



23rd July 2021

Our Ref: - T680208 FRA L02

Countryside Properties PLC

301 Bridgewater Place,

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FLOOD COMPENSATION WORKS AT BRIDGEFIELD FORUM

1. INTRODUCTION

RSK Land and Development Engineering Ltd were appointed by Countryside Properties to assess the provided flood compensatory storage volume provided at the site.

The comments given in this report and opinions expressed are subject to RSK Group Service Constraints provided in **Appendix A**.

2. BACKGROUND

An FRA was completed for the scheme in 2015 (880590 R2(02) dated September 2015) and submitted for planning, with the application approved in January 2016.

Within the FRA a high level flood compensation assessment was undertaken (Section 8.3), with the results highlighted in the below table (replicated from table 8.1 of the FRA).

Ground Level	Fill Volume	Cut Volume
7.95 – 7.75	1527 m ³	1617 m ³
7.75 – 7.55	1165 m ³	1616 m ³
7.55 – 7.35	297 m ³	1178 m ³
7.35 – 7.15	30 m ³	130 m ³
Total	3019 m ³	4541 m ³



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While there is no requirement or justification to provide a betterment in flood compensatory storage, a condition was imposed requiring 4,451m³ of compensatory volume, which is some 1,533m³ over what can be justified.

3. CURRENT SITUATION

Following the build out of the site, a request to assess the ground level changes in the POS area on site was received.

Initial assessment of the POS areas between the pre development topographic survey and the as built survey noted a provided 'cut' volume of 1,327m³ (Figure 1 below).

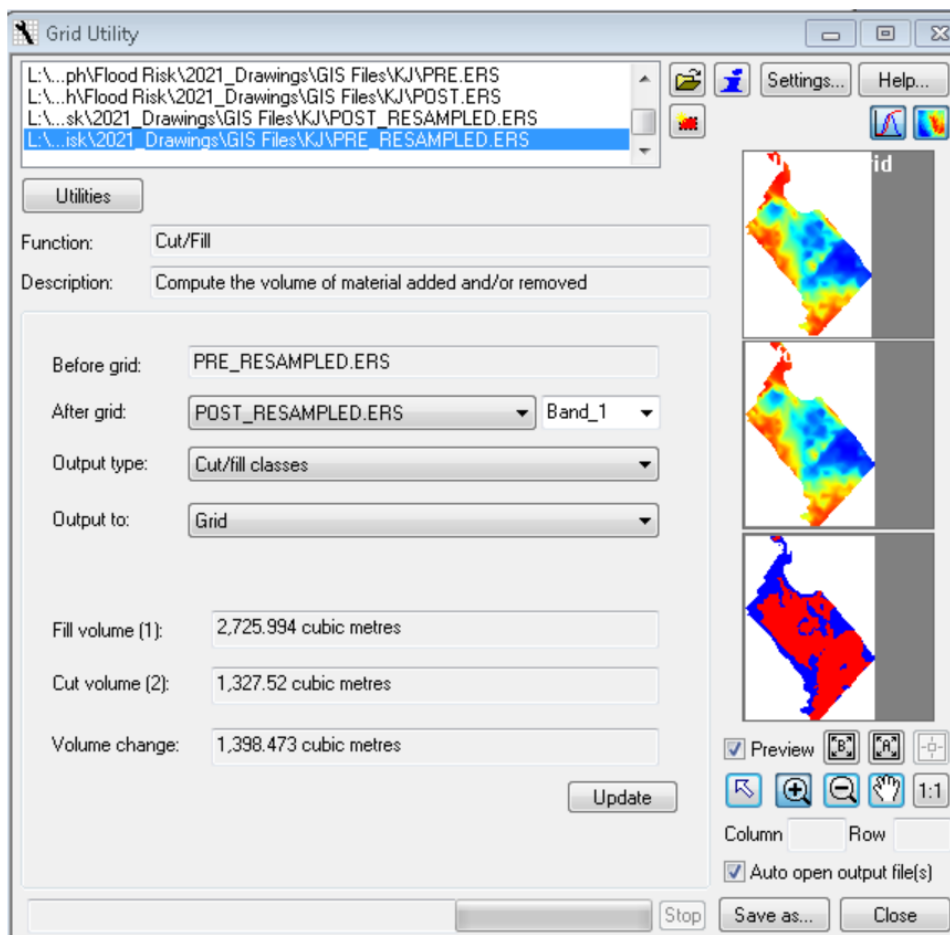


Figure 1: POS area (pre development to as built) calculations

As a result of the initial findings a further cut and fill assessment has been undertaken on the as built survey seeking to provide further compensatory storage at the site.

Due to the existing constraints at the site (including but not limited to the United Utilities water main within the area and connectivity), further cut operations are restricted to an area in the eastern section of the POS. A snapshot of the cut and fill analysis is provided in Figure 2 below, while the original plan is enclosed within Appendix B.

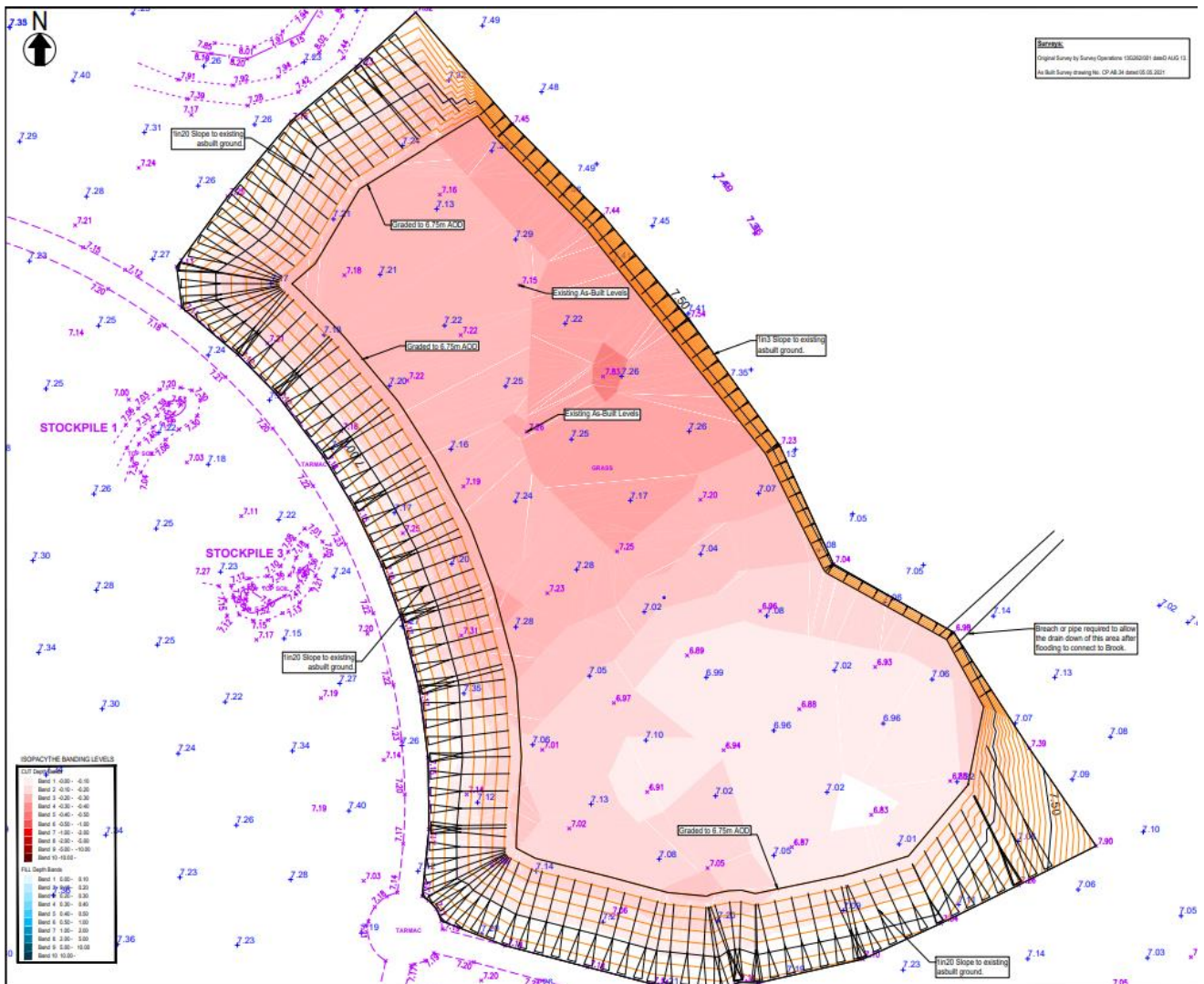


Figure 2: Proposed additional area of cut

4. COMPENSATORY FLOOD STORAGE PROVISION

Based on the assessments undertaken, the achievable compensatory flood storage provided as a combination of the cut volume from the pre development situation to the as built (1,327m³) and the additional proposals (1,781m³) totals **3,108m³**.

Whilst there is no requirement to, the development therefore provides the compensatory area it is obliged to meet plus betterment in compensatory flood storage volume of **89m³** with existing constraints restricting the ability to attain the figure for cut as quoted in the condition.

We trust this information is sufficient for your immediate needs, however please do not hesitate to contact the undersigned if you require any further information.

Yours sincerely

RSK LDE LIMITED



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Senior Hydrologist



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Enc. Appendix A – RSK service constraints

Enc. Appendix B – RSK Proposed Additional Cut and Fill plan

APPENDIX A

SERVICE CONSTRAINTS

RSK Group service constraints

1. This report and the Drainage design carried out in connection with the report (together the "Services") were compiled and carried out by RSK LDE Ltd (RSK) for Countryside Properties PLC (the "client") in accordance with the terms of a contract between RSK and the "client". The Services were performed by RSK with the skill and care ordinarily exercised by a reasonable Civil Engineer at the time the Services were performed. Further, and in particular, the Services were performed by RSK taking into account the limits of the scope of works required by the client, the time scale involved and the resources, including financial and manpower resources, agreed between RSK and the client.
2. Other than that expressly contained in paragraph 1 above, RSK provides no other representation or warranty whether express or implied, in relation to the Services.
3. Unless otherwise agreed the Services were performed by RSK exclusively for the purposes of the client. RSK is not aware of any interest of or reliance by any party other than the client in or on the Services. Unless expressly provided in writing, RSK does not authorise, consent or condone any party other than the client relying upon the Services. Should this report or any part of this report, or otherwise details of the Services or any part of the Services be made known to any such party, and such party relies thereon that party does so wholly at its own and sole risk and RSK disclaims any liability to such parties. Any such party would be well advised to seek independent advice from a competent environmental consultant and/or lawyer.
4. It is RSK's understanding that this report is to be used for the purpose described in the introduction to the report. That purpose was a significant factor in determining the scope and level of the Services. Should the purpose for which the report is used, or the proposed use of the site change, this report may no longer be valid and any further use of or reliance upon the report in those circumstances by the client without RSK's review and advice shall be at the client's sole and own risk. Should RSK be requested to review the report after the date hereof, RSK shall be entitled to additional payment at the then existing rates or such other terms as agreed between RSK and the client.
5. The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions contained in this report should not be relied upon in the future without the written advice of RSK. In the absence of such written advice of RSK, reliance on the report in the future shall be at the client's own and sole risk. Should RSK be requested to review the report in the future, RSK shall be entitled to additional payment at the then existing rate or such other terms as may be agreed between RSK and the client.
6. The observations and conclusions described in this report are based solely upon the Services, which were provided pursuant to the agreement between the client and RSK. RSK has not performed any observations, investigations, studies or testing not specifically set out or required by the contract between the client and RSK. RSK is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this report, RSK did not seek to evaluate the presence

on or off the site of asbestos, electromagnetic fields, lead paint, heavy metals, radon gas or other radioactive or hazardous materials.

7. The Services are based upon RSK's observations of existing physical conditions at the site gained from a walk-over survey of the site together with RSK's interpretation of information including documentation, obtained from third parties and from the client on the history and usage of the site. The Services are also based on information and/or analysis provided by independent testing and information services or laboratories upon which RSK was reasonably entitled to rely. The Services clearly are limited by the accuracy of the information, including documentation, reviewed by RSK and the observations possible at the time of the walk-over survey. Further RSK was not authorised and did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the Services. RSK is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to RSK and including the doing of any independent investigation of the information provided to RSK save as otherwise provided in the terms of the contract between the client and RSK.

8. The phase II or intrusive environmental site investigation aspects of the Services is a limited sampling of the site at pre-determined borehole and soil vapour locations based on the operational configuration of the site. The conclusions given in this report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent of the limited area depends on the soil and groundwater conditions, together with the position of any current structures and underground facilities and natural and other activities on site. In addition chemical analysis was carried out for a limited number of parameters [as stipulated in the contract between the client and RSK] [based on an understanding of the available operational and historical information,] and it should not be inferred that other chemical species are not present.

9. Any site drawing(s) provided in this report is (are) not meant to be an accurate base plan, but is (are) used to present the general relative locations of features on, and surrounding, the site.



APPENDIX B

RSK PROPOSED ADDITIONAL CUT AND FILL DRAWING
