

Arboricultural Method Statement

Phase Two works: Doves Nest Farm, Whitby

Client: York Potash Ltd

c/o Royal Haskoning DHV

Rightwell House

Bretton

Peterborough PE3 8DW

Planning Condition Ref: NYMNPA-70

Prepared by: Andrew Belson

Dip.Arb.RFS, M.Arbor.A, Tech.Cert.Arbor.A

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	NYMNPA-70				

I hope you find this report satisfactory. If you need any more information regarding this assessment, please contact the office below.

Signed:



A M Belson Dip.Arb.RFS, M.Arbor.A, Tech.Cert.Arbor.A 29b High Street East Uppingham Rutland

LE15 9PY www.belsontreesurvey.co.uk

Date: 6th January 2017

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1 INTRODUCTION

- 1.1 In 2014 a planning application (reference NYM/2014/0676/MEIA) was submitted to North York Moors National Park Authority for permission to develop a potash mine, underground Mineral Transport System (MTS) and Materials Handling Facility (MHF). Planning consent was subsequently granted in 2015 subject to conditions.
- This document has been prepared on behalf of Sirius Minerals plc and details the requirements with respect to the management of trees affected by the Phase 2: Site Preparation Works at Dove's Nest Farm phase of the development.
- 1.3 This document is required to partially discharge condition 70 of the NYMNPA planning permission NYM/2014/0676/MEIA (see Table 1 overleaf).
- 1.4 This document, read in conjunction with drawing 2556.Ph2.DNF.YPL.TPP describes a suitable methodology for the protection of the trees on site and on neighbouring land during construction.
- 1.5 Protective measures have been developed and specified in accordance with the recommendations of BS5837: 2012, including relevant terms, definitions and Root Protection Area (RPA) calculations.



Table 1: Condition NYMNPA-70 Arboricultural Method Statement and Tree Protection Plan

Condition requirements	Compliance		
Prior to site preparatory works commencing at DNF or Lady Cross a scheme shall be submitted to and approved by the MPA showing:	This document prepared prior to work commencing.		
 any existing trees, hedges and other vegetation to be retained; together with 	 Tree, hedges and other vegetation to be retained are indicated on drawing 2556.Ph2.DNF.YPL.TPP (those NOT marked in red dashed lines and circles). 		
 any measures for the protection and management/ reinforcement of these areas; and also 	 Protection measures are described in this document in sections 6-10. 		
indicating trees, hedges and other vegetation to be removed.	 Tree works to be carried out before work begins are described in this document in section 5, with trees to be removed listed in section 5.4 and indicated on drawing 2556.Ph2.DNF.YPL.TPP by red dashed lines and circles. 		
This shall include Arboricultural method statement and tree protection plans.	This document comprises an Arboricultural Method Statement for the Phase 2: Site Preparation Works at Dove's Nest Farm. Drawing 2556.Ph2.DNF.YPL.TPP comprises the Tree Protection Plan for the Phase 2: Site Preparation Works at Dove's Nest Farm		
These measures shall be implemented ahead of site preparatory works and retained during construction period.	This instruction is made explicitly in this document, for example in sections 4, 5.1, 7.6, and 9.7.		



2 DEVELOPMENT DETAILS

- 2.1 The works required for the Phase 2: Site Preparation Works at Dove's Nest Farm associated with the York Potash Project comprise the construction of:
 - General site clearance including tree clearance for the welfare road and scrub clearance, as shown on drawing YP-P10-DNF-CX-009
 - Construction of an acoustic fence/environmental barrier and installation of fencing, gates and security, as shown on drawing YP-P10-DNF-CX-004
 - Excavation and construction of the two-tiered working platform with a western upper level at around 204m Above Ordnance Data (AOD) and an eastern lover level at around 200m AOD, as shown in drawing YP-P10-DNF-CX-004
 - Excavation and construction of the site roads, as shown on drawing YP-P10-DNF-CX-004
 - Construction of temporary and permanent soil mounds including the environmental screening bund (Bund A) along the western boundary, as shown on drawing YP-P10-DNF-CX-010
 - Construction of surface water drainage, silt removal facility and an attenuation pond with outfalls to an existing drain, as shown on drawing YP-P10-DNF-CD-001
 - Construction of a site compound to the east of the welfare access road.

3 SITE DESCRIPTION

The site consists of existing farm tracks with highway access off B1416 (as improved in the Phase 1 highway works, see 2556.Ph1.Highways.YPL.AMS), coniferous and hardwood plantation and woodland; and small ditches and bodies of water.



4 SUPERVISION AND MONITORING

- 4.1 It is important that the tree protection measures are understood and adopted at all levels from client to project manager and any sub-contractors in order that the measures can be successful.
- 4.2 Communication between the Client, Main Contractor (and their sub-contractors), the Project Manager and the Arboriculturalist are of high importance.
- 4.3 A pre-commencement meeting will be held on site between the Site Manager and any deputies; the Project Arboriculturalist; contractors' forepersons and the Project Ecologist.
- 4.4 The Local Planning Authority Arboricultural Officer; the Landscape Officer and The Planning Officer will be notified of the meeting and invited to attend as appropriate.
- 4.5 The Site Manager will approve the protective barriers (comprising Site Security Fence; Acoustic Barrier; Temporary Fence or BS59837 Barriers as appropriate) before any work commences and monitor the physical and managed protective tree measures continually.



5 CARRY OUT ARBORICULTURAL WORKS

- 5.1 All tree works will be carried out as a first operation before any other work starts on site.
- 5.2 Individual trees for removal will be marked with a spot of red tree-marking paint before any construction works.
- 5.3 Compartments of plantation for removal will be identified with tape in a manner agreed with the treework contractor.
- The following trees will be removed (as denoted by the dashed red lines and circles on the drawing 2556.Ph2.DNF.YPL.TPP):
 - Woodland 041 W1 (parts)
 - Woodland 041 W5 (parts)
 - Group 041A
 - Group 041B
 - Group 041C
 - Group 041F
 - Group 041H
 - Group 041J
 - Group 041K
 - Group 041L
- 5.5 Laterally reduce overhanging growth from Woodland 041 W3 by up to 1.5m sufficient to facilitate works.
- 5.6 Lift the crowns of the retained trees in Woodland 041 W1 to achieve sufficient clearance over the access road for the highest vehicles likely to be 3.5m +/- 0.5m.



6 TREEWORK GENERAL NOTES

- Before the commencement of any treeworks, the Project Ecologist or similar will carry out the necessary inspections for bats and nesting birds as specified in the DNF Phase 2 Construction Environmental Management Plan.
- The start date for treework will be agreed following the advice of the Project Ecologist.
- Tree work is skilled and potentially dangerous work, which must be carried out by trained and certificated staff working to BS3998: 2010 and working in accordance with the various Regulations of the Health and Safety at Work Act 1974.
- 6.4 Contractors must have Public Liability Insurance and Employer's Liability Insurance to a level appropriate to the nature of the works.
- 6.5 Machinery and equipment must be maintained, inspected and operated in accordance with the various Regulations within the Health and Safety at Work Act.
- The Contractor will be responsible for producing their own Method Statement for the works that will include Risk Assessments, staff profiles and certification, machinery and equipment inspection records and certificates.
- 6.7 The Contractor will be responsible for the treatment of coniferous stumps, according to an assessment of species, soil and climate.
- 6.8 Stump removal may be required and will be agreed with the Client, including the disposal of arisings.
- 6.9 Disposal of timber, brash and other arising is specified in the DNF Phase 2 Construction Environmental Management Plan.



7 ERECT PROTECTIVE BARRIERS

- Once the treeworks are complete, the site security fencing, temporary fencing and acoustic barrier (west side of site) will be erected where indicated by the Masterplan (Drawing reference: YP-P10-DNF-CX-004 DNF Phase2Masterplan).
- 7.2 In moderate to high activity zones (as defined by Sirius Mineral PLC) all the trees will be protected by one type of fence or barrier before any other works commence near trees.
 - Where the site security fence or the acoustic fence is positioned in the same place as the recommended barriers in drawing 2556.Ph2.DNF.YPL.TPP, they will provide adequate tree protection if:
 - a) the fence is beyond the radial extent of the RPA or is beyond the drip line of a tree's crown
 - b) the fence is able to resist lateral forces
 - Barriers to Fig 2 BS5837 will be erected in place of proposed security, temporary or acoustic fences where works are required ahead of their installation, with the line of the barrier being on the same line as the proposed fence. See Appendix B for Fig 2 BS5837 barrier illustration.

In low activity zones, (as defined by Sirius Mineral PLC) the existing stock fence and ditches are considered to provide adequate tree protection

- 7.3 Weather-proof notices stating: 'PROTECTED AREA DO NOT ENTER' will be erected on the security fencing, the acoustic barrier, existing fencing and the protective barriers not less than 5m apart
- 7.4 Temporary access to the protected area will be by permission of Site Manager who will consult the Project Arboriculturalist if required.
- 7.5 The site manager will assess the integrity of the protective fencing protection measures continually. Any shortcomings must be rectified to the original specifications immediately.
- 7.6 Barriers will remain in place until the end of Phase 2 where they may be retained for future use or removed according to requirements.



8 CARRY OUT OTHER PRE-COMMENCEMENT WORKS

8.1 The works will be planned in such a way as to minimise the pressure on the trees through careful planning and management, particularly in excavations and the storage of materials.

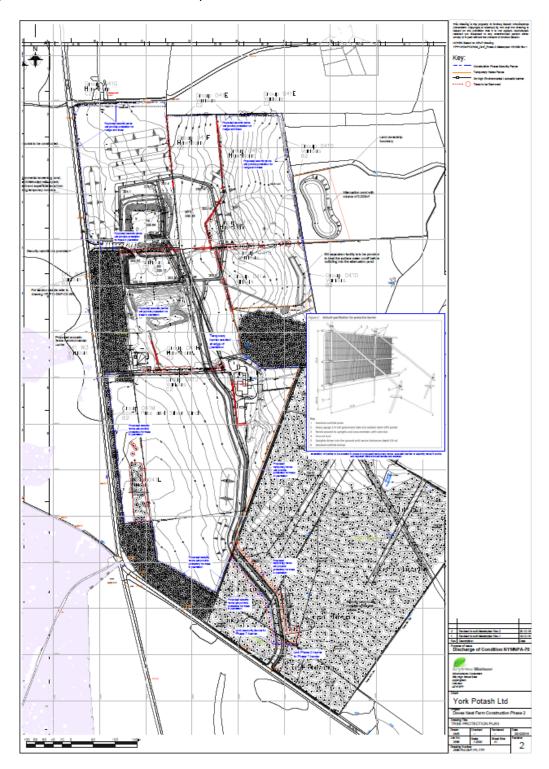
9 OTHER PROTECTION MEASURES REQUIRED BY BS5837

- 9.1 No fires to be lit on site where flames can reach within 5m of a tree's crown; taking the size of the fire, wind speed and direction into account
- 9.2 No storage or discharge of materials within 5 metres of a tree bole.
- 9.3 No mixing of cement or dispensing of fuel or chemicals within 5 metres of a tree bole.
- 9.4 No stripping of topsoil, excavation or changing of levels to occur within the RPA.
- 9.5 Any damage that occurs to the trees during construction must be rectified to the British Standard BS3998: 2010 (Tree Work Recommendations).
- 9.6 Trees must not be used as anchor points for winching or for supporting wires/cables.
- 9.7 Once relocated, the fencing will remain in-situ until all the main development is complete and the site is ready to be landscaped



APPENDIX A - TREE PROTECTION PLAN

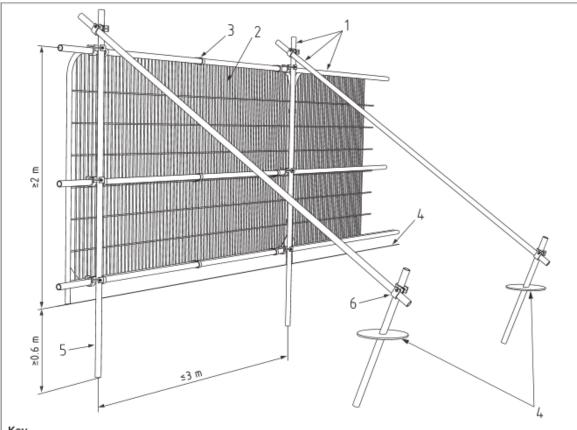
The Tree Protection Plan is pictured below. A full-sized version of the plan has been provided with this file (Filename: 2556.Ph2.DNF.YPL.TPP).





APPENDIX B - BARRIERS TO BS5837-2012

Figure 2 Default specification for protective barrier



Key

- 1 Standard scaffold poles
- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps



APPENDIX C - POSTER TO BE FIXED TO BARRIERS AND FENCES

PROTECTED AREA DO NOT ENTER

(WITHOUT PERMISSION)

This barrier is designed to protect these trees.

PLEASE REPORT ANY BREACH IN THE BARRIER TO THE SITE MANAGER