

Fleming Park Paddling Pool- flood risk application

22/07/24

1. Risk Assessment

We believe that by all reasonable measure, there is no risk to flood water storage or movement from this proposal.

1.1 Embankments- flood impact

We would like to introduce an embankment around 1.4m high to the north side of the paddling pool (almost all outside of flood zone 3). Second, we wish to raise slightly the lawn to the far west of the paddling pool within the area of railings. The latter will create a relatively flat area of grass from which families can sit and view the paddling pool area. The area would only be raised by around 450mm and there would be a flat area for 500mm inside the railings. The steeper sections of the earthworks along the west side would be around 5.5m or greater from Monks Brook bank at their nearest point, so there is no risk of structural damage to the stream bank from the works. The taller bank steep sections would be further away, at around 7.5m at nearest point.

There is some limited impact on flood storage, which we will re-provide as a shallow ditch to the north of the paddling pool. All the calculations relating to this and a plan showing section positions and a series of cross sections through the earthworks closest to Monks Brook are to be found in drawings;

Fleming Park Paddling Pool and Play Area: Location plan and Red line area S4E38- 01

Fleming Park Paddling Pool and Play Area: Phase 2 proposals S4E38- 02

Fleming Park Paddling Pool and Play Area: Levels and cross-section positions S4E38- 03

Fleming Park Paddling Pool and Play Area: Cross-sections A- I S4E38- 04

Fleming Park Paddling Pool and Play Area: Cross-sections J -L S4E38- 05

Fleming Park Paddling Pool and Play Area: Flood slice-section areas and calculations S4E38- 06

1.2 Embankments - environmental impact

The existing area of space and the proposed earthworks are all currently areas of close mown grass. The area of change of grass will be a slight increase. The works will introduce increased variety of micro-habitats, because of the introduction of slopes at different aspects.

1.3 Tree and shrub planting- flood impact

We wish to plant a number of trees, however only around three or four of these are within the flood plain zone 2 area. The trees, especially when in leaf, will mitigate flood risk to a minor degree. This is through the delay of runoff and direct absorption by the trees. The root systems of these trees will also provide channels which are likely to increase the rate of absorption of runoff by the soil.

1.4 Tree and shrub planting- environmental impact

The planting will provide a solely beneficial impact on the environment. Increased feeding and roosting opportunities for birds and invertebrates will be the main benefits. The area will be closed to the public during the (generally) wettest 9 months of the year. This will enhance the value of the shrub areas for wildlife sensitive to human presence.

2. Management Systems

We will comply with Eastleigh Borough Council systems for dealing with any of the following;

- Fuel spills or other chemical releases from the digger used to carry out the excavation for tree pits and post railing post holes.
- Any other incidents likely to result in a negative impact on the water course.

It should be noted that as a planning authority, this council employs an environmental health team with expertise in pollution, offering immediate expert advice free of charge in the unlikely event of an incident.