Response to Antrim and Newtownabbey Draft Plan Strategy South Bank Square Limited

September 2019



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Our reference BSGB3006

September 2019

Executive Summary

- 1. This representation is submitted on behalf of South Bank Square Limited who welcome the opportunity to submit comments on the Draft Plan Strategy issued by Antrim and Newtownabbey Borough Council (ANBC).
- 2. South Bank Square Limited supports the Council's general vision for growth, however see it important that housing need is met in the right places and is commensurate with the levels of population growth and economic growth in the Borough.
- 3. Having reviewed and considered the Local Development Plan as issued, we consider the Plan to be unsound. The legal compliance tests (P1 and P3) have not been met, specifically in relation to the Strategic Environmental Assessment Regulations and guidance, and the following policies contained within the Draft Plan Strategy are unsound. The table below summarises the changes sought.

Policy	Comment	Soundness Test	Section ref.
Vision	Whilst the Vision of the draft Plan Strategy is supported, insofar as the Vision refers to 2030, the plan period should be extended to 2035 to increase the potential for the plan to take full account of RDS directions and achieve its own Spatial Growth Strategy.	C1, C3, CE4	Section 7
Policy SP4 Homes - specifically SP4.2, SP4.3 and SP4.4	The Borough's overall housing allocation should be increased, potentially to the 13,000 set out in the POP – this would also enhance the ability of the Plan to be flexible to deal with changing circumstances (Soundness Test CE4).	C1, C4, CE1 & CE4	Section 9
	Metropolitan Newtownabbey (particularly) and Antrim should receive the majority of the additional allocation.		
	The housing supply evidence base of the Plan should be reviewed to ensure that it represents a robust level of deliverability such that the potential need for any additional land for housing can be identified.		
Policy SP2 Employment	Mallusk is identified as a Strategic Employment Location within Metropolitan Newtownabbey.	CE2	Section 9 & Appendix 5
	The Council's target for job growth, as established through Strategic Policy 2, could be more ambitious in the context of the current employment levels.		
	The plan is unsound as insofar as since		

Schedule of Key Comments

insufficient homes are allocated in settlements such as Metropolitan Newtownabbey with the greatest potential for economic development, there is a coherence issue between the housing and employment allocations. Additional housing should be allocated to Metropolitan Newtownabbey, commensurate with its employment allocation.

1. Introduction & Background

- 1.1 This representation sets out South Bank Square Limited's ('the Company') position and response to the Antrim and Newtownabbey, Draft Plan Strategy 2030 proposals.
 - Section 2 sets out the Legislative Context of plan making;
 - Section 3 provides a summary of soundness in Plan Making;
 - Section 4 considers the Aims and Ambition of the Draft Plan Strategy;
 - Section 5 sets out The Case for Growth in Metropolitan Newtownabbey;
 - Section 6 considers the aspects of the draft Plan Strategy policy which the Company considers to be unsound; and
 - Section 7 provides a summary and conclusion of the representation.
- 1.2 A completed copy of Antrim and Newtownabbey Council's pro forma response to the Draft Plan Strategy is at **Appendix 1** of this submission.
- 1.3 The lands owned by the Company in Mallusk, which set the context of the representation are identified at **Appendix 2** of this submission.

2. Legislative Context

- 2.1 Sections 6 (1) and (2) of the Planning Act (Northern Ireland) 2011 (the 2011 Act) set out that in Northern Ireland, the local development plan (LDP) for each of the 11 local authorities comprises a plan strategy (PS) and a local policies plan (LPP).
- 2.2 The PS represents the first formal stage of the two stage LDP process and Section 8(1) of the 2011 Act requires all Councils in Northern Ireland to prepare a PS for their districts. Section 8 (2) advises that a PS must set out:
 - (a) the Council's objectives in relation to the development and use of land in its district;
 - (b) its strategic policies for the implementation of those objectives; and
 - (c) such other matters as may be prescribed.
- 2.3 It is worth noting that the requirements of a PS differ to those of a LPP, which are set out under Section 9(2) of the 2011 Act, these being:
 - (a) the council's policies in relation to the development and use of land in its district; and
 - (b) such other matters as may be prescribed.
- 2.4 The Act also sets out at Section 8 (4) that the Plan Strategy should be prepared in accordance with the Council's Timetable, as approved by the Department and in accordance with Council's Statement of Community Involvement.
- 2.5 The latest version of the Local Development Plan (LPD) timetable available on Council's website, dated July 2018 sets out the publication of the dPS in Q4 2018/2019. We acknowledge that this was an estimate, however in practice the dPS was published in Q2 2019/2020; 4 months after the agreed date set out in the timetable. In line with the direction set out in the Act, we would respectfully suggest that consideration should be given to modifying the timetable.
- 2.6 Essentially, the purpose of a PS is to provide the strategic policy framework for the plan area as a whole across a range of topics¹, whereas the purpose of the LPP is to set out the local policies and site specific proposals in relation to the development and use of land in its district².
- 2.7 Section 8(5) prescribes the following elements which a Council must take into account when preparing a PS:
 - (a) the regional development strategy (i.e. the RDS 2035);
 - (b) the council's current community plan (i.e. Love Living Here);

¹ Development Plan Practice Note 07 - The Plan Strategy, April 2015

² Development Plan Practice Note 08 - The Local Policies Plan, April 2015

- (c) any policy or advice contained in guidance issued by the Department (i.e. the SPPS); and
- (d) such other matters as the Department may prescribe or, in a particular case, direct.
- 2.8 However, it is noted that Section 8(5) also provides the Council with discretion to have regard to such other information and considerations as appear to the council to be relevant.
- 2.9 In terms of form and content, Part 4 of the Planning (Local Development Plan) Regulations (Northern Ireland) 2015 (the 2015 Regs) set out the relevant requirements. It is important to highlight that Regulation 12 (2) of the 2015 Regs states that 'A development plan document must contain a reasoned justification of the policies contained in it'. Furthermore, Regulation 12 (3) requires such reasoned justification of the policies to be clearly distinguishable from the policies.
- 2.10 The Department has set out a number of objectives within Development Plan Practice Note 07 - The Plan Strategy, dated April 2015, which should be incorporated in the PS. These objectives are reproduced below, as they have helped to guide our review, assessment and critique of Antrim and Newtownabbey's Draft Plan Strategy:
 - reflect longer term local aspirations, based on a vision, objectives and strategic policies agreed to by the community and stakeholders;
 - provide a plan-led strategy specific to the area covered, to act as a basis for rational and consistent decisions about the use and development of land and identify interdependencies and relationships between places both within and across administrative boundaries;
 - provide a settlement hierarchy which identifies settlements and their role within the hierarchy in accordance with the RDS 2035 Spatial Framework Guidance and any policy or advice issued by the Department such as the SPPS and the current community plan;
 - allocate land for housing whilst taking account of the strategic objectives and guidelines contained in the RDS and any policy or advice issued by the Department such as the SPPS and the current community plan;
 - facilitate economic development and the creation of employment whilst taking account of the RDS 2035 Spatial Framework Guidance and any policy or advice issued by the Department such as the SPPS, and the current community plan;
 - facilitate sustainable patterns of growth and regeneration whilst promoting compact urban forms and protecting and maintaining distinctive local character and viability. This may include strategic zonings and/or policy areas where considered necessary;

- identify and define, as appropriate, transportation related proposals, whilst taking account of the RDS and regional transportation proposals contained in Ensuring a Sustainable Transport Future (ESTF);
- conserve, sustain and enhance the area's environmental qualities, local distinctiveness and sites of environmental importance in terms of landscape character and diversity, wildlife and habitats, townscape and archaeology;
- promote the development of sustainable tourism, recreational and other community facilities that will positively contribute to the amenity and wellbeing of the population; and
- facilitate the promotion of equality of opportunity and good relations between persons of different religious belief, political opinion or racial group.
- 2.11 The Department also advises councils to '...aim to ensure that its PS is *both realistic and deliverable* taking into account the *resources available and any potential constraints* which may arise during the plan period' (our emphasis). Furthermore, in order to allow for unforeseen circumstances, the Department directs councils to '...aim to incorporate *a degree of flexibility* within its PS *to ensure* that its objectives and strategic policies for its area can still be *delivered*' (our emphasis).
- 2.12 Once drafted, a PS is required to undergo a formal 8 week period of public consultation and following this, all representations submitted will be made available for public inspection (counter representations) for a further 8 week period. The Department advises that all representations should provide evidence to demonstrate why the draft PS is unsound and/or how any proposed changes make the draft PS more sound³.
- 2.13 Ultimately, the plan strategy will undergo an independent examination and must be found 'sound' if it is to be formally adopted.

³ Development Plan Practice Note 07 - The Plan Strategy, April 2015

3. Soundness in Plan Making

- 3.1 The keystone of the local development plan system is the principle of 'soundness'. Section 10(6) of the 2011 Act provides that the purpose of the Independent Examination (IE) is to determine, in respect of the development plan document:
 - (a) whether it satisfies the requirements of sections 7 and 8 or, as the case may be, sections 7 and 9, and any regulations under section 22 relating to the preparation of development plan documents; and
 - (b) whether it is sound.
- 3.2 The Planning Act (Northern Ireland) 2011 does not define the meaning of 'soundness'. However, Development Plan Practice Note 6 – Soundness (DPPN 6), dated May 2017, suggests that it may be considered in the context of its ordinary meaning of 'showing good judgement' and 'able to be trusted'.
- 3.3 Furthermore, DPPN 6 states that the tests of soundness are based upon three categories. These three categories relate to:
 - how the development plan document (DPD) has been produced;
 - the alignment of the DPD with central government regional plans, policy and guidance; and
 - the coherence, consistency and effectiveness of the content of the DPD.
- 3.4 DPPN 6 advises that 'soundness' involves testing the principles, content and preparation process of the DPD against a list of key criteria. DPPN 6 then sets out the following tests which '...aim to provide a framework to assess the soundness of the DPD, whilst taking account of all relevant procedural, legislative and policy considerations':

Procedural tests

- P1. Has the plan been prepared in accordance with the council's timetable and the Statement of Community Involvement?
- P2. Has the council prepared its Preferred Options Paper and taken into account any representations made?
- P3. Has the plan been subject to sustainability appraisal including Strategic Environmental Assessment?
- P4. Did the council comply with the regulations on the form and content of its plan and on the procedure for preparing the plan?

Consistency tests

• C1. Did the council take account of the Regional Development Strategy?

- C2. Did the council take account of its Community Plan?
- C3. Did the council take account of policy and guidance issued by the Department?
- C4. Has the plan had regard to other relevant plans, policies and strategies relating to the council's district or to any adjoining council's district?

Coherence and Effectiveness tests

- CE1. The plan sets out a coherent strategy from which its policies and allocations logically flow and where cross boundary issues are relevant is it in conflict with the plans of neighbouring councils.
- CE2. The strategy, policies and allocations are realistic and appropriate having considered the relevant alternatives and are founded on a robust evidence base.
- CE3. There are clear mechanisms for implementation and monitoring.
- CE4. The plan is reasonably flexible to enable it to deal with changing circumstances.
- 3.5 Although the tests of soundness are based upon three categories procedural, consistency, coherence and effectiveness, there is a degree of overlap in terms of the criteria used for each test. The purpose of the IE will be to examine how the DPD meets each test and determine whether the DPD is sound as a whole.

4. Vision and Ambition

- 4.1 The Company welcomes the Council's Vision set out within the Draft Plan Strategy (DPS) that by 2030 the "Antrim and Newtownabbey Borough will have a reputation as an excellent, attractive and diverse place in which to live and work. It will be a place that all citizens can take pride in and that is appealing to new residents, investors and visitors alike, with improved job opportunities, housing availability and connectivity that meets the needs of our community"
- 4.2 The vision is focused on the Borough being a place to live and work. Whilst this is supported, it is important that housing need is met in the right places and is commensurate with the levels of population growth and economic growth.
- 4.3 The Council has significantly reduced its overall assessment of housing growth requirements from the Preferred Options Paper (POP) when it was 13,000 to a figure of 9,750 in the DPS⁴. Importantly, this figure is neither a target to be met nor a cap which cannot be exceeded.
- 4.4 The plan horizon is to 2030 calculated as 15 years from 2015 when Council assumed plan making responsibility. On the basis of the Council's latest published timetable, the Local Policies Plan (LPP) part of the plan is not anticipated to be adopted until the end of 2023/2024.
- 4.5 Given the risks to programme, it would be optimistic to suggest that the LPP part of the Plan would be adopted during 2024. Arguably 2025 or 2026 would be more likely. This would leave only four or five years of a plan period to 2030. The decision for the Council then would be whether to undertake the five year review of the plan or start a new plan making process at this point.
- 4.6 Whilst it is obviously understood that plans are material beyond their stated end date, given the time and resources being invested in the process by the Council, consultees and stakeholders, getting the most out of the plan making process is critical, particularly given the age of the 'legacy' plans such as the Newtownabbey Area Plan and the Antrim Area Plan.
- 4.7 The length of time it takes to prepare applications and secure planning permission on freshly zoned land is also an important consideration a newly zoned site for housing or employment in 2026 would not be likely to be able to be commenced until 2028.
- 4.8 Belfast City Council has taken a slightly longer term view and established a plan period to 2035. Derry City & Strabane District Council has set out a plan period to 2032.
- 4.9 A longer plan period, to 2035 would not only provide more scope to better reflect the direction of the RDS, it would also make it more likely that the final plan could clearly and distinctively move the statutory plan for the Borough beyond the 'inherited' strategies, limits and zonings of the legacy plans this would also be consistent with

⁴ At paragraph 5.12 of the POP the 13,000 figure is explained as 9,750 during the Plan Period and a five year housing land supply at the end of that period.

the Development Plan Practice Note 01 reference to a 15 year plan framework. Otherwise the risk is that when the LPP part of the plan is finally adopted, comparison with the previous plans could raise questions around what has actually changed. With the repatriation of planning to local government, this would not be a welcome part of the debate for the new Council's first plan.

- 4.10 Selection of a longer plan period would also reduce the risk of having to identify additional reserves of land to bridge a gap which might emerge in future. This has been the experience in other plan-making exercises such as the Lisburn Area Plan 2001 and BMAP.
- 4.11 The Council believes that there is an ample supply of land to meet and exceed the housing growth requirement. It considers there to be only a minimal requirement for the zoning of additional land for housing unless location specific needs dictate otherwise (DPS para 7.14).
- 4.12 Whilst the majority of zoned housing sites are considered by Council likely to be delivered through existing housing commitments, where a location specific need arises, the identification of new sites will be undertaken in line with the RDS target to locate 60% of new homes on existing vacant and underutilised land within the urban footprint of settlements over 5,000 units.
- 4.13 The Company submits that the DPS must be amended in line with the modifications sought within and throughout this submission, if it is to deliver upon the LDP DPS vision.
- 4.14 We respectfully submit that until this happens, the provisions of the plan will not allow its vision and strategic objectives to be achieved, indeed insofar as the Vision refers to 2030, the plan period should be extended to 2035 to increase the potential for the plan to take full account of RDS directions and achieve its own Spatial Growth Strategy. At present the Vision is unsound in respect of soundness tests C1, C3, CE4.

5. Metropolitan Newtownabbey - The Case for Growth in Mallusk

- 5.1 Metropolitan Newtownabbey has a strong identity in its own right and also forms an important part of the continuous built up area of the Belfast Urban Area/Belfast Metropolitan Urban Area (BUA/BMA).
- 5.2 It has a scale and critical mass of its own⁵ but it also has a physical and functional relationship with the wider Urban/Metropolitan Area in two principal respects:
 - (i) Housing: North Belfast and Metropolitan Newtownabbey are part of an identifiable housing market;
 - (ii) Employment: particularly (but not exclusively) Mallusk provides employment opportunities for the wider BUA/BMA and indeed the BMA Travel to Work Area (TTWA).
- 5.3 Furthermore, in terms of accessibility and connectivity, Metropolitan Newtownabbey is located in a strategically accessible location on the Regional Strategic Transport Network at the junction of the Belfast-Londonderry and Belfast to Larne Key Transport Corridors focused on the M2 and A8. It also has rail connectivity to Belfast City Centre.
- 5.4 These fundamental characteristics have been recognised in successive planning strategies over many years, including:
 - Belfast Urban Area Plan 2001 & subsequent Public Inquiries into sixteen major applications for housing development on BUA white land between the development limit and inner edge of the green belt (the Whitelands Inquiries)⁶
 - Belfast City Region Review⁷
 - Regional Development Strategy (RDS) 2025⁸ & 2035
 - Draft Belfast Metropolitan Area Plan⁹.
- 5.5 The ambition of Antrim & Newtownabbey Borough Council as expressed in the DPS is noted but, particularly in terms of housing allocation and growth, the emerging plan has taken a significant step backwards from the Preferred Option Paper (POP) Stage. The rationale for this may be because of a concern about the Housing Growth

⁵ NISRA's March 2015 Review of the Statistical Classification and Delineation of Settlements report identifies Metropolitan Newtownabbey as the third largest settlement in Northern Ireland by 2011 Census Population, after Belfast City and Derry City

⁶ PAC Report to the Department dated 21 April 1998

⁷ Subsequently replaced by the Regional Strategic Framework (RSF) process prior to it becoming the Regional Development Strategy (RDS)

⁸ Including the Family of Settlements Report (FOSR)

⁹ Adopted BMAP having been declared unlawful by the Court of Appeal

Indicators (HGI), however, these are only one of the RDS factors that need to be taken into account in preparing the DPS.

- 5.6 During the Public Inquiry into objections to draft BMAP there was a focus on RDS 'directions'. In this context Metropolitan Newtownabbey was identified as a focus for growth of the Metropolitan Area. None of the fundamental characteristics of the area have changed, indeed since then the position has strengthened insofar as the Council is now one of the six partner Councils included in the Belfast Region City Deal (BRCD). To sufficiently recognise the strategic direction in the RDS additional land at this location for housing is needed.
- 5.7 In Regional Guidance 8 (RG8), the RDS (para 3.15) states that 'strategic planning places emphasis on the importance of the relationship between the location of housing, jobs, facilities, services and infrastructure'. As presently drafted and in the context of the consistent direction of strategic policy towards focusing growth in Metropolitan Newtownabbey, notwithstanding the Council's positive evaluation of Metropolitan Newtownabbey, the Plan Strategy is inconsistent with the RDS because it allocates too few houses to Metropolitan Newtownabbey, the home of Global Point/Ballyhenry one of the key locations identified for economic growth in the BMUA which is intended to strengthen the role of the BMUA as the regional economic driver (SFG1).¹⁰ A detailed analysis of the Growth position of Mallusk and wider drivers of housing need has been undertaken by Turley Economics and is presented at **Appendix 5** of this report.
- 5.8 The evidential basis of the DPS is also weak insofar as notwithstanding the wellestablished¹¹ transboundary housing market which extends into Belfast, it appears to not have been informed by either a Council specific or BMA wide Housing Market Analysis by the NIHE or others. This is important, not least because Belfast City Council¹² flag the possibility of neighbouring districts within the wider metropolitan area – specifically Lisburn & Castlereagh and Antrim & Newtownabbey – potentially identifying land to be used for housing to accommodate some of Belfast's population growth.
- 5.9 Paragraph 3.28 of Antrim & Newtownabbey DPS Evidence Paper 6 Housing confirms that the SPPS indicates that housing allocations in LDPs should be informed by (interalia) Housing Market Analysis but to the extent that this paper makes reference to the housing market, there is no reference to the role of Metropolitan Newtownabbey within the wider BMA housing market. This must be considered when formulating the final housing requirement for the area. An analysis of the Technical Evidence Paper 6, Housing is presented at **Appendix 4** of this report.

¹⁰ PAC para paragraph 3.2.51 also states that the RDS seeks to develop Newtownabbey's complementary role as a suburban district and its location adjacent to a KTC and major employment potential at Mallusk reinforce the Department's assessment that the part of the District within the MUA has high development potential.

¹¹ At paragraph 3.2.49 the PAC recognised the housing market overlap insofar as Newtownabbey has scope for the provision of additional housing to meet the needs of North Belfast.

¹² Belfast City Council Draft Plan Strategy Technical Supplement 2: Housing para 4.18.

- 5.10 Unfortunately the allocation of housing growth among the settlements does not allow enough focus on core growth on the Metropolitan Newtownabbey Area and the Major Town/Main Hub of Antrim. It is recognised that a combination of the constraining effect of the HGIs and the scale of housing commitments in certain settlements, particularly Ballyclare, have the potential to skew housing allocation/distribution away from the settlements where an allocation commensurate with core growth would be preferred. However, the DPS has to recognise the extent to which the actual delivery of housing on the ground in Ballyclare has been restricted by delays with the implementation of the associated planning permissions, specifically in respect of the delivery of critical road infrastructure.
- 5.11 The critical mass of Metropolitan Newtownabbey, its strategic location on the key transport corridors, home to a substantial employment base, housing market connection with north Belfast and long standing recognition as a location with the potential for further growth are strong indications that the housing allocation in the draft Plan Strategy which essentially perpetuates the status quo is inconsistent with the RDS, SPPS and its own vision and strategic objectives.

Housing Allocation (Distribution)

5.12 The Council's housing allocation is predicated on its assessment of the growth capacity of the main settlements (Table 10 of Evidence Paper 6). This is used to generate a share of the housing allocation as summarised below:

Settlement	Overall Growth Potential	% of Allocation	Allocation	Total Potential Units
Metropolitan Newtownabbey	Н	40	3900	5319
Antrim	Н	28.2	2750	5312
Ballyclare	М	11.3	1100	3511
Crumlin	L	3.6	350	431
Randalstown	L	3.6	350	651

Table 5.1: Housing Allocation

- 5.13 However, on the basis of the Council's assessment¹³ of the scale of committed residential units and potential additional units, there are obvious challenges in reconciling the desired housing allocation with the commitments which are higher in almost all settlements. In particular, Ballyclare has three times more committed housing than housing allocation (3,382 v 1,100).
- 5.14 The DPS allocation of 40% to Metropolitan Newtownabbey is also significantly lower than its share of households (48.6% in 2011¹⁴), which would suggest the potential for a

¹³ Evidence Paper 6 – Housing: Table 12

¹⁴ Evidence Paper 6 – Housing: Table 11

weakening of the settlement's role, at odds with both the DPS itself¹⁵ and the RDS emphasis on the importance of the relationship between the location of housing, jobs, facilities, services and infrastructure¹⁶ and the plan's own identification of Metropolitan Newtownabbey at the top of the settlement hierarchy (notwithstanding both it and Antrim have the same overall growth assessment of 'High').

- 5.15 On the basis that the Council was correct in its POP analysis that the plan should support a housing requirement of the order of 13,000¹⁷, maintaining Metropolitan Newtownabbey's share of households would generate a requirement for over 6,300 houses. Given the consistent strategic evaluation of the potential of Metropolitan Newtownabbey to grow and the strategic drivers behind this evaluation an allocation of this order would be a more representative of the RDS and the emerging Plan's Spatial Growth Strategy.
- 5.16 It recognised that the challenge faced by the plan is balancing the outworking of a housing allocation based on commitments generated by legacy (and in the case of the predecessor Antrim Borough pre-RDS planning) and the direction set in the RDS but the consequences of under allocating to Metropolitan Newtownabbey and Antrim could undermine the ability of the Borough's largest settlements to fulfil their potential.
- 5.17 This would suggest that unless location specific needs dictate otherwise, the majority of any additional housing allocation over and above the theoretical 9,750 allocation should be directed towards the larger settlements with standing in the RDS specifically Metropolitan Newtownabbey and Antrim.
- 5.18 The evidence would suggest that these settlements are also where housing is actually being delivered, notwithstanding the level of commitments further down the settlement hierarchy.
- 5.19 As set out in Appendix 5 of Evidence Paper 6 Housing, Metropolitan Newtownabbey is delivering the largest share of housing completions in the Borough, followed by Antrim, Ballyclare and Crumlin, with Randalstown a somewhat distant outlier.
- 5.20 This table also shows the relatively low level of housing delivery in the Villages and the very low level of housing delivery in the Hamlets. This evidence would appear to have directly informed the respective housing allocations.

North West Newtownabbey – Growth not Constraint

5.21 In the context of the strategic policy recognition that Metropolitan Newtownabbey has significant growth potential, the north western part of Metropolitan Newtownabbey has been specifically identified as the broad location of such growth.

¹⁵ Spatial Growth Strategy (a) refers to strengthening MN's role

¹⁶ RDS RG8 para 3.15

¹⁷ Including the five year additional allocation beyond the stated plan period

- 5.22 Diagram 5 on page 62 of the 2025 RDS provided a broad indication that it is West Lisburn and <u>North West</u> Newtownabbey that are the locations for major planned expansion.
- 5.23 During the process of preparing the Belfast Metropolitan Area Plan (BMAP), the Department produced a paper entitled *The Departmental Approach To The Distribution Of Housing Growth Potential In The Belfast Metropolitan Area And Belfast Metropolitan Area Hinterland. June 2007*
- 5.24 Pages 11-12 state: It is considered that this strategic direction in the RDS should be sufficiently recognised and that additional land at these locations for housing is needed. It is further considered these locations should provide the main focus for additional future housing growth and this direction in the RDS is the main consideration in determining the location of additional land for housing.
- 5.25 The Department went on to devise a scoring mechanism for sites such that to reflect the directions in the RDS sites located in West Lisburn City and <u>North West</u> Metropolitan Newtownabbey were scored as +2.
- 5.26 At paragraph 3.2.51 of their Report On The Strategic Plan Framework on the Public Local Inquiry Into Objections To The Belfast Metropolitan Area Plan 2015:
 - The symbols on Diagram 5 of the RDS are stated as not intended to be definitive in terms of the location of growth within the District but the PAC find that the direction of growth is primarily towards the <u>north west</u> of the metropolitan area.
 - PAC acknowledge that the environmental setting, need to prevent coalescence with the urban parts of Carrickfergus District (Greenisland) and strong barrier provided by the A8 are factors that will constrain the direction of growth in Metropolitan Newtownabbey but consider that there is scope for additional development in the north western part of the district.
 - In this respect, and in the context of increasing Newtownabbey's proportion of housing thereby enabling it to better fulfil its complementary role, the PAC note that: We are satisfied that sufficient housing sites can be identified in sustainable locations where integration with public transport can be achieved and the environmental setting is not compromised. The Hightown Road link is to be completed by developers and this suggests further development in this area as a focus for future growth.
- 5.27 This analysis followed through to the PAC recommendation to include additional lands in the Hydepark Road area in the Short Term Land Reserve (STLR) for the district and released if required.¹⁸
- 5.28 All of this proves that the draft Plan Strategy is unsound insofar as it concerns any suggestion, such as that found in the plan on page 37 of Evidence Paper 2 Settlement Evaluation, that the Hydepark Road area in Mallusk is affected by a potential

¹⁸ Pages 12-15 of the PAC's Report On Newtownabbey Council Area Public Local Inquiry Into Objections To The Belfast Metropolitan Area Plan 2015 31st January 2012

development constraint and cannot accommodate additional development without harm to interests of acknowledged planning importance. Indeed the identification of such a small area with no obvious development constraint does not sit easily with the development planning history of the 'legacy plan'.

- 5.29 For the avoidance of doubt, our analysis, consistent with that of the PAC in dBMAP, is that the Council's strategic settlement analysis is robust in respect of its identification of the following constraints:
 - Belfast Lough
 - The need to avoid coalescence with Greenisland
 - Carnmoney Hill and the important network of open space and greenways including at Three Mile Water and the Valley Leisure Centre
 - The B90 (Old Carrick/Doagh Road) as a defensible limit with the protected higher land to the north
 - The A8 Larne Road and the M2 which provide long term defensible limits/barriers to growth
 - The visually prominent/steep slopes of Cave Hill to the south
- 5.30 An alternative Plan to that produced at page 37 within the Council's Evidence Paper 2 has been produced and is at **Appendix 7** of this submission.

Site Specific Considerations

- 5.31 In the context of the suggestion of constraint in this area and the contrary view that it is a well-established area for growth, the Company has gathered evidence on the potential for the further residential development of north west Newtownabbey in the Hydepark Road area.
- 5.32 The Masterplan by Alan Patterson Design (Appendix 6) provides an indication of how this area could be planned. A central proposition of the masterplan is that if sufficient additional land was zoned for housing on this site, the Mayfield Link Road could be completed by South Bank Square Ltd. As noted above, this is a long standing aspiration for the area which would provide relief for the Hightown Road and direct access to the Mallusk employment area. The Transportation report by Atkins at Appendix 8 outlines the benefit it would bring, unlocking this area as a development opportunity. The Technical Reports on ecology (Appendix 9) and archaeology (Appendix 10) flood risk (Appendix 11), demonstrate that there are no fundamental barriers to the development of the Company's land.
- 5.33 Letter of support from Simon Brien Residential in respect of the development of these lands for housing is located at **Appendix 12**.

6. Challenges to soundness

Overarching observations are that the Draft Plan Strategy is unsound as Procedural Tests P1 and P3 have not been met.

(P1) The Draft Plan Strategy has not been prepared in accordance with Council's published timetable; and

(P3) The Sustainability Appraisal is in breach of its requirements with respect to the Strategic Environmental Assessment Regulations and guidance (refer to Appendix 3 of this submission for full analysis).

6.1 Following the evidential base set out in Section 5, challenges to the soundness of the Draft Plan Strategy are outlined below. The relevant criteria in respect of the soundness challenges are listed specific to each policy as follows:

Strategic Policy SP4: Homes

Test of soundness:

Policies SP 4.2, SP 4.3 are unsound as the policies fail the tests of:

- CE1 and CE4 Coherence and Effectiveness
- C1 and C4 Consistency
- 6.2 Policy SP4.2 and SP4.3 sets out plans for too few new homes and under-allocates, with the potential to undermine the Spatial Growth Strategy (a) objective of focusing core growth in Metropolitan Newtownabbey and the Major Hub Town of Antrim, strengthening their roles. Coherence and Effectiveness Test CE1 is failed on this basis.
- 6.3 It also fails Consistency Test C1 insofar as the Plan does not take sufficient account of the RDS insofar as it is understood to direct a scale of growth to these settlements.
- 6.4 Insofar as it does not sufficiently recognise and plan for the cross-boundary connection with Belfast, it also fails Consistency Test C4 and Coherence and Effectiveness Test CE1.

Test of soundness:

Policy SP4.4 is unsound as the policy fails the test of:

- CE2 coherence and Effectiveness
- 6.5 SP4.4 is unsound insofar as it underscores the Plan Strategy's reliance on committed housing sites, some of which are not delivering houses in sufficient numbers to achieve Spatial Growth Strategy (a), thus failing Coherence and Effectiveness Test CE2 on the robustness of the evidence base, in particular Evidence Paper 6.

The following revisions are suggested to ensure soundness:

- The Borough's overall housing allocation should be increased, potentially to the 13,000 set out in the POP this would also enhance the ability of the Plan to be flexible to deal with changing circumstances (Soundness Test CE4).
- Metropolitan Newtownabbey (particularly) and Antrim should receive the majority of the additional allocation.
- The housing supply evidence base of the Plan should be reviewed to ensure that it represents a robust level of deliverability such that the potential need for any additional land for housing can be properly identified.

Strategic Policy 2: Employment

Test of soundness:

SP2 and SP4 are unsound as the policies fail the test of:

CE2 coherence and Effectiveness

- 6.6 Mallusk is identified as a Strategic Employment Location within Metropolitan Newtownabbey (Table 3: Existing Strategic Employment Locations) page 77.
- 6.7 The Council's target for job growth, as established through Strategic Policy 2, could be more ambitious in the context of the current employment levels.
- 6.8 The plan is unsound as insofar as since insufficient homes are allocated in settlements such as Metropolitan Newtownabbey with the greatest potential for economic development, there is a coherence issue between the housing and employment allocations. Additional housing should be allocated to Metropolitan Newtownabbey, commensurate with its employment allocation.

7. Summary & Conclusion

- 7.1 This response has been prepared on behalf of South Bank Square Limited. The Company welcomes the opportunity to join the debate on the key issues of strategic significance which will influence future development within the Borough.
- 7.2 The Company welcomes the plan Vision of the Borough being an excellent, attractive and diverse place to live and work.
- 7.3 Unfortunately as presently drafted, the scale and distribution of the housing allocations are inconsistent with the draft Plan's own Spatial Growth Strategy insofar as too few homes have been allocated to Metropolitan Newtownabbey and so the Vision and outcomes sought by the Plan are at risk of not being achieved.
- 7.4 Strategic planning guidance places emphasis on the importance of the relationship between the location of housing, jobs, facilities, services and infrastructure. Strengthening Metropolitan Newtownabbey beyond the allocations found in the draft Plan Strategy would be consistent with its strategic location on the key transport corridors, home to a substantial employment base, housing market and general connectivity with Belfast and long standing recognition as a location with the potential for further growth.
- 7.5 Any suggestion within the draft Plan Strategy or its evidence base that there are constraints on the strategic growth of Metropolitan Newtownabbey must be removed. It has been and remains a key driver for the Borough's growth and must be recognised as such.

Appendix 1: ANBC Local Development Plan response Proforma



Consultation Period

Antrim and Newtownabbey Borough Council has published its draft Plan Strategy, the first formal stage of the new Local Development Plan 2030, for public consultation.

The draft Plan Strategy is the first of two documents, which comprise the Local Development Plan 2030. It has been developed following extensive engagement with the public, stakeholders and our elected Members, including the publication of our Preferred Options Paper.

The draft Plan Strategy sets out how our Borough will grow and change up to the year 2030. It puts forward our Plan Vision for the future. It also contains a Spatial Growth Strategy indicating at a strategic level where growth should go in the Borough. It also sets out a range of Strategic Policies and Detailed Management Policies, which together will guide future planning decisions.

The draft Plan Strategy is published for formal public consultation over an 8-week period and the Council is inviting the submissions of representations, beginning on **Friday 26 July and closing on Friday 20 September 2019 at 5pm**.

The submission of representations in relation to the Council's draft Plan Strategy provides an opportunity for the public to influence the policies and proposals for the future planning and development within Antrim and Newtownabbey.

Please note that representations received after the closing period will not be accepted and will be subsequently returned.

Published alongside the draft Plan Strategy are a range of assessments including Sustainability Appraisal (incorporating the Strategic Environmental Assessment), a draft Habitats Regulation Assessment and an Equality (Section 75) Screening and Rural Needs Impact Assessment Report. These assessments are also subject to public consultation during the formal public consultation period closing on Friday 20 September 2019 at 5pm.

Copies of the draft Plan Strategy and all supporting documents are available to view and download from our website at:

www.antrimandnewtownabbey.gov.uk/draftplanstrategy.

Copies of all documents are also available for inspection at the Council Offices in Mossley Mill, Newtownabbey and Antrim Civic Centre, Antrim from Monday to Friday 8.30am to 5pm. Hard copies of the draft Plan Strategy are also available upon request.

Soundness Testing

A key feature of Northern Ireland's new Planning System is 'Soundness' which requires the draft Plan Strategy document to be tested at Independent Examination (IE) in terms of content, conformity and the process by which it has been prepared. Derived from established practices in England and Wales, it is considered that 'Soundness' testing will provide a more effective basis for examining Local Development Plans and consequently contribute towards a shorter IE process.

The purpose of the IE is to determine if the draft Plan Strategy satisfies statutory requirements and is 'sound'. The presumption will be that the draft Plan Strategy is 'sound' unless it is shown to be otherwise as a result of evidence considered at the IE stage.

The tests of soundness are based upon three categories which relate to how the draft Plan Strategy has been produced, the alignment of the document with central government regional plans, policy and guidance and the coherence, consistency and effectiveness of the content of the draft Plan Strategy. The tests of soundness are set out below:

Procedural Tests		
Ρ1	Has the DPD* been prepared in accordance with the Council's timetable and the Statement of Community Involvement?	
P2	Has the Council prepared its Preferred Options Paper and taken into account any representations made?	
Р3	Has the DPD been subject to sustainability appraisal including Strategic Environmental Assessment?	
Ρ4	Did the Council comply with the regulations on the form and content of its DPD and procedure for preparing the DPD?	
Consistency Tests		
C1	Did the Council take account of the Regional Development Strategy?	
C2	Did the Council take account of its Community Plan?	
C3	Did the Council take account of policy and guidance issued by the Department?	
C4	Has the Plan had regard to other relevant plans, policies and strategies relating to the Council's district or to any adjoining Council's district?	
Coherence and Effectiveness Tests		
CE1	The DPD sets out a coherent strategy from which its policies and allocations logically flow and where cross-boundary issues are relevant it is not in conflict with the DPDs of neighbouring Councils.	

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CE2	The strategy, policies and allocations are realistic and appropriate having considered the relevant alternatives and are founded on a robust evidence base.	
CE3	There are clear mechanisms for implementation and monitoring.	
CE4	It is reasonably flexible to enable it to deal with changing circumstances.	
*Development Plan Document (DPD) – Comprises of the draft Plan Strategy		

Further information on Soundness can be found in Development Plan Practice Notes published by the Department for Infrastructure (DfI). Of particular relevance is Practice Note 6 'Soundness' (Version 2) and Practice Note 9 'Submission and Handling of Representations', both are available to view at <u>https://www.infrastructure-ni.gov.uk/publications/development-plan-practice-notes</u>.

In addition, the Planning Appeals Commission has also produced guidance entitled 'Procedures for Independent Examination of Local Development Plans' available at <u>https://www.pacni.gov.uk/procedural-guides</u>.

Making a Representation

As the main purpose of the IE is to determine whether the Development Plan Document (DPD) is 'sound', any person(s) wishing to make a representation to any part of the Plan should do so on the grounds of soundness. Any representation proposing a change to the Plan must demonstrate why the document is not sound having regard to the tests of soundness. Every representation should say precisely how the Plan should be changed in order to achieve soundness and should be supported, succinctly, by all the evidence thought necessary to justify the proposed change. Once the public consultation period has closed, **there will be no further opportunity to submit information unless the Commissioner requests it**.

Where several people share a common view on how the draft Plan Strategy should be changed, we encourage you to co-operate with each other, pool resources and make a single representation, for example, a local community group.

Those who make representations to the draft Plan Strategy should state whether they wish to have their representation considered at IE in writing or as an oral hearing. Unless people specifically request an oral hearing, the Commission will proceed on the basis that you are content that your representation will be considered in writing. The Commissioner will give every representation the same careful consideration regardless of whether the person who made it is heard orally or in written form.

Points to Remember:

- Representations will be made publicly available for inspection at the Council's Offices and online for counter-representations;
- Complete all relevant sections of the response form;
- Clearly state why you consider the draft Plan Strategy to be 'unsound', having regard to the soundness tests;
- There will be no further opportunity to submit information once the public consultation period closes unless the Commissioner requests it;
- We would encourage you to submit separate forms for each representation you wish to submit;
- Every representation should say precisely how the draft Plan Strategy should be changed in order to achieve soundness;
- Representations should be supported, succinctly, by <u>all</u> the evidence thought necessary to justify the proposed change; and
- Clearly, state whether you wish for your representation to be heard orally or in writing.

Submitting Your Representation

We recommend that you submit your representation via our on-line consultation hub, at <u>www.antrimandnewtownabbey.gov.uk/consultations</u>, as this is the most efficient way to make a representation.

However, you can make a representation by completing this form and returning to us by **5pm on Friday 20 September 2019** either by email or by post.

Representations received after the closing period will not be accepted and will be subsequently returned.

What Happens Next

When the consultation has closed, the Forward Planning Team will collate the representations received and as soon as reasonably practicable, publish these online for a further 8-week period of consultation to allow counter-objections to be made. The representations will also be available for public inspection during this period at the Council's Offices in Mossley Mill, Newtownabbey and Antrim Civic Centre, Antrim from Monday to Friday 8:30am to 5pm.

Once this period of counter-representations has closed, the Forward Planning Team will collate the counter-representations and publish these online. They will also be made available for public inspection at the Council's Offices in Mossley Mill, Newtownabbey and Antrim Civic Centre, Antrim from Monday to Friday 8:30am to

5pm. The next anticipated step will be for the Council to contact the Department for Infrastructure to request an Independent Examination of the draft Plan Strategy.

Contact Us

For further assistance, please contact the Forward Planning Team at Mossley Mill, Newtownabbey:

By Post – Forward Planning Team

Mossley Mill

Carnmoney Road North, Newtownabbey

BT36 5QA

By Email – planning@antrimandnewtownabbey.gov.uk

By Telephone - 0300 123 6677



SECTION A – DATA PROTECTION AND CONSENT

Antrim and Newtownabbey Borough Council complies with the General Data Protection Regulation (GDPR) by producing a specific Local Development Plan Privacy Notice, which lets you know how we manage any personal information we receive from you. It contains the standards you can expect when we ask for, or hold, your personal information and an explanation of our information management security policy.

The Local Development Plan Privacy Notice can be found on our website at <u>www.antrimandnewtownabbey.gov.uk/gdpr/planning-gdpr/</u>.

Please note that when you make a representation (or counter-representation) to the Local Development Plan your personal information (with the exception of personal telephone numbers, signatures, email addresses or sensitive personal data) will be made publicly available on the Council's website.

Copies of all representations will be provided to the DfI and an Independent Examiner (a third party) as part of the submission of the Local Development Plan for Independent Examination. A Programme Officer will also have access to this information during the IE stages of the Plan preparation

Dfl, the Programme Officer the Independent Examiner will, upon receipt, be responsible for the processing of your data in line with prevailing legislation.

1. Please tick to confirm that you have read and understood the Council's Local Development Plan Privacy Notice.

☑ I confirm that I have read and understood the Local Development Plan privacy notice and I give my consent for Antrim and Newtownabbey Borough Council to hold my personal data for the purposes outlined.

You can contact the Council's Data Protection Officer via:

Post - Antrim Civic Centre, 50 Styles Way, Antrim BT41 2UB

Email - DPO@antrimandnewtownabbey.gov.uk

Phone - 028 9446 3113

SECTION B - YOUR DETAILS

2. Please specify if you are responding as an individual, as an organisation, or as an agent acting on behalf of an individual, group or organisation?

If you are responding as an agent or representing an organisation you will be the main point of contact for your client/organisation.

(Please select only one item)

- □ Organisation
- ☑ Agent

	Personal Details	Agent Details (If Applicable)
Title		Dr
First Name		Michael
Last Name		Gordon
Job Title (where relevant)		Director, Head of Planning Northern Ireland
Organisation (where relevant)		Turley
Client Name (where relevant)		South Bank Square Limited
Address		Hamilton House 3 Joy Street Belfast
Post Code		BT2 8LE
Telephone Number		02890723900
Email Address		michael.gordon@turley.co.uk

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SECTION C – REPRESENTATION

Your comments should be set out in full. This will help the Independent Examiner understand the issues you raise. You will only be able to submit further additional information to the Independent Examination if the Independent Examiner invites you to do so.

- 3. To which part of the draft Plan Strategy does your representation relate?
 - i) Paragraph Number: Para 3.2 + The Vision, see attached submission entitled 'Response to Antrim and Newtownabbey Draft Plan Strategy'
 - ii) Policy Heading:
 - > Strategic Policy (SP) Paragraph Number:

SP2, SP4 (see attached submission)

- > Detailed Management Policy (DM) Paragraph Number:
- iii) Page Number in Document: _____

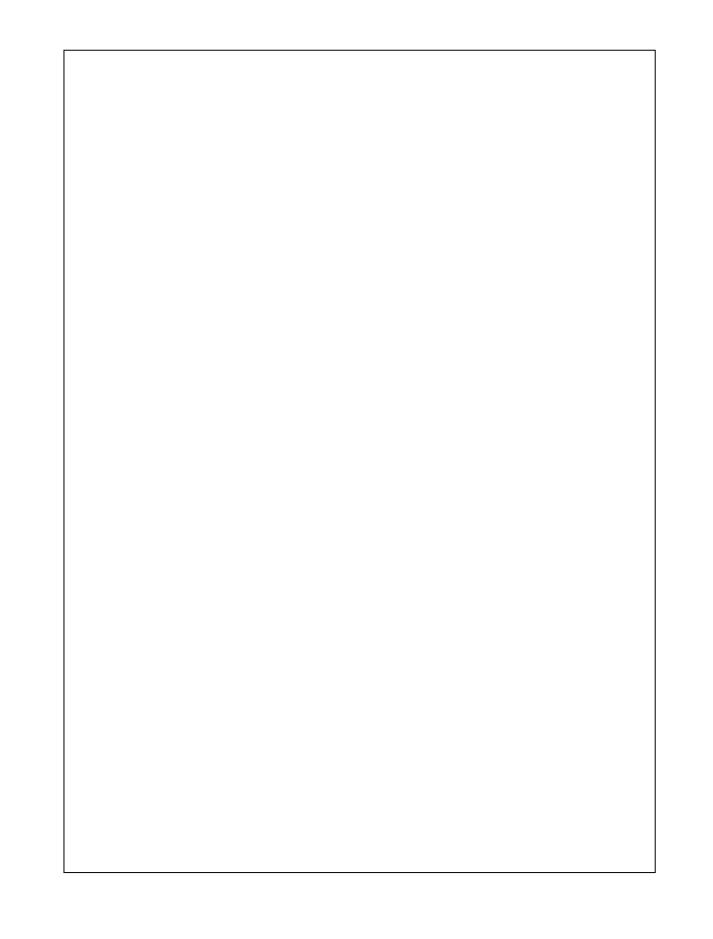
iv) Proposal Map (if relevant state location):_____

- 4. Do you consider the draft Plan Strategy to be:
 - □ 'Sound' (i.e. support)

 \square 'Unsound' (i.e. object)

5. If you consider the draft Plan Strategy to be '**SOUND**' and wish to support the draft Plan Strategy, please set out your comments below.

N/A





6. If you consider the draft Plan Strategy to be **'UNSOUND**' please identify which test(s) of soundness your representation relates to having regard to the Department for Infrastruture's published Development Plan Practice Note 6 'Soundness' (Version 2).

Soundness Tests:

- **X P1** Has the DPD¹ been prepared in accordance with the Council's timetable and the Statement of Community Involvement?
- □ **P2** Has the Council prepared its Preferred Options Paper and taken into account any representations made?
- **X P3 -** Has the DPD been subject to sustainability appraisal including Strategic Environmental Assessment?
- □ **P4** Did the Council comply with the regulations on the form and content of its DPD and procedure for preparing the DPD?
- **X C1 -** Did the Council take account of the Regional Development Strategy.
- □ **C2** Did the Council take account of its Community Plan?
- □ **C3** Did the Council take account of policy and guidance issued by the Department?
- **X C4** Has the DPD had regard to other relevant plans, policies and strategies relating to the Council's district or to any adjoining Council's district?
- X CE1 Does the DPD sets out a coherent strategy from which its policies and allocations logically flow and where cross-boundary issues are relevant it is not in conflict with the DPD's of neighbouring Councils?
- X CE2 Are the strategy, policies and allocations realistic and appropriate having considered the relevant alternatives and are founded on a robust evidence base?
- X CE3 Are there clear mechanisms for implementation and monitoring?
- X CE4 Is it reasonably flexible to enable it to deal with changing circumstances?

¹ Development Plan Document (DPD) – Comprises of the draft Plan Strategy

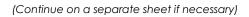
Details

7. Please give details of why you consider the draft Plan Strategy to be **'UNSOUND'** having regard to the test(s) you have identified above. Please be as concise as possible.

<u>Please Note:</u> Your representation should be submitted in full and cover succinctly all the information, evidence, and any supporting information necessary to support/justify your submission. This representation will be considered during the IE and here will be no further opportunity to submit information unless the Commissioner requests it.

See accompanying detailed submission entitled 'Response to Antrim and Newtownabbey Draft Plan Strategy'

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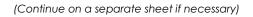


Modifications

8. If you consider the draft Plan Strategy to be **'UNSOUND'**, please provide details of what, if any, modifications do you think should be made to the section, policy or proposal which your representation relates to? What specific modifications do you think should be made in order to address your representation? Please briefly state how your proposed alternative would meet the requirements of the Sustainability Appraisal and other published assessments.

See accompanying detailed submission entitled 'Response to Antrim and Newtownabbey Draft Plan Strategy'

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9. If you are seeking a change to the draft Plan Strategy, please indicate how you would like your representation to be dealt with at Independent Examination:

<u>Please Note:</u> Unless you specifically request an oral hearing, the Commission will proceed on the basis that you are content to your representations considered in written form only. The Commissioner will give every representation the same careful consideration regardless of whether the person who made it is heard orally or not.

Please select only one item;

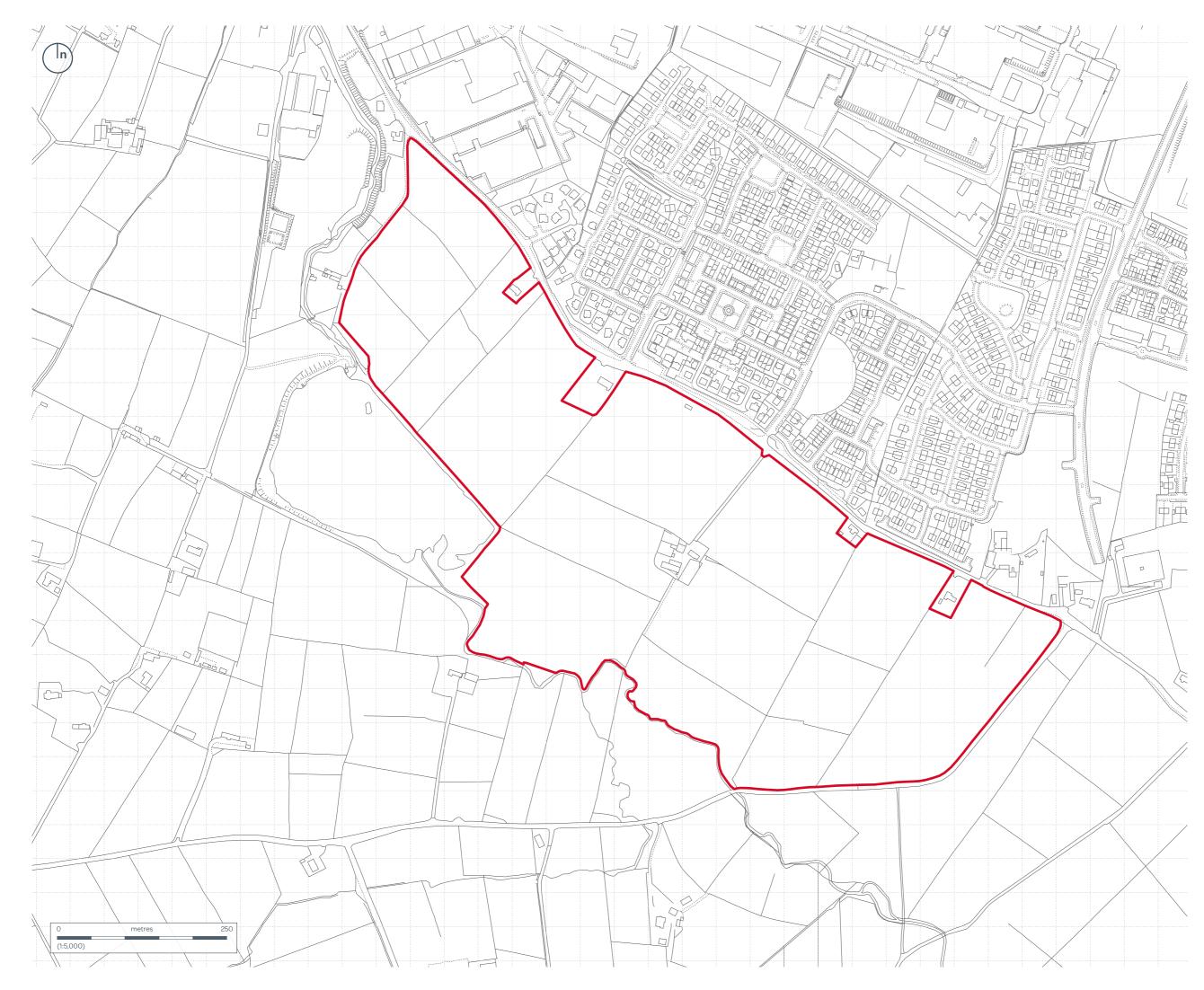
- □ Written Representation
- X Oral Hearing

Signature:	
Date:	20 September 2019

Thank you for your response.



Appendix 2: South Bank Square Lands - Site Location Map



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This drawing is for illustrative purposes only and should not be used for any construction or estimation purposes. To be scaled for planning application purposes only. No liability or responsibility is accepted arising from reliance upon the information contained within this drawing.

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CLIENT: BSG Civil Engineering Ltd

PROJECT:

Land at Hydepark Road, Mallusk

DRAWING:

Site Location Plan

PROJECT NUMBER:

BSGB3006

DRAWING NUMBER:

REVISION:

01 DATE:

September 2019

CHECKED BY:

STATUS:

Final

SCALE:

1:5000 @ A3



Appendix 3: Sustainability Appraisal analysis

Sustainability Review Antrim and Newtownabbey Draft Plan Strategy

September 2019



Contents

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2.	The Selection and Rejection of the Preferred Housing Growth Options	2
3.	Unsound appraisal for housing distribution options	7
4.	Failure to assess the proposed site allocations (reasonable alternatives) for housing	8
5.	Conclusion and recommended remedial action	9

Our reference BSGB3006

September 2019

1. Introduction

- 1.1 On behalf of South Bank Square Ltd, Turley have reviewed the Sustainability Appraisal (hereafter referred to as The 2019 SA) accompanying the Draft Plan Strategy 2030 which was published in June 2019.
- 1.2 For Northern Ireland the relevant guidance with respect to Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) is;
 - Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 (the EAPP Regulations); and
 - Development Plan Practice Note. Sustainability Appraisal incorporating Strategic Environmental Assessment. April 2015.
- 1.3 Given the complexity of the SA process and the experience (including relevant case law referenced in these representations) of its application in England, Scotland and Wales, it is also recommended by the guidance above¹ that reference can be made to the following guidance where necessary;
 - A Practical Guide to SEA. Department of Communities and Local Government, September 2005
 - National Planning Practice Guidance. Strategic environmental assessment and Sustainability appraisal. (http://planningguidance.communities.gov.uk/).
- 1.4 South Bank Square Ltd are fully supportive of the principles of sustainable development and are committed to their development activities within Mallusk having a positive economic, social and environmental benefit on the local economy and community.
- 1.5 Following a review of the SA, we have identified a number of deficiencies and concerns with respect to the SA's legal and procedural requirement. These can be summarised as:
 - (i) The selection and rejection of the preferred Housing Growth Options
 - (ii) Unsound appraisal of the housing distribution options
 - (iii) Failure to assess the proposed site allocations (reasonable alternatives) for housing

¹<u>https://www.planningni.gov.uk/index/advice/practice-notes/dp_practice_note_4_sa.pdf</u>. Page 42.

2. The Selection and Rejection of the Preferred Housing Growth Options

- 2.1 The Preferred Options Paper (POP) published in January 2017 introduced four housing growth options over the plan period. They are as follows:
 - Option 1: Provision of 11,080 dwellings, or 554 dwellings per annum
 - Option 2: Provision of 8,020 dwellings, or 401 dwellings per annum
 - Option 3: Provision of 14,960 dwellings, or 748 dwellings per annum
 - Option 4: Provision of 13,000 dwellings, or 650 dwellings per annum.
- 2.2 The Sustainability Appraisal Interim Report (January 2017) which accompanies the POP assesses the four housing growth options above against the Sustainability Appraisal Objectives as 'Issue 11' within the SA Interim Report. The results are as follows:

		Option 1: 11,080 dwellings	Option 2: 8,020 dwellings	Option 3: 14,960 dwellings	Option 4: 13,000 dwellings
1	Health and Wellbeing	?	?	?	?
2	Housing	+	-	+	+
3	Education	?	-	?	?
4	Society	+	-	+	+
5	Economic Growth	+	-	+	+
6	Active and Sustainable Travel	?	?	?	?
7	Material Assets	?	?	?	?
8	Physical Resources	?	?	?	?
9	Natural Resources and Biodiversity	-	-	-	-

10	Water Resources	-	-	-	-
11	Air Quality	-	-	-	-
12	Climate Change	-	-	-	-
13	Built and Cultural Heritage	?	?	?	?
14	Landscape Character	?	?	?	?

- 2.3 The POP states that Option 4 is the preferred option which states that a "housing growth of 9,750 dwellings during the Plan period and a 5 year housing land supply of 3,250 dwellings at the end of that period is considered a balanced approach." Option 4 was considered to be the most sustainable option because it allows a range of housing needs to be met, but reduces the risks associated with over provision of housing capacity.
- 2.4 Work undertaken by Turley Economics (Appendix 4 of the submission) indicates that the 3,250 dwellings assessed as part of Option 4 is in fact housing to be delivered outwith of the plan period.
- 2.5 As part of these representations it is also relevant to note that Option 2 (8,020 dwellings) scores very poorly from a sustainability perspective.
- 2.6 Of primary concern to South Bank Square Ltd is the inclusion of the 3,250 housing supply figure within Option 4 because this is considered misleading and prejudicial to the SA.

The requirements of the SEA Regulations

- 2.7 Regulation 11 of EAPP (NI) Regulations sets out the requirements for the preparation of an environmental report. The report shall identify, describe and evaluate the likely significant effects on the environment of implementing the plan and reasonable alternatives taking into account the objectives and geographical scope of the plan.
- 2.8 By introducing the 3,250 (effectively housing beyond the plan period) the following significant legal and procedural errors occur with the SA:
 - The SA fails to assess the housing to be delivered in the plan period (9,750) and therefore fails to meet the requirements of the plan period
 - It confuses the reader whom would be forgiven for believing that the plan will deliver up to 13,000 houses
 - It creates further confusion when it is noted that Option 2 (8,020 dwellings which is closer to the actual delivery figure of 9,750) scores relatively poorly

when compared to the higher (although misleading) delivery figure of 13,000 dwellings.

- 2.9 South Bank Square Ltd are aware that the current consultation is with respect to the dPS and the 2019 SA however with respect to this particular issue we believe the deficiencies with the 2019 SA are directly linked to the unsound assessment within the 2017 SA.
- 2.10 The Antrim and Newtownabbey Borough Council Sustainability Appraisal Report (June 2019) updates the appraisal of housing growth options and alternatives against the sustainability framework of fourteen objectives.
- 2.11 Strategic Policy 4: Homes (Housing Growth) of the SA Report (June 2019) reassesses options for housing growth. This version of assessment however, encompasses only two options these are:

Option 1: Provision of 8,310 dwellings, or 554 dwellings per annum

- Option 1: 8,310 Option 2: 9,750 dwellings dwellings 1 Health and Wellbeing + + 2 Housing + + 3 Education ++ ++ 4 Society ? ? 5 Economic Growth + + Active and ? ? 6 Sustainable Travel 7 Material Assets _ _ 8 **Physical Resources** ? ? Natural Resources 9 and Biodiversity 10 Water Resources _ 11 Air Quality _ _ Climate Change 12 0 0 ? ? 13 Built and Cultural
- Option 2: Provision of 9,750

	Heritage		
14	Landscape Character	?	?

- 2.12 As can be observed in the Table above, there is very little difference between the two options and housing option 2 (the preferred option of 9,750) receives a higher SA scoring when compared to Option 4 (the preferred option of 13,000) as assessed in the 2017 SA despite both options delivering the same houses per annum. In essence both preferred options from the 2017 and 2019 SA deliver the same dwellings per annum but secure very different SA scoring.
- 2.13 Given the scenario above, this gives to a number of concerns with the assessment of housing growth options within the 2019 SA which are:
 - There is no additional evidence to support the significantly improved SA scoring for the same housing growth option within the 2019 and 2017 SA
 - The SA scoring of option 2 (8,020 dwellings) within the 2017 SA does not score any positive sustainability benefits yet the assessment of Option 1 (8,3100) scores significantly more sustainability benefits with no evidence to support these conclusions (refer to table xx below)
 - There are no reasons provided for the rejection of the housing growth options (options 1, 2 and 3) not carried forward from the POP.
 - The UK Planning Practice Guidance states² that reasonable alternatives need to be sufficiently different in order to identify their different sustainability impacts. Arguably, due to the similarity in dwelling capacity and the same scoring for Options 1 and 2 within the 2019 SA this assessment does not comply with this guidance.

	SA Interim Report (Jan 2017)	SA Report (June 2019)
	Option 2: 8,020 dwellings	Option 1: 8,310 dwellings
1	Health and Wellbeing	?
2	Housing	-
3	Education	-
4	Society	-
5	Economic Growth	-

Assessment of similar housing growth options

² <u>https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal</u>. Paragraph: 018 Reference ID: 11-018-20140306

6	Active and Sustainable Travel	?
7	Material Assets	?
8	Physical Resources	?
9	Natural Resources and Biodiversity	-
10	Water Resources	-
11	Air Quality	-
12	Climate Change	-
13	Built and Cultural Heritage	?
14	Landscape Character	?

3. Unsound appraisal for housing distribution options

- 3.1 The SA Interim Report (2017) assesses different distribution options for housing, based upon the preferred option for growth across the Borough of 13,000 dwellings.
- 3.2 Option 1, to allocate housing to grow local towns and selected villages, performs the best, and is scored as having five positive effects in relation to the SA objectives on the Borough Council, and is considered the "most favourable in terms of sustainability." In summary the distribution options are based upon distributing the housing growth.
- 3.3 The June 2019 SA Report however presents a new range of housing distribution options which are presented below as follows:
 - Option 1: Proportionate Reduction of the Preferred POP option (25%)
 - Option 2: Retain the level of growth allocated in the Preferred POP option for Metropolitan Newtownabbey and Antrim as the major settlements of the Borough, resulting in a higher proportionate reduction in the allocation to other towns, villages and smaller settlements
 - Option 3: Reduce the proportion of growth to all settlements whilst allocating a higher proportion to the Metropolitan Newtownabbey and Antrim as the major settlements with the remaining allocation reflecting the current size and role of the other towns, villages and smaller settlements.
- 3.4 South Bank Square Ltd are concerned that all of these distribution options are now based upon a reduction in housing growth compared to that presented in the POP. These distribution options are not sound however on the basis that (as demonstrated in Section 2 above) the actual housing growth option selected in the 2017 and 2019 SA are identical in terms of dwellings per annum. There is evidently no reduction in housing and therefore distribution options based upon a reduction in housing from the POP are clearly unsound and unrealistic reasonable alternatives which do not provide stakeholders with an accurate reflection of the sustainability impacts of the dPS.

4. Failure to assess the proposed site allocations (reasonable alternatives) for housing

- 4.1 It is clear that the 2019 SA assesses only Policies against the SA objectives; no potential site allocations are assessed within the SA documents.
- 4.2 The SEA Guidance released from the Department of the Environment (DOE)³ states that:

As each key location or site can be regarded as a potential alternative in the LPP, it is important for a council to only appraise those which are considered reasonable. In order to do this objectively and enhance the transparency of the process, a council may wish to use a number of criteria to filter out alternatives based on a balanced consideration of exclusionary or deliverability criteria such as consistency with strategic policy objectives, environmental designations, flood risk, infrastructure issues etc. This initial stage will help to focus the SA on realistic local policies and proposals and obviate the need to undertake a resource intensive and detailed appraisal of every potential key location or site for the LPP. It will also help to meet the requirements of Schedule 2(8) and justify the reasons for selecting the alternatives dealt with in the LPP.

4.3 The draft Plan SA (2019) does not present or assess any sites proposed for housing allocation and therefore it fails to meet the requirements of the SEA Regulations or DoE Guidance note.

 ^{3 3} Development Plan Practice Note. Sustainability Appraisal incorporating Strategic Environmental Assessment. April 2015.
 Department of the Environment. Section 9, Paragraph 9.1a(iv)

5. Conclusion and recommended remedial action

- 5.1 Given the failings with the SA process to date we recommend that the council take remedial action to ensure that the SA (and therefore the dPS) is both sound and legally compliant with the SEA Directive and NI SEA Regulations. Our recommendations are as follows:
 - (i) Review the reasonable alternatives for housing growth to ensure they meet the guidance of a reasonable alternative and the housing demand.
 - (ii) Reappraise all reasonable alternatives for housing growth (including those within the POP) with a 'fresh pair of eyes'.
 - (iii) Identify new housing distribution options that reflect the growth (not reduction) in housing options. These distribution options should consider the fact that Mallusk is an area of significant economic growth and therefore justifies allocations to locate housing closer to the economic need.
 - (iv) Identify and appraise all proposed site allocations against the SA framework and present clear reasons for the selection/ rejection of sites within the SA document.
 - (v) Publish the revised SA for consultation prior to examination.

Turley Office

9 Colmore Row Birmingham B3 2BJ

T 0121 233 0902



Appendix 4: Housing Land Supply Analysis

Housing Land Supply Analysis

Housing Supply

1. The Council's evidence base in respect of housing supply has inaccuracies.

'Potential Additional Units'

- 2. Reference is made to Urban Capacity sites in Evidence Paper 6 Housing, and there is a column in Table 12 to this effect but there is no further information on the strategic urban capacity study (para 11.3) is available within the supporting evidence.
- 3. Whilst there is an indication (para 11.7) of how windfall has been calculated, windfall sites would presumably draw from the same sources as the unidentified urban capacity sites.
- 4. Paragraph 11.14 refers to a study on Development Opportunity Sites (DOS). Presumably such sites may have potential for non-housing uses.
- 5. In the absence of evidence to the contrary this would suggest that the top up to the potential housing yield in the Borough through the 'Potential Additional Units' source may be overstated.

Committed Residential Units

- 6. Appendix 4 of Evidence Paper 6 contains details of the potential remaining capacity on zoned housing sites.
- 7. There is an acknowledgement that some of the sites have not delivered housing but are too far into the urban area to consider de-zoning. This may be the case, but there is an onus on the Council to ensure that the sites upon which it is relying are deliverable.
- 8. Taking Metropolitan Newtownabbey as an example, we have identified the following concerns:
- 9. Table 12 identifies the following categories of sites with remaining potential:
 - Extant Units Site commenced (1,650 units)
 - Extant Units Site Not Started (622 units)
 - Uncommitted Zoning (1,114 units)
- 10. A corresponding table for Metropolitan Newtownabbey, Appendix 4 within Evidence Paper 6 outlines the following breakdowns identified within the same category.
 - Extant Units Site commenced (466 units)
 - Extant Units Site Not Started (214 units)
 - Uncommitted Zoning (1,164 units)
- 11. There is also a 'Development Ongoing' category which accounts for 814 of the remaining potential units. It is unclear where the discrepancy in respect of unit numbers appears across the Table 12 and Appendix 4 tables.
- 12. Considering the Appendix 4 Table the follow comments are made:



- Of the 466 units in the 'Extant Units Site Commenced' category, 3 sites (accounting for 432 units) have not delivered an additional house in the past 5 years or more.
- Of the 214 units in the 'Extant Units Site Not Started' category, the majority (206) of these units have been awaiting a start for some time (since 2015), which must cast doubt on their delivery.
- Of the 1,114 units in the 'Uncommitted zoning category' the following can be observed:
 - 561 units are sites which have no planning history or have been developed or proposed to be developed for other uses, which would suggest little intent to develop for housing by the owners
 - 252 are either double counted or PAN's have been submitted proposed applications of fewer units that estimated

Countryside

- The assumption with this category is 50 units per year 2015 2030, however, it must be the case

 similar to the diminishing average approach to windfall that this number would reduce over time as opportunities for infill and cluster houses are taken up over the course of the plan period.
- 14. On the basis that the housing allocation should be 13,000 as per the POP, the distribution of additional units should be to the RDS favoured settlements where there is evidence of housing delivery. Issues have been identified with the Council's assumptions on housing land supply.

19 September 2019

BSGB3006



		ED LAND 2018													
	AREA PLAN REF	Housing Monitor Ref	STATUS	REMAINING POTENTIAL	Turley - potential	PLANNING	APPLICATION RECEIVED DATE	APPLICATION STATUS STATUS	APPLICATION DESCRIPTION	SITE COMMENTS	DBMAP ZONING	BMAP ZONING	HM 2015 status	HM 2017 status	MH 2018 status
70		040440	L la serve a itte el		4	REFERENCES				No oito history groonfield	l la contra a	l la valia a	in at stants d	u at atauta d	u et etente d
73 74	MNY 04/01 MNY 04/02	218119 218120	Uncommitted Uncommitted	4	4 4	LA03/2018/0023/O	22 December 2017	Approved 23 Nov 2018	Site for 6no. 2bed. 3	No site history: greenfield	Housing	Housing Housing	not started not started	not started not started	not started not started
14	WINT 04/02	210120	Uncommuted	4	4	LAUSIZU 16/0023/0			person, 2 storey semi- detached houses and 1no. single storey 3 person disabled accessible bungalow for social housing purposes, with associated car parking and		Housing	Housing			
									new access road						
	MNY 04/03	218121	Uncommitted	4	4					No site history: greenfield	Housing	Housing	not started	not started	not started
77	MNY 04/05	212594	Uncommitted	10	10					No site history: Academy sports club	Housing	Housing	not started	not started	not started
78	MNY 04/06	218123	Uncommitted	10	10					No site history: greenfield	Housing	Housing	not started	not started	not started
80	MNY 04/08	221028	Uncommitted	8	8					No site history: greenfield	Housing	Housing	not started	not started	not started
81	MNY 04/09	218125	Uncommitted	10	0	LA03/2017/0075/O	19 January 2017	Approved 18 December 201	7 Erection of care home with associated car parking	Current application for care home	Housing	Housing	not started	not started	not started
82	MNY 04/10	221047	Uncommitted	10	10					No site history: greenfield	Housing	Housing	not started	not started	not started
83	MNY 04/11	218126	Uncommitted	8	8					No site history: greenfield along road	Housing	Housing	not started	not started	not started
84	MNY 04/12	218127	Uncommitted	17	17					No site history: greenfield	Housing	Housina	not started	not started	not started
	MNY 04/13	218128	Uncommitted	13	13					No site history: greenfield	Housing	Housing	not started	not started	not started
86	MNY 04/14	218129	Uncommitted	14	14					No site history: greenfield	Housing	Housing	not started	not started	not started
87	MNY 04/15	212916	Uncommitted	13	13					Not site history: Glenabbey Church?	0	Housing	not started	not started	not started
88	MNY 04/16	212198	Uncommitted	29	29					No site history: Timber yard	Housing	Housing	not started	not started	not started
	MNY 04/19	218130	Uncommitted	42	42					No site history: greenfield	Housing	Housing	not started	not started	not started
93	MNY 04/21	218131	Uncommitted	71	71					No site history: greenfield	Housing	Housing	not started	not started	not started
94	MNY 04/23	211736	Uncommitted	105	105					No site history: greenfield	Housing	Housing	not started	not started	not started
95A	MNY 04/24	221457	Uncommitted	50	50					No site history: greenfield	Housing Major Area of Existing	Housing	not started	not started	not started
	MNY 04/26	221458	Uncommitted	291	163	LA03/2019/0667/F		Under consideration	Proposed residential	163 units not 291	Employment/Industry Outside SDL	Housing	not started	not started	not started
						LA03/2019/0333/PAN	24 April 2019	PAN Acceptable	construction of 162 no. dwellings, associated garages and car parking, open space and landscaping and all other associated site works (including 2 no. temporary waste water treatment works, new bridge crossing Ballymartin River and new curtilage to retained dwelling at 9 Park Road) and new access/road improvement works to include:-2 no accesses onto Park Road with right hand turn provision at main site access (serving 129 no. dwellings); new right turn lane into The Poplars housing development; new footway provision with 2 no. associated pedestrian crossings along Park Road; and new signalisad. Proposed residential						
									development comprising c. 160 dwelling units, garages, car parking, site access, construction of bridge, open space and landscaping and all other associated site						
						LAU3/2010/1136/F	20 December 2016	Refused 21 March 2019	Proposed residential development of 181 no. dwelling units (comprising 53 no. detached dwellings, 110 no. semi-detached dwellings and 18 no. apartments), garages, car parking, site access, construction of bridge, open space and landscaping and all other associated site works (Revised Landscape Masterplan, Reservoir Safety Assurance Report and Reservoir Inundation Modelling Reports received)	Contrary to LC1: Density would be signigficantly higher than nearvyby residential areas; Contrary to AMP2: Exisitng road structure does not have capicity to accommodate increase in traffifc; Contrary to FLD1: At risk of flooding and lokely to increase risj of flooding					

98 MNY 04/27	221460	Uncommitted	47	47					No site history: greenfield site	Area of High Scenic Value Area of Constraint of Mineral Development Greenbelt	Housing	not started	not started	not started
99 MNY 04/28	221459	Uncommitted	48	48	LA03/2018/0016/F	22 December 2017	Consultations issued	Erection of 35 dwellings in a mix of detached, semi- detached and terraced dwellings with associated car parking, landscaping and site works		Outside SDL	Housing	not started	not started	not started
100 MNY 04/29	221461	Uncommitted	49	49					No site history: greenfield site	Area of High Scenic Value Area of Constraint of Mineral Development Greenbelt	Housing	not started	not started (51 potential)	not started (49 potential)
103A MNY 04/32	221462	Uncommitted	178	133	LA03/2018/0290/PAN	43188	PAN Acceptable	180 no dwellings, open space, landscaping,	180 units appears to be for whole site encompassing 103A,103B & 103C but 103C has its own designation for 79 units. Also a103B has a live	Outside SDL	Housing	not started (333 potentia	a not started (333 potentia	not started (178 potentia
103C MNY 04/32	221462	Uncommitted	79						See 103A above					
105 MNY 04/34	200772	Uncommitted	9	9					No site history: greenfield site	Housing	Housing	not started	not started	not started
106 MNY 04/35	221068	Uncommitted	8	8					3 dwellings already on site?		Housing	not started	not started	not started
109 MNY 04/38	221464	Uncommitted	30	30		03 March 2014	Refused15 September 2014		In industrial use. Case officer report notes site "within predominantly industrial part of the area" and "the area has mainly industrial use"	Major Area of Employment / Industry	Housing	not started	not started	not started
					U/2014/0077/F	26 March 2014	Approved 13 Jun 2014	Additional external area on adjacent site for storage of scrap metals						
113 GD 04/01	218074	Uncommitted	3	3					No site history: greenfield	White land	Outside SDL	not started (5 potenital)	not started (5 potential)	not started (3 potenital)
		Total uncommitted	1164	902										

NEWTO	WNABBEY ZON	IED LAND 2018							
	AREA PLAN REF	Housing Monitor Ref	STATUS	REMAINING POTENTIAL	Turley - Actual remaining	MH 2015 status	HM 2017 status	HM 2018	TURLEY SITE OBSERVATIONS
	MNY 02/60, MNY 02/62, MNY	211467		TOTENTIAL	remaining				2018 Turley observations noted site ongoing - 178 remaining
60	03/08, MNY 03/09		Development On- Going	280	178	ongoing (249 remaining)	ongoing (308 remaining)	ongoing (280 remaining)	
63	MNY 03/01	218122	Development On- Going	1	1	ongoing (3 remaining)	ongoing (1 remaining)	ongoing (1 remaining)	
64	MNY 03/02	219039	Development On- Going	4	0	not started (26 remaining)	ongoing (9 remaining)	ongoing (4 remaining)	2018 Turley observations noted site complete - 0 remaining
66	MNY 03/04	212841	Development On- Going	22	15	not started (34 remaining)	ongoing (34 remaining)	ongoing (22 remaining)	2018 Turley observations noted site ongoing and 15 remaining
69	MNY 03/07	220998	Development On- Going	42	42	ongoing (48 remaining)	ongoing (43 remaining)	ongoing (42 remaining)	
71	MNY 03/11	213294	Development On- Going	12	4	ongoing (17 remaining)	ongoing (12 remaining)	ongoing (12 remaining)	2018 Turley observations - 4 remaining
72	MNY 03/12	212132	Development On- Going	5	5	ongoing (16 remaining)	ongoing (15 remaining)	ongoing (5 remaining)	
90	MNY 04/18, MNY 04/22	218132	Development On- Going	56	5	ongoing (124 remaining)	ongoing (56 remaining)	ongoing (24 remaining)	2018 Turley observations - 5 remaining
92	MNY 04/20	221456	Development On- Going	5	0	not started (37 remaining)	ongoing (20 remaining)	ongoing (5 remaining)	2018 Turley observations - 0 remaining
101	MNY 04/30	218133	Development On- Going	180	170	ongoing (213 remaining)	ongoing (180 remaining)	ongoing (179 remaining)	2018 Turley observations - 170 remaining
111	GD 04/08	220977	Development On- Going	168	168	ongoing (203 remaining)	ongoing (176 remaining)	ongoing (168 remaining)	
112	GD 03/06	217852	Development On- Going	13	13	ongoing (22 remaining)	ongoing (18 remaining)	ongoing (13 remaining)	
67A	MNY 03/05	220988	Development On- Going	4	4	ongoing (4 remaining)	ongoing (4 remaining)	ongoing (4 remaining)	
95B	MNY 04/24	219848	Development On- Going	22	0	ongoing (30 remaining)	ongoing (22 remaining)	ongoing (22 remaining)	2018 Turley observations - 0 remaining, complete
			Total ongoing	814	605				

NEWT	EWTOWNABBEY ZONED LAND 2018												
M	AREA PLAN	Housing		REMAINING	Turley -	PREVIOUS	APPLICATION	HM 2015 status	HM 2017 status	HM 2018 status	TURLEY SITE OBSERVATIONS		
р	REF	Monitor Ref	STATUS	POTENTIAL	remaining	PLANNING	DESCRIPTION						
R	of					REFERENCES							
68	MNY 03/06	212589	Site Commenced	40	40			not started	ongoing (full capacity remaining)		2018 Turley noted site commenced (ground works) but full yield remaining		
70	MNY 03/10	218635	Site Commenced	53	44	LA03/2015/0173/F	44 dwellings	not started	ongoing (full capacity remaining)	ongoing (full capacity remaining)			
102	MNY 04/31	211466	Site Commenced	348	348	LA03/2016/0670/F		not started	ongoing (full capacity remaining)	ongoing (full capacity remaining)			
107	MNY 04/36	220863	Site Commenced	25	0			not started	ongoing (full capacity remaining)	ongoing (full capacity remaining)	2018 Turley analysis noted complete - 0 remaining		
			Total commenced	466	432								

NEWTO	NEWTOWNABBEY ZONED LAND 2018												
	AREA PLAN REF	Housing Monitor Ref		REMAINING POTENTIAL	HM 2015	HM 2017	HM 2018	TURLEY SITE OBSERVATIONS					
65	MNY 03/03	220434	Live Approval - Not Started	16	not started	not started	not started	2018 Turley observations - not commenced					
79	MNY 04/07	218124	Live Approval - Not Started	4	not started	not started	not started	2018 Turley observations - not commenced					
89	MNY 04/17	221429	Live Approval - Not Started	44	not started	not started	not started	2018 Turley observations - not commenced (site clearance only)					
96	MNY 04/25	217270	Live Approval - Not Started	92	not started	not started	not started	2018 Turley observations - not commenced					
103 B	MNY 04/32	221541	Live Approval - Not Started	45	?	?	not started	2018 Turley observations - not commenced					
104	MNY 04/33	212498	Live Approval - Not Started	8	?	?	not started	2018 Turley observations - not commenced					
114	GD 04/10	221479	Live Approval - Not Started	5	?	not started	not started	2018 Turley observations - not commenced					
			Total Not started	214									

Мар	AREA PLAN REF	2117 4 72	REMAINING	NOTES
Ref		STATUS	POTENTIAL	NOTES
1	MNY 02/01	Built	0	
2	MNY 02/02	Built	0	
3	MNY 02/03	Built	0	
4	MNY 02/04	Built	0	
5	MNY 02/05	Built	0	
6	MNY 02/06	Built	0	
7	MNY 02/07	Built	0	
8	MNY 02/08	Built	0	
9	MNY 02/09	Built	0	
10	MNY 02/10	Built	0	
11	MNY 02/11	Built	0	
12	MNY 02/12	Built	0	
13	MNY 02/13	Built	0	
14	MNY 02/14	Built	0	
15	MNY 02/15	Built	0	
16	MNY 02/16	Built	0	
17	MNY 02/17	Built	0	
18	MNY 02/18	Built	0	
19	MNY 02/19	Built	0	
20	MNY 02/20	Built	0	
21	MNY 02/21	Built	0	
22	MNY 02/22	Built	0	
23	MNY 02/23	Built	0	
24	MNY 02/24	Built	0	
25	MNY 02/25	Built	0	
26	MNY 02/26	Built	0	
27	MNY 02/27	Built	0	
28	MNY 02/28	Built	0	
29	MNY 02/29	Built	0	
30	MNY 02/30	Built	0	
31	MNY 02/31	Built	0	
32	MNY 02/32	Built	0	
33	MNY 02/33	Built	0	
34	MNY 02/34	Built	0	
35	MNY 02/35	Built	0	
36	MNY 02/36	Built	0	
37	MNY 02/37	Built	0	
38	MNY 02/38	Built	0	
39	MNY 02/39	Built	0	
40	MNY 02/40	Built	0	
41	MNY 02/41	Built	0	
42	MNY 02/42	Built	0	
43	MNY 02/43	Built	0	
44	MNY 02/44	Built	0	
45	MNY 02/45	Built	0	
46	MNY 02/46	Built	0	
47	MNY 02/47	Built	0	
48	MNY 02/48	Built	0	
49	MNY 02/49	Built	0	

50		D	0	1
50	MNY 02/50	Built	0	
51	MNY 02/51	Built	0	
52	MNY 02/52	Built	0	
53	MNY 02/53	Built	0	
54	MNY 02/54	Built	0	
55	MNY 02/55	Built	0	
56	MNY 02/56	Built	0	
57	MNY 02/57	Built	0	
58	MNY 02/58	Built	0	
59	MNY 02/59	Built	0	
	MNY 02/60, MNY 02/62, MNY 03/08, MNY 03/09			
60		Development On- Going	280	
61	MNY 02/61	Built	0	
62	MNY 02/63	Built	0	
02	1111102/00	Development On- Going	0	
63	MNY 03/01		1	
64	MNY 03/02	Development On- Going	4	
65	MNY 03/03	Live Approval - Not Started	16	
66	MNY 03/04	Development On- Going	22	
68	MNY 03/06	Site Commenced	40	
69	MNY 03/07	Development On- Going	42	
70	MNY 03/10	Site Commenced	53	
71	MNY 03/11	Development On- Going	12	
72	MNY 03/12	Development On- Going	5	
73	MNY 04/01	Uncommitted	4	
74	MNY 04/02	Uncommitted	4	Current application
75	MNY 04/03	Uncommitted	4	
76	MNY 04/04	Built	0	
77	MNY 04/05	Uncommitted	10	
78	MNY 04/06	Uncommitted	10	1
79	MNY 04/07	Live Approval - Not Started	4	
80	MNY 04/08	Uncommitted	8	
81	MNY 04/09	Uncommitted	10	current application for care home
82	MNY 04/10	Uncommitted	10	1
83	MNY 04/11	Uncommitted	8	1
84	MNY 04/12	Uncommitted	17	
	MNY 04/12	Uncommitted	13	
85		Sheorinined	10	
85 86			11	
85 86 87	MNY 04/13 MNY 04/14 MNY 04/15	Uncommitted Uncommitted	14 13	

89	MNY 04/17	Live Approval - Not Started	44	
	MNY 04/18, MNY 04/22	Development On- Going		
90			56	
91	MNY 04/19	Uncommitted	42	
92	MNY 04/20	Development On- Going	5	
93	MNY 04/21	Uncommitted	71	
94	MNY 04/23	Uncommitted	105	
96	MNY 04/25	Live Approval - Not Started	92	
97	MNY 04/26	Uncommitted	291	PAN
98	MNY 04/27	Uncommitted	47	
99	MNY 04/28	Uncommitted	48	current application
100	MNY 04/29	Uncommitted	49	
101	MNY 04/30	Development On- Going	180	
102	MNY 04/31	Site Commenced	348	
103A	MNY 04/32	Uncommitted	178	
103B	MNY 04/32	Live Approval - Not Started	45	
103C	MNY 04/32	Uncommitted	79	
104	MNY 04/33	Live Approval - Not Started	8	
105	MNY 04/34	Uncommitted	9	
106	MNY 04/35	Uncommitted	8	
107	MNY 04/36	Site Commenced	25	
108	MNY 04/37	Built	0	
108	MNY 04/37	Built	0	
109	MNY 04/38	Uncommitted	30	
110	MNY 04/39	Built	0	
111	GD 04/08	Development On- Going	168	
112	GD 03/06	Development On- Going	13	
113	GD 04/01	Uncommitted	3	
114	GD 04/10	Live Approval - Not Started	5	
67A	MNY 03/05	Development On- Going	4	
67B	MNY 03/05	Built	0	
95A	MNY 04/24	Uncommitted	50	
95B	MNY 04/24	Development On- Going	22	
	1		2658	

Turley summary

	Council No	Turley No	difference
On-going sites	814	605	209
Site commenced	466	432	34
Live Approval - Not Started	214	214	0
Uncommitted	1164	902	262
	2658	2153	505

Appendix 5: Growth for Mallusk (Economic review)

Growth of Mallusk

Technical Paper on Housing Needs

September 2019



Contents

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2.	Wider Drivers of Housing Need	2
3.	Mallusk as a Location for Further Housing Growth	11
4.	Conclusion	17

1. Introduction

- 1.1 This paper is intended to assist in the promotion of land at Hydepark Road through the Antrim and Newtownabbey Local Development Plan (LDP), and is prepared in the context of ongoing consultation on the Draft Plan Strategy (DPS).
- 1.2 This paper has been prepared to introduce the technical evidence compiled to consider the potential justification for the continued growth of Mallusk. It draws upon and critically reviews evidence produced by Antrim and Newtownabbey Borough Council ('the Council').
- 1.3 The paper is intended to:
 - Establish the drivers of housing need across Antrim and Newtownabbey to provide context on the wider need that could be met through the growth of Mallusk, in **section 2**; and
 - Understand the credentials of Mallusk as a location for further housing growth, in **section 3**.

2. Wider Drivers of Housing Need

- 2.1 The DPS outlines the Council's estimate that 9,750 new housing units will be required throughout the borough over the period from 2015 to 2030, equivalent to 650 dwellings per annum¹.
- 2.2 It confirms that the Council has arrived at this position by taking account of both the most recent Housing Growth Indicator (HGI) and historic rates of housing delivery². Indeed, Evidence Paper 6 suggests that the proposed requirement almost precisely aligns with the midpoint between the HGI of 554 dwellings per annum and the 'precrash build rate' of 748 dwellings per annum, achieved on average between 1995 and 2010³.



Figure 2.1: Proposed Requirement Relative to Past Delivery and HGI

*Source: Antrim and Newtownabbey Borough Council*⁴

2.3 The Council's proposed departure from the HGI recognises the 'significant reduction' from previous HGIs for the area, which has been influenced by a recent period with 'unnaturally depressed market conditions and hence low build rates which are unlikely to continue in the medium to longer term'⁵. The Council highlights 'clear evidence' of a recovering housing market – as shown in the chart above – and concludes that:

¹ Antrim and Newtownabbey Borough Council (2019) Local Development Plan: Draft Plan Strategy, paragraph 7.7

² *Ibid,* paragraph 7.9

³ Antrim and Newtownabbey Borough Council (2019) Local Development Plan Evidence Paper 6: Housing, Table 8

⁴ *Ibid*, Figure 2; updated by Turley to incorporate recent completions stated at paragraph 9.11

⁵ *Ibid*, paragraphs 9.5 and 9.6

"...it is more appropriate to consider a longer term trend average, which omits the unnaturally depressed recent market conditions and would more realistically reflect the pattern of house building activity in the borough over a longer time period"⁶

2.4 It does, however, suggest that:

"...this long term historic pre-crash annual build rate of 748 units would tend to be too great to use as a basis for the identification of housing growth, whilst conversely...the average HGI annual build rate of 554 units was framed within the context of more depressed economic conditions and...[is] too low. Accordingly, the Council proposes that an average of these figures represents a reasonable basis to identify the housing growth requirement for the borough to 2030"⁷

2.5 This conclusion forms the basis for the justification of Strategic Policy 4 in the DPS, which aims to facilitate the delivery of at least 9,750 new homes between 2015 and 2030. The supporting text nonetheless makes clear that this figure represents 'neither a target to be met, nor a cap which cannot be exceeded'⁸.

A Justified Departure from the HGIs

- 2.6 While the Council has expressed its intention to depart from the HGI through a higher growth option, it remains a factor influencing the preferred option given that it represents one of two figures averaged by the Council.
- 2.7 HGIs are expressly produced for guidance purposes, and should not be 'seen as a cap on housing development in the area or a target to be achieved'⁹. They assume that recent population and household formation trends will continue into the future.
- 2.8 The level of growth resulting from these assumptions can be understood by comparing the underlying population projections with historic trends. The following chart shows the level of population growth anticipated under the 2012-based population projections, which underpin the latest available HGIs. The more recent 2014-based and 2016-based population projections are also shown for context, but are yet to have been converted to HGIs or indeed household projections by the Department for Infrastructure. An extrapolation of the long-term average level of growth¹⁰ is also overlaid.

⁶ *Ibid*, paragraph 9.7

⁷ *Ibid*, paragraph 9.8

⁸ Antrim and Newtownabbey Borough Council (2019) Local Development Plan: Draft Plan Strategy, paragraph 7.7

⁹ Department for Infrastructure (2016) 2012 based Housing Growth Indicators

¹⁰ Average growth of 808 persons per annum between 2001 and 2018

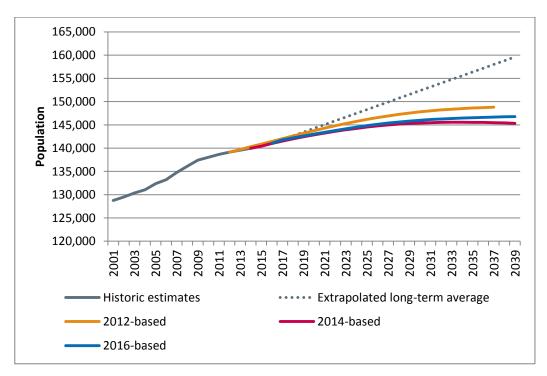


Figure 2.2: Comparing Population Projections for Antrim and Newtownabbey

Source: NISRA; Turley analysis

- 2.9 When comparison is made with the extrapolated long-term average, each of the official projections shown above would see population growth in Antrim and Newtownabbey slowing relative to recent years. This reflects prevalent trends in their respective trend periods.
- 2.10 The following chart shows how the average rate of population growth in Antrim and Newtownabbey varies depending on the historic five year period over which it is calculated. This shows that an average calculated over the five years to 2016, for example which represents the trend period for the latest 2016-based projections is substantially lower than those calculated to include even part of the pre-recession period. Annual population growth of 0.6% during the five year period which underpins the 2012-based projections and therefore the HGIs is similarly lower than calculated when earlier years are included.

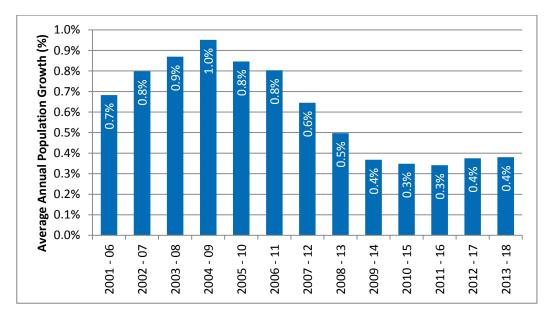


Figure 2.3: Average Annual Population Growth – five year rolling average

Source: NISRA

2.11 Looking at the underlying demographic data reveals that this recent moderation in the rate of population growth in Antrim and Newtownabbey has been particularly influenced by a sustained net outflow of people from the borough, which was not seen prior to the recession and is now showing signs of returning to the more positive long-term trend that saw a net *inflow* of people into to the borough. Figure 2.4 illustrates the scale of departure from this pre-recession trend during the trend periods for the latest official projections. Assuming that these recessionary trends are sustained risks underestimating and indeed undermining the growth in population that is already occurring as the local economy and housing market recovers.

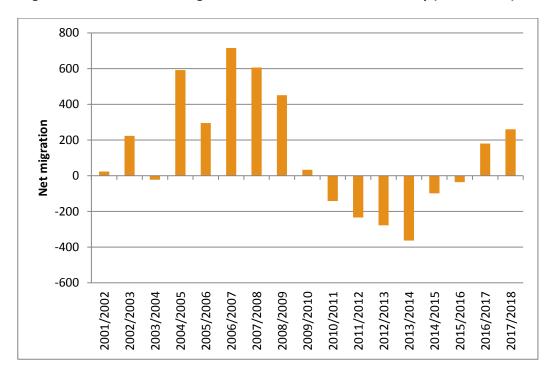


Figure 2.4: Historic Net Migration to Antrim and Newtownabbey (2001 – 2018)

Source: NISRA

- 2.12 Awareness of these factors influencing trend-based population projections is critical when considering housing need over the long-term horizon of the LDP. There is an evident risk that both the 2012-based projections which underpin the HGIs and indeed the latest 2016-based projections will underestimate future growth in the population of Antrim and Newtownabbey, by extrapolating forward trends which are influenced by particularly low levels of housing provision following a misrepresentative period of sustained economic stagnation and suppressed market confidence.
- 2.13 Whilst it may be challenging to sustain peak levels of development and population growth over a plan period unless there are significant drivers which will fundamentally alter population growth it is equally misrepresentative to assume that the growth seen during what is acknowledged as a downturn in the housing market will be sustained. It is agreed that a more balanced position can potentially be established by drawing upon a longer-term trend period, which is more likely to be representative of the cyclical nature of the housing market and balances stronger provision against particularly low rates of growth following the recession.
- 2.14 Relative to the HGIs, this would provide a more representative picture of a complete market cycle, and provide a more positive picture that is not unduly influenced by recessionary trends.
- 2.15 The Council's intention to exceed the HGIs in planning for 650 dwellings per annum is therefore broadly welcomed in principle, insofar as it expressly aims to balance the HGIs with the higher rate of development recorded prior to the recession. The methodology does, however, remain comparatively crude, with no evidence that the comparative significance of factors historically constraining population growth and

household formation – such as the rate of development, shown above – or indeed the drivers of future need have been considered in the context of arriving at a judgement as to by how much the HGI should be uplifted. In this context for Antrim and Newtownabbey it is considered that the role of the economy as a driver of beyond recent trend growth is particularly important, with this considered below.

Appreciating the Future Relationship between Economic Growth and Housing Need

- 2.16 The DPS describes Antrim and Newtownabbey as 'a dynamic, outward looking and fastgrowing borough of innovation and opportunity, which is attractive to new as well as existing businesses'. It highlights a business base that includes 'large firms and institutions such as Belfast International Airport (BIA), Antrim Area Hospital, Randox and the Henderson Group, as well as a range of smaller businesses'. It describes the borough's 'strategic position' and 'high-quality transport and communications infrastructure', and considers these elements to 'support indigenous firms, help attract investment, and support productivity, exports and business growth'¹¹.
- 2.17 The DPS confirms that 'continued economic growth across a range of sectors and the creation of new jobs are key priorities for the Council'. It outlines the Council's commitment to 'promoting a vibrant economy, assisting existing employers, attracting new firms and supporting business start-up'. It further references the Council's participation in the Belfast Region City Deal, which aims to 'harness additional investment, create new jobs and accelerate inclusive economic growth within our borough'¹².
- 2.18 Strategic Policy 2 therefore states that 'the Council will encourage the growth of indigenous businesses, promote innovation and proactively attract investment into our borough to support enterprise and increase employment for the benefit of all our residents'. It explicitly seeks to facilitate the creation of up to 9,000 new jobs by 2030, linked to an underlying forecast which runs from 2017¹³. Accordingly, this represents growth of circa 692 jobs per annum on average.
- 2.19 At the outset, it is important to recognise that whilst planning for job growth is evidently a positive approach, the scale of job growth referenced in the policy would represent a marked slowdown when compared with the recent rate of job growth in Antrim and Newtownabbey. The latest data from NINIS indicates that circa 5,170 additional employee jobs have been created in the borough over the last five years for which data is available¹⁴ (2012-17). This represents an average growth of 1,034 jobs per annum, which is some 49% higher than the annual target set by the Council.
- 2.20 This recent success in local job generation has been driven by a growing services industry and, to a lesser extent, growth in local manufacturing. It is considered that this recent strong economic performance warrants a closer look by the Council at the

¹¹ Antrim and Newtownabbey Borough Council (2019) Local Development Plan: Draft Plan Strategy, paragraphs 5.1 and 5.2

¹² Ibid, paragraphs 5.1 and 5.4

¹³ Antrim and Newtownabbey Borough Council (2019) Local Development Plan Evidence Paper 3: Economic Growth, Appendix 2 p82

¹⁴ NINIS (2017) Employee jobs (administrative geographies)

ongoing appropriateness of this job target and the underlying forecast upon which it is based. Such a review should also take into consideration the current intention to provide almost three times the quantum of employment land that would be needed to accommodate growth of this scale, both to provide flexibility and allow *'unexpected future economic growth'* to be accommodated¹⁵. Collectively this reinforces at the very least that the Council's target for job growth, as established through Strategic Policy 2, should be considered as a modest and certainly not an ambitious position for the LDP to appraise the need for infrastructure to support its potential.

- 2.21 In this context, and notwithstanding the evidence that planning for stronger economic growth would be reasonable, the Council appears to have given no consideration to the potentially critical role of new housing, as an important aspect of the wider infrastructure planning of the LDP, in attracting or retaining the labour force that is necessary to support the creation of up to 9,000 new jobs.
- 2.22 This is an important omission given that the latest economic datasets confirm that there is increasingly limited capacity in the current labour force to support the continued creation of new jobs. The proportion of the borough's residents claiming Jobseeker's Allowance (JSA) has more than halved since 2012, and is now at a lower rate (1.9%) than recorded in the borough at any point since 2008 and only slightly higher than the pre-recession average (1.7%; 2005-08)¹⁶. Where these labour-force pressures continue, sustaining recent economic success and achieving even the modest job growth targeted by the Council will require the attraction and retention of additional working age people. This will in turn create additional pressures for new housing where the LDP proposes to sustainably accommodate its growing labour-force needs in the borough.
- 2.23 The Council's Evidence Paper does acknowledge these demographic challenges facing the borough's economy, namely its shrinking population of working age residents and the increasingly ageing trend¹⁷. In turn the Council has accordingly recognised the *'need for an integrated and agile response'*¹⁸ in these circumstances. However, whilst the problem has been identified, the Council has not sought to consider in its evidence base how it can use the LDP to ensure a positive response to attempt to put in place the infrastructure required to ensure that future economic growth is not constrained. As noted above this includes a lack of evidence to clearly demonstrate that housing provision has been integrated with the economic strategy.
- 2.24 At a basic level, this omission includes a failure to explore and evidence the labour force growth that could result from the planned provision for 650 dwellings per annum within the DPS, nor the scale of departure from past trends implicit in the HGI that would be necessary to support the creation of up to 9,000 jobs in a sustainable manner.

¹⁵ Antrim and Newtownabbey Borough Council (2019) Local Development Plan Evidence Paper 3: Economic Growth, paragraph 8.7

¹⁶ NINIS (2017) Claimant count annual averages – experimental (administrative geographies)

¹⁷ Antrim and Newtownabbey Borough Council (2019) Local Development Plan Evidence Paper 3: Economic Growth, paragraph 7.12

¹⁸ *Ibid*, paragraph 7.15

2.25 In the absence of such evidence, a consideration of the available datasets strongly indicates that a relatively pronounced uplift would appear necessary. This recognises that recent trend-based projections – including those that underpin the latest HGIs – assume that the core working age population (16 – 64) of Antrim and Newtownabbey will have contracted by 2030. This notably contrasts with the recent *growth* that is estimated to have occurred, and it is noted has occurred in parallel with a period of comparatively strong job generation. This suggests a clear departure of the current population datasets from the projections, which are influenced by an earlier trend period as noted above. A continuation of this more recent trend would lead to a larger population and therefore greater housing need than anticipated in the HGI.

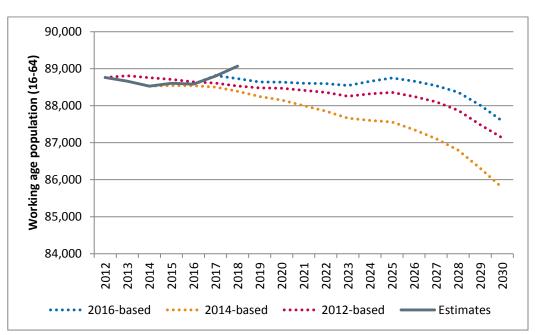


Figure 2.5: Projected Change in Working Age Population over Plan Period

Source: NISRA

2.26 Elevating the level of housing provision beyond the HGIs – and therefore beyond trendbased projections – offers the opportunity to support a growth in the working age population of the borough. As referenced above it is recognised that such an elevation has been proposed by the Council and this is supported further in the context of the evidence above highlighting the need to integrate planned housing provision and economic growth. However, whilst the uplift implied in the DPS could provide additional labour-force capacity, the Council has not taken the next important step to explicitly consider the level of alignment between this growth and its economic ambitions. The result is that this could therefore unknowingly create a situation where labour shortages act as a barrier to investment and undermine the resilience and targeted growth of the local economy. Further evidence should be provided by the Council to confirm that its policy approach is appropriate on this basis, or adjust the planned level of provision from the HGI as required.

Summary

- 2.27 The Council's intention to exceed the HGI by planning for 650 dwellings per annum is broadly welcomed in principle, insofar as it expressly aims to balance the HGI with the higher rate of development recorded prior to the recession. This seeks to minimise the influence of unnaturally depressed economic and market conditions, and allow for a continued recovery of the local housing market.
- 2.28 However, the Council's evidence to support the justification for the scale of adjustment from the HGI fails to provide an adequate basis from which the chosen figure can be judged as appropriate and reasonable, where consideration is given to the likely future drivers of housing need in Antrim and Newtownabbey.
- 2.29 In particular, it appears that no consideration has been given to the potentially critical role of new housing in attracting or retaining the labour force that is necessary to achieve the Council's targeted creation of up to 9,000 new jobs by 2030 in its strategic policies. This is despite recognition of the need for an *'integrated and agile response'* to the demographic challenges that face the borough's economy, including its ageing population. The Council has not assessed whether the provision of 650 dwellings per annum would alleviate or exacerbate these issues, and could therefore unknowingly create a situation where labour shortages act as a barrier to investment and undermine the targeted growth in the local economy. The importance of fully understanding this important relationship is further highlighted where it is recognised that the borough has seen its economy grow strongly with this in turn leading to a tight labour-force.

3. Mallusk as a Location for Further Housing Growth

3.1 This section provides an overview of the evidence considered to justify the continued provision of new housing in Mallusk in the context of the spatial strategy and overall level of provision set out in the DPS.

Major Employment Location

3.2 Mallusk is a major employment location within Antrim and Newtownabbey, and represented the place of work for over 8,200 people in 2011. This suggests that approximately 15% of those working in the borough are based in Mallusk, as of 2011.

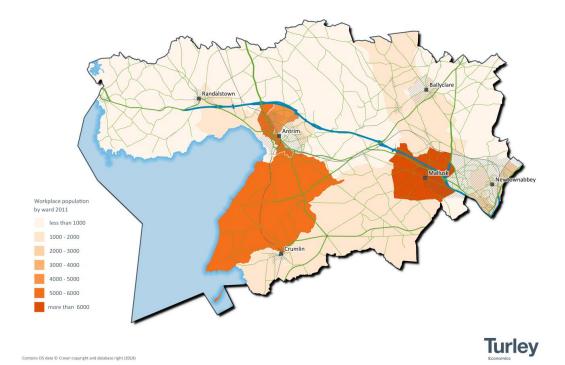
Table 3.1:Workplace Population 2011

	Workplace population	%
Mallusk	8,260	15%
Antrim and Newtownabbey	56,574	100%

Source: Census 2011

3.3 The scale of this concentration of employment is further illustrated in Figure 3.1. This shows the comparative scale of workplace employment at a ward level clearly showing that Mallusk exceeded the workplace population of all other wards in the borough.

Figure 3.1:	Distribution of Workplace Population by Ward 2011
-------------	---



Source: Census 2011

- 3.4 More broadly, only five wards across Northern Ireland contained a larger workplace population than Mallusk at the 2011 Census¹⁹. The density of employment within this location can therefore be considered of regional significance, and the Council has recognised the agglomeration effects that have occurred in Mallusk as a result²⁰.
- 3.5 The relationship between employment opportunities and the workforce is obviously an important informing consideration in developing a sustainable spatial strategy. The Census provides information on the distance travelled by those working in Mallusk, summarised in the following table. Circa 26% of people working in Mallusk lived within 5km of their place of work, which is relatively low when compared to the wider borough and Northern Ireland. Equally the same statistics identify that approximately half of those working in Mallusk travelled more than 10km, exceeding the borough and regional averages. This suggests that a large proportion of workers were, as of 2011, travelling in from relatively long distances to the employment opportunities in the ward. Whilst it is recognised that some additional housing has been provided in Mallusk in the intervening years, a point considered further below, it is not considered likely that this position has changed significantly recognising that the majority of new homes were delivered prior to 2011 and that it is likely that the employment base will also have increased in the context of the borough-wide evidence presented in section 2.

	Mallusk	%	Antrim and Newtownabbey (%)	Northern Ireland (%)
Less than 5km ²¹	2,164	26%	39%	42%
Over 10km	3,974	48%	35%	31%
Total	8,260	_	-	-

Table 3.2:Distance Travelled to Work in Mallusk 2011

Source: Census 2011

3.6 Supporting the delivery of further new homes in close proximity to this regionally significant employment centre would provide the opportunity to reduce the distances typically travelled to work in Mallusk. This will enhance its credentials as a sustainable employment location, and contribute towards its growth as a self-contained community.

¹⁹ Four of these wards are in Belfast (Shaftesbury (50,494); Duncairn (17,649); Falls (12,024) and Island (8,860)) with the fourth largest employment location situated in Armagh, Banbridge and Craigavon (Kernan, 11,670)

²⁰ Antrim and Newtownabbey Borough Council (2019) Local Development Plan Evidence Paper 3: Economic Growth, paragraph 7.11

²¹ Includes working mainly at or from home

Strong Contribution to Housing Supply

3.7 Monitoring by the Council²² indicates that wider Newtownabbey has historically accommodated around half (48%) of the new homes provided in the borough since 1998. This exceeds the contribution made by all other settlements, reflecting its position in the existing settlement hierarchy.

	Completions	%
Newtownabbey	5,271	48%
Antrim	2,467	22%
Ballyclare	1,095	10%
Crumlin	542	5%
Randalstown	376	3%
Other	1,219	11%
Total	10,970	100%

Table 3.3: Completions by Settlement (31/12/1998 – 31/03/2017)

Source: Turley analysis of Antrim and Newtownabbey Borough Council monitoring

3.8 The above data captures Mallusk as part of wider Newtownabbey. However, further analysis enables the historic contribution of Mallusk itself to be estimated²³. This indicates that Mallusk has been the location for at least 1,561 of the homes completed in Newtownabbey since 1998, or more once those sites completely developed before 2015 are taken into account. Mallusk has therefore accommodated at least 30% of the new homes provided in Newtownabbey during the period presented above, and at least 14% of the new homes provided throughout the borough in this time.

Table 3.4:Completions in Mallusk, Newtownabbey and Wider Borough (1998 –
2017)

	Mallusk	Newtownabbey	Antrim and Newtownabbey
Completions	1,561	5,271	10,970
Mallusk as proportion	100%	30%	14%

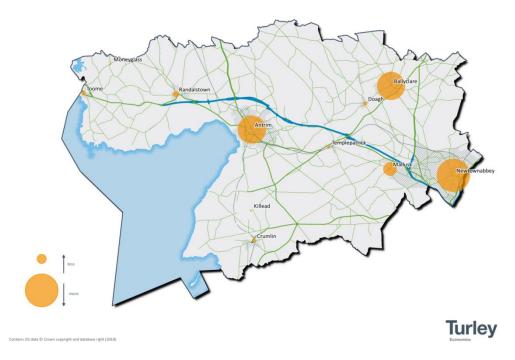
Source: Turley analysis of Antrim and Newtownabbey Borough Council monitoring

²² This time series is based on the Council's published Annual Housing Monitors for 2015 and 2017. A summary of the 2016 Housing Monitor was obtained directly from the Council in 2018 to fill a gap in its published monitoring (2015/16) but was not formally published at that time and was based on a methodology that was subsequently refined in 2017

²³ Only sites with remaining development potential in 2015 or 2017 can be disaggregated to Mallusk based on the Council's published monitoring. The 2016 monitor sourced from the Council cannot be disaggregated below the settlement of Newtownabbey and is similarly excluded from these minimum figures

3.9 Such a level of development means that completions in Mallusk alone have exceeded that seen in all but three of the borough's larger settlements during this period, as further illustrated in the following plan. This reinforces an evidenced position of strong demand for new homes in the settlement. This is unsurprising given its proximity to local employment opportunities and the strong connectivity to the strategic transport network.





Source: Turley analysis of Antrim and Newtownabbey Borough Council monitoring

A Growing Settlement

3.10 As a result of this development of new housing, Mallusk has seen significant population growth over the period to 2017, for which small area estimates are currently available²⁴. It has been estimated that 9,647 people live in Mallusk as of 2017, with the population having grown by some 76% since 2001. This is over seven times the rate of growth seen in wider Antrim and Newtownabbey over the same period (10%), as shown in the following table.

Table 3.5:	Change in Population of Mallusk (2001 – 2017)
------------	---

	2001	2017	Change	% change
Mallusk	5,474	9,647	4,173	76%
Antrim and Newtownabbey	128,760	141,697	12,937	10%
% in Mallusk	4%	7%	32%	-

²⁴ NISRA (2017) 2011 Census Small Area Population Estimates, total population, 2001 to 2017

Source: NISRA, 2017

- 3.11 The table also notably highlights that Mallusk alone has accommodated approximately one third of the population growth seen across the borough since 2001. No other ward in the borough has grown at a faster rate than Mallusk over the period considered above. The rate of growth is also notably the fourth highest of all wards in Northern Ireland during this time²⁵.
- 3.12 The exceptional growth rate of Mallusk also means that it now accommodates a higher proportion of the total population in the borough, having steadily grown over the past fifteen years. The significance of the settlement on this indicator alone has therefore increased and should be fully recognised within the spatial strategy of the DPS and its apportionment of future provision.
- 3.13 Whilst the underlying age profile is not estimated as part of the data introduced above, there is evidence that Mallusk has grown to accommodate younger families in particular²⁶. The 2011 Census found that approximately one quarter (24%) of households in Mallusk were headed by somebody aged under 35, exceeding both the borough average (17%) and that for wider Northern Ireland (18%).
- 3.14 Furthermore, some 44% of all households in 2011 contained dependent children, again surpassing the borough (35%) and regional (34%) average.
- 3.15 As a consequence of these factors, the population of Mallusk is comparatively youthful, with a mean age of 32.7 years in 2011. This is notably lower than the average of 37.6 across both Antrim and Newtownabbey and wider Northern Ireland. The inference is that the settlement has seen the creation of a growing and vibrant community. Recognising this evolving population profile it is important that the future planning strategy for the area supports this growth with the appropriate infrastructure which in turn will require growth to be sustained to ensure its future sustainability.

Summary

- 3.16 Mallusk is a major employment location within Antrim and Newtownabbey, and represented the place of work for over 8,000 people in 2011 more than any other ward in the borough, and exceeded by only five wards across Northern Ireland.
- 3.17 However, only one in four of those working in Mallusk lived within 5km of their place of work. Supporting the delivery of new homes in close proximity to this employment centre will offer the opportunity to reduce the distances typically travelled to work in Mallusk. This will enhance its credentials as a sustainable employment location as well as a growing and self-contained community.
- 3.18 The existence of employment opportunities both locally and in other proximate areas has been a factor in the generation of strong demand for new housing in this area. At least 30% of all new homes provided in Newtownabbey since 1998 have been in

²⁵ Only Kernan (96%), Derryaghy (92%) and Enagh (77%) have grown at a faster rate than Mallusk since 2001 Derryaghy (90%) and Kernan (89%) have grown at a faster rate than Mallusk since 2001

²⁶ NISRA (2011) Household lifestage

Mallusk, with completions in Mallusk alone exceeding that seen in all but three of the borough's settlements. As a result, the population of Mallusk has grown by some 76% since 2001. This is the highest of all wards in the borough, and is the fourth highest of all wards in Northern Ireland. This achievement is particularly notable against the backdrop of a comparatively muted economic and housing market context.

3.19 Its historic role in accommodating growth and continued role as a major employment centre collectively indicate that Mallusk is a credible location that can accommodate significant further growth over the plan period and beyond. Indeed, in building upon the creation of a new and comparatively youthful population, it will be important that supporting infrastructure is provided with this in turn requiring the potential for future growth to ensure its ongoing sustainability.

4. Conclusion

- 4.1 The Draft Plan Strategy (DPS) outlines the Council's estimate that 9,750 new housing units will be required in Antrim and Newtownabbey over the period from 2015 to 2030, equivalent to 650 dwellings per annum.
- 4.2 The Council considers this to form a reasonable basis for the housing growth requirement, balancing a Housing Growth Indicator (HGI) that is likely to be influenced by depressed market conditions with the higher rate of development recorded prior to the recession.
- 4.3 While the departure from the HGI is welcomed in principle, the Council's methodology remains comparatively crude, with no appreciation of the likely future drivers of housing need in Antrim and Newtownabbey. In particular, it appears that no consideration has been given to the potentially critical role of new housing in attracting or retaining the labour force that is necessary to achieve the targeted creation of up to 9,000 new jobs by 2030. This is despite recognition of the need for an integrated and agile response to the demographic challenges that face the borough's economy, including its ageing population. The Council has not assessed whether the provision of 650 dwellings per annum would alleviate or exacerbate these issues, and could therefore unknowingly create a situation where labour shortages act as a barrier to investment and undermine the targeted growth in the local economy.
- 4.4 Planning positively to attract and retain new working age residents will therefore be critical to ensuring a strong and resilient local economy. The types and sizes of homes to be provided to ensure the retention of those of working age will also be an important consideration.
- 4.5 Mallusk is a major employment location within Antrim and Newtownabbey, and represented the place of work for over 8,000 people in 2011 more than any other ward in the borough, and exceeded by only five wards across Northern Ireland.
- 4.6 However, only one in four (26%) of those working in Mallusk lived within 5km of their place of work. Supporting the delivery of new homes in close proximity to this employment centre will offer the opportunity to reduce the distances typically travelled to work in Mallusk. This will enhance its credentials as a sustainable employment location as well as a growing and self-contained community.
- 4.7 The existence of employment opportunities both locally and in other proximate areas has been a factor in the generation of strong demand for new housing to date in this area. At least 30% of all new homes provided in Newtownabbey since 1998 have been in Mallusk, with completions in Mallusk alone exceeding that seen in all but three of the borough's settlements.
- 4.8 As a result of this development, the population of Mallusk has grown by 73% over the past fifteen years. This is the highest of all wards in the borough, and is the third highest of all wards in Northern Ireland. This demonstrates the attractiveness of the area with regards to the scale of demand for new housing. This achievement is

particularly notable against the backdrop of a comparatively muted economic and housing market context.

4.9 Its historic role in accommodating growth and continued role as a major employment centre collectively indicate that Mallusk is a credible location that can accommodate significant further growth over the plan period and beyond.

Turley 1 New York Street Manchester M1 4HD

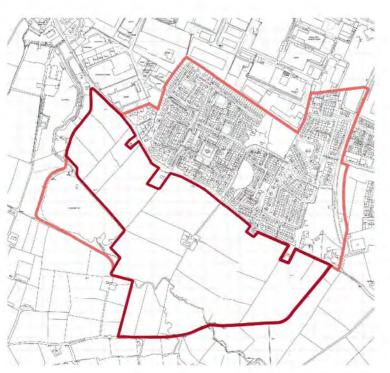
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Appendix 6: Masterplan (Alan Patterson Design)

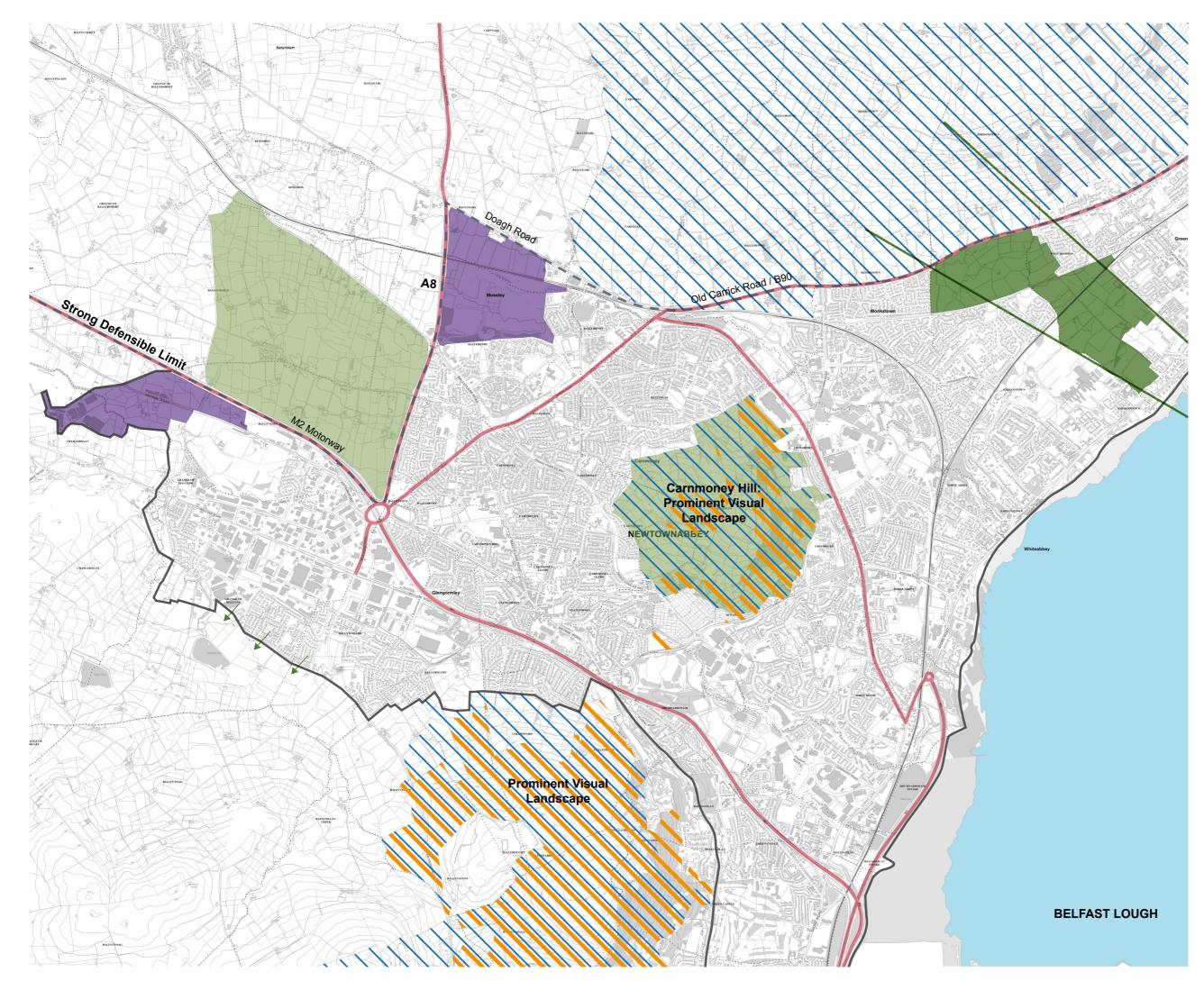
Hydepark Green







Appendix 7: Constraints Map



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No obvious development constraint

CLIENT:

South Bank Square Ltd

PROJECT:

Land at Hydepark Road, Mallusk

DRAWING:

Context Plan

PROJECT NUMBER:

BSGB3006

DRAWING NUMBER: 1001

REVISION: 03

DATE:

September 2019

CHECKED BY SF

STATUS: Final

SCALE:

NTS@A3



Appendix 8: Transportation Overview





Technical Note 2 – Transportation Overview

Project:	Hydepark Green		
Subject:	Transportation Overview		
Author:	Damian Murray	Atkins No.:	5138201
Date:	17/09/2019		
Distribution:	South Bank Square	Revision	Version 2.0

Purpose of Note

The purpose of this note is to provide a Transport Overview of the Mallusk area in the vicinity of the Hydepark Green lands and includes the following:

- Transport Policy Context;
- Site Location;
- Existing vehicle access routes;
- Existing accessibility by sustainable transport modes;
- Overview of Hydepark Green Masterplan;
- Benefits to Transport Accessibility as a result of the Hydepark Green lands.

Transport Policy Context

There are a number of current transportation policies which are pertinent when considering the Hydepark Green development lands. The remainder of this section provides a summary of these.

The Regional Development Strategy 2035 – Building a Better Future

The Regional Development Strategy (RDS) (Building a Better Future) 2035 was published by the Department for Regional Development in March 2012. This is a long-term strategy to deliver the spatial aspects of the Programme for Government, recognising the need for balanced sub-regional growth and importance of key settlements as centres for growth and investment.

The RDS 2035 includes Regional Guidance (RG) to "deliver a balanced approach to transport infrastructure" (RG2) which will allow the region to remain competitive in the global market in a sustainable manner. The focus is on managing the use of road and rail space and how we can use our network in a better, smarter way. Additionally, the improvement of connectivity and access to cities and towns are also key areas of focus.

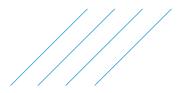
In particular, the RDS 2035 recognises the need to maximise the potential of the Regional Strategic Transport Network (RSTN) to enhance accessibility to towns; to help build an integrated regional economy; facilitate tourist travel including improving connections to key tourism sites; and reduce where possible, unsuitable traffic into towns.

Important policy from the RDS to be noted include:

- SPG Tran 2: Extend travel choice for all sections of the community by enhancing public transport;
- SPG-TRAN 3: Integrate land use and transportation;
- SPG-TRAN 4: Change the regional travel culture and contribute to healthier lifestyles.







The Regional Transportation Strategy

The Regional Transportation Strategy (RTS) (A New Approach to Regional Transportation) is a high-level strategic document which complements the RDS. This regional policy sets out a number of high-level aims and strategic objectives for transportation in Northern Ireland and will be used to set transportation investment priorities after 2015.

The RTS has a transportation vision "to have a modern, sustainable, safe transportation system which benefits society, the economy and the environment and which actively contributes to social inclusion and everyone's quality of life". This will be delivered through three high level aims of supporting the growth of the economy; enhancing the quality of life for all; and reducing the environmental impact of transport.

Against each high-level aim, there are a number of strategic objectives which have been developed to address the challenges. The relevant strategic objectives are:

- Improve connectivity within the region;
- Use road space and railways more efficiently;
- Improve access in our towns and cities;
- Improve safety; and
- Develop transport programmes focused on the user.

Strategic Planning Policy Statement (SPPS)

In September 2015, the Department published a final form document on a "Strategic Planning Policy Statement for Northern Ireland (SPPS) – Planning for Sustainable Development". This document consolidates 20 separate PPSs into one document and brings forward a new strategic policy relating to town centres and retailing. It sets out the core planning proposals which underpin the reformed two-tier planning system introduced in NI from 2015, including promoting sustainable development, well-being and shared space.

The aims of the SPPS with regard to transportation are to secure improved integration with land-use planning, consistent with the RDS; and to facilitate safe and efficient access, movement and parking. The SPPS identifies a number of policy objectives for transportation and land-use planning as follows:

- Promote sustainable transport choices including walking, cycling and public transport, recognising that this may be less achievable in some rural areas;
- Ensure accessibility for all, particularly the needs of people with disabilities and others whose mobility is impaired;
- Promote the provision of adequate facilities for cyclists in new development;
- Promote parking policies that will assist in reducing reliance on the private car and help tackle growing congestion;
- Protect routes required for new transport schemes including disused transport routes with potential for future reuse;
- Restrict the number of new accesses and control the level of use of existing accesses onto Protected Routes; and
- Promote road safety, in particular for pedestrians, cyclists and other vulnerable road users.

Antrim and Newtownabbey LDP

Antrim and Newtownabbey Borough Council are currently preparing a Local Development Plan (LDP) for their council area. To support the preparation of the LDP the Council has prepared a Community Plan and a Preferred Options Paper. Key points to note from a transportation perspective are summarised as follows:

Antrim and Newtownabbey Borough Council 2030 Community Plan

- Our citizens enjoy good health and wellbeing
- Our citizens live in connected, safe, clean and vibrant places





- Our citizens benefit from economic prosperity
- Our Citizens achieve their full potential; and
- Our vulnerable people are supported.

Preferred Options Paper

- To provide an adequate range and quality of land and premises for business and industry;
- To protect strategically important business and employment opportunities;

Member of the SNC-Lavalin Group

- To promote the development and regeneration of our towns and commercial centres;
- To promote high quality environmentally sustainable design;
- To provide a sufficient supply of land for mainstream and affordable housing and ensure a diverse choice of housing;
- To ensure that necessary new infrastructure accompanies new development;
- To accommodate necessary community facilities;
- To encourage better connectivity by transport and digital networks;
- To protect and enhance the natural and built environment;
- To protect open spaces of public value and promote green network linkages around our larger settlements;
- To promote sustainable tourism and economic diversification;
- To integrate climate change adaptation requirements such as flood prevention and sustainable renewable energy production; and
- To make adequate provision for waste management.

Policy Context Summary

This section has provided an overview of the transport policy context for the Hydepark Green development lands. The key policy themes to be drawn out of this review are:

- Land use and transportation should be integrated to reduce congestion and the use for car journeys;
- Ensure the needs of people with disabilities and mobility impaired are taken into account with respect to accessibility;
- Ensure that new developments offer a realistic choice of access by walking, cycling and public transport, recognising that this may be less achievable in some rural areas; and
- Ensuring the most efficient use of existing infrastructure, building and transportation systems.

Location

The development site is located to the South West of Hydepark Road, Mallusk, Newtownabbey. The site is situated approximately 2 miles from Newtownabbey and 5 miles from Belfast. Access to the Strategic Road Network (M2) is provided via Sandyknowes Roundabout.

Existing Vehicle Routes

As illustrated in Figure 1 the subject lands benefits from its strategic location and has a number of access routes to both the local B95 road network and also the wider Strategic Road network via the M2.

Local Access Routes

The B95 provides the main local access route to the development lands and connectivity to:

- Templepatrick to the northwest
- North Belfast to the south







• Glengormley to the north east

Strategic Access Routes

Sandyknowes Roundabout is a key attractor for traffic in the local area as it provides direct access to the M2 Motorway and the wider strategic road network. There are a number of existing routes to/ from the site to access the M2 and include the following as presented in Figure 1 for ease of reference:

- Blue Route: Mallusk Road/ Hydepark Road junction;
- Yellow Route: Through the Blackrock Estate;
- Green Route: via Hightown Road Mallusk Road

Figure 1 Access Routes



Existing Accessibility by Sustainable Modes of Transport

This section presents an overview of the existing accessibility by sustainable transport and includes:

- Public Transport;
- Cycling; and
- Walking.

Figures 2 to 4 provide further details with respect to:

- Bus routes, frequency and location of bus stops;
- Cycling accessibility i.e. the areas cyclist can reasonably assume to access up to 4km; and
- Walking accessibility i.e. the areas a pedestrian can reasonably assume to access up to 1km.







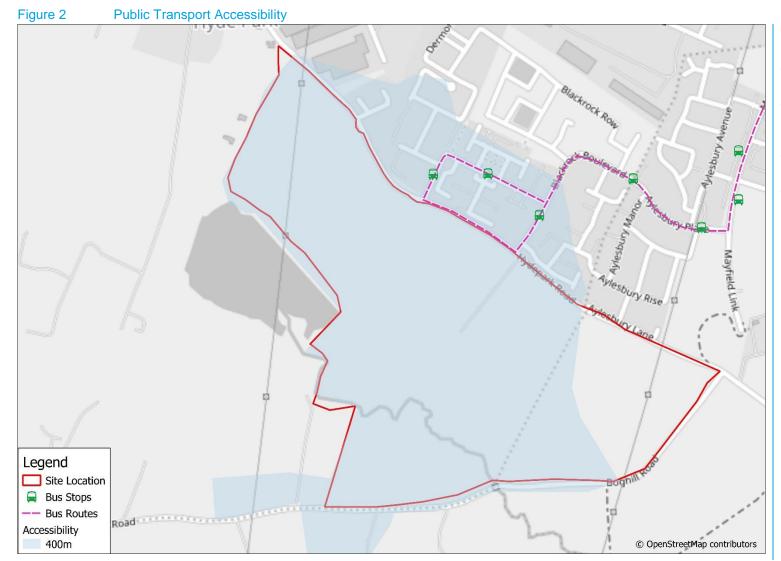


Figure 2 shows:

- Three bus stops within 400m of the proposed development;
- Timetable information is provided at the bus stop along Blackrock Park Avenue.
- These bus stops are serviced by Translink Metro route 1F.
- A summary of the timetable information is below:

Service 1F

- Mon-Fri: 2 services per hour
- **Sat**: 2 services per hour;
- Sun: No service.



Figure 3 Cycling Accessibility

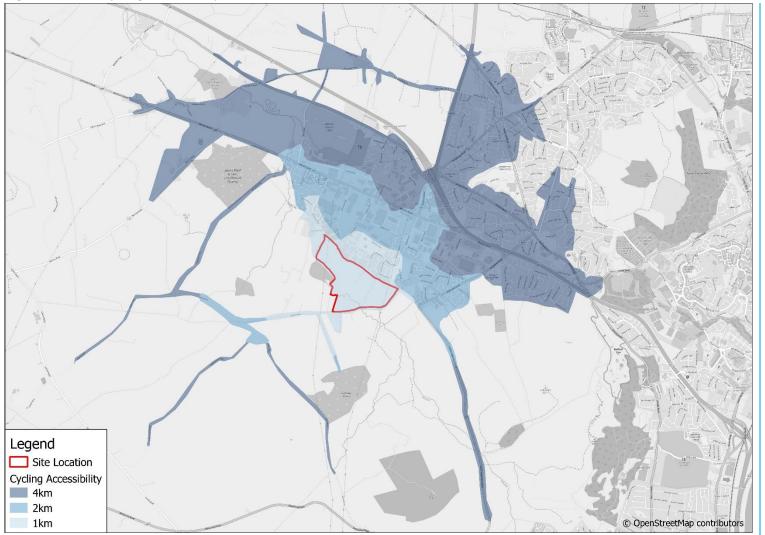


Figure 3 shows:

- The cycling catchment areas of 1km, 2km and 4km (a cycle time of up to approximately 20 minutes).
- A desktop review of the area has identified:
 - There is no formal provision of cycle infrastructure;
 - The NCN does not pass close to the site, with the closest route 4km away;
 - Good quality street lighting in the area.







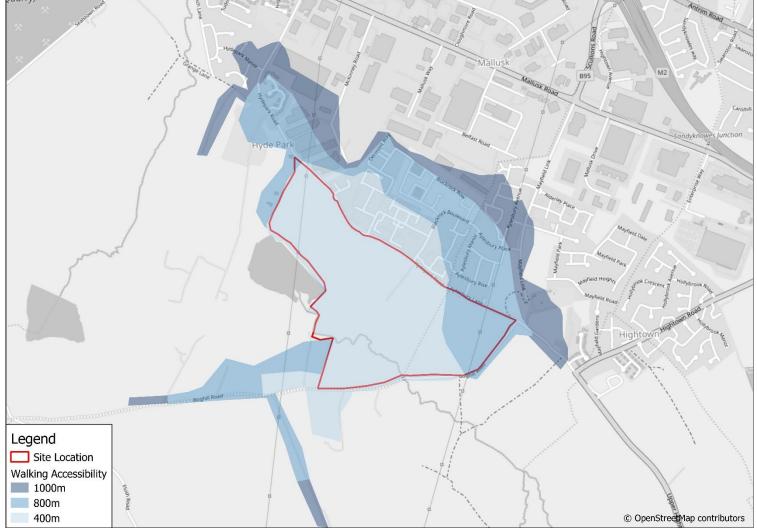


Figure 4 shows:

- The pedestrian catchment areas of 400m, 800m and 1km (a walking time of up to approximately 12 minutes) from both the main access and the pedestrian access;
- The 1km walking catchment largely encompasses nearby residential developments;
- A desktop review of the area has identified:
 - The main walking routes through the adjacent Blackrock development consist of good quality footways (approx. 2m-3m in width);
 - Dropped kerbs and tactile paving at most crossing points;
 - Good quality street lighting.



Development Masterplan – Transport Overview

Figure 5 below sets out the Hydepark Green masterplan proposals and highlights the key transport related attributes.

Figure 5 Hydepark Green Masterplan – Key Transport Attributes







Figure 5 illustrates a number of transport related infrastructure improvements associated with the Hydepark Green Masterplan proposals. These improvements will provide both local benefits to the existing residents and businesses within the Mallusk area as well as wider strategic benefits.

A summary of the transport related infrastructure and associated benefits are outlined below:

Road Network

A summary of the highway related improvements along with an overview of their benefits are shown in Table 1.

Transport element	Benefit
Completion of Mayfield Link Road	This is a strategically significant piece of road network infrastructure which has stalled for a significant number of years. The completion of Mayfield Link Road provides direct access to the M2 strategic road network. It will also significantly enhance accessibility to the wider Mallusk area whilst also providing relief to the Hightown Road.
Provision of new roundabout junction	This new junction will facilitate a safe transition from the Hydepark Road to the newly completed Mayfield Link Road and will be designed in accordance with applicable standards.
Upgrade of existing Hydepark Road	The existing Hydepark Road along the frontage of the existing Hydepark Green development lands is substandard in places with carriageway widths quite narrow in places. This investment will enhance road safety in the local area for all road users.
Potential provision of new distributor road	To be explored as part of the detailed design stage. Whilst not necessary to facilitate the Hydepark Green development lands, the developer is committed to explore the potential benefits of providing such a scheme.

Table 1 Highway Network Improvements

Table 1 shows that the above highway schemes will enhance accessibility in the immediate Mallusk area along with providing direct links to the M2 strategic road network. These schemes will also enhance road safety for all users and will be designed in line with the appropriate standards. The provision of infrastructure will require careful coordination with any phasing of the development lands to ensure economic viability.

Public Transport

A summary of the Public Transport related improvements along with an overview of the benefits are shown in Table 2.

Table 2 Public Transport Improvements

Transport element	Benefit
Extension of existing or provision of new bus service	The Hydepark Green development lands currently benefit from being in close proximity to the existing Translink Metro 1F service which operates between Belfast City Centre and the Blackrock development. It is proposed, through engagement with Translink, that this service, or a new service would extend to the Hydepark Green site. This extended or new service could potentially link into any new Glider service which may be brought forward by the Department for Infrastructure to serve north Belfast.

Table 2 demonstrates that the developer intends to work closely with Translink to improve public transport accessibility for future residents of the site.







Active Travel

A summary of the Active Travel related improvements along with an overview of the benefits are shown in Table 3.

Table 3 Active Travel Improvements

Transport element	Benefit
Provision of dedicated off road cycle routes	Dedicated cycle routes provide safe, traffic free route for existing residents and future residents to enjoy recreation and/ or commute to their place work.
Provision of dedicated off road walking trails	Dedicated walk routes provide safe, traffic free route for existing residents and future residents to enjoy recreation and/ or commute to their place work.
Provision of dedicated walking and cycling infrastructure along Hydepark Road	The provision of dedicated walking / cycling infrastructure along Hydepark Road enhances accessibility and connectivity to facilities and services for existing residents and future residents.

Table 3 outlines that the development will be designed to enhance the walking and cycling accessibility throughout the development site and connecting to the wider Mallusk area.





Summary and Conclusions

The Hydepark Green development lands are situated adjacent an established residential area and benefit from good levels of existing transport accessibility.

KINS

Member of the SNC-Lavalin Group

A range of transport interventions are proposed as part of the Hydepark Green development lands which will:

- Enhance the Active Travel network
- Enhance the Public Transport network
- Enhance the local road network

Table 4 sets summarises how the Hydepark Green development lands adhere and support the themes which have been identified as part of the transport policy context review.

Table 4 Transport Policy Context

Transport Policy Theme	Hydepark Green Development Lands
Land use and transportation should be integrated to reduce congestion and the use for car journeys.	Hydepark Green is situated within the Mallusk area. Mallusk is a major employment location within Antrim and Newtownabbey, and represented the place of work for over 8,000 people in 2011 – more than any other ward in the borough, and exceeded by only five wards across Northern Ireland. Therefore Hydepark Green is seeking to integrate land use and transportation by providing increased housing closer to a major employment centre.
Ensure the needs of people with disabilities and mobility impaired are taken into account with respect to accessibility.	The Hydepark Green development will be designed in accordance with current standards, thus the needs of all users will be accommodated.
Ensure that new developments offer a realistic choice of access by walking, cycling and public transport, recognising that this may be less achievable in some rural areas.	Tables 2 and 3 summarise the proposed Active Travel and Public Transport interventions which will be provided with the development lands. Furthermore, by providing more housing closer to Mallusk, which is a major employment centre, this has the potential to increase the attractiveness of Active Modes and Public Transport to access jobs.
Ensuring the most efficient use of existing infrastructure, building and transportation systems.	Table 1 summaries how the Mayfield Link Road will be complete as part of the Hydepark Green development lands, thus ensuring the most efficient use of existing infrastructure is achieved. This is a unique opportunity to complete Mayfield Link Road and avail of the associated benefits that this will bring

[End]

Appendix 9: Ecological Assessment



Hydepark Road, Mallusk

Ecological Constraints

For South Bank Square Ltd

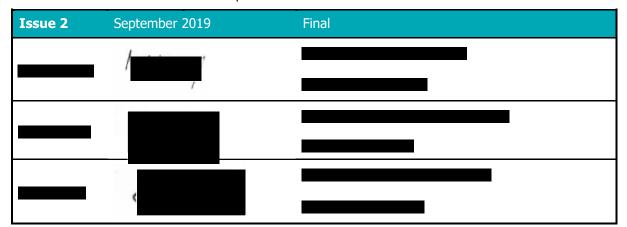
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1 Locksley Business Park, Montgomery Road, Belfast, BT6 9UPTel:028 9070 6000Email:ecology@wyg.com



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V2	09.09.19	Marie-Claire Vallely	Matthew Peden	Amendments to reflect changes in red-line boundary.

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Executive Summary

Summary		
Survey Aims	To identify potential ecological constraints on site and make recommendations for any additional ecological work where required.	
Potential Ecological Constraints Identified On- Site	 The following potential ecological constraints were identified on site: Smooth newts Bats Badgers Otters Invasive species Nesting birds 	
Recommended Additional Surveys	 The following additional surveys are recommended: A Phase 1 habitats survey in order to identify any priority habitats and assess any habitats potential to support protected species. A Habitat Suitability Index assessment of any accessible, connected waterbodies on and within 500 m of the site to assess their suitability for smooth newts and the likelihood of newts using any suitable terrestrial habitat found on site. A survey of buildings and trees to assess their suitability to support roosting bats. An Invasive Species Survey to record the extent of any invasive plant species if present. A Badger Survey to determine the presence and level of badger activity on or within 50 m of the site. An Otter Survey of the Flush River, Ballymartin River and Hydepark Dam to confirm the likely presence or absence of otters on site. An assessment of the potential impacts of the development on aquatic flora and fauna may need to be undertaken depending on the proximity of the development to the Flush River. 	
Recommended Additional Assessment	A Stage 1 Habitats Regulations Assessment is recommended to determine any likely significant effects upon the qualifying features of Lough Neagh Ramsar and Lough Neagh and Lough Beg SPA.	
Further Recommendations	Whilst further surveys are required for a number of potential ecological constraints, the following generic measures are	



 applicable to vegetation clearance works that are likely to be required: Works should be conducted outside of the nesting bird season (March to August inclusive) where possible. An Ecological Clerk of Works (ECoW) should be present during clearance works should it not be possible to clear the site outside the bird breeding season. Clearance of dense scrub only to commence under the supervision of an ECoW due to the risk of smooth newts and badger setts.



Glossary	
ASSI	Area of Special Scientific Interest
BoCC	Bird(s) of Conservation Concern
CEDaR	Centre of Environmental Data and Recording
CEnv	Chartered Environmentalist
CIEEM	Chartered Institute of Ecology & Environmental Management
ECoW	Ecological Clerk of Works
HSI	Habitat Suitability Index
JNCC	Join Nature Conservancy Council
LBAP	Local Biodiversity Action Plan
MCIEEM	Member of Chartered Institute of Ecology & Environmental Management
NIBG	Northern Ireland Bat Group
NIEA	Northern Ireland Environment Agency
NIPH	Northern Ireland Priority Habitat
NIPS	Northern Ireland Priority Species
NMNI	National Museums Northern Ireland
NNR	National Nature Reserve
PRF	Potential Roost Feature
S1	Schedule 1
SAC	Special Area of Conservation
SLNCI	Site of Local Nature Conservation Importance
SPA	Special Protection Area
TPO	Tree Preservation Order



1.0 Introduction

1.1 Background

WYG was commissioned by South Bank Square Ltd in May 2019, to carry out an ecological constraints walkover survey to inform potential development at Hydepark Road, Mallusk, Irish Grid Reference: J 29280 81662 (See Figure 1).

Publicly available aerial imagery indicated the site comprised of grassland fields and associated farm buildings (derelict), a river, scrub, scattered trees and hedgerow.

The Flush River flows along the southern boundary of the site and meets the Hydepark Dam adjacent to the southwestern site boundary, where the outflow forms the Ballymartin River. An industrial estate and a residential development bound the site to the north. Agricultural fields, predominantly improved grassland fields bounded by hawthorn hedgerows, are found east and west of the site.

1.2 Purpose of the Report

This report has been prepared by WYG Assistant Ecologist, Marie-Claire Vallely. The purpose of the report was to:

- Review existing ecological information for the site;
- Carry out an updated desk study of the site;
- Identify potential ecological constraints on site; and
- Make recommendations for any additional ecological work where this is required.

Note that scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.



2.0 Ecology Review

2.1 **Previous Ecological Reports**

An Ecological Assessment was carried out by ATEC in August 2016 (ATEC, 2016) that surveyed the land area directly adjacent to the north-western boundary of the current site.

A badger *Meles meles* sett consisting of seven entrances was recorded along the left bank of the Ballymartin River. Due to the size of the sett it was deemed likely that this was once used as a breeding main sett. However, only one of the entrances showed signs of recent activity, suggesting it was used as an outlier sett at the time of surveying in 2016.

Evidence of otter *Lutra lutra* activity was noted on the Ballymartin River in the form of spraints. Two sprainting sites were identified, both with recent spraint present. The first was within the culverted section of the river, and the second on an outcrop of bedrock along the right of bank of the river.

Three non-native invasive plants listed within Schedule 9 of the Wildlife (Northern Ireland) Order (1985) were also identified within the site boundaries. A subsequent Invasive Species Survey was conducted by WM Associates in September 2016 (WM Associates, 2016). The results of the survey found giant hogweed *Heracleum mantegazzianum*, salmonberry *Rubus spectabilis* and Japanese knotweed *Fallopia japonica* (now known as *Reynoutria japonica* (Stace, 2019) to be present on site. Salmonberry was located in the centre and north of the site (approximately 165 m north-west of the current development site boundary at its closest point) on areas of demolition waste, while giant hogweed and Japanese knotweed were found along the riverbanks to the far north of the site approximately 240 m north-west of the current development site boundary.

2.2 Desk Study Methodology

2.2.1 Local Ecological Records Centre

Information was requested from the National Museums Northern Ireland (NMNI) Centre for Environmental Data and Recording (CEDaR) for information on any protected or notable species records within 2 km of the site.

The data search covered:

- Statutory designated sites for nature conservation, namely Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites, Areas of Special Scientific Interest (ASSIs), and National Nature Reserves (NNRs);
- Non-statutory designated sites for nature conservation, namely Sites of Local Nature Conservation Importance (SLNCIs);
- Legally protected species, such as bats and badger; and,
- Notable habitats and species, such as those listed as Northern Ireland Priority Habitats (NIPH) and Northern Ireland Priority Species (NIPS).

The data search did not cover:

- Tree Preservation Orders (TPOs); or
- Conservation Areas designated for their special architectural and historic interest.



2.2.2 Local Species Recorders

Northern Ireland Bat Group (NIBG) was also contacted for any relevant records that they held.

2.2.3 Online Resources

A search for relevant information was also made using the NIEA Natural Environment Map Viewer. This is NIEA's interactive, web-based database for statutory and non-statutory designated sites for nature conservation in Northern Ireland.

2.3 Field Study Methods

A walkover survey was carried out on the 25th of July 2019 by WYG Project Ecologist Matthew Peden GradCIEEM and WYG Assistant Ecologist Marie-Claire Vallely. Conditions were warm and sunny with temperature of 22°C. The surveyors crossed the site in transects to identify broad scale habitats and evidence of protected species, as well as the habitats potential to support protected species. Any evidence of protected species and important habitat features were noted, photographed and accurately recorded using MapIt GIS software.

2.4 Limitations

To determine presence or likely absence of protected species usually requires multiple visits at suitable times of the year. As a result, this survey focuses on assessing the potential of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to those given protection under UK or European wildlife legislation. This report cannot therefore be considered a comprehensive assessment of the ecological interest of the site. However, it does provide an assessment of the ecological interest present on the day the site was visited and highlights areas where further survey work may be recommended.

Parts of the scrub habitat were extremely dense and therefore inaccessible at the time of survey. Therefore is was not possible to thoroughly examine all areas of the site for signs of mammal activity. As a result, precautionary measures of works are recommended during the clearance of dense scrub i.e. only commencing under the supervision of an Ecological Clerk of Works (ECoW).

It was also not possible to gain access to the occupied houses / garages within the site boundary as prior permission had not been obtained at the time of surveying. Therefore, additional survey visits to complete internal inspections of the buildings be carried out are recommended.



3.0 Results

3.1 Statutory Designated Sites

The desk study found that the Flush River which bounds the southern border of the site forms part of the footprint of Hydepark Dam which is an SLNCI. It is also a tributary of the Six Mile Water River which discharges to Lough Neagh ASSI (DAERA, 1992), Lough Neagh and Lough Beg Ramsar (JNCC, 2005) and Lough Neagh and Lough Beg SPA (DAERA, 1998) approximately 18 km downstream. Lough Neagh ASSI and Lough Neagh and Lough Beg SPA are designated predominantly for their breeding and wintering bird assemblages. Lough Neagh and Lough Beg qualify under Criterion 1 and 2 of the Ramsar convention by being the largest freshwater lake in the United Kingdom and supporting over forty rare or local vascular plants, as well as a large number of rare or local invertebrates.

3.2 Habitats

3.2.1 Habitats

Habitats present included semi-improved and improved neutral grassland, dense scrub, scattered trees, a river and hedgerows.

Multiple hedgerows were identified across the site. Species-rich hedgerow is a Northern Ireland Priority Habitat. However, in order to be considered species-rich it must contain five or more native woody species in a 30 meter length. The hedgerows on-site were generally dominated by hawthorn *Crataegus monogyna* and occasional gorse *Ulex europa*, and therefore considered species-poor.

3.3 Protected and Notable Species

3.3.1 Smooth Newt

<u>Desk Study</u>

The desk study returned no records of smooth newt *Lissotriton vulgaris* within 2 km of the site.

Field study

During the site visit, some areas of standing water, including areas with emergent and overhanging vegetation, were noted which have the potential to be used by smooth newts. Long drainage ditches were located along multiple field boundaries on-site, however these were heavily vegetated over and were either dry or had very little (<5 cm) water in them.

Hydepark Dam lies in close proximity (5-10 m) of the western boundary of the site (See Photograph 1). This was assessed as being a suitable habitat for smooth newts as it contains a diversity of submerged and emergent vegetation, with adjacent habitats of rank grassland and the water within the dam showing no noticeable current which smooth newts prefer.



Photograph 1: Hydepark Dam



3.3.2 Bats

<u>Desk Study</u>

The desk study returned four records of pipistrelle bats within 2 km of the site between 1991 and 1997. However, these records were all more than 15 years old and so are considered to have limited value.

Field Study

In accordance with the Bat Conservation Trust Good Practice Guidelines (Collins 2016), the site was considered to have high suitability to support foraging and commuting bats. The fields, trees and hedgerows on site are likely to provide potential foraging and commuting opportunities. The Flush River along the southern boundary of the site may also be used as a commuting route as well as a foraging site for bats, especially species that favour aquatic features such as those shown in Photograph 1, e.g. Daubenton's bat *Myotis daubentonii*.

The site also supported mature beech *Fagus sylvatica* and sycamore *Acer pseudoplatanus* trees that also had PRFs. These were in the form of rot holes, folded or rotten limbs, a rotten trunk or various crevices of a suitable size for bats to enter (Photograph 2).





Photograph 2: Mature Beech Tree with Rot Holes and Crevices

3.3.3 Badger

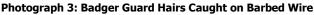
Desk Study

The desk study returned no records of badger within 2 km of the site. Earth banks, hedgerows and dense patches of gorse within the site have all been assessed as being suitable for badger setts with good foraging opportunities available. The Ecological Assessment conducted by ATEC in August 2016 found an outlier sett along the left bank of the Ballymartin River, north-west of the boundary of the current site, confirming that badgers were present in the surrounding area at the time of survey.

Field Study

Badger activity (Figure 3) was recorded throughout the site in the form of mammal trails, snuffle holes, breach points and hairs caught on wire fences and loose clumps beneath a gorse patch (Photograph 3). A badger sett was recorded along the base of a hedgerow field boundary, with four entrance holes, a latrine and spoil bedding identified (Photograph 4).









Photograph 4: Two Sett Entrances with Spoil Bedding

3.3.4 Otter

Desk Study

The desk study returned two records of otter within 2 km of the site, one in 1990 and the other in 2002. The record from 1990 was from Boghil Dam which is located 1 km south-west of the site. The nearest and most recent record was made at Blacks Bridge under which the Flush River flows, adjacent to the south-western site boundary (Photograph 5).

Field Study

The Flush River which flows along the southern site boundary (Figure 2) is hydrologically connected to Lough Neagh Ramsar and ASSI and Lough Neagh and Lough Beg SPA via the Six Mile Water (approximately 9.2 km downstream) which is known to have an abundance of brown trout *Salmo trutta*, providing a plentiful food supply for otters.

Fish were noted to be swimming within the Flush River, with the river also being wide enough to support commuting otters. As can be seen from the desk study results and previous environmental assessment, there is evidence that otters have used the river in the past. It is also plausible that otters may use Hydepark Dam as the Flush River flows through it and lies 500 m west of Boghil Dam. Evidence such as couches, holts and spraints were searched for during the site walkover where access allowed, however none were noted during that time.

Hydepark Road, Mallusk: Ecological Constraints





Photograph 5: View of the Flush River from Blacks Bridge

3.3.5 Birds

Desk Study

The desk study returned 25 records of a range of bird species within 2km of the site. These are presented in Table 1.

Common Name	Latin Name	Year Recorded	BoCC Ireland	BoCC UK				
Woodcock	Scolopax rusticola	2010						
Spotted flycatcher	Muscicapa striata	2015	NIPS					
Hen harrier	Circus cyaneus	2010	NIPS					
Starling	Sturnus vulgaris	2012						
Turtle dove	Streptopelia turtur	2013						
Redwing	Turdus iliacus	2012						
Ringed plover	Charadrius hiaticula	2010						
Kestrel	Falco tinnunculus	2010	S1					
Kingfisher	Alcedo atthis	2014	S1					
Greylag goose	Anser anser	2011						
Mediterranean gull	Larus melanocephalus	2013						
Snipe	Gallinago gallinago	2010						
Bullfinch	Pyrrhula pyrrhula	2014						
Great spotted woodpecker	Dendrocopos major	2013						
Jack snipe	Lymnocryptes minimus	2013						
Blackbird	Turdus merula	2017						

Table 1: Bird species recorded within 2km of the site

Hydepark Road, Mallusk: Ecological Constraints



Common Name	Latin Name	Year Recorded	BoCC Ireland	BoCC UK
Brambling	Fringilla montifringilla	2014		
Carrion crow	Corvus corone	2014		
Grey heron	Ardea cinerea	2012		
Јау	Garrulus glandarius	2012		
Magpie	Pica pica	2010		
Rook	Corvus frugilegus	2016		
Tawny owl	Strix aluco	2013		
Tree creeper	Certhia familiaris	2012		
Woodpigeon	Columba palumbus	2016		

Key:

- BoCC: Birds of Conservation Concern
- NIPS: Northern Ireland Priority Species
- S1: Schedule 1

Field Study

Multiple common bird species were recorded on site during the survey, as shown in Table 2.

Table 2: Bird Species Identified On-Site

Common Name	Latin Name	BoCC Ireland	BoCC UK
House sparrow	Passer domesticus	NIPS	
Swallow	Hirundo rustica		
Woodpigeon	Columba palumbus		
Blackbird	Turdus merula		
Blue tit	Cyanistes caeruleus		
Great tit	Parus major		
Rook	Columba palumbus		

In addition to these species, an occupied birds nest was recorded on site within a dense patch of gorse (See Figure 2). Habitats present on site are suitable to support a wide range of breeding birds. Scrub, scattered trees and hedgerows present on site can support song birds such as wren, great tit and tree sparrows as evident from the site walkover.

3.3.6 Invertebrates

Desk Study

The desk study returned eight records of invertebrates from within 2 km of the site. These records were all more than 15 years old and so are considered to have limited value. These have been provided in Appendix A.

Hydepark Road, Mallusk: Ecological Constraints



Field Study

A high number of invertebrates, in particular butterflies and moths were noted on site. These included painted lady *Vanessa cardui*, meadow brown *Maniola jurtina*, ringlet *Aphantopus hyperantus*, small tortoiseshell *Aglais urticae*, red admiral *Vanessa atalanta*, lunar hornet moth *Sesia bembeciformis* (Photograph 6) and barred straw *Gandaritis pyraliata*, as well as grasshoppers *Chorthippus brunneus* and buff-tailed bumblebee *Bombus terrestris*.

Suitable food plants for a variety of butterflies and other invertebrates, including ragwort *Jacobaea vulgaris,* common spotted orchid *Jacobaea vulgaris* and vetch *Vicia* sp. species were recorded on site. Mature beech foliage is also eaten by the caterpillars of a number of moths, including the barred hook-tip *Drepana cultraria*.





3.3.7 Rare and Notable Plants

Desk Study

The desk study returned records of protected species such as bluebell *Hyacinthoides non-scripta*, primrose *Primula vulgaris* and lesser-butterfly orchid *Platanthera Bifolia* within 2 km of the site. However, with the exception of two records of common species, all were over 15 years old and as such considered to be of limited value. No records of rare plants on site were returned by CEDaR.

Field Survey

The site primarily comprised of improved and poor semi-improved grassland with low species diversity. However, the fields adjacent to the Flush River contained a greater diversity of species as these were less intensively managed. No rare or notable species were recorded.

3.3.8 Invasive Species

Desk Study

The desk study returned no records of invasive plant species. The results from the 2016 Ecological Assessment show that salmonberry, Japanese knotweed and giant hogweed were present approx.



165m north-west of the current site boundary and thus the possibility of them spreading onto the site is likely.

Field Study

No invasive species were noted on site.

3.3.9 Other Mammals

Desk Study

Two records of hedgehog *Erinaceus europaeus* were returned by CEDaR. The closest and most recent record was made in 2013, 1.3 km north-east of the site. One record of a deceased pine marten *Martes martes* from 2009 was made 1.7 km south of the site. No records of red squirrel *Sciurus vulgaris* were returned by CEDaR.

Field Study

No evidence of hedgehog, pine marten or red squirrel were recorded during the survey; however, there were habitats with the potential to support these species in the form of dense scrub and wooded areas.

3.3.10 Aquatic Habitats

Desk Study

The desk study returned no records of Atlantic salmon *Salmo salar* within 2 km of the site. No statutory sites designated for Atlantic salmon are located within 2 km of the site, or are hydrologically connected to the Flush River. Although, the river is hydrologically connected to Lough Neagh ASSI, and Lough Neagh and Lough Beg Ramsar and SPA via the Six Mile Water which is known to have an abundance of brown trout.

Field Study

The Flush River itself has suitable spawning habitat for brown trout as the bed consists of loose pebbles and gravel (See Photograph 7).



Photograph 7: The Flush River



4.0 Recommendations

4.1 Recommended Ecological Baseline Survey Work

The following ecological surveys are recommended to support future planning applications for the site:

Ecological Appraisal: This should comprise of an Extended Phase 1 Habitat Survey of the site undertaken in accordance with published methodology (CIEEM, 2017; JNCC, 2010). The results from the survey would be used to identify the importance of all habitats present, and the potential for those habitats to support protected, notable and invasive species.

The survey should ideally be completed between April and September when most plants are in flower (although note that some species only flower at certain times of year). If the survey is undertaken within 12 months of issuing this report (i.e. before September 2020) then no new desk study will be required. If the survey is undertaken after this date then it is recommended that a new data search information is obtained. Please note additional more detailed botanical surveys may be required in the event that priority habitats/species rich areas are identified on site.

Smooth Newts: A Habitat Suitability Index (HSI) assessment should be carried out on any areas of standing water on site, and within 500 m of the site boundary, as well as any suitable terrestrial habitat within 200 m of the water body, to determine their potential to support smooth newts. This can be carried out in conjunction with the Extended Phase 1 Habitat Survey. It is considered likely that areas of standing water found to have suitability to support smooth newts will require presence / likely absence and possible population size class assessment surveys to be undertaken. It is considered likely that a presence / absence survey will be required. If smooth newts are found on site, appropriate mitigation will be required.

Bats: As part of the Extended Phase 1 Habitat Survey, the suitability of the site for roosting, foraging and commuting bats should be assessed in further detail in accordance with the most recent guidelines (Collins, 2016) to determine the level of survey effort required for bats on site. This should include a detailed external (from ground level) inspection of trees and buildings, as well as internal inspections of the buildings within and surrounding the site for their potential to support roosting bats. Completion of these initial assessments will inform the scope of any additional surveys, which are likely to comprise of activity surveys using transects and static monitors, but may also include of climbed inspections of trees with bat roost potential and emergence surveys of trees and buildings with bat roost potential.

Badgers: A badger sett was found on site as well as numerous other evidence of badger activity throughout. A full badger survey will be carried out during the Extended Phase 1 Habitat Survey to determine the presence and level of badger activity on or within 25 m of the site in accordance with NIEA (2011) guidelines. It is also considered likely that a pre-commencement check for badgers will be recommended immediately prior to works, as they are a mobile species and can rapidly colonise new areas of suitable habitat.

Otters: It is recommended that an otter survey of the entire site is undertaken, paying particular attention to riparian corridors, water body edges, and any areas of woodland or scrub. The survey must also include at least 30 m beyond the site boundaries up and down stream of riparian corridors.



Further surveys covering a more extensive area may be required if breeding is likely to occur on or surrounding the site. Evidence of otter presence (i.e. spraints, footprints, slipways, etc.) should be recorded in line with current guidelines (NIEA 2017a, CIEEM). It is likely that pre-commencement checks for otters will be recommended prior to works involving two site visits; the first undertaken three months prior to works commencing to allow for licensing should evidence of otter be identified, and the second to be conducted 48 hours prior to works commencing as they are a mobile species and their holts are protected. However, it should be noted that the requirements to do surveys may be dependent on how close to the river the development proposals extend.

Invasive species: Whilst undertaking the Extended Phase 1 Habitat Survey as part of an Ecological Appraisal, the site should be surveyed for evidence of invasive plant species such as Japanese knotweed, Indian (Himalayan) balsam, giant hogweed, wall cotoneaster *Cotoneaster horizontalis* and rhododendron *Rhododendron ponticum* × *Rhododendron maximum*. It is strongly recommended that surveys be carried out between April and September inclusive, when most plants are in flower and more visible. Surveys will be conducted in accordance with NIEA (2017b) specific survey requirements.

Aquatic Habitats: Dependent on the proximity of the proposed development to the Flush River, an assessment of the potential impacts of the development on aquatic ecology including flora and fauna may need to be undertaken. In the case of any development near watercourses, due care should be given and appropriate mitigation measures implemented during the construction and operational phases to prevent pollution of the aquatic environment.

4.2 Recommended Assessment

Dependant on the likelihood of the development proposals affecting the habitats within the adjacent river, a report to inform a Habitats Regulations Assessment may be required.

Habitats Regulations Assessment: The EU Habitats Directive (92/43/EEC) requires the competent authority to undertake a Habitats Regulation Assessment of any plan or project not directly connected with or necessary to the management of any Natura 2000 Sites but with the potential to have a significant effect upon, either individually or in combination with other plans or projects. This would be determined following the Extended Phase 1 Habitat Survey and once the extent of the development proposals are known. Primarily, it is recommended that an appropriate development area and work exclusion buffer zone is employed to prevent any potential for impacts on the river that may trigger HRA being required.



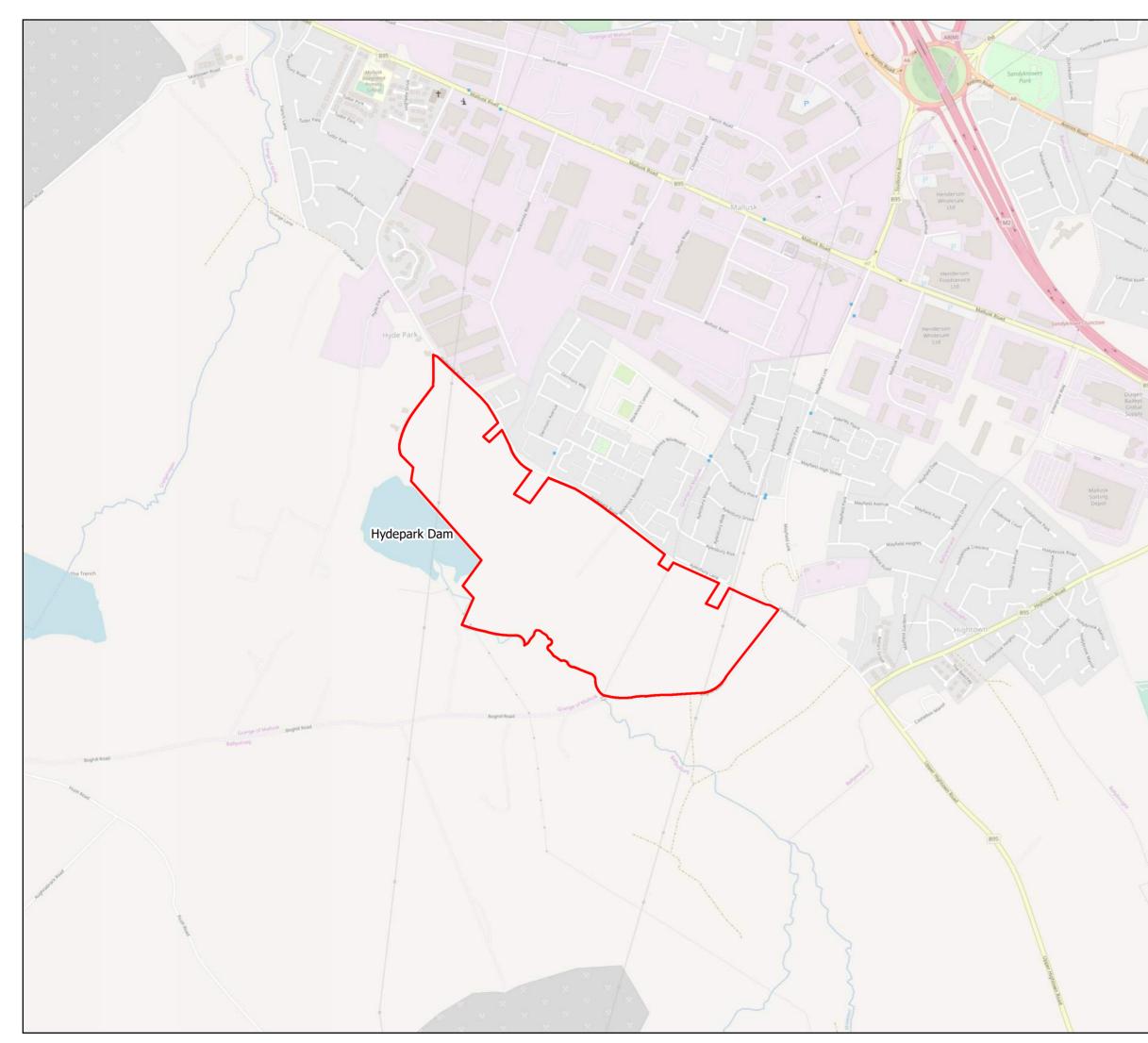
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FIGURES

Figure 1 - Site Location Plan Figure 2 - Ecological Constraints Map



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APPENDIX A – Relevant Desk Study Data



Table 3: NIBG Data

Grid	Scientific Name	Common Name	Date	Abundance
J285824	<i>Pipistrellus</i> sp.	Pipistrelle	10/05/91	4
J2882	Pipistrellus pipistrellus	Common pipistrelle	30/08/1997	1
J2882	Chiroptera	Unidentified	13/08/1997	Present
J291825	<i>Pipistrellus</i> sp.	Pipistrelle	15/07/93	Present

Table 4: CEDaR Data

Taxon Common Name	Taxon Latin Name	Event Date	Event Location	Sample Spatial Reference
			University of Ulster	
Physcia caesia	Physcia caesia	June 1993	Campus	J38
Phaeophyscia	Phaeophyscia		University of Ulster	
nigricans	nigricans	June 1993	Campus	J38
	Coenonympha			
Small Heath	pamphilus	1976	Cave Hill, Belfast	J38
Wall	Lasiommata megera	1976	Cave Hill, Belfast	J38
Grayling	Hipparchia semele	1976	Cave Hill, Belfast	J38
Wood White	Leptidea reali	1977	Cave Hill, Belfast	J38
			Knockagh, 1.5km NW	
Small Blue	Cupido minimus	1894	of Greenisland	J38
Marsh Fritillary	Eurodryas aurinia	1960	Belfast (Unlocalised)	J38
Latticed Heath	Semiothisa clathrata	07/06/2004	Glengormley	J3182
Shaded Broad-	Scotopteryx			
Bar	chenopodiata	1993	Newtownabbey	J38
	Salmo trutta subsp.			
Brown Trout	fario	24/02/1972	Hydepark	J288820
Straight-leaved		February	Collinward,	
Apple-moss	Bartramia ithyphylla	1921	Newtownabbey	J3180
Feathery Bog-	Sphagnum			
moss	cuspidatum	January 1909	Carnmoney, Belfast	J3183
Lustrous Bog-	Sphagnum		Collinward,	
moss	subnitens	July 1983	Newtownabbey	J3180
			Ballymartin Water at	
Eel	Anguilla anguilla	14/08/2000	Mallusk	J297833
Mat-Grass	Nardus stricta	July 2001	Hightown Landfill Site	J2980
Heather	Calluna vulgaris	July 2001	Hightown Landfill Site	J2980
Glaucous Dog-	Rosa caesia subsp.			
Rose	glauca	July 2001	Hightown Landfill Site	J2980
Eyebright	Euphrasia nemorosa	July 2001	Hightown Landfill Site	J2980
Knotted				
Pearlwort	Sagina nodosa	July 2001	Hightown Landfill Site	J2980
Bell Heather	Erica cinerea	July 2001	Hightown Landfill Site	J2980
Lesser Butterfly-				
Orchid	Platanthera bifolia	July 2001	Hightown Landfill Site	J2980
Wild Strawberry	Fragaria vesca	July 2001	Hightown Landfill Site	J2980
Heath Spotted-	Dactylorhiza			
Orchid	maculata	July 2001	Hightown Landfill Site	J2980
Creeping Willow	Salix repens	July 2001	Hightown Landfill Site	J2980



Taxon				Samula
Taxon Common				Sample Spatial
Name	Taxon Latin Name	Event Date	Event Location	Reference
Eyebright	Euphrasia micrantha	July 2001	Hightown Landfill Site	J2980
Northern Marsh-	Dactylorhiza			
Orchid	purpurella	July 2001	Hightown Landfill Site	J2980
Common		1 1 2001		10000
Spotted-Orchid	Dactylorhiza fuchsii	July 2001	Hightown Landfill Site	J2980
Tormentil	Potentilla erecta	July 2001	Hightown Landfill Site	J2980
Cross-Leaved		1 1 2001		10000
Heath	Erica tetralix	July 2001	Hightown Landfill Site	J2980
Ditter Metels	Lathyrus linifolius	1.4.2001		12000
Bitter-Vetch	var. montanus	July 2001	Hightown Landfill Site	J2980
Heath Speedwell	Veronica officinalis	July 2001	Hightown Landfill Site	J2980
Devil's-Bit	Cupaigo protocosio	1.1.2001		12000
Scabious	Succisa pratensis	July 2001	Hightown Landfill Site	J2980
Intermediate	Durala madia	02/07/2001	Hightown Londfill Cite	1202002
Wintergreen	Pyrola media	03/07/2001	Hightown Landfill Site	J292803
March Orchid	Dactylorhiza x formosa	02/07/2001	Uvda Dark, Hightown	12001
Marsh-Orchid		03/07/2001	Hyde Park, Hightown	J2981
Lesser	Ranunculus flammula	03/07/2001	Uvda Dark, Hightown	J2981
Spearwort Marsh	IIdIIIIIUId	03/07/2001	Hyde Park, Hightown	J2901
	Trialochin polystro	03/07/2001	Hudo Dark Hightown	J2981
Arrowgrass	Triglochin palustre Dactylorhiza x	03/07/2001	Hyde Park, Hightown	J2901
Marsh-Orchid	venusta	03/07/2001	Hyde Park, Hightown	J2981
Ragged Robin	Lychnis flos-cuculi	03/07/2001	Hyde Park, Hightown	J2981
Shady Horsetail	Equisetum pratense	03/07/2001	Hyde Park, Hightown	J2981 J2981
Bitter-Vetch	Lathyrus linifolius	03/07/2001	Hyde Park, Hightown	J2981
Ditter-vettin	Lauryrus minonus	03/07/2001	Blacks Bridge, Flush	J2901
Otter	Lutra lutra	07/05/2002	River	J2981
Frog Orchid	Coeloglossum viride	- 1921	Hyde Park, Hightown	J2981
Mountain	coclogiossain vinac	1921		52501
Everlasting	Antennaria dioica	- 1825	Carnmoney, Belfast	J3183
Small-White	Antennana aloica	1025	Collinward,	55105
Orchid	Pseudorchis albida	1908	Newtownabbey	J3180
Lesser		1900		55100
Twayblade	Listera cordata	1907	Sheepheads Hill	J2980
Corn Spurrey	Spergula arvensis	06/07/1906	Carnmoney, Belfast	J3183
Narrow-Leaved	epergula di teriolo			
Eelgrass	Zostera angustifolia	1961 - 1962	Newtownabbey	J38
Wild Celery	Apium graveolens	1894	Woodburn River	J38
Meadow				
Crane's-Bill	Geranium pratense	30/05/1985	Newtownabbey	J38
Cornflower	Centaurea cyanus	30/05/1985	Newtownabbey	J38
	Campanula			
Harebell	rotundifolia	21/02/1986	Newtownabbey	J38
Primrose	Primula vulgaris	21/02/1986	Newtownabbey	J38
Field Scabious	Knautia arvensis	02/05/1986	Newtownabbey	J38
Wood-Sorrel	Oxalis acetosella	02/05/1986	Newtownabbey	J38
	Hyacinthoides non-			
				1



Taxon				Sample
Common				Spatial
Name	Taxon Latin Name	Event Date	Event Location	Reference
Sheep's-Bit	Jasione montana	25/05/1986	Newtownabbey	J38
Sanicle	Sanicula europaea	25/05/1986	Newtownabbey	J38
Early-Purple				
Orchid	Orchis mascula	25/05/1986	Newtownabbey	J38
Common				
Wintergreen	Pyrola minor	25/05/1986	Newtownabbey	J38
Broad-Leaved				
Helleborine	Epipactis helleborine	10/08/1986	Newtownabbey	J38
Petty Spurge	Euphorbia peplus	10/08/1986	Newtownabbey	J38
	Euphorbia			
Sun Spurge	helioscopia	10/08/1986	Newtownabbey	J38
Marsh Ragwort	Senecio aquaticus	03/10/1986	Newtownabbey	J38
Common				
Butterwort	Pinguicula vulgaris	07/07/1987	Newtownabbey	J38
Greater	Platanthera			
Butterfly-Orchid	chlorantha	07/07/1987	Newtownabbey	J38
Lousewort	Pedicularis sylvatica	07/07/1987	Newtownabbey	J38
Heath Milkwort	Polygala serpyllifolia	07/07/1987	Newtownabbey	J38
Marsh				
Lousewort	Pedicularis palustris	07/07/1987	Newtownabbey	J38
Common	Eriophorum			
Cottongrass	angustifolium	07/07/1987	Newtownabbey	J38
	Menyanthes			
Bogbean	trifoliata	07/07/1987	Newtownabbey	J38
Quaking-Grass	Briza media	07/07/1987	Newtownabbey	J38
Star Sedge	Carex echinata	07/07/1987	Newtownabbey	J38
	Dactylorhiza			
Heath Spotted-	maculata subsp.			
Orchid	ericetorum	07/07/1987	Newtownabbey	J38
Common				
Twayblade	Listera ovata	07/07/1987	Newtownabbey	J38
Flea Sedge	Carex pulicaris	07/07/1987	Newtownabbey	J38
Early Marsh-	Dactylorhiza			100
Orchid	incarnata	15/06/1988	Newtownabbey	J38
Round-Leaved		20/00/1000		12000
Sundew	Drosera rotundifolia	29/08/1990	Hightown Road	J3080
Marsh Cinquefoil	Potentilla palustris	29/08/1990	Hightown Road	J3080
	Fundamentia e untitat		Ballyutoag	
Evolution t	Euphrasia arctica	12/00/1001	(Ballytogue), 2.5km S	12000
Eyebright	subsp. borealis	12/08/1991	of Mallusk	J2880
Pixie Gowns	Doltigora vonasa	1061	Knockash Lills	120
Lichen	Peltigera venosa	- 1861	Knockagh Hills	J38
Hodgoboo	Erinacous outranacus	02/07/1007	Sandyknowes	1204020
Hedgehog	Erinaceus europaeus	02/07/1997	Roundabout	J304830
Strawberry	Chara fragifara	10/00/1000	Hydonark	1700010
Stonewort	Chara fragifera	19/08/1988	Hydepark	J288818
Bladder-Sedge	Carex vesicaria	19/08/1988	Hydepark	J288818
Icoland Cull	Larua alauraidan	27/01/1000	Cotton Mount Tip,	12002
Iceland Gull	Larus glaucoides	27/01/1998	Mallusk	J2883



Taxon Common Name	Taxon Latin Name	Event Date	Event Location	Sample Spatial Reference
Swift	Apus apus	25/04/1998	Glengormley	J3182
Mute Swan	Cygnus olor	02/08/1998	Glengormley	J3182
Red Kite	Milvus milvus	16/01/1999	Newtownabbey	J38
Southern	Phalacrocorax carbo			
Cormorant	subsp. sinensis	18/12/1999	Hydepark	J289817
Whooper Swan	Cygnus cygnus	18/12/1999	Hydepark	J289817
Waxwing	Bombycilla garrulus	03/03/2001	Glengormley	J3182
House Martin	Delichon urbica	19/03/2001	Glengormley	J3182
Mistle Thrush	Turdus viscivorus	21/12/2001	Carnmoney, Belfast	J3183
Sparrowhawk	Accipiter nisus	21/12/2001	Carnmoney, Belfast	J3183
Buzzard	Buteo buteo	26/12/2001	Carnmoney, Belfast	J3183
			M5 Motorway, Belfast	
Barn Owl	Tyto alba	16/08/2002	Lough	J38
Crossbill	Loxia curvirostra	29/04/2003	Woodburn Forest	J38
Grasshopper				
Warbler	Locustella naevia	27/05/2003	Woodburn Forest	J38
		,,	Mallusk Industrial	
Wheatear	Oenanthe oenanthe	25/03/2004	Estate, Mallusk Road	J288832
Ring Ouzel	Turdus torquatus	07/11/2004	Carnmoney, Belfast	J3183
Swallow	, Hirundo rustica	21/04/2005	Newtownabbey	J38
Corncrake	Crex crex	11/08/2005	Newtownabbey	J38
Little Egret	Egretta garzetta	06/09/2005	Glengormley	J3182
Long-Eared Owl	Asio otus	29/11/2005	Newtownabbey	J38
Fieldfare	Turdus pilaris	01/01/2008	Woodburn Forest	J38
Siskin	Carduelis spinus	06/01/2008	Woodburn Forest	J38
Holt Notchwort	Cladopodiella francisci	28/07/1815	Hightown Road	J38
Jackdaw	Corvus monedula	06/12/1999	Sandyknowes Roundabout	J304830
Magpie	Pica pica	11/04/2010	Woodburn Forest	J38
Kestrel	Falco tinnunculus	03/03/2010	Hightown, Ballyvaston	J3081
Woodcock	Scolopax rusticola	03/03/2010	Hightown, Ballyvaston	J3081
Cuckoo	Cuculus canorus	13/05/2009	Hightown, Ballyvaston	J3081
	Plectrophenax			
Snow Bunting	nivalis	24/12/2008	Hightown, Ballyvaston	J3081
Snipe	Gallinago gallinago	03/03/2010	Hightown, Ballyvaston	J3081
Hen Harrier	Circus cyaneus	12/04/2010	Woodburn Forest	J38
Ringed Plover	Charadrius hiaticula	03/03/2010	Hightown, Ballyvaston	J3081
Pine Marten	Martes martes	November 2009	Doagh	J38
			City of Belfast Playing Fields, Park Road	
Starling	Sturnus vulgaris	13/02/2012	(East), Mallusk	J291836
	Lymnocryptes			
Jack Snipe	minimus	26/01/2013	Hightown Road	J38
Greylag Goose	Anser anser	16/03/2011	Mallusk (Unlocalised)	J2983
Jay	Garrulus glandarius	06/04/2012	Woodburn Forest	J38
Treecreeper	Certhia familiaris	03/06/2012	Woodburn Forest	J38



Taxon Common Name	Taxon Latin Name	Event Date	Event Location	Sample Spatial Reference
Mediterranean	Larus	22/01/2012		120
Gull	melanocephalus	22/01/2013	Macedon (Unlocalised)	J38
Great Spotted		1 - 100 10010		100
Woodpecker	Dendrocopos major	15/02/2013	Newtownabbey	J38
Grey Heron	Ardea cinerea	03/06/2012	Woodburn Forest	J38
Redwing	Turdus iliacus	13/02/2012	City of Belfast Playing Fields, Park Road (East), Mallusk	J291836
Kingfisher	Alcedo atthis	24/08/2014	Macedon (Unlocalised)	J38
Carrion Crow	Corvus corone	24/02/2014	Ballyvaston, Cave Hill	J3080
Bullfinch	Pyrrhula pyrrhula	19/03/2014	Newtownabbey	J38
Tawny Owl	Strix aluco	01/05/2013 - 14/05/2013	Woodburn Forest	J38
Turtle Dove	Streptopelia turtur	10/11/2013 - 14/11/2013	Newtownabbey	J38
	Fringilla	08/03/2014 -	,	
Brambling	montifringilla	15/03/2014	Carnmoney, Belfast	J3183
Reindeer Moss	Cladonia portentosa	1960 - 2005	Antrim (Vice-county: unlocalised)	J38
Cladonia cornuta	Cladonia cornuta	1960 - 2005	Antrim (Vice-county: unlocalised)	J38
Cladonia	Cladonia coccifera s.		Antrim (Vice-county:	
coccifera	lat.	1960 - 2005	unlocalised)	J38
Cladonia ciliata var. tenuis	Cladonia ciliata var. tenuis	1960 - 2005	Antrim (Vice-county: unlocalised)	J38
West European Hedgehog	Erinaceus europaeus	19/05/2013	Sandyknowes Roundabout	J304828
Irish Hare	Lepus timidus subsp. hibernicus	10/03/2014	McIlwhans Hill, Ballyutoag	J276798
Stoat	Mustela erminea	26/07/2012	Mallusk (Unlocalised)	J283807
Rook	Corvus frugilegus	13/06/2016	Sandyknowes Roundabout	J303830
			Sandyknowes Roundabout	
Woodpigeon	Columba palumbus	17/03/2016	ROUHUADOUL	J306825
Spotted Flycatcher	Muscicapa striata	23/04/2015	Mallusk (Unlocalised)	J2983
Blackbird	Turdus merula	19/07/2017	Sandyknowes Roundabout	J303830
Hare's-foot sedge	Carex lachenalii	19/06/2010	Ballyvaston, Cave Hill	J3080
Ragged-Robin	Lychnis flos-cuculi	19/06/2010	Ballyvaston, Cave Hill	J3080
European Otter	Lutra lutra	31/12/1990	Boghil Dam	J2881



ecology@wyg.com

WYG Environment Planning Transport Limited.

Registered in England & Wales Number: 3050297

Registered Office: Arndale Court, Headingley, Leeds, LS6 2UJ



creative minds safe hands

Appendix 10: Archaeological Assessment



ARCHAEOLOGICAL AND CULTURAL HERITAGE ASSESSMENT

Report	Archaeological and cultural heritage assessment
Project	Hydepark Road, Mallusk
Grid Ref	329210, 381777
Date	05/09/2019



	Planning case officer
Distributed To:	Gahan Long Archaeologists
	Client

Revision	Date	Revisions Made
No.		
1	10/09/2019	Amendments from Turley
2		
3		

NOTES

- 1. PLEASE ENSURE THAT ALL SUPERSEDED METHOD STATEMENTS ARE FILED SEPARATELY OR ARCHIVED
- 2. PLEASE KEEP METHOD STATEMENTS SAFE AND AVAILABLE FOR INSPECTION AS REQUIRED
- 3. ENSURE THAT RISK ASSESSMENT IS SIGN BY ALL SITE PERSONNEL PRIOR TO COMMENCING ANY SITE WORKS

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1 Introduction

1.1 Background

It is proposed to construct a mixed use development on lands to the west of Hydepark Road, Mallusk (figure 1).

This report forms an archaeological desk top assessment of the proposed development and has been prepared cognisant of previous requests for such reports by the local planning authority. It describes the archaeological baseline of the site and the surrounding area; assesses its archaeological potential and details the archaeological mitigation which should be agreed and implemented prior to construction works commencing.

1.2 Development Site

The proposed development site is spread over a wide area off the Hydepark Road, Mallusk and was inspected by a fully qualified archaeologist. The fields which comprise the development area relatively flat, largely overgrown and not maintained (plates 1-2). Nothing of archaeological significance was identified during the inspection. A farm house and associated buildings located within the development area are all derelict (plate 3).



Plate 1: View across the development area from the southern boundary looking north.





Plate 2: View across the development area looking southwest.



Plate 3. View of derelict house within the development area looking southwest.



2 Archaeological Baseline

2.1 Cultural heritage assets relevant to the proposed development

A desk top survey was conducted to identify the location of known cultural heritage sites relevant to the proposed development site. A wider study area extending up to 500m beyond the development area was also examined. This was deemed to be a sufficiently extensive area to allow for an assessment of the archaeological potential of the development site. The following sources were inspected to form the archaeological baseline:

Data Source	Results
Sites and monuments Records (SMR)	11
Industrial Heritage Records (IHR)	7
Historic Buildings Records (HBR)	None in study area
Historic Gardens Register	None in study area
Defence Heritage Register	3
Battle sites	None in study area
Excavations database	2
Pre-Ordnance Survey maps	None in study area
Early edition Ordnance Survey Maps	First edition onwards

A review of the various databases shows that an archaeological site, ANT 56:50 and two defence heritage sites, both numbered DHP 0.00 are located within the development area. The archaeological site ANT 56:50 is described in the SMR as a fortified house and earthwork defences. It was described in 1611 "upon a hill side, a large house with chimneys, which is enclosed by a rampart of earth sods & flankered..." No local tradition of the site survives and the site cannot now be located. No evidence was noted during the site inspection for this assessment of any remains at the location marked.

In addition two WWII defence heritage sites were also identified within the red line boundary, both of which are recorded as DHP 0.00. One of these sites one is recorded as an ammunition bunker and the other as a heavy anti-battery platform. No evidence of these sites is now visible in the landscape.

An inspection of the 1st edition OS map shows buildings within the development area in the general location of the derelict house, although the building currently on the site is more modern than the early 19th century when the OS map was drawn. A quarry is also recorded immediately adjacent to the north western boundary (figure 3). The subsequent editions of the OS maps also show the buildings identified on the 1st edition but no other features area location within the development area (figures 4 and 5).

Looking beyond the red line boundary a number of cultural heritage assets were identified within the study area (figure 2). In addition to the site identified within the development area a further 10 archaeological sites were identified all of which are of local importance.

The site ANT 56:11 is identified as an enclosure of uncertain date. The area of this site has been developed and is now part of Mallusk Industrial estate.

The site ANT 56:12 is identified as a glacial erratic and is not an antiquity.

The site ANT 56:13 is identified s a mound of uncertain date. It is described as being located on a north facing slope at the edge of a ridge, with land rising to south. The site consists of a low, flat topped mound, 1.5m high and 13m x 15m across, built of earth, with some large stones in its makeup. The scarp has been eroded in some places by cattle and a steel box has been built into the north face. Topsoil stripping was carried out on an area west of the mound under archaeological supervision (AE/03/58), prior to development. An area approximately 150m E-W x 40m N-S was stripped. No finds or features of archaeological significance were uncovered. Groundworks for the final phase of development at Mayfield Village were carried out under archaeological supervision. Previous excavations in the area had uncovered a Fulacht Fiadh (cf ANT 056:103, AE/01/25) and a prehistoric occupation site (cf AE/02/45). During this phase, topsoil stripping uncovered a number of shallow linear features and two pits, but no datable evidence was recovered from any of them - the linear features are most likely the remains of plough furrows.

The site ANT 56:41 is identified as the medieval Chapel of Westone which is unlocated.

The site ANT 56:42 is identified as a late medieval castle recorded as being in this townland but which cannot be precisely located.

The site ANT 56:47 was identified from aerial photographs but cannot now be precisely located on the ground.

The site ANT 56:48 is identified as an enclosure of uncertain date which is unlocated. It is described by O'Laverty as a rath formerly 1.5 furlongs SSE of the Castle (ANT 56:41). There is no local knowledge of the site.

The site ANT 56:69 was identified as a circular cropmark from aerial photographs. It is described as being located on reasonably level ground in a slight hollow, with good views east and south. A small, dark complete circular cropmark 25m in diameter, was seen on APs. There are one or two undulations in this area of the field. A small bump, which seems to lies slightly NW of the location shown on the maps, may be natural. It is very approximately 19m N-S x 17m E-W. The other visible feature is a faintly discernible ridge running N-S which would seen to relate to an old lane, shown on the 6" map, on the east side of the field. The land-owner did not know of anything in this field, but said that the ground is quite wet.

The site ANT 56:82 was identified from aerial photographs as a square enclosure. It is described as a dark, almost square cropmark 80m x 80m was seen on APs, close to ANT 56:83. This area has been radically altered in recent years, with the development of large industrial complexes. It is difficult to pinpoint the precise location of these cropmarks using available maps. They would appear to lie within a rough grass-covered area now owned by Michelin. A track runs through it. A large factory lies to W and a 2nd to E. It was not possible to gain access to the property.

The site ANT 56:83 was identified from aerial photographs as a rectangular cropmark. It showed up as a dark sub-rectangular cropmark with a light interior, 90m x70m, cut through by a field boundary. The area has been radically altered in recent years with the development of large industrial complexes. It is difficult to pinpoint the precise location of these cropmarks using available maps. They seem to lies within a rough, grass-covered area now owned by Michelin. Access to the site was not possible as it is surrounded by a high fence with padlocked gates. The ground within the fence has been sub-divided by further fences.

A review of the Industrial heritage records (IHR) revealed a total of 7 sites within the study area (figure 2). The site IHR 7300 is identified as a bridge which carries a by-road over the Flush River. It is shown but undesignated on the 1st edition OS map. On the 1857 and 1904 editions it is recorded as 'Blacks Br' and on the 1920 map as 'Blacks Bridge'.

The site IHR 7301 is identified as Hydepark Bleach Works which consist of the bleach works, IHR 7301:1, bleach greens, IHR 7301:2, a mill pond and dam, IHR 7301:3, a millrace, IHR 7301:4, mill ponds, IHR 7301:5 and a gasometer, IHR 7301:6. The bleach works, IHR 7301:1 is first shown on the 1857 map and recorded as 'Hydepark Bleach Works'. On subsequent editions it is recorded as 'Bleach Works'. The bleach greens, IHR 7301:2 are shown but undesignated on the 1833 and 1857 OS maps but are not shown on the subsequent editions. The mill pond and dam, IHR 7301:3, are shown on the 1833 OS map. The site is recorded as 'Mill Pond' on the 1857 map and as 'Hydepark Dam' on subsequent editions. The millrace, IHR 7301:4 is shown but undesignated on all OS maps. The mill ponds, IHR 7301:5, are shown but undesignated on the 1834 map but recorded as 'Mill Ponds' on the subsequent edition (figures 3-5).

A review of the Defence Heritage records indicated that, in addition to the two sties identified within the red line boundary that a further site also recorded as DHP 0.00, was located within the wider study area. This is a radar platform for which there is not further information.

A review of the Excavations Bulletin revealed two excavations in the vicinity of the proposed development. The first site, AE/04/154 was located at Mayfield Village, Hydepark Road, Mallusk. It is recorded that during the monitoring of topsoil removal for this phase of the development, a small number of deposits were uncovered, but these did not produce any dating evidence. Within the eastern field, located approximately 61m south-west from the northern boundary and 12.5m from the original dividing hedgerow, the removal of topsoil revealed the remains of two pits cutting into subsoil. The first of these was subcircular in shape and measured 0.84m north-east/south-west by 0.94m by 0.14m deep and was filled by loose, dark-black clayey loam with frequent large lumps of charcoal, also with occasional fine plant roots throughout the fill. Within this deposit were fairly large sub-angular stones measuring 0.2m in size on average. No finds were present within the fill. The second feature was sub-rectangular in shape with rounded corners, measuring 1.6m north-south by 0.9m by 0.2m deep. It was filled by loose mid-greyish-brown sandy clay with frequent stones measuring 0.05-0.2m in size, and occasional charcoal flecks. No finds were present within the fill.

During the previous phases of topsoil-stripping for the Mayfield development monitored by Eoin Halpin (Excavations 2002, No. 24, AE/02/67), several features of archaeological interest were uncovered and excavated. These included a small curving gully, from which Early Bronze Age pottery



and worked flint were recovered, and the truncated remains of a burnt mound, or fulacht fiadh, made up of charcoal and heat-shattered stone, with a large pit located below, probably a trough.

The second excavation AE/03/58, was located on Hydepark road and consisted of the monitoring of topsoil removal at the site of a new housing development located at the Hydepark Road on the outskirts of Belfast, prior to the beginning of the current phase of construction. Nothing of archaeological significance was observed during the investigation.

2.2 Archaeological potential of the development site

The desktop survey has indicated that 3 cultural heritage assets were identified within the red line boundary. While the fortified house ANT 56:60 is recorded within the development area, it is described within the SMR as being unlocated and could possibly lie outside the red line area. In addition, two WWII, defence heritage sites are recorded within the development area, no evidence of either of these is now visible within the red line area. However, despite this, it remains possible that elements of all of these assets could exist subsurface.

Coupled with this the desktop survey has also identified a number of other assets in the wider area which indicates that the development is located within an area of some archaeological and cultural heritage significance, with the possibility that further, previously unknown archaeological remains could exist subsurface for which there is now no surface expression.

Should such deposits exist then these could be negatively impacted upon by the proposed development. However, this impact can be significantly reduced by the implementation of an appropriate mitigation strategy.



3 Mitigation and Its Effectiveness

The desk top survey and site inspection indicate that the proposed development site is located in an area of archaeological potential, with the possibility that further archaeological or historical remains could exist subsurface. On the basis of this it is recommended that prior to construction commencing an archaeological evaluation of the site be conducted.

A four stage process would be required to facilitate this:

- Stage 1: Preparation of and submission of an archaeological programme of works for agreement with the local planning authority in consultation with DfC:HED. The programme should provide for the identification and evaluation of archaeological remains within the site, for mitigation of the impacts of development, through excavation recording or by preservation of remains, and for preparation of an archaeological report.
- Stage 2: Submission of an archaeological licence application to DfC:HED to undertake the proposed Stage 1 works.
- Stage 3: Excavation of targeted test trenches to identify and record any archaeological features, following agreement from DfC:HED within the programme of works.
- Stage 4: Upon completion of the on-site works a final monitoring report will be submitted to DfC:HED and to the local planning authority.

The archaeological programme of works should be prepared and submitted through the local Planning Authority at least 8 weeks prior to any construction works commencing on site. The archaeological licence may only be applied for once the programme of works has been approved. The licence should be applied for at least 3 weeks in advance of the required archaeological attendance.

4 Conclusion

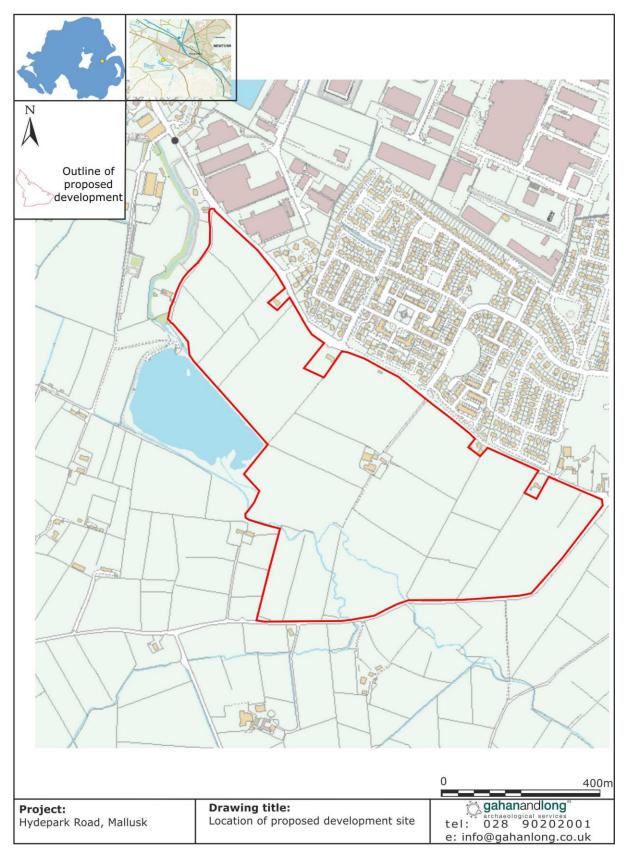
It is proposed to construct a mixed use development on lands off the Hydepark Road, Mallusk (figure 1). A desktop survey has indicated that 3 known cultural heritage assets are located within the red line boundary. These consist of an unlocated fortified house ANT 56:60 and two defence heritage assets dating to WWII. A site inspection revealed no surface expression of these or any other cultural heritage assets, and indeed it remains unclear whether the fortified house is located within the red line boundary. Despite this, it was assessed that the proposed development is located within an area of some archaeological potential and therefore further mitigation has been recommended.





Appendix 1

Figure 1: Location of proposed development site





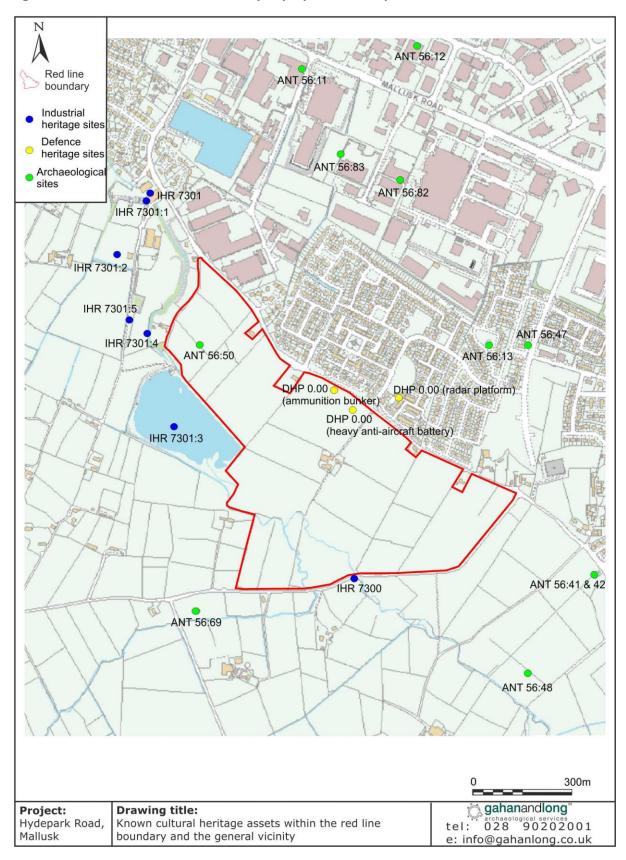
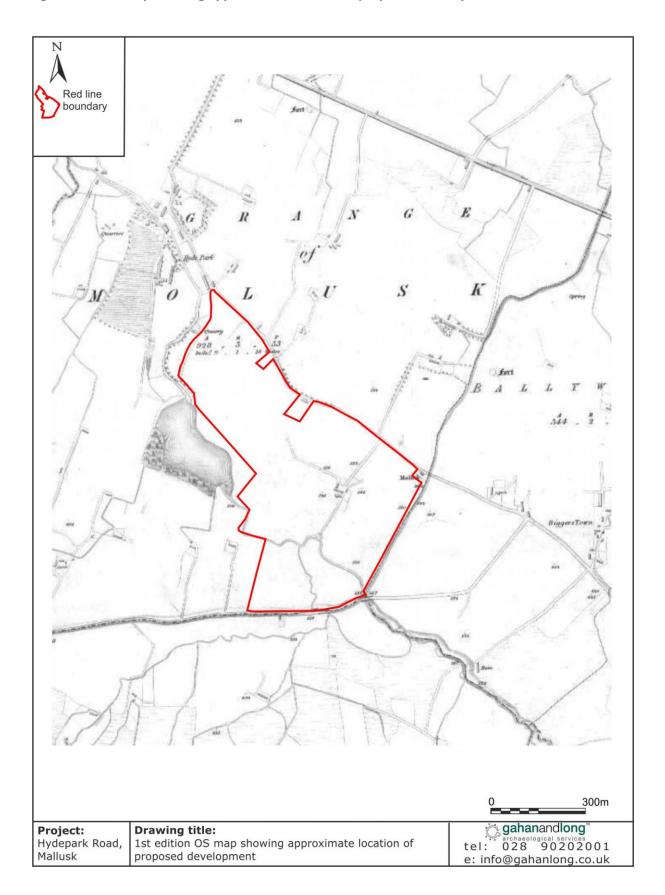


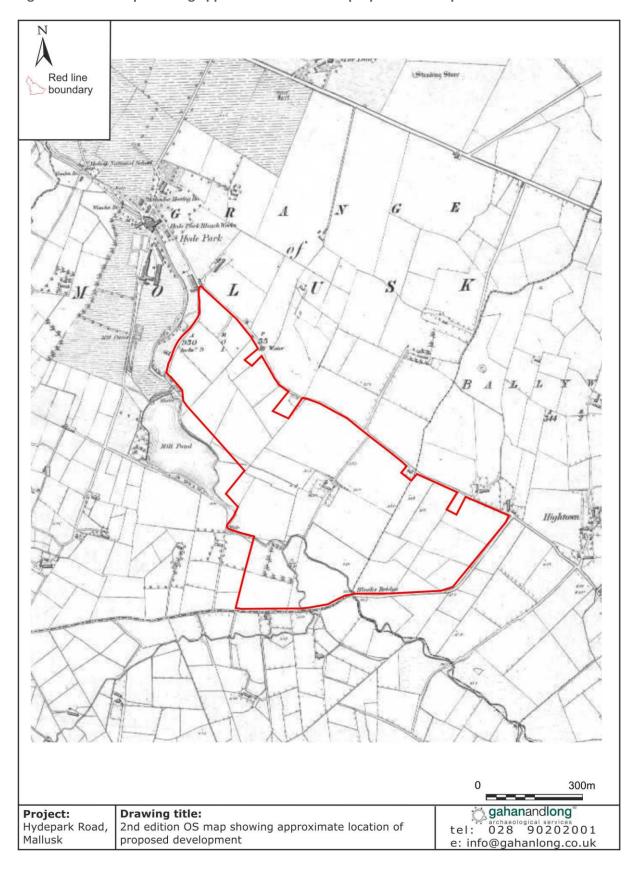
Figure 2: Known cultural assets in vicinity of proposed development site.





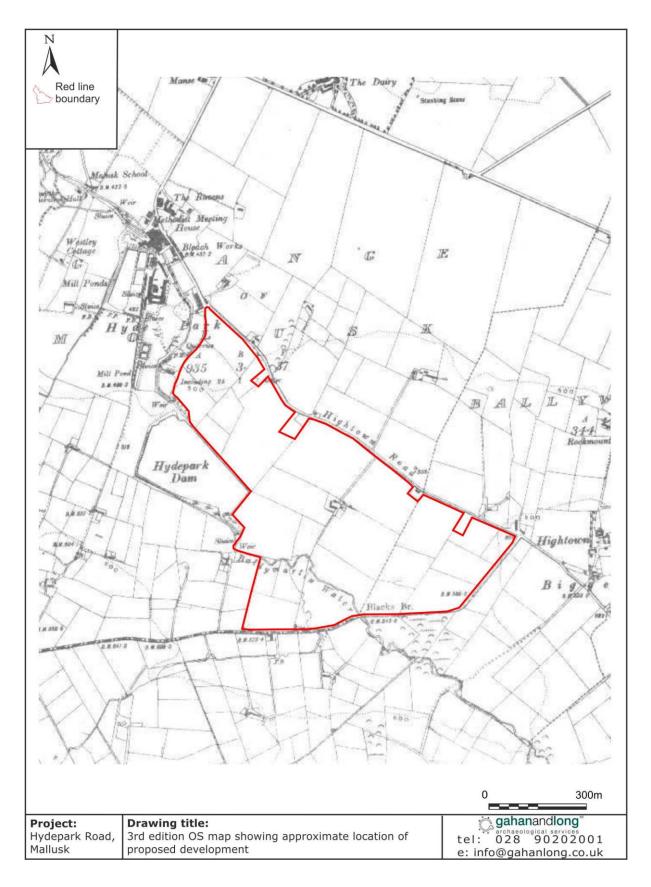














Appendix 11: Drainage and Flood Risk Assessment Report



Hydepark Road, Mallusk

Flood Risk and Drainage Impact Assessment

South Bank Square Limited September 2019 Prepared on behalf of WYG Engineering (Northern Ireland) Limited.



1 Locksley Business Park, Montgomery Road, Belfast, BT6 9UP Tel: +44 (0)28 9070 6000 Fax: +44 (0)28 9070 6050 Email: info@wyg.com Website: www.**wyg**.com

WYG Engineering (Northern Ireland) Limited. Registered in Northern Ireland: Number NI020346 Registered Office: 1 Locksley Business Park, Montgomery Road, Belfast, BT6 9UP



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Disclaimer

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WYG accepts no responsibility or liability arising out of changes in requirements for Flood Risk and Drainage Assessments in the period intervening the final issue of the document and submission by the client.



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1.0 Executive Summary

WYG was commissioned by South Bank Square Limited during June 2019 to evaluate the flood risk and drainage issues impacting a potential future mixed use development at a site at Hydepark Road, Mallusk. Potential future development on the site consists of residential dwellings, pedestrianised roads, a retirement village, commercial development, greenspace and main road.

A review of NI Water asset information shows there to be no NI Water sewers or water mains located within the site boundary. Rainfall on the site currently permeates into the site's sub-soil or discharges via overland flow to local watercourses.

To assess fluvial flood risk affecting the site, and by association future development on the site, WYG reviewed DfI Rivers' 1% AEP strategic fluvial Flood Map (FM). From a planning perspective, fluvial flood risk affecting a development is assessed using 1% Annual Exceedance Probability (AEP) flood event. The FM shows that the site is located within the strategic 1% AEP floodplain of the Flush River.

As a small portion of the site is positioned within the strategic 1% AEP fluvial floodplain DfI Rivers will require a Flood Risk Assessment (FRA) be completed for the proposed development on the site. The FRA will require detailed hydraulic modelling to be completed to accurately determine the 1% AEP flood levels and floodplain extent impacting the site.

Thereafter, proposed development and access routes must be positioned beyond the 1% AEP floodplain extent and provided with a 600mm freeboard above the adjacent 1% AEP fluvial flood level in the Flush River and Hydepark Dam reservoir where this is feasible.

For low lying areas of the site the applicant will need to demonstrate within the FRA that there is no fluvial flood risk to these areas from the 1% AEP fluvial flood event in the Flush River and Hydepark Dam reservoir. DfI Rivers has previously accepted that the presence of elevated ground between the floodplain and low lying areas provides sufficient to enable development of low lying areas to proceed.

Looped Road Option 1 and Looped Road Option 1a both include the provision of a looped main road along the southern extent of proposed development which crosses and passes through the strategic 1% AEP fluvial floodplain respectively. Revised Planning Policy Statement 15 'Planning and Flood Risk' (PPS 15) Policy FLD 1 Development in Fluvial and Coastal Floodplains permits development within the 1% AEP fluvial floodplain in only exceptional circumstances.



Policy FLD 1 exception d) permits development for transport which for operational reasons has to be located within the floodplain. The applicant must demonstrate within the FRA that the roads position within the floodplain is for operational reasons. Furthermore, DfI Rivers will likely require the impact of the proposed road upon flood risk to be assessed via hydraulic modelling as part of the FRA. DfI Rivers has previously approved the positioning of public roads within the 1% AEP fluvial floodplain extent following the completion of hydraulic modelling which demonstrated no impact upon the pre-existing flood risk at the site or elsewhere.

The exact impact of the 1% AEP fluvial floodplain extent upon the site will not be accurately determined until detailed hydraulic modelling of the Flush River and Hydepark Dam reservoir is completed and compared to a detailed topographical survey of the site.

Of particular concern is the Top Water Level (TWL) within the Hydepark Dam reservoir during a 1% AEP fluvial flood event relative to its northern embankment which bounds low lying areas of the site. There is a risk that the detailed hydraulic model and topographical survey show that the reservoirs northern bank may be overtopped during a 1% AEP fluvial flood event or the embankment fails to provide the required freeboard to protect low lying areas of the development.

This potentially could result in a portion of the site being located within the 1% AEP floodplain which is not shown on DfI Rivers' strategic 1% AEP fluvial FM. The developer should be aware that until hydraulic modelling and a detailed topographical survey are completed the exact 1% AEP fluvial floodplain extent at the site will be unknown.

However, in WYG's experience DfI River's strategic 1% AEP fluvial floodplain extent matches the detailed hydraulic model 1% AEP fluvial floodplain extent closely. Hence, there is considered to be a low risk that low lying areas of the site are positioned within the 1% AEP fluvial floodplain.

PPS 15 Policy FLD 2 Protection of Flood Defence and Drainage Infrastructure requires that a working strip, at least 5m wide, be provided along the Flush River and Hydepark Dam with clear access and egress at all times.

PPS 15 Policy FLD 3 Development and Surface Water Flood Risk Outside Floodplains requires that a Drainage Assessment (DA) be completed for the proposed development. The DA must be accompanied by correspondence from NI Water and DfI Rivers demonstrating that stormwater runoff from the development can be safely disposed of.



NI Water's Pre-Development Enquiry (PDE) response for the development is likely to state there is no storm sewer available to serve the proposal and advise liaison with DfI Rivers to determine if stormwater discharge to a local watercourse would be feasible.

The site currently discharges stormwater runoff to the Flush River. It is expected that the development will replicate this drainage regime and discharge stormwater runoff to the Flush River.

As the site is predominantly greenfield agricultural land DfI Rivers are likely to require that storm discharge from the development to the Flush River be limited to the greenfield rate of 10 l/s/ha. Consequently, flow control and attenuation will be required on the development's storm sewer network to achieve DfI Rivers' consented discharge rate.

It is expected that the development's storm network will be designed and constructed to an NI Water adoptable standard with checks made to ensure there is no out of sewer flooding during a 30 year return period storm event and no flooding of properties during a 100 year return period storm event.

Regarding foul flows from the proposed development, given the scale of the development and its position on the edge of NI Water's foul drainage catchment, NI Water's PDE response is likely to state there is no foul sewer available to serve the proposal. Consequently, upgrade and extension of the existing NI Water foul network will likely be required to service the development.

Furthermore, NI Water's PDE response may note that the receiving Wastewater Treatment Works (WwTW) has insufficient capacity to serve the development. Therefore, upgrade of the existing WwTW or provision of on-site treatment may be required.

Whilst there is a risk that the receiving WwTW will have insufficient capacity to treat flows from the site the risk is considered low as NI Water, in its forward planning, will appraise the impact of zoned lands within the development plan upon the receiving WwTW and programme upgrade works where necessary. Should the site be zoned within the development plan NI Water will consider the development's impact upon the WwTW and act accordingly to provide treatment capacity.

In addition, foul Pumping Stations (PSs) may be required to transfer foul flows from low lying areas of the development to the receiving NI Water foul network.



PPS 15 Policy FLD 4 Artificial Modification of Watercourses only permits artificial modification of watercourses where culverting of short length of watercourse is necessary to provide access or where it can be demonstrated that a specific length of watercourse needs to be culverted for engineering reasons and there are no reasonable or practicable alternative courses of action.

The proposal included a number of crossings of the Flush River for paths. Within the FRA for the proposed development the applicant will need to demonstrate that the proposed crossings will not have a detrimental impact upon flood risk via the completion of hydraulic modelling. Schedule 6 consent will be required for the proposed crossings and any other modification of watercourses.

Although the site is located beyond the reservoir flood inundation area modelled by DfI Rivers of both Boghill Dam and Hydepark Dam reservoirs, owing to its close proximity to Hydepark Dam Reservoir and that fact that low lying areas of the development may be positioned below the Top Water Level (TWL) within the reservoir DfI Rivers may take a precautionary approach and request that a Policy FLD 5 assessment be completed for the development.

The Policy FLD 5 assessment will need to demonstrate that the condition, maintenance and management of the reservoir is appropriate to provide sufficient assurance regarding reservoir, so as to enable the development to proceed.

Assurance of reservoir condition takes the form of a Reservoir Inspection Report completed by an All Reservoirs Panel Engineer. If the reservoir owner has not completed this inspection and report the developer may need to commission this inspection and report to demonstrate that the condition of the reservoir is adequate to allow the development to proceed.

Given that DfI Rivers has completed a breach analysis of Hydepark Dam which shows the site to be positioned beyond the inundation area there is considered to be a low flood risk to low lying areas of the site from this source.



2.0 Introduction

WYG was commissioned on behalf of South Bank Square Limited to complete a Flood Risk and Drainage Impact Assessment for a potential mixed-use development at Hydepark Road, Mallusk during June 2019. The site which extends to an area of approximately 38.5 ha consists predominantly of greenfield agricultural land and one derelict Farm House..

The Flood Risk and Drainage Impact Assessment considers flooding and drainage issues which could impact the future development potential of the site. Loop Road – Option 1, Loop Road – Option 1a and Main Street – Option 2, which are mixed use developments consisting of residential and commercial development, are the theoretical future development layouts used to assess potential flooding and drainage issues affecting a future development on the Hydepark Road site within this report.

The following methodology has been employed:

- Desktop review of relevant DfI Rivers, NI Water and Transport NI information, topographical survey data, historical site details and other pertinent information;
- Assessment of anticipated stormwater and foul discharges from the pre- and postdevelopment site;
- Assessment of existing storm and foul sewer infrastructure via a review of NI Water Asset Information;
- Qualitative analysis of potential flood risk to the site and from the proposed development of the site to other upstream / downstream lands;
- Identify potential mitigation options, e.g. flood protection/resilience/recovery measures where necessary; and
- Recommend any additional flooding and drainage work required.

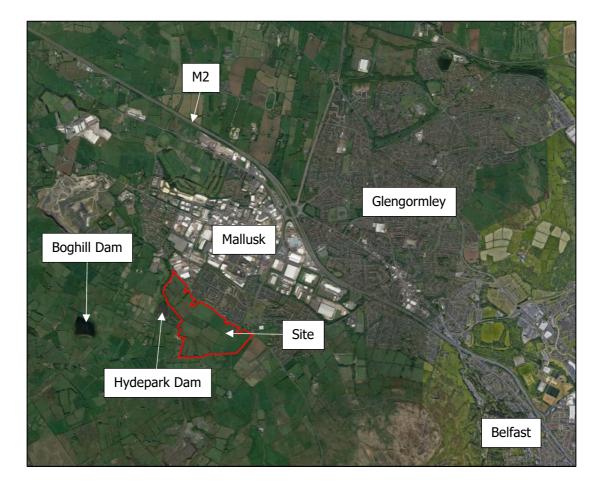


3.0 Site Details

3.1 Site Description

The Hydepark Road, Mallusk site extends to approximately 38.5ha, and is located to the south-west of Hydepark Road, Mallusk. The site is approximately 2.5km south-west of Glengormley town centre and c. 9km north-west of Belfast City centre. The site is predominantly greenfield agricultural land . A copy of the site location plan is contained in Appendix A. Site boundaries comprise:

- North-East: Hydepark Road and beyond residential and commercial development;
- South-East: Boghill Road and beyond agricultural lands;
- South-West: Flush River and Hydepark Dam reservoir, beyond which are agricultural lands; and,



• North-West: No. 41 – 45 Hydepark Road and Flush River beyond.

Figure 1 - Site Location (Regional Context)





Figure 2 – Site Location (Local Context) Red Line is not correct

3.2 Site Topography

The site's topography has been assessed using Open Source Ordnance Survey of Northern Ireland's (OSNI's) 10m Digital Terrain Model (DTM). The 10m DTM provides existing ground levels in metres Above Ordnance Datum Belfast (m AOD Belfast). The 10m DTM has an accuracy of +/- 1m. Site levels range between c. 182m AOD Belfast in the site's north-east corner next to Hydepark Road and 143m AOD Belfast at the site's north-west corner next to Hyde Park Road (refer to Figure 3).

The Hydepark Dam Reservoir is at an elevation of approximately 154.5m AOD Belfast. Site levels to the east of Hydepark Dam's upstream extent, and north of Flush River, fall in the north-east – south-west direction from the site's high point of approximately 182m AOD Belfast next to Hydepark Road to approximately 154m AOD Belfast next to the reservoir.



From Hydepark Dam's upstream extremity site levels rise in the north-west direction to c. 155m AOD Belfast before falling in the north-west direction to approximately 143m AOD Belfast at the site's north-west boundary with Hydepark Road. Hydepark Road levels range between c.182m and c.143m AOD Belfast at the site's east and west extremities respectively.

To the south of Flush River site levels range between approximately 173m AOD Belfast and 156m AOD Belfast. The site to the south of Flush River falls in the south-north direction from Boghill Road towards Flush River. Boghill Road levels range between c.182m AOD Belfast at its junction with Hydepark Road and c. 161m AOD Belfast at the Flush River. A detailed topographical survey of the site will be required to accurately evaluate existing site levels.

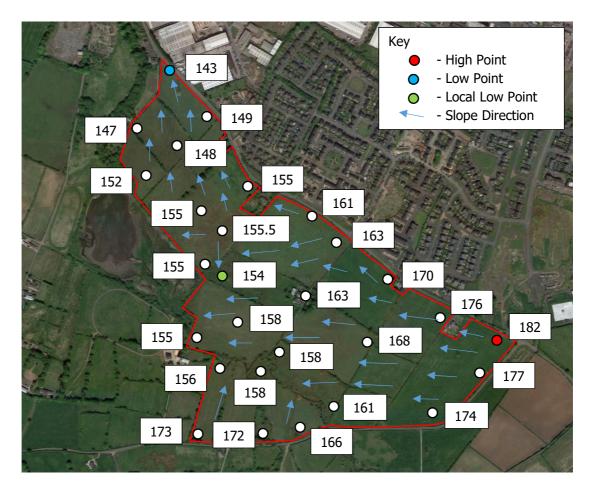


Figure 3 – OSNI 10m DTM Site Topography (m AOD Belfast)



3.3 Existing Drainage and Water Supply Infrastructure

A review of NI Water asset information reveals that there no public NI Water sewers or water mains present on the site. Rainfall on permeable areas of the site either permeates into the site's sub-soil or discharges via overland flow to local drainage ditches and watercourses. There are no foul flows from the site to NI Water's foul sewer network.

3.4 Proposed Development

Potential future development on the site consists of a mixed-use development consisting of residential units and commercial development. There are currently 3 no. layout options under consideration for the site; Loop Road - Option 1 (refer to Figure 4), Loop Road - Option 1a (refer to Figure 5) and Main Street - Option 2 (refer to Figure 6).

All 3 no. development options include the provision of a main road, pedestrianised roads, paths, a retirement village, mixed use community buildings, residential development, a town square, green boulevard, greenspace on floodplain, and the Hydepark Dam reservoir. A copy of the proposed development layouts are included in Appendix B.

The development will be served by separate storm and foul sewer networks which are expected to be adopted by NI Water under the Article 161 adoption process. Consequently, the development's sewer network will be constructed to an adoptable standard I accordance with the latest edition of NI Water's Sewers for Adoption.





Figure 4 – Loop Road – Option 1





Figure 5 – Loop Road – Option 1a



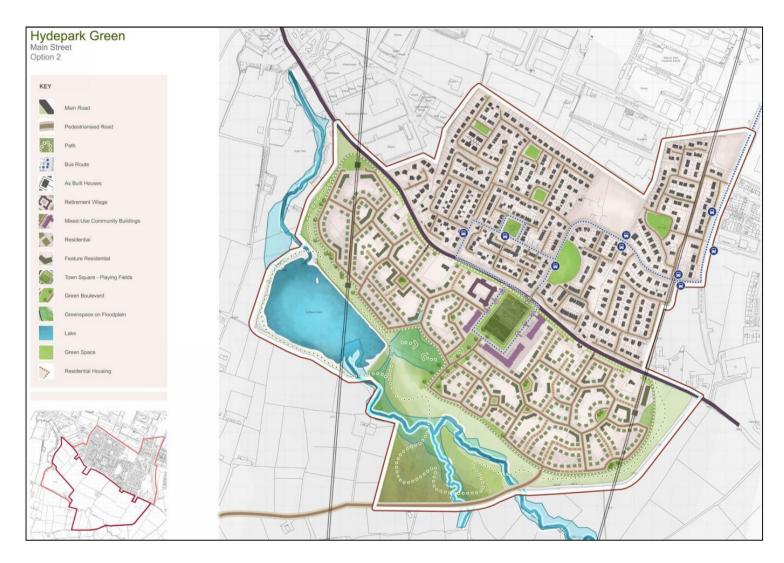


Figure 6 – Main Street – Option 2



4.0 Flooding and Drainage Information

4.1 DfI Rivers Data

The application site is in the vicinity of 2 no. fluvial watercourses, the undesignated Flush River and its tributary and 2 no. controlled reservoirs, Hydepark Dam and Boghill Dam. At its closest, Flush River and Hydepark Dam bound the site's south-west boundary.

To assess the potential fluvial flood risk affecting the application site, WYG reviewed DfI Rivers' 1% Annual Exceedance Probability (AEP) fluvial Flood Map (FM). The FM shows that the Flush River has been strategically modelled by DfI Rivers. Consequently, flood levels and flow rates for the watercourse are not available. DfI Rivers 1% AEP FM shows that a central portion of the site, immediately upstream of Hydepark Dam reservoir, and peripheral areas of the site along Flush River are located within the 1% AEP floodplain (refer to Figure 7 and Appendix C). There are no DfI Rivers flood defences in the vicinity of the site.

A review of DfI Rivers' 0.5% AEP coastal FM shows that the site is located beyond the coastal floodplain extent of Inner Belfast Lough (refer to Figure 8 and Appendix D).

Regarding pluvial (surface water) flood risk, a review of DfI Rivers' 0.5% AEP pluvial FM shows that a central portion of the site and peripheral areas along the watercourse are located within the 0.5% AEP pluvial flood event (refer to Figure 9 and Appendix E). These central areas correspond to a topographical low on the site which has an elevation of c. 154m AOD Belfast (refer to Figure 3).

A review of DfI Rivers' Historical FM shows the site to be unaffected by historical flooding (refer to Figure 10 and Appendix F).

WYG viewed DfI Rivers' 2019/20 Maintenance Programme Map to determine if DfI Rivers' intend to complete any inspection and maintenance work on watercourses in the vicinity of the site during the current financial year. The maintenance map shows DfI Rivers does not intend to complete any inspection or maintenance work on the Flush River or any other watercourses in the vicinity of the site during the current financial year (refer to Figure 11 and Appendix G).

To assess the potential reservoir flood risk affecting the application site WYG reviewed DfI Rivers' online Reservoir Flood Map (RFM). The RFM indicates that the application site is located beyond inundation area associated with an uncontrolled release of water from either Hydepark Dam reservoir or Boghill Dam Reservoir (refer to Figure 12 and Appendix H).



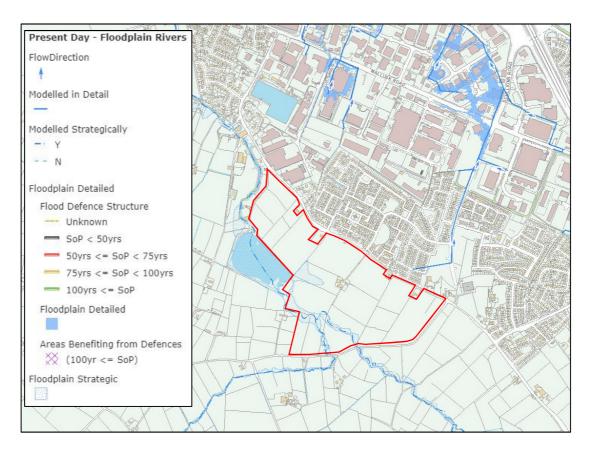


Figure 7 – 1% AEP Fluvial Flood Map

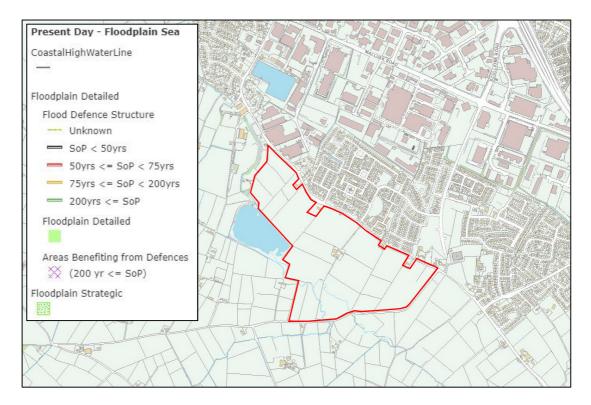


Figure 8 – 0.5% AEP Marine Flood Map



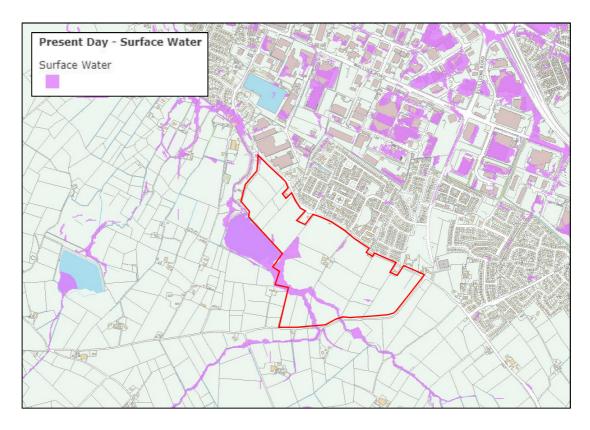


Figure 9 – 0.5% AEP Pluvial Flood Map

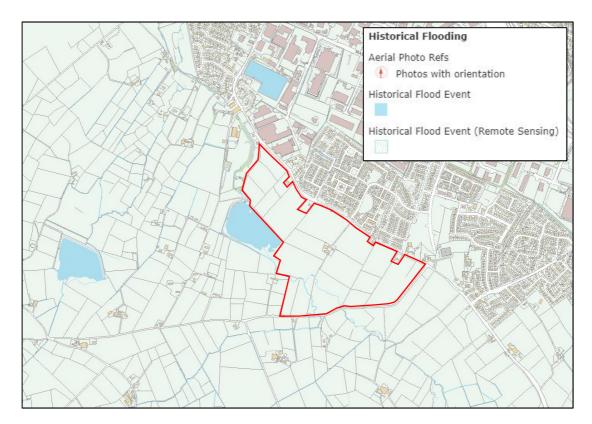


Figure 10 – Historical Flood Map



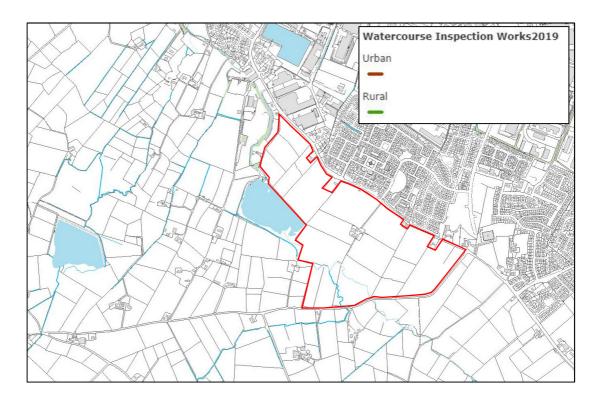


Figure 11 – Maintenance Map

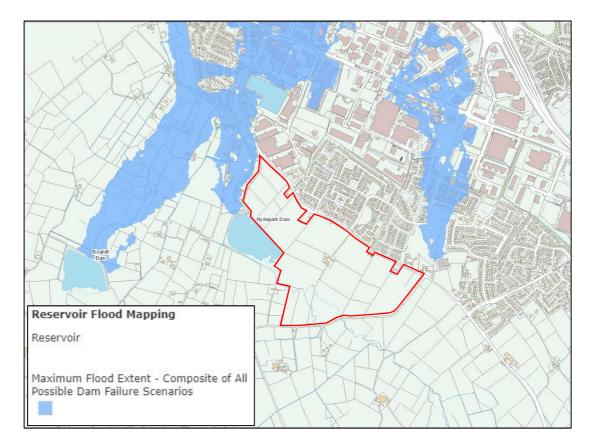


Figure 12 – Reservoir Flood Map



On the 16th July 2019 WYG requested baseline from DfI Rivers. DfI Rivers' 7th August 2019 baseline information response contained in Appendix I can be summarised as follows:

- There are no designated watercourses or culverts under the terms of the Drainage (Northern Ireland) Order 1973 within or bounding your proposed site;
- No inspection or maintenance regimes as there are no assets in the vicinity;
- The Department does not hold any ownership details;
- The Department does not maintain a database of undesignated watercourses, which are present. In this regard, you are advised to consult with Ordnance Survey and/or undertake site inspections, etc; and
- The Department does not have any additional information.

4.2 NI Water Data

WYG viewed NI Water asset information to determine if there was any drainage and water supply infrastructure present on site. The asset information shows that there are no NI Water sewers or water mains traversing the site.

4.3 DfI Roads

On 16th July 2019, WYG requested baseline information from DfI Roads regarding its infrastructure and associated flooding issues in the vicinity of the site; refer to Appendix L. DfI Roads response contained in Appendix J can be summarised as follows:

- There are no watercourses designated under the terms of the Drainage (Northern Ireland) Order 1973 within or bounding the above-mentioned site. The department does not maintain a database of undesignated watercourses. DfI Rivers has no record of historical flood calls at the above location;
- In relation to road drainage, DfI gullies locations are provided on the attached pdf screenshot;
- The Hydepark Road defect history spreadsheet shows defects identified during routine inspection;
- The Customer Enquiry report shows public reports of ponding surface water on road etc, on Hydepark Road. The pre 2013 enquiries are classified as historic and therefore cannot be located exactly, i.e. they could be anywhere along Hydepark Road between Upper Hightown Road and Mallusk Road; and



• You should be aware that the DfI gullies discharge to NI Water carrier pipes and so any drainage design will require approval from NI Water's Developer's services team.



5.0 Flood Risk and Drainage Assessment

5.1 Relevant Planning Policy

The Planning Policy Statement with regard to planning and flood risk in Northern Ireland is PPS 15. The statement contains five Planning Policies as follows:

- FLD 1 Development in Fluvial (River) and Coastal Floodplains;
- FLD 2 Protection of Flood Defence and Drainage Infrastructure;
- FLD 3 Development and Surface Water (Pluvial) Flood Risk Outside Floodplains;
- FLD 4 Artificial Modification of Watercourses; and,
- FLD 5 Development in Proximity to Reservoirs

Each of these Policies is considered in detail in this impact assessment.

5.2 Policy FLD 1 – Development in Fluvial (River) and Costal Floodplains

Policy FLD defines a river or fluvial floodplain as a generally flat area adjacent to a river where water flows in time of flooding or would flow but for the presence of flood defences. For planning purposes, taking into account climate change predictions based on available scientific evidence, the design limits of floodplains are currently defined as follows:

- 'River (Fluvial) Flood Plain the extent of a flood event with a 1 in 100 year probability (or 1% annual probability) of exceeding the peak floodwater level.'
- 'Coastal (Tidal) Flood Plain the extent of a flood event with a 1 in 200 year probability (or 0.5% annual probability) of exceeding the peak floodwater level.'

Policy FLD defines a river or fluvial floodplain as a generally flat area adjacent to a river where water flows in time of flooding or would flow but for the presence of flood defences.

Policy FLD 1 precludes floodplain development for all but seven exceptional cases and proposals that are of overriding regional or sub-regional importance. Policy FLD 1 will not



accept any of the following flood protection and management measures proposed as part of a planning application in order to facilitate development within floodplains:

- New hard engineered or earthen bank flood defences;
- Flood compensation storage works; and
- Land raising (infilling) to elevate a site above the flood level within the undefended fluvial floodplain.

5.3 Policy FLD 2 – Protection of Flood Defence and Drainage Infrastructure

Policy FLD 2 stipulates that no development will be permitted that would impede the operational effectiveness of flood defence and drainage infrastructure or hinder access to enable their maintenance.

5.4 Policy FLD 3 – Development and Surface Water (Pluvial) Flood Risk Outside Floodplains

Policy FLD 3 deals with development and surface water (pluvial) flood risk outside floodplains.

The proposed development has the potential to alter the way in which stormwater flows over the land by increasing the area of impermeable surfaces and introducing collection systems. These collect and transfer stormwater more rapidly than undeveloped, permeable land. The alteration of ground surface conditions, and hence, greater peak stormwater flow rates from the land, has the potential to increase flood risk elsewhere. For this reason, any development beyond the floodplain must be in line with Revised PPS 15 Policy FLD 3, namely:

'A Drainage Assessment will be required for all development proposals that exceed any of the following thresholds:

- A residential development comprising of 10 or more dwelling units
- A development site in excess of 1 hectare
- A change of use involving new buildings and / or hardsurfacing exceeding 1000 square metres in area.



A Drainage Assessment will also be required for any development proposal, except for minor development, where:

- The proposed development is located in an area where there is evidence of a history of surface water flooding.
- Surface water run-off from the development may adversely impact upon other development or features of importance to nature conservation, archaeology or the built heritage.

Such development will be permitted where it is demonstrated through the Drainage Assessment that adequate measures will be put in place so as to effectively mitigate the flood risk to the proposed development and from the development elsewhere.

Where a Drainage Assessment is not required but there is potential for surface water flooding as indicated by the surface water layer of the Strategic Flood Map, it is the developer's responsibility to assess the flood risk and drainage impact and to mitigate the risk to the development and any impacts beyond the site.

Where the proposed development is also located within a fluvial or coastal flood plain, then Policy FLD 1 will take precedence.'

5.5 Policy FLD 4 – Artificial Modification of Watercourses

Policy FLD 4 deals with flooding and land drainage, specifically addressing requirements associated with culverting, or canalization of watercourses. The essence of this policy is that removing open channels will only be permitted in exceptional circumstances.

Policy FLD 4 only permits the artificial modification of a watercourse, including culverting or canalisation operations, in either of the following exceptional circumstances:

- Where the culverting of short length of a watercourse is necessary to provide access to a development site or part thereof; or,
- Where it can be demonstrated that a specific length of watercourse needs to be culverted for engineering reasons and that there are no reasonable or practicable alternative courses of action.



5.6 Policy FLD 5 – Development in Proximity to Reservoirs

Policy FLD 5 Development in Proximity to Reservoirs will only permit new development within the potential flood inundation area of a "controlled reservoir" as shown on the Strategic Flood Map, if:

- the applicant can demonstrate that the condition, management and maintenance regime of the reservoir is appropriate to provide sufficient assurance regarding reservoir safety, so as to enable the development to proceed;
- the application is accompanied by a Flood Risk Assessment which demonstrates:
 - 1. an assessment of the downstream flood risk in the event of:
 - a controlled release of water
 - an uncontrolled release of water due to reservoir failure
 - a change in flow paths as a result of the proposed development; and
 - 2. that there are suitable measures to manage and mitigate the identified flood risk, including details of emergency evacuation procedures

A proposal for the replacement of an existing building within the potential flood inundation area downstream of a controlled reservoir must be accompanied by a FRA. Planning permission will be granted provided it is demonstrated that there is no material increase in the flood risk to the development or elsewhere.

There will be a presumption against development within the potential flood inundation area for proposals that include:

- essential infrastructure;
- storage of hazardous substances;
- bespoke accommodation for vulnerable groups; and,
- for any development located in areas where the FRA indicates potential for an unacceptable combination of depth and velocity.

The implications of these policies for the application site will be explored in the following sections of this report.



5.7 Technical Advice Note The Practical Application of Strategic Planning Policy for 'Development in Proximity to Reservoirs' (August 2018)

TAN 'The Practical Application of Strategic Planning Policy for 'Development in Proximity to Reservoirs' (August 2018) explains the general approach DfI Rivers will follow when providing advice to LPAs on all relevant applications for development within the flood inundation area of a controlled reservoir.

Reservoir Safety Assurance

Regarding Reservoir Safety Assurance DfI Rivers will consider the reservoir safety assurance requirement, as indicated in planning policy, to be satisfied where:

- A Reservoir Inspection Report completed by an All Reservoirs Panel Engineer not more than 8 years before the date of the Planning Application which indicates that no works in the interests of safety are required to the reservoir; or
- A Reservoir Inspection Report completed by an All Reservoirs Panel Engineer not more than 8 years before the date of the Planning Application which indicates that works in the interests of safety are required and the report is accompanied by confirmation in writing from an All Reservoirs Panel Engineer that the works have been completed to his/her satisfaction; or
- A Reservoir Survey Report completed by an All Reservoirs Panel Engineer not more than 8 years before the date of the Planning Application which indicates that the overall condition of the reservoir is "Good"; or
- A Reservoir Survey Report completed by an All Reservoirs Panel Engineer not more than 8 years before the date of the Planning Application which indicates that the overall condition of the reservoir is "Fair", "Poor", or "Very Poor" and the Survey Report is accompanied by confirmation in writing from an All Reservoirs Panel Engineer that the safety works identified in the survey report have been completed to his/her satisfaction; or
- Where works to the reservoir are required to be undertaken for the purposes of ensuring
 reservoir safety and a schedule of works has been agreed by an All Reservoirs Panel
 Engineer, planning permission may be granted subject to a negative condition or a
 planning agreement as considered appropriate, to ensure the works are carried out
 satisfactorily prior to the commencement of the development being sought by the
 planning application; or



• Assurance in writing from an All Reservoirs Panel Engineer that the condition, maintenance and management regime is sufficient regarding reservoir safety.

When obtaining assurance regarding reservoir safety, the developer should engage with the reservoir manager (if it is a different party). This will also provide an opportunity for the manager and developer to jointly consider any structural improvement works required to make the reservoir safe or other implications the development may have for the reservoir manager. The funding of such works is a private matter between the developer and the reservoir manager.

Reservoir safety assurance will not be required where the application relates to a replacement building and the FRA demonstrates there is no material increase in the flood risk to the development or elsewhere.

Controlled Reservoir Development Planning Flood Maps

DfI Rivers has developed reservoir flood inundation maps, which indicate the anticipated depth and velocity of flood water, at any point in the inundation area of a controlled reservoir, as a consequence of catastrophic dam failure. The maps, entitled the 'Reservoir Flood Maps for Development Planning', have been developed for each controlled reservoir in Northern Ireland.

The flood water in the inundation area will be shown in three coloured bandings as follows:

- Building Destroyed Red Banded Area.
 - This level is at least: V > 2m/s and DV > 7m2/s.
- Structural Damage Amber Banded Area.
 - This level is: V> 2m/s and $3m^2/s < DV < 7m^2/s$.
- Inundation only Green Banded Area.
 - This level is at most: V <2m/s or DV < 3m2/s.

Flood Risk Assessment Content

Planning policy requires a FRA to be completed for any proposed development anywhere in a controlled reservoir inundation area, except for minor development. In this context, the definition of minor development is contained in the Glossary to the SPPS as well as PPS 15 (Revised) and is reproduced below at Appendix 1.

The following are to be addressed in the FRA:



- An assessment of the consequence of flooding resulting from a controlled and uncontrolled release of water from the reservoir;
- The proposed means of managing and mitigating the depth and velocity of flood water identified at the proposed development site;
- Any change in flood water flow paths as a result of the proposed development;
- Details of emergency evacuation procedures; and (if applicable)
- Special arrangements for the proposed development of essential infrastructure or the storage of hazardous substances.

The FRA should demonstrate that there are suitable measures in place to manage and mitigate the identified depth and velocity of flood water at the proposed development site for both the construction and operation phases of the proposed development.

The thresholds that the FRA will be expected to mitigate and manage are those that inform the colour bandings of the Reservoir Flood Mapping for Development Planning.

Consequently, the FRA in respect of proposed development anywhere in a controlled reservoir inundation area will be expected to manage and mitigate against flooding to the extent of the depth and velocity of water in the Green Banded Area i.e. V < 2m/s or DV < 3m2/s and that the development does not increase flood risk elsewhere.

DfI Rivers will expect the FRA to only consider how large structures or earthworks affect flow paths e.g. those with a footprint in excess of 1000 square metres, road embankments, large scale infilling etc.

In some instances, a proposed development may cause an alteration in flow paths. If so, DfI Rivers will expect the FRA to demonstrate that there is no impact on any other property or land as a result.

DfI Rivers expects the FRA to consider the consequence of both the controlled and uncontrolled release of water from a controlled reservoir. Controlled release includes consideration of the opening of sluice valves and siphons or the operation of spillways. Uncontrolled release relates to a complete dam failure.

The FRA should include details of emergency evacuation procedures. The detail required should be proportionate to the identified depth and velocity of flood water at the proposed development site. The assessment of the suitability or otherwise of emergency evacuation procedures is outside the remit of DfI Rivers.



For the proposed development of essential infrastructure; e.g. emergency services/depots, transport or utilities, or the storage of hazardous substances, the FRA will, in addition to the foregoing, need to demonstrate that no alternative viable sites or routes are available and that they can remain operational at times of flooding or can demonstrate appropriate contingency planning.

Flood Risk Assessment – Analysis

Each FRA will be considered by PAU on its merits to determine if it contains suitable measures to manage and mitigate the identified depth and velocity, and /or combinations of depth and velocity, of flood water at the proposed development site.

Should the FRA not demonstrate there are suitable measures to manage and mitigate the depth and velocity (or combination of depth and velocity) of water at the proposed development site PAU will consider the depth and velocity (or combination of depth and velocity) is unacceptable and will advise the LPA that the application does not comply with planning policy.

Should the FRA demonstrate there are suitable measures to manage and mitigate the depth and velocity (or combination of depth and velocity) of water at the proposed development site PAU will consider the depth and velocity (or combination of depth and velocity) is acceptable and the Department will advise the LPA that the application complies with planning policy.

The implications of these policies for the application site will be explored in the following sections of this report.

Hydepark Road, Mallusk – Flood Risk and Drainage Impact Assessment



6.0 Development Feasibility and Flood Risk/Drainage Assessment

6.1 Policy FLD 1 – Development in Fluvial (River) and Coastal Floodplains

6.1.1 Fluvial Flood Risk

PPS 15 Policy FLD 1 Development in Fluvial (River) and Coastal Floodplains does not permit development within the 1% AEP fluvial floodplain unless the applicant can demonstrate that the proposal constitutes an exception to the policy or is of overriding regional or sub-regional economic importance. A review of DfI Rivers' 1% AEP fluvial FM indicates that the site is located within the strategically modelled 1% AEP fluvial floodplain associated with the Flush River.

As the Flush River has been strategically modelled 1% AEP flood levels and flow rates associated with the watercourse are not available. When consulted by the Local Planning Authority (LPA) as part of any planning application process for the site, DfI Rivers will request that the extent of 1% AEP fluvial flooding at the site be accurately determined via hydraulic modelling of the Flush River and Hydepark Dam reservoir as part of a Flood Risk Assessment (FRA) for the site. If the site is sub-divided for planning purposes separate FRAs may be requested to accompany each planning application.

The hydraulic modelling exercise will require a detailed topographical survey of the site plus a cross sectional survey of the Flush River watercourse and its tributary. In addition, a reservoir routing exercise will be required for Hydepark Dam reservoir to establish the downstream boundary water level within the reservoir during a 1% AEP flood event in the Flush River. A hydrological assessment of Flush River and Flush River Tributary catchment flows will be required to determine flood flows within the watercourses for application to the hydraulic model.

Comparison of DfI Rivers' strategic 1% AEP floodplain extent with the Loop Road – Option 1, Loop Road – Option 1a and Main Street – Option 2 development layouts indicates a small area of residential development and pedestrianised roads, for all 3 no. options, is positioned within the strategically modelled 1% AEP fluvial floodplain.



Although Policy FLD 1 provides exceptions to the prohibition of 1% AEP fluvial floodplain development the area of proposed residential and pedestrianised roads located within the 1% AEP fluvial floodplain does not satisfy any of the Policy FLD 1 exceptions and therefore their position within the 1% AEP fluvial floodplain is contrary to Policy FLD 1. Consequently, once the Flush River 1% AEP fluvial floodplain extent has been accurately established via hydraulic modelling, all proposed residential development and pedestrianised roads should be positioned beyond the estimated 1% AEP fluvial floodplain extent. By positioning development beyond the 1% AEP fluvial floodplain the proposed development will satisfy the requirements of Policy FLD 1.

Policy FLD 1 will not accept the following flood protection and management measures proposed as part of the planning application, in order to facilitate development within floodplains:

- · New hard engineered or earthen bank flood defences;
- Flood compensation storage works; and
- Land raising (infilling) to elevate a site above the flood level within the undefended fluvial floodplain.

Although, flood compensation storage works are not considered acceptable minor reprofiling of the 1% AEP fluvial floodplain extent may be possible within the site boundary to create a more suitable development layout if required by the developer.

DfI Rivers liaison is required to determine if it would accept minor reprofiling of the 1% AEP fluvial floodplain extent to facilitate the creation of a more suitable development layout. DfI Rivers will likely request that hydraulic modelling be completed to demonstrate that the proposed reprofiling works will not have a detrimental impact upon flood risk at the site or elsewhere.

DfI Rivers will also require that the reprofiling works provide at least an equal volume of compensatory 1% AEP floodplain storage in the same 200mm deep AOD Belfast level band as the 200mm deep AOD Belfast level band being infilled. Re-profiling hydraulic modelling outputs plus compensatory storage calculations will need to accompany the planning applications FRA.

Providing DfI Rivers agree to permit minor reprofiling of the 1% AEP fluvial and flooding and hydraulic modelling accompanies the development's FRA demonstrating the works do not have a negative impact upon floodrisk minor reprofiling will likely be permitted.

Hydepark Road, Mallusk – Flood Risk and Drainage Impact Assessment



In addition, DfI Rivers recommends that a 600mm freeboard be provided to finished development levels and access routes to account for the potential future impact of climate change upon the 1% AEP fluvial flood level. Where possible, a 600mm freeboard should be provided to proposed development and access route finished levels above the estimated adjacent 1% AEP fluvial flood level in the Flush River and Hydepark Dam reservoir.

Although DfI Rivers recommends provision of a 600mm freeboard to all development above the 1% AEP fluvial flood level it will not be feasible to provide DfI River's recommended freeboard to proposed development located on low lying areas of the site to the north of the Hydepark Dam reservoir where existing ground levels range between approximately 154m AOD Belfast and 143m AOD Belfast.

Within the FRA accompanying the planning submission for the site the applicant will need to demonstrate that there is no fluvial flood risk to low lying areas of the site from a 1% AEP fluvial flood event in the Flush River and Hydepark Dam Reservoir. Based upon a review of OSNI 10m DTM height information elevated ground between the Flush River and Hydepark Dam protects low lying areas of the development from a 1% AEP fluvial flood event. DfI Rivers may request geotechnical proof within the FRA that elevated lands protecting low lying areas of the site have sufficient impermeability to protect low lying areas of the development. The site's detailed topographical survey will confirm the presence of elevated lands to protect low lying areas of the site.

Whilst development on low lying areas of the site may be reliant upon elevated areas of ground to protect it from fluvial flood risk arsing from the Flush River and Hydepark Dam reservoir in WYG's experience DfI Rivers has been willing to accept this principle for planning applications which encounter a similar situation.

Loop Road – Option 1 and Loop Road – Option 1a both incorporate a section of main road which loops around the south periphery of the proposed mixed use development on the site, passing close to the Flush River and Hydepark Dam, and linking the existing Hydepark Road at the site's east and west extremity.

To loop around the proposed mixed use development the main road is shown to either cross the Flush River 1% AEP fluvial floodplain extent as shown in Loop Road – Option 1, or pass through the 1% AEP fluvial floodplain as shown by Loop Road – Option 1a.

As noted previously Policy FLD 1 only permits development within the 1% AEP fluvial floodplain where the planning authority accepts that the proposed development meets the 'Exceptions Test'.

Hydepark Road, Mallusk – Flood Risk and Drainage Impact Assessment



Pertinent to Loop Road Options 1 and 1a is Policy FLD 1 exception d) development for agricultural use, transport infrastructure and utilities infrastructure, which for operational reasons has to be located within the floodplain.

To satisfy Policy FLD 1 exception d) the applicant must demonstrate within the development's FRA that the main road's position within the 1% AEP fluvial floodplain is for operational reasons.

In WYG's experience DfI Rivers has been willing to accept the placement of public highways across/within the 1% AEP fluvial floodplain for operational reasons as there was no alternative route available for the highway.

Should the planning authority accept that the main road's position within the 1% AEP fluvial floodplain meets the exception test, the applicant will need to demonstrate within the FRA that the main road's position within floodplain will not have a detrimental impact upon flood risk at the site or elsewhere. DfI Rivers will likely require hydraulic modelling as part of the FRA to demonstrate that the main road route will not have a detrimental impact upon flood risk, i.e. flood levels and floodplain storage volume.

Based on WYG's experience hydraulic modelling of proposed road crossings, provision of flood conveyance culverts and compensatory storage has successfully allowed the positioning of public roads within the 1% AEP fluvial floodplain.

The main road in Loop Road – Option 1 crosses the 1% AEP fluvial floodplain. This could be achieved by either bridging the floodplain or installing conveyance culverts beneath the main road within the floodplain. In either scenario, the pre-existing ground levels within the floodplain at the crossing point must be maintained and a 600mm freeboard provided to the crossing soffit to account for the future impact of climate change.

The reduction in floodplain storage volume, via infilling and/or installation of bridge piers, at the crossing should be minimised to reduce the impact upon 1% AEP fluvial floodplain storage volume. Pre-existing ground levels must be maintained within the floodplain post-development, unless compensatory storage is provided, so the pre-development flooding regime is maintained post-development.

As Main Street – Option 2 does not include a loop road across/through the 1% AEP fluvial floodplain the proposed layout is not reliant upon a Policy FLD 1 exception to permit the development. Furthermore, hydraulic modelling and provision of detailed designs will not be required to accompany the FRA for the development.



All three development options incorporate greenspace within the 1% AEP fluvial floodplain. Policy FLD 1 exception f) the use of land for sport and outdoor recreation, amenity open space or for nature conservation purposes, including ancillary buildings, permits this greenspace development within the floodplain. It should be noted this exception does not include playgrounds for children.

Whilst provision of greenspace within the fluvial floodplain is permitted, pre-existing ground levels within the 1% AEP fluvial floodplain extent must be retained post-development to prevent a reduction in 1% AEP fluvial floodplain storage volume and to maintain the pre-development flooding regime. This should be easily achieved by development on the site by leaving areas within the floodplain at the pre-existing ground level.

To manage flood risk affecting the greenspace area and by association greenspace users warning signs should be provided to notify users that they are entering a floodplain area. DfI Rivers has accepted this methodology on other projects.

Crossings of the Flush River and an associated tributary are proposed as part of all 3 no. development options. The crossings pose a potential constriction to 1% AEP fluvial flood flows along the watercourses. Consequently, DfI Rivers will require that details of each crossing be provided within the development's FRA.

DfI Rivers will likely request hydraulic modelling of the proposed crossings to demonstrate that they will not have a detrimental impact upon flood risk as part of FRA. A 600mm freeboard must be provided above the estimated 1% AEP fluvial flood level to the soffit level of the crossing to account for the future impact of climate change and prevent flood debris becoming trapped in the crossings. Signage should be incorporated along paths entering the 1% AEP fluvial floodplain to notify users they are entering a functional floodplain which may flood.

DfI Rivers Schedule 6 consent is required to install a crossing over a watercourse. DfI Rivers may be willing to forego the need to provide Schedule 6 consent for each crossing at the planning stage.

Although, crossings of the Flush River and its tributary are proposed in WYG's experience DfI Rivers has been willing to accept crossings of watercourses providing their impact upon flood risk is adequately considered within the development's FRA.

The exact impact of the 1% AEP fluvial floodplain extent upon the site will not be accurately determined until detailed hydraulic modelling of the Flush River and Hydepark Dam reservoir is completed and compared to a detailed topographical survey of the site.



Of concern is the Top Water Level (TWL) within the Hydepark Dam reservoir during a 1% AEP fluvial flood event relative to its northern embankment which bounds low lying areas of the site. There is a risk that the detailed hydraulic model and topographical survey show that the reservoirs northern bank may be overtopped during a 1% AEP fluvial flood event or the embankment fails to provide the required freeboard to protect low lying areas of the development.

This potentially could result in a portion of the site being located within the 1% AEP floodplain which is not currently shown on DfI Rivers' strategic 1% AEP fluvial FM. The developer should be aware that until hydraulic modelling and a detailed topographical survey are completed the exact 1% AEP fluvial floodplain extent at the site will be unknown.

Whilst there is a risk that DfI Rivers' strategic FM at the site may be inaccurate, owing to its reliance upon topographical survey information of limited detail, based on WYG's hydraulic modelling experience, DfI Rivers' strategic 1% AEP floodplain extent usually matches detailed hydraulic modelling outputs closely.

6.1.2 Coastal Flood Risk

PPS 15 Policy FLD 1 Development in Fluvial (River) and Coastal Floodplains does not permit development within the 0.5% AEP coastal floodplain unless the applicant can demonstrate that the proposal constitutes an exception to the policy or is of overriding regional or sub-regional economic importance. A review of DfI Rivers' 0.5% AEP coastal FM indicates that the site is located beyond the 0.5% AEP floodplain associated with Inner Belfast Lough. Owing to the site's elevated position above the 0.5% AEP coastal floodplain there is no flood risk to the site from this source.

6.1.3 Pluvial Flood Risk

Pluvial flood risk normally affects sites that occupy low ground adjacent to large steeply sloping catchments. Rain falling on the catchment can result in overland flow that has the potential to inundate low lying sites.

A review of DfI Rivers' Surface Water FM reveals that the central, low lying area of the site, immediately east of Hydepark Dam, will flood during a 0.5% AEP pluvial flood event. This low lying area corresponds with the predicted area of 1% AEP fluvial flooding at the site.

Should the development layout be developed to avoid this area of 1% AEP fluvial flooding, as required by Policy FLD 1, the 0.5% AEP pluvial floodplain at this location will be avoided and the pluvial floodplain at this location should have no impact upon the proposal.

Hydepark Road, Mallusk – Flood Risk and Drainage Impact Assessment



There are 2 no. other small areas of pluvial flooding within the site which it is assumed are associated with topographical depressions which capture surface water runoff from surrounding agricultural lands.

DfI Rivers acknowledges that due to topographical inaccuracies and broad assumptions made regarding existing drainage infrastructure, pluvial floodplain extents should be considered to be indicative rather than accurate.

The estimated 0.5% AEP pluvial floodplain extent corresponds with topographical low points within the site boundary. Construction of an extensive mixed-use development on the site, covering the majority of the site, will remove these low points in which stormwater runoff may accumulate.

Instead the development will introduce, graded hard surfaces and a storm sewer network, preventing the accumulation of stormwater on site and eliminating the pluvial flooding shown on DfI Rivers' 0.5% AEP pluvial FM.

In addition, development levels and gradients will be set to optimise the collection and transfer of stormwater runoff to the receiving storm network and prevent off site discharge to neighbouring development and the public highway.

Pre-development, rainfall on the site either permeates into the site's sub-soil or discharges via overland flow to local watercourses. Post-development, it is expected that the development's storm sewer network will discharge stormwater to the Flush River. As the site is predominantly greenfield agricultural land DfI Rivers are likely to require that stormwater discharge from impermeable areas of the development be limited to the greenfield runoff rate of 10 l/s/ha. DfI Rivers Schedule 6 discharge consent will be required at the planning application stage of the development as part of the Drainage Assessment (DA) for the development.

Stormwater discharge to the Flush River will be limited to the pre-development greenfield runoff rate via flow control and attenuation. It is expected that the storm sewer network will be designed to an NI Water adoptable standard with checks made to ensure no out of sewer flooding occurs during a 30 year return period storm event and no flooding of development properties will occur during a 100 year return period storm event.

Given that development of the site will remove existing topographical low points in which stormwater may accumulate, and implementation of an appropriate storm drainage design will prevent the accumulation of stormwater on site, there is considered to be no pluvial flood risk to or arising from the proposed development.



6.1.4 Groundwater Flood Risk

Groundwater is not considered to be an issue since any development elements located below ground level should be waterproofed ("tanked") to prevent groundwater ingress. Temporary incursions into the subsoil will be made to enable the construction of foundations with the risk of temporary subsurface flooding. Well established operational processes should be employed to manage ground water during this temporary condition.

Any sub-surface structures, such as the basement car parking, should be 'tanked', i.e. water proofed, to prevent the ingress of ground water into below ground areas of the development. Accordingly, there should be no flood risk to the proposed development from groundwater sources.

6.1.5 Interurban Flood Risk

Urban catchments potentially contain a number of vectors for transferring water, comprising foul and storm sewers, including road drainage and culverted watercourses. The authorities responsible for these systems are NI Water, Transport NI and DfI Rivers.

It is possible for a flood risk to arise from capacity restrictions, or blockages in these systems, whereby, the water cannot pass freely through the network, resulting in backing up of flows and out of sewer flooding. In the event that a blockage of a public sewer or a designated culverted watercourse should occur post-completion, the statutory body with responsibility for maintenance of the asset, should attend site to remove the blockage and clean the sewer/culvert.

In the event of flooding occurring from a blocked sewer or burst watermain, NI Water can be notified of the blockage via the Waterline Flooding Emergency telephone number. This number is available 24 hrs a day, seven days a week. The appropriate statutory body, DfI Rivers, Transport NI or NI Water will be notified of the flooding incident so remedial steps can be taken to rectify the blockage or burst. Given that all drainage/water supply infrastructure in and surrounding the application site are owned and maintained by either, DfI Rivers, Transport NI or NI Water, all of whom can be alerted of a flooding incident from its infrastructure there is considered to be a low flood risk to the development from the interurban source.



6.2 Policy FLD 2 – Protection of Flood Defences and Drainage Infrastructure

DfI Rivers fluvial and coastal FM's indicate that there are no flood defences in the vicinity of the site for which DfI Rivers are responsible. Consequently, the development should have no impact upon DfI Rivers flood defence infrastructure.

Furthermore, a review of NI Water asset information indicates that no NI Water sewers or water mains cross the site. Consequently, the proposed development of the site will have no impact upon existing drainage infrastructure in the vicinity of the site.

Policy FLD 2 requires that where a development proposal is located beside a watercourse or control structure it is essential that an adjacent working strip is retained to facilitate future maintenance by DfI Rivers, other statutory undertaker or the riparian landowners. The working strip should have a minimum width of 5m, but up to 10m where considered necessary, and be provided with clear access and egress at all times.

A working strip with minimum width of 5m must be provided along the undesignated Flush River and Hydepark Dam, and be provided with clear access and egress at all times. Landscaping and fencing should not be placed within the working strip as these will inhibit access and egress. Exact working strip requirements to be determined in liaison with DfI Rivers and Hydepark Dam reservoir owner.

6.3 Policy FLD 3 – Development and Surface Water (Pluvial) Flood Risk Outside Floodplains

As noted in Section 5.1, which considers relevant planning policy pertaining to flood risk, a DA is required where a proposed development exceeds the thresholds specified in PPS 15 Policy FLD 3, where runoff from the development may adversely impact upon other development / features, or where there is evidence of a history of surface water flooding in the vicinity of the application site.

Of the 3 no. thresholds stipulated in Policy FLD 3, most relevant to the proposed mixed use development is the requirement to provide a DA for developments which comprise 10 no. or more dwelling units and a change in use involving new buildings and/or hardstanding exceeding 1,000 square metres in area. The DA must accompany the planning submission for any proposed development on the application site which exceeds Policy FLD 3's stipulated thresholds.



6.3.1 Stormwater Discharge

A review of NI Water asset information indicates that there are no public storm sewers present on site. Currently, rainfall on the site either permeates into the site's sub-soil or discharges via overland flow to local watercourses.

Given the scale of the proposed development on the site, and a review of NI Water asset information, a Pre-Development Enquiry (PDE) application to NI Water is likely to receive the response that NI Water does not have a storm sewer in the vicinity of the site capable of serving the proposed development and advising liaison with DfI Rivers to determine if stormwater discharge from the development to a local watercourse is possible.

A review of OSNI 10m DTM height information for the site suggests that stormwater runoff from the site discharges to the Flush River. The site has 3 no. runoff catchments, the first is to the east of Hydepark Dam reservoir and discharges to Flush River upstream of the Hydepark Dam reservoir, the second runoff catchment is to the north of Hydepark Dam reservoir and discharges to Flush River downstream of Hydepark Dam reservoir, and the third is lands to the south of Flush River which discharge to Flush River upstream of Hydepark Dam.

If development on the site is constructed to pre-existing levels it is expected that the 2 no. developed drainage catchments, i.e. those to the north of Flush River and Hydepark Dam, will be retained post-development with 2 no. stormwater discharge locations to the Flush River, one upstream and one downstream of Hydepark Dam, from the development's storm sewer network. This assumption needs confirmation via detailed design of the development's storm sewer network.

Given that the site is predominantly greenfield agricultural land it is expected that DfI Rivers will require that stormwater discharge from impermeable areas of the site be limited to the pre-existing greenfield runoff rate, i.e. 10 l/s/ha. DfI Rivers Schedule 6 discharge consent must accompany the DA submitted to planning.

To achieve the Schedule 6 consented discharge rate flow control and attenuation will be required. Attenuation may take the form of storage tanks, cellular storage or oversized pipes and be placed throughout the proposed development or at the networks downstream end dependent upon space constraints, NI Water storm sewer adoption requirements, DfI Roads Technical Approval of Structures (TAS) requirements and road adoption requirements.

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The attenuation must be positioned beyond the 1% AEP fluvial floodplain and not be surcharged by floodwaters emanating from a 1% AEP flood event in the Flush River. A review of the 3 no. development layout options for the site indicates a minimal amount of large open spaces within the development layout to accommodate offline attenuation storage structures.

Consequently, it appears attenuation will need to be provided at the downstream end of the development's storm sewer networks. While there appears to be space to accommodate attenuation within the available greenspace to the east of Hydepark Dam, there is very little open space available for attenuation for the storm network discharging downstream of Hydepark Dam. The applicant must consider the placement of stormwater attenuation throughout the development when developing the site's layout for submission to planning.

Consideration should be given to the minimisation of permeable surfaces and utilisation of infiltration techniques to reduce the volume of attenuation required to limit stormwater discharge from the development to the DfI Rivers consented greenfield discharge rate.

As part of a DA for the proposed development evidence of correspondence with DfI Rivers and NI Water regarding the safe disposal of stormwater from the development must be included, this includes Schedule 6 discharge consent and a NI Water PDE response. In addition, an indicative storm sewer network layout will be required to accompany the DA to demonstrate to DfI Rivers how storm water discharge from the development will be limited to the greenfield runoff rate, i.e. location of flow control devices and attenuation storage structures. The DA must also include a Micro Drainage analysis of the indicative storm sewer layout to demonstrate the functionality of the system to prevent out of sewer flooding during a 30 year return period storm event and no flooding of development properties during a 100 year return period storm event.

The development's storm sewer design and construction will be completed to an NI Water adoptable standard, i.e. in accordance with the requirements of the latest edition of NI Water's Sewers for Adoption. This design and construction guide requires the storm sewer to be designed for a 2 year return period storm event, with checks made to make sure that no flooding occurs during the 30 year return period storm event and no flooding of properties occurs during the 100 year return period storm event.

The construction a new looped main road in options 1 and 1a is likely to require the provision of a separate storm sewer network within the main road, for DfI Roads adoption, and whose sole purpose is to drain the main road. Stormwater discharge from the main road is likely to be limited to the currently accepted greenfield rate of 10 l/s/ha.



Furthermore, to eliminate potential pluvial flood risk to the development, final development levels and gradients will be set to optimise the collection of stormwater runoff from impermeable areas within the development. Re-profiling of existing site ground levels and construction of a stormwater drainage network to optimise surface water runoff collection will prevent surface water ponding within the proposed development.

6.3.2 Foul Discharge

A review of NI Water asset information indicates that there are no public NI Water foul sewers present within the site. Owing to the scale of the proposed development, and the site's position on the periphery of NI Water's Mallusk foul drainage catchment, NI Water's PDE response is likely to state that there are no foul sewers available which can serve the proposed development.

Consequently, a foul sewer requisition is likely to be required to transfer foul flows from the site to a suitable location on NI Water's foul sewer network. NI Water will provide a Reasonable Cost Allowance (RCA) towards the foul sewer requisition with any deficit between RCA and construction cost being met by the developer.

Alternatively, NI Water may advise a Network Capacity Check (NCC) is required to determine if the existing foul network has capacity to serve the proposal or to determine a suitable connection for the development to the NI Water foul network.

Upon submission of a NCC application NI Water will assess the capacity of its existing foul network and determine a suitable connection location for the development to the NI Water foul network, after which a foul sewer requisition may be required to obtain a NI Water foul sewer to transfer foul flows from the development to a suitable location on NI Water's foul sewer network.

NI Water's PDE response will also confirm if the receiving Wastewater Treatment Works (WwTW) has sufficient capacity to serve the proposed development. Should the receiving WwTW have insufficient capacity upgrade works at the WwTW may be required to facilitate the development, or onsite treatment required prior to discharge to the NI Water foul network.

Alternatively, an onsite treatment facility could be provided for the proposed development which would be owned, maintained and operated by the developer until such time as the receiving NI Water WwTW had capacity to receive flows from the development.

Hydepark Road, Mallusk – Flood Risk and Drainage Impact Assessment



The onsite WwTW would need to obtain a discharge consent from Northern Ireland Environment Agency (NIEA) for effluent discharge to the Flush River and be subject to regular effluent sampling to confirm the WwTW was achieving its consented effluent standard.

Whilst a lack of capacity is a risk at the receiving WwTW is a risk for the proposed development, as part of its forward planning NI Water consider the impact of potential foul flows from areas zoned for development within the area plans. Should the site be zoned within the area plan for a mixed use development, NI Water will consider the impact of foul flows from potential development of the land upon the receiving WwTW and allocate budget towards upgrade of the WwTW if required.

The development's foul sewer network will be designed to an adoptable standard in accordance with the latest edition of NI Water's Sewers for Adoption. As site levels fall away from Hydepark Road towards the Flush River foul Pumping Stations (PSs) may be required to transfer foul flows to NI Water's foul network. The foul PSs will need to be constructed to an adoptable standard to enable adoption of the PSs by NI Water.

The PS's must provide emergency storage in the event of power or pump failure and will require an Emergency Overflow (EO) to the Flush River should the emergency storage volume be exceeded. The EO will require NIEA discharge consent. The PSs must be positioned beyond the 1% AEP fluvial floodplain and incorporated within the planning application submission for the proposed development if required.

Prior to connecting to NI Water's foul sewer network, permission will need to be obtained by the developer from NI Water to connect. Full un-attenuated foul flows will be transferred to NI Water's foul sewer network for onward issue and ultimately treatment at the receiving WwTW. Prior to the discharge of any foul flows from the development to NI Water's network, the developer will obtain discharge consent from NI Water.

6.3.3 Summary

It is expected that storm flows from the proposed development will discharge to the Flush River at the pre-existing greenfield runoff rate, discharge will be limited to the consented rate via flow control and attenuation. Dependent upon NI Water's PDE response foul flows will either discharge to NI Water's foul sewer network via a requisitioned foul sewer or be treated on-site with effluent discharge to Flush River (subject to NIEA consents and approvals).



Although there is a risk that the receiving WwTW may have insufficient capacity to accept foul flows from the propose development, NI Water, as part of its forward planning and budget allocation process, will assess the impact of zoned lands contained within area plans upon receiving WwTW and programme appropriate upgrade works at each receiving WwTW as required to accommodate the expected additional foul flow.

Foul PSs may be required to transfer foul flows from the development to NI Water's foul network (dependent upon discussions with NI Water and development levels), storm and foul drainage networks will be designed to an adoptable standard, permissions will be obtained prior to connection and discharge, and existing ground levels will be re-profiled to optimise stormwater runoff collection and eliminate ponding, there is considered to be no pluvial flood risk to the proposed development nor any adverse impact upon other developments or features as a result of the proposed development.

6.4 Policy FLD 4 – Artificial Modification of Watercourses

Policy FLD 4 deals with culverting, or canalisation of watercourses. All 3 no. development layouts include path crossings of the Flush River and its tributary. Proposed crossings will require Schedule 6 consent from DfI Rivers. DfI Rivers may forego the requirement to have Schedule 6 consent for the crossings at the planning stage and instead request details of each crossing be included within the planning FRA.

DfI Rivers are also likely to request that hydraulic modelling be completed to demonstrate that the proposed crossings will not have a negative impact upon flood risk at the site or elsewhere. Should the planning approval be granted the developer will then submit Schedule 6 applications for each crossing which will be assessed by DfI Rivers Engineering Section based on details provided within the planning approved FRA.

Development of the site is likely to require the closure of drainage ditches. The closure of these minor watercourses within the site boundary and replacement with a formal storm drainage network is likely to be acceptable to DfI Rivers and may not require Schedule 6 consent (to be confirmed in discussion with DfI Rivers at planning stage).

There may be watercourses, external to the site, which discharge into existing watercourses within the site boundary which transfer flows to the Flush River. These external discharges must be maintained post-development and conveyed through the site to the receiving watercourse downstream either via retention of the open watercourse or by culverting the existing watercourse.



This may necessitate the culverting of some watercourses through the site and provision of a working strip along the culvert route. Culverting of a watercourse through the site to maintain a drainage regime for external lands will require Schedule 6 consent from DfI Rivers.

6.5 Policy FLD 5 – Development in Proximity to Reservoirs

A review of DfI Rivers's Reservoir FM indicates that the site is located beyond the inundation of any reservoir. Although the site is located beyond the inundation area associated with an uncontrolled release of water from either Boghill Dam reservoir or Hydepark Dam reservoir, given the site's proximity to Hydepark Dam and the fact that north-western areas of the development will be positioned at a lower elevation than the 1% AEP fluvial flood level in Hydepark Dam reservoir DfI Rivers may request that a Policy FLD 5 assessment be completed for the proposed development to consider potential flood risk from the Hydepark Dam reservoir to the development.

The Policy FLD 5 assessment must demonstrate that the condition, management and maintenance regime of the reservoir is appropriate to provide sufficient assurance regarding reservoir safety, so as to enable the development to proceed. This requires the applicant to provide a Reservoir Inspection Report completed by an All Reservoirs Panel Engineer not more than 8 years before the date of the Planning Application which indicates that no works in the interest of safety are required to the reservoir. The reservoir owner may have a copy of this report.

If DfI Rivers request a Policy FLD 5 assessment the FRA must assess the consequence of a controlled and uncontrolled release of water from the reservoir upon the proposed development, identify the proposed means of managing and mitigating the depth and velocity of flood water at the site, address any changes in flow path resultant from the proposed development and provide details of evacuation procedures.

Although the site is adjacent to Hydepark Dam reservoir breach analysis conducted by DfI Rivers shows the site to be located beyond the inundation area of an uncontrolled release of water from the reservoir. Hence, there is a low flood risk to the site from this source.

The requirement for a Policy FLD 5 assessment must be determined in liaison with DfI Rivers at the planning application stage of the development. Any request for a Policy FLD 5 assessment is likely to be precautionary given that the site is located beyond the modelled inundation area.



7.0 Conclusion

To assist in determining the future development potential of the Hydepark Road, Mallusk site WYG was commissioned by South Bank Square Limited to undertake a flood risk and drainage impact assessment for a conceptual future mixed use development on the site. The site has been assessed in terms of flood risk and drainage in this report. In summary:

7.1 Policy FLD1 – Development in Fluvial (River) and Coastal Floodplains

7.1.1 Fluvial Flood Risk

- Application site ground levels range between c.183m AOD Belfast and 143m AOD Belfast.
- The site is bound to the south-west by the Flush River and Hydepark Dam reservoir. The Flush River has been strategically modelled by DfI Rivers, consequently, flood levels and flow rates are not available.
- A review of DfI Rivers' 1% AEP fluvial FM shows the part of the site is located within the strategically modelled 1% AEP fluvial floodplain. Owing to the site's position within the 1% AEP fluvial floodplain DfI Rivers will require that detailed hydraulic modelling be completed to assess flood risk to the proposed development. DfI Rivers will require that a FRA be completed for the proposed development.
- Proposed development and access routes will need to be positioned beyond the 1% AEP fluvial floodplain extent. A 600mm freeboard should be provided to all development where possible above the adjacent 1% AEP fluvial flood level. The applicant must demonstrate that there is no fluvial flood risk to low lying areas of the site where a 600mm freeboard cannot be provided.
- If the proposed looped main road is to cross, or pass through, the 1% AEP fluvial floodplain the applicant must demonstrate that the roads position with the floodplain constitutes a Policy FLD 1 exception. Hydraulic modelling of the looped main road will be required by DfI Rivers to demonstrate the proposal does not have a detrimental impact upon pre-existing flood risk.
- The provision of greenspace within the 1% AEP fluvial floodplain is acceptable in accordance with Policy FLD 1 exception f) provided pre-development ground levels are retained and there is no reduction in floodplain storage volume.



- Although a small part of the site is located within the strategically modelled 1% AEP fluvial floodplain and a FRA must accompany any planning application for the site, development on areas beyond the 1% AEP fluvial floodplain is possible.
- The exact extent of the 1% AEP fluvial floodplain shall be determined by hydraulic modelling. Based on experience when completing detailed hydraulic modelling, the modelled floodplain extent has a similar extent to DfI Rivers strategic 1% AEP fluvial floodplain. Consequently, there is considered to be a low fluvial flood risk to low lying areas of the site which are currently shown to be out with of DfI Rivers strategic 1% AEP floodplain extent.

7.1.2 Coastal Flood Risk

- PPS 15 Policy FLD 1 permits development within the 0.5% AEP floodplain in only exceptional circumstances.
- A review of DfI Rivers 0.5% AEP coastal FM shows that the site is located beyond the 0.5% AEP coastal floodplain. There is no flood risk to the site from this source.

7.1.3 Pluvial Flood Risk

- A review of DfI Rivers' 0.5% AEP pluvial FM shows that low lying areas of the site will flood during a 0.5% AEP pluvial flood event.
- Development of the site should remove low lying areas and replace them with impermeable areas which drain to the development's storm sewer network, thus eliminating the ponding of surface water runoff in low lying areas of the site.
- The development will be served by a storm sewer network which will be designed to transfer storm flows to the Flush River. Development levels and gradients will be optimised to facilitate stormwater collection and prevent surface water ponding.
- Hence, there is no pluvial risk to or from the development.

7.1.4 Groundwater Flood Risk

- Temporary incursions into the subsoil will be subject to established operational processes to manage groundwater;
- Where permanent subsoil incursions are made into the site's sub-soil these should be water proofed to prevent ground water ingress; and
- No planning objections should be sustained on grounds of flood risk from groundwater sources.



7.1.5 Interurban Flood Risk

- Transport NI and NI Water regularly inspect and maintain their drainage infrastructure;
- Should a blockage occur Transport NI and NI Water can be notified of the issue and remedial action will be taken to mitigate flood risk; and
- There is no interurban flood risk to the proposed development, whereby, no planning objections should be sustained on these grounds.

7.2 Policy FLD 2 – Protection of Flood Defence and Drainage Infrastructure

- There are no flood defences in the vicinity of the site and no NI Water sewers or water mains crossing the site, consequently, the development of the site will not impede the operational effectiveness of any flood defences or drainage infrastructure in the vicinity of the site.
- A minimum 5m working strip must be maintained along the Flush River and Hydepark Dam reservoir.

7.3 Policy FLD 3 – Development and Surface Water (Pluvial) Flood Risk Outside Floodplains

- In accordance with Policy FLD 3 a Drainage Assessment is required for the proposed development.
- As the site is predominantly greenfield agricultural land, DfI Rivers is likely to require stormwater discharge to the Flush River to be limited to the greenfield runoff rate of 10 l/s/ha.
- Discharge can be limited to the consented discharge rate via flow control and attenuation.
- Both the development's storm sewer network and requisitioned storm sewer will be designed to an adoptable standard and will not pose a flood risk to the development or elsewhere.
- Foul discharges shall discharge to NI Water's public foul network. A NI Water PDE application is required to determine if the existing foul sewer network and receiving WwTW have sufficient capacity to serve the development.



 Given that stormwater discharges from the proposed development will be limited to DfI Rivers's consented discharge rate, networks will be designed to an adoptable standard, development levels shall be set to optimise the collection of stormwater runoff and the storm discharge from the development will not increase flood risk elsewhere the requirements of Policy FLD 3 can be satisfied.

7.4 Policy FLD 4 – Artificial Modification of Watercourses

• A number of pedestrian crossings of the Flush River are proposed. These crossings will require Schedule 6 consent. DfI Rivers are likely to require that the impact of the crossings be considered within the development's FRA via hydraulic modelling.

7.5 Policy FLD 5 – Development in Proximity to Reservoirs

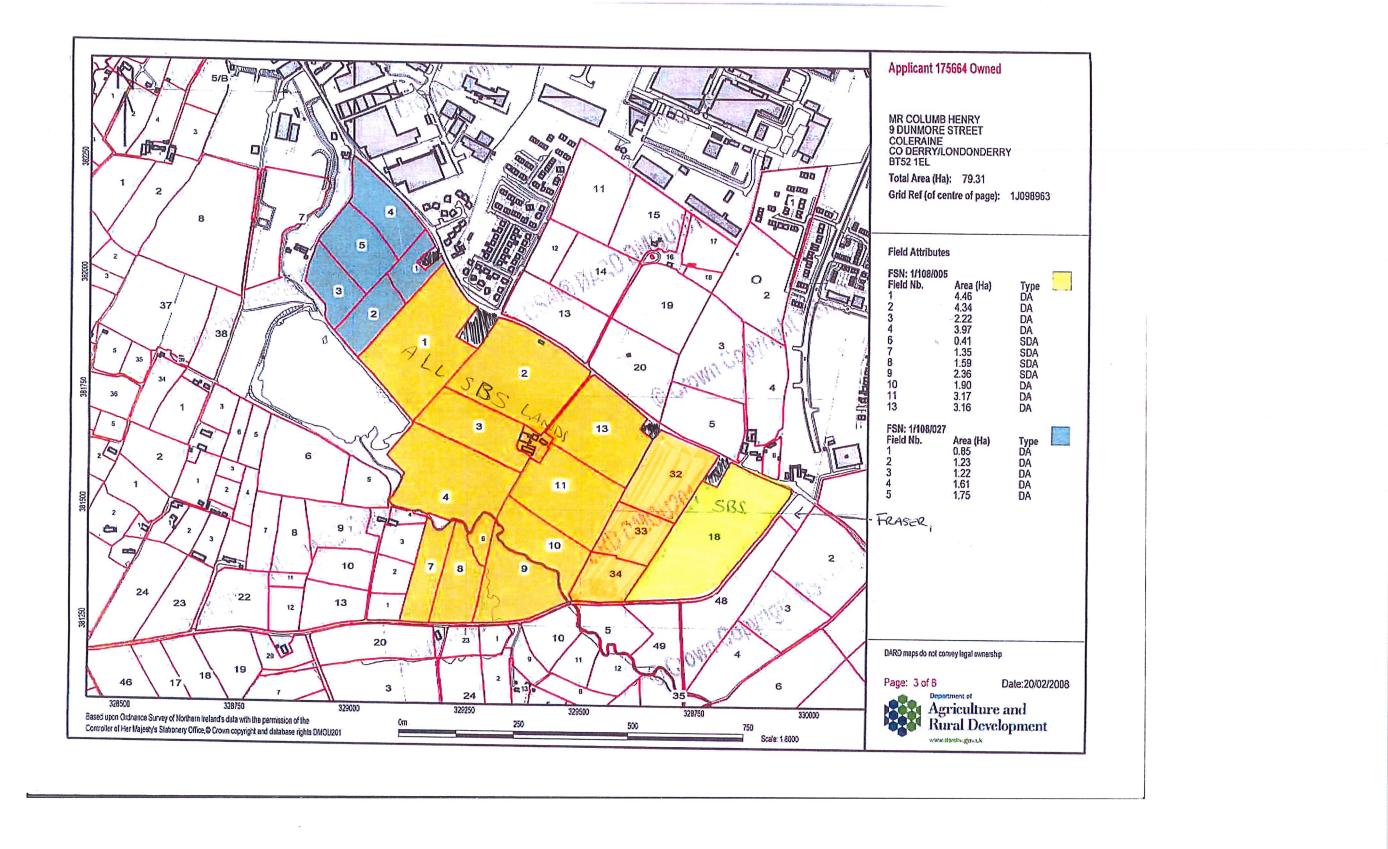
 Although the site is located beyond the inundation area associated with an uncontrolled release of water from either Boghill Dam reservoir or Hydepark Dam reservoir, owing to its proximity to Hydepark Dam reservoir DfI Rivers may request that a Policy FLD 5 assessment be completed for the site. Hydepark Road, Mallusk – Flood Risk and Drainage Impact Assessment



8.0 Appendices



Appendix A – Site Location Plan





Appendix B – Proposed Development Layout

Hydepark Green





Hydepark Green Loop Road Option 1a





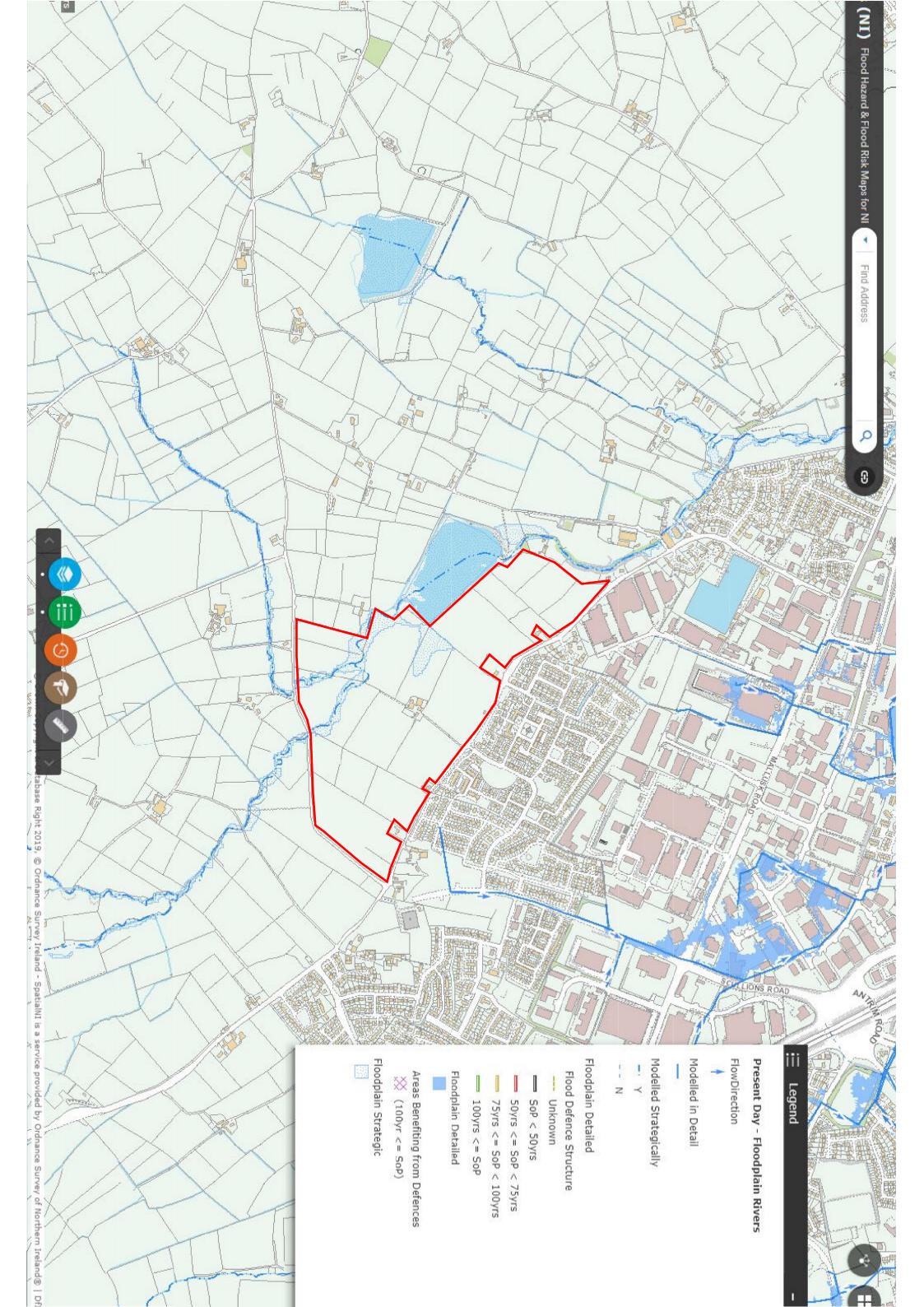
Hydepark Green Main Street Option 2





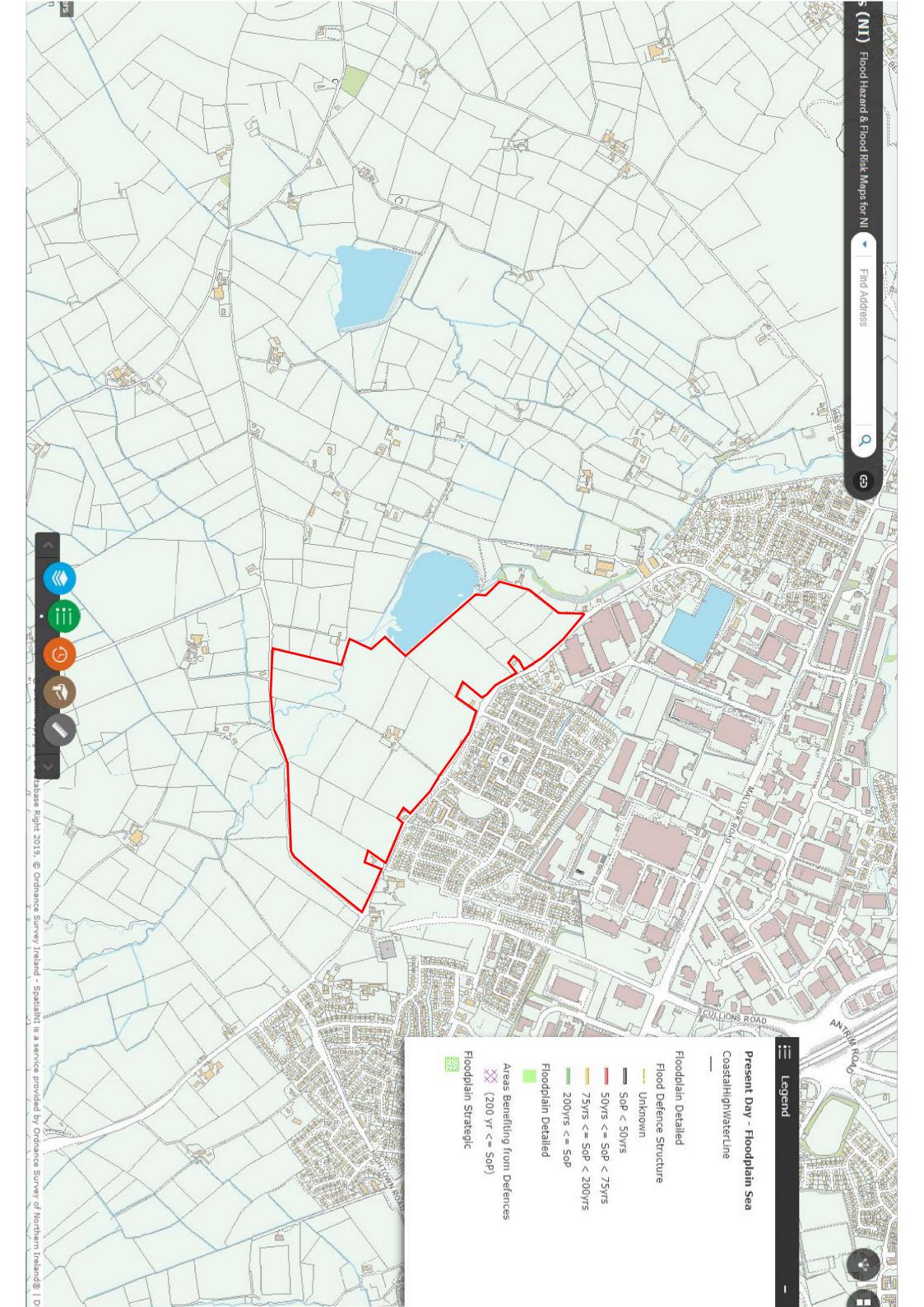


Appendix C – 1% AEP Strategic Flood Map



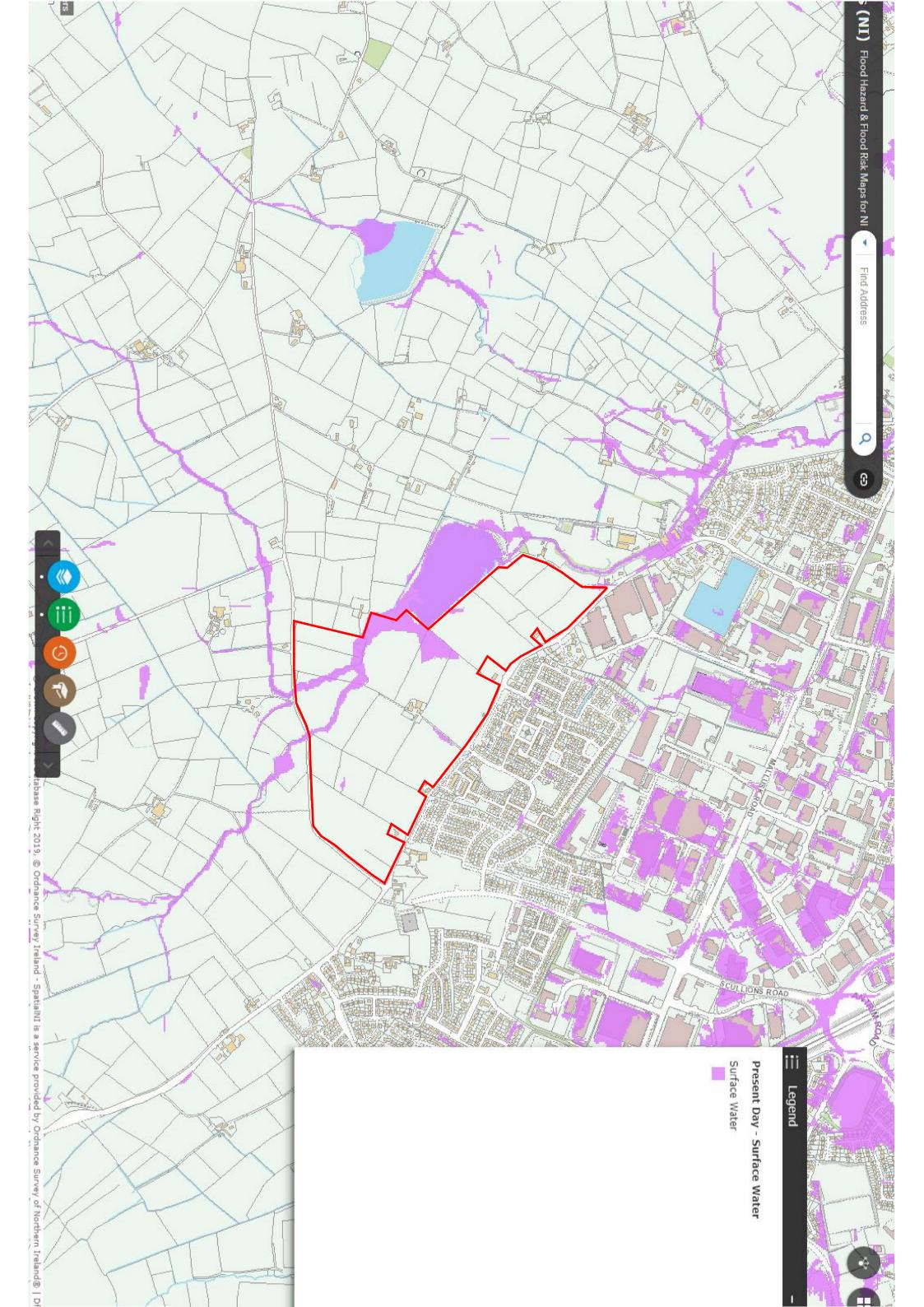


Appendix D – 0.5% AEP Coastal Flood Map



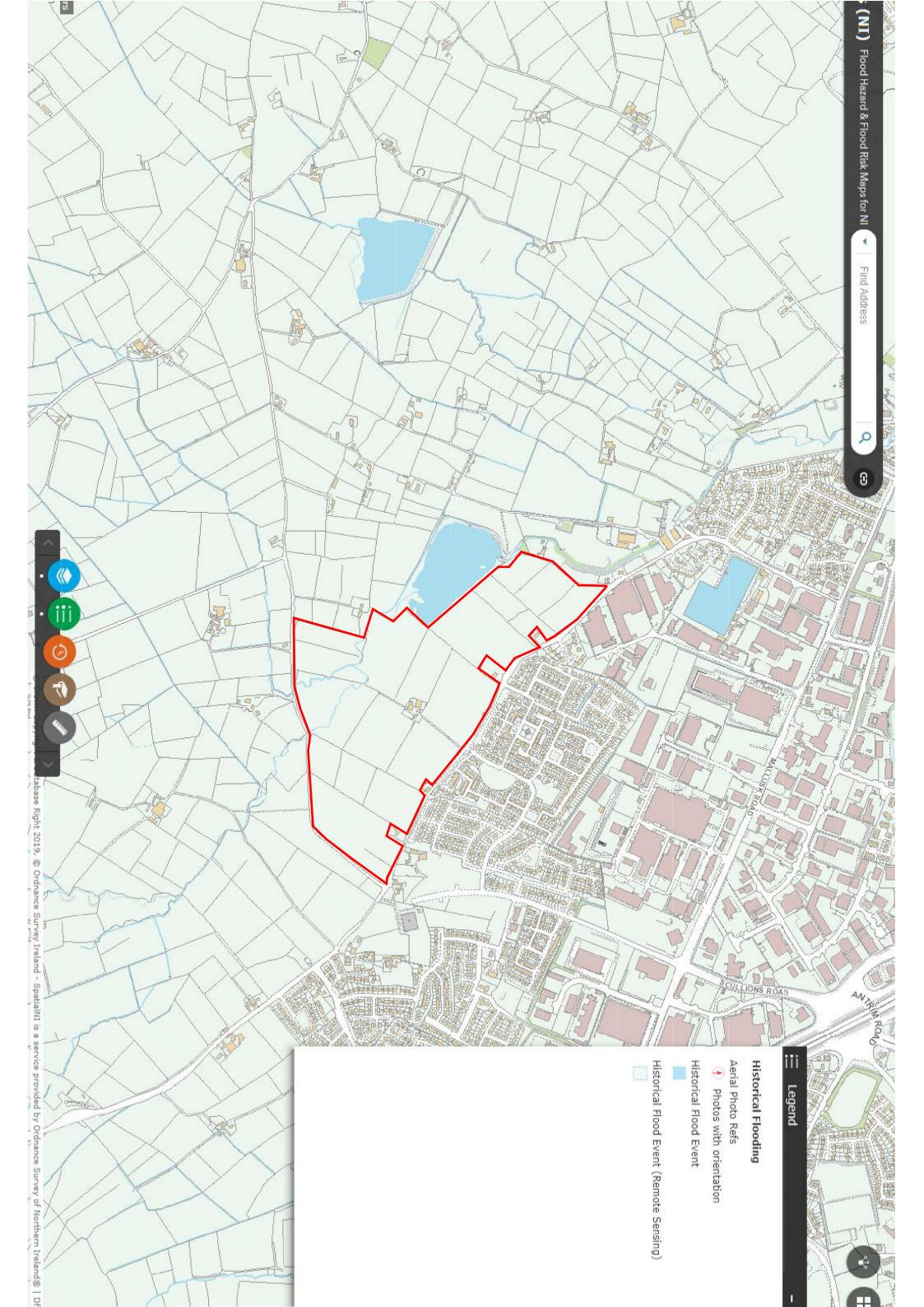


Appendix E – 0.5% AEP Pluvial Flood Map



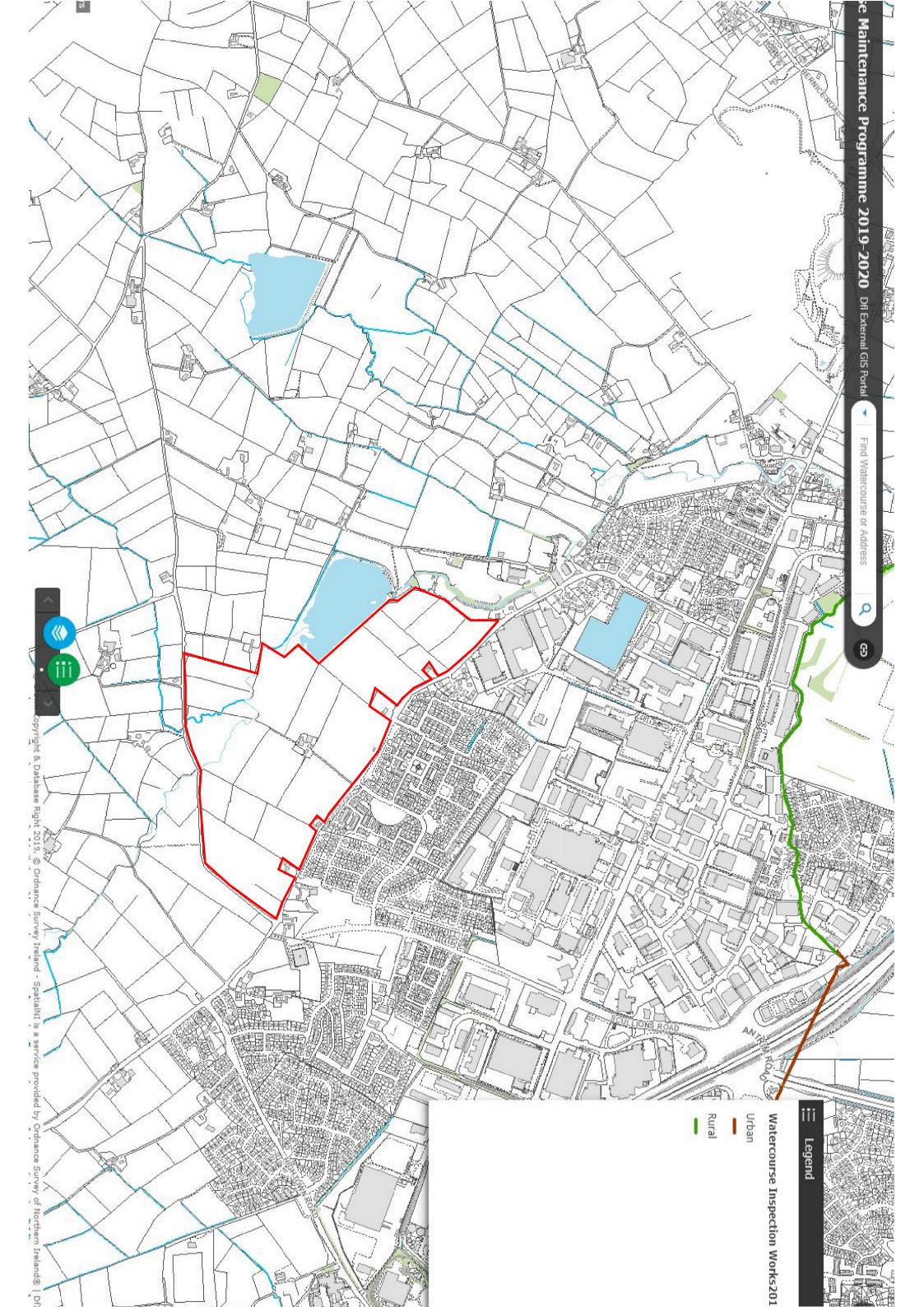


Appendix F – Historical Flood Map



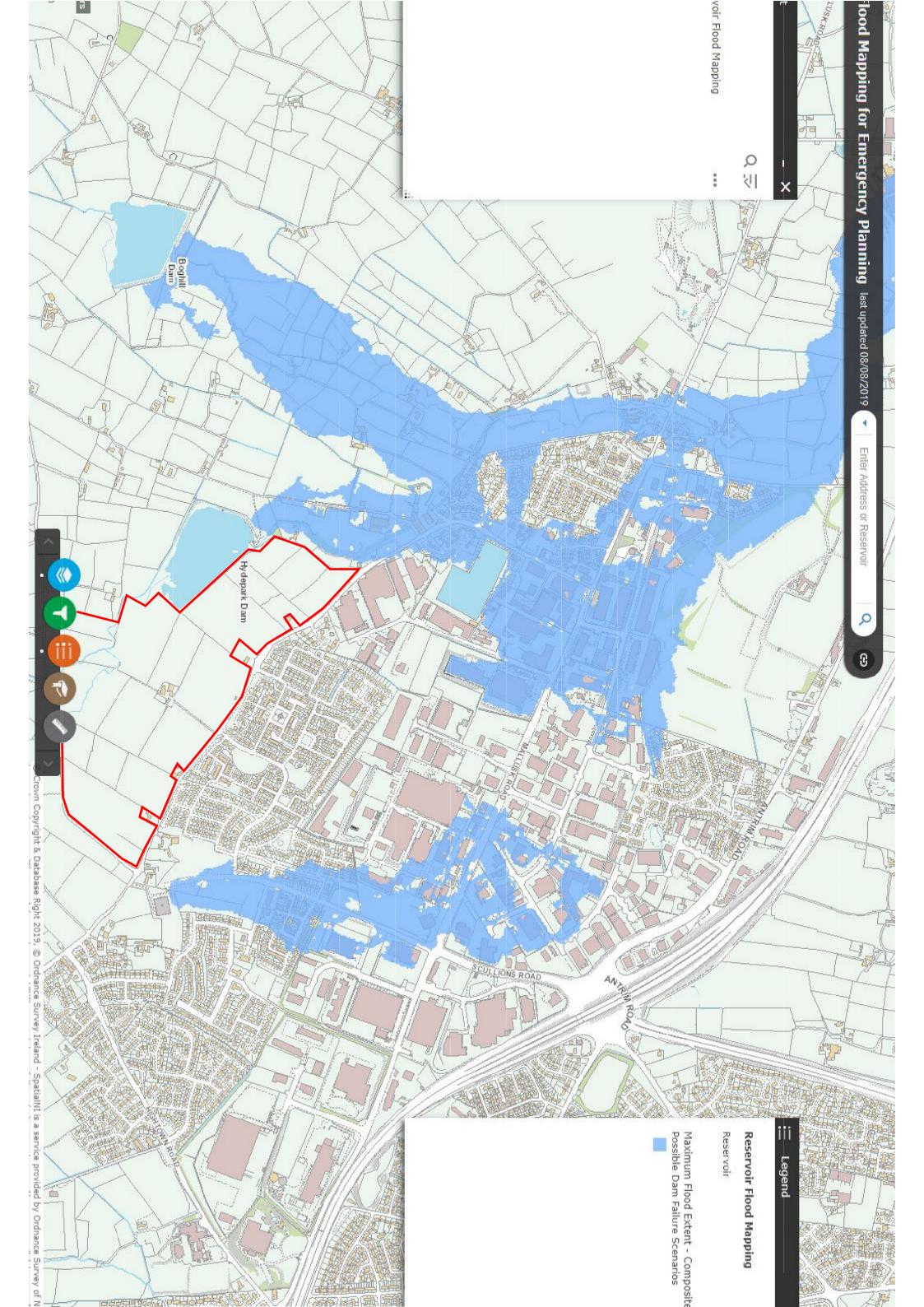


Appendix G – Maintenance Map





Appendix H – Reservoir FM





Appendix I – DfI Rivers Correspondence

Dfl Rivers Lisburn

Mr James Sweeney Senior Consultant WYG Engineering 1 Locksley Business Park Montgomery Road Belfast BT6 9UP



www.infrastructure-ni.gov.uk

Ravarnet House 36 Altona Road Lisburn BT27 5QB Tel: 028 9260 6100

Your reference: A114257/JS/P-03/160719 Our reference: IN1-19-9491

07 August 2019

Dear Mr Sweeney,

RE: HYDEPARK ROAD, MULLUSK – ASSET INFORMATION REQUEST

Thank you for your letter dated the 16 July 2019 regarding the above. From a drainage aspect my comments to your points are as follows.

- 1. There are no designated watercourses or culverts under the terms of the Drainage (Northern Ireland) Order 1973 within or bounding your proposed site.
- 2. No inspection or maintenance regimes as there are no assets in the vicinity.
- 3. The Department does not hold any ownership details.
- 4. The Department does not maintain a database of undesignated watercourses, which are present. In this regard, you are advised to consult with Ordnance Survey and/or undertake site inspections, etc.
- 5. The Department does not have any additional information.

Please quote above reference number on any further correspondence.

Yours Sincerely	WYG BELFAST
	Date 1 3 AUG 2019
Mark Scott Engineering Section	No. PROJECT N.
INVESTORS IN PEOPLE	



Appendix J – DfI Roads Correspondence

james.sweeney

From: Sent: To: Subject: Attachments: info 08 August 2019 14:43 james.sweeney FW: HYDEPARK MULLUSK - Request for baseline information - Ref A114257/JS/P-03/ Hydepark Road gully locations.pdf; Customer Enquiry.xlsx; Hydepark road - defect history.xlsx

Mamta Sonigra

Receptionist / Administrator

We are now a Tetra Tech company, click here to read the announcement

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From: Dfl Roads Northern <dfiroads.northern@infrastructure-ni.gov.uk>
Sent: 05 August 2019 16:11
To: info <info@wyg.com>
Subject: FW: HYDEPARK MULLUSK - Request for baseline information - Ref A114257/JS/P-03/

FAO James Sweeney,

Given that your questions relate primarily to road related queries, and the detail is more easily provided in an electronic format, we have decided to respond by email.

We have also consulted with our colleagues in DfI Rivers who have provided the following input:

There are no watercourses designated under the terms of the Drainage (Northern Ireland) Order 1973 within or bounding the above mentioned site. The Department does not maintain a database of undesignated watercourses. Dfl Rivers has no record of any historical flood calls at the above location.

In relation to road drainage, Dfl gullies locations are provided on the attached pdf screenshot.

The Hydepark road Defect History spreadsheet shows defects (blocked gullies) identified during routine inspection (currently every 3 months).

The Customer Enquiry report shows public reports of ponding surface water on road etc., on Hydepark Road. The pre 2013 enquiries are classified as historic and therefore cannot be located exactly i.e. they could be anywhere along Hydepark Road between Upper Hightown Road and Mallusk Road. There is only one Public Enquiry after 2013 which can be identified as being along the stretch in question.

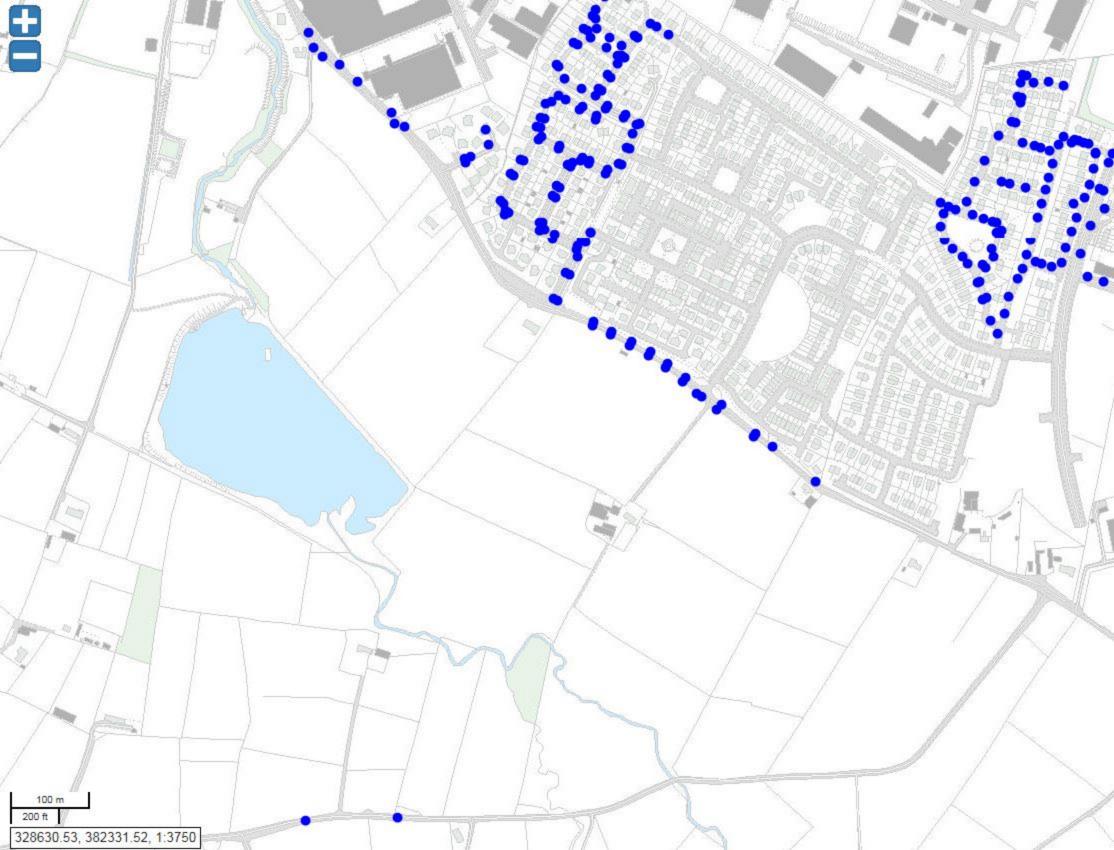
You should be aware that the Dfl gullies discharge to NI Water carrier pipes and so any drainage design will require approval from NI Water's Developer's services team.

I hope this reply has been helpful.

Regards

Gary Quinn Network Maintenance Manager | Dfl Roads | Northern Division County Hall | Castlerock Road | Coleraine BT51 3HS

🖀 : (o28) 70341317 | Network 61317 | 🖂:gary.quinn@infrastructure-ni.gov.uk



Appendix 12: Letters of Support

SIMONBRIEN RESIDENTIAL

simonbrien.com

Mr Michael Gordon Director, Head of Planning Northern Ireland Turley Hamilton House 3 Joy Street Belfast BT2 8LE

19th September 2019

Dear Michael,

RE: SOUTH BANK SQUARE LANDS AT HYDEPARK ROAD, MALLUSK

PLANNING REPRESENTATION TO ANTRIM & NEWTOWNABBEY BOROUGH COUNCIL

We write to you regarding the above noted lands owned by South Bank Square Limited on which we understand you are making a representation to the Council's draft area plan.

Simon Brien Residential have been at the forefront of the housing market in Northern Ireland for over 30 years. We are the leading Estate Agents in the resale market and the sale of new homes in Greater Belfast/Newtownabbey/Lisburn area. We have also been involved in many of the largest land transactions in Northern Ireland over the last 30 years including many large swathes of land throughout Newtownabbey and Mallusk over the years.

We have been involved in many new housing developments in the Mallusk area over the last 15-20 years including Mayfield Village, Aylesbury and Blackrock which all sit adjacent to the South Bank Square Lands. In our experience of selling houses in this area we would confirm that Newtownabbey is a very strong housing market where high volumes of sales can be expected annually. We believe the demand for houses in Newtownabbey and specifically in Mallusk is due in part to;

- The proximity to employment, shops, a range of excellent schools and various other amenities in the general area.
- Easy access to the Motorway network.
- Easy access to Belfast City Centre by car or public transport.

In our experience, the Newtownabbey housing market forms part of a wider market that includes North and West Belfast. This market is typified by people moving up the housing ladder, and out of North and West Belfast to a more suburban location at Mallusk. This was a clear trend that we noted when we were selling the new homes at Mayfield and Aylesbury.

We are confident that the allocation of additional housing lands at this location in Mallusk would help to satisfy the high demand which exists for new homes generally throughout Newtownabbey and Greater Belfast. The provision of new homes at this very popular suburban location in Mallusk would satisfy the demand from growing families and a range of purchasers who will be attracted to the many

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 South Collect
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East Belfast
 225-227 Upper Newtownards Road
 Belfast
 BT4. 3JF
 T 02890 595555
 E eastbelfast@simonbrien.com

Holywood
 60 High Street
 Holywood
 BT18 9AE
 T 02890 428989
 E holywood@simonbrien.com

Newtownards
 17 High Street
 Newtownards
 BT23 4XS
 T 02891 800700
 E newtownards@simonbrien.com

Simon Brien Residential LLP VAT Registration No. 517 4565 37 Company Registration No. NC001115



simonbrien.com

amenities that the area offers. All of this would contribute greatly to the Council's ambitious growth plans.

Should you wish to discuss this matter further at any stage please do not hesitate to contact me.

Kind Regards,

SIMON BRIEN FNAEA

SIMON BRIEN FINAEA SIMON BRIEN RESIDENTIAL 525 Lisburn Rd Belfast, BT9 7GQ

Turley Office

Hamilton House 3 Joy Street Belfast BT2 8LE

T 028 9072 3900

