

METHOD STATEMENT & RISK ASSESSMENT

VESSEL (S):	CLIENT	DATE	REFERENCE
TBC	Kip Marina	30/12/2021	Kip Marina Plough Dredge

WORK ACTIVITY

Plough Dredging

LOCATION

Kip Marina

PPE REQUIREMENTS

Lifejacket, Overalls, Hi Vis Clothing / Vest (Can be incorporated into overalls), Protective footwear, Protective Gloves, Hard Hat

SITE ACCESS

Vessel will mobilise from Fairlie Quay

SITE REQUIREMENTS/RULES

- Daily dredge report
- Incidents / Injuries to be reported to the office as soon as possible
- Any other requirements stipulated by the client

COASTWORKS CONTACT DETAILS

Name	Company	Position	Number
TBC	Coastworks	Workboat	TBC
	Coastworks	Skipper	-
	Coastworks	Deckhand	-
TBC	Coastworks	Workboat	TBC
	Coastworks	Skipper	-
	Coastworks	Deckhand	-
Brian Young	Coastworks	Managing Director	██████████
Ross Hepburn	Coastworks	Marine Superintendent	██████████
Office	Coastworks	-	01475 568 572

ONSITE CONTACT DETAILS

Name	Company	Position	Number
Ian Rodger	Kip Marina	Marina Master	01475 521 485

PLANT/TOOL REQUIREMENT

1. Workboat – TBC
2. 2 crew on each boat
3. Winches
4. A Frame
5. Dredging Plough inc accessories
6. Detailed drawings of dredge area (Supplied by Client)

WORK SCOPE SUMMARY

1. Mobilise to Kip Marina
2. Set up plough dredging equipment
3. Commence works & dredge down to client's required depth

RISK ASSESSMENT

HAZARD	RISK	UNCONTROLLED RISK			CONTROL MEASURES	CONTROLLED RISK		
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Falling overboard	Drowning	2	3	6	<ul style="list-style-type: none"> • Lifejackets must be worn 	1	1	1
Tripping	Falling overboard	2	3	6	<ul style="list-style-type: none"> • Trip hazards to be marked in yellow • Method statement and toolox will mention no running 	1	3	3
Tripping	Foot injury	2	2	4	<ul style="list-style-type: none"> • Protective footwear to be worn 	2	1	2
Getting wet	Hypothermia	2	3	6	<ul style="list-style-type: none"> • All crew to have suitable clothing • Toolbox talk to mention no running 	1	3	3
Working near/over water	Personnel falling into the water	2	2	4	<ul style="list-style-type: none"> • Care to be taken at all times • Toolbox talk • PPE be worn at all times 	1	1	1
Edges of the boat	Personnel falling into the water	2	2	4	<ul style="list-style-type: none"> • Experienced personel. • All personnel to wear lifejackets at all times • Toolbox prior to start of job 	1	1	1
Falling into the water	Drowning	2	3	6	<ul style="list-style-type: none"> • Lifejackets worn at all times • Good housekeeping to prevent slip, trips and falls 	1	2	2
Weils Disease	Infection	3	3	9	<ul style="list-style-type: none"> • All personnel to wear protective gloves • Good standard of hygiene is vital • Provision of onsite hand cleaner incl alcohol gel • Any open wounds to be treated immediately • Any open wounds to be water tight before commencing work • Personnel to go to A&E at the first signs of infection 	1	2	2
Winch	Damage to hands	2	3	6	<ul style="list-style-type: none"> • Winch will be operated remotely • Protective gloves to be worn 	1	2	2
Not wearing eye protection	Damage to eyes	1	3	3	<ul style="list-style-type: none"> • All dredged material will be wet eaning no dust build up • Process occurs under water 	1	1	1
Arriving on site	Running aground and low water	1	2	2	<ul style="list-style-type: none"> • Skipper will do a passage/work plan which includes looking at the tidal conditions on site during the work period. 	1	2	2
Dredging plough	Plough knocking someone overboard when lifting plough into position	1	3	3	<ul style="list-style-type: none"> • Hi Vis clothing to be worn • No one to stand between plough and edge of boat • Plough lines to act as tag lines 	1	2	2
Ploughing	Running aground	2	2	4	<ul style="list-style-type: none"> • Vessel travelling very slowly when ploughing • Ploughing the shallower areas to take place when 	1	1	1

					there is suitable water depth.			
Ploughing	Debris fouling props or rudders	2	3	6	<ul style="list-style-type: none"> • Skipper will keep a look out for debris • Due to operational restrictions the vessel will be manoeuvring slowly should it hit anything. • Boat stops ploughing at the first sign of fouling to get it fixed 	2	1	2
Ploughing	Lifting wires getting snagged and breaking	1	1	2	<ul style="list-style-type: none"> • Wires not running on sea bed to very unlikely to get snagged • Wire and connections checked prior to use. 	1	1	1
Ploughing wires slackening and tightening	Wire breaking and whipping across deck	1	1	1	<ul style="list-style-type: none"> • Ploughing lines are on the outside of the boat so if they do snap they will fall into the water. • Ploughing lines check prior to use. 	1	1	1
Boat coming to an abrupt stop	Crew falling over	2	2	4	<ul style="list-style-type: none"> • Skipper to give a safety briefing on what to expect in terms of any sudden movements • All crew to hold on to the boat when moving around • Boat going very slowly so any abrupt stop will have limited effect. 	1	1	1
Other craft	Collison	1	3	3	<ul style="list-style-type: none"> • Notice to Mariners should be published or canal equivalent • Vessel will be manoeuvring at slow speeds while channel proving • Skipper will get an update from Marina Manager about daily movements 	1	2	2
Restricted in their ability to manoeuvre.	Colliding with another vessel	2	3	6	<ul style="list-style-type: none"> • Vessel will display shapes which tell other vessels that they are "restricted in their ability to manoeuvre" • Skipper very experienced and know who the boat manoeuvres when pulling a plough. 	1	2	2
Setting up the plough	Plough swinging around and hitting someone	2	3	6	<ul style="list-style-type: none"> • Tag line will be attached to the plough while hanging from the crane • Sea state and wind conditions to be assessed prior to set up • Anyone not involved in the lift will be asked to keep clear 	1	2	2
Plough hitting someone while in the air	Injury to personnel	2	3	6	<ul style="list-style-type: none"> • Plough controlled at all times in the air with tag line • Hardhat to be worn at all times while crane in use • Anyone not involved in the lift will be asked to keep clear 	1	2	2
Lifting gear failing	Plough falling while in the air	2	3	6	<ul style="list-style-type: none"> • Crane thoroughly inspected annually • Lifting gear inspected prior to use and thoroughly inspected every 6 months • Lifting gear selected as correct SWL for the lift 	1	2	2
COVID – 19	Prevent the spread	3	3	3	<ul style="list-style-type: none"> • Operatives to wash hands as soon as they are onboard • Nobody allowed onboard if they or someone they live with have the following symptoms; <ul style="list-style-type: none"> ○ Has a high temperature ○ A new persistent cough ○ Lost sense of taste or smell – follow the guidance on self isolation • Operatives, where possible, to keep 2m from each other 	1	3	3

					<ul style="list-style-type: none"> • Face coverings to be worn where necessary if effective 			
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MOBILISATION
 Vessel(s) will mobilise from Fairlie Quay

WORK METHOD

SETTING UP THE PLOUGH

1. The A frame will be pushed up and back over the stern of the boat. Securing chains/wires will then be fixed to lugs the deck. Chains/wires will then be secured from the back of the A Frame to the vessel’s transom. This will stop the A Frame falling forward.
2. Lines (Ploughing Lines) will be attached to the side of the plough and led forward and secured to bollards at the bow of the boat. It will be necessary to adjust these lines to get the plough to pull at the correct angle.
3. The winch wire will be attached to the plough’s lifting chains.
4. The plough will be lifted by the crane and hung over the side of the boat where the load will be transferred to the winch wire.
5. The winch wire will take the weight of the plough. As the plough is lifted it will swing back so it is directly beneath the A frame.

DREDGING

1. Skipper will position the vessel in the dredging area. The start position will be at the discretion of the skipper.
2. The plough will be lowered to the required depth using marks on the winch wire as a guide
3. Once on the sea bed the skipper will put the vessel into forward gear dragging the plough behind it, filling it up with material. This will be dragged out the dredge area and deposited at the specified disposal ground.
4. Once the load has been dumped the skipper will lift the plough a manoeuvre the vessel back into the dredging area and repeat the process.

NB The skipper will do a couple of test pulls to see what type of material they are shifting in case they need to make some adjustments to the plough to make the process as efficient as possible.

TIDAL WORKING
 The skipper will need to take the tide into consideration as areas surrounding the work site dry out at low water. Adjustments to the plough’s pulling wires will be made during the course of the day as the tide changes.

INJURIES

1. All Coastworks personnel are first aid trained
2. There is a small first aid kit on board all our vessels
3. If someone falls overboard, our standard MOB procedure will be followed.
4. The closest evacuation point will be alongside the Pier or pontoon.
5. The nearest accident and emergency department is Inverclyde Royal Hospital

COVID - 19

SELF ISOLATION

Anyone who meets one of the following criteria should not come to site:

1. Has a high temperature or a new persistent cough – follow the guidance on self-isolation
2. Is a vulnerable person (by virtue of their age, underlying health condition, clinical condition or are pregnant)
3. Is living with someone in self-isolation or a vulnerable person

PROCEDURE IF SOMEONE FALLS ILL ONSITE

If an operative develops a high temperature or persistent cough while at work, they should:

1. Put a face mask on immediately.
2. Avoid touching anything.
3. Isolated away from the rest of the operatives.
4. Cough or sneeze into a tissue and put it in the bin, or if they do not have tissues, cough or sneeze into the crook of their elbow.
5. Taken ashore at the soonest opportunity.

They must then follow the guidance on self-isolation and not return to work until their period of self-isolation has been completed.

SOCIAL DISTANCING

1. Operatives to stay 2m apart where possible.
2. Avoid touching surfaces where possible. Use hand sanitiser regularly.
3. Apart from essential personnel everyone else should stay out on deck whenever possible, that includes transiting to and from site.
4. Where social distancing is not possible during certain parts of the operation then face coverings can be used if they are going to be effective. i.e They become useless when they are wet so would not be effective if it rains or operatives as exerting themselves resulting in extra moisture being produced through breathing.

HAND WASHING

1. All operatives to wash their hands immediately boarding the vessels using warm water and soap.
2. Operatives on the jetty to use hand sanitiser.
3. Onboard hand washing areas to be cleaned regularly
4. Hand towels to be put straight in the bin and the bin disposed of as soon as the vessel gets ashore.
5. Hand washing to be carried out in the heads and not using the galley sink.

TOILET FACILITIES

1. Due to the duration of the job, where possible, additional operatives should visit shore side facilities prior to boarding the vessel to limit the number of people needing to use the onboard facilities.
2. Operatives to wash their hands before and after using the facilities.
3. Increased cleaning of the toilet facilities in particular door handles, locks and the toilet flush
4. Extra bin changing may be required.

EATING & DRINKING

1. All operatives to bring their own pre prepared meals and refillable drinking bottle from home.
2. Crockery, eating utensils, cups etc should not be used.
3. Those staying onboard to keep food preparation to a minimum during the job.
4. All rubbish should be put straight in a bin.
5. Operatives to sit 2 metres apart from each other whilst eating and avoid all contact

PPE

1. Gloves to be worn at all times.
2. Face coverings to be worn when necessary and effective.
3. Hard hat during lifting operations.
4. Safety boots to be worn at all times.
5. Hi-vis clothing to be worn at all times.
6. Lifejacket to be worn while on deck or transferring between vessel & shore.

COMMUNICATIONS

All those working on board will be in close proximity to each other so communication will not be a problem.
Hand signals will be used while operating the crane.

SAFE WORKING PRACTICE

SAFETY IS NO ACCIDENT AND ALL HEALTH AND SAFETY PROCEDURES MUST BE FOLLOWED. CONDTIONS MAY DICTATE A CHANGE IN METHOD. THE BOATS ARE NOT DRIVEN FROM THE OFFICE, IT IS THE SKIPPER WHO IS ULTIMATLEY IN CHARGE AND WHO WILL HAVE THE FINAL DECISION. IF THIS IS NECESSARY ALL OPERATIONS WILL STOP WHILE THE CHANGE IN METHOD IS DISCUSSED AND AGREED BY ALL THOSE INVOLVED. SEE SEPARATE SHEET FOR CHANGES.

PREPARED BY

Name: Ross Hepburn

Position: Marine Superintendent

CHANGES TO RAMS RECORD

Any changes made to the RAMS must be recorded below and signed off by a suitably competent person

Change:		
By:	Signed:	Date:

RAMS SIGN SHEET

Please sign and date below if you have read and understood the RAMS (Ref: Ardrishaig PD 2021 (Version 3))
NB If you have any questions please ask.

DATE	PRINT NAME	SIGNATURE