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EDGE OF SETTLEMENT HOUSING SITES,

**AREA 5C MAIDENHEAD – TRIANGLE M4, A308(M)
AND ASCOT ROAD**

**AREA 7A LAND WEST OF HOLYPORT ROAD – AREA
BETWEEN ASCOT ROAD AND HOLYPORT ROAD**

**ON BEHALF OF
HOLYPORT PRESERVATION SOCIETY
AND HOLYPORT RESIDENTS ASSOCIATION**

HIGHWAY AND TRANSPORT REPRESENTATIONS

MARCH 2014

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*EDGE OF SETTLEMENT HOUSING SITES – REPRESENTATIONS ON
BEHALF OF HOLYPORT PRESERVATION SOCIETY*

MARCH 2014



1.0 INTRODUCTION

- 1.1 My name is Dermot McCaffery. I am a highway and transportation consultant. I have 25 years experience in local authority and private consultancies in dealing with the highway development control aspects of development proposals. I am a Member of the Institute of Highway Engineers and the Institute of Road Safety Officers.
- 1.2 I have been appointed by the Holyport Preservation Society (HPS) and Holyport Residents Association (HRA) due to my extensive knowledge of the area to prepare representations on transport and highway grounds against the potential inclusion in the Local Plan of 2 housing sites in Holyport, namely Area 5C – Triangle M4, A3038(M) and Ascot Road, and Area 7A Land west of Holyport Road.
- 1.3 Meetings have taken place with the Members of both the HPS and HRA and these representations as well as being my professional opinion are the views and concerns of the HPS and HRA.
- 1.4 The HPS and HRA have collected considerable traffic data for volume, speed and vehicle weight that has been supplied by RBWM on the lead up to these representations and where relevant that data will assist in providing a factual base to the representations made.

2.0 LOCAL HIGHWAY NETWORK

- 2.1 The sites are located close to the village of Holyport on the south side of Maidenhead town. The highway network in this vicinity is made up primarily by the M4 motorway at Junction 8/9, the A308(M) motorway spur, the A308 Maidenhead to Windsor Road and the A330 Maidenhead to Bracknell road. Due to the proximity of Maidenhead to



MARCH 2014

the motorway network and the affluent nature of the conurbations most roads suffer extreme peak hour congestion. This is evidenced by the recorded poor air quality at the point where the M4 crosses over the A308 Windsor Road in the 2013 Air Quality Progress Report for the Royal Borough of Windsor and Maidenhead.

- 2.2 The most up to date data for the air quality under the M4 bridge on the A308 which shows an increase from 54.7mg/m^3 (2010) to 61.13mg/m^3 (2012). The National Air Quality Objective and EU limit is 40mg/m^3 . As a result it is the recommendation of the RBWM as part of the Local Transport Plans and Strategies to reduce roadside emissions by adopting a range of measures to reduce the volume of traffic at peak time.
- 2.3 The M4 'smart motorway' (previously known as managed motorways) will commence in early 2016 to 2018 from Junction 3 to beyond Junction 12 and will effectively cater for the increase in motorway traffic for the next 20 years. As the motorway will be increased from six lanes to eight a peak time increase in traffic volume and associated pollution of 33.3% can be expected. This will add to the rising air quality pollution problems. The Borough's local roads (Windsor Rd, Upper Bray Rd/Priors Way and Holyport Rd) within the AQMA cumulatively contribute $16.35\text{ }\mu\text{g/m}^3$ which is 57% of the local NO_2 concentration $29.34\text{ }\mu\text{g/m}^3$ from traffic 'transitting' i.e. static and slow moving at the Holyport Road mini roundabout. The remaining $12.99\text{ }\mu\text{g/m}^3$ which is 43% is attributable to the M4 contribution.
- 2.4 Most junctions suffer extensive queuing at peak times and this impacts directly to public transport frequencies and reliability. Future planned housing growth in the Warfield area of Bracknell Forest will add significantly to the existing traffic issues on A330 Ascot Road corridor as the most direct route to the M4 motorway, A404 to the M40 and to Crossrail in just 4 years time. Staff, pupils (500) and deliveries to and from the Holyport College opening this year will have also have a



MARCH 2014

significant detrimental effect on the A330. The inclusion and programmed provision of the Stafferton Way link at the south east of the town centre will make the A4/A308 route to the M4 more attractive by removing the current delays experienced by travelling through Maidenhead town centre. This will add more peak hour pressure to the Braywick roundabout with the “domino effect” on queuing on the A308 Windsor Road and A330 Ascot Road.

2.5 Holyport Road runs through the centre of Holyport village. Its straight alignment on the stretch from the A308 along the edge of Area 7A results in vehicle speeds continually exceeding the 30mph speed limit. This has been recorded by the Council's traffic counters at peak times and during the day.

2.6 Bus services are generally hourly with 3 routes through the village. These services travel between Holyport and Maidenhead along the A308 which is heavily congested at peak times. This limits the convenience of these services as replacements to employment commuting by car.

3.0 AREA 5C MAIDENHEAD - HIGHWAY AND TRANSPORTATION CONSIDERATIONS

3.1 The site is located within the triangle formed by the M4, A308(M) and the A330 Ascot Road. The site has a total area of 25.5ha. Notwithstanding significant planning constraints 400 dwellings have been proposed to this site.

3.2 The *Area Analysis* document prepared by the Council considers that there could be the potential for a direct access to the A308(M) motorway spur. This is wholly unrealistic and contrary to Highway Agency policy. In the unlikely event that the HA agrees to a junction



MARCH 2014

onto the A308(M) the dual carriageway nature of the motorway spur would mean that all vehicles ingressing or egressing the development would have a direct impact on the signal junctions at Junction 8/9 and at the Braywick roundabout. These junctions are operating significantly beyond their practical capacity at present and the scope for further capacity improvements is severely limited.

- 3.3 It is more realistic to consider all access to this site being gained from the A330 Ascot Road. As such, there would be an immediate impact on traffic conditions in Ascot Road. At present, peak hour traffic is stationary for most of the period with queues extending south for 1.8km to Stud Green and regularly beyond the junction with Forest Green Road.
- 3.4 With the stationary traffic extending past the likely site access junctions there must be doubt about whether the junctions could operate satisfactorily and safely. Safety is a very real issue on the A330 and local residents have over many years been campaigning and have made representations with the support of local councillors to RBWM to implement a width restriction on HGV's using the A330 for the safety of residents, pedestrians and road users.
- 3.5 The Braywick roundabout has limited options for capacity improvements. The developers of the site would have to demonstrate that suitable improvements could be delivered that would accommodate the additional traffic that would be generated by the development PLUS modelled traffic growth which would need to include the housing growth at Warfield and the opening of Crossrail both of which would be realised within the likely forecast years for the development. This must all be without detriment to the prevailing traffic conditions on The A308(M) and A308 Windsor Road approaches to the roundabout.



MARCH 2014

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- 3.6 It is my view, HPS and HRA that such improvements cannot be delivered and that the development of the site would result in significant increases in congestion on the immediate highway network.
- 3.7 The site is not accessible to non-car modes of travel. The congestion on the immediate network detailed above means that bus services are not frequent, un reliable and would not be convenient alternatives to car travel. At present, a single bus service travels along Ascot Road which runs 4 times per day. The Ascot Road presents significant severance between the site and the rest of the built up areas of Holyport and Bray where the nearest local facilities and primary schools are located. The lack of suitable alternative modes of transport would result in a car-dependant development which is contrary to National Planning Policy Framework objectives. This is a particular concern in the morning peak period which is heavily influenced by the “school run”. The only local primary school for this catchment area is in Stroud Farm Road (2.1km). Access to this is only practical by car adding to the existing traffic problems, as it would be too far and/or too dangerous for children to walk or cycle to this school. This additional car traffic would impact on the Braywick roundabout, Ascot Road to the south of the site, Holyport Road and the Holyport Road/Windsor Road mini roundabout.
- 3.8 The scale of development would require 2 access road junctions to meet with RBWM highway design guidance. Each junction would require the provision of a right turn lane in accordance with the Department for Transport’s requirements as set out in the technical design memorandum TD42/95 “*Geometric Design of Major/Minor Priority Junctions*”. The proximity of the site frontage to junctions on the east side of Ascot Road would limit the opportunities for achieving access junctions with suitable junction spacing. The heavily trafficked nature of Ascot Road would dictate that the geometric design elements of the access junctions should not be compromised. A roundabout is an



MARCH 2014

alternative access junction design but this would be “land-hungry” and would be severely compromised by the levels of queuing from the Braywick roundabout.

- 3.9 It is my view, HPS and HRA that suitable access arrangements would not be possible to the Ascot Road to accommodate the level of development that is envisaged.

4.0 AREA 7A LAND WEST OF HOLYPORT – AREA BETWEEN ASCOT ROAD AND HOLYPORT ROAD

- 4.1 The site is located on the west side of Holyport Road and to the south of the Aysgarth Park development. It has highway frontages to Holyport Road and Ascot Road. Part of the southern boundary of the site abuts Blind Lane which is a Public Right of Way (Byway 37) and the boundary of the Holyport Conservation area. Public Footpath 38 crosses part of the southern section of the site. From Ascot Road there is an access to the apartments at Philberts Lodge from where access may be gained through three gateways. Planning permission has been granted in principle for an access from Holyport Road for agricultural purposes only, but this access has not been constructed. Before construction of that access, detailed plans for it would have to be presented and have not been presented.

- 4.2 The *Area Analysis* prepared by the Council for this site considers that access may be provided to a development in this area from Ascot Road, Holyport Road and Holyport Street. Accesses to Holyport Road may require right turn lanes depending on the scale of development. For any access to Ascot Road *“it may be necessary to introduce appropriate mitigation measures if speeds were found to be consistently exceeded.”* Speeds and Traffic Volumes on both the A330 and Holyport Road are already known to be excessive.



MARCH 2014

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- 4.3 The frontage of the site to Ascot Road is compromised by the embankments for the motorway overbridge to the north and the horizontal alignment of Ascot Road from the midpoint of the frontage and to the south. Although this section of Ascot Road is subject to a 30mph speed limit vehicle speeds are generally exceeding this and the Council acknowledge this fact in the *Area Analysis* text. The quantum of development that is served by an access to Ascot Road would determine the form and scale of the access junction, however there is considerable concern that significant realignment of the Ascot Road carriageway would be required to enable any form of access to be safely sited particularly in respect of adequate forward visibility across the bends. Furthermore, the lack of any pedestrian facilities along the eastern side of Ascot Road would require additional land-take across the site frontage with the associated loss of trees and hedging.
- 4.4 The suggested use of Holyport Street to access a limited level of development is wholly unrealistic. Holyport Street lacks adequate pedestrian facilities and carriageway width to be suitable as an access to ANY development. The *Area Analysis* suggests that Holyport Street and Blind Lane are used by resident pedestrians and cyclists as a safer way to access the village shops, school and doctors surgery.
- 4.5 The main development access would likely be to Holyport Road. This road is subject to a 30mph speed limit and is the main bus route through the village. 3 Bus stops are located within the site frontage and Holyport Primary School is located off Stompits Road. The form of access to Holyport Road would depend on the scale of development but it is likely that a right turn lane would be required. Any widening of Holyport Road would create a greater severance between the development and the local facilities on the east side of Holyport Road. Even if pedestrian islands were to be incorporated in the design of the right turn lane a wider carriageway would not encourage pedestrian movements between the development and the rest of the village. This



MARCH 2014

is a particular concern for school children and their parents attending the primary school.

- 4.6 Traffic surveys undertaken by the Council in 2012 recorded the speeds of vehicles for a 7-day period. Without exception, the data from each day showed that the 85thile speeds on Holyport Road exceeded the 30mph speed limit with the weekend speeds reaching 41mph i.e. the 85thile speed over the survey periods and not “snapshot” speeds. The risk of speed related accidents would be increased with the additional side road traffic movements that would be generated by the development.
- 4.7 The traffic impact of the development would be concentrated at the Holyport Road/Windsor Road mini roundabout. This junction suffers considerable congestion throughout the day. At peak periods the level of queuing on the Holyport Road arm is exacerbated by the stationary vehicles queuing back from the Braywick roundabout along the A308 towards Windsor. Any development of this site would be required to deliver improvements to this junction in order to mitigate the likely traffic impact. The presence of stationary traffic on the A308 would have serious implications for the successful implementation of any realistic junction improvement.
- 4.8 It is my professional view as well as that of the HPS and HRA that access options for this site are limited due to alignment issues on Ascot Road and the consequential traffic impact of the development would be concentrated at the Holyport Road/Windsor Road mini roundabout for which there is no realistic improvement. Problems of severance and pedestrian safety on Holyport Road mean that any development currently envisaged should be resisted.

5.0 SUMMARY AND CONCLUSIONS



MARCH 2014

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- 5.1 Paragraph 1.17 of the Council's "*Housing: Edge of Settlement Analysis*" (Jan 2014) identifies a potential shortfall of 6000 households that the Council is considering could be built on sites that are within the Green Belt and abutting existing settlements. Further, consideration is ongoing as to whether a hospital would be built on Area 5C. No evidence has been seen that those who favour a hospital have given any consideration whatsoever to the traffic consequences for the area should a hospital ever be built, far less the inability of the hospital to cope as a provider of medical care to people who are unable to access the hospital in an emergency, or to provide emergency vehicular service to accidents etc. Along with the planned developments in Warfield, Holyport College and the Stafferton Way link, if these 2 sites were to be developed there would be catastrophic failure of the transport network in the Holyport area. This is not a sweeping statement – the network is already under severe pressure with key junctions operating beyond their theoretical and safe capacity.
- 5.2 Site 5C has only one highway frontage from which access can be achieved. It is inconceivable that the Highways Agency would consider an access road junction onto the A308(M) motorway spur. The available frontage onto Ascot Road is constrained by existing junctions opposite the site frontage. The level of congestion that occurs at peak times at the Braywick roundabout extends past the site frontage and to the extent that any new development access junction would be compromised in terms of safety and operational capacity. The site is not well located in terms of realistic and convenient alternatives to car travel, particularly so for access to local schools.
- 5.3 The level of traffic impact from a car-dependant development of this scale would require significant transport improvements. There is no evidence to suggest that any developer of this site would be able to deliver the level of improvements that would be essential to mitigate



MARCH 2014

the impact that would be generated. The consequence for traffic and transport conditions in the Holyport area is untenable.

- 5.4 Site 7A has the potential for access to Ascot Road and Holyport Road. The poor horizontal alignment of Ascot Road would require significant realignment of the carriageway in order to provide an access road junction that complies with the Department for Transport's design criteria. Coupled with the lack of pedestrian facilities across the site frontage the impact of such realignment on the trees and hedgerow along the site frontage would be severe.
- 5.5 It might therefore be considered that the more likely access strategy would see the main site access onto Holyport Road. However, the need to widen the carriageway to incorporate a right turn lane would exacerbate the severance of the development from the main village settlement. This would have major implications for pedestrian safety across a road that has an acknowledged speeding problem.
- 5.6 The traffic impact of the development would be concentrated on the Holyport Road/Windsor Road mini roundabout that already suffers significant traffic congestion throughout the day. At peak times the queue of vehicles from the Braywick roundabout passes through the Holyport Road junction. This would be a critical consideration for any proposed junction improvement.
- 5.7 It is already known to RBWM that severe levels of atmospheric pollution currently exist and are rising at the Holyport Road/Windsor Road mini roundabout due to the M4 motorway crossing overhead inhibiting dispersion, and with slow moving or stationary traffic due to queuing for the Braywick roundabout on the A308 or turning traffic held up as it turns into Priors Way and Upper Bray Road. In these circumstances it is considered that any decision to develop Area 7A would only increase traffic congestion at these junctions.



MARCH 2014

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- 5.8 The transport infrastructure is already severely beyond capacity at peak hours. This will be further exacerbated by new approved developments in Warfield, Holyport College and the Stafferton Way Link. To put more pressure with these proposed housing developments pose a very real and severe threat to the village and in my view are unsustainable.
- 5.9 It is therefore my view that as a Highways and Transportation Consultant, I consider that development in either Area 5C or 7A is unsustainable.