NORTHERN INNER RING ROAD SOUTHAMPTON CASE STUDY

BQS HIGHWAY CONTRACTOR

WORKING IN PARTNERSHIP WITH

Balfour Beatty

SOUTHAMPTON CITY COUNCIL

2024

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BQS
HIGHWAY CONTRACTOR

OVERVIEW

As part of Southampton's City Centre Transformation, BQS took on this project working with Balfour Beatty Living Places on behalf of Southampton City Council.

BACKGROUND OF THE PROJECT

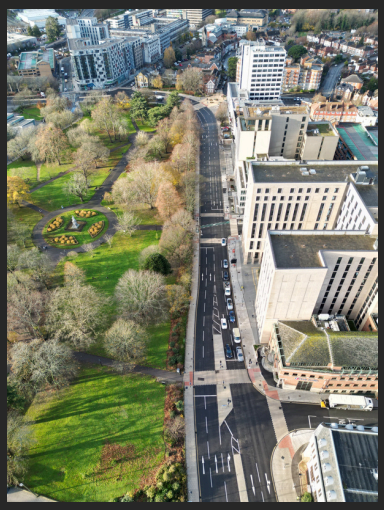
The aim of this project was to improve the transport corridor in this particular area that allows smoother traffic flows providing a better alternative to New Road, and enables bus priority as well as better connectivity across the corridor for people walking and cycling.

The works involved a comprehensive regeneration of existing footways, integrating safety-focused upgrades such as improved crossing points, installation of advanced ducting networks, and the provision of modernised retention socket poles. These measures were paired with priority phasing to enhance pedestrian safety and traffic flow efficiency.

KEY AREAS:

- Creation of a new communal pocket park along Devonshire Road
- Smart technology signal improvements
- Improved pedestrian and cycle crossings at key junctions

OUR INVOLVEMENT



BQS was brought in at the most crucial stage of this scheme, which also happened to be the largest project in Southampton throughout 2024. Prior to this, the much smaller Phase 1 and Phase 2A had been completed the previous year.

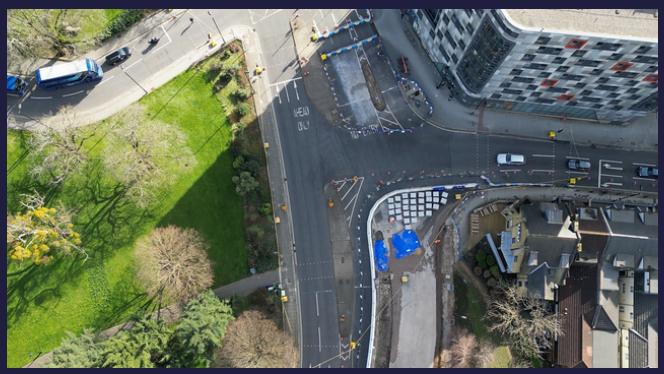
BQS worked alongside other supply chains such as Chapter 8 Traffic Management, IMS and Telent.
This project was one of Balfour Beatty's Living Places largest projects to be completed within the heart of Southampton's City Centre.

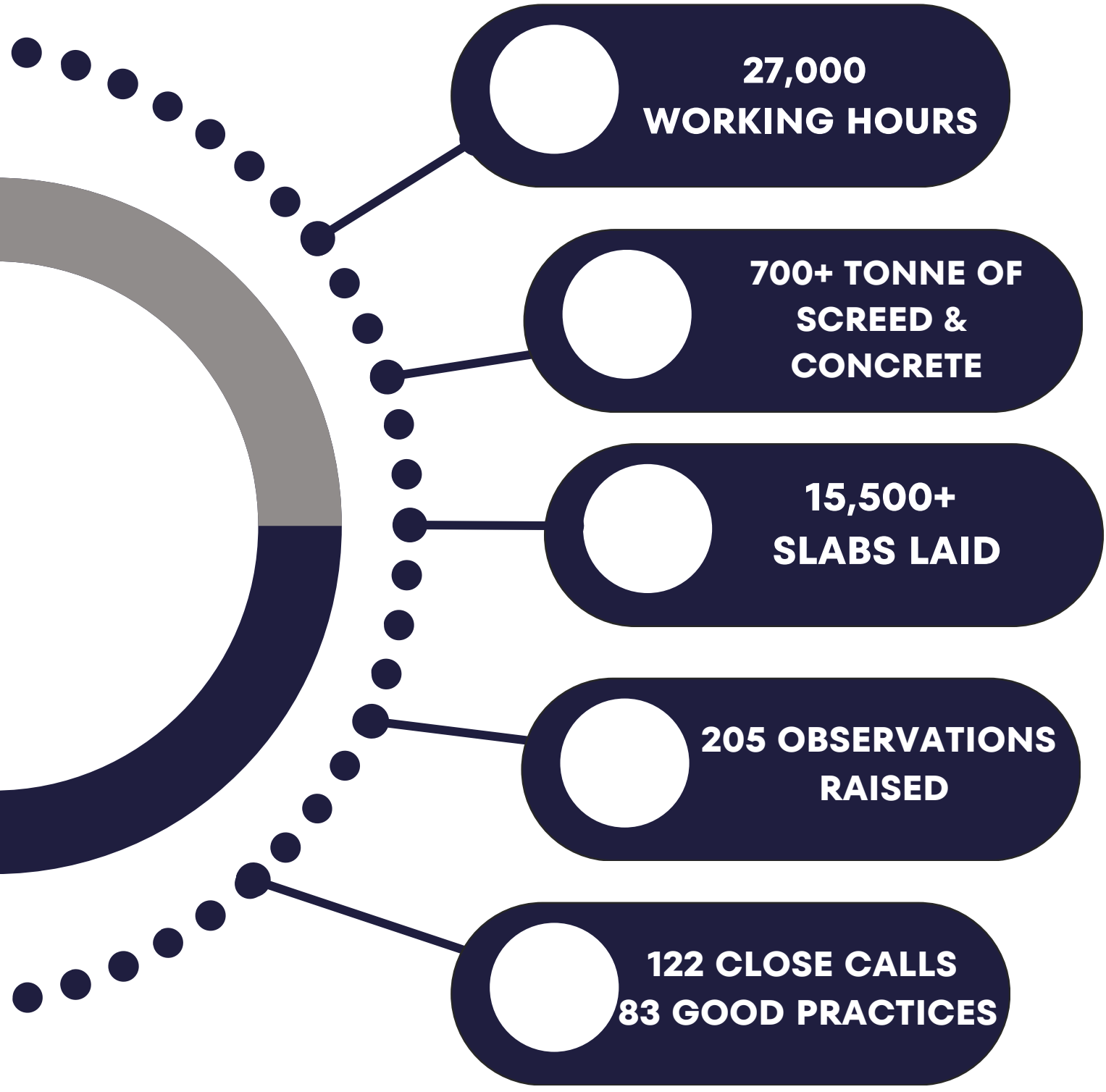
OUR METHOD

The Northern Inner Ring Road is a critical arterial route within Southampton, meaning a full closure was never an option. Understanding the importance of minimising disruption while maintaining productivity, we worked closely with the fantastic BBLP team to develop a carefully phased approach that balanced efficiency with the need to keep traffic flowing.

BQS established a dedicated project team based directly on the Ring Road by renting office space from a local provider, ensuring both our team and BBLP had a central base specifically for this project. Having BBLP located in the office next door allowed for seamless collaboration, real-time decision-making, and efficient coordination throughout the works.

To further enhance project management, BBLP set up a fully equipped site hub within this space, incorporating the latest IT systems to track and monitor all aspects of the programme. This setup ensured that both teams operated as a unified and efficient team, with full visibility over progress, resource allocation, and any necessary adjustments to maintain efficiency and minimise disruption.




27,000
WORKING HOURS
700+ TONNE OF
SCREED &
CONCRETE
15,500+
SLABS LAID
205 OBSERVATIONS
RAISED
122 CLOSE CALLS
83 GOOD PRACTICES

CHALLENGES

One of the project's most complex challenges was its central location in the heart of the city, requiring careful planning to minimize disruption. There were also several other factors we experienced during the course of this 5 month project.

Traffic Management

A one-way traffic system was temporarily implemented on the main ring road to facilitate the works. This innovative solution proved to be a resounding success, allowing construction activities to proceed efficiently while maintaining access for local residents and businesses. The traffic management strategy demonstrated effective collaboration and adaptability in addressing the logistical challenges of urban construction

Events

During our time on the project several main events were taking place in the city:

- Southampton ABP Marathon
- Summer Sessions
- Saints FC being promoted to Premier League
- Isle of Wight Festival
- Civil Rights Protests

The Public

Thew BQS team also faced challenges beyond the technical aspects of the work. They encountered instances of public interference and abuse, which at times disrupted operations and posed safety concerns for our workforce. Despite these difficulties, the team remained professional and resilient, working closely with authorities and stakeholders to manage the situation effectively.

CHALLENGES

UNEXPLODED ORDNANCE

During excavations on Cumberland Place in March 2024, adjacent to several small business and residential dwellings a small unexploded ordnance was found by a BQS operative onsite. The police were called immediately by the team and they attended the site, cordoning off the area and evacuated nearby offices and residences.

'Unexploded' item found in Southampton roadworks revealed

21 March 2024

A cordon was put in place by police at the top of Commercial Road in Southampton

A bomb disposal unit has said an "unexploded" item found by workmen could have been a chair wheel.

This incident reached national press, including The Mirror and The Express.

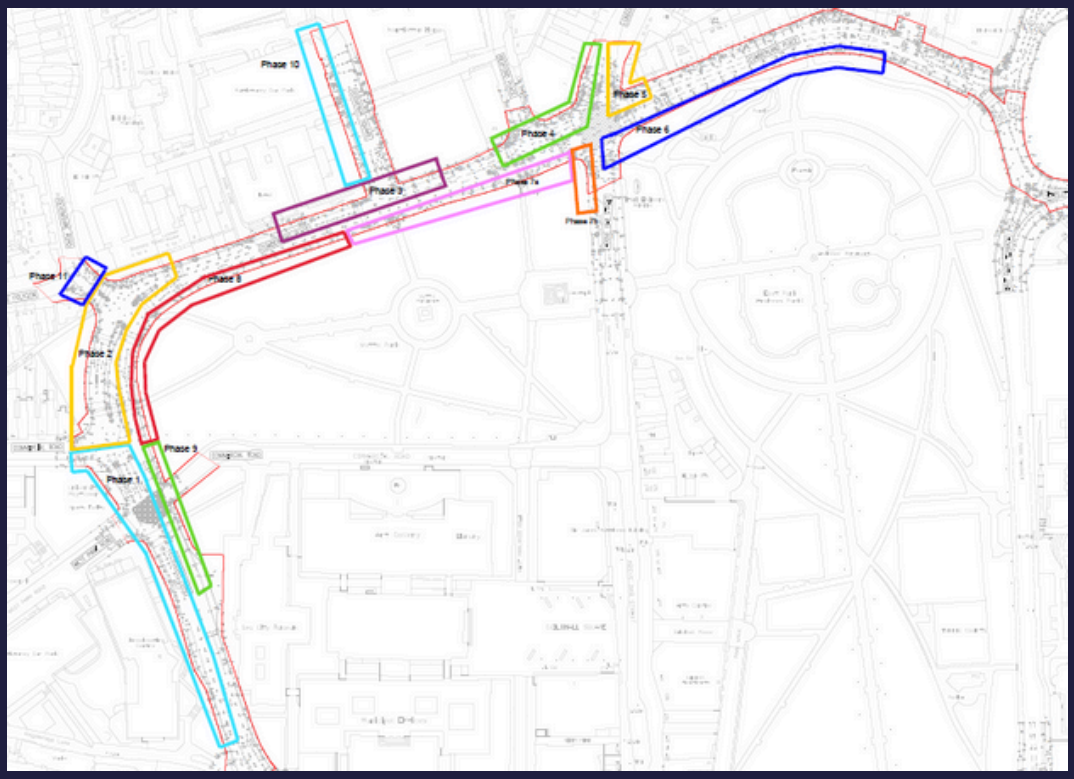
Photograph of the ordnance, which was safely removed.

The team on the ground collaborated closely with Balfour Beatty and the police to ensure a smooth and coordinated handover of the site for their incident response. This joint effort allowed the authorities and specialists to assess the situation safely and take the necessary precautions.

Once the ordnance was identified and secured, a specialist disposal team was swiftly deployed to handle its safe removal from the site. Their expertise ensured that the area was cleared without further risk, allowing our team to resume operations with minimal disruption. Thanks to the efficient response and teamwork between all parties involved, we were able to maintain safety while keeping the project on track.

PHASING

Given the size and complexity of foot traffic in the area, BQS further refined their approach by phasing work at each individual junction. This ensured that pedestrian movement and safety were prioritised throughout the project. By breaking down the scheme into manageable phases, they were able to maintain traffic flow, reduce congestion, and keep disruption to a minimum, all while delivering a high-quality outcome.



The drawing illustrates the multiple phases required to successfully deliver this complex project. While the works themselves were similar across phases, they had to be meticulously planned and managed to align with critical path milestones and scheduled road layout changes. Each phase was carefully coordinated to ensure smooth transitions, maintaining traffic flow and minimising disruption to road users.

Road users also had clear expectations for minimal disruption and timely reopening of completed sections. This required a precise and proactive approach to project scheduling, ensuring that each phase was delivered efficiently while maintaining safety and accessibility for the public.

INNOVATION

HANDHELD VAC-EX

This site was one of the largest and most ambitious of the Southampton HSP's history, with a works area of approximately 800m between the busy points of the Civic Centre junction and Charlotte Place Roundabout. The area has a complex network of underground services, and so during construction a Vacuum Excavator Handheld Unit was used to mitigate the risk of hitting uncharted services.

SOUND PROOF MIXING STATION

BQS designed and established a purpose-built mixing station on-site, ensuring efficient material preparation while minimising disruption to the surrounding area. To further mitigate environmental and community impact, they introduced an innovative approach to noise reduction by using exo sound barriers. These were strategically hung over and attached to secure fencing, effectively shielding local businesses, nature, and the public from excessive noise that could have arisen during the works.

This proactive solution demonstrated our commitment to minimising disruption and maintaining a considerate working environment.

INNOVATION

ECO WELFARE UNIT

BQS had a hybrid unit from GAP hire throughout the project, it incorporates solar panel units alongside the diesel engine this has saved approx. £2600 on 1400 litres of diesel through the course of the projects.

ELECTRIC TELEHANDLER

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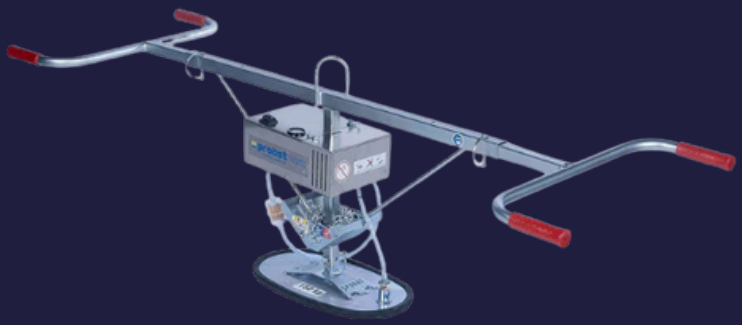
HANDHELD VACUUM LIFTER

During construction, 15,500 slabs were laid to create the new pedestrian walkways. During the installation of these, the team used handheld vacuum lifters to lay the slabs which mitigates the risk of not only damage to the slabs, but also the health risk to the operative who will now be able to reduce the physical strain of placing and lifting the slabs, greatly reducing the manual handling need.



SOCIAL VALUE

As part of BQS's company ethos, they will always try to get involved with the community and give back wherever they can.

BQS whilst working at the NIRR, they took part in numerous local community projects, events and fundraisers.

During the final stages of the Ring Road scheme, we worked alongside Chapter 8 supporting Southampton City Council and Balfour Beatty in St Marys, to make improvements to the concrete blocks currently situated on Argyle Road.

BQS was honoured to volunteer our time by jet-washing the blocks and painting them white, making them the perfect canvas for the designs. They also provided all the necessary paint, brushes, and rollers to get the job done for the community to use. It's wonderful to see these vibrant blocks brightening up the neighbourhood. This project is a testament to what can be achieved when communities and businesses work together.

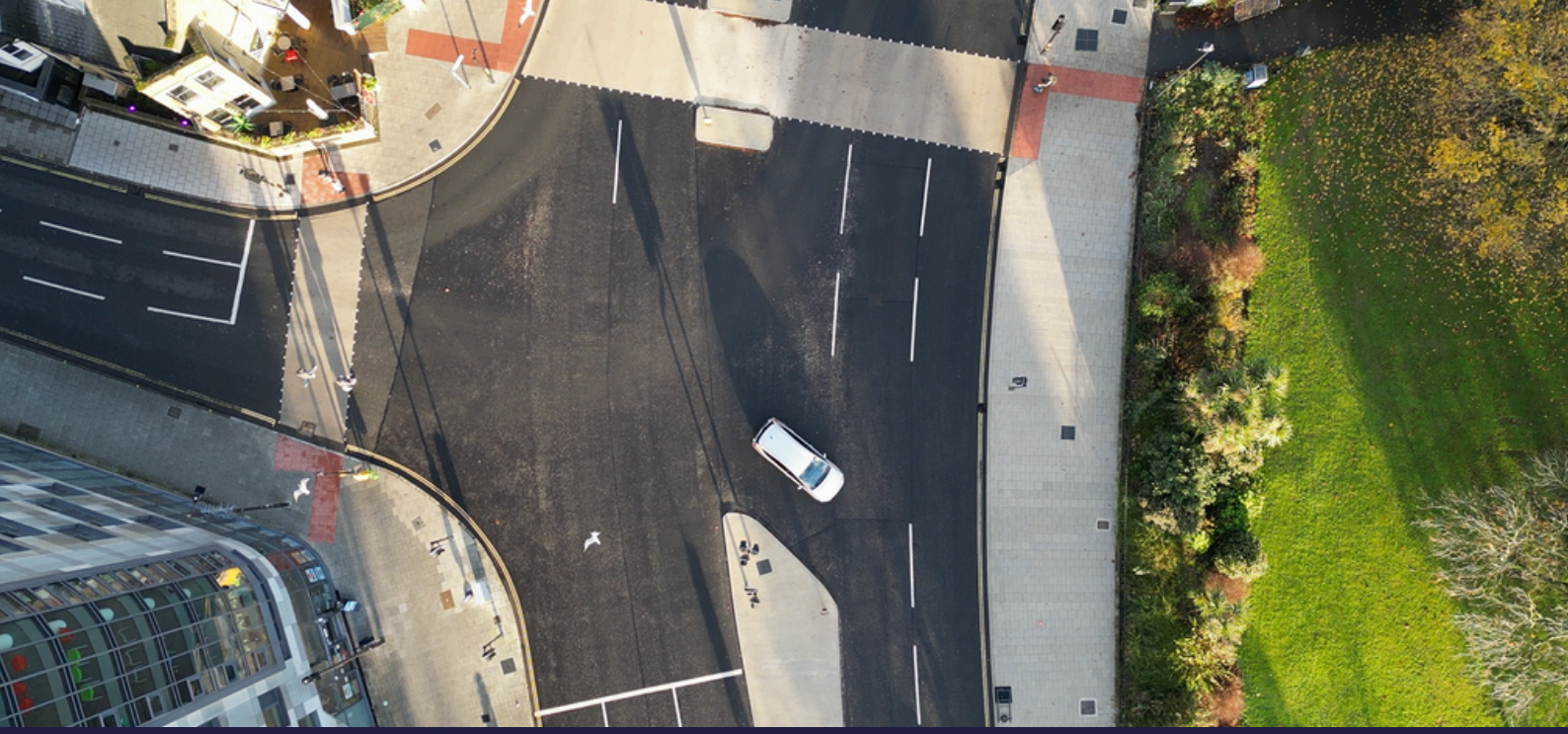
BQS also contributed to Balfour Beatty Living Places' initiative by donating over 200 Easter eggs in support of their fantastic community cause. This donation not only reflects their commitment to corporate social responsibility but also their dedication to making a positive impact beyond the confines of our business.

During the final phases of the Ring Road the BQS team was also proud to march in the Southampton Pride Walk alongside our partners Balfour Beatty Living Places. It was an incredible day filled with unity, celebration, and a shared commitment to inclusivity and diversity

FINAL PROJECT


Except buses
LOCKSMITHS
MOSE


GYM




WHITE
Park Smith

CLIENT FEEDBACK

Our partnership with Balfour Beatty on the NIRR project has been built on trust, collaboration, and shared expertise, ensuring the successful delivery of key project milestones. This partnership has not only strengthened our working relationship but has also laid the foundation for future collaboration. We look forward to building on this success, working together on future projects, and continuing to grow our partnership to drive innovation and deliver outstanding results in the industry.

TESTIMONIAL

"BQS have worked with Balfour Beatty Living Places as our main civil engineering subcontractor in Southampton on several high-profile public realm and active travel projects for several years. They continue to be a trusted, expert, highways partner and in 2024 formed an integral part of the team delivering transformational works in the city, Most notably the £4.6M Northern Inner Ring Road project delivering an improved transport corridor that allows smoother traffic flows and enables bus priority, as well as better connectivity for walking and cycling. Steve, Clive, Chris and the team are a pleasure to work with. Known for their collaborative, solutions-focused approach. Their commitment to delivering excellence for the customer is clear to see. They take pride in executing quality highways works in a safe, sustainable way and with a clear focus on health and safety combined with utilising latest technologies and techniques."

GAETANA WISEMAN, FORMER SOUTHAMPTON LIVING PLACES CONTRACT DIRECTOR

THANK YOU!

BQS
HIGHWAY CONTRACTOR

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