

**YENNADON QUARRY  
DOUSLAND  
DEVON  
PL20 6NA**

**SOCIO-ECONOMIC REPORT**

**On instructions received from:-**

**Yennadon Stone Ltd  
Yennadon Quarry  
Dousland  
PL20 6NA**

**Our Ref: AME/CLR/29119**

**09 February 2012**

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## 1.0 INTRODUCTION

### 1.1 Instructions

- 1.1.1 Written instructions dated 06 September 2011 were received from John Grimes Partnership Ltd to produce a socio-economic study to assess the impact of the proposed expansion of Yennadon Quarry, Dousland to support a planning application.
- 1.1.2 We confirm that we are not aware of any conflicts of interest either personal or in relation to Vickery Holman which prevent us from providing this advice to either Yennadon Stone Ltd or John Grimes Partnership.

### 1.2 The Property

- 1.2.1 Yennadon Quarry is the last quarry in operation within this locality, which has historically always been active in mining slate. It is located on Yennadon Down, within the Dartmoor National Park, approximately 0.25 miles east of the village of Dousland, and 1.25 miles east of Yelverton.
- 1.2.2 Yennadon Down, which is subject to commoner's rights, is owned by the Walkhampton Trust and administered by Lord Roborough's Maristow Estate.
- 1.2.3 The site is a small quarry of approximately 1.8 ha in size, operated under licence by Yennadon Stone Ltd. It produces a product of Dartmoor Rustic Stone, which has an attractive mottled appearance. This has been used for generations as a building material within many of the rural areas of Devon and Cornwall.
- 1.2.4 The quarry is accessed from a private track leading from Iron Mine Lane, which in turn connects to the southern extremity of Dousland, which is mainly residential in nature.
- 1.2.5 The extent of the existing quarry is shown on the plan attached at Appendix I.

### 1.3 Current Planning Consent

- 1.3.1 The main details of the current planning consent are covered in other sections of the Environmental Impact Assessment (EIA). However, the salient points are as follows:
- 35 year consent from 1990
  - Total amount of material removed shall not exceed 14,000 tonnes per annum
  - Lorry trips shall not exceed 35 in any week
  - A minimum of 75% of total tonnage of stone leaving the quarry each year shall be building and walling stone

- At the conclusion of workings, the site is to be subject to a restoration scheme and landscaped

#### 1.4 Proposal

- 1.4.1 The main detail of the proposed planning application are also dealt in more detail within the EIA. The application has been proposed as the quarry operations are close to the boundary limits of the currently permitted working area. This means that at the current rate of extraction, required if the current proven need for the product is to be satisfied, it will become physically unviable to operate within the next 5 years. That is close to 10 years before the expiration of the existing planning consent.
- 1.4.2 It is intended to extend the existing quarry in a northerly direction to include an additional 1.1 hectares of adjacent moorland.
- 1.4.3 It is proposed to reduce the currently approved maximum extraction rate of 14,000 tonnes per annum down to 10,000 tonnes per annum as part of the current proposals.
- 1.4.4 It is also proposed to reduce the maximum permitted lorry trips to 30 in any week. As such, the extended quarry operation can be serviced more than adequately by the existing roads and infrastructure.
- 1.4.5 Therefore, the proposal is simply to extend the lifespan of the quarry so that economic activity and full employment can be maintained.
- 1.4.4 A plan of the indicative scheme is attached within Appendix II.

## 2.0 **STUDY METHODOLOGY**

- 2.1 A comprehensive socio-economic study requires consideration of the following impacts:
- Product market
  - Employment
  - Security
  - Highways and access
  - Designation of Little Yennadon as Common Land
- 2.2 Under each of these topics, we have established the current situation under the existing consent. This involved identification of current legal rights and activities of both the quarry operators, commoners and members of the public.

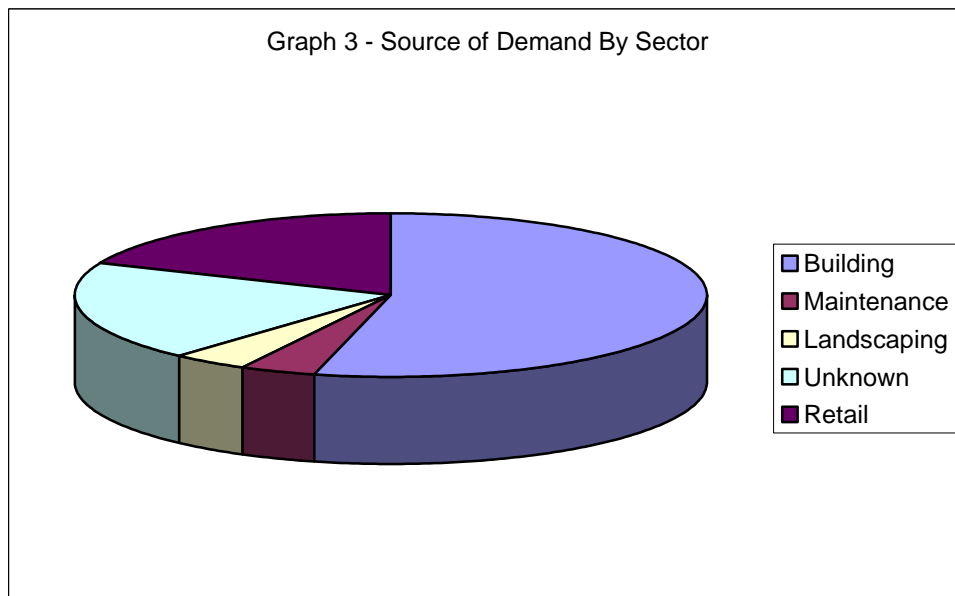
2.3 We then used our knowledge of the area, economic data and details of the scheme to assess the likely changes/effects caused by the proposed development. This enabled us to identify ways to mitigate against any specific effect caused by the proposal.

2.4 Following the assessment of these matters, we arrived at our conclusion on the overall impact of the development upon the surrounding area.

### 3.0 PRODUCT MARKET

3.1 The stone produced from Yennadon Quarry is a Dartmoor Rustic Stone. It is a metamorphosed sedimentary rock that is well suited to, and favoured as, a building stone due to its indigenous appearance, 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.

3.2 The demand for the product itself comes from a range of sources as demonstrated in the graph below:



Source: Yennadon Stone Ltd

3.3 The main source of demand for the material clearly comes from the construction industry, from which the main demand is for facing stone to new buildings and extensions. For this quarried stone needs to have a vertical face of good appearance, achieved as each stone is cut by saw into blocks generally 100mm wide. The demand for blocks with sawn faces continues while a premium value can be achieved for blocks with a natural face, all of which can be achieved at Yennadon Quarry.

3.4 This is important as planning policies continue to encourage the use of such local materials, for example:-

- Dartmoor National Park Adopted Core Strategy – “Policy COR4: Development proposals will be expected to conform to the following design principles.....  
b) *using external materials appropriate to the local environment*”
- West Devon District Council Adopted Core Strategy – “Strategic Policy 20: Promoting High Quality Design. The requirement to achieve high quality design of both buildings and landscaping is a priority for all development proposals. Support will be given for proposals, which have regard to the following requirements.....b. *The distinctive character of the area, including the local context, design, landscape, natural and historic environment and incorporate public art where appropriate.*”
- South Hams District Development Policies – “Policy DP1: 1. All development will display high quality design which, in particular, respects and responds to the South Hams character in terms of its settlements and landscape. New development should.....a. *be based on a good understanding of the context of the site, and contribute positively to its setting by enhancing the local character, taking account of the layout, scale, appearance, existing materials and built and natural features of the surrounding area.*”  

“Policy DP4: 2. *Development should use locally sourced materials where possible, and minimise the use of materials, by using recycled materials in the construction of the development and minimising waste during construction.*”
- Cornwall Council Caradon District Local Plan – “Policy ALT2: Planning permission will not be granted for a proposal unless the development would.....(i) *be compatible in its design with the surroundings in terms of scale, density, massing, height and materials of construction.*”

3.5 These policies create demand for local stone through the requirement for developments to incorporate local features and/or be in-keeping with the surrounding built environment. They have been based around principles of sustainable development, with the majority of the planning policies forming part of adopted documents not due for re-consideration for at least 10 years. As such, there will not be any significant change in the near future.

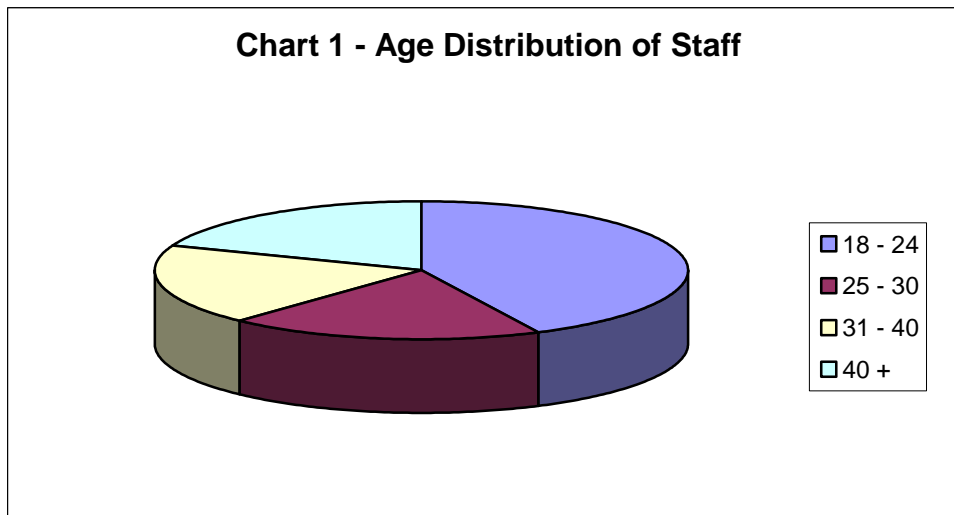
3.6 There are other small-scale quarries in the area which offer a different stone type. However, there are just two other sources of similar stone available within a 30 mile radius of Yennadon, namely:

- Mill Hill Quarry, Tavistock – 6.75 miles North West

- Lantoom Quarry, Dobwalls – 25 miles West
- 3.7 Both these quarries suffer from a lack of production capacity in terms of the ability to service customer demand, as are small in scale.
- 3.8 The Mill Hill Quarry delivers a similar product to Yennadon but with a different colour. It can only supply small quantities of cut stone, but cannot offer ‘rustic’ stone. We have made enquiries with Devon County Council’s Planning Department regarding the Mill Hill Quarry site and understand that this has a current consent to continue operations through to 2042.
- 3.9 We understand that the Lantoom Quarry has planning consent to quarry stone until 2042. However, it can only provide a limited product of around 30 tonnes per week, compared with the 140 tonnes possible at Yennadon.
- 3.10 The net effect is that if the Yennadon quarry closes in the next 5 years, then apart from the alternative stone at Mill Hill and Lantoom, 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 will enable logistical errors to potentially cause significant delays in construction.
- 3.11 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.

#### **4.0 EMPLOYMENT**

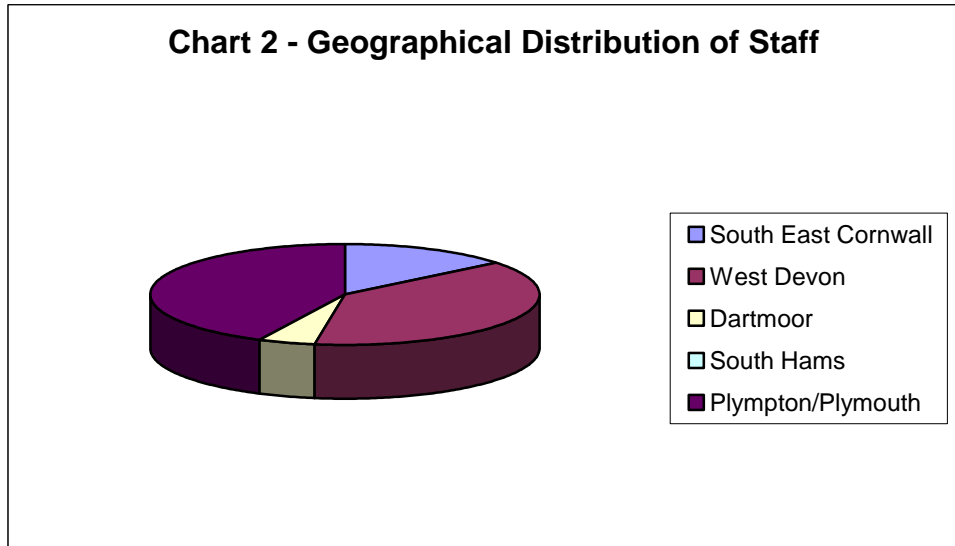
- 4.1 The Yennadon quarry is an established employer within an area of Devon which offers limited opportunities outside of the service, agricultural and tourism industries. The quarry currently employs 21 people including the two directors. The age range is illustrated in the chart below:



Source: Yennadon Stone Ltd

- 4.2 9 persons are aged between 18 and 24 with a further 4 aged between 25 and 30, making up the majority of the staff employed. Against the general economic background the preservation of opportunities for youth employment as skilled labourers and the retention of employment for older skilled workers should be a paramount consideration.
- 4.3 This is particularly relevant in a rural economy, such as West Devon/Dartmoor/South Hams/South East Cornwall, where 12 of the employees reside.
- 4.4 Looking more closely at the place of residence of the employees we identify the following distribution:





Source: Yennadon Stone Ltd

- 4.5 The loss of the 21 jobs at Yennadon Quarry will have ramifications on the local economy through the loss of the economic activity of those employees, a measure of which is Gross Value Added (GVA). GVA is a measure of the value of the goods and services produced in the economy. It is primarily used to monitor the performance of the national economy and is now the measure preferred by the Office for National Statistics (ONS) to measure the overall economic well-being of an area.
- 4.6 We have considered the GVA per head for the West Devon district, which offers the most relevant geographical data to the subject site. The data is summarised on the following table:-

	<b>Plymouth</b>	<b>Devon</b>
GVA (£million)	4,158	12,467
Population	240,720	704,493
GVA per Head (£)	17,273.18	17,696
Persons Currently Employed	101,037	327,579
GVA per job	£41,153.24	£38,058.00

Table 1 : Comparison of GVA  
Source: ONS

- 4.7 Applying the 2009 rate of GVA would imply that, on closure of the quarry, there would be an annual loss of £159,264 from the West Devon and Dartmoor economies.
- 4.8 As there are very limited opportunities for these workers to identify other similar employment within a 30 mile radius it is reasonable to expect that, this economic benefit will be lost completely.

- 4.9 The impact of those employees resident in Plymouth and South East Cornwall cannot be dismissed. Due to work and leisure activities they will be customers of local businesses.
- 4.10 If the impact of the quarry closure is assessed as a whole, then it would mean a total annual loss of over £314,723 from the local economy.
- 4.11 These totals are based upon the assumption that every member of the populace is contributing to the economy. However, in reality this is not the case and the correct multiplier should be those detailed as GVA per job within table 1. Applying this rate suggests an actual loss to the economy of £827,075, which is a much more substantial consideration.
- 4.12 Whilst this is a small percentage of the region's total output, under current economic conditions any potential loss to the economy should be resisted unless planning policies dictate to the contrary.
- 4.13 The current workforce is adequate to operate the extended quarry on the basis of current annual output levels. There is, consequently, no suggestion that the grant of permission will create the immediate opportunity for new jobs.

## **5.0 SECURITY**

- 5.1 The existing quarry operation is fenced all boundaries to prevent third parties and grazing stock from entering the operational area. It is possible that curiosity could lead people to view over the boundary, as is currently witnessed within the existing operation.
- 5.2 The current quarry has an exemplary record of safety such that no member of the public nor any animal has been injured in or around the site due to the quarry operation.
- 5.3 The present proposals include the provision of security fencing around the new extension to ensure continued safety measures at the quarry. We understand these measures have provisionally been approved by the Health & Safety Executive (HSE) following enquiries.

## **6.0 HIGHWAYS AND ACCESS**

- 6.1 The current practice for loaded lorries on leaving the quarry is to travel south onto Iron Mine Lane, which cuts through Dousland and connects to the B3212. This in turn leads south to the A38. By utilising this route it minimises the direct impact on residential dwellings.

- 6.2 The current planning consent allows for 14,000 tonnes of material per year to be removed from the quarry with no more than 35 lorry trips to originate from the site per week.
- 6.3 Output has always been substantially below the permitted level. Since 2004 when Yennadon Stone bought the quarry, it has been operated on a more professional basis and output has increased to the level demonstrated in the table below:

Year	Tonnage		
	Cut (Building Stone)	Selected (Walling Stone)	Total
2007	3218	1817	5035
2008	2597	3115	5712
2009	2677	2291	4968
2010	3260	2072	5332
2011	3450	2100	5550 (Projected)

Table 2: Annual Tonnage Removal – Yennadon Quarry  
Source: Yennadon Stone Ltd

- 6.4 The proposed development does not therefore require an increase in the permitted annual output rate. As the region comes out of recession however the rate of activity is expected to increase and therefore the proposal seeks a 10,000 tonne annual limit to allow flexibility in the operation of the business.
- 6.5 Similarly it is intended to limit the lorry movements to no more than 30 trips per week.
- 6.7 We have already established that should planning be granted for the extension it would serve to preserve rather than create employment. Therefore, the daily commute by employees would remain unchanged.
- 6.8 In light of the above, we conclude the proposed quarry expansion will not place any additional pressures on the existing transport network.
- 6.9 The existing planning consent restricts lorry movements to periods between 0800 to 1800 Monday to Friday and 0800 to 1300 on Saturdays. No variation of these periods is sought as part of this proposal. Thus the impact on local residents will be minimised and controlled within acceptable limits.

## 7.0 DESIGNATION OF LITTLE YENNADON AS COMMON LAND

- 7.1 The site is part of the area designated as Common Land, and therefore general public rights of access are available. Yennadon Down is bisected by a number of

defined paths and tracks that are routinely used by the public although they are free to roam over the whole of the Down. There is in particular a footpath which runs north to south across the Down. This footpath comes within 100 metres of the south eastern corner of the existing approved quarry. All other public footpaths are further from the quarry.

- 7.2 The proposed development will not impinge on the existing footpath and the boundary of the quarry extension land will be at least 130 metres from the footpath. The proposed extension will be located on the western periphery of the Down with little or no historical, ecological or aesthetic interest, and therefore there should be little demand from the public to access this specific area of Yennadon Down.
- 7.3 The designation as common land brings rights for commoners to graze the land. Yennadon Down extends to over 100 ha. Thus the extension area represents circa 1% of the existing common grazing land. This will result in an overall loss of much less than 1% once the unused land within the existing quarry is restored to public access, as detailed within the ecological plan attached to the application.
- 7.4 Having regard to this proportion and stocking levels at Yennadon we do not consider that Commoner's rights will be adversely affected.
- 7.5 There will be a need to ensure stock are kept out of the permitted area with fencing erected around the new quarry in phases. Details of this are further described in the section on Security.
- 7.5 In light of the above, we do not believe that the proposed development will have an undue impact on the access rights of the public.

## **8.0 CONCLUSION**

- 8.1 We have given consideration to a number of social and economic factors affected by the proposal to expand the Yennadon Quarry site in order to extend the lifespan of commercial operations. The aim of these considerations is to assess the likely impact of the proposal and determine whether the proposal should be viewed as acceptable.
- 8.2 We looked first at the economic impacts of the proposal, which largely surround the consequences of the existing operation closing pre-maturely.
- 8.3 Should the consent not be granted then it has been estimated that, at the current rate of extraction, it will become physically unviable to operate within the next 5 years. That is close to 10 years before the expiration of the existing planning consent.
- 8.4 The type of stone extracted from Yennadon Quarry is in high demand as it has a number of advantageous qualities for the building industry, which sets it apart from

competing products. This need is partly created through existing planning policies adopted by Local Authorities requiring local stone to be used in new build projects.

- 8.5 Alternative sources of this product are scarce, with only two quarries within a 30 miles radius able to provide a similar type of stone. These sources are already stretched, a situation which will exacerbate should Yennadon Quarry close. This will require customers to source from further afield, with quarries in North Wales and China being the only alternative.
- 8.6 These alternative sources will clearly involve an increase in delivery times, transport costs and carbon footprint, which will lead to use of this type stone becoming both economically and environmentally unviable.
- 8.7 Whilst it is impossible at this stage to quantify the impact of the quarry closure on product prices, as it is in operation we can quantify the impact on the local economy resulting from the loss of jobs.
- 8.8 We have concluded that, given the limited opportunity in the locality for skilled quarrying jobs, on closure of the quarry the jobs will be lost from the economy. In using GVA figures, this would result in a potential loss of £159,264 per year from rural communities, and £250,000 from the region. This increases to £827,075 if we apply the GVA per job across the region, which is arguably a more appropriate measure.
- 8.9 As a result, we can conclude that the loss of this quarry would have a substantial economic impact on the region.
- 8.10 Clearly the proposal would have a significantly positive impact on the area in terms of the economy. However, we are aware that this needs to be weighed against any negative aspects, represented by those social impacts.
- 8.11 We can establish that traffic movements will remain the same through the retained extraction rate; therefore the proposed expansion will have no greater impact on the wider area.
- 8.12 The proposal will only have an impact on the area within the immediate vicinity of the quarry. Whilst, it is not proposed that the quarry face encroaches closer to principle footpaths over Yennadon Down, there remains the potential for members of public to walk to the boundaries of the site.
- 8.13 In light of this, we understand that existing security measures will also be expanded as part of the proposal, with fencing erected around any exposed faces.

- 8.14 The main social impact arises from the loss of common land itself, as the area of land open for access and grazing by commoners is lost. It has been established within this report that the proposed extension will only result in a loss of approximately 1% of the common land. This will reduce further with a restoration programme of the uneconomical quarry land.
- 8.15 In light of the above, we believe the positive economical benefits, represented by the proposal to extend the quarry, far outweigh the social impacts. This has particular relevance as it is possible to mitigate against a number of the negative aspects of the application.

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Date: 09 January 2012

**APPENDIX I**  
**SITE PLAN**





A386 TO  
TAVISTOCK


YENNADON QUARRY  
(SX 543 688)



A386 TO  
PLYMOUTH

EXTRACT FROM OS MAPPING (NOT TO SCALE)

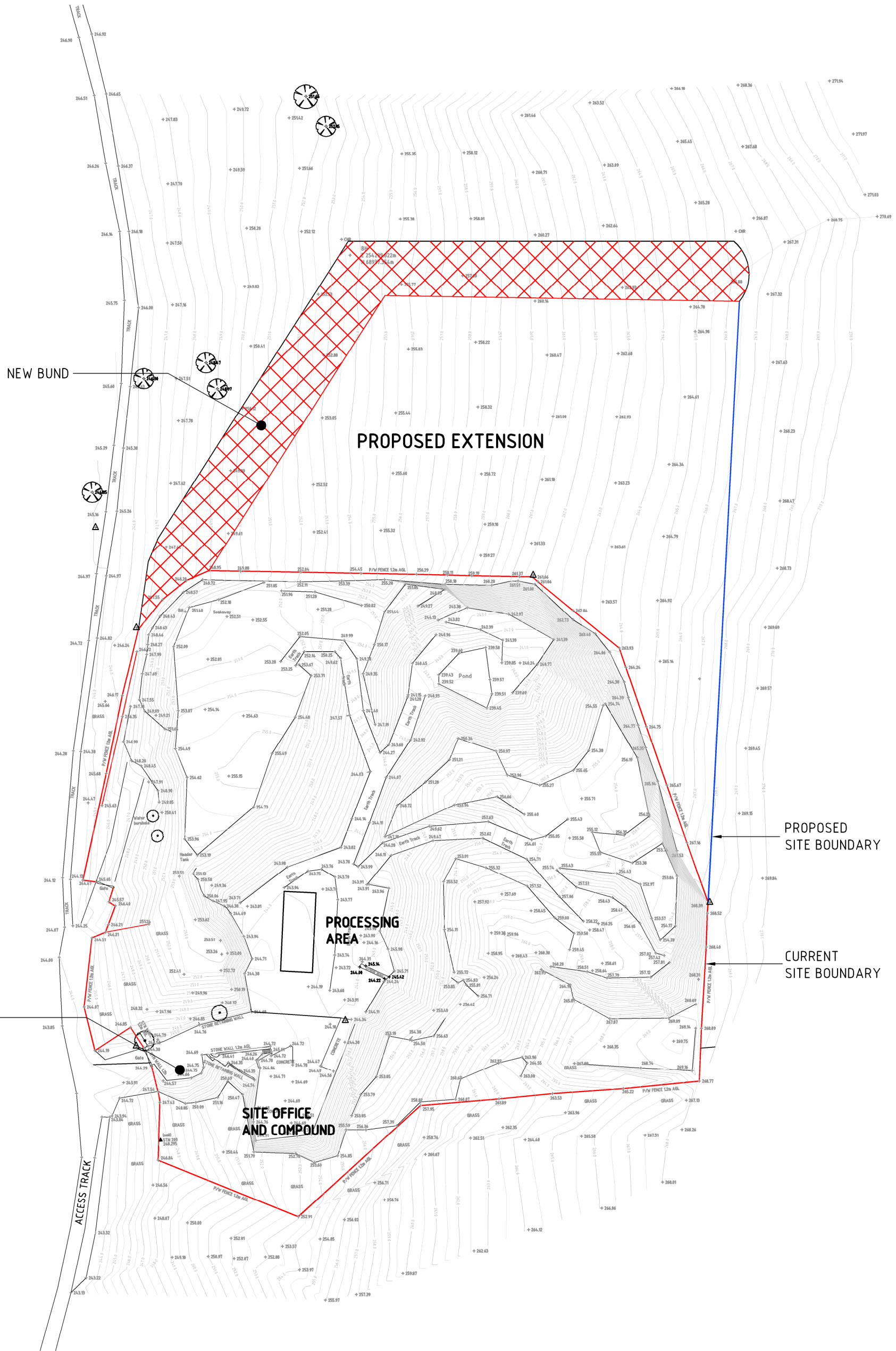
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Client <b>Yennadon</b> STONE LIMITED		Project <b>PROPOSED EXTENSION TO YENNADON QUARRY</b>		John Grimes Partnership Ltd Consulting Engineers & Engineering Geologists	
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Original Size A4	Checker A Robertson			Rev. R1	

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**APPENDIX II**  
**SCHEME PLAN**



R2	NEW BUND EXTENDED	25APR13	MV	AR
R1	REPORT ISSUE	FEB12	TG	AR
Issue	Description	Date	Drwn	Chkd

Client <b>Yennadon</b> STONE LIMITED	
Status REPORT ISSUE	
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Original Size A3	Checker A.ROBERTSON

Project PROPOSED EXTENSION TO YENNADON QUARRY
Title SITE PLAN SHOWING PROPOSED EXTENSION

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