

#### **KINGS PARK PROPERTY LTD**

### **ENVIRONMENTAL PROTECTION NOTES 11.12.23**

#### ON BEHALF OF:

#### **MR RICHARDSON & MRS RICHARDSON BREU**

Kings Park Kings Close Isington Road Alton Hampshire GU34 4PP

#### TO BE READ IN CONJUCTION WITH DRAWINGS: KP01 340 KP01 341 KP01 342

Chris Beardshaw Ltd www.chrisbeardshaw.com office@chrisbeardshaw.com 07721 450 355

Coves Barn, Jackbarrow Road, Winstone, Cirencester, Gloucestershire GL7 7JZ VAT No: 770 999 666 | Registered Address: Staverton Court, Staverton Road, Cheltenham, Gloucestershire GL51 0UX | Company No: 04160497



#### **CONTENTS**

1.0 Tree Protection Notes:				
1.1 Trees affected by Construction and other Tree Works2				
1.2 Arboricultural Method Statement & Tree Protection2				
1.3 Levels				
1.4 Cranes, plant and machinery – general provisions3				
1.5 Services4				
1.6 Hard Surface Types & Construction within the Root Protection Area4				
1.7 Hard Surface Types & Construction within the Root Protection Area4				
1.8 Site Management and Supervision5				
2.0 Bird Habitat9				
2.1 Construction Phase9				
2.2 Operational Phase10				
2.3 Terrestrial Wildlife Habitat				
2.4 Pre-construction				
2.2 Construction Phase11				
2.3 Operational Phase11				
3.0 Soil / Spoil Strip, Stowage and Management11				
3.1 Stripping Topsoil				
3.2 Stripping subsoil12				
3.3 Soil stockpiling13				

Appendix : Drawings KP01 340; KP01 341; KP01 342 (Reduced scale)



#### **1.0 TREE PROTECTION NOTES:**

#### **1.1 TREES AFFECTED BY CONSTRUCTION AND OTHER TREE WORKS**

Tree surgery is required before the protective fencing is to be erected on site. The fencing must be fit for purpose and in full accordance with the requirements of BS 5837:2012 and positioned as shown on the drawings.

The Tree Protection Fence will create a Construction Exclusion Zone (CEZ) and this is shown as hatching on the accompanying Environmental Protection Plan.

#### **1.2 ARBORICULTURAL METHOD STATEMENT & TREE PROTECTION**

#### 1.2.1 Securing of Tree Structure and Root Protection Areas (RPA)

All the remaining trees on site will be protected using stout barrier fencing that is erected in the position indicated on the Tree Protection / Environmental Protection Plan. This fencing will be in accordance with the requirements of BS 5837:2012 for Tree protection and / or Orange Safety Barrier fence for open / less vulnerable areas as indicated in Environmental Protection Plan, including any necessary ground protection. Fences will be erected at earliest instruction on the site, therefore ensuring the maximum protection of site resources. All fencing, which must have all weather notices attached stating 'Construction Exclusion Zone – No Access' Tree Protection Warning Sign. This area will be regarded as sacrosanct and, once erected, will not be removed, or altered without prior consent.

## 1.2.3 On Site Storage of Spoil, Building Materials and Mixing and use of concrete around trees

Prior to and during all construction works on site, no spoil or construction materials will be stored within the CEZ. This is to eliminate any damage occurring to any of the protected trees including compaction of the tree roots. Details of the RPA for each tree are outlined in the drawings. Any encroachment within this protected area will only be with the prior agreement of the Designer; damages caused to on site resources / assets will be claimed.

Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The volume of the bund compound shall be at least equivalent to the capacity of the tank plus 10%. If there are multiple tankages, the compound shall be at least equivalent to the capacity of the largest tank, or the combined capacity of interconnected tanks, plus 10%. All filling points, vents, gauges, and sight glasses shall be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land, or underground strata. Associated pipework shall be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets shall be detailed to discharge downwards into the bund.

Chris Beardshaw Ltd www.chrisbeardshaw.com office@chrisbeardshaw.com 07721 450 355



All material storage facilities and work areas must consider the effects of topography, sloping ground, drains and ditches on the movement of potentially harmful liquid spillages towards or into protected areas. Harmful products included all cementitious, paints, solvents, fuels, oils dust, residue etc or any other material, (including water used for wash / cleaning) must be appropriately contained, used and disposed of with no residue finding its way into any of the site soils including specifically the CEZ an RPA's.

Mixing and use of concrete around trees - concrete or cementitious (mortar, cement, slurry) washout wastewater is caustic and considered to be corrosive with a pH over 12, these are toxic to trees. It is important that protection is provided to prevent these contaminants encountering exposed roots, so limiting the potential for harm.

It is therefore recommended that an impermeable membrane such as heavy-grade polythene sheeting is available when these construction materials are used during the build.

If space is limited, then the mixing will need to be carried out in a bunded area to contain any spillages and runoff. A proprietary mixing tray would suffice where only small quantities are required but mixing of larger quantities (e.g. requiring a mechanical mixer) would require more substantial protection, constructed out of timber sheeting and edged 200mm boards, covered in heavy-grade polythene sheeting.

Should piling be required, then prior to pouring, all pile holes will be lined with heavy-grade polythene sheeting to prevent the leaching of concrete into the surrounding soil and contamination of roots.

#### 1.3 LEVELS

There are areas of the site where there are proposed alterations to soil levels within the RPA of retained trees. Details of the alterations in soil levels, showing elevations and construction methods are indicated on construction drawings.

#### **1.4 CRANES, PLANT AND MACHINERY – GENERAL PROVISIONS**

Contractors' plant used during the build and break-down periods should only be of appropriate size for the operations they are required for, and not larger than is necessary. For excavators, a maximum weight limit of 7.5 tonnes will apply. Metal tracked equipment of any type is not permitted on site. Wheeled plant or vehicles must be fitted with grassland tyres; lugged tyres can be used on tarmac / granular roads and temporary roadway sections only.

Cranes and legged plant used should only be of the appropriate size for the operations they are required for, and not larger than is necessary. If, when in their working positions, crane or vehicle outriggers or stabilisers project beyond the edges of existing or temporary roadways onto unprotected ground within RPAs, the ground beneath their stabiliser pads must be protected by a minimum of two standard (i.e. 8' X 4') sheets of 20mm exterior grade plywood per stabiliser pad.

Coves Barn, Jackbarrow Road, Winstone, Cirencester, Gloucestershire GL7 7JZ

VAT No: 770 999 666 | Registered Address: Staverton Court, Staverton Road, Cheltenham, Gloucestershire GL51 0UX | Company No: 04160497



#### **1.5 SERVICES**

At the detailed design stage and subject to planning consent being obtained, proposed underground services will either utilise existing service routes where possible, or will be located outside the RPAs of trees shown retained.

If any existing services within RPAs require upgrading, care shall be taken to minimise disturbance and where practicable, trenchless techniques employed; only as a last resort should open excavations be considered. Where existing services within RPAs are deemed not satisfactory for any further use they should be left in situ rather than being excavated or removed.

If incursions into RPAs are unavoidable, any new installation will comply with the methods and guidelines detailed in the National Joint Utilities Group publication NJUG 4, Guidelines for the Planning, installation and Maintenance of Utility Apparatus in Proximity to Trees.

The locations of proposed service routes will be approved by the Landscape Designer, where necessary in liaison with Arboriculture consultants, and shown on revised plans.

All routes for overhead services will avoid any trees.

All service providers (Statutory Authorities) must be consulted prior to commencement of works with the aim of minimizing the number of service runs on the site.

#### 1.6 HARD SURFACE TYPES & CONSTRUCTION WITHIN THE ROOT PROTECTION AREA

No construction of footpaths, driveways, non-adoptable roads, and other hard surfaces are to be undertaken within the RPA of any remaining trees as calculated in accordance with BS 5837:2012 other than those detailed.

#### 1.7 HARD SURFACE TYPES & CONSTRUCTION WITHIN THE ROOT PROTECTION AREA

No construction of footpaths, driveways, non-adoptable roads and other hard surfaces are to be undertaken within the RPA of any remaining trees as calculated in accordance with BS 5837:2012 other than those detailed.

If new boundary fencing is to be erected within the RPA of any retained trees, it is proposed that the fence posts will be secured using "Met-Posts" or similar design in order to keep the disturbance and damage of the tree roots to a minimum.

Chris Beardshaw Ltd	www.chrisbeardshaw.com	office@chrisbeardshaw.com	07721 450 355
Coves Barn,	Jackbarrow Road, Winstone	, Cirencester, Gloucestershire	GL7 7JZ



#### **1.8 SITE MANAGEMENT AND SUPERVISION**

*Pre-commencement site meeting:* Before any site works, including site clearance begin, a site meeting between the Site Manager and the Project Arboriculturalist & / or Landscape Designer will be held. The purpose of the meeting will be to discuss tree protection measures detailed in this document and agree the monitoring and/or supervision arrangements between the Designer and the developer using the Site Monitoring and Supervision Schedule.

Site management: It is the responsibility of the main contractor to ensure that the details of here documented are known, understood, and followed by all site personnel. As part of the site induction, all site personnel who could have an impact on trees, should be briefed on specific tree protection requirements. Copies of the report and plans should be always available on site.

*Site monitoring and supervision:* Once the protective fencing and ground boarding (if required) have been erected, the Designer or Project Arboriculturalist will visit the site and inspect these tree protection measures. If the specification or location of these items does not comply with this method statement, adjustments will be made.





Default specification for protective barrier

Coves Barn, Jackbarrow Road, Winstone, Cirencester, Gloucestershire GL7 7JZ VAT No: 770 999 666 | Registered Address: Staverton Court, Staverton Road, Cheltenham, Gloucestershire GLS1 0UX | Company No: 04160497





a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray





# TREE PROTECTION AREA

## **KEEP OUT!**

(TOWN & COUNTRY PLANNING ACT 1990) TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECT OF A TREE PRESERVATION ORDER. CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY



#### **2.0 BIRD HABITAT**

Suitable breeding habitat is present on site; however, this is similar to habitat present abundantly throughout the Site & surrounding area. The bird species within the area are likely to be quite variable.

The proposed development is not expected to negatively affect bird species as abundant suitable habitat is present in adjoining and nearby areas.

Birds can potentially be affected by the following activities that would be completed on for the Project area: habitat removal, noise from construction activities in the Project area and in the surrounding undeveloped land, attraction to cleared areas of stockpiled areas and accidental spills.

#### **2.1 CONSTRUCTION PHASE**

To ensure that breeding birds are not disrupted, vegetation clearing will be completed outside of the typical bird-breeding season (March 1<sup>st</sup> to 1<sup>st</sup> September). The areas to be cleared will be clearly marked to prevent unnecessary clearing. In the event that vegetation clearing must take place within the bird-breeding season anon-intrusive nesting survey of the Project area will be conducted by a bird expert. If a nesting bird species is encountered, contact with and disturbance of the species and its habitat will be avoided. A vegetated buffer will be established around any nests encountered to protect them from disturbance and work in that area will be avoided until after the birds have fledged or vacated.

Hedge / coppice clearing will initially (October to February) entail only the felling, to 60cm from ground level, the stems and trunks of those plants marked for removal; Arisings will be removed from site and not stored in location. Root and under canopy clearance and associated groundworks will be completed outside of reptile, amphibian, and mammal hibernation periods (April to September)

Additionally, some bird species will nest in unattended/ un-vegetated soil piles. If soil piles are to be left unattended/un-vegetated, the piles will be covered to avoid potential nesting. If a nesting bird is discovered, the nest site will be protected with silt fencing and a buffer until the bird has vacated the nest, as determined by a bird expert.

Areas of ground within the development area will be maintained as gravel or close mown grass cover to reduce attractiveness as a bird habitat.

Inspection of the hedge and vegetation to be removed shows that no trees of greater than 20cm dia 1m above ground are required to be felled and no trees with cavities that might offer habitat voids for birds will be felled.

To mitigate noise impacts during construction all equipment will be kept in good working order and maintained regularly. Additionally, machinery will be muffled, if possible, to further reduce noise impacts.



#### **2.2 OPERATIONAL PHASE**

Based on minimization of impacts and the proposed mitigation measures detailed above, the potential residual effects are considered low however they will remain under constant review for the duration of the works with appropriate protection measures adhered to.

#### 2.3 TERRESTRIAL WILDLIFE HABITAT

The clearing of vegetation and site work during construction will affect modest areas of wildlife habitat. It is considered that minimal risk results in habitat fragmentation or disruption of wildlife. Additionally, similar habitat types are present in the surrounding undeveloped areas to the south, east and west of the Project.

It is not anticipated that the proposed development will result in the draining of ponds or the relocation of water courses or wetland habitat.

#### 2.4 PRE-CONSTRUCTION

Exclusion zone - An exclusion zone to protect hedgerows, trees and waterbodies is required throughout the development period following BS guidance 5837:2012 and Orange Site Safety Fence as detailed on Environmental Protection Plan and should be put in place prior to the onset of works.

A Temporary Amphibian/Reptile Fence (TAF) will be installed along the northern site boundary and will enclose the wetland footprint of the site and isolate this from any working compound areas.

The TAF will also include three 10m stretches of outward facing drops of 45° at certain points along the boundaries. This will ensure that the site will be able to self-clear of any remaining reptiles/amphibians, which in turn will return them to more favourable habitat.

The TAF is to be maintained in good condition throughout the development works. Fence maintenance should be reviewed during the tool box talk.

Upon completion of the development the TAF shall be removed at a suitable time of year, avoiding the hibernation period, and the fence line shall be searched by an Ecologist during removal.

Any reptile found during development site clearance shall be carefully relocated to the rough grassland outside of the site.

In the unlikely event that Great crested newt (Triturus cristatus) is / are found or suspected, all works will cease immediately and advice from suitably qualified ecologist sought.



#### **2.2 CONSTRUCTION PHASE**

The construction area will be clearly marked to prevent impacts on wildlife in adjacent areas.

To ensure hibernating and resident terrestrial wildlife comprising but not exclusively badgers, reptiles, amphibians including greater crested newts, invertebrates and water voles are not disrupted by the construction works the timing of ground operations will be strictly limited to non-sensitive seasonal periods. No disturbance of ground or hedge and tree root zone and associated vegetation likely to be hibernation habitat will be permitted between October 31<sup>st</sup> and 1<sup>st</sup> March.

Earthworks, ground clearance and scrub / debris removal will be timed to take place between  $1^{st}$  March and  $30^{th}$  October.

In the event of terrestrial wildlife such as greater crested newts being encountered the localised site will be protected and appropriate ecological advice sought prior to re commencement of any works.

Areas of ground within the development area will be maintained as gravel or close mown grass cover (150mm max height) to reduce attractiveness as a terrestrial wildlife habitat.

No person will approach wildlife encountered on the site.

To mitigate noise impacts during construction all equipment will be kept in good working order and maintained regularly. Additionally, machinery will be muffled, if possible, to further reduce noise impacts.

A tool box talk is required to be given to all Contractors working on the site, to inform personnel of the potential presence of protected wildlife within the local area. The tool box talk will include; identification of all protected species likely to be in the area, and what to do should a species be found during works.

#### 2.3 OPERATIONAL PHASE

Based on minimization of impacts and the proposed mitigation measures detailed above, the potential residual effects are considered low however they will remain under constant review for the duration of the works with appropriate protection measures adhered to.

#### **3.0 SOIL / SPOIL STRIP, STOWAGE AND MANAGEMENT**

All materials excavated are to be reallocated and distributed within the site fenced area as per designer instruction to achieve levels and grades as indicated and to marry smoothly with existing ground at transitions.



#### **3.1 STRIPPING TOPSOIL**

Remove surface vegetation by blading off, by scarification and raking, kill off by application of a suitable non-residual herbicide applied not less than two weeks before stripping commences.

Before commencing work on site, topsoil from all areas that are to be disturbed by construction activities or driven over by vehicles should be stripped by earthmoving plant that is appropriate to the size of the site, the volume of soil to be stripped and haul distances.

Stripping should be undertaken by the excavator standing on the surface of the topsoil, digging the topsoil to its maximum depth and loading into site or off-site transport vehicles.

Topsoil should be stripped to a thickness defined by depth below the surface and/or a distinct colour change as directed by designer.

Soil should be handled in the right conditions of weather and soil moisture and using suitable machinery in an appropriate way. Soil that is wet or very moist (wetter than the plastic limit) should ideally be allowed to dry further.

Avoid multiple handling of soil materials increases the risk of damage to soil structure so should be minimised.

If sustained heavy rainfall (e.g. >10mm in 24 hours) occurs during soil stripping operations, work must be suspended and not restarted until the ground has had at least a full dry day or agreed moisture criteria can be met.

#### **3.2 STRIPPING SUBSOIL**

Before commencing work on site, subsoil from all areas that are to be disturbed by construction activities or driven over by vehicles should be stripped by earthmoving plant that is appropriate to the size of the site, the volume of soil to be stripped and haul distances.

The operation should be adequately supervised and follow a stripping plan showing soil units to be stripped. The soil units should be defined on the site with information to distinguish types and layers, and ranges of thickness.

Soil that is wet or very moist (wetter than the plastic limit) should be allowed to dry further. Multiple handling of soil materials increases the risk of damage to soil structure so should be minimised.

If sustained heavy rainfall (e.g. >10mm in 24 hours) occurs during soil stripping operations, work must be suspended and not restarted until the ground has had at least a full dry day or agreed moisture criteria (such as a specified soil moisture content) can be met.

Where the soil handling technique is such that trafficking over the soil is minimal the period for soil stripping may be extended.

Topsoil should first be stripped from all areas from which subsoil is to be removed for reuse.



Within each soil unit the soil layers above the base/formation layer are removed in sequential strips that can be up to 6m wide (the reach of a 360° excavator). Using an excavator bucket with teeth is preferable to using one without.

The soil transport vehicle runs on the layer beneath the subsoil.

#### **3.3 SOIL STOCKPILING**

The main aim when temporarily storing soil in stockpiles is to maintain soil quality and minimise damage to the soil's physical (structural) condition so that it can be easily reinstated once respread. In addition, stockpiling soil should not cause soil erosion, pollution to water courses or increase flooding risk to the surrounding area.

Handling soil to create stockpiles invariably damages the physical condition of the soil. If stockpiling is done incorrectly the physical condition of the soil can be damaged irreversibly, resulting in a loss of a valuable resource and potentially significant costs to the project. Stockpile heights of 3m to be used for topsoil that can be stripped and stockpiled in a dry state but heights to be no more than 2m where soils are wetter than the plastic limit.

No trafficking over spoil heaps.

Stockpiles should not be positioned within the root or crown spread of trees, or adjacent to ditches, watercourses or existing or future excavations.

Stockpiles to be seeded in spring and maintained with clover ley to minimise soil erosion and to help reduce infestation by nuisance weeds that might spread seed onto adjacent land.

Stockpiles to be seeded and maintained, with a maximum side slope of 1 in 2 (25°). Once the stockpile has been completed the area should be cordoned off with secure fencing to prevent any disturbance or contamination by other construction activities.

Management of weeds that do appear should be undertaken during the summer months, either by spraying to kill them or by mowing or strimming to prevent their seeds being shed.





Coves Barn, Jackbarrow Road, Winstone, Cirencester, Gloucestershire GL7 7JZ VAT No: 770 999 666 | Registered Address: Staverton Court, Staverton Road, Cheltenham, Gloucestershire GL51 0UX | Company No: 04160497





Coves Barn, Jackbarrow Road, Winstone, Cirencester, Gloucestershire GL7 7JZ VAT No: 770 999 666 | Registered Address: Staverton Court, Staverton Road, Cheltenham, Gloucestershire GL51 0UX | Company No: 04160497





Coves Barn, Jackbarrow Road, Winstone, Cirencester, Gloucestershire GL7 7JZ VAT No: 770 999 666 | Registered Address: Staverton Court, Staverton Road, Cheltenham, Gloucestershire GL51 OUX | Company No: 04160497