# PROPOSED MINERALS EXTRACTION SCHEME

# **BOURBLES FARM. PILLING**

# TRANSPORT STATEMENT

**Updated August 2023** 

The Baxter Group

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**Updated August 2023** 

The Baxter Group

Job. No. 220503

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Position: Partner

Signed:

**Date:** 30 August 2023

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## Proposed Minerals Extraction Scheme. Bourbles Farm. Pilling. Transport Statement

Contents	Page	
1.	Introduction	1
2.	Local Highway Network Details	2
3.	<b>Effects of Proposed Development</b>	11
4.	Other Matters	9
	<ul><li>i. Highway Safety</li><li>ii. Access Arrangements</li><li>iii. Public Footpaths</li></ul>	14 14 15
5.	Conclusions	16

Figures

Drawings

#### 1. Introduction

- 1.1 This Statement supports a proposed minerals extraction scheme at Bourbles Farm, Bourbles Lane, Pilling, Lancashire (Figures 1 and 2). The farm is located on deposits of glacial sand and gravel.
- 1.2 The proposed scheme has been the subject of considerable discussion with the Minerals Authority for the area (Lancashire County Council) and has been the subject of a pre-application consultation.
- 1.3 This report considers the effects of the scheme on the highway network. For the internal effects the series of Phasing Drawings prepared to support the application should be examined.
- 1.4 Various access options have been considered in the development of the scheme. As the aim is to get the extracted materials and the imported fill material for the restoration of the site after the extraction onto or off the strategic highway network with the minimum use of local roads, a direct access onto the B5270 Lancaster Road is considered to be the best and only practical option. Accordingly, the site will be accessed by a new access and access road along the boundary of Pointers Farm.
- 1.5 The site has the capacity to supply around 460,000 tonnes of minerals to the local construction industry, reducing the need for this to be supplied from quarries considerable distances away from the area.
- 1.6 It is considered that the best extraction rate which would minimise inconvenience to other highway users and local residents would be to adopt a 5 year period, with the site restoration works taking a year after extraction finishes to complete, and these figures have been used in this assessment.

#### 2. Local Highway Network Details

- 2.1 The site lies to the north of Lancaster Road as shown in Figure 2. There are various roads that may be thought could be used to access the site which have been examined and discounted (Figure 3). All HGV's will be directed to use the A588 and therefore need to get to the A588 as direct as possible in order that activity on the local highway network is minimised.
- 2.2 The site's existing access is along Bourble's Lane. This runs from Little Tongues Lane through to At the junction with Little Tongues Lane it is unsuitable for HGV traffic.



View of Bourbles Lane from Little Tongues Lane

Even if Bourbles Lane were to be improved, HGV's from the development would have to use Little Tongues Lane to reach the B5270 Sandy Lane. Little Tongues Lane is a typical rural residential road with on-street parking and high pedestrian activity, unsuitable for HGV use.



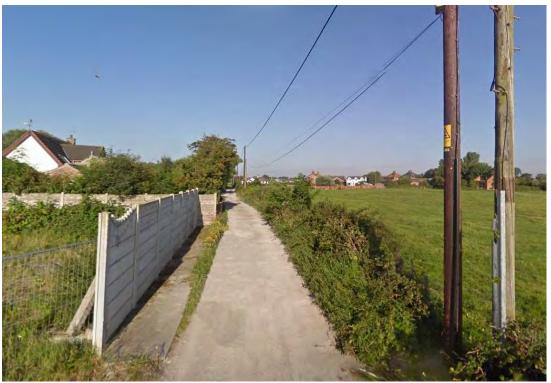
View of Little Tongues Lane Looking South



View of Little Tongues Lane Looking South

- 2.4 HGV's would then need to use the B5270 Sandy Lane passing numerous properties. They would then have to travel the full length of Lancaster Road to reach the A588.
- 2.5 Accordingly this is not an option that could be considered practical.

2.6 The site can also be accessed from Gaulter's Lane which serves Nickson's Farm, although there is no vehicle access at present. Gaulter's Lane is also unsuitable for HGV use.



View of Gaulter's Lane Looking west



View of Gaulter's Lane Looking west

- 2.7 HGV's would then still need to use the B5270 Sandy Lane the full length of Lancaster Road to reach the A588.
- 2.8 Accordingly this is not an option that could be considered practical.
- 2.9 Bourbles Lane continues from Bourbles Farm to The A588 passing Lyndale Farm.



View of Bourbles Lane from A588 east of Lancaster Road Junction.

- 2.10 This is also a route unsuitable for HGV's. The section immediately to the north of the A588 is outside of the development site and the land owners have indicated that they do not wish to be part of the development. This, therefore, is another impractical option.
- 2.11 It has been suggested that a direct access and route be provided from the A588. This would have merits but would involve passing over land outside the control of the development site owners. As above, the land owners have indicated that they do not wish to be part of the development. The site, therefore, cannot be accessed from a direct access onto The A588.
- 2.12 The site does not have direct access onto Lancaster Road but agreement has been reached with the intervening land owners to create a new temporary access and road along the boundary of Pointer Farm.

- 2.13 To ensure that HGV traffic cannot turn left on exiting the access and travel west to Preesall and Knott End on Sea (and therefore use roads on which it would be undesirable to run HGV's and defeat the purpose of creating the new access) the access has been designed to make this a physically impossible manoeuvre. There should therefore be no need for any traffic regulation orders but a routing agreement can form part of the Construction Environmental Management Plan (CEMP) which we expect the contractor will be required to complete as a condition of the planning consent if thought necessary.
- Only the section of Lancaster Road eastwards from the new access point to the A588 will therefore be used by the HGV traffic generated by the development.
- 2.15 The B270 Lancaster Road is a wide single carriageway, previously subject to the National speed limit but now benefits from a recently introduced 30 mph speed limit. As is the case on many roads in the area there are no footpaths but a narrow verge which provides a boundary to the road, with a low hedgerow behind.



View along Lancaster Road looking East. New Access would be just beyond the trees



View along Lancaster Road looking East. New Site Entrance will be approximately opposite existing access. New Site Exit will be around 23m to the East



View along Lancaster Road looking West. New Site Entrance will be on right just before tree line

## 2.16 Lancaster Road bends slightly before meeting the A588.



View along Lancaster Road looking East. Good visibility over hedge for HGV drivers



View along Lancaster Road looking East. Junction with A588 in distance

2.17 At the A588 junction there is very good visibility in both directions.



- Lancaster Road is a bus route used by several School Services and the 89 Lancaster to Knott End on Sea service which runs with a 90 min frequency with first and last services passing through Presall at 07.14 and 19.19 going towards Knott End, and at 07.39 and 19.39 on the return to Lancaster. In total 10 services use Lancaster Road. There are stops close to the site on Green Lane to the west (around 450m from the site entrance) and on the A588 to the east (around 300m from the site) so the 89 service may prove useful for on-site employees that do not travel to the site in one of the HGV's.
- 2.19 There are several businesses located along the length of Lancaster Road. Lancaster Road is currently, therefore, already used by HGV's and PSV's.
- 2.20 Lancaster Road has street lighting (although most of the activity at the site will take place during daylight hours).
- 2.21 The A588 connects to Lancaster and the M6 to the north, and to Blackpool and via the A585 Trunk Road to the M55 to the south. It is a wide single carriageway in the vicinity of the Lancaster Road junction.
- 2.22 The A585 is subject to the National Speed limit in the vicinity of the site.
- 2.23 Lancaster Road has recently been resurfaced and the carriageway markings replaced. The condition of the road and markings will be surveyed before the development commences operations and again at regular intervals during the course of the work (to be specified in the CEMP 3 months is recommended). Any damage caused by

- the vehicles associated with the extraction and reinstatement will be repaired as part of the CEMP.
- 2.24 It is clear that the only practical option (and that involves land outside the site, the use of which has had to be agreed with the land owner) is the new temporary access onto Lancaster Road with all HGV's direct to arrive and depart from the east, i.e. the A588.
- 2.25 With the proposed access arrangements, inconvenience to other highway users and residents will be minimised.

#### 3. Effects of Proposed Development

- 3.1 It is estimated that the mineral reserves that can be extracted are just under 0.5 million tonnes (current best estimate 460,000 but 500,000 tonnes have been assumed for this assessment to give a robust assessment). The saleable products will comprise washed concreting and fine sand together with single sized gravels (10mm/20mm/40mm).
- 3.2 The timescale for extracting the minerals has been carefully considered. If extracted over just a couple of years the activity per day would clearly increase. If the extraction period was increased then the inconvenience that may be perceived to be caused would be over a longer period. A practical timescale for extracting the mineral would be around 5 years balancing the daily activity with the duration of the works.
- Over a 5 year period this would equate to 100,000 tonnes per annum.
- 3.4 Using typical 20 tonne load HGV's this would equate to an average of 5,000 HGV movement per annum.
- 3.5 Assuming no weekend working and a 245 day working year this would equate to an average of around 20 HGV movements per day during the week only.
- The total scheme will be implemented in phases (see Phasing Drawings). The work will also involve the importing of fill material for the site's reinstatement as each phase is worked and after the completion of the extraction works. Fill material will be brought on to the site almost continuously over a 6 year period (i.e. allowing a year after the completion of the extraction works to completely reinstate the site. Topsoil and any other useable material will be stockpiled on site to reduce the amount of material to be used for the reinstatement.
- 3.7 Assuming a similar amount of fill material as the minerals extracted, but over a 6 year period would result in another average of 17 HGV movements per day.
- 3.8 The total effects of the development would therefore be an average of 37 HGV movements per day over 5 years and 17 per day for the following year.
- 3.9 It is unlikely that the vehicles taking minerals from the site would be able to return with suitable fill material but if this was possible it would be considered for the obvious benefit of saving cost but to also reduce the number of movements to / from the site but the worst case would be 40 laden vehicles entering / leaving the site and 40 unladen vehicles entering / leaving the site.
- Over an 8 hour operational day (times to be agreed as part of the CEMP) this would equate to an average of less than 5 vehicles arriving and 5 vehicles departing per hour

per hour for the first 5 years, and an average of around 2 vehicles per hour arriving and departing in the final year. All HGV's will arrive from, and depart to, the A588 to the east.

- In practice there will be some days when the numbers of vehicles will be less, balanced by days during which there will be more to achieve the total possible extraction in the anticipated time period. The practicalities of loading vehicles leaving the site and unloading vehicles arriving with fill material are such, however, that on days when there will be more movements than the average, the variation will not be extreme and a maximum of around 60 HGV movements per day would be a practical limit, balanced by days when there would be less activity.
- The effects of the development can therefore be summarised as in the first 5 years the combined extraction and reinstatement works would result in an average of around 37 HGV movements per day (less than 5 in / 5 out per hour) and a practical maximum of 60 HGV movements per day (7.5 in / 7.5 out per hour) with days when there would be less traffic to balance the days when there was more than the average rate. In the 6<sup>th</sup> year the final reinstatement works will result in an average of around 17 HGV movements per day (2 in / 2 out per hour) with the same practical limit (which if achieved would considerably reduce the number of days when there would be HGV activity.
- 3.13 At all times, the HGV activity would be well under the level at which an Air Quality Assessment would be required.
- 3.14 Once at the A588 junction the HGV's can go in either direction.
- 3.15 There is a Department for Transport Traffic Count site on the A588 just to the east of Lancaster Road and the flows recorded here can be taken to be representative of the flows on the A588 passing the Lancaster Road junction.
- 3.16 The most recent pre-covid restriction count in 2019 showed an average daily traffic flow (both ways combined) of 6035 vehicles with 115 HGV's and 31 Buses and coaches.
- During 2020 the flows reduced considerably due to the covid restrictions. As these have now lifted assuming present day levels of traffic are now fully returned to precovid levels (when in reality with home-working etc is still unlikely to be the case) gives a robust basis for comparing the effects of the development during the life of the scheme.
- 3.18 The A588 average daily traffic flows are based on a 7 day week. As the proposed development will not operate at weekends the above development flows need to be adjusted. On a 7 day week basis the development would result in a two-way Annual

Average Daily Traffic (AADT) flow of 52 HGV's (26 Arriving and 26 departing) during the main 5 year extraction and reinstatement works period.

- 3.19 If this traffic splits equally at the A588 junction the existing AADT flow of 6035 vehicles will increase to 6061 (a 0.5% increase). The HGV / PSV content of the traffic would increase from 146 to 172 which would be 2.8% of the total flow.
- 3.20 Such total flows and HGV / PSV content are very low for an A-class route and the A588 will have no difficulties accommodating the development traffic.

#### 4. Other Matters

#### i. Highway Safety

- 4.1 The Road traffic accident date for the area has been examined using the Highway Authority's plotting service.
- 4.2 Over the last 5 years there has been only 1 recorded accident in the vicinity (Figure 4) This occurred at the Lancaster Road / A588 junction at 08.01 on Tuesday 22 June 2021. The accident occurred in good weather conditions. Only one person received a slight injury.
- 4.3 Using the DoT's data one has to go back to 2013 to find the previous recorded accident in the vicinity which was again at the Lancaster Road / A588 junction.
- 4.4 One accident in 9 years does not indicate an accident problem area. Indeed the recent resurfacing of Lancaster Road and relaying of all the carriageway markings should improve the already good safety record of this area.
- 4.5 There have been no recorded accidents on the section of Lancaster Road between the site and the A588 in the 23 years of records available for examination.

#### ii. Access Arrangements.

- 4.6 The access has been designed to ensure HGV's cannot depart to, or arrive from, the west along Lancaster Road.
- 4.7 Whilst all the hedges in the area are kept at a low height and a driver of a HGV can see over them, there is also a need to ensure that standard visibility splays can be achieved should the new access be used by a light vehicle.
- 4.8 To achieve these aims the entry and exit manoeuvres at the new access would be split and separate entry and exit points would be achieved with a dividing island.
- 4.9 The proposed arrangements are shown on Drawing 220503/01/A.
- 4.10 As can be seen a standard visibility splay for a 30 mph highway (2.4 x 43m.) can be achieved.
- 4.11 Swept Path Plots of articulated tipper lorries arriving and departing are shown on Drawing 220503/02/A. It would be physically impossible to turn left out of the exit point or arrive from the west and turn left into the entry point but if desired the requirement for all HGV's to arrive from and depart to the east can be included in the CEMP.

There is no reason for any light vehicles that may call at the site to not use the section of Lancaster Road to the west of the access and hence the widening on the north side of the exit lane (which from the HGV plots can be seen to be not required for the HGV manoeuvres) to allow a departing van or SUV to turn left at the end of the access road and then make a U turn at the exit point.

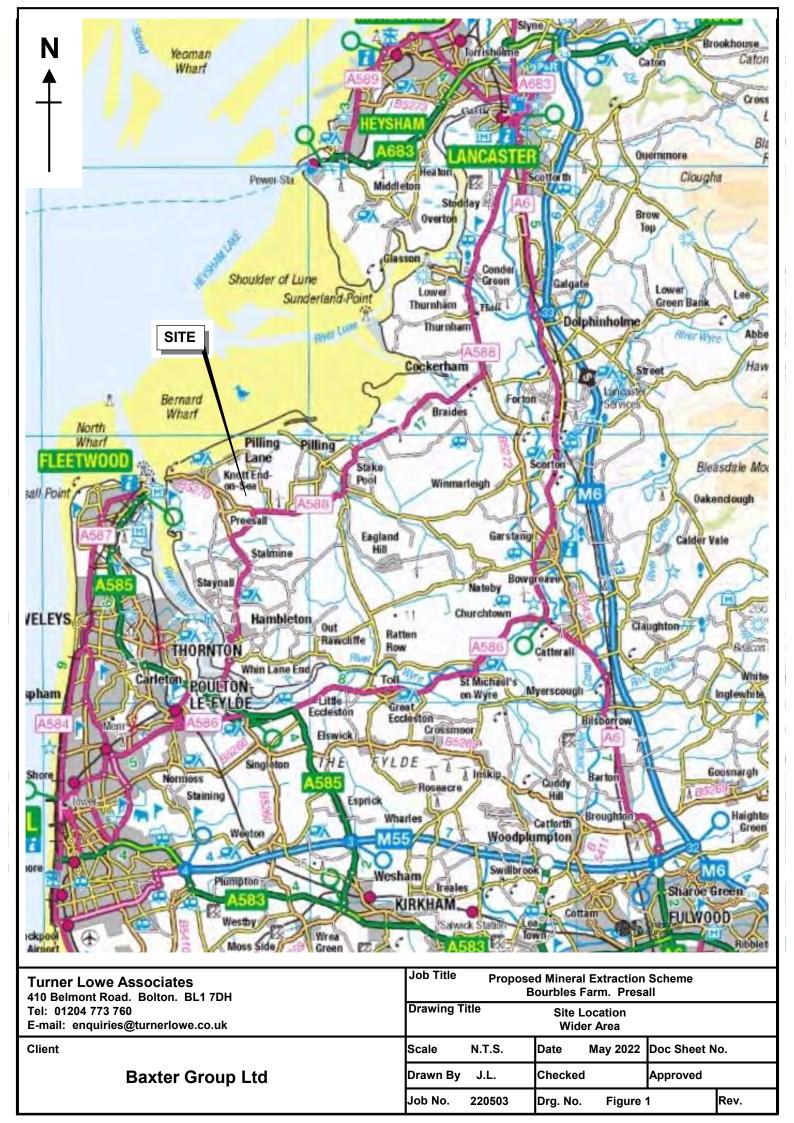
#### iii. Public Footpaths

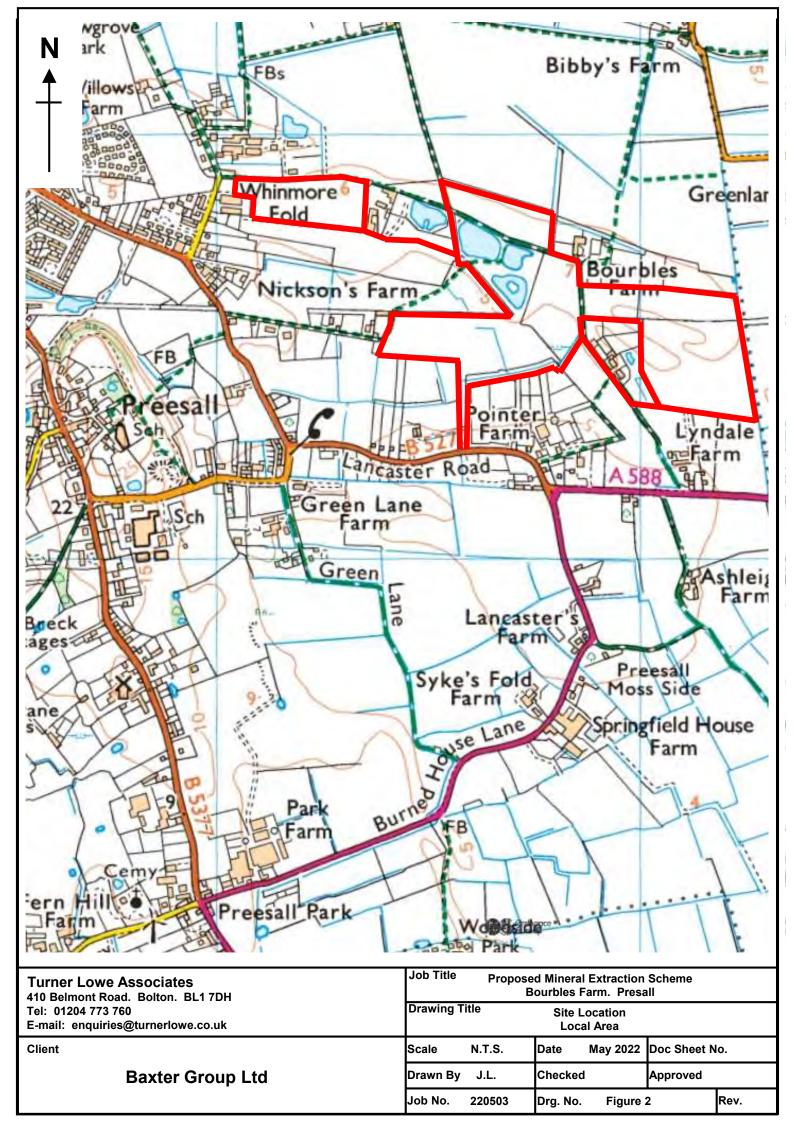
- 4.13 There are a number of public footpaths which cross the total site.
- 4.14 Where possible these will be kept open to the public. If it is necessary to close a particular section for a phase of the works an alternative will be provided and the necessary temporary closure or diversion order agreed with the Highway Authority.

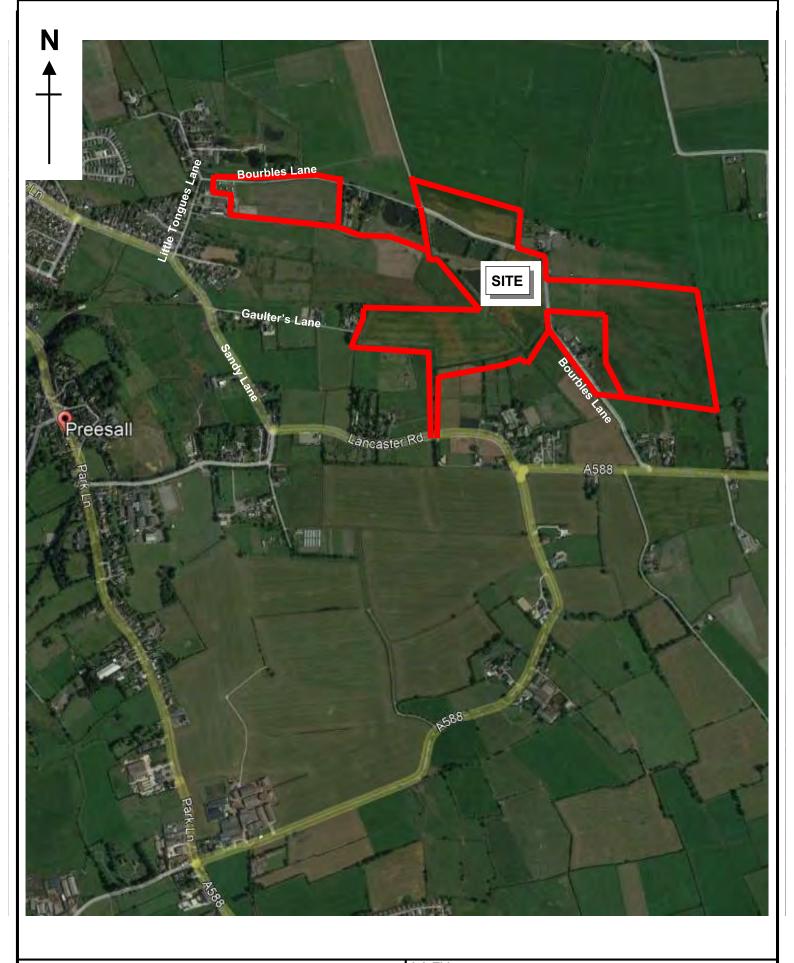
#### 5. Conclusions

- 5.1 The proposed development will not result in a high level of HGV traffic generation in comparison to other mineral extraction sites. The extraction and remediation work will take place at the same time with the remediation work carrying on for another year after the carefully considered anticipated 5 year extraction program and after 6 years there will be no further HGV traffic generated by the site (with considerable reduced activity in year 6).
- Various access options have been considered. The only practical option is a new temporary access on Lancaster Road. All HGV traffic will arrive from and depart to the east along Lancaster Road. This is already used by HGV's buses and farm vehicles. There will be no HGV's using the section of Lancaster Road to the west of the site passing the residential properties and going through Presall or Knott End on Sea.
- 5.3 At the A588 the development will result in around a 0.5% increase in daily traffic with HGV composition being well below the level expected on A class roads at 2.5%.
- The recorded accident record for the area is very good with no accidents recorded on the section of Lancaster Road that would be used by the development traffic in the 23 years of available data. There has been just one recorded accident at the Lancaster Road / A588 junction in 9 years. Slow moving HGV's with very good visibility for the drivers at a high level should not affect the accident records.
- 5.5 It is concluded that there are no highways reasons to oppose the proposed development.

**Figures** 





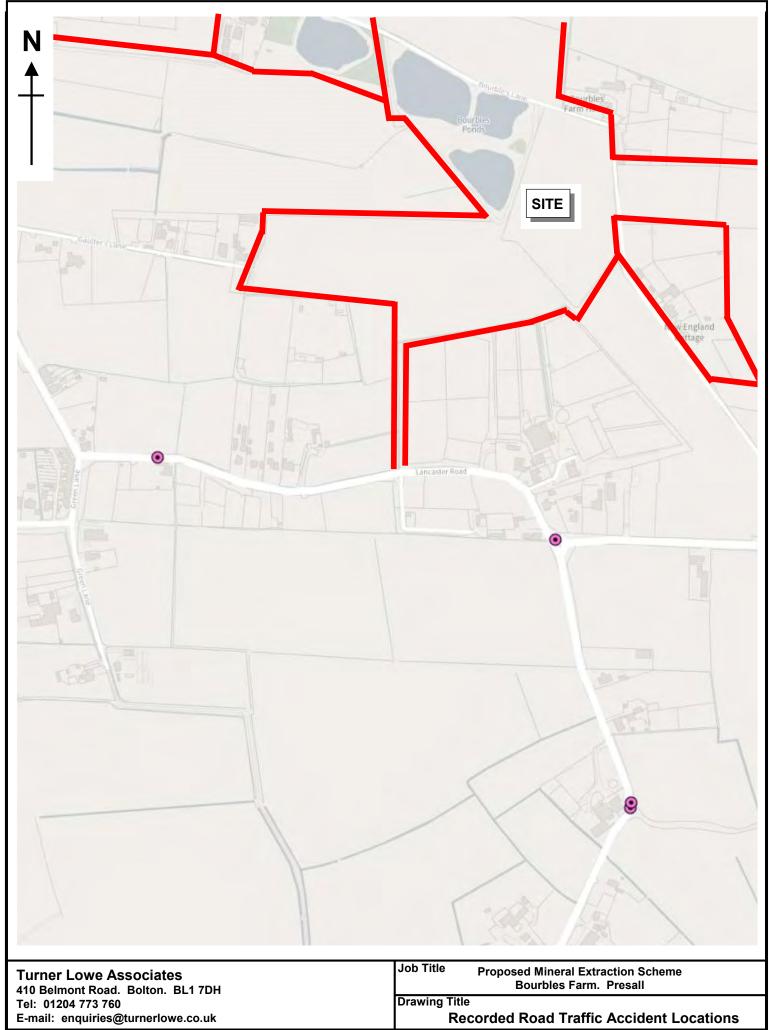


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Job Title Proposed Mineral Extraction Scheme  Bourbles Farm. Presall				
Drawing Title	Site Location Local Highways			
Scale N.T.S.	Date Mar 2023	Doc Sheet No.		
Drawn By J.L.	Checked	Approved		
Job No. 220503	Drg. No. Figure 3 Rev.			



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Drawn By	J.L.	Checked		Approved	
Job No.	220503	Drg. No.	Figure 4	4	Rev.

Proposed Minerals Extraction Scheme. Bourbles Farm. Pilling. Transport Statement

**Drawings** 

