### **P STORER TREE SERVICES**

#### Hayes farm, Longnor, Nr Buxton, Derbyshire, SK17OLN

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#### Method statement for proposed tree works at SELDEN Research Buxton.

There is a large amount of risk with the site and the adjoining A515, every effort needs to be made to protect Selden research staff and the heavy volume of traffic that use the A515 and members of staff working for P Storer tree services.

In order to maintain a high level of safety every precaution needs to be taken.

In order to do this we intend to use the right equipment and fully trained members of staff on the site.

I propose to fell the majority of the trees on site using a 4x4 ford county tractor with a remote controlled 9 ton igland winch along with up to date felling techniques (NPTC CS 31,32,33).

Once the tree is safely on the ground the tree can then be de limbed, the trunk timber can then be removed using the cone splitter and timber grab on the Doosan 14 ton digger.

The timber will be removed off site with the use of a timber trailer and hi-ab

The brash (twigs) will then be piled up in a designated part the site and will then be chipped at the end of the job using the crane fed jenz chipper and woodchips removed off site using tractors and dump trailers and brought back to Hayes farm where the woodchips will be used for winter bedding for cows.

Every tree on site will be climbed and inspected before a winch cable is placed within the canopy to assist felling.

For the trees that cannot be felled safely they will be dismantled by qualified climbers (cs 38,39,41) and experienced groundsman, this includes the trees growing between the wall and the fence along the A 515.

Where any trees come into contact with the A 515 I intended to use a recognised traffic management company (RH Plant hire) stoke on trent.

Any trees that may come into contact with the warehouse/ factory will be dismantled by qualified climbers (NPTC 38,39,41). There is an option to use a MEWP but this will need to be assessed nearer the time with ground conditions.

With the use of the winch tractor, digger with timber grab and crane fed chipper, it is designed to speed up the job but without compromising safety and reducing the amount of manual handling required by any members of staff.

All I can stress is that the work will be done as safely and efficiently as possible.

# **Environmental Policy**

#### **Policy Statement**

This company recognises its responsibilities under the Environmental Protection Act (1990) and the Pollution Prevention & Control Act (1999) to ensure, so far as it is reasonably practicable, the environmental impact of our actions is kept to an absolute minimum

The company attaches the greatest importance to environmental issues and have put in place the following management systems and procedures to reflect this.

The company will take all reasonably practicable precautions for the prevention of spillages unnecessary fuel use waste and all environmental matters as mentioned in the environmental impact assessment The company will also try to create working conditions that encourage employees. To plan work to help reduce any environmental impacts the company will allocate the necessary resources and enlist the active support of all employees in order to achieve this.

The company regards the standards set by the various relevant statutory provisions as the minimum standard which must be achieved and will endeavour to improve upon these standards where reasonably practicable.

This policy and the organisation, arrangements and management procedures will be reviewed regularly, modified and updated as necessary.

#### Objectives

The objectives of the above policy are:

To promote an awareness within the company and to ensure compliance with all relevant statutory provisions.

To wherever possible improve standards and efficiency

To ensure that staff at all levels are provided with adequate instruction, training and supervision with regards to matters of the environment.

To develop awareness and responsible attitudes at all levels.

To promote a joint consultation approach to environmental matters.

To provide a framework within which our performance may be monitored.

Organisation and Responsibilities

The Employer is responsible for ensuring that this company Environmental Policy is implemented in practice.

The Employer has day-to-day responsibility for applying arrangements, procedures, ensuring that these are applied effectively and that there is adequate training, instruction and supervision.

Supervisors have continuous responsibility for applying arrangements and procedures. They are responsible for ensuring compliance with arrangements and procedures by ensuring employees have proper instructions and training in the company's systems.

All employees regardless of position in the company have a duty imposed upon them by these standards This includes:

Take responsible care when working with pollutants

Co-operate with the company in the measures taken to safeguard the environment at work.

Report to a person in authority any defects which adversely affect system procedures

Be aware of the company's environmental arrangements, and those statutory provisions and company procedures relating to their work activity.

It should be noted that disciplinary action can be taken against employees who persistently and deliberately flout the requirements placed upon them by statutory provisions and company Rules.

#### Arrangements

#### Company Structure/Responsible People

All employees, at whatever level, and sub contract labour are required to take reasonable care for their own health and safety and the health and safety of any others who may be affected by anything that they do, or fail to do, in the course of their employment.

The Company structure, detailing who is responsible for what, is as follows:

General Manager:	Overall Responsibility	Ensuring resources are available to meet the company's responsibilities
Environmental Manager:	Directing Group policy and compliance	Keeping up to date with legislation and requirements, ensuring staff are made aware and adhere to relevant areas, ensuring system procedures are suitable and compliant allowing the company to meet its legal responsibilities.
Site Supervisors;	Day to day environmental compliance	Ensuring sites are managed in a way that meets all environmental requirements.
Operatives	Personal and other responsibility	To work in accordance with company environmental policy and systems.

#### Consultation and Communication

All employees and subcontract labour have an active part to play in maintaining and improving environmental standards. They are consulted on environmental issues and made aware of their responsibilities.

#### Training and Competency

All new employees receive induction training relating to company procedures, environmental matters and legal obligations.

All employees will be competent to carry out their duties and will have the necessary, extant certification. No one will carry out any function for which they are not trained or instructed in so as to be able to work safely in relation to the environment, themselves and others.

When an activity is carried out infrequently the supervisor will ensure that the employee is fully competent prior to carrying out that activity.

To ensure competency, personnel records will be kept to record areas of competency, skills and abilities. This will be reviewed on a regular basis to assess on-going training, refresher requirements and deficiencies.

Training will be arranged by managers through appropriate bodies and training providers.

#### Safety Information

Employees will have access to all relevant safety guides e.g. AFAG guides, Data Sheets, Generic Risk Assessments, Site Specific Risk Assessments and operating manuals either on site or in the office or stores as appropriate. (In some cases it may be that duplicate copies are kept in more than one place).

#### **Oil Storage Regulations**

The Oil Storage Regulations require that oils are stored in such a way as to avoid damage to the environment in the case of a spill etc. The company will abide by the requirements of the regulations.

#### Monitoring, Review and Responsibilities

The Company Environmental Policy will be continually monitored for effectiveness. It shall be reviewed in light of any incident that may have implications for the policy or on the suggestion of managers, supervisors or employees.

The manager is ultimately responsible for all aspects of environmental planning and work systems, for reviewing the policy and ensuring that it is complied with.

Supervisors will be responsible for enforcing operational compliance and reporting any breaches to the manager. Employees are responsible for day to day compliance with company environmental policy.

### Doc 1.2 1:0 EMERGENCY CONTINGENCIES

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
1.1	Staff or other personnel on site suffer injury, including infection with communicable disease, e.g. HIV, Hepatitis B and TB See also Section 2: Site considerations	Fatality, ill health, worsening of injury, worsening of condition, complications. Viral infection, psychological trauma	Work team/ client/general public	AFAG Safety Guide 401,402, 802: "A Guide to Good Climbing Practice", "Aerial Rescue Guidance Notes": HSE INDG317 "Chainsaws at work":		Appropriate First Aid Kit on site. Climbers carry personal First Aid Kit. All staff trained and certificated in First Aid. At least one of ground staff trained and certificated in Aerial Rescue. All staff know site location and means of contacting emergency services. Be aware. Items of concern should be carefully handled with protective gloves and disposed of correctly				
1.2	Fire/explosion	Burns/blast injuries	Work team/ client/general public	AFAG Safety Guide 301, 302, 401, 802: HSE HSG47 "Avoiding danger from underground services"		As above and fire extinguishers fitted in works vehicles: staff trained in their use				
1.3	Contact with energised power lines See also 2.2 Power lines – over and underground	Serious injury/ fatality. Third party electrocution.	Work team/ client/general public	AFAG Safety Guide 302, 401, 402, 802, 804: HSE HSG47 "Avoiding danger from underground services"		As above, and all staff trained. Emergency procedures known. Accurate assessment of situation. Means of contacting Regional Electricity Company is known to all staff				

## 1:0 EMERGENCY CONTINGENCIES (continued)

Completed by: Position: Date:

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
1.4	Emergency call-out work: night-time work. Poor weather conditions.	Cut/crush/ impact injury due to poor visibility/ unstable trees or structures/ other people/ vehicles on site.	Work team/ client/general public	AFAG Safety Guide 301, 302, 303, 304, 306, 307, 308, 310, 501, 802, 804: HSE INDG317 "Chainsaws at work", HSE HSG47 "Avoiding danger from underground services": NPTC CS 34, 35:		All operators trained and certificated. Co-ordination with emergency services, local authorities, utility company etc. Portable lighting on site. Unauthorised personnel excluded from work area: signs, barriers, etc. PPE.				

**RIDDOR Incident Contact Centre No: 0845 300 9923** 

### 2:0 SITE CONSIDERATIONS

#### 2.1 WORK SITE – Common Factors

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
a	Works vehicles	Personal injury from contact with sharp edges (doors, lockers, tailgates, etc.). Jump/fall from load bed, trailer, cab, etc. Crush injuries from tipper bed, trailer, unexpected movement, etc.	Work team/ client/general public	AFAG Safety Guide 403, 501, 502, 503, 603, 701, 702: routine preventative maintenance in accordance with internal procedures and manufacturers' recommendations		All operators trained. Vehicle manufacturers instruction manual available. All guards and warnings in place. Regular vehicle maintenance and servicing. Loading and securing of load in accordance with Department for Transport guidelines. Appropriate PPE, such as safety helmet, safety boots and suitable gloves.				

### 2:0 SITE CONSIDERATIONS

#### 2.1 WORK SITE – Common Factors – (continued)

Completed by:

Position:

Date:

Ref:	Hazard	Risk	Persons	Industry best	Date	Control measures	Adequate ? Y/N	Action	Ву	Completed
			involved	practice/guidance	Issued			Required	(date)	(date)
b	Theft of work	Serious injury/	User/abuser/	Internal procedures		Awareness training for all				
	equipment	fatality arising	mis-user/	designed to ensure		operators. Comply with				
	from works	from untrained	general	security of work	1   	all in-company security	1			
	vehicles.	use/abuse/ mis-	public/ work	equipment on site	   	instructions. Do not leave	1			
	Theft of	use of stolen	team/ client/		   	machinery running when	1			
	works	work equipment.	emergency		   	unattended; do not leave	1 1 1			
	vehicles,	Severe injury	services		   	ignition keys in	1			
	including	from contact	personnel		   	unattended vehicles or	1			
	trailed loads.	with stolen			   	idle plant such as				
		vehicle moving			   	brushwood chippers or				
		at speed.			1 1 1	stump grinders. Timing				
		Jump/fall from				of operations in sensitive				
		load bed, trailer,				areas (see also <b>2.6</b>				
		cab, etc. Crush			   	Working in				
		injuries from			   	sensitive/emotionally				
		tipper bed,				charged locality).				
		trailer,				Regular vehicle servicing				
		unexpected			   	and maintenance. All				
		movement, etc.				guards and warnings in				
					   	place. Loading and				
					1 1 1	securing of load in				
					1 1 1	accordance with				
					1 1 1	Department for Transport				
					1 1 1	guidelines.				
					1 1 1	-				
С	Use of hand	Cuts, muscular	Work team	AFAG Safety Guide	1 1 1	Edged tools guarded.	   			
	tools	strain		201, 302, 304, 307,	1 1 1	Safe stance/positioning.				
				401	1	Safe working distance				
					1 1 1	from colleagues. PPE.				
					1 1 1	č				

#### SITE CONSIDERATIONS 2:0

#### WORK SITE – Common Factors – (continued) 2.1

Completed by: Position: Date:

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
d	Access equipment:: Ladders, steps and temporary platforms See also 5.7 Mobile elevated work platform (MEWP)	Falling, injury from falling object, concussion, crushing	Work team/ client/general public	AFAG Safety Guide 401, "A Guide to Good Climbing Practice";		All staff fully trained and competent Ensure stability, especially on soft or uneven ground. Ladders should be secured at the top if used as a working platform, and operator independently secured. Follow manufacturer's safety instructions. Regular inspection of all access equipment.				
e	Powered tools and machinery	Cut injuries, crushing, electrocution, infection from hydraulic oil	Work team/ client/general public	Operator's certificates; AFAG Safety Guides 105, 203		All staff fully trained, with full access to machinery manuals and records. Manufacturers guidelines to be followed, as is guidance published by AFAG, HSE etc.				
f	Manual handling	Muscular strain/ back injury, crush injuries	Work team	HSE INDG317 "Chainsaws at work": AFAG Safety Guide 301, 302, 303, 304.		Avoid manual lifting where practicable: use mechanical aids. Move smaller pieces. Use hand aid tools. Use ergonomic work systems, work planning. PPE.				

## 2:0 SITE CONSIDERATIONS

#### 2.1 WORK SITE – Common Factors – (continued)

Ref:	Hazard	Risk	Persons involved	Industry best	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
	Weather:	Door visibility	Work team	practice/guidance	Issued	Change took Step work		Required	(date)	(date)
g	Extremes of	Poor visibility, loss of grip/	work learn	AFAG Safety Guide 302, 401, 802: "A		Change task. Stop work. PPE. Thermal blanket				
	temperature;	slipping,		Guide to Good		available.	1			
	wet, windy,	physiological		Climbing Practice"	1 1 1	available.				
	electrical	stress,		Olimbing Practice	1 1 1		1			
	storm	hypothermia,								
		electrocution								
h	Terrain	Slipping/ tripping	Work team/	AFAG Safety Guide	1 1 1	Prepare site. Change	r 1 1			
			client/general	302, 307, 401, 802.		task. Change access.				
			public			Appropriate footwear for				
						staff / tyres for vehicles				
i	Staff or other	Fatality, ill	Work team/	Health monitoring		Appropriate First Aid Kit				
	personnel on	health,	client/general	and surveillance		on site. All staff trained				
	site suffer	worsening of	public		1 1 1	and certificated in First	1 1 1			
	injury from	condition,			, ,	Aid. Site location and	   			
	communicable	complications.			1 1 1	means of contacting				
	disease, e.g.	Viral infection,				emergency services is				
	HIV,	psychological			1 1 1	known to all staff Treat	1 1 1			
	Hepatitis B,	trauma			, ,	all blood or body fluid as	   			
	ТВ					infected and take				
	See also					universal precautions i.e.				
	Section 1:				1 1 1	use of gloves, wash hands thoroughly, bag	1 1 1			
	Emergency				- - -	items carefully and seal				
	contingencie					bag. Be aware. Items of				
	S					concern should be				
					-	carefully handled with	1			
					, ,	latex gloves and disposed				
						of correctly.				

## 2:0 SITE CONSIDERATIONS

Completed by: Position: Date:

#### 2.1 WORK SITE – Common Factors – (continued)

Ref:	Hazard	Risk	Persons	Industry best	Date	Control measures	Adequate ? Y/N	Action	Ву	Completed
			involved	practice/guidance	Issued		£ T/IN	Required	(date)	(date)
j	Stings or	Transmitted	Work team/	Health monitoring		Identify any team member	1 1 1			
	bites	infections	client/	and surveillance		with specific allergy.				
		(bacterial or	general		1	Identify the animal / insect	1			
		viral)/ allergic	public			/ vegetation with the	1 1 1			
		reactions				potential to cause harm				
						and monitor position,	1			
						activity and movement	1 1 1			
					1 1 1	and treat with caution.				
						Where the risk of injury is	1			
					1 1 1	real then use the				
					1 1 1	appropriate PPE. First				
					1	Aid training. Guidance				
					1	published by AAIS, AA,				
						HSE etc. Programme				
						work for most appropriate				
						time/season.	   			
							1 1 1			

#### SITE CONSIDERATIONS 2:0

WORK SITE – Common Factors – (continued) 2.1

Completed by: Position: Date:

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
k	Needle stick injuries	Viral infection, psychological trauma	Work team/ client/ general public	Practice/guidance Health monitoring and surveillance	Issued	Identify sites with the potential to harbour discarded hypodermic syringes and treat with caution. Where the risk of injury is real then use "sharps" containers for the acceptable disposal of syringes. Under no circumstances shall syringes be re-sheathed		Required	(date)	(date)
						because of risk of needle stick injury. Appropriate PPE. Appropriate First Aid and post exposure treatment, counselling. Guidance published by AAIS, Arboricultural Association, HSE etc.				

## 2:0 SITE CONSIDERATIONS

#### 2.1 WORK SITE – Common Factors – (continued)

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
1	Deer tick bites	Lyme disease, infection from the bacteria carried by deer ticks, irritation of areas affected by ticks	Work team/ client/ general public: most likely from May to October	Reporting of any ill health. Operatives at risk should maintain regular health checks. "Tick bites and Lyme disease", Kingston and Richmond & Twickenham PCT		Where deer are believed to be present wear long trousers tucked into socks, long sleeves buttoned at wrist and tucked in at waist during May – October		nequireu	(uate)	(uate)
m	Salmonella	Fatality, ill health	Work team/ client/ general public	Reporting of any ill health. Operatives at risk should maintain regular health checks		Be aware, wear gloves. Wash hands thoroughly before eating, smoking etc				
n	Tetanus	Fatality, ill health	Work team/ client/ general public	Regular booster injections. Reporting of any ill health. Operatives at risk should maintain regular health checks		Keep anti-tetanus injections up to date.				
0	Dog and cat faeces: Toxicara	Toxocariasis: Loss of sight, ill health	Work team/ client/ general public	Health monitoring and surveillance		Be aware, wear gloves. Wash hands thoroughly before eating, smoking etc				

## 2:0 SITE CONSIDERATIONS

Completed by: Position: Date:

#### 2.1 WORK SITE – Common Factors – (continued)

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
р	Weils Disease (Leptospirosi s) – transmitted to humans by contact with urine from infected rats	Fatality, ill- health	Anyone who is exposed to rats, rat or cattle urine: those in contact with canal and river water are also at risk	Reporting of any ill health. Operatives at risk should maintain regular health checks. HSE INDG84 Leptospirosis – are you at risk?		Wear protective clothing. Cover all cuts and broken skin with waterproof plasters before and during work. Wash hands after handling contaminated clothing or other materials and always before eating, drinking or smoking. See local Public Health Laboratory Service or hospital consultant microbiologist for advice and serological testing				

## 2:0 SITE CONSIDERATIONS

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
2.2	Power lines – over and underground	Electrocution, contact with live lines	Work team/ client/general public	AFAG Safety Guide 401, 804; HSE HSG47 "Avoiding danger from underground services". NPTC suite of certificates of competence in Utility Arboriculutre (if working within vicinity zones)	-	All staff trained. Observe safe working distances: No work within 15 m of any overhead power line without contacting Regional Electricity Company supplier (REC). If working within vicinity zone, follow instructions and procedures of REC. Shut down power.				
2.3	Other utility wayleaves (e.g: Telephone lines, gas mains, water or sewage pipes)	Rupturing gas/ water/ telecomm supplies: explosions, flooding loss of communication ability, loss of data	Work team/ client/general public	AFAG Safety Guide 401: HSE HSG47 "Avoiding danger from underground services":		Establish existence / position of wayleaves: Utilities' site plans; CAT scanner used by trained operator. Avoid excavation or excavate only using hand tools; Avoid significant ground impact from falling timber; Avoid contact with overhead telecomm lines.				

## 2:0 SITE CONSIDERATIONS

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Reguired	By (date)	Completed (date)
2.4	Buildings or other obstructions	Trees/parts of trees in contact with building or obstruction	Work team/ client/general public	AFAG Safety Guide 302, 307, 310, 401: NPTC Certificates of Competence: CS31, 32, 33, 41, 44		Work planning. All staff trained and certificated in felling and dismantling operations. Buildings evacuated as necessary.				,
2.5	Working near roads/ footpaths/ public areas	Trees/parts of trees hitting passing traffic/ pedestrians. Workers struck by passing traffic	Work team/ client/general public	AFAG Safety Guide 401: Department for Transport Approved Code of Practice "Safety at street works and road works" to support NRSWA.		All staff trained to appropriate level. AT least one certificated operator on site on public roads. Adequate staff on site to maintain traffic control. Use of "Hi-viz" clothing/PPE. Public excluded from work area: signs, barriers, tape.				
2.6	Working in sensitive/ emotionally charged locality	Offending or alienating the general public. Work team becoming the victim of verbal or physical abuse	Work team/ client/general public/local special interest group/anti- social element of local community	In-company code of practice / instruction.		Use of hand tools where possible for pruning works; clear work site: Take brash off-site without chipping to reduce the risk that noise may cause nuisance and/or signal the presence of the work team. Refer situation to supervisor/ team leader/manager/client. Seek to calm the tensions. Guide and educate the general public.				

## 3:0 ENVIRONMENTAL CONSIDERATIONS

Ref:	Hazard	Risk	Persons involved	Industry best practice/quidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
3.1	Mineral oil/ herbicides/ pesticides in or near watercouses. Tree work adjacesnt to watercourses	Pollution threat to aquatic life forms, be they plant or animal Sawdust, chippings, brushwood, timber causing blockage to watercourse	involved Work team, client, general public	practice/guidanceBS 3998:1989"Recommendationsfor Tree Work", BS5837: 1991 "Guidefor trees in relationto construction".ForestryCommission:"Forests and waterguidelines"Countryside andRights of Way Act2000EC Directive2000/60/EC WaterFrameworkDirective	Issued	All staff to receive training. Refuelling of vehicles, plant and equipment to be carried out away from watercourses. No mixing and decanting of pesticides and herbicides or other chemicals in the vicinity of a watercourse. Gain Environment Agency licence for herbicide application within 20m of a watercourse. Ensure watercourses and banks are kept clear of arisings from tree work		Required	(date)	(date)

## **3:0 ENVIRONMENTAL CONSIDERATIONS**

Ref:	Hazard	Risk	Persons	Industry best	Date	Control measures	Adequate ? Y/N	Action	Ву	Completed
			involved	practice/guidance	Issued			Required	(date)	(date)
3.2	Proposed work	Damage to	Work team,	Wildlife and Countryside Act		Experienced surveyor to carry out visual check				
	adjacent to	protected species or	client,	1981 as amended.	i i	before works commence.				
	,	habitat:	general	EC Directive on the	i .					
	protected		public	Conservation of		If protected species				
	species / habitat	Damage to		Wild Birds 1979	1	present either:				
	napitat	badger setts and so			1	<ul> <li>delay works until</li> </ul>				
				(79/409/EEC). EC Directive on		animal moves off				
		community of		Conservation of		of its own accord				
		badgers.		Natural Habitats		(e.g. otter, snake				
		Disturbance to				etc.). or				
		Disturbance to		and Wild Flora and Fauna 1992		delay works until a				
		nesting or				non-critical				
		roosting places.		(92/43/EEC).		season – out of				
		Disturbance to		EC Directive 2000/60/EC Water		nesting,breeding				
		habitat.		Framework	1	or migration				
		nabilal.		Directive.		season, or				
					1	<ul> <li>change scope of</li> </ul>				
				Badger Act 1981. The Deer Act 1991.	1	works to avoid				
				The Protection of		disturbance of				
					1	habitat, or				
				Badgers Act 1992.		<ul> <li>obtain relevant</li> </ul>				
				Countryside and	1	licence from				
				Rights of Way Act 2000.		English Nature				
				English Nature "Bat	į	(badger sett, bats,				
				mitigation	i .	crayfish,				
				guidelines" 2004.	1	watervoles).				
				Arboricultural	1	as appropriate for the				
				Association		species or habitat present.				
				Guidance Note 1	1					
					-	Groundworks within 50 m				
				"Trees and Bats"		of an active badger sett				
				2003	1	will require a license from				
						English Nature.				

## 3:0 ENVIRONMENTAL CONSIDERATIONS

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
3.3	Excessive noise or noise at inappropriate times. Excessive dust.	Loss of enjoyment of property through noise or dust.	Work team, client, general public	Noise at Work Regulations 1989		Only use correctly maintained and silenced vehicles, plant and equipment. Unless emergency work, limit working hours to 8:00 to 18:00 Monday to Friday. Site chipping equipment to avoid wind blowing debris onto private property.				

### 4:0 OPERATIONS

#### 4:1 CHAIN SAWS – Common Factors

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
а	Fuelling	Fire/explosion: burns/blast injuries	Work team/ client/general public	HSE INDG317 "Chainsaws at work": AFAG Safety Guide 301, 308; NPTC CS30.1		All operators trained and competent. Shaded fuelling site. Safe distance from any ignition source. Correct sealed containers. Saw fuel caps replaced securely.				
b	Maintenance: chain / bar	Cuts from chain / bar / hand tools	Work team	HSE INDG317 "Chainsaws at work": AFAG Safety Guide 301; NPTC CS30.1		Avoid bare hand contact with chain and bar. Ensure files have handles. PPE.				
С	Noise	Deafness	Saw operator/ work team	HSE INDG317 "Chainsaws at work": AFAG Safety Guide 301, 801; NPTC CS30.2		Correct saw maintenance (exhaust baffles, chain and bar). Hearing protectors. PPE				

### 4:0 OPERATIONS

#### 4:1 CHAIN SAWS – Common Factors - continued

Ref:	Hazard	Risk	Persons	Industry best	Date	Control measures	Adequate ? Y/N	Action	By	Completed
d	Vibration	Vibration- induced White Finger (VWF), Hand Arm Vibration Syndrome (HAVS)	involved Saw operator, and particularly operators of large chainsaws	practice/guidance HS (G) 88 "Guide to Hand Arm Vibration": INDG317 "Chainsaws at work"; HSE 246/31 "Reducing Risks of HAV Injury From Hand Held Power Tools"; AFAG Safety Guide 301;	Issued	Select appropriate equipment, monitor and carefully regulate exposure times against published data. Correct maintenance for A/V systems, chain and bar. Gloves worn. PPE. Use of lorry-mounted crane to reduce the need to cut large diameter or long	? Y/N	Required	(date)	(date)
e	Poor handling	Muscular strain/ long-term injury	Saw operator	NPTC CS30.2 HSE INDG317 "Chainsaws at work": AFAG Safety Guide 301, 302, 303, 304; NPTC CS30 - 45		All operators trained and competent. Use of ergonomic work systems. Work planning.				
f	Contact with moving chain/ kickback	Cut injuries / laceration	Saw operator	HSE INDG317 "Chainsaws at work": AFAG Safety Guide 301, 302, 303, 304, 306, 307, 308. Appropriate level of chainsaw competence as per NPTC CS units 30 to 45.		All operators trained and competent. Saw safety features fitted and working. Correct bar and chain maintenance. PPE				

### 4:0 OPERATIONS

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#### 4:2 TREE CLIMBING – Common Factors

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
a	Weak tree structure. See also 5.4 Mobile Elevating Work Platform	Failure of climber's anchor point, climber falls from tree, limbs fall on climber/ ground crew	Climber/ ground crew	AFAG Safety Guide 401, 403: "A Guide to Good Climbing Practice; NPTC CS38; HSE Research Report 123 Use and effectiveness of mobile elevating work platforms for tree work		All operators trained and certificated. Assessment of anchor points and tree. Ensure strength of anchor points. Use of supplementary anchor points. Avoid climbing: Consider the use of a Mobile Elevating Work Platform (MEWP) as means of access and/or as working platform.				
b	Equipment failure	Climber falls from or within tree: major or minor contact injuries	Climber/ ground crew	AFAG Safety Guide 401: "A Guide to Good Climbing Practice", NPTC CS38. HSE AIS 30: "LOLER: How the Regulations apply to Arboriculture"		Daily checks of equipment. Worn/damaged equipment withdrawn from service. Thorough Examination of Lifting Equipment (PPE climbing equipment every 6 months)				
С	Poor climbing technique: Free climbing, unprotected position, loss of balance	Climber falls from, or within, tree: major or minor contact injuries	Climber/ ground crew	AFAG Safety Guide 401, "A Guide to Good Climbing Practice", NPTC CS38		All operators trained and certificated. Use of correct equipment and procedures. PPE.				

### 4:0 OPERATIONS

#### 4:2 TREE CLIMBING – Common Factors - continued

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
d	Falling objects: equipment, tools, branches	Injury to persons and /or property below	Work team/ client/general public	AFAG Safety Guide 401, "A Guide to Good Climbing Practice"; NPTC CS38, 39, 40, 41, 45		All operators trained and certificated. Correct use of tools, equipment and tool strops. Identified hazard areas. Communication procedures.				
e	Awkward movements when working in tree	Muscular strain, back injury	Climber	AFAG Safety Guide 401: "A Guide to Good Climbing Practice": "Aerial Rescue Guidance Notes": NPTC CS38, 39.		All operators trained; Planned work programme. Ergonomic climbing techniques, and routing of ropes to achieve best working positions. Use of supplementary anchors.				

### 4:0 OPERATIONS

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#### 4:3 CHAIN SAW IN TREE – Common Factors

Ref:	Hazard	Risk	Persons	Industry best	Date	Control measures	Adequate ? Y/N	Action	Ву	Completed
			involved	practice/guidance	Issued		,	Required	(date)	(date)
a	Top-handled saw use by climber	Kickback, cut injury / laceration. Cutting climbing rope causing fall injury / fatality	Saw operator/ ground crew	HSE INDG317 "Chainsaws at work": HSE CRR 402/2001 "Safe working methods with top-handled chainsaws"; AFAG Safety Guide 301, 308, 401; "A Guide to Good Climbing Practice"; NPTC CS30, 38, 39, 40 41		All operators trained and certificated. Top handled saws used only in tree (apart from warm-up). Operator in correct position. Ropes kept in safe position. Use of supplementary anchor. Use of cut-proof strop if applicable. Chain brake applied before and after cutting. Two-handed use wherever possible, never "cut and hold". PPE.				
b	Passing saw to or from climber	Saw falling on ground staff. Rope damage	Saw operator/ ground crew	HSE INDG317 "Chainsaws at work": HSE CRR 402/2001 Safe working methods with top-handled chainsaws: AFAG Safety Guide 308, 401: "A Guide to Good Climbing Practice": NPTC CS30, 38, 39, 40, 41, 45.		All operators trained and certificated. Good communication. Correct methods of attaching/ securing saw. Use of tool line if appropriate. PPE.				

### 4:0 OPERATIONS

#### 4:3 CHAIN SAW IN TREE – Common Factors

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
С	Large saw use. See also <b>4.1</b> d Vibration	Kickback, cut injury / laceration, Vibration. Muscular strain, back injury. Cutting climbing rope/strop leading to slip or fall injury / fatality	Saw operator/ ground crew	HSE INDG317 "Chainsaws at work": AFAG Safety Guide 301, 401: "A Guide to Good Climbing Practice": NPTC CS30, 39, 41, 45.		All operators trained and certificated. Saw is appropriate to task. Saw supported centrally on harness or on tool line if appropriate. Operator in correct position. Ropes kept in safe position. Use of supplementary anchor. Use of cut-proof stop if applicable. Chain brake applied before and after cutting. Two-handed use at all times. PPE.				

## 4:0 OPERATIONS

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
4.4	Branch removal	Cuts, impact/ crush injuries,	Climber, ground crew, client/general public	HSE INDG317 "Chainsaws at work": AFAG Safety Guide 301, 401, 403, 308: "A Guide to Good Climbing Practice": NPTC CS30, 38, 39, 40, 41		All operators trained and certificated. Correct climber position. Accurate severing cuts. Team communication. Work equipment, plant and machinery stored securely at suitable distance from tree. PPE. Client / General public excluded form work area				
4.5	Use of lowering equipment.	System failure, impact/crush injuries. Rope friction burns	Climber/ ground crew/	AFAG Safety Guide 301, 308, 401,403: "A Guide to Good Climbing Practice": NPTC CS38, 39, 40,41. HSE AIS 30: "LOLER: How the Regulations apply to Arboriculture"		All operators trained and certificated. Equipment inspected regularly by a competent person. Thorough Examination of Lifting Equipment (lowering equipment every 12 months). Correct routing of ropes. Appropriate position and strength of anchor points, pulleys, etc. Working within Safe Working Load. Team communication.				

## 4:0 OPERATIONS

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
4.6	Tree felling	Impact/crush injuries	Work team/ client/general public	HSE INDG317 "Chainsaws at work": AFAG Safety Guide 301, 302, 303, 304, 306, 307, 310, 501; NPTC CS30, 31, 32, 33, 44.		All operators trained and certificated. Safe working distances. Escape routes maintained. Accuracy of cuts. Use of felling aids. PPE.				
4.7	Delimbing and cross cutting.	Chainsaw injury: Kickback, cut injury/ laceration. Impact/crush injury.	Work team/ client	HSE INDG317 "Chainsaws at work": AFAG Safety Guide 301, 303, 304. NPTC CS30, 31, 32, 33		All operators trained and certificated. Work planning. Safe working distances. Escape routes maintained. PPE				
4.8	Storm damaged trees: Extreme tension.	Chainsaw injury: Kickback, cut injury/ laceration. Impact/crush injury.	Work team/ client/ emergency services personnel	AFAG Safety Guide 302, 304, 306, 310; NPTC CS31, 32, 34, 35		All operators trained and certificated. Work planning. Safe working distances. Escape routes maintained. Correct assessment of tension and compression. Safe use of winch. PPE				

## 4:0 OPERATIONS

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
4.9	Chemical spraying.	Contamination, poisoning.	Operator/ work team/ client/general public	AFAG Safety Guide 102, 202; NPTC PA1, PA2, PA6		All operators trained and certificated. Choice of application method. Safe and secure storage. Operation in accordance with COSHH assessment. Data information available. Accurate calibration and mixing. PPE. Washing facilities. Correct disposal of waste. Medical surveillance.				

## 5.0 MACHINERY

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
5.1	Brushwood chippers	Cuts, noise (deafness), limb injury, eye injury.	Operator/ work team/ client/general public.	AFAG Safety Guide 604: HSE Agricultural Information Sheet 38: "Power-fed mobile wood chippers: Operator protection at infeed chutes"; NPTC Certificate of Competence in Brushwood Chipper Operations		All operators trained. Manufacturers instruction manual available. All guards and warnings in place. Regular machine maintenance. Safe fuelling and storage of fuel. Unauthorised personnel excluded from work area: signs, barriers, etc. PPE.				
5.2	Stump grinders	Cuts, noise (deafness) injury from flying debris. Injury from contact with cutter wheel or contact with underground services	Operator/ work team/ client/general public.	AFAG Safety Guide 606: HSE HSG47 "Avoiding danger from underground services": NPTC Certificate of Competence in Stump Grinding Operations		All operators trained. Manufacturers instruction manual available. All guards and warnings in place. Regular machine maintenance. Safe fuelling and storage of fuel Adequate barriers for flying debris. Unauthorised personnel excluded from work area: signs, barriers, etc. PPE.				

## 5.0 MACHINERY

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
5.3	Winches – hand or mechanical	Injuries from: failure of equipment, whiplash, and worn cables.	Operator/ work team/ client/general public.	AFAG Safety Guide 310, 502: HSE AS15 "Farm and estate forestry operations": NPTC CS30-35:		All operators trained. Regular machine maintenance. Equipment inspected regularly by a competent person. Thorough Examination of Lifting Equipment (every 12 months). SWL known: all strops, shackles and cables to SWL minimum. PPE.				
5.4	Brushcutters / Clearing saws	Cuts, noise (deafness) injury from flying debris. Injury from contact with cutting head / blade	Operator/ work team/ client/general public.	AFAG Safety Guide 203; NPTC Certificate of Competence in Brushcutting Operations		All operators trained. Regular machine maintenance. Safe fuelling and storage of fuel Correct fitting of harness. Unauthorised personnel excluded from work area: signs, barriers, etc. PPE.				
5.5	Hedge- trimmers (See also: 2.1 d: Access equipment)	Cuts, noise (deafness) Injury from contact with cutting knives	Operator/ work team/ client/general public.	Manufacturer's operator manual. NPTC AO 11: "Specialist pruning"		All operators trained. Regular machine maintenance. Safe fuelling and storage of fuel. Unauthorised personnel excluded from work area: signs, barriers, etc. PPE.				

## 5.0 MACHINERY

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
5.6	Mechanised pole pruner	Cuts, noise (deafness); Injury from contact with chain, severed sections falling on operator / others	Operator/ work team/ client/general public.	Manufacturer's operator manual. NPTC CS 48: "Mechanised pole pruner"		All operators trained. Regular machine maintenance. Safe fuelling and storage of fuel. Observe working height / angle limits. Unauthorised personnel excluded from work area: signs, barriers, etc. PPE.				
5.7	Mobile elevated work platform (MEWP)	Injuries from: Operator falling from MEWP. MEWP falling over. Equipment failure. MEWP colliding with power lines/ vehicles/other structures	Operator/ work team/ client/general public.	AFAG Safety Guide 403; NPTC Certificate of Competence in Mobile Elevated Work Platforms. HSE Research Report 123: "Use and effectiveness of mobile elevating work platforms for tree work", HSE information sheet MISC 614: "Preventing falls from boom-type mobile elevating work platforms"		All operators trained and certificated. Manufacturers instruction manual available. Regular machine maintenance. Regular inspection by a competent person. Thorough Examination of Lifting Equipment (every 12 months) Appropriate work restraint / fall arrest system used. SWL clearly marked and observed. Safe positioning in accordance with manufacturer's recommendations. Safe working area clearly defined. No work within power line exclusion zone. PPE.				

## 5.0 MACHINERY

Ref:	Hazard	Risk	Persons involved	Industry best practice/guidance	Date Issued	Control measures	Adequate ? Y/N	Action Required	By (date)	Completed (date)
5.8	Cranes	Equipment failure. Crush injuries from falling or swinging material. Working from hook/basket. Contact with power lines.	Operator/ work team/ client/general public.	AFAG Safety Guide 504:		All operators trained. Trained crane operator conversant with tree work. All guards and warnings in place. Regular machine maintenance. Unauthorised personnel excluded from work area: signs, barriers, etc. Team communication. Agreed work plan. PPE. Insurance covering any hire agreement is adequate.				
5.9	Lorry mounted hydraulic loading arm, e.g. HIAB	Equipment failure. Crush injuries from falling or swinging material. Working from hook/basket. Contact with power lines	Operator/ work team/ client/general public.	Manufacturer's instruction manual		All operators trained and conversant with tree work. All guards and warnings in place. Regular machine maintenance. Unauthorised personnel excluded from work area: signs, barriers, etc. Team communication. Agreed work plan. PPE. Insurance covering any hire agreement is adequate.				