

Appendix F: Kaymac Project RAMS







IKM – River Afon –
Grangemouth – Outline
RAMs.

17th May
2024

Haul Road Installation &
Temporary Safeguarding
Protection.

Document Control Sheet									
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IKM – HAUL ROAD INSTALLATION & TEMPORARY SAFEGUARDING PROTECTION– GRANGEMOUTH.				KM-IKM-TSGP-RAMS-17-05-24					
Originator				Client					
 <p style="margin-top: 10px;">Kaymac Marine & Civil Engineering Ltd Osprey Business Park Byng Street Landore Swansea SA1 2NR Tel: 01792 301818</p>				 <p style="margin-top: 10px;">Head Office Park House, 39 Bo'ness Road, Grangemouth, FK3 1 T: +44 (0)1324 878 822</p>					
Authorisation									
Prepared by:	Joshua Burgess	Signature [Redacted]	Date 17/05/2024						
Checked By:	Jon Colcombe	Signature [Redacted]	Date 16/05/2024						
Approved by:	Rhys Colcombe	Signature [Redacted]	Date 17/05/2024						
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Issue Date	Document Description			Status/Revision					
17/05/2024	This document details the Method and associated risks of installing a haul road and temporary rock bag protection along the river Avon.			Draft	Project Issue	1	2	3	4
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1	Kaymac Marine Records			/					
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6									

Amendments Table		
Revision No.	Amendment	Date
1	Addition of Geocell, topsoil and thermal sand after receiving the draft design.	20/05/2024
2	Amendments to rock bag installation.	24/05/2024

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Section 1.0	Introduction
1.1	Description & Purpose of Project
<p>The Central Belt’s River Avon rises in the moors east of Cumbernauld and flows northeast, eventually joining the Firth of Forth at Grangemouth. The river passes the one of INEOS’ largest manufacturing sites by volume of products. It is home to Scotland’s only crude oil refinery and produces the bulk of fuels used in Scotland. Over time, the south riverbank adjacent to the KG plant has been eroded. Ongoing erosion presents a threat to the integrity of the riverbank, the surrounding areas, and the buried utilities in the areas. Kaymac Marine and Civil Engineering Ltd have been contracted by IKM under ECI to develop the methodology for the installation of a temporary safeguard to the south bank of the river. Kaymac's team is tasked with developing the method for the installation of a haul road for access along the riverbank, along with the placement of KYOWA rock bags to protect the riverbank from further scour until a permanent solution is installed.</p>	

Section 2.0	Site Location
2.1	Project Site Location Details
Nearest Address	INEOS site, Riverside Road, Grangemouth, Scotland.
Post Code	FK3 9XE
What3words	///toenail.register.bleaker
2.2	Site Location Map



Blue box marking the approximate location of the haul road. The red circle indicating the approximate location of the temporary safeguarding rock bags.

2.3

Site Access

Van Access.



Access will be gained via gate 7 off the A904. The red line indicated above will then be followed to the area marked as 'Site Access Egress'. This area will be used to unload any equipment needed. The vans will then be parked in front of the permit office.

Heavy Plant and Stone Deliveries.



Kaymac proposes using the gate off the A905 for all heavy plant access.

Section 3.0	Legislative and Site-Specific Compliance
3.1	Statutory Legislation
<p>This document has been prepared to comply with, as far as reasonably practicable, the following current relevant legislation (as applicable):</p> <ul style="list-style-type: none"> • The Health & Safety at Work etc. Act 1974 • The Management of Health & Safety at Work Regulations 1999 • The Health & Safety (First Aid) Regulations 1981 • The Lifting Operations and Lifting Equipment Regulations 1998 • The Work at Height Regulations 2005 • The Personal Protective Equipment at Work Regulations 1992 • The Manual Handling Regulations 2002 • The Control of Substances Hazardous to Health Regulations 2002 • The Reporting of Injuries, Diseases & Dangerous Occurrences (RIDDOR) Regulations 2013 • The Environmental Protection Act 1990 • The Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) 	

3.2	Additional Site-Specific Compliance
<ul style="list-style-type: none"> • Fire Retardant Protective Overalls (EN 531) • High Visibility Vests or Jackets (EN 471) • Gloves (For manual handling) • Safety boots (EN 345-53 and EN 149.1) • Safety Glasses • Ear Defenders 	

3.3	Environmental Considerations
<p>Throughout all aspects of the works, Kaymac will actively aim to conduct activities in a manner that will cause minimum detrimental effects to the local ecology and wildlife and as a result, we will carry out the works with the following Environmental Actions:</p> <ul style="list-style-type: none"> • Prior to the commencement of any works, IKM will obtain all relevant Licenses and permits from SEPA and any other regulatory authority. All works will be carried out in accordance with the above Licenses and permits. • All plant delivered to site will be sourced from a trusted reputable company and upon ordering, Kaymac will enforce the notion that any plant to be delivered will need to be cleaned and fit for purpose (no leaks or damaged pipelines, hoses, etc). • All materials to be used for installation will be inert and will not contain toxic elements which may be harmful to the marine environment, the living resources which it supports or human health. • Upon arrival to site, the Kaymac Supervisor will proceed to inspect the plant for any visible signs of leaks or un-cleanliness that could potentially damage the ecology. All plant will also come with spill kits which all Kaymac Personnel are trained in the use of. • All plant that is to be used on the riverbank will be fitted with bio-degradable hydraulic oil where possible to negate any environmental issues in the unlikely event of a spillage or leak. • No refuelling procedures are to be carried out within 10m of the water course. • All equipment being used near to the watercourse will be appropriately 'bunded' to prevent any possible spillages from harming the local ecology and wildlife. • If any protected species are found within the vicinity of the works, works will cease, and the Client will be informed. Works will not recommence until permission is granted by the Client. 	

- Any waste and unused materials will be removed from site in a safe manner by a licensed waste carrier upon completion of the works.
- The waste hierarchy (Reduce, Reuse, Recycle and Dispose) will be employed throughout the construction works.
- Care will be taken to only order the correct quantity of required materials, reducing disposal of unused materials.
- Any COSHH waste and special waste will be removed from site by a specialised waste carrier. COSHH waste should not be mixed with general waste and/or other recyclables.

Section 4.0

Project Resources

4.1

Kaymac Site Personnel

- 1 x Site manager/Safety boat operator (CSCS/SMSTS).
- 2 x 360 operators (CPCS).
- 1 X Dumper operators (CPCS).
- 2 x slinger signallers (CPCS).
- 1 x Telehandler driver (CPCS).

4.2

Site Welfare & Storage

- Towable Welfare unit.
- Small stores and COSHH box.

4.3

Site Plant & Equipment

- Emergency stretcher for recovery.
- 35T (18M) Long reach excavator.
- 20T 360 excavator.
- 8T excavator.
- 9T Dual view dumper.
- 4T Roller.
- Tele Handler.
- Fuel Bowser.
- Drop Chain.
- 2-way radios.
- Silt curtain.
- CAT and Genny.
- Insulated hand tools.
- Compactor plate.

4.4

Materials

- 2T filled single skin 0.4mx1.9m rock bags.
- 6F2 Granular fill.
- Type 1.
- MACCAFERRI MACTEX H1000 GEOTEXTILE SEPERATOR.
- MACCAFERRI MACGRID EG40S GEOGRID (OR EQUAL APPROVED).
- MACCAFERRI MACGRID EG30S GEOGRID (OR EQUAL APPROVED).
- MACCAFERRI MACWEB 3015-P geocell.
- MACCAFERRI BioMac CJ350 Jute based biodegradable geotextile.
- Seeded topsoil.

4.5	Personal Protective Equipment (PPE)
<p>The <u>minimum</u> PPE requirements for the site will be:</p> <ul style="list-style-type: none"> • Safety Helmet to BS EN397:2012 • Safety Boots (or Wellington Boots) to ISO 20345:2011 • High Visibility Jacket/waistcoat to EN471:2003 • Flame retardant overalls. • Safety Glasses to EN166 • Closed cell neoprene Dry Suits • Life jacket 275N to EN ISO 12402-2:2010 / EN ISO 12401:2009 	

Section 5.0	Project Directory	
5.1	General Contact Numbers	
IKM – Chris Torbet		01324 878 822
IKM –		
IKM –		
Kaymac Site Manager – Gareth Price		[Redacted]
Kaymac Marine & Civil Engineering Ltd-Swansea Office		01792 301818
Kaymac Operations Director-Jeff Lippiett		[Redacted]
Kaymac Project Director-Rhys Colcombe		[Redacted]
Kaymac Senior Project Manager – Jon Colcombe		[Redacted]
Kaymac Assistant Project Manager – Josh Burgess		[Redacted]
Kaymac Project Engineer – Charley Hawkins		[Redacted]
Kaymac Project Coordinator-Jon Dean		01792 301818
5.2	Emergency Contact Numbers	
Forth Valley Royal Hospital		01324566000
HSE Incident Contact Centre		0845 3009923
HSE Infoline		08701 545500
Kaymac Health & Safety Manager-Gareth Crees		[Redacted]
Ambulance, Police or Fire & Rescue Service		999

Section 6.0	Method Statement
<p>Kaymac will be required to carry out the main site induction and local inductions (Utilities & KG) prior to the site survey dates. These are required to gain access to Gate 7.</p> <p>On the first day Kaymac staff will meet IKM representatives at the IKM Grangemouth office and then proceed to site.</p> <p>It is essential that a task briefing is given, read, and understood by all at the start of every shift.</p> <p><u>Mobilisation.</u></p> <p>Kaymac will arrive on site and take delivery of all plant and machinery needed for the project. We intend on setting up a perimeter fence (Heras) to keep our work site separated from the INEOS site (as pictured below). A site compound will be set up in the orange box pictured below. This will have the site welfare, parking for plant</p>	

and vehicles and a lay down area for buffer stone storage.

All plant will be delivered to site and checked prior to use for that they are be clean and fit for purpose (no leaks or damaged pipelines, hoses, etc).



Haul Road installation.

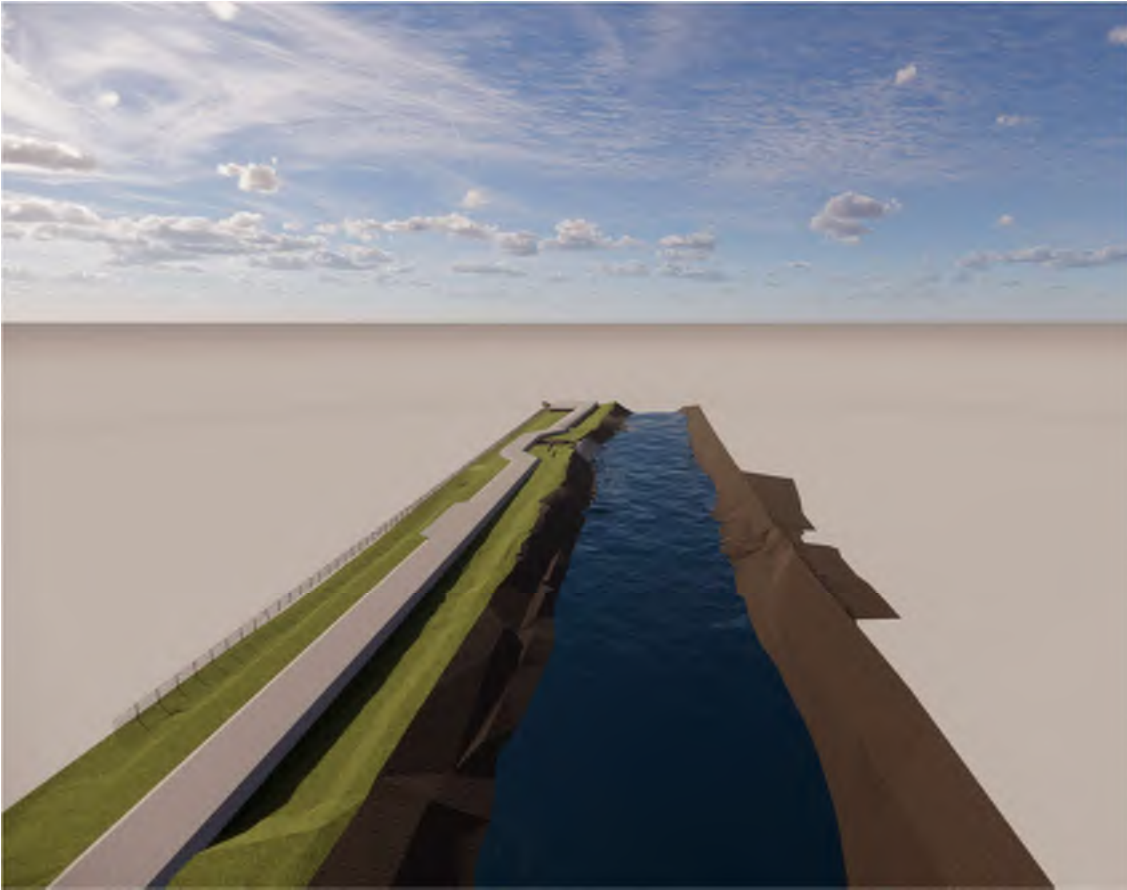
Prior to the riverbank temporary safeguarding works a haul road must be constructed to allow heavy plant to safely pass along the riverbank without damaging any buried services. All Maccaferri equipment will be unloaded from lorries using the telehandler and stored in the laydown area until needed.

IKM have provided us with a 'NEW HAUL ROAD LAYOUT' drawing. The steps for the haul road installation are as follows:

1. All vegetation at surface shall be stripped prior to placing granular fill for the haul road, where permitted by INEOS control of work (CoW) procedures. The expected maximum surface scrape depth is 50mm. The area for the new haul road will be marked out by a designer, as per the design drawings.
 - 1.1. The 8t excavator will be used to carefully strip vegetation from the surface of the bank. Updated service drawing will need to be provided along with a permit to dig prior to breaking ground. A CAT will also be used prior to breaking ground.
 - 1.2. The excavated vegetation will be loaded into the dumper and stored downstream of the haul road ready for collection.
 - 1.3. The excess material and vegetation will be loaded into wagons and disposed of correctly off site.
2. All existing rutting damage is to be repaired by filling with type 1 granular material to create a level surface.
 - 2.1. A measurement will be taken of all the existing rutting prior to the vegetation removal. Enough type 1 can then be ordered and delivered to the site laydown area prior to the rutting infill works.
 - 2.2. The 35t excavator will be used to load up the dumper with stone. The dumper will then travel to the areas needing infill.

- 2.3. Depending on the size of the infill area, the dumper will either tip straight into the area or the machine operator will take buckets from the dumper.
- 2.4. The operator will then level off the area to create a level surface prior to the MACTEX H1000 being installed.
3. MACCAFERRI MACTEX H1000 GEOTEXTILE SEPERATOR will be installed on top of the pre stripped and filled ground.
 - 3.1. MACCAFERRI MACTEX H1000 GEOTEXTILE SEPERATOR will be rolled out along the length of the haul road. If the Maccaferri isn't as wide as the haul road, it will need to be overlapped. Overlaps range from 0.5 – 1m depending on soil conditions. **To be confirmed by designer.**
 - 3.2. Where possible a continuous roll should be used ensuring the recommended overlap is achieved all the way along.
4. MACCAFERRI MACGRID EG40S GEOGRID (OR EQUAL APPROVED) will be placed on top of the geotextile separator.
 - 4.1. MacGrid EG will be rolled out along the haul road. If the MacGrid isn't as wide as the haul road, it will need to be overlapped. Overlaps range from 0.3 – 1m dependant on soil conditions and underlying CBR. **To be confirmed by designer.**
 - 4.2. Where possible a continuous roll should be used ensuring the recommended overlap is achieved all the way along.
5. A layer of 6F2 granular fill (as per clause 803 of SHW) will next be installed on top of the previously installed Geogrid.
 - 5.1. There is a 300mm section of 6F2 to be installed before the next section of MACGRID EG30S needs to be installed.
 - 5.2. The first layer will be installed at 150mm thick. The roller (over 4300 kg up to 5000kg) will then pass over the granular fill 4 times (SHW 802 TABLE 8/4: (02/16) Compaction Requirements for Unbound Mixtures).
 - 5.3. The next 150mm layer will be installed the same as the step above.
6. MACCAFERRI MACGRID EG30S GEOGRID (OR EQUAL APPROVED) will be placed on top of the previously compacted layer of granular fill.
 - 6.1. MacGrid EG will be rolled out along the haul road. If the MacGrid isn't as wide as the haul road, it will need to be overlapped. Overlaps range from 0.3 – 1m dependant on soil conditions and underlying CBR. **To be confirmed by designer.**
 - 6.2. Where possible a continuous roll should be used ensuring the recommended overlap is achieved all the way along.
7. A layer of 6F2 granular fill (as per clause 803 of SHW) will next be installed on top of the previously installed Geogrid.
 - 7.1. A layer of 6F2 granular fill (as per clause 803 of SHW) will next be installed on top of the previously installed Geogrid.
 - 7.2. A 150mm thick layer of granular fill will be installed. The roller (over 4300 kg up to 5000kg) will then pass over the granular fill 4 times (SHW 802 TABLE 8/4: (02/16) Compaction Requirements for Unbound Mixtures).
8. A final layer of Type 1 Granular fill (as per clause 803 of SHW) will be added.
 - 8.1. This layer will also be placed 150mm thick. Again, the roller (over 4300 kg up to 5000kg) will pass over the granular fill 4 times (SHW 802 TABLE 8/4: (02/16) Compaction Requirements for Unbound Mixtures).

Note: Side slopes of the haul road to be no steeper than 1.0V : 1.0H.

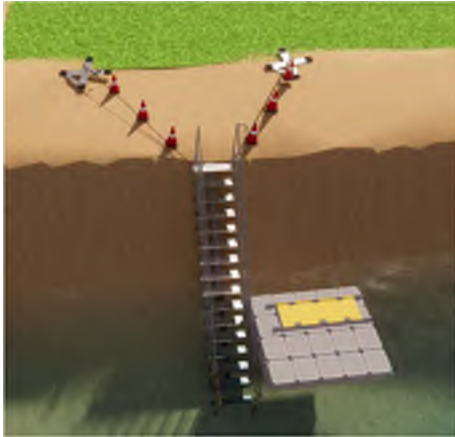


Temporary safeguarding works – Rock bag installation.

There is a 25m section of the riverbank that has been eroded over time. As a temporary protection approximately 84 rock bags are going to be installed. The method for this is as follows:

1. Haki stairs will be set up in a safe area close to the area of the scour. This will allow safe access and egress for an operative to gain access into the river and unhook the rock bags from the excavator.
 - 1.1.1. The Haki stairs will be secured using 2 x ground anchors to avoid the need to fix into the ground on top of the riverbank.

- 1.1.2. A pontoon with stretcher and small inflatable safety boat will be positioned at the bottom of the stairs. The Kaymac team will follow the rescue plan if an incident that requires a rescue arises.



2. The rock bags will be delivered in quantities of 14 per flat bed Lorry.

1.2.1. The Lorry of rock bags will be reversed down the haul road while being watched by a banksman.

1.2.2. The rock bags initially will be unloaded using the long reach excavator that will be sat adjacent to the scoured area on the haul road. He long reach will unload the lorry and the banksman will watch the lorry back out to the safe area off the riverbank.

1.2.3. If another lorry turns up while the long reach is still placing bags, the other excavator will unload the bags. The bags will either be offloaded next to the work area or in the laydown area and transported using the dumper to the scour site as and when needed.

3. Placing of the rock bags. The rock bags will be placed from the bottom up in a tiered Configuration as per the design 'PROPOSED ROCKBAGS TEMPORARY REPAIR LAYOUT & SECTION' provided by IKM. The rock bags will be carefully arranged from upstream to downstream, seamlessly blending into the upstream bank to ensure a smooth flow without any blunt ends interrupting the river's current.

1.3.1. For the first bottom row of bags, we will be targeting low water. This will ensure we have maximum visibility to allow us to place the bags as accurately and efficiently as possible.

1.3.2. One bag will be lifted at a time. A slinger signaller will attach the drop chain connected to the excavator to the ring on the top of the rock bag. The slinger will then direct the machine operative using hand signals or radio, guiding the rock bag into position. The bag will be checked that it is laid in the correct position, before being unhooked.

1.3.3. This process will continue along the first row of bags. Once the first row is positioned, the second row will be placed on top. This will continue until all the layers are complete.

1.3.4. Care should be taken to follow the design, and not to step the bags too far over the top of the bag bellow.

1.3.5. Any small gaps/voids present between individual rock bags should be filled with washed SHW 600 class 6G stone.

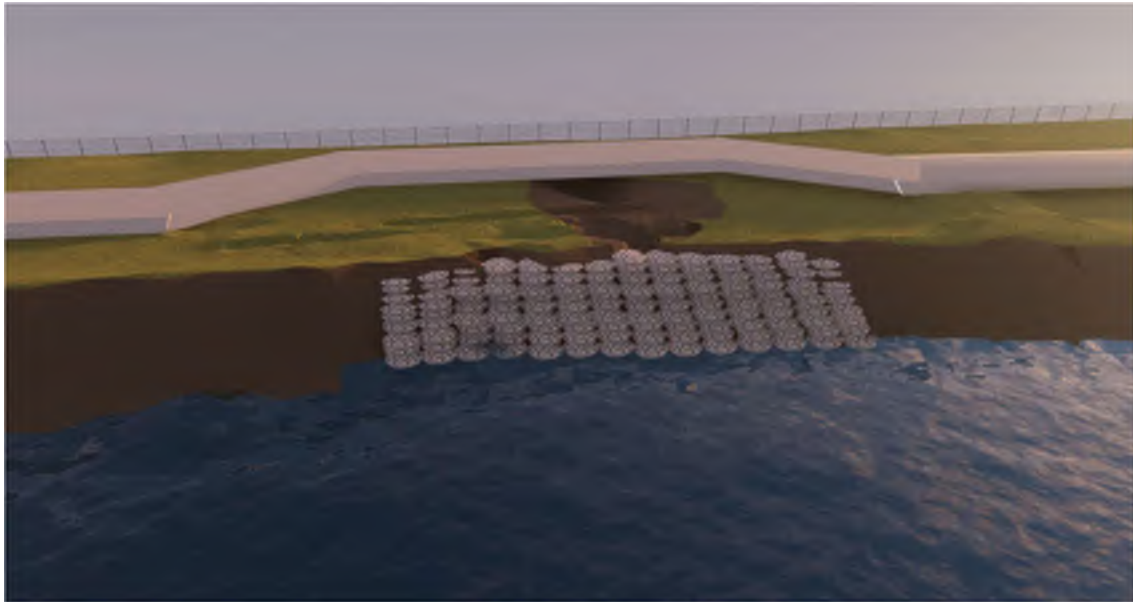
4. Our primary aim is minimizing any excavation work along the riverbank wherever possible. We do not anticipate needing much, if any excavation. However, if a section of the bank is overhanging and unstable, it will need to be graded back to allow for the safe placement of the rock bags and to reduce the risk of bank collapse during nearby work. Minor reshaping may also be needed to again allow the bags to be placed stable and safe. These points outline our strategy for managing the minor reshaping and bag placement while prioritizing environmental protection:
 - 1.4.1. **Minor reshaping for stability:** Only where necessary or required minor reshaping will be carried out. This will enable the safe placement of the rock bags, ensuring the stability of both the bank and the bags.
 - 1.4.2. **Silt containment measures:** If minor reshaping is needed in the lower section of the bank or in an area that doesn't stay above the lowest water line, we will implement localized silt curtains to contain any potential silt migration.
 - 1.4.3. **Timing for minor reshaping:** Any minor reshaping required further up the bank will be conducted when the water level is below that specific area.
 - 1.4.4. **Immediate bag placement:** Once an area has been reshaped as needed, the bag will be promptly placed. This immediate action will decrease the likelihood of silt migration into the water course once the tide reaches that level.
5. Any material that needed to be removed will be taken to the laydown area with the dumper. It will then be collected and disposed of correctly.

Exposed sections of buried electrical cable.

At the bank repair location there are exposed sections of buried cables. These need to be addressed prior to the top layer or layers of bags are installed.

1. Exposed sections of buried electrical cable to be back filled with EN ATS 97-1 compliant thermal sand. With a minimum 300mm cover all round.
 - 1.1. Some localised hand excavation may be required around the cables to create a uniform shape for the sand surround.
 - 1.2. Excavation should be carried out carefully and follow safe digging practices.
 - 1.3. Excavate along side the service rather than directly above it. Horizontal digging is recommended, as the force applied to hand tools can be controlled more effectively.
 - 1.4. Insulated tools should be used when hand digging near electrical cables.
2. The remaining depression behind the temporary safeguarding extents and beyond the 300mm minimum cover of thermal sand is to be filled with SHW SERIES 800 CLASS 6N (OR SIMMILAR APPROVED). **IKM to confirm whether this needs to be compacted.**
3. MACCAFERRI MacTex H1000 separator geotextile is to be laid on top of the prepared infill material.
4. Next MACCAFERRI MACWEB 3015-P geocell will be installed as per manufactures guidance. It will be filled with 100mm washed SHW SERIES 600 CLASS 6N fill or similar approved.

5. The Final 50mm will be filled with seeded topsoil.
6. MACCAFERRI BioMac CJ350 Jute based biodegradable geotextile with no plastic scrim netting to be installed over the geocell. This will be fixed and pinned as per manufactures instructions. A covering of 10mm minimum thickness damp seeded topsoil will be added on top.
7. Any remaining gaps at the interface point between the rear of the rock bags and the outside edge of the macweb to be filled with SHW series 600 class 6N fill and compacted as best as possible.



Rescue Plan.

The river is subject to tidal conditions. There will be a need for an operative to enter the watercourse to unhook the rock bags from the excavator. If the operative in the water course needs assistance or to be rescued the steps are as follows:

Wading rescue –

1. **Assessment and Communication:** Assess the situation from a safe location and communicate with the individual in the water to determine their condition and needs. Ensure that emergency services are notified if necessary. **IKM will notify the relevant INEOS plant staff of the incident by use of a site radio.**
2. **Don Personal Protective Equipment (PPE):** Before entering the water, don appropriate personal protective equipment such as a life jacket, dry suit, and any other necessary safety gear. At least one member of the rescue team will be ready in waiting wearing their dry suit.
3. **Evaluate the Rescue Options:** Determine the best method of rescue based on the individual's location, condition, and any hazards present in the environment.
4. **Throw Rescue Equipment:** If the individual is struggling to stay afloat and is within reach, attempt to throw them the life buoy

attached to the rescue line, to assist them in staying afloat until further assistance arrives (the individual throwing the line needs to remain two meters back from the edge of the bank).

5. **Enter the Water Safely:** If it is safe to do so, wade into the water to reach the individual. Ensure that you always maintain your own safety and avoid entering fast-moving water or areas with hidden hazards.
6. **Approach the Individual:** Approach the individual calmly and reassure them that help is on the way. Maintain clear communication throughout the rescue process.
7. **Assist the Individual:** If the individual is able to move, assist them in making their way to shore by providing support and guidance as needed. If necessary, use a rescue buoy to help them stay buoyant.
8. **Call for Additional Assistance:** If the individual is unable to self-rescue or if the situation becomes more serious, call for additional assistance from the other rescue personnel. Two of the rescue team will then carry the individual with use of the persons buoyancy aid and life buoy to the pontoon at the bottom of the Haki stairs. If needed the individual will be placed on the stretcher and carried up the stairs using the three Kaymac rescue team and other IKM survey team member.
9. **Ensure Safety During Extraction:** Once the individual is safely on shore, assess their condition and provide any necessary first aid until further medical assistance arrives.
10. **Evaluate and debrief:** If the individual requires only minor first aid and can either resume their task safely or be replaced by another IKM team member, work may proceed as planned. However, if the individual requires transportation off-site for further medical attention, work should be halted immediately. An investigation should then be conducted before work can resume, and additional safety measures may need to be implemented. All accidents should be recorded in the accident book and HSE reporting rules should be followed.

Safety boat rescue –

If the operative needs rescuing and the water level is above wading depth or rising beyond that level, we will rescue using the safety boat.

1. **Preparation and Equipment Check:**

- Ensure all personnel involved in the operation are trained in water safety and rescue procedures.
- Verify that all necessary rescue equipment is on board the safety boat, including life jackets, throw ropes, rescue buoys, and first aid supplies.
- Conduct a safety briefing for all personnel involved, emphasizing the importance of wearing life jackets/buoyancy aids and following safety protocols.

2. **Designate Roles and Responsibilities:**

- Assign specific roles to each team member, such as boat operator, rescue person, and communications coordinator.
- Clearly communicate each team member's responsibilities and ensure everyone understands the rescue plan.
- As above one person will be driving the boat, one person will be in the boat in a drysuit to aid with the rescue and the other member carrying out watch on the riverbank (remaining 2m back from the edge).

3. **Maintain Communication:**

- Establish clear communication channels between the safety boat and personnel on the riverbank using mainly verbal and visual communication. If needs be handheld radios or other communication devices.

4. **Immediate Response to Incident:**

- If someone falls into the water, the person on watch on the bank should make the safety boat crew aware (if they aren't already). When possible, **IKM will notify the relevant INEOS plant staff of the incident by use of a site radio.**
- The safety boat should immediately manoeuvre to the location of the person in distress, making sure they approach into the wind or towards the direction of tide/river flow if possible.
- Both the rescue operative and boat operative will keep a visual on the injured person and approach slowly. They will switch the outboard off initially once they have reached the injured person.

- If the injured person is mobile and able the rescue member should assist them getting into the boat.
- If the injured person is incapacitated and or unresponsive, the rescue person should hold onto the injured person and both members on the safety boat should pull the person into the boat.
- If this is not possible the rescue operative should hold onto the persons buoyancy aid and support their head keeping it out of the water and the boat operative should take the boat back to the pontoon.
- Once at the pontoon the further member of the Kaymac rescue team and the other IKM operative should assist the safety boat crew and pull the injured person aboard the pontoon.

5. **Recovery and First Aid:**

Mobile person

- Once the individual is safely back on the safety boat, assess their condition and provide any necessary first aid or medical attention.
- If the person requires further medical assistance, transport them to shore and arrange for emergency services to meet them.

Incapacitated and or unresponsive person.

- If needed the individual will be placed on the stretcher and carried up the stairs using the three Kaymac rescue team and other IKM survey team member.
- Once the individual is safely on shore, assess their condition and provide any necessary first aid until further medical assistance arrives.

6. **Evaluate and debrief:** If the individual requires only minor first aid and can either resume their task safely or be replaced by another IKM team member, work may proceed as planned. However, if the individual requires transportation off-site for further medical attention, work should be halted immediately. An investigation should then be conducted before work can resume, and additional safety measures may need to be implemented. All accidents should be recorded in the accident book and HSE reporting rules should be followed.



Section 7.0	Emergency Procedures
7.1	Local Hospital
<p>Recovery point address and post code: INEOS site, Riverside Road, Grangemouth, Scotland. What3Words: ///impeached.pity.revisits Grid Reference: NS 95142 80423</p> <p>The nearest hospital with a 24-hour accident and emergency unit has been identified as:</p> <p>Forth Valley Royal Hospital Stirling Rd, Larbert</p>	

FK5 4WR

Transfer time by road; 16 minutes (distance: 9.9 miles).

7.2 Hospital Location Map

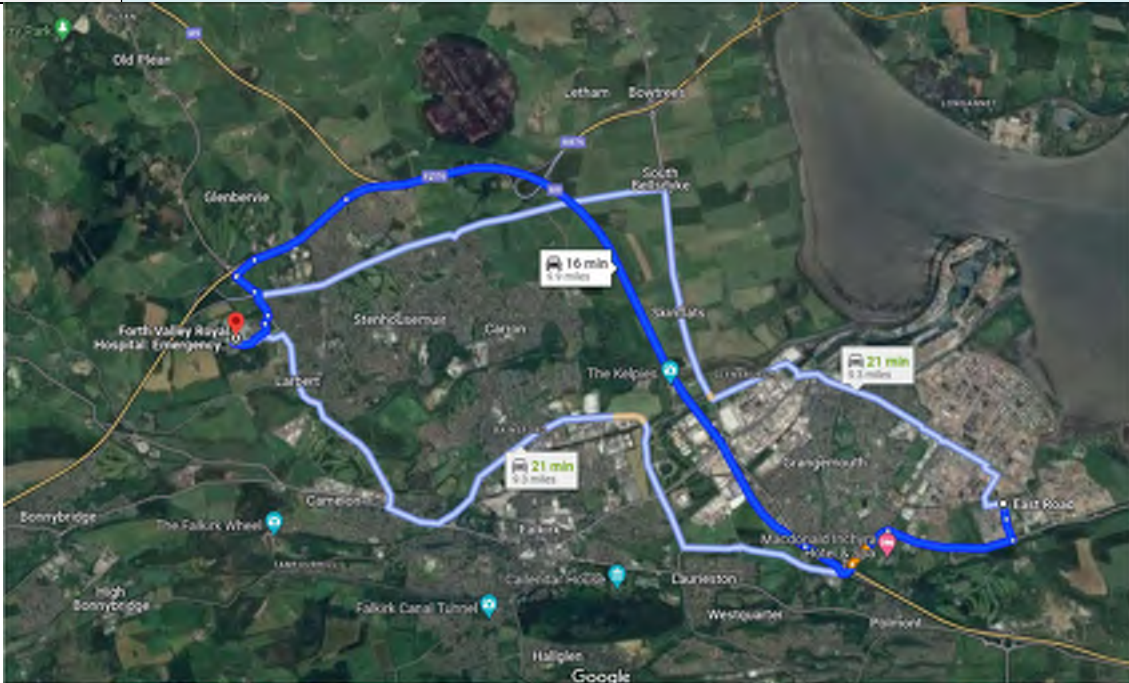


Image courtesy of Google Maps

7.3 Action on Minor Injuries

Administer First Aid on site.

From here the company vehicle will transport the injured person to the local casualty department at the above-mentioned hospital.

A record of the accident is to be entered with all details in the Company Accident Book and notify the client's responsible person.

7.4 Action on Major Injuries

Administer First Aid on site, and then contact the emergency services requesting an ambulance to the site
What3Words: ///impeached.pity.revisits. A record of the accident is to be entered with all details in the Company Accident Book, and notify the client's responsible person. Kaymac Site Manager or his deputy will record on the accident on Kaymac Accident & Incident Report form QPF11 and pass on Kaymac Health and Safety manager who will ensure H.S.E. is informed by way of form F2508.

7.5 Reporting Accidents, Work Related Diseases and Dangerous Occurrences

Reporting procedures

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) require that certain accidents that happen on site must be reported to the Health and Safety Executive. Any of the following types of accidents that occur on site have to be reported in the first instance to the company Safety Officer or Safety Manager who will then notify H.S.E.

Serious or fatal accidents must be notified without delay to HSE, by calling the Incident Contact Centre (ICC) during normal office hours on 0845 300 9923.

Outside these hours, the local HSE office must be contacted. For details of the nearest HSE office, telephone the HSE Infoline on 08701 545500.

This must be followed up with a completed accident report form (F2508) within 10 days. For less serious injuries, where the injured person is unfit (or unable) to do their normal working job for seven consecutive days, excluding the day of the accident, a completed accident report form F2508 must be sent to HSE within ten days.

If a dangerous occurrence happens on site, for example, a building, scaffold or false work collapse, failure of a crane or lifting device or contact with overhead lines, it must be reported immediately, normally by telephone, by calling the Incident Contact Centre (ICC) during normal office hours on 0845 300 9923 or the nearest HSE office. The details must be confirmed within ten days on a completed accident form (F2508).

If a worker suffers from a specified disease associated with their current job, it must be reported to the HSE on a completed disease report form (F2508A).

Keeping records

A record must be kept of any reportable injury, disease or dangerous occurrence. This must include the date and method of reporting; the date, time and place of the event, personal details of those involved and a brief description of the nature of the event or disease. The record can be kept in any form preferred, but each site is supplied with a copy of the Accident Book BI 510 issued by the HSE, and this is the company's preferred method of keeping such records.

Section 8.0 RISK ASSESSMENT RECORD Page 1 of 4

RISK ASSESSMENT

RISK CALCULATION MATRIX						GUIDE BOX			RISK RATING, REVIEW AND ACTION REQUIRMENTS			
HARM	5	5	10	15	20	25	CATEGORY	HARM	LIKELIHOOD	RISK RATING	<i>Risk rating obtained at intersection of harm and likelihood in Calculation Matrix</i>	
	4	4	8	12	16	20	1	NON-INJURY	ALMOST IMPOSSIBLE			Review period
	3	3	6	9	12	15	2	FIRST AID	UNLIKELY	1-4	12 months	No further immediate action. Review annually.
	2	2	4	6	8	10	3	< 7 DAYS	POSSIBLE	5-9	6 months	No further immediate action. Re-assess during next review.
	1	1	2	3	4	5	4	> 7 DAYS	LIKELY	10-16	3 months	Reduce risk and re-assess within review period.
		1	2	3	4	5	5	MAJOR INJURY	ALMOST CERTAIN	17-25	Immediate	Stop-reduce risks/mitigate effects, re-assess immediately.

Hazard Identified	Persons at Risk	Controls in Place	Risk Rating before control measure	Actions to Further Reduce Risk	Risk Rating after control measure
Slips, Trips and Falls resulting in musculoskeletal injuries	Kaymac Site Operatives	Wear appropriate safety boots with good tread; avoid walking on slippery/wet surfaces, be vigilant and probe any soft ground before attempting to walk on it.	10	Take extra precautions when working in wet weather.	5
Manual Handling; back injuries	Kaymac Site Operatives	Wherever possible, mechanical lifting should be used for lifting loads. If manual lifting is necessary, use kinetic lifting techniques, share the load if possible; ensure ground is level and stable.	10	Carry out a Manual Handling Assessment where necessary; carry out health monitoring for personnel.	5
Working in/around contaminated water resulting in water borne infections including Leptospirosis.	Kaymac Site Operatives	Cover any cuts or abrasions with waterproof dressing prior to work. Wear gloves! Wash and disinfect hands prior to eating or drinking; report any injuries immediately to site management. Kaymac guidance notes on Leptospirosis to be available to personnel.	7	Report any flu like symptoms 7-10 days after possible infection; seek medical advice.	4
Exposure to wet or windy conditions	Kaymac Site Operatives	Appropriate clothing to be worn during poor weather conditions-surface swimmers to wear diver's dry suits (if applicable)	6	No further action required.	4
Sudden increase in water flow or level through rainfall or incoming tide	Kaymac Site Operatives	Check tide table and weather report prior to commencement of works and monitor during duration of shift. If flows or water levels are predicted to/or increase to a point where a risk is perceived, works should cease, and all equipment and personnel should be withdrawn from the site.	10	No further action required.	6

Noise	Kaymac Site Operatives/Other Site Operatives	Ear defender to be available if noise levels rise to more than 80 dB(A) Daily Personal Exposure Level	9	Noise monitoring to be carried out by site management.	5
Pollution caused by leaking plant and machinery	Kaymac Site Operatives/Other Site Operatives	All plant and machinery to be checked at the start and end of each shift. All plant entering the watercourse will contain environmentally friendly Bio Oil. Spill kits to be available for all items of plant. Plant movements in the water are to be kept to a minimum	8	Checks are to be carried out daily and any issues reported straight to the site manager.	5
Substances hazardous to health i.e., diesel fuels	Kaymac Site Operatives	COSHH Assessments are to be completed and briefed to the workforce upon arrival to site.	10	All chemicals/substances, etc will be stored in a lockable COSHH storage unit on site.	6
Re-fuelling of plant & equipment	Pollution incident	No refuelling is to be carried out within 10m of the watercourse at any time.	9	No further action required.	6
Ecological hazards associated with wildlife	Injury/ death to animals, protected species, etc	WFD and HRA assessments to be undertaken prior to commencement on site.	9	The site will be monitored at all times for evidence of wildlife activity. Any activity will be reported to the site manager.	6
Contact with buried services.	Kaymac Site Operatives	Prior to any excavation or borehole drilling, the area is to be CAT Scanned by a trained operative.	15	Service drawing to be obtained from the Client where possible	5
Movement of company vehicles during access / egress to site	Members of the Public/ Kaymac Site Operatives	Ensure that banksman is in attendance while moving vehicles on site.	15	Ensure site fencing or barriers are erected where required	5
Public interface. Death / injury of public following entry to working area.	Members of the Public	Border around work site to be fenced, preventing public from entering the works site.	15	Kaymac to remain vigilant at all times	5
Poor weather conditions causing high waves - Overturning of floating plant/ Drowning	Kaymac Site Operatives	Weather is to be monitored by the Kaymac supervisor throughout each day. If the conditions are deemed too poor to allow works to be carried out safely, works will cease until conditions improve.	15	No further action required.	5
Falling from safety boat into water	Kaymac/IKM Site Operatives	Operatives to remain seated where possible. Life jackets to be worn by boat crew. Boatman to be trained and lookout always maintained.	8	No further action required.	8
Falling from height	Kaymac/IKM Site Operatives	All operatives to remain 1m back from the edge of the riverbank. Anyone who needs to be within 1m of the edge of the riverbank should use the man anchor system with a harness.	20	No further action required.	5
Working in area with heavy plant items including dumper, excavator, roller and lorries.	Kaymac/IKM Site Operatives	All operatives should be stood in a position of safety when there is plant being used. Plant movements will be controlled with a banksman.	25	All operators will be CPCS trained and qualified. All site staff will be in hi-vis clothing.	4
Lorries running off haul road and overturning.	Kaymac Site Operatives/Other Site Operatives/Drivers	All Lorries making deliveries should be watched and instructed by a banksman. The banks man should remain in a position of safety and in clear line of site of the driver. Lorries should drive up to a maximum speed of 5MPH.	25	All drivers will be briefed on the site and risks before driving on the haul road.	15
Use of lifting equipment while delivering equipment, plant or	Kaymac Site Operatives/Other	A lift plan for the lifting operation provided by Kaymac, lift plan to be briefed to all persons involved in the lifting operations. Telehandler and 360 ops CPCS card to be	10	Designated unloading area for plant, equipment, and materials to be	3

materials to site.	Site Operatives/Drivers	checked. Certificate of thorough examination for plant, certificates for lifting chains and slings checked, copies kept for both documents. Tag lines to be fitted to load when lifting. Personnel to stay clear of the road during lifting operations. Tag lines will be used to control loads.		established by principal contactor segregated from INEOS.	
Other contractors working on site; conflicting operations resulting in risks to all parties.	Kaymac Site Operatives. Other Site Operatives.	The Kaymac Site Manager and client's Site Manager will coordinate the works in such a way as to avoid overlapping operations between different contractors on site. Kaymac will fence off the work and access area to keep the project separate.	5		2
Underground cables.	Kaymac Site Operatives. Other Site Operatives.	Unless confirmed and witnessed always assume services are live. Any cables that need to be exposed further than they already are, should be hand dug. Safe digging practices should be used. Cables not exposed and in the vicinity of any excavation should be clearly marked out by use of drawings and CAT.	15		10

