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## ISSUE FORTY SIX LBPWEENS











# Rice One. Expands UK Operation



Veetee - UK's Leading Rice Producer

One of the largest rice companies in the UK has been working with HBPW to double its warehousing capacity.

Veetee Rice Limited supplies product to major supermarkets and exports internationally to more than 50 countries out of its headquarters in Rochester, Kent.

However, warehousing at the Neptune Close site had been under considerable strain. prompting the need for expansion.

Senior engineer, Shaun Strugnall, said: "The site faced similar challenges to those we met at Arco's warehouse in Hull (See

Page 2) in that we were required to drive 400m x 13m piles into the ground, so that contractors could lay the new floor to stringent DM2 flatness tolerance ahead of high bay racking being placed over it."

The new extension, which measures 32m x 72m and, at 12m,

is already 4.5m higher than the similar in size original structure, will need to accommodate highmast forklift trucks as well as tall racking.

"These special forklift trucks have to operate on exact surfaces - hence the DM2 flatness requirement, something we also had to achieve in Hull for Arco - otherwise they run the risk of toppling over.

"Piling at site enables this key client requirement to be achieved as part of the extension to



Veetee's 'Building One' and, by doubling the warehouse footprint, we will hopefully, have played a key part in future proofing warehouse operations for one the most important rice operations in the UK," said Shaun.

HBPW has provided all engineering design for both the sub and superstructures.

Client: Veetee Rice Contractor: Faircloth Construction

#### CONTINUED FROM PAGE 1

things like: "Well, .....Tom, Dick, Harry or Harriet is the lead engineer on this project. Ask him / her and they'll talk to me if they need my input."

It's a big step laying down the tools after more than 40 years in the industry don't you think? However, with drones taking over from theodolites when it comes to topographical surveys, and when CAD starts to look like the work of the Devil, something inside tells me it's time to let other talented, engineers come to the fore.

And what a talented bunch we have. There really are some superb engineers in the HBPW team and, whilst the idea of eternal life is occasionally appealing, I'm afraid that geneticists still have a way to go! So, for now, I am going to let my senior engineering colleagues fill the 'project engineer' shoes that I will soon

I just wanted you to know that you really do have an A-class team to call on. I wish they'd been around when I was a lad! So, don't panic, I will continue to wave from the shadows and you'll still be reading my Welcome monologues!

For now we continue to work on some great projects so please keep an eye on the HBPW blog to see what we've been up to (www.hbpw.co.uk).

Enjoy the read!

**PAUL WITHERS** MANAGING PARTNER **HBPW LLP** 

#### Welcome



Paul Withers - Managing Partner

For some time now everyone around me has been suggesting that I start to 'do a little bit less' and, at a time in my life when I seem to have more engineering output than I did when I was in my mid 20's, I'm starting to agree!

So, I thought I would use this edition of the newsletter to tell all my wonderful colleagues and clients that I am starting to pare back my considerable workload.

Retirement sounds just a little bit too permanent so let's say that rather than being lead engineer on key projects, I am going to fade into the background and start to explore life as an 'advising deputy', probably a nice halfway house, for now at least!

There will be no wild retirement party, however, I will no longer apologise for a three day week, a lie in, an extra day off with the grandchildren, or for saving

CONTINUED ON BACK PAGE

## Safe Hands On The Tiller (bury!)



HBPW can reveal itself as part of the team that is helping develop the new £125m port terminal at Tilbury in Essex, considered to be one of the most 'nationally significant' infrastructure projects in the UK.

The development on land at the former Tilbury Power Station is being spearheaded by Port of Tilbury London Limited (PoTLL) and represents an extension to existing operations.

Once complete 'Tilbury 2' will create several hundred new jobs as well as safeguarding the Port's existing workforce of 700+ and those 8,600 full time jobs in the local economy that are a direct consequence of its existence.

HBPW's Managing Partner, Paul Withers, said: "This is one of the most important civil engineering projects currently underway in



the country and we are working closely with Graham Construction to bring the terrestrial elements of the project to fruition.

"There will be new marine works as well as extensive hard standings and associated infrastructure."

The proposed main components of Tilbury2 include:

- A Roll-On/Roll-Off (RoRo) terminal for importing and exporting containers and trailers and also containing a warehouse. This will be located at the southern part of the site.
- A "Construction Materials and Aggregates Terminal" (CMAT) for handling and processing bulk construction materials. This will be located at the northern part of the site.
- · Other parts of the site will be used for storage of bulk goods or vehicles.

"It was a major result for the HBPW team in winning this contract, however, there's no doubt that our historic experience working with Associated British Ports and Peel Ports on projects such as the Immingham Renewable Fuels Terminal (IRFT) and Liverpool's Gladstone Docks

was key to us being named as the engineering firm of choice.'

Although members of the public and key stakeholders were consulted throughout, the original proposals were considered a "Nationally Significant Infrastructure Project" which meant they had to go before the government's Planning Inspectorate directly rather than Thurrock Council.

Sea ports in the UK are deemed crucial to national prosperity and government policy is to support sustainable port development to meet the needs of importers. and exporters thus contributing to long term economic growth of the UK. Tilbury Docks has been in existence for 130 years and its success in recent years means that more land is now required closer to the Port in order to grow the business and support new jobs.

**Client:** Port of Tilbury London Limited (PoTLL) Contractor: Graham Construction





#### **HBPW Helps Secure Morrisons Grain Supply**



A three-way partnership between HBPW, a major grain operator and **Wm Morrisons Supermarkets, has** been playing its part in helping secure the UK's food supply chain.

Several years ago Wm Morrisons Supermarkets acquired Murton Grange in the North York Moors National Park, a substantial 542 hectares agricultural and previously sporting estate, close to the village

of Hawnby, which it now operates as an agricultural enterprise.

Partner, Emyr Parry, said: "The supermarket chain required the erection of a wet grain in-take building, grain drier and grain store at its operation on Ox Pasture Lane, and McArthur Agriculture who build and maintain many of the food and feed processing systems critical to the UK's food supply chain, invited us to the table.

"They work closely with their customers - including the likes of Wm Morrisons Supermarkets - to deliver equipment and turnkey projects that strengthen businesses and ensure peace of mind from an operating point of view. We are now more than two years into our relationship which has gone so well that we continue to work with McArthur's on a range of similar projects up and down the country.

#### "This has been an excellent tripartie relationship"

"Their grain and materials handling knowledge is clearly what Morrisons are buying into and, at Murton Grange, we delivered the structural and foundation drawings for the erection of a 70x25m facility which is now up and running."

Much of the farmland is currently under crops and during the original planning application, officers and Park representatives were told that there had been limited investment

in the site over recent years, and that Morrisons was keen to upgrade the facilities and, in doing so, give Murton Grange a new lease of life by restoring its viability and efficiency.

"This has been an excellent tripartite relationship, " added Emyr, "that has not only opened a new engineering opportunity for HBPW, but also played its part in delivering a successful outcome for all concerned."

**Client:** Wm Morrisons Supermarkets Contractor: McArthur Agriculture





### Meccano Man To The Rescue In Immingham!

Paul Withers' childhood fascination with Meccano stood him in good stead for another challenge at the Immingham Renewable Fuels Terminal (IRFT).

HBPW's Managing Partner was the original design engineer behind phases one and two of the IRFT, a multi-million pounds development for Associated British Ports which saw the creation of a storage and handling facility for imported wood pellets, most of which are now used by Drax Power Station near Selby.

However, the sheer scale of the operation subsequently created a different type of challenge requiring a certain mindset to find a solution.



Paul Withers takes up the story: "Now that the IRFT is working at full tilt, it is fair to say that it features some pretty heavy duty plant and machinery, all of which needs periodically servicing. The new challenge, therefore, was to best determine how to create permanent

A boyhood solution for Immingham!

But it was no mean feat.

"Servicing usually takes place during planned 'outage' periods when power supplies are

and safe access to all this 'kit'.'

completely shut down, however. if you can't access machinery some of it is so tall that it would need scaffolding towers – then how can you carry out repairs and maintenance?

"I had to look at all the equipment in situ and decide how we could build a series of Meccano style ramps, ladders and platforms that could be pieced together to create permanent and easy service access But because there is a lot of pellet dust in the vicinity the IRFT is deemed a potentially explosive environment with huge health and safety restrictions.

"It meant everything had to be lifted into place manually. The result was a series of lightweight metal pieces that bolted together to form a permanent access solution in machinery areas right across the site.

"I am delighted to report that it all came together well, largely thanks to my Meccano mentality!"

PHOTO CREDIT Meccano image courtesy of www.alansmeccano.org/

**Client:** Associated British Ports **Contractor:** Fussey Engineering



## **Snooker Floor Challenge Goes Smoothly!**

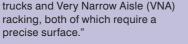


**Engineer Tom Flint is dusting** the chalk from his engineering cue after successfully playing a key part in delivering one of the smoothest warehouse floors in

And the £6m-£7m surface, at safety equipment Arco's huge Humberside facility, is now considered among

the most expensive floors of its type in the UK.

"It had to be laid to DM2 floor flatness tolerance ahead of high bay racking being placed on it," said Tom. "However, the overriding reason for the 'flatness' requirement was because the client needed to utilise both high-mast forklift



Arco's existing warehouse, NDC1. adjacent to Hull's Clive Sullivan Way and not far from the Humber Bridge, had reached capacity despite lots of high-bay racking.

As a consequence the company rolled out plans to develop an additional warehouse. NDC2. measuring 100m x 150m x 19m to the top of the eaves, important in light of its forklift and VNA requirements.

"Everything about this job was 'floor' related." added Tom. "The building structure was almost incidental compared to the ground upon which it was to sit because below the top crust of one and a





half metres of stiff clav was liquid mud down to limestone!

As a result 3,000 piles had to be driven into the ground using four piling rigs in order to support the floor slab. "Those alone cost about £2.4m and the concrete slab a further £1m. The floor cost in the region of £6m-£7m, probably one of the dearest floors, for its size, in Humberside, if not the UK," added Tom.

HBPW designed the piling and floor slab for the scheme, the only realistic solution to cope with heavy load bearing from product, racking and forklifts.

## Lincoln's Eastern Bypass Gets HBPW Scrutiny



Parts of the £120m Lincoln Eastern Bypass, which promises

to alleviate city centre traffic in the famous cathedral city, have been placed under the watchful eve of HBPW.

The 7.5km road, designed to encourage growth and minimise traffic congestion, is due to finish this summer. Huge elements of engineering infrastructure are being built by contractor Galliford Try.

But, such is the scale of the mammoth project, that Galliford's are legally obliged to ensure that mandatory checks of their engineering drawings and calculations - or Category 3 checks - are carried out by a third party, in this instance HBPW.

Partner Jon Livesey said: "The overall scheme has a lead civil engineering designer but, because a number of structures were contractor designed, this created the need for Category 3 checking.

"Galliford Try have been tasked with designing four steel truss footbridges, two reinforced soil walls, two concrete culverts and a pumping station, collectively a small part of the overall £120m scheme, but still a sizeable combination of civil engineering projects.

#### "A sizeable combination of engineerng projects"

"Needless to say, they have asked HBPW to carry out the Category 3 checks which involves us independently overviewing the original engineering designs and calculations."

Jon said that both himself, fellow Partner Tommy Ng and other

members of the HBPW team, were involved in the project. "So-called 'checking' is, in many

ways, as onerous as leading an engineering project," added Jon, "because we have to start from scratch, produce our own calculations and ensure that they actively line up with, support and confirm the originals. The process promotes safety and building confidence."



Client/ Contractor: Galliford Try



Client: Arco

Contractor: Clugston