Proposed reopening of Collyweston Slate Mine
Planning Application
Supporting Statement

Report prepared for
Claude N Smith Ltd.
Slaters Drift Industrial Estate
Collyweston
Northamptonshire
PE9 3PG

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1. Introduction

1.1 This Statement is provided in support of an application for the extraction of Collyweston Slate by underground extraction and associated operations from land at Slate Drift, near the village of Collyweston, Northamptonshire.

1.2 Slate Drift is located to the north of the A43 and provides the access to what was in historical times a centre of extraction operations for Collyweston Slate. The presence of these workings is clearly shown on historic OS maps and can be seen today. This location and the immediate surrounding land is the type location for Collyweston Slate. As described in section 4 subtle and more obvious changes of the particular geological horizon affect the characteristics and properties of material extracted, such that material extracted outside this general location does not replicate those specific sought attributes of Collyweston Slate per se.

1.3 Collyweston Slate is one of the most significant specific building materials in England because of its particular value in maintaining the character not just of vernacular buildings in nearby villages, but also due to its wider use throughout southern England, in more formal buildings, notably, in Cambridge, Oxford and London. There are currently no workings, or valid planning permissions, to work Collyweston Slate per se.

1.4 Some material can be recovered from those few buildings/structures that are occasionally demolished. However, most of this material was of inferior quality when first used (otherwise it would otherwise almost certainly be contained within a ‘Listed’ building, and not now ‘available’) and has weathered since that first use. This supply from demolition is therefore both uncertain and with a limited life. This supply is also shrinking.

1.5 Preservation of the character of individual buildings and entire townscapes therefore requires a small continuous supply of new Collyweston Slate.

1.6 The application area is located on a plateau landform at some 90 metres aod above the broad valley of the River Welland. The centre of the village of Collyweston lies some 500 metres to the SW and that of Easton on the Hill some 1,500 metres to the NE. The application area is part of a builders/masons yard with associated storage and other activities.

1.7 The former slate workings surrounding the application area have now been developed in a patchwork of activities, including the development of residential units. Apart from other property scattered along the A43, other surrounding land is used mainly for intensive agriculture operations, except for an area of restored Collyweston Slate opencast/underground mine workings to the NE. This area is now a designated Site of Special Scientific Interest, due to the presence of
limestone grassland habitat and associated flora and fauna, and is managed as a Local Nature Reserve.

1.8 Other than the above LNR there are no other significant planning designations on the application site or in the immediate surrounding land. This is not a ‘sensitive area’ as identified in the Environmental Impact Assessment Regulations. The operations proposed are to take place in ‘brownfield’ land and will not require the movement of soil, nor the removal of any tree, hedgerow or stone wall.

1.9 A substantial part of Collyweston Village is contained within a Conservation Area, designated for the quality and extent of the vernacular architecture. The relationship of the presence of Collyweston Slate for roofing and the presence of a supply for any repair or new build is clearly central to maintaining the character of this Conservation Area and conservation objectives elsewhere in the Country.

2. The Applicant

2.1 The applicant is Claude N Smith Limited, a local construction company specialising in Collyweston slating. It is a local family run business with a strong reputation, trading since 1965.

2.2 The applicant has received national recognition for roofing excellence, with awards including; Finalist the National Roofing Awards 2013, Winner of the National Roofing Awards 2014 and an Excellence in Roofing Merit Award from the National Home Improvement Council 2014.

2.3 The applicant is an employer of locally skilled staff and apprentices. The applicant has identified a need for Collyweston slates to be produced to satisfy increasing demand both locally and nationally. Having previously relied on reclaimed slates, this source of mineral reserve is now insufficient.

2.4 Claude N Smith Limited purchased the property in 1985. The 2½ acre plot comprises a number of workshops, storage buildings and is the location of the currently disused mine shaft. The mine shaft can be used to access the historic mineral workings some 8m below ground level. The workings stretch north-south across the property. There is evidence of backfilled quarry and mine workings to the west of the shaft; however the eastern mineral reserve has yet to be mined.

2.5 The Applicant has had recent successful applications to renew the workshops on the site.

3. The Mine

3.1 Drawing No’s: P30206-PLN-001 and P30206-PLN-002 provide location and site/application plans to show the surface development to be constructed within
the industrial area; the mine access adit, stone weathering area and a storage water pond.

3.2 The existing mine shaft and underground workings are part of the Slate Drift Industrial Estate. Planning permission exists to use the site as a Builder’s yard in the locality of the proposed mine adit and there is existing industrial usage (B2) consent in the location of the mine shaft and underground workings. An area of approximately 2 acres has been previously mined or quarried. This leaves an area of 0.5 acres within the property boundary of unmined stone.

3.3 The current underground workings have been inspected as part of the investigation and feasibility works. The tunnels and headings appear safe and stable with minimum support.

3.4 Historic maps of the region, including maps dating back to the late 18th Century show quarrying and mining to have been completed on the site and surrounding area.

3.5 Mining at Slate Drift started in about 1847 and, with the exception of periods of closure during both world wars, operated until the 1960s. The mineral reserve lays 8 metres below ground level and works the Lower Lincolnshire Limestone Formation, in particular the Collyweston Slate Facies at the base of the formation. The reserve stone comprises horizontally dipping beds, up to 1 metre thick. The Collyweston Slate Facies exposed underground on-site is a moderately strong, thinly bedded – laminated cream and light grey fine grained very sandy limestone. Once weathered the stone delaminates to form a durable, strong roofing slate.

3.6 The process for slate formation involves excavation of limestone blocks or logs, then taking them to surface for exposure to the weather over a period of time (typically 2-3 years) allowing weathering processes to take place. The log is kept moist at all times to ensure the fine sandy / silty laminations absorb water, once frozen this expands and naturally cleaves the limestone. The delaminated layers are formed around 10mm thick, making them an ideal roof tiling material i.e. strong, light and thin.

3.7 The mining appears to have taken place driving forward in an easterly direction. The existing mine layout is shown on drawing P30206-PLN-003. There is one main underground tunnel or roadway running north - south across the site. The roadway terminates on the land parcel boundary in the south but extends beyond the boundary to the north. The current proposal only includes working the land owned by the Applicant.

3.8 The mineral reserve of Collyweston Slates was mapped underground. It appears exposed along the entire eastern face of the passageway. This face is unmined, undisturbed, natural limestone. The extent of historic extraction in the western direction is unknown and due to the number of supporting walls on this face. It is
proposed to install modern support techniques in this western area, where necessary to allow access.

3.9 There was no sign of instability observed during underground site visits completed by two chartered geologists. There is no sign of excess compressive stress on any of the currently installed stability measures. The current support appears adequate to provide access, however to enable future mining to continue permanent steel or concrete supports are required throughout the main roadway and the proposed access adit.

3.10 The estimated total gross mineral reserve is 1300m$^3$. Due to the lithological texture of the Collyweston Slate and its proposed end-use as roofing material, a degree of wastage is unavoidable. Waste rock will be utilised to provide additional support and may be crushed and used as a base stone, foundation stone for supports. The estimated net reserve, allowing for wastage and any pillars which may require leaving in place is 750m$^3$. A zero waste operation is planned, with waste rock and underlying sand being used in the mining operation.

3.11 The mine access will be enclosed by screen bunds and will include sufficient space for the construction of the adit.

3.12 The mine is located within an industrial estate with hard-standing throughout and a number of small industrial units and workshops. There is limited residential property to the north and south of the site, with agricultural farmland to the west and east. The industrial estate is outside of the main residential area of the village and lies on top of a regional plateau.

3.13 There will also be an open-air surface storage of the extracted stone to allow the weathering processes which are necessary to enable the Collyweston Slates to form. The excavated limestone blocks would be stored on the ground surface (no higher than 1m above ground) and sprayed occasionally with water to ensure the moisture content is constant. A water storage pond will be located adjacent to stone storage area and provide water to assist the weathering process. This wetting of the stone will prevent any dust.

3.14 The Applicant has been producing Collyweston Slates on the site since 1965, through refurbishment of reclaimed slates. Very few slating businesses retain the traditional skills and still operate in the area: the Applicant Claude N Smith Ltd. being one of them.

3.15 There will be no blasting, no noise, no dust, visual or environmental impact from the works. The mine will be a small-scale operation, providing a much needed local resource and enhancing the future sustainability of local industry and a local business. The site has been used to for “Slate” making since before the 1960s.
4. **Description of the proposed development**

4.1 The initial works will involve construction of an access adit from surface to the existing underground roadway as shown in drawing P30206-PLN-004. The adit would be excavated through quarry backfill material, exposing a former quarry face. The adit will then be extended eastwards into the existing void space. The southern area will be worked first, followed by the area north of the shaft.

4.2 The mining will be phased to allow ecological impacts to be minimised. Initial works would involve the southern area of the mine reserve, south east of the existing shaft. This would be carried out over a 4 - 5 year period. This area would then be walled off to provide an ecological refuge. The area north east of the shaft would then be worked. It is envisaged this could also be completed within a 5 year period. The Mine Work Plan is presented in the Part 2, section 1.

4.3 The mine site will be accessed from the current entrance to the Slate Drift Industrial estate. No additional vehicle movements are anticipated to those currently taking place. Upon mining the stone, blocks are left outside to weather and will then be dressed in the workshop units on the site. The slates will then be transported to specific properties and delivered directly to customers when required.

4.4 Output is expected to be approximately 150 tonnes per year. Major slate contracts for Collyweston Slate, for example; new roof at King's College Cambridge may require a maximum output of 150 tonnes for a years' supply.

4.5 The Mine Work Plan is enshrined in the Mine Working and Safety Statement in the Part 2, Section 1 of the application. This details the way in which the mine will be worked safely and in accordance with good practise.

4.6 Mine working is also regulated by expert bodies and agencies, including Her Majesty's Inspector of Mines and the Health and Safety Executive. The mine will be managed under the control of a Mine Manager as will be agreed with HM Inspector of Mine and will be subject to inspections by an experienced regulator in accordance with stringent rules and regulations which are laid down by the Inspectorate.

4.7 There are no sensitive properties above the mine area. There are a small number of industrial units; these would not be affected by the activities. The Claude N Smith Industrial site is bounded by seven residential properties to the north and three residential properties to the south. These will not be affected by the underground workings. There will be no noise, dust or vibration from the underground workings.

4.8 The area of the existing shaft is surrounded by small industrial units; development of this area will not visually impact the site and there will be no noise as the shaft is only to be used in emergencies.
4.9 The development of the main access adit will involve the excavation of a limited area to a depth of 8m. As the site is surrounded by a noise and visual bund in this location these works will not impact the surrounding residents.

4.10 The extracted Collyweston Slate stones will be stored on the ground surface to allow weathering processes. At present there are similar building materials being stored in this area. A small water storage pond will be constructed adjacent to the stone. This water will be used regularly on the stones to enhance the weathering processes and prevent any dust.

4.11 It should be noted currently reclaimed / re-furbished slates are entering and leaving the site. Should the mine be allowed to re-open the entrance of heavy lorries unloading reclaimed slates would be rare, thereby reducing net heavy lorry movement. Currently there is typically 1 HGV movement per day at the site. This is typically not associated with the Claude N Smith Ltd. workings.

4.12 Collyweston Slate is currently enjoying an unprecedented demand. This is expected to continue as building work and refurbishments in the local conservation area remains buoyant. There are many thousands of listed buildings that need or will need the slates in the future. Specific recent demand has been highlighted by an approach from Kings College, Cambridge University to renew the college roof; this would require 1395m² of Collyweston Slates. This is presented formally in a letter in Part 5.

4.13 The number of sources of Collyweston Slates is very limited. The British Geological Survey, Strategic Stone Study database states there are no definite supplies of fresh Collyweston Slates. Only possible suppliers of similar stone are shown.

4.14 A sample of the nearby quarried material has been taken and compared to a sample of the slates on the Applicants site. These were petrographically inspected by Keele University to ascertain the similarities and differences between the two stones. The evidence suggests the two stones are mineralogical and texturally different. Specifically and importantly the grain size of the Collyweston Slate at the Applicant’s site is finer. This has important consequences with regards the possible thicknesses of the slates produced, in particular the thickness of the slates produced at the Applicants site are likely to be thinner, thereby reducing or maintaining the implied load of the roof structure. Alternative sources are likely to impose larger loads on the existing roof structures.

4.15 There is a need to develop more resources for Collyweston Slates than is currently permitted. English Heritage has verbally provided backing for the proposed development. The demand for the roofing slates to repair and replace historic National Trust and English Heritage buildings is high. In addition there have been a number of private clients who have approached the applicant within recent years including both Cambridge and Oxford Universities.
5. Environmental Impact Assessment

5.1 The Environmental Impact Assessment Directive (85/337/EEC) requires that as part of any development consent regime that environmental impact assessment (EIA) should be undertaken for any project that is likely to have significant effects on the environment. The form of that assessment is the production of an Environmental Statement (ES) and such supporting actions. The ES is produced by the developer proposing the development. However, the EIA process and the production of an ES are only relevant to those developments producing 'significant' environmental effects.

5.2 The relevant mechanisms in England for the application of the Directive are set out in The Town and Country Planning (Environmental Impact Assessment) Regulations 2011. These Regulations define those developments which may or may not fall within the requirements for EIA and which thereby require the production of an ES and such supporting actions. Further clarification on thresholds for EIA provision was set out in Circular 02/99, which thresholds are now set out in the National Planning Practice Guidance (NPPG).

5.3 In relation to mineral extraction development Schedule 1 of the Regulations notes in paragraph 19 that quarries or opencast workings over 25 hectares will require compliance with the EIA regulations. Paragraph 2.2(b) of Schedule 2 of the Regulations requires that underground mining requires compliance with the EIA regulations. However, Circular 02/99, and now the NPPG, set out further criteria and thresholds for determination of the presence of significant effects and, inter alia, where provision of an ES and other mechanisms are thereby not required because of the minor nature of the works and/or the associated lack of any significant effects.

5.4 The relevant considerations do not precisely clarify the position for underground extraction of building stone. However, the NPPG sets out indicative thresholds for consideration of the need for EIA for quarries as being if the area exceeds 15 hectares or production would be more than 30,000 tonnes per annum. This application only extends to some 1.5 hectares and the production will be no more than 300 tonnes per annum. On that basis this application lies well below the EIA threshold set out in NPPG.

5.5 Guidance in NPPG also considers if EIA is required due to significant effects that might arise regardless of the above thresholds. As demonstrated elsewhere in this Statement, the application site is not within, adjoining or will have any impact on any international, national or local environmental or landscape designation or significantly affect any protected species. Further, the operations are underground and otherwise un-intrusive in the immediate and wider landscape and will not impact on any asset of historical interest whether designated or not. The extraction operations do not involve blasting and noise and dust will be essentially
5.6 Given that the operational area and the annual production is well below the relevant threshold and that the operations will not cause any significant environmental impacts, the application does not fall within the requirements of the EIA regulations and no ES has been prepared.

6. **Policy**

6.1 The relevant national policy is set out in the National Planning Policy Framework (NPPF) with some further advice in the National Planning Policy Guidance (NPPG).

6.2 The NPPF confirms that decisions on planning applications should be made in accordance with the development plan, unless material considerations indicate otherwise.

6.3 The NPPF notes that the purpose of the planning system is to contribute towards sustainable development, which includes contributing towards protecting and enhancing our built and historic environment.

6.4 The NPPF also notes that decisions should encourage the use of brownfield land, as is proposed here, provided the land is not of high environmental value. The relevant land is not of high environmental value and the works can help to protect and enhance matters relating to the conservation of bats.

6.5 In relation to minerals the NPPF specifically notes the need to provide for policies for extraction of minerals of both local and national importance, which in this case is particularly relevant both due to the national importance of Collyweston Slate in roofing and the lack of any suitable alternative.

6.6 The NPPF stresses that when determining applications, planning authorities should consider the need for small scale extraction to meet demand for the repair of heritage assets and recognise the small scale nature and small scale impacts of building and roofing stone quarries.

6.7 In relation to Collyweston Slate the Northamptonshire Minerals and Waste Local Plan (the 'Local Plan'; adopted September 2014) notes in Policy 6 that the provision of roofing stone is (a) not limited to a specific quantity; (b) promoted at a small scale in rural or appropriate locations; and (c) subject to addressing conservation needs for restoration and new development which maintains or enhances the character of a location. It is unfortunate that this support only acknowledges Collyweston Slate as being of local use and ignores the national significance of the stone. Nevertheless, the support for extraction as set out in Policy 6 is not restricted to local use in that policy.
6.8 The Local Plan notes in paragraph 4.58 that it is not anticipated that provision for roofing stone, and effectively that for Collyweston Slate, is not required in the Local Plan given the extraction operation at Duddington operated by Bullimores and the allocation, MA11 Collyweston Village north of Slate Drift defined in Policy 7. However, Policy 7 also notes that roofing stone will not just be provided by permissions and allocations but also "by any other site that comes forward in line with Local Plan policies" as set out in Policy 3.

6.9 This application complies with the relevant provisions of Policy 3 and, in particular, maximises recovery and minimises waste, particularly the production of aggregate, and ensures the provision of material for high quality and essential uses, which supply cannot be satisfied by existing operations.

6.10 The Local Plan notes that preference will be given to allocated sites and with consideration of supply from existing permissions. However, such preference will be set aside if the characteristics and performance of stone from sources, other than existing permissions or allocations, matches the conservation and technical properties of demand. Such a situation currently applies in Northamptonshire. It is therefore a material consideration, that (a) the allocation for extraction north of Slate Drift (MA11) will not be brought forward by the land owners and that (b) the permission at Duddington operated by Bullimores cannot provide material matching Collyweston Slate per se. The provision of Collyweston Slate per se from this application site therefore complies with Policy 7.

6.11 The current application at Slate Drift meets the provisions of the Local Plan and therefore, as confirmed by the NPPF, should be approved.
SECTION 1

DESIGN AND ACCESS STATEMENT