

Technical Note

Project Mayfield Park
Subject Flood Risk Assessment Statement of Conformity
Project no 0046688
Date 7 October 2021

Revision	Description	Issued by	Date	Approved (signature)
00	Draft	HM	07.10.2021	JF

1 Introduction

This Statement of Conformity has been prepared by Buro Happold to support the Environmental Statement (ES) Addendum, for a Section 73 application for amendments to Mayfield Park (Ref. 124972/FO/2019), hereafter referred to as the 'proposed amendments'. The proposed amendments include changes to the layout of the park only, with amendments to levels, flood compensation areas, tree planting, drainage, remediation and phasing of the development.

This Statement of Conformity considers the impact of the proposed amendments on flood risk, including commentary on any updates to planning policy, guidance or baseline data, and should be read in conjunction with the original Flood Risk Assessment (FRA) for the development, dated September 2019 and prepared by Buro Happold, hereafter referred to as the '2019 FRA'.

Since the submission of the 2019 FRA, Buro Happold has also carried out detailed hydraulic modelling of the proposed development to support the discharge of Condition 22 of planning application ref. 124972/FO/2019. This Statement of Conformity should therefore also be read in conjunction with the following Buro Happold hydraulic modelling reports which have been approved by the Environment Agency (EA):

- Hydraulic Modelling – Mayfield Park Enabling Works (Rev. 01, dated 05/02/2021) – hydraulic modelling to assess the impact of the Mayfield Park development during the construction phase; and
- Hydraulic Modelling – Mayfield Park Full Build Out (Rev. 02, dated 20/04/2021) – hydraulic modelling to assess the impact of the Mayfield Park development in the case where all landscaping works are complete, referred to as the Full Build Out model.

Further commentary on the hydraulic modelling is included in Section 4.1.

2 Planning Context

Although revisions to the National Planning Policy Framework (NPPF) and the NPPF Planning Practice Guidance have been published since the submission of the original 2019 FRA, the updates do not include significant changes that have an impact on the assessment of flood risk. The commentary provided within all of the previous flood risk management reports is therefore considered to remain valid.

There have been no changes or revisions to any of the other planning documents referred to in the 2019 FRA.

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3 Proposed Amendments

The proposed amendments relevant to flood risk include the following:

- **Phasing:** the park is now proposed to come forward in a single phase, rather than in three separate phases. This means that there are no longer phased measures to control river flow, save for those that need to take place whilst the park is being physically delivered.
- **River walls, silted banks, floor areas and green corridor:** rather than removing the existing river walls to the River Medlock and replacing these with new flow control elements, these will predominantly be retained, adapted and refurbished.
- **Relocation of areas:** the former 'wetland area' to the north east of the site is to become the 'Play Yard'. The former play yard area, where Dirt Factory is currently located, will become the new 'wetland area' and will provide areas of flood compensation and manage flood risk on site, up-stream and downstream in line with the new river design.

No changes are proposed to the buildings that are covered by the original ES, including Plots O (Office 1 – 'The Poulton'), Plot N (multi-storey car park) and Plot M (Office 2 – 'The Republic').

A full description of the proposed amendments is included in Section 1 of the ES Addendum.

4 Changes to Flood Risk

4.1 Hydraulic Modelling

Detailed hydraulic modelling of Mayfield Park was carried out between November 2020 and February 2021, as part of the work to discharge Condition 22 of planning application ref. 124972/FO/2019. The hydraulic modelling was approved by the EA in March 2021 and Condition 22 was discharged in May 2021.

All of the proposed amendments described in Section 3 were included in the layout of the proposed Mayfield Park development which was used in the hydraulic modelling approved by the EA. No further updates to the hydraulic modelling are therefore required.

The design flood event for the Full Build Out model is the 1 in 100 year plus 35% climate change allowance, however the 1 in 25 year and the 1 in 100 year return period events were also tested. The reporting of the Full Build Out modelling included an assessment of the impact on water levels and extent of flooding upstream and downstream of the site, with a particular focus on locations known from previous work to be of concern.

The results of the Full Build Out modelling indicate that for all flood events tested, the Mayfield Park development does not cause a change in water level from the baseline of greater than 15mm, and in the majority of locations, this difference is less than 1mm.

The Full Build Out hydraulic modelling report concluded that the results are in line with the conclusions reported in the 2019 FRA, and demonstrate that the complete Mayfield Park does not cause an adverse impact on flood levels or extent, either upstream or downstream of the site.

4.2 Flood Risk from All Sources

The impact of the proposed amendments on flood risk from all sources included in the original 2019 FRA is summarised in Table 4-1:

Table 4-1: Impact of proposed amendments on flood risk

Source of Flooding	Impact of Proposed Amendments	Commentary
Fluvial	No impact	Refer to commentary on hydraulic modelling given in Section 4.1.
Surface Water	No impact	The proposed amendments are included in the detailed surface water drainage design that has been carried out as part of the work to discharge the relevant planning conditions. The risk of surface water flooding is therefore considered to remain low.
Groundwater	No impact	The proposed amendments will not significantly change the dimensions of any below ground structures and will therefore not have an impact on groundwater flood risk, which is therefore considered to remain low.
Artificial Sources	No impact	The proposed amendments will not have an impact on the maximum extent of flooding that would occur in the event of a reservoir or canal failure. The risk of flooding from artificial sources is therefore considered to remain low.

The conclusions reported in the original 2019 FRA regarding flood risk from the sources in Table 4-1 are therefore considered to remain valid and unchanged.

5 Summary and Conclusion

This Statement of Conformity has been prepared by Buro Happold to support the ES) Addendum, for a Section 73 application for amendments to Mayfield Park. The proposed amendments include changes to the layout of the park only, with amendments to levels, flood compensation areas, tree planting, drainage, remediation and phasing of the development.

This Statement of Conformity considers the impact of the proposed amendments on flood risk, including commentary on any updates to planning policy, guidance or baseline data, and should be read in conjunction with the 2019 FRA and the recent hydraulic modelling reports, also prepared by Buro Happold.

All of the proposed amendments described in this report were included in the layout of the proposed Mayfield Park development which was used in the hydraulic modelling of the completed development, referred to as the Full Build Out scenario.

The results of the Full Build Out modelling indicate that for all flood events tested, the Mayfield Park development does not cause a change in water level from the baseline of greater than 15mm, and in the majority of locations, this difference is less than 1mm. This hydraulic modelling was approved by the EA in March 2021.

The Full Build Out hydraulic modelling report concluded that the results are in line with the conclusions reported in the 2019 FRA, and demonstrate that the complete Mayfield Park does not cause an adverse impact on flood levels or the extent of flooding, either upstream or downstream of the site.

The proposed amendments will not have an impact on the risk of flooding from surface water, groundwater or artificial sources. The conclusions reported within the 2019 FRA regarding flood risk from these sources are therefore considered to remain valid and unchanged which, for clarity, are all considered to be low.