



**RTS INFRASTRUCTURE**



# Capability Statement

February 2024



# Contents

- About Us ..... 3
  - Executive Summary ..... 3
  - Our Growth ..... 4
  - Our Senior Team ..... 5
  - Client Testimonials ..... 7
- Our Capabilities at a Glance .....
- Design Works ..... 9
- Construction Projects ..... 11
- Depot Services ..... 13
- Managing HSQE ..... 15
- Case Studies ..... 18
- Our Holbeck Facilities ..... 24
- Future Holbeck Facilities ..... 26





# About Us

## Executive Summary

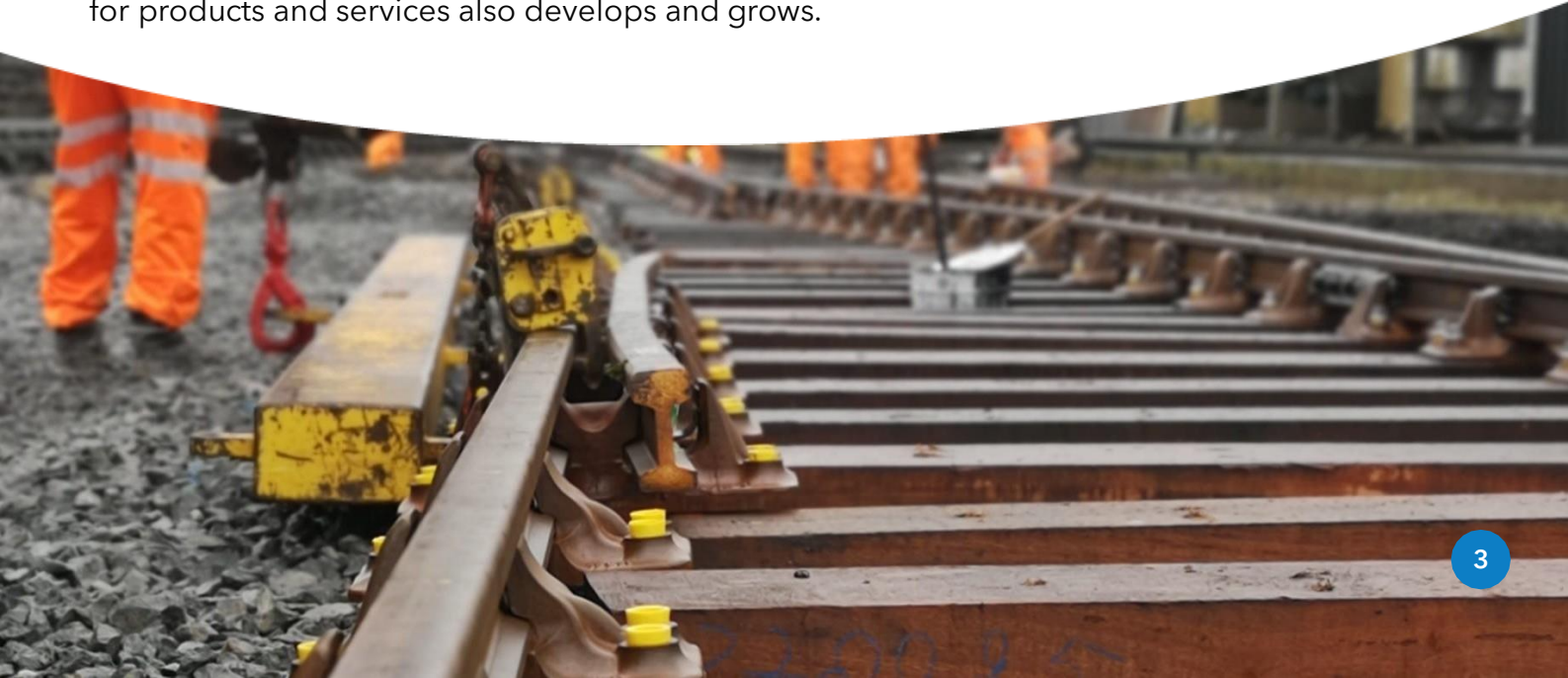
RTS Infrastructure is a specialist rail services company that provides Rail Engineering, Operations, Design, and Construction Services. We are focused on UK rail depots, supporting Network Rail (NR), Train Operating Companies (TOC) and major rail companies including Freight Operating Companies (FOC) and Yellow Plant Operators. A privately owned company with our own dedicated rail depot which connects directly to Network Rail mainline network.

Our purpose-built rail facility in Leeds, West Yorkshire is ideally situated in the Northern Powerhouse, with dedicated direct access to the rail network which offers strategic benefits to passenger, freight and rail plant operators requiring flexible services. Our location has proven to be extremely beneficial for local transport stakeholders by providing additional capacity and operational flexibility to meet the Northern Powerhouse's growth requirements.

In addition to our own facilities, we work with our clients in over 20 different depot locations. During the last three years we have completed over 25 design packages and 40 construction projects across these 20 UK rail depots and have a highly successful track record of supporting our client's needs, from inception through installation and entry into service for a plethora of depot solutions, whilst ensuring our clients maintain smooth depot operations for their fleets.

RTS have expanded our competency to service key rail requirements in civil, M&E, P-Way, S&C, shed construction, carriage wash installations, CET systems and fuelling systems, along with all associated temporary, enabling and ancillary works.

Our continual investment programme offers an ongoing, sustainable growth package which supports and underpins the new Northern Trains services. Since 2011, RTS have consistently reinvested in depot facilities, whilst ensuring that our local community supply chain for products and services also develops and grows.





# Our Growth

Over the last 13 years, RTS has developed close working relationships with train driver managers, engineers, traincrew, and union safety representatives.

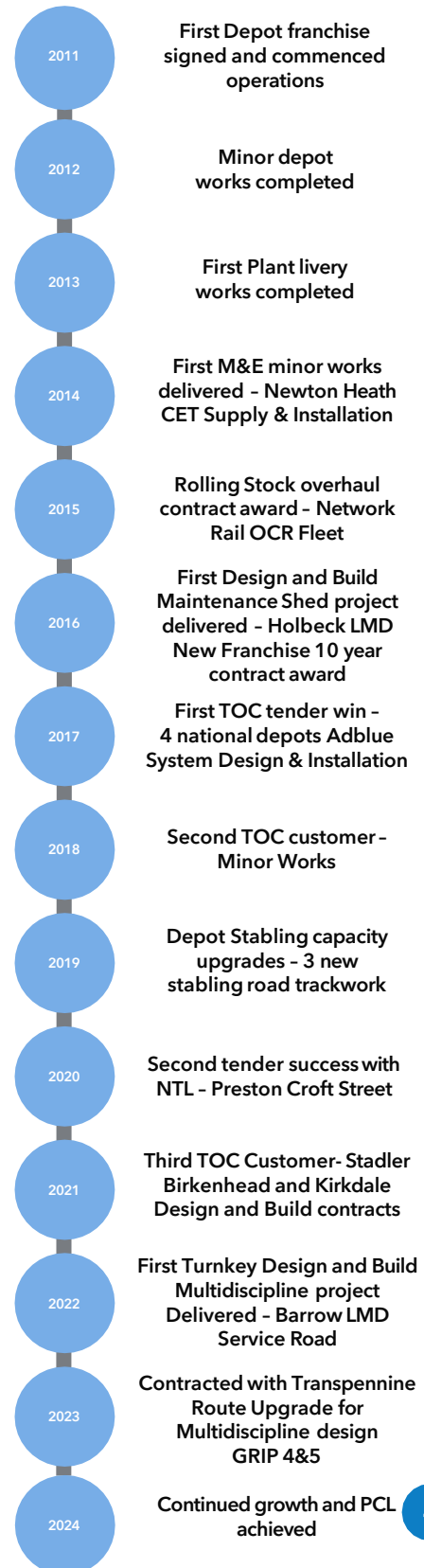
By adopting early engagement with all staff, we have established a simple inspection and compliance process to deliver key safety and welfare enhancements that ensure the depot safety record is maintained to the highest level possible.

**RTS has delivered depot capacity and service improvements which has led to the following highlights of the current business since it formally commenced in 2011:**

- 🌀 **New remodelled 150m network connection to increase train length configurations.**
- 🌀 **Leeds area performance improvement through extra stabling capacity.**
- 🌀 **Utilised existing trains paths through introduction of coupled unit moves to and from Leeds station.**
- 🌀 **Major Infrastructure investment with new fuelling, critical capacity, CET points, and increased rail infrastructure capacity.**
- 🌀 **Supporting the provision of new rail services.**
- 🌀 **Additional peak and off-peak stabling.**
- 🌀 **Introduce an additional fuelling road track and services.**
- 🌀 **Operational staff training.**

Further to the above, RTS are undertaking a significant self-delivered depot enhancement scheme, to be concluded in 2024/25, which will double the stabling and service capacity of the depot by extending, adding to, renewing and reorganising our existing and new assets to ensure smoother flow through

## Growth Timeline



the depot, with more capacity and equipment to carry out routine and bespoke engineering maintenance works.

Following successful delivery of in-house projects, including feasibility, design, and construction projects, RTS have in place our own dedicated, in-house delivery team, capable of managing and delivering all aspects of design works from feasibility through Option Selection (GRIP/ES3) to detailed GRIP/ES 4&5 designs, that are fully compliant to Network Rail standards along with any other required regulatory/legislative guidance/standards applicable to the works.

Furthermore, our project management and engineering teams now undertake full turnkey, multi-disciplinary construction projects and programmes. Projects undertaken are typically packages of work valued between £100k and £5m+, with a focus on the management and customer interface of all aspects of the design, delivery, construction and commissioning phases.

Following on from a successful period of growth and supported by our successful track record of depot services and project delivery, RTS have achieved our Principal Contractors License (PCL) Certificate, with the backing and support of Network Rail .

RTS work with our client's giving advice and support through each GRIP/PACE or RIBA stage of a project, and our ISO accredited IMS project controls and delivery systems are designed to easily navigate whichever governance process is required. We offer clients an integrated service solution from inception through to completion, operation and disposal. We deliver projects that are economically viable, responsible towards the environment, accessible, maintainable and safe, to invigorate the way that clients deal with their rail transport assets - in a sustainable way.

## Our Senior Team

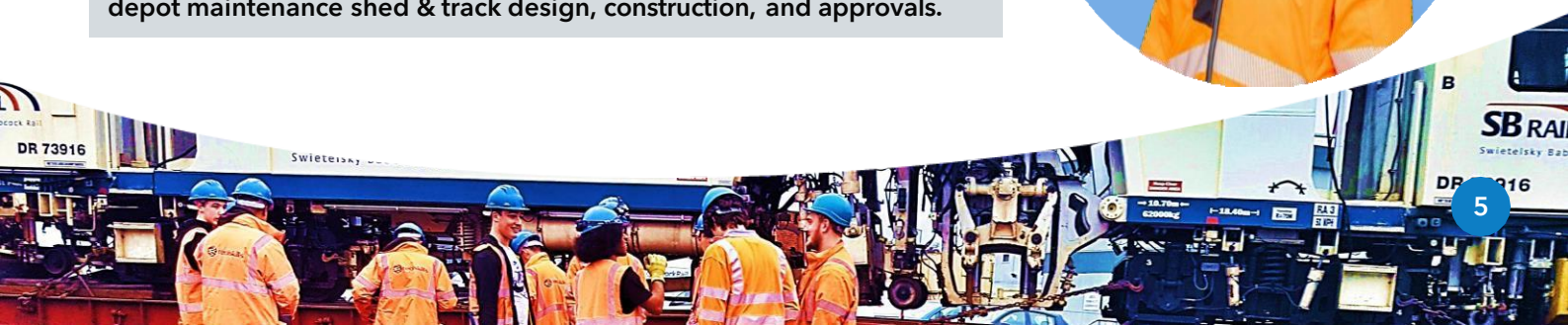
During the last 3 years, RTS have recruited and developed key personnel to establish a very strong operational management team, with key skills and in-depth rail industry knowledge, which has supported our excellent growth. In turn, RTS is further investing in developing its people as the business grows.

The principal members of the Management Team are Chris Reid (Managing Director), Mark Emmerson (Finance), James Smith (Construction) and Adam Showell (Holbeck). This team have successfully supported the Board in establishing and securing sustainable, profitable growth.

### Chris Reid - Managing Director

Chris manages the day-to-day business activities. He has a proven track record as a senior professional, with over 20 years management and engineering experience within the rail industry, specifically depot operations and engineering.

Chris has successfully held senior operational and commercial positions and is a qualified CRE/CEM, with extensive knowledge in depot maintenance shed & track design, construction, and approvals.





## Mark Emmerson - Finance Director

Mark has over 25 years proven track record as a Finance Director in both the rail and construction markets.

He has established a strong reputation in both rail and construction companies prior to joining RTS and oversees all RTS financial and commercial operations. Mark ensures policies and procedures are in place and compliant to regulatory standards and manages all commercial and contractual obligations with his team of commercial and financial specialists.

## James Smith - Construction Director

James runs our construction division, being a senior, experienced construction director within the rail industry. He has significant experience (25+ years) in rail depot construction works, specifically train care depot construction and depot facilities upgrades.

James has a thorough understanding of the NR standards and approvals process that must be complied with for all design and constructions works. James has CRE/CEM experience with NR Ram and NR property stakeholders nationally and a proven track record on delivery timescales.



## Adam Showell - Holbeck Director

Adam has a 20-year railway career holding several roles as a senior experienced P3M specialist and Director within the Rail industry.

His track record performed duties as CEM for eight schemes and CRE in over thirty across multidisciplinary projects including Crossrail (Senior Project Manager -£64m Station Enhancement Scheme on West Outer), DLR Stratford Line Extension (Site Agent -£48m New Stations scheme in time for London 2012), Edinburgh to Glasgow Improvement Project (Head of Civil Engineering -£15m Signalling Renewals) on the rail network.

Adam has been appointed to oversee the Holbeck operations together the with major investment programme.

Together with key individuals covering Commercial, Project Management, Site Management, QS, Estimating, Depot Operations, and Financial, we have created a trustworthy, energetic, and experience team to deliver against our client's requirements and the company budgets.





## Client Testimonials



NORTHERN



**Simon Crabtree**  
Outstation Production  
Manager West - Northern

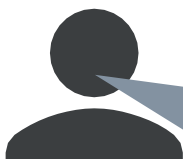
Good Morning Chris

Just wanted to drop you a mail to thank you and your team for the work they have done at Blackpool LMD with the installation of the new Depot Access gate and CCTV.

The team on site have been fantastic and a credit to you, their work ethic and quality is excellent, and the installation looks superb. Please pass on my personal thanks to your team for a job well done.



NORTHERN



**Peter Dunn**  
New Depot Strategy  
Manager - Northern

Gents, Ive held off sending my note of thanks and congratulations until I knew the first three nights of blockade related operations went well at MID.

I'm proud to now tell you that your works were very well received by the end user, with no issues at all - and all facilities easily meeting the demands. To have delivered such a constantly developing work scope to time and cost has been an absolute credit to RTS.

Please ensure that these thanks are passed on to all the people who helped - in the massive heat, and thunderstorms- to make all this so real. It was a pleasure to work along-side you all. With the utmost thanks and greatest respect.



**David Broadbent**  
Senior Project Manager -  
GWEP High Output Plant /  
OTM Lead

RTS were initially contracted to the GWEP project to undertake legacy plant overhauls to the Werst Coast electrification machines and support with the introduction of mechanized plant to the High Output Electrification Plant Systems (HOPS).

Chris and the team also delivered the control centre and war room refurbishment, including the technology development and installation. Working with RTS was a pleasure throughout the project, nothing was too much trouble, the project team were always proactive with any challenges faced. The quality of work delivered was always of a great standard resulting in zero defects throughout and the final delivery was exemplary.

Whilst the team were working with tight timescales, their safety approach was always to a high standard and their working methodology was very impressive meeting the required outputs and programme dates. Overall, very impressed with RTS and would certainly be my choice of contractor for future projects.





# Client Testimonials



**NORTHERN**



**Steve Banks**

Project Manager –  
Northern

Morning Chris,

Feedback across the depot is very positive. BJS complete and everyone agrees that this is a big improvement on how that part of the depot now looks.

The platforms at Deep Clean will be completed this week and are looking good. We just need to give it all a final push to get all the paperwork over the line, both within NTL and with NWR, which we are working on with your team. Cheers.



**NORTHERN**



**Paddy Colbert**

Asset Protection  
Construction  
Manager - Northern

Good Morning Aaron,

Would just like to thank you for all your efforts and hard work with the Newton Heath works (Bernard Jackson Sidings walkways, lighting and Deep Clean Bay).

Your Management of the RTS team and the other contractors has been greatly appreciated and of the highest calibre. You have identified site changes and communicated these back to me and my team regularly which has helped in getting the Works signed off.



**Duncan Grainger**

Driver Manager - Leeds  
CrossCountry

Hi Tony

I know we have had lots of conversations about the workings at Holbeck and they have always been really productive.

Whenever we have had contact you have always been willing to listen to any concerns and been able to rectify them immediately, explaining clearly what will happen in future. Also any concerns you raise are always done in a constructive manner.

I feel able to ring you at anytime to discuss any issue and always find your approach very professional. You take the time to understand what has happened with any incident and are really collaborative when sharing information.

It's always great to see you when we visit the depot and we are made to feel very welcome every time we come down.  
Kind Regards







# Our Capabilities at a Glance

The services RTS Infrastructure offer are detailed in the table

Feasibility and Design	Construction	Depot Services
Rail/Depot Systems	Full Depot Construction	Peak and Off-Peak Depot Stabling
Mechanical	Carriage Wash Systems	Train Wash
Electrical	Vehicle Inspection Systems	Refuelling
Permanent Way	CET, Ad-Blue and Fuelling Systems	Ad-Blue
Switches and Crossings	Modular Buildings inc. Fit Out	CET
Civil Engineering	Traditionally Constructed Buildings & Steel Portal Cladded inc. Fit Out	Livery
Buildings inc. Fit Out	UTX/URX	Internal Carriage Cleaning Services
Building Services	Drainage and Attenuation	Fleet and Depot Consultancy
Architectural	Extraction and Ventilation	Training
Structural	Heating Systems	Safety Critical Train Maintenance
	General Civil Engineering Projects	Train Servicing
	S&C and Track Renewals in Depots	
	Lit Walkway Schemes and Driver Hop-Ups	
	Train Shed Maintenance, Deep Clean and Paint	
	Shed Extensions	





# Design Works

After successfully delivering design packages through GRIP 2 to 5, covering all depot engineering disciplines, RTS offer clients a smooth path for depot upgrades. Every depot has its own unique set of requirements and the RTS team tailors its services to provide value engineering solutions that are fit for purpose, with better whole life costs. We pride ourselves on delivering safe, high-quality products, to budget and programme, while ensuring full stakeholder participation.

We have supported our clients in the past four years through GRIP 1-5 deliverables and more recently through PACE ES1 to ES5, adapting our approach to each design solution as individual requirements dictate.

Our work involves helping with business case development, scoping - including early engineering, programme consultation, supporting budgetary needs, optioneering, feasibility, single option development and detailed design.

We work closely with our client's and funder's engineering teams to ensure all applicable standards and legislation are met, to ensure a smooth design acceptance process. Furthermore, we ensure external and internal stakeholder networks are consulted and included in the journey, to ensure all requirements are nailed down, in a timely manner, minimising the impact of emerging requirements and any scope creep.

## Recent projects have included:

- Feasibility through to detailed design (Grip 2-5) the enhancement of Holbeck Depot to double train capacity.
- Grip 4&5 design for new carriage wash, shed and fuelling roads at Barrow Depot.
- Feasibility and planning application works of new shed, P-Way alignment, carriage wash and specialist plant works at Stoke Depot.
- Detailed GRIP 4&5 design for new carriage wash, shed, multiple fuelling roads and additional track.
- Detailed design for new walkways and lighting in several depots.

Our works portfolio successfully demonstrates the RTS teams innovation skills, practical ideas, and ability to offer a seamless, integrated approach across different disciplines including civil, M&E, track, electrical and rail engineering. Detailed planning and attention to detail, along with our integrating and collaborative approach with all stakeholders, especially local depot staff, ensures our designs are fit for purpose, value for money and delivered on time.





# Construction Projects

Progressing through the design phase and into construction GRIP/ES6, RTS have a reputation for safe, cost effective, quality and on time project delivery.

Our professional in-house management and delivery team are supplemented by our strong, qualified, specialist supply chain partners to provide our clients with the assurance, quality and satisfaction needed in their end product.

From straightforward walkway system solutions through to complex full depot remodeling programs, our clients freely provide testimonials to the service quality supplied and our reputation for delivering on time and to specification.

RTS have undertaken numerous multi-disciplinary construction projects in rail depots during the last four years for six TOC's, Network Rail and other major rail companies, these projects are multi-disciplined using our core skills in:

- Civil Engineering
- Track (P-Way and S&C)
- Building
- Service Installation
- M&E
- E&P
- Specialist Plant Systems (CET, Fueling, Train Wash, Ad-Blue, Sanding)
- Depot Protection Systems
- CCTV
- Logistics and Contract Lifting
- Depot Deep Clean and Refurbishment





Our position as a depot operator, supporting critical operations linked to the mainline network, gives us a unique perspective and underpins our ability to understand the brief, allows us to share our gained experience, best practice solutions and innovative approach and apply these to the construction challenges in busy depot environments.

**Understanding depot operations and infrastructure is critical to being able to deliver a quality product for our clients. Recent projects have included:**

- Construction of train fuelling systems with remote control and monitoring systems to support 3 car fuelling.
- New fuel System at Barrow including depot track remodelling. New
- HOP up solutions in depots and stations for Merseyrail.
- Several new drivers' walkways and lighting solutions in several Northern Rail depots.
- 400m of new track and specialist S&C works.
- Temporary works solutions and Manchester International Airport.
- Major shed design and build, two roads covering 100 metres in length.
- ADPS installation at Eastcroft and Hull.
- Rail service installation and commissioning of Ad-Blue dispensing systems to several rail depots at 5 sites.

RTS's success in design and commissioning of several projects within Northern Powerhouse Rail has led us to be awarded a framework contract by Northern Trains, to support the planned extension programme for rail facilities and station upgrades and modernisation.

Strong client relationships have resulted in repeat demand for our services - in many cases being asked back to perform additional enhancements to their rail depots. RTS can demonstrate we deliver value for our clients on time, we are innovative, flexible, and agile in approach. Our commitment to safety and efficiency, supports and demonstrates a strong pedigree in the provision of professional services.





# Depot Services

Our purpose-built rail facility with direct access to the rail network supports heavy engineering activities and provides the flexibility for even the most complex of overhaul activities.

RTS provides both the management and customer interface, employing trusted certified subcontractors to perform the projects to a high standard. These skilled engineers and craftsmen ensure that the highest quality standards and timescales are met, underpinned by accredited quality systems.

**RTS provides a range of engineering services to complement their rail services and franchise support arrangements. Since inception, these services have grown and RTS now offers the following:**

- Rolling stock overhauls & maintenance
- Vehicle livery and painting
- Digital technology solutions

## Rolling Stock Overhauls & Maintenance

RTS provides high quality overhaul, maintenance facilities and services to train and freight operating companies, ROSCOs, and rolling stock/track plant/wagon manufacturers. Our services are provided around the clock, 365 days a year.

Heavy maintenance projects are undertaken to customer specifications with detailed and robust recording of repairs and testing maintained throughout. RTS's scope of work includes a check on functionality of vehicle systems and, where required, full repair/overhaul of componentry including body suspension mounts, door alignment, and the examination and overhaul of safety critical components - such as DSD, brake controller, and battery/control systems.

**Recent projects have included:**

- Angel Trains/Chrysalis - C6 refurbishment project on 79 x two-car class 142 DMU's.
- Network Rail - MPV Fleet 8 yearly overhaul, wheelset exchange & mod works.
- SB Rail AFM 2000 - 8 yearly overhaul major component exchange.
- Harsco Rail - grinder/stone blower major overhaul to prepare for Swedish market.
- Northern Rail Class 150 DMU modifications.
- Northern Trains Class 150 DMU and 156 DMU Fleet LED lighting modifications.
- Northern Rail Class 333 EMU internal refurbishment.
- Class 150 DMU and 156 DMU WSP brake modifications with Northern Trains.
- Cross-country Voyager servicing, maintenance and train preparedness examinations





## Vehicle and Livery Painting

RTS offers complete rolling stock and rail plant refurbishment which can include exterior and interior re-paints. Our facilities offer 2 fully compliant spray booths where painting is carried out in on-site spray facilities, to the highest quality standards, with minimal environmental impact.

### Recent projects have included:

- Angel Trains/Siemens - Class 333 EMU livery refresh and corrosion works. SB Rail
- AFM 2000 - livery design and delivery.
- Network Rail - MPV fleet new livery.
- Nationwide rebranding for Northern Trains fleet.
- Northern Trains Class 333 EMU refurbishment.
- East Midlands Railway Class 170 DMU first in class.
- Cross Country/ Grand central re-livery

## Digital Technology Solutions

RTS has developed a core engineering function with considerable experience in vehicle enhancement and upgrades. Technological, passenger and performance demands are continuing to dictate changes to rolling stock features and functions, and this change management transcribes into bespoke packages of project work.

We have the capability to deliver projects which include standard refurbishments (like-for-like replacements), installation of passenger information systems, CCTV, passenger counting, air conditioning systems, LED lighting and PRM requirements.

### Recent projects have included:

- Freightliner - GPS tracking and coolant level sensor.
- GWEP HOPS - on board CCTV and wireless networking.
- Northern Trains - Class 158 DMU & Class 333 EMU Digital Train CCTV, USB power, driving cab enhancements and passenger counting equipment.
- Yellow Rail - Class 170 DMU & Class 158 DMU Digital Train upgrades.
- Angel Trains/Siemens - Class 333 EMU livery refresh and corrosion works.





# Managing HSQE

Health and Safety is an integral part of our operations, and the principle of safety first has become second nature. Our commitment to Health and Safety is now deeply embedded within our business culture, resulting in a zero-tolerance philosophy to accidents and this is reflected in our excellent Health and Safety record on both our own, and third rail party sites.

RTS operates a business management system that fully meets the requirements of ISO 9001:2000, Quality Management, ISO 14001:2004, Environmental Management and ISO 45001 Occupational Health and Safety. Clients can thus be assured of auditable, consistently high quality, sustainable processes and delivery which RTS continuously strive to improve.

We will adhere to the principles and established process of our audited ISO systems and Construction (Design and Management) Regulations 2015 to deliver manage the safety of construction and maintenance workers through the design process.



## Railway Life Saving Rules

To support rail specifically RTS have in place policies and procedures which mirror that of Network Rails to ensure full compliance to all HSQE, CDM and governance requirements We as a business have embraced and actively encouraged the promotion of lifesaving rules in all we do in the Rail team as the benchmark of our own safety performances. Our team will adopt and own the Network Rail Lifesaving rules.

Our culture is not to chastise against accident and incidents but to learn, share and improve our own and in turn others' safety performances. Regular toolbox talks and briefings will be undertaken pre and post shift to ensure safety compliance and each other's physical and emotional wellbeing is at the forefront of everything we do.

Close calls will be reported through RTS internal close calls procedure and will be collated by the construction manager for internal KPI monitoring and external safety reporting. RTS commit to sharing all close calls, good calls and lessons learned as a best practice and will upload a weekly update to our client organisation for information.

RTS will undertake periodic reviews on close calls analysing for trends and repeat offences and take a pro-active view on training via briefing, toolbox talks or formal training. RTS will share all findings with our client to ensure a global learning opportunity through the project lifecycle.

The hierarchy of safety reporting will be always followed using emergency reporting guidelines detailed in our safety and CDM documentation. Where applicable route control will be notified of incidents and the level 1, Level 2 incident reporting process will be followed including all relevant parties along the way. If applicable, RTS are fully conversant with the RIDDOR process. Where applicable RTS will undertake Sentinel training to PTS AC and DCCR requirements to aid in the safe understanding of the railway and planning specific survey works during the design phases.

### **Our objective is "Everyone Home Safe Every Day"**

RTS is committed to providing safe and healthy working conditions and the prevention of work related injury and ill health to its employees and others who may be affected by the work activities, including the general public, and seeks to continually improve health and safety performance throughout the organisation by the implementation of an efficient and effective health and safety management system and procedures as an essential part of the overall strategy for the development of the company:

- Provision of safe and healthy workplaces, including DSE compliant home working while constrained by working restrictions.
- Elimination of workplace hazards and reducing health and safety risks.
- Prevention of work-related injury and ill health to employees and others.
- Health and safety integrated into the business processes.
- Setting and reviewing of occupational health and safety objectives.
- Senior management demonstrating leadership and commitment.
- Resources to implement, maintain and improve management systems.
- Consultation and participation of employees.
- Ensuring and promoting continuous improvement in our company and project H&S systems and processes.



Compliance with relevant applicable health and safety legislation and other specific requirements to which the company subscribes shall be the minimum standard and the company aims to achieve best practice through continuous improvement at each location it operates from.

The company shall provide and maintain safe and healthy workplaces, including safe work equipment and safe systems of work for all employees and shall provide such information, training and where necessary supervision to ensure their safety.

Overall responsibility for health and safety rests with the main board and a Safety Director has been appointed with specific responsibility for overseeing the implementation of the policy and for advising the main board on its development.

## Approach to H&S - supporting THE RAILWAY's safety culture

RTS' commitment to H&S is the hallmark of our approach to business. We are committed to working with NR's Life Saving Rules and to providing safe working conditions, preventing work-related injury to our employees and others affected by our activities, and ensuring and promoting continuous H&S improvement. We fully endorse, support and actively encourage behavioral change initiatives to ensure Everyone Home Safe Every Day.

We will ensure all our personnel working on this project are aware of Network Rail policies especially Drugs & Alcohol, Codes of Business Ethics, Lifesaving Rules and Fatigue Management. This will be achieved via our induction and onboarding processes and reaffirmed in specific project inductions.

RTS encourage a 'don't walk by' culture and actively encourage our staff to raise, log and close out where required, close calls, incidents and near misses. We operate a fair culture which is driven by education and training. We also offer our staff members who may be afraid to raise issues, to confidentially raise them internally to their line management to ensure the issue is appropriately raised and closed out.

**"Safety is everyone's responsibility": Testimony to our approach to improving clients' safety performance.**



## GRIP/PACE Stage Risks

RTS know there are associated H&S risks present in each GRIP stage, not just in GRIP 6. We understand the importance of reviewing Health, Safety and Environmental impacts at each GRIP stage gate. The importance of a review of this nature through GRIP 1-5 ensures by the time construction commences in GRIP 6 we are left with only construction-based methodology risks.

Designing with a construction focus and early construction consultation around Health and Safety, and methodology of build, is key to designing out both safety and commercial risk. We will commit to working with your team to create safe and sustainable options for construction which do not create additional H&S risk in the construction methodologies or working patterns of project resources.





RTS INFRASTRUCTURE



# Neville Hill Depot Walkways <sup>Case Study</sup>

**CLIENT:** Northern Trains Limited

**DISCIPLINE:** Civils, M&E

**RTS Lead:** James Smith

**PROJECT DURATION:** 4 Weeks

Safe walking routes were required to allow depot staff access between stabled trains at Neville Hill depot. NTL enlisted the assistance of RTS to provide GRP walkways and lighting within a constrained depot environment.

Innovative lighting solutions were required to meet Network Rail gauging standards and provide suitable Lux levels and safe access.

An LED lighting solution was installed resulting in excellent visibility and safe access in all weathers, whilst maintaining compliance to all standards.



# Stadler Station Hop Ups

## Case Study

**CLIENT:** Stadler

**DISCIPLINE:** Design and Build, Civils, M&E, ETE, Track and Signalling

**RTS LEAD:** James Smith

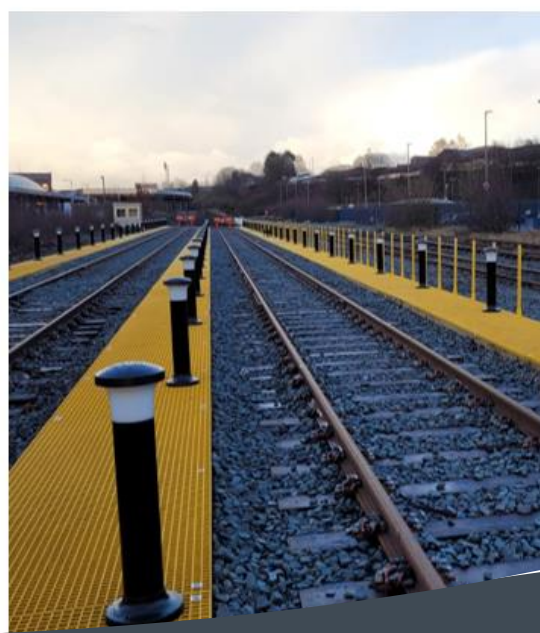
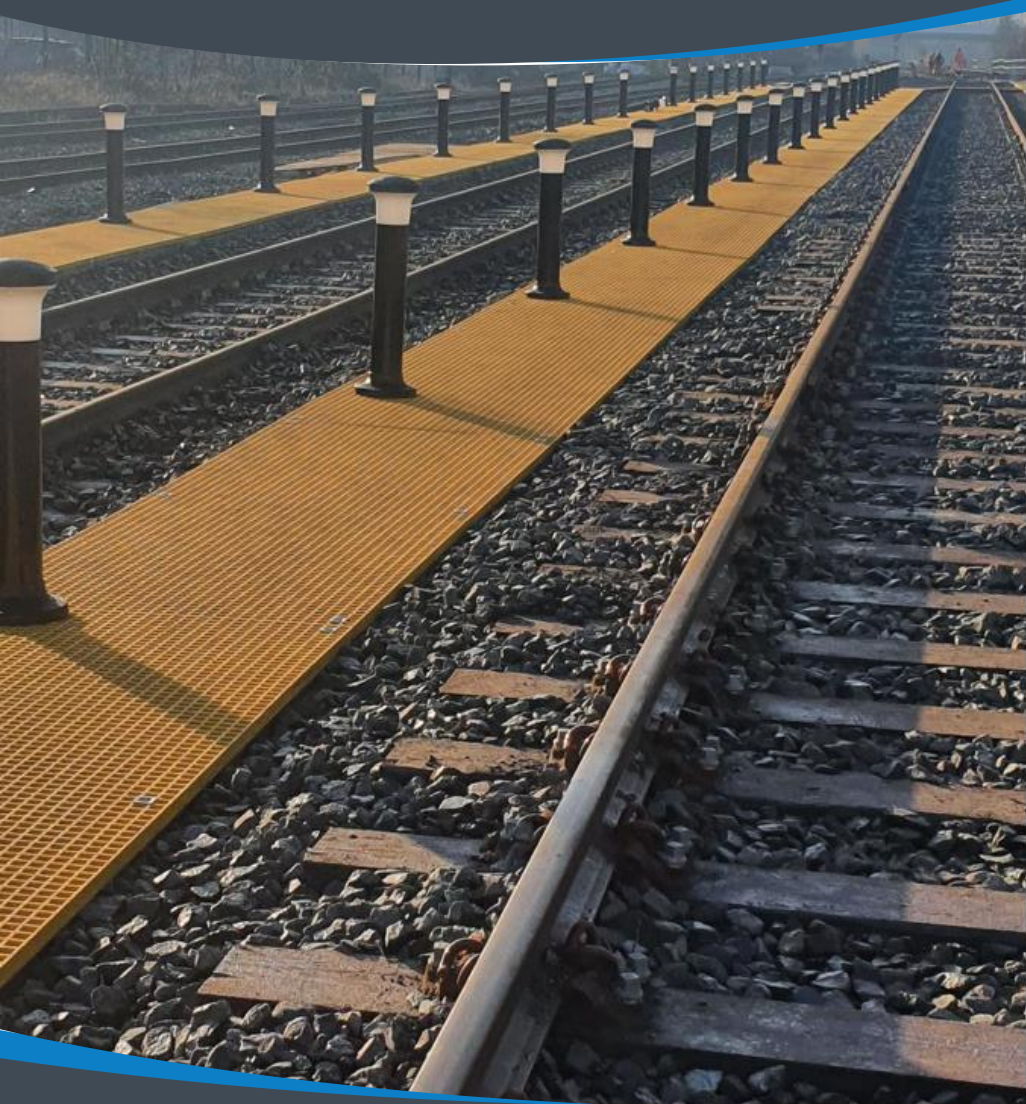
**PROJECT DURATION:** Live

Our Client, Stadler had a requirement for the design, installation and commissioning of access platforms for driver accessibility at three locations (Southport, New Brighton and West Kirby). RTS supported the client with our design services, sharing our expert knowledge and dedicated design team to incorporating the Civils, M&E, Track, Signalling and ETE elements to form fit for purpose solutions to the client's request.

Following design completion, RTS installed walkways and driver access Hop-Ups to all locations. To facilitate the installation of the hop up - amendments to the track signalling and third rail power were undertaken during safety critical blockades.



RTS INFRASTRUCTURE



# Blackburn Sidings

## Case Study

**CLIENT:** Northern Trains Limited **DISCIPLINE:** Design, Civils, M&E and Structures

**RTS Lead:** James Smith **PROJECT DURATION:** June – December 2021

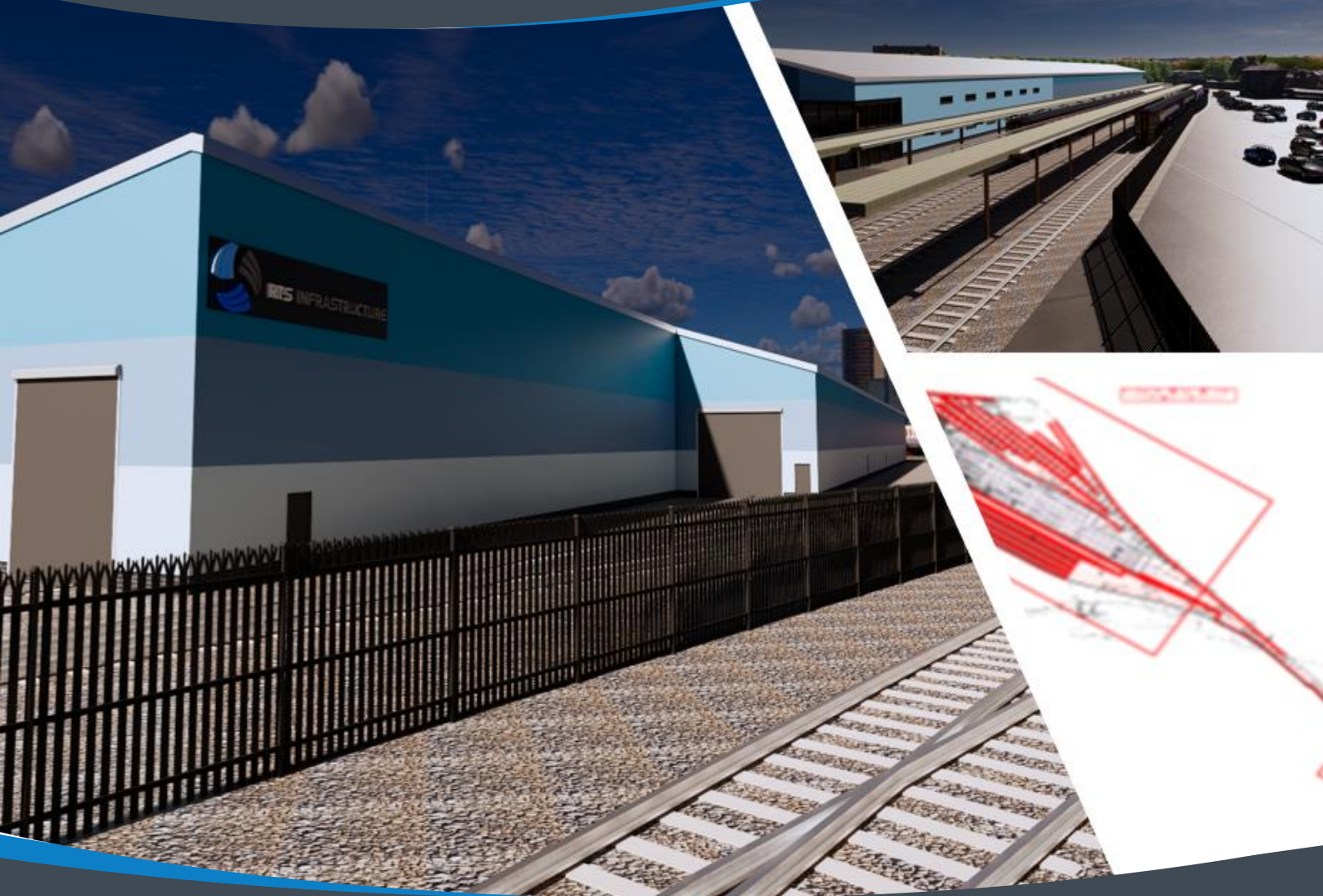
Our Client, NTL had a requirement to design and install GRP access walkways and lighting alongside a shunters cabin at their Blackburn Sidings.

RTS supplied a dedicated team to create the design works package, including electrical engineering services to aid lighting installation and power supply to the self-contained modular shunters cabin.

Works were completed on time, to high specification and to the satisfaction of all stakeholders.



RTS INFRASTRUCTURE



# Holbeck Expansion Project Case Study

**CLIENT:** TransPennine Route Upgrade (TRU)

**DISCIPLINE:** Design

**RTS Lead:** Adam Showell

**PROJECT DURATION:** Jan – Dec 2023

Our Client TRU have a requirement to expand Holbeck Maintenance Depot to facilitate major upgrades at the NTL run Neville Hill LMD. Scope is to increase Holbeck capacity to be able to cope with all NTL DMUs service requirements once the planned Neville Hill Upgrade Programme takes effect in 2026/7. Significantly increasing Holbeck Depots stabling, shed and service road capabilities and capacity.

**Project Successes:**

- ✓ Complex stakeholder management
- ✓ Large Multi-Disciplinary Design Project
- ✓ Implemented PACE systems/process
- ✓ High level of quality
- ✓ Strengthened client relationship

**Client Feedback:**

"Just a quick note to put into writing after I mentioned on the call (...) that I was in a meeting with ST, Depot Engineering Lead from NTL and he mentioned how impressed he was with the way this design is being organised and facilitated, and that he and his operational colleagues took a lot from it."

*Fraser Langford, Sponsor, Network Rail*



RTS INFRASTRUCTURE



# Bernard Jackson Sidings

Case Study

**CLIENT:** Northern Trains Limited

**DISCIPLINE:** M&E, Civils

**RTS Lead:** James Smith

**PROJECT DURATION:** May – Nov 2023

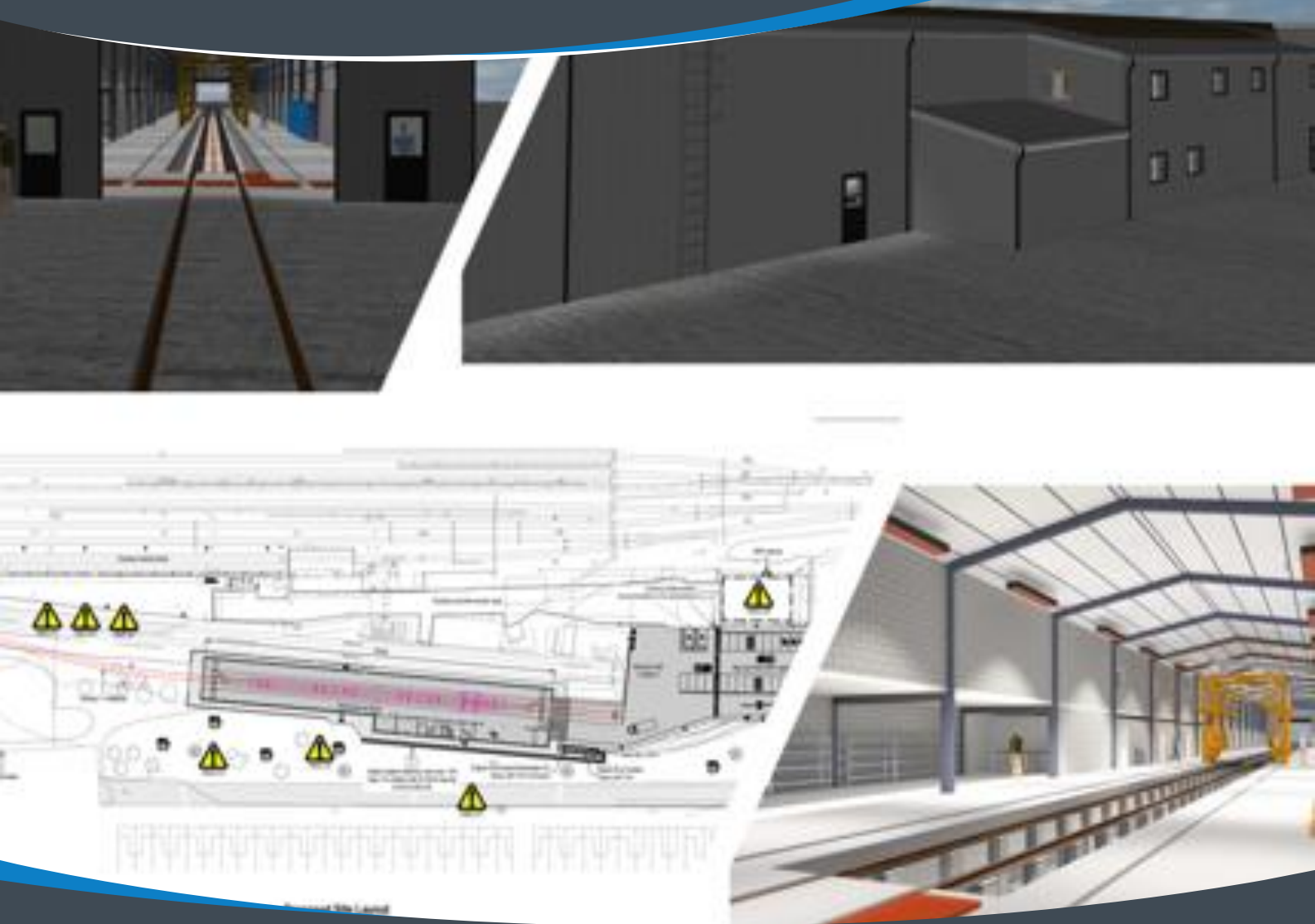
RTS worked in collaboration with our client to undertake upgrades and improvements to the access sidings, providing safe and well-lit access for stabling units and staff training as well as improvements to the depot boundary fencing. This scheme involved RTS dedicated Civils and M&E teams to ensure a fit for purpose solution was reached.

RTS installed train access platforms and LED bollard lighting, including the provision of a welfare cabin to facilitate heavy cleaning of trains which included M&E Services.

Carparking facilities also received an upgrade on this project, including updates to the lighting and installation of Armco barrier and foundations appropriate to achieve RVI risk reduction.



RTS INFRASTRUCTURE



Case Study

# Barrow LMD & Carriage Wash Design

**CLIENT:** Northern Trains Limited

**DISCIPLINE:** Design

**RTS Lead:** James Smith

**PROJECT DURATION:** 12 months

Our client, NTL had a requirement for a new maintenance shed and permanent carriage wash at their Barrow LMD site. RTS were asked to act as Principal Designer for the project. Our dedicated design team undertook feasibility studies to support the design phase and continued to progress the design through to GRIP 4 AiP. Throughout the design phase, RTS engaged our trusted supply to chain to complete all required surveys including:

- Ecology Surveys
- Acoustic services
- Geophys (underground mapping)
- CCTV surveys



# Our Holbeck Facilities

## STABLING



With over 1.7 km of mainline network connected track, the Leeds train care services currently caters for up to 22 rail vehicles stabled at any one time, with a current maximum capacity of 40 rail vehicles.

The existing patronage has increased steadily to now include 24/7 cover, including non-peak day time working and weekend stabling.

## RE-FUELING



RTS has installed an ultra-modern fully automated bonded refuelling facility "fuel road" designed for multiple pump/unit configurations, delivering bulk quantities of up to 75,000 litres in a 24-hour period.

This capacity will support up to 40 rail vehicles.

In addition, RTS provides all operational fluid replenishment facilities including:

- Tanking water systems.
- Ad-Blue.
- Coolant storage and point of use delivery.
- Oil storage and point of use delivery.
- Sanding box replenishment.

## CARRIAGE WASH



We operate and maintain a modern automated external carriage wash plant and underframe wash, integrated into the Holbeck depot facility operations. Substantial investment in the equipment and processes is delivering significant improvements to body side cleanliness.

RTS has recently completed a joint initiative with Northern Trains Limited to significantly reduce the water usage of the train washing facility by 30% - equivalent to saving 100,000 litres of water per annum.

## MOBILE CET



RTS recently installed a modern, mobile CET system at Leeds Holbeck Depot to support improving the train presentation and service quality for passengers.

This system is operated by RTS staff and caters for retention tank emptying and returning toilet facilities back into service.

## TRAIN PRESENTATION



Existing interior light and heavy train cleaning facilities are utilised as part of the planned diagrams and cleaning regimes. RTS are currently working with Northern Trains on a unit front end cleaning programme to ensure all visible areas of a vehicle are presented in the best possible condition.



## ROAD ON/OFF TRACKING



Our Holbeck Depot train care services provides a dedicated rail connected passenger vehicle loading and offloading facility for road haulage in the Yorkshire area.

## WELFARE FACILITIES & OFFICE ACCOMMODATION



RTS provides union approved and inspected welfare facilities for driving and engineering support staff. Recently refurbished and modernised welfare facilities include offices with high-speed broadband and dedicated IS links, providing the Northern franchise with direct access to local networks.

## MAINTENANCE SHED



The maintenance shed supports numerous maintenance and refurbishment projects for both rolling stock and major OTM plant.

The shed facilities include:

- 200 metre covered maintenance roads.
- Pitted road access.
- 5 tonne overhead crane.
- 4 x 20 tonne heavy duty lifting jacks.
- 2 x 100cfm compressed air main system.
- 415v, 240v, 110v services.
- Welding equipment.
- Fume extraction.
- Dedicated workshop area.
- Existing access platforms.
- Secure storage areas.
- Office facilities.

2024 and 2025 will continue to see significant investment at our Holbeck Depot. The investment will be utilised to significantly increase the service offering and capacity within the depot, to support and supplement ambitious network growth plans being led by the Transpennine Route Upgrade (TRU).

The depot enhancements have already seen new S&C, track and signalling layout on the approach to the depot installed, to make entry to the depot much simpler and better controlled, by reducing shunting movements and decreasing the time spent entering the depot. This enhancement offers efficiencies in all depot operations, reduced work activities for the train controllers, meaning more effort can be spent on priority servicing activities and depot movements, a more controlled entry process also means arrivals are more easily directed to where they need to go, reducing shunting movements in depot. This reduction in shunting movements from the main line leads to a service capacity increase in the depot due to time savings on arrival and departure.



# Future Holbeck Facilities

Moving into 2025 we will see an increase in already provided services, supplemented with additional capacity and new service offerings to deal with the planned shortfall in the network that is being brought about by the Transpennine Route Upgrade works.

## TRAIN STABLING

The project will see stabling capacity increase from 1.7km to 2.3km of track, with the addition of 2 x 8 car fueling roads, 1 x new Heavy Cleaning Road and the realignment and extension of existing track within the depot. This will enable the depot to increase its stabling capacity after servicing activities from 38 cars to 68 cars, along with additional flexibility and resilience to carry out depot movements. This will ensure trains egress back onto the network on time and in the correct order, benefitting our customers operations, engineering and customer satisfaction teams.

## MAINTENANCE SHED

The maintenance shed will be extended to the front with a 70 m extension planned taking our shed length to 125m, and to the side, converting the shed from a two 2 x 3 car facility to a 3 x 4 car facility with full length swimming pool pit provision enabling our customers to carry out full A&B examinations.

The shed will continue to support numerous maintenance and refurbishment projects for both rolling stock and major OTM plant, with the following enhancements to services. The shed facilities will include:

- 375 metre covered maintenance roads.
- Swimming pool pitted road access - Converted to swimming pool pits on all roads
- Our 5T overhead crane will be enhanced to 20T, covering the full length and breadth of the shed, this enables heavier maintenance activities and bespoke requirements which need heavy lifting and moving.
- 4 x 20T heavy duty lifting jacks increasing to 8Nr to offer additional lifting operations for TOC/FOC and Yellow Plant customers, meaning heavy maintenance activities can be undertaken safely.
- 2 x 100cfm compressed air main system - Increased capacity to 3 x systems, one per road.
- 415v, 240v, 110v services - Increased capacity.
- Fume extraction - Increased capacity and performance in line with new regulations.
- Dedicated workshop area - Increased capacity and facilities, fixed tooling and benches.
- Existing access platforms - Access Platforms will be fixed within the swimming pool pits to ensure safe access at multiple levels (roof, doors, under-carriage) and enhance inspection and maintenance works.
- Secure storage areas.
- Modern, clean in Shed Office facilities, including meeting room availability.
- Workshops are co-located with the train shed.

## WELFARE FACILITIES & OFFICE ACCOMMODATION

A new office facility will be constructed to co-locate our clients on site staff with our own team. The office will meet all union requirements from a desking, messing and toilet facilities viewpoint, providing all required amenities such as, wi-fi, security, data connections, modern meeting rooms and communal/accessible areas and break out pods. There will also be lockable storage and bike racking facilities.

The office will provide a clean professional working space for up to 30 management and supervisory staff, with private meeting space, allocated private office space and an open plan main office area with access to several hot desks.

New messing and washing facilities will ensure all amenities are strategically located with the appropriate Male/Female/Gender Neutral split with accessible requirements.

## CONTROLLED EMISSION TOILETS (CET)

The capacity of the CET equipment will be drastically increased from 2 CET points in the current arrangement to 12 CET points, situated in the new fuelling roads, allowing fuelling and CET operations to happen concurrently saving time and providing resilience to a busy schedule of maintenance work. This increases our CET capacity to match our enhanced fueling meaning an increase from 2 x 4 car sets in 45 minutes to 8 x 4 car sets in 45 minutes

## REFUELLING & REPLENISHMENT

RTS will continue to provide all operational fluid replenishment facilities including with increased capacity and factored resilience:

- Fuelling - Increase from 2 Fuelling Points to 12.
- Our 75,000-litre fuel tank will be increased to a capacity of 120,000 litres.
- Tanking water systems - Doubled Capacity.
- Ad-Blue - Doubled Capacity.
- Coolant storage and point of use delivery - Doubled Capacity.
- Oil storage and point of use delivery - Doubled Capacity.
- Sanding box replenishment - Doubled Capacity.
- New 10,000ltr white diesel option for Construction and Yellow Plant refuelling activities to further support our infrastructure projects colleagues.

To facilitate the above RTS will be converting two four car stabling roads into 8 car fuelling roads and adding in an additional 2 x 8 car fuelling roads that run in parallel.

To make the fuelling and replenishment systems more economic, the existing operational equipment will be relocated strategically in the depot and will operate from fuelling canopies between the fuelling roads, providing a safe operational area to undertake all maintenance activities of this type in one location.

This activity quadruples our current operational capacity increasing our capacity from 2 x 4 car fuelling roads to 4 x 8 car fuelling roads (8 cars to 32).

## CARRIAGE WASH

A new carriage wash and all associated plant and drainage systems will be installed on the arrival line into Holbeck depot, providing multiple strategic service advantages.

- New location eliminates shunting requirement to use carriage wash, ensuring every train can be washed on arrival.
- New location means reduction in depot shunting operations, easing depot flow constraints.
- The old carriage wash location provides additional stabling, and the road will be converted into an internal heavy maintenance road offering additional capacity and service provision, situated inside a new shed extension.

## ADDITIONAL FACILITIES

Additional services not mentioned in the above comprise of the following:

- Undercarriage wash frame.
- Heavy cleaning road.
- Enhanced parking facilities including EV charging points.
- Upgraded power supplies.

## ENVIRONMENTAL

RTS are a socially and environmentally conscious company and our commitment to future generations has led us to undertake the following enhancements to reduce our carbon footprint and maximise use of resources available to us:

- Solar Panelling or PV Panels on all structures able to facilitate and utilise the output.
- Rainwater and Grey Water Harvesting, to re-use, where possible, water that would otherwise be single use/waste.
- RTS are exploring the use of ground source heat pumps to heat office accommodation and the associated amenities.

For more information about our capabilities  
and services please contact us...



**0113 388 6942**



**[www.rtsinfrastructure.com](http://www.rtsinfrastructure.com)**



**[info@rtsinfrastructure.com](mailto:info@rtsinfrastructure.com)**