YENNADON QUARRY

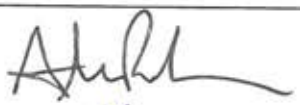
PRODUCT AND ALTERNATIVE SOURCES

FOR

YENNADON STONE LTD.

03 July 2015 **Job No: 7397/AS Rev.D**

John Grimes Partnership Ltd ♦ Leonards Road Ivybridge Devon PL21 0RU
Tel: 01752 690533 ♦ www.johngrimes.co.uk ♦ post@johngrimes.co.uk ♦ Registration No: 4184549

Report Status:	**Revision D**		
Project Number:	**7397/AS**		
	Engineer	**Signature**	**Date**
Report by:	**A. Robertson**		**03 July 2015**
Reviewed by:	**M. Owen**		**03 July 2015**
For and on behalf of John Grimes Partnership Ltd.			

CONTENTS

1.0 INTRODUCTION

1.1.1 An assessment of the stone produced from Yennadon Quarry and its market has been prepared by John Grimes Partnership Ltd on behalf of Yennadon Stone Ltd to accompany the Environmental Statement in support of the extension to Yennadon Quarry. This report should be read in conjunction with the 'Socio-Economic Report' produced by Vickery Holman (Appendix A6-a) and 'Yennadon Stone and the built environment: A review of the important role that stone from the quarry plays in maintaining the character and appearance of the local area' produced by Clifton Emery Design (Appendix A6-c).

1.1.2 Yennadon Quarry is currently active. It is proposed to extend the working area of the quarry to the north of the existing working area. In production terms, the dimension stone produced will continue to be extracted at the current rate up to a maximum of 10,000 tonnes per annum (t/a).

1.1.3 The quarry operators are seeking the extension to enable production to continue, as a minimum at current extraction rates and up to the maximum permitted, until the current planning permission expires in 2025. The operators intend to continue production up to 2025 regardless of the outcome of this planning application; however if permission is not granted, production levels will decline, resulting in a negative impact on employment and a source of local high quality building stone. Granting planning permission to extend the working area of the quarry will enable the quarry to sustain a viable future and continue to provide an invaluable source of local stone for building and restoration projects.

1.1.4 The purpose of this assessment is to provide additional information on the product and market for the stone from Yennadon Quarry, as well as considering the alternatives should the quarry cease operation.

2.0 BUILDING STONE PRODUCT

2.1 Overview of Building Stone in Southwest England

2.1.1 Devon and Cornwall's diverse geology is reflected in the wide range of types of stone that have been used in the construction of local buildings and other structures in the past, and which contribute to the degree of its local distinctiveness.

2.1.2 Significant sources of building stone in Devon include Cretaceous limestone (East Devon), Devonian limestone (South Devon), malmstone and chert (East Devon), Triassic and Permian sandstones (East & South East Devon), Culm Measures sandstone (Central & North Devon), Devonian sandstones (North & South Devon), Budleigh Salterton pebble beds (East Devon), granite (Dartmoor), white elvan (South West Devon), basalt and igneous tuff (Exeter, Totnes and Tavistock), dolerite (South Devon) and 'slate' (South, North and West Devon).

2.1.3 The most significant source of building stone in Cornwall is granite, which is extracted from a number of quarries throughout the county. Other sources include gabbro/ dolerite/basalt (West and East Cornwall), Seprentine (Lizard Peninsula), Grampound Grit (Mid Cornwall), sandstone (North Cornwall) and 'slate' (East-West Cornwall).

2.1.4 The term 'slate' is loosely applied throughout the southwest to the more or less fissile mudstones and siltstones (which have undergone various grades of metamorphism). The nature and appearance of the 'slate' across the region varies greatly from weak to strong, dark to light grey with green or red hues, brown iron oxide staining and quartz veining. Due to their variability, these meta-sedimentary rocks are often labelled as undifferentiated mudstones, siltstones and sandstone on many geological maps. A geological map of Southwest England is provided in Appendix 01 and an extract is provided in Figure 01 showing the locations of Yennadon Quarry and other similar 'slate' quarries in the region.

2.2 The Geology of Yennadon Quarry

2.2.1 The British Geological Survey is currently updating geological maps across the country. As part of this there has been a review of geological formations, which has resulted in the re-naming of some units. The rock formation[1] that Yennadon Quarry is located within is one such unit that has been re-named. Traditionally, this formation was known as the Kate Brook Slate, but is now known as the **Tavy Formation**.

[1] The stratigraphic nomenclature for rock strata of a similar age, lithology, facies, etc. A formation can be sub-divided into series or members.

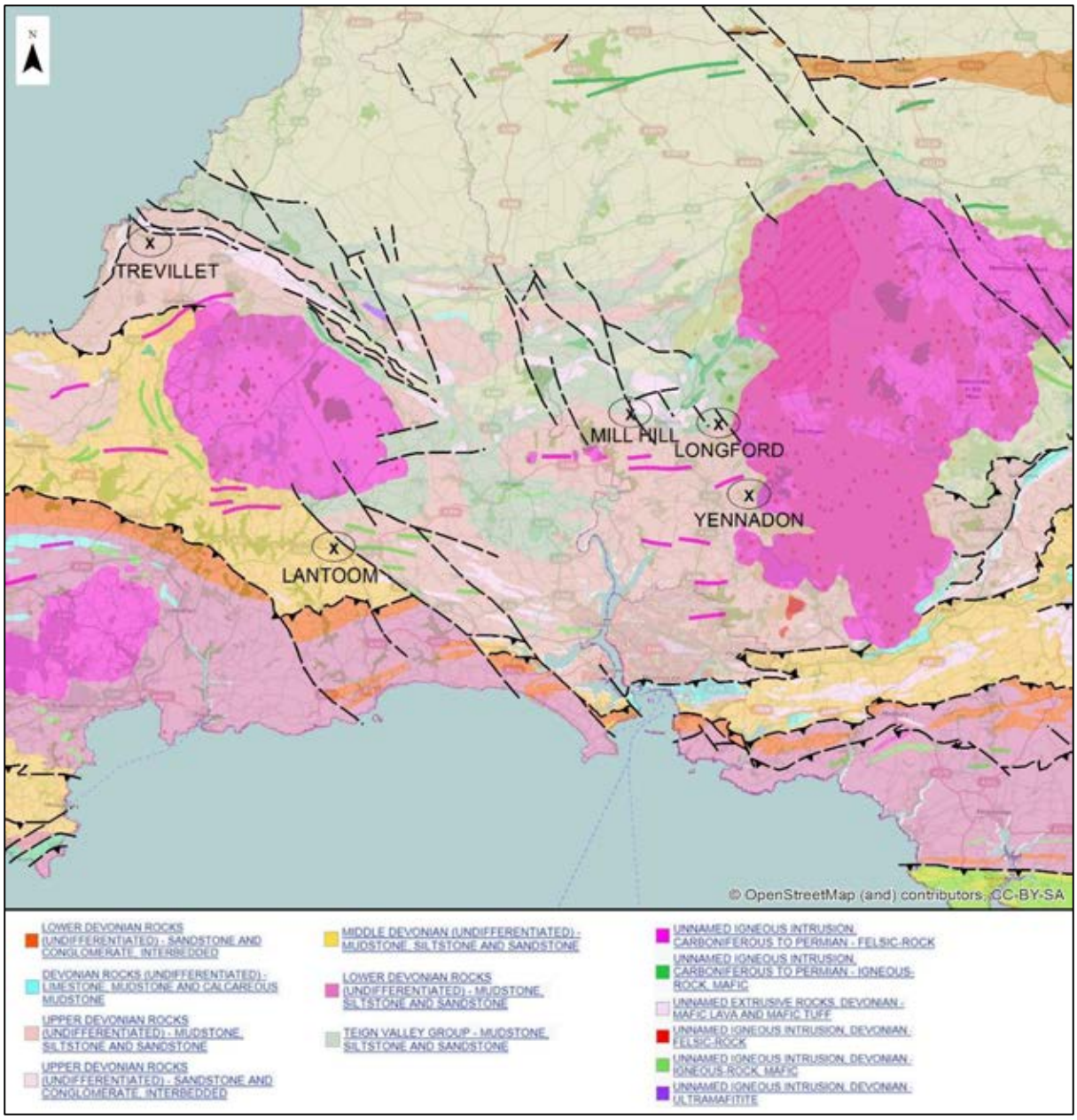


Figure 01: Extract of Geology Map Showing Locations of Slate Building Stone Quarries

2.2.2 The Tavy Formation is part of the Tamar Group of Devonian sedimentary rocks. The Tavy Formation is Frasnian to Famennian in age. It mainly comprises pale green and grey-green slatey silty MUDSTONE with minor thin fine-grained sandstone beds. The South-West region has undergone 'regional' low-grade metamorphism, which has resulted in the mudstone becoming more "slatey" (cleaved; i.e. the rock is crystallised and platy minerals are realigned to form a slaty cleavage) in some localities. At Yennadon Quarry, the Tavy Formation has also been altered by the nearby Dartmoor Granite intrusion (i.e. 'contact' metamorphosed), which has 'altered' (recrystallized) the mudstone into an Hornfelsed Slate, which has resulted in the stone being

particularly strong and durable in comparison to slates from outside the metamorphic aureole (see Section 3.5 for strength and durability comparison). The extent of Hornfelsed Tavy Formation around Dartmoor is shown in Appendix 02.

2.2.3 The Tavy Formation is sandwiched between two other sedimentary units: the underlying Torpoint Formation (which is a purplish red slaty mudstone) and the overlying Burraton Formation (grey slate).

2.3 Product From Yennadon Quarry

2.3.1 Yennadon Quarry extracts a "Rustic Stone", which is the trade name for the regions iron stained slates. The stone from Yennadon Quarry is marketed as "Dartmoor Rustic Stone", which within the building industry has become widely known as "Yennadon Stone". There is a variation in colour from yellowy brown (which is the colour of the iron-stained natural joint faces) through to bluish grey (which is the colour of the cut faces). It has distinct subtleties in colour, tone and patina creating a variegated overall appearance when seen in a wall.

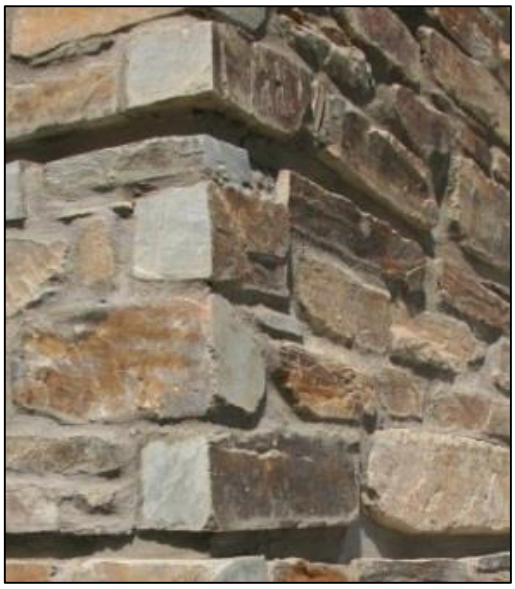
2.3.2 Yennadon Quarry is a sustainable local business, purchasing very little from outside Devon/Cornwall. Consumables (labour, fuel, oil, pallets, dumpy bags) are all purchased within the local area.

2.3.3 Yennadon Quarry is renowned for providing a high quality strong and robust stone that complies with Building Regulation requirements. Yennadon Stone is not prone to weathering and as a result does not tend to flake or delaminate, unlike some other slate stone types in the region. Yennadon Stone has the right appearance as a natural stone product that can be used both locally and regionally to comply with planning and conservation requirements. Used in:

- The patching/repairs of existing buildings/structures
- New developments (buildings/structures/paving)

2.3.4 Yennadon Stone Ltd is also renowned by developers for their prompt delivery and dependable supply. Yennadon Quarry is also unique locally for being able to supply developers with commercial quantities of the much sought after 'natural quoins'; i.e. nearly all of the joints (naturally occurring discontinuities) within the rock are virtually set at right angles, so that rectangular or square blocks are formed resulting in <u>all natural faces</u> having the rustic colouring. Most other quarries have to cut blocks to achieve a square end, which results in a different coloured end face (see photographs below).

'Natural quoins' from Yennadon Quarry



'Cut quoins' form other 'rustic stone' supplier (Lantoom Quarry).

2.4 Market

2.4.1 The main source of demand for the material comes from the construction industry, for new builds, extensions, boundary walls and building repairs. Slate stone is a predominant building material in the 'moorland fringe' settlements and is very evident in the fabric of buildings, walls and other structures. The market for the stone is principally throughout Devon and Cornwall with just 1% of supply going further afield. It is important to note that current levels of supply from the quarry underpin the viability of the operation.

2.4.2 A key role of Yennadon is making suitable stone available for use on Dartmoor and the fringe settlements where it has been used historically and is an integral part of the local scene. Indeed, even the existing (1991) planning conditions (condition b) state that: "*A minimum of 75% of the total tonnage of stone leaving the quarry each year shall be building and walling stone* ***to ensure that the output from the quarry contributes to the achievement of conservation objectives in the area***".

2.4.3 It is clear from DNPA's Policy COR22 that there is no requirement for Yennadon Stone to be used solely within the National Park. This is discussed in the Planning Policy Context (Section 5.0) of the Environment Statement and can be summarised as follows:

> "Part 2 of Policy COR22 allows for small scale mineral working subject to a reasonable set of environmental, amenity and access considerations. However, while the quarried stone is *per se* a local material there is no caveat in the policy that this material should be for local needs only."

2.4.4 Making stone available for building projects further afield directly affects the viability of the quarry and its ability to make stone available locally, which has historically been the case as well. If the quarry only supplied stone to projects in the National Park then it would be unviable and cease to operate.

2.4.5 Local developers and architects often specify "Yennadon Stone" by name in planning applications. As such, the use of Yennadon Stone is often then named within the materials list as part of the planning conditions. Conservation officers request the use of local stone in order to retain the character of an area, both in new builds and in renovation works.

2.4.6 Recent planning application examples where Yennadon Stone was specified by a local council include:

- Construction of a bridge for pedestrians and cyclists at Peak Hill, Dousland (Application No: 0174/14). This development lies within Dartmoor National Park and the Applicant (Devon County Council) specified Yennadon Stone in their Planning Statement.
- New extended toilet block facilities at Whitestrand, Salcombe (Application No: 41/3057/11/DC). This development lies within an AONB and Conservation Area and the Agent/Applicant (South Hams District Council) specified Yennadon Stone as cladding to match the appearance of the main building at the site.

2.4.7 In order to assess Yennadon Stone's market, sales have been evaluated on the basis of (delivery) location, type (building or walling stone) and size of order (see Appendix 04). The latter provides an indication of the size of development; i.e. <10t is likely to be for renovations or small extension; 10t to 100t is likely to be for a small to medium developer; and >100t is likely to be for a moderate to large housing or commercial development. The total sales by area are provided in Table 1 and differentiated sales (building or walling stone) are presented graphically in Figure 02.

Percentage of sales within area	Cut and selected stone			Percentage of total number of sales
	>100t	100t - 10t	<10t	
Dartmoor National Park + fringes	0	36	**64**	8
South Devon	5	40	**55**	37
North Devon	5	**68**	27	4
East Devon	11	39	**50**	4
East Cornwall	8	41	**52**	17
Mid Cornwall	28	**52**	20	7
West Cornwall	16	**67**	16	4
Other	0	36	**64**	1
				100%

Table 1: Percentage of Sales within each Area

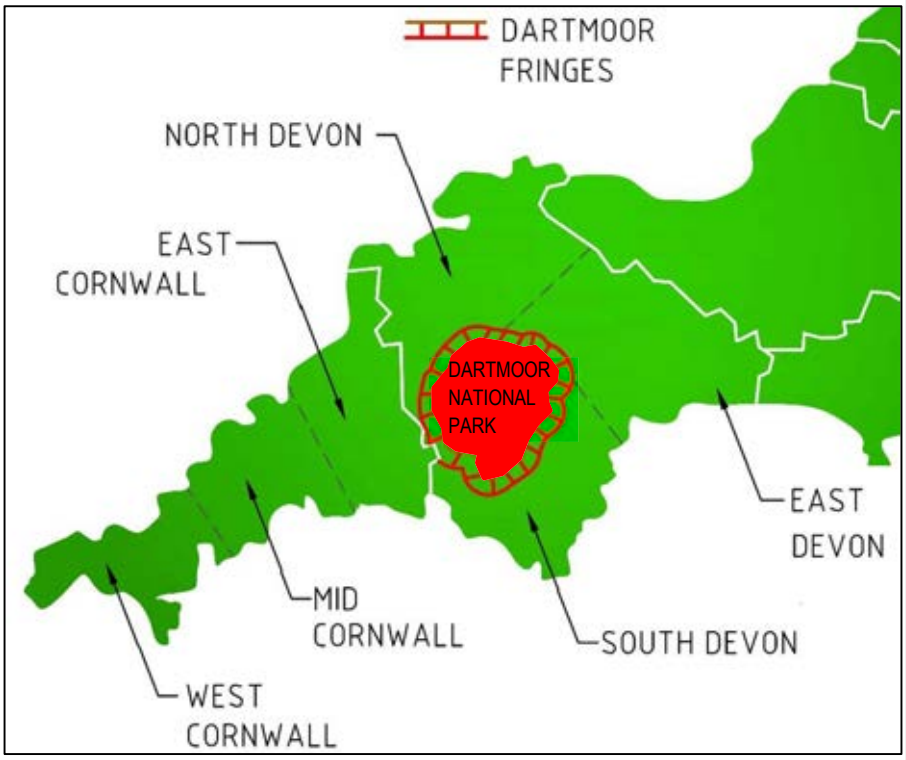
2.4.8 Development within the boundaries of Dartmoor National Park is carefully controlled by the local authority in line with their planning policies. As such, moderate to large developments are very rare. The small number of small to medium-sized developments and renovations permitted within Dartmoor National Park, have to comply with strict development criteria and the use of local stone is encouraged to retain the character of the area. 'Local stone' on Dartmoor comprises both granite and rustic stone. Although granite stonework dominates in much of the National Park, which reflects the underlying geology, there are few population centres within this central area of the National Park, such as Princetown and Moretonhampstead. Most of the larger population centres are located on the western and southern outer edges of the National Park, such as Yelverton, Horrabridge, Ashburton and Buckfastleigh, where rustic stone is the dominant 'local stone'.

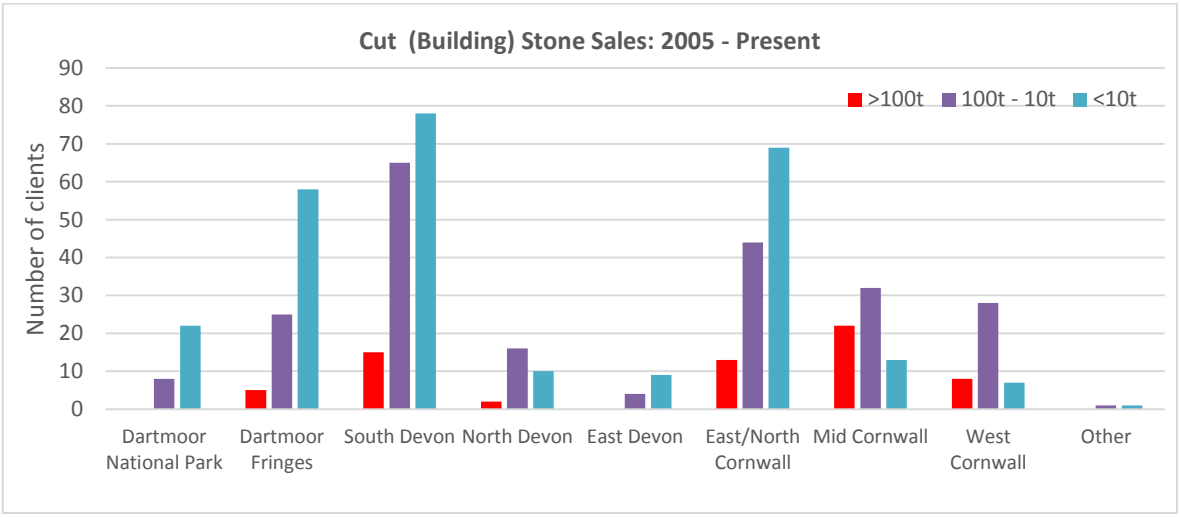
2.4.9 Considering the relatively low population density on Dartmoor and low level of developments granted within the National Park, Yennadon Stone is considered to be an important source of both building and walling stone for the National Park. The production statistics from Yennadon Quarry reflect the propensity of small to medium developments and renovations within the National Park boundary; i.e. the quarry is fulfilling the condition "to contribute to the achievement of conservation objectives in the area".

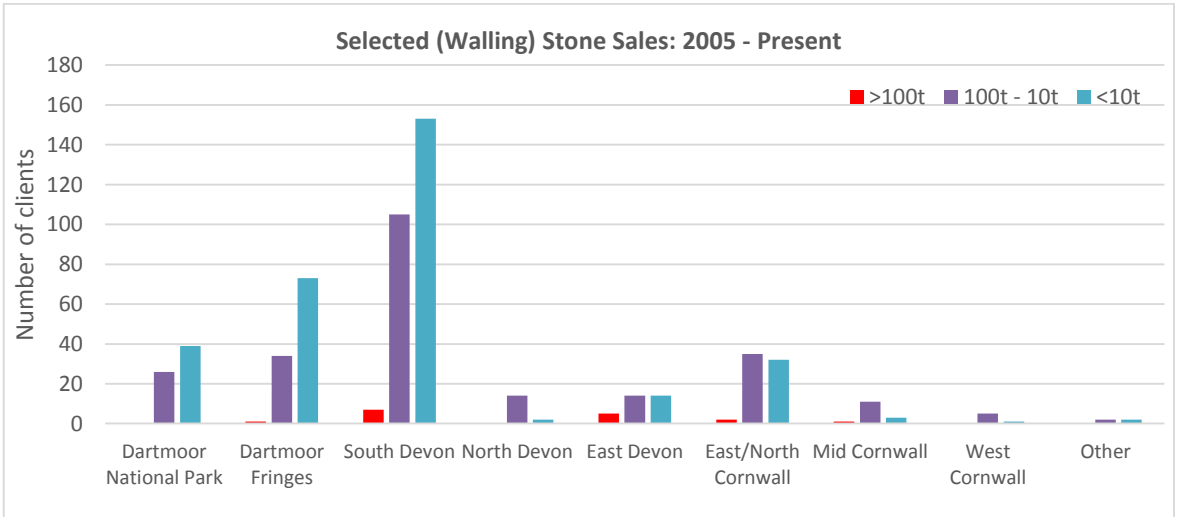
2.4.10 There are also a number of major communities within the 'fringes' of Dartmoor, such as Tavistock, Ivybridge, Bovey Tracey and Okehampton. The Dartmoor Fringes are also considered to be an important area where 'local' building stone should be used to retain the character of the area as a whole. Yennadon Stone is a principal source of both building and walling stone for developments within the Dartmoor Fringes.

Figure 02:
Summary of market based on area and size of developments.

Notes:
>100 t = large developments
100t – 10t = medium-sized developments
<10t = small developments/ repairs
Excludes stone collected from quarry by customers or merchants.







2.4.11 Taken together, Yennadon Stone's sales within Dartmoor National Park and the Dartmoor Fringes is the third largest market area after South Devon and East Cornwall (see Table 1). It should be noted that 64% of all sales with Dartmoor National Park and its fringes are to small developers, which demonstrates the high level of demand from local builders for small developments and the re-instatement of existing / older buildings.

2.4.12 Yennadon Stone's largest market area is South Devon. The South Hams, which makes up most of this market area primarily comprises an Area of Outstanding Natural Beauty (ANOB). The second largest market area for Yennadon Stone is East Cornwall, which is dominated by sales within the Tamar Valley.

2.4.13 It is evident from Table 2 that the majority of Yennadon Stones customers (within each market area) are dominated by small developers and builders. Sales to medium and large developers are often influenced by the lack of production capacity of rustic stone from alternative sources (see Section 3.0); whereas Yennadon Stone Ltd is renowned by developers for their prompt delivery and dependable supply.

2.4.14 National and local developers, including Wainhomes, Taylor Wimpey, Persimmon, Barratts, Linden, Cavanna, Bloor and many more currently get the vast majority of their natural building stone from Yennadon Quarry. Commercial developers, such as Dawnus Construction, and social housing contractors, such as 3MS construction, also draw the bulk of their natural stone from Yennadon Quarry, as do various merchants. It should be noted that sales to medium and large developers outside the South Devon, Dartmoor and East Cornwall areas are often influenced by the lack of production capacity of rustic stone from alternative sources.

2.4.15 Examples of current and recent residential and commercial developments that have used Yennadon Stone are listed in Table 3, which provides an indication of the larger developments that use Yennadon Stone. Photographic examples of some of these recent developments that use Yennadon Stone is provided in Figure 03.

2.4.16 There is also a large demand for Yennadon Stone from builders' merchants. Yennadon Stone are the foremost supplier of Rustic Building Stone to Travis Perkins, Jewsons, Palladium Keyline, Bradfords, RGB, RGC and Interline.

Figure 03: Examples of recent developments using Yennadon Stone

Bottle Park, Lee Mill [Cavanna Homes]

Private residence, East Allington

Cotehele Mill (National Trust), Tamar Valley

Higher Moor, Avonwick
[Linden Homes]

Walling and paving,
Little Dartmouth

Tesco Store,
Kingsbridge

Developer	Location		Product type*
Taylor Wimpey	St Martins Meadow	Liskeard	80/20
	Carrolsland	Staddiscombe	Small Walling
	Fairfields	Probus	Rustic
	Helmers Field	Chillington	Rustic
	Penlee/Meadowlands	Plymouth	25/75
	Tregorrick	St Austell	Small Walling
	Barton Brake	Wembury	Rustic
	St Aubyn	Mabe	75/25
	Pen an Dre	Truro	Rustic
	Liskey Hill	Perranporth	75/25
	Kitley	Yealmpton	Rustic
Wainhomes	Kensey Parc	Launceston	Rustic
	Pochin Meadows	St Austell	Rustic
	Foundry Parc	Charlestown	Rustic
	Green Lane	Bodmin	Rustic
	Oak Meadow	Hatherleigh	Rustic
	Carnsmerry	Bugle	Rustic
	Inns Park	Camelford	Rustic
	Berry Park	Saltash	Rustic
	Porth Meadow	Par	Rustic
	Batheway Fields	North Tawton	Rustic
	Porthpean Road	St, Austell	Rustic
	Hill Hay Close	Fowey	Rustic
	Menear Road	St Austell	Rustic
	Trewollack	Quintrell	Rustic
	Burlawn Meadow	St Austell	Rustic
Redrow Homes	Stourscombe Vale	Launceston	Rustic
	Orleigh Cross	Newton Abbot	75/25
	Tiddybrook Meadow	Tavistock	Rustic
Barratt Homes	Canyke Fields	Bodmin	80/20
	Broome Park	Okehampton	Rustic
	Panorama	Plymouth	20/80
		Bovey Tracey	Rustic
	Canes Orchard	Brixton	Rustic
	The Spires	Ermington	Rustic
Persimmon Homes	Pilmere	Saltash	50/50
	Arundel Parc	St Columb	50/50
	Tregloweth	Truro	50/50
	Lowen Bre	Truro	50/50
	Dickens Reach	Liskeard	50/50
	Saltram Gardens	Plymstock	50/50
	Palmerston Heights	Plymouth	50/50
	Strawberry Fields	Penryn	50/50
	Laureate Heights	Sidmouth	50/50
	Okemont Grove	Okehampton	50/50

Developer	Location		Product type*
Cavanna Homes	St Annes	Saltash	Rustic
	Bottle Park	Lee Mill	Rustic
	Bostons Yard	Plymstokc	Rustic
	504K, Airport	Plymouth	50/50
Bloor Homes	Batson Cross	Salcombe	Rustic
	Baltic Quay	Totnes	Rustic
Linden Homes	Broadclose Farm	Bude	Small Walling
	Liskerret Vale	Liskeard	80/20
	The Central	Bodmin	Rustic
	Tors Farm	Bridestowe	Rustic
	Boscawen Woods	Truro	Rustic
		St Mabyn	Rustic
		St Merryn	70/30
	Ker Street	Plymouth	50/50
	Higher Moor	Avonwick	Rustic
		Holbeton	Rustic
Small to medium-sized developers	J&M Homes	Yelverton	85/15
	Bloor Homes	Loddiswell	Rustic
	Kingsman Construction	Salcombe	Rustic
Commercial Schemes	Tesco Store	Kingsbridge	Rustic
	Lidl Store	Woolwell	25/75
	Lidl Store	Tavistock	Rustic
	Cormac/Duchy of Cornwall	Truro	Smalls
	Tremough Campus	Falmouth	Rustic
	Highway Structures	South West Highways	Small Walling

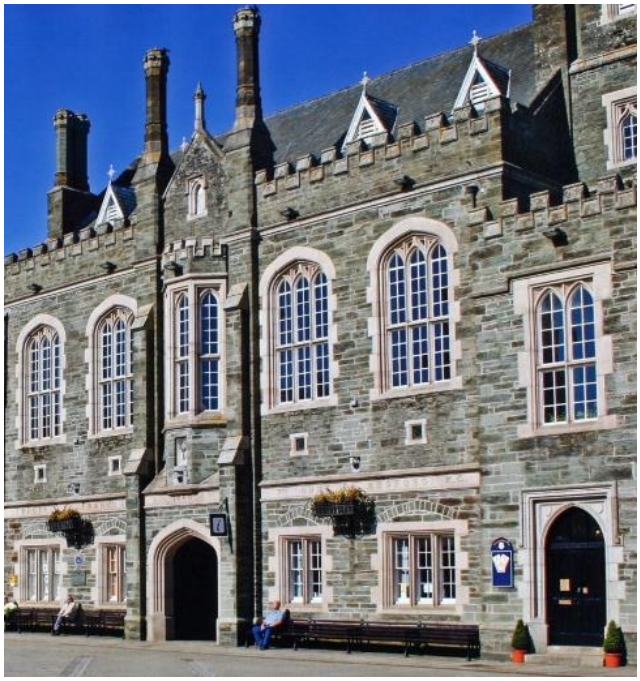
*Rustic Building Stone; Small Walling Stone; Combined Rustic/Walling

Table 2. Examples of Recent Developments using Yennadon Stone

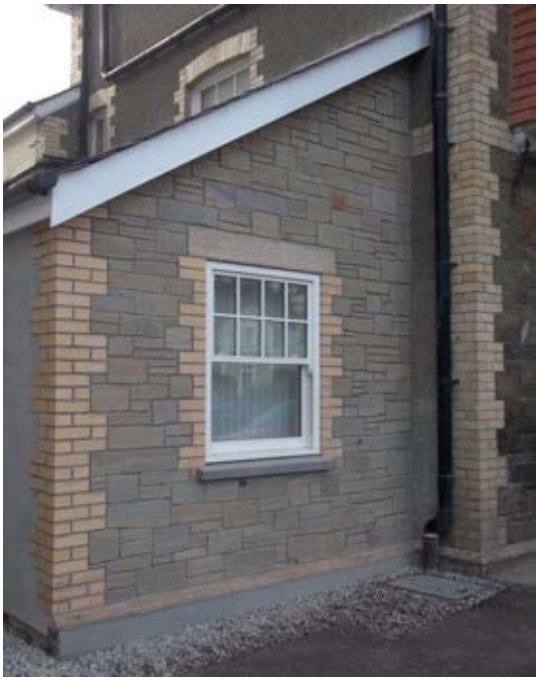
2.4.17 A potentially increasing market for Yennadon Stone is as a replacement for Hurdwick Stone, which was used extensively in Tavistock (World Heritage site) and the surrounding area. Hurdwick Stone comprises Upper Devonian pillow lavas and schalsteins of igneous origin and was extracted from Hurdwick Quarry until the 1930's and again from 1989 until 2002. It was the main building stone for many of Tavistock's main buildings, including the Bedford Hall, Guildhall, Town Hall and Police Station. Today, there are no quarries within the Tavistock area producing the same type of dimension stone.

2.4.18 The cut slate from Yennadon Quarry, when cut square and the faces textured, provides a comparable stone and due to its relatively high strength and durability is now commonly used as a replacement for Hurdwick Stone in extensions, renovations and repairs (see Figure 04).

Figure 04: Hurdwick Stone



Town Hall, Tavistock,
built with Hurdwick Stone



Recent extension in Tavistock built with
Yennadon Stone as a Hurdwick replacement

3.0 ALTERNATIVES TO YENNADON STONE

3.1 Alternative Local Sources of 'Rustic Stone'

3.1.1 There are a variety of different 'slate' stone types that have historically been quarried throughout Devon and Cornwall. The character and appearance of these indigenous stones has played a significant role in contributing to the local distinctiveness of the built environment in different parts of the counties. The term 'slate' for building stone is loosely applied to mudstones and siltstones that have undergone various grades of metamorphism. The nature and appearance of these stones varies greatly. Stones can be weak or strong, durable or non-durable, dark or light grey, have green, to yellow, to red hues, and be characterised by brown iron oxide and/ or quartz veining.

3.1.2 Most other existing 'slate' quarries in the region produce a dark grey "Blue" slate (which can be used as both traditional roofing slate and dimension stone, etc.). There are limited other sources of 'Rustic Stone' within the Southwest. Whilst there are slates that share some 'characteristics' with Yennadon Stone, none extract the high quality Hornfelsed Slate produced at Yennadon. As such, there are none that can provide exact and viable alternatives in terms of stone type, quality, colour, strength and durability.

3.1.3 There are just two other sources of a similar rustic stone available within a 30 mile radius of Yennadon, namely Mill Hill Quarry and Lantoom Quarry. Neither provide appropriate replacements with regard to stone type, quality, colour, strength and durability.

3.1.4 There are other small slate stone quarries in Cornwall, Callywith, Trecarne and Tredinnick that produce a rustic stone. Although, Callywith and Trecarne do produce a cut dimension stone for building / facing, neither are a character replacement for Yennadon Stone. Tredinnick Quarry only produces an unprocessed product suitable for hedging stone.

3.1.5 None of the other sources of rustic dimension stone with a similar colour that is typical of West Dartmoor / Devon and East Cornwall extract the Hornfelsed Slate produced at Yennadon or can produce the tonnage currently demanded by the construction market. The Hornfelsed Slate at Yennadon is particularly strong and durable in comparison to the other rustic stone sources outside the metamorphic aureole. Yennadon Quarry's product is also unique in providing commercial quantities of natural quoins.

3.1.6 These 'alternative' quarries are discussed further below.

3.2 Mill Hill Quarry

3.2.1 Mill Hill Quarry near Tavistock is operated by Mill Hill Quarries Ltd., who also operates the Trevillet Slate Quarry near Tintagel ("blue stone"). The Mill Hill Quarry extracts "Rustic Stone" from the Upper Devonian Tavy Formation (blue/grey in colour with iron stained faces). Although Mill Hill Quarry is regarded as operational, the production of Rustic Stone is sporadic and on a relatively small scale. The quarry is currently close to its operational limit, although it does have permission to extend into adjacent woodland (see extract from Devon County Minerals Local Plan 2004 in Appendix 03), this area is currently not being worked due to significant archaeological features being present.

3.2.2 Their Trevillet Quarry (Tintagel) predominantly produces a 'blue slate' that is used for building stone, roofing, walling and paving. The Trevillet site can also produce very limited amounts of 'rustic' building/walling stone, which is imported into the Mill Hill site for processing.

3.2.3 Mill Hill also operated Longford Quarry within Dartmoor National Park until operations ceased several years ago. Longford produced a rustic stone similar to Yennadon Stone.

3.2.4 Should Yennadon Quarry reduce production output, Mill Hill Quarries could not currently achieve the production capacity required by developers. Even if the Mill Hill Quarry site were to start extracting stone from the adjacent woodland, it is noted that the local road network is inadequate to support additional quarry traffic, and therefore could not increase production rates to satisfy the demand.

3.3 Lantoom Quarry

3.3.1 Lantoom Quarry is situated near Liskeard. Lantoom as a company operates four other quarries; however it is only the Lantoom Quarry site that produces a 'Rustic Slate' dimension stone. It should be noted that Lantoom Quarry also produces various other 'slate' stone and hardcore/aggregate products, not just dimension stone. Lantoom Quarry has planning permission until 2042.

3.3.2 Lantoom Quarry is located within the **Saltash Formation** of Emsian to Tournasian Age. This formation comprises a dark grey silty Mudstone with variable but very subordinate amounts of laminae and thin beds of siltstone and sandstone. Due to its age and regional metamorphism this meta-mudstone can have the appearance and characteristics of a slate and quarries within such deposits are often termed as Slate Quarries. The bedding width is typically 100mm to 200mm thick, which controls the final block size. The maximum block size produced at Lantoom Quarry is 300mm.

3.3.3 The 'slate' at Lantoom Quarry is blue-grey in colour. The natural weathering of joints within the bedrock also results in the 'faces' of the extracted blocks having the orange-brown colour associated with 'Rustic Stone'. The original grey colour is revealed on sawn faces.

3.3.4 The 'rustic stone' produced at Lantoom Quarry has some similarities in appearance but many differences in terms of strength and durability. Laboratory testing was carried out in order to provide an indication of the difference in the performance of Yennadon Stone with that of Lantoom Stone (as a possible alternative source), a number of samples from both quarries were sent to an independent UKAS accredited laboratory for the following comparative tests:

- Compressive Strength;

- Water Absorption; and
- Resistance to Salt Crysatllisation

3.3.5 The results are provided in Appendix 06 and discussed in Section 3.5 below.

3.3.6 During 2013 Lantoom Quarry stated on their website that 'Rustic Stone' is their most popular building stone material and that as it is often in high demand "delivery can be subject to long lead times". This indicated that Lantoom Quarry would be unable to cope with increased demand. It should be noted that their website was refurbished following submission of the original planning permission and this statement is no longer present.

3.3.7 It is understood that Lantoom Quarry have experienced supply difficulties in recent years. In 2011Yennadon Stone hired a mobile saw and labour to Lantoom Quarry for six weeks to cut 150 tonnes of stone as Lantoom were unable to meet an order. In addition in the same year, Yennadon Stone supplied a site in Cornwall with stone from Yennadon Quarry at the request of the developer as Lantoom were unable to meet an urgent order.

3.3.8 In their objection to the original planning application, Stephens Scown Solicitors, who were acting on behalf of Lantoom Quarry, indicated that should Yennadon Quarry cease production, Lantoom Quarry would be able to accommodate any increase in demand / sales and would also be able to employ any Yennadon Quarry staff made redundant.

3.3.9 Yennadon Quarry commissioned an independent review of the financial performance of Lantoom Ltd. and their ability to absorb Yennadon Quarry's business demand from Wills Accountants. Their report is provided in Appendix 05. Wills Accountants indicated that based on publically available data held at Companies House, Lantoom Ltd has been cash flow insolvent for the financial years seen and have reported losses in two of the last five years recorded. Wills Accountants have concluded that they are of the opinion that Lantoom Ltd would struggle to have the financial stability in its present form to replicate the business of Yennadon.

3.3.10 With regard to Stephens Scown Solicitors' latter assertion regarding Yennadon Quarry's employees relocating to Lantoom Quarry, this would be an unrealistic round trip of 56

miles and a 1.5 hour commute. Considering the typical wage of quarry workers, this commute would be financially impractical.

3.4 Other Sources

3.4.1 There are three other small slate stone quarries in Cornwall, Callywith, Trecarne and Tredinnick. None of which supply a building stone considered to be a character replacement for Yennadon Stone. Callywith and Trecarne do produce a cut dimension for building / facing stone, however, Tredinnick Quarry only produces an unprocessed product suitable for hedging stone. A summary of these three quarries are provided below.

Callywith Quarry, located near Bodmin, Cornwall, predominantly supplies hedging stone and stone for pathways, driveways and rockeries. It can produce a masonry stone, with cut (grey) quoins. The natural joint faces are a more brownish grey in colour, which is characteristic of building stone in mid to west Cornwall.

Trecarne Quarry, located near Delabole, North Cornwall produces a range of slate products including hedging, paving and hardcore. The slate is highly cleaved, with irregular jointing. Building stone suitable for housing predominantly comprises cut faces, which are grey in colour.

Tredinnick Quarry is located near St Issey, Wadebridge. It is a small operation that produces a grey shale (low-grade metamorphic slate) used as a hedging stone. It forms an irregular stone with reddish joint faces. It does not produce a building dimension stone. (There is a second Tredinnick Quarry near Grampound, which produced a gritstone (granular in appearance). It has been non-operational for approximately 10 years).

3.4.2 None of these three quarries are considered to be a viable production alternative source as their 'rustic' stone does not have a similar colouring to Yennadon, Mill Hill or Lantoom; and could not provide the required production capacity should Yennadon cease operation.

3.4.3 Based on the fact that Mill Hill Quarry could not viably increase production to supply demand; and that the other three quarries mentioned above are not considered suitable alternatives (due to differences in colour, shape, quality and product type), Lantoom Quarry would be the main beneficiary should Yennadon Quarry reduce output. Given that Lantoom Quarry has experienced delivery problems in the past and is considered unlikely to meet future demand in its present financial form, it is considered that sustainable alternative sources of rustic stone are scarce.

3.4.4 The net effect is that if Yennadon Quarry reduces capacity, then apart from the alternative stone at these two small-scale quarries, the only other sources of the same type of stone are to be found in North Wales and China, which would have a significant transport and carbon footprint cost. Delivery times for developers will also significantly increase, and could potentially cause significant delays in construction. As a result either costs of construction will increase or customers will seek alternative building styles, such as render or brick, adversely impacting on the policies for preserving local character in new design.

3.5 Comparison of Rustic Stone from Lantoom Quarry and Yennadon Quarry

3.5.1 In order to provide an indication of the difference in the performance of Yennadon Stone with that of Lantoom Stone (as a possible alternative source), a number of samples from both quarries were sent to an independent UKAS accredited laboratory for the following comparative tests:

- Compressive Strength;
- Water Absorption; and
- Resistance to Salt Crysatllisation

3.5.2 The Compressive Strength of a rock is the loading required to cause failure and is used as a measure of design strength. The table below provides the range of compressive strengths to which descriptive terms can be assigned to the building stone.

Descriptive Term	Compressive Strength (MPa)
Extremely strong rock	>200
Very strong rock	100-200
Strong rock	50-100
Moderately strong rock	12.5-50
Moderately weak rock	5.0-12.5
Weak rock	1.25-5.0
Very weak rock	0.60-1.25

Table 3: Descriptive Terms Based on Compressive Strength

3.5.3 Water Absorption is the mass of water required to saturate the stone, expressed as a percentage of the solid mass of the stone. The test is an indicator of weathering resistance (i.e. susceptibility to freeze-thaw action and salt crystallisation). In general, the lower the percentage the better, with an absorption of less than 5% being preferable.

3.5.4 Resistance to Salt Crystallisation provides a measure of durability and behaviour of the stone in the environment (i.e. weathering characteristics). The test involves 15 cycles of wetting (in a salt solution) and drying (where the salts crystallise out). Fine pores cannot accommodate the increasing accumulations of salts and are eventually broken apart by the expansive forces of the crystal growth, causing the stone to physically decay. The susceptibility of dimension stone to salt crystallisation damage varies depending to a considerable extent on the size and distribution of pores. In the natural environment, soluble salts can include sea salt, road salt, acid gases, etc. The durability of the stone is assessed by the magnitude of its weight loss.

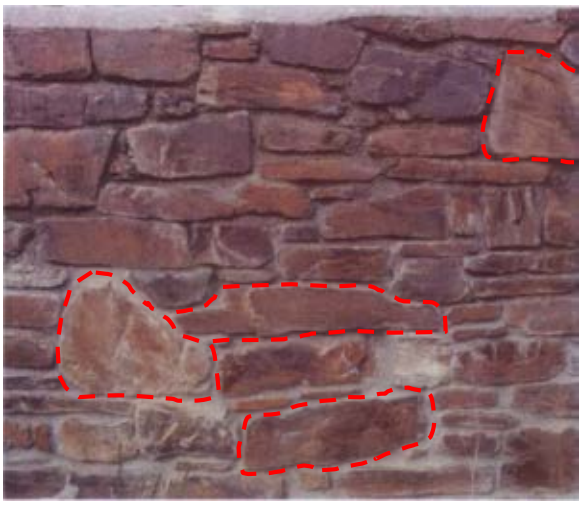
3.5.5 The test results from Yennadon Stone and Lantoom Stone are summarised in the table below.

	Yennadon Stone	**Lantoom Stone**
Compressive Strength (MPa) BS EN 1926:2006	80	22
Descriptive Term	Strong rock	Moderately strong rock
Water Absorption (%) BS EN 13755:2008	3.2	6.7
Resistance to Salt Crystallisation: Mass Change after 15 cycles (%) BS EN 12370:1999	-8.8 (full 15 cycles completed)	-44.2 (stopped after 12 cycles due to disintegration)

Table 4: Summary of Laboratory Testing

3.5.6 The laboratory analysis demonstrates Yennadon Stone's high strength and durability and low weathering potential. With regard to strength, Yennadon Stone lies within the upper range of 'Strong Rock'. These laboratory results clearly reflect the contact metamorphic processes that Yennadon Stone have been subject to, which result in the contact metamorphosed hornfels being of higher strength than meta-mudstones and slates located outside the metamorphic aureole. The high durability and low weathering potential would result in Yennadon Stone being less likely to flake and delaminate on weathering than meta-mudstones / slates located outside the metamorphic aureole.

3.5.7 With regard to comparing the aesthetic appearance of the Yennadon Stone and Lantoom Stone, the photographs below were provided by Stephens Scown on behalf of Lantoom Ltd as part of their objection to the previous planning submission. The upper photographs illustrates the 'selected walling' stone, which is an unprocessed product; and the lower photographs illustrate the 'cut building' stone which has been cut (processed) to achieve stone suitable for building.



'Selected walling' stone – Lantoom Stone
Red lines highlight some of the irregular block shapes.

'Selected walling' stone – Yennadon Stone
Note: parallel edges.

Lantoom's mixed rustic/cut stone

Yennadon's 50/50 rustic/cut stone

3.5.8 The photographs were submitted by Stephens Scown with the aim of showing the similarity between Lantoom Stone and Yennadon Stone; i.e. both show a brown 'rustic stone'. However, it is considered that these photographs also demonstrate marked differences between the two products:

1. Yennadon Quarry produces naturally rectangular stone with parallel faces with near right-angled corners, which result in regular parallel mortar bedding joints; whereas Lantoom Quarry produces a combination of angled and flat stone, which results irregular and undulating mortar bedding joints.
2. Yennadon Stone is a 'mellow' yellowish brown product; whereas Lantoom Stone is darker and more orange brown in colouration.

3.5.9 The laboratory results demonstrate that Yennadon Stone is stronger, more durable and less prone to damage (flaking and delamination) due to weathering than stone quarried from Lantoom. There are also key differences in colour and tone. Whilst natural faces from Yennadon predominantly ranges from mellow yellow to brown hues with some hints of bluish grey; natural facing from Lantoom tends to have more dark yellow to orange brown hues. It is also quite different as a cornering material, Lantoom Stone generally needs to be cut to work at right angles to produce a quoin. Unlike Yennadon Stone which produces natural quoins.

3.5.10 Although Lantoom Quarry produces a rustic stone, it does not have the same colour, shape, quality and strength and cannot be compared as like for like.

3.5.11 The main reason for these differences is that the two quarries fall within different underlying geological areas; Yennadon in the Tavy Formation and Lantoom in the Saltash Formation.

3.5.12 In addition to the differences identified, Lantoom Quarry also does not have the production capacity that Yennadon has (as indicated by Wills Accountants report). It is considered likely that Lantoom Quarry would be the main alternative source should Yennadon Quarry reduce capacity. Given that Lantoom Quarry has experienced delivery problems in the past and is considered unlikely to meet future demand in its present financial form, it is considered that sustainable alternative sources of rustic stone are scarce.

3.6 Opening a New Quarry

3.6.1 The Hornfelsed Slate deposit that Yennadon Stone quarries lies predominantly within the boundary of Dartmoor National Park, as shown in Appendix 02.

3.6.2 Much of the 'contact metamorphosed' Tavy Formation that lies to the south of the Dartmoor Granite outside the National Park comprise inter-bedded metamorphosed

slates, meta-basic rocks/volcanic tuff, and metamorphosed limestone/calcareous rocks (calc-flinta). In addition, the granite intrusions in this area have also undergone chemical alteration known as kaolinisation, which also chemically altered the surrounding meta-sedimentary rocks, resulting in them being more clayey /softer. As such, is considered unlikely that a viable alternate source would be present in this area.

3.6.3 To the east of the Dartmoor Granite, there is an area of a slates within the metamorphic aureole, however these are recorded as being dark grey in colour and also lie within the National Park boundary.

3.6.4 Therefore, alternative sources of Rustic Stone from high grade Hornfelsed Slate are limited outside the National Park.

4.0 CONCLUSIONS

4.1 The stone produced from Yennadon Quarry is a Dartmoor Rustic Stone (known widely as Yennadon Stone). It is a metamorphosed sedimentary rock that is well suited to, and favoured as, a building stone due to its indigenous appearance (colour), high strength, square jointing (including natural quoins) and resistance to both frost and weathering. As such, it has an established reputation in the market place as a good, flexible, high quality building product.

4.2 The market for Yennadon Stone comes from the construction and building industry, from which the main demand is for facing stone to new buildings and extensions, and for walling. Yennadon Quarry also supplies a high percentage of local builders for small developments and the re-instatement of existing / older buildings. Planning policies continue to encourage the use of local materials through the requirement for developments to incorporate local features and/or be in-keeping with the surrounding built environment.

4.3 Yennadon Stone's production statics for sales within Dartmoor National Park reflect the sizeable amount of small to medium developments and renovations within the area and lack of larger developments. Yennadon Stone is considered to be an important source of both building and walling stone for the National Park (in areas where granite is not the dominant 'local' stone in the surrounding built environment).

4.4 A key role of Yennadon is making suitable stone available for use on Dartmoor and the fringe settlements where it has been used historically and is an integral part of the local scene. Indeed, even the existing (1991) planning conditions (condition b) state that: "*A minimum of 75% of the total tonnage of stone leaving the quarry each year shall be building and walling stone* ***to ensure that the output from the quarry contributes to the achievement of conservation objectives in the area***".

4.5 In addition, DNPA's planning policy COR22 states that there is no requirement for stone from quarries within the National Park to be used solely within the National Park. There are also a number of communities within the 'fringes' of Dartmoor, where 'local' building stone is considered essential to retain the character of the Dartmoor area as a whole. Yennadon Stone is a principal source of both building and walling stone for developments within the Dartmoor Fringes.

4.5 Taken together, Yennadon Stone's sales within Dartmoor National Park and the Dartmoor Fringes is the third largest market area after South Devon and East Cornwall,. It should be noted that 64% of all sales with Dartmoor National Park and its fringes are to small developers, which demonstrates the high level of demand from local builders for small developments and the re-instatement of existing / older buildings.

4.6 Yennadon Stone's largest market area is South Devon (South Hams) and the second largest is East Cornwall (which is dominated by sales within the Tamar Valley). The majority of Yennadon Stones customers are small to medium developers, builders and builders merchants. Sales to medium and large developers outside the South Devon, Dartmoor and East Cornwall area are often influenced by the lack of production capacity of rustic stone from alternative sources. Yennadon Stone Ltd is renowned by developers for their prompt delivery and dependable supply.

4.7 Alternative sources of this product are scarce, with only two quarries within a 30 miles radius able to provide a similar type of stone; both of these quarries suffer from a lack of production capacity; a situation which will exacerbate should Yennadon Quarry reduce production. The net effect is that if Yennadon Quarry reduces output prematurely, then apart from the alternative stone at these two quarries, the only other sources of the same type of stone are to be found in North Wales and China, which would have a significant transport and carbon footprint cost. As a result either costs of construction will increase or customers will seek alternative building styles, such as

render or brick, adversely impacting on the policies for preserving local character in new design.

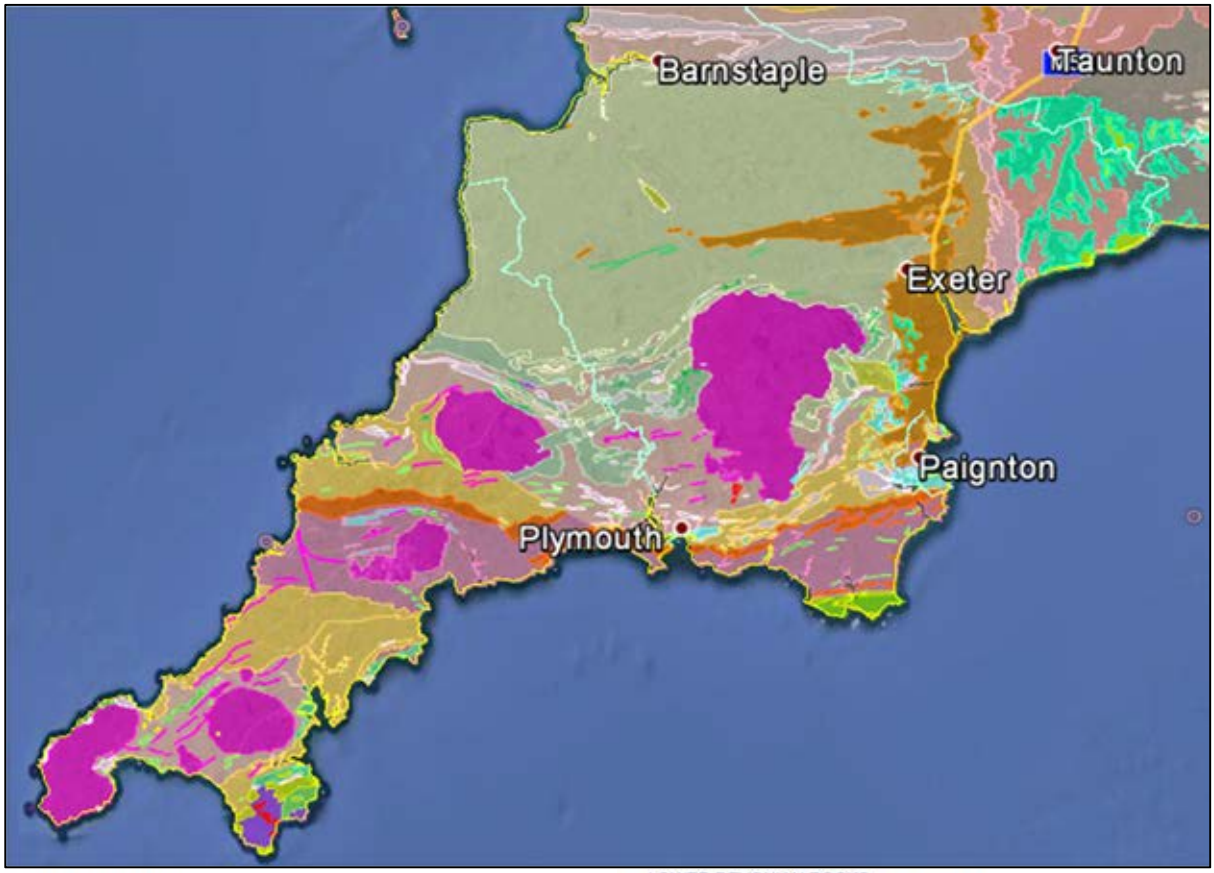
4.8 Yennadon Stone is considered to be an important source of building and walling stone both in the Dartmoor area and region as a whole. The reduction of output from Yennadon Quarry would have a significant effect on the supply and demand for 'local' rustic stone within the region and will have a detrimental effect on future developments and renovations within Dartmoor National Park and surrounding areas.

APPENDICES

APPENDIX 01

Geological Map of Southwest England

Appendix 01: Geological Map of Southwest England



Superficial deposits

- ALLUVIUM - CLAY, SILT AND SAND
- BLOWN SAND - SAND AND GRAVEL
- PEAT - PEAT
- RAISED MARINE DEPOSITS - SAND AND GRAVEL
- RIVER TERRACE DEPOSITS (UNDIFFERENTIATED) - SAND AND GRAVEL

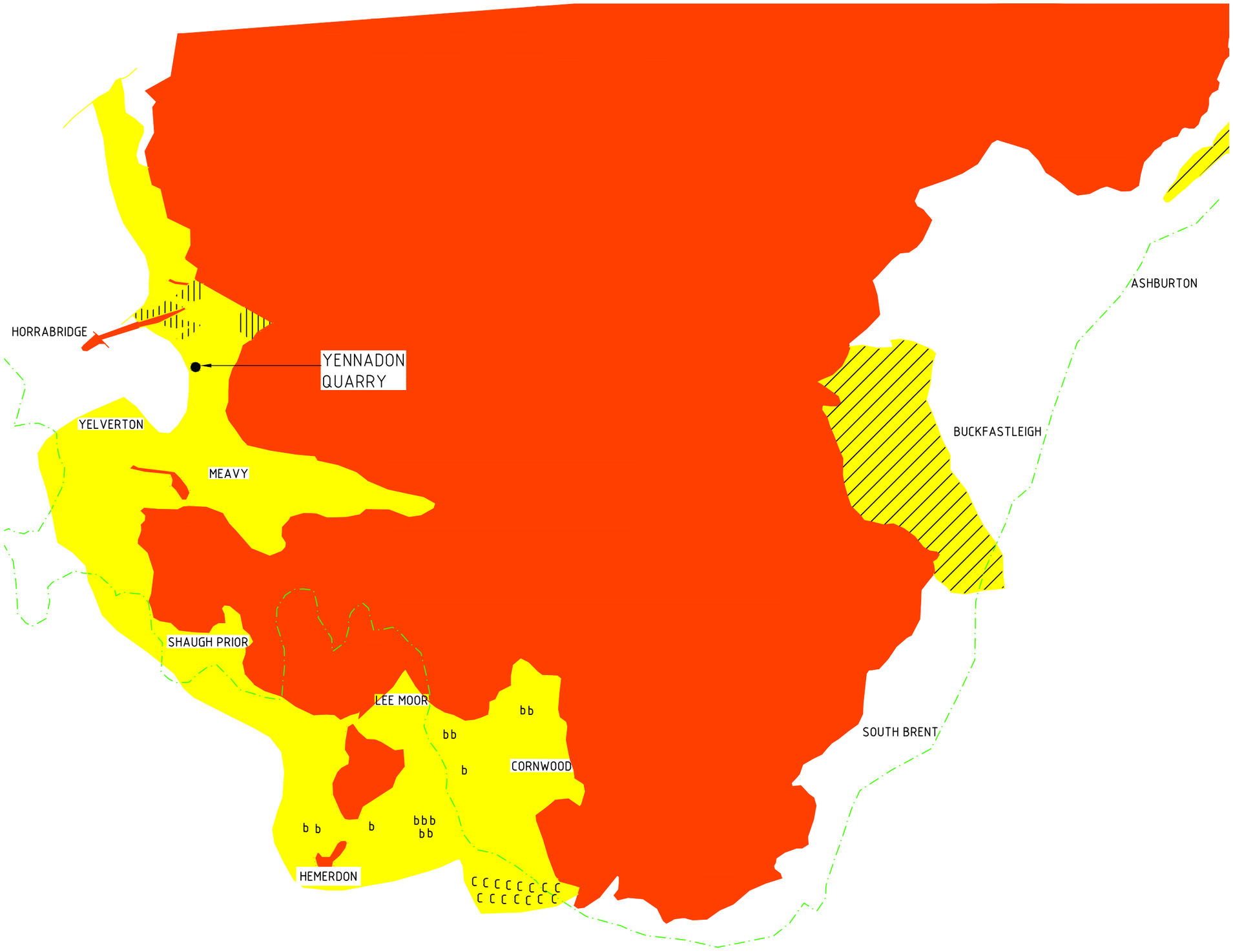
Bedrock geology

- BRACKLESHAM GROUP AND BARTON GROUP (UNDIFFERENTIATED) - SAND, SILT AND CLAY
- EOCENE TO MIOCENE ROCKS (UNDIFFERENTIATED) - CLAY, SILT, SAND AND GRAVEL
- GAULT FORMATION AND UPPER GREENSAND FORMATION (UNDIFFERENTIATED) - MUDSTONE, SANDSTONE AND LIMESTONE
- PERMIAN ROCKS (UNDIFFERENTIATED) - SANDSTONE AND CONGLOMERATE, INTERBEDDED
- UNNAMED EXTRUSIVE ROCKS, PERMIAN - LAVA, FELSIC
- UNNAMED EXTRUSIVE ROCKS, PERMIAN - LAVA, MAFIC
- HOLSWORTHY GROUP - MUDSTONE, SILTSTONE AND SANDSTONE
- DINANTIAN ROCKS (UNDIFFERENTIATED) - LIMESTONE WITH SUBORDINATE SANDSTONE AND ARGILLACEOUS ROCKS
- UNNAMED EXTRUSIVE ROCKS, CARBONIFEROUS - MAFIC LAVA AND MAFIC TUFF
- UNNAMED EXTRUSIVE ROCKS, CARBONIFEROUS - LAVA, MAFIC
- LOWER DEVONIAN ROCKS (UNDIFFERENTIATED) - SANDSTONE AND CONGLOMERATE, INTERBEDDED
- DEVONIAN ROCKS (UNDIFFERENTIATED) - LIMESTONE, MUDSTONE AND CALCAREOUS MUDSTONE
- UNNAMED EXTRUSIVE ROCKS, DEVONIAN - MAFIC LAVA AND MAFIC TUFF
- UNNAMED EXTRUSIVE ROCKS, DEVONIAN - LAVA, MAFIC
- UNNAMED EXTRUSIVE ROCKS, DEVONIAN - TUFF, MAFIC
- UNNAMED IGNEOUS INTRUSION, DEVONIAN - FELSIC-ROCK
- UNNAMED IGNEOUS INTRUSION, DEVONIAN - IGNEOUS-ROCK, MAFIC
- UNNAMED IGNEOUS INTRUSION, DEVONIAN - ULTRAMAFITITE
- UNNAMED EXTRUSIVE ROCKS, CARBONIFEROUS - TUFF, MAFIC
- UNNAMED IGNEOUS INTRUSION, CARBONIFEROUS TO PERMIAN - FELSIC-ROCK
- UNNAMED IGNEOUS INTRUSION, CARBONIFEROUS TO PERMIAN - IGNEOUS-ROCK, MAFIC
- TEIGN VALLEY GROUP - MUDSTONE, SILTSTONE AND SANDSTONE
- UPPER DEVONIAN ROCKS (UNDIFFERENTIATED) - MUDSTONE, SILTSTONE AND SANDSTONE
- UPPER DEVONIAN ROCKS (UNDIFFERENTIATED) - SANDSTONE AND CONGLOMERATE, INTERBEDDED
- MIDDLE DEVONIAN (UNDIFFERENTIATED) - MUDSTONE, SILTSTONE AND SANDSTONE
- LOWER DEVONIAN ROCKS (UNDIFFERENTIATED) - MUDSTONE, SILTSTONE AND SANDSTONE

APPENDIX 02

Tavy Formation Hornfelsed Slate Deposits

Notes
1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. CONTRACTORS MUST CHECK ALL DIMENSIONS ON SITE. ONLY FIGURED DIMENSIONS ARE TO BE WORKED FROM.
3. DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE PROCEEDING.



DARTMOOR NATIONAL PARK BOUNDARY

GRANITE

TAVY FORMATION (WITHIN CONTACT METAMORPHIC AUREOLE)

- YELLOWISH BROWN TO BLUISH/GREENISH GREY HORNFELSED SLATE
- INTER BEDDED SLATE / META-BASIC ROCKS WITH VARYING DEGREES OF ALTERATION
- DARK GREY SLATE
- CALC-FLINTA (META-LIMESTONE)
- HORNFELSED SILTSTONE

Issue	Description	Date	Drwn	Chkd
P1	PRELIMINARY ISSUE	16/04/13	TRS	AR

Status: PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

First Issue Signatures

Scales		Author	T.R. SPILLER
Original Size	A3	Checker	A. ROBERTSON

JGP JOHN GRIMES PARTNERSHIP
Leonards Road, Ivybridge, Devon, PL21 0RU
Tel: +44 (0)1752 690533 Fax: +44 (0)1752 690570
post@johngrimes.co.uk www.johngrimes.co.uk

Client: YENNADON STONE LTD

Project: YENNADON QUARRY PRODUCT AND ALTERNATIVE SOURCES

Title: TAVY FORMATION HORNFELSED SLATE DEPOSITS

Project No.	Appendix.	Rev.
7397 —	02 —	P1

50mm on Original

FILENAME: P:\7000-7999\7397 Yennadon Quarry\Drawings\Drawings\JGP\Drawings\Current\Extensions\geology, PLOTTED BY: Tom Spiller, DATE: 07 November 2013 12:05:53

APPENDIX 03

Extract from Devon County Minerals Plan 2004 regarding Mill Hill Quarry

Source: Devon County Minerals Local Plan, Adopted Plan: Part B, June 2004

MILL HILL

INSET PLAN 43

LOCATION

(NGR SX 452748)

The Consultation Area lies two kilometres west of Tavistock.

GEOLOGY

The quarry works Upper Devonian slates that are blue-grey in colour with many of the bedding planes being heavily stained with iron oxides.

PLANNING HISTORY

Quarrying operations have taken place at Mill Hill for over 400 years and the decorative slate and building stone produced here is in demand both locally and outside the County. Quarrying operations are controlled by a number of planning permissions granted between 1950 and 1968, and another granted in 1986 that included a voluntary agreement to discontinue working on parts of the earlier permission areas.

Although not currently worked, the planning permission to extract stone from Ogbeare Woods has been implemented and will feature in the continued development of the site. An application in 1974 to extract slate from the spoil area south of Higher Lumburn Bridge was refused because of the proximity of residential properties on the opposite side of the valley.

ROMP STATUS

Mill Hill Quarry is an Active Phase I site which was determined on 24 November 1999. The Approved Scheme includes conditions controlling the working scheme, access, traffic and protection of the public highway as well as environmental protection measures, restriction on the hours of working and requirements for landscaping, restoration and aftercare of the mineral site.

DESCRIPTION OF OPERATIONS

Mill Hill Quarry specialises in high quality, high value stone production for specialist building purposes. These include cut and natural building stone, flooring material, rockery stone, and garden walling and decorative stonework. Rock is loosened from the quarry face by controlled blasting, and fallen stone is selected by hand for various uses. There is a high proportion of waste for which there are currently limited markets. Stone is also imported from two other quarries in the same ownership for dressing and resale.

Mill Hill Quarry.

COMMENT

- The Mineral Consultation Area lies in an area classified by the Environment Agency as a minor aquifer.
- The local road network is inadequate for additional quarry traffic.
- Ogbeare Woods contain the remains of a 15th century leat that is of significant archaeological interest.

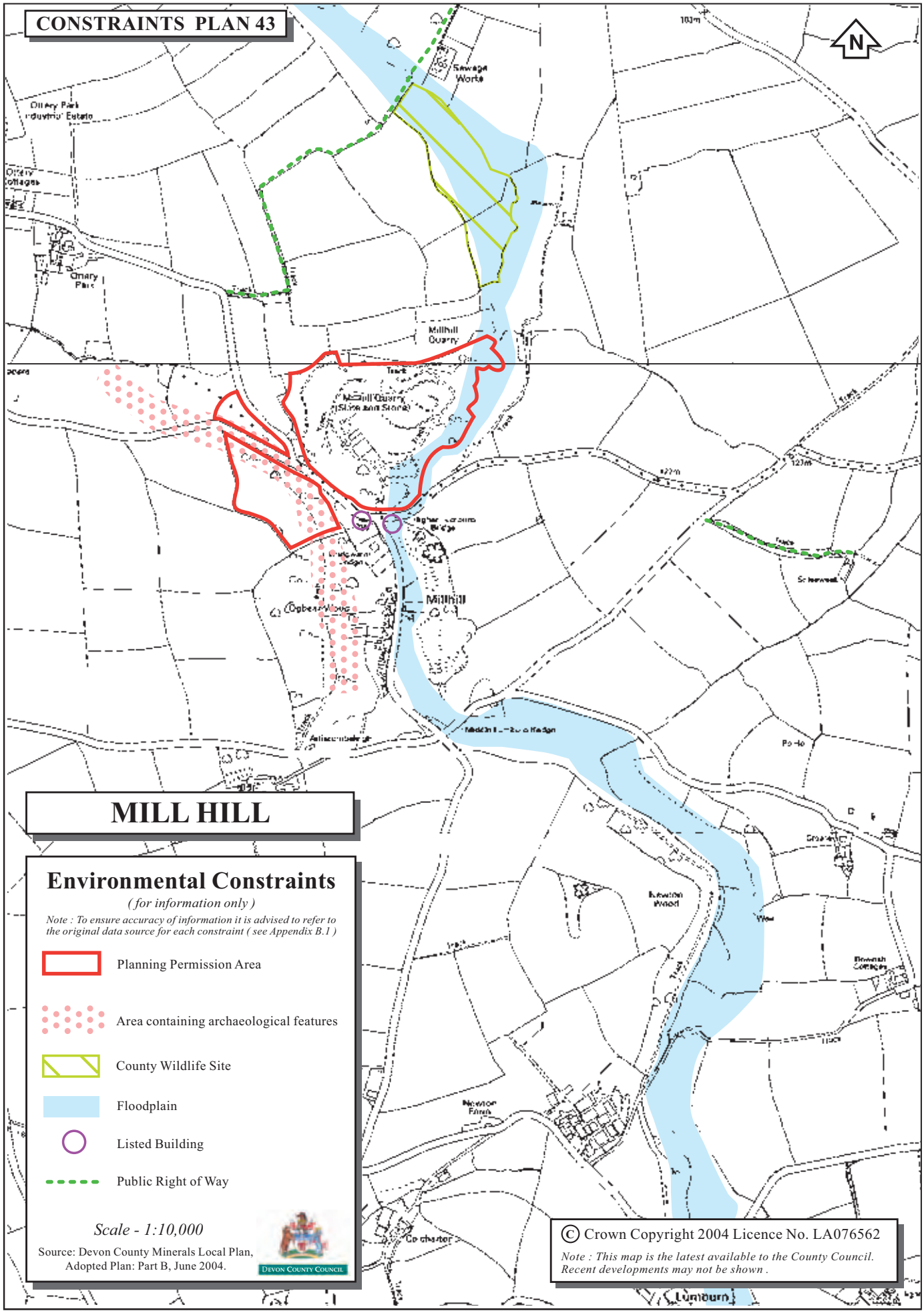
Pallets of cut stone wrapped ready for transport.

PROPOSALS

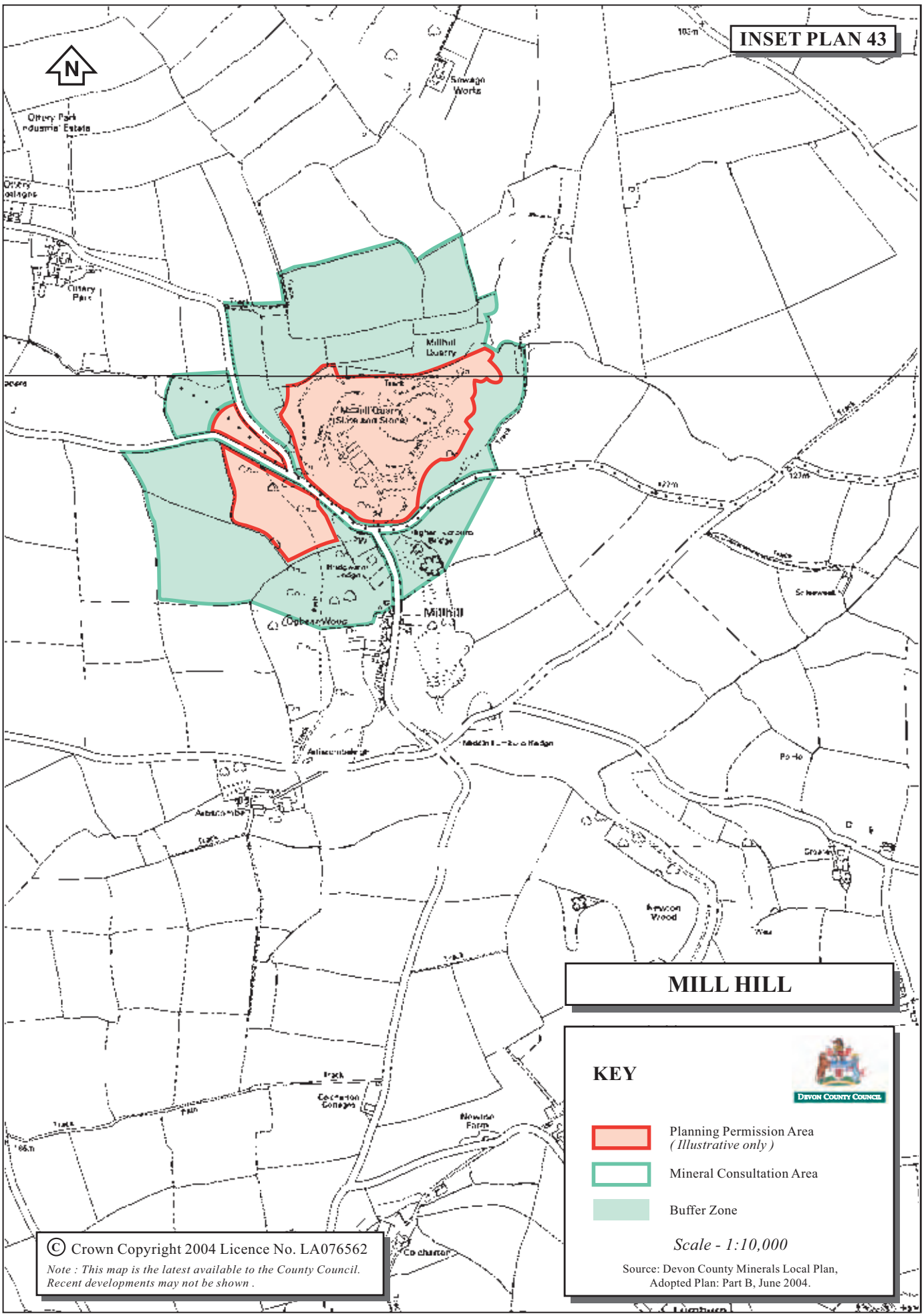
PROPOSAL: INSET 43.1

The MPA will ensure that the features of the 15th century leat are recorded before it is affected by mineral working.

Source: Devon County Minerals Local Plan, Adopted Plan: Part B, June 2004



Source: Devon County Minerals Local Plan, Adopted Plan: Part B, June 2004



APPENDIX 04

Summary of Sales by Area (2005 - Nov 2013)

Deliveries to Customers Within Dartmoor National Park (2005 - Nov13)

	Cut (Building) Stone			Selected (Walling) Stone		
Location	**100t+**	**100t - 10t**	**n/e10t**	**100t+**	**100t - 10t**	**n/e10t**
Ashburton			x			
Ashburton					x	
Ashburton			x			
Belstone					x	
Bittaford			x			
Bittaford			x			
Haytor					x	
Haytor						x
Horndon					x	
Horrabridge			x			
Horrabridge					x	
Horrabridge			x			
Horrabridge						x
Horrabridge			x			
Horrabridge					x	
Horrabridge						x
Horrabridge		x				
Horrabridge			x			
Horrabridge					x	
Lee Moor			x			
Lydford		x				
Lydford						x
Mary Tavy		x				
Mary Tavy						x
Mary Tavy						x
Mary Tavy					x	
Mary Tavy						x
Meavy					x	
Peter Tavy			x			
Peter Tavy		x				
Shaugh Prior					x	
Shaugh Prior					x	
Shaugh Prior						x
Shaugh Prior					x	
Shaugh Prior						x
Sheepstor					x	
Sticklepath			x			
Walkhampton			x			
Walkhampton						x
Walkhampton						x
Walkhampton						x
Walkhampton			x			
Walkhampton						x
Walkhampton		x				
Walkhampton					x	
Walkhampton						x
Widecombe					x	
Yelverton			x			
Yelverton					x	
Yelverton			x			
Yelverton			x			
Yelverton						x
Yelverton						x
Yelverton						x
Yelverton						x

Yelverton					x	
Yelverton					x	
Yelverton						x
Yelverton						x
Yelverton			x			
Yelverton						x
Yelverton						x
Yelverton						x
Yelverton						x
Yelverton						x
Yelverton						x
Yelverton			x			
Yelverton						x
Yelverton			x			
Yelverton		x				
Yelverton					x	
Yelverton			x			
Yelverton			x			

Deliveries to Customers Within Dartmoor Fringes (2005 - Nov13)

	Cut (Building) Stone			Selected (Walling) Stone		
Location	**100t+**	**100t - 10t**	**n/e10t**	**100t+**	**100t - 10t**	**n/e10t**
Ashbury			x			
Avonwick		x				
Beaworthy			x			
Beaworthy			x			
Beaworthy					x	
Bere Alston					x	
Bere Alston					x	
Bere Alston					x	
Bere Alston			x			
Bere Alston			x			
Bere Alston			x			
Bere Alston						x
Bere Alston						x
Bere Ferrers						x
Bovey Tracey						x
Bovey Tracey		x				
Bovey Tracey						x
Bovey Tracey					x	
Bovey Tracey						x
Bovey Tracey		x				
Bovey Tracey						x
Brentor		x				
Brentor					x	
Brentor						x
Brentor					x	
Brentor			x			
Brentor			x			
Bridestowe		x				
Bridestowe		x				
Bridestowe						x
Broadwoodwidger			x			
Chillaton			x			
Chillaton					x	
Chillaton						x
Clearbrook			x			
Cornwood						x
Cornwood						x
Cornwood						x
Crapstone			x			
Crapstone			x			
Crapstone					x	
Crapstone		x				
Crapstone			x			
Crapstone			x			
Crapstone			x			
Crapstone			x			
Crapstone						x
Crapstone			x			
Crapstone					x	
Crapstone			x			
Crapstone						x
Crapstone						x
Crapstone			x			
Dinnaton					x	
Dinnaton						x

Dinnaton						x
Diptford					x	
Diptford		x				
Diptford					x	
Dousland						x
Dousland			x			
Dousland			x			
Dousland						x
Dousland			x			
Dousland					x	
Dousland						x
Dousland						x
Dousland			x			
Dousland						x
Drewsteignton					x	
Grenofen		x				
Grenofen					x	
Grenofen			x			
Gulworthy		x				
Gulworthy					x	
Hemerdon						x
Ivybridge						x
Ivybridge						x
Ivybridge			x			
Ivybridge					x	
Ivybridge						x
Ivybridge						x
Ivybridge						x
Ivybridge						x
Ivybridge						x
Ivybridge					x	
Ivybridge		x				
Ivybridge						x
Ivybridge						x
Ivybridge					x	
Ivybridge			x			
Ivybridge			x			
Ivybridge						x
Ivybridge					x	
Ivybridge						x
Lamerton		x				
Lee Mill		x				
Lee Mill			x			
Lopwell						x
Maristow				x		
Milton Coombe						x
Milton Coombe						x
Morwellham					x	
Okehampton					x	
Okehampton		x				
Okehampton	x					
Okehampton	x					
Okehampton		x				
Okehampton					x	
Okehampton					x	
Okehampton			x			
Okehampton			x			
Okehampton						x

Okehampton			x			
Okehampton	x					
Okehampton			x			
Okehampton						x
Roborough						x
Sparkwell					x	
Sparkwell						x
Sparkwell					x	
Sparkwell			x			
Sparkwell			x			
Sparkwell					x	
Sparkwell			x			
Tavistock						x
Tavistock					x	
Tavistock						x
Tavistock			x			
Tavistock						x
Tavistock					x	
Tavistock						x
Tavistock					x	
Tavistock					x	
Tavistock			x			
Tavistock					x	
Tavistock	x					
Tavistock		x				
Tavistock						x
Tavistock		x				
Tavistock			x			
Tavistock						x
Tavistock			x			
Tavistock					x	
Tavistock						x
Tavistock			x			
Tavistock						x
Tavistock						x
Tavistock			x			
Tavistock			x			
Tavistock			x			
Tavistock		x				
Tavistock						x
Tavistock						x
Tavistock			x			
Tavistock						x
Tavistock			x			
Tavistock						x
Tavistock			x			
Tavistock			x			
Tavistock						x
Tavistock			x			
Tavistock			x			
Tavistock			x			
Tavistock		x				
Tavistock		x				
Tavistock						x
Tavistock			x			
Tavistock			x			
Tavistock						x
Tavistock			x			

Ugborough		x				
Ugborough						x
Ugborough						x
Ugborough						x
Ugborough			x			
Ugborough						x
Whiddon Down						x

Deliveries to Customers in South Devon (2005 - Nov13)

	Cut (Building) Stone			Selected (Walling) Stone		
Location	**100t+**	**100t - 10t**	**n/e10t**	**100t+**	**100t - 10t**	**n/e10t**
Beesands		x				
Beesands					x	
Bigbury		x				
Bigbury		x				
Bigbury						x
Blackawton			x			
Blackawton			x			
Blackawton						x
Blackawton						x
Blackpool Sands					x	
Bovisand						x
Brixham					x	
Brixham					x	
Brixham						x
Brixton					x	
Brixton						x
Brixton		x				
Brixton					x	
Brixton	x					
Broadhempston						x
Broadhempston		x				
Buckfastleigh					x	
Buckfastleigh			x			
Buckfastleigh						x
Buckfastleigh					x	
Buckfastleigh						x
Buckfastleigh						x
Buckfastleigh						x
Buckfastleigh						x
Buckfastleigh		x				
Buckfastleigh						x
Buckfastleigh					x	
Buckland Abbey						x
Buckland Abbey						x
Buckland Abbey					x	
Buckland Monachorum						x
Buckland Monachorum			x			
Buckland Monachorum			x			
Buckland Monachorum						x
Buckland Monachorum						x
Buckland Monachorum			x			
Buckland Monachorum						x
Bugford						x
Chillington	x					
Chillington		x				
Chillington					x	
Churchstow		x				
Churchstow		x				
Dartington					x	
Dartington						x
Dartington						x
Dartington						x
Dartington						x
Dartmouth					x	
Dartmouth					x	

Dartmouth				x		
Dartmouth					x	
Dartmouth					x	
Dartmouth					x	
Dartmouth			x			
Dartmouth				x		
Dartmouth					x	
Dartmouth				x		
Dartmouth					x	
Dartmouth					x	
Dartmouth						x
Dartmouth						x
Dartmouth					x	
Dartmouth			x			
Dartmouth					x	
Dartmouth		x				
Dartmouth	x					
Dartmouth					x	
Dartmouth						x
Dartmouth		x				
Dartmouth		x				
Dartmouth						x
Denbury						x
Dittisham			x			
Dittisham					x	
Dittisham					x	
Dittisham						x
Down Thomas					x	
East Allington				x		
East Allington				x		
East Allington						x
East Allington						x
East Allington					x	
East Allington						x
East Charleton			x			
East Portlemouth						x
East Portlemouth			x			
Ermington	x					
Frogmore		x				
Frogmore			x			
Frogmore					x	
Frogmore						x
Galmpton					x	
Galmpton					x	
Galmpton					x	
Halwell					x	
Halwell					x	
Harberton			x			
Harberton						x
Harberton						x
Harbertonford					x	
Heybrook Bay						x
Holbeton						x
Holbeton					x	
Holbeton	x					
Holbeton						x
Holbeton						x
Holbeton	x					

Ideford					x	
Ideford		x				
Ipplepen		x				
Ipplepen		x				
Ipplepen		x				
Kingsbridge					x	
Kingsbridge						x
Kingsbridge		x				
Kingsbridge					x	
Kingsbridge		x				
Kingsbridge			x			
Kingsbridge			x			
Kingsbridge		x				
Kingsbridge	x					
Kingsbridge			x			
Kingsbridge					x	
Kingsbridge						x
Kingsbridge			x			
Kingsbridge		x				
Kingsbridge						x
Kingsbridge			x			
Kingsbridge						x
Kingsbridge		x				
Kingsbridge					x	
Kingsbridge			x			
Kingsbridge						x
Kingsbridge					x	
Kingsbridge			x			
Kingsbridge			x			
Kingsbridge			x			
Kingsbridge			x			
Kingskerswell					x	
Kingskerswell						x
Kingswear					x	
Kingswear			x			
Kingswear		x				
Kingswear					x	
Kingswear					x	
Kingswear			x			
Kingswear		x				
Lifton		x				
Lifton			x			
Lifton			x			
Loddiswell					x	
Loddiswell					x	
Loddiswell						x
Loddiswell					x	
Loddiswell					x	
Loddiswell					x	
Loddiswell	x					
Ludbrook		x				
Malborough					x	
Marldon					x	
Milton Abbot						x
Milton Abbot						x
Milton Abbot						x
Milton Abbot						x
Milton Abbot						x

Milton Abbot		x				
Modbury			x			
Modbury		x				
Modbury						x
Modbury			x			
Modbury					x	
Modbury					x	
Modbury			x			
Modbury					x	
Modbury			x			
Modbury					x	
Moreleigh						x
Newton Abbot	x					
Newton Abbot			x			
Newton Abbot					x	
Newton Abbot	x					
Newton Ferrers			x			
Newton Ferrers						x
Newton Ferrers						x
Newton Ferrers			x			
Newton Ferrers						x
Newton Ferrers					x	
Newton Ferrers					x	
Newton Ferrers						x
Newton Ferrers						x
Newton Ferrers		x				
Newton Ferrers			x			
Newton Ferrers						x
Newton Ferrers			x			
Newton Ferrers					x	
Newton Ferrers						x
Newton Ferrers						x
Newton Ferrers		x				
North Huish			x			
Noss Mayo			x			
Noss Mayo						x
Noss Mayo						x
Noss Mayo					x	
Noss Mayo			x			
Noss Mayo					x	
Ogwell						x
Paignton						x
Paignton						x
Paignton			x			
Paignton		x				
Paignton					x	
Paignton					x	
Paignton						x
Paignton						x
Paignton						x
Paignton						x
Paignton		x				
Plymouth			x			
Plymouth					x	
Plymouth						x
Plymouth						x
Plymouth						x
Plymouth						x

Plymouth		x				
Plymouth						x
Plymouth						x
Plymouth						x
Plymouth						x
Plymouth			x			
Plymouth						x
Plymouth		x				
Plymouth						x
Plymouth						x
Plymouth					x	
Plymouth						x
Plymouth			x			
Plymouth						x
Plymouth						x
Plymouth			x			
Plymouth					x	
Plymouth			x			
Plymouth						x
Plymouth	x					
Plymouth						x
Plymouth			x			
Plymouth						x
Plymouth			x			
Plymouth						x
Plymouth						x
Plymouth						x
Plymouth						x
Plymouth						x
Plymouth			x			
Plymouth						x
Plymouth		x				
Plymouth						x
Plymouth						x
Plymouth						x
Plymouth						x
Plymouth			x			
Plymouth					x	
Plymouth						x
Plymouth		x				
Plymouth						x
Plymouth						x
Plymouth		x				
Plymouth		x				
Plymouth			x			
Plymouth			x			
Plymouth			x			
Plymouth					x	
Plymouth						x
Plymouth		x				
Plymouth						x
Plymouth					x	
Plymouth					x	
Plymouth						x
Plymouth	x					
Plymouth		x				
Plymouth	x					
Plymouth		x				

Plymouth					x	
Plymouth		x				
Plymouth					x	
Plymouth						x
Plymouth	x					
Plymouth			x			
Plymouth						x
Plymouth					x	
Plymouth		x				
Plymouth						x
Plymouth		x				
Plymouth			x			
Plymouth		x				
Plymouth						x
Plymouth						x
Plymouth					x	
Plympton						x
Plympton		x				
Plympton						x
Plympton					x	
Plympton						x
Plympton					x	
Plympton						x
Plympton					x	
Plympton						x
Plympton					x	
Plympton						x
Plympton			x			
Plympton			x			
Plympton			x			
Plympton			x			
Plympton						x
Plympton						x
Plympton						x
Plympton					x	
Plympton						x
Plympton						x
Plympton						x
Plympton						x
Plymstock					x	
Plymstock		x				
Plymstock			x			
Plymstock						x
Plymstock				x		
Plymstock					x	
Plymstock			x			
Plymstock						x
Plymstock						x
Plymstock			x			
Plymstock						x
Plymstock						x
Plymstock		x				
Plymstock						x
Plymstock			x			
Salcombe					x	
Salcombe			x			
Salcombe		x				
Salcombe					x	
Salcombe					x	

Salcombe			x			
Salcombe				x		
Salcombe					x	
Salcombe	x					
Salcombe		x				
Salcombe			x			
Salcombe		x				
Salcombe		x				
Salcombe			x			
Sidmouth		x				
Sidmouth						x
Sidmouth						x
Sidmouth		x				
Sigford			x			
Sigford					x	
Sigford						x
Slapton		x				
Slapton					x	
Slapton					x	
Slapton					x	
Slapton		x				
Smithaleigh		x				
South Brent						x
South Brent						x
South Brent		x				
South Brent					x	
South Brent					x	
South Brent						x
South Brent						x
South Brent					x	
South Milton					x	
Stoke Fleming						x
Stoke Fleming						x
Stoke Fleming						x
Stoke Gabriel		x				
Stokenham						x
Stokenham						x
Strete					x	
Strete						x
Strete						x
Strete						x
Tamerton Foliot			x			
Tamerton Foliot					x	
Tamerton Foliot					x	
Tamerton Foliot					x	
Tamerton Foliot					x	
Tamerton Foliot					x	
Tamerton Foliot			x			
Teignmouth						x
Teignmouth						x
Teignmouth						x
Teignmouth					x	
Thurlestone					x	
Thurlestone		x				
Thurlestone					x	
Torcross						x
Torquay						x
Torquay					x	

Torquay						x
Torquay		x				
Torquay			x			
Torquay						x
Torquay						x
Torquay						x
Torquay						x
Torquay						x
Totnes					x	
Totnes		x				
Totnes		x				
Totnes			x			
Totnes			x			
Totnes			x			
Totnes					x	
Totnes		x				
Totnes					x	
Totnes						x
Totnes			x			
Totnes						x
Totnes					x	
Totnes			x			
Totnes						x
Totnes						x
Totnes						x
Totnes						x
Totnes						x
Totnes			x			
Totnes			x			
Totnes						x
Totnes			x			
Totnes						x
Totnes					x	
Totnes						x
Totnes			x			
Totnes						x
Totnes			x			
Totnes		x				
Totnes		x				
Totnes		x				
Tuckenhay						x
Tuell						x
Wembury						x
Wembury			x			
Wembury						x
West Alvington					x	
West Charleton					x	
West Charleton		x				
Yealmpton						x
Yealmpton						x
Yealmpton						x
Yealmpton						x
Yealmpton			x			
Yealmpton	x					
Yealmpton					x	
Yealmpton						x
Yealmpton						x

Deliveries to Customers to East/North Cornwall (2005 - Nov13)

	Cut (Building) Stone			Selected (Walling) Stone		
Location	**100t+**	**100t - 10t**	**n/e10t**	**100t+**	**100t - 10t**	**n/e10t**
Albaston						x
Albaston			x			
Altarnun			x			
Altarnun			x			
Botus Fleming					x	
Botus Fleming						x
Botus Fleming					x	
Boyton			x			
Bray Shop					x	
Bray Shop						x
Bude				x		
Bude		x				
Callington			x			
Callington					x	
Callington		x				
Callington		x				
Callington			x			
Callington			x			
Callington			x			
Callington			x			
Callington		x				
Callington					x	
Callington			x			
Callington					x	
Callington						x
Callington		x				
Callington			x			
Calstock						x
Camelford	x					
Cargreen					x	
Chilsworthy		x				
Chilsworthy						x
Cotehele					x	
Cotehele					x	
Crafthole			x			
Cremyll			x			
Downderry					x	
Downgate					x	
Duloe			x			
East Taphouse			x			
Gunnislake						x
Gunnislake			x			
Gunnislake					x	
Gunnislake			x			
Gunnislake			x			
Gunnislake						x
Gunnislake					x	
Gunnislake			x			
Halton Quay					x	
Halton Quay						x
Halton Quay						x
Harrowbarrow		x				
Hatt						x
Hatt					x	
Hatt			x			

Hatt			x			
Jacobstow		x				
Jacobstow			x			
Kelly Bray	x					
Kelly Bray	x					
Kelly Bray			x			
Kilkhampton						x
Kingsand					x	
Landrake						x
Lanreath					x	
Lanreath			x			
Lansallos		x				
Lanteglos					x	
Launceston	x					
Launceston	x					
Launceston	x					
Launceston		x				
Launceston	x					
Launceston			x			
Launceston		x				
Launceston			x			
Launceston			x			
Launceston		x				
Launceston		x				
Launceston			x			
Launceston	x					
Launceston		x				
Launceston			x			
Launceston		x				
Launceston			x			
Lewannick		x				
Liskeard	x					
Liskeard						x
Liskeard	x					
Liskeard		x				
Liskeard		x				
Liskeard	x					
Liskeard	x					
Liskeard		x				
Liskeard			x			
Liskeard			x			
Looe						x
Looe		x				
Looe			x			
Looe			x			
Looe		x				
Looe			x			
Looe			x			
Looe		x				
Looe						x
Looe			x			
Luckett						x
Marhamchurch			x			
Menheniot					x	
Menheniot		x				
Metherell					x	
Millbrook		x				
Millbrook		x				

Millbrook			x			
Morval						x
Morval					x	
Morval			x			
Narkurs					x	
Narkurs						x
North Tamerton					x	
Pelynt			x			
Pengover		x				
Pensilva		x				
Pensilva		x				
Pensilva			x			
Pensilva					x	
Pillaton			x			
Pipers Pool			x			
Polperro						x
Polruan			x			
Portlooe			x			
Portwrinkle			x			
Portwrinkle			x			
Quethiock			x			
Rilla Mill					x	
Rilla Mill					x	
Saltash		x				
Saltash			x			
Saltash	x					
Saltash		x				
Saltash						x
Saltash			x			
Saltash		x				
Saltash		x				
Saltash			x			
Saltash					x	
Saltash					x	
Saltash						x
Saltash	x					
Saltash						x
Saltash			x			
Saltash						x
Saltash			x			
Saltash			x			
Sandplace			x			
Seaton			x			
Siblyback			x			
South Petherwin		x				
South Petherwin			x			
St Anns Chapel					x	
St Anns Chapel		x				
St Anns Chapel						x
St Cleer					x	
St Dominick		x				
St Dominick		x				
St Dominick		x				
St Dominick					x	
St Dominick					x	
St Germans			x			
St Keyne		x				
St Mellion			x			

St Mellion					x	
St Mellion			x			
St Mellion						x
Stoke Climsland						x
Stoke Climsland		x				
Stoke Climsland			x			
Stoke Climsland			x			
Stoke Climsland			x			
Stoke Climsland		x				
Stoke Climsland						x
Stoke Climsland			x			
Stoke Climsland		x				
Tideford						x
Tideford			x			
Trematon			x			
Trematon						x
Trematon						x
Trematon						x
Trewidland			x			
Upton Cross		x				
Widegates					x	
Widegates					x	

Deliveries to Customers in East Devon (2005 - Nov13)

	Cut (Building) Stone			Selected (Walling) Stone		
Location	**100t+**	**100t - 10t**	**n/e10t**	**100t+**	**100t - 10t**	**n/e10t**
Bickleigh					x	
Bickleigh			x			
Bridford			x			
Cheriton Bishop			x			
Chudleigh					x	
Cornworthy						x
Cornworthy						x
Crediton			x			
Crediton			x			
Crediton					x	
Crediton		x				
Crediton						x
Crediton						x
Dawlish						x
Doddiscombleigh			x			
Dunsford						x
Ebford		x				
Ebford						x
Ebford		x				
Exeter						x
Exeter			x			
Exeter			x			
Exeter					x	
Exeter					x	
Exeter						x
Exeter					x	
Exeter						x
Exeter				x		
Exeter					x	
Exeter				x		
Exeter					x	
Exeter				x		
Exeter					x	
Exeter						x
Exeter					x	
Exeter						x
Exmouth					x	
Exmouth						x
Exmouth		x				
Otterton					x	
Ottery St Mary					x	
Woodbury				x		
Woodbury				x		
Woodbury			x			

Deliveries to Customers in North Devon (2005 - Nov13)

	Cut (Building) Stone			Selected (Walling) Stone		
Location	**100t+**	**100t - 10t**	**n/e10t**	**100t+**	**100t - 10t**	**n/e10t**
Barnstaple		x				
Barnstaple						x
Barnstaple		x				
Barnstaple		x				
Bideford		x				
Bideford		x				
Croyde					x	
Croyde			x			
Dulverton			x			
Fremington			x			
Hatherleigh		x				
Hatherleigh		x				
Hatherleigh	x					
Huntsham					x	
Ilfracombe		x				
Ilfracombe					x	
Ilfracombe			x			
Ilfracombe		x				
Ilfracombe			x			
Muddiford		x				
Newton St Petrock					x	
North Tawton			x			
North Tawton			x			
Northlew					x	
Pancrasweek					x	
Saunton			x			
Saunton Sands	x					
South Molton					x	
Spreyton		x				
Taunton		x				
Taunton						x
Tedburn St Mary					x	
Tiverton			x			
Tiverton					x	
Tiverton			x			
Tiverton		x				
Virginstowe					x	
Waddeton					x	
Willand					x	
Woolacombe		x				
Woolacombe		x				
Yeoford		x				
Yeoford					x	
Yeoford					x	

Deliveries to Customers in Mid Cornwall (2005 - Nov13)

	Cut (Building) Stone			Selected (Walling) Stone		
Location	**100t+**	**100t - 10t**	**n/e10t**	**100t+**	**100t - 10t**	**n/e10t**
Bodmin					x	
Bodmin		x				
Bodmin			x			
Bodmin		x				
Bodmin		x				
Bodmin	x					
Bodmin		x				
Bodmin		x				
Bodmin	x					
Bugle	x					
Carglaze	x					
Charlestown	x					
Crantock		x				
Crantock		x				
Cubert		x				
Duporth		x				
Ladock		x				
Lerryn						x
Lerryn		x				
Lostwithiel					x	
Lostwithiel			x			
Lostwithiel	x					
Lostwithiel		x				
Mawgan Porth						x
Mevagissey					x	
Mevagissey		x				
Mitchell		x				
Mitchell	x					
Mitchell		x				
Mitchell		x				
Mitchell		x				
Mitchell			x			
Mitchell					x	
Mitchell			x			
Newquay			x			
Newquay		x				
Newquay		x				
Newquay				x		
Padstow					x	
Par	x					
Par			x			
Polkerris		x				
Polzeath			x			
Port Isaac		x				
Porth		x				
Portloe					x	
Probus	x					
Rock		x				
Rock			x			
Rock			x			
St Agnes	x					
St Austell	x					
St Austell			x			
St Austell		x				
St Austell					x	

St Austell	x					
St Austell					x	
St Austell					x	
St Austell					x	
St Austell						x
St Columb Major	x					
St Columb Major		x				
St Columb Major		x				
St Columb Major		x				
St Columb Major	x					
St Columb Major			x			
St Mabyn	x					
St Mabyn		x				
St Merryn	x					
St Newlyn East		x				
St Newlyn East			x			
St Wenn		x				
Trelights		x				
Tremough Campus	x					
Tremough Campus		x				
Tresillian			x			
Trevose	x					
Trispen	x					
Truro	x					
Truro					x	
Truro		x				
Truro	x					
Truro		x				
Truro	x					
Truro	x					
Truro	x					
Truro		x				
Truro	x					
Wadebridge		x				

Deliveries to Customers in West Cornwall (2005 - Nov13)

	Cut (Building) Stone			Selected (Walling) Stone		
Location	**100t+**	**100t - 10t**	**n/e10t**	**100t+**	**100t - 10t**	**n/e10t**
Breage		x				
Carharrack		x				
Carnon Downs					x	
Carnon Downs			x			
Falmouth						x
Falmouth		x				
Feock		x				
Flushing			x			
Fowey		x				
Fowey					x	
Fowey		x				
Gorran Haven		x				
Grampound		x				
Grampound		x				
Hayle		x				
Hayle		x				
Helford		x				
Helston		x				
Helston					x	
Helston		x				
Helston			x			
Helston			x			
Mabe	x					
Mount Hawke					x	
Mullion		x				
Mullion		x				
Mullion		x				
Penpol					x	
Penryn	x					
Penryn	x					
Penryn			x			
Penryn	x					
Perranporth			x			
Perranwell Station			x			
Portreath		x				
Portreath		x				
Portreath		x				
Portreath		x				
Restronguet		x				
St Ives		x				
Stithians		x				

Deliveries to Customers Outside Devon/Cornwall (2005 - Nov13)

	Cut (Building) Stone			Selected (Walling) Stone		
Location	**100t+**	**100t - 10t**	**n/e10t**	**100t+**	**100t - 10t**	**n/e10t**
Andover						x
Bridgwater		x				
Bristol		x				
Bristol		x				
Bristol		x				
Chelmsford, Essex					x	
Crowcombe					x	
Godstone, Surrey					x	
Isle of Man						x
Lympstone						x
Tamworth			x			

APPENDIX 05

Wills Accountants Report

Wills Accountants

09 April 2015

The Directors
Yennadon Stone Ltd
Yennadon Quarry
Iron Mine Lane
Dousland
Yelverton
Devon
PL20 6NA

Dear Sirs

Lantoom Ltd ("the company")

Assignment

You have asked us to critically appraise the financial performance of the company and their suitability to be able to absorb your business should that ever occur, in response to your application for planning which was countered by the company stating that they could replicate your business from their quarry.

The company is registered in England number 04129832 and has a financial year of 31 March.

The company extracts Cornish stone from its quarry some 30 miles from the Yennadon quarry.

Information available

We have been supplied with the abbreviated accounts for the company for the years ended 31 March 2009 to 2014 which are readily available in the public domain at Companies House as well as certain information regarding the market place and the products that we have gleaned by working with you.

Disclaimer

This is a brief appraisal of the financials of the company – this is not meant to be an exhaustive, nor is this meant to be a due diligence exercise and that that involves – and your use of this information is solely for your own purposes and what use you make of this report is entirely at your own risk. The comments below are based solely on the information supplied other factors could exist which we are not aware of which could alter the thoughts now being expressed.

Results

From our review of the financial information we can state:

1. **Cash Flow and insolvent position.**

   The company has in all the financial years seen, been cash flow insolvent – the current liabilities being greater than the current assets for each year. Indeed in 2013 if it were not for the revaluation reserve the company would be Balance Sheet insolvent.

We would question how the company would be able to cope financially with the additional influx of the Yennadon business should that occur, pushing towards servicing an additional £1 million of sales, and the fact that the majority of customers use extended credit terms.

There would also be a need we consider, for the company to make additional investments in plant and equipment in the region of £400k, which again would add pressure on the company's liquidity and resources.

Thus there would be, in our view, a serious concerns on cash flow as the company is not generating and keeping sufficient cash flow to pay its way as it is.

Cash flow issues are the major cause of company closures. From the website of Dun & Bradstreet they state:

"90% of small business failures are caused by poor cash flow. Put simply, not enough cash coming in the door and too much going out. Getting paid on time and managing your outgoings is critical to business success".

2. Closing stock position and potential over stocking

Stocks of stone in 2014 are the highest for the years we have seen records of from Companies House back to 2009.

It is not unusual to hold a certain amount of stone in stock, however holding too much stock ties in cash flow and uses up valuable resource unnecessarily. We would question why a quarry would hold any significant level of stocks except for a small period of time.

We would estimate that the company are holding at least 4 weeks stock holding, this not only ties up cash, but also creates a representation within the accounts which would increase the profitability of a business artificially if the company so decided.

In this business sector we consider that during its peak call off periods of 6-8 weeks are the normal, and thus would question why a company would hold some 4 weeks of stock or approximately 300 tonnes of stock.

This business sector has the unique ability to be able to create its own stock, by using its own labour to work on the seam and create stock holdings if it so wished. In ordinary commercial business' the approach is NOT to keep stock if at possible to any great extended and keep your stock holding with your suppliers and only requisition it when orders require. Increasing stock levels and/or the costs attached to that stock holding in a financial year does though have the effect of increasing a company's profits, not that we are suggesting that this was the practice that the company adopted here.

3. Erratic recent profit and loss performance

The company has an uncertain profit pattern, and swings wildly from profit to loss year from year in the years we reviewed. Losses being reported in 2 of the last 5 years recorded at Companies House, thus there is a 40% probability of a loss in 2015?

This is worrying as it present a picture of business that is not consistent and thus the management are not reacting to the costs of the business while the company is forecasting to make a loss, or they are but too late, and then gaining the positive action the subsequent year, the relax and let overheads take over again resulting in a loss the following year. This pattern does not bode well for a business not does it paint the management efficiency in a good light.

Overall conclusion

From the information available from Companies House and our knowledge of this business sector gleaned from Yennadon Stone Ltd and are of the opinion that the company would struggle to have the financial stability in its present form to replicate the business of Yennadon.

We trust this brief report on the company will prove useful to you in your re-application of the planning request to help counter any such similar claims made by the company to counter your re-application.

Yours faithfully

Wills Accountants Ltd

Wills Accountants Ltd

APPENDIX 06

Certificates of Laboratory Analysis

CERTIFICATE OF TEST - DETERMINATION OF WATER ABSORPTION AT ATMOSPHERIC PRESSURE
TESTED IN ACCORDANCE WITH BS EN 13755:2008

Laboratory reference no(s) :	**15-62130 - 192163** Head Office Certificate No : **192163-15-62130-M77**
Client :	**John Grimes Partnership Ltd**
Certificate address :	**Leonards Road** **Ivybridge** **Devon** **PL21 0RU**
Contract :	**Yennadon Quarry**

Client Supplied Information

Supplier's name:	**Yennadon Quarry**
Commercial name of stone:	**Yennadon Stone**
Petrographic name of stone:	**Cube Set 1 - Stone Samples**
Country and region of extraction:	**Data not supplied**
Surface finish of samples:	**Sawn**
Sampled by :	**Data not supplied**
Direction of plane of anistropy:	**Not shown on specimens**
Date received :	**16/03/2015**
Preparation/Conditioning:	**In accordance with BS EN 13755:2008**

Results:

Specimen dimensions: 50±5 mm

Sample No.	Water Absorption
1	3.5%
2	2.0%
3	4.7%
4	3.5%
5	2.3%
6	2.9%
Mean	**3.2%**

Variation from test procedure : **None**

Remarks :

Tested by : **SS** Date tested : **22.04.15** Approved : **25/04/2015**

Approved Signatories : [ ] S J White *Head of Laboratories* [ ] A Bates *Laboratory Manager* [ ] D. Faulkner *Quality Manager* [ ] M Slater *Senior Technician*

Head Office
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE

Tel 01202 622858
Fax 01202 625045

Registered Office
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE
ACS Testing Limited
Registered in England and
Wales No. 4639658

ACS TESTING
www.acstesting.co.uk

CERTIFICATE OF TEST - DETERMINATION OF UNIAXIAL COMPRESSIVE STRENGTH
TESTED IN ACCORDANCE WITH BS EN 1926:2006

Laboratory reference no(s) : **15-62130 - 192163** Head Office Certificate No : **192163-15-62130-M81-NS**

Client : **John Grimes Partnership Ltd**

Certificate address : **Leonards Road**
Ivybridge

Devon
PL21 0RU

Contract : **Yennadon Quarry**

Client Supplied Information

Supplier's name: **Yennadon Quarry**
Commercial name of stone: **Yennadon Stone**
Petrographic name of stone: **Cube Set 1 - Stone Samples**
Country and region of extraction: **Data not supplied**
Surface finish of samples: **Sawn**
Sampled by : **Data not supplied**
Direction of plane of anistropy: **Not shown on specimens**

Date received : **16/03/2015**

Preparation/Conditioning: **In accordance with BS EN 1926:2006**

Results:

Specimen Type: **Cube**
Direction of loading: **Unknown**

Sample No	Height (mm)	Width (mm)	Breadth (mm)	Failure Load (kN)	Compressive Strength *R* (Mpa)
1	53	52.0	53.5	270	**97**
2	54	49.7	49.5	190	**77**
3	49	49.0	49.3	320	**132**
4	50	53.5	52.2	170	**61**
5	51	50.6	48.1	180	**74**
6	49	52.5	52.5	210	**76**
7	50	54.8	53.7	170	**58**
8	53	48.3	52.0	160	**64**
9	48	53.5	50.7	250	**92**
10	52	49.4	51.7	170	**67**
				Mean Value	**80**
				Standard Deviation	**22**
				Variation Coefficient	**0.28**

Variation from test procedure : **None**

Remarks : **None**

Tested by : **JM** Date tested : **14.04.15** Approved : **25/04/2015**

Approved Signatories : [ ] S J White *Head of Laboratories* [ ] A Bates *Laboratory Manager* [ ] D. Faulkner *Quality Manager* [ ] M Slater *Senior Technician*

Head Office
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE

Tel 01202 622858
Fax 01202 625045

Registered Office
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE
ACS Testing Limited
Registered in England and
Wales No. 4639658

25th ANNIVERSARY 1987-2012

Quality Testing & Materials Consultancy to the Construction Industry

UKAS TESTING 0999

www.acstesting.co.uk

CERTIFICATE OF TEST - DETERMINATION OF RESISTANCE TO SALT CRYSTALLISATION
TESTED IN ACCORDANCE WITH BS EN 12370:1999

Laboratory reference no(s) : **15-62234 - 192784** Head Office Certificate No : **192784-15-62234-M71**

Client : **John Grimes Partnership Ltd**

Certificate address : **Leonards Road**
Ivybridge
Devon
PL21 0RU

Contract : **Yennadon Quarry**

Client Supplied Information

Supplier's name:	**Yennadon Quarry**
Commercial name of stone:	**Yennadon Stone**
Petrographic name of stone:	**Cube Set 1 - Stone Samples**
Country and region of extraction:	**Data not supplied**
Surface finish of samples:	**Sawn**
Sampled by :	**Data not supplied**
Direction of plane of anistropy:	**Not shown on specimens**

Date received : **30/03/2015**

Preparation/Conditioning: **In accordance with BS EN 12370:1999**

Results:

Sample No	Height (mm)	Width (mm)	Breadth (mm)	**Mass Change %**	Remarks
1	41.2	40.8	41.6	**-15.1**	None
2	41.3	40.6	41.4	**-0.6**	None
3	42.0	41.8	38.6	**-0.8**	None
4	41.1	40.3	41.1	**-17.0**	None
5	40.9	39.4	41.1	**-4.9**	None
6	39.7	41.0	41.2	**-14.2**	None
			Mean Value	**-8.8**	

Variation from test procedure : **None**

Remarks : **See attached photographic records - prior to and post testing**

Tested by : **JM/JB/PJ** Date tested : **11.05.15** Approved : **14/05/2015**

Approved Signatories : [ ] S J White *Head of Laboratories* [ ] A Bates *Laboratory Manager* [ ] D. Faulkner *Quality Manager* [ ] M Slater *Senior Technician*

Head Office
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE

Tel 01202 622858
Fax 01202 625045

Registered Office
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE
ACS Testing Limited
Registered in England and
Wales No. 4639658

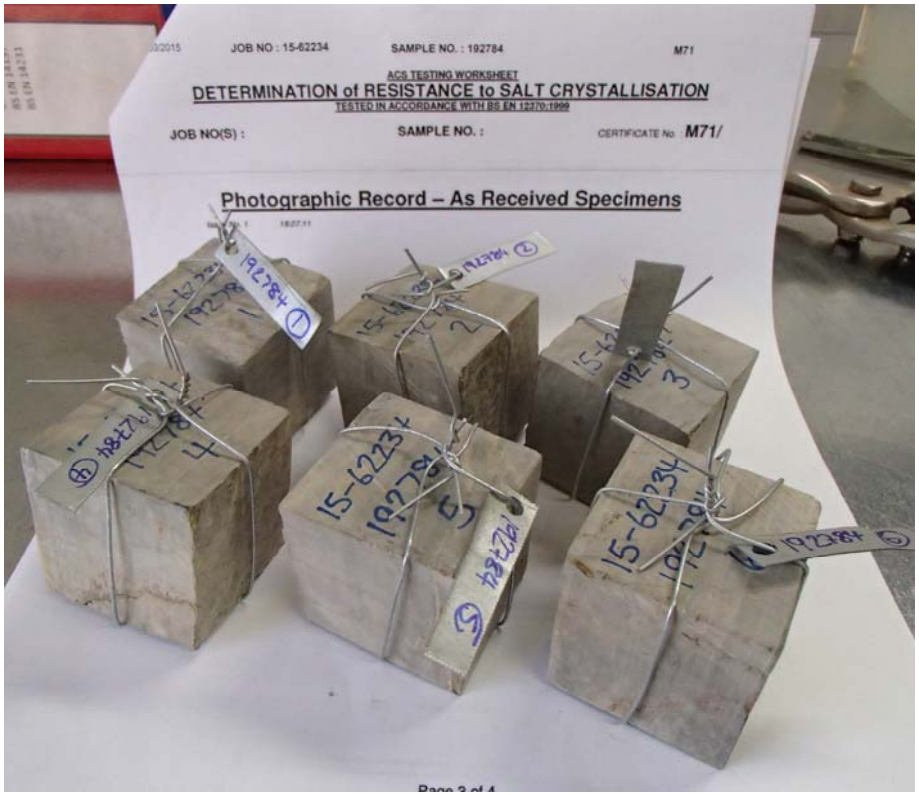
25th ANNIVERSARY 1987-2012

Quality Testing & Materials Consultancy to the Construction Industry

UKAS TESTING 0999

CERTIFICATE OF TEST - DETERMINATION OF RESISTANCE TO SALT CRYSTALLISATION
TESTED IN ACCORDANCE WITH BS EN 12370:1999

PHOTOGRAPHIC RECORDS



ACS TESTING
www.acstesting.co.uk

CERTIFICATE OF TEST - DETERMINATION OF WATER ABSORPTION AT ATMOSPHERIC PRESSURE TESTED IN ACCORDANCE WITH BS EN 13755:2008

Laboratory reference no(s) : **15-62128 - 192161** Head Office Certificate No : **192161-15-62128-M77**

Client : **John Grimes Partnership Ltd**

Certificate address : **Leonards Road**
Ivybridge

Devon
PL21 0RU

Contract : **Lantoom Quarry**

Client Supplied Information

Supplier's name: **Lantoom Quarry**
Commercial name of stone: **Lantoom Stone**
Petrographic name of stone: **Cube Set 2 - Stone Samples**
Country and region of extraction: **Data not supplied**
Surface finish of samples: **Sawn**
Sampled by : **Data not supplied**
Direction of plane of anistropy: **Not shown on specimens**

Date received : **16/03/2015**

Preparation/Conditioning: **In accordance with BS EN 13755:2008**

Results:

Specimen dimensions: 50±5 mm

Sample No.	Water Absorption
1	6.1%
2	9.9%
3	2.6%
4	6.3%
5	7.6%
6	7.8%
Mean	**6.7%**

Variation from test procedure : **None**

Remarks :

Tested by : **SS** Date tested : **22.04.15** Approved : **06/05/2015**

Approved Signatories : [ ] S J White *Head of Laboratories* [ ] A Bates *Laboratory Manager* [ ] D. Faulkner *Quality Manager* [ ] M Slater *Senior Technician*

Head Office
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE

Tel 01202 622858
Fax 01202 625045

Registered Office
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE
ACS Testing Limited
Registered in England and Wales No. 4639658

25th ANNIVERSARY 1987-2012

Quality Testing & Materials Consultancy to the Construction Industry

UKAS TESTING 0999

ACS TESTING
www.acstesting.co.uk

CERTIFICATE OF TEST - DETERMINATION OF UNIAXIAL COMPRESSIVE STRENGTH
TESTED IN ACCORDANCE WITH BS EN 1926:2006

Laboratory reference no(s) : **15-62128 - 192161** Head Office Certificate No : **192161-15-62128-M81-NS**

Client : **John Grimes Partnership Ltd**

Certificate address : **Leonards Road**
Ivybridge

Devon
PL21 0RU

Contract : **Lantoom Quarry**

Client Supplied Information

Supplier's name:	**Lantoom Quarry**
Commercial name of stone:	**Lantoom Stone**
Petrographic name of stone:	**Cube Set 2 - Stone Samples**
Country and region of extraction:	**Data not supplied**
Surface finish of samples:	**Sawn**
Sampled by :	**Data not supplied**
Direction of plane of anistropy:	**Not shown on specimens**

Date received : **16/03/2015**

Preparation/Conditioning: **In accordance with BS EN 1926:2006**

Results:

Specimen Type: **Cube**
Direction of loading: **Unknown**

Sample No	Height (mm)	Width (mm)	Breadth (mm)	Failure Load (kN)	**Compressive Strength *R* (Mpa)**
1	51	49.0	49.5	30	**12**
2	48	50.0	48.3	60	**25**
3	49	49.6	48.9	60	**25**
4	47	49.9	46.0	60	**26**
5	48	49.8	45.8	50	**22**
6	50	48.0	50.2	70	**29**
7	50	49.2	50.1	30	**12**
8	48	49.3	49.8	60	**24**
9	50	50.8	49.6	80	**32**
10	50	48.3	49.6	30	**13**
				Mean Value	**22**
				Standard Deviation	**7**
				Variation Coefficient	**0.32**

Variation from test procedure : **None**

Remarks : **None**

Tested by : **JM** Date tested : **14.04.15** Approved : **06/05/2015**

Approved Signatories : [ ] S J White *Head of Laboratories* [ ] A Bates *Laboratory Manager* [ ] D. Faulkner *Quality Manager* [ ] M Slater *Senior Technician*

Head Office
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE

Tel 01202 622858
Fax 01202 625045

Registered Office
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE
ACS Testing Limited
Registered in England and
Wales No. 4639658

25th ANNIVERSARY 1987-2012

Quality Testing & Materials Consultancy to the Construction Industry

UKAS TESTING 0999

CERTIFICATE OF TEST - DETERMINATION OF RESISTANCE TO SALT CRYSTALLISATION
TESTED IN ACCORDANCE WITH BS EN 12370:1999

Laboratory reference no(s) : **15-62128 - 192161** Head Office Certificate No : **192161-15-62128-M71**

Client : **John Grimes Partnership Ltd**

Certificate address : **Leonards Road**
Ivybridge
Devon
PL21 0RU

Contract : **Lantoom Quarry**

Client Supplied Information

Supplier's name: **Lantoom Quarry**
Commercial name of stone: **Lantoom Stone**
Petrographic name of stone: **Cube Set 2 - Stone Samples**
Country and region of extraction: **Data not supplied**
Surface finish of samples: **Sawn**
Sampled by : **Data not supplied**
Direction of plane of anistropy: **Not shown on specimens**

Date received : **16/03/2015**

Preparation/Conditioning: **In accordance with BS EN 12370:1999**

Results:

Sample No	Height (mm)	Width (mm)	Breadth (mm)	**Mass Change %**	Remarks
1	39.0	40.4	39.6	**-30.6**	Stopped at 12 cycles
2	40.6	40.5	40.5	**-43.2**	Stopped at 12 cycles
3	40.3	40.5	41.2	**-62.2**	Stopped at 12 cycles
4	39.0	40.7	38.0	**-42.7**	Stopped at 12 cycles
5	39.1	39.4	39.7	**-26.5**	Stopped at 12 cycles
6	38.9	39.2	38.0	**-60.0**	Stopped at 12 cycles
			Mean Value	**-44.2**	

Variation from test procedure : **Test stopped after 12 cycles instead of the required 15 cycles, samples extensively disintegrated.**

Remarks : **See attached photographic records - prior to and post testing**

Tested by : **JM/JB/PJ** Date tested : **11.05.15** Approved : **14/05/2015**

Approved Signatories : [ ] S J White *Head of Laboratories* [ ] A Bates *Laboratory Manager* [ ] D. Faulkner *Quality Manager* [ ] M Slater *Senior Technician*

Head Office
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE

Tel 01202 622858
Fax 01202 625045

Registered Office
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE
ACS Testing Limited
Registered in England and
Wales No. 4639658

CERTIFICATE OF TEST - DETERMINATION OF RESISTANCE TO SALT CRYSTALLISATION
TESTED IN ACCORDANCE WITH BS EN 12370:1999

PHOTOGRAPHIC RECORDS