



Work Method Statement

Harvesting & Extraction of Timber within Scheduled Ancient Monument

Nether Howcleuch Forest

October 2016

Approved for issue:

Name and Position
Fountains Forestry

Date

Review and acceptance by:

Name and Position
Fountains Forestry

Date

LIST OF REVISIONS:

Issue	Date	Revisions	Amended by	Approved by

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1 SCOPE OF WORKS

To harvest (fell and extract) trees within Scheduled Ancient Monument SM3348 Little Clyde to March Burn Roman Road

2 HAZARDS AND RISK ASSESSMENT

2.1 HAZARDS IDENTIFIED (HAZARDS TO SCHEDULED ANCIENT MONUMENT)

- Use of forestry machinery for harvesting and forwarding (extraction) of timber
- Ground disturbance as a result of harvesting by means of motor manual chainsaw

2.2 RISK ASSESSMENT

Reference should be made to Appendix 1.

HAZARD	IMPACT SEVERITY	RISK 1=Low 2=Minor 3=Moderate 4=High	CONTROL MEASURES	RESIDUAL RISK
Timber harvesting causing ground damage	Very Serious	3	• All harvesters are purpose built with low ground pressure capability. • Machinery will operate only on well built brash mats. • Brash mats (extraction routes) will run perpendicular to the planting lines and therefore the plough lines. With the tree stumps left in place this will further reduce ground compaction. • Only a single track of brash mat will be required. All trees will be harvested by machine to reduce ground compaction across the Scheduled area. • Brash mats can be left in place to protect the ground or removed.	2
Forwarding (extraction) of timber causing ground damage	Very Serious	3	• All harvesters are purpose built with low ground pressure capability. • Machinery will operate only on well built brash mats. • Brash mats (extraction routes) will run perpendicular to the planting lines and therefore the plough lines. With the tree stumps left this will further reduce ground compaction. • Brash mats can be left in place to protect the ground or removed. • Extraction routes to be maintained so as to prevent excessive water building in bodies that could cause ground movement or mass water movement.	2
Roadside timber stacking for uplift causing ground damage	Very Serious	3	• Timber to be stacked in areas created for timber stacking and along edge of road, across drain, by agreement with Historic Scotland. All timber to be placed on log bearers to prevent ground damage from lorry mounted timber grabs.	2

3 OPERATORS & PERSONNEL

3.1 OPERATORS

The harvesting and extraction operation will be undertaken by the harvesting company who have purchased standing timber from Fountains Forestry. Site supervision will be undertaken by Fountains Forestry.

3.2 PERSONNEL REQUIRED TO CARRY OUT ACTIVITY

- Harvester operators
- Forwarder operators
- Chainsaw operators
- Lorry drivers

3.3 TRAINING AND COMPETENCY

All personnel will have the relevant industry approved operator competencies to undertake operations on site.

4 PLANT & WORK EQUIPMENT

Machinery required to carry out harvesting:

- Mechanical purpose built harvesters – Type TBC
- Mechanical purpose built forwarder – Type TBC
- Timber lorry with self loading trailer – Articulated 44 tonne lorries

5 METHOD

- Define Scheduled Ancient Monument (SAM) area.
- Assess site and inform all personnel of location and extent of SAM's.
- The harvester will fell and process trees within the SAM, felling trees in a direction away from the Monument. Trees are processed while suspended in the air by the harvester with processed timber stacked in piles outwith the SAM. The harvester has a 10 metre reach which reduces the number of passes needed to clear any given area.
- An extraction route will be created running within the outer edge of the SAM. The extraction route will be made of brash (branching) from trees which is placed on top of the ground and tree stumps before the machine. Edge trees have more foliage, heavier branches and more branches and make the most stable and secure brash mats. The brash mat will run perpendicular to the tree rows and therefore across the plough lines which will further reduce pressure from machinery.
- Processed timber will be extracted using track within the SAM using a low ground pressure forwarder. Harvested and processed timber from outwith the SAM will be brought down the hill onto the extraction route and forwarded along the brash mat (route shown on attached map). Due to the steep nature of the site, extracting along this route is the safest method.
- Timber will be stacked along the roadside at locations (shown orange on map G.22012.013) on land between the forest road and the previous edge of the trees. This land is within the SAM and is land that has been previously disturbed by forestry operations prior to the Scheduling of the monument. Timber will be stacked with one end on the forest road and one end on the ground on the opposite side to the roadside drain.
- Stacked timber will then be craned from stacks onto lorries parked on the forest road.

5.1 EMERGENCY PLANS

- Map with planned works to be held on site in each machine.
- Any deviation from the agreed work methods is to be reported immediately to the Forest Manager, Sam Booth, and the Fountains Hazard Reporting Line.

FOUNTAINS FORESTRY – DUMFRIES
EMERGENCY CONTACT PLAN

FIELD MANAGER – J Adams

FOREST MANAGER – J Proudlock

HISTORIC SCOTLAND

(Monument ref: SM3348 & SM102)

0131 6688770

SEPA

24Hr Emergency No.

0800 807060

Fountain Forestry Contacts

Head Office (Inverness)

Douglas Murray

Andrew Clark (Safety and Compliance)

Forest Works Manager & Site Supervisor

TBC

Nether Howcleuch – Site Location Details

Nether Howcleuch

Nr. Moffat

Dumfries and Galloway

Grid Reference (Forest Access): NT 046 141

SAM Details & Locations

SM3348 - Little Clyde to March Burn Roman Road

**ALL INCIDENTS INVOLVING SCHEDULED ANCIENT MONUMENTS TO BE REPORTED TO THE
FOREST WORKS MANAGER IMMEDIATELY**

APPENDIX 1

Consequences	Frequency (Environment and Safety)					
	Environment	Likely Occurs repeatedly, event expected	Probable Not surprising, will occur several times	Possible Could occur at some time	Remote Unlikely to occur, although conceivable	Improbable So unlikely that probability is close to zero
	Catastrophic National importance, major breach of legislation	4	4	4	3	2
	Very Serious Significant effects, serious breach of legislation	4	4	3	3	2
	Major Significant effects, contained within site	4	3	3	2	1
	Moderate Effects contained mainly on site, likely to be short lived	3	3	2	2	1
	Minor Small to negligible effects	3	3	2	1	1

Table of Risk Ranking Matrix

Risk Class		Tolerability	Action Required
4	High	Intolerable	Work not started, or immediately stopped
3	Moderate	Intolerable Risk	Work not started, or immediately stopped
2	Minor	Tolerable Risk	Extremely harmful consequences may require further controls. Monitor to ensure controls maintained and effective.
1	Low	Acceptable Risk	No action required. No further controls needed. Monitor to ensure that controls are maintained. And effective

APPENDIX 2

Method Statement Site Briefing & Confirmation Sheet

Method Statement Title	Nether Howcleuch
Method Statement Number	MS.22009.001
Scope of Works	Works within Scheduled Ancient Monuments Ref: SM3348

I agree that I have been briefed on the above Method Statement and confirm that I understand its requirements.

Name.	Designation.	Signature.