CENTURYAN

CENTURA GROUP

Teamwork, Strength & Inclusivity

Issue 18
April 2021

Invercannie Service Reservoir: Roof Membrane

The last issue of Centuryan was published at the end of 2019. The UK had just voted in a new Government, we were all enjoying a Christmas break and the Company was preparing itself for Brexit. How quickly things can change.

One of the strengths of a successful business is just how well it can adapt to different and challenging circumstances. 2020 and now 2021 has certainly demonstrated how well Centura can work through probably the most extreme conditions that it may ever experience.

I have tried to keep you all up to date on a regular basis so I do not propose to repeat what was said in those announcements. What you should know is just how well we have performed during these past months.

Our managers have only looked forward, never backwards. As soon as the extent of the crisis became clear all our business plans were adjusted to best suit the changing markets. I am pleased to say that in just about every area we have matched or exceeded those plans. Our trading figures to June 2020 are well aligned to market expectations and our performance since then has been strong. As always our cash management has remained an absolute priority.

In CRL the new Board led by Sanjay Patel is working very well together. The plan was always to bring new talent and new ideas to that business to take us forward. Our smaller companies are no less important and are all working well towards their individual targets. Each business has examined the way it works and the costs that it incurs. In every case significant and very positive changes have been made.

The expectations and needs of all our staff and stakeholders are of vital importance to the business. In Centura we are continually striving to improve the conditions in our workplace. In recognition of the huge loyalty and commitment of our staff we seek to ensure that no-one experiences discrimination of any kind and that everyone is treated equally and fairly. Any behaviour that challenges those principles will simply not be tolerated.

We are a great team here in Centura. Part of that team spirit is created amongst our staff and their interaction at work. Clearly that has been very difficult this past year. I do hope that as we approach mid-summer we will see more of you back in your workplaces sharing not only your skills but also your experiences of the past 12 months. I know that many of you are now being vaccinated. I firmly believe that our basic instructions of regular hand washing, social distancing and face coverings are extremely effective not only for self protection but also for the protection of others. We will of course continue to provide a safe place of work for all.

Recently we were very sad to learn that Nicola Hill, editor of all previous newsletters, has decided to leave us to help create a family business. Of course we wish Nicola well for the future and thanks her for everything she has done for Centura. Our new editor is Mike Balletta and this is his first issue of Centuryan. Mike will do a brilliant job but I encourage you all to help him with articles, comments and general news that you may wish to share with your colleagues.

The Centura group has worked through the most difficult trading conditions that any of us can remember. As we move away from the lockdowns and social restrictions caused by Covid 19 I thank you all for the commitment that you have shown and the sacrifices you have made.

We will move forward with teamwork, strength and inclusivity.

Tony Rimoldi
Chief Executive

the numbers

A regular feature in this newsletter is to publish a scorecard showing how the group is preforming. The following tables has gathered together all the latest information from the current financial year.

CENTURA GROUP

Qtr 1, 2 & 3 (Jul 2020 - Mar 2021)

Customers & Markets

1044	No. of tenders submitted
£152m	Value of tenders submitted
426	No. of new contracts awarded
£22.2m	Value of contracts awarded

Operational

100	% of performance questionnaires showing client satisfaction
205	No. of contracts in progress
164	No. of contracts ahead of target

Learning, Quality & Innovation

329,000	RIDDOR free man hours
98%	CSCS carded site workforce
92%	Employees H&S Training Compliant
0	Suggestions submitted in the Innovation scheme

Financial & Stakeholders

Turnover year to March
Profit year to March
Overhead costs year to March
Cash Flow

Group Business Plan Sales for Year to June 2021

	Target	Total
Concrete Repairs Ltd		
Bristol	£7.3m	
Chesterfield	£5.0m	
Chesterfield Highways	£8.0m	
Falkirk	£5.5m	
Mitcham	£7.2m	
Australia	£3.3m	£36.3m
CRL Surveys Ltd	£1.5m	£1.5m
Buxton Associates Ltd	£0.3m	£0.3m
FJ Samuely Ltd	£0.15m	£0.15m
Equilux Ltd	£1.5m	£1.5m
TL Fire Ltd	£0.2m	£0.2m
Lifespan Ltd	£0.4m	£0.4m
Total Sales		***£40.35m***

group gossip

The Group would like to welcome…

Alizera Kuhang, CRL AUS
Antony Stephenson, (JNR) CRL MIT
Antony Stephenson (SNR) CRL MIT
David Patrick, CRL MIT
Dylan Howard, CRL AUS
Jason Smith, CRL BRI
Liam Dawtry, CRL BRI
Lisa Davie, CRL FAL
Magdalena Fernandes, CEN
Muhsin Khan, CRL BRI
Scott Robinson, CRL BRI
Sophie O'Brien, CRL CHE
Alexander Ilievski, CRL AUS
Alexander Lawrence, CRL FAL
Alin-Catalin Gocea, CRL MIT
Andrew Campbell, CRL FAL
Artur Sikora, CRL BRI
Arun Bagshaw, CRL BRI
Benjamin Allen, CRL AUS
Benjamin Notman, CRL AUS
Bradley Linnen, CRL MIT
Cassie East, CRL AUS
Charles Roberts, CRL FAL
Chris Merkus, CRL AU
Cory Mason, CRL BRI
Craig Steele, CRL HIG
Darcey Smith, CRL AUS
Elliot Etherington,CRL CHE
Elliot Moogan, CRL CHE
Gary Groenewald, CRL BRI
Hannah Browne, CRL BRI
Ian Callaway, CRL BRI
Iulian Manuel Patru, CRL MIT
Jack Fiume, CRL AUS
James Noonan, CRL AUS
Jason Bridges, CRL AUS
Jonathan Bradshaw,CRL BRI
Jose Castro, CRL HIG
Joseph Came, CRL CHE
Joshua Smith,CRL AUS
Joss Davies, CRL BRI
Kierran Gardner, CRL FAL
Kyle Newman, CRL CHE
Lance Painter, CRL BRI
Laura Clark, CRL AUS
Lee Pearson, CRL CHE
Leigh Cavallin, CRL AUS
Lewis Beddis, CRL BRI
Lez Thomas, CRL CHE
Luke Clark, CRL BRI
Luke Robertson, CRL AUS
Luke Sibley, CRL SUR
Markus Donkin, CRL CHE
Mausia Papani, CRL AUS
Namo Rashid, CRL BRI
Oliver Taylor, CRL BRI
Paul Richardson, CRL CHE
Ross Macpherson, CRL BRIS
Sammy Adams, CRL MIT
Sean Johnson, CRL AUS
Shonagh Patterson, CRL HIG
Stuart Beddis, CRL BRI
Vimbainashe Kanyangarara, CRL MIT
Wiktor Gwozdz, CRL BRI

Say goodbye to…

Abdurrahman Tamimi, CRL MIT
Agron Mustali, CRL MIT
Alasdair Brannan, BUX
Alejandro (Alex) Garcia, CRL CHE
Alice Fung, SAM
Alizera Kuhang, CRL AUS
Andrew Campbell, CRL FAL
Andrew Lucking, CRL MIT
Anna Hancock, CEN
Anthony Cooke, CRL FAL
Antony Stephenson (JNR), CRL MIT
AntonyStephenson(SNR),CRL MIT
Ashvini Mistry, CRL HO
Christos Spolidoro, CRL AUS
Craig Jeffrey, CRL FAL
Daniel McNamee, CRL CHE
David Patrick, CRL MIT
Dominic Cauchi, EQU
Elle Fabian, CRL CHE
Evan Jones,CRL FAL
Fraser Duncan,CRL SUR
Gavin Scott, CRL FAL
Greg Nowakowski
Jaimin Desai

group gossip

Say goodbye to...

Greg Nowakowski, CRL SUR
Jaimin Desai, CRL MIT
Jaimin Patel, BUX
Jake Church, CRL CHE
James McQueen, CRL FAL
James Parker, CRL BRI
Jason Smith, CRL BRI
Jo-Ann Lai-Oduber, BUX
Joe Jeffers, CRL MIT
Joseph Beaney, CRL BRI
Judith Stanbra, CRL CHE
Klisman Pepa, CRL MIT
Lethu Sithole, CRL CHE
Liam Dawtry, CRL BRI
Lisa Davie, CRL FAL
Lloyd Davies, CRL BRI
Lyn Brian Davies, CRL BRI
Magdalena Fernandes, CEN
Marc Fox, CRL CHE
Marcia Warrell, CEN
Marek Dwornicki, CRL SUR
Matt Cain, CRL CHE
Matthew Smith, BUX
Maureen Mallinson, CRL MIT
Maya Stanislawska, SAM
Muhsin Khan, CRL BRI
Neil O'Donnell, CRL SUR
Nicola Hill, CEN
Paul Roles, CRL BRI
Piotr Welzant, CRL SUR
Raheal Merzouk, CEN
Rhys Davies, CRL BRI
Robert Elder, CRL CHE
Samantha Taylor, CRL SUR
Sammy Adams, CRL MIT
Scott Robinson, CRL BRI
Soaif Sarasiya, CRL HO
Sophie O'Brien, CRL CHE
Steve Carter, CRL MIT
Tanya Sives, CRL FAL
William Vivers, CRL FAL
Wioletta Zukowska, CEN
Zakhiya Kara-Newton, CEN

Congratulations on promotions to...

Adam Kasperczyk, CRL MIT - Tradesman
Bartek Wisniewski, CRL MIT - Snr Tradesman
Callum Cruse-Morrell, CRL CHE - Trainee Estimator
Carl Fox, CRL CHE - Project Mngr
Carl McMenamin, CRL CHE - Snr Tradesman
Colin Smith, CRL AUS - Supervisor
Craig Steele, CRL HIGH - Contracts Mngr
Dagmara Urbanska, CRL MIT - Proj Mngr
Daren King, CRL CHE - Northern Reg Dir
Donald Smith, CRL FAL - Foreman
Drini Hazizi, CRL MIT - Snr Foreman
Elizabeth Tyler, CRL HIGH - Cont Mngr
Francis Allan, CRL FAL - Snr Site Mngr
Gary Dunlop, CRL FAL - Contracts Manager
Gary Groenewald, CRL BRI - Tradesman
Gavin Atkins, CRL CHE - Improver
J Paul Quinlan, CRL HIGH -Contracts Mngr
Jack Dunlop, CRL FAL - Tradesman
James Rowles, CRL BRI - Estimator
Jamie Robertson, CRL FAL - Tradesman
Jason Ilagan, CRL SOU - Trainee Mngr
Jose Castro, CRL HIGH - Site Mngr
Kenton Riley, CRL BRI - Reg Mngr
Keysha Parker, CRL CHE - Office Admin
Lewis Beddis, CRL BRI - Tradesman
Lukasz Kielsa, CRL MIT - Snr Foreman
Martyn Lewis, CRL BRI - Snr Contracts Mngr
Matthew Robinson, CRL CHE - Contracts Mngr
Michael Duggan, CRL CHE - Foreman
Miroslaw Pletkiewicz, CRL Mit - Snr Foreman
Miroslaw Wiszniewski, CRL MIT - Snr Tradesman
Murray Soutar, CRL FAL - Reg Dir (Scotland & Ireland)
Paul Ritchie-Duncan, CRL FAL - Contracts Mngr
Peter McDonough, CRL CHE - Foreman
Richard Simpson, CRL CHE - Snr Tradesman
Robert Foulsham, TL FIRE - Snr Fire Alarm Eng
Stefan Andreescu, CRL MIT - Foreman
Wiktor Gwozdz, CRL BRI - Tradesman

updates

Introducing Social Value

Social value refers to all the positive social, environmental and economic impacts we create. It is the overall benefits delivered to the community, either as part of our contracts or additional activities.

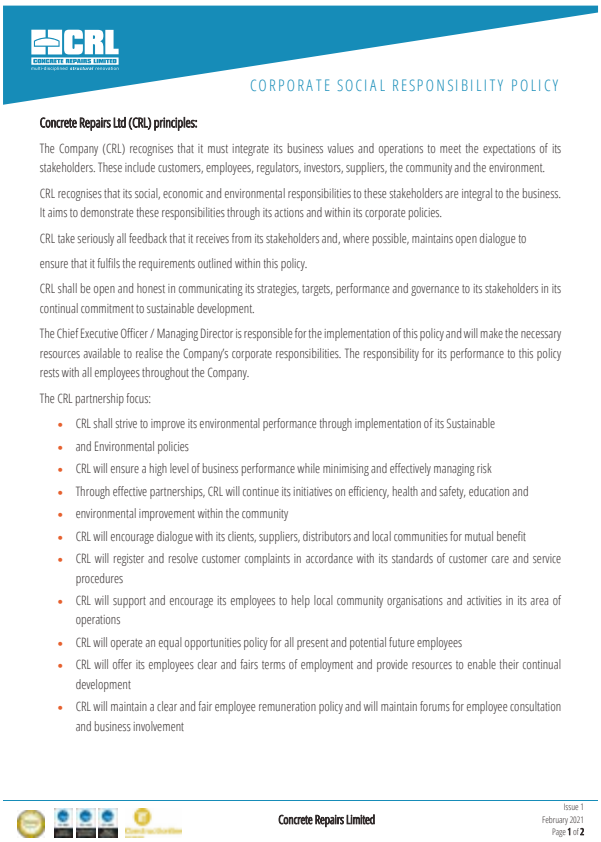
This is important to us because we want to be a business that makes a real difference to the areas we work in. As we all recover from the challenges presented by Covid-19, we feel delivering social value is more important than ever before.

There are many ways in which we already deliver social value. For example, by offering training, development, and career support – as shown by our Investors in People accreditation last year – or by adopting environmental best practice. Going forward, we want to adopt a more official, strategic approach so we can increase our activities, but also measure and report them.

We have created a new Social Value Policy and Strategy which shows how we can embed social value delivery into all aspects of our work. It outlines our objectives and how we plan to achieve them. This will be made public soon. It explores new ways for us to deliver social value and involve everyone across the company – such as, working more with charities, community organisations and social enterprises.

As this is relatively new territory for us, we very much welcome new ideas and feedback regarding anything social value related. If you have any suggestions or questions you can direct them to Joe (jcame@crl.uk.com / 07557 153953).

CRL's New Style Branding



CRL
CONCRETE REPAIRS LIMITED

CORPORATE SOCIAL RESPONSIBILITY POLICY

Concrete Repairs Ltd (CRL) principles:

The Company (CRL) recognises that it must integrate its business values and operations to meet the expectations of its stakeholders. These include customers, employees, regulators, investors, suppliers, the community and the environment.

CRL recognises that its social, economic and environmental responsibilities to these stakeholders are integral to the business. It aims to demonstrate these responsibilities through its actions and within its corporate policies.

CRL take seriously all feedback that it receives from its stakeholders and, where possible, maintains open dialogue to ensure that it fulfils the requirements outlined within this policy.

CRL shall be open and honest in communicating its strategies, targets, performance and governance to its stakeholders in its continual commitment to sustainable development.

The Chief Executive Officer / Managing Director is responsible for the implementation of this policy and will make the necessary resources available to realise the Company's corporate responsibilities. The responsibility for its performance to this policy rests with all employees throughout the Company.

The CRL partnership focus:

- CRL shall strive to improve its environmental performance through implementation of its Sustainable and Environmental policies
- CRL will ensure a high level of business performance while minimising and effectively managing risk
- Through effective partnerships, CRL will continue its initiatives on efficiency, health and safety, education and environmental improvement within the community
- CRL will encourage dialogue with its clients, suppliers, distributors and local communities for mutual benefit
- CRL will register and resolve customer complaints in accordance with its standards of customer care and service procedures
- CRL will support and encourage its employees to help local community organisations and activities in its area of operations
- CRL will operate an equal opportunities policy for all present and potential future employees
- CRL will offer its employees clear and fairs terms of employment and provide resources to enable their continual development
- CRL will maintain a clear and fair employee remuneration policy and will maintain forums for employee consultation and business involvement

Concrete Repairs Limited

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February 2021
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For those of you who aren't aware, CRL have been undergoing a 're-branding' exercise for quite a while now! It started with the new website (which I am sure you have all now seen!) being launched in October last year and has moved on, albeit slowly, with applying the same style to our brochures, documents, letters, etc.

To enable us to ensure consitentency of style of all our documents we have had 'templates' created for our letters and documents. In order to rollout these templates to everyone in the comany who needs them, we have appointed 'Champions' in each region who will be responsible for issuing the templates and (hopefully!) sorting out any problems you might have with them. If you are familiar with Word you will have no problem with using the templates and will love the new 'CRL' ribbon!

The 'Champions' for the various regions are;

Bristol - Kath Deane; **Chesterfield** - Lyndsey Fox; **Falkirk** - Anne Idziak & **Mitcham** - Kerry Bryant.

By the time you read this newsletter, all the 'champions' will hopefully have been briefed on, and have access to the templates. Please contact them if you require either a letter template, or a document template.

Any feedback, comments, or change requests, please discuss with your regional 'champion'.

snapshot

some projects from CRL Mitcham

150 Harwell Building, Beam Strengthening

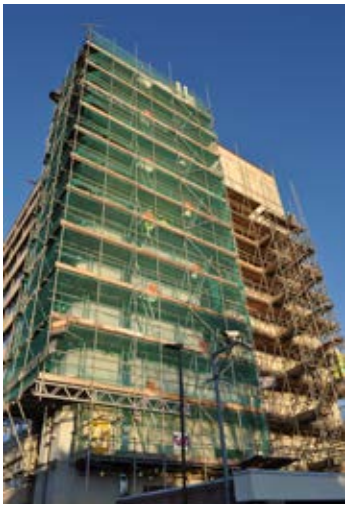
CRL are strengthening 8no. 10 metre long beams using Mapei Planitop Floor HPC46 fibre micro concrete in the Harwell Building at the Harwell Science campus in Oxford. The works involve installing new reinforcement to the outside of the beams to provide anchorage for the 70 mm thick jackets that are then cast around the beams. Designed formwork is first installed around the beams using 18mm WBP ply, 100 x 50 mm timber carcassing and then supported by Titan props. Slots 300mm x 60 mm are then cut into the slab above the formwork to enable the fibre reinforced concrete to be poured into the formwork.

To pour 2m^3 of concrete through slots above and keep the concrete flowing along the 10 metre long beams within the enclosed formwork has been challenging to say the least. In order to maintain the flowable properties of the fibre reinforced concrete mix, and obtain a good distribution of the fibres within the mix it is really critical to keep a continuous mixing time of 8 minutes, and have a continuous flow of concrete going into the slots.

Kevin Hodgson - Senior Contracts Manager (Mitcham)

Enterprise House, Chingford

CRL have recently finished carrying out the repairs and refurbishment of the external facades at Enterprise House (a nine-storey block of 188 retirement flats) in Chingford, East London. The building was originally constructed between 1965 and 1967 and is made up of a concrete frame with concrete block wall in-fills and clad with 80mm pre-cast concrete façade panels. The finish on the precast façade panels is exposed aggregate, whilst the in-situ concrete (stairways and lift shafts) has a rippled/ pockmarked finished.



Although repairs had been carried out on the exposed concrete facades in the past, it was apparent that it was time to undertake a new set of repairs and apply another layer of ant-carbonation coating. The anti-carbonation coating applied 18 years previously had done its job but was now degrading and starting to lose its protective abilities. This was resulting in new areas of concrete beginning to spall.

In June 2020, a condition survey and investigation of the external concrete facades was commissioned. Although the concrete frame was in good condition (having been protected from the elements by the concrete façade panels), it was found that a fair number of the concrete panels were in the High, or Extremely High corrosion risk category. This fact, coupled with visibly spalling areas of concrete, encouraged the Client to promptly issue a tender and award the contract to carry out the repairs.

The works consisted mainly of; access works, high pressure cleaning, concrete repairs, joint sealing between precast panels and the application of an anti-carbonation coating.

Michael Balletta - Infrastructure Manager (Mitcham)

Any contributions are gratefully received - please contact mballetta@crl.uk.com

snapshot

some projects from CRL Mitcham

Horstead Storage Reservoir, Ludham

Client: Anglian Water Services Limited (AWS)

Value: £135,000

Duration: December 2020 to March 2021

Horstead reservoir is a newly built reservoir. It is 33.6m X 26.4m and approx. 4m deep. It has 6No. hatches. It was constructed from a combination of pre-cast panels and in-situ concrete. It also had tow cells with a full height dividing wall.

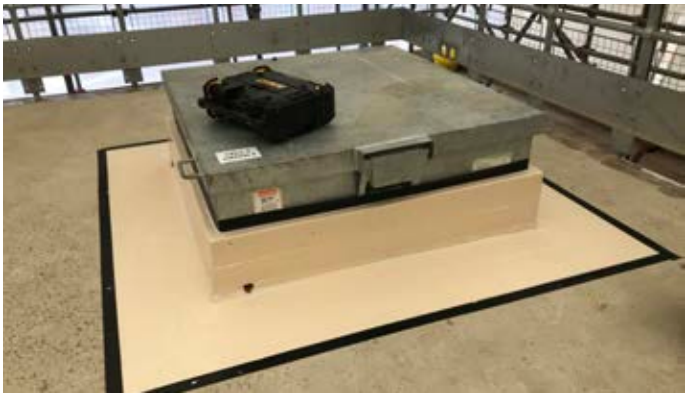
As part of the ongoing framework contract, CRL were contracted to install a new waterproofing membrane over the entire roof and a section of the wall. CRL engaged with AWS at the early stages to examine the best waterproofing solution. Prior to the works being carried out, the entire roof of the reservoir was covered with a 'tent' to allow environmental controls to be installed to facilitate the works. The coating phase of the works were carried out round the clock.

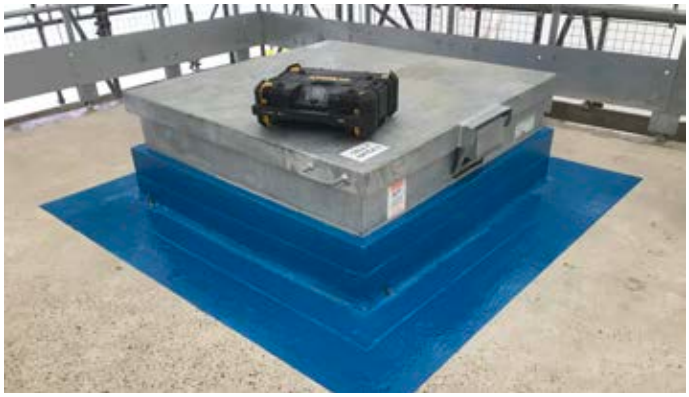
The works included;

- Preparation of the substrate
- Application of overbanding to perimeter of hatches
- Provision of heaters and dehumidifiers
- Application of Acothane DW coating
- Cleaning and disinfection

The reservoir went into service 8th March 2021. CRL were thanked by the Principal Contractor for their dedication in delivering the project.

Submitted by Olu Ogunwale - Senior Contracts Manager (Mitcham)



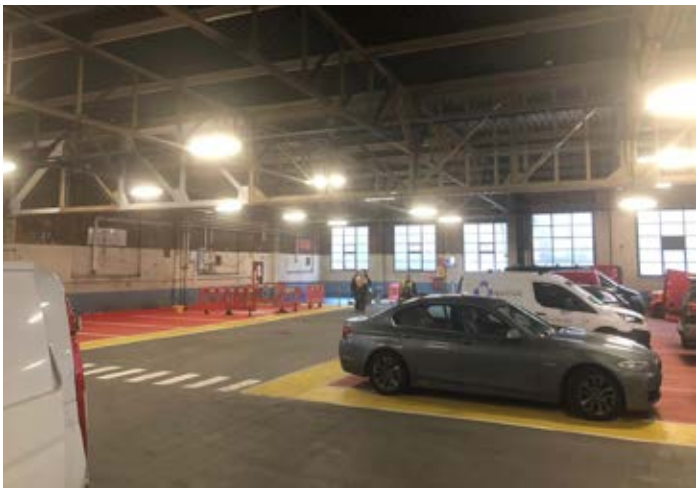


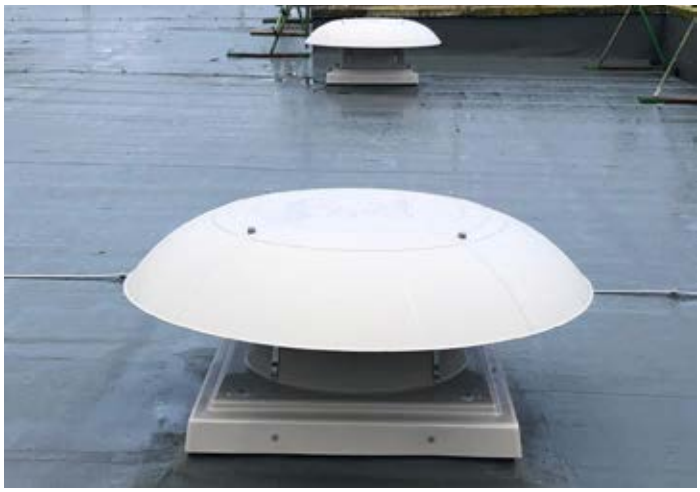
update

Equilux update

BRIGHTON DELIVERY OFFICE

Equilux have recently completed this project that involved a replacement lightning protection system, new roof mounted ventilation extraction fans, New LED lighting to the car park and extensive above ground drainage using a fusion weld system from the flat roof that was repaired. CRL were also instructed to carry out concrete repair works to the sorting area ceilings.





SOUTH STREET MSCP (WAVERLEY BOROUGH COUNCIL /CRL)

Equilux working for CRL installed a new Energy efficient LED lighting system to South Street MSCP. This lighting scheme featured dimming control to reduce energy consumption in quiet periods.

The works entailed a complete new electrical installation as the existing containment system was too badly corroded from water ingress to re-use.

ROYAL SCHOOL OF MILITARY ENGINEERING (GIBRALTAR BARRACKS MINLEY)

Equilux have commenced works on a full refurbishment project on this site, including new LTHW heating services, new boilers, new building management system, fire alarm, data infrastructure, electrical services and lighting throughout.

snapshot

the Chesterfield region ...

Boulby Mine

CRL have been employed by Cleveland Potash Limited to carry out concrete repairs to the surface section of a mine shaft at their Boulby Mine, North Yorkshire which forms part of their major capital refurbishment works. The mine shaft is 12.5m in diameter over a height of 45m and is situated in a highly corrosive environment imposed by the sea air, exposed location and by nature of the mined material creating a chloride/sulphate atmosphere.

Defects found on the structure include significant concrete spalling; with affected areas reaching in excess of 7m2, corroded reinforcement, cracks, construction defects such as substandard reinforcement and redundant alterations.

The works involved erecting a scaffold structure to enclose the shaft and provide access to the works. The project required significant hydro demolition operations followed by reinstatement of corroded and missing reinforcement before the concrete repairs could be made. Sacrificial Anodes were then incorporated to the concrete repairs to rapidly slow down the corrosion of the reinforcement and prolong its life: leading to fewer future repairs and an enhanced service life. Any patches with removed concrete are then further reinforced with stainless steel mesh and made good with sprayed concrete to match the existing finish. Any smaller patches and cracks were then manually broken out and repaired by hand.

CRL were able to carry out the works whilst the mine was in full operation and completed the project without affecting the client's productivity. CRL rely on their industry leading experience, expertise with cathodic protection and concrete repairs: to deliver a high-quality and safe service.

snapshot

the Chesterfield region ...

Belper Bridge Maintenance Works

CRL were employed to carry out repairs to an historic road bridge in Belper, Derbyshire. Belper Bridge, a Grade II triple arched ashlar bridge listed structure, is situated just below a series of weirs, retaining walls and sluices and carries the A517 over the River Derwent. It was built by Benjamin Marshall and dates back to 1796.

The project was based on a ten-week program, included re-painting parapets, barrier guard rails and cantilevered foot way support beams, waterproofing of foot ways, minor concrete repairs, re-pointing masonry and carriage resurfacing. Works on the underside of the bridge could only be done to one arch at a time to allow the river to still flow freely.

The works to Belper bridge started in mid-June. The first phase of the project was to install pontoons to the first arch of the bridge and once this was completed a scaffold access staircase was erected on a pontoon which was designed to move up and down with the rise and fall of the river. Aluminium scaffold towers were used for the access to the works on the I-beams which consisted of a mechanical preparation, spot prime, under coat and finally a topcoat. The client would specify the areas needed for renewal of pointing, and once a sample of the mortar to be used was approved by the heritage society, work could continue.

Once completed the arch would be signed off and the pontoon would be moved to the next arch and the process repeated. Areas on the top side of the bridge would be worked on behind traffic management which comprised of a road closure and a footpath closure. The parapets and handrails would then go through the same process as the I-beams. Localised areas of concrete repairs would be marked up, broken out and then reinstated. The footpath areas were stripped of their old membranes and the surface prepared. A Stirling Lloyd Bridge master system was then applied and hot pour used for the expansion joints. The upstand would then be painted with an anti-carbonation paint.

Once the upstream side of the project was complete the same process would be mirrored on the downstream side. The final part of the project was the resurfacing of the carriageway. A full road closure was set up, the carriageway planed down by 55mm, a bond coat applied and new asphalt reinstated. New line markings would then be applied and the road reopened. The project was completed in nine weeks, one week ahead of programme.

snapshot

some projects from our Highways division ..

P86 Viaduct, Gravelly Hill, Birmingham (Area 9)

This is the 2nd part of the original award for the works at Gravelly Hill, started in 2018. The works in this iteration involve the removal of the originally installed cathodic protection (CP) system from over 20 years ago to 4 bent structures, located adjacent to the River Tame and the Aston Expressway – a main arterial route into the centre of Birmingham.

Access to reach the structures is first secured by erection of high level scaffolds, followed by fitting of protective timbers internally, encapsulating and protecting the working areas of each bent structure. Surface preparation of the concrete is carried out prior to a resonance or hammer survey being completed to establish the extent of the delaminated and de-bonded parent concrete material. A half-cell survey is then completed to plot the areas of likely future corrosion of steel reinforcement within the concrete. Following reinstatement of all repairs, the CP installation can be started, focusing on those areas with the highest readings detected through the half-cell survey. An overlay spray applied concrete is ultimately applied to the finished CP installation prior to energisation of all works. The beams continue to be monitored for 12 months following de-mobilisation from site.

These projects are part of a very successful run for CRL, of large scale concrete repair and CP installations undertaken on the Midland Links in the West Midlands.

Both Projects Submitted by Paul Quinlan - Projects Manager (CRL Highways)

River Dane, J18 of the M6, Cheshire (Area 10)

This project is currently nearing completion of the ECI (Early Contractor Involvement) works to repair a major bridge just north of J18 on the M6, Cheshire. CRL have been selected as the contractor to prepare design briefs and proposals for a bridge that carries the M6 over the River Dane – the bridge itself is in urgent need of repair and in order to maintain running traffic during the repair phase, our proposals have had to reflect this as a central requirement.

The river running through the works has been a priority issue in any proposals made, due to the significant tidal flows that can be experienced during times of heavy downpours. A contingency temporary works design has had to be agreed with our client, Highways England in order to account for the fluctuating water flows that can occur, in the event that a conventional scaffold access is deemed inappropriate for the works to be completed. One side of the bridge structure (south side) has suffered considerably greater deterioration than the other and this is where the TW designs have been concentrated. Our proposal is to dredge the concrete apron covering the river bed, spanning between the two rows of piers located on either side of the river. Once this has been completed, we will install a temporary Portadam to the south bank to protect our excavation works to reveal the column foundation base. Ground anchors will restrain any revetment soil from falling back into the excavation. A concrete stem wall between all the columns, will then be constructed below from foundation base, rising to 4 metres above bed level – and above the maximum water flows recorded. Props will then be installed, extending up beyond 7.0 metres from the top of the stem wall, to support the underside of the M6 motorway. Scaffold access will then be erected around the props, punched off the stem wall, enabling concrete repairs to be completed, followed by installation of a CP system.

The construction phase for these works is due to proceed from 2022. Among many other challenges, access to the columns and piers on either side of the water will be one of them, matched in complexity by the nature of the repair methods prescribed, as well as the CP system envisaged, the tidal flows of the water and the times of year in which work can be successfully managed. Working around some major services – high voltage electricity cables, high pressure gas mains and oil pipelines – will be an interesting experience as well.

snapshot

Buxtons Associates & Samuely ...

Harbour Vale School

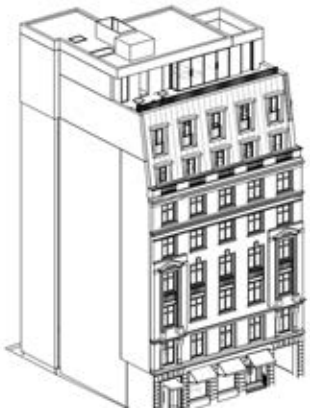
This school in Dorset has a 5 year masterplan to reconfigure, adapt and extend the existing Victorian builidngs. The first stage, which is currently on site, is a new timber framed building providing additional teaching space and reception. Our works included the drainage design, foundations and design of the timber frame.

Queen's House, St James's Street London

The substantial remodelling of an office block in central London to bring it up to modern standards. We're adding 2 storeys on top and extending out at the rear – the building sits on top of the Jubilee Line tunnel so we've had to be careful about keeping the proposed load similar to the existing.

The existing building, redeveloped in the mid 80's, has a retained façade from the 1930's and a steel framed internal structure. Our new floors mimic this and we sit new columns on top of the existing so that we don't need to provide new foundations – except where we have to relocate one of the lift cores…

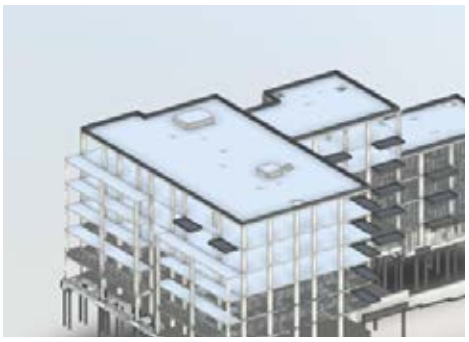
The scheme is currently in planning and expected to go to site in the Autumn.



Stag House, Barnet

Just as we entered Lockdown 1 we were appointed by Rydon Construction to undertake the structural and civil design for this £12.5m, 55 unit assisted living development for Barnet Homes. We developed a 3d Revit model to facilitate production of our drawings and to allow coordination with the other members of the design team. This is a screen shot showing the full structure, from piles to lift overruns.

A concrete framed building with blade columns set in party walls and 225 thick flat slab floors, all conventionally reinforced. Built on a sloping site allows for a lower ground floor plant room at one end of the building; elsewhere we have 5 storeys of accommodation. The numerous bolt on balconies, required for amenity space for each unit, have been a struggle to resolve; we had to deal with levels, thermal breaks, deflections, waterproofing etc etc. This started on site in late 2020 and the first floor is currently being constructed.



The Gatehouse, Southwark Bridge Road

Formerly the entrance to the Courage Brewery this Victorian terrace has suffered with some rather serious subsidence. Working for the London Borough of Southwark we have been monitoring the movement for a couple of years to see how it changes over time. We have developed a remedial works scheme using a piled raft where the load-bearing walls are underpinned. The contractor is now on site preparing to carry out this work and also the major repairs to the flats, which will remain occupied throughout the works.

snapshot

what our guys are doing up in Scotland

The Boys are back in Town ...

After missing last years visit to Shetland due to the COVID19 lockdown, CRL's Dolphin repair and Cathodic Protection team are back in Shetland with a programme of works to carry our repairs and CP installation to four berthing dolphins and two mooring dolphins, valued at £1.6m, at the Sullom Voe oil terminal.

The team led by CRL Contracts Manager Gary Dunlop left Central Scotland last week and after an interesting ferry journey from Aberdeen to Lerwick under strict COVID segregation regulations, they arrived on site to shiny new offices and workshops that have been allocated to us for the duration of the works.

The works this year will be carried out between March and September, which in Shetland is when it gets daylight in the Spring and September is when it gets dark again, takes a bit of getting used to!!

CRL have a team of 24 people including sub-contractors rotating on a 3 week on and 1 week off basis and Alec in Denny has become an accomplished travel agent arranging cars, ferries, planes, and accommodation for the team whilst ensuring that all the COVID travel regulations are observed including COVID testing at the start and finish of any journey.

The works involve hydrodemolition of the first 150mm of concrete from the underside and sides of the dolphins, replacement of any corroded reinforcement, installation of a mesh and overlay cathodic protection system and spray back to the original profile.

Our customer for this project is The Shetland Islands Council who own this jetty and we work as a sub-contractor to Malakoff who are a marine contractor who provide all access and work and safety boats for the works. This is CRL's seventh year in Shetland, working on this jetty and a good few of the team have been there every year, almost locals now!!

snapshot

Bristol projects ...

Phoenix Lane MSCP, Tiverton

Phoenix Lane MSCP in Tiverton, Devon, underwent an extensive repair and refurbishment during the Summer of 2020. The 620 space, 11 level car park is the only multi-storey in Tiverton, providing essential parking to the local high street and adjoining Mid-Devon District Council office. The car park also provides 24/7 parking for the adjoining Premier Inn hotel.

Concrete Repairs Limited were employed working as Principal Contractor for Mid-Devon District Council, to undertake the extensive refurbishment to all car parking levels and four staircases. The works consisted of concrete repairs, application of partially reinforced waterproofing to the three top exposed levels, Radflex mechanical movement joints, anti-carbonation coatings, decorations, line-marking and signage replacement throughout. The staircases received new metal fire doors, floor coverings, decorations and Health & Safety signage.

Despite previous failed attempts to waterproof the top three external car parking decks, CRL provided a partially reinforced waterproofing system supported by a 10 year warranty. The Car park construction meant that bespoke reinforcement was designed over the 4000 meters of plank edge joints, followed by application of a heavy-duty, rapid curing, Triflex PMMA waterproofing decking system.

Value: £770,396.27

Duration: 20 weeks

Martyn Lewis - Senior Contracts Manager (Bristol)

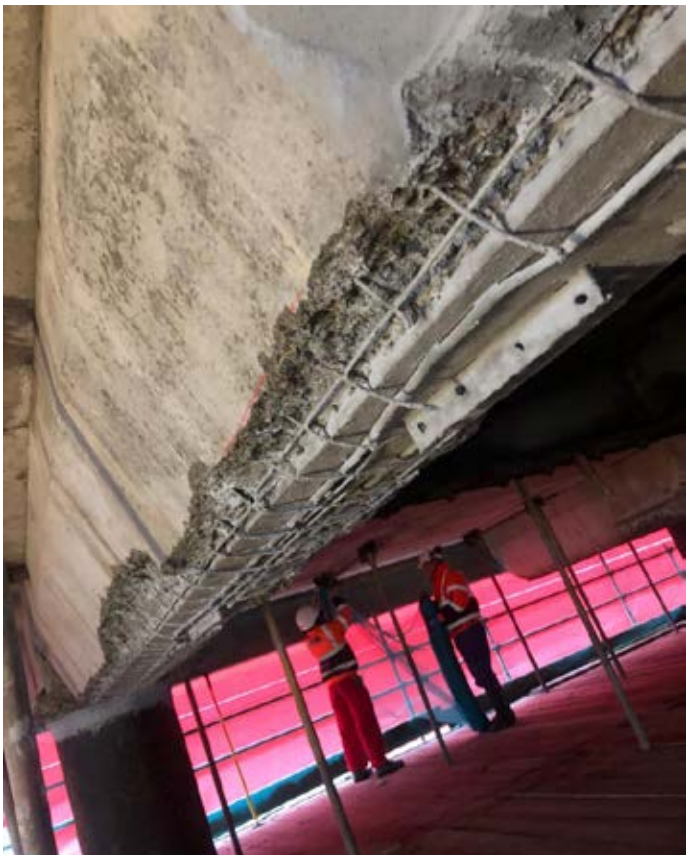
VPOT - Berth 2 Concrete Repairs

CRL after completion of structural repairs works at Berth 3 of the Valero Oil Terminal in 2018, has successfully secured Phase 2 of the refurbishment scheme on Berth 2.

Access to the works was by the means of suspended scaffolding supplied by Valero Oil Terminal Ltd. The scope of the works was to carry out a hammer test survey and identify all the defective concrete within the cross beam and soffit of Berth 2, remove all defective concrete by high pressure water jetting, treating the exposed reinforcement, placing formwork, and re-instating the defective concrete using Sika products.

Following the completion of the concrete repairs, the whole surface of the cross beams and soffits were pressure washed, and a corrosion inhibitor sprayed applied using an air less spray mavhine at the rate specified.

All the excess of corrosion inhibitor was then washed from the surface by high pressure jet spray and a Sika waterproof coating applied to provide further protection and durability to the structure from the harsh environment it is located in.



Khalid Rahmany - Project Manager (Mitcham)

snapshot

another project from Bristol ...

M5 Junction 10-11 Staverton Bridge Deck

Contract Value: £1 million +
Duration of Project: 12 Months

CRL Bristol have been working for Highways England and alongside R&W Civil Engineering on the Staverton Deck Bridge, located over the M5 between Junctions 10 and 11 in Cheltenham.

The scope of works comprises of the removal of defective areas of concrete to the bridge deck and areas under the bridge including the piers and the reinstatement of these agreed areas with specific proposed materials both poured and hand applied. These repairs will have to be completed in different phases, a total of 13 phases. Currently, CRL have completed 6 phases and have reinstated approximately 160 cubic metres thus far. The reinstated material used is the Strike 4.5, which achieves a mean compressive strength of 45 N/mm2 in 3 days. Vector XP4 Galvanic anodes will also be fixed in place within the broken-out repairs before the reinstatement commences to prevent corrosion of the steel reinforcement. Due to the size of the repair in some phases, the reinstated mix must be supplied from a batching plant and delivered via a concrete lorry, assisted by a concrete pump. Other works include:

- Ferro Scanning Deck to locate steel reinforcement for additional channels
- Laser Mapping to set out levels for concrete pour
- Investigation under bearings

Figure 1: Staverton Bridge Deck prior to any phases of work beginning

During the first phase, CRL encountered many challenges with the works being carried out on the bridge deck, an example being damage to the void formers when hydro demolition is carried out. Damage to the void formers will lead to water escaping on to the live M5 motorway below. During freezing conditions, this posed danger to the public. However, the site team managed to have this under control during each phase by making sure a member of CRL carried out constant monitoring under the bridge when these works are being carried out. The number of void formers hit was greatly reduced following subsequent phases.

Figure 2: Phase 1 excavations complete

Before each of the next phases begin, the concrete material used to reinstate the deck has to be tested and will need to pass a minimum compressive strength of 45 N/mm2. This concrete will also need to pass an S3 slump test which is carried out before the pour begins. Working on any construction site, health and safety is the priority. CRL have made sure to keep the site safe for all workers working on the site and the public travelling on the motorway constantly.

Figure 3: Enclosed area where hydro demolition is carried out

Everyone on site has played a major part in making sure the site runs as smoothly and as safely as possible. A big thanks to the Contract's Manager, Senior Site Managers, and site operatives in making sure all problems encountered were solved immediately and the works carried out in a safe and sustainable manner to the clients satisfaction.

Namo Rashid - Student Engineer (Bristol)

general chatter

With most people working from home and not being able to gossip around the office, there doesn't seem to be much 'general chatter' to report on in this newsletter!

Lets hope that with things now returning to normal we will start hearing more of what is going on ...

Evening Class Claim Scheme

Please remember that the company will contribute up to £100 per employee, per academic year. towards the cost of an evening class at a local college or education centre.

Previous claims include baking, Spanish, motorcycle CBT, archaeology and yoga – no subject off-limits!

For more info contact Karen Cummins, Training Department, kcummins@centuragroup.co.uk

0208 288 4828.

Community Projects Scheme

For those of you who are not aware, Centura has a Community Projects Scheme which can be used by all Group employees to actively serve the local communities in which they work and live.

To this end, up to 3 days paid absence per year will be granted to enable you to participate in an approved local community project. Schemes will typically involve care of the aged and infirm; projects for disadvantaged people, hospitals, community centres and other community initiatives. However, this scheme does not extend to fund raising for charities, working in charity shops, or anything to do with your own family or friends help and requirements

Anyone wishing to be involved must complete a Community Projects form; this can be obtained from the forms folder on the intranet or from the HR Department.

Congratulations to Carl Fox & Jose Castro who gained their HNC in Construction & Built Environment!

What a great achievement!