

REMOTE ACCOMODATION SYSTEM (RAS) 2014 DEPLOYMENT



PLANNING APPLICATION SUPPORTING STATEMENT 23 Jan 2014

RATIONALE

The Cairngorm Outdoor Access Trust is undertaking a 4 year Mountain Heritage Project, funded by the Heritage Lottery Fund, to build and repair footpaths across the East Cairngorms. In 2014 work will be carried out on footpaths through Lairig an Laoigh, near the Fords of A'on. These sites all have a walk in well in excess of 1hr 30 minutes, this would have a significant impact on productivity over the length of the contract. Realistically, walk in time at this level could account for almost 40% of the total contract cost. There is also a small window of opportunity to carry out work at these sites given the weather constraints and it is therefore essential to maximise time spent on site.

The proposed worksites for 2014 are by accepted industry standards classed as 'remote', As a result Health and Safety requirements alter. In the event of an injury or accident evacuation is always the preferred option. In less remotes sites in with a half hour walk in or good mobile phone signal the alarm can be raised quickly and a casualty can be dealt with on site with survival blankets and basic first aid kit until help arrives. However, when a site is geographically remote and has little or no mobile phone coverage this will take the casualty out-with the 'golden hour' before they receive professional assistance. In addition, conditions in the Cairngorms can deteriorate rapidly and for long periods further complicating evacuation of the casualty whilst also compromising the safety of others onsite who cannot abandon their colleague. In this situation the remote accommodation provides a vital and essential emergency shelter keeping the casualty safe and secure until evacuation can be implemented.

Further a long daily walk in to and out from a worksite on rough and steep terrain can also contribute to damage of knee and ankle joints of path workers, the extent of which may be difficult to ascertain until the damage is irreversible.

Locating the remote systems in the desired location will allow contractors to maximise time spent onsite and make the best possible use of the weather window, it shall also contribute immeasurably to site safety and workers wellbeing.

The Remote Accommodation System has been successfully deployed and extracted at Shelter Stone in 2012 (Moray Council 2011/0272/DET) and Braeriach in 2013 (Highland Council 2013/0038/DET).

PROPOSED LOCATION

NJ04620453, Elevation 730m

The site is a remote wilderness area on Abernethy Estate and RSPB reserve. The proposed site location offers a flat, level area ideal for siting the camp. The ground is relatively dry with predominantly grasses mix with some heather atop granite soils offering a fairly robust and well drained area. The site is at an elevation of approximately 730m. (Sample photos below). The chosen location for the camp site is at approximately mid-point along the chosen works site and is ideal to minimize the amount of 'work time' walk in time for the contractors. The site is also close to the main Lairig an Laoigh path which will aid access to and from the site for both contractors and other RAS site visitors.

A site visit was undertaken with Ian Perks, RSPB and Shirley Reid, SNH August 2013 to identify and agree the proposed site as being suitable location for the temporary siting of the RAS.



Proposed site Lairig an Loagh

DURATION

The siting of the Remote Access System would be for a period of 7 months from 1st April 2014 to 31st October 2014. This time period would maximise the window of opportunity for operating in this environment, allowing sufficient time to deploy the system and carryout the essential work required, whilst building in a margin for delays in deploying and removing the system due to weather conditions.

REMOTE ACCOMMODATION SYSTEM

The Remote Accommodation System comprises four cabins each fulfilling a separate function: kitchen/dining, bunkroom, toilet and store/drying room. There are four external vermin and water proof storage containers for food and waste storage. All cabins are elevated from direct ground contact by means of timber pads to minimise damage to vegetation through shading and compaction. Pathways between the cabins and around the camp are protected with temporary walkway to prevent trampling of the vegetation.

POWER & FUEL STORAGE

Power is supplied by two 15KVA generators and an inverter system with batteries to minimise fuel consumption. The generators are powered by diesel stored in two 500L double bunded oil tank and spill kits will be available on site at all times. Advice has been sought from SEPA and all fuel will be stored and transferred in accordance with their guidelines and the Scottish Oil Storage Regulations.

Both fuel tanks are of all steel construction for high security and strength. They are built to withstand heavy use, are U.N. approved for the transportation of diesel on the highway and are fully bunded in accordance with Environmental Agency Pollution Prevention Guidelines (PPG2). The fuel lines are factory fitted with 1/2" BSP anti-spill push fit type generator feed and return connections to avoid possibility of fuel spillages. Spill kits will be available on site at all times.

Sequence and Method:

1. Once tanks and generators are in designated position unfasten fuel lines and identify flow and return
2. Using push fit connections, connect both flow feeds together and return feeds together.
3. Generators will automatically pump fuel and filter any air in system.
4. Inspect fuel lines on a daily basis to ensure correct operation, and any failure of the system is to be remedied immediately.

FRESH WATER AND GREY WATER SOAKAWAY

Fresh water supply will come from the burn flowing down the east facing crag of A' Choinneach, and the approximate tank location is NJ04340459 at an elevation of 760m. The water will pass through a UV filter prior to use by the inhabitants. All cleaning and personal hygiene products will be fully biodegradable. Discharge of grey water from sinks in the kitchen unit and toilet block, and rainwater run-off from cabin roofs shall be via a soakaway system. This system has a small footprint with minimal ground excavation and disturbance whilst offering an effective drainage solution. There is no shower and there are no other drainage requirements.

Sequence and Method:

1. Choose suitable area for soakaway position <5m from RAS
2. Dig a hole 450mm x 450mm minimum to depth of 600mm minimum. All soils/aggregates shall be kept for reinstatement works.
3. Link plumbing pipes from kitchen and toilet sinks into feeder pipe to soakaway hole
4. Back fill soakaway hole with large aggregates to promote filtration and replace turfs on top.
5. Soakaway is to be inspected on a daily basis to ensure correct operation, and any failure of the system is to be remedied immediately.
6. Sequence shall be reversed when deployment ends, all soils/aggregates and turfs replaced to original condition.

WASTE STORAGE/REMOVAL

The system is serviced with a Biolett composting toilet, an entirely self-contained unit which has no incoming water supply or outgoing drainage requirement. The system converts all human waste and toilet paper into dry compost granules. All compost granules will be bagged, stored in a water proof container, prior to being removed from site at the end of the deployment.

A waste management system is set out in the RAS User Protocols to ensure proper management of all waste to prevent pollution of the environment, infestation and to allow correct disposal at the end of the deployment. All waste will be sorted as follows:

- Recyclables in the **BLUE** bags
- General rubbish in the **BLACK** bags
- Biolett WC solid waste in **GREEN** bags

All full/partially full bags will be stored in the appropriate vermin/waterproof sealed box at all times. All waste will be removed at the end of the deployment. No waste products will be left or disposed of on site.

2012 SET UP AT SHELTER STONE



2012 Shelter Stone Camp



Typical Cabin



DEPLOYMENT & REMOVAL

The system is flown into and out of the site by helicopter and takes approximately 7 hours to deliver and assemble. It requires two teams of four at either end, with two certified lifters supplied by helicopter provider.



2012 Deployment



Over winter the system is stored and maintained at National Trust for Scotland's Mar Lodge Estate. Prior to deployment a dummy set up is carried out on the estate to check all components and equipment to minimise the requirement for on-site maintenance.



2012 Dummy set-up at Mar Lodge Estate

