

Our reference: 061604-CUR-00-00-CO-GE-00001-V02

12 August 2021

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Dear Mike

Re: St Johns Re-development – Manchester Goods Yard

1.0 Introduction

Further to our recent e-mail correspondence we have pleasure in submitting this letter for your records and subsequent submission to Manchester City Council Planning Department (Council) to ultimately aid discharge of Planning Condition 37 in relation to application reference 121511/FO/2018.

This letter is to be read in conjunction with Lendlease letter of 12 August 2021, document reference “Confirmation Letter” (Ref.1) and its appendices.

2.0 Background

The Manchester Goods Yard development is part of the wider redevelopment of the area known as St Johns, the former Granada TV Studios located off Water Street, Manchester.

The Manchester Goods Yard part of the wider site is shown on Figure 2.1. The area of the Application reference 121511/FO/2018 development site controlled by Lendlease during their works is demarked by red line.

As instructed by Allied London, Curtins undertook a Phase 1 Desk Study and a Phase 2 Ground Investigation of the St Johns site.

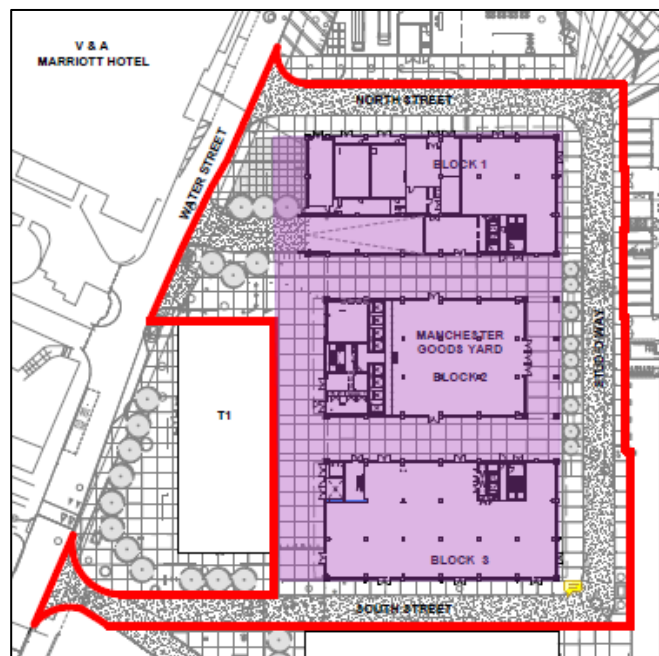


Figure 2.1 Manchester Goods Yard Development



The ground investigation was reported in the document, “St. John’s, Manchester Phase 2 Site Investigation” Curtins Ref: 065330-CUR-00-XX-RP-GE-001-V03 Revision: V03 Issue Date: 05 March 2019 (Ref.2). This report considers the wider St Johns area of which the Manchester Goods Yard is part.

Regarding ‘relevant contaminant linkages’, the conclusions of the ground investigation report (Ref.2), considered that the redevelopment of the St Johns site would include single and double basement structures across the area to be developed as shown in Figure 2.2 below. The Manchester Goods Yard development was constructed with double storey basement parking levels.

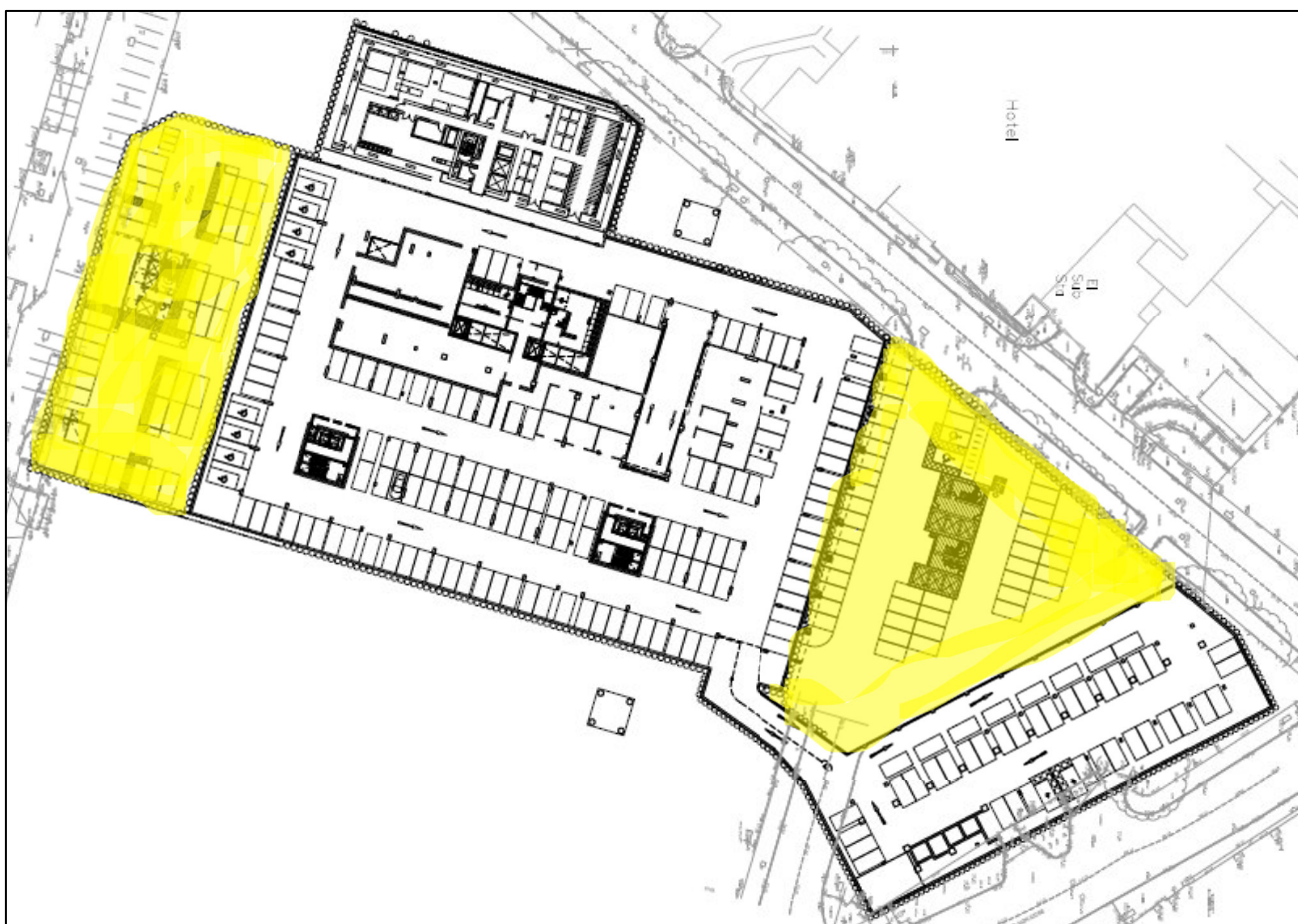


Figure 2.2 St Johns Redevelopment, Basement Plan (areas highlighted not yet constructed)

Section 10.2 (1) of the ground investigation report (Ref.2) states that “It is anticipated that all Made Ground soils are to be removed from site to facilitate the construction of a single and dual storey basement. It is unlikely that a remediation strategy will be required for this development, should development plans change the conclusions of this report should be reassessed”.

It is understood that planning Condition 36 was discharged with reference to the findings and recommendations of the report (Ref.2) and the submitted planning drawings showing the proposed extent and depth of basement and thus no remediation strategy was required by the Council.



This letter provides commentary as to how Lendlease satisfied the requirements that allowed discharge of Condition 36 in so far as their contract and thus extent of works required them to do so.

3.0 Planning Conditions

The outstanding planning condition is Condition 37 as stated below;

37) No occupation of any part of the development shall take place until a verification report demonstrating completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to and approved, in writing, by the local planning authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met. It shall also include any plan (a "long-term monitoring and maintenance plan") for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action, as identified in the verification plan. The long-term monitoring and maintenance plan shall be implemented as approved.

Condition 37 is outstanding by default due to its inclusion in the decision notice and not by actual planning process requirement. As Condition 36 was discharged without the requirement for an approved Remediation Strategy logically a remediation Verification Report is not required.

The Council have discharged Condition 36 without requiring a Remediation Strategy but implicitly that decision was made conditionally on made ground being removed from site; with reference to the statement in the Ground investigation report (Ref.2).

Therefore, it would be reasonable for the Council to require additional information and documentation to show that made ground has been removed, but not in the form of a remediation Verification Report.

Lendlease have been contracted to construct the basement, superstructure and drainage infrastructure for the Manchester Goods Yard (MGY) development. It is understood that Lendlease have not been contracted to construct the external works as shown on the approved planning drawings.

To show compliance with the reasoning made in discharging Condition 36 and thus fulfilling their obligation for providing information to aid discharge of Condition 37 it is Lendlease responsibility for confirming that all made ground within the contiguous piled wall basement structure relevant to the MGY area was removed from site as expected by the Council.

4.0 Summary of Made Ground Depths and Relevant Contaminant Linkage

Information contained within Curtins ground investigation report (Ref.2) can be used to determine that the exploratory holes identified in Table 1 below were undertaken within the footprint of the Manchester Goods Yard development site; see also Figure 4.1 below.

Table 4.1 also records, a) the made ground thickness, its commencing level and description at the exploratory hole location, b) any relevant contaminant linkages regarding Human Health risk and groundwater impact and c) whether the exploratory hole was located in the basement excavation.



Table 4.1 Manchester Goods Yard Exploratory Holes

Exploratory Hole	Existing Ground Level (m)	Made Ground Thickness (m)	Made Ground Description	Located within Basement Excavation	Relevant Contaminant Linkage (Human Health)	Relevant Contaminant Linkage (Groundwater)
WS04	-	1.7	Gravelly Sand; thin clay layer	Yes	No	No
WS05	-	1.7	Gravelly Sand and Clay	Yes	No	No
WS06	-	1.3	Gravelly Sand and Clay	Yes	No	No
WS08	-	1.2	Gravelly Sand and Clay	Yes	No	No
RBH04	-	0.48	Gravelly Sand and Sand	Yes	No	No
RBH09	26.37	1.5	Sand and Gravel	Yes	No	No
RBH10	26.37	1.0	Ash fill	Yes	No	No
RBH10A	26.28	1.7	Gravelly Sand	Yes	No	No
RBH11	26.65	4.0	Gravel, Cobble, Boulder	Yes	No	No
RBH12A	26.45	1.0	Gravel, Cobble, Gravelly Sand	Yes	No	No
RBH13	26.60	0.6	Brick Fill	Yes	No	No
RBH18A	26.47	4.0	Sand and Gravel	Yes	No	No
BH04	26.55	3.4m	Gravelly Sand	Yes	No	Yes

- Not recorded

Only BH04 presented a relevant contamination linkage but this is within the basement excavation footprint so compliance with the reasoning for discharge of Condition 36 would be obtained if the made ground soil was excavated. As stated previously the Manchester Goods Yard basement was two storeys with the same footprint (see Figure 2.2) and therefore its construction would remove the full depth of made ground to reveal natural strata throughout.

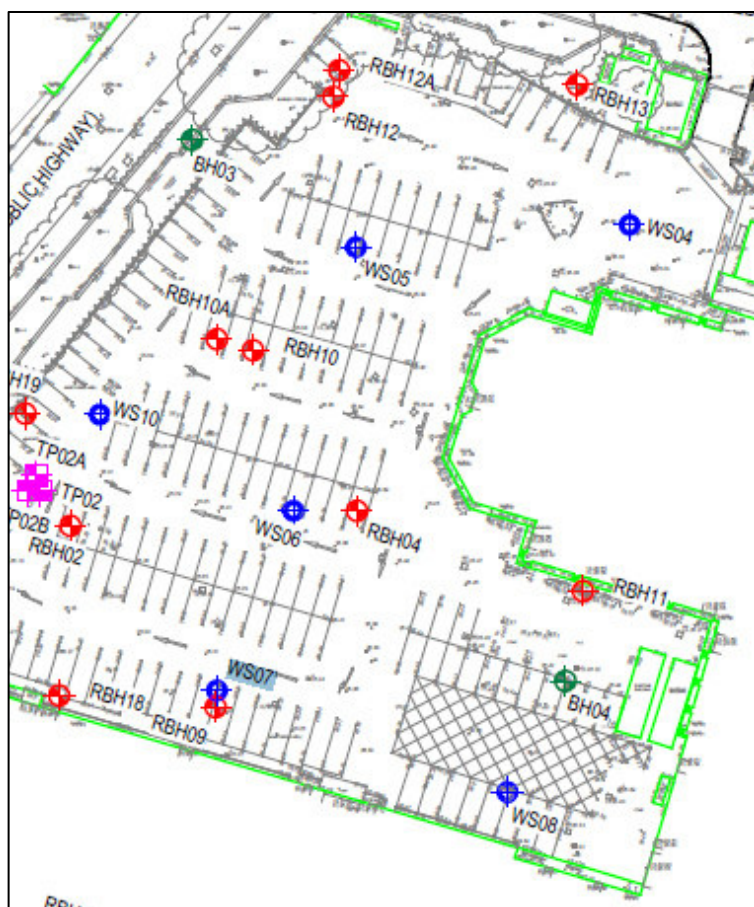


Figure 4.1 Exploratory Hole Locations

5.0 Information Requirements

Sections 2.0 to 4.0 of this letter show that the reasoning for the previous discharge of planning Condition 36 would be valid if Lendlease remove all the made ground from the basement excavation in relation to the Manchester Goods Yard development site.

Although these excavation works were not specifically undertaken as a 'remedial action' due to a relevant contaminant linkage, the completion of them as required to construct the basement would remove the only relevant contaminant linkage identified by the ground investigation report (Ref.2) in the Manchester Goods Yard development demise.

Consequently, it should be anticipated that the record information kept by Lendlease would be related to the discharge of their Duty of Care with regard to Waste Management as all excavated soils needed to be removed from site to a suitably permitted or exempt disposal facility.

For this Duty of Care, it is expected that Lendlease would record and retain the following information.

- 1) A copy of the development plan clearly showing the Lendlease 'site' with respect to the Manchester Goods Yard development and planning boundary along with the extent of the basement excavation.



- 2) A brief description of the works to be undertaken, materials to be excavated, their volume and anticipated disposal facilities prior to commencement of the works.
- 3) Confirmation by the waste producer (Lendlease and or earthworks contractor) explaining how they have classified the excavated soils for waste disposal and intend to manage the disposal.
- 4) Description of the works undertaken.
- 5) A record of the Waste Transfer/Consignment Notes including a statement on actual volumes excavated and removed from site.

6.0 Information Provided

Lendlease have provided a brief report with appendices (Ref.1). The Lendlease report is discussed within this section to confirm that they have complied with the Information Requirements stated above.

Item 1) - Lendlease have provided a plan in Appendix A of their report (Ref.1) showing the extent of their works demise and schematically showing the extents of the basement construction undertaken for the Manchester Goods Yard development. This has been extracted as Figure 2.1 above. Curtins have noted that the basement constructed currently extends under North Street as identified in Figure 2.2.

The information provided clearly shows the areas of interest regarding the Manchester Goods Yard development and the information is considered appropriate.

Item 2) – Lendlease have briefly described the works undertaken in their letter (Ref.1). They have advised that their initial estimate of excavated soil to be removed from site due to the basement excavation works was 50,000m³ with an estimated tonnage removed as 56,672 tonnes. This results in an estimated bulked density of soils removed averaging 1.13te/m³ which is perhaps low for both sand and gravel with clay made ground and natural soils.

It is known from the approved planning drawings that the lower basement level is 19.750m AOD and allowing for the basement slab the reduced level of the basement excavation would be around 19.450m AOD. The average original ground level calculated from Table 4.1 is 26.470m AOD. This determines a depth of excavation of around 7m on the Manchester Goods Yard development site. Applying this to the basement footprint of 6000m² indicates a volume of excavation around 42,000m³.

It is considered that the initially estimated tonnage of excavated soils for disposal is perhaps slightly low and its volume a slight overestimate but given the overall size of the excavation are reasonable initial allowances.

Additionally, Lendlease have identified appropriate haulier and disposal facilities in Appendix B of their letter (Ref.1).

Item 3) – In their letter (Ref.1) and with reference to its appendices B, C, D and E, Lendlease have explained their initial and further classification of soils for waste disposal. Initially they have used the chemistry laboratory results for samples of made ground obtained from the MGY basement area as reported in the ground investigation (Ref.2). They have also acknowledged that additional testing would be required to confirm the waste classification of excavated materials prior to removal from site.



The initial classification of the excavated made ground soils for disposal has been undertaken with the aid of an Atkins CATWASTE SOILS analysis. It should be noted that the CATWASTE SOILS analysis output only states whether soil samples submitted are Hazardous or Non-Hazardous. The analysis returned all samples as Non-Hazardous; a Non-Hazardous classification for the made ground was accounted for at that stage which is considered appropriate for the material description.

Further sampling on selected arising by Curtins at Lendlease request and by Lendlease on a 25m sampling grid was undertaken as reported in the Lendlease letter (Ref.1) Appendix D and E. The further sampling and assessment by Lendlease concluded that made ground classification for disposal was a) not Hazardous classification and b) a varied classification of Non-Hazardous to Inert. The excavated soils have an EWC of Mirror Non-Hazardous 17 05 04 soil and stones other than those mentioned in 17 05 03.

It is apparent that Lendlease and their earthworks contractor/approved haulier had a management plan in place for classifying for disposal and physical disposal of the excavated soils. In addition, they allowed for an Asbestos Management Plan; no Asbestos Containing Material(ACM) or soil samples with asbestos fibres were determined.

Item 4 - The information provided by Lendlease does not describe the soils removal operation in detail. From information contained in Lendlease letter (Ref.1) it is stated that bulk excavation was conducted by W.H. Maher & Son (Maher), resulting in the “removal of all made ground within in MGY demise and underlying natural ground to the required depth”. Maher were contracted by Lendlease to confirm waste classification for, and excavate and dispose of, soils from site to enable the construction of the two-story basement.

Maher classified the soils to be excavated prior to removal from site. Soils were sampled on a 25m grid and on behalf of Maher, Churchill Enviro Ltd took samples at these locations and forwarded to Enviro Lab for appropriate chemical analysis including asbestos screening.

After receipt of sample analysis results and further to waste classification Maher commenced excavation of the MGY area referenced to the grid locations. The progress of the excavation was recorded photographically in Appendix F of Lendlease letter (Ref.1). Excavated material was removed to permitted facilities by Maher under their waste carrier license and taken to the facilities outlined in Appendix G.

Although the depths of excavation or the material description are not confirmed in the Lendlease letter report (Ref.1), this is adequately covered above in Item 2 and Section 4.0. Made ground material removed from site will largely comprise sand and gravelly sand with lesser volumes of gravelly clay and rare ash and brick fill. Table 4.1 indicates that the thickness of made ground is typically not excessive across the MGY footprint.

Additionally, the photographic record (24/06/19 to 29/08/19) provided by Lendlease in Appendix F of their letter report (Ref.1) visually confirms a) the extent of the basement excavation, b) that the base of excavation is in natural soils, c) the made ground is a relatively thin layer when viewed across the full extent of the excavation and d) the made ground in the Manchester Goods Yard basement has



been fully excavated. Photographs 6.1, 6.2, 6.3 and 6.4 record the excavation at significant times during the Lendlease works.



Photograph 6.1 Southern extent of MGY excavation



Photograph 6.2 Northern extent of MGY excavation



Photograph 6.3 Northern and Western extent of MGY excavation



Photograph 6.4 Full extent of Basement Excavation

It can be seen from the information described above that the made ground has been removed from the MGY basement footprint.

Item 5 – With reference to Lendlease letter (Ref.1) Appendix H the record of soil removed can be reviewed. Lendlease have recorded the excavated soil removed from site on their environmental reporting system 'Footprint'.

The tonnage recorded in the Footprint reporting system (when all non-bulk excavation loads are excluded) is 63,237te from 4,270 eight-wheel 20te lorry loads. Using the excavation plan area as before at 6000m² and depth at 7m, a bulked density of 1.5te.m³ is determined. This suggests that the



largely granular particle size of the made ground and natural soil excavated has reduced the bulking factor of the excavated material from that originally estimated.

Waste transfer notes have been kept by Lendlease as contained in Appendix H of their letter report (Ref.1).

Curtins have not assessed whether Lendlease have complied with their Waste Management Duty of Care, this is not required for the purpose of this report. It can however be advised that Waste Transfer notes have been obtained and kept and have been recorded on Lendlease own system. The tonnage of soil disposed of and recorded in the Footprint system is considered to be reasonable when considering the nature of the material excavated and the volume of the excavation.

7.0 Conclusion

With reference to the information discussed herein it is concluded that all the made ground has been fully excavated from the MGY basement footprint; the excavation extending significantly into natural soils.

Furthermore, with specific reference to the ground investigation report "St. John's, Manchester Phase 2 Site Investigation" Curtins Ref: 065330-CUR-00-XX-RP-GE-001-V03 Revision: V03 Issue Date: 05 March 2019 (Ref.2), the relevant contaminant linkages on the MGY site determined in the report have been 'broken, due to the excavation.

The reasoning for discharging planning Condition 36 in relation to the MGY site has been found to have been complied with by Lendlease and thus planning Condition 37 can be considered to have been appropriately accounted for.

Yours faithfully

Director

For and on behalf of

Curtins Consulting Ltd