

Westleigh Quarry

Community Survey – July – November 2014

Survey Report

November 2014

Common Places LLP



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1. Purpose

The Westleigh Quarry Survey was commissioned by Burlescombe Parish Council and sponsored by Burlescombe Parish Council, Aggregate Industries UK, Mid Devon District Council and Devon County Council.

Its purpose was to:

- Ascertain whether there are any issues or areas of Westleigh Quarry's operations which are having significant negative impacts upon the quality of life of residents of the Parish of Burlescombe; and
- If there are significant impacts, to work out whether there are realistic and appropriate actions which can be undertaken to lessen them.

The purpose of this document is summarise the results of the survey, ahead of setting up an action plan, setting out potential actions with regarding the development of future options and activities.

2. The survey approach

The Westleigh Quarry Survey is part of a wider approach, which incorporates the major stakeholders in the development of any actions which may result from the results of the survey.

2.1 Representativeness and the target of the survey

The purpose of the survey was to enable those who are experiencing difficulties or danger as a result of the quarry's operations to make any impacts known and provide detailed information regarding them. The survey was qualitative, not quantitative, and as such it should there has never been an expectation that the whole of the community

of the parish of Burlescombe might answer the survey or that it is somehow representative in the manner of a "vote" for or against the quarry in some way. It is important that those who are experiencing difficulties or danger as a result of the quarry's operations have been given an opportunity to give an in depth answer regarding those difficulties.

In order to ensure that those within the whole parish who wish to make a comment have had an opportunity to do so, extensive efforts to disseminate knowledge of the availability of the survey have been made and the returns from throughout the Parish indicate that these efforts have been successful. Where a return online has been a problem, then the opportunity for paper questionnaires was given and these questionnaires returned.

The survey was anonymous; allowing respondents to answer freely. At the same time, information around where they live was collected; via postcode and road which allowed cross reference of their answers to the area where they live on future potential mitigation measures.

Respondents had a choice of how to return their questionnaire but returns were predominantly online; this is a helpful medium as it removes the peer pressure which predominates within public meetings or some other engagement techniques where only the "loudest" or most passionate are heard and, perhaps, sway other's opinions.

The importance of this survey is that it focuses data from those impacted by the quarry most directly; identifies where they live (in order to allow an opportunity to correlate their homes to the vicinity of the quarry or the lorry routes, for example) and goes on to open a dialogue around how issues may be resolved.

2.2 Issues of negativity

There is a danger, particularly when subject is contentious or difficult, for there to be a naturally leaning for respondents to be negative. An illustration of this effect is surveys undertaken about waiting times in the NHS:

In order to discuss the subject of waiting times then naturally that is the area to focus on. There is an inherent point that the NHS is a good thing; but there is no need to ask *that* question in a survey about waiting times. In addition, it is also only really worth asking people who have experience of waiting times to answer the question and those answering are those who may have had a bad experience. However, it is the view of those experiencing the issue that we seek, rather than everyone within the whole of the United Kingdom, many of whom will have a judgement whose knowledge is sweeping and generalised and based on no direct experience (or perhaps based on second hand data or the media).

In the end, negative responses are not necessarily factually incorrect and learning can still be drawn from them. From a data management perspective attempting to illicit solution-based responses provides a way of attempting to turn negative answers to positive.

With this example in mind, the quarry survey provided parallel methodological challenges and ways to resolve them. We are not asking whether Westleigh Quarry is a good thing; we are asking if there are issues and, if so, beginning to work with people around ideas to resolve them. There are many reasons why the quarry is a good thing and, we are

delighted to report, that some people chose to make that point in the final open question, for example:

"It brings work to a lot of local people. Everyone was aware of the quarry when they moved to the village."

"Enjoy quarry day"

"More open days would be fun and informative."

"...they are an employer and that is not an insignificant consideration - they may have their drawbacks but employment is very important too"

"I would like to thank them for the input they have had on the village, in the way of support for projects and open days. The staff understands the issues faced and do their best to help."

"I believe there are some positive impacts the quarry has on the community, during bad weather the road through the village is looked after and I can exit safely. Also the environmental work being done around the quarry to return it to its natural state I think is important."

"I would like to remind people of how much the quarry does to help the local community by donated things and having open days which are great"

"The quarry has been there for hundreds of years and people must learn to live with it. The villages would be worse off without the quarry providing employment and a source of funding for various local amenities and trying to keep the parish alive."

Inevitably, when asking about issues and problems the opening questions in some

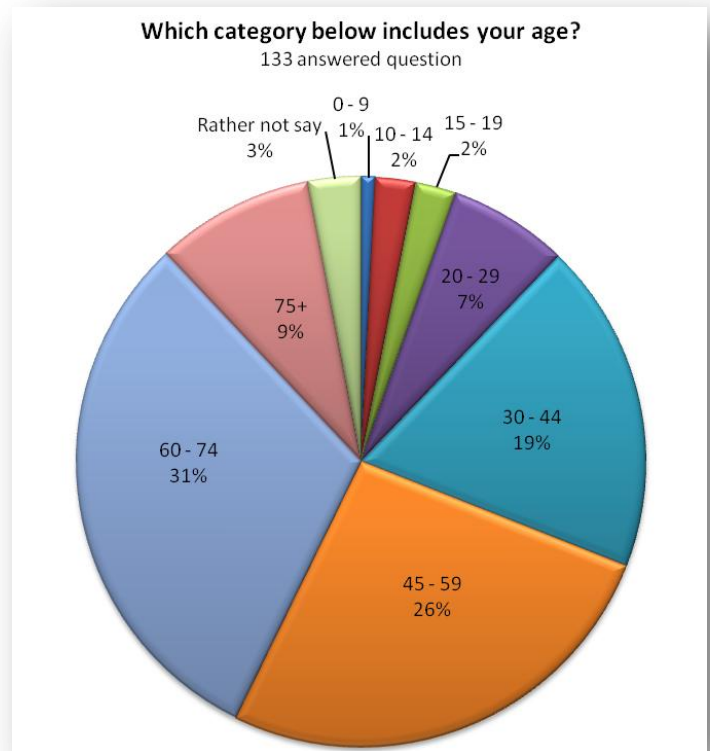
surveys will tend towards the respondents answering negatively. A common way to ask such negative questions in some surveys is to keep the choice as a closed one (“yes”/“no”) with an inference made within the question; this tends to add an amount of “leading” into the question. In the quarry questions, aware of the pit falls of such questions we opened questions to a gradient of choices (for example “High impact”, “Some impact”, Little Impact”, “No Impact”) and then followed up certain choices (perhaps the most negative ones) asking for further explanation. This removes element of skew but also asks the respondent to follow up such an answer with more detail. In identifying the real depth of issues, it has been the qualitative comments that ultimately give us the detail and profound evidence.

3. Responses

3.1 General

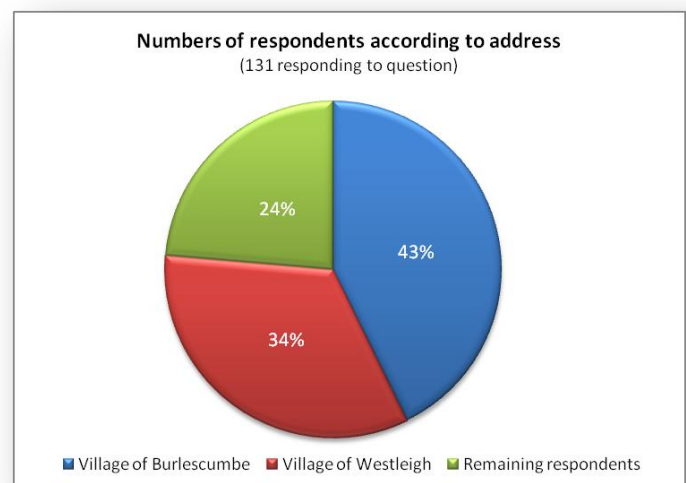
135 Respondents answered the survey, of which:

- 124 were online responses
- 11 were paper responses



3.2 Mapping the answers

Although the responses were anonymous, postcodes and road were asked for. This gave the opportunity to cross reference individual answers, when required, but also to analyse the correlation between the geographical provenance and particular issues and problems. The following graph demonstrates the proportion of respondents based in the villages of Burlescombe and Westleigh compared to the remaining areas of the parish.



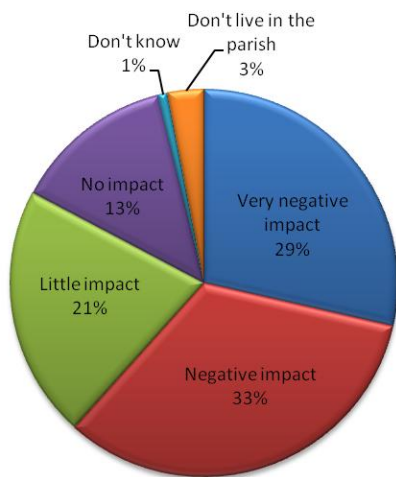
3.3 General Answers

The initial question around the degree of impact of the quarry's activity should be seen within the context that those answering are likely to be those impacted by the quarry in some way. The intention of the question is one of drawing those impacted into further questions around the degree to which they are impacted, in what areas of the quarry's operations and open a discussion around the

types of options that would reduce those impacts. Indeed, logic questioning, for those answering that they weren't impacted, moved the respondent to the end of the survey for any additional comments and the end of the survey.

For those saying that there was an impact on their lives an open question was asked next. In this question, there were no areas of operations suggested and the respondents were allowed to answer in any way they wished.

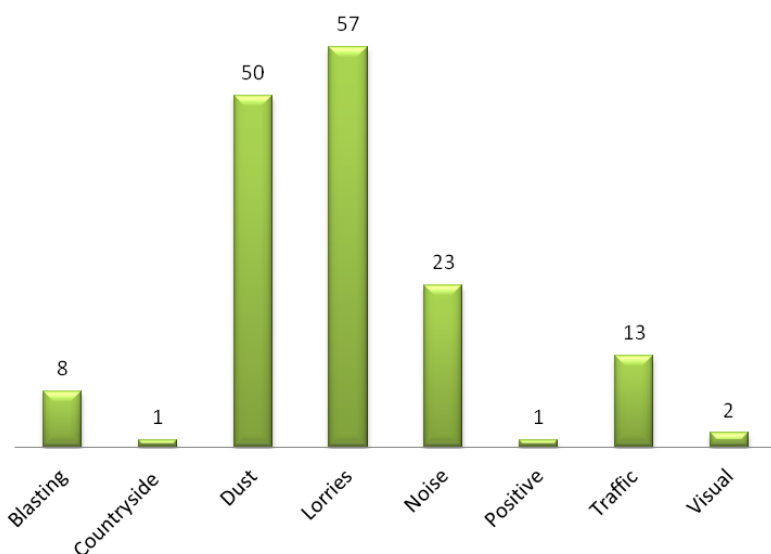
To what extent do the quarry's activities have a negative impact upon your quality of life as a resident of the Parish of Burlescombe?
(133 reponses)



The question was open; the intention being that respondents were able to choose any concern whatsoever. The categories of answers are set out in the graph below. Within the 107 people answering, 57 of those stated had issues with lorries and 50 with dust.

These answers mirrored the major issues in the following sections of the survey and the more detailed responses.

Response categories from text answer - "As you answered that the quarry has an impact on your quality of life , please describe...which activity has the most significant impact"
(107 answering)



The following sections set out specific areas of operation which would have concerns for respondents. It should be reiterated that these specific questions were directed at those who had said that their quality of life was specifically impacted.

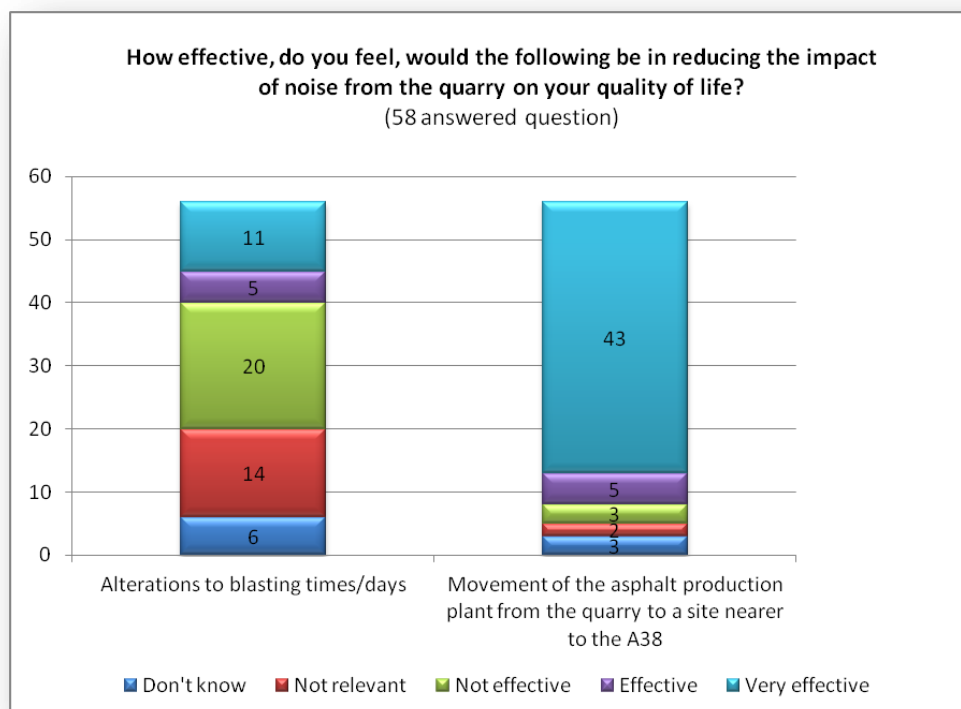
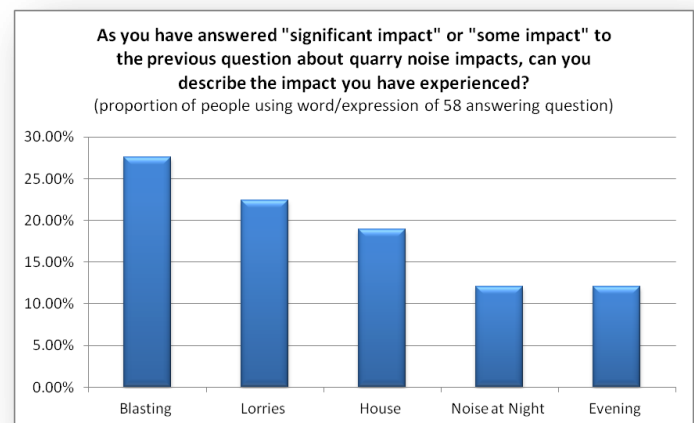
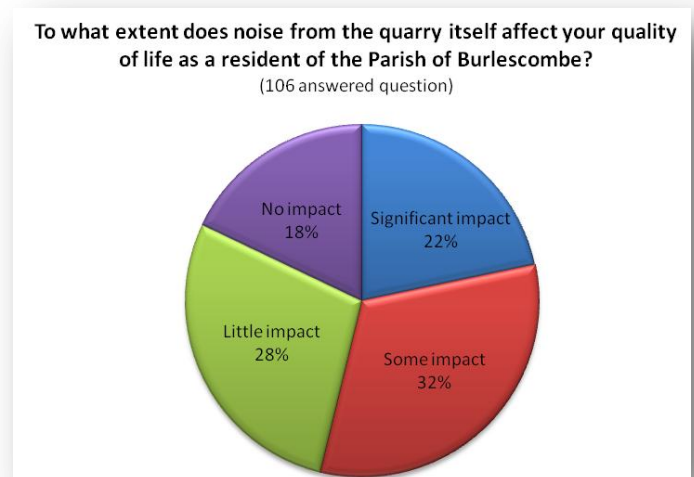
3.4 Noise from the Quarry itself

The purpose of the initial question was to direct those whose concerns were around noise directly from the quarry to be drawn into further questions that issue. Those answering "no impact" or "little impact" were navigated to the next section of the survey and those answering "significant.." or "some impact" on to further questions about noise from the quarry.

Those answering that there was "significant" or "some" impact were asked to describe the impact that they had experienced.

Words which occurred mostly across the answers were "blasting", "lorries" and "house"; this last relating to the impact of the noise on their house or the fact that the noise could be heard inside (or outside) of it.

The next question asked about how the respondents, in their personal opinion, may consider amelioration of the issues that impact upon them. Prior to an open ended option two options were offered (graded around their opinion of "effectiveness")



There were a number of additional comments regarding the top answer of moving the asphalt plant, these included:

"Moving asphalt plant away from quarry will reduce noise at weekends and evenings"

"Anything that is moved closer to the A38 would be a good thing. Importantly, traffic movement should be restricted to a direct purpose built route to the A38 not abusing country lanes."

"Asphalt smell is minimal but moving the plant would reduce or remove. Can occasionally hear the plant, so again moving it further away would be good"

"The quarry lorries with stone of course have to come from the quarry. That is enough for Burlescombe to cope with. The asphalt processing plant has caused a considerable increase in lorry movement at unsocial hours"

"movement of asphalt plant nearer A38 would reduce noise and lorry traffic through village significantly"

"The asphalt production plant should be moved away from residential areas"

"Moving the tar plant would be very effective if moved away from the villages which would hopefully result in reducing dust pollution and reduce quarry traffic flow."

"The asphalt production plant now has a new hot tar plant this means that transport of asphalt at night has increased! At night we are more aware of lighting and noise from this plant - and move to the A38 would be a miracle!!"

"It is understood that the asphalt plant has been granted Planning consent to operate on 24/7 basis, meaning that material coming into and exiting the quarry could continue, with what is a rather noisy operation throughout the night. Were the tar plant to be removed to the A38 area, away from private earshot, it would certainly be an effective measure."

"If the asphalt and production was moved to a site nearer the A38, this would probably stop the movement of HGVs night times, stopping some of the dust and noise"

"If the asphalt production is moved nearer to the A38 there should be less traffic through the village. Or at least i hope so!"

"Smells from asphalt production

About 20% of HGV traffic is as a consequence of asphalt production. Nearly 100% of night time and weekend HGV traffic is as a consequence of asphalt production. Moving the asphalt plant would reduce the quarry's overall impact."

"Less lorries through the village particularly at night if moved nearer the A38"

"The asphalt production is the subject that I consider causes the filth"

"We assume the asphalt production is what happens at night and generates so much lorry traffic. These both have negative impacts"

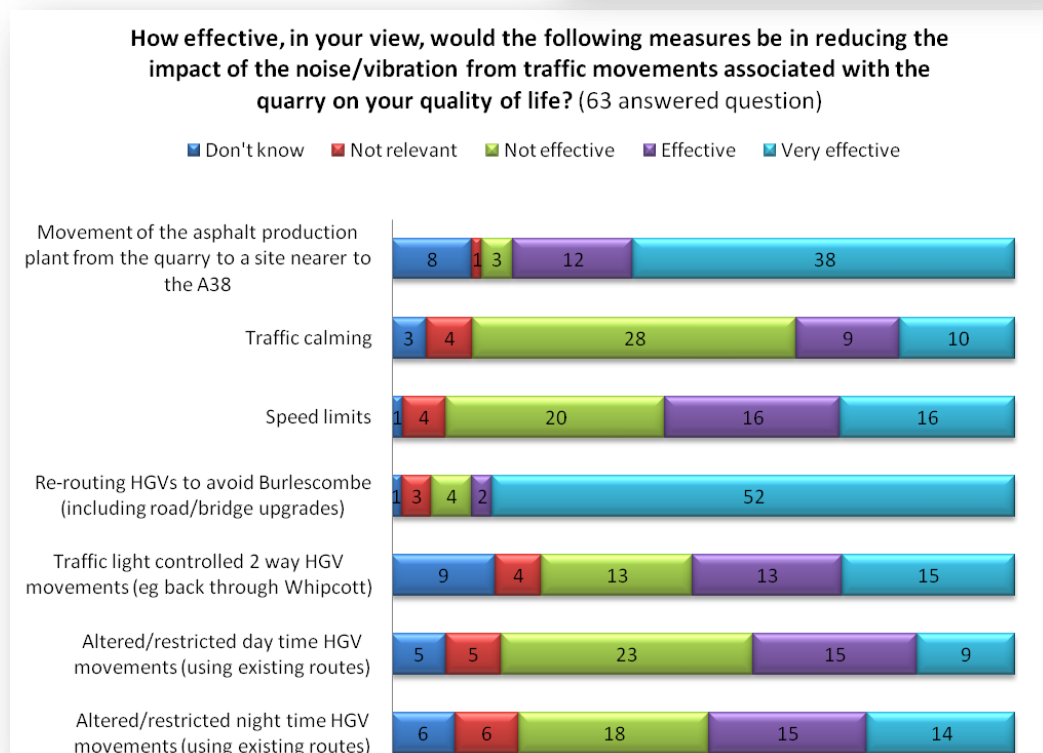
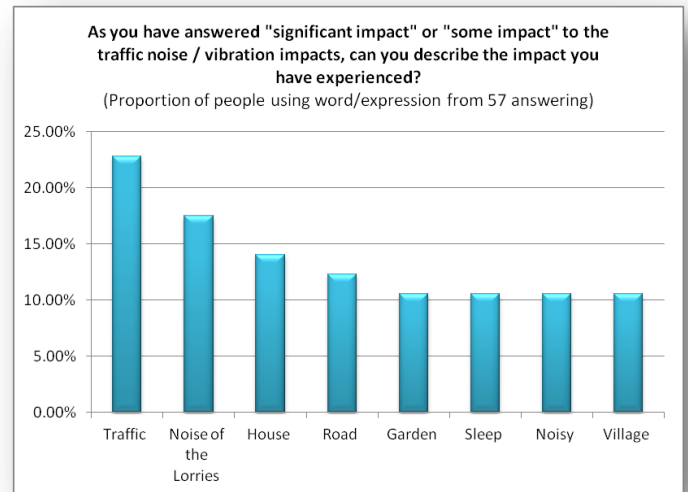
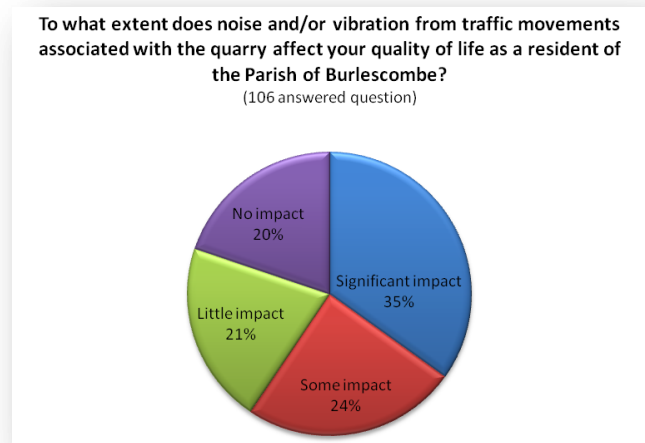
"Movement of any workings to a site closer to main road network would be very effective on reducing noise impact within the village"

3.5 Noise and / or vibration from traffic movements associated with the quarry

This section was drawing on those who had “some..” or “significant” impact on their quality of life with regard to noise and/or vibration from traffic movements associated with the quarry. 59% of those answering the initial question in that way were asked further questions exploring this.

The main areas of impact from those text answers were around the traffic, the noise of the lorries and the types of impacts that had on their houses.

Respondents were then asked what particular measures would be most effective in ameliorating those issues. The stand out answers in that regard were the movement of the asphalt plant to a site closer to the A38 and by rerouting HGVs to avoid Burlescombe (including bridge and road upgrades)

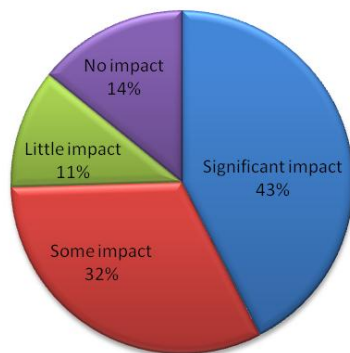


3.6 Safety Concerns

This section drew on those whose quality of life was impacted safety concerns. Initially asking to what extent that was then drawing on more detail from those respondents who answered “significant..” or “some...” impact.

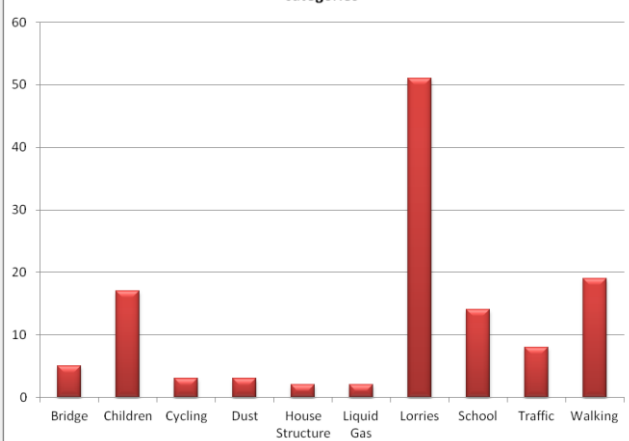
Of all of the sections, the impact on quality of life over safety had the largest number of respondents answering that there was “significant impact” or “some impact” on their quality of life (75%).

To what extent do safety concerns associated with the quarry activities (including traffic movements) impact on your quality of life as a resident of the Parish of Burlescombe?
(106 responses)



For those answering in that way, the next question asked about their own experience of this; what experiences had they had that were giving them concern. The words most significantly used were “lorries” and mostly used in the context of it’s impact on walking, children and school.

Those answering "Significant Impact" or "Some Impact" - can you describe the impact you have experienced (77 answered question) - categories



The potential options for ameliorating concerns were picked up in the following questions. The most significant response to that response was that using a different route (using the existing road network) was the most effective. 63 respondents felt this would be “very effective” (52) or “effective” (11) (from a total answering that element of 75).

The second highest response was the suggestion of altered/restricted vehicle movements (of 75) responding to that segment, 53 though this would be “very effective” (37) or “effective” (16).

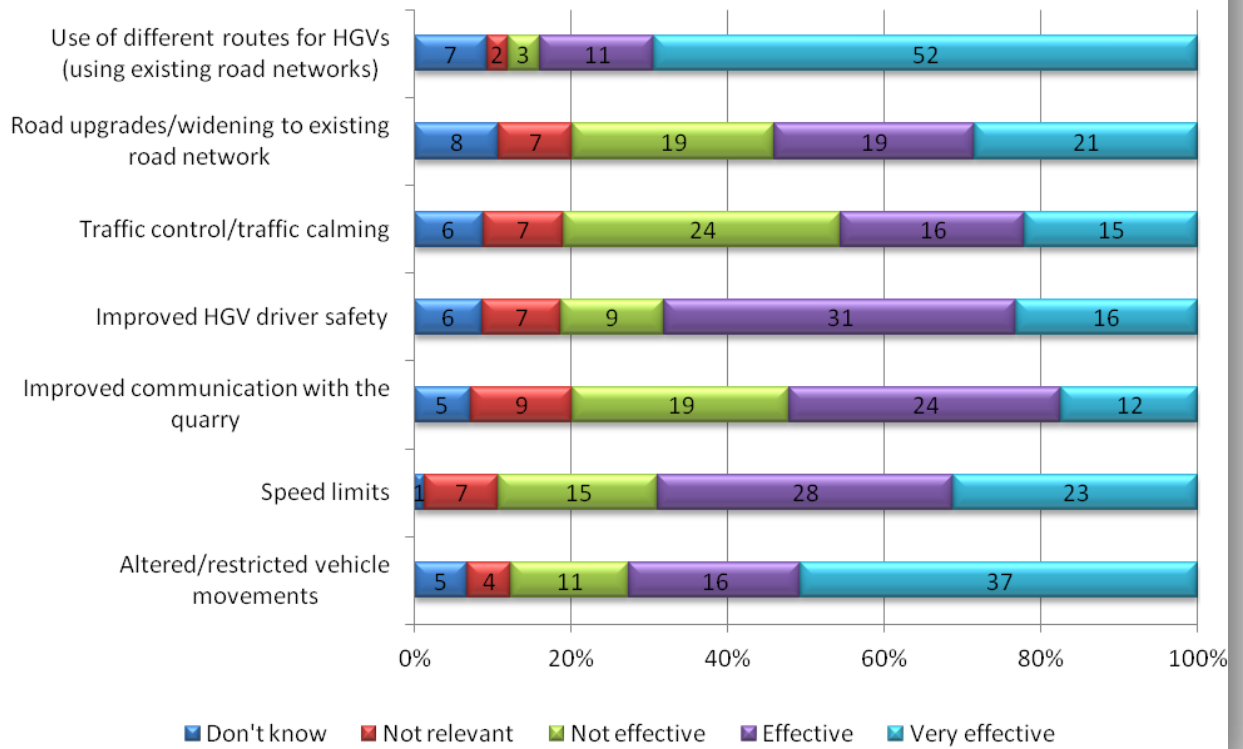
The answers to these particular issues are very important to the discussion in the stakeholder group. The mixture of heavy lorries, children, schools and narrow country roads is very emotive. In addition, it is also one where actions are limited. A number of respondents, made comments such as:

- *“It is only a matter of time before there is a serious accident on the road....simply a matter of time”*
- *“Hold your breath as the lorries fly past children on bikes or mothers with push chairs!”*
- *“One day there will be a nasty accident.”*
- *“I am scared to let my children cross the road”*
- *“An accident is likely....”*

The types of solutions suggested produced one particular stand out solution in from the perspective of the respondents; that of using different routes for HGV; 84% of respondents thing this an effective solution (indeed, 69% feeling this would be “very effective”).

Other solutions did also feature, including speed limits and altered / restricted vehicle movements.

How effective, do you feel, would the following measures be in reducing your safety concerns associated with quarry activities?
(79 answered question)

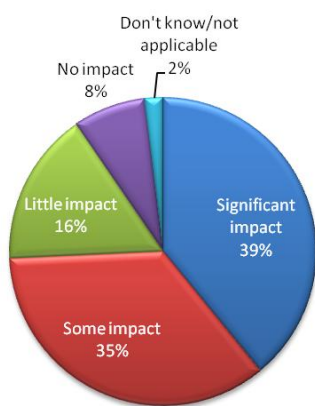


3.7 Air pollution

The initial question set out how many respondents felt their quality of life is impacted by the air pollution (including dust from the quarry and its vehicle movements)

From the 105 respondents answering that question, 74% felt that there was “significant” or “some” impact on their quality of life.

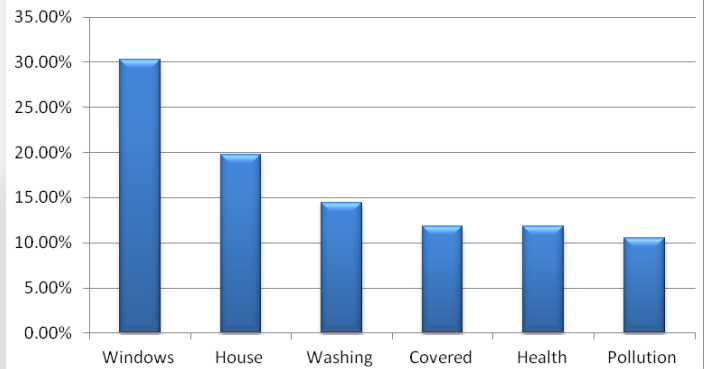
To what extent does air pollution, including dust from the quarry and its vehicle movements affect your quality of life as a resident of the Parish of Burlescombe? (105 responses)



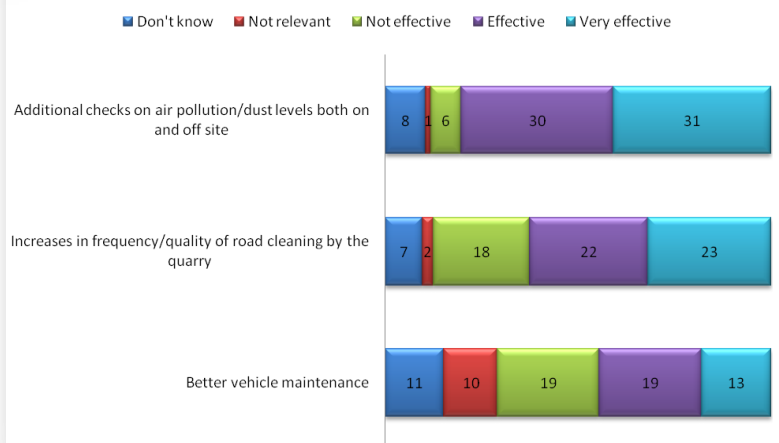
From those answering in that way, further questions were asked about the types of impact. Answers around windows, houses and washing predominated.

As far as some possible mitigation measures, from the options given, the highest “effective” response was that of having additional checks on the air pollution / dust levels both on and off the site.

As you have answered “significant impact” or “some impact” to air pollution, including dust, impacts can you describe the impact you have experienced? (proportion of people using word /expression from the 76 answering)



How effective would the following measures be in reducing the impact of air pollution/dust from the quarry and its vehicle movements on your quality of life? (77 responses)



4. Ranking of solutions

From the community’s perspective there were particular measures which would be more likely to be effective in ameliorating their concerns over the various impacts of the quarry and its operations. These can be put in a ranking order. This is summarised in the table (right)

This ranking is based on a calculation made around the preferred options set against the most significant issues. The full calculation is shown in [APPENDIX 1](#).

5. Next Actions

This report provides views from the community to assist the stakeholders in developing a set of appropriate actions and measures to be taken forward.

Rank	Amelioration activity
1	Movement of the asphalt production plant from quarry to a site nearer the A38
2	Speed limits
3	Use of different routes for HGVs (using existing road networks)
4 =	Altered/restricted vehicle movements
4 =	Improved HGV driver safety
6 =	Increases in frequency/quality of road cleaning by the quarry
6 =	Additional checks on air pollution/dust levels both on and off site
8	Re-routing HGVs to avoid Burlescombe (including road/bridge upgrades)
9 =	Improved communication with the quarry
9 =	Traffic control/traffic calming
9 =	Road upgrades/widening to existing road network
12	Better vehicle maintenance
13 =	Altered/restricted day time HGV movements (using existing routes)
13 =	Traffic light controlled 2 way HGV movements (eg back through Whipcott)
13 =	Altered/restricted night time HGV movements (using existing routes)
16	Traffic calming
17	Alteration to blasting times / days

APPENDIX 1 – Calculation of rankings of community preferred solutions

Multi-criteria Decision Analysis

Multi-Criteria Analysis Process

1. Identify the impacts suggested by the consultation;
2. Weight the impacts to reflect their relative importance according to the community consultation (by numbers and depth of concern) ;
3. Score the potential actions to reflect how, according to the community, each action performs against each impact;
4. Prioritise the weighted scores;
5. Test the results for robustness; and
6. Use results as an initial basis for action.

Stage 1 - Weightings of Quarry Impacts:

Relative prioritisation of impacts contained in survey	Weighting (apportionment related to % "Significant impact" or "Some impact")		
Noise from the Quarry itself	5.4	"Significant impact" or "some impact"	54%
Noise and / or vibration from traffic movements associated with the quarry	5.9	"Significant impact" or "some impact"	59%
Safety concerns associated with the quarry	7.5	"Significant impact" or "some impact"	75%
Air pollution, including dust from the quarry and its vehicle movements	7.4	"Significant impact" or "some impact"	74%

How effective does each corrective action score according to community
Stage 2 - Scores *without* weightings - Scores (0-5)

	Noise from the Quarry itself	Noise and / or vibration from traffic movements associated with the quarry	Safety concerns associated with the quarry	Air pollution, including dust from the quarry and its vehicle movements	%	Effectiveness score = Total % of Very Effective + Effective = 0 = 0%(i.e. not included heading)
Option	Score	Score	Score	Score		
Alteration to blasting times / days	2	0	0	0	28.57	1 = 1 - 20%
Movement of the asphalt production plant from quarry to a site nearer the A38	5	4	0	0	85.72	2 = 21 - 40%
Altered/restricted night time HGV movements (using existing routes)	0	3	0	0	49.15	3 = 41 - 60%
Altered/restricted day time HGV movements (using existing routes)	0	3	0	0	42.11	4 - 61 - 80%
Traffic light controlled 2 way HGV movements (eg back through Whipcott)	0	3	0	0	51.85	5 = 81 - 100%
Re-routing HGVs to avoid Burlescombe (including road/bridge upgrades)	0	5	0	0	87.1	
Speed limits	0	3	4	0	56.14	68.92
Traffic calming	0	2		0	35.19	
Altered/restricted vehicle movements	0	0	4	0	72.6	
Improved communication with the quarry	0	0	3	0	52.17	
Improved HGV driver safety	0	0	4	0	68.12	
Traffic control/traffic calming	0	0	3	0	45.59	
Road upgrades/widening to existing road network	0	0	3	0	54.06	
Use of different routes for HGVs (using existing road networks)	0	0	5	0	84	
Better vehicle maintenance	0	0	0	3	44.45	
Increases in frequency/quality of road cleaning by the quarry	0	0	0	4	62.5	
Additional checks on air pollution/dust levels both on and off site	0	0	0	4	80.26	

Stage 3 - The Weighting is now included to account for the importance of the issue according to the community

Scores times weighting

	Noise from the Quarry itself	Noise and / or vibration from traffic movements associated with the quarry	Safety concerns associated with the quarry	Air pollution, including dust from the quarry and its vehicle movements	
Option	Score x weighting	Score x weighting	Score x weighting	Score x weighting	Total for measure
Alteration to blasting times / days	10.8	0	0	0	10.8
Movement of the asphalt production plant from quarry to a site nearer the A38	27	23.6	0	0	50.6
Altered/restricted night time HGV movements (using existing routes)	0	17.7	0	0	17.7
Altered/restricted day time HGV movements (using existing routes)	0	17.7	0	0	17.7
Traffic light controlled 2 way HGV movements (eg back through Whipcott)	0	17.7	0	0	17.7
Re-routing HGVs to avoid Burlescombe (including road/bridge upgrades)	0	29.5	0	0	29.5
Speed limits	0	17.7	30	0	47.7
Traffic calming	0	11.8	0	0	11.8
Altered/restricted vehicle movements	0	0	30	0	30
Improved communication with the quarry	0	0	22.5	0	22.5
Improved HGV driver safety	0	0	30	0	30
Traffic control/traffic calming	0	0	22.5	0	22.5
Road upgrades/widening to existing road network	0	0	22.5	0	22.5
Use of different routes for HGVs (using existing road networks)	0	0	37.5	0	37.5
Better vehicle maintenance	0	0	0	22.2	22.2
Increases in frequency/quality of road cleaning by the quarry	0	0	0	29.6	29.6
Additional checks on air pollution/dust levels both on and off site	0	0	0	29.6	29.6

Stage 4 - Activities ranked in accordance with the final score

Green positive rank - fading to red as scoring a negative as priority diminishes.

Important note: These are preferred options relative to each other (ie lower ranking options may still be wanted but higher ranking ones are preferred)

Action	Rank
Alteration to blasting times / days	17
Movement of the asphalt production plant from quarry to a site nearer the A38	1
Altered/restricted night time HGV movements (using existing routes)	13
Altered/restricted day time HGV movements (using existing routes)	13
Traffic light controlled 2 way HGV movements (eg back through Whipcott)	13
Re-routing HGVs to avoid Burlescombe (including road/bridge upgrades)	8
Speed limits	2
Traffic calming	16
Altered/restricted vehicle movements	4
Improved communication with the quarry	9
Improved HGV driver safety	4
Traffic control/traffic calming	9
Road upgrades/widening to existing road network	9
Use of different routes for HGVs (using existing road networks)	3
Better vehicle maintenance	12
Increases in frequency/quality of road cleaning by the quarry	6
Additional checks on air pollution/dust levels both on and off site	6

