and its heavy-duty stablemate the 5CX PRO all feature a new CommandPlus operator's cab and JCB Automate features to make the machines easier to use and boost productivity.

The 68kW (91hp) engine used by their predecessors has been replaced with a new 81kW (109hp) Stage V powerplant operating through a new six-speed EcoRoad transmission with new gear ratios to reduce fuel and save time, says JCB.

The new 4.8-litre JCB 448 engine is fitted with a diesel oxidation catalyst and a combined selective catalytic reduction/diesel particulate filter (SCR/DPF) which JCB says has an 8,000 hour operating life. The JCB LiveLink telematic system also monitor DPF regeneration, which is done automatically.

The 3CX backhoe, fitted with the three-litre, 55kW (74hp) Stage V engine introduced last year as the 750,000th 'Special Edition' model, has now been redesignated the 3CX ECO.

The company's Loadall range of telehandlers have also all be upgraded with the addition of Stage V engines. All models, from the 531-70 through to the 540-200 are now powered by the 448 DieselMax engine.

Two new 3.5-tonne Loadall models – a zero-tailswing model and a conventional machine – have been added to the company's compact excavator range.

The 35Z-1 replaces JCB's previous-generation 8035ZTS zero-tailswing model; but the conventional rear-end 36C-1 is a new addition to the range. This machine doesn't have the 35Z-1's compact dimensions but it compensates for this with increased productivity resulting from greater reach and better stability and lifting performance.

Both of these models are powered by a Stage V/T4 Final Perkins diesel engine delivering 18.4kW (24.6hp) of power. The engine uses mechanical fuel injection and has no requirement for a diesel particulate filter (DPF) or any form of exhaust after-treatment.

Also benefiting from the addition of Stage V engines are the 140X, 150X and 220X crawler excavators. The T4F JCB EcoMax 444 engine from the previous 140X and 150X has been replaced by the 4.8-litre Stage V DieselMax 448, delivering the same 81kW (108hp) power output but with 516Nm of torque (a rise of 135Nm). The 220X swaps out the EcoMax 444 engine in T4F trim, for the new 448 Stage V unit, offering the same 129kW (172hp) and 690Nm of torque.



The existing T4F models will continue to be offered in non-Stage V territories, says JCB.



Contracts Awarded

Mace Dragados wins HS2 Birmingham Curzon Street station

HS2 Ltd has confirmed that Mace Dragados Joint Venture will build Birmingham's new city centre high speed railway station.



Above: Birmingham Curzon Street station, designed by WSP and Grimshaw

The contract is worth £570m to the joint venture, which will work with HS2 Ltd in two stages, firstly to finalise the detailed design and then build the station in Curzon Street.

Mace Dragados also has the contract for the £1.3bn Euston HS2 station in London, which it was awarded in 2019.

Birmingham Curzon Street, the HS2 terminus in Birmingham city centre, is designed by WSP and Grimshaw Architects to be net zero carbon in operation, capturing rainwater and using sustainable power generation, with more than 2,800 sqm of solar panels on platform canopies.

Mace and Dragados have also previously worked together on the refurbishment of Birmingham New Street, Battersea Power Station (phase 2) and on the Spanish high speed rail network, including the new Madrid Atocha and Barcelona Sants stations.

BAM Ferrovial (a joint venture consisting of BAM Nuttall and Ferrovial Construction) and Laing O'Rourke Construction had also been shortlisted for the contract.

HS2 Ltd chief executive Mark Thurston said: "Birmingham Curzon Street is right at the heart of the HS2 project, providing a fantastic terminus for trains running right into the heart of the city centre. The station will play a vital role in the long-term economic future of the West Midlands, creating hundreds of jobs during construction and boosting the region after the pandemic.

"Mace and Dragados have some incredible experience delivering some of the world's most challenging and exciting infrastructure projects, and I look forward to welcoming them to the team."

HS2 worked with WSP and Grimshaw Architects LLP on the design for Curzon Street, which is inspired by the great arched roofs built by the Victorian railway pioneers. The design takes that inspiration into the 21st Century, ensuring accessibility and a focus on the open space and landscaping around it.

Significant progress has already been made on site at Curzon Street, HS2 said. Site clearance is now complete and an archaeological programme involving 70 archaeologists has unearthed the world's oldest railway roundhouse.



Graham gets going on Marsh Barton station

John Graham Construction started work last month on a new £16m railway station in Exeter.



The new two-platform station is next to the waste incinerator by the Marsh Barton industrial estate.

Devon County Council, the client, provided the initial concept design, which Graham is using in its design and build contract, along with Network Rail and train operating company GWR.

The project also involves the construction of a pedestrian and cycle bridge over the line.

The new station will provide rail services for more than 7,000 people employed at Marsh Barton. There are also development plans for around 2,500 new homes across the estate, which is currently used for light industrial and office space, along with several car showrooms.

Graham's civil engineering managing director, Leo Martin, said that he and his colleagues were "delighted" to be working on the job. "This latest scheme adds to our impressive portfolio, which also includes several projects we are delivering this year for Crossrail alongside Network Rail," he said.

A spokesperson for Devon County Council said: "The station is a core element of the Devon Metro rail strategy for Exeter and is central to supporting economic growth to the south west of Exeter and to the Marsh Barton employment area itself, as well as Dawlish and Newton Abbot."



Morgan Sindall signs for Carlisle Southern Link Road

Cumbria County Council has selected Morgan Sindall for the £144m Carlisle Southern Link Road project.



Morgan Sindall Infrastructure has been appointed initially to develop the detailed design of the road that will connect Junction 42 of the M6 with the A595 at Newby West.

The 8km road will include four new roundabouts, three new road bridges, a combined cycleway/footway on the northern side of the road and four new shared-use overbridges.

The road will open the way for Carlisle City Council's St Cuthbert's Garden Village (SCGV) plans, a potential development of 10,000 new homes. It should also improve east-west connectivity to the south of the city.

The council received planning consent for the road in October 2020 following a period of extensive public consultation. The council is continuing to work with landowners and statutory stakeholders to minimise the impact of the scheme on their land.

The works are due to start on site in spring 2022 and it is anticipated the construction of the road will take approximately two years to complete.

The Ministry of Housing, Communities & Local Government announced funding towards the new road in February 2019. In July 2020 the council's Cabinet agreed to enter into a funding agreement with Homes England for £134m. In addition, Cumbria County Council and Carlisle City Council have committed to make contributions of £5m each, which will be sourced from developer contributions as homes are built, for a total budget of £144m for the new road.

It is understood that the value of Morgan Sindall's contract is £65m.

Councillor Keith Little, Cumbria County Council's cabinet member for highways and transport, said: "I'm delighted that we have reached this important milestone. The benefits the road will bring in connecting East and West Cumbria and unlocking housing for the new garden village as well as stimulating employment, economic growth and investment at a time when our county really needs it cannot be underestimated."

=====

Bidders sought for £24m Dudley Interchange

Transport for West Midlands has published the tender notice for its £24m Dudley Interchange project.

Transport for West Midlands (TfWM), part of the West Midlands Combined Authority, is looking for a contractor to design and build a combined bus and tram station in Dudley town centre.

It hopes that construction will start on site in February 2022.



Above: CGI of the planned Dudley Interchange

The new interchange will be built on the site of the existing bus station, linking to the Metro tram extension that is under construction by the Midland Metro Alliance between Wednesbury and Brierley Hill. Both projects are scheduled to be completed in 2023. The closing date for tender submissions is noon on Friday 4th June 2021.

TfWM has organised a pre-tender briefing session at 11am on Thursday 13th May 2021 via Microsoft Teams to explain the project and give bidders the opportunity to ask questions.

Tender documents are available through the WMCA's e-tendering portal wmca.bravosolution.co.uk (tender reference itt_948).



Taylor Woodrow wins £328m A358 upgrade

Highways England has awarded a £328m contract to Taylor Woodrow Plus to design and build the A358 Taunton to Southfields upgrade scheme.



Taylor Woodrow, the civil engineering division of Vinci Construction UK, will work with consulting engineers Arup and Ramboll to widen to dual carriageway a nine-mile section of the A358 in Somerset between Southfields Roundabout on the A303 and the M5 at Taunton.

Preparatory works have already begun, with ground investigation and environmental surveys.

This is in preparation for a statutory consultation on the proposals ahead of submission of the scheme's development consent order application to the Planning Inspectorate.

Highways England programme leader Andrew Alcorn said: "Taylor Woodrow has an extensive track record working with Highways England and delivering large scale infrastructure projects, so we are confident they will deliver a scheme that will support economic growth, improve traffic flows at peak times and make the road safer."

Taylor Woodrow managing director Julian Gatward said: "Taylor Woodrow Plus brings together the expertise of Taylor Woodrow, Arup and Ramboll in delivering solutions from conception through to construction. Supported by Taylor Woodrow's Vinci sister companies, we are committed to contributing to the local community whilst supporting economic growth in the area."

The scheme is part of a long-term aim to create a dual carriageway link between London and Cornwall. While much of the corridor is a dual carriageway, there are still over 35 miles of single carriageway. Other elements of the wider project include a tunnel under Stonehenge.



CMPE Branches





Contractors Mechanical Plant Engineers

Acting National Chairman

Malcolm Saddington - malcsaddington@uwclub.net

Tel: 01257 252132

National Secretary

John Robinson - johnr@cmpe.co.uk

Tel: 07974 357844

National Registrar

David Holden - dholden30@btinternet.com

Tel: 07813 895875

Newsletter Editor

David Nicholson - cmpepreston@gmail.com

Tel: 07903 848200

CMPE Website: www.cmpe.co.uk

