

Issue: Rev 1.1 Date: 23/11/22

Work Package Plan

Beauly Viaduct

Beauly Viaduct Waybeam replacement 09m 1363y – 09m 1536y WCK:3400

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Senior project engineer

Signalling CRE

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23/11/2022

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David Tomnay

CEM

[redacted]

[redacted] 23/11/2022

(Signature)

23/11/2022

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Scheme Project Manager (WD Civils)

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VERSION CONTROL

VERSION NUMBER	SUMMARY OF CHANGES	
Draft		
1.0	Draft for comment	
1.1	Update with fall protection and design info	



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1 Introduction

1.1 Brief outline of work methodology

Vital projects propose the following detailed methodology for Beauly Viaduct Waybeam replacement site, this will be three phases spread over Preparatory, Core and Follow up. The programme for the three phases will start on WON week 33 of 22/23 and run through to the end of WON week 38 22/23.

The Programme consist of 2 weeks of preparation works in week 33 & 34. There is then 1 weekend of disruptive access running from Saturday night week 35 until Monday morning week 35. Further ROTR shifts are booked Saturday nights weeks 36, 37 & 38 to complete the scope of works.

The longitudinal timbers supporting the permanent way track across structure 302/029 Beauly Viaduct (W.B). on WCK have been identified as life expired and require renewal. 7/10 timbers are proposed to be replaced for hardwood timbers in Year 4 – 2022/2023, these include: L1, L2, L3, L5, R1, R2, R3. ID plates to be installed on every waybeam including those NOT being replaced. Micro-drilling has been carried out at this structure in compliance to standard NR_L2_TRK_3038 and forms part of the TEF3279 Management Plan. The latest TEF3279 Management Plan and any other TEF3014 forms will be made available to the contractor for each scheme and should have been verified during the design development stage of the project.

All existing track components should be re-used if the condition allows (rail, baseplates, packers, fishplates etc). This will have been detailed by the designer but the Contractor should carry out their own check and agree with WD Civils SPM. The design will highlight where there is a need to install additional baseplates 'chair shuffling' and packing to accommodate non-compliance spacings.

WK33 - Monday - Friday Dayshift (Yard clearance works off track)

WK34 - Monday - Thursday Nightshift RotR

WK35 - Saturday - Monday Disruptive access

WK35 - Monday - Thursday Nightshift RotR

WK36 - Saturday - Sunday Nightshift ROTR

WK36 - Monday - Thursday Nightshift RotR

WK37 - Saturday - Sunday Nightshift ROTR

WK37 - Monday - Thursday Nightshift RotR

WK38 - Saturday - Sunday Nightshift ROTR

Start date of the project 14/11/22 with the end date being 18/12/22.

Mileages covered will be: -09m 1363y - 09m 1536y WCK:3400



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The task briefings associated with these works are TBS001, TBS002, TBS003, TBS004, and any supplementary Task Briefings will be added as required should specifications change during the process.

The works will be carried out by Vital Project operatives all of whom will have received a Project induction.

This work package plan specifically addresses how the tasks shall be planned, installed, and interfaced with other disciplines and implemented safely. All accidents must be reported to Network Rail Control.

When a risk of an over-run has been identified this must be highlighted to Network Rail Control. When works cannot be complete and the asset condition possesses a risk to normal or safe operations of the railway this must be notified to Network Rail Control and discussed with the relevant L3 Network Rail on call manager.

An end of shift report must be completed noting the completion status of the shift's works including any near misses, any over runs, accidents, or incidents. The shift report should be sent to those noted on the distribution list as agreed with the Network Rail Scheme Project Manager.

Where the defined process cannot be followed in ways that fundamentally alter the safe system of work or could affect the safety of the operational railway, station users, station staff or the workforce, work will be suspended until a change to the Work Package Plan can be made and reapproved.

Minor changes can be authorised by the acting site manager but must be recorded in the Task Brief.

Any skips left within the access points will be clear of any Gates and obstructions. They will also be locked to try and mitigate any risk of any vandalism.

The following tasks support this Work Package Plan:

Reference & Prepared by:	Task Briefing Sheet Title	Activity Start Date
TBS001; T Jamieson	Prep works (Yard clearance)	14/11/22
TBS002; T Jamieson	Prep works	21/11/22
TBS003; T Jamieson	Waybeam installation	26/11/22
TBS004; T Jamieson	Temporary joint monitoring	28/11/22

TBS001: Prep works (Yard clearance)

Off track within Aird Rd yard, These works to be carried out under ALO arrangements. Machine controller working with 13t excavator to act as ALO coordinator.

All staff must receive a full briefing of the works in compound area and gain full understanding of what is required for the shift before the worksite is granted. Completing paperwork and checks ALO plan will be available on site and coordinated by Vital site supervisor. HIAB lorry to remove scrap sleepers from site, HIAB unable to reach open line from Aird Road. On completion 13t excavator to level the land within the compound area ensuring land is reasonably level to position a small cabin and stable an RRV, a small amount of fresh ballast is available at the compound to provide a surface. Site supervisor to act as ALO coordinator for the works ensuring excavator does not encroach the open line. Machine to be positioned such that it cannot reach the track when boom is fully extended when transiting the machine is locked to ensure jib unable to turn towards open line. ALO plan will be compiled and available on site. On completion of the works staff to ensure access gate at Aird Road is secured.



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TBS002: Prep works

On track under Possession

All staff must receive a full briefing of the works in compound area and gain full understanding of what is required for the shift before the worksite is granted. Completing paperwork and checks. Once granted permission the E.S. shall set up the worksite and grant the PIC/COSS permission to start work. The COSS will then brief all manpower on safe system of work.

P-way team access site and erect strip lighting and engineering staff access site and mark up site for upcoming works. Datum to be established on bridge structure for track geometry and marked up. P-way team will transport materials to site and take delivery of relevant materials as per plan. Rope access contractor to erect fall protection please refer to method statement of these works once confirmed. RRV access at Muir of Ord station and transport slave rails to site using trailers. Slave rails to be placed in wide way on approach to the structure on either side. RRV then return to Muir of Ord station and transport new waybeams and smalls transporting to site and placing in the cess on the approach to the site. All materials to be at least 2m away from the running line and banded if necessary. Re-fuelling to be carried out at least 10m out-with structure and spill kits on site at all times. On completion RRV to stable at Aird road compound area, egressing using bog matts.

Any refuelling to be carried out clear of the viaduct to reduce the possibility of spill into the Beauly water. Once all manpower has left the site, the Supervisor must ensure all gates are locked and will complete a site report and distribute to the key individuals identified on attached Distribution list. TEF3203 to be completed and distributed as necessary to ensure line is fit for passage of trains.

TBS003: Waybeam installation.

On track under Possession

All staff must receive a full briefing of the works in compound area and ensure gaining a full understanding of what is required for the shift before the worksite is granted. Completing paperwork and checks. Once granted permission the E.S. shall set up the worksite and grant the PIC/COSS permission to start work.

Engineer to access the track and mark up relevant waybeam for renewal on current shift. Manpower load up trolleys with hand tools and access the site of works. RRV access at Aird Road using bog matts and convey to site. P-way team disc cut at cut in points and once RRV in position unclip the rail being removed. RRV then splay rail out towards the cess. Slave rail installed to allow RRV to run on for waybeam renewal. Slave rails are temporary jointed using fishplates and robels. Bolts tightened with impact wrench.

Once all of these in place p-way team will remove fishplates from rails on waybeam's involved using impact wrench. P-way team bar slave bottom rails into 4ft. Staff install holding eyes to pre-bored holes. RRV remove spent waybeam's and place in laydown area. Holding eyes then installed on new waybeam being installed and RRV lift into position. Engineering staff to measure for any notching necessary and this is carried out using Mafel saw by joiners on site. Install new waybeam ensuring in correct position and beam is sitting correct in the trough. Baseplates are then laid out at the distance as per design (Existing NRS2 baseplates to be re-used), ensuring spacings are correct. Slave rail then reinstalled by lifting over the chairs or rolled in using rail turning bar if rail is not sitting upright. Once the rail is in position the fishplates are attached at either end. Engineering staff then work through the beams ensuring gauge is correct to L2TRK2102 (1435mm - 1441mm). Once the gauge has been checked / corrected the chairs are drilled into position using sleeper drill, then ferules and ASHT wood screws inserted and tightened using impact wrench. This process is repeated for 4x waybeams on the left hand leg. On completion slave rail removed and CWR re-installed using RRV and clipped up & temporary joints installed at relevant locations, ensuring information being collated on temporary joint paperwork and sent to NWR. This process then carried out for right hand leg, where 3x waybeams are to be installed as per design. All re-fuelling to take place at least 10m away from structure to ensure watercourse not at risk. On Completion of all works closure rails installed at cut in points and rails all welded. During the disruptive in wk 35 TSR to be erected as per TSR4013 design (See appendices for design) Erected on week 35 and removed week 38 post welding works.

Once all manpower has left the site, the Supervisor must ensure all gates are locked and will complete a site report and distribute to the key individuals identified on attached Distribution list. TEF3203 to be complete and distributed as necessary to ensure line is fit for passage of trains. The Supervisor will then complete a site report and distribute to the key Individuals Identified on attached Distribution list.



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TBS004: Temporary joint monitoring

On track under Possession

All staff must receive a full briefing of the works with a full understanding of what is required for the shift before the worksite is granted. Complete paperwork and checks. Once granted permission the E.S. shall set up the worksite and grant the PIC/COSS permission to start work.

Once all members of staff are briefed on the SSOW they will access site via authorised point as instructed by the supervisor and detailed in the task briefing sheet. Manpower will then travel to the worksite mileage dictated by the Supervisor.

The appointed Joint Checker will then check every temporary joint and record all information on the joint inspection form. When the joint has been formed, the checker undertakes his inspection and must have any significant defects corrected before the track is opened to traffic.

Factors to be checked for include the following.

- a) Steps in the running table, gauge corner and gauge face
- b) Fishplates that are not seated into the web correctly
- c) Damage, deformation, or excessive wear on the fishplates
- d) Missing, damaged, or Incorrect bolts, clips, side posts or insulators
- e) Grinding length, quality, and severity
- f) Joint gap
- g) Proximity of nearest existing joints/welds/flash-butts/Insulated Block Joint's
- h) Proximity of bridge abutments, level crossings and long timber bridges
- i) Defects on the sleepers
- j) Sleeper squareness and spacing
- k) Sleeper types (depth and material) for two sleepers each side of the joint
- I) Sleeper and fastening condition
- m) Ballast profile
- n) Presence and severity of rail damage
- o) Presence of excessive rail end batter
- p) Presence and severity of Rolling Contact Fatigue, Gauge Corner Cracking, or Chair Gall
- q) Bolts and clamps correctly torqued
- r) Presence and severity of voiding

Once all manpower, tool and materials are clear of the line the PIC/COSS will inform the ES that the line everyone is clear, and the line is safe and Handback the worksite.

Once the worksite is handed back the Supervisor will complete a site report and distribute to the key Individuals Identified on attached Distribution list.



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1.2 Principal Contractor's delivery organisation

The following individuals from the Principal Contractor's organisation will be involved during this work package:

Role	Name	Contact Number
Client Liaison Manager	David Tomnay	[redacted]
Works Manger	Dylan Miller	[redacted]
Contractors Engineering Manager	David Tomnay	[redacted]
Contractors Responsible Engineer (Track)	David Hutchinson	[redacted]
Contractors Responsible Engineer (S&T)	Mark Traynor	[redacted]
Senior P-way Engineer	Thomas Jamieson	[redacted]
H&S Manager	Jane Hepburn	
Temporary works designer	A Gray	[redacted]
Temporary works Supervisor	A McMonagle	[redacted]
Temporary works coordinator	A Gray	МНВ
ALO Responsible manager	D Miller	[redacted]
ALO Planner	K Connelly	[redacted]
ALO Coordinator	Frankie Arnold	[redacted]

The following companies, specialist contractors and/or individuals will be involved during this work package:

Name and address of company, specialist contractor or individual, etc.	Work activity / Specialism	Point of contact details (name and telephone number
Story	Fitter Cover	Alexander Gemmell
Cicry	Timer cover	[redacted]
Story	POS	Alexander Gemmell
Story	1 03	[redacted]
Story	Heavy Plant	Alexander Gemmell
Story	riedvy riant	[redacted]
Speedy	Small plant and tools	[redacted]
Inspired access	Fall protection. Temporary works design and coordination on site also managed by Inspired access.	Stephen Pearson [redacted]
МНВ	Temporary works designer	A Gray [redacted]



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1.3 Resources

The following resources will be used for this work package:

People

Number of People and their competence	Task	
Machine controller / ALO coordinator Supervisor Trackmen x 2	TBS001 (Prep works yard clearance)	
Senior Supervisor Senior Engineer Engineering Supervisor COSS TCM Trackmen x 7 CC	TBS002 (Prep works),	
Senior Supervisor Senior Engineer Engineering Supervisor COSS TCM Trackmen x 7 CC Fitter Joiners Rope access team	TBS003 (Waybeam installation)	
Engineering Supervisor STM	TBS004 (Temporary joint inspection)	

Plant, Equipment and Tools

Quantity of Plant, Equipment and Tools	Task
13t excavator	TBS001
2x Impact wrench, 4x Heel bars, 4x Hammers, 2x pan setter, 2x pandrol installer, 2x pan setter, 4x scrappers, 4x duff jacks, 4x alderbran lights, 2x Hand trolley, 4x Shovels	TBS002
1x RRV, 2x Impact wrench, 4x Heel bars, 4x Hammers, 2x pan setter, 2x pandrol installer, 2x pan setter, 4x scrappers, 4x duff jacks, 4x alderbran lights, 2x Hand trolley, 4x Shovels 2 x Mafel Saw, 2x cant bars, Torque wrench	TBS003
Torque wrench	TBS004



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Materials

Materials	Task
INSULATOR INS NYLON YELLOW GAUGE SIDE 150 INSULATOR INS NYLON RED FIELD SIDE 150 PAD RAIL TYPE A 10VA 150 CLIP RAIL E2007 TYPE 240 CLIP RAIL, E1810 TYPE, LEFT HAND, YELLOW POWDER COATING TO RAL 1021. FOR USE ON SPHEROIDAL GRAPHITE (SG) BASEPLATES, DIRECTLY-FASTENED CONCRETE SLEEPERS AND STEEL 60 BASEPLATE BASPLATE. NRS2 TYPE 8 PACKING STEEL NRS2 BPT 1MM 100 PACKING STEEL NRS2 BPT 3MM 100 PACKING STEEL NRS2 BPT 5MM 100 PACKING STEEL NRS2 BPT 7MM 80 PACKING STEEL NRS2 BPT 9MM 60 FERRULE YELLOW, POLYPROPYLENE. ACCEPTED FOR USE IN NETWORK RAIL ACCEPTED CAST IRON CHAIRS AND BASE PLATES IN ACCORDANCE WITH NETWORK RAIL TRACK DESIGN HANDBOOK NR/L2/TRK/2049 AND PLASTIC FERRULES NR/SP/TRK/027 400 RESIN SPIKEFAST ET-75 TIMBER PLUGGING AND REPAIR RESIN. (1 = 1 CARTRIDGE). REFER TO PRODUCT ACCEPTANCE CERTIFICATE FOR CONDITIONS OF USAGE 3 boxes CHAIRSCREW AS (HT) 400 RAIL SHORT, 56E1, 260 GRADE, 18.288M, UNDRILLED 2] WAYBEAM TIMBERS (VARIOUS SIZES) 9	TBS001-04



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2 Working Together

2.1 At site communication

On site communications will predominantly be face to face, remote staff shall communicate via mobile phones. All machine movements will be communicated using dect-comm radios so that operator and machine controller are in continuous communication. A check of the project limits has confirmed good signal coverage throughout. Phone numbers will be detailed in the task briefing sheet and in general staff be working in pairs therefore both numbers will be available. Within each task briefing sheet and within the compound site cabin, a list of contact numbers including signal box/panel, vital on-call Manager and Network Rail contacts will be available.

2.2 Contact details.

The following are the main contacts for this work package:

Name	Role	Organisation	Contact details	Tick to confirm number works and has been tested
Inverness West RETB	Controlling signal box	Network Rail	[redacted]	✓
Tom Phillips	DPE	Network Rail	[redacted]	✓
James Montgomery	Programme Manager	Network Rail	[redacted]	✓
Andrew Sinclair	Project Manager	Network Rail	[redacted]	✓
Zoe Monkhouse	Scheme Project Manager	Network Rail	[redacted]	✓
Michael Jenkins	Project Engineer (Structures)	Network Rail	[redacted]	✓
Jonathan Lowe	Project Engineer (Track)	Network Rail	[redacted]	✓
Scott McDermott	Site supervisor	Network Rail	[redacted]	✓
Alex Fleming	Construction manager	Network Rail	[redacted]	✓
Scott Mayle	Project Director	Vital Projects	[redacted]	✓
Dylan Miller	Assistant works manager	Vital Projects	[redacted]	✓
David Tomnay	Contractors Engineering Manager	Vital Projects	[redacted]	√
David Hutchinson	Contractors Responsible Engineer (Track)	Vital Projects	[redacted]	✓
Julie-Ann Kean	Contractors Responsible Engineer (S&T)	Vital Projects	[redacted]	✓
Jane Hepburn	H&S Manager	Vital Projects		
CONTROL	CONTROL	Vital Projects	[redacted]	✓
ВТР	British Transport Police	ВТР	0800 40 50 40 or TEXT 61016	✓
Environmental Agency	Environmental Department	Scotland Environmental Agency	0800 807 060	√
BT dial before	BT Telecoms	BT Engineering	0800 917 3993	✓



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Network Rail Control	West Control	Network Rail	[redacted]	✓

2.3 Other parties involved with the package of work (interfaces details)

The following working arrangements will apply with all parties / organisations that have been identified with this work package:

Interfacing Organisation	Interface Point for:	Point of Contact and contact details	Interface arrangements
Network Rail Works Delivery	P-Way	Zoe Monkhouse Works Delivery SPM [redacted]	Network Rail representative for exchange of technical information and Engineering requirements prior, during and post installation of rail. Interface meetings will include Stagegate Reviews, Progress Meetings, IDC/IDR as required and whiteboard meetings. Emails and phone calls will deal with the bulk of day to day correspondence.
Inspired access	Providing fall protection for staff on site	Stephen Pearson [redacted]	Inspired access to engage temporary works design and carry out supervision of the temporary works and fall protection. Vital to be consulted in design process.
МНВ	Temporary works design	A Gray [redacted]	Temporary works designers as engaged by NWR / Inspired access.
Story Rail	Large plant	Alexander Gemmell [redacted]	Appointed by vital and engaged via ∀ital procedures.
Speedy	Small plant	[redacted]	Appointed by vital and engaged via ∀ital procedures.

3 Hazard Management

3.1 Work involving particular risks.

The work in this package involves the following particular risk(s), as detailed in Regulation 12 (2), (Schedule 3) of the CDM Regulations 2015:

Risk	When and where will the risk be present?	Permits Required	How will this risk be controlled?
Work exposing workers to the risk of drowning/Fall from Height	At all times when working on Beauly Viaduct	Temporary works design and risk assessments from rope access provided.	Debris netting will be installed along the length of the Viaduct. Fall protection to be erected on the structure. Temporary works design to be issued and approved as per temporary works process.



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3.2 Significant railway and construction risks

3.2.1 The following are the significant railway and construction safety and health risks that apply during this work package:

What are the main risks (including health) during this Work Package?	When and where will the risk be present?	How will the risk be controlled	
ALO consideration during yard clearance at Aird Road	Midweek 33 during yard clearance.	ALO assessment to be carried out. Lorry with HIAB to remove scrap sleepers from Aird Road. HIAB unable to encroach open line due to railway boundary. 13t excavator to level the ground to enable welfare cabin to be positioned and RRV stable in between works. Crowd barrier to be erected, Site supervisor to act as ALO coordinator ensuring machine positioned and locked in such a position as it does not risk affecting open line.	
High cross level at Aird Road Access point	When working with RRV	Lifting plan to be generated accounting for high cross level and tight curvature. Story to supply post assessment.	
Fatigue	At all times	Hotels to be provided for all staff during works due to distance site is from home depot. Staff to be made aware travelling and working on same shift is not an option for this location.	
Adverse weather affecting ground conditions on site and around compound area.	When on or near the lines and in compound area. Heavy rainfall may lead to flooding in the tunnel area.	If necessary rock salt to be ordered and distributed to ensure underfoot conditions acceptable. If conditions are poor on site a decision to be made with on call how best to proceed. This applies to all works. Pay attention to weather forecast. Works may require to be suspended.	
Large, heavy objects that need moved and positioned. Potential for impact or crushing injuries	During lifting operations with RRV	Appropriate construction sequence should be used which allows safe placement of heavy objects, specifying crane use. * Weights of elements to be provided by designer. * Still a risk of impact or crushing injuries. These can be controlled by Contractor's Method Statement and Risk Assessment for control of the works. Suitably qualified personnel to carry out the works who have a current certificate of competence that has been issued by the AP. Permit to Work to be issued by AP in advance of the Works.	
Debris on site and potential for sharps to be unearthed	At all times on or near the line	Shifts booked for preparatory works. Should any sharps be unearthed area surrounding to be marked off and Network Rail control to be notified. Nobody to touch/remove sharps unless trained and competent to do so.	
Exposure of individuals to Leptospirosis	Trackside works will expose staff to vermin such as rats (and other small mammals) and to sources of contaminated water which may carry Leptospirosis (Weils Disease).	Awareness of Leptospirosis, good hygiene, provision of Welfare for washing hands before food/after work, PPE - Protective gloves to be worn	



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RRV (Road rail vehicles)	When using RRV during track works	Each RRV will be allocated with a dedicated Crane Controller (CC) or Machine Controller (MC) who will be responsible for all movements of the RRV along with maintaining the required exclusion zone whilst the RRV is in operation. Communication between the CC or MC and the RRV operator will be via DECTCOM. Prior to any movements the CC or MC will gain positive confirmation from the Task Leaders that all affected activities have been stopped and that staff and equipment are clear of the movement. All RRV movements will be made at walking pace. Plant operative scheme (POS) will be present for the duration of the works to monitor and carry out vehicle checks/ control movements on site. Exclusion zones to be set up and enforced around the machines by the machine / crane controller. Machines to be stood down to allow staff to pass safely
Vehicle and plant movements – Risk of Crushing	While works are being carried out, deliveries will be constant on site and will be met at the gates of the compound. Staff will brief the driver prior to the deliveries commencing and will assist where required to achieve a safe delivery. Working with plant when grading the compound base and importing of new formation materials.	All access to be made via Authorised access Point. Vehicles are to obey speed limits and have hazards lights on when entering and exiting the site. All RRV movements are to be controlled by a designated banksman, or machine controller. All operatives shall be wearing high visibility clothing and where possible pedestrian and plant movement shall be segregated.
Parking	Rollaway results in incursion onto rail lines Reverse moves from parking result in collision Parked vehicles cause obstruction leading to incident or accident	Parking to be parallel to railway and physical constraints to be provided to prevent incursion onto railway, reverse park, park to avoid obstruction of sight lines. Ample space for parking at the site compound.
Lifting Operations	Lifting of Engineering products and equipment by mechanical means with the associated risk of striking, dropping or overturning. No adequate ground assessment	All lifting operations to be controlled by relevant crane / controller as directed by site supervisor.
Welfare and housekeeping	Poor housekeeping and inadequate welfare facilities can result in hygiene issues, or slips and trips issues around the site and compound	Provision of appropriate welfare, toolbox talks, weekly site inspections, identification of Roles – Responsibilities Chart, use of near miss process and board for any unsafe conditions. Car Park to be kept tidy.
Manual Handling	It will be necessary to manually lift, move, push, or pull various equipment and heavy items into position.	Trained staff – manual handling, provision of lifting aids - trolleys, pallet trucks, forklift, cranes, appropriate design information / data sheets, PPE
Underfoot Conditions Leading to: Slips Trips and Falls	Working in the railway environment will expose staff to dangers from slips, trip and falls	PPE, use of safe wa king routes, provision of lighting where required, PTS training, safe installation, and routing of generator cables



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Lifting operations with OTP in rail mode	Failure – dropping a load, overturning of machine, uncontrolled movement of machine	All lifts to be planned in advance, all lifts to be planned and supervised by CC competent. No CPCS appointed person to plan, machine specification chart to be consulted as part of plan, exclusion zone
Use of Tools, Plant and Test Equipment	"The use of construction plant, power tools and test Equipment will result in hazards which require specific controls."	Competent staff, method Statement (Certificated equipment / maintained equipment), only use tools that are in date, the correct tool for the correct job, all electrical equipment to be PAT tested.
Risk of electric shock	During all works covered by this WPP	Competent Trained Signalling Staff. Use of Insulated Hand Tools (only a protective measure on S&T circuits). Isolation of equipment prior to alterations staff are to reference notice board NRS278
Risk of damage to signalling equipment/assets	During all works covered by this WPP	All existing signalling assets to be identified prior to works commencing. Any damage should be repaired within the possession by the appointed signalling staff where competences allow. If not possible damage to be escalated and contact NWR first response to repair. All damage to be reported immediately and logged
Poor existing equipment condition	During all works covered by this WPP	Poor condition of existing equipment, At any time any poor condition is noted then this should be escalated via shift report and completion of the D form as part of the TEF 3203. Notes to be captured on AMP10.

3.3 Lifesaving rules

3.3.1

	Lifesaving Rule	When and where will the risk be present?
Working	g responsibly	
SING	Always be sure the required plans and permits are in place before you start a job or go on or near the line.	TBS001, TBS002, TBS003, TBS004
×	Always use equipment that is fit for its intended purpose.	TBS001, TBS002, TBS003, TBS004
	Never undertake any job unless you have been trained and assessed as competent.	TBS001, TBS002, TBS003, TBS004
	Never work or drive while under the influence of drugs or alcohol.	TBS001, TBS002, TBS003, TBS004
Driving		
***************************************	Never use a hand-held or hands-free phone, or programme any other mobile device, while driving.	TBS001, TBS002, TBS003, TBS004
	Always obey the speed limit and wear a seat belt.	TBS001, TBS002, TBS003, TBS004
Working	with electricity	
4	Always test before applying earths or straps.	N/A
*	Never assume equipment is isolated – always test before touch.	TBS001, TBS002, TBS003, TBS004
Working	g at height	
	Always use a safety harness when working at height unless other protection is in place.	TBS001, TBS002, TBS003, TBS004
Working	y with moving equipment	3 NATIONAL DE LA CONTRACTOR DE LA CONTRA
	Never enter the agreed exclusion zone, unless directed to by the person in charge.	TBS001, TBS002, TBS003, TBS004



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4 Environmental and Waste Management Arrangements

4.1 Environmental management arrangements

It is not anticipated that the works will have any impact on the environment.

However, the task briefings for all works within the sites will highlight the need to be vigilant with respect to nesting birds, badger sets, protected species etc. For environmental incidents or incidents where damage occurs and for operational close calls, Network Rail's NSC 24/7 will be informed, by phone, as soon as possible ([redacted]]).

In addition, key members of the Network Rail and Works Delivery Project Team will be informed of any accident, incident or event as follows:

Stephen Curran - Workforce HSEA: [redacted]

If necessary, investigations shall be made, and an accident/incident report compiled by the HSEA. In the event of a serious accident occurring, Senior Managers shall attend the location for recovery and investigative purposes.

If there is a significant incident, accident or event which could impact the Operational Infrastructure, West area Route Control will need to be contacted as they could stop trains and arrange for emergency response. It is essential that the Network Rail Project Manager be advised of an incident in the event of rail services being suspended.

Emergency response to the event must still be in accordance with local arrangements and the signaller. The Works Delivery Project Manager and Workforce Health, Safety & Environment Advisor will select and nominate an investigation team who will be responsible for completing the investigation process. Within 24 hours, and unless otherwise agreed, a level 1 report will be submitted to Network Rail using their 'Preliminary Report and Investigation Form - (NR2072P). Subsequent level 2 investigation will be initiated, as necessary, and agreed (including deadlines) with The Network Rail Project Team.

The HSEA will be responsible for the reporting of any injuries, diseases or dangerous occurrences as required by RIDDOR. Emergency response to any incident will continue to be in accordance with any local arrangements where applicable including the signaller. Specific instructions will be included within the Relevant Task Brief Sheet and task risk such as water contamination, re-fuelling etc. will be discussed at periodic PIC meetings.

All close calls when reported to the HSEA will be recorded to facilitate any trend analysis reporting and where significant findings can be fed back to the project team. All personnel will be encouraged via the project induction to report environmental hazards which are currently not included within the NR Hazard Directory when discovered. Such hazards can include but are not limited to:

- Invasive / Injurious Species (e.g., Japanese Knotweed)
- Disturbance of nesting birds. It is a criminal offence to disturb nesting birds with a potential fine
 of £5,000 for each bird affected. Any bird nests found on site must be left undisturbed until
 the nest is no longer in use. If a nest is located contact your project manager or line
 manager.
- Contaminated Land / Water
 - If such hazards are identified, these must be reported firstly as a close call and contact the Vital Project Managers. Where appropriate this will be submitted for inclusion in the National Hazard Directory, in accordance with NR/L2/MTC/006 Maintenance & Contents of the National Hazard Directory, using SMF/MG/0335 – National Hazard Directory – Hazard Notification Form.

Noise

All staff will be briefed prior to works on noise pollution and instructed to keep noise to a minimum. Engines will be turned off when not in use. Noise letters to be delivered to houses within 200m of the site of works and station car park, noise letters at the site of works to be delivered by Vital operatives. This area is a populated area especially within Aird Rd area, all staff to be mindful when in the area.



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Spill Response

Spill kits will be located at strategic locations around the site and in the site compound. Refuelling will be undertaken at refuelling stations at least 10m from any water course. Drip trays will be used with all static plant.

4.2 Waste management arrangements

Vital Projects will provide multiple skips for the recycle of different waste products generated as part of the works. All waste will be disposed of as per vital company procedures and NR Environmental Policy. Staff to ensure correct materials placed in correct skips. Scrap beams to be left in a safe manner and uplifted following the MR1 process.

5 Emergency Arrangements

5.1 Site emergency arrangements

In an emergency affecting the infrastructure contact the relevant signaller as listed in 2.2.1.

The COSS will carry a mobile phone which will be used to contact the emergency services by dialling 999. The Emergency Response procedures will define managerial and employee responsibilities and actions to respond to a specific emergency.

Additionally, it will include contact details for emergency services, enforcement authorities and site contacts.

To ensure that the information is cascaded throughout the project to all staff required. The emergency arrangements relevant from this Work Package Plan will be transferred corresponding task briefing. There will be a mandatory requirement for the information to be available at all locations during work activities. All personnel will be briefed on the relevant control measures as part of the project induction.

Following an initial project review, the following type of emergencies have been identified as having the potential to arise during the life cycle of the project within this package of works.:

- Electrocution
- Fall from heights
- Injury to staff caused due to being struck by moving vehicles / plant / trains
- Crush injuries / death caused to catastrophic failure during lifting operations

The types of injuries that may be encountered include but are not limited to:

- Electrical burns
- Death from electric shock
- Fractured limbs
- Concussion
- Sickness, Vomiting
- Crush from falling objects during lifting operations
- Crush injuries from being struck / trapped by plant
- Death from lifting operation failure

Major / multiple injuries / fatalities due to collision of passenger trains

All emergencies are to be reported to Vital Rail Control and the Project Manager as soon as possible. Route to Raigmore Hospital, Old Perth Road, Inverness, IV2 3UJ.

In emergency situation relevant response team to be contacted and given the access point at Aird Rd, Beauly. Emergency services to be made aware of tight access in this street. First aider to be on site at all times to attend to situation until such times as emergency services can attend.



15.7

16.3

16.4

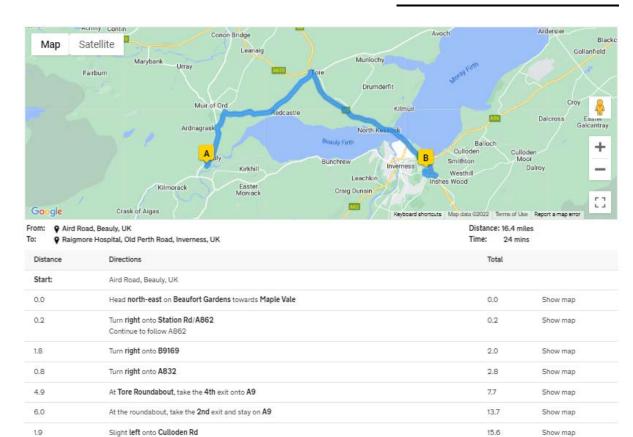
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5.1.1 First aid arrangements

Turn left onto Culloden Rd/B9006

Turn right onto Raigmore Hospital

At Inshes Roundabout, take the 4th exit onto Old Perth Rd/B9006

Arrive: Raigmore Hospital, Old Perth Road, Inverness, UK

Section time: 24 mins 38 s, Total time: 24 mins 38 s

0.1

0.2

0.1

All works covered by this WPP will be broken down to fit within the TBSs defined in table 1.1.2 and the risks identified in section 3 will be included within the relevant TBS. At the pre-planning stage for each of the tasks the risk involved shall be identified, mitigation and controls defined and discussed at the PIC meetings. The first aid requirements will be agreed and documented and the onsite first aider will be identified and appointed for the task and works. A first aid assessment will be conducted for the project to encompass, geographical location, risk, numbers of personnel on-site and tasks being undertaken. The level of injury could be potentially high, as the survey works include work at height. All first aid risk assessments are conducted in accordance with NR/L2/OHS/00110. A first aider will be nominated at the work site for this project. Legal requirements for first aid at work are laid down in the First Aid Regulations 1981 and NR/L2/OHS/00110. All first aiders and vehicles will have a first aid kit available; size will be dependent upon scope and size of work site. All Task briefing Sheets, Work Package Plans and Safe Systems of work will contain the details of the nearest hospital. Given the nature of these works injuries could range from mild to severe.

All first aiders and appointed persons on the project will be detailed within the First Aid risk assessment. First aiders will be responsible for communicating the details and condition of the casualty. A comprehensive first aid kit shall be contained in the site office. Each site team shall carry a first aid kit. A trained first aider to be on site at all times equipped with first aid box and emergency details.



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Task briefing sheets will include details of the nearest accident and emergency hospital plus the most appropriate route from site.

5.1.2 Evacuation arrangements

The site induction briefing will also contain this information plus details of the site compound muster point in the event a site evacuation is necessary.

Whole site evacuation

Whilst this scenario is extremely unlikely, the following actions will be taken:

Senior Vital Projects supervisor on site will contact the project ES's and request that they contact PIC/COSSs/IWAs and initiate an evacuation to the depot / site muster point at the temporary access gate adjacent to the viaduct.

The senior Vital Projects construction person will make a list of those personnel who have accessed site and will carry out a roll call.

Discrepancies will be escalated as appropriate.

Casualty evacuation

Even if treated by a first aider, a seriously injured person will not be removed by on-site personnel unless the safety of others or the line is an issue. The emergency services (ambulance) will be notified and requested to attend for seriously injured people. The emergency services will access at the temporary access gate adjacent to the site of works.

Non-seriously injured persons will, if deemed necessary by the first aider, be escorted to the nearest A&E department dependent upon the work location. The nearest A&E is Raigmore hospital.

5.1.3 Fire safety arrangements

Within the site compound a fire extinguisher and where required a fire blanket will be available. All staff are trained on fire safety which includes the correct response to specific incidents. Any fires will be treated as a serious incident and will be investigated in accordance with Vital Personal Accident Reporting Procedure SQM/W/519.

In accordance with the Fire Safety (Scotland) Regulations 2006 Vital Projects will carry out suitable assessments of fire risk for any building or area, temporary or fixed, under its control and for the work it is carrying out. This assessment shall be in accordance with Vital Projects Fire Risk Management. Where appropriate, an electronic copy of the assessment will be retained.

Where premises are under the control of a third party, the existing Fire Arrangements will be complied with.

Appropriate fire precautions and emergency control measures including the method for raising the alarm, fire-fighting equipment required, and a designated assembly point will be implemented as appropriate. Specific details will be included in WPP's and TBS's accordingly.

Smoking is not allowed in any building/construct in accordance with the Prohibition of Smoking in Certain Premises (Scotland) Regulations 2006 and will not be permitted in areas where there is a risk of fire/explosion (near to fuel or flammable materials storage areas for example).

All fire safety kit will be available at the site office at compound area.

Should a fire start within the compound or on site emergency services to be summoned by dialling 999. If safe to do so staff use fire extinguisher on site in an attempt to extinguish the flames. Once evacuated all staff to congregate a safe distance from the fire and wait for emergency services.



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5.1.4 Security arrangements

Authorised access and egress points to site are as identified in the NR Hazard Directory, appropriate extracts from which will be issued to PIC/COSS's and IWA's. All gates providing access to the railway infrastructure shall be kept closed and locked when not in use. Any access which cannot be secured in this manner shall be reported immediately to the supervisor (on-call manager if out of normal hours) and to Network Rail Infrastructure Group Control. To ensure the security of Network Rail's Managed infrastructure and that of our own personnel (contractors and visitors), all staff shall work in accordance with the requirements in NR/GN/CPR/401 "Guidance and Contractual Health & Safety Requirements" at all times.

All staff are to receive security instruction at their initial employee induction and for each specific project. The team will ensure that arrangements cover any task or location's security concerns. Consideration shall be given to the likelihood of trespass and vandalism at all locations where appropriate advice will be sought from BT Police, and Network Rail Health and Safety Manager for the territory.

All access gates to the railway infrastructure shall always be locked and secured with approved padlocking. All plant and materials shall be secured and stored within the on-site lockable stores' unit or within the locked compound fenced area. At all times access to and egress from the site will be strictly controlled by means of site induction and sign in at site office.

Consideration will be made on the additional site security arrangements at the worksite:

- All access gates to the railway infrastructure will always be locked and secured with approved padlocking to prevent trespass, fly tipping and associated risks.
- After any use of Network rail or 3rd party access point, it should be securely locked before leaving site.
- Upon arrival to site, if the railway boundary fence is found to be in an unfit state, this must be made secure where possible and will be reported to Network Rail Control.
- No vehicles are left blocking access/egress points to the railway including stations.

Works Delivery will ensure the site is left in a fit and secure state before leaving the site and no potential hazards are left behind.

5.1.5 Summoning emergency services

In the event of the emergency services being summoned to site the Site Supervisor/Site Manager/COSS/Person in Charge will immediately ensure that everyone is in a position of safety, prior to contacting the emergency services. In circumstances whereby the Site Supervisor/Site Manager/COSS is unable to, then a member of the team shall be nominated to do so and take control of the situation. The emergency services shall be directed to the access point and of any hazards which may affect access to the location. Access and egress arrangements to the infrastructure and the programme of site activities, the project team may consider it prudent to share information with the emergency services including agreement of an emergency response plan prior to specific phases of the construction plan. Access to all sites will be achieved via the agreed compound and lineside access points and shall always be detailed and agreed within the Safe Work Pack prior to the commencement of any works. It is not foreseen that any of the proposed access points would provide restrictions to emergency services, however, safe access and its suitability will be subject to review throughout the project life cycle.

5.1.6 Railway emergency (trains and electrical)

The PIC/COSS or IWA will act in accordance with Handbooks 1 (Section 8.2) and 16 (Section 6.1) of the Railway Rulebook in emergency situations. In summary:



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Stopping trains

Make the immediate area safe for staff and inform the signaller if any adjacent open lines are affected and need protecting by TEPs.

I DETR I	Inverness West RETB	Controlling Signal Box	Network Rail	01463 245 103
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Procedures detailed within the Rule Book GE/RT8000/ Handbook 1 General duties and track safety for track workers section 8 apply.

Telephone the Network Rail NSC 24/7 or signaller, as appropriate, using a line side telephone or mobile.

- During daylight
 - -If time allows, contact the signaller and request for trains to be stopped.
 - -If time does not allow, show a red flag or if no red flag is available raise both arms above head.
- During darkness/poor visibility show a red light or wave any light violently.

Switching off OLE power

Cathcart ECO will liaise with Nominated person for isolating of OHLE (No OHLE in this area)

Isolate the hazard of electricity (650v signalling supply)

In the case of the electrical power having to be shut down in an emergency the SMTH will shut
the incoming power to location cabinet Y4/2 from location cabinet Y4/3 will then contact the
signaller at Yoker SC [redacted]
 NWR control West [redacted]

5.1.7 Asbestos

Prior to attending site the asbestos register will be consulted to check for the presence of asbestos within the proposed work site. Where asbestos is present an ARMS report will be obtained. Only specialised personnel will be utilised where contact with asbestos will be made. Site operatives will be made aware of areas contaminated with asbestos via briefings and inductions. It has not been identified from the information supplied that asbestos is present at site and surrounding area. Where asbestos is identified during the project, work shall cease, and only specialised personnel will be utilised where contact with asbestos will be made.

Once any discovery is fully under control Works Delivery Signalling shall take the following action:

- A copy of the Asbestos Report will be placed in the site folders
- Site operatives will be made aware of areas contaminated with asbestos via briefings and inductions.
- All paperwork shall be updated to reflect this information and bring the hazard to the attention of all the project team and operatives.

Work Programmes will be reviewed to reflect the possible disturbance of the asbestos. It may be possible that asbestos maybe present within the Network. Where any of these areas are identified then work in the immediate area will cease. Any findings will be reported back to the Network Rail Project team, also incorporating HSEA in order to come to an agreement on how works will proceed safely. The Site Manager shall be responsible for reporting any additional asbestos discovered during the works. Works Delivery Scotland shall advise the Network Rail nominated person, as part of the H&S File information, of any unrecorded asbestos and/or if asbestos was removed during the works so that the Network Rail asbestos register (currently Asbestos Risk Management System - ARMS) can be updated.

Vital Projects will then arrange for sampling and analysis to be carried out to determine whether the substance is an ACM.

If the material is confirmed as an ACM Vital Projects will then discuss and agree with the Client what actions are required and appropriate.

When required Vital Projects will employ competent organisations/people to undertake asbestos surveys and removal.



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5.1.8 Utilities

5.1.7.1 The discovery of previously unidentified buried utilities will entail those at the point of discovery undertaking additional safe digging precautions in accordance with HS(G)47 (Avoiding Danger from Underground Services) to reduce the potential for damage/harm.

Should such a discovery be made, Vital Projects will prepare and submit a notification of a new hazard

for inclusion in the NR National Hazard Directory.

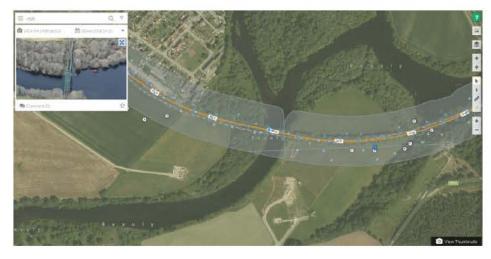
Should a utility be damaged, it will be treated as an event and reporting will be in accordance with the details shown in Section 5.5. In such an event one of the following may be required to be contacted:

Name:	Number:	
Scottish Hydro (Water)	0800 300 999	
Scottish Power (Gas)	0800 111 999	
Contrib Down (Floring)	From a landline 0800 092 9290	
Scottish Power (Electrical)	From a mobile 0330 1010 222	

Work Package Arrangements

Site Layout 6.1







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Photo 4: Track View - At Span 2 towards Low Mileage (11/08/21)



Photo 12: Span 2 - General View (11/08/21)

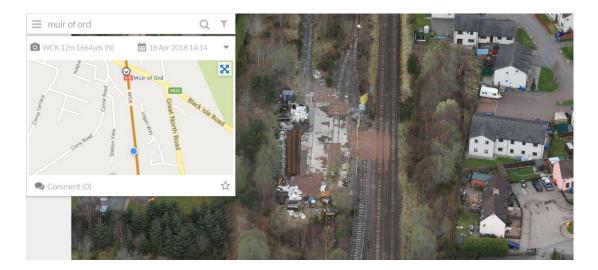
6.2 Access and Egress

RRV access is Via Muir of Ord (as per below). Materials to be delivered to this location and transported to site using RRV. Land agreement has been obtained via Network Rail. Muir of Ord station address: Corry Rd, Muir of Ord IV6 7ST. Between prep works in week 34 and core works week 35 RRV to be stationed at site compound at Aird Rd compound.



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The site of work is situated in a residential area. Noise is to be kept within reasonable limits. Prolonged idling of engines of road vehicles in built up areas will not be permitted. Staff on site, are to refrain from swearing and shouting. Fuel and oil will be stored within appropriate containers on a watertight base. A spill kit shall be kept by the fuel point or as nearby as appropriate.

6.3 Welfare

Vital will comply with The Workplace (Health, Safety 7 Welfare) Regulations 1992 and Network Rail Standard NR/L3/INI/CP0036: The Provision of Welfare Facilities, for the provision of accommodation and other facilities. Cabins/ welfare will be sited at compound area At Beauly Station car park. In this there will be 1 x toilet block to comply with the project welfare assessment requirements. With toilet facilities and handwashing, 1 x Site welfare unit with handwashing, first aid kit, food heating facilities



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and source of water heating by kettle and fridge. With bottled water, Tea & Coffee provided. Vital projects will assume responsibility for the maintenance and upkeep of the welfare facilities provided to ensure their availability, function and cleanliness are to the required standards and satisfy the requirements of all personnel engaged on the project.

See image below, compound area at Beauly station car park highlighted in red. Parking spaces secured via Usecureit. Beauly station postcode: IV4 7EZ



6.4 Rail Traffic Management

All drivers to be dressed in Network Rail standard PPE. If required, they will be accompanied by a competent banksman for large vehicle movements. Vehicles will switch off their engines when stationary and remove key from ignition. Please respect surrounding railway neighbouring properties during the works.

Speed limit of 5mph to be adhered to on access roads to site.

Any movements of on-track plant and machinery shall be authorised and controlled by the machine controller / crane controller and briefed out during the site / white board meeting.

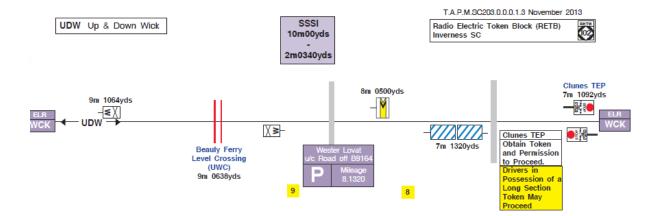
Machines will access at Muir of Ord station. Staff will be briefed on specific requirements for "Maintaining safe working zones" around RRV's etc. and also for "Send and Receive Movements for On-Track Plant" for transport in rail mode of all plant items between site and access points. (See diagram below for access point) ALO not applicable at this location for delivery of materials.

Details of any movements of on-track plant and machinery, including permitted on/off tracking points will be detailed in the Task Brief Sheet, included on the SSOWP given to the PIC/COSS and briefed out during the 'Whiteboard' Meeting. No train movements planned during our works or material deliveries.



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6.5 Road Traffic Management

No road traffic management is required for this site, however all staff to follow Vital procedures for driving to and from place of work. All vehicles to reverse park in compound area and when travelling no more than 5mph. ALO not applicable at this location for delivery of materials.

6.6 Delivery Point Management

The Compound at Muir of Ord and the area at Beauly Station have been identified as a 'low Risk' for the activity and agreed by the supplying and transporting organisations, plant/equipment/material deliveries to and collection from site, will be overseen on site by a suitably competent Vital representative. Materials and plant will be delivered and stored in clearly demarked areas. No tools or machinery will be left unattended at the site of works.

6.7 Site Induction

All personnel working on the project will be provided with a project induction which will contain the following information as a minimum:

- Nature and scale of the project
- Site layout
- Access arrangements
- Welfare arrangements
- Significant hazards
- Accident/incident reporting
- Emergency arrangements
- Environmental considerations (from the EMP)

All personnel working on this site shall have been through the Network Rail Industry Common Induction and their site induction shall focus on the site-specific significant risks.

Everyone working on this site(s) shall receive a shift task briefing where they shall be advised of shift tasks and site hazards.

All visitors to this site shall receive a briefing that covers the activities whilst on site. They shall be always accompanied by a member of site staff who has been briefed on the site activities and hazards preventing the visitor to exposure to unnecessary risks.



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Hand Over and Hand Back Arrangements

7.1 Hand over and hand back arrangements

Post Shift

Following completion of each shift's activities, and on confirming that the track is fit for use, each COSS will hand their worksite back to the relevant Engineering Supervisor in accordance with the Rule Book requirements and within the timescale agreed with the Engineering Supervisor. Signalling staff to check with Signaller that there are no issues and that his panel is showing normal indication this information will then be passed onto the Vital site supervisor. Where required, Vital Projects Handback Engineer shall undertake P-Way handback procedure and proforma, in line with NR/L2/TRK/001/mod13, Confirming Track is Safe for Selected Line Speed after Work. Site report to be distributed as per Vital projects protocol & supporting TEF paperwork's distributed to Network Rail post shift (if possible) or within 24 hours as per AMP process.

Completion of programmed works

On completion of programmed construction duties, the Vital Engineering and Supervisory team shall instate a walkout to outline and identify construction quality and remit adherence. Following this meeting, Vital Management team shall engage client organisation, as per NR/L2/MTC/089 to engage client and maintenance teams locally to undertake hand back of site, and cessation of supplementary inspections (if/as required).

APPENDICES – Supporting information

Design

Please refer to:

Project Title: Year 4- Longitudinal Timbers

Report Title: Civil Design Summary Beauly Viaduct

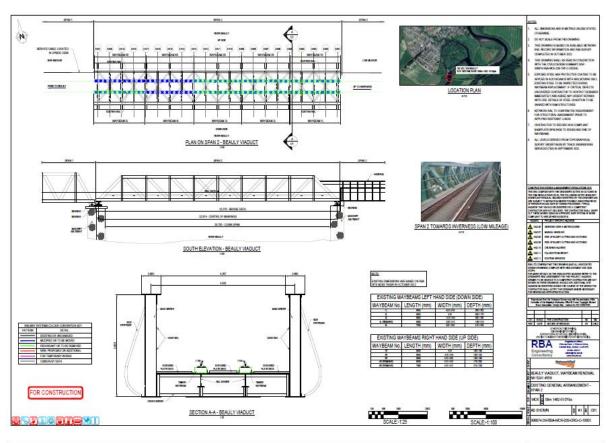
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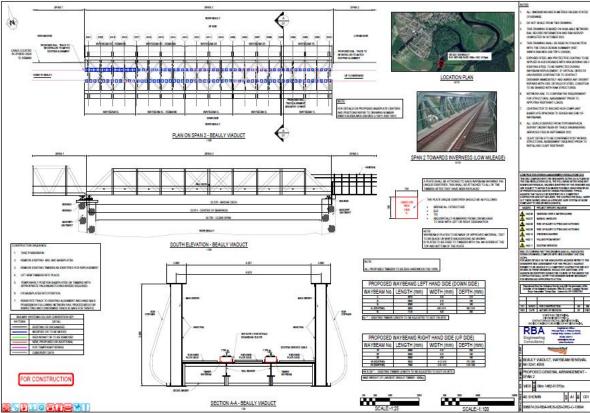
ELR/Mileage: WCK/ 9m1430y

RBA Job Ref: 006974-RBA-WCK-029-TRP-C-020304



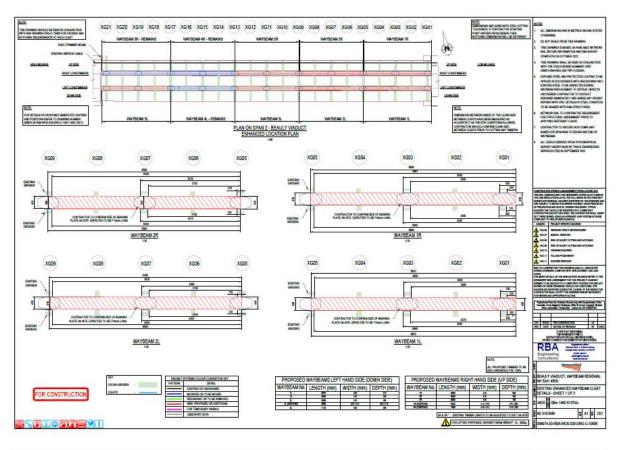
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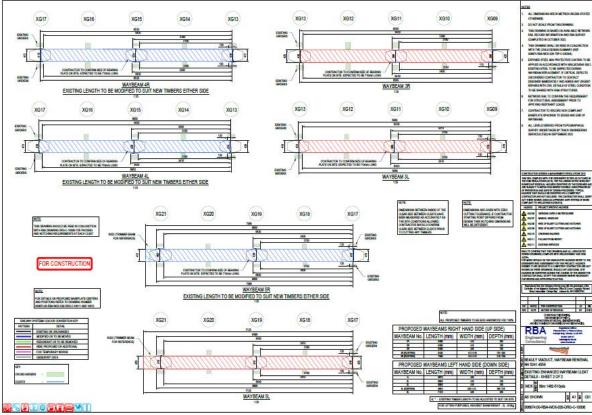






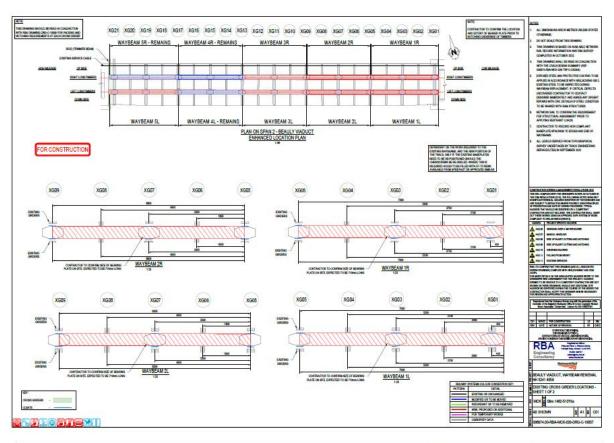
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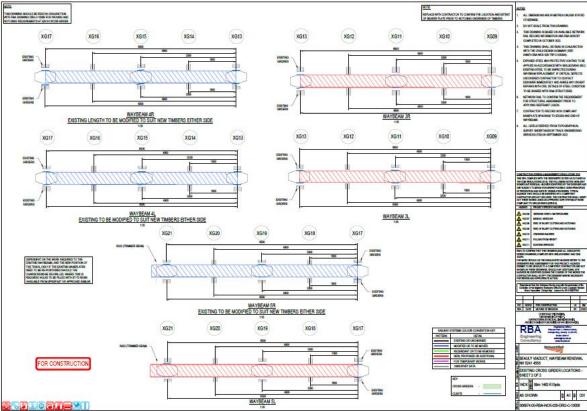






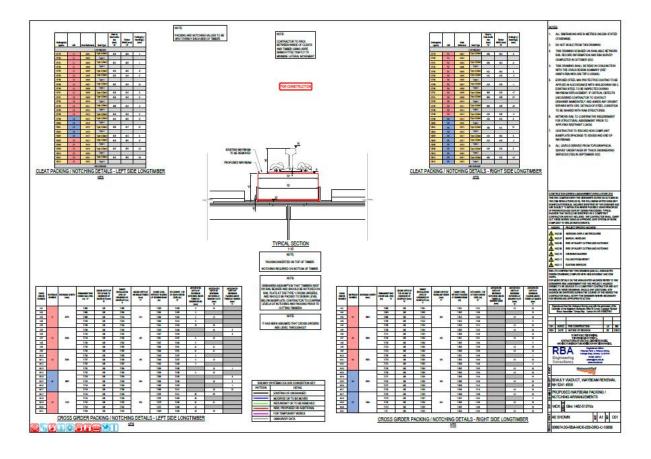
Issue: Rev 1.1







Issue: Rev 1.1





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Temporary works design:

Please refer to:

UB 302/029 Beauly Viaduct Temporary

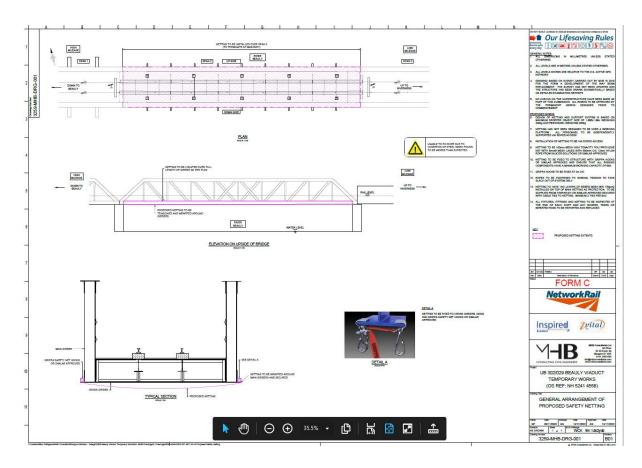
Works

Safety Netting

Form C: Certificate of Design & Check for

Temporary Works

Doc. No.: 3259-MHB-REP-001





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Hazard Directory

<u>ID</u>	ELR	START MILEAGE	END MILEAGE	DESCRIPTION	LOCAL NAME	Track
10514210	WCK	0.0044	161.0792	Buried Service	various	All/Multiple Tracks
ASBESTOS	IDENTIF	ICATION & REMOVA	L THE LENGTH O	F THE LINE. H&S REF NO SH001463		
10495930	WCK	2.0340	10.0000	Water Source Protection Area	Beauly Firth	All/Multiple Tracks
Water Sour	ce Protect	ion Area (On Rly) We	edspraying prohibit	ted in this area		
10408315	WCK	2.0340	10.0000	Site of Special Scientific Interest (SSSI)	Beauly Firth	
Designated	06/04/88~	- File No. 278/1/1c Do	oc LB 129/27-28 HF	R01856/6001~ Node=N038		
10495931	WCK	9.0440	10.0000	Water Source Protection Area	Beauly Firth	All/Multiple Tracks
Water Source	ce Protect	ion Area (On Rly) We	edspraying prohibit	ted in this area		
10407778	WCK	9.0880	10.1320	Hazard Associated With Bridge	UB28 and UB31	All/Multiple Tracks
Curve at Be	auly - UB:	28 - UB31~ Node=N0	38			
10521195	WCK	9.0999	9.1497	Red Zone Working Prohibited	BEAULY VIADUCT	Rev Single
WARNING	SSOW PR	ROHIBITION COVERS	S ALL LINES. SIGN	NED OFF BY SRG 080803.		
10402102	WCK	9.1060	9.1060	Overhead Electrical Cables	BEAULY	All/Multiple Tracks
WAYLEAVE	L V O/H I	LINE~ ~ ~ Node=N03	8			
10582835	WCK	9.1462	9.1462	Hazard Associated With Bridge	302/029	All/Multiple Tracks

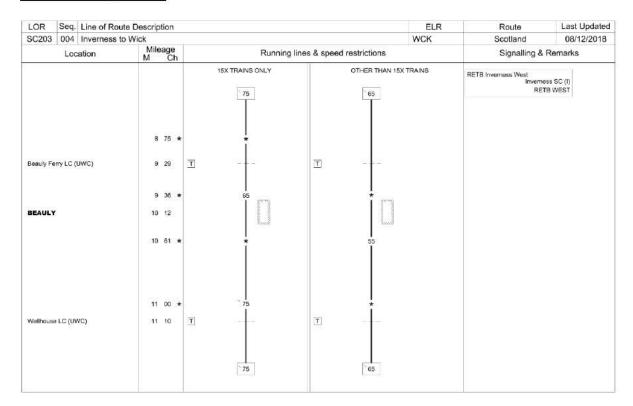
There is a risk of fall from height when working on adjacent slopes



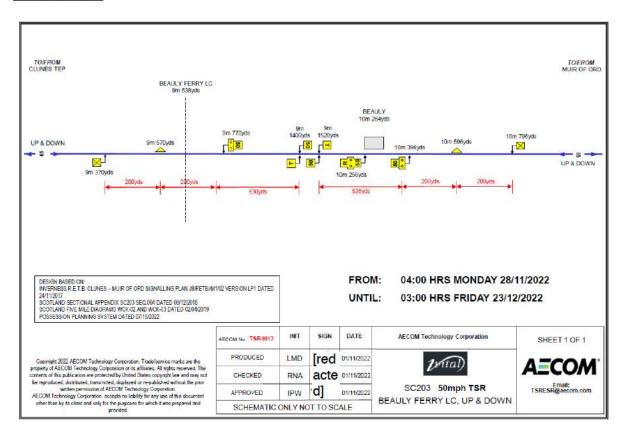
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Sectional appendix



TSR Design





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Date: 23/11/22

Risk assessments

0.004	
GA01	Work on Or Near the Line
GA04	Work in or Near Public Places
GA07	Loading/Unloading Wagons and Vehicles
GA17	Decanting Fuel and Fuelling Small Plant
GA18	Working with on Track Machines
GA19	Working with or near Mobile Plant
GA25	Line Side Materials and Equipment
GH01	Manual Handling
GH02	Underfoot Conditions
GH05	Asbestos
GHE01	Environmental - Invasive and Injurious Plants
GHE02	Waste Storage and Segregation
GHE03	NOISE - Working near homes / schools / hospitals
GHE05	Refuelling
MP01	Use and Control of OTP
MP02	Delivery and Safe Storage of OTP and Transit from storage point to the ON/Off Tracking point
MP03	On/Off and Cross Tracking Self Propelled OTP, RMMM, Trailers and Attachments
MP04	Load - Unloading Materials and People onto OTP
MP05	Transit of OTP with / without a Machine Controller present
MP06	Lifting and Thimbling Operations
MP07	Use of OTP with Attachments
MP24	Machine operator acting as a Machine Controller when operating OTP
SP08	Use of Manual Trolleys / Rail Skate / Scooter



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SP09	Use of Impact Wrench
SP11	Use of jacks
SP16	Use of Site Lights

