OXFORD ROAD TEMPORARY CAR PARK

DRAINAGE STATEMENT

1 INTRODUCTION

1.1 Vectos has been appointed by Total Car Parks Ltd to advise on the drainage aspects of the planning application for a Temporary car at Oxford Road. This Technical Note assesses the former use of the site and the nature of the drainage system when operating as a BBC site.

1.2 Most of the buildings on the site have now been demolished and so this assessment considers the existing drainage, the likely risk of pollutants arising from cars parking on the site and affecting the surface water network.

1.3 In this analysis consideration is given to the Pollution Prevention Guidance for sites of this nature.

2 FORMER SITE USE

2.1 The former BBC site had a number of land uses on the site including surface and undercroft car parks totalling 196 spaces as well as significant service yard areas across the site.

2.2 The former layout of the site is shown in Dwg 2010/191/100.

2.3 The eastern car park areas were laid out with grasscrete and others with concrete surfaces all with a surface water drainage system in place. The undercroft car park benefitted from a concrete base with surface water drainage.

2.4 A description of the site, its former ground conditions and drainage systems while under BBC operation is given in the WSP report, extracts of which are provided as Appendix A.There are separate foul and surface water drainage systems. Because of the depth of the main sewer connections and the main services under the road, headers had to be constructed. The total capacity of the drainage system was 54,000 litres which is the equivalent to 32mm of water over the total area of the site.

2.5 This report shows that there are three petrol interceptors on the site. Two of which were located close to an oil storage tank. These were subject to annual maintenance.

3 DEMOLITION

3.1 The buildings on the site were demolished in the summer of 2012. During this process Encia, the demolition contractors prepared a method statement which was approved by MCC engineers. The demolition took the buildings down to surface level. The site has two main level differences on the site with an upper level at the Brancaster Road side and a lower level accessed from Charles Street. Here there were surface car parks and service yards to the north and eastern parts of the site and also an undercroft car park.

4 CURRENT SITE CONDITIONS

4.1 The site has a number of different areas on the site. The eastern part of the site is shown in image 1 below.

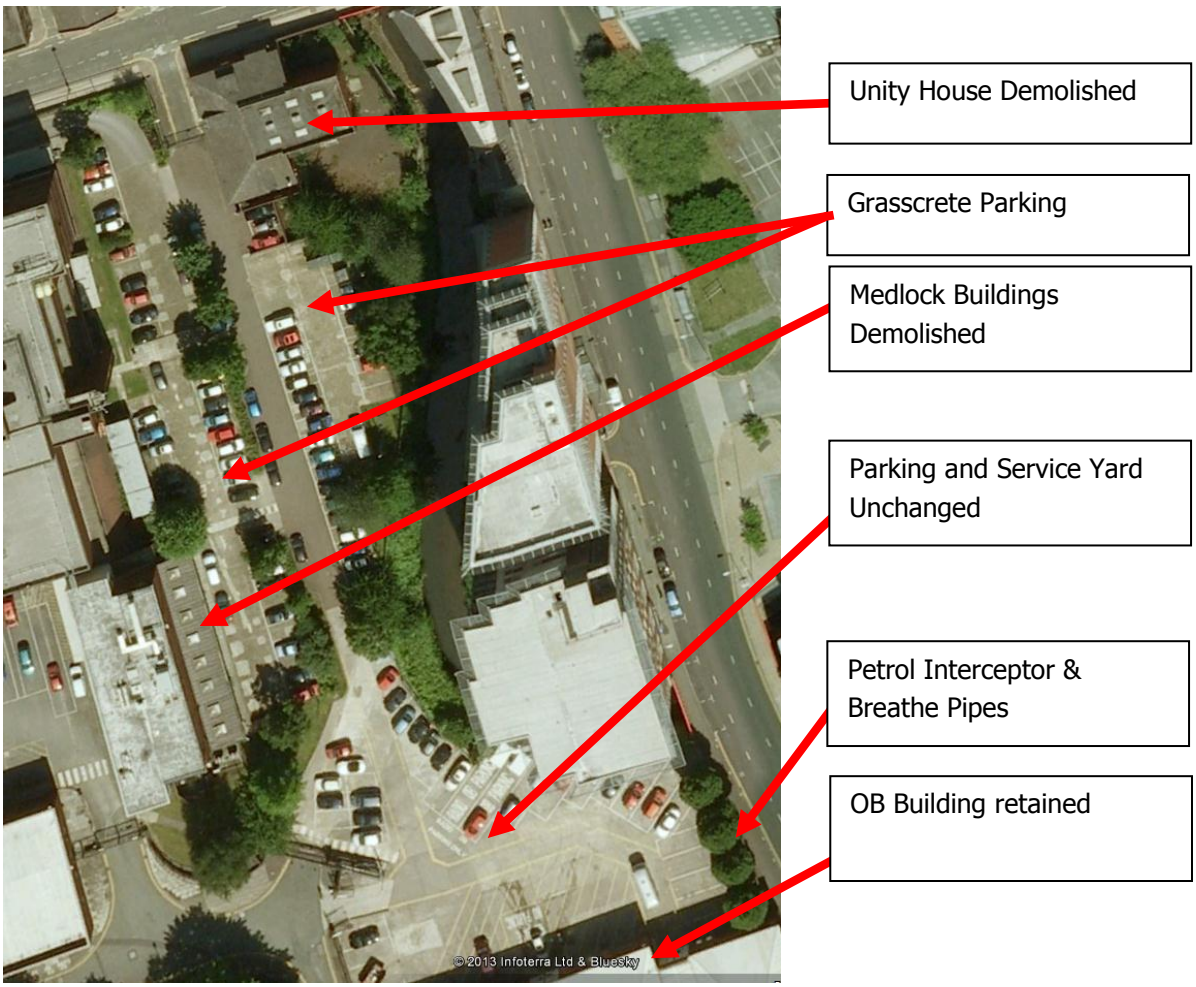

Image 1 Former BBC Areas Eastern Area

4.2 To the south east corner of the site the outside broadcasting building (OB Base) has been retained and its service yard and car park areas have not been affected by any works.

4.3 In this area a petrol interceptor together with the breathe pipes have been retained.



Image 2 Petrol Interceptor Location with Breathe Pipes

4.4 North of this area lies the former eastern car parks of the site. Many of parking areas were set out in grasscrete as shown below. In Image 3 below it can be seen the former Medlock Building base and the grasscrete parking to the north.



Image 3 Medlock Building with Former Parking area to North

4.5 The area of former parking, landscape and Unity House are shown in Image 4 below



Image 4 North Eastern Car Park areas with Unity House site to north and the River Medlock to the East

4.6 The southern part of the site is a service yard and car parking area surrounded by the Scanner Building to the south, The Main Oxford Road building to the west and the Philharmonic buildings to the north.

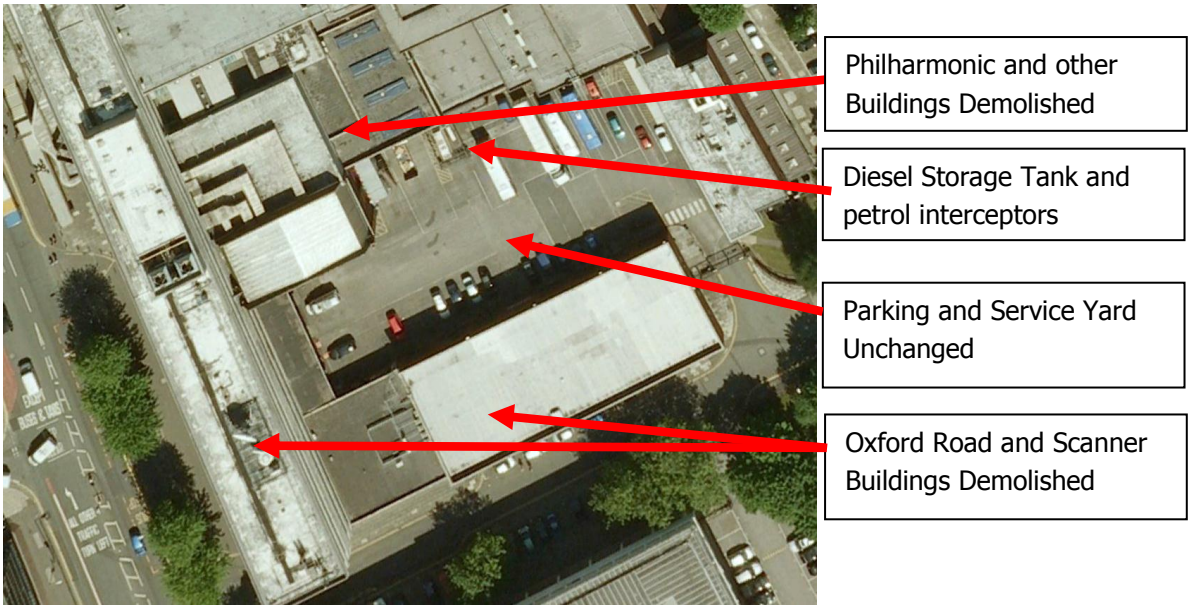

Image 5 Former BBC Areas Southern Area

4.7 The Top Yard looking east with the service yard in the middle ground and cleared building sites to the north and south is shown in Images 6 & 7.



Image 6 Former BBC Areas Top Yard Service Area looking East



Image 7 Former BBC Areas Top Yard Service Area looking East

4.8 Within this area there is a petrol interceptor within the former service yard as shown in Image 7.



Image 7 Petrol Interceptor within Top Yard Service Area.

4.9 The northern part of the site was characterised by a service yard/parking area along the Charles Street frontage which connected into an undercroft car park underneath that building. This is shown in Image 8.

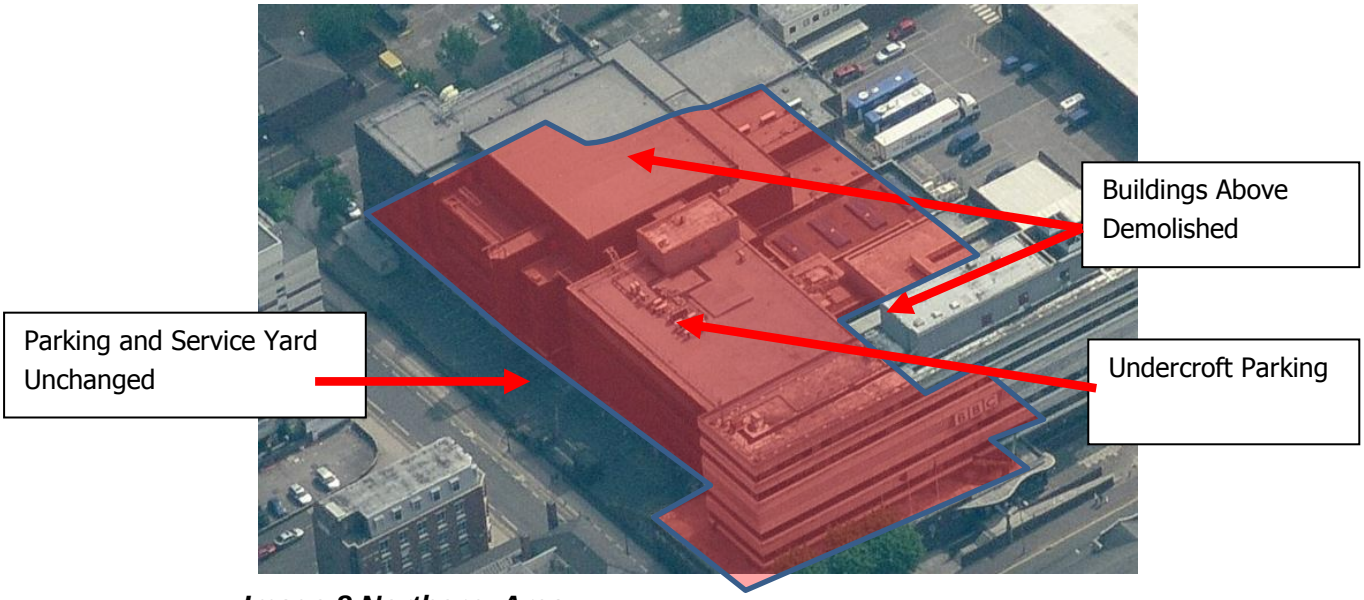

Image 8 Northern Area.

4.10 The cleared parking areas and undercroft parking of the northern area is shown in Images 9 and 10 below.



Image 9 Northern Area showing Undercroft Parking Areas



Image 10 Northern Area - Undercroft Parking level and Service Yard to the fore

4.11 The drainage of the former undercroft parking area is shown in Images 11 and 12 below.



Image 11 Undercroft Parking Drainage



Image 12 Service Yard Drainage

5 DRAINAGE FOR THE TEMPORARY CAR PARK

5.1 It can be seen from the above descriptions that there is existing drainage infrastructure that served the parking, undercroft and service yard parking for the former BBC uses. This drainage system benefitted from petrol interceptors that still remain in place.

5.2 A Ground Penetrating Radar survey was undertaken throughout the site and this picked up the drainage systems from the demolished buildings as well as the majority of the existing hardstanding areas. The survey was undertaken by Survey Operations and shown (Dwg 12E126 001-004).

5.3 The car park layout is shown in Dwg 2010/191/110. Here it can be seen that the level difference does split the car park into car parks A and B although there is in fact a connection between them.

5.4 It can be seen that significant areas of the site have already been used as car/HGV parking service yards or roadways for many years. These areas are connected to existing underground drainage systems which are intended to remain in place until the site is developed.

5.5 As previously noted, the 3no. drainage interceptors on site were subject to annual maintenance, and this maintenance plan will be continued in due course.

5.6 The potential for increased contamination risk therefore will come from those areas of hardstanding or ground floor slabs that remain following demolition of the existing buildings or those areas of landscaping that have since been cleared.

5.7 The proposed use is for a temporary car park. Considering the Pollution Prevention Guidance, there is a risk of infrequent light contamination and potential for small spills on a small scale and localised nature due to dripping engine sump oil or any petrol leakage.

5.8 Any such pollution within the existing car parking areas will be picked up within the existing petrol interceptors. Any pollution within the newly formed car parking areas (resulting from the demolition) is likely to be isolated and would in any event be widely disbursed across the site, and most likely make its way into the system treated by the petrol interceptors.

5.9 It has been noted that some of the existing drains and gullies on the site have become silted following the demolition process. This report therefore recommends that these drains and gullies are jetted to ensure the existing drains are not compromised.

6 CONCLUSIONS

6.1 This report has shown that much of the Oxford Road site was formerly used as car parking, service yards and roadways. Its proposed use as a temporary car park is not dissimilar to that former use and the surface water drainage system has been kept intact.

6.2 The site benefits form an existing surface water drainage system which has been retained during the demolition process. The site also benefits from a petrol interceptor on the Upper Brook Street side and also on the Top Yard car park close to a former storage tank.

6.3 The potential for increased contamination risk comes from those areas of hardstanding or ground floor slabs that remain following demolition of the existing buildings or from landscaped areas.

6.4 The pollution risk is considered to be low, potentially arising from infrequent light contamination and potential for small spills on a small scale and localised nature due to dripping engine sump oil or any petrol leakage.

6.5 Any such pollution is only likely to be isolated and would in any event be widely disbursed across the site.

Drawings

2010/191/100
12E126 001-004
2010/191/110