Joint Parishes Group

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Town & Country Planning Act 1990

APPEAL BY KENT INTERNATIONAL GATEWAY LTD ARISING FROM MAIDSTONE BOROUGH COUNCIL'S FAILURE TO DETERMINE AN APPLICATION FOR PLANNING PERMISSION FOR A PROPOSED RAIL/ROAD FREIGHT INTERCHANGE, WAREHOUSING AND OTHER WORKS ON LAND BETWEEN THE M20 AND THE A20, TO THE WEST OF JUNCTON 8 AND EAST OF THURNHAM LANE, MAIDSTONE.

Revised Proof of Evidence on behalf of the Joint Parishes Group (JPG)

Geology

Peter Waite

5 October 2009

JPG
c/o Clerk to the Joint Parishes Group
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Joint Parishes Group

1 PERSONAL DETAILS

1.1 My name is Peter Waite and I appear at this public inquiry on behalf of the Joint Parishes Group (JPG).

1.2 I am a builder and property developer and specialise in residential and commercial developments. I am resident in Thurnham and am a Parish Councillor where I act as Vice Chairman. I am a member of the Mid Kent Downs Steering Group. I am an ex Member of Maidstone Borough Council and acted as their Vice Chairman of Planning.

1.3 I am not an expert in planning law or any other technical matter relevant to this public inquiry. I appear as a local resident/Parish Councillor and a member of the JPG.

2. SCOPE OF EVIDENCE

2.1 This proof of evidence highlights the complex geological characteristics of the site and provides examples of local developments where the plans to mitigate the difficulties have failed (only one of which is even mentioned by the Appellant). It shows that the Appellant's reluctance to provide details of geological evidence that the scheme is viable is a breach of PPG14.

3. GEOLOGY

3.1 Local characteristics

3.1.1 The British Geological Survey (BGS) Sheet 288 Maidstone, Solid and Drift Geology Edition 1978 (1:50,000) indicates that the site is underlain by Gault Formation (Gault Clay) which overlies the Folkestone Formation (Folkestone Beds) of the Lower Greensand Group. Local occurrences of River Terrace Gravels are also indicated to occur sporadically overlying the Gault Formation[1].

3.1.2 The KIG site is within the Wealden Geological System, which in Kent has the form of an anticline. The upper levels are Chalk: Upper, Middle and Lower are all represented in the North Downs escarpment, the steep scarp of which overlooks the lower undulating land that comprises the KIG site. Over many millennia there has been considerable outwash from the higher ground to the lower land. Most of the bedrock of the KIG site is either Gault Clay or Folkestone Beds. Owing to the undulating topography of the site the proposal for the rail/road freight interchange and very large warehouses requires much cut and fill: well over a million cubic metres of cut and over a million cubic metres of fill. The cut is mostly in the Gault Clay which will be spread over both Gault Clay and

[1] The British Geological Survey (BGS) Sheet 288 Maidstone, Solid and Drift Geology Edition 1978 (1:50,000)

Folkestone Sands. Such amounts of earthmoving create instability in and on the ground and variations in the properties of the bedrock.

3.1.3 Gault Clay has a high degree of plasticity, whereby it is basically impervious but absorbs water slowly and when saturated is subject to heave with horizontal as well as vertical movement, often quite suddenly, thereby threatening built structures on or near the heave area, including the major transport routes, unless specific engineering measures are taken to stabilise both the cut and the fill areas.

3.1.4 Folkestone Beds - poorly consolidated quartzose sands are not very stable but have the important property of having the capacity to absorb and retain large amounts of water, thereby serving as a significant aquifer for Maidstone. The likely impact caused by disrupting this formation is set out in the JPG's proof of evidence on hydrology.

3.2 Local history of building on Gault Clay

3.2.1 Building on Gault Clay is challenging and requires considerable earth work in order to make buildings of the scale proposed possible.

3.2.2 Despite the Appellant's assurances that these challenges can be mitigated, large scale works in this area have a history of failure. Most famously the cutting made to accommodate the M20 at Longham Wood collapsed within just a few years of completion. This came, no doubt, despite assurances that the difficulties of working with Gault Clay can be mitigated. This development will require at least 1,500,000 m^3 (the figure varies depending on which of the Appellant's documents you read) of material to be excavated, much of which will be re-used on site. The key to preventing solifluction of the Gault Clay is good drainage but as we have shown in our hydrology proof above the Appellant's plans for drainage on site remain woefully under developed. Equally, plans to improve drainage to the extent that it can properly mitigate solifluction of the Gault Clay may risk increasing run off from the site to an unacceptable level given the site's tendency towards flooding and unique ecological habitat found in the Len.

3.2.3 The construction of the M20 motorway section and more recently the construction of the CTRL were accompanied by supposedly comprehensive plans for balancing ponds and run off. Yet in the end result, we the locals still suffer from increasing water run off on both the Thurnham Lane and the Water Lane. The latter can be rendered impassable in Winter. In summary; none of the expert solutions have worked in practice.

3.2.4 Further examples of the challenges of working with Gault Clay that the Appellant has failed to acknowledge include: Gault Clay resulting in an unstable embankment at the Golf Club on Thurnham Lane; the construction of the CTRL necessitated an additional stabilization trench. Within the last few years a dene hole occurred on the Landway which was the size of a single deck bus, outside but very close to the KIG site.

3.2.5 Even small scale residential developments have had their problems. Athelstan Green, Hollingbourne which lies close to the back of the Service Station at Junction 8 has

suffered from major problems for some 40 years. Of 14 new houses built 10 have required major remedial work over the years. Due to the nature of the underlying geology the houses showed signs of movement with cracking both inside and outside in the brickwork. Mitigation has included the insertion of a concrete raft in an attempt to solve the problem. This is just one illustrative example of a well known problem in the area which has not been addressed. There are probably many more and it is the Appellant's role to address them. PPG14 makes it clear that nearby precedent (beyond lip service to the M20 landslide) should be considered at this stage:

> "It is important that such an assessment of a proposed development site should examine the site within its geographical context since instability of nearby ground may affect a site."

PPG14 is clear that general assurances that working with Gault Clay is not unusual and that difficulties can be overcome are not sufficient for a Planning Authority to make a decision. The absence of a detailed plan to deal with ground movement or even a proper site specific assessment are grounds to refuse this development.

3.2.6 In the Appellant's SES insufficient attention is paid to the underlying Geology, especially the interface between the Gault Clay and Folkestone Beds, again a source of instability, yet there is no indication of the depth of the various strata, in the Proof of Evidence, the ES or the SES. In fact, KIG15.1 para 3.5 even acknowledges such materials as found on the site 'contain low-strength relict shear surfaces, for which due allowance must be made in detailed investigation'. No Planning Authority could possibly make a decision about the viability of this site for this purpose without access to the results of detailed investigation at the outline planning stage.

3.2.7 The Appellant states that a 'very detailed appraisal of soil structure interaction will be required[2]'. Quite, but local residents would have found it much easier to believe that the Appellant has any intention of operating a real SRFI from this site in the long term if some of the many questions about the viability of building such large structures on this site had been answered prior to the planning application and certainly well before this inquiry. At the very least, a proper site specific indication of the depths of the various strata is needed if we are to make an informed decision of whether an SRFI and associated structures is suitable on this site. Paragraph 16 of PPG14 says that responsibility for establishing whether land is suitable for a particular purpose lies with the developer and paragraph 20 makes it clear that stability of the ground is a material consideration at the planning stage. The viability of a proposed scheme is explicitly not just a matter for a building inspector. The developer must therefore provide certainty that the development is suitable for the geological conditions at the planning stage. The JPG considers that the case is far from proven[3].

[2] KIG Environmental Statement Chapter 9

[3] PPG14 – Paragraphs 16 & 20

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4. Conclusion

4.1 In summary, there are problems and local precedents associated with building on Gault Clay which the Appellant has chosen to ignore. The ground conditions will change the civil engineering paradigm and necessitate expensive solutions upon which we may be short-changed producing the serious consequences of long-term severe ground movements, propensity to flood and acute water shortages.

4.2 The Appellant has a duty to provide the details above at the outline planning stage. The fact it has chosen not to provide these details in good time not only demonstrates a contempt for this process but also begs the question why they would risk failing to provide details – were they concerned that the answers would not fit their arguments?

4.3 Even now, after these concerns have been pointed out to the Appellant, their Proof of Evidence 15.1 only addresses precedent in relation to the M20 collapse and CTRL. None of the other local precedents have been addressed and, worse, para 7.7 of Proof KIG15.1 reveals that the reassurances their expert provided were based on the fact: “I examined the Masterplan and visited the site”. Is this a case of ‘hear no evil, see no evil’ – how on earth have we got to the Inquiry and still fundamental questions about viability are being answered on the basis of desk top surveys, general assertions and a site visit.