



ETHICAL
ARBORICULTURE

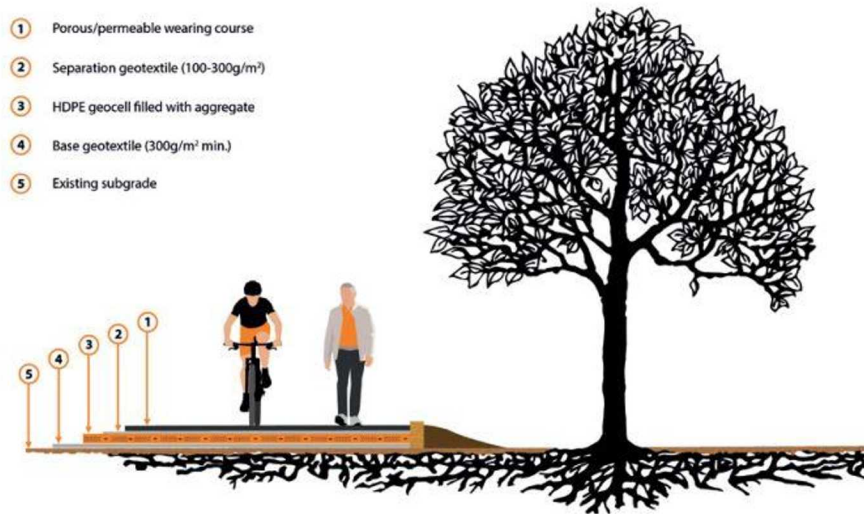
Proposed Construction and Surfacing of Driveway and Turning area

Minimal Dig Specification 59a High Street
Gosberton Lincs PE11 4NJ

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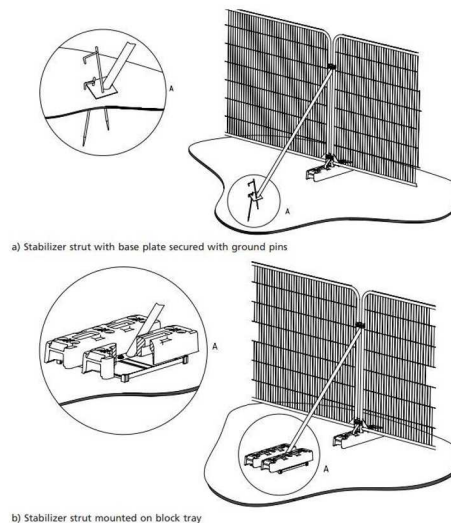
METHOD STATEMENT FOR “NO-DIG” CONSTRUCTION IN LINE WITH APN12 “DRIVEWAYS CLOSE TO TREES”

Outlined below is the proposed methodology and surface to be utilized for the construction of the access and turning area for 59a High Street Gosberton Lincs PE11 4NJ. This methodology and specification should provide a satisfactory driveway for the property while having a minimal impact on the retained Lime tree.



Prior to commencing any construction on site, erect protective fencing around trees to form an exclusion zone beneath the dripline in any unpaved area as per condition 16 of the planning permission ref H08-1096-18.

Contrary to this condition, to ensure adequate protection of the retained tree the use of braced Heras panels, as per BS5837:2012 section 6.2.2 Barriers Figure 3 Examples of above-ground stabilizing systems, is to be used. This should be installed after area preparation and remain in situ until completion of the project.



This will ensure that roots will not be severed during the construction work and the soil in the area of the exclusion zone will not be compacted, enabling oxygen and liquid to continue to diffuse into the soil beneath.

Construction of the road and parking/turning area should be undertaken in dry weather between May and October when the ground is driest and least prone to compaction.

1. Kill ground vegetation using a translocated herbicide (glyphosate), ensuring that the selected herbicide doesn't damage the root of the tree(s) below the surface of the path.
2. Remove the dead or organic material from the site and ensure that large stones and shrub stumps are removed from the proposed route.
3. Any stumps should be ground rather than excavated to minimize soil disturbance.
4. The resulting hollows and any other holes in the path should be filled with sharp sand.
5. A 300g/m² with a CBR puncture resistance of 400N separation geotextile matting should be laid across the full width of the access and turning area. These properties are required because the angular stone infill can penetrate thinner textiles. This will prevent the intrusion of roots into the sub-base whilst still allowing nutrients and gaseous exchange.
6. A three dimensional Cellular Confinement System (CCS) such as Geo-synthetics Cellweb or Terram Geocells, will be used as an integral component of the sub-base. These cells act as a suspension layer into which the recommended materials are laid and should be staked in place with J Hooks. The length of these pins should be at least 3 times the cell height.

If conditions require that adjacent sections of geocell be joined rather than butted against each other heavy duty staples should be used.

7. The road and turning area is to be supported against the CCS matting by small concrete kerbs pegged and set in concrete. This will create an attractive finish that is comparable to standard surface installations.
8. Using the lightest machinery practical, push either 20/40 crushed stone or 4/20 stone into the CCS matting to form an aggregate sub-base. It is vital that excavator buckets with no teeth are used during this process. In all situations the infill material should be washed or graded so that it contains no fine particles (fines).

The amount of infill required can be calculated using the following equations:

Quantity of 4/20 infill required = m² of coverage depth of geocells(m) x 2 tonnes

Quantity of 20/40 infill required = m² of coverage x depth of geocells(m) x 1.8 tonnes

An aggregate cover on top of the geocells does not contribute towards the increase of the bearing capacity of the surface but it can protect the geocells and as such it is advised that the CCS is overfilled by a minimum of 25mm additional aggregate before the surface layers are installed.

9. The sub-base should be placed at one end of the matting and pushed/spread across the matt to prevent compacting the soil, working from the highway back towards the site.
10. Settlement of the sub-base to ensure binding with the CCS and to minimise future rutting is to be achieved by a minimum of four passes of a small roller with a max weight of 1000kg/m width WITHOUT vibration. After several passes the infill reorients and becomes stable, causing local fill stiffening. The aim is to reach the point where the infill is consolidated. Checks should be made to ensure that the infill is fully consolidated before laying the wearing course.
11. A second layer of geotextile matting should be laid across the full width of the access and turning area. This will prevent the intrusion of fines into the sub-base and should be the same material as used for the initial base geotextile.
12. As it is only a residential driveway and turning area, which typically bear light and slow-moving vehicular traffic an unbound 4-20 graded gravel surface is proposed. This should be contained within small plastic stabilisation grids, to prevent tearing of the upper geotextile and contamination of the sub-base with fines.

