Network Rail Project No:	
AMCO Contract No:	
WPP Revision:	
Revision Date:	30/03/21

Work Package Plan

IS????, Rossie Viaduct, UB090/275 ANI1 38m 968yds & 38m 1620yrds

Start Date: 2021

Finish Date: 2021

Work Package Plan Number:
WPP000: *IS????*

Controlled Copy Number
Add Unique No: 001

Construction Phase Plan Number IS00758/001
Add Unique No:

Controlled copies will have a controlled copy number shown in **RED**. Any variation will be regarded as uncontrolled for information only.

The responsibility for the health, safety and environmental management of the Works rests fully and unreservedly with the Amalgamated Construction Ltd. The acceptance of a Work Package Plan on behalf of Network Rail and involvement in Studies or Audits does not in any way absolve Amalgamated Construction Ltd from that accountability and responsibility, nor is it intended to confirm or suggest that Amalgamated Construction Ltd fully meets the statutory requirements.

Prepared by:

30/03/21

James Matrecano ……..Date
(Print Name)

……
(Signature)

Engineer

(Job Title)

Approved by the Contractor's Responsible Engineer (CRE):

Phil Tait ……..…Date

(Print Name)

……
(Signature)

……
(Job Title)

Project Manager/CRE

……
(CRE Discipline (*as stated in the CPP*)

Accepted on behalf of Network Rail

……
(Print Name) ……..…Date

……
(Signature)

……
(Job Title)

Always be sure the required plans and permits are in place, before you start a job or go on or near the line.

Network Rail Project No:	
AMCO Contract No:	
WPP Revision:	
Revision Date:	30/03/21

DISTRIBUTION LIST

ISSUED TO:	JOB TITLE	ORGANISATION	VERSION
Document Control Master	Administrator		
	Senior Project Manager		

VERSION CONTROL

REVISION NUMBER	SUMMARY OF CHANGES
Draft	
01	
02	

Supporting guidance

L2OHS0044_F02.pdf

CONTENTS

1 Introduction

1.1 Brief outline of work methodology

- Detailed prioritised schedule of masonry repairs for all structural elements, including piers - this should include defects beneath water line and specification of appropriate repair details.
- Repairs should be based on Network Rail Standard Details where appropriate.
- Remediation to address pier fractures to pier 7 following results of investigation.
- Repair schedule should highlight areas of pier/spandrels which would benefit from clearing weep holes and installing further weep holes.
- Review of spandrel condition and remediate from any further movement - consideration to be given to installation of spandrel ties.
- Review requirement for ballast retention improvement at all four corners of structure. .
- Review of current edge protection for compliance with working at height regulations - proposing remediation/upgrade/repair as necessary.
- De-vegetation of structure and 5m surrounding envelope, roots to be treated to prevent regrowth.

The works comprising in this contract involves the successful identification and repairs of defective masonary and installation of spandrel wall ties. Access to Structures will mainly be a rope access system.

Authorising Start of Works

Prior to works commencing Operatives must be briefed on the following.

- Full Site induction
- Whiteboard brief
- Task Briefing
- Any relevant Permits
- Site Specific Rules
- POWRA

The following tasks support this Work Package Plan:

Reference & Prepared by:	Task Briefing Sheet Title	Activity Start Date

General

- All operatives will receive the site safety induction and sign the site safety induction log
- All personnel on the site will receive a task briefing to cover the methodology and risks associated with the activities.
- All personnel holding a PTS card to swipe in at the start of every shift with the card checker. Ensure you are swiped out at the end of the shift prior to leaving site.
- Copies of all training cards to be supplied prior to any works commencing
- A daily white board briefing will be carried out each day which all site personnel will attend. Any new hazards will be identified at this point.
- A point of work risk assessment and daily briefing will be carried out each day which all operatives will sign to show they have understood the methodology and hazards. Any new hazards will be identified at this point.
- All personnel to be wearing the minimum requirement of PPE

TB001 – Installation of Rope Access System

Primary and secondary anchorage installation

- An exclusion zone will be set up around the over-head work area and the area will be checked for loose materials. The exclusion zone will be demarcated by a physical barrier where possible. The exclusion zone will be monitored by the L3 IRATA trained supervisor to ensure no third parties stray into the work sites / exclusion zone.
- A safe system of work for the rope access installation will be set up by the L3 supervisor during a ROTR possession. This will require operatives wearing safety harness and lines to be restrained by use of the running rail whilst the works access system is installed. Operatives will ensure that whilst rigging this temporary fall arrest system that they rig under the rail and around the chairs to protect against risk of the safety line being damaged. On track movements will not be permitted over or past any rope access rigging during the works whilst technicians are using the system.
- The safe system of access for the masonry repair work will then be established with the Amco engineer/ supervisor and the specialist subcontractor IRATA level 3 supervisor identifying and agreeing the anchorage locations.
- Anchors will be located as required along the parapet, with supplementary intermediate locations as required, and will be cored using a core rig or hand held core drill, with ATC function
- By using the safety line restraint secured from the rail the technicians will be able to walk on the string course on the external parapet face and install secondary anchors to the face of the parapet wall at the desired locations.
- Technicians will access the external face of the parapet wall along the length of the structure on each side to install and test anchor bolts in accordance with BS EN 795. The anchors will comprise Hilti HIT V studs drilled and fixed into the sandstone blocks using Hilti HIT HY 70 chemical anchors.
- A horizontal safety line shall be installed running the length of the structure on the Up and Down elevations. The safety line shall be tensioned with intermediate anchors installed at maximum 5 metre centres
- The installation of the safety line will allow unrestricted access for technicians to clip onto the line and walk along the parapet string course, protected against risk of fall. The technicians will then be able to access to above the proposed working locations and install secondary vertical anchorage/ ropes above each drilling and working location. Following installation and testing of the vertical ropes the main drilling works may commence and which will then allow works to be undertaken out with rail possession.
- The installed anchor points will be required to pass a load test in accordance with BS EN 795:1997.
- Secondary anchors will be installed as above but are 200mm below the primary system and will be a specified distance from the primary anchors, as determined by the IRATA Level 3 trained supervisor.

Notes

All fixtures and fittings must be checked on a daily basis by a competent person. The inspection findings will be recorded on an inspection checklist form by L3 and this will be countersigned by the Amco Site foreman.

TB002 Installation of the suspended access cradle system

The main aspects of the rope access cradle system is -

- Primary and secondary end anchorage
- Primary and secondary intermediate anchorage
- Primary and secondary cable installation
- As above the secondary wire support system will be installed to provide a coherent system to overcome the hazard of the platform failing. The secondary system will similar to the primary system but is to be 200mm lower.

End anchorage installation.

- A safe system of work will be set up by the level 3 supervisors during a line blockage/ possession. The safe system of work will consist of a 25mm RAWL bolt mechanical anchor drilled and fixed to the structure which will act as the point hanger for the ropes to enable rope access personnel to Aid Climb along the structure to install the end anchorages using rope access without the need for possessions. M20 threaded anchors and eye nuts can be used as rope access anchors which may be installed where required during the possession. Other immovable objects such as running rails can be used as anchor points for the rope access system if deemed sufficient by the L3 on site. Where T3 possessions are available rope access personnel will access the anchor positions by abseiling down the structure from track level.
- An exclusion zone set up below the over-head work area and the area will be checked for loose materials. The exclusion zone will be demarcated by a physical barrier either cordon tape or netlon fencing. The exclusion zone will be monitored by the L3 to ensure no third parties stray into the work sites / exclusion zone.
- Materials will be transported to the worksite using manual handling techniques for suitable loads. Any large items must transported to the worksite using a combination of manual handling and mechanical means.
- The end anchorage location will then be marked by the IRATA level 3 under the guidance from the AMCO engineer.
- The holes for the anchors will be installed using a Hilti TE60 drill and 28mm dia masonry bit or if granular fill material is encountered before the 700mm embedment into solid masonry a core barrel 50mm diameter can be used.
- A 24mm diameter high tensile steel bar will then be placed in the core hole and grouted using cementitious grout as specified in the approved temporary works design, this bar will be long enough to suit the requirements of the Form 003 and is to be cut on site to suit. Once this has cured a 150mm x 150mm x 25mm thick face plate will be fitted and mortared to the spandrel wall at both ends to ensure a flush connection is achieved. M24 nuts will be threaded onto the bar and locked in position and then the star point VRM-M24 eye nut will be placed onto the bar.
- The end anchorage will be required to pass a tension load test as specified on the approved temporary works design.
- Secondary end anchors will be installed as above and 200mm below the primary support system.

Intermediate anchor installation

- Intermediate anchors will be installed between the end termination anchors on both the primary and secondary line at spacings as determined by the approved temporary works design.
- The holes for the anchors will be installed using a Hilti TE60 drill and 24mm dia masonry bit.
- A 20mm diameter high tensile steel bar will then be placed in the core hole and grouted using cementitious grout as specified in Form 003 Design, this bar will be long enough to suit the requirements of the approved temporary works design and is to be cut on site to suit. Once this has cured a 150mm x 150mm x 10mm thick face plate will be fitted and mortared to the spandrel wall at both ends to ensure a flush connection is achieved. M20 nuts will be threaded onto the bar and locked in position and then the star point VRM-M20 eye nut will be placed onto the bar.

Cable Installation

- An exclusion zone will be set up below the over-head work area and the area checked for loose material.
- Materials will be delivered from the main compound to the worksite using manual handling techniques for suitable loads. Any large items must transported to the worksite using a combination of manual handling and mechanical means.
- The 19mm diameter steel core wire cable (Approved temporary works design will give specification) will be threaded through all the star point eye nuts.
- This will be clamped as per approved temporary works design.
- A turnbuckle will be connected to the other end of the wire, this will allow the wire to be tensioned when the cradle has been set up.
- The wire will be tensioned to allow maximum sag of 300mm at the mid-span when loaded under its self weight.
- The cables for the secondary system are to be installed the same as above.
- The system will then be tested as per approved temporary works drawings by loading the cradles in a specified manner using sand bags.

Rigging access cradle

- The access cradle will be transported in suitable sections for safe manual handling to the appropriate span where it will be constructed in accordance with the manufacturers recommendations by Geckotech personnel. The completed cradle will be 4 x 3m cradle sections joined to make 1 x 12m cradle.
- One scafor winch will be connected to each end of the access cradle. The winches will also be connected to the previously installed access anchor system located beneath the stringer course.
- The wire rope from the scafor winches will be lowered to the ground and connected to the winch and stirrup at each end of the cradle.
- Once assembled the system will be put through a load test as detailed in the designers specification. This should be monitored by AMCO site management and results approved prior to use for man and materials lifting.
- Prior to use on a daily basis or after every time the system is taken down and re installed it will be given a thorough inspection by a competent member of the Geckotech team. All aspects of the system that fall within LOLER 98 will be inspected and the findings recorded and kept in the job pack on site. AMCO management must countersign these inspection sheets and keep a copy for their records. The cradle will be marked with a tag to show it is or is not suitable for use.

- The winches are then ready to be operated by the rope access personnel to manoeuvre the cradle up into the arch barrel and undertake the masonry repair works as necessary.
- The cradle will be moved horizontally in the arch barrel using a manual rope or tirfor winch and pulley system set up by the rope access team.
- Form 005 to be issued by nominated person & permit to load prior to use

TB003 - Masonry Repairs

Raking & Pointing

- Operatives will use hand tools (and lightweight 110v breakers or angle grinders if required) to remove all loose mortar from the masonry courses to a depth of at least 25mm i.e. to suit good practice recommendation of 2 ½ x joint width.
- The prepared joint shall be lightly swept to remove surface dust and loose mortar. It shall be lightly dampened with clean water immediately prior to the repointing work being undertaken to aid in the control of the mortar hardening.
- A lime mortar mix as per the design specification will then be dry mixed in the main compound before being transported round to the work area.
- A measured amount of water will then be added to the mix in the bucket to form the mortar, which will then be applied to the re-formed mortar beds before being struck flush.
- After drying but before hardening the mortar joint will be lightly swept with a soft brush to remove excess mortar from the surface and to aid in producing a well filled uniform joint. .

Stitching Cracks

- Cracks to be stitched will be cleaned out using wire brushes, scrapers and stiff bristle brushes
- The stitch bar locations will be marked out by the foreman or leading mason to brick or masonry units avoiding mortar joints.
- Operatives will then drill 10 mm diameter holes to the stitch locations using a 110v masonry drill
- The drilled hole will be flush cleaned of dirt/ debris and resin injected into the anchor hole.
- Stainless steel deformed bars 8mm dia will then be installed into the holes using Hilti HY150 resin or similar product (the dowels will be spun into the holes using the Hilti spinning attachment.
- HAVS monitoring will be conducted during activities which may cause HAVS EAV's to be exceeded

Brick Replacement

- Areas of defective masonry will be removed to a sound surface by cutting with a grinder then breaking out back to the clean edge using 110v medium weight breakers
- The masonry will be washed to remove any dust then the replacement brick will be offered into position to check the sizing of the hole.
- A lime mortar mix as per the design specification will then be dry mixed in the main compound before being transported round to the work area.
- A measured amount of water will then be added to the mix in the bucket to form the mortar, which will then be applied to the re-formed mortar beds before being struck flush.
- The brick will then have mortar applied and will be inserted into the gap in the masonry. (where this is upside down or at risk of becoming dislodged, small timber wedges will be inserted to temporary hold the brick)
- The brick will then be pointed and struck flush before the mortar is brushed with a soft brush to remove surplus and to finish to the works.
- When the mortar is cured, the wedges will be removed and the remaining holes filled with mortar to match the pointing.

- HAVS monitoring will be conducted during activities which may cause HAVS EAV's to be exceeded

Sand stone replacement

- A suitable replacement for the existing sandstone material will be sourced. Defective areas will be measured and replacement stone ordered.
- Areas of defective sandstone will be removed to a sound surface by cutting with a grinder or diamond tipped blade then breaking out back to the clean edge using 110v medium weight breakers. Exclusion zones in place beneath.
- The masonry will be washed to remove any dust then the replacement brick will be offered into position to check the sizing of the hole.
- Two 6-8mm holes will be drilled into the sides of the sound surface of the existing sandstone to a depth of approximately 100mm. A steel dowel will be inserted into both holes with a piece of cord wound round the outside end of each rod.
- Two corresponding holes will be drilled in the replacement piece of sandstone to allow the thread to be passed through.
- A lime mortar mix as per the design specification will then be dry mixed in the main compound before being transported round to the work area.
- A measured amount of water will then be added to the mix in the bucket to form the mortar, which will then be applied to the re-formed mortar beds before being struck flush.
- The sandstone will be lifted into position using approved lifting and rigging techniques by Bell Access. Once in position the cord can be pulled and the dowels will be pulled over half their length from the existing masonry to the replacement section to hold it in place.
- The replacement section will be offered up to the indented area so that the corresponding holes meet. The cord will be passed through the holes in the replacement sand stone and once in place the dowels will be pulled into the replacement section by the cord to approximately 20mm from the outside face of the replacement stone.
- The dowels will then be resined into place and the dowel hole pointed up using the lime mortar mix. The whole section will then be pointed into position using the lime mortar mix.
- Replacement masonry which is in danger of being dislodged prior to the mortar hardening may also be temporarily pinned with timber needles. The timbers will then be removed and the joint made good when the mortar has attained sufficient set/ strength to fully retain the masonry repair in position.
- This process will be repeated on all areas where sand stone replacement is required.
  No personnel will be permitted to access the back of their wagon, unless suitable fall arrest/prevention system is in place.
  Hi-ab lifting plans to be in place for all unloading/loading works.
  Waste removal to be planned and coordinated and supervised at all times by a banksman.

TB004 – Installation of Spandrel Ties

- Site supervisor will brief all personnel involved on their tasks and the contents of the sub-contractor method statement.
- Supervisor to ensure that all permits in place prior to work commencing. Check with AMCO site supervisor.
- Prior to start, scope of works will be confirmed with Amco Supervisor and all works will be as per design drawings.
- Each spandrel tie location will then be marked out and verified by Amco Engineer/Supervisor.
- Line and level of each tie location is to be monitored throughout works. If at any time the core deviates from intended position, then works will cease and both designer and NWR Project Engineer notified.

- During core rig setup, mounting plates will be fixed to the spandrel wall and all fixings checked (no movement allowed in fixings) and the core rig fitted to the plate. The core rig will then be checked for line and level. A minimum 15kVa generator and sufficient 32 amp cabling per core rig will be provided by Geckotech.
- Once setup, core through full width of structure using 75mm core barrels and remove all cores from site. The coring of the spandrel is to be monitored at all times if the coring deviates more than 75mm stop the works and consult with the designer. A 68mm pipe will then be used to sleeve the hole
- Once the spandrel wall tie has been inserted and the correct length of tie is protruding from each side of the core the sleeve will be grouted using a pressure pot, non-shrink grout pumped at between 3-5 bar.
- The ends of the pipe will be blocked using expanding foam and a breather pipe installed at the top of the pipe to allow a grout return.
- The grout volume will be controlled and the injection pressure maintained until the anchor is fully grouted in the sleeve.
- It is important to clean any grout staining on the structure at this stage before the grout cures.
- Once the grout has cured the 10mm mortar plinths will be formed for the pat-tress plates.
- Fit pat-tress plates, nuts and end caps.
- End caps to be filled with denso grease prior to fitting to pat-tress plate.
- All works will be undertaken off track
- Form 005 to be completed at end of each shift

1.2 AMCO's delivery organisation

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

Role	Name	Contact Number
Regional Director		
Contracts Manager		
Project Manager		
Site Engineer		
Site Foreman		
Contractors Engineering Manager		
Contractors Responsible Engineer (Civils)		
Contractors Responsible Engineer (Civils)		
Contractors Responsible Engineer (Civils)		
ALO Responsible Manager		
ALO Planner		
ALO Coordinator		
CRT Coordinator		
Temporary Works Coordinator		
Engineer [Civils]		
H&S Advisor		
H&S Advisor		
Sustainability & Assurance Advisor		

1.2.2 The following companies, specialist contractors and/or individuals will be involved during this work package as defined in the CPP:

Name of company, specialist contractor or individual, etc.	Work activity / Specialism	Point of contact details	
		Name	***Office***

1.3 Resources

1.3.1 The following resources will be used for this work package:

Relevant Design Documents

Structure

A copy of any drawings and other design documentation relevant to this task can be found on Site.

People

Number of People and their competence associated with this WPP		Task
Competence	**No of People**	**TBS Ref**

Plant, Equipment and Tools

Quantity of Plant, Equipment and Tools associated with this WPP		Task
Plant item	**No**	**TBS Ref**
Rope access harness sets		1,2
25m ropes		1,2
50m ropes		1,2
Rope protectors		1,2
Purple slings		1,2
Karibiners		1,2
Pulley		1,2
Hiliti TE60 drill (cw 28mm dia, 800mm long masonry bit)		1,2
Hilti TE6A battery drill (cw masonry bits 10mm > 20mm dia)		1-5
3m sky climber access cradle sections		2
Scafor winches and cables		1,2
Tirfor winch (1.6t) and 20m cables		1,2
Weka hand core drills and 50mm dia diamond tipped core barrels		1-4

3Kva gen-set cw 110V cables and splitter box		1-5
Puddle pump 110V cw ¾" lay flat hose (20m)		3,4
Hilti manual water pump and hose set		3,4
Tractel load cells		1,2
Tension meter for 19mm cable		1,2
Drip tray and spill kit		1-4
VRM 24 RUD eyes and plates		1,2
Turn buckles		1,2
VRM 20 RUD eyes and plates		1,2
Pear malions		1,2
1m M24 threaded bar 8.8 grade		1,2
380ml anchor set resin capsules and applicator gun		1,2
90 cfm compressor		1-4
Pressure pot		3
D shackles and split pins		1,2
Rescue pack and stretcher		1-4
Rope access harness sets		1-4
Rope access harness sets		1-4

Materials

Quantity of Materials		Task
Material	**Quantity**	**TBS Ref**
Hilti hit resin		1,2
M10 shield anchors		1,2
M12 shield anchors		1,2
Masonry drill bits of various sizes		1-4

2 Working Together

2.1 At site communication

2.1.1 All site personnel will be inducted upon first arrival at site. At which time they will be briefed accordingly on the site rules and communication methods expected and permitted. Mobile phone communication, will only be permitted when the staff member is in a safe position. On-call managers will be contacted at the end of each shift and as required after an incident has occurred. In the event of an Emergency and where mobile phone signal is poor, personnel will be permitted to seek out a location where they can make a call.

2.2 Contact details

2.2.1 The following are the main contacts for this work package:

NR Project Team

Name	Role	Contact details	Tick to confirm number works and has been tested
			x
			x
			x
			x
			x
			x

Regulators

Organisation	Contact details	Tick to confirm number works and has been tested
Emergency Services	Emergency – 112 / Non Emergency 101	x
British Transport Police	0800 405040	x
HSE	Fatalities and Major Injuries - 0845 3009923. Other - http://www.hse.gov.uk/riddor/report.htm	x
ORR	020 7282 2000	x
EA/SEPA/NRW	0800 807060	x
Flood line	0345 9881188	x
Spill clean up	0800 592827	x

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

2.3.1 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

Landowners	Site compound/ mobilisation	Sandy/ Valerie Roy	Use of loud, noisy equipment and access to the land 24/7.

3 Hazard Management

3.1 Work involving particular risks

3.1.1 The work in this package **does** involve some of the 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 which ~~puts~~ workers at risk of ~~burial under earthfalls, engulfment in swampland or~~ falling from a height, where the risk is particularly aggravated by the nature of the work or processes used or by the environment at the place of work or site~~.~~	During installation of rope access/cradle system	Permit to work at height	• Works at height only to be carried out by trained, competent and authorised persons. • Exclusion zone to be fenced and signed. Permit to work at height to be in place for all Works at Height. • Justification to work at height to be completed • Competencies of trained individuals to be recorded and held in site files. To be up to date.
~~Work which puts workers at risk from chemical or biological substances constituting a particular danger to the health or safety of workers or involving a legal requirement for health monitoring.~~	N/A	N/A	N/A
~~Work with ionizing radiation requiring the designation of controlled or supervised areas under regulation 16 of the Ionising Radiations Regulations 1999(1).~~	N/A	N/A	N/A
~~Work near high voltage power lines.~~	N/A	N/A	N/A
Work exposing workers to the risk of drowning.	Present throughout the works detailed in the WPP	Permit to Work in or Near a Watercourse	Safety Boat to be made available throughout works.

			Practice/Rehersal emergency escape to be conducted. Life Jackets to be present on site and given to workforce before works commence each shift and to be in good condition, appropriate sizing for each operative. Lighting to be set up and illuminate the watercourse in case of accident/emergency. Detailed Daily reminder regarding the dangers of working near a watercourse to be briefed each day before shift commences.
~~Work on wells, underground earthworks and tunnels.~~	N/A	N/A	N/A
~~Work carried out by divers having a system of air supply.~~	N/A	N/A	N/A
~~Work carried out by workers in caissons with a compressed air atmosphere.~~	N/A	N/A	N/A
~~Work involving the use of explosives.~~	N/A	N/A	N/A
~~Work involving the assembly or dismantling of heavy prefabricated components.~~	N/A	N/A	N/A

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. A copy of the risk assessments associated with this WPP can be found in **Appendix 1**

What are the main risks (including health) during this Work Package?	When and where will the risk be present?	Permits Required	How will the risk be controlled
Working on Network Rail Managed Infrastructure	During installation of rope access/cradle system	PTS/TVP	Use of approved walking routes and access points. Use of national hazard directory. Briefing instructions to suppliers and sub-contractors. Suitable security measures to be implemented and monitored. Safe Systems of Work that are planned and commensurate with work under consideration.

Fire	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs	Hot Works Permit,	Avoidance of accumulation of combustible material. Correct storage of gasses and highly flammable liquids. Control of sources of ignition. Firefighting equipment to be readily available, serviced and maintained. No smoking to be permitted onsite. Electrical appliances and small tools to be inspected. Hot works permit.
Slips, Trips & Falls	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs		Avoidance of accumulation of material specifically on walkways. Correct storage of plant and material. Taking the time throughout the shift to tidy the site. Encourage operatives to only take the plant/materials they require for the task in hand. Return plant and equipment to the correct stores upon completion of the task. Keep walking routes clear at all times. Ensure deliveries are put away as soon as they come in to prevent build up on walkways. Set up site lighting to minimise the risk of issues in periods of darkness.
Manual Handling	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs		Eliminate risk by design where practicable. Restriction of weight. Restriction of distance carried. Eliminate twisting when loading. Use of additional personnel. Use mechanical means where possible.
Small tools	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs		Use of battery powered tools Low voltage equipment (110v). Regular circuit test/PAT. HAVS assessments to be undertaken and briefed. Noise assessments to be undertaken.
Noise	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs		Noise levels to be monitored and hearing protection worn if required. When noise levels reach 85db hearing protection shall be mandatory. When using any hand held power tools or near or with machinery hearing protection shall be mandatory. Letter Drop local residents before works begin.

Plant Movements (off Track)	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs		Only Trained and authorised personnel to use plant. Plant not to be overloaded and load not to restrict drivers view. Reversing horns to be working on mobile plant at all times whilst reversing Banksman with machine at all times whilst working or travelling
Environmental interface	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs		24hr spill response team on standby. Trained and competent staff and personnel. Well informed personnel.
Lifting Operations	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs	Permit to Lift	All lifting to be planned and assessed with a lift plan. All lifting equipment to be checked & records kept. All lifting to be controlled by a banksman/signaller. All lifting from a failsafe position. Exclusion zone to be set up using barriers and fencing. All paperwork should be submitted to AMCO prior to works commencing.
HAVS	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs		Use low vibration tools Where appropriate use anti vibration handles. HAVS monitoring to be completed daily. Ensure ELV's are not breached and actions are taken when EAV are reached. Rotate personnel.
Dust	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs		Use wet cutting/drilling methods at all times. Wear FFP3 dust masks at all times when working in the vicinity of drilling/cutting operations or cleaning up thereafter. Carry out occupational health assessments.
Roped Access Works	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs	Permit to Work at height, Form 005	IRATA Trained personnel only to use the roped access equipment. At least 1 level 3 IRATA member to be on site at all times.
Compressed Air	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs	Permit to Work at height	Whip arrestors to be used at all times. Compressors not be used above their safe working pressures. Pressures and flow rates to be suitable for the tools in use.
Fall of materials from the Access System	Installation of Rope Access/Cradle System, Spandrel Installation & Masonry Repairs	N/A	Materials, tools are to be kept away from the edge of the cradle. Ensure kicker boards are in place around the edges

			of the work platforms. No work to be carried out over personnel, plant and equipment. All tools/materials to be tied onto user/rope to prevent falling materials
Working In Hours Of Darkness.	During any Nightshift Working	N/A	Ensure task lighting is available during the hours of darkness. All personnel to have cap laps attached to hard hats.
Hazardous substances	Risk Present throughout works when using mechanical plant or refuelling.	N/A	All site personnel, briefed on refuelling requirements during induction. All COSHH materials to be stored in COSHH store. Wear correct PPE. Sypol assessments to be arranged.

3.3 Lifesaving rules

3.3.1 The following table highlights those Life Saving Rules applicable to this WPP

Always		Never	
	✓ or X		✓ or X
	✓		✓
	✓		✓
			
	✓		✓
	✓		✓

4 Environmental and Waste Management Arrangements

4.1 Environmental management arrangements

4.1.1 The following environmental issues are applicable to this WPP

Environmental Issues	Project Control Measures	Environmental Consents and Permits

Management of oils and chemicals	• All tanks shall be bunded in accordance with the oil storage regulations. • Storage facilities shall be positioned at least 10m away from a drains and gullies. • Drip trays shall be used whilst refuelling. • Containers shall be fit for purpose, labelled and have proper fitting lids. • Containers and tanks shall be made secure against vandalism or theft, locked in COSHH store. • Refuelling shall take place in a dedicated area at least 10m away from a drain or gully. • Spill kits shall be kept on site in high risk areas and shall be appropriate to the risk and amount of oils and chemicals present.	• N/A
Dust, Noise, Odour	• Stihl saw suppression kit to be used. • Saw cutting to be completed during the day instead of on nightshift. • Toolbox talk to be held with all members of staff on working responsibly in the community. • Welfare units to be turned off upon completion of shifts. • Plant to be turned off when not in use.	• N/A

4.2 Waste management arrangements

4.2.1 The following waste management arrangements are applicable to this WPP. All waste shall be reused or recycled in accordance with the Site Waste management Plan.

Waste type	How will it be stored?	Testing required prior to disposal	Waste classification	Reuse (R) onsite / Disposal off site (D)
Office Waste	8yds skips	No	Non Haz	D
Mixed Construction Waste	8yds skips	No	Non Haz	D

5 Emergency Arrangements

5.1 Site emergency arrangements

5.1.1 First aid arrangements

5.1.1.1 The first aid arrangements for this package of work are

First aiders	**Name**	**Qualifications**
	TBC	Full First Aid
Likely injuries associated with this work package	Falls form height, Crush, impact injuries, cuts and grazes.	
First aid equipment provision	Equipment	Location
	Large First Aid Kit	Site Office/ Canteen

A first Aid risk assessment can be found in Appendix 5 of the CPP.

5.1.2 Evacuation arrangements

5.1.2.1 Evacuation arrangements can be found in Appendix 6 of the CPP

5.1.3 Fire safety arrangements

5.1.3.1 A Fire Risk assessment can be found in Appendix 6 of the CPP.

5.1.4 Security arrangements

5.1.4.1 CCTV to be installed and set up throughout site.

5.1.5 Summoning emergency services

5.1.5.1 Upon an emergency the management team will contact the relevant service to attend site. (AMCO Bucharn Farm, Huntly, AB54 4PU)The nearest hospital can be found in APPENDIX 3.

5.1.6 Railway emergency (trains and electrical)

5.1.6.1

	Contact Details
ECO	
Signal box	

Protection Signals Ref	

In the event of an emergency affecting the safety of the railway the following actions will be undertaken.

1. Do not place yourself or the safety of others in danger
2. The lead communicator on site will be one of the following people and in this order – PICOP > Route Setting Agent > Protection Controller > COSS or SWL or IWA.
3. In an emergency a train can be stopped by raising both arms in the air or at night by waving a light vigorously
4. In an emergency the signaller / ECO(see above) shall be contacted immediately via mobile phone or using the nearest signal post telephone.
   The lead communicator shall state (*using the phonetic alphabet to communicate any* difficult words) :
   - 'This is an emergency call'
   - Confirm who you are speaking to the right person *ie usually the signaller or Electrical Control Operator (ECO)*
   - Tell them
     - who you are (*Joe bloggs*),
     - what you do (ie *COSS*); and
     - your location (for example *Shapton East Junction or near to SH20 (sierra, hotel, two, zero) signal*
   - Describe the problem and what part of the railway is affected ie *Down Main xx or Level crossing at yy*
   - Tell them what action needs to be taken ie any emergency service required
   - Ask the person to 'repeat back' the information
   - The Signaller or ECO shall end the conversation.

Access to the track shall be via the following rail access point

5.1.7 Asbestos

5.1.7.1 There is no record of asbestos at the train station. Should AMCO or subcontractors come in conctact with asbestos, works are to be halted immediately and works to be reviewed.

5.1.8 Utilities

5.1.8.1

Organisation	Contact details
Electricity	0800 092 9290
Gas	0800 111 999
Telecoms	0800 023 2023
Water	0800 077 8778

6 Work Package Arrangements

6.1 Site Layout

6.1.1 TBC

6.2 Access and Egress

6.2.1

6.3 Welfare

6.3.1

TBC

6.4 Rail Traffic Management

6.4.1 N/A

6.5 Road Traffic Management

A Separate Traffic Management plan, risk assessment and drawing will be located in the site office.

7 Hand Over and Hand Back Arrangements

7.1 Hand over and hand back arrangements

AMCO will conduct a dilapidation survey.

APPENDICES – Supporting information

Appendix 1 –
Appendix 2
Appendix 3 –
Appendix 4 –

Appendix 1 – Risk Assessment

- Installation of Rope Access System
- Masonry Repairs
- Installation of Spandrel Ties

Appendix 2 – Site Layout Plan

Appendix 3 – Hospital Route