APPENDIX 3 - BAA OBSTACLE LIMITATION SURFACES

Planning & Surface Access, BAA Safeguarding Team First Point, Buckingham Gate Gatwick Airport West Sussex RH6 oNT

Telephone: (01293) 504854 Fax: (01293) 507750

Katy Taylor Turley Associates 25 Savile Row London W1S 2ES

3 March 2008

Dear Katy

Re: Height Restrictions for Richmond upon Thames

Our Ref: LHR1708

In response to your request for advice contained in your email of 21 February 2008, we would advise as follows:

The site lies approximately 6Km to the South East of the Aerodrome Reference Point for Heathrow Airport. It also lies beneath the Obstacle Limitation Surfaces for the Airport. In the accompanying powerpoint document, each slide shows the relevant surface (the one with the lowest height limit) applicable to each area shown. An explanation of each slide is below.

Slide 1

This shows the whole site and the surfaces applicable to the area. The easily identified surfaces on the slide are:

- Red Approach and Transitional Surfaces (Transitional Surfaces do not fall within the Richmond Boundary)(Approach is bounded by the large red triangular shapes)
- Green Take Off Climb Surfaces
- Magenta line (at edge of Conical Surface) Outer edge of the Inner Horizontal Surface
- Orange Conical Surface
- Light Blue Circle Outer edge of the Outer Horizontal Surface

Slide 2

The area shaded in blue is the part of the area that lies beneath the Inner Horizontal Surface (IHS). This is a flat surface with a limit of 67.87m AOD and is the height to which buildings (and structures) and items on top of the buildings such as, plant rooms, aerials, flag poles etc must be restricted. This site is approx 3.5Km from the landing threshold for runway 27L and will require a crane permit for construction purposes. This can be obtained from the Operations department at Heathrow. Cranes may temporarily breach this surface during the construction period but will require aircraft warning lights.

Slide 3

This slide shows the area beneath the Conical Surface which is an inclined surface rising from the outer edge of the Inner Horizontal Surface at 67.87m AOD to the inner edge of the Outer Horizontal Surface at 172.87m AOD. The surface rises at a rate of 1:20. This surface restricts buildings (and structures) and items on top of the buildings such as, plant rooms, aerials, flag poles etc. A crane permit will be required for construction purposes. This can be obtained from the Operations Department at Heathrow. Cranes may temporarily breach this surface during the construction period but will require aircraft warning lights.

Slide 4

This slide also shows an area beneath the Conical Surface which rises at 1:20 from 102m AOD to 145m AOD. This surface restricts buildings (and structures) and items on top of the buildings such as, plant rooms, aerials, flag poles etc. A crane permit will be required for construction purposes. This can be obtained from the Operations Department at Heathrow. The site is also beneath the Approach Surface, which in this area rises at 1:40from 123m AOD to 145m AOD. In general cranes **will not** be allowed to breach the Conical Surface, however there may be some leeway for them to extend to the height of the Approach Surface. Therefore should building proposals (including plant rooms etc) attain the height of the Conical Surface, other methods of building (than tower cranes) will need to be found.

Slide 5

This slide shows the area beneath the Approach and Conical Surfaces where the Approach Surface is the lower of the two and therefore gives the height to which buildings and structures will be restricted (including plant rooms etc). This is from 145m AOD to 173m AOD, the Approach Surface rises at 1:40. A crane permit will be required for construction purposes. This can be obtained from the Operations Department at Heathrow. For the area shaded in blue, cranes **will not** be allowed to breach the Approach Surface. Therefore should building proposal (including plant rooms etc) attain the height of the Approach Surface, other methods of building (than tower cranes) will need to be found.

Slide 6

This slide shows the area beneath the Outer Horizontal Surface (OHS) which is a flat surface located at 172.87m AOD, and is the height that buildings and structures will be restricted to. Where the blue shaded area falls beneath the Approach Surfaces areas, then cranes will not be permitted to breach the 172.87m AOD limit, however the blue shaded area to the south of the Approach Surfaces will allow temporary infringements of the OHS during construction only.

Slide 7

This slide shows the areas beneath the Approach Surfaces which are at approx 173m AOD. Part of the northern site also lies beneath the Take-Off Climb

Surface, however the Approach surface in this area is lower. This part of the Approach Surface is flat and therefore no contours are shown. Although a crane permit is not required for these areas, Cranes must not breach the 173m AOD limit. Buildings and structures (including plant rooms etc) will be limited to this height.

Slide 8

This slide shows the only area that is completely outside of the Obstacle Limitation Surfaces. There is no height limit as such, however buildings over 150m in height may require aircraft warning lights to be fitted. Should you wish to build to this height in this location, I would need to take advice from the CAA due to its very close proximity to the Obstacle Limitation Surfaces. (The CAA may also request aircraft warning lights on buildings over 90m).

Other issues we would assess under Aerodrome Safeguarding for this whole area would be:

- Landscaping
- Areas of open water
- Wind turbines
- Land fill Sites

I have attached a copy of each of our eight Advice Notes which gives general guidance on the subjects they contain.

The area is so vast and is covered by complex surfaces, therefore as each proposal is put forward we would be pleased to conduct a pre-application assessment for each site as it arises. However you will need to allow 4 -5 weeks for each assessment due to our current workload.

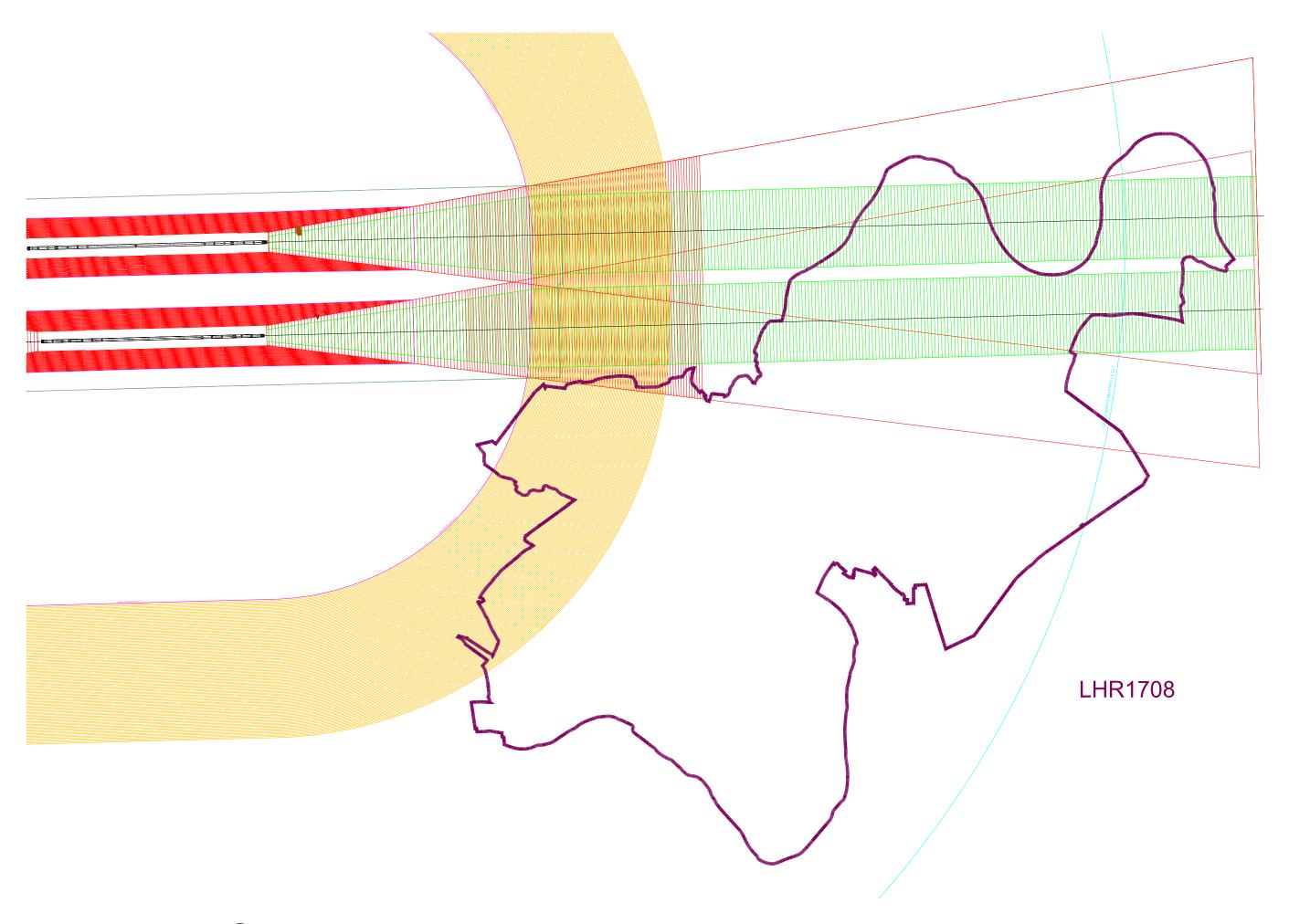
If you have any queries regarding the information that I have supplied, please do not hesitate to give me a call on 01293 503879.

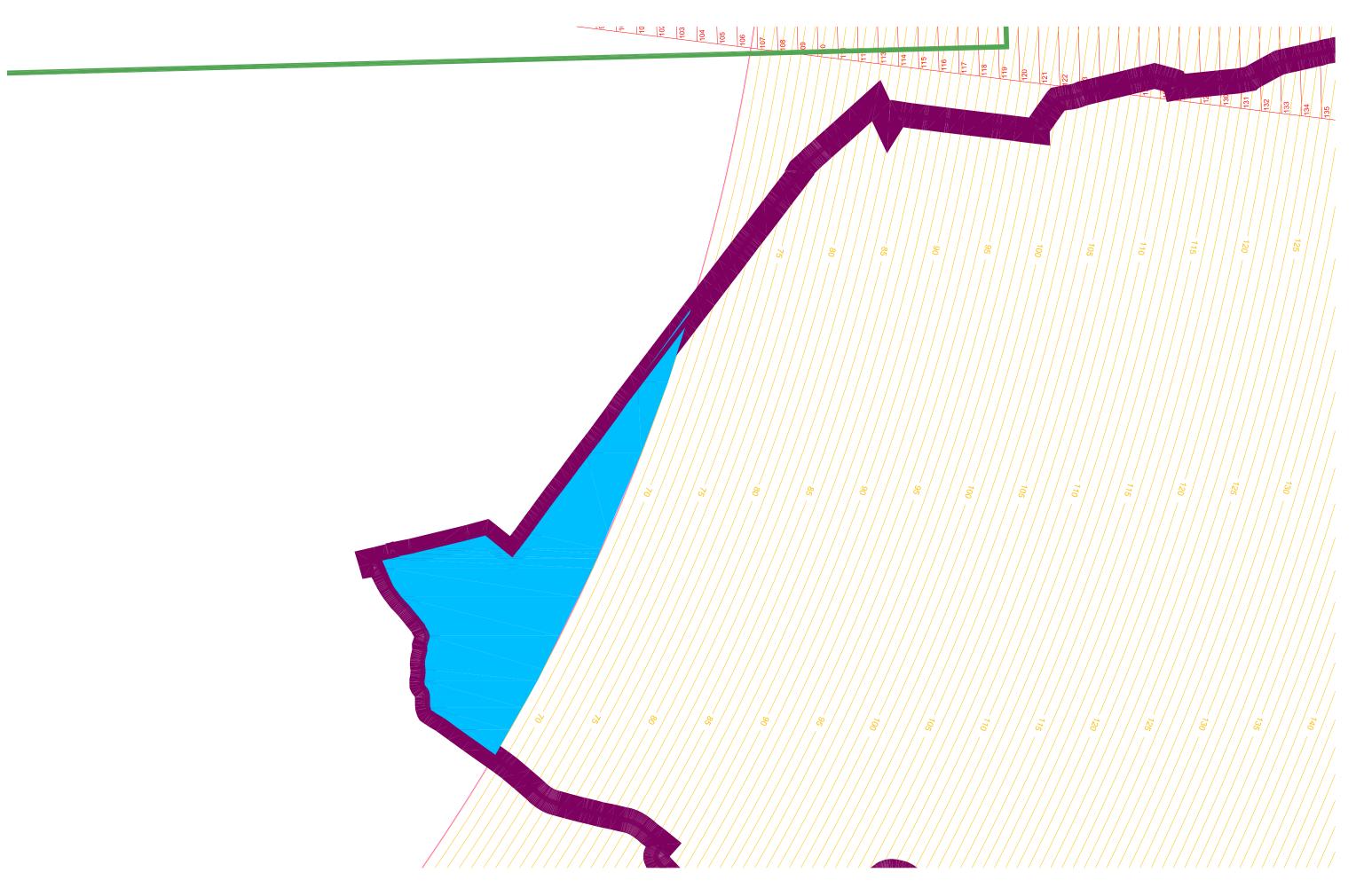
Please be advised that the advice given is informal and without prejudice to the consideration of any planning application which may be referred to us pursuant to Planning Circular 01/2003 in consultation under the safeguarding procedure. It cannot be assumed that any response to consultation under Planning Circular 01/2003 will necessarily coincide with the informal advice now given. We will not have any liability to you or third parties who may follow this advice.

It should also be made clear that provision of this advice does not constitute support for the development nor an opinion that the development is acceptable under local planning policy

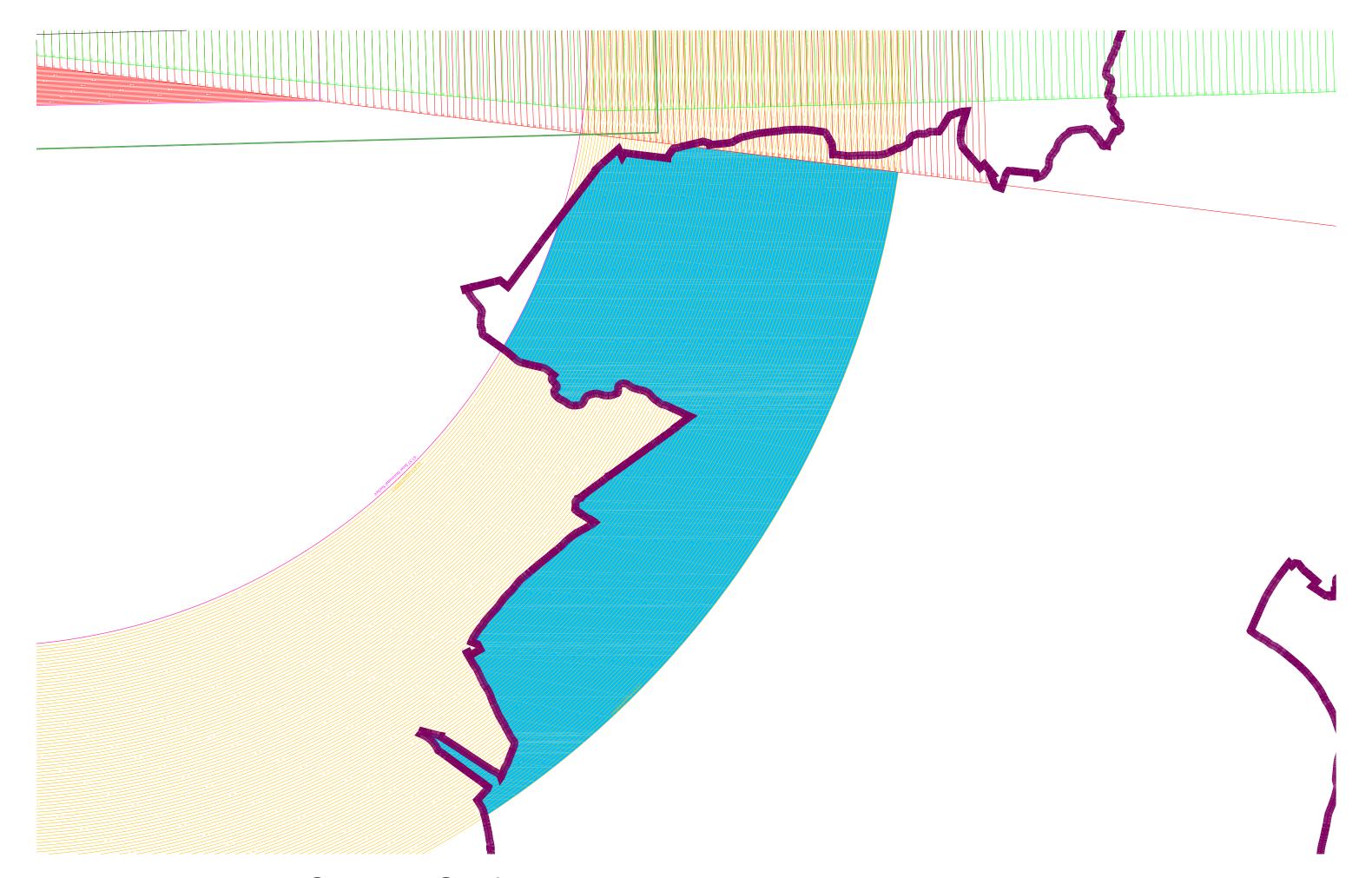
Yours sincerely

Lesley Duggan (Mrs)
For and on behalf of Heathrow Airport Limited

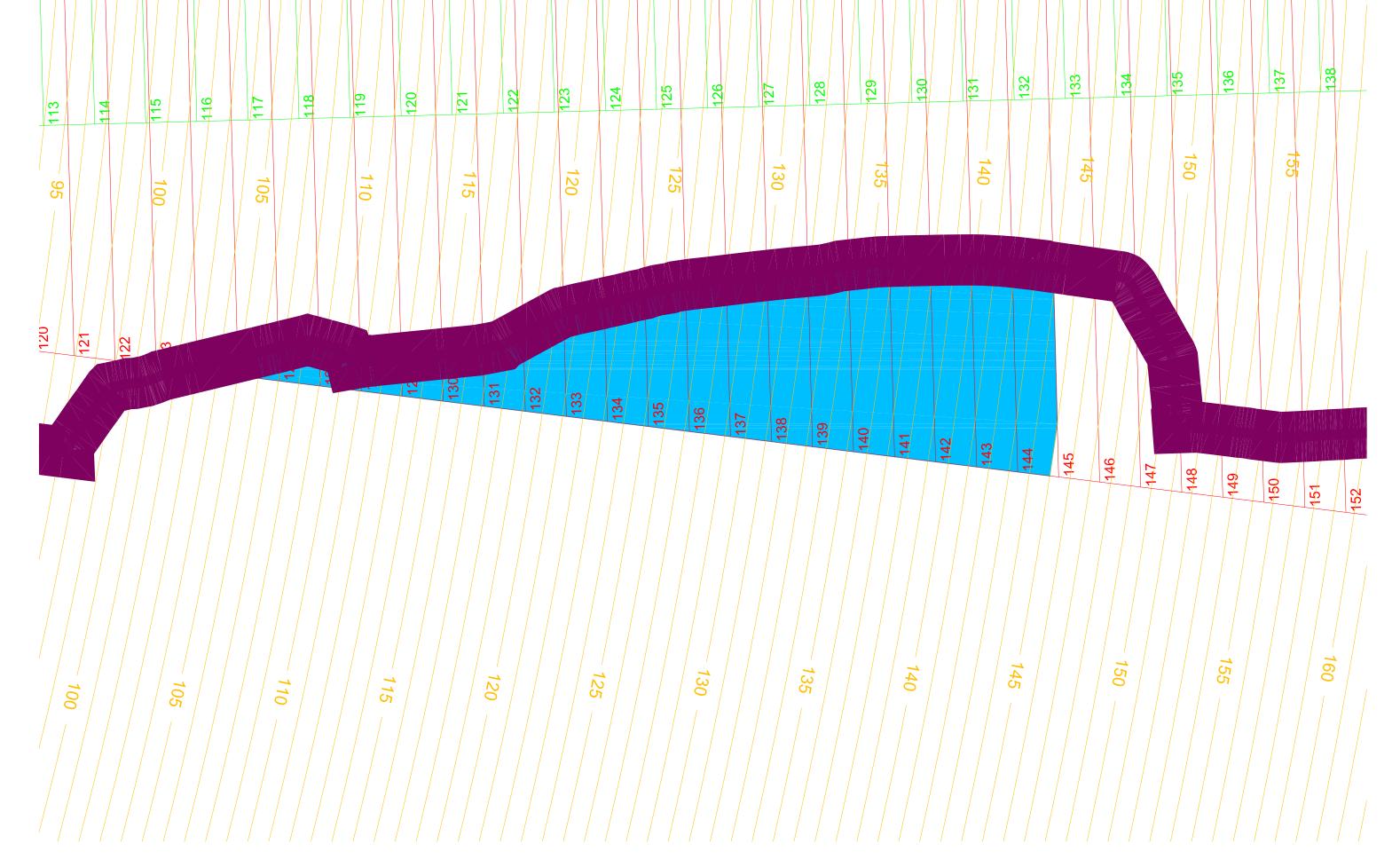




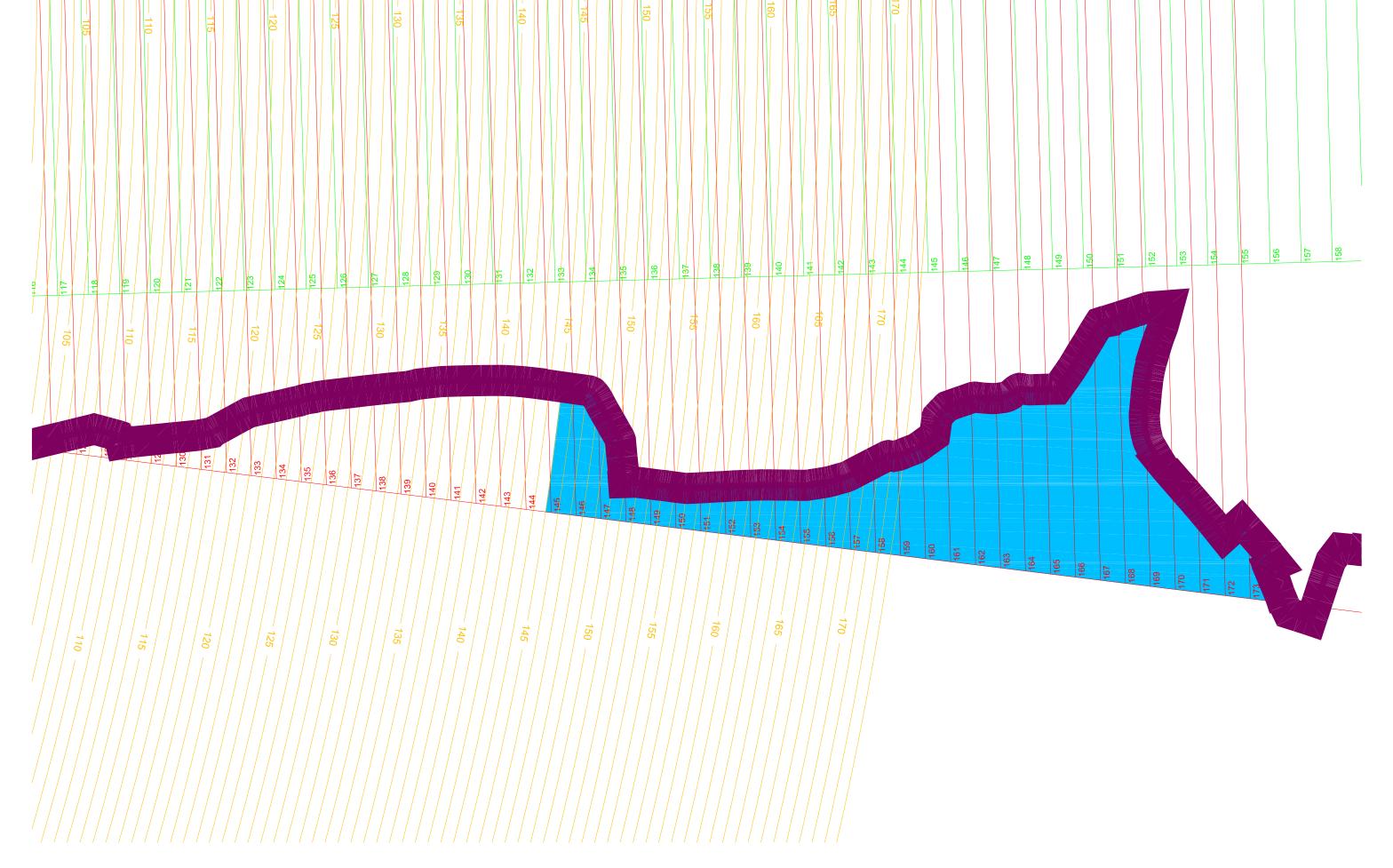
2 Area under Inner Horizontal Surfaces (Flat limit 67.87m AOD)



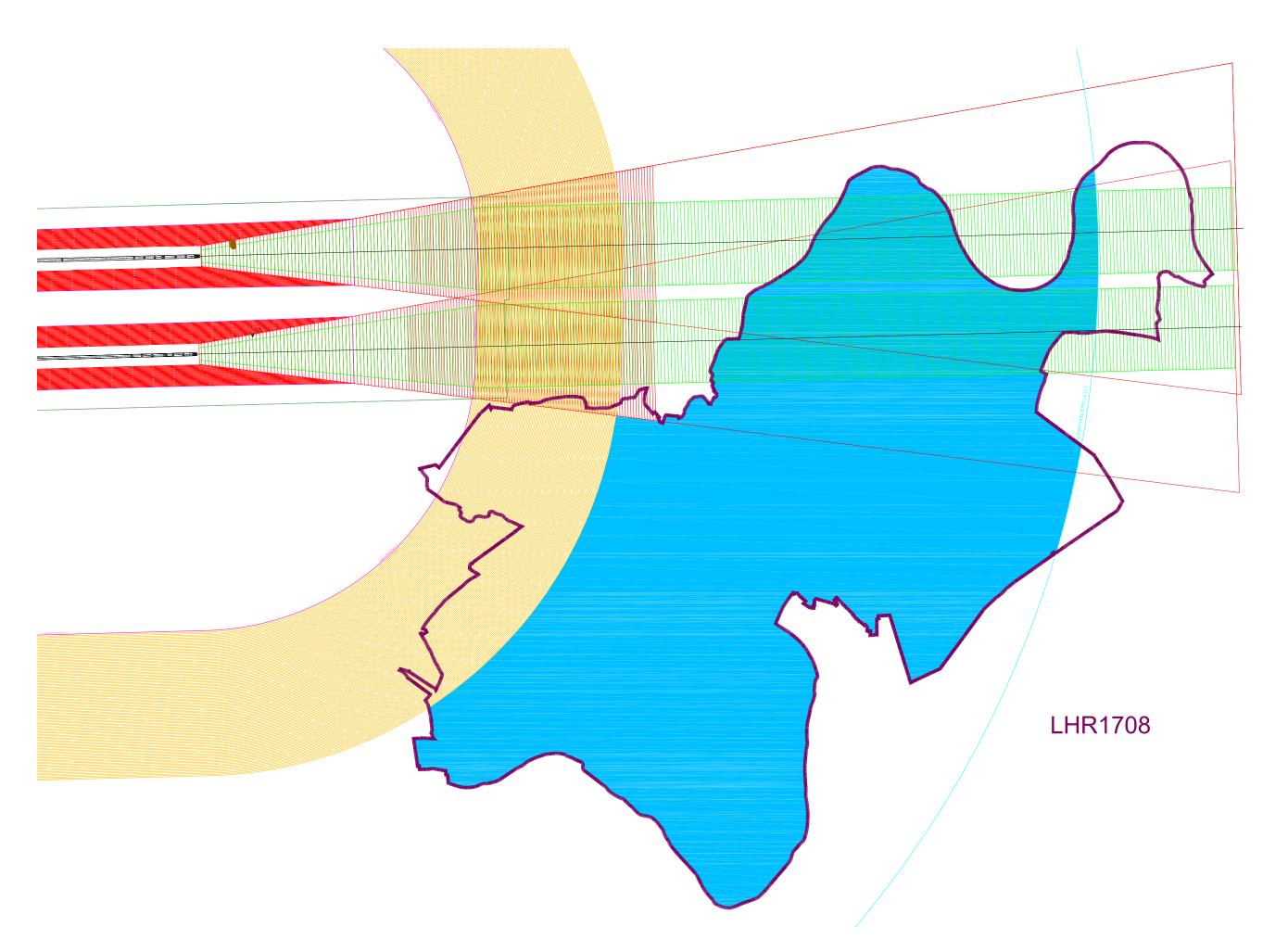
3 Area under Conical Surface (limit 67.78m AOD – 172.87m AOD rises 1:20)



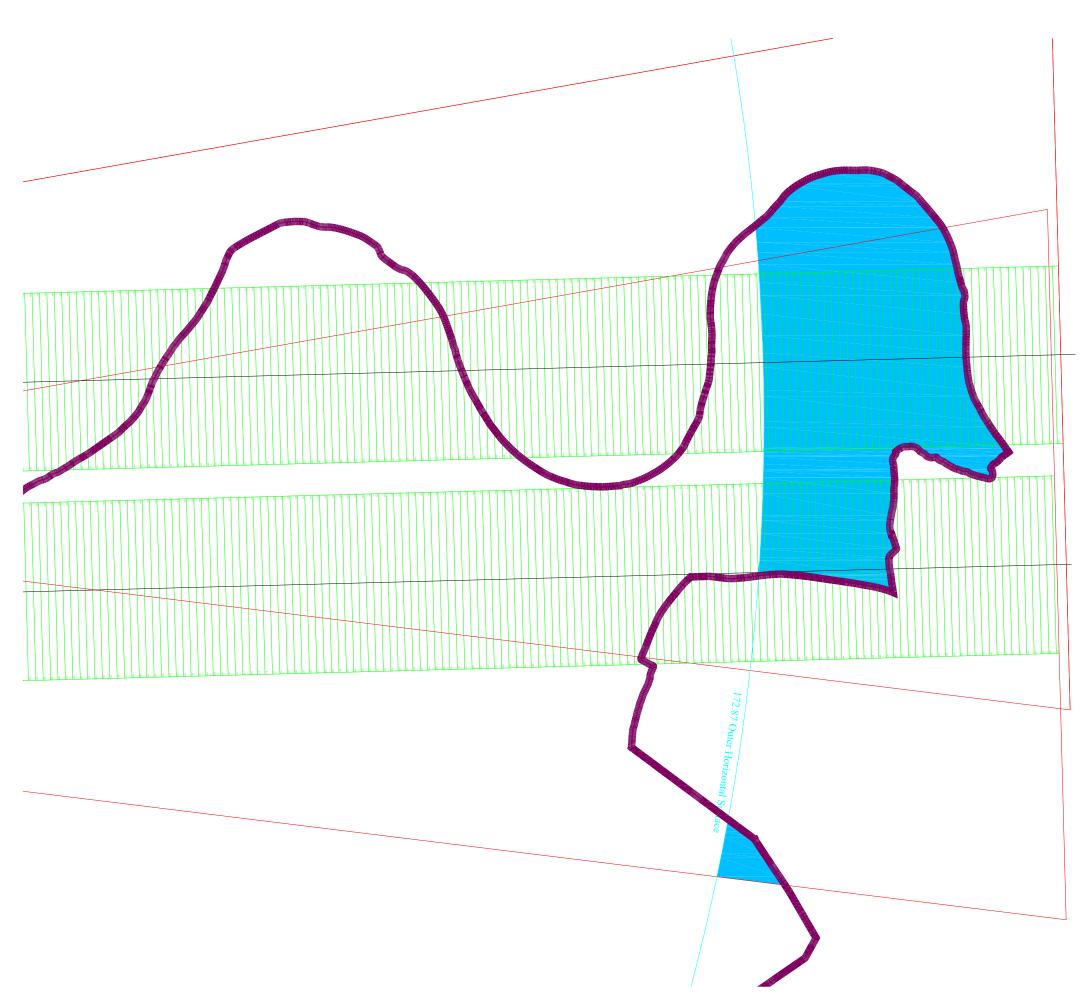
4 Area under Conical Surface (rises 102m AOD to 145m AOD at 1:20) (also under Approach Surface but Conical is more onerous)



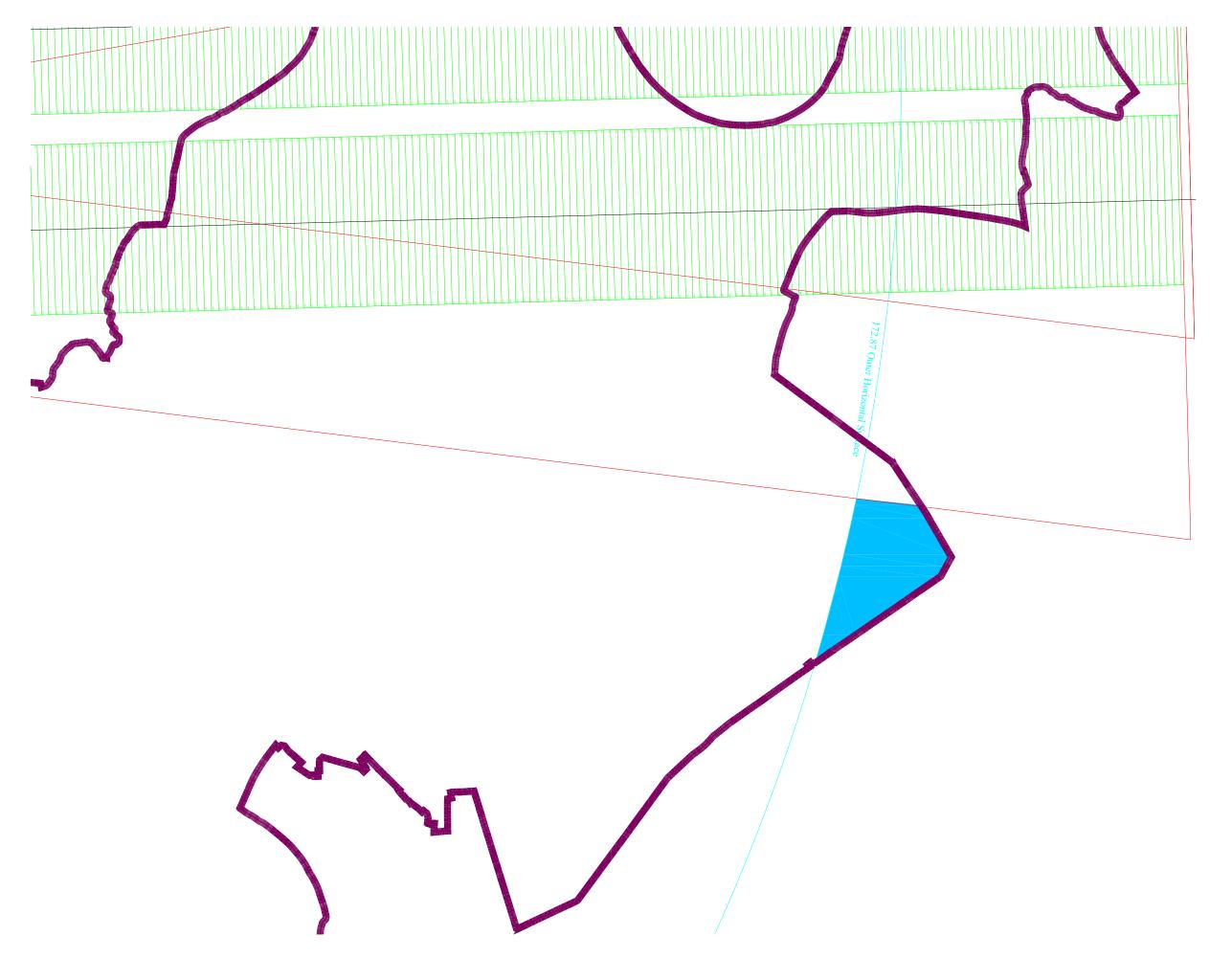
5 Area under Approach Surface (rises 145m AOD to 173m AOD at 1:50) (also under Conical Surface but Approach Surface is more onerous)



6 Area under Outer Horizontal Surface (Flat limit 172.87m AOD)



7 Area under Approach Surface (Flat limit 173m AOD)



8 Area outside of Obstacle Limitation Surfaces

BELFAST 028 9023 5435

BIRMINGHAM 0121 233 0902

BRISTOL 0117 989 7000

EDINBURGH 0131 225 1717

GLASGOW 0141 248 9233

LEEDS 0113 386 3800

LONDON 020 7851 4010

MANCHESTER 0161 831 1300

SOUTHAMPTON 023 8072 4888

www.turleyassociates.co.uk

TURLEYASSOCIATES