

Cambridgeshire and Peterborough Minerals and Waste Local Plan: Level of Provision and a Spatial Strategy for Minerals

Sand and Gravel

1. The Cambridgeshire and Peterborough Minerals and Waste Local Plan (MWLP) needs to identify a provision figure for sand and gravel to be produced in the area over the plan period, i.e. up to 2036. This has to be achieved in a way that is compliant with the National Planning Policy Framework (NPPF) and any other national guidance, particularly the National Planning Practice Guidance (NPPG). It has to take account of the longstanding Managed Aggregate Supply System (or MASS) and in particular how this relates to the preparation of Local Plans and Local Aggregates Assessments (LAA) and the direct relationship between them.
2. Paragraph 207 of the NPPF (2018) states that:

Minerals planning authorities should plan for a steady and adequate supply of aggregates by: (a) preparing an annual Local Aggregate Assessment, either individually or jointly by agreement with another or other mineral planning authorities, based on a rolling average of 10 years sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources).

3. The NPPG states that the LAA must also consider other relevant local information in addition to the ten year rolling supply, which seeks to look ahead at possible future demand, rather than rely solely on past sales. Such information may include, for example, levels of planned construction and house building in their area. Minerals Planning Authorities (MPAs) should also look at average sales over the last three years in particular to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply. These LAA matters are also directly relevant to the preparation of the MWLP.

A sand and gravel provision figure for the MWLP

4. The MWLP will be the first plan to incorporate provision figures to be prepared for Cambridgeshire and Peterborough since the changes to identifying mineral provision in development plans were brought by the NPPF. The MWLP will replace the Minerals and Waste Core Strategy, adopted in 2011, which identified a provision figure based on the former aggregates supply system where a regional figure was provided by government and linked to the regional planning regime and then apportioned to the Mineral Planning Authority (MPA) areas in that region. This apportionment figure was 2.82 million tonnes per annum (Mtpa) for Cambridgeshire and Peterborough, however the Core Strategy contains a figure of 3.00 Mtpa (based on the apportionment figure of 2.82 Mtpa plus a 0.18 Mtpa margin for flexibility).

5. Annual sales figures for sand and gravel over the ten year period leading up to the commencement of the plan period (2008 to 2017) and the annual averages for the ten and three year periods are set out in the table below.

Table 1: Aggregate (Sand and Gravel) Sales 2008 to 2017

Year	Plan Area Sales (mt)
2008	3.05
2009	2.30
2010	1.78
2011	1.70
2012	1.72
2013	1.83
2014	2.58
2015	2.54
2016	2.56
2017	3.56
10 year average (2008 - 2017)	2.36
3 year average (2015 - 2017)	2.89

6. If the annual provision for sand and gravel in the MWLP was to be based solely on the latest ten year (2008 to 2017) annual average sales figure it would be 2.36 Mtpa. This would assume that there is no compelling case for any adjustment either upwards or downwards. A 2.36 Mtpa provision would be noticeably less than the 3.00 Mtpa in the adopted Core Strategy; the three year (2015 to 2017) annual average sales figure of 2.89 Mtpa would only be marginally less. However the provision figure for sand and gravel in the MWLP should not be driven by how it relates to the previously adopted figure but what will be the most balanced and robust figure for the new plan.
7. The total provision figure to be met in the MWLP is the annual provision figure multiplied by the number of years from the start of plan period to the end of the plan period in 2036. In the case of the MWLP if this is to be a ten year annual average sales figure for 2008 to 2017 then this will be 2.36 Mtpa multiplied by 21 years (1 January 2016 to 31 December 2036) and therefore would be 49.56million tonnes (Mt) in total. However some minerals local plans add a further seven years provision, equating to a notional seven year landbank, at the end of the plan period for their total figure - this would be a further 16.52 Mt. The MWLP is not intending to do this on the basis that the Plan will be reviewed and a new one adopted well before 2029 (that is to say 2036 minus seven years).
8. It should be noted that with current permitted reserves (end 2017) being 41.43 Mt, a total provision figure of 49.56Mt would mean only 8.13Mt would need to be identified through allocations in the Plan. Indeed if existing uncommitted allocations (allocations that have not been given planning permission) were to be rolled forward unchanged into the MWLP then that figure would reduce further.
9. In relation to any potential upward adjustment, the current levels of development and growth that are planned for the plan area are intended to be greater than

previously but not significantly so - i.e. the quantum of additional growth is not so great as to have a direct relationship to provision. It is noted that in relation to the Cambridge-Milton Keynes-Oxford Corridor, the National Infrastructure Commission's finding is that up to 1 million homes will need to be built in the corridor by 2050 if the area is to maximise its economic potential. In the 32 years to 2050 then this would equate to 31,250 new dwellings per annum. At this stage it is uncertain where in the wider corridor such development will go and the quantum that will be provided for in particular locations - for example some new settlements in the corridor could be very significant in scale potentially to accommodate up to 100,000 population.

10. On the basis that it is at this stage unknown what proportion of corridor growth will arrive within the plan area it is appropriate to not make specific provision for it within the MWLP. If it does emerge that significant growth is identified in the plan area of a scale that poses questions about the provision figure in the MWLP, then the MWLP should be subject to a partial or full revision. If that is the case then whilst the revision is underway, to accommodate any increased need the MWLP will need to allow consideration of emerging trends as identified through the most recent LAA and provide for flexibility by including policies that enable unallocated sites to come forward where the need is justified.
11. Notwithstanding possible Oxford-Cambridge corridor related growth, growth is nevertheless planned for Cambridgeshire and Peterborough. Much of this will be related to new development areas particularly in the south of Cambridgeshire, such as the new settlements at Northstowe and Bourn Airfield, and there will also be large scale new development areas at Hampton/Great Haddon in Peterborough and east of St. Neots and at Alconbury Weald in the west of Cambridgeshire.
12. Of the nationally significant infrastructure schemes planned, the A14 Cambridge to Huntingdon Improvement is underway and is due to open to traffic by the end of 2020. It will therefore not have an impact on the overall level of provision for the new MWLP. In the early stages of the plan period construction of the approximately 10 mile long A428 Caxton Gibbet to Black Cat element of the Oxford-Cambridge Expressway is expected to commence. At about the mid-point of the plan period construction is also intended to commence on the central section of East-West Rail which is proposed to include a new twin track railway built from Bedford to Cambridge via the Sandy area; the broad alignment, let alone the detail of this route or its mineral requirements, has yet to be determined. These schemes can be seen as a continuation of infrastructure provision through the Plan period, although not necessarily at the same scale as the A14 improvements, and they would not likely be under construction at the same time.
13. In relation to significant constraints on sand and gravel resources that could possibly justify a lower than ten year figure, these are not present in the plan area to an extent that it could significantly affect identification of sites. Indeed the assessments of the sand and gravel sites put forward at the Preliminary Draft

Plan stage suggests that the vast majority of these sites are, in relation to potential environmental and amenity impacts, appropriate in principle to allocate and indeed comprise far more sites than are actually necessary to allocate in the Plan. The presence of international designations in the plan area adjacent or in proximity to proposed sites does not necessarily prevent their allocation; indeed allocation of such sites can be used to support, and potentially over the long term increase the extent of, these designations.

14. The other element to look at is whether the three year annual average sales figures are showing a higher figure trajectory than the ten year figures. Based on the latest data (2015 – 2017) the three year figure has increased to 2.89Mt whilst the ten year figure has reduced to 2.36Mt, making the three year figure higher than the ten year one.
15. The 2017 sales figure appears to have been inflated by several sites coming back online but there are also several due to complete. It has also been affected by the provision of sand and gravel from quarries (in addition to borrowpits), to supply the A14 improvement scheme. As it stands at December 2018, it is uncertain where exactly figures will go in the next few years, although projections for permitted sites indicate a slight increase for 2018 followed by a drop and then a period of fluctuating production. It is therefore considered that utilising the three year figure (2.89Mt) as the basis for the plan provision is not robust enough, even though this is below the current adopted Core Strategy provision.
16. It is pertinent to note that the ten year derived figure in minerals local plans is supported by the minerals industry as a whole and that objections from the industry cannot be upheld simply on the basis that the industry now considers it should be higher because of growth being planned or that part of the ten year period was when there was a recession and in the other years the economy was only growing slowly again. Nevertheless the ten year figure (2.36Mt) would be a significant reduction and therefore some upward adjustment would be appropriate in order to bolster the ten year figure on the basis of what over a twenty year period, allowing for economic fluctuations, the market is likely to want to produce.
17. The Councils have looked at the correlation between past mineral sales and house building, and have found that the two appear to be closely aligned (see Figure 1 below). Whilst the link between past house building rates and sand and gravel sales is only indicative, the Councils believe the correlation shown is sufficient to factor into the calculation of provision rate.

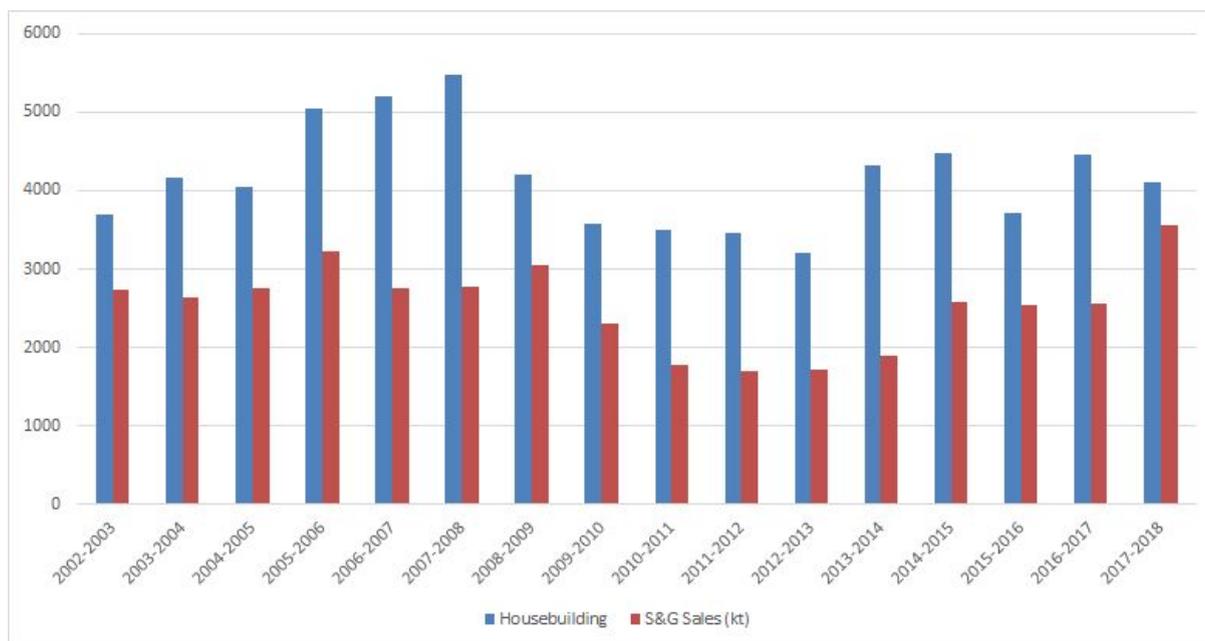


Figure 1: Sand and Gravel Sales vs Housebuilding 2002 to 2018

18. Taking account of the ten year average (2.36Mt) and the uplift shown by the three year average (2.89Mt), the Councils have determined that an appropriate annual provision rate for the Plan is 2.6Mtpa . This represents the mid-point between the 10 year sales average and the 3 year sales average, and is also a 10% increase on the 10 year sales average (10% often being used as a proxy for a buffer above the 10 year sales average in other Minerals and Waste Local Plans).

19. An annual provision of 2.6Mtpa over the Plan period (2016 to 2036) would give rise to a total requirement for 54.6Mt of sand and gravel. The Local Aggregates Assessment records that Cambridgeshire and Peterborough, at the end of 2017, has permitted reserves of 41.43Mt. This leaves a potential shortfall of 13.17Mt to be addressed through the MWLP.

Developing a spatial strategy for sand and gravel

20. The adopted Core Strategy contains a strategic vision for mineral extraction with a spatial strategy for sand and gravel that can be broadly summarised thus:
- A band running north to south through the central part of the plan area where new allocations will be made.
 - Half of the new provision during the plan period will come from the Earith/Mepal area where extraction can create new lowland wet grassland enhancement habitat for the Ouse Washes as well as water storage bodies to secure more sustainable flood management for the sensitive Cranbrook / Counter Drain catchment (as per the adopted SPD).
 - That allocations for extraction will not be made in the Ouse and Nene river valleys. The Nene Valley is recognised as an historic and cultural asset, with a range of distinctive features supporting ecological diversity, and social and cultural amenity. The Ouse Valley has already been extensively worked for sand and gravel, and the area of undisturbed river valley has been

significantly reduced. It also is a Strategic Green Corridor with other policies in place which are focussing on the area being used for enhanced access and recreational purposes.

21. Since the adoption of the Core Strategy production has come forward almost in line with expectations in the northern zone and in the central/southern zone outside of the Earith/Mepal area. However Earith/Mepal zone production is significantly below expectations. The headline reasons for this appear to be:
- The move out of recession has been slower than anticipated.
 - Extraction locations outside of the Earith/Mepal zone have been nearer to the main growth locations in the plan area (Greater Cambridge and Peterborough) and so as the construction industry strengthened after the recession these locations found more favour over those at Earith/Mepal.
 - A key operator has been concentrating on extraction from their other large site away from the Earith/Mepal area, and has not commenced extraction at Earith/Mepal.
 - A planning application for extraction in the Earith/Mepal zone was refused as the restoration scheme was not policy compliant.
 - The scale of Earith/Mepal and what was planned to be extracted here and by when was probably overly optimistic, particularly taking account of distance from growth centres and the scale of the late noughties recession.
22. An alternative spatial strategy for the MWLP could therefore be one that better reflects more recent production trends and focusses extraction at locations more directly related to Cambridge and Peterborough, perhaps with a secondary area of focus linked to the Huntingdonshire growth locations of St. Neots and Huntingdon/Alconbury Weald. However such a spatial strategy could, depending on the broad area identified, be seen to move attention back towards the Ouse and Nene river valleys, the former to supply the Huntingdonshire growth locations and the latter to partially supply Peterborough. This would be somewhat of a volte face compared to the current adopted plan strategy (it could also be seen as encouraging further Welland valley related extraction). Furthermore it could place Earith/Mepal at risk of not fulfilling its potential to create new habitat and water storage.
23. Another option regarding the spatial strategy for the MWLP could therefore probably be something in between the current approach and the alternative outlined in the paragraph above. A spatial strategy based on this would assist in addressing planned growth, linking extraction to existing infrastructure networks and ensuring deliverability.
24. The potential sustainability effects of these options has been tested against the sustainability objectives through the Sustainability Appraisal (SA) process in order to assess potential contribution towards achieving sustainability outcomes and addressing key issues.
25. The proposed spatial strategy is therefore to focus extraction in a band north to south across the centre of the plan area that includes within it a focus at each

end to support the growth locations of Cambridge/South Cambridgeshire, and Peterborough. Land at Needingworth Quarry and Block Fen/Langwood Fen will also supply these areas, and the towns of Fenland and the Ouse Valley; as well as delivering key habitat creation and sustainable flood management purposes. There would be no extraction from the Nene and Ouse valleys. The preferred option was also determined through the SA process to present the highest potential contribution towards achieving sustainability outcomes and addressing key issues.

26. In order to minimise the impact of mineral extraction on the environment and local communities the spatial strategy should also include the principles of giving preference in site selection to extensions to, or sites close to, existing quarries. In that way, allocations will be well related to the strategic road network (and HCV network in Cambridgeshire). Allocations in the Green Belt should be avoided if there are non-Green Belt alternatives. In addition, the spatial strategy will seek the best opportunities to deliver, through the restoration of allocated mineral sites, substantial net gains in biodiversity of international and national importance; as well as flood risk management gains of strategic importance.

Setting out the sand and gravel provision in the MWLP

27. The adopted Core Strategy identifies three production zones in the plan related to the spatial strategy and for each zone a provision is given that totals up to the 3.00 Mtpa provision figure for the whole plan area. The zones in the plan and the provision for each is as follows:

Northern Zone	0.75 Mtpa
Earith/Mepal Zone	1.40 Mtpa
Central/Southern Zone (excluding Earith/Mepal)	0.85 Mtpa

28. The spatial strategy for the MWLP would not be too different from that in the adopted plan but it would give less prominence to the overall contribution to be made by the Earith/Mepal zone (or more appropriately what is now referred to as the Block Fen/Langwood Fen area); albeit that it would still seek to facilitate delivery of strategic new habitat and water storage in this area. Furthermore, it acknowledges the importance of other parts of what is in effect a central spine to deliver growth. It is considered that trying to be more specific in focussing extraction through identifying 'zone' based provision figures within this central spine (as sought through the existing plan), would not provide an appropriate level of flexibility and should be discontinued. This means that there would only be a plan-wide figure. Having a plan-wide figure is in line with many other minerals plans.

29. As the plan area comprises two MPAs consideration was given as to whether separate provision figures should be given for each. However on the basis that the two authorities have previously been treated together; that the adopted plans do

not make a distinction between the two authorities; and that the LAA covers both authorities, it does not seem to be particularly appropriate to split the figures up within a joint plan. There would also be a question of how the figures would be split up, particularly if this was to be done on the basis of apportionments based on past sales between the two areas, as there would be issues around the release of these data because of confidentiality matters in respect of individual site sales.

Provision and the sand and gravel landbank

30. The MWLP will, as per NPPF guidance, seek to ensure there is the necessary planning permissions to meet the required seven year landbank of provision. This landbank is calculated as the permitted reserves divided by the annual provision figure.
31. It is important to recognise that the new aggregates system introduced by the NPPF is not meant to be a constraint on production. This is why there is a requirement to produce a LAA annually, and also to specifically consider the last three years annual average supply if this is showing an upward trajectory compared to the ten year figure and the provision figure set out in policy.
32. Where the landbank is over seven years this should not necessarily preclude a proposal on an allocated site from being granted planning permission. The rationale for this is that the MWLP should not try to constrain demand if this exhibits itself through an earlier uptake of allocated sites than anticipated. However this should also not equate to a free-for-all where the landbank simply becomes a minor consideration in determining an application. A phased implementation of the allocations in the MWLP will nevertheless be required to ensure a steady and adequate supply of minerals throughout the plan period and within this it is considered that extensions to existing sites should be given preference over other allocations where these extensions are needed to continue operations when the current adjacent operation is coming to a close.

Emerging allocations in the MWLP

33. The importance of the resources in the plan area to the minerals industry is highlighted by the number of sites put forward through the call for sites process, which is well in excess of what is required to meet the plan provision. It should be noted that all sites put forward were considered appropriate in-principle, following individual assessments, to be allocated. Therefore there needed to be a selection process to determine which of these sites should be allocated.
34. The selection process was driven by the following considerations:
 - To give greater weight to sites that came forward consistent with the sand and gravel spatial strategy.
 - Within the sand and gravel spatial strategy area to allocate extensions to committed sites or sites closely related to these in preference to more freestanding sites.

- Within the Block Fen/Langwood Fen area to prioritise sites that are within the Block Fen/Langwood Fen Master Plan SPD area over other locations in the vicinity.
- Where sites are in the adopted plan and are still being supported by the industry then to retain them in the new Plan (unless there are compelling reasons not to).
- to give priority to sites which could deliver, through site restoration, significant biodiversity and/or flood water management gains.

35. The emerging allocations are in six locations across the plan area, with five of them being within the sand and gravel spatial strategy. These six production locations are: Pode Hole/West of Thorney, Maxey, King's Dike Whittlesey, North of Over/Willingham, North-east of Cottenham and Block Fen/Langwood Fen (see table below). Mineral extraction sites are currently located within all of these production locations and therefore the MWLP does not introduce new production areas. All but Land off Main Road Maxey are within the sand and gravel spatial strategy area, and all of the Block Fen/Langwood Fen sites are within the area covered by the Master Plan SPD.

Broad Location	Local Authority Area	Committed/ Operational Sites (Dec 2018)	Proposed Allocated Sites
Pode Hole/West of Thorney	PCC	<ul style="list-style-type: none"> - Pasture House Farm - Willow Hall Farm - Pode Hole Extension 	<ul style="list-style-type: none"> - M029 Gores Farm, Thorney - M034 Willow Hall Farm, Thorney
Maxey	PCC	<ul style="list-style-type: none"> - Maxey Quarry 	<ul style="list-style-type: none"> - M033 Land off Main Road, Maxey
King's Dike Whittlesey	CCC/FDC	<ul style="list-style-type: none"> - Must Farm 	<ul style="list-style-type: none"> - M028 Kings Delph, Whittlesey
North of Over/Willingham	CCC/SCDC	<ul style="list-style-type: none"> - Needingworth 	<ul style="list-style-type: none"> - M019 Bare Fen & West Fen, Willingham / Over
North-east of Cottenham	CCC/SCDC	<ul style="list-style-type: none"> - Mitchell Hill Farm North 	<ul style="list-style-type: none"> - M021 Mitchell Hill Farm South, Cottenham - M022 Chear Fen, Cottenham
Block Fen/Langwood Fen	CCC/FDC	<ul style="list-style-type: none"> - Block Fen Quarry Block Fen Quarry II 	<ul style="list-style-type: none"> - M035 Block Fen / Langwood Fen East, Mepal - M036 Block Fen / Langwood Fen West, Mepal

36. As noted previously, an annual provision of 2.6Mtpa over the Plan period (2016 to 2036) would give rise to a total requirement for 54.6Mt of sand and gravel. Cambridgeshire and Peterborough, at the end of 2017, had permitted reserves of 41.43Mt, leaving a shortfall of 13.17Mt. Taking off sales in 2016 and 2017 (2.56Mt and 3.56Mt respectively), this leaves a remaining plan period requirement of 48.48Mt. Subtracting permitted reserves of 41.43Mt from the remaining requirement leaves a potential shortfall of 7.05Mt to be addressed. The proposed allocations will provide 18.77Mt leaving a potential surplus of

11.72Mt. This provides a suitable margin for flexibility. The reserves, anticipated start date, and indicative extraction rate of each allocation is shown below, noting that some sites (particularly Block Fen / Langwood Fen) would work beyond 2036 thereby also providing a longer term resource.

Proposed Allocation	Allocation Reference Number	Estimated Reserve for Plan Period (Mt)	Anticipated Start Date	Indicative Extraction Rate (Mtpa)
Bare Fen & West Fen, Willingham / Over	M019	3.000	2031	0.800
Mitchell Hill Farm South, Cottenham	M021	0.820	2031	0.140
Chear Fen, Cottenham	M022	0.820	2030	0.140
Kings Delph , Whittlesey	M028	0.350	2030	0.050
Gores Farm, Thorney	M029	1.600	2026	0.300
Land of Main Road, Maxey	M033	1.925	2030	0.275
Willow Hall Farm, Thorney	M034	2.800	2023	0.200
Block Fen / Langwood Fen East, Mepal	M035	4.680	Langwood Fen East & Hundreds Farm 2020 / Witcham Meadlands 2020	0.250 0.100
Block Fen / Langwood Fen West, Mepal	M036	2.780	Wenny Farm 2030	0.500

37. To clarify, the extraction expected to take place at sites beyond 2036 has been discounted and does not contribute to the provision to be made during the plan period, identified above. Thus the proposed allocations, together with consented reserves, are more than sufficient to maintain a seven year landbank of sand and gravel; and to facilitate a continuous supply of mineral at a rate of 2.6Mtpa over the period to 2036.

Limestone

38. Limestone resources within the plan area are mostly confined to the far north-west corner of the plan area, with a smaller resource area east of Stretham (stretching between Upware and Barway). These areas are quite limited and effectively go towards defining the limestone spatial strategy, which is to continue extraction at existing consented limestone sites in this limited area. As minerals can only be worked where they are found, and the distribution of the limestone resources is limited, the potential to develop options regarding a spatial strategy is reduced. In addition the call for sites issued in May 2018 only brought one potential site forward which, after assessment, was not deemed suitable for allocation.

39. Provision should, as per national policy, be based on the ten year annual average sales for 2008 to 2017; this would be 0.30 Mtpa (or 6.3 Mt for the duration of the MWLP) which is the same as the 0.30 Mtpa provision figure in the adopted Core Strategy. However, in reality and given the limited limestone resource, it is acknowledged that it may not be possible to achieve this over the plan period. To assist any future additional limestone extraction, a criteria based policy approach has been taken, although it is noted that a similar approach in the currently adopted plan has not brought forward any new sites for limestone extraction.

Brick Clay

40. As with limestone the extraction of brick clay takes place in a limited geographical area, which is aligned with the last local operational and long standing brick making works located near Whittlesey in Cambridgeshire. The spatial strategy for brickclay is therefore to continue to locate extraction in this location at existing consented reserves; and at King's Delph, Whittlesey where it is proposed that an allocation be made (site M028) to secure long term reserves. The allocated site will deliver around 27 million tonnes of brickclay, which at over 60 years supply, will ensure that the national policy requirement to maintain a minimum of 25 years supply will be met.

Other Minerals

38. Other minerals in the plan area are chalk, brickclay (other than for the Whittlesey brick works), building stone, and limestone for non-aggregate purposes. These are a limited resource in the plan area, and often extraction is located at a single site to serve a dedicated processing plant. Such examples, include: Steeple

Morden where high quality chalk is extracted and processed for use in industrial purposes; and Wicken where limestone is extracted for non-aggregate (mainly agricultural) uses.

39. The spatial strategy for these other minerals is to continue extraction at existing consented sites. In addition one allocation is also proposed for brickclay extraction at Burwell (site M023), which is to provide for a continuation of supply of brickclay to a small brickworks which makes handmade bricks and tiles for conservation purposes. Provision for the future supply of other small scale minerals has been made through a criteria based policy in the Local Plan.

Safeguarding and Transport Infrastructure

40. Mineral Safeguarding Areas (MSAs) will be identified in order to safeguard the wider mineral resource in the Plan area, and to ensure that mineral resources are taken into account in all land use planning decisions. The designation of the MSAs is the subject of a separate evidence report 'Methodology for Identifying MSAs'. The MSA will be shown on the Policies Proposals Map.
41. Transport Infrastructure Areas (TIAs) which are essential in order to facilitate the sustainable transport of mineral will also be identified and safeguarded. Such areas may include railheads, wharves and ancillary facilities. Railheads are also essential in enabling the supply of mineral which does not occur naturally, or in great quantity, in the Plan area to be brought in to support planned growth and development. Hard crushed rock in particular is imported into the Plan area.