

MAIDSTONE BOROUGH COUNCIL LOCAL PLAN EXAMINATION

SESSION 7 RURAL SERVICE CENTRES

This statement is made by Henny Shotter (R1934) and supported by Lenham Parish Council (R19154).

Issue (iii) - What should be the respective roles of the Local Plan and the Neighbourhood Plan in the allocation of housing development?

Qn 7.14 to Qn 7.16 inclusive

Qn7.14 Has the identification of the Broad Location had sufficient regard to ground water drainage considerations?

14.No. Maidstone Borough Council has not produced a detailed landscape study for Lenham. It has not identified and mapped components of local ecological networks (see NPPF 117)

14.1. It has not promoted the preservation, restoration and re-creation of ecological networks. (see NPPF 117).

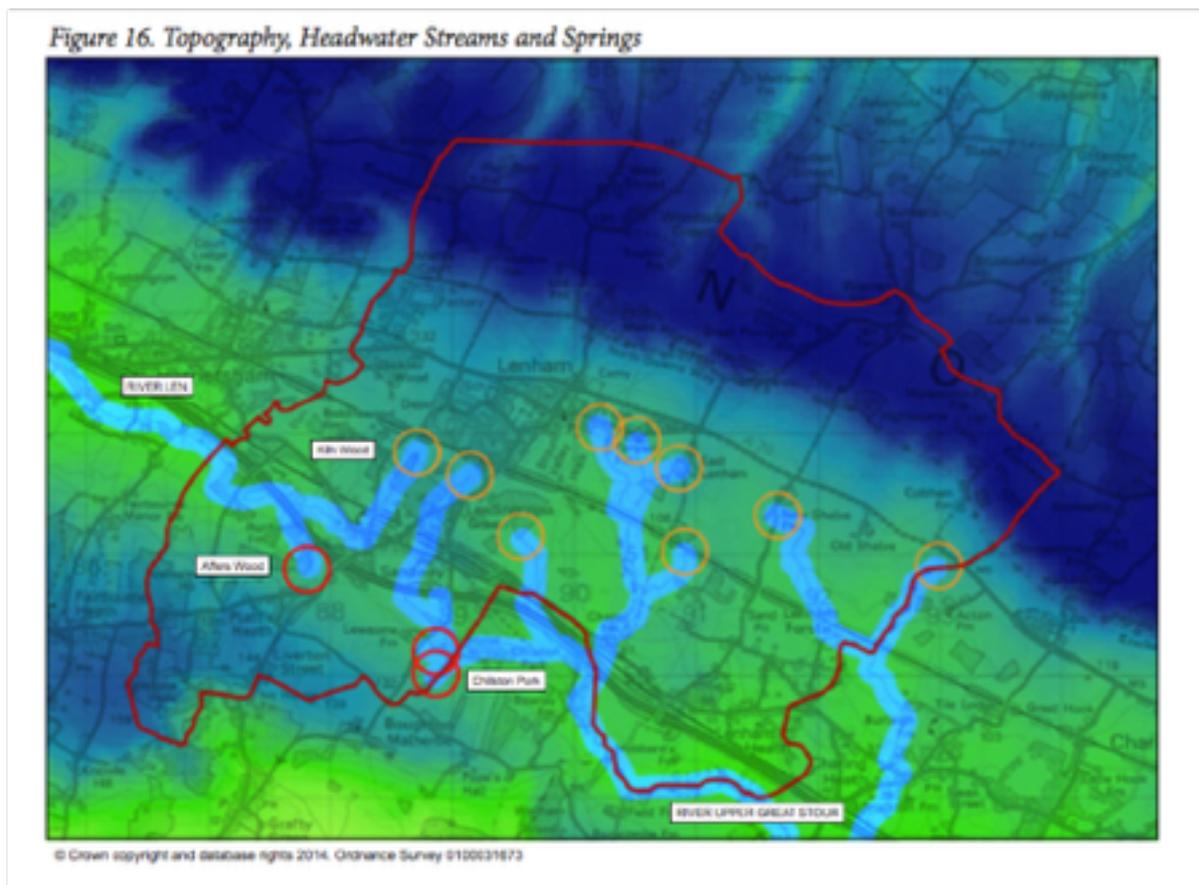
It has not aimed to prevent harm to geological conservation interest in relation to Lenham SSI(NPPF 117,) The site contains a view point which relates to the understanding of the geology of the area. It has not considered wider impact on SSI (NPPF §118).

14.2. The fact that the aquifers of the AONB and some aquifers which extend to areas outside of the AONB drain into the land and eventually create the 'Upper Stour' has not been explored anywhere in detail.

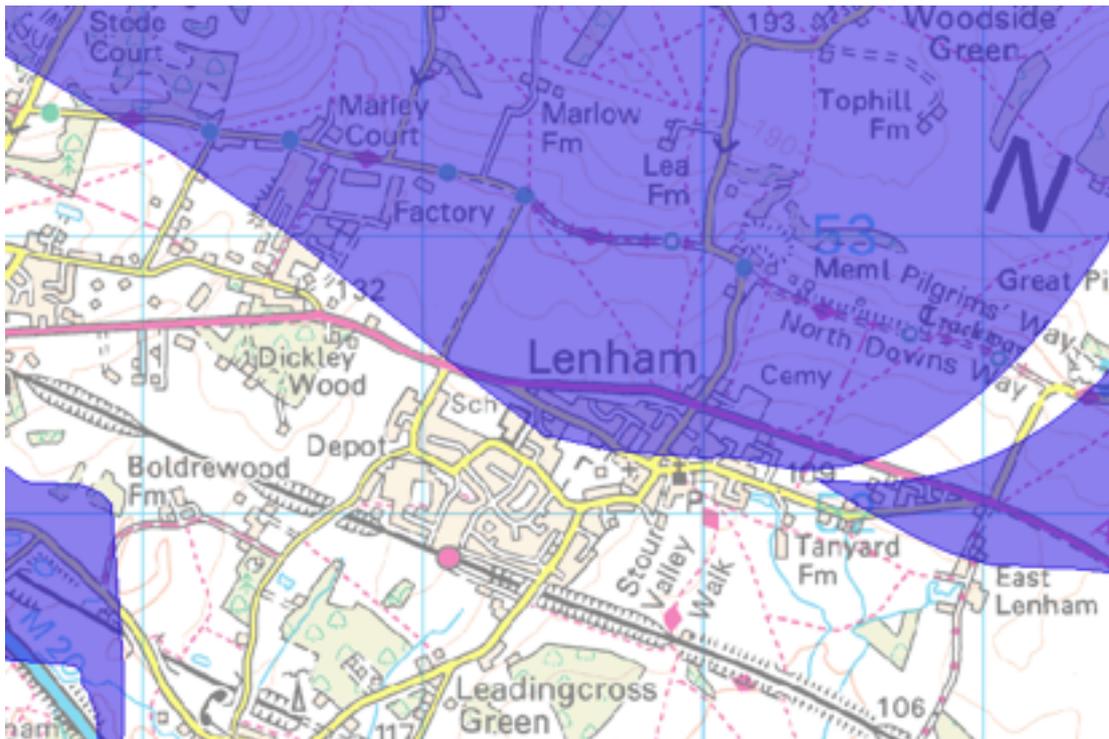
3. The NP team has commissioned a Landscape Study. The Lenham NP has based its considerations on this study.

14.4 The Goundwater issue of Lenham has been raised in our presentation for Public Examination Session 1a and 4 (where we made the point of impact on building in front of the spring line all along Eyhorne Vale, Harrietsham to Lenham Vale and East Lenham Vale).

14.5 The image (Lenham NP Landscape Study) below shows the flow of ground water from the AONB and the headwaters of the Stour and the Len.



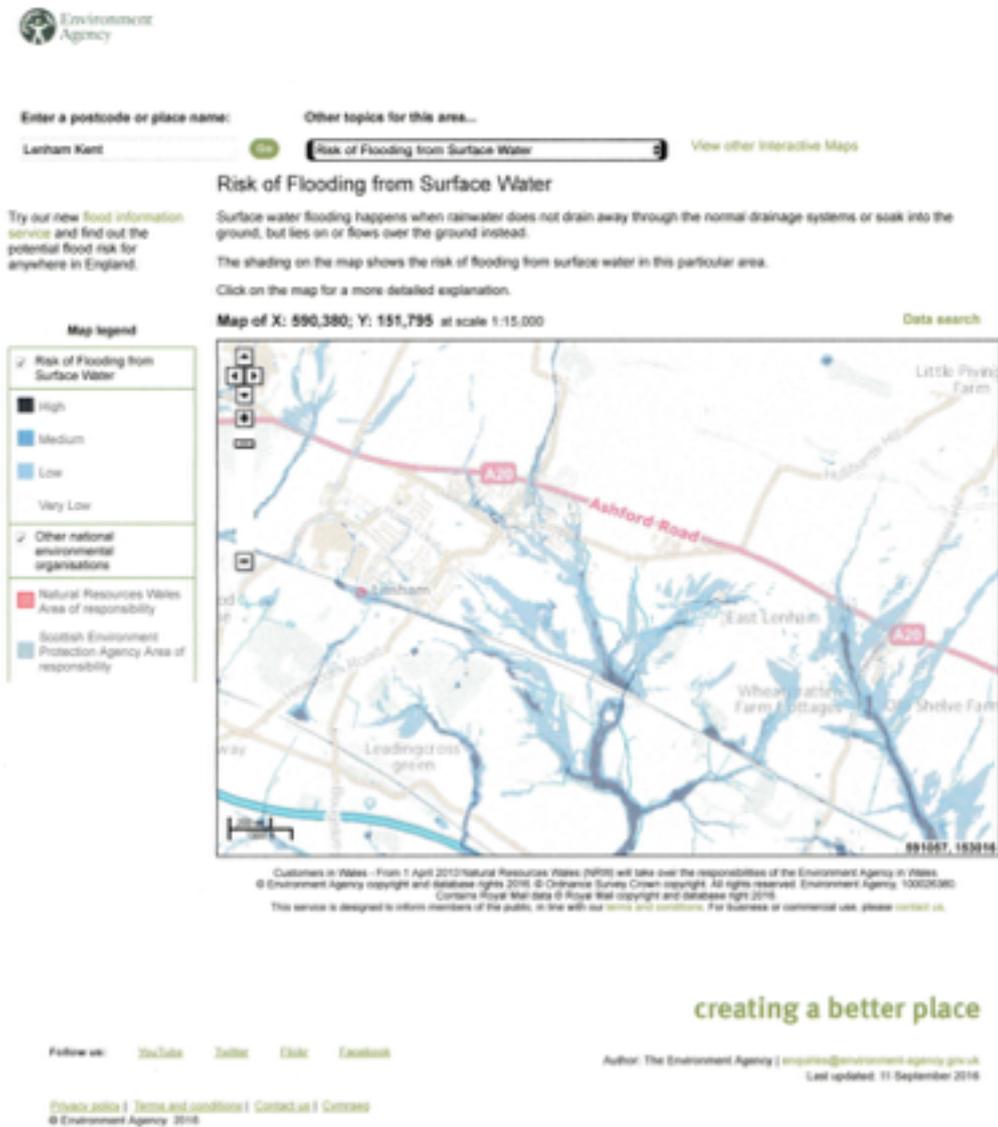
14.6 The image below shows the extent of the major aquifers in Lenham East



The major aquifer of the North Downs extends into Tanyard Farm North and the historic village

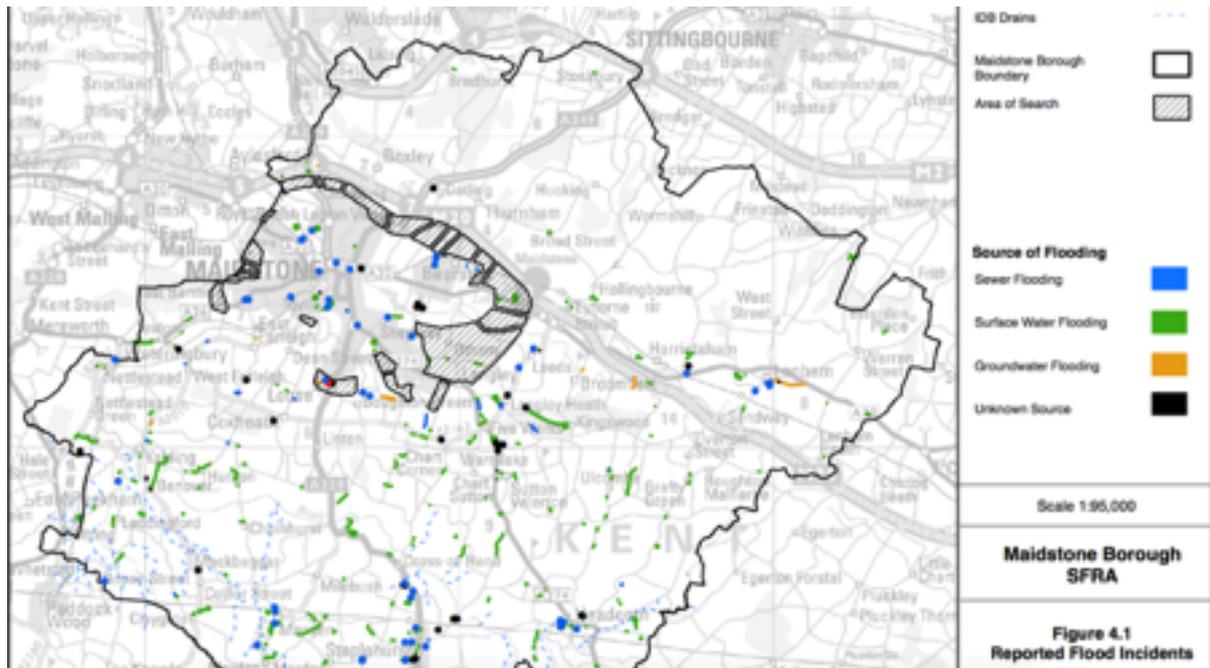
14.7 The image below shows the flow of surface water in Lenham

We want to draw attention to the water coming into the land west of Ham Lane.
(see comment on SuDDS)



Groundwater Flooding and ponding

The headwaters to the east supply the Stour where Lenham sewage works are located. In order to accommodate the sewage works it is important not to put structures with foundations in the way of groundwater. (see our answer to your question for H1 (43). The flow of groundwater is already compromised by Old Ashford Road (Tanyard Farm North) which results in flooding. (map provided by MBC)



Ponding caused by the railway embankment is also evidenced by KCC

<p>Lenham and Warren Street</p>	<p>Heavy rainfall resulting in surface water run off and overloaded sewers</p> <p>Surface water (blocked drains / gullies)</p> <p>Fluvial</p>	<p>Ashford Road, Court Lodge, Ham Lane, Headcorn Road, Headcorn Road near Gruffy Green, High Street, Lenham, Honeywood Road, Robins Close, The Square and Westwood</p> <p>Sewers (Court Lodge, High Street, Lenham, and Robins Close)</p> <p>There is isolated ponding highlighted by the FMSW (deep) within Lenham. Flow routes have been indicated south west of East Lenham, the railway embankment appears to act as a barrier to flows. Flows continue in a south easterly direction downstream of the embankment. This area appear to be blocked by another embankment and continue alongside flowing to the east, through Charing Heath.</p>	<p>There are soakaways present on Ashford Road which were listed as the cause of flooding on A25 in the past. Reports describe Ashford Road being inundated by excess surface water caused by heavy rainfall, the latest dated incident was in 2011. KCC Highways records describe regular surface water flooding of Headcorn Road. The remaining roads have isolated records attributed to them.</p> <p>MDC SFRA describes sewer flooding on Court Lodge, High Street, Lenham, and Robins Close.</p>
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Residents also report ponding from the western side of Lenham. Especially in front of Lenham Storage (there used to be a pond on the site) and on the playing field (William Pitts Field).

14.9. Our concern about operational issues of the Sewage Works has been shared with the Environment Agency. For ease of reading we insert the relevant sections of their answer:

‘ Looking firstly at the sewage treatment issues. As you rightly observe, most treated wastewater from the village is discharged into the River Great Stour from Southern Water Services’ (SWS) Wastewater Treatment Works (WwTW). The ‘Great’ in the name is a bit of a misnomer: the river at this point is tiny. At times of low natural flow, the treated effluent can form the largest component of the flow.

It is our responsibility to set standards on the quality of the effluent to ensure that no environmental damage is caused to the receiving watercourse. SWS then have to operate the WwTW within these standards. Given that the River Great Stour is so small the environmental standards are very stringent.

It is generally the case that the larger the receiving watercourse the more resilient it

is to coping with the discharge of treated effluent. For example, our coastal areas are generally more resilient to wastewater discharges. Following this rationale you could reasonably argue that new development should be steered away from the top end of river catchments. Obviously though there are many other planning issues to be considered.

If the population served by a WwTW expands, as could be the case in Lenham, then it is likely that the operator (in this case SWS) would need to invest in further treatment plant to accommodate the additional throughput. We would not accept a lowering of standards. The water companies take Local Plan allocations into account when planning future investment.

The upper reaches of the River Great Stour are currently rated as 'Poor' under the Water Framework Directive (WFD). This categorisation system sets 5 standards: High, Good, Moderate, Poor and Bad. Up until 2010 the river was categorised as 'Bad' so there has been some improvement. Our target is to get the river to 'Good' standard by 2027. I have attached our Waterbody Improvement Plan (WIP) which sets out some of the actions that have been taken and others that are proposed.

Turning now to the changes to the infiltration pattern of water into the Upper Stour. The change from a 'greenfield' situation to a built development form has the potential to increase both the speed and volume of water entering the river during rainfall events. This has two impacts: flood risk downstream is likely to increase; and the amount of water available to recharge groundwater sources decreases. The impact of this is that the river systems tend to become more 'peaky'.

To address this issue we recommend that new development incorporates sustainable drainage systems (SuDS). Correctly designed these tend to mimic natural run-off patterns.'

14.10. Effectiveness of SuDS

The response of the EA relies on the effectiveness of SuDS to slow down infiltration pattern. This is a valid argument for infiltration of surface water (under the right conditions).

SuDS however do not address the issue of groundwater flow as stated in the article below (our highlighting)

Importance of groundwater conditions in the design of SuDS

There are a number of considerations that need to be taken into account when designing ground-draining systems. First is the ease with which [stormwater](#) will infiltrate the ground. This is not only dependent on the nature of the top soil (clay/sand/silt), but also what lies beneath. The [permeability](#) of those underlying deposits will dictate whether or not the ground is likely to accept the anticipated quantity of stormwater. In some systems where the infiltration capacity is constrained, excess water may be stored for delayed infiltration or allowed to overflow to drainage networks.

The infiltration rate must be considered in conjunction with the [water table elevation](#) which for most schemes should be at least 1 m below the base of the SuDS scheme. This unsaturated thickness is necessary to ensure that there is space for a local rise in groundwater that may result from stormwater infiltration. A permanent unsaturated zone is also required in most systems as a final polishing step for the treatment of stormwater pollutants, the majority of which should be removed via above ground pre-treatment stages. Further to these design considerations, there are rare but significant [geological hazards](#) that may arise as a result of infiltrating water. Examples include voids and collapse features created by the dissolution of soluble rocks and minerals, down-slope waterlogging leading to increased landslide risk and changes in subsurface water content leading to ground compression and subsidence.

The use of infiltration to the ground in replacement of piped drainage systems is essentially aiming to return the groundwater [recharge](#) regime to something closer to pre-urbanisation conditions. A long-term effect of this may be a rise in groundwater levels over the catchment-scale. Whilst this provides benefits for river base flow, it may also have consequences for subsurface assets such as basements and utilities and, in more serious cases, for areas susceptible to groundwater flooding. The use of catchment-scale modelling can predict groundwater rise and therefore should be a consideration when planning multiple SuDS schemes in urban areas.

UK Groundwater Forum <http://www.groundwateruk.org/Groundwater-issues-SUDS.aspx>

[DEFRA](#) launched the governments '[Future Water](#)' strategy for England and Wales in 2008. This called for sustainable management of surface water, which included facilitating water re-use, storage and infiltration into the ground to decrease the reliance on traditional drainage systems. **To promote this change, the strategy advocated a shift in policy to withdraw the automatic right for developers to connect to the drainage system and also to provide clarification on the ownership and maintenance responsibilities for systems which infiltrate to the ground. The current lack of clarification in this matter is limiting the development of new schemes because of their reliance on adequate maintenance.**

<http://www.groundwateruk.org/Groundwater-issues-SUDS.aspx>

SUDDS issues reported from Westwood Grange (Lenham)

On Sun, Oct 9, 2016 at 2:00 PM, Jill Hatcher wrote:

The pond at Westwood Grange is a continual bone of contention. It is continually virtually empty with what can be called a very small puddle of water in the bottom when it rains, to call it a drainage system is extending the meaning of the words drainage beyond the rhelms of the meaning. We were told this was a surface water drainage system for the field behind Loder Close and Westwood Grange. When it rains heavily large puddles of water appear in these fields.

Westwood Grange is a gated, private development off Ham Lane (Lenham west). Residents maintain there is no maintenance of the system despite making a contribution.

We suggest that planners and developers should take the following into account:-

“The design process should consider the maintenance of the components (access, waste management, etc.) including any corrective maintenance to repair defects or improve performance. A SuDS management plan for the maintenance of SuDS should be prepared. In the absence of legislation funding for the adopter to maintain their SuDS may need to be resolved at the start of the development process to ensure that either the local authority, a maintenance, local residents or the water company has sufficient resources to maintain the system in the long-term.

[‘http://www.susdrain.org/delivering-suds/using-suds/adoption-and-maintenance-of-suds/maintenance/index.html](http://www.susdrain.org/delivering-suds/using-suds/adoption-and-maintenance-of-suds/maintenance/index.html)

Summary Groundwater Issues:

Lenham East:

In order to allow groundwater infiltration into the Stour the Lenham NP does not envisage more housing to the East of Lenham. We consider that the site Tanyard Farm north can be put to better future use.

Lenham West:

Groundwater and Surface Flow pattern to the West of Lenham are heavily

compromised already not only by the A20 but also by the Marley site and Lenham Storage. This has led to a decline of the streams supplying the Len. They are completely dry in the summer.

However as the site slopes down towards the railway embankment we believe there is an opportunity for a drainage strategy for the whole site with additional benefit to wildlife and open space provision. We do not think that drainage strategies by individual developers will provide a proper solution as suggested by MBC.

Qn7.15 What is the view of Representatives such as the Neighbourhood Plan Group, the Kent Downs AONB Unit and the Lenham Parish Council about the recent exploratory work for the Broad Location?

- 1) The so called Stakeholders meeting was by invitation only and did not represent a cross section of the community.

The major restriction will arise from lack of infrastructure particularly roads, parking and sewage.

For this to happen, Maidstone Borough Council must consult with Lenham Parish Council and Lenham Neighbourhood Plan Group to give them the opportunity to discuss and consult with the local residents.

- 2) 1500 as a number was not questioned nor was the underlying rationale examined.
- 3) The session failed to examine constraints (landscape and ecological). The exercise was merely:-
 - a) To be able to demonstrate “consultation”
 - b) Examine ways to fit 1500 dwellings
- 4) Recognition of potential south of the railway was noted.
- 5) The report including maps which showed the use of land not available or withdrawn.

Qn7.16 If the number of dwellings to be provided were to be reduced to that proposed in the Neighbourhood Plan, what implications would that have for development elsewhere?

This would be an opportunity to allocate in line with Alternative Strategies considered as part of this Examination while still delivering a proportionate share of the Local Plan number to Lenham.

Issue (iv) - Whether the 2 proposed Lenham housing allocations are justified and effective and consistent with national policy?

H1(42) Tanyard Farm, Old Ashford Road (155 dwellings)

Qn7.17 Would ground water drainage considerations or park and walk provision materially affect the anticipated yield from this site in terms of the number of dwellings and is any modification of the policy needed for effectiveness?

Yes. Insufficient consideration has been given to groundwater drainage.

All sites in front of the AONB and North of the Upper Stour will need to consider the flow of ground and surface water from the AONB water. (see maps)

- As mentioned earlier KCC points out the pooling effect which the railway embankment has in East Lenham. Development to the North of the railway embankment (Tanyard Farm) will increase this effect.
- The site H1(42) lies not only between 2 existing areas of built development and faces the Kent Downs AONB, it also lies in front of a Heritage Asset, The Lenham Cross.

MBC has so far not considered at all the impact of housing development on this site on the setting of this heritage asset. We hope we could demonstrate that development of Tanyard Farm involving 155 foundations will impact negatively on the flow of groundwater and could potentially increase the level of groundwater (see. Notes on SuDDS).

'Hello Lenham' (photo submitted for NP photo competition)

The openness of the site 'Tanyard Farm north' is very important to the local community because of the views to and from the AONB and the chalk hill cross, which was installed as a war memorial in 1922 by the community and has been maintained by the community for 94 years. Historic England has undertaken a millennium project to

list all war memorials. The listing of Lenham's chalk hill cross is currently processed.



The public footpath which connects the National Trail (North Downs Way) to Old Ashford Road and the village runs through the Tanyard North site.



06/07/2013 Monty Finch



field

View from the

View from a roof top window

H1(43) Glebe Gardens, Lenham (10 dwellings)

The planning application for 8 houses was allowed.

The images below show the archaeological trench immediately after excavation in April after a prolonged time without rain.



Qn7.18 Do the conclusions of the Inquiry for land west of Ham Lane have any implications for the H1(42) allocation in relation to the setting of the AONB?

The conclusions of the Inquiry acknowledges that H1 (42) Tanyard Farm appears to have a more sensitive relationship to the AONB

‘The merits or otherwise of individual allocations remain to be addressed as part of a future Local Plan examination but I acknowledge the evidence regarding the contrasting characteristics of a retained allocation at nearby Tanyard Farm (previous emerging Local Plan Ref: H1(29), now H1(42)). In particular, I note the evidence submitted that the retained site appears to have a more sensitive relationship to the AONB. In the emerging Local Plan, the appeal site had also been identified to have an approximate net capacity for 80 dwellings, Tanyard Farm for some 155 dwellings.’ (see point 61, appeal decision ORD 032).

The inspector’s suggestion is confirmed by the viewshed which was published in

‘LENHAM NEIGHBOURHOOD PLAN LANDSCAPE BASELINE ASSESSMENT

(NOVEMBER 2014 by ARBORVITAE, Sustainable Landscape Planning Ltd)

Figure 9. North Downs Way Viewshed

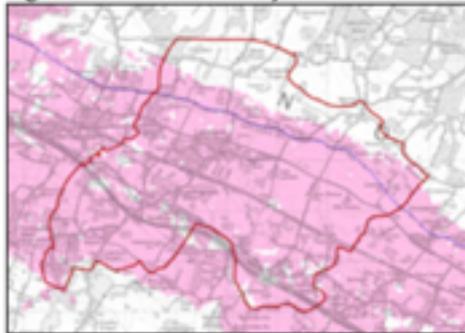


Figure 10. Lenham Cross Viewshed

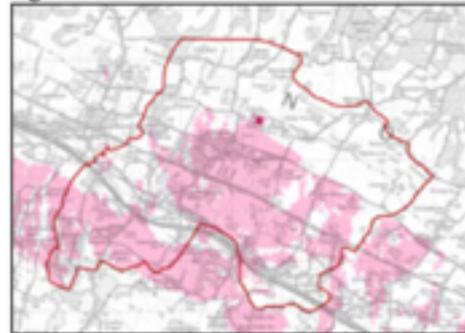


Figure 11. Privington Quarry Viewpoint Viewshed

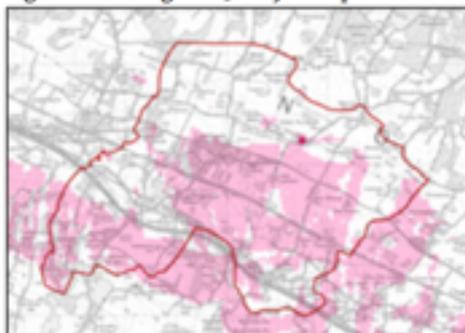
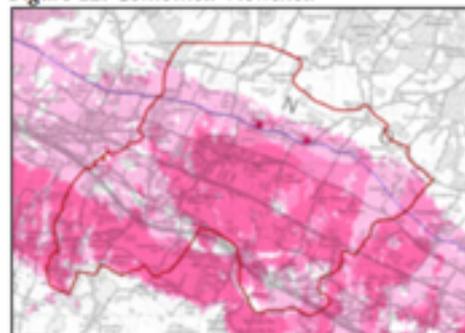


Figure 12. Combined Viewshed



Summary: The images show the sensitivity of the allocated site Tanyard Farm North

H1 (42) in relationship to views from :-

The AONB Fig 12

The North Downs Way (one of 15 National Trails in Britain) Fig 9

Lenham Cross (Heritage Asset) Fig 10

Pivington Quarry (SSSI) viewpoint Fig 11

The images also show the sensitivity of, especially this site, in respect of views to the AONB from Old Ashford Road (a publicly accessible area) and the footpath leading to the Lenham Cross and the AONB.

Screening the site with trees would screen out views to the AONB from Old Ashford Road.

By allocating H1 (42) Maidstone Borough Council has chosen the most sensitive site in Lenham in relationship to the AONB which the people of Lenham wish to see maintained as an open space for recreational purposes.

18th October 2016