MJGleeson
the urban regeneration specialist

Supporting Statement

Executive Summary

- This Section 73 seeks to remove or amend Condition 6 of Application 2015/0436 – Variation of Conditions 18 and 22 of application 2014/1219 - Erection of 97 no. dwellings with garages including parking spaces together with the provision of associated roads, sewers and infrastructure, in relation to surfacing of parking manoeuvring areas
- Gleeson submitted a previous Section 73 application in May 2016 which was refused on 24th August 2016 (2016/0630) on highway safety and visual amenity grounds. Gleeson appealed this decision (APP/R4408/W/17/3170205). The appeal was dismissed – the Inspector was satisfied that the proposals did not constitute a significant hazard to motorists, but maintained concerns regarding highway safety and visual amenity.
- The previous application and appeal concerned Gleeson's original private drive specification, comprising crushed aggregate drives with a tarmac apron.
- The Gleeson private drive specification submitted in this Section 73 application has been revised in order to respond to the Inspector's findings. The amended specification proposes that private drives will be constructed using crushed aggregate (as previously) but with the addition of two rows of concrete paving slabs to minimise the theoretical migration of stones onto the highway. In addition, a Weedstoppa membrane is proposed to prevent weed growth. The revised specification also identifies that the shared drives will be surfaced with bitumen.
- Aggregate is considered to be a fit for purpose, highly sustainable material for private drives in new homes. Gleeson has recently won the National PLC award for the most sustainable business in the UK and the Company's private drive construction supports that accolade.
- At paragraph 148 the revised NPPF states that "The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure."
- The installation of aggregate drives as proposed with two rows of concrete flags generates less CO^2 in its carbon footprint than a tarmac drive. The carbon footprint of the full driveway

with two rows of flags is 220kg CO^2e which is 30kg CO^2e less than a tarmac drive. Across the entire site this represents a significant saving in CO^2 emissions.

- Consistent with national and local policy, the Gleeson private drive is a form of Sustainable Urban Drainage System that helps to reduce additional impermeable area to be included in the surface water hydraulic design. Aggregate allows a slowdown of run off at times of rainfall, reducing the pressure on the drainage system. It is a form of drainage encouraged by the Environment Agency.
- There are no local or national policies in place that presume against the use of aggregate or paving slabs in private drives. Permitted development rights allow for the use of these materials across the UK and Government and Environment Agency guidance endorses a type of surface treatment for drives (wheel tracks) that is comparable to the Gleeson specification. Had the Government been concerned about matters such as visual amenity or highways safety such permitted development rights would have been curtailed or withdrawn completely.
- The Gleeson private drive specification provides for contrast and texture in the streetscene when many other housebuilder developments are dominated by a sea of tarmac.
- Gleeson private drives have been accepted by many Local Planning Authorities. Whilst the Council might prefer tarmac surfaces to be installed at the site the evidence demonstrates that this is a safe and fit for purpose material and the amended private drive specification addresses the perceived highway safety and visual amenity concerns set out by the previous Inspector. In addition aggregate is a far more sustainable material than tarmac and given the objectives of NPPF to move to a low carbon future, Gleeson considers that the sustainability merits of the Gleeson private drive specification should be given considerable weight in the overall planning balance.
- A number of initiatives promote the use of aggregate drives, including www.graveldrives.org, Lambeth's 'depave' campaign www.lambeth.gov.uk/depaving-a-guide and www.slowtheflow.net in Calderdale.

Background Information

In May 2016 Gleeson submitted a S73 to vary Condition 6 of application 2015/0436. Permission was refused on 24th August 2016 on the following basis:

> *'1 The proposed driveway specification is considered to be contrary to the interests of highway safety. The tarmac apron has proved ineffective at preventing loose material (gravel) from being deposited onto the public highway, a matter clearly evidenced by the applicants preference for this design on their existing developments located elsewhere in the Borough. Consequently the Council is of the opinion that the displacement of the material poses a safety hazard for users of the highway which includes motorists but especially cyclists, wheelchair users and pedestrians who are particularly vulnerable. The applicant has stated that the condition is not in line with sustainable development, but insufficient justification has been put forward to justify this which would outweigh the concerns expressed. As such it is not considered that the requirements of the condition can be varied as the proposed driveway design would be contrary to requirements of Core Strategy Policy CSP26 'New Development and Highway Improvement' which require new developments to be served with safe and convenient access arrangements.*
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> *2 In addition the Local Planning Authority also objects to the proposals on visual amenity grounds. The displacement of material onto the highway that results from the substandard design of the driveway specification results in marking and damage occurring to the highway surface. This would have an unsightly appearance that would detract from the overall quality, appearance and finish of the development. As such it is considered to be contrary to the requirements of Policy CSP 29 'Design' and the aspirations of the NPPF.'*

Gleeson subsequently submitted an appeal, which was dismissed by Inspector John Dowsett on 27th November 2017 (Appeal Ref: APP/R4408/W/17/3170205). The Inspector considered that loose aggregate may be dispersed onto the public highway and footways but that *'the probability of vehicles losing control as a result of encountering a small quantity of loose material on the carriageway surface, or skidding in the event of having to brake sharply, is very low'* . The Inspector also concluded that *'In respect of the effect of loose stones on pedestrians, wheelchair users, persons with mobility difficulties and cyclists, I do not consider that loose aggregate would result in a serious impediment to wheelchair users or to pushchairs.'* The Inspector did however raise concerns with regards to the effect on *'pedestrians, particularly young children, persons with a visual impairment, those who walk with difficulty or use a walking aid'* and also cyclists.

With regards to amenity concerns, the Inspector also expressed concerns regarding *'the visual effect resulting from migration of aggregate pieces onto the surface of the carriageway and footway, and from weed growth through the driveway surfaces'.*

It is with the aforementioned issues in mind, that Gleeson have revised their drive specification to address the concerns of both the Council and the Inspector. The revised specification proposes that the private drives will be constructed with crushed aggregate (as previously) but with the addition of two rows of concrete paving sabs and a Weedstoppa membrane. The combined crushed aggregate and flagged paving solution, with a Weedstoppa membrane, retains the sustainability benefits associated with crushed aggregate drives; it practically eliminates any potential migration of crushed aggregate from the drives onto the highway; and therefore addresses the associated residential amenity and visual concerns of the Council and concerns expressed by the Inspector in the previous appeal. The revised specification also sets out that all shared drives within the proposed development would be surfaced with bitumen.

There are no local or national policies in place that presume against the use of aggregate or paving slabs in private drives. Permitted development rights allow for the use of these materials across the UK and Government and Environment Agency guidance endorses a type of surface treatment for drives (wheel tracks) that is comparable to the Gleeson specification. Had the Government been concerned about matters such as visual amenity or highways safety such permitted development rights would have been curtailed or withdrawn completely. A copy of this guidance is attached.

Specification of Crushed Aggregate Driveways

Gleesons revised driveway specification, as shown on the submitted plans, comprises two rows of 50mm x 600mm x 900mm flagstones at 1.7m centres set within a crushed aggregate bed. The flags are laid on a soft sand layer which includes a WeedStoppa membrane. The crushed aggregate layer comprises 15/20mm aggregate to BS EN13242 which is rolled and well compacted to a maximum thickness of 38mm. This is laid on a 250mm thick Type 3 sub-base that has been lightly dusted with cement. This specification ensures that generally there are no more than two layers of stone, that the cement dust binds the lower layer into the sub-base and that the top layer is locked into the bottom layer. The specification therefore ensures that the crushed aggregate surfacing provides a stable and durable surface.

It is emphasised that the specification includes 15/20mm crushed aggregate, which is an angular material, and not pea gravel, which is usually rounded. Unlike pea gravel, the use of crushed

aggregate locks the top layer into the bottom layer, and limits gravel spillage onto the adjacent public highway.

The rows of paving flags will run to the back edge of the adopted footpath, or highway, as applicable. Where plots have already been constructed and occupied, the two rows of flags would run from the back edge of the existing 1.5m tarmac apron.

Highways

Highways concerns have previously revolved around the theoretical displacement of aggregate from driveways onto both the footways and adopted highway, and the perceived influence of this on specific groups (i.e. pedestrians, those with mobility problems, car drivers). Whilst the new proposed specification will resolve this perceived issue, it is considered here to demonstrate the improvements made by Gleeson which address the concerns of both the Council and previous Inspector.

The perceived issues relating to highway safety can be divided into two categories; the presence of displaced aggregate on footways, and the presence of displaced aggregate on the highway. These are discussed in turn below.

In consideration of the presence of displaced aggregate on the adopted carriageway, at appeal, the Inspector confirmed that *'the probability of vehicles losing control as a result of encountering a small quantity of loose material on the carriageway surface, or skidding in the event of having to break sharply, is very low'* and that it is not likely *'that any aggregate pieces that become dislodged from vehicle tyres or are driven over by moving vehicles would become airborne with any significant velocity, and would not constitute a hazard to pedestrians or other motorists'.* Whilst the Inspector did not hold significant concerns on this aspect of highway safety, and perceived the risk to be low, the introduction of paving flags reduces any risk further to being negligible.

The second perceived highway safety concern relates to *'the effect of loose stones on pedestrians, wheelchair users, persons with mobility difficulties and cyclists'.* The Inspector confirmed *'I do not consider that loose aggregate would result in a serious impediment to wheelchair users or to pushchairs'* and this is therefore not discussed further in this document. The Inspector concluded that *'it would present a slipping or stumbling hazard to pedestrians, particularly young children, persons with a visual impairment, those who walk with difficulty or use a walking aid. Loose aggregate pieces of this size would also affect the stability of cyclists due to the narrower tyres and wheels of cycles.'*

Notwithstanding these comments made by the Inspector, the introduction of paving flags for wheel tracks will overcome the likelihood that vehicles will drive on the crushed aggregate, even when entering and leaving the driveways and thus preventing any displacement. To prove the point, a typical drive layout onto a road with a 4.8m wide carriageway has been Auto-tracked using both large and medium size cars, as shown on the enclosed plans. The diagrams show that both sizes of car can enter and leave a driveway without over-running the aggregate. The revised driveway specification will therefore prevent aggregate being transported onto the adjacent adopted footway and will ensure that there is no detriment to highway or pedestrian safety.

Visual Amenity and Maintenance

With regards to amenity concerns, the Inspector previously expressed concerns regarding *'the visual effect resulting from migration of aggregate pieces onto the surface of the carriageway and footway, and from weed growth through the driveway surfaces'* .

The Gleeson private drive specification submitted to the Council has been revised following the dismissed appeal in order to respond to the appeal Inspector's findings on visual amenity. The amended specification proposes that the private drives will be constructed with crushed aggregate (as previously) but with a) the addition of two rows of concrete paving slabs to prevent tracking of stones onto the highway, and b) a WeedStoppa membrane is proposed to prevent weed growth.

As demonstrated by the attached Auto-track plans, cars can enter and leave the driveway without over-running the aggregate, therefore overcoming perceived concerns regarding material displacement. This revised specification therefore addresses visual amenity concerns of both the Council and Inspector.

With regards to weed growth through driveway surfaces, all types of hard surface – including crushed aggregate, concrete block paving and even tarmacadam – develop an element of weed growth over time unless this is removed on a regular basis by mechanical or chemical means.

The proposed revised driveway specification includes a weed control membrane to prevent plant growth. This is an important aspect of the new revised specification since it effectively eliminates one of the Inspector's main concerns – namely that weed growth may contribute to an untidy appearance of the overall street scene. Weed control membranes have, over many years, proved to be an effective means of ensuring that weeds will not penetrate the driveway surface.

Occasional drive care is analogous to maintaining the garden of a house or removing weeds/algae from block paved/tarmac drives. All homes require maintenance. Lawns need mowing, windows

need cleaning and aggregate drives need to be occasionally raked. Whilst the Inspector for the previous appeal cast some doubt on whether all customers would maintain their drives, Gleeson has received a recent appeal decision relating to aggregate drives at Pottery Bank, Newcastle (see enclosed decision notice), where that Inspector drew more favourable conclusions on maintenance. In any event, it is my view that the amended specification introduced in this S73 application substantially reduces the maintenance requirements for occupiers of the proposed development.

It is Gleeson's view that the combined crushed aggregate and flagged paving solution proposed in this Section 73 with a Weedstoppa membrane retains the sustainability benefits associated with crushed aggregate drives; it practically eliminates the potential migration of any crushed aggregate from the drives onto the highway; and therefore addresses the associated residential amenity and visual concerns of the Council and concerns expressed by the Inspector in the previous appeal.

Drainage

The sustainability benefits of the Gleeson private drive specification also extend to drainage. The use of aggregate in the private drive specification, which is a permeable material, will assist with the natural drainage of surface water into the ground and the private drive specification is a form of SuDS (Sustainable Urban Drainage Systems). The NPPF and associated PPG seek to prioritise the use of SuDS and this type of drainage forms part of the Government's strategy to reduce the extent and effects of flooding.

The Environment Agency Guidance on the Permeable Surfacing of Front Gardens (please find enclosed) refers to the use of gravel as a suitable material to create permeable surfaces in front gardens and driveways and the paving of front gardens with such materials is a form of permitted development.

The previous Inspector also noted that given the *'site was considered unsuitable for infiltration drainage due to the low permeability of the underlying soils and solid geology'* he afforded little weight to the contribution of gravel drives towards sustainable drainage. Gleeson disagree with the Inspector's conclusions as the the crushed aggregate driveway, constructed on a Type 3 sub-base, is a source-control component of a SuDS drainage scheme. The aggregate surface is porous, allowing infiltration into the sub-base which provides attenuation storage. Where the infiltration of the underlying and surrounding soil is poor, the driveway construction is nevertheless beneficial as it provides storage capacity and when this is exceeded, the rate of any runoff is reduced, due to the

surface roughness compared with a smooth impermeable surface such as tarmacadam or block paving.

Other Benefits of the Specification

- The installation of a gravel driveway is one deterrent that is highly recommended by the Police's Official Security Initiative – Secured by Design. Unlike traditional driveway surfaces, such as asphalt or concrete, gravel emits a crunching sound when it is walked upon. The noise deters potential burglars from even approaching the property as they are unlikely to make entry without alerting the occupants or even the neighbours.
- Did you know a standard tarmac drive generates around 250kg of CO^2 in its carbon footprint? The installation of aggregate drives as proposed generates 30kg less CO^2e. Across the entire site this represents a significant saving in CO^2 emissions.
- Consistent with national and local policy, the Gleeson private drive is a form of Sustainable Urban Drainage System that helps to reduce additional impermeable area to be included in the surface water hydraulic design. Aggregate allows a slowdown of run off at times of rainfall, reducing the pressure on the drainage system. It is a form of drainage encouraged by the Environment Agency.
- At paragraph 148 the revised NPPF states that "The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure."
- Many Local Authorities are big supporters of the EA approved gravel drives, some choosing to condition that driveways must be porous. For example, Kirklees have attached a condition which reads as follows:

  "Prior to first occupation of any dwelling, the approved vehicle parking areas shall be surfaced and drained in accordance with the Communities and Local Government; and Environment Agency's 'Guidance on the permeable surfacing of front gardens (parking areas)' published 13th May 2009 (ISBN 9781409804864) as amended or superseded; and retained thereafter. No alternative surfacing material shall be used except where full details have been submitted to and approved in writing by the Local Planning Authority.
  Reason: In the interest of highway safety, sustainable drainage, and to ensure adequate space within the site for vehicle movements and parking and in accordance with Kirklees

Unitary Development Plan Policy T10 and Chapter 10 of the National Planning Policy Framework."

Gleeson's proposed specification wholly accords with such a condition.

Conclusions

The previous appeal concerned Gleeson's original private drive specification, comprising crushed aggregate drives with a tarmac apron. This Section 73 application surrounding Condition 6 includes an amended private drive specification comprising crushed aggregate and two rows of concrete flags which have been introduced to address the concerns set out by the previous Inspector in relation to visual amenity. In addition, a membrane has been added to the specification to prevent weed growth.

The aspects of visual amenity which the previous Inspector was concerned with included the potential for weed growth; and the potential transfer of chippings onto the adopted highway. Whilst Gleeson do not agree with the Inspector's views on these matters, Gleeson have wholly addressed these elements of concern with the revised specification. The theoretical transfer of aggregate onto the highway has been addressed by the use of two rows of concrete paving flags, and the potential for weed growth and the need for maintenance will be virtually eliminated by the installation of a weed membrane.

Highway safety concerns similarly revolved around the potential for the migration of aggregate onto the highway. Again, this concern is overcome through the introduction of the paving flag 'wheel tracks'.

The amended private drive specification is analogous to the wheel tracks permeable surface option endorsed by DCLG and the EA in its guidance. Were there to be a safety problem with this option, then it would be highly unusual for it to be favoured by Government.

The revised NPPF expressly states that the planning system should support the transition to a low carbon future in a changing climate. As set out in this statement, the amended specification has a significantly lower carbon footprint than tarmac drives. The amended Gleeson private drive specification is considered to be fit for purpose and it addresses the visual amenity and theoretical highway safety concerns raised by the previous appeal Inspector. We therefore respectfully request that this Section 73 application is allowed.